

# Bearman's PV Tech Page



## VOLVO PV Front Disc Brakes

In visiting several Volvo Bulletin Boards, I've noticed a few questions concerning updating PV's to front disc brakes. This is a fairly easy conversion. The rotors, calipers, caliper mount plates, and dust shields from the single circuit 120 series are used.

The PV and 120 have the same spindle dimensions. This allows the installation of the 120 rotor assembly to the PV spindle, using the 120 *OR* the PV bearings and seals. The bearings and seals are the same, whether rotor or drum brake. However, before you install the rotors, you must install the 120 caliper mount plates and dust shields.

Temporarily install the *LEFT* mount plate onto the *RIGHT* PV spindle. You will note that only one bolt hole (the forward upper hole) lines up properly when the plate is centered on the spindle. This is when the caliper is in roughly the 10 o'clock position on the spindle. Mark and drill the other three holes into the mount plate. Using the mount plate as a guide, drill the dust shield also. Now you may attach the mount plate and dust shield to the spindle. I recommend using Grade 8 hardware, and Loctite. Install the rotor, then bolt the *RIGHT* caliper to the mount plate. Install 120 Brake hose (preferably new) to the caliper. Insure that the PV brake line has the proper flare and fitting to match the 120 Brake hose end.

Now repeat this procedure for the *LEFT* side, using the *RIGHT* mount bracket.

Be sure to inspect and replace any questionable bearings and seals, and repack as necessary. Inspect and rebuild or replace calipers as necessary. Inspect and rebuild or replace PV master cylinder if needed. This cylinder has a 1 inch bore, and is adequate for the new system.

Tighten all bolts and connections, and bleed brakes at all four wheels. Carefully test brakes at low speed, to get used to the new feel. Some folks prefer to install a Brake-Bias (proportioning) Valve in the rear brake line. If your rear drums lock-up before the front discs, I recommend that you put one in. This varies from car to car, as I have seen

both 1 inch and 7/8 inch rear wheel cylinders. Try it out, and decide for yourself.

At this point you will have noticed that the calipers interfere with the front shock absorbers, before full steering lock is reached. To restore the original steering radius, the front shock absorbers will have to be moved from the rear of the control arms to the front.

There are a few different methods of Disc Brake conversion and this is only one of them, but it has worked for me for many a PV. If you have any input on this conversion, please share it with me. I'm always looking for a better way!

**HOMEPAGE**

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