



"C-Clip" Axle Shaft Ordering Defined

1250 E. Piper Ct. Meridian, Idaho 83642

Phone: 503.257.6604

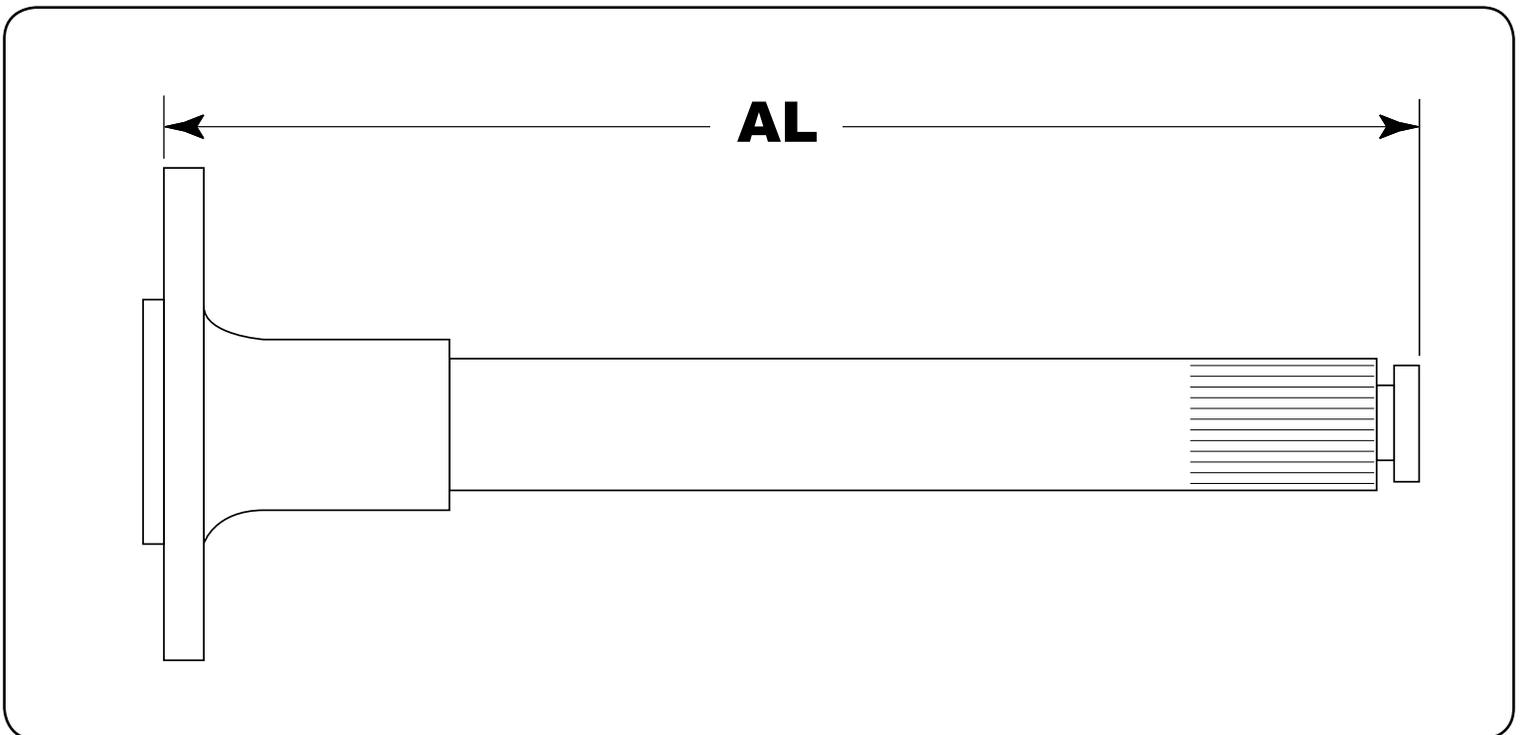
Fax 503.253.6564

Rear end Type

This is simply the make and model of the rear end you are working on. Examples of this is GM 12 Bolt, Mopar 9 1/4, Ford 8.8, etc...

AL- Right or Left: (Axle Flange to End of Spline)

This should be measured with a tape measure by hooking the outside of the axle flange (wheel side-where the wheel studs are) and pulling back to the end of the C-Clip Button. If you put a ruler or straight edge at the end of the shaft this measurement will be accurate. Note; Measuring at an angle will give you a longer measurement. Depending on the length of the axle and the dia. of the flange, this will be approximately 1/16" – 1/8" longer. It's best to measure straight across using a straight edge.



A word about the "Alternate Measurements" section:

The following methods of measuring should ONLY be used if you DON'T know your "AL" Axle lengths. IF you're filling out the alternate measurement section, use one method that fits your situation the best (NOT both). Be careful to measure according to our instructions and diagrams, as the axle length on C-Clip type axles is critical. If you are narrowing the rear end, it's really best to determine how much you are going to narrow the rear end 1st and take exactly that dimension out of both the housing and the axle shaft, it make the math easier.



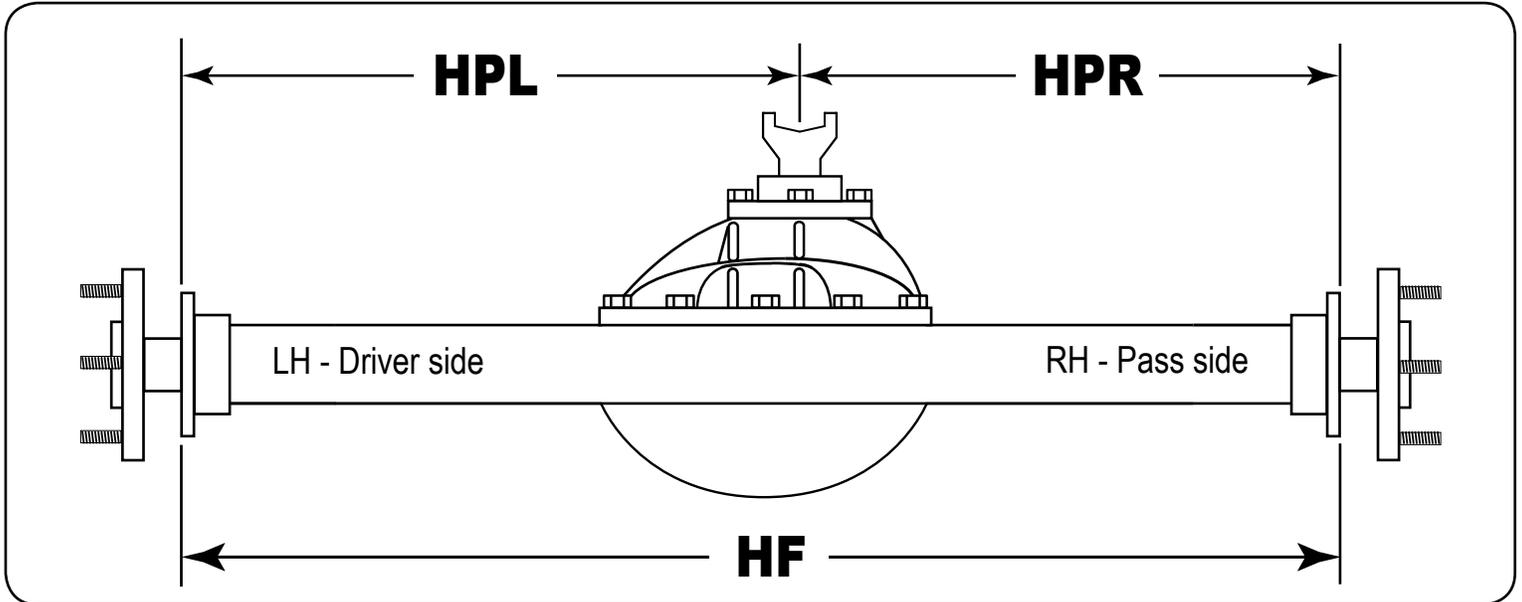
"C-Clip" Axle Shaft Ordering Defined

1250 E. Piper Ct. Meridian, Idaho 83642

Phone: 503.257.6604 Fax 503.253.6564

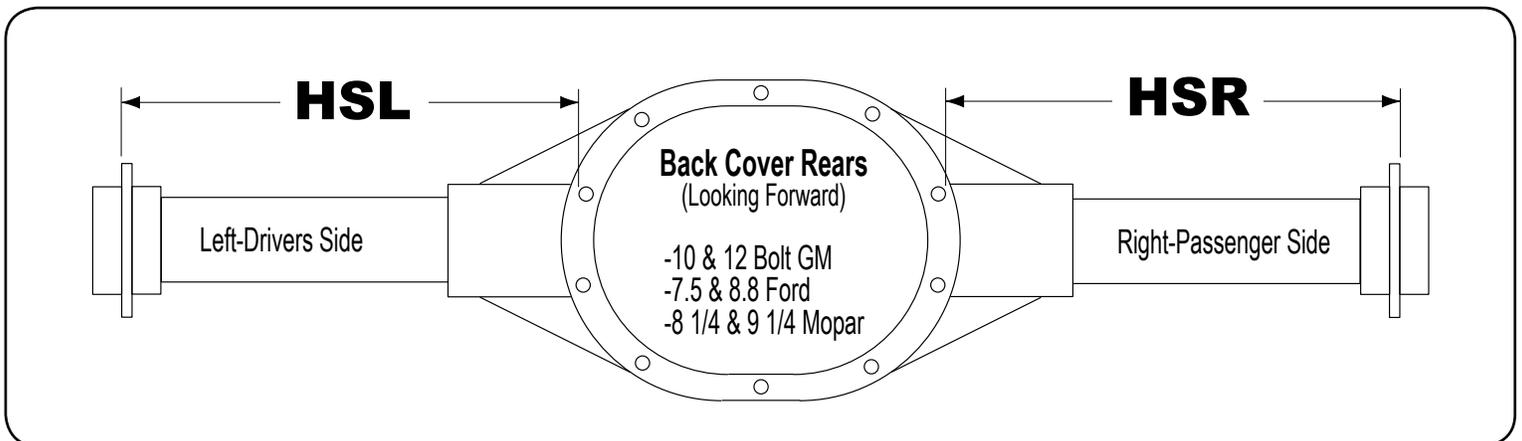
HPL/HPR: (Housing Flange to Pinion Centerline)

This should be measured with a tape measure; with a helper and a straight edge on the housing flange (where your brake backing plate or caliper mount goes) measure to the center of the pinion yoke on the left and right hand sides taking care to keep the tape straight so your measurement will be accurate. Avoid bending the tape measure at an angle as the length will be longer than what it should be. The two dimensions added together should be the same as the overall width of the housing-the "HF" dimension.



HF: (Housing Flange to Housing Flange)

This should be measured with a tape measure; with a helper and a straight edge or ruler on each housing flange (where your brake backing plate or caliper mount goes), taking care to keep the tape straight, so your measurement will be accurate. Avoid bending the tape over the 3rd member or suspension brackets or measuring at an angle as the length will be longer than what it should be.



HSR/HSL: (Housing Flange to Outside of Stud or bolt hole)

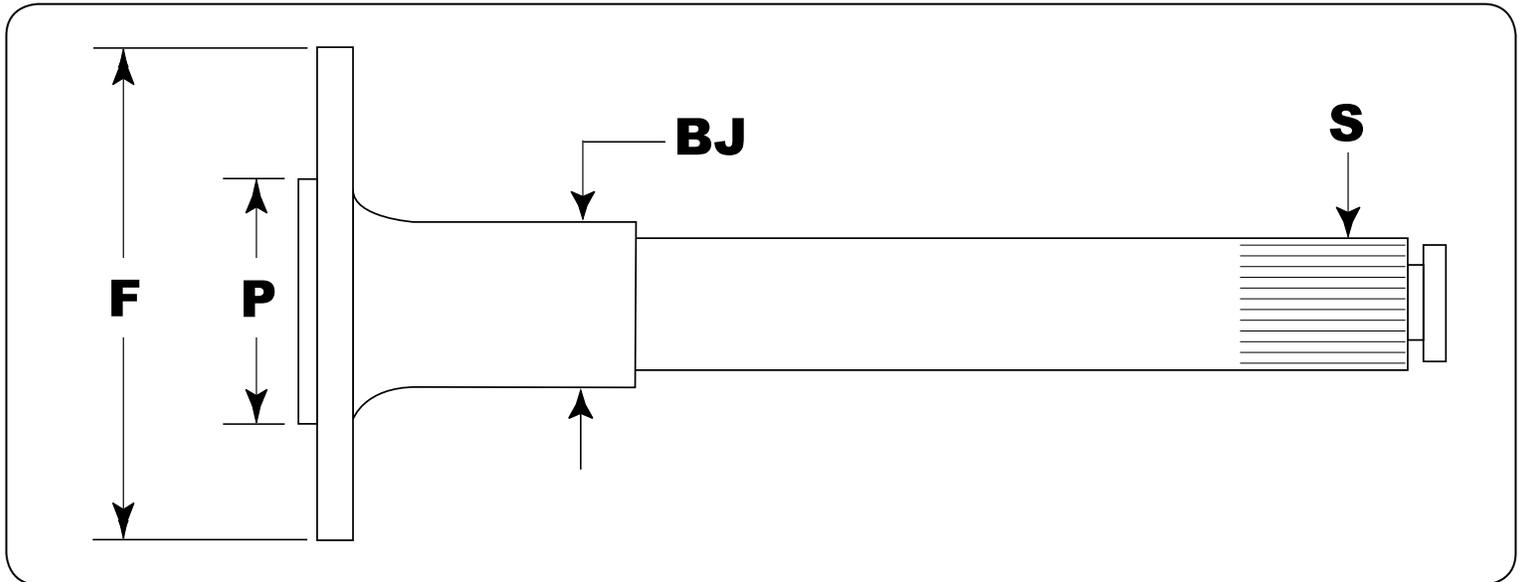
This should be measured with a tape measure and only if you cannot provide axle lengths or pinion location. Please refer to the diagram for a visual representation of the OUTSIDE of the stud to housing flange measurement.



"C-Clip" Axle Shaft Ordering Defined

1250 E. Piper Ct. Meridian, Idaho 83642

Phone: 503.257.6604 Fax 503.253.6564



S: (Spline count)

List the number of splines and the type of differential or spool you will be using. If using an aftermarket carrier or full spool, list the manufacturer (as some use different pressure angles for their splines as well as slightly different end of spline dimensions).

BW: (Button Width)

This can be measured with a vernier caliper or tape measure [IF you're good with one]. Refer to our reference chart for application, spline, and button width combinations (To confirm what you have).

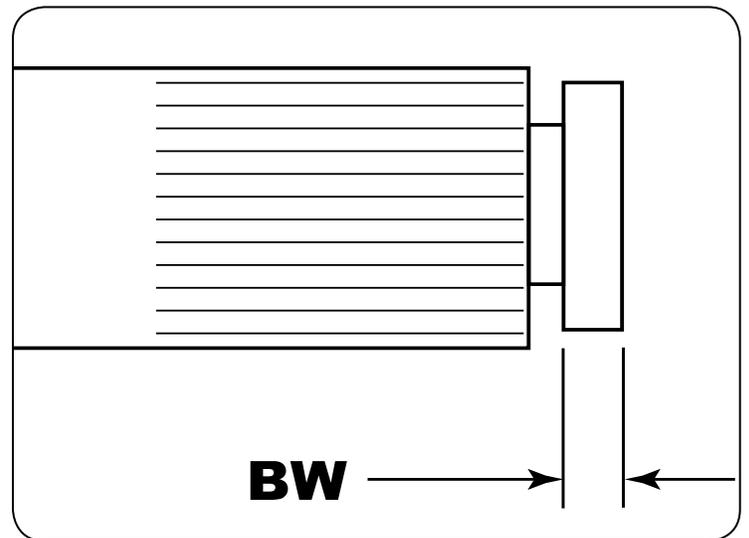
F: (Axle Flange Dia.)

This can be measured with a tape measure and is the maximum diameter for the axle flange (where the wheel studs stick out) that will fit inside your brake drum or rotor.

BJ: (Bearing Journal)

This should be measured with a micrometer or vernier caliper. At this time, we make axles for the following popular bearing journal sizes;

- 1.400, up to 31 spline
- 1.620 [w/o traction control], up to 31 spline
- 1.620 [with traction control], up to 33 spline
- 1.705, up to 35 spline
- 1.875



P: (Drum or Rotor Pilot)

This should be measured with a micrometer or dial caliper on the axle. Note: Some factory axles have a stepped pilot, so be sure to measure the larger diameter that is closest to the flange [NOT the outer smaller dia.]. If you are using aftermarket brakes, there is a good chance the center hole in the drum or rotor is a different size than the original axle pilot size. In this case, skip measuring your axle and ONLY measure the drum or rotor center hole of the kit you are using and list it in the notes.

Also note, our axles have a 1/4" tall pilot to catch the drum or rotor only, NO step. Tall or stepped pilots carry a surcharge. Call us for the details.



"C-Clip" Axle Shaft Ordering Defined

1250 E. Piper Ct. Meridian, Idaho 83642

Phone: 503.257.6604 Fax 503.253.6564

Brake kit info:

Check OEM if you are running the factory brake kit. Also check whether it's drum or disc. IF aftermarket, list the manufacturer name and/or part number. If you're unsure of the required flange OD "F" and pilot size "P", check with the manufacturer or brake kit instructions for this info.

An example of this would be:

GM 12 bolt axles running a Wilwood disc kit, #140-7141, "F" = 6 3/8" [flange OD], "P" = 3.062 [pilot size].

Bolt Pattern(s): (Wheel pattern)

This should be measured with a tape measure; 4 & 6 lug bolt patterns can be center to center, but 5 lug bolt patterns need to be OUTSIDE of one to center of the 2nd one across (see illustrations).

Studs: (Wheel studs)

7/16", 1/2", 9/16", 5/8", 12mm, & 14mm press-in style studs have knurls under the head and press in from the back side of the axle flange. These are just like what OE axle shafts used.

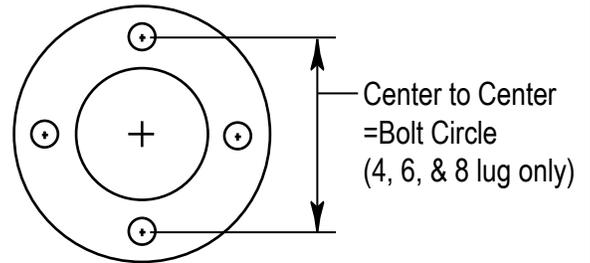
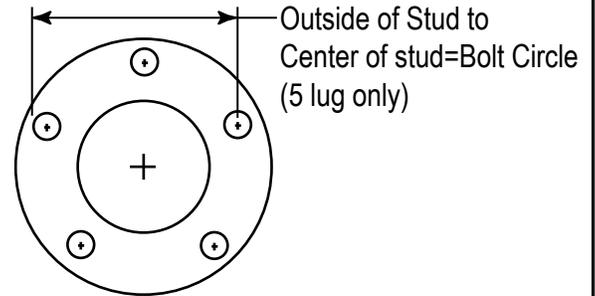
1/2" by 2" or 3" long screw-in style studs are threaded the entire length of the stud (under the head) and screw in from the back side of the axle shaft. The 3" long version is typically used on drag cars that require the threads showing past the lug nuts. (Note: Using an impact wrench on thread in studs should be avoided, as this can back the stud out of the axle flange).

Hardware items installed or loose

Installing the axle hardware [Studs and/or an optional c-clip eliminator kit] depends on whether or not you have a press and want to assemble the axles "after the fact" for any reason. Our pricing includes "Free" assembly, so it's your choice.

NOTE: We don't recommend using your old studs as they won't press in as tight the 2nd time around & you never know what kind of abuse they have had. Save yourself the trouble & let us install new studs. This also applies to the wheel bearings & seals. Start 100% fresh to prevent pre-mature axle scoring and leaks.

Bolt Pattern Measuring



7/16" Drum



7/16" Disc



12mm x 1.5



1/2" Drum



1/2" Disc



1/2" x 2" screw in



1/2" x 3" screw in



14mm x 1.5



14mm x 2.0



5/8", NF & NC





"C-Clip" Axle Shaft Ordering Defined

1250 E. Piper Ct. Meridian, Idaho 83642

Phone: 503.257.6604

Fax 503.253.6564

Common Factory Buttons & Splines

| Make | Button Width | Spline Count | Spline Diameter |
|---|---------------------|---------------------|------------------------|
| Mopar 7.25 | .250 | 25 | 1.080 |
| (GM 10B) (Buick/Olds) | .205 | 26 | 1.125 |
| (Mopar 8.25 Car/Trk) (Jeep) | .250 | 27 | 1.167 |
| (Jeep) | .255 | 29 | 1.250 |
| (GM 10B, 90-99 Camaro/Trans AM) | .205 | 28 | 1.205 |
| (GM 8.2, 10B Car/Trk) (Buick/Olds) (Ford 7.5/8.8 Car/Trk) (Mazda 94-99 Trk) | .250 | 28 | 1.205 |
| (GM Late 8.5, 10B Trk/Imp) | .250 | 30 | 1.290 |
| (GM Early 8.5, 10B) (GM 8.875, 12B Car/Trk) | .315 | 30 | 1.290 |
| (Jeep) | .290 | 30 | 1.290 |
| (Mopar 9.25 Car/Trk) | .370 | 31 | 1.330 |
| (Ford 8.8 Car/SVO Trk) | .250 | 31 | 1.330 |
| (Ford 8.8 SVO Car/Trk) | .305 | 31 | 1.330 |
| (GMC 9.5 14B Trk) | .345 | 33 | 1.415 |
| (Ford 9.75, 97 & up, 1/2T, Superduty Trk) | .305 | 34 | 1.375 |
| (Ford 10.25, 3/4T, Trk/Van) | .305 | 35 | 1.500 |

Common Pilot & Flange Diameters

| Make | *Pilot Diameter | Flange Diameter |
|---|------------------------|--|
| Ford Cars & Trucks 7.5 & 8.8 | 2.432 | 6 1/8 |
| | 2.531 | 6" (SVO Disc); 6 1/8 (Ranger Drum) |
| | 2.777 | 6 1/8 |
| | 3.062 | 6 1/2 (5 on 5 BP) |
| Ford Trucks 7.5, 8.8 & 9.75 | 2.510 | 6 1/8 (Early model van) |
| | 2.800 | 6 3/4 (Drum); 6 1/8 (SVO Disc, 6.437 max) |
| | 2.875 | 6 3/4 (early model PU) |
| | 3.440 | 6 3/4 (late model PU, metric BP) |
| | 3.450 | 6 3/4 (late model van E150) |
| GM Cars & Trucks / Buick, Olds & Pontiac Cars | 2.780 | 6 1/8 (late model cars); (S10 Trk Drum & Disc) |
| | 2.810 | 6 1/8 (early model cars) |
| | 3.062 | 6 1/2 (Drum); 6 1/4 (Disc); 6 5/8 (9.5 Trk, 6 lug) |
| GM Trucks & Vans | 3.086 | 6 3/4 (5 lug) |
| | 3.093 | 6 3/4 (Early model PU - 5 lug) |
| | 3.562 | 6 3/4 (Early model PU - 6 lug) |
| | 3.872 | 6 3/4 (6 lug) |
| | 3.980 | 6 3/4 (6 lug) |
| Mopar Cars | 2.308 | 5 1/2 (A-Body only) |
| | 2.830 | 6 1/4 |
| Mopar & Jeep Trucks | 2.830 | 6 3/4 (Drum); 6" Disc (6.437 max) |
| | 3.080 | 6 3/4 (Disc) |
| | 3.090 | 6 3/4 (Disc) |
| | 3.562 | 6 3/4 (Drum) |

*PILOT MEASUREMENTS LISTED ARE FROM THE AXLE, NOT THE DRUM