



INSTRUCTION TO SERVICE

ITS: 60969		April 2024
SECTION:	400-Structures	
WRITTEN BY:	Troy Stutsky	
SUBJECT:	Rework Center Axle Radius Rod Support Casting to Add Wall Thickness to the Lower Radius Rod Mounting Holes	
ISSUE:	The lower radius rod mounting holes may have been located incorrectly during production of the parts and may be too close to the wall of the casting which could possibly cause the casting to crack at the lower radius rod mounting holes. Both the RH & LH casting could be affected	
SUMMARY:	Add wall thickness to any center axle lower radius rod mounting holes that were identified to be below the allowed minimum wall thickness as identified in ITS-60966	

ITS60969

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

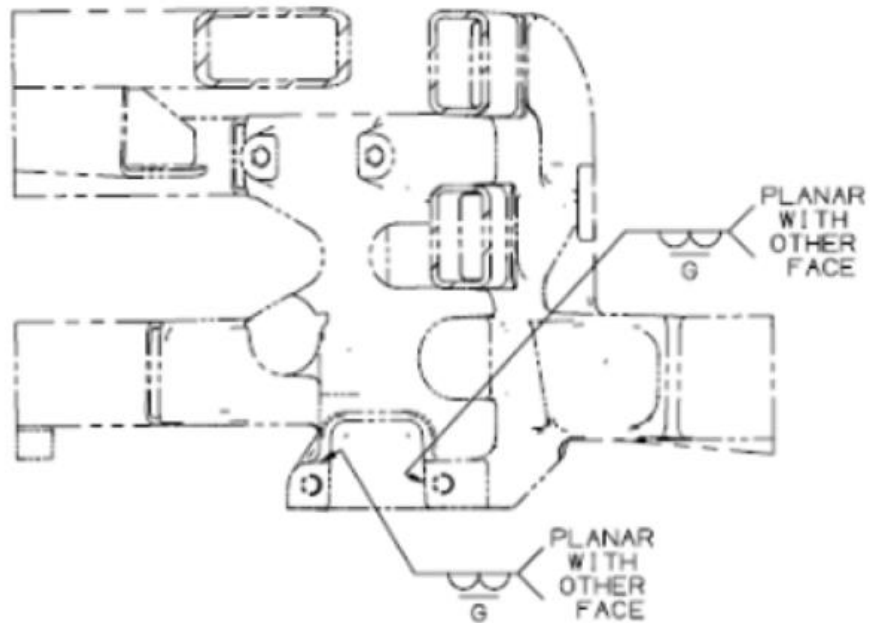
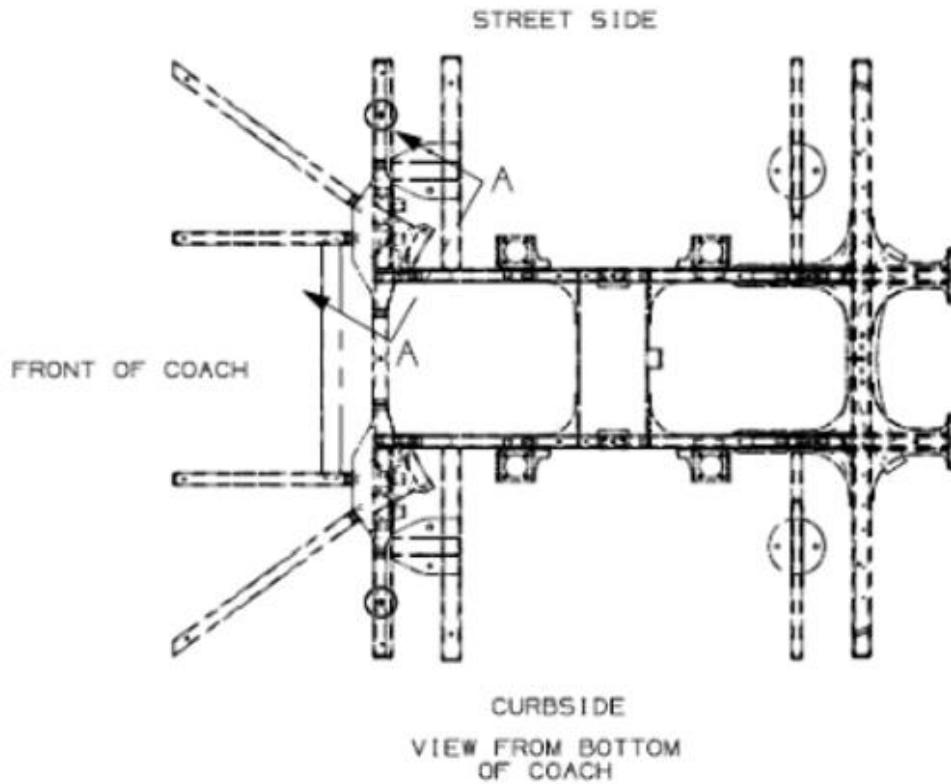
THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.

PROCEDURE AFTER ITS-60966 HAS BEEN PERFORMED:

1. Set park brake and chock wheels.
2. Turn the main battery disconnect switch to the “OFF” position.
 - ⚠ **WARNING: Disconnect all modules and prepare the bus for welding. Follow all Welding Procedures that are outlined in your New Flyer Service Manual in Section 11 “Welding Procedures” and follow all local shop Safety procedures. Use proper PPE as required.**
 - ⚠ **WARNING: The following safety equipment must be available at the work station:**
 - Safety shields must be set up around the weld area to protect against flash hazards
 - Fire extinguishers must be kept at each work station. Each operator should know the location of the extinguisher and how to operate it.
 - ⚠ **WARNING: Raise the bus in accordance to the “Raising the Vehicle” procedures and precautions that are outlined in your New Flyer Service Manual. Follow all shop procedures and safety practices while raising the bus. Use proper PPE per shop requirements.**
 - 👉 **NOTE: Use welding blankets around the area that will be welded to prevent damage to any components. Including all electrical and airlines.**
 - 👉 **NOTE: Repair welding shall be performed by companies certified to CSA W47.1 Division 1 or 2, by a CWB certified welder. Alternatively, AWS qualified welders and welding fabricators may be used and are considered an approved equal.**
3. On the center axle radius rod support castings in the lower radius rod mounting locations on the mounting hole(s) that were identified to have too thin walls after ITS-60966 has been completed, please add wall thickness by adding a surface weld as shown in Figure 1. Follow the weld procedure shown below:

WELD REPAIR PROCEDURE:

- **PREHEAT THE CASTING TO 200-250 F PRIOR TO WELDING.**
- **USE .045" METAL SHIELD MC6 WIRE. WELD EACH JOINT WITH SUGGESTED SETTING TO BE AT 257-270 AMPS AS SHOWN IN W.P.D.S. 10-FF OF WELDING PROCEDURE SPECIFICATION NF-2.**
- **GAS MIXTURE TO BE: -17% CO2-83% ARGON (RECOMMENDED GAS IS STARGOLD C-17 OF PRAXAIR INC) OR -20% CO2-80% ARGON (RECOMMENDED GAS IS STARGOLD C-20 OF PRAXAIR INC)**
- **CJP WELD TO FILL USING REASONABLY SIZED PASSES TO AVOID EXCESSIVE STRESS AND DISTORTION. ALLOW TO AIR COOL. GRIND FLUSH. MPI ON THE REPAIRED AREAS REQUIRED. NO POST REPAIR HEAT TREATMENT REQUIRED.**
- **AFTER ALL REPAIRS ARE COMPLETED PART MUST MEET DRAWING POROSITY SPECIFICATION.**



DETAIL F
SCALE 1:4
COPY OF SECTION A-A
TYP STREET SIDE AND CURBSIDE
VIEW ROTATED 120.5° CCW

Figure 1: Surface Weld Center Axle Castings Lower Radius Rod Mounting Holes

- Grind the weld flat to meet the allowable wall thickness as shown in Figure 2.

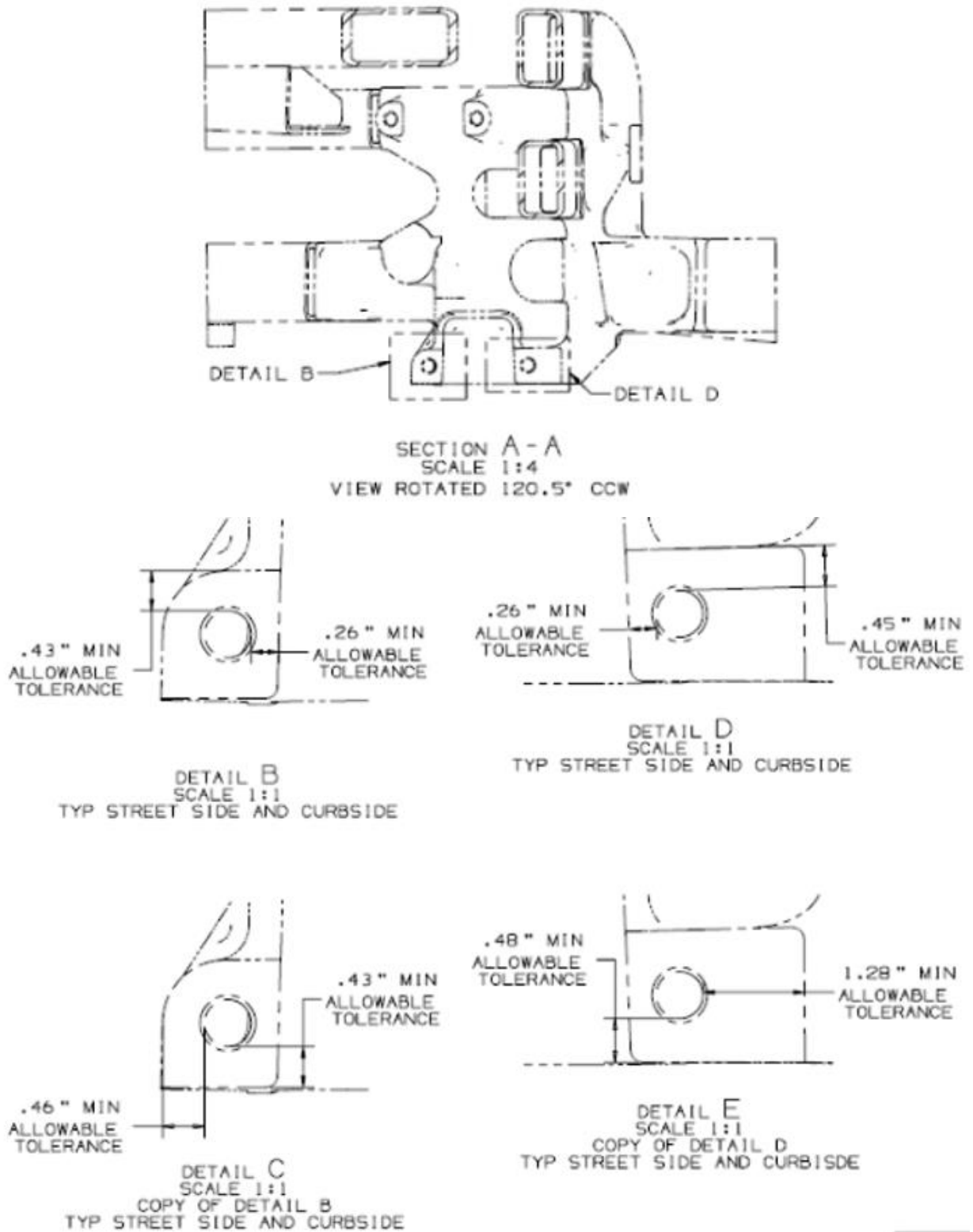


Figure 2: Allowable Wall Thickness

5. Ensure the lower radius rod mounting holes in the casting are clean and free from any debris. Fasten the radius rod to the center axle radius rod support casting using two washers (NF PN 6407959), two spacers (NF PN 6490019) and two bolts (NF PN 6490020) per radius rod end. Apply a thin layer of Never Seize (NF PN 5928660) to the mounting surfaces of the washers, spacers and to the entire length of the bolt and under the bolt head. Ensure only a thin layer is applied and wipe off any excess. Assemble bolted connection as shown in Figure 3 and torque the hardware to 300Ft/Lbs.

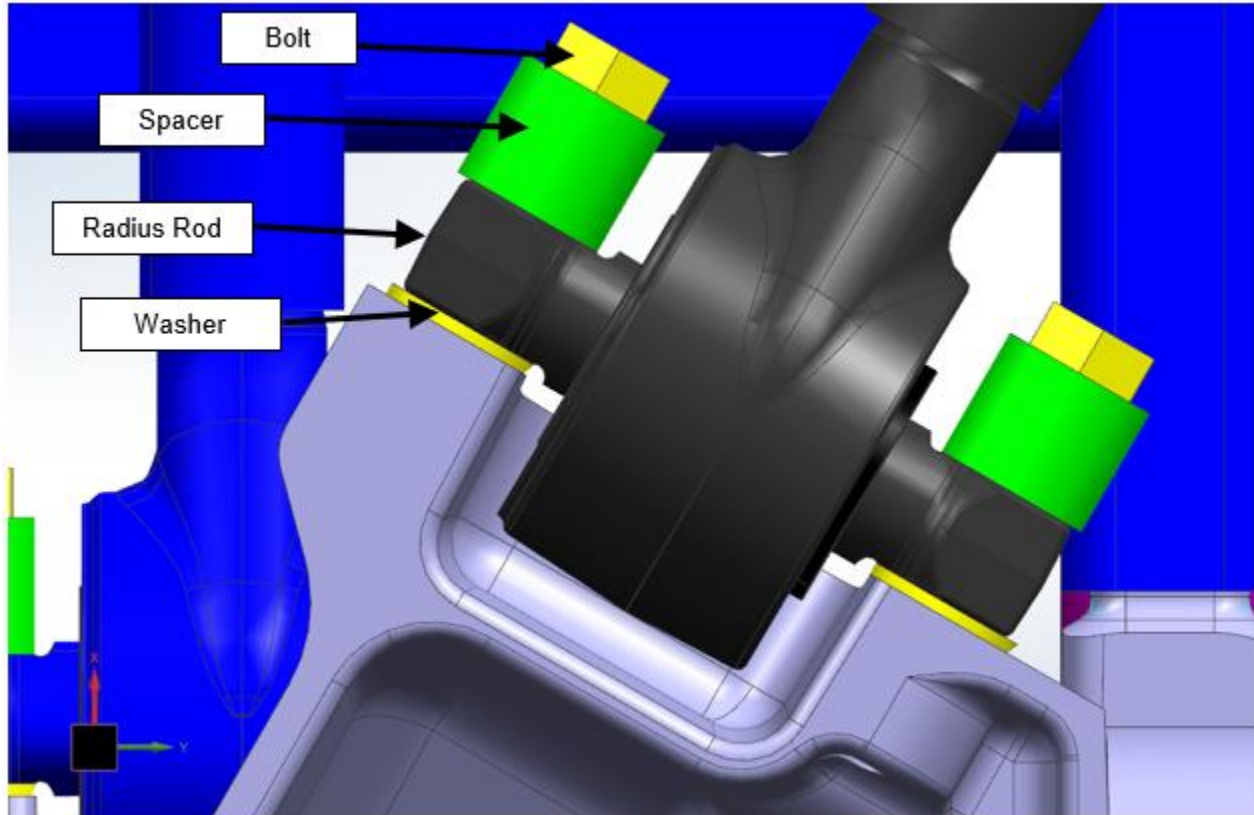


Figure 3: Radius Rod Hardware Stack Up

6. Clean up all tools and debris and return the bus to service condition.
7. Turn on all the modules that were turned off.
8. Turn the main battery disconnect switch to the "ON" position.
9. Ensure all systems are functioning as they should.



LABOUR ESTIMATE				
	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Add wall thickness to any center axle lower radius rod mounting holes	1	2.0	2.0

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	5928660	NEVER SEIZE	0.01	EA	Source Locally
2	6407959	WASHER	4	EA	Order as Required
3	6490020	BOLT-M18 X 1.5 X 100	4	EA	Order as Required
4	6490019	SPACER-BUSH 32 L X 38 O.D. X 20.6 ID	4	EA	Order as Required