



for excellent riders

The Performance Edge

SS KIT MANUAL

01 YZF-R6

2001 YZF-R6 Kit Manual

Please note:

- Please understand that these parts are not covered by the warranty.
- The manufacturer does not take any responsibility for problems caused by these parts.
- These kit parts are intended exclusively for racing purposes. You are strictly requested not to use them for use on public roads.
- The specifications and usage methods of these kit parts along with the contents of this manual are subject to change without notice for improvement.
- This manual has been written for persons having knowledge and experience in the field of motorcycles. Please refer to the service manual for information on part assembly and maintenance.

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1 Standard Specifications (SS spec.)

Item	Spec
Engine type	Liquid-cooled, 4-stroke, In-Line DOHC 4-valve
Displacement	599.7 cc
Bore × stroke	65.5 mm × 44.5 mm
Compression ratio	12.4~13.0 : 1
Valve timing (event angle)	
Intake	= 103°
Exhaust	= 112°
Squish height	0.60 mm (minimum)
Minimum valve x piston clearance	
Intake	= 0.75 mm (minimum), 10° after exhaust top dead center
Exhaust	= 1.75 mm (minimum), 10° before exhaust top dead center
Valve (tappet) clearance	
Intake	= 0.20±0.3 mm
Exhaust	= 0.30±0.3 mm
Intake system	Constant vacuum carburetor, CVRD37 (KEIHIN), minimum bore = 36.3 mm, throttle bore = 37.5 mm
Exhaust system	4-2-1 system, #1-2, #3-4 exhaust pipe coupling
Transmission	Constant mesh type, 6 speeds
Clutch	Wet, multi-disk type
Ignition system	DC-CDI

2 Kit Parts

2-1 Basic Kit Set Contents

Spark Plug Set (You can use STD SPARK PLUGS)

Plug Set

Head Gasket (t = 0.50 mm)

Camshafts and Cam Sprockets

Carburetor Setting Parts Set

Air Funnel Set (Bell Mouth Set)

Air Ventilation Pipe Set

Clutch Spring Set

Rotor Set

CDI Control Unit and Wire Harness Set

Kit Manual

CAUTION:

Although those parts indicated with an asterisk (☆) in the parts list are included in the kit set, when individual parts are required, they are available through the general parts sales channel.

2-2 Engine Parts

1. Maintenance Set (5EB-MAINT-71)

• Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
☆	1	5EB-11603-10	PISTON RING SET	12	
☆	2	93210-17129	CIRCLIP	24	
☆	3	5EB-11654-00	BOLT, CON-ROD	24	
☆	4	90179-07652	NUT	24	
☆	5	4TV-12119-00	SEAL, VALVE STEM	48	
☆	6	4FN-12213-00	GASKET, TENTIONER	3	
☆	7	5EB-13414-00	GASKET, STRAINER	3	
☆	8	5EB-15451-00	GASKET, COVER 1	3	
☆	9	5EB-15461-00	GASKET, COVER 2	3	
☆	10	5EB-15456-00	GASKET 1	3	
☆	11	5EB-15463-00	GASKET 2	3	
☆	12	93102-35423	SEAL, OIL	3	
☆	13	90215-21022	WASHER	3	

○ The piston ring set is for the 5MT-11631-00 and 5EB-11631-10 piston.

2. Spark Plugs

• Parts List

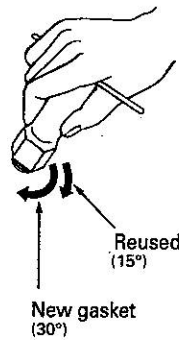
No.	PART No.	PART NAME	Q'TY	REMARKS
1	5FL-94700-70	PLUG, SPARK	1	NGK R0045Q-10

Set No.: 5FL-R045Q-70 (R0045Q-10, 4 plugs)

CAUTION:

Since these spark plugs use a copper gasket, caution is required with respect to the following points during installation.

1. The tightening torque is 1.0 – 1.2 kg-m.
2. When not controlling torque, tighten by turning only 30° after tightening by hand in the case of new plugs. When reusing plugs, turn 15° to tighten.



3. Plug Set

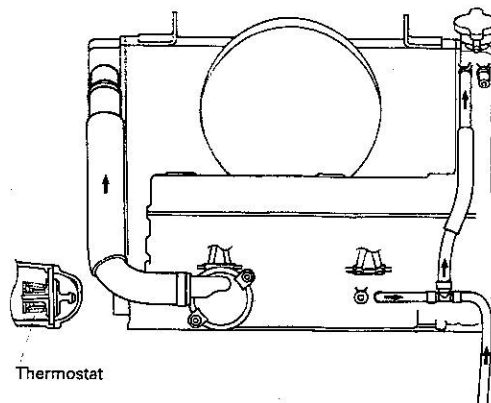
• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
☆ 1	16G-13539-00	PLUG	6	
☆ 2	90467-10039	CLIP	6	

- One plug each is used for the head cylinder and radiator when the carburetor warmer has been removed.
- Four plugs are used for the vacuum outlet portion of intake (head cylinder).

CAUTION:

Remove the thermostat to improve cooling efficiency. A rubber seal is attached to the thermostat body. Assemble after returning this rubber seal only to its original position.



4. Head Gaskets

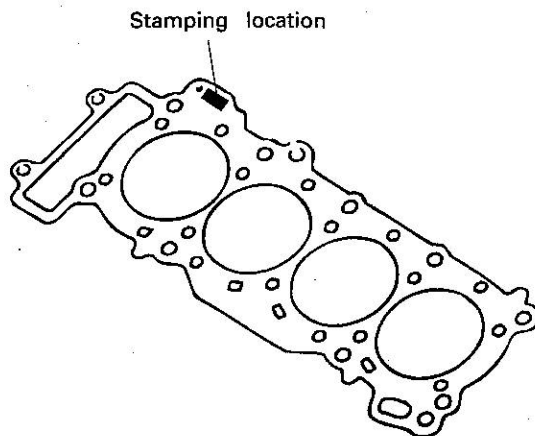
• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-11181-70	GASKET, HEAD CYL.	1	t=0.40mm
2	5EB-11181-80	GASKET, HEAD CYL.	1	t=0.50mm

- The standard gaskets have a thickness of 0.60 mm.
- These gaskets are used to adjust squish height. They are normally used at a squish height of -80 (0.50 mm). In the case of machining the cylinder (upper case), always make sure to measure the squish height and select the gaskets so that it is 0.60 mm or more.

NOTE:

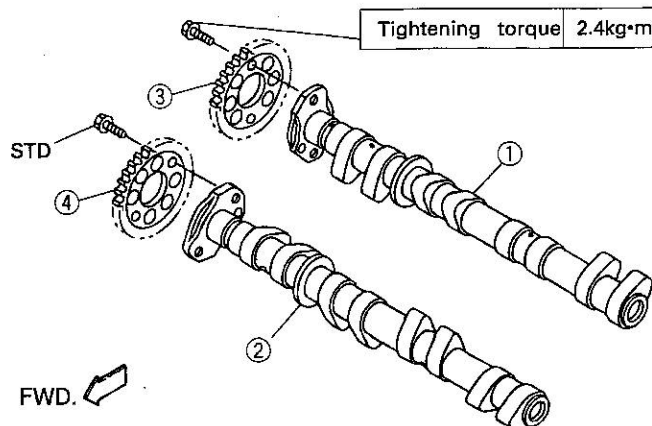
Squish height refers to the clearance between the flat surface of the piston and the surface along the head cylinder.



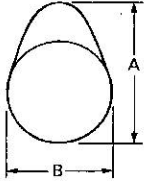
5. Camshaft and Cam Sprockets

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-12171-71	SHAFT, CAM 1	1	INT.300-7.8
2	5EB-12181-70	SHAFT, CAM 2	1	EXT.288-7.3
3	5MT-12176-70	SPROCKET, CAM 1	1	103°
4	5EB-12177-71	SPROCKET, CAM 2	1	112°



• **Specifications**

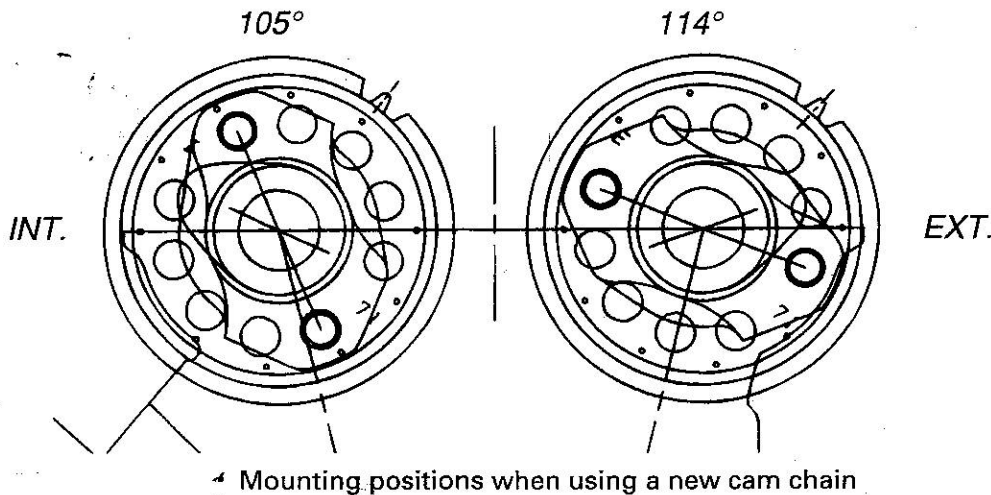
	Intake	Exhaust
Working angle	300°	288°
Valve timing (sprocket)	103° (5MT-12176-70)	112° (5EB-12177-71)
Valve clearance	0.17-0.23 mm	0.27-0.33 mm
Cam lobe 	a: 33.05-33.15 mm b: 25.18-25.28 mm	a: 32.55-32.65 mm b: 25.11-25.21 mm

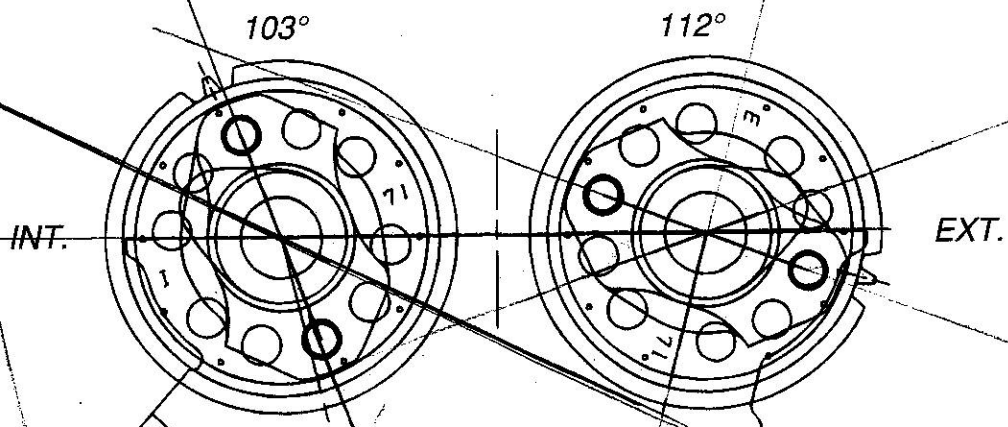
• **Aligning of Valve Timing**

- When assembling the camshaft, always make sure to align the valve timing. If this is not done, not only will performance not be enhanced when the camshaft is assembled, it will also cause damage to the engine.
- Use the cam sprocket included in the kit for aligning valve timing. The cam sprocket included in the kit allows selection of five valve timings. In the case of aligning for the purpose of attaining a minimum squish height of 0.60 mm, use of the center mounting hole allows setting for intake valve timing of 103° and exhaust valve timing of 112°.
- Valve timing adjustment range can be changed to either $\pm 1^\circ$ or $\pm 2^\circ$ relative to the center mounting hole.

CAUTION:

1. In the case of using a new cam chain, make sure to wear in by assembling on the cam sprockets as shown in the diagram below. Since the cam chain stretches by 1~1.5° after completion of wear-in, adjust by changing the cam sprocket mounting positions after re-measuring cam timing.

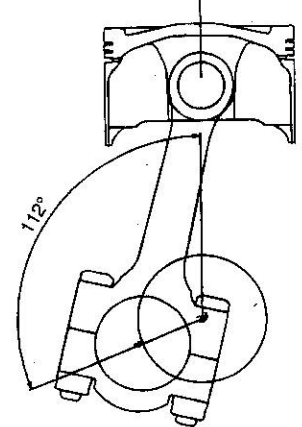
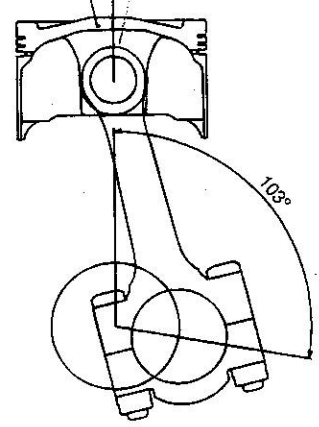
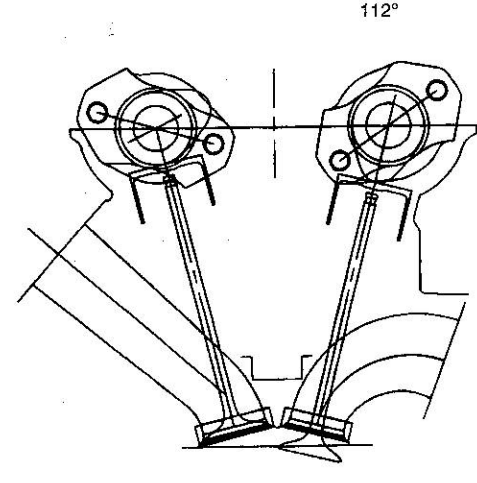
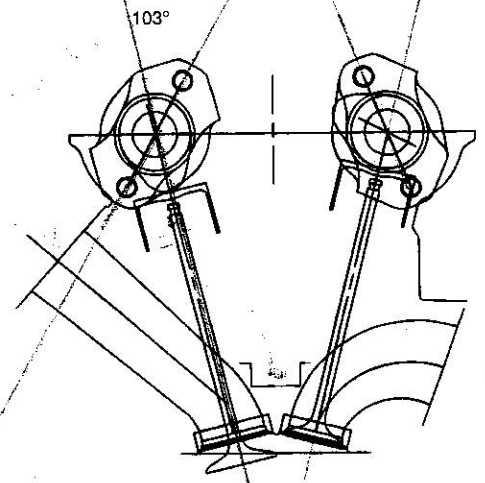




Mounting positions after completion of break-in

EVENT ANGLE INT.

EVENT ANGLE EXT.



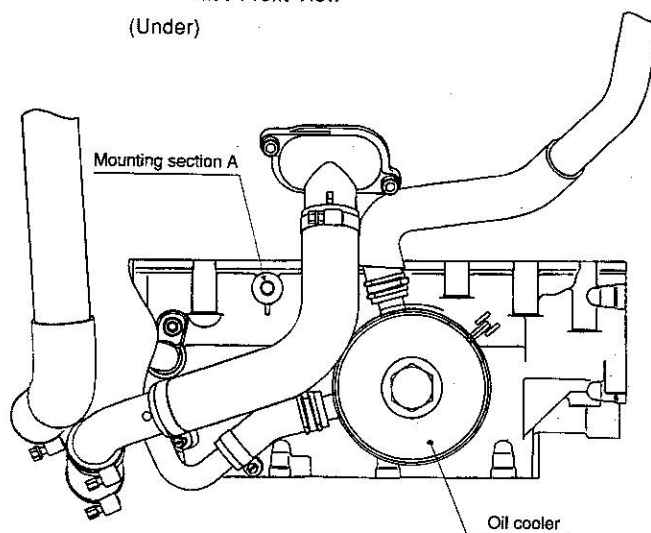
Event Angle

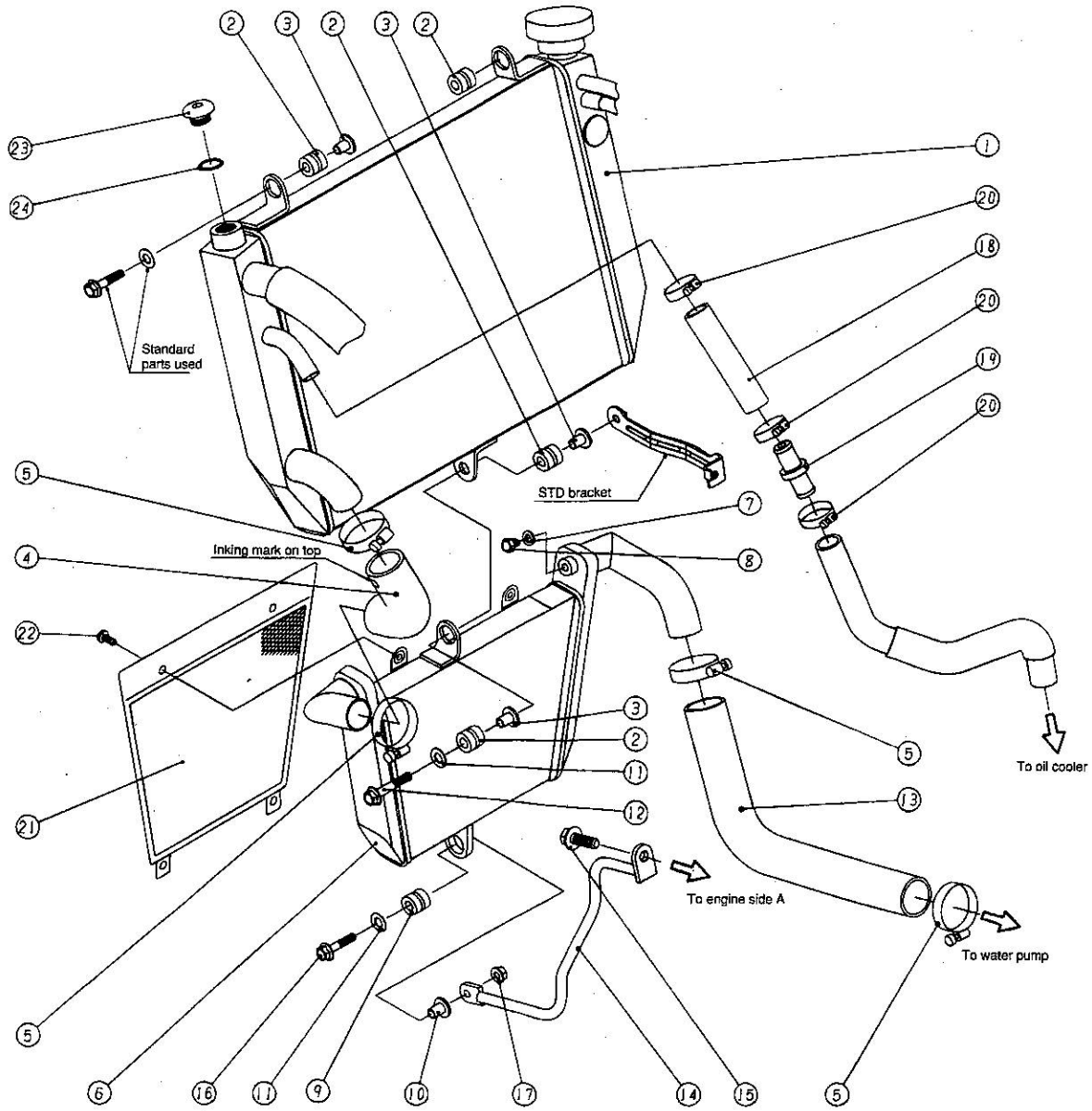
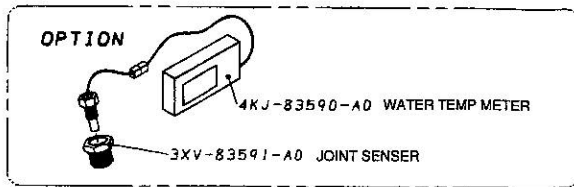
6. Radiator Set (5EB-A2400-80)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-12460-70	RADIATOR ASSY.	1	
☆ 2	90480-15363	GROMMET	4	
☆ 3	90387-07391	COLLAR	3	
4	5EB-12576-71	HOSE, 1	1	RAD.-SUB.RAD.
☆ 5	90450-35001	CLAMP, HOSE	4	
6	5EB-1240A-74	SUB. RAD. ASSY.	1	
☆ 7	90430-06166	GASKET	1	Air venting
☆ 8	97017-06008	BOLT	1	Air venting
☆ 9	90480-15001	GROMMET	1	
☆ 10	90387-0614M	COLLAR	1	
☆ 11	90201-06071	WASHER, PLAIN	2	
☆ 12	95807-06040	BOLT, FLG.	1	Top of sub-radiator M6, L40
13	5EB-12579-70	HOSE, 4	1	Radiator W/P
14	5EB-1244E-71	BRACKET, 1	1	Bottom of sub-radiator
☆ 15	95807-08016	BOLT, FLG.	1	Engine side M8, L16
☆ 16	95807-06030	BOLT, FLG.	1	Bottom of sub-radiator M6, L30
☆ 17	95707-06500	NUT, FLG.	1	Bottom of sub-radiator
18	5EB-12589-71	HOSE, 6	1	O/C-radiator
19	5EB-24380-70	JT., PIPE	1	
☆ 20	90450-22052	HOSE, CLAMP	3	
21	5EB-12467-70	COVER, RADIATOR	1	
☆ 22	97607-05216	SCREW, PH/ W/W	4	Cover radiator mounted at 4 locations
☆ 23	36Y-15189-00	PLUG	1	
☆ 24	93210-16325	O RING	1	

Crankcase Front View
(Under)





Radiator Set Assembly

1. Remove the STD radiator and assemble the kit radiator and sub-radiator as shown above.
2. After assembling the kit radiator, finally attach radiator cover (21).

7-1. Carburetor Setting Parts (5MT-A4140-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	#118	MAIN JET	2	99101-393-0118
2	#120	MAIN JET	2	99101-393-0120
3	#122	MAIN JET	2	99101-393-0122
4	#125	MAIN JET	2	99101-393-0125
5	#128	MAIN JET	2	99101-393-0128
6	#130	MAIN JET	2	99101-393-0130
7	#132	MAIN JET	2	99101-393-0132
8	5MT-14916-70	NEEDLE	2	"N9WB"
9	5MT-14917-90	NEEDLE	2	"N8NC"
10	4TV-14919-70	CLIP	4	
11	4TV-1491G-70	COLLAR 1	4	t=0.45mm
12	4TV-1491H-70	COLLAR 2	4	t=0.85mm
13	5EB-1414G-70	MAIN BLEED PIPE	4	
14	#38	PILOT JET	4	1001-GC7H-0350

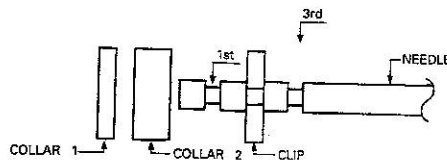
• Standard Settings

	#1, #4	#2, #3
MAIN JET	#125	#128
NEEDLE	N9WB -2.0	N8NC -2.0
MAIN BLEED	KIT (NON BLEED TYPE)	KIT (NON-BLEED TYPE)
MAIN AIR JET	#110 (STD)	#110 (STD)
PILOT JET	#38	#38
PILOT AIR JET	#100 (STD)	#100 (STD)

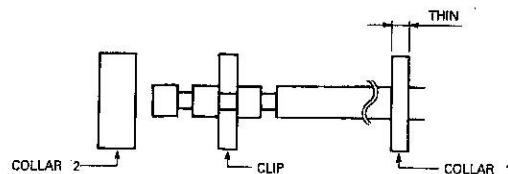
- This setting data applies to the use of the bell mouth of the kit and removed ELEMENT ASS'Y.
- Set up the air ventilation pipe according to this manual. If the air ventilation pipe is not attached or installed at the indicated position, standard settings may not be applicable.

Refer to the diagrams below for adjustment of the jet needle.

a. 2nd POSITION



b. 2.5 POSITION



7-2. Carburetor Setting Parts (5EB-A4140-80, for 2000 model)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	#118	MAIN JET	2	99101-393-0118
2	#120	MAIN JET	2	99101-393-0120
3	#122	MAIN JET	2	99101-393-0122
4	#125	MAIN JET	2	99101-393-0125
5	#128	MAIN JET	2	99101-393-0128
6	#130	MAIN JET	2	99101-393-0130
7	#132	MAIN JET	2	99101-393-0132
8	5EB-14916-71	NEEDLE	2	"N9WA"
9	5EB-14917-71	NEEDLE	2	"N8NB"
10	4TV-14919-70	CLIP	4	
11	4TV-1491G-70	COLLAR 1	4	t=0.45mm
12	4TV-1491H-70	COLLAR 2	4	t=0.85mm
13	5EB-1414G-70	MAIN BLEED PIPE	4	
14	#35	PILOT JET	4	1001-GC7H-0350

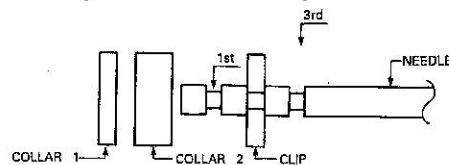
• Standard Settings

	#1 ,#4	#2 ,#3
MAIN JET	#125	#128
NEEDLE	N9WA -2.0	N8NB -2.0
MAIN BLEED	KIT (NON BLEED TYPE)	KIT (NON-BLEED TYPE)
MAIN AIR JET	#110 (STD)	#110 (STD)
PILOT JET	#35	#35
PILOT AIR JET	#100 (STD)	#100 (STD)

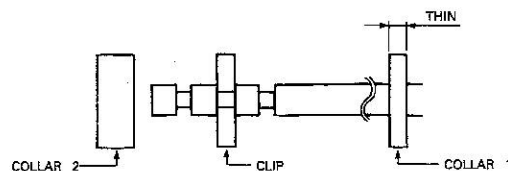
- This setting data applies to the use of the bell mouth of the kit and removed ELEMENT ASS'Y.
- Set up the air ventilation pipe according to this manual. If the air ventilation pipe is not attached or installed at the indicated position, standard settings may not be applicable.

Refer to the diagrams below for adjustment of the jet needle.

a. 2nd POSITION



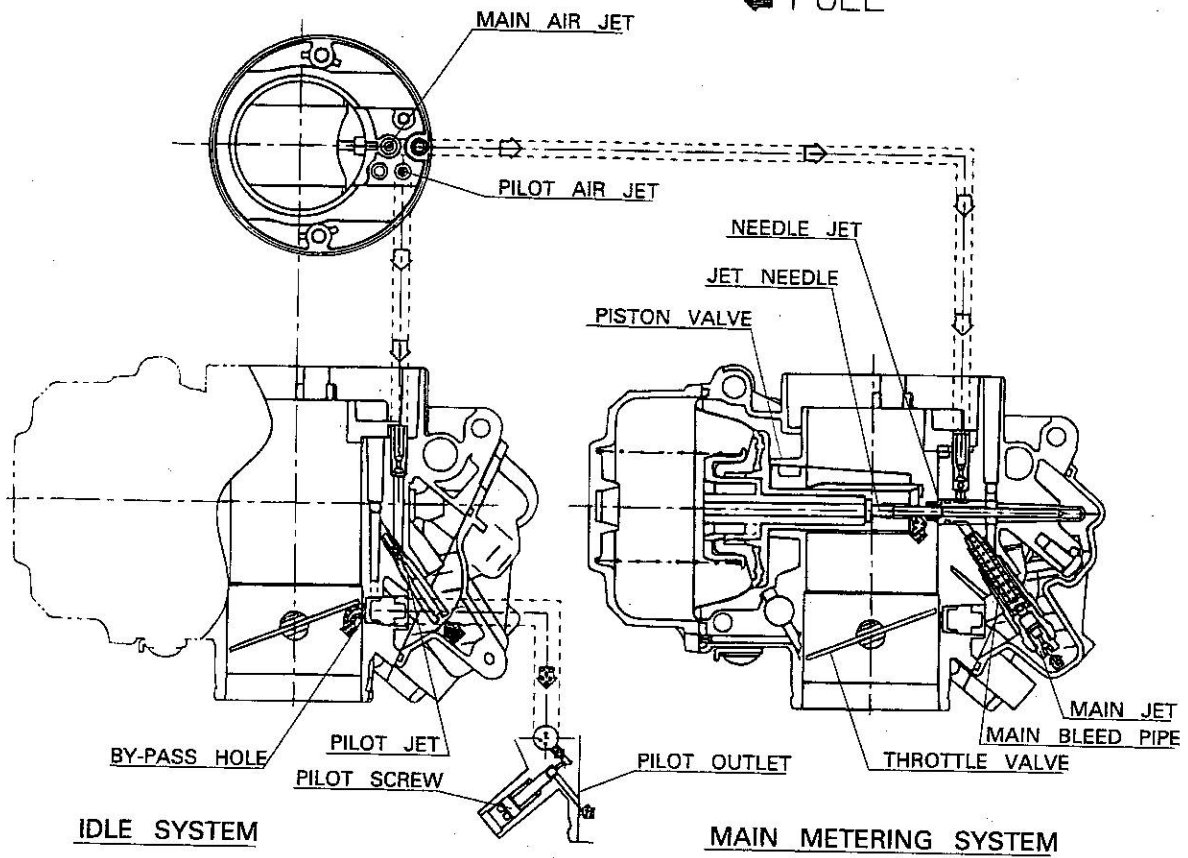
b. 2.5 POSITION



◊ AIR

◈ MIXTURE

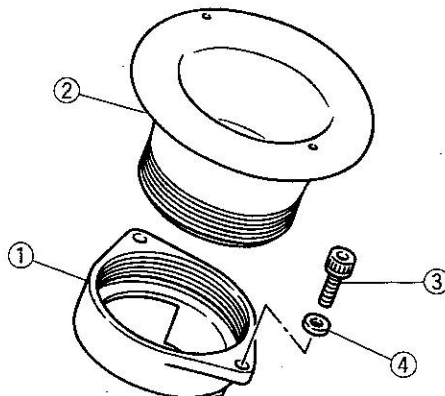
◀ FUEL



8. Air Funnel Set (Bell Mouth Set) (5EB-A4460-80)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-14454-80	JOINT	4	
2	5EB-14469-80	FUNNEL (BELL-MOUTH)	4	
☆	91317-04012	BOLT	8	
☆	92907-04600	WASHER	8	



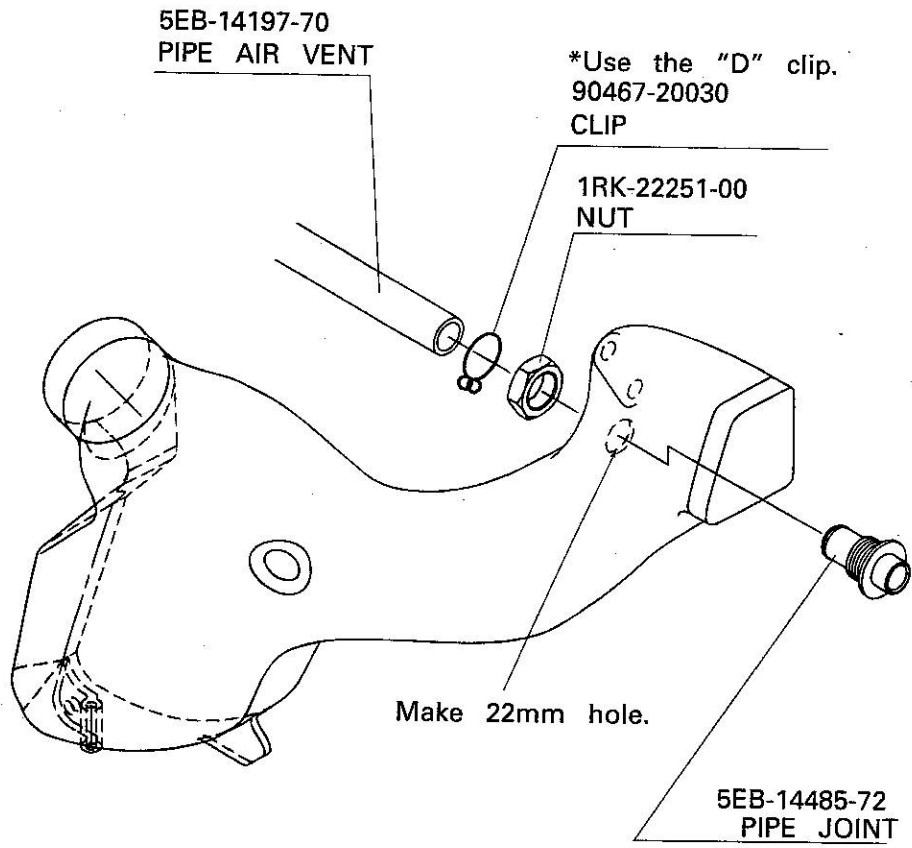
Installation Precautions:

- Attach the joint to the carburetor, and after installing the lower air cleaner case, attach the funnel to the joint.
- Nominal dimensions are represented with the height when the funnel and joint are assembled. The nominal dimension is 40 mm in the case of this kit.

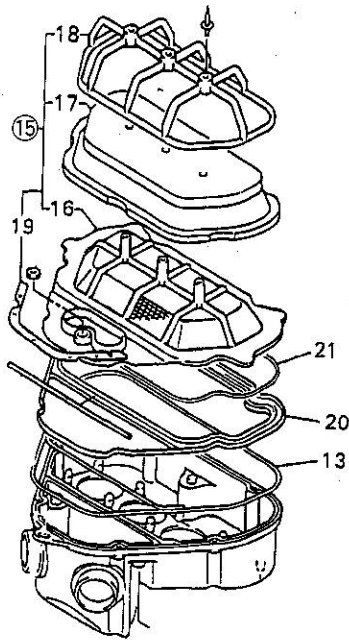
9. Air Ventilation Pipe Set (5EB-A4480-70)

• Parts List

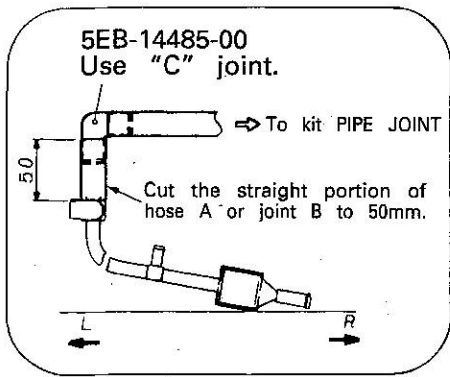
No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-14485-70	PIPE, JOINT	1	
2	1RK-22251-00	NUT 1	1	
3	5EB-14197-70	PIPE, AIR VENT	1	
4	90331-14010	PLUG	1	



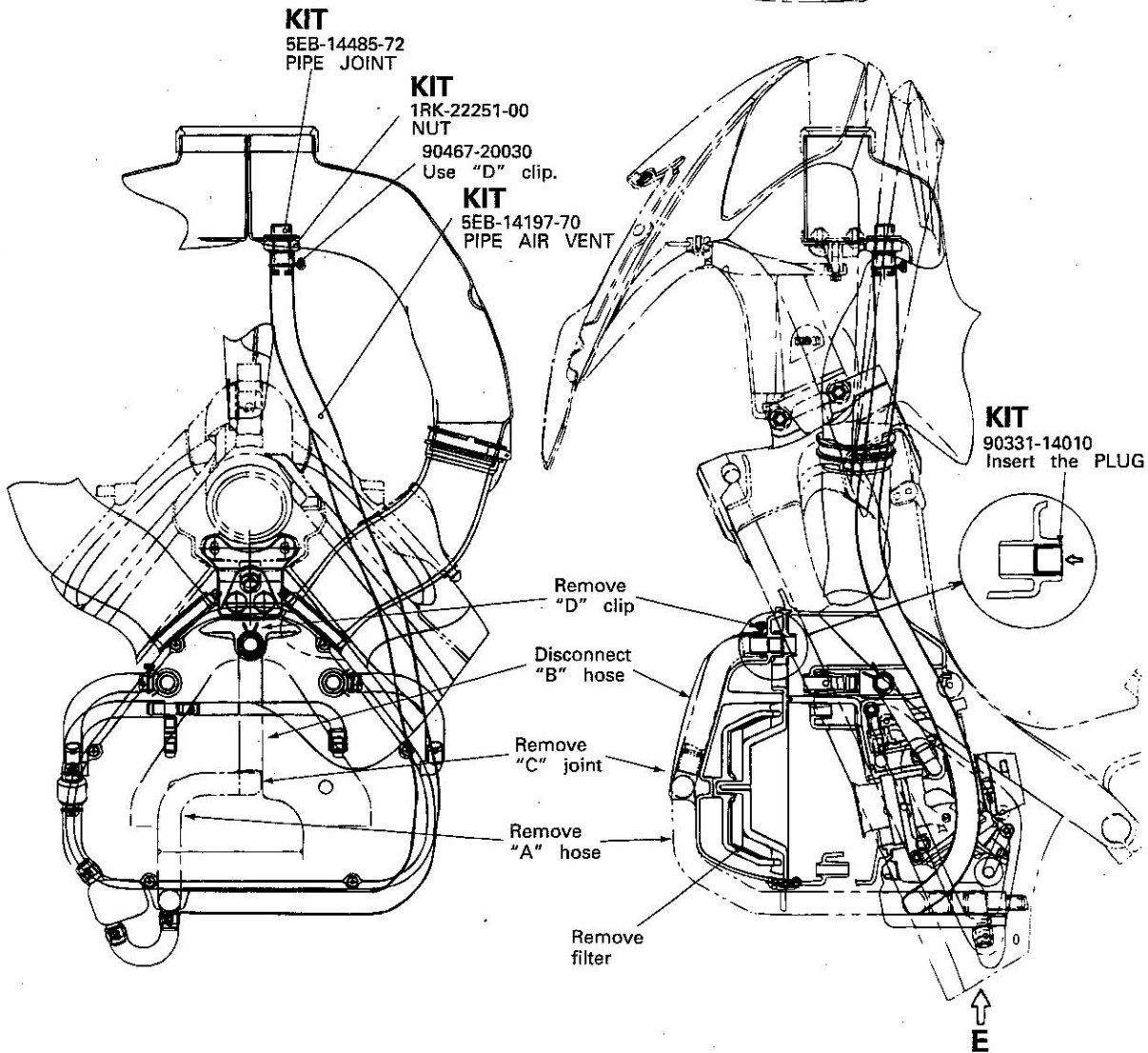
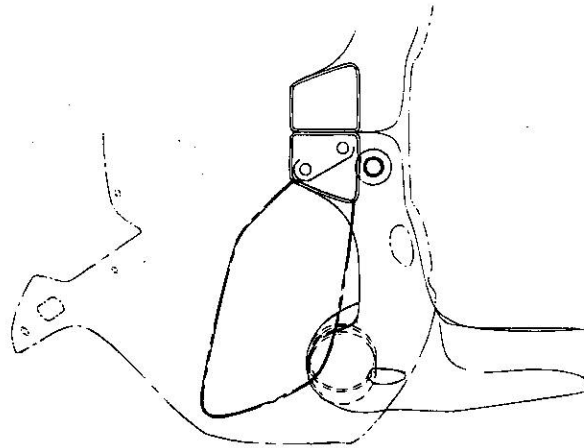
Must remove ⑮ ELEMENT ASS'Y.



AIR VENT PIPESET installation



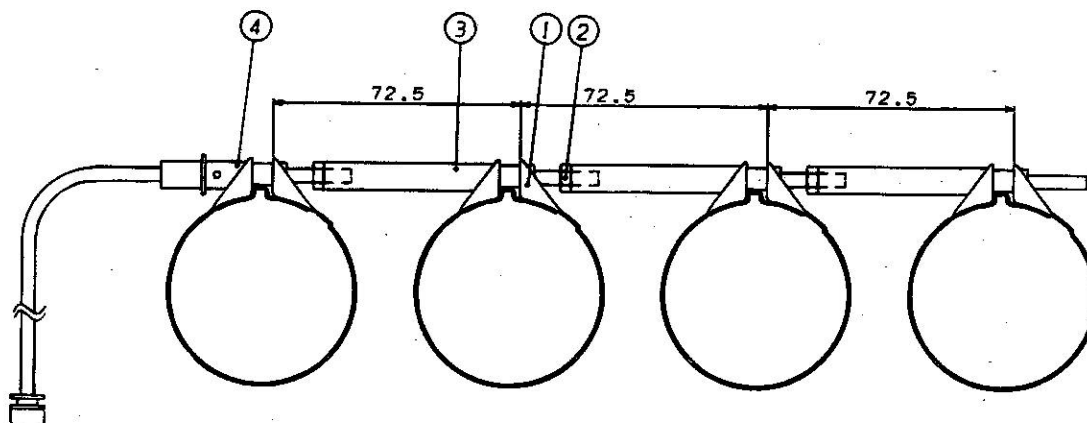
View E



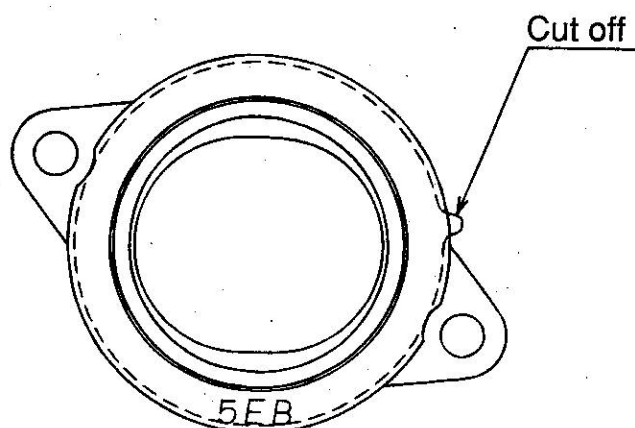
10. Carburetor Clump complete (5EB-1351A-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
☆ 1	90450-54093	BAND	4	
☆ 2	95307-04600	NUT	4	
3	5EB-13573-70	BOLT, 1	3	
4	5EB-1358A-70	ROD COMP.	1	



This part is the one to improve the service of the carburetor.
Cut off prominence for the positioning of the band is in "joint, carburetor 1" before using.

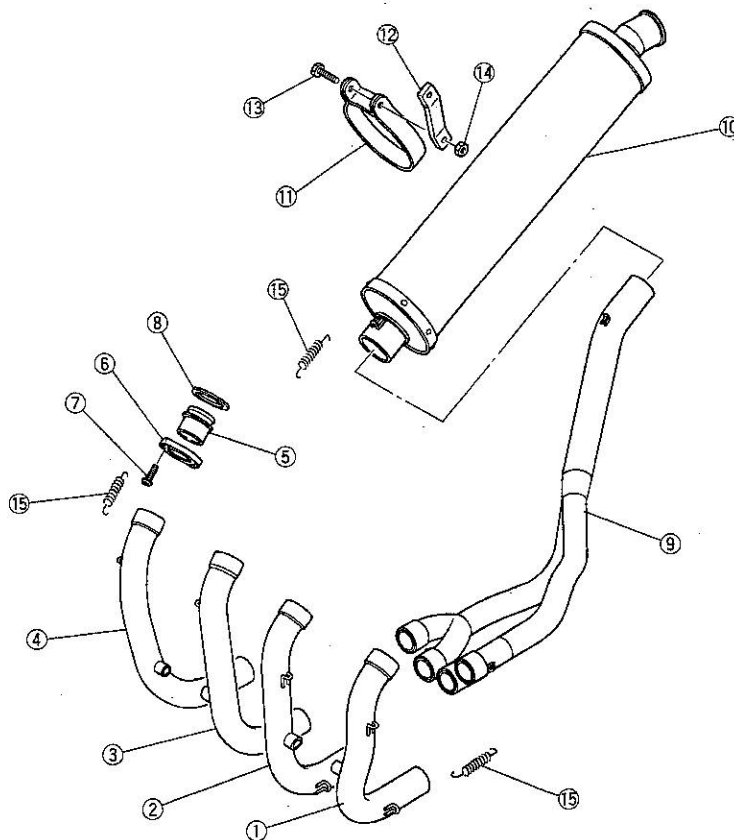


The color has arrived at the band for the prevention to tighten up too much.
When bracing ordinarily, the crack in this place becomes about 9 millimeters.
Turn a control with the hand and brace it.
A bolt isn't sometimes included in the nut has been welded together in the band when exchanging in the new band.
In this case, at the nut, must through the tap of "M4x0.7", correct a nut.

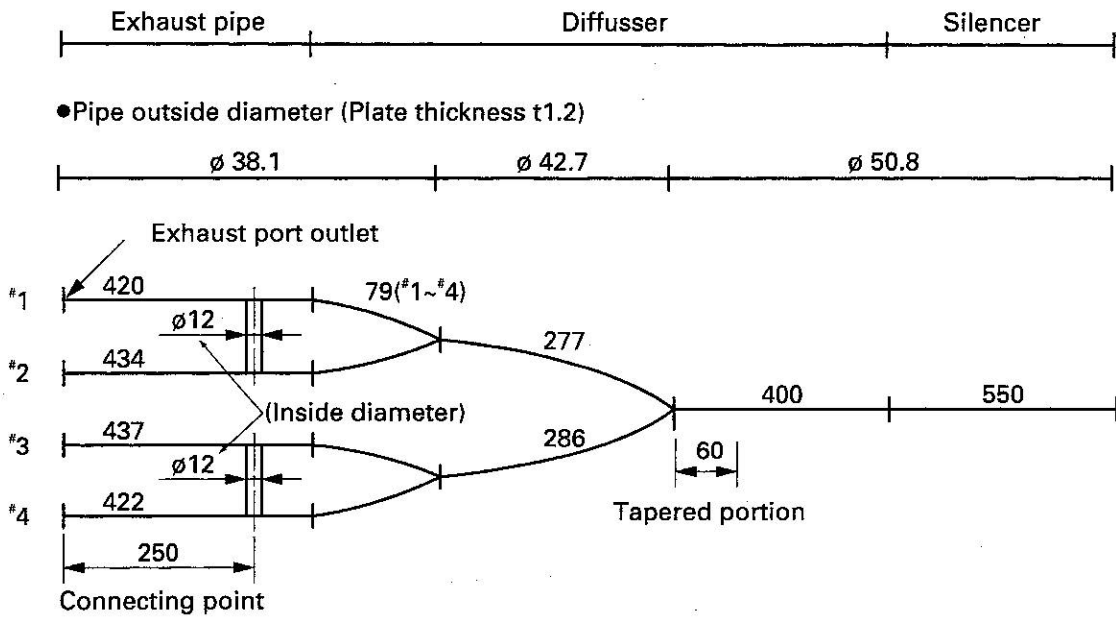
11. Exhaust Pipe Set (5EB-A4600-72)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-14611-71	PIPE, EXT. 1	1	
2	5EB-14621-71	PIPE, EXT. 2	1	
3	5EB-14631-71	PIPE, EXT. 3	1	
4	5EB-14641-71	PIPE, EXT. 4	1	
5	2TK-14612-70	NUT, RING 1	4	
6	5EB-14622-70	NUT, RING 2	4	
☆	7	92017-08016	BOLT	8
☆	8	3YF-14613-01	GASKET	4
9	5EB-14785-72	DIFFUSER	1	
10	5EB-14750-70	SILENCER ASS'Y	1	
11	5FL-1471K-70	BRACKET	1	
12	5EB-21445-72	STAY	1	
☆	13	92014-08020	BOLT	1
☆	14	95607-08200	NUT	1
☆	15	90507-20030	SPRING	10



EXT. DIMENSION



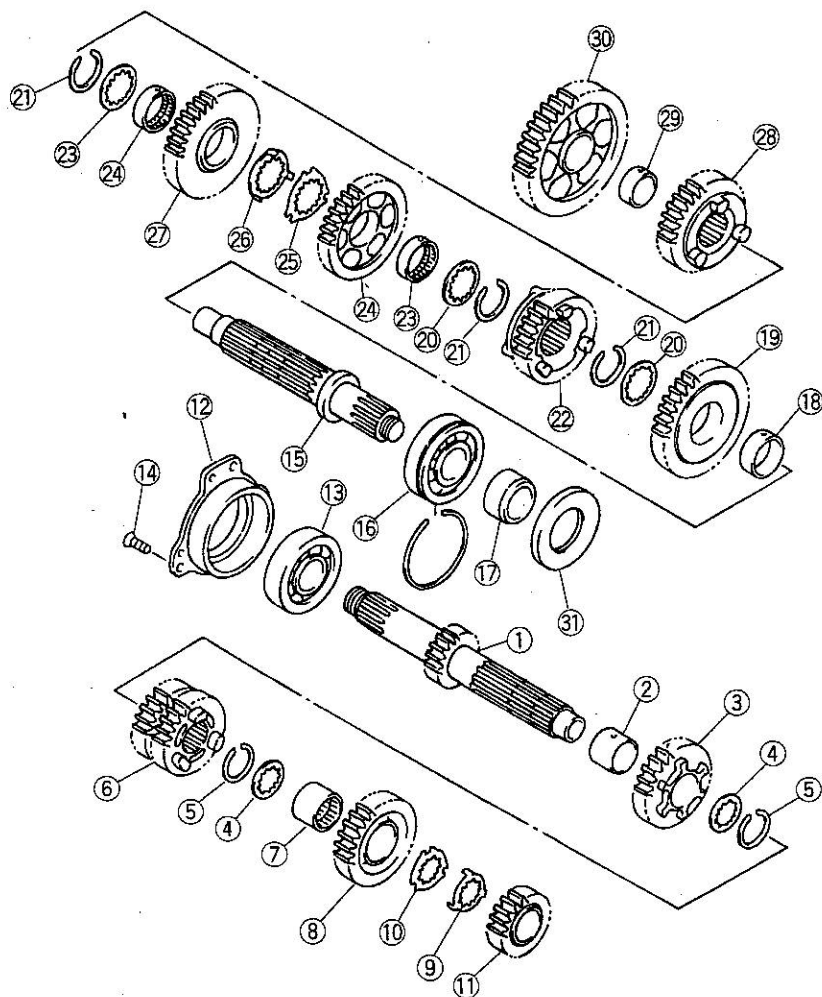
12. Transmission Gear Set (5EB-A7400-70)

• Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
	1	5EB-17411-70	AXLE, MAIN (A)	1	15T
	1	5EB-17411-80	AXLE, MAIN (B)	1	16T
☆	2	90387-253M6	COLLAR	1	
	3	5EB-17151-70	GEAR, 5P	1	26T
☆	4	90209-21332	WASHER	2	
☆	5	93440-25084	CIRCLIP	2	
	6	5EB-17131-70	GEAR, 3P (A)	1	21T/25T
	6	5EB-17131-80	GEAR, 3P (B)	1	19T/25T
☆	7	90387-2513E	COLLAR	1	
	8	5EB-17161-70	GEAR, 6P	1	22T
☆	9	90209-22352	WASHER	1	
☆	10	90209-21351	WASHER	1	
	11	5EB-17121-70	GEAR, 2P	1	21T, A&B
☆	12	5EB-15163-01	HOUSING	1	
☆	13	93306-30525	BEARING	1	
☆	14	90149-06285	SCREW	3	
☆	15	5EB-17421-00	AXLE, DRIVE	1	
☆	16	93306-30546	BEARING	1	
☆	17	90387-2504A	COLLAR	1	
☆	18	90387-2813C	COLLAR	1	
	19	5EB-17221-70	GEAR, 2W (A)	1	35T
	19	5EB-17221-80	GEAR, 2W (B)	1	36T
☆	20	90209-25342	WASHER	3	
☆	21	93440-28062	CIRCLIP	3	
	22	5EB-17261-70	GEAR, 6W	1	24T
☆	23	90387-2813D	COLLAR	2	
	24	5EB-17241-70	GEAR, 4W	1	31T
☆	25	90209-25349	WASHER	1	
☆	26	90209-25350	WASHER	1	
	27	5EB-17231-70	GEAR, 3W (A)	1	29T
	27	5EB-17231-80	GEAR, 3W (B)	1	27T
	28	5EB-17251-70	GEAR, 5W	1	30T
☆	29	90387-2202V	COLLAR	1	
	30	5EB-17211-70	GEAR, 1W (A)	1	31T
	30	5EB-17211-80	GEAR, 1W (B)	1	34T
☆	31	93102-35423	SEAL, OIL	1	

CAUTION:

1. The 2P gear is used for both gear ratios A and B.



• Gear Ratio

Speed	A No. of teeth (gear ratio)	B No. of teeth (gear ratio)	C (Option) No. of teeth (gear ratio)	STD (Reference) No. of teeth (gear ratio)
1st	31/15 (2.066)	34/16 (2.125)	32/14 (2.285)	37/13 (2.846)
2nd	35/21 (1.666)	36/21 (1.714)	—	37/19 (1.947)
3rd	29/21 (1.380)	27/19 (1.421)	—	28/18 (1.555)
4th	31/25 (1.240)	(←)	—	32/24 (1.333)
5th	30/26 (1.153)	(←)	—	25/21 (1.190)
6th	24/22 (1.090)	(←)	—	26/24 (1.083)
L/T	1.894	1.947	(2.095)	2.628

CAUTION

The gears of the kit transmission and those of the standard transmission are completely incompatible.
 Only combine the gears provided in the kit transmission set.

13. Sprockets

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	4FN-17460-74	SPROCKET, DRIVE		14T
2	4FN-17460-74	SPROCKET, DRIVE		15T
3	4FN-17460-74	SPROCKET, DRIVE		16T
4	4FN-17463-71	NUT		
5	5EB-25443-70	SPROCKET, REAR		43T
6	5EB-25444-70	SPROCKET, REAR		44T
7	5EB-25445-70	SPROCKET, REAR		45T
8	5EB-25446-70	SPROCKET, REAR		46T
9	5EB-25447-70	SPROCKET, REAR		47T
10	5EB-25448-70	SPROCKET, REAR		48T
11	5EB-25449-70	SPROCKET, REAR		49T

- These parts are for 520 chain size (the standard size is 532).
- In the case of using the standard drive sprocket nut, it cannot be tightened as is. In this case, use three STD lock washers or use kit nut (4FN-17463-71).
- Do not use a 17T drive sprocket. This will cause contact between the engine case and chain that may result in damage.

<Gear Ratio Conversion Table>

Front Rear	14T	15T	16T	
43T	3.071	2.866	2.687	Secondary reduction = $\frac{\text{Driven sprocket}}{\text{drive sprocket}}$ STD SETTING = $\frac{47}{15}$ CHAIN = 520 SIZE.
44T	3.142	2.933	2.750	
45T	3.214	3.000	2.812	
46T	3.285	3.066	2.875	
47T	3.357	3.133	2.937	
48T	3.428	3.200	3.000	
49T	3.500	3.266	3.062	
50T	3.571	3.333	3.125	

14. 1st Speed Gear Set

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-17411-90	AXLE, MAIN	1	14T (C)
2	5EB-17211-90	GEAR, 1 ST WHEEL	1	32T (C)
☆	3	5EB-15163-01	1	HOUSING
☆	4	93306-30525	1	BEARING

This gear has a lower ratio than gear ratios A and B of the kit in order to improve starting on high-speed courses.

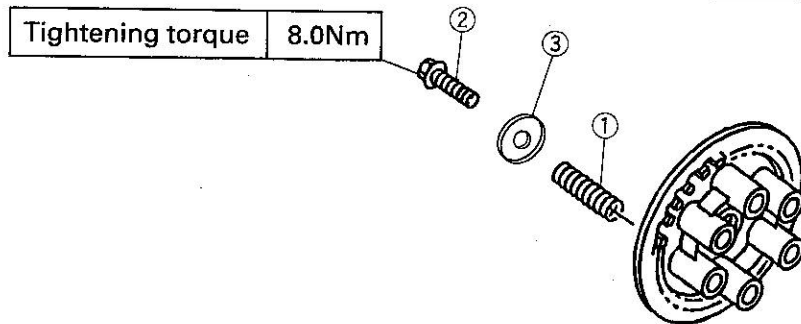
15. Clutch Spring Set (5EB-A6330-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	3FV-2304E-70	SPRING	6	
2	5EB-90159-70	SCREW	6	
3	5EB-16559-70	WASHER	6	

• Specifications

	Kit	Standard
Identification color	Red	Pink
Free length	50.2 mm	55.0 mm
Mounting load	24.1 kgf	20.4 kgf
Mounting height	29.6 mm	29.6 mm



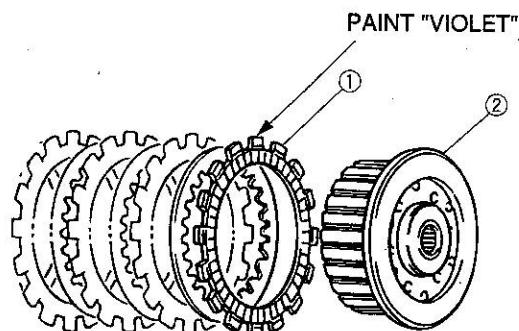
This clutch spring set contains a spring featuring increased pressure load of approximately 20%, along with a washer for improving the durability of the spring itself and the pressure plate by suppressing excessive movement of the spring.

16. Friction Plate and Clutch Boss

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-16321-72	PLATE, FRICTION	8	SET=5EB-A6321-72
2	5EB-16371-70	BOSS, CLUTCH	1	

The friction plate of this kit offers improved durability and operation feel in comparison with the standard friction plate. The clutch boss features improved durability as a result of surface treatment.

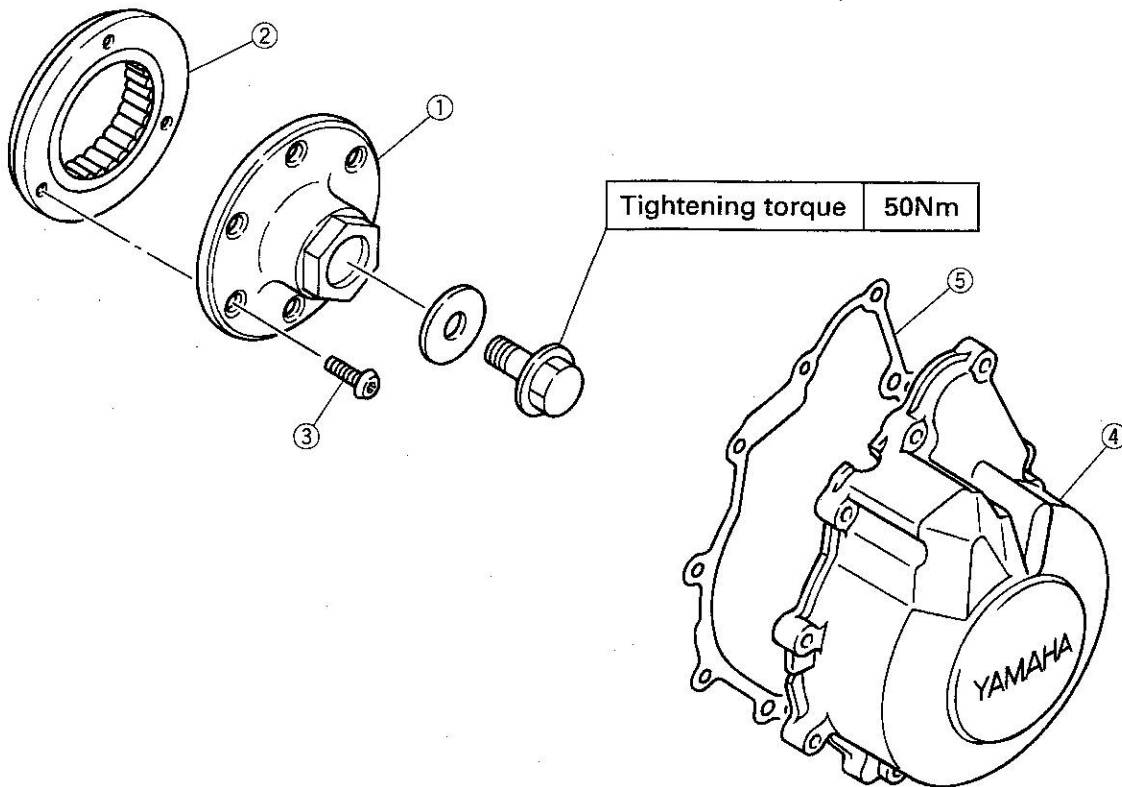


17. Rotor Set (5EB-F1400-71)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-81411-70	BASE	1	
☆ 2	5BP-15590-00	CLUTCH ASS'Y	1	
☆ 3	90149-08329	SCREW	3	
4	5EB-15411-70	COVER 1	1	
☆ 5	5EB-15451-00	GASKET	1	

This set is for reducing crank mass by allowing removal of the magnet rotor for electrical power generation. The height of the cover has been changed to increase the cornering angle.

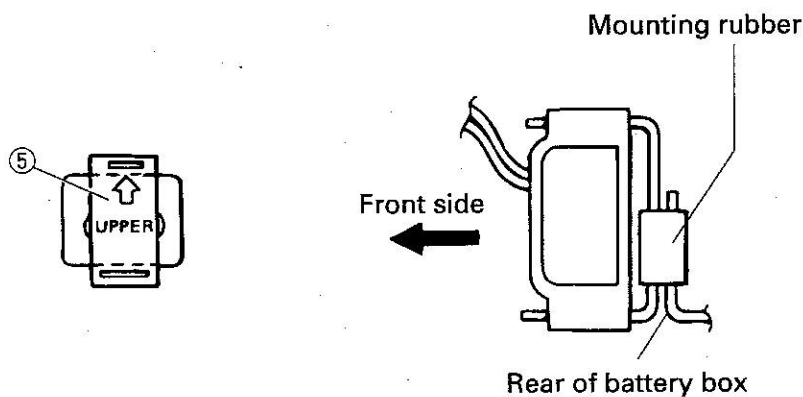


18-1. CDI Control Unit and Wire Harness Set (5MT-F2590-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5MT-85540-70	CDI UNIT ASS'Y	1	
2	5MT-82590-70	WIRE-HARNESS ASS'Y	1	
☆ 3	25G-81950-01	RELAY ASS'Y	1	
☆ 4	4U8-81950-02	RELAY ASS'Y	1	
☆ 5	4BH-82576-00	EMERGENCY SW.	1	
6	0WG3-90801-10	SELECTOR SW.	1	

Install emergency switch ⑤ while paying attention to the vertical orientation of the switch as shown in the diagram.



Always make sure to remove the battery when storing the motorcycle. Although the fuel indicator inside the meter will flash if the fuel sender is not connected, this does not present any problem for motorcycle operation. This flashing is due to the circuit inside the meter interpreting not connecting the fuel sender as a disconnection in the circuit.

In this kit, the ECU and wire harness set have been designed to enable adjustment of the initial position by $\pm 3^\circ$ in order to correct ignition timing due to differences in fuel and circuit conditions.

CAUTION

1. The standard position is selector switch "3".

	STD IGN.							
Selector Knob Position	0	1	2	3	4	5	6	7
Amount of Change	-3°	-2°	-1°	$\pm 0^\circ$	$+1^\circ$	$+2^\circ$	$+3^\circ$	$\pm 0^\circ$

In the case of positions other than those indicated above in the table or in the case of removing the selector, the setting becomes the STD ignition ($\pm 0^\circ$).

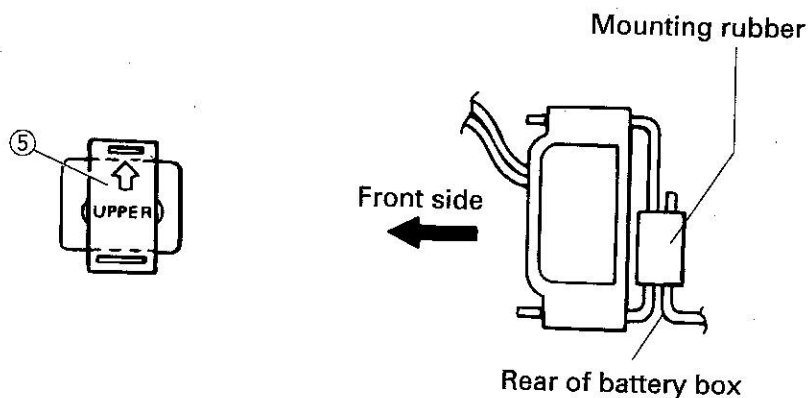
2. When a change cannot be felt even if the selector knob position has been changed, select a lower (smaller number) position.
3. Refer to the end of this manual for the wiring diagram.

18-2. CDI Control Unit and Wire Harness Set (5EB-F2590-80, For 2000 model)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-85540-80	CDI UNIT ASS'Y	1	
2	5EB-82590-80	WIRE-HARNESS ASS'Y	1	
☆ 3	25G-81950-01	RELAY ASS'Y	1	
☆ 4	4U8-81950-02	RELAY ASS'Y	1	
☆ 5	4BH-82576-00	EMERGENCY SW.	1	
6	0WG3-90801-10	SELECTOR SW.	1	

Install emergency switch ⑤ while paying attention to the vertical orientation of the switch as shown in the diagram.



Always make sure to remove the battery when storing the motorcycle. Although the fuel indicator inside the meter will flash if the fuel sender is not connected, this does not present any problem for motorcycle operation. This flashing is due to the circuit inside the meter interpreting not connecting the fuel sender as a disconnection in the circuit.

In this kit, the ECU and wire harness set have been designed to enable adjustment of the initial position by $\pm 3^\circ$ in order to correct ignition timing due to differences in fuel and circuit conditions.

CAUTION

1. The standard position is selector switch "3".

	STD IGN.							
Selector Knob Position	0	1	2	3	4	5	6	7
Amount of Change	-3°	-2°	-1°	$\pm 0^\circ$	$+1^\circ$	$+2^\circ$	$+3^\circ$	$\pm 0^\circ$

In the case of positions other than those indicated above in the table or in the case of removing the selector, the setting becomes the STD ignition ($\pm 0^\circ$).

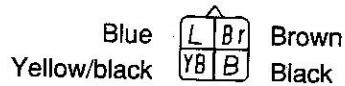
2. When a change cannot be felt even if the selector knob position has been changed, select a lower (smaller number) position.
3. Refer to the end of this manual for the wiring diagram.

19. Tachometer Set (5EB-F3540-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-83540-70	TACHOMETER ASS'Y	1	
2	5EB-8355H-70	CORD	1	

This tachometer can be used for the YZF-R6 or YZF-R1. The wire harness of the 2001 kit comes with a mounting coupler. In the case of using for the 2000 kit or earlier or the standard harness, attach the cord provided to the harness.



Brown = Tachometer driving power supply (+, 12 V)

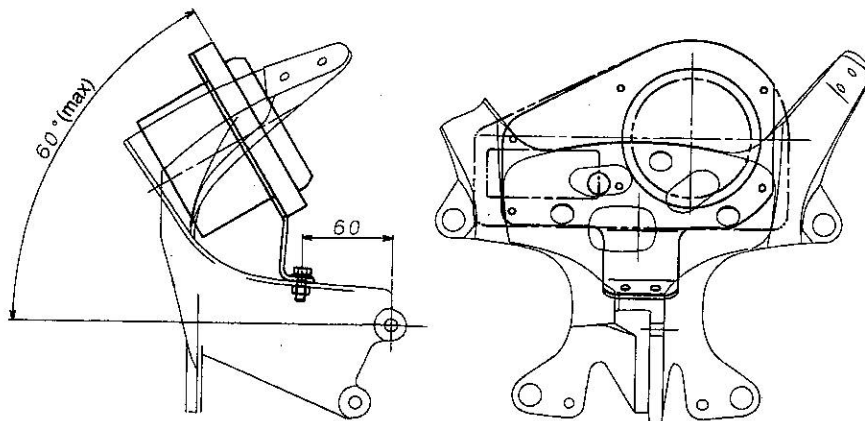
Black = Ground (-)

Yellow/black = Signal from igniter (2 pulses/revolution)

Blue = Light power supply (+, 12 V)

This tachometer is operated by a signal comprised of two pulses per revolution. In the case of installing on a single-pulse motorcycle, the value indicated for engine speed is half the actual engine speed. Use the 3FV-83540-70 for operation at 1 pulse per revolution. Always make sure to connect the pickup signal from the igniter. The meter may be damaged if this is connected from the primary wire of the ignition coil.

In the case of mounting the tachometer on the chassis, support it so that it is not mounted directly on the chassis, but rather is cushioned with a rubber sponge and so forth. The mounting angle should be 60 degrees or less. When storing individually, place the display surface facing up.



20. Water Temperature Meter Set (4KJ-F3590-A1)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	4KJ-83590-A1	WATER TEMP. METER	1	
2	3XV-83591-A0	ADAPTER	1	

This water temperature meter is powered by a dry cell battery. Although the meter will continue to operate for about one year, if the display becomes difficult to see or is no longer visible, open the back cover and replace the battery (part no. LR44, 1 pc.).

The mounting size of the sensor is PT1/8. In the case of the R6, install in place of the standard sensor located behind the head cylinder. The adapter uses M16 and has a pitch of 1.5. It is compatible with the kit radiator.

21. Meter Stay Set

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-28356-70	STAY 1	1	
2	YR0-83611-70	PANEL, METER	1	
☆	4A0-83522-00	COLLAR	6	
☆	97780-40110	SCREW	6	

This meter stay set is for use with the tachometer of this kit. To install, either bolt or weld to the standard stay (refer to the section on the tachometer).

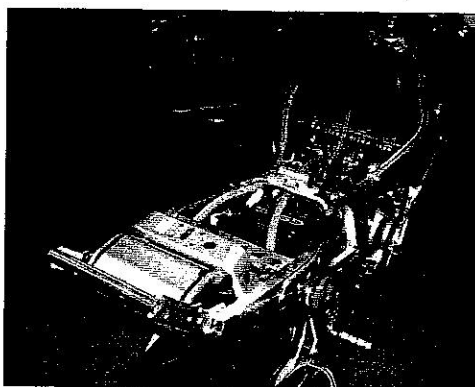
3. Chassis Parts

22. Oil Catcher Tank Set

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-21707-70	OIL TANK COMP	1	
2	5EB-15373-70	PIPE, BREATHER	2	
☆ 3	90464-15152	CLAMP	2	L=370mm
☆ 4	90465-10098	CLAMP	2	L=100mm

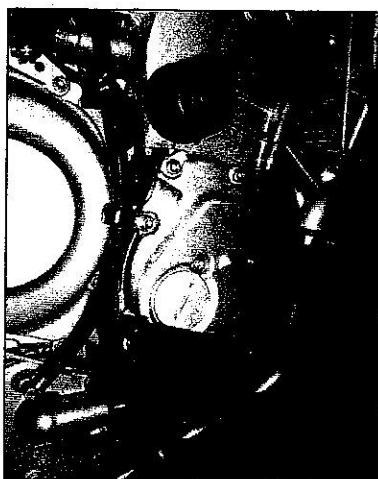
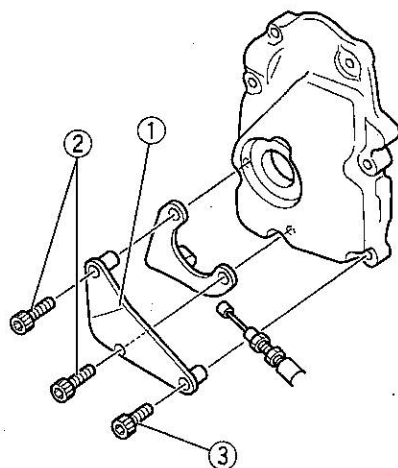
This actual capacity of this oil tank is 1000 cc. Install behind the rear frame above the rear fender (see photograph).



23. Engine Protector Set (5EB-A5491-70)

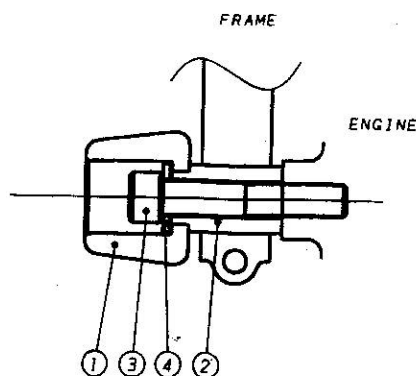
No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-15491-70	PROTECTOR	1	
☆ 2	91314-06030	BOLT	2	
☆ 3	91314-06025	BOLT	1	

This part reduces damage when the motorcycle tips over along with the chassis protector.



24. Chassis Protector Set (5EB-C117G-70)

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-2117G-70	PROTECTOR	2	
2	5EB-21472-70	COLLAR, PROTECTOR LH	1	
2	5EB-21472-75	COLLAR, PROTECTOR RH	1	
3	91318-12090	BOLT, HEX SOCKET	1	LH
3	91318-12070	BOLT, HEX SOCKET	1	RH
☆ 4	90201-125F7	WASHER	2	



25. Rear Suspension Springs

• Parts List

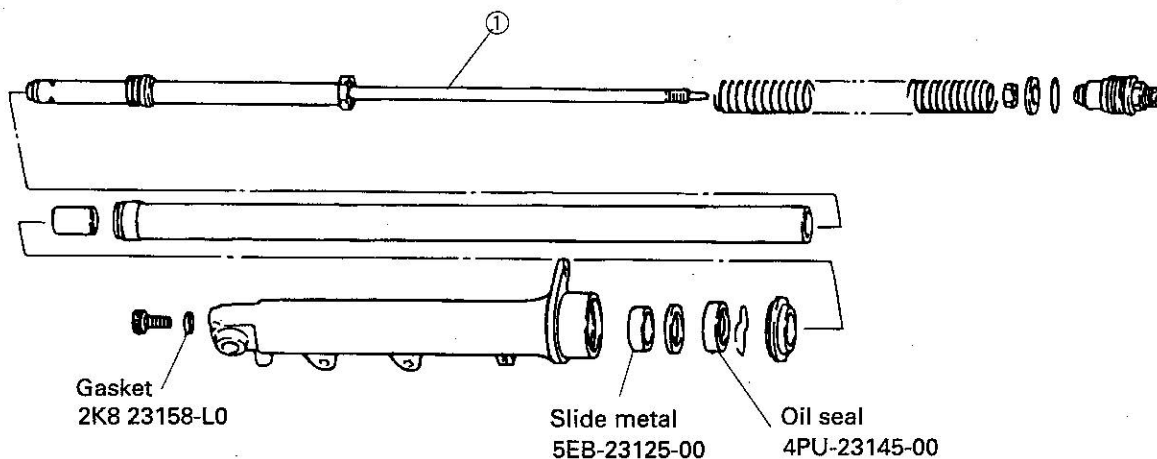
No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-22212-70	SPRING	1	K=10.7
2	5EB-22212-80	SPRING	1	K=11.7

These springs are for the standard suspension.
The standard spring rate is K=9.7.

26. Front Fork Damper - Complete Set (5EB-C3170-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-23170-70	DAMPER COMP.	1	



The damping characteristics of these parts have been changed relative to the standard parts, resulting in an average increase in damping force of roughly 25%.

• Standard Setting

Oil level height	107 mm, from upper surface of the inner tube at maximum compression without spring
Recommended oil	Yamaha Suspension Oil 01
Standard settings	Rebound damping: 7 clicks out from full turn in
	Compression damping: 6 clicks out from full turn in

27. Front Fork Spring

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-23141-70	SPRING 1	2	SET=5EB-C3141-70
2	5EB-23141-80	SPRING 1	2	SET=5EB-C3141-80
3	5EB-23141-90	SPRING 1	2	SET=5EB-C3141-90

• Specifications

	-70	-80	-90	STD
Free length	252 mm	252 mm	252 mm	252 mm
Spring constant	1.05 kg/mm	0.95 kg/mm	0.85 kg/mm	0.75 kg/mm
ID	2 slits on end surface	1 slit on end surface	3 slits on end surface	None

• Standard Setting

Initial:	5 mm (same as STD)
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Check the number of slits on the end of the spring for identification.

28. Throttle Tube Set (5EB-C6300-71)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
☆ 1	4YR-26240-01	GRIP ASS'Y	1	
2	5EB-26311-70	WIRE 1	1	PULL SIDE
3	5EB-26312-70	WIRE 2	1	

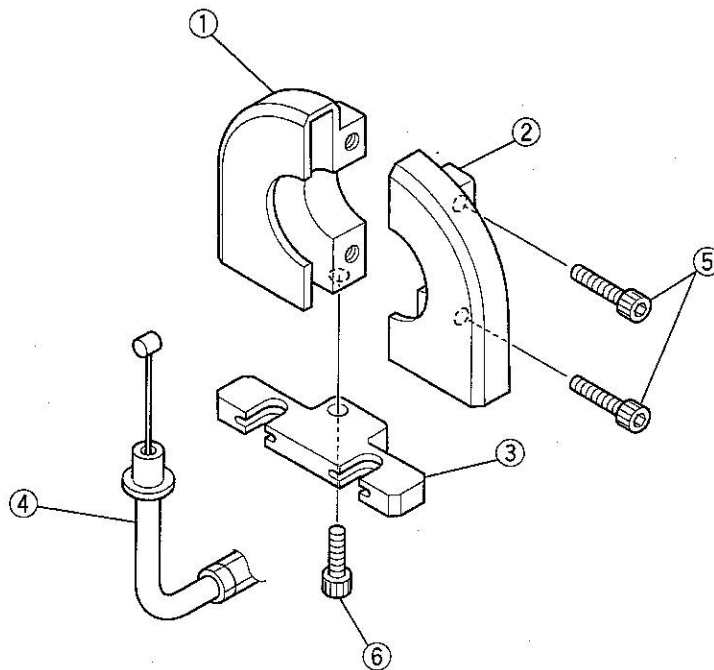
• Specifications

	Kit	STD
Operating angle	55°	65°

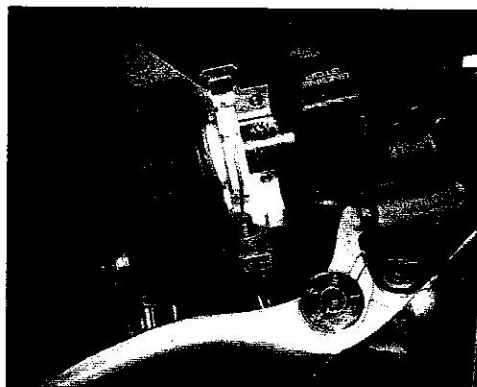
29. Throttle Set (5MT-C6300-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-26281-80	CAP, GRIP UPPER	1	
2	5EB-26282-80	CAP, GRIP LOWER	1	
3	5EB-26391-80	CLIP, THROTTLE WIRE	1	
4	5EB-26302-80	THROTTLE WIRE ASS'Y	1	
☆	91317-05020	BOLT	2	
☆	90317-05014	BOLT	1	
☆	4YR-26240-01	GRIP ASS'Y	1	
☆	3XW-83975-00	SW., HANDLE 2	1	
9	5EB-8258A-70	EXTENTION, HARNESS 2	1	USE WITH 3XW-00 SW.



This part allows the throttle grip to be removed without removing the carburetor wire to facilitate easier maintenance. The operating angle is 55 degrees.

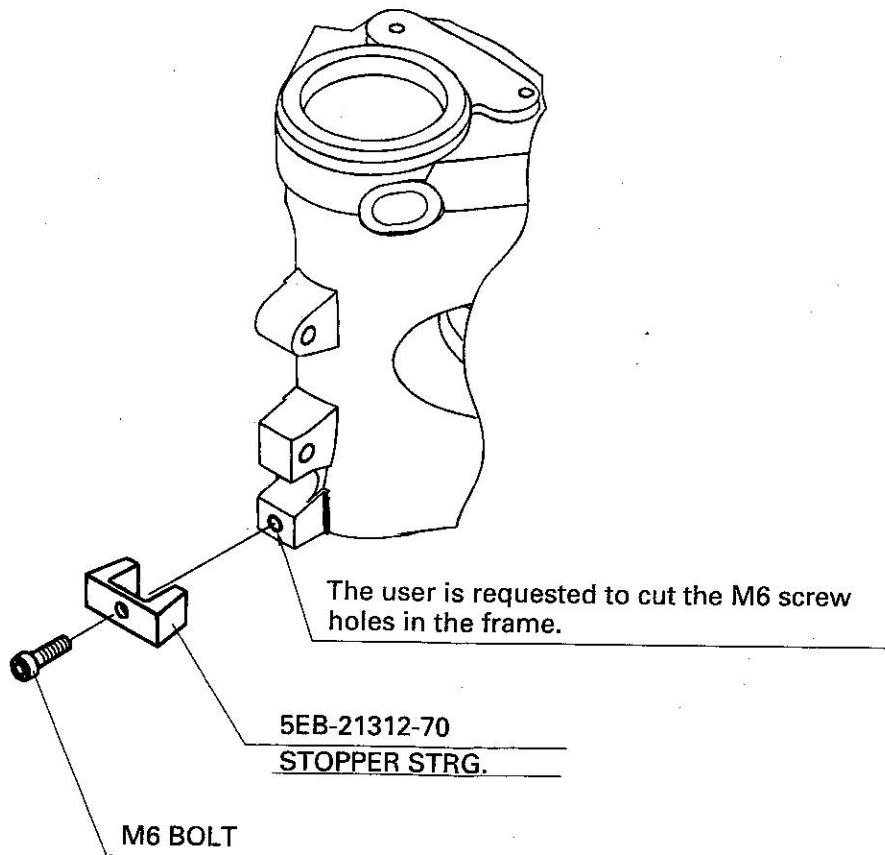


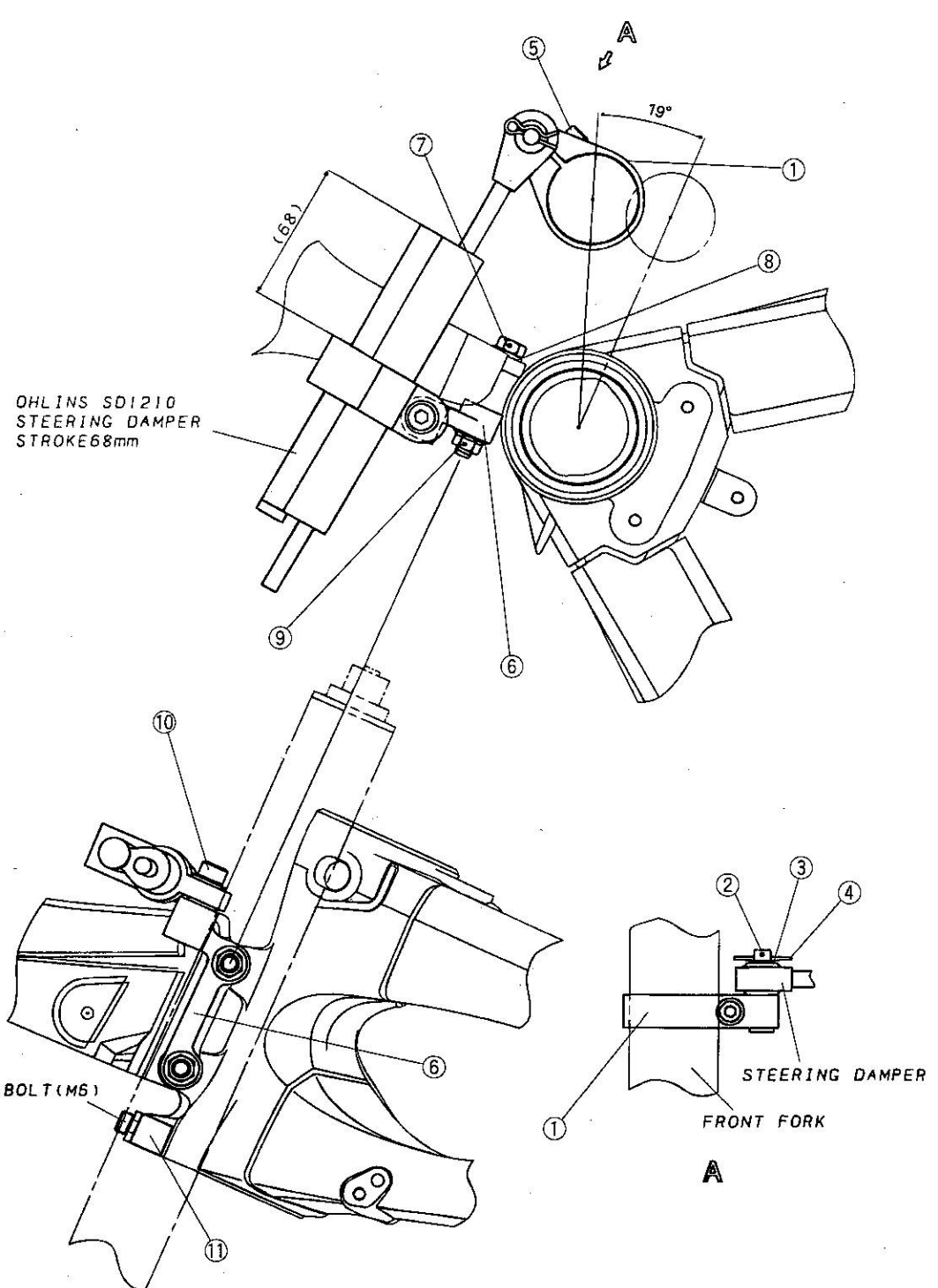
The engine stop switch is changed to the one provided. There is a projection on the bottom of the switch that is used as a reference for positioning. Install the stop switch after removing this projection.

30. Steering Damper Stay Set (5EB-C3495-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-23495-70	STAY	1	
☆ 2	90701-08038	PIN	1	
☆ 3	90201-08455	WASHER	1	
☆ 4	90468-16099	CLIP	1	
☆ 5	91317-06025	BOLT	1	
6	5EB-2349T-70	BRACKET	1	
☆ 7	90101-08026	BOLT	2	
☆ 8	92907-08200	WASHER	2	
☆ 9	95707-08500	NUT	2	
☆ 10	91317-08030	BOLT	1	
11	5EB-21312-70	STOPPER	1	

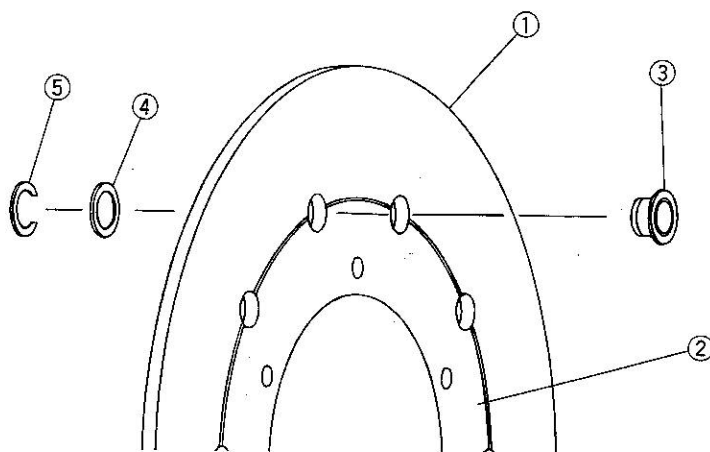




31. Front Disk Brake Assembly (5EB-2581T-71)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5EB-2582T-71	DISK	1	
2	5EB-25832-70	BRACKET	1	
3	5EB-2581M-70	PIN	10	
4	5EB-2581N-70	WASHER	10	
5	5EB-93430-70	CIRCLIP	10	

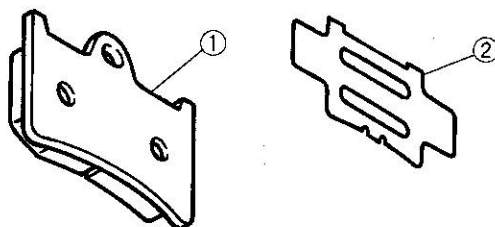


The disk thickness and heat treatment of these parts has been changed for racing use, resulting in improved durability and operation. These parts can also be used on the YZF-R1. Yamaha genuine part 93430-09038 can also be used for the circlip.

32. Front Brake Pad Set (5EB-W0045-70)

• Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
☆ 1	5EB-25811-70	PAD. COMP.	4	
☆ 2	5EB-25919-70	SUPPORT	4	



- These parts feature improved stopping power for racing use. They can also be used on the YZF-R1 and YZF-R7.

Since these pads grip the disk more strongly than the standard pads, if braking feels poorly when the brake is applied or if the pads appear to be slipping, check the braking surface of the disk and replace the disk as necessary.

- The supports are installed to make it difficult for heat from the brake pads to be transferred to the caliper. Always make sure to install these supports on the pads.

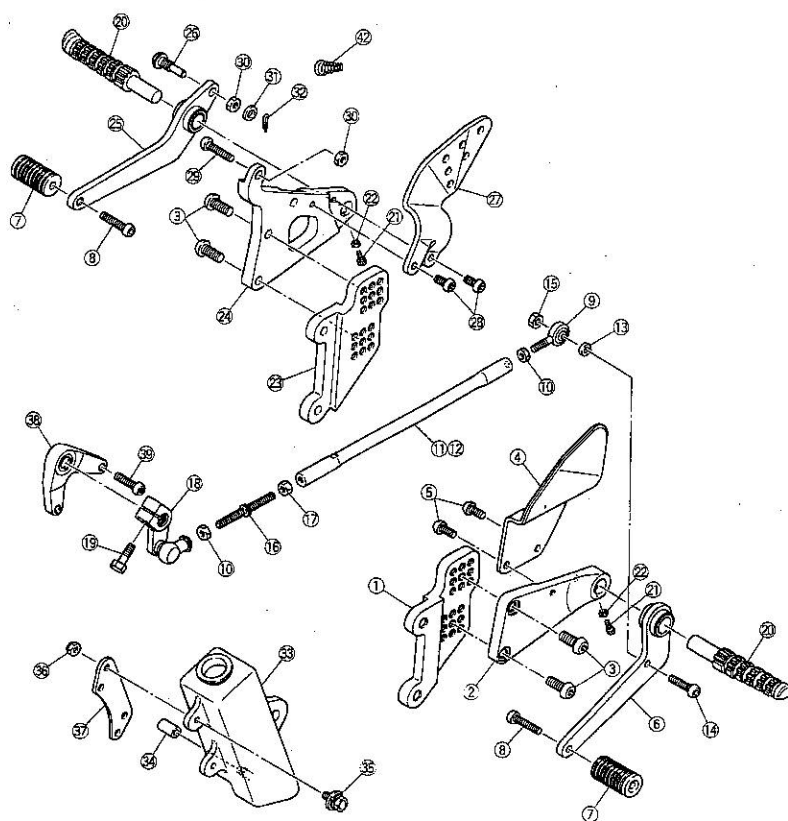
33.Foot Rest Set

• Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
	1	5EB-27452-70	BRACKET,FOOT 1	1	
	2	5EB-27412-70	BRACKET	1	
☆	3	90151-08022	SCREW	4	
	4	5FL-27445-00	PLATE	1	
☆	5	92017-06012	BOLT	3	
	6	5FL-18111-71	PEDAL,SHIFT	1	
	7	5EB-18162-70	PEDAL	2	
☆	8	92017-06030	SCREW	2	
☆	9	3TC-18116-00	JOINT,ROD	1	
☆	10	95304-06700	NUT	2	
☆	11	5FL-18115-00	ROD	1	
☆	12	4XV-18115-00	ROD	1	
	13	5EB-1811E-70	COLLAR	1	
☆	14	92017-06025	BOLT	1	
☆	15	95607-06100	NUT	1	
☆	16	26H-18115-00	ROD	1	
☆	17	90170-06228	NUT ,L	1	
☆	18	4BR-18112-00	ARM ,SHIFT	1	
☆	19	95824-06020	BOLT	2	
☆	20	4JT-27411-01	FOOTREST	2	
☆	21	91317-06020	BOLT	2	
☆	22	92907-06600	WASHER	2	
	23	5EB-27462-70	BRACKET ,FOOT 2	1	
	24	5EB-27422-70	BRACKET	1	
	25	5EB-27411-70	PEDAL ,BRAKE	1	
	26	5EB-27853-70	SHAFT	1	
☆	27	5EB-27446-00	PLATE 2	1	
☆	28	92017-06018	BOLT	1	
☆	29	92017-08030	BOLT	2	
☆	30	95307-08700	NUT	1	
☆	31	92907-06200	WASHER	1	
☆	32	91401-16012	PIN	1	
☆	33	82M-21871-00	TANK	1	
☆	34	16G-13569-00	PLUG	1	
☆	35	90110-06108	BOLT	2	

No.	PART No.	PART NAME	Q'TY	REMARKS
☆ 36	95607-06100	NUT U	1	
37	5EB-1541A-71	STAY	1	
38	5EB-18179-71	GUIDE	1	
☆ 39	91314-06035	BOLT	2	
☆ 40	95307-08600	NUT	2	
☆ 41	90387-0608S	COLLAR	1	
42	5EB-27456-70	SPRING RETURN	1	FOR REAR BRAKE

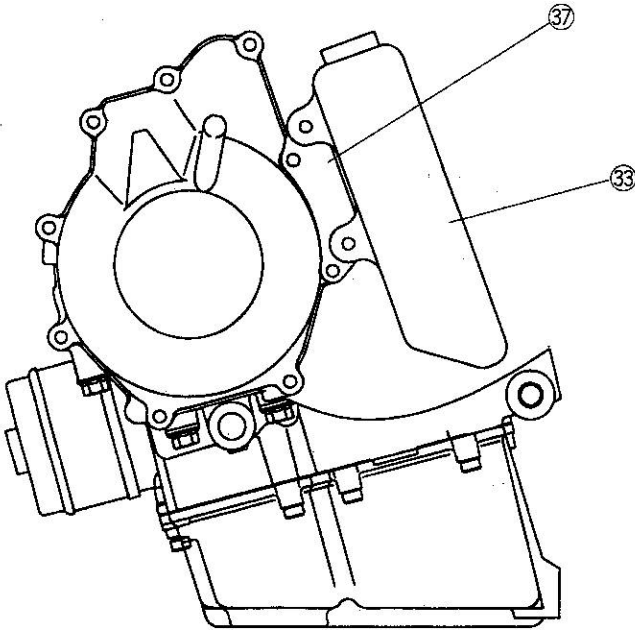
This foot rest kit allows position to be changed forward or backward from center as well as up and down by 10 mm. The center position is shifted 20 mm to the rear and 15 mm upward relative to standard specifications.



Install the return spring of the rear brake on the master cylinder by removing the rubber boot.



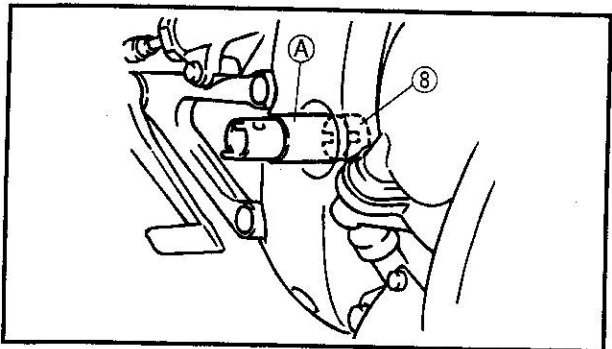
Since the standard radiator recovery tank cannot be used, install the recovery tank provided in the kit.



3 Assembly Precautions

1. Please check next point for set up your motorcycle.

a) REAR ARM



Install:

- swingarm
- pivot shaft
- washer
- pivot shaft adjust bolt (8)
- pivot shaft nut

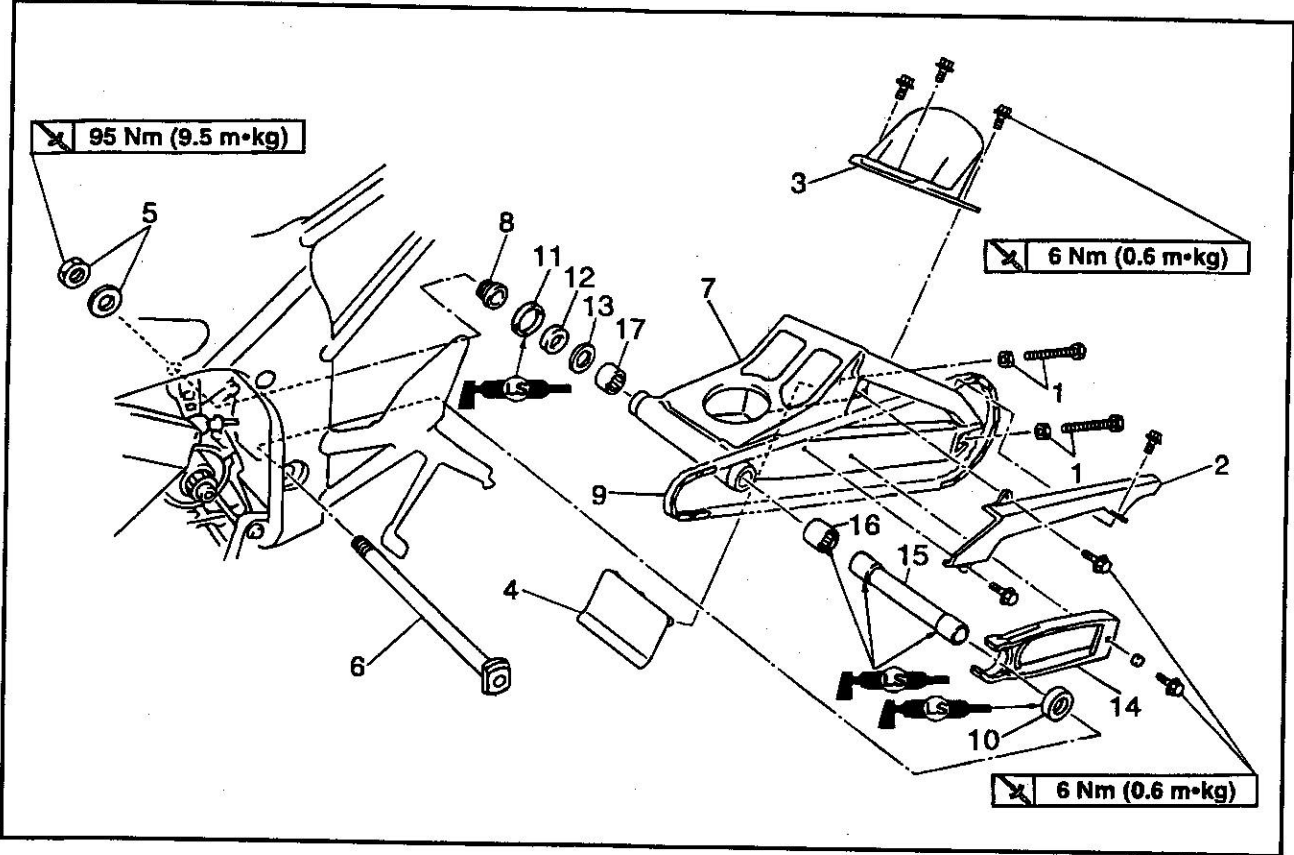
5.0 Nm (0.5 m•kg)

NOTE:

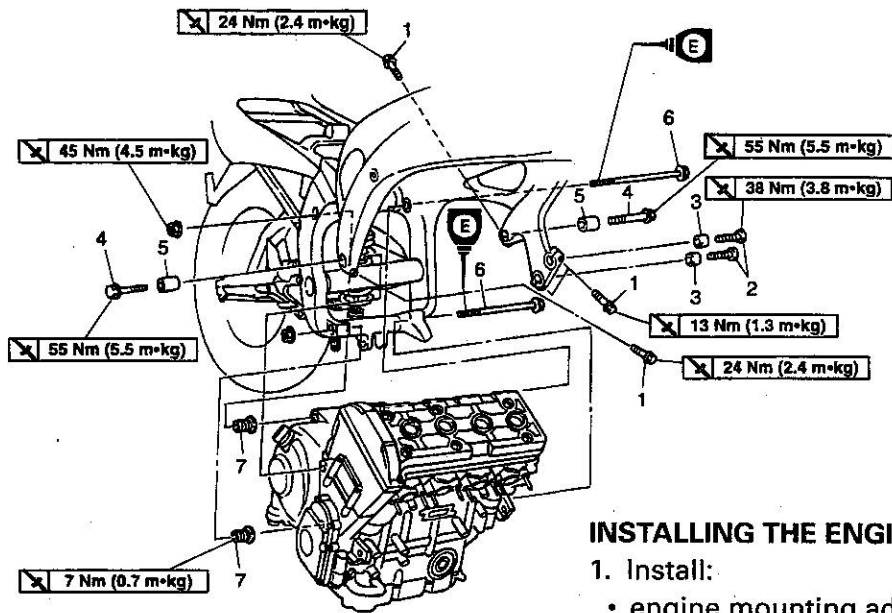
Use the pivot shaft wrench (A) to tighten the pivot adjust bolt to finger tightness.



Pivot shaft wrench:
90890-01471



⑥ ENGINE



INSTALLING THE ENGINE

1. Install:

- engine mounting adjust bolts ⑦
- rear mounting bolts ⑥
- self-locking nuts
- collars ⑤
- front mounting bolts ④
- collars ③
- button head bolts ②
- pinch bolts ①

NOTE:

- Lubricate the rear mounting bolt threads with lithium soap base grease.
- Do not fully tighten the nuts and bolts.

2. Tighten:

- self-locking nut

	47 Nm (4.7 m•kg)
--	------------------
- front mounting bolts

	55 Nm (5.5 m•kg)
--	------------------
- button head bolt

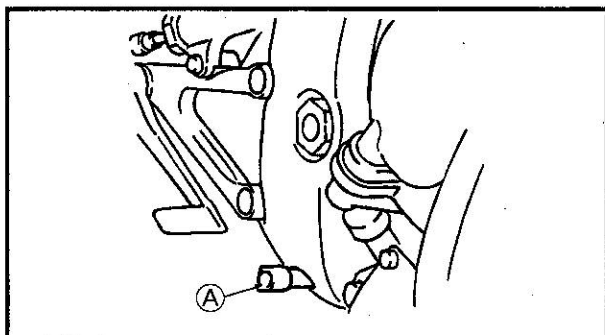
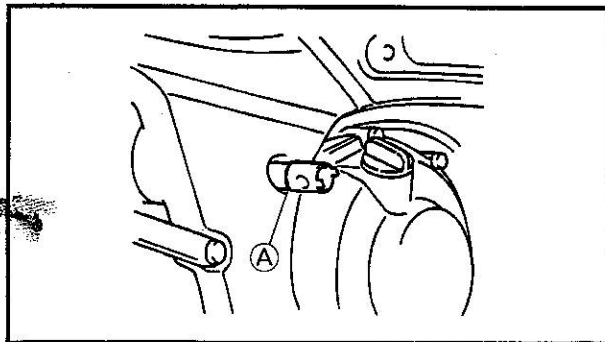
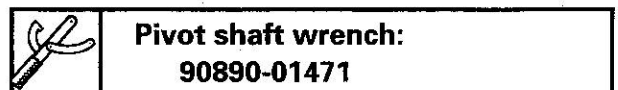
	39 Nm (3.9 m•kg)
--	------------------
- pinch bolt

M8	24 Nm (2.4 m•kg)
----	------------------
- pinch bolt

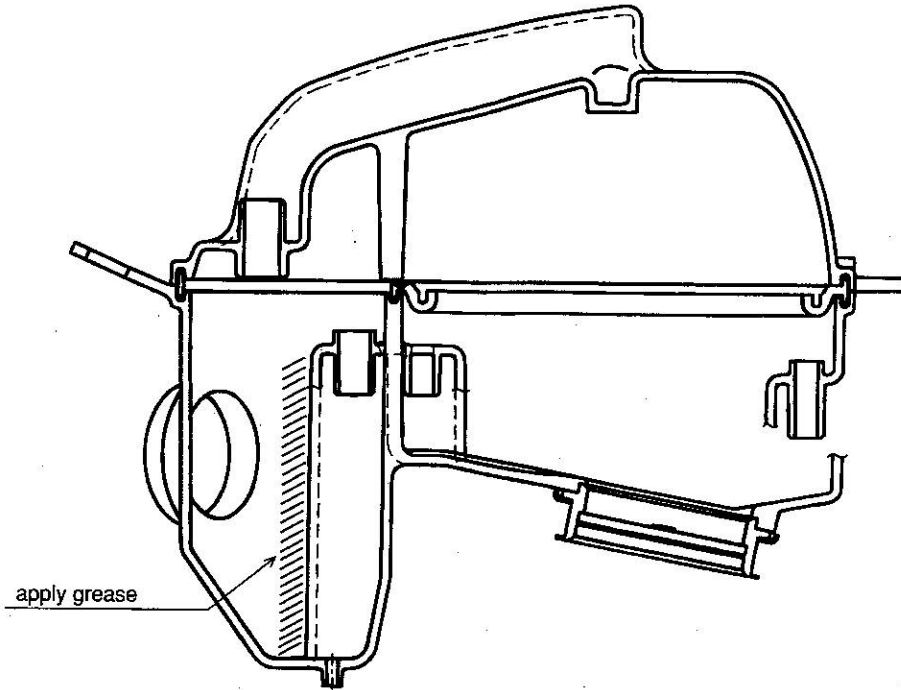
M6	13 Nm (1.3 m•kg)
----	------------------
- engine adjusting bolts

NOTE:

Use the pivot shaft wrench ① to tighten the engine mounting adjust bolt to finger tightness.

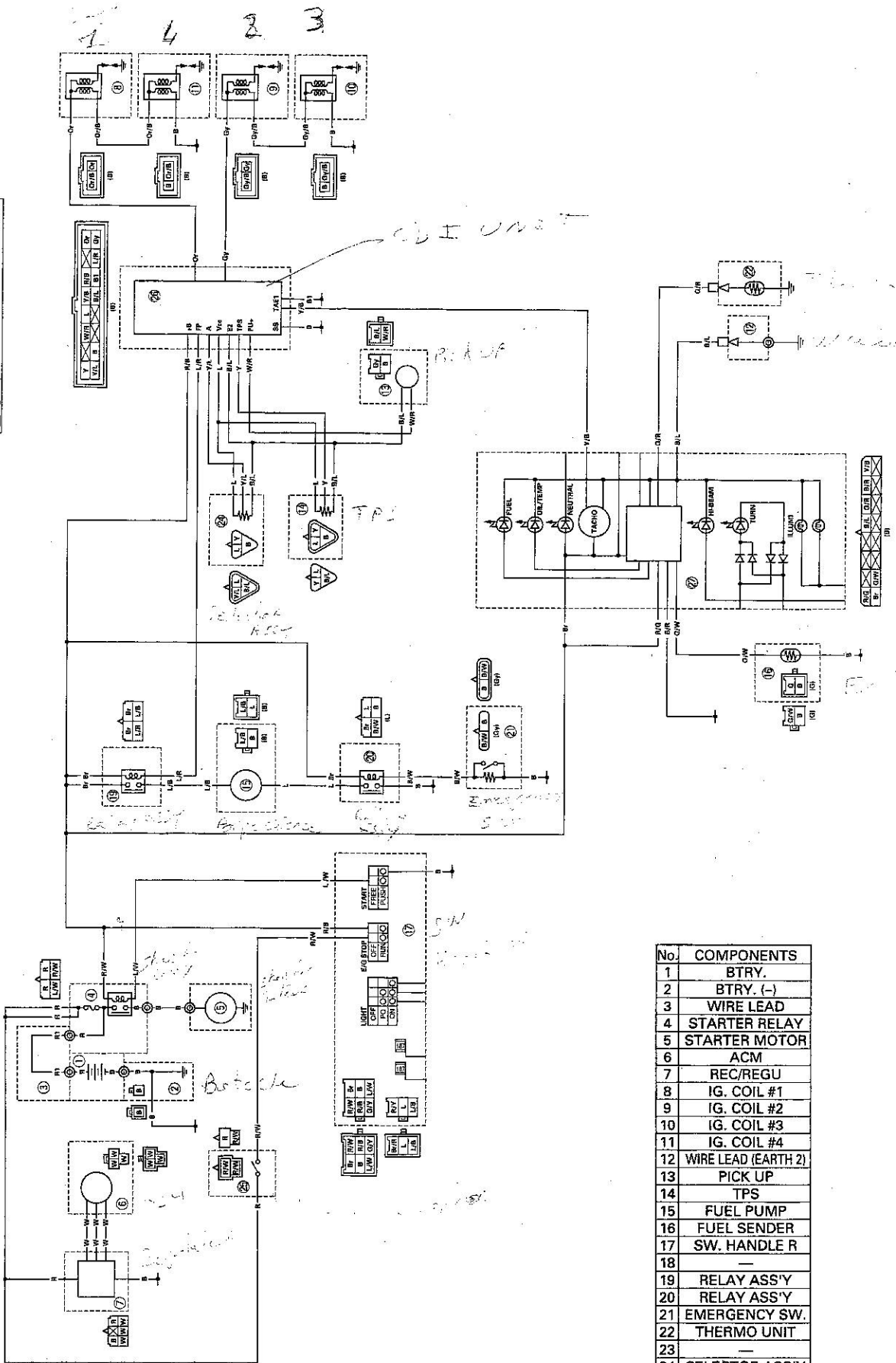


2. Please apply grease on the wall in AIR CLEANER CASE.
This grease will catch some dusts.



2001 YZF-R6 Wiring Diagram

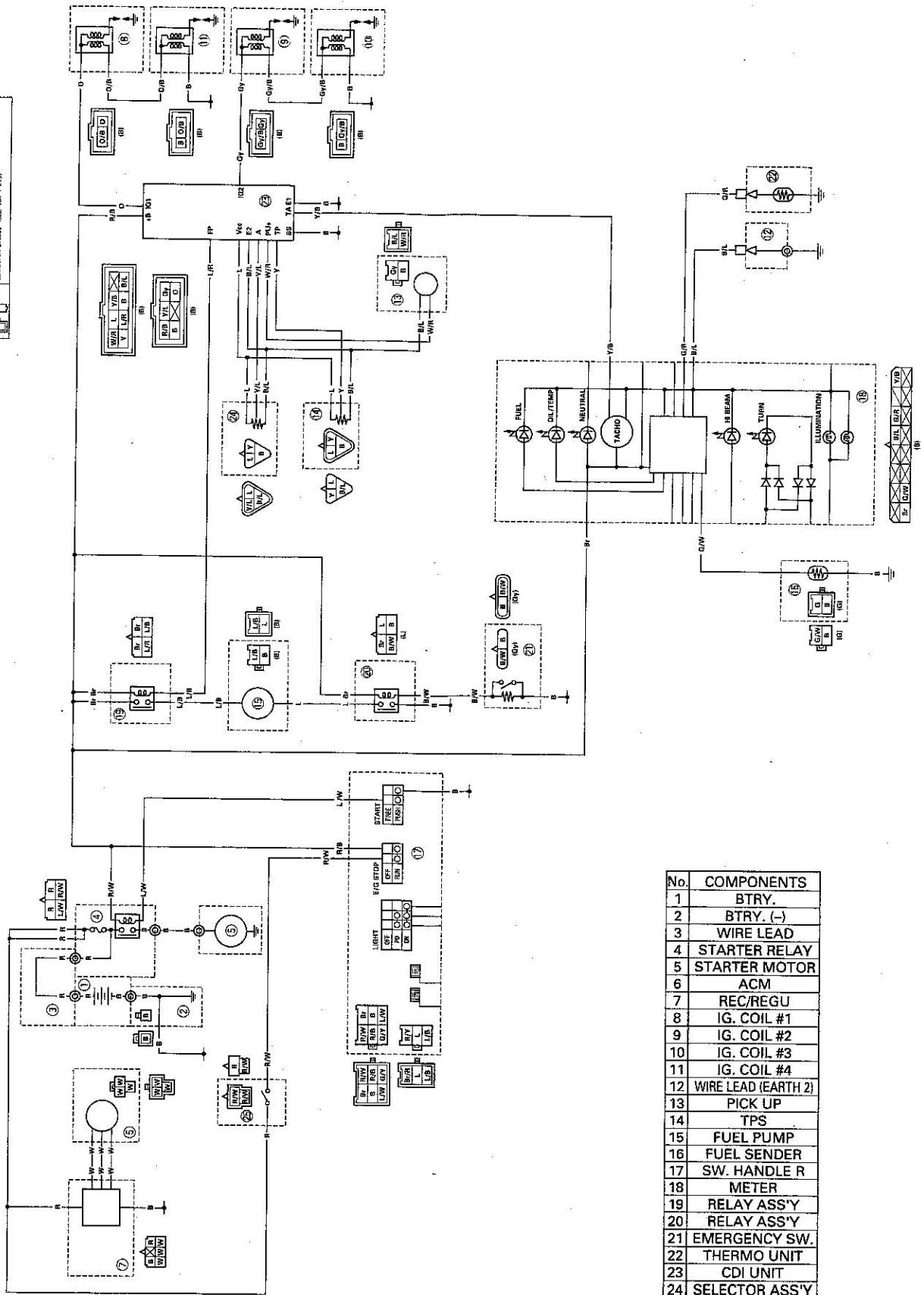
MARK	EXPLANATION
BRN/PW	COLOR CODE (SEE YOK-300)
---	CONNECTING WITH ONLY WIRE
---	GND
(A/B/C)	CONNECTOR MARK (SEE YOK-300)
(A/B/C)	CONNECTOR SYMBOL (SEE YOK-300)



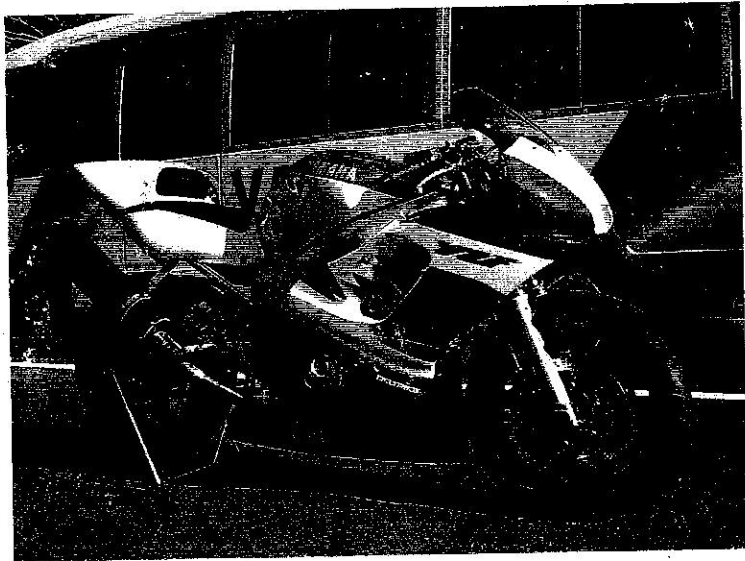
No.	COMPONENTS
1	BTRY.
2	BTRY. (-)
3	WIRE LEAD
4	STARTER RELAY
5	STARTER MOTOR
6	ACM
7	REC/REGU
8	IG. COIL #1
9	IG. COIL #2
10	IG. COIL #3
11	IG. COIL #4
12	WIRE LEAD (EARTH 2)
13	PICK UP
14	TPS
15	FUEL PUMP
16	FUEL SENDER
17	SW. HANDLE R
18	---
19	RELAY ASS'Y
20	RELAY ASS'Y
21	EMERGENCY SW.
22	THERMO UNIT
23	---
24	SELECTOR ASS'Y
25	MAIN CONNECTOR
26	CDI UNIT
27	METER

2000 YZF-R6 Wiring Diagram

MARK	EXPLANATION
ALB, B/W, ...	COLOR CODE (SEE P. 1-37)
---	CONNECTING WITH BARE WIRE
---	CONNECTOR MARK (BETWEEN MAIN AND WIRELESS)
---	CONNECTING SYMBOL (SEE P. 1-21)



No.	COMPONENTS
1	BTRY.
2	BTRY. (-)
3	WIRE LEAD
4	STARTER RELAY
5	STARTER MOTOR
6	ACM
7	REC/REGU
8	IG. COIL #1
9	IG. COIL #2
10	IG. COIL #3
11	IG. COIL #4
12	WIRE LEAD (EARTH 2)
13	PICK UP
14	TPS
15	FUEL PUMP
16	FUEL SENDER
17	SW. HANDLE R
18	METER
19	RELAY ASS'Y
20	RELAY ASS'Y
21	EMERGENCY SW.
22	THERMO UNIT
23	CDI UNIT
24	SELECTOR ASS'Y
25	MAIN CONNECTOR



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