

TIGHTENING TORQUES

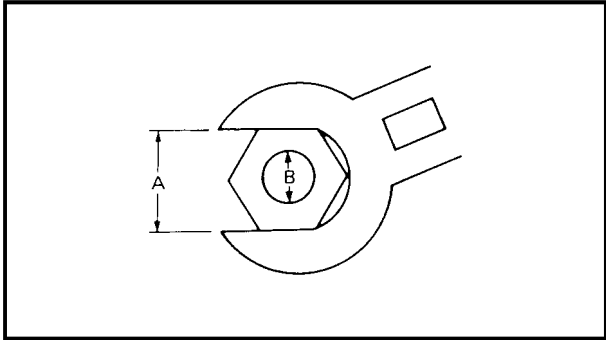
SPECIFIED TORQUES

Part to be tightened		Thread size	Tightening torques		
			Nm	m•kgf	ft•lb
POWER UNIT					
Manual injection pump cable		M5	4	0.4	2.9
Fuel pump		M5	3	0.3	2.2
Intake silencer		M6	3	0.3	2.2
Carburetor drain plug		—	5	0.5	3.6
Pilot jet plug		—	3	0.3	2.2
Oil pump		M6	7	0.7	5.1
Recoil starter drive plate		M6	6	0.6	4.3
Flywheel magnet assembly		M20	190	19	137
Negative battery lead		M8	7	0.7	5.1
Power unit mount		M8	21	2.1	15
Ignition coil		M6	8	0.8	5.8
Starter motor lead		M6	9	0.9	6.5
Relay assembly lead		M6	4	0.4	2.9
Starter motor		M8	30	3.0	22
Intake manifold	1st	M6	4	0.4	2.9
	2nd		8	0.8	5.8
Reed valve		M5	3	0.3	2.2
Reed valve stopper		M3	1	0.1	0.7
Spark plug		M14	25	2.5	18
Thermostat cover	1st	M6	4	0.4	2.9
	2nd		8	0.8	5.8
Cylinder head cover	1st	M6	4	0.4	2.9
	2nd		8	0.8	5.8
Cylinder head	1st	M8	15	1.5	11
	2nd		30	3.0	22
Cooling water pressure control valve cover	1st	M6	4	0.4	2.9
	2nd		8	0.8	5.8
Exhaust port outer cover	1st	M6	4	0.4	2.9
	2nd		8	0.8	5.8
Crankcase	1st	M8	10	1.0	7.2
	2nd		18	1.8	13
	1st	M10	20	2.0	14
	2nd		40	4.0	29
Connecting rod	1st	M8	12	1.2	8.7
	2nd		37	3.7	27
	3rd		0	0	0
	4th		12	1.2	8.7
	5th		37	3.7	27



Part to be tightened	Thread size	Tightening torques		
		Nm	m•kgf	ft•lb
LOWER UNIT				
Propeller	M18	55	5.5	40
Trim tab	M10	43	4.3	31
Lower unit	M10	40	4.0	29
Ring nut	—	145	14.5	105
Pinion nut	M22	95	9.5	68
Gear oil drain screw	—	7	0.7	5.1
Gear oil level check screw	—	7	0.7	5.1
BRACKET UNIT				
Steering friction rod	—	18	1.8	13
Steering handle assembly	—	38	3.8	27
Throttle cable	—	38	3.8	27
Shift arm	—	36	3.6	25
Flushing hose	M5	5	0.5	3.6
Shift rod detent mechanism screw	—	24	2.4	17
Upper mount	M12	53	5.3	38
Lower mount	M14	73	7.3	53
Exhaust manifold assembly	M8	21	2.1	15
Muffler	M8	18	1.8	13
Exhaust manifold	M8	18	1.8	13
Lower exhaust manifold guide	M8	18	1.8	13
Clamp bracket	M22	15	1.5	11
Clamp bracket (E115AMH, E115AWH)	M10	37	3.7	27
Trim sensor stopper	M6	2	0.2	1.4
Trim stopper	—	37	3.7	27
POWER TRIM AND TILT UNIT				
Power trim and tilt reservoir cap	—	8	0.8	5.8
Power trim and tilt reservoir	1/4"	5	0.5	3.6
Power trim and tilt motor	1/4"	5	0.5	3.6
Manual valve	—	4	0.4	2.9
Tilt ram end screw	—	130	13	94
Gear pump unit	5/16"	9	0.9	6.5
Gear pump	—	6	0.6	4.3
Trim ram end screw	—	80	8.0	52

Nut (A)	Bolt (B)	General torque specifications		
		Nm	m•kgf	ft•lb
8 mm	M5	5	0.5	3.6
10 mm	M6	8	0.8	5.8
12 mm	M8	18	1.8	13
14 mm	M10	36	3.6	25
17 mm	M12	43	4.3	31



GENERAL TORQUES

This chart specifies tightening torques for standard fasteners with a standard ISO thread pitch. Tightening torque specifications for special components or assemblies are provided in applicable sections of this manual. To avoid warpage, tighten multi-fastener assemblies in a crisscross fashion and progressive stages until the specified tightening torque is reached. Unless otherwise specified, tightening torque specifications require clean, dry threads. Components should be at room temperature.