



**BOMBARDIER**  
*RECREATIONAL PRODUCTS*

**1995**  
**1999**

**HIGH  
ALTITUDE  
TECHNICAL  
DATA**

**High altitude  
and  
Sea level  
technical data  
1995-99**

# TABLE OF CONTENTS

<b>ITEM</b>	<b>PAGE</b>
What are the reasons for special, high altitude set-up? .....	5
What are the reasons for special, sea level set-up? .....	7
Bombardier lite drive pulley .....	8
Drive pulley springs .....	9
TRA clutch ramps .....	15
Drive pulley pressure lever identification .....	16
Drive pulley ramp identification .....	18
Driven pulley cams .....	22
Sprocket identification chart .....	23
Driving chains .....	26
Chaincase sprockets/drive chain length conversion charts	27
Carburetor throttle slide openings .....	30
Carburetor main jets .....	31
Carburetor needle jets .....	32
Carburetor pilot jet .....	33
Carburetor jet needle .....	34
Carburetor throttle slide cut-away .....	35
High Altitude Technical Data - 1999 models .....	1999-1
Sea Level Technical Data - 1999 models .....	1999-57
High Altitude Technical Data - 1998 models .....	1998-1
High Altitude Technical Data - 1997 models .....	1997-1
High Altitude Technical Data - 1996 models .....	1996-1
High Altitude Technical Data - 1995 models .....	1995-1
Sea Level Technical Data - 1995 models .....	1995-33
Pulley alignment - 1994 models (as an example) .....	Annexe A

## WHAT ARE THE REASONS FOR SPECIAL, HIGH ALTITUDE SET-UP?

The atmosphere surrounding our planet is most dense at sea level and as you move up from sea level, the air becomes "thinner". Air is composed of 78 percent nitrogen, 21 percent oxygen and 1 percent total of carbon dioxide, argon, neon and water. The percentage of these gases is essentially the same at all altitudes but at higher altitudes where the barometric pressure is lower, there are fewer atoms or molecules of each of these gases per cubic foot of air. The "thinner" air at 10,000 feet is still 78 percent nitrogen and 21 percent oxygen but there are fewer molecules of each in a cubic foot of air. At standard temperatures, atmospheric pressure at sea level is 14.7 lb per square inch while at 10,000 ft, atmospheric pressure is only 10 lb per square inch.

This change in the atmosphere with increasing altitude has two effects on our engines: 1) The fuel-oxygen ratio changes; 2) The cylinder pressure drops.

A chemically correct ratio of air to gasoline is that ratio which provides exactly the right amount of oxygen to "burn" a given amount of gasoline without any oxygen or unburned gasoline left over after the reaction. At standard temperature and pressure (sea level), that ratio is about 15 lb of air to 1 lb of gasoline. The amount of fuel delivered by the carburetor is fixed by the jetting. The engine has the ability to "breathe in" only a certain volume of air in a single stroke and has no way to compensate for the density of the air. It is easily seen then that if an engine drew in one cubic foot of air at 10,000 ft above sea level, the engine operating at the 10,000 ft elevation would have less oxygen in the cylinder. To maintain a chemically correct ratio of fuel and oxygen, the engine operation at 10,000 ft would have to have smaller jets installed. The final result of leaning down the jetting is that less fuel is burned, less heat is produced and the engine's power output has to drop.

The second effect of the less dense air at high altitude is a decrease in cylinder pressure even before combustion begins. That cubic foot of air the engine breathes in at 10,000 ft has fewer molecules of gas in it than the cubic foot of air at sea level. With less gas in the cylinder during compression, the cylinder pressure will be lower and the horsepower of the engine will be decreased as a result of the lower pressure.

The total loss of power output from the engine will be about 3 percent per 1000 ft of elevation increase. An engine that produces 50 horsepower at sea level will, then, produce about 48.5 horsepower at 1000 ft, 47 horsepower at 2000 ft and only 36.8 horsepower at 10,000 ft.

We have already seen that a change in carburetor jetting is an absolute necessity to keep the engine from running too rich as the altitude increases. Because the horsepower is lower at all RPM's, sometimes changes in chaincase gearing and clutch calibration will be required at higher altitudes.

If we look at our engine that produced 50 HP (maximum) at sea level, that machine would have been set-up with a clutch engagement speed of about 4000 RPM where the engine was producing 16 HP. Take that same machine to a 10,000 ft mountain playground and the clutch would still engage at 4000 RPM but the engine would only be producing about 11.7 HP and it is quite likely the snowmobile would only slip the belt and bog down. There are two approaches that can be taken to overcome the bog on takeoff: 1) Increase the engagement speed of the clutch; 2) Decrease the overall gear ratio in the drive line.

Depending on the power curve shape of a particular engine, either one or a combination of the two approaches could be used to overcome the "bog" on takeoff. Because the entire power curve will be lower at higher altitude, however, the upshift speed of the transmission will be slowed down and the downshift pattern will be speeded up. To accomplish this, driven pulley spring preload can be increased, driven pulley cam angles can be decreased, drive pulley return springs, centrifugal weights and ramps can be changed. Exactly which components are to be changed is dependent upon a particular engine's power curve, the conditions the machine is to be used in and the altitude the machine will be operated at.

The appeal of the mountains is to be able to ride a snowmobile over 5 to 25 ft of snow with not a track on it, let alone a hard packed, groomed trail. That glorious powder snow presents some special set-up requirements too. The torque reaction slide suspension systems have a lot of adjustment and special set-up tricks. The mountain snowmobiler should be aware of them to fully enjoy that mountain powder.

The following pages will list the jetting, gearing, clutch set-up and chassis adjustments suggested for all models for the last five years. In some cases, kits are available under a separate part number.

There are additional changes such as increases in compression ratio and ignition advance that could be employed for high altitude use, however, some of those changes are of a permanent nature and not recommended for the occasional high altitude snowmobiler. Remember also, as you begin dropping below 6000 ft, make sure you change back the clutch and jetting on your machine.

**NOTE:** All specifications are given for a temperature of - 4°F (- 20°C).



## **CAUTION**

**Carburetor adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.**

## **WHAT ARE THE REASONS FOR SPECIAL, SEA LEVEL SET-UP?**

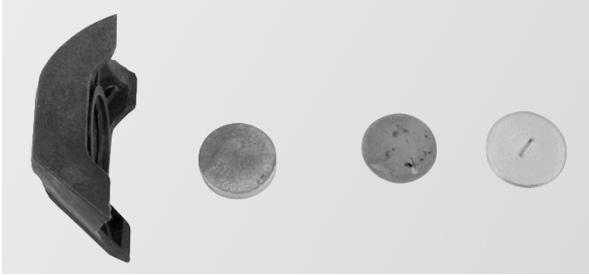
As written previously in the text, the atmospheric pressure is lower at high altitude than sea level. The Summit family is designed and already calibrated for high altitude. For customers who want to use their 1999 and 1995 Summits at or below 6000 ft (1800 m), we offer sea level data sheets and kits; 1996, 1997 and 1998 Summits do not require kits.

The Summits are equipped with a HAC system (High Altitude Compensator) that provides carburetor system adjustments for all altitudes. However on Summit models, to obtain complete sea level calibration, the drive pulley return spring has to be changed in the transmission system.

The 1999 and 1995 sea level sections are following the high altitude sections.

# BOMBARDIER LITE DRIVE PULLEY CALIBRATION PARTS

## BOMBARDIER LITE CLUTCH



A03D2JQ

BOMBARDIER NO.	COLOR	SPRING PRESSURE N @ 62 mm (lbf @ 2.44 in) N (lbf)	SPRING PRESSURE N @ 40 mm (lbf @ 1.57 in) N (lbf)	SPRING RATE N/mm (lbf/in)	FREE LENGTH mm (in)
417 115 600	Blue	255 (57)	507 (114)	11.45 (65.4)	86 (3.39)
417 115 900	Turquoise	258 (58)	605 (136)	13.36 (76.3)	85 (3.35)
417 118 400	Red/Blue on Violet	564 (127)	951 (214)	17.60 (100.5)	102 (4.02)
417 118 500	Yellow/Green on Violet	392 (88)	888 (199)	22.5 (128.5)	82 (3.23)

### CENTRIFUGAL BLOCKS

PART NUMBER	DESCRIPTION	WEIGHT (grams)
417 115 700	Red (push type)	38
417 118 100	Black (screw type)	39.6
417 114 300	Red (screw type)	41.8

### CALIBRATION WEIGHTS

PART NUMBER	DESCRIPTION	WEIGHT (grams)
417 114 400	Screw type	3.4
417 120 400	Screw type	21
417 115 800	Push type	1.8
417 114 500	Capsule screw type	1.65

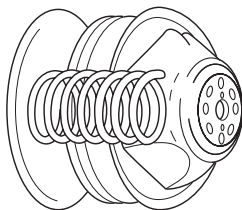
# DRIVE PULLEY SPRINGS

THE FOLLOWING REFERENCES ARE USED IN CHARTS:

- (1) Length of spring when installed in clutch and clutch in fully "open" position.
- (2) Length of spring in clutch when clutch is fully "closed".
- (3) Pounds of force per inch of spring compression.

## TRA & TRA Light CLUTCH SPRINGS

- 1 -



A01D11Q

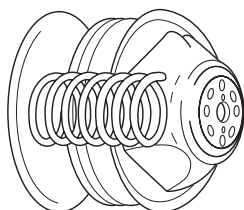
BOMBARDIER NO.	COLOR	SPRING PRESSURE N @ 74 mm (lbf @ 2.9 in) (1)	SPRING PRESSURE N @ 41 mm (lbf @ 1.6 in) (2)	SPRING RATE N/mm (lbf/in) (3)	FREE LENGTH mm (in)
414 639 000	BL - OR	580 (130)	890 (200)	9.4 (53.6)	135.5 (5.33)
414 605 600	WH	667 (150)	1077 (242)	12.1 (68.9)	128.7 (5.07)
414 689 700	YL - OR	455 (102)	890 (200)	13.2 (75.2)	105.7 (4.16)
414 689 500	BL - YL	580 (130)	102.5 (230)	13.5 (76.8)	115.1 (4.53)
414 605 500	YL	455 (102)	1200 (270)	14.8 (84.2)	122 (4.80)
414 748 600	YL - YL	454 (102)	1024 (229.5)	17.3 (98.6)	100.3 (3.95)
414 817 700	BL - GN	579 (130)	1157 (260)	17.5 (99.9)	105.7 (4.16)
414 742 100	YL - GN	455 (102)	1157 (260)	21.3 (121.2)	94 (3.7)
414 817 500	RD - YL	318 (71.3)	1024 (229.5)	21.4 (121.7)	87.9 (3.46)
414 689 400	BL - BL	580 (130)	1290 (290)	21.5 (122.6)	99.8 (3.93)
414 817 900	VI - VI	712 (160)	1420 (319)	21.6 (122.7)	105.7 (4.16)
BL: Blue		GN: Green	OR: Orange	PI: Pink	RD: Red
VI: Violet		WH: White	YL: Yellow		

**NOTE:** TRA clutch springs **cannot** be used in other drive pulleys.



## TRA & TRA Light CLUTCH SPRINGS

- 2 -



A01D11Q

BOMBARDIER NO.	COLOR (1)	SPRING PRESSURE N @ 74 mm (lbf @ 2.9 in) (2)	SPRING PRESSURE N @ 41 mm (lbf @ 1.6 in) (3)	SPRING RATE N/mm (lbf/in)	FREE LENGTH mm (in)
414 818 000	YL - BL	454 (101.7)	1290 (289.1)	25.3 (144.5)	91.0 (3.58)
414 689 200	RD - GN	320 (72)	1157 (260)	25.4 (144.6)	85.9 (3.38)
414 701 000	RD - VI	320 (72)	1420 (320)	33.52 (140.7)	83 (3.27)
414 768 200	GN - BL ①	750 (162)	1290 (290)	12.12 (68.9)	144.3 (5.68)
414 817 800	BL - VI	580 (130)	1420 (320)	25.61 (145.7)	96.6 (3.80)
414 754 200	PI - VI ②	1025 (230)	1425 (320)	12.15 (68.9)	154.7 (6.09)
414 762 800	GN - VI ③	667 (160)	1425 (320)	16.21 (92.2)	126.7 (4.99)
414 756 900	GN - PI ④	667 (160)	1650 (350)	20.21 (115)	116.1 (4.57)
414 916 300	BL - PI ⑤	580 (130)	1650 (350)	29.65 (169.3)	93.5 (3.68)
414 993 000	YL - RD	445 (100)	756 (170)	9.42 (54)	121.1 (4.77)
414 991 400	PI - WH	1023 (230)	1690 (380)	20.2 (115.5)	124.5 (4.90)
BL: Blue	GN: Green	OR: Orange	PI: Pink	RD: Red	
VI: Violet	WH: White	YL: Yellow			

① Formerly Pink - Green

② Formerly Yellow - Red

③ Formerly Green - Yellow

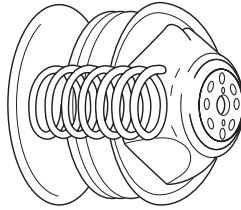
④ Formerly Green

⑤ Formerly Blue

**NOTE:** TRA clutch springs **cannot** be used in other drive pulleys.

## TRA & TRA Light CLUTCH SPRINGS

- 3 -

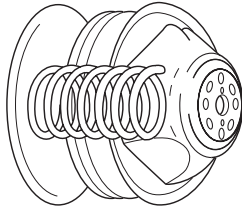


A01D11Q

BOMBARDIER NO.	COLOR (1)	SPRING PRESSURE N @ 74 mm (lbf @ 2.9 in) (2)	SPRING PRESSURE N @ 41 mm (lbf @ 1.6 in) (3)	SPRING RATE N/mm (lbf/in)	FREE LENGTH mm (in)
415 034 900	VI - BL	712 (160)	1290 (290)	17.52 (100)	114.6 (4.512)
415 015 400	VI - GN	712 (160)	1157 (260)	13.48 (76.97)	133.5 (5.256)
414 689 800	RD - RD	320 (72)	770 (173)	13.76 (78.57)	96.3 (3.79)
414 691 500	RD - BL	320 (72)	1290 (290)	29.45 (168.16)	84.1 (3.31)
415 015 300	VI - YL	712 (160)	1023 (230)	9.42 (53.78)	157.9 (6.217)
415 015 200	RD - OR	311 (70)	890 (200)	17.55 (100.21)	91.2 (3.591)
414 678 400	YL - VI	445 (100)	1424 (320)	29.64 (169.2)	88.99 (3.503)
414 949 500	VI - PI	712 (160)	1557 (350)	25.62 (146.29)	101.8 (4.007)
415 074 800	PI - PI	1023 (230)	1557 (350)	16.18 (92.39)	137.2 (5.401)
417 222 004	WH - WH	1112 (250)	1690 (380)	17.53 (100)	137.44 (5.411)
417 222 164	WH - SI	1157 (260)	1868 (420)	21.56 (123.11)	127.6 (5.024)
BL: Blue VI: Violet	GN: Green WH: White	OR: Orange YL: Yellow	PI: Pink	RD: Red SI: Silver	

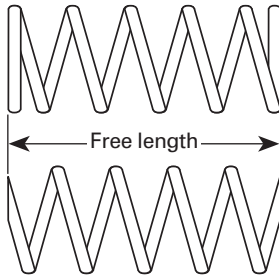
**NOTE:** TRA clutch springs **cannot** be used in other drive pulleys.

## IDENTIFICATION CHARTS



A01D11Q

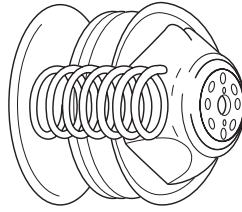
Type "A"



Type "B"

A01D12Q

## ROUND SHAFT CLUTCH SPRING

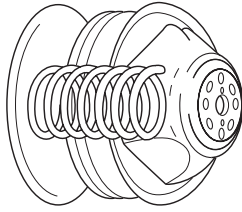


A01D11Q

BOMBARDIER NO.	COLOR	SPRING PRESSURE lbf @ 2.0 in (1)	SPRING PRESSURE lbf @ 1.25 in (2)	SPRING RATE lbf/in (3)	FREE LENGTH in	TYPE
414 258 000	Bronze	41	66	34	3.20	A
414 442 200 ①	Black	75	101	35	4.13	B

① Spring seat differs from original

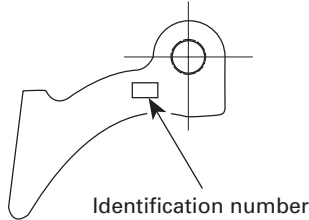
## SQUARE SHAFT CLUTCH SPRINGS



A01D11Q

BOMBARDIER NO.	COLOR	SPRING PRESSURE lbf @ 2.5 in (1)	SPRING PRESSURE lbf @ 1.25 in (2)	SPRING RATE lbf/in (3)	FREE LENGTH in	TYPE
414 196 700	Light Blue	86	135	39	4.69	A
414 406 500	Orange	96	196	80	3.80	A
414 350 800	Pink	130	239	87	4.00	A
414 232 800	Gold	41.5	164	98	2.93	A
414 261 000	Purple	44.5	184.5	112	2.90	A
414 478 400	Black	62	203	112	3.06	A
414 577 200	Light Blue	59.5	N.A.	93	3.14	A
414 232 900	Orange	57	N.A.	87	3.19	A
414 199 500	Yellow	89	N.A.	62	3.94	A
414 196 600	Pink	60	N.A.	26	4.81	A

## TRA CLUTCH RAMPS



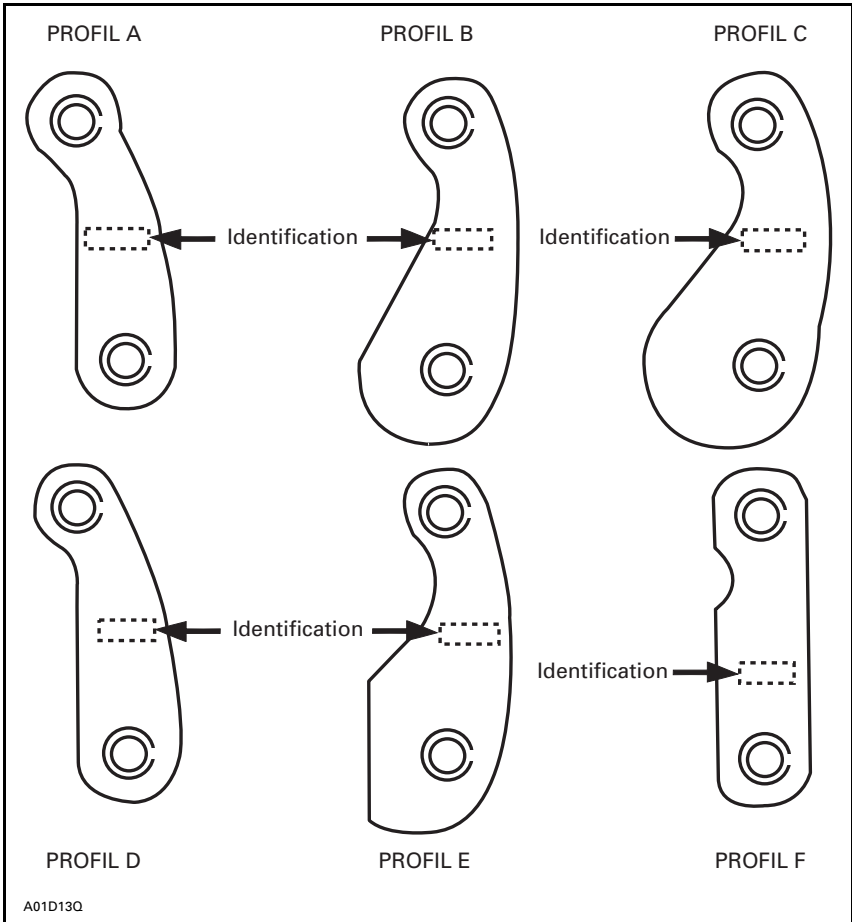
A01D18Q

PART NUMBER	IDENTIFICATION
414 754 300	PX
414 796 000	DX
415 023 800	CF1
417 005 140	140
417 005 143	143
417 005 146	146
417 005 221	221
417 005 223	223
417 005 227	227
417 005 228	228
417 005 280	280
417 005 281	281
417 005 284	284
417 005 285	285
417 005 286	286
417 005 287	287
417 005 289	289
417 005 290	290
417 005 291	291
417 005 291X	291X
417 005 292	292
417 005 292X	292X
417 005 293	293
417 005 293X	293X

PART NUMBER	IDENTIFICATION
417 005 294	294
417 005 294X	294X
417 005 295X	295X
417 005 296X	296X
417 005 297X	297X
417 222 090	295
417 222 089	296
417 222 123	297
420 480 142	142
420 480 144	144
420 480 145	145
420 480 146	146
420 480 149	149
420 480 221	221
420 480 221	223 or 226
420 480 226	226
420 480 227	227
420 480 228	228
420 480 280	280
420 480 281	281
420 480 283	283
504 069 900	0699
504 096 400	FZ
504 259 400	DA9

# DRIVE PULLEY PRESSURE LEVER IDENTIFICATION

- 1 -



## DRIVE PULLEY PRESSURE LEVER IDENTIFICATION

- 2 -

PROFIL	IDENTIFICATION	WEIGHT (g)
A	A-2-S	21.70
A	A-3-S	23.80
A	A-3-S-H	22.10
A	A-4-S	26.16
A	A-5-S	27.05
A	A-6-S	32.30
A	A-8-S	38.45
B	B-1-K-S	24.30
B	B-2-K-S	26.00
B	B-2-K-S-H	26.00
B	B-3-K-S-H	28.30
C	C-3-L-S	33.75
C	C-4-L	36.85
C	C-4-L-S	36.85
C	C-4-L-S-H	34.95

PROFIL	IDENTIFICATION	WEIGHT (g)
C	C-6-L	43.65
C	C-6-L-H	41.14
C	C-7-L	47.35
C	C-7-L-H	44.80
C	C-7-L-X	42.20
C	C-8	55.55
C	C-8-L	50.95
C	C-8-L-H	46.40
C	C-8-M	52.10
C	C-8-M-H	50.71
D	D-2-S	20.70
D	D-4	25.40
E	E-4	32.65
F	F-8	13.90

Calibration washers (2 ramp models)

P/N 391 302 200

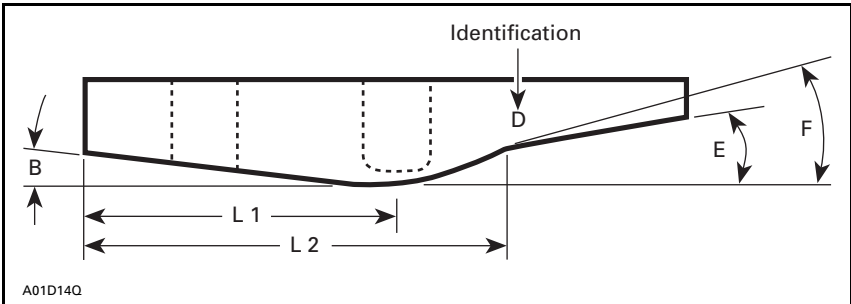
Small calibration washers (3 ramp models)

P/N 391 302 100



# DRIVE PULLEY RAMP IDENTIFICATION

- 1-

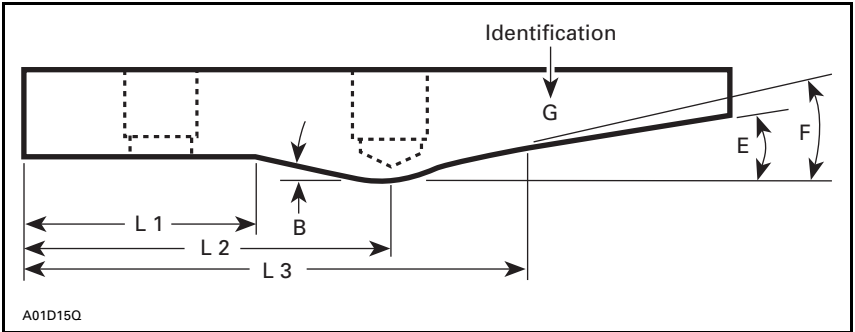


A01D14Q

RAMP NO.	ANGLE B	ANGLE E	ANGLE F	L1	L2	IDENTIFICATION
				mm (in)		
504 248 800	5°	15°	18°	31.12 (1.225)	40.64 (1.600)	<b>D</b>

# DRIVE PULLEY RAMP IDENTIFICATION

-2-

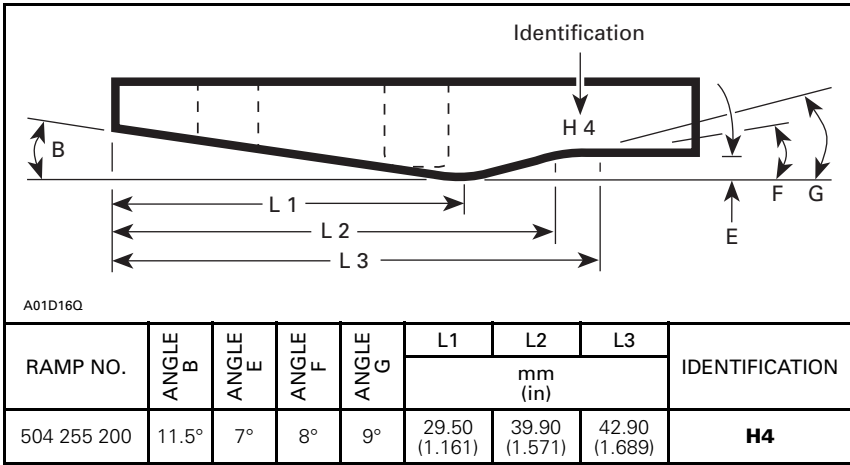


A01D15Q

RAMP NO.	ANGLE B	ANGLE E	ANGLE F	L1	L2	L3	IDENTIFICATION
				mm (in)			
504 250 300	8°	12°	14°	19.00 (.748)	30.50 (1.201)	44.45 (1.750)	<b>G</b>
504 254 200	8°	11°	14°	19.00 (.748)	30.50 (1.201)	43.00 (1.693)	<b>S1</b>

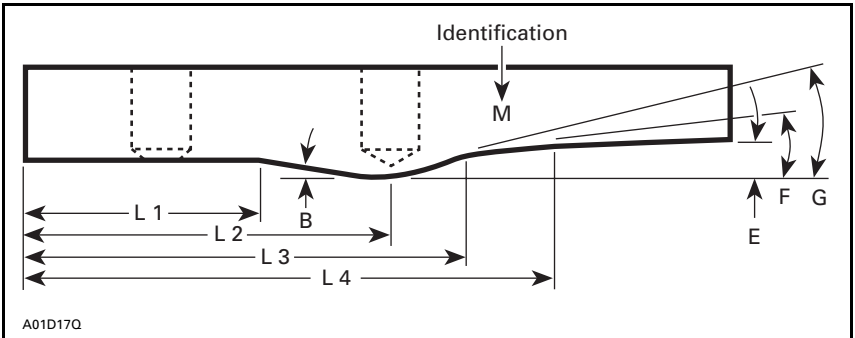
# DRIVE PULLEY RAMP IDENTIFICATION

-3-



# DRIVE PULLEY RAMP IDENTIFICATION

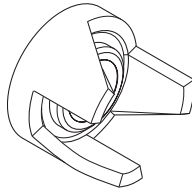
-4-



A01D17Q

RAMP NO.	ANGLE B	ANGLE E	ANGLE F	ANGLE G	L1	L2	L3	L4	IDENTIFICATION
					mm (in)				
504 057 400	8°	8°	10°	13°	19.00 (.748)	30.50 (1.201)	35.50 (1.398)	44.25 (1.742)	<b>M</b>

## DRIVEN PULLEY CAMS



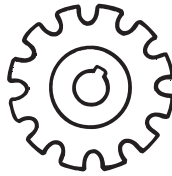
A01D19Q

PART NUMBER	NOTE	CAM ANGLE
504 135 500	2	36°
504 087 400	4	37.8°
504 138 000	4	37.8°
504 092 100	3	40°
504 137 400	2	40°
504 096 000	3	44°
504 134 800	2	44°
504 128 200	1	44°
504 136 300	2	50°
504 140 100	3	50°
504 096 100	3	50°
504 139 000	2	53°
504 140 900	3	47°

**NOTE:** 1 - 87.8 mm dia./6.35 mm (.250 in) keyway  
 2 - 87.8 mm dia./8 mm (.315 in) keyway  
 3 - 88.9 mm dia./8 mm (.315 in) keyway extended center sleeve  
 4 - Movable sleeve

# SPROCKET IDENTIFICATION CHART

- 1 -



A01D1AQ

PART NO.	TEETH	TYPE	SHAFT (in)	SPLINES	PITCH (in)
504 000 800	10	Single	3/4	<b>8</b>	1/2
504 001 300	25	Single	1	<b>10</b>	1/2
504 054 100	12	Single	1	<b>15</b>	1/2
504 088 500	14	Single	1	<b>15</b>	1/2
504 088 600	25	Single	1	<b>15</b>	1/2
504 054 300	27	Single	1	<b>15</b>	1/2
504 010 200	12	Double	1	<b>8</b>	3/8
504 009 100	14	Double	3/4	<b>8</b>	3/8
504 004 400	15	Double	3/4	<b>8</b>	3/8
504 013 000	33	Double	1	<b>10</b>	3/8
504 004 500	34	Double	1	<b>10</b>	3/8
504 012 900	35	Double	1	<b>10</b>	3/8
504 052 200	37	Double	1	<b>10</b>	3/8
504 050 800	38	Double	1	<b>10</b>	3/8
504 052 100	39	Double	1	<b>10</b>	3/8
504 012 400	15	Double	1	<b>15</b>	3/8
504 010 600	16	Double	1	<b>15</b>	3/8
504 008 900	17	Double	1-5/16	<b>15</b>	3/8
504 044 000	21	Triple	1	<b>10</b>	3/8
504 019 300	34	Triple	1	<b>10</b>	3/8
504 052 200	37	Triple	1	<b>10</b>	3/8
504 028 900	38	Triple	1	<b>10</b>	3/8
504 032 100	42	Triple	1	<b>10</b>	3/8
420 434 910	17	Triple	1	<b>15</b>	3/8
504 064 500	46	Triple	1	<b>15</b>	3/8
504 066 700	54	Triple	1	<b>15</b>	3/8

# SPROCKET IDENTIFICATION CHART

- 2 -



A01D1AQ

PART NO.	TEETH	TYPE	SHAFT (in)	SPLINES	PITCH (in)
504 070 400	16	Silent	1	<b>15</b>	3/8
420 434 900	17	Silent	1	<b>15</b>	3/8
504 071 800	17	Silent	1	<b>15</b>	3/8
504 070 100	18	Silent	1	<b>15</b>	3/8
414 680 500	19	Silent	1	<b>15</b>	3/8
504 058 800	20	Silent	1	<b>15</b>	3/8
504 074 800 (heavy duty)	20	Silent	1	<b>15</b>	3/8
504 084 000	21	Silent	1	<b>15</b>	3/8
504 091 200	21	Silent	1	<b>15</b>	3/8
504 096 200	21	Silent	1	<b>15</b>	3/8
504 139 300	21	Silent	1	<b>15</b>	3/8
504 056 000	22	Silent	1	<b>15</b>	3/8
504 074 700 (heavy duty)	22	Silent	1	<b>15</b>	3/8
504 083 500	22	Silent	1	<b>15</b>	3/8
504 091 100	22	Silent	1	<b>15</b>	3/8
504 078 400	23	Silent	1	<b>15</b>	3/8
504 085 400	23	Silent	1	<b>15</b>	3/8
504 087 800	23	Silent	1	<b>15</b>	3/8
504 091 000	23	Silent	1	<b>15</b>	3/8
504 056 100	24	Silent	1	<b>15</b>	3/8
504 078 600	24	Silent	1	<b>15</b>	3/8
504 090 900	24	Silent	1	<b>15</b>	3/8
504 139 700	24	Silent	1	<b>15</b>	3/8
504 084 100	25	Silent	1	<b>15</b>	3/8
504 084 300	25	Silent	1	<b>15</b>	3/8
504 085 200	25	Silent	1	<b>15</b>	3/8
504 055 900	26	Silent	1	<b>15</b>	3/8
504 085 300	26	Silent	1	<b>15</b>	3/8
504 148 400	27	Silent	1	<b>15</b>	3/8
504 148 800	27	Silent	1	<b>15</b>	3/8
504 148 900	27	Silent	1	<b>15</b>	3/8
504 089 000	40	Silent	1	<b>15</b>	3/8
504 070 900	44	Silent	1	<b>15</b>	3/8
504 084 400	44	Silent	1	<b>15</b>	3/8
581 096 800	44	Silent	1	<b>15</b>	3/8
504 088 200	44	Silent	1	<b>15</b>	3/8

# SPROCKET IDENTIFICATION CHART

- 3 -

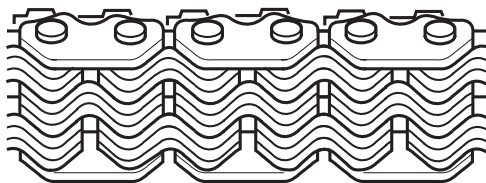


A01D1AQ

PART NO.	TEETH	TYPE	SHAFT (in)	SPLINES	PITCH (in)
504 056 400	38	Silent	1-1/8	<b>17</b>	3/8
504 056 200	40	Silent	1-1/8	<b>17</b>	3/8
504 057 300	44	Silent	1-1/8	<b>17</b>	3/8
504 085 500	44	Silent	1-1/8	<b>17</b>	3/8
504 148 500	43	Silent	1-1/8	<b>17</b>	3/8
504 148 600	43	Silent	1-1/8	<b>17</b>	3/8
504 148 700	43	Silent	1-1/8	<b>17</b>	3/8
414 652 600	44	Silent	1-13/16	<b>29</b>	3/8



## DRIVING CHAINS



A00D10Q

PART NO.	TYPE	PITCH (in)	ROLLER QTY
412 104 800	Single	1/2	62
412 105 400	Single	1/2	62
412 106 300	Single	1/2	62
412 106 200	Single	1/2	64
412 100 400	Single	1/2	66
412 100 100	Single	1/2	85
412 100 200	Single	1/2	88
412 100 900	Double	1/2	60
412 100 800	Double	1/2	67
412 104 600	Double	3/8	86
412 104 100	Double	3/8	88
412 105 100	Double	3/8	92
412 103 200	Triple	3/8	68
412 103 100	Triple	3/8	70
412 103 000	Triple	3/8	72
412 105 200	Triple	3/8	92
420 499 080	Triple	3/8	92
420 499 084	Triple	3/8	96
420 499 087	Triple	3/8	98
412 101 800	Triple	3/8	100
412 101 900	Triple	3/8	102
420 49 082	Triple	3/8	102
412 102 000	Triple	3/8	104
412 105 900	Silent	3/8	70
412 106 800	Silent	3/8	70
504 151 882	Silent	3/8	70
504 151 830	Silent	3/8	72
504 151 883	Silent	3/8	72
412 105 500	Silent	3/8	72 - 11
412 106 700	Silent	3/8	72 - 13
504 151 857	Silent	3/8	74
504 151 859	Silent	3/8	74
412 105 800	Silent	3/8	74 - 11
412 106 900	Silent	3/8	74 - 13
412 107 600	Silent	3/8	76
504 151 856	Silent	3/8	76
412 103 500	Silent	3/8	80
412 103 600	Silent	3/8	82
412 104 900	Silent	3/8	92
412 106 500	Silent	3/8	94
412 106 400	Silent	3/8	96
412 106 600	Silent	3/8	98

# CHAINCASE SPROCKETS/ DRIVE CHAIN LENGTH CONVERSION CHARTS

SAFARI CITATION/E 1989-1990

CITATION/E 1991

TUNDRA/LT 1987 to 1994

ÉLAN 1994

Available Parts

DRIVING CHAIN, SINGLE, 1/2" PITCH			
LINKS	P/N	LINKS	P/N
62	412 104 800 (Citation)	64	412 106 200

UPPER SPROCKET, SINGLE, 1/2" PITCH, 1" SHAFT, 15 SPLINES			
NB OF TEETH	P/N	NB OF TEETH	P/N
12	504 054 100	15	504 054 200
14	504 088 500		

LOWER SPROCKET, SINGLE, 1/2" PITCH, 1" SHAFT, 15 SPLINES			
NB OF TEETH	P/N	NB OF TEETH	P/N
25	504 088 600	27	504 054 300

CHAIN LENGTH CONVERSION CHART		
UPPER SPROCKET	LOWER SPOCKET	
	25	27
12	62	62
14	62	64
15	64	64

SAFARI LC/GLX 1990-1991  
 SAFARI LX/LXE 1990 to 1992  
 SAFARI L/LE/DL 1990 to 1993  
 SCOUT 1991-1992

SAFARI LCE/GLX 1992  
 SAFARI II 1992-1994  
 SAFARI RALLY 1993  
 SAFARI L/DL 1994

Available Parts

DRIVING CHAIN, 3/8" SILENT			
LINKS	P/N	LINKS	P/N
94	412 106 500	98	412 106 600
96	412 106 400		

UPPER SPROCKET, SILENT, 3/8" PITCH, 1" SHAFT, 15 SPLINES			
NB OF TEETH	P/N	NB OF TEETH	P/N
17	504 071 800	20	504 074 800
18	504 070 100	21	504 084 000
19	414 680 500	22	504 074 700

LOWER SPROCKET, SILENT, 3/8" PITCH, 1" SHAFT, 15 SPLINES	
NB OF TEETH	P/N
44	504 070 900

LOWER SPROCKET, SILENT, 3/8" PITCH, 1-13/16" SHAFT, 29 SPLINES	
NB OF TEETH	P/N
44	414 652 600

CHAIN LENGTH CONVERSION CHART	
UPPER SPROCKET	LOWER SPOCKET
17	94
18	94
19	96
20	96
21	96
22	98

Example: A 22 teeth sprocket with a 44 teeth sprocket requires a 98-link chain.

FORMULA MX SERIES 1989 to 1992	MACH 1/Z 1994
FORMULA PLUS SERIES 1989 to 1992	SUMMIT 583/470 1994
FORMULA MACH 1 SERIES 1989 to 1992	MX/Z 1994
FORMULA GRAND TOURING 1993	FORMULA ST/STX/Z 1994
GRAND TOURING/XTC/SE 1994	

Available Parts

DRIVING CHAIN, 3/8" SILENT			
LINKS	P/N	LINKS	P/N
68	412 106 000	72	412 106 700
70	412 105 900	74	412 105 800
72	412 105 500	74	412 106 900

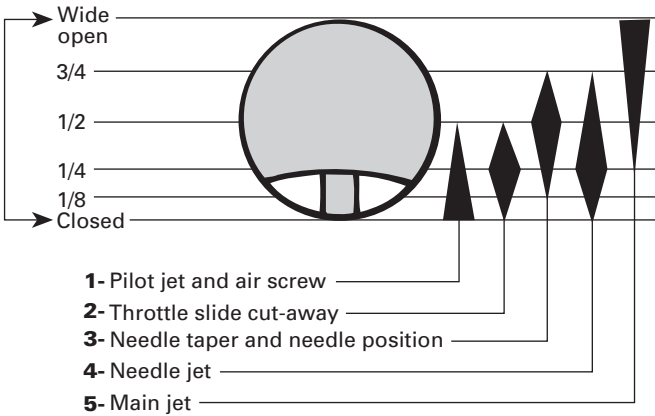
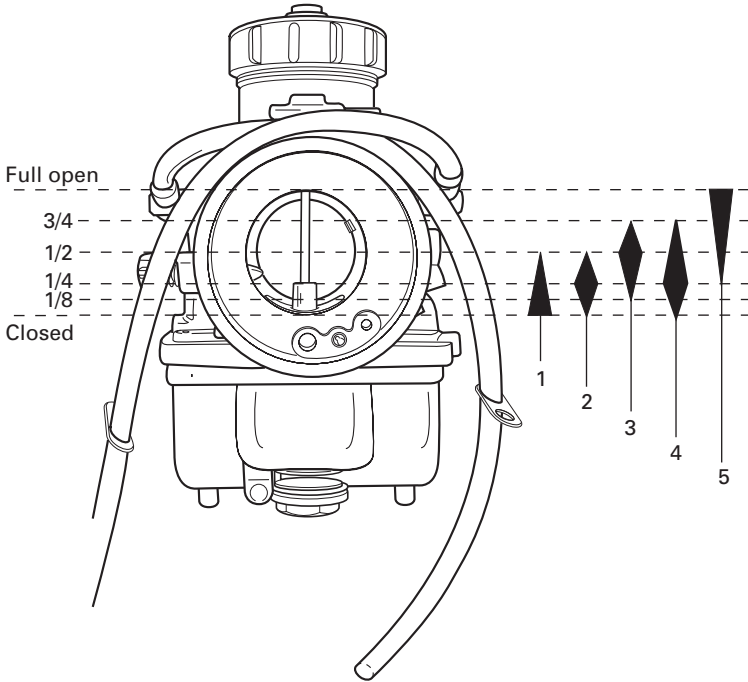
UPPER SPROCKET, SILENT, 3/8" PITCH, 1" SHAFT, 15 SPLINES			
NB OF TEETH	P/N	NB OF TEETH	P/N
20	504 074 800	24	504 078 600
21	504 084 000	25	504 084 100
22	504 074 700	25	504 084 300
23	504 078 400	26	504 055 900
23	504 085 400	26	504 085 300

LOWER SPROCKET, SILENT, 3/8" PITCH, 1-1/8" SHAFT, 17 SPLINES			
NB OF TEETH	P/N	NB OF TEETH	P/N
38	504 056 400	44	504 085 500
40	504 056 200	44	504 084 400 (Grand Touring)
44	504 057 300		

CHAIN LENGTH CONVERSION CHART			
UPPER SPROCKET	LOWER SPOCKET		
	38	40	44
20	68	68	72
21	70	70	72
22	70	70	72
23	70	70	72
24	70	72	74
25	70	72	74
26	70	72	74

Example: A 22 teeth sprocket with a 44 teeth sprocket requires a 72-link chain.

# CARBURETOR THROTTLE SLIDE OPENINGS



The above illustration shows which circuit in the carburetor is in operation at various throttle openings.

A01A1VQ

# CARBURETOR MAIN JETS



A01C2CQ

MIKUNI NO.	BOMBARDIER NO.	MIKUNI NO.	BOMBARDIER NO.
LEAN		LEAN	
#95	404 132 800	#290	404 101 100
#100	404 132 000	#300	404 101 200
#105	404 132 100	#310	404 107 800
#110	404 124 100	#320	404 101 300
#115	404 124 000	#330	404 101 400
#120	404 123 900	#340	404 104 900
#125	404 124 800	#350	404 106 000
#130	404 124 900	#360	404 106 100
#135	404 130 400	#370	404 106 200
#140	404 126 600	#380	404 106 300
#145	404 130 500	#390	404 106 400
#150	404 120 900	#400	404 100 900
#155	404 128 700	#410	404 101 000
#160	404 118 200	#420	404 107 900
#165	404 119 300	#430	404 108 000
#170	404 123 800	#440	404 108 100
#175	404 119 200	#450	404 106 500
#180	404 112 200	#460	404 106 600
#185	404 119 500	#470	404 106 700
#190	404 119 000	#480	404 106 800
#195	404 119 400	#490	404 106 900
#200	404 112 300	#520	404 115 100
#205	404 159 200	#540	404 114 800
#210	404 119 100	#560	404 108 400
#220	404 111 200	#580	404 115 400
#230	404 118 900	#600	404 115 500
#240	404 100 200	#620	404 115 700
#250	404 100 300	#640	404 115 900
#260	404 100 600	#660	404 114 700
#270	404 100 400	#680	404 116 200
#280	404 100 500	#700	404 114 600
RICH		RICH	

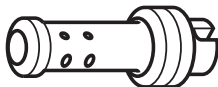
# CARBURETOR NEEDLE JETS



A01C2CQ

MIKUNI NO.	BOMBARDIER NO.	MIKUNI NO.	BOMBARDIER NO.
LEAN		LEAN	
(159) N-2	404 147 700	(224) BB-5	404 113 100
(159) N-4	404 147 300	(224) CC-0	404 116 600
(159) N-6	404 154 300	(224) Z-5	404 127 800
(159) O-0	404 130 200	(224) Z-8	404 148 400
(159) O-2	404 147 900	(224) Z-9	404 153 800
(159) O-8	404 116 900	(286) P-0	404 158 500
(159) P-0	404 107 000	(327) N-7	404 161 839
(159) P-2	404 100 700	(327) O-2	404 161 830
(159) P-4	404 103 600	(327) O-3	404 161 803
(159) P-6	404 110 600	(480) O-4	404 152 100
(159) P-8	404 120 800	(480) O-6	404 148 500
(159) Q-0	404 110 700	(480) O-8	404 148 600
(159) Q-2	404 110 800	(480) O-9	404 161 801
(159) Q-4	404 114 200	(480) P-0	404 133 200
(159) Q-8	404 132 700	(480) P-1	404 159 000
(166) R-0	404 108 700	(480) P-2	404 131 200
(182) O-8	404 118 100	(480) P-3	404 155 000
(224) AA-0	404 133 500	(480) P-4	404 131 500
(224) AA-1	404 155 400	(480) P-5	404 157 300
(224) AA-2	404 148 300	(480) P-6	404 148 000
(224) AA-3	404 151 800	(480) P-7	404 156 900
(224) AA-4	404 147 600	(480) P-8	404 161 700
(224) AA-5	404 126 700	(480) P-9	404 161 805
(224) AA-6	404 148 200	(480) Q-3	404 160 900
(224) AA-7	404 152 800	(480) Q-4	404 149 100
(224) AA-8	404 161 815	(480) Q-6	404 157 600
(224) BB-0	404 114 000	Q-6	404 161 869
RICH		RICH	

# CARBURETOR PILOT JET



A01C2EQ

MIKUNI NO.	BOMBARDIER NO.
LEAN	
#20	404 108 600
#25	404 110 300
#30	404 107 700
#35	404 102 700
#37.5	404 161 846
#40	404 109 100
#45	404 109 400
#50	404 109 500
#55	404 113 900
#60	404 121 000
#75	404 148 100
RICH	



## CARBURETOR JET NEEDLE

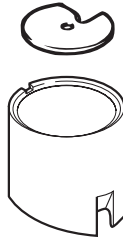


A01C2FQ

MIKUNI NO.	BOMBARDIER NO.
6BGY15	404 157 500
6DEH5	404 161 800
6DEY2	404 157 900
6DEY4	404 159 900
6DGY9	404 161 820
6DH2	404 110 400
6DH3	404 126 900
6DH4	404 101 900
6DH7	404 111 300
6DH8	404 124 400
6DHN43	404 147 100
6DHN44	404 147 200
6DHY48	404 161 500
6DP1	404 118 000
6DP9	404 152 600
6EJ1	404 110 500
6F9	404 109 200
6F1Y5-58	404 161 871
6FEY1	404 156 800
6FJ6	404 131 100
6FJ43	404 157 200
6FL14	404 114 100
7DFY1	404 161 847
7DH2	404 113 200
7DH3	404 127 700
7DL7	404 147 800
7DPI-1	404 157 700
7ECY1	404 157 400
7EDY1	404 156 700
7EGO6	404 147 200
7EJ5	404 133 400
7FHO1	404 133 300
8ABY1-40	404 161 804
8ADY1-41	404 161 829
8DH2	404 139 300

# CARBURETOR THROTTLE SLIDE CUT-AWAY

- 1 -



**WITH RETAINING PLATE**

A02C0NQ

CARBURETOR	CUT-AWAY	BOMBARDIER NO.
TM 38	2.0	404 152 900
	3.0	404 137 700
TMX 34-1	4.0	404 161 867
VM 28	2.0	404 118 300
VM 30	2.0	404 119 600
	2.5	404 117 200
	3.0	404 117 400 ①
VM 32	3.0	404 130 300
	3.5	404 117 100
VM 34	2.0	404 119 600
	3.0	404 117 400 ①
	3.5	404 117 100 ①
VM38	2.0	404 152 900

① USE WITH PACKING P/N 404 117 000

# HIGH ALTITUDE TECHNICAL DATA - 1999 MODELS

1999-MACH Z/MACH Z LT/MACH Z M.H.

## HIGH ALTITUDE KIT (P/N 861 766 600)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Blue 414 768 200	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 295	←	←	←	←	←
Calibration screw position		3	4	4	4	5	6
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		4200	←	←	4500	←	←
Maximum RPM ± 100		8300	←	←	←	←	←

### DRIVEN PULLEY (Mach Z/Z LT)

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	53-44 417 126 387	←	←	←	←	←

### DRIVEN PULLEY (Mach Z R/Z M.H. R/Z LT R)

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Violet 414 978 300	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00	←	←	←	←	←
Cam angle	° (degrees)	47-44 417 126 385	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

**Recommendation (Mach Z/Z R/Z M.H. R):** For use at and above 2400m/8000 ft **or** in deep snow;  
chaincase ratio: 24/43, sprocket 24 teeth, large, (P/N 504 090 900).

**Recommendation (Mach Z LT/Z LT R):** For use at and above 2400m/8000 ft **or** in deep snow;  
chaincase ratio: 23/43, sprocket 23 teeth, large, (P/N 504 085 400).

# 1999-MACH Z/MACH Z LT/MACH Z M.H.

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		310 310 310	290 290 290	270 270 270	250 250 250	230 230 230	210 210 210	PTO CTR MAG
Jet needle		8ADY1-41	←	←	←	←	←	3
Needle position		3	←	2	←	1	←	—
Slide cut-away		2.0	←	←	←	←	←	3
Pilot jet		50	←	←	←	←	←	3
Air screw		4.50	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		O-2 (327)	←	←	←	←	←	3
Float level	mm	21.0	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.30	←	1.40	←	1.50	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		330	310	290	270	240	220	PTO/ CTR/MAG
- 30°C - 20°F		320	300	280	260	230	210	PTO/ CTR/MAG
<b>- 20°C - 4°F</b>		<b>310</b>	<b>290</b>	<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>PTO/ CTR/MAG</b>
- 10°C 14°F		300	280	260	240	220	200	PTO/ CTR/MAG
0°C 32°F		290	270	250	230	210	190	PTO/ CTR/MAG
10°C 50°F		280	260	240	220	200	190	PTO/ CTR/MAG
20°C 70°F		270	250	230	210	200	180	PTO/ CTR/MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MACH 1

## HIGH ALTITUDE KIT (P/N 861 766 700)

### DRIVE PULLEY

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Green/Violet 414 762 800	←	←	←	←	←
	Ramp	Qty 3 x 1 417 005 286	←	←	←	←	←
	Calibration screw position	3	3	4	4	5	6
	Pin	Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
	Engagement RPM ± 100	4200	←	←	4500	←	←
	Maximum RPM ± 100	8300	←	←	←	←	←

### DRIVEN PULLEY (MACH 1)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Beige 414 558 900	←	←	←	←	←
	Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
	Cam angle	° (degrees)	53-44 417 126 387	←	←	←	←

### DRIVEN PULLEY (MACH 1 R)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Violet 414 978 300	←	←	←	←	←
	Spring tension	Kg ± 0.7 lb ± 1.5	0.00 Position 0	←	←	←	←
	Cam angle	° (degrees)	47-44 417 126 385	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** At and above 2400 m/8000 ft **or** in deep snow; chain-case ratio: 23/43, sprocket 23 teeth, large, (P/N 504 085 400).



**CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**CARBURATION**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		300	280	260	240	220	200	3
Jet needle		8AGY1/41	←	←	←	←	←	3
Needle position		4	←	3	←	2	←	—
Slide cut-away		2.0	←	←	←	←	←	3
Pilot jet		50	←	←	←	←	←	3
Air screw		4.00	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		N-7 (327)	←	←	←	←	←	3
Float level	mm	21.0	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	1.5	←	1.4	←	1.5	—

**MAIN JET CHART**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		320	300	280	260	240	220	3
- 30°C - 20°F		310	290	270	250	230	210	3
<b>- 20°C - 4°F</b>		<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>3</b>
- 10°C 14°F		290	270	250	230	210	190	3
0°C 32°F		280	260	240	220	200	190	3
10°C 50°F		270	250	230	220	200	180	3
20°C 70°F		260	240	230	210	190	170	3

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA III 800

## HIGH ALTITUDE KIT (P/N 861 766 800)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Blue 415 034 900	←	←	Green/Blue 414 768 200	←	←
Ramp		Qty 3 x 1 417 005 295	←	←	←	←	←
Calibration screw position		3	3	4	4	5	6
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3800	←	←	4500	←	←
Maximum RPM ± 100		8000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50-47 417 126 339	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** For use at and above 2400m/8000 ft **or** in deep snow; chaincase ratio: 24/43, sprocket 24 teeth, large, (P/N 504 090 900).

# 1999-FORMULA III 800

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	270 290 280	250 270 260	230 250 240	220 230 220	200 210 200	180 190 180	PTO CTR MAG
	Jet needle	8ADY1-41	←	←	←	←	←	3
Needle position	3	←	2	←	1	←	—	—
Slide cut-away	2.0	←	←	←	←	←	←	—
Pilot jet	50	←	←	←	←	←	←	3
Air screw	4.50	←	←	←	←	←	←	3
Valve seat	1.5	←	←	←	←	←	←	3
Needle jet	O-2 (327)	←	←	←	←	←	←	3
Float level	mm	210	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.30	←	1.40	←	1.50	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature	- 40°C - 40°F	290/ 310/300	270/ 290/280	250/ 270/260	240/ 250/240	220/ 230/220	200/ 210/200	PTO/ CTR/MAG
	- 30°C - 20°F	280/ 300/290	260 280/270	240/ 260/250	230/ 240/230	210/ 220/210	190/ 200/190	PTO/ CTR/MAG
- 20°C - 4°F	<b>270/ 290/280</b>	<b>250/ 270/260</b>	<b>230/ 250/240</b>	<b>220/ 230/220</b>	<b>200/ 210/200</b>	<b>180/ 190/180</b>	<b>PTO/ CTR/MAG</b>	
- 10°C 14°F	260/ 280/270	240/ 260/250	220/ 240/230	210/ 220/210	190/ 200/190	170/ 180/170	PTO/ CTR/MAG	
0°C 32°F	250/ 270/260	230/ 250/240	220/ 230/220	200/ 210/200	180/ 190/180	170/ 180/170	PTO/ CTR/MAG	
10°C 50°F	240/ 260/250	220/ 240/230	210/ 220/210	200/ 210/200	180/ 190/180	160/ 170/160	PTO/ CTR/MAG	
20°C 70°F	230/ 250/240	220/ 230/220	210/ 220/210	190/ 200/190	170/ 180/170	150/ 160/150	PTO/ CTR/MAG	

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1999-FORMULA III 700

## HIGH ALTITUDE KIT (P/N 861 766 900)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Blue 415 034 900	←	←	Green/Blue 414 768 200	←	←
Ramp		Qty 3 x 1 417 005 297	←	←	←	←	←
Calibration screw position		3	3	4	3	4	5
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3800	←	←	4500	←	←
Maximum RPM ± 100		8000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50-47 417 126 339	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** For use at and above 2400m/8000 ft **or** in deep snow; chaincase ratio: 23/43, sprocket 23 teeth, large, (P/N 504 085 400).

# 1999-FORMULA III 700



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		290	270	250	230	210	190	PTO/ CTR MAG
Jet needle		6DEH5	←	←	←	←	←	3
Needle position		3	←	2	←	1	←	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet		50	←	←	←	←	←	3
Air screw		2.50	←	←	←	←	←	3
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-1 (480)	←	←	←	←	←	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	←	1.30	1.40	←	1.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		310	290	270	250	230	210	PTO/ CTR/MAG
- 30°C - 20°F		300	280	260	240	220	200	PTO/ CTR/MAG
<b>- 20°C - 4°F</b>		<b>290</b>	<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>190</b>	<b>PTO/ CTR/MAG</b>
- 10°C 14°F		280	260	240	220	200	180	PTO/ CTR/MAG
0°C 32°F		270	250	230	210	190	180	PTO/ CTR/MAG
10°C 50°F		260	240	220	210	190	170	PTO/ CTR/MAG
20°C 70°F		250	230	210	200	180	160	PTO/ CTR/MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA III 600

## HIGH ALTITUDE KIT (P/N 861 767 000)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Blue 414 768 200	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 297	←	←	Qty 3 x 1 417 005 281	←	←
Calibration screw position		3	4	5	4	5	6
Pin		Qty 3 x 1 417 334 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		4200	←	←	4500	←	←
Maximum RPM ± 100		8400	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50-47 417 126 339	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** For use at and above 2400m/8000 ft **or** in deep snow; chaincase ratio: 22/43 with 70 links chain, (P/N 412 106 800), sprocket 22 teeth, large, (P/N 504 083 500).

# 1999-FORMULA III 600

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		270	250	230	210	190	170	3
Jet needle		6DEY2	←	←	←	←	←	3
Needle position		2	←	1	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet		50	←	←	←	←	←	3
Air screw		2.00	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-0 (286)	←	←	←	O-8 (286)	←	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.30	←	1.40	←	1.50	1.60	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		290	270	250	230	210	190	3
- 30°C - 20°F		280	260	240	220	200	180	3
<b>- 20°C - 4°F</b>		<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>190</b>	<b>170</b>	<b>3</b>
- 10°C 14°F		260	240	220	200	180	160	3
0°C 32°F		250	230	210	190	170	150	3
10°C 50°F		240	220	200	180	160	140	3
20°C 70°F		230	210	190	170	150	130	3

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA Z 670/FORMULA DLX 670

## HIGH ALTITUDE KIT (P/N 861 767 100)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Yellow 415 015 300	←	←	←	←	←
Ramp		417 005 286	←	←	←	←	←
Calibration screw position		3	4	5	4	5	6
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3800	←	←	4500	←	←
Maximum RPM ± 100		7700	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 417 126 343	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional Information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at and above 2400 m/8000 ft.

**Recommendation:** At and above 2400 m/8000 ft **or** in deep snow; chain-case ratio: 23/43 with 72 links chain, (P/N 412 106 700), sprocket 23 teeth, large, (P/N 504 085 400).

# 1999-FORMULA Z 670/FORMULA DLX 670

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		310 290	290 270	260 240	240 220	210 200	190 175	PTO MAG
Jet needle		7EDY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		60	←	←	←	←	←	2
Air screw		2.25	←	2.00	1.75	1.50	1.25	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-3 (224)	←	←	AA-1 (224)	←	AA-0 (224)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1700	←	←	←	←	←	—
Idle throttle valve position	mm	2.10	2.15	2.25	2.40	2.55	2.65	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		330 310	310 290	280 260	260 240	230 210	210 190	PTO MAG
- 30°C - 20°F		320 300	300 280	270 250	250 230	220 200	200 180	PTO MAG
<b>- 20°C - 4°F</b>		<b>310 290</b>	<b>290 270</b>	<b>260 240</b>	<b>240 220</b>	<b>210 200</b>	<b>190 175</b>	<b>PTO MAG</b>
- 10°C 14°F		300 280	280 260	250 230	230 210	200 190	185 170	PTO MAG
0°C 32°F		290 270	270 250	240 220	220 200	195 185	175 160	PTO MAG
10°C 50°F		270 250	250 240	230 210	210 195	185 175	170 155	PTO MAG
20°C 70°F		260 240	240 230	220 200	200 185	185 170	160 150	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA Z 583/FORMULA DLX 583

## HIGH ALTITUDE KIT (P/N 861 767 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Blue 415 034 900	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	Qty 3 x 1 417 005 289	←	←
Calibration screw position		3	4	5	3	4	5
Pin		417 004 309	←	←	←	←	←
Engagement RPM ± 100		4100	←	←	←	←	←
Maximum RPM ± 100		7900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 417 126 343	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional Information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at and above 2400 m/8000 ft.

**Recommendation:** (Formula Z 583) at and above 2400 m/8000 ft **or** in deep snow; chaincase ratio: 23/43 with 72 links chain, (P/N 412 106 700), sprocket 23 teeth, large, (P/N 504 085 400).

# 1999-FORMULA Z 583/FORMULA DLX 583

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION (Formula Z 583)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		280 260	260 240	230 210	210 190	190 170	170 150	PTO MAG
Jet needle		7ECY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		60	←	←	←	←	←	2
Air screw		2.0	←	←	←	1.75	1.5	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-2 (224)	←	←	AA-0 (224)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.0	2.10	2.20	2.60	2.70	2.80	—

### MAIN JET CHART (Formula Z 583)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		310 290	280 260	250 230	230 210	210 190	190 170	PTO MAG
- 30°C - 20°F		290 270	270 250	240 220	220 200	200 180	180 160	PTO MAG
<b>- 20°C - 4°F</b>		<b>280 260</b>	<b>260 240</b>	<b>230 210</b>	<b>210 190</b>	<b>190 170</b>	<b>170 150</b>	<b>PTO MAG</b>
- 10°C 14°F		270 250	250 230	220 200	200 180	180 165	165 145	PTO MAG
0°C 32°F		250 230	240 220	210 195	195 175	175 155	155 140	PTO MAG
10°C 50°F		240 220	230 210	200 185	185 165	170 150	155 135	PTO MAG
20°C 70°F		230 210	220 190	195 175	175 160	160 145	145 130	PTO MAG



# 1999-FORMULA Z 583/FORMULA DLX 583

## CARBURATION (Formula DLX 583)

Altitude Calibration		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		270 260	250 240	230 220	210 200	195 185	180 170	PTO MAG
Jet needle		6DEY4	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		2.0	1.75	1.5	←	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-7 (480)	←	←	P-5 (480)	←	P-4 (480)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.0	2.1	2.2	2.3	2.4	2.5	—

## MAIN JET CHART (Formula DLX 583)

Altitude Temperature		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
- 40°C - 40°F		290 280	270 260	250 240	230 220	210 200	195 185	PTO MAG
- 30°C - 20°F		280 270	260 250	240 230	220 210	200 195	185 175	PTO MAG
<b>- 20°C - 4°F</b>		<b>270 260</b>	<b>250 240</b>	<b>230 220</b>	<b>210 200</b>	<b>195 185</b>	<b>175 170</b>	<b>PTO MAG</b>
- 10°C 14°F		260 250	240 230	220 210	200 195	180 170	155 150	PTO MAG
0°C 32°F		240 230	230 220	210 200	195 185	170 165	150 145	PTO MAG
10°C 50°F		230 220	220 210	200 195	185 180	165 160	145 140	PTO MAG
20°C 70°F		220 210	210 200	195 185	180 170	160 150	140 130	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA Z 500/DELUXE 500 LC

## HIGH ALTITUDE KIT (P/N 861 767 300)

### DRIVE PULLEY (Formula DLX 500 LC)

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Violet/Blue 415 034 900	←	←	←	←
Ramp	Qty 3 x 1 417 005 286	←	←	Qty 3 x 1 417 005 281	←	←
Calibration screw position	2	3	4	4	5	6
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	3800	←	←	←	←	←
Maximum RPM ± 100	7800	←	←	←	←	←

### DRIVE PULLEY (Formula Z 500)

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Violet/Yellow 415 015 300	←	←	Green/Blue 414 768 200	←
Ramp	Qty 3 x 1 417 005 281	←	←	←	←	←
Calibration screw position	2	3	4	4	5	6
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	4100	←	←	4300	←	←
Maximum RPM ± 100	7800	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige 414 558 900	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	° (degrees)	50° 417 126 343	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA Z 500/DELUXE 500 LC

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		300 280	280 260	260 240	240 210	220 200	200 180	PTO MAG
Jet needle		6DGY9	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	55	←	←	2
Air screw		2.00	←	←	2.50	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		Q-3 (480)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.80	1.90	2.10	2.30	2.40	2.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C	320	300	280	260	240	220	200	PTO MAG
- 40°F	300	280	260	230	220	200	200	
- 30°C	310	290	270	250	230	210	190	PTO MAG
- 20°F	290	270	250	220	210	190	190	
<b>- 20°C</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>PTO MAG</b>
<b>- 4°F</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>210</b>	<b>200</b>	<b>180</b>	<b>180</b>	
- 10°C	290	270	250	230	210	190	170	PTO MAG
14°F	270	250	230	200	190	170	170	
0°C	280	260	240	220	200	180	160	PTO MAG
32°F	260	240	220	190	180	160	160	
10°C	270	250	230	210	190	170	150	PTO MAG
50°F	250	230	210	180	170	150	150	
20°C	260	240	220	200	180	160	140	PTO MAG
70°F	240	220	200	170	160	140	140	

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA DELUXE 500/FORMULA SL

## HIGH ALTITUDE KIT (P/N 861 767 400)

### DRIVE PULLEY

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Yellow/Red 414 993 000	←	Blue/Yellow 414 689 500	←	←	←
	Ramp	Qty 3 417 005 291X	←	Qty 3 417 005 292X	←	←	←
	Calibration screw position	3	4	2	3	4	5
	Pin	Qty 3 417 004 309	←	←	←	←	←
	Engagement RPM ± 100	3300	←	3600	←	←	←
	Maximum RPM ± 100	7000	←	←	←	←	←

### DRIVEN PULLEY (Formula SL)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←	←
Cam angle	° (degrees)	44 417 126 333	←	←	←	←	←

### DRIVEN PULLEY (Formula Deluxe 500)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Yellow 415 092 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00 Position 3	←	←	←	←	←
Cam angle	° (degrees)	47 - 44 417 124 700	←	←	←	←	←

### REVERSE CONNECTOR (Formula Deluxe 500)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Reverse connector		515 174 800	←	←	←	515 174 700	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA DELUXE 500/FORMULA SL

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Calibration		Altitude						Qty
		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Main jet		180 170	170 160	160 150	150 140	140 130	130 120	PTO MAG
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.875	←	←	1.5	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.85	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

### MAIN JET CHART

Calibration		Altitude						
		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
- 40°C - 40°F		200 190	190 180	175 165	165 155	155 145	140 130	PTO MAG
- 30°C - 20°F		190 180	180 170	165 155	155 145	145 135	135 125	PTO MAG
<b>- 20°C - 4°F</b>		<b>180 170</b>	<b>170 160</b>	<b>160 150</b>	<b>150 140</b>	<b>140 130</b>	<b>130 120</b>	<b>PTO MAG</b>
- 10°C 14°F		170 160	160 150	155 145	145 135	135 125	125 115	PTO MAG
0°C 32°F		165 155	155 145	150 140	140 130	130 120	120 110	PTO MAG
10°C 50°F		160 150	150 140	140 130	130 120	125 115	115 105	PTO MAG
20°C 70°F		155 145	145 135	135 125	125 115	120 110	110 100	PTO MAG

# 1999-FORMULA S/DELUXE 380

## HIGH ALTITUDE KIT (P/N 861 767 500)

### DRIVE PULLEY

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Red/Blue 417 118 400	←	←	←	←	←
	Block	Qty 3 x 1 417 118 100	←	←	←	←	←
	Weight	Qty 3 x 1 417 120 400	←	Qty 3 x 5 417 114 400	Qty 3 x 4 ←	Qty 3 x 3 ←	Qty 3 x 2 ←
	Capsule	Qty 3 x 1 417 114 500	←	←	←	←	←
	Engagement RPM ± 100	3500	←	←	←	←	←
	Maximum RPM ± 100	6900	←	←	←	←	←

### DRIVEN PULLEY (Formula S)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←	←
Cam angle	° (degrees)	44 417 126 333	←	←	←	←	←

### DRIVEN PULLEY (Formula Deluxe 380)

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Clutching	Spring	Yellow 417 092 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00 Position 3	←	←	←	←	←
Cam angle	° (degrees)	47 - 44 417 124 700	←	←	←	←	←

### ELECTRONIC REVERSE (Formula Deluxe 380)

	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Reverse connector	515 174 800	←	←	←	515 174 700	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-FORMULA S/DELUXE 380



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
<b>Calibration</b>								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25	←	←	1.5	←	←	2
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.7	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
<b>Temperature</b>								
-40°C	-40°F	150	145	140	135	125	120	2
-30°C	-20°F	145	140	135	130	120	115	2
<b>-20°C</b>	<b>-4°F</b>	<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
-10°C	14°F	135	130	125	120	110	105	2
0°C	32°F	130	125	120	115	105	100	2
10°C	50°F	125	120	115	110	100	95	2
20°C	70°F	120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MX Z 670 HO/HO T.H.

## HIGH ALTITUDE KIT (P/N 861 767 600)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	Green/Blue 414 768 200	←	←	← Green/Pink 414 756 900	←	←
Ramp	415 005 297	←	←	←	←	←
Calibration screw position	2	3	4	4	5	6
Pin	Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100	4200	←	←	4500	←	←
Maximum RPM ± 100	8000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring	Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	° (degrees)	53 - 47 417 126 380	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** At and above 2400 m/8000 ft **or** in deep snow; chain-case ratio: 23/43 with 72 links chain, (P/N 412 106 700), sprocket 23 teeth, large, (P/N 504 085 400).



# 1999-MX Z 670 HO/HO T.H.

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		340 310	←	←	←	←	←	PTO MAG
Jet needle		7ECY1	←	←	←	←	←	2
Needle position		3	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		55	←	←	←	←	←	2
Air screw		1.75	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	—
Needle jet		AA-4 (224)	←	←	←	←	←	2
Float level	mm	22.9	←	←	←	←	←	—
Idle	RPM ± 200	1700	←	←	←	←	←	—
Idle throttle valve position	mm	1.9	2.1	2.2	2.3	2.4	2.5	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		360 330	←	←	←	←	←	PTO MAG
- 30°C - 20°F		350 320	←	←	←	←	←	PTO MAG
<b>- 20°C - 4°F</b>		<b>340 310</b>	←	←	←	←	←	<b>PTO MAG</b>
- 10°C 14°F		340 310	←	←	←	←	←	PTO MAG
0°C 32°F		340 310	←	←	←	←	←	PTO MAG
10°C 50°F		340 310	←	←	←	←	←	PTO MAG
20°C 70°F		340 310	←	←	←	←	←	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MX Z 600

## HIGH ALTITUDE KIT (P/N 861 767 700)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	Violet/Yellow 415 015 300	←	←	Blue/Orange 414 639 000	←	←
Ramp	Qty 3 x 1 417 005 281	←	←	←	←	←
Calibration screw position	3	4	5	3	4	5
Pin	Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100	3800	←	←	←	←	←
Maximum RPM ± 100	8000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring	Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	° (degrees)	50° 417 126 343	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** From 2400 m (8000 ft) and above, or in deep snow, install a large 22 teeth sprocket (P/N 504 083 500) to set chain case ratio to 23/43 whit 70 links chain.

# 1999-MX Z 600

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Calibration		Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet			280 280	270 270	250 250	230 230	220 220	210 210	PTO MAG
Jet needle			7DfY1	←	←	←	←	←	2
Needle position			3	←	←	2	←	←	—
Slide cut-away			2.5	←	←	←	←	←	2
Pilot jet			37.5	←	←	45	←	←	2
Air screw			0.5	←	←	←	←	←	—
Valve seat			1.5 (V)	←	←	←	←	←	2
Needle jet			Z-9 (224)	←	←	←	←	←	2
Float level	mm		22.9	←	←	←	←	←	—
Idle	RPM ± 200		1600	←	←	←	←	←	—
Idle throttle valve position	mm		1.3	1.4	1.5	1.7	1.8	1.9	—

### MAIN JET CHART

Temperature		Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
- 40°C - 40°F			300 300	290 290	270 270	250 250	240 240	230 230	PTO MAG
- 30°C - 20°F			290 290	280 280	260 260	240 240	230 230	220 220	PTO MAG
<b>- 20°C - 4°F</b>			<b>280 280</b>	<b>270 270</b>	<b>250 250</b>	<b>230 230</b>	<b>220 220</b>	<b>210 210</b>	<b>PTO MAG</b>
- 10°C 14°F			270 270	260 260	240 240	220 220	210 210	205 205	PTO MAG
0°C 32°F			260 260	250 250	230 230	210 210	205 205	200 200	PTO MAG
10°C 50°F			250 250	240 240	220 220	205 205	200 200	195 195	PTO MAG
20°C 70°F			240 240	230 230	210 210	200 200	195 195	190 190	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MX Z 500

## HIGH ALTITUDE KIT (P/N 861 767 800)

### DRIVE PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Sea Level</b>	<b>600 m</b> <b>2000 ft</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Spring	Violet/Yellow 415 015 300	←	←	Green/Blue 414 768 200	←	←
Ramp	417 005 281	←	←	←	←	←
Calibration screw position	2	3	4	4	5	6
Pin	417 004 309	←	←	←	←	←
Engagement RPM ± 100	4100	←	←	4300	←	←
Maximum RPM ± 100	7800	←	←	←	←	←

### DRIVEN PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Sea Level</b>	<b>600 m</b> <b>2000 ft</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2000 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Spring	Beige 415 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	° (degrees)	50° 417 126 343	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MX Z 500



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		300 280	280 260	260 240	240 210	220 200	200 180	PTO MAG
Jet needle		6DGY9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	45	←	←	2
Air screw		2.5	←	←	3.0	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		Q-4 (480)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.8	←	2.1	2.2	2.3	2.4	—

### MAIN JET CHART

Altitude Temperature		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
- 40°C	- 40°F	320	300	280	260	240	220	PTO MAG
		300	280	260	230	220	200	
- 30°C	- 20°F	310	290	270	250	230	210	PTO MAG
		290	270	250	220	210	190	
- 20°C	- 4°F	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>PTO MAG</b>
		<b>280</b>	<b>260</b>	<b>240</b>	<b>210</b>	<b>200</b>	<b>180</b>	
- 10°C	14°F	290	270	250	230	210	190	PTO MAG
		270	250	230	200	190	170	
0°C	32°F	280	260	240	220	200	180	PTO MAG
		260	240	220	190	180	160	
10°C	50°F	270	250	230	210	190	170	PTO MAG
		250	230	210	180	170	150	
20°C	70°F	260	240	220	200	180	160	PTO MAG
		240	220	200	170	160	140	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MX Z 440

## HIGH ALTITUDE KIT (P/N 861 767 900)

### DRIVE PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Blue/Yellow 414 689 500	←	Blue/Green 414 817 700	←	←
Ramp	Qty 3 x 1 417 005 291X	←	Qty 3 x 1 417 005 292X	←	←	←
Calibration screw position	3	4	2	3	4	5
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	3700	←	←	←	←	←
Maximum RPM ± 100	7000	←	←	←	←	←

### DRIVEN PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Orange 414 505 800	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←
Cam angle	° (degrees)	47 417 126 337	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MX Z 440



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		205 195	195 185	185 175	175 165	165 155	155 145	PTO MAG
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	1	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		35	←	←	←	←	←	2
Air screw		1.5	←	←	1.0	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.8	1.9	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		215 205	205 195	195 185	185 175	180 170	170 160	PTO MAG
- 30°C - 20°F		210 200	200 190	190 180	180 170	170 160	160 150	PTO MAG
<b>- 20°C - 4°F</b>		<b>205 195</b>	<b>195 185</b>	<b>185 175</b>	<b>175 165</b>	<b>165 155</b>	<b>155 145</b>	<b>PTO MAG</b>
- 10°C 14°F		200 190	190 180	180 170	170 160	160 150	150 140	PTO MAG
0°C 32°F		195 185	185 175	175 165	165 155	155 145	145 135	PTO MAG
10°C 50°F		185 175	175 165	165 155	155 145	145 135	140 130	PTO MAG
20°C 70°F		180 170	170 160	160 150	150 140	140 130	135 125	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-GRAND TOURING SE

## HIGH ALTITUDE KIT (P/N 861 768 000)

### DRIVE PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Yellow/ Orange 414 689 700	←	←	Violet/ Yellow 415 015 300	←	←
Ramp		Qty 3 x 1 417 005 297	←	←	←	←	←
Calibration screw position		3	4	5	4	5	6
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3300	←	←	4200	←	←
Maximum RPM ± 100		8000	←	←	←	←	←

### DRIVEN PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Violet 414 978 300	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00	←	←	←	←	←
Cam angle	° (degrees)	47-44 417 126 385	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** At and above 2400 m/8000 ft **or** in deep snow; chaincase ratio: 22/43 with 70 links chain, (P/N 412 106 800), sprocket 22 teeth, large, (P/N 504 083 500).



# 1999-GRAND TOURING SE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Calibration		Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
		Sea Level							
Main jet			270 290 280	←	←	←	←	←	PTO CTR MAG
Jet needle			8ADY1-41	←	←	←	←	←	3
Needle position			3	←	←	←	←	←	—
Slide cut-away			2.0	←	←	←	←	←	3
Pilot jet			50	←	←	←	←	←	3
Air screw			4.50	←	←	←	←	←	3
Valve seat			1.5	←	←	←	←	←	3
Needle jet			O-2 (327)	←	←	←	←	←	3
Float level	mm		21.0	←	←	←	←	←	—
Idle	RPM ± 200		1800	←	←	←	←	←	—
Idle throttle valve position	mm		1.30	←	←	1.40	←	1.50	—

# 1999-GRAND TOURING SE

## MAIN JET CHART

Altitude Temperature	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C - 40°F	290 310 300	←	←	←	←	←	PTO CTR MAG
- 30°C - 20°F	280 300 290	←	←	←	←	←	PTO CTR MAG
<b>- 20°C - 4°F</b>	<b>270 290 280</b>	←	←	←	←	←	<b>PTO CTR MAG</b>
- 10°C 14°F	270 290 280	←	←	←	←	←	PTO CTR MAG
0°C 32°F	270 290 280	←	←	←	←	←	PTO CTR MAG
10°C 50°F	270 290 280	←	←	←	←	←	PTO CTR MAG
20°C 70°F	270 290 280	←	←	←	←	←	PTO CTR MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-GRAND TOURING 700

## HIGH ALTITUDE KIT (P/N 861 768 100)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Yellow/Red 414 993 000	←	←	Violet/Yellow 415 015 300	←	←
Ramp		Qty 3 x 1 417 005 285	←	←	←	←	←
Calibration screw position		4	5	6	4	5	6
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3300	←	←	4200	←	←
Maximum RPM ± 100		8000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Violet 414 978 300	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00	←	←	←	←	←
Cam angle	° (degrees)	47-44 417 126 385	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** At and above 2400 m/8000 ft **or** in deep snow; chaincase ratio: 22/43 with 70 links chain, (P/N 412 106 800), sprocket 22 teeth, large, (P/N 504 083 500).

# 1999-GRAND TOURING 700

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	PTO CTR MAG
Calibration								
Main jet		290	290	290	290	290	290	
Jet needle		6DEH5	←	←	←	←	←	—
Needle position		3	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet		50	←	←	←	←	←	—
Air screw		2.50	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	—
Needle jet		P-1 (480)	←	←	←	←	←	—
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	←	1.30	1.40	←	1.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	PTO CTR MAG
Temperature								
- 40°C - 40°F		310	←	←	←	←	←	PTO CTR MAG
- 30°C - 20°F		300	←	←	←	←	←	PTO CTR MAG
- 20°C - 4°F		<b>290</b>	←	←	←	←	←	<b>PTO CTR MAG</b>
- 10°C 14°F		290	←	←	←	←	←	PTO CTR MAG
0°C 32°F		290	←	←	←	←	←	PTO CTR MAG
10°C 50°F		290	←	←	←	←	←	PTO CTR MAG
20°C 70°F		290	←	←	←	←	←	PTO CTR MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-GRAND TOURING 583

## HIGH ALTITUDE KIT (P/N 861 768 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Red/Orange 415 015 200	←	←	Violet/Blue 415 034 900	←	←	1
Ramp		Qty 3 x 1 417 005 285	←	←	Qty 3 x 1 417 005 289	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		417 004 309	←	←	←	←	←	3
Engagement RPM ± 100		3100	←	←	4200	←	←	—
Maximum RPM ± 100		7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47 417 126 337	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at 2400 m/8000 ft.

# 1999-GRAND TOURING 583

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		270 260	250 240	230 220	210 200	195 185	180 170	PTO MAG
Jet needle		6DEY4	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		2.0	1.75	1.5	←	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-7 (480)	←	←	P-5 (480)	←	P-4 (480)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.00	2.10	2.20	2.30	2.40	2.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
-40°C	290	270	250	230	210	195	PTO	MAG
-40°F	280	260	240	220	200	185	MAG	
-30°C	280	260	240	220	200	185	PTO	MAG
-20°F	270	250	230	210	195	175	MAG	
<b>-20°C</b>	<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>195</b>	<b>175</b>	<b>PTO</b>	<b>MAG</b>
<b>-4°F</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>185</b>	<b>170</b>	<b>MAG</b>	
-10°C	260	240	220	200	180	155	PTO	MAG
14°F	250	230	210	195	170	150	MAG	
0°C	250	230	210	195	170	150	PTO	MAG
32°F	240	220	200	185	165	145	MAG	
10°C	240	220	200	185	165	145	PTO	MAG
50°F	230	210	195	180	160	140	MAG	
20°C	230	210	195	180	160	140	PTO	MAG
70°F	220	200	185	170	150	130	MAG	

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1999-GRAND TOURING 500

## HIGH ALTITUDE KIT (P/N 861 768 300)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Blue/Green 414 817 700	←	←	Blue/Blue 414 689 400	←	←
Ramp		417 005 228	←	←	←	←	←
Calibration screw position		2	3	4	4	5	6
Pin		417 004 309	←	←	←	←	←
Engagement RPM ± 100		3600	←	←	←	←	←
Maximum RPM ± 100		7800	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	44 417 126 333	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1999-GRAND TOURING 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		300 280	280 260	260 240	240 210	220 200	200 180	PTO MAG
Jet needle		6DGY9	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	55	←	←	2
Air screw		2.0	←	←	2.50	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		Q-3 (480)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.80	1.90	2.10	2.30	2.40	2.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C	320	300	280	260	240	220	200	PTO MAG
- 40°F	300	280	260	230	220	200	200	
- 30°C	310	290	270	250	230	210	190	PTO MAG
- 20°F	290	270	250	220	210	190	190	
<b>- 20°C</b>	300	280	260	<b>240</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>PTO MAG</b>
<b>- 4°F</b>	280	260	240	<b>210</b>	<b>200</b>	<b>180</b>	<b>180</b>	
- 10°C	290	270	250	230	210	190	170	PTO MAG
14°F	270	250	230	200	190	170	170	
0°C	280	260	240	220	200	180	160	PTO MAG
32°F	260	240	220	190	180	160	160	
10°C	270	250	230	210	190	170	150	PTO MAG
50°F	250	230	210	180	170	150	150	
20°C	260	240	220	200	180	160	140	PTO MAG
70°F	240	220	200	170	160	140	140	

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.



# 1999-TOURING SLE/SKANDIC 500

## HIGH ALTITUDE KIT (P/N 861 768 400)

### DRIVE PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Red/Red 414 689 800	←	Yellow/Green 414 742 100	←	←
Ramp ①	Qty 3 x 1 417 005 291X	←	Qty 3 x 1 417 005 284	←	←	←
Calibration screw position	3	4	2	3	4	5
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	2900	←	3300	←	←	←
Maximum RPM ± 100	7000	←	←	←	←	←

① NOTE: On Skandic 500, the part number of the ramp is 417 005 292X.

### DRIVEN PULLEY

Clutching \ Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
		Spring	Yellow 415 092 800	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00 Position 3 0.00	←	←	←	←	←
Cam angle	° (degrees)	47 - 44 417 124 700	←	←	←	←	←

### ELECTRONIC REVERSE

	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Reverse connector	515 174 800	←	←	←	515 174 700	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-TOURING SLE/SKANDIC 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty	
<b>Calibration</b>	Main jet	180 170	170 160	160 150	150 140	140 130	130 120	PTO MAG	
	Jet needle	6DH2	←	←	←	←	←	2	
	Needle position	3	←	←	←	←	←	—	
	Slide cut-away	2.5	←	←	←	←	←	2	
	Pilot jet	40	←	←	45	←	←	2	
	Air screw	1.88	←	←	0.750	←	←	—	
	Valve seat	1.5	←	←	←	←	←	2	
	Needle jet	P-0 (159)	←	←	←	←	←	2	
	Float level	mm	23.9	←	←	←	←	←	—
	Idle	RPM ± 200	1650	←	←	1550	←	←	—
	Idle throttle valve position	mm	1.5	1.8	2.1	2.4	2.5	2.6	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
<b>Calibration</b>	- 40°C	200	190	175	165	155	140	PTO MAG
	- 40°F	190	180	165	155	145	130	
<b>Calibration</b>	- 30°C	190	180	165	155	145	135	PTO MAG
	- 20°F	180	170	155	145	135	125	
<b>Calibration</b>	<b>- 20°C</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>PTO</b> <b>MAG</b>
	<b>- 4°F</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>120</b>	
<b>Calibration</b>	- 10°C	170	160	155	145	135	125	PTO MAG
	14°F	160	150	145	135	125	115	
<b>Calibration</b>	0°C	165	155	150	140	130	120	PTO MAG
	32°F	155	145	140	130	120	110	
<b>Calibration</b>	10°C	160	150	140	130	125	115	PTO MAG
	50°F	150	140	130	120	115	105	
<b>Calibration</b>	20°C	155	145	135	125	120	110	PTO MAG
	70°F	145	135	125	115	110	100	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-TOURING LE

## HIGH ALTITUDE KIT (P/N 861 768 500)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	Red/Yellow 414 817 500	←	Yellow/Green 414 742 100	←	←	←
Ramp	Qty 3 x 1 417 005 284	←	←	←	←	←
Calibration screw position	2	3	2	3	4	5
Pin	417 004 309	←	←	←	←	←
Engagement RPM ± 100	2900	←	3300	←	←	←
Maximum RPM ± 100	7000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	Yellow 415 092 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.0 Position 3	←	←	←	←
Cam angle	(degrees) 47 - 44	417 124 700	←	←	←	←

### ELECTRONIC REVERSE

	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Reverse connector	515 174 800	←	←	←	515 174 700	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-TOURING LE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		205 195	195 185	185 175	175 165	165 155	155 145	PTO MAG
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	1	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		35	←	←	←	←	←	2
Air screw		1.50	←	←	1.0	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.8	1.9	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
-40°C	215	205	195	185	180	170	170	PTO
-40°F	205	195	185	175	170	160	160	MAG
-30°C	210	200	190	180	180	170	160	PTO
-20°F	200	190	180	170	170	160	150	MAG
<b>-20°C</b>	205	195	185	175	165	155	155	<b>PTO</b>
<b>-4°F</b>	195	185	175	165	155	145	145	<b>MAG</b>
-10°C	200	190	180	170	170	160	150	PTO
14°F	190	180	170	160	160	150	140	MAG
0°C	195	185	175	175	165	155	145	PTO
32°F	185	175	165	165	155	145	135	MAG
10°C	185	175	165	165	155	145	140	PTO
50°F	175	165	155	155	145	135	130	MAG
20°C	180	170	160	150	150	140	135	PTO
70°F	170	160	150	140	140	130	125	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-TOURING E/SKANDIC 380

## HIGH ALTITUDE KIT (P/N 861 768 600)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Green/Green on Violet 417 125 300	←	Red/Blue on Violet 417 118 400	←	←
Block	Qty 3 x 1 417 118 100	←	←	←	←	←
Weight	Qty 3 x 1 417 120 400	←	Qty 3 x 5 417 114 400	Qty 3 x 4 ←	Qty 3 x 3 ←	Qty 3 x 2 ←
Capsule	Qty 3 x 1 417 114 500	←	←	←	←	←
Engagement RPM ± 100	2500	←	3100	←	←	←
Maximum RPM ± 100	6900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
		Spring	Yellow 415 092 800	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.0 Position 3 0.0	←	←	←	←	←
Cam angle	° (degrees)	47 - 44 417 124 700	←	←	←	←	←

### ELECTRONIC REVERSE

	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Reverse connector	515 174 800	←	←	←	515 174 700

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-TOURING E/SKANDIC 380

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
<b>Calibration</b>								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25	←	←	1.5 ①	←	←	2
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.7	←	←	—

① On Skandic 380, from 1800 m (4000 ft) and over, carburetor air screw must be positioned at 0.5 turn on PTO side and at 1.0 turn on MAG side.

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
<b>Temperature</b>								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is

repeated.

## 1999-TUNDRA/TUNDRA R

### HIGH ALTITUDE KIT (P/N 861 768 900)

#### DRIVE PULLEY (Tundra/Tundra R)

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Turquoise 417 115 900	←	Yellow/Green on Violet 417 118 500	←	←	←
Block		Qty 3 x 1 417 114 300	←	←	←	←	←
Weight		—	—	Qty 3 x 2 417 114 400	Qty 3 x 1 ←	Qty 3 x 1 ←	—
Capsule		Qty 3 x 2 417 114 500	←	Qty 3 x 1 ←	Qty 3 x 2 ←	Qty 3 x 2 ←	Qty 3 x 3 ←
Engagement RPM ± 100		3100	←	3500	←	←	←
Maximum RPM ± 100		6900	←	←	←	←	←

#### DRIVEN PULLEY (Tundra R)

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Yellow 415 094 300	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00 Position3	←	←	←	←	←
Cam angle	° (degrees)	37.8 417 126 350	←	←	←	←	←

#### DRIVEN PULLEY (Tundra)

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		White 414 509 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	3.6 7.9	←	5.9 13.0	←	←	←
Cam angle	° (degrees)	37.8 504 081 300	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-TUNDRA/TUNDRA R

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		190	185	175	150	140	130	1
Jet needle		6DH4	←	←	←	←	←	1
Needle position		2	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	1
Pilot jet		40	←	←	35	←	←	1
Air screw		1.0	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	1
Needle jet		O-8 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—

### (Tundra Only)

Idle	RPM ± 200	1200	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.5	←	←	—

### (Tundra R Only)

Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	←	1.7	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
-40°C	-40°F	210	200	190	170	160	150	1
-30°C	-20°F	200	190	180	160	150	140	1
<b>-20°C</b>	<b>-4°F</b>	<b>190</b>	<b>185</b>	<b>175</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>1</b>
-10°C	14°F	185	180	170	145	135	125	1
0°C	32°F	180	175	165	140	130	120	1
10°C	50°F	170	165	155	130	120	110	1
20°C	70°F	165	160	150	125	115	105	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1999-SKANDIC WT LC

## HIGH ALTITUDE KIT (P/N 861 769 000)

### DRIVE PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	Yellow/Blue 414 818 000		←	Red/Red 414 689 800	←	←	←
Ramp	Qty 3 x 1 417 005 290		←	←	←	←	←
Calibration screw position	4		5	1	2	3	4
Pin	Qty 3 x 1 417 004 308		←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100	2500		←	←	←	←	←
Maximum RPM ± 100	7000		←	←	←	←	←

### DRIVEN PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring	Blue A C S 3 - 188		←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-SKANDIC WT LC



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		250 240	240 230	230 220	220 210	200 200	190 190	PTO MAG
Jet needle		6DH4	←	←	←	←	←	2
Needle position		2	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.0	←	←	0.5	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-2 (159)	←	←	←	←	←	2
Float level	mm	36.5	←	←	←	←	←	—
Idle	RPM ± 200	1900	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	1.6	1.7	1.8	1.9	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		270	260	250	240	230	220	PTO MAG
		260	250	240	230	220	210	
- 30°C - 20°F		260	250	240	230	220	210	PTO MAG
		250	240	230	220	210	200	
<b>- 20°C</b> <b>- 4°F</b>		<b>250</b>	<b>240</b>	<b>230</b>	<b>220</b>	<b>210</b>	<b>200</b>	<b>PTO</b> <b>MAG</b>
		<b>240</b>	<b>230</b>	<b>220</b>	<b>210</b>	<b>200</b>	<b>190</b>	
- 10°C 14°F		240	230	220	210	200	190	PTO MAG
		230	220	210	200	190	180	
0°C 32°F		230	220	210	200	190	180	PTO MAG
		220	210	200	190	180	170	
10°C 50°F		220	210	200	190	180	170	PTO MAG
		210	200	190	180	170	160	
20°C 70°F		210	200	190	170	160	150	PTO MAG
		200	190	180	170	160	150	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-SKANDIC WT

## HIGH ALTITUDE KIT (P/N 861 769 100)

### DRIVE PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Yellow/Orange 414 689 700	←	←	Blue/Green 414 817 700	←
Ramp	Qty 3 x 1 417 005 290	←	←	←	←	←
Calibration screw position	4	5	6	2	3	4
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	3000	←	←	3300	←	←
Maximum RPM ± 100	6800	←	←	←	←	←

### DRIVEN PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Blue A C S 3 - 188	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-SKANDIC WT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		210	200	190	180	170	160	2
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.0	←	←	0.75	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-2 (159)	←	←	←	←	←	2
Float level	mm	36.5	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		230	220	210	200	190	180	2
- 30°C - 20°F		220	210	200	190	180	170	2
<b>- 20°C - 4°F</b>		<b>210</b>	<b>200</b>	<b>190</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>2</b>
- 10°C 14°F		205	190	180	170	160	150	2
0°C 32°F		200	190	180	165	155	145	2
10°C 50°F		190	180	170	160	150	140	2
20°C 70°F		180	170	160	150	140	130	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-SKANDIC SWT

## HIGH ALTITUDE KIT (P/N 861 769 200)

### DRIVE PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Yellow/Orange 414 689 700		←	←	←	←
Ramp	Qty 3 x 1 417 005 290		←	←	←	←	←
Calibration screw position	2		3	4	5	6	3
Pin	Qty 3 x 1 417 004 309		←	←	←	←	←
Engagement RPM ± 100	3000		←	←	←	←	3300
Maximum RPM ± 100	6800		←	←	←	←	←

### DRIVEN PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Blue A C S 3 - 188		←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-SKANDIC SWT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		185 185	180 175	175 170	170 165	165 160	160 155	PTO MAG
Jet needle		6DH2	←	←	←	←	←	1
Needle position		3	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	1
Pilot jet		40	←	←	←	←	←	1
Air screw		1.25	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-1 (159)	←	←	←	←	←	1
Float level	mm	36.5	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		205	200	195	190	185	180	PTO MAG
- 40°F		205	195	190	185	180	175	
- 30°C		195	190	185	180	175	170	PTO MAG
- 20°F		195	185	180	175	170	165	
<b>- 20°C</b>		<b>185</b>	<b>180</b>	<b>175</b>	<b>170</b>	<b>165</b>	<b>160</b>	PTO MAG
<b>- 4°F</b>		<b>185</b>	<b>175</b>	<b>170</b>	<b>165</b>	<b>160</b>	<b>155</b>	
- 10°C		180	175	170	165	160	155	PTO MAG
14°F		180	170	165	160	155	150	
0°C		175	170	165	160	155	150	PTO MAG
32°F		175	165	160	155	150	145	
10°C		170	165	160	155	150	145	PTO MAG
50°F		170	160	155	150	145	140	
20°C		170	165	155	155	150	145	PTO MAG
70°F		170	160	150	150	145	140	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1999-MX Z 700

## HIGH ALTITUDE KIT (P/N 861 771 600)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Yellow 415 015 300	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 297	←	←	←	←	←
Calibration screw position		3	4	2	3	4	5
Pin		Qty 3 x 1 417 004 308	←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100		3800	←	4100	←	←	←
Maximum RPM ± 100		8000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47° 417 126 337	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** From 2400 m (8000 ft) and above, or in deep snow, install a large 23 teeth sprocket (P/N 504 085 400) to set chain case ratio to 23/43.

# 1999-MX Z 700

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		310 310	310 310	310 310	310 310	310 310	310 310	PTO MAG
Jet needle		7DHY6	←	←	←	←	←	2
Needle position		4	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.0	←	←	←	←	←	—
Valve seat		1.5 (V)	←	←	←	←	←	2
Needle jet		Z-5 (224)	←	←	←	←	←	2
Float level	mm	22.9	←	←	←	←	←	—
Idle	RPM ± 200	1600	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	1.6	1.7	1.8	1.9	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		←	←	←	←	←	←	PTO MAG
- 30°C - 20°F		←	←	←	←	←	←	PTO MAG
- 20°C - 4°F		310 310	310 310	310 310	310 310	310 310	310 310	PTO MAG
- 10°C 14°F		←	←	←	←	←	←	PTO MAG
0°C 32°F		←	←	←	←	←	←	PTO MAG
10°C 50°F		←	←	←	←	←	←	PTO MAG
20°C 70°F		←	←	←	←	←	←	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1999-MX Z 600

## HIGH ALTITUDE KIT (High Performance)

(P/N 861 772 900)

### DRIVE PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Yellow 415 015 300	←	Green/Blue 414 768 200	←	←	←
Ramp		Qty 3 x 1 417 005 281	←	Qty 3 x 1 417 005 294	←	←	←
Calibration screw position		3	4	3	4	5	6
Pin		Qty 3 x 1 417 004 308	←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100		3800	←	4200	←	←	←
Maximum RPM ± 100		8000	←	←	←	←	←

### DRIVEN PULLEY

Clutching	Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50° 417 126 343	←	47° 417 126 337	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Recommendation:** From 2400 m (8000 ft) and above, or in deep snow, install a large 23 teeth sprocket (P/N 504 085 400) to set chain case ratio to 23/43.

# 1999-MX Z 600



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		280 280	270 270	250 250	230 230	220 220	210 210	PTO MAG
Jet needle		7DfY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		37.5	←	←	45	←	←	2
Air screw		0.5	←	←	←	←	←	—
Valve seat		1.5 (V)	←	←	←	←	←	2
Needle jet		Z-9 (224)	←	←	←	←	←	2
Float level	mm	22.9	←	←	←	←	←	—
Idle	RPM ± 200	1600	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	1.4	1.5	1.7	1.8	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		300 300	290 290	270 270	250 250	240 240	230 230	PTO MAG
- 30°C - 20°F		290 290	280 280	260 260	240 240	230 230	220 220	PTO MAG
<b>- 20°C - 4°F</b>		<b>280 280</b>	<b>270 270</b>	<b>250 250</b>	<b>230 230</b>	<b>220 220</b>	<b>210 210</b>	<b>PTO MAG</b>
- 10°C 14°F		270 270	260 260	240 240	220 220	210 210	205 205	PTO MAG
0°C 32°F		260 260	250 250	230 230	210 210	205 205	200 200	PTO MAG
10°C 50°F		250 250	240 240	220 220	205 205	200 200	195 195	PTO MAG
20°C 70°F		240 240	230 230	210 210	200 200	195 195	190 190	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# SEA LEVEL TECHNICAL DATA - 1999 MODELS

1999-SUMMIT X 670

## SEA LEVEL KIT (P/N 861 770 800)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	←	Violet/Violet 414 817 900	←	←	Violet/Yellow 415 015 300	←
Ramp	←	417 005 286	←	←	417 005 287	←
Calibration screw position	3	4	3	4	5	6
Pin	←	417 004 308	←	←	417 004 309	←
Engagement RPM ± 100	←	3800	←	←	4100	←
Maximum RPM ± 100	←	←	←	←	8000	←

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	←	←	←	←	Beige 414 558 900	←
Spring tension	Kg ± 0.7 lb ± 1.5	←	←	←	7.0 15.4	←
Cam angle	° (degrees)	←	←	←	47 417 126 337	←

**Recommendation:** At sea level, chaincase ratio: 23/43, sprocket 23 teeth, large, (P/N 504 085 400).

# 1999-SUMMIT X 670

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		350 340	350 340	350 340	350 340	350 340	350 340	PTO MAG
Jet needle		←	←	←	←	7ECY1		2
Needle position		←	←	←	←	2	←	—
Slide cut-away		←	←	←	←	2.5	←	2
Pilot jet		←	←	←	←	55	←	2
Air screw		←	←	←	←	1.75	←	—
Valve seat		←	←	←	←	1.5	←	2
Needle jet		←	←	←	←	AA-8 (224)	←	2
Float level	mm	←	←	←	←	22.9	←	—
Idle	RPM ± 200	←	←	←	←	1700	←	—
Idle throttle valve position	mm	1.90	2.10	2.20	2.30	2.40	2.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		370 360	←	←	←	←	←	PTO MAG
- 30°C - 20°F		360 350	←	←	←	←	←	PTO MAG
- 20°C - 4°F		350 340	←	←	←	←	←	<b>PTO MAG</b>
- 10°C 14°F		350 340	←	←	←	←	←	PTO MAG
0°C 32°F		350 340	←	←	←	←	←	PTO MAG
10°C 50°F		350 340	←	←	←	←	←	PTO MAG
20°C 70°F		350 340	←	←	←	←	←	PTO MAG

# 1999-SUMMIT 600/SUMMIT 500

## SEA LEVEL KIT (P/N 861 770 900)

### DRIVE PULLEY (Both Models)

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	←	←	←	←	Green/Blue 414 768 200
Ramp	←	←	←	←	417 005 294	←
Pin	←	Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←
Engagement RPM ± 100	←	4000	←	←	4200	←

#### Summit 600 Only

Calibration screw position	4	5	3	4	5	6
Maximum RPM ± 100	←	←	←	←	8000	←

#### Summit 500 Only

Calibration screw position	3	4	2	3	4	5
Maximum RPM ± 100	←	←	←	←	7800	←

### DRIVEN PULLEY (Both Models)

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
		Spring	←	←	←	←	Beige 414 558 900
Spring tension	Kg ± 0.7 lb ± 1.5	←	←	←	←	7.0 15.4	←

#### Summit 600 Only

Cam angle	° (degrees)	←	←	←	←	47 417 126 337	←
--------------	----------------	---	---	---	---	-------------------	---

#### Summit 500 Only

Cam angle	° (degrees)	←	←	←	←	44 417 126 333	←
--------------	----------------	---	---	---	---	-------------------	---

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** On Summit 600, use a 23 teeth sprocket (P/N 504 085 400) at sea level to obtain a chain case ratio of 23/43.

# 1999-SUMMIT 600/SUMMIT 500



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION (Summit 600)

Calibration \ Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		←	←	←	←	280	←	2
Jet needle		←	←	←	←	7DFY1	←	2
Needle position		←	←	←	←	3	←	—
Slide cut-away		←	←	←	←	2.5	←	2
Pilot jet		←	←	←	←	37.5	←	2
Air screw		←	←	←	←	0.5	←	2
Valve seat		←	←	←	←	1.5 (V)	←	2
Needle jet		←	←	←	←	Z-9 (224)	←	2
Float level	mm	←	←	←	←	22.9	←	—
Idle	RPM ± 200	←	←	←	←	1600	←	—
Idle throttle valve position	mm	←	←	←	←	1.7	←	—

### CARBURATION (Summit 500)

Calibration \ Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		←	←	←	←	PTO 350 MAG 330	←	2
Jet needle		←	←	←	←	6DHY48	←	2
Needle position		←	←	←	←	4	←	—
Slide cut-away		←	←	←	←	2.5	←	2
Pilot jet		←	←	←	←	75	←	2
Air screw		←	←	←	←	2.00	←	2
Valve seat		←	←	←	←	1.5 (V)	←	2
Needle jet		←	←	←	←	Q-6 (480)	←	2
Float level	mm	←	←	←	←	18.1	←	—
Idle	RPM ± 200	←	←	←	←	1800	←	—
Idle throttle valve position	mm	←	←	←	←	2.2	←	—

# 1999-SUMMIT 600/SUMMIT 500

## MAIN JET CHART (Summit 600)

Altitude Temperature	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C - 40°F	←	←	←	←	300	←	PTO MAG
- 30°C - 20°F	←	←	←	←	290	←	PTO MAG
<b>- 20°C</b> <b>- 4°F</b>	←	←	←	←	<b>280</b>	←	PTO MAG
- 10°C 14°F	←	←	←	←	280	←	PTO MAG
0°C 32°F	←	←	←	←	280	←	PTO MAG
10°C 50°F	←	←	←	←	280	←	PTO MAG
20°C 70°F	←	←	←	←	280	←	PTO MAG

## MAIN JET CHART (Summit 500)

Altitude Temperature	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C - 40°F	←	←	←	←	350 330	←	PTO MAG
- 30°C - 20°F	←	←	←	←	350 330	←	PTO MAG
<b>- 20°C</b> <b>- 4°F</b>	←	←	←	←	<b>350</b> <b>330</b>	←	PTO MAG
- 10°C 14°F	←	←	←	←	350 330	←	PTO MAG
0°C 32°F	←	←	←	←	350 330	←	PTO MAG
10°C 50°F	←	←	←	←	350 330	←	PTO MAG
20°C 70°F	←	←	←	←	350 330	←	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# HIGH ALTITUDE TECHNICAL DATA - 1998 MODELS

## 1998-SKANDIC SWT

### HIGH ALTITUDE KIT (P/N 861 764 300)

#### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	Red/Yellow 414 817 500	←	Red/Blue 414 691 500	←	←	←
Ramp	Qty 3 x 1 417 005 146	←	←	←	←	←
Calibration screw position	4	5	2	3	4	5
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	2300	←	←	2800	←	←
Maximum RPM ± 100	6500	←	←	←	←	←

#### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring	Blue A C S 3 - 188	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.0 13.2	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1998-SKANDIC SWT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		230	220	200	180	170	160	1
Jet needle		6DH8	←	←	←	←	←	1
Needle position		4	←	←	3	←	←	—
Slide cut-away		3.0	←	←	←	←	←	1
Pilot jet		25	←	←	←	←	←	1
Air screw		1.5	←	←	0.75	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		O-0 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		250	240	220	195	190	180	1
- 30°C - 20°F		240	230	210	190	180	170	1
<b>- 20°C - 4°F</b>		<b>230</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>1</b>
- 10°C 14°F		220	210	190	175	165	155	1
0°C 32°F		210	200	180	170	160	150	1
10°C 50°F		200	190	170	160	155	145	1
20°C 70°F		190	180	160	150	150	140	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC WT

## HIGH ALTITUDE KIT (P/N 861 764 200)

### DRIVE PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Yellow/Orange 414 689 700	←	←	Blue/Green 414 817 700	←
Ramp	Qty 3 x 1 417 005 290	←	←	←	←	←
Calibration screw position	4	5	6	2	3	4
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	2800	←	←	3100	←	←
Maximum RPM ± 100	6800	←	←	←	←	←

### DRIVEN PULLEY

Clutching \ Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
		Spring	Blue A C S 3 - 188	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC WT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		210	200	190	180	170	160	2
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.5	←	←	0.75	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-4 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		230	220	210	200	190	180	2
- 30°C - 20°F		220	210	200	190	180	170	2
<b>- 20°C - 4°F</b>		<b>210</b>	<b>200</b>	<b>190</b>	<b>175</b>	<b>165</b>	<b>155</b>	<b>2</b>
- 10°C 14°F		205	190	180	170	160	150	2
0°C 32°F		200	190	180	165	155	145	2
10°C 50°F		190	180	170	160	150	140	2
20°C 70°F		180	170	160	150	140	130	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC WT LC

## HIGH ALTITUDE KIT (P/N 861 764 100)

### DRIVE PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Yellow/Blue 414 818 000	←	Red/Red 414 689 800	←	←
Ramp	Qty 3 x 1 417 005 290	←	←	←	←	←
Calibration screw position	4	5	3	4	5	6
Pin	Qty 3 x 1 417 004 308	←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100	2500	←	←	←	←	←
Maximum RPM ± 100	7000	←	←	←	←	←

### DRIVEN PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Blue A C S 3 - 188	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC WT LC



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty	
Calibration	Main jet	250 220	230 200	210 180	200 170	190 160	180 150	PTO MAG	
	Jet needle	6DH4	←	←	←	←	←	2	
	Needle position	2	←	←	1	←	←	—	
	Slide cut-away	2.5	←	←	←	←	←	2	
	Pilot jet	30	←	←	←	←	←	2	
	Air screw	1.0	←	←	←	←	←	—	
	Valve seat	1.5	←	←	←	←	←	2	
	Needle jet	P-2 (159)	←	←	←	←	←	2	
	Float level	mm	23.9	←	←	←	←	←	—
	Idle	RPM ± 200	1800	←	←	←	←	←	—
	Idle throttle valve position	mm	1.5	1.6	1.7	1.8	1.9	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature	- 40°C	270	250	230	220	210	200	PTO MAG
	- 40°F	240	220	200	190	180	170	
	- 30°C	260	240	220	210	200	190	PTO MAG
	- 20°F	230	210	190	180	170	160	
	<b>- 20°C</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>200</b>	<b>190</b>	<b>180</b>	<b>PTO MAG</b>
	<b>- 4°F</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	
	- 10°C	240	220	200	190	180	170	PTO MAG
	14°F	210	190	170	160	150	140	
	0°C	230	210	190	180	170	160	PTO MAG
	32°F	200	180	160	150	140	130	
	10°C	220	200	180	170	160	150	PTO MAG
	50°F	190	170	150	140	130	120	
	20°C	210	190	170	160	150	140	PTO MAG
	70°F	180	160	140	130	120	110	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-TUNDRA R

## HIGH ALTITUDE KIT (P/N 861 764 000)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Turquoise 417 115 900	←	Yellow/Green 417 118 500	←	←	←
Block		Qty 3 x 1 417 114 300	←	Qty 3 x 1 417 115 700	←	←	←
Weight		—	←	Qty 3 x 3 417 115 800	Qty 3 x 2 ←	Qty 3 x 2 ←	Qty 3 x 1 ←
Capsule		Qty 2 x 3 417 114 500	←	←	←	←	←
Engagement RPM ± 100		3100	←	←	←	←	←
Maximum RPM ± 100		6900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Yellow 415 094 300	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00 Position1 0.00	←	←	←	←	←
Cam angle	° (degrees)	37.8 417 124 100	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-TUNDRA R



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		190	185	175	140	130	125	1
Jet needle		6DH4	←	←	←	←	←	1
Needle position		2	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	1
Pilot jet		40	←	←	35	←	←	1
Air screw		1.0	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	1
Needle jet		O-8 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1200	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		210	200	190	150	145	135	1
- 30°C - 20°F		200	190	180	145	135	130	1
<b>- 20°C - 4°F</b>		<b>190</b>	<b>185</b>	<b>175</b>	<b>140</b>	<b>130</b>	<b>125</b>	<b>1</b>
- 10°C 14°F		185	180	170	135	125	120	1
0°C 32°F		180	175	165	130	120	115	1
10°C 50°F		170	165	155	125	115	110	1
20°C 70°F		165	160	150	120	110	105	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-TUNDRA II LT

## HIGH ALTITUDE KIT (P/N 861 763 900)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Turquoise 417 115 900	←	Blue 417 115 600	←	←
Block	Qty 3 x 1 417 114 300	←	Qty 3 x 1 417 115 700	←	←	←
Weight	—	←	Qty 3 x 3 417 115 800	Qty 3 x 2 ←	Qty 3 x 2 ←	Qty 3 x 1 ←
Capsule	417 114 500	←	←	←	←	←
Engagement RPM ± 100	3100	←	←	←	←	←
Maximum RPM ± 100	6900	←	←	←	←	←

### DRIVEN PULLEY

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Clutching			←	←	←	←	←
Spring		White 414 509 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	3.6 7.9	←	5.9 13.0	←	←	←
Cam angle	° (degrees)	37.8 504 081 300	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1998-TUNDRA II LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		190	185	175	140	130	125	1
Jet needle		6DH4	←	←	←	←	←	1
Needle position		2	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	1
Pilot jet		40	←	←	35	←	←	1
Air screw		1.0	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	1
Needle jet		0-8 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1200	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		210	200	190	150	145	135	1
- 30°C - 20°F		200	190	180	145	135	130	1
<b>- 20°C - 4°F</b>		<b>190</b>	<b>185</b>	<b>175</b>	<b>140</b>	<b>130</b>	<b>125</b>	<b>1</b>
- 10°C 14°F		185	180	170	135	125	120	1
0°C 32°F		180	175	165	130	120	115	1
10°C 50°F		170	165	155	125	115	110	1
20°C 70°F		165	160	150	120	110	105	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC 380

## HIGH ALTITUDE KIT (P/N 861 763 800)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Green on Violet 417 009 500	←	Red/Blue on Violet 417 118 400	←	←	←
Block		417 118 100	←	←	←	←	←
Weight		Qty 3 x 1 417 120 400	←	Qty 3 x 5 417 114 400	Qty 3 x 4 ←	Qty 3 x 3 ←	Qty 3 x 2 ←
Capsule		Qty 3 x 1 417 114 500	←	←	←	←	←
Engagement RPM ± 100		2500	←	3100	←	←	←
Maximum RPM ± 100		6900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←	←
Cam angle	° (degrees)	44 504 096 000	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC 380



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25	←	←	.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC 500

## HIGH ALTITUDE KIT (P/N 861 763 700)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Red/Yellow 414 817 500	←	Yellow/Green 414 742 100	←	←	←
Ramp		Qty 3 x 1 417 005 291	←	Qty 3 x 1 417 005 292	←	←	←
Calibration screw position		3	4	2	3	4	5
Pin		Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100		2900	←	3300	←	←	←
Maximum RPM ± 100		7000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←	←
Cam angle	° (degrees)	44 504 096 000	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-SKANDIC 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		180 170	170 160	160 150	150 140	140 130	130 120	PTO MAG
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.88	←	←	1.5	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.85	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Calibration								
- 40°C - 40°F		200 190	190 180	175 165	165 155	155 145	140 130	PTO MAG
- 30°C - 20°F		190 180	180 170	165 155	155 145	145 135	135 125	PTO MAG
<b>- 20°C - 4°F</b>		<b>180 170</b>	<b>170 160</b>	<b>160 150</b>	<b>150 140</b>	<b>140 130</b>	<b>130 120</b>	<b>PTO MAG</b>
- 10°C 14°F		170 160	160 150	155 145	145 135	135 125	125 115	PTO MAG
0°C 32°F		165 155	155 145	150 140	140 130	130 120	120 110	PTO MAG
10°C 50°F		160 150	150 140	140 130	130 120	125 115	115 105	PTO MAG
20°C 70°F		155 145	145 135	135 125	125 115	120 110	110 100	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-TOURING E

## HIGH ALTITUDE KIT (P/N 861 763 600)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Green on Violet 417 009 500	←	Red/Blue on Violet 417 118 400	←	←	←
Block		417 118 100	←	←	←	←	←
Weight		Qty 3 x 1 417 120 400	←	Qty 3 x 5 417 114 400	Qty 3 x 4 ←	Qty 3 x 3 ←	Qty 3 x 2 ←
Capsule		Qty 3 x 1 417 114 500	←	←	←	←	←
Engagement RPM ± 100		2500	←	3100	←	←	←
Maximum RPM ± 100		6900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←	←
Cam angle	° (degrees)	44 504 096 000	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-TOURING E



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25 1.25	←	←	0.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-TOURING LE

## HIGH ALTITUDE KIT (P/N 861 763 500)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Red/Blue 414 691 500	←	Yellow/Green 414 742 100	←	←	←
Ramp		Qty 3 x 1 417 005 291	←	Qty 3 x 1 417 005 292	←	←	←
Calibration screw position		2	3	3	4	5	6
Pin		417 004 309	←	←	←	←	←
Engagement RPM ± 100		2900	←	3000	←	←	←
Maximum RPM ± 100		7000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←	←
Cam angle	° (degrees)	44 504 096 000	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1998-TOURING LE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty	
Calibration	Main jet	200 190	190 180	180 170	170 160	160 150	150 140	PTO MAG	
	Jet needle	6DH2	←	←	←	←	←	2	
	Needle position	3	←	←	2	←	1	—	
	Slide cut-away	2.5	←	←	←	←	←	2	
	Pilot jet	35	←	←	←	←	←	2	
	Air screw	1.50	←	←	1.00	←	←	—	
	Valve seat	1.5	←	←	←	←	←	2	
	Needle jet	P-0(159)	←	←	←	←	←	2	
	Float level	mm	23.9	←	←	←	←	←	—
	Idle	RPM ± 200	1650	←	←	←	←	←	—
	Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature	- 40°C	210	200	190	180	175	165	PTO MAG
	- 40°F	200	190	180	170	165	155	
	- 30°C	205	195	185	175	165	155	PTO MAG
	- 20°F	195	185	175	165	155	145	
	<b>- 20°C</b>	<b>200</b>	<b>190</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>PTO MAG</b>
	<b>- 4°F</b>	<b>190</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	
	- 10°C	195	185	175	165	155	145	PTO MAG
	14°F	185	175	165	155	145	135	
	0°C	190	180	170	160	150	140	PTO MAG
	32°F	180	170	160	150	140	130	
	10°C	180	170	160	150	140	135	PTO MAG
	50°F	170	160	150	140	130	125	
	20°C	175	165	155	145	135	130	PTO MAG
	70°F	165	155	145	135	125	120	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-TOURING SLE

## HIGH ALTITUDE KIT (P/N 861 763 400)

### DRIVE PULLEY

Clutching \ Altitude	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Spring	Red/Yellow 414 817 500	←	Yellow/Green 414 742 100	←	←
Ramp	Qty 3 x 1 417 005 291	←	Qty 3 x 1 417 005 292	←	←	←
Calibration screw position	3	4	2	3	4	5
Pin	Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100	2900	←	3300	←	←	←
Maximum RPM ± 100	7000	←	←	←	←	←

### DRIVEN PULLEY

Clutching \ Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
		Spring	Yellow 415 092 800	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	0.00 Position 1 0.00	←	←	←	←	←
Cam angle	° (degrees)	47 - 44 417 122 800	←	←	←	←	←

### ELECTRONIC REVERSE

	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Reverse connector	515 174 800	←	←	←	515 174 700	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-TOURING SLE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	180 170	170 160	160 150	150 140	140 130	130 120	PTO MAG
	Jet needle	6DH2	←	←	←	←	←	2
	Needle position	3	←	←	←	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	40	←	←	45	←	←	2
	Air screw	1.88	←	←	0.750	←	←	—
	Valve seat	1.5	←	←	←	←	←	2
	Needle jet	P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	1550	←	←	—
Idle throttle valve position	mm	1.5	1.8	2.1	2.4	2.5	2.6	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Calibration	- 40°C - 40°F	200 190	190 180	175 165	165 155	155 145	140 130	PTO MAG
	- 30°C - 20°F	190 180	180 170	165 155	155 145	145 135	135 125	PTO MAG
	<b>- 20°C - 4°F</b>	<b>180 170</b>	<b>170 160</b>	<b>160 150</b>	<b>150 140</b>	<b>140 130</b>	<b>130 120</b>	<b>PTO MAG</b>
	- 10°C 14°F	170 160	160 150	155 145	145 135	135 125	125 115	PTO MAG
	0°C 32°F	165 155	155 145	150 140	140 130	130 120	120 110	PTO MAG
	10°C 50°F	160 150	150 140	140 130	130 120	125 115	115 105	PTO MAG
	20°C 70°F	155 145	145 135	135 125	125 115	120 110	110 100	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-GRAND TOURING 500

## HIGH ALTITUDE KIT (P/N 861 763 300)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Blue/Green 414 817 700	←	←	Blue/Blue 414 689 400	←	←
Ramp		417 005 228	←	←	←	←	←
Calibration screw position		3	4	5	4	5	6
Pin		417 004 309	←	←	←	←	←
Engagement RPM ± 100		3600	←	←	←	←	←
Maximum RPM ± 100		7800	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	44 504 096 000	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** At 1800 m/6000 ft, change 2 Rave Valve springs, using P/N 420 239 946.

# 1998-GRAND TOURING 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		300 280	280 260	260 240	240 210	220 200	200 180	PTO MAG
Jet needle		6DGY9	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	55	←	←	2
Air screw		2.0	←	←	2.25	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		Q-3 (480)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.80	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C	- 40°F	320	300	280	260	240	220	PTO MAG
	- 40°F	300	280	260	230	220	200	
- 30°C	- 20°F	310	290	270	250	230	210	PTO MAG
	- 20°F	290	270	250	220	210	190	
- 20°C	- 4°F	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>PTO MAG</b>
	- 4°F	<b>280</b>	<b>260</b>	<b>240</b>	<b>210</b>	<b>200</b>	<b>180</b>	
- 10°C	14°F	290	270	250	230	210	190	PTO MAG
	14°F	270	250	230	200	190	170	
0°C	32°F	280	260	240	220	200	180	PTO MAG
	32°F	260	240	220	190	180	160	
10°C	50°F	270	250	230	210	190	170	PTO MAG
	50°F	250	230	210	180	170	150	
20°C	70°F	260	240	220	200	180	160	PTO MAG
	70°F	240	220	200	170	160	140	

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-GRAND TOURING 583

## HIGH ALTITUDE KIT (P/N 861 763 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Red/Orange 415 015 200	←	←	Violet/Blue 415 034 900	←	←	1
Ramp		Qty 3 x 1 417 005 285	←	←	Qty 3 x 1 417 005 289	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		417 004 309	←	←	←	←	←	3
Engagement RPM ± 100		3100	←	←	4200	←	←	—
Maximum RPM ± 100		7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47 504 140 900	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at 2400 m/8000 ft.

# 1998-GRAND TOURING 583

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		270 260	250 240	230 220	210 200	195 185	180 170	PTO MAG
Jet needle		6DEY4	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		2.0	1.75	1.5	←	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-7 (480)	←	←	P-5 (480)	←	P-4 (480)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.00	2.10	2.20	2.30	2.40	2.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C		290	270	250	230	210	195	PTO MAG
- 40°F		280	260	240	220	200	185	
- 30°C		280	260	240	220	200	185	PTO MAG
- 20°F		270	250	230	210	195	175	
<b>- 20°C</b>		<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>195</b>	<b>175</b>	<b>PTO MAG</b>
<b>- 4°F</b>		<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>185</b>	<b>170</b>	
- 10°C		260	240	220	200	180	155	PTO MAG
14°F		250	230	210	195	170	150	
0°C		250	230	210	195	170	150	PTO MAG
32°F		240	220	200	185	165	145	
10°C		240	220	200	185	165	145	PTO MAG
50°F		230	210	195	180	160	140	
20°C		230	210	195	180	160	140	PTO MAG
70°F		220	200	185	170	150	130	

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-GRAND TOURING 700

## HIGH ALTITUDE KIT (P/N 861 763 100)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Blue/Violet 414 817 800	←	←	Yellow/Green 414 742 100	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	←	←	←
Calibration screw position		3	4	5	3	4	5
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3600	←	←	←	←	←
Maximum RPM ± 100		7900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47 504 140 900	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.



# 1998-GRAND TOURING 700

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Calibration								
Main jet		310 300 310	290 280 290	260 250 260	240 230 240	210 200 210	190 180 190	PTO CTR MAG
Jet needle		6DEH5 Qty 3 x 1	←	←	←	←	←	—
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet		50	←	←	←	←	←	—
Air screw		2.50	1.75	1.50	1.25	1.00	←	—
Valve seat		1.5	←	←	←	←	←	—
Needle jet		P-1 (480)	←	←	P-0 (480)	←	O-9 (480)	—
	Starter jet	1.50	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	1.40	1.60	1.80	2.00	2.20	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		330	300	280	250	230	200	PTO CTR MAG
		320	290	270	240	220	190	
		330	300	280	250	230	200	
- 30°C - 20°F		320	290	270	240	220	195	PTO CTR MAG
		310	280	260	230	210	185	
		320	290	270	240	220	195	
- 20°C - 4°F		<b>310</b>	290	260	240	210	190	<b>PTO</b> <b>CTR</b> <b>MAG</b>
		<b>300</b>	280	250	230	200	180	
		<b>310</b>	290	260	240	210	190	
- 10°C 14°F		300	280	250	230	200	180	PTO CTR MAG
		290	270	240	220	195	175	
		300	280	250	230	200	180	
0°C 32°F		290	270	240	220	195	175	PTO CTR MAG
		280	260	230	210	190	170	
		290	270	240	220	195	175	
10°C 50°F		270	250	230	210	185	160	PTO CTR MAG
		260	240	220	200	175	155	
		270	250	230	210	185	160	
20°C 70°F		260	240	220	200	180	155	PTO CTR MAG
		250	230	210	190	170	150	
		260	240	220	200	180	155	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

Additional information: Unscrew Rave Valve cover approximately 3 turns.

# 1998-GRAND TOURING SE

## HIGH ALTITUDE KIT (P/N 861 763 000)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Blue/Pink 414 916 300	←	Violet/Violet 414 817 900	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	Qty 3 x 1 417 005 285	←	←	←
Calibration screw position		2	3	2	3	4	5
Pin		Qty 3 x 1 417 004 308	←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100		3600	←	4300	←	←	←
Maximum RPM ± 100		8500	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47 504 140 900	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-GRAND TOURING SE

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		300	←	←	←	←	←	3
Jet needle		6DEY2	←	←	←	←	←	3
Needle position		4	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	3
Pilot jet		50	←	←	←	←	←	3
Air screw		2.00	←	←	←	←	←	3
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-9 (480)	←	←	←	←	←	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		300	←	←	←	←	←	3
- 30°C - 20°F		300	←	←	←	←	←	3
<b>- 20°C - 4°F</b>		<b>300</b>	←	←	←	←	←	<b>3</b>
- 10°C 14°F		300	←	←	←	←	←	3
0°C 32°F		300	←	←	←	←	←	3
10°C 50°F		300	←	←	←	←	←	3
20°C 70°F		300	←	←	←	←	←	3

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve cover approximately three (3) turns.

# 1998-MX Z 440

## HIGH ALTITUDE KIT (P/N 861 762 500)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Blue/Yellow 414 689 500	←	Blue/Green 414 817 700	←	←	←
Ramp		Qty 3 x 1 417 005 291	←	Qty 3 x 1 417 005 292	←	←	←
Calibration screw position		3	4	2	3	4	5
Pin		Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100		3700	←	←	←	←	←
Maximum RPM ± 100		7000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 415 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←	←
Cam angle	° (degrees)	47 504 140 900	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-MX Z 440

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		205 195	190 180	180 170	170 160	160 150	150 140	PTO MAG
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		35	←	←	←	←	←	2
Air screw		1.5	←	←	1.0	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C		210	200	190	180	175	165	PTO MAG
- 40°F		200	190	180	170	165	155	
- 30°C		205	195	185	175	165	155	PTO MAG
- 20°F		195	185	175	165	155	145	
<b>- 20°C</b>		<b>200</b>	<b>190</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>PTO MAG</b>
<b>- 4°F</b>		<b>190</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	
- 10°C		195	185	175	165	155	145	PTO MAG
14°F		185	175	165	155	145	135	
0°C		190	180	170	160	150	140	PTO MAG
32°F		180	170	160	150	140	130	
10°C		180	170	160	150	140	135	PTO MAG
50°F		170	160	150	140	130	125	
20°C		175	165	155	145	135	130	PTO MAG
70°F		165	155	145	135	125	120	

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-MX Z 500

## HIGH ALTITUDE KIT (P/N 861 762 300)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Yellow 415 015 300	←	←	Green/Blue 414 768 200	←	←
Ramp		417 005 281	←	←	←	←	←
Calibration screw position		2	3	4	4	5	6
Pin		417 004 309	←	←	←	←	←
Engagement RPM ± 100		4100	←	←	4300	←	←
Maximum RPM ± 100		7800	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 415 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50° 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** At 1800 m/6000 ft, change 2 Rave Valve springs, using P/N 420 239 946.

# 1998-MX Z 500



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty	
Calibration	Main jet	300 280	280 260	260 240	240 210	220 200	200 180	PTO MAG	
	Jet needle	6DGY9	←	←	←	←	←	2	
	Needle position	3	←	←	2	←	←	—	
	Slide cut-away	2.5	←	←	←	←	←	2	
	Pilot jet	50	←	←	←	←	←	2	
	Air screw	2.5	←	←	2.0	←	←	—	
	Valve seat	1.5	←	←	←	←	←	2	
	Needle jet	Q-4 (480)	←	←	←	←	←	2	
	Float level	mm	18.1	←	←	←	←	←	—
	Idle	RPM ± 200	1800	←	←	←	←	←	—
	Idle throttle valve position	mm	1.8	1.9	2.0	2.1	2.2	2.3	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature	- 40°C	320	300	280	260	240	220	PTO MAG
	- 40°F	300	280	260	230	220	200	
	- 30°C	310	290	270	250	230	210	PTO MAG
	- 20°F	290	270	250	220	210	190	
	<b>- 20°C</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>PTO MAG</b>
	<b>- 4°F</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>210</b>	<b>200</b>	<b>180</b>	
	- 10°C	290	270	250	230	210	190	PTO MAG
	14°F	270	250	230	200	190	170	
	0°C	280	260	240	220	200	180	PTO MAG
	32°F	260	240	220	190	180	160	
	10°C	270	250	230	210	190	170	PTO MAG
	50°F	250	230	210	180	170	150	
	20°C	260	240	220	200	180	160	PTO MAG
	70°F	240	220	200	170	160	140	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-MX Z 583

## HIGH ALTITUDE KIT (P/N 861 762 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Blue 414 768 200	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	Qty 3 x 1 417 005 289	←	←
Calibration screw position		3	4	5	2	3	4
Pin		Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100		4400	←	←	4500	←	←
Maximum RPM ± 100		7900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at 2400 m/8000 ft.




**CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**CARBURATION**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty	
Calibration	Main jet	280 260	260 240	230 210	210 190	190 170	170 150	PTO MAG	
	Jet needle	7ECY1	←	←	←	←	←	2	
	Needle position	3	←	←	2	←	←	—	
	Slide cut-away	2.5	←	←	←	←	←	2	
	Pilot jet	60	←	←	←	←	←	2	
	Air screw	2.0	←	←	←	1.75	1.5	—	
	Valve seat	1.5	←	←	←	←	←	2	
	Needle jet	AA-2 (224)	←	←	AA-0 (224)	←	←	2	
	Float level	mm	18.1	←	←	←	←	—	
	Idle	RPM ± 200	1800	←	←	←	←	—	
	Idle throttle valve position	mm	2.0	2.10	2.20	2.60	2.70	2.80	—

**MAIN JET CHART**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature	- 40°C - 40°F	310 290	280 260	250 230	230 210	210 190	190 170	PTO MAG
	- 30°C - 20°F	290 270	270 250	240 220	220 200	200 180	180 160	PTO MAG
	<b>- 20°C - 4°F</b>	<b>280 260</b>	<b>260 240</b>	<b>230 210</b>	<b>210 190</b>	<b>190 170</b>	<b>170 150</b>	<b>PTO MAG</b>
	- 10°C 14°F	270 250	250 230	220 200	200 180	180 165	165 145	PTO MAG
	0°C 32°F	250 230	240 220	210 195	195 175	175 155	155 140	PTO MAG
	10°C 50°F	240 220	230 210	200 185	185 165	170 150	155 135	PTO MAG
	20°C 70°F	230 210	220 190	195 175	175 160	160 145	145 130	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-MX Z 670

## HIGH ALTITUDE KIT (P/N 861 762 100)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Yellow 415 015 300	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	←	←	←
Calibration screw position		3	4	5	4	5	6
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3800	←	←	4500	←	←
Maximum RPM ± 100		7700	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at 2400 m/8000 ft.

# 1998-MX Z 670

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		310 290	290 270	260 240	240 220	210 200	190 175	PTO MAG
Jet needle		7EDY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		60	←	←	←	←	←	2
Air screw		2.25	←	2.0	1.75	1.5	1.25	—
Valve seat		1.5	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Needle jet		AA-3 (224)	←	←	AA-1 (224)	←	AA-0 (224)	2
Idle	RPM ± 200	1700	←	←	←	←	←	—
Idle throttle valve position	mm	2.10	2.15	2.25	2.40	2.55	2.65	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		330 310	310 290	280 260	260 240	230 210	210 190	PTO MAG
- 30°C - 20°F		320 300	300 280	270 250	250 230	220 200	200 180	PTO MAG
<b>- 20°C - 4°F</b>		<b>310 290</b>	<b>290 270</b>	<b>260 240</b>	<b>240 220</b>	<b>210 200</b>	<b>190 175</b>	<b>PTO MAG</b>
- 10°C 14°F		300 280	280 260	250 230	230 210	200 190	185 170	PTO MAG
0°C 32°F		290 270	270 250	240 220	220 200	195 185	175 160	PTO MAG
10°C 50°F		270 250	250 240	230 210	210 195	185 175	170 155	PTO MAG
20°C 70°F		260 240	240 230	220 200	200 185	185 170	160 150	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA S/S ELECTRIC

## HIGH ALTITUDE KIT (P/N 861 762 000)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
			2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring		Red/Blue on Violet 417 118 400	←	←	←	←	←
Block		Qty 3 x 1 417 118 100	←	←	←	←	←
Weight		Qty 3 x 1 417 120 400	←	Qty 3 x 5 417 114 400	Qty 3 x 4 ←	Qty 3 x 3 ←	Qty 3 x 2 ←
Capsule		Qty 3 x 1 417 114 500	←	←	←	←	←
Engagement RPM ± 100		3500	←	←	←	←	←
Maximum RPM ± 100		6900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
			2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←	←
Cam angle	° (degrees)	44 504 096 000	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA S/S ELECTRIC

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25 1.25	←	←	.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA SL

## HIGH ALTITUDE KIT (P/N 861 761 900)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Yellow/Red 414 993 000	←	Blue/Yellow 414 689 500	←	←	←
Ramp		Qty 3 417 005 291	←	Qty 3 417 005 292	←	←	←
Calibration screw position		3	4	2	3	4	5
Pin		Qty 3 417 004 309	←	←	←	←	←
Engagement RPM ± 100		3300	←	3600	←	←	←
Maximum RPM ± 100		7000	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←	←
Cam angle	° (degrees)	44 504 096 000	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA SL



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	180 170	170 160	160 150	150 140	140 130	130 120	PTO MAG
	Jet needle	6DH2	←	←	←	←	←	2
	Needle position	3	←	←	2	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	40	←	←	45	←	←	2
	Air screw	1.875	←	←	1.5	←	←	—
	Valve seat	1.5	←	←	←	←	←	2
	Needle jet	P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.85	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Calibration	- 40°C - 40°F	200 190	190 180	175 165	165 155	155 145	140 130	PTO MAG
	- 30°C - 20°F	190 180	180 170	165 155	155 145	145 135	135 125	PTO MAG
	<b>- 20°C</b> <b>- 4°F</b>	<b>180</b> <b>170</b>	<b>170</b> <b>160</b>	<b>160</b> <b>150</b>	<b>150</b> <b>140</b>	<b>140</b> <b>130</b>	<b>130</b> <b>120</b>	<b>PTO</b> <b>MAG</b>
	- 10°C 14°F	170 160	160 150	155 145	145 135	135 125	125 115	PTO MAG
	0°C 32°F	165 155	155 145	150 140	140 130	130 120	120 110	PTO MAG
	10°C 50°F	160 150	150 140	140 130	130 120	125 115	115 105	PTO MAG
	20°C 70°F	155 145	145 135	135 125	125 115	120 110	110 100	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA 500/500 DELUXE

## HIGH ALTITUDE KIT (P/N 861 761 800)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Blue 415 034 900	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	Qty 3 x 1 417 005 281	←	←
Calibration screw position		2	3	4	4	5	6
Pin		Qty 3 x 1 417 004 309	←	←	←	←	←
Engagement RPM ± 100		3800	←	←	←	←	←
Maximum RPM ± 100		7800	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50° 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** At 1800 m/6000 ft, change 2 Rave Valve springs, using P/N 420 239 946.



# 1998-FORMULA 500/500 DELUXE

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		300 280	280 260	260 240	240 210	220 200	200 180	PTO MAG
Jet needle		6DGY9	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	55	←	←	2
Air screw		2.00	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		Q-3 (480)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.80	1.90	2.00	2.10	2.20	2.30	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C	320	300	280	260	240	220	200	PTO MAG
- 40°F	300	280	260	230	220	200	200	
- 30°C	310	290	270	250	230	210	190	PTO MAG
- 20°F	290	270	250	220	210	190	190	
<b>- 20°C</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>PTO MAG</b>
<b>- 4°F</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>210</b>	<b>200</b>	<b>180</b>	<b>180</b>	
- 10°C	290	270	250	230	210	190	170	PTO MAG
14°F	270	250	230	200	190	170	170	
0°C	280	260	240	220	200	180	160	PTO MAG
32°F	260	240	220	190	180	160	160	
10°C	270	250	230	210	190	170	150	PTO MAG
50°F	250	230	210	180	170	150	150	
20°C	260	240	220	200	180	160	140	PTO MAG
70°F	240	220	200	170	160	140	140	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA 583 DELUXE

## HIGH ALTITUDE KIT (P/N 861 761 600)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Blue 415 034 900	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	Qty 3 x 1 417 005 289	←	←
Calibration screw position		3	4	5	3	4	5
Pin		417 004 309	←	←	←	←	←
Engagement RPM ± 100		4100	←	←	←	←	←
Maximum RPM ± 100		7900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at 2400 m/8000 ft.

# 1998-FORMULA 583 DELUXE

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		270 260	250 240	230 220	210 200	195 185	180 170	PTO MAG
Jet needle		6DEY4	←	←	←	←	←	2
Needle position		2	←	←	1	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		2.00	1.75	1.50	←	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-7 (480)	←	←	P-5 (480)	←	P-4 (480)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.00	2.10	2.20	2.30	2.40	2.50	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
-40°C	290	270	250	230	210	195	PTO	MAG
-40°F	280	260	240	220	200	185	MAG	
-30°C	280	260	240	220	200	185	PTO	MAG
-20°F	270	250	230	210	195	175	MAG	
<b>-20°C</b>	<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>195</b>	<b>175</b>	<b>PTO</b>	<b>MAG</b>
<b>-4°F</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>185</b>	<b>170</b>	<b>MAG</b>	
-10°C	260	240	220	200	180	155	PTO	MAG
14°F	250	230	210	195	170	150	MAG	
0°C	250	230	210	195	170	150	PTO	MAG
32°F	240	220	200	185	165	145	MAG	
10°C	240	220	200	185	165	145	PTO	MAG
50°F	230	210	195	180	160	140	MAG	
20°C	230	210	195	180	160	140	PTO	MAG
70°F	220	200	185	170	150	130	MAG	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA Z 583

## HIGH ALTITUDE KIT (P/N 861 761 500)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Blue 415 034 900	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	Qty 3 x 1 417 005 289	←	←
Calibration screw position		3	4	5	3	4	5
Pin		417 004 309	←	←	←	←	←
Engagement RPM ± 100		4100	←	←	←	←	←
Maximum RPM ± 100		7900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at 2400 m/8000 ft.

# 1998-FORMULA Z 583

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		280 260	260 240	230 210	210 190	190 170	170 150	PTO MAG
Jet needle		7ECY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		60	←	←	←	←	←	2
Air screw		2.0	←	←	←	1.75	1.5	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-2 (224)	←	←	AA-0 (224)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.0	2.10	2.20	2.60	2.70	2.80	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		310 290	280 260	250 230	230 210	210 190	190 170	PTO MAG
- 30°C - 20°F		290 270	270 250	240 220	220 200	200 180	180 160	PTO MAG
<b>- 20°C - 4°F</b>		<b>280 260</b>	<b>260 240</b>	<b>230 210</b>	<b>210 190</b>	<b>190 170</b>	<b>170 150</b>	<b>PTO MAG</b>
- 10°C 14°F		270 250	250 230	220 200	200 180	180 165	165 145	PTO MAG
0°C 32°F		250 230	240 220	210 195	195 175	175 155	155 140	PTO MAG
10°C 50°F		240 220	230 210	200 185	185 165	170 150	155 135	PTO MAG
20°C 70°F		230 210	220 190	195 175	175 160	160 145	145 130	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA Z 670

## HIGH ALTITUDE KIT (P/N 861 761 400)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Yellow 415 015 300	←	←	←	←	←
Ramp		417 005 286	←	←	←	←	←
Calibration screw position		3	4	5	4	5	6
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		3800	←	←	4500	←	←
Maximum RPM ± 100		7700	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve adjuster screws approximately three (3) turns at 2400 m/8000 ft.

# 1998-FORMULA Z 670

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		310 290	290 270	260 240	240 220	210 200	190 175	PTO MAG
Jet needle		7EDY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		60	←	←	←	←	←	2
Air screw		2.25	←	2.00	1.75	1.50	1.25	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-3 (224)	←	←	AA-1 (224)	←	AA-0 (224)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1700	←	←	←	←	←	—
Idle throttle valve position	mm	2.10	2.15	2.25	2.40	2.55	2.65	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		330 310	310 290	280 260	260 240	230 210	210 190	PTO MAG
- 30°C - 20°F		320 300	300 280	270 250	250 230	220 200	200 180	PTO MAG
<b>- 20°C - 4°F</b>		<b>310 290</b>	<b>290 270</b>	<b>260 240</b>	<b>240 220</b>	<b>210 200</b>	<b>190 175</b>	<b>PTO MAG</b>
- 10°C 14°F		300 280	280 260	250 230	230 210	200 190	185 170	PTO MAG
0°C 32°F		290 270	270 250	240 220	220 200	195 185	175 160	PTO MAG
10°C 50°F		270 250	250 240	230 210	210 195	185 175	170 155	PTO MAG
20°C 70°F		260 240	240 230	220 200	200 185	185 170	160 150	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA III 600 AND FORMULA III 600 LT

## HIGH ALTITUDE KIT (P/N 861 761 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Violet 414 762 800	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 285	←	Qty 3 x 1 417 005 281	←	←	←
Calibration screw position		4	5	2	3	4	5
Pin		Qty 3 x 1 417 004 308	←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100		3800	←	4500	←	←	←
Maximum RPM ± 100		8500	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1998-FORMULA III 600 AND FORMULA III 600 LT

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		290	270	240	220	200	170	3
Jet needle		6DEY4	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet		50	←	←	60	←	←	3
Air screw		2.00	←	←	1.50	←	1.00	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-0 (286)	←	←	←	←	←	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		310	290	270	240	220	190	3
- 30°C - 20°F		300	280	250	230	200	180	3
<b>- 20°C - 4°F</b>		<b>290</b>	<b>270</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>170</b>	<b>3</b>
- 10°C 14°F		280	260	240	210	190	170	3
0°C 32°F		270	250	230	210	180	160	3
10°C 50°F		260	240	220	200	180	160	3
20°C 70°F		250	230	210	190	170	150	3

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA III 700

## HIGH ALTITUDE KIT (P/N 861 761 100)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Blue 414 768 200	←	←	Violet/Blue 415 034 900	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	←	←	←
Calibration screw position		3	4	5	3	4	5
Pin		Qty 3 x 1 417 004 308	←	←	Qty 3 x 1 417 004 309	←	←
Engagement RPM ± 100		4200	←	←	4100	←	←
Maximum RPM ± 100		7900	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-FORMULA III 700

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	310 300 310	290 280 290	260 250 260	240 230 240	210 200 210	190 180 190	PTO CTR MAG
	Jet needle	6DEH5	←	←	←	←	←	3
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet		50	←	←	←	←	←	3
Air screw		2.50	1.75	1.50	1.25	1.00	←	3
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-1 (480)	←	←	P-0 (480)	←	O-9 (480)	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	1.40	1.60	1.80	2.00	2.20	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature	- 40°C - 40°F	330/ 320/330	300/ 290/300	280/ 270/280	250/ 240/250	230/ 220/230	200/ 190/200	PTO/ CTR/MAG
	- 30°C - 20°F	320/ 310/320	290/ 280/290	270/ 260/270	240/ 230/240	220/ 210/220	195/ 185/195	PTO/ CTR/MAG
- 20°C - 4°F		<b>310/ 300/310</b>	<b>290/ 280/290</b>	<b>260/ 250/260</b>	<b>240/ 230/240</b>	<b>210/ 200/210</b>	<b>190/ 180/190</b>	<b>PTO/ CTR/MAG</b>
- 10°C 14°F		300/ 290/300	280/ 270/280	250/ 240/250	230/ 220/230	200/ 195/200	180/ 175/180	PTO/ CTR/MAG
0°C 32°F		290/ 280/290	270/ 260/270	240/ 230/240	220/ 210/220	195/ 190/195	175/ 170/175	PTO/ CTR/MAG
10°C 50°F		270/ 260/270	250/ 240/250	230/ 220/230	210/ 200/210	185/ 175/185	160/ 155/160	PTO/ CTR/MAG
20°C 70°F		260/ 250/260	240/ 230/240	220/ 210/220	200/ 190/200	180/ 170/180	155/ 150/155	PTO/ CTR/MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-MACH 1

## HIGH ALTITUDE KIT (P/N 861 761 000)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Green/Violet 414 762 800	←	←	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	Qty 3 x 1 417 005 285	←	←	←
Calibration screw position		2	3	2	3	4	5
Pin		Qty 3 x 1 417 004 308	←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100		4200	←	4700	←	←	←
Maximum RPM ± 100		8300	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47-50 504 148 300	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve covers approximately three (3) turns.

 **CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**CARBURATION**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		300	280	250	230	200	180	3
Jet needle		6DEY2	←	←	←	←	←	3
Needle position		4	←	3	←	←	2	—
Slide cut-away		2.5	←	←	←	←	←	3
Pilot jet		50	←	←	60	←	←	3
Air screw		2.00	←	←	1.50	←	1.00	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-9 (480)	←	←	←	←	←	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	←	←	←	←	←	—

**MAIN JET CHART**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C - 40°F		320	290	270	240	220	190	3
- 30°C - 20°F		310	290	260	240	210	190	3
<b>- 20°C - 4°F</b>		<b>300</b>	<b>280</b>	<b>250</b>	<b>230</b>	<b>200</b>	<b>180</b>	<b>3</b>
- 10°C 14°F		290	270	240	220	200	170	3
0°C 32°F		280	260	240	210	190	170	3
10°C 50°F		270	250	230	210	180	160	3
20°C 70°F		260	240	220	200	180	160	3

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1998-MACH Z/MACH Z LT

## HIGH ALTITUDE KIT (P/N 861 760 900)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring		Violet/Green 415 015 400	←	Green/Blue 414 768 200	←	←	←
Ramp		Qty 3 x 1 417 005 286	←	←	←	←	←
Calibration screw position		2	3	2	3	4	5
Pin		Qty 3 x 1 417 004 308	←	Qty 3 x 1 417 004 309	←	←	←
Engagement RPM ± 100		3900	←	4200	←	←	←
Maximum RPM ± 100		8300	←	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47-50 504 148 300	←	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1998-MACH Z/MACH Z LT

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		330 340 330	300 310 300	280 290 280	250 250 250	220 220 220	200 200 200	PTO CTR MAG
Jet needle		8ABY1-40	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.0	←	←	←	←	←	3
Pilot jet		50	←	←	60	←	←	3
Air screw		4.00	←	3.50	←	3.00	2.00	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		O-3 (327)	←	←	←	←	←	3
Float level	mm	20.0	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	
Temperature								
- 40°C - 40°F		350/ 360/350	320/ 330/320	300/ 310/300	270/ 270/270	240/ 240/240	210/ 210/210	PTO/ CTR/MAG
- 30°C - 20°F		340/ 350/340	310/ 320/310	290/ 300/290	260/ 260/260	230/ 230/230	205/ 205/205	PTO/ CTR/MAG
<b>- 20°C - 4°F</b>		<b>330/ 340/330</b>	<b>300/ 310/300</b>	<b>280/ 290/280</b>	<b>250/ 250/250</b>	<b>220/ 220/220</b>	<b>200/ 200/200</b>	<b>PTO/ CTR/MAG</b>
- 10°C 14°F		320/ 330/320	290/ 300/290	270/ 280/270	240/ 240/240	220/ 220/220	190/ 190/190	PTO/ CTR/MAG
0°C 32°F		310/ 320/310	290/ 300/290	260/ 270/260	240/ 240/240	210/ 210/210	190/ 190/190	PTO/ CTR/MAG
10°C 50°F		300/ 310/300	280/ 290/280	250/ 260/250	230/ 230/230	210/ 210/210	180/ 180/180	PTO/ CTR/MAG
20°C 70°F		290/ 300/290	270/ 280/270	240/ 250/240	220/ 220/220	200/ 200/200	170/ 170/170	PTO/ CTR/MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# HIGH ALTITUDE TECHNICAL DATA - 1997 MODELS

## 1997-TUNDRA II LT

### HIGH ALTITUDE KIT (P/N 861 753 800)

#### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m' 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Turquoise 417 115 900	←	Blue 417 115 600	←	←	←	1
Block		417 114 300	←	417 115 700	←	←	←	3
Weight		0	←	3 of 417 115 800	2 of ←	2 of ←	1 of ←	x 3
Capsule		417 114 500	←	0	←	←	←	x 2
Engagement RPM ± 100		3100	←	←	←	←	←	—
Maximum RPM ± 100		6900	←	←	←	←	←	—

#### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		White 414 509 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	3.6 7.9	←	5.9 13	←	←	←
Cam angle	° (degrees)	37.8	←	←	←	←	←

#### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		14	←	←	←	←	←
Bottom sprocket		25	←	←	←	←	←
Chain, quantity of links		62	←	←	←	←	←
Drive sprocket, quantity of teeth		8	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1997-TUNDRA II LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		190	185	175	140	130	125	1
Jet needle		6DH4	←	←	←	←	←	1
Needle position		2	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	1
Pilot jet		40	←	←	35	←	←	1
Air screw		1.0	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	1
Needle jet		0-8 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1200	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		210	200	190	150	145	135	1
- 30°C - 20°F		200	190	180	145	135	130	1
<b>- 20°C - 4°F</b>		<b>190</b>	<b>185</b>	<b>175</b>	<b>140</b>	<b>130</b>	<b>125</b>	<b>1</b>
- 10°C 14°F		185	180	170	135	125	120	1
0°C 32°F		180	175	165	130	120	115	1
10°C 50°F		170	165	155	125	115	110	1
20°C 70°F		165	160	150	120	110	105	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC WT

## HIGH ALTITUDE KIT (P/N 861 758 000)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Blue/Violet 420 817 800	←	Blue/Yellow 414 689 500	←	←	←	1
Ramp	417 005 146	←	←	←	←	←	3
Calibration screw position	3	4	2	3	4	5	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	3300	←	←	←	←	←	—
Maximum RPM ± 100	6500	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Blue	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	(degrees)	40	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	N.A.	←	←	←	←	←
Bottom sprocket	N.A.	←	←	←	←	←
Chain, quantity of links	N.A.	←	←	←	←	←
Drive sprocket, quantity of teeth	8	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997 - SKANDIC WT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		230	220	200	180	170	160	1
Jet needle		6DH8	←	←	←	←	←	1
Needle position		4	←	←	3	←	←	—
Slide cut-away		3.0	←	←	←	←	←	1
Pilot jet		25	←	←	←	←	←	1
Air screw		1.5	←	←	.75	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		O-0 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	18	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		250	240	220	195	190	180	1
- 30°C - 20°F		240	230	210	190	180	170	1
<b>- 20°C - 4°F</b>		<b>230</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>1</b>
- 10°C 14°F		220	210	190	175	165	155	1
0°C 32°F		210	200	180	170	160	150	1
10°C 50°F		200	190	170	160	155	145	1
20°C 70°F		190	180	160	150	150	140	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC SWT

## HIGH ALTITUDE KIT (P/N 861 758 100)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Red/Yellow 414 817 500	←	Red/Blue 414 691 500	←	←	←	1
Ramp	417 005 146	←	←	←	←	←	3
Calibration screw position	4	5	2	3	4	5	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	2900	←	←	2800	←	←	—
Maximum RPM ± 100	6500	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Blue	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.0 13.2	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	N.A.	←	←	←	←	←
Bottom sprocket	N.A.	←	←	←	←	←
Chain, quantity of links	N.A.	←	←	←	←	←
Drive sprocket, quantity of teeth	8	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC SWT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		230	220	200	180	170	160	1
Jet needle		6DH8	←	←	←	←	←	1
Needle position		4	←	←	3	←	←	—
Slide cut-away		3.0	←	←	←	←	←	1
Pilot jet		25	←	←	←	←	←	1
Air screw		1.5	←	←	.75	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		O-0 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.9	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		250	240	220	195	190	180	1
- 30°C - 20°F		240	230	210	190	180	170	1
<b>- 20°C - 4°F</b>		<b>230</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>1</b>
- 10°C 14°F		220	210	190	175	165	155	1
0°C 32°F		210	200	180	170	160	150	1
10°C 50°F		200	190	170	160	155	145	1
20°C 70°F		190	180	160	150	150	140	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC WT LC

## HIGH ALTITUDE KIT (P/N 861 760 000)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Blue/Orange 420 639 000	←	Blue/Pink 414 916 300	←	←	←	1
Ramp	417 005 290	←	←	←	←	←	3
Calibration screw position	2	3	2	3	4	5	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	3400	←	←	←	←	←	—
Maximum RPM ± 100	6800	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
			2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring		Blue	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	40	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	25	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC WT LC

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		260 280	250 270	240 260	190 210	180 200	170 190	PTO MAG
Jet needle		6DH4	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.0	←	←	←	←	←	2
Pilot jet		30	←	←	←	←	←	2
Air screw		1.0 .75	←	←	.5 .5	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1900	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	1.6	1.7	1.8	1.9	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		280	270	260	210	200	190	PTO
- 40°F		300	290	280	230	220	210	MAG
- 30°C		270	260	250	200	190	180	PTO
- 20°F		290	280	270	220	210	200	MAG
<b>- 20°C</b>		<b>260</b>	<b>250</b>	<b>240</b>	<b>190</b>	<b>180</b>	<b>170</b>	<b>PTO</b>
<b>- 4°F</b>		<b>280</b>	<b>270</b>	<b>260</b>	<b>210</b>	<b>200</b>	<b>190</b>	<b>MAG</b>
- 10°C		250	240	230	180	170	160	PTO
14°F		270	260	250	200	190	180	MAG
0°C		240	230	220	170	160	150	PTO
32°F		260	250	240	190	180	170	MAG
10°C		230	220	210	160	150	140	PTO
50°F		250	240	230	180	170	160	MAG
20°C		220	210	200	150	140	130	PTO
70°F		240	230	220	170	160	150	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC 380

## HIGH ALTITUDE KIT (P/N 861 757 900)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Yellow/green on Violet 417 118 500	←	Red/Blue on Violet 417 118 400	←	←	←	1
Block		417 118 100	←	←	←	←	←	1
Weight		1 of 417 120 400	←	5 of 417 114 400	4 of	3 of	2 of	x 3
Capsule		417 114 500	←	←	←	←	←	x 3
Engagement RPM ± 100		2900	←	3100	←	←	←	—
Maximum RPM ± 100		6900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←	←
Cam angle	° (degrees)	44	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		21	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		72	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1997 - SKANDIC 380



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25	←	←	1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC 500

## HIGH ALTITUDE KIT (P/N 861 757 800)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Red/Yellow 414 817 500	←	Red/Blue 414 691 500	←	←	←	1
Ramp		417 005 284	←	←	←	←	←	3
Calibration screw position		4	5	2	3	4	5	—
Pin		417 004 303	←	←	←	←	←	3
Engagement RPM ± 100		3000	←	←	←	←	←	—
Maximum RPM ± 100		7100	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange 414 505 800	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←	←
Cam angle	(degrees)	44	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		21	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		72	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1997-SKANDIC 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		180 170	170 160	160 150	150 140	140 130	130 120	PTO MAG
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.875	←	←	1.5	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.85	—
Exhaust restricting ring		N.A.	←	←	514 043 400	←	←	1

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
- 40°C - 40°F		200 190	190 180	175 165	165 155	155 145	140 130	PTO MAG
- 30°C - 20°F		190 180	180 170	165 155	155 145	145 135	135 125	PTO MAG
<b>- 20°C - 4°F</b>		<b>180 170</b>	<b>170 160</b>	<b>160 150</b>	<b>150 140</b>	<b>140 130</b>	<b>130 120</b>	<b>PTO MAG</b>
- 10°C 14°F		170 160	160 150	155 145	145 135	135 125	125 115	PTO MAG
0°C 32°F		165 155	155 145	150 140	140 130	130 120	120 110	PTO MAG
10°C 50°F		160 150	150 140	140 130	130 120	125 115	115 105	PTO MAG
20°C 70°F		155 145	145 135	135 125	125 115	120 110	110 100	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-TOURING E/E LT

## HIGH ALTITUDE KIT (P/N 861 757 700)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring (Touring E LT)	Yellow/Green on Violet 417 118 500	←	Red/Blue on Violet 417 118 400	←	←	←	1
Spring (Touring E)	Red/Blue on Violet 417 118 400	←	←	←	←	←	1
Block	417 118 100	←	←	←	←	←	1
Weight	1 of 417 120 400	←	5 of 417 114 400	4 of ←	3 of ←	2 of ←	x 3
Capsule	417 114 500	←	←	←	←	←	x 3
Engagement RPM ± 100	(E LT) 2900 (E) 3100	←	3100	←	←	←	—
Maximum RPM ± 100	6900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Orange	←	←	←	←	←
Spring tension	Kg ± 0.7	4.8	5.5	←	←	←
	lb ± 1.5	10.6	12.1	←	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	21	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-TOURING E/E LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25 1.25	←	←	0.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	--
Idle	RPM ± 200	1650	←	←	←	←	←	--
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	--

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-TOURING LE

## HIGH ALTITUDE KIT (P/N 861 757 600)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Yellow/Violet 414 678 400	←	Blue/Pink 415 916 300	←	←	←	1
Ramp	417 005 227	←	←	←	←	←	3
Calibration screw position	4	5	2	3	4	5	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	3500	←	3700	←	←	←	—
Maximum RPM ± 100	7000	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Orange	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	21	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-TOURING LE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		180	170	160	140	130	120	2
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	1	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		2.25	←	←	1.25	1.0	0.75	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-1 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.6	1.9	2.0	2.2	2.3	2.4	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		195	185	175	155	145	135	2
- 30°C - 20°F		185	175	165	145	135	125	2
<b>- 20°C - 4°F</b>		<b>180</b>	<b>170</b>	<b>160</b>	<b>140</b>	<b>130</b>	<b>120</b>	<b>2</b>
- 10°C 14°F		175	165	155	135	125	115	2
0°C 32°F		170	160	150	130	120	110	2
10°C 50°F		165	155	145	125	115	105	2
20°C 70°F		155	145	135	115	105	95	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-TOURING SLE

## HIGH ALTITUDE KIT (P/N 861 757 500)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Red/Yellow 414 817 500	←	Red/Blue 414 691 500	←	←	←	1
Ramp	415 005 284	←	←	←	←	←	3
Calibration screw position	4	5	2	3	4	5	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	3000	←	←	←	←	←	—
Maximum RPM ± 100	7100	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Orange	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←
Cam angle	(degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	21	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1997-TOURING SLE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		180	170	160	150	140	130	PTO MAG
		170	160	150	140	130	120	
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.875	←	←	1.5	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.85	—
Exhaust restricting ring		N.A.	←	←	514 043 400	←	←	1

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C - 40°F		200	190	175	165	155	140	PTO MAG
		190	180	165	155	145	130	
- 30°C - 20°F		190	180	165	155	145	135	PTO MAG
		180	170	155	145	135	125	
- 20°C - 4°F		<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>PTO</b> <b>MAG</b>
		<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>120</b>	
- 10°C 14°F		170	160	155	145	135	125	PTO MAG
		160	150	145	135	125	115	
0°C 32°F		165	155	150	140	130	120	PTO MAG
		155	145	140	130	120	110	
10°C 50°F		160	150	140	130	125	115	PTO MAG
		150	140	130	120	115	105	
20°C 70°F		155	145	135	125	120	110	PTO MAG
		145	135	125	115	110	100	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-GRAND TOURING 500

## HIGH ALTITUDE KIT (P/N 861 757 400)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Violet/Violet 414 817 900	←	Green/Blue 414 768 200	←	←	←
Ramp	414 005 228	←	←	←	←	←	3
Calibration screw position	3	4	2	3	4	5	—
Pin	417 004 304	←	417 004 303	←	←	←	3
Engagement RPM ± 100	3500	←	4400	←	←	←	—
Maximum RPM ± 100	7800	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige 414 558 900	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	(degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	23	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1997-GRAND TOURING 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		330 310	310 290	290 270	260 250	240 230	220 210	PTO MAG
Jet needle		6FEY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		1.125	←	←	1.00	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-4 (480)	←	←	P-2 (480)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.80	1.90	1.95	2.00	2.10	2.20	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		350	330	310	280	260	240	PTO
- 40°F		330	310	290	270	250	230	MAG
- 30°C		340	320	290	270	250	230	PTO
- 20°F		320	300	280	260	240	220	MAG
<b>- 20°C</b>		<b>330</b>	<b>310</b>	<b>290</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>PTO</b>
<b>- 4°F</b>		<b>310</b>	<b>290</b>	<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>MAG</b>
- 10°C		320	300	280	250	230	210	PTO
14°F		300	280	260	240	220	200	MAG
0°C		310	290	270	240	220	200	PTO
32°F		290	270	250	230	210	190	MAG
10°C		300	280	260	230	210	190	PTO
50°F		280	260	240	220	200	180	MAG
20°C		290	270	250	220	200	180	PTO
70°F		270	250	230	210	190	170	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-GRAND TOURING 583

## HIGH ALTITUDE KIT (P/N 861 757 300)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Blue/Blue 414 689 400	←	←	Violet/Pink 414 949 500	←	←	1
Ramp		417 005 285	←	←	417 005 289	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		417 004 303	←	←	←	←	←	3
Engagement RPM ± 100		3800	←	←	4200	←	←	—
Maximum RPM ± 100		7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←	←
Cam angle	(degrees)	47	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		25	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1997-GRAND TOURING 583



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	280 270	250 240	230 220	210 200	190 180	170 160	PTO MAG
	Jet needle	6BGY15	←	←	←	←	←	2
	Needle position	4	←	←	←	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	50	←	←	←	←	←	2
	Air screw	2.25	←	←	2.0	1.75	1.50	—
	Valve seat	1.5	←	←	←	←	←	2
	Needle jet	Q-6 (480)	←	←	Q-4 (480)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.00	2.10	2.20	2.60	2.70	2.80	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature	- 40°C	310	280	250	230	210	190	PTO
	- 40°F	300	270	240	220	200	180	MAG
	- 30°C	300	270	240	220	200	180	PTO
	- 20°F	290	260	230	210	190	170	MAG
	<b>- 20°C</b>	<b>280</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>190</b>	<b>170</b>	<b>PTO</b>
	<b>- 4°F</b>	<b>270</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>160</b>	<b>MAG</b>
	- 10°C	270	240	220	200	180	160	PTO
	14°F	260	230	210	190	170	150	MAG
	0°C	260	230	210	190	170	155	PTO
	32°F	250	220	200	180	160	145	MAG
	10°C	250	220	200	180	160	145	PTO
	50°F	240	210	190	170	155	135	MAG
	20°C	240	210	190	170	150	135	PTO
	70°F	230	200	185	160	145	130	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-GRAND TOURING SE

## HIGH ALTITUDE KIT (P/N 861 757 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Blue/Pink 414 916 300	←	Green/Violet 414 762 800	←	←	←	1
Ramp		417 005 286	←	417 005 285	←	←	←	3
Calibration screw position		3	4	2	3	4	5	—
Pin		417 004 304	←	417 004 303	←	←	←	3
Engagement RPM ± 100		3600	←	4800	←	←	←	—
Maximum RPM ± 100		8500	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	(degrees)	47	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		26	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1997-GRAND TOURING SE

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		350	←	←	←	←	←	3
Jet needle		6DEY2	←	←	←	←	←	3
Needle position		4	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	3
Pilot jet		50	←	←	←	←	←	3
Air screw		2.25	←	←	←	←	←	3
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-7 (480)	←	←	←	←	←	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.40	1.50	1.70	1.80	1.90	2.00	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		350	←	←	←	←	←	3
- 30°C - 20°F		350	←	←	←	←	←	3
<b>- 20°C - 4°F</b>		<b>350</b>	←	←	←	←	←	<b>3</b>
- 10°C 14°F		350	←	←	←	←	←	3
0°C 32°F		350	←	←	←	←	←	3
10°C 50°F		350	←	←	←	←	←	3
20°C 70°F		350	←	←	←	←	←	3

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve cover approximately three (3) turns.

# 1997-MX Z 440

## HIGH ALTITUDE KIT (P/N 861 757 100)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Blue/Green 414 817 700	←	Blue/Blue 414 689 400	←	←	
Ramp	417 005 289	←	417 005 284	←	←	←	3
Calibration screw position	3	4	3	4	5	6	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	3800	←	←	←	←	←	—
Maximum RPM ± 100	7000	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Orange	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	6.8 15.0	←	←
Cam angle	° (degrees)	47	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	23	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1997-MX Z 440



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	205 195	195 185	185 175	170 160	160 150	150 140	PTO MAG
	Jet needle	6DH2	←	←	←	←	←	2
	Needle position	3	←	←	2	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	35	←	←	←	←	←	2
	Air screw	1.5	←	←	1.0	←	←	—
	Valve seat	1.5	←	←	←	←	←	2
	Needle jet	P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	←	1.7	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature	- 40°C	220	210	200	185	175	165	PTO
	- 40°F	210	200	190	175	165	155	MAG
	- 30°C	210	200	190	175	165	155	PTO
	- 20°F	200	190	180	165	155	145	MAG
	<b>- 20°C</b>	<b>205</b>	<b>195</b>	<b>185</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>PTO</b>
	<b>- 4°F</b>	<b>195</b>	<b>185</b>	<b>175</b>	<b>160</b>	<b>150</b>	<b>140</b>	<b>MAG</b>
	- 10°C	200	190	180	165	155	145	PTO
	14°F	190	180	170	155	145	135	MAG
	0°C	195	185	175	160	150	140	PTO
	32°F	185	175	165	150	140	130	MAG
	10°C	185	175	165	150	140	135	PTO
	50°F	175	165	155	140	130	125	MAG
	20°C	175	165	155	145	135	130	PTO
	70°F	165	155	145	135	125	120	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-MX Z 583

## HIGH ALTITUDE KIT (P/N 861 756 900)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Green/Blue 414 768 200	←	←	←	←	←	1
Ramp		417 005 286	←	←	417 005 289	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		417 004 303	←	←	←	←	←	3
Engagement RPM ± 100		4400	←	←	4500	←	←	3
Maximum RPM ± 100		7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	(degrees)	50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		25	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1997-MX Z 583

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		280 260	260 240	230 210	210 190	190 170	170 150	PTO MAG
Jet needle		7ECY1	←	←	←	←	←	2
Needle position		3	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		60	←	←	←	←	←	2
Air screw		2.0	←	←	←	1.75	1.5	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-2 (224)	←	←	AA-0 (224)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.0	2.10	2.20	2.60	2.70	2.80	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		310 290	280 260	250 230	230 210	210 190	190 170	PTO MAG
- 30°C - 20°F		290 270	270 250	240 220	220 200	200 180	180 160	PTO MAG
<b>- 20°C - 4°F</b>		<b>280 260</b>	<b>260 240</b>	<b>230 210</b>	<b>210 190</b>	<b>190 170</b>	<b>170 150</b>	<b>PTO MAG</b>
- 10°C 14°F		270 250	250 230	220 200	200 180	180 160	160 145	PTO MAG
0°C 32°F		250 230	240 220	210 190	190 170	170 155	150 135	PTO MAG
10°C 50°F		240 220	230 210	200 170	180 160	160 145	145 130	PTO MAG
20°C 70°F		230 210	220 190	190 160	170 150	155 135	135 120	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-MX Z 440 LC

## HIGH ALTITUDE KIT (P/N 861 757 000)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Pink/White 414 991 400	←	Green/Pink 414 756 900	←	←	
Ramp	417 005 283	←	417 005 289	←	←	←	3
Calibration screw position	3	4	2	3	4	5	—
Pin	417 005 303	←	←	←	←	←	3
Engagement RPM ± 100	4400	←	←	←	←	←	—
Maximum RPM ± 100	8000	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft	
	Spring	Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	5.5 12.1	←	←	←
Cam angle	° (degrees)	44	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	23	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-MX Z 440 LC



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	240 210	230 200	220 190	200 170	185 155	175 145	PTO MAG
	Jet needle	6FJ43	←	←	←	←	←	2
	Needle position	2	←	←	←	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	40	←	←	50	←	←	2
	Air screw	.5	←	←	.75	←	←	—
	Valve seat	1.5	←	←	←	←	←	2
	Needle jet	P-8 (159)	←	P-6 (159)	P-5 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1700	←	←	←	←	←	—
Idle throttle valve position	mm	1.8	1.85	1.9	2.0	2.1	2.2	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature	- 40°C	260	250	240	220	200	195	PTO
	- 40°F	230	220	210	200	175	165	MAG
	- 30°C	250	240	230	210	195	185	PTO
	- 20°F	220	210	200	180	165	155	MAG
	<b>- 20°C</b>	<b>240</b>	<b>230</b>	<b>220</b>	<b>200</b>	<b>185</b>	<b>175</b>	<b>PTO</b>
	<b>- 4°F</b>	<b>210</b>	<b>200</b>	<b>190</b>	<b>170</b>	<b>155</b>	<b>145</b>	<b>MAG</b>
	- 10°C	230	220	210	190	175	165	PTO
	14°F	200	190	180	160	145	125	MAG
	0°C	220	210	200	180	165	155	PTO
	32°F	190	180	170	150	135	125	MAG
	10°C	210	200	190	170	155	145	PTO
	50°F	180	170	160	140	125	115	MAG
	20°C	170	190	180	160	145	135	PTO
	70°F	200	160	150	130	115	105	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-MX Z 670

## HIGH ALTITUDE KIT (P/N 861 756 800)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Violet/Yellow 415 015 300	←	←	←	←	←	1
Ramp		417 005 286	←	←	←	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		417 004 304	←	←	417 004 303	←	←	3
Engagement RPM ± 100		3800	←	←	4500	←	←	3
Maximum RPM ± 100		7700	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	(degrees)	50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		26	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1997-MX Z 670

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		300 270	280 250	260 230	240 210	220 200	200 180	PTO MAG
Jet needle		7EDY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		60	←	←	←	←	←	2
Air screw		2.25	←	2.0	1.75	1.5	1.125	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-2 (224)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1700	←	←	←	←	←	—
Idle throttle valve position	mm	2.10	2.15	2.25	2.40	2.55	2.65	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		320 290	300 270	280 250	260 250	240 220	220 200	PTO MAG
- 30°C - 20°F		310 280	290 260	270 240	250 220	230 210	210 190	PTO MAG
<b>- 20°C - 4°F</b>		<b>300 270</b>	<b>280 250</b>	<b>260 230</b>	<b>240 210</b>	<b>220 200</b>	<b>200 180</b>	<b>PTO MAG</b>
- 10°C 14°F		290 260	270 240	250 220	230 200	210 190	190 170	PTO MAG
0°C 32°F		280 250	260 230	240 210	220 190	200 180	180 170	PTO MAG
10°C 50°F		270 240	250 220	230 200	210 190	200 180	180 170	PTO MAG
20°C 70°F		260 240	240 210	220 200	200 180	180 170	170 160	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA S

## HIGH ALTITUDE KIT (P/N 861 756 700)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Red/Blue on Violet 417 118 400	←	←	←	←	←
Block	417 118 100	←	←	←	←	←	3
Weight	1 of 417 120 400	←	5 of 417 114 400	4 of	3 of	2 of	x 3
Capsule	417 114 500	←	←	←	←	←	x 3
Engagement RPM ± 100	3100	←	←	←	←	←	—
Maximum RPM ± 100	6900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Orange	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	5.5 12.1	←	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	21	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1997-FORMULA S

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25 1.25	←	←	.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA SL

## HIGH ALTITUDE KIT (P/N 861 756 600)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Blue/Yellow 414 689 500	←	Blue/Blue 414 689 400	←	←	←
Ramp	417 005 284	←	←	←	←	←	3
Calibration screw position	3	4	2	3	4	5	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	3600	←	←	←	←	←	—
Maximum RPM ± 100	7100	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Orange	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	22	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA SL



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		180	170	160	150	140	130	PTO MAG
		170	160	150	140	130	120	
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.825	←	←	1.5	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM ± 200	1650	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.7	1.8	1.85	—
Exhaust restricting ring		N.A.	←	←	514 043 400	←	←	1

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C - 40°F		200	190	175	165	155	140	PTO MAG
		190	180	165	155	145	130	
- 30°C - 20°F		190	180	165	155	145	135	PTO MAG
		180	170	155	145	135	125	
- 20°C - 4°F		<b>180</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>PTO</b> <b>MAG</b>
		<b>170</b>	<b>160</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>120</b>	
- 10°C 14°F		170	160	155	145	135	125	PTO MAG
		160	150	145	135	125	115	
0°C 32°F		165	155	150	140	130	120	PTO MAG
		155	145	140	130	120	110	
10°C 50°F		160	150	140	130	125	115	PTO MAG
		150	140	130	120	115	105	
20°C 70°F		155	145	135	125	120	110	PTO MAG
		145	135	125	115	110	100	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA 583

## HIGH ALTITUDE KIT (P/N 861 756 400)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Violet/Blue 415 034 900	←	←	←	←	←	1
Ramp		417 005 286	←	←	417 005 289	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		417 004 303	←	←	←	←	←	3
Engagement RPM ± 100		4100	←	←	4200	←	←	—
Maximum RPM ± 100		7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		25	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA 583



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	280 270	250 240	230 220	210 200	190 180	170 160	PTO MAG
	Jet needle	6BGY15	←	←	←	←	←	2
	Needle position	4	←	←	←	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	50	←	←	←	←	←	2
	Air screw	2.25	←	←	2.0	1.75	1.5	—
	Valve seat	1.5	←	←	←	←	←	2
	Needle jet	Q-6 (480)	←	←	Q-4 (480)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.0	2.10	2.20	2.60	2.70	2.80	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature	- 40°C	310	280	250	230	210	170	PTO
	- 40°F	300	270	240	220	200	180	MAG
	- 30°C	300	270	240	220	200	180	PTO
	- 20°F	290	260	230	210	190	170	MAG
	<b>- 20°C</b>	<b>280</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>190</b>	<b>170</b>	<b>PTO</b>
	<b>- 4°F</b>	<b>270</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>180</b>	<b>160</b>	<b>MAG</b>
	- 10°C	270	240	220	200	180	160	PTO
	14°F	260	230	210	190	170	150	MAG
	0°C	260	230	210	190	170	155	PTO
	32°F	250	220	200	180	160	145	MAG
	10°C	250	220	200	180	160	145	PTO
	50°F	240	210	190	170	155	135	MAG
	20°C	240	210	190	170	150	135	PTO
	70°F	230	200	185	160	145	130	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA 500/500 DELUXE

## HIGH ALTITUDE KIT (P/N 861 756 500)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Violet/Green 415 015 400	←	Green/Violet 414 762 800	←	←	←
Ramp	417 005 281	←	←	←	←	←	3
Calibration screw position	3	4	3	4	5	6	—
Pin	417 004 303	←	←	←	←	←	3
Engagement RPM ± 100	4200	←	4600	←	←	←	—
Maximum RPM ± 100	7750	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	° (degrees)	50	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	23	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA 500/500 DELUXE

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		310 290	290 270	270 250	240 230	220 210	200 190	PTO MAG
Jet needle		6FEY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		1.50	←	1.25	←	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-3 (480)	←	←	←	P-1 (480)	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.8	1.85	1.9	2.0	2.1	2.15	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		330	310	290	260	240	220	PTO
- 40°F		310	290	270	250	230	210	MAG
- 30°C		320	300	280	250	230	210	PTO
- 20°F		300	280	260	240	220	200	MAG
<b>- 20°C</b>		<b>310</b>	<b>290</b>	<b>270</b>	<b>240</b>	<b>220</b>	<b>200</b>	<b>PTO</b>
<b>- 4°F</b>		<b>290</b>	<b>270</b>	<b>250</b>	<b>230</b>	<b>210</b>	<b>190</b>	<b>MAG</b>
- 10°C		300	280	260	230	210	190	PTO
14°F		280	260	240	220	200	180	MAG
0°C		290	270	250	220	200	180	PTO
32°F		270	250	230	210	190	170	MAG
10°C		280	260	240	210	190	170	PTO
50°F		260	240	220	200	180	160	MAG
20°C		270	250	230	200	180	160	PTO
70°F		250	230	210	190	170	150	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA Z

## HIGH ALTITUDE KIT (P/N 861 756 300)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Violet/Blue 415 034 900	←	←	←	←	←	1
Ramp		417 005 286	←	←	417 005 289	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		417 004 303	←	←	←	←	←	3
Engagement RPM ± 100		4100	←	←	4200	←	←	—
Maximum RPM ± 100		7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		25	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1997-FORMULA Z



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	280 260	260 240	230 210	210 190	190 170	170 150	PTO MAG
	Jet needle	7ECY1	←	←	←	←	←	2
	Needle position	3	←	←	←	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	60	←	←	←	←	←	2
	Air screw	2.0	←	←	←	1.75	1.5	—
	Valve seat	1.5	←	←	←	←	←	2
	Needle jet	AA-2 (224)	←	←	AA-0 (224)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	2.0	2.10	2.20	2.60	2.70	2.80	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature	- 40°C	310	280	250	230	210	190	PTO MAG
	- 40°F	290	260	230	210	190	170	
	- 30°C	290	270	240	220	200	180	PTO MAG
	- 20°F	270	250	220	200	180	160	
	<b>- 20°C</b>	<b>280</b>	<b>260</b>	<b>230</b>	<b>210</b>	<b>190</b>	<b>170</b>	<b>PTO MAG</b>
	<b>- 4°F</b>	<b>260</b>	<b>240</b>	<b>210</b>	<b>190</b>	<b>170</b>	<b>150</b>	
	- 10°C	270	250	220	200	180	160	PTO MAG
	14°F	250	230	200	180	160	145	
	0°C	250	240	210	190	170	150	PTO MAG
	32°F	230	220	190	170	155	135	
	10°C	240	230	200	180	160	145	PTO MAG
	50°F	220	210	170	160	145	130	
	20°C	230	220	190	170	155	135	PTO MAG
	70°F	200	190	160	150	135	120	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA III AND FORMULA III LT

## HIGH ALTITUDE KIT (P/N 861 756 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Pink/White 414 991 400	←	←	←	←	←	1
Ramp		417 005 281	←	←	←	←	←	3
Calibration screw position		4	5	6	2	3	4	—
Pin		417 004 304	←	417 004 303	←	←	←	3
Engagement RPM ± 100		4500	←	←	←	←	←	—
Maximum RPM ± 100		8400	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige 414 558 900	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	50 504 096 100	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket (Formula III)		25	←	←	←	←	←
Top sprocket (Formula III LT)		23	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links (Formula III)		74	←	←	←	←	←
Chain, quantity of links (Formula III LT)		72	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1997-FORMULA III AND FORMULA III LT

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		330	300	280	250	220	200	3
Jet needle		6DEY4	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet		50	←	←	60	←	←	3
Air screw		1.50	←	1.25	1.00	0.75	←	3
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-O (286)	←	←	←	←	←	3
Starter jet		1.60	←	←	←	←	←	—
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1900	←	←	←	←	←	—
Idle throttle valve position	mm	1.20	1.40	1.60	1.80	2.00	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		350	320	300	270	240	210	3
- 30°C - 20°F		340	310	290	260	230	205	3
<b>- 20°C - 4°F</b>		<b>330</b>	<b>300</b>	<b>280</b>	<b>250</b>	<b>220</b>	<b>200</b>	<b>3</b>
- 10°C 14°F		320	290	270	240	220	190	3
0°C 32°F		310	290	260	240	210	190	3
10°C 50°F		300	280	250	230	210	180	3
20°C 70°F		290	270	240	220	200	180	3

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** At 2400 m, on Formula III LT, restriction ring (P/N 514 096 800), Qty 3 must be installed.

# 1997-MACH 1

## HIGH ALTITUDE KIT (P/N 861 756 100)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Pink/White 414 991 400	←	Green/Violet 414 762 800	←	←	←
Ramp	417 005 286	←	417 005 285	←	←	←	3
Calibration screw position	4	5	2	3	4	5	—
Pin	417 004 304	←	417 004 303	←	←	←	3
Engagement RPM ± 100	4500	←	4800	←	←	←	—
Maximum RPM ± 100	8500	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige 414 558 900	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←
Cam angle	(degrees)	47-50	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	26	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

**Additional information:** Unscrew Rave Valve covers approximately three (3) turns.

 **CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**CARBURATION**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		350	310	270	230	190	150	3
Jet needle		6DEY2	←	←	←	←	←	3
Needle position		4	←	←	3	←	←	—
Slide cut-away		2.5	←	←	←	←	←	3
Pilot jet		50	←	←	65	←	←	3
Air screw		2.25	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-7 (480)	←	←	P-5 (480)	←	←	3
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.40	1.50	1.70	1.80	1.90	2.00	—

**MAIN JET CHART**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		370	330	290	250	210	170	3
- 30°C - 20°F		360	320	280	240	200	160	3
<b>- 20°C - 4°F</b>		<b>350</b>	<b>310</b>	<b>270</b>	<b>230</b>	<b>190</b>	<b>150</b>	<b>3</b>
- 10°C 14°F		340	300	260	220	180	140	3
0°C 32°F		330	290	250	210	170	130	3
10°C 50°F		320	280	240	200	160	120	3
20°C 70°F		310	270	230	190	150	110	3

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-MACH Z LT

## HIGH ALTITUDE KIT (P/N 861 756 000)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Green/Blue 414 768 200	←	←	←	←	←	1
Ramp		417 005 286	←	←	←	←	←	3
Calibration screw position		3	4	3	4	5	6	—
Pin		417 004 304	←	417 004 303	←	←	←	3
Engagement RPM ± 100		4100	←	4500	←	←	←	—
Maximum RPM ± 100		8300	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47-50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		26	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1997-MACH Z LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		380	350	320	290	260	230	3
Jet needle		8 AGY1-41	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.0	←	←	←	←	←	3
Pilot jet		50	←	←	60	←	←	3
Air screw		4.00	3.50	3.00	←	2.50	2.00	3
Valve seat		1.5	←	←	←	←	←	3
Needle jet		O-4 (327)	←	←	←	←	←	3
Float level	mm	20	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.30	1.40	1.60	1.80	2.00	2.20	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		400	370	340	300	270	240	3
- 30°C - 20°F		390	360	330	300	270	240	3
<b>- 20°C - 4°F</b>		<b>380</b>	<b>350</b>	<b>320</b>	<b>290</b>	<b>260</b>	<b>230</b>	<b>3</b>
- 10°C 14°F		370	340	310	280	250	220	3
0°C 32°F		360	330	300	270	250	220	3
10°C 50°F		350	320	290	260	240	210	3
20°C 70°F		340	310	290	260	230	200	3

NOTE: Arrows in the charts indicate that the preceding information is repeated.

Additional information: At 2400 m, restriction ring (P/N 514 096 700), Qty 3 must be installed.

# 1997-MACH Z

## HIGH ALTITUDE KIT (P/N 861 755 900)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Green/Blue 414 768 200	←	←	←	←	←	1
Ramp		417 005 286	←	←	←	←	←	3
Calibration screw position		3	4	3	4	5	6	—
Pin		417 004 304	←	417 004 303	←	←	←	3
Engagement RPM ± 100		4100	←	4500	←	←	←	—
Maximum RPM ± 100		8300	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	7.0 15.4	←	←	←	←	←
Cam angle	° (degrees)	47-50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		26	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



 **CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**CARBURATION**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		380	350	320	290	260	230	3
Jet needle		8 AGY1-41	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.0	←	←	←	←	←	3
Pilot jet		50	←	←	60	←	←	3
Air screw		4.00	3.50	3.00	←	2.50	2.00	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		O-4 (327)	←	←	←	←	←	3
Float level	mm	20	←	←	←	←	←	—
Idle	RPM ± 200	1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.30	1.40	1.60	1.80	2.00	2.20	—

**MAIN JET CHART**

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		400	370	340	300	270	240	3
- 30°C - 20°F		390	360	330	300	270	240	3
<b>- 20°C - 4°F</b>		<b>380</b>	<b>350</b>	<b>320</b>	<b>290</b>	<b>260</b>	<b>230</b>	<b>3</b>
- 10°C 14°F		370	340	310	280	250	220	3
0°C 32°F		360	330	300	270	250	220	3
10°C 50°F		350	320	290	260	240	210	3
20°C 70°F		340	310	290	260	230	200	3

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# HIGH ALTITUDE TECHNICAL DATA - 1996 MODELS

## 1996-ÉLAN

### HIGH ALTITUDE KIT (P/N 861 753 900)

#### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Blue 417 115 000	←	←	←	←	←	1
Block		417 114 300	←	←	←	←	←	—
Weight		6	←	←	5	←	←	—
Capsule		417 114 500	←	←	←	←	←	—
Engagement RPM ± 100		2100	←	←	←	←	←	—
Maximum RPM ± 100		5200	←	←	←	←	←	—

#### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Black	←	←	←	←	←
Spring tension	Kg ± 0.7	3.6	←	4.5	←	←	←
	lb ± 1.5	7.9		9.9			
Cam angle	° (degrees)	40.4	←	←	←	←	←

#### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		10	←	←	←	←	←
Bottom sprocket		25	←	←	←	←	←
Chain, quantity of links		62	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		160	155	145	135	125	120	1
Jet needle		6DP1	←	←	←	←	←	1
Needle position		3	←	←	←	←	←	—
Slide cut-away		2.0	←	←	←	←	←	1
Pilot jet		30	←	←	←	←	←	1
Air screw		1.5	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	1
Needle jet		0-8 (182)	←	←	←	←	←	1
Float level	mm	17.3	←	←	←	←	←	—
Idle	RPM	1100-1300	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		170	165	155	145	140	130	1
- 30°C - 20°F		165	160	150	140	130	125	1
<b>- 20°C - 4°F</b>		<b>160</b>	<b>155</b>	<b>145</b>	<b>135</b>	<b>125</b>	<b>120</b>	<b>1</b>
- 10°C 14°F		155	150	140	130	120	115	1
0°C 32°F		150	145	135	125	115	110	1
10°C 50°F		145	140	130	120	110	105	1
20°C 70°F		140	135	125	115	105	100	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-TUNDRA II LT

## HIGH ALTITUDE KIT (P/N 861 753 800)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Turquoise 417 115 900	←	Blue 417 115 600	←	←	←	1
Block	417 114 300	←	417 115 700	←	←	←	3
Weight	0	←	3 of 417 115 800	2 of ←	2 of ←	1 of ←	x 3
Capsule	2	←	0	←	←	←	x 3
Engagement RPM ± 100	3900	←	3200	←	←	←	—
Maximum RPM ± 100	6900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	White	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	←	5.9 13	←	←	←
Cam angle	° (degrees)	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	14	←	←	←	←	←
Bottom sprocket	25	←	←	←	←	←
Chain, quantity of links	62	←	←	←	←	←
Drive sprocket, quantity of teeth	8	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-TUNDRA II LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		190	185	175	140	130	125	1
Jet needle		6DH4	←	←	←	←	←	1
Needle position		2	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	1
Pilot jet		40	←	←	35	←	←	1
Air screw		1.0	←	←	←	←	←	—
Valve seat		1.5	←	←	←	←	←	1
Needle jet		0-8 (154)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1100-1300	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	←	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		210	200	190	150	145	135	1
- 30°C - 20°F		200	190	180	145	135	130	1
<b>- 20°C - 4°F</b>		<b>190</b>	<b>185</b>	<b>175</b>	<b>140</b>	<b>130</b>	<b>125</b>	<b>1</b>
- 10°C 14°F		185	180	170	135	125	120	1
0°C 32°F		180	175	165	130	120	115	1
10°C 50°F		170	165	155	125	115	110	1
20°C 70°F		165	160	150	120	110	105	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-SKANDIC WT

## HIGH ALTITUDE KIT (P/N 861 751 900)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Blue/Violet 420 438 137	←	Red/Blue 414 691 500	←	←	←
Ramp	420 480 146	←	←	←	←	←	3
Calibration screw position	3	4	2	3	4	5	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	2900	←	←	←	←	←	—
Maximum RPM ± 100	6500	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Blue	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.4 14.1	←	←	←	←
Cam angle	° (degrees)	35-50	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	N.A.	←	←	←	←
Bottom sprocket	N.A.	←	←	←	←	←
Chain, quantity of links	N.A.	←	←	←	←	←
Drive sprocket, quantity of teeth	8	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-SKANDIC WT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		220	210	190	170	160	150	1
Jet needle		6DH8	←	←	←	←	←	1
Needle position		4	←	←	3	←	←	—
Slide cut-away		3.0	←	←	←	←	←	1
Pilot jet		25	←	←	←	←	←	1
Air screw		1.5	←	←	.75	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		O-0 (159)	←	←	←	←	←	1
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500-1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	1.4	←	1.5	1.6	1.7	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		240	230	210	185	180	170	1
- 30°C - 20°F		230	220	200	180	170	160	1
<b>- 20°C - 4°F</b>		<b>220</b>	<b>210</b>	<b>190</b>	<b>170</b>	<b>160</b>	<b>150</b>	<b>1</b>
- 10°C 14°F		210	200	180	165	155	145	1
0°C 32°F		200	190	170	160	150	140	1
10°C 50°F		190	180	160	150	145	135	1
20°C 70°F		180	170	150	140	140	130	1

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-SKANDIC 380

## HIGH ALTITUDE KIT (P/N 861 751 800)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring	Yellow/Green * 417 118 500	←	Red/Blue * 417 118 400	←	←	←	1
Block	417 118 100	←	←	←	←	←	3
Weight	1 of 417 120 400	←	5 of 417 114 400	4 of ←	3 of ←	2 of ←	x 3
Capsule	1	←	←	←	←	←	x 3
Engagement RPM ± 100	2900	←	3100	←	←	←	—
Maximum RPM ± 100	6900	←	←	←	←	←	—

\* NOTE: The spring is painted VIOLET **not** the normal black.

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring	Orange	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	21	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1996-SKANDIC 380



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.25	←	←	.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500- 1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
- 20°C - 4°F		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-SKANDIC 500

## HIGH ALTITUDE KIT (P/N 861 751 700)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Red/Orange 420 438 130	←	Red/Blue 420 438 095	←	←	←
Ramp	420 480 284	←	←	←	←	←	3
Calibration screw position	4	5	3	4	5	6	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	3000	←	←	←	←	←	—
Maximum RPM ± 100	7100	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←	←
Cam angle	° (degrees)	44	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		21	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		72	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-SKANDIC 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		190 180	180 170	170 160	150 140	140 130	130 120	PTO MAG
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.25	←	←	1.0	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500- 1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	←	1.7	1.8	1.85	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		210	200	185	165	155	140	PTO
- 40°F		200	190	175	155	145	130	MAG
- 30°C		200	190	175	155	145	135	PTO
- 20°F		190	180	165	145	135	125	MAG
<b>- 20°C</b>		<b>190</b>	<b>180</b>	<b>170</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>PTO</b>
<b>- 4°F</b>		<b>180</b>	<b>170</b>	<b>160</b>	<b>140</b>	<b>130</b>	<b>120</b>	<b>MAG</b>
- 10°C		180	170	165	145	135	125	PTO
14°F		170	160	155	135	125	115	MAG
0°C		175	165	160	140	130	120	PTO
32°F		165	155	150	130	120	110	MAG
10°C		170	160	150	130	125	115	PTO
50°F		160	150	140	120	115	105	MAG
20°C		165	155	145	125	120	110	PTO
70°F		155	145	135	115	110	100	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-TOURING E/E LT

## HIGH ALTITUDE KIT (P/N 861 751 600)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring (Touring E LT)	Yellow/Green * 417 118 500	←	Red/Blue * 417 118 400	←	←	←	1
Spring (Touring E)	Red/Blue * 417 118 400	←	←	←	←	←	1
Block	417 118 100	←	←	←	←	←	3
Weight	1 of 417 120 400	←	5 of 417 114 400	4 of ←	3 of ←	2 of ←	x 3
Capsule	1	←	←	←	←	←	x 3
Engagement RPM ± 100	(E LT) 2900 (E) 3100	←	3100	←	←	←	—
Maximum RPM ± 100	6900	←	←	←	←	←	—

\* NOTE: The spring is painted VIOLET **not** the normal black.

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring	Orange	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	5.5 12.1	←	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	21	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-TOURING E/E LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25	←	←	0.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500- 1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-TOURING LE

## HIGH ALTITUDE KIT (P/N 861 751 500)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Yellow/Violet 414 678 400	←	Violet/Green 415 015 400	←	←	←
Ramp	420 480 227	←	←	←	←	←	3
Calibration screw position	4	5	3	4	5	6	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	3100	←	3500	←	←	←	—
Maximum RPM ± 100	7000	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Orange	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	←	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	21	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-TOURING LE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		180	170	160	140	130	120	2
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	1	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		2.25	←	←	1.25	1.0	0.75	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-1 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500-1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.8	1.9	2.0	2.2	2.3	2.4	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		195	185	175	155	145	135	2
- 30°C - 20°F		185	175	165	145	135	125	2
<b>- 20°C - 4°F</b>		<b>180</b>	<b>170</b>	<b>160</b>	<b>140</b>	<b>130</b>	<b>120</b>	<b>2</b>
- 10°C 14°F		175	165	155	135	125	115	2
0°C 32°F		170	160	150	130	120	110	2
10°C 50°F		165	155	145	125	115	105	2
20°C 70°F		155	145	135	115	105	95	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-TOURING SLE

## HIGH ALTITUDE KIT (P/N 861 751 400)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Red/Orange 415 015 200	←	Red/Blue 414 691 500	←	←	←	1
Ramp	420 480 284	←	←	←	←	←	3
Calibration screw position	4	5	3	4	5	6	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	3000	←	←	←	←	←	—
Maximum RPM ± 100	7100	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Orange	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	21	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1996-TOURING SLE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Main jet		190	180	170	150	140	130	PTO MAG
		180	170	160	140	130	120	
Jet needle		6DH2	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	45	←	←	2
Air screw		1.25	←	←	1.0	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500- 1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	←	1.7	1.8	1.85	—
Exhaust restricting ring		N.A.	←	←	514 043 400	←	←	1

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
- 40°C		210	200	185	165	155	140	PTO MAG
	- 40°F	200	190	175	155	145	130	
- 30°C		200	190	175	155	145	135	PTO MAG
	- 20°F	190	180	165	145	135	125	
- 20°C		<b>190</b>	<b>180</b>	<b>170</b>	<b>150</b>	<b>140</b>	<b>130</b>	<b>PTO</b> <b>MAG</b>
	- 4°F	<b>180</b>	<b>170</b>	<b>160</b>	<b>140</b>	<b>130</b>	<b>120</b>	
- 10°C		180	170	165	145	135	125	PTO MAG
	14°F	170	160	155	135	125	115	
0°C		175	165	160	140	130	120	PTO MAG
	32°F	165	155	150	130	120	110	
10°C		170	160	150	130	125	115	PTO MAG
	50°F	160	150	140	120	115	105	
20°C		165	155	145	125	120	110	PTO MAG
	70°F	155	145	135	115	110	100	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-GRAND TOURING 500

## HIGH ALTITUDE KIT (P/N 861 751 100)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Green/Blue 414 768 200	←	←	←	←	←	1
Ramp		420 480 228	←	←	←	←	←	3
Calibration screw position		3	4	2	3	4	5	—
Pin		504 259 600	←	420 429 140	←	←	←	3
Engagement RPM ± 100		4100	←	4400	←	←	←	—
Maximum RPM ± 100		7500	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	6.8 15.0	←	←	←
Cam angle	° (degrees)	44	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		23	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		72	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1996-GRAND TOURING 500

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		320	300	280	260	240	220	2
Jet needle		6FEY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		45	←	←	←	←	←	2
Air screw		1.75	←	←	1.25	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-7 (480)	←	←	P-5 (480)	←	P-3 (480)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1700-1900	←	←	←	←	←	—
Idle throttle valve position	mm	1.8	←	1.9	2.0	2.1	2.2	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		340	320	300	280	260	240	2
- 30°C - 20°F		330	310	290	270	250	230	2
<b>- 20°C - 4°F</b>		<b>320</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>2</b>
- 10°C 14°F		310	290	270	250	230	210	2
0°C 32°F		300	280	260	240	220	200	2
10°C 50°F		290	270	250	230	210	190	2
20°C 70°F		280	260	240	220	200	180	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-GRAND TOURING 580

## HIGH ALTITUDE KIT (P/N 861 751 000)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Yellow/Red 414 993 000	←	←	Blue/Orange 414 639 000	←	←	1
Ramp	420 480 228	←	←	←	←	←	3
Calibration screw position	3	4	5	3	4	5	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	3200	←	←	←	←	←	—
Maximum RPM ± 100	7300	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←
Cam angle	° (degrees)	50	←	←	44	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	25	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-GRAND TOURING 580

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		360 370	340 350	320 330	300 310	280 290	260 270	PTO MAG
Jet needle		6DHN44	←	←	←	←	←	2
Needle position		4	←	←	3	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	50	←	←	2
Air screw		1.25	←	←	1.5	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		O-4 (480)	←	←	O-3 (480)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1800- 2000	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	1.6	1.65	1.7	1.75	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		390	270	350	330	310	290	PTO
- 40°F		400	380	360	350	320	300	MAG
- 30°C		370	350	330	310	290	270	PTO
- 20°F		380	360	340	320	300	280	MAG
<b>- 20°C</b>		<b>360</b>	<b>340</b>	<b>320</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>PTO</b>
<b>- 4°F</b>		<b>370</b>	<b>350</b>	<b>330</b>	<b>310</b>	<b>290</b>	<b>270</b>	<b>MAG</b>
- 10°C		350	330	310	290	270	250	PTO
14°F		360	340	320	300	280	260	MAG
0°C		340	320	300	280	260	240	PTO
32°F		350	330	310	290	270	250	MAG
10°C		330	310	290	270	250	230	PTO
50°F		340	320	300	280	260	240	MAG
20°C		310	290	270	250	240	220	PTO
70°F		320	300	280	260	250	230	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-GRAND TOURING SE

## HIGH ALTITUDE KIT (P/N 861 750 900)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Yellow/Orange 414 689 700	←	←	Violet/Yellow 415 015 300	←	
Ramp	420 480 280	←	←	420 480 286	←	←	3
Calibration screw position	3	4	5	4	5	6	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	3500	←	←	3800	←	←	—
Maximum RPM ± 100	7700	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←	←
Cam angle	° (degrees)	47	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		25	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-GRAND TOURING SE



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		360	330	300	280	260	240	2
Jet needle		7EDY1	←	←	←	←	←	2
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		2.25	←	2.0	1.75	1.5	1.125	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-3 (224)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1800- 2000	←	←	←	←	←	—
Idle throttle valve position	mm	1.9	2.15	2.25	2.4	2.55	2.65	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		380	350	320	300	280	260	2
- 30°C - 20°F		370	340	310	290	270	250	2
<b>- 20°C - 4°F</b>		<b>360</b>	<b>330</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>2</b>
- 10°C 14°F		350	320	300	280	260	240	2
0°C 32°F		340	310	290	270	250	230	2
10°C 50°F		340	310	290	270	250	230	2
20°C 70°F		330	300	280	260	240	220	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MX Z 440

## HIGH ALTITUDE KIT (P/N 861 750 800)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Pink/White 414 991 400	←	Green/Pink 414 756 900	←	←	
Ramp	420 480 283	←	420 480 289	←	←	←	3
Calibration screw position	3	4	2	3	4	5	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	4400	←	←	←	←	←	—
Maximum RPM ± 100	8000	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	23	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1996-MX Z 440

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		230 210	220 200	210 190	190 170	175 155	165 145	PTO MAG
Jet needle		6FJ43	←	←	←	←	←	2
Needle position		2	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		.5	←	←	.75	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-8 (159)	←	P-6 (159)	P-5 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1600- 1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.8	←	1.9	2.0	2.1	2.2	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		250	240	230	210	195	185	PTO
- 40°F		230	220	210	200	175	165	MAG
- 30°C		240	230	220	200	185	175	PTO
- 20°F		220	210	200	180	165	155	MAG
<b>- 20°C</b>		<b>230</b>	<b>220</b>	<b>210</b>	<b>190</b>	<b>175</b>	<b>165</b>	<b>PTO</b>
<b>- 4°F</b>		<b>210</b>	<b>200</b>	<b>190</b>	<b>170</b>	<b>155</b>	<b>145</b>	<b>MAG</b>
- 10°C		220	210	200	180	165	155	PTO
14°F		200	190	180	160	145	135	MAG
0°C		210	200	190	170	155	145	PTO
32°F		190	180	170	150	135	125	MAG
10°C		200	190	180	160	145	135	PTO
50°F		180	170	160	140	125	115	MAG
20°C		190	180	170	150	135	125	PTO
70°F		170	160	150	130	115	105	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MX Z 583

## HIGH ALTITUDE KIT (P/N 861 750 700)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Green/Blue 414 768 200	←	Violet/Blue 415 034 900	←	←	
Ramp	420 480 286	←	420 480 289	←	←	←	3
Calibration screw position	2	3	2	3	4	5	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	4400	←	3800	←	←	←	3
Maximum RPM ± 100	7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←
Cam angle	° (degrees)	50	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	25	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MX Z 583

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		270 260	250 240	230 220	210 200	190 180	180 170	PTO MAG
Jet needle		7ECY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		45	←	←	55	←	←	2
Air screw		1.875	←	←	1.5	1.25	.75	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-2 (224)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1800- 2000	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	1.6	1.7	1.8	1.9	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		290 280	270 260	250 240	230 220	210 200	200 190	PTO MAG
- 30°C - 20°F		280 270	260 250	240 230	220 210	200 190	190 180	PTO MAG
<b>- 20°C - 4°F</b>		<b>270 260</b>	<b>250 240</b>	<b>230 220</b>	<b>210 200</b>	<b>190 180</b>	<b>180 170</b>	<b>PTO MAG</b>
- 10°C 14°F		260 250	240 230	220 210	200 190	185 175	175 165	PTO MAG
0°C 32°F		255 245	235 225	215 205	195 185	175 165	165 155	PTO MAG
10°C 50°F		245 235	225 215	205 195	185 175	165 155	155 145	PTO MAG
20°C 70°F		235 225	215 205	195 185	175 165	155 145	145 135	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA S

## HIGH ALTITUDE KIT (P/N 861 751 300)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring	Violet * 417 118 400	←	←	←	←	←	1
Block	417 118 100	←	←	←	←	←	3
Weight	1 of 417 120 400	←	5 of 417 114 400	4 of ←	3 of ←	2 of ←	x 3
Capsule	1	←	←	←	←	←	x 3
Engagement RPM ± 100	3100	←	←	←	←	←	—
Maximum RPM ± 100	6900	←	←	←	←	←	—

\* NOTE: The spring is painted VIOLET **not** the normal black.

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring	Orange	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	4.8 10.6	←	5.5 12.1	←	←
Cam angle	° (degrees)	44	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	21	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA S



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		140	135	130	125	115	110	2
Jet needle		6DP9	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	←	←	2
Air screw		1.25	←	←	.5 1.0	←	←	PTO MAG
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (159)	←	←	O-8 (159)	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500- 1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.3	←	←	1.6	←	←	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		150	145	140	135	125	120	2
- 30°C - 20°F		145	140	135	130	120	115	2
<b>- 20°C - 4°F</b>		<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	<b>115</b>	<b>110</b>	<b>2</b>
- 10°C 14°F		135	130	125	120	110	105	2
0°C 32°F		130	125	120	115	105	100	2
10°C 50°F		125	120	115	110	100	95	2
20°C 70°F		120	115	110	105	95	90	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA SL

## HIGH ALTITUDE KIT (P/N 861 751 200)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Blue/Yellow 414 689 500	←	Blue/Blue 414 689 400	←	←	←	1
Ramp		420 480 284	←	←	←	←	←	3
Calibration screw position		3	4	2	3	4	5	—
Pin		420 429 140	←	←	←	←	←	3
Engagement RPM ± 100		3600	←	←	←	←	←	—
Maximum RPM ± 100		7100	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Orange	←	←	←	←	←
Spring tension	Kg ± 0.7	4.8	←	5.5	←	←	←
	lb ± 1.5	10.6		12.1			
Cam angle	° (degrees)	44	←	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA SL



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
		Main jet	190 180	180 170	170 160	150 140	140 130	
Jet needle	6DH2	←	←	←	←	←	←	2
Needle position	3	←	←	2	←	←	←	—
Slide cut-away	2.5	←	←	←	←	←	←	2
Pilot jet	40	←	←	45	←	←	←	2
Air screw	1.25	←	←	1.0	←	←	←	—
Valve seat	1.5	←	←	←	←	←	←	2
Needle jet	P-0 (159)	←	←	←	←	←	←	2
Float level	mm	23.9	←	←	←	←	←	—
Idle	RPM	1500- 1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.5	←	←	1.7	1.8	1.85	—
Exhaust restricting ring	N.A.	←	←	514 043 400	←	←	←	1

### MAIN JET CHART

Altitude Calibration		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
		- 40°C - 40°F	210 200	200 190	185 175	165 155	155 145	
- 30°C - 20°F	200 190	190 180	175 165	155 145	145 135	135 125	PTO MAG	
<b>- 20°C</b> <b>- 4°F</b>	<b>190</b> <b>180</b>	<b>180</b> <b>170</b>	<b>170</b> <b>160</b>	<b>150</b> <b>140</b>	<b>140</b> <b>130</b>	<b>130</b> <b>120</b>	<b>PTO</b> <b>MAG</b>	
- 10°C 14°F	180 170	170 160	165 155	145 135	135 125	125 115	PTO MAG	
0°C 32°F	175 165	165 155	160 150	140 130	130 120	120 110	PTO MAG	
10°C 50°F	170 160	160 150	150 140	130 120	125 115	115 105	PTO MAG	
20°C 70°F	165 155	155 145	145 135	125 115	120 110	110 100	PTO MAG	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA SLS

## HIGH ALTITUDE KIT (P/N 861 750 600)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Green/Blue 420 438 194	←	Pink/White 414 991 400	←	←	
Ramp	420 480 287	←	←	←	←	←	3
Calibration screw position	3	4	2	3	4	5	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	4500	←	4900	←	←	←	—
Maximum RPM ± 100	7500	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	6.8 15.0	←	←
Cam angle	° (degrees)	50	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	25	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1996-FORMULA SLS



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		320	300	280	260	240	220	2
Jet needle		6FEY1	←	←	←	←	←	2
Needle position		3	←	←	2	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		45	←	←	←	←	←	2
Air screw		1.75	←	←	1.25	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-7 (480)	←	←	P-5 (480)	←	P-3 (480)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1700-1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.8	←	1.9	2.0	2.1	2.2	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		340	320	300	280	260	240	2
- 30°C - 20°F		330	310	290	270	250	230	2
<b>- 20°C - 4°F</b>		<b>320</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>220</b>	<b>2</b>
- 10°C 14°F		310	290	270	250	230	210	2
0°C 32°F		300	280	260	240	220	200	2
10°C 50°F		290	270	250	230	210	190	2
20°C 70°F		280	260	240	220	200	180	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA STX/STX LT

## HIGH ALTITUDE KIT (P/N 861 750 500)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring (STX)		Blue/Green 414 817 700	←	Violet/Violet 414 817 900	←	←	←	1
Spring (STX LT)		Yellow/Green 414 742 300	←	Violet/Violet 414 817 900	←	←	←	1
Ramp		420 480 228	←	←	←	←	←	3
Calibration screw position		(STX) 4 (STX LT) 3	5	3	4	←	5	—
Pin		420 429 140	←	←	←	←	←	3
Engagement RPM ± 100		(STX) 3500 (STX LT) 3200	←	(STX) 3800 (STX LT) 3800	←	←	←	—
Maximum RPM ± 100		7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7	6.1	←	←	←	←	←
	lb ± 1.5	13.4	←	←	←	←	←
Cam angle	° (degrees)	50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		(STX) 25 (STX LT) 23	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		(STX) 74 (STX LT) 72	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA STX/STX LT

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		320 330	300 310	280 290	250 270	230 250	210 230	PTO MAG
Jet needle		6DHN44	←	←	←	←	←	2
Needle position		3	←	←	←	←	←	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		40	←	←	←	55	←	2
Air screw		1.5	←	←	1.5 1.0	←	←	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		P-0 (480)	←	←	0-4 (480)	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1800- 2000	←	←	←	←	←	—
Idle throttle valve position	mm	1.6	1.65	1.7	1.75	1.8	1.85	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C		340	320	300	270	250	240	PTO
- 40°F		350	330	310	290	270	260	MAG
- 30°C		330	310	290	260	240	230	PTO
- 20°F		340	320	300	280	260	250	MAG
<b>- 20°C</b>		<b>320</b>	<b>300</b>	<b>280</b>	<b>250</b>	<b>230</b>	<b>220</b>	<b>PTO</b>
<b>- 4°F</b>		<b>330</b>	<b>310</b>	<b>290</b>	<b>270</b>	<b>250</b>	<b>240</b>	<b>MAG</b>
- 10°C		310	290	270	240	220	210	PTO
14°F		320	300	280	260	240	230	MAG
0°C		300	280	260	230	210	200	PTO
32°F		310	290	270	250	230	220	MAG
10°C		290	270	250	220	200	190	PTO
50°F		300	280	260	240	220	210	MAG
20°C		280	260	240	210	190	180	PTO
70°F		290	270	250	230	210	200	MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA SS

## HIGH ALTITUDE KIT (P/N 861 750 300)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Violet/Yellow 415 015 300	←	←	←	←	←	1
Ramp		420 480 286	←	←	←	←	←	3
Calibration screw position		3	4	5	4	5	6	—
Pin		504 259 600	←	←	420 429 140	←	←	3
Engagement RPM ± 100		3800	←	←	4100	←	←	—
Maximum RPM ± 100		7700	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	6.8 15.0	←	←	←
Cam angle	° (degrees)	47	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		26	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA SS



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet		360	330	300	280	260	240	2
Jet needle		7EDY1	←	←	←	←	←	2
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.5	←	←	←	←	←	2
Pilot jet		50	←	←	←	←	←	2
Air screw		2.25	←	2.0	1.75	1.5	1.125	—
Valve seat		1.5	←	←	←	←	←	2
Needle jet		AA-3 (224)	←	←	←	←	←	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1800- 2000	←	←	←	←	←	—
Idle throttle valve position	mm	1.9	2.15	2.25	2.4	2.55	2.65	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		380	350	320	300	280	260	2
- 30°C - 20°F		370	340	310	290	270	250	2
<b>- 20°C - 4°F</b>		<b>360</b>	<b>330</b>	<b>300</b>	<b>280</b>	<b>260</b>	<b>240</b>	<b>2</b>
- 10°C 14°F		350	320	300	280	260	240	2
0°C 32°F		340	310	290	270	250	230	2
10°C 50°F		340	310	290	270	250	230	2
20°C 70°F		330	300	280	260	240	220	2

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA Z

## HIGH ALTITUDE KIT (P/N 861 750 400)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Yellow 414 605 500	←	Violet/Violet 414 817 900	←	←	←
Ramp	420 480 228	←	←	←	←	←	3
Calibration screw position	4	5	3	4	←	5	—
Pin	420 429 140	←	←	←	←	←	3
Engagement RPM ± 100	3800	←	←	←	←	←	—
Maximum RPM ± 100	7900	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←
Cam angle	° (degrees)	50	←	44	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	25	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA Z



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty	
Calibration	Main jet	340	320	310	290 300	270 280	250 260	PTO MAG	
	Jet needle	7DL7	←	←	←	←	←	2	
	Needle position	3	←	←	←	←	←	—	
	Slide cut-away	2.5	←	←	←	←	←	2	
	Pilot jet	45	←	55	60	←	←	2	
	Air screw	1.5	←	←	←	←	←	—	
	Valve seat	1.5	←	←	←	←	←	2	
	Needle jet	AA-2 (224)	←	Z-8 (224)	←	←	←	2	
	Float level	mm	18.1	←	←	←	←	—	
	Idle	RPM	1800- 2000	←	←	←	←	—	
	Idle throttle valve position	mm	1.8	1.85	1.9	1.95	2.0	2.05	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature	- 40°C - 40°F	360	240	330	320 330	300 310	280 290	PTO MAG
	- 30°C - 20°F	350	330	320	300 290	280 290	260 270	PTO MAG
	<b>- 20°C - 4°F</b>	<b>340</b>	<b>320</b>	<b>310</b>	<b>290 300</b>	<b>270 280</b>	<b>250 260</b>	<b>PTO MAG</b>
	- 10°C 14°F	330	310	300	280 290	260 270	240 250	PTO MAG
	0°C 32°F	320	300	290	270 280	250 260	230 240	PTO MAG
	10°C 50°F	310	290	280	260 270	240 250	220 230	PTO MAG
	20°C 70°F	300	280	270	250 260	220 230	210 220	PTO MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-FORMULA III AND FORMULA III LT

## HIGH ALTITUDE KIT (P/N 861 750 200)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Pink/White 420 438 193	←	←	←	←	
Ramp	420 480 281	←	←	←	←	420 480 289	3
Calibration screw position	4	5	3	4	5	6	—
Pin	420 429 220	←	420 429 140	←	←	←	3
Engagement RPM ± 100	4500	←	4700	←	←	4100	—
Maximum RPM ± 100	8200	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	6.8 15.0	←	←	←
Cam angle	° (degrees)	50	←	←	←	←
						44

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket (Formula III)	25	←	←	←	←
Top sprocket (Formula III LT)	23	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links (Formula III)	74	←	←	←	←	←
Chain, quantity of links (Formula III LT)	72	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1996-FORMULA III AND FORMULA III LT

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet PTO/Ctr/MAG		330/ 320/330	300/ 290/300	280/ 270/280	250/ 240/250	220/ 220/220	200/ 200/200	—
Jet needle		6DEY2	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.5	←	←	←	←	←	—
Pilot jet PTO/Ctr/MAG		50/55/50	←	←	60/65/60	←	←	—
Air screw PTO/Ctr/MAG		1.50/ 1.50/1.50	←	1.25/ 1.25/1.25	1.50/ 1.50/1.50	1.125/ 1.125/1.125	0.75/ 0.75/0.75	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		P-O (286)	←	←	←	←	←	3
Starter jet		1.5	←	←	←	←	←	—
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1800- 2000	←	←	←	←	←	—
Idle throttle valve position	mm	1.2	1.3	1.4	1.6	1.8	2.0	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		350/ 340/350	320/ 310/320	300/ 290/300	270/ 260/270	240/ 240/240	210/ 210/210	PTO/ Ctr/MAG
- 30°C - 20°F		340/ 330/340	310/ 300/310	290/ 280/290	260/ 250/260	230/ 230/230	205/ 205/205	PTO/ Ctr/MAG
<b>- 20°C - 4°F</b>		<b>330/ 320/330</b>	<b>300/ 290/300</b>	<b>280/ 270/280</b>	<b>250/ 240/250</b>	<b>220/ 220/220</b>	<b>200/ 200/200</b>	<b>PTO/ Ctr/MAG</b>
- 10°C 14°F		320/ 310/320	290/ 280/290	270/ 260/270	240/ 230/240	220/ 220/220	190/ 190/190	PTO/ Ctr/MAG
0°C 32°F		310/ 300/310	290/ 280/290	260/ 250/260	240/ 230/240	210/ 210/210	190/ 190/190	PTO/ Ctr/MAG
10°C 50°F		300/ 290/300	280/ 270/280	250/ 240/250	230/ 230/230	210/ 210/210	180/ 180/180	PTO/ Ctr/MAG
20°C 70°F		290/ 280/290	270/ 260/270	240/ 240/240	220/ 220/220	200/ 200/200	180/ 180/180	PTO/ Ctr/MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MACH 1

## HIGH ALTITUDE KIT (P/N 861 750 100)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
	Spring	Pink/White 414 991 400	←	←	←	←	
Ramp	420 480 286	←	420 480 283	←	←	←	3
Calibration screw position	2	3	2	3	4	5	—
Pin	504 259 600	←	420 429 140	←	←	←	3
Engagement RPM ± 100	4500	←	4700	←	←	←	—
Maximum RPM ± 100	8200	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
	Spring	Beige	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	←	←	←
Cam angle	° (degrees)	47	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
	Top sprocket	26	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MACH 1



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration	Main jet	420 400	410 390	380 360	350 330	320 300	300 280	PTO MAG
	Jet needle	7EGO6	←	←	←	←	←	2
	Needle position	3	←	2	←	←	←	—
	Slide cut-away	2.5	←	←	←	←	←	2
	Pilot jet	35	←	←	45	←	←	2
	Air screw	1.5	←	←	←	←	←	—
	Valve seat	2.0	←	←	←	←	←	2
	Needle jet	AA-7 (224)	←	←	AA-3 (224)	←	AA-1 (224)	2
Float level	mm	18.1	←	←	←	←	←	—
Idle	RPM	1800- 2000	←	←	←	←	←	—
Idle throttle valve position	mm	2.25	2.3	2.4	2.45	2.5	2.6	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature	- 40°C	440	430	400	370	340	320	PTO MAG
	- 40°F	420	410	380	350	320	300	
	- 30°C	430	420	390	360	330	310	PTO MAG
	- 20°F	410	400	370	340	310	290	
	<b>- 20°C</b>	<b>420</b>	<b>410</b>	<b>380</b>	<b>350</b>	<b>320</b>	<b>300</b>	<b>PTO</b> <b>MAG</b>
	<b>- 4°F</b>	<b>400</b>	<b>390</b>	<b>360</b>	<b>330</b>	<b>300</b>	<b>280</b>	
	- 10°C	410	400	370	340	310	290	PTO MAG
	14°F	390	380	350	320	290	270	
	0°C	400	390	360	330	300	280	PTO MAG
	32°F	380	370	340	310	280	260	
	10°C	390	380	350	320	290	270	PTO MAG
	50°F	370	360	330	300	270	250	
	20°C	380	370	340	310	280	260	PTO MAG
	70°F	360	350	320	290	260	240	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MACH Z LT

## HIGH ALTITUDE KIT (P/N 861 750 000)

### DRIVE PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Spring		Green/Violet 414 762 800	←	←	←	←	←	1
Ramp		420 480 286	←	←	←	←	←	3
Calibration screw position		4	5	3	4	5	6	—
Pin		504 259 600	←	420 429 140	←	←	←	3
Engagement RPM ± 100		4100	←	4500	←	←	←	—
Maximum RPM ± 100		8200	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2000 m 8000 ft	3000 m 10000 ft
Spring		Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	6.8 15.0	←	←	←
Cam angle	° (degrees)	50	←	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket		25	←	←	←	←	←
Bottom sprocket		44	←	←	←	←	←
Chain, quantity of links		74	←	←	←	←	←
Drive sprocket, quantity of teeth		9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MACH Z LT

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet PTO/Ctr/MAG		380/ 370/380	350/ 340/350	320/ 310/320	290/ 280/290	260/ 250/260	230/ 220/230	—
Jet needle		8 AGY1-41	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.0	←	←	←	←	←	3
Pilot jet PTO/Ctr/MAG		40/45/45	←	←	←	←	←	—
Air screw PTO/Ctr/MAG		4.5/ 4.0/3.5	←	←	3.375/ 3.0/2.625	2.25/ 2.0/1.75	2.0/ 1.75/1.5	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		O-4 (372)	←	←	←	←	←	3
Float level	mm	20	←	←	←	←	←	—
Idle	RPM	1500-1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.2	1.4	1.6	1.8	2.0	2.2	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F		400 390/400	370 360/370	340 330/340	300 290/300	270 260/270	240 230/240	PTO Ctr/MAG
- 30°C - 20°F		390 380/390	360 350/300	330 320/330	300 290/300	270 260/270	240 230/240	PTO Ctr/MAG
<b>- 20°C - 4°F</b>		<b>380 370/380</b>	<b>350 340/350</b>	<b>320 310/320</b>	<b>290 280/290</b>	<b>260 250/260</b>	<b>230 220/230</b>	<b>PTO Ctr/MAG</b>
- 10°C 14°F		370 360/370	340 330/340	310 300/310	280 270/280	250 240/250	220 210/220	PTO Ctr/MAG
0°C 32°F		360 350/360	330 320/330	300 290/300	270 260/270	250 240/250	220 210/220	PTO Ctr/MAG
10°C 50°F		350 340/350	320 310/320	290 280/290	260 250/260	240 230/240	210 200/200	PTO Ctr/MAG
20°C 70°F		340 330/340	310 300/310	290 280/290	260 250/260	230 220/230	200 190/200	PTO Ctr/MAG

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MACH Z

## HIGH ALTITUDE KIT (P/N 861 749 900)

### DRIVE PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m	Qty
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft	
Spring	Green/Violet 414 762 800	←	←	←	←	←	1
Ramp	420 480 286	←	←	←	←	←	3
Calibration screw position	3	4	3	4	5	6	—
Pin	504 259 600	←	420 429 140	←	←	←	3
Engagement RPM ± 100	4100	←	4500	←	←	←	—
Maximum RPM ± 100	8200	←	←	←	←	←	—

### DRIVEN PULLEY

Altitude Clutching	Sea Level	600 m	1200 m	1800 m	2000 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Spring	Beige	←	←	←	←	←
Spring tension	Kg ± 0.7 lb ± 1.5	6.1 13.4	←	6.8 15.0	←	←
Cam angle	° (degrees)	50	←	←	←	←

### CHAINCASE and DRIVE AXLE

Altitude Gearing	Sea Level	600 m	1200 m	1800 m	2400 m	3000 m
		2000 ft	4000 ft	6000 ft	8000 ft	10000 ft
Top sprocket	26	←	←	←	←	←
Bottom sprocket	44	←	←	←	←	←
Chain, quantity of links	74	←	←	←	←	←
Drive sprocket, quantity of teeth	9	—	—	—	—	—

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1996-MACH Z

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Calibration								
Main jet PTO/Ctr/MAG		380/ 370/380	350/ 340/350	320/ 310/320	290/ 280/290	260/ 250/260	230/ 220/230	—
Jet needle		8 AGY1-41	←	←	←	←	←	3
Needle position		3	←	2	←	←	1	—
Slide cut-away		2.0	←	←	←	←	←	3
Pilot jet PTO/Ctr/MAG		40/45/45	←	←	←	←	←	—
Air screw PTO/Ctr/MAG		4.5/ 4.0/3.5	←	←	3.375/ 3.0/2.625	2.25/ 2.0/1.75	2.0/ 1.75/1.5	—
Valve seat		1.5	←	←	←	←	←	3
Needle jet		O-4 (372)	←	←	←	←	←	3
Float level	mm	20	←	←	←	←	←	—
Idle	RPM	1500-1800	←	←	←	←	←	—
Idle throttle valve position	mm	1.2	1.4	1.6	1.8	2.0	2.2	—

### MAIN JET CHART

Altitude		Sea Level	600 m 2000 ft	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft	Qty
Temperature								
- 40°C - 40°F	400 390/400	370 360/370	340 330/340	300 290/300	270 260/270	240 230/240	PTO Ctr/MAG	
- 30°C - 20°F	390 380/390	360 350/300	330 320/330	300 290/300	270 260/270	240 230/240	PTO Ctr/MAG	
<b>- 20°C - 4°F</b>	<b>380 370/380</b>	<b>350 340/350</b>	<b>320 310/320</b>	<b>290 280/290</b>	<b>260 250/260</b>	<b>230 220/230</b>	<b>PTO Ctr/MAG</b>	
- 10°C 14°F	370 360/370	340 330/340	310 300/310	280 270/280	250 240/250	220 210/220	PTO Ctr/MAG	
0°C 32°F	360 350/360	330 320/330	300 290/300	270 260/270	250 240/250	220 210/220	PTO Ctr/MAG	
10°C 50°F	350 340/350	320 310/320	290 280/290	260 250/260	240 230/240	210 200/200	PTO Ctr/MAG	
20°C 70°F	340 330/340	310 300/310	290 280/290	260 250/260	230 220/230	200 190/200	PTO Ctr/MAG	

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# HIGH ALTITUDE TECHNICAL DATA - 1995 MODELS

1995-ÉLAN

## HIGH ALTITUDE KIT (P/N 861 739 900)

### CARBURATOR

Altitude Calibration	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	160	145	135	125	120
Needle jet	182 O-8	182 O-8	182 O-8	182 O-8	182 O-8
Pilot jet	30	30	30	30	30
Needle	6DP1	6DP1	6DP1	6DP1	6DP1
Needle clip position from top	3	3	3	3	3
Slide cut-away	2.0	2.0	2.0	2.0	2.0
Air screw	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
Idle speed (RPM)	1100-1300	1100-1300	1100-1300	1100-1300	1100-1300

### DRIVE PULLEY

Altitude Clutching	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Return spring	Blue/Blue 417 115 000	Blue/Blue 417 115 000	Blue/Blue 417 115 000	Blue/Blue 417 115 000	Blue/Blue 417 115 000
Block	417 114 300 Std	417 114 300 Std	417 114 300 Std	417 114 300 Std	417 114 300 Std
Weight	417 114 400 6	417 114 400 6	417 114 400 6	417 114 400 6	417 114 400 6
Capsule	417 114 500 Std	417 114 500 Std	417 114 500 Std	417 114 500 Std	417 114 500 Std
Calibration screw position	N.A.	N.A.	N.A.	N.A.	N.A.

### DRIVEN PULLEY

Altitude Gearing	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring preload	8 lb ± 1.5	10 lb ± 1.5	10 lb ± 1.5	10 lb ± 1.5	10 lb ± 1.5
Cam	40.4° Std 504 102 900	40.4° Std 504 102 900	40.4° Std 504 102 900	40.4° Std 504 102 900	40.4° Std 504 102 900
Chaincase gearing	10/25	10/25	10/25	10/25	10/25

SPECIAL SET-UP NOTES:





**CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**MAIN JET CHART**

Altitude Temperature	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	170	155	145	140	130
- 30°C - 20°F	165	150	140	130	125
<b>- 20°C - 4°F</b>	<b>160</b>	<b>145</b>	<b>135</b>	<b>125</b>	<b>120</b>
- 10°C 14°F	155	140	130	120	115
0°C 32°F	150	135	125	115	110
10°C 50°F	145	130	120	110	105
20°C 70°F	140	125	115	105	100

# 1995-TUNDRA II LT

## HIGH ALTITUDE KIT (P/N 861 743 400)

### CARBURETOR

<b>Altitude</b> <b>Calibration</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Main jet	190	175	140	130	125
Needle jet	159 O-8	159 O-8	159 O-8	159 O-8	159 O-8
Pilot jet	40	40	35	35	35
Needle	6DH4	6DH4	6DH4	6DH4	6DH4
Needle clip position from top	2	2	2	2	2
Slide cut-away	2.5	2.5	2.5	2.5	2.5
Air screw	1	1	1	1	1
Idle speed (RPM)	1100-1300	1100-1300	1100-1300	1100-1300	1100-1300

### DRIVE PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Return spring	Turquoise 417 115 900	Blue 417 115 600	Blue 417 115 600	Blue 417 115 600	Blue 417 115 600
Centrifugal level arm	B1KSH 504 088 400	A3SH 860 416 600	A3SH 860 416 600	A3SH 860 416 600	A3SH 860 416 600
Block	417 114 300 Std	417 115 700	417 115 700	417 115 700	417 115 700
Weight	N.A.	417 115 800 3	417 115 800 2	417 115 800 2	417 115 800 1
Capsule	2	0	0	0	0

### DRIVEN PULLEY

<b>Altitude</b> <b>Gearing</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Spring preload	8 lb ± 2	13 lb ± 1	13 lb ± 1	13 lb ± 1	13 lb ± 1
Cam	37.8° Std 504 081 300	37.8° Std 504 081 300	37.8° Std 504 081 300	37.8° Std 504 081 300	37.8° Std 504 081 300
Chaincase gearing	14/25 Std	14/25 Std	14/25 Std	14/25 Std	14/25 Std

SPECIAL SET-UP NOTES:

# 1995- TUNDRA II LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### MAIN JET CHART

<b>Altitude</b> <b>Temperature</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
- 40°C - 40°F	210	190	150	145	135
- 30°C - 20°F	200	180	145	135	130
<b>- 20°C</b> <b>- 4°F</b>	<b>190</b>	<b>175</b>	<b>140</b>	<b>130</b>	<b>125</b>
- 10°C 14°F	185	170	135	125	120
0°C 32°F	180	165	130	120	115
10°C 50°F	170	155	125	115	110
20°C 70°F	165	150	120	110	105

# 1995-ALPINE II

## HIGH ALTITUDE KIT (P/N 861 725 300)

### CARBURETOR

<b>Altitude</b> <b>Calibration</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Main jet	200	180	170	160	145
Needle jet	159 P-0	159 P-0	159 P-0	159 P-0	159 P-0
Pilot jet	40	40	40	40	40
Needle	6DH3	6DH3	6DH3	6DH3	6DH3
Needle clip position from top	2	2	2	2	2
Slide cut-away	2.5	2.5	2.5	2.5	2.5
Air screw	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
Idle speed (RPM)	1800-2000	1800-2000	1800-2000	1800-2000	1800-2000

### DRIVE PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Return spring	Red/Red 414 689 800	Red/Green 414 689 200	Red/Green 414 689 200	Red/Green 414 689 200	Red/Green 414 689 200
Centrifugal level arm	Std	Std	Std	Std	Std
Calibration washers or pin	Std	Std	Std	Std	Std
Governor cup or ramp	221 420 480 221	221 420 480 221	221 420 480 221	221 420 480 221	221 420 480 221
Calibration screw position	4	4	4	4	4

### DRIVEN PULLEY

<b>Altitude</b> <b>Gearing</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Spring preload	17 lb ± 2	17 lb ± 2	17 lb ± 2	17 lb ± 2	17 lb ± 2
Cam	Std	Std	Std	Std	Std
Chaincase gearing	17/46	17/46	17/46	17/46	17/46

#### SPECIAL SET-UP NOTES:

This vehicle is equipped with a "TRA" type clutch.

# 1995-ALPINE II



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### MAIN JET CHART

<b>Altitude</b> <b>Temperature</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
- 40°C - 40°F	220	195	180	170	155
- 30°C - 20°F	210	185	175	165	150
<b>- 20°C</b> <b>- 4°F</b>	<b>200</b>	<b>180</b>	<b>170</b>	<b>160</b>	<b>145</b>
- 10°C 14°F	195	175	165	155	140
0°C 32°F	190	170	160	150	135
10°C 50°F	180	165	155	145	130
20°C 70°F	175	155	150	140	125

# 1995 - SKANDIC 380 R, TOURING E/LE, FORMULA S

## HIGH ALTITUDE KIT (P/N 861 746 900)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring (Skandic 380 R, Touring LE)	1	Violet 417 118 500	Violet 417 118 400	←	←	←
Spring (Formula S, Touring E)	—	Violet 417 118 400	←	←	←	←
Block	3	STD	←	←	←	←
Weight	—	6	3	2	2	1
Capsule	—	1	←	←	←	←
Engagement RPM	—	2800 3000	←	←	←	←
Max. RPM	—	6700 7000	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	—	Orange	←	←	←	←
Spring tension	—	10.5	12	←	←	←
Cam angle (deg.)	—	44°	←	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	—	21	←	←	←	←
Bottom sprocket	—	44	←	←	←	←
Chain, quantity links	—	72	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1995- SKANDIC 380 R, TOURING E/LE, FORMULA S



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	2	135	125	120	110	105
Jet needle	2	6DP9	←	←	←	←
Needle position	—	3	←	2	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	40	←	45	←	←
Air screw	PTO MAG	1.25	←	1/2 1	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	P-0 (159)	←	O-8 (159)	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	23.9	←	←	←	←
Idle RPM	—	1500 1800	←	←	←	←
Idle throttle valve position	—	1.3	←	1.6	←	←

### MAIN JET CHART

Altitude Temperature	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	2	145	135	130	120	115
- 30°C - 20°F	2	140	130	125	115	110
<b>- 20°C - 4°F</b>	<b>2</b>	<b>135</b>	<b>125</b>	<b>120</b>	<b>110</b>	<b>105</b>
- 10°C 14°F	2	130	120	115	105	100
0°C 32°F	2	125	115	110	100	95
10°C 50°F	2	120	110	105	95	90
20°C 70°F	2	115	105	100	90	85

# 1995 - SKANDIC 500 R/TOURING SLE/ FORMULA SL

## HIGH ALTITUDE KIT (P/N 861 746 800)

### DRIVE PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m 4000 ft</b>	<b>1800 m 6000 ft</b>	<b>2400 m 8000 ft</b>	<b>3000 m 10000 ft</b>
Spring (Skandic 500 R, Touring SLE)	1	Red/Green	Red/Violet	←	←	←
Spring (Formula SL)	1	Blue/Green	Blue/Violet	←	←	←
Ramp	3	STD	←	←	←	←
Cal. screw position (Skandic 500 R, Touring SLE)	—	4	3	4	5	6
Cal. screw position (Formula SL)	—	3	2	3	4	5
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	3500-3700	←	←	←	←
Max. RPM	—	6900-7200	←	←	←	←

### DRIVEN PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m 4000 ft</b>	<b>1800 m 6000 ft</b>	<b>2400 m 8000 ft</b>	<b>3000 m 10000 ft</b>
Spring	1	Orange	←	←	←	←
Spring	1	Beige	←	←	←	←
Spring tension	—	5 kg 10.5 lb	5.5 kg 12 lb	←	←	←
Cam angle (deg.)	1	44°	←	←	←	←

### CHAINCASE

<b>Altitude</b> <b>Gearing</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m 4000 ft</b>	<b>1800 m 6000 ft</b>	<b>2400 m 8000 ft</b>	<b>3000 m 10000 ft</b>
Top sprocket (Skandic 500 R, Touring SLE)	1	21	←	←	←	←
Top sprocket (Formula SL)	1	22	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	72	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.



# 1995- SKANDIC 500 R/TOURING SLE/ FORMULA SL



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO	190	170	150	140	130
	MAG	180	160	140	130	120
Jet needle	2	6DH2	←	←	←	←
Needle position	—	3	←	2	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	40	←	45	←	←
Air screw	—	1.25	←	1.0	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	P-0 (159)	←	←	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	23.9	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	1.3	←	1.65	1.70	1.75

### MAIN JET CHART

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C	PTO	210	185	165	155	140
	MAG	200	175	155	145	130
- 30°C	PTO	200	175	155	145	135
	MAG	190	165	145	135	125
<b>- 20°C</b>	<b>PTO</b>	<b>190</b>	<b>170</b>	<b>150</b>	<b>140</b>	<b>130</b>
	<b>MAG</b>	<b>180</b>	<b>160</b>	<b>140</b>	<b>130</b>	<b>120</b>
- 10°C	PTO	180	165	145	135	125
	MAG	170	155	135	125	115
0°C	PTO	175	160	140	130	120
	MAG	165	150	130	120	110
10°C	PTO	170	150	130	125	115
	MAG	160	140	120	115	105
20°C	PTO	165	145	125	120	110
	MAG	155	135	115	110	100

# 1995- SKANDIC W/T AND SKANDIC M/S

## HIGH ALTITUDE KIT (P/N 861 747 600)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Red/Violet	←	Blue/Violet	←	←
Ramp	3	STD	←	420 480 227	←	←
Cal. screw position	—	5	←	←	←	6
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	2800-3000	←	←	←	←
Max. RPM	—	6800-7100	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Blue	←	←	←	←
Spring tension	—	7.7 kg 17 lb	←	←	←	←
Cam angle (deg.)	1	35°-50°	←	←	←	←

**NOTE:** Arrows in the charts indicate that the preceding information is repeated.

# 1995- SKANDIC W/T AND SKANDIC M/S



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	1	250	220	210	200	190
Jet needle	1	6DH8	←	←	←	←
Needle position	—	4	←	←	←	←
Cut-away	1	3	←	←	←	←
Pilot jet	1	25	←	←	←	←
Air screw	—	1.5	←	1.250	←	←
Valve seat	1	1.5	←	←	←	←
Needle jet	1	O-0 (159)	←	←	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	23.9	←	←	←	←
Idle RPM	—	1500-1800	←	←	←	←
Idle throttle valve position	—	1.3	←	←	←	←

### MAIN JET CHART

Altitude Temperature	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	—	270	240	230	220	210
- 30°C - 20°F	—	260	230	220	210	200
<b>- 20°C - 4°F</b>	—	<b>250</b>	<b>220</b>	<b>210</b>	<b>200</b>	<b>190</b>
- 10°C 14°F	—	240	210	200	190	180
0°C 32°F	—	230	200	190	180	175
10°C 50°F	—	220	190	185	175	170
20°C 70°F	—	210	185	180	170	165

# 1995- GRAND TOURING 470/MX

## HIGH ALTITUDE KIT (P/N 861 745 400)

### DRIVE PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m 4000 ft</b>	<b>1800 m 6000 ft</b>	<b>2400 m 8000 ft</b>	<b>3000 m 10000 ft</b>
Spring (GT 470)	1	Blue/Pink	Blue/Violet	←	←	←
Spring (MX)	1	Blue/Yellow	Blue/Violet	←	←	←
Ramp	3	STD	420 480 284	←	←	←
Cal. screw position (GT 470)	—	5	2	3	4	5
Cal. screw position (MX)	—	4	2	3	4	5
Pin (GT 470)	3	STD	420 429 140	←	←	←
Pin (MX)	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	3400-3600	←	←	←	←
Max. RPM	—	7300-7500	←	←	←	←

### DRIVEN PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m 4000 ft</b>	<b>1800 m 6000 ft</b>	<b>2400 m 8000 ft</b>	<b>3000 m 10000 ft</b>
Spring (GT 470)	1	Orange	←	←	←	←
Spring (MX)	1	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	44°	←	←	←	←

### CHAINCASE

<b>Altitude</b> <b>Gearing</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m 4000 ft</b>	<b>1800 m 6000 ft</b>	<b>2400 m 8000 ft</b>	<b>3000 m 10000 ft</b>
Top sprocket	1	23	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	72	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1995- GRAND TOURING 470/MX



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	290 280	260 250	220 220	210 210	200 200
Jet needle	2	6DHN44	←	←	←	←
Needle position	—	3	←	2	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	35	40	45	50	←
Air screw	—	1.0	←	1.75	←	←
Valve seat	2	1.2	←	←	←	←
Needle jet	2	N-4 (159)	←	N-2 (159)	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	23.9	←	←	←	←
Idle RPM	—	1600-1800	←	←	←	←
Idle throttle valve position	—	1.6	1.70	1.75	1.80	1.85

### MAIN JET CHART

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO MAG	310 300	280 270	240 240	230 230	220 220
- 30°C - 20°F	PTO MAG	300 290	270 260	230 230	220 220	210 210
<b>- 20°C - 4°F</b>	<b>PTO MAG</b>	<b>290 280</b>	<b>260 250</b>	<b>220 220</b>	<b>210 210</b>	<b>200 200</b>
- 10°C 14°F	PTO MAG	280 270	250 240	210 210	200 200	190 190
0°C 32°F	PTO MAG	270 260	240 230	200 200	190 190	185 185
10°C 50°F	PTO MAG	260 250	230 220	195 195	185 185	175 175
2°C 70°F	PTO MAG	250 240	220 210	185 185	175 175	165 165

# 1995 - MX Z

## HIGH ALTITUDE KIT (P/N 861 745 300)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Pink/White	←	←	←	←
Ramp	3	STD	504 096 400	←	←	←
Cal. screw position	—	3	←	4	5	←
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	4300-4500	←	5000	←	←
Max. RPM	—	8100	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Beige	←	←	←	←
Spring tension	—	6.5 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	44°	←	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	1	23	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	72	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

 **CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**CARBURATION**

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	270 270	240 240	220 220	195 195	175 175
Jet needle	2	6DHN43	←	←	←	←
Needle position	—	3	←	2	←	1
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	50	←	60	←	←
Air screw	—	.5	←	1.0	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	N-6 (159)	←	←	←	N-0 (159)
Power jet	—	N.A.	←	←	←	←
Float level	—	23.9	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	1.8	2.0	2.2	2.4	2.6

**MAIN JET CHART**

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C (- 40°F)	PTO/MAG	290	260	240	215	195
- 30°C (- 20°F)	PTO/MAG	280	250	230	205	185
<b>- 20°C (- 4°F)</b>	<b>PTO/MAG</b>	<b>270</b>	<b>240</b>	<b>220</b>	<b>195</b>	<b>175</b>
- 10°C (14°F)	PTO/MAG	260	230	210	185	165
0°C (32°F)	PTO/MAG	250	220	200	175	155
10°C (50°F)	PTO/MAG	240	210	190	165	145
20°C (70°F)	PTO/MAG	230	200	180	155	135

 **CAUTION**

The rotary valve has to be changed and RAVE valve cap has to be unscrewed 5 turns when riding at over 1200 m (4000 ft). Rotary valve timing is 134°, 65°.

# 1995- GRAND TOURING 580

## HIGH ALTITUDE KIT (P/N 861 745 600)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Yellow/Red	←	Blue/Orange	←	←
Ramp	3	STD	←	←	←	←
Cal. screw position	—	3	5	3	4	5
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	3100-3300	←	←	←	←
Max. RPM	—	7200-7400	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	50°	←	44°	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	1	25	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1995- GRAND TOURING 580



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	360 370	320 330	300 310	280 290	260 270
Jet needle	2	6DHN44	←	←	←	←
Needle position	—	4	←	3	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	40	←	50	←	←
Air screw	—	1.25	←	1.5	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	O-4 (480)	←	O-3 (480)	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	18.1	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	1.5	1.6	1.65	1.7	1.75

### MAIN JET CHART

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO MAG	390 400	350 360	330 350	310 320	290 300
- 30°C - 20°F	PTO MAG	370 380	330 340	310 320	290 300	270 280
<b>- 20°C - 4°F</b>	<b>PTO MAG</b>	<b>360 370</b>	<b>320 330</b>	<b>300 310</b>	<b>280 290</b>	<b>260 270</b>
- 10°C 14°F	PTO MAG	350 360	310 320	290 300	270 280	250 260
0°C 32°F	PTO MAG	340 350	300 310	280 290	260 270	240 250
10°C 50°F	PTO MAG	330 340	290 300	270 280	250 260	230 240
20°C 70°F	PTO MAG	310 320	270 280	250 260	240 250	270 280

# 1995- GRAND TOURING SE

## HIGH ALTITUDE KIT (P/N 861 745 500)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Yellow/Orange	Blue/Violet	←	←	←
Ramp	3	STD	420 480 228	←	←	←
Cal. screw position	—	3	1	2	3	4
Pin	—	STD	←	←	←	←
Lever	—	STD	←	←	←	←
Engagement RPM	—	3400-3600	←	←	←	←
Max. RPM	—	7600-7800	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	—	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	—	47°	←	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	—	25	←	←	←	←
Bottom sprocket	—	44	←	←	←	←
Chain, quantity links	—	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1995- GRAND TOURING SE

## ▼ CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	360 370	320 330	310 320	290 300	270 280
Jet needle	—	7EG06	←	←	←	←
Needle position	—	3	←	2	←	←
Cut-away	—	2.5	←	←	←	←
Pilot jet	2	40	←	50	←	←
Air screw	—	1.0	←	0.75	←	←
Valve seat	—	1.5	←	←	←	←
Needle jet	2	AA-3 (224)	←	Z.9 (224)	←	←
Power jet	N.A.	←	←	←	←	←
Float level	—	18.1	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	2.15	2.35	2.5	2.65	2.75

### MAIN JET CHART

Altitude Temperature	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO MAG	380 390	340 350	330 340	310 320	290 300
- 30°C - 20°F	PTO MAG	370 380	330 340	320 330	300 310	280 290
<b>- 20°C - 4°F</b>	<b>PTO MAG</b>	<b>360 370</b>	<b>320 330</b>	<b>310 320</b>	<b>290 300</b>	<b>270 280</b>
- 10°C 14°F	PTO MAG	350 360	310 320	300 310	280 290	260 270
0°C 32°F	PTO MAG	340 350	300 310	290 300	270 280	250 260
10°C 50°F	PTO MAG	330 340	290 300	280 290	260 270	240 250
20°C 70°F	PTO MAG	310 320	270 280	260 270	250 260	230 240

# 1995 - FORMULA STX/LT

## HIGH ALTITUDE KIT (P/N 861 745 200)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Blue/Green	Violet/Violet	←	←	←
Ramp	3	STD	←	←	←	←
Cal. screw position	—	4	3	4	4	5
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	3400-3600	←	←	←	←
Max. RPM	—	7800-8000	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	50°	44°	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	1	25	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1995 - FORMULA STX/LT



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	320 330	280 290	250 270	230 250	210 230
Jet needle	2	6DHN44	←	←	←	←
Needle position	—	3	←	←	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	40	←	←	←	←
Air screw	—	1.5	←	PTO 1.5 MAG 1.0	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	P-O (480)	←	0-4 (480)	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	18.1	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	1.6	1.7	1.75	1.80	1.85

### MAIN JET CHART

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO MAG	340 350	300 310	270 290	250 270	240 260
- 30°C - 20°F	PTO MAG	330 340	290 300	260 280	240 260	230 250
<b>- 20°C - 4°F</b>	<b>PTO MAG</b>	<b>320 330</b>	<b>280 290</b>	<b>250 270</b>	<b>230 250</b>	<b>220 240</b>
- 10°C 14°F	PTO MAG	310 320	270 280	240 260	220 240	210 230
0°C 32°F	PTO MAG	300 310	260 270	230 250	210 230	200 220
10°C 50°F	PTO MAG	290 300	250 260	220 240	200 220	190 210
20°C 70°F	PTO MAG	280 290	240 250	210 230	190 210	180 200

# 1995-FORMULA SS

## HIGH ALTITUDE KIT (P/N 861 745 100)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Blue/Green	Violet/Violet	←	←	←
Ramp	3	STD	420 480 228	←	←	←
Cal. screw position	—	3	1	2	3	4
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	3400-3600	←	←	←	←
Max. RPM	—	7600-7800	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	47°	←	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	1	26	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1995 - FORMULA SS



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	360 370	320 330	310 320	290 300	270 280
Jet needle	2	7E06	←	←	←	←
Needle position	—	3	←	2	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	40	←	50	←	←
Air screw	—	1.0	←	0.75	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	AA-3 (224)	←	Z-9 (224)	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	18.1	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	2.15	2.35	2.5	2.65	2.75

### MAIN JET CHART

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO MAG	380 390	340 350	330 340	310 320	290 300
- 30°C - 20°F	PTO MAG	370 380	330 340	320 330	300 310	280 290
<b>- 20°C - 4°F</b>	<b>PTO MAG</b>	<b>360 370</b>	<b>320 330</b>	<b>310 320</b>	<b>290 300</b>	<b>270 280</b>
- 10°C 14°F	PTO MAG	350 360	310 320	300 310	280 290	260 270
0°C 32°F	PTO MAG	340 350	300 310	290 300	270 280	250 260
10°C 50°F	PTO MAG	330 340	290 300	280 290	260 270	240 250
20°C 70°F	PTO MAG	310 320	270 280	260 270	250 260	230 240

# 1995-FORMULA Z

## HIGH ALTITUDE KIT (P/N 861 745 000)

### DRIVE PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Spring	1	Yellow	Violet/Violet	←	←	←
Ramp	3	STD	←	←	←	←
Cal. screw position	—	4	3	4	4	5
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	3700-3900	←	←	←	←
Max. RPM	—	7800-8000	←	←	←	←

### DRIVEN PULLEY

<b>Altitude</b> <b>Clutching</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Spring	1	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	50°	44°	←	←	←

### CHAINCASE

<b>Altitude</b> <b>Gearing</b>	<b>Qty</b>	<b>Sea Level</b>	<b>1200 m</b> <b>4000 ft</b>	<b>1800 m</b> <b>6000 ft</b>	<b>2400 m</b> <b>8000 ft</b>	<b>3000 m</b> <b>10000 ft</b>
Top sprocket	1	25	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1995 - FORMULA Z



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	340 340	310 310	290 300	270 280	250 260
Jet needle	2	7DL7	←	←	←	←
Needle position	—	3	←	←	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	45	55	60	←	←
Air screw	—	1.0	←	←	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	AA-2 (224)	←	Z-8 (224)	←	←
Power jet	—	N.A.	←	←	←	←
Float level	—	18.1	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	1.80	1.90	1.95	2.00	2.05

### MAIN JET CHART

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO MAG	360 360	330 330	320 330	300 310	280 290
- 30°C - 20°F	PTO MAG	350 350	320 320	300 290	280 290	260 270
<b>- 20°C - 4°F</b>	<b>PTO MAG</b>	<b>340 340</b>	<b>310 310</b>	<b>290 300</b>	<b>270 280</b>	<b>250 260</b>
- 10°C 14°F	PTO MAG	330 330	300 300	280 290	260 270	240 250
0°C 32°F	PTO MAG	320 320	290 290	270 280	250 260	230 240
10°C 50°F	PTO MAG	310 310	280 280	260 270	240 250	220 230
20°C 70°F	PTO MAG	300 300	270 270	250 260	220 230	210 220

# 1995-FORMULA III

## HIGH ALTITUDE KIT (P/N 861 744 900)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	—	Pink/White	←	←	←	←
Ramp	—	STD	←	←	←	←
Cal. screw position	—	4	1	2	3	4
Pin	3	STD	420 429 140	←	←	←
Lever	—	STD	←	←	←	←
Engagement RPM	—	4300-4500	←	←	←	←
Max. RPM	—	8300-8500	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	—	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	50°	44°	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	—	25	←	←	←	←
Bottom sprocket	—	44	←	←	←	←
Chain, quantity links	—	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←



## CAUTION

The tailpipe has to be modified using the restriction ring included in kit when riding at over 600 m (2000 ft).

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1995 - FORMULA III



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.



## CAUTION

The spark plugs have to be changed for BR8ES when riding at over 1200 m (4000 ft).

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet PTO/CTR/MAG	—	320/ 320/320	290/ 290/290	270/ 270/270	250/ 250/250	230/ 230/230
Jet needle	—	6DHZ43	←	←	←	←
Needle position	—	4	←	←	←	←
Cut-away	—	2.5	←	←	←	←
Pilot jet	—	40	50	←	←	55
Air screw PTO/CTR/MAG	—	1.5/1.0/1.0	1.0/1.0/1.0	←	←	←
Valve seat	—	1.5	←	←	←	←
Needle jet	—	480 P-3	480 P-0	480 O-8	←	480 O-6
Power jet	—	N.A.	←	←	←	←
Float level	—	18.1	←	←	←	←
Idle RPM	—	1800-2000	←	←	←	←
Idle throttle valve position	—	1.4	1.7	1.8	1.9	2.0

### MAIN JET CHART

Altitude Temperature	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO/ CTR/MAG	340/ 340/340	310/ 310/310	300/ 300/300	280/ 280/280	260/ 260/260
- 30°C - 20°F	PTO/ CTR/MAG	330/ 330/330	300/ 300/300	280/ 280/280	260/ 260/260	240/ 240/240
<b>- 20°C - 4°F</b>	<b>PTO/ CTR/MAG</b>	<b>320/ 320/320</b>	<b>290/ 290/290</b>	<b>270/ 270/270</b>	<b>250/ 250/250</b>	<b>230/ 230/230</b>
- 10°C 14°F	PTO/ CTR/MAG	310/ 310/310	280/ 280/280	260/ 260/260	240/ 240/240	220/ 220/200
0°C 32°F	PTO/ CTR/MAG	300/ 300/300	270/ 270/270	250/ 250/250	230/ 230/230	210/ 210/210
10°C 50°F	PTO/ CTR/MAG	290/ 290/290	260/ 260/260	240/ 240/240	220/ 220/220	200/ 200/200
20°C 70°F	PTO/ CTR/MAG	280/ 280/280	240/ 240/240	230/ 230/230	210/ 210/210	190/ 190/190

# 1995- MACH 1

## HIGH ALTITUDE KIT (P/N 861 744 800)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Pink/White	←	←	←	←
Ramp	3	STD	420 480 283	←	←	←
Cal. screw position	—	3	2	3	4	5
Pin	3	STD	420 429 140	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	4400-4600	←	←	←	←
Max. RPM	—	8300	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Beige	←	←	←	←
Spring tension	—	6.5 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	47°	←	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	1	26	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

**▼ CAUTION**

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

**CARBURATION**

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	PTO MAG	430 410	380 360	340 330	310 300	290 280
Jet needle	2	7EG06	←	←	←	←
Needle position	—	3	2	←	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	35	45	←	←	←
Air screw	—	1.5	←	←	←	←
Valve seat	2	2.0	←	←	←	←
Needle jet	2	AA-7 (224)	←	←	AA-1 (224)	←
Power jet	—	N.A.	←	←	←	←
Float level	—	18.1	←	←	←	←
Idle RPM	—	1600-1800	←	←	←	←
Idle throttle valve position	—	2.25	2.40	2.45	2.50	2.60

**MAIN JET CHART**

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO MAG	450 430	400 380	360 350	330 320	310 300
- 30°C - 20°F	PTO MAG	440 420	390 370	350 340	320 310	300 290
<b>- 20°C - 4°F</b>	<b>PTO MAG</b>	<b>430 410</b>	<b>380 360</b>	<b>340 330</b>	<b>310 300</b>	<b>290 280</b>
- 10°C 14°F	PTO MAG	420 400	370 350	330 320	300 290	280 270
0°C 32°F	PTO MAG	410 390	360 340	320 310	290 280	270 260
10°C 50°F	PTO MAG	400 380	350 330	310 300	280 270	260 250
20°C 70°F	PTO MAG	390 370	340 320	300 290	270 260	250 240

# 1995- MACH Z

## HIGH ALTITUDE KIT (P/N 861 744 700)

### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Green/Violet	←	←	←	←
Ramp	3	STD	←	←	←	←
Cal. screw position	—	3	4	2	3	←
Pin	3	STD	420 429 140	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	4000-4200	4400-4500	←	←	←
Max. RPM	—	8100-8300	←	←	←	←

### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Beige	←	←	←	←
Spring tension	—	5 kg 12 lb	6.5 kg 15 lb	←	←	←
Cam angle (deg.)	1	50°	←	←	←	←

### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	1	26	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	74	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.

# 1995- MACH Z



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet PTO/CTR/MAG	—	390/ 380/400	330/ 320/330	300/ 290/300	270/ 260/270	240/ 230/240
Jet needle	3	8AGY01-41	←	←	←	←
Needle position	—	3	2	←	←	1
Cut-away	—	2.0	←	←	←	←
Pilot jet PTO/CTR/MAG	—	40/45/45	←	←	←	←
Air screw PTO/CTR/MAG	—	4.5/4.0/3.5	←	3.375/ 3.0/2.625	2.250/ 2.0/1.750	←
Valve seat	3	1.5V	←	←	←	←
Needle jet	2	O-4 (327)	←	←	←	←
Starter Jet	3	1.5	←	←	←	←
Float level	—	22.0	←	←	←	←
Idle RPM	—	1700-1800	←	←	←	←
Idle throttle valve position	—	1.2	1.6	1.8	2.0	2.2

### MAIN JET CHART

Altitude Temperature		Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	PTO/ CTR/MAG	410/ 400/420	350/ 340/360	320/ 310/320	290/ 280/290	260/ 250/260
- 30°C - 20°F	PTO/ CTR/MAG	400/ 390/410	340/ 330/340	310/ 300/310	280/ 270/280	250/ 240/250
<b>- 20°C - 4°F</b>	<b>PTO/ CTR/MAG</b>	<b>390/ 380/400</b>	<b>330/ 320/330</b>	<b>300/ 290/300</b>	<b>270/ 260/270</b>	<b>240/ 230/240</b>
- 10°C 14°F	PTO/ CTR/MAG	380/ 370/390	320/ 310/320	290/ 280/290	260/ 250/260	230/ 220/230
0°C 32°F	PTO/ CTR/MAG	370/ 360/380	310/ 300/310	280/ 270/280	250/ 240/250	220/ 210/220
10°C 50°F	PTO/ CTR/MAG	360/ 350/370	300/ 290/300	270/ 260/270	240/ 230/240	210/ 200/210
20°C 70°F	PTO/ CTR/MAG	350/ 340/360	290/ 280/290	260/ 250/260	230/ 220/230	200/ 190/200

# SEA LEVEL TECHNICAL DATA - 1995 MODELS

## 1995-SUMMIT 583

### SEA LEVEL KIT (P/N 861 745 600)

#### DRIVE PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Blue/Green	Violet/Violet	←	←	←
Ramp	3	STD	←	←	←	←
Cal. screw position	—	4	3	4	←	5
Pin	3	STD	←	←	←	←
Lever	3	STD	←	←	←	←
Engagement RPM	—	3400-3600	3700-3900	←	←	←
Max. RPM	—	7800-8000	←	←	←	←

#### DRIVEN PULLEY

Altitude Clutching	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Spring	1	Beige	←	←	←	←
Spring tension	—	6 kg 13.5 lb	←	←	←	←
Cam angle (deg.)	1	44°	←	←	←	←

#### CHAINCASE

Altitude Gearing	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Top sprocket	1	23	←	←	←	←
Bottom sprocket	1	44	←	←	←	←
Chain, quantity links	1	72	←	←	←	←
Sprocket, quantity teeth	—	9	←	←	←	←

NOTE: Arrows in the charts indicate that the preceding information is repeated.



# 1995 - SUMMIT 583



## CAUTION

These adjustments are guidelines only. Specific adjustments vary with temperature, altitude and snow conditions. Always observe spark plug condition for proper jetting.

### CARBURATION

Altitude Calibration	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
Main jet	—	PTO 380 MAG 380	←	←	←	←
Jet needle	2	6FL14	←	←	←	←
Needle position	2	2	←	←	←	←
Cut-away	2	2.5	←	←	←	←
Pilot jet	2	75	←	←	←	←
Air screw	2	1.0	←	←	←	←
Valve seat	2	1.5	←	←	←	←
Needle jet	2	P-6 (480)	←	←	←	←
Power jet	—	N.A.	←	←	←	←
Float level	2	19.6	←	←	←	←
Idle RPM	—	1500-1700	←	←	←	←
Idle throttle valve position	—	2.2	2.4	2.55	2.7	2.9

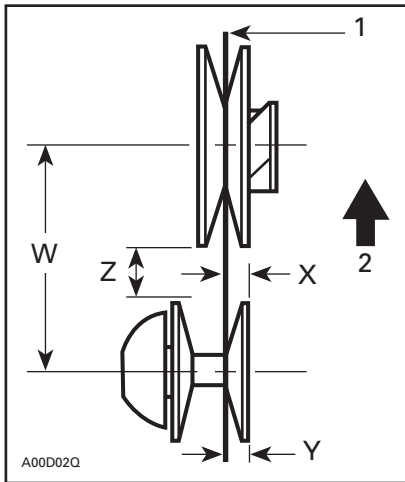
### MAIN JET CHART

Altitude Temperature	Qty	Sea Level	1200 m 4000 ft	1800 m 6000 ft	2400 m 8000 ft	3000 m 10000 ft
- 40°C - 40°F	2	380	380	380	380	380
- 30°C - 20°F	2	380	380	380	380	380
<b>- 20°C - 4°F</b>	<b>2</b>	<b>380</b>	<b>380</b>	<b>380</b>	<b>380</b>	<b>380</b>
- 10°C 14°F	2	380	380	380	380	380
0°C 32°F	2	380	380	380	380	380
10°C 50°F	2	380	380	380	380	380
20°C 70°F	2	380	380	380	380	380

# ANNEXE A

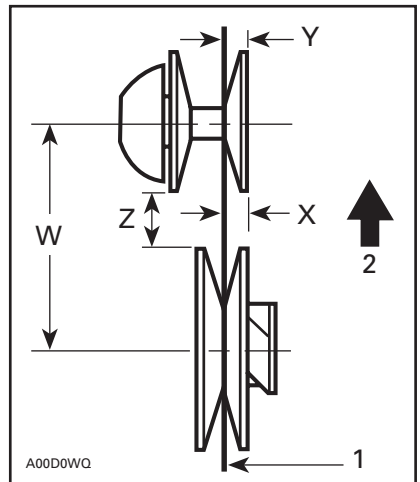
## PULLEY ALIGNMENT - 1994 MODELS (as an example)

### ÉLAN AND ALPINE II



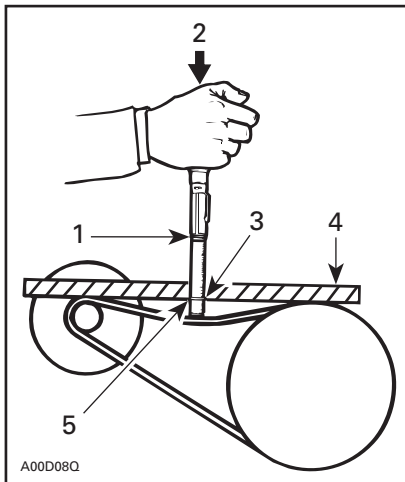
1. Straight bar
2. Front

### ALL OTHERS



1. Straight bar
2. Front

## DRIVE BELT DEFLECTION MEASUREMENT



### BELT TENSION TESTER (P/N 414 348 200)

1. Upper O-ring
2. Force
3. Deflection
4. Reference rule
5. Lower O-ring

### 1994 (AS AN EXAMPLE)

MODEL	W	X	Y - X	Z	BELT DEFLECTION		BELT HEIGHT OVER DRIVEN PULLEY	DRIVEN PULLEY AXIAL FREE PLAY
	mm (in)	mm (in)	mm (in)	+ 0, - 1 mm (+ 0, - 0.040 in)	mm (in)	kg (lb)	mm (in)	mm (in)
Élan	268 (10-9/16)	32.8 ± 0.4 (1-9/16 ± 1/64)	0 ± 0.75 (0 ± 1/32)	40 (1-3/32)	33 ± 3 (1-5/16 ± 1/8)	5 (11)	N.A.	N.A.
Alpine II	284 (11-3/16)	36.0 ± 0.4 (1-7/16 ± 1/64)	1.12 ± 0.38 (3/64 ± 1/64)	43 (1-11/16)	32 ± 5 (1-1/32 ± 3/16)	6.8 (15)	N.A.	N.A.
All Tundra	269.5 (10-5/8)	36.0 ± 0.4 (1-7/16 ± 1/64)	0.75 ± 0.75 (1/32 ± 1/32)	36.5 (1-7/16)	32 ± 5 (1-1/32 ± 3/16)	6.8 (15)	N.A.	N.A.
All Skandic and Safari	268.3 (10-9/16)	37.0 ± 0.4 (1-7/16 ± 1/64)	0.75 ± 0.75 (1/32 ± 1/32)	27.0 (1-1/16)	32 ± 5 (1-1/32 ± 3/16)	6.8 (15)	0.75 ± 0.75 (1/32 ± 1/32)	N.A.
Mach 1 and All Grand Touring	268.3 (10-9/16)	36.0 ± 0.5 (1-7/16 ± 1/64)	1.5 ± 0.5 (1/16 ± 1/64)	27.0 (1-1/16)	32 ± 5 (1-1/32 ± 3/16)	6.8 (15)	0.75 ± 0.75 (1/32 ± 1/32)	2.5 ± 0.5 (3/32 ± 1/64)
Formula Z, ST, STX, MX, MX Z, Summit 470 and Summit 583	257.5 (10-1/8)	35.0 ± 0.5 (1-3/8 ± 1/64)	1.5 ± 0.5 (1/16 ± 1/64)	16.5 (21/32)	32 ± 5 (1-1/32 ± 3/16)	6.8 (15)	0.75 ± 0.75 (1/32 ± 1/32)	0.5 ± 0.5 (1/64 ± 1/64)
Mach Z and Summit 670	257.5 (10-1/8)	35.0 ± 0.5 (1-3/8 ± 1/64)	1.5 ± 0.5 (1/16 ± 1/64)	16.5 (21/32)	32 ± 5 (1-1/32 ± 3/16)	6.8 (15)	2.25 ± 0.75 (3/32 ± 1/32)	0.5 ± 0.5 (1/64 ± 1/64)

## TO GET ADDITIONAL COPIES, ORDER:

High altitude technical data sheets (1995-1999): P/N 484 300 003 (binder sold separately).

Three-ring binder (8-1/2 x 5-1/2): P/N 484 054 500.

To maintain your booklet accurate and up to date, each year Bombardier makes available in the fall a revised and updated edition of the high altitude technical data sheets. The 1996-2000 sheets will be available in the fall of 1999.

**NOTE:** Order them through your regular parts channels.

## **BOMBARDIER SERVICE PUBLICATIONS REPORT**

Bombardier's Technical Publications Department strives to maintain the highest possible standards, but occasionally slip-ups do occur and we appreciate your bringing it to our attention. Just fill in and mail the pre-addressed card below. Feel free to write in your suggestions also.

CUT ALONG DOTTED LINE

-----

### **Bombardier** SERVICE PUBLICATIONS REPORT

Publication title and year \_\_\_\_\_ Page \_\_\_\_\_

Vehicle \_\_\_\_\_  Report of Error  Suggestion

---

---

---

---

---

---

---

---

Name \_\_\_\_\_

Address \_\_\_\_\_

City and State/Prov. \_\_\_\_\_ Date \_\_\_\_\_

Zip code/Postal code \_\_\_\_\_

AFFIX  
PROPER  
POSTAGE

---

**BOMBARDIER**  
*RECREATIONAL PRODUCTS*  
TECHNICAL PUBLICATION  
VALCOURT (QUEBEC)  
CANADA JOE 2L0