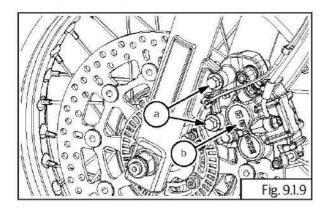
INTERCEPTOR & CONTINENTAL GT

BRAKE CALIPER REMOVAL AND INSTALLATION AND BRAKE BLEEDING PROCEDURE

9.1.2. Brake Caliper - Front

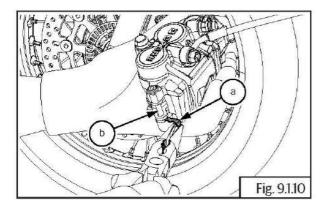
- Gently remove hose from caliper assembly (section 9.3.1).
- Support the front brake caliper assembly suitably.
- Loosen and remove upper and lower Hex flange head bolts (M10) (a) to remove front brake caliper assembly (b) from LH fork.





14 mm Socket with Ratchet

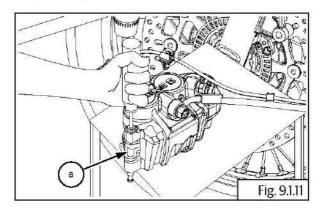
- Gently slide out front brake caliper assembly from front LH fork.
- Remove brake pad lock clip (a) from brake caliper assembly (b).



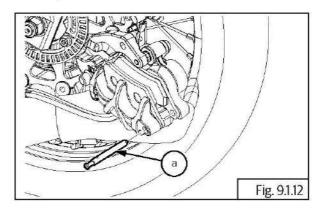


Nose plier

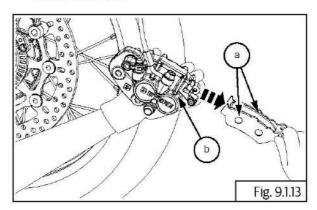
Suitably support caliper and correctly tap brake pad pin (a) from inner side to outside.



Once pin (a) is free, gently pull out pin from brake caliper.

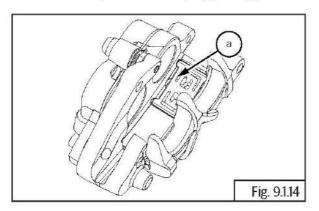


Slide out and remove brake pads (a) from brake caliper front (b).

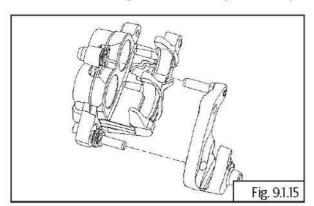


Dismantling Front Brake Caliper

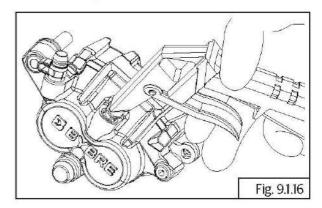
Remove the pad tensioner spring plate (a).



Remove mounting bracket from caliper assembly.



- Remove the bellow and boot.
- Position caliper body with the pistons down and apply small squirts of air pressure to fluid inlet hole to remove pistons.



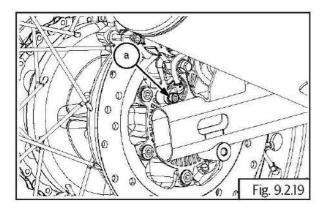
A CAUTION

Do not use high pressure air or bring the nozzle too close to the inlet. Place a shop towel over the pistons to prevent the pistons from becoming projectiles. Push the dust seals and piston seals in and lift them out using a blunt tool. Care should be taken to avoid any damages on the bore of the sliding surface.

Enough care should be taken to avoid damages of the piston OD while servicing/handling. Remove the bleed screw.

9.2.2. Brake Caliper Assembly - Rear

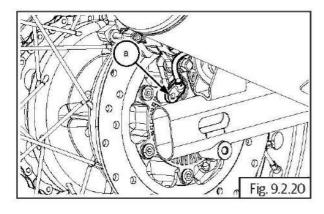
- Remove the following:
 - · Swing arm bolt, spindle and chain adjuster assembly from rear wheel (section 6.8.3).
- Loosen and remove Hex socket head screw (M6) (a) located below brake caliper on RH rear wheel.



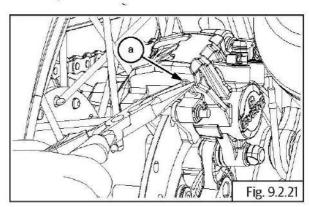


5 mm Allen socket with Ratchet

Gently remove rear wheel speed sensor ABS (a) from rear wheel hub.



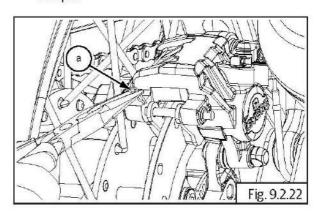
Remove brake pad outer clip (a) from brake pad lock pin.





Nose plier

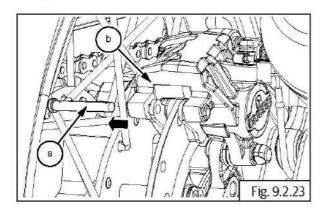
Remove brake pad inner clip (a) from brake pad lock pin.

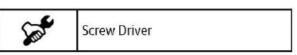




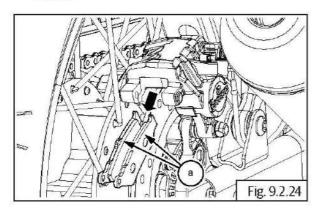
Nose plier

Remove brake pad lock pin (a) from brake caliper (b).

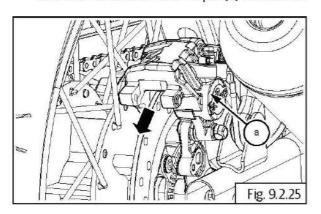




Slide out and remove brake pads (a) from brake caliper.

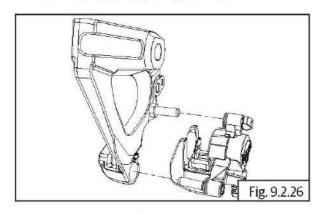


Slide out and remove brake caliper (a) with holder.

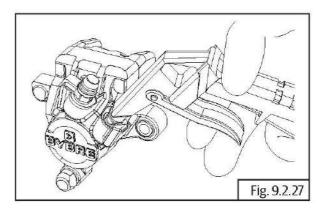


Dismantling Rear Brake Caliper

Separate the mounting bracket from the caliper assembly by gently pulling them apart.



Position caliper body with pistons down and apply small squirts of air pressure to the fluid inlet hole to remove pistons.



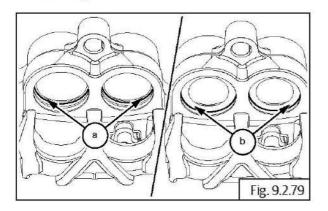
A CAUTION

DO NOT use high pressure air or bring the nozzle too close to the inlet. Place a shop towel over the pistons to prevent the pistons from becoming projectiles. Push the dust seals and piston seals in and lift them out using a blunt tool. Care should be taken to avoid any damage on the bore of the sliding surface.

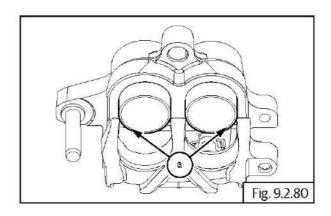
Enough care should be taken to avoid damages of the piston OD while servicing/handling. Remove the bleed Screw.

9.2.8. Brake Caliper - Front

- Coat fresh brake fluid on new dust seals and piston
- Install piston seals in inner groove (a) and dust seals in outer groove (b) in the bore in caliper assembly.



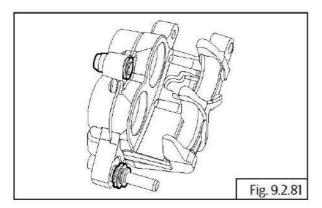
- Coat the caliper cylinders and pistons with fresh brake fluid.
- Insert closed end of the pistons into caliper bores and gently press it into caliper fully till open ends of the piston (a) are flush with caliper bore outer edge.



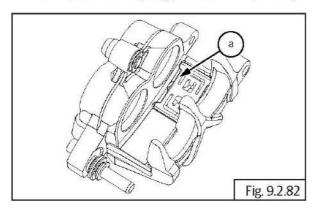
NOTE

· Do not apply force while assembling the pistons into the caliper. Press only with minimal hand pressure. Assemble pistons one at a time into the caliper.

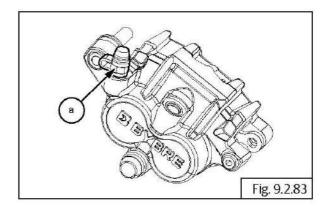
Smear fresh brake fluid on the caliper boot and bellow and assemble them on the caliper body.



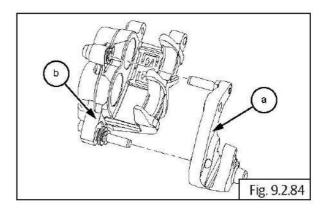
Install pad tension spring plate (a) in caliper body.



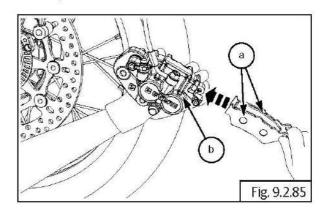
Assemble bleeder valve (a) with dust cap on the caliper body.



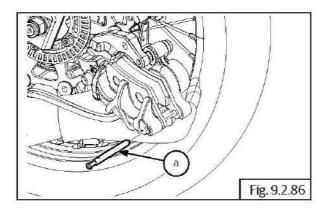
Assemble the mounting bracket (a) on caliper body (b).



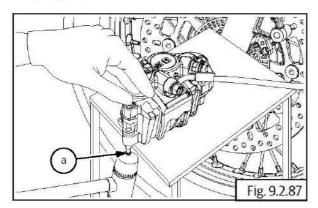
Slide in and assemble brake pads (a) into brake caliper (b).



Lubricate and insert brake pad pin (a) into caliper.



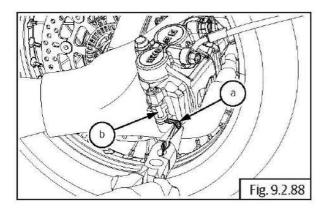
Suitably support caliper and correctly tap brake pad pin (a) from outside to inside.





Pin punch and Mallet

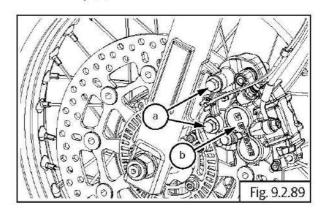
Assemble brake pad lock clip (a) into the brake pad pin (b).





Nose plier

- Support and hold the front brake caliper assembly suitably onto the front LH fork.
- Locate and tighten upper and lower Hex flange head bolts (M10) (a) to fix front brake caliper assembly (b) to LH fork.

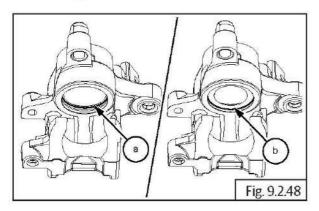


Sol	14 mm Socket with Ratchet	
Torque	45 N-m/4.5 kgf-m	

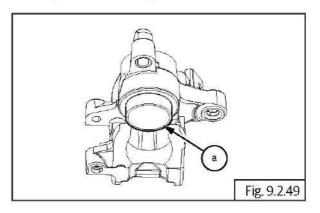
9.2.5. Brake Caliper Assembly - Rear

Assembling Rear Brake Caliper

- Coat fresh brake fluid on new dust seals and piston
- Install piston seals in the inner groove (a) and dust seals in the outer groove (b) in the bore in caliper assembly.



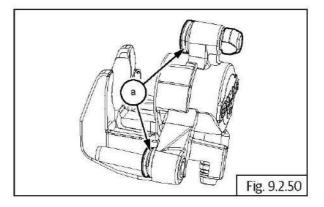
- Coat the caliper cylinder and piston with fresh brake fluid.
- Insert the closed end of the piston (a) into the caliper bore and gently press it into caliper fully till the open ends of the piston are flush with the caliper bore outer edge



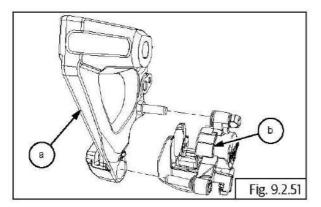
1 CAUTION

DO NOT apply force while assembling the piston into the caliper. Press only with minimal hand pressure.

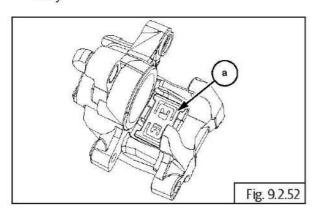
Assemble the rubber grommets (a) on the bracket mounting area of the caliper.



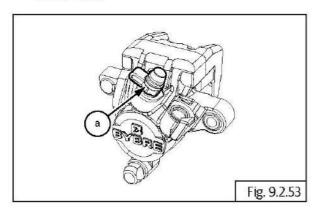
Locate bracket (a) on the caliper (b) and gently press caliper into bracket fully.



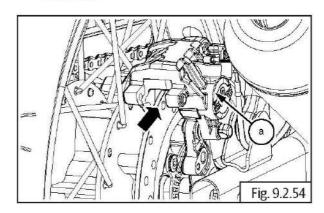
Install the pad tension spring plate (a) in the Caliper body.



Assemble Bleed screw (a) with the dust cap on the caliper body.

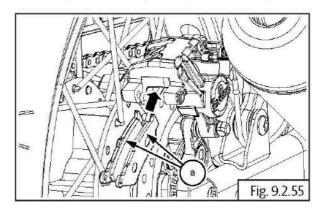


Gently locate brake caliper (a) with holder onto brake disc.

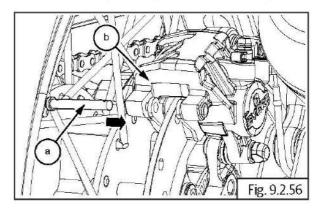


Rear Brake Pads in Wheel Caliper

Gently locate brake pads (a) into brake caliper.

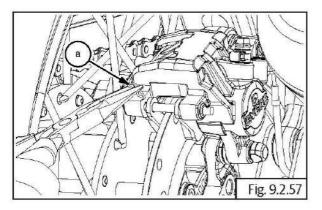


Locate brake pad lock pin (a) into brake caliper (b).



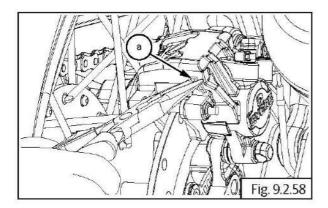


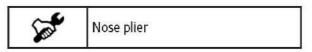
Install brake pad inner clip (a) into brake pad lock pin.



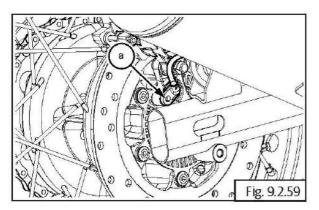


Install brake pad outer clip (a) into brake pad lock pin.

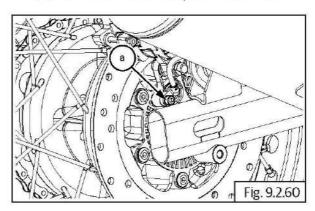




Gently assemble rear wheel speed sensor ABS (a) into rear wheel hub.



Locate and tighten Hex socket head screw (M5) (a) located below brake caliper on rear wheel RH.



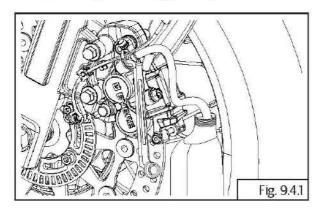


4 mm Allen socket with Ratchet

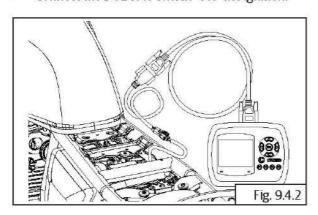
Bleeding the Hydraulic Brake System With DOL Tool (Front & Rear)

9.4. Preparation (Front Disc Brake)

- Use a Philips screwdriver to loosen and remove the screws of the front disc brake master cylinder.
- Remove the cap, and Diaphragm Plate with diaphragm.
- Remove the dust cap and place the suitable ring spanner on the bleeding nipple and attach a Vinyl Pipe (transparent).
- Thereafter, take a Clean glass / Plastic container (transparent) with fresh brake fluid, and dip the other end of the vinyl pipe (transparent) in it (make sure that the vinyl pipe is always submerged in the fluid during the bleeding process).

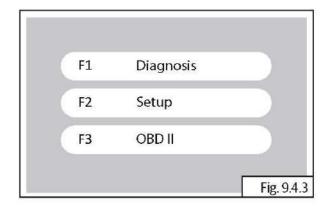


· Connect the DOL tool switch "ON" the ignition.

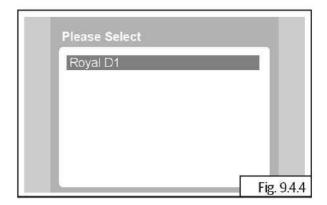


Procedure

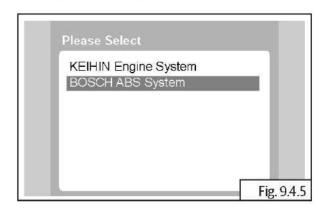
Select - F1 Diagnosis.



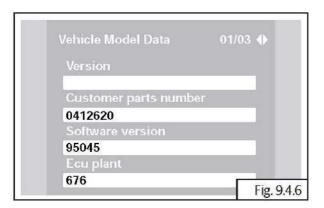
Select – Royal D1.



Select – Bosch ABS.



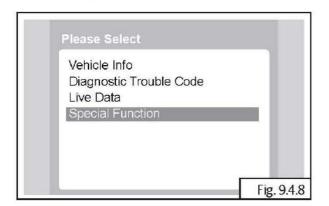
Default Screen.



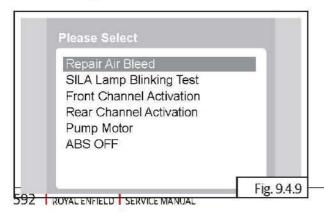
Press C.



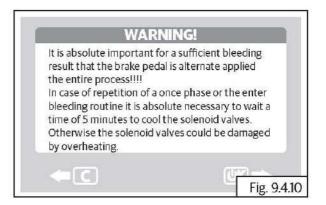
Select - Spl Function.



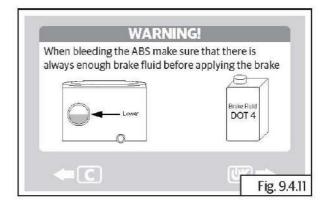
Select - Repair Air Bleed.



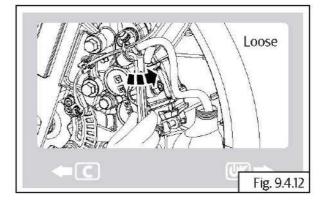
· Default Screen.



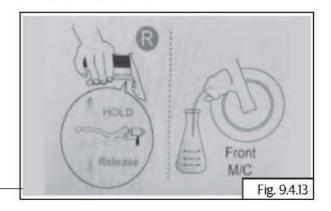
Default Screen.



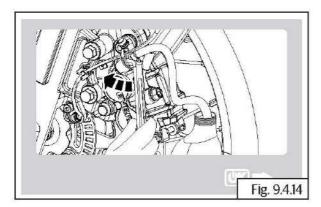
Loosen the bleeder nipple.



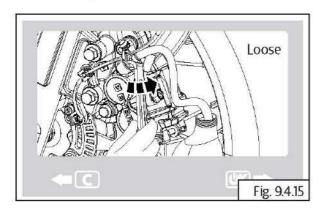
· Operate the brake lever.



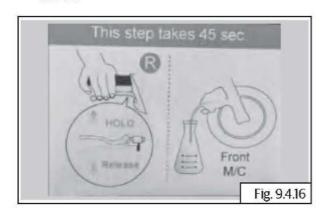
Hold the lever in pressed condition and tighten the bleeder nipple.



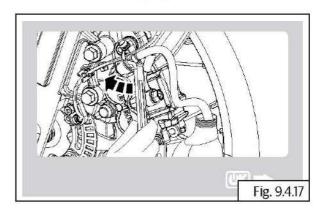
Loosen the bleeder nipple - (Brake lever in released condition).



Operate the brake lever till the next window open in DOL.



Hold the brake lever in pressed condition and tighten the bleeding nipple.



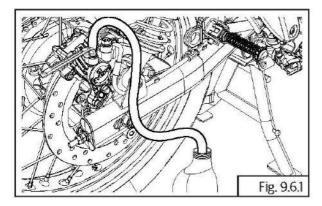
During this operation pump will run and expel the air trapped in the system through bleeder nipple.

9.5. Reassembly

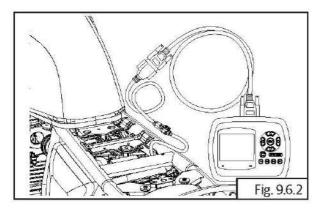
- Switch OFF the ignition.
- Disconnect the DOL Tool.
- Remove the vinyl pipe and remove the ring spanner.
- Refit the dust cap (make sure that there is no leak from the bleeder nipple).
- Refit the diaphragm with diaphragm plate of the master cylinder.
- Refit the master cylinder cap taking care that the vent slot in the cap is facing rider.

9.6. Preparation (Rear Disc Brake)

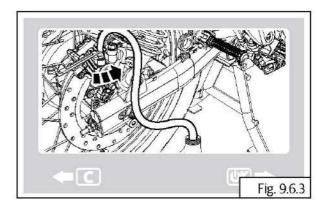
- Remove the reservoir cap of the rear disc brake.
- Remove the Diaphragm Plate with diaphragm.
- Remove the dust cap and place the suitable ring spanner on the bleeding nipple.
- Attach a Vinyl Pipe (transparent).
- Thereafter, take a Clean glass / Plastic container (transparent) with fresh brake fluid, and dip the other end of the vinyl pipe (transparent) in it (make sure that the vinyl pipe is always submerged in the fluid during the bleeding process).



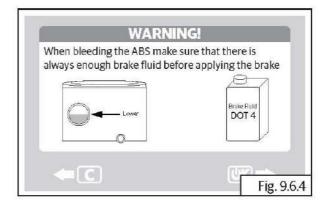
Connect the DOL tool switch on the ignition



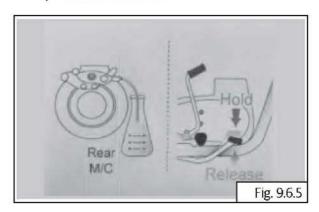
Loosen the bleeder nipple.



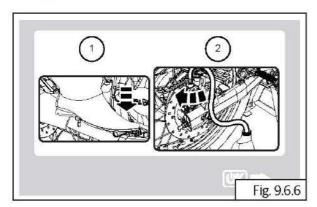
Default Screen.



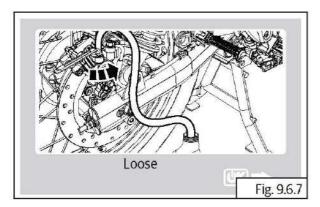
Operate the brake lever.



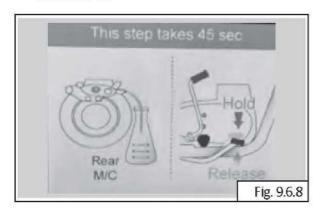
Hold the brake Pedal in pressed condition and tighten the bleeding nipple.



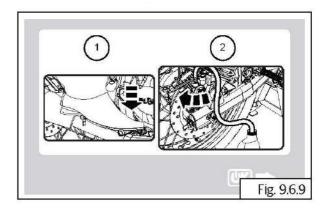
Loosen the bleeder nipple - (Brake lever in released condition)



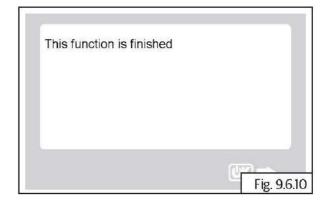
Operate the brake lever until the next window opens in DOL.



Hold the brake lever in pressed condition and tighten the bleeding nipple.



During this operation pump will run and expel the air trapped in the system through bleeder nipple



9.7. Reassembly

- Switch OFF the ignition and disconnect and remove the DOL tool.
- Remove the vinyl pipe and remove the ring spanner.
- Refit the dust cap (make sure that there is no leak from the bleeder nipple).
- Refit the diaphragm with diaphragm plate of the reservoir.
- Refit the reservoir cap.

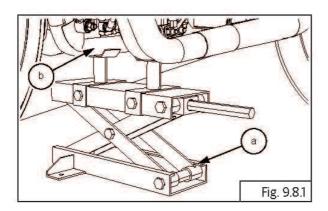
BRAKE BLEEDING (Front & Rear) Manual Method

9.8. Brake Bleeding

! CAUTION

Ensure the motorcycle is upright on a firm and flat surface.

Support motorcycle with suitable equipment below cradle frame.



A CAUTION

Do not spill brake fluid on any part of the motorcycle as it will damage the painted/ plastic surfaces.

A WARNING

Ensure brake fluid does not get in contact with eyes and skin. In-case of exposure wash affected area thoroughly with water. Seek medical attention immediately if any irritation persists.

Keep out of reach of children.

Dispose drained brake fluid carefully and responsibly.

A WARNING

Brake fluid is Hygroscopic hence, absorbs moisture from air. Ensure fluid reservoirs caps are closed properly.

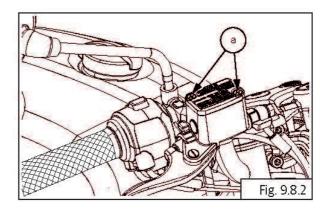
If moisture in the brake system may cause damage to brake parts and fluid, causing reduction in braking efficiency; which in turn may lead to fatal accidents.

NOTE

- Use brake fluid from sealed containers only.
- Use only DOT4 specification brake fluid listed in technical specifications (section 2.4).
- Ensure ignition switch and stop switch are in ON position.

9.8.1. Front Brake Bleeding

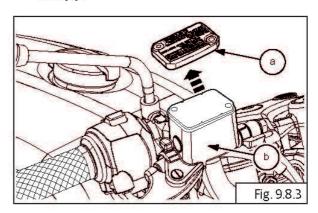
Loosen and remove 2 Nos. screws (a) from front brake reservoir tank.



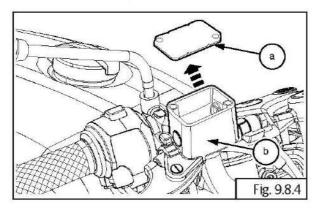


Screw driver phillips

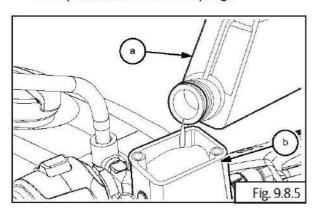
Remove reservoir cap (a) from front brake reservoir tank (b).



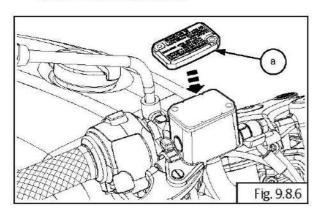
Remove reservoir diaphragm (a) from front brake reservoir tank (b).



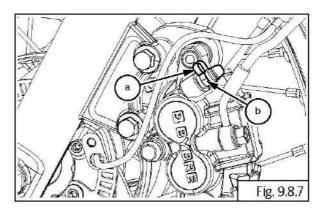
- Gently top up fresh brake fluid (a) into reservoir (b).
- Do not over fill as it may cause malfunctioning of some parts due to brake fluid spillage.



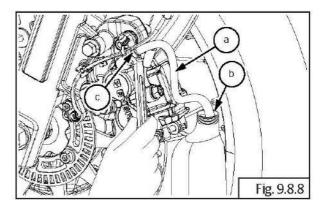
Locate diaphragm and cap (a) on the reservoir and DO NOT fasten with screws.



Remove rubber cap (a) from bleeder valve (b) from front caliper on front wheel RH.

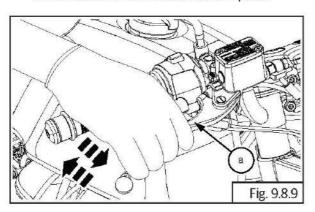


- Dip bleeder hose (a) one end into a container (b) with fresh brake fluid to avoid air passage into bleeder valve.
- Insert bleeder hose other end into bleeder valve (c) on front caliper to drain used oil.

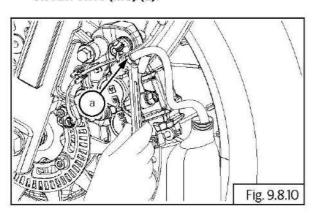


- · Use brake fluid from new, sealed containers only.
- · Use only DOT4 specification brake fluid listed in technical specifications (section 2.4).

- Gently pump brake lever (a) until brake is effective.
- Once brake lever is effective, hold it in place.



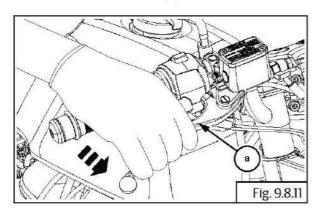
While holding brake lever, quickly open and close bleeder valve (M6) (a).



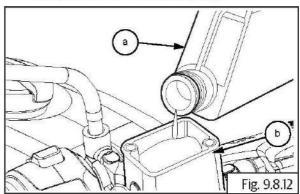


11 mm Ring spanner and air bleeder.

Release the brake lever (a).



- Gently top up fresh brake fluid (a) into reservoir (b).
- Do not over fill as it may cause malfunctioning of some parts due to brake fluid spillage.



Repeat this operation until air from the system is released completely. Observe bleeder hose. As air in the system is cleared, bubbles stop appearing in hose.

1 CAUTION

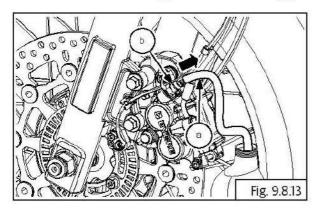
While bleeding the brake system always ensure brake fluid is above min level BUT below "Max" level. Never allow the brake fluid go below minimum level to avoid air entering brake system. Always fill the brake fluid from sealed container only.

Do not leave the master cylinder cap and or brake fluid container open for long as brake fluid is highly hygroscopic in nature a and will loose its properties if exposed to atmospheric conditions.

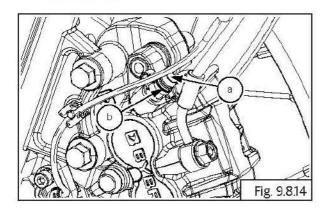
Inspect brake lever efficiency.

- The fluid level must be checked often during the bleeding operation and top up with fresh brake fluid as necessary.
- · Gently tap brake hose for proper bleeding performance.
- · Check brake fluid level after completion of brake bleeding.
- · Whenever the modulator is removed or replaced the brake bleeding time will be longer as brake fluid will have to travel from master cylinder to modulator and then to wheel caliper
- · Whenever bleeding the brake system, it is always recommended to bleed both the front and rear brakes.

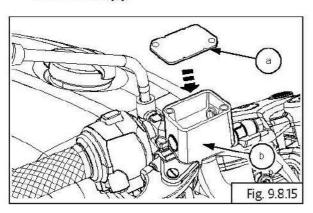
Remove bleeder hose (a) from bleeder valve (b).



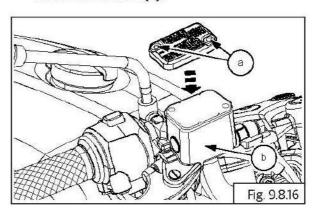
- Close rubber cap (a) on bleeder valve (b).
- Ensure cap is locked properly to avoid exposure to dust or mud.

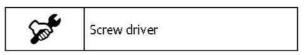


Install reservoir diaphragm (a) into front brake reservoir tank (b).



Locate and tighten 2 Nos. screws (a) into front brake reservoir tank (b).



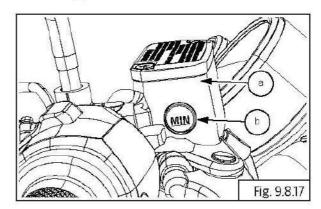


9.8.2. Front Brake Fluid Leakage

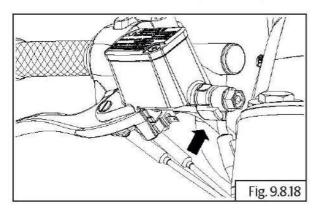
! CAUTION

Ensure motorcycle is placed on a flat surface resting it on ramp/center stand.

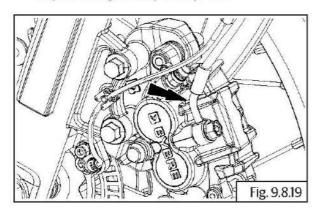
- Inspect fluid level at every 5000 Km (300 miles). Replace fluid after 25000 Km (1500 miles).
- Inspect fluid level, visible in window glass on front reservoir tank (a).
- Ensure brake fluid level is always above 'MIN' mark (b) on window.



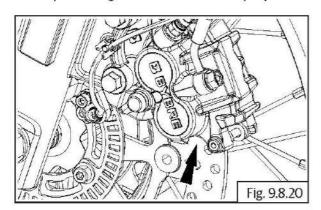
If oil level is below 'MIN', inspect leakage at front brake hoses and front master cylinder banjo bolt.



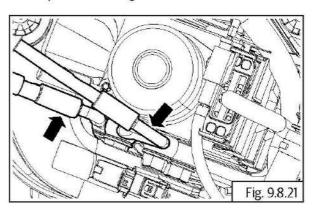
Inspect leakage at caliper banjo bolt.



Inspect leakage on brake disc from caliper piston.

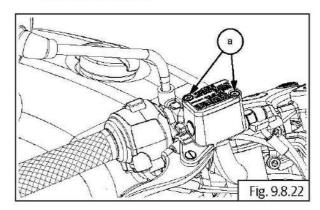


Inspect fluid leakage at hoses at ABS modulator.



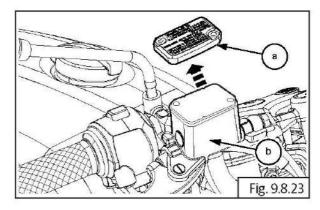
9.8.3. Front Brake Fluid Top up

Loosen and remove 2 Nos. screws (a) from front brake reservoir tank.

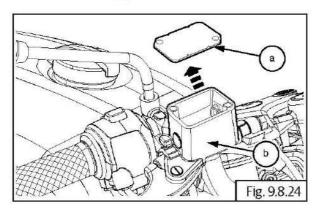




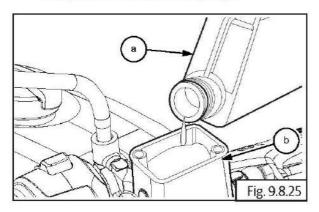
Remove reservoir cap (a) from front brake reservoir tank (b).



Remove reservoir diaphragm (a) from front brake reservoir tank (b).



- Top up fresh fluid (a) into reservoir tank (b) up to 'MAX' mark on the window.
- Do not over fill as it may cause malfunctioning of some parts due to brake fluid spillage.



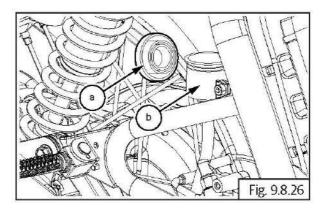
9.8.4. Rear Brake Bleeding

L CAUTION

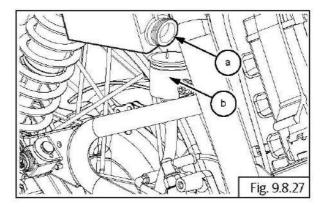
Ensure the motorcycle is upright on a firm and flat surface.

Support motorcycle with suitable equipment below cradle frame.

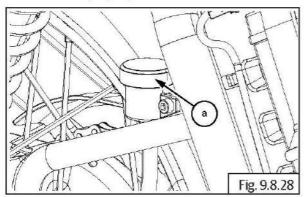
- Rear brake reservoir is located near rear wheel on cradle frame.
- Open rear brake reservoir cap (a) from reservoir (b).



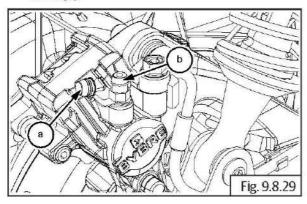
- · Use brake fluid from sealed containers only.
- · Use only DOT4 specification brake fluid listed in technical specification Information (section 2.4).
- Fill fresh brake fluid (a) into reservoir (b).



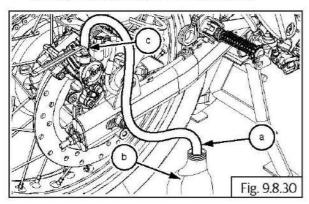
- Do not over fill as it may cause malfunctioning of some parts due to brake fluid spillage.
- Locate the reservoir cap (a) on the tank and ensure it is seated properly.



- Locate rear brake bleeder valve on rear wheel brake caliper, behind silencer.
- Open rubber cap (a) from rear brake bleeder valve (b).



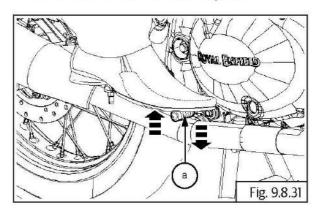
- Dip bleeder hose (a) one end into a container (b) with fresh brake fluid to avoid air passage into bleeder valve.
- Insert bleeder hose other end into bleeder valve (M6) (c) on front caliper to drain used oil.



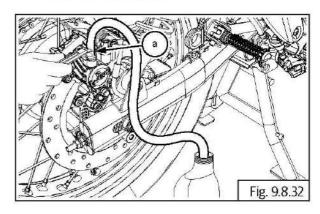


11 mm Ring spanner

Gently pump rear brake pedal (a) until pumping becomes hard and then hold it in place.



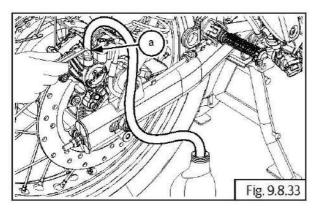
While holding brake, quickly open and close bleeder valve (M6) (a).



- Repeat this operation until air from system is released completely.
- Inspect brake lever efficiency.

- · The fluid level must be checked often during the bleeding operation and top up with fresh brake fluid as necessary.
- · Gently tap brake hose for proper bleeding performance.
- · Check brake fluid level after completion of brake bleeding.

Remove bleeder hose (a) from bleeder valve on rear caliper.



- Close bleeder valve (a) rubber cap (b).
- Ensure cap is locked properly to avoid exposure to dust or mud.

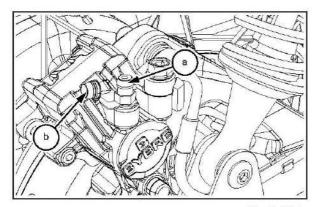


Fig. 9.8.34

9.8.5. Rear Brake Fluid Leakage

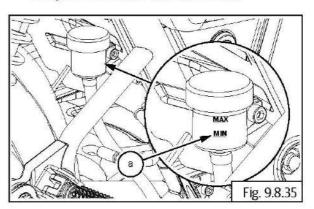
1 CAUTION

Ensure the motorcycle is upright on a firm and flat surface.

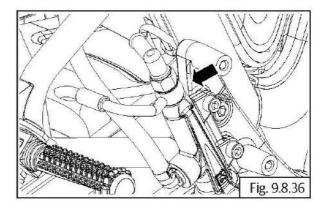
NOTE

· Inspect fluid level at every 5000Km (3000 miles). Replace fluid after 25000Km (15000 miles).

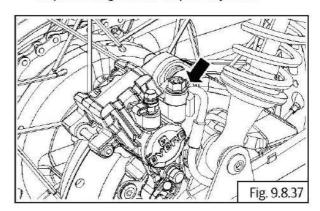
- Inspect fluid level visible on rear reservoir tank.
- Ensure brake fluid level in rear reservoir tank is always between 'MIN' and 'Max' marks.



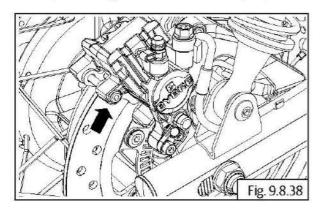
If oil level is below 'MIN', inspect leakage at rear brake hoses and rear master cylinder banjo bolt.



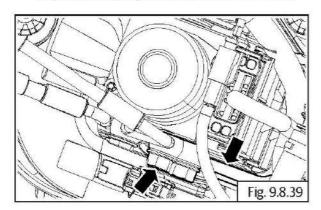
Inspect leakage at rear caliper banjo bolt.



Inspect leakage on brake disc from caliper piston.

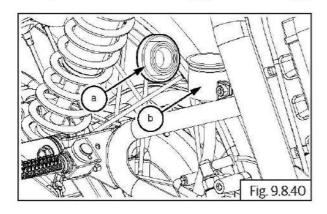


Inspect fluid leakage at hoses on ABS modulator.

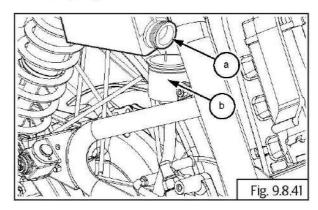


9.8.6. Rear Brake Fluid Top Up

Open rear brake reservoir cap (a) from reservoir (b).



Top up fresh brake fluid (a) into reservoir tank (b) only up to MAX level. Do not over fill as it may cause malfunctioning of some parts due to brake fluid spillage.



Locate the reservoir cap (a) on the tank and ensure it is seated properly.

