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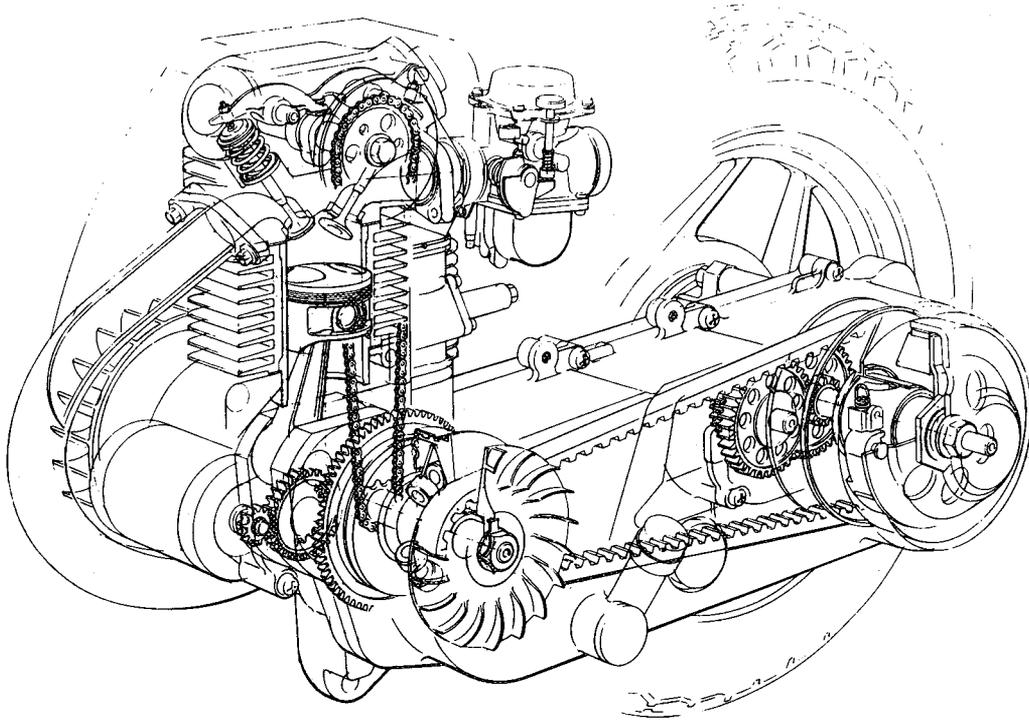
YAMAHA

Model :

1WA281972000



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**XC125S
SERVICE MANUAL**

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1st Edition, August 1985**

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Printed in Japan

NOTICE

This manual was written by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to put an entire mechanic's education into one manual, so it is assumed that persons using this book to perform maintenance and repairs on Yamaha scooter have a basic understanding of the mechanical concepts and procedures inherent in scooter repair technology. Without such knowledge, attempted repairs or service to this model may render it unfit to use and/or unsafe.

Yamaha Motor Company, Ltd. is continually striving to improve all models manufactured by Yamaha. Modifications and significant changes in specifications or procedures will be forwarded to all Authorized Yamaha dealers and will, where applicable, appear in future editions of this manual.

TECHNICAL PUBLICATIONS
SERVICE DIVISION
MOTORCYCLE OPERATIONS
YAMAHA MOTOR CO., LTD.

HOW TO USE THIS MANUAL

PARTICULARLY IMPORTANT INFORMATION

This material is distinguished by the following notation.

NOTE: A **NOTE** provides key information to make procedures easier or clearer.

CAUTION: A **CAUTION** indicates special procedures that must be followed to avoid damage to the scooter.

WARNING: A **WARNING** indicates special procedures that must be followed to avoid injury to a scooter operator or person inspecting or repairing the scooter.

MANUAL FORMAT

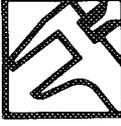
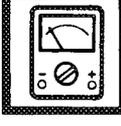
All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspection operations.

In this revised format, the condition of a faulty component will precede an arrow symbol and the course of action required will follow the symbol, e.g.,

- Bearings
Pitting/Damage → Replace.

EXPLODED DIAGRAM

Each chapter provides exploded diagrams before each disassembly section for ease in identifying correct disassembly and assembly procedures.

<p>①</p> <p>GEN INFO</p> 	<p>②</p> <p>INSP ADJ</p> 	
<p>③</p> <p>ENG</p> 	<p>④</p> <p>COOL</p> 	
<p>⑤</p> <p>CARB</p> 	<p>⑥</p> <p>CHAS</p> 	
<p>⑦</p> <p>ELEC</p> 	<p>⑧</p> <p>APPX</p> 	
<p>⑨</p> 	<p>⑩</p> 	
<p>⑪</p> 	<p>⑫</p> 	
<p>⑬</p> 	<p>⑭</p> 	
<p>⑮</p> 	<p>⑯</p> 	<p>⑰</p> 
<p>⑱</p> 	<p>⑲</p> 	<p>⑳</p> 
<p>㉑</p> 		

ILLUSTRATED SYMBOLS (Refer to the illustration)

Symbols ① to ⑧ are designed as thumb tabs to indicate the chapter's number and content.

- ① General information
- ② Periodic inspection and adjustment
- ③ Engine
- ④ Cooling system
- ⑤ Carburetion
- ⑥ Chassis
- ⑦ Electrical
- ⑧ Appendices

Symbols ⑨ to ⑭ are used to identify the specifications appearing in the text.

- ⑨ Filling fluid
- ⑩ Lubricant
- ⑪ Tightening
- ⑫ Wear limit, clearance
- ⑬ Engine speed
- ⑭ Ω , V, A

Symbols ⑮ to ㉑ in the exploded diagram indicate grade of lubricant and location of lubrication point.

- ⑮ Apply engine oil
- ⑯ Apply gear oil
- ⑰ Apply molybdenum disulfide oil
- ⑱ Apply wheel bearing grease
- ⑲ Apply lightweight lithium-soap base grease
- ⑳ Apply molybdenum disulfide grease
- ㉑ Apply locking agent (LOCTITE®)

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CHASSIS	 CHAS 5
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CHAPTER 1. GENERAL INFORMATION

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GENERAL INFORMATION

SCOOTER IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

The vehicle identification number ① is stamped into the frame.

Starting Serial Number:
JYA1WA00 * GA000101

NOTE:
The scooter identification number is used to identify your scooter and may be used to register your scooter with the licensing authority in your state.

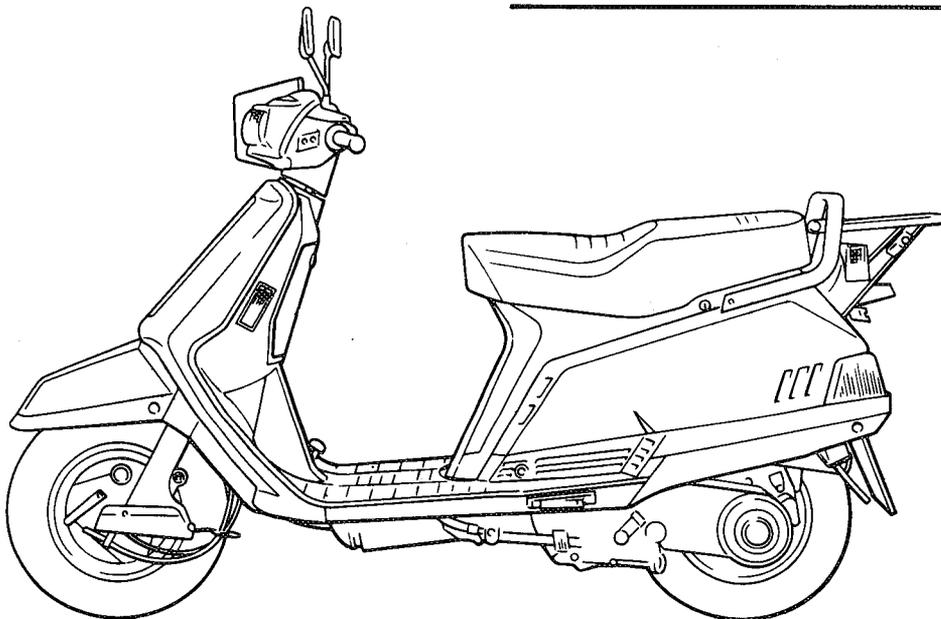
ENGINE SERIAL NUMBER

The engine serial number ① is stamped into the elevated part of the left rear section of the transmission case.

NOTE:
The first three digits of these numbers are for model identifications; the remaining digits are the unit production number.

Starting Serial Number:
1WA-000101

NOTE:
Designs and specifications are subject to change without notice.



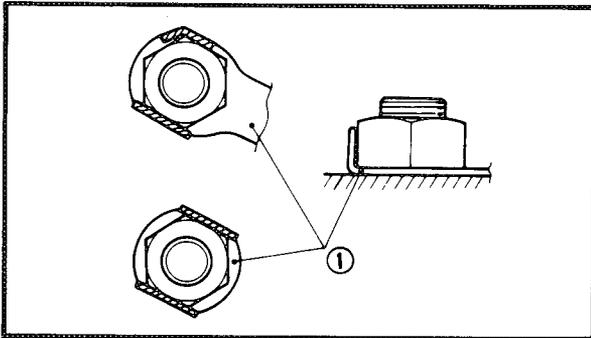
IMPORTANT INFORMATION

ALL REPLACEMENT PARTS

1. We recommend to use Yamaha genuine parts for all replacements. Use oil and/or grease recommended by Yamaha for assembly and adjustment.

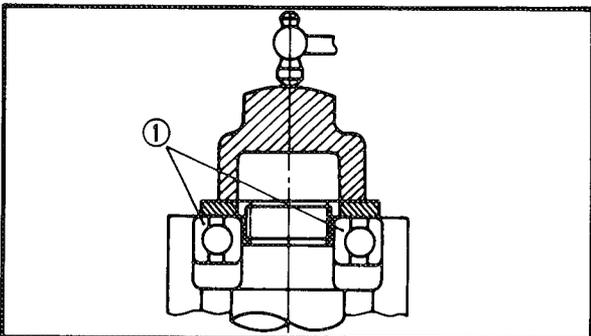
GASKETS, OIL SEALS, AND O-RINGS

1. All gaskets, seals, and O-rings should be replaced when an engine is overhauled. All gasket surfaces, oil seal lips, and O-rings must be cleaned.
2. Properly oil all mating parts and bearings during reassembly. Apply grease to the oil seal lips.



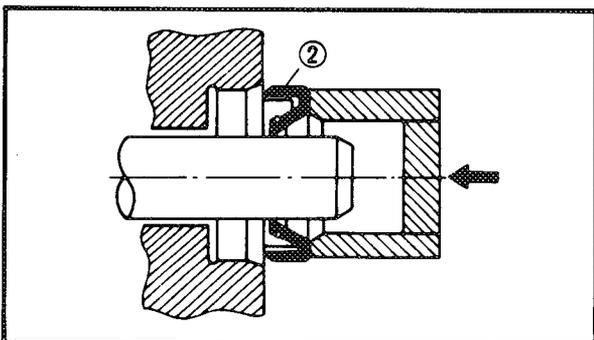
LOCK WASHERS/PLATES AND COTTER PINS

1. All lock washers/plates (1) and cotter pins must be replaced when they are removed. Lock tab(s) should be bent along the bolt or nut flat(s) after the bolt or nut has been properly tightened.



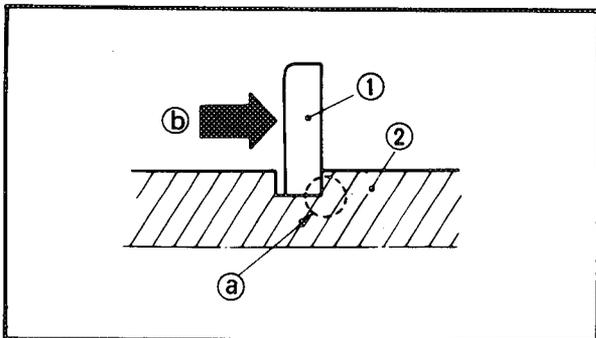
BEARINGS AND OIL SEALS

1. Install the bearing(s) (1) and oil seal(s) (2) with their manufacturer's marks or numbers facing outward. (In other words, the stamped letters must be on the side exposed to view.) When installing oil seal(s), apply a light coating of light-weight lithium base grease to the seal lip(s). Oil the bearings liberally when installing.



CAUTION:

Do not use compressed air to spin the bearings dry. This causes damage to the bearing surfaces.



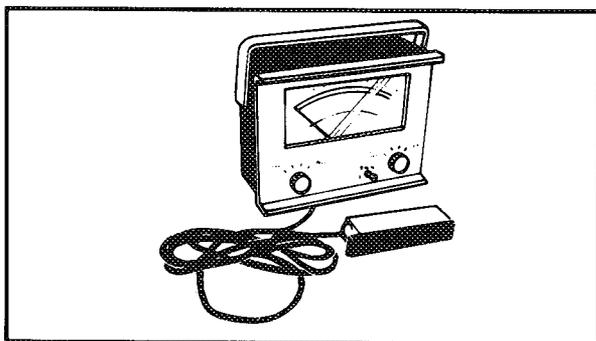
CIRCLIPS

1. All circlips should be inspected carefully before reassembly. Always replace piston pin clips after one use. Replace distorted circlips. When installing a circlip ①, make sure that the sharp-edged corner ③ is positioned opposite to the thrust ④ it receives. See the sectional view.

② Shaft

SPECIAL TOOLS

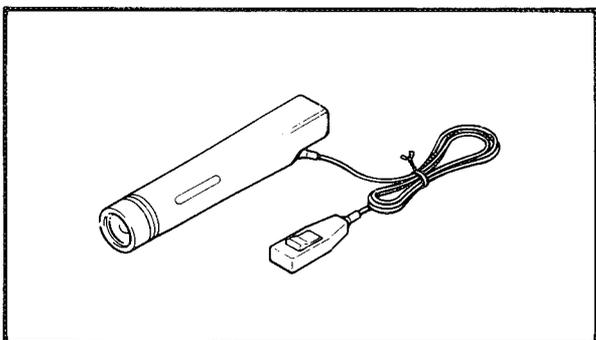
The proper special tools are necessary for complete and accurate tune-up and assembly. Using the correct special tool will help prevent damage caused by the use of improper tools or improvised techniques.



FOR TUNE-UP

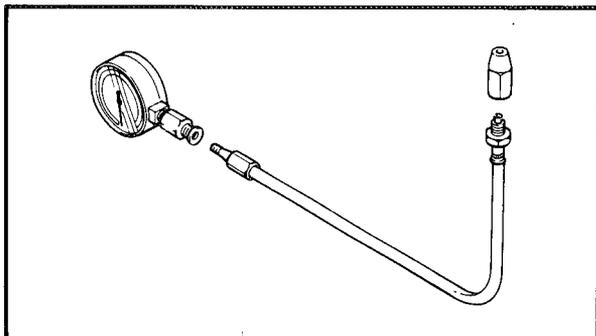
1. Inductive Tachometer
P/N YU-8036

This tool is needed for detecting engine rpm.



2. Timing Light
P/N YU-08037

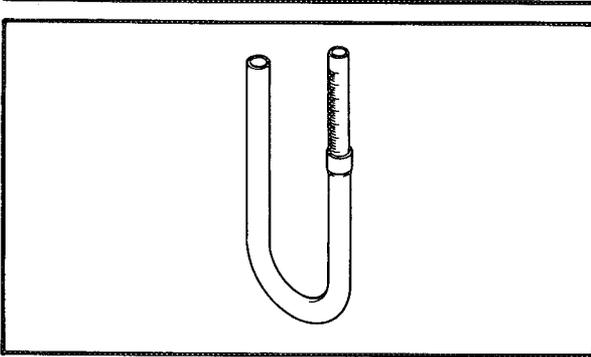
This tool is necessary for checking timing.



3. Compression Gauge
P/N YU-33223

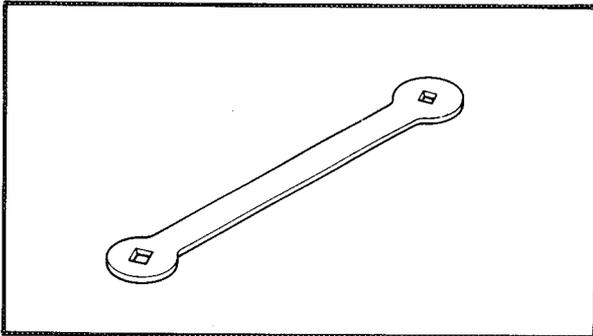
This gauge is used to measure engine compression.

1



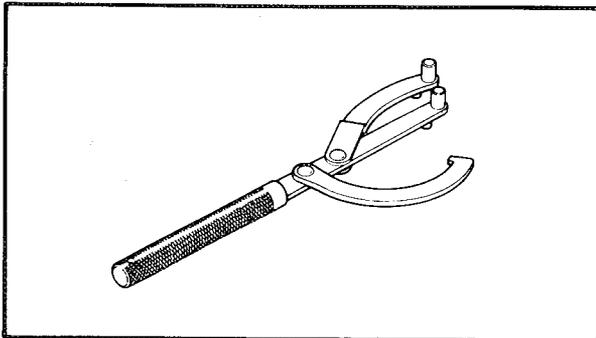
4. Fuel Level Gauge
P/N YM-01312-A

This gauge is used to measure the fuel level in the float chamber.



5. Valve Adjusting Tool
P/N YM-08035

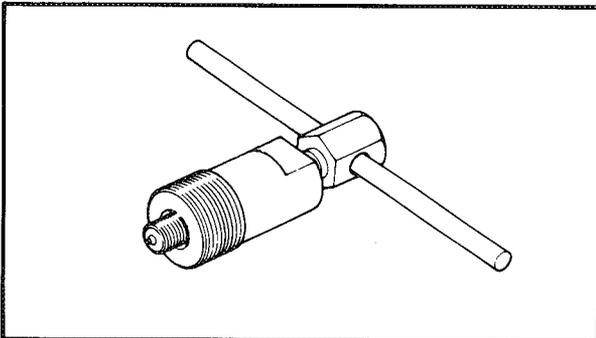
This tool is necessary for adjusting the valve clearance.



FOR ENGINE SERVICE

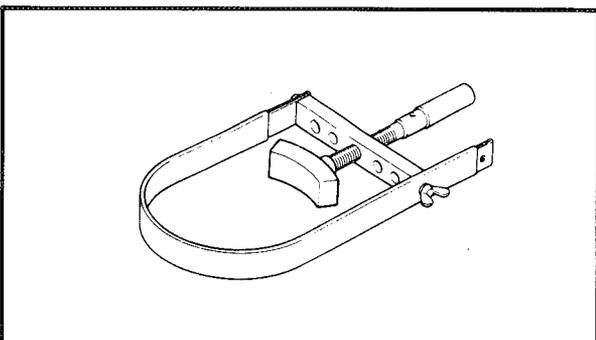
1. Rotor Holder
P/N YU-01235

This tool is used to hold the flywheel magneto when removing or installing the flywheel magneto securing nut.



2. Flywheel Magneto Puller
P/N YM-01189

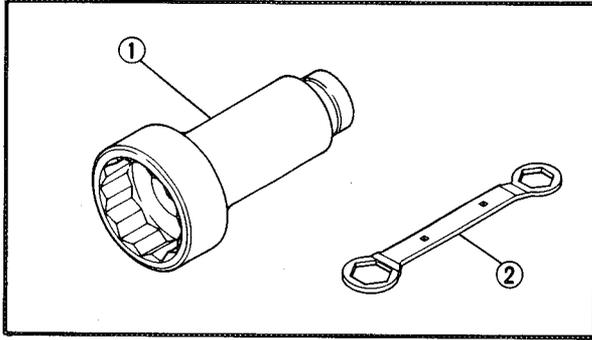
This tool is used to remove the flywheel.



3. Primary Sheave Holder
P/N YU-01701

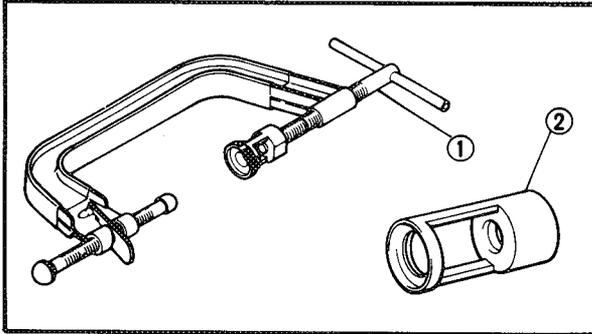
This tool is used when holding the clutch hub.

1



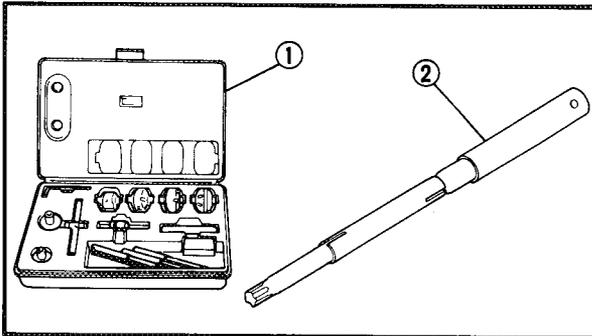
- 4. Middle Drive Shaft Nut Wrench – ①
P/N YM-04045-A
Locknut Wrench – ②
P/N YM-4045-A

These tools are used to remove and install the secondary sheave nut.



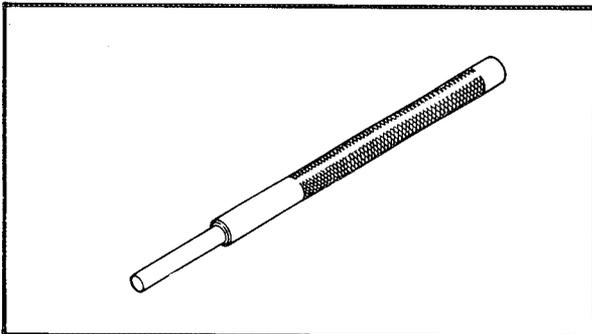
- 5. Valve Spring Compressor
P/N YM-04019 – ①
Adapter
P/N YM-4108 – ②

These tools are used to remove and install the valve assemblies.



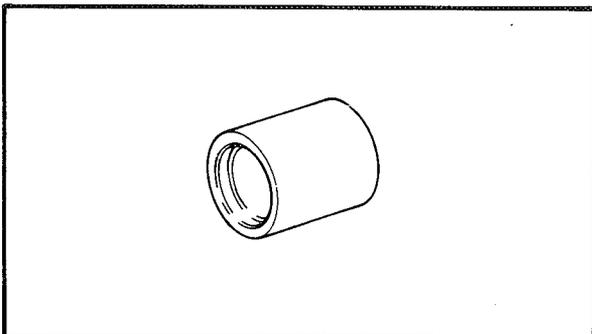
- 6. Valve Seat Cutter
P/N YM-91043 – ①
5 mm Pilot
P/N YM-91043-50 – ②

These tools are used to resurface the valve seat.



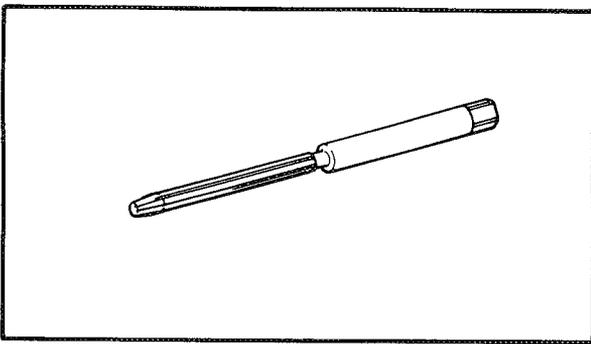
- 7. Valve Guide Remover
P/N YM-4097

This tool is needed to install the valve guides properly.



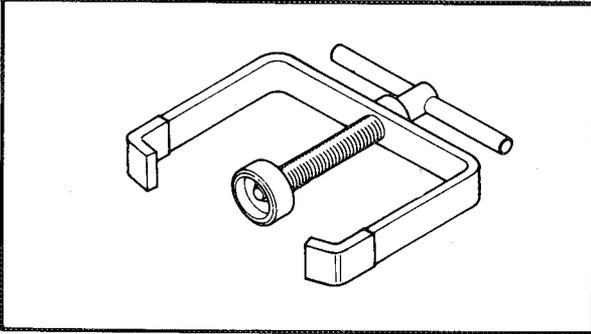
- 8. Valve Guide Installer
P/N YM-4098

This tool is needed to install the valve guides properly.



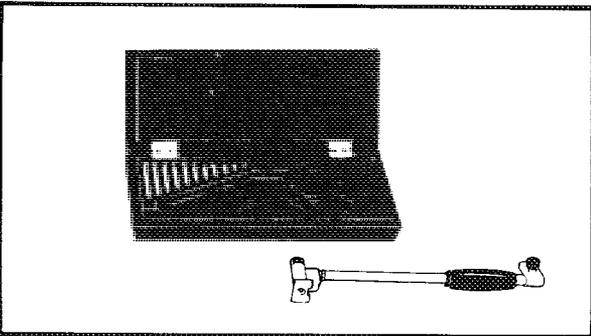
9. Valve Guide Reamer
P/N YM-4099

This tool is used to re bore the new valve guide.



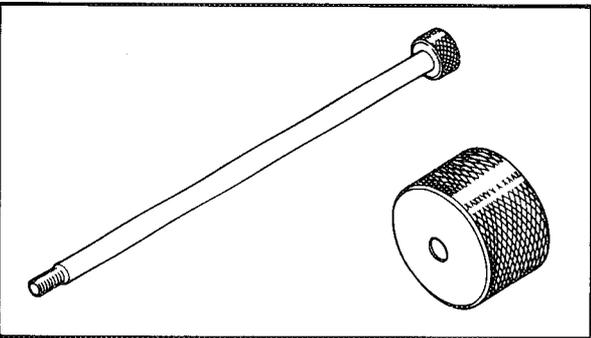
10. Clutch Spring Holder
P/N YS-28891

This tool is used to disassembly and assembly the secondary sheave.



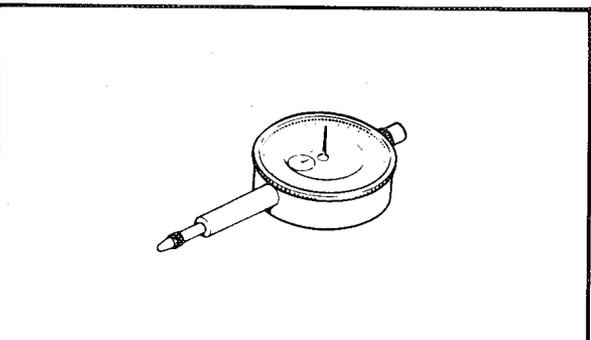
11. Cylinder Gauge
P/N 90890-03016

This tool is used to measures cylinder bore.

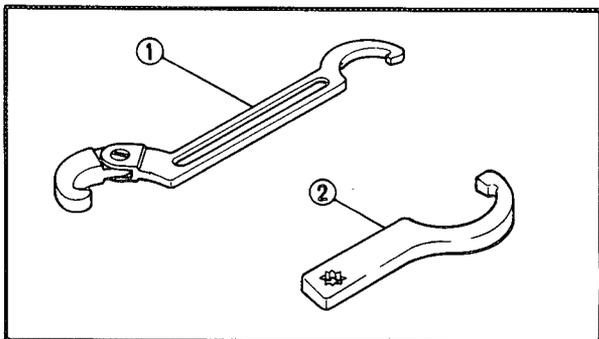


12. Slide Hammer Set (M6)
P/N YU-01083

These tools are used to remove and install the rocker arm shafts.

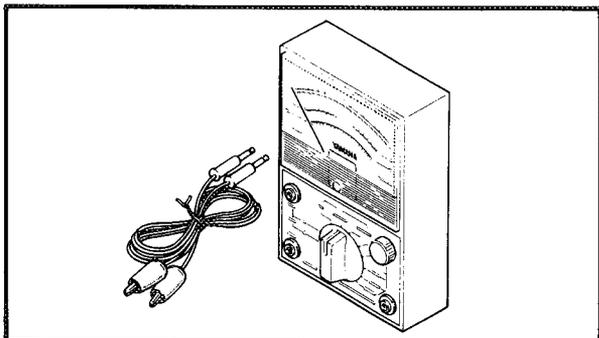


13. Dial Gauge
P/N YU-03097

**FOR CHASSIS SERVICE**

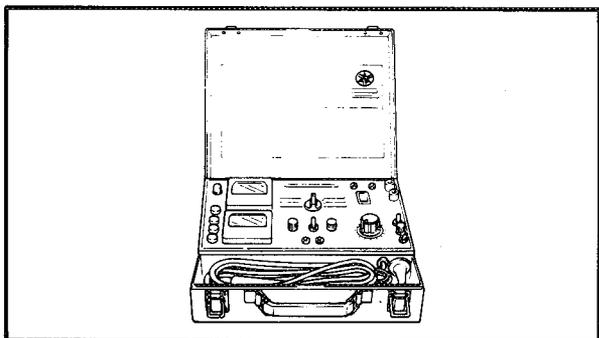
1. Ring Nut Wrench
P/N YU-01268 – ①
P/N YU-33975 – ②

These tools are used to loosen and tighten the steering ring nut.

**FOR ELECTRICAL COMPONENTS**

1. Pocket Tester
P/N YU-03112

This instrument is invaluable for electrical system inspection and adjustment.



2. Electro Tester
P/N YU-33260

This instrument is necessary for ignition system inspection.

CHAPTER 2. PERIODIC INSPECTION AND ADJUSTMENTS

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INTRODUCTION/ PERIODIC MAINTENANCE/LUBRICATION INTERVALS

PERIODIC INSPECTIONS AND ADJUSTMENTS

INTRODUCTION

This chapter includes all information necessary to perform recommended inspections and adjustments. These preventive maintenance procedures, if followed, will ensure more reliable vehicle operation and a longer service life. The need for costly overhaul work will be greatly reduced. This information applies to vehicles already in service as well as new vehicles that are being prepared for sale. All service technicians should be familiar with this entire chapter.

PERIODIC MAINTENANCE/LUBRICATION INTERVALS

Unit: km (miles)

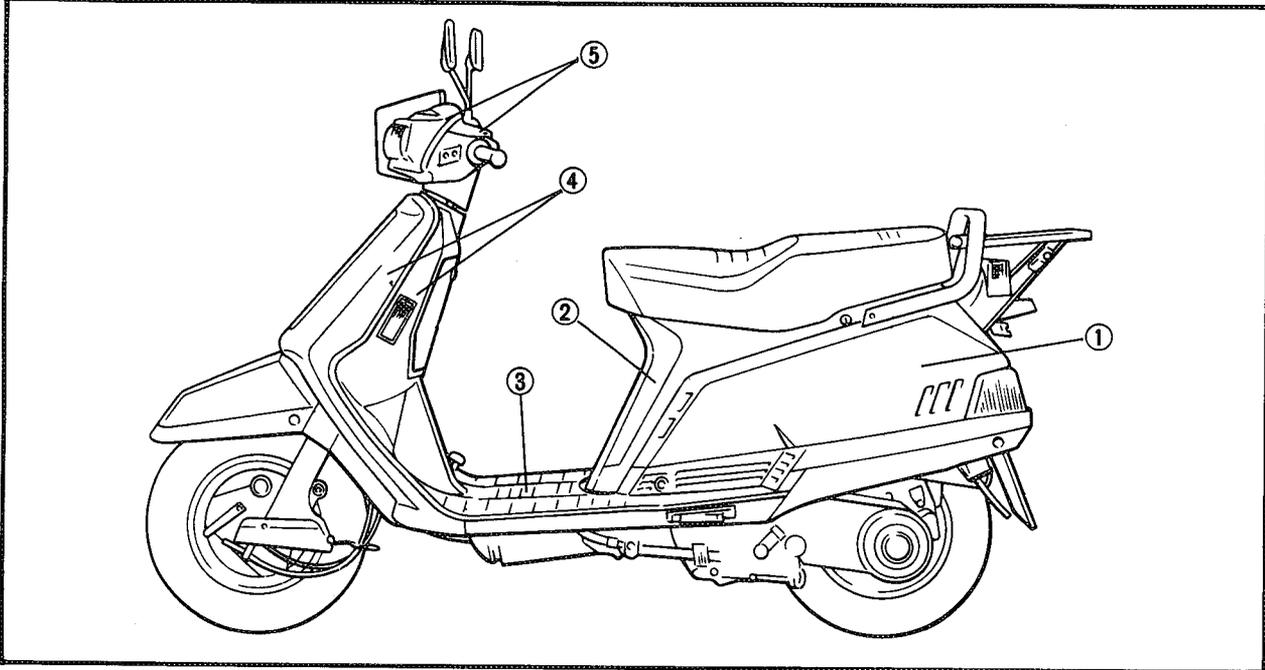
ITEM	REMARKS	BREAK-IN 1,000 (600)	EVERY	
			6,000 (4,000) or 6 months	12,000 (8,000) or 12 months
Valve(s)*	Check valve clearance. Adjust if necessary.	○	○	○
Spark plug(s)	Check condition. Clean or replace if necessary.	○	○	○
Air filter	Clean. Replace if necessary.		○	○
Crankcase filter	Clean. Replace if necessary.			○
Carburetor*	Check idle speed/starter operation. Adjust if necessary.	○	○	○
Fuel line*	Check fuel hose and vacuum pipe for cracks or damage. Replace if necessary.		○	○
Engine oil	Replace (Warm engine before draining).	○	○	○
Final gear oil	Check oil level/oil leakage. Replace every 24,000 (16,000) or 24 months.	REPLACE	○	○
Brake	Check operation. Adjust if necessary.		○	○
Clutch	Check operation. Adjust if necessary.		○	○
Front brake tensionbar pivots and bottom link pivots	Apply until new grease shows.***		○	○
Front axle	Apply grease lightly.**		○	○
Wheels*	Check balance/damage/runout. Repair if necessary.		○	○
Wheel bearings*	Check bearings assembly for looseness/damage. Replace if damaged.		○	○
Steering bearing*	Check bearings assembly for looseness. Correct if necessary. Moderately repack every 24,000 (16,000) or 24 months.**	○		○
Front forks*	Check operation/oil leakage. Repair if necessary.		○	○
Rear shock absorber*	Check operation/oil leakage. Repair if necessary.		○	○
V-belt	Check damage and wear. Replace if necessary. Replace every 18,000 km (12,000 mi).		○	○
Fittings/Fasteners*	Check all chassis fittings and fasteners. Correct if necessary.	○	○	○
Center and sidestand*	Check operation. Repair if necessary.	○	○	○
Sidestand switch*	Check operation. Clean or replace if necessary.	○	○	○
Battery*	Check specific gravity. Check breather pipe for proper operation. Correct if necessary.		○	○

*: It is recommended that these items be serviced by a Yamaha dealer.

** : Medium weight wheel bearing grease.

*** : Lithium soap base grease.

REMOVING THE COVERS AND PANELS

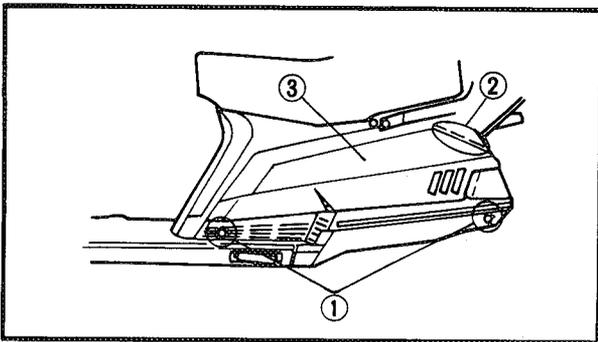


2

- ① Side covers (Right/Left)
- ② Front cover
- ③ Footrest board
- ④ Front and rear leg shield
- ⑤ Front and rear handlebar cover

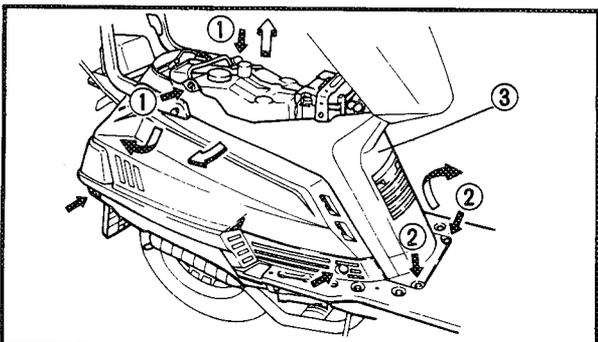
CAUTION:

- Before removing the cover(s), make sure that all hooks are free.
- After installing the cover(s), make sure that all hooks are securely fitted.



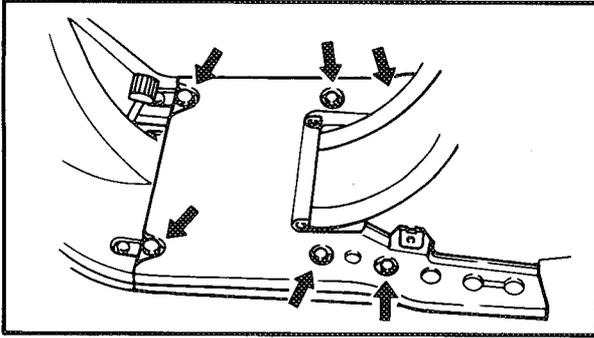
SIDE COVER (Right/Left)

1. Remove:
 - Screws (Side cover) ①
2. Unhook:
 - Hooks ②
3. Remove:
 - Side cover ③



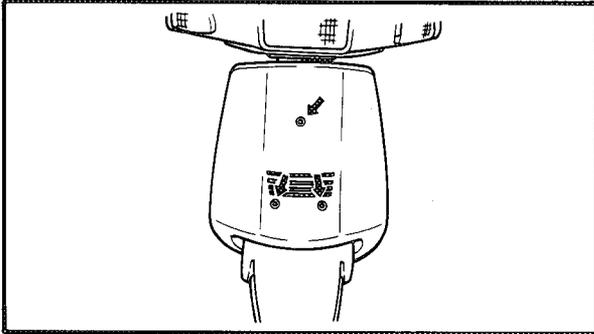
FRONT COVER

1. Open the seat.
2. Remove:
 - Screws (Front cover) ①
 - Bolts (Front cover) ②
3. Close the seat.
4. Remove:
 - Front cover ③



FOOTREST BOARD

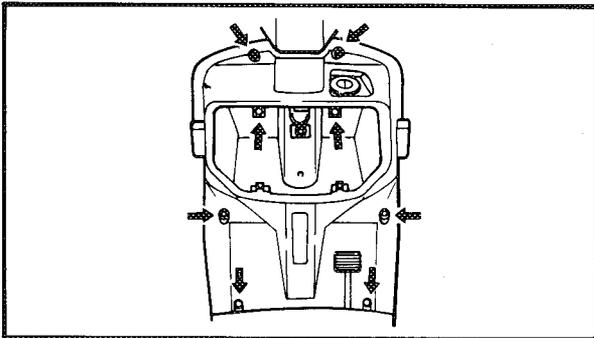
1. Remove:
 - Side covers (Right/Left)
 - Front cover
 - Footrest mat
 - Bolts (Footrest board)
 - Footrest board



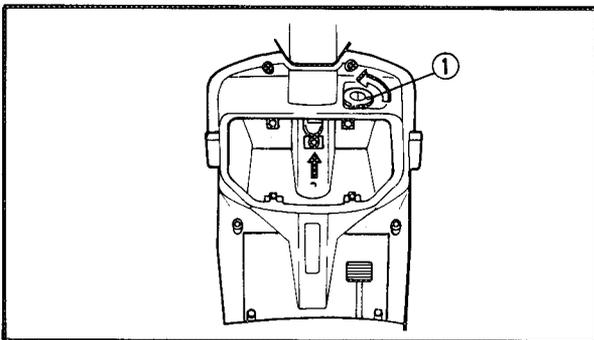
FRONT AND REAR LEG SHIELD

Front Leg Shield

1. Remove:
 - Nuts (Leg shield)

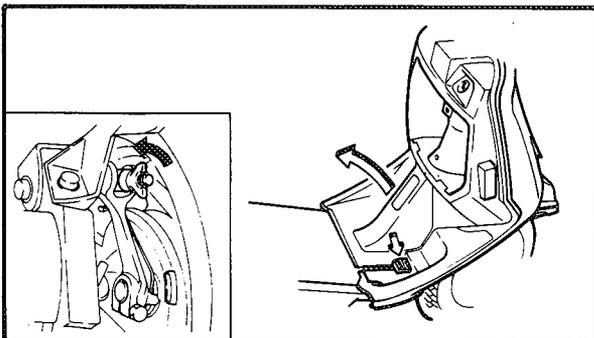


2. Remove:
 - Screws (Leg shield)
 - Bolts (Footrest board)
 - Front leg shield



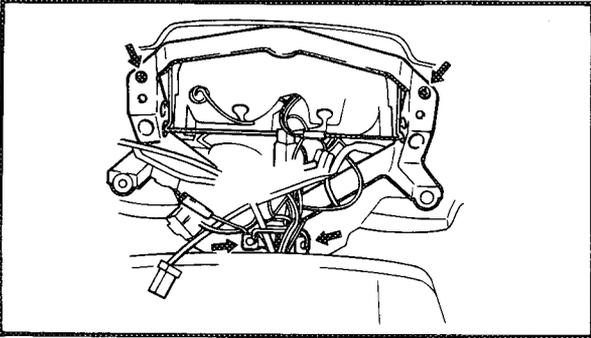
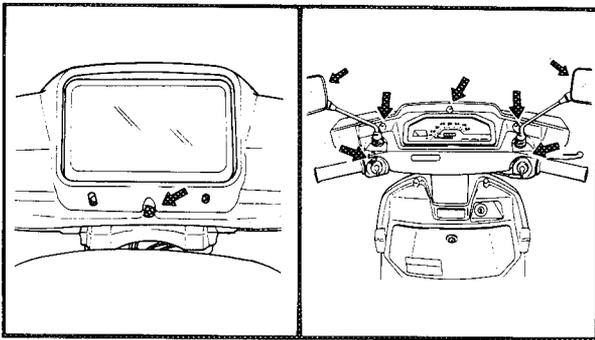
Rear Leg Shield

1. Remove:
 - Footrest board
 - Front leg shield
 - Screws (Rear leg shield)
 - Nut (Rear leg shield)
 - Main switch cap ①
Turn counterclockwise and pull off.



2. Loosen:
 - Rear brake adjuster
3. Apply the rear brake fully, move the leg shield then remove the leg shield.
4. Remove:
 - Rear leg shield

2



FRONT AND REAR HANDLEBAR COVERS

Front Handlebar Cover

1. Remove:
 - Rear view mirrors
 - Screws (Handlebar cover)
2. Remove:
 - Front handlebar cover

Rear Handlebar Cover

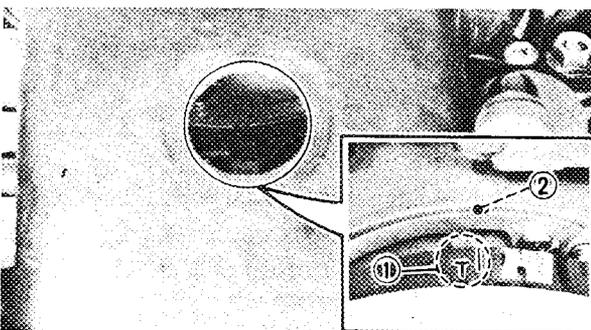
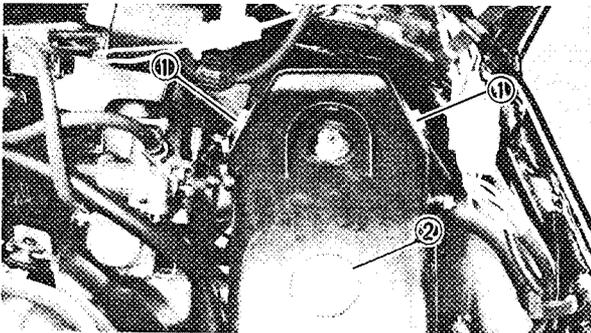
1. Remove:
 - Front handlebar cover
2. Disconnect:
 - Speedometer cable
3. Remove:
 - Screws (Handlebar cover)
 - Rear handlebar cover

2

ENGINE

VALVE CLEARANCE ADJUSTMENT

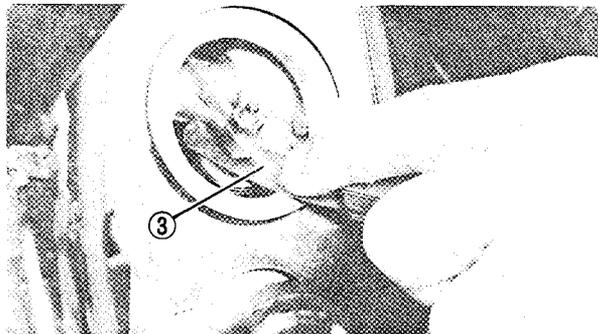
NOTE: _____
 Valve clearance must be measured when the engine is cool to the touch.



1. Remove:
 - Side cover (Right)
 - Front cover
 - Valve covers ① (Intake/Exhaust)
 - Spark plug
 - Timing check window plug ②
2. Measure:
 - Valve clearance
 By the following measurement steps.

Valve clearance measurement steps:

- Align the "T" mark ① on the flywheel with the stationary pointer ② on the crankcase. When the "T" mark is aligned with the stationary pointer, the piston is at Top Dead Center (TDC).

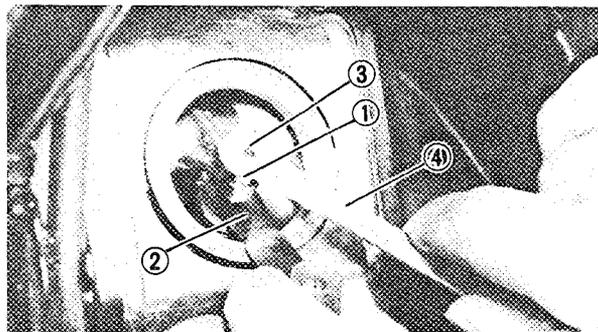


- Measure the valve clearance using a Feeler Gauge ③ .
Out of specification → Adjust clearance.



Intake Valve (Cold):
0.08 ~ 0.12 mm (0.003 ~ 0.005 in)
Exhaust Valve (Cold):
0.10 ~ 0.14 mm (0.004 ~ 0.006 in)

2



3. Adjust:
- Valve clearance
By the following adjustment steps.

Valve clearance adjustment steps:

- Loosen the locknut ① .
- Insert a Feeler Gauge ② between the adjuster end and the valve end.
- Turn the adjuster ③ clockwise or counterclockwise with the Valve Adjusting Tool ④ (YM-08035) until proper clearance is attained.



Intake Valve (Cold):
0.08 ~ 0.12 mm (0.003 ~ 0.005 in)
Exhaust Valve (Cold):
0.10 ~ 0.14 mm (0.004 ~ 0.006 in)

- Hold the adjuster to prevent it from moving and thoroughly tighten the locknut.



Valve Clearance Adjusting Locknut:
7 Nm (0.7 m·kg, 5.1 ft·lb)

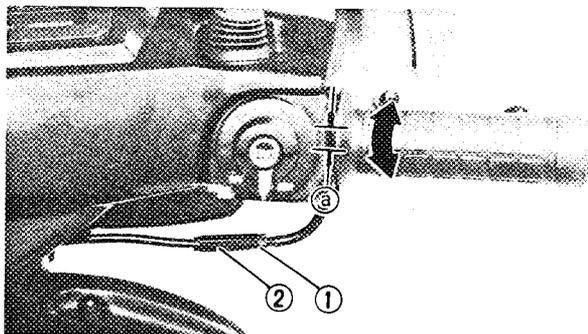
- Measure the valve clearance.
- If the clearance is incorrect, repeat above steps until the proper clearance is obtained.

4. Install:
- Reverse the applicable removal steps. (See page 2-4)



Spark Plug:
12.5 Nm (1.25 m·kg, 9.0 ft·lb)
Valve Cover (Intake/Exhaust):
7 Nm (0.7 m·kg, 5.1 ft·lb)

THROTTLE CABLE ADJUSTMENT/ IDLE SPEED ADJUSTMENT



THROTTLE CABLE ADJUSTMENT

1. Check:
 - Throttle cable free play (a)
Out of specification → Adjust.

 **Throttle Cable Free Play (a) :**
1.5 ~ 3.5 mm (0.06 ~ 0.14 in)

2. Adjust:
 - Throttle cable free play
By the following adjustment steps.

Throttle cable free play adjustment steps:

- Loosen the locknut (1).
- Turn the adjuster (2) clockwise or counterclockwise until proper free play is attained.
- Tighten the locknut.
- Measure the throttle cable free play.
- If the free play is incorrect, repeat above steps until the proper free play is obtained.

NOTE:

After adjusting, turn the handlebars to right and left and make sure that the engine idling does not run faster.

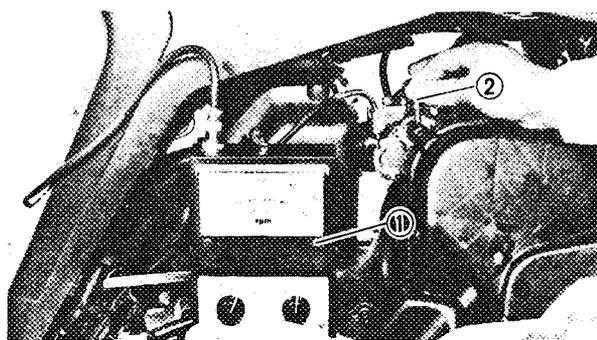
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IDLE SPEED ADJUSTMENT

1. Remove:
 - Side covers (Right/Left)
2. Start the engine and warm it up before setting idle-speed.

NOTE:

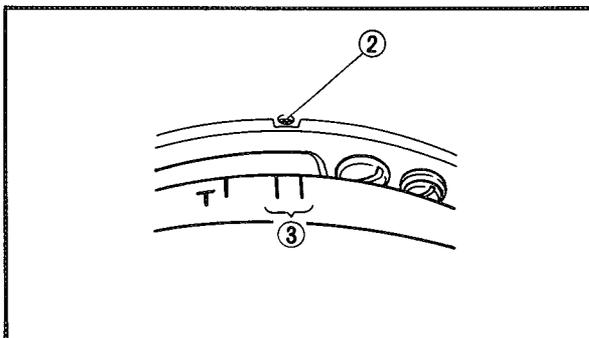
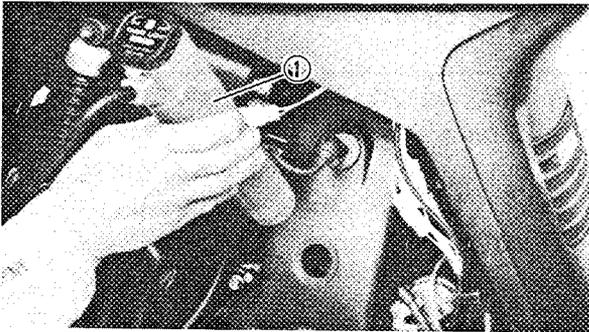
A warm engine is defined as one which had been operated for about 3 minutes at 3,000 r/min with no load.



3. Attach:
 - Inductive Tachometer (YU-8036) (1)
4. Adjust:
 - Idle speed
Turn the throttle stop screw (2) clockwise to increase engine speed and counterclockwise to decrease engine speed.



Engine Idle Speed:
1,350 ~ 1,450 r/min



IGNITION TIMING CHECK

WARNING:

The ignition timing is adjusted for maximum performance at the factory. **DO NOT** attempt to change this setting.

1. Check:
 - Ignition timing
 By the following steps.

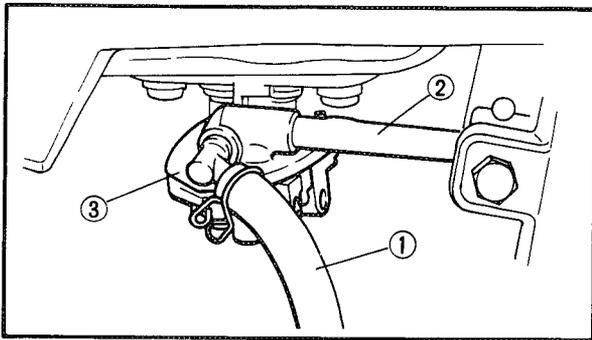
Ignition timing check steps:

- Remove the timing check window.
- Connect the timing light (YU-08037) ① to spark plug lead.
- Warm up the engine and allow it to idle at the specified engine speed.
Use the tachometer



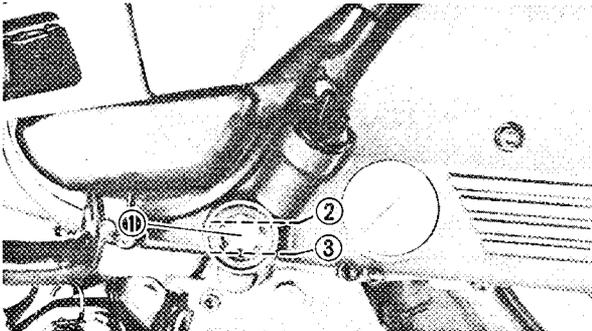
Engine Speed:
1,400 r/min

- Visually check the stationary pointer ② on the crankcase to verify it is within the required firing range ③ indicated on the flywheel.
Incorrect firing range → Check flywheel and/or pickup assembly (tightness damage). Refer to "CHAPTER 6. ELECTRICAL" for further information.



FUEL LINE INSPECTION

1. Inspect:
 - Fuel hose ①
 - Vacuum hose ②
 - Fuel cock ③Crack/Damage → Replace.



ENGINE OIL LEVEL INSPECTION

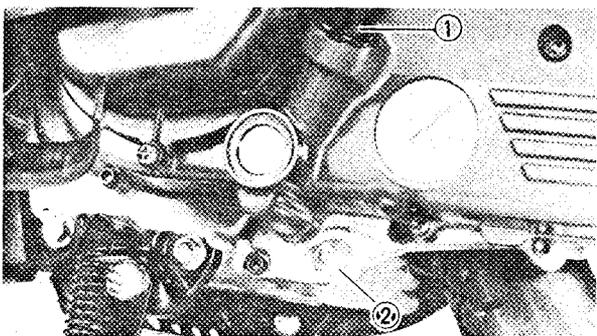
1. Inspect:
 - Oil levelOil level low → Add sufficient oil.
By the following inspection steps.

Engine oil level measurement steps:

- Place the scooter on its centerstand.
- Warm up the engine for a few minutes.
- Stop the engine.
- Observe the oil level through the level window ① located at the lower part of left side crankcase cover.
- If the level is lower, add the oil up to the proper level.

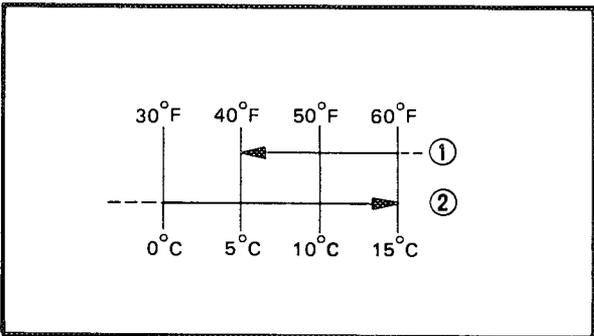
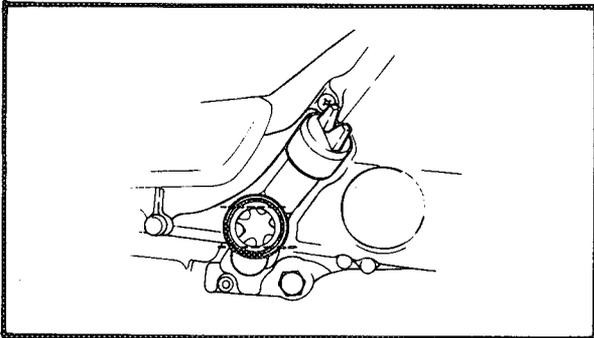
NOTE:

- Position scooter straight up when checking oil level; a slight tilt to the side can produce false readings.
- Wait a few minutes until level settles before checking.
- Oil level should be between maximum ② and minimum ③ marks.



ENGINE OIL REPLACEMENT

1. Place the scooter on a level place.
2. Warm up engine for several minutes, and stop it.
3. Place an oil pan under the engine.
4. Remove:
 - Oil filler cap ①
 - Drain plug ②Drain the engine oil.



2

- Tighten:
 - Drain plug

 **Drain Plug:**
20 Nm (2.0 m·kg, 14 ft·lb)

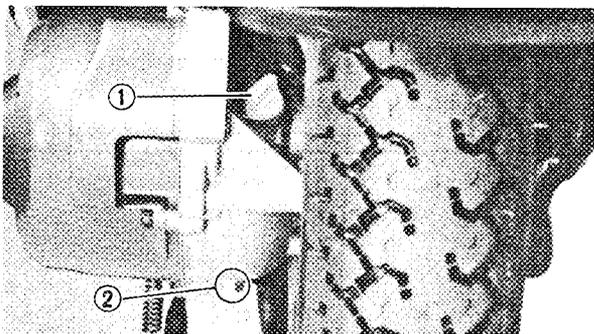
- Fill:
 - Crankcase

 **Recommended Oil:**
 At 5°C (40°F) or Higher:
 Yamalube 4-cycle Oil or
 SAE 20W40 Type SE Motor Oil ①
 At 15°C (60°F) or Lower:
 SAE 10W30 Type SE Motor Oil ②
Periodic Oil Change:
 1.0 L (0.9 Imp qt, 1.1 US qt)

NOTE: Recommended engine oil classification; API Service "SE", "SF" type or equivalent (e.g. "SF-SE", "SF-SE-CC", "SF-SE-SD" etc.).

CAUTION: Do not allow foreign material to enter the crankcase.

- Observe:
 - Oil level
- Install:
 - Oil filler cap

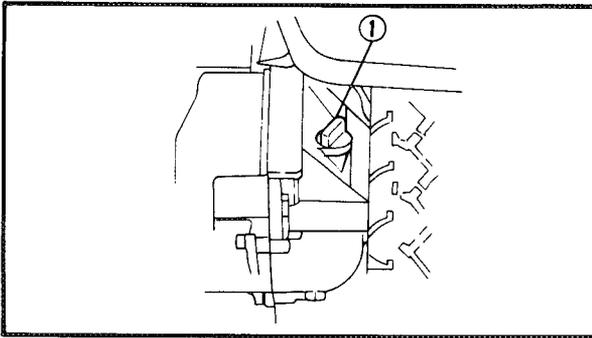


**FINAL GEAR OIL (SUB TRANSMISSION OIL)
REPLACEMENT**

- Place the scooter on a level place.
- Warm up engine for several minutes, and stop it.
- Place an oil pan under the final gear case.
- Remove:
 - Oil filler cap ①
 - Drain plug ②
 Drain the engine oil.
- Tighten:
 - Drain plug

 **Drain Plug:**
16 Nm (1.6 m·kg, 11 ft·lb)

AIR FILTER AND CRANKCASE FILTER CLEANING



6. Fill:
 - Final gear case



Final Gear Oil:
SAE 10W30 Type SE Motor Oil
Total Amount:
0.15 L (0.13 Imp qt, 0.16 US qt)

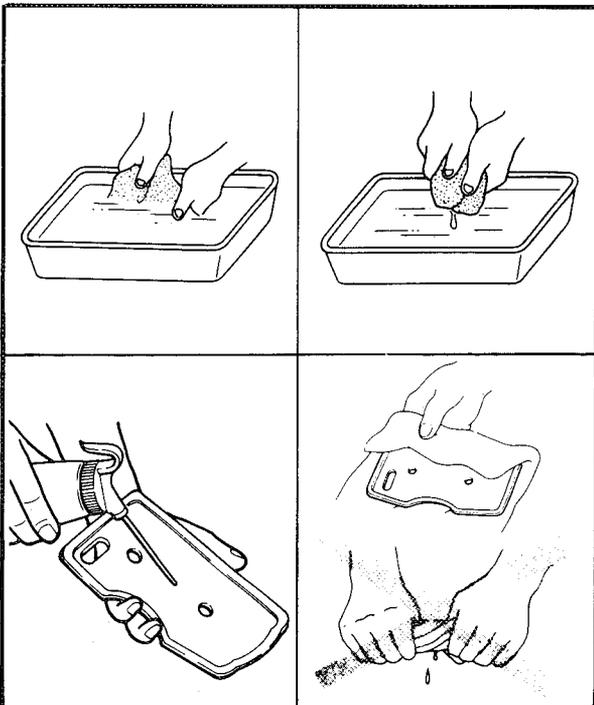
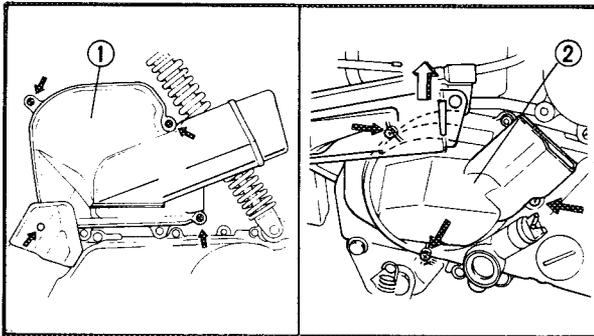
CAUTION: _____

Wipe off any oil split on tire or wheel.

7. Install:
 - Oil filler cap ①

AIR FILTER AND CRANKCASE FILTER CLEANING

1. Remove:
 - Side cover (Left)
 - Bolts (Footrest board)
 - Air filter case cover ①
 - Crankcase filter cover ②
 - Air filter element
 - Crankcase filter element
2. Clean:
 - Air filter element
 - Crankcase filter element



Filter elements cleaning steps:

- Wash the filter gently, but thoroughly, in solvent.
- Squeeze the solvent out of the filter, and allow the filter to dry.
- Pour a small quantity of Air cooled 2 stroke engine oil on the filter and work it thoroughly into the foam.
- Wrap it with a clean cloth, and squeeze it lightly.

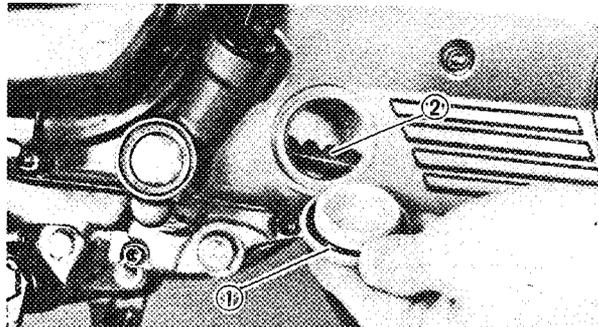
NOTE: _____

- Don't squeeze the filter in the manner as shown.
- Replace the filter, if damaged.

3. Install:
 - Above components list (step 1)

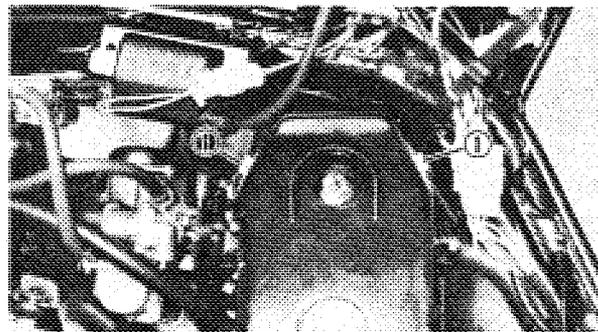
NOTE: _____

After installing the filter, make sure it is positioned correctly in place.



V-BELT INSPECTION

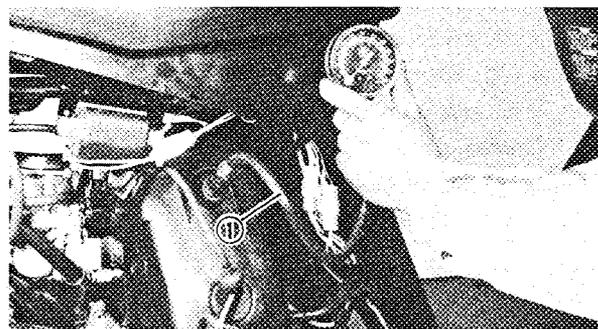
1. Remove:
 - V-belt check window plug ①
(from the left side crankcase cover)
2. Inspect:
 - V-belt ②
Damage/Crack/Wear/Chipping → Replace.
Oil/Grease → Check sheaves.
(Refer to page 3-27)



COMPRESSION PRESSURE MEASUREMENT

NOTE:

Insufficient compression pressure will result in performance loss.



1. Remove:
 - Side cover (Right)
 - Valve covers (Intake/Exhaust) ①
2. Measure:
 - Valve clearance
Out of specification → Adjust.
3. Warm up the engine for a few minutes, and stop it.
4. Remove:
 - Spark plug
5. Measure:
 - Compression pressure
By the following measurement steps.

Compression pressure measurement steps:

- Install the Compression Gauge (YU-33223) ① using an adapter.
- Crank over the engine with the electric starter (be sure the battery is fully charged) with the throttle wide-open until the compression reading on the gauge stabilizes.
- Check readings with specified levels (See chart).

Compression Pressure (at sea level):

Standard:

882 kPa (9 kg/cm², 128 psi)

Minimum:

785 kPa (8 kg/cm², 114 psi)

Maximum:

1,079 kPa (11 kg/cm², 156 psi)

2



WARNING:

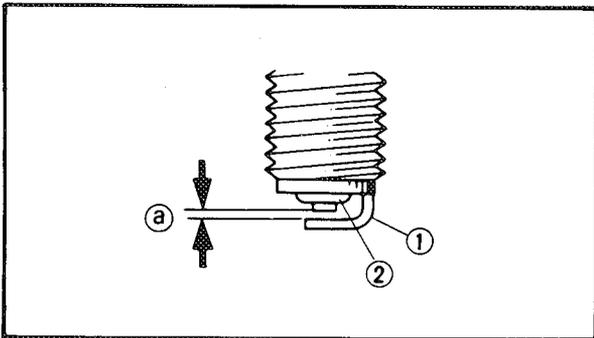
When cranking the engine, ground the spark plug lead to prevent sparking.

- If pressure falls below the minimum level:
 - 1) Squirt a few drops of oil into the cylinder.
 - 2) Measure the compression again.

**Compression Pressure
(with oil introduced into cylinder)**

Reading	Diagnosis
Higher than without oil	Worn or damaged piston rings.
Same as without oil	Defective ring(s), valves, cylinder head gasket or piston is possible.
Above maximum level	Inspect cylinder head, valve surfaces, or piston crown for carbon deposits.

2



SPARK PLUG INSPECTION

1. Inspect:
 - Electrode ①
Wear/Damage → Replace.
 - Insulator color ②
Normal condition is a medium to light tan color.
Distinctly different color → Check the engine condition.
- ② Spark plug gap
2. Clean:
 - Spark plug
Clean the spark plug with a spark plug cleaner or wire brush.
3. Inspect:
 - Spark plug type
Incorrect → Replace.



2

**Standard Spark Plug:
U20FSR-U (N.D.)**

4. Measure:
 - Spark plug gap
Use a wire gauge.
Out of specification → Regap.



**Spark Plug Gap:
0.6 ~ 0.7 mm (0.024 ~ 0.028 in)**

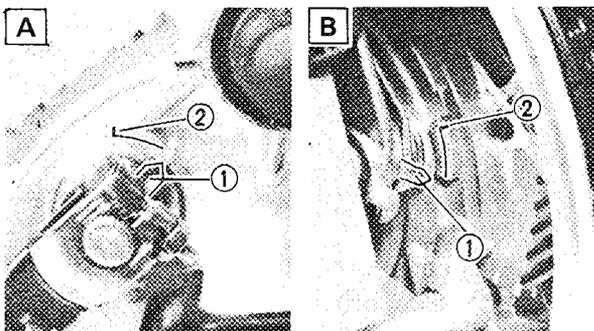
5. Tighten:
 - Spark plug

NOTE: _____
Before installing a spark plug, clean the gasket surface and plug surface.



**Spark Plug:
12.5 Nm (1.25 m·kg, 9.0 ft·lb)**

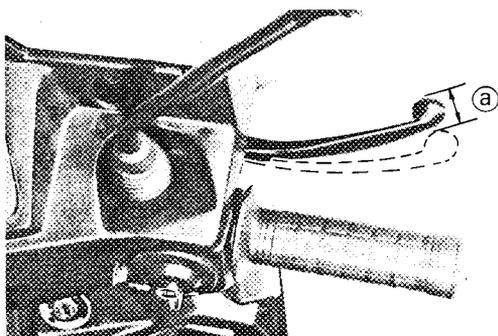
NOTE: _____
If a torque wrench is not available when you are installing a spark plug, a good estimate of the correct torque is 1/4 to 1/2 turns part finger tight. Have the spark plug torqued to the correct value as soon as possible with a torque wrench.



**CHASSIS
BRAKE LINING INSPECTION**

1. Activate the brake lever or brake pedal.
2. Inspect:
 - Wear indicator ①
Indicator reaches the wear limit line ②
→ Replace brake shoes.

A FRONT
B REAR



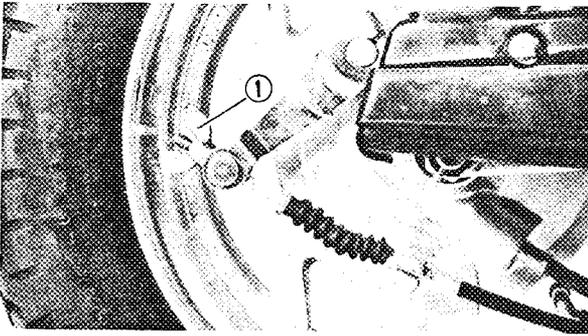
FRONT BRAKE ADJUSTMENT

1. Check:
 - Free play ①
Out of specification → Adjust.



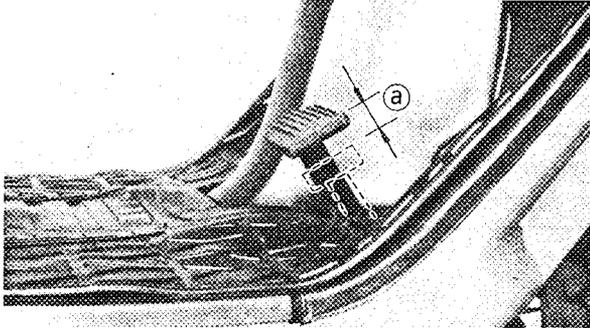
**Front Brake Lever Free Play ① :
10 ~ 20 mm (0.4 ~ 0.8 in)**

REAR BRAKE ADJUSTMENT/ TIRES AND CAST WHEELS CHECK



2. Adjust:
 - Free play
Turn the adjuster ① until the free play is within the specified range.

NOTE: _____
After adjusting, check the operation of the brake light.

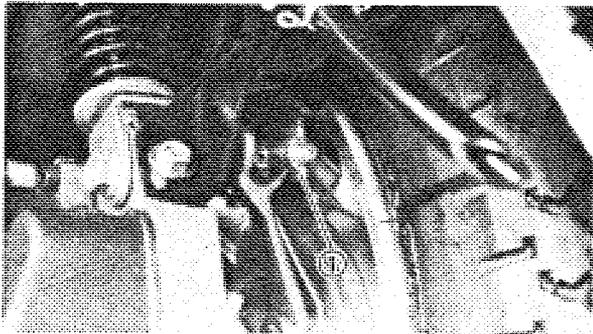


REAR BRAKE ADJUSTMENT

1. Check:
 - Free play ①
Out of specification → Adjust.

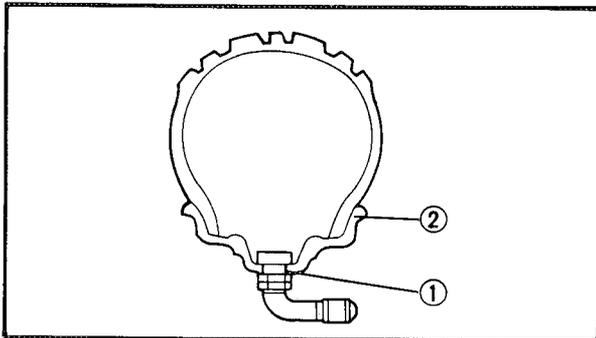
 **Rear Brake Pedal Free Play ① :**
5 ~ 15 mm (0.2 ~ 0.6 in)

2



2. Adjust:
 - Free play
Turn the adjuster ① until the free play is within the specified range.

NOTE: _____
After adjusting, check the operation of the brake light.



TIRES AND CAST WHEELS CHECK

This scooter is equipped with cast wheels designed for tubeless tires only.

Tubeless tires are installed as standard equipments.

1. Measure:
 - Air pressure
Use an air gauge.
Out of specification → Adjust pressure.

Maximum load*	168 kg (370 lb)	
Cold tire pressure	Front	Rear
Up to 75 kg (165 lb) load*	147 kPa (1.5 kg/cm ² , 21 psi)	196 kPa (2.0 kg/cm ² , 28 psi)
75 kg (165 lb)-155 kg (341 lb) load* (Maximum load)	147 kPa (1.5 kg/cm ² , 21 psi)	294 kPa (3.0 kg/cm ² , 43 psi)

* Load is the total weight of cargo, rider, passenger, and accessories.

- ① Air valve
② Cast wheel (Tubeless wheel)

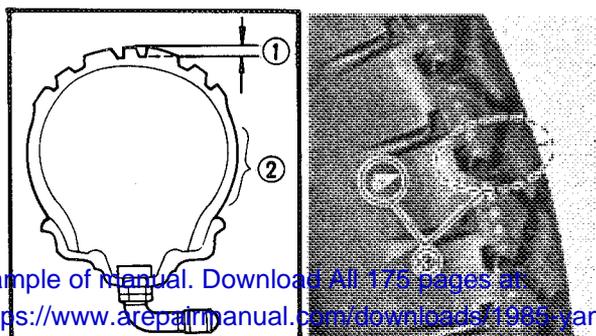
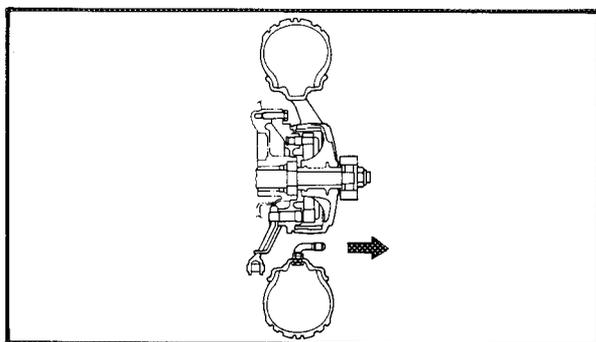
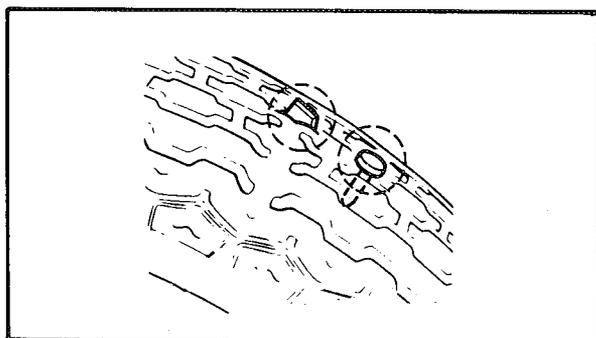


TIRES AND CAST WHEELS CHECK

2

WARNING:

Proper loading of your scooter is important for the handling, braking, and other performance and safety characteristics of your scooter. Do not carry loosely packed items that can shift. Securely pack your heaviest items close to the center of the scooter, and distribute the weight evenly from side to side. And check the condition and pressure of your tires. **NEVER OVERLOAD YOUR SCOOTER.** Make sure the total weight of the cargo, rider, passenger, and accessories (fairing, saddlebags, etc. if approved for this model) does not exceed the maximum load of the scooter. Operation of an overloaded scooter could cause tire damage, an accident, or even injury.



2. Inspect:
 - Tire surface
Wear/Damage/Cracks/Road hazards → Replace.
 - Aluminum wheels
Damage/Bends → Replace.

WARNING:

- Never attempt even small repairs to the wheel.
- Install the rear wheel air valve on the right of the scooter (on the muffler side).
- Ride conservatively after installing a tire to allow it to seat itself properly on the rim.

3. Measure:
 - Tire tread depth
Out of specification → Replace.



Minimum Tire Tread Depth:
 (front and rear)
 1.0 mm (0.04 in)

- ① Tread depth
- ② Side wall
- ③ Wear indicator