



**Power**  
**to DELIVER**

A M E R I C A N   A X L E   &   M A N U F A C T U R I N G



***AAM 7.25 4WD 10P  
Disconnect Shifter Kit  
Assembly Guide***

***AAM Power To Deliver Disconnect Shifter Kit – 74080002***  
***GM 7.25 IOP Front Axle***



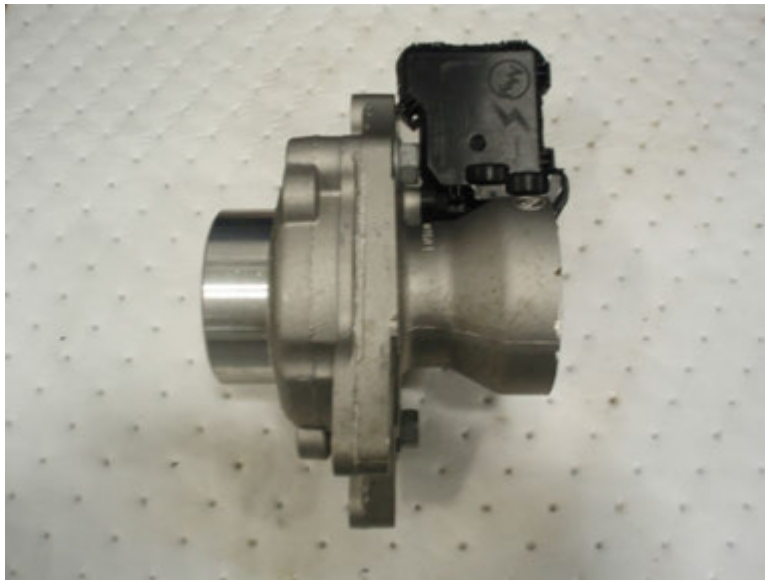
## ***Tools and Materials Needed***

1. 55-65 cc / ( 1.86 - 2.20 oz ) Grease - GM Part number 12377985 (or compatible substitute that meets NLGI#2 Category LB GC-LB )
2. Housing Sealant GM Part Number 105942 or equivalent
3. Torque wrench
4. 8mm and 15mm socket
5. Shop Press and Tooling (not pictured)

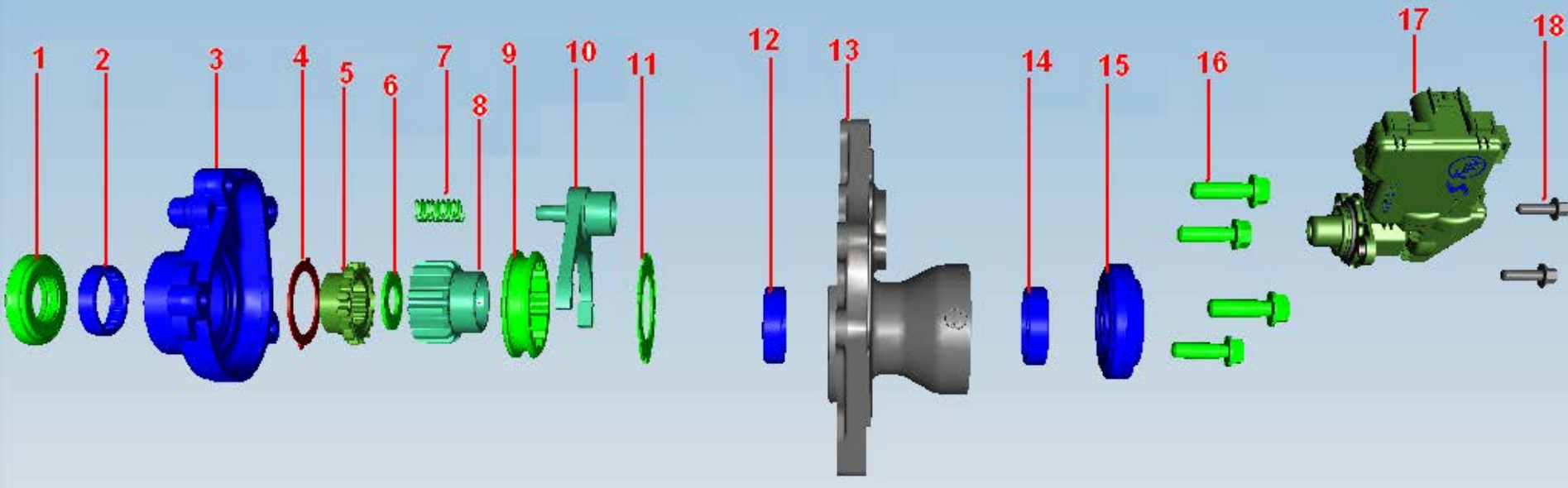


**\*\* IMPORTANT PLEASE READ \*\***

The following slides cover the steps to assemble the GM 7.25 IOP Disconnect Assembly. Its Important to note that the grease was intentionally left out for illustration purposes. During assembly, all internal components should be thoroughly coated with grease and the inner and outer housings filled with the remainder before being sealed and bolted together.



## ***Exploded Assembly View***



1. Inner Housing Seal
2. Inner Housing Outer Bearing
3. Inner Housing
4. Inner Housing Thrust Washer
5. Inner Clutch gear
6. Clutch Assembly Thrust Washer

7. Clutch Fork Spring
8. Outer Clutch Gear
9. Clutch Fork Sleeve
10. Clutch Fork
11. Outer Housing Thrust Washer
12. Outer Housing Inner Bearing

13. Outer Housing
14. Outer Housing Outer Bearing
15. Outer Housing Seal
16. Housing Assembly Bolts
17. Shift Actuator
18. Actuator Assembly Bolts

## ***Bearing Assembly***

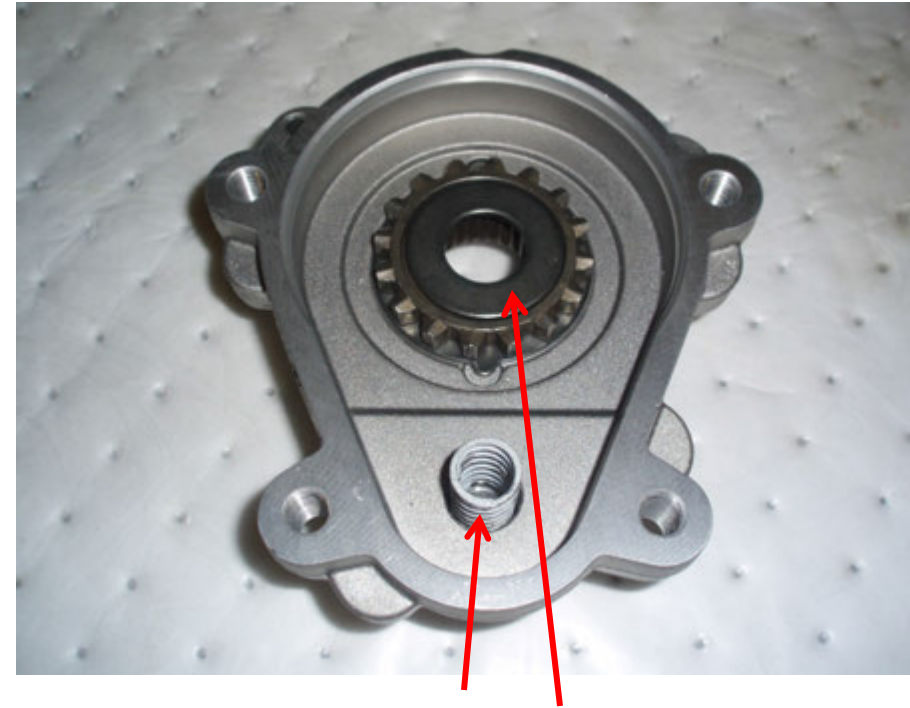
The Disconnect Shifter Kit contains three bearings of the same size. (reference exploded view item numbers 2,12,14)  
Begin assembling the kit by placing a bearing into the bore of each housing with the part numbers facing outward and press until seated. The Inner housing uses bearing number (2) and the outer housing uses bearing numbers 12 and 14.



## *Inner Housing Assembly*



Place Inner housing thrust washer (4) in Inner Housing and ensure tabs of thrust washer are located in pockets of inner housing.

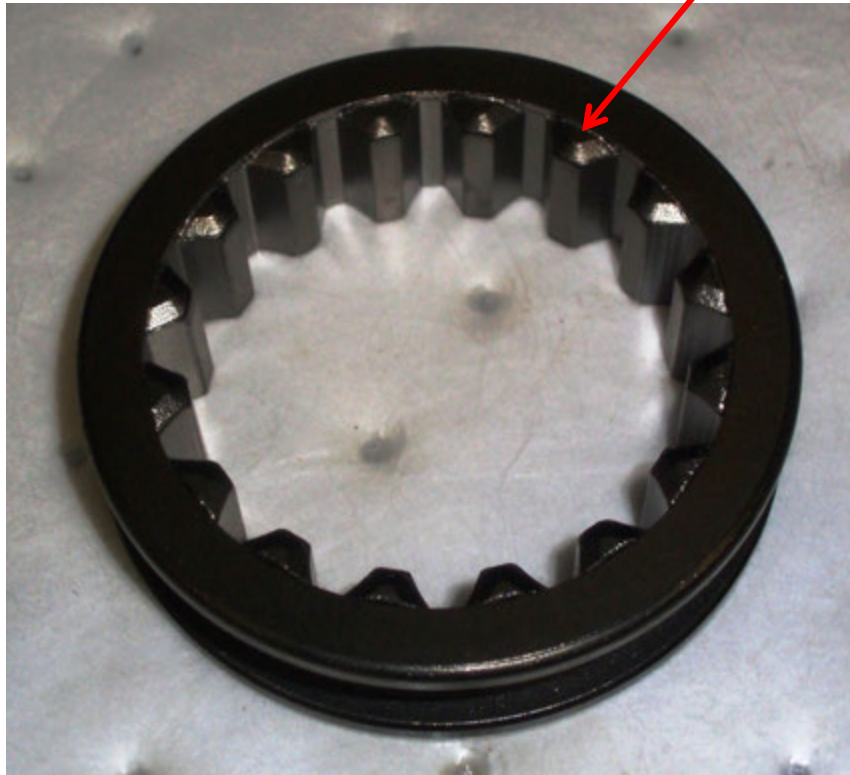


Place Clutch Assembly Thrust Washer (6) on Inner Clutch Gear. Place Clutch Fork Spring (7) in Bore of inner Housing.

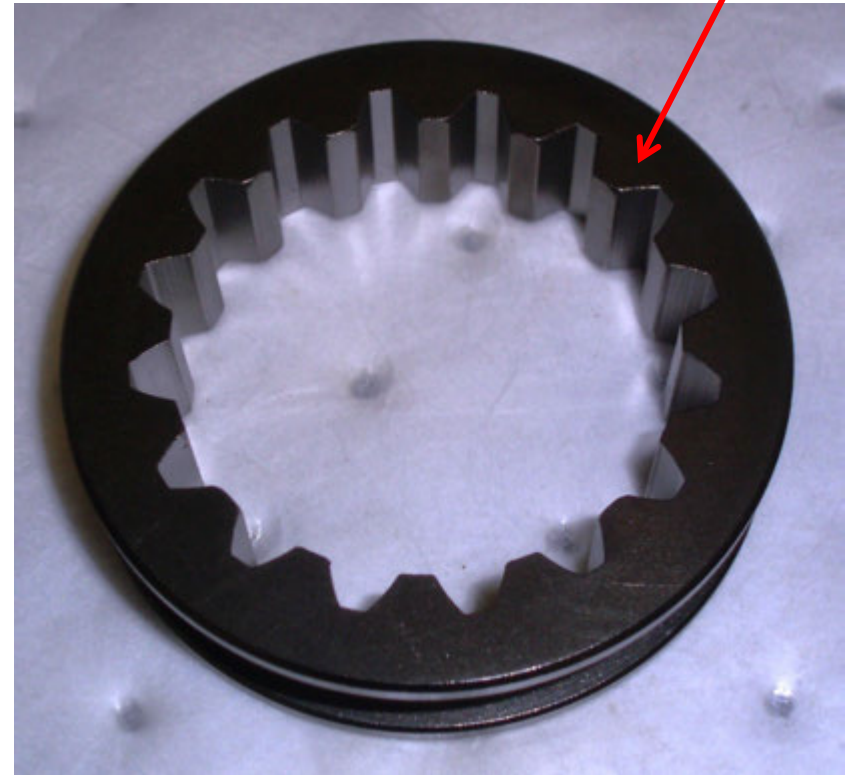
## ***Clutch Fork Sleeve Orientation***

The splines on the Clutch Fork Sleeve (9) have a “pointed” side and a “flat” side. Be sure to install the sleeve with “pointed” side facing towards Inner Clutch Gear (5) See following slide for correct assembly orientation.

**“Pointed” Side**



**“Flat” Side**





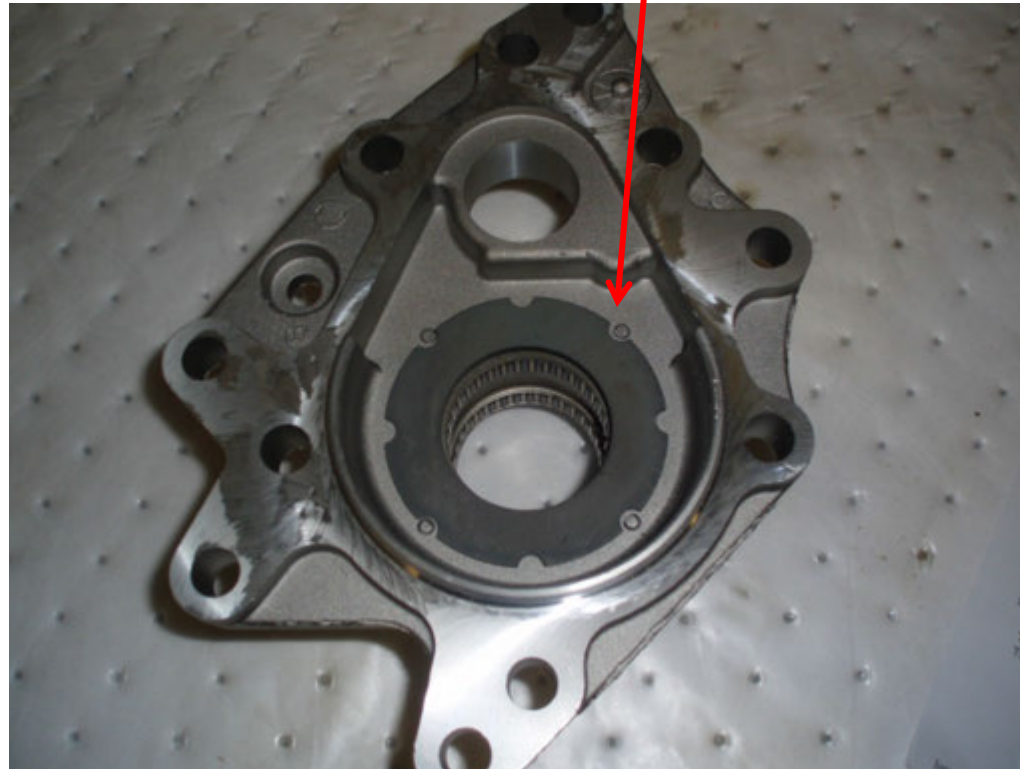
Place Clutch Fork Sleeve (9) in Clutch Fork (10) with “pointed side” of sleeve facing Inner Clutch Gear(5) and guide pilot of clutch fork into the spring (7) and pocket of the Inner Housing (3)

Place the Outer Clutch Gear (8) in the Sleeve (9) with the journal side of the Clutch Gear facing up



## ***Outer Housing***

Coat the backside of the Outer Housing Thrust Washer (11) with grease to hold in place, and install in Outer Housing (13) between locating tabs.



\*\* Photos for demonstration purposes only. You should only join the two housings after all internal components and both housing cavities have been greased with the prescribed amount. \*\*

Apply a bead of sealant to the mating surface of one side of either of the housings

Install the Outer Housing to the Inner Housing, install the four Housing Assembly Bolts (16) and torque to 48 Nm (35 lb ft.)

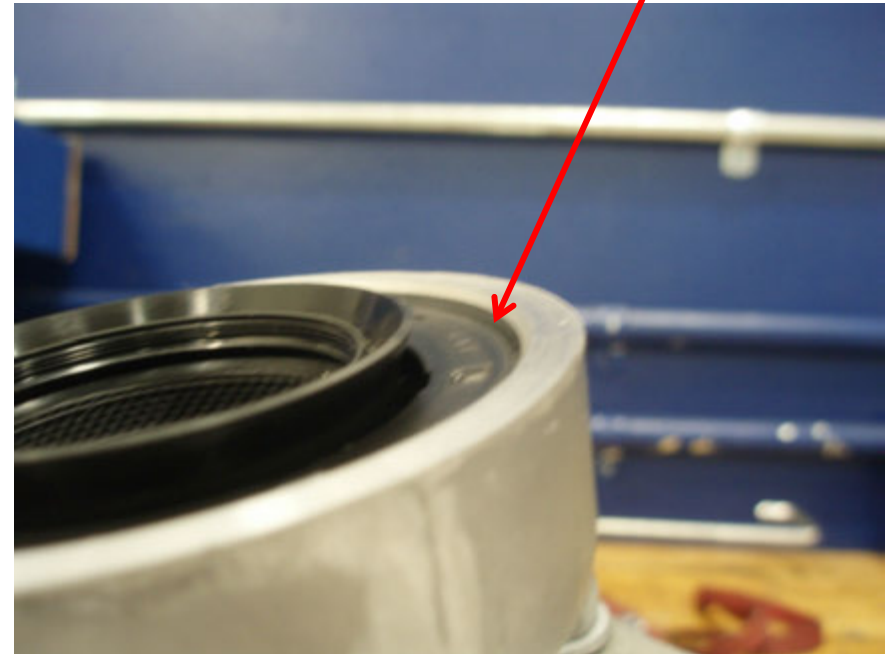


## ***Seal Installation***

Using a press and appropriate tooling, press the Inboard Housing seal (1) until seated in the seal bore.

The Outboard Seal (15) is installed using the same method as the inboard seal.

**\*\*The Outboard Seal must be pressed .9 – 1.1 mm (.035-.043 in) below the surface of the housing bore. If the seal is not pressed to this dimension, damage to the seal may occur.\*\***



Install the Actuator (17) and Bolts (18) and torque to 6 Nm (53 lb in.) to complete assembly



## *Actuator Pin Schematic*

