YAMAHA

FZR1000F
FZR1000FC

SUPPLEMENTARY SERVICE MANUAL

LIT-11616-09-21

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and data for the FZR1000F/FZR1000FC. For complete service information procedures it is necessary to use this Supplementary Service Manual together with the following manual.

FZR1000W/WC SERVICE MANUAL: LIT-11616-06-80
FZR1000A/FZR1000AC SUPPLEMENTARY SERVICE MANUAL: LIT-11616-07-26
FZR1000B/FZR1000BC SUPPLEMENTARY SERVICE MANUAL: LIT-11616-07-83

FZR1000F/FZR1000FC
SUPPLEMENTARY
SERVICE MANUAL
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NOTICE

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

for USA, California
This model has been designed and manufactured to perform within certain specifications in regard to performance and emissions. Proper service with the correct tools in necessary to ensure that the motorcycle will operate as designed. If there is any question about a service procedure, it is imperative that you contact a Yamaha dealer for any service information changes that apply to this model. This policy is intended to provide the customer with the most satisfaction from his motorcycle and to conform with federal environmental quality objectives.

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.

NOTE:
For USA, California:
This Service Manual contains information regarding periodic maintenance to the emission control system. Please read this material carefully.

PARTICULARY IMPORTANT INFORMATION

This material is distinguished by the following notation.

⚠	The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!
⚠ WARNING	Failure to follow WARNING instructions could result in severe injury or death to the motorcycle operator, a bystander, or a person inspecting or repairing the motorcycle.
CAUTION:	A CAUTION indicates special precautions that must be taken to avoid damage to the motorcycle.
NOTE:	A NOTE provides key information to make procedures easier or clearer.

HOW TO USE THIS MANUAL

CONSTRUCTION OF THIS MANUAL

This manual consists of chapters for the main categories of subjects. (See "Illustrated symbols")

1st title ①: This is a chapter with its symbol on the upper right of each page.
2nd title ②: This title appears on the upper of each page on the left of the chapter symbol. (For the chapter "Periodic inspection and adjustment" the 3rd title appears.)
3rd title ③: This is a final title.

MANUAL FORMAT

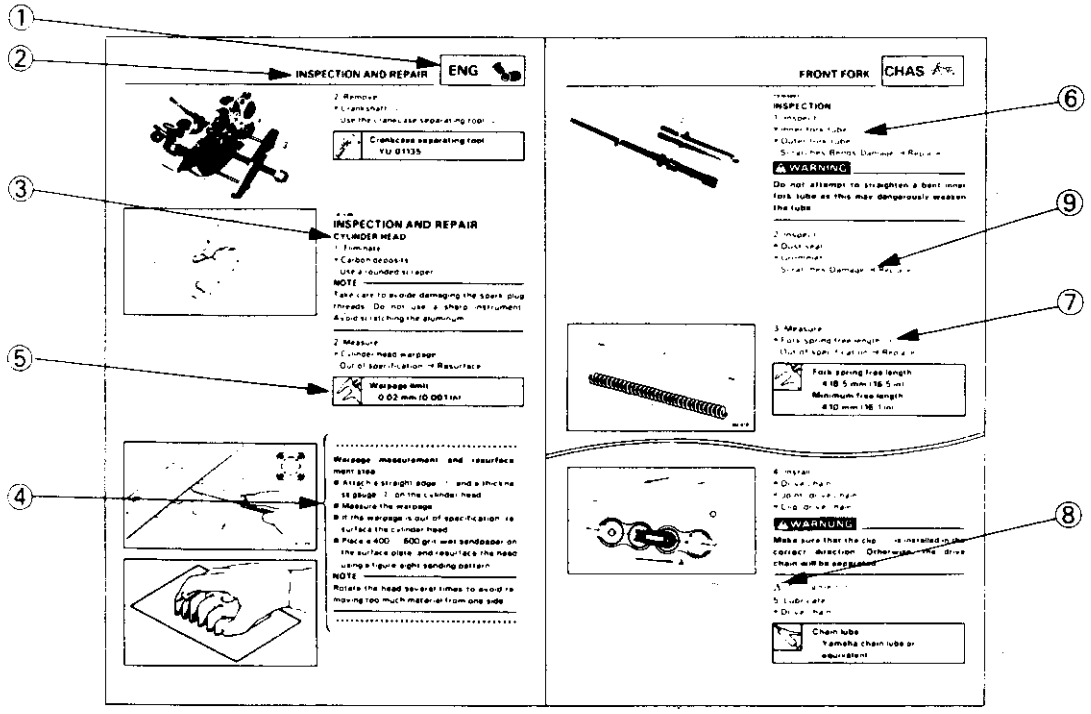
All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspections.
A set of particularly important procedure ④ is placed between a line of asterisks "✻"with each procedure preceded by "●".

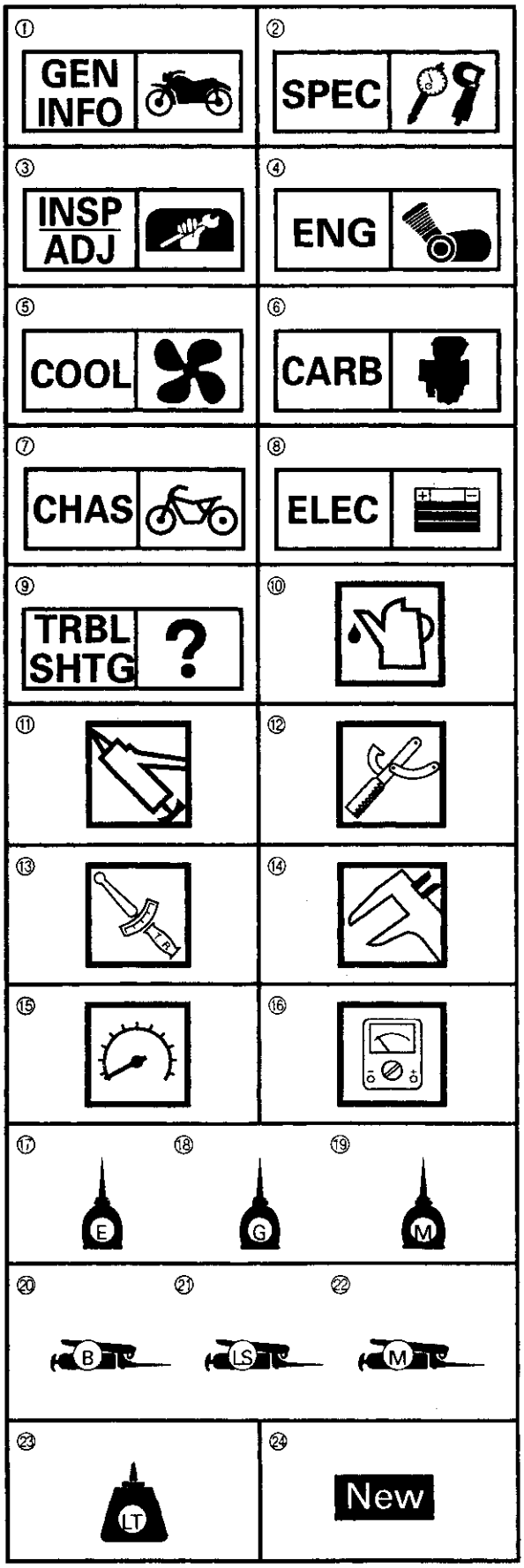
IMPORTANT FEATURES

- Data and a special tool are framed in a box preceded by a relevant symbol ⑤.
- An encircled numeral ⑥ indicates a part name, and an encircled alphabetical letter data or an alignment mark ⑦, the others being indicated by an alphabetical letter in a box ⑧.
- A condition of a faulty component will precede an arrow symbol and the course of action required the symbol ⑨.

EXPLODED DIAGRAM

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





ILLUSTRATED SYMBOLS

(Refer to the illustration)

Illustrated symbols ① to ⑨ are designed as thumb tabs to indicate the chapter's number and content.

① General information
② Specifications
③ Periodic inspection and adjustment
④ Engine
⑤ Cooling system
⑥ Carburetion
⑦ Chassis
⑧ Electrical
⑨ Troubleshooting

Illustrated symbols ⑩ to ⑯ are used to identify the specifications appearing in the text.

⑩ Filling fluid
⑪ Lubricant
⑫ Special tool
⑬ Tightening
⑭ Wear limit, clearance
⑮ Engine speed
⑯ Ω,V,A

Illustrated symbols ⑰ to ㉔ in the exploded diagram indicate grade of lubricant and location of lubrication point.

⑰ Apply engine oil
⑱ Apply gear oil
⑲ Apply molybdenum disulfide oil
⑳ Apply wheel bearing grease
㉑ Apply lightweight lithium-soap base grease
㉒ Apply molybdenum disulfide grease
㉓ Apply locking agent (LOCTITE®)
㉔ Use new one

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  - VEHICLE IDENTIFICATION NUMBER 1
  - ENGINE SERIAL NUMBER 1
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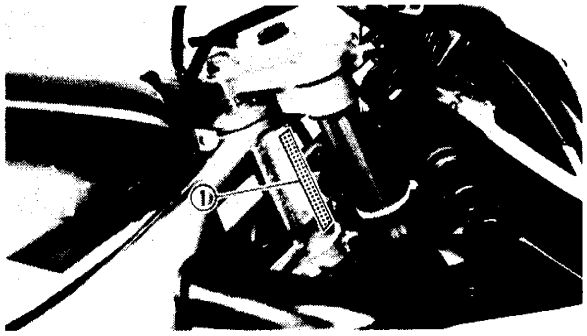
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GENERAL INFORMATION

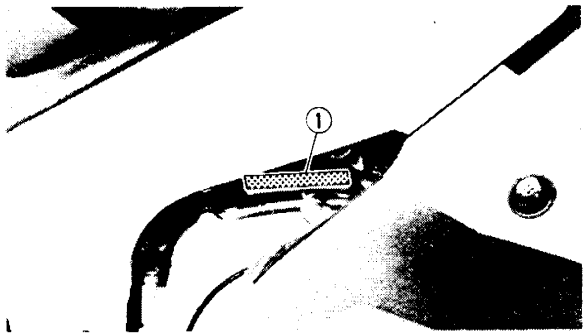
MOTORCYCLE IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

The vehicle identification number ① is stamped into the frame.

Starting serial number:
JYA3LKE0*RA026101
(USA-Except for California)
JYA3LKC0*RA029101
(USA-For California)
JYA3LJT0*RA007101
(CDN)

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



ENGINE SERIAL NUMBER

The engine serial number ① is stamped into crankcase.

Starting serial number:
3LK-026101
(USA-Except for California)
3LK-029101
(USA-For California)
3LJ-007101
(CDN)

NOTE:
- The first three digits of these numbers are for model identification; the remaining digits are the unit production number.
- Designs and specifications are subject to change without notice.

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.
The shape and part number used for the special tool differ by country, so two types are provided.

Refer to the list provided to avoid errors when placing an order.

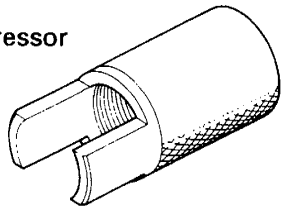
PN. YM- □□□□□, YU-□□□□□
YS- □□□□□, YK-□□□□□
ACC-□□□□□ — For US, CDN

P/N. 90890- □□□□□ — Except for US, CDN

FOR CHASSIS SERVICE

1

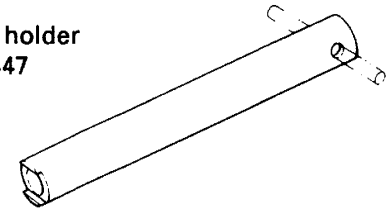
Fork spring compressor
P/N. YM-01458



This tool is needed to disassemble and assemble the front fork.

2

Damper rod holder
P/N. YM-01447



This tool is used to loosen and tighten the damper rod holding bolt.

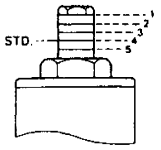
SPECIFICATIONS

GENERAL SPECIFICATIONS

Model		FZR1000F/FZR1000FC
Model code number:		3LKG (USA-Except for California) 3LKH (USA-For California) 3LKJ (CDN)
Engine starting number:		3LK-026101 (USA-Except for California) 3LK-029101 (USA-For California) 3LK-030101 (CDN)
Vehicle identification number:		JYA3LKE0*RA026101 (USA-Except for California) JYA3LKC0*RA029101 (USA-For California) JYA3LKN0*RA030101 (CDN)
Dimensions:		
Overall length		2,110 mm (83.1 in)
Overall width		755 mm (29.7 in)
Overall height		1,165 mm (45.9 in)
Seat height		780 mm (30.7 in)
Wheel base		1,470 mm (57.9 in)
Minimum ground clearance		135 mm (5.3 in)
Spark plug:		
Type		DP8EA-9 / X24EP-U9 (USA) DR8EA / X24ESR-U (CDN)
Manufacturer		NGK / NIPPONDENSO
Spark plug gap		0.6 ~ 0.7 mm (0.024 ~ 0.028 in)
Chassis:		
Frame type		Diamond
Caster angle		26.4°
Trail		108 mm (4.25 in)
Tire:		
Type		Tubeless
Size	front	130/60 VR 17-V280
	rear	170/60 VR 17-V280
Manufacturer / Type	front	DUNLOP / K510F
	rear	DUNLOP / K510

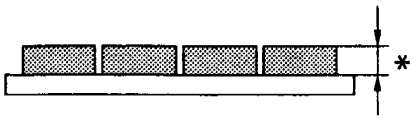
MAINTENANCE SPECIFICATIONS

CHASSIS

Model		FZR1000F/FZR1000FC
Front suspension:		
Front fork travel		120 mm (4.72 in)
Fork spring free length		340 mm (13.4 in)
<Limit>		<335 mm (13.2 in)>
Spring rate	(K1)	8.0 N/mm (0.80 kg/mm, 44.8 lb/in)
Stroke	(K1)	0 ~ 120 mm (0.00 ~ 4.72 in)
Optional spring		No
Oil capacity		470 cm^3 (16.5 Imp oz, 15.9 US oz)
Oil level		78 mm (3.07 in)
Oil grade		Suspension oil "01" or equivalent
Adjustment		

	HARD			STD	SOFT
Adjusting position	1	2	3	4	5

Rear suspension:		
Shock absorber travel		70 mm (2.76 in)
Spring free length		218 mm (8.58 in)
Fitting length		200 mm (7.87 in)
Spring rate	(K1)	70 N/mm (7.0 kg/mm, 392 lb/in)
Stroke	(K1)	0 ~ 70 mm (0.00 ~ 2.76 in)
Optional spring		No
Enclosed gas / Air pressure	(STD)	1,200 kPa (12 kg/cm^2, 171 psi)
Front wheel:		
Type		Cast wheel
Rim size		MT3.50 × 17
Rim material		Aluminum
Rim runout limit	radial	1.0 mm (0.04 in)
	lateral	0.5 mm (0.02 in)
Rear wheel		
Type		Cast wheel
Rim size		MT5.50 × 17
Rim material		Aluminum
Rim runout limit	radial	1.0 mm (0.04 in)
	lateral	0.5 mm (0.02 in)
Front disc brake:		
Type		Dual
Disc outside diameter × thickness		320 × 4 mm (12.6 × 0.16 in)
Pad thickness	inner	5 mm (0.20 in)
<Limit>		<0.5 mm (0.20 in)>
Pad thickness	outer	5 mm (0.20 in)

Model	FZR1000F/FZR1000FC
<Limit>  Master cylinder inside diameter Caliper cylinder inside diameter Brake fluid type	<0.5 mm (0.20 in)> 15.87 mm (0.62 in) 26.9 mm (1.06 in) + 26.9 mm (1.06 in) + 25.4 mm (1.00 in) DOT #4
Rear disc brake: Type Disc outside diameter × thickness Pad thickness inner <Limit> Pad thickness outer <Limit>  Master cylinder inside diameter Caliper cylinder inside diameter Brake fluid type	 Single 267 × 5 mm (10.51 × 0.20 in) 5.5 mm (0.22 in) <0.5 mm (0.02 in)> 5.5 mm (0.22 in) <0.5 mm (0.02 in)> 14 mm (0.55 in) 42.85 mm (1.69 in) DOT #4
Clutch: Master cylinder inside diameter Release cylinder inside diameter Brake fluid type	 15.87 mm (0.62 in) 38.1 mm (1.50 in) DOT #4

ELECTRICAL

Model	FZR1000F/FZR1000FC
Voltage regulator: Type No lead regulated voltage	 Semi conductor-Field control type 14.2 ~ 14.8 V
Flasher relay: Type Model / Manufacturer Self concelling device Flasher frequency Wattage	 Full transistor type G8A-101-03 / OMRON No 75 ~ 95 cycle / min 21 W × 2 + 3.4 W

Tightening torques

Part to be tightened	Thread size	Tightening torque			Remarks
		Nm	m·kg	ft·lb	
Front axle	M18	150	15.0	110	
Front axle pinch	M8	20	2.0	14	
Front fender	M6	6	0.6	4.3	
Under bracket and outer tube	M8	23	2.3	17	
Handle crown and outer tube	M8	26	2.6	19	
Handle crown and steering stem	M22	110	11.0	80	
Lower ring nut (steering shaft)	M22	–	–	–	Refer to "NOTE"
Brake caliper (front/rear)	M10	35	3.5	25	
Brake disc and wheel (front)	M8	20	2.0	14	◀G
Master cylinder and holder (front brake)	M6	13	1.3	9.4	
Master cylinder cap (front brake)	M5	2	0.2	1.4	
Bleed screw (brake caliper/clutch release cylinder)	M8	6	0.6	4.3	
Brake (clutch) hose	M10	26	2.6	19	
Handlebar and handle boss	M8	28	2.8	20	
Handlebar boss and handle crown	M8	28	2.8	20	
Grip end (handlebar)	M16	30	3.0	22	
Engine mounting:					
Pinch bolt (cylinder head side)	M8	22	2.2	16	
Pinch bolt (cylinder side)	M8	22	2.2	16	
Pinch bolt (rear)	M8	15	1.5	11	
Mounting bolt (cylinder head)	M10	40	4.0	29	
Mounting bolt (cylinder)	M10	40	4.0	29	
Mounting bolt (rear – upper)	M10	55	5.5	40	
Mounting bolt (rear – lower)	M10	55	5.5	40	
Footrest bracket and frame (front)	M8	28	2.8	20	
Footrest and footrest bracket (front)	M10	55	5.5	40	
Pivot axle and locknut	M18	130	13.0	94	
Relay arm and frame	M10	48	4.8	35	
Arm and swingarm	M12	74	7.4	53	
Arm and relay arm	M12	74	7.4	53	
Rear shock absorber and frame	M10	40	4.0	29	
Rear shock absorber and relay arm	M10	40	4.0	29	
Footrest bracket and frame (rear)	M8	28	2.8	20	
Master cylinder and frame (rear)	M8	23	2.3	17	
Rear frame and frame	M10	55	5.5	40	◀G
Compression bar (front and rear)	M8	60	6.0	43	
Brake disc and clutch hub	M8	20	2.0	14	
Sprocket and hub (rear)	M10	60	6.0	43	
Rear axle and nut	M18	150	15.0	110	
Side stand bracket and frame	M8	28	2.8	20	
Side stand pivot bolt	M10	46	4.6	33	
Side stand pivot nut	M10	39	3.9	28	

Part to be tightened	Thread size	Tightening torque			Remarks
		Nm	m·kg	ft·lb	
Fuel cock and fuel tank	M6	7	0.7	5.1	
Fuel sender and fuel tank	M6	7	0.7	5.1	

NOTE:

1. Tighten the lower ring nut 52 Nm (5.2 m • kg, 37 ft • lb) by using the torque wrench.
2. Loosen the lower ring nut completely and retighten it 3 Nm (0.3 m • kg, 2.2 ft • lb).
3. Install the upper ring nut, and then align the slots of both ring nut.

LUBRICATION POINT AND GRADE OF LUBRICANT

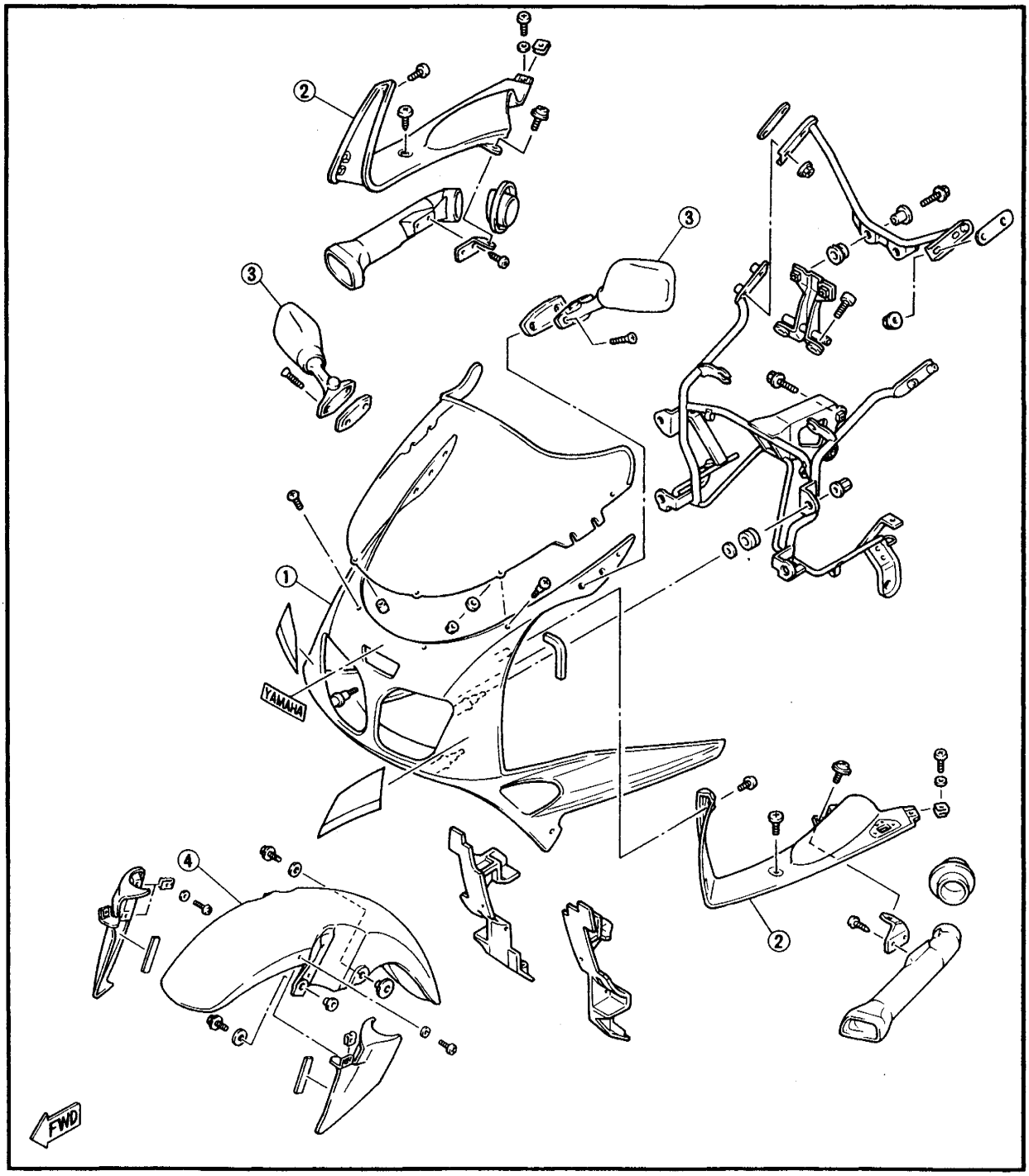
ENGINE

Lubrication Point	Symbol	Grade of Lubricant
Oil seal lip	LS	Lithium-soap base
O-Ring	LS	Lithium-soap base
Bearing	E	Engine oil
Piston surface	E	Engine oil
Piston pin	E	Engine oil
Crankshaft pin	E	Engine oil
Crankshaft journal	E	Engine oil
Connecting rod bolt/Nut	M	Molybdenum disulfide oil
Camshaft cam lode/Journal	M	Molybdenum disulfide oil
Valve stem (IN, EX)	M	Molybdenum disulfide oil
Valve stem end (IN, EX)	E	Engine oil
Water pump impeller shaft	E	Engine oil
Oil pump rotor (Inner/Outer), housing	E	Engine oil
Oil strainer assembly	E	Engine oil
Outer starter clutch surface	E	Engine oil
Idle gear surface/Bearing	E	Engine oil
Starter clutch ball	E	Engine oil
Primary driven gear	E	Engine oil
Transmission gear (Wheel/Pinion)	M	Molybdenum disulfide oil
Axle (Main/Drive)	M	Molybdenum disulfide oil
Shift cam	E	Engine oil
Shift fork/Guide bar	E	Engine oil
Shift shaft assembly	E	Engine oil

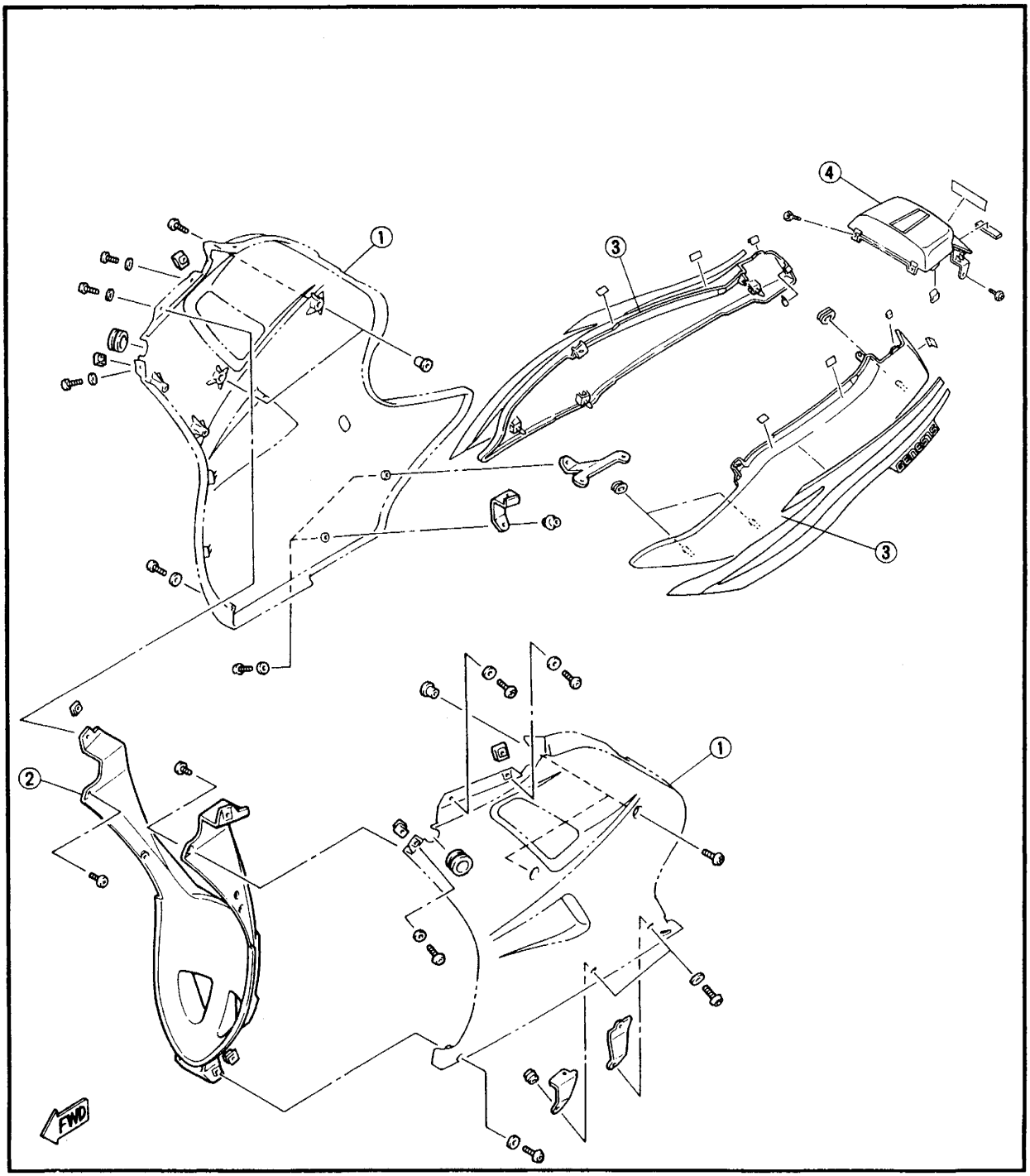
PERIODIC INSPECTION AND ADJUSTMENT

COWLINGS

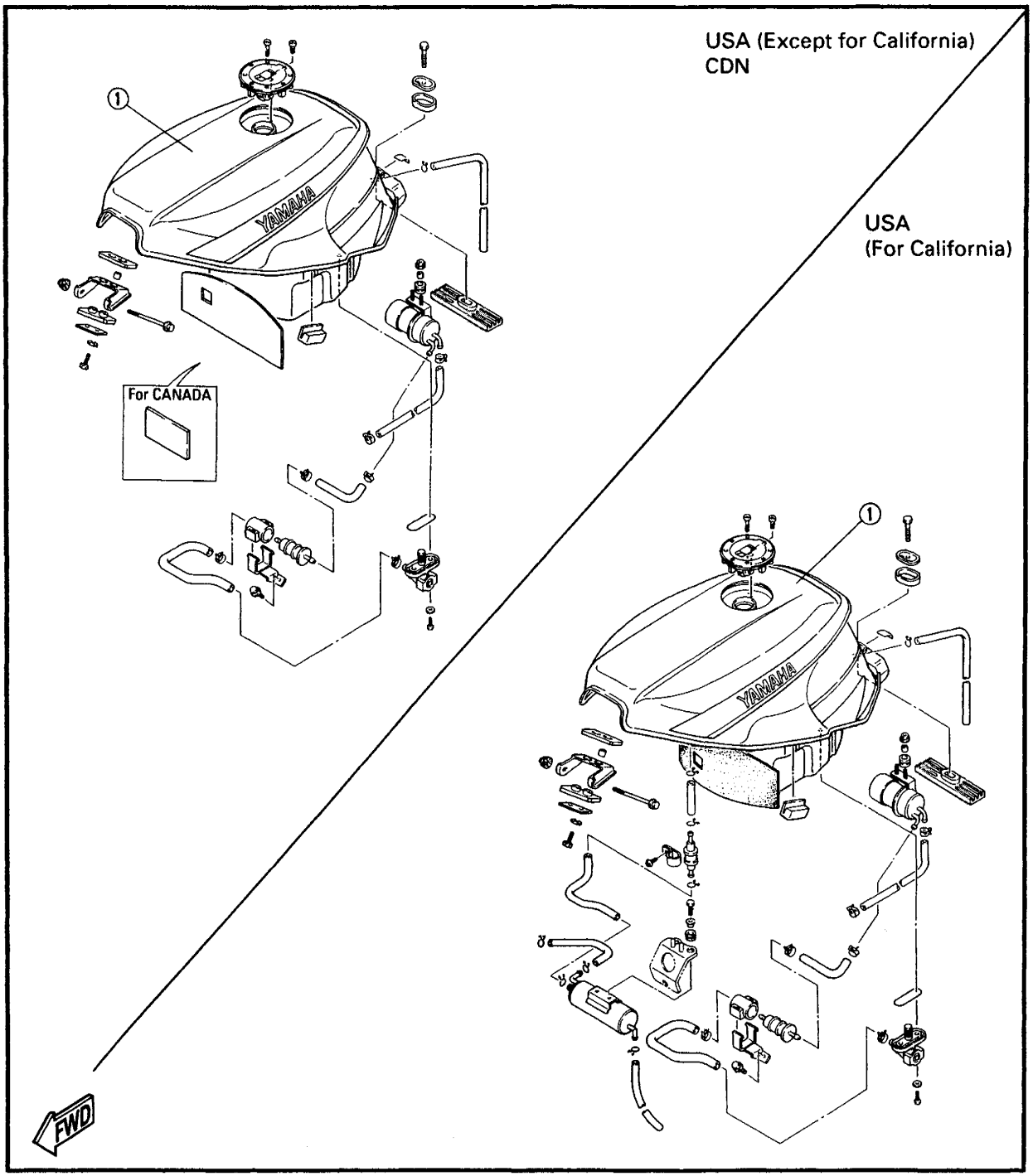
① Upper cowling
② Inner cover (left and right)
③ Rear view mirror (left and right)
④ Front fender

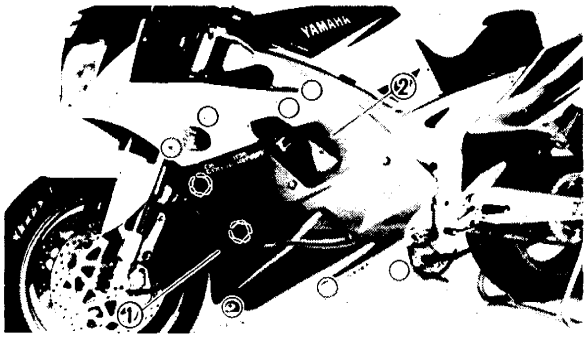


① Side cowling (left and right)
② Front cover
③ Side cover (left and right)
④ Tail cover



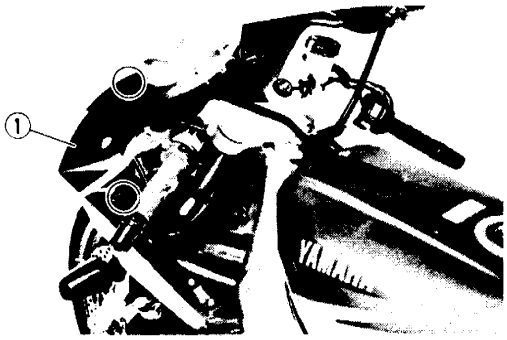
① Fuel tank


USA (Except for California)
CDN
USA
(For California)
For CANADA
FWD

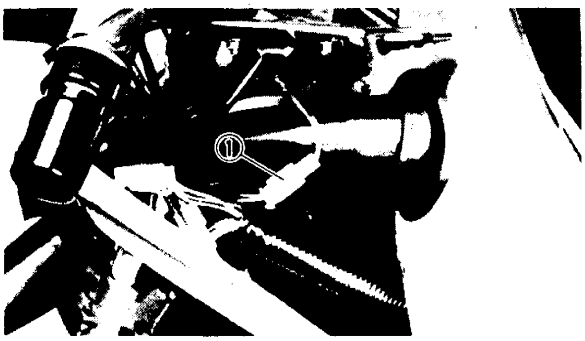


REMOVAL

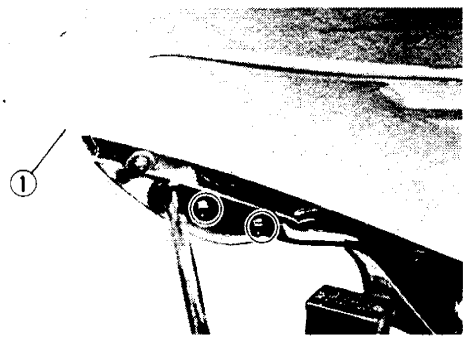
1.Remove:
- Screws
- Front cover ①
- Side cowling ② (left and right)



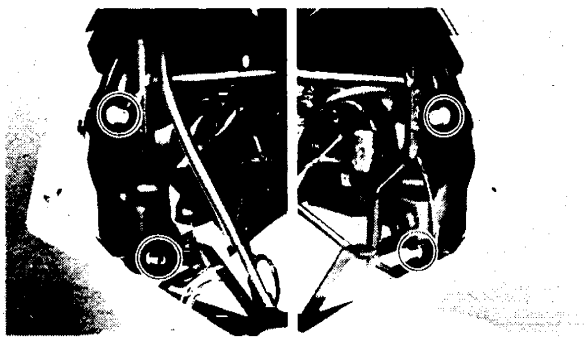
2.Remove:
- Inner cover ① (left and right)



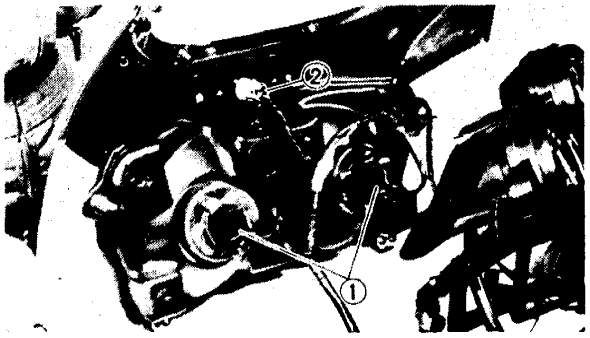
3.Disconnect:
- Fuel reserve switch coupler ①



4.Remove:
- Rear view mirror ① (left and right)



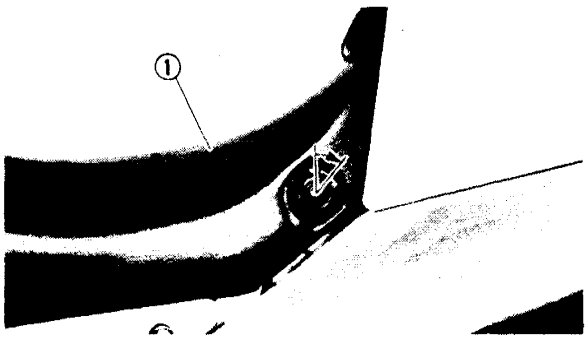
5.Remove:
- Nuts



6.Disconnect:
- Headlight coupler ①
- Auxiliary light coupler ② (for Europe)

7.Remove:
- Upper cowling

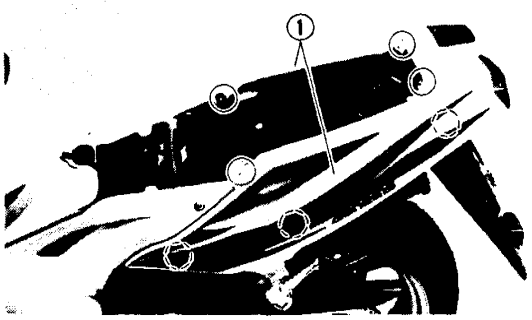
INSTALLATION
Reverse the "REMOVAL" procedure.



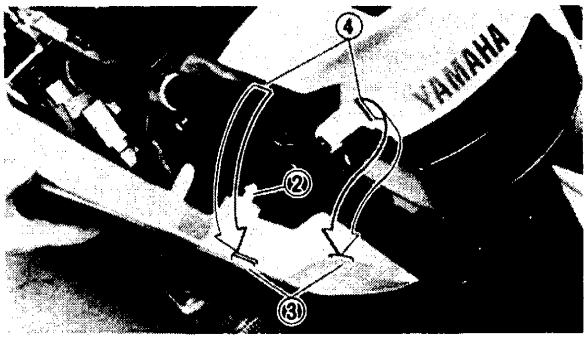
SEAT AND COVERS

REMOVAL
1.Remove:
- Seat ①

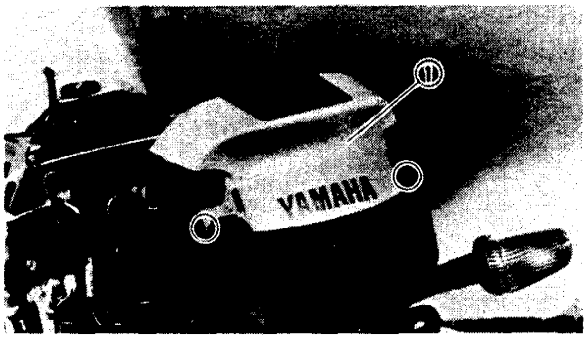
NOTE:
Insert the key into the lock and turn it clockwise to release the seat lock.



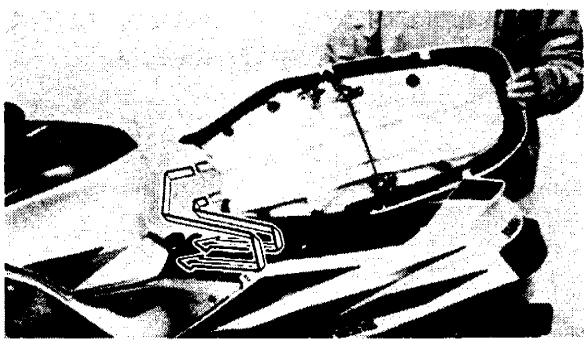
2.Remove:
- Side cover ① (left and right)



NOTE:
When removing the side covers, unhook the projections ② on the side cover from the grommets on the frame and then, unhook the hooks ③ on the side cover end from the slots ④ on the tail cover.



3.Remove:
- Tail cover ①



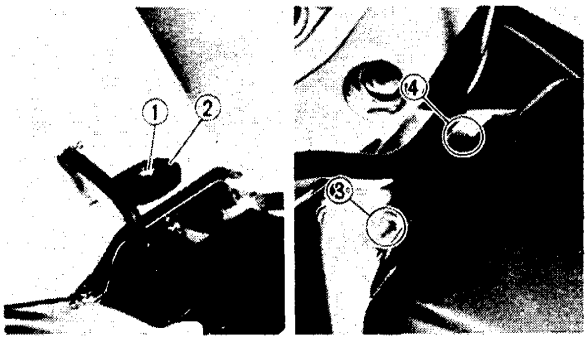
INSTALLATION
Reverse the "REMOVAL" procedure.
Note the following points.

NOTE:
Install the lobes on the front of the seat into the bracket of the frame, then push down the seat end.

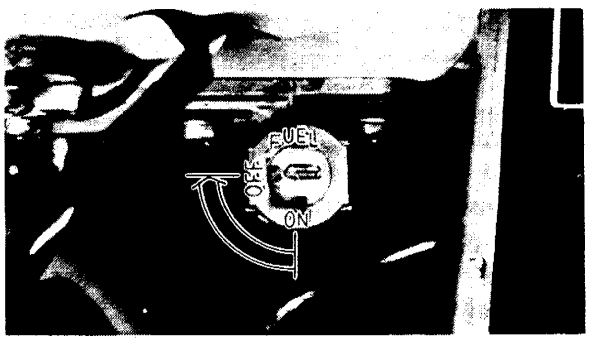
FUEL TANK

REMOVAL

1.Remove:
- Seat
  Refer to the "SEAT AND COVERS" section.



2.Remove:
- Bolt ①
- Plate ②
- Damper rubber
- Nut ③
- Bolt ④



3.Turn the fuel cock to "OFF" position.



4.Disconnect:
- Breather hose (fuel tank) ①



5.Disconnect:
- Fuel sender coupler ①
- Fuel hose ②

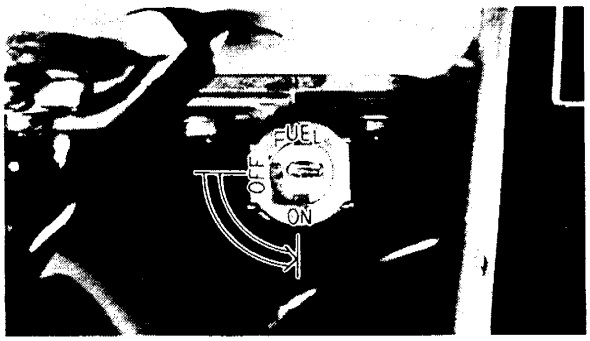
⚠ WARNING

Gasoline is highly flammable.
Avoid spilling fuel on the hot engine.

NOTE:

Place a rag under the fuel hose to avoid spilling fuel.

6.Remove:
- Fuel tank



INSTALLATION

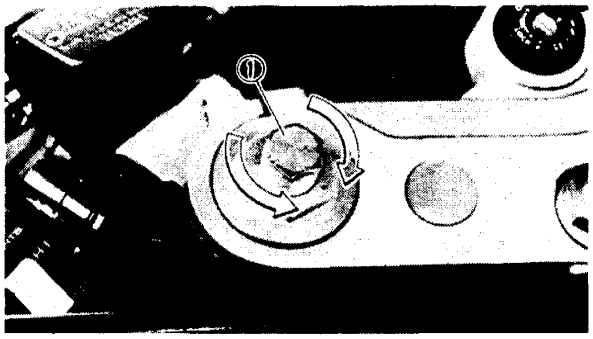
Reverse the "REMOVAL" procedure.
Note the following points.
1.Turn the fuel cock to "ON" position.

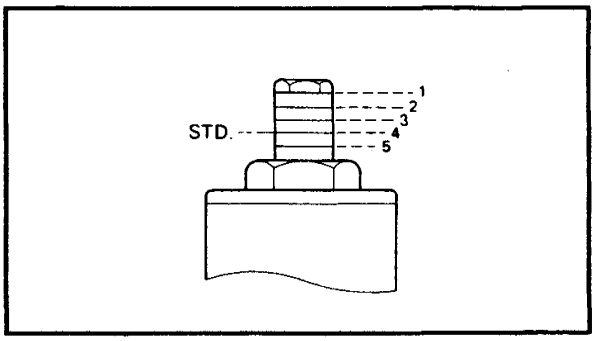
CHASSIS

FRONT FORK ADJUSTMENT

⚠ WARNING

- **Always adjust each fork to the same setting. Uneven adjustment can cause poor handling and loss of stability.**
- **Securely support the motorcycle so there is no danger of it falling over.**





Spring preload

1.Adjust:

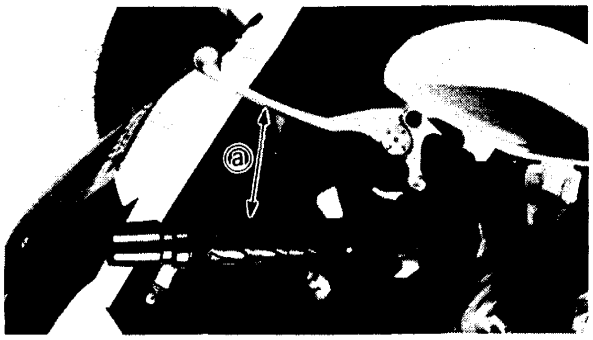
- Spring preload
  Turn the adjuster ① in or out.

Turn in → Spring preload is harder.
Turn out → Spring preload is softer.

	HARD			STD	SOFT
Adjusting position	**1**	**2**	**3**	**4**	**5**

CAUTION:

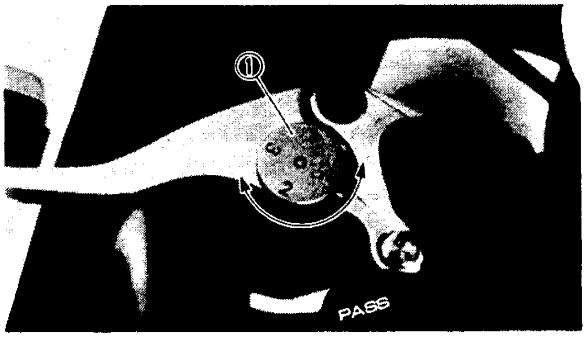
- **Grooves are provided to show the adjusting level.**
- **Always keep the adjustment level equal on both forks.**
- **Never turn the adjuster beyond the maximum or minimum setting.**

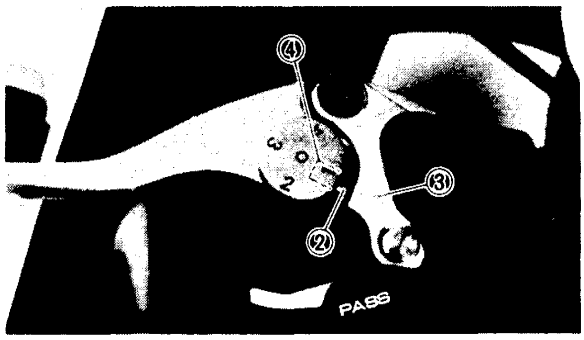


CLUTCH LEVER POSITION ADJUSTMENT

1.Adjust:

- Clutch lever position
  (distance ⓐ from handle grip to clutch lever)





****

Adjustment Steps:

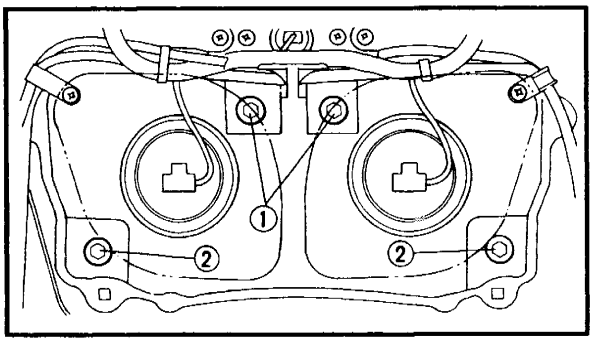
- Turn the adjuster ① while pushing the clutch lever forward until the desired lever position is obtained.

Adjuster position #1	**Distance ⓐ is the largest**
↕	↕
Adjuster position #4	**Distance ⓐ is the smallest**

⚠ WARNING

After adjusting the clutch lever position (distance), make sure the pin ② on the clutch lever holder ③ is firmly inserted in the hole ④ in the adjuster ①.

****



ELECTRICAL

HEADLIGHT BEAM ADJUSTMENT

1.Adjust:
- Headlight beam (vertically)
  Turn the adjuster ① in or out.

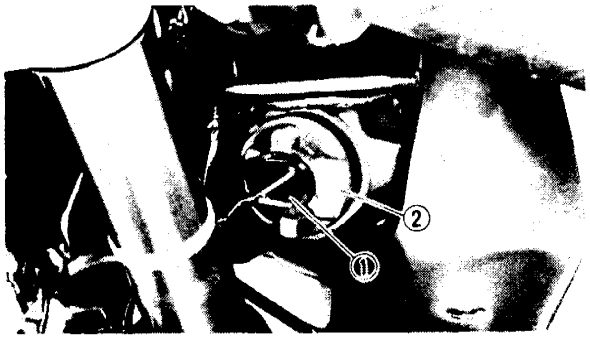
Turning in → Headlight beam higher.
Turning out → Headlight beam lower.

2.Adjust:
- Headlight beam (horizontally)
  Turn the adjuster ② in or out.
  Left-hand light

Turning in → Headlight beam to the left.
Turning out → Headlight beam to the right.

Right-hand light

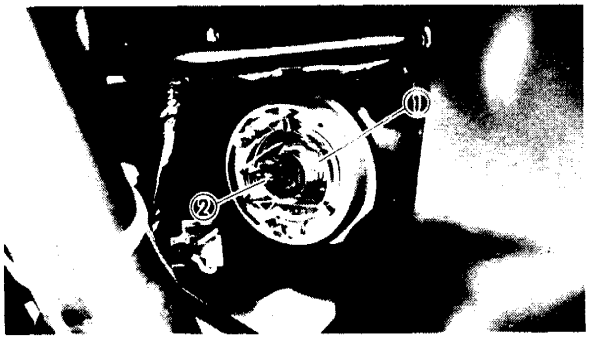
Turning in → Headlight beam to the right.
Turning out → Headlight beam to the left.



HEADLIGHT BULB REPLACEMENT

1.Disconnect:
- Headlight lead ①

2.Remove:
- Cover ②



3.Unhook:
- Bulb holder ①

4.Remove:
- Bulb ②

⚠ WARNING

Keep flammable products and your hands away from the bulb while it is on, as it will be hot. Do not touch the bulb until it has cooled down.

5.Install:
- Bulb (new)

Secure the new bulb with the bulb holder.

CAUTION:

Avoid touching the glass part of the bulb. Keep it free from oil; otherwise, the transparency of the glass, life of the bulb, and luminous flux will be adversely affected. If oil gets on the bulb, thoroughly clean it with a cloth moistened with alcohol or lacquer thinner.

6.Hook:
- Bulb holder

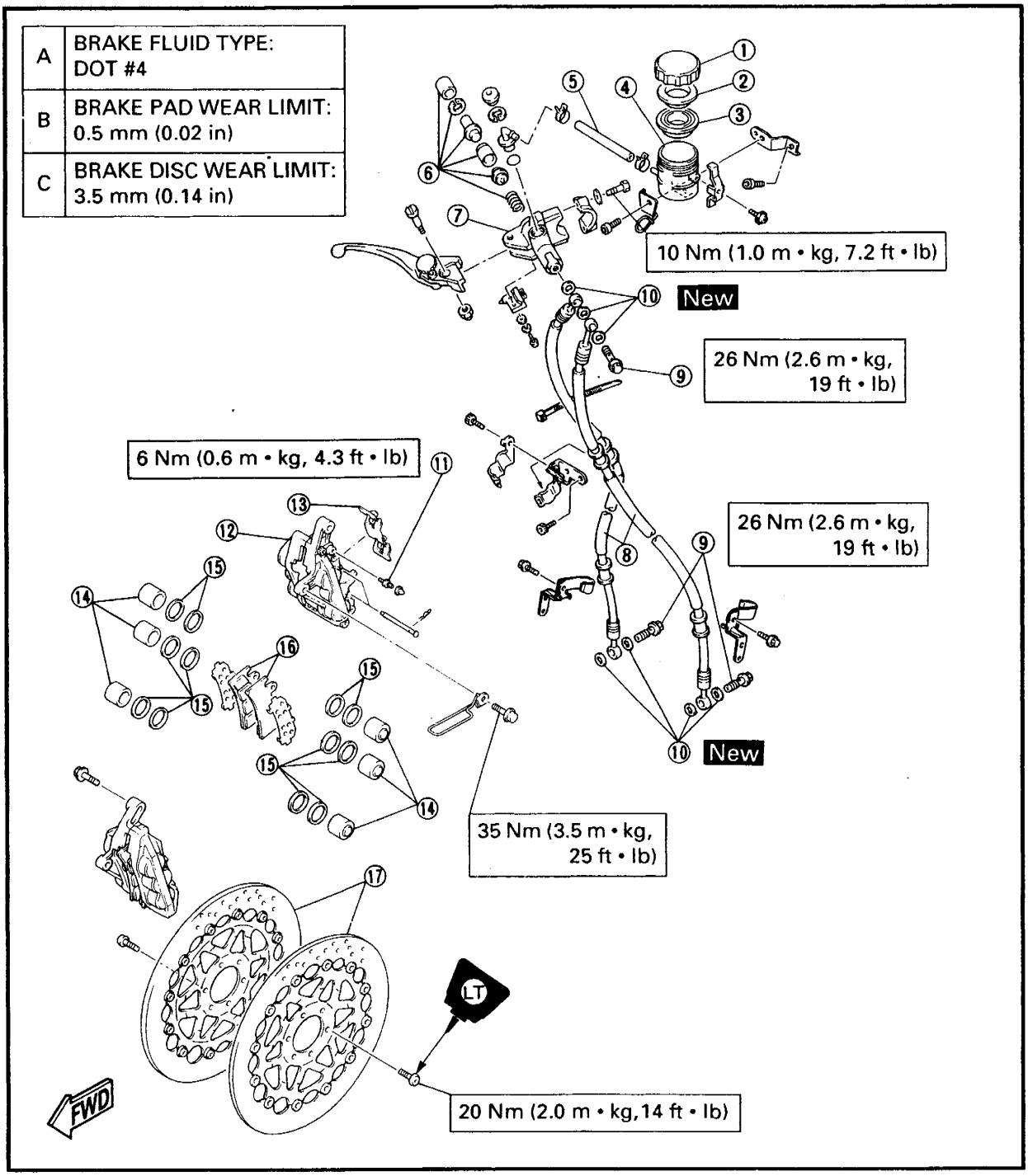
7.Install:
- Cover

8.Connect:
- Headlight lead

CHASSIS

FRONT AND REAR BRAKE

① Reservoir tank cap
② Holder (diaphragm)
③ Diaphragm
④ Reservoir tank
⑤ Reservoir hose
⑥ Master cylinder kit
⑦ Master cylinder
⑧ Brake hose
⑨ Union bolt
⑩ Copper washer
⑪ Bleed screw
⑫ Brake caliper
⑬ Pad spring
⑭ Piston
⑮ Piston seal
⑯ Brake pad
⑰ Brake disc



CAUTION:

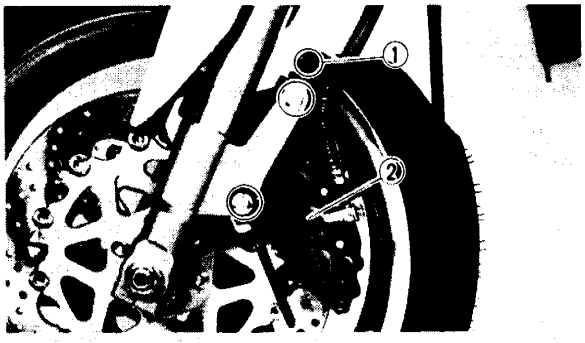
Disc brake components rarely require disassembly. DO NOT:

- **Disassemble components unless absolutely necessary.**
- **Use solvents on internal brake components.**
- **Use contaminated brake fluid for cleaning.**
  Use only clean brake fluid.
- **Allow brake fluid to come in contact with the eyes, otherwise eye injury may occur.**
- **Allow brake fluid to contact painted surfaces or plastic parts otherwise damage may occur.**
- **Disconnect any hydraulic connection otherwise the entire system must be disassembled, drained, cleaned, and then properly filled and bled after reassembly.**

BRAKE PAD REPLACEMENT

NOTE:

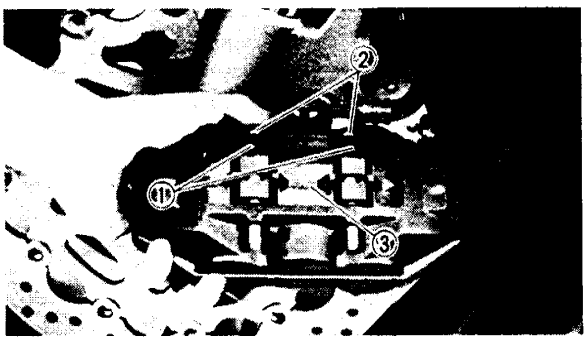
It is not necessary to disassemble the brake caliper and brake hose to replace the brake pads.



Front brake

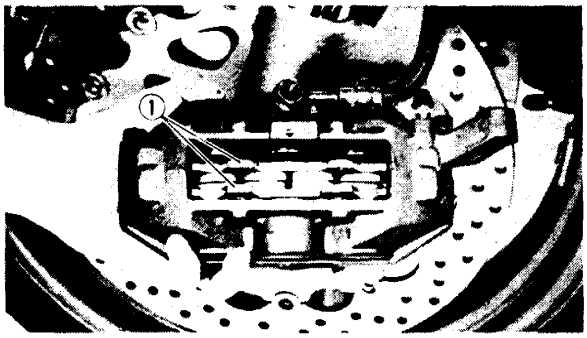
1.Remove:

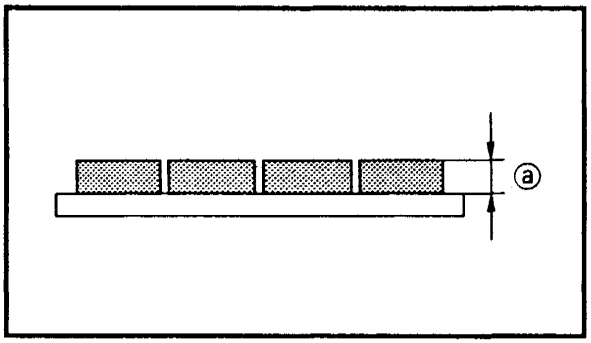
- Brake hose holder ①
- Brake caliper ②



2.Remove:

- Retaining clips ①
- Retaining pins ②
- Pad spring ③



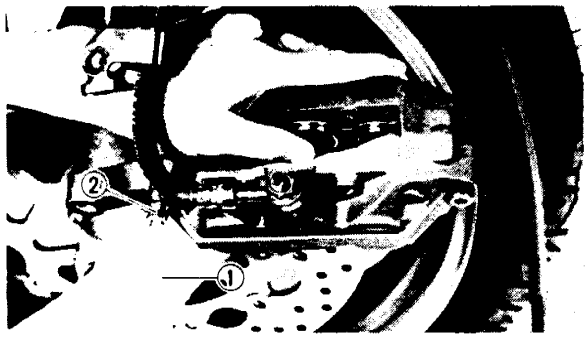


3.Remove:
- Brake pads ① (with pad shims)

NOTE:
- When pad replacement is required, also replace the pad spring and shims.
- Replace the pads as a set if either is found to be worn to the wear limit ⓐ.

Wear limit ⓐ:
0.5 mm (0.02 in)

4.Install:
- Pad shims (onto brake pads)
- Brake pads
- Pad spring



****

Installation steps:
- Connect a suitable hose ① tightly to the caliper bleed screw ②. Then, place the other end of this hose into an open container.
- Loosen the caliper bleed screw and push the pistons into the caliper with the finger.
- Tighten the caliper bleed screw ②.

Caliper bleed screw:
6 Nm (0.6 m • kg, 4.3 ft • lb)

- Install the pad shims (new) onto the new brake pads.
- Install the brake pads (new) and pad spring (new).

****

5.Install:
- Retaining pins
- Retaining clips
- Brake caliper

	**Bolt (brake caliper):** **35 Nm (3.5 m • kg, 25 ft • lb)**



6.Inspect:
- Brake fluid level
  Refer to the "BRAKE FLUID INSPECTION" section in CHAPTER 3.

7.Check:
- Brake lever operation
  A soft or spongy feeling → Bleed brake system.
  Refer to the "AIR BLEEDING" section in CHAPTER 3.

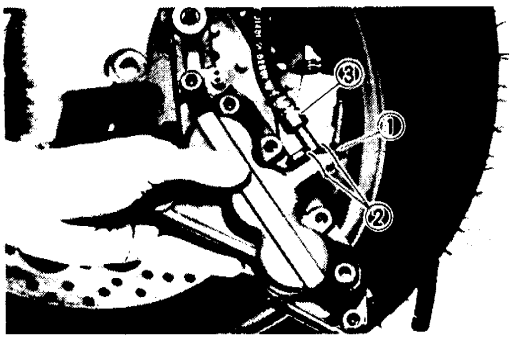
CALIPER DISASSEMBLY

NOTE:
Before disassembling the front brake caliper or rear brake caliper, drain the brake hose, master cylinder, brake caliper and reservoir tank of their brake fluid.

Front brake

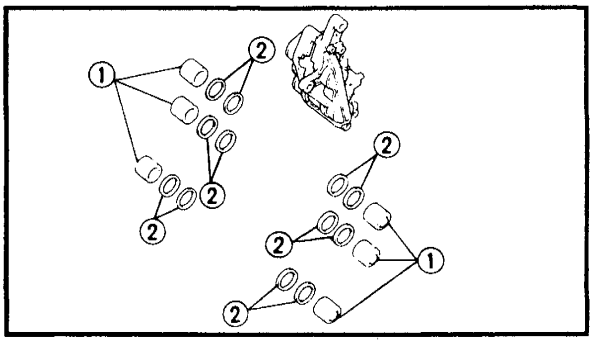
1.Loosen:
- Union bolt

2.Remove:
- Brake caliper
- Retaining clips
- Retaining pins
- Pad spring
- Brake pads (with pad shims)
  Refer to the "BRAKE PAD REPLACEMENT" section.



3.Remove:
- Union bolt ①
- Copper washers ②
- Brake hose ③

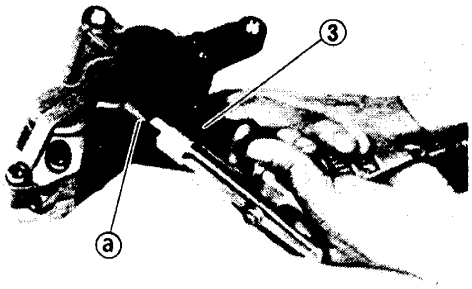
NOTE:
Place the open end of the hose into a container and pump the oil fluid out carefully.



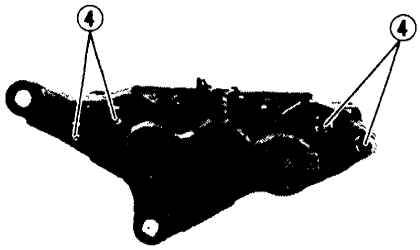
4.Remove:
- Pistons ①
- Piston seals ②

****

Removal steps:
- Using a wood piece ③, lock the right side piston.
- Blow compressed air into the hose joint opening ⓐ to force out the left side piston from the caliper body.
- Remove the piston seals and reinstall the piston.
- Repeat previous step to force out the right side piston from the caliper body.



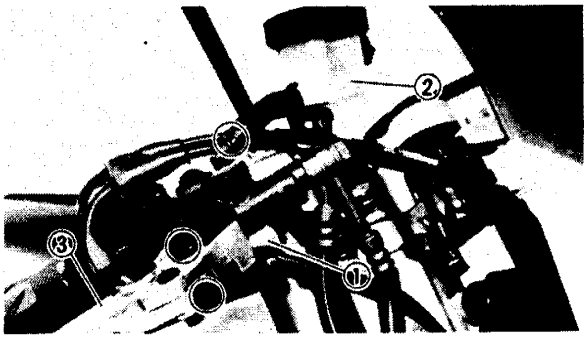
⚠ WARNING
- **Never try to pry out the piston.**
- **Do not loosen the bolts ④.**



****

MASTER CYLINDER DISASSEMBLY

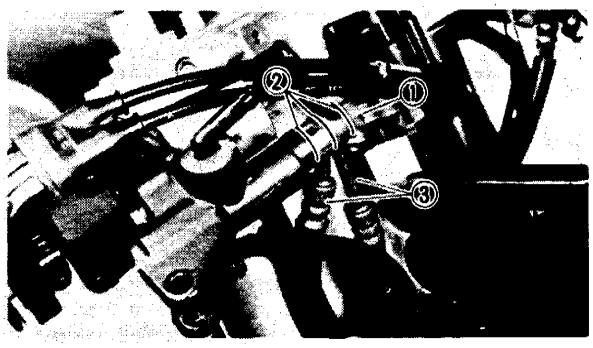
NOTE:
Before disassembling the front or rear brake master cylinders, drain the brake hose, master cylinder, brake caliper and reservoir tank of their brake fluid.



Front brake

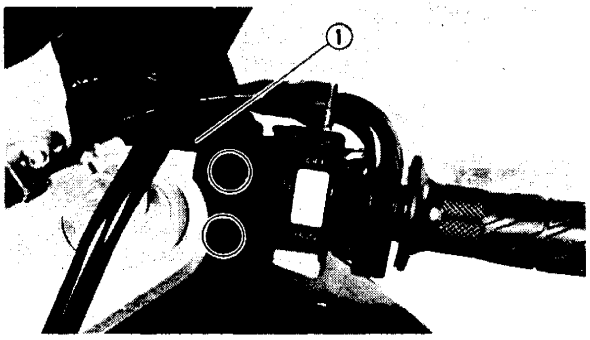
1.Disconnect:
- Brake switch leads ①

2.Remove:
- Reservoir tank ②
- Brake lever ③

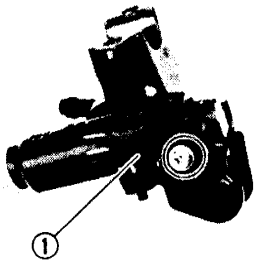


3.Remove:
- Union bolt ①
- Copper washers ②
- Brake hoses ③

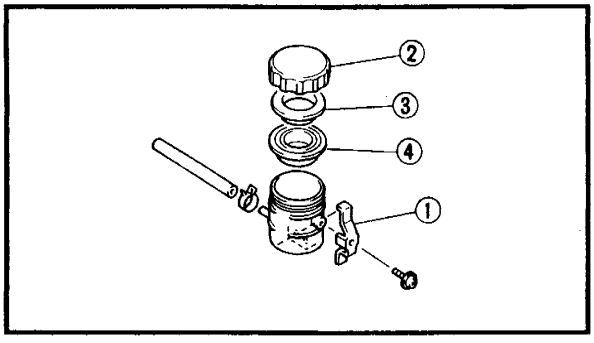
NOTE:
Hold a container under the master cylinder and under the hose end to collect remaining brake fluid.



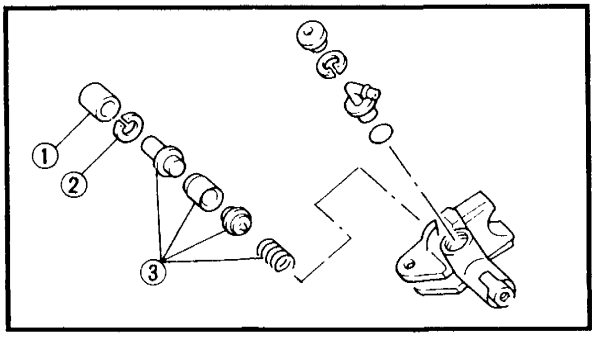
4.Remove:
- Master cylinder ①



5.Remove:
- Brake switch ①



6.Remove:
- Stopper ①
- Cap ② (reservoir tank)
- Holder ③ (diaphragm)
- Diaphragm ④



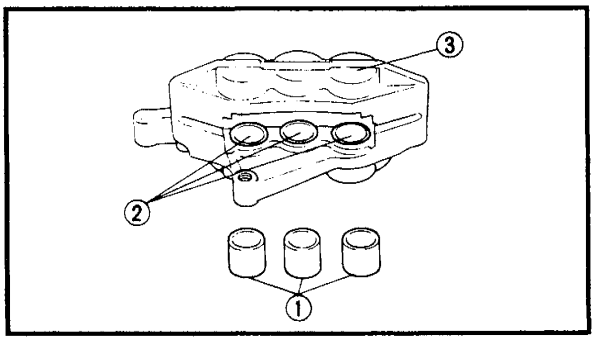
7.Remove:
- Dust boot ①
- Circlip ②
- Master cylinder kit ③

INSPECTION AND REPAIR

Recommended brake component replacement schedule:	
Brake pads	**As required**
Piston seal, dust seal	**Every two years**
Brake hoses	**Every two years**
Brake fluid	**Replace only when brakes are disassembled.**

⚠ WARNING

All internal parts should be cleaned in new brake fluid only. Do not use solvents as they will cause seals to swell and distort.

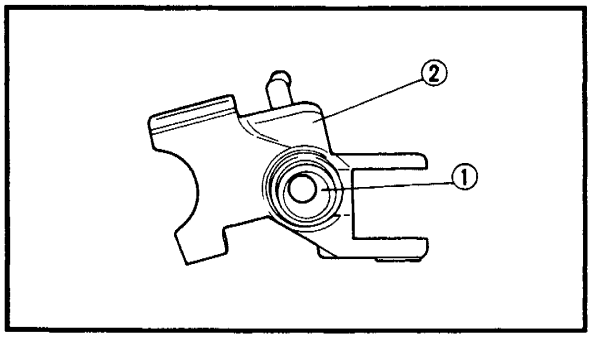


Front brake

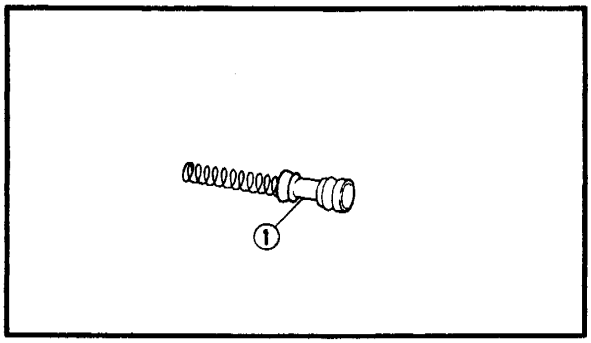
1.Inspect:
- Caliper piston ①
  Scratches/Rust/Wear → Replace caliper assembly.
- Caliper cylinder ②
  Wear/Scratches → Replace caliper assembly.
- Caliper body ③
  Cracks/Damage → Replace.
- Oil delivery passage (caliper body)
  Blow out with compressed air.

⚠ WARNING

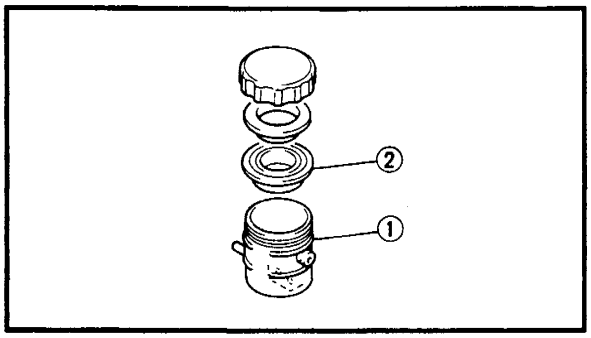
Replace the piston seal and dust seal whenever the caliper is disassembled.



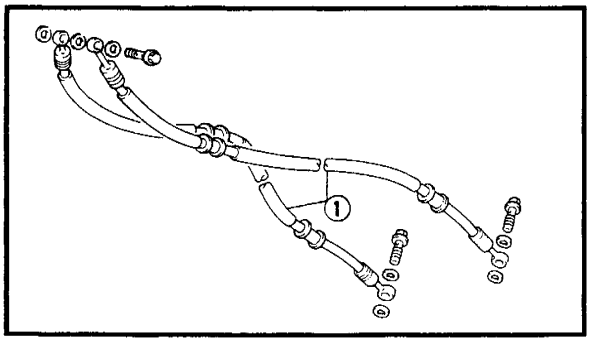
2.Inspect:
- Master cylinder ①
  Wear/Scratches → Replace the master cylinder assembly.
- Master cylinder body ②
  Cracks/Damage → Replace.
- Oil delivery passage
  (master cylinder body)
  Blow out with compressed air.



3.Inspect:
- Master cylinder kit ①
  Scratches/Wear/Damage → Replace as a set.



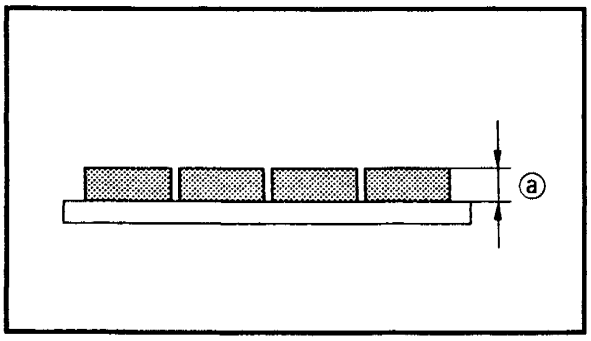
4.Inspect:
- Reservoir tank ①
  Cracks/Damage → Replace.
- Diaphragm ②
  Wear/Damage → Replace.



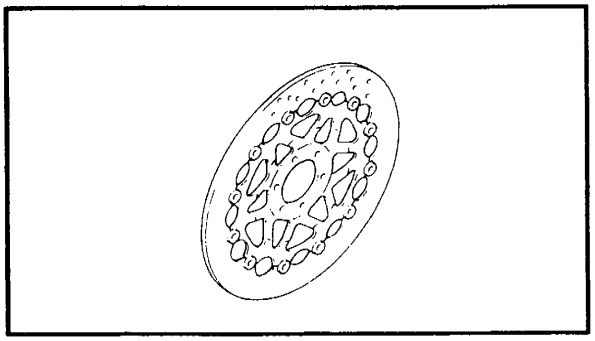
5.Inspect:
- Brake hoses ①
  Cracks/Wear/Damage → Replace.

6.Measure:
- Brake pads (thickness) ⓐ
  Out of specification → Replace.

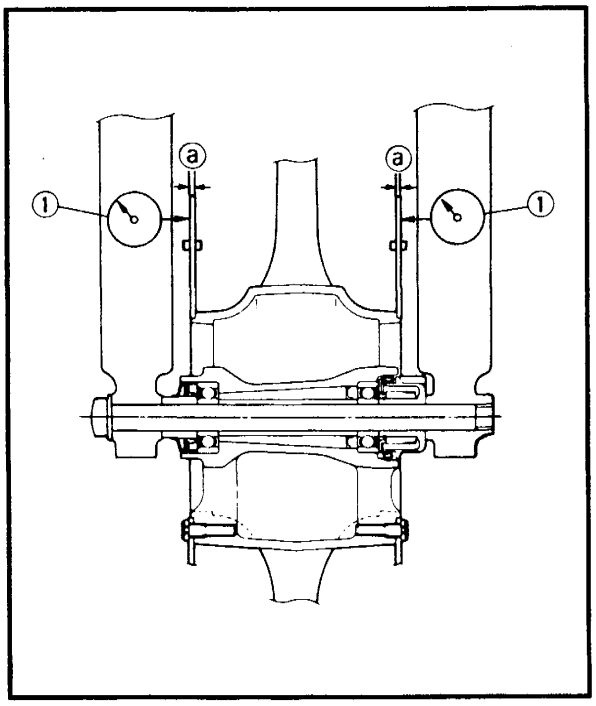
NOTE:
- When pad replacement is required, also replace the pad spring and shims.
- Replace the pads as a set if either is found to be worn to the wear limit ⓐ.



Wear limit ⓐ (front and rear):
0.5 mm (0.02 in)



7.Inspect:
- Brake discs
  Galling/Damage → Replace.



8.Measure:
- Brake disc deflection
  Out of specification → Inspect wheel runout.
  If wheel runout is in good condition, replace the brake disc(s).

Maximum deflection:
0.2 mm (0.008 in)

- Brake disc thickness ⓐ
  Out of specification → Replace.

Minimum thickness:
3.5 mm (0.14 in)

① Dial gauge

NOTE:
Tighten the bolts (brake disc) in stage using a crisscross pattern.

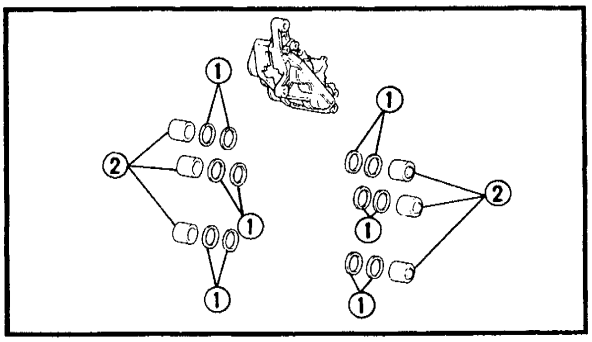
Bolt (brake disc):
20 Nm (2.0 m • kg, 14 ft • lb)
LOCTITE®

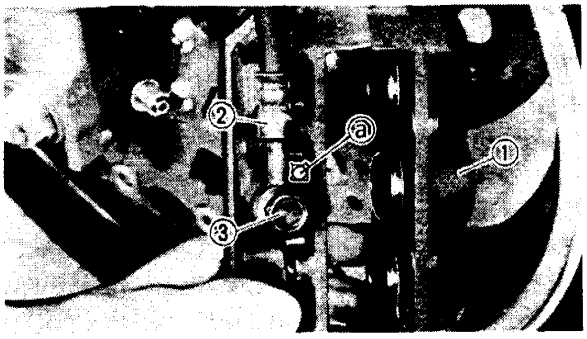
CALIPER ASSEMBLY

⚠ WARNING
- **All internal parts should be cleaned in new brake fluid only.**
- **Internal parts should be lubricated with brake fluid when installed.**

Recommended brake fluid:
DOT #4

- **Replace the piston seals and dust seals whenever a caliper is disassembled.**





Front brake

1.Install:
- Piston seals ①
- Pistons ②

⚠ WARNING

Always use new piston seals.

2.Install:
- Brake caliper ① (temporarily)
- Copper washers
- Brake hose ②
- Union bolt ③

Union bolt:
26 Nm (2.6 m • kg, 19 ft • lb)

CAUTION:

When installing the brake hose on the caliper ①, take care that the pipe touches the projection ⓐ on the brake caliper.

⚠ WARNING

- **Proper hose routing is essential to insure safe motorcycle operation. Refer to "CABLE ROUTING".**
- **Always use new copper washers.**

3.Remove:
- Brake caliper

4.Install:
- Brake pads (with pad shims)
- Pad spring
- Retaining pins
- Retaining clips
- Brake caliper
  Refer to the "BRAKE PAD REPLACEMENT" section.

Bolt (brake caliper):
35 Nm (3.5 m • kg, 25 ft • lb)

5.Fill:
- Reservoir tank

	Recommended brake fluid: DOT #4

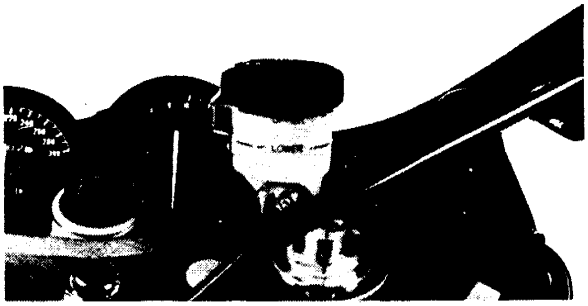
CAUTION:

Brake fluid may erode painted surfaces or plastic parts. Always clean up spilled fluid immediately.

⚠ WARNING

- **Use only the designated quality brake fluid: otherwise, the rubber seals may deteriorate, causing leakage and poor brake performance.**
- **Refill with the same type of brake fluid: mixing fluids may result in a harmful chemical reaction and lead to poor performance.**
- **Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.**

6.Air bleed
- Brake system
  Refer to the "AIR BLEEDING" section in CHAPTER 3.



7.Inspect:
- Brake fluid level
  Fluid level is under "LOWER" level line → Replenish.
  Refer to the "BRAKE FLUID INSPECTION" section in CHAPTER 3.

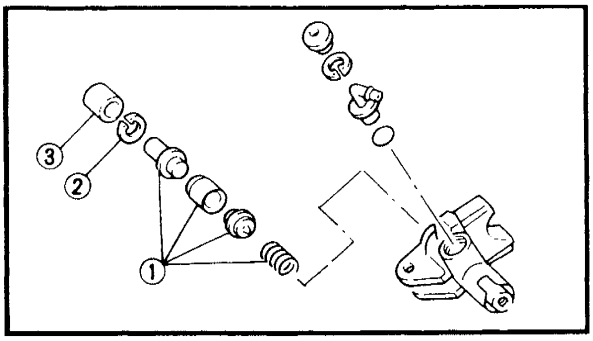
MASTER CYLINDER ASSEMBLY

⚠ WARNING

- **All internal parts should be cleaned in new brake fluid only.**
- **Internal parts should be lubricated with brake fluid when installed.**

	Recommended brake fluid: DOT #4

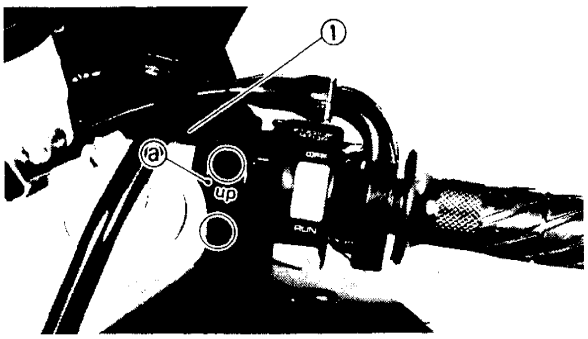
- **Replace the piston seals and dust seals whenever a caliper is disassembled.**



Front brake

1.Install:

- Master cylinder kit ①
- Circlip ②
- Dust boot ③
- Brake switch



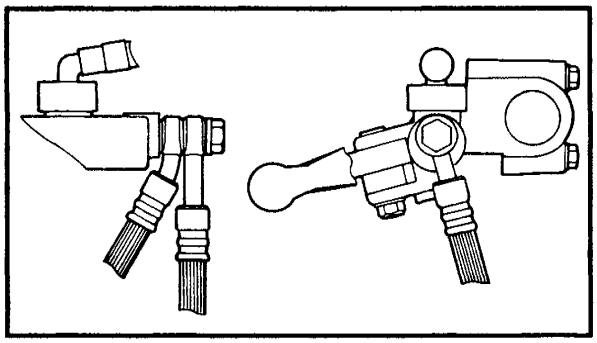
2.Install:

- Master cylinder ①

CAUTION:

- **Install the master cylinder holder with the "UP" mark facing upward.**
- **Align the end of the holder with the punch mark ⓐ on the handlebar.**
- **Tighten first the upper bolt, then the lower bolt.**

	Bolt (master cylinder holder): 10 Nm (1.0 m • kg, 7.2 ft • lb)



3.Install:
- Copper washers
- Brake hose
- Union bolt

Union bolt:
26 Nm (2.6 m • kg, 19 ft • lb)

NOTE:
- Tighten the union bolt while holding the brake hose as shown.
- Check that the brake hose does not touch other parts (throttle cable, wire harness, leads, etc.) by turning the handlebar left and right, and correct if necessary.

⚠ WARNING
- **Proper hose routing is essential to insure safe motorcycle operation. Refer to "CABLE ROUTING".**
- **Always use new copper washers.**

4.Install:
- Brake lever
- Reservoir tank

5.Connect:
- Brake switch leads

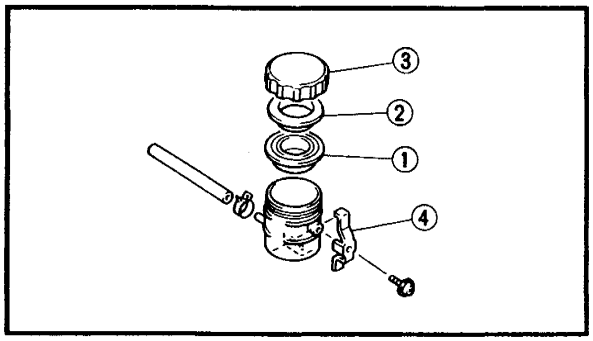
6.Fill:
- Reservoir tank

Recommended brake fluid:
DOT #4

CAUTION:
Brake fluid may erode painted surfaces or plastic parts. Always clean up spilled fluid immediately.

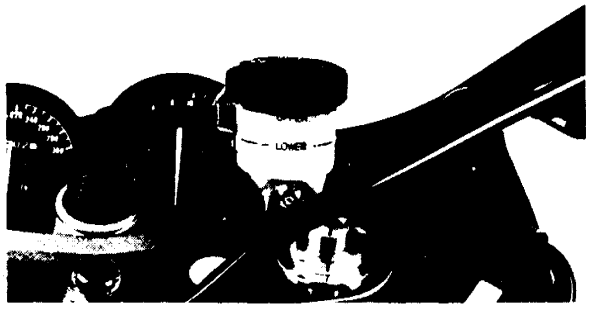
⚠ WARNING
- **Use only the designated quality brake fluid: otherwise, the rubber seals may deteriorate, causing leakage and poor brake performance.**

- **Refill with the same type of brake fluid: mixing fluids may result in a harmful chemical reaction and lead to poor performance.**
- **Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.**



7.Install:
- Diaphragm ①
- Holder ② (diaphragm)
- Cap ③ (master cylinder)
- Stopper ④

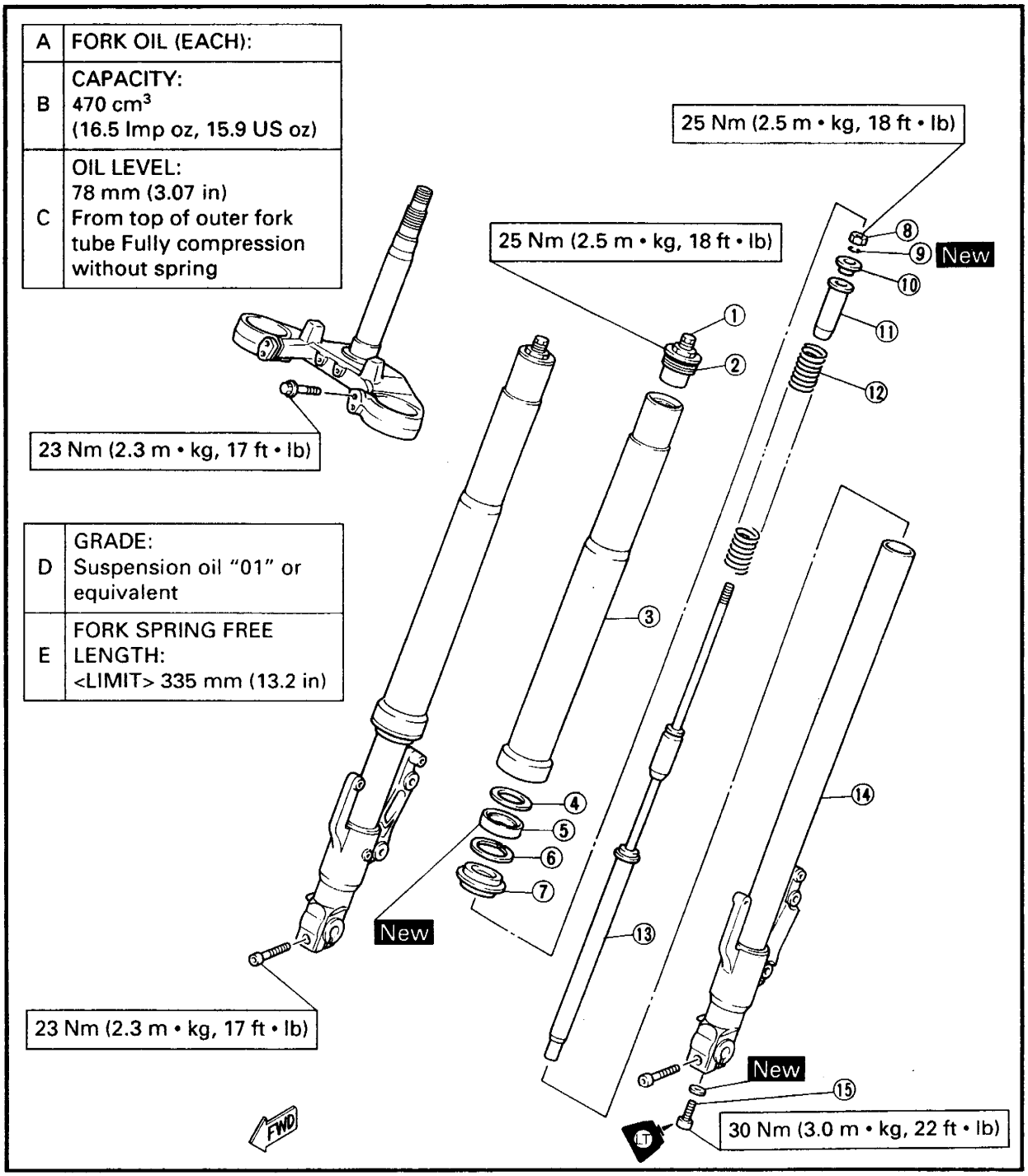
8.Air bleed:
- Brake system
  Refer to the "AIR BLEEDING" section in CHAPTER 3.



9.Inspect:
- Brake fluid level
  Fluid level is under "LOWER" level line → Replenish.
  Refer to the "BRAKE FLUID INSPECTION" section in CHAPTER 3.

FRONT FORK

① Spring preload adjuster
② Cap bolt
③ Outer fork tube
④ Plain washer
⑤ Oil seal
⑥ Circlip
⑦ Dust seal
⑧ Lock nut
⑨ Circlip
⑩ Spring seat
⑪ Spring guide
⑫ Fork spring
⑬ Dumper rod assembly
⑭ Inner fork tube
⑮ Dumper rod bolt



REMOVAL

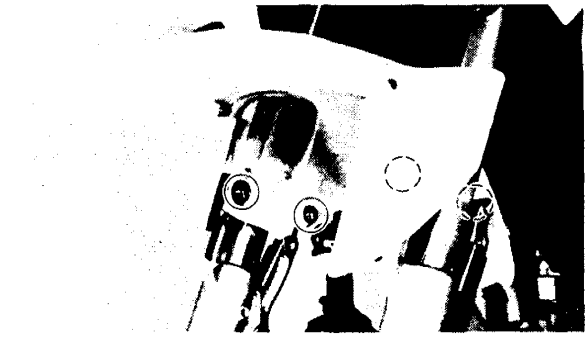
⚠ WARNING

Securely support the motorcycle so there is no danger of it falling over.

1.Place the motorcycle on a level place.
2.Remove:
- Side cowling (left and right)
- Front cover

Refer to the "COWLINGS" section.
3.Remove:
- Brake calipers
- Front wheel

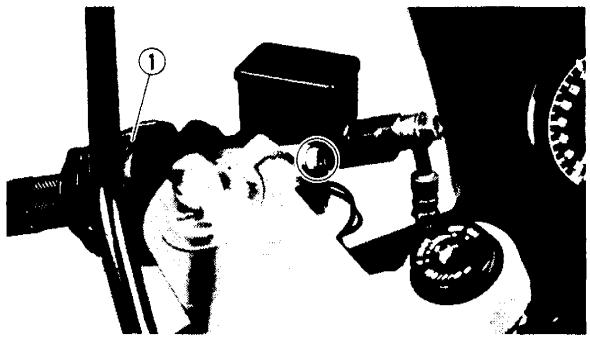
Refer to the "FRONT WHEEL" section.



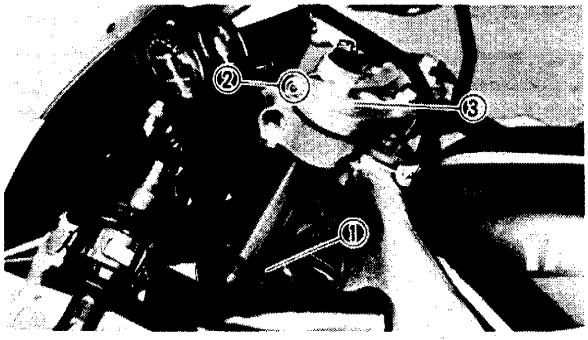
4.Remove:
- Front fender



5.Remove:
- Master cylinder ① (from steering head)

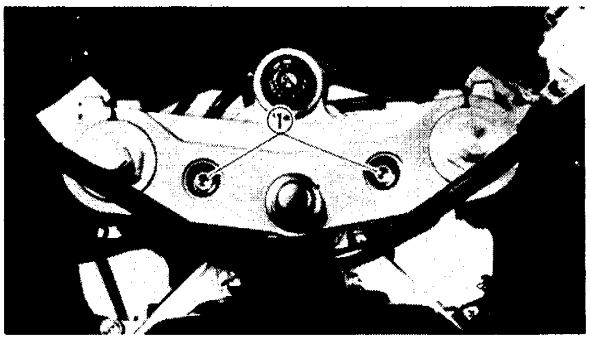


6.Remove:
- Handlebar assembly ① (left and right)

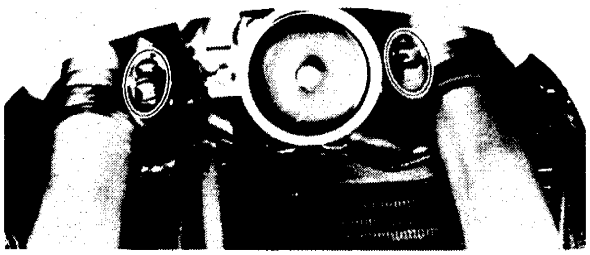


7.Remove:
- Bands ①

8.Loosen:
- Pinch bolts ② (upper bracket)
- Cap bolts ③



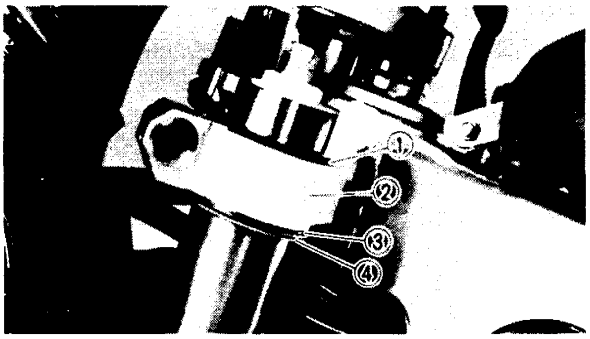
9.Remove:
- Bolts ① (handlebar boss)



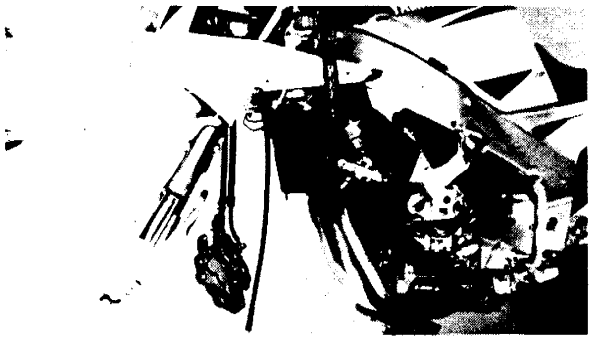
10.Loosen:
- Pinch bolts (lower bracket)

⚠ WARNING

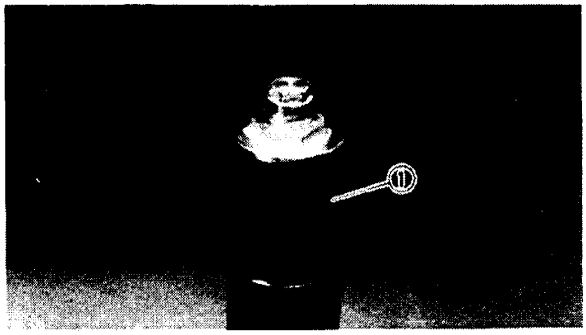
Support the fork before loosening the pinch bolts.



11.Remove:
- Rubber ①
- Handlebar boss ②
- Rubber ③
- Washer ④

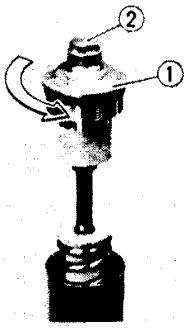


12.Remove:
- Front fork



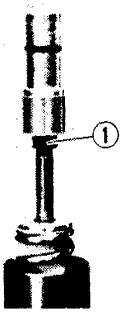
DISASSEMBLY

1.Unscrew:
- Outer fork tube ①

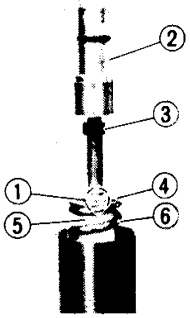


2.Remove:
- Cap bolt ①

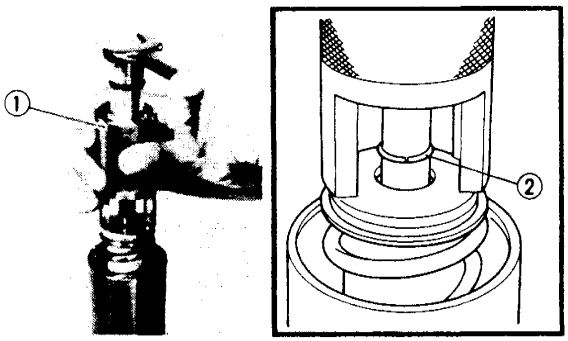
NOTE:
Holding the spring preload adjuster ② with a wrench, remove the cap bolt ①.



3.Loosen:
- Lock nut ①



4.Remove:
- Circlip ①
- Spring preload adjuster ②
- Lock nut ③
- Spring seat ④
- Spring guide ⑤
- Fork spring ⑥



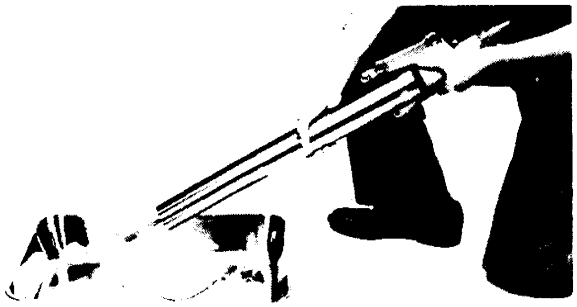
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Removal steps:
- Install the fork spring compressor ① while holding the spring preload adjuster with a wrench. Screw in the fork spring compressor ① and press down on the spring seat.

	Fork spring compressor ①: **P/N. YM-01458**

- Remove the circlip ② using a screw driver.
- Remove the fork spring compressor ①.
- Remove the spring preload adjuster and locknut.
- Remove the spring seat, spring guide and fork spring.

****



5.Drain:
- Fork oil

****

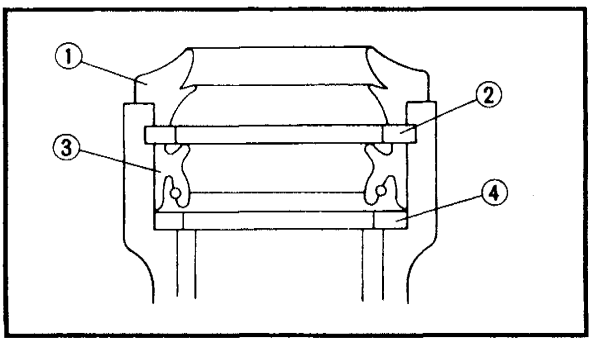
Draining steps:
- Drain the fork oil while stroking the piston rod several times.

NOTE:
Be sure to firmly grip the outer fork tube since it can easily come off.

****

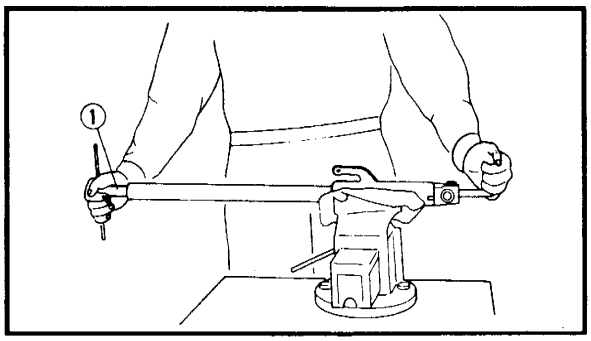
6.Remove:
- Outer fork tube

CAUTION:
- **Be sure not to damage the dust seal.**
- **Be very careful, since the whole assembly must be replaced if the metal slide in the outer fork tube is damaged.**



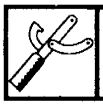
7.Remove:
- Dust seal ①
- Circlip ②
- Oil seal ③
- Plain washer ④

NOTE:
Remove the dust seal and oil seal using a screw driver without damaging the outer fork tube.



8.Remove:
- Damper rod assembly

NOTE:
Loosen the bolt (damper rod) while holding the damper rod with the damper rod holder ①.

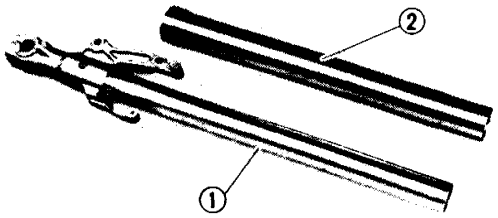


Damper rod holder:
P/N. YM-01447

INSPECTION

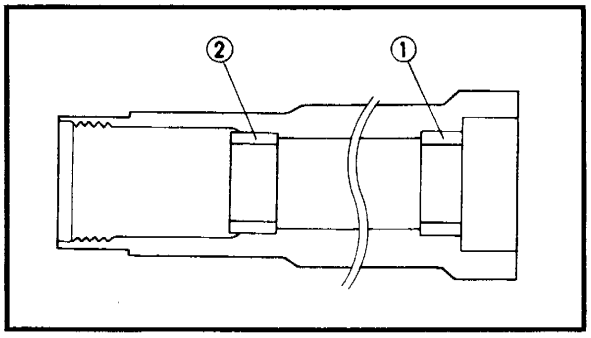
1.Inspect:
- Inner fork tube ①
- Outer fork tube ②

Scratches/Bends/Damage → Replace.



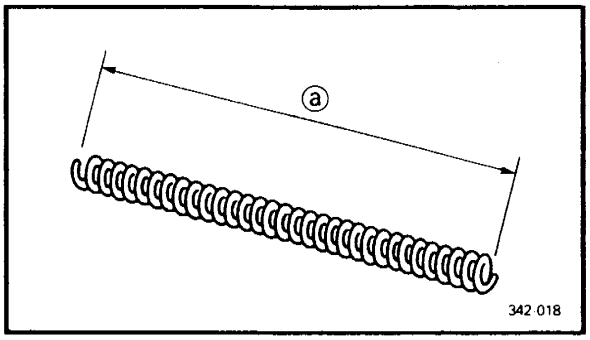
⚠ WARNING

Do not attempt to straighten a bent inner fork tube as this may dangerously weaken the tube.



2.Inspect:
- Slide metal ①
- Piston metal ②

Scratches/Wear → Replace outer fork tube.

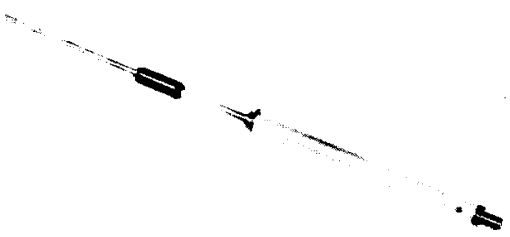


3.Measure:
- Fork spring ⓐ

Over specified limit → Replace.



Fork spring free length (limit):
335 mm (13.2 in)



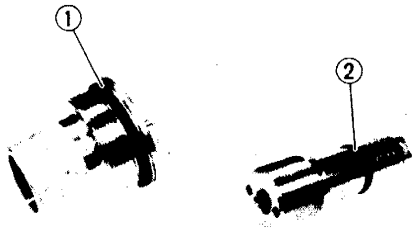
4.Inspect:
- Damper rod assembly

Bend/Damage → Replace damper rod assembly.

CAUTION:

The front fork with a built-in piston rod has a very sophisticated internal construction and is particularly sensitive to foreign material.

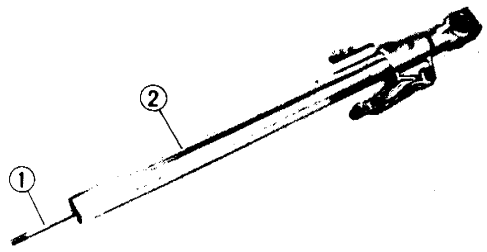
Use enough care not to allow any foreign material to come in when the oil is replaced or when the front fork is disassembled and reassembled.



5.Inspect:
- O-ring (cap bolt) ①
- O-ring (spring preload adjuster) ②
  Wear/Damage → Replace.

ASSEMBLY
Reverse the "DISASSEMBLY" procedure.
Note the following points.

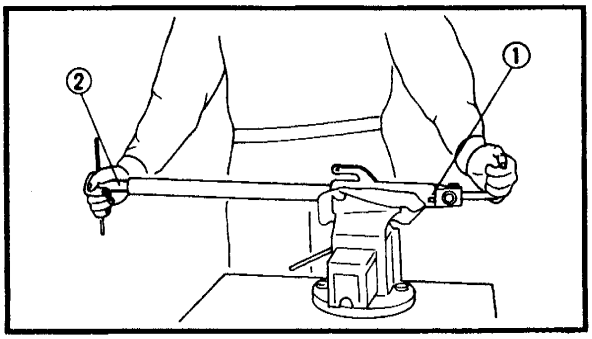
NOTE:
- In front fork reassembly, be sure to use following new parts.
  ✳Oil seal
- Make sure that all components are clean before reassembly.



1.Install:
- Damper rod assembly ①

CAUTION:
Allow the damper rod to slide slowly down the inner fork tube ② until it protrudes from the bottom, being careful not to damage the inner fork tube.

NOTE:
Always use a new copper washer.

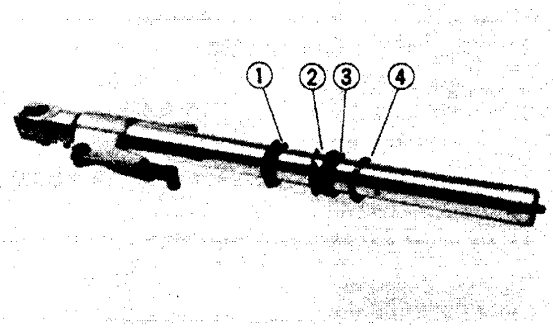


2.Tighten:
- Bolt (damper rod) ①

Bolt (damper rod):
30 Nm (3.0 m • kg, 22 ft • lb)
LOCTITE®.

NOTE:
Tighten the bolt (damper rod) while holding the damper rod with the damper rod holder.

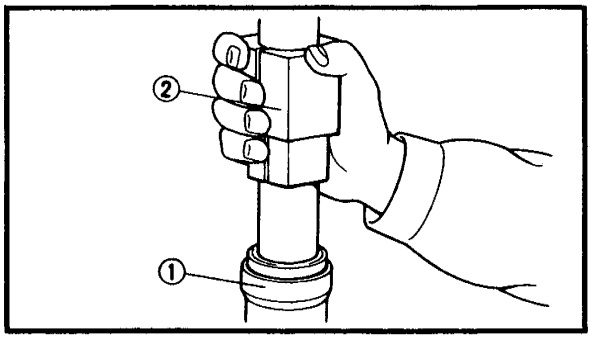
Damper rod holder:
P/N. YM-01447



3.Install:
- Dust seal ①
- Circlip ②
- Oil seal ③
- Plain washer ④

NOTE:
Install the oil seal with its manufacture's marks or number facing the axle holder side.

4.Install:
- Inner fork tube (to outer fork tube)



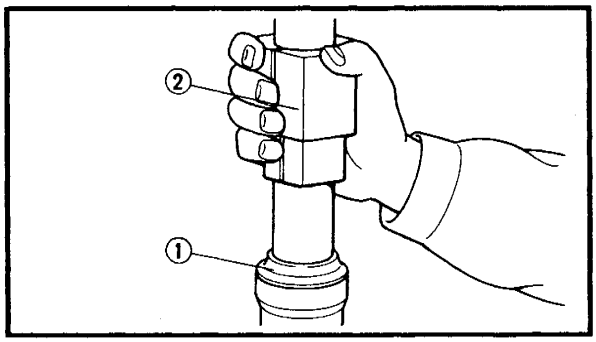
5.Install:
- Oil seal ①

Press the oil seal into the outer fork tube with fork seal driver.

Fork seal driver ②:
P/N. YM-1424

6.Install:
- Circlip

NOTE:
Fit the circlip correctly in the groove in the outer fork tube.



7.Install:
- Dust seal ①

Press the dust seal into the outer fork tube with fork seal driver ②.

Fork seal driver:
P/N YM-1424

8.Compress the front fork fully.
9.Fill:
- Front fork oil

Fork oil capacity:
470 cm³
(16.5 Imp oz, 15.9 US oz)
Recommended oil:
Suspension oil "01" or equivalent

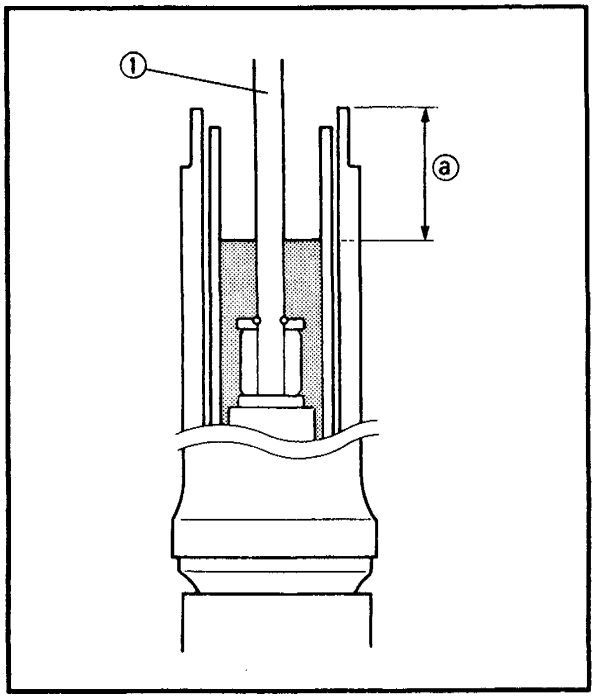
CAUTION:
- **Be sure to use recommended fork oil. If other oils are used, they may have an excessively adverse effect on the front fork performance.**
- **NEVER allow foreign materials to enter the front fork.**

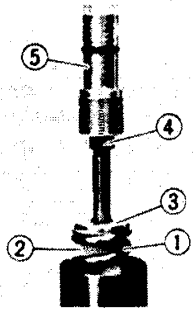
10.After filling, pump the damper rod ① slowly up and down more than 10 times to distribute the front fork oil.

NOTE:
Be sure to pump the damper rod slowly because the fork oil will spurt out from its end.

CAUTION:
Be sure that the outer tube does not come in contact with the dust seal.

11.Wait ten minutes until the air bubbles have been removed form the front fork, and the oil has dispense evenly in system before setting recommended oil level.





12.Measure:
- Oil level ⓐ (left and right)
  Out of specification → Adjust.

	Fork oil level: **78 mm (3.07 in)**
From top of outer tube with inner fork tube and damper rod ① fully compressed without spring.	

CAUTION:

Slowly lower the outer fork tube so that contacts the end of the axle bracket being careful not to damage the dust seat.

⚠ WARNING

Never fail to mark the oil level adjustment specification level and always adjust each front fork to the same setting. Uneven adjustment can cause poor handling and loss of stability.

13.Install:
- Fork spring ①
- Spring guide ②
- Spring seat ③
- Lock nut ④
- Spring preload adjuster ⑤
- Circlip

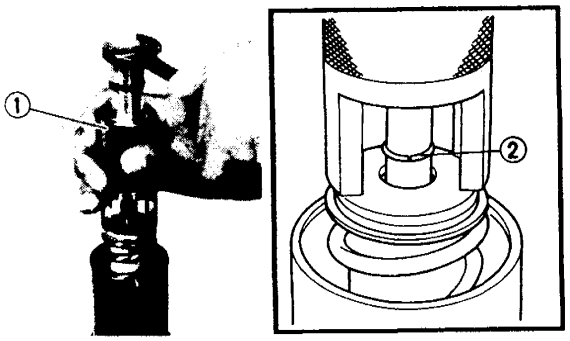
****

Installing steps:
- Install the fork spring, spring guide and spring seat.
- Install the locknut and spring preload adjuster.

NOTE:

Fully tighten the spring preload adjuster and tighten the locknut to the specified torque.

	Lock nut: **25 Nm (2.5 m • kg, 18 ft • lb)**



● Install the fork spring compressor ① while holding the spring preload adjuster with a wrench. Screw in the fork spring compressor ① and press down on the spring seat.

	Fork spring compressor ①: P/N. YM-01458

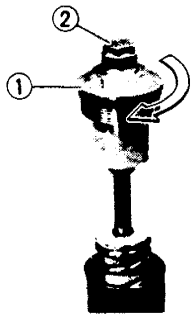
● Install the circlip ②.

⚠ WARNING

Always use new circlip.

● Remove the fork spring compressor ①.

****

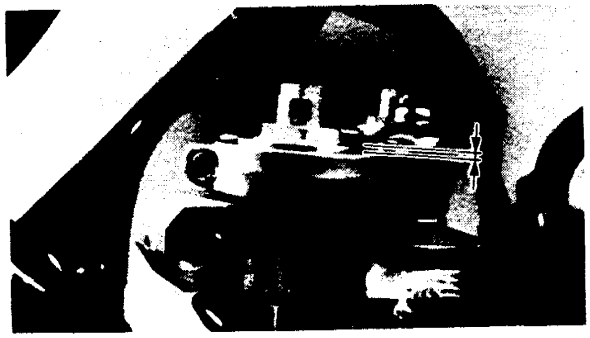


14. Install:
- Cap bolt ①

NOTE:
Holding the spring preload adjuster ② with a wrench, install the cap bolt ①.



15. Install:
- Outer tube ① (to cap bolt complete)
  Temporarily tighten the cap bolt complete.



INSTALLATION

Reverse the "REMOVAL" procedure.
Note the following points.

1. Install:
- Front fork(s)
  Temporary tighten the pinch bolts.

NOTE:
Be sure the outer fork tube end is flush with the top of the upper bracket.

2.Tighten:
- Pinch bolts (lower bracket)
- Pinch bolts (handlebar)
- Cap bolts
- Pinch bolts (upper bracket)

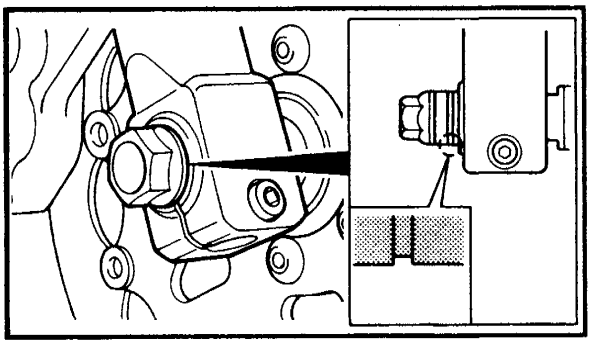
Pinch bolts (lower bracket):
23 Nm (2.3 m • kg, 17 ft • lb)
Bolts (handlebar boss):
28 Nm (2.8 m • kg, 20 ft • lb)
Pinch bolt (upper bracket):
23 Nm (2.3 m • kg, 17 ft • lb)
Cap bolt:
25 Nm (2.5 m • kg, 18 ft • lb)

3.Install:
- Front fender
- Brake hose holder

Bolt (front fender):
6 Nm (0.6 m • kg, 4.3 ft • lb)

4.Install:
- Front wheel
- Brake caliper
  Refer to the "FRONT WHEEL" section.

Front axle:
150 Nm (15.0 m • kg, 110 ft • lb)
Bolt (brake caliper):
35 Nm (3.5 m • kg, 25 ft • lb)
Pinch bolt (front axle):
20 Nm (2.0 m • kg, 14 ft • lb)



NOTE:
Be sure that the axle's grooves can be seen around the circumference after tightening the front axle.

⚠ WARNING
Make sure that the brake hose are routed properly.

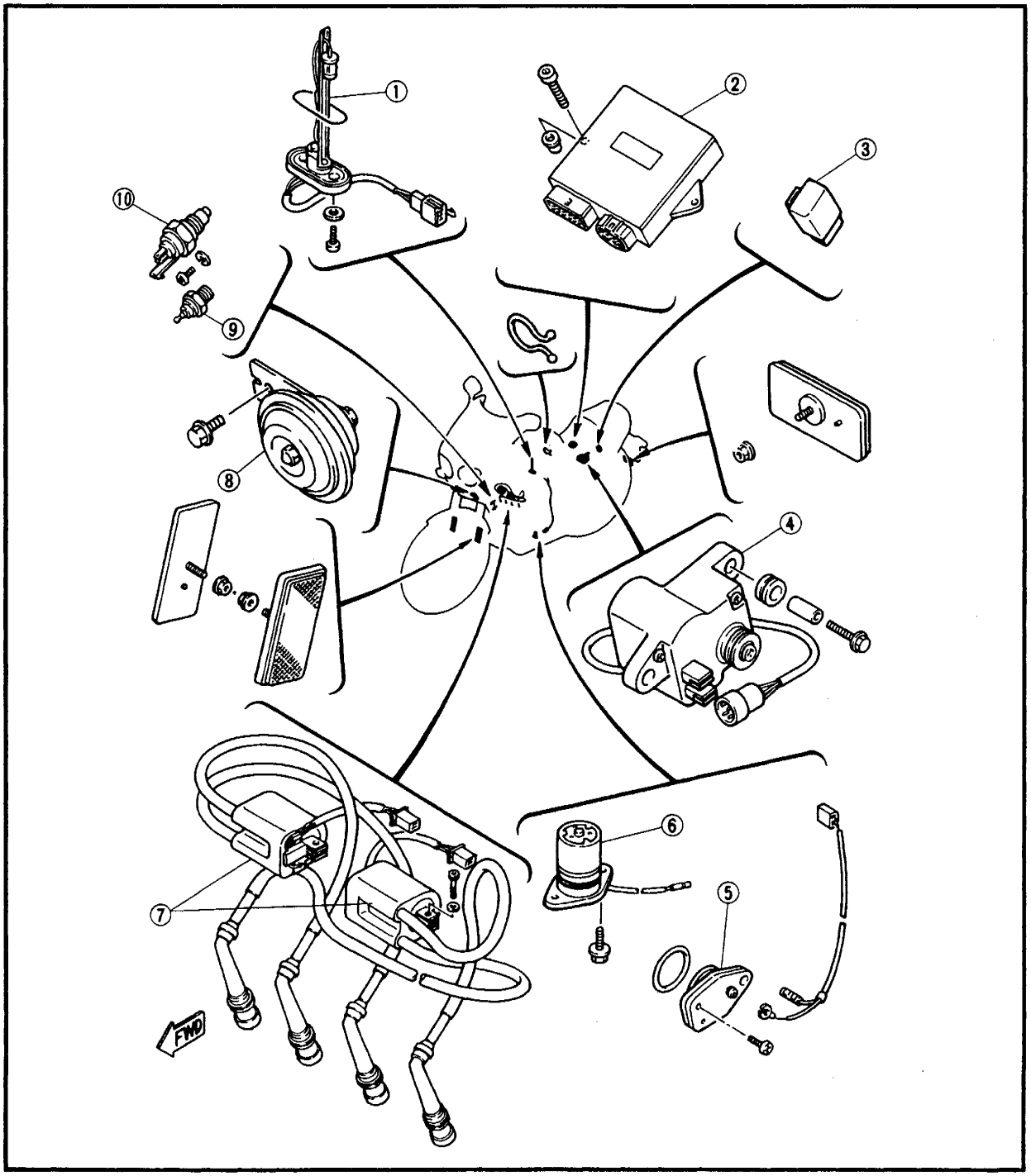
5.Adjust:
- Spring preload
  Refer to the "FRONT FORK ADJUSTMENT" section.

ELECTRICAL

ELECTRICAL COMPONENTS

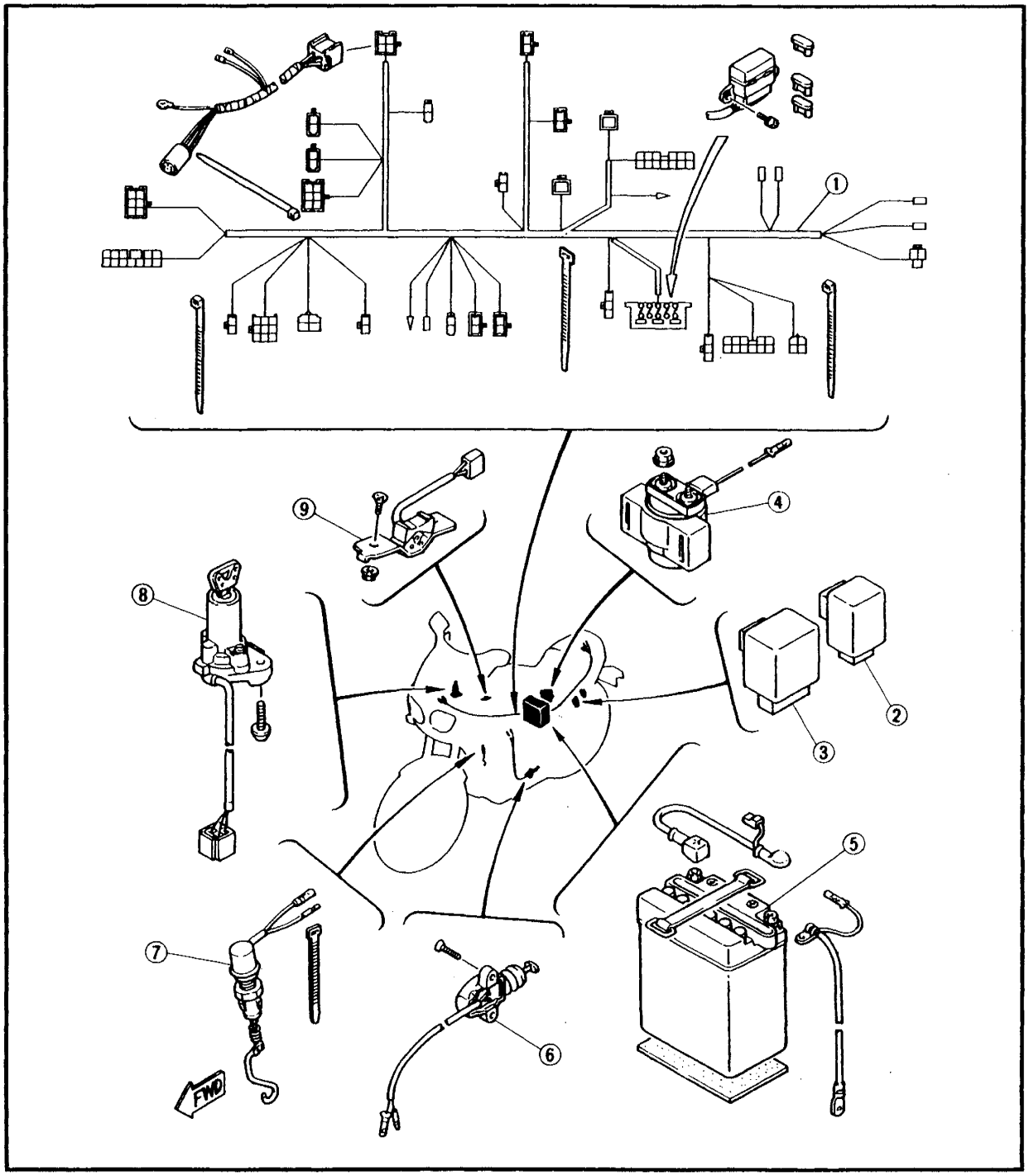
① Fuel sendor
② Ignitor unit
③ Flasher relay
④ Servo motor
⑤ Neutral switch
⑥ Oil level switch
⑦ Ignition coil
⑧ Horn
⑨ Thermo unit
⑩ Thermo switch

IGNITION COIL:
PRIMARY WINDING RESISTANCE:
1.8 ~ 2.2 W at 20°C (68° F)
SECONDARY WINDING RESISTANCE:
9.6 ~ 14.4 kW at 20° C (68° F)



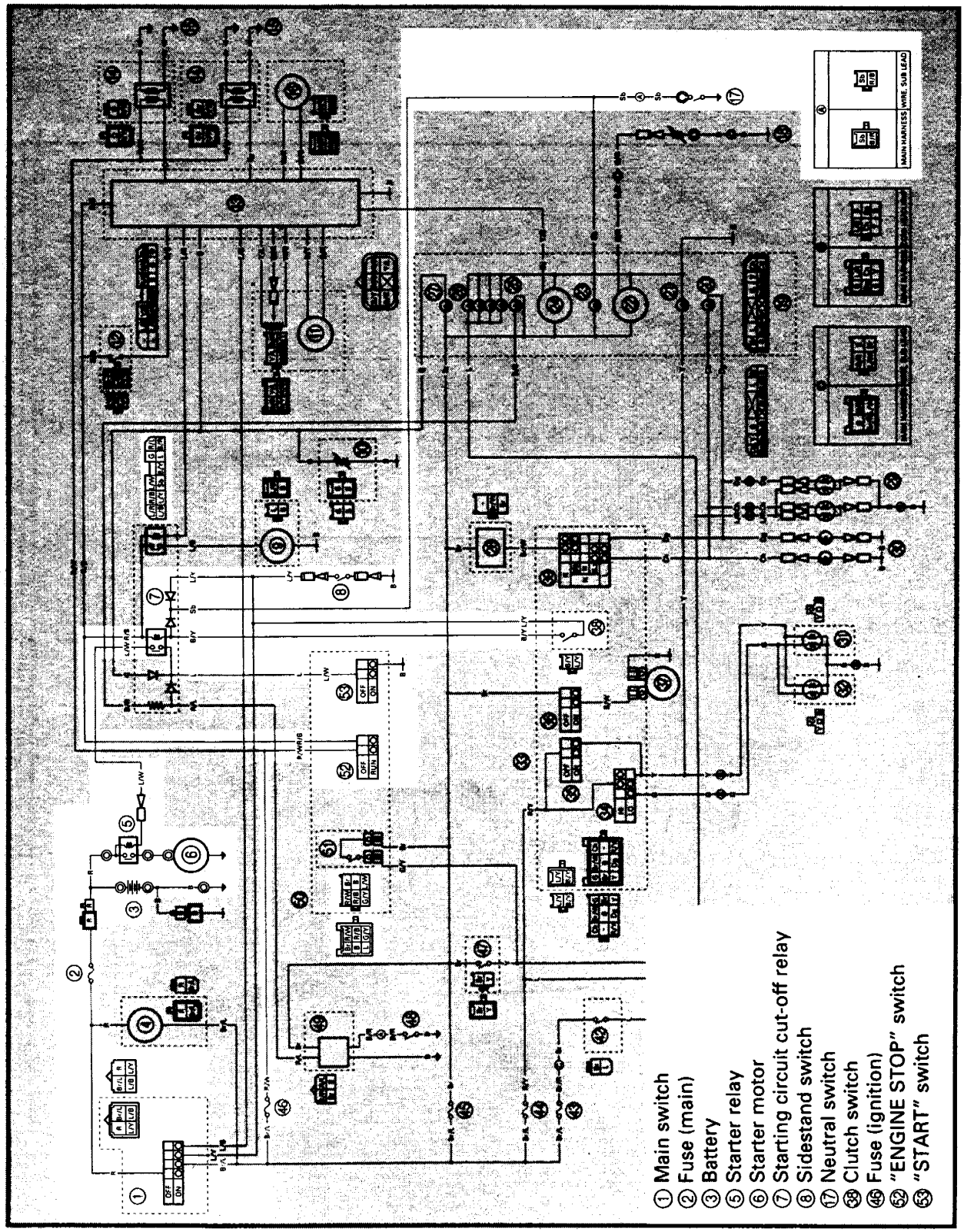
① Wireharness
② Flasher relay
③ Starting circuit cut-off relay
④ Starter relay
⑤ Battery
⑥ Sidestand switch
⑦ Brake switch
⑧ Main switch
⑨ Fuel reserve switch

BATTERY:
CAPACITY:
12V 12AH
SPECIFIC GRAVITY:
1.320



ELECTRIC STARTING SYSTEM

CIRCUIT DIAGRAM



TROUBLESHOOTING

STARTER MOTOR DOES NOT OPERATE.

Procedure

Check;

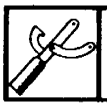
1.Fuse (main and ignition)
2.Battery
3.Starter motor
4.Starting circuit cut off-relay
5.Starter relay
6.Main switch
7."ENGINE STOP" switch
8.Neutral switch
9.Sidestand switch
10.Clutch switch
11."START" switch
12.Wiring connection (entire starting system)

NOTE:

- Remove the following parts before troubleshooting.

1)Seat
2)Side cover (left)
3)Side cowlings
4)Front cover
5)Fuel tank
6)Air filter case

- Use the following special tool(s) in this troubleshooting.



Pocket tester:
P/N. YU-03112

1.Fuse (main and ignition)

- Remove the fuses.
- Connect the pocket tester (Ω × 1) to the fuses.
- Check the fuses for continuity.

NO CONTINUITY → Replace fuse(s).

CONTINUITY ↓

2.Battery

- Check the battery condition. Refer to "BATTERY INSPECTION" in CHAPTER 3.

Open circuit voltage:
12.8V or more at 20° C (68° F)

INCORRECT →

- Clean battery terminals.
- Recharge or replace the battery.

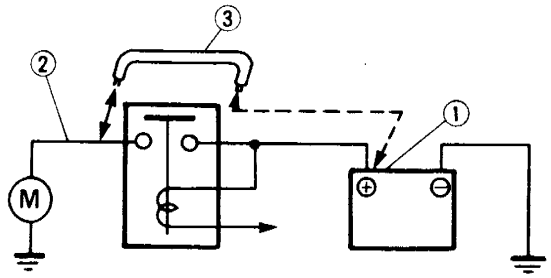
CORRECT ↓

*

*

3.Starter motor

- Connect the battery positive terminal ① and starter motor cable ② using a jumper lead ③ *.
- Check the starter motor for operation.



*

⚠ WARNING

- **A wire for jumper lead must have the equivalent capacity as that of the battery lead or more, otherwise it may cause the jumper lead to be burned.**
- **This check is likely to produce sparks, so be sure that no flammable gas or fluid is in the vicinity.**

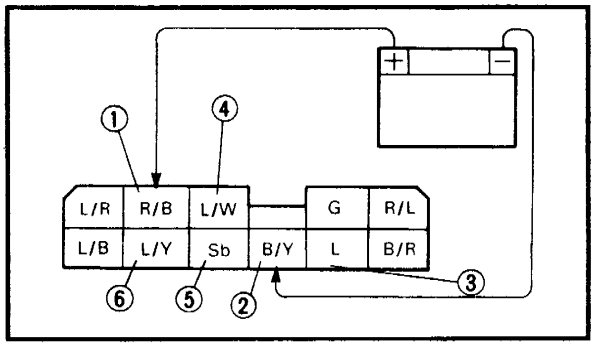
DOES NOT MOVE

Repair or replace starter motor.

MOVES

4.Starting circuit cut-off relay

- Disconnect the starting circuit cut-off relay coupler from the wireharness.
- Connect the pocket tester (Ω × 1) and battery (12V) to the starting circuit cut-off relay coupler terminals.



A **Battery (+) terminal →**
Red/Black terminal ①
Battery (–) terminal →
Black/Yellow terminal ②

Tester (+) terminal → Blue terminal ③
Tester (–) terminal → Blue/White ④

B **Tester (+) terminal →**
Black/Yellow terminal ②
Tester (–) terminal →
Sky blue terminal ⑤

C **Tester (+) terminal →**
Blue/Yellow terminal ⑥
Tester (–) terminal →
Sky blue terminal ⑤

- Check the starting circuit cut-off relay for continuity (A, B and C).

NO CONTINUITY

Replace starting circuit cut-off relay.

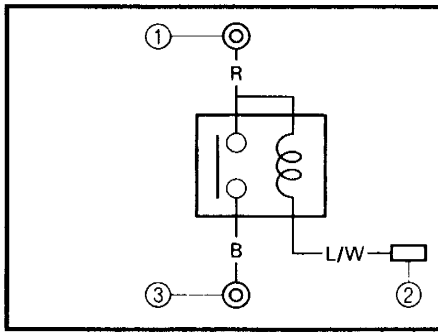
CONTINUITY

*

*

5.Starter relay

- Disconnect the relay unit coupler from the wireharness.
- Connect the pocket tester (Ω × 1) and battery (12V) to the relay unit coupler terminals.



Battery (+) terminal → Red terminal ①
Battery (–) terminal → Blue/White terminal ②

Tester (+) lead → Red terminal ①
Tester (–) lead → Black terminal ③

- Check the starter relay for continuity.

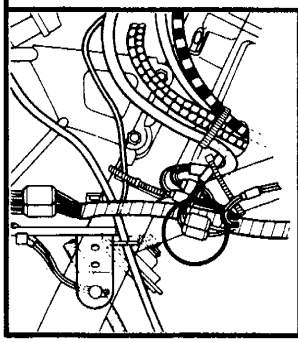
NO CONTINUITY

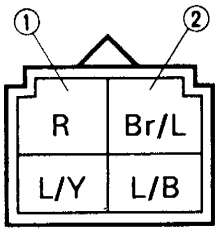
Replace starter relay.

CONTINUITY

6.Main switch

- Disconnect the main switch coupler from the wireharness.
- Check the switch component for the continuity between "Red ① and Brown/Blue ②".
  Refer to "CHECKING OF SWITCHES".





INCORRECT

Replace main switch.

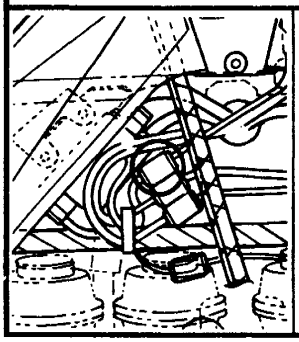
CORRECT

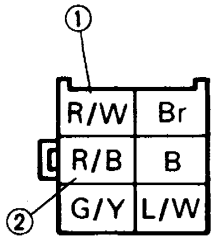
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7."ENGINE STOP" switch

- Disconnect the handlebar switch (right) coupler from the wireharness.
- Check the switch component for the continuity between "Red/White ① and Red/Black ②".
  Refer to "CHECKING OF SWITCHES".





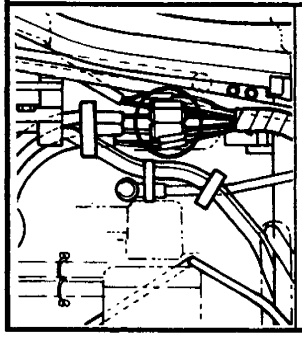
INCORRECT

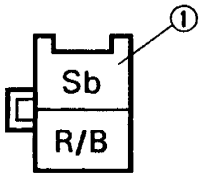
Replace handlebar switch (right).

CORRECT

8.Neutral switch

- Disconnect the neutral switch coupler from the wireharness.
- Check the switch component for the continuity between "Sky blue ①" and Ground.
  Refer to "CHECKING OF SWITCHES".





INCORRECT

Replace neutral switch.

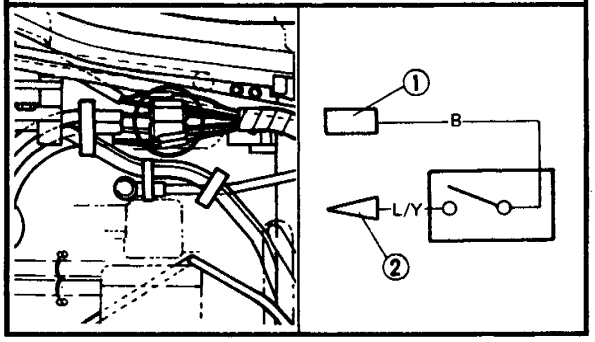
CORRECT

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9.Sidestand switch

- Disconnect the sidestand switch leads from the wireharness.
- Check the switch component for the continuity between "Black ① and Blue/Yellow ②".
  Refer to "CHECKING OF SWITCHES".



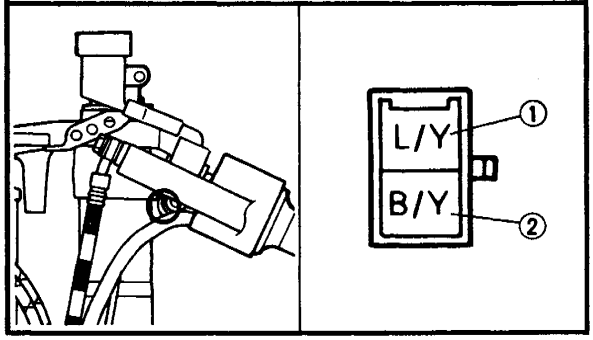
INCORRECT

Replace sidestand switch.

CORRECT

10.Clutch switch

- Disconnect the clutch switch coupler from wireharness.
- Check the clutch switch component for the continuity between "Blue/Yellow ① and Black/Yellow ②".
  Refer to "CHECKING OF SWITCHES".



INCORRECT

Replace clutch switch.

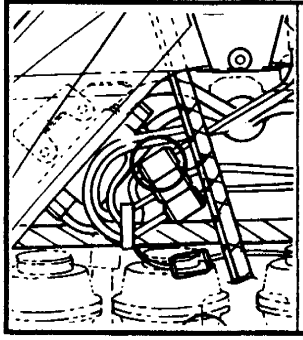
CORRECT

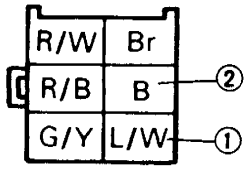
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11."START" switch

- Disconnect handlebar switch (right) coupler from wireharness.
- Check the "START" switch component for the continuity between "Blue/White ① and Black ② ".
  Refer to "CHECKING OF SWITCHES".





INCORRECT

Replace handlebar switch (right).

CORRECT

12.Wiring connection

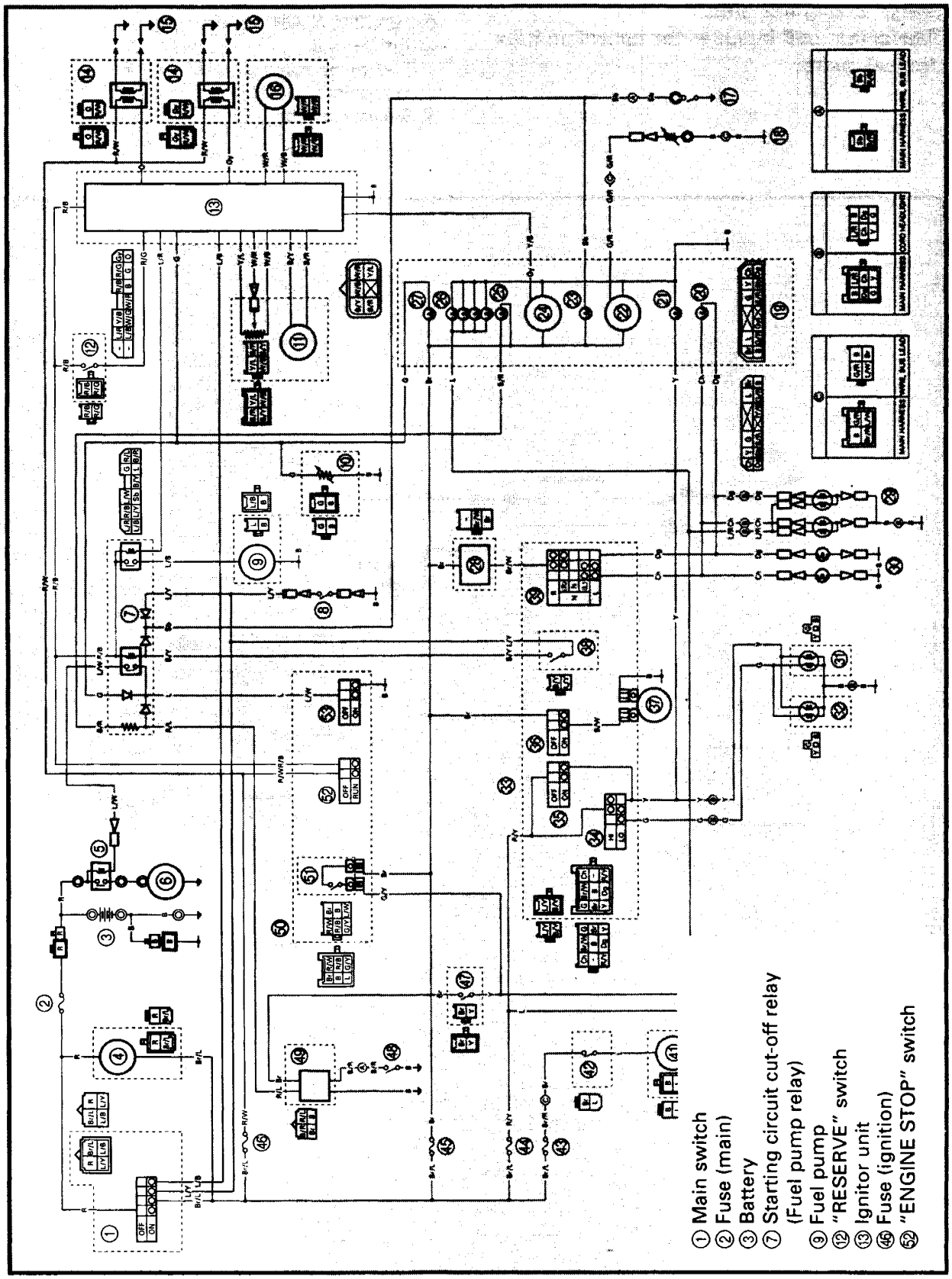
- Check the entire starting system for connections.
  Refer to "CIRCUIT DIAGRAM".

POOR CONNECTION

Correct.

FUEL PUMP SYSTEM

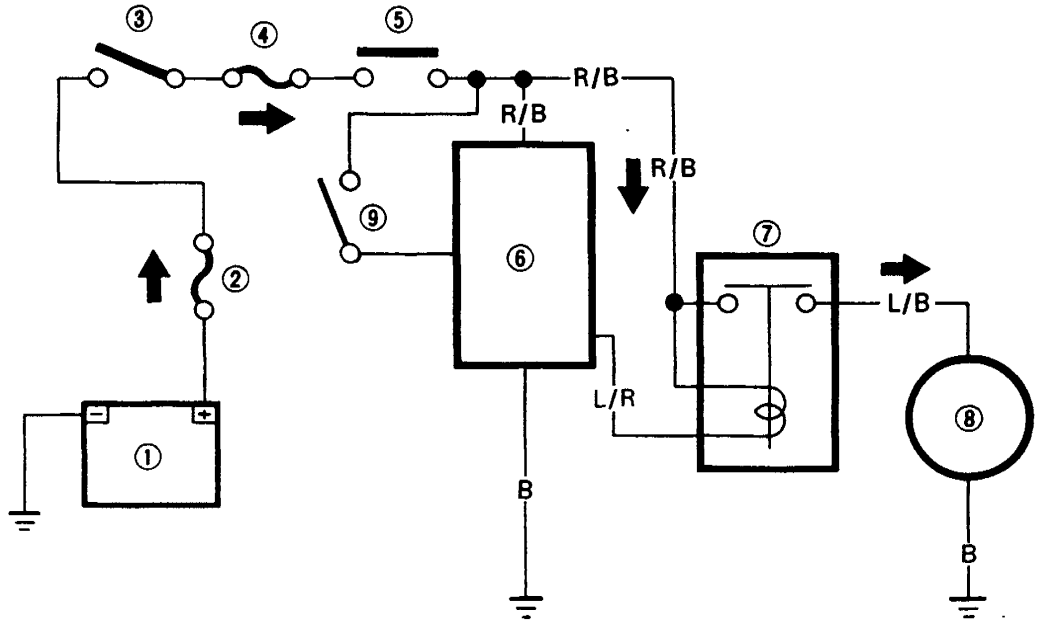
CIRCUIT DIAGRAM



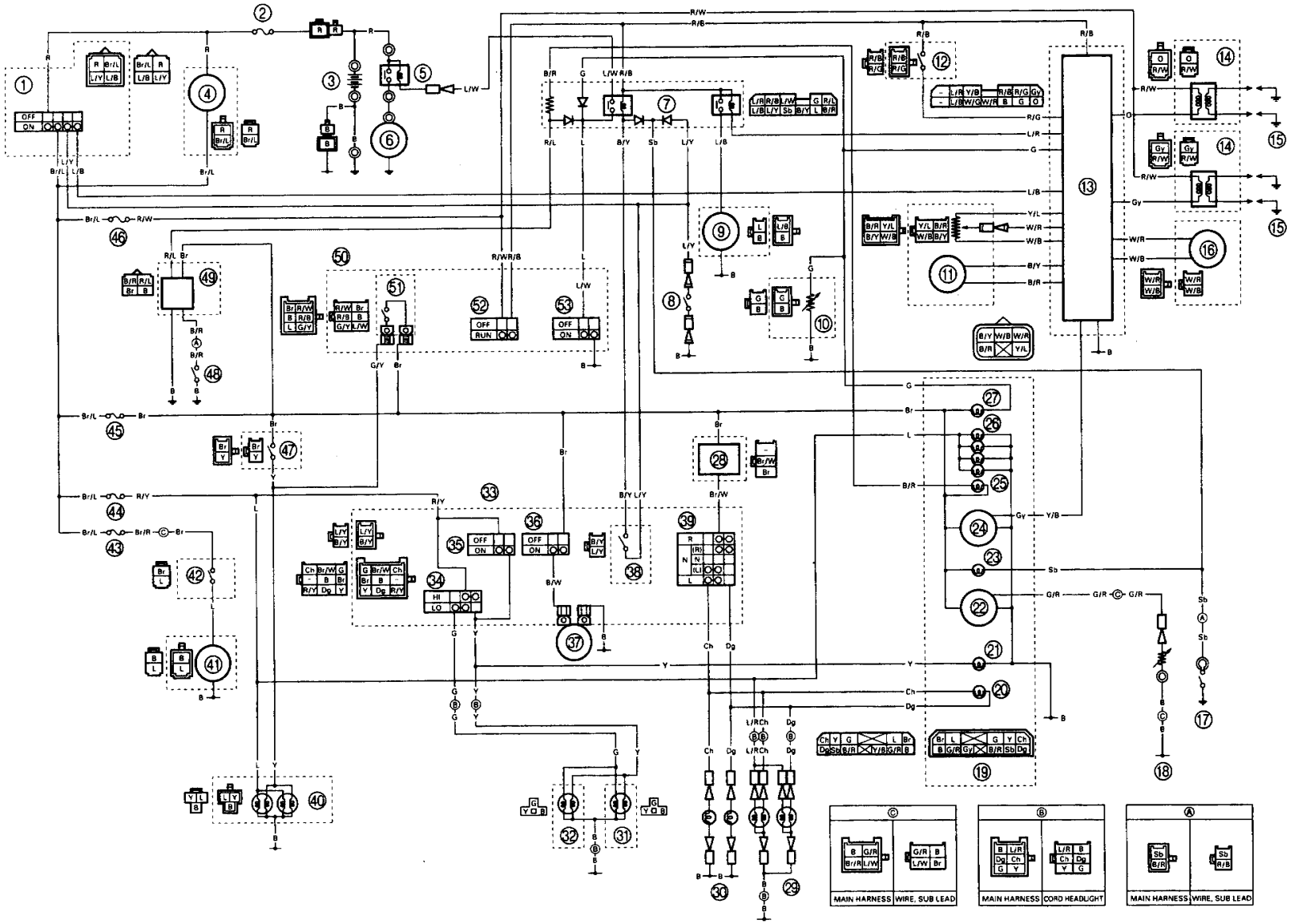
FUEL PUMP CIRCUIT OPERATION

The fuel pump circuit consists of the fuel pump relay, fuel pump, "ENGINE STOP" switch and ignitor unit.
The ignitor unit includes the control unit for the fuel pump.

① Battery
② Fuse (MAIN)
③ Main switch
④ Fuse (IGNITION)
⑤ "ENGINE STOP" switch
⑥ Ignitor unit
⑦ Fuel pump relay
⑧ Fuel pump
⑨ Reserve switch



FZR1000 F/FC WIRING DIAGRAM



① Main switch
② Main fuse
③ Battery
④ A.C. Generator
⑤ Starter relay
⑥ Starter motor
⑦ Relay
⑧ Sidestand switch
⑨ Fuel pump
⑩ Fuel sender
⑪ "EXUP" servo motor
⑫ "FUEL" (Reserve) switch
⑬ Ignitor unit
⑭ Ignition coil
⑮ Spark plug
⑯ Pickup coil
⑰ Neutral switch
⑱ Thermo unit
⑲ Meter assembly
⑳ "TURN" indicator light
㉑ "HIGH BEAM" indicator light
㉒ Engine temperature gauge
㉓ "NEUTRAL" indicator light
㉔ Tachometer
㉕ "OIL LEVEL" indicator light
㉖ Meter illumination
㉗ "FUEL LEVEL" indicator light
㉘ Flasher relay
㉙ Front flasher light
㉚ Rear flasher light
㉛ Headlight (Left)
㉜ Headlight (Right)
㉝ Handlebar switch (Left)
㉞ "LIGHTS" (Dimmer) switch
㉟ "PASS" switch
㊱ "HORN" switch
㊲ Horn
㊳ Clutch switch
㊴ "TURN" signal switch
㊵ Tail/brake light
㊶ Fan motor
㊷ Thermo switch
㊸ Fuse (fan)
㊹ Fuse (head)
㊺ Fuse (signal)
㊻ Fuse (ignition)
㊼ Rear brake switch
㊽ Oil level gauge
㊾ "OIL LEVEL" ingicator light relay
㊿ Handlebar switch (Right)
(51) Front brake switch
(52) "ENGINE STOP" switch
(53) "START" switch

COLOR CODE

B ..... Black	O ..... Orange	Dg ..... Dark green	L/Y ..... Blue/Yellow	Y/B ..... Yellow/Black	R/Y ..... Red/Yellow	W/B ..... White/Black
L ..... Blue	Br ..... Brown	W ..... White	L/R ..... Blue/Red	Y/L ..... Yellow/Blue	R/W ..... Red/White	W/G ..... White/Green
G ..... Green	Ch ..... Chocolate	B/Y ..... Black/Yellow	L/W ..... Blue/White	R/B ..... Red/Black	Br/L ..... Brown/Blue	W/R ..... White/Red
Y ..... Yellow	Gy ..... Gray	B/R ..... Black/Red	G/Y ..... Green/Yellow	R/L ..... Red/Blue	Br/R ..... Brown/Red	
R ..... Red	Sb ..... Skyblue	L/B ..... Blue/Black	G/R ..... Green/Red	R/G ..... Red/Green	Br/W ..... Brown/White	

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