

LAMPIRAN 1








ALAT SPESIAL/SPECIAL TOOLS

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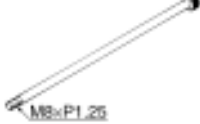



Alat-alat khusus dibawah ini, diperlukan untuk melakukan penyetelan, pembongkaran, dan pemasangan yang sempurna. selalu pergunakan alat yang tepat untuk mencegah terjadinya kerusakan yang disebabkan kesalahan dalam penggunaan alat. Nomor part, nama Special tools, atau keduanya setiap negara berbeda. Jika akan melakukan pemesanan, lihat list dibawah agar tidak terjadi kesalahan order.

CATATAN:

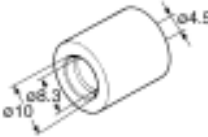

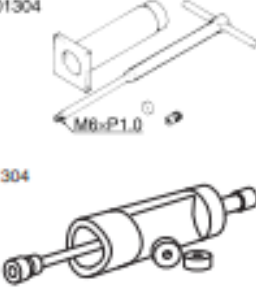
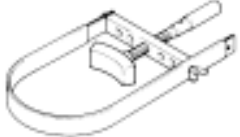


- Untuk U.S.A. dan Canada, pergunakan nomor part dengan awalan "YM-", "YU-", atau "ACC-".
- Untuk negara lain, pergunakan awalan dengan nomor "90890-".

Nama Tool/No Tool.	Ilustrasi	halaman untuk referensi
Pocket tester 90890-03112 Analog pocket tester YU-03112-C		1-6, 5-35, 8-59, 8-60, 8-61, 8-64, 8-65, 8-66, 8-67, 8-68, 8-69, 8-70, 8-71, 8-72, 8-73
Tappet adjusting tool 90890-01311 Six piece tappet set YM-A5970	90890-01311  3mm YM-A5970 	3-4
FI diagnostic tool 90890-03182		3-5, 8-35
Timing light 90890-03141 Inductive clamp timing light YU-03141		3-8
Compression gauge 90890-03081 Engine compression tester YU-33223		3-8
Steering nut wrench 90890-01403 Spanner wrench YU-33975	 R20	3-21, 4-46

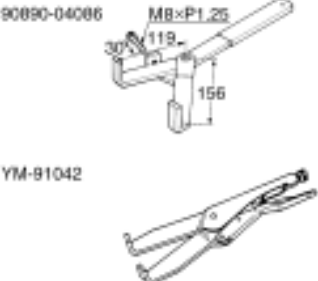

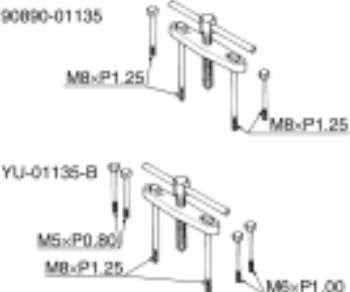
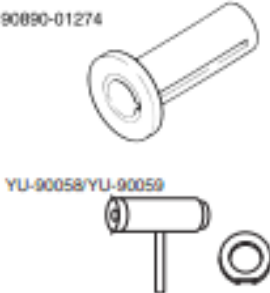

ALAT SPESIAL/SPECIAL TOOLS

Nama tool/Nomor Tool	Ilustrasi	Halaman untuk referensi
T-handle 90890-01326 T-handle 3/8" drive 60 cm long YM-01326		4-38, 4-40
Fork seal driver weight 90890-01367 Replacement hammer YM-A9409-7	 <p>90890-01367</p> <p>YM-A9409-7/YM-A5142-4</p>	4-40
Fork seal driver attachment (ø33) 90890-01368 Replacement 33 mm YM-A9409-4		4-40
Fork seal driver 90890-01442 Adjustable fork seal driver (36–46 mm) YM-01442		4-40
Slide hammer bolt 90890-01085 Slide hammer bolt 8 mm YU-01083-2		5-14
Valve spring compressor 90890-04019 YM-04019		5-17, 5-22
Valve spring compressor attachment 90890-04108 Valve spring compressor adapter 22 mm YM-04108		5-17, 5-22
Valve guide remover (ø4.5) 90890-04116 Valve guide remover (4.5 mm) YM-04116		5-18



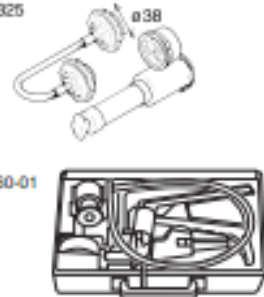
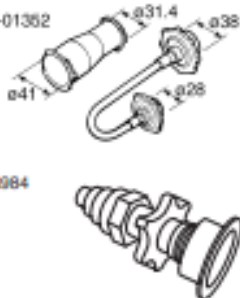

ALAT SPESIAL/SPECIAL TOOLS

Nama tool/Tool No.	Ilustrasi	halaman untuk referensi
Valve guide installer (ø4.5) 90890-04117 Valve guide installer (4.5 mm) YM-04117		5-18
Valve guide reamer (ø4.5) 90890-04118 Valve guide reamer (4.5 mm) YM-04118		5-18
Piston pin puller set 90890-01304 Piston pin puller YU-01304		5-24
Sheave holder 90890-01701 Primary clutch holder YS-01880-A		5-30, 5-31, 5-32
Flywheel puller 90890-01362 Heavy duty puller YU-33270-B		5-30
Yamaha bond No. 1215 90890-85505 (Three Bond No.1215®)		5-32, 5-63







ALAT SPESIAL/SPECIAL TOOLS

Nama tool/Nomor tool	Ilustrasi	Halaman untuk referensi
Universal clutch holder 90890-04086 YM-91042	 <p>90890-04086 M8xP1,25 30° 119 156</p> <p>YM-91042</p>	5-41, 5-43
Thickness gauge 90890-03180 Feeler gauge set YU-26900-9		5-41
Crankcase separating tool 90890-01135 Crankcase separator YU-01135-B	 <p>90890-01135 M8xP1,25 40 M8xP1,25</p> <p>YU-01135-B 40 M5xP0,80 M8xP1,25 M5xP1,00</p>	5-65
Crankshaft installer pot 90890-01274 Installing pot YU-90058	 <p>90890-01274</p> <p>YU-90058/YU-90059</p>	5-66
Crankshaft installer bolt 90890-01275 Bolt YU-90060	 <p>M14xP1,5</p>	5-66

ALAT SPESIAL/SPECIAL TOOLS

Nama tool/Nomor tool	Ilustrasi	Halaman untuk referensi
Adapter (M12) 90890-01278 Adapter #3 YU-90063		5-66
Spacer (crankshaft installer) 90890-04081 Pot spacer YM-91044		5-66
Radiator cap tester 90890-01325 Radiator pressure tester YU-24460-01		6-3
Radiator cap tester adapter 90890-01352 Radiator pressure tester adapter YU-33984		6-3
Mechanical seal installer 90890-04145		6-8

ALAT SPESIAL/SPECIAL TOOLS

Nama tool/Nomor tool.	Ilustrasi	Halaman untuk referensi
Middle driven shaft bearing driver 90890-04058 Bearing driver 40 mm YM-04058		6-8
Pressure gauge 90890-03153 YU-03153		7-6
Fuel pressure adapter 90890-03186		7-6
Vacuum/pressure pump gauge set 90890-06756 Mityvac brake bleeding tool YS-42423		7-12
Ignition checker 90890-06754 Opama pet-4000 spark checker YM-34487		8-68
Digital circuit tester 90890-03174 Model 88 Multimeter with tachometer YU-A1927		8-72

LAMPIRAN 2

SPESIFIKASI SECARA UMUM

EAS20280

SPESIFIKASI SECARA UMUM

Model

Model	3C11
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Dimensi

Panjang	2000 mm (78.7 in)
Lebar	705 mm (27.8 in)
Tinggi	1035 mm (40.7 in)
Tinggi tempat duduk	790 mm (31.1 in)
Jarak sumbu roda	1282 mm (50.5 in)
Jarak ketanah	167 mm (6.57 in)
Kemampuan berbelok	2080 mm (81.9 in)

Berat

Dengan oli dan bahan bakar	125.0 kg (276 lb)
Beban maksimum	205.0 kg (452 lb)

Lampiran 3

TORSI PENGENCANGAN

EAG00009

SPESIFIKASI PENGENCANGAN SECARA UMUM

Tabel dibawah ini menunjukkan pengencangan standart sesuai ulir standart ISO. Untuk komponen dan rakitan khusus dapat menggunakan ketentuan-ketentuan yang ada didalam buku petunjuk ini Untuk menghindari defleksi dari komponen yang dikencangkan dengan banyak baut, kencangkan dengan pola silang, secara bertahap hingga batas torsi yang ditentukan.

Semua pengencangan dikencangkan dengan ulir kering (tanpa diberi oli) kondisi bersih dan dalam suhu ruang.











A: Ukuran baut/mur
B: Diameter luar ulir

A (mur)	B (baut)	Torsi pengencangan secara umum		
		Nm	m-kg	ft-lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13.0	94

TORSI PENGENCANGAN

TORSI PENGENCANGAN MESIN

Bagian	ukuran ulir	Jml	Torsi pengencangan	Keterangan
Baut Cylinder head	M8	4	22 Nm (2.2 m-kg, 16 ft-lb)	
Baut Cylinder head	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Busi/Spark plug	M10	1	13 Nm (1.3 m-kg, 9.4 ft-lb)	
Baut penutup cylinder head	M6	5	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut unit Air cut-off valve	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut check oli	M6	1	7 Nm (0.7 m-kg, 5.1 ft-lb)	
Baut stud cylinder head (sisi pipa pembuangan)	M8	2	15 Nm (1.5 m-kg, 11 ft-lb)	
Baut penguras coolant	M6	1	7 Nm (0.7 m-kg, 5.1 ft-lb)	
Mur gear balancer driven	M10	1	50 Nm (5.0 m-kg, 36 ft-lb)	
Mur pengunci setelan klep	M5	4	7 Nm (0.7 m-kg, 5.1 ft-lb)	
Baut sprocket camshaft	M8	1	30 Nm (3.0 m-kg, 22 ft-lb)	
Baut camshaft retainer	M6	2	7 Nm (0.7 m-kg, 5.1 ft-lb)	
Baut Timing chain guide	M6	1	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut timing chain tensioner	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	Yamaha bond No. 1215 (Three bond 1215®)
Baut unit pompa air	M6	3	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut penutup rumah pompa air	M6	4	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut as Impeller retainer	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut penutup Thermostat	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut unit Pompa oli	M5	2	4 Nm (0.4 m-kg, 2.9 ft-lb)	
Baut penguras mesin	M35	1	32 Nm (3.2 m-kg, 23 ft-lb)	
Baut penutup saringan oli	M6	3	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut oli baffle plate	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut manifold pemasukan	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut Injector	M6	1	12 Nm (1.2 m-kg, 8.7 ft-lb)	
Baut clem joint Throttle body	M4	2	2 Nm (0.2 m-kg, 1.4 ft-lb)	
Baut clem join rumah saringan	M4	1	2 Nm (0.2 m-kg, 1.4 ft-lb)	
Baut rumah Air filter	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Baut Resonator	M6	2	10 Nm (1.0 m-kg, 7.2 ft-lb)	
Mur pengunci (throttle cable)	M6	1	7 Nm (0.7 m-kg, 5.1 ft-lb)	
Mur knalpot	M8	2	15 Nm (1.5 m-kg, 11 ft-lb)	
Baut knalpot	M8	2	20 Nm (2.0 m-kg, 14 ft-lb)	
Baut protektor pipa knalpot	M6	2	8 Nm (0.8 m-kg, 5.8 ft-lb)	

TORSI PENGENCANGAN

Bagian	ukuran ulir	Jml	Torsi pengencangan	Keterangan
Baut protector knalpot	M6	2	8 Nm (0.8 m·kg, 5.8 ft·lb)	↺
Baut Crankcase	M6	12	10 Nm (1.0 m·kg, 7.2 ft·lb)	
Baut penutup generator	M6	8	10 Nm (1.0 m·kg, 7.2 ft·lb)	
Baut penutup kopling	M6	10	10 Nm (1.0 m·kg, 7.2 ft·lb)	
Baut penutup sprocket	M6	2	10 Nm (1.0 m·kg, 7.2 ft·lb)	
Mur tuas Kickstarter	M12	1	50 Nm (5.0 m·kg, 36 ft·lb)	
Baut stoper tuas kickstarter	M8	2	28 Nm (2.8 m·kg, 20 ft·lb)	
Baut Starter clutch	M6	3	14 Nm (1.4 m·kg, 10 ft·lb)	Stake
Baut guide ratchet gear	M6	2	12 Nm (1.2 m·kg, 8.7 ft·lb)	↺
Mur gear primary drive	M12	1	60 Nm (6.0 m·kg, 43 ft·lb)	
Baut per kopling	M6	4	12 Nm (1.2 m·kg, 8.7 ft·lb)	
Mur pengunci setelan kopling	M6	1	8 Nm (0.8 m·kg, 5.8 ft·lb)	
Mur clutch boss	M14	1	70 Nm (7.0 m·kg, 50 ft·lb)	
Mur pengunci setelan kopling	M8	1	9 Nm (0.9 m·kg, 6.5 ft·lb)	
Mur tuas kopling	M6	1	7 Nm (0.7 m·kg, 5.1 ft·lb)	
Baut holder tuas kopling	M6	1	7 Nm (0.7 m·kg, 5.1 ft·lb)	
Baut retainer drive sprocket	M6	2	10 Nm (1.0 m·kg, 7.2 ft·lb)	
Baut bearing retainer	M6	2	7 Nm (0.7 m·kg, 5.1 ft·lb)	↺
Baut Shift drum segment	M6	1	12 Nm (1.2 m·kg, 8.7 ft·lb)	↺
Baut stopper lever	M6	1	10 Nm (1.0 m·kg, 7.2 ft·lb)	↺
Baut stator coil	M6	3	10 Nm (1.0 m·kg, 7.2 ft·lb)	↺
Baut crankshaft position sensor	M6	2	10 Nm (1.0 m·kg, 7.2 ft·lb)	↺
Mur rotor generator	M12	1	70 Nm (7.0 m·kg, 50 ft·lb)	
Neutral switch	M10	1	20 Nm (2.0 m·kg, 14 ft·lb)	
Baut motor starter	M6	2	10 Nm (1.0 m·kg, 7.2 ft·lb)	
Sensor temperatur coolant	M12	1	18 Nm (1.8 m·kg, 13 ft·lb)	