



# INSTRUCTION TO SERVICE

ITS: 60577		November 24, 2022
<b>SECTION:</b>	204-Rear Suspension	
<b>WRITTEN BY:</b>	Troy Stutsky	
<b>SUBJECT:</b>	Inspect Tag Axle Air Spring Mounting Brackets for Incorrect Bracket. Replace the Tag Axle Air Spring Mounting Bracket "If Required".	
<b>ISSUE:</b>	Some coaches could have been built with the wrong tag axle air spring bracket. This could over-extend the shocks or allow the shocks to hit their internal stops. Both situations can damage the shock.	
<b>SUMMARY:</b>	Suspect coaches will be inspected. If the coach is affected, the tag axle air spring bracket will need to be replaced.	
<b>AFFECTED MODEL:</b>	CRT Model Coaches	

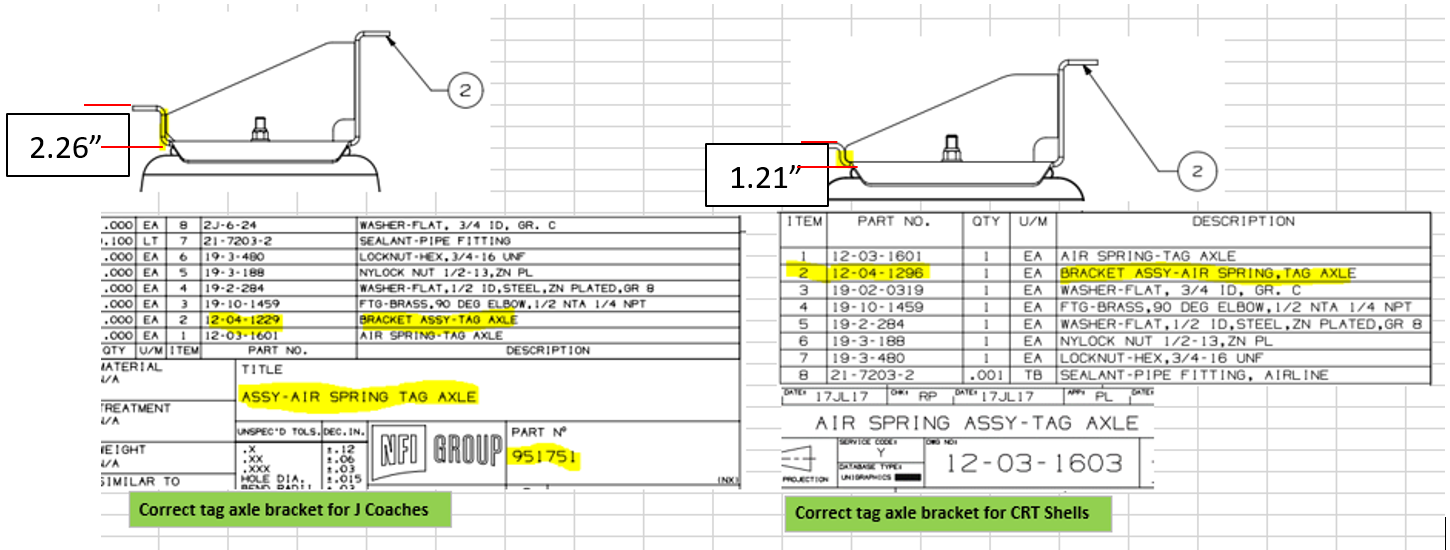
# ITS60577

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

**THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.**

**PROCEDURE:**

1. Set park brake and chock wheels.
2. Turn the main battery disconnect switch to the "OFF" position.
3. Inspect both the LH & RH the tag axle air spring mounting brackets by looking over the tag tire and noting the height of the flange seen below. The CRT coaches should have a flange height of 1.21" as shown in Figure 1.



**Figure 1: Correct Flange Height of Tag Axle Air Spring Mounting Brackets for CRT Model Coaches = 1.21"**

4. If the flange height is correct at 1.21" on the CRT Model coach, this tag axle air spring mounting bracket is correct and no further action is needed on it.

5. If the flange height is incorrect at 2.26" on the CRT Model coach, this tag axle air spring mounting bracket is incorrect and will need to be replaced.
6. To replace the incorrect tag axle air spring mounting bracket, please follow these steps:
  - a. Lift the coach about 1-2" of the ground using Rotary lifts on the front and drive wheels. See Figure 2.



**Figure 2: Lifting the Coach**

- b. Remove & retain tag axle wheel & wheel nuts. See Figure 3.



**Figure 3: Remove Tag Axle Wheel**

- c. Pull loom back and disconnect tag axle blue ½ OD airline tube from 90° elbow brass fitting. See Figure 4.



**Figure 4: Disconnect Air Line**

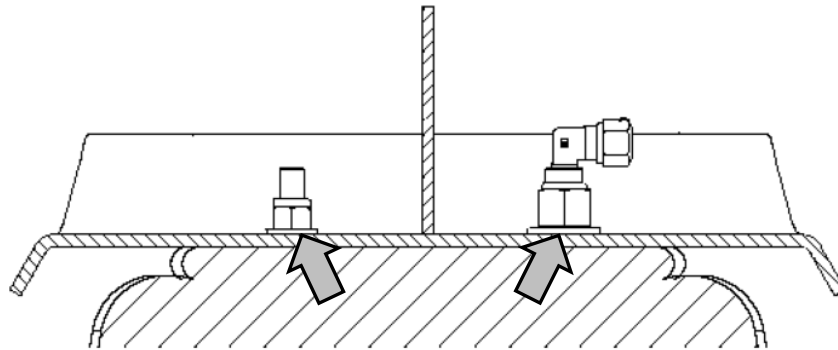
- d. Remove & retain the tag axle air spring assembly and hardware from the coach structure by removing hex long cap screws, spring lock washers, and flat washers (6 places). The air spring assembly will drop down on Tag axle plate by its weight. See Figure 5.



**Figure 5: Unfasten the Tag Axle Air Spring Assembly**

- e. With the air spring assembly resting on the tag axle plate, push down on the air spring assembly and remove & retain the lock nuts & washers that fasten the tag axle mounting bracket to the existing air spring. Discard the mounting bracket and replace it with the correct mounting bracket for the CRT Model coaches (PN 12-04-1296). Fasten the new mounting bracket to the existing air spring using the existing hardware. Torque the two lock nuts to 40 – 50 Ft/Lbs, (Not to exceed 50Ft/Lbs). See Figure 6.

**NOTE:** Prior to installation, apply a thin layer of sealant (PN 21-7203-2) to external pipe threads of all fittings leaving the three leading threads bare.



**Figure 6: Remove & Replace Tag Axle Air Spring Mounting Bracket**

- f. Raise and mount the tag axle air spring assembly to the coach structure and fasten with hex long cap screws, spring lock washers, and flat washers removed in step d Figure 5. Add 1 – 2 drops of blue Loctite (PN 21-7212-18) to the threads of the hardware and torque hardware to  $17 \pm 2$  Ft/Lbs. See Figure 5.
  - g. Connect blue  $\frac{1}{2}$  OD airline tube from ECASII rear pressure sensor to 90° elbow brass fitting on tag axle air spring. Fully position loom onto the airline tube and secure with electrical tape.
  - h. After installing the tag axle air spring assembly apply Sikaflex (PN 21-7112-31) all around and between the air spring mounting bracket and the frame. Touch up any bare metal areas on the bracket and the frame with undercoating.
7. Re-install the tag axles wheels using the procedure in Appendix A.
  8. Lower the coach and remove the rotary lifts from the coach.
  9. Complete an air leak test after installation has been completed.
  10. Remove all tools and debris and return the coach to service condition.
  11. Turn the main battery disconnect switch to the “ON” position.



**LABOUR ESTIMATE**

	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Inspect LH & RH Tag Axle Air Spring Mounting Brackets for Incorrect Brackets	1	0.25	0.25
2	Replace One Tag Axle Air Spring Mounting Bracket	1	1.25	1.25
3	Replace Both the LH & RH Tag Axle Air Spring Mounting Brackets	1	2.5	2.5

**PARTS REQUIRED**

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	12-04-1296	BRACKET ASM-AIR SPRING,TAG AXLE	2	EA	If Required
2	21-7203-2	SEALANT-PIPE FITTING	0.01	EA	If Required
3	21-7212-18	ADHESIVE-LOCTITE THRD-LOCKING	0.01	EA	If Required
4	21-7112-31	SEALANT-SIKAFLEX,GREY,221,11OZ	0.01	EA	If Required

**SPECIAL TOOLS REQUIRED**

Item	Part Number	Description	Qty.	Units	Notes
1	NPN	ROTARY LIFT	1	EA	Source Locally
2	NPN	OPEN WRENCH	1	EA	Source Locally
3	NPN	TORQUE TOOLS	1	EA	Source Locally
4	NPN	WHEEL INSTALLATION TOOLS	1	EA	Source Locally
5	NPN	ELECTRICAL TAPE	0.01	EA	Source Locally
5	NPN	UNDERCOAT	0.01	EA	Source Locally
6	NPN	ANTISEIZE COMPOUND	0.01	EA	Source Locally

## Appendix A

### Front or Tag Axle Wheel Installation

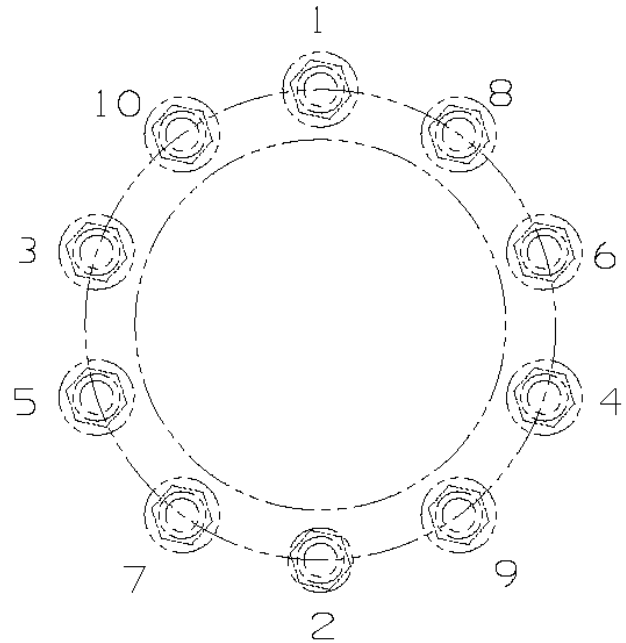
Installation is the reverse of removal.

1. Before installing the wheels, lubricate the hub pilot pads with an antiseize compound to prevent galling. Do not lubricate any other surface of the wheel or hub.
2. Place one of the pilot pads at the 12 o'clock position to center the wheel precisely and reduce run-out.

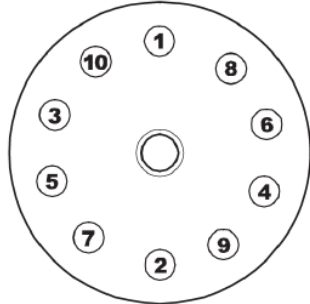
### NOTICE

*Do not use the nuts to force the wheel on to the hub if the wheel does not fully slide.*

3. Ensure that the wheel is squarely mounted against the hub before fully tightening the wheel nuts.



TIGHTENING SEQUENCE



**Figure 10. Torque Sequence**

4. Using a calibrated torque wrench, torque the wheel nuts to between 450–500 ft-lb (610–678 Nm) using the sequence shown.