YAMAHA 2002

YFA1(P)

3FA-AE1

SUPPLEMENTARY SERVICE MANUAL

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and new data for the YFA1(P) 2002. For complete information on service procedures, it is necessary to use this Supplementary Service Manual together with the following manual.

YFA1W SERVICE MANUAL: 3FA-ME1

YFA1(P) 2002
SUPPLEMENTARY
SERVICE MANUAL

EB001000

NOTICE

This manual was produced by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to include all the knowledge of a mechanic in one manual, so it is assumed that anyone who uses this book to perform maintenance and repairs on Yamaha machine has a basic understanding of the mechanical ideas and the procedures of machine repair. Repairs attempted by anyone without this knowledge are likely to render the machine unsafe and unfit for use.

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

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

IMPORTANT INFORMATION

Particularly important information is distinguished in this manual by the following notations.

⚠ 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 machine operator, a bystander or a person inspecting or repairing the machine.

CAUTION: A CAUTION indicates special precautions that must be taken to avoid damage to the machine.

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

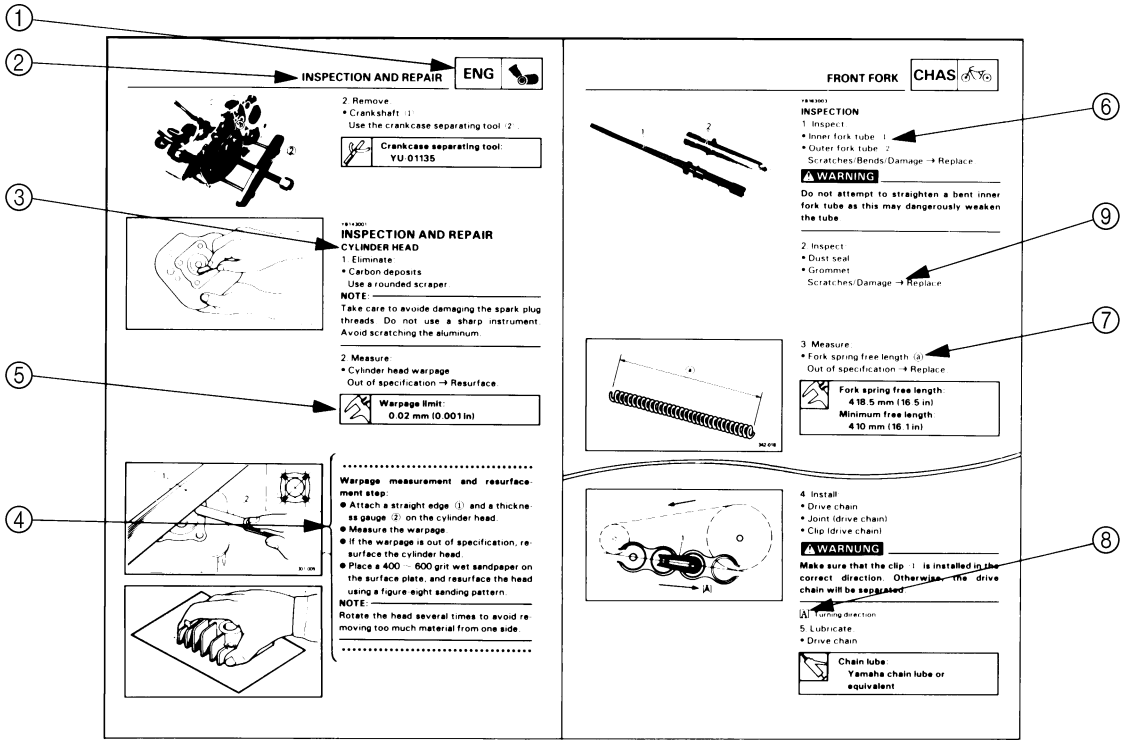
All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspections.
A set of particularly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

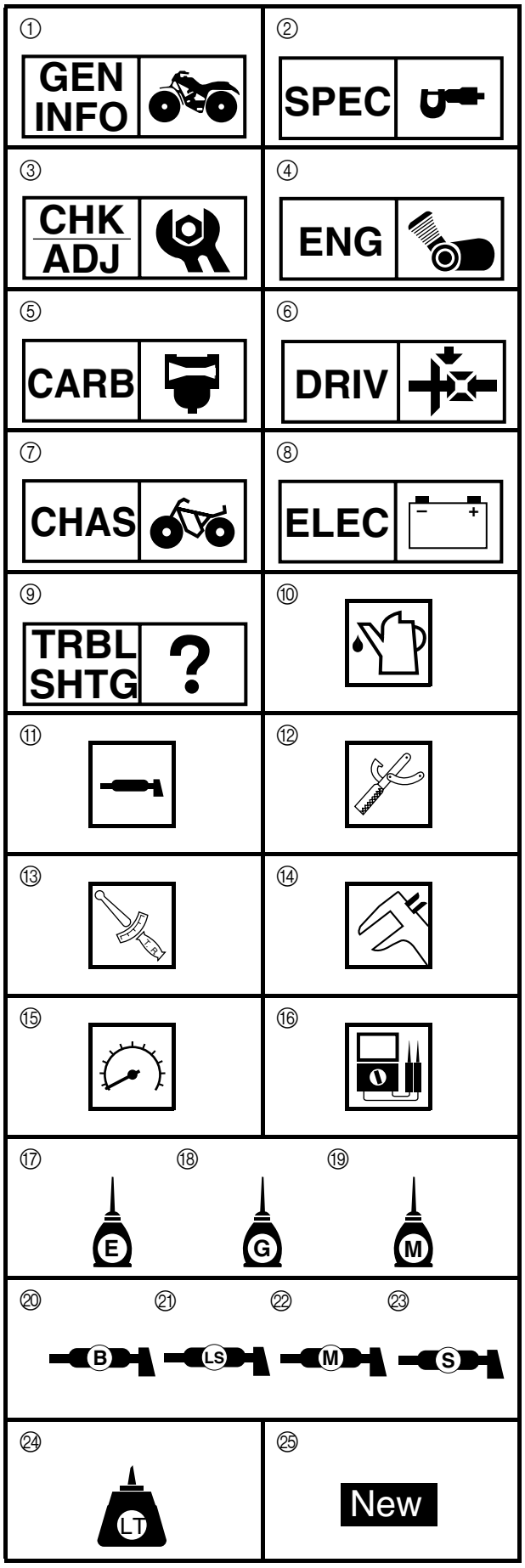
IMPORTANT FEATURES

- 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 ⑨ and the course of action will follow it.

EXPLODED DIAGRAM

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





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ILLUSTRATED SYMBOLS

Illustrated symbols ① to ⑨ are printed on the top right of each page and indicate the subject of each chapter.

① General information
② Specifications
③ Periodic checks and adjustments
④ Engine
⑤ Carburetion
⑥ Drive train
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 Torque
⑭ Wear limit, clearance
⑮ Engine speed
⑯ Ω, V, A

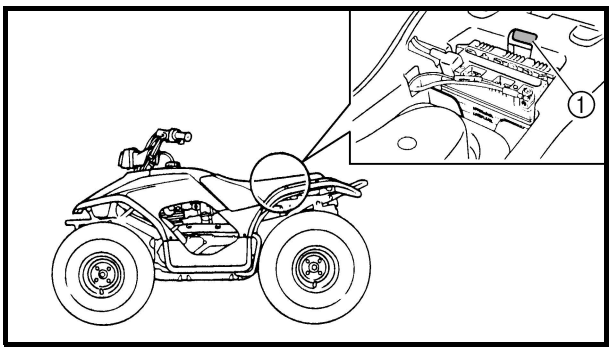
Illustrated symbols ⑰ to ㉓ in the exploded diagrams indicate the types of lubricants and lubrication points.

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 silicon grease

Illustrated symbols ㉔ to ㉕ in the exploded diagrams indicate where to apply a locking agent ㉔ and when to install a new part ㉕.

㉔ Apply the locking agent (LOCTITE®)
㉕ Replace

CONTENTS



GENERAL INFORMATION

MACHINE IDENTIFICATION

MODEL LABEL

The model label ① is affixed to the frame. This information will be needed to order spare parts.

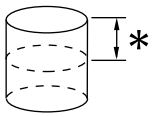
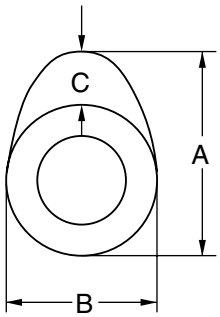
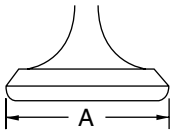
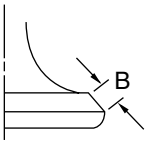
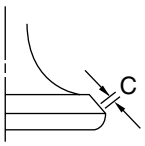
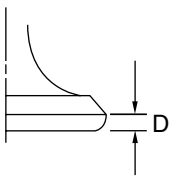
SPECIFICATIONS

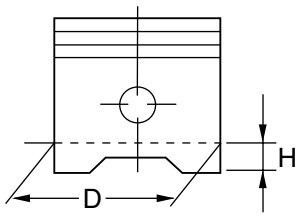
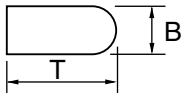
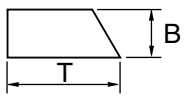
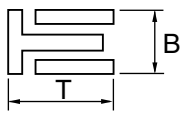
GENERAL SPECIFICATIONS

Model	YFA1 (P) 2002
Model code number	3FAY (CDN, Europe and Oceania)
Engine:	
Engine type	Air-cooled 4-stroke, SOHC
Cylinder arrangement	Forward-inclined single cylinder
Displacement	124 cm^3
Bore × stroke	49 × 66 mm (1.93 × 2.60 in)
Compression ratio	9.0 : 1
Compression pressure	850 kPa (8.5 kg/cm^2, 121 psi) at 570 r/min
Starting system	Electric starter
Transmission:	
Primary reduction system	Helical gear/spur gear
Primary reduction ratio	43/14 × 40/17 (7.226)
Secondary reduction system	Chain drive
Secondary reduction ratio	32/12 (2.666)
Clutch type	Dry, centrifugal automatic
Transmission type	Single speed automatic (V-belt)
Operation	Centrifugal automatic type
Single speed automatic	2.303 ~ 0.821
Reverse ratio	49/14 × 49/15 × 40/17 (26.902)
Tire:	
Type	Tubeless
Size	
Front	AT20 × 7–8
Rear	AT22 × 10–8
Manufacturer (type)	
Front	DUNLOP (KT536A)
Rear	DUNLOP (KT537A)
Wear limit	3.0 mm (0.12 in)
Electrical:	
Ignition system	CDI
Generator system	A.C. magneto generator
Battery capacity	12 V 12 AH
Battery type	12N12C-4A-2
Headlight type	Bulb type
Headlight bulb type	Incandescence
Bulb wattage (quantity)	
Headlight	12 V 25 W/25 W (1 pc.)
Tail/brake light	12 V 5 W/21 W (1 pc.)
Neutral indicator light	12 V 3.4 W (1 pc.)
Reverse indicator light	12 V 3.4 W (1 pc.)

MAINTENANCE SPECIFICATIONS

ENGINE

Model	YFA1 (P) 2002
Cylinder:	
Bore size 	48.99 ~ 49.03 mm (1.9287 ~ 1.9303 in)
<Wear limit>	<49.15 mm (1.935 in)>
Measuring point "✳"	45 mm (1.77 in)
Camshaft:	
Drive method	Chain drive (left)
Cam dimensions 	
Intake "A"	26.169 ~ 26.269 mm (1.0303 ~ 1.0342 in)
"B"	21.061 ~ 21.161 mm (0.8292 ~ 0.8331 in)
"C"	5.159 ~ 5.279 mm (0.2031 ~ 0.2078 in)
Exhaust "A"	26.169 ~ 26.269 mm (1.0303 ~ 1.0342 in)
"B"	21.061 ~ 21.161 mm (0.8292 ~ 0.8331 in)
"C"	5.159 ~ 5.279 mm (0.2031 ~ 0.2078 in)
Camshaft runout limit	0.03 mm (0.0012 in)
Rocker arm/rocker arm shaft:	
Inside diameter (rocker arm)	10.000 ~ 10.015 mm (0.3937 ~ 0.3943 in)
Outside diameter (shaft)	9.981 ~ 9.991 mm (0.3930 ~ 0.3933 in)
Arm-to-shaft clearance	0.009 ~ 0.034 mm (0.0004 ~ 0.0013 in)
Valve, valve seat, valve guide:	
Valve clearance (cold)	
Intake	0.08 ~ 0.12 mm (0.0031 ~ 0.0047 in)
Exhaust	0.10 ~ 0.14 mm (0.0039 ~ 0.0055 in)
Valve dimensions	
"A" head diameter 	
Intake	25.9 ~ 26.1 mm (1.02 ~ 1.03 in)
Exhaust	21.9 ~ 22.1 mm (0.86 ~ 0.87 in)
"B" face width 	
Intake	1.4 ~ 3.0 mm (0.06 ~ 0.12 in)
Exhaust	1.7 ~ 2.8 mm (0.07 ~ 0.11 in)
"C" seat width 	
Intake	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)
Exhaust	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)
"D" margin thickness 	
Intake	0.4 ~ 0.8 mm (0.016 ~ 0.031 in)
Exhaust	0.8 ~ 1.2 mm (0.031 ~ 0.047 in)
Outside diameter (valve stem)	
Intake	4.975 ~ 4.990 mm (0.196 in)
Exhaust	4.960 ~ 4.975 mm (0.195 ~ 0.196 in)

Model	YFA1 (P) 2002
Inside diameter (valve guide)	
Intake	5.000 ~ 5.012 mm (0.197 in)
Exhaust	5.000 ~ 5.012 mm (0.197 in)
Stem-to-guide clearance	
Intake	0.010 ~ 0.037 mm (0.004 ~ 0.0014 in)
Exhaust	0.025 ~ 0.052 mm (0.0010 ~ 0.0020 in)
Stem runout limit	0.01 mm (0.0004 in)
Valve seat width	
Intake	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)
Exhaust	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)
Piston:	
Piston size “D”	48.96 ~ 49.00 mm (1.927 ~ 1.929 in)
Measuring point “H” 	6 mm (0.24 in) From bottom of the piston.
Piston-to-cylinder clearance	0.020 ~ 0.040 mm (0.0008 ~ 0.0016 in)
<Wear limit>	<0.15 mm (0.006 in)>
Over size 2nd	49.5 mm (1.95 in)
4th	50.0 mm (1.97 in)
Piston off-set	0.5 mm (0.02 in)
Piston off-set direction	Intake side
Inside diameter (piston pin bore)	13.002 ~ 13.013 mm (0.5119 ~ 0.5123 in)
Outside diameter (piston pin)	12.996 ~ 13.000 mm (0.5117 ~ 0.5118 in)
Piston pin-to-piston clearance	0.002 ~ 0.017 mm (0.0001 ~ 0.0006 in)
<Limit>	<0.07 mm (0.003 in)>
Piston ring:	
Type	
Top ring	Barrel
2nd ring	Taper
Dimension (B × T)	
Top ring 	1.0 × 2.0 mm (0.039 × 0.079 in)
Second ring 	1.0 × 2.0 mm (0.039 × 0.079 in)
Oil ring 	2.0 × 2.2 mm (0.079 × 0.087 in)
End gap (installed)	
Top ring	0.15 ~ 0.30 mm (0.006 ~ 0.012 in)
Second ring	0.15 ~ 0.30 mm (0.006 ~ 0.012 in)
Oil ring	0.20 ~ 0.80 mm (0.008 ~ 0.031 in)

Model		YFA1 (P) 2002
Side clearance		
Top ring		0.03 ~ 0.07 mm (0.0012 ~ 0.0027 in)
Second ring		0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in)
Carburetor:		
I.D. mark		3FA02
Main jet	(M.J.)	#82.5
Main air jet	(M.A.J.)	ø1.3
Jet needle	(J.N.)	4H36-3
Needle jet	(N.J.)	N-6
Cutaway	(C.A.)	2.5
Pilot air jet	(P.A.J.)	#130
Pilot outlet	(P.O.)	ø0.7
Pilot jet	(P.J.)	#12.5
Bypass 1	(B.P.1)	1.1
Pilot screw	(P.S.)	2 and 1/2 turns out
Valve seat size	(V.S.)	1.8
Starter jet	(G.S.)	#45
Float height	(F.H.)	21.8 mm (0.858 in)
Fuel level	(F.L.)	4.0 ~ 6.0 mm (0.16 ~ 0.24 in) With special tool
Engine idling speed		1,650 ~ 1,750 r/min
Intake vacuum		26.7 kPa (200 mm Hg, 7.88 in Hg)

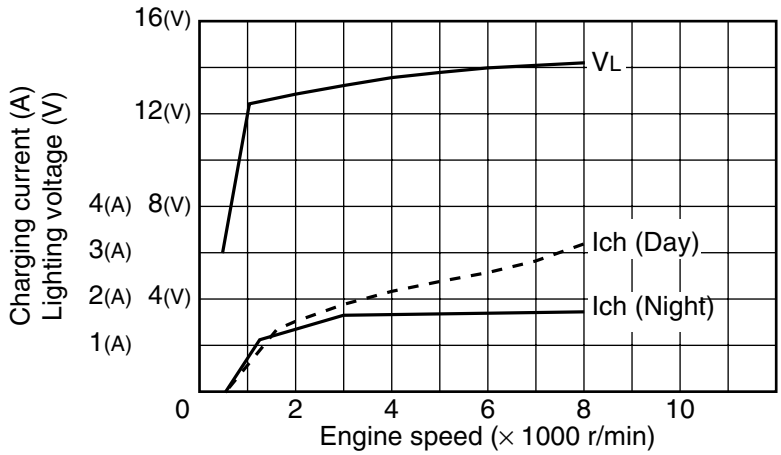
CHASSIS

Model	YFA1 (P) 2002
Suspension:	
Suspension travel	
Front	41 mm (1.614 in)
Rear	60 mm (2.362 in)
Free length (spring)	
Front	148 mm (5.827 in)
Rear	205 mm (8.071 in)
Installed length	
Rear	180 mm (7.09 in)
Spring rate	
Front	29.4 N/mm (3.0 kg/mm, 167.9 lb/in)
Rear	36.3 N/mm (3.7 kg/mm, 207.3 lb/in)
Stroke	
Front	0.0 ~ 41 mm (0.0 ~ 1.614 in)
Rear	0.0 ~ 60 mm (0.0 ~ 2.362 in)
Optional spring	
Front	No
Rear	No

Model	YFA1 (P) 2002
Drive chain:	
Type/manufacturer	520V6/DAIDO
Number of links	74 links
Chain slack	30 mm (1.18 in)
10-link length limit	150.1 mm (5.909 in)
Brake lever:	
Free play	
Front brake	5 ~ 8 mm (0.20 ~ 0.31 in) At lever pivot.
Rear brake	5 ~ 8 mm (0.20 ~ 0.31 in) At lever pivot.

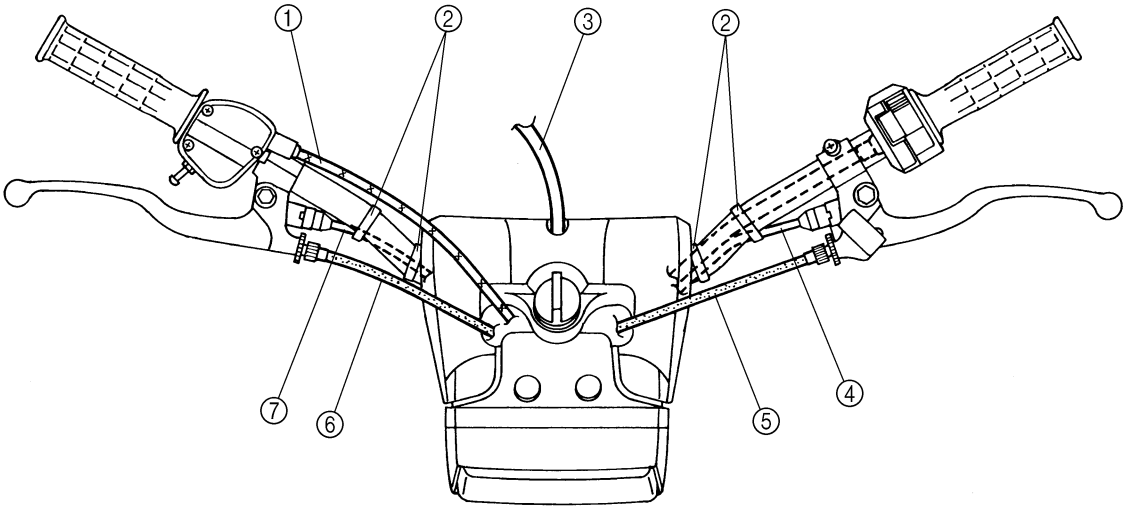
ELECTRICAL

Model	YFA1 (P) 2002
C.D.I.:	
Magneto model/manufacturer	F3FA/YAMAHA
Pickup coil resistance	248 ~ 372 Ω at 20 °C (68 °F)
(lead color)	(White–Red)
C.D.I. unit model/manufacturer	3FA/YAMAHA
Ignition coil:	
Model/manufacturer	2JN/YAMAHA
Minimum spark gap	6.0 mm (0.24 in)
Primary coil resistance	0.18 ~ 0.28 Ω at 20 °C (68 °F)
Secondary coil resistance	6.32 ~ 9.48 kΩ at 20 °C (68 °F)
Spark plug cap:	
Material	Resin
Resistance	10 kΩ at 20 °C (68 °F)
Charging system:	
Type	A.C. magneto generator
Magneto model/manufacturer	F3FA/YAMAHA
Charging coil resistance	0.96 ~ 1.44 Ω at 20 °C (68 °F)
(lead color)	(Black–White)
Charging current	
Day (Minimum)	0.8 A at 3,000 r/min
(Maximum)	2.0 A at 8,000 r/min
Night (Minimum)	0.6 A at 3,000 r/min
(Maximum)	3.5 A at 8,000 r/min
Lighting coil resistance	0.72 ~ 1.08 Ω at 20 °C (68 °F)
(lead color)	(Black–Yellow)
Lighting voltage (Minimum)	12.0 V at 3,000 r/min
(Maximum)	14.8 V at 8,000 r/min
Standard output	14 V 125 W at 5,000 r/min

Model	YFA1 (P) 2002
	
Rectifier/regulator:	
Model/manufacturer	EHU–01TR31/MATSUSHITA
Regulator type	Semi conductor short circuit type
No load regulated voltage (DC)	14.0 ~ 15.0 V
No load regulated voltage (AC)	13.0 ~ 14.0 V
Rectifier capacity (DC)	8.0 A
Rectifier capacity (AC)	8.0 A
Withstand voltage	200 V
Electric starting system:	
Type	Constant mesh
Starter motor	
Model/manufacturer	3FA1/YAMAHA
Output	0.4 kW
Armature coil resistance	0.019 ~ 0.023 Ω at 20 °C (68 °F)
Overall length (brush)	10.0 mm (0.39 in)
<Limit>	<3.5 mm (0.14 in>
Brush spring pressure	552 ~ 828 g
Commutator diameter	22.0 mm (0.87 in)
<Wear limit>	<21.0 mm (0.83 in)>
Mica undercut	1.5 mm (0.06 in)
Starter relay	
Model/manufacturer	MS5D–611/JIDECO
Amperage rating	100 A
Coil resistance	3.87 ~ 4.73 Ω at 20 °C (68 °F)
Starting circuit cut-off relay	
Model/manufacturer	ACA1211–9/MATSUSHITA
Coil resistance	72 ~ 88 Ω at 20 °C (68 °F)
Diode	No

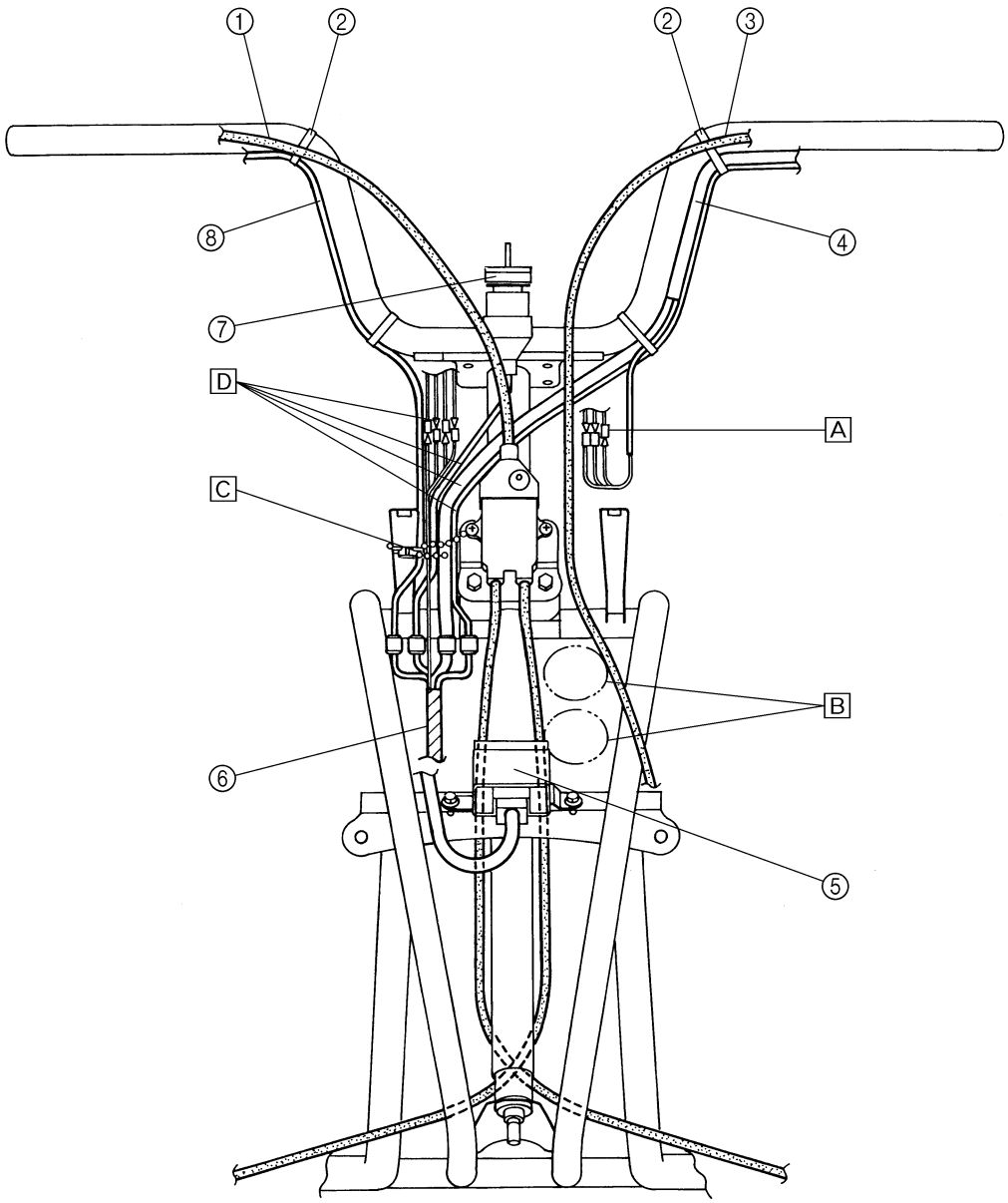
CABLE ROUTING

① Throttle cable
② Band
③ Breather hose
④ Rear brake switch lead
⑤ Rear brake cable
⑥ Front brake cable
⑦ Front brake switch lead



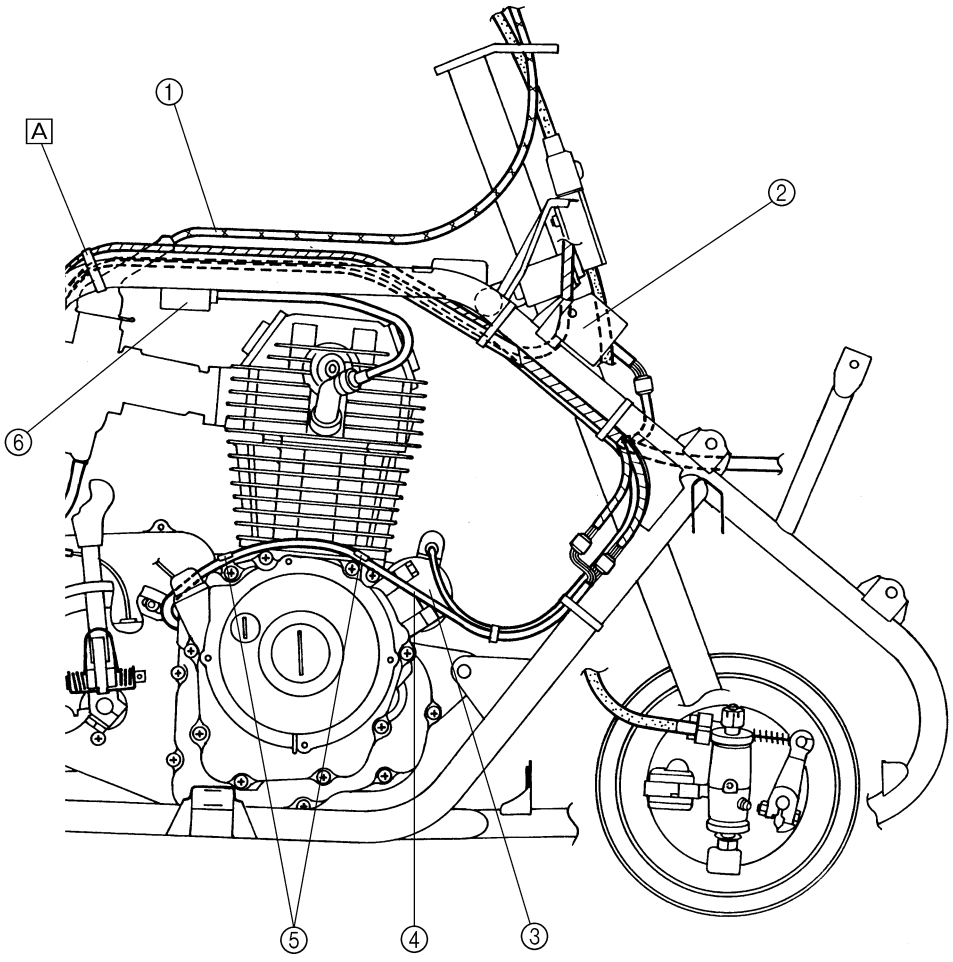
① Front brake cable
② Band
③ Rear brake cable
④ Rear brake switch lead
⑤ CDI unit
⑥ Wire harness
⑦ Main switch
⑧ Front brake switch lead

A Pass leads in front of the brake cable and connect them inside the headlight body.
B Pass the inlet and outlet hoses between the brake cables.
C Clamp the front brake switch lead, rear brake switch lead, main switch lead, handlebar switch lead, and wire sub-leads with a plastic clamp.
D Pass the leads between the throttle cable and front brake cable.



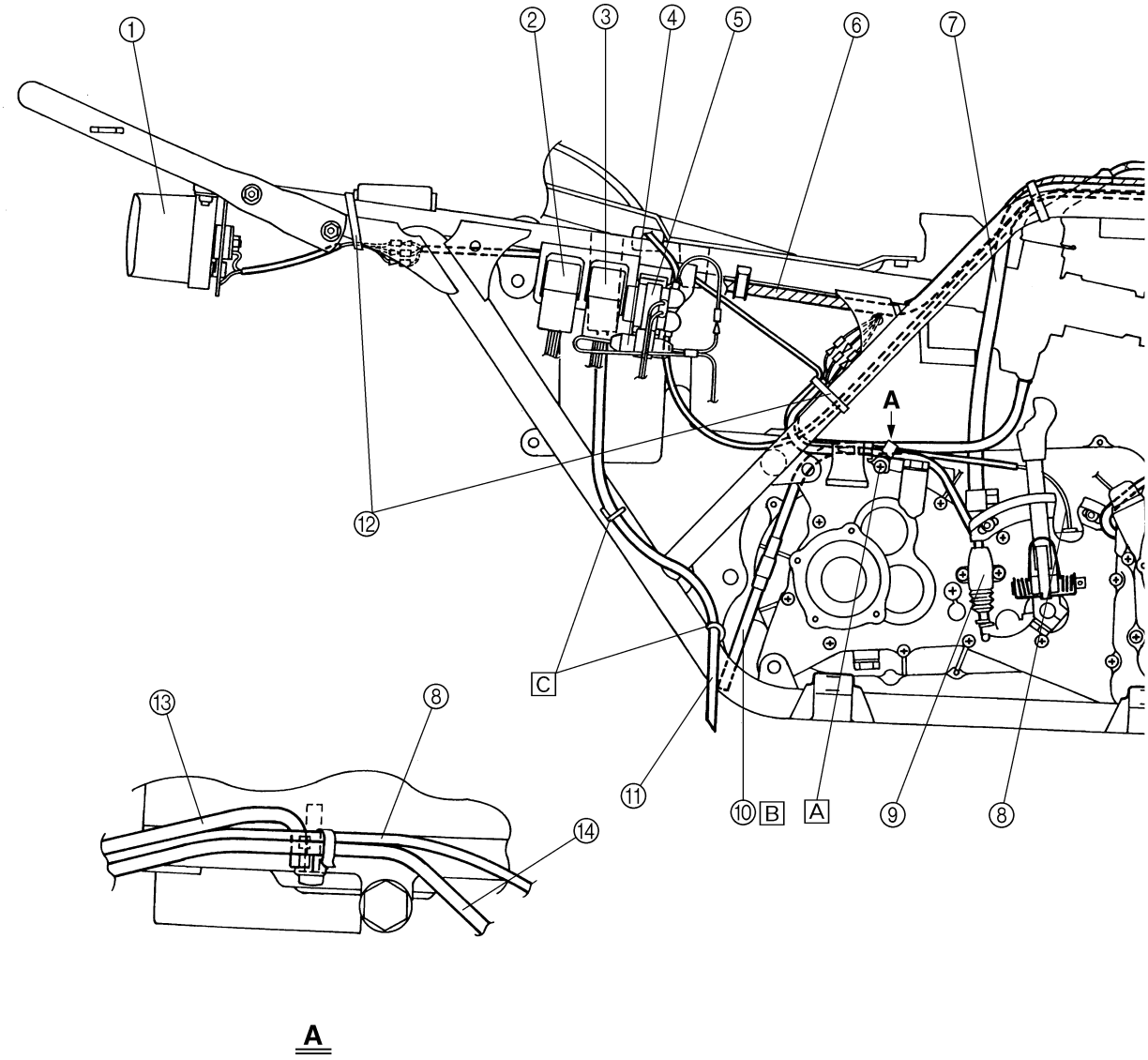
① Throttle cable
② Rectifier/regulator
③ Starting motor
④ CDI magneto lead
⑤ Clamp
⑥ Ignition coil

Ⓐ Fasten the wire harness, starting motor lead and transmission case breather hose to the frame with a plastic band.



① Taillight
② Reverse relay
③ Starting circuit cut-off relay
④ Fuse holder
⑤ Starter relay
⑥ Wire harness
⑦ Breather hose (transmission case)
⑧ Neutral switch lead
⑨ Select lever switch
⑩ Overflow hose
⑪ Battery breather hose
⑫ Band
⑬ Battery negative lead
⑭ Reverse switch lead

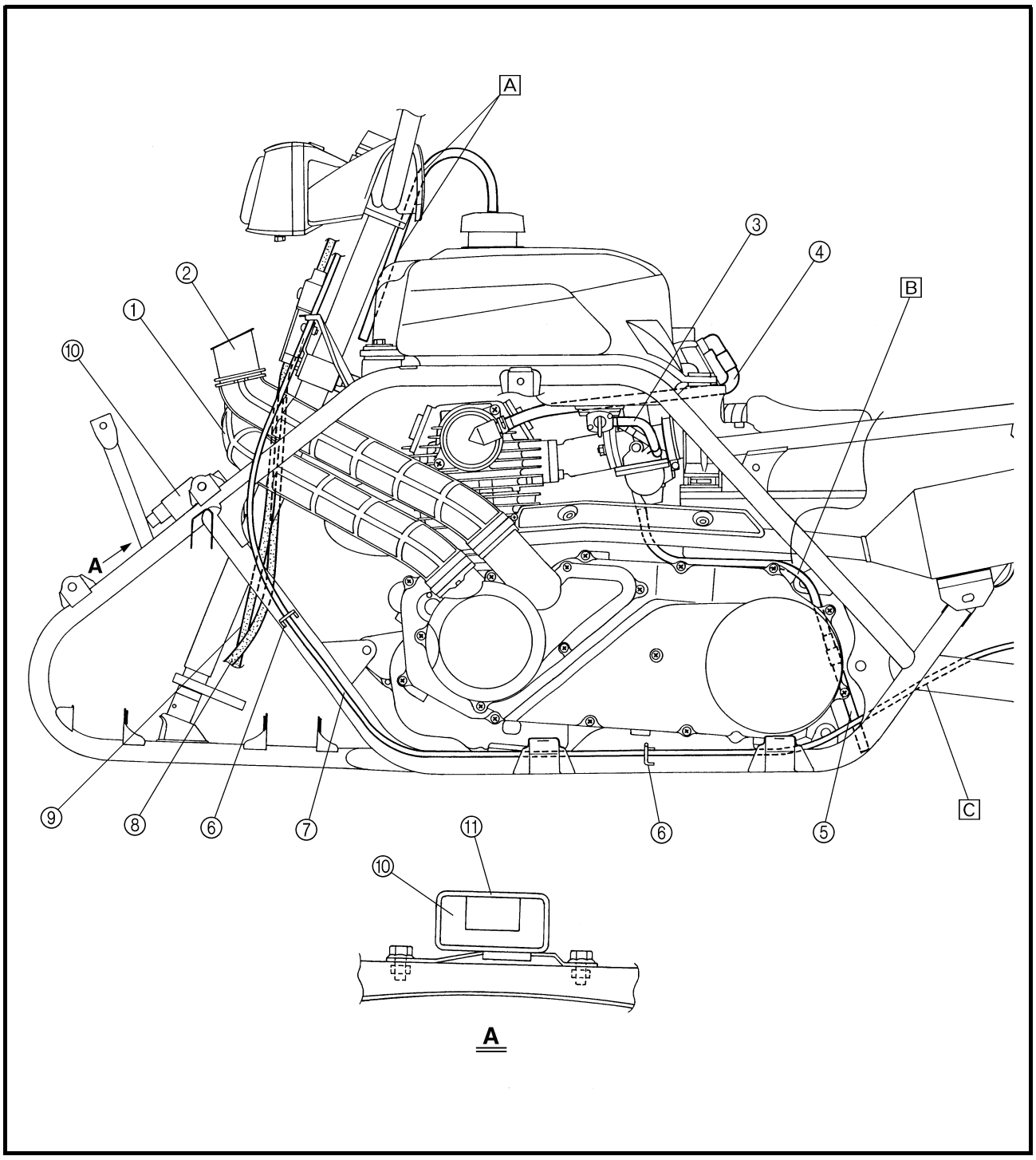
A Hold the clamp and ground lead to the crankcase with a screw.
B Pass the overflow hose between the engine and swingarm.
C Pass the battery breather hose through the guides.



A

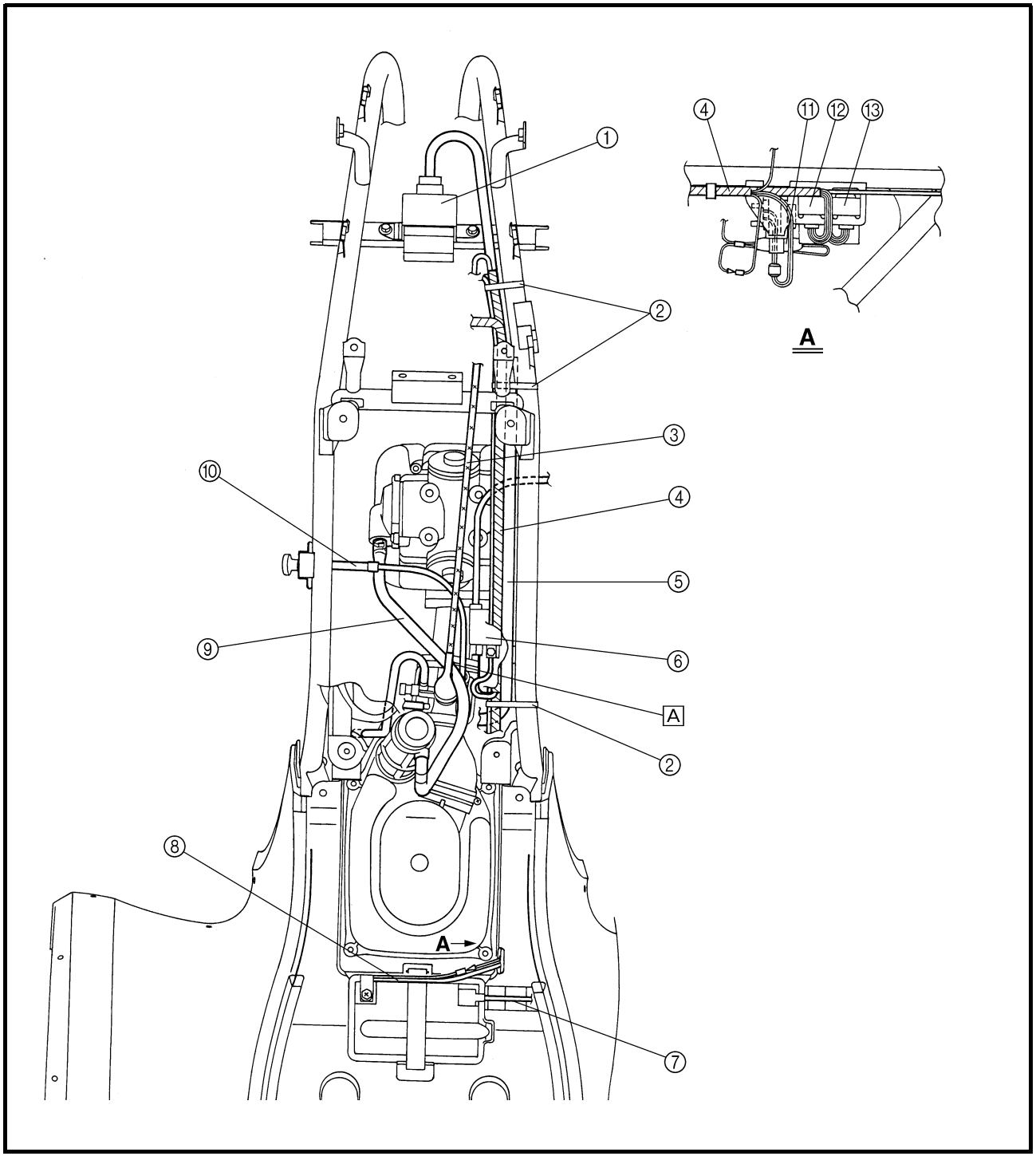
① Inlet hose
② Outlet hose
③ Fuel hose
④ Breather hose (crankcase)
⑤ Overflow hose
⑥ Guide
⑦ Rear brake cable
⑧ Front brake cable (left)
⑨ Front brake cable (right)
⑩ CDI unit
⑪ Band

A Pass the breather hose through the hole of handlebar cover and then between the steering column and fuel tank.
B Pass the overflow hose left side of the engine stay.
C Pass the brake cable inside the swingarm.



① CDI unit
② Band
③ Starter cable
④ Wire harness
⑤ Breather hose (transmission case)
⑥ Ignition coil
⑦ Battery positive lead
⑧ Battery negative lead
⑨ Breather hose (crankcase)
⑩ Throttle cable
⑪ Fuse holder
⑫ Starting circuit cut-off relay
⑬ Reverse relay

[A] Pass the breather hose between the throttle cable and starter cable.



EB300000

PERIODIC CHECKS AND ADJUSTMENTS

INTRODUCTION

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

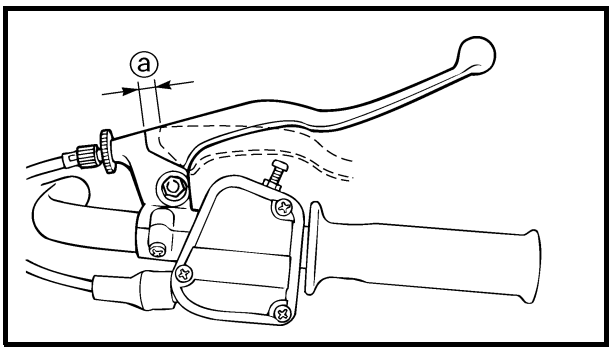
EB301000

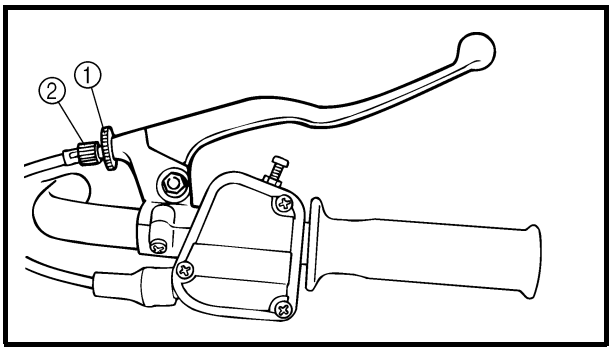
PERIODIC MAINTENANCE/LUBRICATION INTERVALS

ITEM	ROUTINE	INITIAL			EVERY	
		1 month	3 months	6 months	6 months	1 year
Valves*	• Check valve clearance. • Adjust if necessary.	○		○	○	○
Spark plug	• Check condition. • Adjust gap and clean. • Replace if necessary.	○	○	○	○	○
Air filter element (for engine and V-belt compartment)	• Clean. • Replace if necessary.	Every 20 ~ 40 hours (More often in wet or dusty areas.)				
Carburetor*	• Check idle speed/starter operation. • Adjust if necessary.		○	○	○	○
Cylinderhead cover breather system*	• Check breather hose for cracks or damage. • Replace if necessary.			○	○	○
Exhaust system*	• Check leakage. • Retighten if necessary. • Replace gasket if necessary.			○	○	○
Fuel line*	• Check fuel hose for cracks or damage. • Replace if necessary.			○	○	○
Engine oil	• Replace (Warm engine before draining).	○		○	○	○
Oil strainer*	• Clean. • Replace if necessary.	○		○		○
Drive chain	• Check and adjust slack/alignment/clean/lube.	○	○	○	○	○
Transmission oil	• Check oil level/oil leakage. • Replace every 12 months.	○				○
Brakes*	• Check operation. • Adjust if necessary.	○	○	○	○	○
V-belt*	• Check operation. • Replace if damage or excessive wear.	○				○
Wheels*	• Check balance/damage/runout. • Replace if necessary.	○		○	○	○
Wheel bearings*	• Check bearing assembly for looseness or damage. • Replace if necessary.	○		○	○	○
Steering system*	• Check operation. • Replace if damaged. • Check toe-in. • Adjust if necessary.	○	○	○	○	○
Knuckle shafts/ Steering shaft*	• Lubricate every 6 months.**			○	○	○
Fittings and Fasteners*	• Check all chassis fittings and fasteners. • Correct if necessary.	○	○	○	○	○
Battery*	• Check specific gravity. • Check breather hose for proper operation. • Correct if necessary.	○	○	○	○	○

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

** Lithium-soap-based grease





CHASSIS

ADJUSTING THE FRONT BRAKE

1.Check:

- Front brake lever free play ⓐ
  Out of specification → Adjust.

Front brake lever free play:
5 ~ 8 mm (0.20 ~ 0.3 in) at lever pivot

2.Adjust:

- Front brake lever free play

****

- Loosen the locknut ①.
- Turn the adjuster ② in or out until the specified brake lever free play is obtained.

Turning in	**Free play is increased.**
Turning out	**Free play is decreased.**

- Tighten the locknut.

CAUTION:

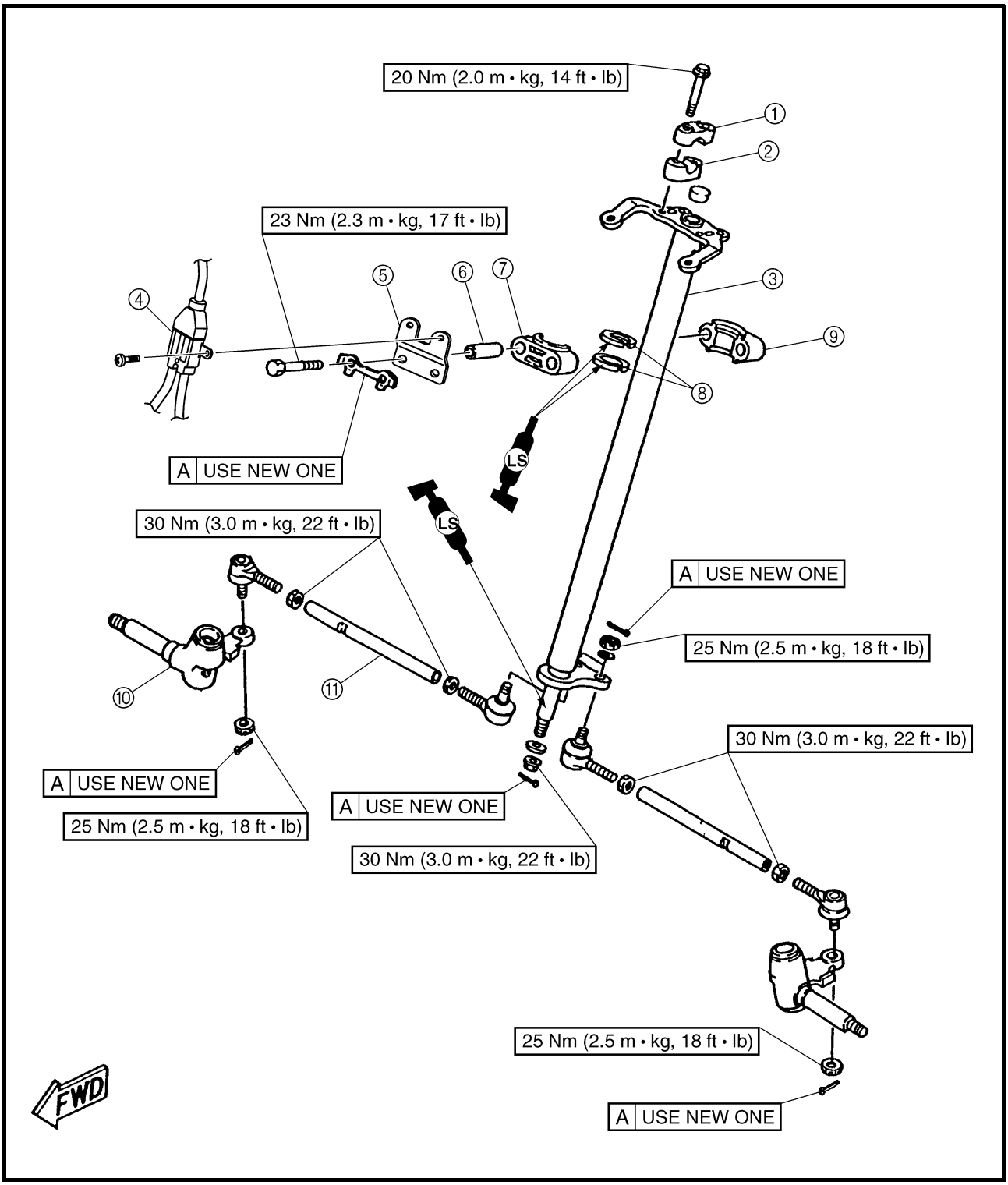
After adjusting the brake lever free play, make sure there is no drag.

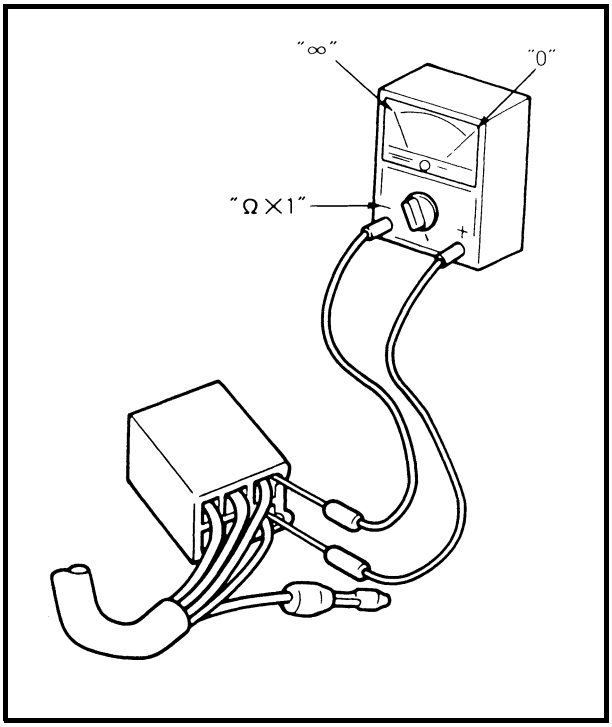
****

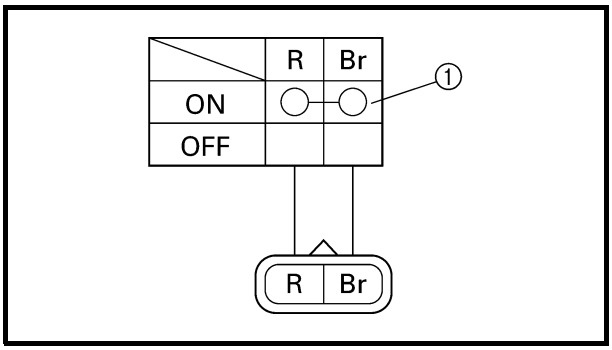
CHASSIS

STEERING SYSTEM

① Handlebar holder (upper)
② Handlebar holder (lower)
③ Steering column
④ Cable joint
⑤ Cable joint bracket
⑥ Collar
⑦ Steering bracket
⑧ Oil seal
⑨ Steering bracket
⑩ Steering knuckle
⑪ Tie-rod







ELECTRICAL

CHECKING THE SWITCH

CHECKING THE SWITCH

Use a pocket tester to check the terminals for continuity. If the continuity is faulty at any point, replace the switch.

Pocket tester:
P/N. YU-03112, 90890-03112

NOTE:

- Set the pocket tester to "0" before starting the test.
- The pocket tester should be set to the "Ω × 1" range when testing the switch for continuity.
- Turn the switch on and off a few times when checking it.

CHECKING A SWITCH SHOWN IN THE MANUAL

The terminal connections for switches (main switch, handlebar switch, engine stop switch, light switch, etc.) are shown in a chart similar to the one on the left.

This chart shows the switch positions in the column and the switch lead colors in the top row.

For each switch position, "○——○" indicates the terminals with continuity.

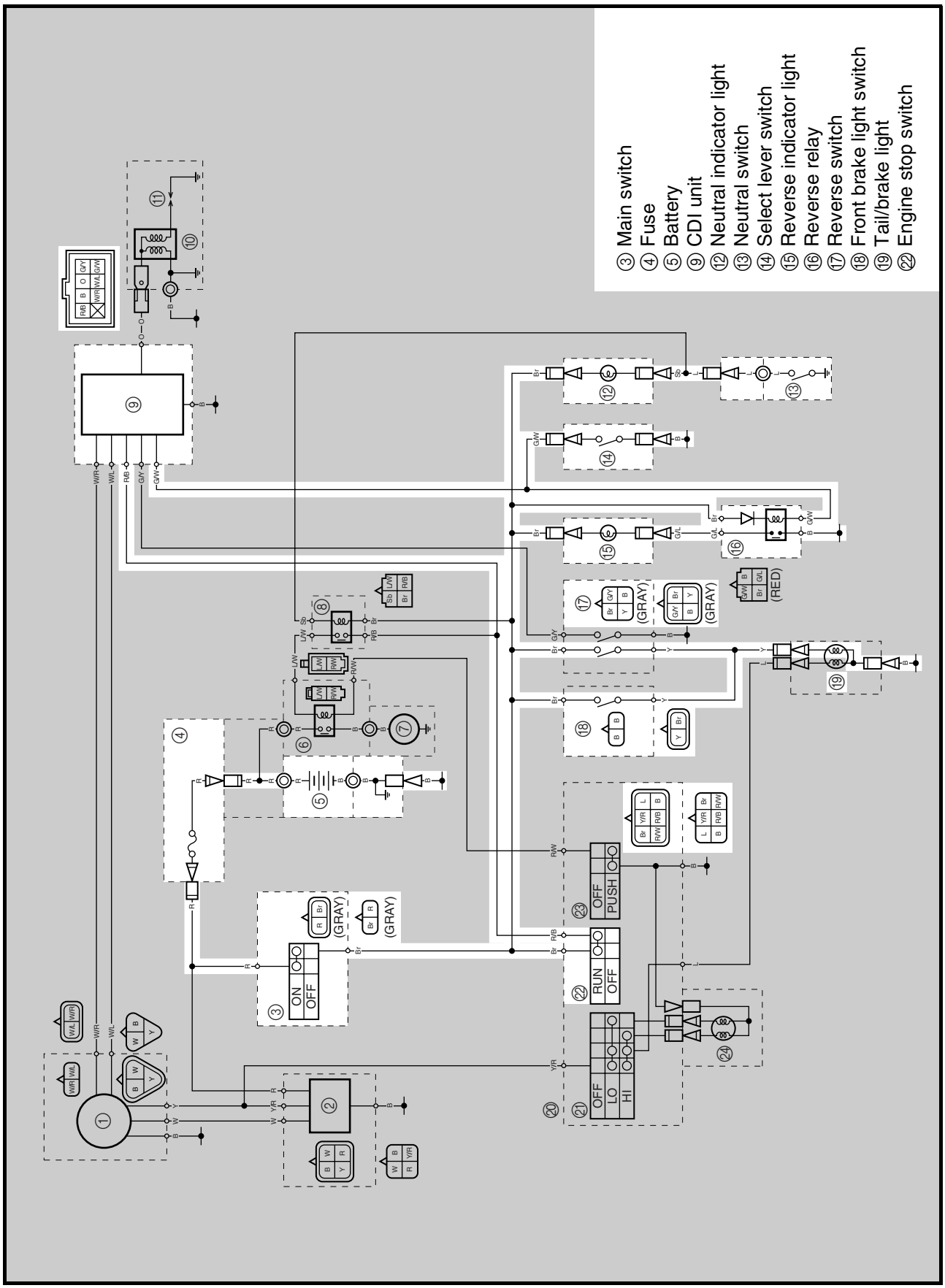
The example chart shows that:

① There is continuity between the "Red and Brown" leads when the switch is set to "ON".

EB806000

SIGNAL SYSTEM

CIRCUIT DIAGRAM



CHECKING THE SIGNAL SYSTEM

1.If the tail/brake light fails to come on:

1.Bulb and bulb socket

- Check the bulb and bulb socket for continuity.

NO CONTINUITY → Replace the bulb and/or bulb socket.

CONTINUITY ⇩

2.Brake light switches

Refer to “CHECKING THE SWITCH”.

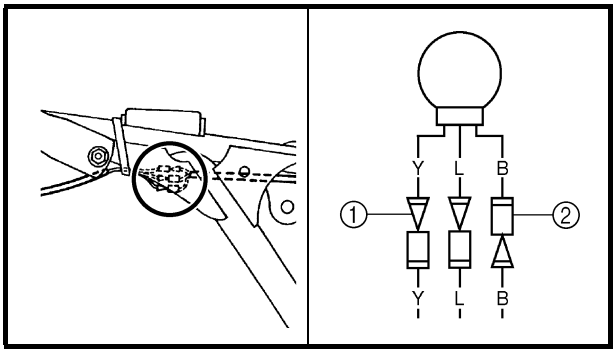
NO CONTINUITY → Replace the brake switch.

CONTINUITY ⇩

3.Voltage

- Connect the pocket tester (DC 20V) to the bulb socket connector.

Tester (+) lead → Yellow terminal ①
Tester (–) lead → Black terminal ②



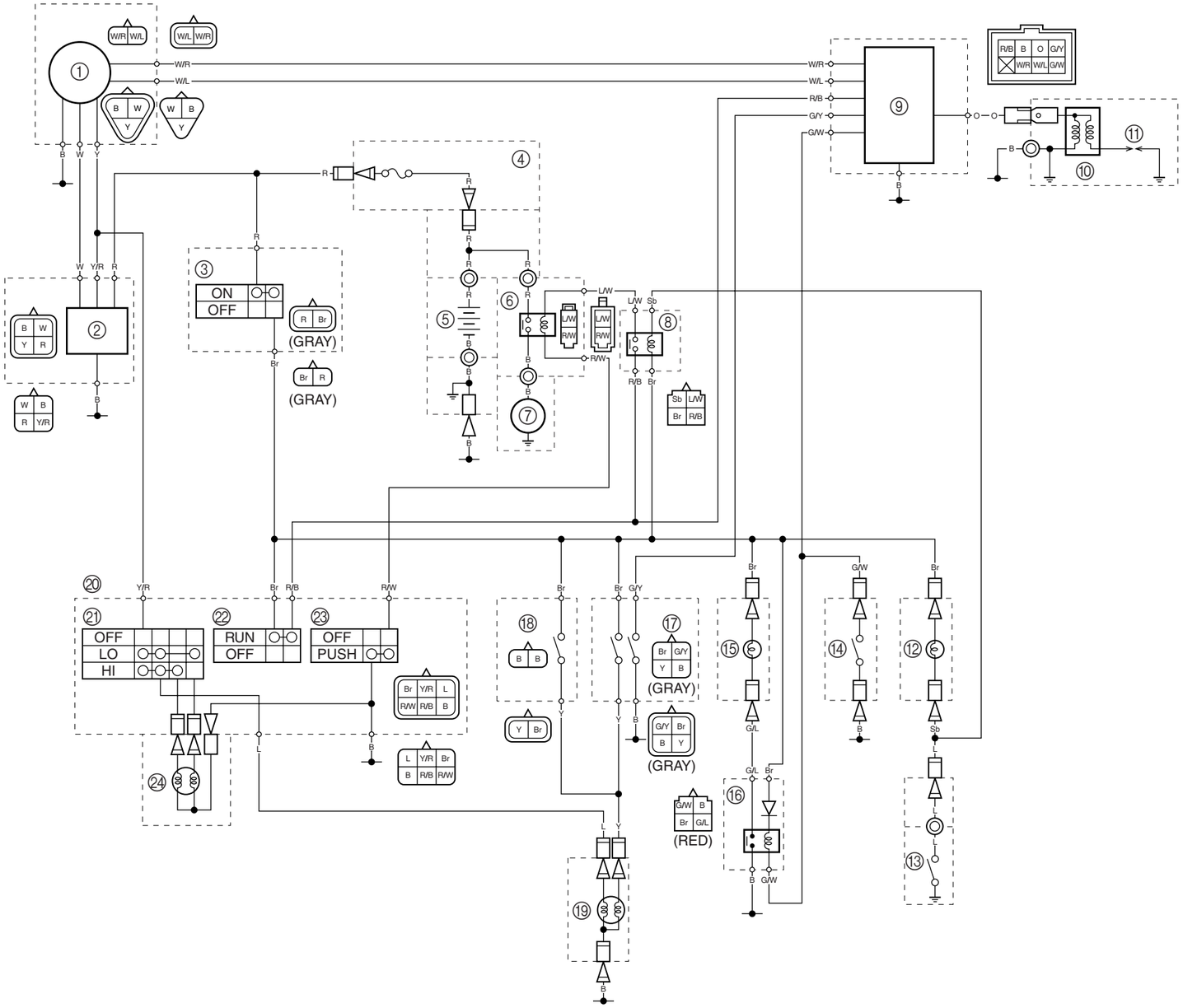
- Turn the main switch to “ON”.
- Check the voltage (12 V) of the “Yellow” lead on the bulb socket connector.

OUT OF SPECIFICATION → The wiring circuit from the main switch to the bulb socket connector is faulty, repair it.

MEETS SPECIFICATION ⇩

This circuit is not faulty.

YFA1(P) 2002 WIRING DIAGRAM



① AC magneto
② Rectifier/regulator
③ Main switch
④ Fuse
⑤ Battery
⑥ Starter relay
⑦ Starter motor
⑧ Starting circuit cut-off relay
⑨ CDI unit
⑩ Ignition coil
⑪ Spark plug
⑫ Neutral indicator light
⑬ Neutral switch
⑭ Reverse switch
⑮ Reverse indicator light
⑯ Reverse relay
⑰ Brake lever switch
⑱ Front brake light switch
⑲ Tail/brake light
⑳ Handlebar switch (left)
㉑ Lights switch
㉒ Engine stop switch
㉓ Start switch
㉔ Headlight

COLOR CODE

B .....Black	W .....White	R/B.....Red/Black
Br.....Brown	Y .....Yellow	R/W.....Red/White
L.....Blue	G/L.....Green/Blue	W/L .....White/Blue
O.....Orange	G/W .....Green/White	W/R.....White/Red
R.....Red	G/Y .....Green/Yellow	Y/R.....Yellow/Red
Sb .....Sky blue	L/W .....Blue/White	