YAMAHA

FZR1000B
FZR1000BC

SUPPLEMENTARY SERVICE MANUAL

LIT-11616-07-83

3LK-28197-12

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and new data for the FZR1000B/BC. For complete information on service procedures, it is necessary to use this Supplementary Service Manual together with following manuals:

FZR1000W/WC Service manual (LIT-11616-06-80)

FZR1000A/AC Supplementary service manual (LIT-11616-07-26)

FZR1000B/BC
SUPPLEMENTARY
SERVICE MANUAL
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LIT-116 16-07-83

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 motorcycles have a basic understanding of the mechanical concepts and procedures inherent in motorcycle repair technology. Without such knowledge, attempted repairs or service to this model may render it unfit to use and/or unsafe.

This model has been designed and manufactured to perform within certain specifications in regard to performance and emissions. Proper service with the correct tools is 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 provicde 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:

This Service Manual contains information regarding periodic maintenance to the emission control system for the FZR1000B/BC. Please read this material carefully.

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

HOW TO USE THIS MANUAL

PARTICULARLY 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 cleaer.

HOW TO USE THIS MANUAL

CONSTRACTION 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

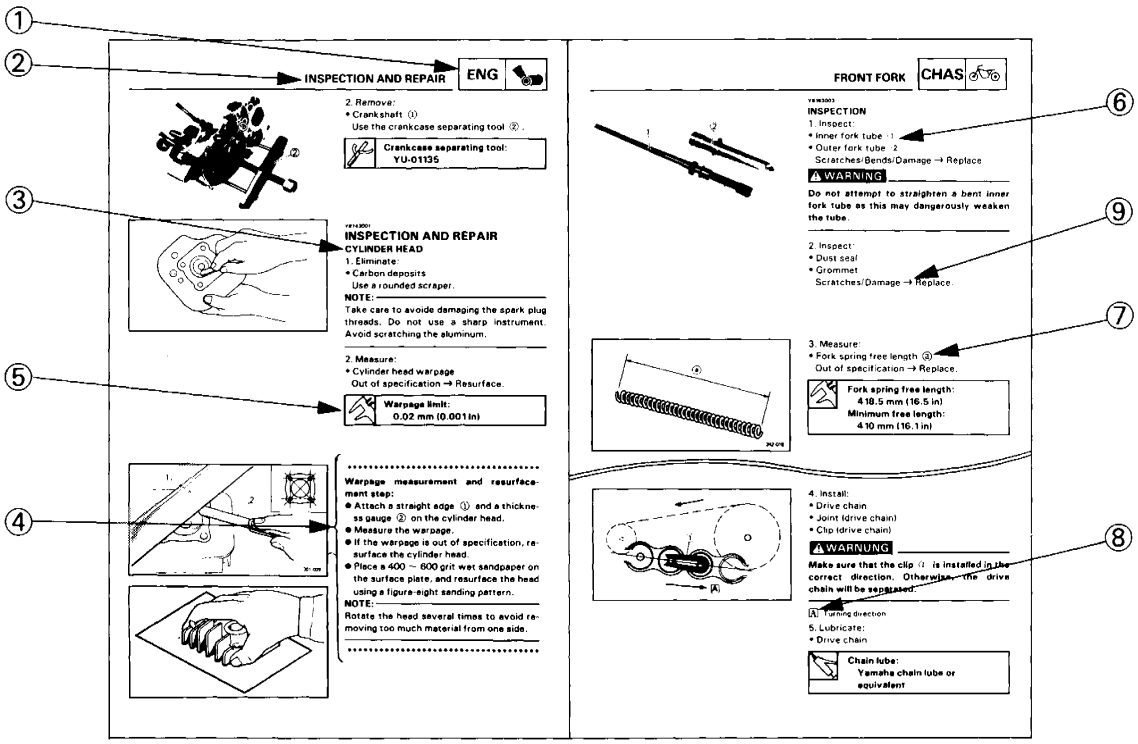
All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspections.
A set of particularly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

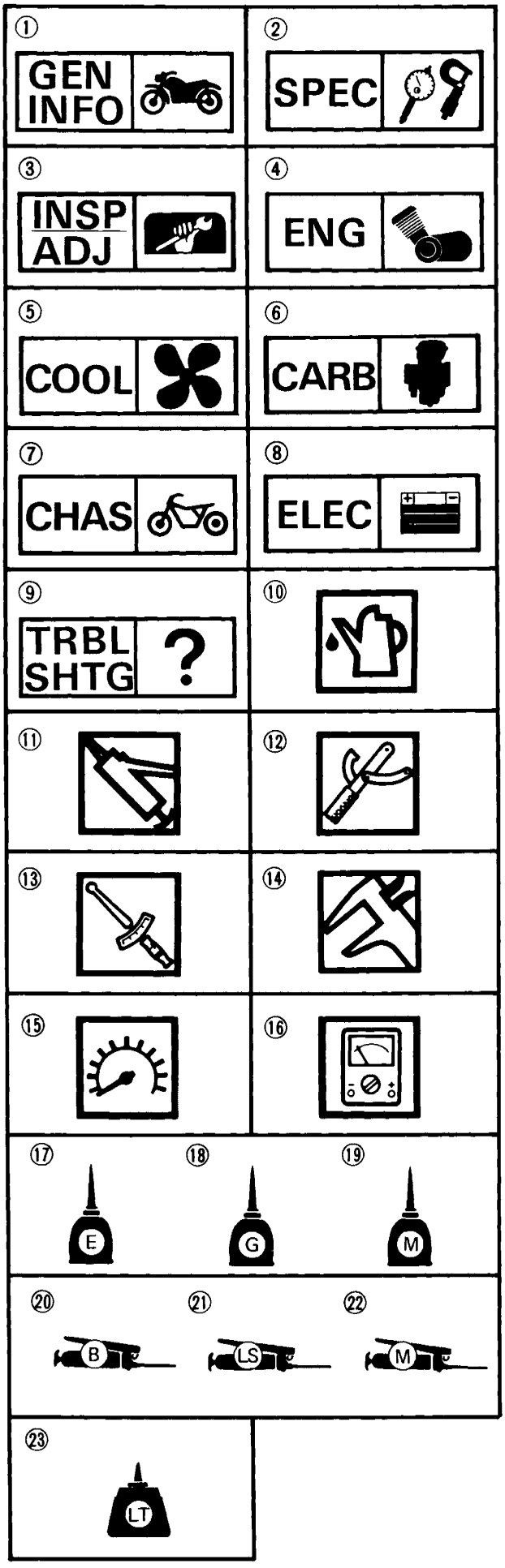
IMPORTANT FEATURES

- 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.

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 ㉓ 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®)

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  - VEHICLE IDENTIFICATION NUMBER 1
  - ENGINE SERIAL NUMBER 1
- SPECIAL TOOLS 2

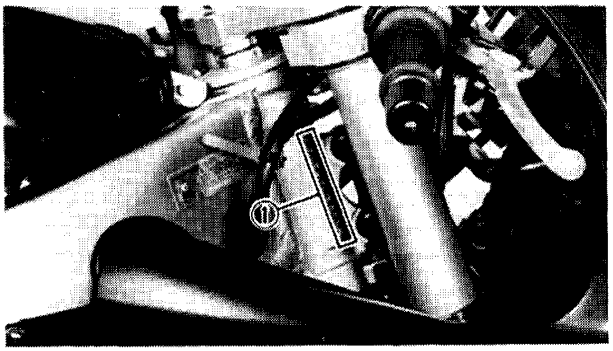
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GENERAL INFORMATION



MOTORCYCLE IDENTIFICATION

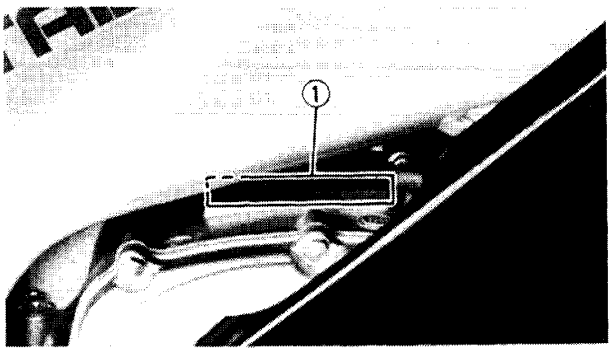
VEHICLE IDENTIFICATION NUMBER

The vehicle identification number ① is stamped into the right side of the steering head.

Starting Serial Number:
FZR1000B:
JYA3LKE0*MA013101
FZR1000BC:
JYA3LKC0*MA016101

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 the right side of the engine.

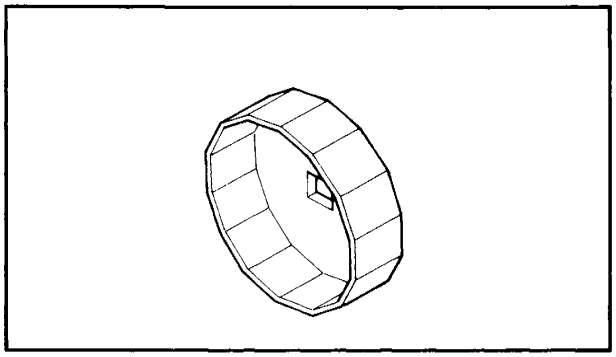
Starting Serial Number:
FZR1000B:
3LK-013101
FZR1000BC
3LK-016101

NOTE:

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

SPECIAL TOOLS

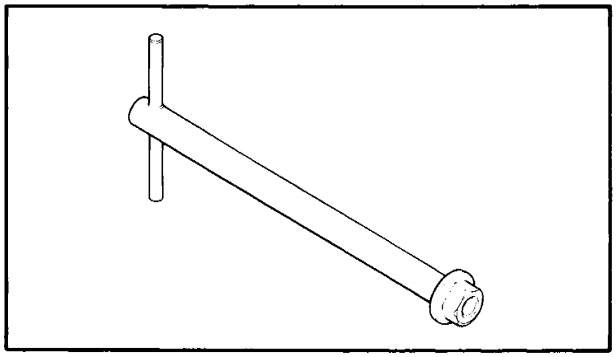
The proper special tools are necessary for complete and accurate tune-up and assembly. Using the correct special tool will help prevent damage caused by the use of improper tools or improvised techniques.



FOR ENGINE SERVICE

1. Oil filter wrench
   P/N YU-38411

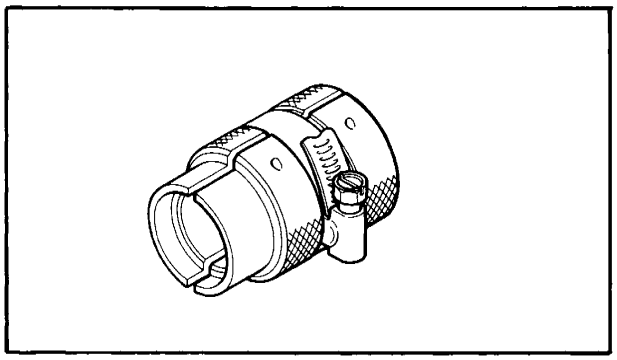
This tool is used to remove and install the oil filter.



FOR CHASSIS SERVICE

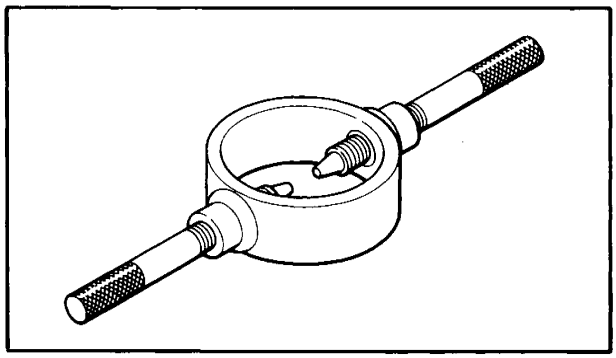
1. Damper rod holder (24 mm)
   P/N YM-01445

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



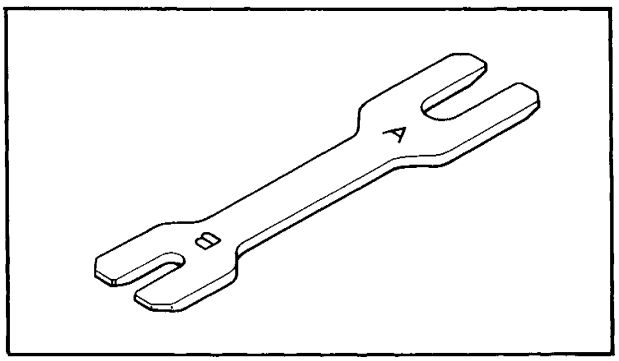
2. Front fork seal driver
   P/N YM-1424

This tool is used when installing the fork seal.



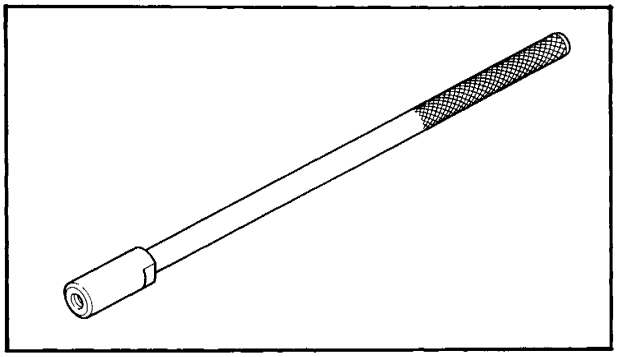
3. Fork spring compressor
   P/N YM-01441

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



4. Rod holder
   P/N YM-01434

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



5. Rod puller
   P/N YM-01437

This tool is used to install the front fork.

SPECIFICATIONS

GENERAL SPECIFICATIONS

Model	FZR1000B/FZR1000BC	
Model Code Number:	3LK7 (FZR1000B) 3LK8 (FZR1000BC)	
Vehicle Identification Number:	JYA3LKE0*MA013101 (FZR1000B) JYA3LKC0*MA016101 (FZR1000BC)	
Engine Starting Number:	3LK-013101 (FZR1000B) 3LK-016101 (FZR1000BC)	
Dimensions: Overall Length Overall Width Overall Height Seat Height Wheelbase Minimum Ground Clearance	 2,110 mm (83.1 in) 745 mm (29.3 in) 1,170 mm (46.1 in) 775 mm (30.5 in) 1,470 mm (57.9 in) 135 mm (5.3 in)	
Minimum Turning Radius:	3,300 mm (130 in)	
Coolant Total Amount: (Including All Routes)	2.8 L (2.5 Imp qt, 3.0 US qt)	
Fuel: Type Tank capacity Reserve Amount	 Unleaded fuel 19.0 L (4.2 Imp gal, 5.0 US gal) 3.4 L (0.75 Imp gal, 0.90 US gal)	
Chassis: Frame Type Caster Angle Trail	 Backbone 26.4° 108 mm (4.25 in)	
Tire:	Front	Rear
Type Size Manufacture (Type)	Tubeless 130/60 VR17-V280 130/60 ZR17 Bridgestone (CY17) Dunlop (K510F) Pirelli (MP7S) Michelin (A59X) Metzler (ME33)	Tubeless 170/60 VR17-V280 170/60 ZR17 Bridgestone (CY20) Dunlop (K510) Pirelli (MP7S) Michelin (M59X) Metzler (ME55A)
Electrical: Ignition System Generator System Battery Type or Model Battery Capacity	 T.C.I. (Digital ignition) AC generator YTX14-BS 12V 12AH	
Bulb Wattage x Quantity: Headlight Tail/Brake Light Front position light/Front flasher light Rear flasher light Meter Light	 12V, 60W/55W x 1 12V, 5W/21W x 2 12V, 8W/27W x 2 12V, 27W x 2 12V, 1.7W x 4	
Indicator Light: Wattage x Quantity "NEUTRAL" "HIGH BEAM" "TURN" "OIL LEVEL"	 12V, 3.4W x 1 12V, 3.4W x 1 12V, 3.4W x 1 12V, 3.4W x 1	

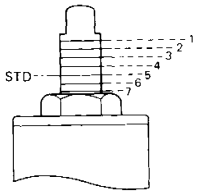
MAINTENANCE SPECIFICATIONS

ENGINE

Tightening Torque

Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m·kg	ft·lb	
Camshaft Cap	Bolt	M6	40	10	1.0	7.2	
Cylinder Head (exhaust pipe)	Stud bolt	M8	8	15	1.5	11	
Cylinder Head	Nut	M10	8	41	4.1	30	
Cylinder Head	Cap nut	M10	4	41	4.1	30	
Spark Plug	–	M12	4	17.5	1.75	12.5	
Cylinder Head Cover	Bolt	M6	8	10	1.0	7.2	
Connecting Rod	Nut	M8	8	36	3.6	25	
Timing Chain Sprocket	Flange bolt	M7	4	24	2.4	17	
Timing Chain Tensioner	Bolt	M6	2	10	1.0	7.2	
Timing Chain Tensioner End	Cap bolt	M11	1	20	2.0	14	
Chain Guide (intake side)	Bolt	M6	2	10	1.0	7.2	
Oil Pump Housing	Screw	M6	1	10	1.0	7.2	
Oil Pump Mount	Bolt	M6	3	10	1.0	7.2	
Oil filter	–	M20	–	17	1.7	12	
Oil cooler	–	M20	–	63	6.3	45	
Oil Pan	Bolt	M6	12	10	1.0	7.2	
Drain Plug	–	M14	1	43	4.3	31	
Oil Pipe 1	Bolt	M6	3	7	0.7	5.1	
Oil Baffle Plate (lower)	Flange bolt	M6	4	10	1.0	7.2	
Oil Baffle Plate (upper)	Flange bolt	M6	10	10	1.0	7.2	
Oil Cooler House	Union bolt	M12	2	32	3.2	23	
Oil Level Switch	Bolt	M6	2	10	1.0	7.2	
Exhaust Pipe	Nut	M8	8	20	2.0	14	
Exhaust Pipe and Muffler	Flange bolt	M8	1	20	2.0	14	
Muffler and Muffler Stay	Flange bolt	M8	1	20	2.0	14	
Muffler Bracket	Flange bolt	M8	1	20	2.0	14	
Exhaust Pipe Blind Plug (CO test)	Bolt	M6	4	10	1.0	7.2	
Crankcase	Stud bolt	M10	12	10	1.0	7.2	
Main Axle Bearing Stopper	Torx	M6	3	10	1.0	7.2	
Crankshaft End Cover	Screw	M6	6	7	0.7	5.1	
Crankcase Cover (right)	Bolt	M6	11	10	1.0	7.2	
Crankcase	Flange bolt	M6	7	12	1.2	8.7	
Crankcase	Flange bolt	M8	17	24	2.4	17	
Crankcase	Flange bolt	M9	11	32	3.2	23	
Starter Clutch	Bolt	M8	3	25	2.5	18	
HY-VO Chain Guide	Bolt	M6	2	10	1.0	7.2	
Clutch Boss	Nut	M20	1	70	7.0	50	Use lock washer
Clutch Spring	Bolt	M6	6	8	0.8	5.8	
Drive Sprocket	Nut	M18	1	70	7.0	50	Use lock washer
Shift Cam Stopper Lever	Bolt	M6	1	10	1.0	7.2	
Shift Cam Stopper	Bolt	M6	1	10	1.0	7.2	
Guide Bar Stopper (shift fork)	Bolt	M6	1	10	1.0	7.2	
Neutral Switch	Screw	M6	2	4	0.4	2.9	

CHASSIS

Model		FZR1000B/FZR1000BC
Front Suspension:		
Front Fork Travel		120 mm (4.72 in)
Front Spring Free Length		331.5 mm (13.1 in)
<Limit>		<328 mm (12.9 in)>
Spring Rate:	K1	8 N/mm (0.8 kg/mm, 44.8 lb/in)
Stroke	K1	Zero ~ 120 mm (Zero ~ 4.72 in)
Optional Spring		No
Oil Capacity		462 cm³ (16.3 Imp oz, 15.6 US oz)
Oil Level (Fully Compression)		124 mm (4.88 in) Below the top of inner fork tube without fork spring
Oil Grade		Yamaha Fork Oil 5W or equivalent
Adjustment		

	Stiffer				STD	Softer	
Adjusting position	1	2	3	4	5	6	7

Tightening Torque

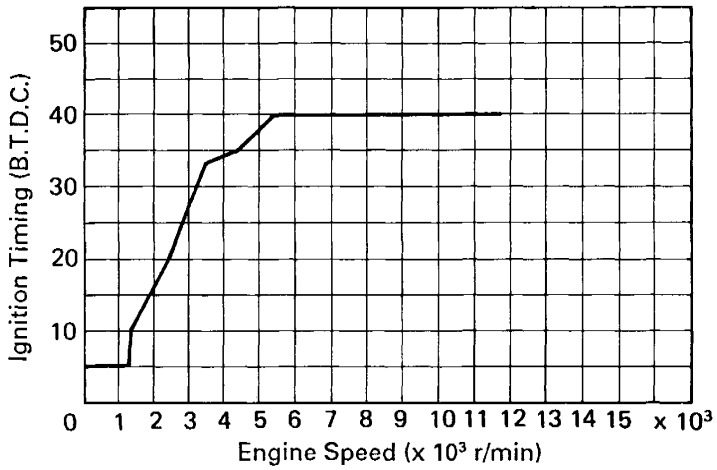
Part to be tightened	Thread size	Tightening torque			Remarks
		Nm	m·kg	ft·lb	
Front Axle	M16	48	4.8	35	
Front Axle Pinch	M8	20	2.0	14	
Front Fender	M6	6	0.6	4.3	
Under Bracket and outer tube	M8	23	2.3	17	
Handle Crown and outer tube	M8	26	2.6	19	
Handle Crown and Steering Stem	M22	110	11.0	80	
Lower Ring Nut (steering shaft)	M22	–	–	–	Refer to "NOTE"
Brake Caliper (front/rear)	M10	35	3.5	25	
Brake Disc and Wheel	M8	20	2.0	14	LT
Master Cylinder and Holder (front brake)	M6	10	1.0	7.2	
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	25	2.5	18	
Handlebar and Handle Boss	M8	28	2.8	20	
Handlebar Boss and Handle Crown	M8	19	1.9	13	
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	28	
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	LT
Compression Bar (front and rear)	M8	30	3.0	22	
Brake Disc and Clutch Hub	M8	20	2.0	14	
Sprocket and Hub	M10	60	6.0	43	
Rear Axle and Nut	M 18	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	
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.

ELECTRICAL

Model	FZR1000B/FZR1000BC
Voltage:	12V
Ignition System:	
Ignition Timing (B.T.D.C.)	5° at 1,350 r/min
Advanced Timing (B.T.D.C.)	40° at 5,500 r/min
Advancer Type	Electrical



T.C.I.:	
Pickup Coil Resistance (Color)	135 ~ 165Ω at 20°C (68°F) (Gray-Black)
T.C.I. Unit/Manufacturer	BB7232/HITACHI
Battery:	
Capacity	12V, 12AH
Specific Gravity	1.320
Electrical Starter System:	
Type	Constant mesh type
Starter Motor:	
Model/Manufacturer	SM-13/MITSUBA
Output	0.7 kw
Armature Coil Resistance	0.011 ~ 0.013Ω at 20KC (68°)
Brush – Overall Length	12.5 mm (0.49 in)
<Limit>	4 mm (0.16 in)
– Spring Force	680 ~ 920 g (24.0 ~ 32.4 oz)
Commutator Dia.	28 mm (1.10 in)
Wear Limit	27 mm (1.06 in)
Mica Undercut	0.7 mm (0.028 in)
Starter Switch:	
Model/Manufacturer	A104-128/HITACHI
Amperage Rating	100A
Coil Resistance	4.0 ~ 4.7Ω at 20°C (68°F)

ELECTRICAL

Model	FZR1000B/FZR1000BC
Flasher Relay (Relay Assembly):	
Type	Semi transistor type
Model/Manufacturer	G8A-101-03/OMRON or FA249MD/NIPPONDENSO
Self Cancelling Device	No
Flasher Frequency	75 ~ 95 cycle/min
Wattage	27W x 2 pcs + 3.4W
Circuit Breaker:	
Type	Fuse
Amperage for Individual Circuit x Quantity:	
MAIN	30A x 1
HEADLIGHT	20A x 1
SIGNAL	10A x 1
IGNITION	10A x 1
FAN	10A x 1
RESERVE	10A x 1. 20A x 1. 30A x 1

LUBRICATION POINT AND GRADE OF LUBRICANT

ENGINE

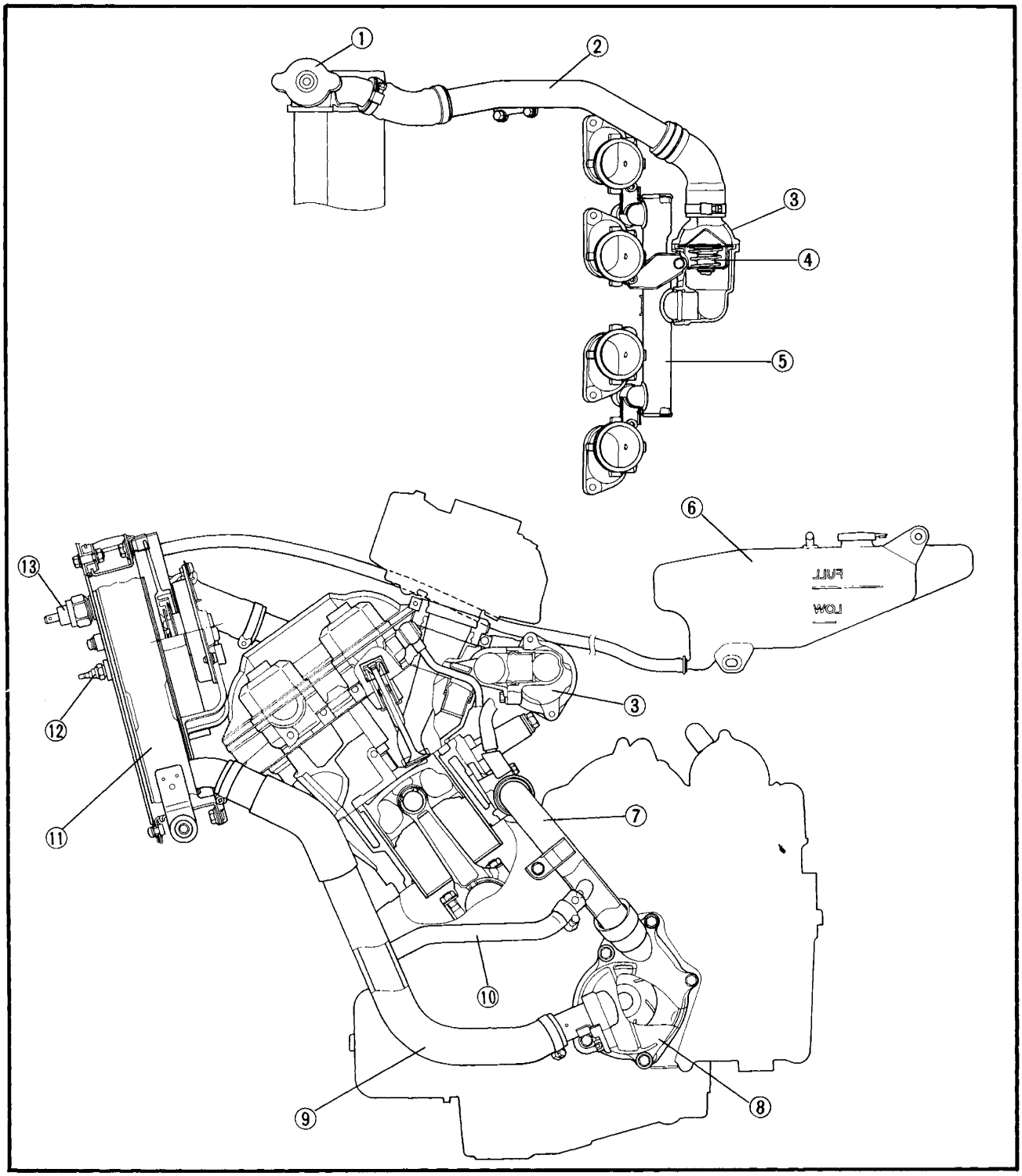
Lubrication Point	Symbol	Grade of Lubricant
Oil seal lip	LS	Lithium-soap base
O-Ring	LS	Lithium-soap base
Bearing	E	Engine oil
Piston surface	E	Engine oil
Piston pin	E	Engine oil
Crankshaft pin	E	Engine oil
Crankshaft journal	E	Engine oil
Connecting rod bolt/Nut	M	Molybdeum disulfide oil
Camshaft cam lode/Journal	M	Molybdeum disulfide oil
Valve stem (IN, EX)	M	Molybdeum disulfide oil
Valve stem end (IN, EX)	M	Molybdeum disulfide 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	Molybdeum disulfide oil
Axle (Main/Drive)	M	Molybdeum disulfide oil
Shift cam	M	Molybdeum disulfide oil
Shift fork/Guide bar	E	Engine oil
Shift shaft assembly	E	Engine oil

CHASSIS

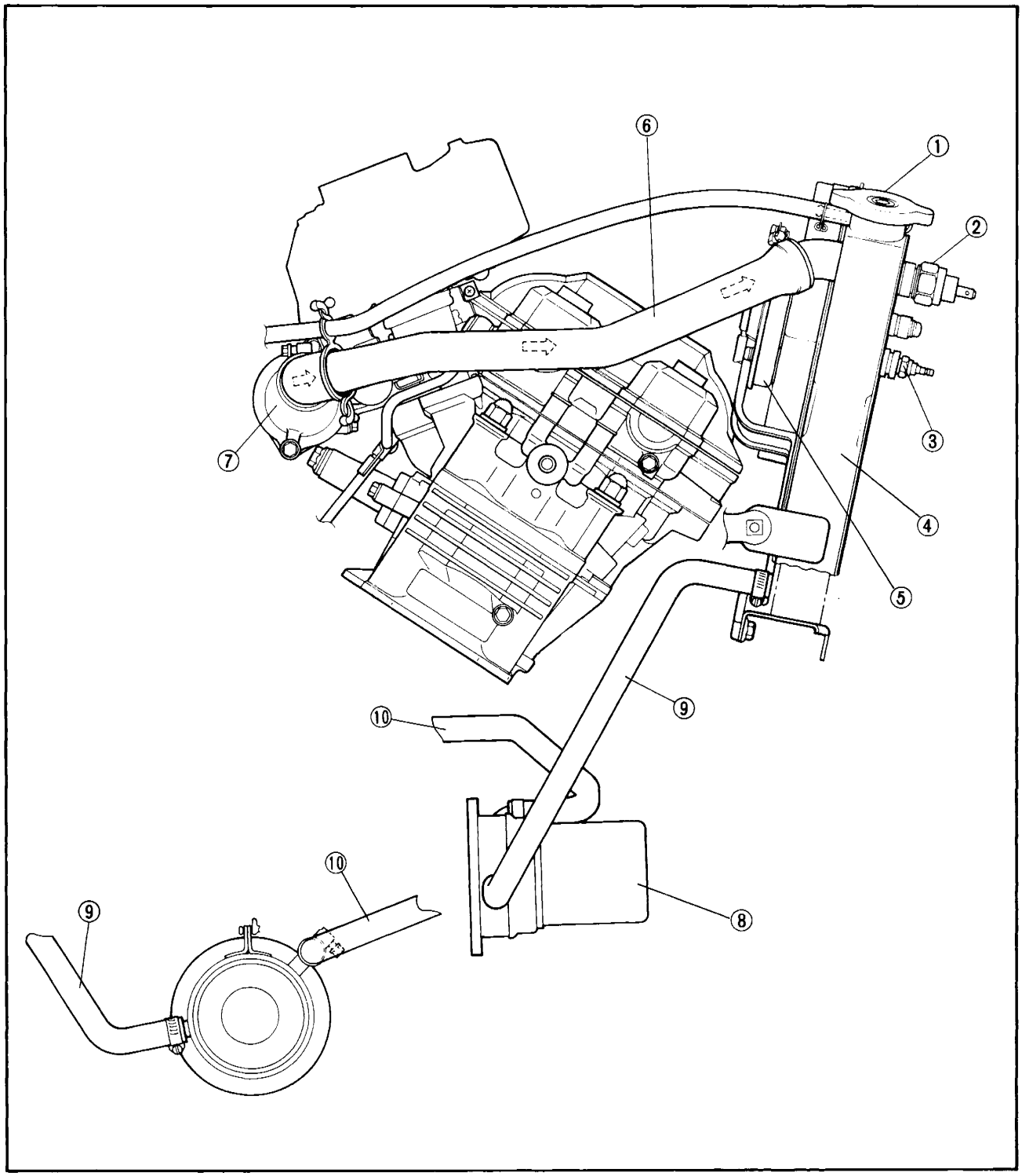
Lubrication Point	Symbol	Grade of Lubricant
Steering bearing (Upper/Lower)		Lithium-soap base grease
Wheel bearing/Axle		Lithium-soap base grease
Front wheel oil seal (Right/Left)		Lithium-soap base grease
Rear wheel oil seal		Lithium-soap base grease
Clutch hub oil seal		Lithium-soap base grease
Clutch hub fitting area		Lithium-soap base grease
Rear brake pedal shaft		Lithium-soap base grease
Change pedal		Lithium-soap base grease
Side stand sliding surface		Lithium-soap base grease
Tube guide (Throttle grip) inner surface		Lithium-soap base grease
Brake lever bolt, sliding surface		Lithium-soap base grease
Clutch lever bolt, sliding surface		Lithium-soap base grease
Rear shock absorber (Upper/Lower)		Molybdenum disulfide grease
Swingarm pivot bearing		Molybdenum disulfide grease
Pivot shaft		Molybdenum disulfide grease
Arm 1, 2 bearing		Molybdenum disulfide grease
Thrust cover (Inner)		Molybdenum disulfide grease
Rellay arm bearing (Inner)		Molybdenum disulfide grease
Rear footrest ball		Lithium-soap base grease
Rear footrest pin		Lithium-soap base grease

COOLANT DIAGRAM

① Radiator cap
② Inlet pipe (radiator)
③ Thermostatic valve housing
④ Thermostatic valve
⑤ Water jacket joint (outlet)
⑥ Reservoir tank (coolant)
⑦ Outlet pipe (water pump)
⑧ Water pump
⑨ Inlet pipe (water pump)
⑩ Outlet pipe (oil cooler)
⑪ Radiator
⑫ Thermo unit
⑬ Thermo switch

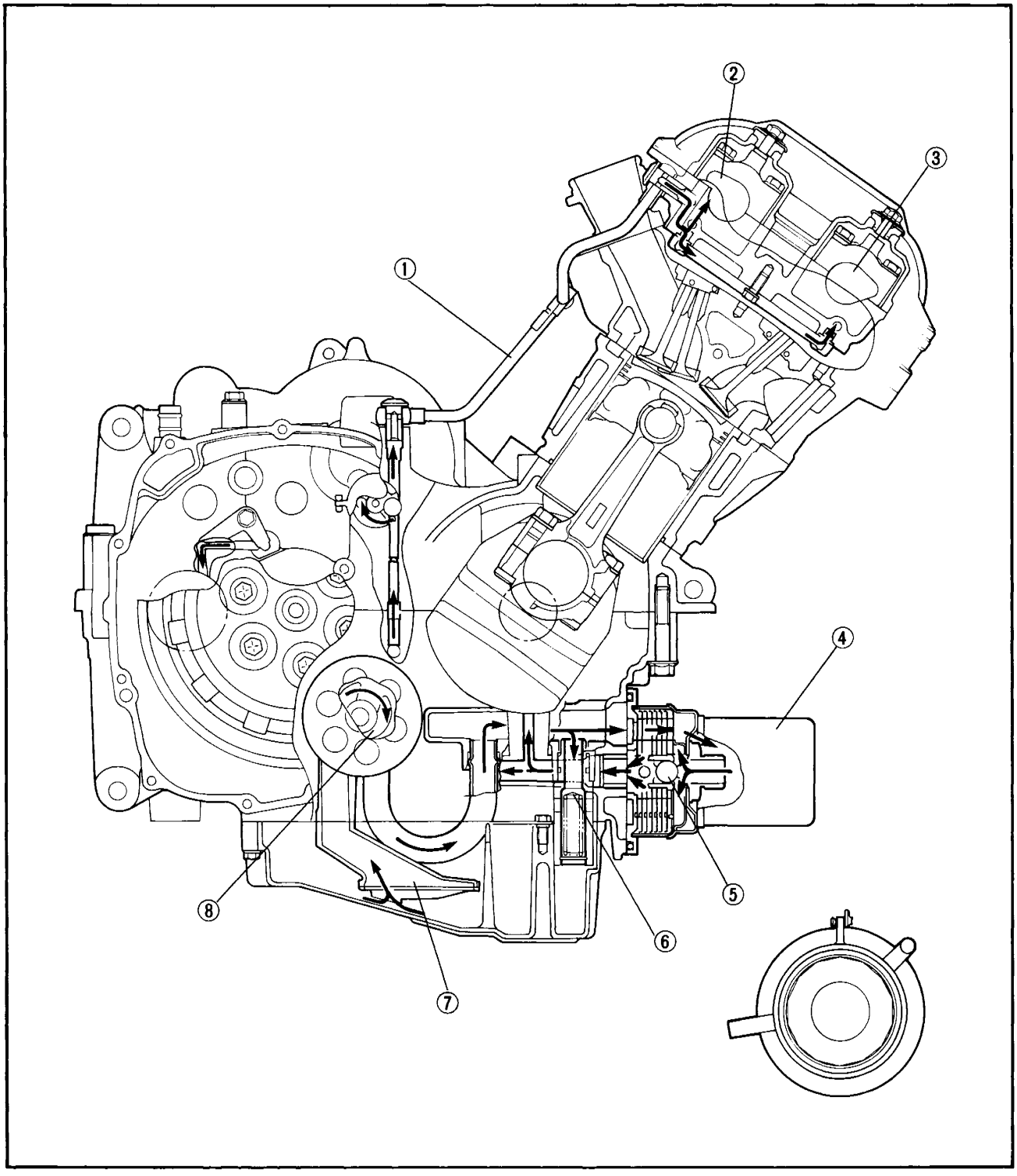


① Radiator cap
② Thermo switch
③ Thermo unit
④ Radiator
⑤ Fan motor
⑥ Inlet pipe (radiator)
⑦ Thermostatic valve housing
⑧ Oil filter
⑨ Inlet pipe (Oil cooler)
⑩ Outlet pipe (Oil cooler)



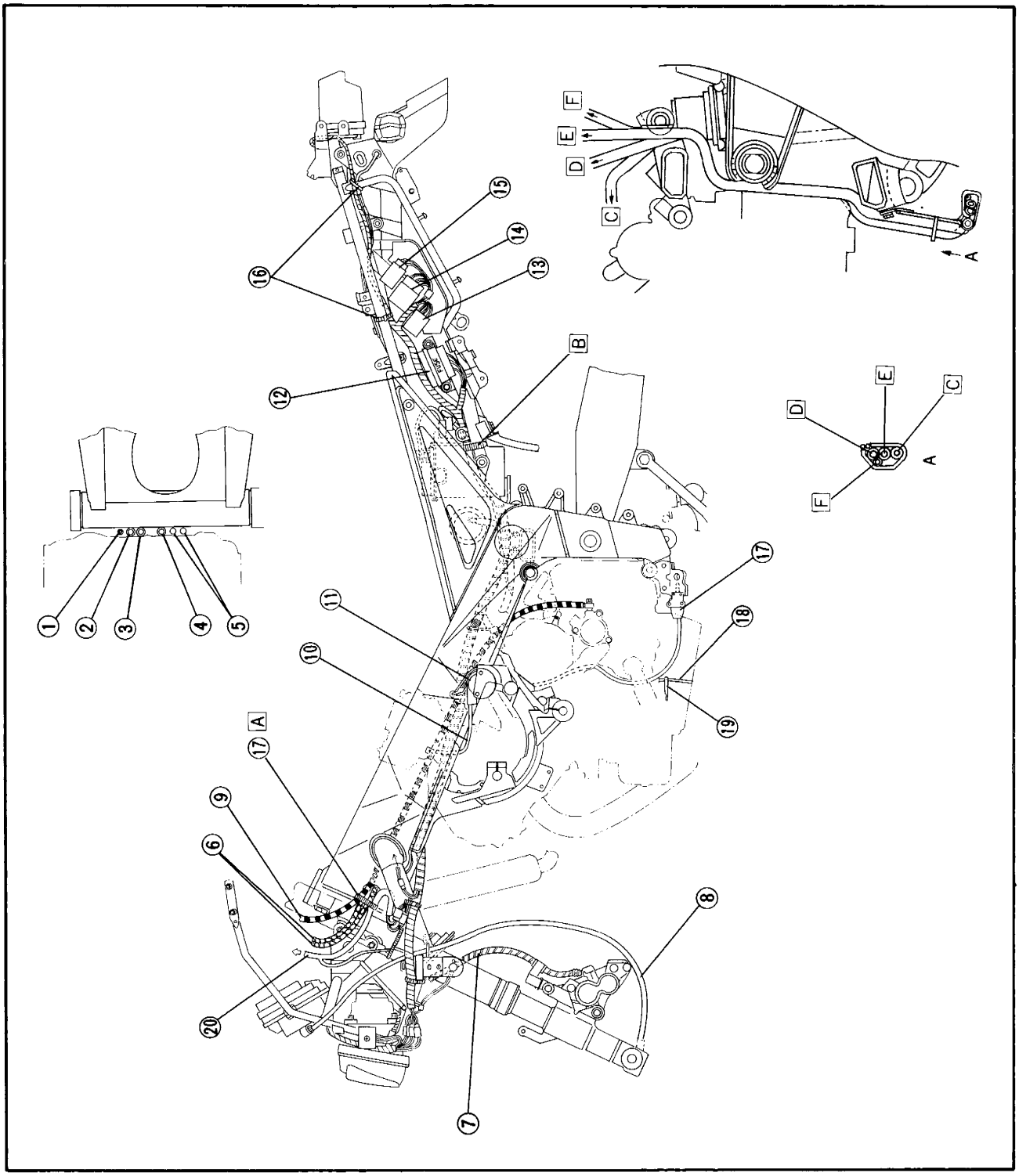
LUBRICATION DIAGRAMS

① Oil delivery pipe 2
② Camshaft (intake)
③ Camshaft (exhaust)
④ Oil filter
⑤ Bypass valve
⑥ Relief valve
⑦ Oil strainer
⑧ Oil pump

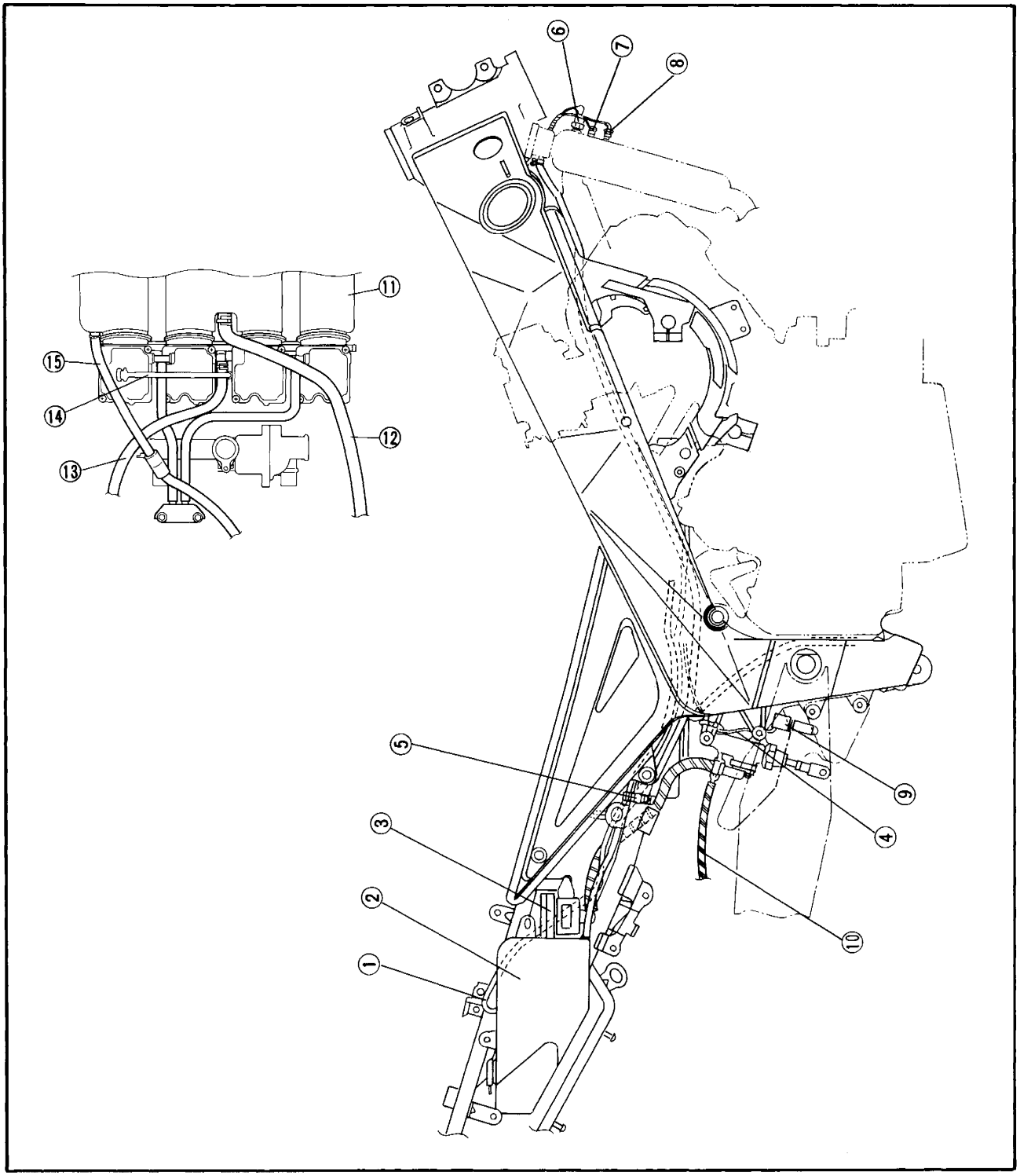


CABLE ROUTING

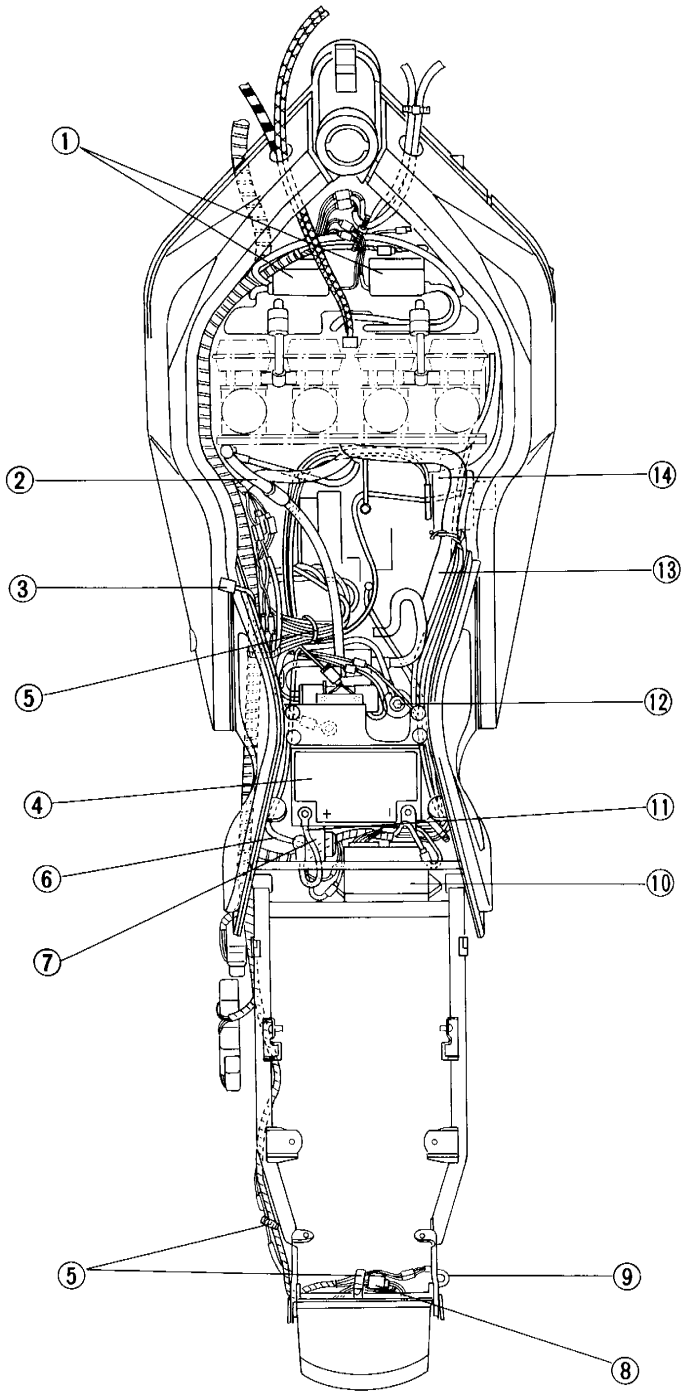
① Ventilation hose (coolant reservoir tank)
② Ventilation hose (air filter case)
③ Breather hose (fuel tank)
④ Canister hose
⑤ EXUP cables
⑥ Throttle cables
⑦ Brake hose
⑧ Speedometer cable
⑨ Clutch hose
⑩ Starter cable
⑪ Starter lever assembly
⑫ Fuse box
⑬ Flasher relay
⑭ Relay unit
⑮ Oil level switch relay
⑯ Band
⑰ Sidestand switch
⑱ Oil level switch lead
⑲ Clamp
⑳ Handlebar switch lead (left)
[A] Clamp the clutch hose and throttle cables and handlebar switch lead (left).
[B] Clamp the wireharness and starter motor lead.
[C] To canister roll over valve
[D] To air cleaner
[E] To fuel tank
[F] To reserver tank



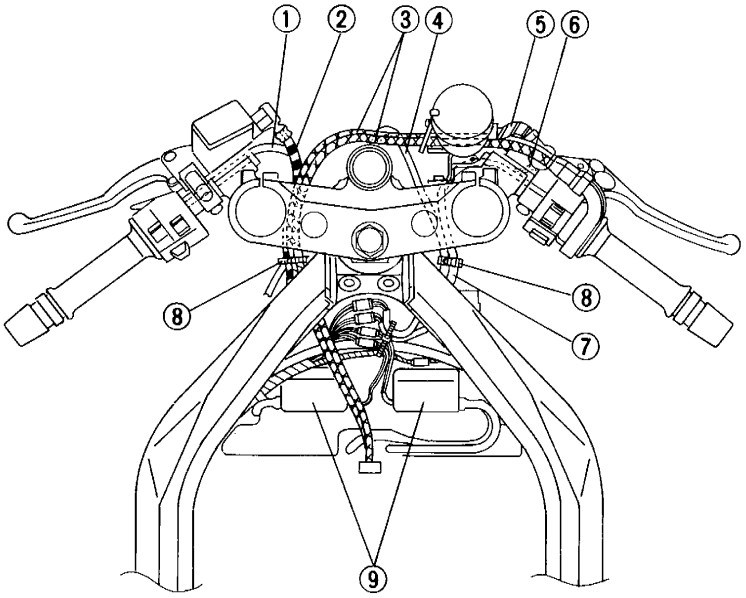
① Ventilation hose (coolant reservoir tank)
② Reservoir tank (coolant)
③ Reservoir tank (rear brake)
④ Rear brake switch leads
⑤ Band
⑥ Thermo switch
⑦ Ground lead
⑧ Thermo unit
⑨ Rear brake switch
⑩ Rear brake hose
⑪ Air filter box
⑫ Ventilation hose (crankcase)
⑬ Fuel hose
⑭ Throttle stop screw
⑮ Air filter drain hose

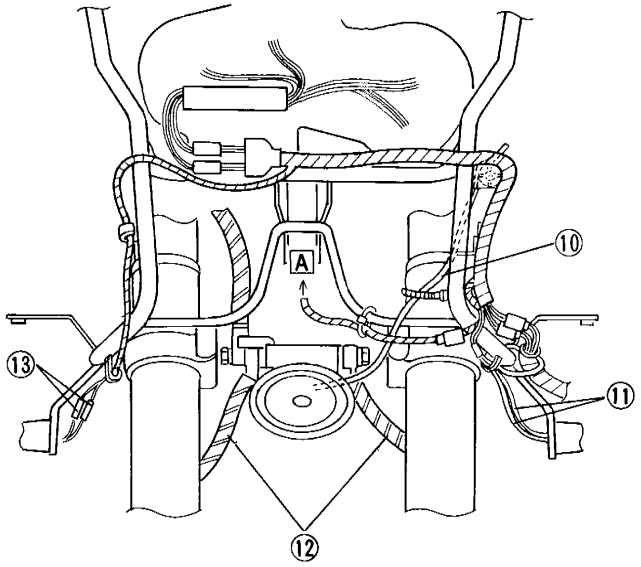


① Ignition coil
② Ventilation hose (air filter case)
③ Fuel sender
④ Battery
⑤ Band
⑥ Starter motor lead
⑦ Starter relay
⑧ Tail/brake light coupler
⑨ Rear flasher light leads
⑩ Digital ignitor unit
⑪ Battery positive lead
⑫ Sub tank (rear shock absorber)
⑬ Ventilation hose (crankcase)
⑭ EXUP servo motor

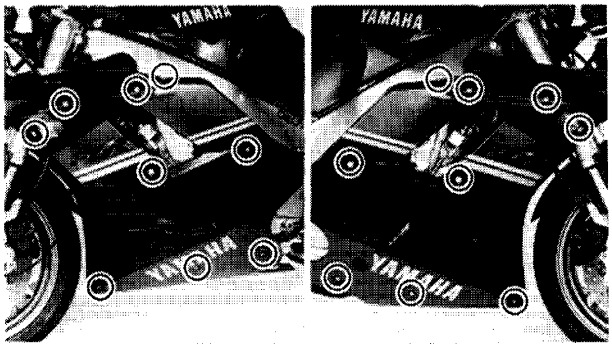


① Handlebar switch leads (left)
② Clutch hose
③ Throttle cables
④ Main switch lead
⑤ Front brake hoses
⑥ Front brake switch lead
⑦ Handlebar switch leads (right)
⑧ Band
⑨ Ignition coil
⑩ Horn lead
⑪ Front flasher light leads (left)
⑫ Front brake hose
⑬ Front flasher light leads (right)
[A] To headlight





PERIODIC INSPECTION AND ADJUSTMENT



COWLINGS

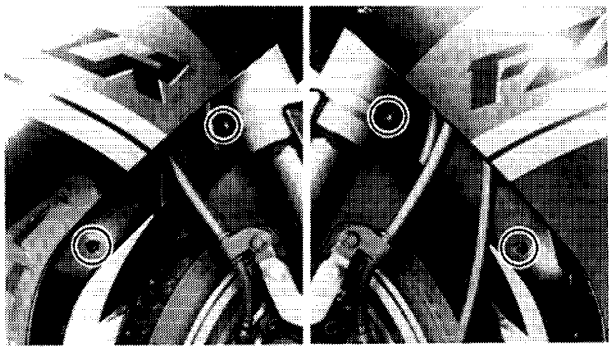
REMOVAL

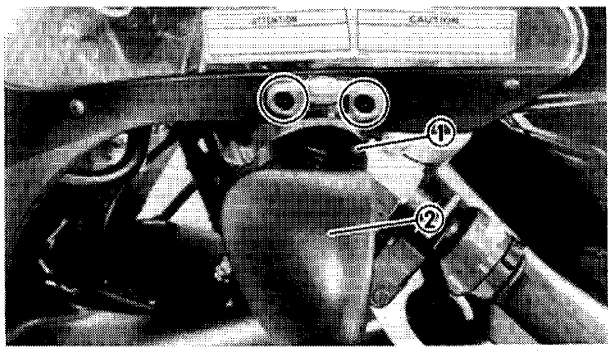
Side and upper cowling

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

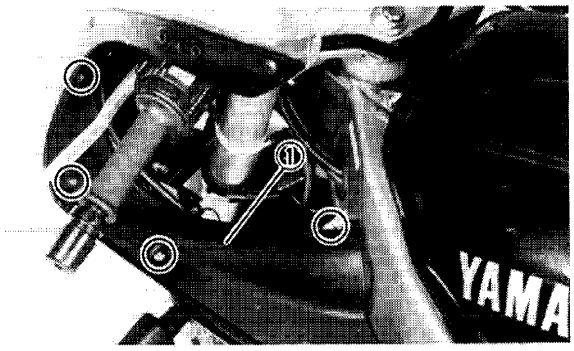
NOTE:

When removing the front cover, the spring nuts may fall off. Be careful not to lose these parts.

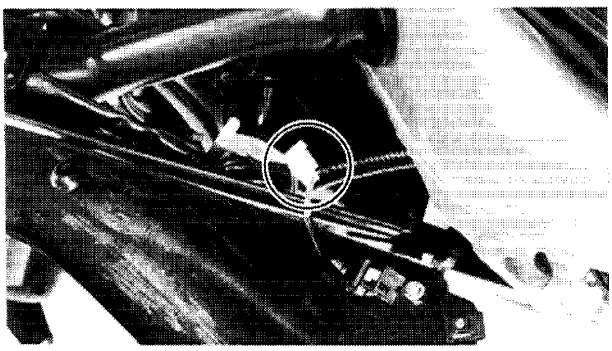




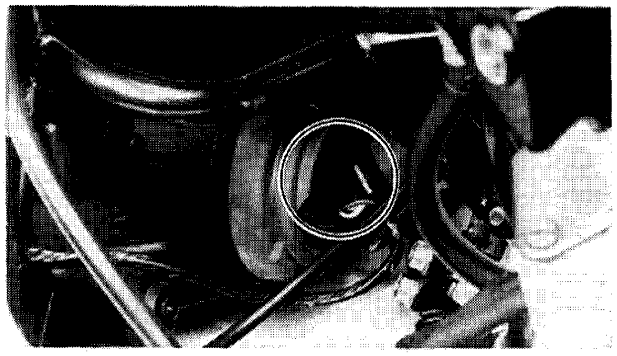
2. Pull back the rubber cover ①.
3. Remove:
   - Rear view mirrors (left and right) ②



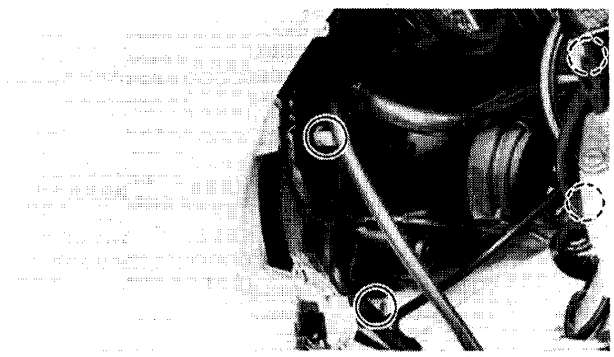
4. Remove:
   - Inner covers (left and right) ①



5. Disconnect:
   - "RES" (fuel reserve) switch ② coupler



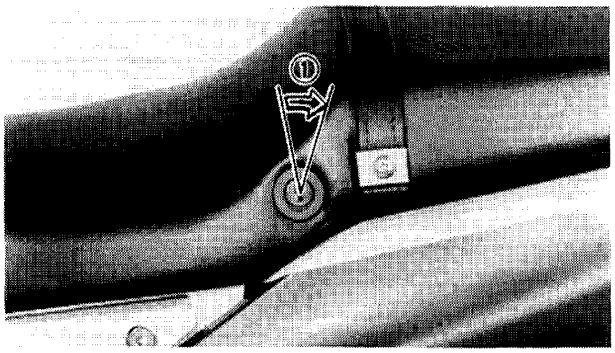
6. Disconnect:
   - Headlight coupler



7. Remove:
   - Nuts ①
   - Upper cowling ②

CAUTION:

Remove the headlight together with the upper cowlig to prevent the headlight from falling out.

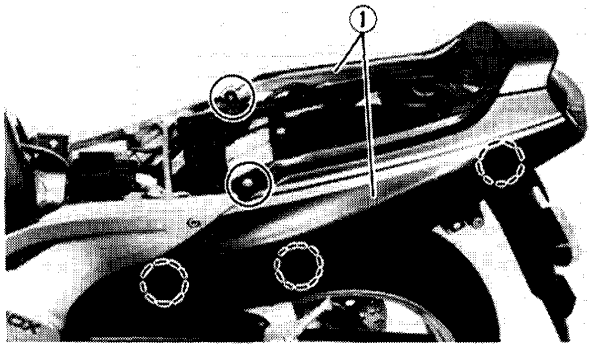


Side and tail cover

1. Remove
   - Seat ①

NOTE:

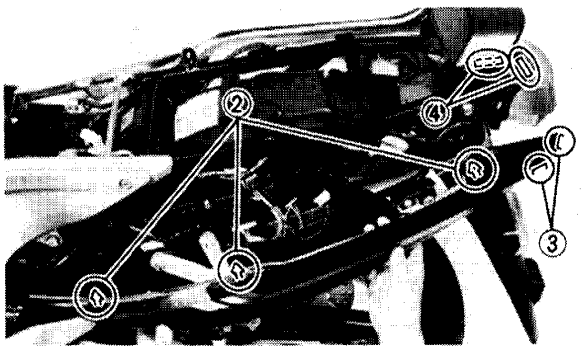
Insert the key into the lock and turn it clockwise to release the seat lock.

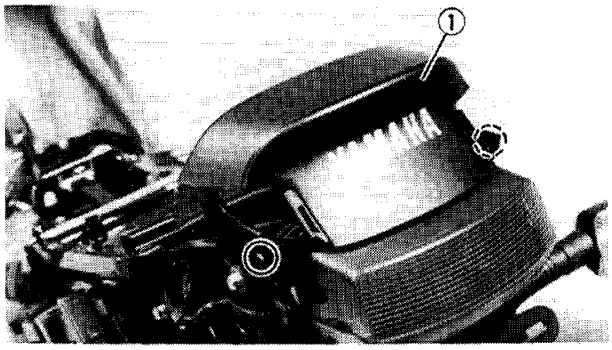


2. Remove:
   - Side covers (left and right) ①

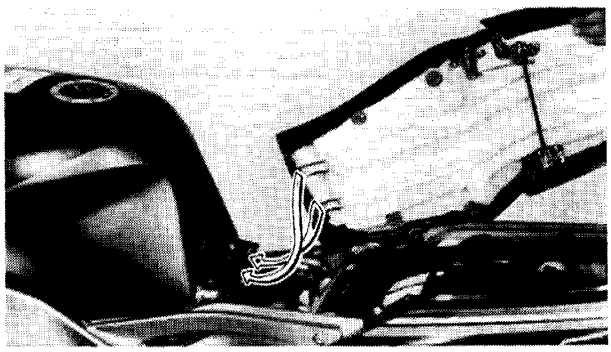
NOTE:

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.
Seat and tail cover

1. Install:
   - Seat

NOTE:

Insert the lobs on the seat front into the receptacle on the frame, then push down the seat end.

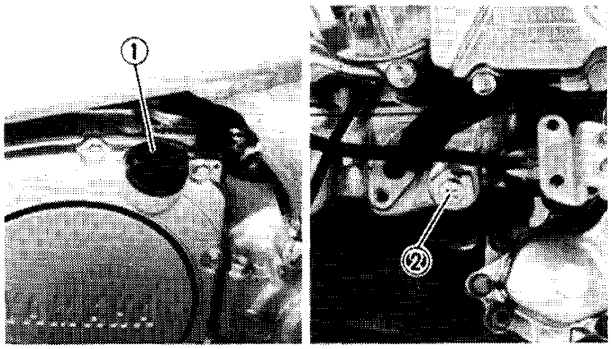
ENGINE

ENGINE OIL FILTER REPLACEMENT

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

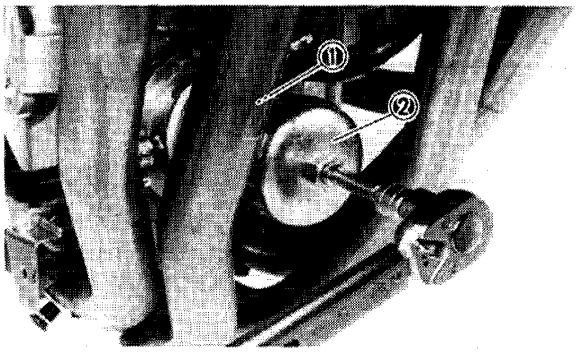
   Refer to the "COWLING AND SEAT REMOVAL AND INSTALLATION" section.
2. Warm up the engine for several minutes.
3. Place a drain pan under the engien.
4. Remove:
   - Oil filler cap ①
   - Drain plug ②

   Drain the crankcase of its engine oil

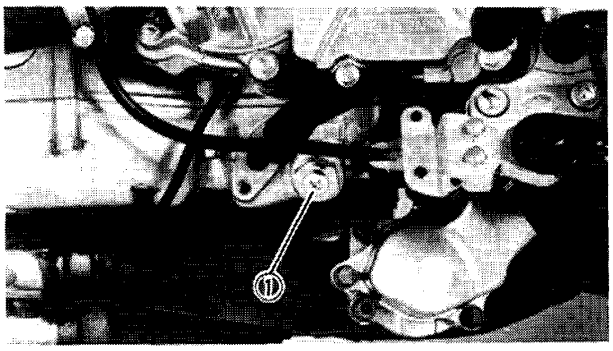


5. Remove:
   - Oil filter ①

   Use the oil filter wrench ②.



	Oil filter wrench: **P/N YU-38411**

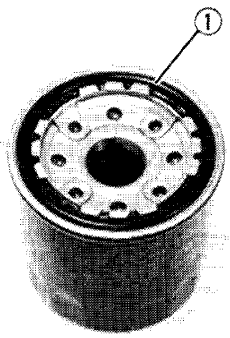


6. Inspect:
   - O-ring(oil filler cap)
   - Gasket (drain plug)

   Wear/Damage → Replace.
7. Install:
   - Drain plug ①

   (with gasket)

	Drain plug: **43 Nm (4.3 m • kg, 31 ft • lb)**

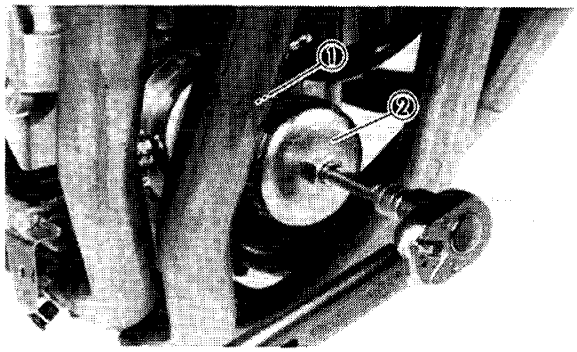


8. Apply:
   - Engine oil (lightly)

   (to O-ring ① of new oil filter)

NOTE:

Make sure the O-ring ① is positioned properly.



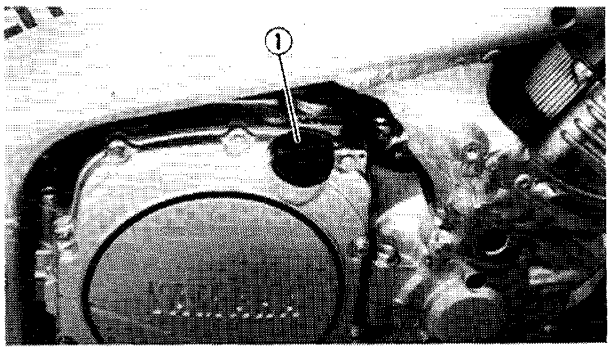
9. Install:
   - Oil filter (new) ①
10. Tighten:
   - Oil filter ①
     Use the oil filter wrench ② .

	Oil filter wrench: **P/N YU-38411**

	Oil filter: **17 Nm (1.7 m • kg, 12 ft • lb)**

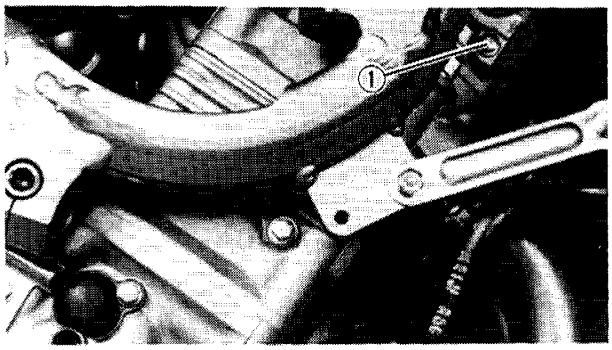
11. Fill:
   - Crankcase
     Refer to the "ENGIEN OIL REPLACEMENT" section for recommended engine oil.

	With oil filte replacement: **3.0 L (2.6 Imp qt, 3.1 US qt)**



12. Install:
   - Oil filter cap ①
     (with O-ring)
13. Warm up the engine for a few minutes, then stop the engine.

14. Inspect:
   - Oil leaks
   - Oil level



15. Inspect:
    - Oil flow

****

Inspection steps:

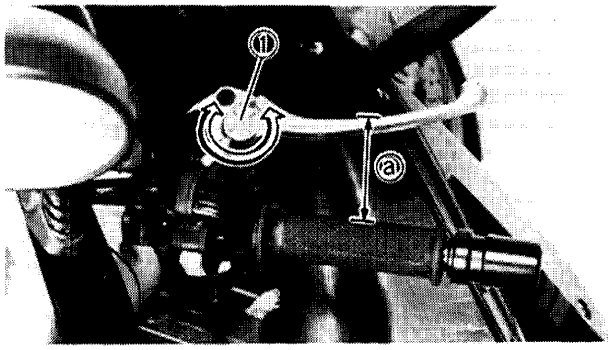
- Slightly loosen the oil gallery bolt ① on the cylinder head.
- Start the engien and keep it idling until oil begins to seep from the oil gallery hole. If no oil comes out after one minute, stop the engine immediately so the engine will not seize.
- Restart the engine after solving the problem(s), and recheck the oil pressure.
- Stop the engine and tighten the oil gallery bolt to specification.

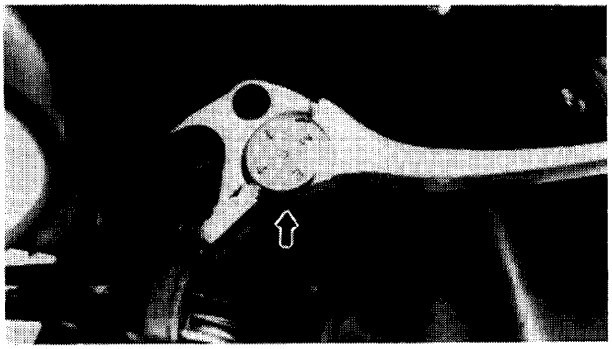
	Bolt (oil gallery): **10 Nm (1.0 m • kg, 7.2 ft • lb)**

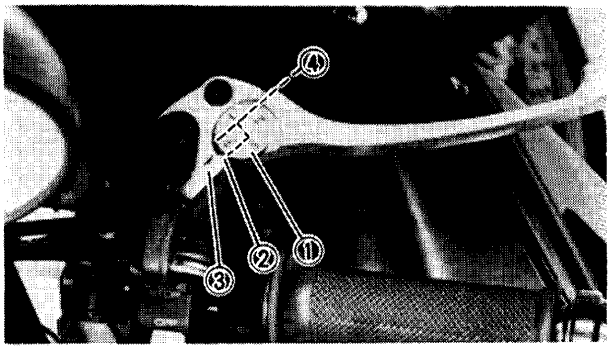
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16. Install:
    - Side cowlings (left and right)
    - Front cover

    Refer to the "COWLING AND SEAT REMOVAL AND INSTALLATION" section.







CHASSIS

FRONT BRAKE LEVER POSITION ADJUSTMENT

1. Adjust:
   - Brake lever position
     (distance ⓐ from handle grip to front brake leve)

****

Adjustment steps:

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

Adjuster position #1 ↓ Adjuster position #4	Distance ⓐ is the largest Distance ⓐ is the smallest

⚠ WARNING

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

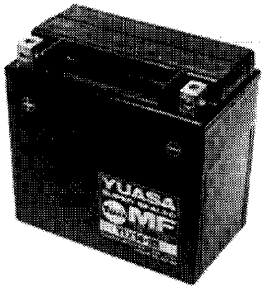
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ELECTRICAL

BATTERY INSPECTION

NOTE:

Since the MF battery is of a sealed-type construction, it is impossible to measure the specific gravity of the electrolyte in order to check the state of charge in the battery. Therefore, to check the state of charge in the battery, voltage must be measured at the battery terminals.



CAUTION:

CHARGING METHOD

- This battery is sealed type. Never remove sealing caps even when charging. With the sealing cap removed, this balancing will not be maintained, and battery performance will lower gradually.
- Never add water. If distilled water is added, chemical reaction in the battery will not proceed in the normal way, thus making it impossible for the battery to operate regularly.
- The charging time, charging current and charging voltage for the MF battery is different than general type batteries.

  The MF battery should be charged as instructed in the "Charging method". Should the battery be overcharged, the electrolyte level will lower extremely. Therefore, use special care when charging the battery.
- Avoid using any electrolyte other than specified. The specific gravity of the MF battery electrolyte is 1.32 at 20°C (68°F). (The specific gravity of the general type battery electrolyte is 1.28.) If the electrolyte whose specific gravity is less than 1.32, the sulfuric acid will decrease and thus low battery performance will result. Should any electrolyte, whose specific gravity is 1.32 or more, be used, the battery plates will corrode and battery life will shorten.



⚠WARNING

Battery electrolyte is dangerous; it contains sulfuric acid and therefore is poisonous and highly caustic.

Always follow these preventive measures:

- **Avoid bodily contact with elecrolyte as it can cause severe burns or permanent eye injury.**
- **Wear protective eye gear when handling or working near batteries.**

Antidote (EXTERNAL):

- **SKIN-Flush with water.**
- **EYES-Flush with water for 15 minutes and get immediate medical attention.**

Antidote (INTERNAL):

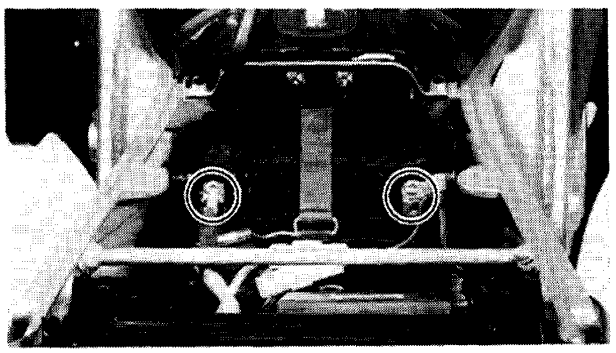
- **Drink large quantities of water or milk follow with milk of magnesia, beaten egg, or vegetable oil. Get immediate medical attention.**

Batteries also generate explosive hydrogen gas, therefore you should always follow these preventive measures:

- **Charge batteries in a well-ventilated area.**
- **keep batteries away from fire, sparks, or open flames (e.g., welding equipment, lighted cigarettes, etc.)**
- **DO NOT SMOKE When charging or handling batteries.**

KEEP BATTERIES AND ELECTROLYTE OUT OF REACH OF CHILDREN.

1. Remove:
   - Seat

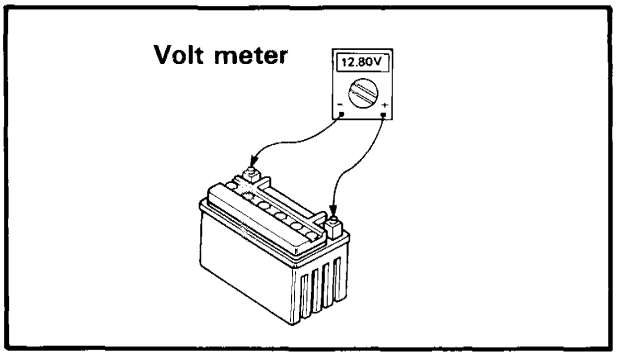


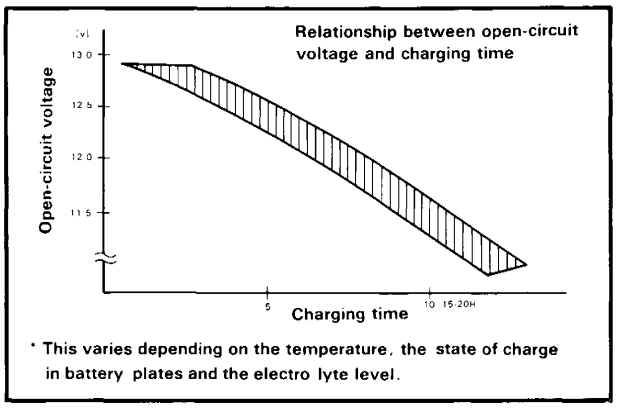
2. Disconnect:
   - Battery leads

CAUTION:

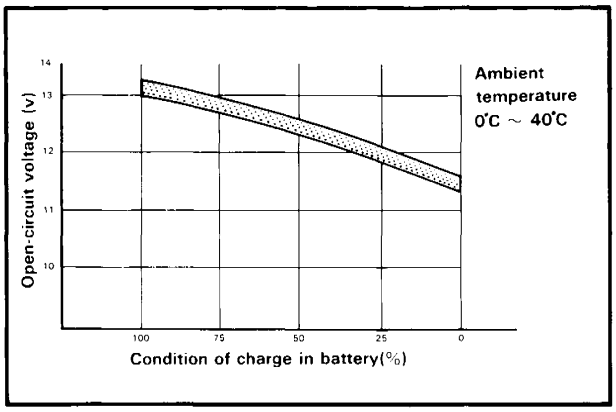
Disconnect the negative lead first and then disconnect the positive lead.

3. Remove:
   - Battery





* This varies depending on the temperature, the state of charge in battery plates and the electro lyte level.



4. Check:
   - Battery condition

* *

Battery condition checking steps:

- Connect the pocket tester to the battery terminals.

Tester (+) lead → Battery (+) terminal.
Tester (–) lead → Battery (–) terminal.

NOTE:

The state of a discharged MF battery can be checked by measuring open circuit voltage (the voltage measured with the positive terminals being disconnected).

Open-circuit voltage	Charging time
12.8 v or higher	No charging is necessary.
12.7 v - 11.5 v	5 - 10 hours
Less than 11.5 v	15 - 20 hours

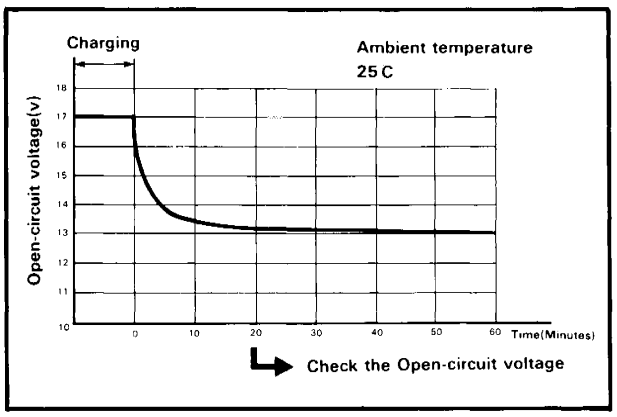
- Battery condition chart as shown.

* *

5. Charging method of MF battery

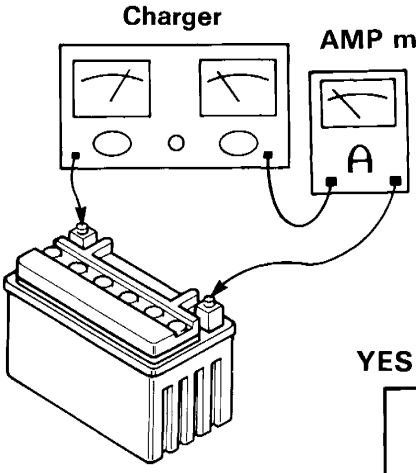
CAUTION:

- **If it is impossible to set the standard charging current, charge the battery according to the instructions on "Charging using a constant-current type charger".**
- **When charging the battery, be sure to remove it from the machine. (If charging has to be done with the battery mounted on the machine for some reason, be sure to disconnect the wire at the negative terminal.)**
- **Never remove the sealing plug from the MF battery.**



- Use special care so that charging clips are in a full contact with the terminal and that they are not shorted. (A corroded clip of the charger may cause the battery to generate heat at the contact area. A weak clip spring may cause sparks.)
- Before removing the clips from the battery terminals, be sure to turn off the power switch of the charger.
- Change in the open-circuit voltage of the MF battery after being charged is shown below. As shown in the figure, the open-circuit voltage is stabilized 30 minutes after charging has been completed.
  Therefore, to check the condition of the battery, measure the open-circuit voltage 30 minutes after charging has been completed.

Charging method using a variable-current (voltage) type charger



Measure the open-circuit voltage prior to charging.

NOTE:
Voltage should be measured 30 minutes after the machine is stopped.

Connect a charger and AMP meter to the battery and start charging.

NOTE:
Set the changing voltage at 16-17v. (If the setting is lower, charging will be insufficient. If too high, the battery will be over-charged.)

Make sure the current is higher than the standard charging current written on the battery.

YES

Adjust the voltage so that current is at standard charging level.

Set the timer according to the charging time suitable for the open-circuit voltage.

NO

By turning the charging voltage adjust dial, set the charging voltage at 20 - 25 v.

Monitor the amperage for 3-5 minutes to check if the standard charging current is reached.

1A or less

After 5 minutes, adjust the voltage to 16 - 17 v, and continue charging.

1A or more

If the current is more than 1 amp, adjust the voltage to 16 - 17 v and continue charging.

NO

If current does not exceed standard charging current after 5 minutes, replace the battery.

In case that charging requires more than 5 hours, it is advisable to check the charging current after a lapse of 5 hours. If there is any change in the amperage, readjust the voltage to obtain the standard charging current.

Measure the battery open-circuit voltage after having left the battery unused for more than 30 minutes.
12.8 v or more --- Charging is complete.
12.7 v or less --- Recharging is required.
Under 12.0 v --- Replace the battery.

Charging method using a constant-voltage type charger

Measure the open-circuit voltage prior to charging.

NOTE:
Voltage should be measured 30 minutes after the machine is stopped.

Connect a charger and AMP meter to the battery, and start charging.

Make sure the current is higher than the standard charging current written on the battery.

YES

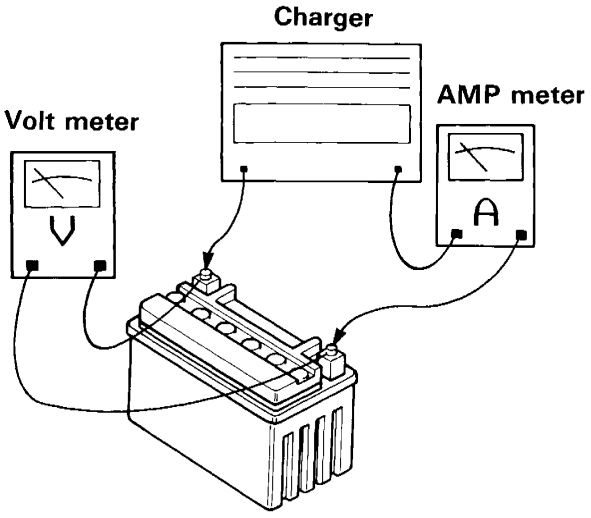
Charge the battery until the battery's charging voltage is 16 volts or more

NOTE:
Set the charging time at 20 hours (maximum).

Check the open-circuit voltage after having left the battery for 30 minutes after charging.
12.8 v or more---Charging is complete.
12.7 v or less---Recharging is necessary.
Under 12 v---Replace the battery.

NO

This type of battery charger cannot charge the MF battery. A variable voltage charger or a constant current charger is recommended.



Charging method using a constant current type charger (Exclusive for MF Battery)

Measure the open-circuit voltage prior to charging.

NOTE:
Voltage should be measured 30 minutes after the machine is stopped.

Connect a charger and AMP meter to the battery, and start charging.

After one hour of charging, make sure the rated charging current of the charger is flowing by checking AMP meter.

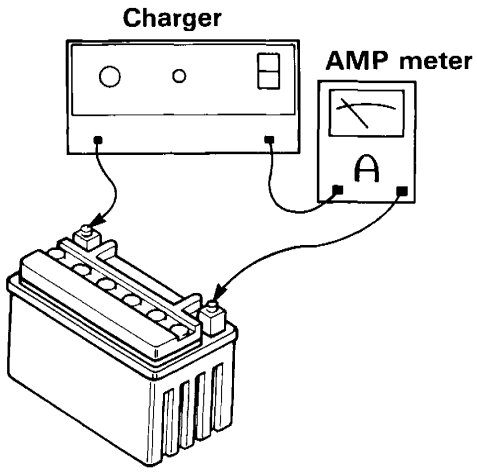
YES

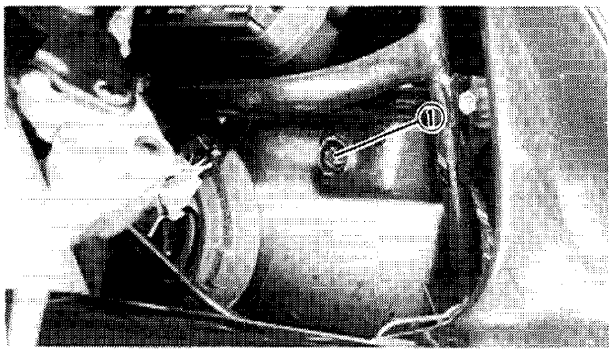
Since the charging current is constant, the charging time varies depending on the battery capacity.
Set the charging time according to the instructions specified for the charger.

Measure the battery open-circuit voltage after having left the
battery unused for more than 30 minutes.
12.8 v or more---Charging is complete.
12.7 v or less---Recharging is required.
Under 12.0 v---Replace the battery.

NO

If rated current is not flowing, replace the battery.

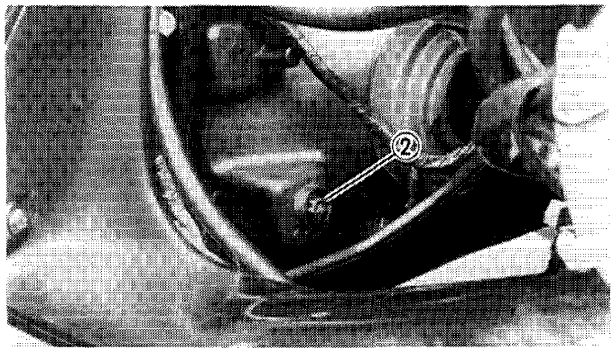




HEADLIGHT BEAM ADJUSTMENT

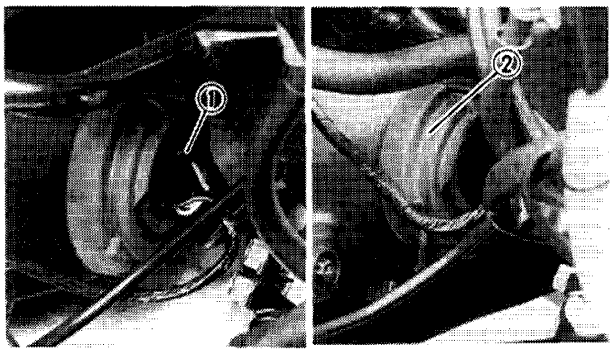
1. Adjust:
   - Headlight beam (horizontally)

Horizontal adjustment	
Right	Turn adjusting screw ① clockwise.
Left	Turn adjusting screw ① counter-clockwise.



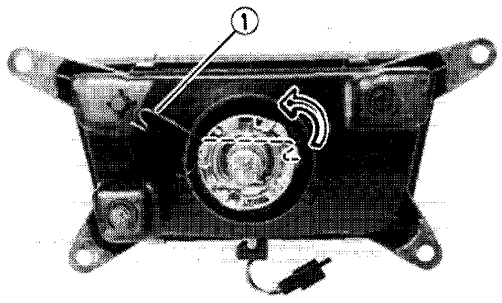
2. Adjust:
   - Headlight beam (vertically)

Vertical adjustment	
Higher	Turn the adjusting screw ② counter clockwise.
Lower	Turn the adjusting screw ② clock-wise

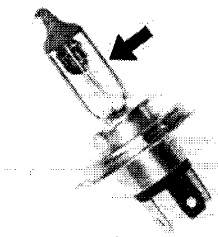


HEADLIGHT BULB REPLACEMENT

1. Disconnect:
   - Headlight coupler(s) ①
2. Remove:
   - Headlight bulb cover(s) ②
     (for one bulb headlight)



3. Remove:
   - Bulb holder



4. Remove:
   - Bulb (defective)

⚠ WARNING

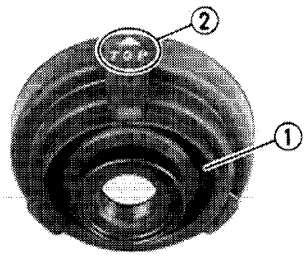
Keep flammable products or your hands away from the bulb while it is on, it will be hot. Do not touch the bulb until it cools down.

5. Install:
   - Bulb (new)

NOTE:
- Make sure that the projections on the bulb are meshed with the slot in the bulb case.

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 illuminous flux will be adversely affected. If oil gets on the bulb, throughly clean it with a cloth moistened with alcohol or lacquer thinner.



6. Install:
   - Bulb holders
7. Install:
   - Headlight bulb cover ①

NOTE:

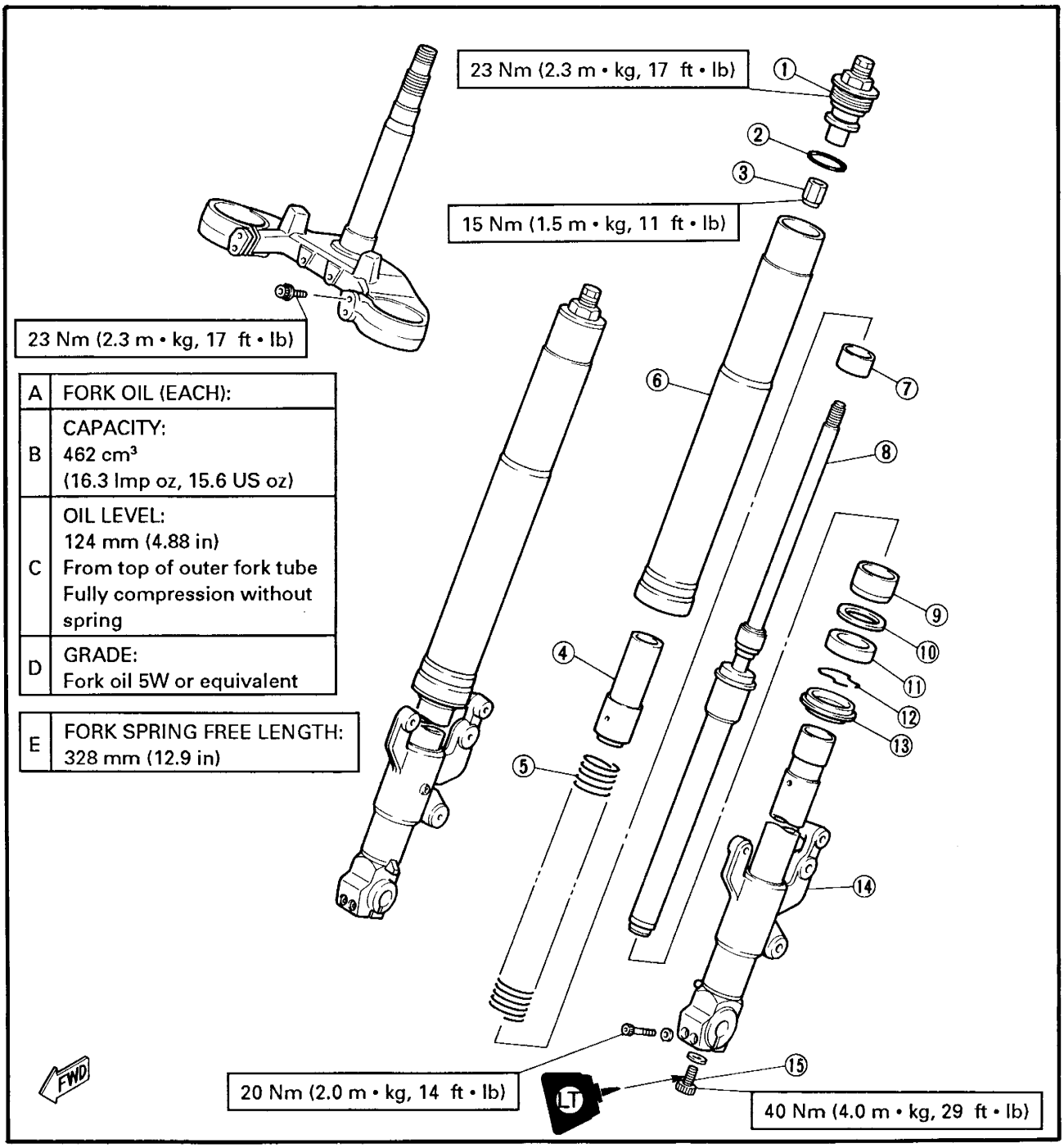
Install the bulb covers so that the "TOP" mark faces ② upward.

8. Connect:
   - Headlight coupler(s)

CHASSIS

FRONT FORK

① Cap bolt complete
② O-ring
③ Locknut
④ Spacer collar
⑤ Fork spring
⑥ Outer fork tube
⑦ Piston metal
⑧ Damper rod assembly
⑨ Slide metal
⑩ Plain washer
⑪ Oil seal
⑫ Stopper ring
⑬ Dust seal
⑭ Inner fork tube
⑮ Damper rod bolt

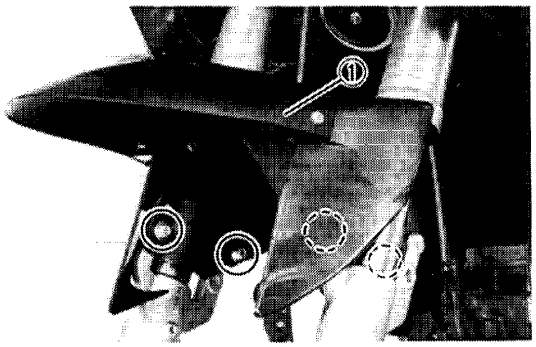


REMOVAL

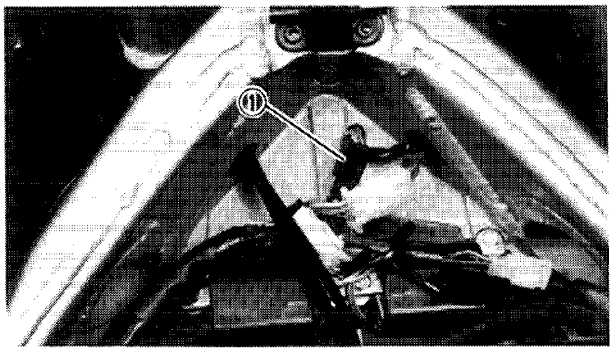
⚠ WARNING

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

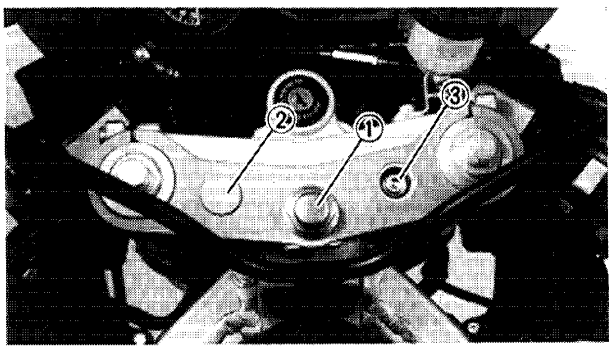
1. Remove:
   - Side cowlings (left and right)
   - Front cover
     Refer to the "COWLING" section in the CHAPTER 3.
   - Seat
   - Fuel tank
     Refer to the "FUEL TANK" section in the CHAPTER 3.
   - Air filter case
     Refer to the "ENGIEN REMOVAL – AIR FILTER CASE" section in the CHAPTER 4.



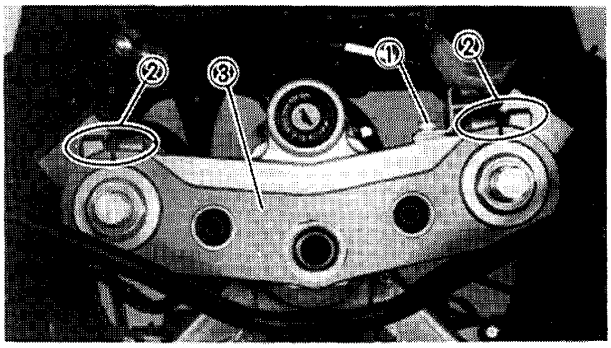
2. Remove:
   - Front wheel
     Refer to the "FRONT WHEEL" section.
3. Remove:
   - Front fender ①



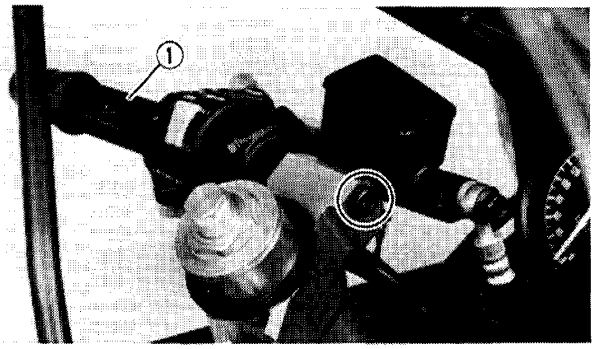
4. Disconnect:
   - Main switch coupler ①



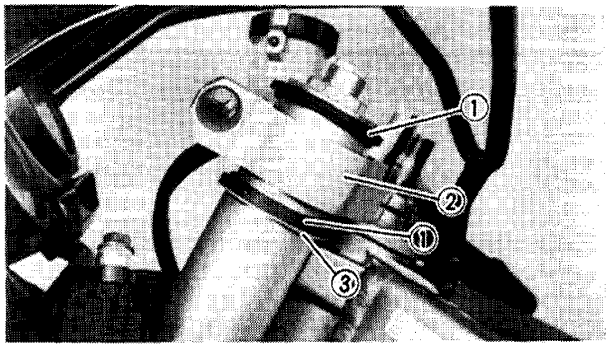
5. Remove:
   - Nut (steering stem) ①
   - Blind plugs ②
   - Bolts (handlebar boss) ③



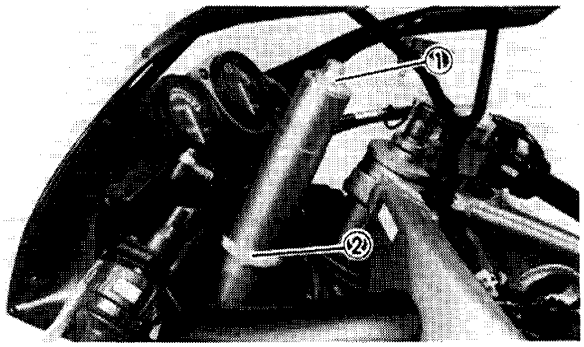
6. Remove:
   - Bolt (reserver tank) ①
7. Loosen:
   - Pinch bolts (upper brakcet) ②
8. Remove:
   - Upper bracket ③



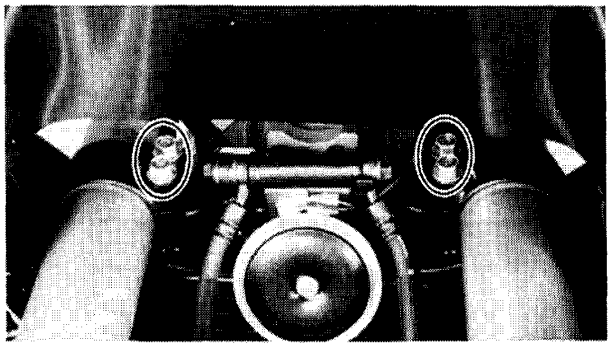
9. Remove:
   - Handlebar assembly (left and right) ①



10. Remove:
    - Rubber ①
    - Handlebar boss ②
    - Rubber ①
    - Washer ③



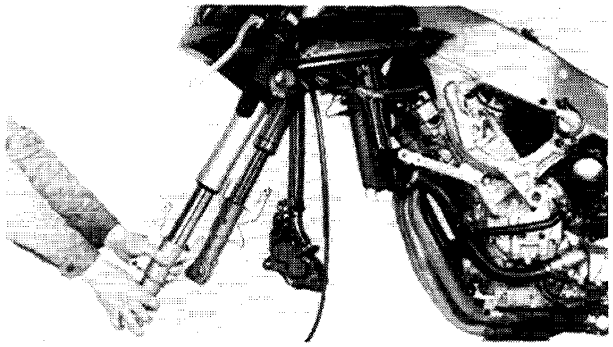
11. Loosen:
    - Cap bolt ①
12. Remove:
    - Clamp (horn lead) ②



13. Loosen:
    - Pinch bolts (lower bracket)

CAUTION:

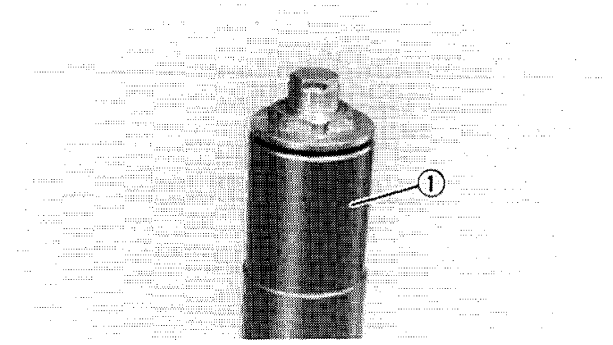
Support the fork before loosening the pinch bolts.



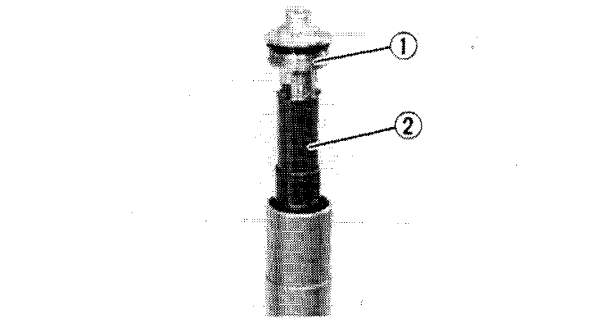
14. Remove:
    - Front fork(s)

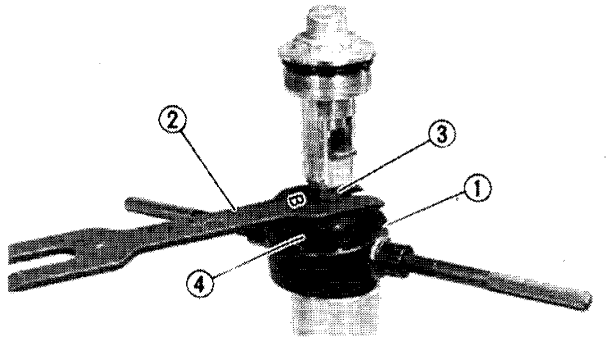
DISASSEMBLY

1. Unscrew:
    - Outer tube ①



2. Remove:
    - Cap bolt complete ①
    - Spacer ②
    - Fork spring





****

Removal steps:

● Press down the spacer using the fork spring compressor ①.

	**Fork spring compressor:** **P/N YM-01441**

● Set the rod holder ② between the lock nut ③ and spacer ④.

NOTE:

Use "B" side of rod holder.

	**Rod holder:** **P/N YM-01434**

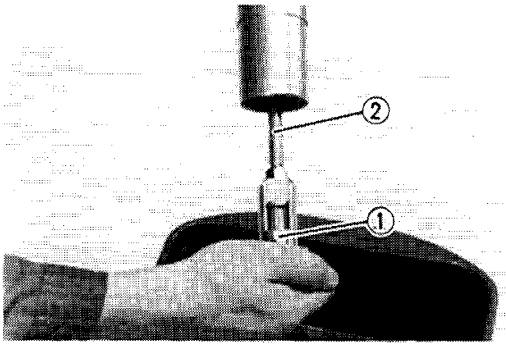
● Loosen the lock nut.
● Remove the cap bolt complete.
● Remove the rod holder ② and fork spring compressor ①.

⚠ WARNING

Be carefull, this fork spring is compresed.

- Remove the spacer and fork spring.

****



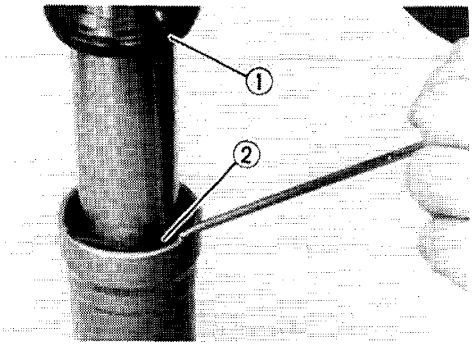
3. Drain:
   - Fork oil

****

Draining steps:

- Install the cap bolt complete ① to piston rod②.
- Drain the fork oil while stroking the piston rod several times.
- Remove cap bolt complete.

****

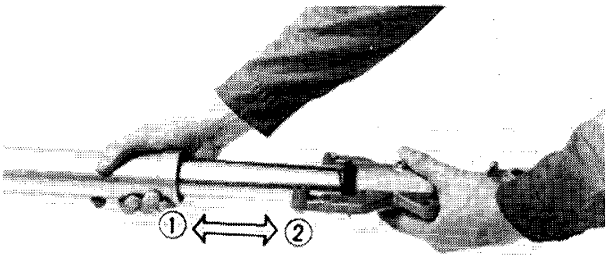


4. Remove:
   - Dust seal ①
   - Stopper ring ②

   Using slotted-head screwdriver.

CAUTION:

Take care not to scratch the inner tube.



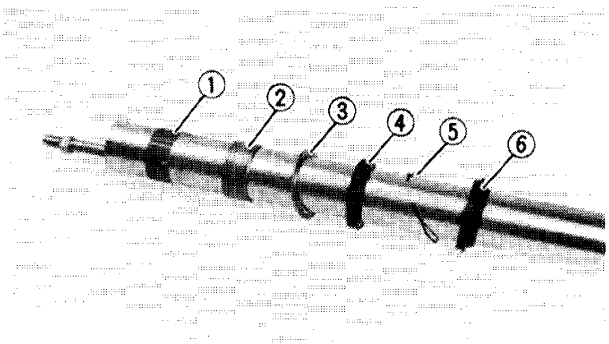
5. Remove:
   - Oil seal

****

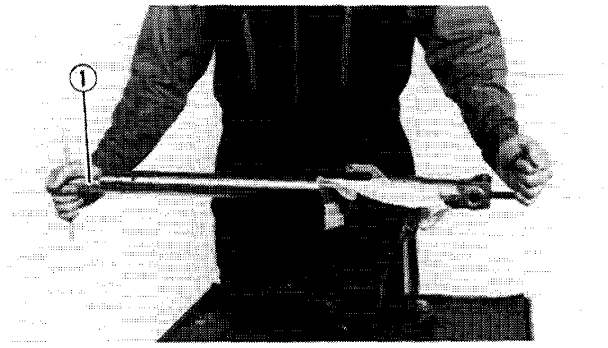
Oil seal removal steps:

- Push in slowly ① the inner tube just before it bottoms out and then pull it back quickly ② .
- Repeat this step until the inner tube can be pulled out from the outer tube.

****



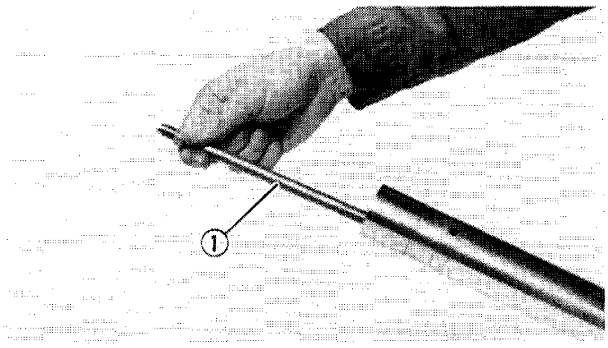
6. Remove:
   - Piston metal ①
   - Slide metal ②
   - Plain washer ③
   - Oil seal ④
   - Stopper ring ⑤
   - Dust seal ⑥
7. Remove:
   - Bolt (damper rod)
   - Copper washer



NOTE:

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

	Damper rod holder: **P/N YM-01445**

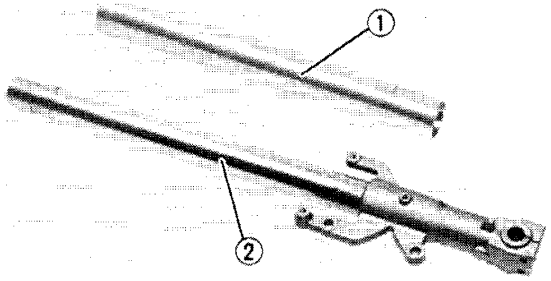


8. Remove:
   - Damper rod assembly ①

INSPECTION

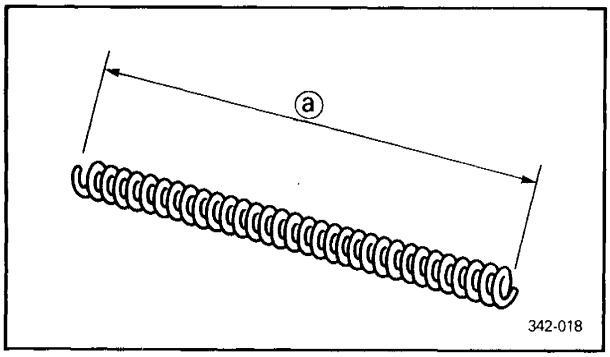
1. Inspect:
   - Inner fork tube ①
   - Outer fork tube ②

   Scratches/Bends/Damage → Replace.



⚠WARNING

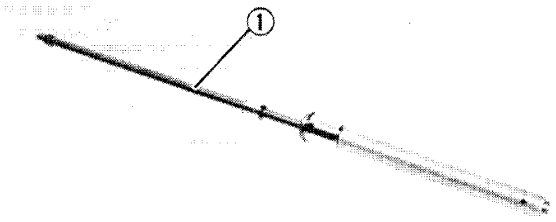
Do not attempt to straighten a bent inner fork tube as this may dangerously weaken the tube.



2. Measure:
   - Fork spring ⓐ

   Over specified limit → Replace.

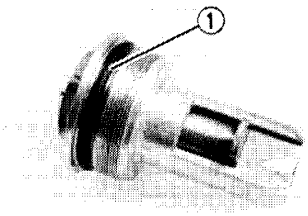
	Fork spring free length (limit): **328 mm (12.9 in)**



3. Inspect:
   - Rod assembly ①
     Bend/Damage → Replace 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.



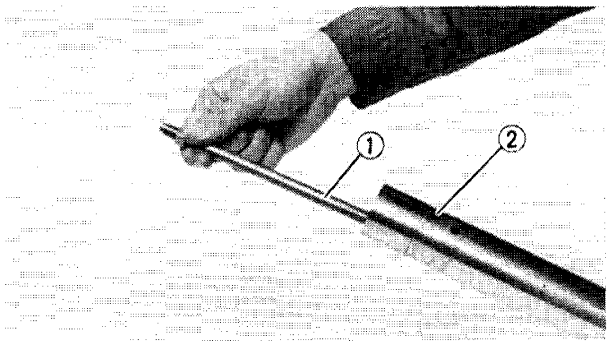
4. Inspect:
   - O-ring (cap bolt complete) ①
     Wear/Damage → Replace.

ASSEMBLY

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

NOTE:

- In front fork reassembly, be sure to use following new parts.
  * Piston metal
  * Slide metal
  * Oil seal
  * Dust seal
- Make sure that all components are clean before reassembly.



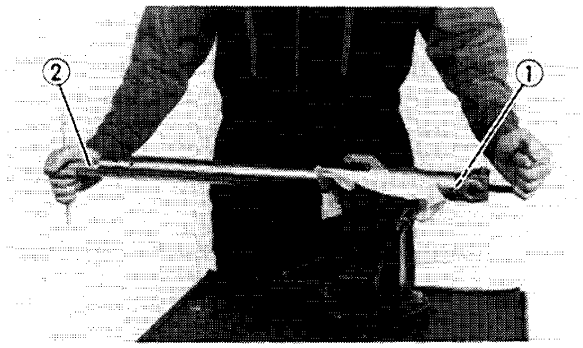
1. Install:
   - Damper rod ①

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:

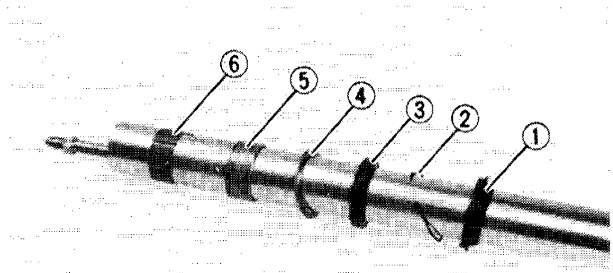
Always use a new copper washer.



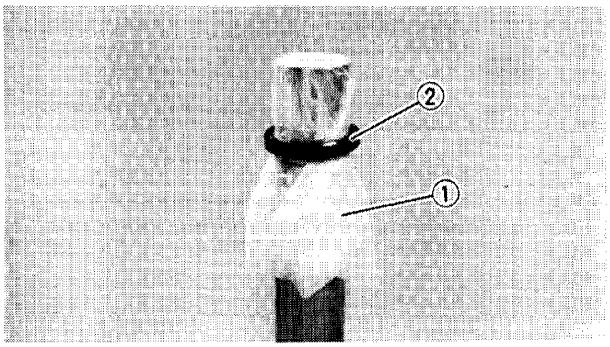
2. Tighten:
   - Bolt (damper rod) ①

   Use Damper Rod Holder ② to lock the rod assembly.

	Damper rod holder: **P/N YM-01445**
	Bolt (damper rod): **40 Nm (4.0 m • kg, 29 ft • lb)** **LOCTITE®**

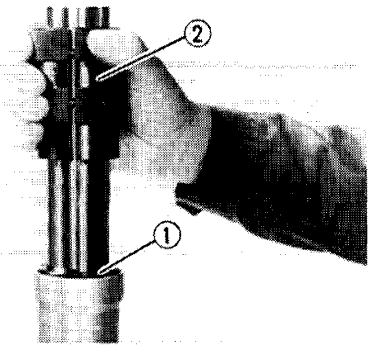


3. Install:
   - Dust seal ①
   - Stopper ring ②
   - Oil seal ③
   - Plain washer ④
   - Slide metal ⑤
   - Piston metal ⑥



NOTE:
- Apply the fork oil on the inner tube.
- When installing the oil seal ②, use vinyl seat ① with fork oil applied to protect the oil seal lip.
- Install the oil seal with its manufacture's marks or number facing the axle holder side.

4. Install:
   - Outer tube
   - Inner tube



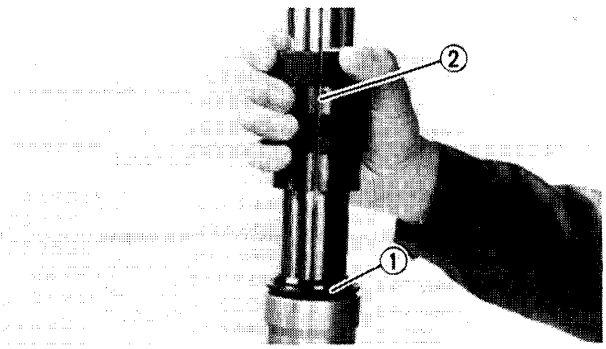
5. Install:
   - Oil seal ①

   Press the oil seal into the outer tube with Fork Seal Driver ②.

Fork Seal Driver:
P/N YM-1424

6. Install:
   - Stopper ring

NOTE:
Fit the stopper ring correctly in the groove in the outer tube.



7. Install:
   - Dust seal ①

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

Fork seal driver:
P/N YM-1424

8. Compress the front fork fully.

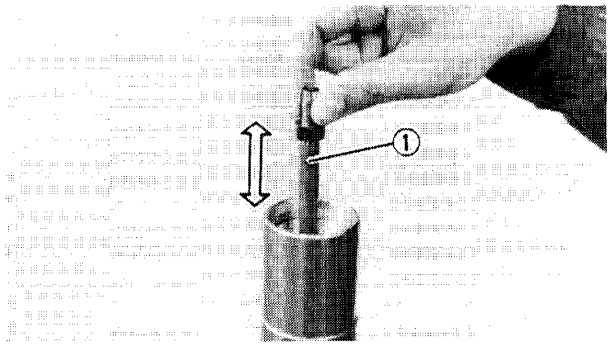
9. Fill:
   - Front fork oil
     Until outer tube top surface with recommended fork oil ①.

Fork Oil Capacity:
462 cm³ (16.3 Imp oz, 15.6 US oz)
Recommended Oil:
Yamaha fork oil 5W 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.**

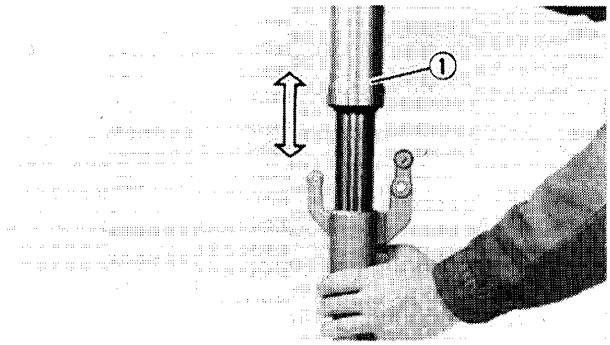
10. After filling, pump the damper rod① slowly up and down more than 10 times to distribute the fork oil.



NOTE:

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

11. After filling, pump the outer tube ① slowly up and down (about 120 mm (4.7 in) stroke) to distribute the fork oil once more.



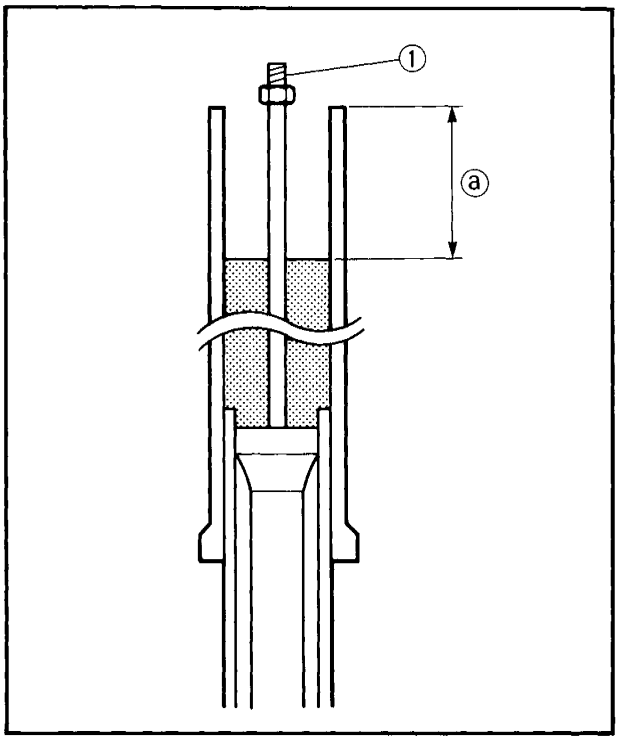
NOTE:

Be careful not to excessive full stroke. A stroke of 120 mm (4.7 in) or more will cause air to enter. In this case, repeat the steps 10 to 11.

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

NOTE:

Fill with the fork oil up to the top end of the outer tube, or the fork oil will not spread over to every part of the front forks, thus making it impossible to obtain the correct level.
Be sure to fill with the fork oil up to the top of the outer tube and bleed the front forks.



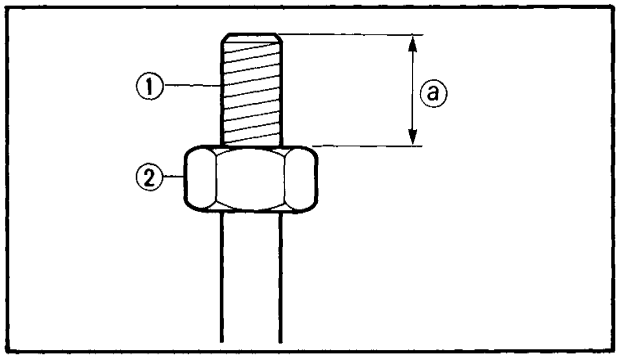
13. Measure:
- Oil level (left and right) ⓐ
  Out of specification → Adjust.

Fork Oil Level:
124 mm (4.88 in)

From top of outer tube with inner tube and damper rod ① fully compressed without spring.

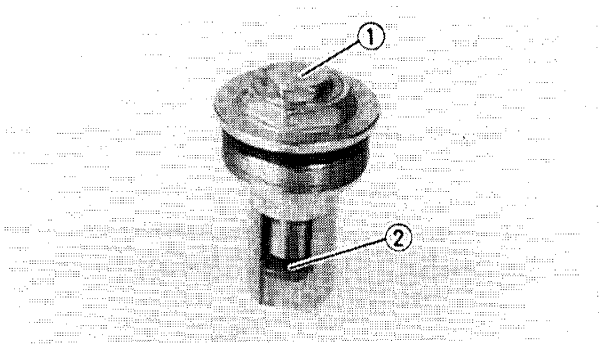
⚠ WARNING

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.

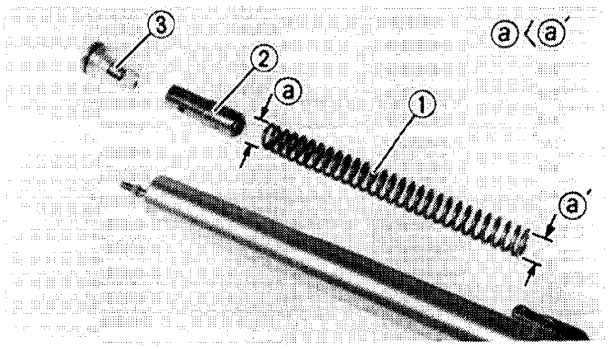


14. Measure:
- Distance ⓐ
  Out of specification → Turn into the locknut.

Distance ⓐ :
16 mm (0.63 in) or more
Between damper rod top ① and locknut top ② .

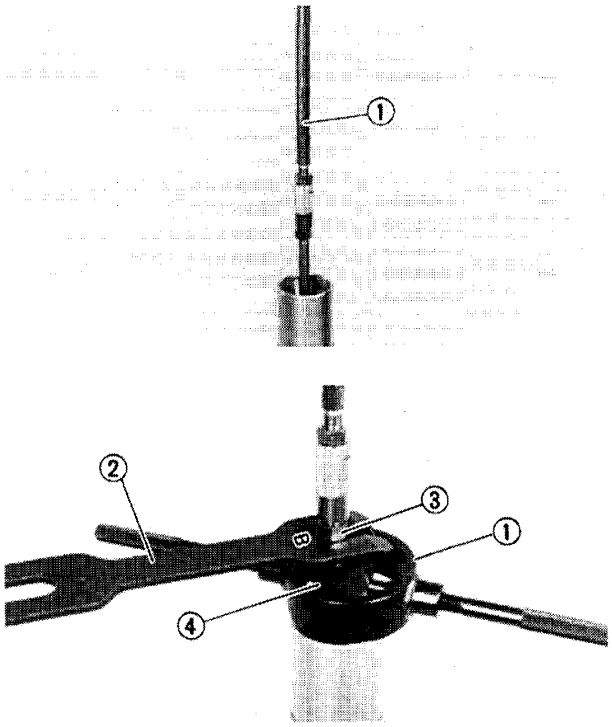


15. Tighten:
- spring preload adjuster ①
  (until no free play of stopper ②)



16. Install:
    - Fork spring ①
    - Spacer ②
    - Cap bolt Complete ③

NOTE:
Fork spring must be installed with the smaller diameter ⓐ upward.



****

Installing steps:

- Install the rod puller ① to damper rod.

	Rod puller: **P/N YM-01437**

- Install the fork spring and spacer.
- Press down the spacer using the fork spring compressor ①.

	Fork spring compressor: **P/N YM-01441**

- Pull up the damper rod and set the rod holder ② between the lock nut ③ and spacer ④.

NOTE:
Use "B" side of rod holder.

	Rod holder: **P/N YM-01434**

- Remove the rod puller.
- Install the cap bolt complete and tighten with your finger slightly tight.
- Tighten the lock nut.

NOTE:
Hold the cap bolt and tighten the locknut with specified torque.

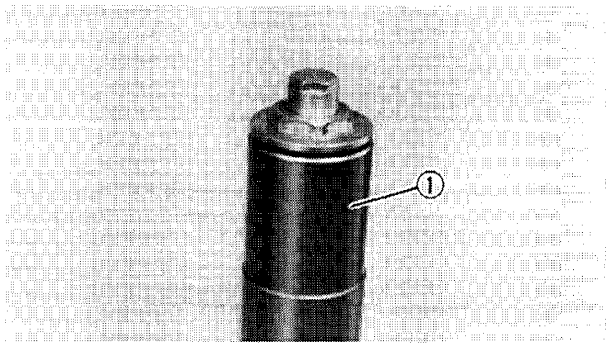
	Locknut: **15 Nm (1.5 m • kg, 11 ft • lb)**

- Remove the rod holder and fork spring compressor.

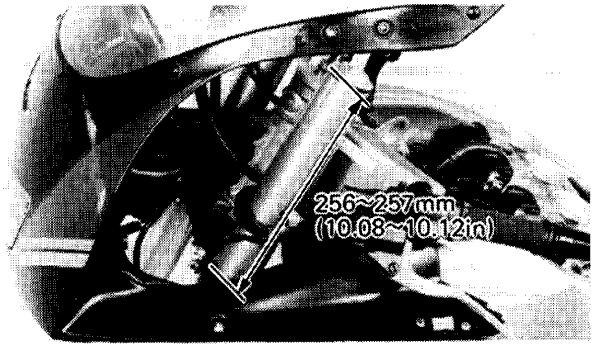
⚠ WARNING

Be carefull, this fork spring is compressed.

****



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



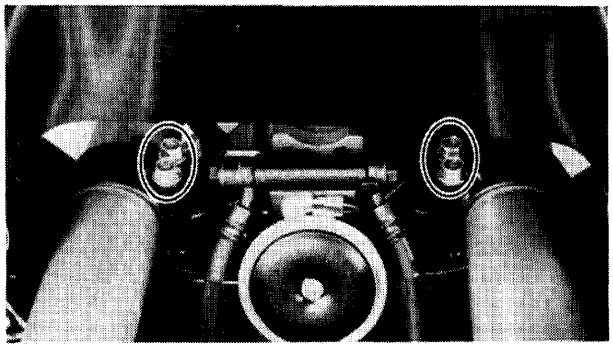
INSTALLATION

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

1. Install:
    - Front fork (s)

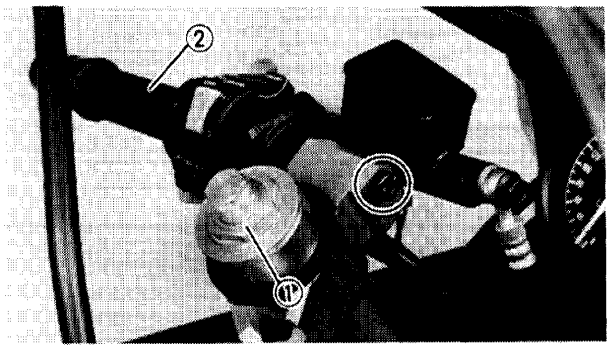
NOTE:

Position the upper end of the inner tube so that it is within 256 ~ 257 mm (10.08 ~ 10.12 in) above the lower bracket.

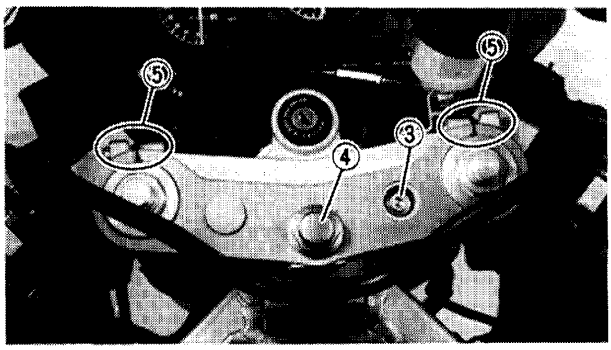


2. Tighten:
    - Pinch bolt (lower bracket)

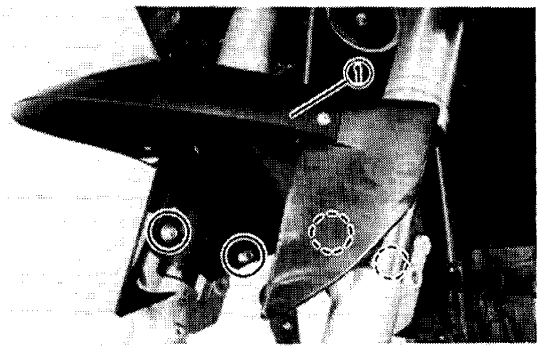
	Pinch bolt (lower bracket): **23 Nm (2.3 m • kg, 17 ft • lb)**



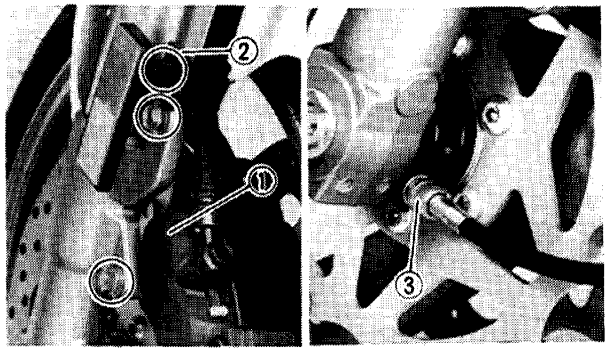
3. Tighten:
    - Cap bolt ①
    - Handlebar assembly ②
    - Bolts (handlebar boss) ③
    - Nut (steering stem) ④
    - Pinch bolts (upper bracket) ⑤



	Cap bolt: **23 Nm (2.3 m • kg, 17 ft • lb)**
	Bolt (handlebar and handlebar boss): **28 Nm (2.8 m • kg, 20 ft • lb)**
	Bolt (handlebar boss and hamdle crown): **19 Nm (1.9 m • kg, 13 ft • lb)**
	Nut (steering stem): **110 Nm (11.0 m • kg, 80 ft •lb)**
	Pinch bolt (upper bracket): **26 Nm (2.6 m • kg, 19 ft • lb)**



4. Adjust:
   - Spring preload
     Refer to the "FRONT FORK ADJUSTMENT" section in the CHAPTER 3.



5. Install:
   - Front fender ①

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

6. Install:
   - Front wheel
   - Brake caliper (left and right) ①
   - Clamp (brake hose) ②
   - Speedometer cable ③
     Refer to the "FRONT WHEEL" section.

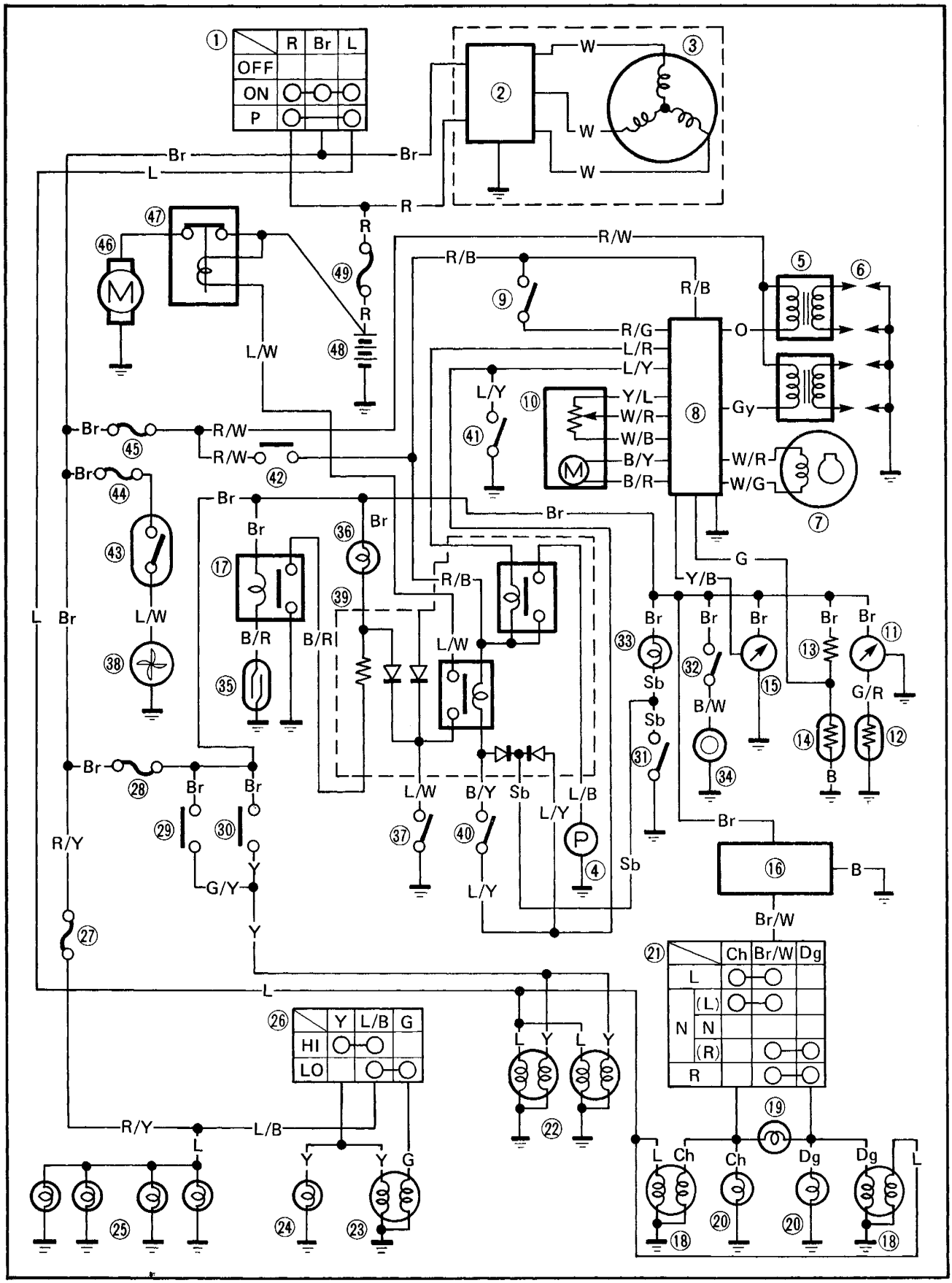
	Front axle: **48 Nm (4.8 m • kg, 35 ft • lb)** **Bolt (brake caliper):** **35 Nm (3.5 m • kg, 25 ft • lb)** **Pinch bolt (front wheel axle):** **20 Nm (2.0 m • kg, 14 ft • lb)**

⚠ WARNING

Make sure that the brake hoses are routed properly.

ELECTRICAL

FZR1000 B CIRCUIT DIAGRAM



① Main switch
② Rectifier/Regulator
③ AC generator
④ Fuel pump
⑤ Ignition coil
⑥ Spark plug
⑦ Pick up coil
⑧ Digital ignitor unit
⑨ Reserve switch
⑩ EXUP servo motor
⑪ Engine temperature gauge
⑫ Thermo unit
⑬ Resistor
⑭ Fuel sender
⑮ Tachometer
⑯ Flasher relay
⑰ "OIL LEVEL" indicator light relay
⑱ Front flasher light
⑲ "TURN" indicator light
⑳ Rear flasher light
㉑ "TURN" switch
㉒ Tail/Brake light
㉓ Headlight
㉔ "HIGH BEAM" indicator light
㉕ Meter light
㉖ "LIGHT" (dimmer) switch
㉗ Fuse (headlight)
㉘ Fuse (signal)
㉙ Front brake switch
㉚ Rear brake switch
㉛ Neutral switch
㉜ "HORN" switch
㉝ Neutral indicator light
㉞ Horn
㉟ Oil level switch
㊱ "OIL LEVEL" indicator light
㊲ "START" switch
㊳ Fan motor
㊴ Relay unit
㊵ Clutch switch
㊶ Sidestand switch
㊷ "ENGINE STOP" switch
㊸ Thermo switch
㊹ Fuse (fan)
㊺ Fuse (ignition)
㊻ Starter motor
㊼ Starter relay
㊽ Battery
㊾ Fuse (main)

COLOR CODE

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