

## Ninja ZX-6R

# 2007 Ninja ZX-6R Racing Kit Manual

This manual contains only the information of the racing kit parts. Refer to the base manual listed below for information of the original model.

| Base Manual               | Part Number   |
|---------------------------|---------------|
| Ninja ZX-6R               | 99924-1382-01 |
| Motorcycle Service Manual | 99924-1302-01 |

Congratulation on your purchase of racing kit parts for the 2007 Ninja ZX-6R.

#### **IMPORTANT**

This manual provides how to install racing kit parts for the 2007 Ninja ZX-6R and how to tune up basically.

As for the basic knowledge, refer to the base Service Manual for the Ninja ZX-6R (P/No. 99924-1382-01).

When you participate in a race, it is necessary to modify the machine for the regulation. So we want you to ask for the tuning up shop.

## **A** WARNING

AFTER ANY MODIFICATION TO TUNE THE VEHICLE TO A COMPETITION MACHINE, IT SHOULD NOT BE USED ON PUBLIC STREETS, ROADS OR HIGHWAYS. THE USE OF THIS VEHICLE SHOULD BE LIMITED TO PARTICIPATION IN SANCTIONED COMPETITION EVENTS UPON A CLOSED COURSE.

#### **CAUTION**

When operating the engine, be careful not to trouble persons with noise. Do not turn the engine with loud engine and exhaust noise.

#### **DISCLAIMER OF WARRANTY**

ON OPTIONAL TUNING PARTS FOR RACING ARE NO WARRANTIES EXPRESSED OR IMPLIED.

#### **BASIC WORKS IN INSTALLING KIT PARTS**

We are going to make up the original Ninja ZX-6R for the racing machine. We recommend that the rider himself should do the basic works, removing parts or installing parts etc., given advices by the tuning shop. In a race, although trouble will be apt to happen, if you participate in basic works, you can discriminate cause of trouble, so you can return the race soon.

But concerning difficult technical works, you should as tuning shop.

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## **General Specifications**

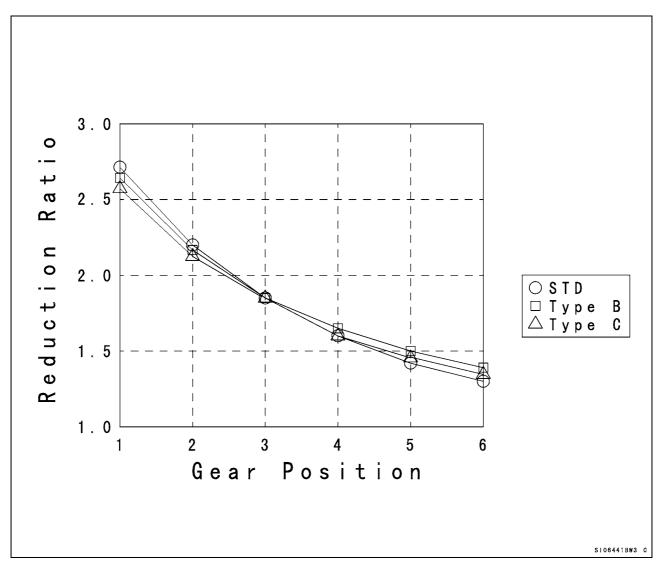
| Item                          | 2007 Ninja ZX-6R Racing                            |
|-------------------------------|----------------------------------------------------|
| Engine:                       |                                                    |
| Ignition timing               | 12.5°BTDC @1 300 r/min (rpm)                       |
| Fuel (Recommended)            | Racing gasoline                                    |
| Engine oil (Recommended):     | Racing oil                                         |
| Level                         | Between upper and lower levels of oil level gauge. |
| Drive Train:                  |                                                    |
| Primary drive reduction ratio | 1.900 (76/40)                                      |

## **Transmission Gear Table**

|     |                                             | Original                                            | Type B                                              | Type C                                              |
|-----|---------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
| 1st | In<br>Out<br>Teeth (Out/In)                 | 13127-0044<br>13262-0507<br>38/14                   | 13127-0055<br>13262-0526<br>37/14                   | (13127-0055)<br>13262-0535<br>36/14                 |
| 2nd | Gear Ratio In Out Teeth (Out/In) Gear Ratio | 2.714<br>13262-0372<br>13262-0508<br>33/15<br>2.200 | 2.643<br>13262-0527<br>13262-0528<br>39/18<br>2.167 | 2.571<br>13262-0536<br>13262-0537<br>34/16<br>2.123 |
| 3rd | In<br>Out<br>Teeth (Out/In)<br>Gear Ratio   | See note<br>13262-0509<br>37/20<br>1.850            |                                                     |                                                     |
| 4th | In<br>Out<br>Teeth (Out/In)<br>Gear Ratio   | See note<br>13262-0510<br>32/20<br>1.600            | 13262-0529<br>13262-0530<br>33/20<br>1.650          |                                                     |
| 5th | In<br>Out<br>Teeth (Out/In)<br>Gear Ratio   | 13262-0374<br>13262-0380<br>27/19<br>1.421          | 13262-0531<br>13262-0532<br>30/20<br>1.500          | 13262-0538<br>13262-0539<br>32/22<br>1.455          |
| 6th | In<br>Out<br>Teeth (Out/In)<br>Gear Ratio   | 13262-0375<br>13262-0381<br>26/20<br>1.300          | 13262-0533<br>13262-0534<br>32/23<br>1.391          | 13262-0540<br>13262-0541<br>35/26<br>1.346          |

## Note:

| Input 3rd-4th gear (3rd-4th) |         | 4th gear type   |                  |
|------------------------------|---------|-----------------|------------------|
| input sid-4til geal (si      | u-4111) | A B             |                  |
| 3rd gear type                | А       | 13262-0506(A-A) | 13262-0529 (A-B) |



## **Number of Grooves**

|      |     | STD | Type B | Type C |
|------|-----|-----|--------|--------|
| 1st  | In  | 0   | 1      | 1      |
| 151  | Out | 0   | 1      | 2      |
| 2nd  | In  | 0   | 1      | 2      |
| 2110 | Out | 0   | 1      | 2      |
| 3rd  | In  | 0   |        |        |
| Siu  | Out | 0   |        |        |
| 4th  | In  | 0   | 1      |        |
| 401  | Out | 0   | 1      |        |
| 5th  | In  | 0   | 1      | 2      |
| 501  | Out | 0   | 1      | 2      |
| 6th  | In  | 0   | 1      | 2      |
| Olli | Out | 0   | 1      | 2      |

## **Racing Kit Service Data**

| Item                               | Standard                      |
|------------------------------------|-------------------------------|
| Cylinder Head, Valves:             |                               |
| Duration:                          |                               |
| Intake                             | 288°                          |
| Exhaust                            | 266°                          |
| Camshaft timing (cam lift center): |                               |
| Intake                             | 105° (ATDC)                   |
| Exhaust                            | 110° (BTDC)                   |
| Valve clearance:                   |                               |
| Intake                             | 0.16 mm                       |
| Exhaust                            | 0.28 mm                       |
| Valve to piston clearance:         |                               |
| Intake                             | 0.80 mm (Minimum) @12°ATDC    |
| Exhaust                            | 1.40 mm (Minimum) @12°BTDC    |
| Ignition System:                   |                               |
| Spark plugs                        | NGK R0045Q-10, R0373A-10      |
| Spark plug tightening torque       | 13 N·m (1.3 kgf·m, 113 in·lb) |

These values show the specifications when standard cylinder head and gasket are used. When the clearance between the valve and the piston head is smaller than the minimum specific values, turn the installed position of the camshaft sprocket on the camshaft and change the camshaft timing.

## **Periodic Maintenance Chart**

The scheduled maintenance must be done in accordance with this chart to keep the motorcycle in good running condition.

| FREQENC                             | Y Each<br>Race | Every<br>3 races | Every 5 races | Every<br>10 races | As<br>Required |
|-------------------------------------|----------------|------------------|---------------|-------------------|----------------|
| OPERATION                           | (300 km)       | (1 000 km)       | (1 500 km)    | (3 000 km)        | Roquirou       |
| Engine                              |                |                  |               |                   |                |
| Clutch plate check*                 | •              |                  |               |                   |                |
| Throttle grip play check*           | •              |                  |               |                   |                |
| Spark plug clean/gap*               | •              |                  |               |                   |                |
| Engine oil change                   | •              |                  |               |                   |                |
| Oil filter replace                  | •              |                  |               |                   |                |
| Valve lapping                       |                |                  | •             |                   |                |
| Cylinder head/valve decarbonization |                |                  | •             |                   |                |

| FREQENCY                                        | Each     | Every       | Every         | Every       | As       |
|-------------------------------------------------|----------|-------------|---------------|-------------|----------|
|                                                 | Race     | 3 races     | 5 races       | 10 races    |          |
| OPERATION                                       | (300 km) | (1 000 km)  | (1 500 km)    | (3 000 km)  | Required |
| Cylinder check*                                 |          |             | •             |             |          |
| Piston/cylinder clearance check*                |          |             | •             |             |          |
| Piston, Piston ring, Piston pin replace         |          |             | •             |             |          |
| Crankshaft main bearing check*                  |          |             |               | •           |          |
| Connecting rod big end bearing check*           |          |             |               | •           |          |
| Transmission gear, bearing check*               |          |             |               | •           |          |
| Engine sprocket check*                          | •        |             |               |             |          |
| Coolant change                                  |          |             |               |             | •        |
| Radiator hoses, connections check*              | •        |             |               |             |          |
| Frame                                           |          |             |               |             |          |
| Brake operation check*                          | •        |             |               |             |          |
| Brake pad wear check*                           | •        |             |               |             |          |
| Brake fluid level check*                        | •        |             |               |             |          |
| Brake fluid change*                             |          |             |               |             | year     |
| Brake master cylinder cup and dust seal replace |          |             |               |             | year     |
| Brake caliper piston seal and dust seal replace |          |             |               |             | year     |
| Brake hose replace                              |          |             |               |             | 2 years  |
| Drive chain adjust                              | •        |             |               |             |          |
| Drive chain lubricate                           | •        |             |               |             |          |
| Drive chain wear check*                         | •        |             |               |             |          |
| Drive chain guide replace                       |          |             | If damaged    |             |          |
| Front fork clean/check*                         | •        |             |               |             |          |
| Front fork oil change                           | First    | change afte | r 2 races, th | nen every 5 | races    |
| Nut, bolt, and fastener tightness check*        | •        |             |               |             |          |
| Fuel system clean                               | •        |             |               |             |          |
| Fuel hose, fuel filter replace                  |          |             |               |             | •        |
| Steering play check*                            | •        |             |               |             |          |
| Steering stem bearing grease                    |          |             | •             |             |          |
| Rear sprocket replace                           |          |             |               |             | •        |
| General lubrication of chassis perform          | •        |             |               |             |          |
| Wheel bearing (rear) grease                     |          |             |               | •           |          |
| Swingarm pivot, uni-track linkage grease        |          |             | •             |             |          |
| Swingarm pivot, uni-track linkage check*        |          |             | •             |             |          |

<sup>\*:</sup> Replace, add, adjust, clean, or torque if necessary.

## **Preparation**

## **Before Installing**

- Modify the parts based on your race regulation.
- To avoid misuse keep the parts replaced with the kit parts separate.
- When reusing parts, clean them and check them for damage or deterioration.
- Main Removal Parts:

Lights

**Rear View Mirrors** 

Side Stand

Starter Lockout Switch

 Remove the side stand switch. When the optional main harness is not used, connect removing Black/Yellow and Green/White Leads directly.

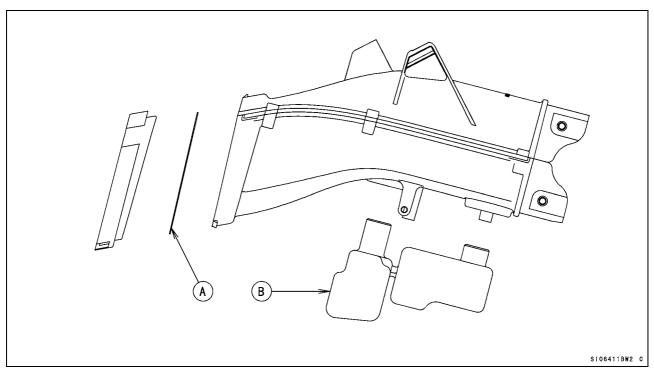
## **Racing Kit Parts**

Also, we have provided the spare parts, and other optional parts (engine, frame, and electric parts) for racing. So please order each parts referring to the "Racing Kit Parts List" in the back of this manual.

## **Engine Parts Installation**

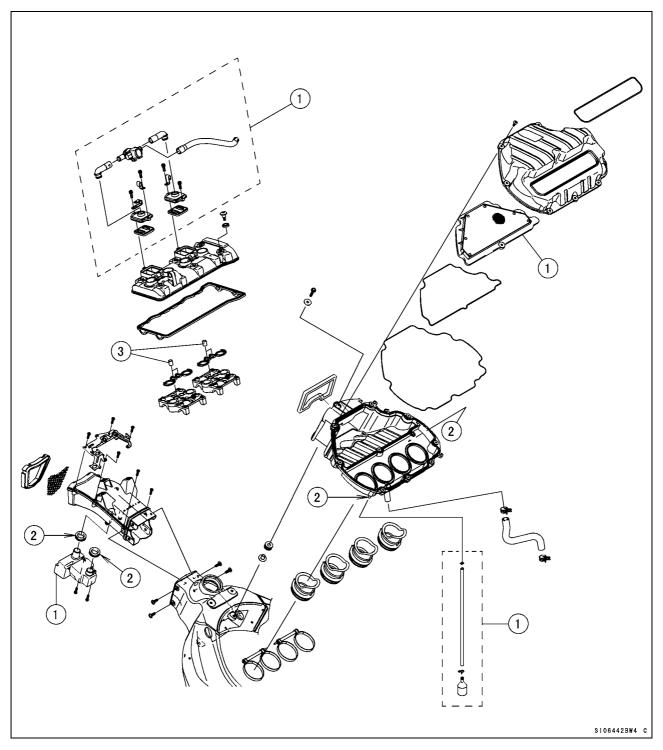
## **Air Intake Parts**

- Remove the wire net of Ram Air duct intake to reduce the air flow resistance.
- Remove the tank (16181-0011) to reduce the weight. Plug the holes firmly with a tape.
   The air pressure in the duct rises during high speed operation because the Ram Air System is used.



- A. Wire Net (14037-0057)
- B. Tank (16181-0011)

- Remove the secondary valves of cylinder head and relational parts, then plug the each holes.
- Remove the oil receiver and plug the hole.
- Remove the air cleaner element or cut the cleaner element off remaining punched plate to reduce the air flow resistance.



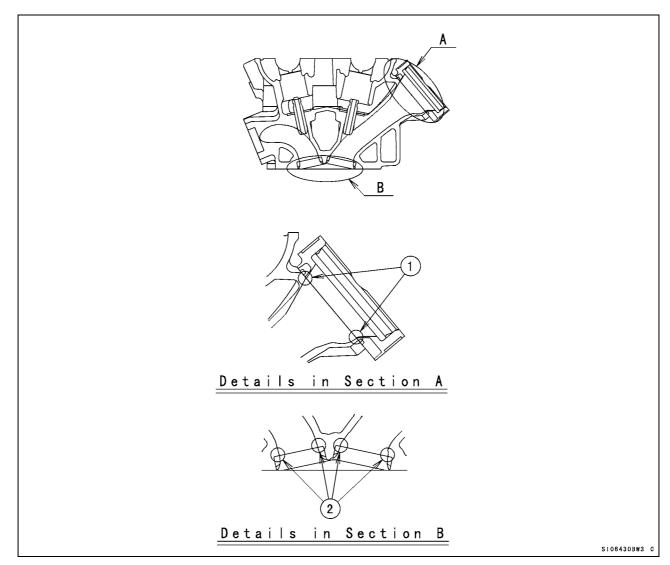
- 1. Remove the parts.
- 2. Plug the holes.
- 3. Replace with plugs (92043-1506), and plug the holes.

## **Cylinder Head**

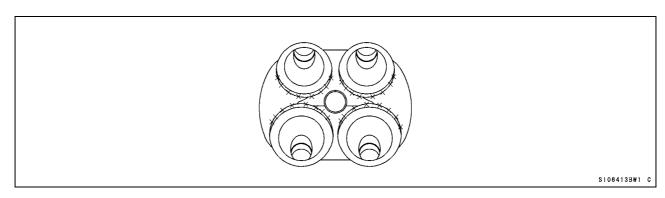
- Grind off the stepped portions of the ports and smooth the inside of ports to make intake/exhaust gas flow more smooth.
- O Grind off the stepped portion only at the mating surface between the carburetor holder and the intake port. Do not port it. To extend the intake port, air flow speed will be reduced and the engine performance at the high speed range may be down.
- O Mark the carburetor holders so that they can be installed in their original positions.
- O Grind off and smooth the stepped portions at the mating surface between valve seat and the port.
- O Smooth the inside of the intake port and exhaust port.
- Use the hand grinder.
- O Use #200 oil stone for eliminating any stepped portions.
- O Use #200 oil stone for smoothing and #300 oil stone for finishing.

#### NOTE

O These procedures make air resistance less and intake/exhaust gas flow more smooth. However, much more effect can not be expected by excessive grinding and smoothing. It may be done to the extent of getting rid of uneven surfaces.



- 1. Stepped Portions of carburetor holder and cylinder head.
- Stepped Portions of valve seat and cylinder head.
- The combustion chambers are modified by cutting work but the edges shown must be hand finished for smooth corners (Round them to about R1).
- Chamfer the machining edge of the cylinder head where the valve seat is installed, also smooth the dome of the combustion chamber with the valves installed. Excessive smoothing may reduce the cylinder compression.



XXX. Edges

#### NOTE

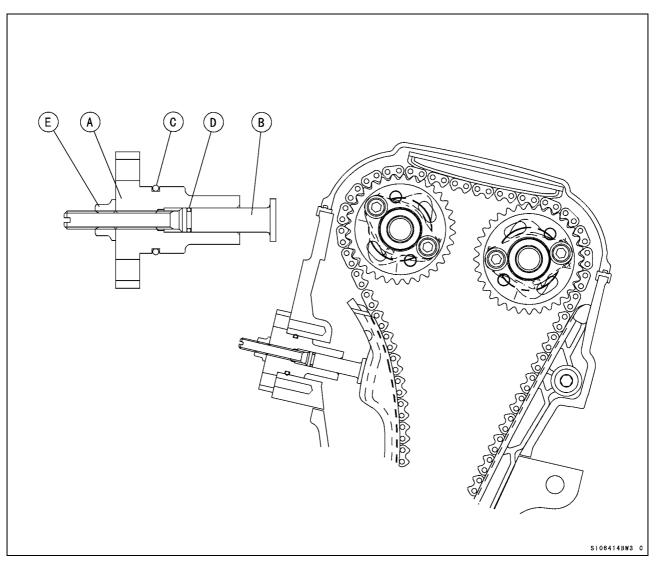
O When grinding the cylinder head bottom surface or using thinner gaskets, adjust the valve timing to keep that the valve to piston clearance is not less than the minimum value (IN: 0.7 mm, EX: 1.4 mm).

#### **Camshaft Chain Tensioner**

- Replace the cam chain tensioner with the kit to gain the durability.
- Apply the engine oil to the tensioner rod, O-ring and tensioner body, insert them into the tensioner body.
- O Check to see that the tensioner rod turns freely in the body, if not, polish the tensioner rod or fine the female threads in the body with a tap (Diameter  $\times$  Pitch = 6 mm  $\times$  1.0 mm).
- Install the tensioner on the cylinder block with the tensioner rod is fully pushed back.
- Turn the tensioner rod in with a screwdriver until it becomes hard to turn.
- Turn the crankshaft clockwise forcing lightly to the tensioner rod with twisting force to take up any gap and tighten the locknut.
- Tighten the rock nut after adjustment.

#### **NOTE**

- O Never forward the tensioner rod forcibly, this will increase mechanical loss of the tensioner and may damage to the chain guide.
- O The cam chain tensioner must be adjusted at every race.



- A. Tensioner
- B. Tensioner Rod
- C. O-ring
- D. O-ring
- E. Lock nut

## Camshafts, Sprockets

## Camshafts, Sprockets:

• Adjust the valve clearance within the specified value, but more performance is expected when adjusted from middle value to upper limit between adjustable range.

| Original | Timing | Cam Lift | Valve Clearance |
|----------|--------|----------|-----------------|
| Intake   | 288°   | 8.30 mm  | 0.13 ~ 0.19 mm  |
| Exhaust  | 266°   | 7.50 mm  | 0.24 ~ 0.31 mm  |

| Kit     | Timing | Cam Lift | Valve Clearance |
|---------|--------|----------|-----------------|
| Intake  | 308°   | 8.30 mm  | 0.13 ~ 0.19 mm  |
| Exhaust | 274°   | 7.30 mm  | 0.24 ~ 0.31 mm  |

- If you don't adjust the valve timing for racing, install the camshaft sprocket to the kit camshaft using the round bolt holes and adjust the cam chain timing according to the Ninja ZX-6R Service Manual. If you adjust the valve timing, install the sprocket to the camshaft between the adjustable range of the long bolt holes.
- Tighten the camshaft sprocket bolts to 15 N·m (1.5 kgf·m, 11.0 ft·lb) of torque.

#### Valve Timing (when the round bolt holes are used)

| Timing (cam lift center) | Intake | Exhaust |
|--------------------------|--------|---------|
| Original                 | 105°   | 110°    |
| Race use                 | 105°   | 110°    |

- O When grinding the cylinder head bottom surface, grinding the cylinder top surface or using thinner gaskets, be sure the valve to piston clearance especially.
- O When using the sprocket long bolt holes and adjusting the valve timing to be different from the standard timing, check the valve to piston clearance of all cylinders after adjusting the valve clearance correctly.

#### **Valve to Piston Clearance (Min.)**

| Intake  | 0.7 mm |
|---------|--------|
| Exhaust | 1.4 mm |

If the valve to piston clearance is less than the minimum value, do not start the engine because the valves will touch the piston and the engine may be damaged.

 Measure the valve to piston clearance at about 12° ATDC (Intake) and 11° BTDC (Exhaust) of crankshaft timing. At this point, the valve to piston clearance will be minimum.

## Valve Springs

The original machine's valve springs should be used.

## **Cylinder Compression**

- To adjust the cylinder compression, adjust the thickness of the cylinder head gasket and the cylinder base gasket or smooth the cylinder top surface to make the piston squish 0.65 ~ 0.8 mm. Keep the piston squish more than 0.65 mm.
- O Position the piston at Top Dead Center, and put a small piece of modeling clay on the shoulder of the piston. Install the cylinder head gasket and cylinder head, and tighten the head bolts to the specified torque.
- O Remove the cylinder head and measure the thickness of the clay. The thickness of the collapsed clay is the size of the squish.

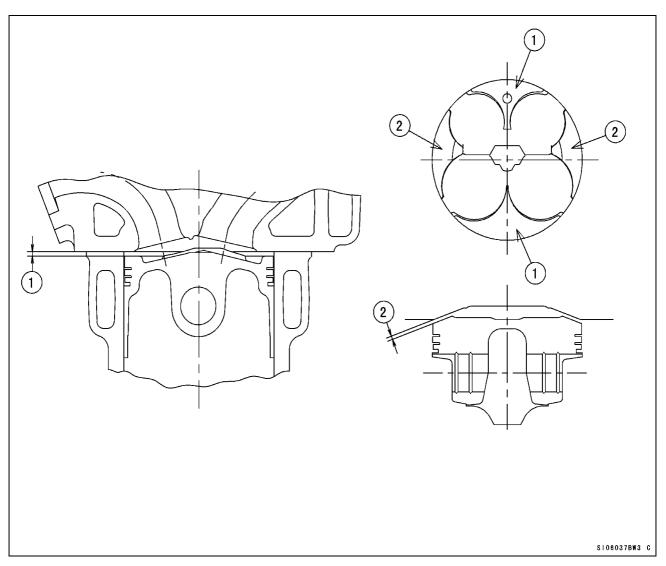
## **Squish Measurement**

| [1] Front and Rear | 0.65 ~ 0.80 mm |
|--------------------|----------------|
| [2] Left and Right | 0.67 ~ 0.85 mm |

- O The most preferable squish measurement is [1] 0.65 mm/[2] 0.67 mm.
- O Select proper cylinder head gasket and cylinder base gasket.
- O Note that by grinding the cylinder head surface only left and right squishes become narrower, while by grinding the cylinder top surface or decreasing the gasket-thickness all the squishes become narrower.

#### **Cylinder Head Gasket**

| ,          |           |          |
|------------|-----------|----------|
| Part No.   | Thickness | Note     |
| 11004-0071 | 0.45 mm   | KIT      |
| 11004-0070 | 0.50 mm   | KIT      |
| 11004-0069 | 0.55 mm   | KIT      |
| 11004-0068 | 0.60 mm   | KIT      |
| 11004-0057 | 0.65 mm   | Original |
| 11004-0067 | 0.70 mm   | KIT      |



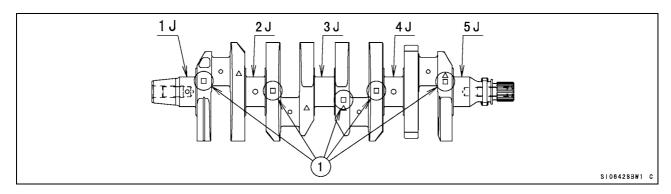
- 1. Squish, Front/Rear
- 2. Squish, Left/Right

## **Crankshaft Main Journal and Connecting Rod Big End Bushings**

- To adjust clearance of crankshaft main journal you can select proper bush in accordance with the marks.
- The kit bushings are improved in anti-seizuring characteristics as well as in wear-resistance as compared with the standard bushings.

## 1) Crankshaft Main Journal

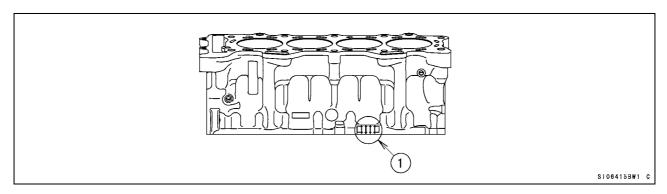
O Crankshaft Main Journal Diameter



## 1. Crankshaft Main Journal Diameter Marks

| SIZE     |                  |                  |  |
|----------|------------------|------------------|--|
| "1" mark | : over 30.992 mm | within 31.000 mm |  |
| None     | : over 30.984 mm | within 30.992 mm |  |

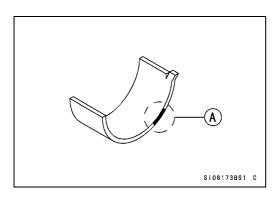
#### O Crankcase Main Journal inside Diameter



#### 1. Main Journal Diameter Marks

| SIZE     |                      |                  |  |
|----------|----------------------|------------------|--|
| "○" mark | : over 34.000 mm     | within 34.008 mm |  |
| None     | : 34.008 mm and over | within 34.016 mm |  |

## O Main Journal Bush



A. Size Color

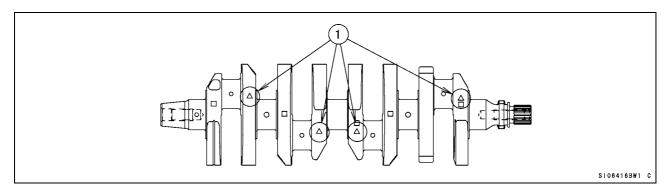
| Size Color | Thickness mm | Journal Number | Part Number<br>(STD) | Part Number<br>(KIT) |
|------------|--------------|----------------|----------------------|----------------------|
|            | 4 400 4 500  | 1-4            | 92139-0189           | 92139-0200           |
| blue       | 1.499-1.503  | 5              | 92139-0171           | 92139-0197           |
| blask      | 4 405 4 400  | 1-4            | 92139-0190           | 92139-0201           |
| black      | 1.495-1.499  | 5              | 92139-0172           | 92139-0198           |
| brown      | 1 404 1 405  | 1-4            | 92139-0191           | 92139-0202           |
| brown      | 1.491-1.495  | 5              | 92139-0173           | 92139-0199           |

## O Selection Table

| Crankcase inner Diameter | eter Crankshaft Diameter |        | Journal | Part<br>Number | Part<br>Number |
|--------------------------|--------------------------|--------|---------|----------------|----------------|
|                          |                          | Color  | Number  | (STD)          | (KIT)          |
| 0                        | 1                        | brown  | 1-4     | 92139-0191     | 92139-0202     |
| (34.000 mm ~ 34.008 mm)  | (30.992 mm ~ 31.000 mm)  | DIOWII | 5       | 92139-0173     | 92139-0199     |
| 0                        | なし                       | black  | 1-4     | 92139-0190     | 92139-0201     |
| (34.000 mm ~ 34.008 mm)  | (30.984 mm ~ 30.992 mm)  | DIACK  | 5       | 92139-0172     | 92139-0198     |
| なし                       | 1                        | black  | 1-4     | 92139-0190     | 92139-0201     |
| (34.008 mm ~ 34.016 mm)  | (30.992 mm ~ 31.000 mm)  | DIACK  | 5       | 92139-0172     | 92139-0198     |
| なし                       | なし                       | blue   | 1-4     | 92139-0189     | 92139-0200     |
| (34.008 mm ~ 34.016 mm)  | (30.984 mm ~ 30.992 mm)  | Diue   | 5       | 92139-0171     | 92139-0197     |

## 2) Crankpin

## O Crankpin Diameter



## 1. Crankpin Diameter Marks

"O" mark : over 29.992 mm within 30.000 mm

None : 29.984 mm and over within 29.992 mm

## O Connecting Rod Big End Inside Diameter

## Connecting Rod Big End Inside Diameter Marks

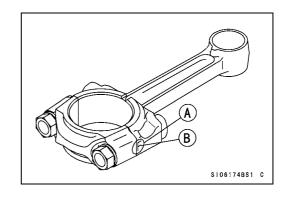
"O" mark : over 33.008 mm within 33.016 mm

None : 33.000 mm and over within 33.008 mm

## A. Inside Diameter Mark

(O or None)

B. Weight Mark, Alphabet (G.H etc)



## O Connecting Rod Big End Bushings

| Size Color | Thickness mm    | Part Number | Part Number |
|------------|-----------------|-------------|-------------|
| Size Coloi | THICKHESS HIIII | (STD)       | (KIT)       |
| blue       | 1.485-1.490     | 92139-0165  | 92139-0194  |
| black      | 1.480-1.485     | 92139-0166  | 92139-0195  |
| brown      | 1.475-1.480     | 92139-0167  | 92139-0196  |

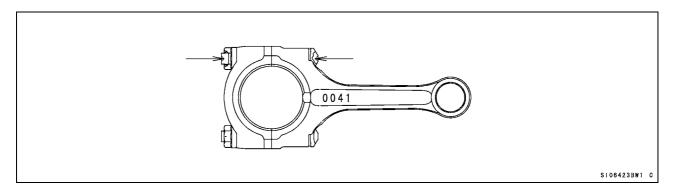
#### O Selection Table

| Connecting Ded Dig End  |                                            | Size   | Part        | Part       |
|-------------------------|--------------------------------------------|--------|-------------|------------|
| Inside Diameter         | necting Rod Big End Crankpin Diameter Mark |        | Number      | Number     |
| inside Diameter         |                                            | Color  | (STD)       | (KIT)      |
| None                    | 0                                          | brown  | 92139-0167  | 92139-0196 |
| (33.000 mm ~ 33.008 mm) | (29.992 mm ~ 30.000 mm)                    | DIOWII | 92 139-0107 | 92139-0190 |
| None                    | None                                       | black  | 92139-0166  | 92139-0195 |
| (33.000 mm ~ 33.008 mm) | (29.984 mm ~ 29.992 mm)                    | DIACK  | 92139-0100  | 92139-0193 |
| 0                       | 0                                          | black  | 92139-0166  | 92139-0195 |
| (33.008 mm ~ 33.016 mm) | (29.992 mm ~ 30.000 mm)                    | DIACK  | 92139-0100  | 92139-0193 |
| 0                       | None                                       | blue   | 92139-0165  | 92139-0194 |
| (33.008 mm ~ 33.016 mm) | (29.984 mm ~ 29.992 mm)                    | biue   | 92139-0103  | 32133-0134 |

## **Connecting Rod Bolts**

Use the original connecting bolts and nuts.

The original connecting rod bolt has recesses at both ends to measure its length and determine the bolt stretch.



- Install the original bolts into the connecting rod.
- Before every tightening, use a point micrometer to measure the length of the bolts and record the values to find the bolt stretch.
- Apply a small amount of molybdenum disulfide grease to the threads of bolts.
- Tighten the big end nuts at the torque of 11.8 ±2 N·m (1.2 ±0.2 kgf·m): reference
- Check the length of the bolts and find the bolt stretch.

Bolt Length after tightening – Bolt Length before tightening = Stretch

#### **Bolt Stretch**

Usable Range: 0.33 ~ 0.38 mm (0.013 ~ 0.015 in.)

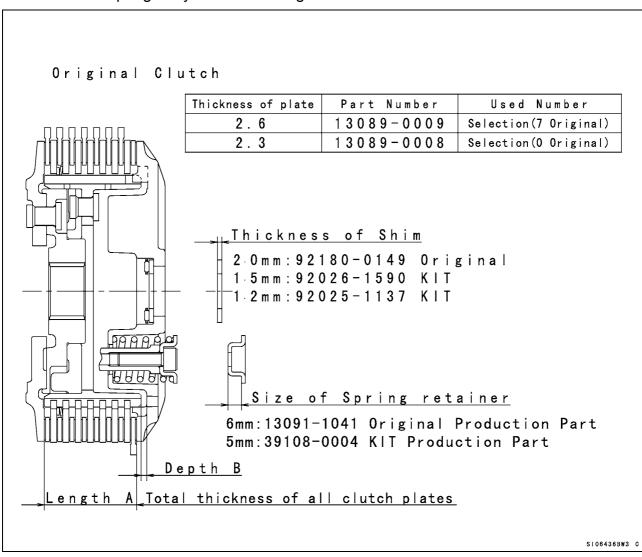
Turn the big end nuts more until the bolt stretch reaches the usable range.

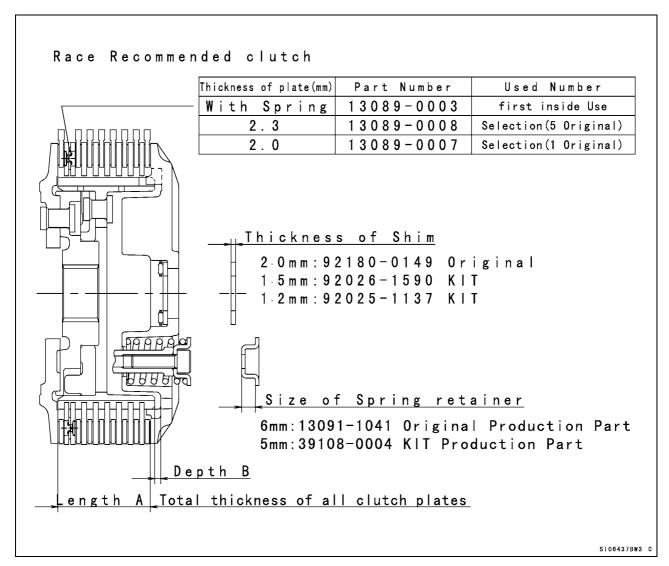
#### NOTE

O Replace the original bolts with new ones if they have already been tightened up to usable range 2 times.

## **Clutch Adjustment (Back-Torque Limiter Setting)**

The Ninja ZX-6R engine is equipped with the Kawasaki back-torque limiter mechanism in the clutch. The back-torque limiter works to reduce the chance of rear wheel hop caused by engine braking during hard braking and down shifting. The back-torque limiter operating condition can be changed by changing the total thickness of clutch plates and changing the number of leaf springs. Try different settings and select the best.



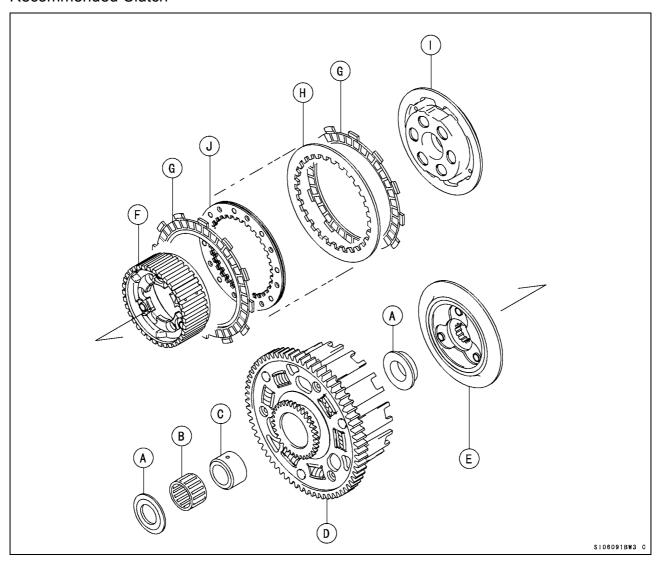


- The standard setting of length [A], total thickness of clutch plates shown in the illastration, becomes about 40.7 mm. For this setting the effective stroke of clutch spring plate during the back-torque limiter operation is adjusted between 0.45 and 0.75 mm. By increasing the effective stroke the back-torque limiter causes more slip. The effective stroke increases by decreasing the length [A]. The length [A] between 39.5 and 40.7 mm is available by changing the combination of the steel plates. Replace one steel plate with a thinner one and try the setting. If the operation of the back-torque limiter is not enough replace other steel plates one by one.
- \* Steel plates of former model's are available.

| Thickness (mm) | Part Number |
|----------------|-------------|
| 2.0            | 13089-1073  |

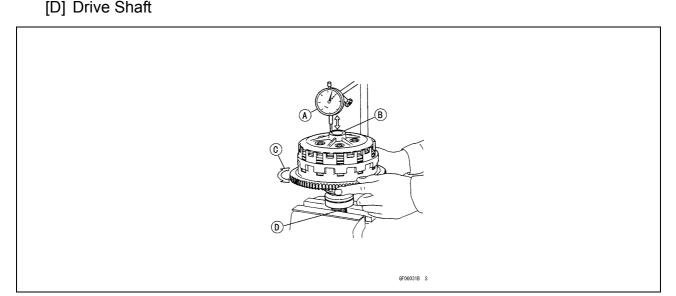
- For precise setting the measurement of the effective stroke of clutch spring plate is recommended.
  - Remove oil from clutch plates.
  - Hold an extra drive shaft in a vise and install the following clutch parts on the shaft.

## **Recommended Clutch**



- [A] Spacers
- [B] Needle Bearing
- [C] Bushing
- [D] Clutch Outer Casing
- [E] Clutch Hub
- [F] Sub Clutch Hub
- [G] Friction Plates: total 8 pcs.
- [H] Steel Plates
- [I] Spring Plate
- [J] Steel Plate with Spring

- Engage the cam followers (Clutch Hub) with the cams (Sub Clutch Hub).
- To measure the effective stroke of clutch spring plate, set a dial gauge [A] against the raised center [B] of the clutch spring plate.
- Move the clutch housing gear back and forth [C]. The difference between the highest and lowest gauge readings is the amount of the effective stroke of clutch spring plate.



- After installing the clutch to the engine, measure and record the depth [B] shown in the figure on page 21. The length from the clutch spring plate to the top surface of the sub clutch hub, using a caliper or a depth gauge. Manage the depth [B] to adjust the effective stroke after that, because the friction disks would be worn and the length [A] (Total thickness of all clutch plates) would change. The decrease of the depth [B] from the initial setting shows the increase of the effective stroke of clutch spring plate from the value initially measured.
- When decreasing the length [A], total thickness of clutch plates, use the optional spring
  retainers (provided as optional production parts) to keep the preload of clutch springs
  according to the table below. If you have clutch slip during acceleration use shorter
  spring retainers by 1 mm to increase preload of clutch springs.
- When decreasing the length [A], total thickness of clutch plates, use the optional shim (provided as optional production part) to keep the position of clutch release lever according to the table below.
- The standard setting of the number of leaf springs is four. By decreasing the number of the leaf springs the sub clutch hub operates easily and pushes the clutch operating plate causing more slip. Two types of nuts are available for the number of leaf springs, two and three. They are provided as optional production parts. The number of leaf springs affects all over the operation of the back-torque limiter but especially the beginning of the operation.

## **Standard Selection of Spring Retainers**

| Total Thickness of Clutch Plates | Size of Spring Retainers | Remarks          |
|----------------------------------|--------------------------|------------------|
| 40.2 - 40.7 mm                   | 6 mm                     | P/No. 13091-1041 |
| 40.2 ~ 40.7 mm                   | 6 mm                     | Original Setting |
| 39.5 ~ 40.2 mm                   | 5 mm                     | P/No. 39108-0004 |

<sup>\*</sup> If clutch slip is occurred with a retainer of 6 mm, try with a retainer of 5 mm.

#### Standard Selection of Shim

| Total Thickness of Clutch Plates | Size of Shim | Remarks          |
|----------------------------------|--------------|------------------|
| Approx. 40.7 mm                  | 2.0 mm       | P/No. 92180-0149 |
|                                  |              | Original Setting |
| 40.2 mm                          | 1.5 mm       | P/No. 92026-1590 |
| 39.5 ~ 40 mm                     | 1.2 mm       | 92025-1137       |

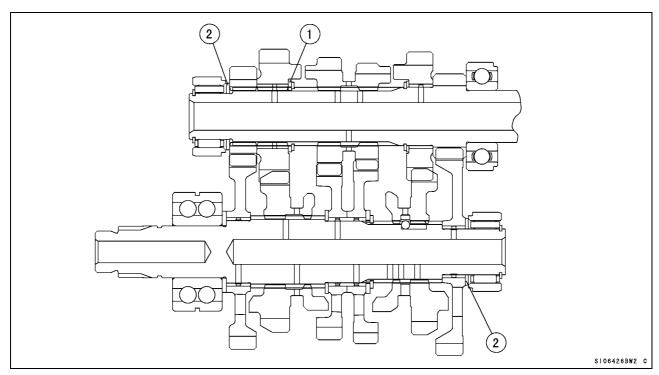
## **Transmission**

- Remove the three steel balls (600A0500) from the output shaft assembly.
- Take kit and optional transmission gears are available to be closer to each gear ratio.

## **Transmission Shimming**

By using washers with various thickness, keep the axial clearance between 0.3 mm and 0.5 mm, to prevent the seizure of gears and to keep smooth gear-shifting.

|                              | Thickness | Part No.   |                 |
|------------------------------|-----------|------------|-----------------|
| Spline washer (input)        | 1.6 mm    | 92200-0050 | Original        |
|                              | 1.8mm     | 92200-0231 | Kit             |
|                              | 1.4 mm    | 92200-0230 | Kit             |
| Plane washer (input, output) | 1.4 mm    | 92200-0138 | Original        |
|                              | 1.6 mm    | 92022-212  | Production part |
|                              | 1.8 mm    | 92202-1722 | Production part |

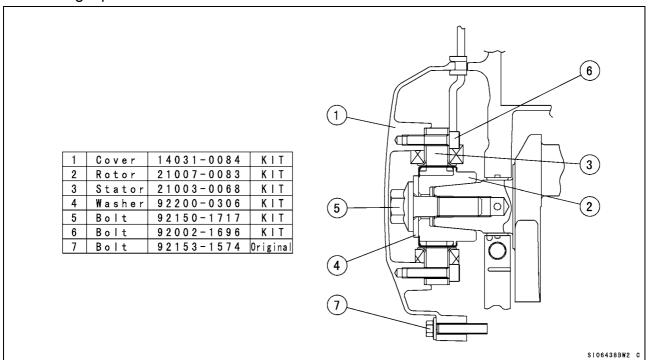


- 1. Spline washer (input)
- 2. Plane washer

## **Generator (Option)**

To quicken response by reducing the flywheel mass and to reduce the weight, use the optional inner rotor generator.

- Select using the optional generator or original generator according to the situation.
- Use the optional regulator and optional generator cover set when using the optional generator.
- The output power of the optional generator is 10A/8000 rpm (Original: 30A/5000rpm).
   The consume current of the racing model in running condition is 7 ~ 8A.
- Installing Option Generator



## **Generator Cover (Option)**

Use the option generator with the optional generator cover.

#### **NOTE**

O When using the optional generator cover, use the optional generator.

## **Cover Gaskets**

The optional cover gaskets are available.

They are made from "meta-form" and made easy to exfoliation.

## **Ducts (Air Funnels)**

Select suitable combination for target characteristic of engine.

| Length (mm) | Part Number |        |
|-------------|-------------|--------|
| 15          | 14073-0124  | Option |
| 20          | 14073-0125  | Option |
| 30          | 14073-0174  | Option |
| 40          | 14073-0151  | STD    |
| 50          | 14073-0152  | STD    |

#### Muffler

With recommended muffler engine performance can be improved.

Recommended muffler: Beet NASSERT-R 1002-E02-00
Web Site : http://www.beet.co.jp/(beetjapan)

## **Water Temperature Sensor**

The original water temperature sensor installed in the cylinder head must be remain and connected to the main harness because the electronic control unit (E.C.U.) needs the output signal from the original water temperature sensor. The optional tachometer is equipped with a water temperature display. Install the optional water temperature sensor to the optional water pipe and connect the sensor and the optional meter unit with the optional harness.

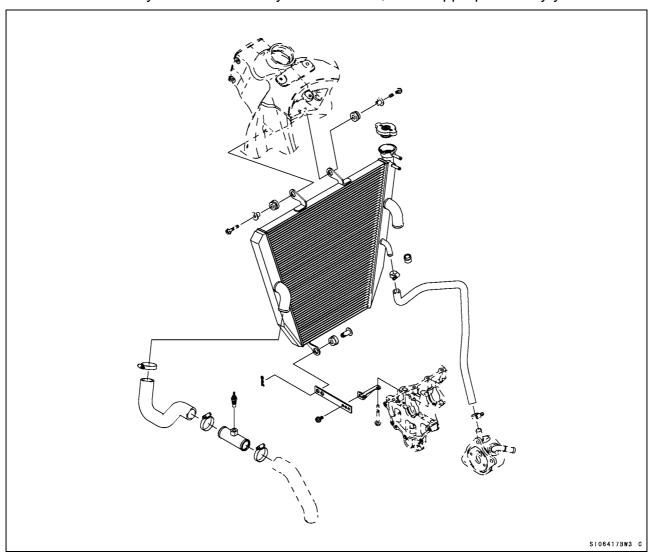
## Radiator (Kit)

'05 model ZX-6RR and '07 ZX-6R Racing Kit provides the capacity increased main radiator (39060-0020) to improve cooling performance.

<sup>\*</sup> For further information contact the manufacturer of muffler directly.

## **Radiator Installation**

- Use the radiator stay (35063-0439) and bracket (11054-1818) belong to kit, and fasten the radiator to the Crankcase by bolts as shown in the figure.
- Stay has several installation holes. Install position is adjustable for proper position of radiator.
- Some muffler may interfere with stay. In such case, make appropriate stay yourself.



- Machine the original cowl to meet the outline of radiator.
- Standard Resave tank is not available. Use some appropriate tank.
- Fill the space between the cowl and the sides of radiator by fixing a sponge or the like.

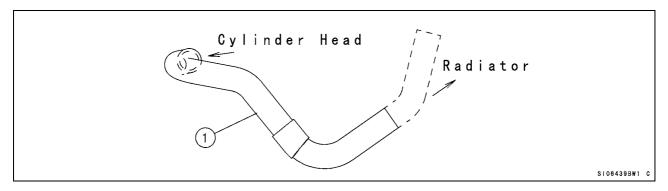
#### NOTE

O After radiator's installation, be sure to check that there is no interference between the radiator and the manifold, or fender, tire and the front fork full bottomed.

#### **Water Hose Installation**

#### **Radiator inlet**

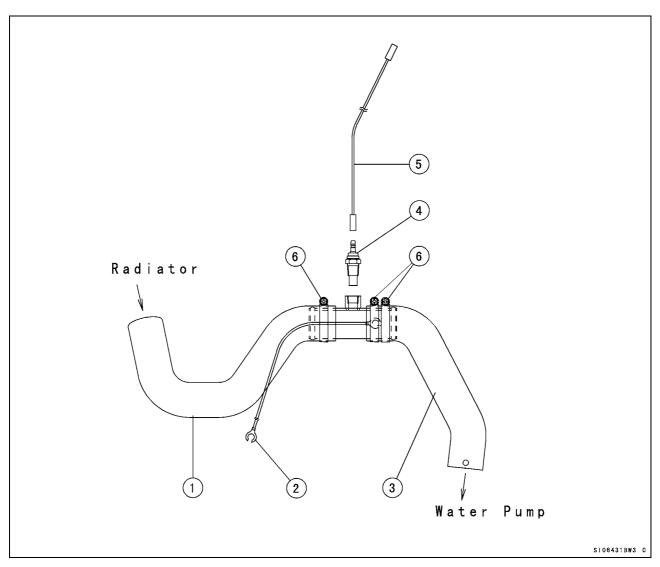
• Divide the original water hose (39062-0156) at suitable position, and insert the hose between cylinder head and radiator.



- 1. Water Hose 39062-0156
- Insert the water hose (39062-0220) between oil cooler outlet and radiator.

#### **Radiator outlet**

- Apply a non-permanent locking agent to the thread of the water temperature sensor (Kit: for Meter Lamp). Mount the sensor on the pipe (39192-0011).
- Insert the ground terminal of the water temperature sensor lead between the hose and the pipe, and clamp the hose as shown in the figure. Fasten the another terminal to the cover (generator) by the bolt.
- \* If you don't use water temperature meter, use standard pipe and hose at oilcooler outlet side and cover it radiator side with cap (11065-1056).



- 1. Water Hose 39062-0219
- 2. Ground Wire 26011-0071
- 3. Water Hose 39062-0166 (Standard)
- 4. Sensor 21176-1099
- 5. Lead Wire 26011-1779
- 6. Clamp 92171-0179

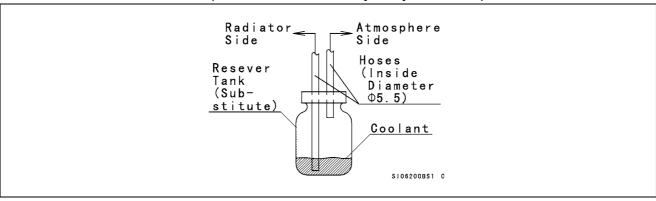
## **Reserve Tank Installation**

When using the radiator (Kit), the original reserve tank cannot be used. Prepare a suitable substitue.

Reserve Tank should be equipped with a band so as not to affect the running and the handling.

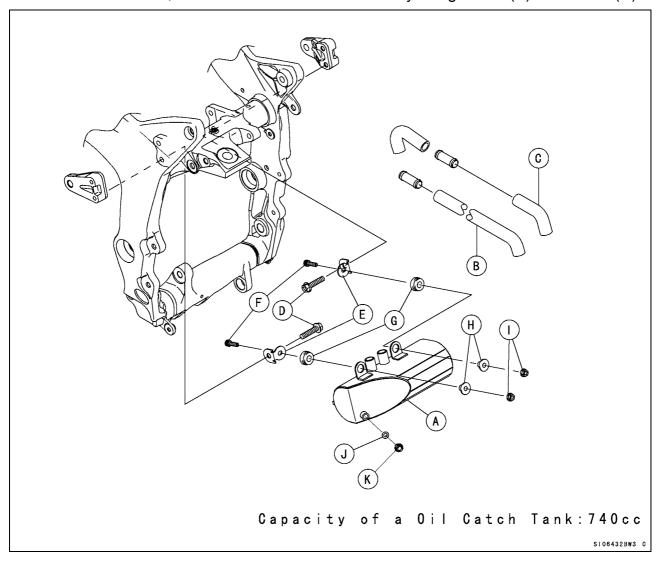
#### **NOTE**

- O Capacity of a reserve tank should be more than 200 cc.
- O Position of the hose to a reserve tank.
  - \* End of the hose to the radiator should be always in the liquid.
  - \* End of the hose to atmosphere should be always beyond the liquid surface.



## **Oil Catch Tank Installation**

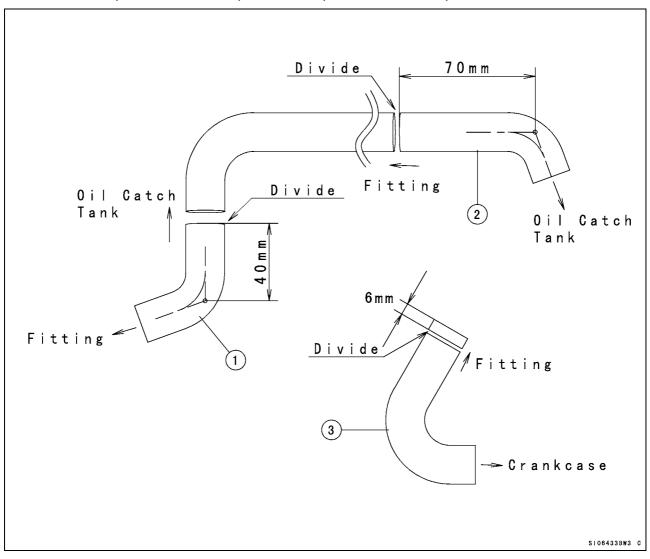
- O Fasten the Bracket (E) to the Engine Hanger by using bolt (D).
- O Fasten Oil Catch Tank (A) to the Bracket (E) by using bolt (F) and nut (I).
- O Connect Air Cleaner, Crankcase and Oil Catch Tank by using hose1 (B) and hose2 (C).



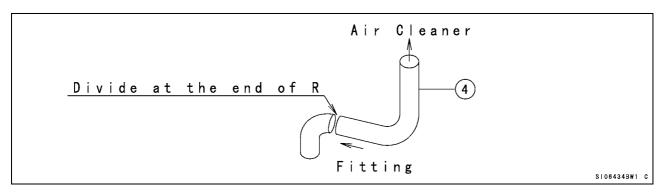
- A) Oil Catch Tank (52001-0004)
- B) Hose1 (Air Cleaner Oil Catch Tank)
- C) Hose2 (Crankcase Oil Catch Tank)
- D) Bolt (130BA0835 standard)
- E) Bracket (11054-1799)
- F) Bolt (120P0620)
- G) Dumper (92075-277)
- H) Collar (92027-194)
- I) Nut (92015-1193)
- J) Washer (92022-304)
- K) Drain Bolt (130Y0610)

Hose1 (B) and Hose2 (C) assembling

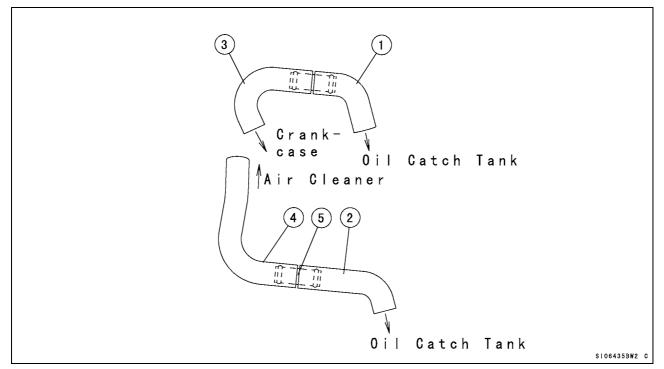
• Divide Hose (92059-1587, KIT) and Hose (92059-1629, KIT) as shown below.



• Divide installed tube (92192-0429, standard) as shown below.



### • Assemble hoses as shown below



5. Fitting (92005-0080)

### **Frame Parts Installation**

### **Throttle Parts (Kit)**

The following throttle cases, grip and reels are available as optional parts. These optional parts quicken throttle response to the twist grip.

### 1) Throttle Case

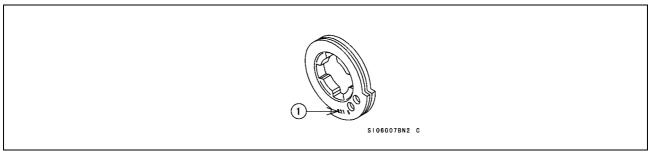
| Parts                | P/No.      |
|----------------------|------------|
| Throttle Case, Upper | 32099-0004 |
| Throttle Case, Lower | 32099-0005 |
| Bolts (2)            | 120S0625   |
| Grip, Right          | 46075-1143 |

### 2) Throttle Reels

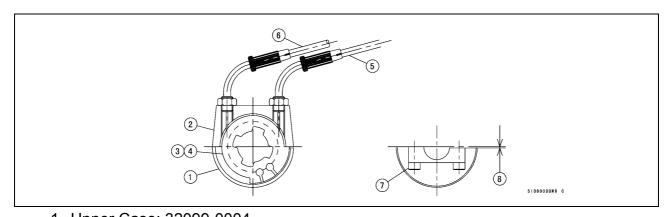
Tow types are available.

| P/No.      | I.D. Mark | Twist Grip Turn Angle<br>to Full Throttle |
|------------|-----------|-------------------------------------------|
| 59101-0001 | R21.5     | 60°                                       |
| 59101-0002 | R20.0     | 65°                                       |

Throttle Reel Travel Angle·····Effective angle excluding throttle cable free play.



1. Identification Mark



Upper Case: 32099-0004
 Lower Case: 32099-0005
 Reel, 60°: 59101-0001
 Reel, 65°: 59101-0002

5. Throttle Cable, Open Side: 54012-01866. Throttle Cable, Close Side: 54012-0216

7. Bolt: 120S0625

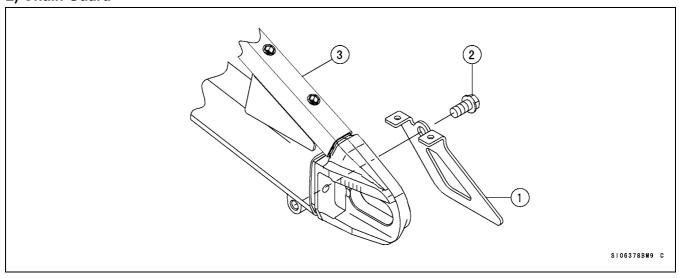
8. Gap

### **Final Drive Parts (Kit)**

### 1) Drive Chain

#520 Joint endless drive chain is available as an optional parts.

### 2) Chain Guard



Guard: 55020-0028
 Bolt: 130J1020

3. Swingarm (Left Side)

#### **Brake Pads (Kit)**

The front and rear brake pads for racing use are available. The front pads are for higher braking force, and the rear pads are for lower braking force.

#### **Front Brake Pads**

| P/No.      | Mark     | Braking Force                               |
|------------|----------|---------------------------------------------|
| 43082-0074 | 2508     | High                                        |
|            |          | $\stackrel{igstyle \perp}{\underline{	au}}$ |
| Original   | TT2172HH | Low                                         |

#### **Rear Brake Pads**

| P/No.      | Mark  | Braking Force          |
|------------|-------|------------------------|
| Original   | FO GG | High                   |
| 43082-1220 | C93G  | <b>\(\frac{1}{2}\)</b> |
| 43082-1192 | G196  | Low                    |

### **Steering Damper (Kit)**

The steering damper is useful at high speeds to prevent handlebar vibration.

The steering damper should be installed to do not the steering handle movement stop by the steering damper itself at the fully locket position both left and right side.

(Steering angle should be controlled by the regulation)

### 1) Recommended Steering Damper

**OHLINS SD121** 

Set the steering damper to the holder as shown.

### 2) Stroke(s)

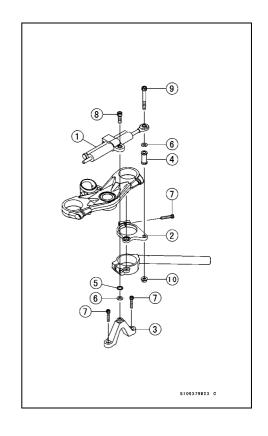
SD121: 68 mm

1. Steering Damper: OHLINS SD121

Bracket: 11054-1816
 Bracket: 11054-1817
 Collar: 92152-0589
 Ring: 670 B 2012
 Washer: 410 B 0800

Bolt, Socket: 120 CA0630
 Bolt, Socket: 120 CA0825
 Bolt, Socket: 120 CA0865

10. Nut: 92105-1397



### **Seat Height Adjustment**

- Loosen the nut (1) and insert the spacer (2) as required.
- Tighten the nut (1) to 59 N·m (6.0 kgf·m, 43 ft·lb) of torque.
- O One turn of the spring adjusting nut changes the spring length by 1.5 mm.

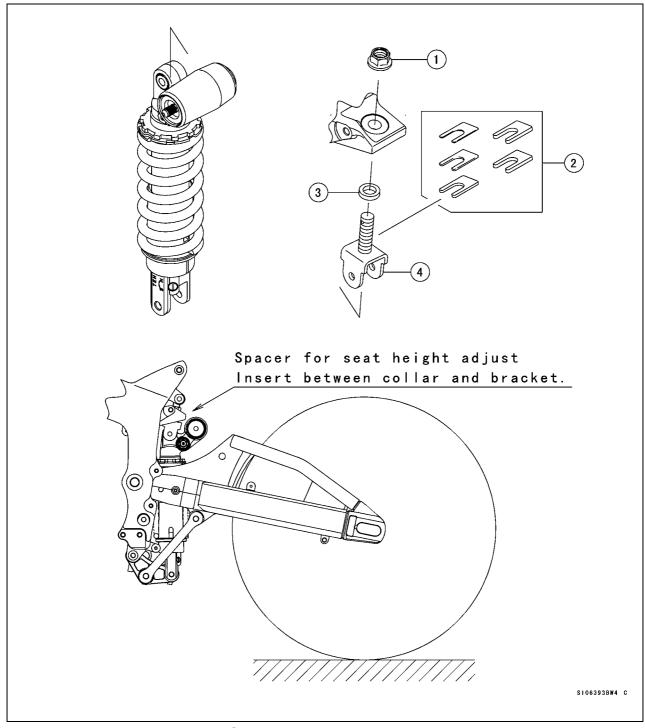
### **Rear Suspension Condition of Seat Height Adjustment**

• When the seat height adjusts spacer applied, the rear suspension should be softened.

### **Seat Height Adjustment**

Spacer Set: 92026-1586

| P/No.      | Quantity | Thickness |
|------------|----------|-----------|
| 92026-1582 | 1        | 1.0 mm    |
| 92026-1583 | 1        | 2.0 mm    |
| 92026-1584 | 1        | 3.2 mm    |
| 92026-1585 | 2        | 4.5 mm    |



- 1. Nut
- 3. Collar
- 2. Spacer
- 4. Bracket

### **Front Fork Springs (Kit)**

The optional front fork springs are available for racing.

### 1) Front Fork Specifications

| Items                               | Original                                          |
|-------------------------------------|---------------------------------------------------|
| Rebounded damping setting (Upper)   | 1 1/2 turns out from the fully clockwise position |
| Compression damping setting (Lower) | 1 1/2 turns out from the fully clockwise position |
| Fork oil                            | SHOWA SS47                                        |
| Fork oil level                      | 97 mm                                             |
| Oil lock                            | Oil lock piece                                    |
| Oil seal                            |                                                   |
| Spring length                       | 257.0 mm (Free Length)                            |
| Spring constant                     | 9.0 N/mm                                          |
| Sub spring stroke                   | 28 mm                                             |

#### 2) Front Fork Spring

| P/No.      | A × B × C (mm)     | Number of Winding | Spring Constant |
|------------|--------------------|-------------------|-----------------|
| Original   | 4.7 × 31.5 × 257.0 | 17.5              | K = 9.0 N/mm    |
| 92145-0507 | 4.6 × 31.6 × 257.0 | 16.9              | K = 8.25 N/mm   |
| 92145-0508 | 4.7 × 31.5 × 257.0 | 16.6              | K = 9.25 N/mm   |
| 92145-0509 | 4.8 × 31.4 × 257.0 | 17.3              | K = 9.75 N/mm   |

A: Coil Diameter

B: Spring Inside Diameter

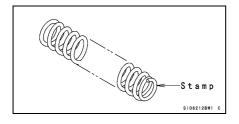
C: Spring Free Length

### 3) Front Fork Spring Replacement

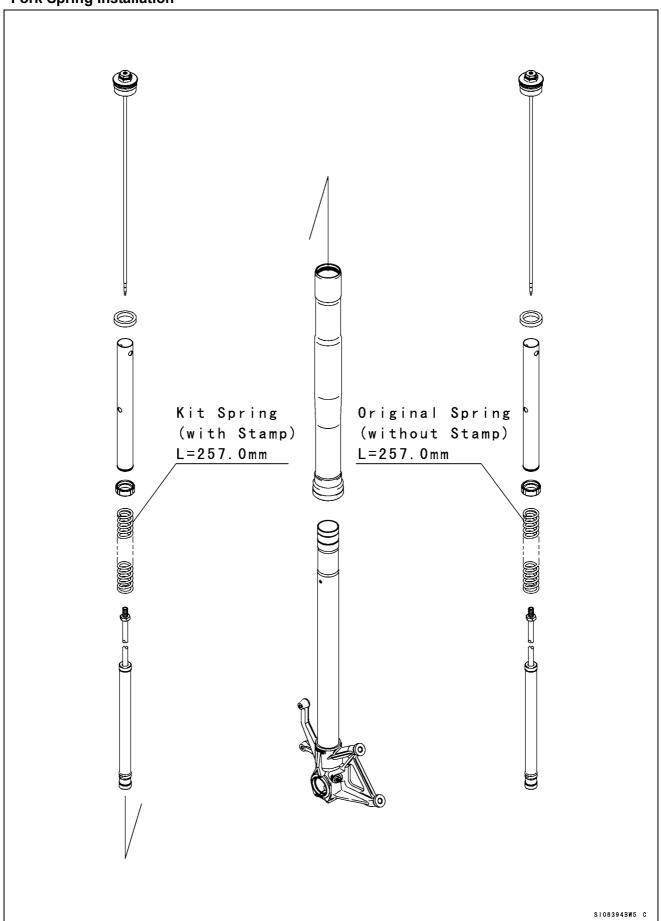
Replace the main spring referring to the Fork Oil Change section of the base Service Manual.

#### **Identification Mark**

The spring constant value is stamped on the one side surface of the spring.



## Fork Spring Installation



### **Electric Parts Installation**

### **Battery**

• Use the original battery or a battery with 12 V 7 Ah or more capacity.

### Main Harness and Sub Harness (Kit)

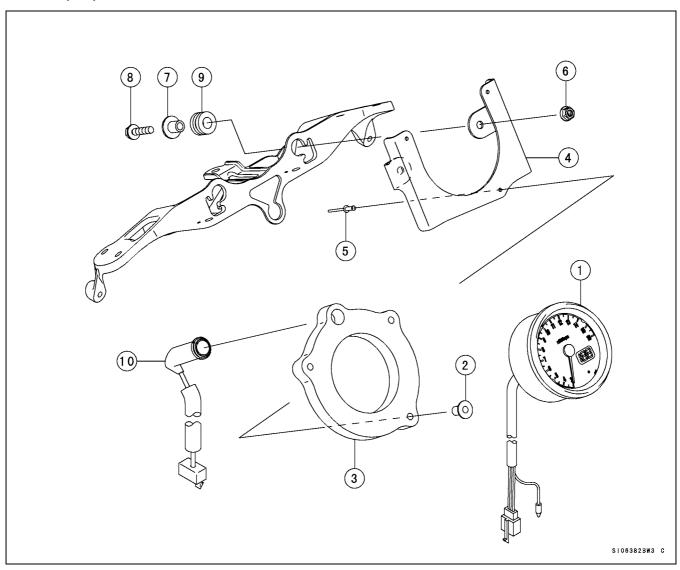
Main harness and sub harness are available for racing use as optional parts. Select one of them in accordance with your race regulation.

Main Harness (with Optional Meter): 26031-0559

Sub Harness (with Original Meter and Original Main Harness): 26031-0327

Main Harness (with Original Meter): 26031-0558

### Meter (Kit) Installation



1. Tachometer with Water Temperature Gauge (Optional): 25031-1142

Collar (Optional): 92152-0058
 Pad (Optional): 39156-0098
 Bracket (Optional): 11053-1749
 Rivet (Optional): 92039-1106
 Nut (Optional): 92015-1233

7. Collar (Optional): 92152-1074

8. Bolt (Optional): 130J0625

9. Damper (Original): 92160-1167

10. Lamp Assembly (Optional): 23016-0006

• Insert the three collars [2] into the damper [3].

• Insert the rivet [5] from the backside of the bracket [4] and fix them.

• Install the bracket [4] to the original bracket [10].

## Main Harness Combination Parts Table Main Harness and Kit Part Combination Table

 $\bigcirc$ : need  $\times$ : no need.

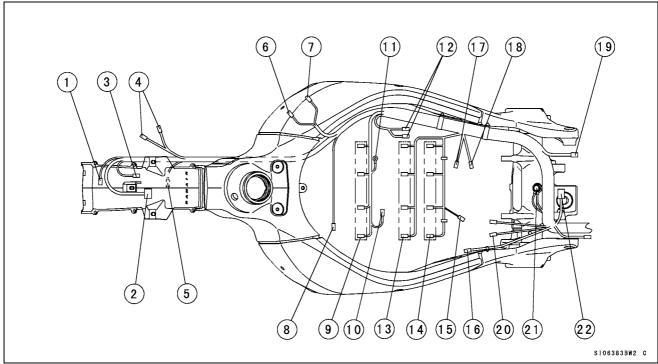
| Harness<br>Part                                             | Harness for<br>Kit Meter<br>26031-0559 | Harness for<br>Original Meter<br>26031-0558 | Sub Harness<br>26031-0327 |
|-------------------------------------------------------------|----------------------------------------|---------------------------------------------|---------------------------|
| Meter Assembly (Kit)                                        | ×                                      | 0                                           | 0                         |
| Tachometer with Water Temperature Gauge (Kit) 25031-1142    | 0                                      | ×                                           | ×                         |
| Water Temperature Gauge<br>Lead (Kit)<br>26011-1779         | 0                                      | ×                                           | ×                         |
| Water Temperature Sensor<br>Ground Lead (Kit)<br>26011-0071 | 0                                      | ×                                           | ×                         |
| Water Temperature Sensor 21176-1099                         | 0                                      | ×                                           | ×                         |
| Relay Box (Original)<br>27002-0007                          | ×                                      | ×                                           | 0                         |
| Relay Assembly (Original)<br>27002-3703                     | 0                                      | 0                                           | ×                         |

### Main Harness and Original Part Combination Table

 $\bigcirc$ : need  $\times$ : no need.

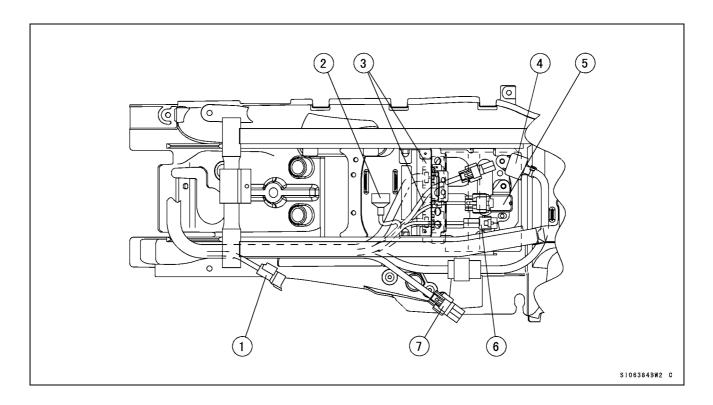
|                                         |         |                                        | ○. 1100a /\. 110 1100a.                     |
|-----------------------------------------|---------|----------------------------------------|---------------------------------------------|
| Part                                    | Harness | Harness for Kit<br>Meter<br>26031-0559 | Harness for<br>Original Meter<br>26031-0558 |
| Main Harness (Original)                 |         | ×                                      | ×                                           |
| Meter Assembly (Original)               |         | ×                                      | 0                                           |
| Left Handlebar Switches                 |         | ×                                      | 0                                           |
| License Light                           |         | X                                      | X                                           |
| Rear Brake Light Switch                 |         | ×                                      | X                                           |
| Turn Signal Light (Front, Rear, Left, F | Right)  | ×                                      | X                                           |
| Headlight                               |         | ×                                      | X                                           |
| Tail/Brake Light                        |         | ×                                      | X                                           |
| Ignition Switch                         |         | ×                                      | X                                           |
| Fan Motor                               |         | ×                                      | X                                           |
| Horn                                    |         | ×                                      | X                                           |
| Side Stand Switch                       |         | ×                                      | X                                           |
| Turn Signal Relay                       |         | ×                                      | X                                           |
| Fuse Box                                |         | ×                                      | X                                           |
| Neutral Switch                          |         | ×                                      | X                                           |
| Oil Pressure Switch                     |         | ×                                      | X                                           |
|                                         |         |                                        |                                             |

### **Wiring Routing**



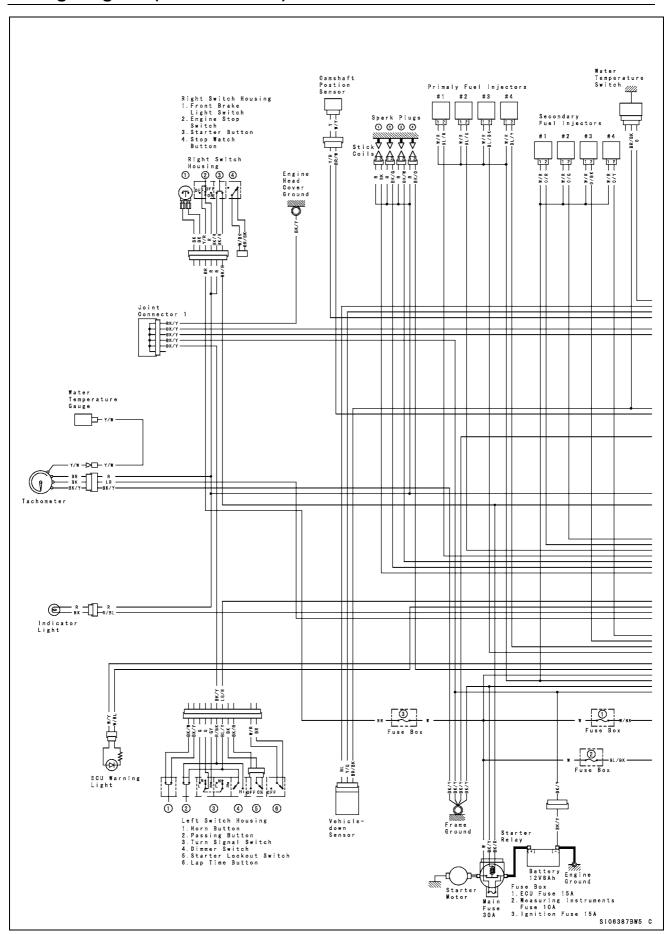
- 1. Vehicle-down Sensor
- 2. Meter Assembly
- 3. Shift Up Indicator Light
- 4. Right Handlebar Switch
- 5. Left Handlebar Bar Switch
- 6. Intake Air Temperature Sensor
- 7. Boost Sensor
- 8. Cam Shaft Position Sensor
- 9. Ignition Coil
- 10. Subthrottle Valve Actuator
- 11. Cylinder Head Ground

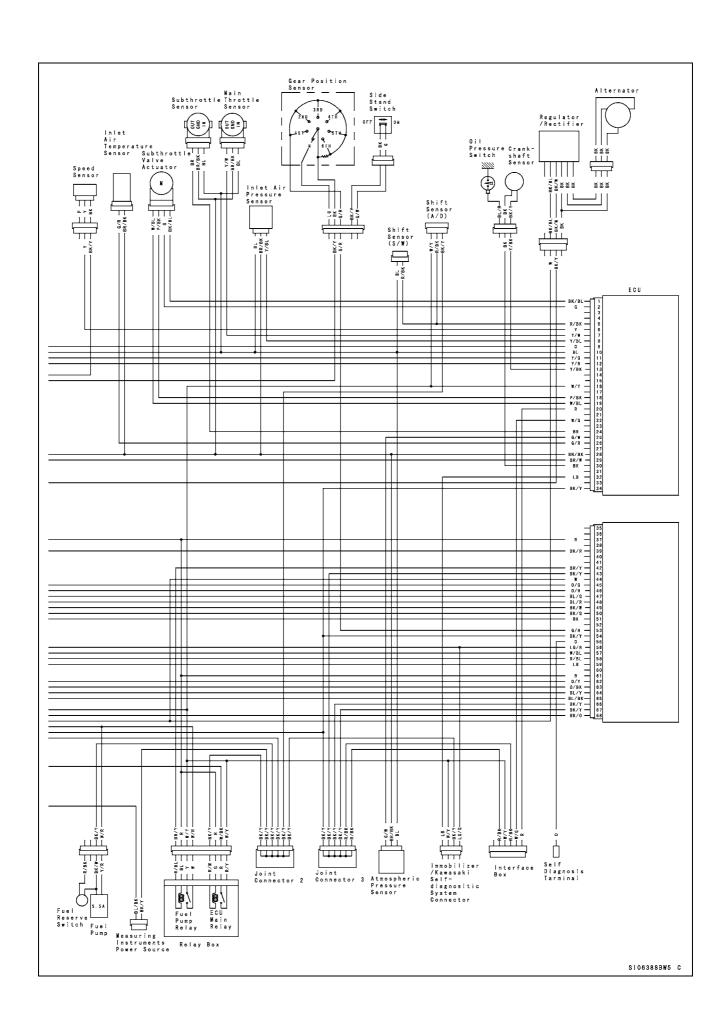
- 12. Main Throttle Sensor
- 13. Injector, Secondary
- 14. Injector, Primary
- 15. Coolant Temperature Sensor
- 16. Speed Sensor
- 17. Crank Shaft Position Sensor
- 18. Gear Position Sensor
- 19. Battery (-)
- 20. Auto Shifter
- 21. Frame Ground
- 22. Regulator
- The headlight beam (Hi/Lo) change switch on the left handlebar switch works as a speed limit switch of the pit-road and passing switch works as same also.
- In case of using optional meter, the connector of coolant temperature sensor "15" must used.
- The auto shifter "20" should be used according to local regulation.



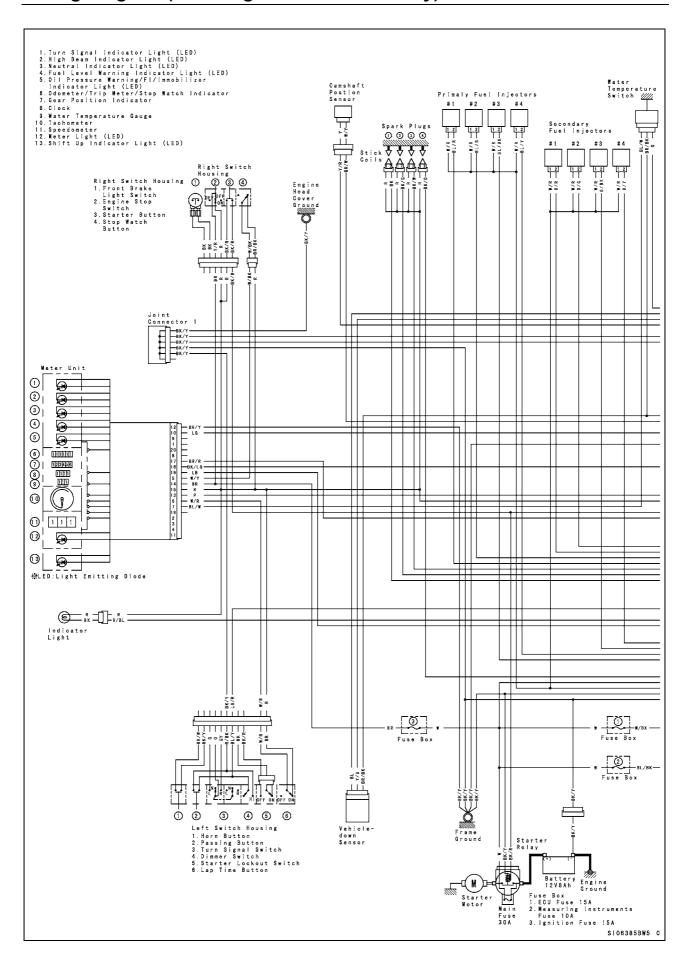
- 1. Fuel Pump
- 2. Magnetic Switch
- 3. ECU
- 4. Relay Assembly (27002-3703)
- 5. Atmospheric Pressure Sensor
- 6. Power Source for Measuring Instruments
- 7. Setting Tool
- The relay assembly "4" should make sure to avoid the interference with other parts.
- When apply the measuring instruments, the power source "6" available as a 12 V power source.
- The setting tool should be used according to the manual of "Kawasaki Fl Calibration Tool".

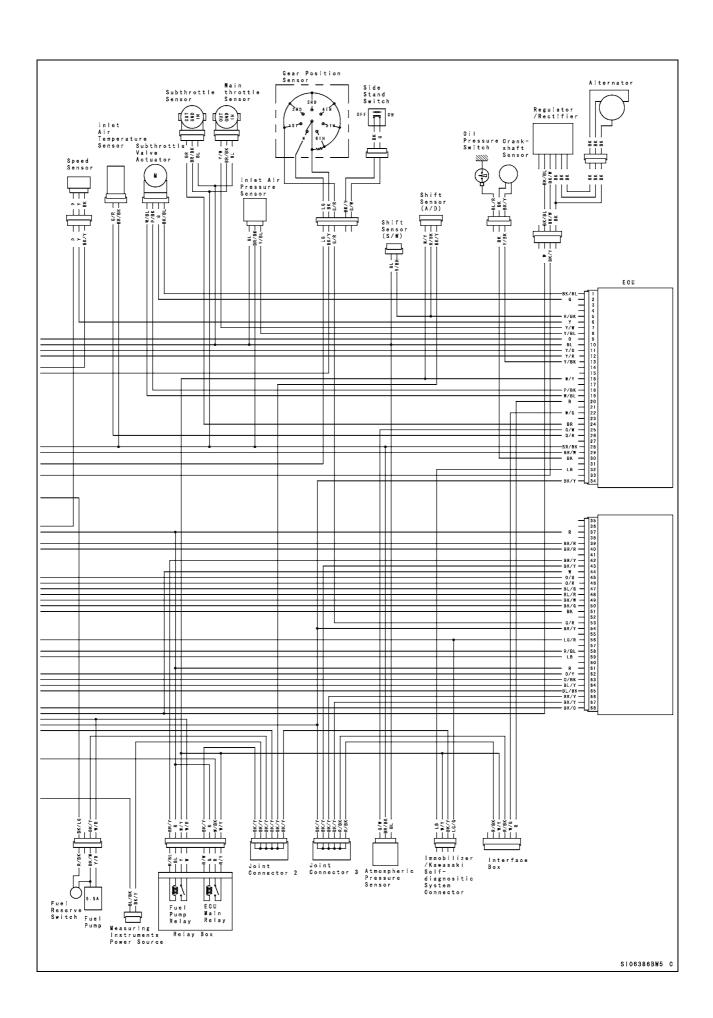
## Wiring Diagram (with Kit Meter)





## Wiring Diagram (with Original Meter Assembly)





# **Racing Kit Parts List**

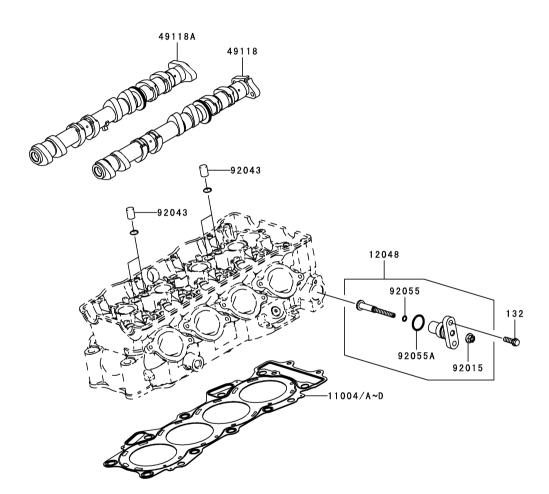
## GRID NO. **B-3**

E1121

### This grid covers:

## Cylinder





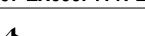
| Dof                    |                                                 |                                                          |           | Quar        | ntity- | ZX60 | 00 |  |
|------------------------|-------------------------------------------------|----------------------------------------------------------|-----------|-------------|--------|------|----|--|
| Ref.                   | Part No.                                        | Description                                              | Spec Code | '07         |        |      |    |  |
| No.                    |                                                 | •                                                        | -         | P7FR        |        |      |    |  |
| 11004                  | 11004-0067<br>(OPTION)                          | GASKET-HEAD,T=0.70                                       |           | 1           |        |      |    |  |
| 11004A                 | 11004-0068<br>(OPTION)                          | GASKET-HEAD,T=0.60                                       |           | 1           |        |      |    |  |
| 11004B                 | 11004-0069<br>(OPTION)                          | GASKET-HEAD,T=0.55                                       |           | 1           |        |      |    |  |
| 11004C                 | 11004-0070<br>(OPTION)                          | GASKET-HEAD,T=0.50                                       |           | 1           |        |      |    |  |
| 11004D                 | 11004-0071<br>(OPTION)                          | GASKET-HEAD,T=0.45                                       |           | 1           |        |      |    |  |
| 12048                  | 12048-1175<br>(OPTION)                          | TENSIONER-ASSY                                           |           | 1           |        |      |    |  |
| 49118                  | 49118-0110<br>(OPTION)                          | CAMSHAFT-COMP,INTAKE                                     |           | 1           |        |      |    |  |
| 49118A                 | 49118-0111<br>(OPTION)                          | CAMSHAFT-COMP,EXHAUST                                    | -         | 1           |        |      |    |  |
| 92015<br>92043         | 92015-1078<br>92043-1506<br>(OPTION)            | NUT,FLANGED,6MM<br>PIN,10X14                             |           | 1<br>4      |        |      |    |  |
| 92055<br>92055A<br>132 | 92055-011<br>92055-086<br>132BA0620<br>(OPTION) | RING-O,5MM<br>RING-O,18.8X1.9<br>BOLT-FLANGED-SMALL,6X20 | )         | 1<br>1<br>2 |        |      |    |  |

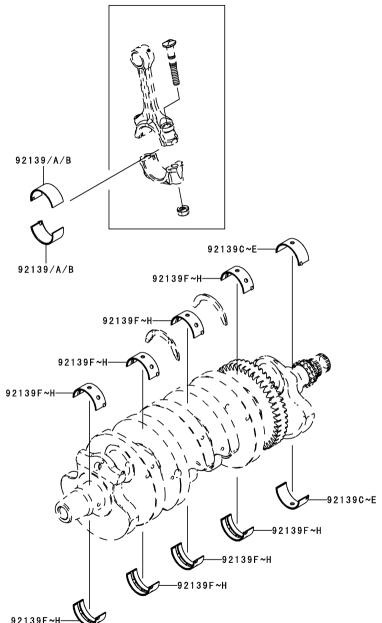
1



E1321

This grid covers: **Crankshaft** 

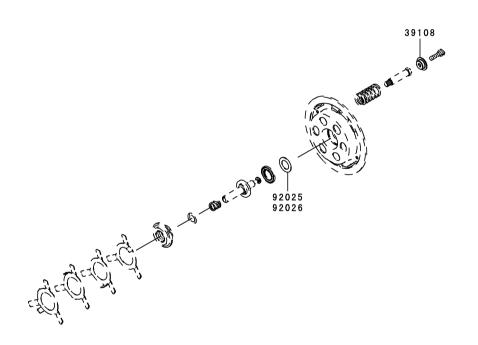




| Ref.   |                        |                        |           | Quantity- | ZX60 | 0 |  |
|--------|------------------------|------------------------|-----------|-----------|------|---|--|
| No.    | Part No.               | Description            | Spec Code | '07       |      |   |  |
| INO.   |                        |                        |           | P7FR      |      |   |  |
| 92139  | 92139-0194<br>(OPTION) | BUSHING,CONROD,BLUE    |           | AR        |      |   |  |
| 92139A | 92139-0195<br>(OPTION) | BUSHING,CONROD,BLACK   |           | 8         |      |   |  |
| 92139B | 92139-0196<br>(OPTION) | BUSHING,CONROD,BROWN   |           | AR        |      |   |  |
| 92139C | 92139-0197<br>(OPTION) | BUSHING,CRANK #5,BLUE  |           | AR        |      |   |  |
| 92139D | 92139-0198<br>(OPTION) | BUSHING,CRANK #5,BLACK |           | 2         |      |   |  |
| 92139E | 92139-0199<br>(OPTION) | BUSHING,CRANK #5,BROWN | N         | AR        |      |   |  |
| 92139F | 92139-0200<br>(OPTION) | BUSHING,CRANK #1     | ,BLUE    | AR        |      |   |  |
| 92139G | 92139-0201<br>(OPTION) | BUSHING,CRANK #1     | ,BLK     | 8         |      |   |  |
| 92139H | 92139-0202<br>(OPTION) | BUSHING,CRANK #1     | ,BRN     | AR        |      |   |  |

2 DEC.20,2006





GRID NO.

This grid covers: **B-5** 

### Clutch

E1350

| Ref.  |                                    |                       |            | Quantity-ZX600 |  |  |  |  |
|-------|------------------------------------|-----------------------|------------|----------------|--|--|--|--|
| _     | Part No.                           | Description           | Spec Code  | '07            |  |  |  |  |
| No.   |                                    |                       | -          | P7FR           |  |  |  |  |
| 39108 | 39108-0004<br>(OPTION)             | RETAINER-SPRING,T=5.0 | )(STD-1.0) | 6              |  |  |  |  |
| 92025 | 92025-1137                         | SHIM,15.3X27.5X1.20   |            | 1              |  |  |  |  |
| 92026 | (OPTION)<br>92026-1590<br>(OPTION) | SPACER,T=1.5          |            | 1              |  |  |  |  |

3

## GRID NO. **B-6**

This grid covers:

## Transmission(TYPE-B)

E1361 13262G 13127 13262A 13262E 13262B 92022/A 132620 13262D 13262H 13144 13262  $\widehat{Q}$ 13262F 92022/A

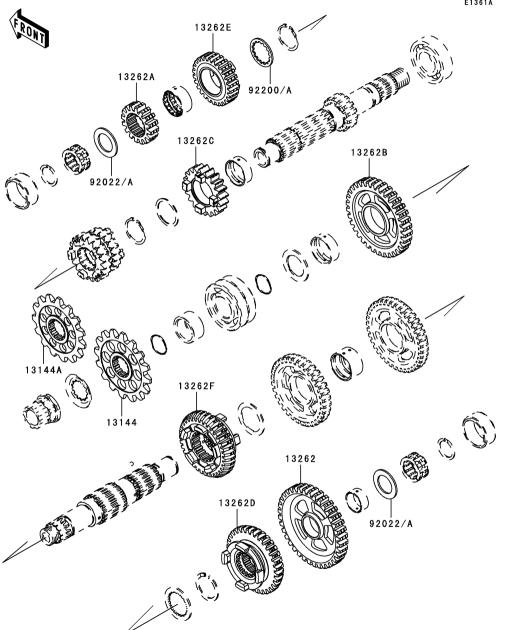
| Ref.   |                        |                         |           | Quantity-ZX600 |  |  |  |  |  |
|--------|------------------------|-------------------------|-----------|----------------|--|--|--|--|--|
| No.    | Part No.               | Description             | Spec Code | '07            |  |  |  |  |  |
| INU.   |                        |                         |           | P7FR           |  |  |  |  |  |
| 13127  | 13127-0055<br>(OPTION) | SHAFT-TRANSMISSION INP  | UT,14T    | 1              |  |  |  |  |  |
| 13144  | 13144-0047<br>(OPTION) | SPROCKET-OUTPUT,16T     |           | 1              |  |  |  |  |  |
| 13144A | 13144-0048<br>(OPTION) | SPROCKET-OUTPUT,15T     |           | 1              |  |  |  |  |  |
| 13262  | 13262-0526<br>(OPTION) | GEAR,OUTPUT LOW,37T     |           | 1              |  |  |  |  |  |
| 13262A | 13262-0527<br>(OPTION) | GEAR,INPUT 2ND,18T      |           | 1              |  |  |  |  |  |
| 13262B | 13262-0528<br>(OPTION) | GEAR,OUTPUT 2ND,39T     |           | 1              |  |  |  |  |  |
| 13262C | 13262-0529<br>(OPTION) | GEAR,INPUT 3RD&4TH,20T8 | ≩20T      | 1              |  |  |  |  |  |
| 13262D | 13262-0530<br>(OPTION) | GEAR,OUTPUT 4TH,33T     |           | 1              |  |  |  |  |  |
| 13262E | 13262-0531<br>(OPTION) | GEAR,INPUT 5TH,20T      |           | 1              |  |  |  |  |  |
| 13262F | 13262-0532<br>(OPTION) | GEAR,OUTPUT 5TH,30T     |           | 1              |  |  |  |  |  |
| 13262G | 13262-0533<br>(OPTION) | GEAR,INPUT 6TH,23T      |           | 1              |  |  |  |  |  |
| 13262H | 13262-0534<br>(OPTION) | GEAR,OUTPUT 6TH,32T     |           | 1              |  |  |  |  |  |
| 92022  | 92022-1722<br>(OPTION) | WASHER,22.3X35X1.8      |           | AR             |  |  |  |  |  |
| 92022A | 92022-212<br>(OPTION)  | WASHER,22.3X35X1.6      |           | AR             |  |  |  |  |  |
| 92200  | 92200-0230<br>(OPTION) | WASHER,28.3X34.0X1.4    |           | AR             |  |  |  |  |  |
| 92200A | 92200-0231<br>(OPTION) | WASHER,28.3X34.0X1.8    |           | AR             |  |  |  |  |  |

### GRID NO. **B-7**

### This grid covers:

## **Transmission(TYPE-C)**

E1361A



| Dat    |                        |                      |           | Quai | ntity- | ZX60 | 00 |  |
|--------|------------------------|----------------------|-----------|------|--------|------|----|--|
| Ref.   | Part No.               | Description          | Spec Code | '07  |        |      |    |  |
| No.    |                        |                      |           | P7FR |        |      |    |  |
| 13144  | 13144-0047<br>(OPTION) | SPROCKET-OUTPUT,16T  |           | 1    |        |      |    |  |
| 13144A | 13144-0048<br>(OPTION) | SPROCKET-OUTPUT,15T  |           | 1    |        |      |    |  |
| 13262  | 13262-0535<br>(OPTION) | GEAR,OUTPUT LOW,36T  |           | 1    |        |      |    |  |
| 13262A | 13262-0536<br>(OPTION) | GEAR,INPUT 2ND,16T   |           | 1    |        |      |    |  |
| 13262B | 13262-0537<br>(OPTION) | GEAR,OUTPUT 2ND,34T  |           | 1    |        |      |    |  |
| 13262C | 13262-0538<br>(OPTION) | GEAR,INPUT 5TH,22T   |           | 1    |        |      |    |  |
| 13262D | 13262-0539<br>(OPTION) | GEAR,OUTPUT 5TH,32T  |           | 1    |        |      |    |  |
| 13262E | 13262-0540<br>(OPTION) | GEAR,INPUT 6TH,26T   |           | 1    |        |      |    |  |
| 13262F | 13262-0541<br>(OPTION) | GEAR,OUTPUT 6TH,35T  |           | 1    |        |      |    |  |
| 92022  | 92022-1722<br>(OPTION) | WASHER,22.3X35X1.8   |           | AR   |        |      |    |  |
| 92022A | 92022-212<br>(OPTION)  | WASHER,22.3X35X1.6   |           | AR   |        |      |    |  |
| 92200  | 92200-0230<br>(OPTION) | WASHER,28.3X34.0X1.4 |           | AR   |        |      |    |  |
| 92200A | 92200-0231<br>(OPTION) | WASHER,28.3X34.0X1.8 |           | AR   |        |      |    |  |

11061C

## This catalog covers: '07 ZX600P7FR Engine

11061D

11061A

14031

11061

## GRID NO.

# This grid covers: Engine Cover(s)

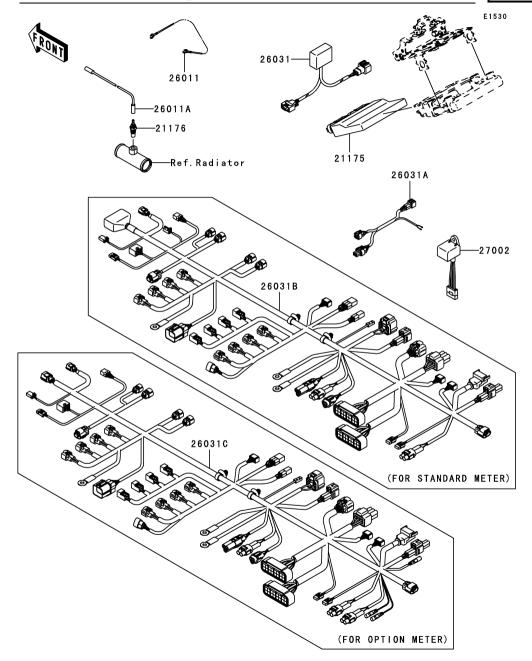


| Ref.   |                        |                       |           | Quantity-ZX600 |  |  | 0 | <u>+</u> |
|--------|------------------------|-----------------------|-----------|----------------|--|--|---|----------|
|        | Part No.               | Description           | Spec Code | '07            |  |  |   |          |
| No.    |                        | ·                     |           | P7FR           |  |  |   |          |
| 11061  | 11061-0303<br>(OPTION) | GASKET,CLUTCH COVER   |           | 1              |  |  |   |          |
| 11061A | 11061-0304<br>(OPTION) | GASKET,GENERATOR COVE | R         | 1              |  |  |   |          |
| 11061B | 11061-0305<br>(OPTION) | GASKET,OIL PAN        |           | 1              |  |  |   |          |
| 11061C | 11061-0306<br>(OPTION) | GASKET,LARGE COVER    |           | 1              |  |  |   |          |
| 11061D | 11061-0307<br>(OPTION) | GASKET,SMALL COVER    |           | 1              |  |  |   |          |
| 14031  | 14031-0084<br>(OPTION) | COVER-GENERATOR       |           | 1              |  |  |   |          |

## GRID NO.

### This grid covers:

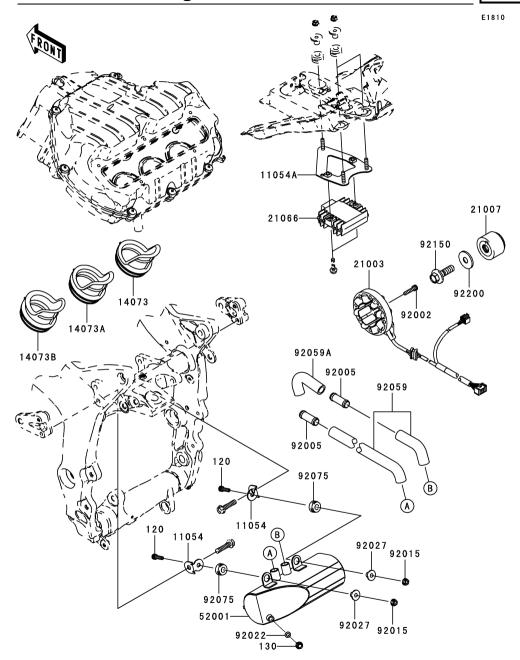
## Fuel Injection



| Ref.   |                        |                        |           | Quantity- | Quantity-ZX600 |  |  |  |  |  |
|--------|------------------------|------------------------|-----------|-----------|----------------|--|--|--|--|--|
|        | Part No.               | Description            | Spec Code | '07       |                |  |  |  |  |  |
| No.    |                        | •                      |           |           |                |  |  |  |  |  |
| 21175  | 21175-0145<br>(OPTION) | CONTROL UNIT-ELECTRON  | NIC       | 1         |                |  |  |  |  |  |
| 21176  | ,                      | SENSOR,TEMP            |           | 1         |                |  |  |  |  |  |
| 26011  | 26011-0071<br>(OPTION) | WIRE-LEAD, TEMP SENSOR | REARTH    | 1         |                |  |  |  |  |  |
| 26011A | 26011-1779<br>(OPTION) | WIRE-LEAD,METER-TEMP   | SENSOR    | 1         |                |  |  |  |  |  |
| 26031  | 26031-0240<br>(OPTION) | HARNESS,INTERFACE BOX  | (         | 1         |                |  |  |  |  |  |
| 26031A | 26031-0327<br>(OPTION) | HARNESS,SUB,STD METER  | R&HARNESS | 1         |                |  |  |  |  |  |
| 26031B | 26031-0558<br>(OPTION) | HARNESS,MAIN,STD METE  | R         | 1         |                |  |  |  |  |  |
| 26031C | 26031-0559<br>(OPTION) | HARNESS,MAIN,KIT METER | ?         | 1         |                |  |  |  |  |  |
| 27002  | 27002-3703<br>(OPTION) | RELAY-ASSY             |           | 1         |                |  |  |  |  |  |

7

### Generator

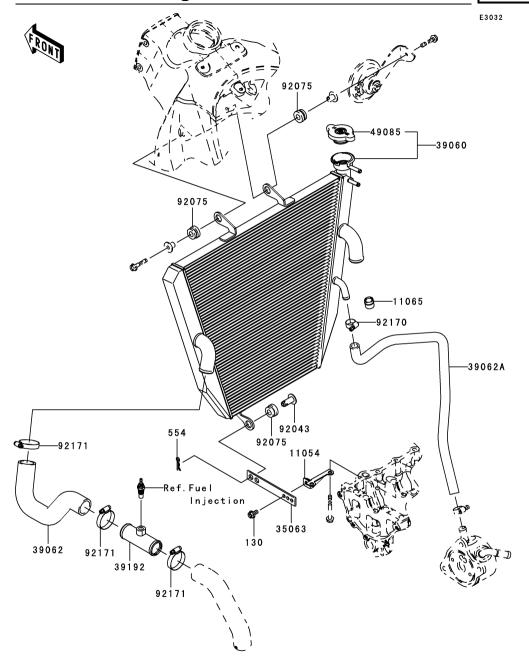


| Ref.   | Part No.                         | Description       | Spec Code | Quantity-Z | (600 | _ |
|--------|----------------------------------|-------------------|-----------|------------|------|---|
|        |                                  |                   |           | P7FR       |      |   |
| 11054  | 11054-1799<br>(OPTION)           | BRACKET,OIL TANK  |           | 2          |      |   |
| 11054A | 11054-1810<br>(OPTION)           | BRACKET,REGULATOR |           | 1          |      |   |
| 14073  | 14073-0124<br>(OPTION)           | DUCT,FUNNEL,L=15  |           | 2          |      |   |
| 14073A | 14073-0125<br>(OPTION)           | DUCT,FUNNEL,L=20  |           | 2          |      |   |
| 14073B | 14073-0174<br>(OPTION)           | DUCT,FUNNEL,L=30  |           | 2          |      |   |
| 21003  | 21003-0068<br>(OPTION)           | STATOR            |           | 1          |      |   |
| 21007  | 21007-0083<br>(OPTION)           | ROTOR             |           | 1          |      |   |
| 21066  | 21066-0010<br>(OPTION)           | REGULATOR-VOLTAGE |           | 1          |      |   |
| 52001  | 52001-0004<br>(OPTION)           | TANK-OIL          |           | 1          |      |   |
| 92002  | 92002-1696<br>(OPTION)           | BOLT,SOCKET,6X25  |           | 4          |      |   |
| 92005  | 92005-0080<br>(OPTION)           | FITTING           |           | 2          |      |   |
| 92015  | 92015-1193<br>(OPTION)           | NUT,FLANGED,6MM   |           | 2          |      |   |
| 92022  | 92022-304<br>(OPTION)            | WASHER,6.2X11X1   |           | 1          |      |   |
| 92027  | 92027-194<br>(OPTION)            | COLLAR,L=11.1     |           | 2          |      |   |
| 92059  | 92059-1587<br>(OPTION)           | TUBE              |           | 1          |      |   |
| 92059A | 92059-1629<br>(OPTION)           | TUBE,L=100MM      |           | 1          |      |   |
| 92075  | 92075-277<br>(OPTION)            | DAMPER            |           | 2          |      |   |
| 92150  | 92150-1717<br>(OPTION)           | BOLT,12X40        |           | 1          |      |   |
| 92200  | 92200-Ò306                       | WASHER,12X36X3.2  |           | 1          |      |   |
| 120    | (OPTION)<br>120P0620<br>(OPTION) | BOLT-SOCKET,6X20  |           | 2          |      |   |
| 130    | 130Y0610<br>(OPTION)             | BOLT-FLANGED,6X10 |           | 1          |      |   |

### This grid covers:

## B-11

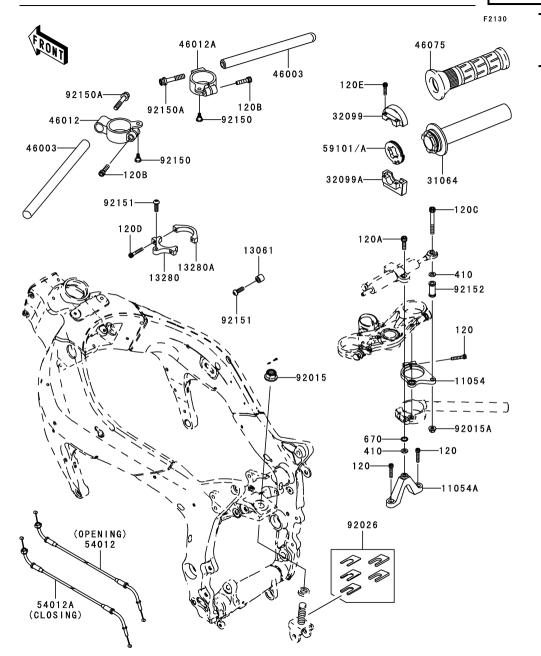
## Radiator



| Ref.   |                        |                      |           | Quantity-ZX600 |  |  |  |  |  |
|--------|------------------------|----------------------|-----------|----------------|--|--|--|--|--|
|        | Part No.               | Description          | Spec Code | '07            |  |  |  |  |  |
| No.    | NO.                    |                      |           | P7FR           |  |  |  |  |  |
| 11054  | 11054-1818<br>(OPTION) | BRACKET,RADIATOR     |           | 1              |  |  |  |  |  |
| 11065  | 11065-1056<br>(OPTION) | CAP                  |           | 1              |  |  |  |  |  |
| 35063  | 35063-0439<br>(OPTION) | STAY, RADIATOR       |           | 1              |  |  |  |  |  |
| 39060  | 39060-0020<br>(OPTION) | RADIATOR,BIG         |           | 1              |  |  |  |  |  |
| 39062  | 39062-0219<br>(OPTION) | HOSE-COOLING,KIT RAD | PIPE      | 1              |  |  |  |  |  |
| 39062A | 39062-0220<br>(OPTION) | HOSE-COOLING,O.COOLE | R-KIT RAD | 1              |  |  |  |  |  |
| 39192  | 39192-0011<br>(OPTION) | PIPE-WATER           |           | 1              |  |  |  |  |  |
| 49085  | 49085-1066<br>(OPTION) | CAP-ASSY-PRESSURE    |           | 1              |  |  |  |  |  |
| 92043  | 92043-1436<br>(OPTION) | PIN                  |           | 1              |  |  |  |  |  |
| 92075  | 92075-1123<br>(OPTION) | DAMPER,RUBBER        |           | 3              |  |  |  |  |  |
| 92170  | 92170-1287<br>(OPTION) | CLAMP, COOLING HOSE  |           | 1              |  |  |  |  |  |
| 92171  | 92171-0179<br>(OPTION) | CLAMP                |           | 3              |  |  |  |  |  |
| 130    | 130BA0612<br>(OPTION)  | BOLT-FLANGED,6X12    |           | 1              |  |  |  |  |  |
| 554    | 554A1000<br>(OPTION)   | PIN-SNAP,10MM        |           | 1              |  |  |  |  |  |

### This grid covers:

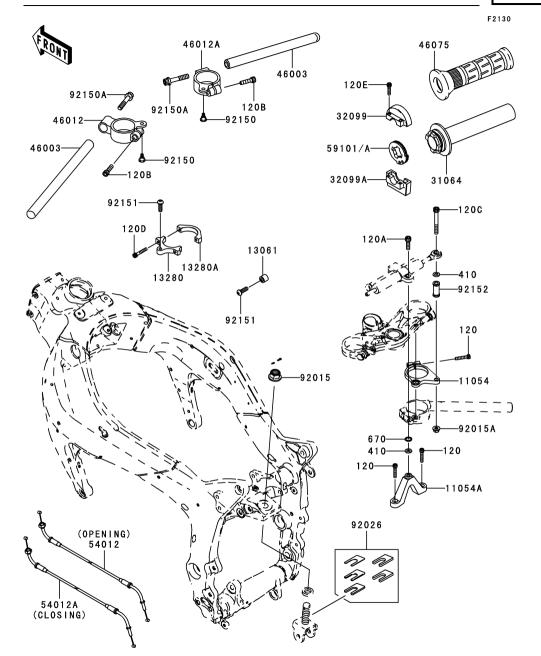
## Frame Fittings(1/2)



| Ref             |                                    |                                       |           | Quantity-ZX600 |  |  |  |  |  |
|-----------------|------------------------------------|---------------------------------------|-----------|----------------|--|--|--|--|--|
| No.             | Part No.                           | Description                           | Spec Code | '07            |  |  |  |  |  |
| INO.            |                                    |                                       |           | P7FR           |  |  |  |  |  |
| 11054           | 11054-1816<br>(ORTION)             | BRACKET                               |           | 1              |  |  |  |  |  |
| 11054A          | (OPTION)<br>11054-1817<br>(OPTION) | BRACKET                               |           | 1              |  |  |  |  |  |
| 13061           | 13061-1628<br>(OPTION)             | BOSS                                  |           | 1              |  |  |  |  |  |
| 13280           | 13280-0011                         | HOLDER,STEERING DAMPE                 | ΞR        | 1              |  |  |  |  |  |
| 13280A          | (OPTION)<br>13280-0012<br>(OPTION) | HOLDER,STEERING DAMPE                 | ≣R        | 1              |  |  |  |  |  |
| 31064           | 31064-1151<br>(OPTION)             | PIPE-COMP,GRIP                        |           | 1              |  |  |  |  |  |
| 32099           | 32099-0004<br>(OPTION)             | CASE,UPP                              |           | 1              |  |  |  |  |  |
| 32099A          | 32099-0005<br>(OPTION)             | CASE,LWR                              |           | 1              |  |  |  |  |  |
| 46003<br>46012  | 46003-1351<br>46012-1238           | HANDLE<br>HOLDER-HANDLE,LH            |           | 2<br>1         |  |  |  |  |  |
| 46012A<br>46075 | 46012-1239<br>46075-1143           | HOLDER-HANDLE,RH<br>GRIP,THROTTLE     |           | 1              |  |  |  |  |  |
| 54012           | (OPTION)<br>54012-0186             | CABLE-THROTTLE                        |           | 1              |  |  |  |  |  |
| 54012A          | (OPTION)<br>54012-0216             | CABLE-THROTTLE,CLOSING                | G         | 1              |  |  |  |  |  |
| 59101           | (OPTION)<br>59101-0001<br>(OPTION) | REEL,R21.5,60DEG                      |           | 1              |  |  |  |  |  |
| 59101A          | 59101-0002<br>(OPTION)             | REEL,R20.0,65DEG                      |           | 1              |  |  |  |  |  |
| 92015           | 92015-1316<br>(OPTION)             | NUT,FLANGED,16MM                      |           | 1              |  |  |  |  |  |
| 92015A          | 92015-1397<br>(OPTION)             | NUT,LOCK,FLANGED,8MM                  |           | 1              |  |  |  |  |  |
| 92026           | 92026-1586<br>(OPTION)             | SPACER,SET                            |           | 1              |  |  |  |  |  |
| 92150           | 92150-1090                         | BOLT,6MM                              |           | 2              |  |  |  |  |  |
| 92150A<br>92151 | 92150-1494<br>92151-1593           | BOLT,SOCKET,10X50<br>BOLT,SOCKET,8X25 |           | 2<br>2         |  |  |  |  |  |
| 92152           | (OPTION)<br>92152-0589             | COLLAR                                |           | 1              |  |  |  |  |  |
| 120             | (OPTION)<br>120CA0630<br>(OPTION)  | BOLT-SOCKET,6X30                      |           | 3              |  |  |  |  |  |

### This grid covers:

## Frame Fittings(2/2)

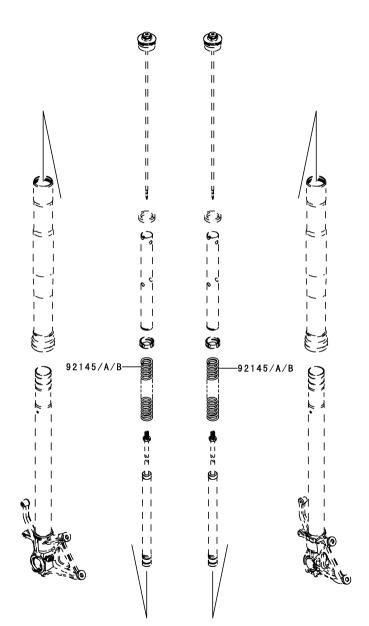


| Ref.       | Part No.                         |                                       |           | Quantity-ZX600 |  |  |  |  |  |
|------------|----------------------------------|---------------------------------------|-----------|----------------|--|--|--|--|--|
|            |                                  | Description                           | Spec Code | '07            |  |  |  |  |  |
| No.        |                                  |                                       | -         | P7FR           |  |  |  |  |  |
| 120A       | 120CA0825<br>(OPTION)            | BOLT-SOCKET,8X25                      |           | 1              |  |  |  |  |  |
| 120B       | 120CA0830                        | BOLT-SOCKET,8X30                      |           | 2              |  |  |  |  |  |
| 120C       | 120CA0865<br>(OPTION)            | BOLT-SOCKET,8X65                      |           | 1              |  |  |  |  |  |
| 120D       | 120P0635<br>(OPTION)             | BOLT-SOCKET,6X35                      |           | 2              |  |  |  |  |  |
| 120E       | 120S0625<br>(OPTION)             | BOLT-SOCKET,6X25                      |           | 2              |  |  |  |  |  |
| 410<br>670 | 410B0800<br>670B2012<br>(OPTION) | WASHER-PLAIN-SMALL,8MI<br>O RING,12MM | M         | 2<br>1         |  |  |  |  |  |

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This grid covers:

## **C-5**

### **Front Fork**

F2340

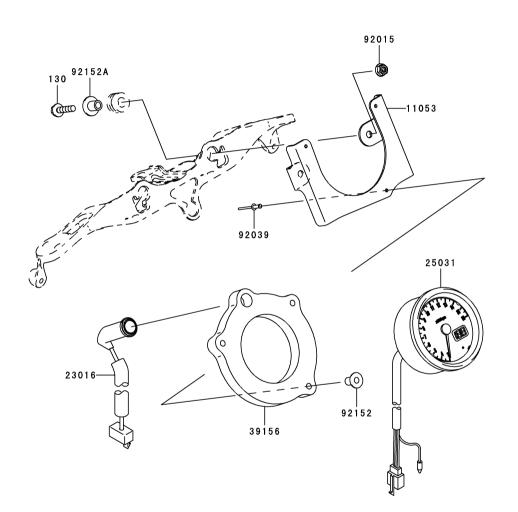
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F2530

### O. This grid covers:

## Meter(s)





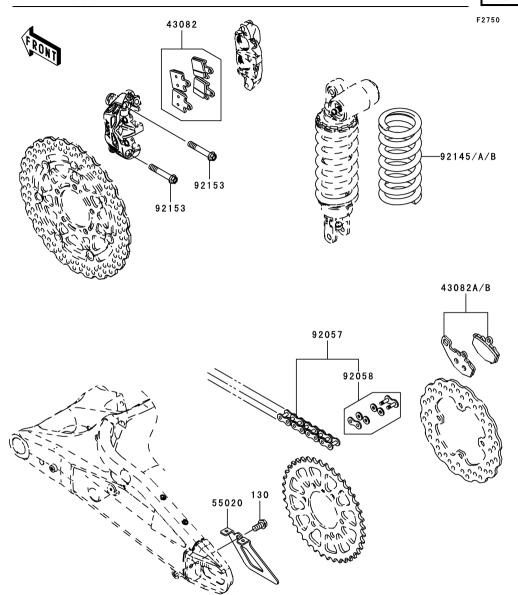
| Ref.   |                        |                       |           | Quantity-2 | ZX60 | 0 |  |
|--------|------------------------|-----------------------|-----------|------------|------|---|--|
|        | Part No.               | Description           | Spec Code | '07        |      |   |  |
| No.    |                        | ·                     |           | P7FR       |      |   |  |
| 11053  | 11053-1749<br>(OPTION) | BRACKET,KIT METER     |           | 1          |      |   |  |
| 23016  | 23016-0006<br>(OPTION) | LAMP-ASSY,INDICATOR   |           | 1          |      |   |  |
| 25031  | 25031-1142<br>(OPTION) | METER-ASSY            |           | 1          |      |   |  |
| 39156  | 39156-0098<br>(OPTION) | PAD,KIT METER         |           | 1          |      |   |  |
| 92015  | 92015-1233<br>(OPTION) | NUT,FLANGED,6MM,BLACK |           | 2          |      |   |  |
| 92039  | 92039-1106<br>(OPTION) | RIVET                 |           | 3          |      |   |  |
| 92152  | 92152-0058<br>(OPTION) | COLLAR                |           | 3          |      |   |  |
| 92152A | 92152-1074<br>(OPTION) | COLLAR                |           | 2          |      |   |  |
| 130    | 130L0625<br>(OPTION)   | BOLT-FLANGED,6X25     |           | 2          |      |   |  |

## '07 ZX600P7FR Chassis

## GRID NO. **C-7**

### This grid covers:

## Other



| Dof    |                        |                         |            | Quanti | ty-ZX6 | 00 |  |
|--------|------------------------|-------------------------|------------|--------|--------|----|--|
| Ref.   | Part No.               | Description             | Spec Code  | '07    |        |    |  |
| No.    |                        |                         |            | P7FR   |        |    |  |
| 43082  | 43082-0074<br>(OPTION) | PAD-ASSY-BRAKE,FR       |            | 1      |        |    |  |
| 43082A | 43082-1192<br>(OPTION) | PAD-ASSY-BRAKE,RR,C93   |            | 1      |        |    |  |
| 43082B | 43082-1220<br>(OPTION) | PAD-ASSY-BRAKE,RR,C93G  |            | 1      |        |    |  |
| 55020  | 55020-0028<br>(OPTION) | GUARD,CHAIN             |            | 1      |        |    |  |
| 92057  | 92057-1529<br>(OPTION) | CHAIN,DRIVE,120L(#520)  |            | 1      |        |    |  |
| 92058  | 92058-1090<br>(OPTION) | JOINT-CHAIN,DRIVE(#520) |            | 1      |        |    |  |
| 92145  | 92145-0504<br>(OPTION) | SPRING,SHOCKABSORBER    | ,K=95N/MM  | 1      |        |    |  |
| 92145A | 92145-0505<br>(OPTION) | SPRING,SHOCKABSORBER    | ,K=100N/MM | 1      |        |    |  |
| 92145B | 92145-0506<br>(OPTION) | SPRING,SHOCKABSORBER    | ,K=105N/MM | 1      |        |    |  |
| 92153  | 92153-1777<br>(OPTION) | BOLT,FLANGED,10X60      |            | 4      |        |    |  |
| 130    | 130J1020<br>(OPTION)   | BOLT-FLANGED,10X20      |            | 1      |        |    |  |

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