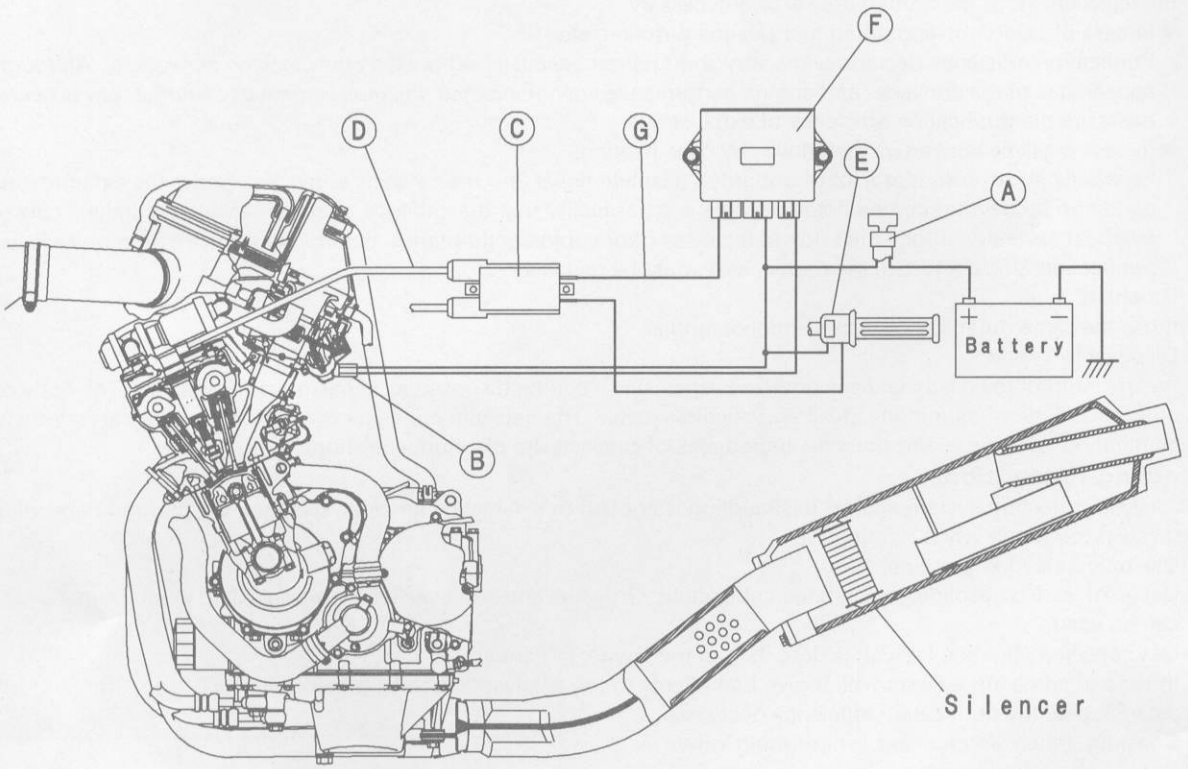
KAWASAKI
ZX6R-1999

SERVICE MANUAL +
PARTS MICROFICHE

ZX600-G1 Left Side View:

ZX600-G1 Right Side View:

Kawasaki Low Exhaust Emission System



- Do not run overspeed limiter too much from the standpoint to protect the engine. (Overspeed limiter has a protection system that applies ignition cut method and fuel cut method together. Conventional system applies fuel-on method.)
- Do not run the engine under the condition that even if only one cylinder has a misfire or has unstable running. In this case, request the nearest service facility to correct it. If you have no choice but running by yourself, keep engine rpm as low as possible and try to finish running at the shortest period.
- When the battery is dead, do not push-start. Connect another full-charged battery with jumper cables, and start the engine.

5. Additional Information

1) Secondary Air Injection System

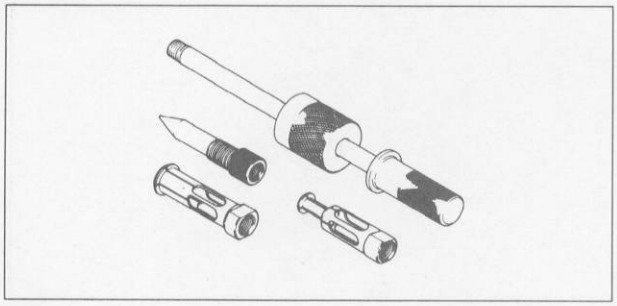
The mechanism is simple and power loss is minimum because the system uses the vacuum pressure created by exhaust pulses.

The secondary injection air helps the fuel/air mixture burn more completely. (The primary air means air which flows through the inlet pipe.) As the exhaust valve opens, and the burned fuel passes the exhaust valve, a stream of fresh air is introduced through the air suction valve. This fresh air burns the unburned gas and converts the carbon monoxide (CO) and hydrocarbons (HC) into harmless carbon dioxide (CO_2) and water (H_2O).

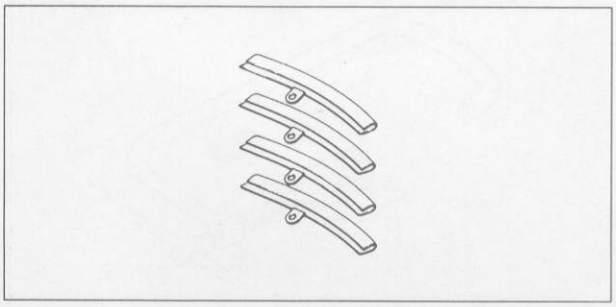
$$CO + 1/2\ O_2 \rightarrow CO_2$$
$$HC + O_2 \rightarrow CO_2 + H_2O$$

The secondary air injection system consists of a vacuum switch valve, and two air suction valves. Without using an air pump, the air suction valve can draw fresh air into the exhaust passage near the exhaust valves by vacuum that exhaust pulses generate.

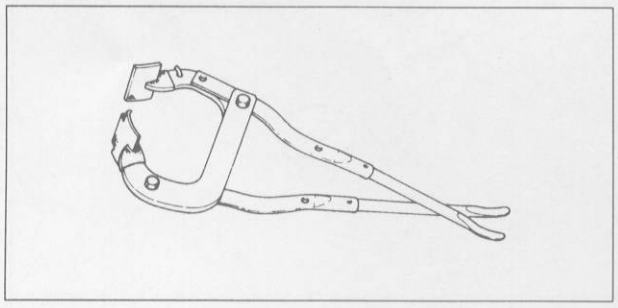
Oil Seal & Bearing Remover: 57001-1058



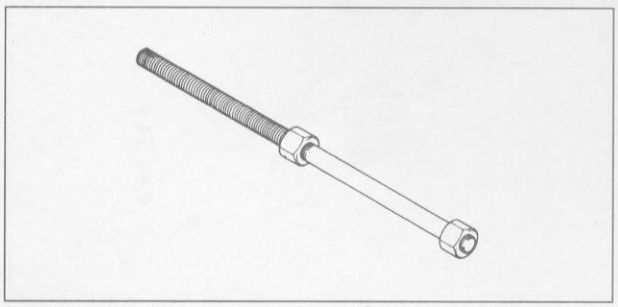
Rim Protector: 57001-1063



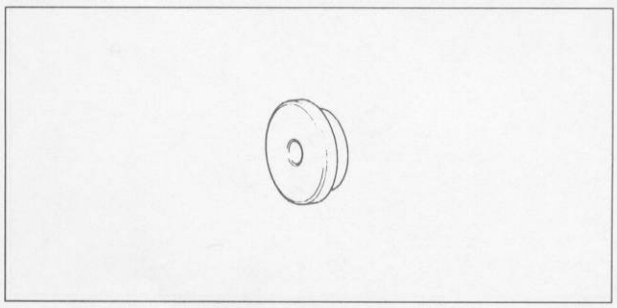
Bead Breaker Assembly: 57001-1072



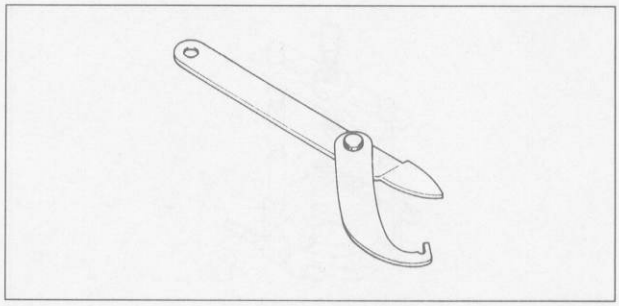
Head Pipe Outer Race Press Shaft: 57001-1075



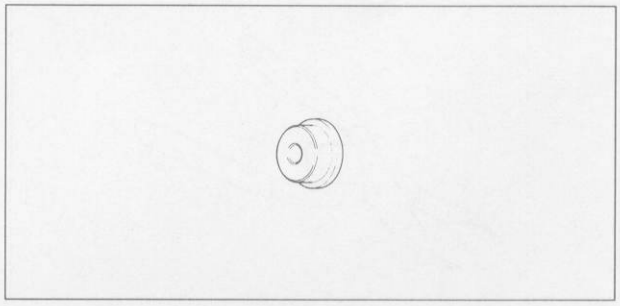
Head Pipe Outer Race Driver: 57001-1077



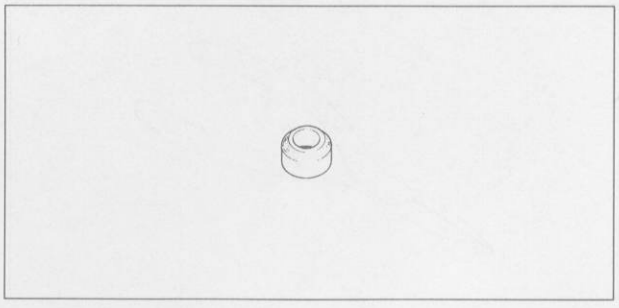
Steering Stem Nut Wrench: 57001-1100



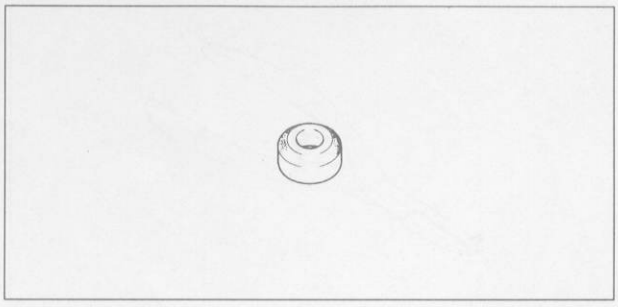
Head Pipe Outer Race Driver: 57001-1106



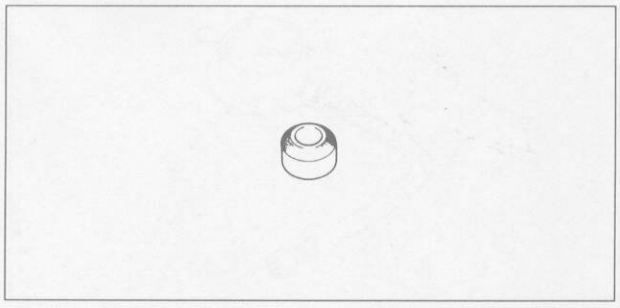
Valve Seat Cutter, 45° – Φ24.5: 57001-1113

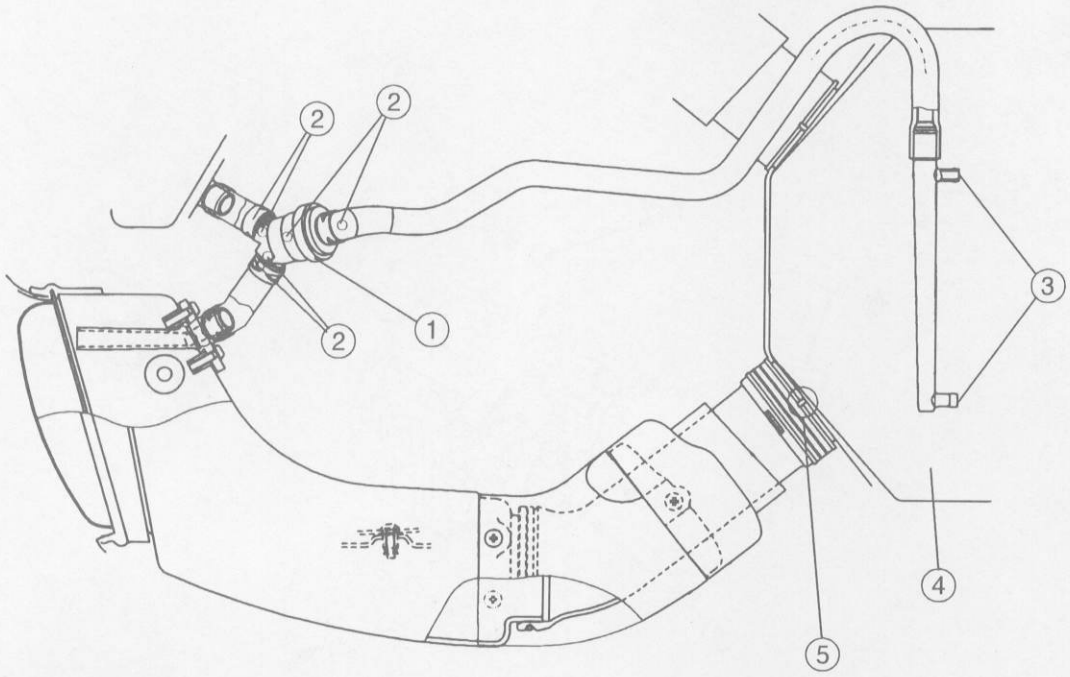


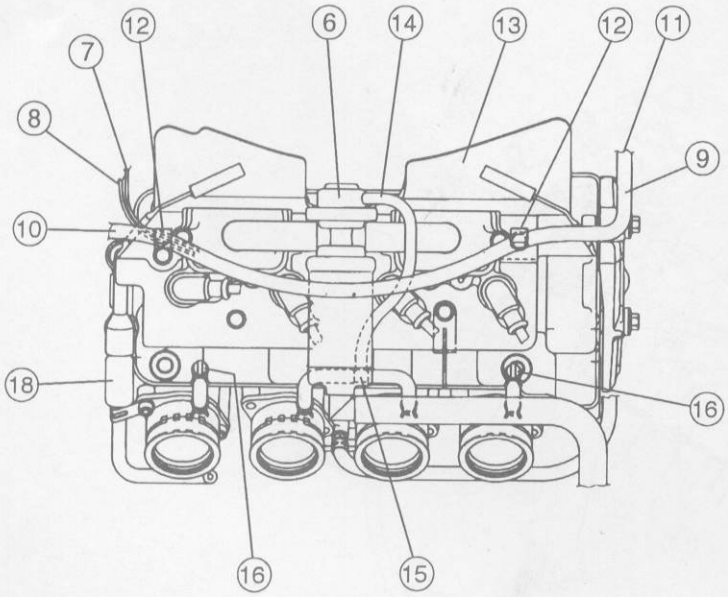
Valve Seat Cutter, 45° – Φ27.5: 57001-1114

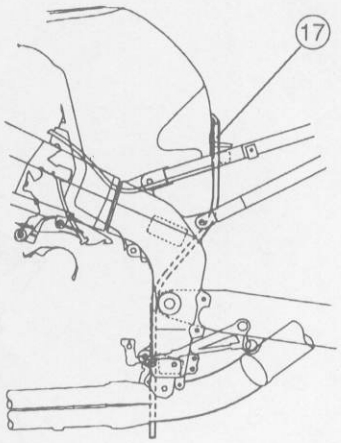


Valve Seat Cutter, 32° – Φ25: 57001-1118









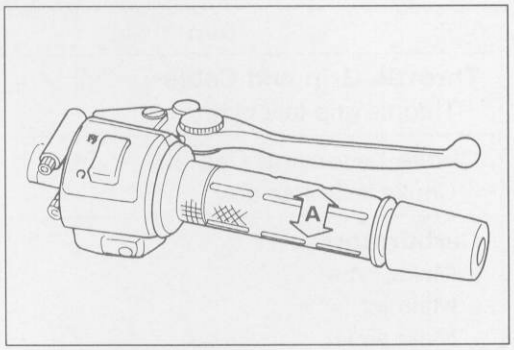
1. Air Vent Filter
2. Align the mark on the hose with the mark on the filter.
3. To Carburetors
4. Air Cleaner Housing
5. Fit the projection of the housing in the recess of the air duct.
6. Vacuum Switch Valve
7. Radiator Fan Motor Lead
8. Radiator Fan Switch Lead
9. Coolant Reserve Tank Hose
10. To Coolant Reserve Tank
11. To Radiator
12. Install the clamps with the buffle plate.
13. Buffle Plate
14. Vacuum Hose
15. Vacuum Hose Fitting
16. Plug
17. Fuel Tank Drain Hose

(AR, FG, FR, IT, KR, NL, ST, UK Models)

18. Coolant Filter

Throttle Grip and Cables

Free Play Inspection

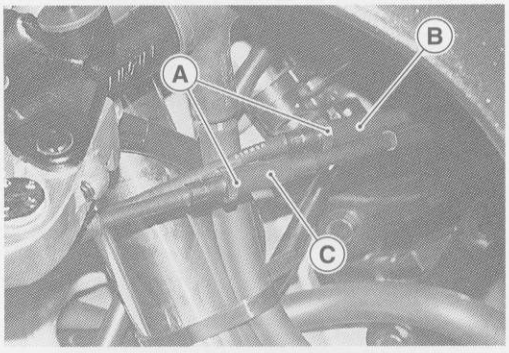


- Check the throttle grip free play [A].

★If the free play is incorrect, adjust the throttle cable.

Throttle Grip Free Play
Standard: 2 ~ 3 mm

Free Play Adjustment



- Loosen the locknuts [A], and screw both throttle cable adjusters in completely so as to give the throttle grip plenty of play.
- Turn out the decelerator cable adjuster [B] until there is no play when the throttle grip is completely closed.
- Tighten the locknut.

★Turn the accelerator cable adjuster [C] until 2 ~ 3 mm of throttle grip play is obtained.

- Tighten the locknut.

Cable Installation

- Install the throttle cables in accordance with Cable Routing section in General Information chapter.
- Install the lower ends of the throttle cables in the cable bracket on the carburetor.
- Install the cable stopper on the cable bracket.
- Install the upper ends of the throttle cables in the grip.
- After installation, adjust each cable properly.

⚠WARNING

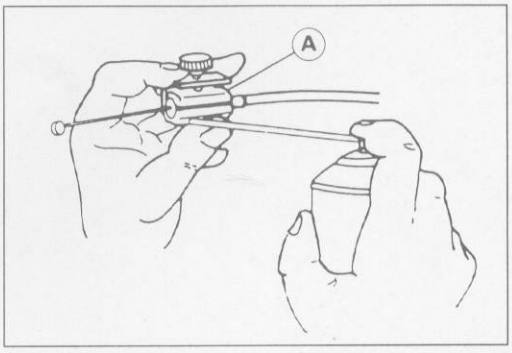
Operation with incorrectly routed or improperly adjusted cables could result in an unsafe riding condition.

Cable Lubrication

Whenever the cable is removed, lubricate the throttle cable as follows:

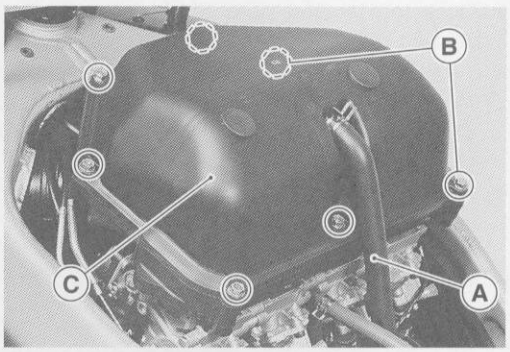
- Apply a thin coating of grease to the cable lower ends.
- Lubricate the cable with a penetrating rust inhibitor.

Special Tool – Pressure Cable Luber: k56019-021 [A]

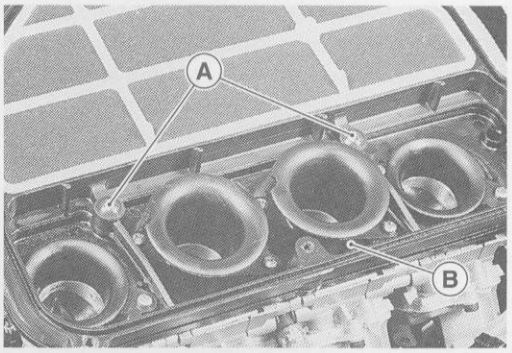


Air Cleaner

Air Cleaner Housing Removal

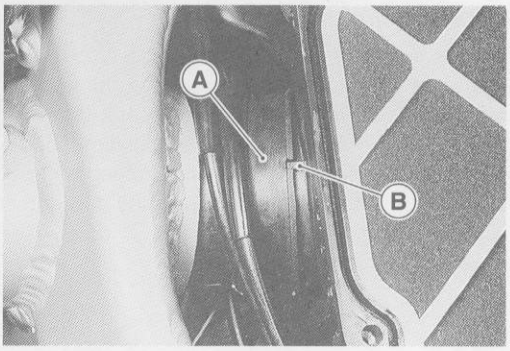


- ●Remove:
  - Seats (see Frame chapter)
  - Fuel Tank (see Fuel Tank Removal)
  - Engine Breather Hose [A]
  - Upper Housing Mounting Bolts [B]
  - Upper Housing [C]



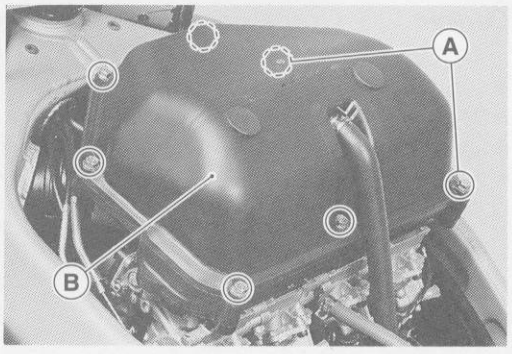
- ●Remove:
  - Lower Housing Mounting Bolts [A]
  - Lower Housing [B]
- ○Pull up the rear of the housing, and then remove it from the air ducts.

Air Cleaner Housing Installation

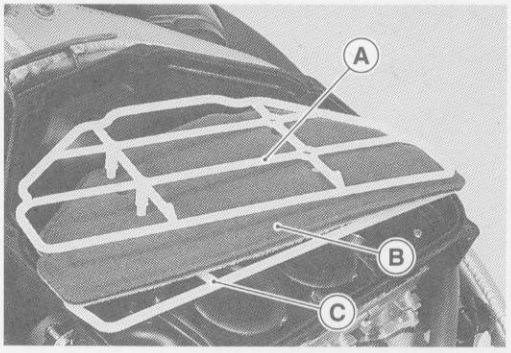


- ●Insert the housing into the air ducts [A] securely, and fit the projection [B] of the housing in the recess of the air ducts.
- ●Tighten:
  - Housing Mounting Bolts
- ●Be sure to fit the engine breather hose.

Element Removal

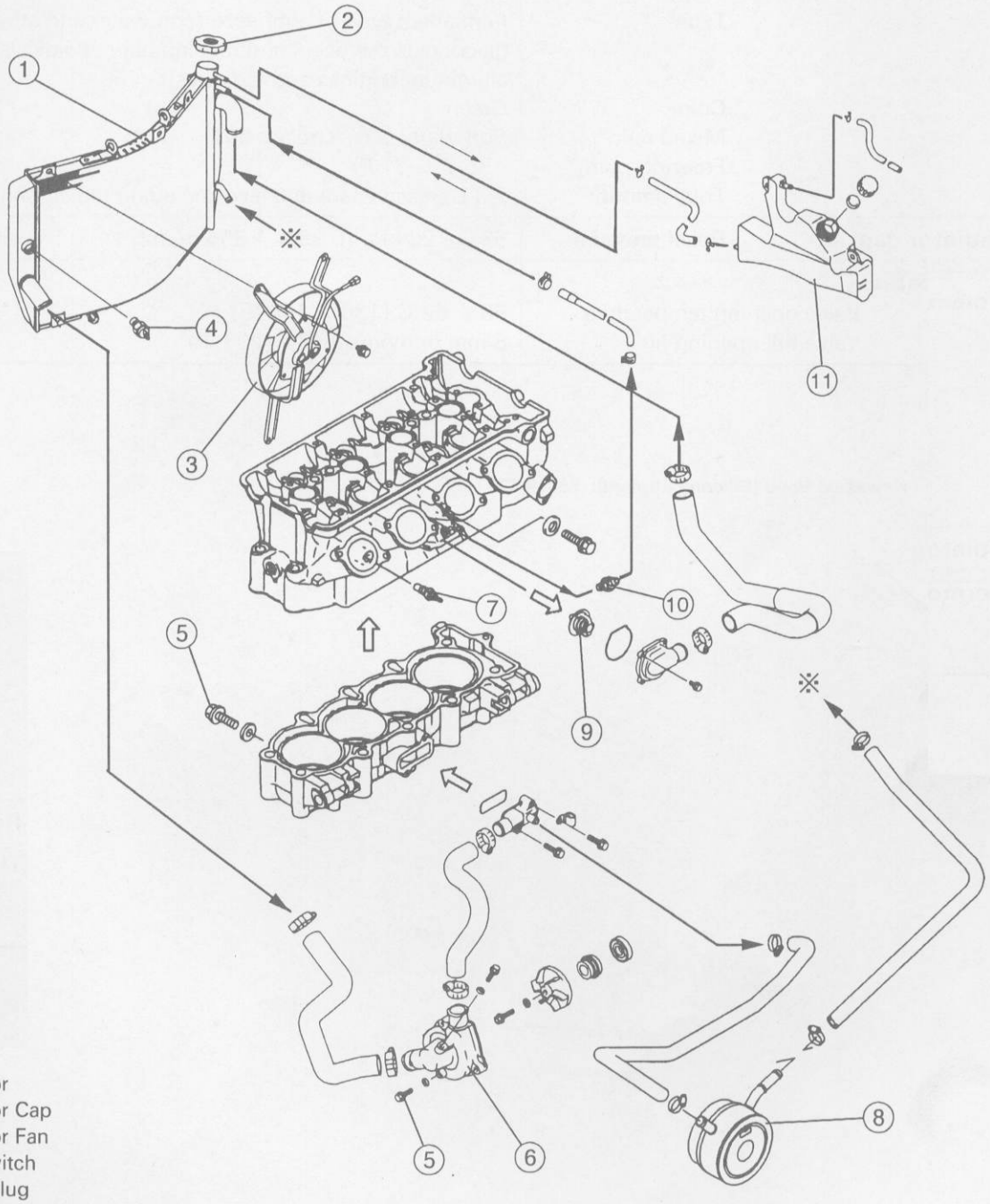


- ●Remove:
  - Seats (see Frame chapter)
  - Fuel Tank (see Fuel Tank Removal)
  - Upper Housing Mounting Bolts [A]
  - Upper Housing [B]



- ●Remove the following parts as a unit.
  - Upper Plastic Holder [A]
  - Element [B]
  - Lower Plastic Holder [C]

Coolant Flow Chart



1. Radiator
2. Radiator Cap
3. Radiator Fan
4. Fan Switch
5. Drain Plug
6. Water Pump
7. Water Temperature Sensor
8. Oil Cooler
9. Thermostat
   When the engine is cold, the thermostat is closed so that the coolant flow is restricted through the air bleeder hole, causing the engine to warm up more quickly.
10. By-pass Fitting
    The fitting is installed to bleed the air.
11. Reserve Tank
    When the engine is very hot, the pressure valve in the radiator cap allows air and vapor to escape into the reserve tank. When the engine cools down, the pressure drop draws the vacuum valve (another small valve) open, admitting coolant from the reserve tank into the radiator.

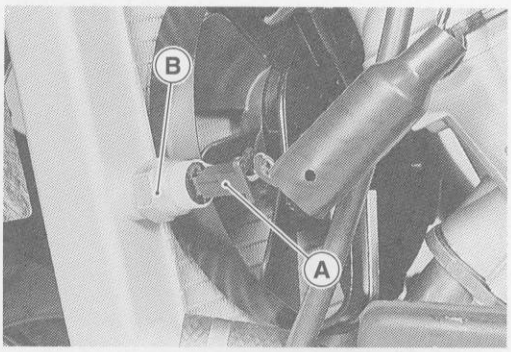
Radiator Fan Switch, Water Temperature Sensor

Radiator Fan Switch, Water Temperature Sensor Removal

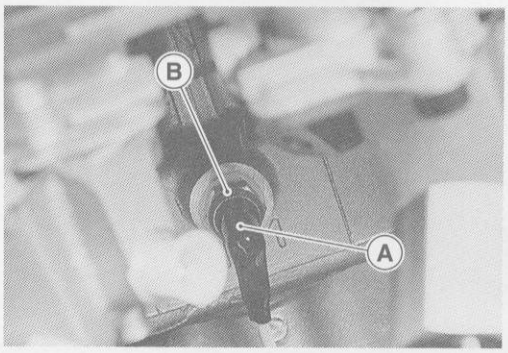
CAUTION

The fan switch or the water temperature sensor should never be allowed to fall on a hard surface. Such a shock to their parts can damage them.

- Drain the coolant (see Coolant Draining).
- Remove:
  Radiator Fan Switch Lead Connector [A]
  Radiator Fan Switch [B]



  Seats (see Frame chapter)
  Fuel Tank (see Fuel System chapter)
  Water Temperature Sensor Lead Connector [A]
  Water Temperature Sensor [B]



Radiator Fan Switch, Water Temperature Sensor Installation

- Apply silicone sealant to the threads of the water temperature sensor.

Sealant – Kawasaki Bond (Silicone Sealant): 56019-120

- Tighten the fan switch and water temperature sensor.

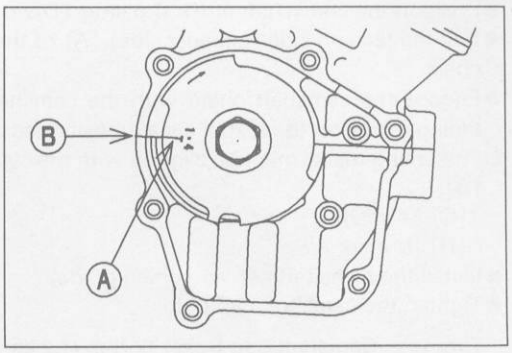
Torque – Radiator Fan Switch : 18 N-m (1.8 kg-m, 13.0 ft-lb)
Water Temperature Sensor : 7.8 N-m (0.80 kg-m, 69 in-lb)

Radiator Fan Switch, Water Temperature Sensor Inspection

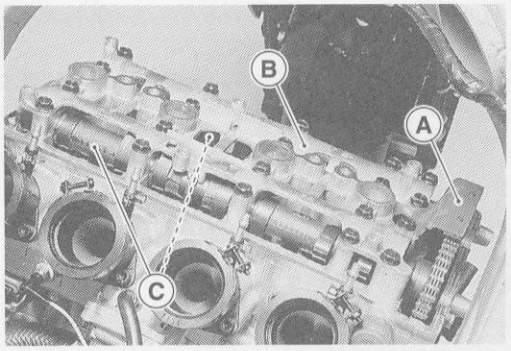
- Refer to Electrical System chapter for these inspections.

Camshaft, Camshaft Chain

Camshaft Removal



- Remove:
  Cylinder Head Cover (see Cylinder Head Cover Removal)
  Pickup Coil Cover
- Position the crankshaft at #1, 4 piston TDC.
  [A] TDC mark for #1, 4 Pistons
  [B] Timing Mark (crankcase halves mating surface)

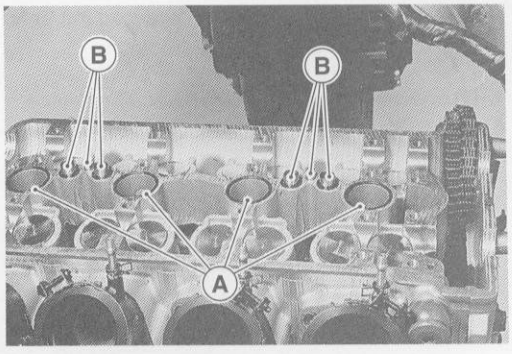


- Remove:
  Camshaft Chain Tensioner (see Camshaft Chain Tensioner Removal)
  Rubber Gaskets and Cylinder Head Cover Gasket
  Camshaft Cap Bolts
  Chain Guide [A]
  Camshaft Cap [B]
  Camshafts [C]
- Stuff a clean cloth into the chain tunnel to keep any parts from dropping into the crankcase.

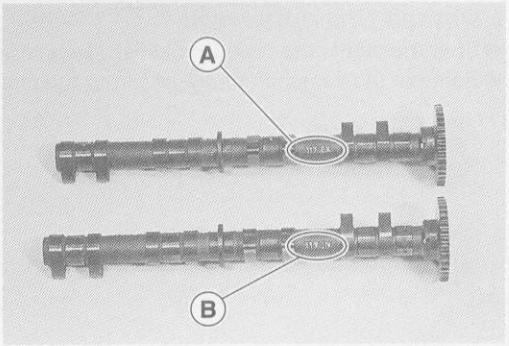
CAUTION

The crankshaft may be turned while the camshafts are removed. Always pull the chain taut while turning the crankshaft. This avoids kinking the chain on the lower (crankshaft) sprocket. A kinked chain could damage both the chain and the sprocket.

Camshaft Installation



- Be sure to install the following parts.
  [A] O-rings
  [B] Pins



- Apply engine oil to all cam parts and journals.
- If a new camshaft is to be used, apply a thin coat of molybdenum disulfide grease to the cam surfaces.

NOTE

○ *The exhaust camshaft has a 117 EX mark [A] and the inlet camshaft has a 117 IN mark [B]. Be careful not to mix up these shafts.*

NOTE

○ *The reading is not actual valve/valve guide clearance because the measuring point is above the guide.*

Valve/Valve Guide Clearance (Wobble Method)

	Standard	Service Limit
Exhaust	0.10 ~ 0.18 mm	0.35 mm
Inlet	0.03 ~ 0.12 mm	0.29 mm

Valve Seat Inspection

● Remove the valve (see Valve Removal).

● Check the valve seating surface [A] between the valve [B] and valve seat [C].

○ Measure the outside diameter [D] of the seating pattern on the valve seat.

★ If the outside diameter is too large or too small, repair the seat (see Seat Repair).

Valve Seating Surface Outside Diameter

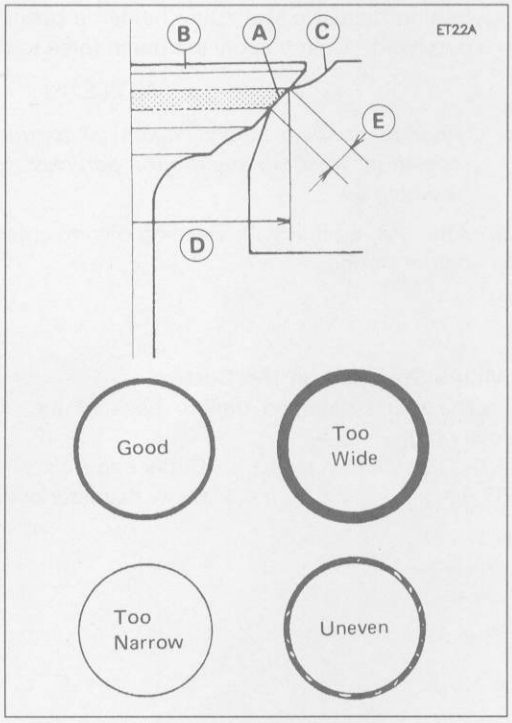
Standard: Exhaust 22.1 ~ 22.3 mm
Inlet 26.1 ~ 26.3 mm

○ Measure the seat width [E] of the portion where there is no build-up carbon (white portion) of the valve seat with a vernier caliper.

★ If the width is too wide, too narrow or uneven, repair the seat (see Valve Seat Repair).

Valve Seating Surface Width

Standard: Exhaust, Inlet 0.5 ~ 1.0 mm



Valve Seat Repair

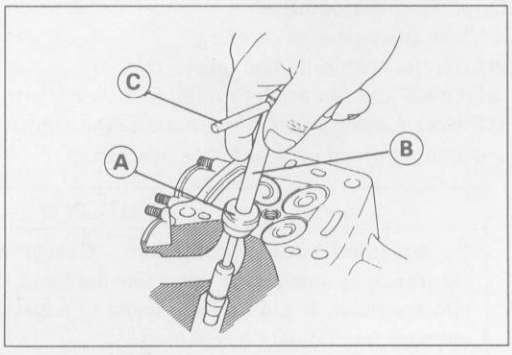
● Repair the valve seat with the valve seat cutters [A].

Special Tools – Valve Seat Cutter Holder, Φ4: 57001-1275 [B]
Valve Seat Cutter Holder Bar: 57001-1128 [C]

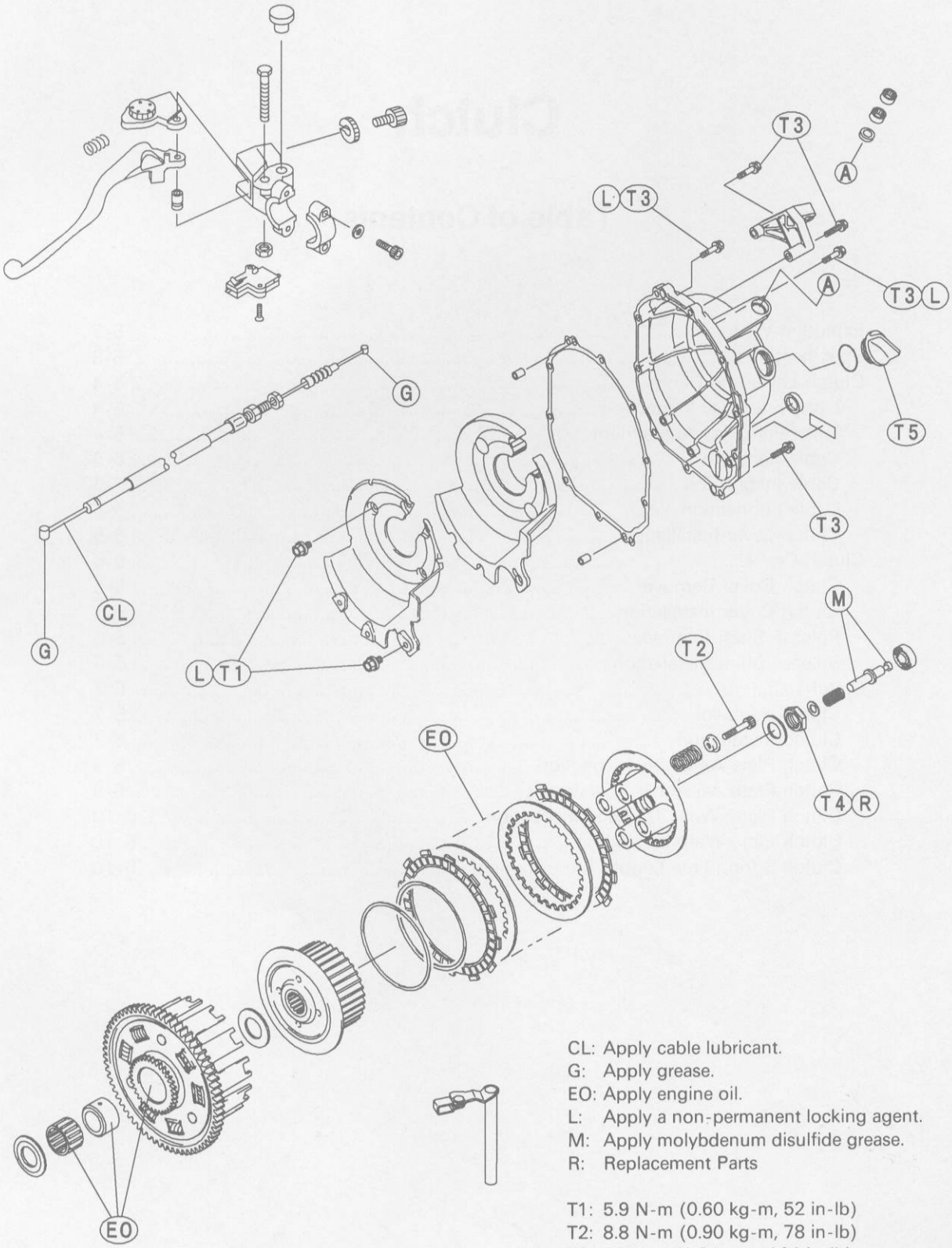
[For Exhaust Valve Seat]
Valve Seat Cutter, 45° – Φ24.5: 57001-1113
Valve Seat Cutter, 32° – Φ25: 57001-1118
Valve Seat Cutter, 60° – Φ25: 57001-1328

[For Inlet Valve Seat]
Valve Seat Cutter, 45° – Φ27.5: 57001-1114
Valve Seat Cutter, 32° – Φ28: 57001-1119
Valve Seat Cutter, 60° – Φ27: 57001-1409

★ If the manufacturer's instructions are not available, use the following procedure.



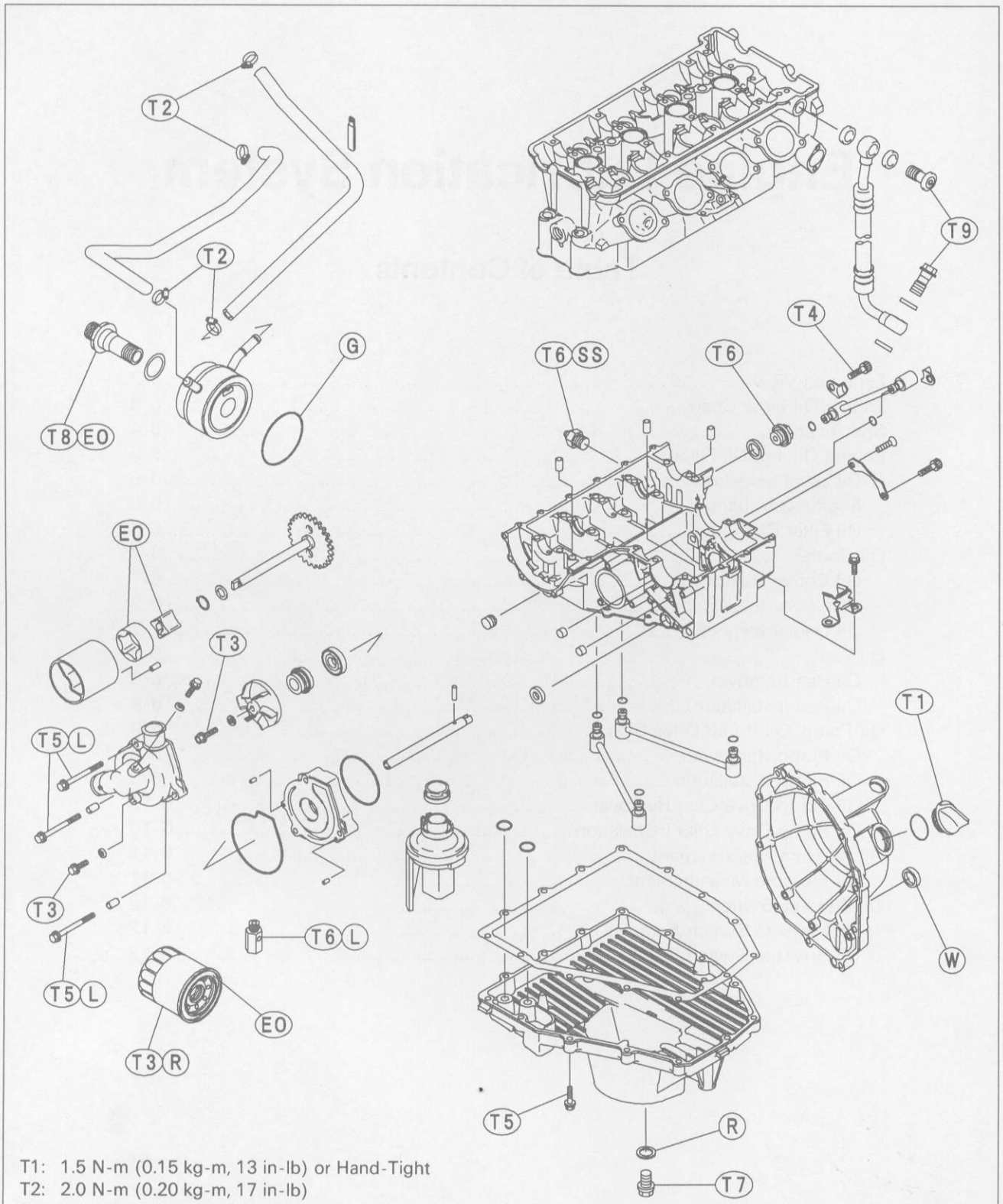
Exploded View



CL: Apply cable lubricant.
G: Apply grease.
EO: Apply engine oil.
L: Apply a non-permanent locking agent.
M: Apply molybdenum disulfide grease.
R: Replacement Parts

T1: 5.9 N-m (0.60 kg-m, 52 in-lb)
T2: 8.8 N-m (0.90 kg-m, 78 in-lb)
T3: 12 N-m (1.2 kg-m, 104 in-lb)
T4: 130 N-m (13.5 kg-m, 98 in-lb)
T5: 1.5 N-m (0.15 kg-m, 13 in-lb) or Hand-Tight

Exploded View

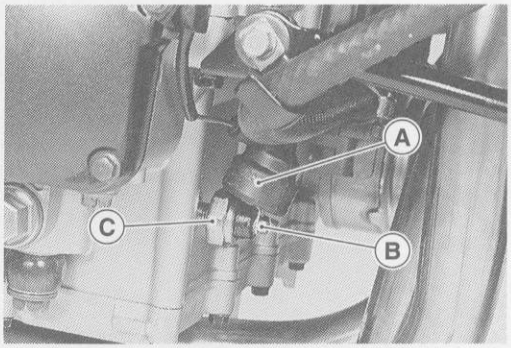


T1: 1.5 N-m (0.15 kg-m, 13 in-lb) or Hand-Tight
T2: 2.0 N-m (0.20 kg-m, 17 in-lb)
T3: 9.8 N-m (1.0 kg-m, 87 in-lb)
T4: 13 N-m (1.3 kg-m, 113 in-lb)
T5: 12 N-m (1.2 kg-m, 104 in-lb)
T6: 15 N-m (1.5 kg-m, 11.0 ft-lb)
T7: 20 N-m (2.0 kg-m, 14.5 ft-lb)
T8: 78 N-m (8.0 kg-m, 58 ft-lb)
T9: 25 N-m (2.5 kg-m, 18.0 ft-lb)

SS: Apply silicone sealant.
L: Apply a non-permanent locking agent.
R: Replacement Parts
G: Apply grease.
EO: Apply engine oil.
W: Apply water.

Oil Pressure Switch

Oil Pressure Switch Removal



- Remove:
  Right Lower Fairing (see Frame chapter)
  Engine Oil (drain, see Engine Oil Change)
  Switch Cover [A]
  Switch Terminal [B]
  Oil Pressure Switch [C]

Oil Pressure Switch Installation

- Apply silicone sealant to the threads of the oil pressure switch and tighten it.

Sealant – Kawasaki Bond (Silicone Sealant): 56019-120

Torque – Oil Pressure Switch: 15 N-m (1.5 kg-m, 11.0 ft-lb)

- Tighten the terminal bolt.

Torque – Oil Pressure Switch Terminal Bolt: 1.5 N-m (0.15 kg-m, 13 in-lb)

- Apply grease to the terminal.

Item	Standard	Service Limit
Transmission:		
Shift fork ear thickness	5.9 ~ 6.0 mm	5.8 mm
Gear groove width	6.05 ~ 6.15 mm	6.25 mm
Shift fork guide pin diameter	5.9 ~ 6.0 mm	5.8 mm
Shift drum groove width	6.05 ~ 6.20 mm	6.3 mm

Special Tool – Outside Circlip Pliers: 57001-144

Sealant – Kawasaki Bond (Silicone Sealant): 56019-120

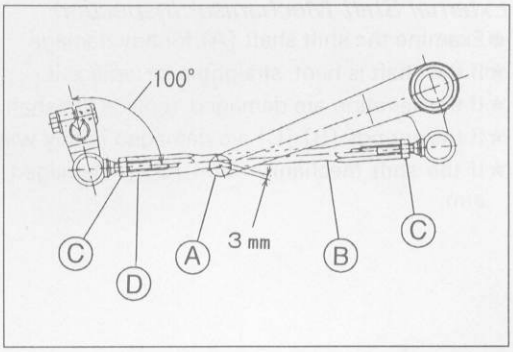
Transmission

Shift Pedal Removal

- Mark the position of the shift lever on the shift shaft so that it can be installed later in the same position.
- Remove the shift lever and shift pedal.

Shift Pedal Installation

- Install the shift pedal [A] so that the distance between the center of the shift pedal and the center line of the shift rod [B] is about 3 mm by loosening the front and rear locknuts [C] and turning the rod.



NOTE

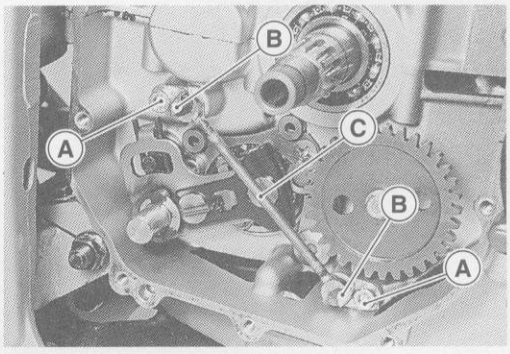
○ *The locknut next to the groove [D] of the rod has left-hand threads.*

★If necessary, adjust the pedal position from the standard position to suit you as follows.

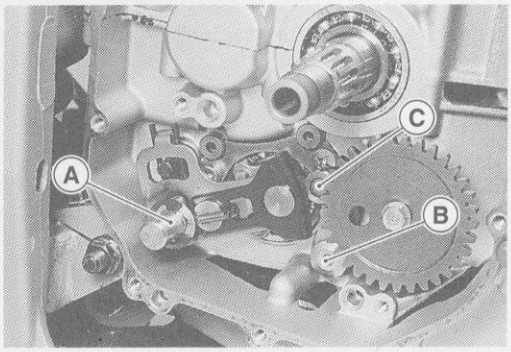
- Loosen the front and rear rod locknuts.
- Turn the rod to adjust the pedal position.
- Tighten the locknuts securely.

External Shift Mechanism Removal

- Remove:
  Engine Oil (drain, see Engine Lubrication System chapter)
  Shift Pedal (see Shift Pedal Removal)
  Clutch (see Clutch chapter)
  Bolts [A], Oil Pipe Holders [B], Oil Pipe [C] and O-ring

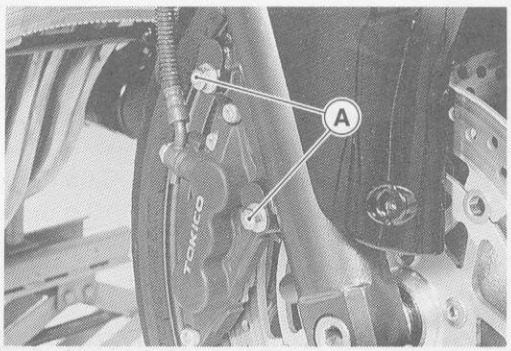


- Remove:
  Shift Shaft [A]
  Bolt [B]
  Gear Positioning Lever [C] and Spring

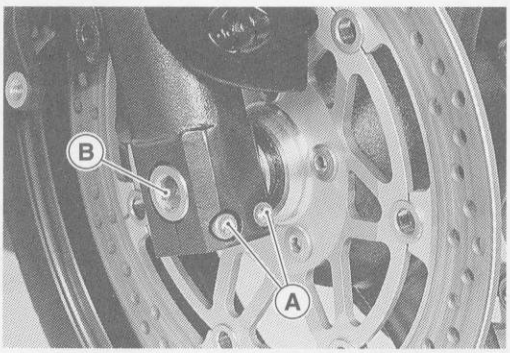


Wheels (Rims)

Front Wheel Removal



● Remove:
Lower Fairings (see Frame chapter)
Brake Caliper Mounting Bolts [A]



● Loosen:
Right Side Axle Clamp Bolts [A]
Axle [B]

● Raise the front wheel off the ground.

Special Tool – Jack: 57001-1238

● Pull out the axle to the right and drop the front wheel out of the forks.

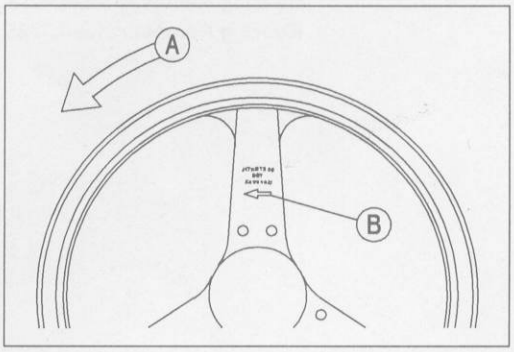
CAUTION

Do not lay the wheel down on one of the discs. This can damage or warp the disc. Place blocks under the wheel so that the disc does not touch the ground.

Front Wheel Installation

NOTE

○ *The direction of the wheel rotation [A] is shown by an arrow [B] on the wheel spoke.*



● Check the wheel rotation mark on the front wheel and install it.
● Fit the collars on the both sides of the hub.
● Tighten the axle nut and axle clamp bolt.

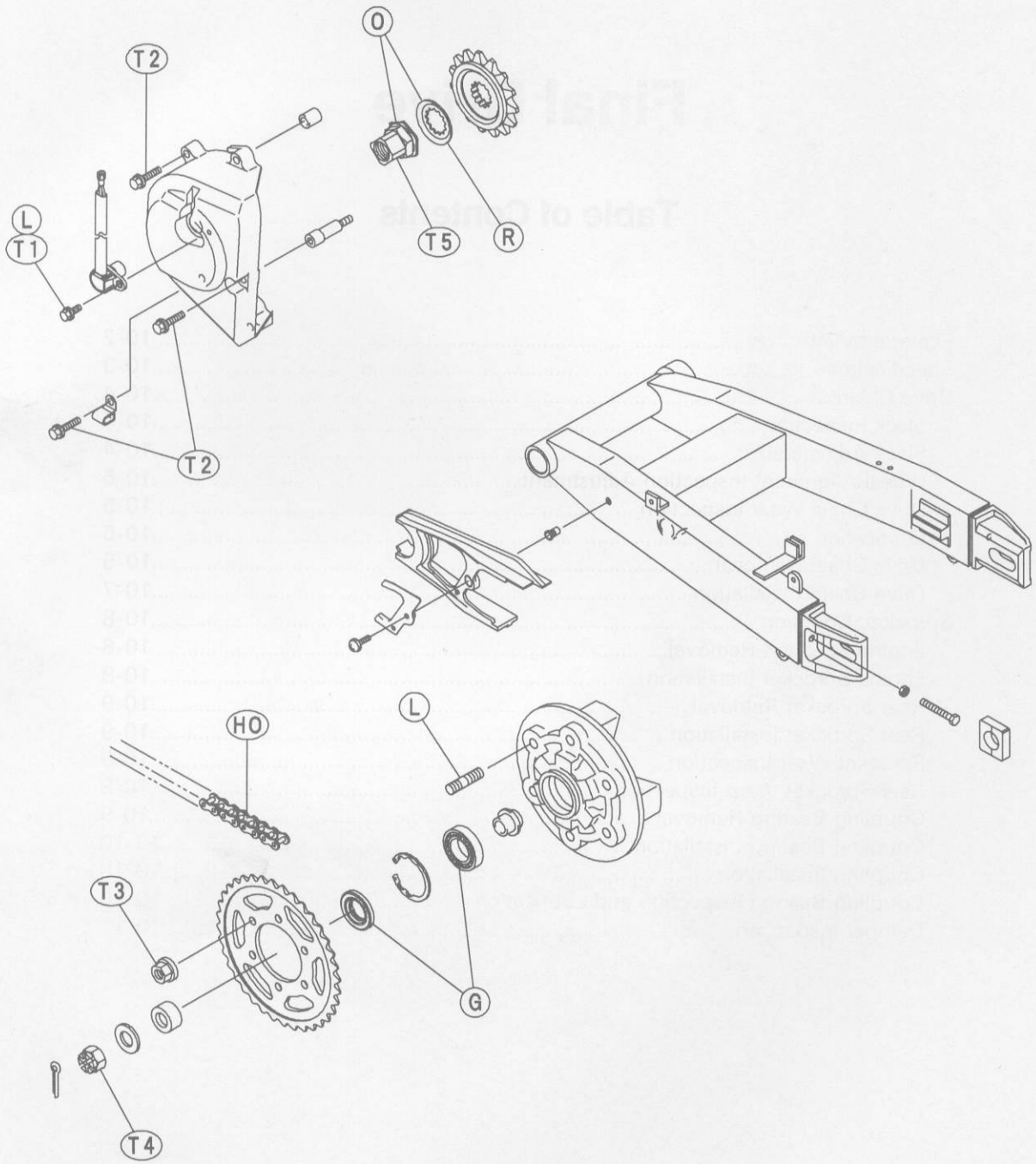
Torque – Front Axle Nut: 110 N-m(11.0 kg-m, 80 ft-lb)
Front Axle Clamp Bolts: 20 N-m(2.0 kg-m, 14.5 ft-lb)

● Install the front brake caliper (see Brakes chapter).
● Check the front brake.

⚠WARNING

Do not attempt to drive the motorcycle until a full brake lever is obtained by pumping the brake lever until the pads are against the disc. The brake will not function on the first application of the lever if this is not done.

Exploded View



G : Apply grease.
HO: Apply heavy oil.
L : Apply a non-permanent locking agent.
O : Apply oil.
R : Replacement Parts

T1 : 6.9 N-m (0.70 kg-m, 61 in-lb)
T2 : 12 N-m (1.2 kg-m, 104 in-lb)
T3 : 59 N-m (6.0 kg-m, 43 ft-lb)
T4 : 110 N-m (11.0 kg-m, 80 ft-lb)
T5 : 125 N-m (13.0 kg-m, 94 ft-lb)

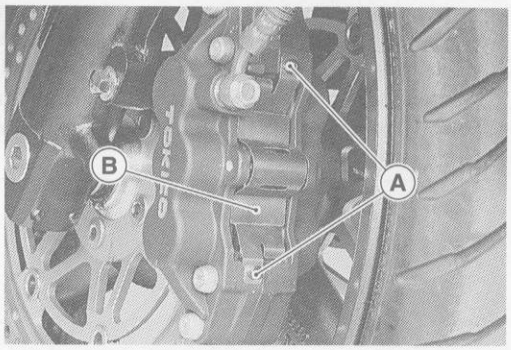
Brakes

Table of Contents

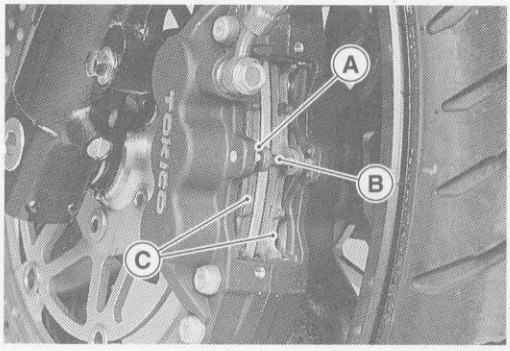
Brake Pads

Front Brake Pad Removal

- Unscrew the pad spring bolts [A], and remove the pad spring [B].



- Draw out the clip [A], and take off the pad pin [B].
- Remove the brake pads [C].



Front Brake Pad Installation

- Push the caliper pistons in by hand as far as they will go.
- Install the brake pads.
- Install the pad pin and clip. The clip must be "outside" of the pads.
- Install the caliper (see Caliper Installation).

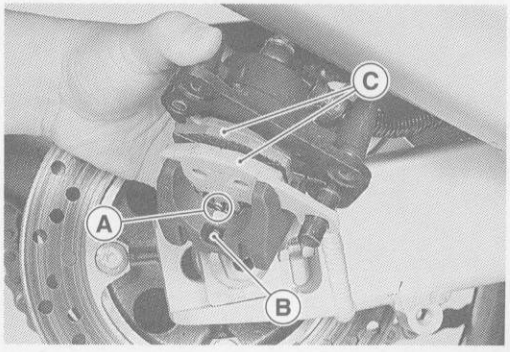
Torque – Front Brake Pad Spring Bolts: 2.9 N-m (0.30 kg-m, 26 in-lb)

⚠WARNING

Do not attempt to drive the motorcycle until a full brake lever is obtained by pumping the brake lever until the pads are against the disc. The brake will not function on the first application of the lever if this is not done.

Rear Brake Pad Removal

- Unscrew the caliper mounting bolts.
- Detach the caliper from the disc.
- Draw out the clip [A], and take off the pad pin [B].
- Remove the brake pads [C].



Rear Brake Pad Installation

- Push the caliper piston in by hand as far as it will go.
- Install the anti-rattle spring in place.
- Install the brake pads.
- Install the pad pin and clip. The clip must be "outside" of the pads.
- Install the caliper (see Caliper Installation).

Brake Hose

Brake Hose Removal/Installation

CAUTION
Brake fluid quickly ruins painted or plastic surfaces; any spilled fluid should be completely wiped up immediately with wet cloth.

- When removing the brake hose, take care not to spill the brake fluid on the painted or plastic parts.
- When removing the brake hose, temporarily secure the end of the brake hose to some high place to keep fluid loss to a minimum.
- There are washers on each side of the brake hose fitting. Replace them with new ones when installing.
- When installing the hoses, avoid sharp bending, kinking, flattening or twisting, and route the hoses according to Hose Routing section in General Information chapter.
- Tighten the banjo bolts at the hose fittings.

Torque – Brake Hose Banjo Bolts: 25 N-m (2.5 kg-m, 18.0 ft-lb)

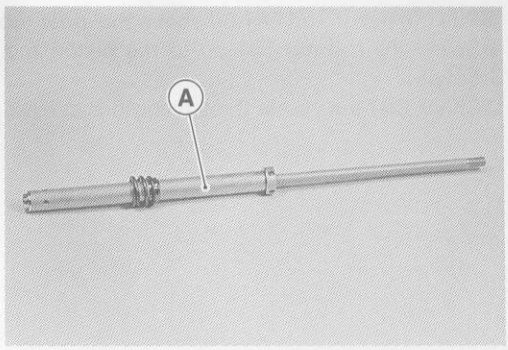
- Bleed the brake line after installing the brake hose (see Bleeding the Brake Line).

Brake Hose Inspection

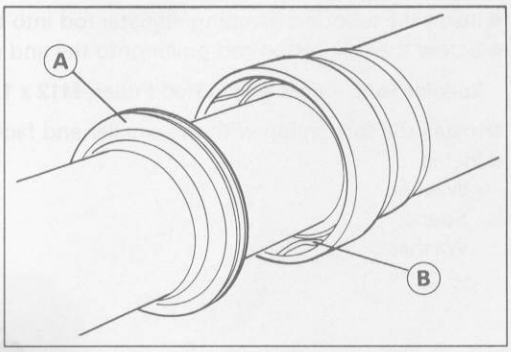
- The high pressure inside the brake line can cause fluid to leak or the hose to burst if the line is not properly maintained. Bend and twist the rubber hose while examining it.

★Replace it if any cracks or bulges are noticed.

●Take the cylinder unit [A].
○Do not disassemble the cylinder unit.

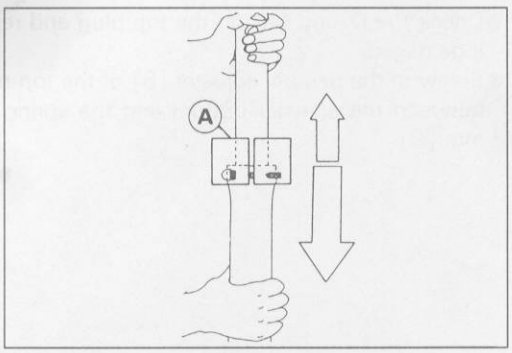


●Separate the inner tube from the outer tube as follows.
○Slide up the dust seal [A].
○Remove the retaining ring [B] from the outer tube.

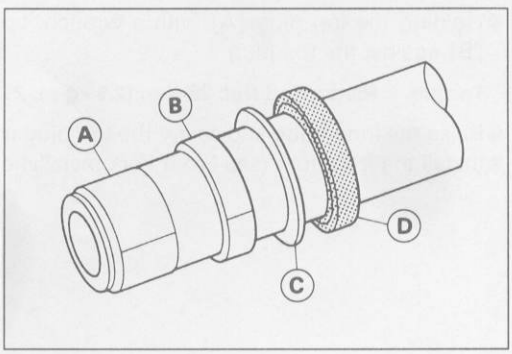


○Grasp the inner tube and stroke the outer tube up and down several times. The shock to the fork seal separates the inner tube from the outer tube.
★If the tubes are tight, use a fork outer tube weight [A].

Special Tool – Fork Outer Tube Weight: 57001-1218



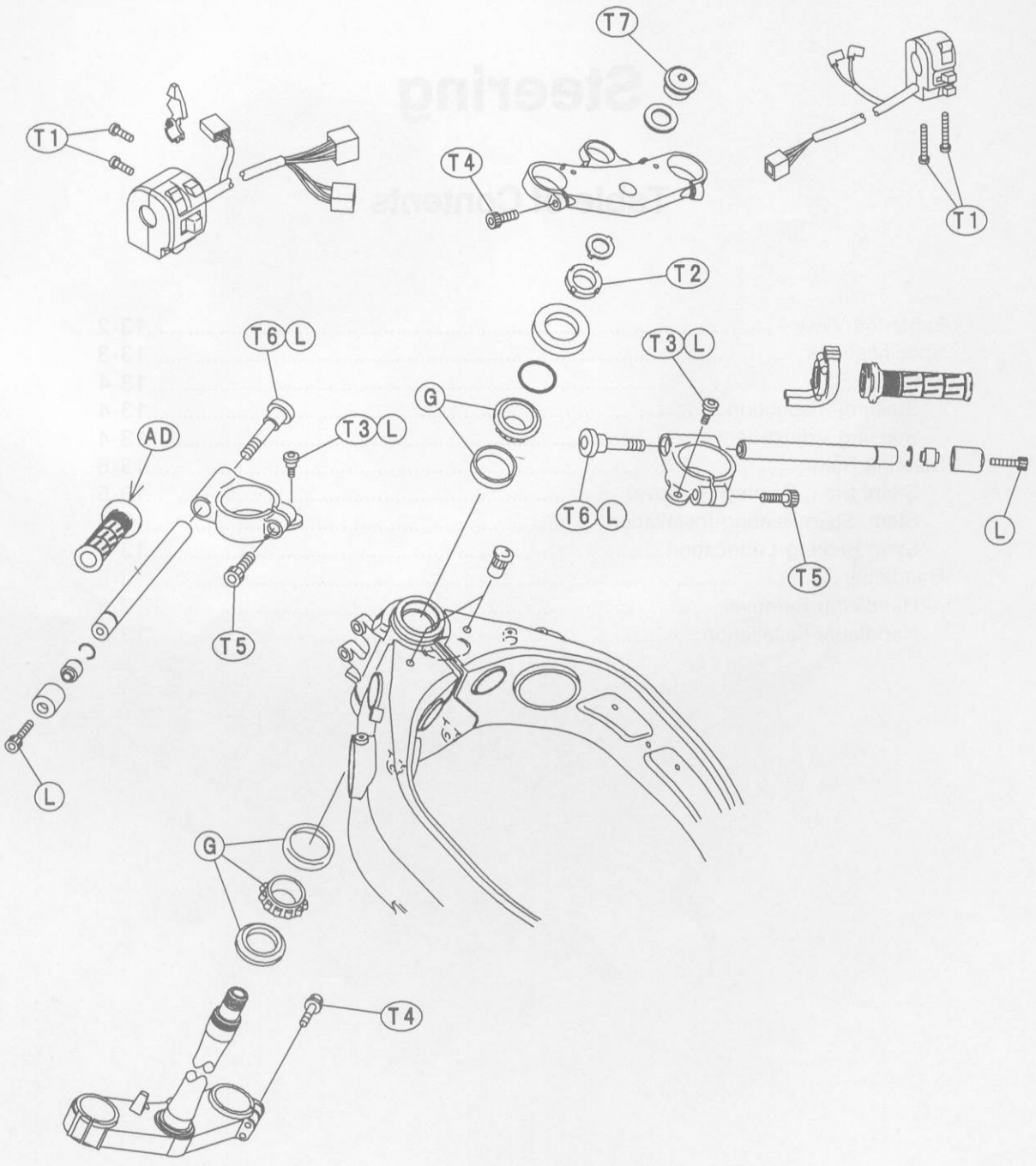
●Remove the inner tube guide bushing [A], outer tube guide bushing [B], washer [C], oil seal [D] from the inner tube.
●Remove the cylinder base from the bottom of the outer tube.



Front Fork Assembly

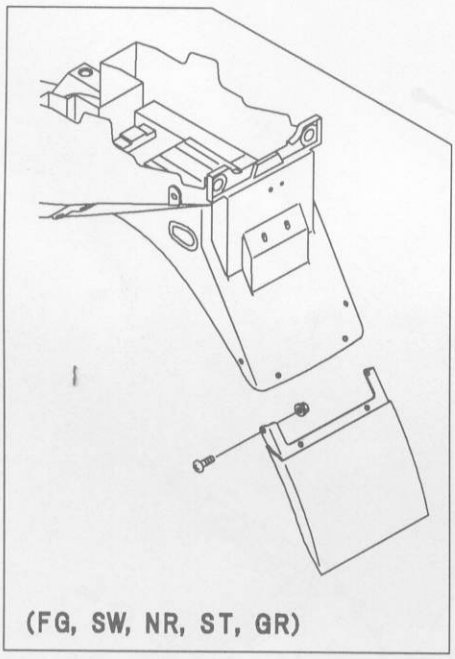
●Replace the following parts with new one.
Oil Seal
Guide Bushings
●Install the following parts onto the inner tube.
Outer Tube Guide Bushing
Inner Tube Guide Bushing

Exploded View

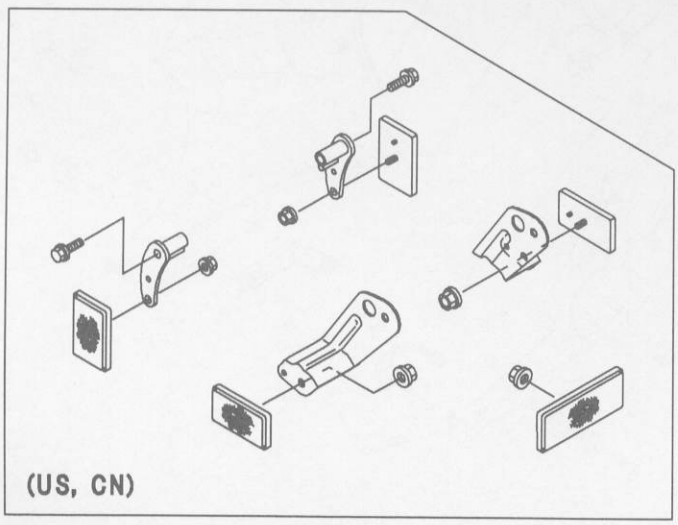


T1: 3.4 N-m (0.35 kg-m, 30 in-lb)
T2: 4.9 N-m (0.50 kg-m, 43 in-lb)
T3: 9.8 N-m (1.0 kg-m, 87 in-lb)
T4: 20 N-m (2.0 kg-m, 14.5 ft-lb)
T5: 23 N-m (2.3 kg-m, 16.5 ft-lb)
T6: 34 N-m (3.5 kg-m, 25 ft-lb)
T7: 49 N-m (5.0 kg-m, 36 ft-lb)

AD: Apply adhesive.
G: Apply grease.
L: Apply a non-permanent locking agent.

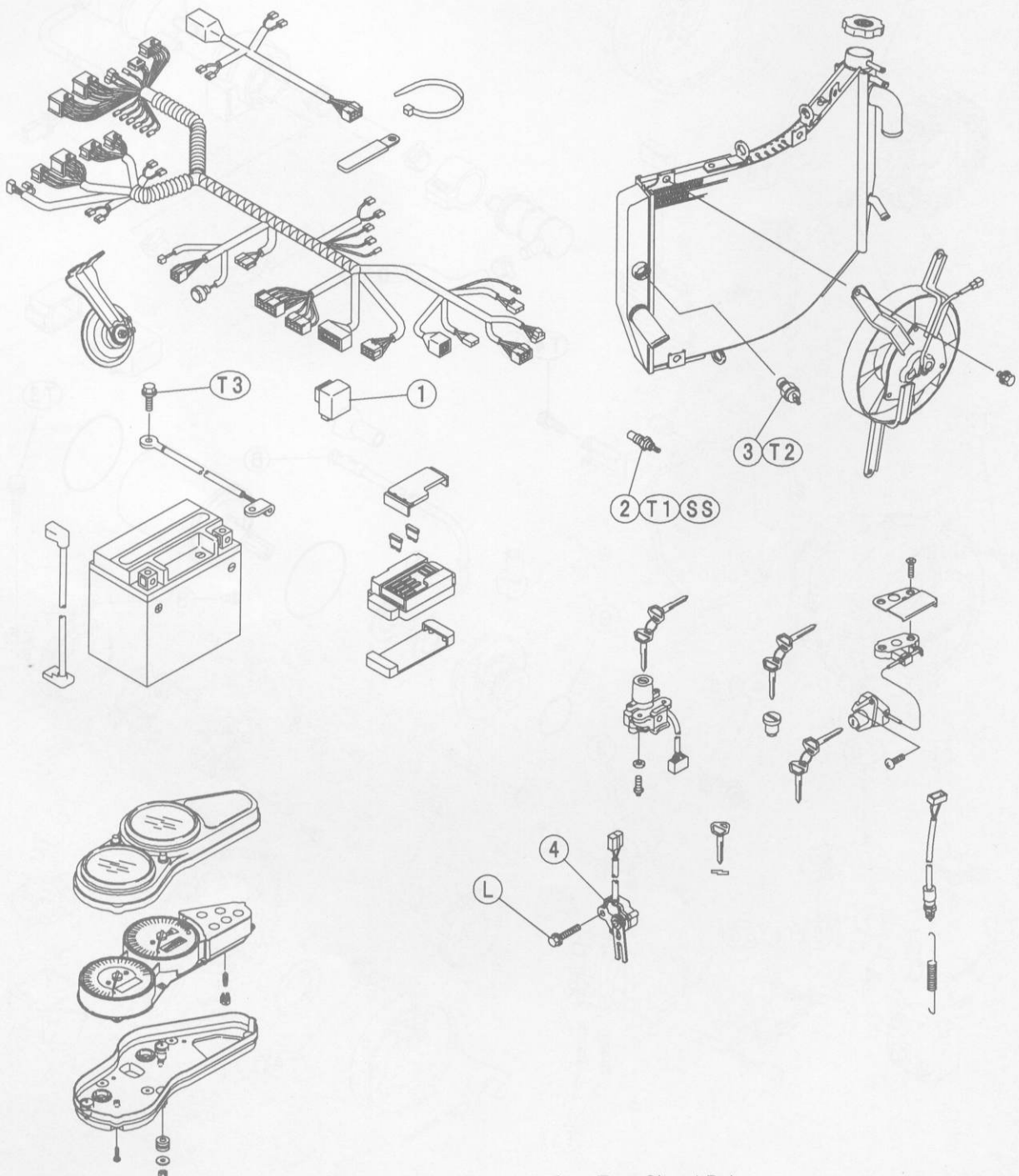


(FG, SW, NR, ST, GR)



(US, CN)

CN: Canada
FG: Germany
GR: Greece
NR: Norway
SW: Sweden
ST: Switzerland
US: U.S.A.



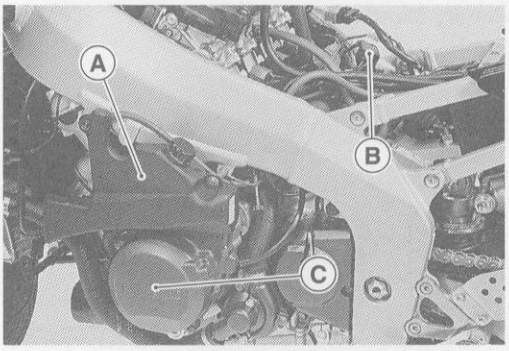
1. Turn Signal Relay
2. Water Temperature Sensor
3. Fan Switch
4. Side Stand Switch

SS: Apply silicone sealant.
L: Apply a non-permanent locking agent.

T1: 7.8 N-m (0.80 kg-m, 69 in-lb)
T2: 18 N-m (1.8 kg-m, 13.0 ft-lb)
T3: 9.8 N-m (1.0 kg-m, 87 in-lb)

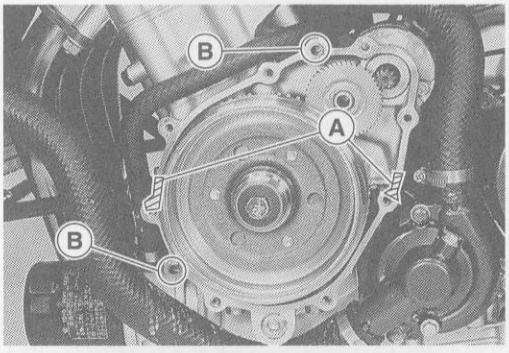
Charging System

Alternator Cover Removal



- Remove:
  Left Lower Fairing (see Frame chapter)
  Coolant Reserve Tank [A]
  Fuel Tank (see Fuel System chapter)
  Alternator Lead Connector [B]
- Place a suitable container under the alternator cover [C], and remove the cover.

Alternator Cover Installation



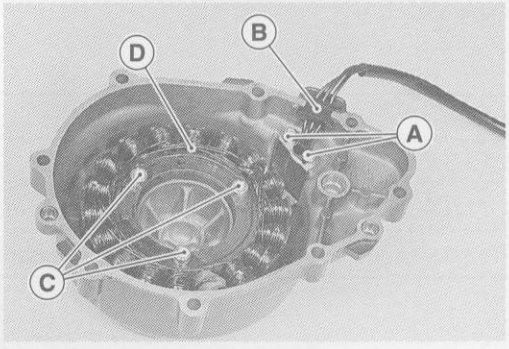
- Apply silicone sealant to the alternator lead grommet and crankcase halves mating surface [A] on the front and rear sides of the cover mount.

  Sealant – Kawasaki Bond (Silicone Sealant): 56019-120

- Check that knock pins [B] are in place on the crankcase.
- Install a new gasket and the alternator cover.
- Tighten the cover bolts.

  Torque – Alternator Cover Bolts: 12 N-m (1.2 kg-m, 104 in-lb)

Stator Coil Removal



- Remove:
  Alternator Cover (see Alternator Cover Removal)
  Holding Plate Bolts [A] and Plate
  Alternator Lead Grommet [B]
  Stator Coil Bolts [C]
- Remove the stator coil [D] from the alternator cover.

Stator Coil Installation

- Apply a non-permanent locking agent to the threads of the stator coil bolts and tighten them.

  Torque – Stator Coil Bolts: 12 N-m (1.2 kg-m, 104 in-lb)

- Apply silicone sealant to the circumference of the alternator lead grommet, and fit the grommet into the notch of the cover securely.

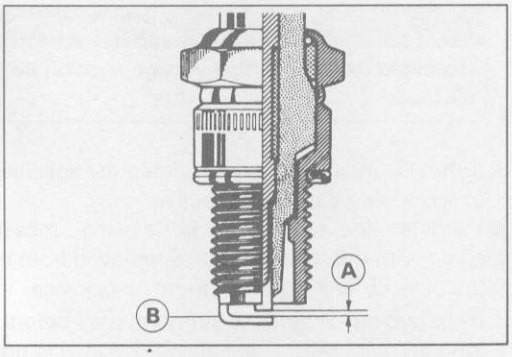
  Sealant – Kawasaki Bond (Silicone Sealant): 56019-120

- Secure the alternator lead with a holding plate, and apply a non-permanent locking agent to the threads of the plate bolts and tighten them.

  Torque – Alternator Lead Holding Plate Bolts: 8.3 N-m (0.85 kg-m, 74 in-lb)

- Install the alternator cover (see Alternator Cover Installation).

Spark Plug Gap Inspection



- Measure the gap [A] with a wire-type thickness gauge.

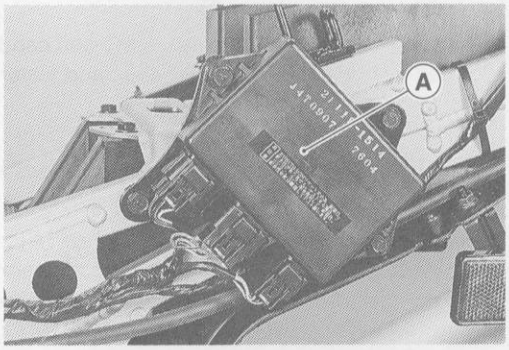
★If the gaps are incorrect, carefully bend the side electrode [B] with a suitable tool to obtain the correct gaps.

Spark Plug Gap : 0.7 ~ 0.8 mm

IC Igniter Inspection

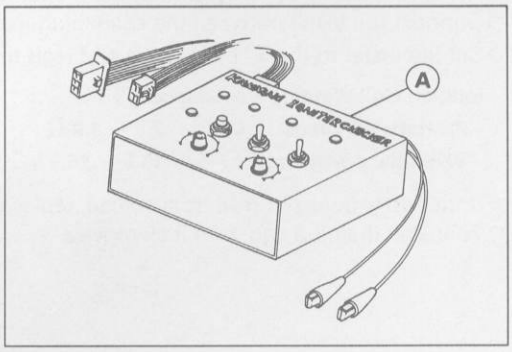
CAUTION

When inspecting the IC igniter observe the following to avoid damage to the IC Igniter.
Do not disconnect the IC igniter with the ignition switch on. This may damage the IC igniter.
Do not disconnect the battery leads while the engine is running. This may damage the IC igniter.



- Remove the seats (see Frame chapter).
- Remove the IC igniter [A] and disconnect the connectors.
- To check the condition of the IC igniter, connect the igniter checker [A] to the IC igniter.
- Set the select switch at A position.

Special Tools – Igniter Checker Assembly: 57001-1378
Harness Adapter #13: 57001-1399



NOTE

- *When using the igniter checker, refer to the manufacturer's instructions.*
- *Using the igniter checker is a more reliable way to determine the condition of the IC igniter than igniter internal resistance measurements.*
- *The igniter checker can detect the simulated dynamic characteristics: igniter response to r.p.m., interlock circuit signal, tachometer signal and engine over speed limiter signal.*
- *The igniter checker cannot inspect the condition of the CDI unit.*

★If the igniter checker is not available, the IC igniter can be checked for a broken or badly shorted wiring with the hand tester.

- Set the hand tester to the x 1 kΩ range and make the measurements shown in the table.

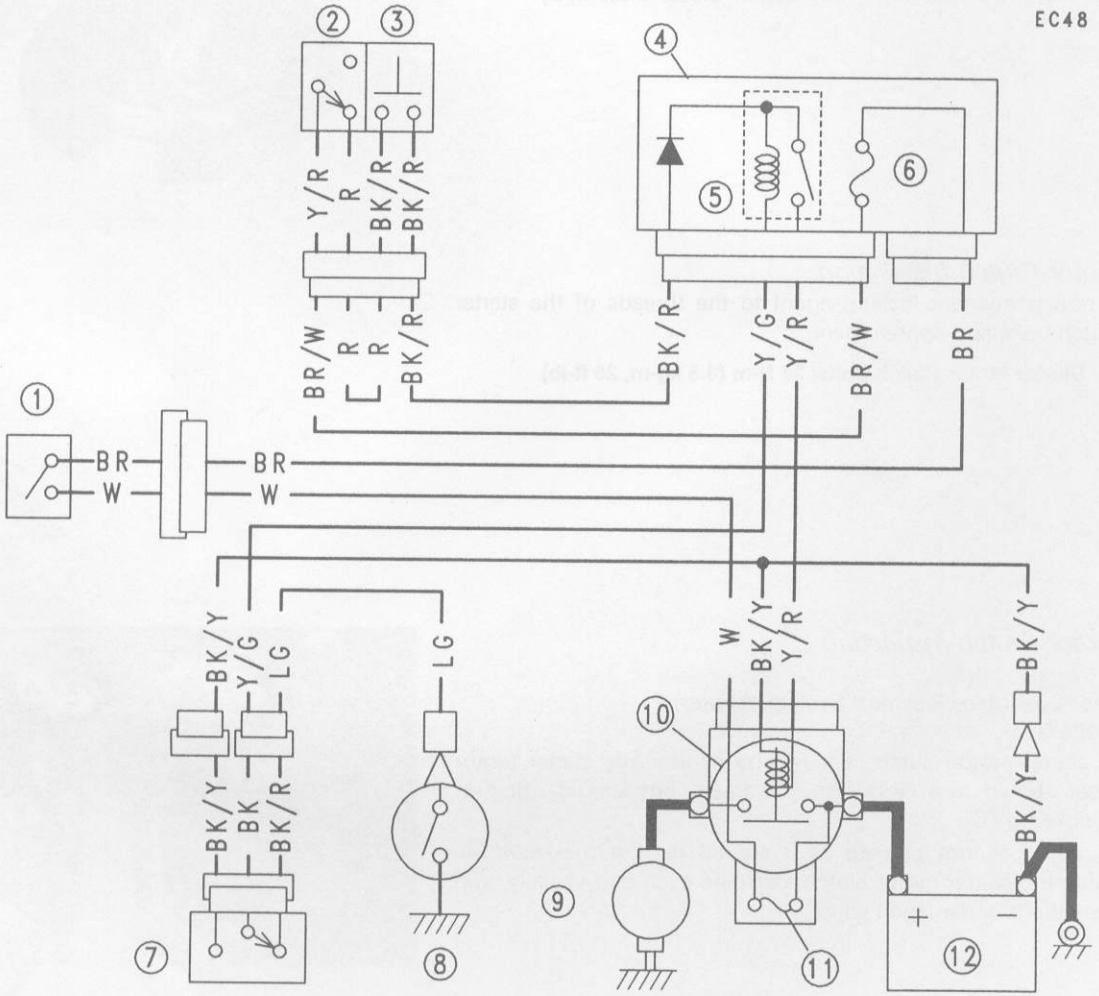
Special Tool – Hand Tester: 57001-1394

★If the tester readings are not as specified, replace the IC igniter.

CAUTION

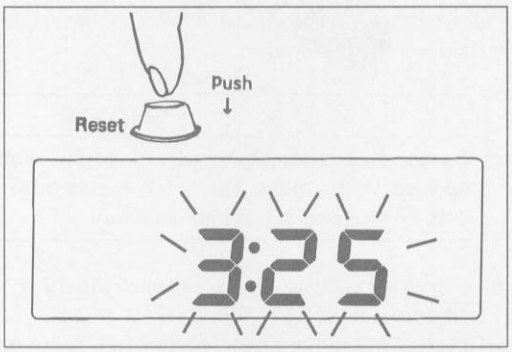
Use only Hand Tester 57001-1394 for this test. A tester other than the Kawasaki Hand Tester may show different readings.
If a megger or a meter with a large-capacity battery is used, the IC igniter will be damaged.

Electric Starter Circuit

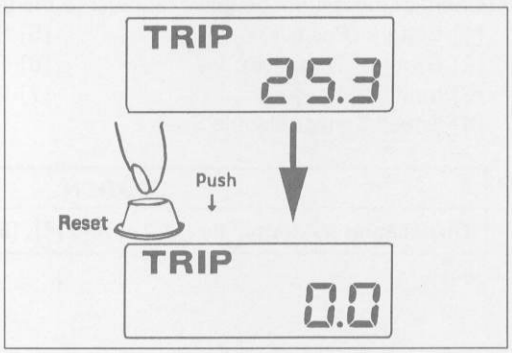


1. Ignition Switch
2. Engine Stop Switch
3. Starter Button
4. Junction Box
5. Starter Circuit Relay
6. Ignition Fuse 10A
7. Starter Lockout Switch
8. Neutral Switch
9. Starter Motor
10. Starter Relay
11. Main Fuse 30A
12. Battery

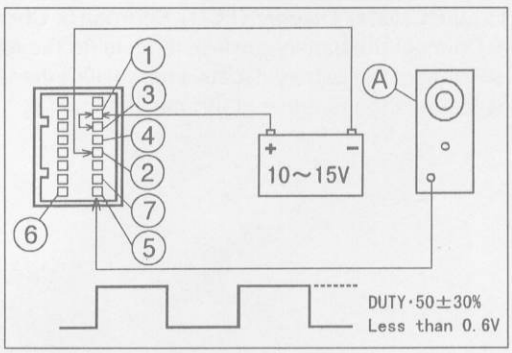
● Indicate the clock mode.
● Check that when the RESET button is pushed for more than two seconds, the meter display turns to the clock set mode.
● Check that it is possible to adjust hours and minutes.
★ If the display function does not work and can not be adjusted, replace the meter assembly.



● Indicate the trip mode.
● Check that when the RESET button is pushed for more than two seconds, the figure display turns to 0.0.
★ If the figure display does not turn to 0.0, replace the meter assembly.



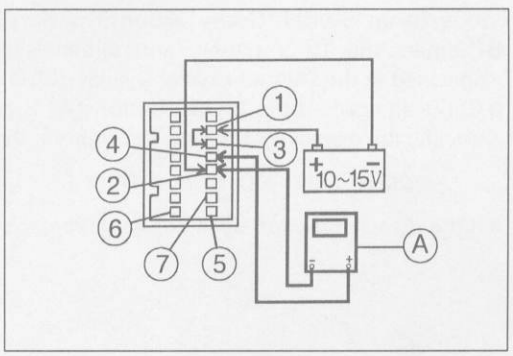
Speedometer Check:
● Connect the 12 V battery and terminals in the same manner as specified in the "Liquid Crystal Display (LCD) Segments Check".
● The speed equivalent to the input frequency is indicated in the oscillator [A], if the square wave is input into the terminal [5].
○ Indicates approximately 60 mph in case the input frequency would be approximately 138 Hz.
○ Indicates approximately 60 km/h in case the input frequency would be approximately 89.0 Hz.



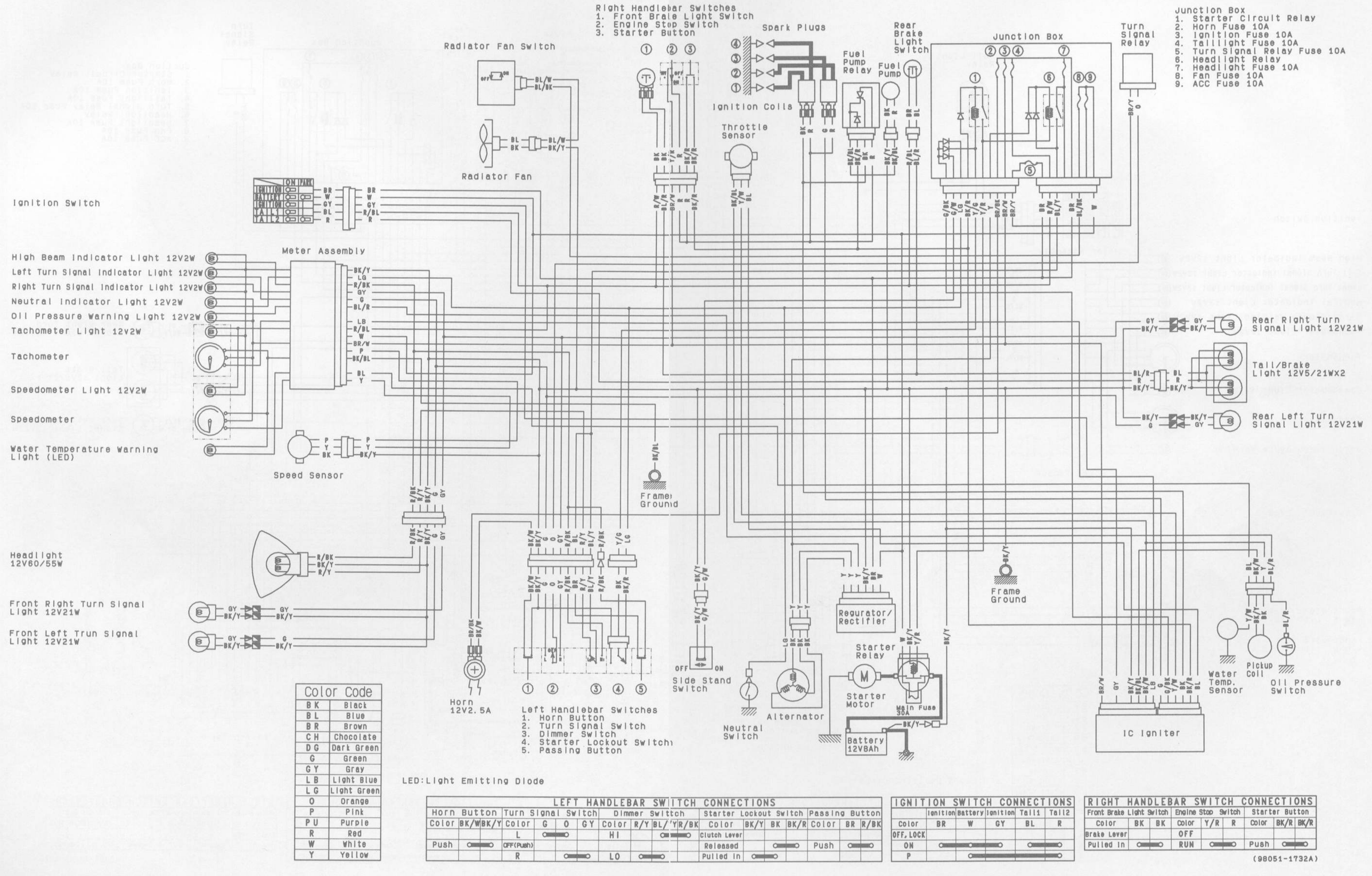
● If the oscillator is not available, the speedometer can be checked as follows.
○ Install the meter unit.
○ Raise the rear wheel off the ground, using the jack.
○ Turn on the ignition switch.
○ Rotate the rear wheel by hand.
○ Check that the speedometer shows the speed.
★ If the speedometer does not work, check the speed sensor electric source voltage and speed sensor.

Speed Sensor Electric Source Check:
● Connect the 12 V battery and terminals in the same manner as specified in the "Liquid Crystal Display (LCD) Segments Check".
● Set the hand tester to the DC25 V range and connect it to the terminals [2] and [4].
★ If the voltage is less than 7 V, replace the meter assembly.

CAUTION
Do not short the terminals [2], [4] and [4], [5].



Wiring Diagram (Australia)



Color Code	
BK	Black
BL	Blue
BR	Brown
CH	Chocolate
DG	Dark Green
G	Green
GY	Gray
LB	Light Blue
LG	Light Green
O	Orange
P	Pink
PU	Purple
R	Red
W	White
Y	Yellow

LED: Light Emitting Diode

LEFT HANDLEBAR SWITCH CONNECTIONS																	
Horn Button			Turn Signal Switch				Dimmer Switch				Starter Lockout Switch				Passing Button		
Color	BK/W	BK/Y	Color	G	O	GY	Color	R/Y	BL/Y	R/BK	Color	BK/Y	BK	BK/R	Color	BR	R/BK
			L	○	○		HI		○	○	Clutch Lever						
Push	○	○	OFF(Push)								Released		○		Push	○	
			R		○		LO	○			Pulled In	○					

IGNITION SWITCH CONNECTIONS					
	Ignition	Battery	Ignition	Tail1	Tail2
Color	BR	W	GY	BL	R
OFF, LOCK					
ON	○	○	○	○	
P		○	○	○	○

RIGHT HANDLEBAR SWITCH CONNECTIONS								
Front Brake Light Switch			Engine Stop Switch			Starter Button		
Color	BK	BK	Color	Y/R	R	Color	BK/R	BK/R
Brake Lever			OFF					
Pulled In	○		RUN	○		Push	○	

(98051-1732A)

Nut, Bolt, and Fastener Tightness

Tightness Inspection

● Check the tightness of the bolts and nuts listed here. Also, check to see that each cotter pin is in place and in good condition.

NOTE

○ *For the engine fasteners, check the tightness of them when the engine is cold (at room temperature).*

★ If there are loose fasteners, retorque them to the specified torque following the specified tightening sequence. Refer to the appropriate chapter for torque specifications. If torque specifications are not in the appropriate chapter, see the Standard Torque Table. For each fastener, first loosen it by 1/2 turn, then tighten it.

★ If cotter pins are damaged, replace them with new ones.

Nut, Bolt and Fastener to be checked

Wheels:
- Front Axle Nut
- Front Axle Clamp Bolts
- Rear Axle Nut
- Rear Axle Nut Cotter Pin

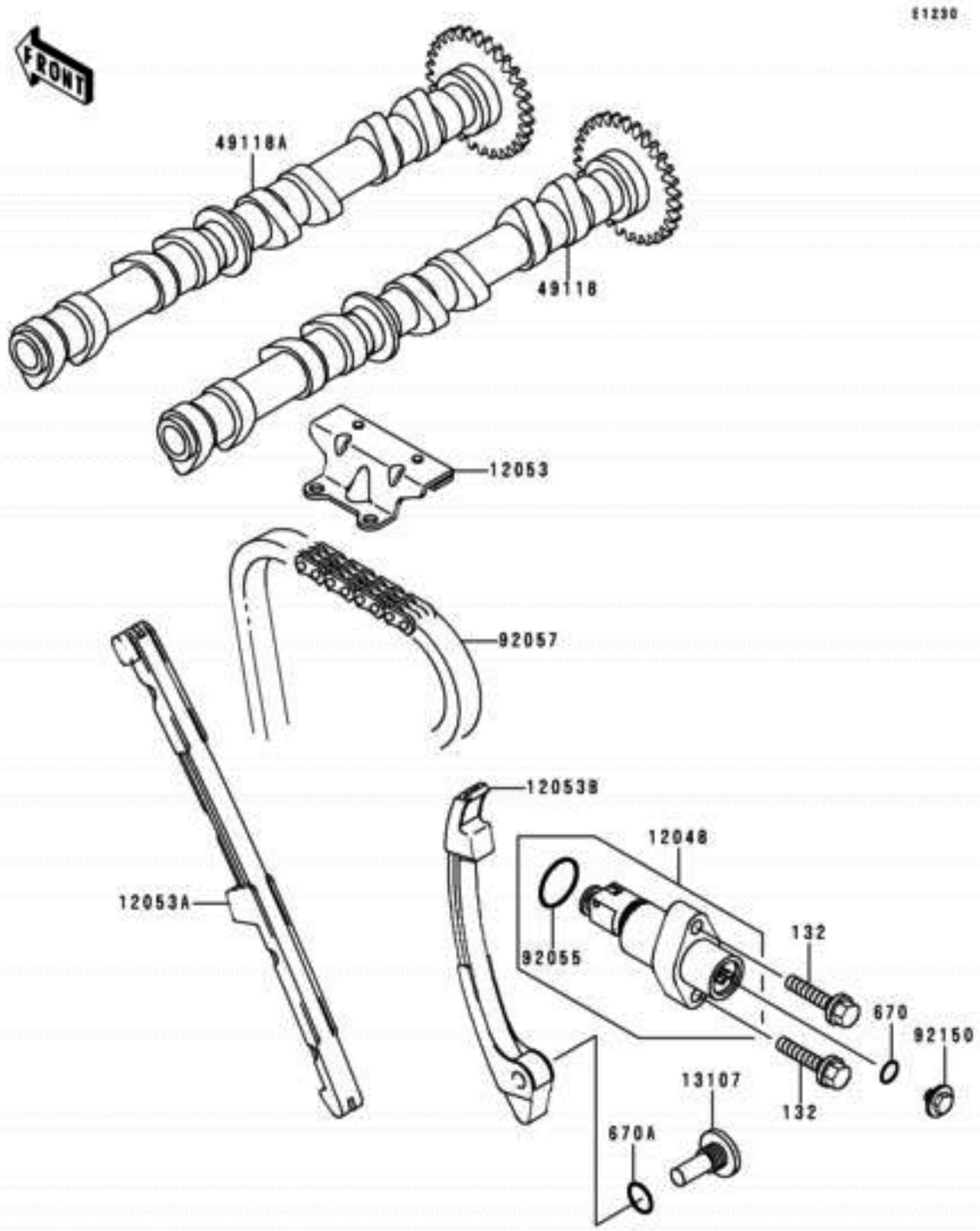
Brakes:
- Front Master Cylinder Clamp Bolts
- Caliper Mounting Bolts
- Rear Master Cylinder Mounting Bolts
- Brake Lever Pivot Nut
- Brake Pedal Bolt
- Brake Rod Joint Cotter Pin

Suspension:
- Front Fork Clamp Bolts
- Front Fender Mounting Bolts
- Rear Shock Absorber Mounting Bolts
- Swingarm Pivot Shaft Nut
- Uni-Trak Link Nuts

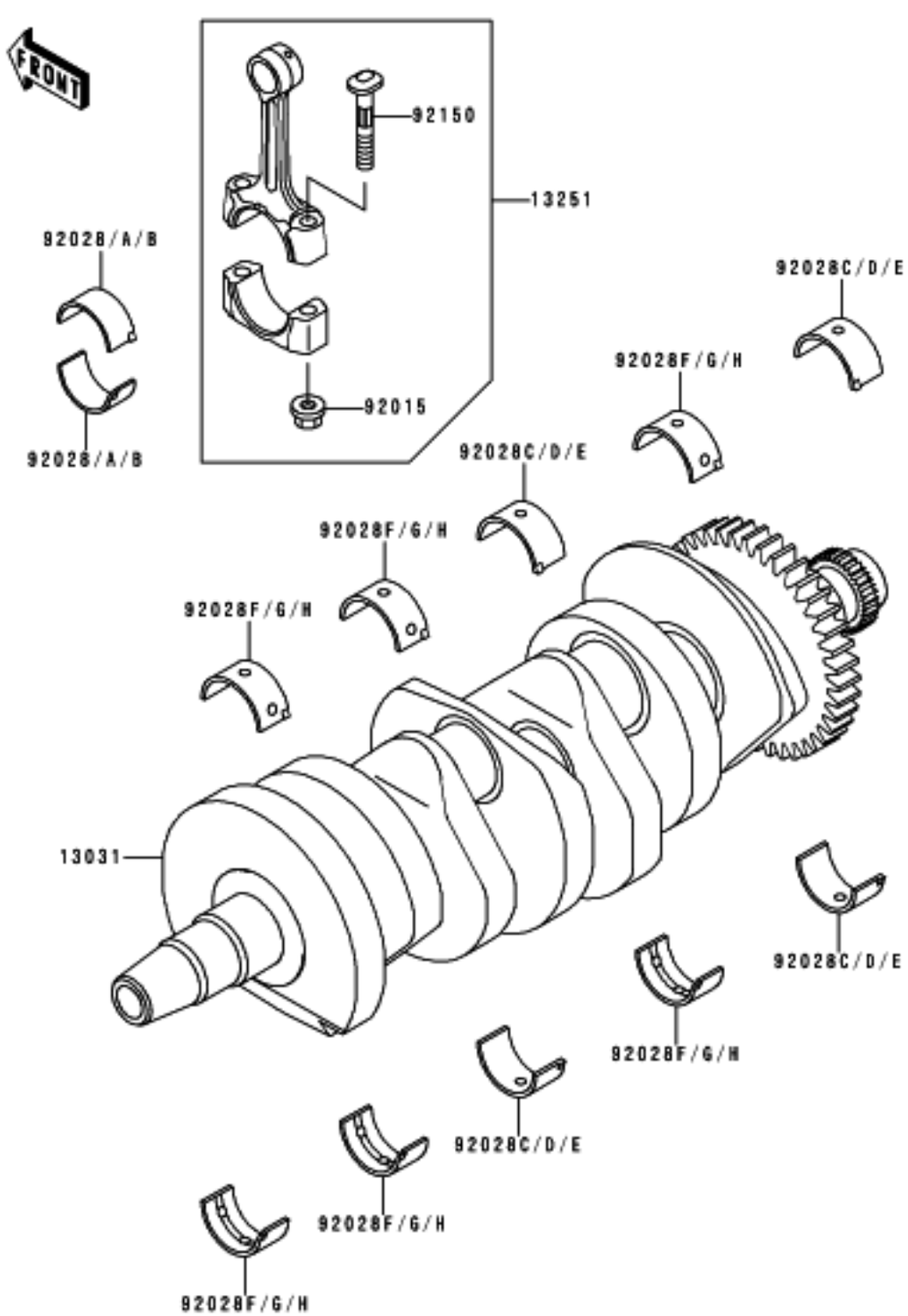
Steering:
- Stem Head Nut
- Handlebar Mounting Bolts

Engine:
- Engine Mounting Bolts
- Cylinder Head Bolts
- Muffler Mounting Bolts
- Exhaust Pipe Holder Nuts
- Muffler Connecting Clamp Bolt
- Clutch Lever Pivot Nut

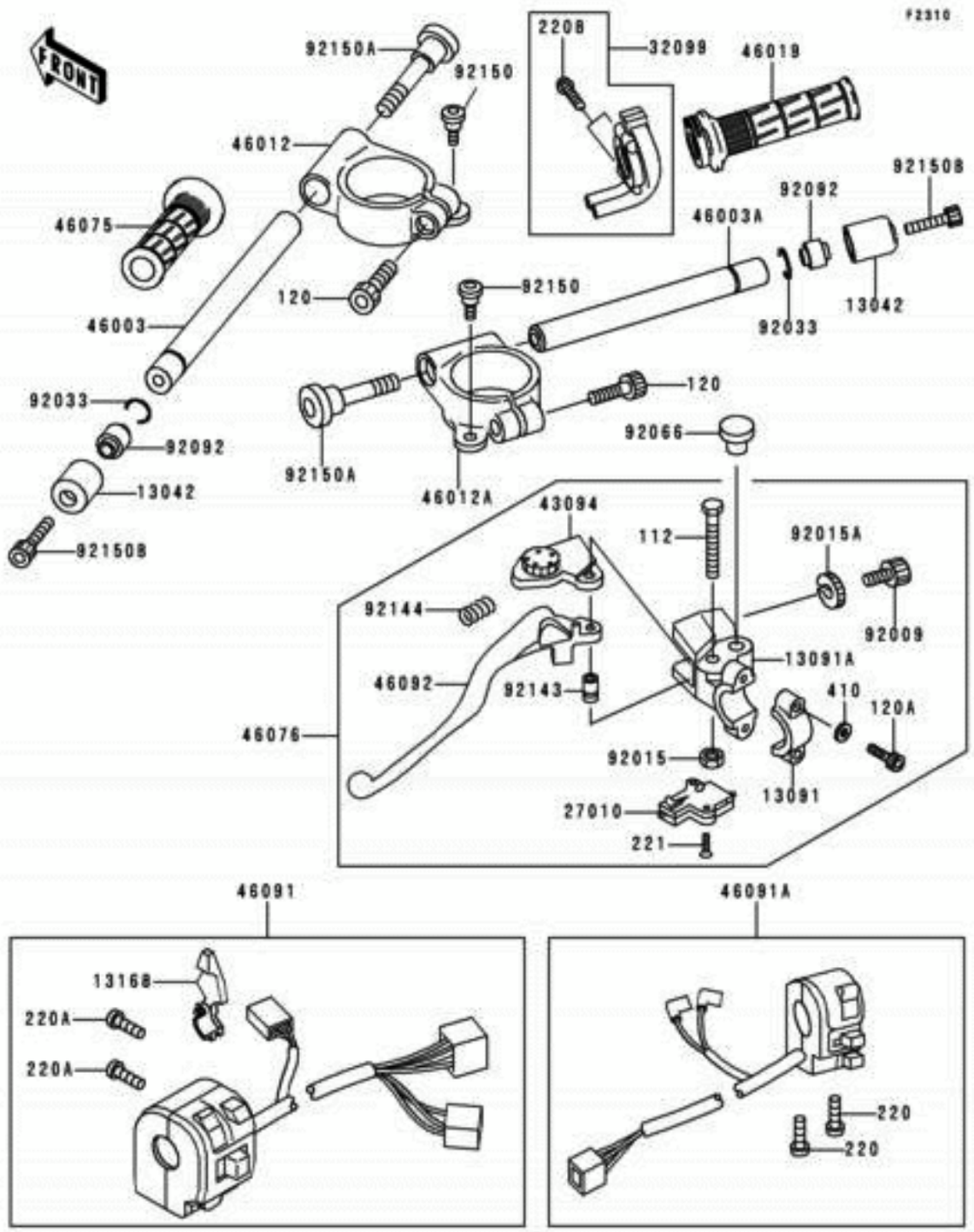
Others:
- Side Stand Bolt
- Footpeg Mounting Bolts
- Footpeg Bracket Mounting Bolts



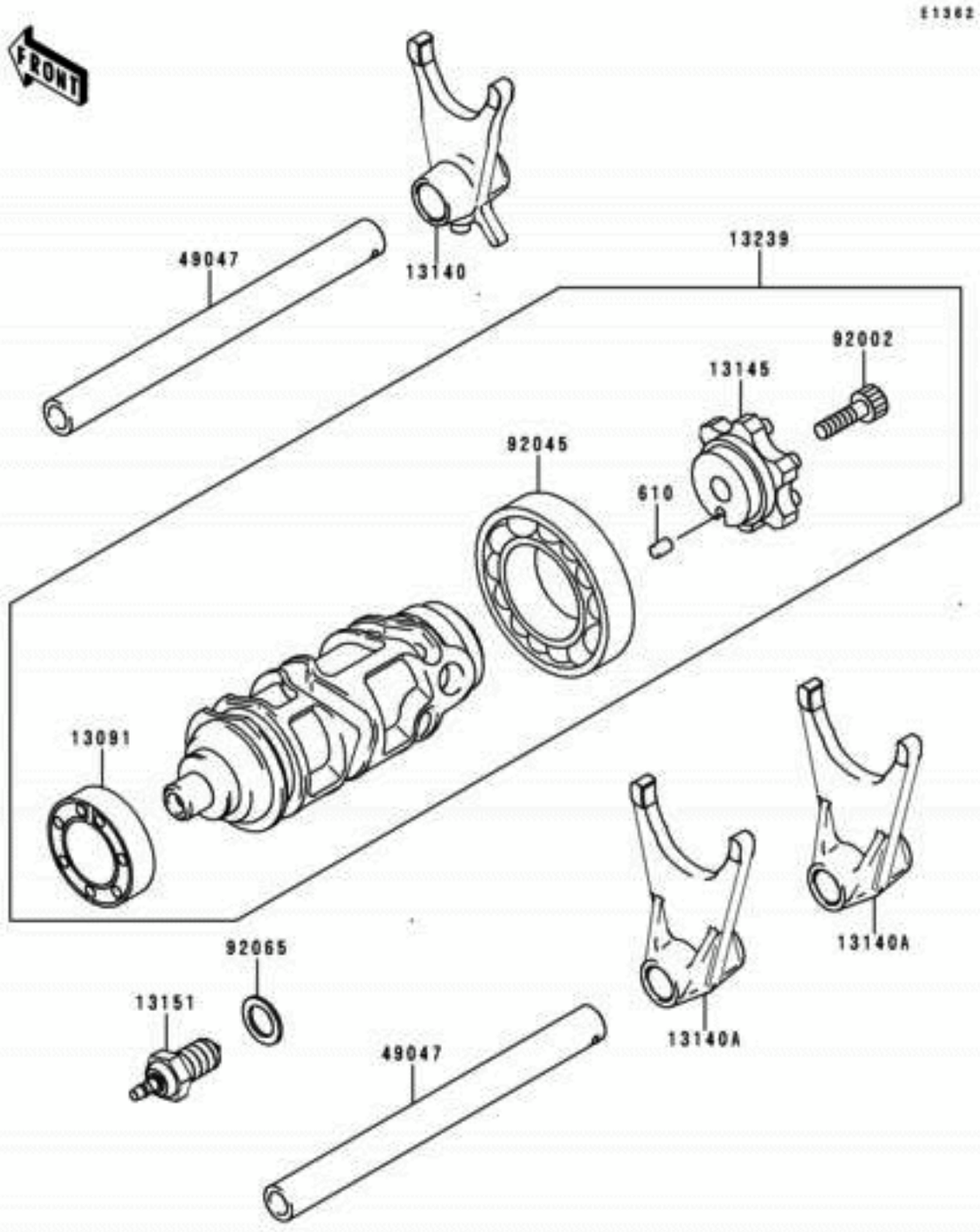
Ref #	Part #		Description	Qty	Spec Code	Price
132	132J0625	INFO	BOLT-FLANGED-SMALL	2		
670	670D2010	INFO	O RING	1		
670A	670D2014	INFO	O RING,14MM	1		
12048	12048-1159	INFO	TENSIONER-ASSY	1		
12053	12053-1352	INFO	GUIDE-CHAIN,UPP	1		
12053A	12053-1408	INFO	GUIDE-CHAIN,FR	1		
12053B	12053-1409	INFO	GUIDE-CHAIN,RR	1		
13107	13107-1226	INFO	SHAFT	1		
49118	49118-1173	INFO	CAMSHAFT-COMP,INTAKE	1		
49118A	49118-1174	INFO	CAMSHAFT-COMP,EXHAUST	1		
92055	92055-1583	INFO	RING-O,TENSIONER	1		
92057	92057-1397	INFO	CHAIN,CAM,92RH2015	1		
92150	92150-1380	INFO	BOLT,TENSIONER	1		



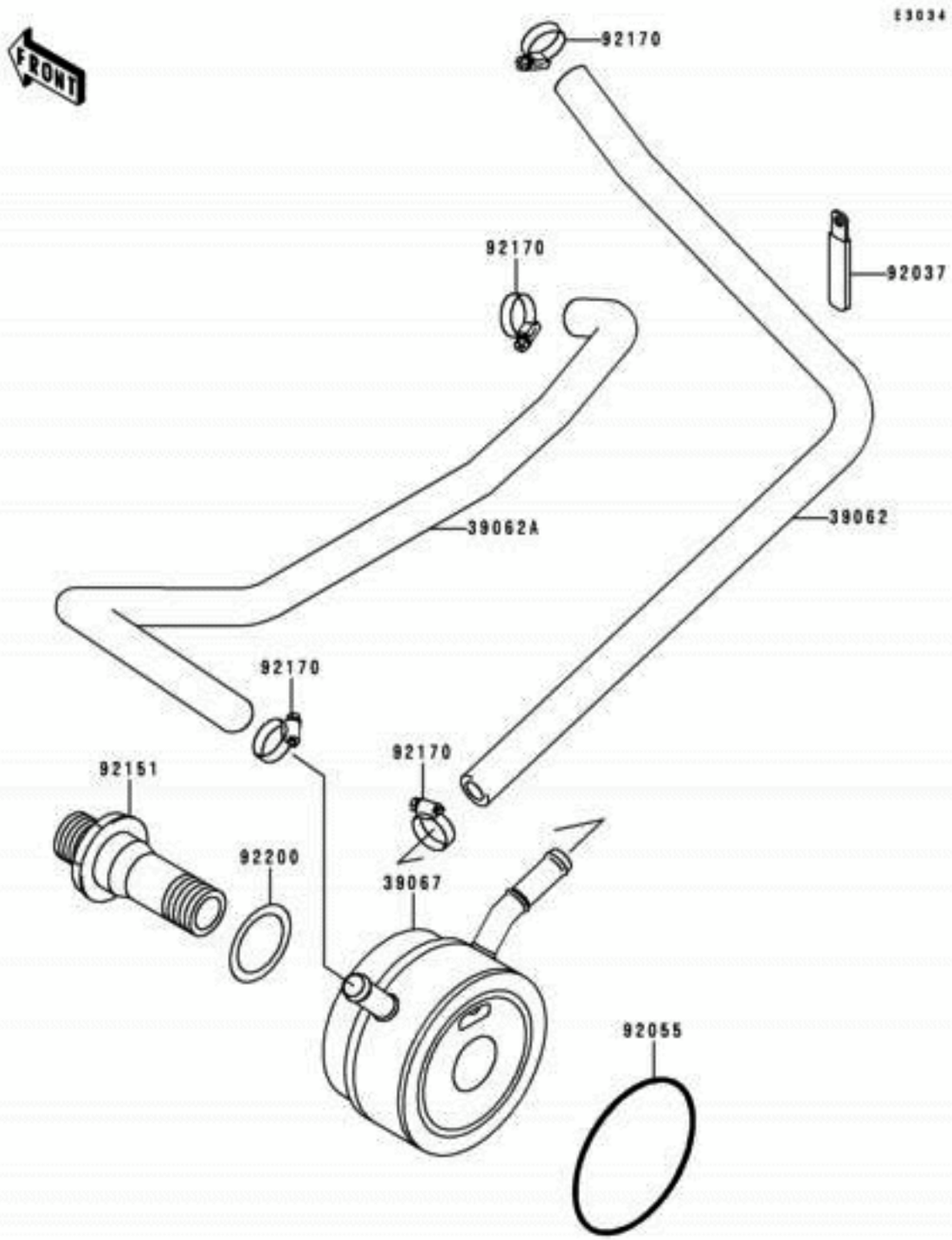
Ref #	Part #		Description	Qty	Spec Code	Price
13031	13031-1437	INFO	CRANKSHAFT-COMP	1		
13251	13251-1120-JJ	INFO	ROD-ASSY-CONNECTING,J	4		
92015	92015-1527	INFO	NUT,CONNECTING ROD,7MM	8		
92028	92028-1878	INFO	BUSHING,CONNECTING ROD,BLACK	AR		
92028A	92028-1879	INFO	BUSHING,CONNECTING ROD,BROWN	8		
92028B	92028-1880	INFO	BUSHING,CONNECTING ROD,PINK	AR		
92028C	92028-1881	INFO	BUSHING,CRANKSHAFT,BLUE	4		
92028D	92028-1882	INFO	BUSHING,CRANKSHAFT,BLACK	AR		
92028E	92028-1883	INFO	BUSHING,CRANKSHAFT,BROWN	AR		
92028F	92028-1884	INFO	BUSHING,CRANKSHAFT,BLUE	6		
92028G	92028-1885	INFO	BUSHING,CRANKSHAFT,BLACK	AR		
92028H	92028-1886	INFO	BUSHING,CRANKSHAFT,BROWN	AR		
92150	92150-1683	INFO	BOLT,CONNECTING ROD,7MM	8		



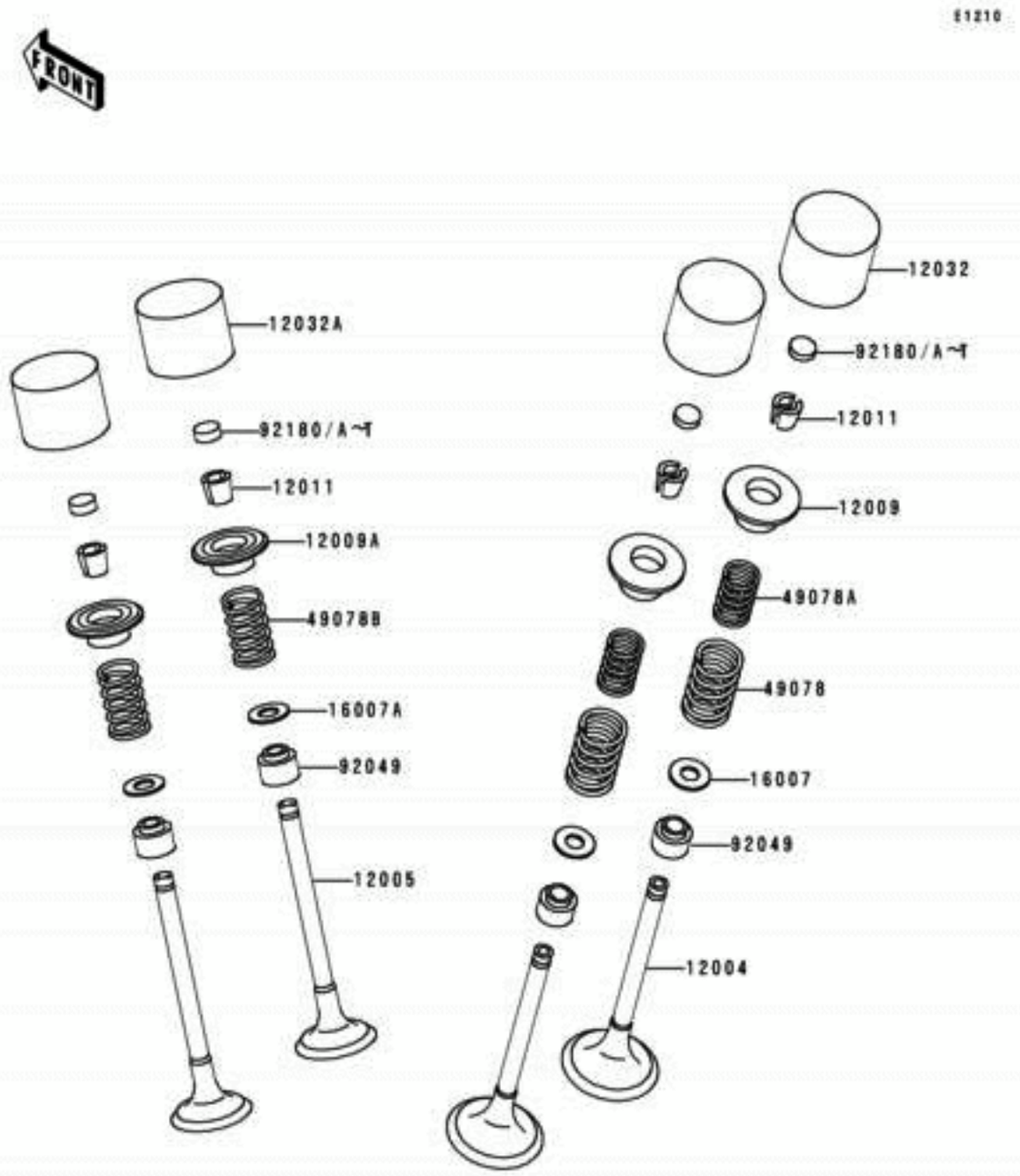
Ref #	Part #		Description	Qty	Spec Code	Price
23007	23007-1347	INFO	LENS-COMP,HEAD LAMP	1		
49016	49016-1193	INFO	COVER-SEAL,HEAD LAMP	1		
92015	92015-1094	INFO	NUT,6MM	4		
92069	92069-1002	INFO	BULB,12V 60/55W,H4	1		
92151	92151-1241	INFO	BOLT,6X25	4		
92160	92160-1007	INFO	DAMPER	2		



Ref #	Part #		Description	Qty	Spec Code	Price
610	610A0406	INFO	ROLLER,4X6	1		
13091	13091-1791	INFO	HOLDER	1		
13140	13140-1231	INFO	FORK-SHIFT,INPUT	1		
13140A	13140-1232	INFO	FORK-SHIFT,OUTPUT	2		
13145	13145-1082	INFO	CAM-CHANGE DRUM	1		
13151	13151-1085	INFO	SWITCH-COMP	1		
13239	13239-1192	INFO	DRUM-ASSY-CHANGE	1		
49047	49047-1096	INFO	ROD-SHIFT,IN	2		
92002	92002-1696	INFO	BOLT,SOCKET,6X25	1		
92045	92045-1045	INFO	BEARING-BALL,16006(NTN)	1		
92065	92065-058	INFO	GASKET,10.5X16X1,DRAIN PLUG	1		



Ref #	Part #		Description	Qty	Spec Code	Price
39062	39062-1748	INFO	HOSE-COOLING,COOLER-RADIATOR	1		
39062A	39062-1749	INFO	HOSE-COOLING,COOLER-CYLINDER	1		
39067	39067-1066	INFO	COOLER-OIL	1		
92037	92037-1069	INFO	CLAMP,WIRING HARNESS,L=60	1		
92055	92055-1581	INFO	RING-O,OIL COOLER	1		
92151	92151-1366	INFO	BOLT,OIL COOLER	1		
92170	92170-1287	INFO	CLAMP,COOLING HOSE	4		
92200	92200-1379	INFO	WASHER,OIL COOLER	1		



Ref #	Part #		Description	Qty	Spec Code	Price
12004	12004-1120	INFO	VALVE-INTAKE	8		
12005	12005-1214	INFO	VALVE-EXHAUST	8		
12009	12009-1059	INFO	RETAINER-VALVE SPRING	8		
12009A	12009-1076	INFO	RETAINER-VALVE SPRING	8		
12011	12011-1052	INFO	COLLET	32		
12032	12032-1060	INFO	TAPPET	8		
12032A	12032-1061	INFO	TAPPET	8		
16007	16007-1159	INFO	SEAT-SPRING	8		
16007A	16007-1160	INFO	SEAT-SPRING	8		
49078	49078-1134	INFO	SPRING-ENGINE VALVE,INTAKE,OUT	8		
49078A	49078-1135	INFO	SPRING-ENGINE VALVE,INTAKE,INN	8		
49078B	49078-1143	INFO	SPRING-ENGINE VALVE,EXHAUST	8		
92049	92049-1308	INFO	SEAL-OIL,VALVE GUIDE	16		
92180	92180-1014	INFO	SHIM,T=2.50	AR		
92180A	92180-1016	INFO	SHIM,T=2.55	AR		
92180B	92180-1018	INFO	SHIM,T=2.60	AR		
92180C	92180-1020	INFO	SHIM,T=2.65	AR		
92180D	92180-1022	INFO	SHIM,T=2.70	AR		
92180E	92180-1024	INFO	SHIM,T=2.75	AR		
92180F	92180-1026	INFO	SHIM,T=2.80	AR		
92180G	92180-1028	INFO	SHIM,T=2.85	AR		
92180H	92180-1030	INFO	SHIM,T=2.90	AR		
92180I	92180-1032	INFO	SHIM,T=2.95	AR		
92180J	92180-1034	INFO	SHIM,T=3.00	AR		
92180K	92180-1036	INFO	SHIM,T=3.05	AR		
92180L	92180-1038	INFO	SHIM,T=3.10	AR		
92180M	92180-1040	INFO	SHIM,T=3.15	AR		
92180N	92180-1042	INFO	SHIM,T=3.20	AR		
92180O	92180-1044	INFO	SHIM,T=3.25	AR		
92180P	92180-1046	INFO	SHIM,T=3.30	AR		
92180Q	92180-1048	INFO	SHIM,T=3.35	AR		
92180R	92180-1050	INFO	SHIM,T=3.40	AR		
92180S	92180-1052	INFO	SHIM,T=3.45	AR		
92180T	92180-1054	INFO	SHIM,T=3.50	AR		