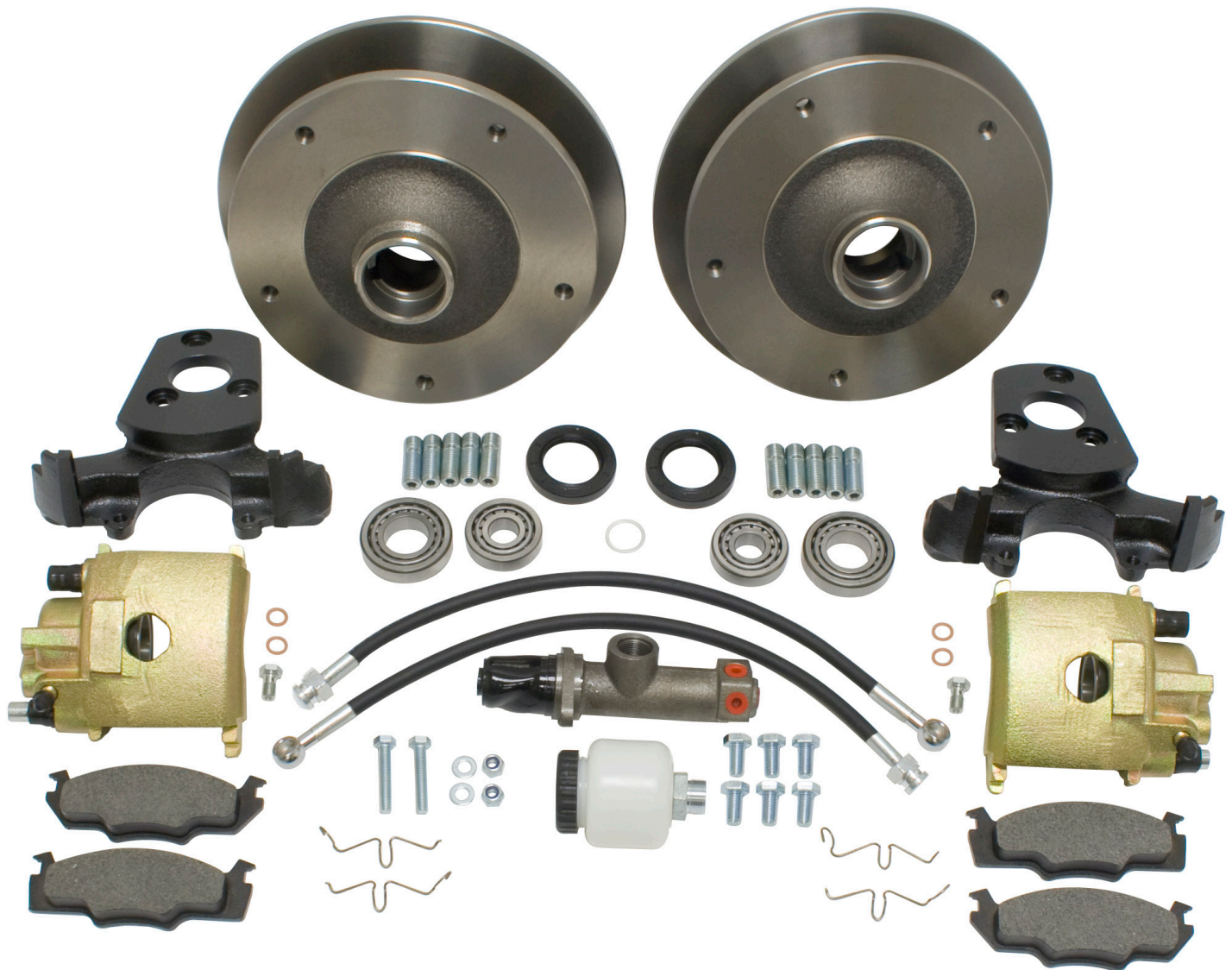


Installation Instructions For EMPI Porsche 356 Front Disc Brake Kit

Please Read First

Please read this entire set of instructions before proceeding with the installation. Any instructions that are Safety related are listed in ***Bold Italic*** typeface and must be strictly adhered to.

These step by step instructions should be read before you start to do any work and you should be able to understand them completely. If you do not have the resources to do this installation then have it performed by a qualified mechanic. ***Failure to follow these directions could result in damage to your vehicle or possible bodily injury.***



Please use the checklist on the following page to ensure that there are no missing parts before you begin.

Master Cylinder information. When converting from 4 wheel drum brakes to front disc/rear drum combination the master cylinder must be replaced. Failure to replace the master cylinder may lead to premature wear of the front disc pads and disc rotors due to excessive residual pressure from the check valve found in drum brake master cylinders (front disc pads will continually make contact with the disc brake rotor). Failure to utilize these components will void the warranty of this brake conversion kit.

Parts Checklist

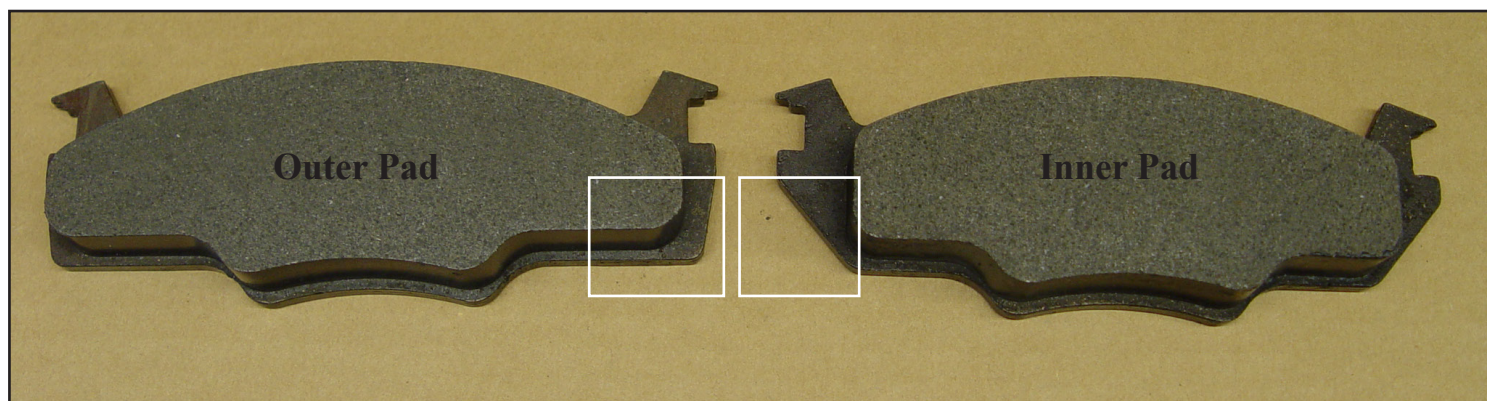
Qty.	Description
2	Disc Brake Rotor
10	M14x1.5 Lug Nut Stud
2	Inner Wheel Bearing and Race (Race already installed in Disc Rotor)
2	Inner Grease Seal
2	Outer Wheel Bearing and Race (Race already installed In Disc Rotor)
2	Caliper (left & right are different)
2	Caliper Brackets (left & right are different)
6	M10x1.5x20 Caliper Bracket Bolts
4	Disc Pad Anti Rattle Clip (top & bottom are different)
2	404mm Flexible Brake Hose (Banjo fitting on one end)
4	Disc Brake Pads
1	Master Cylinder
1	Master Cylinder Reservoir
1	M22 Reservoir Sealing Washer
2	M8x1.25x45 Bolts
2	M8x1.25 Nylock Nuts
2	M8 Flat Washers

- STEP 1: To start, secure the vehicle on a level, hard surface. Block the rear wheels and set the emergency brake, loosen the front lug nuts while the front wheels are still on the ground, but do not remove yet.
- STEP 2: Elevate the complete front suspension off of the ground and ***use approved jack stands to support the weight of the vehicle. (DO NOT use the jack only to support the vehicle.)***
- STEP 3: Remove both front tires/wheels.
- STEP 4: Remove the existing master cylinder. When removing brake line fittings always use an 11mm flair nut wrench to prevent 'rounding off' damage to the fitting. If the fittings are damaged the metal brake line must be replaced.
- STEP 5: Install the master cylinder reservoir on the master cylinder, be sure to place the M22 sealing washer between the master cylinder and the reservoir.
- STEP 6: Install the newly supplied master cylinder with the new longer bolts and nuts supplied with this kit (always bench bleed a new master cylinder) . Reinstall the stop light switch and metal brake lines. Care must be taken when threading metal lines into the new master cylinder to avoid cross threading. If fitting does not start easily by hand the line may need a slight bend to properly line up the fitting with the master cylinder. Care must be taken here to avoid 'kinking' the brake line.
- STEP 7: Remove the front brake drum on the driver's or left side, making sure you remove the inner wheel bearing and old grease seal.
- STEP 8: Loosen and remove the flexible brake hoses from metal brake line at the pan.
- STEP 9: Remove the 3 bolts that hold the drum brake backing plate to the spindle. Remove the complete backing plate (including brake shoes and wheel cylinder with hose).
- STEP 10: Clean and inspect your drum spindle, making sure that the spindle stub is in good condition. ***If the spindle is damaged or shows signs of excessive wear, you should replace it before you install your new brake kit.***
- STEP 11: Clean the surface of the spindle before installing the new caliper bracket . This surface must be free from anything that will cause the bracket to bind or not sit flat on the spindle. ***Bolting the bracket to an uneven surface will cause it to crack or break.***
- STEP 12: Install brackets with the 10 mm bolts (10 .9 grade) supplied with kit. Install the bracket so that caliper is the rear of the spindle. The bracket should go on easily, ***DO NOT hammer or force the bracket in place. DO NOT use the bolts to "pull" the bracket in place. (Doing this will cause the bracket to crack or break,)*** Torque the bolts to 25 ft. lbs.
- STEP 13: Pack the new bearings with suitable hi-temp wheel bearing grease.

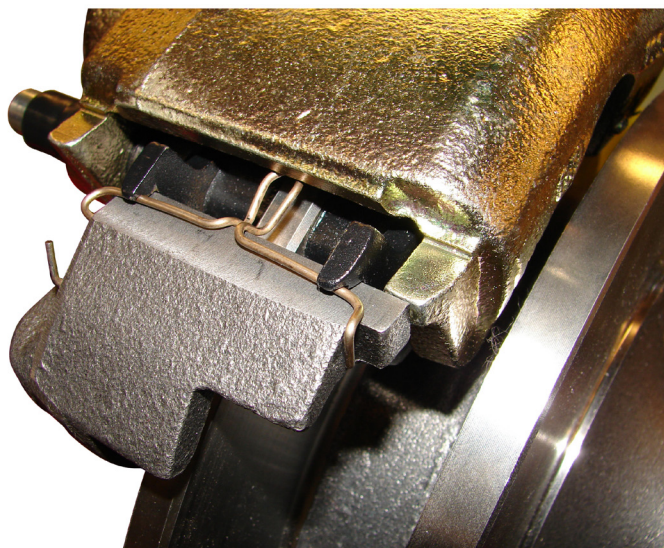
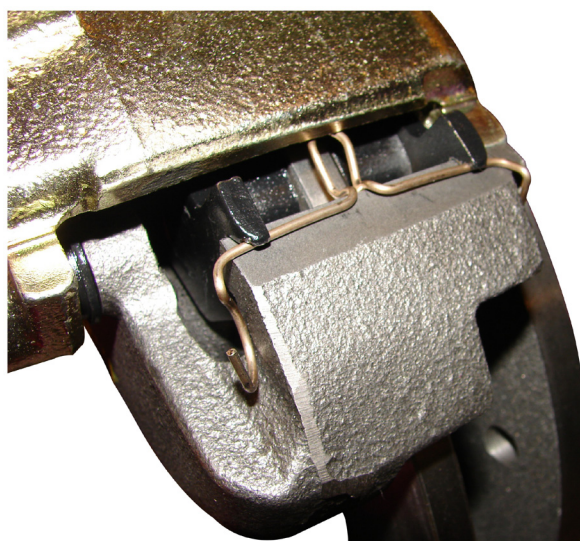
STEP 14: Install greased wheel bearings and the inner seal in the new rotors (bearing races are pre-installed in the rotor).

STEP 15: Install the new rotors on the existing drum brake spindle - using existing thrust washer and adjuster nuts. Adjust to factory specifications. (*Be careful not to over tighten adjuster nut. This will cause overheating of the bearings, resulting in damage to spindle, bearings and rotor*). Install the grease cap and speedometer clip.

STEP 16: Install the inner and outer disc pad, into the caliper. Note: The Inner and Outer pads are different (See Below)



STEP 17: Install the anti rattle clips with the loops facing upward and towards each other, the clip will rest on top of the caliper bracket with the open circular loop on the inboard (piston) side of the caliper. The straight wire section will rest in the small notch in the upper ear of the pads. (See photos below)



- STEP 18: Install the caliper over the pads. Put thread locker on the caliper pin threads and thread into the bracket and tighten. (NOTE: There is a right and left side caliper. The caliper bleeder valve must be towards the top and facing the rear of the vehicle to allow proper bleeding of the system).
- STEP 19: Install the new hose at the caliper first. Tighten, now attach to the metal brake line at the pan, tighten. Install the clip into hose, securing it to the bracket. Once installed turn the steering right and left, lock to lock to ensure that the new brake hose does not interfere with any moving parts and that the line is long enough to achieve lock to lock turns.
- STEP 20: You are now ready to repeat this procedure on the passenger side. Once completed you will be ready to bleed the system.
- STEP 21: To bleed the complete hydraulic system. Fill the brake fluid reservoir with fresh dot 3 disc brake fluid.
- STEP 22: Start at the master cylinder loosening each metal brake line to bleed air there first, recheck the fluid level.
- STEP 23: Bleed the passenger side caliper side caliper first and then driver's side, remembering to not allow the reservoir to run dry!
- STEP 24: Do the final system bleed. Start with the passenger side rear then driver side rear. Move to the front and bleed the passenger side front, and finally the driver front. Do the final fill of the brake fluid.
- STEP 25: Rinse any spilled brake fluid off with water (brake fluid is water-soluble), be careful not to let brake fluid get on any painted surfaces.
- STEP 26: If lug studs (supplied in kit) will be used, install at this time, be sure to use thread lock compound on the threads that mate to the disc rotor.
- STEP 27: Re-install the front tires and wheels, remove from the jack stands and lower the vehicle to the ground. Give the lug nuts a final tightening.

When test driving, be sure to make a few slow short stops first to familiarize yourself with the vehicles new braking power and making sure that everything is functioning properly.