



Visit us on the web at  
[www.moserengineering.com](http://www.moserengineering.com)

102 Performance Drive Portland, IN 47371  
 Ph#:(260)726-6689 Fax#:(260)726-4159

## Jeep<sup>®</sup> Model 20 One-Piece Axle Kit

**Installation Instructions for M/E Custom Alloy Axles for Jeep<sup>®</sup> CJ5, CJ7, & CJ8  
 For installation of kit with Timken Set 9 Bearings.**

### Before You Begin!

Check your kit against the parts list to ensure you have received all of the components. If you have not received all of the pieces on the list, contact Moser Engineering at (260)726-6689.

If your Jeep<sup>®</sup> has a "PowerLock" brand differential, please contact Moser Engineering before beginning installation. (A "PowerLock" has 4 spider gears and the differential case is bolted together.) A "PowerLock" brand differential is an aftermarket unit not found in original equipment Jeeps<sup>®</sup> and requires longer axles. If you are using the stock differential or another brand of aftermarket differential, please continue with installation instructions.

Parts List
1- Right Axle shaft with studs
1- Left Axle shaft with studs
2- Timken Set 9 Wheel Bearings
2- Press Rings
2- Bearing Spacer Rings
1- Tube of Moser Silicone

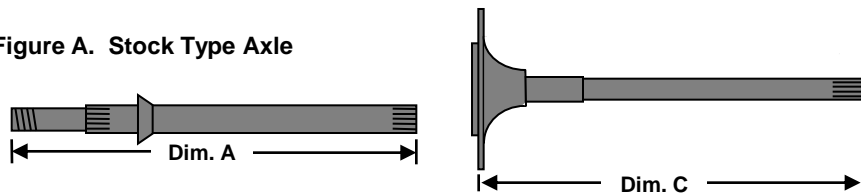
### Disassembly!

- 1.) Disconnect parking brake cables from brake assembly and backing plate.
- 2.) Remove nut on axle. Remove the original hub.
- 3.) Disconnect the brake line from the backing plate and cap the line to avoid losing brake fluid.
- 4.) Remove the original protective guard and the outer retainer/seal plate.
- 5.) Remove the backing plate. **When removing backing plates, be sure to mark them as to the side (passenger side or driver side) and also the direction they are facing.** In addition, installation may be easier with the brake shoes removed.
- 6.) Remove the original axle.
- 7.) Repeat steps 1-6 for other side.

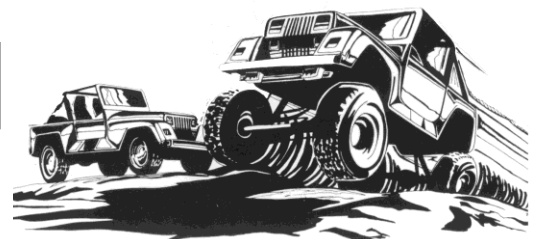


Identify your stock axles (Figure A, Dimension A) and compare the lengths to the lengths shown for the one-piece replacement axles (Figure A, Dimension C) to be sure you have the correct axles for your Jeep<sup>®</sup>. If the measurements do not match, contact Moser Engineering at (260)726-6689.

Figure A. Stock Type Axle



Jeep <sup>®</sup> Model	Original Lengths Dim. (A)	One-Piece Replacement Lengths Dim. (C)	Kit Part #:
'76-'83 CJ5 & '76-'81 CJ7	26 1/4" 29 1/4"	23 1/8" 26 1/8"	CJS
'82-'86 CJ7	28 1/2" 31 1/2"	25 5/16" 28 5/16"	CJL
'76-'79 CJ7 with Quad.	22" 33 1/2"	18 7/8" 30 5/16"	CJQ



OVER

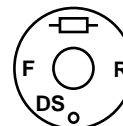
# Installation Instructions for M/E Custom Alloy Axles

page 2 of 2

## Assembly!

- 1.) Reuse or replace inner and outer seals as needed.
- 2.) With inner seal installed, install the bearing spacer ring into the housing end with the OD ring (lip) toward the outside (smaller OD goes toward the seal). (See Figure C)
- 3.) *Before installing it on the axle*, test fit the bearing into the housing end. Make sure to slide the bearing in as shown in Figure B with the larger lip on the inner race going in first.
- 4.) With the seal and bearing spacer ring all of the way in, the bearing should stick out .020"-.080" from the housing end. (See Figure C) If it protrudes more than .080", remove the bearing spacer ring, then grind the bearing spacer ring until the appropriate measurements are achieved.
- 5.) Slide the original protective guard (optional) and the retainer/seal plate on the axle.
- 6.) Slide the backing plate on the M/E One-Piece Axle. *Be sure to slide the backing plates on the axle for correct side and facing the correct direction*
- 7.) **Pack the Timken Bearing with hi-quality E.P. wheel bearing grease.** If your Jeep® is used for 4-wheeling in water, it is recommended you re-pack the wheel bearings frequently.
- 8.) Slide the bearing on the axle (**as shown in Figure B with the larger lip on the inner race toward the splines.**)
- 9.) Using a press, install the bearing and the press ring on the axle.
- 10.) Clean the housing end. Apply silicone around the face of the housing end and on the retainer/seal plate.
- 11.) Slide the axle into the housing. Align the backing plate, retainer/seal plate, and housing end, and then install and tighten the 4 bolts.
- 12.) Re-assemble brakes, re-install the parking brake cable, re-install the brake line.
- 13.) Repeat steps 1-12 for the other side.
- 14.) Bleed the brake system to remove air from the brake lines.

## IMPORTANT!



Backing Plate must be installed on axle before pressing on bearings!

Figure B. One-Piece Replacement Axle

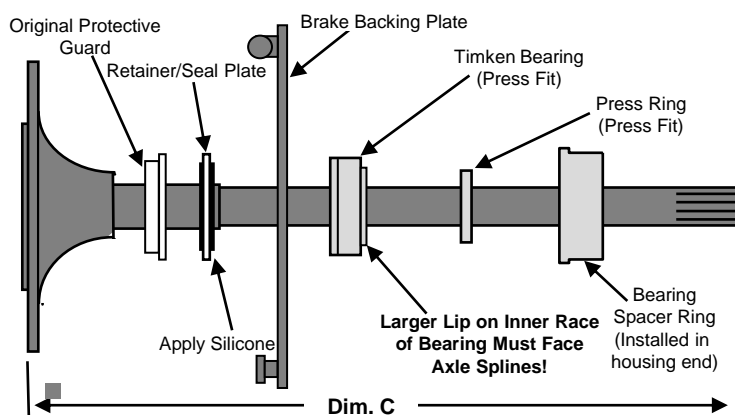
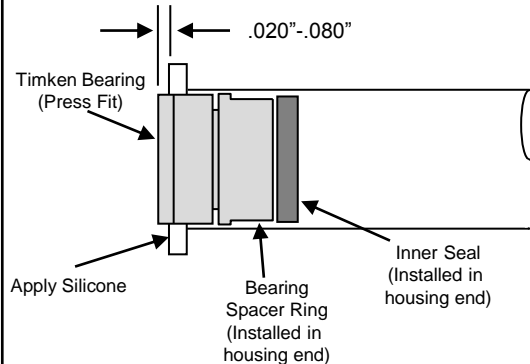


Figure C. Housing End-Expanded View



## Warranty Information

Moser Engineering, Inc. will replace free of cost, prior to assembly or use of the part, any part found not to be of ordered dimensional specifications.

In addition, Moser Engineering, Inc. will **replace** their M/E One-Piece Jeep Axles for a period of ten (10) years after the original date of purchase if broken at the splined end *due to excessive horsepower*.

This replacement policy only applies to the original purchaser and broken axles must be returned without alteration or repair, including welding, along with your proof of purchase, name, address, telephone number, and a description of the problem.

This warranty is only applicable for parts manufactured by Moser Engineering and have the "M/E" trademark and does not apply to parts damaged due to accident or collision, abuse, misuse, or improper installation or service.

This warranty **DOES NOT** cover the wheel bearings and seals and in no event is Moser Engineering responsible for damages including down time, lost profits, goodwill, damage to or replacement of equipment and property, loss of use, or cost of substituted products.



102 Performance Drive  
Portland, IN 47371

Ph#:(260)726-6689  
Fax#:(260)726-4159



Visit us on the web at  
[www.moserengineering.com](http://www.moserengineering.com)

102 Performance Drive Portland, IN 47371  
Ph#:(260)726-6689 Fax#:(260)726-4159

**Print for machining seal area to use a Timken Set 9 bearing on Moser Engineering One-Piece Jeep axles that originally used a ball bearing.**

