



Final Lap Spring Replacement Procedure

This Procedure can be used to replace the spring and/or the shaft on the Final Lap steering assembly. Have a look at the bumper stop at this time as well.

1. Open the control panel and disconnect the steering assembly harness, remove (4) button head screws.
2. Remove (7) 1/4-20 button head screws and nuts of the vacu-formed bezel to gain access to the steering assembly mounting screws.
3. Remove (6) 1/4-20 steering assembly mounting screws and nuts to gain access to the spring stops mounting screws.
4. Remove steering assembly from the control panel.
5. Remove (4) phillips head screws from the two spring stops.
6. Remove the 1/4-20 cap screw, washers, and gear from the end of the shaft.
7. Remove the (2) 8-32 nuts and screws and catch, and (2) spacers from the shaft.
8. Remove the klip ring and large diameter washer. SAFETY: Cover the klip ring with a rag during removal.
9. Slide steering shaft back to remove and replace the spring.
10. Lube bronze bearings on the insides and thrust surfaces with a light oil.
11. Replace the shaft.
12. Install large diameter washer and klip ring.
13. Align stop of shaft opposite to bumper stop of housing.
14. Install (2) 8-32 x 1 3/8 (longer) cap screws, from bottom up, on either side of spring.
15. Replace (2) new longer spacers over cap screws.

16. Place catch over the spacer on the cap screw that is closest to the steering wheel with the half moon cutout facing the spring tang.
17. Thread in the cap screw partway.
- 18.* THIS IS THE HARD PART: Pull the other spring tang around the shaft in a clockwise direction (facing the steering wheel), pre-loading the spring until it is on the other side of the catch and nested in the half moon cutout. Now push the catch over and onto the remaining 8-32 capscrew.
- 19.* Thread in this cap screw then tighten both to 28 +-5 in. lbs.
20. IMPORTANT: Be sure to lube the spring with a heavy lubricant (axle grease, white grease, Vaseline, nyogel, silicon grease) on the inside, outside, between the coils, and at each tang where it is nests in the half moon cutout.
21. Install both spring stops with the (4) 8-32 phillips head screws so that:
 - 1) The shaft stop is opposite the bumper stop (it should just cover the 3/16 diameter hole in the housing).
22. Install gear, washers, and 1/4-20 cap screw on end of shaft, DO NOT TIGHTEN YET!
23. IMPORTANT: Be sure to align the pot gear so that the set screw is pointing down (toward the center solder lug of the harness), and the steering wheel is centered. Now tighten the 1/4-20 cap screw on the end of the shaft.
24. Steering wheel should now work and feel right now. NOTE: Inspect the bumper stop now.
25. Replace the (6) 1/4-20 steering assembly mounting bolts.
26. Replace the (7) 1/4-20 bezel mounting bolts.
27. Reconnect steering harness.
28. Close and secure the control panel with the (4) button head screws.