



# ***STOP! READ THIS FIRST!!***

## **Installation Instructions for Rear Disc Brake Kits with e-Brake**

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.

**NOTE:** Metal Brake Lines 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:**

#### **SWINGAXLE**

111 698 601BES: '58-'67 (No Pattern - Blank)  
111 698 601ES: '58-'67 (VW Pattern - 4x130mm)  
111 698 601PES: '58-'67 (Porsche Pattern - 5x130mm)  
111 698 601CES: '58-'67 (Chevy Pattern - 5x4-3/4")  
111 698 601FES: '58-'67 (Ford Pattern - 5x4-1/2")  
111 698 601DNS: '58-'67 (VW Pattern - 5x205mm)  
111 601 601DS: '58-'67 (VW Pattern - 5x205mm)

#### **IRS**

113 698 601BE: '68-'72 (No Pattern - Blank)  
113 698 601E: '68-'72 (VW Pattern - 4x130mm)  
113 698 601PE: '68-'72 (Porsche Pattern - 5x130mm)  
113 698 601CE: '68-'72 (Chevy Pattern - 5x4-3/4")  
113 698 601FE: '68-'72 (Ford Pattern - 5x4-1/2")  
113 698 601DNL: '68-'72 (VW Pattern - 5x205mm)  
113 698 601DL: '68-'72 (VW Pattern - 5x205mm)

133 698 601BE: '73-'79 (No Pattern - Blank)  
133 698 601E: '73-'79 (VW Pattern - 4x130mm)  
133 698 601PE: '73-'79 (Porsche Pattern - 5x130mm)  
133 698 601CE: '73-'79 (Chevy Pattern - 5x4-3/4")  
133 698 601FE: '73-'79 (Ford Pattern - 5x4-1/2")  
133 698 601DNL: '73-'79 (VW Pattern - 5x205mm)  
133 698 601DL: '73-'79 (VW Pattern - 5x205mm)

### **Some of the tools required for Installation:**

Small Slotted Screwdriver  
Pliers  
7mm Wrench  
10mm Wrench  
11mm Wrench  
14mm Socket  
17mm Socket  
3/8" Drive Ratchet  
36mm Socket  
Breaker Bar or Impact Gun  
Lug Nut Wrench  
Torque Wrench (ft./lbs.)

### **Your kit includes the following items:**

- Two (2) High Performance Disc Brake Rotors
- Two (2) Disc Brake Caliper Brackets, Right & Left
- Two (2) Disc Brake Calipers, Right & Left
- Two (2) Sets Disc Brake Pads (Installed in Caliper)
- Two (2) Axle seal Kits ('73-'79 Axle Seal ONLY)
- Two (2) e-Brake Hardware Kits
- Two (2) e-Brake Cables

### **Additional items needed for Installation:**

Metal brake lines to replace the short metal lines from the wheel cylinder to the rubber hose.  
Swingaxle metal line (AC Ind. Part# 113 611 781E)  
IRS metal line (AC Ind. Part# 113 611 764B)  
Brake Fluid (DOT 3 is preferred) (AC Ind. Part# 000 412)

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

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

**STEP 3** - Remove both rear tires.

**STEP 4** - Remove the cotter pin from the center axle nut on the driver (left) side of the car. With 36mm socket, remove the large axle nut (this nut is extremely tight) release the emergency brake, slide drum off of axle.

**STEP 5** - Loosen and remove metal brake line. This will need to be replaced with a longer unit.

**STEP 6** - Loosen and remove the 4 bearing cap bolts and the bearing cap. Set these aside, you will be using them again.

**STEP 7** - Inside the car, remove emergency brake boot, loosen and remove the adjuster nut from e-brake cables, remove "C" clip and pivot pin from handle, remove handle assembly.

**STEP 8** - Remove drum brake backing plate and emergency brake cable as one unit.

**STEP 9** - Completely clean bearing housing flange. (Any foreign object can keep the new bracket from aligning the caliper properly.) On Swingaxle applications, don't forget to install the big and little o-ring seals. These are crucial.

**STEP 10** - **BEFORE** installing any part, do final test fit to make sure that you have all the correct parts. **REMEMBER** that it is the installer's responsibility to make sure that the parts are correct, once installed, the parts **CANNOT** be returned.

**STEP 11** - Many of the components of this kit are iron, and left "as is" will rust. For cosmetic reasons, we recommend priming and painting these parts before installing.

**STEP 12** - Fit caliper bracket with mounting flange towards the rear of the car, make sure there isn't any dirt or rust between mounting bracket and flange. If the bracket binds, it can crack. (Your bracket may vary in appearance but installation is still the same)

**STEP 13** - Install axle seal in bearing cap. Align and re-install bolts and torque to 40-45 ft./lbs.

**STEP 14** - Install rotor over splines. Install and torque axle nut to 240 ft./lbs.\*, place cotter pin through nut and axle to lock nut in place.

**STEP 15** - Install caliper in place with supplied hardened bolts and washers, torque to 35-40 ft./lbs., (when mounting caliper make sure that the bleeder valve is up so that all air can be bled out.)

**\*NOTE: Stripped rear rotor drive splines are only caused by loose axle nuts not over tightened ones. There is no warranty on stripped rear rotor splines due to not being torqued properly.**

**STEP 16** - The upper bolt on the caliper slider needs to be removed in order to rotate the slider out of the way to install the cable. With the caliper bolt installed the e-brake cable is unable to pass by to its proper location. **(SEE IMAGE BELOW)**

**STEP 17** - Remove 14mm head bolt and rotate away from rotor and disc and install e-brake cable securing it with the supplied clip. Make sure rubber dust shield is completely installed.

**STEP 18** - You will need a replacement metal brake line (not supplied with kit) bend and install this brake line to replace the original line to the caliper.

**STEP 19** - Repeat steps 4 through 18 on the passenger (right) side of the car.

**STEP 20** - Lastly you need to tighten and adjust the e-brake cables. Raise the parking brake lever 2 clicks and adjust each side until the wheels can just be turned by hand. (This must be equal on both sides to work properly) Finally lock the e-brake cable nuts down and install the boot.

**STEP 21** - With both sides completely installed, its 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 22** - Bleed the passenger (right) side caliper first and then the driver (left) side remembering to keep the reservoir full of 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 23** - Do the final air bleed. 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.

**STEP 24** - Install the rear wheels and remove vehicle from jack stands.

**STEP 25** - 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 26** - 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 27** - Enjoy your new found stopping power.

