

TECHNICAL DATA

SI* METRIC INFORMATION GUIDE

BASE UNITS			
DESCRIPTION	UNIT		SYMBOL
length	meter		m
mass	kilogram		kg
force	newton		N
liquid	liter		L
temperature	Celsius		°C
pressure	kilopascal		kPa
torque	newton•meter		N•m
speed	kilometer per hour		km/h

PREFIXES			
PREFIX	SYMBOL	MEANING	VALUE
kilo	k	one thousand	1 000
centi	c	one hundredth	0.01
milli	m	one thousandth	0.001
micro	μ	one millionth	0.000001

CONVERSION FACTORS			
TO CONVERT	TO †	MULTIPLY BY	
in	mm	25.4	
in	cm	2.54	
in ²	cm ²	6.45	
in ³	cm ³	16.39	
ft	m	0.3	
oz	g	28.35	
lb	kg	0.45	
lbf	N	4.4	
lbf•in	N•m	0.11	
lbf•ft	N•m	1.36	
lbf•ft	lbf•in	12	
PSI (lbf/in ²)	kPa	6.89	
imp. oz	U.S. oz	0.96	
imp. oz	mL	28.41	
imp. gal	U.S. gal	1.2	
imp. gal	L	4.55	
U.S. oz	mL	29.57	
U.S. gal	L	3.79	
MPH	km/h	1.61	
Fahrenheit	Celsius	(°F - 32) ÷ 1.8	
Celsius	Fahrenheit	(°C × 1.8) + 32	






* The international system of units abbreviates SI in all languages.

† To obtain the inverse sequence, divide by the given factor. To convert mm to in, divide by 25.4.

NOTE: Conversion factors are rounded off to 2 decimals for easier use.

Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		GRAND TOURING 700	GRAND TOURING SE	FORMULA III 600	FORMULA III 700		
ENGINE TYPE		699	809	599	699		
	Number of Cylinders	3	3	3	3		
	Bore	mm (in)	69.75 (2.746)	70.5 (2.776)	64.5 (2.5394)	69.75 (2.746)	
	Stroke	mm (in)	61.0 (2.402)	68.0 (2.677)	61.0 (2.402)	61.0 (2.402)	
	Displacement	cm ³ (in ³)	699.25 (42.67)	796.3 (48.59)	597.94 (36.49)	699.20 (42.67)	
	Compression Ratio (corrected)		6.8	6.8	6.8	6.8	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	8400	8000	
	Piston Ring Type	1 st /2 nd	ST/R	ST/R	ST/R	ST/R	
	Ring End Gap	New	mm (in)	0.2 (.008)	0.2 (.008)	0.2 (.008)	0.2 (.008)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.03 (.0012)	0.03 (.0012)	0.03 (.0012)	0.03 (.0012)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm (in)	0.10 (.0039)	0.095 (.0037)	0.07 (.0028)	0.10 (.0039)
		Wear Limit	mm (in)	0.15 (.0059)	0.15 (.0059)	0.15 (.0059)	0.15 (.0059)
	Connecting Rod Big End Axial Play	New	mm (in)	0.31 (.0122)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		Wear Limit	mm (in)	1.2 (.0472)	1.2 (.0472)	1.2 (.0472)	1.2 (.0472)
	Maximum Crankshaft End-play ②	mm (in)	0.3 (.012)	0.3 (.012)	0.3 (.012)	0.3 (.012)	
	Maximum Crankshaft Deflection at Center	mm (in)	0.08 (.0031)	0.08 (.0031)	0.08 (.0031)	0.08 (.0031)	
Rotary Valve Timing and P/N 420 924 XXX	Opening Closing	N.A.	N.A.	N.A.	N.A.		
	Magneto Generator Output	W	360	360	290	290	
	Ignition Type		CDI	CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ES	NGK BR9ES	NGK BR9ES	NGK BR9ES	
	Spark Plug Gap	mm (in)	0.45 (.018)	0.45 (.018)	0.45 (.018)	0.45 (.018)	
	Ignition Timing BTDC ③	mm (in)	2.77 (.109)	2.59 (.102)	2.77 (.109)	2.77 (.109)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	N.A.	N.A.	25 – 56	25 – 56
		High Speed	Ω	N.A.	N.A.	3.5 – 8.1	3.5 – 8.1
	Lighting Coil ④	Ω	0.0 – 0.05	0.0 – 0.5	0.15 – 0.35	0.15 – 0.35	
	High Tension Coil ④	Primary	Ω	0.2 – 0.5	0.2 – 0.5	0.2 – 0.5	0.2 – 0.5
Secondary		kΩ	6 – 13	6 – 13	6 – 13	6 – 13	
	Carburetor Type	PTO/CTR/MAG	3 x VM 38 422	TM 38 C232	3 x VM 36 190	3 x VM 38 420	
	Main Jet	PTO/CTR/MAG	290	270/290/280	270	290	
	Needle Jet		480-P-1	327 O-2	286 P-0	480 P-1	
	Pilot Jet		50	50	50	50	
	Needle Identification — clip position		6DEH5-3	8ADY1-41-3	6DEY2-2	6DEH5-3	
	Slide Cut-Away		2.5	2.5	2.5	2.5	
	Float Adjustment	± 1 mm (± .040 in)	18.1 (.71)	21.0 (.83)	18.1 (.71)	18.1 (.71)	
	Air Screw Adjustment	± 1/16 Turn	2-1/2	4-1/2	2	2.5	
	Idle Speed	± 200 RPM	1800	1800	1800	1800	
	Gas Type/Pump Octane Number		Super Unleaded/91	Super Unleaded/91	Super Unleaded/91	Super Unleaded/91	
	Gas/Oil Ratio		Injection	Injection	Injection	Injection	
	Type		Liquid	Liquid	Liquid	Liquid	
	Axial Fan Belt Adjustment	Deflection	mm (in)	N.A.	N.A.	N.A.	N.A.
		Force	kg (lbf)	N.A.	N.A.	N.A.	N.A.
	Thermostat Opening Temperature	°C (°F)	N.A.	N.A.	N.A.	N.A.	
Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)	90 (13)		
	Drive Pulley Retaining Screw		⑤	⑤	⑤	⑤	
	Exhaust Manifold Nuts or Bolts		10 (7)	10 (7)	10 (7)	10 (7)	
	Magneto Ring Nut		125 (92)	125 (92)	125 (92)	125 (92)	
	Crankcase Nuts or Screws	M6	13 (9.5)	13 (9.5)	13 (9.5)	13 (9.5)	
		M8	29 (21)	29 (21)	29 (21)	29 (21)	
	Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)	35 (26)	
	Cylinder Head Nuts		29 (21)	29 (21)	29 (21)	29 (21)	
	Crankcase/Cylinder Nuts or Screws		29 (21)	29 (21)	29 (21)	29 (21)	
Axial Fan Shaft Nut		N.A.	N.A.	N.A.	N.A.		





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Subsection 02 (ENGINES)

VEHICLE MODEL		FORMULA III 800	MACH 1/1 R	MACH Z/Z R/Z M.H. R/Z LT/Z LT R
ENGINE TYPE		809	699	809
Number of Cylinders		3	3	3
Bore mm (in)		70.50 (2.776)	69.75 (2.746)	70.50 (2.776)
Stroke mm (in)		68.0 (2.677)	61.0 (2.402)	68.0 (2.677)
Displacement cm ³ (in ³)		796.3 (48.59)	699.20 (42.67)	796.3 (48.59)
Compression Ratio (corrected)		6.8	6.8	6.8
Maximum Power Engine Speed ① ± 100 RPM		8000	8300	8300
Piston Ring Type 1 st /2 nd		ST/R	ST/R	ST/R
Ring End Gap	New mm (in)	0.2 (.010)	0.2 (.008)	0.2 (.010)
	Wear Limit mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
Ring/Piston Groove Clearance	New mm (in)	0.03 (.0012)	0.03 (.0012)	0.03 (.0012)
	Wear Limit mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
Piston/Cylinder Wall Clearance	New mm (in)	0.11 (.0043)	0.10 (.0039)	0.11 (.0043)
	Wear Limit mm (in)	0.15 (.0059)	0.15 (.0059)	0.15 (.0059)
Connecting Rod Big End Axial Play	New mm (in)	0.31 (.0122)	0.39 (.0154)	0.31 (.0122)
	Wear limit mm (in)	1.2 (.0472)	1.2 (.0472)	1.2 (.0472)
Maximum Crankshaft End-play ② mm (in)		0.3 (.012)	0.3 (.012)	0.3 (.012)
Maximum Crankshaft Deflection at Center mm (in)		0.08 (.0031)	0.08 (.0031)	0.08 (.0031)
Rotary Valve Timing and P/N 420 924 XXX Opening Closing		N.A.	N.A.	N.A.
Magnet Generator Output W		290	290	290
Ignition Type		CDI	CDI	CDI
Spark Plug Make and Type		NGK BR9ES	NGK BR9ES	NGK BR9ES
Spark Plug Gap mm (in)		0.45 (.018)	0.45 (.018)	0.45 (.018)
Ignition Timing BTDC ③ mm (in)		2.59 (.102)	2.77 (.107)	2.59 (.102)
Trigger Coil ④ Ω		190 – 300	190 – 300	190 – 300
Generating Coil ④	Low Speed Ω	25 – 56	25 – 56	25 – 56
	High Speed Ω	3.5 – 8.1	3.5 – 8.1	3.5 – 8.1
Lighting Coil ④ Ω		0.15 – 0.35	0.15 – 0.35	0.15 – 0.35
High Tension Coil ④	Primary Ω	0.2 – 0.5	0.2 – 0.5	0.2 – 0.5
	Secondary kΩ	6 – 13	6 – 13	6 – 13
Carburetor Type PTO/CTR/MAG		TM 38 C228	TM 38 C224	TM 38 C236
Main Jet PTO/CTR/MAG		270/290/280	300	310
Needle Jet		327 O-2	327 N-7	327 O-2
Pilot Jet		50	50	50
Needle Identification — clip position		8ADY1-41-3	8AGY1-41-4	8ADY1-41-3
Slide Cut-away		2.0	2.0	2.0
Float Adjustment ± 1 mm (± .040 in)		21.0 (.83)	21.0 (.83)	21.0 (.83)
Air Screw Adjustment ± 1/16 Turn		4-1/2	4	4-1/2
Idle Speed ± 200 RPM		1800	1800	1800
Gas Type/Pump Octane Number		Super Unleaded/91	Super Unleaded/91	Super Unleaded/91
Gas/Oil Ratio		Injection	Injection	Injection
Type		Liquid	Liquid	Liquid
Axial Fan Belt Adjustment	Deflection mm (in)	N.A.	N.A.	N.A.
	Force kg (lbf)	N.A.	N.A.	N.A.
Thermostat Opening Temperature °C (°F)		N.A.	N.A.	N.A.
Radiator Cap Opening Pressure kPa (PSI)		90 (13)	90 (13)	90 (13)
ENGINE COLD N·m (lb·ft)	Drive Pulley Retaining Screw		⑤	⑤
	Exhaust Manifold Nuts or Bolts		10 (7)	10 (7)
	Magnet Ring Nut		125 (92)	125 (92)
	Crankcase Nuts or Screws	M6	13 (9.5)	13 (9.5)
		M8	29 (21)	29 (21)
	Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)
	Cylinder Head Nuts		29 (21)	29 (21)
	Crankcase/Cylinder Nuts or Screws		29 (21)	29 (21)
Axial Fan Shaft Nut		N.A.	N.A.	

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Subsection 03 (VEHICLES)

VEHICLE MODEL		GRAND TOURING 700	GRAND TOURING SE	FORMULA III 600	FORMULA III 700				
ENGINE TYPE		699	809	599	699				
	Chain Drive Ratio		24/43	24/43	24/43	25/43			
	Chain	Pitch	in	3/8	3/8	3/8	3/8		
		Type/Links Qty/Plates Qty		Silent 72/13	Silent 72/13	Silent 72/13	Silent 72/13		
	Drive Pulley	Type of Drive Pulley		TRA	TRA	TRA	TRA		
		Ramp Identification and Roller Pin Type		285 Ⓢ	297 Ⓢ	297 Ⓢ	297 Ⓢ		
		Calibration Screw Position or Calibration Disc Quantity		4	3	3	3		
		Spring Color		Yellow/Red	Yellow/Orange	Green/Blue	Violet/Blue		
		Spring Length	± 1.5 mm (± .060 in)	121.1 (4.77)	105.7 (4.16)	147.4 (5.80)	114.6 (4.51)		
		Clutch Engagement		± 200 RPM	3300	3300	4200	3800	
	Driven Pulley	Type		HPV27	HPV27	Formula	Formula		
		Spring Preload		± 0.7 kg (± 1.5 lb)	N.A.	N.A.	7.0 (15.4)	7.0 (15.4)	
		Cam Angle		Degree	47 – 44	47 – 44	50 – 47	50 – 47	
	Pulley Distance	Z		(+ 0, - 1) mm (± 0, - .040) in	121.0 (4.764)	121.0 (4.764)	120.0 (4.724)	120.0 (4.724)	
		Offset	X		± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	35.5 (1.398)	35.5 (1.398)
			Y – X	MIN. – MAX.	mm (in)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)
	Drive Belt Part Number (P/N)			417 300 066	417 300 066	417 300 066	417 300 066		
	Drive Belt Width (new) ①			35.1 (1.382) mm (in)	35.1 (1.382)	35.1 (1.382)	35.1 (1.382)		
	Drive Belt Adjustment	Deflection		± 5 mm (± .197 in)	38 (1.496)	38 (1.496)	38 (1.496)	38 (1.496)	
		Force ②		kg (lbf)	11.5 (25)	11.5 (25)	11.5 (25)	11.5 (25)	
	Track	Width		cm (in)	38.1 (15.0)	38.1 (15.0)	38.1 (15.0)	38.1 (15.0)	
		Length		cm (in)	345.5 (136)	345.5 (136)	307.4 (121)	307.4 (121)	
		Profile Height		mm (in)	22.3 (.878)	22.3 (.878)	22.3 (.878)	22.3 (.878)	
		Adjustment	Deflection		mm (in)	30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)
			Force ③		kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type	Track			SC-10 HP	SC-10 HP	SC-10 HP	SC-10 HP	
		Ski			ADSA	ADSA	ADSA	ADSA	
		Length		cm (in)	303.5 (119.5)	303.5 (119.5)	277.5 (109.3)	277.5 (109.3)	
		Width		cm (in)	117.4 (46.2)	117.4 (46.2)	117.4 (46.2)	117.4 (46.2)	
Height		cm (in)	130.0 (51.2)	130.0 (51.2)	114.3 (45.0)	114.3 (45.0)			
Ski Stance		cm (in)	104.1 (41)	104.1 (41)	104.1 (41)	104.1 (41)			
Mass (dry)		kg (lb)	278 (612)	282 (620)	253 (556)	244 (537)			
Ground Contact Area		cm ² (in ²)	7423.2 (1150.6)	7423.2 (1150.6)	6670.9 (1034)	6670.9 (1034)			
Ground Contact Pressure		kPa (PSI)	3.67 (.532)	3.73 (.541)	3.72 (.539)	3.59 (.521)			
Frame Material			Aluminum	Aluminum	Aluminum	Aluminum			
Bottom Pan Material			Impact Copolymer	Impact Copolymer	Impact Copolymer	Impact Copolymer			
Hood Material			TPO	TPO	TPO	TPO			
	Battery		V (A•h)	12/22	12/22	N.A.	N.A.		
	Headlight		W	H4 60/55	H4 60/55	H4 60/55	H4 60/55		
	Taillight and Stoplight		W	8/27	8/27	8/27	8/27		
	Tachometer and Speedometer Bulbs		W	3	3	3	3		
	Fuel and Temperature Gauge Bulbs		W	3	3	3	3		
	Fuse	Starter Solenoid		A	30	30	N.A.	N.A.	
		Fuel Level Sensor		A	0.25	0.25	0.25	0.25	
	Fuel Tank		L (U.S. gal)	42 (11.1)	42 (11.1)	42 (11.1)	42 (11.1)		
	Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)	250 (8.5)		
	Cooling System ④		L (U.S. oz)	5.1 (172.5)	5.1 (172.5)	5.0 (169)	5.0 (169)		
	Injection Oil Reservoir		L (U.S. oz)	4.1 (138.7)	4.1 (138.7)	4.1 (138.7)	4.1 (138.7)		



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Subsection 03 (VEHICLES)

VEHICLE MODEL		FORMULA III 800	MACH 1	MACH 1 R	MACH Z	
ENGINE TYPE		809	699	699	809	
Chain Drive Ratio		26/43	25/43	25/43	26/43	
Chain	Pitch	in 3/8	3/8	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 72/13	Silent 72/13	Silent 72/13	Silent 72/13	
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	TRA	
	Ramp Identification and Roller Pin Type	295 ⑤	286 ⑤	286 ⑤	295 ⑤	
	Calibration Screw Position or Calibration Disc Quantity	3	3	3	3	
	Spring Color	Violet/Blue	Green/Violet	Green/Violet	Green/Blue	
	Spring Length	± 1.5 mm (± .060 in) 114.6 (4.51)	126.7 (4.99)	126.7 (4.99)	147.4 (5.80)	
	Clutch Engagement	± 200 RPM 3800	4200	4200	4200	
Driven Pulley	Type	Formula	Formula	HPV27	Formula	
	Driven Pulley Spring Preload	± 0.7 kg (± 1.5 lb) 7.0 (15.4)	7.0 (15.4)	N.A.	7.0 (15.4)	
	Cam Angle	Degree 50 – 47	53 – 44	47 – 44	53 – 44	
Pulley Distance	Z	(+ 0, - 1) mm (+ 0, - 1/32) in 120.0 (4.724)	120.0 (4.724)	121.0 (4.764)	120.0 (4.724)	
	X	± 0.4 mm (± 1/64 in) 35.5 (1.398)	35.5 (1.398)	35.5 (1.398)	35.5 (1.398)	
Offset	Y – X	MIN. – MAX. mm (in) 1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	
	Drive Belt Part Number (P/N)		417 300 066	417 300 066	417 300 066	417 300 066
Drive Belt Width (new) ①		mm (in) 35.1 (1.382)	35.1 (1.382)	35.1 (1.382)	35.1 (1.382)	
Drive Belt Adjustment	Deflection	± 5 mm (± 13/64 in) 38 (1.496)	38 (1.496)	38 (1.496)	38 (1.496)	
	Force ②	kg (lbf) 11.5 (25)	11.5 (25)	11.5 (25)	11.5 (25)	
Track	Width	cm (in) 38.1 (15.0)	38.1 (15.0)	38.1 (15.0)	38.1 (15.0)	
	Length	cm (in) 307.4 (121)	307.4 (121)	307.4 (121)	307.4 (121)	
	Profile Height	mm (in) 22.3 (.878)	22.3 (.878)	22.3 (.878)	22.3 (.878)	
	Adjustment	Deflection	mm (in) 30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)
		Force ③	kg (lbf) 7.3 (16)	7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track	SC-10 HP	SC-10 HP	SC-10 HP	SC-10 HP	
	Ski	ADSA	ADSA	ADSA	ADSA	
Length		cm (in) 277.5 (109.3)	277.5 (109.3)	277.5 (109.3)	277.5 (109.3)	
Width		cm (in) 117.4 (46.2)	117.4 (46.2)	117.4 (46.2)	117.4 (46.2)	
Height		cm (in) 114.3 (45.0)	114.3 (45.0)	114.3 (45.0)	114.3 (45.0)	
Ski Stance		cm (in) 104.1 (41)	104.1 (41)	104.1 (41)	104.1 (41)	
Mass (dry)		kg (lb) 251 (552)	253 (557)	254 (559)	260 (572)	
Ground Contact Area		cm ² (in ²) 6670.9 (1034)	6670.9 (1034)	6670.9 (1034)	6670.9 (1034)	
Ground Contact Pressure		kPa (PSI) 3.69 (.535)	3.72 (.539)	3.74 (.542)	3.82 (.554)	
Frame Material		Aluminum	Aluminum	Aluminum	Aluminum	
Bottom Pan Material		Impact Copolymer	Impact Copolymer	Impact Copolymer	Impact Copolymer	
Hood Material		TPO	TPO	TPO	TPO	
Battery		V (A•h) N.A.	N.A.	N.A.	N.A.	
Headlight		W H4 60/55	H4 60/55	H4 60/55	H4 60/55	
Taillight and Stoplight		W 8/27	8/27	8/27	8/27	
Tachometer and Speedometer Bulbs		W 3	3	3	3	
Fuel and Temperature Gauge Bulbs		W 3	3	3	3	
Fuse	Starter Solenoid	A N.A.	N.A.	N.A.	N.A.	
	Fuel Level Sensor	A 0.25	0.25	0.25	0.25	
Fuel Tank		L (U.S. gal) 42 (11.1)	42 (11.1)	42 (11.1)	42 (11.1)	
Chaincase/Gearbox		mL (U.S. oz) 250 (8.5)	250 (8.5)	250 (8.5)	250 (8.5)	
Cooling System ④		L (U.S. oz) 5.0 (169)	5.0 (169)	5.0 (169)	5.0 (169)	
Injection Oil Reservoir		L (U.S. oz) 4.1 (138.7)	4.1 (138.7)	4.1 (138.7)	4.1 (138.7)	

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Subsection 03 (VEHICLES)

VEHICLE MODEL		MACH Z R MACH Z M.H. R	MACH Z LT	MACH Z LT R	
ENGINE TYPE		809	809	809	
Chain Drive Ratio		26/43	25/43	25/43	
Chain	Pitch	in 3/8	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 72/13	Silent 72/13	Silent 72/13	
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	
	Ramp Identification and Roller Pin Type	295 ⑤	295 ⑤	295 ⑤	
	Calibration Screw Position or Calibration Disc Quantity	3	3	3	
	Spring Color	Green/Blue	Green/Blue	Green/Blue	
	Spring Length	± 1.5 mm (± .060 in) 147.4 (5.80)	147.4 (5.80)	147.4 (5.80)	
	Clutch Engagement	± 200 RPM 4200	4200	4200	
Driven Pulley	Type	HPV27	Formula	HPV27	
	Driven Pulley Spring Preload	± 0.7 kg (± 1.5 lb) N.A.	7.0 (15.4)	N.A.	
	Cam Angle	degree 47 – 44	53 – 44	47 – 44	
Pulley Distance	Z	(+ 0, - 1) mm (+ 0, - 1/32) in 121.0 (4.764)	120.0 (4.724)	121.0 (4.764)	
	Offset	X ± 0.4 mm (± 1/64 in) 35.5 (1.398)	35.5 (1.398)	35.5 (1.398)	
	Y – X	MIN. – MAX. mm (in) 1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	
Drive Belt Part Number (P/N)		417 300 066	417 300 066	417 300 066	
Drive Belt Width (new) ①		mm (in) 35.1 (1.382)	35.1 (1.382)	35.1 (1.382)	
Drive Belt Adjustment	Deflection	± 5 mm (± 13/64 in) 38 (1.496)	38 (1.496)	38 (1.496)	
	Force ②	kg (lbf) 11.5 (25)	11.5 (25)	11.5 (25)	
Track	Width	cm (in) 38.1 (15.0)	38.1 (15.0)	38.1 (15.0)	
	Length	cm (in) 307.4 (121)	345.5 (136)	345.5 (136)	
	Profile Height	mm (in) 22.3 (.878)	22.3 (.878)	22.3 (.878)	
	Adjustment	Deflection	mm (in) 30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)
		Force ③	kg (lbf) 7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type		Track SC-10 HP	SC-10 HP	SC-10 HP	
	Ski	ADSA	ADSA	ADSA	
	Length	cm (in) 277.5 (109.3)	297.2 (117.0)	297.2 (117.0)	
	Width	cm (in) 117.4 (46.2)	118.1 (46.5)	118.1 (46.5)	
	Height	cm (in) 114.3 (45.0)	114.3 (45.0)	114.3 (45.0)	
	Ski Stance	cm (in) 104.1 (41)	104.1 (41)	104.1 (41)	
	Mass (dry)	kg (lb) 261 (574)	265 (582)	265 (584)	
	Ground Contact Area	cm ² (in ²) 6670.9 (1034)	7549.2 (1170.1)	7549.2 (1170.1)	
	Ground Contact Pressure	kPa (PSI) 3.84 (.557)	3.44 (.499)	3.44 (.499)	
	Frame Material	Aluminum	Aluminum	Aluminum	
	Bottom Pan Material	Impact Copolymer	Impact Copolymer	Impact Copolymer	
	Hood Material	TPO	TPO	TPO	
	Battery	V (A•h)	N.A.	N.A.	N.A.
Headlight	W	H4 60/55	H4 60/55	H4 60/55	
Taillight and Stoplight	W	8/27	8/27	8/27	
Tachometer and Speedometer Bulbs	W	3	3	3	
Fuel and Temperature Gauge Bulbs	W	3	3	3	
Fuse	Starter Solenoid	A	N.A.	N.A.	
	Fuel Level Sensor	A	0.25	0.25	
	Fuel Tank	L (U.S. gal) 42 (11.1)	42 (11.1)	42 (11.1)	
	Chaincase/Gearbox	mL (U.S. oz) 250 (8.5)	250 (8.5)	250 (8.5)	
	Cooling System ④	L (U.S. oz) 5.0 (169)	5.1 (173)	5.1 (173)	
	Injection Oil Reservoir	L (U.S. oz) 4.1 (138.7)	4.1 (138.7)	4.1 (138.7)	

ENGINE LEGEND

BTDC: Before Top Dead Center
CDI: Capacitor Discharge Ignition
CTR: Center
K: Kilo (× 1000)
MAG: Magneto Side
N.A.: Not Applicable
PTO: Power Take Off Side
R: Rectangular
ST: Semi-trapez

- ① The maximum horsepower RPM applicable on the vehicle. It may be different under certain circumstances and **BOMBARDIER INC.** reserves the right to modify it without obligation.
- ② Crankshaft end-play is not adjustable on these models. Specification is given for verification purposes only.
- ③ At 3500 RPM with headlamp turned on.
- ④ All resistance measurements must be performed with parts at room temperature (approx. 20°C (68°F)). Temperature greatly affects resistance measurements.
- ⑤ Drive pulley retaining screw: torque to 90 to 100 N•m (66 to 74 lbf•ft), install drive belt, accelerate the vehicle at low speed (maximum 30 km/h (20 MPH)) and apply the brake; repeat 5 times. Recheck the torque of 90 to 100 N•m (66 to 74 lbf•ft).

VEHICLE LEGEND

ADSA: Advanced Direct Shock Action
TPO: Thermo Plastic Olefin
TRA: Total Range Adjustable
N.A.: Not Applicable

- ① Minimum allowable width may not be less than 3.0 mm (1/8 in) of new drive belt.
- ② Force applied midway between pulleys to obtain specified tension deflection.
- ③ Force or downward pull applied to track to obtain specified tension deflection.
- ④ Coolant mixture: 60% antifreeze/40% water.
- ⑤ Lever with roller pin (P/N 417 004 308) (solid).