



## INSTRUCTION TO SERVICE

<b>ITS: 5369</b>	
<b>SECTION:</b>	203 Front Suspension
<b>WRITTEN BY:</b>	Iman Fatemi
<b>SUBJECT:</b>	Steering box mounting spacer replacement

# ITS5369

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**PROCEDURE:**

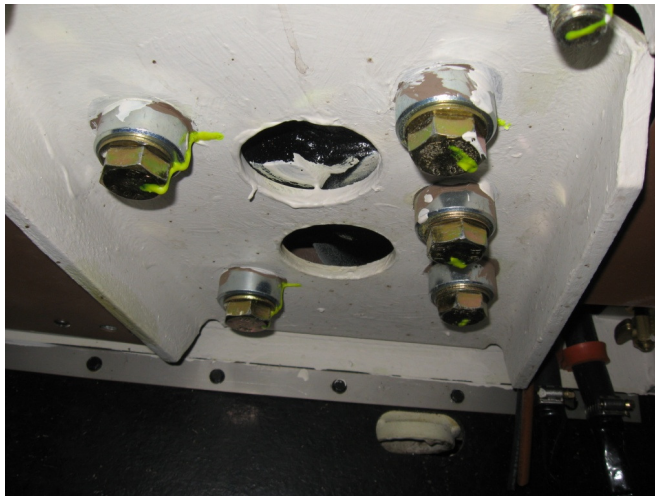
1. Turn the main battery disconnect switch to the “OFF” position.
2. Raise coach in accordance with the New Flyer Service Manual.
3. Remove steering box mounting bolt, washer and spacer, see Figures 1 and 2.

☞ **NOTE: Only remove one bolt at a time.**

4. Throw the washer and spacer away or recycle. These parts are steel.

☞ **NOTE: Do not throw the bolt away.**

5. Apply Never-Seize to the threads, see Figure 3.



**Figure 1: Steering Box Mounting Hardware**



**Figure 2: Removed Bolt, Washer and Spacer**



**Figure 3: Never-Seize Application**



**Figure 4: New Spacer**

6. Place a new spacer (PN: 356715) on the existing bolt, see Figure 4.
  - ☞ **NOTE: Do not install a washer.**
7. Use a 1 ¾ (or equivalent) steel wire brush to remove the undercoat and primer from the mounting hole to a diameter of approx 2.0".
  - ☞ **NOTE: Use an air drill or high speed electric drill. A cordless drill may not generate enough RPMs to be effective.**
  - ☞ **NOTE: If a wire wheel is not available, 40-80 grit sandpaper may be used.**
8. Install the bolt and torque to 200-225 ft. lbs., see Figure 5.
  - ☞ **NOTE: Do not use power tools.**
  - ☞ **NOTE: Do not fully torque yet.**



**Figure 5: Hand tight bolts**



**Figure 6: Torque Bolts to Specification**

9. Make certain that the entire spacer contact area sits on bare metal. If not repeat step 7.
10. Repeat steps 3 – 9 for the other 4 bolts.
11. Torque all (5) bolts to 350 ft. lbs, see Figure 6.
12. Scrape away any old torque marks, see Figure 7.
13. Re-apply torque marks.

☞ **NOTE: Use a marker with a color different from that of the original torque mark.**

14. Touch up zinc primer to the remaining bare areas around the spacer and let it dry. **Refer to Appendix A.**
15. Touch up corashield over the zinc primer and let it dry, see Figure 8. **Refer to Appendix A.**
16. Extend all torque marks over the mounting plate once the corashield has cured.
17. Lower coach in accordance with the New Flyer Service Manual.
18. Turn the main battery disconnect switch to the “ON” position.



**Figure 7: Scrape Away Old Torque Marks**



**Figure 8: Touch up Primer and Corashield**



**Figure 9: Re-apply Torque Marks**



## APPENDIX A

### PRIMER AND CORASHEILD APPLICATION INSTRUCTIONS

#### Primer Mixing Instructions

- I. Clean area to be primed per painting and priming procedures in the New Flyer Service Manual under section: Chassis and Structure.
- II. Mix 1 part of PPG Catalyst S28079 (NFIL P/N 108936) with 2 parts of PPG Red Zinc Powdercoat S28080 (NFIL P/N 115956). Mixture to be applied by brush. No Varsol (thinner) is required. Mix thoroughly. Cure time is 4 hours at 77°F (25°C).

**☞ NOTE: Pot life of mixture is approximately 3 to 4 hours, BUT is significantly reduced with exposure to air (moisture).**

#### Corashield Protective Coating Application

- I. Remove excess dirt, dust and debris from substrate using clean, dry cloth or air stream.
- II. Coating to be applied at ambient air temperature between 50 to 99°F (10 to 32°C).
- III. Substrate temperature must not exceed 212°F (100°C) during application.
- IV. Keep parts above freezing within first 24 hours after application.
- V. Apply Corashield (NFIL P/N 080288) by brush.
- VI. Allow to air dry at room temperature.



## NEW FLYER

### LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Steering box mounting hardware replacement	1	1.0	1.0

### PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	356715	SPACER-STRG BOX SUPPORT, 27 M	5	EA	
2	108936	PRIMER MOISTURE CURE URETHANE	0.02	GA	
3	115956	PRIMER-ZINC POWDER RED	0.04	GA	
4	080288	CORASHIELD-7972 / 5 GAL	0.01	EA	
5	5928660	NEVER-SEIZE	0.01	EA	

### SPECIAL TOOLS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
		NO SPECIAL TOOLS REQUIRED			