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

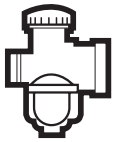
CONVERSION FACTORS

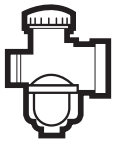
TO CONVERT	TO †	MULTIPLY BY
in	mm	25.4
in	cm	2.54
in^2	cm^2	6.45
in^3	cm^3	16.39
ft	m	0.3
oz	g	28.35
lb	kg	0.45
lbf	N	4.4
lbf•**in**	N•m	0.11
lbf•ft	N•m	1.36
lbf•ft	lbf•**in**	12
PSI (lbf/in^2)	kPa	6.89
imp. oz	U.S. oz	0.96
imp. oz	mL	28.41
imp. gal	U.S. gal	1.2
imp. gal	L	4.55
U.S. oz	mL	29.57
U.S.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

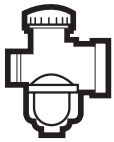
* The international system of units abbreviates SI in all languages.

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

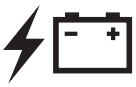
NOTE: Conversion factors are rounded off to 2 decimals for easier use.

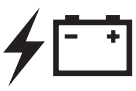
	VEHICLE MODEL			TUNDRA R	FORMULA S	TOURING E, SKANDIC 380, FORMULA DELUXE 380
	ENGINE TYPE			**277**	**377**	**377**
	Number of Cylinders			1	2	2
	Bore		mm (in)	72.00 (2.835)	62.00 (2.441)	62.00 (2.441)
	Stroke		mm (in)	66.00 (2.598)	61.00 (2.402)	61.00 (2.402)
	Displacement		cm^3 (in^3)	268.7 (16.40)	368.3 (22.48)	368.3 (22.48)
	Compression Ratio (corrected)			6.4	6.7	6.7
	Maximum Power Engine Speed ①		± 100 RPM	6900	6900	6900
	Piston Ring Type		1st/2nd	KS/R	KS/R	KS/R
	Ring End Gap	(new) (wear limit)	mm (in) mm (in)	0.25 (.008) 1.0 (.039)	0.2 (.008) 1.0 (.039)	0.2 (.008) 1.0 (.039)
	Ring/Piston Groove Clearance	(new) (wear limit)	mm (in) mm (in)	0.025 (.001) 0.2 (.008)	0.04 (.0016) 0.2 (.008)	0.04 (.0016) 0.2 (.008)
	Piston/Cylinder Wall Clearance	(new) (wear limit)	mm (in) mm (in)	0.080 (.0031) 0.2 (.008)	0.070 (.0028) 0.2 (.008)	0.070 (.0028) 0.2 (.008)
	Connecting Rod Big End Axial Play	(new) (wear limit)	mm (in) mm (in)	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)
	Maximum Crankshaft Deflection Measured at PTO		mm (in)	0.08 (.0031)	0.06 (.0024)	0.06 (.0024)
	Rotary Valve Timing ③ and P/N 420 924 XXX		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 ④⑧		mm (in)	3.61 (.142)	1.38 (.054)	2.79 (.110)
	Trigger Coil Air Gap		mm (in)	0.50 – 0.70 (.020 – .028)	0.45 – 0.55 (.018 – .022)	0.50 – 0.70 (.020 – .028)
	Trigger Coil ⑤		Ω	160 – 180	140 – 180	160 – 180
	Generating Coil ⑤		Ω	5.1 – 6.2	230 – 330	5.1 – 6.2
	Lighting Coil ⑤		Ω	0.17 – 0.21	0.23 – 0.28	0.17 – 0.21
	High Tension Coil ⑤	Primary	Ω	N.A.	N.A.	N.A.
		Secondary	kΩ	0.9 – 1.1	5.1 – 6.3	0.9 – 1.1
	Carburetor Type		PTO/MAG	VM 34-551	2 x VM 30-200	2 x VM 30-200
	Main Jet		PTO/MAG	190	140/140	140/140
	Needle Jet			159 O-8	159 P-0	159 P-0
	Pilot Jet			40	40	40
	Needle Identification — Clip Position			6DH4-2	6DP9-3	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	1-1/4	1-1/4
	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			Radial fan	Axial fan	Axial fan
	Axial Fan Belt Adjustment	Deflection	mm (in)	N.A.	8 – 9 (.31 – .35)	8 – 9 (.31 – .35)
		Force ⑥	kg (lbf)	N.A.	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	⑦	⑦
		Exhaust Manifold Nuts or Bolts		25 (18)	22 (16)	22 (16)
		Magneto Ring Nut		90 (66)	105 (77)	105 (77)
		Crankcase Nuts or Screws	M6 M8	— 22 (16)	10 (7) 22 (16)	10 (7) 22 (16)
		Crankcase/Engine Support Nuts or Screws		21 (15)	39 (29)	39 (29)
		Cylinder Head Nuts		26 (19)	22 (16)	22 (16)
		Crankcase/Cylinder Nuts or Screws		N.A.	N.A.	N.A.
		Axial Fan Shaft Nut		N.A.	48 (35)	48 (35)

	VEHICLE MODEL			TOURING LE	SKANDIC 500, TOURING SLE, FORMULA DELUXE 500	MX Z 440
	ENGINE TYPE			**443**	**503**	**443**
	Number of Cylinders			2	2	2
	Bore		mm (in)	67.5 (2.658)	72.00 (2.835)	67.5 (2.6575)
	Stroke		mm (in)	61.00 (2.402)	61.00 (2.402)	61.0 (2.402)
	Displacement		cm^3 (in^3)	436.6 (26.64)	496.7 (30.31)	436.6 (26.64)
	Compression Ratio (corrected)			6.4	6.2	6.4
	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) (wear limit)	mm (in) mm (in)	0.2 (.008) 1.0 (.039)	0.25 (.010) 1.0 (.039)	0.2 (.008) 1.0 (.039)
	Ring/Piston Groove Clearance	(new) (wear limit)	mm (in) mm (in)	0.04 (.0016) 0.2 (.008)	0.04 (.0016) 0.2 (.008)	0.04 (.0016) 0.2 (.0079)
	Piston/Cylinder Wall Clearance	(new) (wear limit)	mm (in) mm (in)	0.070 (.0028) 0.2 (.008)	0.080 (.0031) 0.2 (.008)	0.07 (.0028) 0.2 (.008)
	Connecting Rod Big End Axial Play	(new) (wear limit)	mm (in) mm (in)	0.20 (.0079) 1.0 (.0394)	0.2 (.0079) 1.0 (.0394)	0.2 (.0079) 1.0 (.0394)
	Maximum Crankshaft End-Play ②		mm (in)	0.3 (.0118)	0.3 (.0118)	0.3 (.012)
	Maximum Crankshaft Deflection Measured at PTO		mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)
	Rotary Valve Timing ③ and P/N 420 924 XXX		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 ⑧		mm (in)	2.79 (.110)	2.76 (.109)	1.38 (.054)
	Trigger Coil Air Gap		mm (in)	0.50 – 0.70 (.020 – .028)	0.50 – 0.70 (.020 – .028)	0.50 – 0.70 (.020 – .028)
	Trigger Coil ⑤		Ω	160 – 180	160 – 180	140 – 180
	Generating Coil ⑤		Ω	5.1 – 6.2	5.1 – 6.2	230 – 330
	Lighting Coil ⑤		Ω	0.17 – 0.21	0.17 – 0.21	0.23 – 0.28
	High Tension Coil ⑤	Primary	Ω	N.A.	N.A.	N.A.
		Secondary	kΩ	0.9 – 1.1	0.9 – 1.1	5.1 – 6.3
	Carburetor Type		PTO/MAG	VM 34-547/548	VM 34-549/550	VM 34 547/548
	Main Jet		PTO/MAG	205/195	180/170	205/195
	Needle Jet			159 P-0	159 P-0	159 P-0
	Pilot Jet			35	40	35
	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	1-1/2	1-7/8	1-1/2
	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	⑦	⑦
		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)	10 (7) 22 (16)
		Crankcase/Engine Support Nuts or Screws		39 (29)	39 (29)	38 (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)	50 (37)

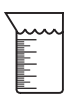
	VEHICLE MODEL			FORMULA 500 LC FORMULA DLX 500 LC TOURING 500 LC	SKANDIC WT SKANDIC SWT	SKANDIC WT LC
	ENGINE TYPE			**494**	**503**	**494**
	Number of Cylinders			2	2	2
	Bore		mm (in)	69.5 (2.736)	72.0 (2.835)	69.5 (2.736)
	Stroke		mm (in)	65.8 (2.59)	61.0 (2.402)	65.8 (2.59)
	Displacement		cm^3 (in^3)	499.3 (30.47)	496.7 (30.31)	499.3 (30.47)
	Compression Ratio (corrected)			6.8	6.2	6.8
	Maximum Power Engine Speed ①		± 100 RPM	7800	6800	7000
	Piston Ring Type		1st/2nd	ST/R	ST/R	ST/R
	Ring End Gap	(new) (wear limit)	mm (in) mm (in)	0.25 (.010) 1.0 (.039)	0.2 (.0079) 1.0 (.039)	0.25 (.010) 1.0 (.039)
	Ring/Piston Groove Clearance	(new) (wear limit)	mm (in) mm (in)	0.04 (.0016) 0.2 (.0079)	0.04 (.0016) 0.2 (.0079)	0.04 (.0016) 0.2 (.0079)
	Piston/Cylinder Wall Clearance	(new) (wear limit)	mm (in) mm (in)	0.11 (.0043) 0.15 (.0059)	0.9 (.0035) 0.2 (.0079)	0.11 (.0043) 0.15 (.0059)
	Connecting Rod Big End Axial Play	(new) (wear limit)	mm (in) mm (in)	0.39 (.0156) 1.2 (.0472)	0.2 (.0079) 1.0 (.0394)	0.39 (.0154) 1.2 (.0472)
	Maximum Crankshaft End-Play ②		mm (in)	0.3 (.012)	0.3 (.012)	0.3 (.012)
	Maximum Crankshaft Deflection Measured at PTO		mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)
	Rotary Valve Timing ③ and P/N 420 924 XXX		Opening Closing	135° – 64° 509	N.A.	148° – 52° 509
	Magneto Generator Output		W	220	240	220
	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 ④⑧		mm (in)	1.81 (.071)	1.66 (.065)	1.81 (.071)
	Trigger Coil Air Gap		mm (in)	0.55 – 1.45 (.022 – .057)	0.45 – 0.55 (.018 – .021)	0.55 – 1.45 (.022 – .057)
	Trigger Coil ⑤		Ω	190 – 300	140 – 180	190 – 300
	Generating Coil ⑤		Ω	10 – 17	230 – 330	10 – 17
	Lighting Coil ⑤		Ω	0.20 – 0.35	0.23 – 0.28	0.20 – 0.35
	High Tension Coil ⑤	Primary	Ω	0.3 – 0.7	N.A.	0.3 – 0.7
		Secondary	kΩ	8 – 16	5.1 – 6.3	8 – 16
	Carburetor Type		PTO/MAG	VM 38 431/432	2 x VM 34	2 x VM 34
	Main Jet		PTO/MAG	300/280	185	250/240
	Needle Jet			480-Q3	159 P1	159-P2
	Pilot Jet			50	40	40
	Needle Identification — Clip Position			6DGY9-2	6DH2-3	6DGH10-2
	Slide Cut-Away			2.5	2.5	2.5
	Float Adjustment		± 1 mm (± .040 in)	18.1 (.71)	36.5 (1.44)	36.5 (1.44)
	Air Screw Adjustment		± 1/16 turn	1	1	1
	Idle Speed RPM		± 200 RPM	1800	1650	1900
	Gas Type/Pump Octane Number			Unleaded/87	Unleaded/87	Unleaded/87
	Gas/Oil Ratio			Injection	Injection	Injection
	Type			Liquid	Axial fan	Liquid
	Axial Fan Belt Adjustment	Deflection	mm (in)	N.A.	9 – 10 (.35 – .39)	N.A.
		Force ⑥	kg (lbf)	N.A.	5 (11)	N.A.
	Thermostat Opening Temperature		°C (°F)	42 (108)	N.A.	42 (108)
	Radiator Cap Opening Pressure		kPa (PSI)	90 (13)	N.A.	90 (13)
	**ENGINE COLD N•m (lb•ft)**	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		23 (17)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	105 (77)	125 (92)
		Crankcase Nuts or Screws	M6 M8	9 (6.5) 29 (21)	— 22 (16)	9 (6.5) 21 (16)
		Crankcase/Engine Support Nuts or Screws		39 (29)	39 (29)	39 (29)
		Cylinder Head Nuts		29 (21)	22 (16)	29 (21)
		Crankcase/Cylinder Nuts or Screws		29 (21)	N.A.	29 (21)
		Axial Fan Shaft Nut		N.A.	48 (35)	N.A.

	VEHICLE MODEL				TUNDRA R	SKANDIC 380	SKANDIC 500
	ENGINE TYPE				**277**	**377**	**503**
	Chain Drive Ratio				14/25	18/44	18/44
	Chain	Pitch		in	1/2	3/8	3/8
		Type/Links Qty/Plates Qty			Single/62	Silent/70/11	Silent/70/11
	Drive Pulley	Type of Drive Pulley			Bombardier Lite	Bombardier Lite	TRA
		Ramp Identification			N.A.	N.A.	292X ⑤
		Calibration Screw Position or Calibration Part ①			1143 1 x C, 3 x S3.4	1181 1 x C, 1 x S21	3
		Spring Color			Turquoise	Green/Green	Red/Red
		Spring Length		± 1.5 mm (± .060 in)	85.3 (3.36)	72 (2.835)	97.2 (3.87)
		Clutch Engagement		± 200 RPM	3100	2500	2900
	Driven Pulley	Type of Driven Pulley			Tundra reverse	LPV27	LPV27
		Spring Preload		± 0.7 kg (± 1.5 lb)	N.A.	N.A.	N.A.
		Cam Angle		degree	37.8	47 – 44	47 – 44
	Pulley Distance Z			(+ 0, - 1) mm ((+ 0, - 1/32) in)	37.0 + 0, - 1.5 (1.457 + 0, - .060)	26.0 ± 0.5 (1.024 ± .020)	17.0 ± 0.5 (.669 ± .020)
	Offset	X		mm (in)	36.0 ± 1.0 (1.417 ± .040)	33.4 ± 0.5 (1.315 ± .020)	35.5 ± 0.5 (1.398 ± .020)
		Y – X		MIN. MAX.	- 0 (- 0) + 1.5 (+ .059)	+ 0.5 (+ .020) + 1.5 (+ .059)	+ 1 (+ .039) + 2 (+ .079)
	Drive Belt Part Number (P/N)				414 827 600	415 060 600	415 060 600
	Drive Belt Width (new) ②			mm (in)	33.3 (1-5/16)	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 ③		kg (lbf)	6.8 (15)	11.3 (25)	11.3 (25)
	Track	Width		cm (in)	38.1 (15)	38.1 (15)	38.1 (15)
		Length		cm (in)	354 (139)	345 (136)	345 (136)
		Profile Height		mm (in)	18.4 (.724)	23.2 (.913)	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 ④	kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type		Track		Torque reaction slide	SC-10 Touring	SC-10 Touring
			Ski		Telescopic strut	DSA	DSA
	Length			cm (in)	284.5 (112)	294 (115.7)	294 (115.7)
	Width			cm (in)	95.3 (37.5)	108 (42.5)	108 (42.5)
	Height			cm (in)	114 (44.9)	122 (48.0)	122 (48.0)
	Ski Stance			cm (in)	81.3 (32.0)	94 (37)	94 (37)
	Mass (dry)			kg (lb)	173 (380)	209 (459)	225 (494)
	Ground Contact Area			cm^2 (in^2)	7570 (1173)	7227 (1120)	7227 (1120)
	Ground Contact Pressure			kPa (PSI)	2.24 (.325)	2.84 (.412)	3.05 (.442)
	Frame Material				Steel	Aluminum	Aluminum
	Bottom Pan Material				Polyethylene high density	Impact copolymer	Impact copolymer
	Hood Material				Polyethylene high density	RRIM polyurethane	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.	3	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)	40 (10.6)	40 (10.6)
	Chaincase Gearbox			mL (U.S.oz)	250 (8.5)	250 (8.5)	250 (8.5)
	Cooling System ④			L (U.S. oz)	N.A.	N.A.	N.A.
	Injection Oil Reservoir			L (U.S. oz)	1.9 (64)	2.55 (86)	2.55 (86)

	VEHICLE MODEL				TOURING E	TOURING LE	TOURING SLE
	ENGINE TYPE				**377**	**443**	**503**
	Chain Drive Ratio				18/44	21/44	21/44
	Chain	Pitch		in	3/8	3/8	3/8
		Type/Links Qty/Plates Qty			Silent/70/11	Silent/72/11	Silent/72/11
	Drive Pulley	Type of Drive Pulley			Bombardier Lite	TRA	TRA
		Ramp Identification			N.A.	284 ⑤	291X ⑤
		Calibration Screw Position or Calibration Part ①			1181 1 x C, 1 x S21	2	3
		Spring Color			Green/Green	Red/Yellow	Red/Red
		Spring Length		± 1.5 mm (± .060 in)	72.0 (2.83)	87.9 (3.46)	97.2 (3.83)
		Clutch Engagement		± 200 RPM	2500	2900	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			mm (in)	26.0 ± 0.5 (1.024 ± .020)	17.0 ± 0.5 (.669 ± .020)	17.0 ± 0.5 (.669 ± .020)
	Offset	X		mm (in)	33.4 ± 0.5 (1.315 ± .020)	35.5 ± 0.5 (1.398 ± .020)	35.5 ± 0.5 (1.398 ± .020)
		Y – X		MIN. MAX.	+ 0.5 (+ .020) + 1.5 (+ .059)	+ 1 (+ .039) + 2 (+ .079)	+ 1 (+ .039) + 2 (+ .079)
	Drive Belt Part Number (P/N)				415 060 600	415 060 600	415 060 600
	Drive Belt Width (new) ②			mm (in)	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 ③		kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width		cm (in)	38.1 (15)	38.1 (15)	38.1 (15)
		Length		cm (in)	345 (136)	345 (136)	345 (136)
		Profile Height		mm (in)	18.4 (.724)	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)	35 – 40 (1-3/8 – 1-9/16)
			Force ④	kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type		Track		SC-10 Touring	SC-10 Touring	SC-10 Touring
			Ski		DSA	DSA	DSA
	Length			cm (in)	294 (115.7)	294 (115.7)	294 (115.7)
	Width			cm (in)	115.6 (45.5)	120.7 (47.5)	120.7 (47.5)
	Height			cm (in)	122 (48.0)	122 (48.0)	122 (48.0)
	Ski Stance			cm (in)	101.6 (40)	106.7 (42)	106.7 (42)
	Mass (dry)			kg (lb)	209 (459)	202 (445)	216 (475)
	Ground Contact Area			cm^2 (in^2)	7227 (1120)	7227 (1120)	7227 (1120)
	Ground Contact Pressure			kPa (PSI)	2.84 (.412)	2.74 (.397)	2.93 (.425)
	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)	12 (22)
	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	3	3	3
	Fuel and Temperature Gauge Bulb			W	N.A.	N.A.	N.A.
	Fuse	Starter Solenoid		A	30	30	30
		Tachometer		A	N.A.	N.A.	N.A.
	Fuel Tank			L (U.S. gal)	40 (10.6)	40 (10.6)	40 (10.6)
	Chaincase Gearbox			mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)
	Cooling System ④			L (U.S. oz)	N.A.	N.A.	N.A.
	Injection Oil Reservoir			L (U.S. oz)	2.55 (86)	2.55 (86)	2.55 (86)

	VEHICLE MODEL				FORMULA S	FORMULA DELUXE 380	FORMULA DELUXE 500
	ENGINE TYPE				**377**	**377**	**503**
	Chain Drive Ratio				18/44	18/44	21/44
	Chain	Pitch		in	3/8	3/8	3/8
		Type/Links Qty/Plates Qty			Silent/72/11	Silent/70/11	Silent/72/11
	Drive Pulley	Type of Drive Pulley			Bombardier Lite	Bombardier Lite	TRA
		Ramp Identification			N.A.	N.A.	291X ⑤
		Calibration Screw Position or Calibration Part ①			1181 1 x C, 1 x S21	1181 1 x C, 1 x S21	3
		Spring Color			Red/Blue	Red/Blue	Yellow/Red
		Spring Length		± 1.5 mm (± .060 in)	96 (3.78)	96 (3.78)	121 (4.77)
		Clutch Engagement		± 200 RPM	3500	3500	3300
	Driven Pulley	Type of Driven Pulley			Formula	LPV27	LPV27
		Spring Preload		± 0.7 kg (± 1.5 lb)	4.8 (10.6)	N.A.	N.A.
		Cam Angle		degree	44	47 – 44	47 – 44
	Pulley Distance Z			mm (in)	26.0 ± 0.5 (1 ± .020)	26.0 ± 0.5 (1.024 ± .020)	17.0 ± 0.5 (.669 ± .020)
	Offset	X		± 0.4 mm (± 1/64 in)	33.4 ± 0.5 (1.315 ± .020)	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)	+ 1.0 (+ .039) + 2.0 (+ .079)
	Drive Belt Part Number (P/N)				415 060 600	415 060 600	415 060 600
	Drive Belt Width (new) ②			mm (in)	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 ③	kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width		cm (in)	38.1 (15)	38.1 (15)	38.1 (15)
		Length		cm (in)	307 (121)	307 (121)	307 (121)
		Profile Height		mm (in)	18.4 (.724)	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)	35 – 40 (1-3/8 – 1-9/16)
			Force ④	kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type		Track		SC-10 Sport	SC-10 Sport	SC-10 Touring
			Ski		DSA	DSA	DSA
	Length			cm (in)	272.5 (107.3)	272.5 (107.3)	272.5 (107.3)
	Width			cm (in)	115.6 (45.5)	115.6 (45.5)	120.7 (47.5)
	Height			cm (in)	112 (44.1)	116.9 (46)	116.9 (46)
	Ski Stance			cm (in)	101.6 (40)	101.6 (40)	106.7 (42)
	Mass (dry)			kg (lb)	193 (425)	202 (445)	211 (465)
	Ground Contact Area			cm^2 (in^2)	6503 (1008)	6503 (1008)	6503 (1008)
	Ground Contact Pressure			kPa (PSI)	2.91 (.422)	3.05 (.442)	3.18 (.461)
	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)	N.A.	12 (22)	12 (22)
	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	5	5	2 x 3
	Fuel and Temperature Gauge Bulb			W	N.A.	N.A.	N.A.
	Fuse	Starter Solenoid		A	N.A.	30	30
		Tachometer		A	N.A.	N.A.	N.A.
	Fuel Tank			L (U.S. gal)	40 (10.6)	40 (10.6)	40 (10.6)
	Chaincase Gearbox			mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)
	Cooling System ④			L (U.S. oz)	N.A.	N.A.	N.A.
	Injection Oil Reservoir			L (U.S. oz)	2.55 (86)	2.55 (86)	2.55 (86)

	VEHICLE MODEL				MX Z 440	FORMULA 500 LC	FORMULA DLX 500 LC
	ENGINE TYPE				**443**	**494**	**494**
	Chain Drive Ratio				21/44	23/43	23/44
	Chain	Pitch		in	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	TRA	TRA
		Ramp Identification			291X ⑤	281 ⑤	286 ⑤
		Calibration Screw Position or Calibration Part ①			3	2	2
		Spring Color			Blue/Yellow	Violet/Yellow	Violet/Blue
		Spring Length		± 1.5 mm (± .060 in)	115.1 (4.53)	157.9 (6.22)	114.6 (4.51)
		Clutch Engagement		± 200 RPM	3700	4100	3800
	Driven Pulley	Type of Driven Pulley			Formula	Formula	Formula
		Spring Preload		± 0.7 kg (± 1.5 lb)	6.1 (13.4)	7.0 (15.4)	7.0 (15.4)
		Cam Angle		Degree	47°	50°	50°
	Pulley Distance Z			mm (in)	16.5 ± 0.5 (.650 ± .020)	16.5 (21/32)	16.5 (21/32)
	Offset	X		± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	35.5 (1.398)
		Y – X	MIN. – MAX.	mm (in)	+ 0.5 (+ .020) + 1.5 (+ .059)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)
	Drive Belt Part Number (P/N)				414 060 600	414 860 700	414 860 700
	Drive Belt Width (new) ②			mm (in)	34.7 (1.366)	35.3 (1-3/8)	35.3 (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 ③	kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width		cm (in)	38.1 (15.0)	38.1 (15.0)	38.1 (15.0)
		Length		cm (in)	307 (121)	307 (121)	307 (121)
		Profile Height		mm (in)	18.4 (.724)	18.4 (.724)	18.4 (.724)
		Adjustment	Deflection	mm (in)	35 – 40 (1-3/8 – 1-3/4)	30 – 35 (1-3/16 – 1-3/8)	30 – 35 (1-3/16 – 1-3/8)
			Force ④	kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type		Track		SC-10 Sport	SC-10 HP	SC-10 HP
			Ski		DSA	DSA	DSA
	Length			cm (in)	272.5 (107.3)	272.5 (107.3)	272.5 (107.3)
	Width			cm (in)	117.4 (46.2)	120.0 (47.2)	120.0 (47.2)
	Height			cm (in)	108 (42.5)	106.9 (42.1)	106.9 (42.1)
	Ski Stance			cm (in)	104.1 (41)	106.7 (42)	106.7 (42)
	Mass (dry)			kg (lb)	201 (442)	216 (475)	230 (505)
	Ground Contact Area			cm^2 (in^2)	6632 (1028)	6671 (1034)	6671 (1034)
	Ground Contact Pressure			kPa (PSI)	2.97 (.431)	3.18 (.461)	3.38 (.490)
	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)	N.A.	N.A.	12 (22)
	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	N.A.	N.A.	N.A.
	Fuse	Starter Solenoid		A	N.A.	N.A.	30
		Tachometer		A	N.A.	N.A.	N.A.
	Fuel Tank			L (U.S. gal)	37 (9.8)	40 (10.6)	40 (10.6)
	Chaincase/Gearbox			mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)
	Cooling System ④			L (U.S. oz)	N.A.	4.7 (159)	4.7 (159)
	Injection Oil Reservoir			L (U.S. oz)	2.55 (86)	2.8 (95)	2.8 (95)

	VEHICLE MODEL				TOURING 500 LC	SKANDIC WT	SKANDIC SWT	SKANDIC WT LC
	ENGINE TYPE				**494**	**503**	**503**	**494**
	Chain Drive Ratio				23/44	N.A.	N.A.	N.A.
	Chain	Pitch		in	3/8	N.A.	N.A.	N.A.
		Type/Links Qty/Plates Qty			Silent 72/11	N.A.	N.A.	N.A.
	Drive Pulley	Type of Drive Pulley			TRA	TRA	TRA	TRA
		Ramp Identification			228 ⑤	290 ⑤	290 ⑤	290 ⑥
		Calibration Screw Position or Calibration Part ①			2	4	2	4
		Spring Color			Blue/Green	Yellow/Orange	Yellow/Orange	Yellow/Blue
		Spring Length		± 1.5 mm (± .060 in)	105.7 (4.16)	105.7 (4.16)	105.7 (4.16)	90.7 (3.57)
		Clutch Engagement		± 200 RPM	3600	3000	3000	3000
	Driven Pulley	Type of Driven Pulley			Formula	Cam	Cam	Cam
		Spring Preload		± 0.7 kg (± 1.5 lb)	7.0 (15.4)	7.0 (15.4)	7.0 (15.4)	7 (15.4)
		Cam Angle		degree	44°	40°	40°	40°
	Pulley Distance Z			(+ 0, - 1) mm ((+ 0, - 1/32) in)	16.5 (21/32)	32.3 (1-9/32)	32.3 (1-9/32)	32.3 (1-9/32)
	Offset	X		± 0.5 mm (± .020 in)	35.5 (1.398)	35.0 (1.380)	35.0 (1.380)	35.0 (1.380)
		Y – X	MIN. – MAX.	mm (in)	1.0 – 2.0 (.039 – .079)	0.75 – 2.25 (.030 – .086)	0.75 – 2.25 (.030 – .086)	0.75 – 2.25 (.030 – .086)
	Drive Belt Part Number (P/N)				414 860 700	414 633 800	414 633 800	414 633 800
	Drive Belt Width (new) ②			mm (in)	35.3 (1-3/8)	34.6 (1-3/8)	34.6 (1-3/8)	34.6 (1-3/8)
	Drive Belt Adjustment		Deflection	± 5 mm (± 13/64 in)	32 (1-1/4)	32 (1-1/4)	32 (1-1/4)	32 (1-1/4)
			Force ③	kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width		cm (in)	38.1 (15.0)	50.0 (19.7)	60.0 (23.6)	50.0 (19.7)
		Length		cm (in)	345.5 (136)	396.8 (156.2)	396.8 (156.2)	396.8 (156.2)
		Profile Height		mm (in)	18.4 (.724)	23.5 (.925)	23.5 (.925)	23.5 (.925)
		Adjustment	Deflection	mm (in)	30 – 35 (1-3/16 – 1-3/8)	40 – 50 (1-9/16 – 1-31/32)	40 – 50 (1-9/16 – 1-31/32)	40 – 50 (1-9/16 – 1-31/32)
			Force ④	kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type		Track		SC-10 HP	Skandic WT	Skandic WT	Skandic WT
			Ski		DSA	Telescopic strut	Telescopic strut	Telescopic strut
	Length			cm (in)	297.8 (117.2)	302.0 (118.9)	315.0 (124.0)	315.0 (124.0)
	Width			cm (in)	120.0 (47.2)	104.5 (41.1)	110.0 (43.3)	110.0 (43.3)
	Height			cm (in)	128.3 (50.5)	122 (48)	133 (52.4)	122 (48)
	Ski Stance			cm (in)	106.7 (42)	90.0 (35.4)	90.0 (35.4)	90.0 (35.4)
	Mass (dry)			kg (lb)	248 (546)	260 (573)	277 (611)	281 (620)
	Ground Contact Area			cm^2 (in^2)	7356.7 (1140.3)	10793 (1672.9)	13986 (2167.8)	12335 (1912)
	Ground Contact Pressure			kPa (PSI)	3.31 (.480)	2.41 (.350)	1.98 (.287)	2.28 (.331)
	Frame Material				Aluminum	Steel	Steel	Steel
	Bottom Pan Material				Impact copolymer	HD polyethylene	HD polyethylene	HD polyethylene
	Hood Material				RRIM polyurethane	RRIM	RRIM	RRIM
	Battery			V (A•h)	12 (22)	12 (22)	12 (22)	12 (22)
	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	N.A.	N.A.	N.A.	N.A.
	Fuse	Starter Solenoid		A	30	20	20	20
		Tachometer		A	N.A.	N.A.	N.A.	N.A.
	Fuel Tank			L (U.S. gal)	40 (10.6)	42 (11.1)	42 (11.1)	42 (11.1)
	Chaincase/Gearbox			mL (U.S. oz)	250 (8.5)	400 (13.5)	400 (13.5)	400 (13.5)
	Cooling System ④			L (U.S. oz)	5.0 (169)	N.A.	N.A.	N.A.
	Injection Oil Reservoir			L (U.S. oz)	2.8 (95)	2.5 (84.5)	2.5 (84.5)	2.5 (84.5)

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
KS: Keystone

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 R. Specification is given for verification purposes only.

③ Rotary valve to crankcase clearance: 0.27 – 0.48 mm (.011 – .019 in).

④ For all non-RER models timing is verified 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).

⑧ For all RER models timing is verified at 3500 RPM (engine cold) with headlamp turned on.

VEHICLE TECHNICAL DATA LEGEND

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

① 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).

② Minimum allowable width may not be less than 3.0 mm (1/8 in) of a new drive belt.

③ Force applied midway between pulleys to obtain specified deflection.

④ Force or downward pull applied to track to obtain specified tension deflection.

⑤ Lever with roller pin (P/N 417 004 309) (hollow).

⑥ Lever with roller pin (P/N 417 004 308) (solid).