

The BillaVista TECH GARAGE

**ZJ Disc brakes on an XJ
Dana 44 (or Dana 35)**
*(A project to adapt Jeep
Grand Cherokee disc brakes
to a Jeep Cherokee)*

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Photography: Bill Ansell
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Offroad Tech
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This article chronicles my project to fit 1998 Jeep Grand Cherokee (ZJ) D35 C-clip rear disc brakes to my 1987 Jeep Cherokek (XJ) Dana 44. Note that the XJ NON c-clip rear axle shares the bearing retainer bolt pattern with the D44 so these instructions will work for the D35 non c-clip too. All measurements shown are approximate



The ZJ D35 axle I bought. It has c-clip axles and 3.55 gears (open).



ZJ Right caliper assembly.



Back of right ZJ disc brake assembly.



Caliper and rotor removed, e-brake shoes visible.



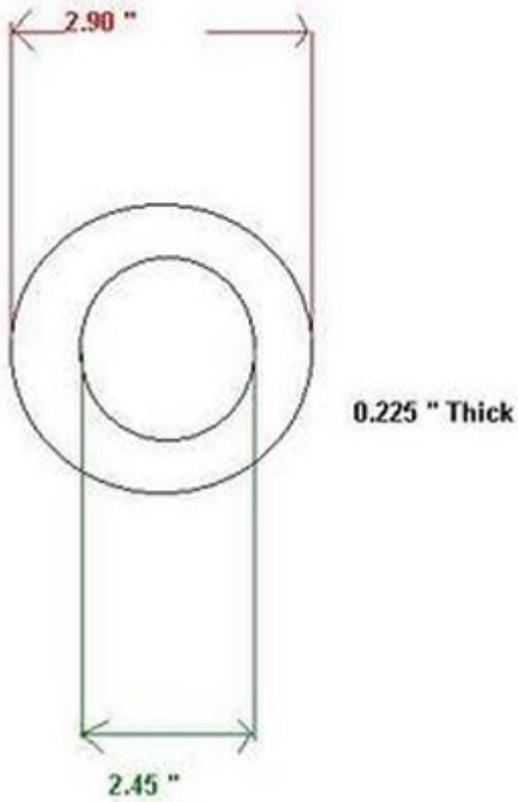
Axle shafts removed from ZJ axle.



Close-up of ZJ assembly, showing flange bolt pattern.



This shows the difference. The center will need to be reamed out, the bolt pattern welded and re-drilled to match, and a custom spacer (next pic) machined to fit on the shaft outboard of the axle seal, to ensure the bearing sits in the race properly. Note that the D35 NON c-clip axle bearing retainer bolt pattern is identical to the D44, and so if you copy what I did you can fit the ZJ discs on your d35 non c-clip the same way.



These are the correct dimensions for the custom spacer to bear properly on the seal.



The original setup on the axle shaft.



The arrangement of the little e-brake lever.





Back of the ZJ disc caliper bracket and splash shield.



The e-brake shoe assembly removed.



The splash shield and caliper mounting bracket separated.



Once you remove the splash shield, you have to remove the little rubber e-brake lever boot.



Back of the separated caliper mount bracket. The larger hole to the left side is the hole for the ABS sensor (not used by me)



The bracket, ready to go to the welders / machine shop. You need someone experienced with cast steel to do the welding.



The XJ D44 bearing retainer plate overlaid on the caliper mounting bracket - showing the difference in flange bolt pattern, and the need to weld up and re-drill the caliper bracket.



The stock configuration of the bearing retainer plate against the axle seal.



The stock configuration of the bearing retainer plate against the axle seal 2.



The bracket back from the shop, large hole enlarged to 3", and the D44 bolt pater drilled. They would not weld the cast bracket.



Bearing retainer plate on the re-drilled bracket.



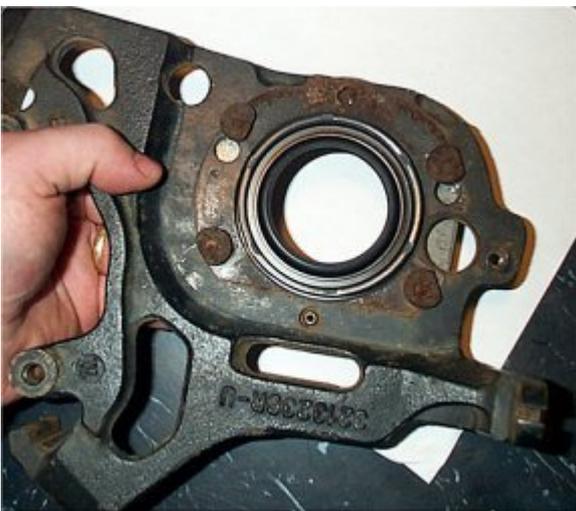
The machine shop wouldn't weld the cast bracket. Luckily it could be re-drilled without welding.



Custom spacer sitting on the bearing retainer.



Bearing retainer in place, and custom spacer in background.



Custom spacer and seal in place on the retainer plate.



Side view of the seal on the spacer.



All the bits.



The spacer sitting on the seal.



Exploded view (kind of) :-)



The machine shop swore I'd have no problems as it was, but I just couldn't leave it, so I plugged the hole with a steel putty, 18, 000 psi compression strength.



This is the steel putty I used.



The NEW Dana 44 Disc Brake caliper bracket!



The NEW Dana 44 Disc Brake caliper bracket!

Dust shield re-installed.



It's starting to look good now.



Here's the arrangement of parts on the axle, including the custom spacer in place.



How it will all sit when installed.



I turned the awful rusty rotors that came on the ZJ axle and they look pretty good.



In goes the shaft with all the stuff on it.



Bracket and brake shoes in place, axle installed.]

Complete except for rotor and caliper.



Back view assembled.



Disc in place It's looking REALLY good now!



Calipers on.



One last mod - I had to weld the XJ drum brake parking brake lever cable fitting end onto the new lever (the ZJ has different cable ends). You could just get ZJ cables, but I'm using the long YJ cables.



Sweeeeet !!



Complete and installed!



Left side.

Right side.



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