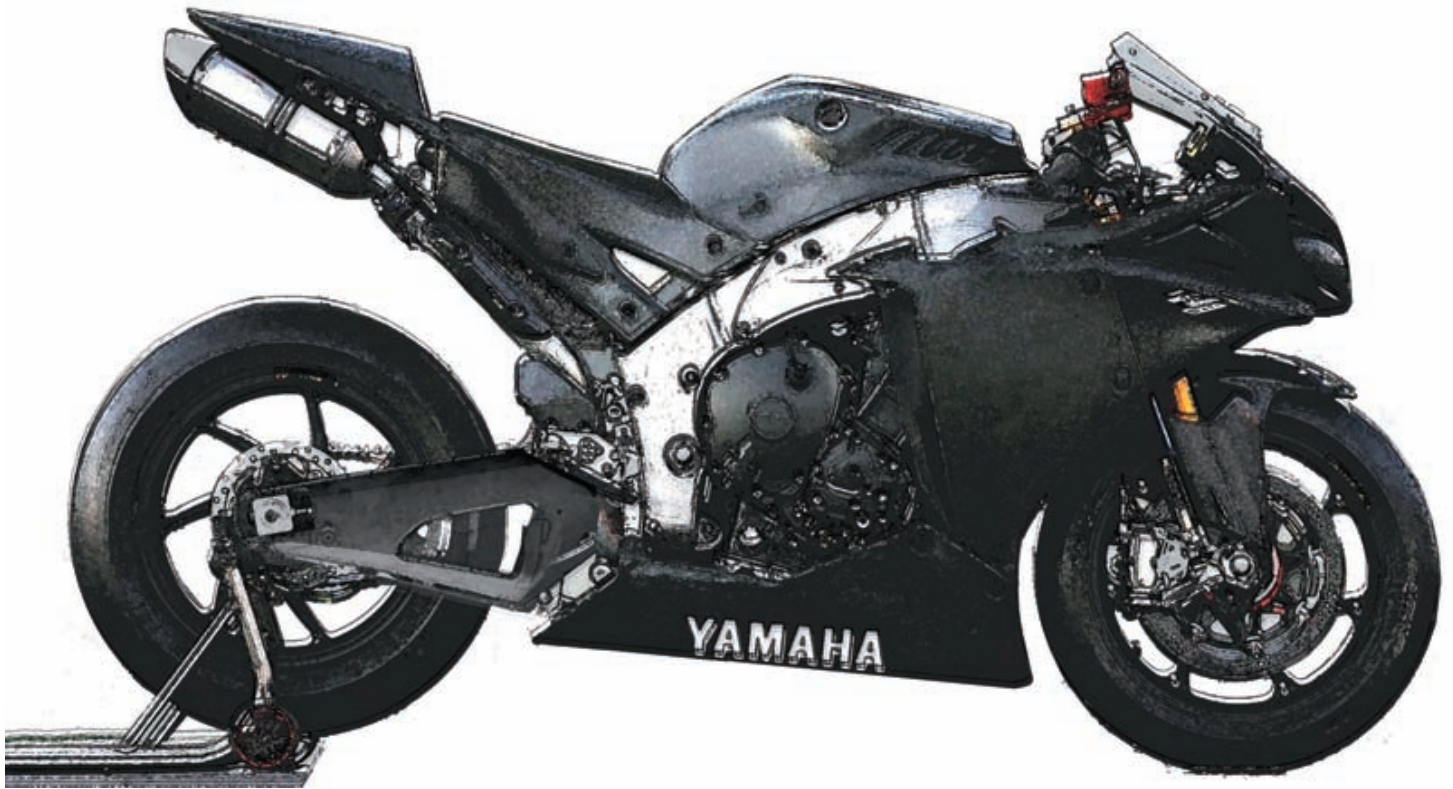


# '09 YZF-R1 KIT MANUAL



**The Performance Edge**  
*for excellent riders*



# Introduction

- This manual is intended for persons with knowledge and experience of motorcycles. Please refer to the YZF-R1 service manual, which shall be published from YAMAHA MOTOR CO. LTD., for information on part assembly and maintenance.
- The design of the YZF-R1 racing kit is based on YZF-R1, according to FIM racing rules, but that does not mean the kit conforms to all competitions. When used in races, riders must mount the YZF-R1 racing kit at their own discretion after checking the rules of competition issued by the sponsor.

## About Warranty

- Please understand that these parts are not covered by warranty.
- The Manufacturer does not take any responsibility for problems caused by these parts.

## Request

- These kit parts are intended exclusively for racing purposes. You are strictly requested not to use them 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.

## Parts List Symbols

- The star mark (\*) means that the part is included in the kit set and is a genuine Yamaha part. Therefore, you can easily purchase the part at any Yamaha part dealer when necessary.
- The circle mark (°) means that when needed, the individual part is sold separately to the kit set.

	No.	PART No.	PART NAME	Q'TY	REMARKS
°	1	4C8-11181-70	GASKET, CYLINDER HEAD 1	3	t=0.30mm
*	2	5VY-11351-00	GASKET, CYLINDER 1	3	
*	3	4C8-11603-00	PISTON RING SET	12	
	4	5VY-1165A-01	BOLT, CONNECTING ROD SPECIAL	24	
*				24	

## Symbol Marks

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

**▲** This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

**⚠ WARNING** A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**NOTICE** A NOTICE indicates special precautions that must be taken to avoid damage to the vehicle or other property.

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

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# 1 Engine Specifications

Spec		SB	ST
Displacement		998cc	998cc
Bore/stroke		78.0 x 52.2 mm	78.0 x 52.2 mm
Maximum engine speed (limiter controlled speed)		13750 rpm	13750 rpm
Compression ratio		12.8:1 (13.2:1 will result from 0.2mm cylinder head surface grinding.)	12.7:1
Valve timing (event angle)	INT	110°	105°
	EXT	110°	105°
Squish height		0.65 mm (Minimum)	0.775 mm (Minimum)
Clearance between valve and piston	INT	1.0 mm (ATDC10°)	1.16 mm (ATDC10°)
	EXT	2.0 mm (BTDC10°)	2.14 mm (BTDC10°)
Valve (tappet) clearance	INT	0.17 – 0.23 mm	0.11 – 0.20 mm
	EXT	0.27 – 0.33 mm	0.21 – 0.25 mm

## 2 Kit Parts

### 2-1 Installing Engine Parts

#### 1. Maintenance Set (14B-MAINT-70)

##### Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
°	1	14B-11181-70	GASKET, CYLINDER HEAD 1	3	t=0.30 mm
*	2	14B-11351-00	GASKET, CYLINDER 1	3	t=0.20mm (STD)
*	3	14B-11603-00	PISTON RING SET	12	
	4	5VY-1165A-01	BOLT, CONNECTING ROD SPECIAL	24	
*	5	93450-18157	CIRCLIP	24	
*	6	3P6-12129-00	SEAL, VALVE STEM OIL 2	24	INT
*	7	4TE-12119-00	SEAL, VALVE STEM OIL	24	EXT
°	8	14B-13414-70	GASKET, STRAINER	3	OIL PAN (ANTI STICK TYPE)
°	9	14B-15451-70	GSKT., CRANKCASE COVER 1	3	ACM (ANTI STICK TYPE)
°	10	14B-15461-70	GSKT., CRANKCASE COVER 2	3	CLUTCH (ANTI STICK TYPE)
°	11	14B-15456-70	GSKT., 1	3	PICK UP (ANTI STICK TYPE)
*	12	14B-15462-00	GSKT., CRANKCASE COVER 3	3	BREATHER
*	13	90215-30233	WASHER, TONGUED	3	SPROCKET
*	14	93102-40330	SEAL, OIL	3	DRIVE AXLE
*	15	90149-06082	SCREW	9	MAIN AXLE

These sets of parts necessary for engine disassembly and maintenance are provided in three (3) sets.

## 2. Spark Plug Set (14B-R465B-70)

### Parts List

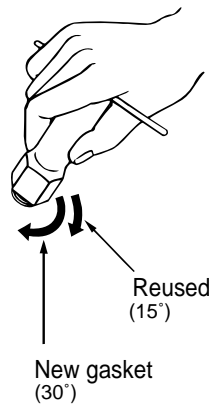
No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-1119C-70	PLUG, SPARK	4	NGK R0465B-10

The spark creating portion of this spark plug is of a semi-surface discharge type of shape.

### TIP

Since these spark plugs have a copper gasket, caution is needed during installation on the following points.

1. The tightening torque is 10 – 12 N·m (1.0 – 1.2 kgf·m).
2. When not checking the torque, tighten by rotating through 30° after manual tightening in the case of new plugs. When reusing plugs, tighten by rotating through 15°.



### 3. Head-gasket, Cylinder Gasket

#### Parts List

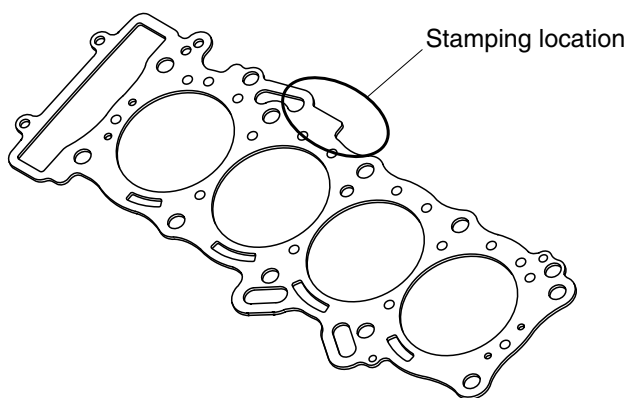
No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-11181-70	GASKET, CYLINDER HEAD 1	1	t=0.30 mm
2	14B-11181-80	GASKET, CYLINDER HEAD 1	1	t=0.35 mm
3	14B-11351-70	GASKET, CYLINDER 1	1	t=0.10 mm
4	14B-11351-80	GASKET, CYLINDER 1	1	t=0.15 mm

These parts are used to adjust the squish height and compression ratio.

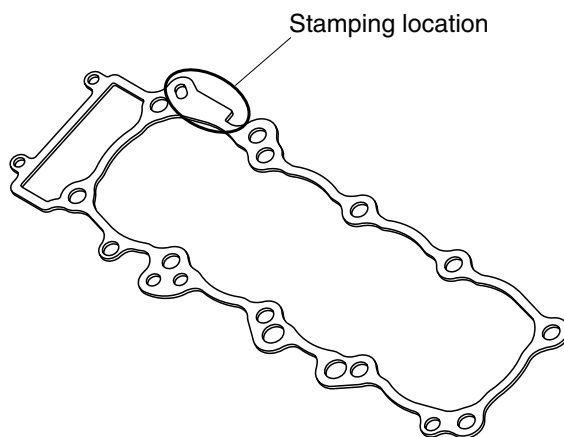
They should be installed in the direction, which enables the punched alpha-numeral "14B" is visible.

The standard head cylinder gasket thickness is 0.40 mm and the cylinder gasket thickness is 0.20 mm.

#### GASKET, CYLINDER HEAD



#### GASKET, CYLINDER

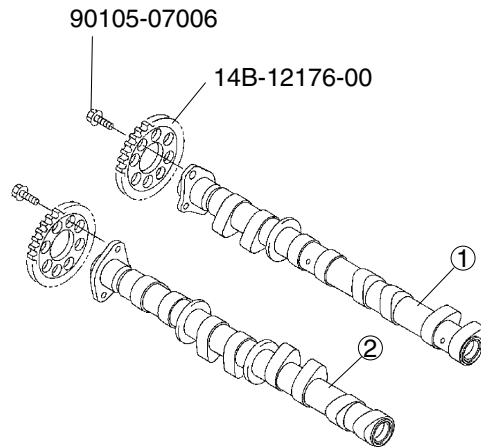


#### 4. High-lift Camshafts

##### Parts List

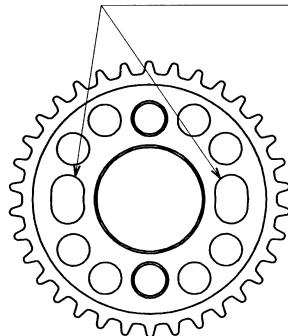
No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-12170-70	SHAFT, CAM 1	1	INT
2	14B-12180-70	SHAFT, CAM 2	1	EXT

This camshaft has a cam profile etc. changed from the STD one.



To adjust the valve timing, use the oval holes of the standard cam sprocket.

USE THESE OVAL HOLES FOR TIMING ADJUSTMENT.



##### TIP

**For valve timing adjustment, refer to the KIT TOOL MANUAL.**

##### NOTICE

- When using this camshaft, use the valve spring set 14B-A2110-70.
- Make sure to align the valve timing when the camshaft is assembled. If otherwise, no intended performance can be expected and more over, the engine may be damaged.



## 5. Valve Spring Set (14B-A2110-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-12113-70	SPRING, 1	8	I.D.Color:Blue (INT)
2	14B-12114-70	SPRING, 2	8	I.D.Color:Red (EXT)

This valve spring is used when the camshaft is mounted from the kit.

#### **NOTICE**

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**When using this valve spring, use the camshafts 14B-12170-70, and 14B-12180-70.**

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## 6. Air Funnel Set (MGC-021008-00)

### Parts List

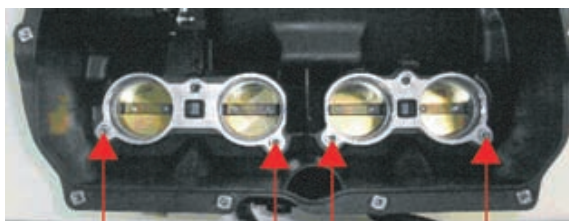
No.	PART No.	PART NAME	Q'TY	REMARKS
1		PLATE L	1	
2		PLATE R	1	
3		PRIMARY FUNNEL	4	L=55mm
4		SUPPORT L	1	
5		SUPPORT R	1	
6		SHAFT ASSY.	1	Short type

### Installation

#### 1. Installing the Plate

Secure the plate onto the throttle body.

As shown, secure the plate only at two positions below, using the supplied screws (25mm long).

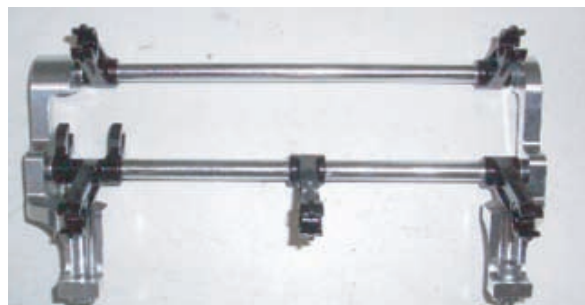
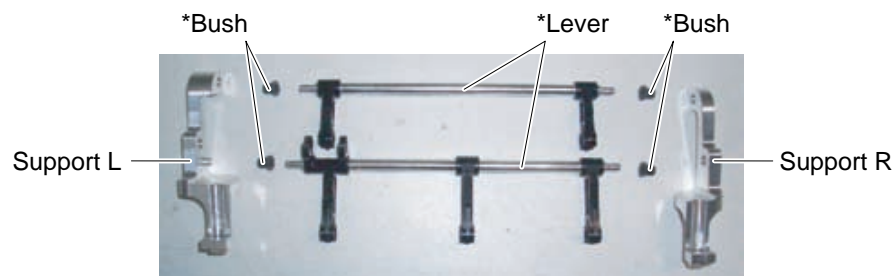


#### 2. Installing the Supports

Install the supports onto the levers.

Make sure to use the STD bush in the support hole.

\*Use the lever and bushing intended for a STD machine.

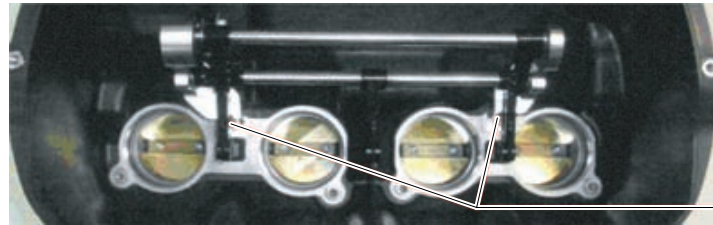


Lever Assembly

### 3. Installing the Lever Assembly

Secure the lever assembly onto the plates.

Using the supplied screws (30mm long), secure the assembly at the locations as shown.



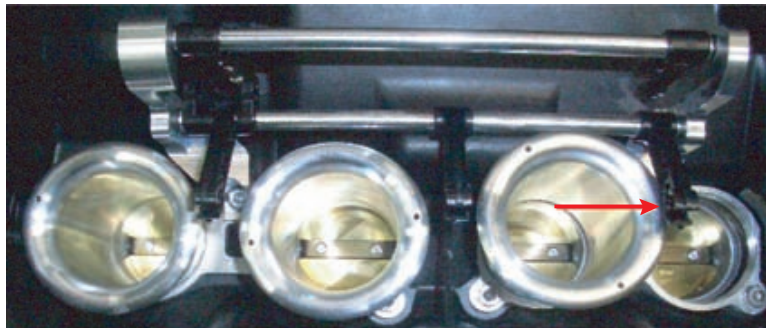
Holes for  
installation

### 4. Installing the Primary Funnel

Secure the primary funnel by screwing it into the plate.

#### TIP

- For installation of the plate and funnel, apply a thin coat of grease to their screw threads.
- For installation of the right-hand funnel, arrange the resin portion of the lever to be located above the funnel.



### 5. Installing the Secondary Funnel

Install the STD secondary funnel onto the lever assembly.



## 6. Installing the Shaft Assembly

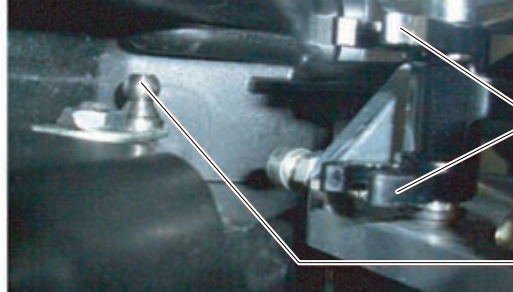
Install the shaft assembly that is shorter than the STD.

After fitting the assembly onto the ball joint on the motor side, fit the white prism rod on the reverse side to the lever assembly clip.

Motor side



Lever side



Clip

Ball joint

### **Ycci System Control**

You can use the Ycci system as the kit funnel.

You can control the operation timing by using the YMS software packed together with the kit ECU.

You can also control the STD funnel by using the YMS software.

This set is made by MG Competition. For details of the specification, please check with MG Competition.

TEL +33 (0) 4 50 25 59 96

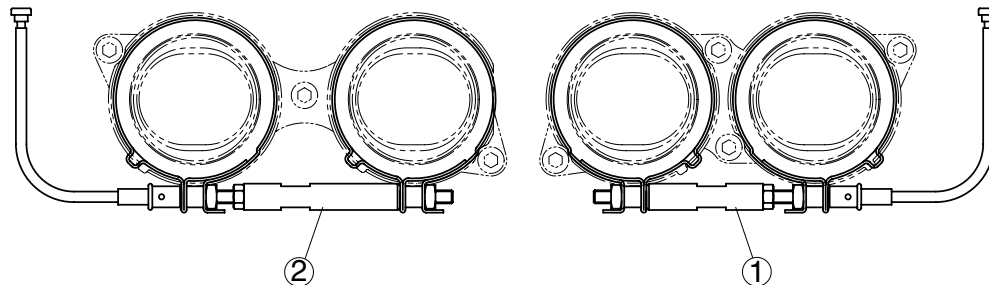
FAX +33 (0) 4 50 25 59 98

Web <http://www.mgcompetition.fr/>

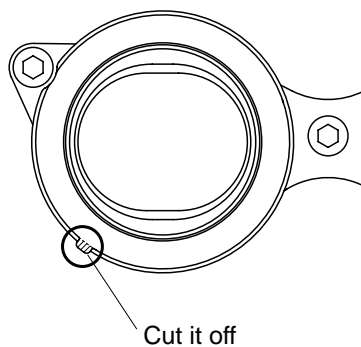
## 7. Throttle Body Clamp Set (14B-1351A-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1		CLAMP COMP.	1	Right side (3-4)
2		CLAMP COMP.	1	Left side (1-2)



This part is used to enhance maintenance performance of the throttle body. Before using it, cut off the protrusion for positioning bands at the cabjoint.



The part has a collar to prevent over-tightening. In normal cases, the part will not be tightened till it reaches to the collar. Just manually tighten it.

Make sure to put a new band through a M5 x 0.8 tap before using it.

## 8. AIS-plug Set (5VY-A4890-70)

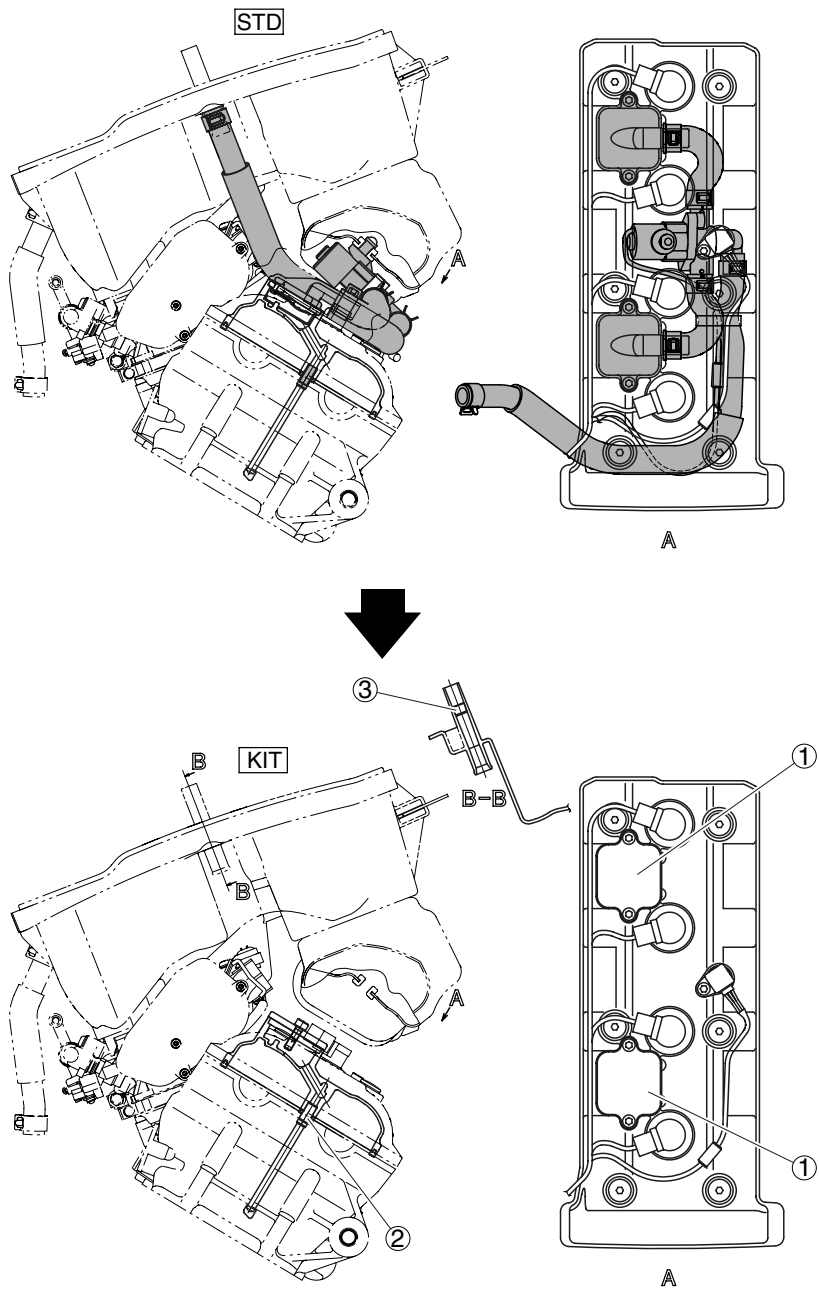
This plug set is used when the AIS (Air Induction System), an exhaust gas purifying system, is removed.

### Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
	1	5SL-1482L-70	PLATE, 2	2	
*	2	93608-16M16	PIN, DOWEL	4	
	3	90336-10020	PLUG, TAPER	1	

### Installation

1. Remove the hose attached to the cylinder head cover and the air cut-off valve accompanying the hose.
2. Remove the cap fitted to the hose, remove the reed valve and plate from inside.
3. Install the plate (5SL-1482L-70) in replacement of the cap. Apply liquid gasket to the plate.
4. Remove the cylinder head cover and the four collars fitted to the cover. Install the PIN (93608-16M16).
5. After removing the hose connected to the air filter casing from the air cut-off assembly, insert the PLUG (90336-10020) onto the side of the air filter casing to close the opening.



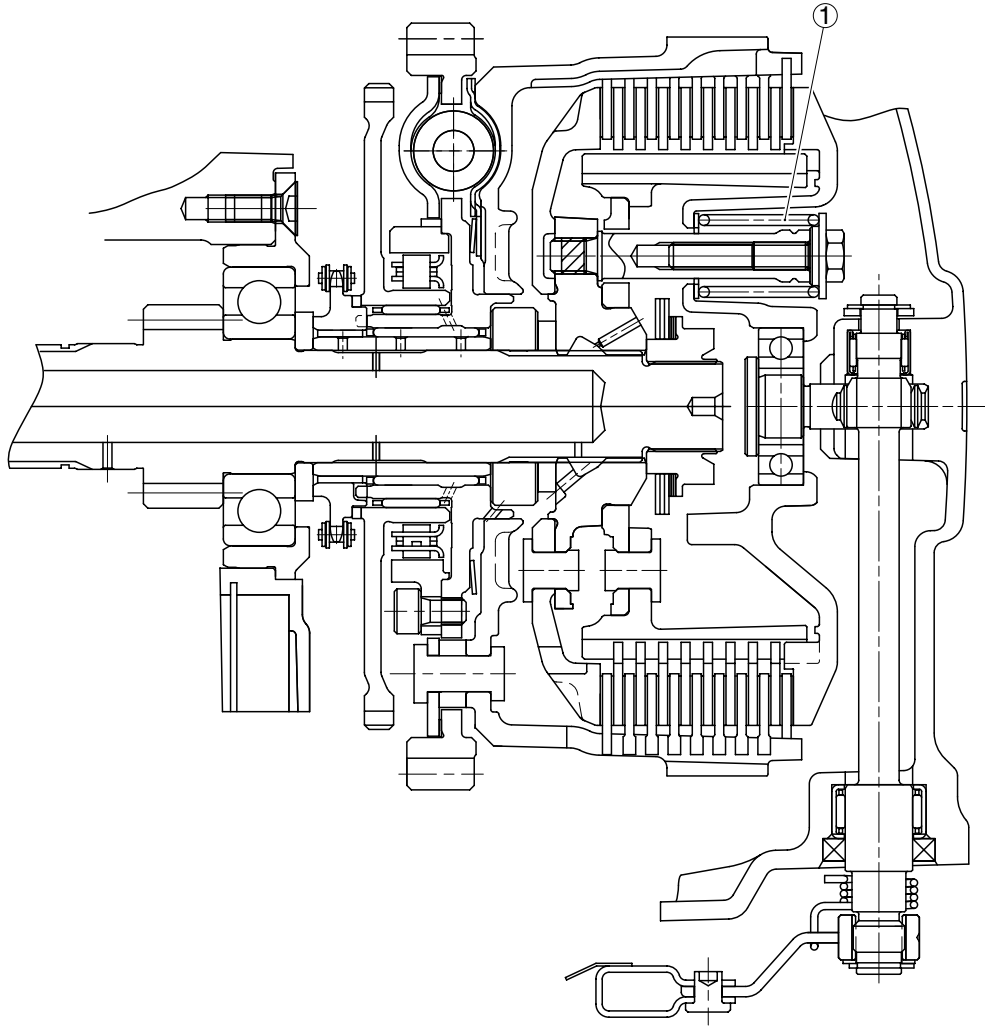


## 9. Clutch Spring Set (4B1-A6330-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	4B1-16334-70	SPRING, CLUTCH	6	

The kit spring has 10% more installation load than the STD spring.

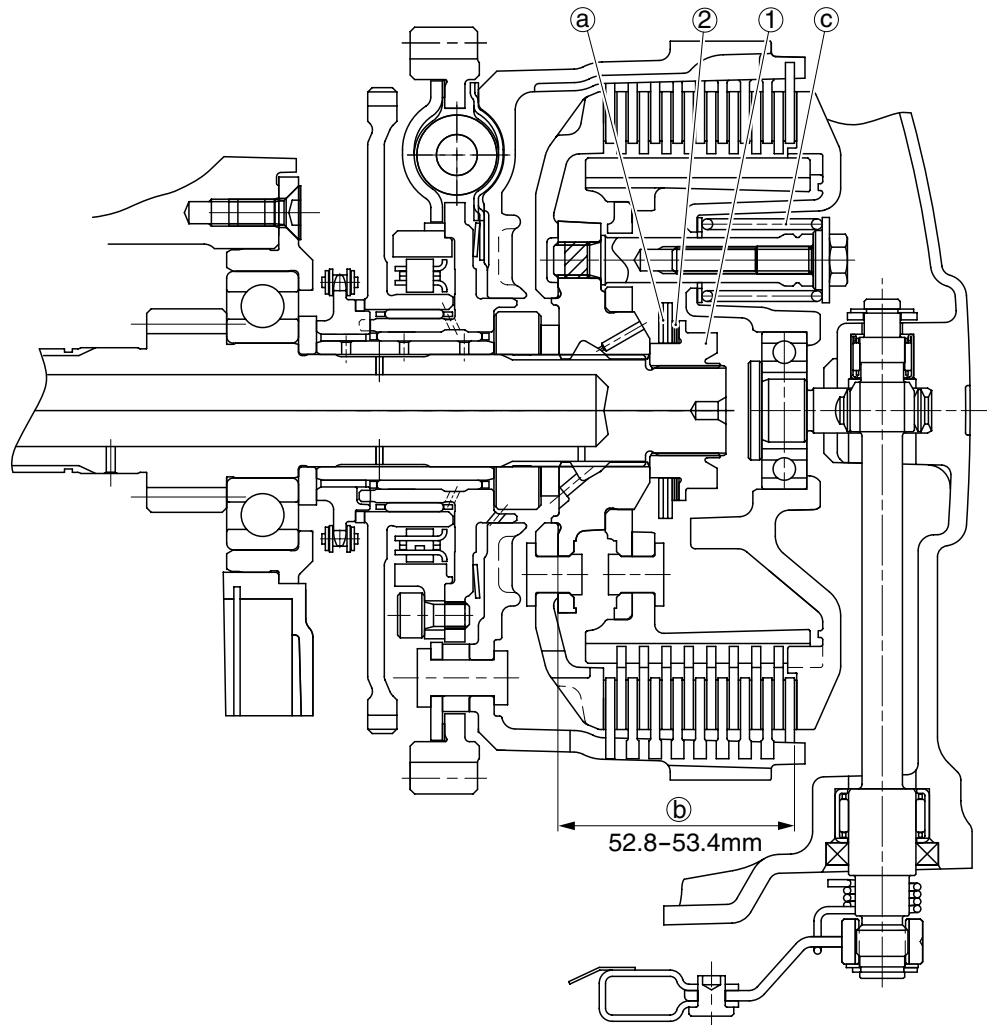


## 10. Slipper Clutch Setting Set (4C8-A6377-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
° 1	4C8-16377-70	NUT, LOCK	1	
° 2	4B1-16391-70	SHIM	3	

Installing this part makes it possible to adjust the engine braking effect.



**(Setting of back torque limiter of clutch).**

A clutch with a back torque limiter mechanism is installed in the YZF-R1 engines. The operation of the back torque limiter can be adjusted through adjusting: ② the number of SHIMs (set up for the kit); ① the number of springs; ③ the whole thickness of the clutch plate; and the strength of ④ spring (set up for the kit) of the slipper clutch setting set.

**(Recommended setting method)**

To begin with, the dimensions of the clutch are re-set to the standard values. (For details, please refer to the service manual published from YAMAHA MOTOR CO. LTD.



When the ① ② slipper clutch setting sets are to be installed, and the number of the SHIMs are to be three in stack, the setting may be carried out according to the standard.

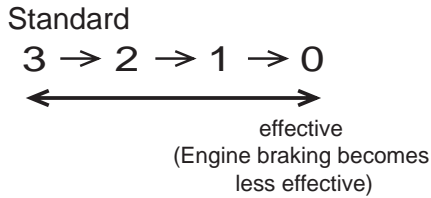


④ Spring may be selected from either one of the kit parts or the standard parts. Spring load of the kit parts is designed to increase in 10% as compared with that of the standard parts.

When installing the kit parts, the back torque limiter tends not to be effective (Engine braking becomes more effective).



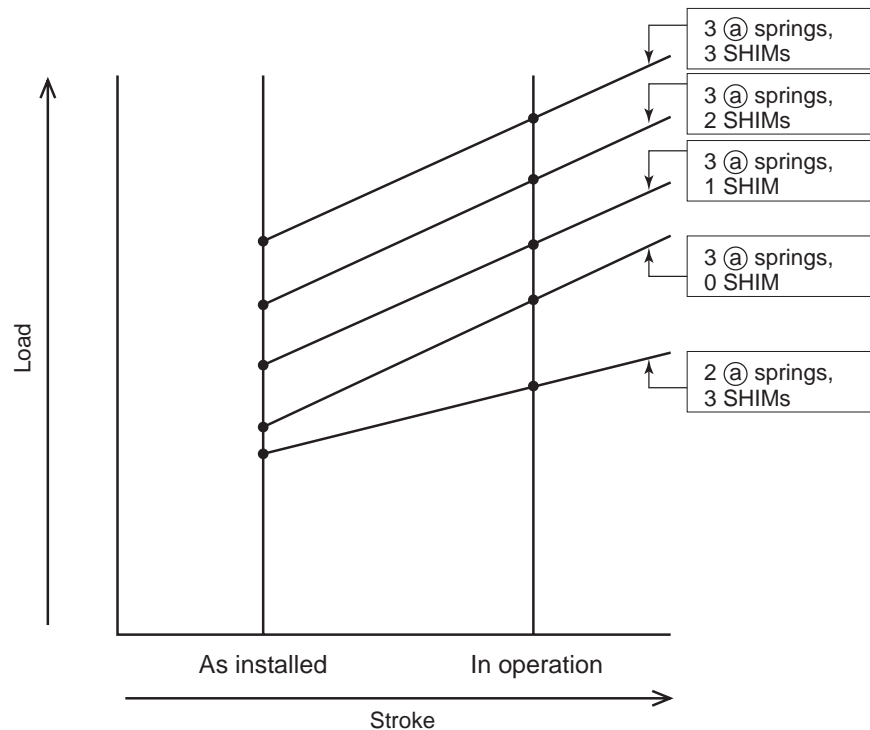
When decreasing the number of SHIMs (standard setting is three) of slipper clutch setting set, the back torque limiter tends to be effective (Engine braking becomes less effective).



Further, when decreasing the number of @ spring (the number of standard setting is three) to two, the back torque limiter becomes effective (Engine braking becomes less effective).

**NOTICE**

**When decreasing the number of @ spring to two, the caution should be taken to surely use three pieces of SHIMs for the slipper clutch setting set. If its number being less than the above, the less load may be supported so as to exert serious influences on driving. Decreasing the number of @ spring to one is not allowed.**



## 11. Transmission Gear

### Parts List

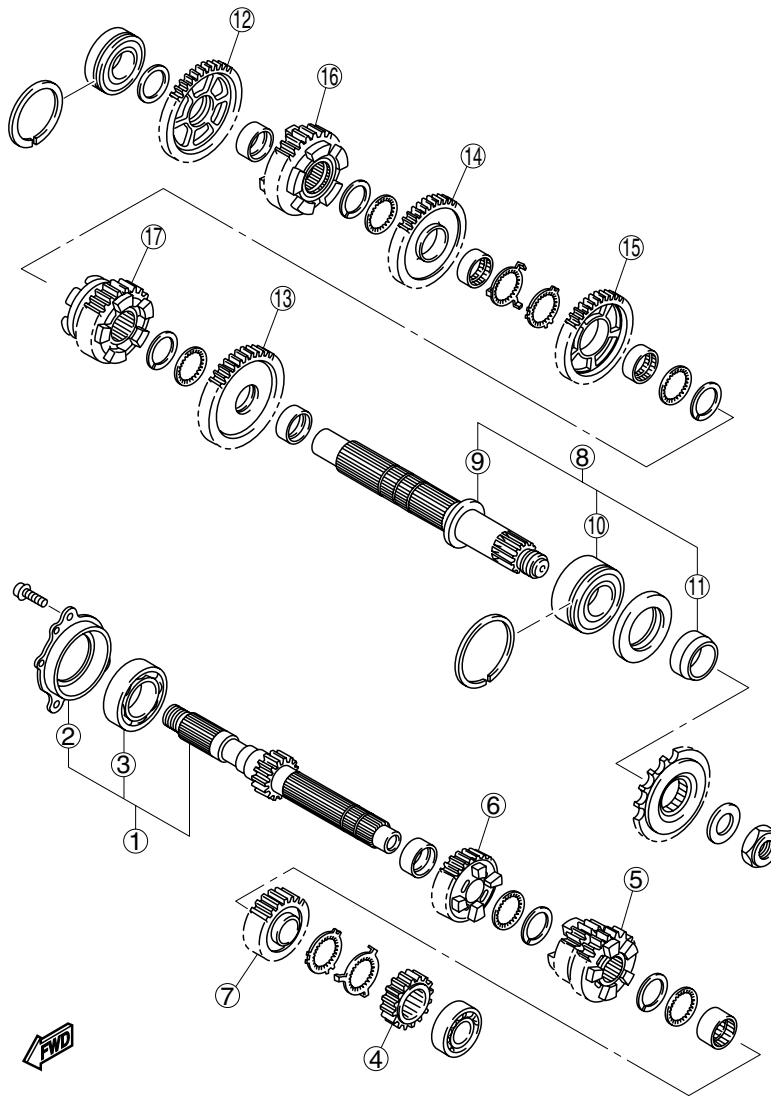
No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-17401-70-A	MAIN AXLE ASSY.	1	AB
1	14B-17401-80-C	MAIN AXLE ASSY.	1	C
*	2	14B-15163-00	HSG., BEARING	1
*	3	93306-20652	BRG.	1
4	14B-17121-70-A	GEAR, 2ND PINION	1	A
4	14B-17121-80-B	GEAR, 2ND PINION	1	BC
5	14B-17131-AA	GEAR, 3RD PINION	1	AA
5	14B-17131-AB	GEAR, 3RD PINION	1	AB
5	14B-17131-AC	GEAR, 3RD PINION	1	AC
5	14B-17131-BB	GEAR, 3RD PINION	1	BB
5	14B-17131-BA	GEAR, 3RD PINION	1	BA
5	14B-17131-BC	GEAR, 3RD PINION	1	BC
5	14B-17131-CC	GEAR, 3RD PINION	1	CC
6	14B-17151-70-A	GEAR, 5TH PINION	1	A
6	14B-17151-80-B	GEAR, 5TH PINION	1	BC
7	14B-17161-70-A	GEAR, 6TH PINION	1	A
7	14B-17161-80-B	GEAR, 6TH PINION	1	B
7	14B-17161-90-C	GEAR, 6TH PINION	1	C
8	14B-17402-70	DRIVE AXLE ASSY.	1	
*	9	14B-17421-00	AXLE, DRIVE	1
*	10	93305-20605	BRG.	1
*	11	90387-30012	COLLAR	1
12	14B-17211-70-A	GEAR, 1ST WHEEL	1	A
12	14B-17211-80-B	GEAR, 1ST WHEEL	1	B
12	14B-17211-90-C	GEAR, 1ST WHEEL	1	C
13	14B-17221-70-A	GEAR, 2ND WHEEL	1	A
13	14B-17221-80-B	GERA, 2ND WHEEL	1	B
13	14B-17221-90-C	GERA, 2ND WHEEL	1	C
14	14B-17231-70-A	GEAR, 3RD WHEEL	1	A
14	14B-17231-80-B	GEAR, 3RD WHEEL	1	B
14	14B-17231-90-C	GEAR, 3RD WHEEL	1	C
15	14B-17241-70-A	GEAR, 4TH WHEEL	1	A
15	14B-17241-80-B	GEAR, 4TH WHEEL	1	B
15	14B-17241-90-C	GEAR, 4TH WHEEL	1	C
16	14B-17251-70-A	GEAR, 5TH WHEEL	1	A
16	14B-17251-80-B	GEAR, 5TH WHEEL	1	B
16	14B-17251-90-C	GEAR, 5TH WHEEL	1	C

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
17	14B-17261-70-A	GEAR, 6TH WHEEL	1	A
17	14B-17261-80-B	GEAR, 6TH WHEEL	1	BC

This transmission gear is set at a closer ratio than the STD gear, making it possible to select a gear adapted to the course.

Select the gear after referring to the speed table and the ratio table.



**NOTICE**

**This set contains modified gear ratios and docks compared with the STD gearbox.  
Kit gears cannot use combine standard gear.**

**Gear ratio**

	std	A	B	C
1st	38/15 (2.533)	34/14 (2.429)	33/14 (2.357)	37/16 (2.313)
2nd	33/16 (2.063)	32/15 (2.133)	32/16 (2.000)	31/16 (1.938)
3rd	37/21 (1.762)	31/17 (1.824)	33/19 (1.737)	29/18 (1.611)
4th	35/23 (1.522)	32/20 (1.600)	35/23 (1.522)	31/21 (1.476)
5th	30/22 (1.364)	28/19 (1.474)	31/22 (1.409)	30/22 (1.364)
6th	33/26 (1.269)	28/21 (1.333)	33/25 (1.320)	33/26 (1.269)

## YZF-R1 Mission ratio

GEAR	PLAN	Ratio	Pinion gear			Wheel gear		
			Part number	The number of teeth	Stamp	Part number	The number of teeth	Stamp
1st	A	2.429	14B-17401-70-A	14	14B-AB	14B-17211-70-A	34	14B-1WA
	B	2.357	14B-17401-70-A	14	14B-AB	14B-17211-80-B	33	14B-1WB
	C	2.313	14B-17401-80-C	16	14B-C	14B-17211-90-C	37	14B-1WC
2nd	A	2.133	14B-17121-70-A	15	14B-2PA	14B-17221-70-A	32	14B-2WA
	B	2.000	14B-17121-80-B	16	14B-2PBC	14B-17221-80-B	32	14B-2WB
	C	1.938	14B-17121-80-B	16	14B-2PBC	14B-17221-90-C	31	14B-2WC
3rd	A	1.824	See the 3- and 4-speed pinion gear combinations table.	17	14B-3PA	14B-17231-70-A	31	14B-3WA
	B	1.737		19	14B-3PB	14B-17231-80-B	33	14B-3WB
	C	1.611		18	14B-3PC	14B-17231-90-C	29	14B-3WC
4th	A	1.600		20	14B-4PA	14B-17241-70-A	32	14B-4WA
	B	1.522		23	14B-4PB	14B-17241-80-B	35	14B-4WB
	C	1.476		21	14B-4PC	14B-17241-90-C	31	14B-4WC
5th	A	1.474	14B-17151-70-A	19	14B-5PA	14B-17251-70-A	28	14B-5WA
	B	1.409	14B-17151-80-B	22	14B-5PBC	14B-17251-80-B	31	14B-5WB
	C	1.364	14B-17151-80-B	22	14B-5PBC	14B-17251-90-C	30	14B-5WC
6th	A	1.333	14B-17161-70-A	21	14B-6PA	14B-17261-70-A	28	14B-6WA
	B	1.320	14B-17161-80-B	25	14B-6PB	14B-17261-80-B	33	14B-6WBC
	C	1.269	14B-17161-90-C	26	14B-6PC	14B-17261-80-B	33	14B-6WBC

### NOTICE

Make sure that the pinion and wheel gear are combined for use according to the chart plan.

### 3- and 4-Speed Pinion Gear Combinations Table

Part number	PLAN		Mating wheel gear part numbers	
	3rd	4th	3rd	4th
14B-17131-AA	A	A	14B-17231-70-A	14B-17241-70-A
14B-17131-AB	A	B	14B-17231-70-A	14B-17241-80-B
14B-17131-AC	A	C	14B-17231-70-A	14B-17241-90-C
14B-17131-BB	B	B	14B-17231-80-B	14B-17241-80-B
14B-17131-BA	B	A	14B-17231-80-B	14B-17241-70-A
14B-17131-BC	B	C	14B-17231-80-B	14B-17241-90-C
14B-17131-CC	C	C	14B-17231-90-C	14B-17241-90-C



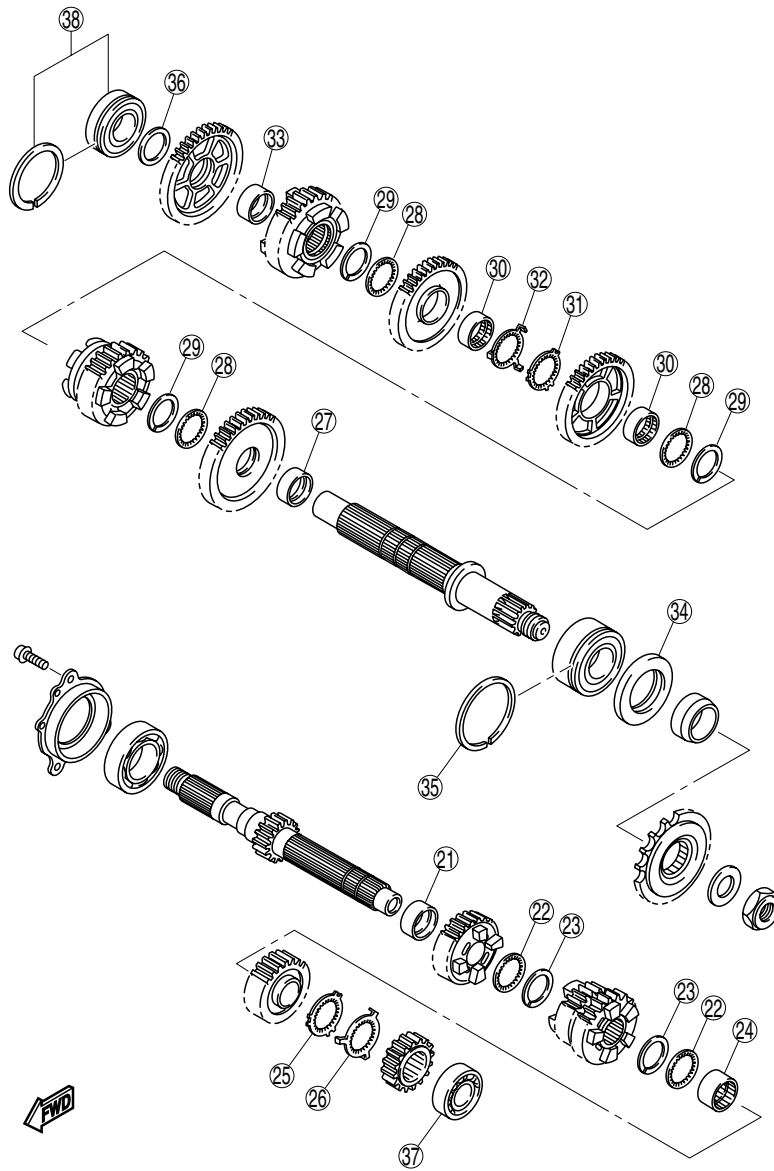


## 12. Mission Maintenance Set (14B-A7000-70)

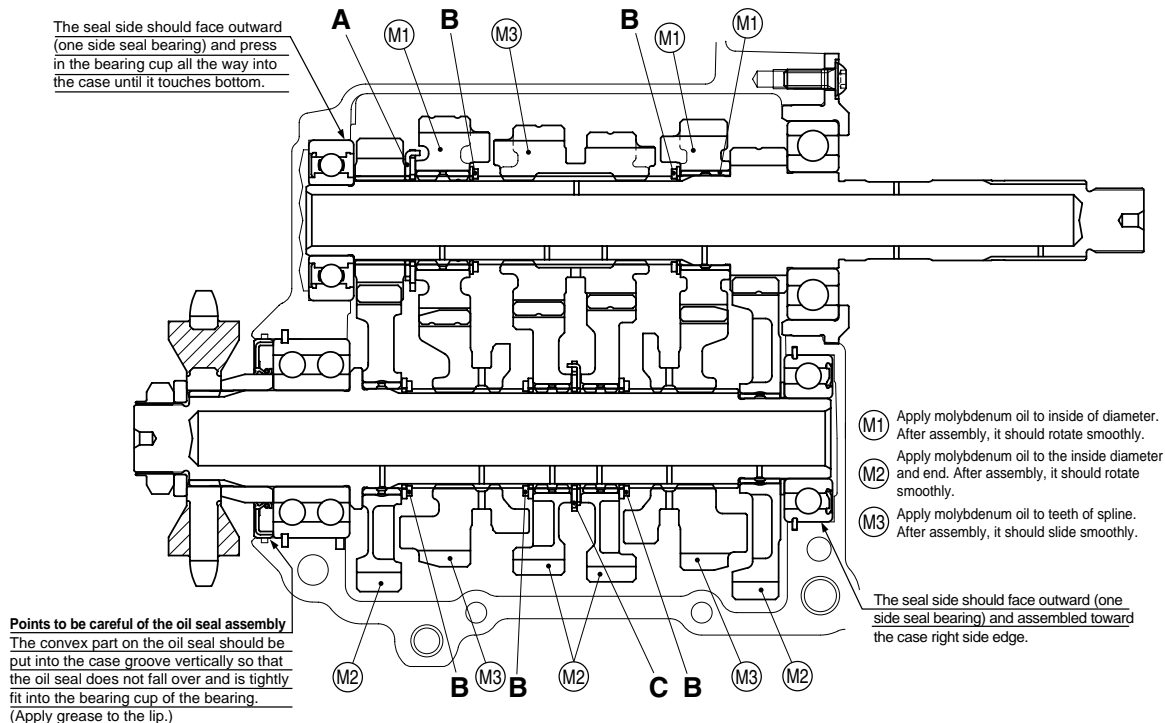
### Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
*	21	90387-28003	COLLAR	3	
*	22	90209-25011	WASHER	6	
*	23	93440-28184	CIRCLIP	10	
*	24	90387-25023	COLLAR	3	
*	25	90214-25004	WASHER, CLAW	3	
*	26	90214-25003	WASHER, CLAW	3	
*	27	90387-31003	COLLAR	3	
*	28	90209-28008	WASHER	9	
*	29	93440-31187	CIRCLIP	15	
*	30	90387-28004	COLLAR	6	
*	31	90214-29002	WASHER, CLAW	3	
*	32	90214-28002	WASHER, CLAW	3	
*	33	90387-25008	COLLAR	3	
*	34	93102-40330	SEAL, OIL	3	
*	35	93440-62032	CIRCLIP	5	
*	36	90201-257H0	WASHER, PLAIN	3	
*	37	93306-27208	BRG.	3	
	38	5VY-17166-00	BRG., 2	3	

This kit contains three (3) sets of parts necessary for transmission disassembly and maintenance.

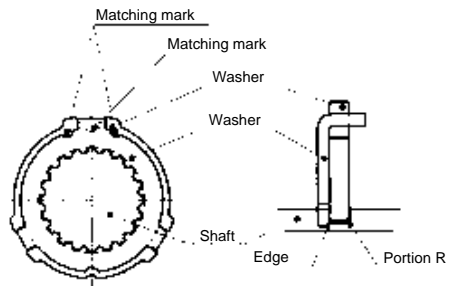


# Transmission Assembly



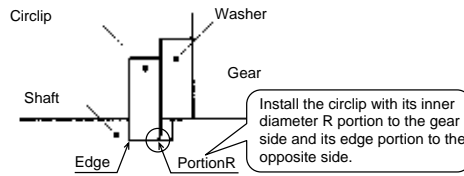
**TIP**

- Always use a new circlip.
- Do not mistake the washer and circlip directions.  
(See drawing below.)



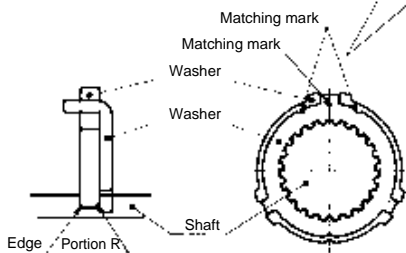
**A** Detail of installation of washer

Rotate washer so that its teeth meet axle-spline teeth on the axle, and then lock with washer's claw. Assemble washer with putting together their matching mark.



**B** Detail of installation of circlip

Position the center of the abutment joint of the circlip right with the spline threads.



**C** Detail of installation of washer

### 13. Drive Sprockets

#### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	4XV-17460-75	SPROCKET, DRIVE	1	15T, 520SIZE
2	4XV-17460-76	SPROCKET, DRIVE	1	16T, 520SIZE
3	4XV-17460-77	SPROCKET, DRIVE	1	17T, 520SIZE

This sprocket is weight-saved by changing the chain size to 520 in relation to the STD one.

**NOTICE**

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**When using this drive sprocket, use the sprocket nut of the kit.**

---

## 14. Sprocket Nut Set (4C8-A7463-70)

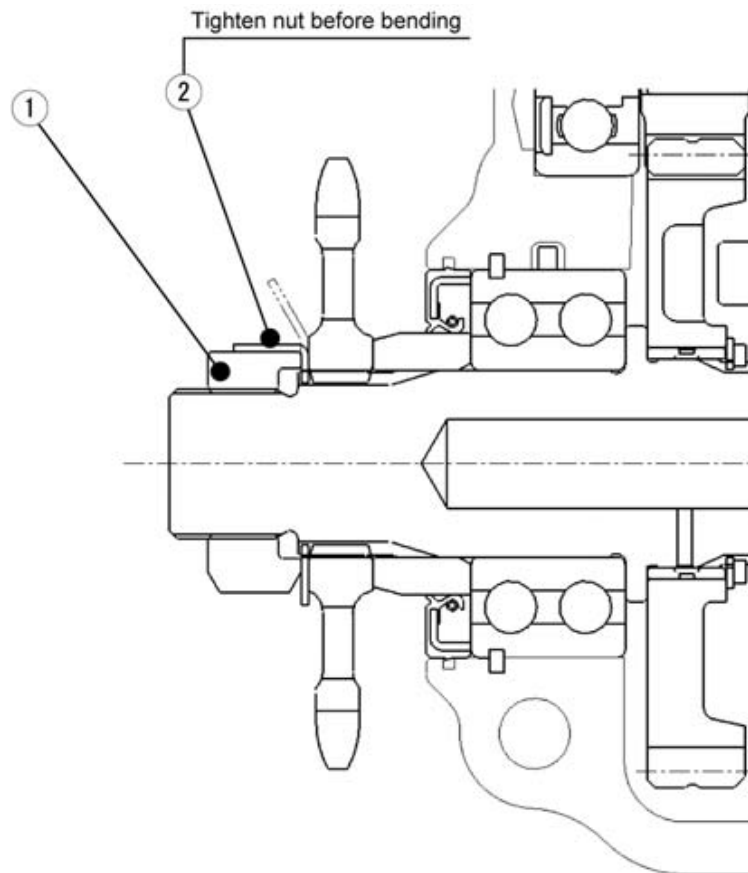
### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	4C8-17463-70	NUT	1	
*	90215-30233	WASHER, LOCK	1	

This sprocket nut uses a bending type of lock washer instead of the STD caulking type.

### **NOTICE**

**When using this sprocket nut, use the drive sprocket of the kit.**



## 2-2 Installing Chassis Parts

### 15. Oil Catcher Tank Set (14B-C1707-70)

#### Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
	1	14B-21707-70	OIL TANK COMP.	1	
*	2	90467-18172	CLIP	4	
	3	14B-15373-70	PIPE, BREATHER	1	
	4	14B-15393-70	PIPE, BREATHER 2	1	
*	5	90480-11006	GROMMET	2	
*	6	90387-062N2	COLLAR	2	
*	7	90111-06051	BOLT, HEX. SOCKET BUTTON	2	
*	8	92907-06200	WASHER, PLAIN	2	

The oil catcher tank is available to meet the racing regulations.

The capacity of this tank is 550cc.

#### Installation

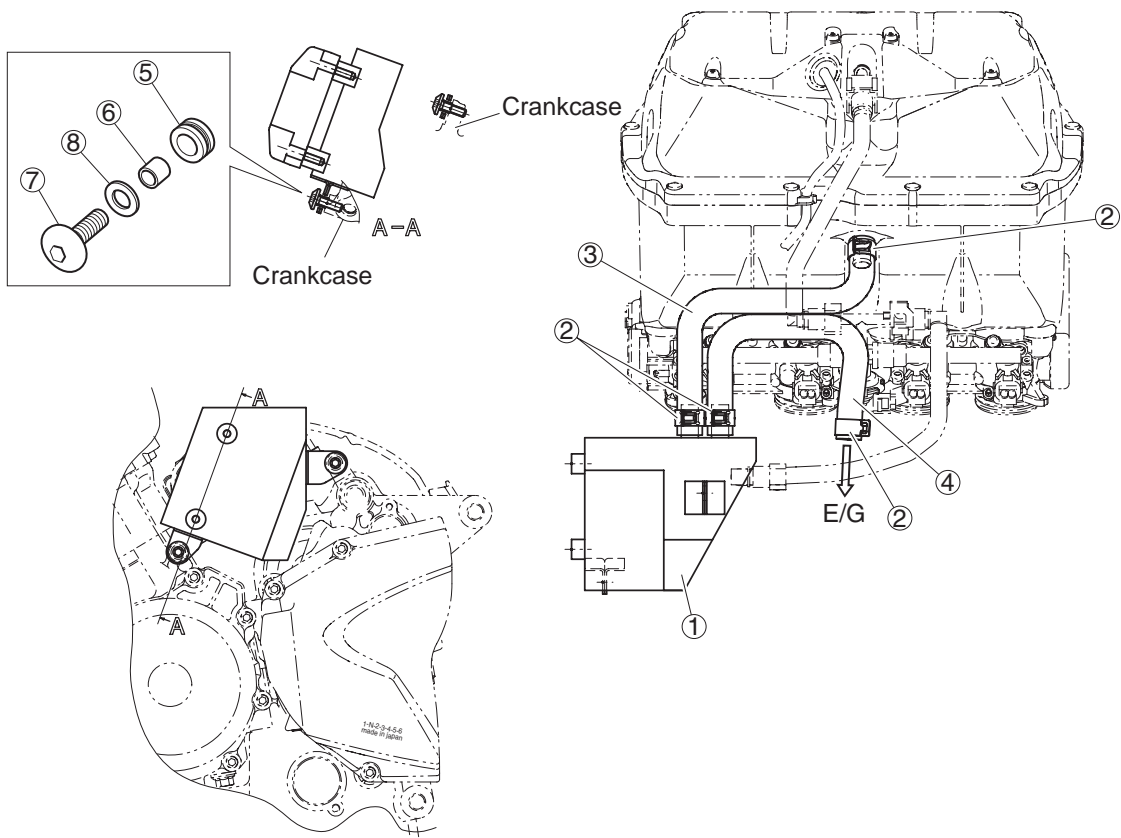
1. Remove the coolant reservoir from the chassis.
2. Remove from the chassis the breather hose that is connected to the air filter case from the crankcase.
3. Install the oil catcher tank and breather hose from the kit as shown.  
(Install at the same positions where the coolant reservoir were removed.)

#### **NOTICE**

---

**Change the clip direction so it does not contact the wire harness.**

---





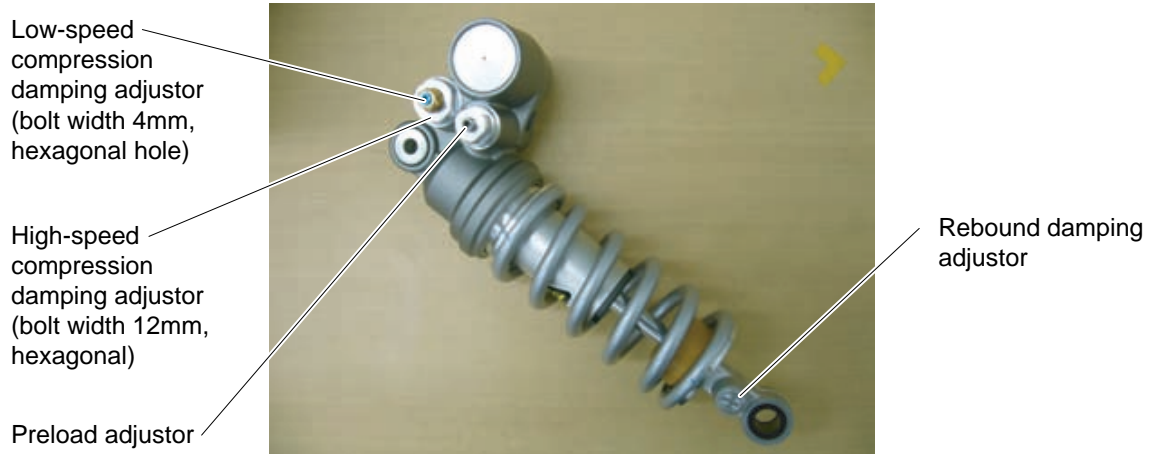
## 16. Shock Absorber Rear (14B-22210-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-22210-70	SHOCK ABSORBER, Rr.	1	98 N/mm

### Rear Suspension Performance Adjustment Method

Low-speed compression damping, high-speed compression damping, rebound damping and preload can be adjusted.

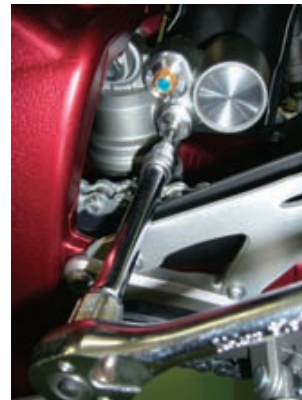


### Preload Adjustment Method

Turn the adjustor clockwise to increase the preload and anticlockwise to reduce the preload.

The adjustment range is 8mm (0.5mm/turn).

Shipping position: Tightened 8 turns from the preload minimum position.



### Rebound Damping Adjustment Method

Turn clockwise to increase the damping force and anticlockwise to reduce the damping force.

The adjustment range is between 3 to 20 steps back from the lightly tightened adjustor position.

Shipping position: 15 steps back from the tightened adjustor position.



#### **NOTICE**

---

**When tightening the adjustor, do it lightly. Over-tightening the adjustor can damage it.**

---

### Compression Damping Adjustment Method At Low Speeds

Turn clockwise to increase the damping force and anticlockwise to reduce the damping force.

The adjustment range is 1 to 20 steps back from the lightly tightened adjustor position.

Shipping position: 10 steps back from the tightened adjustor position.



#### **NOTICE**

---

**When tightening the adjustor, do it lightly. Over-tightening the adjustor can damage it.**

---

### At High Speeds

Turn clockwise to increase the damping force and anticlockwise to reduce the damping force.

The adjustment range is 4 steps back from the lightly tightened adjustor position.

Shipping position: 3 turns back from the tightened adjustor position.



#### **NOTICE**

---

**When tightening the adjustor, do it lightly. Over-tightening the adjustor can damage it.**

---

## 17. Spring Rear Shock

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-22222-70	SPRG., Rr. SHOCK	1	108 N/mm Identifying stamp: 159.5-55-108
2	14B-22222-75	SPRG., Rr. SHOCK	1	103 N/mm Identifying stamp: 159.5-55-103
3	14B-22222-80	SPRG., Rr. SHOCK	1	98N/mm Identifying stamp: 159.5-55-98

- These springs can be used with the standard or kit shock absorbers.
- There is a stamp on the side of the springs for rate identification.
- The stamp number indicates the length, diameter and rate.
- For spring replacement, see the 14B STD. Service Manual.
- The spring rate of the standard rear suspension is 98.1 N/mm.

## 18. Front Fork ASSY

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-23102-70	Fr. FORK ASSY. LH.	1	10.0 N/mm
2	14B-23103-70	Fr. FORK ASSY. RH.	1	10.0 N/mm

### Front Fork Performance Adjustment Method

Designed to develop damping force independent of each other, the left leg develops the compression damping force and the right one the rebound damping force.

Adjustment is possible in preload as well as in compression and rebound damping force.



### Preload Adjustment Method

Turn clockwise to increase the preload and anticlockwise to reduce the preload.

The adjustment range is 15mm (1mm/turn).

Shipping position: Tightened 5 turns from the preload minimum position.



### **Damping Adjustment Method**

Turn clockwise to increase the damping force and anticlockwise to reduce the damping force.

The adjustment range is:

Rebound : 1 to 25 steps back from the adjustor's clockwise lightly tightened position.

Compression : 1 to 25 steps back from the adjustor's clockwise lightly tightened position.

Shipping position

Rebound : 10 steps back from the tightened adjustor position.

Compression : 10 steps back from the tightened adjustor position.

#### **NOTICE**

---

**When tightening the adjustor, do it lightly. Over-tightening the adjustor can damage it.**

---



## 19. Spring Front Fork

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-23141-70	SPRG., Fr. FORK	1	11.0 N/mm Identifying slits 3
2	14B-23141-75	SPRG., Fr. FORK	1	10.5 N/mm Identifying slits 2
3	14B-23141-80	SPRG., Fr. FORK	1	10.0 N/mm Identifying slits None
4	14B-23141-85	SPRG., Fr. FORK	1	9.5N/mm Identifying slits 1

- There are slits at the ends of the spring for rate identification.
- The number of slits indicates the rate as shown above.
- When using an optional spring for the STD fork, replace the supplied preload tube with the set.



#### NOTICE

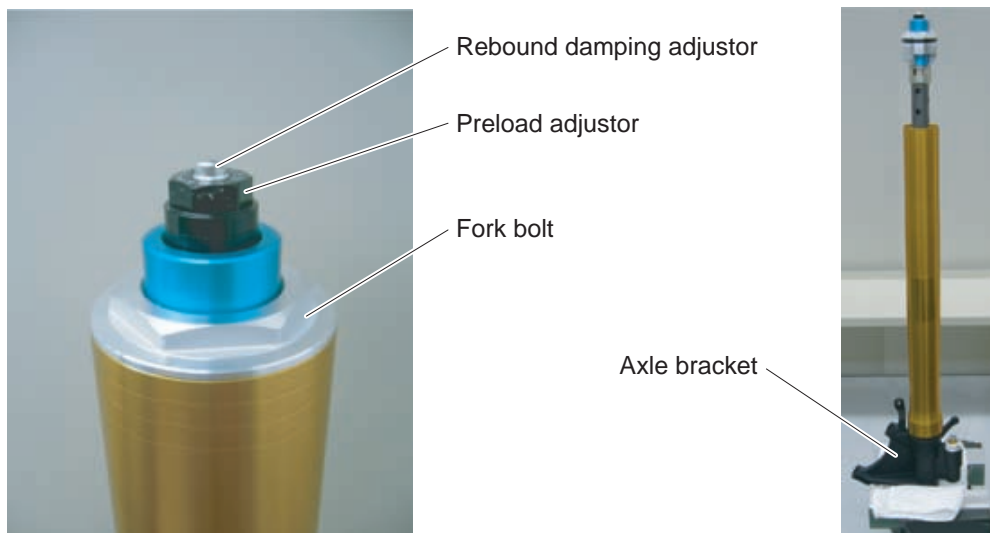
When using an optional spring for the kit fork, you do not need to replace the preload tube. Use the original tube fitted to the fork.

#### TIP

- A spanner (SPECIAL TOOLS) and rod (SPECIAL TOOLS) are supplied with the front fork (14B-23102-70).
- Use Yamaha M1 suspension oil.

## Front Fork Spring Replacement Method

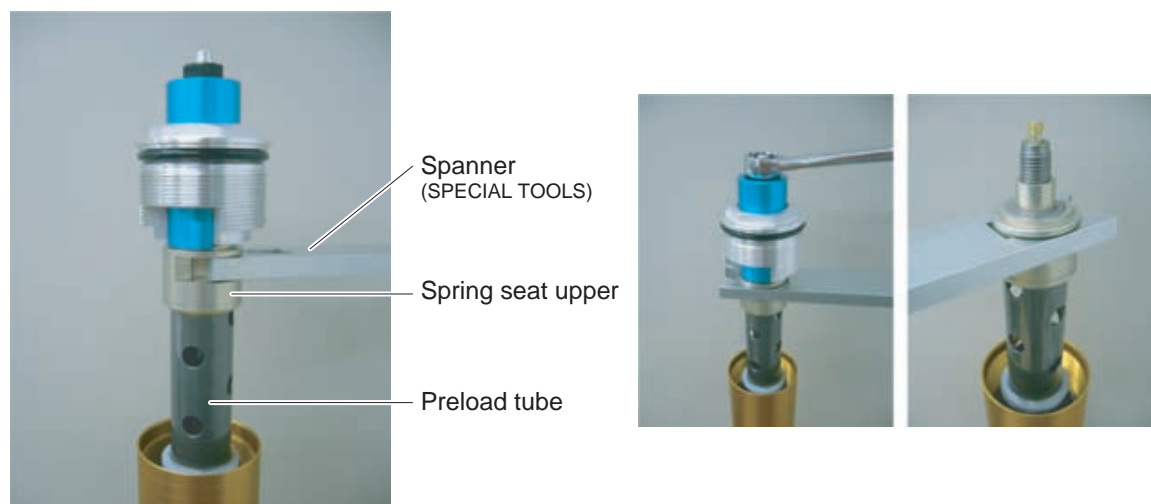
1. Turn the damping adjuster and preload adjuster anticlockwise to set to the weakest position.
2. After fixing the axle bracket in a vice, turn the fork bolt anticlockwise to lower the outer tube until the dust seal touches the upper surface of the axle bracket.



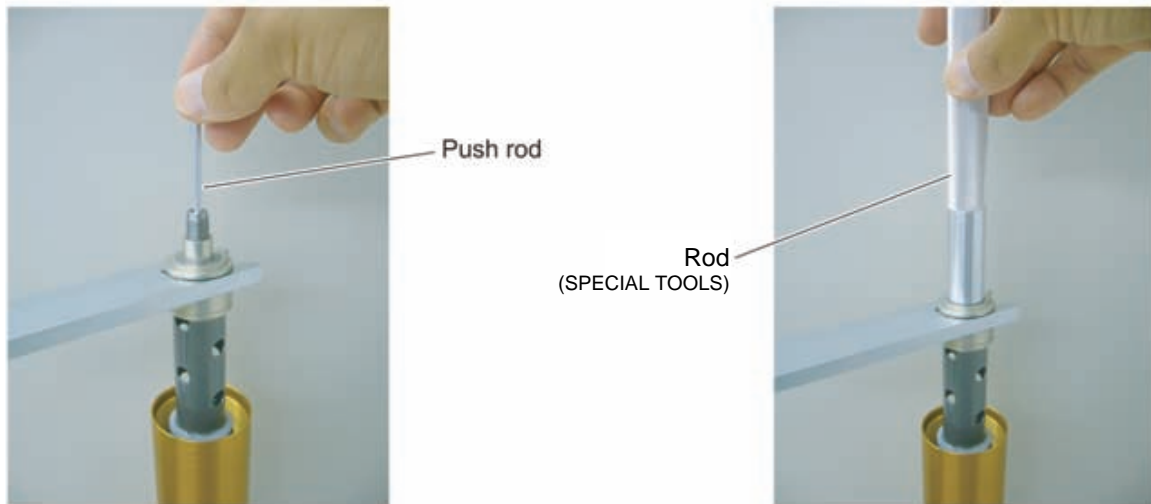
3. Insert the spanner (SPECIAL TOOLS) into the notch of the spring seat upper and clamp the 14mm special nut.
4. Use a 14mm box spanner on the preload adjuster to remove the cap bolt assembly.

### **NOTICE**

**Do not remove the spanner (SPECIAL TOOLS) while doing this.**



5. Remove the push rod and fit the rod (SPECIAL TOOLS) to the piston rod.



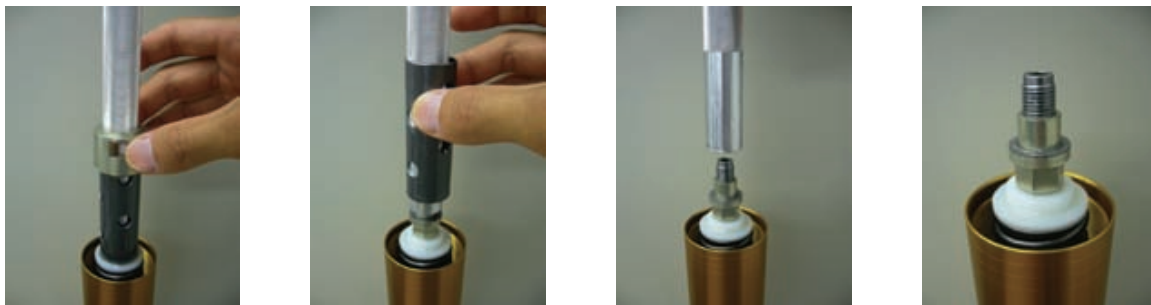
6. Grip the rod (SPECIAL TOOLS) firmly and remove the spanner (SPECIAL TOOLS).

**NOTICE**

Be very careful to apply downward pressure on the rod (SPECIAL TOOLS) when you remove the spanner (SPECIAL TOOLS).



7. Remove the spring seat upper and preload tube before removing the rod (SPECIAL TOOLS).

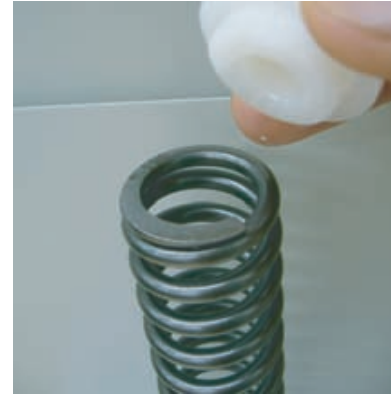
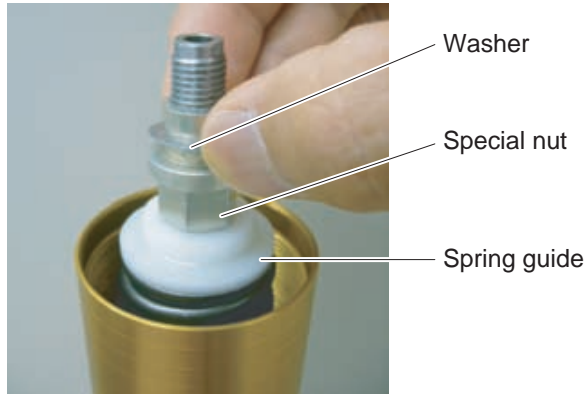




8. Remove the washer, special nut and spring guide and replace the spring.

**NOTICE**

**Be very careful to apply downward pressure on the rod (SPECIAL TOOLS) when you remove the spanner (SPECIAL TOOLS).**



9. Press the rod downwards before adjusting the oil level.

- Oil level in Shipping state: With the spring removed and the outer tube and rod lowered, 160mm from the top of the outer tube.



10. Reassemble the parts after oil level adjustment by following the disassembly procedure in reverse.



Tightening torque: 20N/m



## 20. Seat Cushion (13S-24713-70)

### Parts List

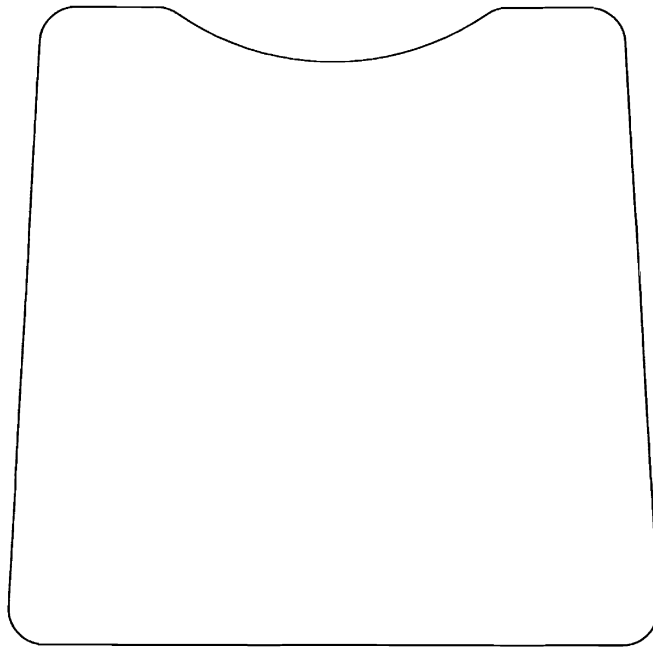
No.	PART No.	PART NAME	Q'TY	REMARKS
1	13S-24713-70	CUSHION SEAT	1	

Anti slip seat.

Cut to any size for use.



FWD



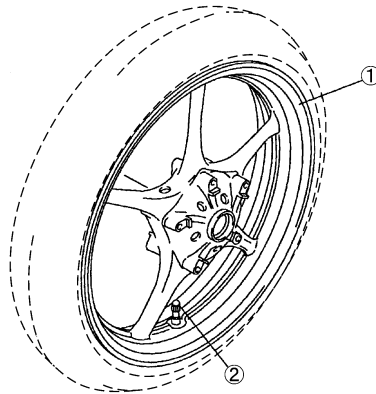
## 21. Front Spare Wheel ASS'Y (4C8-25100-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	4C8-25160-00	CAST WHEEL ASSY.	1	MAT BLACK
*	93900-00030	VALVE, RIM	1	

\*This kit does not include a tire.

This part is an assembly of bearings, spacers and an air valve in a STD wheel.



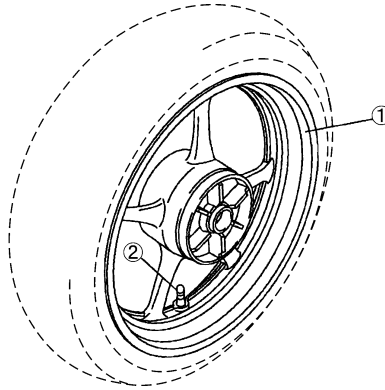
## 22. Rear Spare Wheel ASS'Y (4C8-25300-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	4C8-25370-00	WHEEL,CAST	1	MAT BLACK
*	93900-00030	VALVE, RIM	1	

\*This kit does not include a tire.

This part is an assembly of bearings, spacers and an air valve in a STD wheel.

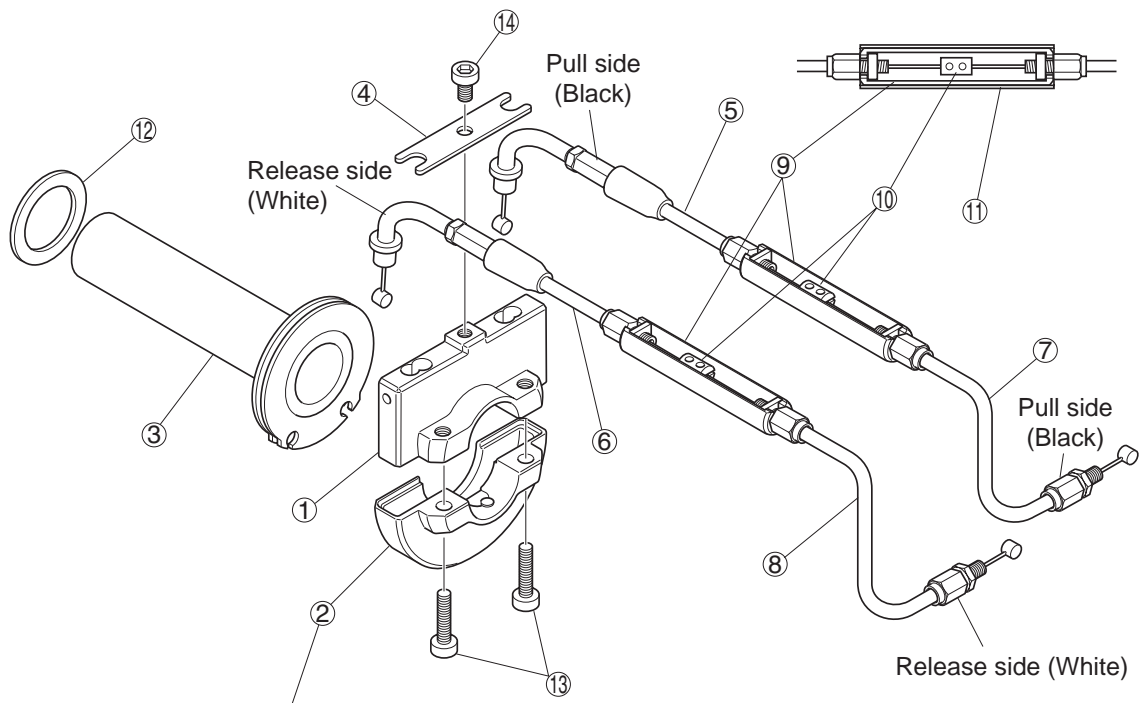


### 23. Throttle Set (14B-C6300-70)

#### Parts List

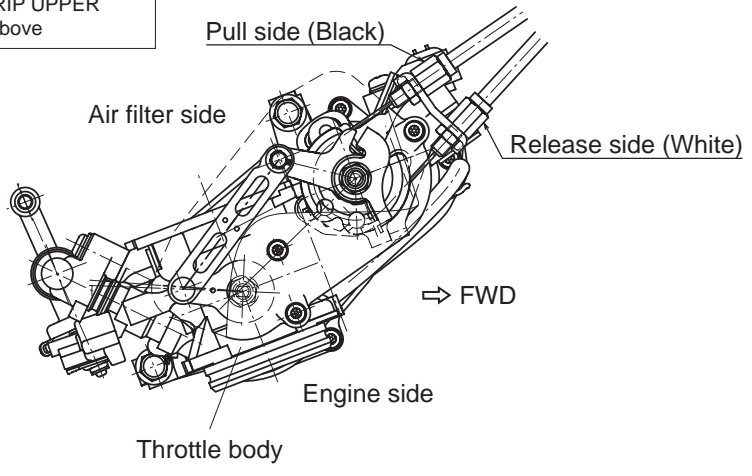
	No.	PART No.	PART NAME	Q'TY	REMARKS
°	1	2C0-26281-70	CAP, GRIP UPPER	1	
*	2	5FL-26282-00	CAP, GRIP UNDER	1	
°	3	5SL-26243-71	TUBE, GUIDE	1	Linear type
°	4	2C0-26391-70	CLIP, WIRE 1	1	
°	5	14B-26311-70	WIRE, THROTTLE 1	1	Grip side, Pull side Stamp:14B-70-1 Plated color:Black
°	6	14B-26312-70	WIRE, THROTTLE 2	1	Grip side, Release side Stamp:14B-70-2 Plated color:White
°	7	14B-26313-70	WIRE, THROTTLE 3	1	Engine side, Pull side Stamp:14B-70-3 Plated color:Black
°	8	14B-2631J-70	WIRE, THROTTLE 4	1	Engine side, Release side Stamp:14B-70-4 Plated color:White
°	9	2C0-26261-70	CYLINDER	2	
°	10	5FL-26244-70	SLIDER	2	
	11	2C0-2639E-70	PROTECTOR	2	
*	12	90201-261L1	WASHER, PLAIN	1	
*	13	91314-05020	BOLT, HEX. SOCKET HEAD	2	
*	14	91314-05008	BOLT, HEX. SOCKET HEAD	1	

In this throttle set the throttle grip can be removed and maintained by itself.



Machining off the boss.

Scrap away CAP, GRIP UPPER of the kit as shown above

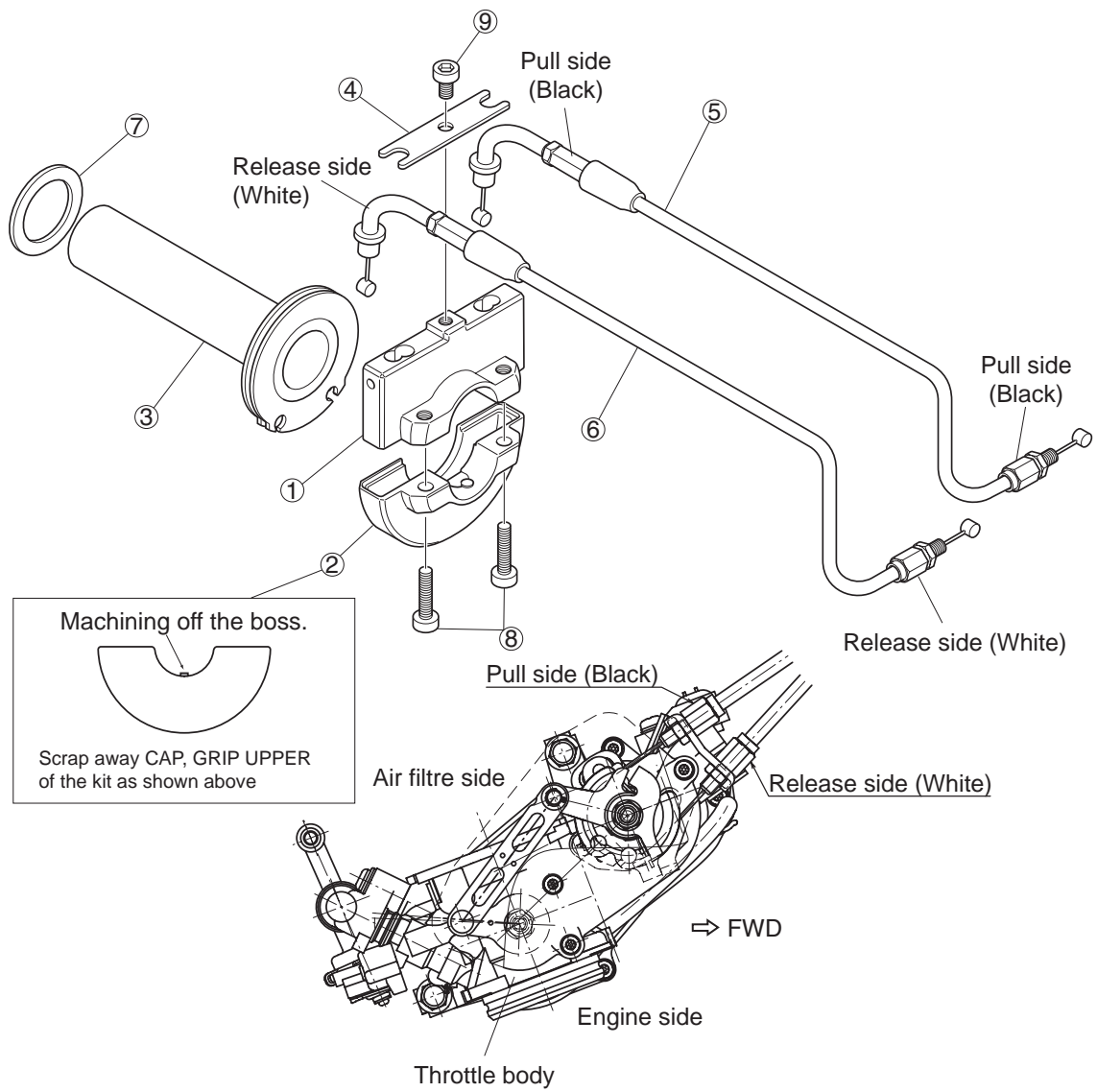


## 24. Throttle Set (14B-C6300-80)

### Parts List

	No.	PART No.	PART NAME	Q'TY	REMARKS
°	1	2C0-26281-70	CAP, GRIP UPPER	1	
*	2	5FL-26282-00	CAP, GRIP UNDER	1	
°	3	5SL-26243-71	TUBE, GUIDE	1	Linear type
°	4	2C0-26391-70	CLIP, WIRE 1	1	
°	5	14B-26301-70	THROTTLE WIRE ASSY., 1	1	Pull side Stamp:14B-80-1 Plated color:Black
°	6	14B-26302-70	THROTTLE WIRE ASSY., 2	1	Release side Stamp:14B-80-2 Plated color:White
*	7	90201-261L1	WASHER, PLAIN	1	
*	8	91314-05020	BOLT, HEX. SOCKET HEAD	2	
*	9	91314-05008	BOLT, HEX. SOCKET HEAD	1	

In this throttle set the working angle of the throttle grip turning is made smaller for quicker response to the throttle opening.





## 25. Tube Guide (5VY-26243-80)

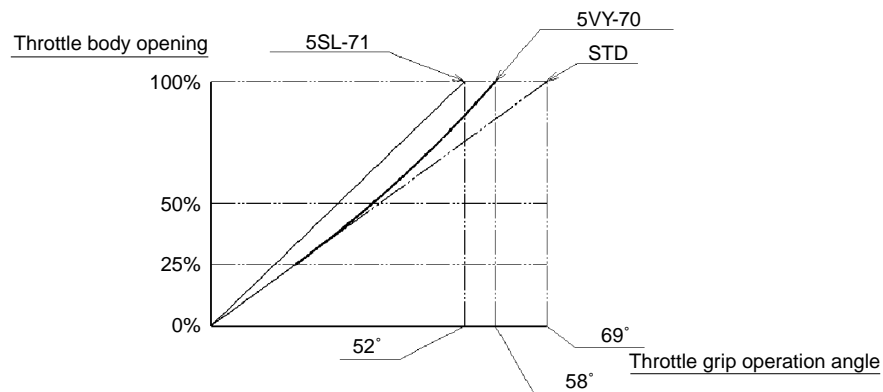
### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	5VY-26243-80	TUBE, GUIDE	1	Progressive type

### About the Throttle Tube Guide Specifications

As shown below, the operating angle of the throttle grip up to when the throttle body opening is 25% is the same as STD, and the operating angle of the throttle grip when the throttle is fully opened is 58°.

According to this, the easy operability has been realized through controlling the throttle body opening at an initial stage of the throttle grip operation, the stage of which is difficult to control, as that of the STD, while keeping the operability (full opening performance) during racing.



## 2-3 Installing Electrical Parts

### 26. ECU Set (14B-8591A-70)

#### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-8591A-70	ECU	1	
2	13S-2818Y-80	CD	1	YMS, MANUAL

- Use of this set and a wire harness included in the kit enables regulation (or setting) of fuel injection and ignition timing, etc.
- For details as to how to regulate (or set) fuel injection and ignition timings, etc., refer to the FI matching system manual in the CD-ROM that comes with the set.
- There are two types of basic control data for the ECU included in this set: SB (Super Bike) and ST (Stock Sports). They can be switched over and vice versa. To make it in the ST specification, just remove two couplers located at the lower left of the kit harness fuel tank. (See the figure below.)

<Setting-up Details>

SB specification: Kit cam shaft and \*Recommended muffler

ST specification: \*Recommended muffler

\* Recommended muffler

Made by Akrapovic (For details of the specification, please access the website.)

Web <http://www.akrapovic-exhaust.com/>



#### NOTICE

**Do not use the ECU of this set for any other assembly than the one below.**

	ECU	WIRE HARNESS ASSY.	THROTTLE BODY ASSY.
2007 Models	4C8-8591A-70	4C8-82590-70	4C8-13750-00
2008 Models	4C8-8591A-80	4C8-82590-80	4C8-13750-20
2009 Models	14B-8591A-70	14B-82590-70	14B-13750-00

## 27. Cable Interface (13S-8533A-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	13S-8533A-70	CABLE, INTERFACE	1	USB
2	13S-N81CD-70	8cm CD	1	USB driver

- This cable connects the kit wire harness to the personal computer on which YEC FI Matching System (YMS) is installed.
- Please see the YMS manual for instructions on how to use YMS.
- When connecting the cable to the PC for the first time, it is necessary to install the USB driver. Refer to the USB Driver Installation Manual provided on the 8 cm CD for details on how to install the USB driver.
- The product vendor ID and product ID are provided by the Hamamatsu TOA Electronics, Inc.

Vendor ID: 6837

Product ID: 9001

## Diagnosis Functions

- Use of the ECU in the kit and the harness allows functioning of the following codes in the STD diagnosis.

\* YMS-Monitor: YEC FI Matching System also allows functioning of the code shown below.

CODE	Contents	*YMS-Monitor
01	Throttle sensor	TPS 1(deg)
02	Atmospheric pressure sensor	Atmospheric (kPa)
03	Intake pressure sensor 1	Intake Air (kPa)
05	Intake temperature sensor	Air Temp. (°C)
06	Water temperature sensor	Water Temp. (°C)
07	Vehicle speed sensor	Speed Signal (--)
08	Overturn sensor	Lean Angle Signal (V)
09	Monitor voltage	System Voltage (V)
13	Throttle sensor 2	TPS 2 (deg)
14	Accelerator sensor 1	APS 1 (deg)
15	Accelerator sensor 2	APS 2 (deg)
30	Ignition coil #1	—
31	Ignition coil #2	—
32	Ignition coil #3	—
33	Ignition coil #4	—
34	Intake funnel	—
36	Injector (primary) #1	—
37	Injector (primary) #2	—
38	Injector (primary) #3	—
39	Injector (primary) #4	—
40	Injector (secondary) #1	—
41	Injector (secondary) #2	—
42	Injector (secondary) #3	—
43	Injector (secondary) #4	—
47	Steering damper solenoid	—
50	Main relay	—
70	Program version	—

### Self-Diagnosis Functions

- The ECU and harness in the kit provide the functions for the following codes of standard self-diagnosis:

CODE	Description
00	All functions normally.
11	Cam angle sensor malfunctions.
12	Crank angle sensor malfunctions.
13	Intake pressure sensor malfunctions (open circuit / short circuit).
14	Intake pressure sensor malfunctions (piping system).
15	Throttle opening sensor malfunctions (open circuit / short circuit / ETV).
20	Intake pressure sensor or atmospheric pressure sensor malfunctions.
21	Water temperature sensor malfunctions (open circuit / short circuit).
22	Intake temperature sensor malfunctions (open circuit / short circuit).
23	Atmospheric pressure sensor malfunctions (open circuit / short circuit).
33	Ignition coil #1 malfunctions (open circuit).
34	Ignition coil #2 malfunctions (open circuit).
35	Ignition coil #3 malfunctions (open circuit).
36	Ignition coil #4 malfunctions (open circuit).
39	Injector (primary) malfunctions (open circuit).
40	Injector (secondary) malfunctions (open circuit).
43	Battery voltage monitor malfunctions (power source for fuel system).
46	Power source for vehicle malfunctions.
59	Accelerator opening sensor malfunctions (open circuit / short circuit).
60	Throttle motor malfunctions (drive system).

## 28. Wire Harness Set (14B-F2590-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS
1	14B-82590-70	WIRE HARNESS ASSY.	1	
*	2	5GF-83976-00	SW., HANDLE 1	PIT ROAD LIMITER
	3	14B-83976-70	SW., HANDLE 1	Map select
	4	2C0-82509-70	WIRE, SUB-LEAD	
	5	4C8-82188-70	RESISTOR ASSY.	Finished with joint in Wire Harness.
	6	14B-2128A-70	BRKT., REGULATOR 1	
*	7	90480-13003	GROMMET	
*	8	90560-06201	SPACER	
*	9	90111-06051	BOLT, HEX. SOCKET BUTTON	
	10	14B-2161F-70	BRKT., 5	
	11	14B-2161E-70	BRKT., 4	
*	12	90480-12237	GROMMET	
*	13	90387-06023	COLLAR	
*	14	90338-06018	PLUG	
*	15	120-82131-00	BAND, BATTERY	
*	16	90110-06172	BOLT, HEX. SOCKET	
*	17	92902-06200	WASHER, PLAIN	
*	18	90110-06219	BOLT, HEX. SOCKET	

This wire harness is weight-saved by doing away with connecting wires for lights.

#### **NOTICE**

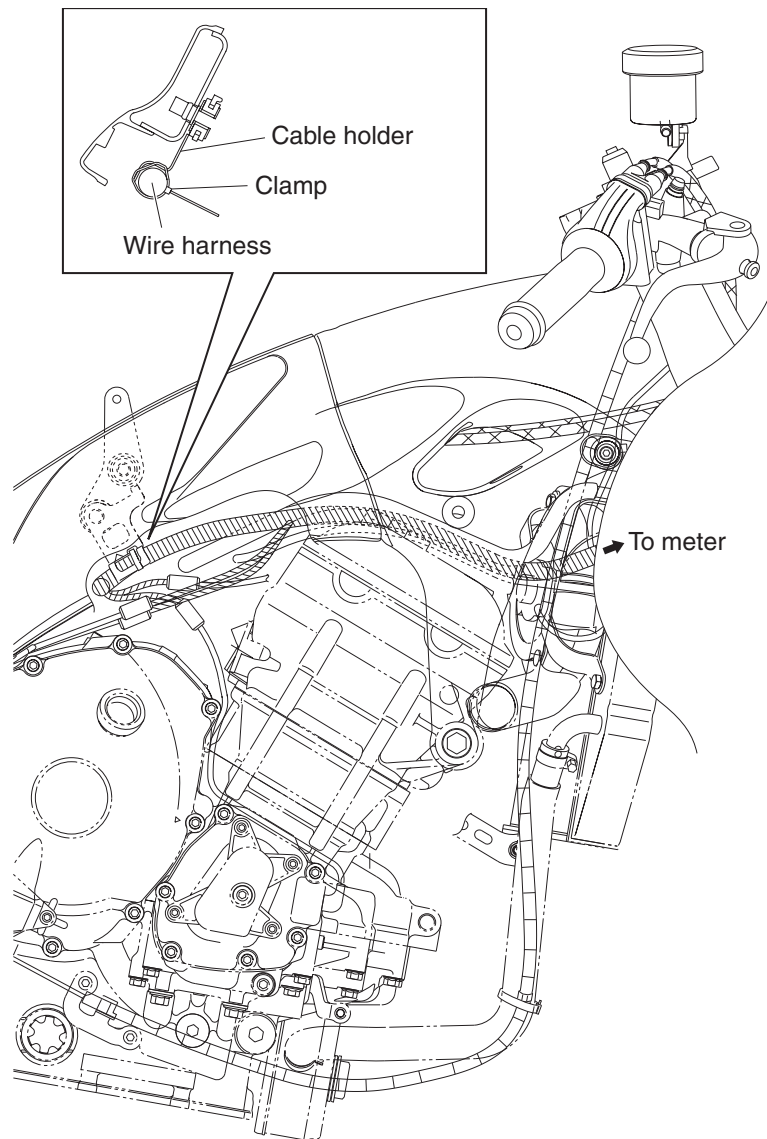
- Do not remove the AC generator but leave it to function. Use on the battery alone will make the machine unable to run in a short time.
- The wire harness will not function if it is not assembled with the ECU (14B-8591A-70) of the kit.

#### **TIP**

- If the wire harness is installed from the kit, the STD D-MODE (drive mode) will not function.
- If the E-SD (STD steering damper) is not used, removing its coupler will pose no problem.

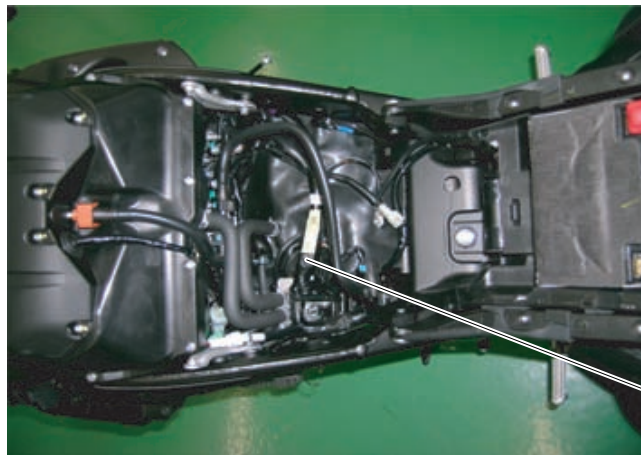
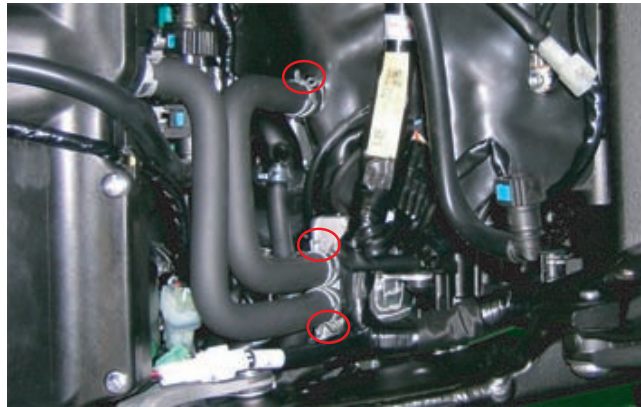
### Installing Wire Harness:

1. Remove the STD wire harness from the chassis.
2. Install the wire harness from the kit by reference to the service manual.
3. Pass the wire harness through the hole in the cable holder side and secure it with a clamp at the location indicated. Align the clamping position with the purple taping on the wire harness.



**NOTICE**

When the oil catcher tank is in use, change the direction of the hose clip so it won't touch the wire harness.

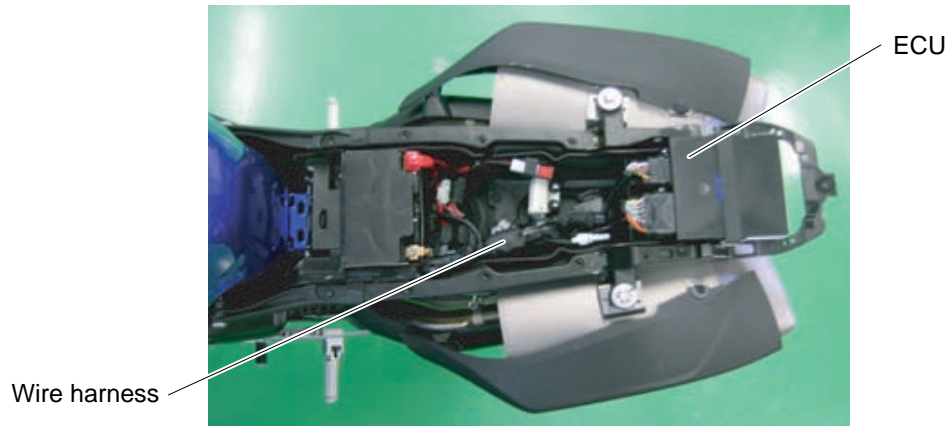


Wire harness



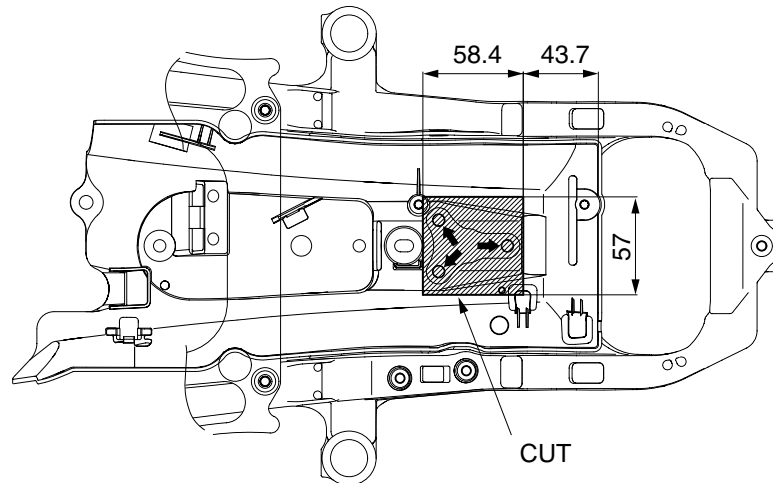
**NOTICE**

The wire from the ACM is designed to be so long that for routing it, enough care should be taken not to allow it to hang out of the chassis or to interfere with other parts.

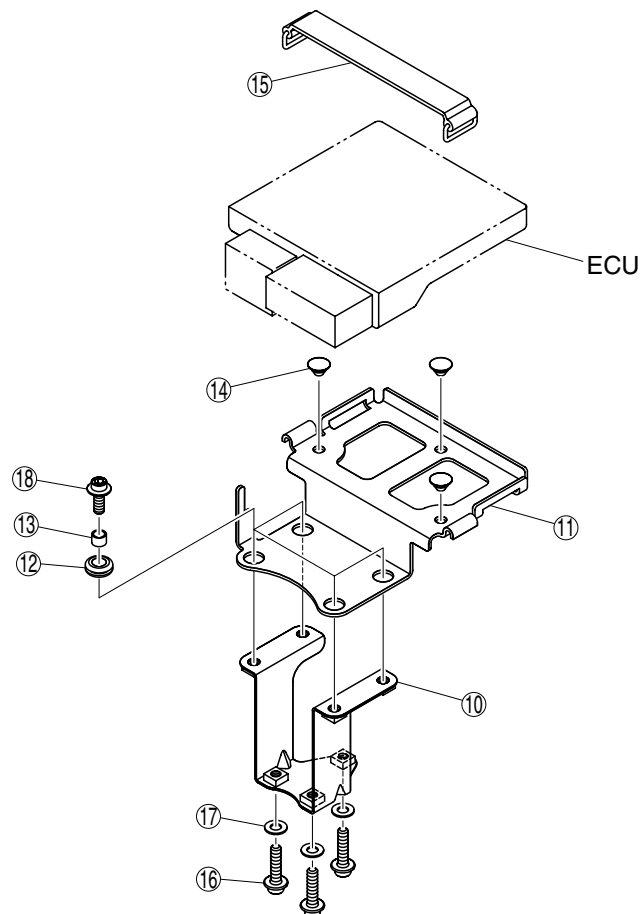


## Installing ECU:

1. Cut the shaded area off the battery box (to provide an installation area for fixing for BRKT5<sup>⑩</sup> seat).



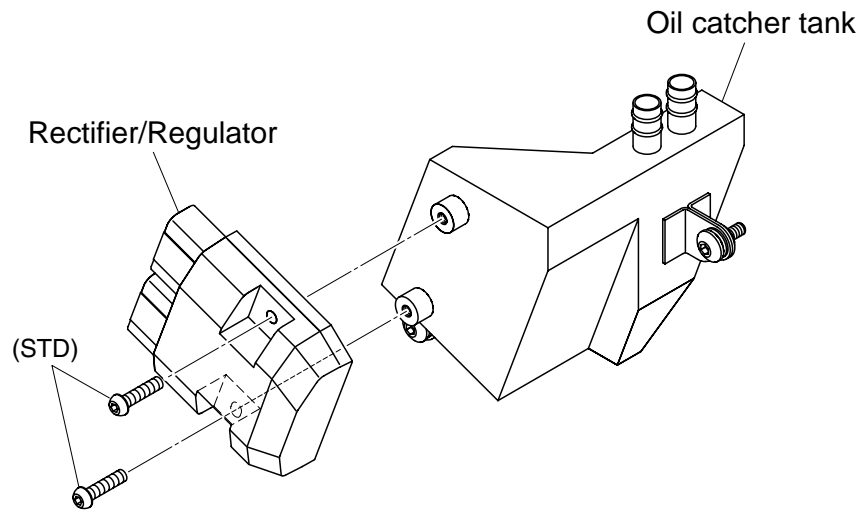
2. Install BRKT5<sup>⑩</sup> with bolt<sup>⑯</sup> and washer<sup>⑰</sup> at the location where the STD mudguard was installed.
3. Install BRKT4<sup>⑪</sup> to BRKT5<sup>⑩</sup> with bolt<sup>⑱</sup>, collar<sup>⑲</sup>, and grommet<sup>⑲</sup>.
4. Install plug<sup>⑭</sup> to BRKT4.
5. Secure the ECU with band<sup>⑮</sup>.



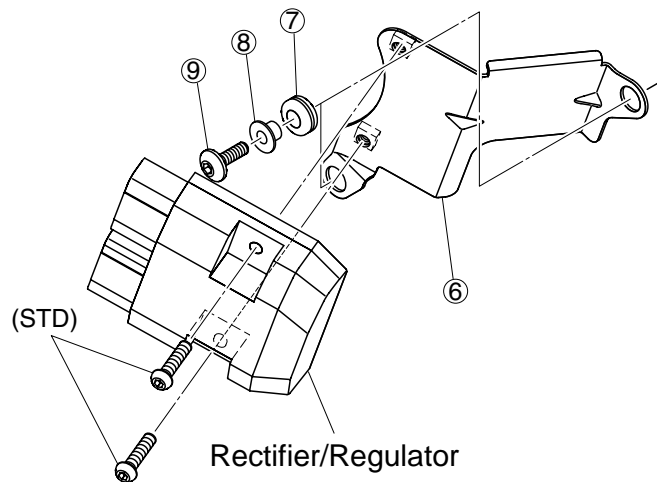
### Installing Rectifier/Regulator:

1. Remove from the chassis the STD rectifier/regulator that is installed on the right side of the radiator.
2. Install the rectifier/regulator to the catcher tank from the kit using the STD chassis bolts.
3. In case the oil catcher tank is not used from the kit, install the rectifier/regulator using the supplied bracket⑥, grommet⑦, spacer⑧, and bolt⑨.

In case the oil catcher tank is used.



In case the oil catcher tank is not used.



- Map select switches Map 1 and Map 2 of the YMS “Comp. FUEL.”

**NOTICE**

**When switching to Map 1 or Map 2 using “Map Select” while riding, check that proper riding is possible even when using either map.**

- The switches (2 types) supplied in this set enable the map select and pit road limiter to be used. (See diagram 1.) The switch accompanying the assembly, functions as the main switch.

(Diagram 1)



- Use the 3-prong coupler in front with the red wire attached as the main switch. (See diagram 2.)  
Fitting it turns the power on and removing it turns the power off.

**NOTICE**

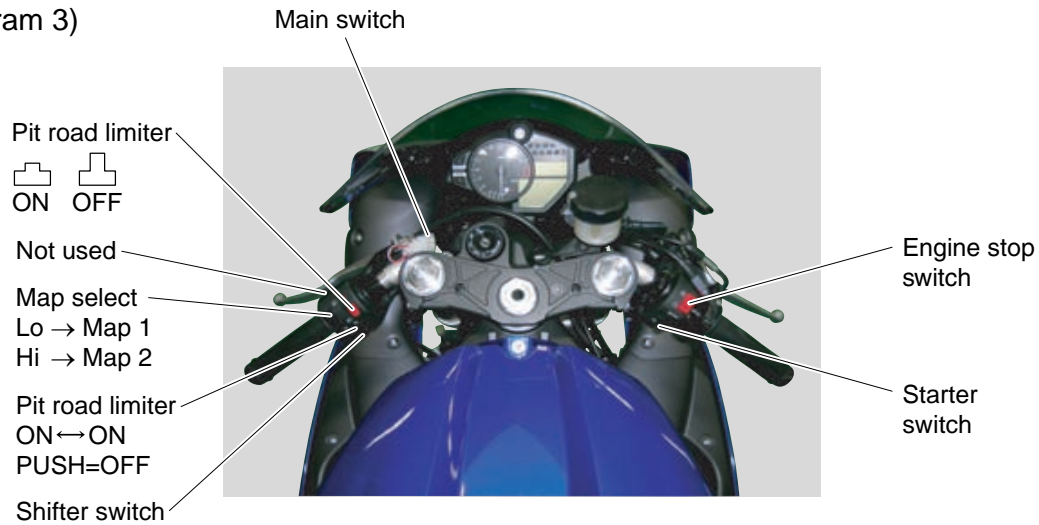
**Be careful not to pull the wire too strongly.**

(Diagram 2)



- The switch installed to the STD machine may be used as is. (See diagram 3.)

(Diagram 3)



- The shifter switch function can be used by combining the harness and kit ECU.
  - ① To use the STD switch (left side) to function as the shifter switch, connect the wire sub-lead that was packaged with this set to the terminal that is normally connected to the left side horn. (See diagram 4.) However, if the resistor assembly is not installed, there is the possibility that the shifter switch will operate incorrectly in rainy weather. (See diagram 5.)

**NOTICE**

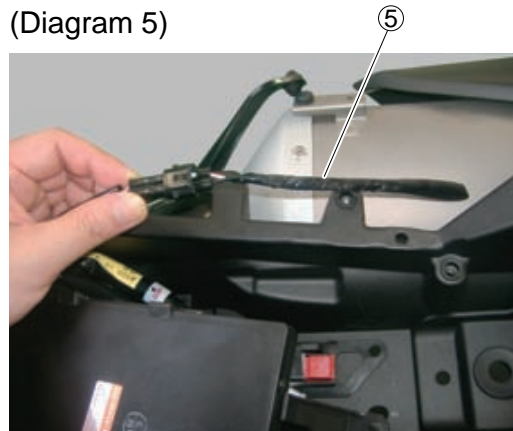
**Do not bend the resistor assembly. It will cease to function if it is bent.**

- ② Install the switch to the 2-pin black coupler underneath the fuel tank. Turning the switch ON cuts the ignition.

(Diagram 4)



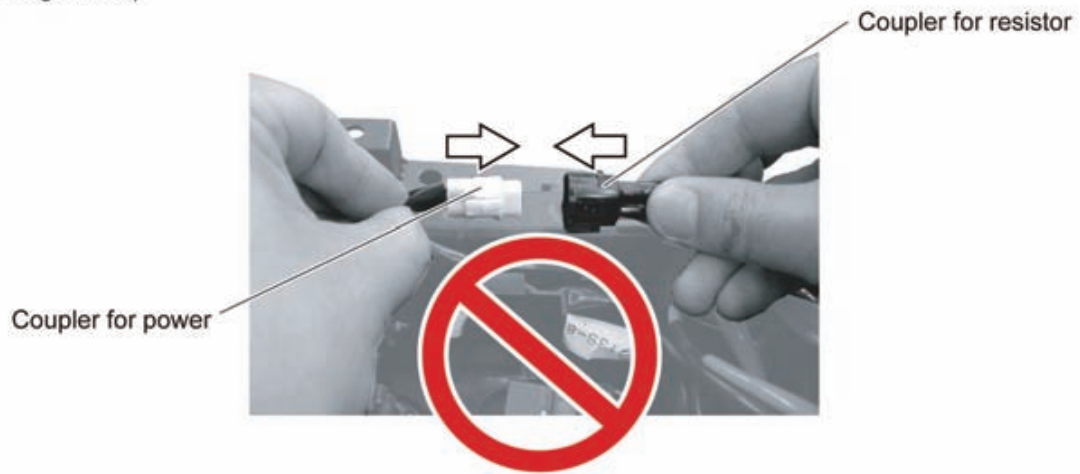
(Diagram 5)



**NOTICE**

Do not connect the coupler for resistor (black, 2-prong) and the coupler for power (white, 2-prong). Connecting them may cause a malfunction. (See diagram 6)

(Diagram 6)



- This harness has a coupler that connects to the 2D made data logger. For details of the specifications of the data logger, please access the website. Web<http://www.2d-kit-system.com/>

## 29. Headlight Harness Set (14B-F4350-70)

### Parts List

No.	PART No.	PART NAME	Q'TY	REMARKS	
1	14B-84359-70	CORD, HEAD LIGHT	1		
*	2	5JJ-81950-20	RELAY ASSY.	1	
*	3	5GF-83976-00	SW., HANDLE 1	1	For emergency
*	4	5RT-83963-00	SW., HANDLE 3	1	On-off, kill
5	4C8-84312-70	CORD ASSY.	1		

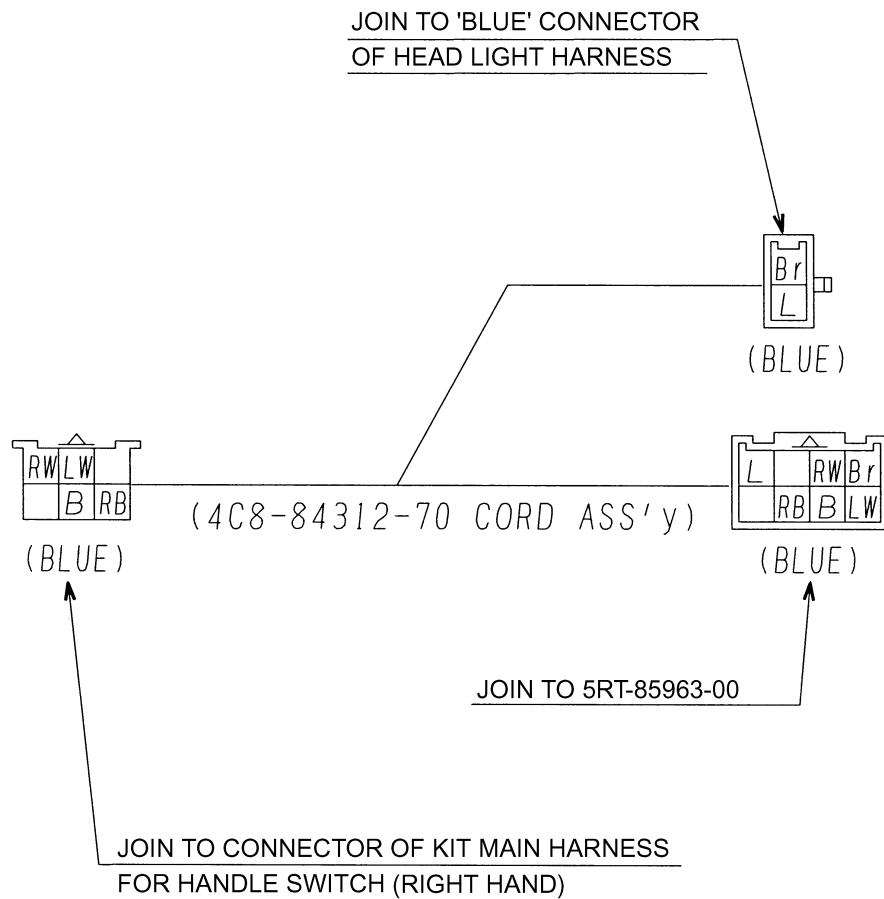
This set is used in endurance races in combination with the kit harness for turning on the STD headlights and taillights.

It assumes that the standard headlights and taillights are used.

The headlight lights up on the Hi side.

The headlight and taillight circuits are independent of one another. If the headlight is broken, the taillight will not go out.

The switch (5GF-83976-00) lights only the rear light.



### 30. ACM Set (14B-F1400-70)

#### Parts List

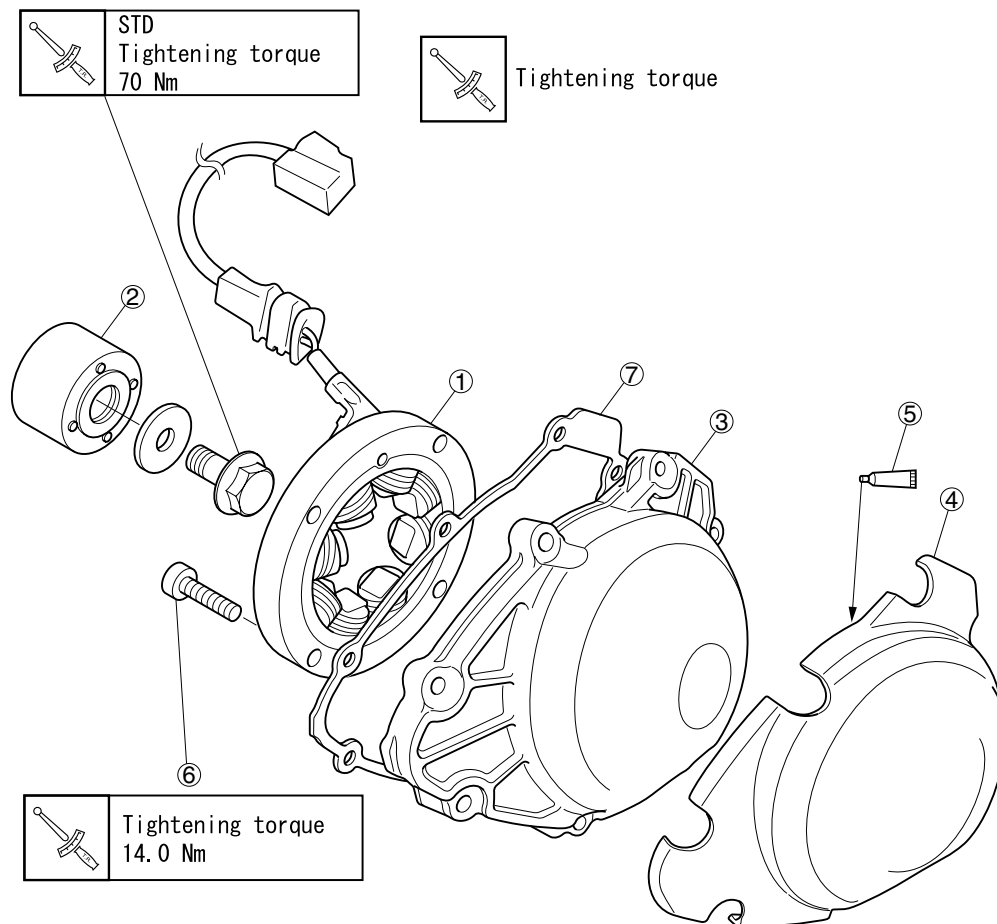
No.	PART No.	PART NAME	Q'TY	REMARKS	
1	14B-81410-70	STATOR ASSY.	1		
2	14B-81450-70	ROTOR ASSY.	1		
3	14B-15411-70	COVER, CRANKCASE 1	1		
4	14B-15414-70	COVER, 1	1		
5	14B-1541H-70	BOND, COVER	1	Adhesive	
*	6	90149-06080	SCREW	4	
	7	14B-15451-70	GSKT., CRANKCASE COVER 1	1	

This ACM is designed to have less inertial mass and friction by making it into an inner rotor type.

#### TIP

#### Regarding Assembly

1. Remove grease from the taper surfaces of both rotor and crank before assembling them.
2. Apply engine oil on the thread and flange of mounting bolts before using them.
3. Using the included adhesive, adhere the carbon cover to the crankcase cover.





### 3 Tightening Torque List

#### Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
Plug for sand drain hole	90340-18002	PLUG, STRAIGHT SCREW	M18 x 1.5	42±4 (4.3±0.4)	3	APPLY LOCK- ING AGENT (LOCKTITE® TO BOTH SCREW THREAD AND TAPERED PORTION.
Install SPARK PLUG	14B-1119C-70	PLUG, SPARK	M10S x 1.0	10 – 12 (1.0 – 1.2)	4	FOR DETAILS, SEE page 3.
Tighten HEAD	90175-10075	NUT	M10 x 1.25	TURN OF NUT METHOD: AXIAL FORCE TAR- GET VALUE OF 43kN ± 5kN	2	FOR DETAILS, SEE page 73.
Tighten HEAD	90179-10029	NUT	M10 x 1.25	TURN OF NUT METHOD: AXIAL FORCE TAR- GET VALUE OF 43kN ± 5kN	8	FOR DETAILS, SEE page 73.
Tighten HEAD	90110-05315	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	12±2 (1.2±0.2)	2	
CAP x HEAD	90105-06027	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	20	APPLY OIL TO SCREW THREAD AND BEARING SURFACE
Tighten HEAD COVER	90109-066F0	BOLT	M6 x 1.0	10±2 (1.0±0.2)	6	
Embedded in HEAD (Install EX.PIPE)	95612-08625	BOLT, STUD	M8 x 1.25	15±2 (1.5±0.2)	8	
AI CAP	90110-06175	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	4	
SPROCKET x CAMSHAFT	90105-07006	BOLT, FLANGE	M7 x 1.0	24±2 (2.4±0.2)	4	
HEAD X JOINT, CARBURETOR	90110-06193	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	7	
Oil check bolt	90149-06070	SCREW	M6 x 1.0	10±2 (1.0±0.2)	1	

## Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
CON ROD	5VY-11654-01	BOLT, CON-ROD BIG END	M8 x 0.75	TURN OF NUT METHOD: RETIGHTEN TO SNUG TORQUE OF 19.6 (2.0) • ANGLE OF 150 ± 5°.	8	APPLY "SUM- ICO MORI ASSEMBLY OIL 150".
	5VY-1165A-01 (Long bolt)				8	
ACM rotor	90105-126A8	BOLT, FLANGE	M12 x 1.25	70±5 (7.0±0.5)	1	FOR DETAILS, SEE page 61.
SPROCKET, CRANK	90105-10290	BOLT, FLANGE	M10 x 1.25	60±5 (6.0±0.5)	1	APPLY OIL TO SCREW THREAD.
CAM CHAIN, TENSIONER	91312-06025	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	2	
Install PIPE, 1	90110-05182	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	1	
Install PIPE, 2	90110-06256	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	2	
Install PIPE, 4	90110-06182	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	1	WATER PUMP SIDE
Install PIPE, 4	90110-06022	SCREW	M6 x 1.0	10±2 (1.0±0.2)	1	RUBBER MOUNT SIDE
Tighten HOSE	90450-38040	HOSE CLAMP ASSY	—	REF. 1. 5 -2.5 (0.15 – 0.25)	3	BREAKAGE OCCURS AT 4 - 5N•m.
	90450-35001				3	
Install PUMP DRIVING SPROCKET	90105-06066	BOLT, FLANGE	M6 x 1.0	15±2 (1.5±0.2)	1	DEGREASE SCREW THREAD.
Install PUMP	90110-06167	BOLT, FLANGE	M6 x 1.0	12±2 (1.2±0.2)	2	
THERMOSTAT ASSY	90176-06014	CAP, NUT	M6 x 1.0	10±2 (1.0±0.2)	2	
Install PIPE, 5	90110-05182	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	1	
Install OIL COOLER	5FL-12822-00	BOLT, UNION	M20 x 1.5	63±3 (6.3±0.3)	1	APPLY OIL TO SCREW THREAD AND BEARING SURFACE

## Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
Tighten DRAIN BOLT	90340-14132	PLUG	M14 x 1.5	43±4 (4.3±0.4)	1	
Install PIPE, OIL 1	90110-06182	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	2	
Install HOUSING, STRAINER	90110-06173	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	3	
Install PIPE HOLDER	90110-06182	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	2	
Install oil delivery pipe 1	90110-06182	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	1	
Install oil delivery pipe 5	90149-06071	SCREW	M6 x 1.0	10±2 (1.0±0.2)	1	
Tighten CLEANING BOLT, UNION	90401-20145	BOLT, UNION	M20 x 1.5	80±15 (8.0±1.5)	1	
Install OIL CLEANER ASSY	5GH-13440-20	OIL CLEANER ASSY	M20 x 1.5	17±2 (1.7±0.2)	1	APPLY GREASE TO O-RING.
Install COVER, STRAINER	90149-06079	SCREW	M6 x 1.0	10±2 (1.0±0.2)	13	
Install RELIEF VALVE	90110-06169	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	2	
Install THROTTLE WIRE	14B-26302-00	BOLT, ADJUST- ING	M6 x 1.0	3.5±5.5 (0.35±0.55)	2	
JOINT ASSY X THROTTLE BODY	90450-62002	HOSE CLAMP	M5 x 0.8	3±0.5 (0.3±0.05)	4	
THROTTLE X FUNNEL	90110-06163	BOLT	M6 x 1.0	8±2 (0.8±0.2)	6	
UPPER COVER	98902-05020	SCREW, BINDING HEAD	M5 x 0.8	2.0±0.5 (0.2±0.05)	9	(TARGET VALUE OF 2.0N•m)

## Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
NUT, RING X CYLINDER HEAD	90179-08410	NUT	M8 x 1.25	20±2 (2.0±0.2)	8	
EX. PIPE (DIFFUSER) X MUFFLER	90105-08063	BOLT, FLANGE	M8 x 1.25	20±2 (2.0±0.2)	2	
Install EX. PIPE ASSY	95812-08040	BOLT, FLANGE	M8 x 1.25	20±2 (2.0±0.2)	1	
Install WIRE PULLEY DOUBLE NUT	14B-1133E- □□ 14B-1133F- □□	WIRE, PULLEY,1 WIRE, PULLEY,2	M6 x 1.0	5 – 7 (0.5 – 0.7)	2	
CATALYST CONVERTER X BRACKET, REAR ARM	90111-08071	BOLT, BUTTON HEAD	M8 x 1.25	20±2 (2.0±0.2)	1	
CATALYST CONVERTER X BRACKET STAY	92014-08035	BOLT, BUTTON HEAD	M8 x 1.25	20±2 (2.0±0.2)	1	
EX. PIPE ASSY X CATALYST CONVERTER	91314-06030	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	1	
Install SERVOMOTOR	95022-06020	BOLT, FLANGE (SMALL HEAD)	M6 x 1.0	10±2 (1.0±0.2)	1	
MUFFLER X REAR FRAME	95814-08045	BOLT, FLANGE	M8 x 1.25	18 – 28 (1.8 – 2.8)	2	
Install MUFFLER PROTECTOR	90111-06087	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	4	
Install CATALYST CONVERTER PROTECTOR	90110-06200	BOLT, HEXAGON SOCKET BUTTON	M6 x 1.0	6.5±1.5 (0.65±0.15)	4	
Install PULLEY COVER	90119-06115	BOLT, HEXAGON WITH WASHER	M6 x 1.0	10±2 (1.0±0.2)	3	
Install DIFFUSER COVER	90111-06095	BOLT, HEXAGON SOCKET BUTTON	M6 x 1.0	7±1.5 (0.7±0.15)	4	

## Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
Implant in CRANKCASE 1	90116-10051	BOLT, STUD	M10 x 1.25	8 TARGETED AT 6 – 9 (0.8 TARGETED AT 0.6-0.9)	10	APPLY OIL TO BOTH SCREW THREAD AND BEARING SURFACE. CONTROL TORQUE.
CRANKCASE 1 x CRANKCASE 2	90119-09010	BOLT, HEXAGON WITH WASHER	M9 x 1.25	FOR DETAILS, SEE page 74.	10	APPLY OIL TO BOTH SCREW THREAD AND BEARING.
CRANKCASE 1 x CRANKCASE 2	90119-08130	BOLT, HEXAGON WITH WASHER	M8 x 1.25	24±2 (2.4±0.2)	8	APPLY OIL TO BOTH SCREW THREAD AND BEARING.
CRANKCASE 1 x CRANKCASE 2	95812-08060	BOLT, FLANGE	M8 x 1.25	24±2 (2.4±0.2)	2	APPLY OIL TO BOTH SCREW THREAD AND BEARING.
CRANKCASE 1 x CRANKCASE 2	90109-06100	BOLT	M6 x 1.0	10±2 (1.0±0.2)	2	APPLY OIL TO BOTH SCREW THREAD AND BEARING.
CRANKCASE 1 x CRANKCASE 2	90105-06165	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	1	APPLY OIL TO BEARING SURFACE.
CRANKCASE 1 x CRANKCASE 2	95812-06060	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	6	APPLY OIL TO BOTH SCREW THREAD AND BEARING.
CRANKCASE 1 x CRANKCASE 2	95812-06050	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	7	APPLY OIL TO BOTH SCREW THREAD AND BEARING.
CRANKCASE 1 x CRANKCASE 2	95812-06040	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	4	APPLY OIL TO BOTH SCREW THREAD AND BEARING.
Install COVER, CRANKCASE 1	90110-06326	BOLT	M6 x 1.0	12±2 (1.2±0.2)	8	ACM COVER
Install COVER, CHAINCASE	90110-06338	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	3	DRIVE SPROCKET COVER
Install COVER, CRANK 2	90110-06323	BOLT	M6 x 1.0	12±2 (1.2±0.2)	8	CLUTCH COVER
Install COVER, CRANK 2	90110-06324	BOLT	M6 x 1.0	12±2 (1.2±0.2)	1	CLUTCH COVER
Install COVER1	90110-06331	BOLT	M6 x 1.0	12±2 (1.2±0.2)	5	CAM CHAIN COVER

## Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
Install COVER1	90110-06323	BOLT	M6 x 1.0	12±2 (1.2±0.2)	1	CAM CHAIN COVER
Install COVER	90110-05326	BOLT	M6 x 1.0	12±2 (1.2±0.2)	6	BREATHER COVER
Install PLATE, BREATHER	90149-06071	SCREW	M6 x 1.0	10±2 (1.0±0.2)	4	
Install COVER2	90110-06178	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	2	REED VALVE COVER
Install PROTECTOR to COVER C/C2	90149-06152	SCREW	M6 x 1.0	6 – 8 (0.6 – 0.8)	2	
Install PLUG to COVER C/C3	92014-08016	BOLT, BUTTON HEAD	M8 x 1.25	15±2 (1.5±0.2)	1	CHECK TIM- ING.
Install PLUG to COVER C/C2	3F9-15362-00	PLUG, OIL LEVEL	M20 x 1.5	1.5±0.5 (0.15±0.05)	1	TAKE CARE NOT TO OVER- TIGHTEN.
MAIN GALLERY 1	36Y-15189-00	PLUG	M16 x 1.5	8±2 (0.8±0.2)	2	TAKE CARE NOT TO OVER- TIGHTEN.
MAIN GALLERY 2	4H7-15189-00	PLUG	M20 x 1.5	8±2 (0.8±0.2)	1	TAKE CARE NOT TO OVER- TIGHTEN.
Install HOLDER CLUTCH WIRE	90110-06340	BOLT	M6 x 1.0	10±2 (1.0±0.2)	2	
OIL RETURN PLUG	90340-12003	PLUG, STRAIGHT SCREW	M12 x 1.0	24±3 (2.4±0.3)	1	
ACM LEAD	90110-06182	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	1	
Install STATOR	90149-06128	SCREW	M6 x 1.0	14±2 (1.4±0.2)	3	TORQUES
Install BAFFLE PLATE 1 -3	90149-06082	SCREW	M6 x 1.0	10±2 (1.0±0.2)	10	
Install COVER, CRANKCASE 3	90149-06152	SCREW	M6 x 1.0	6 – 8 (0.6 – 0.8)	4	
Install BRACKET	90105-06181	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	1	

## Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
Install IDLER GEAR	90110-06223	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	1	
Install STARTER CLUTCH HOLDER	90149-06158	SCREW	M6 x 1.0	14±2 (1.4±0.2)	3	
Install CLUTCH BOSS	4C8-16377-00	NUT, ROCK	M20 x 1.0	115±5 (11.5±0.5)	1	CLAMP NUT AND APPLY OIL TO BOTH SCREW THREAD AND BEARING SURFACE.
Install CLUTCH SPRING	90159-06026	BOLT, FLANGE	M6 x 1.0	10±2 (1.0±0.2)	6	
Install DRIVE SPROCKET	90179-22019	NUT	M22 x 1.0	80±10 (8.5±1.0)	1	CLAMP NUT.
Install BEARING HOUSING	90151-06024	SCREW, CROSS- RECESSE D COUN- TERSUNK	M6 x 1.0	12±2 (1.2±0.2)	3	CLAMP
Install STOPPER, SHIFT BAR and PLATE, STOPPER 2	90149-06071	SCREW	M6 x 1.0	10±2 (1.0±0.2)	2	
Install STOPPER SCREW	1D7-18127-00	STOPPER, SCREW	M8 x 1.25	22±2 (2.2±0.2)	1	
Install ROD, SHIFT	90170-06228	NUT, HEX- AGON	M6 x 1.0	6.5±1.5 (0.65±0.15)	1	
Install ROD, SHIFT	95304-06700	NUT, HEX- AGON	M6 x 1.0	6.5±1.5 (0.65±0.15)	1	LEFT-HAND SCREW
Install JOINT ROD	90111-06019	BOLT, HEXAGON SOCKET BUTTON	M6 x 1.0	10±2 (1.0±0.2)	1	
Install ARM, SHIFT	95022-06020	BOLT, FLANGE (SMALL HEAD)	M6 x 1.0	10±2 (1.0±0.2)	1	CHECK SER- RATION FOR TIGHTENING UP

## Engine

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
Install NEUTRAL SWITCH	90110-05063	BOLT, HEXAGON SOCKET HEAD	M5 x 0.8	4 – 6 (0.4 – 0.6)	2	
Install COVER, SERVOMOTOR	97702-50514	SCREW, TRUSS HEAD TAP- PING	M5 x 0.8	1 – 3 (0.1 – 0.3)	2	
Install THERMO SENSOR (for water temperature)	8CC-85790-01	THERMO SENSOR ASSY	M12 x 1.5	17.6±2 (1.8±0.2)	1	
SENSOR, CAM POSITION	90110-06175	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	7.5±1.5 (0.75±0.15)	1	
Install SENSOR, PRESSURE (for atmospheric pressure)	97707-50020	SCREW, TRUSS HEAD TAP- PING	M5 x 0.8	6 – 8 (0.6 – 0.8)	2	
Install PICKUP ASSY	90110-06168	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	2	
Install OIL LEVEL SENSOR	95022-06016	BOLT, FLANGE (SMALL HEAD)	M6 x 1.0	10±2 (1.0±0.2)	2	APPLY GREASE TO O-RING.
Install STARTER MOTOR	90109-06016	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	12±2 (1.2±0.2)	2	
Install SPEED SENSOR	90110-06161	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10±2 (1.0±0.2)	1	



## Chassis

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
HANDLE, CROWN & OUTER TUBE	91314-08030	BOLT, HEXAGON SOCKET HEAD	M8 x 1.25	23 – 28 (2.3 – 2.8)	2	
HANDLE, CROWN & STEERING SHAFT	90170-28419	NUT, HEX- AGON	M28 x 1.0	100 – 125 (10.2 – 12.7)	1	
HANDLE & OUTER TUBE	91314-08030	BOLT, HEXAGON SOCKET HEAD	M8 x 1.25	13 – 18 (1.3 – 1.8)	2	
HANDLE and HANDLE, CROWN	91312-06025	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	10 – 16 (1.0 – 1.6)	2	
STEERING SHAFT and RING NUT	90179-30691	NUT	M30 x 1.0	15 – 20 (1.5 – 2.0)	1	
OUTER TUBE and UNDER BRACKET	91314-08030	BOLT, HEXAGON SOCKET HEAD	M8 x 1.25	20 – 25 (2.0 – 2.5)	4	
E/G BRACKET, FRONT, LEFT	95817-12080	BOLT, FLANGE	M12 x 1.25	60 – 80 (6.1 – 8.2)	1	
E/G BRACKET, FRONT, RIGHT	90105-12062	BOLT, FLANGE	M12 x 1.25	60 – 80 (6.1 – 8.2)	1	
E/G BRACKET, REAR UPPER	90179-10028	NUT	M10 x 1.25	42 – 60 (4.3 – 6.1)	1	
E/G BRACKET, REAR UNDER	90179-10028	NUT	M10 x 1.25	42 – 60 (4.3 – 6.1)	1	
ADJUST BOLT for E/G BRACKET, REAR	14B-21495- 00	BOLT, ENGINE ADJUST- ING	M18 x 1.0	6 – 8 (0.6 – 0.8)	1	
MAIN FRAME & REAR FRAME	14B-2585H- 00	SCREW	M10 x 1.25	37 – 45 (3.8 – 4.6)	4	
SHAFT, PIVOT & FRAME	14B-22141- 00	SHAFT, PIVOT	M30 x 1.0	5 – 8 (0.5 – 0.8)	1	
SHAFT, PIVOT & LOCK NUT	4C8-22252- 00	NUT, 2	M30 x 1.0	50 – 80 (5.1 – 8.2)	1	
SHAFT, PIVOT & U NUT	90185-20008	NUT, SELF LOCKING	M20 x 1.5	80 – 130 (8.2 – 13.3)	1	

## Chassis

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
ARM & FRAME	90105-10150	BOLT, FLANGE	M10 x 1.25	—	1	SCREW IN FROM THE LEFT SIDE.
	95602-10200	NUT, U FLANGE	M10 x 1.25	31 – 49 (3.2 – 5.0)	1	
ARM, RELAY & ARM	90105-10017	BOLT, FLANGE	M10 x 1.25	—	1	SCREW IN FROM THE LEFT SIDE.
	95602-10200	NUT, U FLANGE	M10 x 1.25	31 – 49 (3.2 – 5.0)	1	
ARM & REAR ARM	90105-10018	BOLT, FLANGE	M10 x 1.25	—	1	SCREW IN FROM THE LEFT SIDE.
	95602-10200	NUT, U FLANGE	M10 x 1.25	31 – 49 (3.2 – 5.0)	1	
REAR CUSHION & ARM, RELAY	90105-10017	BOLT, FLANGE	M10 x 1.25	—	1	SCREW IN FROM THE LEFT SIDE.
	95602-10200	NUT, U FLANGE	M10 x 1.25	31 – 49 (3.2 – 5.0)	1	
REAR CUSHION & BRACKET, UPPER	90105-10020	BOLT, FLANGE	M10 x 1.25	—	1	SCREW IN FROM THE LEFT SIDE.
	95602-10200	NUT, U FLANGE	M10 x 1.25	31 – 49 (3.2 – 5.0)	1	
BRACKET UPPER & FRAME	95602-16200	NUT, U FLANGE	M16 x 1.0	71 – 112 (7.2 – 11.4)	1	
ADJUST NUT for CHAIN PULLER	95302-08600	NUT, HEX- AGON	M8 x 1.25	12 – 19 (1.2 – 1.9)	2	
FUEL TANK & FUEL PUMP	90110-05028	BOLT, HEXAGON SOCKET HEAD	M5 x 0.8	3 – 5 (0.3 – 0.5)	6	
FRONT STAY for FUEL TANK & FRAME	95022-06030	BOLT, FLANGE, (SMALL HEAD)	M6 x 1.0	5 – 8 (0.5 – 0.8)	2	
FRONT STAY for FUEL TANK & FUEL TANK	91312-06016	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	5 – 8 (0.5 – 0.8)	2	
REAR STAY for FUEL TANK & REAR FRAME	90110-06123	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	5 – 8 (0.5 – 0.8)	4	
REAR STAY for FUEL TANK & FUEL TANK	90110-06296	BOLT, HEXAGON SOCKET HEAD	M6 x 1.0	5 – 8 (0.5 – 0.8)	1	

## Chassis

To be tightened	Part No.	Part Name	Thread dia. x pitch	Tightening torque N•m (kgf•m)	Q'ty	Remarks
FRONT WHEEL SHAFT & FLANGE BOLT	90105-14002	BOLT, FLANGE	M14 x 1.5	70 – 111 (7.1 – 11.3)	1	
REAR WHEEL SHAFT & NUT	90185-24007	NUT, SELF LOCKING	M24 x 1.5	120 – 180 (12.2 – 18.4)	1	
FRONT CALIPER & FRONT FORK	90401-10012	BOLT, UNION	M10 x 1.25	30 – 40 (3.1 – 4.1)	4	
DISC BRAKE & WHEEL (FRONT)	90149-06043	SCREW	M6 x 1.0	14 – 22 (1.4 – 2.2)	10	
DISC BRAKE & WHEEL (REAR)	90149-08009	SCREW	M8 x 1.25	23 – 37 (2.3 – 3.8)	5	
REAR WHEEL SPROCKET & CLUTCH HUB	90185-10009	NUT, SELF LOCKING	M10 x 1.25	90 – 109 (9.2 – 11.1)	6	
SPLIT BOLT for FRONT AXLE	91314-08035	BOLT, HEXAGON SOCKET HEAD	M8 x 1.25	18 – 23 (1.8 – 2.3)	4	

## For reference

	Tightening torque N•m
M5 x 0.8	4.5 – 7.0
M6 x 1.0	7.5 – 12
M8 x 1.25	18 – 28
M10 x 1.25	37 – 58
M10 x 1.25	68 – 108

## Tightening the Cylinder Head

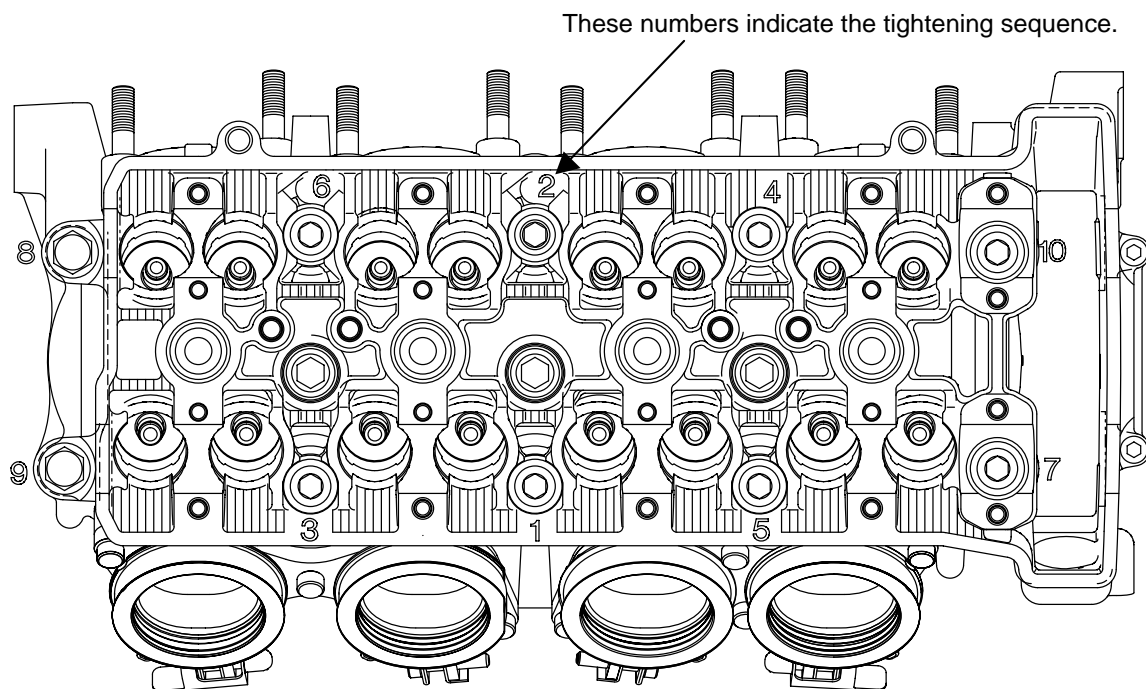
### Tightening the Cylinder Head (Turn-of-Nut Method)

1. Tighten the bolts in the tightening sequence of 1 to 10 to a snug torque of 25N•m (2.5kgf•m).
2. Retighten the bolts in the tightening sequence of 1 to 2 to a turn-of-nut angle of  $145^{\circ}\pm 5^{\circ}$ .
3. Retighten the bolts in the tightening sequence of 3 to 7 to a turn-of-nut angle of  $135^{\circ}\pm 5^{\circ}$ .
4. Retighten the bolts in the tightening sequence of 8 and 9 to a turn-of-nut angle of  $160^{\circ}\pm 5^{\circ}$ .
5. Retighten the bolts in the tightening sequence of 10 to a turn-of-nut angle of  $135^{\circ}\pm 5^{\circ}$ .

### TIP

The numbers 1 to 10 show the sequence in which the bolts are tightened.

Apply engine oil to the bolt threads, contact surfaces, and washers.



## Installing the Crankcase

### Tightening the bolts

1. Tighten the bolts in the tightening sequence of 1 to 10 to  $29.4\text{N}\cdot\text{m}$  ( $3.0\text{kg}\cdot\text{m}$ ).
2. After loosening the bolts once in the tightening sequence of 1 to 10, retighten them one by one to  $17.6\text{N}\cdot\text{m}$  ( $1.8\text{kg}\cdot\text{m}$ ).
3. Retighten the bolts in the tightening sequence of 1 to 10 to a turn-of-nut angle of  $56^\circ - 61^\circ$  ( $60^\circ$  at new).

Tightening torque for reference:  $35.0\text{N}\cdot\text{m}$  ( $3.5\text{kg}\cdot\text{m}$ )

4. Tighten the bolts in the tightening sequence of 11 to 20 to  $24\pm 2\text{N}\cdot\text{m}$  ( $2.4\pm 0.2\text{kgf}\cdot\text{m}$ ).
5. Tighten the bolts in the tightening sequence of 21 to 40 to  $10\pm 2\text{N}\cdot\text{m}$  ( $1.0\pm 0.2\text{kgf}\cdot\text{m}$ ).

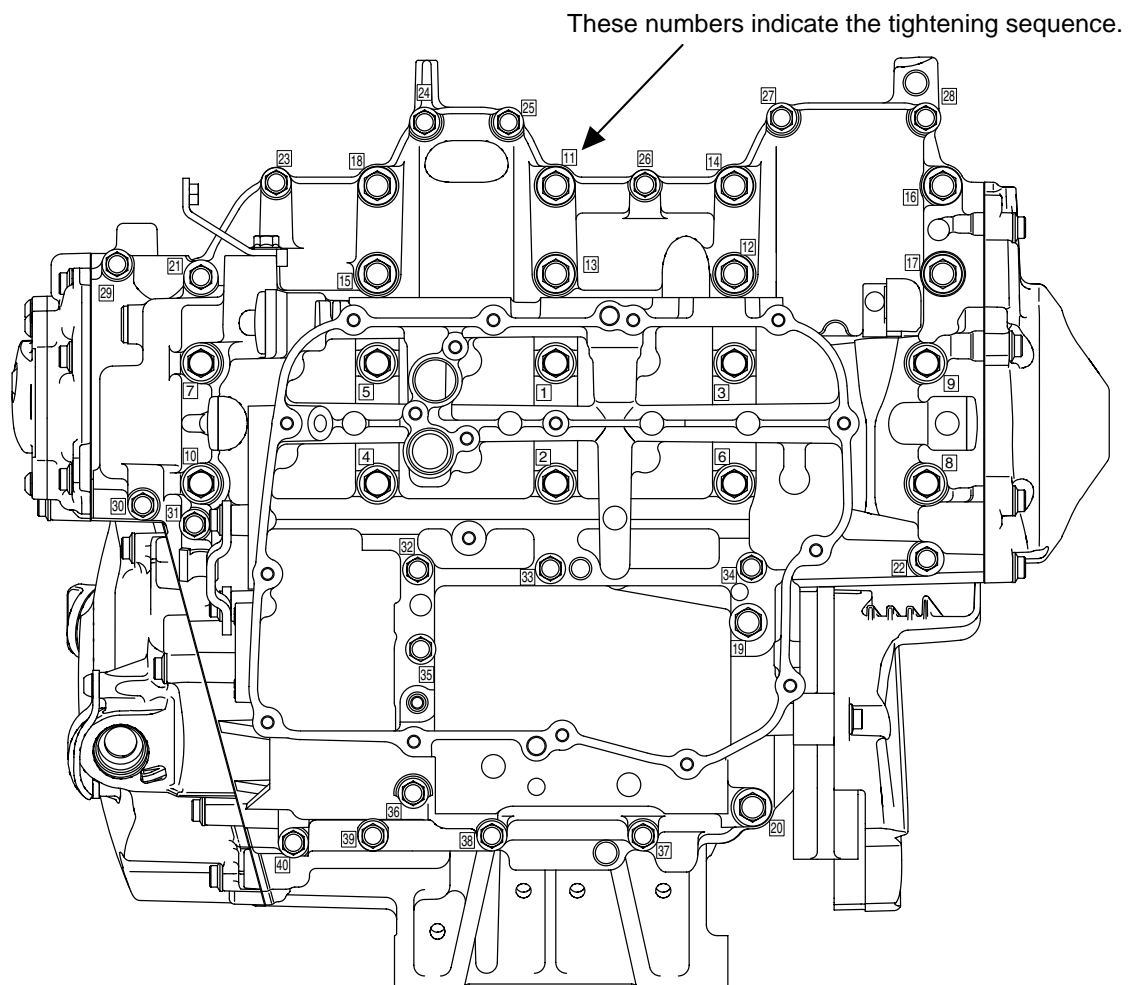
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### TIP

The numbers 1 to 40 show the sequence in which the bolts are tightened.

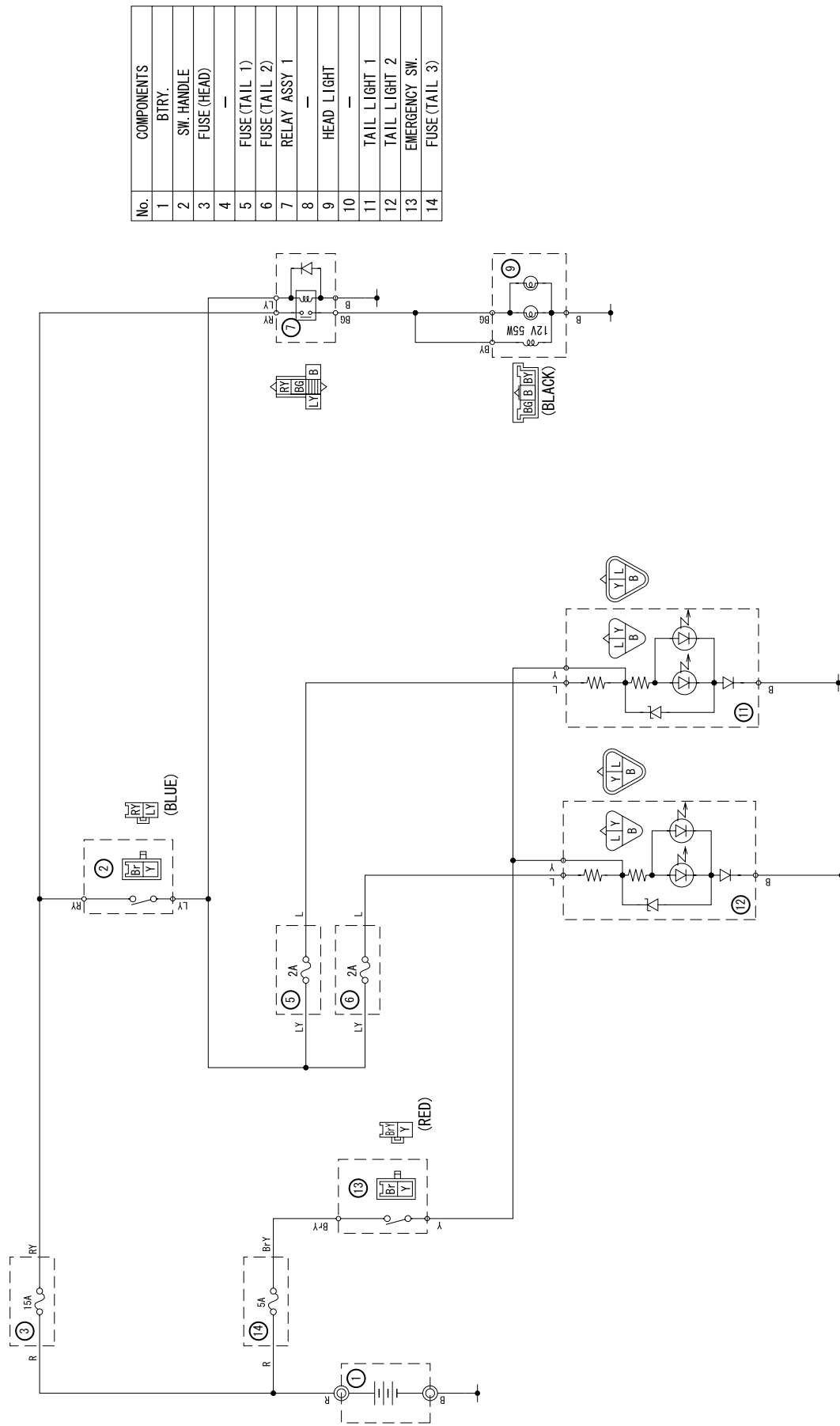
Apply engine oil to the bolt threads and both sides of the washers.

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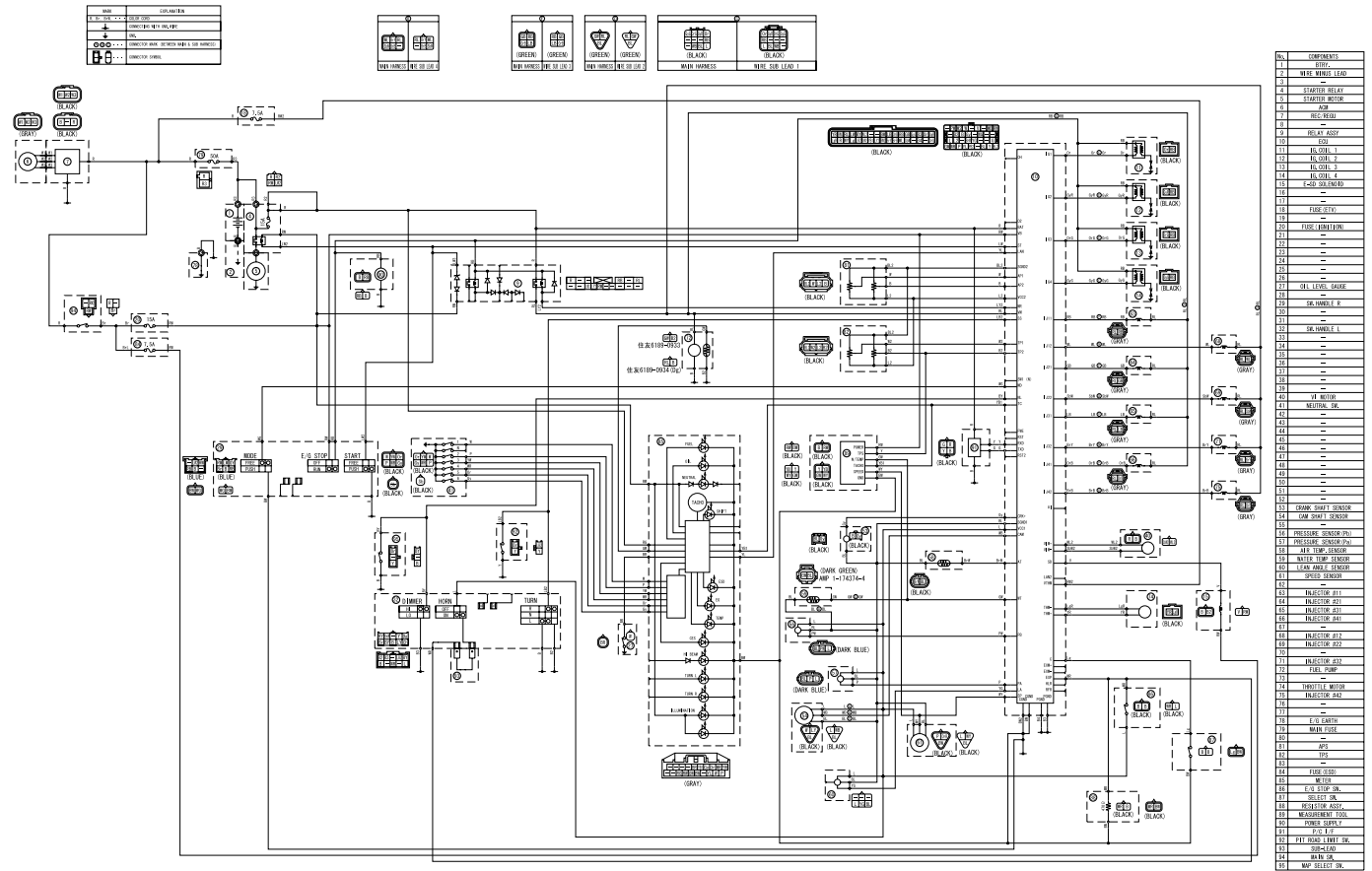




# 4 Headlight Cord Wiring Diagram



# 5 YZF-R1 Wiring Diagram





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