

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.






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Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 380F FAN (CAN./U.S.)	MX Z 500F FAN (CAN./U.S.)	G. TOURING 380F FAN (CAN./U.S.)				
ENGINE TYPE		380	503	380				
	Number of Cylinders		2	2	2			
	Bore		62.00 (2.441)	72.00 (2.835)	62.00 (2.441)			
	Stroke		61.00 (2.402)	61.00 (2.402)	61.00 (2.402)			
	Displacement		368.30 (22.475)	496.70 (30.311)	368.30 (22.475)			
	Compression Ratio		± 0.5	10.80	11.20			
	Maximum Power Engine Speed ①		± 100 RPM	6800	6700	6800		
	Piston Ring Type		1 st /2 nd	ST/R	ST/R	ST/R		
	Ring End Gap		New	0.2 (.008)	0.2 (.008)	0.2 (.008)		
			Wear Limit	1.0 (.039)	1.0 (.039)	1.0 (.039)		
	Ring/Piston Groove Clearance		New	0.04 (.0016)	0.04 (.0016)	0.04 (.0016)		
			Wear Limit	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)		
	Piston/Cylinder Wall Clearance		New	0.070 ± 0.016 (.0028 ± .0006)	0.080 ± 0.016 (.0031 ± .0006)	0.070 ± 0.016 (.0028 ± .0006)		
			Wear Limit	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)		
	Connecting Rod Big End Axial Play		New	0.527 (.027)	0.527 (.027)	0.527 (.027)		
			Wear Limit	1.0 (.0394)	1.0 (.0394)	1.0 (.0394)		
Maximum Crankshaft End-play ②		mm (in)	0.3 (.012)	0.3 (.012)	0.3 (.012)			
Maximum Crankshaft Deflection at PTO		mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)			
	Magneto Generator Output		W	300	300	300		
	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 ③		mm (in)	2.79 (.110)	2.29 (.091)	2.79 (.110)		
	Trigger Coil ④		Ω	160 – 180	160 – 180	160 – 180		
	Generating Coil ④		Low Speed	Ω	N.A.	N.A.	N.A.	
			High Speed	Ω	5.1 – 6.1	5.1 – 6.1	5.1 – 6.1	
	Lighting Coil ④		Ω	0.123 – 0.153	0.123 – 0.153	0.123 – 0.153		
	High Tension Coil ④		Primary	Ω	N.A.	N.A.	N.A.	
Secondary			kΩ	N.A.	N.A.	N.A.		
	Carburetor Type		PTO/MAG	VM 30-205	VM 34-576	VM 30-205		
	Main Jet		PTO/MAG	185/185	210/210	185/185		
	Needle Jet			Q-2 (159)	P-4 (159)	Q-2 (159)		
	Pilot Jet			40	40	40		
	Needle Identification — Clip Position		PTO MAG	6CDY1-3	6AFY5-4	6CDY1-3		
	Slide Cut-Away			2.0	2.0	2.0		
	Float Adjustment		± 1 mm (± .040 in)	23.90 (.941)	23.90 (.941)	23.90 (.941)		
	Air or Pilot Screw Adjustment		± 1/16 Turn	N.A.	N.A.	N.A.		
	Idle Speed		± 200 RPM	1650	1650	1650		
	Gas Type/Pump Octane Number			Unleaded/87	Unleaded/87	Unleaded/87		
	Gas/Oil Ratio			Injection	Injection	Injection		
	Type			Fan	Fan	Fan		
	Axial Fan Belt Adjustment		Deflection	mm (in)	9.5 ± 0.5 (.374 ± .020)	9.5 ± 0.5 (.374 ± .020)	9.5 ± 0.5 (.374 ± .020)	
			Force	kg (lbf)	5.0 (11.0)	5.0 (11.0)	5.0 (11.0)	
	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 (lbf _t)		Drive Pulley Retaining Screw		⑦	⑦	⑦	
			Exhaust Manifold Nuts or Bolts		21.5 (16)	21.5 (16)	21.5 (16)	
			Magneto Ring Nut		105 (77)	105 (77)	105 (77)	
			Crankcase Nuts or Screws		M6	N.A.	N.A.	N.A.
					M8	21.5 (16)	21.5 (16)	21.5 (16)
			Crankcase/Engine Support Nuts or Screws		40.0 (30)	40.0 (30)	40.0 (30)	
			Cylinder Head Screws		21.5 (16)	21.5 (16)	21.5 (16)	
			Crankcase/Cylinder Nuts or Screws		N.A.	N.A.	N.A.	
Axial Fan Shaft Nut		48.0 (35)	48.0 (35)	48.0 (35)				






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Subsection 02 (ENGINES)

VEHICLE MODEL		G. TOURING 500F FAN (CAN./U.S.)	LEGEND 380F FAN (CAN./U.S.)	LEGEND 500F FAN (CAN./U.S.)	
ENGINE TYPE		503	380	503	
	Number of Cylinders	2	2	2	
	Bore	mm (in) 72.00 (2.835)	62.00 (2.441)	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 (30.311)	368.30 (22.475)	496.70 (30.311)	
	Compression Ratio	± 0.5 10.80	11.20	10.80	
	Maximum Power Engine Speed ①	± 100 RPM 6700	6800	6700	
	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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in) 0.080 ± 0.016 (.0031 ± .0006)	0.070 ± 0.016 (.0028 ± .0006)	0.080 ± 0.016 (.0031 ± .0006)
		Wear Limit	mm (in) 0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in) 0.527 (.027)	0.527 (.027)	0.527 (.027)
Wear Limit		mm (in) 1.0 (.0394)	1.0 (.0394)	1.0 (.0394)	
Maximum Crankshaft End-play ②	mm (in) 0.3 (.012)	0.3 (.012)	0.3 (.012)		
Maximum Crankshaft Deflection at PTO	mm (in) 0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W 300	300	300	
	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 ③	mm (in) 2.29 (.091)	2.79 (.110)	2.29 (.091)	
	Trigger Coil ④	Ω 160 – 180	160 – 180	160 – 180	
	Generating Coil ④	Low Speed	Ω N.A.	N.A.	N.A.
		High Speed	Ω 5.1 – 6.1	5.1 – 6.1	5.1 – 6.1
	Lighting Coil ④	Ω 0.123 – 0.153	0.123 – 0.153	0.123 – 0.153	
	High Tension Coil ④	Primary	Ω N.A.	N.A.	N.A.
Secondary		kΩ N.A.	N.A.	N.A.	
	Carburetor Type	PTO/MAG VM 34-576	VM 30-205	VM 34-576	
	Main Jet	PTO/MAG 210/210	185/185	210/210	
	Needle Jet	P-4 (159)	Q-2 (159)	P-4 (159)	
	Pilot Jet	40	40	40	
	Needle Identification — Clip Position	PTO MAG 6AFY5-4	6CDY1-3	6AFY5-4	
	Slide Cut-Away	2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in) 23.90 (.941)	23.90 (.941)	23.90 (.941)	
	Air or Pilot Screw Adjustment	± 1/16 Turn N.A.	N.A.	N.A.	
	Idle Speed	± 200 RPM 1650	1650	1650	
	Gas Type/Pump Octane Number	Uleaded/87	Uleaded/87	Uleaded/87	
	Gas/Oil Ratio	Injection	Injection	Injection	
	Type	Fan	Fan	Fan	
	Axial Fan Belt Adjustment	Deflection	mm (in) 9.5 ± 0.5 (.374 ± .020)	9.5 ± 0.5 (.374 ± .020)	9.5 ± 0.5 (.374 ± .020)
		Force	kg (lbf) 5.0 (11.0)	5.0 (11.0)	5.0 (11.0)
	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	21.5 (16)	21.5 (16)	21.5 (16)
		Magneto Ring Nut	105 (77)	105 (77)	105 (77)
		Crankcase Nuts or Screws	M6 N.A.	N.A.	N.A.
			M8 21.5 (16)	21.5 (16)	21.5 (16)
		Crankcase/Engine Support Nuts or Screws	40.0 (30)	40.0 (30)	40.0 (30)
		Cylinder Head Screws	21.5 (16)	21.5 (16)	21.5 (16)
		Crankcase/Cylinder Nuts or Screws	N.A.	N.A.	N.A.
Axial Fan Shaft Nut	48.0 (35)	48.0 (35)	48.0 (35)		






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Subsection 02 (ENGINES)

VEHICLE MODEL		SUMMIT 500F FAN (CAN./U.S.)	MX Z 500 SPORT (CAN./U.S.)	MX Z 500 R SPORT (CAN./U.S.)		
ENGINE TYPE		503	493	493		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	72.00 (2.835)	69.50 (2.736)	69.50 (2.736)	
	Stroke	mm (in)	61.00 (2.402)	65.80 (2.591)	65.80 (2.591)	
	Displacement	cm ³ (in ³)	496.70 (30.311)	499.30 (30.47)	499.30 (30.47)	
	Compression Ratio	± 0.5	10.80	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	6700	8000	8000	
	Piston Ring Type	1 st /2 nd	ST/R	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.2 (.008)	0.4 (.016)	0.4 (.016)
		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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.080 ± 0.016 (.0031 ± .0006)	0.100 ± 0.016 (.0039 ± .0006)	0.100 ± 0.016 (.0039 ± .0006)
		Wear Limit	mm (in)	0.2 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.527 (.027)	0.39 (.0154)	0.39 (.0154)
		Wear Limit	mm (in)	1.0 (.0394)	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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	300	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ES	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018)	0.45 (.018) ⑧	0.45 (.018) ⑧	
	Ignition Timing BTDC ③	mm (in)	2.29 (.091)	3.00 (.118)	3.00 (.118)	
	Trigger Coil ④	Ω	160 – 180	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	N.A.	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	5.1 – 6.1	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.123 – 0.153	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	N.A.	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	N.A.	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	VM 34-578	TM 40-B151	TM 40-B151	
	Main Jet	PTO/MAG	240/240	500/500	500/500	
	Needle Jet		P-8 (159)	P-0 ⑤	P-0 ⑤	
	Pilot Jet		70	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	6AFY5-4	9HGY1/58 ⑥	9HGY1/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	23.90 (.941)	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	N.A.	1	1	
	Idle Speed	± 200 RPM	1650	1600	1600	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	Gas/Oil Ratio		Injection	Injection	Injection	
	Type		Fan	Liquid	Liquid	
	Axial Fan Belt Adjustment	Deflection	mm (in)	9.5 ± 0.5 (.374 ± .020)	N.A.	N.A.
		Force	kg (lbf)	5.0 (11.023)	N.A.	N.A.
	Thermostat Opening Temperature	°C (°F)	N.A.	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	N.A.	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		21.5 (16)	21.5 (16)	21.5 (16)
		Magneto Ring Nut		105 (77)	105 (77)	105 (77)
		Crankcase Nuts or Screws	M6	N.A.	N.A.	N.A.
			M8	21.5 (16)	21.5 (16)	21.5 (16)
		Crankcase/Engine Support Nuts or Screws		40.0 (30)	40.0 (30)	40.0 (30)
		Cylinder Head Screws		21.5 (16)	21.5 (16)	21.5 (16)
		Crankcase/Cylinder Nuts or Screws		N.A.	N.A.	N.A.
Axial Fan Shaft Nut		48.0 (35)	48.0 (35)	48.0 (35)		






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Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 500 TRAIL (CAN./U.S.)	MX Z 600 SPORT (CAN./U.S.)	MX Z 600 R SPORT (CAN./U.S.)		
ENGINE TYPE		493	593	593		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	69.50 (2.736)	76.00 (2.992)	76.00 (2.992)	
	Stroke	mm (in)	65.80 (2.591)	65.80 (2.591)	65.80 (2.591)	
	Displacement	cm ³ (in ³)	499.30 (30.47)	597.00 (36.43)	597.00 (36.43)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	8000	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.100 ± 0.016 (.0039 ± .0006)	0.120 ± 0.016 (.0047 ± .0006)	0.120 ± 0.016 (.0047 ± .0006)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.00 (.118)	3.00 (.118)	3.00 (.118)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B151	TM 40-B154	TM 40-B154	
	Main Jet	PTO/MAG	500/500	500/500	500/500	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	20	20	
	Needle Identification — Clip Position	PTO MAG	9HGY1/58 ⑥	9HGY1/58 ⑥	9HGY1/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1.0	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1600	1600	1600	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)		
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	35 (26)	35 (26)	35 (26)	
		Cylinder Head Screws	29 (21)	29 (21)	29 (21)	
		Crankcase/Cylinder Nuts or Screws	29 (21)	29 (21)	29 (21)	
Axial Fan Shaft Nut	N.A.	N.A.	N.A.			






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Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 600 TRAIL (CAN./U.S.)	MX Z 600 R ADRENALINE (CAN./U.S.)	MX Z 600 R RENEGADE (CAN./U.S.)		
ENGINE TYPE		593	593	593		
	Number of Cylinders		2	2	2	
	Bore	mm (in)	76.00 (2.992)	76.00 (2.992)	76.00 (2.992)	
	Stroke	mm (in)	65.8 (2.591)	65.8 (2.591)	65.8 (2.591)	
	Displacement	cm ³ (in ³)	597.00 (36.43)	597.00 (36.43)	597.00 (36.43)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	8000	
	Piston Ring Type		1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.04 (.0016)	0.040 (.0016)	0.40 (.0157)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.120 ± 0.016 (.0047 ± .0006)	0.120 ± 0.016 (.0047 ± .0006)	0.120 ± 0.016 (.0047 ± .0006)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output		W	290	290	290
	Ignition Type			CDI	CDI	CDI
	Spark Plug Make and Type			NGK BR9ECS	NGK BR9ECS	NGK BR9ECS
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③		mm (in)	3.00 (.118)	3.00 (.118)	3.00 (.118)
	Trigger Coil ④		Ω	190 – 300	190 – 300	190 – 300
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④		Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type		PTO/MAG	TM 40-B154	TM 40-B154	TM 40-B154
	Main Jet		PTO/MAG	500/500	500/500	500/500
	Needle Jet			P-0 ⑤	P-0 ⑤	P-0 ⑤
	Pilot Jet			20	20	20
	Needle Identification — Clip Position		PTO MAG	9HGY1/58 ⑥	9HGY1/58 ⑥	9ZLY3/58 ⑥
	Slide Cut-Away			2.0	2.0	2.0
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment		± 1/16 Turn	1-1/2	1-1/2	1-1/2
	Idle Speed		± 200 RPM	1600	1600	1600
	Gas Type/Pump Octane Number			Unleaded/87	Unleaded/87	Unleaded/87
	Gas/Oil Ratio			Injection	Injection	Injection
		Type			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)	42 (108)	42 (108)	42 (108)	
Radiator Cap Opening Pressure		kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	125 (92)	125 (92)
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)
		Cylinder Head Screws		29 (21)	29 (21)	29 (21)
		Crankcase/Cylinder Nuts or Screws		29 (21)	29 (21)	29 (21)
Axial Fan Shaft Nut		N.A.	N.A.	N.A.		






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 600 X (CAN./U.S.)	MX Z 600 R X (CAN./U.S.)	MX Z 700 SPORT (CAN./U.S.)		
ENGINE TYPE		593	593	693		
	Number of Cylinders		2	2	2	
	Bore	mm (in)	76.00 (2.992)	76.00 (2.992)	78.00 (3.071)	
	Stroke	mm (in)	65.80 (2.591)	65.80 (2.591)	73.00 (2.874)	
	Displacement	cm ³ (in ³)	597.00 (36.43)	597.00 (36.43)	697.70 (42.58)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	8000	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.120 ± 0.016 (.0047 ± .0006)	0.120 ± 0.016 (.0047 ± .0006)	0.115 ± 0.013 (.0045 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output		W	290	290	
	Ignition Type			CDI	CDI	
	Spark Plug Make and Type			NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.00 (.118)	3.00 (.118)	3.36 (.132)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type		PTO/MAG	TM 40-B154	TM 40-B154	TM 40-B160
	Main Jet		PTO/MAG	500/500	500/500	510N/510N
	Needle Jet			P-0 ⑤	P-0 ⑤	P-0 ⑤
	Pilot Jet			20	20	17.5
	Needle Identification — Clip Position		PTO MAG	9HGY1/58 ⑥	9HGY1/58 ⑥	9ZLY3/58 ⑥
	Slide Cut-Away			2.0	2.0	2.0
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1600	1600	1500	
	Gas Type/Pump Octane Number			Unleaded/87	Unleaded/87	Unleaded/87
	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)	42 (108)	42 (108)	42 (108)
	Radiator Cap Opening Pressure		kPa (PSI)	90 (13)	90 (13)	90 (13)
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	125 (92)	125 (92)
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)
		Cylinder Head Screws		29 (21)	29 (21)	29 (21)
		Crankcase/Cylinder Nuts or Screws		29 (21)	29 (21)	40 (29)
Axial Fan Shaft Nut		N.A.	N.A.	N.A.		






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 700 R SPORT (CAN./U.S.)	MX Z 700 TRAIL (CAN./U.S.)	MX Z 700 R ADRENALINE (CAN./U.S.)		
ENGINE TYPE		693	693	693		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	78.00 (3.071)	78.00 (3.071)	78.00 (3.071)	
	Stroke	mm (in)	73.00 (2.874)	73.00 (2.874)	73.00 (2.874)	
	Displacement	cm ³ (in ³)	697.70 (42.58)	697.70 (42.58)	697.70 (42.58)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	8000	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.118 ± 0.016 (.0046 ± .0006)	0.115 ± 0.013 (.0045 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.36 (.132)	3.36 (.132)	3.36 (.132)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B160	TM 40-B160	TM 40-B160	
	Main Jet	PTO/MAG	510N/510N	510N/510N	510N/510N	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY3/58 ⑥	9ZLY3/58 ⑥	9ZLY3/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	35 (26)	35 (26)	35 (26)	
		Cylinder Head Screws	29 (21)	29 (21)	29 (21)	
		Crankcase/Cylinder Head Nuts or Screws	40 (29)	40 (29)	40 (29)	
Axial Fan Shaft Nut	N.A.	N.A.	N.A.			






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 700 R RENEGADE (CAN./U.S.)	MX Z 700 X (CAN./U.S.)	MX Z 700 R X (CAN./U.S.)			
ENGINE TYPE		693	693	693			
	Number of Cylinders		2	2	2		
	Bore		mm (in)	78.00 (3.071)	78.00 (3.071)	78.00 (3.071)	
	Stroke		mm (in)	73.00 (2.874)	73.00 (2.874)	73.00 (2.874)	
	Displacement		cm ³ (in ³)	697.70 (42.58)	697.70 (42.58)	697.70 (42.58)	
	Compression Ratio		± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①		± 100 RPM	8000	8000	8000	
	Piston Ring Type		1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap		New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
			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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance		New	mm ± (in)	0.115 ± 0.013 (.0045 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)
			Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play		New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
			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 PTO		mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output		W	290	290	290	
	Ignition Type			CDI	CDI	CDI	
	Spark Plug Make and Type			NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap		± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③		mm (in)	3.36 (.132)	3.36 (.132)	3.36 (.132)	
	Trigger Coil ④		Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④		Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
			High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④		Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④		Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary			kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type		PTO/MAG	TM 40-B160	TM 40-B160	TM 40-B160	
	Main Jet		PTO/MAG	510N/510N	510N/510N	510N/510N	
	Needle Jet			P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet			17.5	17.5	17.5	
	Needle Identification — Clip Position		PTO MAG	9ZLY3/58 ⑥	9ZLY3/58 ⑥	9ZLY3/58 ⑥	
	Slide Cut-Away			2.0	2.0	2.0	
	Float Adjustment		± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment		± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed		± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number			Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
Radiator Cap Opening Pressure		kPa (PSI)	90 (13)	90 (13)	90 (13)		
	ENGINE COLD N _m (lbf _{ft})						
	Drive Pulley Retaining Screw			⑦	⑦	⑦	
	Exhaust Manifold Nuts or Bolts			22 (16)	22 (16)	22 (16)	
	Magneto Ring Nut			125 (92)	125 (92)	125 (92)	
	Crankcase Nuts or Screws		M6	9 (7)	9 (7)	9 (7)	
			M8	29 (21)	29 (21)	29 (21)	
	Crankcase/Engine Support Nuts or Screws			35 (26)	35 (26)	35 (26)	
	Cylinder Head Screws			29 (21)	29 (21)	29 (21)	
Crankcase/Cylinder Nuts or Screws			40 (30)	40 (30)	40 (30)		
Axial Fan Shaft Nut			N.A.	N.A.	N.A.		






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 800 SPORT (CAN./U.S.)	MX Z 800 R SPORT (CAN./U.S.)	MX Z 800 TRAIL (CAN./U.S.)		
ENGINE TYPE		793	793	793		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	82.00 (3.228)	82.00 (3.228)	82.00 (3.228)	
	Stroke	mm (in)	75.70 (2.980)	75.70 (2.980)	75.70 (2.980)	
	Displacement	cm ³ (in ³)	799.20 (48.77)	799.20 (48.77)	799.20 (48.77)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	7900	7900	7900	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.05 (.0020)	0.05 (.0020)	0.05 (.0020)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.125 ± 0.013 (.0049 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.51 (.138)	3.51 (.138)	3.51 (.138)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B166	TM 40-B166	TM 40-B166	
	Main Jet	PTO/MAG	520N/520N	520N/520N	520N/520N	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY2/58 ⑥	9ZLY2/58 ⑥	9ZLY2/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	125 (92)	125 (92)
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)
		Cylinder Head Screws		29 (21)	29 (21)	29 (21)
		Crankcase/Cylinder Nuts or Screws		40 (29)	40 (29)	40 (29)
Axial Fan Shaft Nut		N.A.	N.A.	N.A.		






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 800 R ADRENALINE (CAN./U.S.)	MX Z 800 R RENEGADE (CAN./U.S.)	MX Z 800 X (CAN./U.S.)		
ENGINE TYPE		793	793	793		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	82.00 (32.228)	82.00 (32.228)	82.00 (32.228)	
	Stroke	mm (in)	75.70 (2.980)	75.70 (2.980)	75.70 (2.980)	
	Displacement	cm ³ (in ³)	799.20 (48.77)	799.20 (48.77)	799.20 (48.77)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	7900	7900	7900	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.05 (.0020)	0.05 (.0020)	0.05 (.0020)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.125 ± 0.013 (.0049 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.51 (.138)	3.51 (.138)	3.51 (.138)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B166	TM 40-B166	TM 40-B166	
	Main Jet	PTO/MAG	520N/520N	520N/520N	520N/520N	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY2/58 ⑥	9ZLY2/58 ⑥	9ZLY2/58 ⑥ 9ZLY3/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	9 (7) 29 (21)	9 (7) 29 (21)	9 (7) 29 (21)	
		Cylinder Head Screws	29 (21)	29 (21)	29 (21)	
		Crankcase/Cylinder Nuts or Screws	40 (29)	40 (29)	40 (30)	
Axial Fan Shaft Nut	N.A.	N.A.	N.A.			






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		MX Z 800 R X (CAN./U.S.)	SUMMIT 600 SPORT (CAN./U.S.)	SUMMIT 600 R SPORT (CAN./U.S.)	
ENGINE TYPE		793	593	593	
	Number of Cylinders	2	2	2	
	Bore	mm (in)	82.00 (32.228)	76.00 (2.992)	76.00 (2.992)
	Stroke	mm (in)	75.70 (2.980)	65.80 (2.591)	65.80 (2.591)
	Displacement	cm ³ (in ³)	799.20 (48.77)	597.00 (36.43)	597.00 (36.43)
	Compression Ratio	± 0.5	12.0	12.0	12.0
	Maximum Power Engine Speed ①	± 100 RPM	7900	8000	8000
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.05 (.0020)	0.045 (.0016)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.125 ± 0.013 (.0049 ± .0005)	0.120 ± 0.016 (.0047 ± .0006)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)
		Wear Limit	mm (in)	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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)	
	Magneto Generator Output	W	290	290	
	Ignition Type		CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.51 (.138)	3.00 (.118)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B166	TM 40-B157	
	Main Jet	PTO/MAG	520N/520N	500/500	
	Needle Jet		P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	20	
	Needle Identification — Clip Position	PTO		9ZLY2/58 ⑥	9HGY1/58 ⑥
		MAG		9ZLY3/58 ⑥	
	Slide Cut-Away		2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	
Gas/Oil Ratio		Injection	Injection		
	Type		Liquid	Liquid	
	Axial Fan Belt Adjustment	Deflection	mm (in)	N.A.	N.A.
		Force	kg (lbf)	N.A.	N.A.
	Thermostat Opening Temperature	°C (°F)	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)
			M8	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	35 (26)	35 (26)	
		Cylinder Head Screws	29 (21)	29 (21)	
		Crankcase/Cylinder Nuts or Screws	40 (30)	29 (21)	
Axial Fan Shaft Nut	N.A.	N.A.			






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		SUMMIT 700 SPORT (CAN./U.S.)	SUMMIT 700 R SPORT (CAN./U.S.)	SUMMIT 800 SPORT (CAN./U.S.)		
ENGINE TYPE		693	693	793		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	78.00 (3.071)	78.00 (3.071)	82.00 (3.228)	
	Stroke	mm (in)	73.0 (2.874)	73.0 (2.874)	75.70 (2.980)	
	Displacement	cm ³ (in ³)	697.70 (42.58)	697.70 (42.58)	799.20 (48.77)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	7900	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		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)	0.05 (.0020)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.115 ± 0.013 (.0045 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.36 (.132)	3.36 (.132)	3.51 (.138)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B163	TM 40-B163	TM 40-B175	
	Main Jet	PTO/MAG	510N/510N	510N/510N	520N/520N	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY3/58 ⑥	9ZLY3/58 ⑥	9ZLY2/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)		
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	35 (26)	35 (26)	35 (26)	
		Cylinder Head Screws	29 (21)	29 (21)	29 (21)	
		Crankcase/Cylinder Nuts or Screws	40 (29)	40 (29)	40 (29)	
Axial Fan Shaft Nut	N.A.	N.A.	N.A.			






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		SUMMIT 800 R SPORT (CAN./U.S.)	SUMMIT 800 X (CAN./U.S.)	SUMMIT 800 R X (CAN./U.S.)		
ENGINE TYPE		793	793	793		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	82.00 (3.228)	82.00 (3.228)	82.00 (3.228)	
	Stroke	mm (in)	75.70 (2.980)	75.70 (2.980)	75.70 (2.980)	
	Displacement	cm ³ (in ³)	799.20 (48.77)	799.20 (48.77)	799.20 (48.77)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	7900	7900	7900	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.05 (.0020)	0.05 (.0020)	0.05 (.0020)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.125 ± 0.013 (.0049 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.51 (.138)	3.51 (.138)	3.51 (.138)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B175	TM 40-B175	TM 40-B175	
	Main Jet	PTO/MAG	520N/520N	520N/520N	520N/520N	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY2/58 ⑥	9ZLY2/58 ⑥	9ZLY2/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	35 (26)	35 (26)	35 (26)	
		Cylinder Head Screws	29 (21)	29 (21)	29 (21)	
		Crankcase/Cylinder Nuts or Screws	40 (29)	40 (29)	40 (29)	
Axial Fan Shaft Nut	N.A.	N.A.	N.A.			






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		SUMMIT 800 HIGHMARK (CAN./U.S.)	SUMMIT 800 R HIGHMARK (CAN./U.S.)	SUMMIT 800 HIGHMARK X (CAN./U.S.)		
ENGINE TYPE		793	793	793		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	82.00 (3.228)	82.00 (3.228)	82.00 (3.228)	
	Stroke	mm (in)	75.70 (2.980)	75.70 (2.980)	75.70 (2.980)	
	Displacement	cm ³ (in ³)	799.20 (48.77)	799.20 (48.77)	799.20 (48.77)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	7900	7900	7900	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.05 (.0020)	0.04 (.0016)	0.05 (.0020)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.125 ± 0.013 (.0049 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	290	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.51 (.138)	3.51 (.138)	3.51 (.138)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B175	TM 40-B175	TM 40-B175	
	Main Jet	PTO/MAG	520N/520N	520N/520N	520N/520N	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY2/58 ⑥	9ZLY2/58 ⑥	9ZLY2/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
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)	42 (108)	42 (108)	42 (108)	
Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)		
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	35 (26)	35 (26)	35 (26)	
		Cylinder Head Screws	29 (21)	29 (21)	29 (21)	
		Crankcase/Cylinder Nuts or Screws	40 (29)	40 (29)	40 (29)	
Axial Fan Shaft Nut	N.A.	N.A.	N.A.			






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		SUMMIT 800 R HIGHMARK X (CAN./U.S.)	LEGEND 500 SPORT (CAN./U.S.)	LEGEND 600 GS (CAN./U.S.)		
ENGINE TYPE		793	493	593		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	82.00 (3.228)	69.50 (2.736)	76.00 (2.992)	
	Stroke	mm (in)	75.70 (2.980)	65.80 (2.591)	65.80 (2.591)	
	Displacement	cm ³ (in ³)	799.20 (48.77)	499.30 (30.469)	597.00 (36.431)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	7900	8000	8000	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.05 (.0020)	0.04 (.0016)	0.04 (.0016)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.125 ± 0.013 (.0049 ± .0005)	0.100 ± 0.016 (.0039 ± .0006)	0.115 ± 0.013 (.0045 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	290	360	290	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ES	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018)	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.51 (.138)	3.00 (.118)	3.51 (.138)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	N.A.	17.5 – 42.5
		High Speed	Ω	2.4 – 5.8	N.A.	2.4 – 5.8
	Lighting Coil ④	Ω	0.1 – 0.4	0.1 – 1.0	0.1 – 1.0	
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	N.A.	0.3 – 0.7
Secondary		kΩ	8.0 – 16.0	N.A.	8.0 – 16.0	
	Carburetor Type	PTO/MAG	TM 40-B175	TM 40-B151	TM 40-B154	
	Main Jet	PTO/MAG	520N/520N	500/500	500/500	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	20.0	
	Needle Identification — Clip Position	PTO MAG	9ZLY2/58 ⑥	9HGY1-58 ⑥	9HGY1-58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1600	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	N.A.	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	N.A.	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	125 (92)	125 (92)
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)
		Cylinder Head Screws		29 (21)	29 (21)	29 (21)
		Crankcase/Cylinder Nuts or Screws		40 (29)	40 (29)	40 (29)
Axial Fan Shaft Nut		N.A.	N.A.	N.A.		






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		LEGEND 600 SE (CAN./U.S.)	LEGEND 600 SPORT (CAN./U.S.)	LEGEND 700 GS (CAN./U.S.)		
ENGINE TYPE		593	593	693		
	Number of Cylinders		2	2	2	
	Bore		76.00 (2.992)	76.00 (2.992)	78.00 (3.071)	
	Stroke		65.80 (2.591)	65.80 (2.591)	73.00 (2.874)	
	Displacement		597.00 (36.431)	597.00 (36.431)	697.70 (42.576)	
	Compression Ratio		± 0.5	12.0	12.0	
	Maximum Power Engine Speed ①		± 100 RPM	7900	7900	
	Piston Ring Type		1 st /2 nd	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.115 ± 0.013 (.0045 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
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 PTO		mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)	
	Magneto Generator Output		W	290	290	360
	Ignition Type			CDI	CDI	CDI
	Spark Plug Make and Type			NGK BR9ECS	NGK BR9ECS	NGK BR9ECS
	Spark Plug Gap		± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③
	Ignition Timing BTDC ③		mm (in)	3.51 (.138)	3.51 (.138)	3.36 (.132)
	Trigger Coil ④		Ω	190 – 300	190 – 300	190 – 300
	Generating Coil ④	Low Speed	Ω	17.5 – 42.5	17.5 – 42.5	N.A.
		High Speed	Ω	2.4 – 5.8	2.4 – 5.8	N.A.
	Lighting Coil ④		Ω	0.1 – 1.0	0.1 – 1.0	0.1 – 1.0
	High Tension Coil ④	Primary	Ω	0.3 – 0.7	0.3 – 0.7	N.A.
Secondary		kΩ	8.0 – 16.0	8.0 – 16.0	N.A.	
	Carburetor Type		PTO/MAG	TM 40-B154	TM 40-B154	TM 40-B160
	Main Jet		PTO/MAG	500/500	500/500	510N/510N
	Needle Jet			P-0 ⑤	P-0 ⑤	P-0 ⑤
	Pilot Jet			20.0	20.0	17.5
	Needle Identification — Clip Position		PTO MAG	9HGY1-58 ⑥	9HGY1-58 ⑥	9ZLY3/58 ⑥
	Slide Cut-Away			2.0	2.0	2.0
	Float Adjustment		± 1 mm (± .040 in)	N.A.	N.A.	N.A.
	Air or Pilot Screw Adjustment		± 1/16 Turn	1-1/2	1-1/2	1-1/2
	Idle Speed		± 200 RPM	1500	1500	1500
	Gas Type/Pump Octane Number			Unleaded/87	Unleaded/87	Unleaded/87
	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.	42 (108)
Radiator Cap Opening Pressure		kPa (PSI)	N.A.	N.A.	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	125 (92)	125 (92)
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)
		Cylinder Head Screws		29 (21)	29 (21)	29 (21)
		Crankcase/Cylinder Nuts or Screws		40 (29)	40 (29)	40 (29)
Axial Fan Shaft Nut		N.A.	N.A.	N.A.		






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		LEGEND 700 SPORT (CAN./U.S.)	LEGEND 800 SE (CAN./U.S.)	GRAND TOURING 500 SPORT (CAN./U.S.)		
ENGINE TYPE		693	593	493		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	78.00 (3.071)	82.00 (3.228)	69.50 (2.736)	
	Stroke	mm (in)	73.00 (2.874)	75.70 (2.980)	65.80 (2.591)	
	Displacement	cm ³ (in ³)	697.70 (42.576)	799.20 (48.77)	499.30 (30.469)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	7900	8000	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		Wear Limit	mm (in)	1.0 (.039)	1.0 (.039)	1.0 (.039)
	Ring/Piston Groove Clearance	New	mm (in)	0.04 (.0016)	0.05 (.0020)	0.04 (.0016)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.115 ± 0.013 (.0045 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)	0.100 ± 0.016 (.0039 ± .0006)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	360	360	360	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ES	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018)	
	Ignition Timing BTDC ③	mm (in)	3.36 (.132)	3.51 (.138)	3.00 (.118)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	N.A.	N.A.	N.A.
		High Speed	Ω	N.A.	N.A.	N.A.
	Lighting Coil ④	Ω	0.1 – 1.0	0.1 – 1.0	0.1 – 1.0	
	High Tension Coil ④	Primary	Ω	N.A.	N.A.	N.A.
Secondary		kΩ	N.A.	N.A.	N.A.	
	Carburetor Type	PTO/MAG	TM 40-B160	TM 40-B166	TM 40-B151	
	Main Jet	PTO/MAG	510N/510N	520N/520N	500/500	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY3/58 ⑥	9ZLY2/58 ⑥	9HGY1-58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1	
	Idle Speed	± 200 RPM	1500	1500	1600	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw	⑦	⑦	⑦	
		Exhaust Manifold Nuts or Bolts	22 (16)	22 (16)	22 (16)	
		Magneto Ring Nut	125 (92)	125 (92)	125 (92)	
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws	35 (26)	35 (26)	35 (26)	
		Cylinder Head Screws	29 (21)	29 (21)	29 (21)	
		Crankcase/Cylinder Nuts or Screws	40 (29)	40 (29)	40 (29)	
Axial Fan Shaft Nut	N.A.	N.A.	N.A.			






Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		GRAND TOURING 600 SE (CAN./U.S.)	GRAND TOURING 600 GS (CAN./U.S.)	GRAND TOURING 600 SPORT (CAN./U.S.)		
ENGINE TYPE		593	593	593		
	Number of Cylinders		2	2	2	
	Bore	mm (in)	76.00 (2.992)	76.00 (2.992)	76.00 (2.992)	
	Stroke	mm (in)	76.25 (3.002)	76.25 (3.002)	76.25 (3.002)	
	Displacement	cm ³ (in ³)	597.00 (36.431)	597.00 (36.431)	597.00 (36.431)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	8000	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		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 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.120 ± 0.013 (.0047 ± .0005)	0.120 ± 0.013 (.0047 ± .0005)	0.120 ± 0.013 (.0047 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output		W	360	360	360
	Ignition Type			CDI	CDI	CDI
	Spark Plug Make and Type			NGK BR9ECS	NGK BR9ECS	NGK BR9ECS
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.36 (.132)	3.36 (.132)	3.36 (.132)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	N.A.	N.A.	N.A.
		High Speed	Ω	N.A.	N.A.	N.A.
	Lighting Coil ④	Ω	0.1 – 1.0	0.1 – 1.0	0.1 – 1.0	
	High Tension Coil ④	Primary	Ω	N.A.	N.A.	N.A.
Secondary		kΩ	N.A.	N.A.	N.A.	
	Carburetor Type		PTO/MAG	TM 40-B154	TM 40-B154	TM 40-B154
	Main Jet		PTO/MAG	500/500	500/500	500/500
	Needle Jet			P-0 ⑤	P-0 ⑤	P-0 ⑤
	Pilot Jet			20.0	20.0	20.0
	Needle Identification — Clip Position	PTO MAG		9HGY1-58 ⑥	9HGY1-58 ⑥	9HGY1-58 ⑥
	Slide Cut-Away			2.0	2.0	2.0
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1600	1600	1600	
	Gas Type/Pump Octane Number			Unleaded/87	Unleaded/87	Unleaded/87
	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)	42 (108)	42 (108)	42 (108)
Radiator Cap Opening Pressure		kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	125 (92)	125 (92)
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)
		Cylinder Head Screws		29 (21)	29 (21)	29 (21)
		Crankcase/Cylinder Nuts or Screws		40 (29)	40 (29)	40 (29)
Axial Fan Shaft Nut		N.A.	N.A.	N.A.		





Section 10 TECHNICAL DATA

Subsection 02 (ENGINES)

VEHICLE MODEL		GRAND TOURING 700 GS (CAN./U.S.)	GRAND TOURING 700 SPORT (CAN./U.S.)	GRAND TOURING 800 SE (CAN./U.S.)		
ENGINE TYPE		693	593	793		
	Number of Cylinders	2	2	2		
	Bore	mm (in)	78.00 (3.071)	78.00 (3.071)	82.00 (3.228)	
	Stroke	mm (in)	73.00 (2.874)	73.00 (2.874)	75.70 (2.980)	
	Displacement	cm ³ (in ³)	697.70 (42.576)	697.70 (42.576)	799.20 (48.77)	
	Compression Ratio	± 0.5	12.0	12.0	12.0	
	Maximum Power Engine Speed ①	± 100 RPM	8000	8000	7900	
	Piston Ring Type	1 st /2 nd	ST/N.A.	ST/N.A.	ST/N.A.	
	Ring End Gap	New	mm (in)	0.4 (.016)	0.4 (.016)	0.4 (.016)
		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)	0.05 (.0020)
		Wear Limit	mm (in)	0.2 (.0079)	0.2 (.0079)	0.2 (.0079)
	Piston/Cylinder Wall Clearance	New	mm ± (in)	0.115 ± 0.013 (.0045 ± .0005)	0.115 ± 0.013 (.0045 ± .0005)	0.125 ± 0.013 (.0049 ± .0005)
		Wear Limit	mm (in)	0.20 (.0079)	0.20 (.0079)	0.20 (.0079)
	Connecting Rod Big End Axial Play	New	mm (in)	0.39 (.0154)	0.39 (.0154)	0.39 (.0154)
		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 PTO	mm (in)	0.06 (.0024)	0.06 (.0024)	0.06 (.0024)		
	Magneto Generator Output	W	360	360	360	
	Ignition Type		CDI	CDI	CDI	
	Spark Plug Make and Type		NGK BR9ECS	NGK BR9ECS	NGK BR9ECS	
	Spark Plug Gap	± 0.05 mm (± .002 in)	0.45 (.018) ③	0.45 (.018) ③	0.45 (.018) ③	
	Ignition Timing BTDC ③	mm (in)	3.36 (.132)	3.36 (.132)	3.51 (.138)	
	Trigger Coil ④	Ω	190 – 300	190 – 300	190 – 300	
	Generating Coil ④	Low Speed	Ω	N.A.	N.A.	N.A.
		High Speed	Ω	N.A.	N.A.	N.A.
	Lighting Coil ④	Ω	0.1 – 1.0	0.1 – 1.0	0.1 – 1.0	
	High Tension Coil ④	Primary	Ω	N.A.	N.A.	N.A.
Secondary		kΩ	N.A.	N.A.	N.A.	
	Carburetor Type	PTO/MAG	TM 40-B160	TM 40-B160	TM 40-B166	
	Main Jet	PTO/MAG	510N/510N	510N/510N	520N/520N	
	Needle Jet		P-0 ⑤	P-0 ⑤	P-0 ⑤	
	Pilot Jet		17.5	17.5	17.5	
	Needle Identification — Clip Position	PTO MAG	9ZLY3/58 ⑥	9ZLY3/58 ⑥	9ZLY2/58 ⑥	
	Slide Cut-Away		2.0	2.0	2.0	
	Float Adjustment	± 1 mm (± .040 in)	N.A.	N.A.	N.A.	
	Air or Pilot Screw Adjustment	± 1/16 Turn	1-1/2	1-1/2	1-1/2	
	Idle Speed	± 200 RPM	1500	1500	1500	
	Gas Type/Pump Octane Number		Unleaded/87	Unleaded/87	Unleaded/87	
	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)	42 (108)	42 (108)	42 (108)	
	Radiator Cap Opening Pressure	kPa (PSI)	90 (13)	90 (13)	90 (13)	
	ENGINE COLD N _m (lbf _{ft})	Drive Pulley Retaining Screw		⑦	⑦	⑦
		Exhaust Manifold Nuts or Bolts		22 (16)	22 (16)	22 (16)
		Magneto Ring Nut		125 (92)	125 (92)	125 (92)
		Crankcase Nuts or Screws	M6	9 (7)	9 (7)	9 (7)
			M8	29 (21)	29 (21)	29 (21)
		Crankcase/Engine Support Nuts or Screws		35 (26)	35 (26)	35 (26)
		Cylinder Head Screws		29 (21)	29 (21)	29 (21)
		Crankcase/Cylinder Nuts or Screws		40 (29)	40 (29)	40 (29)
Axial Fan Shaft Nut		N.A.	N.A.	N.A.		

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 380F FAN (CAN./U.S.)	MX Z 500F FAN (CAN./U.S.)	G. TOURING 380F FAN (CAN./U.S.)			
ENGINE TYPE		380	503	380			
	Chain Drive Ratio		19/43	21/43	18/43		
	Chain	Pitch in	3/8	3/8	3/8		
		Type/Links Qty/Plates Qty		Silent 72/11	Silent 74/11	Silent 72/11	
	Drive Pulley	Type of Drive Pulley		Bombardier Lite	TRA	Bombardier Lite	
		Ramp Identification and Roller Pin Type		N.A.	296 \odot	N.A.	
		Calibration Screw Position or Calibration Part ①		1181-1xC, 3xS21	3	1181-1xC, 3xS21	
		Spring Color		Red/Blue	Red/Yellow	Red/Blue	
		Spring Length mm (in)		–	87.90 (3.461)	–	
		Clutch Engagement \pm 100 RPM		3500	3500	3500	
	Driven Pulley	Type		LPV27	LPV27	LPV27	
		Spring Preload \pm 0.7 kg (\pm 1.5 lb)		N.A.	N.A.	N.A.	
		Cam Angle Degree		44	47/44	44	
	Pulley Distance	Z \pm 0.5 mm (\pm .020 in)		26.0 (1.024)	17.5 (.689)	26.0 (1.024)	
		Offset	X \pm 0.5 mm (\pm .020 in)		33.4 (1.315)	35.5 (1.398)	33.4 (1.315)
			Y – X	MIN. – MAX. mm (in)	1.0 \pm 0.75 (.039 \pm .030)	1.5 \pm 0.5 (.059 \pm .020)	1.0 \pm 0.75 (.039 \pm .030)
	Drive Belt Part Number (P/N)		415 060 600	415 060 600	415 060 600		
	Drive Belt Width (new) ② mm (in)		34.7 (1.366)	34.7 (1.366)	34.7 (1.366)		
	Drive Belt Adjustment	Deflection \pm 5 mm (\pm .197 in)		32 (1.260)	32 (1.260)	32 (1.260)	
		Force ③ kg (lbf)		11.34 (25)	11.34 (25)	11.34 (25)	
	Track	Width mm (in)		381 (15.0)	381 (15.0)	381 (15.0)	
		Length mm (in)		3074 (121)	3074 (121)	3455 (136.024)	
		Profile Height mm (in)		25.4 (1.00)	25.4 (1.00)	22.34 (.88)	
		Adjustment	Deflection mm (in)		35 – 40 (1.378-1.575)	30 – 35 (1.181 – 1.378)	35 – 40 (1.378-1.575)
			Force ④ kg (lbf)		7.3 (16)	7.3 (16)	7.3 (16)
	Suspension Type	Track		SC-10	SC-10	SC-10 LT	
		Ski		ADSA	ADSA	ADSA	
		Length mm (in)		3005 (118.307)	3005 (118.307)	3034 (119.449)	
Width mm (in)		1172 (46.142)	1172 (46.142)	1213 (47.756)			
Height mm (in)		1136 (44.724)	1136 (44.724)	1409 (55.472)			
Ski Stance (carbide to carbide) mm (in)		1080 (43)	1080 (43)	1080 (43)			
Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	0 (0) 0			
Mass (dry) kg (lb)		191 (420)	200 (440)	205 (452)			
Ground Contact Area cm ² (in ²)		6671 (1034)	6671 (1034)	7356.7 (1140.291)			
Ground Contact Pressure kPa (PSI)		2.81 (.407)	2.94 (.426)	2.73 (.396)			
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.	12/18		
	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		2 x 3	2 x 3	2 x 3		
	Fuel and Temperature Gauge Bulbs W		N.A.	N.A.	N.A.		
	Fuse	Starter Solenoid A		N.A.	N.A.	N.A.	
		Fuel Level Sensor A		N.A.	N.A.	N.A.	
	Fuel Tank L (U.S. gal)		37.3 (9.9)	37.3 (9.9)	37.3 (9.9)		
	Chaincase/Gearbox mL (U.S. oz)		250 (8.5)	250 (8.5)	250 (8.5)		
	Cooling System ⑤ L (U.S. oz)		N.A.	N.A.	N.A.		
	Injection Oil Reservoir L (U.S. oz)		3.5 (118.4)	3.5 (118.4)	3.5 (118.4)		





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		G. TOURING 500F FAN (CAN./U.S.)	LEGEND 380F FAN (CAN./U.S.)	LEGEND 500F FAN (CAN./U.S.)
ENGINE TYPE		503	380	503
Chain Drive Ratio		19/43	19/43	21/43
Chain	Pitch in	3/8	3/8	3/8
	Type/Links Qty/Plates Qty	Silent 72/11	Silent 72/11	Silent 74/11
Drive Pulley	Type of Drive Pulley	TRA	Bombardier Lite	TRAC
	Ramp Identification and Roller Pin Type	296 \varnothing	N.A.	296 \varnothing
	Calibration Screw Position or Calibration Part ①	3	1181-1xC, 3xS21	3
	Spring Color	Red/Yellow	Violet (Blue/Green)	Red/Yellow
	Spring Length mm (in)	87.90 (3.461)	N.A.	87.90 (3.461)
Driven Pulley	Clutch Engagement \pm 100 RPM	3500	3600	3500
	Type	LPV27	LPV27	LPV27
	Spring Preload \pm 0.7 kg (\pm 1.5 lb)	N.A.	N.A.	N.A.
Pulley Distance	Cam Angle Degree	47/44	44	47/44
	Z \pm 0.5 mm (\pm .020 in)	17.5 (.689)	26.0 (1.024)	17.5 (.689)
Offset	X \pm 0.5 mm (\pm .020 in)	35.5 (1.398)	33.4 (1.315)	35.5 (1.398)
	Y - X MIN. - MAX. mm (in)	1.5 \pm 0.5 (.059 \pm .020)	1.0 \pm 0.75 (.039 \pm .030)	1.5 \pm 0.5 (.059 \pm .020)
Drive Belt Part Number (P/N)		415 060 600	415 060 600	415 060 600
Drive Belt Width (new) ② mm (in)		34.7 (1.366)	34.7 (1.366)	34.7 (1.366)
Drive Belt Adjustment	Deflection \pm 5 mm (\pm .197 in)	32 (1.260)	32 (1.260)	32 (1.260)
	Force ③ kg (lbf)	11.34 (25)	11.34 (25)	11.34 (25)
Track	Width mm (in)	381 (15.0)	381 (15.0)	381 (15.0)
	Length mm (in)	3455 (136.024)	3074 (121.024)	3074 (121.024)
	Profile Height mm (in)	22.34 (.88)	18.40 (.724)	22.34 (.88)
	Adjustment	Deflection mm (in)	30 - 35 (1.181 - 1.378)	35 - 40 (1.378 - 1.575)
Force ④ kg (lbf)		7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track	SC-10 LT	SC-10	SC-10
	Ski	ADSA	ADSA	ADSA
Length mm (in)		3034 (119.449)	3005 (118.307)	3005 (118.307)
Width mm (in)		1213 (47.756)	1172 (46.142)	1172 (46.142)
Height mm (in)		1409 (55.472)	1136 (44.724)	1136 (44.724)
Ski Stance (carbide to carbide) mm (in)		1080 (43)	1080 (43)	1080 (43)
Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	0 (0) 0
Mass (dry) kg (lb)		224 (493)	200 (440)	209 (460)
Ground Contact Area cm ² (in ²)		7356.7 (1140.291)	6835.8 (1059.551)	6835.8 (1059.551)
Ground Contact Pressure kPa (PSI)		2.99 (.434)	2.87 (.416)	3.0 (.435)
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		12/18	12/18	12/18
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		2 x 3	2 x 3	2 x 3
Fuel and Temperature Gauge Bulbs W		N.A.	N.A.	N.A.
Fuse	Starter Solenoid A	N.A.	N.A.	N.A.
	Fuel Level Sensor A	N.A.	N.A.	N.A.
Fuel Tank L (U.S. gal)		37.3 (9.9)	37.3 (9.9)	37.3 (9.9)
Chaincase/Gearbox mL (U.S. oz)		250 (8.5)	250 (8.5)	250 (8.5)
Cooling System ⑤ L (U.S. oz)		N.A.	N.A.	N.A.
Injection Oil Reservoir L (U.S. oz)		3.5 (118.4)	3.5 (118.4)	3.5 (118.4)

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		SUMMIT 500F FAN (CAN./U.S.)	MX Z 500 SPORT (CAN./U.S.)	MX Z 500 R SPORT (CAN./U.S.)		
ENGINE TYPE		503	493	493		
	Chain Drive Ratio		17/43	22/43	22/43	
	Chain	Pitch in	3/8	3/8	3/8	
		Type/Links Qty/Plates Qty		Silent 72/11	Silent 74/11	Silent 74/11
	Drive Pulley	Type of Drive Pulley		TRAC	TRA	TRA
		Ramp Identification and Roller Pin Type		296 ⑦	283 ⑥	283 ⑥
		Calibration Screw Position or Calibration Part ①		3	4	3
		Spring Color		Tellow/Yellow	Green/White	Green/Pink
		Spring Length mm (in)		100.30 (3.949)	110.7 (4.36)	118.0 (4.65)
		Clutch Engagement ± 100 RPM		3800	4400	4400
	Driven Pulley	Type		LPV27	FORMULA	HPV27
		Spring Preload ± 0.7 kg (± 1.5 lb)		N.A.	7.0 (15.4)	N.A.
		Cam Angle Degree		44	42	44
	Pulley Distance	Z ± 0.5 mm (± .020 in)		17.5 (.689)	16.5 (.650)	17.5 (.689)
		X ± 0.5 mm (± .020 in)		35.5 (1.398)	35.5 (1.398)	35.5 (1.398)
	Offset	Y - X	MIN. - MAX. mm (in)	1.5 ± 0.5 (.059 ± .020)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)
		Drive Belt Part Number (P/N)		415 060 600	414 860 700	414 860 700
	Drive Belt Width (new) ②		mm (in)	34.7 (1.366)	35.30 (1.390)	35.30 (1.390)
	Drive Belt Adjustment	Deflection ± 5 mm (± .197 in)		32 (1.260)	32 (1.260)	32 (1.260)
		Force ③ kg (lbf)		11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width mm (in)		381 (15.0)	381 (15.0)	381 (15.0)
		Length mm (in)		3455.00 (136.024)	3074 (121)	3074 (121)
		Profile Height mm (in)		38.10 (1.50)	22.3 (0.9)	22.3 (0.9)
		Adjustment	Deflection mm (in)	35 - 40 (1.378 - 1.575)	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	SC-10 III	SC-10 III	
	Ski		ADSA	ADSA	ADSA	
	Length mm (in)		2932 (115.433)	2725 (107.3)	2725 (107.3)	
	Width mm (in)		1139 (44.843)	1329 (52.3)	1329 (52.3)	
	Height mm (in)		1130 (44.5)	1130 (44.5)	1130 (44.5)	
	Ski Stance (carbide to carbide) mm (in)		1025 (40.354)	1195 (47.0)	1195 (47.0)	
	Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	0 (0) 0	
	Mass (dry) kg (lb)		202 (445)	213 (468)	213 (468)	
	Ground Contact Area cm² (in²)		8226.9 (1033.992)	6836 (1060)	6836 (1060)	
	Ground Contact Pressure kPa (PSI)		2.41 (.349)	3.06 (.444)	3.06 (.444)	
	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.	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		2 x 3	3	3	
	Fuel and Temperature Gauge Bulbs W		N.A.	N.A.	N.A.	
	Fuse	Starter Solenoid A	N.A.	N.A.	N.A.	
		Fuel Level Sensor A	N.A.	N.A.	N.A.	
	Fuel Tank L (U.S. gal)		37.3 (9.9)	37.3 (9.9)	37.3 (9.9)	
	Chaincase/Gearbox mL (U.S. oz)		250 (8.5)	250 (8.5)	250 (8.5)	
	Cooling System ⑤ L (U.S. oz)		N.A.	3.8 (128.5)	3.8 (128.5)	
	Injection Oil Reservoir L (U.S. oz)		3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 500 TRAIL (CAN./U.S.)	MX Z 600 SPORT (CAN./U.S.)	MX Z 600 R SPORT (CAN./U.S.)	
ENGINE TYPE		493	593	593	
Chain Drive Ratio		22/43	24/43	24/43	
Chain	Pitch in	3/8	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 74/11	Silent 74/13	Silent 74/13	
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	
	Ramp Identification and Roller Pin Type	283 ⑥	299 ⑥	299 ⑥	
	Calibration Screw Position or Calibration Part ①	4	4	3	
	Spring Color	Green/White	Green/White	Green/Violet	
	Spring Length mm (in)	110.7 (4.35)	110.7 (4.36)	133.5 (5.26)	
	Clutch Engagement ± 100 RPM	4400	4100	4100	
Driven Pulley	Type	FORMULA	FORMULA	HPV27	
	Spring Preload ± 0.7 kg (± 1.5 lb)	7.0 (15.4)	7.5 (16.54)	N.A.	
	Cam Angle Degree	42	47	47	
Pulley Distance	Z ± 0.5 mm (± .020 in)	16.5 (.650)	16.5 (.650)	17.5 (.689)	
	X ± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	35.5 (1.398)	
Offset	Y - X				
	MIN. - MAX. mm (in)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	
Drive Belt Part Number (P/N)		414 860 700	414 860 700	414 860 700	
Drive Belt Width (new) ② mm (in)		35.3 (1.390)	35.3 (1.390)	35.3 (1.390)	
Drive Belt Adjustment	Deflection ± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	32 (1.260)	
	Force ③ kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)	
Track	Width mm (in)	381 (15.0)	381 (15.0)	381 (15.0)	
	Length mm (in)	3074 (121)	3074 (121)	3074 (121)	
	Profile Height mm (in)	22.3 (.880)	22.3 (.880)	22.3 (.880)	
	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 ④ kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track	SC-10 III	SC-10 III	SC-10 III	
	Ski	ADSA	ADSA	ADSA	
Length mm (in)		2725 (107)	2725 (107)	2725 (107)	
Width mm (in)		1213 (47.7)	1329 (52)	1329 (52)	
Height mm (in)		1130 (44)	1130 (44)	1130 (44)	
Ski Stance (carbide to carbide) mm (in)		1080 (42.5)	1195 (47)	1195 (47)	
Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	0 (0) 0	
Mass (dry) kg (lb)		213 (468)	214 (472)	214 (472)	
Ground Contact Area cm ² (in ²)		6670.9 (1034)	6836 (1060)	6836 (1060)	
Ground Contact Pressure kPa (PSI)		3.13 (.454)	3.09 (.448)	3.09 (.448)	
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.	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		N.A.	N.A.	N.A.	
Fuse	Starter Solenoid A	N.A.	N.A.	N.A.	
	Fuel Level Sensor A	N.A.	N.A.	N.A.	
Fuel Tank L (U.S. gal)		37.3 (9.9)	37.3 (9.9)	37.3 (9.9)	
Chaincase/Gearbox mL (U.S. oz)		250 (8.5)	250 (8.5)	250 (8.5)	
Cooling System ⑤ L (U.S. oz)		3.8 (128.5)	3.8 (128.5)	3.8 (128.5)	
Injection Oil Reservoir L (U.S. oz)		3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 600 TRAIL (CAN./U.S.)	MX Z 600 R ADRENALINE (CAN./U.S.)	MX Z 600 R RENEGADE (CAN./U.S.)	
ENGINE TYPE		593	593	593	
Chain Drive Ratio		24/43	24/43	21/43	
Chain	Pitch	in	3/8	3/8	
	Type/Links Qty/Plates Qty		Silent 74/13	Silent 74/13	
Drive Pulley	Type of Drive Pulley		TRA	TRA	
	Ramp Identification and Roller Pin Type		299 ⑥	299 ⑥	
	Calibration Screw Position or Calibration Part ①		4	3	
	Spring Color		Green/White	Green/Violet	
	Spring Length	mm (in)	110.7 (4.35)	133.7 (5.26)	
	Clutch Engagement	± 100 RPM	4100	4100	
Driven Pulley	Type		FORMULA	HPV27	
	Spring Preload	± 0.7 kg (± 1.5 lb)	7.0 (15.4)	N.A.	
	Cam Angle	Degree	47	47	
Pulley Distance	Z	± 0.5 mm (± .020 in)	16.5 (.650)	17.5 (.689)	
Offset	X	± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	
	Y – X	MIN. – MAX. mm (in)	1.0 – 2.0 (.040 – .080)	1.0 – 2.0 (.040 – .080)	
Drive Belt Part Number (P/N)			414 860 700	417 300 127	
Drive Belt Width (new) ②		mm (in)	35.3 (1.390)	36.35 (1.431)	
Drive Belt Adjustment	Deflection	± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	
	Force ③	kg (lbf)	11.3 (25)	11.3 (25)	
Track	Width	mm (in)	381 (15.0)	381 (15.0)	
	Length	mm (in)	3074 (121)	3455 (136)	
	Profile Height	mm (in)	22.3 (.880)	31.8 (1.3)	
	Adjustment	Deflection	mm (in)	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)
Suspension Type	Track		SC-10 III	SC-10 III	
	Ski		ADSA	ADSA	
Length		mm (in)	2725 (107.3)	3005 (118.3)	
Width		mm (in)	1213 (47.7)	1172 (46.1)	
Height		mm (in)	1130 (44.5)	1136 (44.7)	
Ski Stance (carbide to carbide)		mm (in)	1080 (42.5)	1092 or 1156 (43 or 45.5)	
Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	
Mass (dry)		kg (lb)	213 (469)	221 (486)	
Ground Contact Area		cm ² (in ²)	6670.9 (1034)	7522 (1166)	
Ground Contact Pressure		kPa (PSI)	3.13 (.469)	2.88 (.418)	
Frame Material			Aluminum	Aluminum	
Bottom Pan Material			Impact copolymer	Impact copolymer	
Hood Material			RRIM Polyurethane	RRIM Polyurethane	
Battery		V/A•h	N.A.	N.A.	
Headlight		W	H4 60/55	H4 60/55	
Taillight and Stoplight		W	8/27	8/27	
Tachometer and Speedometer Bulbs		W	3	3	
Fuel and Temperature Gauge Bulbs		W	N.A.	N.A.	
Fuse	Starter Solenoid	A	N.A.	N.A.	
	Fuel Level Sensor	A	N.A.	N.A.	
Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	
Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	
Cooling System ⑤		L (U.S. oz)	3.8 (128.5)	4.0 (135.3)	
Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 600 X (CAN./U.S.)	MX Z 600 R X (CAN./U.S.)	MX Z 700 SPORT (CAN./U.S.)
ENGINE TYPE		593	593	693
Chain Drive Ratio		24/43	24/43	25/43
Chain	Pitch	in 3/8	3/8	3/8
	Type/Links Qty/Plates Qty	Silent 76/13	Silent 76/13	Silent 76/13
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA
	Ramp Identification and Roller Pin Type	299 ⑥	299 ⑥	300 ⑥
	Calibration Screw Position or Calibration Part ①	4	3	3
	Spring Color	Green/White	Green/Violet	Violet/Yellow
	Spring Length	mm (in) 110.7 (4.36)	133.7 (5.26)	157.9 (6.22)
	Clutch Engagement	± 100 RPM 4100	4100	3800
Driven Pulley	Type	FORMULA	HPV27	FORMULA
	Spring Preload	± 0.7 kg (± 1.5 lb) 7.0 (15.43)	N.A.	8 (17.6)
	Cam Angle	Degree 47	47	48/44
Pulley Distance	Z	± 0.5 mm (± .020 in) 16.5 (.650)	17.5 (.689)	16.5 (.650)
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) 1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)
Drive Belt Part Number (P/N)		414 860 700	414 860 700	417 300 127
Drive Belt Width (new) ②		mm (in) 35.3 (1.390)	35.3 (1.390)	36.4 (1.431)
Drive Belt Adjustment	Deflection	± 5 mm (± .197 in) 32 (1.260)	32 (1.260)	32 (1.260)
	Force ③	kg (lbf) 11.3 (25)	11.3 (25)	11.3 (25)
Track	Width	mm (in) 381 (15.0)	381 (15.0)	381 (15.0)
	Length	mm (in) 3074 (121)	3074 (121)	3074 (121)
	Profile Height	mm (in) 25.4 (1.0)	25.4 (1.0)	22.34 (.880)
	Adjustment	Deflection	mm (in) 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 III	SC-10 III	SC-10 III
	Ski	ADSA	ADSA	ADSA
Length		mm (in) 2801 (110)	2801 (110)	2725 (107)
Width		mm (in) 1217 (48)	1217 (48)	1329 (52)
Height		mm (in) 1085 (43)	1085 (43)	1130 (44)
Ski Stance (carbide to carbide)		mm (in) 1195 (47)	1195 (47)	1195 (47)
Toe-out and Camber		mm (in) 0 (0)	0 (0)	0 (0)
		degree 0	0	0
Mass (dry)		kg (lb) 214 (472)	214 (472)	214 (472)
Ground Contact Area		cm ² (in ²) 6836 (1060)	6836 (1060)	6836 (1060)
Ground Contact Pressure		kPa (PSI) 3.09 (.448)	3.09 (.448)	3.09 (.448)
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.	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 N.A.	N.A.	N.A.
Fuse	Starter Solenoid	A N.A.	N.A.	N.A.
	Fuel Level Sensor	A N.A.	N.A.	N.A.
Fuel Tank		L (U.S. gal) 37.3 (9.9)	37.3 (9.9)	37.3 (9.9)
Chaincase/Gearbox		mL (U.S. oz) 250 (8.5)	250 (8.5)	250 (8.5)
Cooling System ⑤		L (U.S. oz) 3.8 (128.5)	3.8 (128.5)	3.8 (128.5)
Injection Oil Reservoir		L (U.S. oz) 3.5 (118.4)	3.5 (118.4)	3.5 (118.4)

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 700 R SPORT (CAN./U.S.)	MX Z 700 TRAIL (CAN./U.S.)	MX Z 700 R ADRENALINE (CAN./U.S.)				
ENGINE TYPE		693	693	693				
	Chain Drive Ratio		25/43	25/43	25/43			
	Chain	Pitch	in	3/8	3/8	3/8		
		Type/Links Qty/Plates Qty		Silent 76/13	Silent 76/13	Silent 76/13		
	Drive Pulley	Type of Drive Pulley		TRA	TRA	TRA		
		Ramp Identification and Roller Pin Type		300 ⑥	300 ⑥	300 ⑥		
		Calibration Screw Position or Calibration Part ①		3	3	3		
		Spring Color		Green/Violet	Green/Violet	Green/Violet		
		Spring Length		mm (in)	133.7 (5.26)	133.7 (5.26)	133.7 (5.26)	
		Clutch Engagement		± 100 RPM	3800	3800	3800	
	Driven Pulley	Type		HPV27	FORMULA	HPV27		
		Spring Preload		± 0.7 kg (± 1.5 lb)	N.A.	8 (17.6)	0 (0)	
		Cam Angle		Degree	50/47	48/44	50/47	
	Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	16.5 (.650)	17.5 (.689)		
	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)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	
	Drive Belt Part Number (P/N)			417 300 127	417 300 127	417 300 127		
	Drive Belt Width (new) ②		mm (in)	36.4 (1.431)	36.4 (1.431)	36.4 (1.431)		
	Drive Belt Adjustment	Deflection		± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	32 (1.260)	
		Force ③		kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)	
	Track	Width		mm (in)	381 (15.0)	381 (15.0)	381 (15.0)	
		Length		mm (in)	3074 (121)	3074 (121)	3074 (121)	
		Profile Height		mm (in)	22.34 (.880)	22.3 (.880)	25.4 (1.0)	
		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 ④		kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track			SC-10 III	SC-10 III	SC-10 III 136		
	Ski			ADSA	ADSA	ADSA		
	Length		mm (in)	2725 (107)	2725 (107)	2725 (107)		
	Width		mm (in)	1329 (52)	1213 (48)	1329 (52)		
	Height		mm (in)	1130 (44)	1130 (44)	1130 (44)		
	Ski Stance (carbide to carbide)		mm (in)	1195 (47)	1080 (42.5)	1195 (47)		
	Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	0 (0) 0		
	Mass (dry)		kg (lb)	214 (472)	214 (472)	214 (472)		
	Ground Contact Area		cm ² (in ²)	6836 (1060)	6671 (1034)	6836 (1060)		
	Ground Contact Pressure		kPa (PSI)	3.09 (.448)	3.16 (.458)	3.09 (.448)		
	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.	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	N.A.	N.A.	N.A.			
Fuse		Starter Solenoid		A	N.A.	N.A.	N.A.	
		Fuel Level Sensor		A	N.A.	N.A.	N.A.	
	Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	37.3 (9.9)		
	Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)		
	Cooling System ⑤		L (U.S. oz)	3.8 (128.5)	3.8 (128.5)	3.8 (128.5)		
	Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	3.5 (118.4)		





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 700 X (CAN./U.S.)	MX Z 700 R X (CAN./U.S.)	MX Z 800 R ADRENALINE (CAN./U.S.)	
ENGINE TYPE		693	693	793	
Chain Drive Ratio		25/43	25/43	26/43	
Chain	Pitch in	3/8	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 76/13	Silent 76/13	Silent 76/13	
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	
	Ramp Identification and Roller Pin Type	300 ⑥	300 ⑥	301 ⑥	
	Calibration Screw Position or Calibration Part ①	3	3	3	
	Spring Color	Green/Violet	Vert/Violet	Violet/Yellow	
	Spring Length mm (in)	133.7 (5.26)	133.7 (5.26)	157.9 (6.22)	
	Clutch Engagement ± 100 RPM	3800	3800	3800	
	Driven Pulley	Type	FORMULA	HPV27	HPV27
Spring Preload ± 0.7 kg (± 1.5 lb)		8.0 (17.64)	N.A.	N.A.	
Cam Angle Degree		48/44	50/47	47/44	
Pulley Distance	Z ± 0.5 mm (± .020 in)	16.5 (.650)	16.5 (.650)	17.5 (.689)	
	X ± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	35.5 (1.398)	
Offset	Y - X				
	MIN. - MAX. mm (in)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	
Drive Belt Part Number (P/N)		417 300 127	417 300 127	417 300 127	
Drive Belt Width (new) ② mm (in)		36.3 (1.431)	36.3 (1.431)	36.4 (1.431)	
Drive Belt Adjustment	Deflection ± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	32 (1.260)	
	Force ③ kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)	
Track	Width mm (in)	381 (15.0)	381 (15.0)	381 (15.0)	
	Length mm (in)	3074 (121)	3074 (121)	3074 (121)	
	Profile Height mm (in)	25.4 (1.0)	25.4 (1.0)	25.4 (1.0)	
	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 ④ kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track	SC-10 III	SC-10 III	SC-10 III	
	Ski	ADSA	ADSA	ADSA	
Length mm (in)		2801 (110)	2801 (110)	2725 (107)	
Width mm (in)		1217 (48)	1217 (48)	1329 (52)	
Height mm (in)		1085 (43)	1085 (43)	1086 (43)	
Ski Stance (carbide to carbide) mm (in)		1195 (47)	1195 (47)	1195 (47)	
Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	0 (0) 0	
Mass (dry) kg (lb)		214 (472)	214 (472)	215 (474)	
Ground Contact Area cm ² (in ²)		6836 (1060)	6836 (1060)	6836 (1060)	
Ground Contact Pressure kPa (PSI)		3.09 (.448)	3.09 (.448)	3.09 (.448)	
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.	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		N.A.	N.A.	N.A.	
Fuse	Starter Solenoid A	N.A.	N.A.	N.A.	
	Fuel Level Sensor A	N.A.	N.A.	N.A.	
Fuel Tank L (U.S. gal)		37.3 (9.9)	37.3 (9.9)	37.3 (9.9)	
Chaincase/Gearbox mL (U.S. oz)		250 (8.5)	250 (8.5)	250 (8.5)	
Cooling System ⑤ L (U.S. oz)		3.8 (128.5)	3.8 (128.5)	3.8 (128.5)	
Injection Oil Reservoir L (U.S. oz)		3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	




Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 800 R RENEGADE (CAN./U.S.)	MX Z 800 X (CAN./U.S.)	MX Z 800 SPORT (CAN./U.S.)			
ENGINE TYPE		793	793	793			
	Chain Drive Ratio		23/43	26/43	26/43		
	Chain	Pitch	in	3/8	3/8	3/8	
		Type/Links Qty/Plates Qty		Silent 74/13	Silent 76/13	Silent 76/13	
	Drive Pulley	Type of Drive Pulley		TRA	TRA	TRA	
		Ramp Identification and Roller Pin Type		301 ⑥	301 ⑥	301 ⑥	
		Calibration Screw Position or Calibration Part ①		3	3	3	
		Spring Color		Violet/Yellow	Violet/Yellow	Violet/Yellow	
		Spring Length		mm (in)	157.9 (6.22)	157.9 (6.22)	157.9 (6.22)
		Clutch Engagement		± 100 RPM	3800	3800	3800
	Driven Pulley	Type		HPV27	HPV27	HPV27	
		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	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	17.5 (.689)	
	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)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)
	Drive Belt Part Number (P/N)			417 300 127	417 300 127	417 300 127	
	Drive Belt Width (new) ②		mm (in)	36.4 (1.431)	36.4 (1.431)	36.4 (1.431)	
	Drive Belt Adjustment	Deflection		± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	32 (1.260)
		Force ③		kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width		mm (in)	381 (15.0)	381 (15.0)	381 (15.0)
		Length		mm (in)	3455 (136)	3074 (121)	3074 (121)
		Profile Height		mm (in)	31.8 (1.3)	25.4 (1.0)	25.4 (1.0)
		Adjustment	Deflection		mm (in)	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 II 136	SC-10 III	SC-10 III		
	Ski		ADSA	ADSA	ADSA		
	Length		mm (in)	3005 (118.3)	2801 (110)	2725 (107)	
	Width		mm (in)	1172 (46.1)	1217 (48)	1218 (48)	
	Height		mm (in)	1136 (44.7)	1085 (43)	1130 (44)	
	Ski Stance (carbide to carbide)		mm (in)	1092 or 1156 (43 or 45.5)	1195 (47)	1195 (47)	
	Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	0 (0) 0	
	Mass (dry)		kg (lb)	222 (489)	214 (472)	215 (474)	
	Ground Contact Area		cm ² (in ²)	7522 (1166)	6836 (1060)	6836 (1060)	
	Ground Contact Pressure		kPa (PSI)	2.90 (.421)	3.09 (.448)	3.09 (.448)	
	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.	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	N.A.	N.A.	N.A.		
Fuse		Starter Solenoid		A	N.A.	N.A.	
		Fuel Level Sensor		A	N.A.	N.A.	
	Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	37.3 (9.9)	
	Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)	
	Cooling System ⑤		L (U.S. oz)	4.0 (135.3)	3.8 (128.5)	3.8 (128.5)	
	Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		MX Z 800 R SPORT (CAN./U.S.)	MX Z 800 TRAIL (CAN./U.S.)	MX Z 800 R X (CAN./U.S.)	
ENGINE TYPE		793	793	793	
Chain Drive Ratio		26/43	26/43	26/43	
Chain	Pitch	3/8 in	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 76/13	Silent 76/13	Silent 76/13	
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	
	Ramp Identification and Roller Pin Type	301 ⑥	301 ⑥	301 ⑥	
	Calibration Screw Position or Calibration Part ①	3	3	3	
	Spring Color	Violet/Yellow	Violet/Yellow	Violet/Yellow	
	Spring Length	157.9 (6.22) mm (in)	157.9 (6.22)	157.9 (6.22)	
	Clutch Engagement	± 100 RPM	3800	3800	
Driven Pulley	Type	HPV27	HPV27	HPV27	
	Spring Preload	± 0.7 kg (± 1.5 lb)	N.A.	N.A.	
	Cam Angle	Degree	47/44	47/44	
Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	
Offset	X	± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	
	Y - X	MIN. - MAX.	mm (in)	1.0 - 2.0 (.040 - .080)	
Drive Belt Part Number (P/N)		417 300 127	417 300 127	417 300 127	
Drive Belt Width (new) ②		mm (in)	36.4 (1.431)	36.4 (1.431)	
Drive Belt Adjustment	Deflection	± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	
	Force ③	kg (lbf)	11.3 (25)	11.3 (25)	
Track	Width	mm (in)	381 (15.0)	381 (15.0)	
	Length	mm (in)	3074 (121)	3074 (121)	
	Profile Height	mm (in)	25.4 (1.0)	25.4 (1.0)	
	Adjustment	Deflection	mm (in)	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)
Suspension Type	Track		SC-10 III	SC-10 III	
	Ski		ADSA	ADSA	
	Length	mm (in)	2725 (107)	2725 (107)	
	Width	mm (in)	1218 (48)	1213 (48)	
	Height	mm (in)	1130 (44)	1130 (44)	
	Ski Stance (carbide to carbide)	mm (in)	1195 (47)	1080 (43)	
	Toe-out and Camber	mm (in) degree	0 (0) 0	0 (0) 0	
	Mass (dry)	kg (lb)	215 (474)	215 (474)	
	Ground Contact Area	cm² (in²)	6836 (1060)	6670 (1034)	
	Ground Contact Pressure	kPa (PSI)	3.09 (.448)	3.16 (.458)	
	Frame Material		Aluminum	Aluminum	
	Bottom Pan Material		Impact copolymer	Impact copolymer	
	Hood Material		RRIM Polyurethane	RRIM Polyurethane	
	Battery	V/A•h	N.A.	N.A.	
	Headlight	W	H4 60/55	H4 60/55	
	Taillight and Stoplight	W	8/27	8/27	
	Tachometer and Speedometer Bulbs	W	3	3	
	Fuel and Temperature Gauge Bulbs	W	N.A.	N.A.	
	Fuse	Starter Solenoid	A	N.A.	N.A.
		Fuel Level Sensor	A	N.A.	N.A.
	Fuel Tank	L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	
	Chaincase/Gearbox	mL (U.S. oz)	250 (8.5)	250 (8.5)	
	Cooling System ⑤	L (U.S. oz)	3.8 (128.5)	3.8 (128.5)	
	Injection Oil Reservoir	L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		SUMMIT 600 SPORT (CAN./U.S.)	SUMMIT 600 R SPORT (CAN./U.S.)	SUMMIT 700 SPORT (CAN./U.S.)			
ENGINE TYPE		593	593	793			
	Chain Drive Ratio		19/43	19/43	21/43		
	Chain	Pitch	in	3/8	3/8	3/8	
		Type/Links Qty/Plates Qty		Silent 72/13	Silent 72/13	Silent 74/13	
	Drive Pulley	Type of Drive Pulley		TRA	TRA	TRA	
		Ramp Identification and Roller Pin Type		300 Ⓢ	299 Ⓢ	299 Ⓢ	
		Calibration Screw Position or Calibration Part ①		1	1	1	
		Spring Color		Violet/Green	Violet/Blue	Violet/Yellow	
		Spring Length		mm (in)	133.5 (5.26)	114.6 (4.51)	157.9 (6.22)
		Clutch Engagement		± 100 RPM	4000	4000	4100
	Driven Pulley	Type		FORMULA	HPV27	FORMULA	
		Spring Preload		± 0.7 kg (± 1.5 lb)	7.5 (16.54)	N.A.	7.5 (16.5)
		Cam Angle		Degree	44	47/44	47
	Pulley Distance	Z	± 0.5 mm (± .020 in)	16.5 (.650)	17.5 (.689)	16.5 (.650)	
	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)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)
	Drive Belt Part Number (P/N)			417 300 127	417 300 127	417 300 127	
	Drive Belt Width (new) ②		mm (in)	36.4 (1.431)	36.4 (1.431)	36.4 (1.431)	
	Drive Belt Adjustment	Deflection		± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	32 (1.260)
		Force ③		kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width		mm (in)	381 (15.0)	381 (15.0)	381 (15.0)
		Length		mm (in)	3648 (144)	3648 (144)	3648 (144)
		Profile Height		mm (in)	50.8 (2.0)	50.8 (2.0)	50.8 (2.0)
		Adjustment	Deflection		mm (in)	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-10 144	SC-10 144	SC-10 144		
	Ski		ADSA	ADSA	ADSA		
	Length		mm (in)	2947 (116.0)	2947 (116.0)	2947 (116.0)	
	Width		mm (in)	1139 (45)	1139 (45)	1310 (51.6)	
	Height		mm (in)	1130 (44.5)	1130 (44.5)	1130 (44.5)	
	Ski Stance (carbide to carbide)		mm (in)	1025 or 1080 (40 or 43)	1025 or 1080 (40 or 43)	1139 (44.8)	
	Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	0 (0) 0	
	Mass (dry)		kg (lb)	222 (489)	222 (489)	224 (492)	
	Ground Contact Area		cm² (in²)	8684 (1346)	8684 (1346)	8650 (1341)	
	Ground Contact Pressure		kPa (PSI)	2.51 (.364)	2.51 (.364)	2.54 (.368)	
	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.	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	N.A.	N.A.	N.A.		
Fuse		Starter Solenoid		A	N.A.	N.A.	
		Fuel Level Sensor		A	N.A.	N.A.	
		Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	37.3 (9.9)
	Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)	
	Cooling System ⑤		L (U.S. oz)	4.0 (135.3)	4.0 (135.3)	4.0 (135.3)	
	Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		SUMMIT 700 R SPORT (CAN./U.S.)	SUMMIT 800 SPORT (CAN./U.S.)	SUMMIT 800 R SPORT (CAN./U.S.)			
ENGINE TYPE		793	793	793			
Chain Drive Ratio		21/43	21/43	21/43			
Chain	Pitch	3/8 in	3/8	3/8			
	Type/Links Qty/Plates Qty	Silent 74/13	Silent 74/13	Silent 74/13			
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA			
	Ramp Identification and Roller Pin Type	300 Ⓢ	300 Ⓢ	300 Ⓢ			
	Calibration Screw Position or Calibration Part ①	1	1	1			
	Spring Color	Violet/Yellow	Blue/Orange	Blue/Orange			
	Spring Length	157.9 (6.22) mm (in)	135.5 (5.36)	135.5 (5.36)			
	Clutch Engagement	± 100 RPM	4100	4000	4000		
Driven Pulley	Type	HPV27	HPV27	HPV27			
	Spring Preload	± 0.7 kg (± 1.5 lb)	N.A.	N.A.			
	Cam Angle	Degree	44	44	44		
Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	17.5 (.689)		
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)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	
Drive Belt Part Number (P/N)		417 300 127	417 300 127	417 300 127			
Drive Belt Width (new) ②		mm (in)	36.4 (1.431)	36.4 (1.431)	36.4 (1.431)		
Drive Belt Adjustment	Deflection	± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	32 (1.260)		
	Force ③	kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)		
Track	Width	mm (in)	381 (15.0)	381 (15.0)	381 (15.0)		
		Length	mm (in)	3648 (144)	3648 (144)	3648 (144)	
	Profile Height	mm (in)	50.8 (2.0)	50.8 (2.0)	50.8 (2.0)		
		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 ④	kg (lbf)	7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track		SC-10 144	SC-10 144	SC-10 144		
	Ski		ADSA	ADSA	ADSA		
Length		mm (in)	2947 (116.0)	3134 (123)	3134 (123)		
Width		mm (in)	1310 (52)	1310 (52)	1310 (52)		
Height		mm (in)	1130 (44)	1130 (44)	1130 (44)		
Ski Stance (carbide to carbide)		mm (in)	1139 (44.8)	1025 or 1080 (40.3 or 42.5)	1025 or 1080 (40.3 or 42.5)		
Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	0 (0) 0		
Mass (dry)		kg (lb)	224 (492)	225 (494)	225 (494)		
Ground Contact Area		cm² (in²)	7507 (1164)	8684 (1346)	8684 (1346)		
Ground Contact Pressure		kPa (PSI)	2.93 (.425)	2.54 (.368)	2.54 (.368)		
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.	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	N.A.	N.A.	N.A.		
Fuse	Starter Solenoid	A	N.A.	N.A.	N.A.		
	Fuel Level Sensor	A	N.A.	N.A.	N.A.		
Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	37.3 (9.9)		
Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)		
Cooling System ⑤		L (U.S. oz)	4 (135.3)	4 (135.3)	4 (135.3)		
Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	3.5 (118.4)		

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		SUMMIT 800 X (CAN./U.S.)	SUMMIT 800 R (CAN./U.S.)	SUMMIT 800 HIGHMARK (CAN./U.S.)		
ENGINE TYPE		793	793	793		
	Chain Drive Ratio	21/43	21/43	19/43		
	Chain	Pitch	3/8 in	3/8	3/8	
		Type/Links Qty/Plates Qty	Silent 74/13	Silent 74/13	Silent 72/13	
	Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	
		Ramp Identification and Roller Pin Type	300 ⑥	300 ⑥	300 ⑥	
		Calibration Screw Position or Calibration Part ①	1	1	1	
		Spring Color	Blue/Orange	Blue/Orange	Blue/Orange	
		Spring Length	135.5 (5.36) mm (in)	135.5 (5.36)	135.5 (5.36)	
		Clutch Engagement	± 100 RPM	4000	4000	
	Driven Pulley	Type	HPV27	HPV27	HPV27	
		Spring Preload	± 0.7 kg (± 1.5 lb)	N.A.	N.A.	
		Cam Angle	Degree	44	44	
	Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	
		X	± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	
	Offset	Y – X	MIN. – MAX.	1.0 – 2.0 (.040 – .080) mm (in)	1.0 – 2.0 (.040 – .080)	
		Drive Belt Part Number (P/N)		417 300 127	417 300 127	417 300 127
	Drive Belt Width (new) ②		mm (in)	36.4 (1.431)	36.4 (1.431)	
	Drive Belt Adjustment	Deflection	± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	
		Force ③	kg (lbf)	11.3 (25)	11.3 (25)	
	Track	Width	mm (in)	381 (15.0)	381 (15.0)	
			Length	mm (in)	3648 (144)	3648 (144)
		Profile Height	mm (in)	50.8 (2.0)	50.8 (2.0)	50.8 (2.0)
			Adjustment	Deflection	mm (in)	30 – 35 (1-3/16 – 1-3/8)
Force ④				kg (lbf)	7.3 (16)	7.3 (16)
Suspension Type	Track		SC-10 144	SC-10 151		
	Ski		ADSA	ADSA		
	Length	mm (in)	3134 (123)	3216 (127)		
	Width	mm (in)	1310 (52)	1139 (45)		
	Height	mm (in)	1130 (44)	1130 (44)		
	Ski Stance (carbide to carbide)	mm (in)	1025 or 1080 (40.3 or 42.5)	1025 or 1080 (40.3 or 42.5)		
	Toe-out and Camber	mm (in) degree	0 (0) 0	0 (0) 0		
	Mass (dry)	kg (lb)	225 (494)	227 (499)		
	Ground Contact Area	cm ² (in ²)	8684 (1346)	9141 (1417)		
	Ground Contact Pressure	kPa (PSI)	2.54 (.368)	2.44 (.354)		
	Frame Material		Aluminum	Aluminum		
	Bottom Pan Material		Impact copolymer	Impact copolymer		
	Hood Material		RRIM Polyurethane	RRIM Polyurethane		
	Battery	V/A•h	N.A.	N.A.		
	Headlight	W	H4 60/55	H4 60/55		
	Taillight and Stoplight	W	8/27	8/27		
	Tachometer and Speedometer Bulbs	W	3	3		
	Fuel and Temperature Gauge Bulbs	W	N.A.	N.A.		
	Fuse	Starter Solenoid	A	N.A.	N.A.	
		Fuel Level Sensor	A	N.A.	N.A.	
	Fuel Tank	L (U.S. gal)	37.3 (9.9)	37.3 (9.9)		
	Chaincase/Gearbox	mL (U.S. oz)	250 (8.5)	250 (8.5)		
	Cooling System ⑤	L (U.S. oz)	4 (135.3)	4.3 (143.7)		
	Injection Oil Reservoir	L (U.S. oz)	3.5 (118.4)	3.5 (118.4)		





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		SUMMIT 800 R HIGHMARK (CAN./U.S.)	SUMMIT 800 HIGHMARK X (CAN./U.S.)	SUMMIT 800 R HIGHMARK X (CAN./U.S.)	
ENGINE TYPE		793	793	793	
Chain Drive Ratio		19/43	19/43	19/43	
Chain	Pitch	3/8 in	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	300 Ⓢ	300 Ⓢ	300 Ⓢ	
	Calibration Screw Position or Calibration Part ①	1	1	1	
	Spring Color	Blue/Orange	Blue/Orange	Blue/Orange	
	Spring Length	135.5 (5.36) mm (in)	135.5 (5.36)	135.5 (5.36)	
	Clutch Engagement	± 100 RPM	4000	4000	
Driven Pulley	Type	HPV27	HPV27	HPV27	
	Spring Preload	± 0.7 kg (± 1.5 lb)	N.A.	N.A.	
	Cam Angle	Degree	44	44	
Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	
Offset	X	± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	
	Y - X	MIN. - MAX.	mm (in)	1.0 - 2.0 (.040 - .080)	
Drive Belt Part Number (P/N)		417 300 127	417 300 127	417 300 127	
Drive Belt Width (new) ②		mm (in)	36.4 (1.431)	36.4 (1.431)	
Drive Belt Adjustment	Deflection	± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	
	Force ③	kg (lbf)	11.3 (25)	11.3 (25)	
Track	Width	mm (in)	381 (15.0)	381 (15.0)	
	Length	mm (in)	3648 (144)	3836 (151)	
	Profile Height	mm (in)	50.8 (2.0)	50.8 (2.0)	
	Adjustment	Deflection	mm (in)	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)
Suspension Type	Track		SC-10 151	SC-10 151	
	Ski		ADSA	ADSA	
Length		mm (in)	3216 (127)	3216 (127)	
Width		mm (in)	1139 (49)	1139 (49)	
Height		mm (in)	1130 (44)	1130 (44)	
Ski Stance (carbide to carbide)		mm (in)	1025 or 1080 (40.3 or 42.5)	1025 or 1080 (40.3 or 42.5)	
Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	
Mass (dry)		kg (lb)	227 (499)	227 (499)	
Ground Contact Area		cm ² (in ²)	9141 (1417)	9141 (1417)	
Ground Contact Pressure		kPa (PSI)	2.49 (.354)	2.49 (.354)	
Frame Material			Aluminium	Aluminium	
Bottom Pan Material			Impact copolymer	Impact copolymer	
Hood Material			RRIM Polyurethane	RRIM Polyurethane	
Battery		V/A•h	N.A.	N.A.	
Headlight		W	H4 60/55	H4 60/55	
Taillight and Stoplight		W	8/27	8/27	
Tachometer and Speedometer Bulbs		W	3	3	
Fuel and Temperature Gauge Bulbs		W	N.A.	N.A.	
Fuse	Starter Solenoid	A	N.A.	N.A.	
	Fuel Level Sensor	A	N.A.	N.A.	
Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	
Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	
Cooling System ⑤		L (U.S. oz)	4.3 (143.7)	4.3 (143.7)	
Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		LEGEND 500 SPORT (CAN./U.S.)	LEGEND 600 GS (CAN./U.S.)	LEGEND 600 SE (CAN./U.S.)			
ENGINE TYPE		493	593	593			
	Chain Drive Ratio		22/43	24/43	24/43		
	Chain	Pitch	3/8 in	3/8	3/8		
		Type/Links Qty/Plates Qty		Silent 74/11	Silent 74/13	Silent 74/13	
	Drive Pulley	Type of Drive Pulley		TRA	TRA	TRA	
		Ramp Identification and Roller Pin Type		283 ⑥	299 ⑥	299 ⑥	
		Calibration Screw Position or Calibration Part ①		4	4	4	
		Spring Color		Violet/Pink	Violet	Violet	
		Spring Length		101.80 (4.008) mm (in)	106.98 (4.212)	106.98 (4.212)	
		Clutch Engagement		± 100 RPM	3500	3600	3600
	Driven Pulley	Type		HPV27	HPV27	HPV27	
		Spring Preload		± 0.7 kg (± 1.5 lb)	N.A.	N.A.	
		Cam Angle		Degree	44	47	47
	Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	17.5 (.689)	
	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)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)
	Drive Belt Part Number (P/N)			414 860 700	414 860 700	414 860 700	
	Drive Belt Width (new) ②		mm (in)	35.3 (1.390)	35.3 (1.390)	35.3 (1.390)	
	Drive Belt Adjustment	Deflection		± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	32 (1.260)
		Force ③		kg (lbf)	11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width		mm (in)	381 (15.0)	381 (15.0)	381 (15.0)
		Length		mm (in)	3074 (121)	3074 (121)	3074 (121)
		Profile Height		mm (in)	22.3 (.880)	22.3 (.880)	22.3 (.880)
		Adjustment	Deflection		mm (in)	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 III	SC-10 III	SC-10 III	
	Ski			ADSA	ADSA	ADSA	
	Length		mm (in)	3005 (118.307)	3005 (118.307)	3005 (118.307)	
	Width		mm (in)	1172 (46.142)	1172 (46.142)	1172 (46.142)	
	Height		mm (in)	1185 (46.654)	1185 (46.654)	1185 (46.654)	
	Ski Stance (carbide to carbide)		mm (in)	1080 (42.5)	1195 (47)	1195 (47)	
	Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	0 (0) 0	
	Mass (dry)		kg (lb)	222 (489)	223 (490)	223 (490)	
	Ground Contact Area		cm ² (in ²)	6670.9 (1034)	6758.4 (1047.554)	6758.4 (1047.554)	
	Ground Contact Pressure		kPa (PSI)	3.26 (.473)	3.24 (.470)	3.24 (.470)	
	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	12/18	12/18	12/18
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.	3	3		
Fuse		Starter Solenoid		A	30	30	30
		Fuel Level Sensor		A	0.25	0.25	0.25
	Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	37.3 (9.9)	
	Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	250 (8.5)	
	Cooling System ⑤		L (U.S. oz)	3.8 (128.5)	3.8 (128.5)	3.8 (128.5)	
	Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		LEGEND 600 SPORT (CAN./U.S.)	LEGEND 700 GS (CAN./U.S.)	LEGEND 700 SPORT (CAN./U.S.)	
ENGINE TYPE		593	693	693	
Chain Drive Ratio		24/43	25/43	25/43	
Chain	Pitch	3/8 in	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 74/13	Silent 76/13	Silent 76/13	
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	
	Ramp Identification and Roller Pin Type	299 ⑥	299 ⑥	299 ⑥	
	Calibration Screw Position or Calibration Part ①	4	3	3	
	Spring Color	Violet	Blue/Yellow	Blue/Yellow	
	Spring Length	106.98 (4.212) mm (in)	115.10 (4.531)	115.10 (4.531)	
	Clutch Engagement	± 100 RPM	3600	3600	
Driven Pulley	Type	HPV27	HPV27	HPV27	
	Spring Preload	± 0.7 kg (± 1.5 lb)	N.A.	N.A.	
	Cam Angle	Degree	47	47	
Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	
Offset	X	± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)	
	Y - X	MIN. - MAX.	mm (in)	1.0 - 2.0 (.040 - .080)	
Drive Belt Part Number (P/N)		414 860 700	417 300 127	417 300 127	
Drive Belt Width (new) ②		mm (in)	35.3 (1.390)	36.3 (1.431)	
Drive Belt Adjustment	Deflection	± 5 mm (± .197 in)	32 (1.260)	32 (1.260)	
	Force ③	kg (lbf)	11.3 (25)	11.3 (25)	
Track	Width	mm (in)	381 (15.0)	381 (15.0)	
	Length	mm (in)	3074 (121)	3074 (121)	
	Profile Height	mm (in)	22.34 (.880)	22.34 (.880)	
	Adjustment	Deflection	mm (in)	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)
Suspension Type	Track		SC-10 III	SC-10 III	
	Ski		ADSA	ADSA	
Length		mm (in)	3005 (118.307)	3005 (118.307)	
Width		mm (in)	1172 (46.142)	1172 (46.142)	
Height		mm (in)	1185 (46.654)	1185 (46.654)	
Ski Stance (carbide to carbide)		mm (in)	1195 (47)	1080 (42.520)	
Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	
Mass (dry)		kg (lb)	223 (490)	224 (493)	
Ground Contact Area		cm ² (in ²)	6758.4 (1047.554)	6670.9 (1033.992)	
Ground Contact Pressure		kPa (PSI)	3.24 (.470)	3.29 (.477)	
Frame Material			Aluminum	Aluminum	
Bottom Pan Material			Impact copolymer	Impact copolymer	
Hood Material			RRIM Polyurethane	RRIM Polyurethane	
Battery		V/A•h	12/18	12/18	
Headlight		W	H4 60/55	H4 60/55	
Taillight and Stoplight		W	8/27	8/27	
Tachometer and Speedometer Bulbs		W	3	3	
Fuel and Temperature Gauge Bulbs		W	3	N.A.	
Fuse	Starter Solenoid	A	30	30	
	Fuel Level Sensor	A	0.25	0.25	
Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	
Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	
Cooling System ⑤		L (U.S. oz)	3.8 (128.5)	3.8 (128.5)	
Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		LEGEND 800 SE (CAN./U.S.)	GRAND TOURING 500 SPORT (CAN./U.S.)	GRAND TOURING 600 SE (CAN./U.S.)		
ENGINE TYPE		793	493	593		
	Chain Drive Ratio		26/43	21/43	22/43	
	Chain	Pitch in	3/8	3/8	3/8	
		Type/Links Qty/Plates Qty		Silent 76/13	Silent 74/11	Silent 74/13
	Drive Pulley	Type of Drive Pulley		TRA	TRA	TRA
		Ramp Identification and Roller Pin Type		301 ⑥	283 ⑥	299 ⑥
		Calibration Screw Position or Calibration Part ①		3	4	3
		Spring Color		Violet/Yellow	Violet/Pink	Violet/Violet
		Spring Length mm (in)		106.98 (4.212)	101.80 (4.008)	106.98 (4.212)
		Clutch Engagement ± 100 RPM		3800	3500	3600
	Driven Pulley	Type		HPV27	HPV27	HPV27
		Spring Preload ± 0.7 kg (± 1.5 lb)		N.A.	N.A.	N.A.
		Cam Angle Degree		47	44	47
	Pulley Distance	Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	17.5 (.689)
	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)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)
	Drive Belt Part Number (P/N)		417 300 127	414 860 700	414 860 700	
	Drive Belt Width (new) ② mm (in)		35.3 (1.390)	35.3 (1.390)	35.3 (1.390)	
	Drive Belt Adjustment	Deflection ± 5 mm (± .197 in)		32 (1.260)	32 (1.260)	32 (1.260)
		Force ③ kg (lbf)		11.3 (25)	11.3 (25)	11.3 (25)
	Track	Width mm (in)		381 (15.0)	381 (15.0)	381 (15.0)
		Length mm (in)		3074 (121)	3455 (136.024)	3455 (136.024)
		Profile Height mm (in)		25.40 (1.000)	25.40 (1.000)	25.40 (1.000)
		Adjustment	Deflection mm (in)		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 II	SC-10 II LT	SC-10 II LT	
	Ski		ADSA	ADSA	ADSA	
	Length mm (in)		3005 (118.307)	3034 (119.449)	3034 (119.449)	
	Width mm (in)		1172 (46.142)	1213 (47.756)	1213 (47.756)	
	Height mm (in)		1185 (46.654)	1250 (49.213)	1250 (49.213)	
	Ski Stance (carbide to carbide) mm (in)		1195 (47)	1080 (42.520)	1080 (42.520)	
	Toe-out and Camber mm (in) degree		0 (0) 0	0 (0) 0	0 (0) 0	
	Mass (dry) kg (lb)		225 (495)	248 (546)	249 (547)	
	Ground Contact Area cm ² (in ²)		6758.4 (1047.554)	7356.7 (1140.291)	7356.7 (1140.291)	
	Ground Contact Pressure kPa (PSI)		3.27 (.474)	3.31 (.480)	3.32 (.481)	
	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		12/18	12/18	12/18
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	N.A.	3		
Fuse		Starter Solenoid A		30	30	30
		Fuel Level Sensor A		0.25	0.25	0.25
		Fuel Tank L (U.S. gal)		37.3 (9.9)	37.3 (9.9)	37.3 (9.9)
	Chaincase/Gearbox mL (U.S. oz)		250 (8.5)	250 (8.5)	250 (8.5)	
	Cooling System ⑤ L (U.S. oz)		3.8 (128.5)	4.0 (135.3)	4.0 (135.3)	
	Injection Oil Reservoir L (U.S. oz)		3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	





Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		GRAND TOURING 600 GS (CAN./U.S.)	GRAND TOURING 600 SPORT (CAN./U.S.)	GRAND TOURING 700 GS (CAN./U.S.)	
ENGINE TYPE		593	593	693	
Chain Drive Ratio		23/43	23/43	23/43	
Chain	Pitch	in 3/8	3/8	3/8	
	Type/Links Qty/Plates Qty	Silent 74/13	Silent 74/13	Silent 74/13	
Drive Pulley	Type of Drive Pulley	TRA	TRA	TRA	
	Ramp Identification and Roller Pin Type	299 ⑥	299 ⑥	299 ⑥	
	Calibration Screw Position or Calibration Part ①	3	3	3	
	Spring Color	Violet/Violet	Violet/Violet	Blue/Yellow	
	Spring Length	mm (in) 106.98 (4.212)	106.98 (4.212)	115.10 (4.531)	
	Clutch Engagement	± 100 RPM 3600	3600	3500	
Driven Pulley	Type	HPV27	HPV27	HPV27	
	Spring Preload	± 0.7 kg (± 1.5 lb) N.A.	N.A.	N.A.	
	Cam Angle	Degree 47	47	47	
Pulley Distance	Z	± 0.5 mm (± .020 in) 17.5 (.689)	17.5 (.689)	17.5 (.689)	
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) 1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	1.0 - 2.0 (.040 - .080)	
Drive Belt Part Number (P/N)		414 860 700	414 860 700	417 300 127	
Drive Belt Width (new) ②		mm (in) 35.3 (1.390)	35.3 (1.390)	35.3 (1.390)	
Drive Belt Adjustment	Deflection	± 5 mm (± .197 in) 32 (1.260)	32 (1.260)	32 (1.260)	
	Force ③	kg (lbf) 11.3 (25)	11.3 (25)	11.3 (25)	
Track	Width	mm (in) 381 (15.0)	381 (15.0)	381 (15.0)	
	Length	mm (in) 3455 (136.024)	3455 (136.024)	3455 (136.024)	
	Profile Height	mm (in) 25.40 (1.000)	25.40 (1.000)	22.30 (.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 ④	kg (lbf) 7.3 (16)	7.3 (16)	7.3 (16)
Suspension Type	Track	SC-10 II LT	SC-10 II LT	SC-10 II LT	
	Ski	ADSA	ADSA	ADSA	
Length		mm (in) 3034 (119.449)	3034 (119.449)	3034 (119.449)	
Width		mm (in) 1213 (47.756)	1213 (47.756)	1213 (47.756)	
Height		mm (in) 1409 (55.472)	1409 (55.472)	1409 (55.472)	
Ski Stance (carbide to carbide)		mm (in) 1080 (42.520)	1080 (42.520)	1080 (42.520)	
Toe-out and Camber		mm (in) degree 0 (0) 0	0 (0) 0	0 (0) 0	
Mass (dry)		kg (lb) 249 (547)	249 (547)	250 (550)	
Ground Contact Area		cm ² (in ²) 7356.7 (1140.291)	7356.7 (1140.291)	7356.7 (1140.291)	
Ground Contact Pressure		kPa (PSI) 3.32 (.481)	3.32 (.481)	3.33 (.483)	
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 12/18	12/18	12/18	
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 30	30	30	
	Fuel Level Sensor	A 0.25	0.25	0.25	
Fuel Tank		L (U.S. gal) 37.3 (9.9)	37.3 (9.9)	37.3 (9.9)	
Chaincase/Gearbox		mL (U.S. oz) 250 (8.5)	250 (8.5)	250 (8.5)	
Cooling System ⑤		L (U.S. oz) 4.0 (135.3)	4.0 (135.3)	4.0 (135.3)	
Injection Oil Reservoir		L (U.S. oz) 3.5 (118.4)	3.5 (118.4)	3.5 (118.4)	

Section 10 TECHNICAL DATA

Subsection 03 (VEHICLES)

VEHICLE MODEL		GRAND TOURING 700 SPORT (CAN./U.S.)	GRAND TOURING 800 SE (CAN./U.S.)			
ENGINE TYPE		593	793			
	Chain Drive Ratio		23/43	24/43		
	Chain	Pitch	in	3/8	3/8	
		Type/Links Qty/Plates Qty		Silent 74/13	Silent 74/13	
	Drive Pulley	Type of Drive Pulley		TRA	TRAC	
		Ramp Identification and Roller Pin Type		299 ⑥	301 ⑥	
		Calibration Screw Position or Calibration Part ①		3	3	
		Spring Color		Blue/Yellow	Violet/Yellow	
		Spring Length	mm (in)	115.10 (4.531)	157.90 (6.217)	
	Driven Pulley	Clutch Engagement		± 100 RPM	3500	3800
		Type		HPV27	HPV27	
		Spring Preload	± 0.7 kg (± 1.5 lb)	N.A.	N.A.	
	Pulley Distance	Cam Angle		Degree	47	47/44
		Z	± 0.5 mm (± .020 in)	17.5 (.689)	17.5 (.689)	
	Offset	X		± 0.5 mm (± .020 in)	35.5 (1.398)	35.5 (1.398)
		Y – X	MIN. – MAX.	mm (in)	1.0 – 2.0 (.040 – .080)	1.0 – 2.0 (.040 – .080)
	Drive Belt Part Number (P/N)		417 300 127	417 300 127		
	Drive Belt Width (new) ②		mm (in)	35.3 (1.390)	35.3 (1.390)	
	Drive Belt Adjustment	Deflection		± 5 mm (± .197 in)	32 (1.260)	32 (1.260)
		Force ③		kg (lbf)	11.3 (25)	11.3 (25)
	Track	Width		mm (in)	381 (15.0)	381 (15.0)
Length		mm (in)	3455 (136.024)	3455 (136.024)		
Profile Height		mm (in)	22.30 (.878)	31.80 (1.252)		
Adjustment		Deflection		mm (in)	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)
Suspension Type	Track		SC-10 II LT	SC-10 II LT		
	Ski		ADSA	ADSA		
	Length		mm (in)	3034 (119.449)	3034 (119.449)	
	Width		mm (in)	1213 (47.756)	1213 (47.756)	
	Height		mm (in)	1409 (55.472)	1250 (49.213)	
	Ski Stance (carbide to carbide)		mm (in)	1080 (42.520)	1080 (42.520)	
	Toe-out and Camber		mm (in) degree	0 (0) 0	0 (0) 0	
	Mass (dry)		kg (lb)	250 (550)	251 (552)	
	Ground Contact Area		cm ² (in ²)	7356.7 (1140.291)	7356.7 (1140.291)	
	Ground Contact Pressure		kPa (PSI)	3.33 (.483)	3.35 (.486)	
	Frame Material		Aluminum	Aluminum		
	Bottom Pan Material		Impact Copolymer	Impact Copolymer		
	Hood Material		RRIM Polyurethane	RRIM Polyurethane		
		Battery		V/A•h	12/18	12/18
Headlight		W	H4 60/55	H4 60/55		
Taillight and Stoplight		W	8/27	8/27		
Tachometer and Speedometer Bulbs		W	3	3		
Fuel and Temperature Gauge Bulbs		W	3	3		
Fuse		Starter Solenoid		A	30	30
		Fuel Level Sensor		A	0.25	0.25
	Fuel Tank		L (U.S. gal)	37.3 (9.9)	37.3 (9.9)	
	Chaincase/Gearbox		mL (U.S. oz)	250 (8.5)	250 (8.5)	
	Cooling System ⑤		L (U.S. oz)	4.0 (135.3)	4.0 (135.3)	
	Injection Oil Reservoir		L (U.S. oz)	3.5 (118.4)	3.5 (118.4)	

ENGINE LEGEND

BTDC: Before Top Dead Center

CDI: Capacitor Discharge Ignition

K: Kilo (x 1000)

ST: Semi-Trapezoidal

MAG: Magneto Side

N.A.: Not Applicable

PTO: Power Take Off Side

- 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 Press fit type, not replaceable.
- ⑥ Needle with one groove, not adjustable.
- ⑦ Drive pulley retaining screw: torque to 80 to 100 N•m (59 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. Retorque screw to 90 to 100 N•m (66 to 74 lbf•ft).
- ⑧ **CAUTION:** Do not attempt to adjust gap on spark plug BR 9 ECS.

VEHICLE LEGEND

ADSA: Advanced Direct Shock Action

RRIM: Reinforced Reaction Injection Molding

TRA: Total Range Adjustable

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 new drive belt.
- ③ Force applied midway between pulleys to obtain specified tension deflection.
- ④ Force or downward pull applied to track to obtain specified tension deflection.
- ⑤ Coolant mixture: 60% antifreeze/40% water.
- ⑥ Lever with roller pin (P/N 417 004 308) (solid).
- ⑦ Lever with roller pin (P/N 417 004 309) (hollow).
- ⑧ Lever with roller pin (P/N 417 222 478) (solid).