

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.



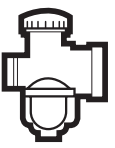


Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)




VEHICLE MODEL		TUNDRA	TUNDRA R	FORMULA S	TOURING E, SKANDIC 380, FORMULA DELUXE 380	
ENGINE TYPE		277	277	377	377	
	Number of Cylinders	1	1	2	2	
	Bore	72.00 (2.835)	72.00 (2.835)	62.00 (2.441)	62.00 (2.441)	
	Stroke	66.00 (2.598)	66.00 (2.598)	61.00 (2.402)	61.00 (2.402)	
	Displacement	268.70 (16.40)	268.70 (16.40)	368.30 (22.48)	368.30 (22.48)	
	Compression Ratio (corrected)	6.7	6.7	6.8	6.8	
	Maximum Power Engine Speed ①	± 100 RPM	6900	6900	6900	
	Piston Ring Type	1 st /2 nd	ST/R	ST/R	ST/R	
	Ring End Gap	(new) mm (in) (wear limit) mm (in)	0.2 (.008) 1.0 (.039)	0.2 (.008) 1.0 (.039)	0.2 (.008) 1.0 (.039)	0.2 (.008) 1.0 (.039)
	Ring/Piston Groove Clearance	(new) mm (in) (wear limit) mm (in)	0.04 (.0016) 0.2 (.008)	0.025 (.001) 0.2 (.008)	0.04 (.0016) 0.2 (.008)	0.04 (.0016) 0.2 (.008)
	Piston/Cylinder Wall Clearance	(new) mm (in) (wear limit) mm (in)	0.090 (.0031) 0.2 (.008)	0.090 (.0031) 0.2 (.008)	0.060 (.0024) 0.2 (.008)	0.060 (.0024) 0.2 (.008)
	Connecting Rod Big End Axial Play	(new) mm (in) (wear limit) mm (in)	0.20 (.0079) 1.0 (.0394)	0.20 (.0079) 1.0 (.0394)	0.20 (.0079) 1.0 (.0394)	0.20 (.0079) 1.0 (.0394)
	Maximum Crankshaft End-Play ②	mm (in)	0.3 (.0118)	0.3 (.0118)	0.3 (.0118)	0.3 (.0118)
	Maximum Crankshaft Deflection Measured at Center	mm (in)	0.08 (.0031)	0.08 (.0031)	0.08 (.0031)	0.08 (.0031)
	Rotary Valve Timing ③	Opening Closing	N.A.	N.A.	N.A.	N.A.
	Magneto Generator Output	W	160	240	240	
	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 ④	mm (in)	1.62 (.064)	3.04 (.120)	1.38 (.054)	
	Trigger Coil Air Gap	mm (in)	N.A.	0.40 – 0.10 (.016 – .043)	0.45 – 0.55 (.018 – .022)	
	Trigger Coil ⑤	Ω	N.A.	160 – 180	140 – 180	
	Generating Coil ⑤	Low Speed Ω High Speed Ω	40 – 76 N.A.	N.A. 5.1 – 6.2	N.A. 230 – 330	
	Lighting Coil ⑤	Ω	0.05 – 0.6	0.17 – 0.21	0.23 – 0.28	
	High Tension Coil ⑤	Primary Ω Secondary kΩ	0.11 – 0.21 4.9 – 7.5	N.A. 0.9 – 1.1	N.A. 5.1 – 6.3	
	Carburetor Type	PTO/MAG	VM 34-529	VM 34-537	2 x VM 30-195	
	Main Jet	PTO/MAG	190	190	140/140	
	Needle Jet		159 O-8	159 O-8	159 P-0	
	Pilot Jet		40	40	40	
	Needle Identification — Clip Position		6DH4-2	6DH4-2	6DP9-3	
	Slide Cut-Away		2.5	2.5	2.5	
	Float Adjustment	± 1 mm (± .040 in)	23.9 (.94)	23.9 (.94)	23.9 (.94)	
	Air Screw Adjustment	± 1/16 turn	1	1	1-1/4	
	Idle Speed RPM	± 200 RPM	1200	1650	1650	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	Gas/Oil Ratio		Injection	Injection	Injection	
	Type		Radial Fan	Radial Fan	Axial Fan	
	Axial Fan Belt Adjustment	Deflection mm (in) Force ⑥ kg (lbf)	N.A. N.A.	N.A. N.A.	8 – 9 (.31 – .35) 5 (11)	
	Thermostat Opening Temperature	°C (°F)	N.A.	N.A.	N.A.	
	Radiator Cap Opening Pressure	kPa (PSI)	N.A.	N.A.	N.A.	
	ENGINE COLD N·m (lb·ft)					
	Drive Pulley Retaining Screw ⑦		95 (70)	95 (70)	95 (70)	
	Exhaust Manifold Nuts or Bolts		25 (18)	25 (18)	22 (16)	
	Magneto Ring Nut		90 (66)	90 (66)	105 (77)	
	Crankcase Nuts or Screws	M6 M8	— 22 (16)	— 22 (16)	10 (7) 22 (16)	
	Crankcase/Engine Support Nuts or Screws		21 (15)	21 (15)	39 (29)	
	Cylinder Head Nuts		26 (19)	26 (19)	22 (16)	
	Crankcase/Cylinder Nuts or Screws		N.A.	N.A.	N.A.	
Axial Fan Shaft Nut		N.A.	N.A.	48 (35)		

Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

	VEHICLE MODEL		FORMULA SL	TOURING LE	SKANDIC 500, TOURING SLE FORMULA DELUXE 500		
	ENGINE TYPE		503	443	503		
	Number of Cylinders		2	2	2		
	Bore	mm (in)	72.00 (2.835)	67.5 (2.658)	72.00 (2.835)		
	Stroke	mm (in)	61.00 (2.402)	61.00 (2.402)	61.00 (2.402)		
	Displacement	cm ³ (in ³)	496.70 (30.31)	436.6 (26.64)	496.70 (30.31)		
	Compression Ratio (corrected)		6.2	6.4	6.2		
	Maximum Power Engine Speed ①	± 100 RPM	7000	7000	7000		
	Piston Ring Type	1 st /2 nd	ST/R	ST/R	ST/R		
	Ring End Gap	(new)	mm (in)	0.2 (.008)	0.2 (.008)	0.2 (.008)	
		(wear limit)	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)	
	Ring/Piston Groove Clearance	(new)	mm (in)	0.04 (.0016)	0.04 (.0016)	0.04 (.0016)	
		(wear limit)	mm (in)	0.2 (.008)	0.2 (.008)	0.2 (.008)	
	Piston/Cylinder Wall Clearance	(new)	mm (in)	0.090 (.0035)	0.070 (.0028)	0.080 (.0031)	
		(wear limit)	mm (in)	0.2 (.008)	0.2 (.008)	0.2 (.008)	
	Connecting Rod Big End Axial Play	(new)	mm (in)	0.2 (.0079)	0.20 (.0079)	0.2 (.0079)	
		(wear limit)	mm (in)	1.0 (.0394)	1.0 (.0394)	1.0 (.0394)	
Maximum Crankshaft End-Play ②		mm (in)	0.3 (.0118)	0.3 (.0118)	0.3 (.0118)		
Maximum Crankshaft Deflection Measured at Center		mm (in)	0.08 (.0031)	0.08 (.0031)	0.08 (.0031)		
Rotary Valve Timing ③	Opening Closing		N.A.	N.A.	N.A.		
	Magneto Generator Output	W	240	240	240		
	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 ④	mm (in)	1.66 (.065)	2.79 (.110)	2.76 (.109)		
	Trigger Coil Air Gap	mm (in)	0.45 – 0.55 (.018 – .022)	0.40 – 1.10 (.016 – .043)	0.40 – 1.10 (.016 – .043)		
	Trigger Coil ⑤	Ω	140 – 180	160 – 180	160 – 180		
	Generating Coil ⑤	Low Speed	Ω	N.A.	N.A.	N.A.	
		High Speed	Ω	230 – 330	5.1 – 6.2	5.1 – 6.2	
	Lighting Coil ⑤	Ω	0.23 – 0.28	0.17 – 0.21	0.17 – 0.21		
	High Tension Coil ⑤	Primary	Ω	N.A.	N.A.	N.A.	
Secondary		kΩ	5.1 – 6.3	0.9 – 1.1	0.9 – 1.1		
	Carburetor Type	PTO/MAG	VM 34-532/533	VM 34-530/531	VM 34-532/533		
	Main Jet	PTO/MAG	180/170	205/195	180/170		
	Needle Jet		159 P-0	159 P-0	159 P-0		
	Pilot Jet		40	35	40		
	Needle Identification — Clip Position		6DH2-3	6DH2-3	6DH2-3		
	Slide Cut-Away		2.5	2.5	2.5		
	Float Adjustment	± 1 mm (± .040 in)	23.9 (.94)	23.9 (.94)	23.9 (.94)		
	Air Screw Adjustment	± 1/16 turn	1-7/8	1-1/2	1-7/8		
	Idle Speed RPM	± 200 RPM	1650	1650	1650		
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87		
	Gas/Oil Ratio		Injection	Injection	Injection		
	Type		Axial Fan	Axial Fan	Axial Fan		
	Axial Fan Belt Adjustment	Deflection	mm (in)	9 – 10 (.35 – .39)	9 – 10 (.35 – .39)	9 – 10 (.35 – .39)	
		Force ⑥	kg (lbf)	5 (11)	5 (11)	5 (11)	
	Thermostat Opening Temperature	°C (°F)	N.A.	N.A.	N.A.		
Radiator Cap Opening Pressure	kPa (PSI)	N.A.	N.A.	N.A.			
	ENGINE COLD N•m (lb•ft)	Drive Pulley Retaining Screw ⑦		95 (70)	95 (70)	95 (70)	
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut		105 (77)	105 (77)	105 (77)	
		Crankcase Nuts or Screws	M6		—	—	—
			M8		22 (16)	22 (16)	22 (16)
		Crankcase/Engine Support Nuts or Screws		39 (28)	39 (28)	39 (28)	
		Cylinder Head Nuts		22 (16)	22 (16)	22 (16)	
		Crankcase/Cylinder Nuts or Screws		N.A.	N.A.	N.A.	
Axial Fan Shaft Nut		48 (35)	48 (35)	48 (35)			

Section 10 TECHNICAL DATA
Subsection 03 (VEHICLES)

VEHICLE MODEL		TUNDRA	TUNDRA R	SKANDIC 380		
ENGINE TYPE		277	277	377		
	Chain Drive Ratio	14/25	14/25	18/44		
	Chain	Pitch in	1/2	1/2	3/8	
		Type/Links Qty/Plates Qty	Single/62	Single/62	Silent/70/11	
	Drive Pulley	Type of Drive Pulley	Bombardier Lite	Bombardier Lite	Bombardier Lite	
		Ramp Identification	N.A.	N.A.	N.A.	
		Calibration Screw Position or Calibration Part ②	1143 2 x C	1143 2 x C	1181 1 x C, 1 x S21	
		Spring Color	Turquoise	Turquoise	Green/Green	
		Spring Length ± 1.5 mm (± .060 in)	85.3 (3.36)	85.3 (3.36)	72 (2.835)	
	Driven Pulley	Clutch Engagement ± 200 RPM	3100	3100	2500	
		Type of Driven Pulley	Tundra	Tundra Reverse	LPV27	
		Spring Preload ± 0.7 kg (± 1.5 lb)	3.6 (7.9)	N.A.	N.A.	
	Pulley Distance Z	degree	37.8	37.8	47 – 44	
		(+ 0, - 1) mm (+ 0, - 1/32) in	37.0 + 0, - 1.5 (1.457 + 0, - .060)	37.0 + 0, - 1.5 (1.457 + 0, - .060)	26.0 ± 0.5 (1.024 ± .020)	
	Offset	X mm (in)	36.0 ± 1.0 (1.417 ± .040)	36.0 ± 1.0 (1.417 ± .040)	33.4 ± 0.5 (1.315 ± .020)	
		Y – X MIN. MAX.	- 0 (- 0) + 1.5 (+ .059)	- 0 (- 0) + 1.5 (+ .059)	+ 0.5 (+ .020) + 1.5 (+ .059)	
	Drive Belt Part Number (P/N)		414 827 600	414 827 600	415 060 600	
	Drive Belt Width (new) ③		33.3 (1-5/16)	33.3 (1-5/16)	34.7 (1-3/8)	
	Drive Belt Adjustment	Deflection ± 5 mm (± 13/64 in)	32 (1-1/4)	32 (1-1/4)	32 (1-1/4)	
		Force ④	6.8 (15)	6.8 (15)	11.3 (25)	
	Track	Width	38.1 (15)	38.1 (15)	38.1 (15)	
		Length	354 (139)	354 (139)	345 (136)	
		Profile Height	18.4 (.724)	18.4 (.724)	23.2 (.913)	
		Adjustment	Deflection mm (in)	35 – 40 (1-3/8 – 1-9/16)	35 – 40 (1-3/8 – 1-9/16)	35 – 40 (1-3/8 – 1-9/16)
			Force ⑤	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type	Track	Torque Reaction Slide	Torque Reaction Slide	SC-10 Touring	
		Ski	Telescopic Strut	Telescopic Strut	DSA	
		Length	284.5 (112)	284.5 (112)	294 (115.7)	
		Width	95.3 (37.5)	95.3 (37.5)	108 (42.5)	
Height		114 (44.9)	114 (44.9)	122 (48.0)		
Ski Stance		81.3 (32.0)	81.3 (32.0)	94 (37)		
Mass (dry)		173 (380)	173 (380)	209 (459)		
Ground Contact Area		7570 (1173)	7570 (1173)	7227 (1120)		
Ground Contact Pressure		2.24 (.325)	2.24 (.325)	2.84 (.412)		
Frame Material		Steel	Steel	Aluminum		
Bottom Pan Material		Polyethylene High Density	Polyethylene High Density	Impact Copolymer		
Hood Material		Polyethylene High Density	Polyethylene High Density	RRIM Polyurethane		
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 Bulb W		N.A.	N.A.	3		
Fuel and Temperature Gauge Bulb W		N.A.	N.A.	N.A.		
Fuse	Starter Solenoid A	N.A.	N.A.	N.A.		
	Tachometer A	N.A.	N.A.	N.A.		
	Fuel Tank L (U.S. gal)	26 (6.9)	26 (6.9)	40 (10.6)		
	Chaincase Gearbox mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)		
	Cooling System L (U.S. oz)	N.A.	N.A.	N.A.		
	Injection Oil Reservoir L (U.S. oz)	1.9 (64)	1.9 (64)	2.55 (86)		

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		SKANDIC 500	TOURING E	TOURING LE	
ENGINE TYPE		503	377	443	
Chain Drive Ratio		18/44	18/44	21/44	
Chain	Pitch	3/8 in	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent/70/11	Silent/70/11	Silent/72/11	
Drive Pulley	Type of Drive Pulley	TRA	Bombardier Lite	TRA	
	Ramp Identification	292X ①	N.A.	284 ①	
	Calibration Screw Position or Calibration Part ②	3	1181 1 x C, 1 x S21	2	
	Spring Color	Red/Red	Green/Green	Red/Yellow	
	Spring Length ± 1.5 mm (± .060 in)	97.2 (3.87)	72.0 (2.83)	87.9 (3.46)	
	Clutch Engagement ± 200 RPM	2900	2500	2900	
Driven Pulley	Type of Driven Pulley	LPV27	LPV27	LPV27	
	Spring Preload ± 0.7 kg (± 1.5 lb)	N.A.	N.A.	N.A.	
	Cam Angle degree	47 – 44	47 – 44	47 – 44	
Pulley Distance Z		17.0 ± 0.5 (.669 ± .020) mm (in)	26.0 ± 0.5 (1.024 ± .020) mm (in)	17.0 ± 0.5 (.669 ± .020) mm (in)	
Offset	X	35.5 ± 0.5 (1.398 ± .020) mm (in)	33.4 ± 0.5 (1.315 ± .020) mm (in)	35.5 ± 0.5 (1.398 ± .020) mm (in)	
	Y – X	MIN. MAX.	+ 0.5 (+ .020) + 1.5 (+ .059)	+ 1 (+ .039) + 2 (+ .079)	
Drive Belt Part Number (P/N)		415 060 600	415 060 600	415 060 600	
Drive Belt Width (new) ③		34.7 (1-3/8) mm (in)	34.7 (1-3/8) mm (in)	34.7 (1-3/8) mm (in)	
Drive Belt Adjustment	Deflection ± 5 mm (± 13/64 in)	32 (1-1/4)	32 (1-1/4)	32 (1-1/4)	
	Force ④	11.3 (25) kg (lbf)	11.3 (25) kg (lbf)	11.3 (25) kg (lbf)	
Track	Width	38.1 (15) cm (in)	38.1 (15) cm (in)	38.1 (15) cm (in)	
	Length	345 (136) cm (in)	345 (136) cm (in)	345 (136) cm (in)	
	Profile Height	23.2 (.913) mm (in)	18.4 (.724) mm (in)	18.4 (.724) mm (in)	
	Adjustment	Deflection	35 – 40 (1-3/8 – 1-9/16) mm (in)	35 – 40 (1-3/8 – 1-9/16) mm (in)	35 – 40 (1-3/8 – 1-9/16) mm (in)
		Force ⑤	7.3 (16) kg (lbf)	7.3 (16) kg (lbf)	7.3 (16) kg (lbf)
Suspension Type		Track SC-10 Touring	Track SC-10 Touring	Track SC-10 Touring	
		Ski DSA	Ski DSA	Ski DSA	
Length		294 (115.7) cm (in)	294 (115.7) cm (in)	294 (115.7) cm (in)	
Width		108 (42.5) cm (in)	115.6 (45.5) cm (in)	120.7 (47.5) cm (in)	
Height		122 (48.0) cm (in)	122 (48.0) cm (in)	122 (48.0) cm (in)	
Ski Stance		94 (37) cm (in)	101.6 (40) cm (in)	106.7 (42) cm (in)	
Mass (dry)		225 (494) kg (lb)	193 (425) kg (lb)	202 (445) kg (lb)	
Ground Contact Area		7227 (1120) cm ² (in ²)	7227 (1120) cm ² (in ²)	7227 (1120) cm ² (in ²)	
Ground Contact Pressure		3.05 (.442) kPa (PSI)	2.62 (.380) kPa (PSI)	2.74 (.397) kPa (PSI)	
Frame Material		Aluminum	Aluminum	Aluminum	
Bottom Pan Material		Impact Copolymer	Impact Copolymer	Impact Copolymer	
Hood Material		RRIM Polyurethane	RRIM Polyurethane	RRIM Polyurethane	
Battery		V (A•h)	12 (22)	12 (22)	
Headlight		W	H4 60/55	H4 60/55	
Taillight and Stoplight		W	8/27	8/27	
Tachometer and Speedometer Bulb		W	3	3	
Fuel and Temperature Gauge Bulb		W	N.A.	N.A.	
Fuse	Starter Solenoid	A	30	30	
	Tachometer	A	N.A.	N.A.	
Fuel Tank		L (U.S. gal)	40 (10.6)	40 (10.6)	
Chaincase Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	
Cooling System		L (U.S. oz)	N.A.	N.A.	
Injection Oil Reservoir		L (U.S. oz)	2.55 (86)	2.55 (86)	

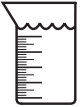
Section 10 TECHNICAL DATA
Subsection 03 (VEHICLES)

VEHICLE MODEL		TOURING SLE	FORMULA S	FORMULA SL	
ENGINE TYPE		503	377	503	
Chain Drive Ratio		21/44	18/44	21/44	
Chain	Pitch	3/8	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent/72/11	Silent/72/11	Silent/72/11	
Drive Pulley	Type of Drive Pulley	TRA	Bombardier Lite	TRA	
	Ramp Identification	291X ①	N.A.	291 ①	
	Calibration Screw Position or Calibration Part ②	3	1181 1 x C, 1 x S21	3	
	Spring Color	Red/Red	Red/Blue	Yellow/Red	
	Spring Length ± 1.5 mm (± .060 in)	97.2 (3.83)	96 (3.78)	121.1 (4.77)	
Driven Pulley	Clutch Engagement ± 200 RPM	2900	3500	3300	
	Type of Driven Pulley	LPV27	Formula	Formula	
	Spring Preload ± 0.7 kg (± 1.5 lb)	N.A.	4.8 (10.6)	4.8 (10.6)	
	Cam Angle degree	47 – 44	44	44	
Pulley Distance Z		17.0 ± 0.5 (.669 ± .020)	25.5 ± 0.5 (1 ± .020)	16.5 ± 0.5 (.650 ± .020)	
Offset	X	± 0.4 mm (± 1/64 in)	35.5 ± 0.5 (1.398 ± .020)	35.5 ± 0.5 (1.398 ± .020)	
	Y – X	MIN. MAX.	+ 1 (+ .039) + 2 (+ .079)	+ 0.5 (+ .020) + 1.5 (+ .059)	
Drive Belt Part Number (P/N)		415 060 600	415 060 600	415 060 600	
Drive Belt Width (new) ③		34.7 (1-3/8)	34.7 (1-3/8)	34.7 (1-3/8)	
Drive Belt Adjustment	Deflection ± 5 mm (± 13/64 in)	32 (1-1/4)	32 (1-1/4)	32 (1-1/4)	
	Force ④	11.3 (25)	11.3 (25)	11.3 (25)	
Track	Width	38.1 (15)	38.1 (15)	38.1 (15)	
	Length	345 (136)	307 (121)	307 (121)	
	Profile Height	18.4 (.724)	18.4 (.724)	18.4 (.724)	
	Adjustment	Deflection	35 – 40 (1-3/8 – 1-9/16)	35 – 40 (1-3/8 – 1-9/16)	35 – 40 (1-3/8 – 1-9/16)
		Force ⑤	7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type		Track SC-10 Touring	Track SC-10 Sport	Track SC-10 Sport	
		Ski DSA	Ski DSA	Ski DSA	
Length		294 (115.7)	272.5 (107.3)	272.5 (107.3)	
Width		120.7 (47.5)	115.6 (45.5)	120.7 (47.5)	
Height		122 (48.0)	112 (44.1)	112 (44.1)	
Ski Stance		106.7 (42)	101.6 (40)	106.7 (42)	
Mass (dry)		216 (475)	193 (425)	202 (445)	
Ground Contact Area		7227 (1120)	6503 (1008)	6503 (1008)	
Ground Contact Pressure		2.93 (.425)	2.91 (.422)	3.05 (.442)	
Frame Material		Aluminum	Aluminum	Aluminum	
Bottom Pan Material		Impact Copolymer	Impact Copolymer	Impact Copolymer	
Hood Material		RRIM Polyurethane	RRIM Polyurethane	RRIM Polyurethane	
Battery		V (A•h)	12 (22)	N.A.	
Headlight		W	H4 60/55	H4 60/55	
Taillight and Stoplight		W	8/27	8/27	
Tachometer and Speedometer Bulb		W	3	3	
Fuel and Temperature Gauge Bulb		W	N.A.	N.A.	
Fuse	Starter Solenoid	A	30	N.A.	
	Tachometer	A	N.A.	N.A.	
Fuel Tank		L (U.S. gal)	40 (10.6)	40 (10.6)	
Chaincase Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	
Cooling System		L (U.S. oz)	N.A.	N.A.	
Injection Oil Reservoir		L (U.S. oz)	2.55 (86)	2.55 (86)	

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		FORMULA DELUXE 380	FORMULA DELUXE 500		
ENGINE TYPE		377	503		
Chain Drive Ratio		18/44	21/44		
Chain	Pitch	in	3/8		
	Type/Links Qty/Plates Qty	Silent/72/11	Silent/72/11		
Drive Pulley	Type of Drive Pulley	Bombardier Lite	TRA		
	Ramp Identification	N.A.	291X ①		
	Calibration Screw Position or Calibration Part ②	1181 1 x C, 1 x S21	3		
	Spring Color	Red/Blue	Yellow/Red		
	Spring Length	± 1.5 mm (± .060 in)	96 (3.78)	121 (4.77)	
	Clutch Engagement	± 200 RPM	3500	3300	
Driven Pulley	Type of Driven Pulley	LPV27	LPV27		
	Spring Preload	± 0.7 kg (± 1.5 lb)	N.A.		
	Cam Angle	degree	47 – 44	47 – 44	
Pulley Distance Z		mm (in)	26.0 ± 0.5 (1.024 ± .020)	17.0 ± 0.5 (.669 ± .020)	
Offset	X	mm (in)	33.4 ± 0.5 (1.315 ± .020)	35.5 ± 0.5 (1.315 ± .020)	
	Y – X	MIN. MAX.	+ 0.5 (+ .020) + 1.5 (+ .059)	+ 0.5 (+ .020) + 1.5 (+ .059)	
Drive Belt Part Number (P/N)		415 060 600	415 060 600		
Drive Belt Width (new) ③		mm (in)	34.7 (1-3/8)	34.7 (1-3/8)	
Drive Belt Adjustment	Deflection	± 5 mm (± 13/64 in)	32 (1-1/4)	32 (1-1/4)	
	Force ④	kg (lbf)	11.3 (25)	11.3 (25)	
Track	Width	cm (in)	38.1 (15)	38.1 (15)	
	Length	cm (in)	307 (121)	307 (121)	
	Profile Height	mm (in)	18.4 (.724)	18.4 (.724)	
	Adjustment	Deflection	mm (in)	35 – 40 (1-3/8 – 1-9/16)	35 – 40 (1-3/8 – 1-9/16)
		Force ⑤	kg (lbf)	7.3 (16)	7.3 (16)
Suspension Type		Track Ski	SC-10 Sport DSA	SC-10 Touring DSA	
Length		cm (in)	272.5 (107.3)	272.5 (107.3)	
Width		cm (in)	115.6 (45.5)	120.7 (47.5)	
Height		cm (in)	116.9 (46)	116.9 (46)	
Ski Stance		cm (in)	101.6 (40)	106.7 (42)	
Mass (dry)		kg (lb)	202 (445)	211 (465)	
Ground Contact Area		cm ² (in ²)	6503 (1008)	6503 (1008)	
Ground Contact Pressure		kPa (PSI)	3.05 (.442)	3.18 (.461)	
Frame Material		Aluminum	Aluminum		
Bottom Pan Material		Impact Copolymer	Impact Copolymer		
Hood Material		RRIM Polyurethane	RRIM Polyurethane		
Battery		V (A•h)	12 (22)	12 (22)	
Headlight		W	H4 60/55	H4 60/55	
Taillight and Stoplight		W	8/27	8/27	
Tachometer and Speedometer Bulb		W	5	2 x 3	
Fuel and Temperature Gauge Bulb		W	N.A.	N.A.	
Fuse	Starter Solenoid	A	30	30	
	Tachometer	A	N.A.	N.A.	
Fuel Tank		L (U.S. gal)	40 (10.6)	40 (10.6)	
Chaincase Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	
Cooling System		L (U.S. oz)	N.A.	N.A.	
Injection Oil Reservoir		L (U.S. oz)	2.55 (86)	2.55 (86)	



ENGINE TECHNICAL DATA LEGEND

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

- ① The maximum horsepower RPM is 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 except Tundra series. Specification is given for verification purposes only.
- ③ Rotary valve to crankcase clearance: 0.27 – 0.48 mm (.011 – .019 in).
- ④ At 6000 RPM (engine cold) with headlamp turned on.
- ⑤ All resistance measurements must be performed with parts at room temperature (approx. 20°C (68°F)). Temperature greatly affects resistance measurements.
- ⑥ Force applied midway between pulleys to obtain specified deflection.
- ⑦ 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 TECHNICAL DATA LEGEND

DSA: Direct Shock Action
RRIM: Reinforced Reaction Injection Molding
TRA: Total Range Adjustable drive pulley
N.A.: Not Applicable

- ① Lever with roller pin (P/N 417 004 309) (Hollow).
- ② For Bombardier Lite drive pulleys:
1157 = Red block, push type 38 g (P/N 417 115 700).
1181 = Black block, screw type 39.6 g (P/N 417 118 100).
1143 = Red block, screw type 41.8 g (P/N 417 114 300).
W = Washer 1.8 g (P/N 417 115 800).
C = Cap 1.65 g (P/N 417 114 500).
S3.4 = Weight, screw type 3.4 g (P/N 417 114 400).
S21 = Weight, screw type 21 g (P/N 417 120 400).
- ③ Minimum allowable width may not be less than 3.0 mm (1/8 in) of a new drive belt.
- ④ Force applied midway between pulleys to obtain specified deflection.
- ⑤ Force or downward pull applied to track to obtain specified tension deflection.