



STOP! READ THIS FIRST!

Installation Instructions for No Hassle Wide 5 Front Disc Brakes

NOTE: This kit will only work with wheels that are 15" or larger!

Thank you for purchasing an AC Industries Disc Brake Kit. All of our kits are designed with components that are easy to install and with regular maintenance, should last the rest of your car's life. **BUT** if you lack the knowledge and/or the proper tools to do this installation... **DO NOT** attempt to install this kit yourself, have it installed by a qualified mechanic. These step-by-step instructions should be read **COMPLETELY** before you start to do any work, and you should be able to understand it completely before you start! Failure to install this kit correctly and completely can result in damage to your car, injury to yourself and others and even death.

BEFORE disassembling your vehicle, remove all parts from their boxes, inspect your kit completely, because over the years many parts on cars have been interchanged, make sure that you have the correct parts for **YOUR** car. It is the **INSTALLERS** responsibility to **VERIFY** that the kit is correct **BEFORE** starting to do the work! Once the kit has been installed, modified or painted, the parts **CANNOT** be returned.

The AC Industries kit that you have purchased is specifically made for the year car interchange shown on the label of the master box. There is **NEVER** a reason to machine or grind on these components. If you are experiencing a fitment or caliper to rotor alignment issue and you chose to modify the components of this kit in any way you void the warranty. AC Industries will not replace any modified components.

NOTE: Heavy Duty Wheel Bearing Grease and Brake Fluid are not supplied in the kit. You will need to purchase these items before installing this kit.

These instructions cover the following kits:

Standard Beetle and Thing

498530 1966 5 x 205mm lug pattern
498540 '67-'68 5 x 205mm lug pattern
498550 '69-'77 5 x 205mm lug pattern

This kit includes the following components:

2 pcs Front rotors
1 pair Front caliper adapter brackets
2 pcs Front calipers with premium brake pads
2 pcs Inner wheel bearings and races
2 pcs Outer wheel bearings and races
2 pcs Wheel bearing grease seals
2 pcs Front brake hoses
4 pcs Bolts, caliper to spindle
4 pcs Serrated lock washers for above bolts

Some of the tools required for the installation:

7mm Allen wrench
11mm Line wrench
13, 15 & 17mm wrench
15 & 17mm socket
3/8" Drive ratchet
Lug nut wrench
Torque Wrench (ft./lbs.)
Bearing race install tool

Additional items needed for the installation:

Heavy duty wheel bearing grease (pt #000614)
Brake fluid, DOT 3 is preferred (pt #000412)
Master Cyl, W/ front disc (pt #113 611 015BD)
Master Cyl, W/ 4 whl disc (pt #113 611 020BDD)
Brake fluid reservoir (pt #251 611 301V)

STEP 1 - To start, place the car on a level, hard surface, block the rear wheels and set the emergency brake.

STEP 2 - Raise the complete Front Suspension off the ground and use suitable jack stands to support the weight of the car. (Do not use the jack alone to support the car. Jacks can lose pressure and allow the car to drop.)

STEP 3 - Remove both front wheels.

- STEP 4** – Remove the front brake drum on the Driver's (Left) side. Set the grease cap, thrust washer, nut, and speedometer cable clip aside, you will be using these again. Be sure to remove the inner wheel bearing and grease seal.
- STEP 5** – Loosen and remove the rubber brake hose from the metal line at the pan. Remove retaining clip.
- STEP 6** – Remove the old bolts that hold the drum brake backing plate to the spindle. Set these aside, you will reuse these bolts later. Remove the complete backing plate.
- STEP 7** – Clean and inspect your drum spindle, making sure that the spindle stub, where the bearing will ride, is in good condition (free of deep grooves or bluing from excessive bearing heat). If any of these signs exist, you **MUST** replace the spindle before you continue.
- STEP 8 – IMPORTANT!** The mounting surface of the spindle that will accept the new disc caliper bracket must be clean. This surface must be free of anything that will cause the bracket to bind and not set flat against the spindle. Failure to perform this step may cause the caliper bracket to crack, bend, or break.
- STEP 9** - Install the caliper bracket using the original backing plate bolts making sure the caliper is to the rear of the spindle and torque to 36 ft./lbs. The bracket should go on easily DO NOT use the caliper bracket bolts to "pull" the bracket in place. (Doing so could crack, bend, or break the caliper bracket.)
- STEP 10** - Install the wheel bearing races in the new rotor with a race install tool. Be careful not to damage the rotor when you install the bearing races during this procedure. The races **MUST** be installed straight or it can crack the rotor!! Pack the wheel bearings with a suitable SAE heavy duty wheel bearing grease (not supplied in kit) Install greased wheel bearings and inner grease seal into new rotor.
- STEP 11** - Install new rotor with greased wheel bearings and grease seal onto the existing drum brake spindles using the original thrust washer and adjuster nut. Adjust the wheel bearing preload to factory specifications. (Be careful not to over tighten the adjuster nut. This will cause overheating of the bearings, resulting in damage to the spindle, bearings and rotor.) Tighten pinch bolt to 7-10 ft./lbs. Reinstall the grease cap and speedometer cable with clip. (**NOTE:** You must clean the rotor faces with a suitable cleaner to remove any oil and/or rust inhibitor before installing the calipers)
- STEP 12** - Install the brake caliper to adapter bracket using the supplied hardware and torque to 29 ft./lbs.
- STEP 13** Install the brake hose at the caliper first and tighten to 11-14 ft./lbs. Install the metal brake line to the opposite end of the brake hose remembering to feed the end of the brake hose thru the bracket mounted to the pan first. Tighten the brake hose to the brake line and install the retainer clip securing the hose to the bracket.
- STEP 14-** Repeat steps 4 through 13 on the passenger (right) side of the car.
- STEP 15** - With both sides completely installed, it's time to bleed the air from the entire braking system. Fill the brake fluid reservoir with new DOT 3 brake fluid. (Never use brake fluid from a container that has been standing open after the use. Brake fluid is hygroscopic and contaminates within days of exposure to ambient air.)
- STEP 16** - Bleed the complete system. Start with the passenger (right) side rear, then the driver (left) side rear, then the passenger (right) side front and finally the driver (left) side front. Finally top off the brake fluid reservoir with new DOT 3 brake fluid. **NOTE:** Allowing the reservoir to run empty at any time during the bleeding process will reintroduce air to the system and the process will have to start all over again.
- STEP 17** - Install the front wheels and remove vehicle from jack stands.
- STEP 18** - With the vehicle on the ground & brake fluid reservoir topped off, sit in the driver seat and depress the brake pedal. Pedal should be firm without sponginess. Sponginess indicates air is in the hydraulic system and the bleeding process must be redone.
- STEP 19** - Confirm all previous steps are complete by rechecking your work. When satisfied take the car out for a test drive and make several test stops to seat the new brake pads with the new brake rotors. Once the disc brakes are seated, you will notice increased stopping performance.
- STEP 20** - Enjoy your new found stopping power.