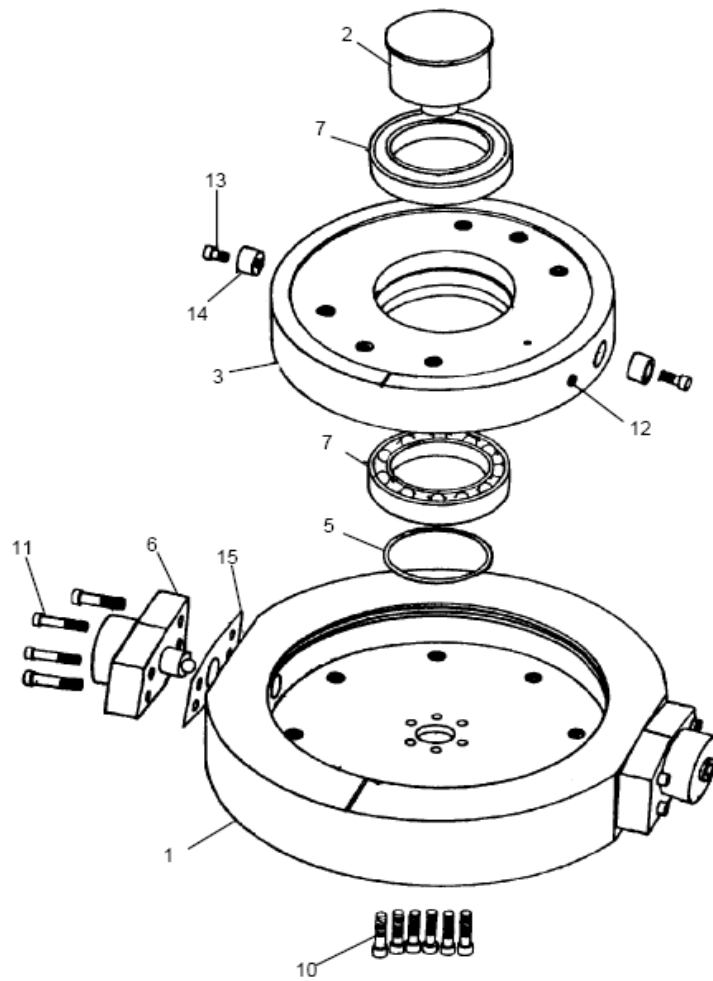


TORQUE LIMITER COMPONENTS



ITEM	DESCRIPTION
1	Housing Carrier
2	Inner Hub
3	Outer Hub
4	Rigid Hub
*5	Spacer Ring
6	Safety Element
7	Deep Groove Ball Bearing
N.S.	Socket Head Cap Screw (Hub Bolts)
10	Socket Head Cap Screw
11	Socket Head Cap Screw

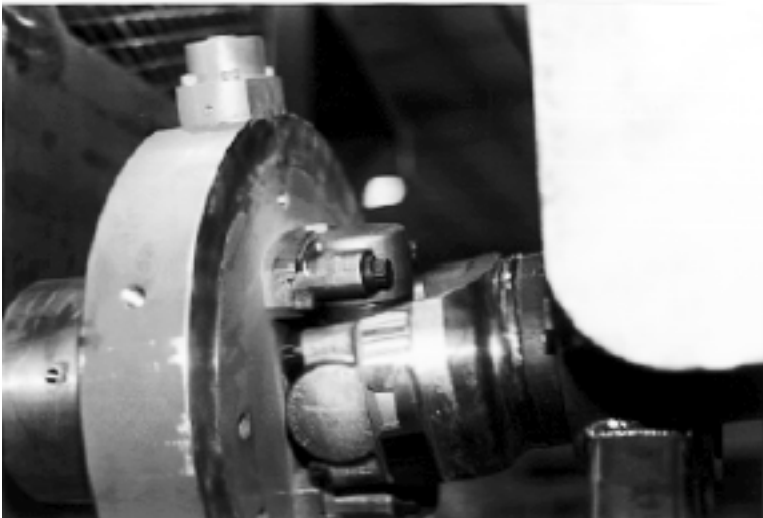
TORQUE LIMITER REPLACEMENT



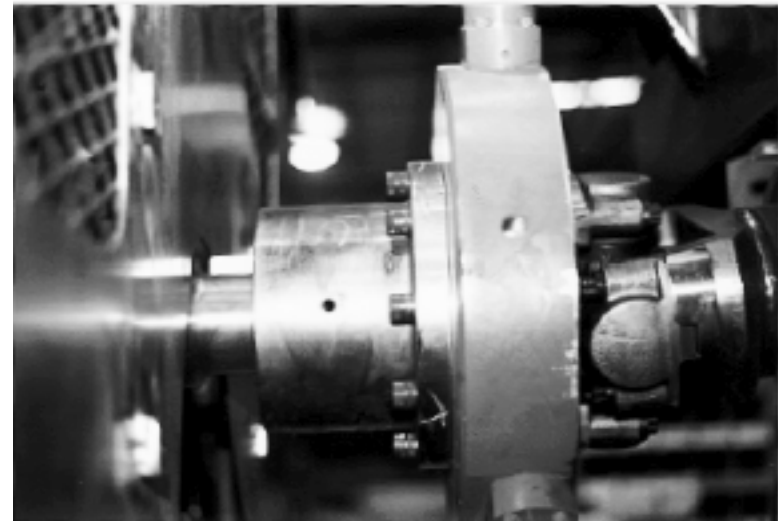
1. Raise tub floor and engage tub lock tube, lock out machine.



2. Remove PTO shaft safety guard.

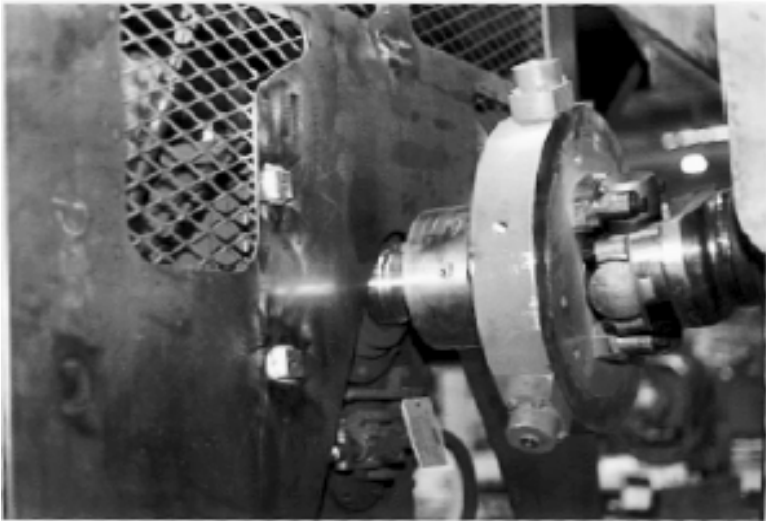


3. Remove 4 bolts holding drive shaft to torque limiter.



4. Support torque limiter and unbolt torque limiter from flange.

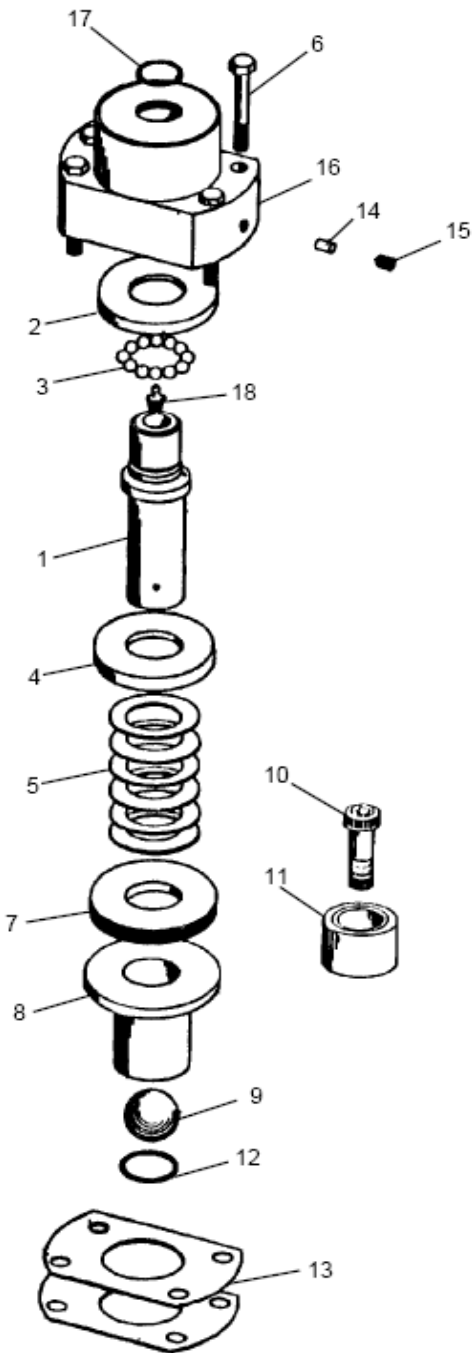
SAFETY ELEMENT COMPONENTS



- 5. Reverse procedure to install. Torque bolts to specs on page# 8-6.
- 6. Drive Shaft to torque limiter 3/4-10 Gr. 8.
Torque limiter to PTO hub 1/2-13 Gr. 8.



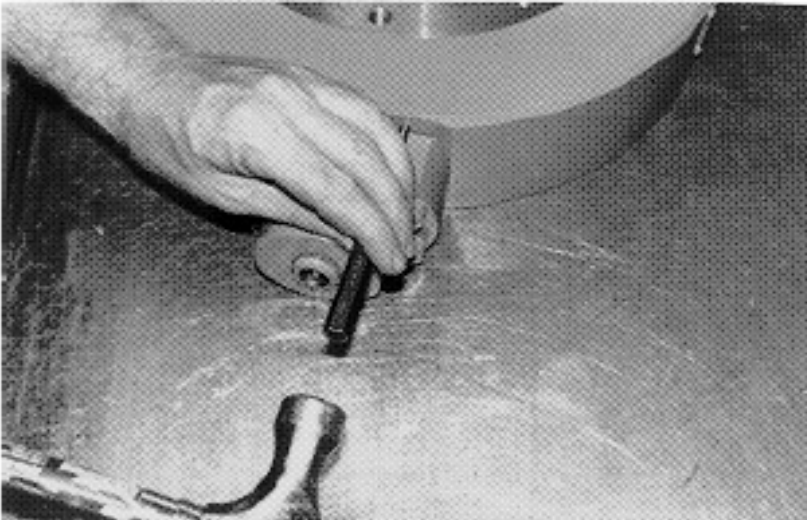
WARNING: When reinstalling shaft, splined end must be toward hammer mill.



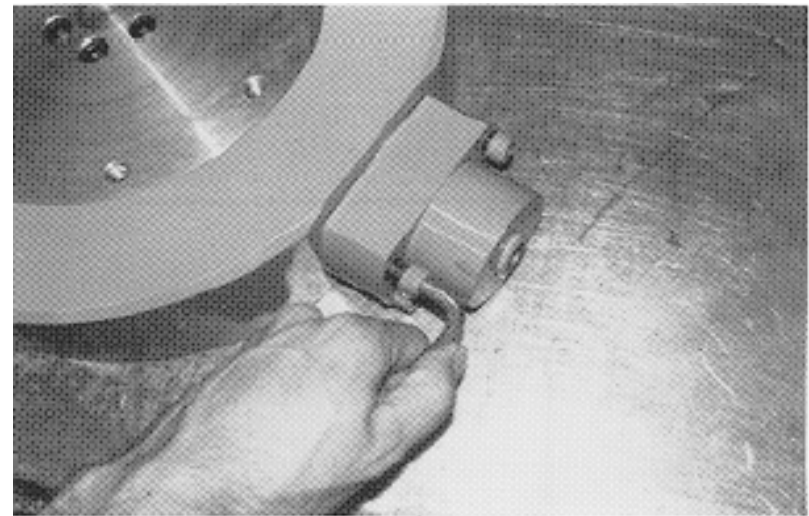
ITEM DESCRIPTION

ITEM	DESCRIPTION
1	Plunger
2	Outer Thrust Race
3	Ball - 10mm (12 per set)
4	Inner Thrust Race
5	Disc Spring (6 per set)
6	Socket Head Cap Screw
7	Adjusting Nut
8	Bushing
9	Detent Ball
10	Socket Head Cap Screw
11	Detent Pocket
12	"O" Ring Bushing
13	Shim Pack
14	Locking Pellet
15	Socket Set Screw
16	Housing
17	"O" Ring Housing
18	Grease Fitting

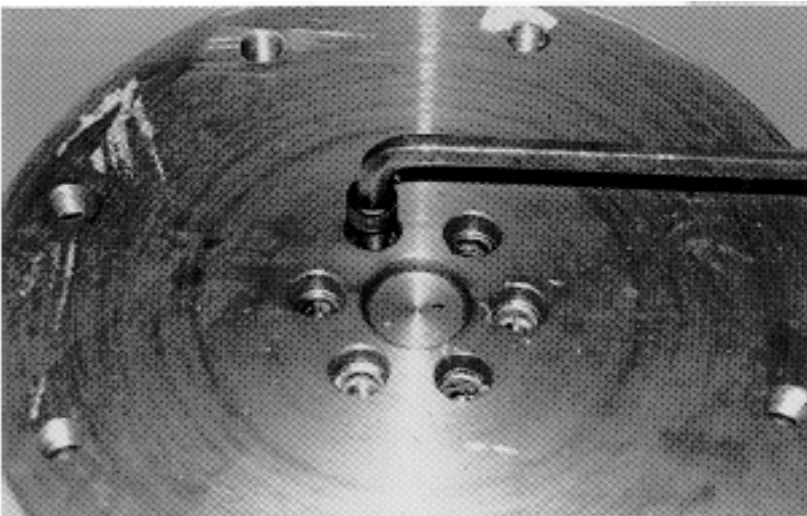
TORQUE LIMITER DISASSEMBLY



1. Mark safety element to the housing carrier using a prick punch and hammer. This is to assure safety element is reinstalled in same hole.



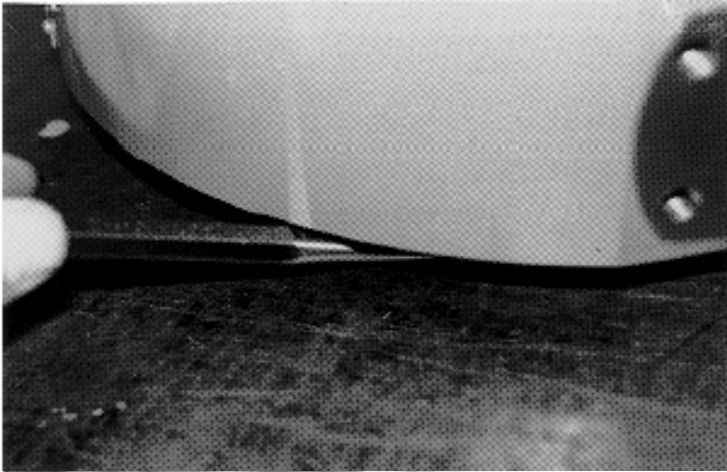
2. Remove the four housing bolts. When removing the safety element, keep shim and bushing together.



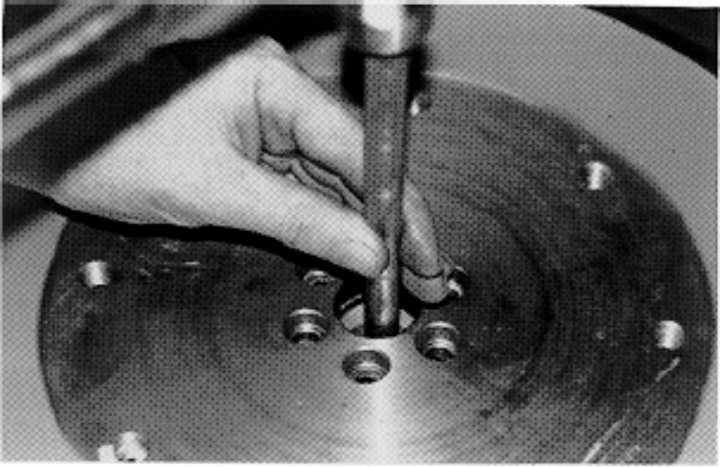
3. Remove the six socket head cap screws that hold the housing carrier and hub together.



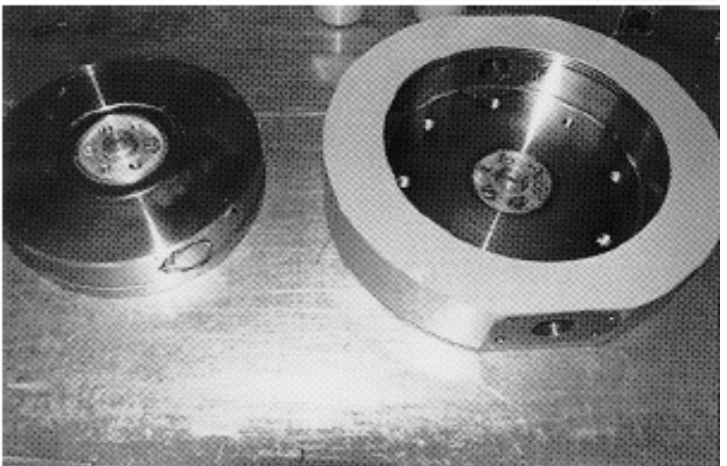
4. Mark stub shaft of inner hub to the housing carrier for reassembly.



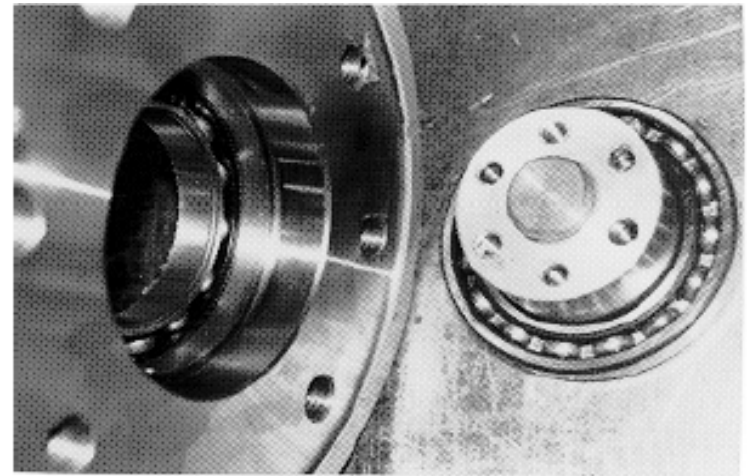
5. Block housing carrier up using small blocks around outer edge.



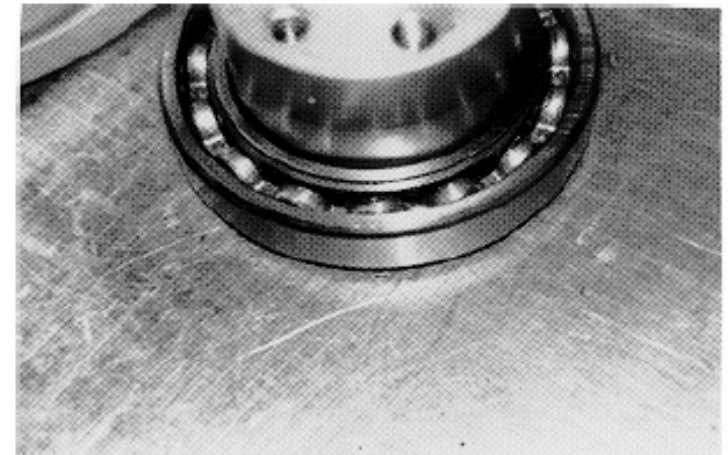
6. Using a brass drift and a hammer, tap stub shaft until outer hub drops free of housing carrier.



7. Set housing carrier aside, and block up outer hub with stub shaft facing up.

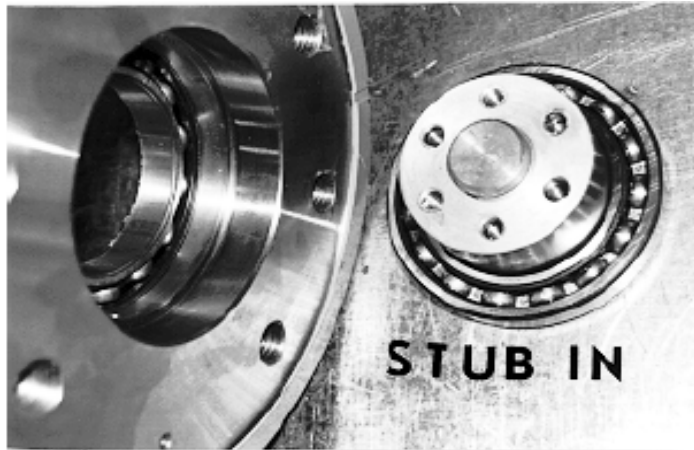


8. Using a lead hammer, tap on stub shaft until inner hub comes free of outer hub.



9. Once inner hub has been removed, clean bearings and check for any wear.

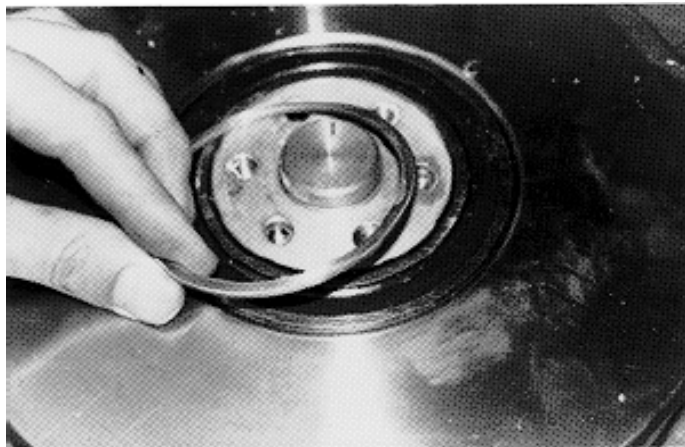
TORQUE LIMITER ASSEMBLY



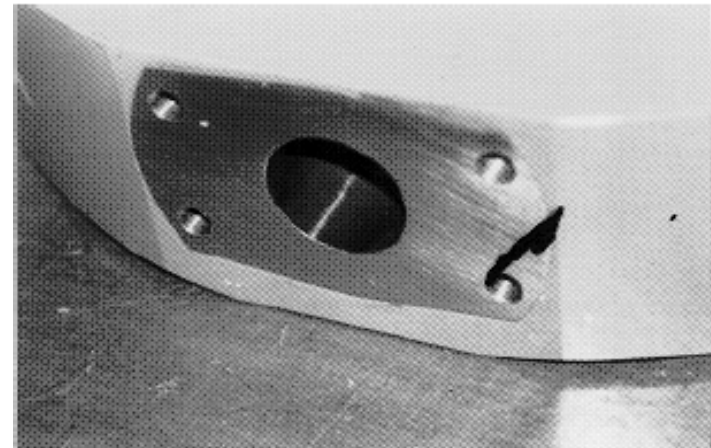
1. Tap inner hub back into outer hub as illustrated.



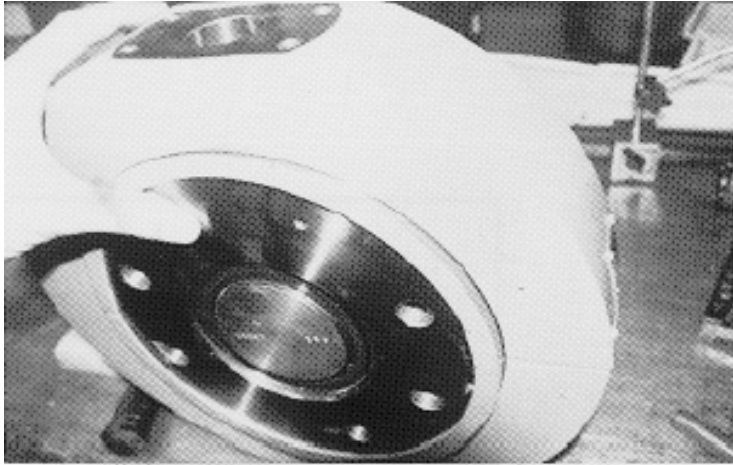
2. Grease seals must be toward outer edge of hubs.



3. Spacer ring must be installed on stub shaft side of inner hub.



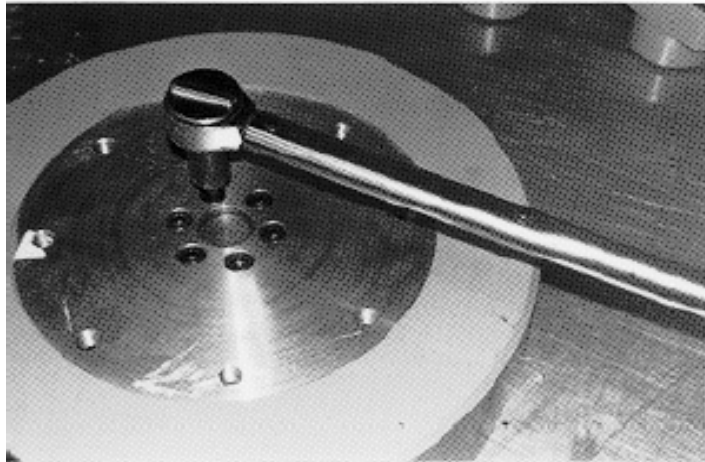
4. Check housing carrier detent pockets for any rough edges or dents. Use a file or die grinder to remove any obstructions.



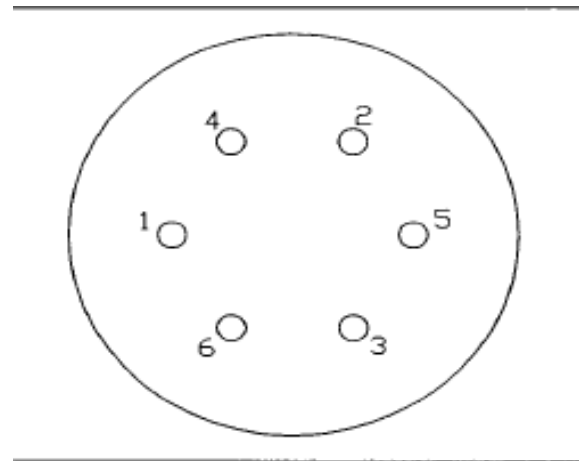
5. Reinstall outer hub into housing carrier. NOTE: Align marks on inner hub to housing carrier for proper installation.



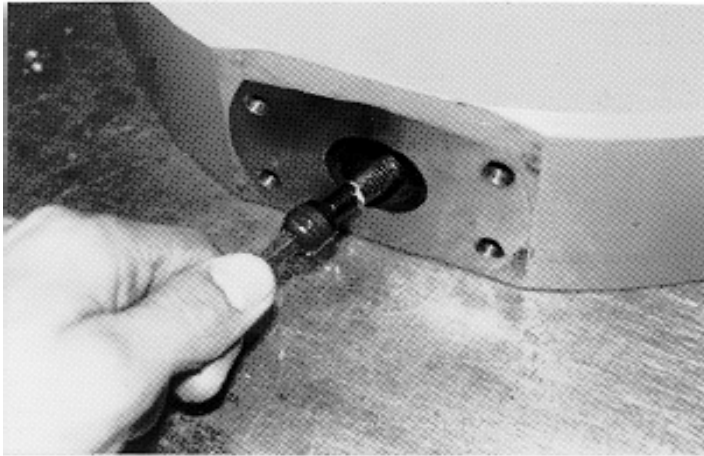
6. Remove old Lock-Tite compound from the socket head cap screws. Use one drop of stud grade Lock-Tite upon installation.



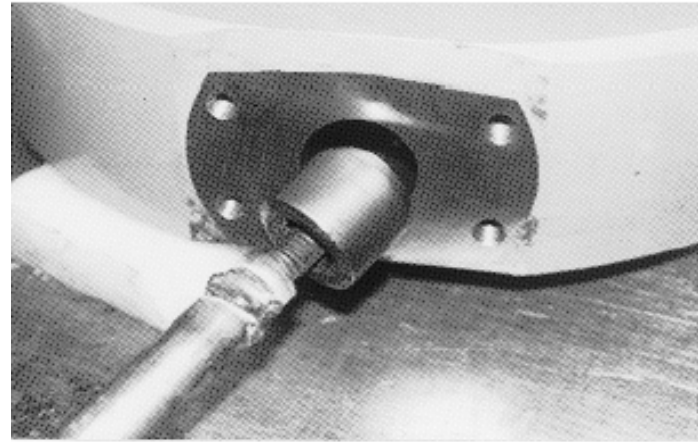
7. Torque bolts to 33 ft. lbs. Torque in a star fashion as illustrated.



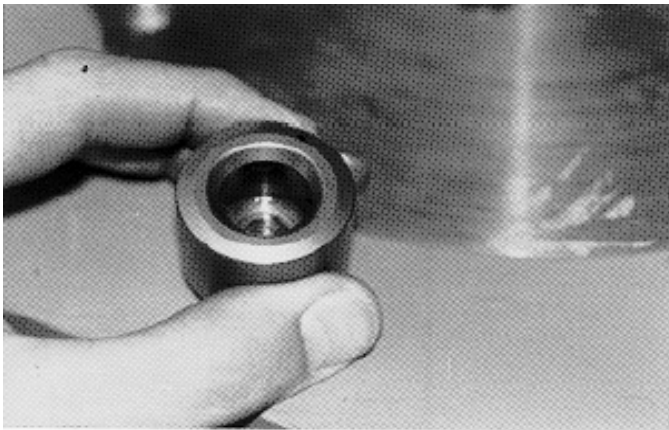
DETENT POCKET



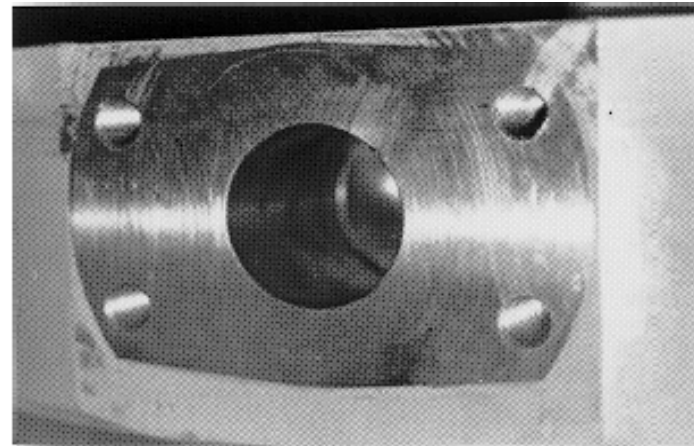
1. Remove detent socket head cap screw.



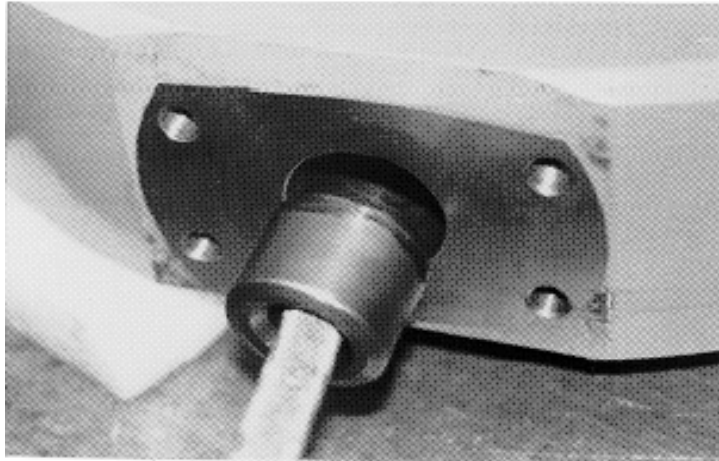
2. Using a slide hammer puller, thread bolt into detent and remove.



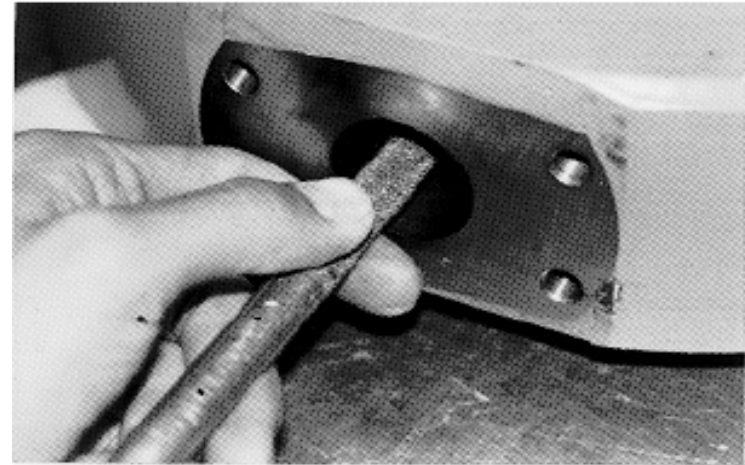
3. Inspect detent pocket for any wear.



4. Inspect detent hole for any wear. Use a file to clean hole.



5. If wear is present on detent, rotate detent until worn area is out of ball travel pattern.



6. Using proper size drift, drive detent until it bottoms out.



7. Clean detent socket head cap screw of any locking compound.



8. Put a drop of stud grade locking compound on bolt. Torque to 33 ft. lbs.

SAFETY ELEMENT DISASSEMBLY



1. Remove plunger bushing to expose spanner nut



2. Remove set screw and aluminum pusher which holds spanner nut stationary.



3. Put safety element into a vise.



4. Remove spanner nut, in a counter clockwise rotation.



5. Once spanner nut has been removed, remove all internal parts of the safety element.



6. Clean all parts in a parts washer.

SAFETY ELEMENT ASSEMBLY



1. Inspect all parts once cleaned. If worn, replace.



2. All parts must be covered with a thin layer of a Mobil xtc grease or its equivalent.



3. Install outer thrust race (thin), with concave side up.



4. Once in position, add a thick layer of grease on the race.



5. Insert the plunger making sure it is setting flat against bottom. Install ball bearings around plunger.



6. Next, install the inner thrust race. Make sure concave side goes against ball bearings.



7. Install first thrust washer with concave side towards thrust race.



8. Next thrust washer must be installed with convex side towards thrust race.



9. Continue this alternating procedure until all six have been installed.



10. Next, install spanner nut. Tighten spanner nut until it comes in contact with the top thrust washer. When these meet, it is considered zero spring pressure.



11. Scribe a mark onto spanner nut. Use a depth micrometer to measure distance between mark on spanner nut and safety element housing.



12. Tighten until nut is more than first reading. (see settings chart at end of chapter)
NOTE: Always take readings from mark on spanner nut.



13. Once the proper measurement has been established, install aluminum locking pellet and set screw.



14. Slide bushing onto shaft.



15. If bushing does not set into housing, use a lead hammer to center bushing in housing.

SAFETY ELEMENT INSTALLATION



1. Put steel ball into end of safety element and slide unit into housing.



2. Using a feeler gauge, determine the distance between safety element and housing carrier.



3. The shim pack to be installed must be .006" to .008" under the reading. This will preload the ball and detent.



4. Remove the safety element and grease the detent and ball.



5. Install safety element and shim pack.



6. Torque retainer bolts to 37 ft. lbs. Fill safety element with Mobil xtc grease or its equivalent.