REPLACES: Please discard bulletin MC19-01 dated February 15, 2019.

TITLE: INSPECT & REPLACE ABS HYDRAULIC UNIT

RECALL

THIS BULLETIN IS OF THE HIGHEST PRIORITY AND MUST BE ACTED UPON IMMEDIATELY TO ENSURE CUSTOMER SAFETY.

Eligibility

Eligible Units

Year	Model	Model Codes	VIN Eligibility
2019	Z900 ABS	ZR900BKF ZR900BKFL	Check VIP in K-Dealer
2019	Z900 RS ABS	ZR900CKFB ZR900CKFBL	
2019	Z900 RS CAFE ABS	ZR900EKF ZR900EKFL	

Verify eligibility using VIP in K-Dealer before starting the repair.

Please check VIP (Vehicle Information Portal) in K-Dealer for other possible repair campaigns for eligible units.

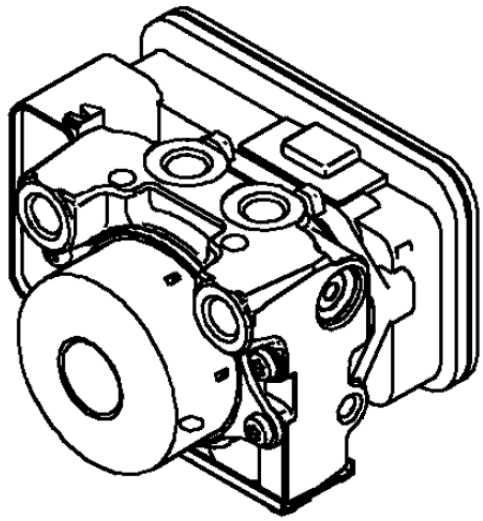
Subject

On affected units, the ABS hydraulic unit may have been contaminated with debris during the manufacturing process. Contamination could result in improper functioning of the anti-lock braking system, allowing the front or rear tire to lock during operation of the anti-lock braking system, creating the potential for a crash resulting in injury or death.

Kawasaki Action

Initiate Campaign:
Kawasaki has initiated a Recall campaign to repair all eligible units. The repair consists of inspecting and replacing the ABS hydraulic unit if it is found to be defective.

Notify Registered Owners:
Kawasaki is sending a Recall letter to all registered owners of eligible units. A copy of the letter is printed on page 36 of this bulletin.



Kawasaki

Dealer Action

Repair Eligible Units:
Repair all eligible units including sold units in the field and unsold units in your dealership inventory prior to delivery to the retail purchaser. It is the obligation of authorized Kawasaki retail Dealers to repair eligible units in Dealer's possession prior to retail sale. Failure to comply with this obligation to repair all units eligible for Recall or FDM campaigns by the Dealer constitutes a breach of the Dealer Sales and Service Agreement. Refer to Service Policies bulletin SP 08-01. Refer to the Replacement, Inspection and Test Procedure sections of this bulletin for details.

IMPORTANT NOTE:

- *It's the law! Under the U.S. National Highway Traffic Safety Administration (NHTSA), Federal Law 49 U.S.C. Section 30120(i) requires dealers to perform Recall repairs before delivering any vehicle affected by the Recall to a purchaser.*

Document Completed Repairs:
Federal law requires manufacturers to maintain accurate follow-up records on repairs performed on eligible units. Dealers MUST submit a Warranty Claim for each repair. Refer to the Warranty Information section of this bulletin for details.

NOTE:

- *If you fail to submit a Warranty Claim for a new unit that is subsequently sold and registered, the new owner will receive the Recall letter requesting the return of the vehicle to you for repair.*

Submit Product Registration:
Submit the product registration to Kawasaki via K-Dealer immediately after retail sale of any eligible unit. Be sure to supply the correct customer name and mailing address. Kawasaki uses the product registration information for customer notification. Also, if you know that the customer has moved, please submit a Customer Update via K-Dealer.

Parts Information

- Only ABS Pumps with a specific Lot Number require replacement.
- Perform the ABS Hydraulic Unit Inspection procedure beginning on page 4 of this bulletin.

IMPORTANT NOTE:

o *ABS Pumps replaced erroneously under this campaign that do not contain the affected Lot Number will be debited back to the dealer.*

NG LOT NUMBERS									
8S08	8S12	8S16	8S20	8S24	8S28	8T01	8T05	8T09	8T13
8S09	8S13	8S17	8S21	8S25	8S29	8T02	8T06	8T10	8T14
8S10	8S14	8S18	8S22	8S26	8S30	8T03	8T07	8T11	
8S11	8S15	8S19	8S23	8S27	8S31	8T04	8T08	8T12	

Repair Kit Part Numbers

Kit 99999-0704 (for ZR900B) or 99999-0705 (for ZR900C/E) installed only if inspection criteria found in this bulletin indicates replacement.

Order parts to complete the Recall through K-Dealer as outlined in Service Bulletin SP15-03.

NOTE:

o *Use VIP in K-Dealer to identify affected units in your dealership inventory to order repair kits for unsold units*

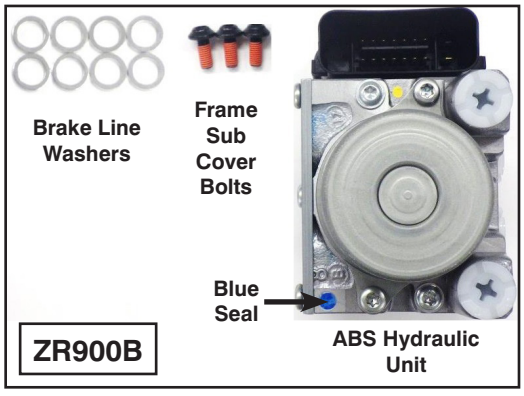
Parts Availability:

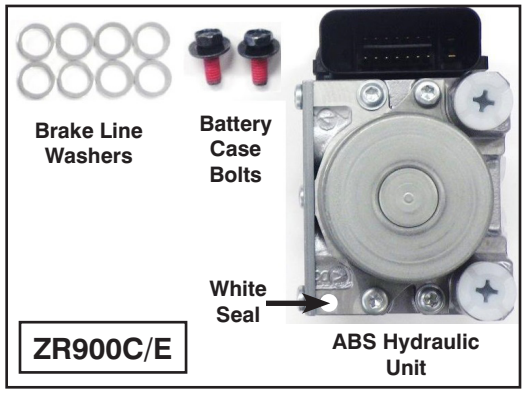
To ensure parts availability across the dealer network, Kawasaki initially requests that parts are ordered based on immediate demand:

- For retailed units, order parts as customers schedule repairs or for repairs expected to take place within the next two weeks.
- For unsold units, use VIP in K-Dealer to identify the number of affected units in your dealership inventory. Order repair parts only for units that will be repaired for retail sale within the next two weeks.

KIT, ABS MC19-01 - P/N 99999-0704, ZR900B	
Contents	**Qty**
Pump Assy-Oil, ABS	1
Washer-Seal	8
Bolt, Socket, with MEC	3

KIT, ABS MC19-01 - P/N 99999-0705, ZR900C/E	
Contents	**Qty**
Pump Assy-Oil, ABS	1
Washer-Seal	8
Bolt, Socket, with MEC	2





For detailed information and procedures related to parts removal and installation, refer to the appropriate sections of the Service Manual.

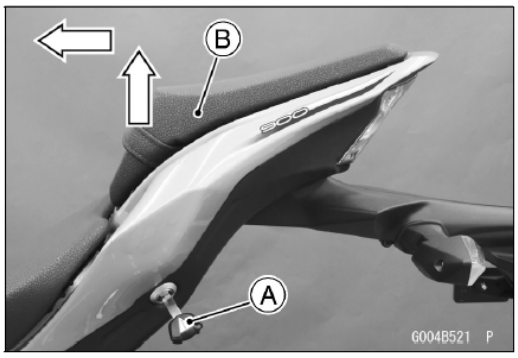
Model	Part Number
ZR900B	99924-1525-04
ZR900C/E	99924-1537-03

ABS Hydraulic Unit Inspection

ZR900B Models, begins on page 4 (this page).
ZR900C/E Models, begins on page 17.

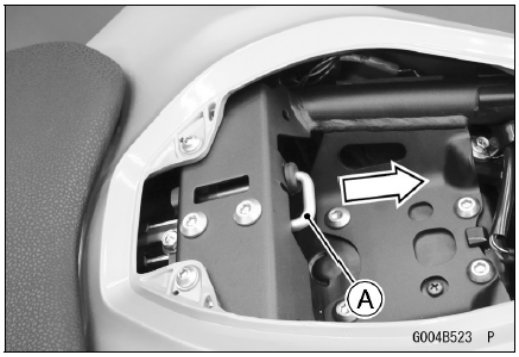
Rear Seat Removal

- Insert the ignition switch key [A] into the seat lock, turning the key clockwise, pulling the front part of the rear seat [B] up, and pull the rear seat forward.



Front Seat Removal

- Remove the rear seat (see Rear Seat Removal).
- Slide the seat lock bracket [A] backward.

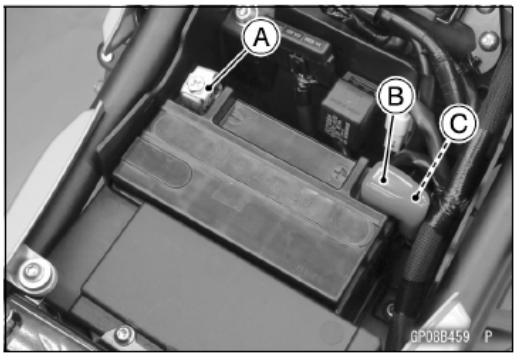


Battery Removal

- Turn the ignition switch off.
- Remove:
  Front Seat (see Front Seat Removal in the Frame chapter)
- Disconnect the negative (–) cable [A].

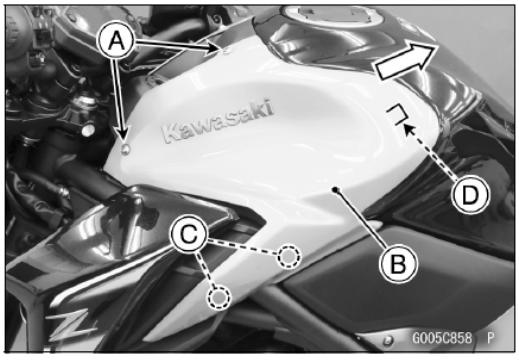
NOTICE
Be sure to disconnect the negative (–) cable first.

- Slide out the positive (+) terminal cap [B] and disconnect the positive (+) cable [C].
- Remove the battery.



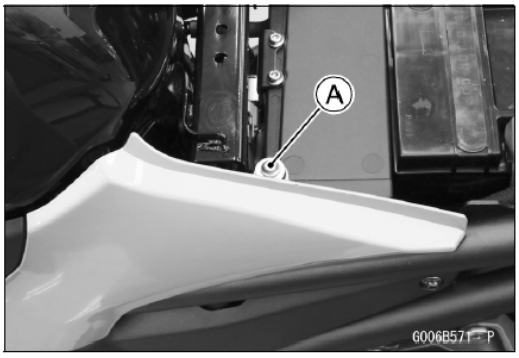
Fuel Tank Cover Removal

- Remove:
  Bolts [A] and Washers
- Pull the lower side of the fuel tank cover [B] outward to clear the projections [C].
- Remove the fuel tank cover backward to clear the hook [D].

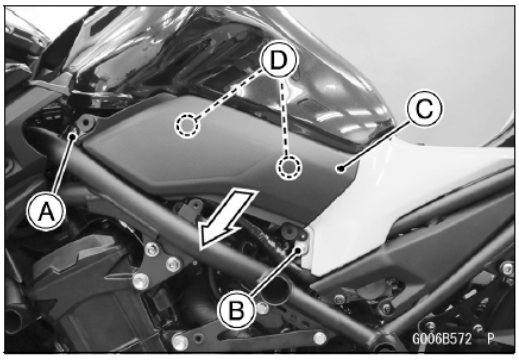


Side Cover Removal

- Remove:
  Front Seat (see Front Seat Removal)
  Fuel Tank Cover (see Fuel Tank Cover Removal)
  Frame Cover (see Frame Cover Removal)
  Bolt [A] and Collar

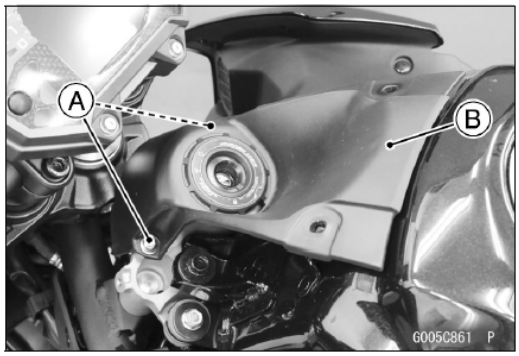


- Remove:
  Bolt [A] and Washer
  Bolt [B] and Collar
- Remove the side cover [C] outward to clear the projections [D].



Ignition Switch Cover Removal

- Remove:
  Fuel Tank Covers (see Fuel Tank Cover Removal)
  Bolts [A]
  Ignition Switch Cover [B]



Fuel Tank Removal

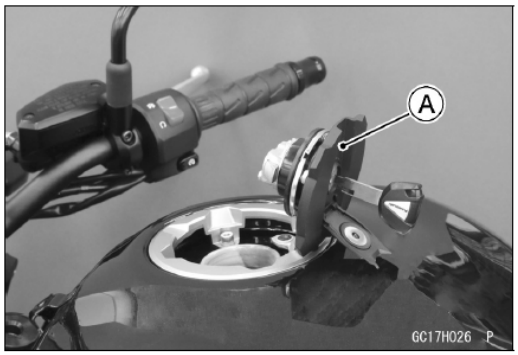
⚠ WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Do not smoke. Turn the ignition switch off. Disconnect the battery (–) terminal. To avoid fuel spills, draw it from the tank when the engine is cold. Be prepared for fuel spillage; any spilled fuel must be completely wiped up immediately.

- Turn the ignition switch off.
- Wait until the engine cools down.
- Disconnect the battery (–) terminal (see Battery Removal in the Electrical System chapter).

- Open the fuel tank cap [A] to lower the pressure in the tank.

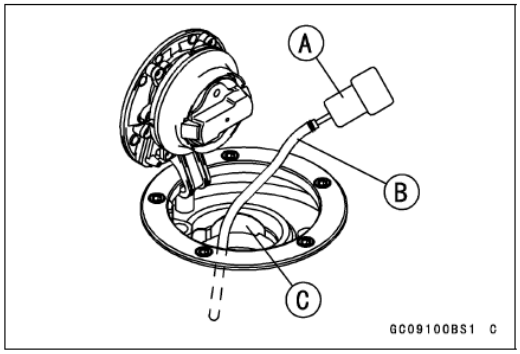
○During tank removal, keep the tank cap open to release pressure in the tank. This makes fuel spillage less.



- Draw the fuel out from the fuel tank with a commercially available pump [A].

○Use a soft plastic hose [B] as a pump intake hose in order to insert the hose smoothly.

○Put the hose through the fill opening [C] into the tank and draw the fuel out.



⚠ WARNING

Spilled fuel is flammable and can be explosive under certain conditions. The fuel can not be removed completely from the fuel tank. Be careful for remained fuel spillage.

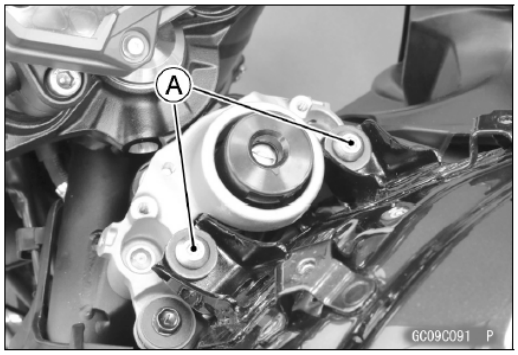
- Remove:

  Side Cover (see Side Cover Removal in the Frame chapter)

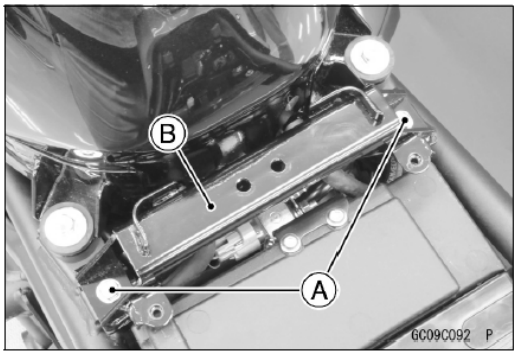
  Fuel Tank Cover (see Fuel Tank Cover Removal in the Frame chapter)

  Ignition Switch Cover (see Ignition Switch Cover Removal in the Frame chapter)

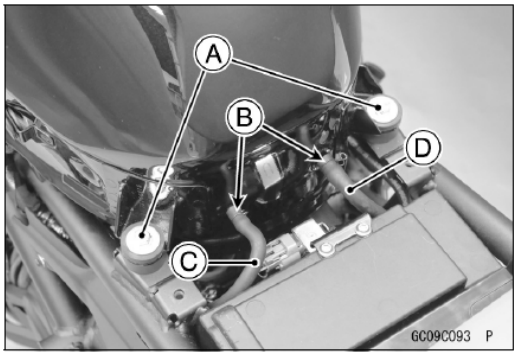
  Fuel Tank Bolts [A]



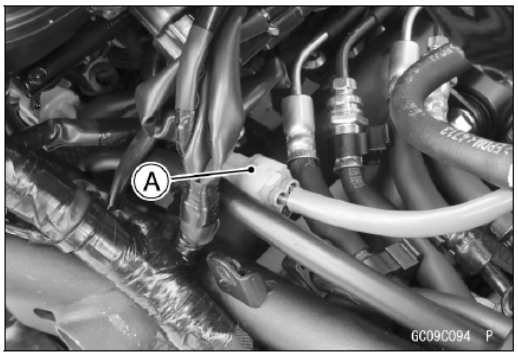
- Remove:
  Seat Bracket Bolts [A]
  Seat Bracket [B]



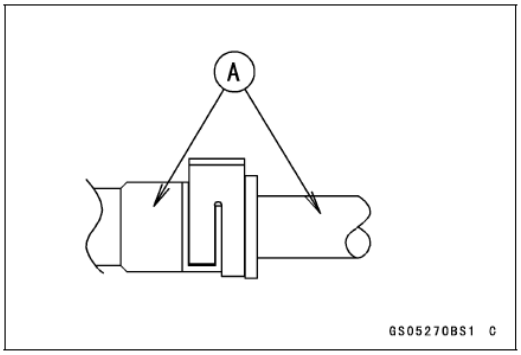
- Remove:
  Fuel Tank Bolt [A]
- Slide the clamps [B], and disconnect the drain hose [C] and breather hose [D].



- Disconnect the fuel pump lead connector [A].



- Be sure to place a piece of cloth around the fuel hose joint.
- Wipe off the dirt of the surface [A] around the connection using a cloth or a soft brush.

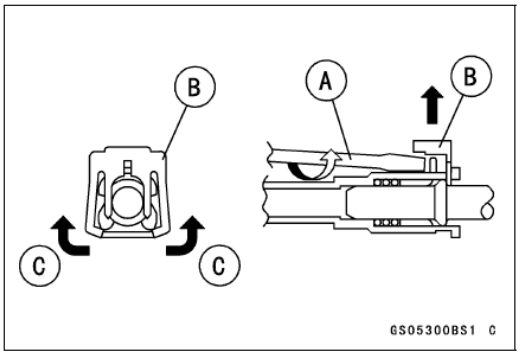


When removing with flat tip screwdriver

- Insert the flat tip screwdriver [A] into slit on the joint lock [B].
- Turn the driver to disconnect the joint lock.

When removing with fingers

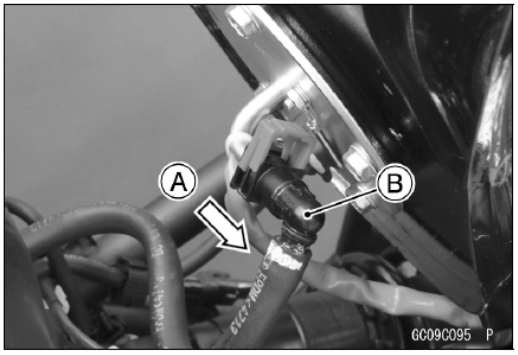
- Open and push up [C] the joint lock with your fingers.



NOTICE

Prying or excessively widening the joint lock ends for fuel hose removal will permanently deform the joint lock, resulting in a loose or incomplete lock that may allow fuel to leak and create the potential for a fire explosion. To prevent fire or explosion from a damaged joint lock, do not pry or excessively widen the joint lock ends when removing the fuel hose. The joint lock has a retaining edge that locks around the housing.

- Pull [A] the fuel hose joint [B] out of the outlet pipe.



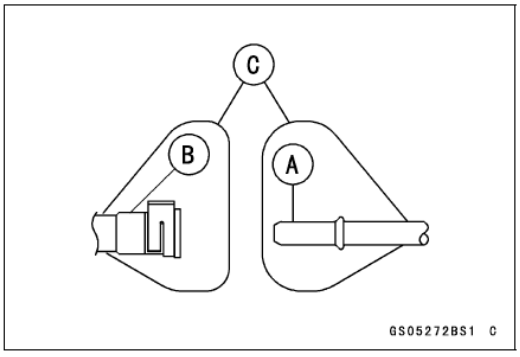
⚠ WARNING

Fuel is flammable and explosive under certain conditions and can cause severe burns. Be prepared for fuel spillage; any spilled fuel must be completely wiped up immediately. When the fuel hose is disconnected, fuel spills out from the hose and the pipe because of residual pressure. Cover the hose connection with a piece of clean cloth to prevent fuel spillage.

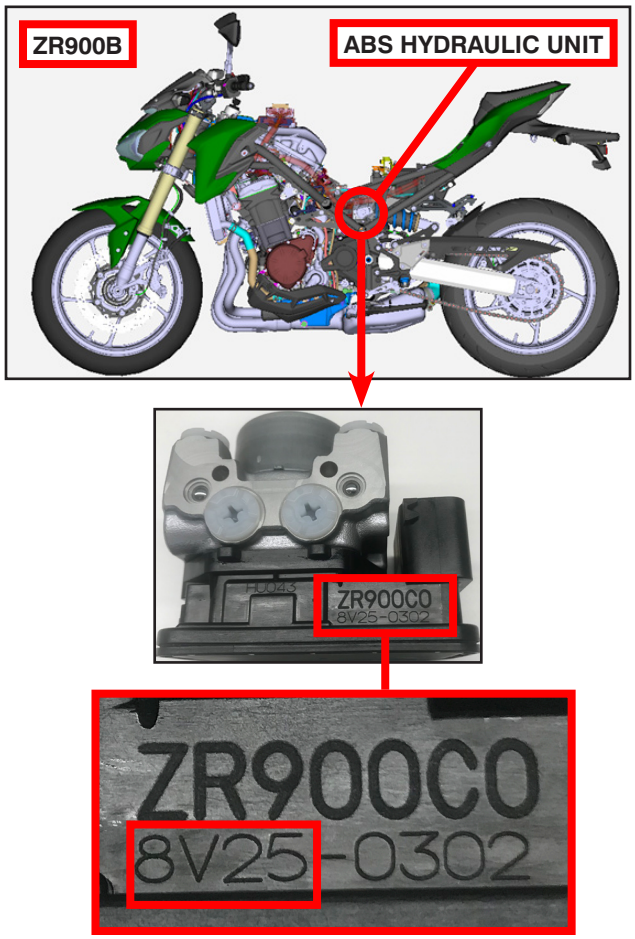
- Close the fuel tank cap.
- Remove the fuel tank, and place it on a flat surface.

○Do not apply the load to the fuel pipe of the fuel pump.

- Clean the pipe [A].
- Cover the pipe and the hose joint [B] with the vinyl bags [C] to keep it clean.



Locate Lot Number of ABS Hydraulic Unit



- Locate the ABS Hydraulic Unit on the left side of the motorcycle.
- Locate the identification markings on the top of the ABS Hydraulic Unit.
- Locate the lot number. It is the first four characters as shown.

Check Lot Number of ABS Hydraulic Unit

- Replace the ABS hydraulic unit if the LOT # appears in the table below. If the LOT # does not appear in the table it does not require replacement.

NG LOT NUMBERS			
8S08	8S18	8S28	8T07
8S09	8S19	8S29	8T08
8S10	8S20	8S30	8T09
8S11	8S21	8S31	8T10
8S12	8S22	8T01	8T11
8S13	8S23	8T02	8T12
8S14	8S24	8T03	8T13
8S15	8S25	8T04	8T14
8S16	8S26	8T05	
8S17	8S27	8T06	

NOTE:

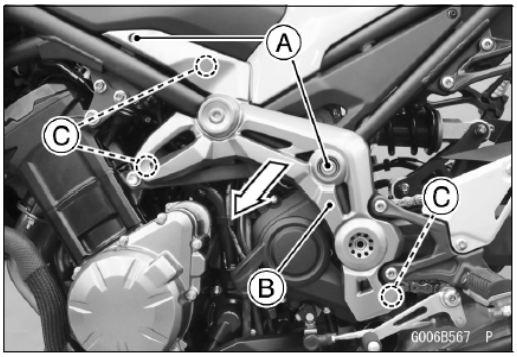
o Do not replace the ABS hydraulic unit if the LOT # does not appear in the table.

★ If the ABS hydraulic unit does not require replacement reassemble then proceed to the Warranty Information section of this bulletin.

★ If the ABS hydraulic unit requires replacement proceed to the next page of this bulletin.

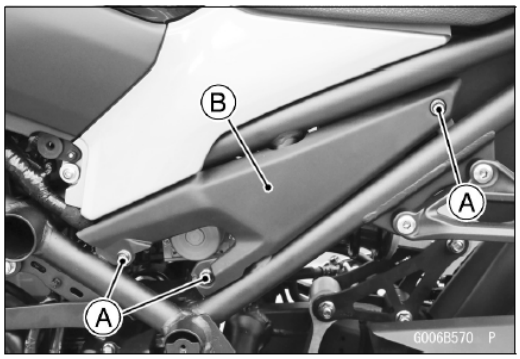
ABS Hydraulic Unit Replacement

Frame Cover Removal



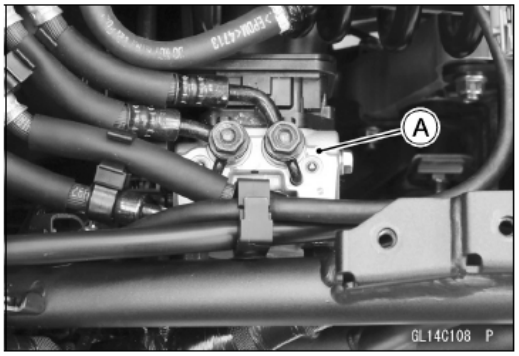
- Remove:
  Bolts [A] and Washers
- Remove the frame cover [B] outward to clear the projections [C].

Frame Sub Cover Removal



- Remove:
  Left Frame Cover (see Frame Cover Removal)
  Bolts [A], Washers and Collars
  Frame Sub Cover [B]

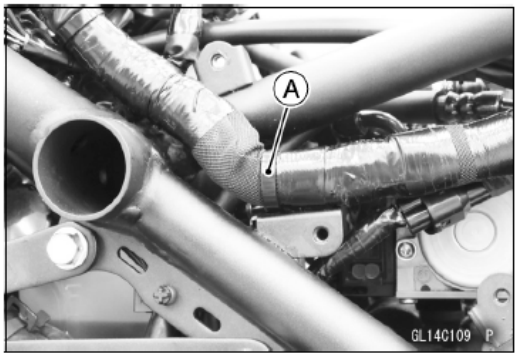
ABS Hydraulic Unit Removal



NOTICE

The ABS hydraulic unit [A] has been adjusted and set with precision at the factory. Therefore, it should be handled carefully, never struck sharply, as with a hammer, or allowed to fall on a hard surface.
Be careful not to get water or mud on the ABS hydraulic unit.

- Drain the brake fluid from the front and rear brake lines.
  ○Drain the brake fluid through the bleed valve by pumping the brake lever and pedal.



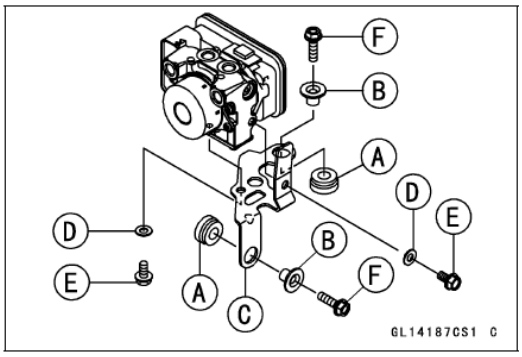
- Remove:
  Fuel Tank (see Fuel Tank Removal in the Fuel System (DFI) chapter)
  Frame Sub Cover (see Frame Sub Cover Removal in the Frame chapter)
- Open the clamp [A].
- Clean the ABS hydraulic unit.

NOTICE

Clean all fittings on the ABS hydraulic unit and the rear master cylinder because dirt around the banjo bolts could contaminate the brake fluid in the line during removal/installation. Spread over a shop towel around the ABS hydraulic unit before removing the brake line so that brake fluid does not leak on the parts.

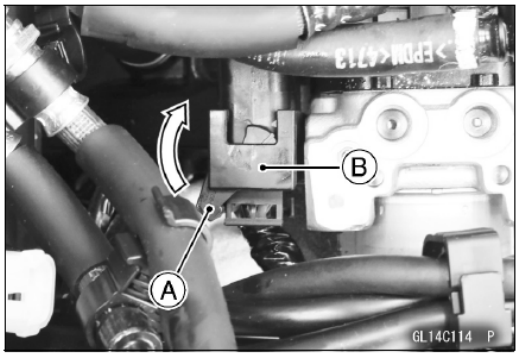
- Installation is the reverse of removal.
- Be sure to install the dampers [A] and collars [B] on the bracket [C].
- Install the washers [D].
- Tighten:

Torque - ABS Hydraulic Unit Bolts [E]: 8.8 N·m (0.90 kgf·m, 78 in·lb)
ABS Hydraulic Unit Bracket Bolts [F]: 8.8 N·m (0.90 kgf·m, 78 in·lb)



- Pull the lever [A] forward to connect the ABS hydraulic unit connector [B].
- Replace the washers that are on each each side of pipe fitting with new one.
- Install the brake pipes (see Cable, Wire, and Hose Routing section in the Appendix chapter).
- Tighten:

Torque - Brake Pipe Banjo Bolts: 33 N·m (3.4 kgf·m, 24 ft·lb)



NOTICE

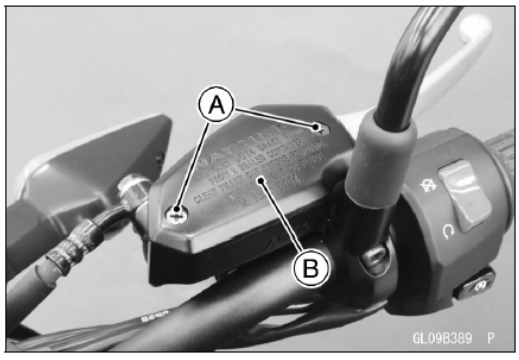
Brake fluid quickly damages painted plastic surfaces; any spilled fluid should be completely washed away immediately.

NOTE

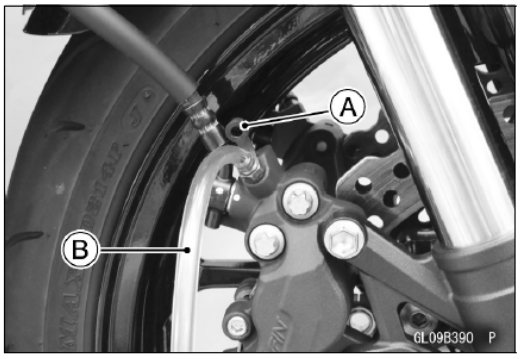
○*The procedure to bleed the front brake line is as follows. Bleeding the rear brake line is the same as for the front brake.*

- Remove:
  Front Brake Reservoir Cap Screws [A]
  Front Brake Reservoir Cap [B]
  Diaphragm Plate
  Diaphragm
- Fill the reservoir with fresh brake fluid to the upper level line in the reservoir.
- Slowly pump the brake lever several times until no air bubbles can be seen rising up through the fluid from the holes at the bottom of the reservoir.

○Bleed the air completely from the master cylinder by this operation.



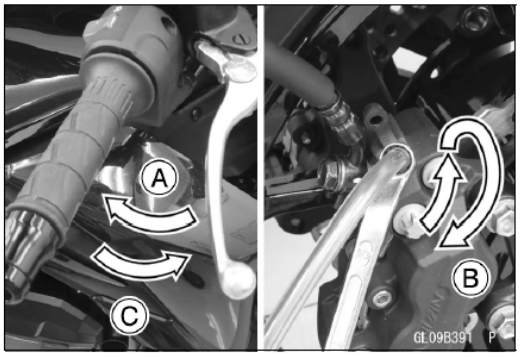
- Remove the rubber cap [A] from the bleed valve on the caliper.
- Attach a clear plastic hose [B] to the bleed valve, and run the other end of the hose into a container.



- Bleed the brake line and the caliper.

○Repeat this operation until no more air can be seen coming out into the plastic hose.

1. Pump the brake lever until it becomes hard, and apply the brake and hold it [A].
2. Quickly open and close [B] the bleed valve while holding the brake applied.
3. Release the brake [C].



NOTICE

After pumping the brake lever several times, releasing it without opening and closing of the bleed valve may cause brake fluid to be blown back from the master cylinder reservoir. Brake fluid spilt on painted surfaces and plastic parts will quickly damage them. Be sure to open and close the bleed valve.

NOTE

○*The fluid level must be checked often during the bleeding operation and replenished with fresh brake fluid as necessary. If the fluid in the reservoir runs completely out any time during bleeding, the bleeding operation must be done over again from the beginning since air will have entered the line.*

○*Tap the brake hose lightly from the caliper to the reservoir for more complete bleeding.*

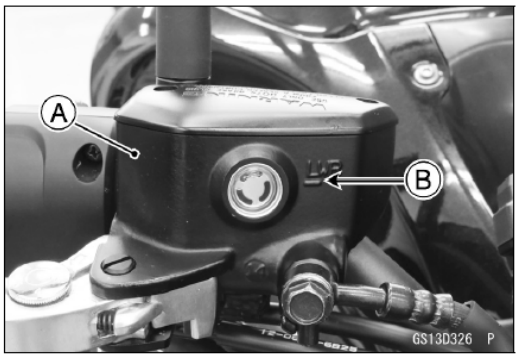
○*Front Brake: First bleeding the right caliper then repeat the above steps for the left caliper.*

- Remove the clear plastic hose.
- Install:

  Diaphragm
  Diaphragm Plate
  Front Brake Reservoir Cap
- Tighten:

Torque - Front Brake Reservoir Cap Screws: 1.5 N·m (0.15 kgf·m, 13 in·lb)

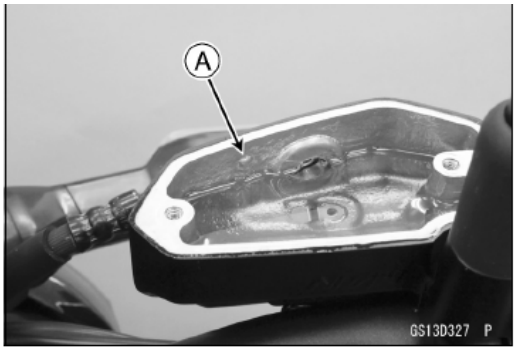
Brake Fluid Level Inspection



- Check that the brake fluid level in the front brake reservoir [A] is above the lower level line [B].

NOTE

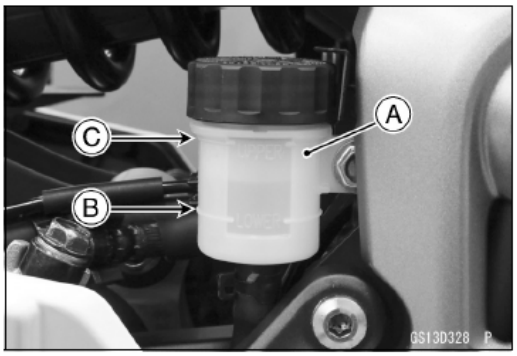
○*Hold the reservoir horizontal by turning the handlebars when checking brake fluid level.*



★If the fluid level is lower than the lower level line, fill the reservoir to the upper level line [A].

- Tighten:

Torque - Front Brake Reservoir Cap Screws: 1.5 N·m (0.15 kgf·m, 13 in·lb)



- Check that the brake fluid level in the rear brake reservoir [A] is above the lower level line [B].

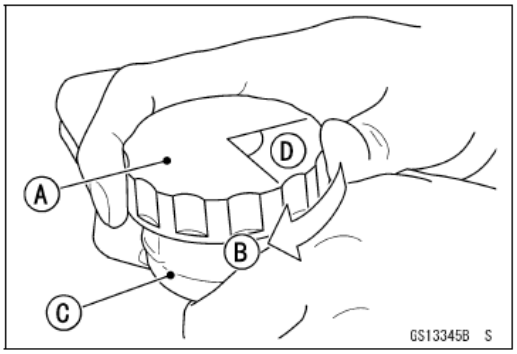
★If the fluid level is lower than the lower level line, fill the reservoir to the upper level line [C].

○Remove:
Right Frame Cover (see Frame Cover Removal in the Frame chapter)
Screw
Stopper

⚠ WARNING

Mixing brands and types of brake fluid can reduce the brake system's effectiveness and cause an accident resulting in injury or death. Do not mix two brands of brake fluid. Change the brake fluid in the brake line completely if the brake fluid must be refilled but the type and brand of the brake fluid that is already in the reservoir are unidentified.

Recommended Disc Brake Fluid
Grade: DOT4



- Follow the procedure below to install the rear brake reservoir cap correctly.

○First, tighten the brake reservoir cap [A] clockwise [B] by hand until slight resistance is felt indicating that the cap is seated on the reservoir body [C], then tighten the cap an additional 1/6 turn [D] while holding the brake reservoir body.

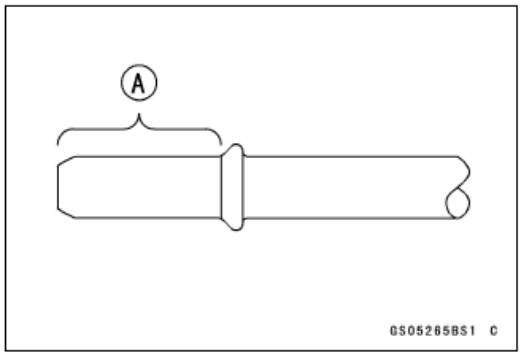
- Install the stopper and tighten the screw.
- Install the right frame cover (see Frame Cover Installation in the Frame chapter).

Fuel Tank Installation

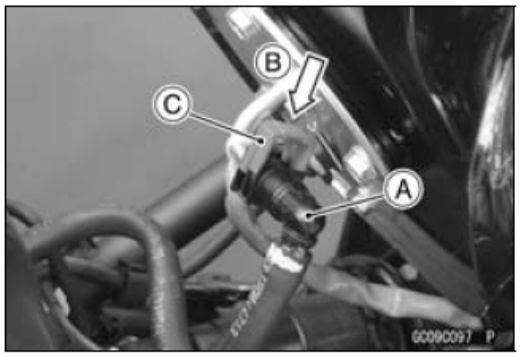
- Remove the vinyl bags on the pipe and fuel hose joint.
- Check the joint lock for deformation and wear.

★If the joint lock is deformed, replace the fuel hose with a new one.

- Check that there are no flaws, burrs, and adhesion of foreign materials on the pipe [A].
- Apply engine oil to the pipe.



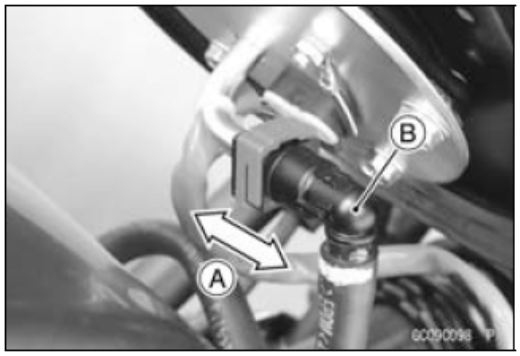
- Insert the fuel hose joint [A] straight onto the fuel outlet pipe until the hose joint clicks.
- Push [B] the joint lock [C] until the hose joint clicks.



- Push and pull [A] the hose joint [B] back and forth more than two times, and make sure it is locked and does not come off.

⚠ WARNING

Leaking fuel can cause a fire or explosion resulting in serious burns. Make sure the hose joint is installed correctly on the delivery pipe.



★If it comes off, reinstall the hose joint.

- Connect the fuel pump lead connector.

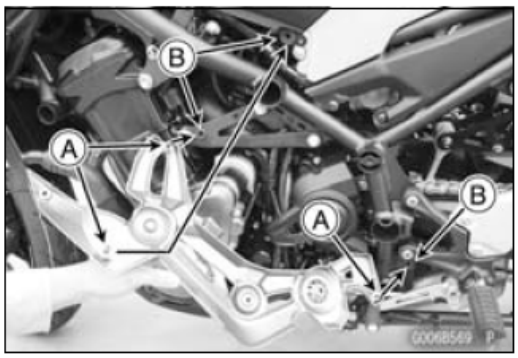
Ignition Switch Cover

- Install
  Bolts [A]
  Ignition Switch Cover [B]

- Install frame sub cover [B] using new bolts [A] from the repair kit.

- Insert the projections [A] of the frame cover into the grommets [B].
- Tighten:

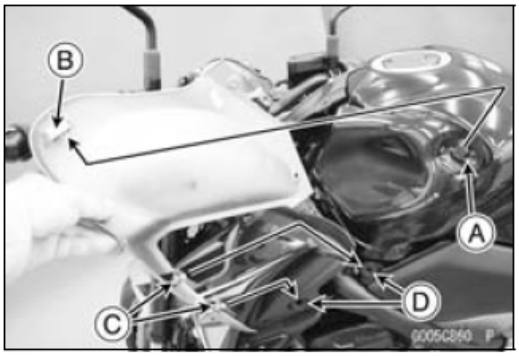
Torque - Frame Cover Bolts: 2.2 N·m (0.22 kgf·m, 20 in·lb)



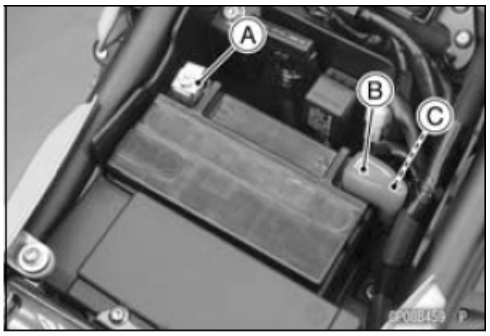
Fuel Tank Cover Installation

- Insert the hook [A] of the fuel tank into the slot [B] on the fuel tank cover.
- Insert the projections [C] of the fuel tank cover into the grommets [D].
- Tighten:

Torque - Fuel Tank Cover Bolts: 1.9 N·m (0.19 kgf·m, 17 in·lb)

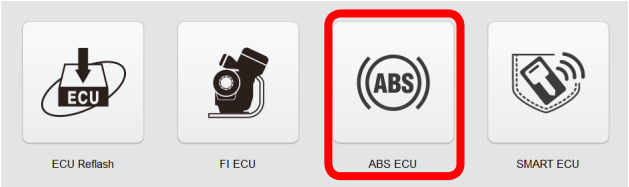


- Install battery.
  - *Turn the ignition switch off.*
  - *Connect positive cable [B] first.*
  - *Cover positive terminal with cap [C].*
  - *Connect negative cable [A] second.*
  - *Apply a light coat of grease on the terminals to prevent corrosion.*

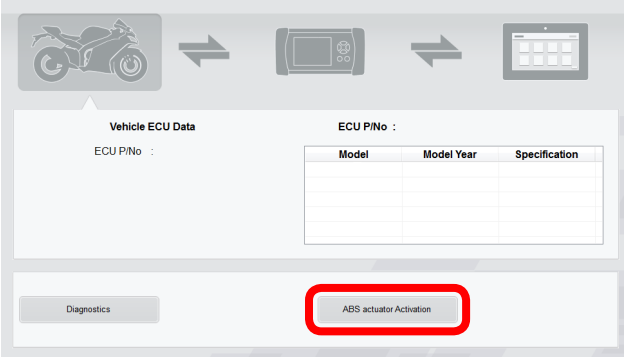


ABS Hydraulic Unit Test Procedure

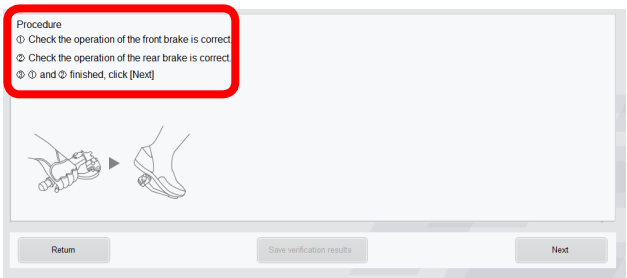
- Connect KVCS cable 57001-1843 to the 6-Pin ABS connector under the seat
- Turn ignition switch to the ON position.
- Launch the KVCS software.
- Click on the ABS ECU tile.



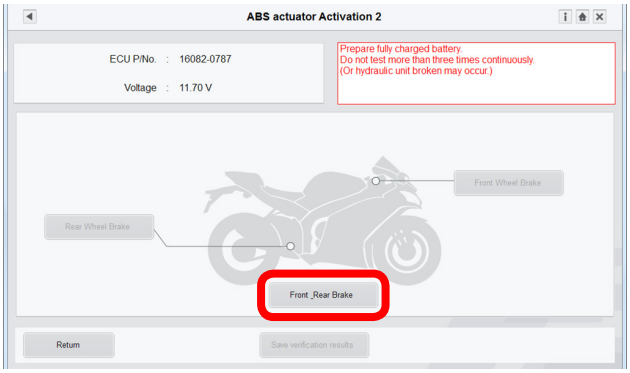
- Click on the “ABS actuator Activation” button.



- Check the function of the front and rear brakes by exercising the brake lever and pedal to ensure the calipers are actuated.
- Click on the “Next” button if the brakes are operational.

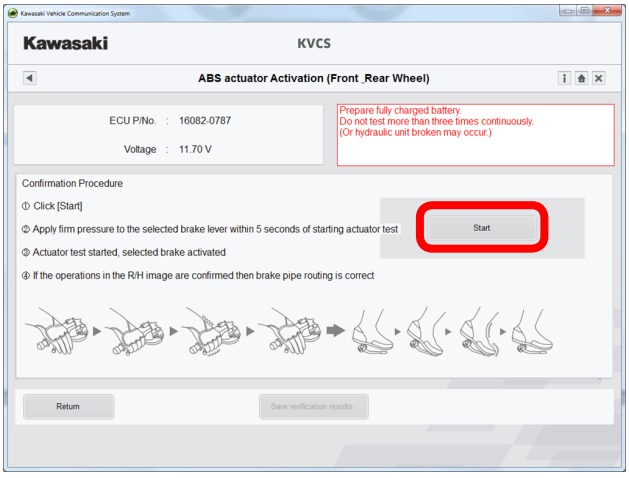


- Click on the “Front_Rear Brake” button.



The following 4 steps must be performed in order and without hesitation:

1. Click the start button on the KVCS screen.
2. Immediately squeeze the front brake lever and hold. The brake handle will vibrate and then push against your hand.
3. Release the front brake lever.
4. Immediately depress the rear brake pedal and hold. The pedal will vibrate and then raise up slightly, indicating the completion of the test.

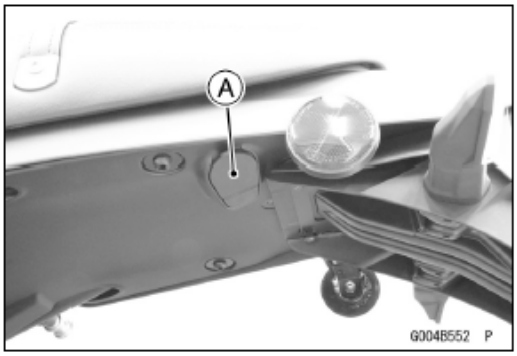


- Install seats.
- Test ride to verify ABS function.
- Proceed to the Warranty Information section on page 35 of this bulletin.

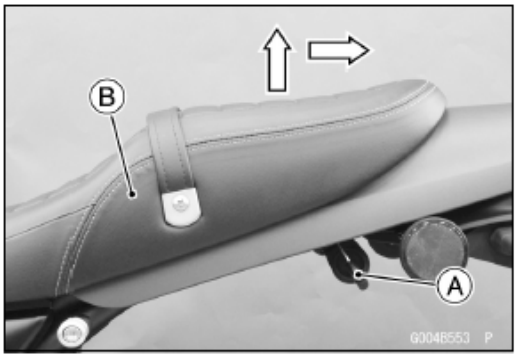
ABS Hydraulic Unit Inspection

Seat Removal

- Open the seat lock cover [A].



- Insert the ignition key [A] into the seat lock, turning the key clockwise, pulling up on the rear part of the seat [B], and pull the seat backward.

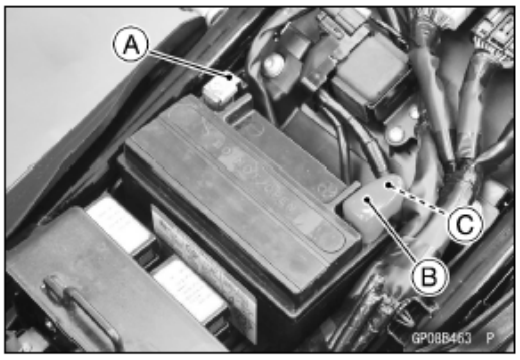


Battery Removal

- Turn the ignition switch off.
- Remove:
  Seat (see Seat Removal in the Frame chapter)
- Disconnect the negative (–) cable [A].

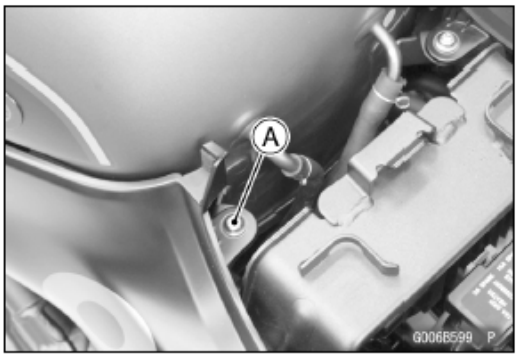
NOTICE
Be sure to disconnect the negative (–) cable first.

- Slide out the positive (+) terminal cap [B] and disconnect the positive (+) cable [C].
- Remove the battery.

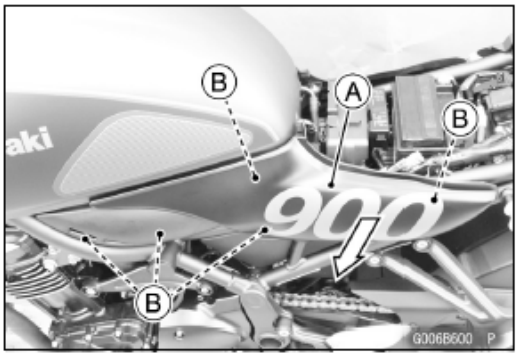


Side Cover Removal

- Remove:
  Seat (see Seat Removal)
  Bolt [A] and Washer



- Remove the side cover [A] outward to clear the projections [B].



Fuel Tank Removal

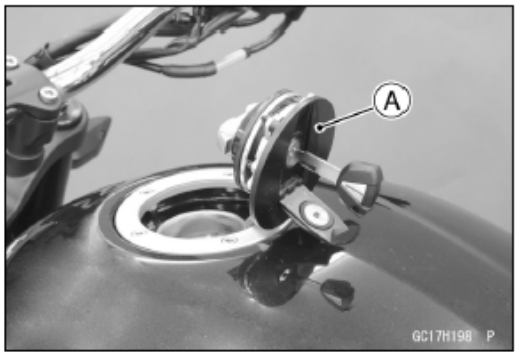
⚠ WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Do not smoke. Turn the ignition switch off. Disconnect the battery (–) terminal. To avoid fuel spills, draw it from the tank when the engine is cold. Be prepared for fuel spillage; any spilled fuel must be completely wiped up immediately.

- Turn the ignition switch off.
- Wait until the engine cools down.
- Disconnect the battery (–) terminal (see Battery Removal in the Electrical System chapter).

- Open the fuel tank cap [A] to lower the pressure in the tank.

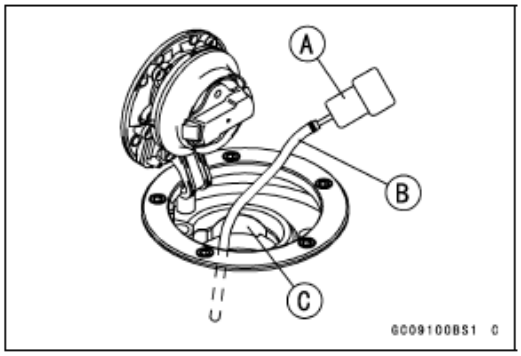
○During tank removal, keep the tank cap open to release pressure in the tank. This makes fuel spillage less.



- Draw the fuel out from the fuel tank with a commercially available pump [A].

○Use a soft plastic hose [B] as a pump intake hose in order to insert the hose smoothly.

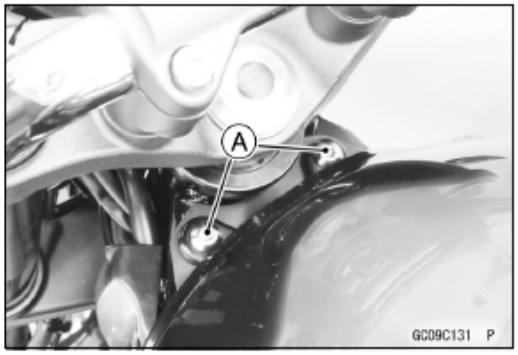
○Put the hose through the fill opening [C] into the tank and draw the fuel out.



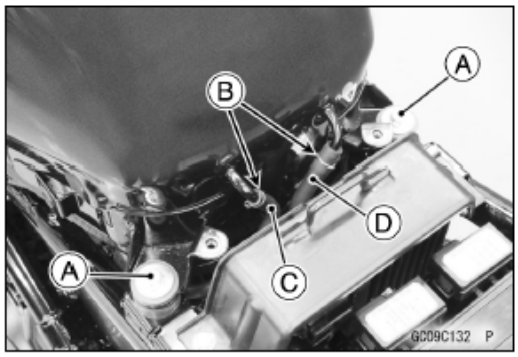
⚠ WARNING

Spilled fuel is flammable and can be explosive under certain conditions. The fuel can not be removed completely from the fuel tank. Be careful for remained fuel spillage.

- Remove:
  Side Covers (see Side Cover Removal in the Frame chapter)
  Fuel Tank Bolts [A]

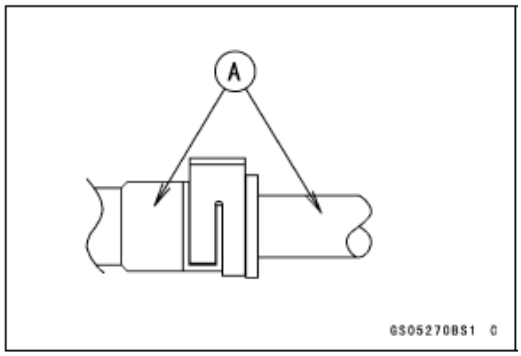


- Remove:
  Fuel Tank Bolts [A]
- Slide the clamps [B], and disconnect the drain hose [C] and breather hose [D].



- Disconnect the fuel pump lead connector [A].

- Be sure to place a piece of cloth around the fuel hose joint.
- Wipe off the dirt of the surface [A] around the connection using a cloth or a soft brush.

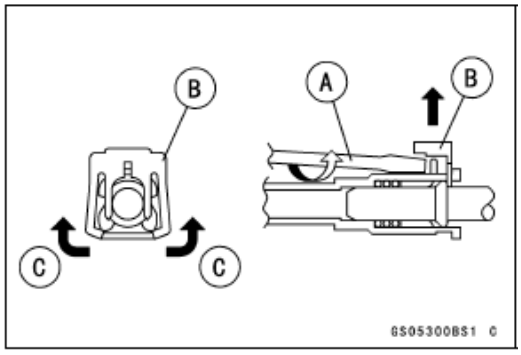


When removing with flat tip screwdriver

- Insert the flat tip screwdriver [A] into slit on the joint lock [B].
- Turn the driver to disconnect the joint lock.

When removing with fingers

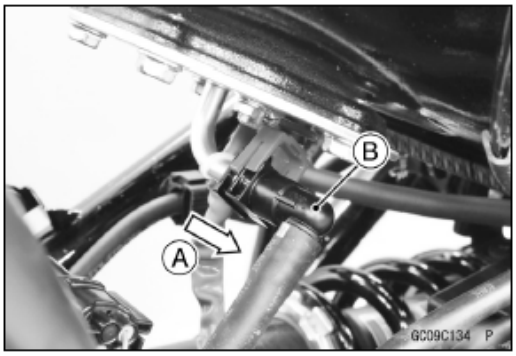
- Open and push up [C] the joint lock with your fingers.



NOTICE

Prying or excessively widening the joint lock ends for fuel hose removal will permanently deform the joint lock, resulting in a loose or incomplete lock that may allow fuel to leak and create the potential for a fire explosion. To prevent fire or explosion from a damaged joint lock, do not pry or excessively widen the joint lock ends when removing the fuel hose. The joint lock has a retaining edge that locks around the housing.

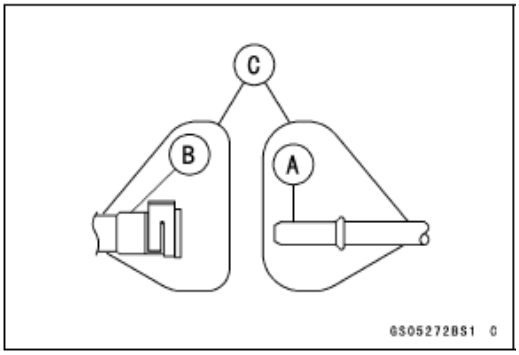
● Pull [A] the fuel hose joint [B] out of the outlet pipe.



⚠ WARNING

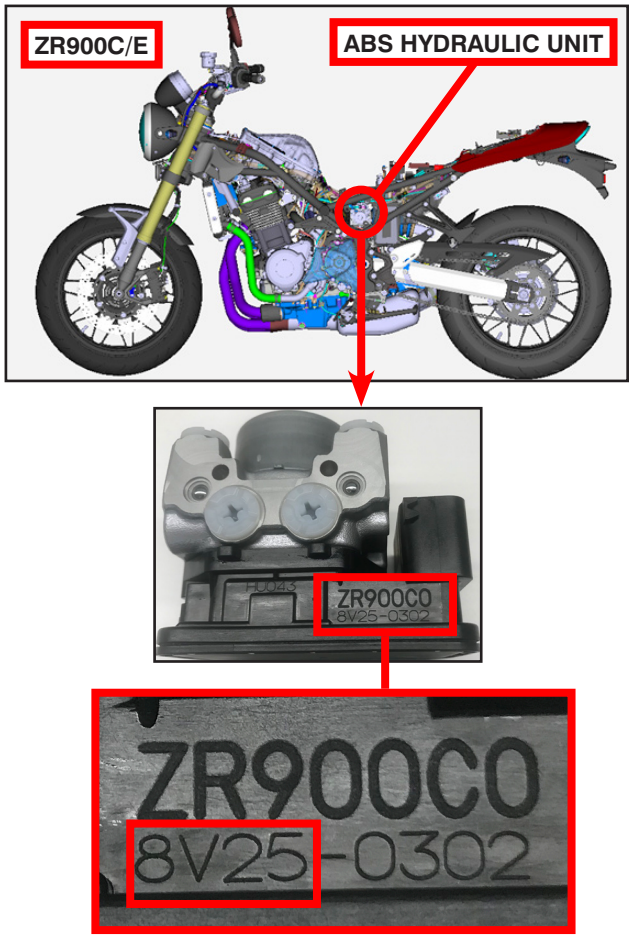
Fuel is flammable and explosive under certain conditions and can cause severe burns. Be prepared for fuel spillage; any spilled fuel must be completely wiped up immediately. When the fuel hose is disconnected, fuel spills out from the hose and the pipe because of residual pressure. Cover the hose connection with a piece of clean cloth to prevent fuel spillage.

● Close the fuel tank cap.
● Remove the fuel tank, and place it on a flat surface.
○Do not apply the load to the fuel pipe of the fuel pump.
● Clean the pipe [A].
● Cover the pipe and the hose joint [B] with the vinyl bags [C] to keep it clean.



Inspection Procedure - ZR900C/E

Locate Lot Number of ABS Hydraulic Unit



- Locate the ABS Hydraulic Unit on the left side of the motorcycle.
- Locate the identification markings on the top of the ABS Hydraulic Unit.
- Locate the lot number. It is the first four characters as shown.

Check Lot Number of ABS Hydraulic Unit

- Replace the ABS hydraulic unit if the LOT # appears in the table below. If the LOT # does not appear in the table it does not require replacement.

NG LOT NUMBERS			
8S08	8S18	8S28	8T07
8S09	8S19	8S29	8T08
8S10	8S20	8S30	8T09
8S11	8S21	8S31	8T10
8S12	8S22	8T01	8T11
8S13	8S23	8T02	8T12
8S14	8S24	8T03	8T13
8S15	8S25	8T04	8T14
8S16	8S26	8T05	
8S17	8S27	8T06	

NOTE:

o *Do not replace the ABS hydraulic unit if the LOT # does not appear in the table.*

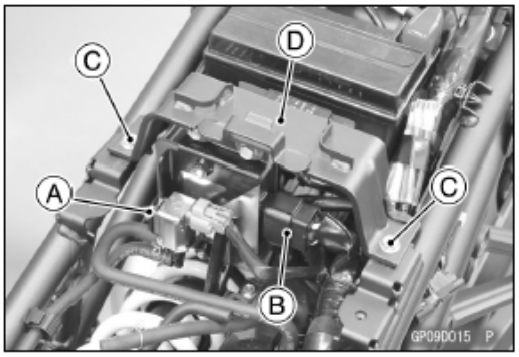
★ If the ABS hydraulic unit does not require replacement reassemble then proceed to the Warranty Information section of this bulletin.

★ If the ABS hydraulic unit requires replacement proceed to the next page of this bulletin.

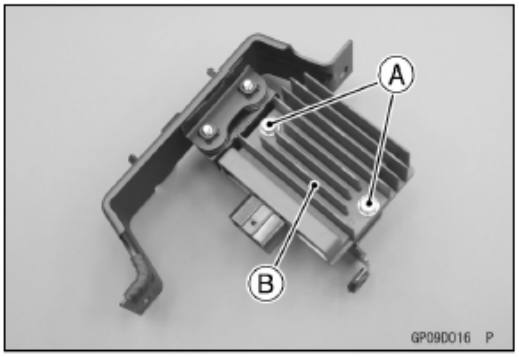
ABS Hydraulic Unit Replacement

Regulator/Rectifier Removal

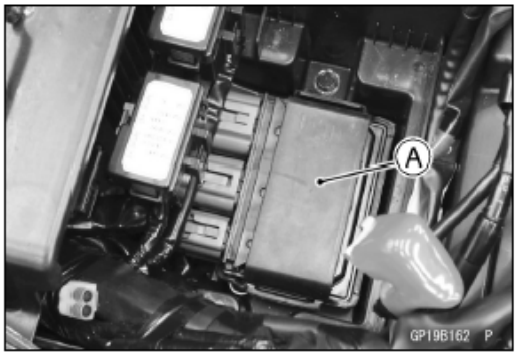
- Remove:
  Fuel Tank (see Fuel Tank Removal in the Fuel System (DFI) chapter)
  Purge Valve Mounting Nut [A]
- Disconnect the connector [B].
- Remove:
  Bolts [C]
  Seat Bracket [D] with Regulator/Rectifier



- Remove:
  Bolts [A]
  Regulator/Rectifier [B]



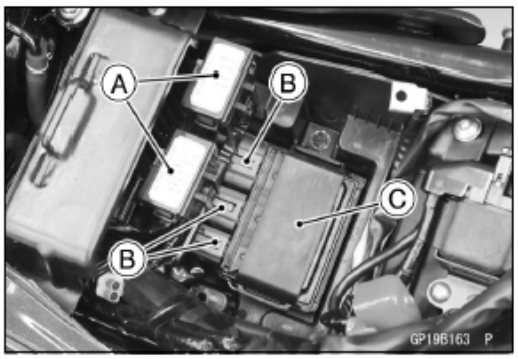
The relay box [A] has relays and diodes. The relays and diodes can not be removed.



Relay Box Removal/Installation

NOTICE
Never drop the relay box especially on a hard surface. **Such a shock to the relay box can damage it.**

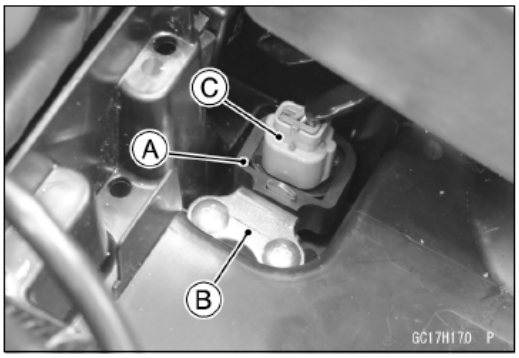
- Remove:
  Battery (see Battery Removal)
  Fuse Boxes [A]
- Disconnect:
  Connectors [B]
- Remove:
  Relay Box [C]
- Installation is the reverse of removal.



Vehicle-down Sensor Removal

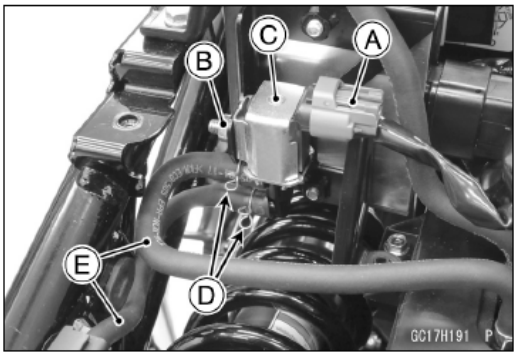
NOTICE

Never drop the vehicle-down sensor especially on a hard surface. Such a shock to the sensor can damage it.



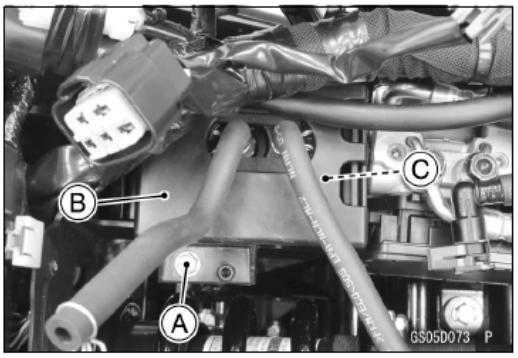
- Remove the relay box with the connectors installed (see Relay Box Removal in the Electrical System chapter).
- Remove the vehicle-down sensor [A] from the bracket [B].
- Disconnect:
  Vehicle-down Sensor Connector [C]
- Remove:
  Vehicle-down Sensor

Purge Valve Removal/Installation



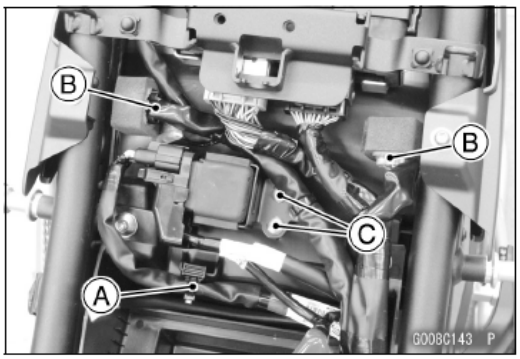
- Remove:
  Fuel Tank (see Fuel Tank Removal)
- Disconnect the purge valve connector [A].
- Remove the nut [B].
- Remove the purge valve [C] from the bracket.
- Slide the clamps [D].
- Disconnect the hoses [E].
- Installation is the reverse of removal.
- Run the hoses correctly (see Cable, Wire, and Hose Routing section in the Appendix chapter).

Evaporative Emission Control System (Equipped Models)



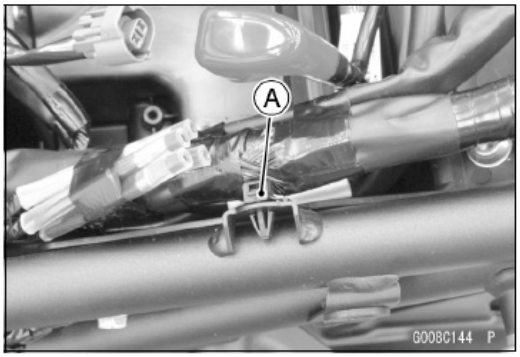
- Remove:
  Bolt [A]
  Cover [B]
  Canister [C]

Battery Case Removal

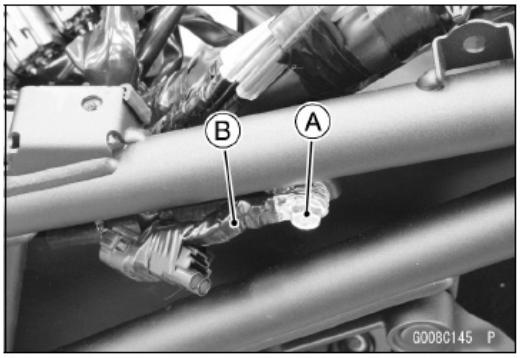


- Remove the connectors [B] from the pads.
- Remove the screws [C].

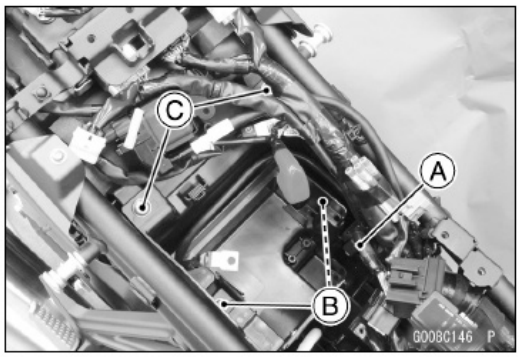
- Remove the clamp [A] from the frame.



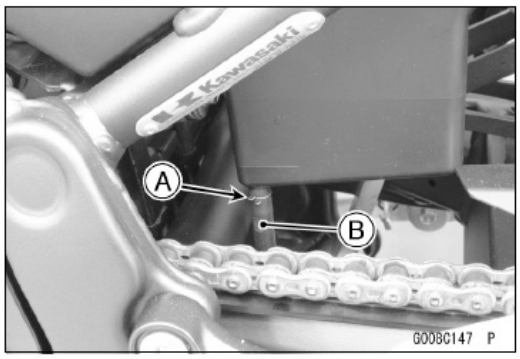
- Remove the bolt [A] and free the frame ground terminal [B].



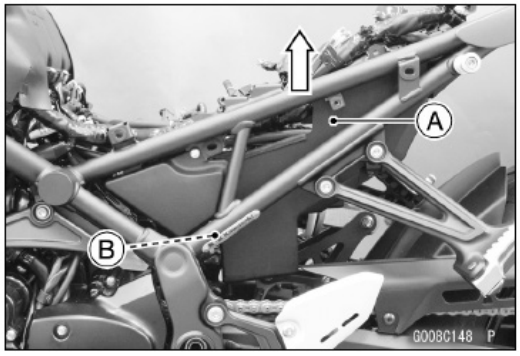
- Remove:
  Turn Signal Relay [A]
  Battery Case Mounting Bolts [B]
  Bolts [C]



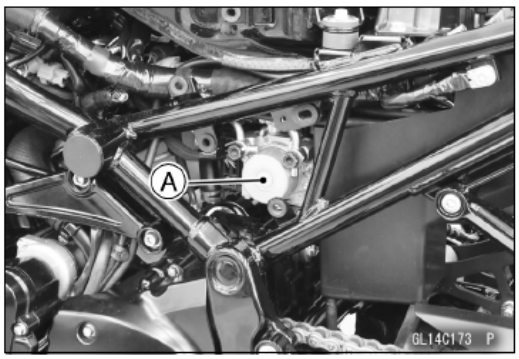
- Slide the clamp [A].
- Disconnect the drain tube [B].



- Pull the battery case [A] upward to clear the projection [B], and remove the battery case.



ABS Hydraulic Unit Removal

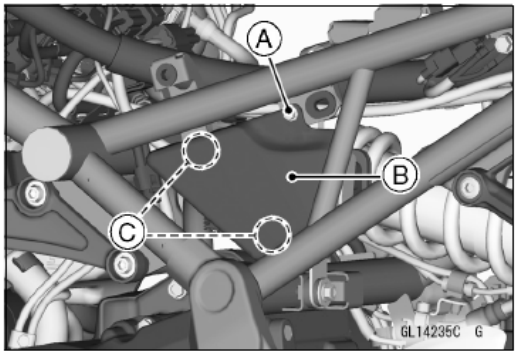


NOTICE

The ABS hydraulic unit [A] has been adjusted and set with precision at the factory. Therefore, it should be handled carefully, never struck sharply, as with a hammer, or allowed to fall on a hard surface.
Be careful not to get water or mud on the ABS hydraulic unit.

- Drain the brake fluid from the front and rear brake lines.

○Drain the brake fluid through the bleed valve by pumping the brake lever and pedal.



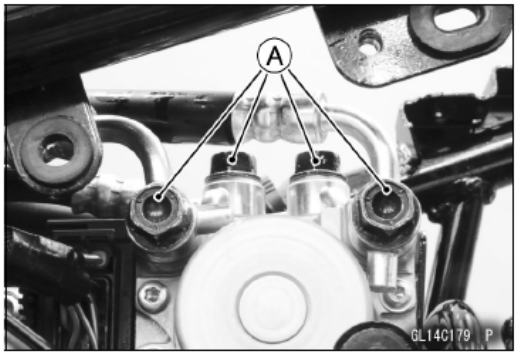
- Remove:
  Bolt [A] and Washer
  ABS Unit Cover [B]

○Clear the projections [C] from the grommets.

- Clean the ABS hydraulic unit.

NOTICE

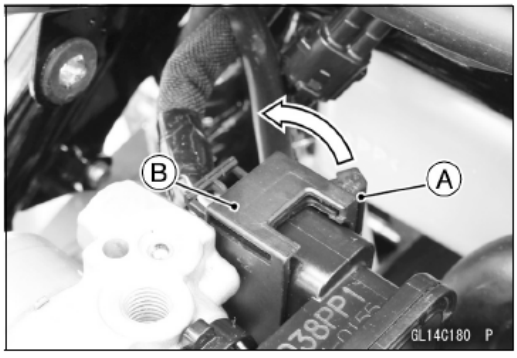
Clean all fittings on the ABS hydraulic unit and the rear master cylinder because dirt around the banjo bolts could contaminate the brake fluid in the line during removal/installation. Spread over a shop towel around the ABS hydraulic unit before removing the brake line so that brake fluid does not leak on the parts.



- Remove:
  Brake Pipe Banjo Bolts [A] and Washers
- Disconnect the brake pipes from the ABS hydraulic unit.

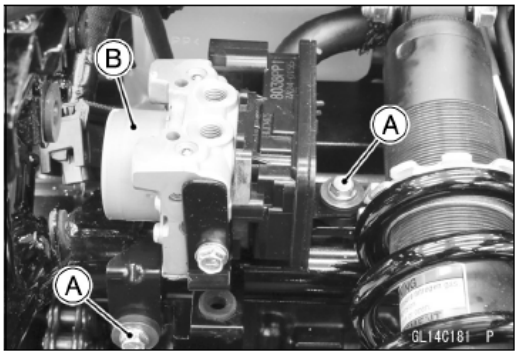
NOTICE

Brake fluid quickly damages painted plastic surfaces; any spilled fluid should be completely washed away immediately.

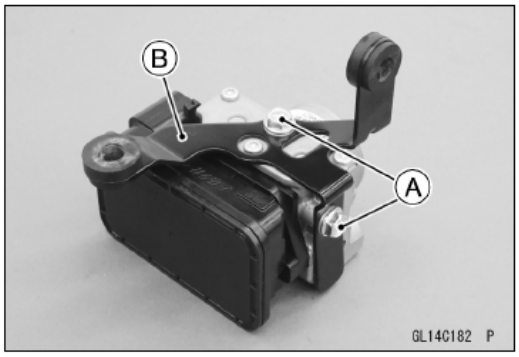


- Pull the lever [A] backward to disconnect the ABS hydraulic unit connector [B].

- Remove:
  ABS Hydraulic Unit Bracket Bolts [A]
- Remove the ABS hydraulic unit [B] together with the bracket.



- Remove:
  ABS Hydraulic Unit Bolts [A] and Washers
  Bracket [B]



NOTICE

The ABS hydraulic unit has been adjusted and set with precision at the factory. Do not try to disassemble and repair the ABS hydraulic unit.

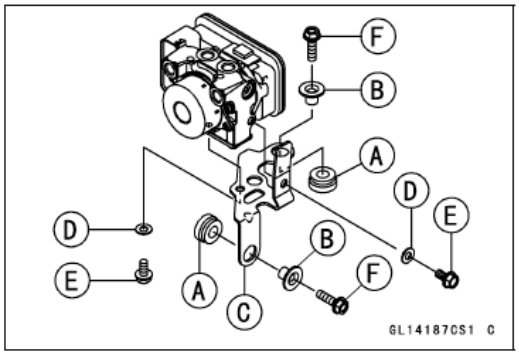
ABS Hydraulic Unit Installation

NOTICE

Brake fluid quickly damages painted plastic surfaces; any spilled fluid should be completely washed away immediately.

- Installation is the reverse of removal.
- Be sure to install the dampers [A] and collars [B] on the bracket [C].
- Install the washers [D].
- Tighten:

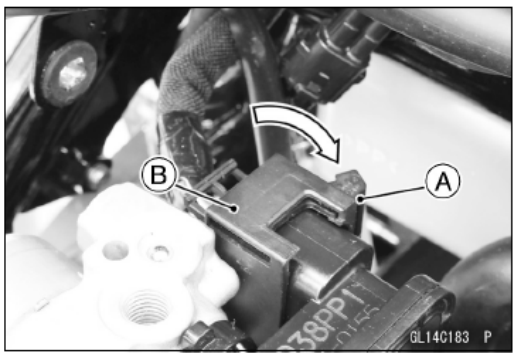
Torque - ABS Hydraulic Unit Bolts [E]: 9.0 N·m (0.92 kgf·m, 80 in·lb)
ABS Hydraulic Unit Bracket Bolts [F]: 9.0 N·m (0.92 kgf·m, 80 in·lb)

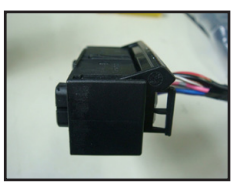


- Pull the lever [A] forward to connect the ABS hydraulic unit connector [B].
- Replace the washers that are on each side of pipe fitting with new one.
- Install the brake pipes (see Cable, Wire, and Hose Routing section in the Appendix chapter).
- Tighten:

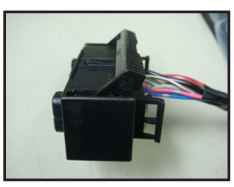
Torque - Brake Pipe Banjo Bolts: 33 N·m (3.4 kgf·m, 24 ft·lb)

- Bleed the brake line (see Brake Line Bleeding).
- Check the brake for good braking power, no brake drag, and no fluid leakage.





LOCKED



UNLOCKED

Brake Line Bleeding

The brake fluid has a very low compression coefficient so that almost all the movement of the brake lever or pedal is transmitted directly to the caliper for braking action. Air, however, is easily compressed. When air enters the brake lines, brake lever or pedal movement will be partially used in compressing the air. This will make the lever or pedal feel spongy, and there will be a loss in braking power.

⚠ WARNING

Air in the brake lines diminish braking performance and can cause an accident resulting in injury or death. If the brake lever or pedal has a soft or "spongy" feeling mushy when it is applied, there might be air in the brake lines or the brake may be defective. Do not operate the vehicle and service the brake system immediately.

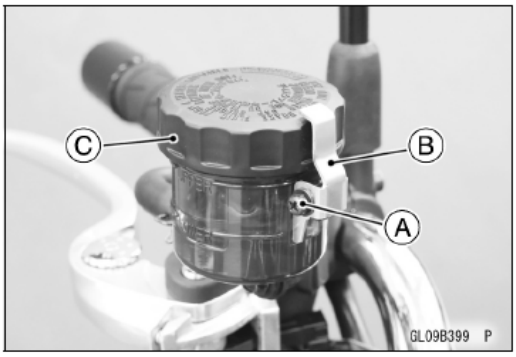
NOTICE

Brake fluid quickly damages painted plastic surfaces; any spilled fluid should be completely washed away immediately.

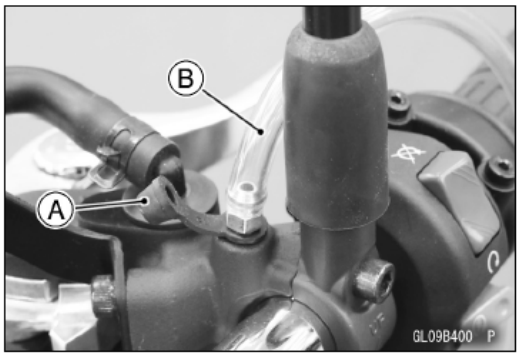
NOTE

○ *The procedure to bleed the front brake line is as follows. Bleeding the rear brake line is the same as for the front brake.*

- Remove:
  Front Brake Reservoir Cap Stopper Screw [A]
  Stopper [B]
  Front Brake Reservoir Cap [C]
  Diaphragm Plate
  Diaphragm
- Fill the reservoir with fresh brake fluid to the upper level line in the reservoir.
- Slowly pump the brake lever several times until no air bubbles can be seen rising up through the fluid from the holes at the bottom of the reservoir.



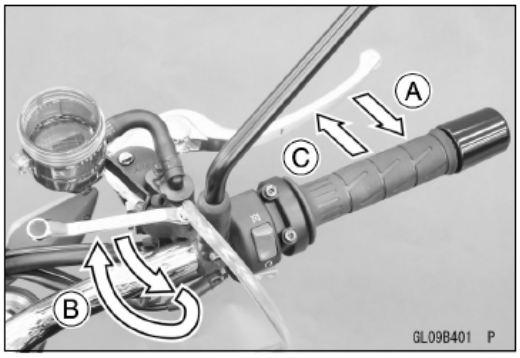
- Remove the rubber cap [A] from the bleed valve on the front master cylinder.
- Attach a clear plastic hose [B] to the bleed valve, and run the other end of the hose into a container.



- Bleed the brake line and the master cylinder.

○Repeat this operation until no more air can be seen coming out into the plastic hose.

1. Pump the brake lever until it becomes hard, and apply the brake and hold it [A].
2. Quickly open and close [B] the bleed valve while holding the brake applied.
3. Release the brake [C].



NOTICE

After pumping the brake lever several times, releasing it without opening and closing of the bleed valve may cause brake fluid to be blown back from the master cylinder reservoir. Brake fluid spilt on painted surfaces and plastic parts will quickly damage them. Be sure to open and close the bleed valve.

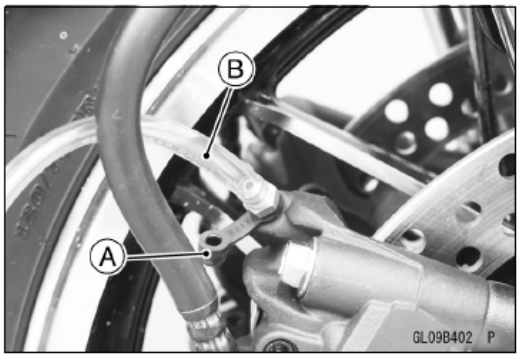
NOTE

○*The fluid level must be checked often during the bleeding operation and replenished with fresh brake fluid as necessary. If the fluid in the reservoir runs completely out any time during bleeding, the bleeding operation must be done over again from the beginning since air will have entered the line.*

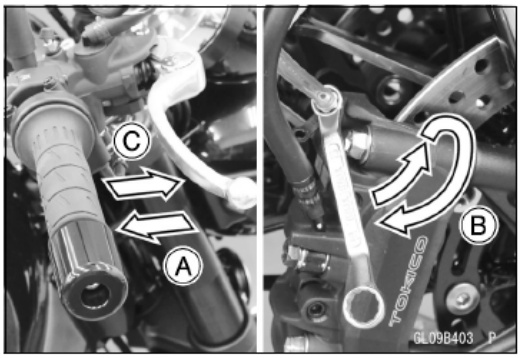
- Remove the clear plastic hose.
- Tighten the bleed valve, and install the rubber cap.

Torque - Bleed Valve: 8.0 N·m (0.82 kgf·m, 71 in·lb)

- Remove the rubber cap [A] from the bleed valve on the caliper.
- Attach a clear plastic hose [B] to the bleed valve, and run the other end of the hose into a container.



● Bleed the brake line and the caliper.
○Repeat this operation until no more air can be seen coming out into the plastic hose.
1. Pump the brake lever until it becomes hard, and apply the brake and hold it [A].
2. Quickly open and close [B] the bleed valve while holding the brake applied.
3. Release the brake [C].

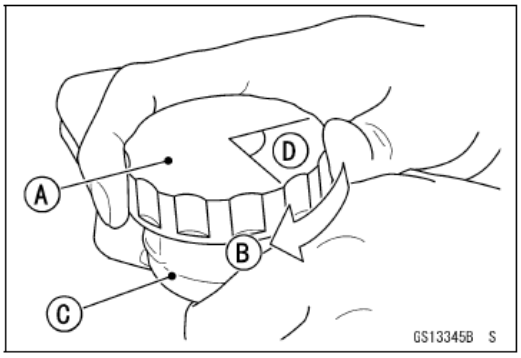


NOTE

○*The fluid level must be checked often during the bleeding operation and replenished with fresh brake fluid as necessary. If the fluid in the reservoir runs completely out any time during bleeding, the bleeding operation must be done over again from the beginning since air will have entered the line.*
○*Tap the brake hose lightly from the caliper to the reservoir for more complete bleeding.*
○*Front Brake: Repeat the above steps for the other caliper.*

● Remove the clear plastic hose.
● Install:
Diaphragm
Diaphragm Plate
Front Brake Reservoir Cap

● Follow the procedure below to install the front/rear brake fluid reservoir cap correctly.
○First, tighten the brake fluid reservoir cap [A] clockwise [B] by hand until slight resistance is felt indicating that the cap is seated on the reservoir body [C], then tighten the cap an additional 1/6 turn [D] while holding the brake fluid reservoir body.



● Tighten the front brake reservoir cap stopper screw.
● Tighten the bleed valve, and install the rubber cap.
Torque - Bleed Valves: 8.0 N·m (0.82 kgf·m, 71 in·lb)
● Check the fluid level (see Brake Fluid Level Inspection in the Periodic Maintenance chapter).
● After bleeding is done, check the brake for good braking power, no brake drag, and no fluid leakage.

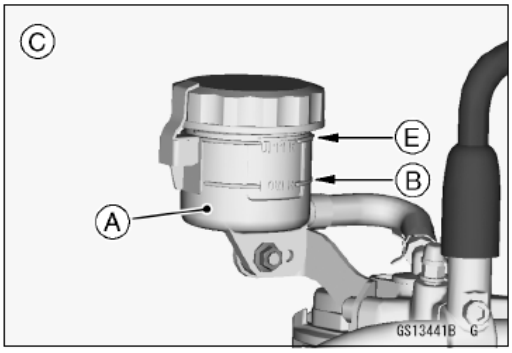
Brake Fluid Level Inspection

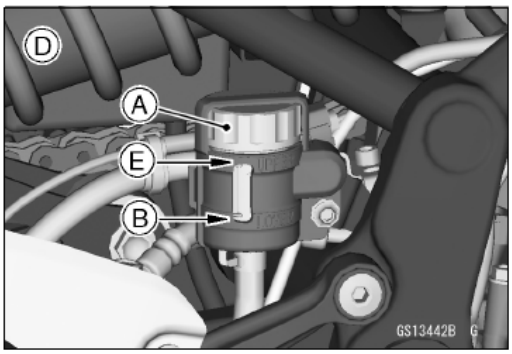
● Check that the brake fluid level in the brake reservoir [A] is above the lower level line [B].
Front Brake [C]
Rear Brake [D]

NOTE

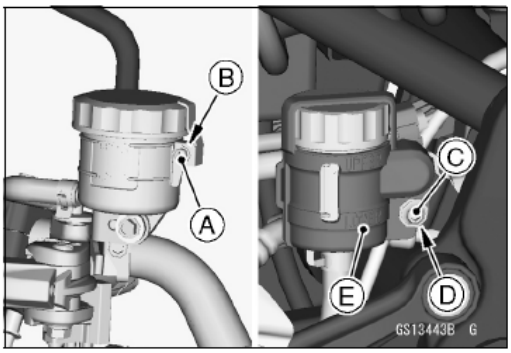
○*Hold the reservoir horizontal by turning the handlebars when checking brake fluid level.*

★If the fluid level is lower than the lower level line, fill the reservoir to the upper level line [E].





○To open the front brake reservoir cap, remove the screw [A] and washer [B].
○To open the rear brake reservoir cap, remove the bolt [C], collar [D], and cover [E].

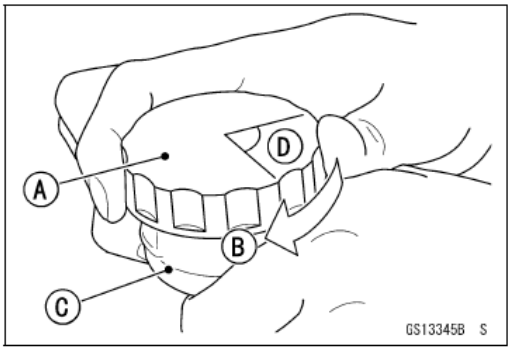


⚠ WARNING

Mixing brands and types of brake fluid can reduce the brake system's effectiveness and cause an accident resulting in injury or death. Do not mix two brands of brake fluid. Change the brake fluid in the brake line completely if the brake fluid must be refilled but the type and brand of the brake fluid that is already in the reservoir are unidentified.

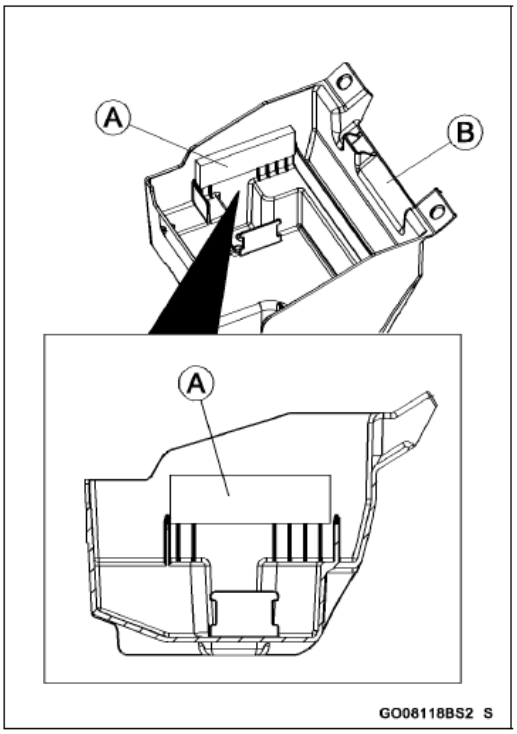
Recommended Disc Brake Fluid
Grade: DOT4

● Follow the procedure below to install the brake reservoir cap correctly.
○First, tighten the brake reservoir cap [A] clockwise [B] by hand until slight resistance is felt indicating that the cap is seated on the reservoir body [C], then tighten the cap an additional 1/6 turn [D] while holding the brake reservoir body.
● Install the removed parts.

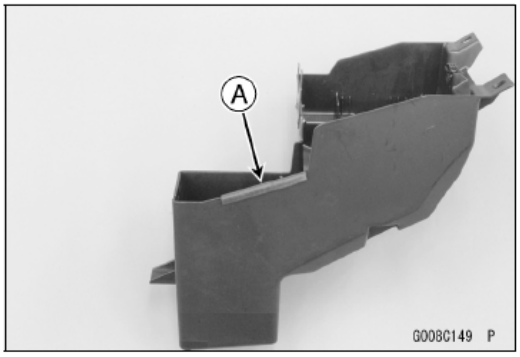


Battery Case Installation

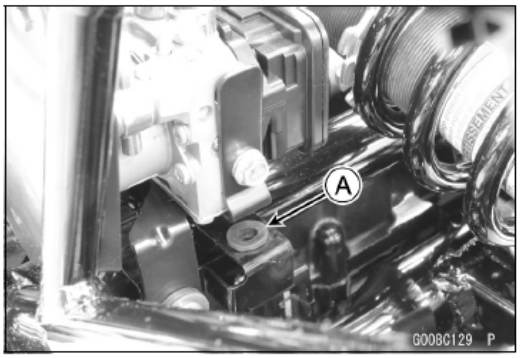
- Installation is the reverse of removal.
- When installing the pad [A], install it on the battery case [B] as shown.



- Check that the trim [A] is in place on the battery case.



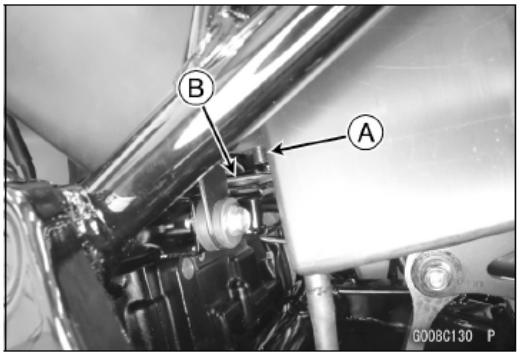
- Check that the grommet [A] is in place on the frame.



- Insert the projections [A] of the battery case into the grommet [B].
- Tighten:

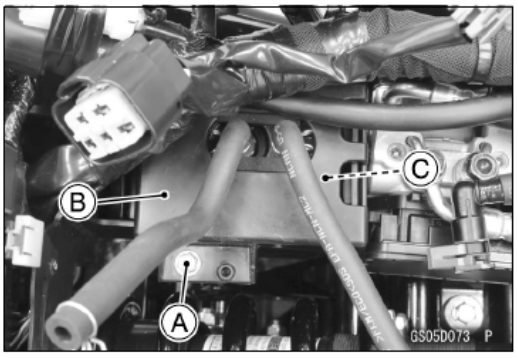
  Torque - Battery Case Mounting Bolts: 4.0 N·m (0.41 kgf·m, 35 in·lb)

- Run the leads, cables and hoses correctly (see Cable, Wire, and Hose Routing section in the Appendix chapter).



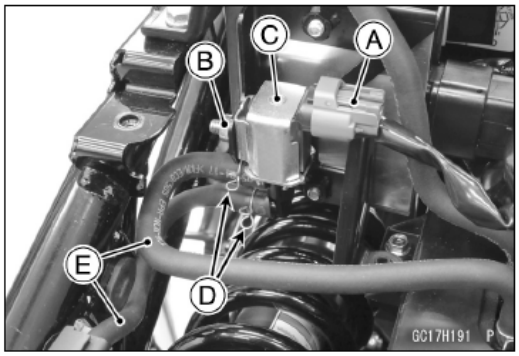
Evaporative Emission Control System (Equipped Models)

- Install:
  Bolt [A]
  Cover [B]
  Canister [C]



Purge Valve Installation

- Connect the hoses [E].
- Slide the clamps [D].
- Install the purge valve [C].
- Install the nut [B].
- Connect the purge valve connector [A].
- Run the hoses correctly (see Cable, Wire, and Hose Routing section in the Appendix chapter).

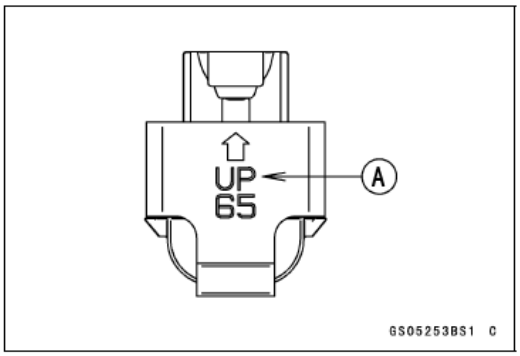


Vehicle-down Sensor Installation

- The UP mark [A] of the sensor should face upward.

⚠ WARNING

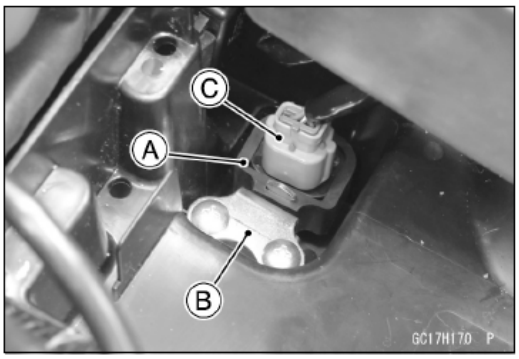
Incorrect installation of the vehicle-down sensor could cause sudden loss of engine power. The rider could lose balance during certain riding situations for an accident resulting in injury or death. Ensure that the vehicle-down sensor is held in place by the sensor bracket.



NOTICE

Never drop the vehicle-down sensor especially on a hard surface. Such a shock to the sensor can damage it.

- Install vehicle-down sensor.
- Connect vehicle-down sensor connector [C].
- Install vehicle-down sensor [A] on bracket [B].

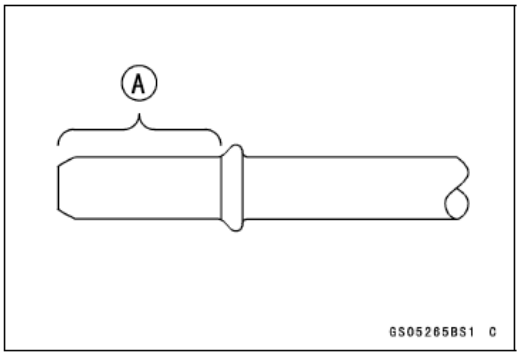


Fuel Tank Installation

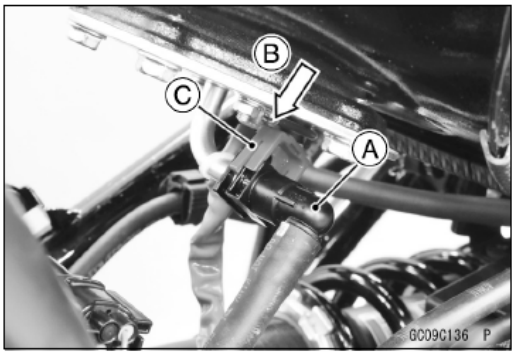
- Remove the vinyl bags on the pipe and fuel hose joint.
- Check the joint lock for deformation and wear.

★If the joint lock is deformed, replace the fuel hose with a new one.

- Check that there are no flaws, burrs, and adhesion of foreign materials on the pipe [A].
- Apply engine oil to the pipe.



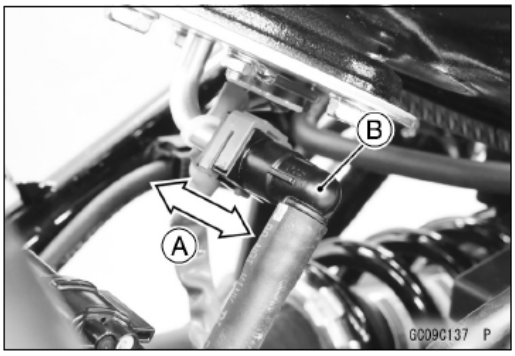
- Insert the fuel hose joint [A] straight onto the fuel outlet pipe until the hose joint clicks.
- Push [B] the joint lock [C] until the hose joint clicks.



- Push and pull [A] the hose joint [B] back and forth more than two times, and make sure it is locked and does not come off.

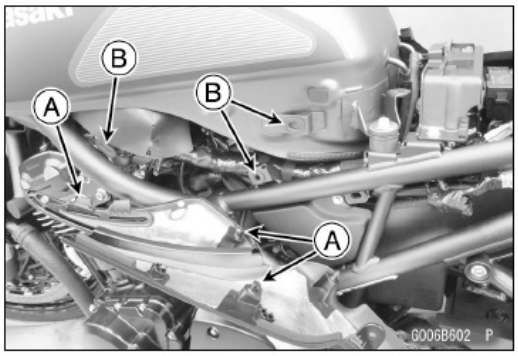
⚠ WARNING

Leaking fuel can cause a fire or explosion resulting in serious burns. Make sure the hose joint is installed correctly on the delivery pipe.

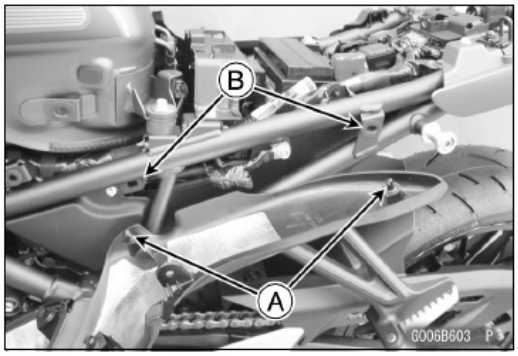


★If it comes off, reinstall the hose joint.
- Connect the fuel pump lead connector.

Side Cover Installation

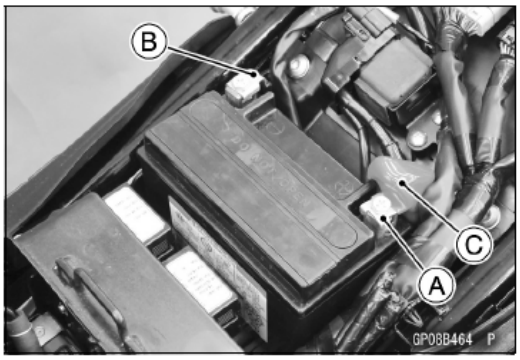


- Insert the projections [A] of the side cover into the grommets [B].



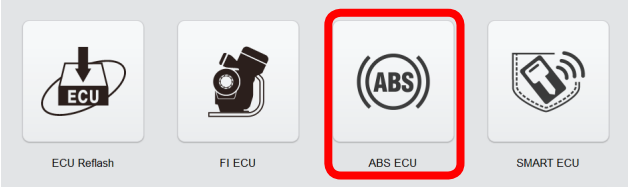
Battery Installation

- Turn the ignition switch off.
- Put the battery into the battery case.
- Connect the positive (+) cable [A] first.
- Cover the positive (+) terminal with the cap [C].
- Connect the negative (–) cable [B].
- Apply a light coat of grease on the terminals to prevent corrosion.

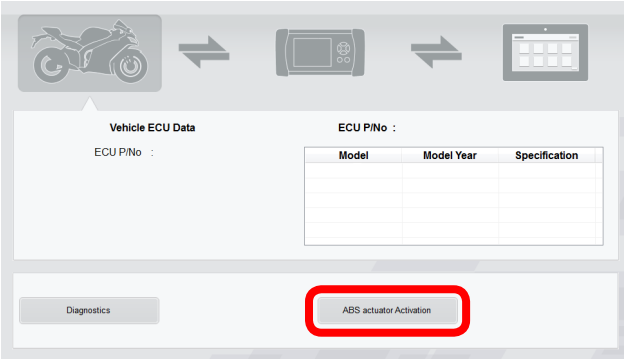


ABS Hydraulic Unit Test Procedure

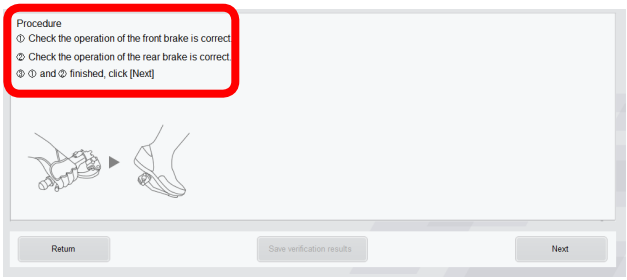
- Connect KVCS cable 57001-1843 to the 6-Pin ABS connector under the seat
- Turn ignition switch to the ON position.
- Launch the KVCS software.
- Click on the ABS ECU tile.



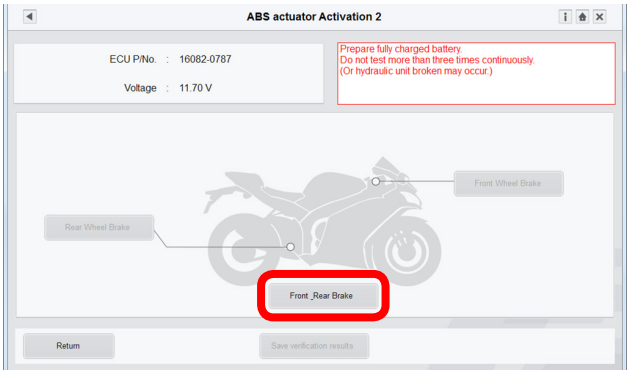
- Click on the “ABS actuator Activation” button.



- Check the function of the front and rear brakes by exercising the brake lever and pedal to ensure the calipers are actuated.
- Click on the “Next” button if the brakes are operational.

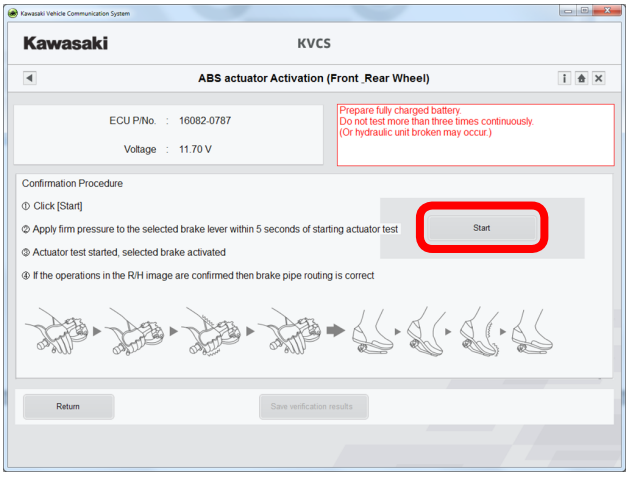


- Click on the “Front_Rear Brake” button.



The following 4 steps must be performed in order and without hesitation:

1. Click the start button on the KVCS screen.
2. Immediately squeeze the front brake lever and hold. The brake handle will vibrate and then push against your hand.
3. Release the front brake lever.
4. Immediately depress the rear brake pedal and hold. The pedal will vibrate and then raise up slightly, indicating the completion of the test.



- Install seats.
- Test ride to verify ABS function.
- Proceed to the Warranty Information section on page 35 of this bulletin.

Warranty Information

This is a safety Recall campaign. Repair is authorized regardless of ownership or warranty status.

Repairs MUST BE PERFORMED IMMEDIATELY ON ALL ELIGIBLE UNITS in the field and during initial assembly and preparation if the inspection reveals an ABS hydraulic unit with an NG LOT #.

See the Warranty Policies and Procedures Manual (claim type 3 information) for detailed instructions when submitting the Warranty Claim.

	ZR900B		ZR900C/E	
	Inspect Only	**Inspect & Replace ABS Hydraulic Unit**	**Inspect Only**	**Inspect & Replace ABS Hydraulic Unit**
Job Code	22517	22518	22519	22520
Flat Rate Time	0.5	1.4	0.5	1.0
Claim Type	3	3	3	3
Part Number	99999-0704	99999-0704	99999-0705	99999-0705
Description	Kit, ABS, MC19-01	Kit, ABS, MC19-01	Kit, ABS, MC19-01	Kit, ABS, MC19-01
Quantity	0	1	0	1

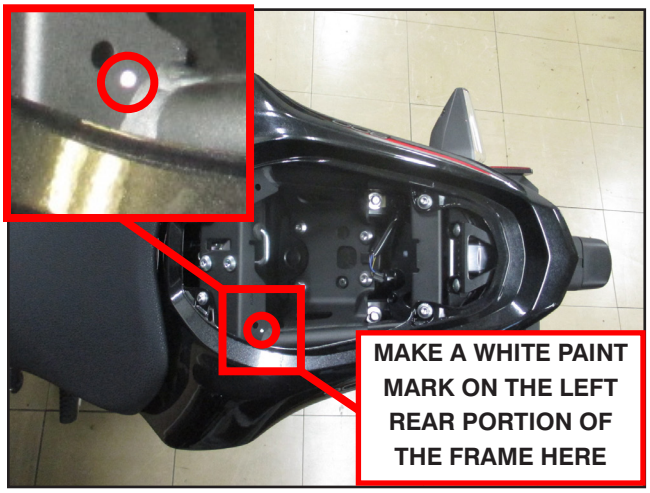
Repair Verification

Make a white paint mark on the left/rear portion of the frame under the seat as shown below to serve as repair verification.

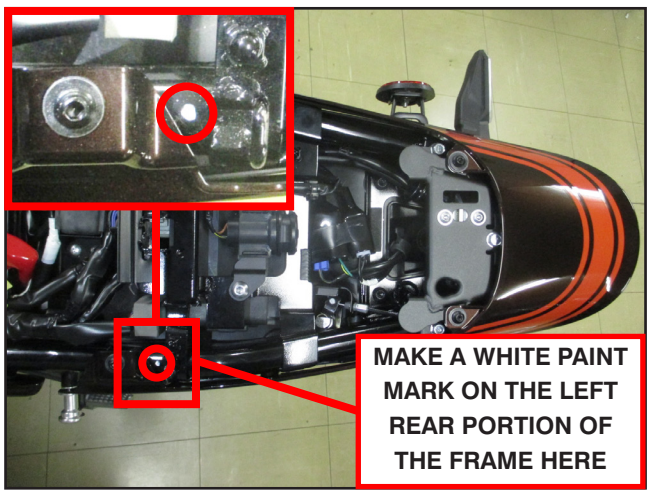
NOTE:

- Repair verification is an essential part of the repair procedure. Along with the physical repair verification, check VIP (Vehicle Information Portal) in K-Dealer for other possible repair campaigns for eligible units.

ZR900B



ZR900C/E



2019 Z900 ABS, Z900 RS ABS & Z900 RS CAFE ABS
INSPECT & REPLACE ABS HYDRAULIC UNIT

IMPORTANT SAFETY RECALL

NHTSA RECALL NO. 19V-083

Dear Kawasaki Motorcycle Owner:

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Kawasaki Motors Corp., U.S.A., has decided that a defect which relates to motor vehicle safety exists in certain 2019 Z900 ABS, Z900 RS ABS & Z900 RS CAFE ABS models.

The reason for this notice:
On affected units, the ABS hydraulic unit may have been contaminated with debris during the manufacturing process. Contamination could result in improper functioning of the anti-lock braking system, allowing the front or rear tire to lock during operation of the anti-lock braking system, creating the potential for a crash resulting in injury or death. Our records indicate that you have purchased one of these units.

What Kawasaki and your dealer will do:
Kawasaki has authorized your dealer to inspect your motorcycle and replace the ABS hydraulic unit if it is found to be defective free of charge. The actual repair will take up to an hour and a half but may take longer due to scheduling at the dealership and the time needed to obtain required parts.

What should you do to ensure your safety?
Please call your Kawasaki dealer to schedule an appointment to have your motorcycle inspected and repaired if required. Please have your Vehicle Identification Number (VIN) ready when calling. To locate the nearest authorized Kawasaki motorcycle dealer, please visit www.kawasaki.com and click on the “LOCATE DEALER” link.

If you need help:
If you have questions or concerns that your dealer is not able to resolve, please contact Kawasaki Customer Care at (866) 802-9381 (toll-free) between 7:30 a.m. and 4:30 p.m. PT Monday through Friday. Please have your Vehicle Identification Number ready when calling.

If your dealer fails or is unable to remedy this defect without charge within a reasonable amount of time (60 days after your first attempt to obtain remedy), you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave. S.E., Washington, D.C. 20590, or call the toll-free Vehicle Safety Hotline at 1(888) 327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov.

If you received this notice in error:
Our records indicate you are the current owner of the motorcycle described in this letter. If you no longer have the vehicle described in this letter, please help us to update our records at www.kawasaki.com by clicking on “OWNER CENTER => OWNER SUPPORT => UPDATE OWNER INFO” or by calling Kawasaki toll free at (866) 802-9381. Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Reimbursement:
If you have experienced the failure described above prior to receiving this letter and have paid to have it corrected, you may be eligible for full or partial reimbursement for your documented cost of repair(s). To apply for reimbursement, please send copies of current owner and VIN information along with copies of repair orders and payment confirmation to the following address:

Kawasaki Motors Corp., U.S.A.
ATTN: Kawasaki Customer Care
P.O. Box 25252
Santa Ana, California 92799-5252

Please note the following conditions for reimbursement:
Claims may be excluded if proper documentation is not included. Current owner and VIN information along with copies of repair orders and payment confirmation must be provided.

We are sorry for any inconvenience this may cause, but we have taken this action in the interest of your safety and your continued satisfaction with your Kawasaki motorcycle.

Sincerely,

Kawasaki Motors Corp., U.S.A.