









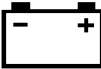

YAMAHA

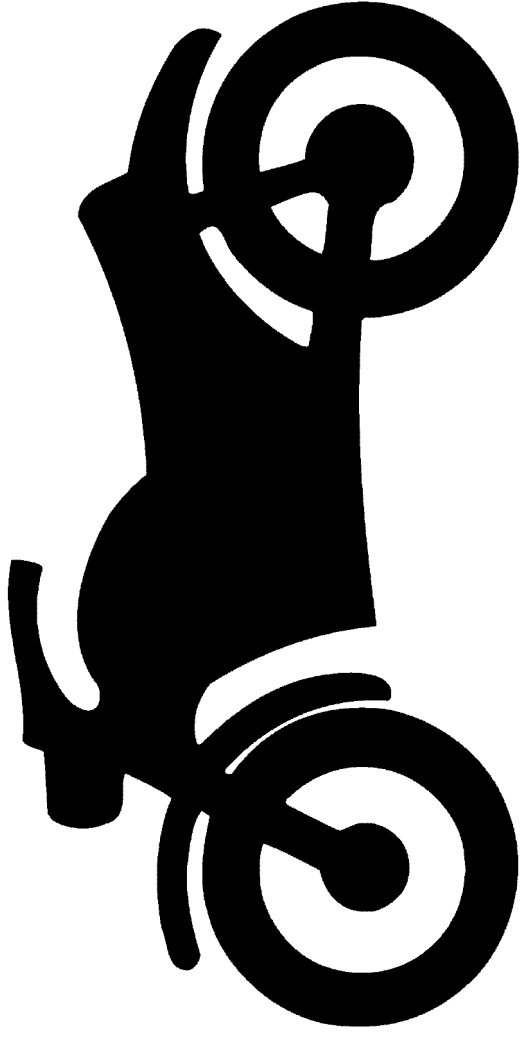
MBK

YN50 ²⁰⁰²
5RN-AE1

SERVICE MANUAL

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GENW

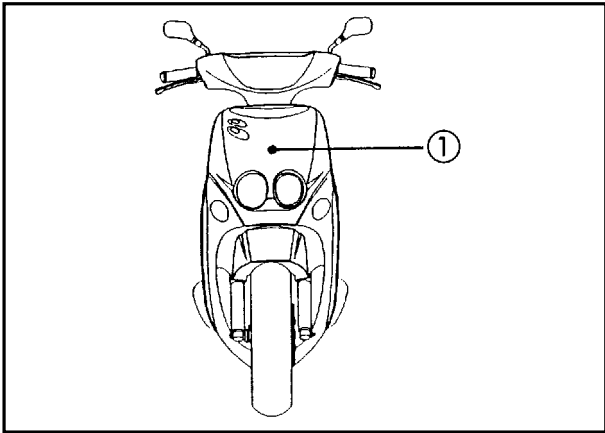
INFO

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CHAPTER 1 GENERAL INFORMATION

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IDENTIFICATION OF THE SCOOTER

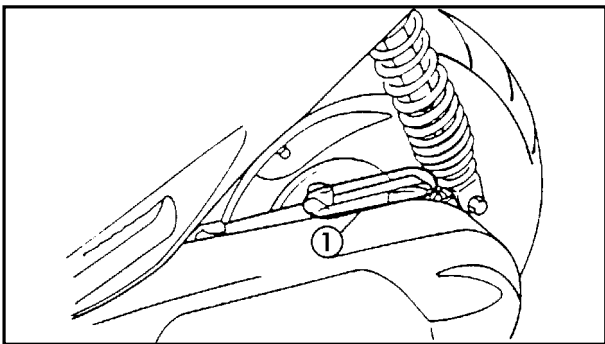


GENERAL INFORMATION SCOOTER IDENTIFICATION

FRAME SERIAL NUMBER

The serial number of the frame ① is stamped on the steering head pipe.

Frame VTL5AD	according standard EU0
Frame VTL5A15	according standard EU1
Frame VTL5A19	according Mofa Version



ENGINE SERIAL NUMBER

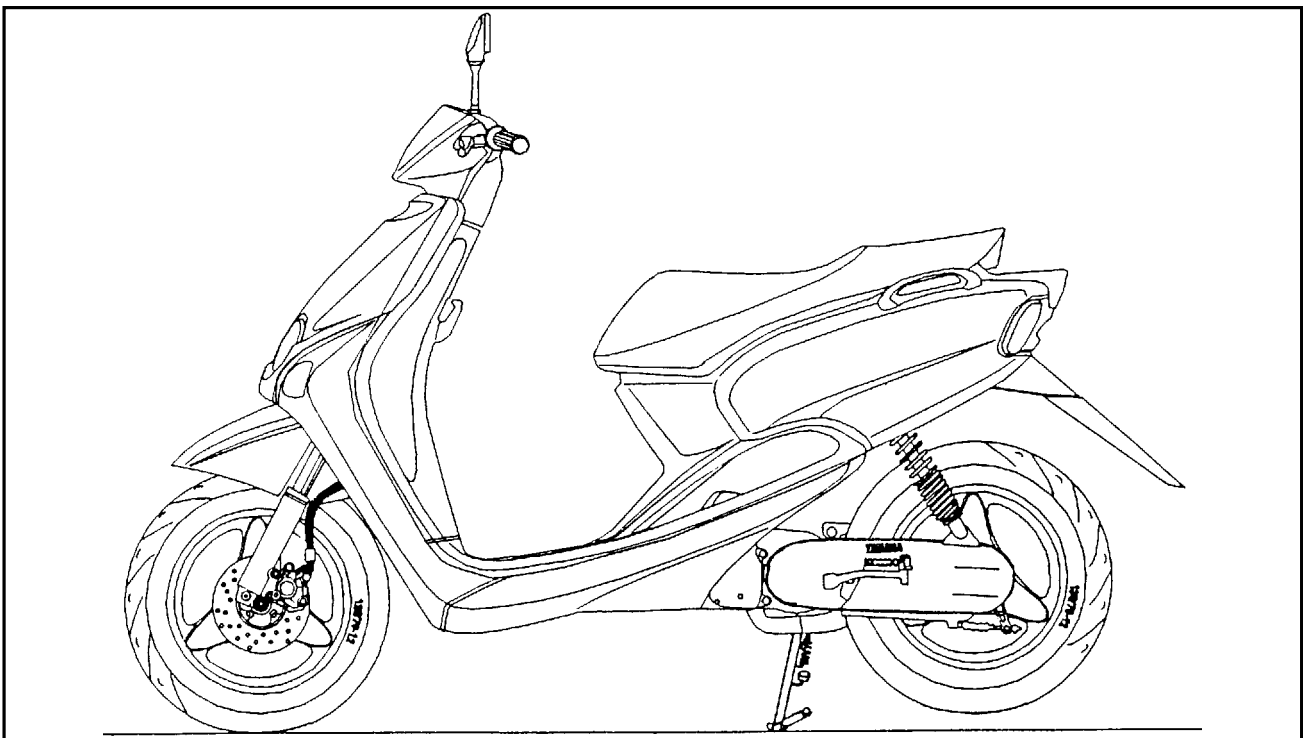
The engine serial number ① is stamped on the upper part of the rear left-hand section of the gear box.

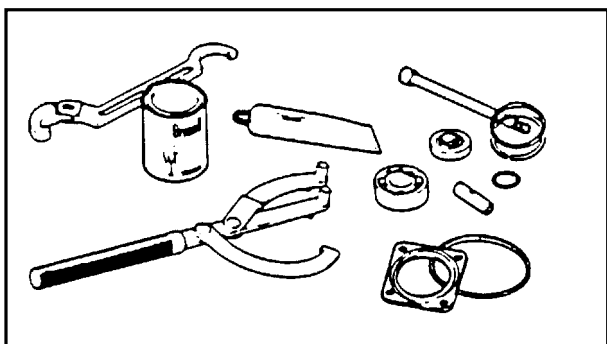
NOTE: _____

The first three digits of these numbers identify the model, the remaining digits are the manufacturing number of the unit.

NOTE: _____

The designs and specification are subject to change without prior notice.

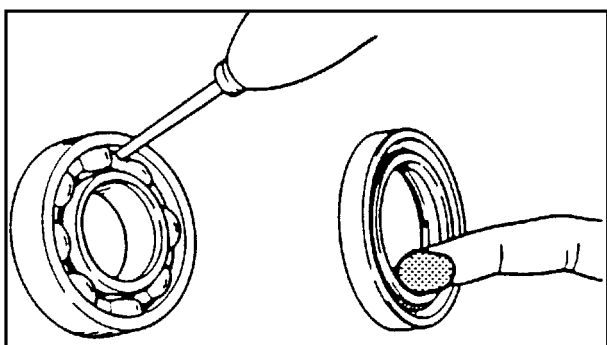




IMPORTANT INFORMATION

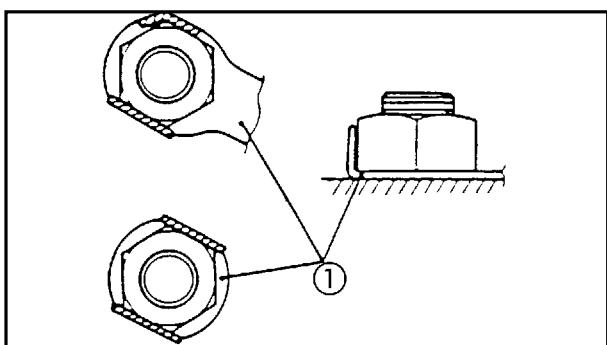
CHANGE OF ALL PARTS

1. We recommend that original Yamaha parts are used as spare parts. Use the oil and/or grease recommended by Yamaha for assembly and adjustment.



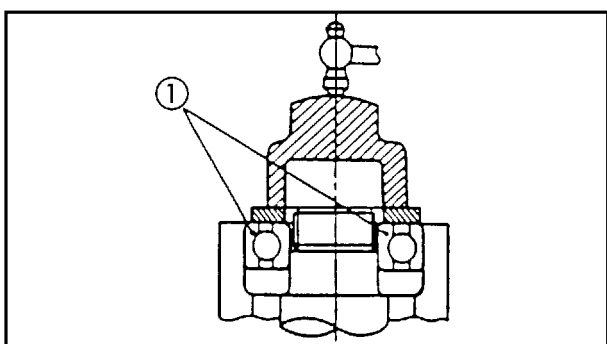
GASKETS, OIL SEALS AND O-RINGS

1. All gaskets and o-rings should be replaced when the engine is overhauled and repaired. All gasket surfaces, the lips of seals and o-rings should be cleaned.
2. Lubricate with grease all corresponding parts and bearings during assembly. Apply grease on the lips of seals.



SEALING WASHER/PLATES AND KEYS

1. All washers/plates ① and keys should be replaced when they are removed. The locking tabs should be folded along the flat parts of the bolts or nuts after correctly tightening them.

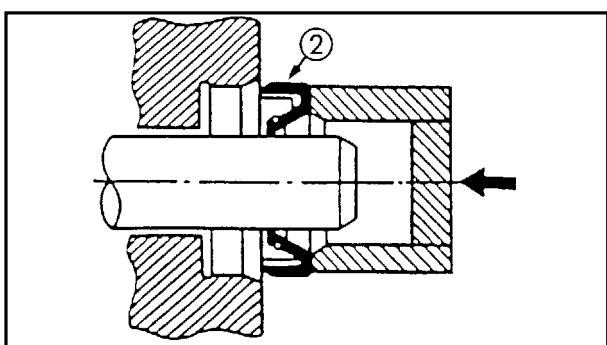


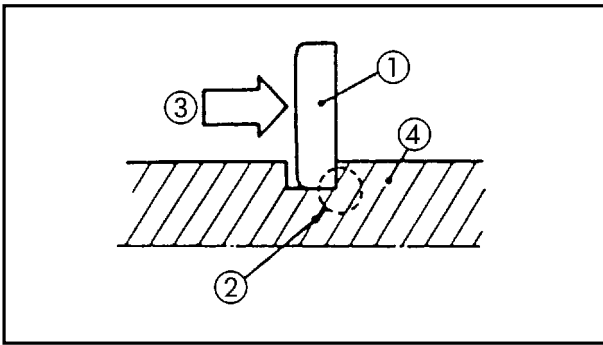
BEARINGS AND OIL SEALS

1. Install the bearings ① and oil seals ② with their manufacturer's marks or numbers facing outwards (i.e. the printed letters should be on the side exposed to view). When the oil seals are installed, apply a thin layer of light lithium-based grease on the edges of the seal. Put oil on the bearings when they are installed.

ATTENTION:

Do not turn the bearings in compressed air to dry them. This will damage the surface of the bearings.



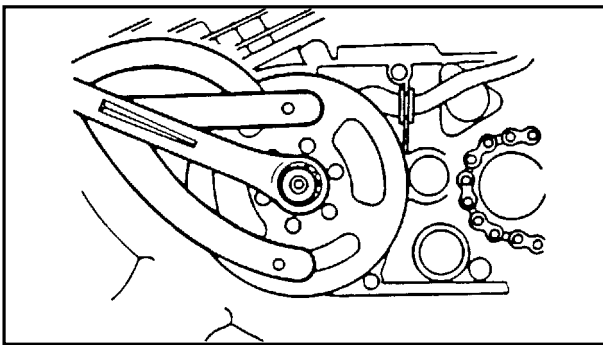


CIRCLIPS

1. All circlips should be carefully inspected before assembly. Always replace circlips of the piston drum after use. Replace deformed circlips. When installing a circlip ①, ensure that the corner with the sharp edge ② is placed in the opposing direction to the thrust ③ it receives. See sectional view. ④ Axle

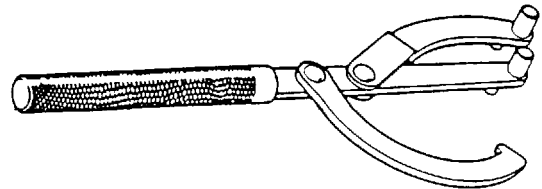
SPECIAL TOOLS

Appropriate special tools are needed to complete and perfect assembly with accuracy. Using correct tools will help to avoid damage caused by the use of incorrect tools or improvised techniques.

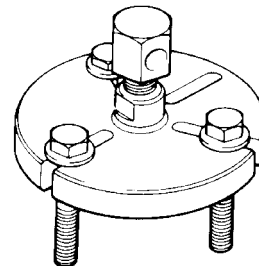


FOR SERVICING THE ENGINE

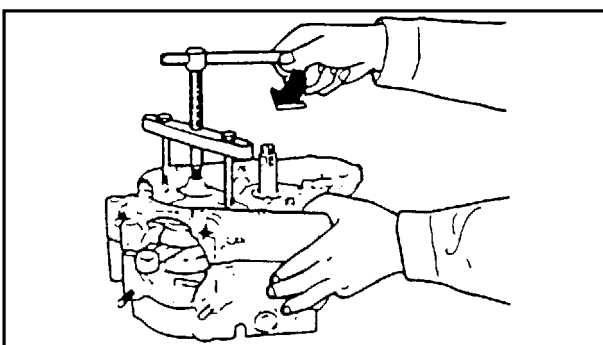
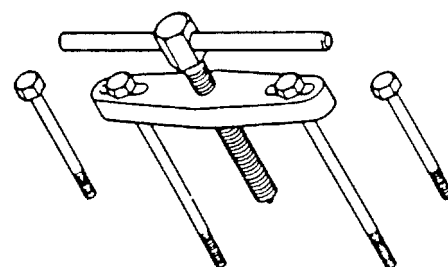
1. Engine wheel holding tool
(90890-01235)



2. Engine wheel removal tool
(90890-01362)

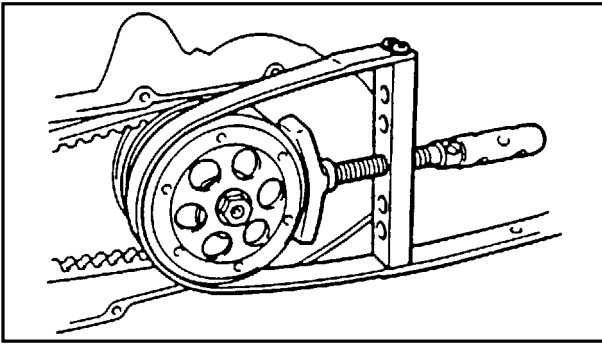


3. Crankcase separation tool
(90890-01135)

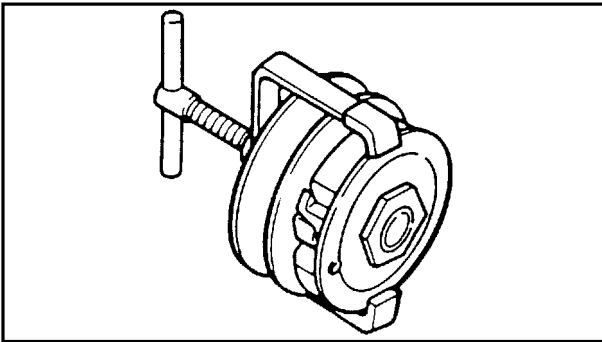
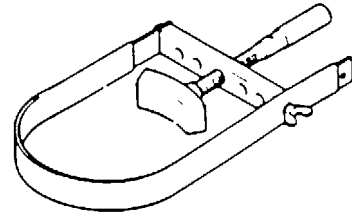


SPECIAL TOOLS

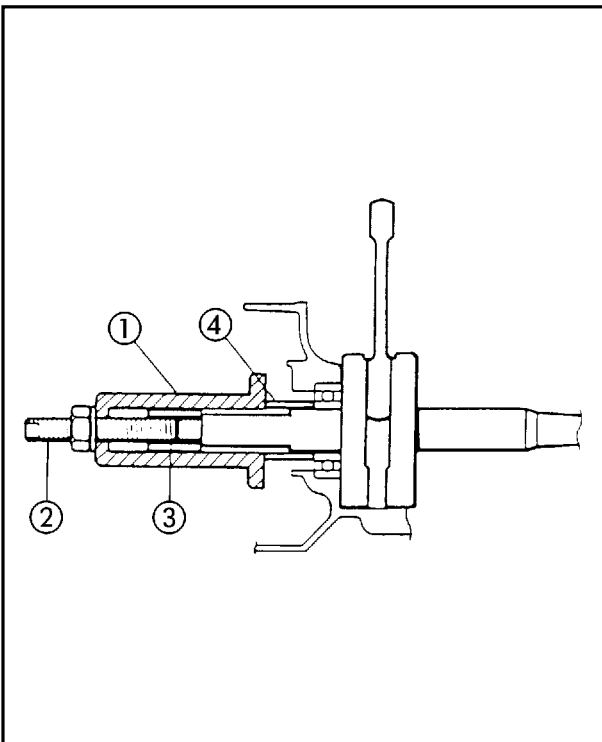
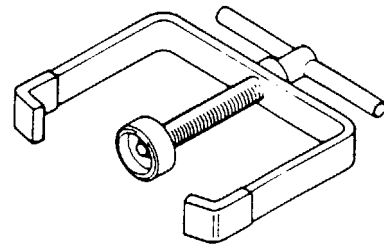
GEN/
INFO



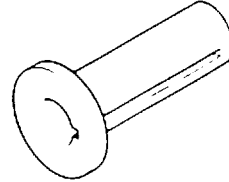
4. Pulley wheel clamp
(90890-01701)



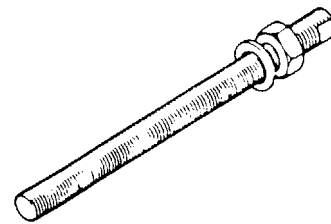
5. Clutch spring compressor
(90890-01337)

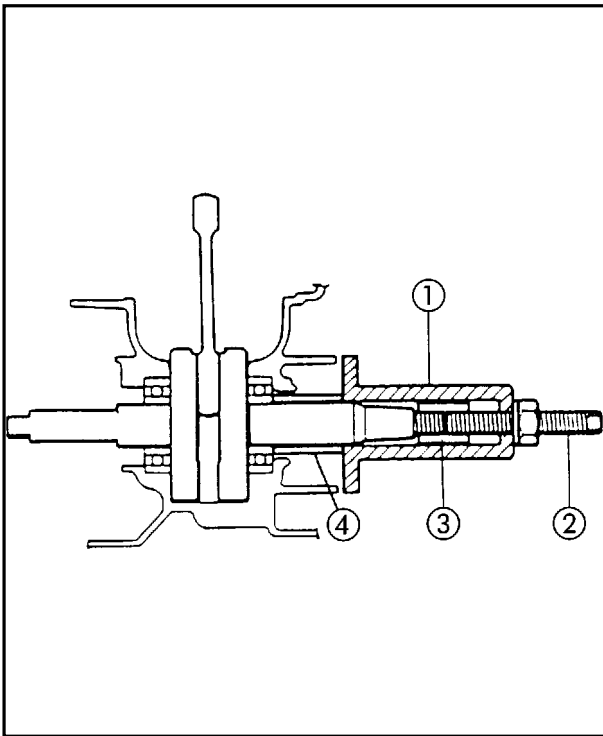


6. Crankshaft installer crucible... ①
(90890-01274)

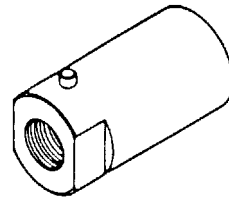


7. Crankshaft installer bolt... ②
(90890-01275)

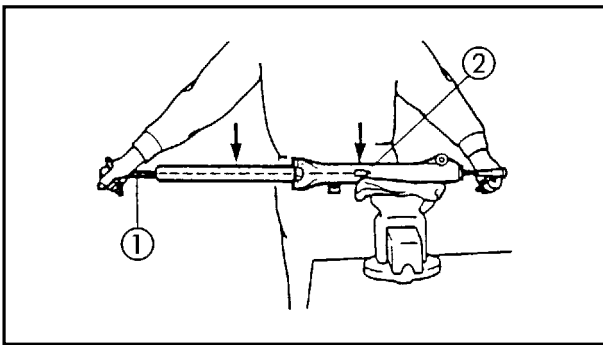
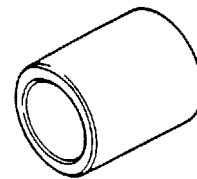




8. Adaptor (M10)... ③
(90890-01277)



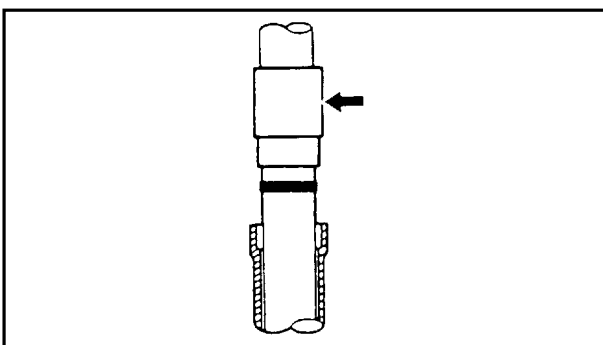
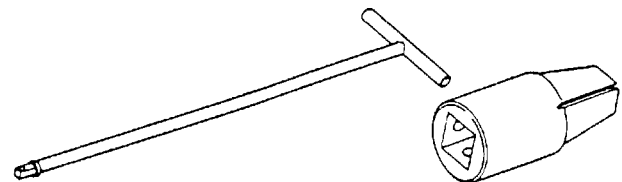
9. Spacer... ④
(90890-01411)



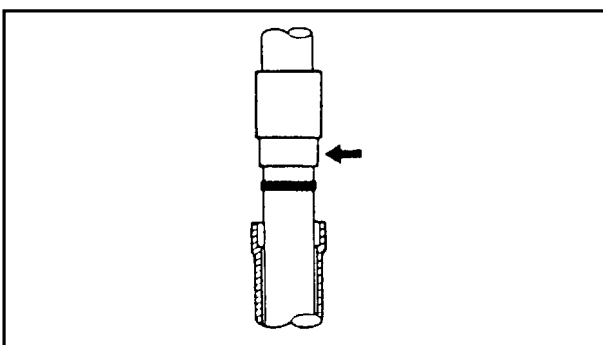
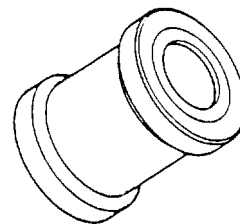
FOR SERVICING THE CHASSIS

1. T-shaped handle 2... ①
(90890-01326)

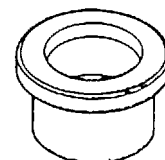
Shock absorber rod support... ②
(90890-01294-A)



2. Counterbalance for insertion of fork seals
(90890-01184)



3. Accessory for insertion of fork seals
(90890-01186)

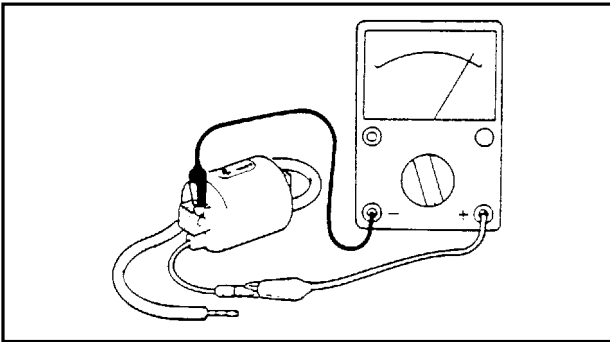
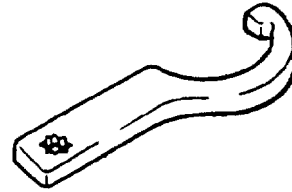


SPECIAL TOOLS

GEN/
INFO

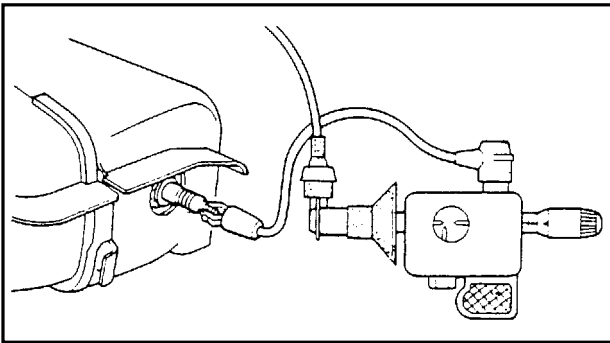
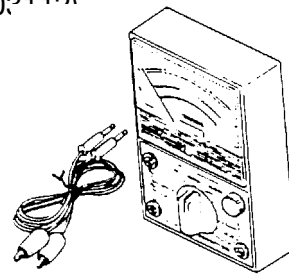


4. Steering nuts wrench
(90890-01403)

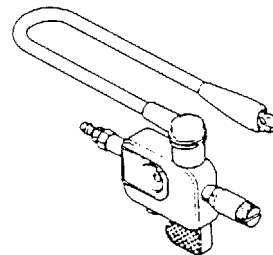


FOR ELECTRICAL COMPONENTS

1. Pocket tester
(90890-02112)



2. Ignition tester
(90890-06754)



2

2

SPEC

CHAPTER 2 SPECIFICATIONS

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GENERAL SPECIFICATIONS

SPEC



Model	YN50R			
Engine: Engine type Arrangement of cylinders Cylinder capacity Diameter and stroke Compression ratio Starter system	Reed valve, petrol, 2-stroke, air-cooled One cylinder inclined to the front 49.2 cc 40.0 x 39.2 mm <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">11.6:1 5AD</td> <td style="width: 33%;">10.2:1 SA15</td> <td style="width: 33%;">11:1 SA19</td> </tr> </table> Electrical and pedal kickstart	11.6:1 5AD	10.2:1 SA15	11:1 SA19
11.6:1 5AD	10.2:1 SA15	11:1 SA19		
Lubrication system: Type or grade of oil: Engine oil Transmission oil	Yamaha autolubrication 2-stroke air-cooled engine oil SE type 10W30 SAE engine oil			
Oil capacity: Oil sump (engine oil) Transmission oil Periodic change of oil Total quantity	1.2 L 0.10 L 0.11 L			
Air filter:	Flue type			
Fuel: Type Fuel tank capacity	Unleaded petrol 6.5 L			
Carburettor: Type/Manufacturer	PHVA/DELLORTO/PY12,1/GURTNER			
Spark plug: Type/Manufacturer Distance between electrodes	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 66%;">5AD y SA15 BR8HS/N.G.K. 0.6 ~ 0,7 mm</td> <td style="width: 33%;">SA19 BPR4HS/NGK 0.6 ~ 0.7 mm</td> </tr> </table>	5AD y SA15 BR8HS/N.G.K. 0.6 ~ 0,7 mm	SA19 BPR4HS/NGK 0.6 ~ 0.7 mm	
5AD y SA15 BR8HS/N.G.K. 0.6 ~ 0,7 mm	SA19 BPR4HS/NGK 0.6 ~ 0.7 mm			
Clutch type:	Dry, automatic centrifugal			
Transmission: Primary reduction system Primary reduction ratio Secondary reduction system Secondary reduction ratio Type of transmission Action	Helicoidal gearing 52/13 (4.00) Straight gearing <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">42/13(3.230) 5AD-SA15</td> <td style="width: 50%;">45/12(33.750) SA19</td> </tr> </table> Automatic one speed (Trapezoidal belt type) Automatic centrifuge type	42/13(3.230) 5AD-SA15	45/12(33.750) SA19	
42/13(3.230) 5AD-SA15	45/12(33.750) SA19			
Chassis: Frame Inclination angle of front axle Trail	Steel underside of pipe 26,5° 92.5 mm			
Tyres: Size (FR) Size (R)	120/70-12 130/70-12			
Tyre pressures (cold): <div style="text-align: right;">(Front) (Rear)</div>	1.75 kg/cm ² 2.00 kg/cm ²			

GENERAL SPECIFICATIONS

SPEC

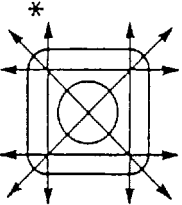
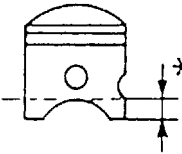
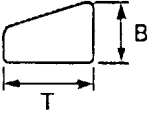
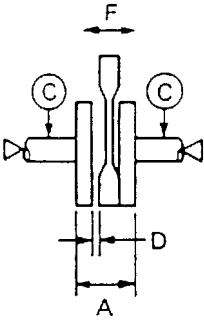


Model	YN50R
Brakes: Front brake type Operation Rear brake type Operation	Disc brake Right-hand operation Drum brake Left-hand operation
Suspension: Front suspension Rear suspension	Telescopic fork Balancing unit
Shock absorber: Front shock absorber Rear shock absorber	Spring/oil shock absorber Spring/oil shock absorber
Travel of wheels: Travel of front wheel Travel of rear wheel	70 mm 60 mm
Electrical system: Ignition system Generating system Battery type or model Battery capacity	DC-C.D.I. Magnetic flywheel YB4C-B 12V4AH
Type of headlight:	Bulb type
Bulb voltage/quantity: Headlamp Rear light/brake Indicator Metre light	25W/25Wx2 5/21W 10Wx4 1.2Wx2
Warning lights/quantity: Oil Fuel Indicators	2Wx1 2Wx1 2Wx2



MAINTENANCE SPECIFICATIONS

ENGINE

Model	YN50R
Cylinder head: Warping limit	 0.02 mm * The lines indicate the measurement
Cylinder: Internal diameter <Limit> Taper limit Eccentricity limit	39.993 ~ 40.012 mm <40.1 mm> 0.05 mm 0.01 mm
Piston: Piston size Measurement point Piston clearance First clearance	 39.952 ~ 39.972 mm 5 mm 0.034 ~ 0.047 mm 40.50 mm
Piston ring: Cross section B x T Distance between ends (installed) <Limit> Lateral clearance	 1.5 x 1.8 mm 0.15 ~ 0.35 mm <0.6 mm> 0.03 ~ 0.05 mm
Crank shaft: Width of crank shaft "A" Deflection limit "C" Connecting rod big end clearance "D" Free play from small end "F" Free play "E"	 37.90 ~ 37.95 mm 0.03 mm 0.2 ~ 0.5 mm 0.4 ~ 0.8 mm 0.004 ~ 0.017 mm

MAINTENANCE SPECIFICATIONS

SPEC



Model	YN50R					
Automatic centrifugal clutch: Thickness of clutch shoe <Limit> Free length of clutch shoe spring Clutch revolutions Clutch binding revolutions	2 mm <1 mm> 29.9 mm 3.600±250 rpm 5.600±400 rpm					
Transmission: Main axle deflection limit Drive axle deflection limit	0.08 mm 0.08 mm					
Choke handle: Type Pedal friction force	Ratchet type 150 ~ 250 g					
Air filter oil grade (oil filter):	Oil for foam air filter 2T oil for air-cooled engines					
Carburettor: Type/Manufacturer/Quantity Main jet (M.J.) Retaining position of jet needles (J.N.) Main air jet (M.A.I.) Pilot jet (P.J.) Pilot air screw (P.A.S.) Valve seat size engine idling	PHVA/Dellorto/1		YP12/GURTNER/1			
		#78/5AD	#65//SA15	#74/5AD	#62/SA15	#60/SA19
	needles (J.N.)	A12-3/5	A20-3/5	B10A-2/3	B10A-2/3	L3035H-1/3
	Main air jet (M.A.I.)	ø 1.5	ø 1.5	-	-	-
	Pilot jet (P.J.)	#36/5AD	#36/SA15	#38/5AD	#38/SA15	#36/SA19
	Pilot air screw (P.A.S.)	1 1/4 ± 1/4	2 1/8 ± 1/8	1 1/8	1 7/8	1 7/8
	Valve seat size engine idling	1.2 1.800 r.p.m.		1.4 1.800 r.p.m		


CHASSIS

Model	YN50R
Steering system: Steering bearing type	Ball bearing
Front suspension: Travel of front shock absorber Free length of shock absorber spring <Limit> Spring/stroke ratio (K ₁) (K ₂) Oil capacity Oil grade	70 mm 226 mm 1.12 Kgf/mm 1.78 Kgf/mm 45 cm ³ ±1 10 W shock absorber oil or equivalent
Rear suspension: Shock absorber travel Length of spring coupling Spring/stroke ratio (K ₁) (K ₂)	60 mm 221 mm 3.75 Kgf/mm 7,10 Kgf/mm
Wheels: Type of front wheel Type of rear wheel Size/material of front wheel Size/material of rear wheel Rim run-out limit Vertical Lateral	Alloy rim Alloy rim 12 x 3.5 aluminium 12 x 3.5 aluminium 1.0 mm 1.0 mm
Front disc brake Type External diameter and disc thickness Thickness of pads <Limit> Internal diameter of master cylinder Internal diameter of calliper Brake fluid type	Single 190.0 x 3.5 mm 4 mm <0.8 mm 11 mm 30.16 mm DOT 4
Drum brake: Type Internal diameter of drum <Limit> Lining thickness <Limit>	Shoes 110 mm 110.5 mm 4.0 mm 2.0 mm
Brake levers Free play of brake lever (right)/position Free play of brake lever (left)/position	2 ~ 5 mm /at the end of the lever 5 ~ 10 mm /at the end of the lever



ELECTRICAL SYSTEM

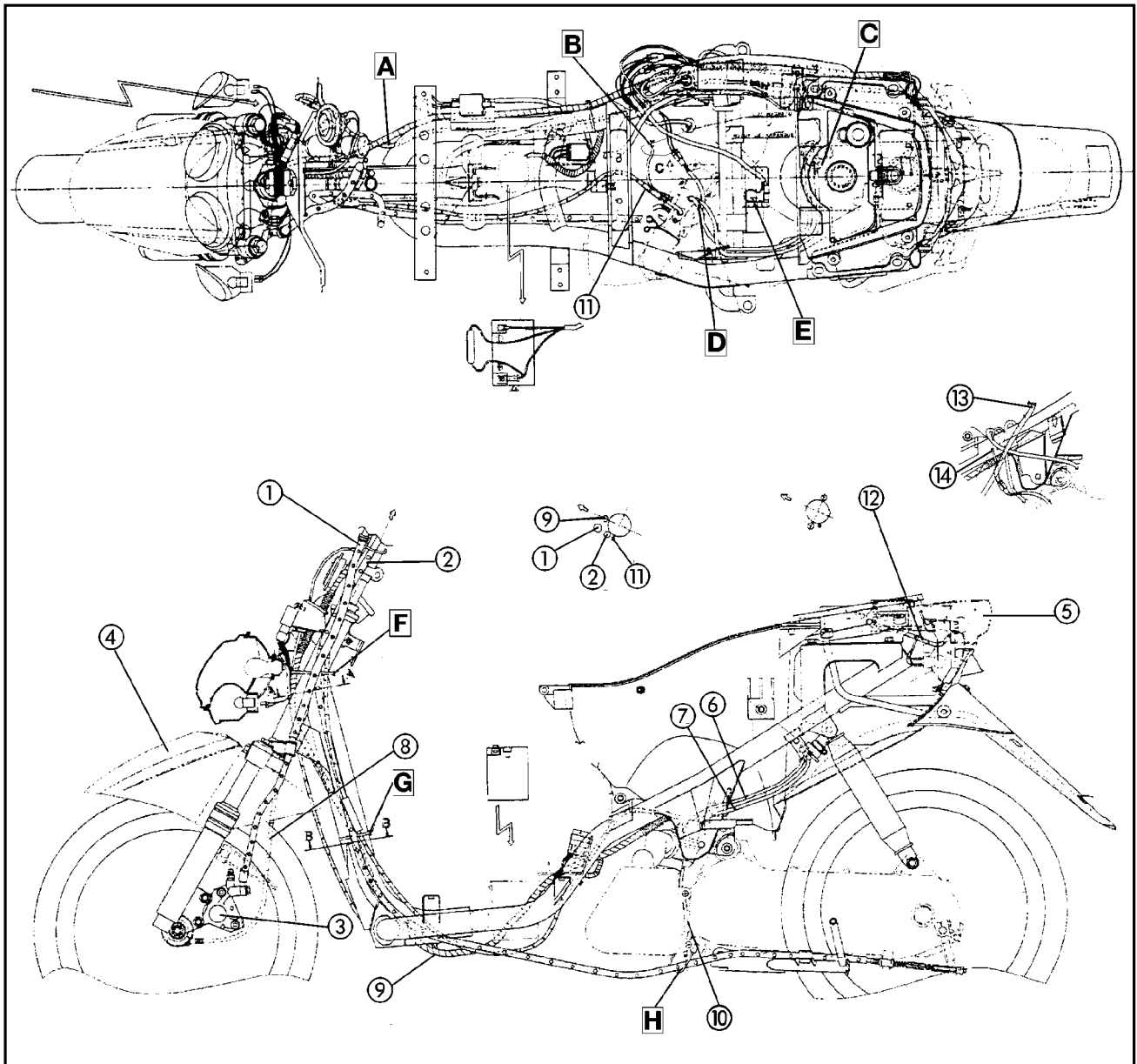
Model	YN50R
Ignition system: Type Ignition distribution (A.P.M.S.)	DC-C.D.I. 14*/5.000 r/min
C.D.I.: Harnessing coil resistance (colour)	400 ~ 600 Ω a 20 °C (68 °F) (Black/Red-Black)
Ignition coil: Spark plug electrodes gap Primary coil resistance Secondary coil resistance	6.0 mm 0.56 ~ 0.84 Ω at 20 °C 5,68 ~ 8,52 KΩ at 20 °C
Charging system: Charging output Charging coil resistance (colour) (Black-White)	0.4 A or more/3.000 rpm/min 1 A or less/8.000 rpm/min 4.8 ~ 7.2 Ω a 20 °C (68 °F)
Lighting system: Lighting output Lighting coil resistance (colour)	12 V or more/3.000 rpm/min, 15 V or less/8.000 rpm/min 0.4 ~ 0.6 Ω a 20 °C (68 °F) (Yellow/Red-Black)
Battery: Type: Capacity Specific gravity	YB4L-B 12V4AH 1280/20 °C
Starter system: Type:	Constant mesh type
Starter motor: Output Induction coil resistance Brush length <Limit>	0.14 kw 0.064 ~ 0.079 Ω at 20 °C 3.9 mm <0.9 mm>
Circuit breaker: Type: Amperage/Quantity Principal	Fuse 7A x 1



CABLE ROUTING

- ① Front brake pipe
- ② Rear brake cable
- ③ Rear brake calliper
- ④ Rear mudguard
- ⑤ Rear warning light
- ⑥ Vacuum tube
- ⑦ Fuel pipe
- ⑧ Speedometer cable
- ⑨ Installation
- ⑩ Breather
- ⑪ Accelerator cable
- ⑫ Seat closing cable
- ⑬ Oil hose
- ⑭ choke wire

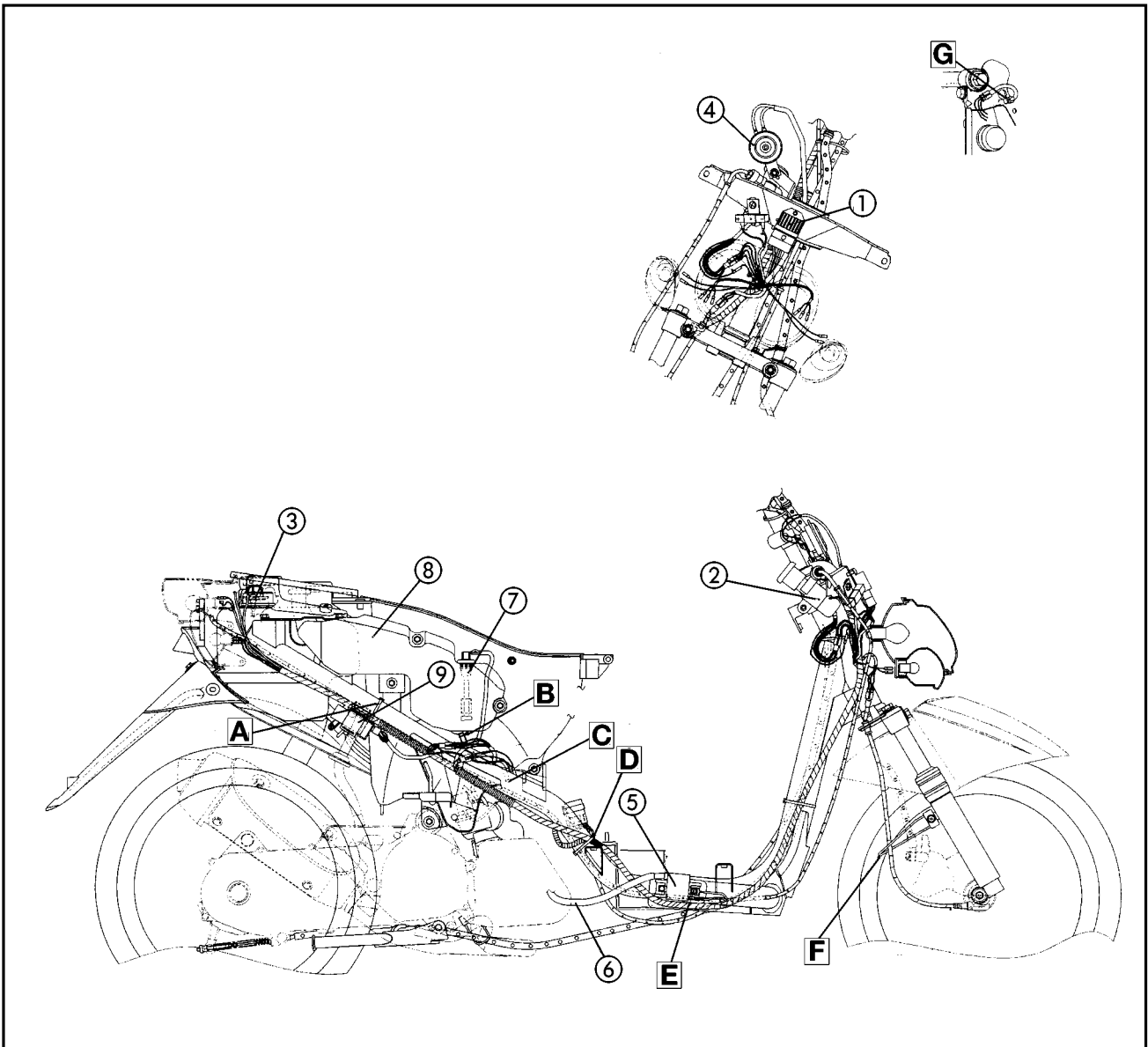
- A Insert the seat closing cable through the frame orifice
- B Connect the oil tube to the carburettor
- C Splice the fuel pipe to the cock
- D Splice the fuel pipe to the carburettor
- E Press the earth cable and the starter motor together
- F Splice all the cables except the brake hose, without tightening
- G Splice to the frame wire harness and throttle
- H Pass the brake cable through the guide





- ① Rectifier/Regulator
- ② Main switch
- ③ Fuel level measurer
- ④ Horn
- ⑤ Ignition coil
- ⑥ Spark plug cable
- ⑦ Oil level sensor
- ⑧ Oil tank
- ⑨ C.D.I.

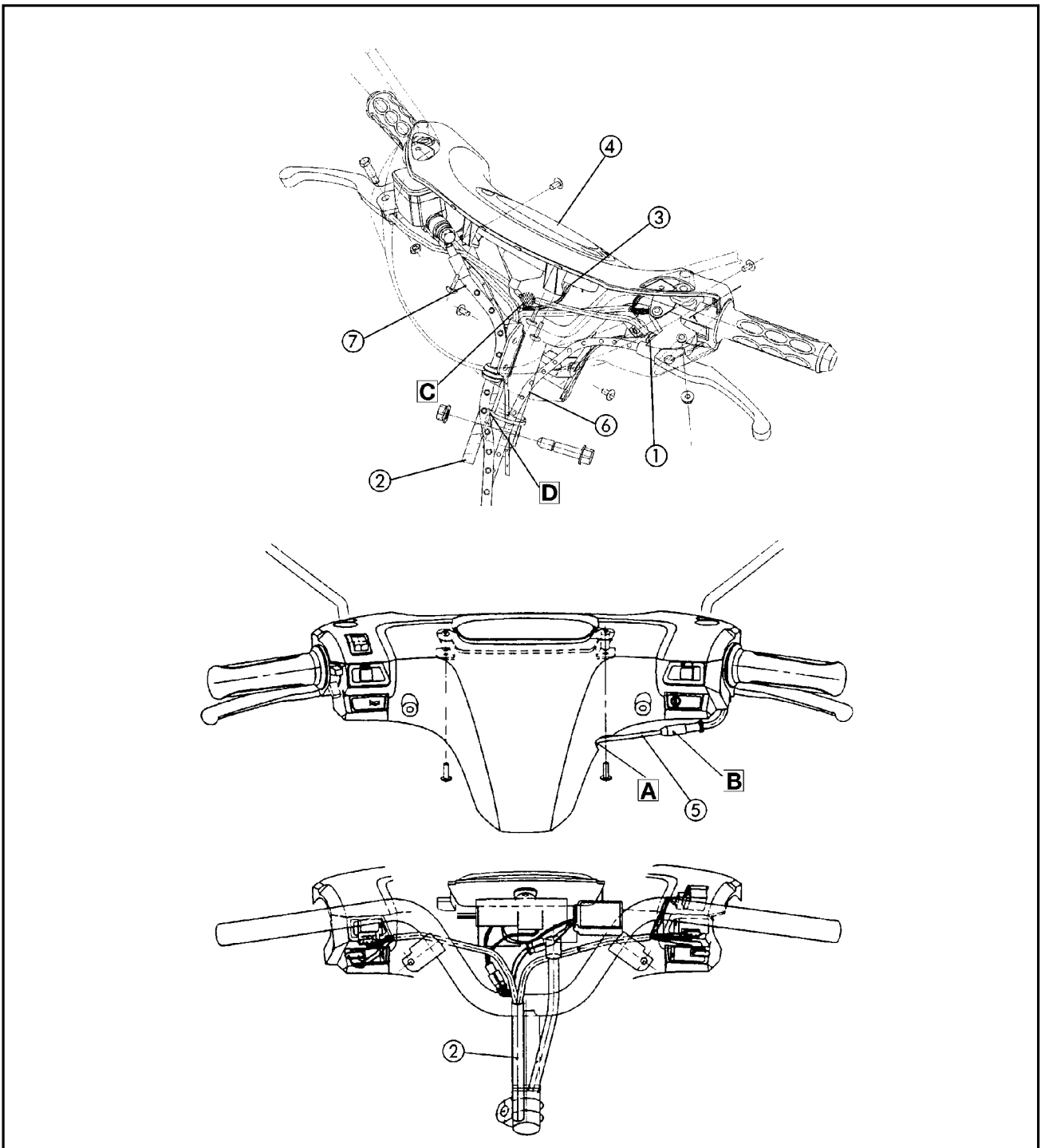
- A Splice the electrical installation to the frame
- B Splice the oil pipe to the tank
- C Connect the oil pipe to the pump
- D Splice the installation to the frame
- E Tighten the earth cable and the ignition coil together
- F Pass the speedometer cable through the guide
- G Fit the grommet in the small hole of the underbracket

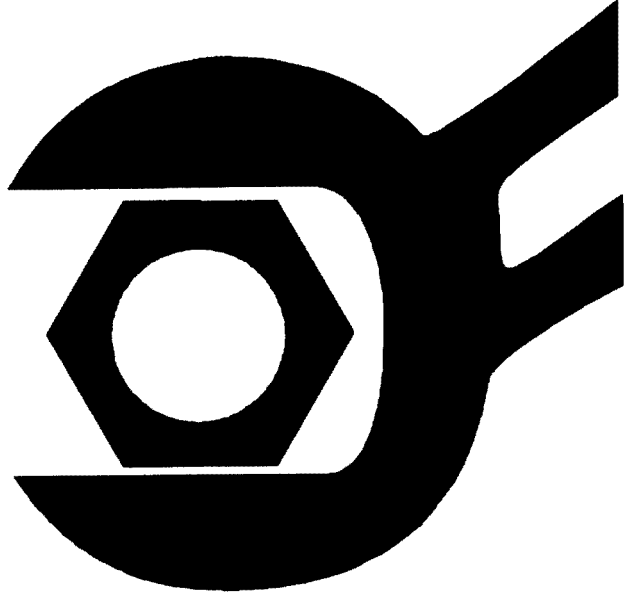




- ① Front break switch
- ② Electrical installation
- ③ Intermittent relay
- ④ Speedometer assembly
- ⑤ Accelerator cable
- ⑥ Rear brake cable
- ⑦ Choke cable
- ⑧ Front brake hose

- A Do not pinch the accelerator cable when assembling the handlebar covers
- B Accelerator cable tensioner. Cover after adjusting
- C Connect the brake switch cables in this area
- D Do not pass the brake pipe through the flange





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3

CHAPTER 3

PERIODIC INSPECTION AND ADJUSTMENTS

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PERIOD INSPECTION AND ADJUSTMENTS

INTRODUCTION

This chapter includes all information necessary to carry out inspections and adjustments recommended. These preventive maintenance procedures, if they are correctly followed, will ensure the most reliable operation of the vehicle and a longer useful life. The need for overhauls and costly repairs will be greatly reduced. This applies both to vehicles which are already in service and to new vehicles which are ready for sale. All service technicians should familiarise themselves with the entire chapter.

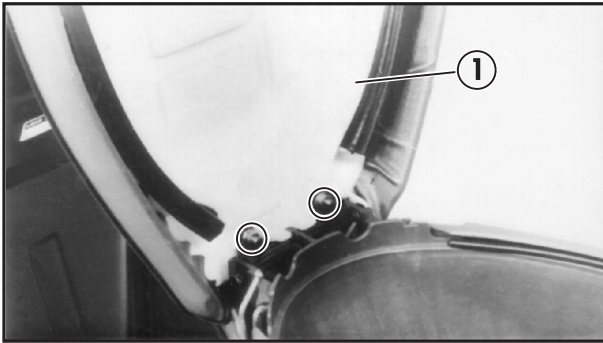
PERIODIC MAINTENANCE / LUBRICATION INTERVALS

N.	INTEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (x 1.000 km)					ANNUAL CHECK
			1	6	12	18	24	
1	*	Fuel line • Check fuel hoses and vacuum hose for cracks		✓	✓	✓	✓	✓
2		Spark Plug • Check condition. • Clean and regap. • Replace.		✓		✓		
3		Air filter element • Clean. • Replace.		✓		✓		
4	*	Front brake • Check operation, fluid level and vehicle for fluid leakage. • Replace brake pads.	✓	✓	✓	✓	✓	✓
5	*	Rear brake • Check operation and adjust brake lever freeplay. • Replace brake shoes.	✓	✓	✓	✓	✓	✓
6	*	Brake hose • Check for cracks or damage. • Replace. (See NOTE on page 6-5)		✓	✓	✓	✓	✓
7	*	Wheels • Check runout and for damage.		✓	✓	✓	✓	
8	*	Tires • Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary.		✓	✓	✓	✓	
9	*	Wheel bearings • Check bearing for looseness or damage.		✓	✓	✓	✓	
10	*	Steering bearings • Check bearing play and steering for roughness. • Lubricate with lithium-soap-based grease.	✓	✓	✓	✓	✓	
11	*	Chassis fasteners • Make sure that all nuts, bolts and screws are properly tightened.		✓	✓	✓	✓	✓
12		Centerstand • Check operation. • Lubricate.		✓	✓	✓	✓	✓
13	*	Front fork • Check operation and for oil leakage.		✓	✓	✓	✓	
14	*	Rear shock absorber assembly • Check operation and shock absorber for oil leakage.		✓	✓	✓	✓	
15	*	Carburetor • Check starter (choke) operation. • Adjust engine idling speed.	✓	✓	✓	✓	✓	✓
16	*	Autolube pump • Check operation. • Bleed if necessary.	✓		✓		✓	✓
17		Final gear oil • Check oil level and vehicle for oil leakage. • Change.	✓	✓		✓		
18	*	V-belt • Replace			✓		✓	
19		Front and rear brake switches • Check operation.	✓	✓	✓	✓	✓	✓
20	*	Moving parts • Lubricate, and cables		✓	✓	✓	✓	✓
21		Lights, signals and switches • Check operation. • Adjust headlight beam.	✓	✓	✓	✓	✓	✓

- Since these items require special tools, data and technical skills, have a Yamaha/MBK dealer perform the service.

NOTE:

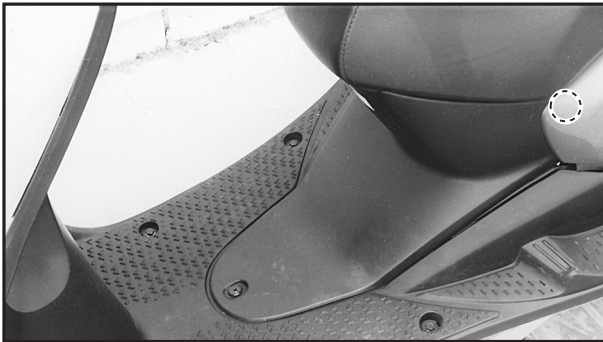
- The air filter needs more frequent service if you are riding in unusually wet or dusty areas.
- Hydraulic brake service
- Regularly check and, if necessary, correct the brake fluid level.
- Every two years replace the internal components of the brake master cylinder and caliper, and change the brake fluid.
- Replace the brake hoses every four years and if cracked or damaged.



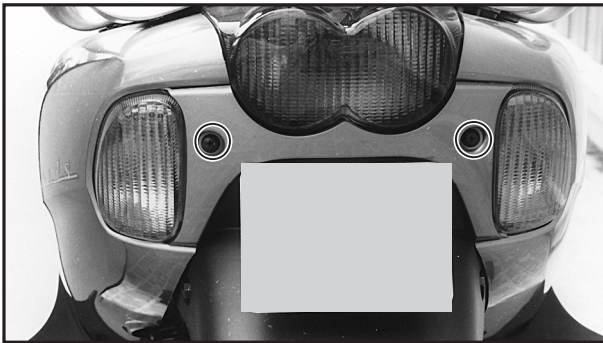
REAR BODYWORK AND FOOTREST

REMOVAL

1. Raise the seat
2. Remove:
 - Seat ①



3. Remove:
 - Battery cover



4. Remove:
 - Rear cover



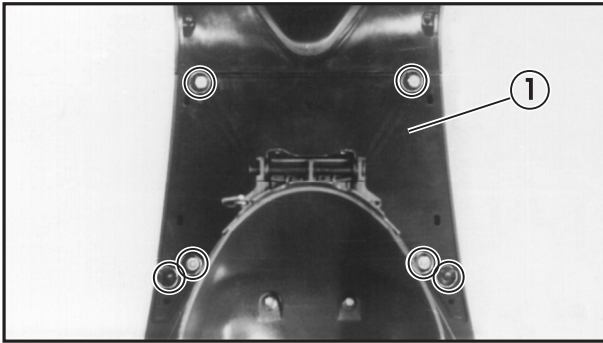
5. Remove:
 - Side covers

NOTE: _____

When the side covers are being removed unhook them from the catches and slide them outwards.

REAR BODYWORK AND FOOTREST

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6. Remove:
- Footrest ①

INSTALLATION

When the foot support panel and the rear cover are being installed, reverse the removal process.

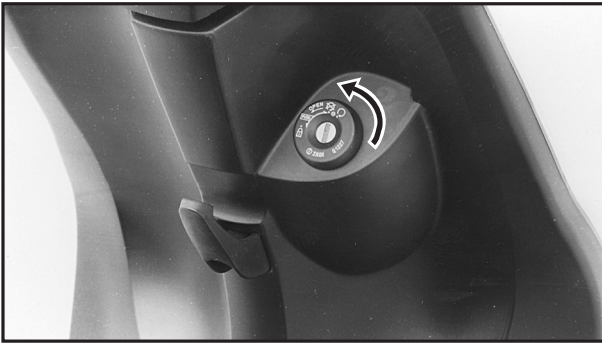
Remember the following points.



1. Install:
- Side covers

NOTE:

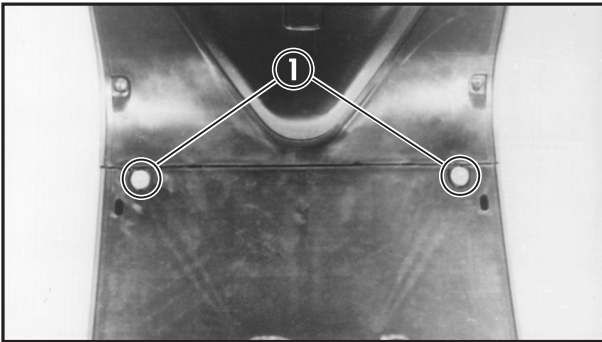
- Match up the support and hole and then apply pressure.



REAR BODYWORK, MUDGUARDS

REMOVAL

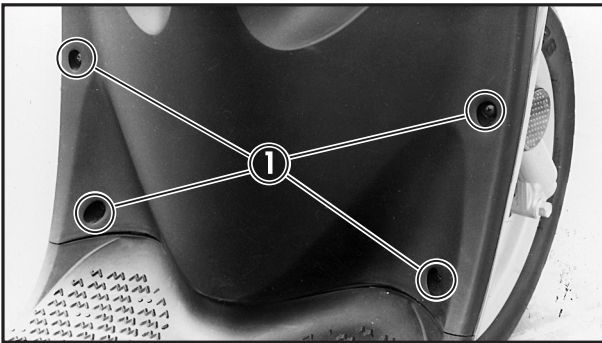
1. Remove:
 - Main switch cover.
Turn the cover to the left and pull upwards.



2. Remove:
 - Upper screws in ignition key panel
 - Rear fairing assembly and headlight

NOTE:

Disconnect the headlight cable and indicators.



3. Remove:
 - Front lower fairing screws ①
 - Carrier hook bolt
 - Footrest lower cover screws
4. Remove:
 - Battery cover
 - Battery, fuse and starter relay
 - Bottom footrest cover
 - Footrest
 - Bottom rear fairing

NOTE:

Disconnect indicator cables.

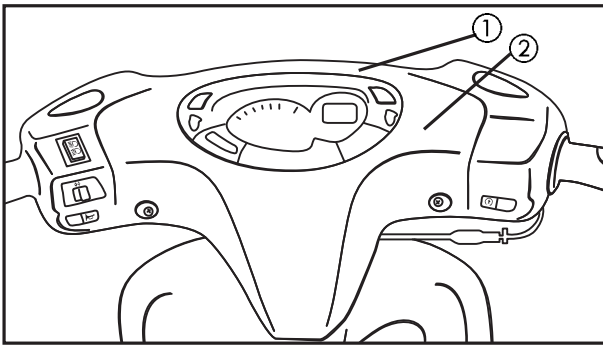
- Mudguards

INSTALLATION

Reverse the removal process.

NOTE:

After installing all plastic parts, check that all hooks are properly attached.



HANDLEBAR COVERS

REMOVAL

1. Remove:
 - Front handlebar cover ①
 - Rear handlebar cover ②

INSTALLATION

Reverse the removal procedure. Remember the following points.

1. Install:
 - Front handlebar cover ①
 - Rear handlebar cover ②

NOTE: _____

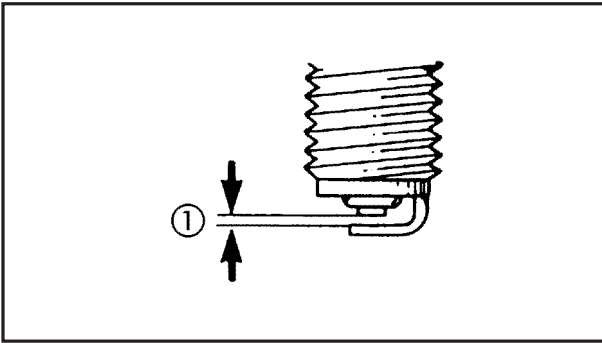
When installing the rear cover, check that the speedometer cables goes through its housing.

NOTE: _____

After installing the handlebar cover, ensure that all the hooks are properly coupled.

SPARK PLUG INSPECTION

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SPARK PLUG INSPECTION

1. Inspect:
 - Incorrect type of spark plug → Replace

Standard spark plug (5AD y SA15)
BR8HS/N.G.K.
for SA19
BRP4HS/N.G.K.

2. Inspect:
 - Electrode ①
Worn/Damaged → Replace
 - Insulator ②
Abnormal colour → Replace
The normal colour is a light to medium coffee colour.
3. Clean the spark plug with a spark plug cleaner or wire brush.
4. Measure:
 - Distance between electrodes
Use a thickness gauge.
Outside the specified value → Correct



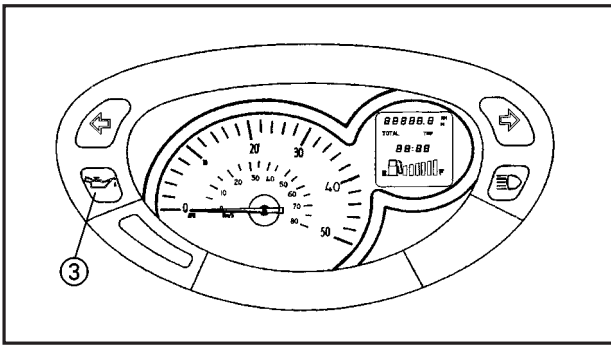
Gap between electrodes
0.6 ~ 0.7 mm

5. Tighten:
 - Spark plug



Spark plug
2.0 m • kg

INSPECTION OF ENGINE OIL LEVEL

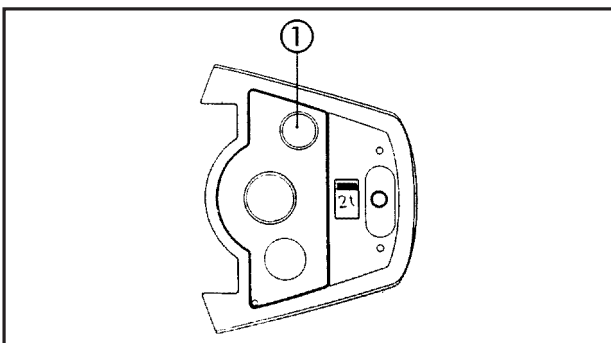
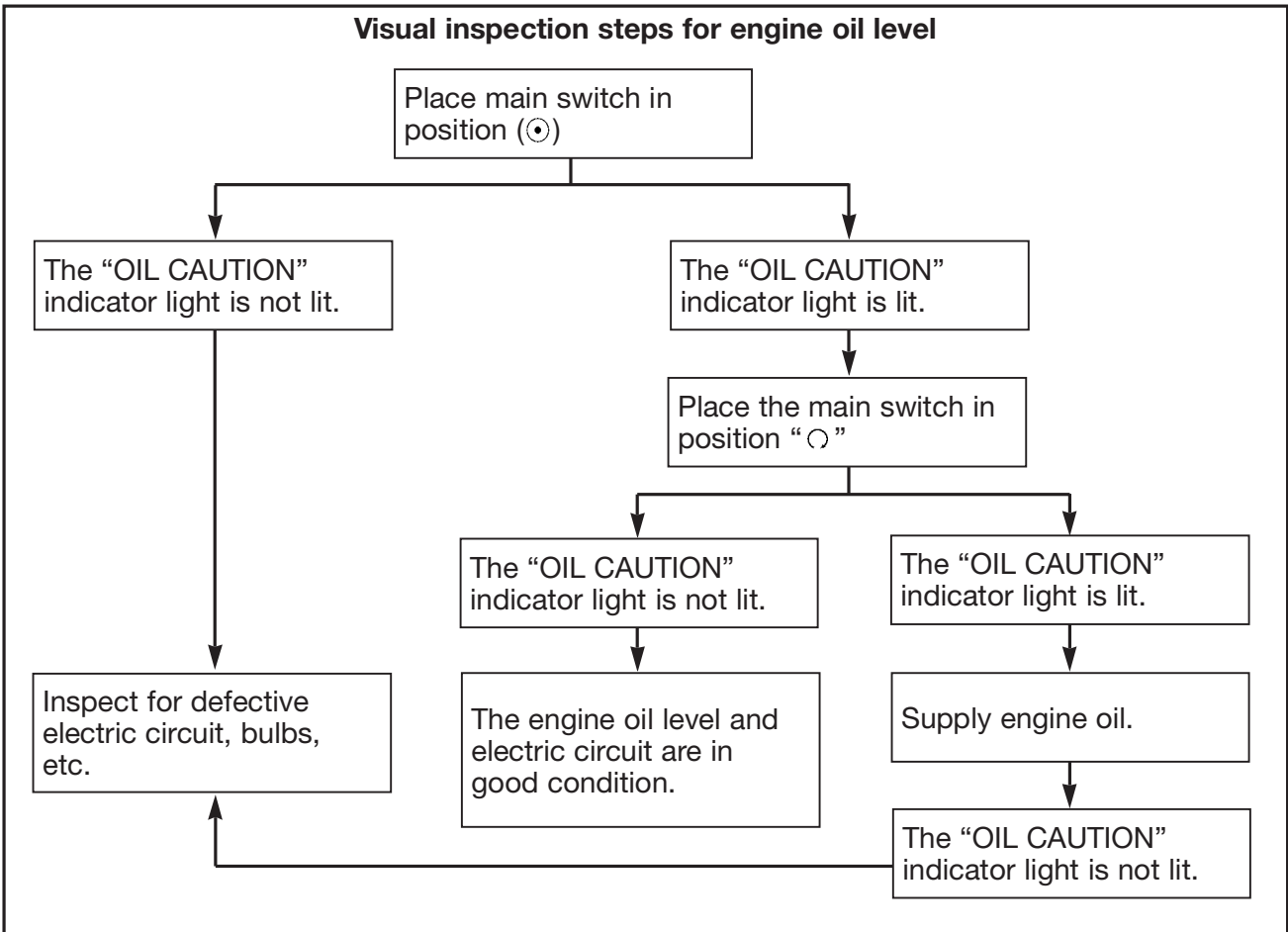


INSPECTION OF ENGINE OIL LEVEL

1. Inspect:
 - Engine oil level
 - Low oil level → Add sufficient oil.

③ Oil indicator light “OIL CAUTION”

Visual inspection steps for engine oil level

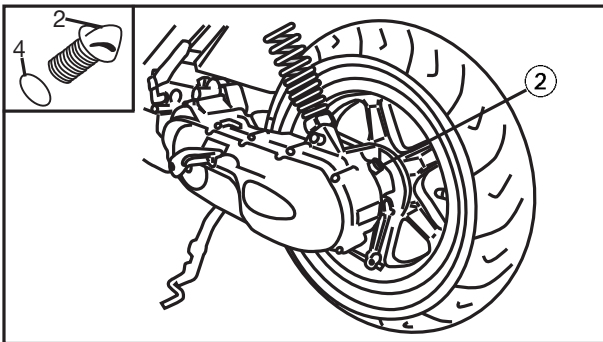
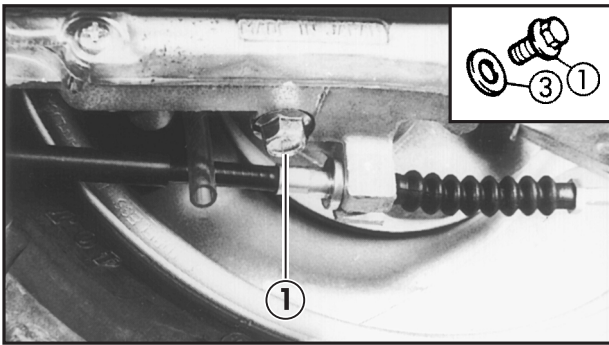


Recommended oil:
JASO grade FC 2 stroke engine oil or equivalent
Total:
1.2 L

NOTE: _____
 After filling the oil tank, replace the cap and close the seat.

CHANGE OF TRANSMISSION OIL / CLEANING AIR FILTER

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CHANGE OF TRANSMISSION OIL

1. Remove:
 - Drainage bolt ①
Drain the transmission oil.
 - Oil refill cap ②
2. Inspect:
 - Gasket ③ (drainage screw)
 - O-ring ④ (refill cap)
Damaged → Change
3. Install:
 - Gasket
 - Drainage screw

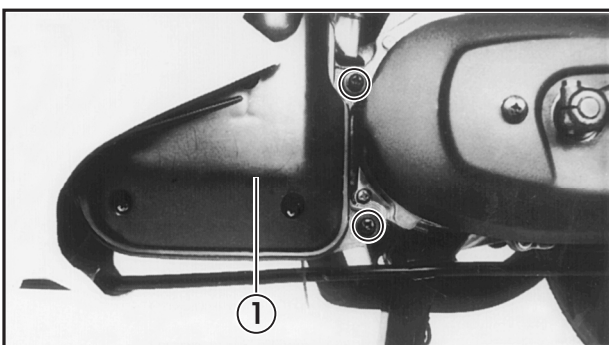


Drainage screw
18 Nm (1.8 m • kg)

4. Fill:
 - Transmission Case



Transmission oil
SE engine oil type SAE 30 or GL
gear oil
Caacity:
0.11 L



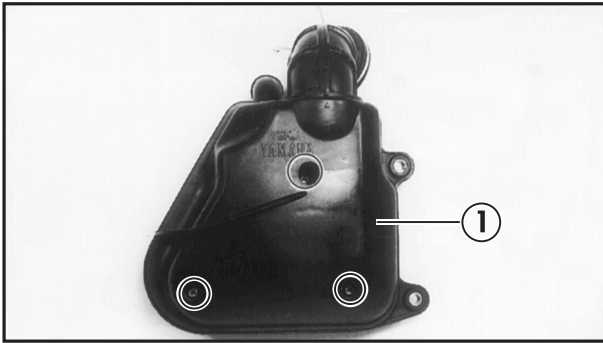
CLEANING AIR FILTER

Carburettor side

1. Remove:
 - Air filter box assembly ①

CLEANING AIR FILTER

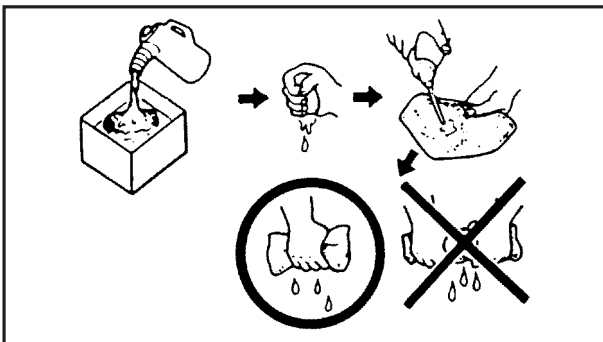
INSP
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2. Remove:
 - Air filter box ①
 - Air filter

ATTENTION: _____

Never start up the engine with the air filter removed. This will allow the entry of unfiltered air, causing rapid wear and possible damage to the engine. Also, using the engine without the filter will affect the carburetor jets resulting in poor performance and the possible overheating of the engine. Be careful not to block the inlet area of the air filter with cloths or rags.



3. Inspect:
 - Damaged element → Change
4. Clean:
 - Air filter



Steps for cleaning air filter:

- Wash the filter carefully but completely with solvent.

⚠ WARNING _____

Never use solvents with a low flammability point, such as petrol, to clean the filter. Such solvents may cause fire or explosions.

- Clean off excess solvent from the filter and leave it to dry.

ATTENTION: _____

Do not wring the filter when drying it.

- Apply oil for foam air filters or YAMAHA 2T engine oil or equivalent oil for 2 stroke air-cooled engines.
- Wipe off the excess oil.

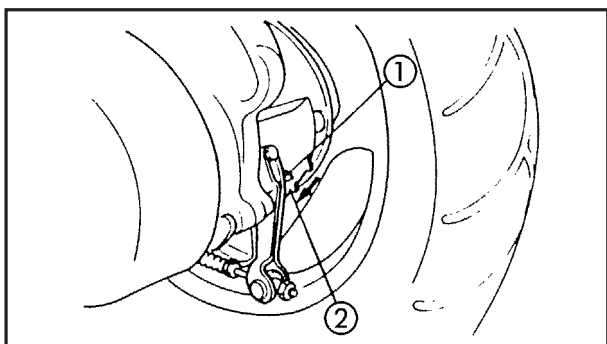
NOTE: _____

The filter should be wet but not dripping.



INSPECTION OF BRAKE SHOES / INSPECTION OF BRAKE FLUID LEVEL

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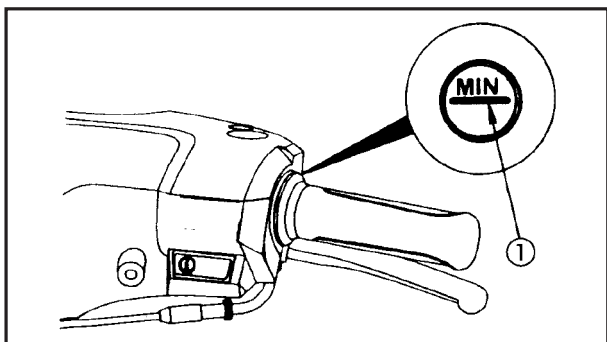
INSPECTION OF BRAKE SHOES

1. Activate the brake lever
2. Inspect:
 - Wear indicator ①Indicator on wear limit line ② → Change the brake shoes.

INSPECTION OF BRAKE FLUID LEVEL

NOTE:

Place the scooter upright when inspecting the fluid level.



1. Inspect:
 - Fluid level.The fluid level is below the minimum level line → Refill up to correct level.



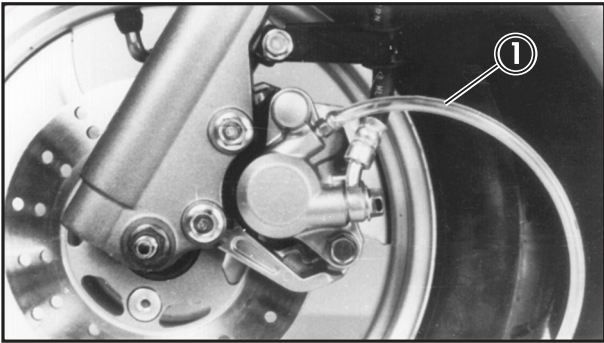
Recommended fluid:
DOT 4

ATTENTION:

The fluid may corrode painted surfaces or plastic parts. Always clean any spilt fluid immediately.

⚠ WARNING:

- Only use fluid of the designated quality. Otherwise the rubber seals may deteriorate due to leakages and poor performance of the brakes.
- Refill with the same type of fluid. The mixture of fluids may cause a damaging chemical reaction which may cause the poor performance of the brakes.
- Take care not to let water enter the pump while it is being filled. The water will lower the boiling point of the fluid significantly and may cause a steam blockage.



AIR BLEEDING (HYDRAULIC BRAKE SYSTEM)

1. Bleed:
- Brake fluid

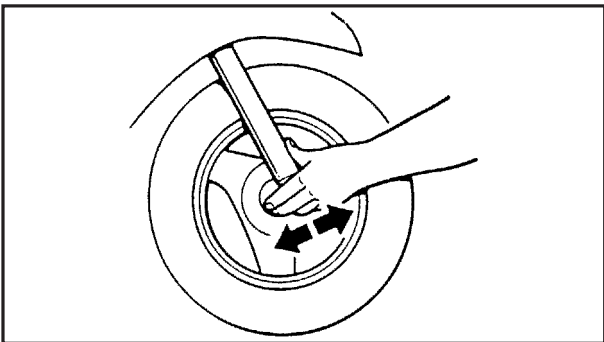


Steps for air bleeding:

- Add the appropriate amount of brake fluid to the sump.
- Install the diaphragm. Take care not to spill fluid or to let the sump overflow.
- Connect the clean plastic tube ①.
- Place the other end of the tube in a container.
- Slowly apply the brake lever several times.
- Pull the lever inwards. Keep it in this position.
- Loosen the bleed screw and tighten the lever as far as it will go.
- Tighten the bleed screw when it has reached its limit, afterwards loosen the lever.
- Repeat steps (e) to (h) until the air bubbles in the system have been removed.
- Add brake fluid to the correct level.

⚠ WARNING

Check the brake operation after bleeding the system.



STEERING ADJUSTMENT

1. Check:
- Steering assembly bearings Press down the bottom of the fork and carefully move the assembly forwards and backwards.
Loose → Adjust



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