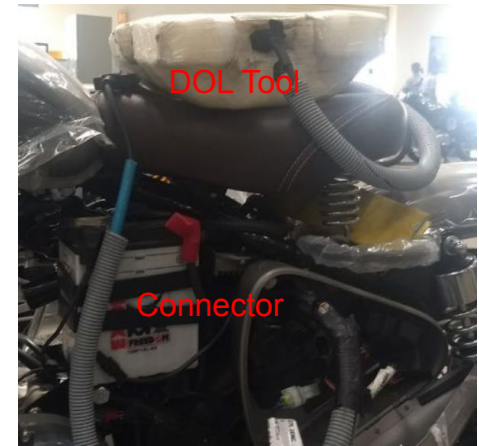


**Bleeding the Hydraulic  
Brake System  
With DOL Tool  
(Front & Rear)**

## Preparation ( Front Disc Brake)

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



# ABS

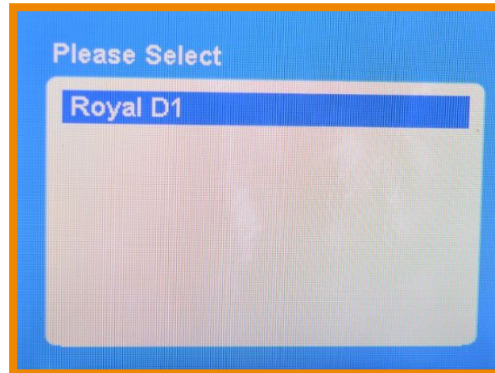
## Procedure

1



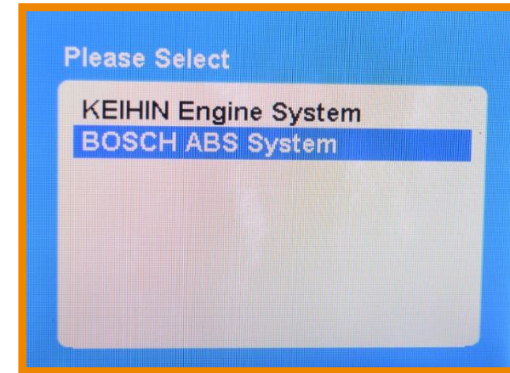
Select – F1 Diagnosis

2



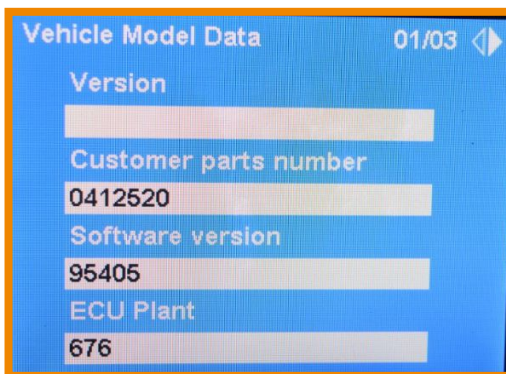
Select – Royal D1

3



Select – Bosch ABS

4



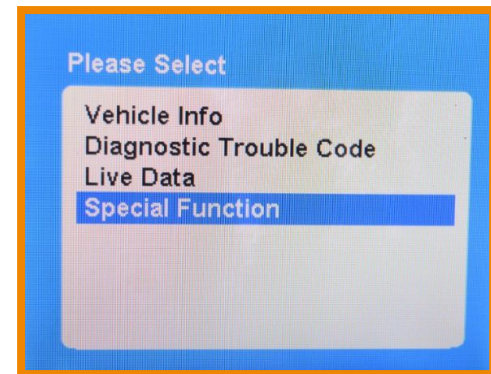
Default Screen

5



Press C

6

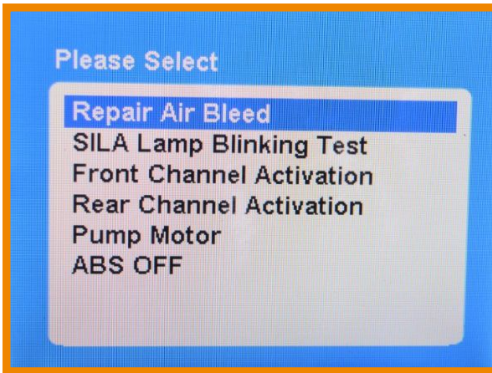


Select – Spl Function

# ABS

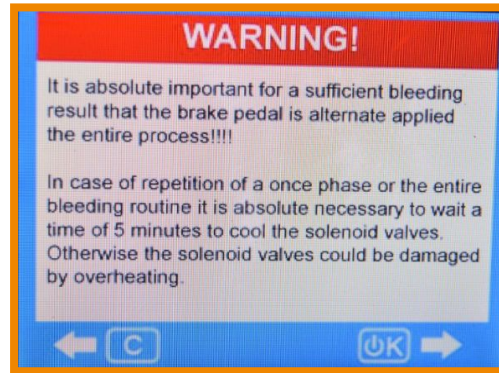
## Procedure

7



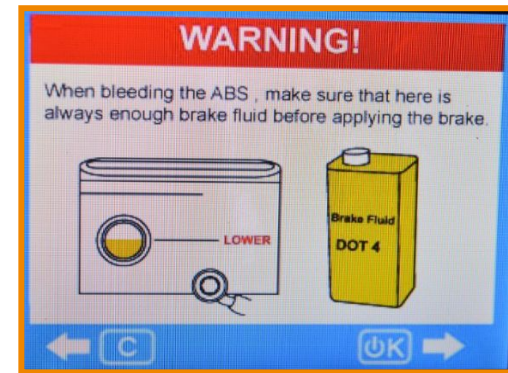
Select – Repair Air Bleed

8



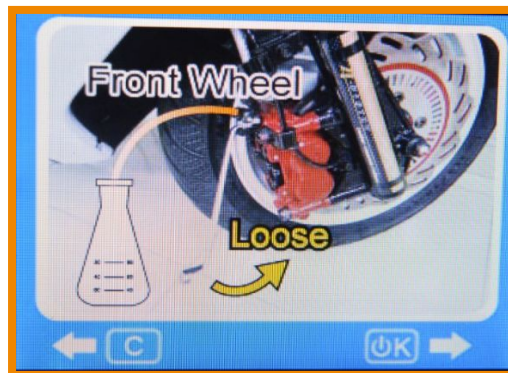
Default Screen

9



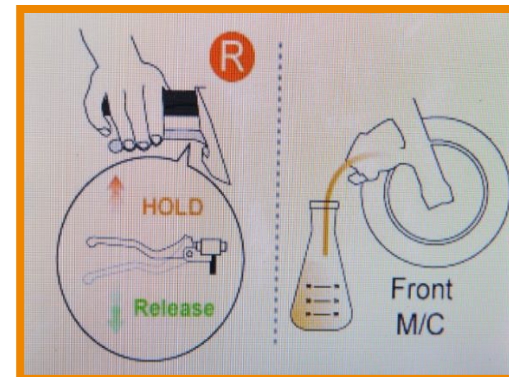
Default Screen

10



Loosen the bleeder nipple

11



Operate the brake lever

# ABS

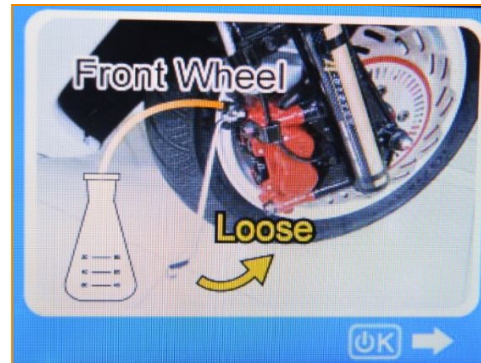
## Procedure

12



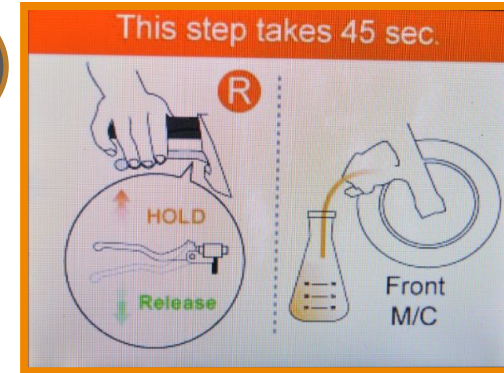
Hold the lever in pressed condition and tighten the bleeder nipple

13



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

14



\* Operate the brake lever till the next window open in DOL

15



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

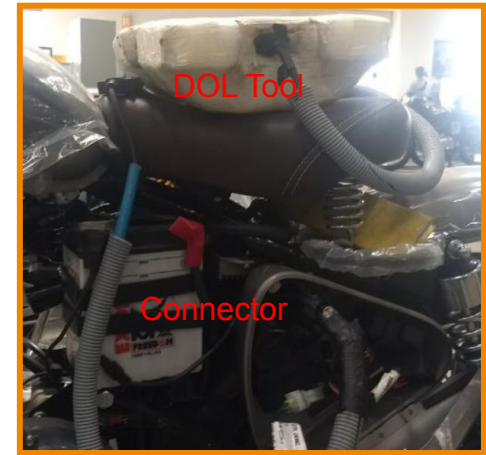
\* During this operation pump will run and expel the air trapped in the system through bleeder nipple

## Reassembly

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

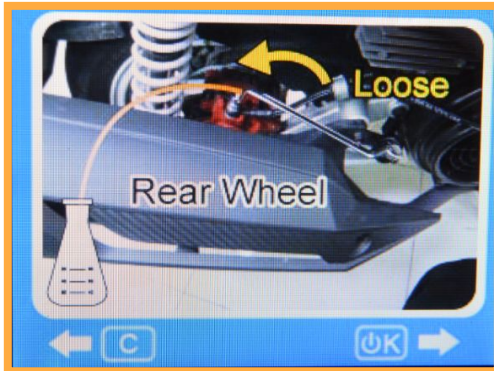
## Preparation ( Rear Disc Brake)

1. Remove the reservoir cap of the rear disc brake
2. Remove the Diaphragm Plate with diaphragm
3. Remove the dust cap and place the suitable ring spanner on the bleeding nipple
4. Attach a Vinyl Pipe ( transparent)
5. 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.)
6. Connect the DOL tool switch on the ignition



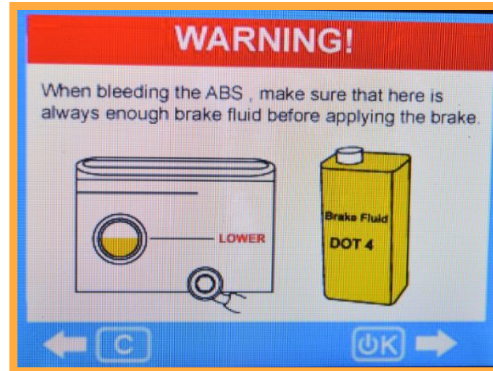
# ABS

16



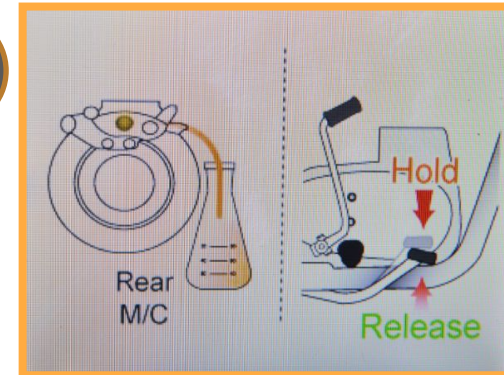
Loosen the bleeder nipple

17



Default Screen

18



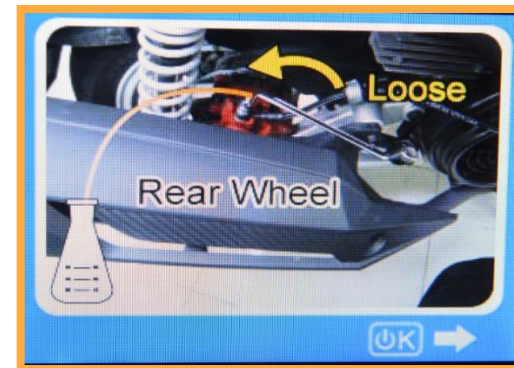
Operate the brake lever

19



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

20



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



## ABS

21



\* Operate the brake lever till the next window open in DOL

22



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

This function is finished



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

## Reassembly

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

**Bleeding the Hydraulic  
Brake System  
Manual  
(Front & Rear)**

## Preparation ( Front Disc Brake)

1. Use a Philips screwdriver to loosen and remove the screws of the front disc brake master cylinder.
2. Remove the cap, and Diaphragm Plate with diaphragm
3. Remove the dust cap and place the suitable ring spanner on the bleeding nipple attach a Vinyl Pipe ( transparent)
4. 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.)

## Bleeding procedure

1. Operate the brake lever to the maximum travel, three to four times and hold the lever in pressed condition
2. Then, use the suitable ring spanner to loosen the bleeding nipple
3. Now you will notice that the brake fluid is coming out of bleeding nipple with air bubbles.
4. As and when brake fluid flow stops tighten the bleeding nipple using suitable ring spanner. Release the brake lever
5. Repeat step (1) through step (5) several times until the discharged fluid is free of air bubbles. And Check the travel of the brake lever. If a firm resistance is felt, the manual bleeding is complete.
6. Do not let the brake master cylinder/reservoir fluid get below the MIN level during the bleeding operation. Keep the master cylinder / reservoir filled with fresh DOT4 brake fluid (never fill the reservoir with the used brake fluid)

## Reassembly

1. Remove the vinyl pipe and remove the ring spanner
2. Refit the dust cap ( make sure that there is no leak from the bleeder nipple)
3. Refit the diaphragm with diaphragm plate of the master cylinder
4. Refit the master cylinder cap taking care that the vent slot in the cap is facing rider

## Preparation ( Rear Disc Brake)

1. Remove the reservoir cap of the rear disc brake
2. Remove the Diaphragm Plate with diaphragm
3. Remove the dust cap and place the suitable ring spanner on the bleeding nipple
4. Attach a Vinyl Pipe ( transparent)
5. 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.)

## Bleeding procedure

1. Operate the brake lever to the maximum travel, three to four times and hold the lever in pressed condition
2. Then, use the suitable ring spanner to loosen the bleeding nipple
3. Now you will notice that the brake fluid is coming out of bleeding nipple with air bubbles.
4. As and when brake fluid flow stops tighten the bleeding nipple using suitable ring spanner. Release the brake lever
5. Repeat step (1) through step (5) several times until the discharged fluid is free of air bubbles. And Check the travel of the brake lever. If a firm resistance is felt, the manual bleeding is complete.
6. Do not let the brake master cylinder/reservoir fluid get below the MIN level during the bleeding operation. Keep the master cylinder / reservoir filled with fresh DOT4 brake fluid (never fill the reservoir with the used brake fluid)

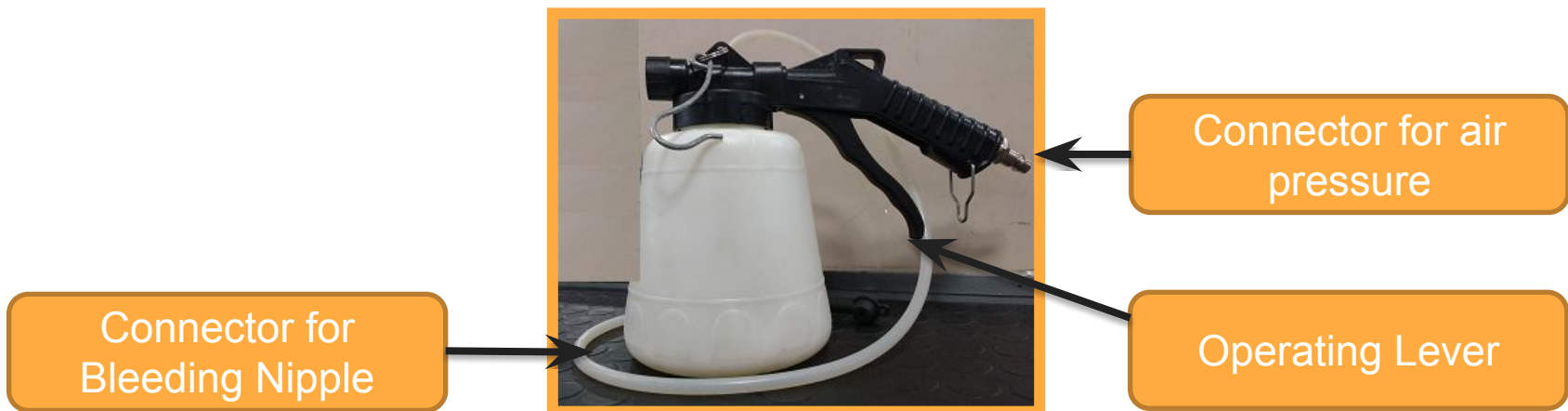


## Reassembly

1. Remove the vinyl pipe and remove the ring spanner
2. Refit the dust cap ( make sure that there is no leak from the bleeder nipple)
3. Refit the diaphragm with diaphragm plate of the reservoir
4. Refit the reservoir cap

# Bleeding the Hydraulic Brake System

## Bleeder equipment pneumatic assisted (Front & Rear)



## Preparation ( Front Disc Brake)

1. Use a Philips screwdriver to loosen and remove the screws of the front disc brake master cylinder.
2. Remove the cap, and Diaphragm Plate with diaphragm
3. Remove the dust cap and place the suitable ring spanner on the bleeding nipple
4. Make sure that the brake fluid reservoir level is maintained

## Bleeding procedure

1. Attach the bleeding equipment pipe to the bleeding nipple
2. Attach the other end of the bleeding equipment connector to the compressed air line
3. Now open the bleeding nipple by using appropriate spanner, and simultaneously press the lever of bleeding equipment for a few seconds and observe that the brake fluid is coming out of the bleeding nipple into the container of the bleeding equipment – if you observe that, air bubble along with brake fluid, continue the above procedure for more duration
4. Simultaneously fill the reservoir to the specified mark and close the bleeding nipple with the help of appropriate spanner
5. And Check the travel of the brake lever. If a firm resistance is felt, the bleeding is complete.

## Reassembly

1. Disconnect the compressor connection from the equipment and pipe line from the bleeding nipple
2. Refit the dust cap ( make sure that there is no leak from the bleeder nipple)
3. Refit the diaphragm with diaphragm plate of the reservoir
4. Refit the reservoir cap

## Preparation (Rear Disc Brake)

1. Remove the reservoir cap of the rear disc brake
2. Remove the Diaphragm Plate with diaphragm
3. Remove the dust cap and place the suitable ring spanner on the bleeding nipple
4. Make sure that the brake fluid reservoir level is maintained

## Bleeding procedure

1. Attach the bleeding equipment pipe to the bleeding nipple
2. Attach the other end of the bleeding equipment connector to the compressed air line
3. Now open the bleeding nipple by using appropriate spanner, and simultaneously press the lever of bleeding equipment for a few seconds and observe that the brake fluid is coming out of the bleeding nipple into the container of the bleeding equipment – if you observe that, air bubble along with brake fluid, continue the above procedure for more duration
4. Simultaneously fill the reservoir to the specified mark and close the bleeding nipple with the help of appropriate spanner
5. And Check the travel of the brake lever. If a firm resistance is felt, the bleeding is complete.

## Reassembly

1. Disconnect the compressor connection from the equipment and pipe line from the bleeding nipple
2. Refit the dust cap ( make sure that there is no leak from the bleeder nipple)
3. Refit the diaphragm with diaphragm plate of the reservoir
4. Refit the reservoir cap



## Periodic Maintenance Service & Schedule

1. Use only DOT 4 Brake Fluid
2. Never mix the multi grade brake fluid
3. Every Service inspect the Bundy pipe for damage, leaks, cracks clinks and proper routing.
4. Every Service inspect the Banjo union for its tightness and for leak
5. Maintain the brake fluid level above the minimum level in the reservoir
6. Replace the Brake fluid at every **XXXXXXXX** Km/ **XXXXXX** Months which ever is earlier
7. Replace the Bundy pipe and Banjo bolt at every **XXXXXX** Km/ **XXXXX** Months which ever is earlier (always use new banjo washer)

**Need schedule**



**HAPPY LEARNING**

**RE ACADEMY**

**THANK  
YOU**

