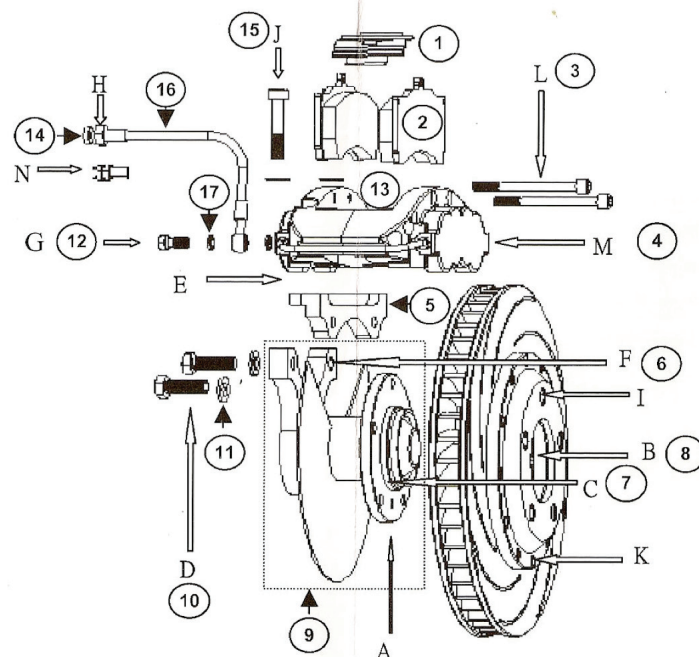




|   |                             |    |                      |
|---|-----------------------------|----|----------------------|
| 1 | ANTI-RATTLE CLIP            | 10 | GASKET/WASHER        |
| 2 | BRAKE PAD                   | 11 | CALIPER MTG BOLT     |
| 3 | PAD RETAINER BOLT           | 12 | BANJO                |
| 4 | BLEED NIPPLES               | 13 | BRAKE CALIPER        |
| 5 | CALIPER MOUNTING BRACKET    | 14 | HOSE LOCATION WASHER |
| 6 | OE CALIPER MOUNTING BRACKET | 15 | CALIPER MTG BOLT     |
| 7 | BRAKE DISC MOUNTING         | 16 | BRAKE HYDRAULIC HOSE |
| 8 | BRAKE DISC                  | 17 | GASKET/WASHER        |
| 9 | HUB                         |    |                      |

### Installation Instructions

1. Please raise the car and remove the OE brake caliper and the brake disc.
2. Use emery paper to clean the brake disc mounting faces (pic A) or use a blade to remove rust and then make sure all faces of the brake disc mounting are clean.
3. The antirust grease spreads over the brake disc when the product leaves the manufacturer. Please clean oil sludge on the surface of it for fear of permeating the grease into the brake pads, in order to avoid causing unusual noise and a peculiar smell.
4. Afterwards, please fit the brake disc in the car and ensure the central point of the brake disc and that of the brake disc mounting match (pic B and pic C).

5. The new caliper mounting bracket needs to be bolted to the location points on the OE caliper mounting bracket and then all bolts must be tightened by using recommended torques. Please note the length of the bolts and spec. for thread must be proper. (pic D)
6. Bolt the brake caliper to the caliper mounting bracket.
7. Measure the distance on all sides between the 2 brake pads and the brake disc.
8. Due to the fact that location points on the OE caliper mounting bracket have tolerance, please check whether the brake disc is central in the caliper pathway. If not, realign the brake caliper and the brake disc to the optimum position by putting the washer that is 0.25mm between the caliper and the caliper mounting bracket, or between the caliper mounting bracket and the hub. (pic E and pic F). Please note that 2 washers at most can be stacked off one bolt and two bolts should be fit.
9. The brake disc should be flush with the brake disc mounting before the measurement of the relative distances between the brake caliper, the brake disc and the caliper mounting bracket are taken.
10. The bleed nipples must be located at the top of the brake caliper when it is fitted to the vehicle.
11. Please note the washer should be put onto the banjos (pic G ) and tightened when the brake hydraulic hose is connected.
12. Connect the brake hydraulic hose to the vehicle and tighten it.
13. The same car model made in different countries may require different specifications for the brake hydraulic hose joint. The technician should note if the brake hydraulic hose joint which is connected to the vehicle is either raised-type or concave-type for all car models (pic H ). These two types of adapting joints are supplied with the kit so the technician is able to decide which type of the adapting joint is required.(pic N).
14. The method of fixing the brake hydraulic hose attached to the hub is not exactly the same as where the OE location has been provided. The tool bag has 2 pcs of 8-type iron strips and 2 pcs of long fixing strips. The technician is able to alter the angle that is required. Upon completion of fitting, close the indentation of the 8-type iron strips by using the particular tools (pic P ).
15. The U-type strips supplied in the tool bag are used to fix the brake hydraulic hose. The U-type strips are not applicable for all vehicles; therefore, the technician can decide to fit it or not depending on the application.
16. No matter how the technician fixes the brake hydraulic hose by any means, the technician should verify the brake hydraulic hose will not be affected by the hub direction or the shock absorbers stroke.
17. The initial temperature of the brake pads is 50°C and the highest is 800°C. It is essential to get the vehicle driven for around 1-5 kilometers in either cold or snowy weather until the brake pads reach the standard temperature. This will bring the brake to its best performance.

## 18. Tightening Torques Table

| Part Number | Tightening Torques |
|-------------|--------------------|
| <b>D</b>    | <b>68-70NM</b>     |
| <b>G</b>    | <b>25NM</b>        |
| <b>J</b>    | <b>58NM</b>        |
| <b>K</b>    | <b>14NM</b>        |
| <b>L</b>    | <b>14NM</b>        |
| <b>M</b>    | <b>17NM</b>        |

### Trouble shooting

#### 1. Fluid Leaking

- a. Please check if the joint of the brake hydraulic hose has any foreign bodies or wrong specification. ( raised-type or concave-type )
- b. It is normal to see a small amount of oil sludge around bleed nipples. If obvious oil leaking is found, disassemble and cleanse the screws, then refit them.
- c. Brake systems must be sent back to the original manufacturer if excessive use of it leads the piston to leak oil.

#### 2. Vibration on driving

- a. The brake discs and brake discs mounting do not closely fit together at their central aperture. Add a ring of iron to improve that.
- b. Take out the brake disc, then revolve it 90° and put it back.
- c. If the car's bushing is worn, please replace it with a new one.
- d. Brake systems do not lock-in tightly themselves.
- e. Please use the power stabilizer to test and improve.
- f. The maximum disc run out must be no more than 0.10 mm ( 0.004 " ). The brake discs are handed, therefore it is important to refer to the disc brake identification sheet attached to ensure that the discs are mounted to the correct side of the car.

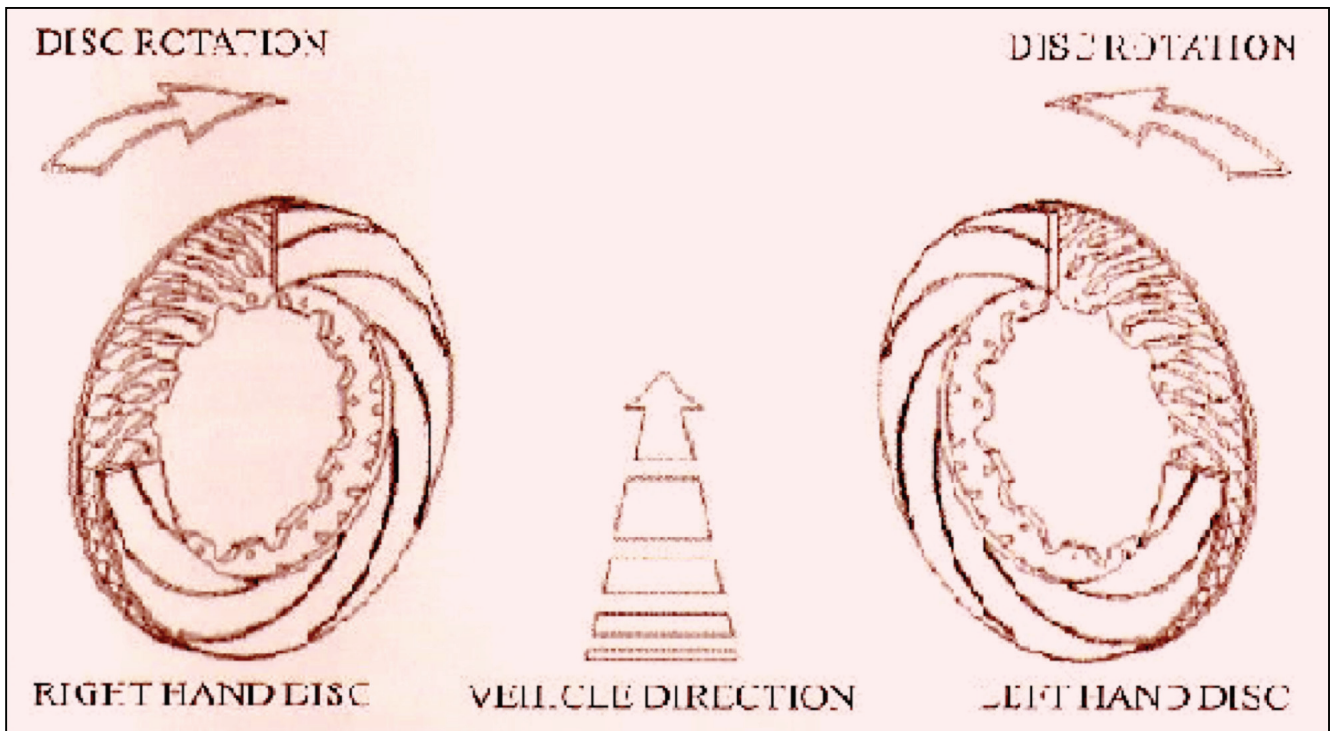
#### 3. Vibration on braking

- a. If the brake disc is overused or when it, in high temperature, gets wet in water, both of the two above conditions will lead to deformation of the brake disc. It must be replaced with new one.
- b. If the car's bushing is worn, please replace it with new one.

#### 4. Unusual noise

- a. When you drive forward and brake, it will lead to a loud noise. When you reverse, it will also lead to a loud noise. Noise caused by both of the two above conditions result from the incomplete installation of anti-rattle clips.
- b. It is normal to hear soft sharp noise when you brake. Use anti-noise wax.

## BRAKE DISC RH & LH IDENTIFICATION



### NOTE:

Please note the rotation when fitting the disc. The disc rotations are related to the efficiency of heating. When the disc rotation being wrong will effect braking performance.

