

# 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 <sup>2</sup> .....	cm <sup>2</sup> .....	6.45	
in <sup>3</sup> .....	cm <sup>3</sup> .....	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 <sup>2</sup> ) .....	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		TOURING FAN 380, TOURING CARGO 380 FORMULA DELUXE FAN 380 MX Z FAN 380	TOURING FAN 500, TOURING CARGO 500 FORMULA DELUXE 500 MX Z FAN 500	MX Z FAN 440		
ENGINE TYPE		377	503	443		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	62.01 (2.441)	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 <sup>3</sup> (in <sup>3</sup> )	368.3 (22.48)	496.7 (30.31)	436.6 (26.64)	
	Compression Ratio (corrected)		6.7	6.4	6.4	
	Maximum Power Engine Speed ①	± 100 RPM	6900	7000	7000	
	Piston Ring Type	1 <sup>st</sup> /2 <sup>nd</sup>	ST/R	ST/R	ST/R	
	Ring End Gap	(new)	mm (in)	0.2 (.008)	0.25 (.010)	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 (.0079)
	Piston/Cylinder Wall Clearance	(new)	± 0.016 mm (± .0006 in)	0.070 (.0028)	0.080 (.0031)	0.08 (.0031)
		(wear limit)	mm (in)	0.2 (.008)	0.2 (.008)	0.2 (.008)
	Connecting Rod Big End Axial Play	(new)	mm (in)	0.20 (.0079)	0.2 (.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 (.012)		
Maximum Crankshaft Deflection Measured at PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	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	± 0.05 mm (± .002 in)	0.45 (.018)	0.45 (.018)	0.45 (.018)	
	Ignition Timing BTDC ④ ⑤	mm (in)	2.79 (.110)	2.77 (.109)	2.79 (.110)	
	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	160 – 180	
	Generating Coil ⑤	Ω	5.1 – 6.2	5.1 – 6.2	5.1 – 6.2	
	Lighting Coil ⑤	Ω	0.17 – 0.21	0.17 – 0.21	0.17 – 0.21	
	High Tension Coil ⑤	Primary	Ω	N.A.	N.A.	N.A.
Secondary		kΩ	0.9 – 1.1	0.9 – 1.1	0.9 – 1.1	
	Carburetor Type	PTO/MAG	2 x VM 30-200	VM 34-549/550	VM 34 547/548	
	Main Jet	PTO/MAG	140/140	180/170	205/195	
	Needle Jet		159 P-0	159 P-0	159 P-0	
	Pilot Jet		40	40	35	
	Needle Identification — Clip Position		6DP9-3	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	1-1/4	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 <sub>o</sub> 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	10 (7)	—	10 (7)
			M8	22 (16)	22 (16)	22 (16)
		Crankcase/Engine Support Nuts or Screws		40 (29)	40 (29)	40 (29)
		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 02 (ENGINES)

VEHICLE MODEL		SUMMIT FAN 500	SKANDIC LT		
ENGINE TYPE		503	443		
	Number of Cylinders	2	2		
	Bore	mm (in)	72.00 (2.835)	67.5 (2.6575)	
	Stroke	mm (in)	61.00 (2.402)	61.0 (2.402)	
	Displacement	cm <sup>3</sup> (in <sup>3</sup> )	496.7 (30.31)	436.6 (26.64)	
	Compression Ratio (corrected)		6.4	6.4	
	Maximum Power Engine Speed ①	± 100 RPM	7000	6750	
	Piston Ring Type	1 <sup>st</sup> /2 <sup>nd</sup>	ST/R	ST/R	
	Ring End Gap	(new) mm (in) (wear limit) mm (in)	0.25 (.010) 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)	0.04 (.0016) 0.2 (.0079)	
	Piston/Cylinder Wall Clearance	(new) ± 0.016 mm (± .0006 in) (wear limit) mm (in)	0.080 (.0031) 0.2 (.008)	0.080 (.0031) ③ 0.2 (.008)	
	Connecting Rod Big End Axial Play	(new) mm (in) (wear limit) mm (in)	0.2 (.0079) 1.0 (.0394)	0.2 (.0079) 1.0 (.0394)	
	Maximum Crankshaft End-Play ②	mm (in)	0.3 (.0118)	0.3 (.012)	
	Maximum Crankshaft Deflection Measured at PTO	mm (in)	0.06 (.0024)	0.08 (.0031)	
		Magneto Generator Output	W	240	240
Ignition Type			CDI	CDI	
Spark Plug Make and Type			NGK BR9ES	NGK BR9ES	
Spark Plug Gap		± 0.05 mm (± .002 in)	0.45 (.018)	0.45 (.018)	
Ignition Timing BTDC ④ ⑤		mm (in)	2.77 (.109)	2.79 (.110)	
Trigger Coil Air Gap		mm (in)	0.50 – 0.70 (.020 – .028)	0.45 – 0.55 (.018 – .022)	
Trigger Coil ⑤		Ω	160 – 180	160 – 180	
Generating Coil ⑤		Ω	5.1 – 6.2	5.1 – 6.2	
Lighting Coil ⑤		Ω	0.17 – 0.21	0.17 – 0.21	
High Tension Coil ⑤	Primary	Ω	N.A.	N.A.	
	Secondary	kΩ	0.9 – 1.1	0.9 – 1.1	
	Carburetor Type	PTO/MAG	VM 34 -565/566	VM 32-19110	
	Main Jet	PTO/MAG	200/190	195	
	Needle Jet		159 P-2	159 O-6	
	Pilot Jet		70	45	
	Needle Identification — Clip Position		6DH2-4	6DGH10	
	Slide Cut-Away		2.5	2.5	
	Float Adjustment	± 1 mm (± .040 in)	23.9 (.94)	23.9 (.94)	
	Air Screw Adjustment	± 1/16 Turn	2-1/4	1-1/2	
	Idle Speed RPM	± 200 RPM	1650	1650	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	
	Gas/Oil Ratio		Injection	Injection	
	Type		Axial fan	Axial fan	
	Axial Fan Belt Adjustment	Deflection mm (in) Force ⑥ kg (lbf)	9 – 10 (.35 – .39) 5 (11)	9 – 10 (.35 – .39) 5 (11)	
	Thermostat Opening Temperature	°C (°F)	N.A.	N.A.	
	Radiator Cap Opening Pressure	kPa (PSI)	N.A.	N.A.	
	ENGINE COLD N•m (lb•ft)	Drive Pulley Retaining Screw	⑦	⑧	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	
		Magneto Ring Nut	105 (77)	105 (77)	
		Crankcase Nuts or Screws	M6 M8	—	—
		Crankcase/Engine Support Nuts or Screws		40 (29)	40 (29)
		Cylinder Head Nuts		22 (16)	22 (16)
		Crankcase/Cylinder Nuts or Screws		N.A.	N.A.
Axial Fan Shaft Nut		48 (35)	48 (35)		





## Section 10 TECHNICAL DATA

### Subsection 02 (ENGINES)

	VEHICLE MODEL	SKANDIC WT SKANDIC SWT	SKANDIC WT LC	
	ENGINE TYPE	503	593	
	Number of Cylinders	2	2	
	Bore	mm (in) 72.0 (2.835)	76.00 (2.992)	
	Stroke	mm (in) 61.0 (2.402)	65.8 (2.591)	
	Displacement	cm <sup>3</sup> (in <sup>3</sup> ) 496.7 (30.31)	597.0 (36.43)	
	Compression Ratio (corrected)	6.2	6.7	
	Maximum Power Engine Speed ①	± 100 RPM 6800	7200	
	Piston Ring Type	1 <sup>st</sup> /2 <sup>nd</sup> ST/R	ST	
	Ring End Gap	(new) mm (in) (wear limit) mm (in) 0.2 (.0079) 1.0 (.039)	0.4 (.016) 1.0 (.039)	
	Ring/Piston Groove Clearance	(new) mm (in) (wear limit) mm (in) 0.04 (.0016) 0.2 (.0079)	0.04 (.0016) 0.2 (.0079)	
	Piston/Cylinder Wall Clearance	(new) ± 0.016 mm (± .0006 in) (wear limit) mm (in) 0.9 (.0035) 0.2 (.0079)	0.12 (.0047) 0.2 (.0079)	
	Connecting Rod Big End Axial Play	(new) mm (in) (wear limit) mm (in) 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)	
	Maximum Crankshaft Deflection Measured at PTO	mm (in) 0.06 (.0024)	0.08 (.0031)	
		Magneto Generator Output	W 240	290
Ignition Type		CDI	CDI	
Spark Plug Make and Type		NGK BR9ES	NGK BR9ES	
Spark Plug Gap		± 0.05 mm (± .002 in) 0.45 (.018)	0.45 (.018)	
Ignition Timing BTDC ④ ⑥		mm (in) 1.66 (.065)	3.00 (.118)	
Trigger Coil Air Gap		mm (in) 0.45 – 0.55 (.018 – .021)	0.55 – 1.45 (.022 – .057)	
Trigger Coil ⑤		Ω 140 – 180	190 – 300	
Generating Coil ⑤		Ω 230 – 330	11.6 – 21.6	
Lighting Coil ⑤		Ω 0.23 – 0.28	0.10 – 0.40	
High Tension Coil ⑤		Primary Ω Secondary kΩ N.A. 5.1 – 6.3	0.0 – 0.9 9.5 – 16.5	
	Carburetor Type	PTO/MAG 2 x VM 34-19084	VM 38-19111/19112	
	Main Jet	PTO/MAG 185	330/310	
	Needle Jet	159 P-1	480 Q-4	
	Pilot Jet	40	40	
	Needle Identification — Clip Position	6DH2-3	6FL14-4	
	Slide Cut-Away	2.5	2.5	
	Float Adjustment	± 1 mm (± .040 in) 23.9 (.937)	18.1 (.710)	
	Air Screw Adjustment	± 1/16 Turn 1-1/4	1-1/2	
	Idle Speed RPM	± 200 RPM 1650	1900	
	Gas Type/Pump Octane Number	Unleaded/87	Unleaded/87	
	Gas/Oil Ratio	Injection	Injection	
	Type	Axial fan Liquid	Liquid	
	Axial Fan Belt Adjustment	Deflection mm (in) Force ⑥ kg (lbf) 9 – 10 (.35 – .39) 5 (11)	N.A. N.A.	
	Thermostat Opening Temperature	°C (°F) N.A.	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI) N.A.	100 (14.5)	
	<b>ENGINE COLD</b> N•m (lb•ft)	Drive Pulley Retaining Screw	⑦	⑦
		Exhaust Manifold Nuts or Bolts	22 (16)	23 (17)
		Magneto Ring Nut	105 (77)	125 (92)
		Crankcase Nuts or Screws	M6 M8 — 22 (16)	9 (6.5) 29 (21)
		Crankcase/Engine Support Nuts or Screws	39 (29)	35 (26)
		Cylinder Head Nuts	22 (16)	29 (21)
		Crankcase/Cylinder Nuts or Screws	N.A.	29 (21)
		Axial Fan Shaft Nut	48 (35)	N.A.




## Section 10 TECHNICAL DATA

### Subsection 03 (VEHICLES)





VEHICLE MODEL		TOURING FAN 380 TOURING CARGO 380	TOURING FAN 500 TOURING CARGO 500	FORMULA DELUXE FAN 380		
ENGINE TYPE		377	503	377		
	Chain Drive Ratio		18/44	18/44		
	Chain	Pitch in	3/8	3/8	3/8	
		Type/Links Qty/Plates Qty	Silent/70/11	Silent/72/11	Silent/70/11	
	Drive Pulley	Type of Drive Pulley		Bombardier Lite	TRA	Bombardier Lite
		Ramp Identification		N.A.	292X ⑤	N.A.
		Calibration Screw Position or Calibration Part ①		1181 1 x C, 1 x S21	3	1181 1 x C, 1 x S21
		Spring Color		Green/Green	Red/Red	Red/Blue
		Spring Length ± 1.5 mm (± .060 in)		72.0 (2.83)	97.2 (3.83)	96 (3.78)
		Clutch Engagement ± 200 RPM		2500	2900	3500
	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 (+ 0, - 1) mm (+ 0, - 1/32) in		26.0 ± 0.5 (1.024 ± .020)	17.0 ± 0.5 (.669 ± .020)	26.0 ± 0.5 (1.024 ± .020)	
	Offset	X mm (in)	33.4 ± 0.5 (1.315 ± .020)	35.5 ± 0.5 (1.398 ± .020)	33.4 ± 0.5 (1.315 ± .020)	
		Y – X MIN. MAX.	+ 1 (+ .039) + 2 (+ .079)	+ 1 (+ .039) + 2 (+ .079)	1.0 – 2.0 (.039 – .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)	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 Touring	SC-10 Touring	SC-10 Sport
		Ski		DSA	DSA	DSA
		Length cm (in)		294 (115.7)	294 (115.7)	272.5 (107.3)
		Width cm (in)		120.7 (47.5)	120.7 (47.5)	120.7 (47.5)
Height cm (in)		122 (48.0)	122 (48.0)	116.9 (46.0)		
Ski Stance cm (in)		106.7 (42)	106.7 (42)	106.7 (42)		
Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	0 (0) 0		
Mass (dry) kg (lb)		T. FAN 205 (452) T. CARGO 208 (458)	T. FAN 224 (493) T. CARGO 227 (499)	202 (445)		
Ground Contact Area cm <sup>2</sup> (in <sup>2</sup> )		7227 (1120)	7227 (1120)	6503 (1008)		
Ground Contact Pressure kPa (PSI)		T. FAN 2.84 (.412) T. CARGO 2.82 (.409)	T. FAN 3.04 (.441) T. CARGO 3.08 (.447)	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 (20)	12 (20)	12 (20)
	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)		38 (10)	38 (10)	38 (10)
Chaincase Gearbox mL (U.S. oz)		250 (8.5)	250 (8.5)	250 (8.5)		
Cooling System ⑦ 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)		

# Section 10 TECHNICAL DATA

## Subsection 03 (VEHICLES)



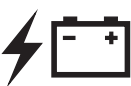

VEHICLE MODEL		FORMULA DELUXE FAN 500	MX Z FAN 440	MX Z FAN 380	
<b>ENGINE TYPE</b>		<b>503</b>	<b>443</b>	<b>377</b>	
Chain Drive Ratio		21/44	21/44	18/44	
Chain	Pitch in	3/8	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 72/11	Silent 72/11	Silent 70/11	
Drive Pulley	Type of Drive Pulley	TRA	TRA	Bombardier Lite	
	Ramp Identification	291X ⑤	287 ⑤	N.A.	
	Calibration Screw Position or Calibration Part ①	3	3	1181 1 x C, 1 x S21	
	Spring Color	Yellow/Red	Green/Violet	Red/Blue	
	Spring Length ± 1.5 mm (± .060 in)	121 (4.77)	133.7 (5.26)	96 (3.78)	
	Clutch Engagement ± 200 RPM	3300	4500	3500	
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 (+ 0, - 1) mm (+ 0, - 1/32) in		17.0 ± 0.5 (.669 ± .020)	16.5 ± 0.5 (.650 ± .020)	26.0 ± 0.5 (1.024 ± .020)	
Offset	X mm (in)	35.5 ± 0.5 (1.315 ± .020)	35.5 (1.398)	33.4 (1.315)	
	Y – X MIN. MAX.	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .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 (1.366)	34.7 (1.366)	
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 (15.0)	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 – 1-9/16)	35 – 40 (1-3/8 – 1-3/4)	35 – 40 (1-3/8 – 1-3/4)
		Force ④ kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track	SC-10 Touring	SC-10 Sport	SC-10 Sport	
	Ski	DSA	DSA	DSA	
	Length cm (in)	272.5 (107.3)	272.5 (107.3)	272.5 (107.3)	
	Width cm (in)	120.7 (47.5)	120.7 (47.5)	120.7 (47.5)	
	Height cm (in)	116.9 (46.0)	116.9 (46.0)	116.9 (46.0)	
	Ski Stance cm (in)	106.7 (42)	106.7 (42)	106.7 (42)	
	Toe-out and Camber mm (in)	0 (0)	0 (0)	0 (0)	
	degree	0	0	0	
	Mass (dry) kg (lb)	211 (465)	201 (442)	193 (425)	
	Ground Contact Area cm² (in²)	6503 (1008)	6503 (1008)	6503 (1008)	
	Ground Contact Pressure kPa (PSI)	3.18 (.461)	3.03 (.439)	2.91 (.422)	
	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 (20)	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		3	3	3	
Fuel and Temperature Gauge Bulb W		N.A.	N.A.	N.A.	
Fuse		Starter Solenoid A	30	N.A.	N.A.
		Tachometer A	N.A.	N.A.	N.A.
	Fuel Tank L (U.S. gal)	38 (10)	38 (10)	38 (10)	
	Chaincase Gearbox mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)	
	Cooling System ⑦ 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)	

**Section 10 TECHNICAL DATA**  
Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z FAN 500	SUMMIT FAN 500	SKANDIC LT		
<b>ENGINE TYPE</b>		<b>503</b>	<b>503</b>	<b>443</b>		
	Chain Drive Ratio	21/44	17/44	17/44		
	Chain	Pitch in	3/8	3/8	3/8	
		Type/Links Qty/Plates Qty	Silent 72/11	Silent 70/11	Silent 70/11	
	Drive Pulley	Type of Drive Pulley	TRA	TRA	Comet	
		Ramp Identification	287 ⑤	227 ⑤	–	
		Calibration Screw Position or Calibration Part ①	3	3	–	
		Spring Color	Green/Blue	Green/Violet	Silver/Black	
		Spring Length ± 1.5 mm (± .060 in)	147.4 (5.80)	133.7 (5.26)		
	Driven Pulley	Clutch Engagement ± 200 RPM	4500	4500	3000	
		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	40	
		Pulley Distance Z (+ 0, - 1) mm ((+ 0, - 1/32) in)	16.5 ± 0.5 (.650 ± .020)	17.0 ± 0.5 (.669 ± .020)	34.2 ± 0.75 (1.346 ± .030)	
	Offset	X mm (in)	35.5 (1.398)	35.5 (1.398)	35.0 (1.380)	
		Y – X MIN. MAX.	1.0 – 2.0 (.039 – .079)	1.0 – 2.0 (.039 – .079)	0.75 – 2.25 (.030 – .086)	
	Drive Belt Part Number (P/N)		415 060 600	417 300 064	414 633 800	
	Drive Belt Width (new) ② mm (in)		34.7 (1.366)	35.1 (1.382)	34.6 (1-3/8)	
	Drive Belt Adjustment	Deflection ± 5 mm (± 13/64 in)	32 (1-1/4)	38 (1-1/4)	32 (1-1/4)	
		Force ③ kg (lbf)	11.3 (25)	11.5 (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)	345.5 (136)	396.8 (156.2)	
		Profile Height mm (in)	18.4 (.724)	38.1 (1.5)	25 (1)	
		Adjustment	Deflection mm (in)	30 – 35 (1-3/16 – 1-3/8)	35 – 40 (1-3/8 – 1-3/4)	40 – 50 (1-9/16 – 1-31/32)
			Force ④ kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type	Track	SC-10 Sport	SC-10 Mountain	Skandic WT	
		Ski	DSA	DSA	Telescopic strut	
		Length cm (in)	272.5 (107.3)	293.9 (115.7)	302.0 (118.9)	
		Width cm (in)	120.0 (47.2)	120.7 (47.5)	96.0 (37.8)	
Height cm (in)		116.9 (46.0)	122.0 (48)	129.5 (51)		
Ski Stance cm (in)		106.7 (42)	106.7 (42)	82 (32.3)		
Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	5 (3/16) -2		
Mass (dry) kg (lb)		202 (445)	205 (450)	212 (467)		
Ground Contact Area cm² (in²)		6503 (1008)	7227.2 (1120.2)	8811.3 (1365.8)		
Ground Contact Pressure kPa (PSI)		3.05 (.442)	2.78 (.403)	2.41 (.350)		
Frame Material		Aluminum	Aluminum	Steel		
Bottom Pan Material		Impact copolymer	Impact copolymer	HD polyethylene		
Hood Material		RRIM polyurethane	RRIM polyurethane	RRIM		
	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	3	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)	38 (10)	38 (10)	37 (9.8)		
	Chaincase Gearbox mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.8)		
	Cooling System ⑦ L (U.S. oz)	N.A.	N.A.	N.A.		
	Injection Oil Reservoir L (U.S. oz)	2.55 (86)	2.55 (86)	2.5 (84.5)		

# Section 10 TECHNICAL DATA

## Subsection 03 (VEHICLES)

VEHICLE MODEL		SKANDIC WT	SKANDIC SWT	SKANDIC WT LC		
ENGINE TYPE		503	503	593		
	Chain Drive Ratio		N.A.	N.A.	N.A.	
	Chain	Pitch in	N.A.	N.A.	N.A.	
		Type/Links Qty/Plates Qty	N.A.	N.A.	N.A.	
	Drive Pulley	Type of Drive Pulley		TRA	TRA	TRA
		Ramp Identification		290 ⑤	290 ⑤	290 ⑥
		Calibration Screw Position or Calibration Part ①		4	2	4
		Spring Color		Yellow/Orange	Yellow/Orange	Red/Red
		Spring Length ± 1.5 mm (± .060 in)		105.7 (4.16)	105.7 (4.16)	96.3 (3.79)
		Clutch Engagement ± 200 RPM		3000	3000	2900
	Driven Pulley	Type of Driven Pulley		Cam	Cam	Cam
		Spring Preload ± 0.7 kg (± 1.5 lb)		7.0 (15.4)	7.0 (15.4)	7 (15.4)
		Cam Angle degree		40	40	40
	Pulley Distance Z (+ 0, - 1) mm ((+ 0, - 1/32) in)		32.3 ± 0.75 (1.346 ± .030)	32.3 ± 0.75 (1.346 ± .030)	± 0.75 (1.346 ± .030)	
	Offset	X mm (in)	35.0 (1.380)	35.0 (1.380)	35.0 (1.380)	
		Y - X MIN. MAX.	0.75 - 2.25 (.030 - .086)	0.75 - 2.25 (.030 - .086)	0.75 - 2.25 (.030 - .086)	
	Drive Belt Part Number (P/N)		414 633 800	414 633 800	414 633 800	
	Drive Belt Width (new) ② mm (in)		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)	
		Force ③ kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)	
	Track	Width cm (in)		50.0 (19.7)	60.0 (23.6)	50.0 (19.7)
		Length cm (in)		396.8 (156.2)	396.8 (156.2)	396.8 (156.2)
		Profile Height mm (in)		23.5 (.925)	23.5 (.925)	31.8 (1.250)
		Adjustment	Deflection mm (in)	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)	
Suspension Type	Track	Skandic WT	Skandic WT	Skandic WT		
	Ski	Telescopic strut	Telescopic strut	Telescopic strut		
	Length cm (in)		302.0 (118.9)	315.0 (124.0)	315.0 (124.0)	
	Width cm (in)		104.5 (41.1)	110.0 (43.3)	110.0 (43.3)	
	Height cm (in)		122 (48)	133 (52.4)	122 (48)	
	Ski Stance cm (in)		90.0 (35.4)	90.0 (35.4)	90.0 (35.4)	
	Toe-out and Camber	mm (in)	5 (3/16)	5 (3/16)	5 (3/16)	
		degree	- 2	- 2	- 2	
	Mass (dry) kg (lb)		260 (573)	277 (611)	281 (620)	
	Ground Contact Area cm² (in²)		10793 (1672.9)	13986 (2167.8)	12335 (1912)	
	Ground Contact Pressure kPa (PSI)		2.41 (.350)	1.98 (.287)	2.28 (.331)	
	Frame Material		Steel	Steel	Steel	
	Bottom Pan Material		HD polyethylene	HD polyethylene	HD polyethylene	
	Hood Material		RRIM	RRIM	RRIM	
	Battery V (A•h)		12 (20)	12 (20)	12 (20)	
	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	15	15	15	
		Tachometer A	N.A.	N.A.	N.A.	
		Fuel Tank L (U.S. gal)		42 (11.1)	42 (11.1)	42 (11.1)
Chaincase Gearbox mL (U.S. oz)		400 (13.5)	400 (13.5)	400 (13.5)		
Cooling System ⑦ L (U.S. oz)		N.A.	N.A.	4.5 (152)		
Injection Oil Reservoir L (U.S. oz)		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  
ST: Semi-Trapezoidal

- 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.
- ⑨ Piston/cylinder clearance with new parts on Skandic LT is 0.080 ± 0.0067 mm (.0031 ± .00026 in).
- ⑩ Tightening torques for Skandic LT Comet drive pulley.  
Retaining screw: 60 to 68 N•m (44 to 50 lbf•ft).  
Spider: 170 N•m (125 lbf•ft).  
Cover screws: 12.5 N•m (110 lbf•in).  
Pivot bolts and nuts: 5.6 N•m (50 lbf•in).

## 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).
- ⑦ Ethylene-glycol antifreeze for aluminum engines mixed with distilled water (3 parts of antifreeze for 2 parts of distilled water). Bombardier pre-mixed coolant - 52°C (- 62°F) (16 x 1 L) (P/N 413 711 802).