



D2 SPINDLE REBUILD INSTRUCTIONS

PARTS BREAKOUT

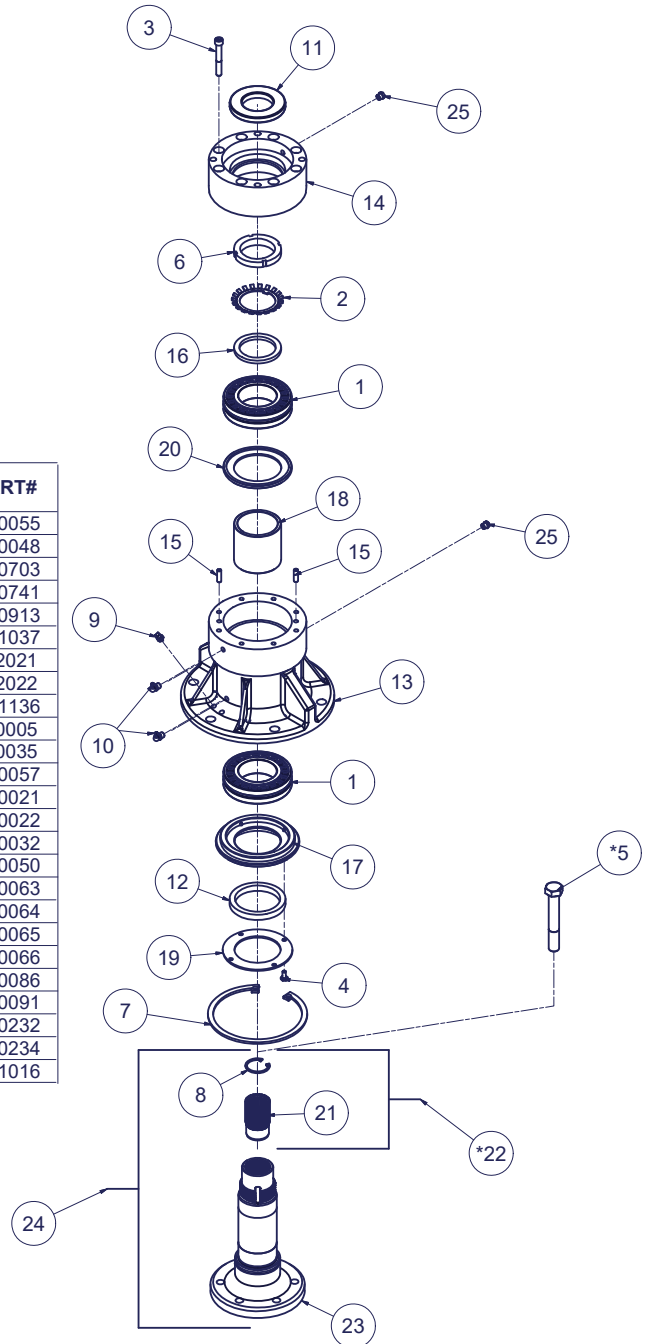
Grease with #2 lithium based grease every 500 hrs.
Use 10 pumps (0.44 oz) into each of the two grease zerks.

Warning: Do not over-grease.
Over-greasing will cause damage or premature failure of the bearings, housing, & seals.

* The splined insert kit includes the insert removal tool 11-0913. Not a spindle component. For coupling removal only.

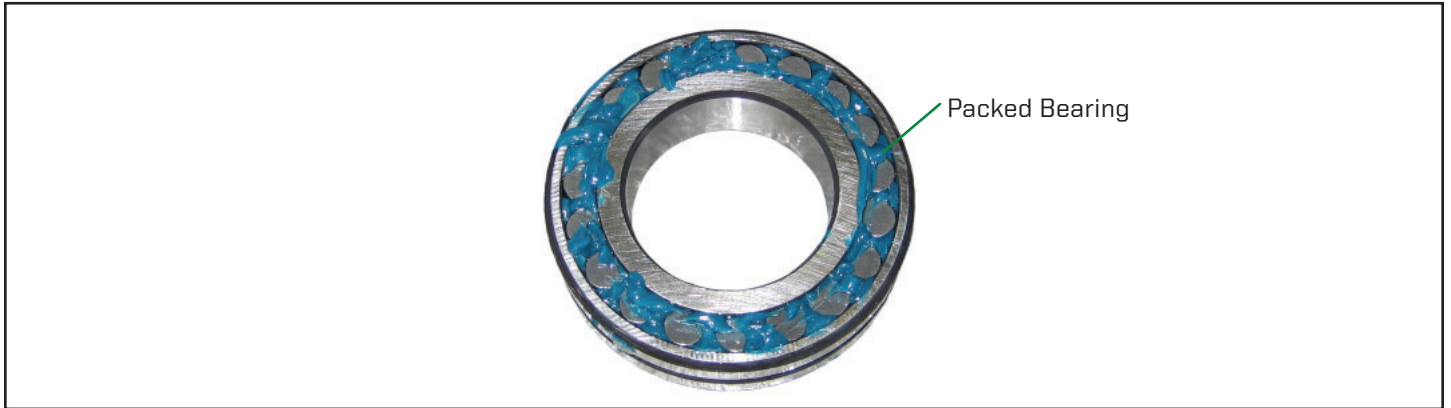
REF#	PARTS DESCRIPTION	REQ	PART#
1	BEARING	2	10-0055
2	LOCKING WASHER	1	11-0048
3	3/8-16 X 2-3/4 ASTM A574 SOCKET CAP, BLACK OXIDE	8	11-0703
4	1/4-20 X 1/2 GR 5 HEX CAP, ZINC	4	11-0741
*5	3/4-16 X 5 GR 8 HEX CAP, PLAIN	1	11-0913
6	2-1/2 SPANNER NUT	1	11-1037
7	LARGE SNAP RING	1	11-2021
8	SMALL SNAP RING	1	11-2022
9	PIPE PLUG	1	21-1136
10	GREASE ZERK	2	23-0005
11	UPPER SEAL	1	33-0035
12	LOWER SEAL	1	33-0057
13	SPINDLE HOUSING	1	35-0021
14	SEAL/MOTOR MOUNT	1	35-0022
15	ALIGNMENT PIN	2	35-0032
16	NUT LOCK SPACER	1	35-0050
17	BOTTOM SEAL PLATE	1	35-0063
18	SPINDLE SPACER	1	35-0064
19	BOTTOM PLATE	1	35-0065
20	GREASE CATCH	1	35-0066
21	SPLINE INSERT	1	35-0086
*22	SPLINED INSERT KIT	1	35-0091
23	SPINDLE SHAFT	1	35-0232
24	SPINDLE SHAFT COMPLETE	1	35-0234
25	BREATHER	2	80-1016

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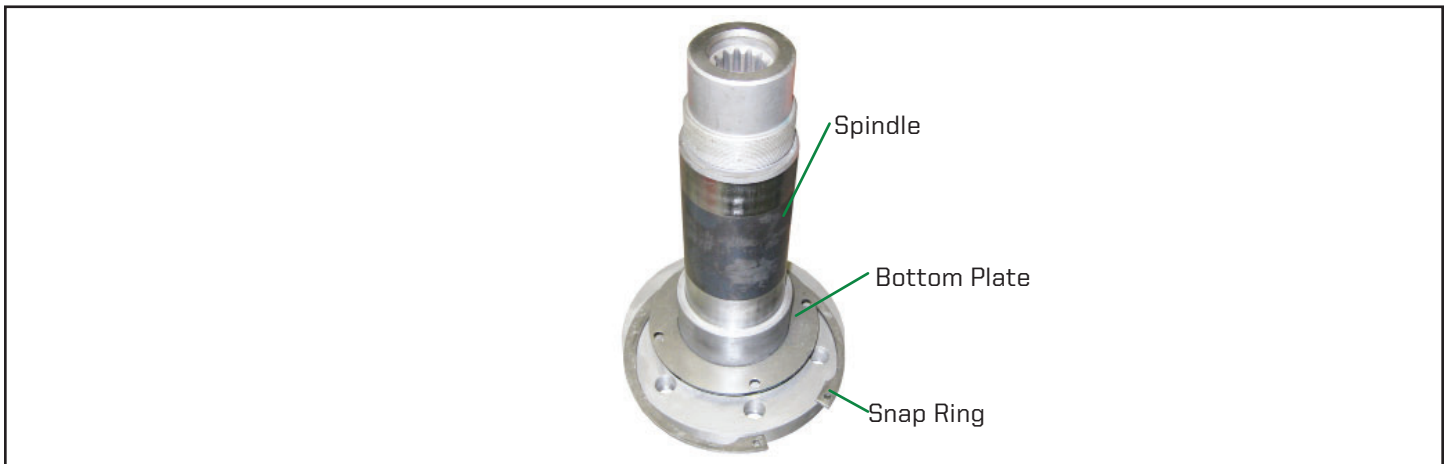


REBUILD INSTRUCTIONS

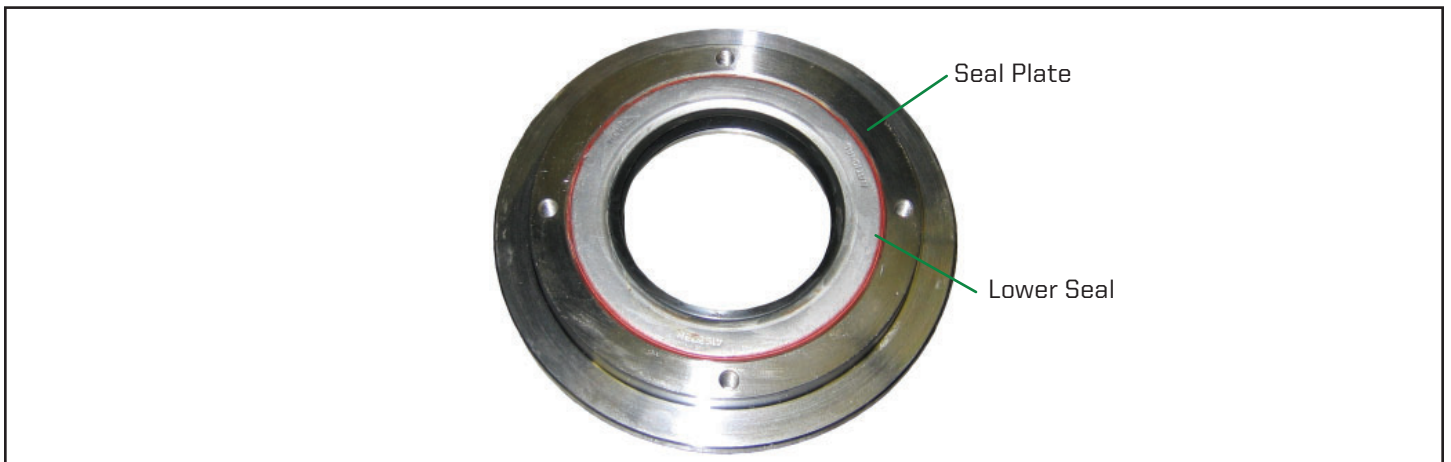
1. Pack the two bearings with #2 lithium based grease on both sides.



2. Place the large snap ring and bottom plate onto the spindle.



3. Place the lower seal into the recess of the bottom seal plate with the lettering facing up.



4. Gently tap evenly around the lower seal until the fully seated.

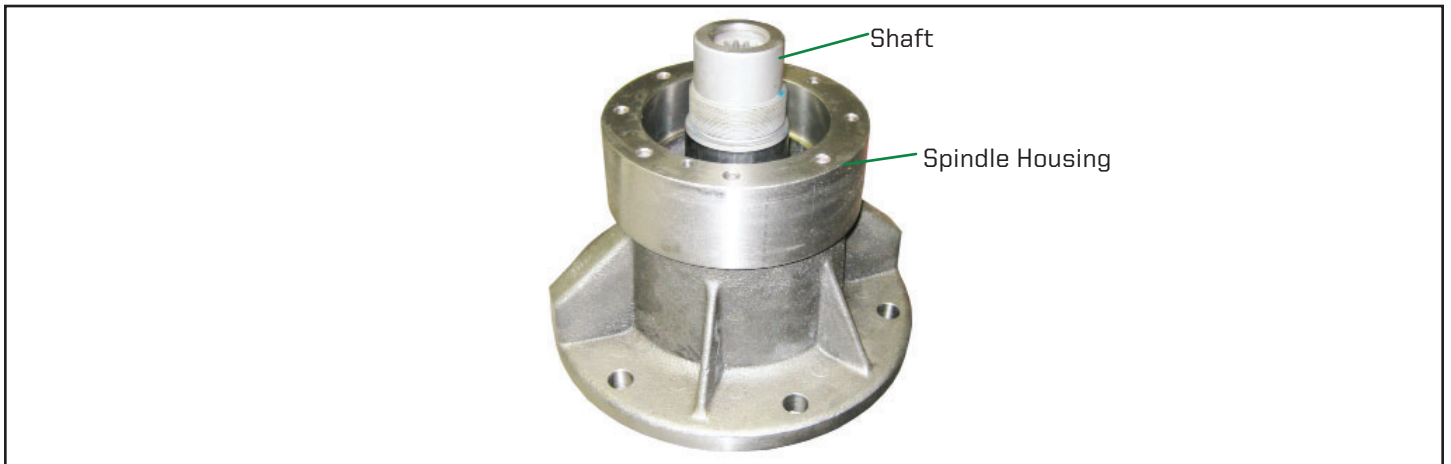
5. Press the bottom seal plate down around the spindle shaft (lower seal facing down) until it no longer moves.



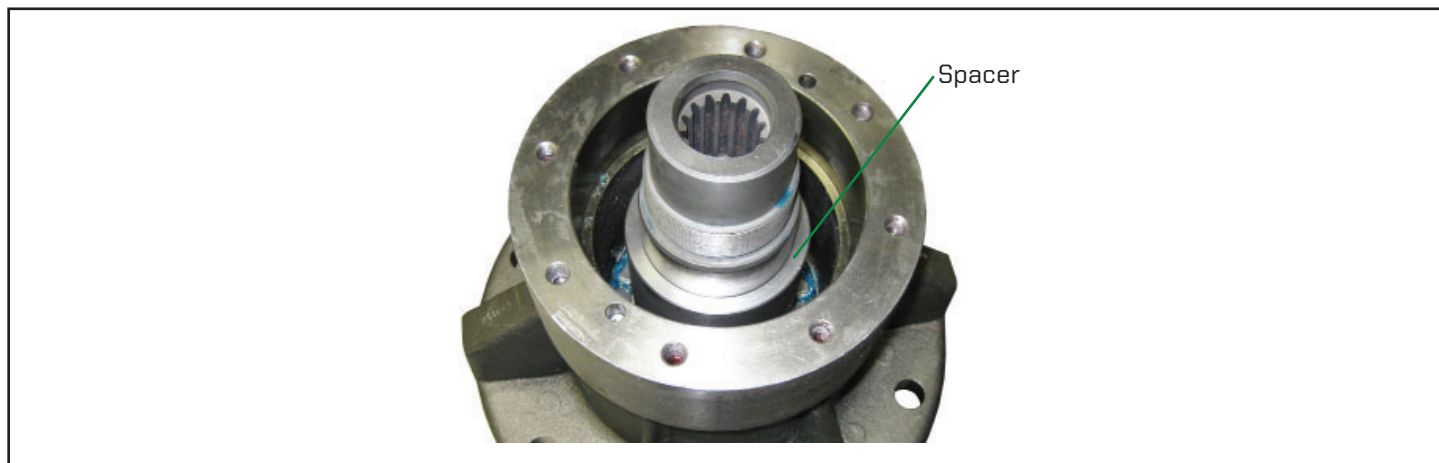
6. Press the bearing down around the spindle shaft down until it can no longer move.



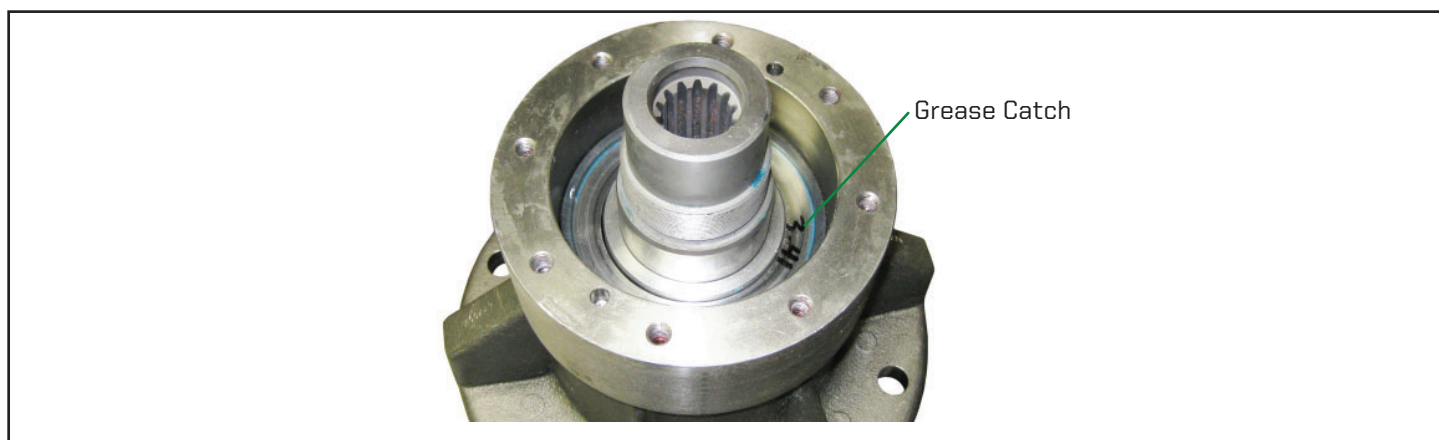
7. Place the spindle housing down around the spindle shaft until fully seated.



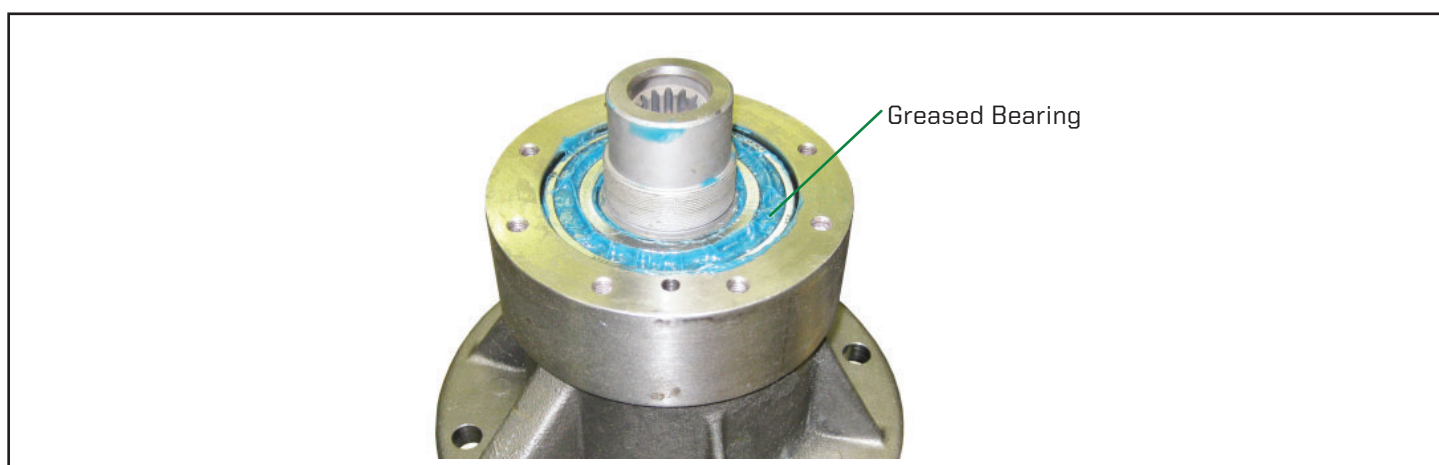
8. Slip the spacer down around the spindle shaft until fully seated.



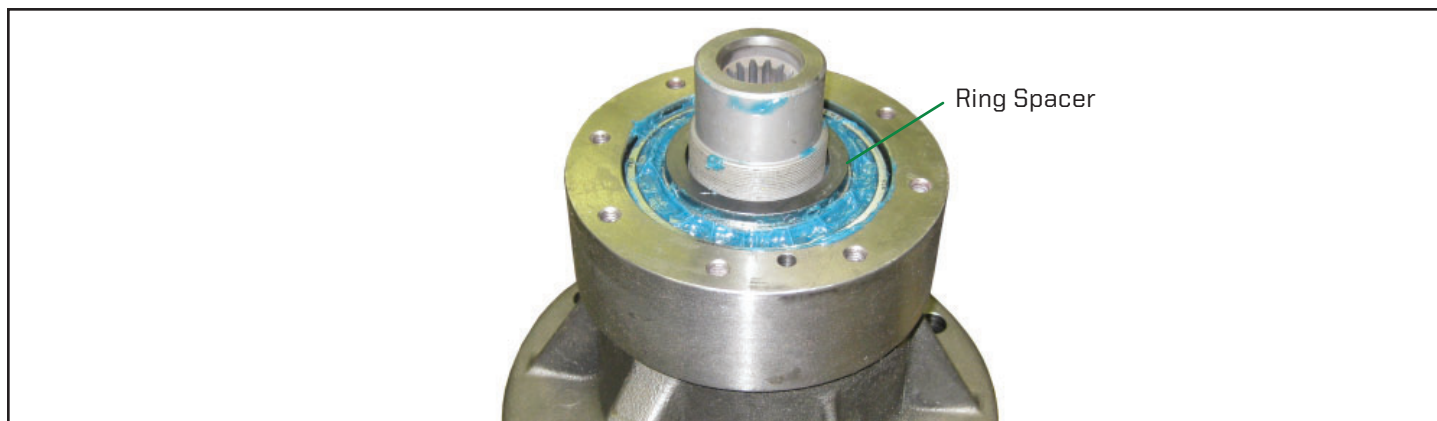
9. Install the grease catch with the lip facing up around the spindle shaft until it is seated against the spacer.



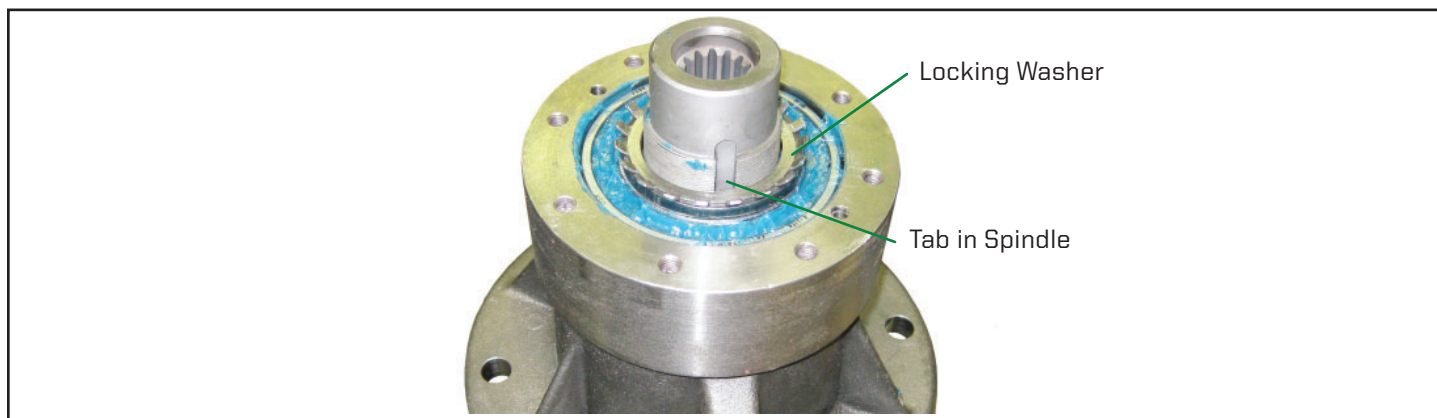
10. Place and press the bearing around the spindle shaft.



11. Install the ring spacer down around the spindle shaft until it rests on the bearing.

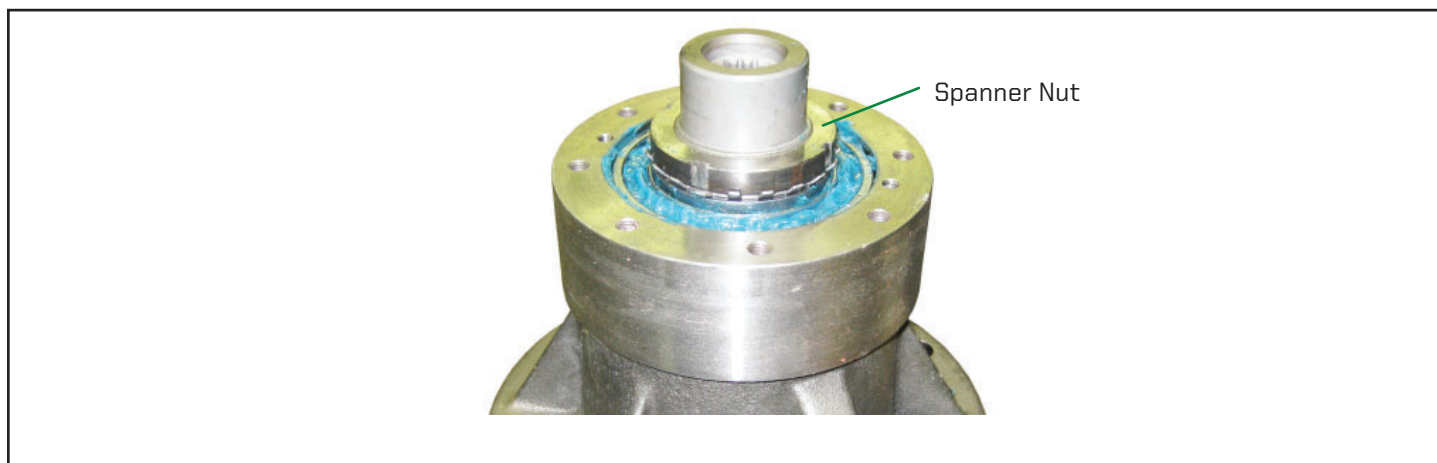


12. Install the locking washer down around the spindle shaft until it is resting on top of the ring spacer.



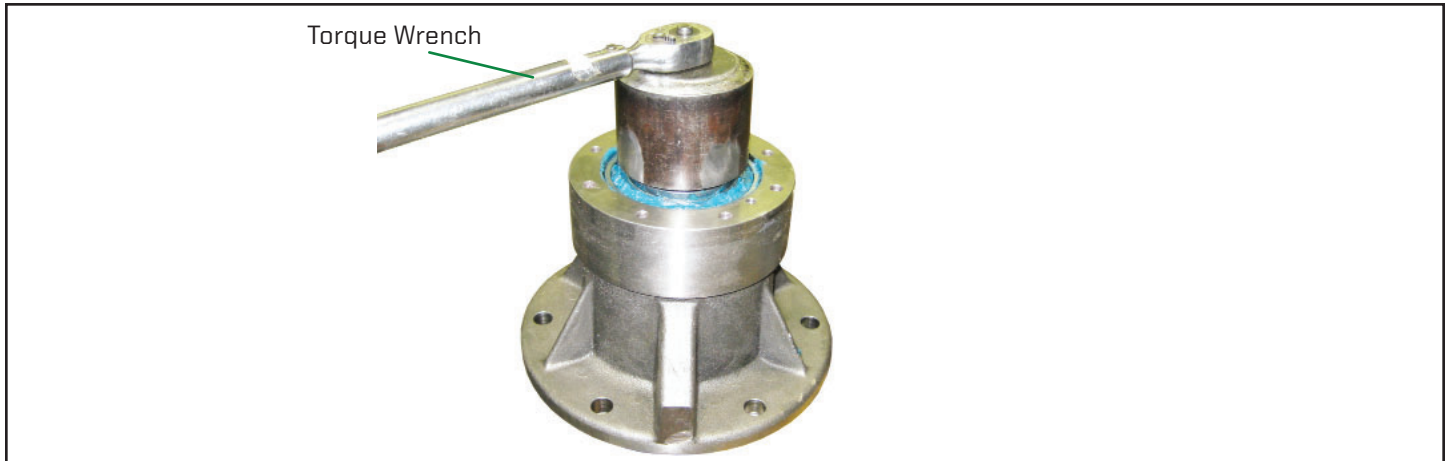
13. Verify the locking washer tab is inside the slot on the spindle.

14. Thread the spanner nut on the spindle shaft until it contacts the locking washer.

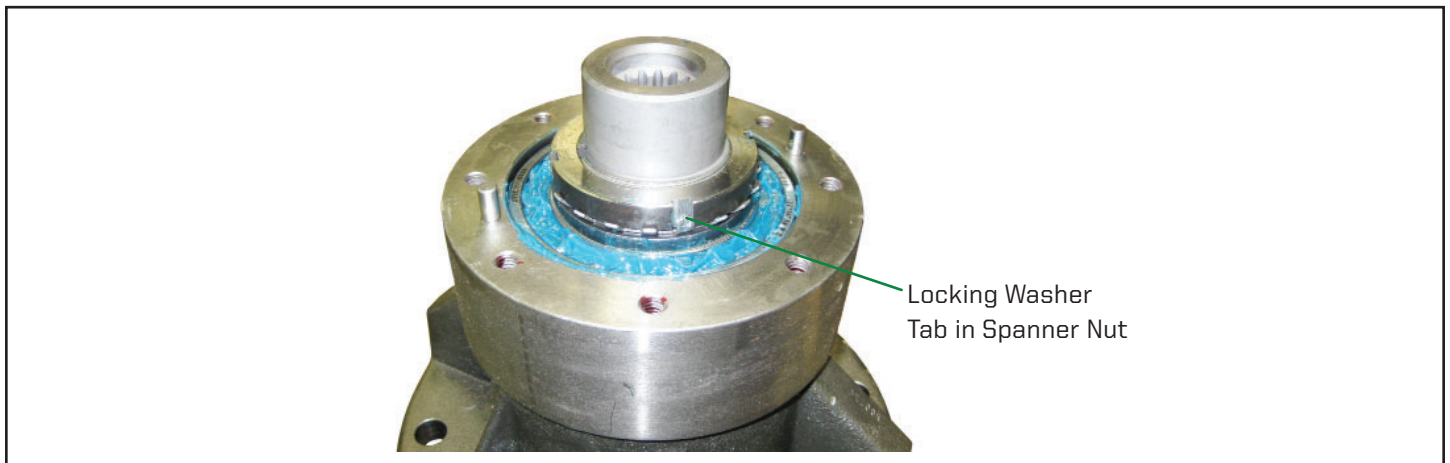


15. Hand tighten the spanner nut.

16. Torque the spanner nut to 250 ft-lbs.

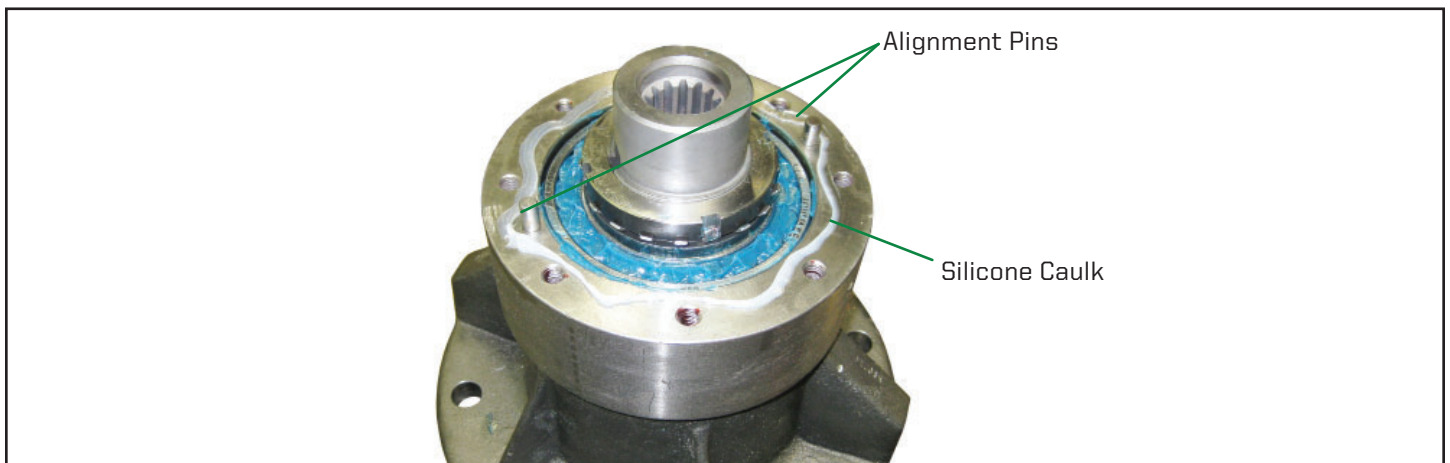


17. Tap one of the locking washer tabs into the spanner nut.



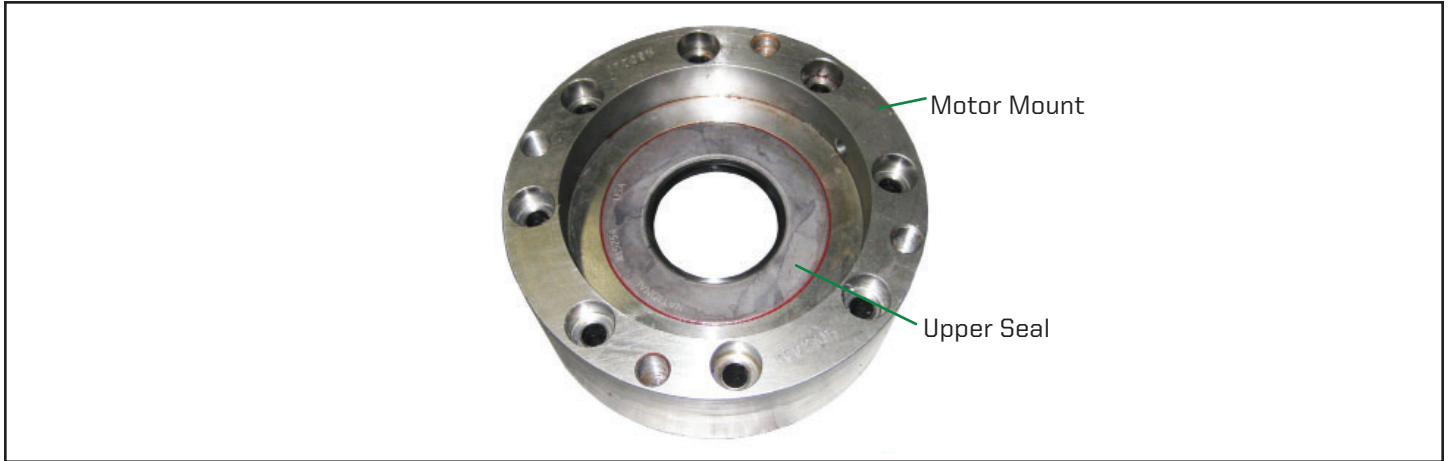
18. Clean off grease and debris off the spindle housing top surfaces.

19. Install and gently tap the two alignment pins into the recesses on the spindle housing.



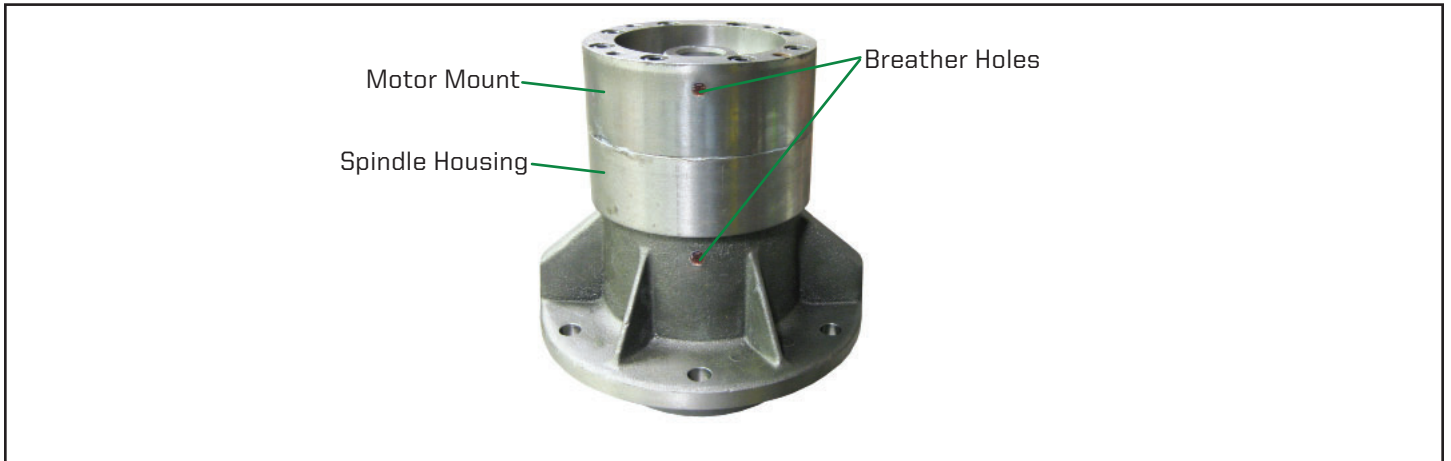
20. Apply a thin bead of silicone caulking on the top surface of the spindle housing.

21. Place the upper seal with the lettering facing up into the recesses of the seal/motor mount.



22. Gently tap all away around the upper seal until fully seated.

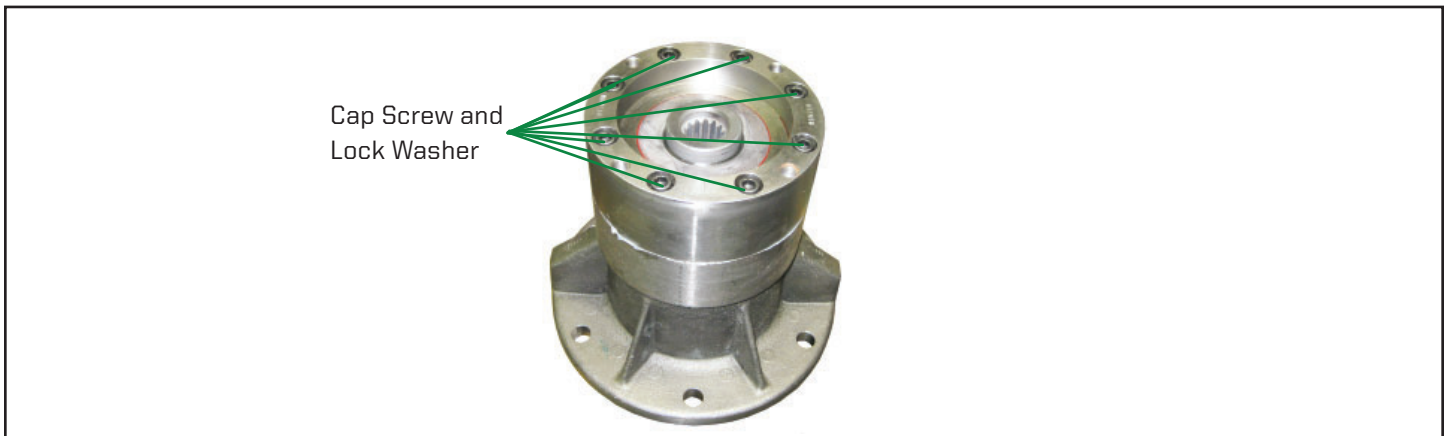
23. With the alignment pin recesses on the seal/motor assembly and on the spindle housing aligned, place the seal and motor mount onto the spindle housing. Ensure the breather holes on the motor assembly and spindle housing align.



24. Press the seal and motor mount until they are fully seated against each other.

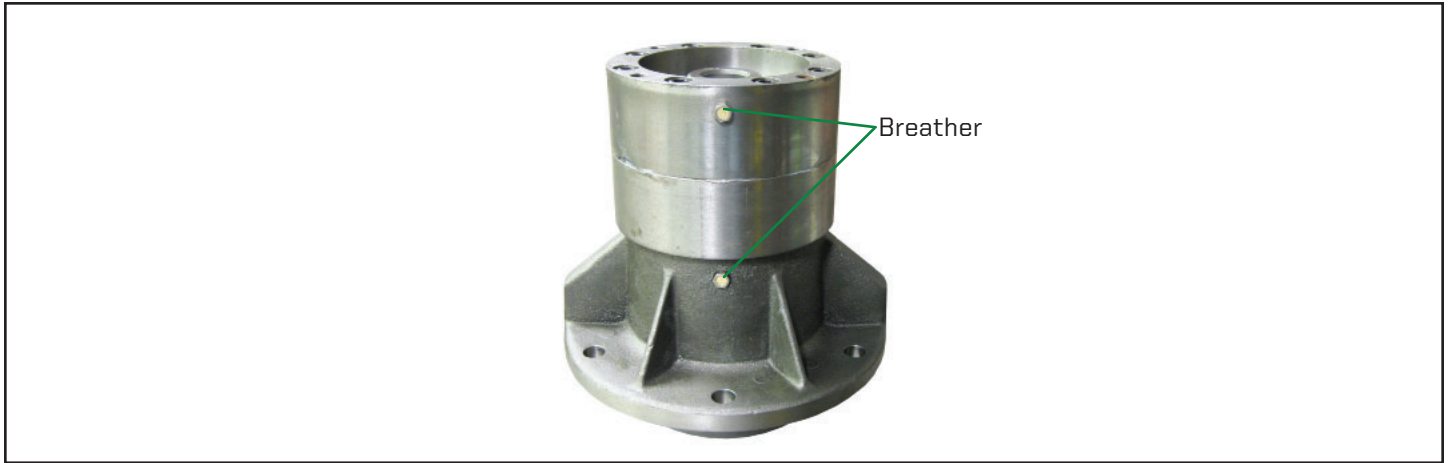
25. Apply Loctite 262 to the cap screw heads.

26. Secure the seal and motor mount to the spindle with cap screws and lock washers.

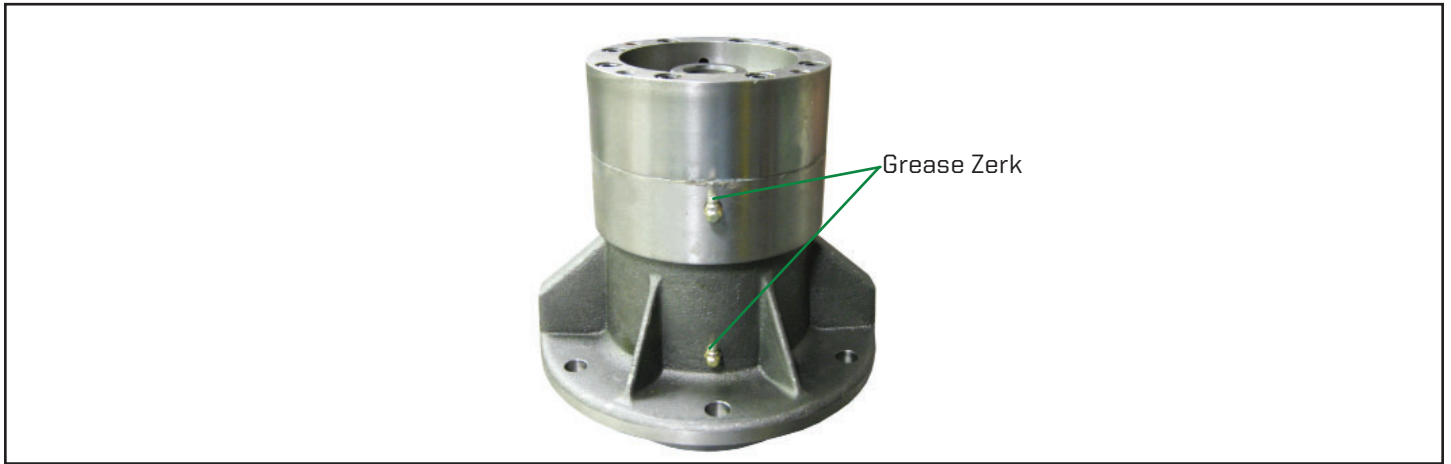


27. Torque the cap screws in a criss cross pattern to 30ft-lbs.

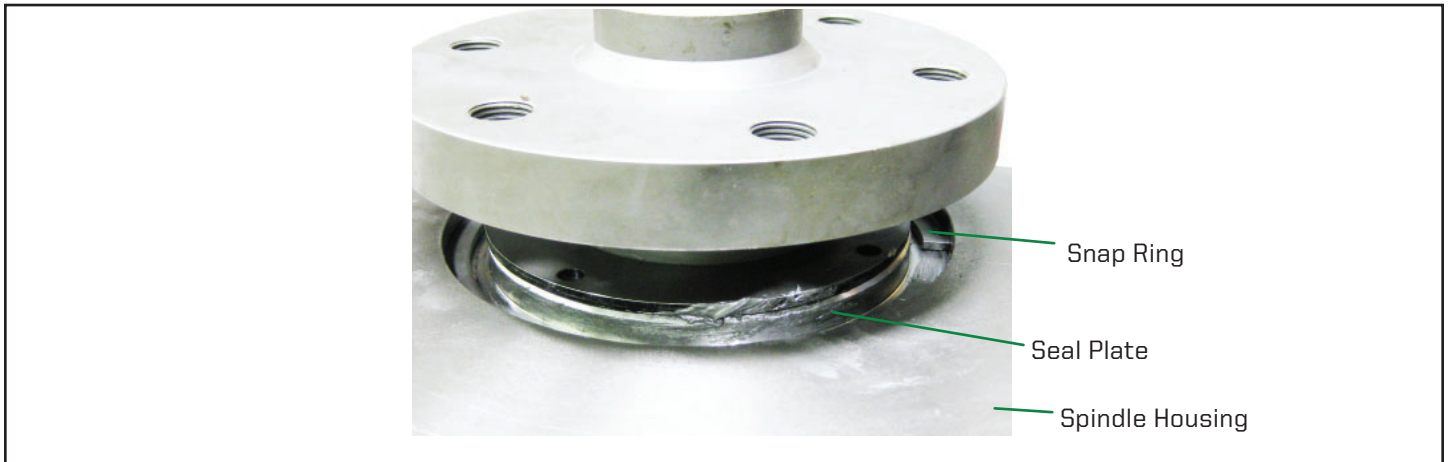
28. Screw the two breathers into the seal/motor mount and spindle housing as far as possible.



29. Screw the two 90° grease zerks into the spindle housing as possible with the zerks facing up.

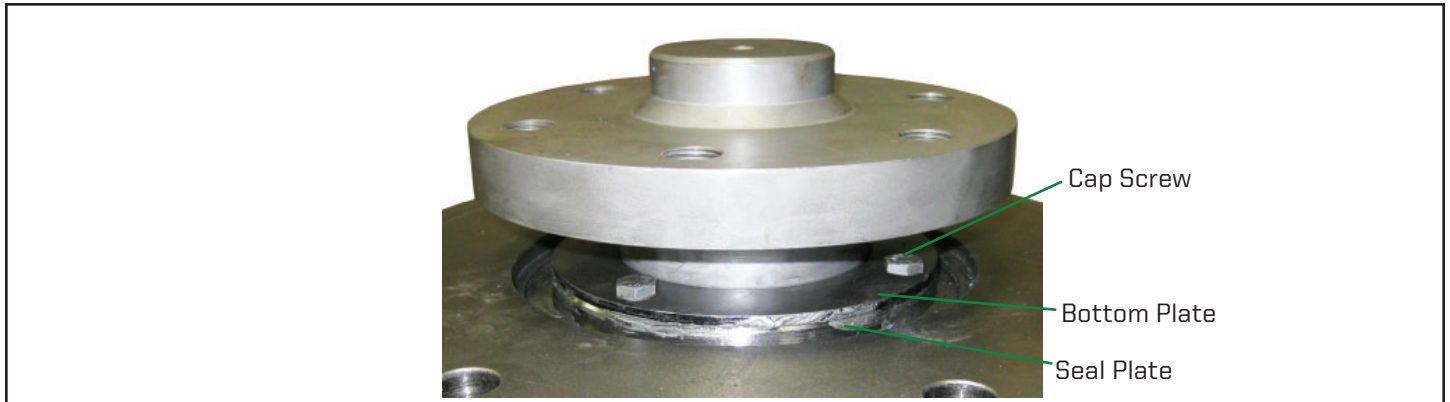


30. Secure the bottom seal plate to the spindle housing with a snap ring.



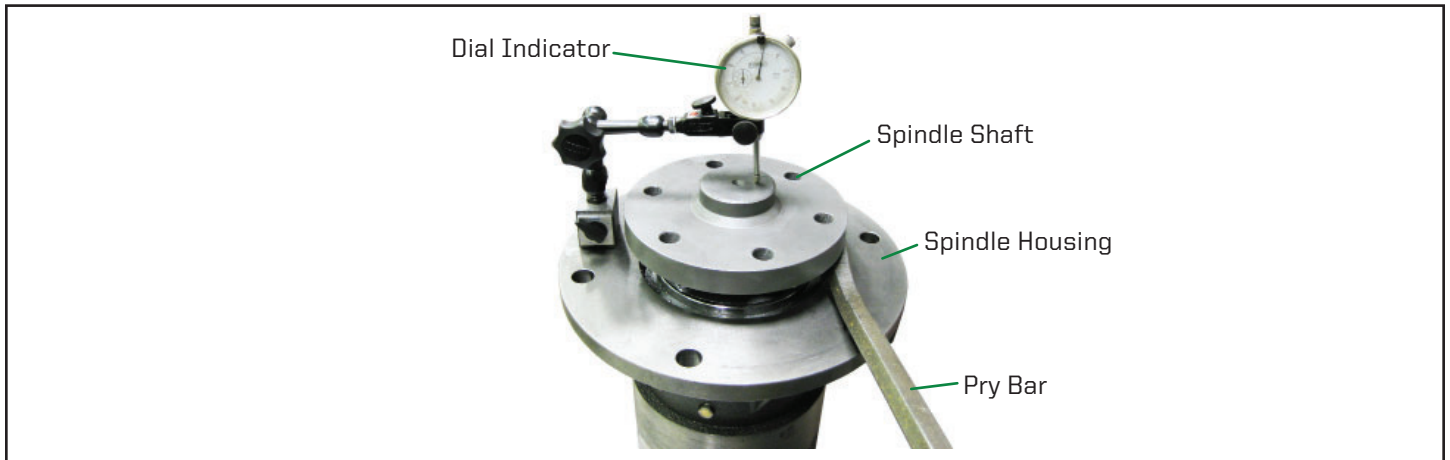
31. Apply Loctite 262 to the cap screws.

32. Secure the bottom plate to the bottom seal plate with cap screws.



33. Torque the cap screws in a criss cross pattern to 8-ft-lbs.

34. Place a dial indicator on the spindle assembly.



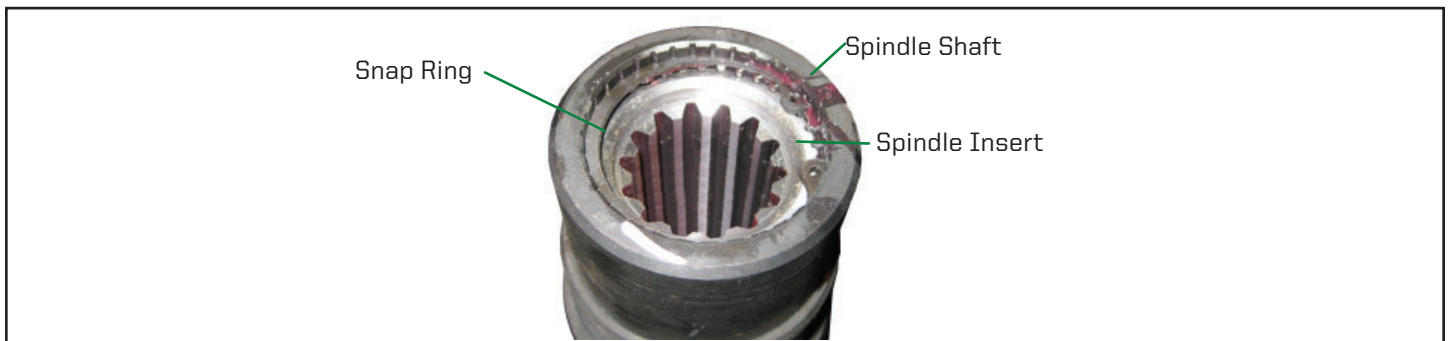
35. Use a pry bar to pry the spindle shaft up and down.

36. Ensure the end play is between .015" and .045".

37. If necessary, place a piece of wood on the end of the spindle shaft then strike the down on the piece of wood with a mallet.

38. Check the play again.

39. Insert the splined spindle insert into the spindle shaft.



40. Secure the splined spindle insert into the spindle shaft with a snap ring.

QUESTIONS AND ADDITIONAL INFORMATION

Contact Diamond Mowers at 1-888-960-0364 with any questions or for additional information.