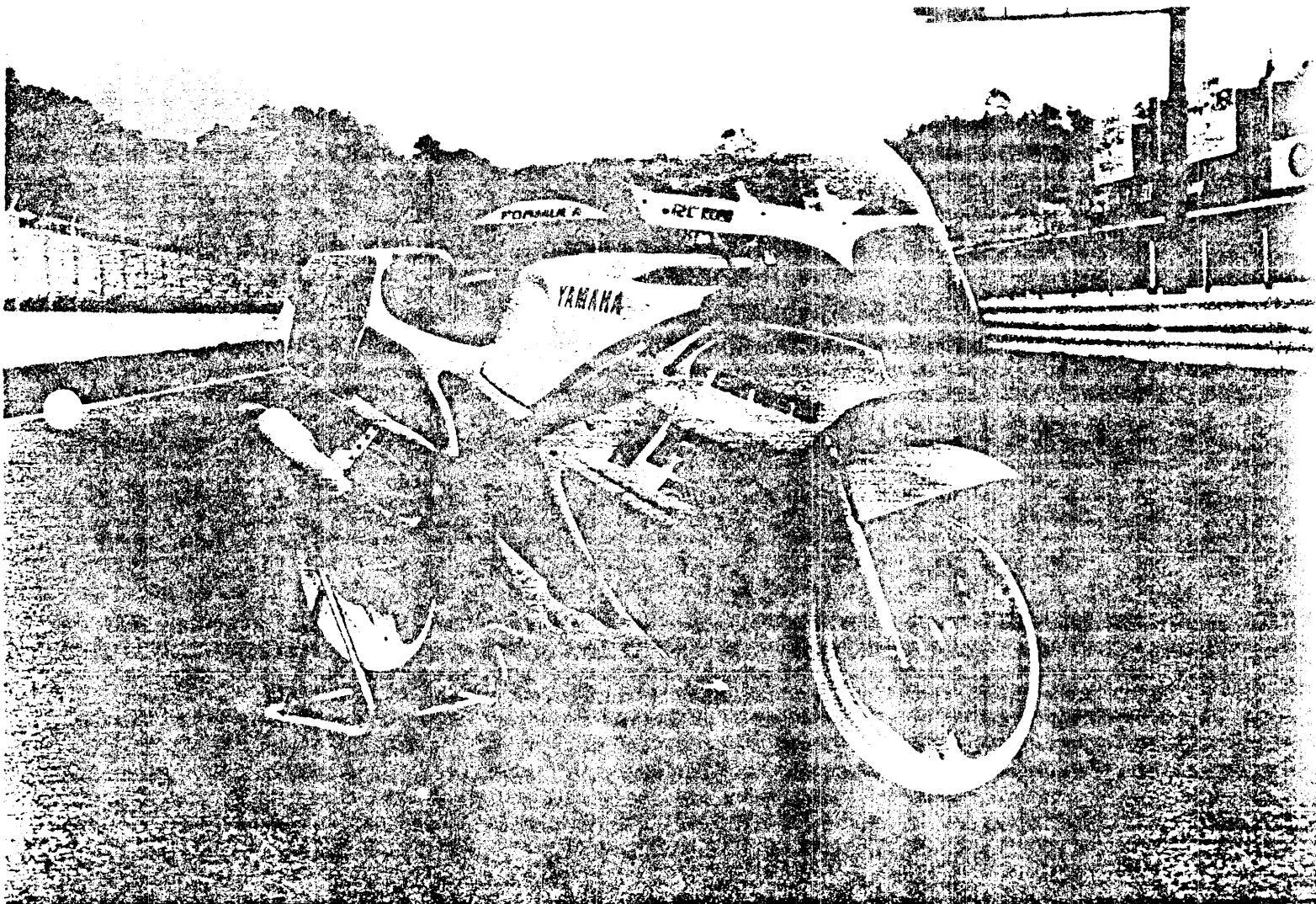


# RACE KIT PARTS MANUAL

'88 FZR400S  
FZR400



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- Description of parts for the FZR400(S)

1. SP engine kit set

Designed for beginners: It only requires a change of parts relating to the intake and exhaust systems.

2. Full engine kit set

This is a tune-up kit involving a change of parts relating to the intake and exhaust systems, camshafts, pistons, connecting rods, transmission, etc.

**CAUTION:**

- For assembly and maintenance service, follow the service manual.
- Parts marked with ( ◊ ) on the parts list are available at a Yamaha dealer.
- Unlike the generally-sold Yamaha parts, the kit parts will not be covered by the Yamaha warranty.
- Specifications are subject to change without notice due to improvements.

**WARNING:**

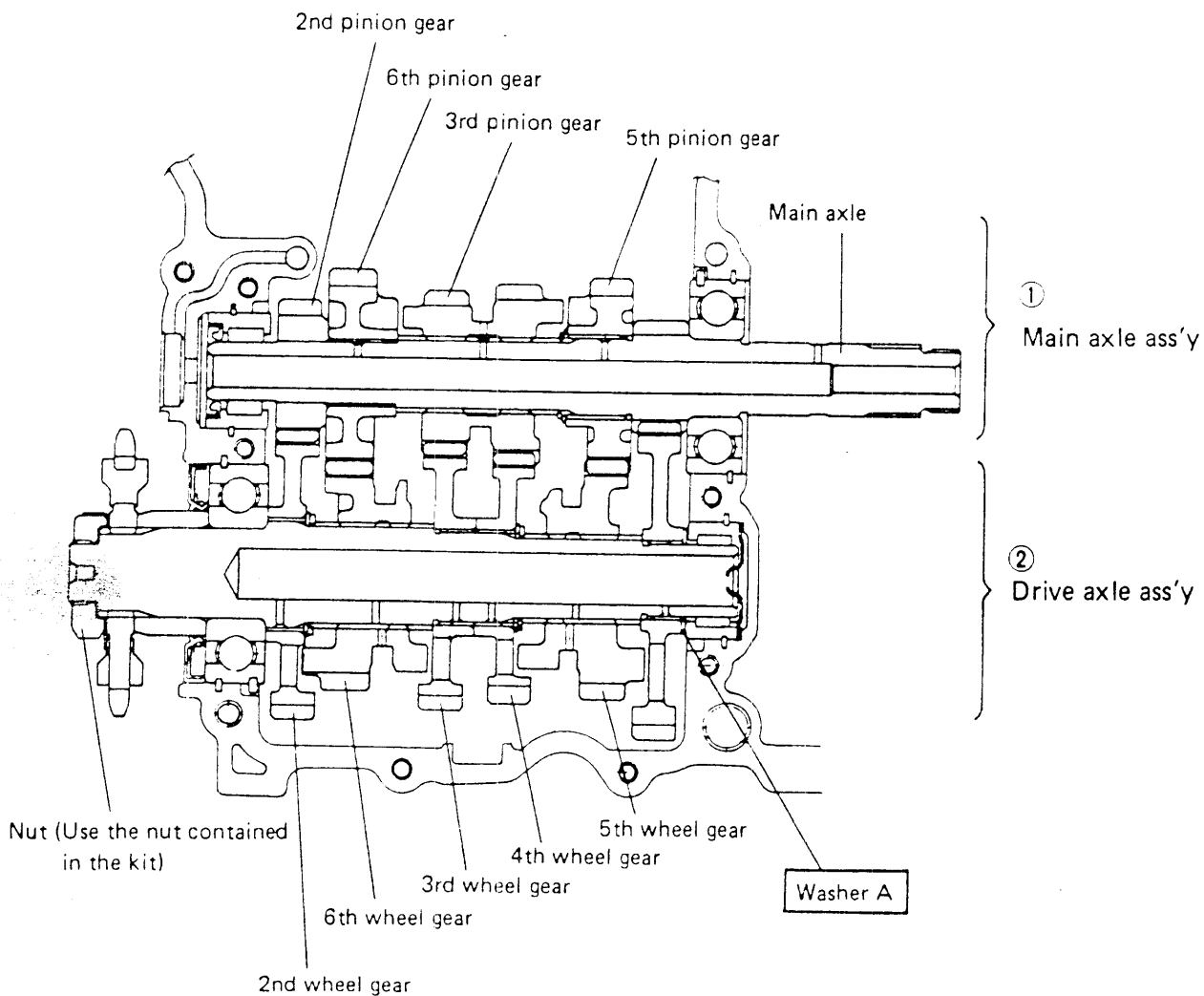
These parts are designed exclusively for racing. Avoid using them when travelling on highways.

- Parts contained in the FIII kits

### 1. Cross-ratio transmission

Use of a cross-ratio transmission matching circuit riding and engine characteristics.

| No. | Parts No.    | Parts number     | Q'ty | Remarks |
|-----|--------------|------------------|------|---------|
| 1   | 2TK-17410-00 | Main axle ass'y  | 1    |         |
| 2   | 2TK-17420-00 | Drive axle ass'y | 1    |         |



**NOTE:**

- When installing the drive accelerator assembly, do not forget to install washer A on its right end.
- Apply molybdenum grease to the shift fork and fork groove.
- After putting together the crankcase halves, coat all gears with engine oil and check that they operate correctly.
- Parts other than the gears and main axle are of the standard type. For maintenance service, refer to the service manual.

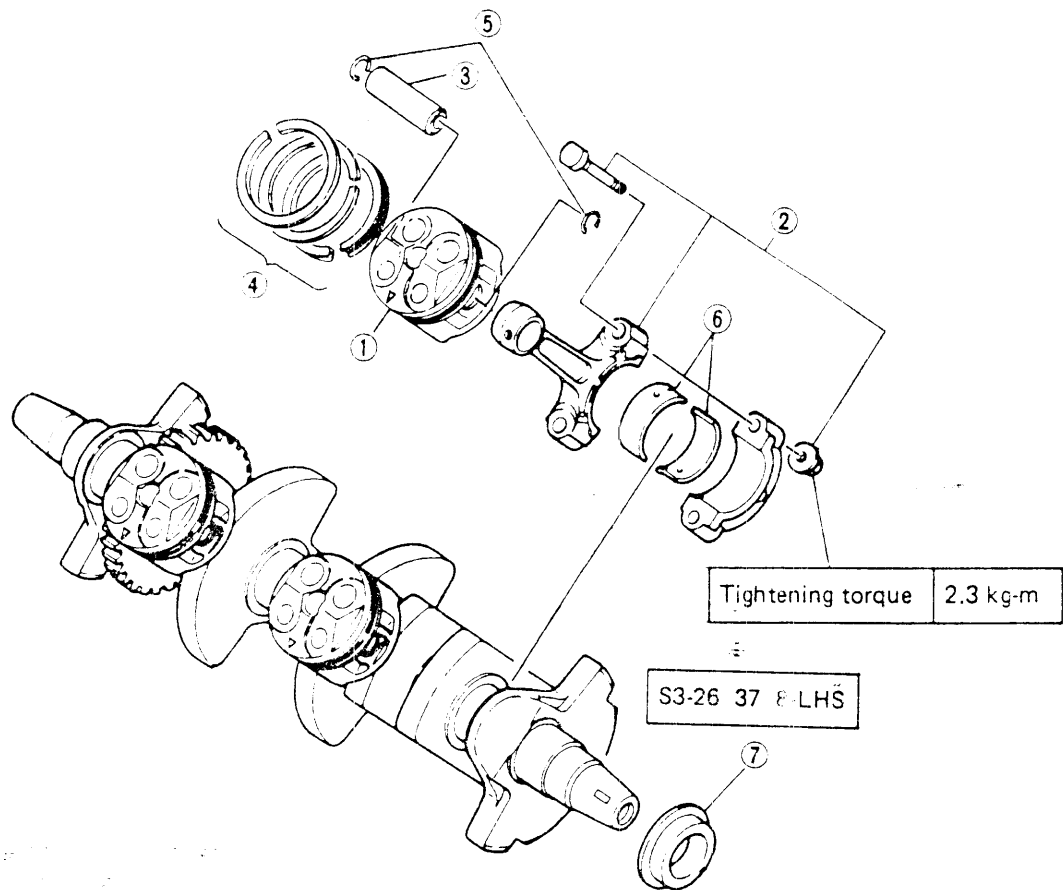
Table of transmission gear ratios

|      | Standard gear ratio | Closed gear ratio |
|------|---------------------|-------------------|
| 1 st | $43/13 = 3.308$     | $32/13 = 2.462$   |
| 2 nd | $40/18 = 2.222$     | $33/17 = 1.941$   |
| 3 rd | $36/21 = 1.714$     | $31/19 = 1.632$   |
| 4 th | $33/23 = 1.435$     | $27/18 = 1.5$     |
| 5 th | $28/22 = 1.273$     | $26/19 = 1.368$   |
| 6 th | $27/23 = 1.174$     | $25/20 = 1.25$    |

## 2. Piston, connecting rod

To increase the compression ratio and to decrease power loss, change the piston, piston pin, and connecting rod.

| No. | Parts NO.    | Parts name           | Q'ty | Remark                             |
|-----|--------------|----------------------|------|------------------------------------|
| 1   | 2TK-11631-70 | Piston               | 4    | Compression ratio = 12.0           |
| 2   | 2TK-11650-00 | Connecting rod sss'y | 4    | Rod length = 98.5 mm (STD 97.0 mm) |
| 3   | 2TK-11633-00 | Pin, piston          | 4    | Length = 43 mm (STD 45 mm)         |
| ◇   | 4            | 1WG-11610-00         | 4    | Piston ring set<br>STD             |
| ◇   | 5            | 93450-16068          | 8    | Circlip<br>STD                     |
| ◇   | 6            | 1WG-11656-00         | 8    | Bearing, plain<br>STD (Blue)       |
| ◇   |              | 1WG-11656-10         | 8    | Bearing, plain<br>STD (Black)      |
| ◇   |              | 1WG-11656-20         | 8    | Bearing, plain<br>STD (Brown)      |
| ◇   |              | 1WG-11656-30         | 8    | Bearing, plain<br>STD (Green)      |
| ◇   | 7            | 93101-26146          | 1    | Oil seal<br>STD                    |
| ◇   |              | 1WG-11351-00         | 1    | Gasket, cylinder<br>STD            |
| ◇   |              | 1WG-11181-00         | 1    | Gasket, cylinder head<br>STD       |



### NOTE:

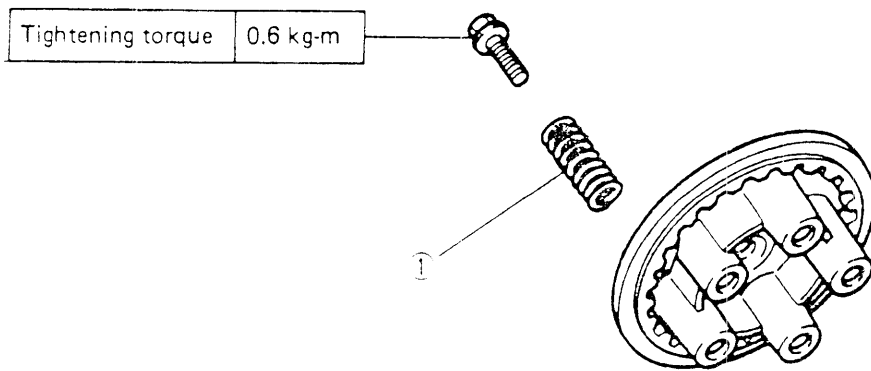
- Be sure to use the piston, piston pins and connecting rod contained in the kit and as a set.
- The piston is not marked with a triangle (  $\Delta$  ). Install it in the same manner as the standard piston.
- The standard connecting rod, bolts and nuts are used. The nuts should be tightened alternately in three steps, to 0.8 kg-m, 1.5 kg-m, and 2.3 kg-m. The connecting rod, bolts and nuts should be replaced every two or three times of reassembly.
- The piston should be replaced roughly every 2,000 km of operation.

For steady performance, it is advisable to replace the piston rings every six hours of operation.

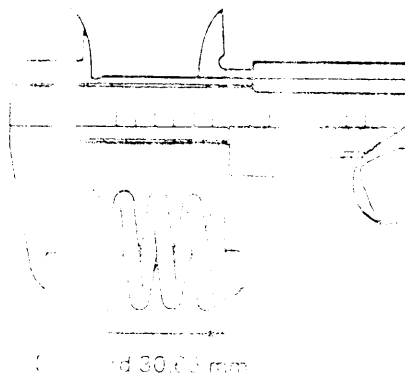
### 3. Clutch spring

Modify the clutch spring so that it can withstand increased engine power.

| No. | Parts No.   | Parts name          | Q'ty | Remark          |
|-----|-------------|---------------------|------|-----------------|
| 1   | 90501-235E0 | Spring, compression | 5    | Color "Yellow". |



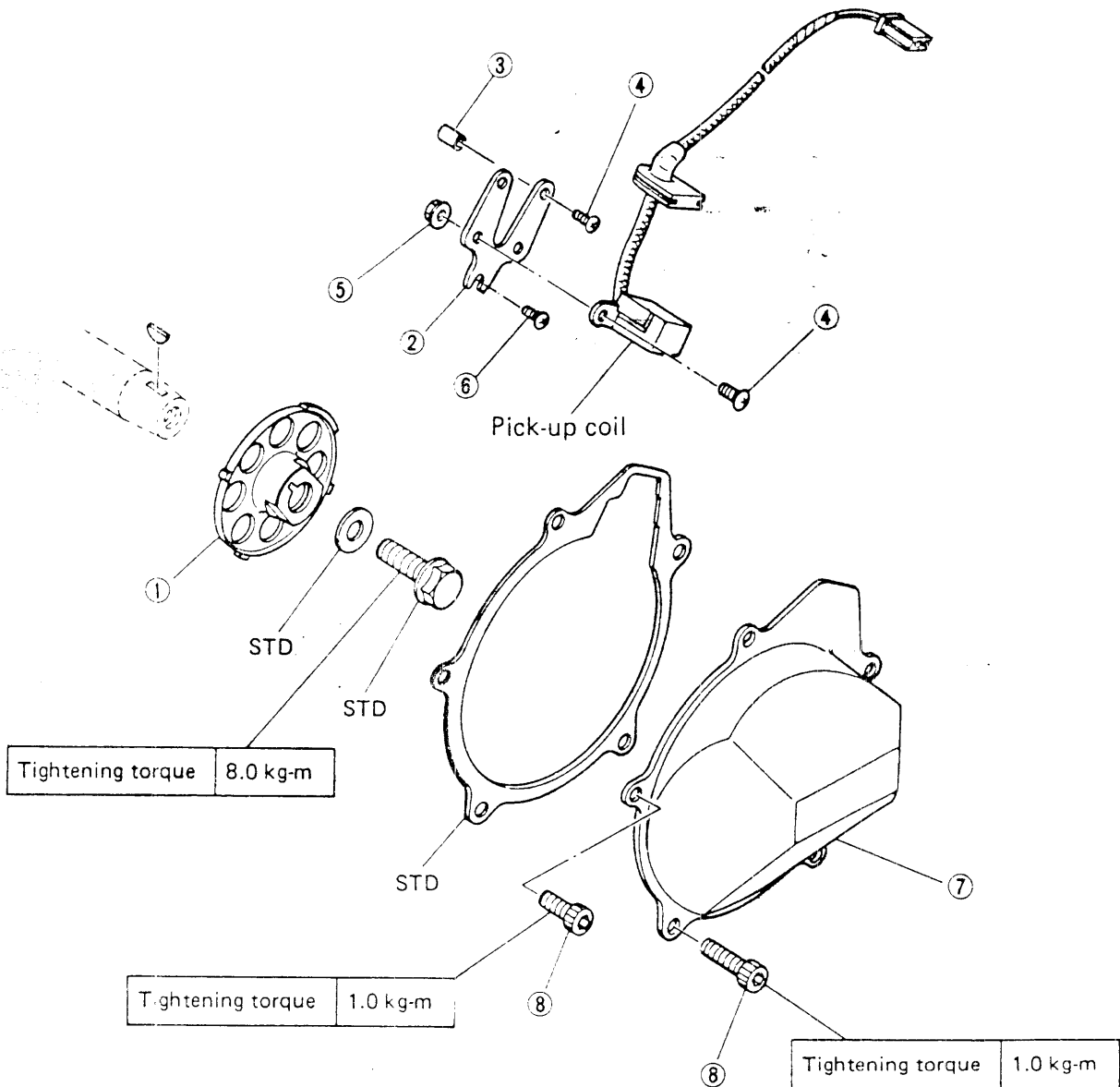
When the free length of the clutch spring becomes 29 mm or less (standard 30.65 mm as standard) it should be replaced.



#### 4. Pick-up rotor

To improve the throttle response by reducing the crank mass, replace ACM with a special rotor.

| No. | Parts No. | Parts name   | Q'ty                 | Remark |  |
|-----|-----------|--------------|----------------------|--------|--|
|     | 1         | 1WG-81673-70 | Rotor                | 1      |  |
|     | 2         | 2TK-81671-70 | Base, pickup         | 1      |  |
| ◇   | 3         | 90387-05682  | Collar               | 2      |  |
| ◇   | 4         | 97601-05316  | Screw                | 4      |  |
| ◇   | 5         | 95701-05100  | Nut, flange          | 2      |  |
| ◇   | 6         | 97601-06312  | Screw                | 1      |  |
|     | 7         | 1WG-15410-70 | Cover 1              | 1      |  |
| ◇   | 8         | 91311-06016  | Bolt, hexagon socket | 2      |  |



#### NOTE:

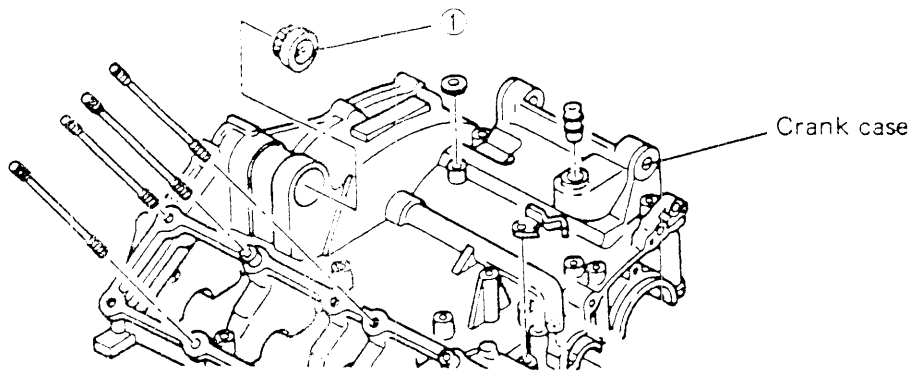
Separate the pick-up coil from the standard stator assembly when using it.



5. Removing the electric starting system

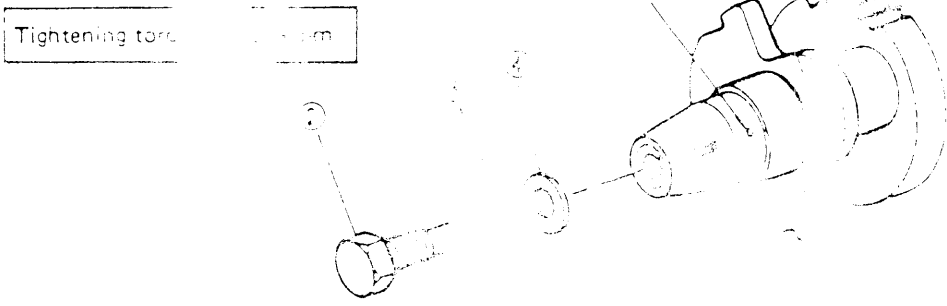
~~Remove the starter motor, starter switch assembly, etc. to reduce the machine weight.~~

| No. | Parts No.    | Parts name     | Q'ty | Remark |
|-----|--------------|----------------|------|--------|
| ◇ 1 | 2H7-15361-00 | Gauge, level   | 1    |        |
| ◇ 2 | 2TK-90001-70 | Bolt, oil stop | 1    |        |
| ◇ 3 | 93210-48364  | O-ring         | 1    |        |
| ◇ 4 | 90201-10951  | Washer         | 1    |        |



Crank

Oil hole



**NOTE:** When the starter motor assembly has been removed, be sure to use the bolts contained in the kit, or the piston bearing may seize up.

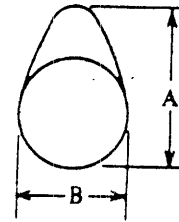
## 6. Camshaft

To increase engine power, replace the camshaft with the one having a modified cam profile.

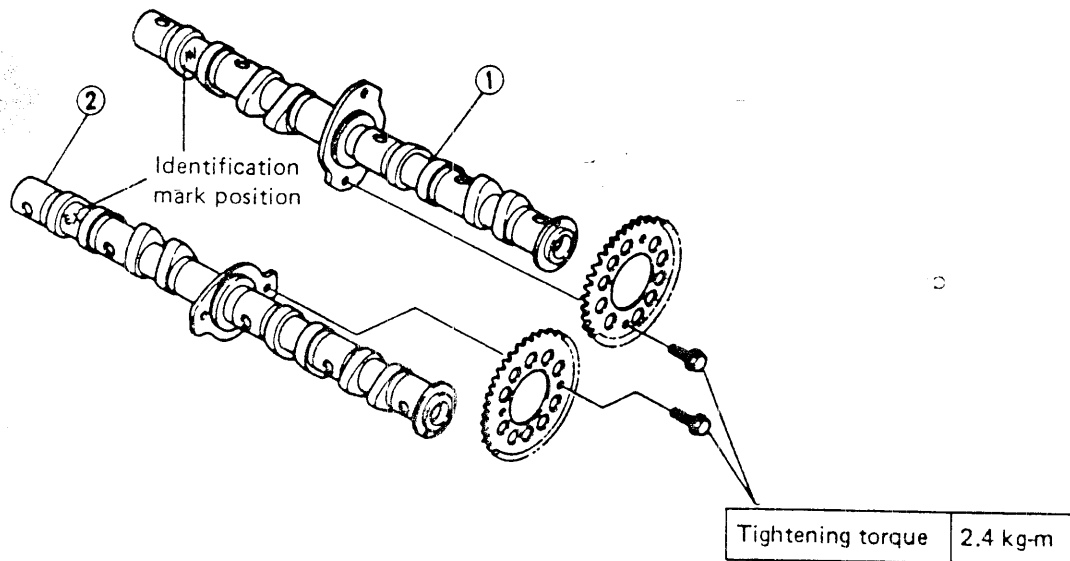
| No. | Parts No.    | Parts name   | Q'ty | Remark |
|-----|--------------|--------------|------|--------|
| 1   | 1WG-12171-70 | Shaft, cam 1 | 1    | IN.    |
| 2   | 1WG-12181-70 | Shaft, cam 2 | 1    | EX.    |

### ○ Cam profile

|               |        | IN    | EX    |
|---------------|--------|-------|-------|
| A             | ( mm ) | 32.80 | 32.30 |
| B             | ( mm ) | 25.10 | 25.10 |
| Working angle | ( ° )  | 284   | 276   |
| Lift          | ( mm ) | 7.5   | 7.0   |
| Event angle   | ( ° )  | 104   | 102   |



- Use the standard cam sprocket. It should be installed in the same manner as the standard type.



- Adjust the valve clearance to the following specification.

|    | Clearance (Cold engine) |
|----|-------------------------|
| IN | 0.16 ~ 0.20 mm          |
| EX | 0.26 ~ 0.30 mm          |

## 7. Igniter unit

| No. | Parts No.    | Parts name   | Q'ty | Remark |
|-----|--------------|--------------|------|--------|
|     | 1WG-82305-70 | Ignitor unit | 1    |        |

- The spark advance characteristic has been modified so as to match a tuned-up engine, and the maximum engine speed is limited to 14,500 rpm (STD 14,200 rpm).
- Distinguish the engine from the standard type by the label on the case.

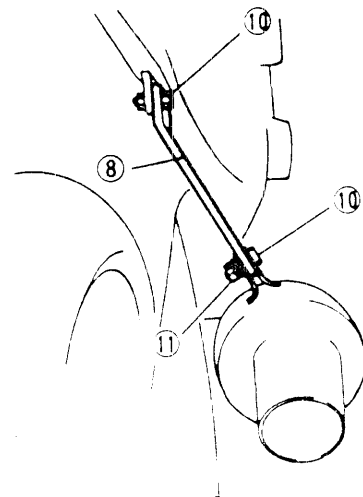
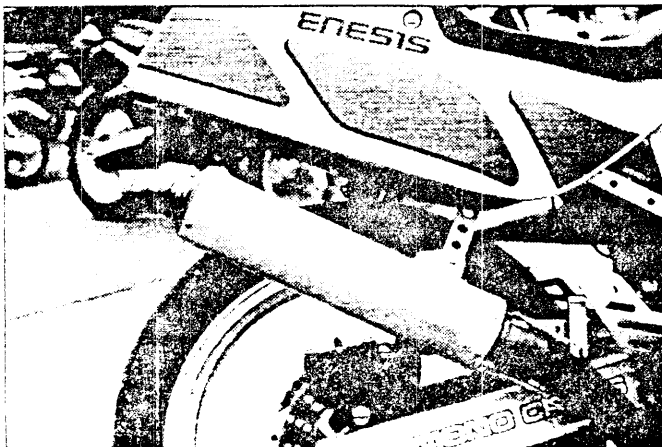
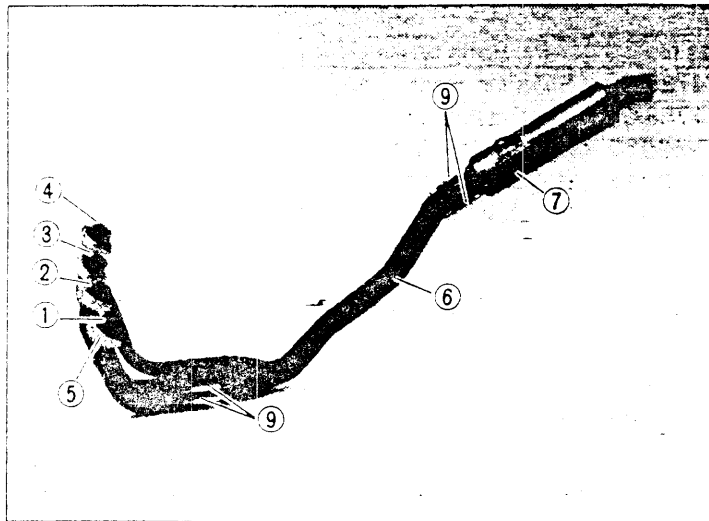
KIT 1WG-70  
STD 3BF-00  
3FH-00 (FZR400S)

- Parts interchangeable between the FIII and SP kits

### 1. Muffler ass'y (No EXUP)

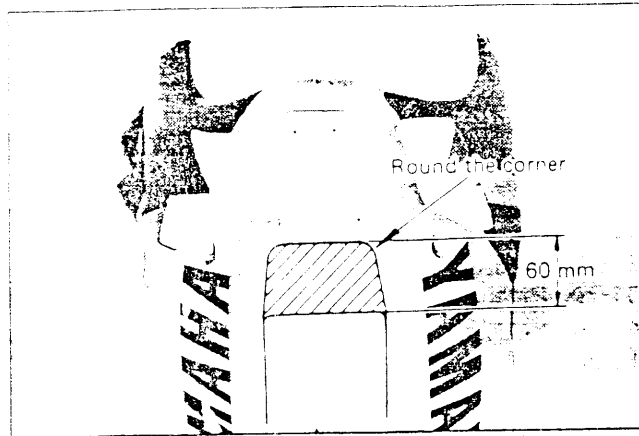
Modify the muffler assembly to increase exhaust efficiency.

| No. | Parts NO.    | Parts name      | Q'ty | Remark |
|-----|--------------|-----------------|------|--------|
| 1   | 1WG-14611-70 | Pipe, EX. 1     | 1    |        |
| 2   | 1WG-14621-70 | Pipe, EX. 2     | 1    |        |
| 3   | 1WG-14631-70 | Pipe, EX. 3     | 1    |        |
| 4   | 1WG-14641-70 | Pipe, EX. 4     | 1    |        |
| ◇   | 33M-14612-00 | Nut, ring       | 4    |        |
| 6   | 1WG-14785-70 | Difuser         | 1    |        |
| 7   | 2TK-14720-70 | Silencer ass'y  | 1    |        |
| 8   | 1WG-21445-70 | Muffler, stay   | 1    |        |
| ◇   | 90507-20030  | Spring, tension | 6    |        |
| ◇   | 90109-08718  | Bolt, flange    | 2    |        |
| ◇   | 95701-08500  | Nut, flange     | 1    |        |



**NOTE**

The standard under-cowl should be cut as shown below.

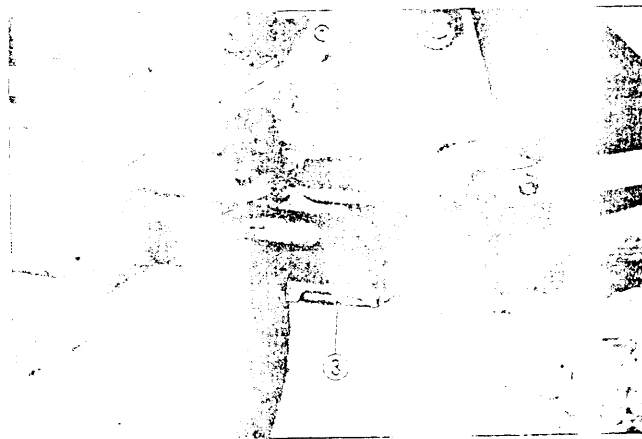


**2. Muffler ass'y (With EXUP)**

To maintain the function of EXUP, replace the silencer alone.

| No. | Parts No.    | Parts name      | Qty | Remark |
|-----|--------------|-----------------|-----|--------|
| 1   | 2TK-14720-80 | Silencer ass'y  | 1   |        |
| 2   | 2TK-14788-70 | Band, silencer  | 1   |        |
| 3   | 90507-20030  | Spring, tension | 2   |        |
|     | 90109-08718  | Ball flange     | 1   |        |
|     | 95701-08500  | Ball flange     | 1   |        |

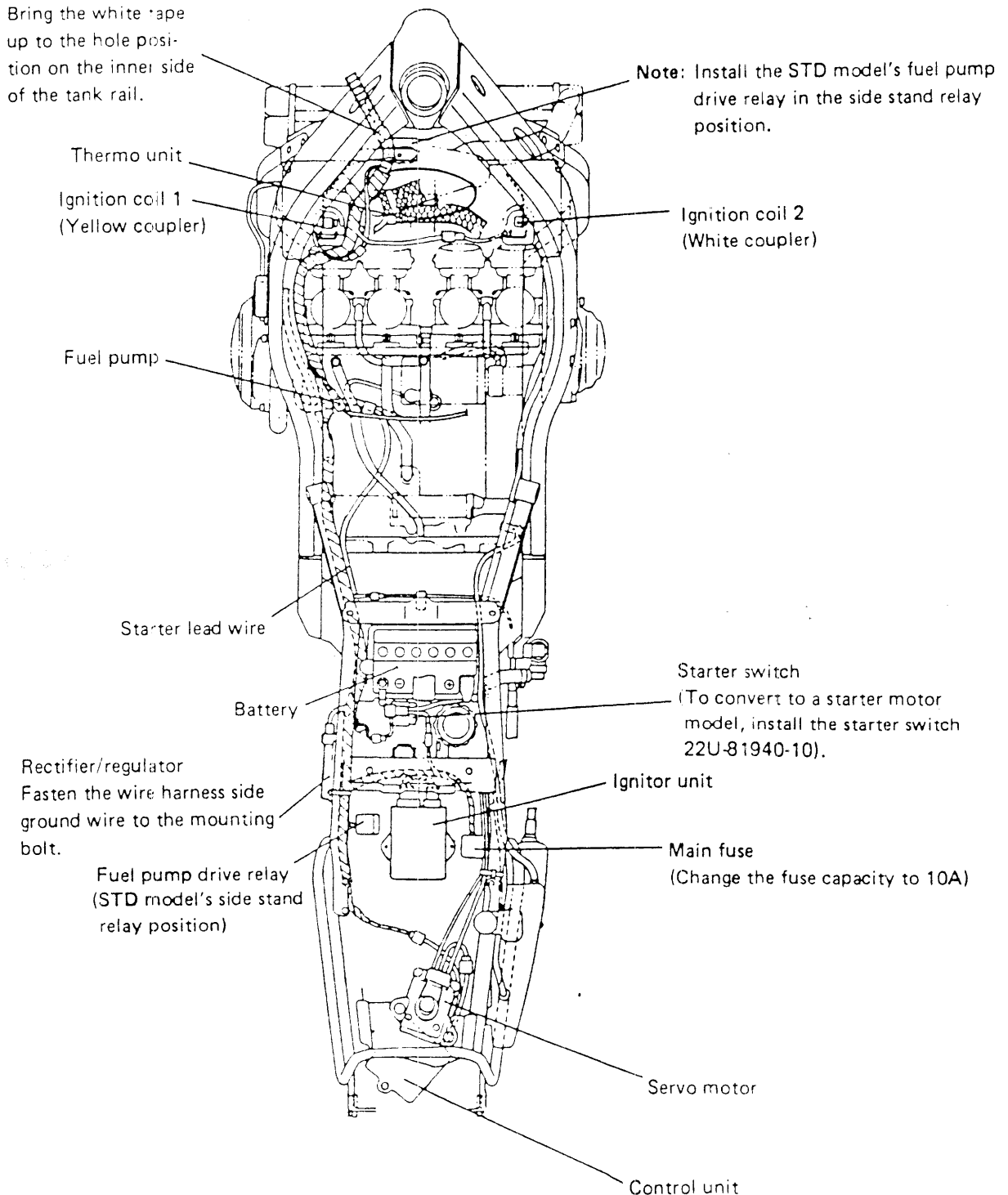
Use the standard cowl.



### 3. Wire harness installation

| Part name    | Q'ty (Kit is packed) | Remark |
|--------------|----------------------|--------|
| 3FH-82590-70 | Wireharness          | 1      |

This wire harness is designed for use with both of the FZR400 and the FZR400R and can be used with either of the models, whether or not they are equipped with a starter motor.



★ The FZR400 has neither of the servo-motor and the control unit, and the rest of the machine construction is almost the same as the standard model.

- ① Remove the upper cowl, fuel tank, air cleaner and side cover assembly. Also, be sure to remove the battery for sake of safety.
- ② ~~Wire harnesses and couplers are routed and colored like those of the standard model.~~  
When disconnecting them, make sure of how they are routed and colored, and connect them in the same way as before.
- ③ Fasten the negative lead to the rectifier/regulator mounting bolt.
- ④ When no EXUP is used, the coupler for the EXUP control unit should be disconnected as in Note 1.
- ⑤ The parts unnecessary, such as the left handle switch unit, flasher relay, fuse box, side stand relay, diode assembly, etc., should be removed.
- ⑥ Replace the main fuse (30A) with a 10A type.
- ⑦ a When no starter motor is used
  1. Disconnect the starter switch coupler as specified in Note 1.
  2. Disconnect the starter relay and starter motor, and disconnect the thick lead from the engine case.
  3. A sub-lead is connected to the battery. Keep the coupler disconnected, when it is not used.
- b When the starter motor is used
  1. Connect the thick lead to the battery in the same manner as on the standard model.
  2. If the standard starter relay is used, it is impossible to stop the starter motor by turning the kill switch off. Replace the starter relay with the one (22U-81940-10) which is used with the XV500.
  3. Both of the sub-leads are unnecessary. Connect the positive lead to the couple coming from the standard lead (positive). Keep the other sub-lead disconnected.

## WIRING DIAGRAM



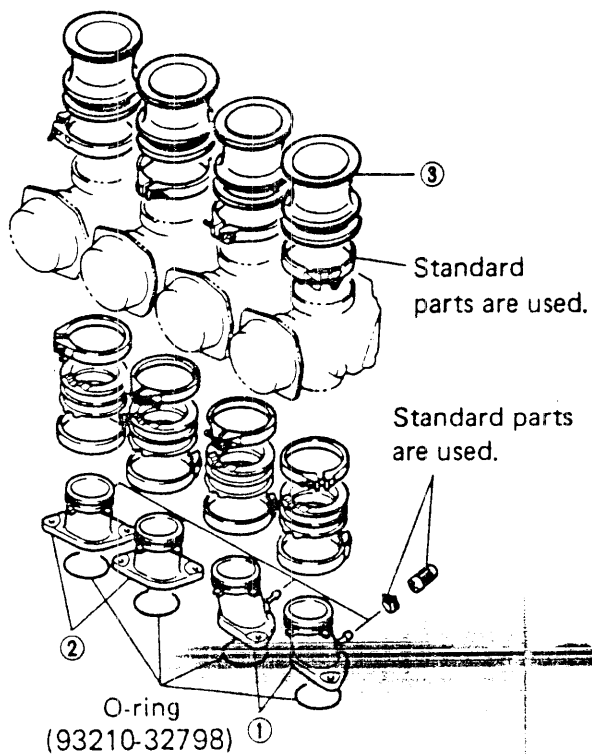
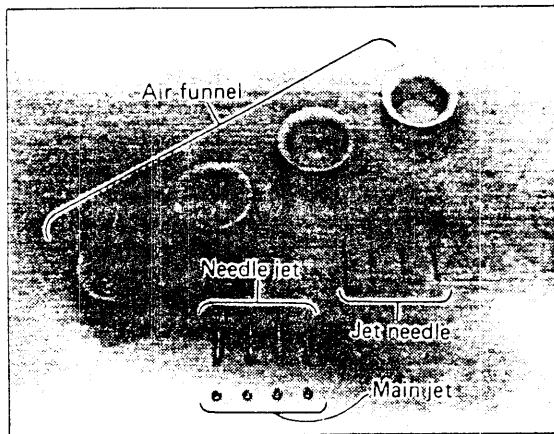
#### 4. Carburetor setting parts

Parts list (FIII)

| No. | Parts No.    | Parts name        | Q'ty | Remark  |
|-----|--------------|-------------------|------|---|
|     |              | Main jet (#120)   | 4    |   |
|     |              | Main jet (#122.5) | 4    |   |
|     |              | Main jet (#125)   | 4    |   |
|     |              | Jet needle set    | 4    | J.N. (5CT1), Washer, Clip                                   |
|     |              | Needle jet (x-6)  | 4    |   |
| 1   | 1WG-13586-70 | Joint, carburetor | 2    | $\ell = 40\text{mm}(\text{STD}=50\text{mm})$ for #1,#2 Cyl. |
| 2   | 1WG-13596-70 | Joint, carburetor | 2    | $\ell = 40\text{mm}(\text{STD}=50\text{mm})$ for #3,#4 Cyl. |
| 3   | 1WG-14453-70 | Air funnel        | 4    | $\ell = 30$   |
|     | 1WG-14157-70 | Cover, funnel     | 4    |   |

Parts list (SP)

| No. | Parts No.    | Parts name     | Q'ty | Remark                   |
|-----|--------------|----------------|------|--------------------------|
|     |              | Main jet       | 4    | #110                     |
|     |              | Main jet       | 4    | #112.5                   |
|     |              | Main jet       | 4    | #115                     |
|     |              | Jet needle set | 4    | J.N (5CT1), Washer, Clip |
| 3   | 1WG-14453-70 | Air funnel     | 4    | $\ell = 30$              |
|     | 1WG-14157-70 | Cover, funnel  | 4    |                          |

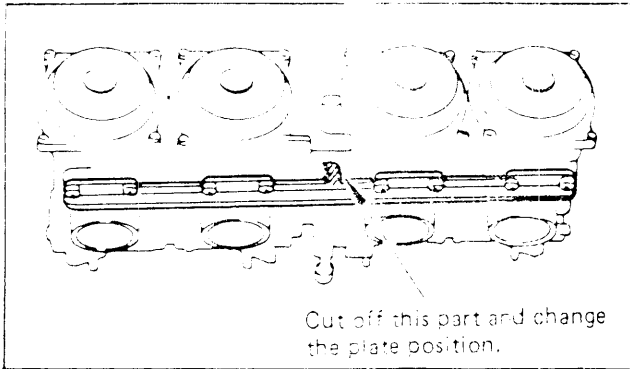




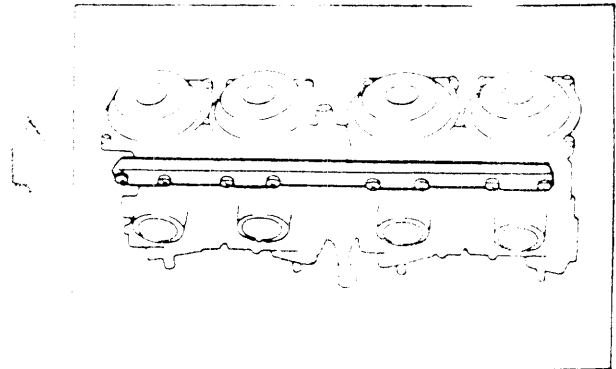
**NOTE**

When this kit carburetor is contained in the Full-Size used product it follows.

1. Change of the carburetor connecting plate.

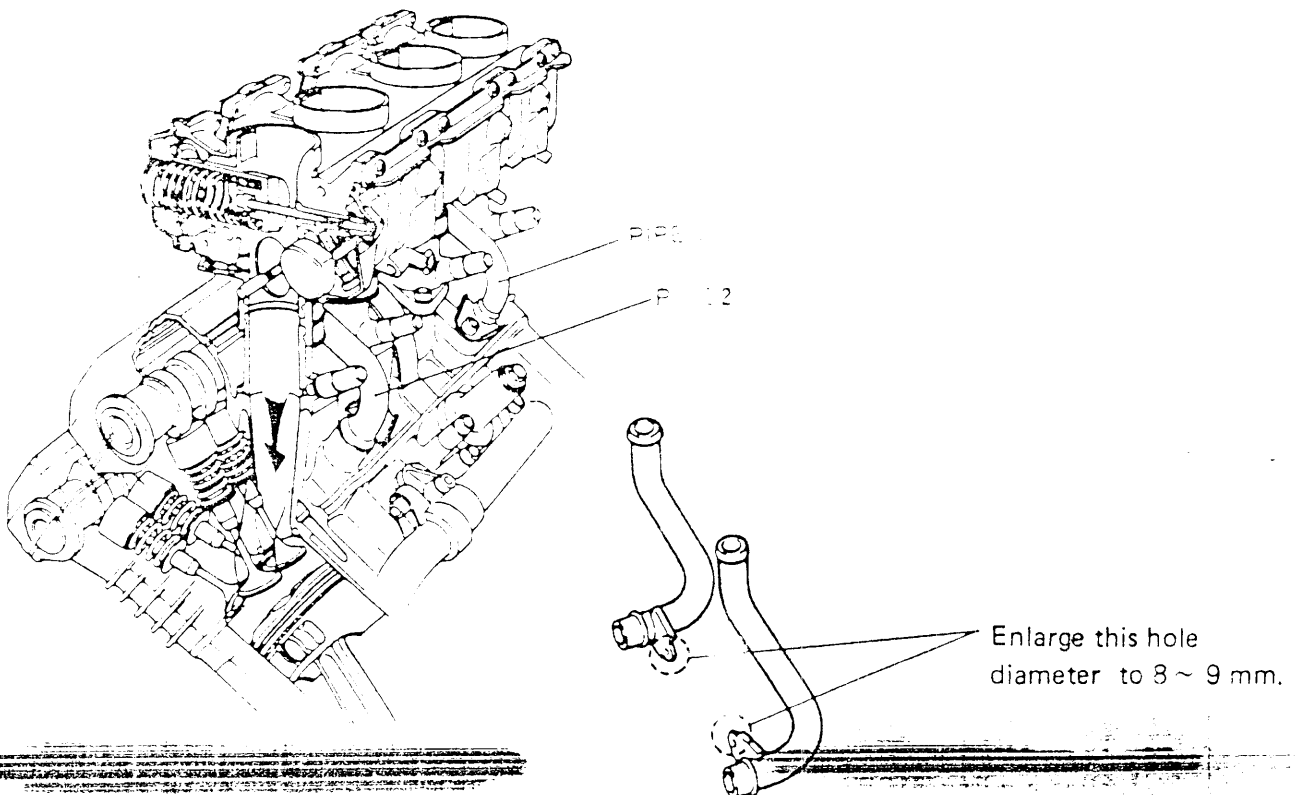


Standard model



Model equipped with the kit parts

- ② Further, install pipes 2 and 3. Position them so that they do not contact the carburetor.

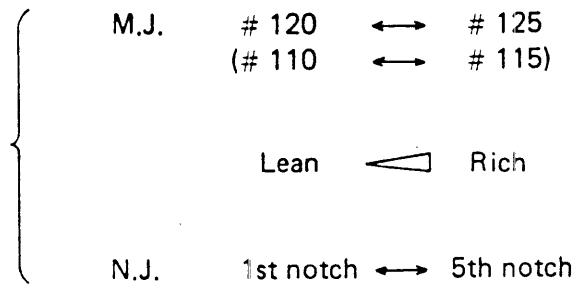
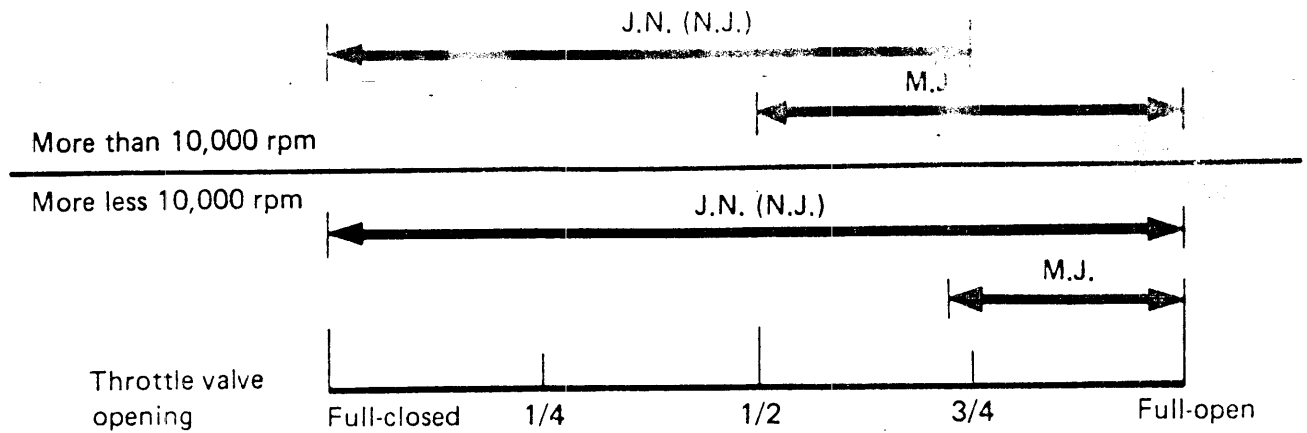


Standard settings

|                     | F III                         | SP                                     |
|---------------------|-------------------------------|--|
| Main jet            | #122.5                        | # 112.5                                |
| Jet needle          | 5CT1 4th notch (from the top) | 5CT1 2nd and half notch (from the top) |
| Needle, jet         | X-6                           | Y-0 (STD)                              |
| Idling engine speed | 1600 ~ 1700 rpm               | 1500 ~ 1700 rpm                        |

- When adjusting the needle jet position, change it half a step each time.
- To move up the needle jet half a step, place the washer underneath. Do not remove the washer, since it retains the jet in place.

Effective range and settings



5. Drive sprocket, driven sprocket

Parts list (F III)

| No. | Parts No.    | Parts name          | Qty   | Remark            |
|-----|--------------|---------------------|-------|-------------------|
|     | 1WG-17461-74 | Sprocket, drive     | 1 14T | For the 520 chain |
|     | 1WG-17461-75 | Sprocket, drive     | 1 15T | For the 520 chain |
|     | 1WG-17461-76 | Sprocket, drive     | 1 16T | For the 520 chain |
|     | 1WG-90002-70 | Nut, drive sprocket | 1     |                   |
| ◇   | 90215-21022  | Washer, lock        | 7     |                   |

Parts list (SP...No EXUP)

| No. | Parts No.    | Parts name          | Qty   | Remark            |
|-----|--------------|---------------------|-------|-------------------|
|     | 1WG-17461-74 | Sprocket, drive     | 1 14T | For the 520 chain |
|     | 1WG-17461-75 | Sprocket, drive     | 1 15T | For the 520 chain |
|     | 1WG-90002-70 | Nut, drive sprocket | 1     |                   |
| ◇   | 90215-21022  | Washer, lock        | 3     |                   |
|     | 1WG-25442-70 | Sprocket, driven    | 1 42T | For the 520 chain |
|     | 1WG-25443-70 | Sprocket, driven    | 1 43T | For the 520 chain |
|     | 1WG-25444-70 | Sprocket, driven    | 1 44T | For the 520 chain |

Parts list (SP...With EXUP)

| No. | Parts No.    | Parts name          | Qty   | Remark            |
|-----|--------------|---------------------|-------|-------------------|
|     | 1WG-17461-74 | Sprocket, drive     | 1 14T | For the 520 chain |
|     | 1WG-17461-75 | Sprocket, drive     | 1 15T | For the 520 chain |
|     | 1WG-90002-70 | Nut, drive sprocket | 1     |                   |
| ◇   | 90215-21022  | Washer, lock        | 3     |                   |
|     | 1WG-25440-70 | Sprocket, driven    | 1 40T | For the 520 chain |
|     | 1WG-25441-70 | Sprocket, driven    | 1 41T | For the 520 chain |
|     | 1WG-25442-70 | Sprocket, driven    | 1 42T | For the 520 chain |

Gear ratio conversion table

| Front \ Rear | 14T   | 15T   | 16T   | Secondary reduction ratio  | Driven sprocket / Drive sprocket |
|--------------|-------|-------|-------|--|----------------------------------|
| 39T          | 2.786 | 2.600 | 2.438 | <ul style="list-style-type: none"> <li>The number of chain links is 102, 104, and 106, from the top.</li> <li>The smaller the number, the greater the gear ratio.</li> <li>The larger the number, the smaller the gear ratio.</li> </ul> |                                  |
| 40T          | 2.857 | 2.666 | 2.500 |  |                                  |
| 41T          | 2.929 | 2.733 | 2.563 |  |                                  |
| 42T          | 3.000 | 2.800 | 2.625 |  |                                  |
| 43T          | 3.071 | 2.867 | 2.688 |  |                                  |
| 44T          | 3.143 | 2.933 | 2.750 |  |                                  |
| 45T          | 3.214 | 3.000 | 2.813 |  |                                  |
| 46T          | 3.286 | 3.667 | 2.875 |  |                                  |

○ Sprocket tightening torque

|        |          |
|--------|----------|
| Drive  | 7.0 kg-m |
| Driven | 3.2 kg-m |

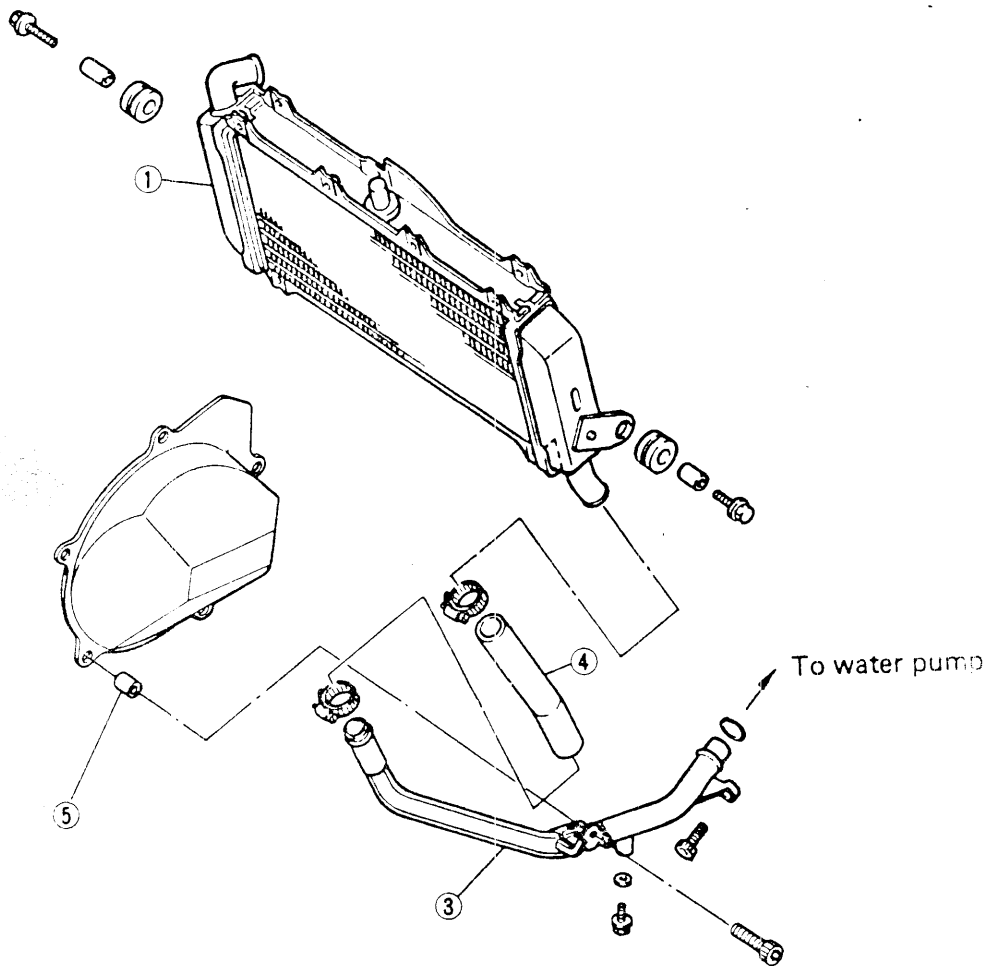
NOTE:

- When installing the kit drive sprocket, be sure to use the kit nut.
- The standard sprocket is designed for the 525 chain.

## Optional parts

### Radiator

| No. | Parts No.    | Parts name     | Q'ty | Remark   |
|-----|--------------|----------------|------|--|
| 1   | 2TK-12460-70 | Radiator ass'y | 1    | Valve opening pressure 1.1 kg/cm <sup>2</sup><br>(STD 0.9 kg/cm <sup>2</sup> ) |
|     | 22W-12462-00 | Cap, radiator  | 1    |  |
| 3   | 2TK-12484-00 | Pipe 4         | 1    |  |
| 4   | 2TK-12588-00 | Hose 5         | 1    |  |
| 5   | 90387-06026  | Collar         | 1    |  |



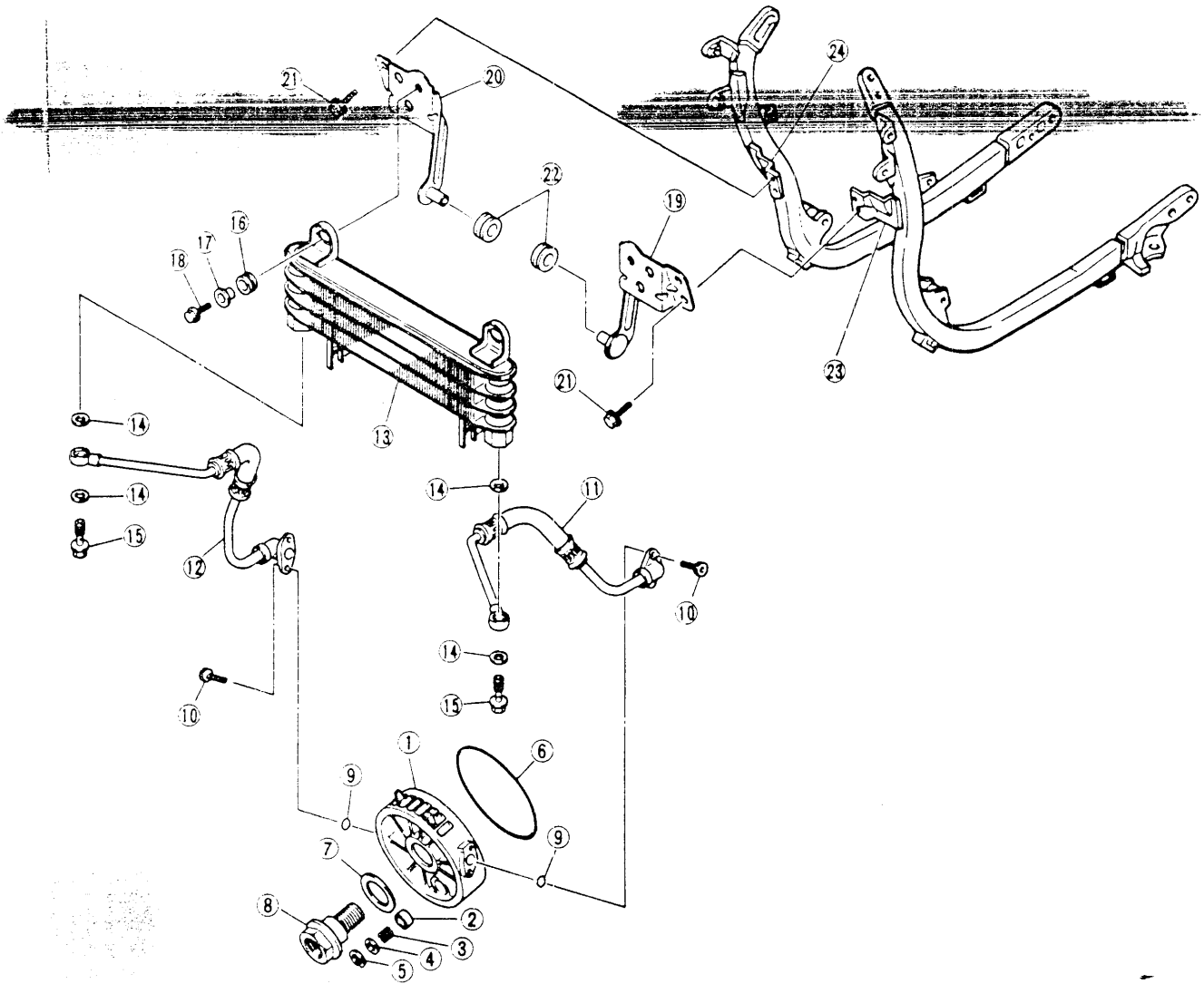
It can be installed in the same manner as the standard type.

- When the FIII kit rotor is installed, mount the collar between cover 1 and pipe 4.

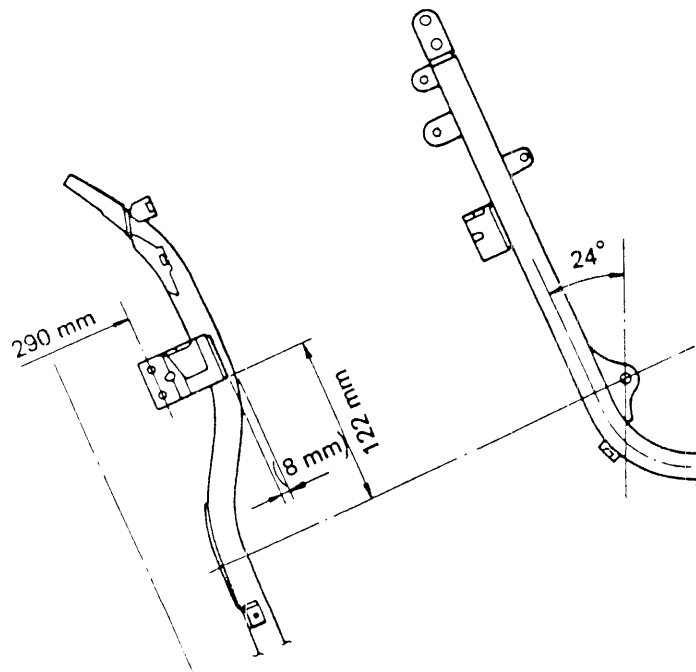
2. Oil cooler

| No. | Parts No. | Parts name   | Qty | Remark  |
|-----|-----------|--------------|-----|---------|
| ◇   | 1         | 5N1-13461-00 | 1   |         |
| ◇   | 2         | 2H9-13493-00 | 1   |         |
| ◇   | 3         | 90501-12413  | 1   |         |
| ◇   | 4         | 90209-06173  | 1   |         |
| ◇   | 5         | 99009-17500  | 1   |         |
| ◇   | 6         | 93210-87723  | 1   |         |
| ◇   | 7         | 90201-25526  | 1   | t = 2.0 |
| ◇   | 8         | 90401-20089  | 1   |         |
| ◇   | 9         | 93210-10197  | 2   |         |
| ◇   | 10        | 91311-06016  | 4   |         |
|     | 11        | 2TK-13464-00 |     |         |
|     | 12        | 2TK-13465-00 |     |         |
|     | 13        | 2TK-13470-00 |     |         |
| ◇   | 14        | 90430-12202  | 4   |         |
| ◇   | 15        | 90401-12122  | 2   |         |
| ◇   | 16        | 90480-15235  | 2   |         |
|     | 17        | 90387-067K8  | 1   |         |
| ◇   | 18        | 95826-06020  | 2   |         |
|     | 19        | 2TK-21498-00 | 1   | LH      |
|     | 20        | 2TK-21499-00 | 1   | RH      |
| ◇   | 21        | 91006-06012  | 4   |         |
| ◇   | 22        | 90480-13383  | 2   |         |
|     | 23        | 2TK-2139K-00 | 1   | LH      |
|     | 24        | 2TK-2139L-00 | 1   | RH      |

It not be installed when the standard radiator is installed.

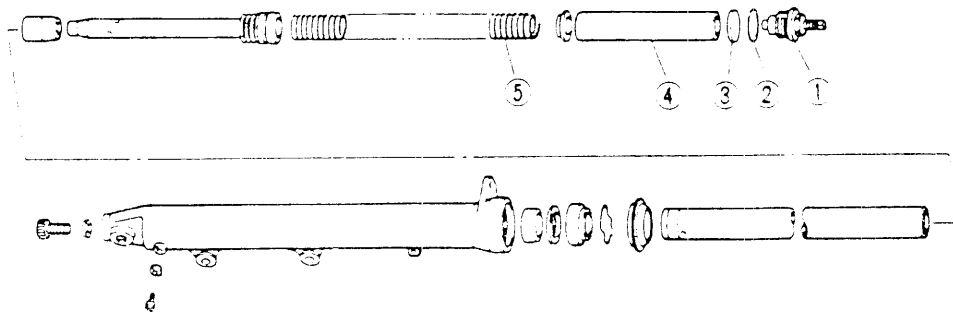


○ Welding position of the right and left halves of the bracket.

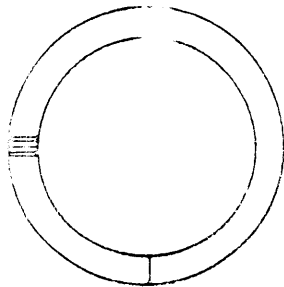


# Front suspension setting kit

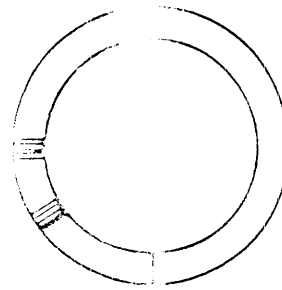
| No. | parts No     | Parts name           | Qty | Remark                                     |
|-----|--------------|----------------------|-----|--|
| 1   | 2TK-23111-00 | Bolt, cap            | 2   |  |
| 2   | 1W4-23114-10 | Gasket               | 2   |  |
| 3   | 2KT-23149-10 | Washer, spring upper | 2   |  |
| 4   | 2TK-23118-70 | Spacer               | 2   | $\ell = 134$ mm                            |
| 5   | 1WG-23141-70 | Spring               | 2   | Spring constant $k = 0.5$ $\ell = 412$ mm  |
| 5   | 1WG-23141-80 | Spring               | 2   | Spring constant $k = 0.55$ $\ell = 412$ mm |



3 The spring has a slit on its end as an identification mark.



$k = 0.50$  kg/mm



$k = 0.55$  kg/mm

(H-10)

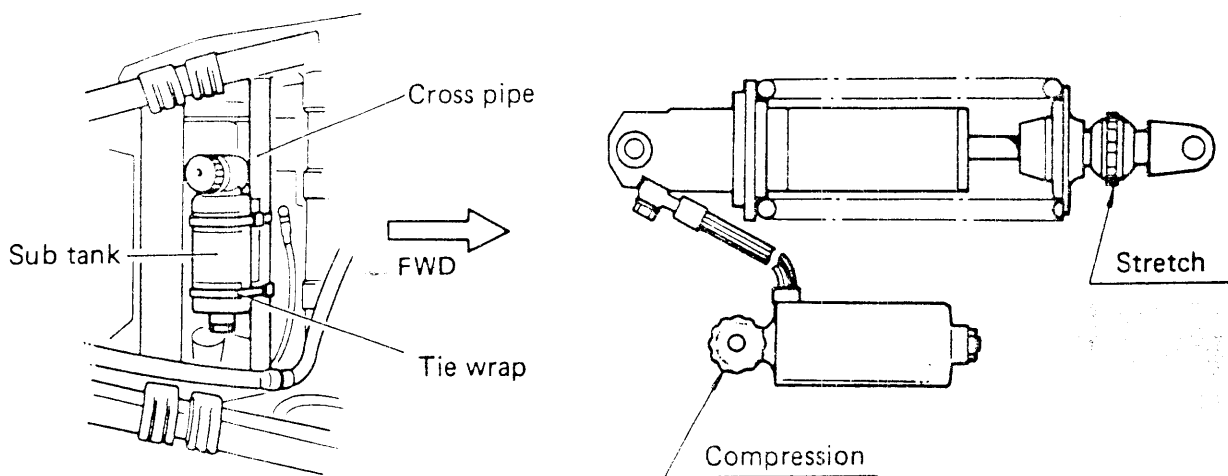
3 Standard setting

|                          |   |
|--------------------------|---|
| Spring                   | $k = 0.50$ kg/mm  |
| Initial                  | 28 mm (1st notch from the top)  |
| Initial adjustment range | 28 mm ~ 43 mm (5th notch from the top)  |
| Oil                      | Oil   |
| Oil level                | 113 mm above the upper end of the inner tube (without spring, at a maximum of pressure) |

## Rear shock absorber

| No. | Parts No.    | Parts name          | Q'ty | Remark |
|-----|--------------|---------------------|------|--------|
|     | 2TK-22210-70 | Rear shock absorber | 1    |        |

- Install the sub-tank on the cross-pipe in the frame with the tie wrap through the damper seat rubber.



Sub-tank mounting position

Adjust dial position

### Standard setting

|                                    |  |
|------------------------------------|--|
| Initial                            | 20 mm (Spring set length 160 mm)                                       |
| Stretch side adjuster position     | 5 notches from a position at which the adjuster is tightened to right  |
| Compression side adjuster position | 10 notches from a position at which the adjuster is tightened to right |

### NOTE:

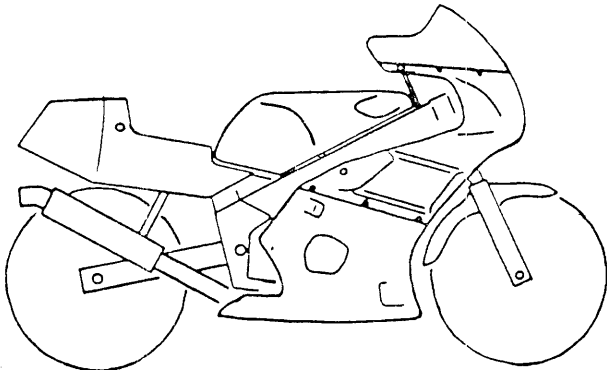
- If the stretch side adjuster is fully tightened, the rear shock absorber will not operate. Damping force cannot be varied, if the adjuster is tightened beyond 15th notch.
- The rear shock absorber is filled with nitrogen gas. Therefore, strictly follow the instructions given below.
  - ① Never attempt to disassemble.
  - ② Avoid stowing it away in high temperature.
  - ③ Be careful not to scratch the sub-tank and hose.
  - ④ Be sure to extract the nitrogen gas when scrapping.



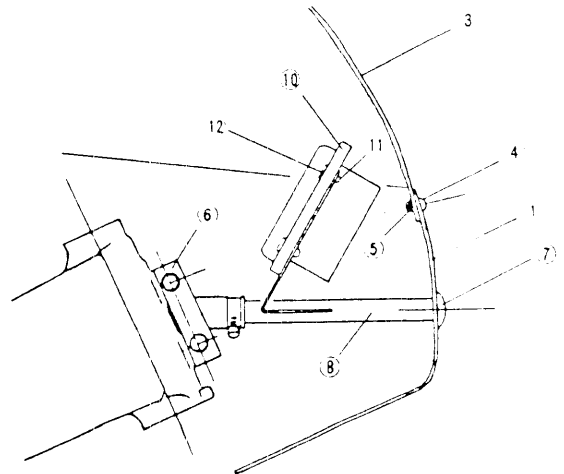
# Cowling set

| No. | Parts No. | Parts name            | Q'ty | Remark                        |
|-----|-----------|-----------------------|------|-------------------------------|
| 1   |           | Cowling, upper        | 1    | } SET                         |
| 2   |           | Cowling, under        | 1    |                               |
| 3   |           | Screen                | 1    |                               |
| 4   |           | Screw                 | 5    | } For plastic screen mounting |
| 5   |           | Nut                   | 5    |                               |
| 6   |           | Stay, front 1         | 1    |                               |
| 7   |           | Screw                 | 1    |                               |
| 8   |           | Stay, meter           | 1    |                               |
| 9   |           | Band                  | 1    |                               |
| 10  |           | Panel meter           | 1    |                               |
| 11  |           | Screw                 | 4    |                               |
| 12  |           | Nut                   | 4    | Plastic                       |
| 13  |           | Cover, fuel tank      | 1    |                               |
| 14  |           | Stay, tank cover      | 1    |                               |
| 15  |           | Band, tank fitting    | 1    |                               |
| 16  |           | Stay, upper           | 1    |                               |
| 17  |           | Blind rivet           | 4    |                               |
| 18  |           | Washer                | 4    |                               |
| 19  |           | Stay, screen          | 1    |                               |
| 20  |           | Cowl nut              | 2    | Plastic                       |
| 21  |           | Screw                 | 2    |                               |
| 22  |           | Clip                  | 2    |                               |
| 23  |           | Seat, cowl            | 1    |                               |
| 24  |           | Bracket, tank fitting | 1    |                               |
| 25  |           | Bolt                  | 2    |                               |
| 26  |           | Bolt                  | 2    |                               |
| 27  |           | Boss                  | 2    |                               |
| 28  |           | Bolt                  | 2    |                               |

Overall view

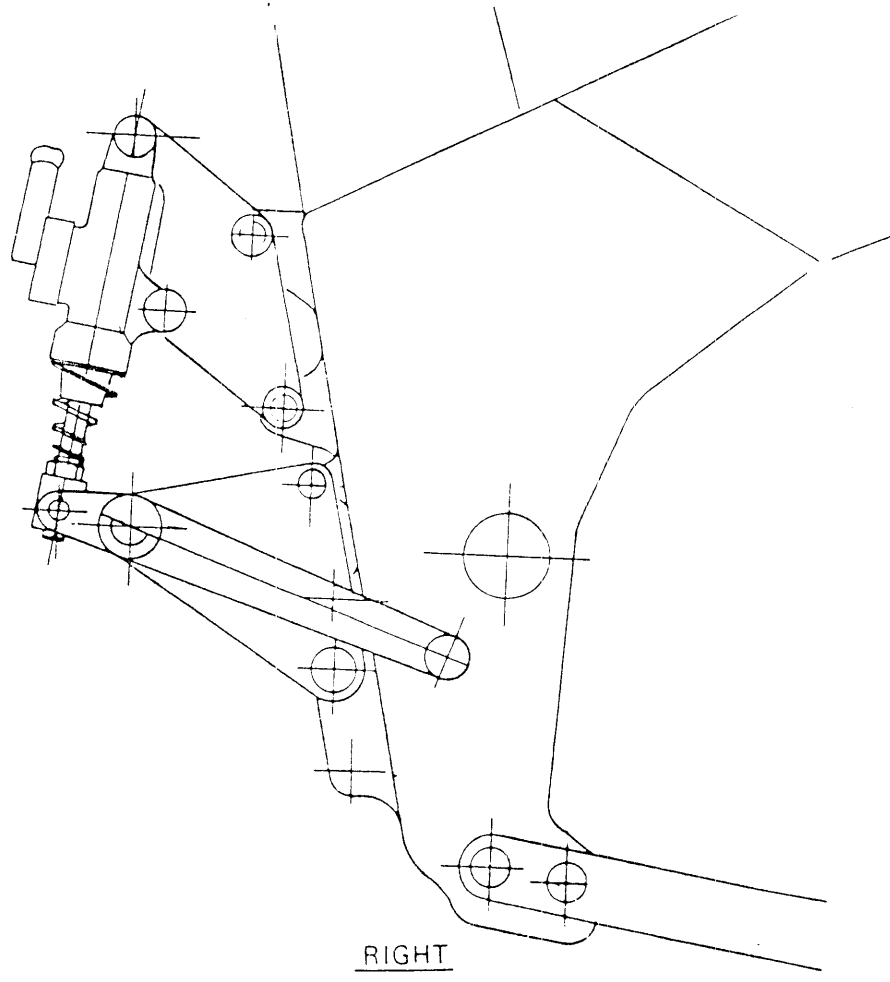
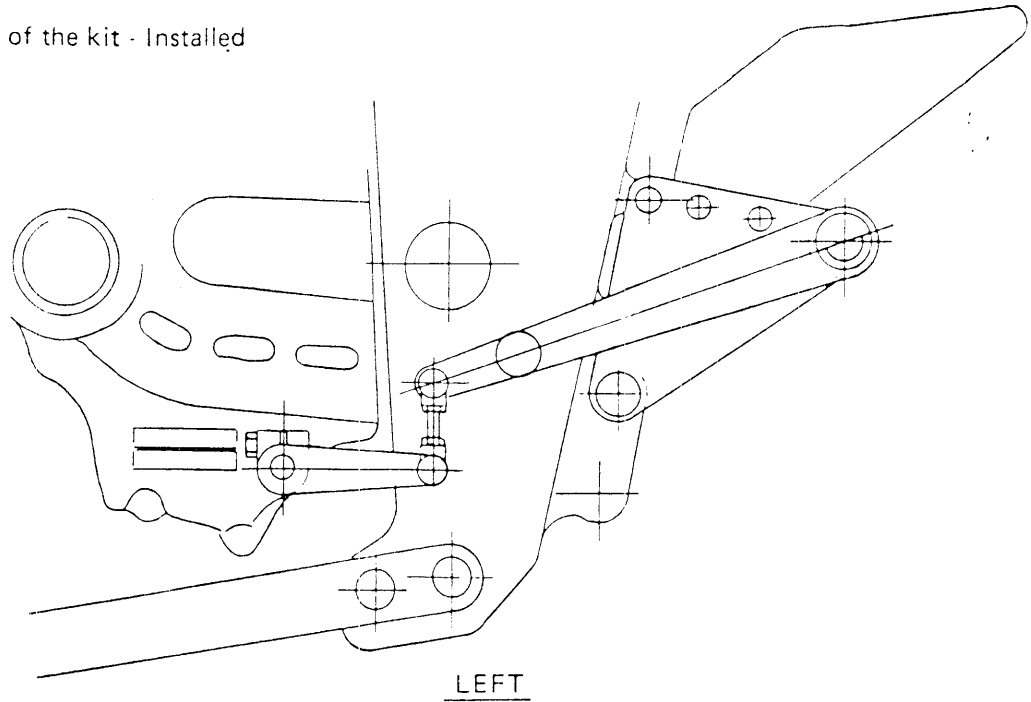


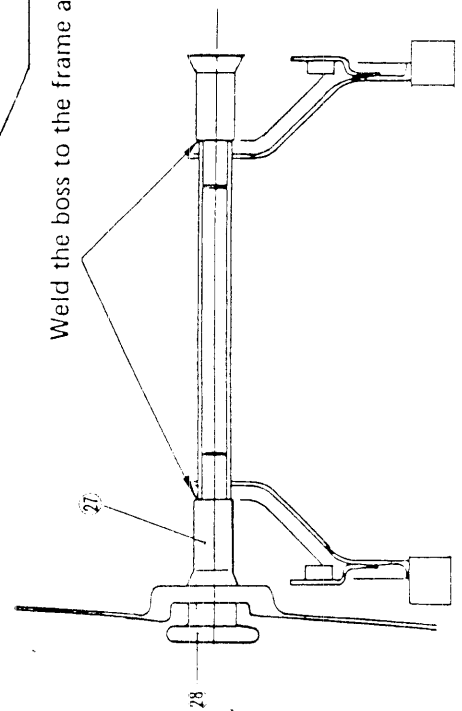
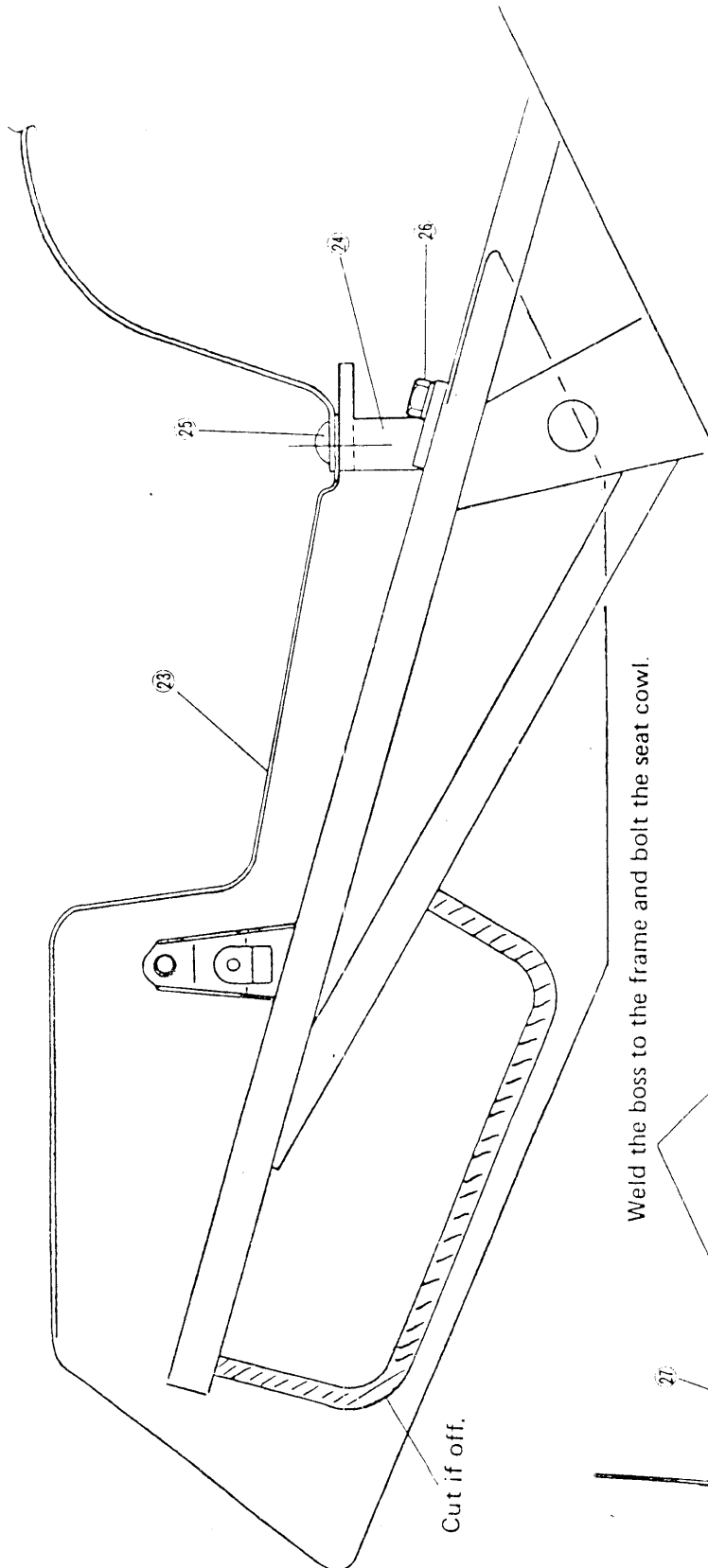
Front stay and adjacent area



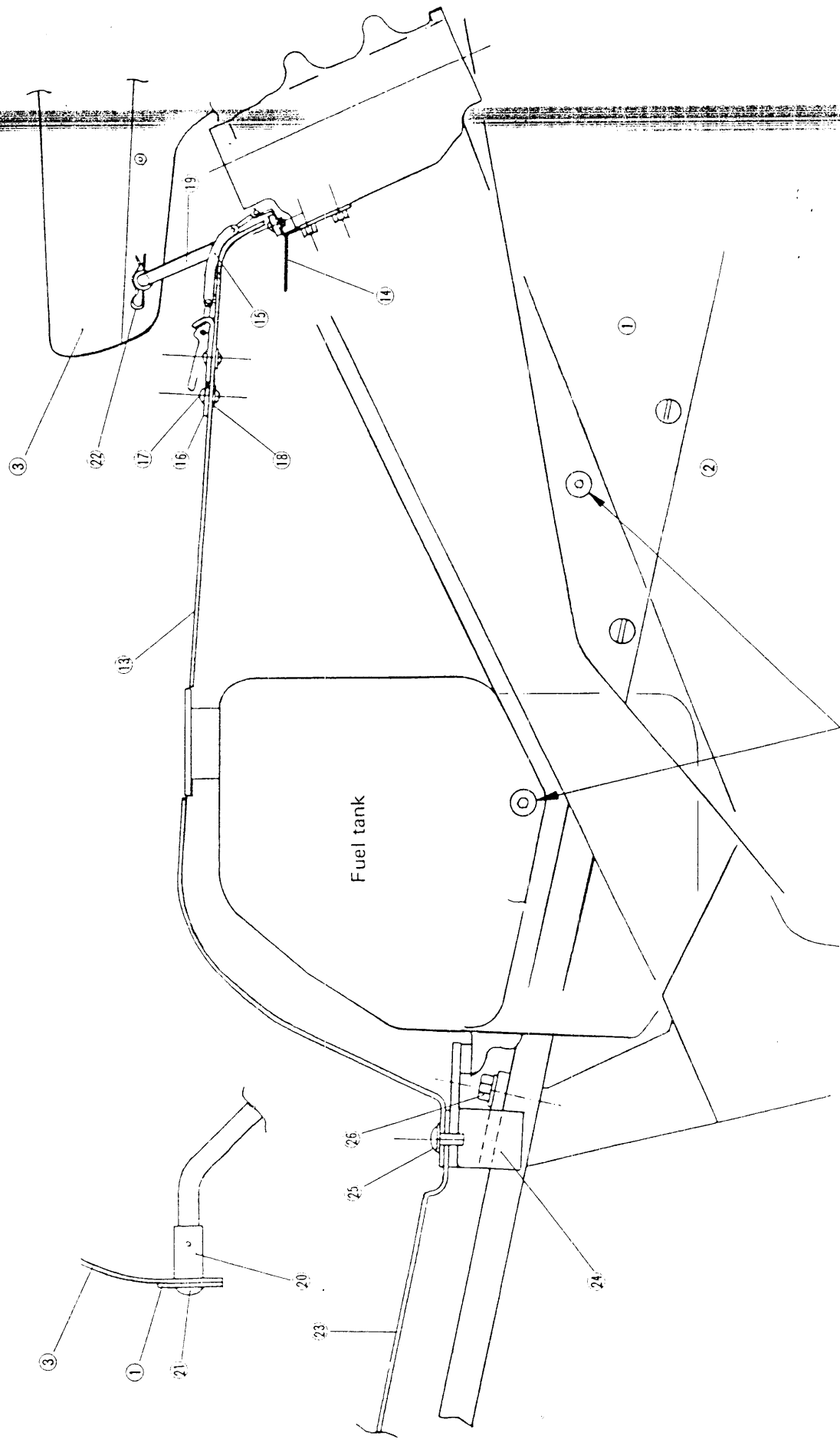
**Footrest kit:**

View of the kit - Installed





Weld the boss to the frame and bolt the seat cowl.



These two parts are mounted in the same position as in the case of the standard model.  
 Use the screws for the standard model.

## The Saga of Overtime Jones

Lo here lie the bones, of Overtime Jones.

He never owned an acre.

He worked all day for T. W. A.

Just to pay the undertaker.

His wife, she cried.

When he cracked up and died,

For he was a very good man.

His kids, they were sad,

But the Company was glad,

For he had the retirement plan.

We raffled his tools, according to the rules,

And took a collection for flowers.

So now he can sleep, in a grave cool and deep,

And forget all those overtime hours.

When the last of the slaves, are laid in their graves,

And being content is a habit,

There'll be overtime yet,

and more money to get,

But they won't be able to grab it.

So, if you'd like to live long, take life with a song.

Don't rush to and fro with the speedy.

Be satisfied, hold fast to your pride,

For overtime is for the greedy.

—From USWA LU 25 Tacoma, Wash.



# YAMAHA MOTOR CORPORATION, U.S.A.

6555 KATELLA AVENUE • CYPRESS, CALIFORNIA 90630  
MAIL ADDRESS: P.O. BOX 6555, CYPRESS, CALIFORNIA 90630  
PHONE: (714) 761-7300

January 1, 1988

Attention Yamaha Dealer,

I am proud to announce Yamaha Motor Corporation's 1988 FZR RACING PARTS PROGRAM. Yamaha's Motorsports Department will be handling the sales, shipping and technical information for all of the past parts as well as the future racing parts. Attached with this letter is a catalog and price list for the 1988 program. Please review this information and get your orders in ASAP, due to the limited quantities we will be offering for these parts. If you would like to place an order or if you have some questions regarding these parts, please call me at (714) 761-7511.

Sincerely,

Tim Norton  
Motorsports Dept.  
Yamaha Motor Corporation U.S.A.

tn\  
Attachments

TN88-33

**WARNING !**

INSTALLATION OF THE FOLLOWING RACING PARTS WILL VOID ALL EXPRESSED WRITTEN WARRANTIES FOR ANY YAMAHA PRODUCT THEY MAY BE INSTALLED ON.

YAMAHA'S RACING PARTS ARE NOT COVERED UNDER ANY TYPE OF WARRANTY OTHER THAN MANUFACTURING OR MATERIAL DEFECTS.

YAMAHA'S RACING PARTS ARE FOR CLOSED COURSE RACING USE ONLY!

## FZR400 RACING ENGINE & CHASSIS

### E. FZR400 ENGINE cont'd.

DESCRIPTION:

PART #:

---

FZR400 SP KIT (49-ST MODEL).....1WG-88ENG-80

Kit includes:

- \* EXHAUST SYSTEM
- \* RACING WIRE HARNESS
- \* CARBURETOR JETTING
- \* AIR FUNNEL
- \* DRIVE SPROCKET ASS'Y.
- \* DRIVEN SPROCKET ASS'Y.
- \* 520 RACING CHAIN

This kit is for 49 state models only.

FZR400 SP KIT (CAL. MODEL).....1WG-88ENG-A0

Kit includes:

- \* EXHAUST SYSTEM
- \* RACING WIRE HARNESS
- \* CARBURETOR JETTING
- \* AIR FUNNEL
- \* DRIVE SPROCKET ASS'Y.
- \* DRIVEN SPROCKET ASS'Y.
- \* 520 RACING CHAIN

This kit is for CALIFORNIA models only.



## FZR400 RACING ENGINE & CHASSIS

### E. FZR400 ENGINE

DESCRIPTION:

PART #:

---

1988 FZR400 RACING ENGINE KIT (49-ST MODEL).....1WG-88ENG-70

Kit includes:

- \* INTAKE CAMSHAFT
- \* EXHAUST CAMSHAFT
- \* TRANSMISSION ASS'Y.
- \* PISTON ASS'Y. with spares
- \* EXHAUST SYSTEM
- \* AIR FUNNEL KIT
- \* CARBURETOR JETTING
- \* INTAKE MANIFOLD ASS'Y.
- \* RACING CLUTCH SPRINGS
- \* RACING WIRE HARNESS
- \* RACING IGNITOR BOX
- \* RACING FLYWHEEL ASS'Y.
- \* ALTERNATOR COVER
- \* DRIVE SPROCKET ASS'Y.

This kit is for NON-CALIFORNIA models only.

A

1988 FZR400 RACING ENGINE KIT (CAL. MODEL).....1WG-88ENG-90

Kit includes:

- \* INTAKE CAMSHAFT
- \* EXHAUST CAMSHAFT
- \* TRANSMISSION ASS'Y.
- \* PISTON ASS'Y. with spares
- \* EXHAUST SYSTEM
- \* AIR FUNNEL KIT
- \* CARBURETOR JETTING
- \* INTAKE MANIFOLD ASS'Y.
- \* RACING CLUTCH SPRINGS
- \* RACING WIRE HARNESS
- \* RACING IGNITOR BOX
- \* RACING FLYWHEEL ASS'Y.
- \* ALTERNATOR COVER
- \* DRIVE SPROCKET ASS'Y.

This kit is for models equipped with EXUP system.

**FZR400 RACING ENGINE & CHASSIS****E. FZR400 ENGINE cont'd.**

| DESCRIPTION:                             | PART #:      |
|--|--------------|
| RACING PISTON.....                       | 2TK-11631-70 |
| * 12.2 Compression ratio.                |              |
| PISTON RING ASS'Y.....                   | 1WG-11610-00 |
| INTAKE CAMSHAFT ASS'Y.....               | 1WG-12171-70 |
| EXHAUST CAMSHAFT ASS'Y.....              | 1WG-12181-70 |
| EXHAUST PIPE ASS'Y. (49 STATE ONLY)..... | 2TK-Y4600-70 |
| MUFFLER ASS'Y. (49-STATE).....           | 2TK-14720-70 |
| MUFFLER ASS'Y. (CAL. MODEL).....         | 2TK-14720-80 |
| CLOSE-RATIO TRANSMISSION ASS'Y.....      | 2TK-Y1710-70 |
| DRIVEN SPROCKET ASS'Y. (14-T).....       | 1WG-17461-74 |
| (15-T).....                              | 1WG-17461-75 |
| (16-T).....                              | 1WG-17461-76 |
| SPECIAL SPROCKET NUT.....                | 1WG-90179-70 |
| 520 RACING CHAIN ASS'Y.....              | 1WG-RCSGO-C5 |
| OIL COOLER SET.....                      | 2TK-Y1347-70 |
| RACING RADIATOR ASS'Y.....               | 2TK-Y1246-70 |
| CLUTCH SPRING ASS'Y.....                 | 1WG-90501-70 |

## FZR400 RACING ENGINE & CHASSIS

### F. FZR400 CARBURETOR

| DESCRIPTION:          | PART #:      |
|-----------------------|--------------|
| CARB SETTING KIT..... | 1WG-Y1490-70 |
| * Main jets.          |              |
| * Needle jets.        |              |
| * Jet needles.        |              |
| CARB JOINT KIT.....   | 1WG-Y1358-70 |
| AIR FUNNEL SET.....   | 1WG-Y1415-70 |

### G. FZR400 IGNITION

| DESCRIPTION:             | PART #:      |
|--------------------------|--------------|
| RACING IGNITOR UNIT..... | 2TK-82305-70 |
| ACM COVER.....           | 2TK-Y8145-70 |
| TACHOMETER.....          | 1WG-83540-70 |
| RACING WIRE HARNESS..... | 2TK-82590-70 |

**FZR400 RACING ENGINE & CHASSIS****H. FZR400 CHASSIS**

| DESCRIPTION:              | PART #:      |
|---------------------------|--------------|
| RACING WINDSHIELD.....    | 1WG-RCSGO-25 |
| RACING UPPER FAIRING..... | 1WG-RCSGO-35 |
| RACING LOWER FAIRING..... | 1WG-RCSGO-45 |
| FUEL TANK COVER.....      | 1WG-RCSGO-55 |
| SEAT COWL ASS'Y.....      | 1WG-RCSGO-65 |
| METER STAY.....           | 1WG-RCSGO-75 |
| FRONT STAY.....           | 1WG-RCSGO-85 |
| SEAT STAY.....            | 1WG-RCSGO-95 |
| REAR SET ASS'Y.....       | 1WG-RCSGO-A5 |
| HANDLE BAR ASS'Y.....     | 1WG-RCSGO-B5 |
| REAR SHOCK ASS'Y.....     | 2TK-22210-70 |
| FORK SPRING KIT.....      | 2TK-Y2314-70 |
| FORK PRELOAD ADJ.....     | 2TK-Y2311-70 |