

1 ANTI-RATTLE CLIP	10 CALIPER MT G BOLT
2 BRAKE PAD	11 GASKET/WASHER
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 MT G BOLT
7 OE BRAKE DISC MOUNTING	16 BRAKE HYDRAULIC HOSE
8 BRAKE DISC	17 GASKET/WASHER
9 HUB	

Production Description

When getting this production, please read this description as follows:

- Kits include:
 - 2 X Brake calipers with either 6 or 8 pot (pistons)
 - 2 X Brake discs
 - 2 X Caliper mounting brackets
 - 4 X Brake pads
 - 2 X Brake hydraulic hoses
 - 1 X Workbag
 - 1 X Brochure
- When opening the box, please note and see if there are any kits (a-f) missing. If you have those problems above, please feel free to contact your retailer immediately.
- Before fitting the brake system, a. you have to make sure the measurement of the bolt hose for brake disc and the measurement of the bolt for your caliper mounting bracket are the same. (pic I) b. ensure the central point of the brake disc and that of the OE brake disc mounting match. (pic B and pic C) c. you have to check that the size of the Two holes for the caliper mounting bracket and the hub are the same. (pic F) d. You have to check to be sure the size of the brake hydraulic hose joint connecting to your vehicle is the same as the original joint.

(pic H). Normally, the brake hydraulic hose length which is supplied is longer.

- Please absolutely verify each step mentioned above then fit the brake system. Returning the goods is unacceptable once the brake system has been fit on the vehicle or any scratches on the goods have occurred.
- Upon fitting the brake system correctly, you have to run your vehicle around 10 to 20 miles. Please note and see and hear if there is any unusual noise and/or vibration. Please check that all bolts are tightened.
- It is important that new discs and pads are allowed to bed properly for around 300 to 400 miles, during which time you should avoid excessive or hard braking, as this may cause overheating and/or warping of the discs which will seriously affect braking performance.
- The product is meant to increase braking performance. In order to obtain optimum performance, our brake pads and brake discs are made from particularly tough material. It is common for a weak squeal of brakes and this will void the warranty.
- The brake system is the most important safety system in your car, hence any brake modifications must be carried out by mechanics licensed and experienced in the

installation of the brake system.

- It is very important for fitting the brake system to have practical experience. Please communicate with licensed technician to qualify the safety. If any problems happen, the installer has to take all responsibilities for them. We only indemnify the value of products.
- The fitting methods of brake hydraulic hoses may vary on each vehicle. The technician has to make sure of the angle and the position and/or turn the tires back and forth and vibrate your vehicle to ensure the brake hydraulic hose won't be dragged and be damaged by your tires. You should fit the brake hydraulic hose by approved methods.
- Fitting the brake caliper, please note that the bleed nipple (pic M) should be upturned. Please remember the air in the brake fluid should absolutely exhausted.
- It is recommended that the new brake pads and the brake disc are applied during the same application when replacing the worn ones.
- You can choose the same applications but different parts by manufacturers, such as AP, FERODO, MINTEX, CARBON METALLIC. The warranty is void if damaging for discs.

- Our discs are all qualified by balance testing. Normally, there are some snicks on the discs. You cannot drill a hole and/or snicks in brake disc unless brake disc lacks balance.
- The production of OE hub for each vehicle all has tolerances (pic E). When the hubs are in conflict with the discs, it is possible to alter the hub.
- 99% of brake hydraulic hose joints Connecting to the vehicle are either raised-type or concave-type (pic H). If you figure out the joint cannot connect to your vehicle, please use the proper adapting joint (pic N) in the workbag to connect onto.
- Please replace the brake pads when a minimum of 3mm of pad material is left on the pad. Please replace the brake disc when a minimum of 30.5mm of brake disc is left.
- Do not use SILICONE brake fluid.
- This product is special design for racing and particular propose and cannot be used for street. You have to change the OE wheel.

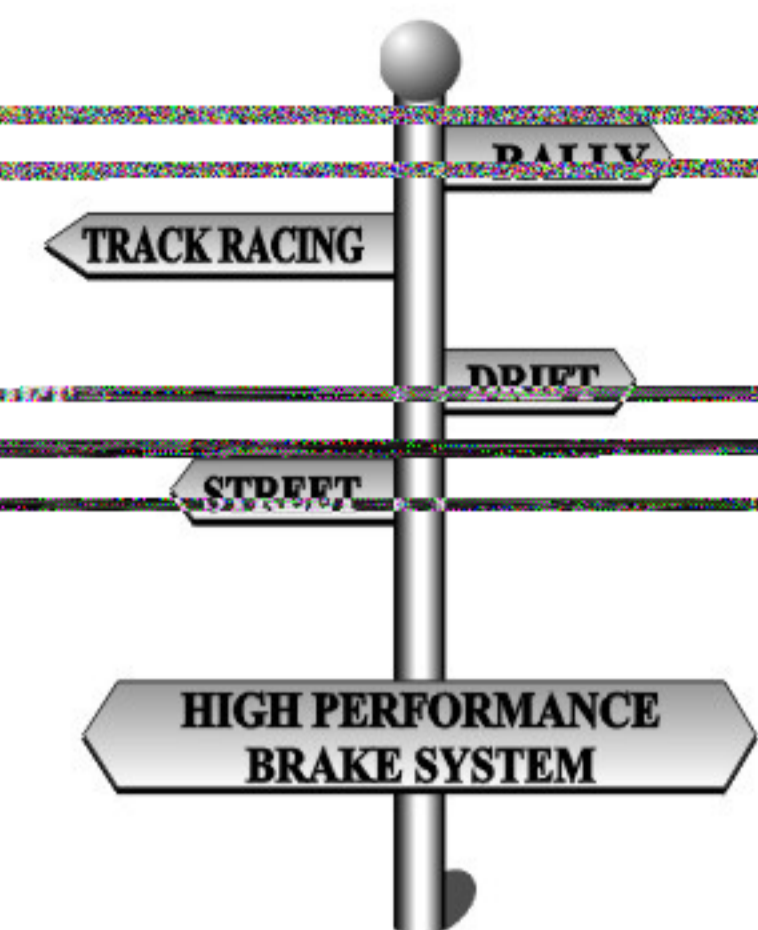
Warranty

Warranty includes any fault in production. After our examination, it shows that most

brake systems' problems (failures) result not from production fault, but from consumers' misuse or improper installation. Any warranty claim is subject to our examination results. The warranty is void if

- The disc face shows blue/purple marks, meaning overheating
- Brake discs crack owing to misuse or braking at high speed
- While you are washing the car or the car is wading through water, brake systems under high temperature get wet, which will lead to deformation of brake discs and vibration.
- Soft sharp noise.
- Overuse of brake, and excessive wear of brake pads and brake discs.

All costs of transportation are born by the customer when the products are sent back to the original manufacturer for overhaul during its warranty period. After our examination, no matter if the responsibility (who leads to the failure in the product) comes from the buyer or seller, the manufacturer (the seller) is responsible for sending the product back to the buyer by sea transportation. During the maintenance period, if it inconveniences you not to have your car driven, the warranty does not cover this part.



Attention

- When fitting the caliper on the vehicle, please pay attention to a sticker on the caliper. The direction of the arrow must be exactly the same as that of the vehicle.
- In some circumstances, the caliper can be modified to be fit onto the vehicles. Or the position where the caliper is fit is not exactly the same in every country.
- Once the direction of the caliper is not correct; you could change the positions of the bleed nipples (NO. 4) and the pipeline (cooper material) to ensure the correct direction.
- There is an arrow in the anti-rattle clip (NO. 1), please make the arrow head to face the tire rotation is a must.

Installation Instructions

- Please raise the car and remove the OE brake caliper and the brake disc.
- 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.
- The anti-rust 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.
- Afterwards, please fit the brake disc in the car and ensure the central point of the brake disc and that of the OE brake disc mounting match (pic B and pic C).
- 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)
- Bolt the brake caliper to the caliper mounting bracket.
- Measure the distance on all sides between the 2 brake pads and the brake disc.
- 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.

- 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.
- The bleed nipples must be located at the top of the brake caliper when it is fitted to the vehicle.
- Please note the washer should be put onto the banjos (pic G) and tightened when the brake hydraulic hose is connected.
- Contact the brake hydraulic hose to the vehicle and tighten it.
- 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)

- 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)
- 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.
- 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.
- The initial temperature of the brake pads is 50°C and the highest is 800°C. It's 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.

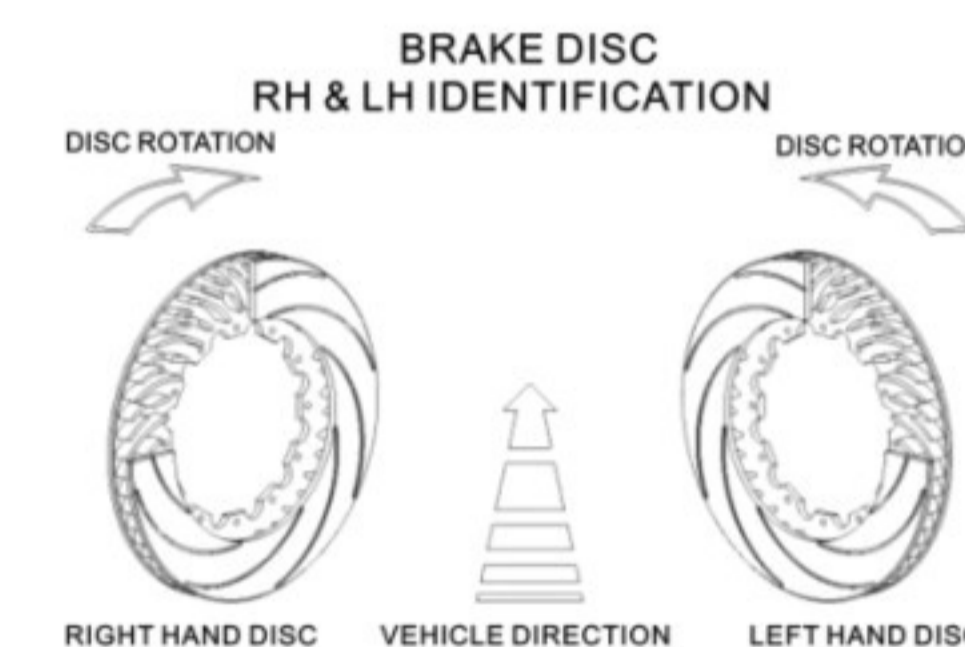
18. Tightening Torques Table

Part Number	Tightening Torques
D	68-70 NM
G	25 NM
J	58 NM
K	14 NM
L	14 NM
M	17 NM

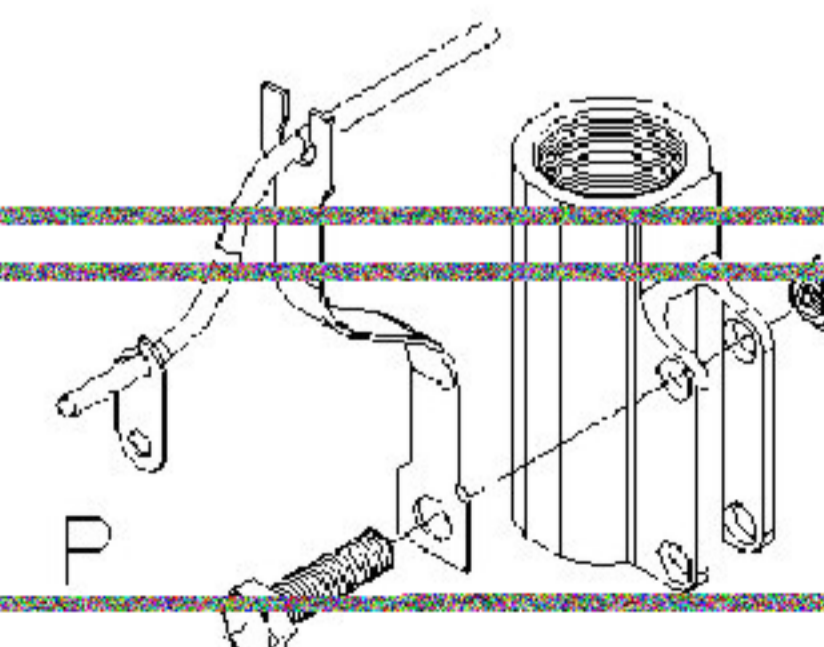
Trouble shooting

- Fluid Leaking**
 - Please check if the joint of the brake hydraulic hose has any foreign bodies or wrong specification. (raised-type or concave-type)
 - 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.
 - Brake systems must be sent back to the original manufacturer if excessive use of it leads the piston to leak oil.
- Vibration on driving**
 - The brake discs and brake discs mounting do not closely fit together at their central aperture. Add a ring of iron to improve that.
 - Turn out the brake disc, then rotate it 90° and put it back.

- If the car's bushing is worn, please replace it with a new one.
 - Brake systems do not lock-in tightly the mselves.
 - Please use the power stabilizer to test and improve.
 - 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.
- Vibration on braking**
 - 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.
 - If the car's bushing is worn, please replace it with new one.
 - Unusual noise**
 - 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.
 - It is normal to hear soft sharp noise when you brake. Use anti-noise wax.



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 efficiency braking performance.



The Exclusive Method of Vibration on Driving or Braking



PIC. A

Please take the measurement when the disc mounting of OE hub turns over, the tolerance ± 0.01 mm of the vibration. If the tolerance ± 0.01 mm of the vibration cannot reach it, please replace the bearing of OE disc mounting.



PIC. B

After installing the disc onto hub, please tighten the bolt of wheel, and fixing the disc, please turn the disc and measure if the tolerance ± 0.04 mm of the vibration.



PIC. C



PIC. D

If the tolerance ± 0.04 mm of the vibration cannot reach it, please base on the method of PIC. C to clean it. If there is damage oxidizing for OE brake disc mounting, please base on the method of PIC. D to clean it. After you finish installation, please check again if the tolerance of brake disc vibration is between 0 mm and 0.04 mm of PIC. B. If the brake disc vibrated continually, please use the professional balance machine to test if there is correct of the balance of tire itself.