AMAHA ERVICE MANUAL



G1A/M/E/M (3/4/5)

F-11616-G1-83



GOLF CAR G1-AM3

Service Manual

IT-11616-03-89

EXHAUST VALVE



A. ADJUSTMENTS



NOTE:_

Before adjusting, remove the return spring installed between connector rod 2 and the exhaust pipe.

1. Setting the governor lever

Adjust the length of the joint rod 1 so when the accelerator pedal is fully depressed, and the governor lever is turned counterclockwise, the carburetor thorttle valve just reaches the fully open position. (To adjust the joint rod length, loosen two locknuts, adjust the length, then tighten the locknuts.)

2. Setting the engine idle speed

With the V-belt removed, make sure the engine idles at 1,200 r/min. (When the V-belt is mounted, the idling speed is 1,000 r/min.) If not, make an idle speed adjustment by turning the throttle stop screw.

While making this idle speed adjustment, the engine speed will not affect the opening of the butterfly valve (exhaust valve).

3. Exhaust valve setting

Adjust the length of connector rod so when the governor lever returns to the closed position, the butterfly valve in the exhaust port closes completely. (To adjust the length of connector rod 1, loosen two locknuts, and after adjusting, tighten the locknuts.)

To check that the exhaust valve is completely closed, remove the exhaust pipe. The valve

position can be checked by looking into the exhaust flange. As shown in Fig. 1, check the valve position. The screw head should face the exhaust pipe.

To facilitate checking the exhaust valve in the full-closed position, prepare a tool as shown in Fig. 4



4. Adjusting the throttle wire

Adjust the throttle wire so when the accelerator pedal is fully depressed, the carburetor throttle just reaches full-open position.

NOTE:__

After adjusting the throttle wire, install the return spring between connector rod 2, and the exhaust pipe.

5. Governor adjustment



1. Adjusting screw 2.

2. Governor lever

Adjust the car speed by turning the adjusting screw in either direction. The maximum amount of adjustment is about 4.8 km/h $(\pm 3 \text{ m.p.h.})$

Tightening the adjust screw increases the speed; loosening it decreases the speed.



After this operation, check the following points:

- Check whether both links and butterfly valve move smoothly.
- Check whether the links move beyond dead center, and become locked.
- Check for abnormal noise from the butterfly valve and related parts.

6. Rod assembly 2 adjustment

Adjust the rod ass'y 2 length by turning the shaft so that when the throttle valve is at a closed (idle) position (by pushing the speed limiter lever slightly), the exhaust valve is at a closed position as illustrated on the next page. Tighten the locknut, keeping the plastic ends at a 90° angle to each other.





- 4 -

NOTE:

Check to see that when the throttle valve is fully open, the exhaust valve is also fully open.

B. DISASSEMBLY AND ASSEMBLY

In general, except when links are damaged or the joint is extremely worn, neither removal nor disassembly is necessary. When dismounting the engine from the chassis or reassembling links after replacing parts, the adjustments specified in D, above must be performed.

 The link adjustment should be made only by adjusting the length of the joint rod and connector rod 1. It is unnecessary to adjust the length of connector rod 2 because it is already adjusted by the factory.

Standard eye-to eye distance of connector rod (2): 179 mm (7 in)



 As illustrated, the bracket should be installed with the open end facing downward, and all joints should be installed squarely facing the ball so that movement is free throughout its operating range.



3. Do not apply grease to the contact surface of the joint.

SPECIFICATIONS

SPECIFICATIONS

÷

A. General

Model	G1-AM3
Item	
Model:	
Code No.	J24
Frame I.D. No. & Starting No.	J24-000101
Engine I.D. No. & Starting No.	J24-000101
Dimensions:	
Overall length	2,403 mm (94.6 in)
Overall width	1,140 mm (44.9 in)
Overall height (steering height)	1,180 mm (46.5 in)
Height of floor	295 mm (11.6 in)
Height of seat from floor	428 mm (16.9 in)
Wheelbase	1,550 mm (61.0 in)
Tread: Front	900 mm (35.4 in)
Rear	900.mm (35.4 in)
Min. ground clearance	110 mm (4.3 in)
Weight:	465
Dry weight	310 kg (684 lb)
Performance:	
Maximum loading limit	340 kg (750 lb)
Maximum speed	19 km/h (12 mph)
Starter generator red zone	4,000 r/min (25 km/h)
Cranking speed	Appx, 800 r/min
Minimum turning radius	3,000 mm (118 in)
Braking distance	4,500 mm (177 in) at 19 km/h (12 mph)
Seating capacity	2 persons
Hill climbing ability	30° (57% grade) on pavement
Fuel consumption	20 km/ℓ at 19 km/h on pavement
Oil consumption	4,500 km/l at 19 km/h on pavement

B. Engine

Model	G1-AM3			
Item				
Description:				
Engine type	Reversible, 2-stroke, Gasoline, 7-port piston reed valve			
Number of cylinder	Forward-inclined, Single			
Displacement	214 cm ³ (13.06 cu.in)			
Bore × Stroke	68 x 59 mm (2.68 x 2.32 in)			
Compression ratio	5.7 : 1			
Cooling system	Forced air cooled			
Starting system	Normal & Reversible starter generator			
Ignition system	C.D.I.			
Lubrication system	"Autolube" oil injection			
Cylinder head:				
Combustion chamber volume (with spark plug)	31.3 cm ³ (1.91 cu.in)			
Compression chamber type	Dome + Squish			
Head gasket thickness	0.6 mm (0.024 in)			

Model	G1 AM2				
Item	G1-AM3				
Cylinder:					
Material	Cast iron sleeved aluminum				
Bore size	68 mm (2.677 in)				
Taper limit	0.05 mm (0.0020 in)				
Out of round limit	0.01 mm (0.0004 in)				
Piston:	8				
Piston skirt clearance (measuring point) Std.	0.030 ~ 0.035 mm (0.0012 ~ 0.0014 in)				
	(10 mm (0.39 in) from piston skirt end)				
Max.	0.1 mm (0.0039 in)				
Piston oversize	1st. 68.25 mm (2.687 in)				
	2nd. 68.50 mm (2.697 in)				
Piston pin outside diameter x Length	φ 18 x 55 mm (φ 0.709 x 2.165 in)				
Piston ring:					
Piston ring design (Top)/I.D. mark	Keystone/"RN"				
Piston ring design (2nd)/I.D. mark	R				
a na transmissional de la construction de la co	\bigcirc				
	Keystone/"R"				
Ring end gap (installed) (Top)	0.2 ~ 0.4 mm (0.008 ~ 0.016 in)				
(2nd)	0.2 ~ 0.4 mm (0.008 ~ 0.016 in)				
Small end bearing:					
Туре	Needle bearing				
Big end bearing:					
Туре	Needle bearing				
Crankshaft:					
Crankshaft assembly width (A)	56 $^{+0}_{-0.05}$ mm (2.20 $^{+0}_{-0.002}$ in)				
Crankshaft deflection (D)	0.02 mm (0.008 in)				
Connecting rod big end side clearnace (C)	0.25 ~ 0.75 mm (0.010 ~ 0.030 in)				
Connecting rod small end deflection (P) Max.	2.0 mm (0.079 in)				
CLUTCH SIDE	2				
D H	•				
8 -	ц 8				
LT.					
40 mm (1.57 in)	₄ 40 mm (1.57 in)				
	H				
-	μ 				
	P				
Crank pin outside diameter x Length	$\phi 24 +0 -0.013 \times 55 -0.2 \text{ mm}$				
	$(\phi 0.945^{+0} \times 2.165^{-0.0078} in)$				
Coolinia trans	Colid shaft				
Grank barries tune (Left) - Ofter					
Crank bearing type (Left) x Q'ty #6306 c3 (Nylon retainer) x 1 pc					
Grank bearing type (Right) x O'ty	#6306 c3 (Nylon retainer) x 1 pc				
Grank oil seal type (Left) x U'ty	FFJ-30 / 2 8 X 1 pc				
Crank oil seal type (Right) x Q'ty	FPJ-30 48 8 x 1 pc				

Model	G1 AM2					
Item	GI-AWS					
Air cleaner:						
Element type	Wet paper with element cover					
Element assembly P/N	J10-14450-10					
Element cover P/N	J10-14417-00					
Intake reed valve:						
Туре	"V" type					
At rest open limit	0.3 mm (0.012 in)					
Valve lift	10.4 ± 0.2 mm (0.409 ± 0.0078 in)					
Choke cable:						
Free play	1 mm (0.04 in)					
Carburetor:						
Model/Maker	BV21-16/MIKUNI					
P/No.	J24-14101-00					
I.D. mark	J2400					
Venturi diameter (Ven. T.)	φ 16					
Main jet (M.J.)	#97.5					
Air jet (A.J.)	φ1.2					
Main nozzle (M.N.)	28					
Pilot jet (P.J.)	#42.5					
Pilot air jet (P.A.J.)	φ1.0					
Throttle valve (Th.V.)	#100					
Valve seat (V.S.)	φ1.0					
By-pass (1) (B.P1)	φ 0.8					
By-pass (2) (B.P2)	φ0.7					
Pilot outlet (P.O.)	φ1.1					
Pilot screw (P.S.)	1 and 3/8 turn out					
Float height (F.H.)	18 mm (0.7 in)					
Engine idling speed*	1,200 r/min					
Fuel pump:						
Part No.	J10-24410-02					
Manufacturer/Type	MIKUNI/DF-36 (Diaphragm)					
Fuel tank:						
Fuel grade	Any grade gasoline					
Fuel tank canacity	25.5 L (5.6 Imp gal, 6.7 US gal)					
Fuel tank position	Front of left rear wheel					
Material/Color	Polvethylene/Black					
Gauge position	Side of filler cap					
Lubrication system:	Separated lubrication					
Autolube pump – Type	YAMAHA Automatic oil injection system					
Autorese partip	(controlled by exhaust pressure)					
– Color code	Pink					
– Minimum stroke	$0.50 \sim 0.55$ mm (0.020 ~ 0.022 in)					
- Maximum stroke	$1.80 \sim 1.85 \text{ mm} (0.071 \sim 0.073 \text{ in})$					
- Reduction ratio	1/1 9 x 1/84					
May output (600 mm An avhaust nine 1/1)	Approx 21.1 cm ³ /h at 3.250 r/min					
Max, output (0 mm Ag avhaust pipe 1/1)	Approx 5.9 cm ³ /h at 3.250 r/min					
Mixing ratio	150 · 1 at Max nower					
withing ratio	150. Tat wax, power					

Item	G1-AM3				
Oil tank:					
Oil	Yamalube Golf Car oil or if not available, any two stroke oil that is B.I.A. certified for service T.C.W.				
Oil tank capacity	1.7 L (1.5 Imp qt, 1.8 US qt)				
Oil tank position	Top of left rear fender				
Material/Color	Polyethylene/White				
Jet senser:					
Туре	One hole (ϕ 0.85) orifice plate type with cleaner: Wire				
Pipe dia./Material	φ 6.35 mm (0.25 in)/Stainless				

C. Transmission

Item	G1-AM3
Transmission:	
Туре	V-belt automatic centrifugal engagement
Primary reduction ratio	3.1 : 1 ~ 0.8 : 1
Clutch engagement r/min	1,500 r/min
Shift r/min	3,600 r/min
Primary spring:	
Parts No.	90501-32557
Outside dia. x Wire dia.	42.9 x 3.2 mm (1.69 x 0.126 in)
Set load/Spring rate	7.8 kg/0.372 kg/mm
No of turns/Free length	6.5/82 mm (2.95 in)
Color code	Cr plated (Silver)
Secondary spring:	La Fuel d'Autorité d'Anné d
Part No.	90501-45600
Outside dia. x Wire dia.	54.5 x 4.5 mm (2.15 x 0.177 in)
No. of turns/Free length	6.37/101 mm (3.98 in)
Color code	Cr plated (Gold)
Torque cam angle	Forward 50 deg/Reverse 45 deg
Sheave center to center distance	231 mm (9.09 in)
Sheave offset	26 mm (1.02 in)
V-belt part No.	J17-46241-00
V-belt width and outer line length	31 x 925 mm (1.22 x 36.4 in)
V-belt wear limit	27 mm (1.06 in)
Differential/Reduction gear:	
Secondary reduction system	Helical gear
Secondary reduction ratio	2.952 × 4.588
Differential type	SPUR gear 4 pinion
Lubricant/Capacity	SAE 90 Gear oil/800 cm ³ (27 oz.)
Governor:	
Туре	Oil bath flyweight
Adjustment	Screw with locknut
Factory speed setting	19 km/h (12 mph)

	Model G1-AM3
Item	
Frame:	
Туре	Ladder type pipe structure
Material	Tubular steel (STKM)
Color	Yamaha Black
Front cowl:	
Туре	(RIM)
Material	Urethane
Color	Ivory white
Rear cowl:	
Туре	Match metal die shell type fiber galss (SMC)
Material	Fiber reinforced plastic (FRP)
Color	Ivory white
Seat:	
Seat cover Material	Vinyl chloride leather + Nylon lining
Color	
Seat cushion Material	
Bumper:	
Front	Steel + EVA end
Rear	
Steering system:	
Туре	Worm and pin
Steering angle (L, H)	1.4 turn
(R, H)	1.4 turn
Turning radius	3.0 m
Lubricant Type	
Capacity	150 CC (5.1 02)
Front axle:	
Туре	Single wish bone
Toe-in	$10 \pm 5 \text{ mm} (0.394 \pm 0.197 \text{ m})$
Camber	0 deg
Caster Kinggin inclingtion	3 deg
Kingpin Inclination	
Rear axle:	Semi floating calit
Rear wheel axie type	0 mm (0 ic)
l oe-in Cambor	0 den
Front suspension:	Single ouingarm (independent suspension)
Туре	Coil springs with hydraulic shock absorbers
	(Single action type)
Spring rate	3.6 kg/mm
Coil spring free length	185 mm (7.28 in)
Damper type	Oil damper (Single action/tension only)
Poar euspansion:	
Type	Axle type trailing arm (Unit swing)
i ype	Coil springs with hydraulic shock absorbers
	(double action type)
Spring rate	2.1 kg/mm
Coil spring free length	240 mm (9.45 in)
Damper type	Oil damper (Double action/Both Comp & Tens)

D. Chassis

۱

	Model	G1-AM3				
ltem						
Brakes:						
Brake system		Mechanical brake linkage to individual drum brakes				
		on each rear wheel with self-adjusting brake shoe.				
		Dual internal expanding shoe				
Method of oper	ation	Leading/Trailing shoes (self-adjusting)				
Lining thickness	s Std/Min.	4 mm (0.157 in)/1.5 mm (0.06 in)				
Brake drum insi	de dia.	160 mm (6.30 in)				
Linkage adjustn	nent (Brake wire free play)	0.1 ~ 0.5 mm (0.004 ~ 0.020 in)				
Parking brake	Туре	Foot type; Parking brake with automatic release				
	Release timing	$0 \simeq 0.5$ mm ($0 \simeq 0.02$ in)				
	(Free play of throttle wire end)	Lightly depress the accelerator pedal with your hand				
		(The parking brake is not released.)				
Wheel:						
Tire type	Front	Tubeless (Rib)				
(pattern)	Rear	Tubeless (Block)				
Tire size	Front	18 x 8.50 - 8.00/4 ply rating				
	Rear	18 x 8.50 - 8.00/4 ply rating				
Tire pressure	Front/Rear	0.8 kg/cm ² (12 psi)				
Rim size	Front/Rear	7.00 – I – 8.00				

E. Electrical

N	Aodel	G1-AM3	
Item			
Voltage:		12V, Negative ground	
Ignition system:			
Туре		Flywheel magneto (C.D.I. type)	
Model/Manufacturer		F3T35671/MITSUBISHI	
Pulser coil resistance (Color code)		$14\Omega \pm 10\%$ at 20°C (68°F) (White/Red – Black)	
Output (Min.)		4.5V AC @ Cranking speed*	
Charging coil resistance (Color code)		$350\Omega \pm 10\%$ at 20° (68°F) (Brown – Black)	
Output (Min.)		40V AC @ Cranking speed*	
Ignition timimg Static		B.T.D.C. 1.3 mm (0.051 in) by dial indicator	
Dynamic		Fan to crankcase marks at 1,200 r/min by timing light	
-1 -2 -3 0.5 1 2 Engir	3 ne speed	4 (x 10 ³ r/min)	
Ignition:			
Model/Manufacturer		F6T411/MITSUBISHI	
Sprak gap		9 mm (0.35 in)/300 r/min.	
		11 mm (0.43 in)/3.000 r/min	
Primary winding resistance		$1.0\Omega \pm 15\%$ at 20°C (68°F) (Orange – Black)	
Secondary winding resistance		5.9k Ω ± 15 % at 20°C (68°F) (High tension code – Black)	
Diode (Yes or No) No		No	

* = Cranking speed approximately 800 r/min

	Model	G1-AM3				
Item		GI-AWS				
Spark plug: Type & Quantity Spark plug gap Thread size		NGK BP-6HS x 1 pc 0.6 ~ 0.7 mm (0.024 ~ 0.028 in) M14 x P1.25				
Spark plug cap: Type Noise suppressor resistance		Noise suppressor $5k\Omega \pm 15\%$ at 20°C (68°F)				
C.D.I. unit: Model/Manufacturer Minimum C.D.I. output		F8T 02171/MITSUBISHI 4.0V @ Cranking speed*				
Charging • Starting/System: Type Model/Manufacturer Starting output Charging output Armature coil resistance Field coil resistance		Starter generator GSB107-02/HITACHI 0.6 kw 14V-15A/5,000 r/min 0.013 Ω ± 20% at 20°C (68°F) (A1 A2)				
Shunt coil (Battery charging) Series coil (Starting) Brush port number Bursh length Std/Min. Spring pressure/Q'ty Commutator outside dia. Mica undercut/No. of slot		$5\Omega \pm 10\%$ at 20°C (68°F) (Red – Green) 0.006 $\Omega \pm 20\%$ at 20°C (68°F) (F1 – F2) J10-81111-10 23 mm (0.9 in)/16 mm (0.63 in) 700 ~ 900 g (24.7 ~ 31.7 oz)/4 pcs. 41 ± 0.1 mm (1.61 ± 0.004 in) 0.7 mm (0.028 is)/(11 ccs				
Voltage regulator: Type Model/Manufacturer Regulated voltage (No Ioad) Voltage regulator Core gap Yoke gap Point gap Voltage coil resistance		Tillil type T107-23/HITACHI 14.8 \pm 0.5V 0.6 \sim 1.0 mm (0.0024 \sim 0.04 in) 0.9 mm (0.035 in) 0.35 \sim 0.45 mm (0.014 \sim 0.018 in) 10.3 Ω \pm 20% at 20°C (68°E)				
Soleniod relay: Model (P/No.)/Manufacturer Amperage rating Cut in voltage Winding resistance		YZ18 (J17-81950-00)/ASAH1 DENSO 60A Less than 8V 11.8Ω ± 5% at 20°C (68°F)				
Battery: Model/Manufacturer Capacity (Rating minimum) Specific gravity Gross weight Electrolyte quantity Dimension (W x H x T) Terminal description		For U.S.A. and Canada Group 24 12V-48 AH 1.26 - - 6-3/4 x 10-1/4 x 9 in For Australia and Ja N-50/FURUKAWA 12V-50 AH 1.26 - 4,500 cc 252 x 225 x 165 m C C C C C C C C C C C C C				

* = Cranking speed approximately 800 r/min

Item	G1-AM3 At your requirement 50/60 Hz, 410 VA 6 ~ 12V 20A, 18 ~ 24V 10A 5% of AH rating			
Battery charger: A.C. Input (House hold use) D.C. Out put Battery charge rating				
Back buzzer: Type Model/Manufacturer Frequency Current	Continuous beep S-12/NIKKO 600 ± 100 Hz. Less than 0.08A			
Fuse: Plus fuse: Amperage/Q'ty Minum fuse: Amperage/Q'ty	10A/1pc plus one spare 10A/1pc plus one spare			

10-3. TIGHTENING TORQUE

De das ha distanced	Part name Thread size		Tightening torque			Bemerke
Part to be tightened Part name	Thread size	Nm	m•kg	ft•lb	Remarks	
[Engine]				and Address		
Spark plug		M14 P1.25	28	2.8	20	
Airshroud x Cylinder head crankcase	Bolt	M6 P1.0	7	0.7	5.1	Use Loctite [®]
Airshroud cylinder 1 x 2	Pan head	M6 P1.0	5	0.5	3.6	Use Loctite®
Cylinder head: First	Nut	M8 P1.25	20	2.0	14	
Final			25	2.5	18	
Cylinder x Exhaust pipe ring put	Bolt	M8 P1 25	15	1.5	11	
Carburetor x Joint	Clamp &	M4 P0.7	15	1.5		Tightening
	Pan head			-	0	steady
Oil nump ass'y y Gear unit ass'y	Pan head	M5 P0.8	4	04	29	steady
Ean y CDI magneto	Polt	M6 P1 0	10	1.0	7.3	Ling logitite®
Fan X CDT magneto	Nut	M16 P1 0	72	7.0	52	Ose loctife
Flywheel magneto	Nut	M10 P1.0	/3	1.3	53	8
Crankcase x Engine bracket	Boit	MIU P1.25	30	3.0	22	
Crankcase left x Right	Pan nead	M6 P1.0		0.7	5	
(Crankcase tightenin	ig sequence] — (•	5	
[Drive]				-		
Primary sheave cap x Engine	Bolt	1/2-UNF	75	7.5	54	
Secondary sheave x Input shaft	Castle nut	M12 P1.25	60	6.0	43	
Transmission case x Rear arm	Bolt	M10 P1.25	40	4.0	29	
Transmission case x Rear arm housing	Bolt	M8 P1.25	25	2.5	18	
Transmission case 1	Nut	M9 D1 25	20	2.0	14	First
x Transmission case 2	Nut	10 11.25	25	2.5	18	Final
Differential case x Ring gear	Bolt	M8 P1.25	25	2.5	18	
Governor fork x Governor shaft	Pan head	M4 P0.8	2	0.2	1.4	Use loctite®
[Chassis]					1	
Tension rod x Front lower arm	Bolt	M12 P1 25	125	12.5	90	
Tension rod x Frame	Bolt	M8 P1.25	68	6.8	49	
Front lower arm x Frame	Bolt	M10 P1 25	68	6.8	49	6
Rear arm comp. x Frame	Bolt	M10 P1.25	90	9.0	65	
Tie rod x Ball joint	Nut	M12 P1.25	43	4.3	31	
King pin x Steering knuckle	Nylon nut	M12 P1 25	87	87	65	
Pitman arm x Idler arm	Nylon nut	M16 P1.5	85	8.5	61	Use lock washer
Steering gear housing x Steering cover	Bolt	M8 P1 25	18	1.8	13	
Steering adjusting bolt x Nut	Nut	M48 P20	25	2.5	18	55 mm width
Wheel x Hub or drum	Nut	M12 P1 25	80	80	58	So min width
Back plate ass'y x Rear axle housing	Bolt	M8 P1 25	30	30	22	
Back lower support x Hinge	Nut	M10 P1.25	35	3.5	25	
[Electrical]	Nulon nut	Me D1 0	2	0.2	1.4	
Tractice motor terminal w Wire	Nut	M0 F1.0	2	0.2	1.4	
Polou terminal x Mire	Nut	M0 01 05	6	0.7	12	
Relay terminal x wire	NUT	WIO P1.25	0	0.0	4.3	

GENERAL TORQUE SPECIFICATIONS

This chart specifies torque for standard fasteners with standard I.S.O. pitch threads. Torque specifications for special components or assemblies are included in the applicable sections of this book. To avoid warpage, tighten multi-fastener assemblies in a crisscross fashion, in progressive stages, until full torque is reached. Unless otherwise specified, torque specifications call for clean, dry threads. Components should be at room temperature.

Ŧ	_4	$\widehat{}$	1	
Ţ	$\langle c$	\mathbb{D}	~	
-	-4	-		

А	в	Ge	eneral torque	Je Is		
(Nut)	lut) (Bolt)		(Bolt) Nm	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	51		
22 mm	16 mm	130	13.0	94		

CONVERSION TABLES

Known	Multiplier	Result
	9.807	Nm
m∙kg	7.233	ft·lb
	9.807	N
kg	2.205	lb
mm	0.03937	in
3	0.03527	Imp oz
cm²	0.03381	US oz
[(]:+)	0.2200	Imp gal
L (liter)	0.2642	US gal
1 (1:+)	0.8802	Imp qt
L (liter)	1.057	US qt
1	9.807	N/mm
kg/mm	56.00	lb/in
1	98.07	kPa
kg/cm-	14.22	psi
	133.3	ра
nimeg	0.03937	inHg
Centigrade (°C)	9/5 (°C) +32	Fahrenheit (°F

INC	H TO METRIC S	YSTEM	
Known	Multiplier	Result	
Nm	0.10197	- m•kg	
ft•lb	0.13826		
N	0.10197	- kg	
lb	0.4535		
in	25.4	mm	
Imp oz	28.35	- cm ³	
US oz	29.57		
Imp gal	4.545	L (liter)	
US gal	3.785		
lmp qt	1.136	L (liter)	
US qt	3.785		
N/mm	0.10197	– kg/mm	
lb/in	0.0178		
kPa	0.0102	- kg/cm²	
psi	0.0703		
ра	0.0075		
inHg	25.4	- mmHg	
Fahrenheit (°F)	5/9 (°F) - 32	Centigrade (°C)	

DEFINITIONS OF TERMS

m∙kg	=	Meter Kilogram(s) (usually torque)
g	=	Gram(s)
kg	=	Kilogram(s) (1000 grams)
L	=	Liter(s)
cm ³	=	Cubic centimeter(s) (volume or capacity)
kg/mm	=	Kilogram(s) per millimeter (usually spring compression rate)
kg/cm ²	=	Kilogram(s) per square centimeter (pressure)

CC	Liter	US gallon
1	0.001	0.0002642
1,000	1	0.2642
3,785	3.875	1
4,546	4.546	1.201
946.1	0.9461	0.25
1136.3	1.1363	0.3002



LIT-11616-03-27

INDEX

GENERAL INFORMATION

PERIODIC INSPECTIONS AND ADJUSTMENTS

ENGINE OVERHAUL

CARBURETION

POWER TRAIN

CHASSIS

ELECTRICAL

ELECTRIC CAR

4

6

TROUBLESHOOTING

2

APPENDIX

CHAPTER 1. GENERAL INFORMATION

1-1.	EXTERNAL VIEW 1-1
1-2.	LOCATION OF THE "CAUTION AND SPECIFICATION LABELS"
1-3.	DESCRIPTION 1-3
1-4.	CAR IDENTIFICATION 1-5
1-5.	FEATURES 1-5 ENGINE 1-6 GOVERNOR 1-9 CLUTCHES 1-11 DIFFERENTIAL 1-13 BRAKES 1-15 YAMAHA AUTOLUBE 1-20
1-6.	SERVICE NOTES 1-23
1-7.	SPECIAL TOOLS

1

GENERAL INFORMATION

1-1. EXTERNAL VIEW







1-2. LOCATION OF THE "CAUTION AND SPECIFICATION LABELS"

- () indicate label location.
- *: For G1-A only
- **: For G1-E only

"No asterisks" applies both G1-A and G1-E.





1-3. DESCRIPTION

G1-A3



G1-E3



G1-A3







а	Overall length	2,430 mm (94.6 in)
b	Overall width	1,140 mm (44.9 in)
С	Steering height	1,180 mm (46.5 in)
d	Carrier height	1,100 mm (43.3 in)
e	Over-hang (front)	364 mm (14.3 in)
f	Wheelbase	1,550 mm (61.0 in)
g	Over-hang (rear)	489 mm (19.3 in)
h	Height of floor	295 mm (11.6 in)
i	Height of seat from floor	428 mm (16.9 in)



- 1. Steering wheel
- 2. Front wheel
- 3. Rear wheel Tire size (Tubeless) (F) 18 x 8.50-8-4PR
- (R) 18 x 8.50-8-4PR
- 4. Battery
- 5. Fuel tank
- 6. Starter-generator belt
- 7. Clutch belt
- 8. Oil tank
- 9. Transmission
- 10. Air cleaner

- 11. Parking brake pedal
- 12. Brake pedal
- 13. Accelerator pedal
- 14. Choke knob
- 15. Main switch
- 16. Lid
- 17. Buck up buzzer
- 18. Solenoid relay
- 19. Speed controller
- 20. Resistor
- 21. Charging receptacle
- 22. Motor



Download the full PDF manual instantly.

Our customer service e-mail: aservicemanualpdf@yahoo.com