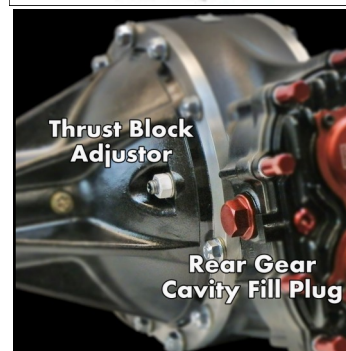


# ***PEM Quick Change Assembly Instructions***

Your Quick Change has been assembled and set up at PEM for back lash and gear pattern. Then, disassembled and boxed (3) for shipping.

## **Install Side Bells on Center Section**

- The best way we have found to do this is to install your hub on the left side tube and stand straight up with the wheel mounted on the hub.
- Before you set on the ring gear/carrier group make sure to loosen the Thrust Block Adjustor Screw.
- Lube the ends of the spool so they will not tear the carrier seal.
- Install spool and ring gear with flat side of ring gear facing down.
- Lightly lube on the side bell o-ring and install in groove on bell.
- Sit the center assembly on the side bell. There are stamped numbers at the top of the bell and center section to line the bolts up correctly.
- Lightly lube on the side bell o-ring and install in groove on bell.
- Set on the Right Side Bell.
- The bells should almost sit flush with the center section and install thru bolts. Torque side bell bolts to 35 foot lbs. in a criss cross pattern.
- If you choose to aid in sealing of your housing, a thin coat of RTV can be used on the side bell o-rings.



## **Thrust Block on Left Side Bell**

Adjust screw on left side bell till the thrust block touches the back of the ring gear and then back off 1/4 turn and lock in place with lock nut. Check video on our website.



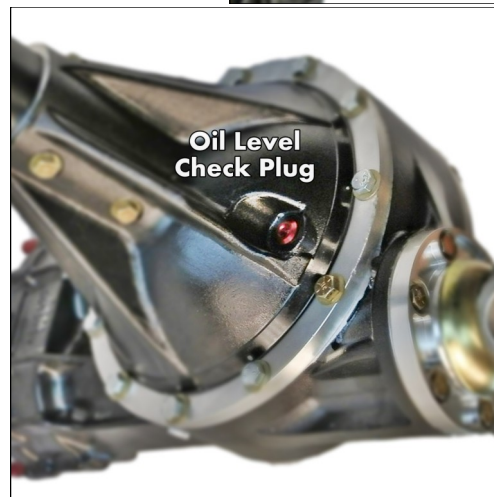
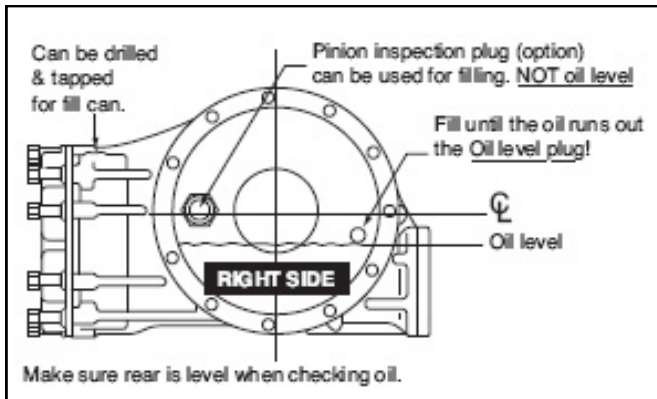
## **Torque Settings on Bolts**

- Side bell thru bolts & short bolts 35 foot lbs.
- Yoke Retainer Bolt 45 foot lbs
- Yoke Seal Support retainer bolts (6) 25 foot lbs.
- Rear Cover Aluminum High Nuts 25 foot lbs.

# PEM Quick Change Assembly Instructions

## Lubrication and Fill Level

- Recommended Lube is a quality name brand mineral based 80-90w for regular conditions and in the hottest summer a 85-140W.
- Synthetic lube GL5 such as a Mobil 1 75-90w.
- Fill through Large Pinion Inspection Plug on Right Side Bell.
- Oil Level Plug is Small Button Plug on the front side of the Passenger Side Bell. Make sure rear end is level when you are filling to the small oil level plug. Recommended oil level is 2" below axle center line. Too much lube causes overheating.
- Capacity is usually between 3.5 and 4 quarts.



## SPACER BOLTS BETWEEN THE FLOATER AXLES

Axles for 9" ford rear ends and quick change rear ends are calculated so you can run a locker or gear drive differential so there is a gap between the axles when they are mounted.

This gap is usually 1" to 1 1/4".

Spacer bolts must be installed in the axles for proper spline engagement with the spool and drive flange. You want to leave 1/16" gap between the axle and the outer drive flange cap on each side.

Use a 3/8"-24 bolt with a jam nut. You can run bolts with lock nuts on both sides or just one side.

You may also choose to run longer axles with a spool if you have no plans to run a differential.

