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INSTRUCTION TO SERVICE ITS: 4498

SECTION: 203 Suspension - Front	MODEL: <input type="checkbox"/> 30FT <input type="checkbox"/> 35FT <input checked="" type="checkbox"/> 40FT <input checked="" type="checkbox"/> 60FT <input checked="" type="checkbox"/> DSL <input type="checkbox"/> CNG <input type="checkbox"/> LNG <input checked="" type="checkbox"/> ELEC	TYPE: <input type="checkbox"/> HIGH FLOOR <input checked="" type="checkbox"/> LOW FLOOR	WRITTEN BY: Grant Li
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OBJECTIVE/SUBJECT:

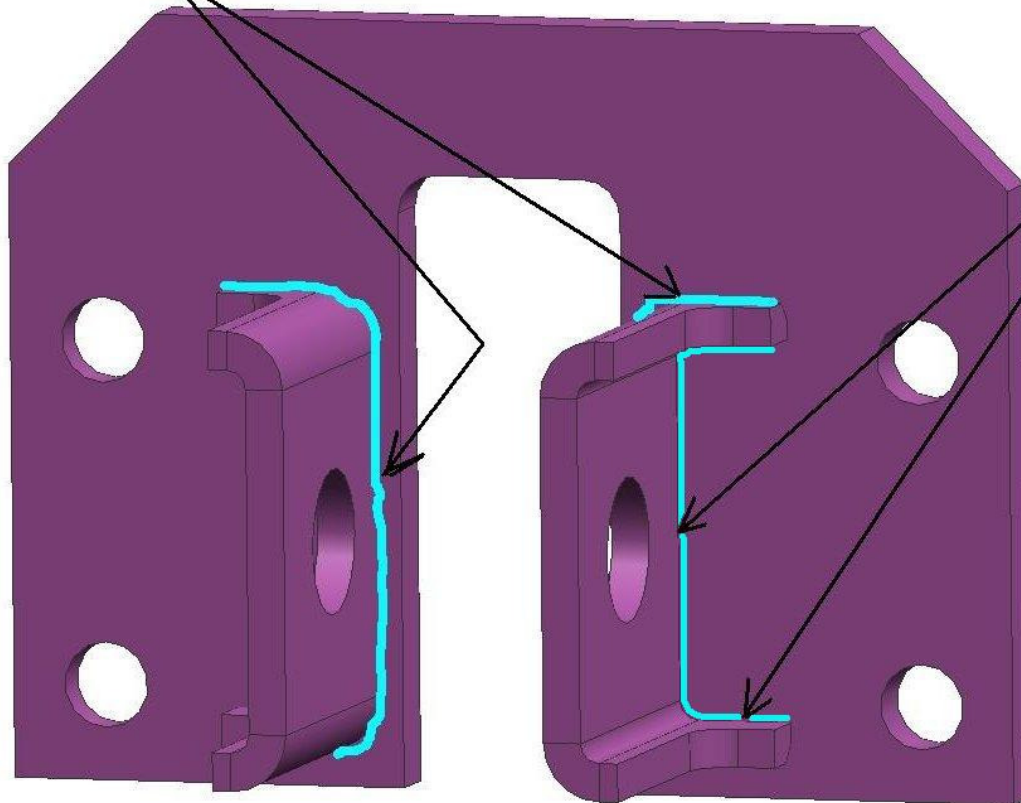
Inspect for missing weld and replace front radius rod mounting brackets if required.

PROCEDURE:

1. Turn the main battery disconnect switch to the "OFF" position.
2. Raise coach in accordance with the New Flyer Service Manual.
3. Clean and visually inspect the front radius rod bracket on both curbside and streetside for missing welds and "rust leaks". Brackets should be welded on both sides of each of the attachment ears and no "rust leaks". See Figure 1.



Check for weld here



Check for weld here

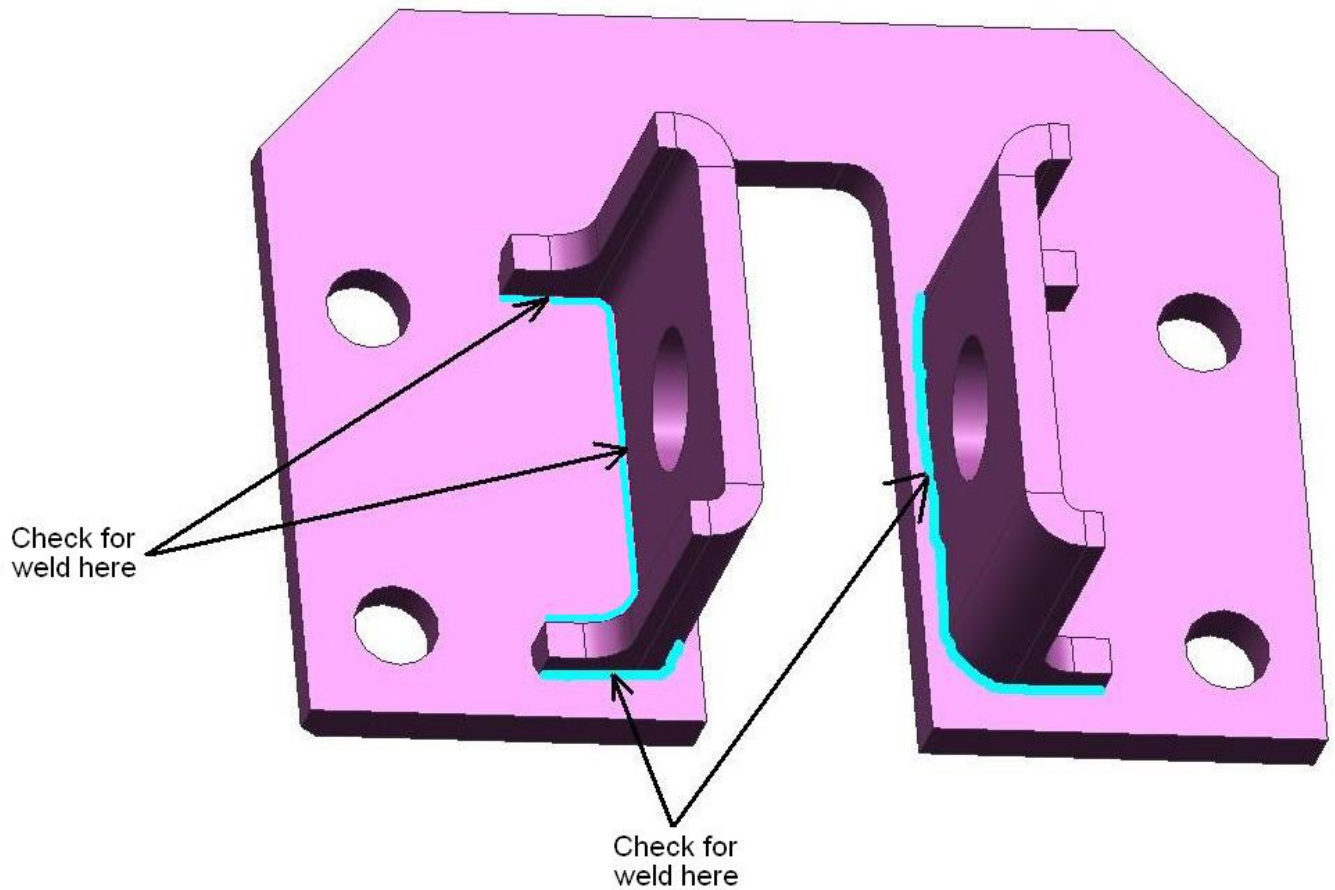


Figure 1: Radius rod mounting bracket.

4. If brackets have welds on both sides of each ear and no “rust leaks”, return coach to service. Otherwise go to Step 5.
5. Disconnect front leveling valve link and pull down on leveling valve arm to drain air springs.

- ☞ **NOTE:** Do not remove both radius rods as the same time. Remove and replace radius rods one at a time.
- ☞ **NOTE:** To maintain proper alignment, note the quantity and location of shims between the frame and radius rod mounting bracket and ensure they are present on the new installation.
- ☞ **NOTE:** Replace any hardware that is damaged.

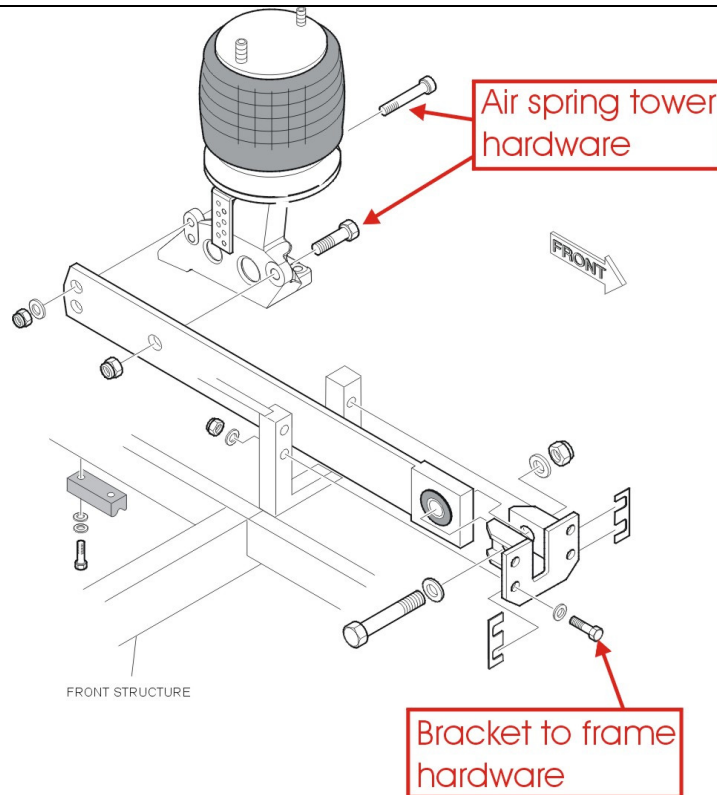


Figure 2: Streetside radius rod hardware.

6. Streetside Radius Rod Bracket Replacement:

- a. Remove access cover located under drivers platform.
- b. Remove hardware supporting radius rod to air spring tower. See Figure 2. Set all hardware aside for reuse.
- c. Remove hardware retaining radius rod bracket to frame. See Figure 2. Set all hardware aside for reuse.
- d. Slide radius rod and mount forward out through access hole under drivers platform.
- e. Remove hardware from the radius rod mounting bracket. Bracket, washers and locknut may be discarded. Keep bolt for reuse. See Figure 3.

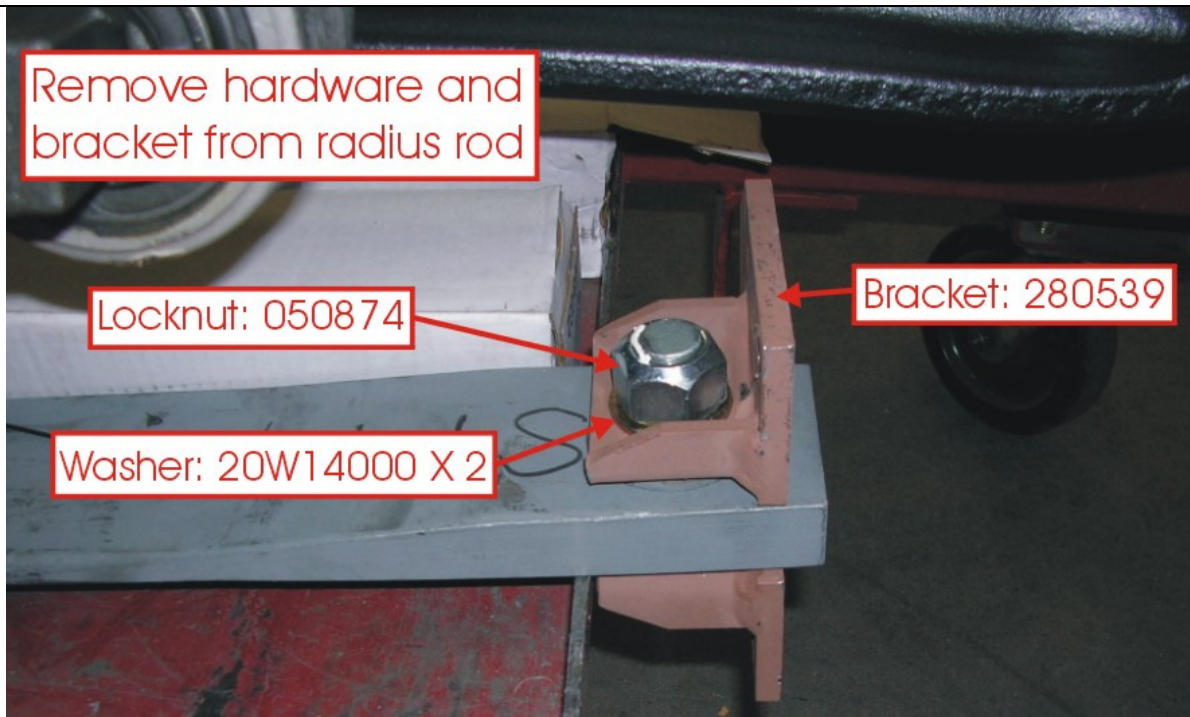


Figure 3: Radius rod hardware and bracket.

- f. Take new bracket (PN 280539) and install on radius rod reusing bolt, new washers (PN 20W14000) and new locknut (PN 050874). Torque hardware to 450 ft-lbs with Never-Seez. See Figure 3.
- g. Slide radius rod assembly into position through access hole under drivers platform.
- h. Install shims between frame and mounting bracket in their original locations.
- i. Reinstall hardware retaining the radius rod mounting bracket to the frame. Torque hardware to 75 ft-lbs with Never-Seez. See Figure 2.
- j. Align radius rod to air spring tower and reinstall the single M24 bolt and nut loose. See Figure 4.

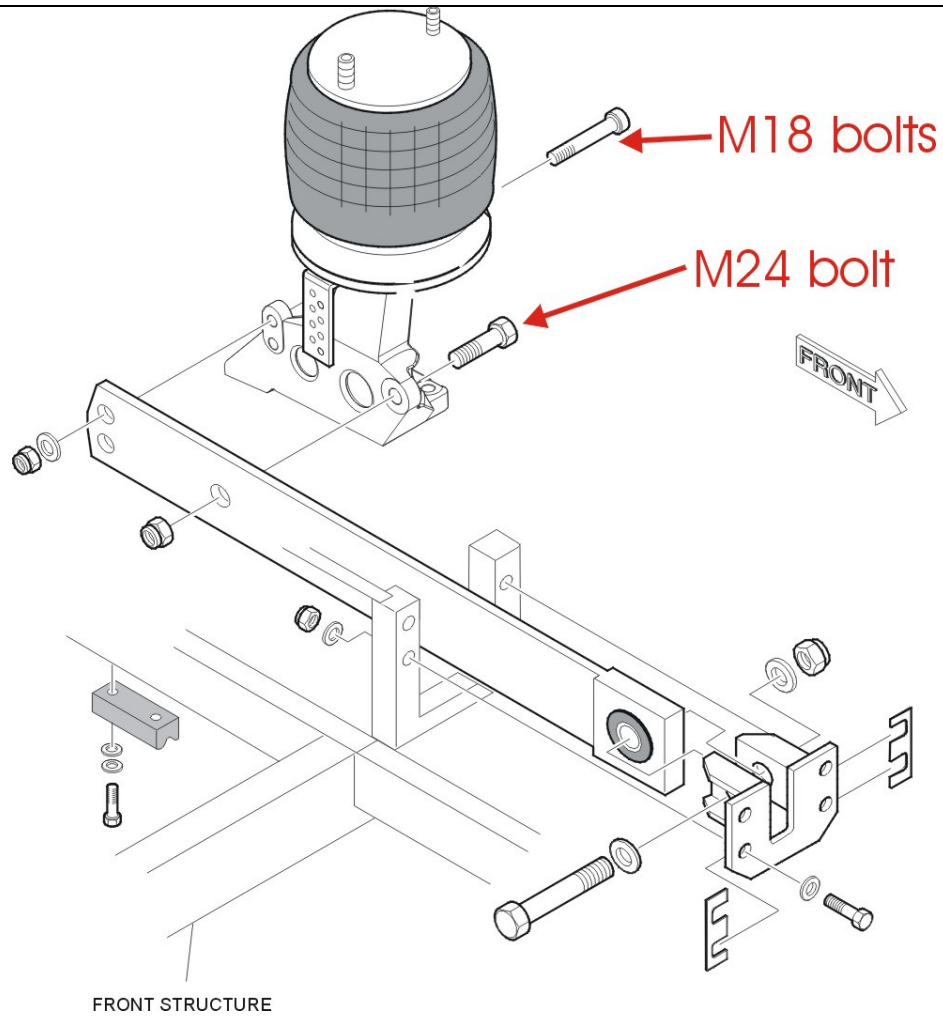


Figure 4: Streetside radius rod hardware.

- k. Reinstall the two M18 bolts and nuts loose. See Figure 4.
- l. Torque M24 hardware between 550-600 ft-lbs with Never-Seez.
- m. Torque M18 hardware to 175 ft-lbs with Never-Seez.

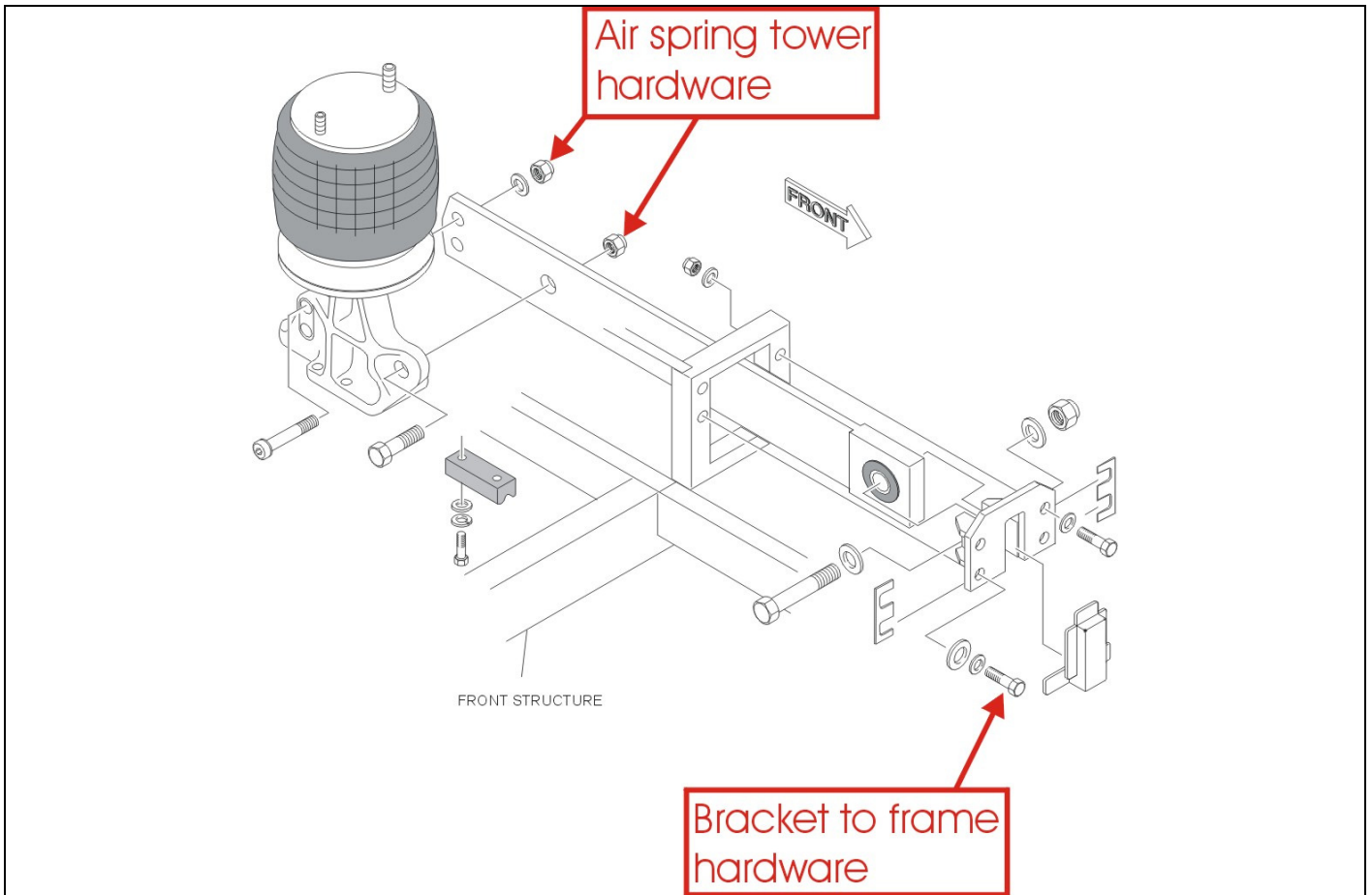


Figure 5: Curbside radius rod hardware.

7. Curbside Radius Rod Bracket Replacement:

- a. Remove access cover from the lower front curbside wheel well.
- b. Remove hardware supporting radius rod to air spring tower. See Figure 5. Set all hardware aside for reuse.
- c. Remove hardware retaining radius rod bracket to frame. See Figure 5. Set all hardware aside for reuse.
- d. Slide radius rod and mount forward out through access hole in wheel well.
- e. Remove hardware from the radius rod mounting bracket. Bracket, washers and locknut may be discarded. Keep bolt for reuse. See Figure 6.

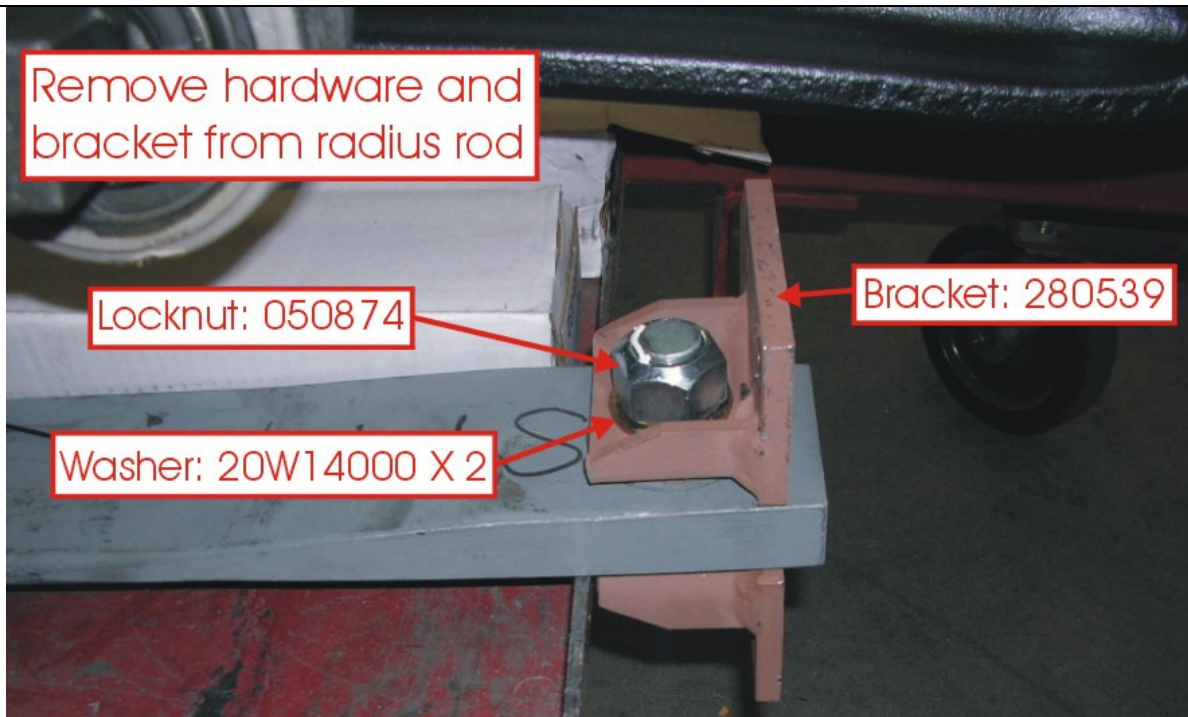


Figure 6: Radius rod hardware and bracket.

- f. Take new bracket (PN 280539) and install on radius rod reusing bolt, new washers (PN 20W14000) and new locknut (PN 050874). Torque hardware to 450 ft-lbs with Never-Seez. See Figure 6.
- g. Slide radius rod assembly into position through access hole in front wheel well.
- h. Install shims between frame and mounting bracket in their original locations.
- i. Reinstall hardware retaining the radius rod mounting bracket to the frame. Torque hardware to 75 ft-lbs with Never Seez. Bend lock plate against bolts. See Figure 5.
- j. Align radius rod to air spring tower and reinstall the single M24 bolt and nut loose. See Figure 7.

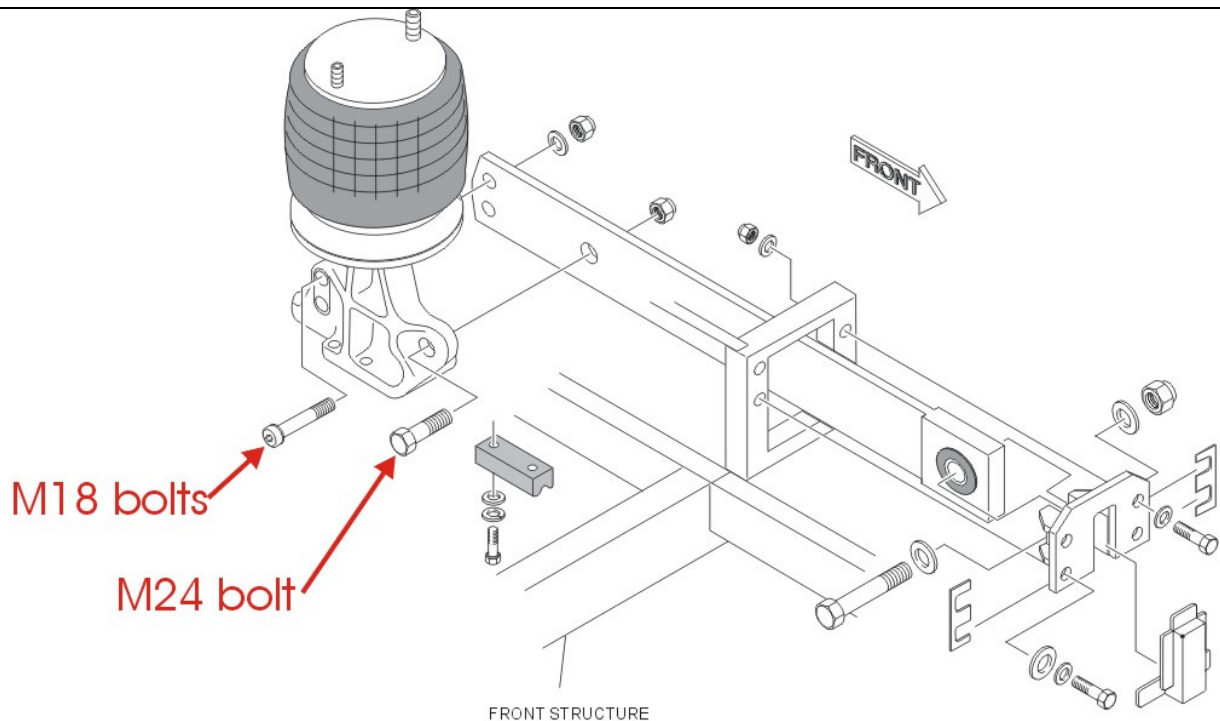


Figure 7: Curbside radius rod hardware.

- k. Reinstall the two M18 bolts and nuts loose. See Figure 7.
 - l. Torque M24 hardware between 550-600 ft-lbs with Never-Seez.
 - m. Torque M18 hardware to 175 ft-lbs with Never-Seez.
8. Mark each fastener with a torque stripe.
 9. Reapply Sika around radius bracket as required.
 10. Reinstall access covers.
 11. Reconnect leveling link in its original position.
 12. If necessary, lower coach in accordance with the New Flyer Service Manual.
 13. Turn the main battery disconnect switch to the "ON" position.



LABOUR ESTIMATE				
	Operation	Men	Hours	Labour Time M X HR
1	Inspect bracket for missing welds.	1	0.25	0.25
2	Replace streetside front radius rod mounting bracket.	1	2.0	2.0
3	Replace curbside front radius rod mounting bracket.	1	2.0	2.0

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	5928660	NEVER SEIZE	0.01	EA	
2	280539	ASSY-WELD ADAPT RAD ROD	2	EA	
3	20W14000	WASHER FLAT HARDENED 7/8"	4	EA	
4	050874	NUT-HEX HD LOCK M24X1.5	2	EA	