



# INSTRUCTION TO SERVICE

ITS: 60966		April 2024
<b>SECTION:</b>	400-Structures	
<b>WRITTEN BY:</b>	Troy Stutsky	
<b>SUBJECT:</b>	Inspect Center Axle Radius Rod Support Castings	
<b>ISSUE:</b>	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 streetside (SS) & curbside (CS) castings could be affected	
<b>SUMMARY:</b>	Use a Go/No Go tool to determine if the location of the lower radius rod mounting holes is suspected to be incorrect on both the streetside (SS) & curbside (CS) center axle radius rod support castings.	

# ITS60966

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

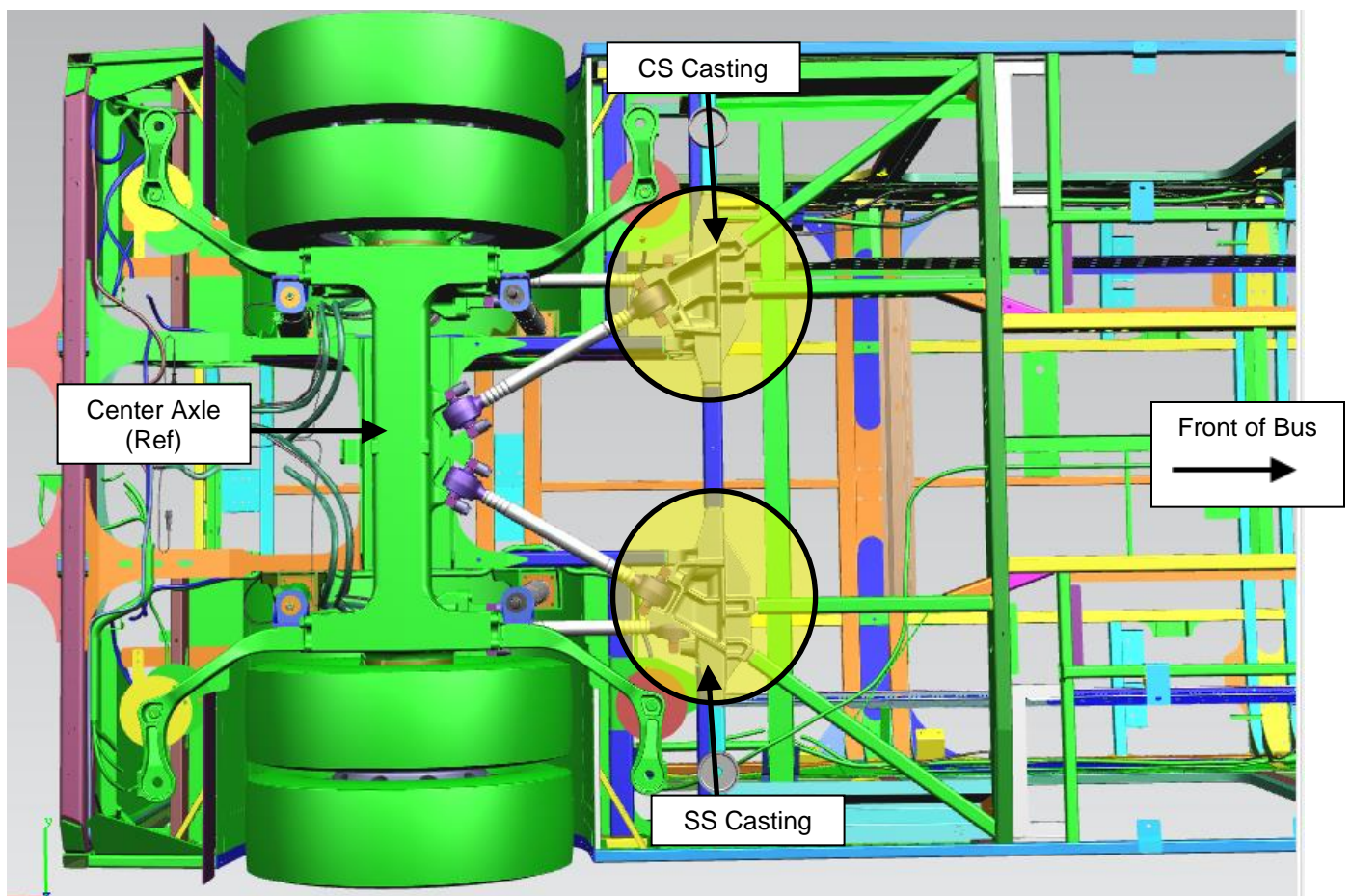
**THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.**

## PROCEDURE:

1. Set park brake and chock wheels.
2. Turn the main battery disconnect switch to the “OFF” position.

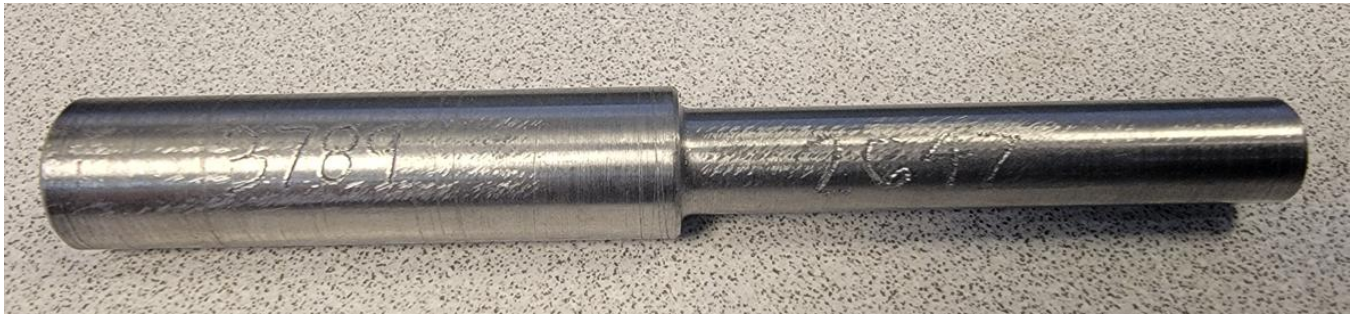
**⚠ WARNING: Raise the bus in accordance to the “Raising the Vehicle” procedures and precautions that are outlined in your New Flyer Service Manual. Follow all shop procedures and safety practices while raising the bus. Use proper PPE per shop requirements.**

3. Locate the center axle bulkhead assembly that is directly in front of the center axle and then locate the SS and CS center axle radius rod support castings. See Figure 1.

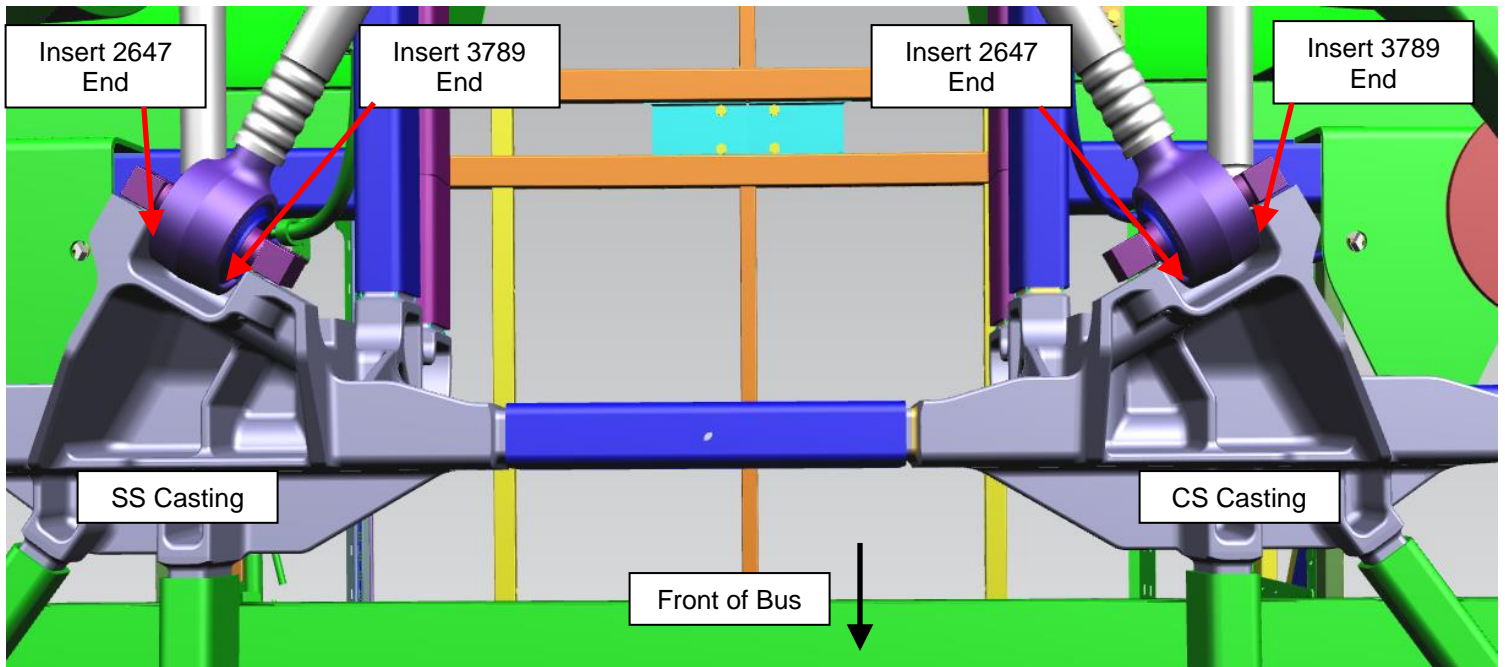


**Figure 1: SS & CS Center Axle Radius Rod Castings (View from Under Bus)**

4. Using the supplied “Go / No Go Tool”, check the clearance between the lower radius rod and the casting wall. The tool has two different end sizes etched on it (thick end is 0.3789” & thin end is 0.2647”) see Figure 2. It is important to insert the correct end size on the correct side of the radius rod end. See Figure 3 and 4 for the correct locations to insert the correct end of the tool.



**Figure 2: Go / No Go Tool**



**Figure 3: How to Measure for a Pass or Suspect Casting (View from Under Bus)**

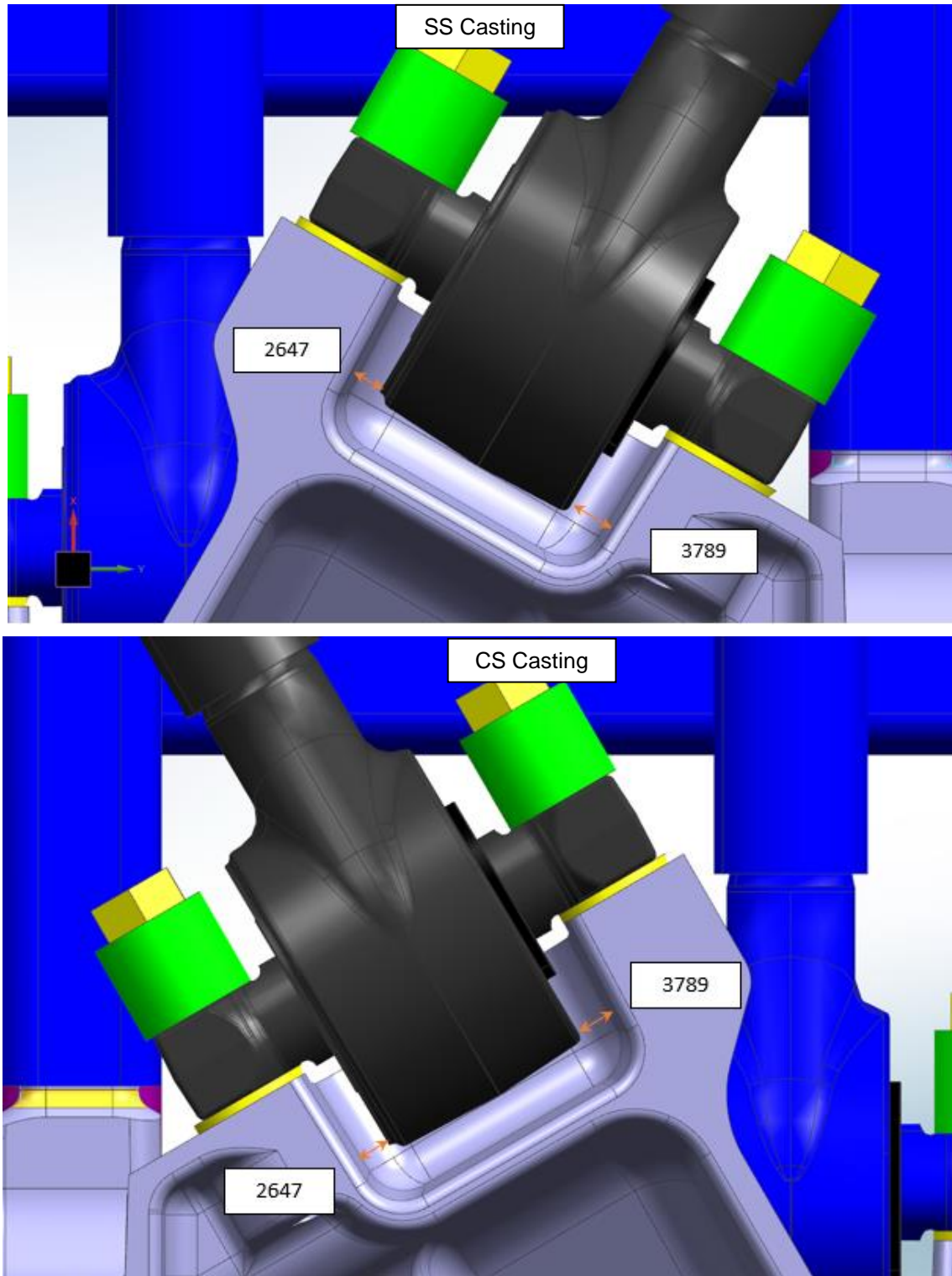
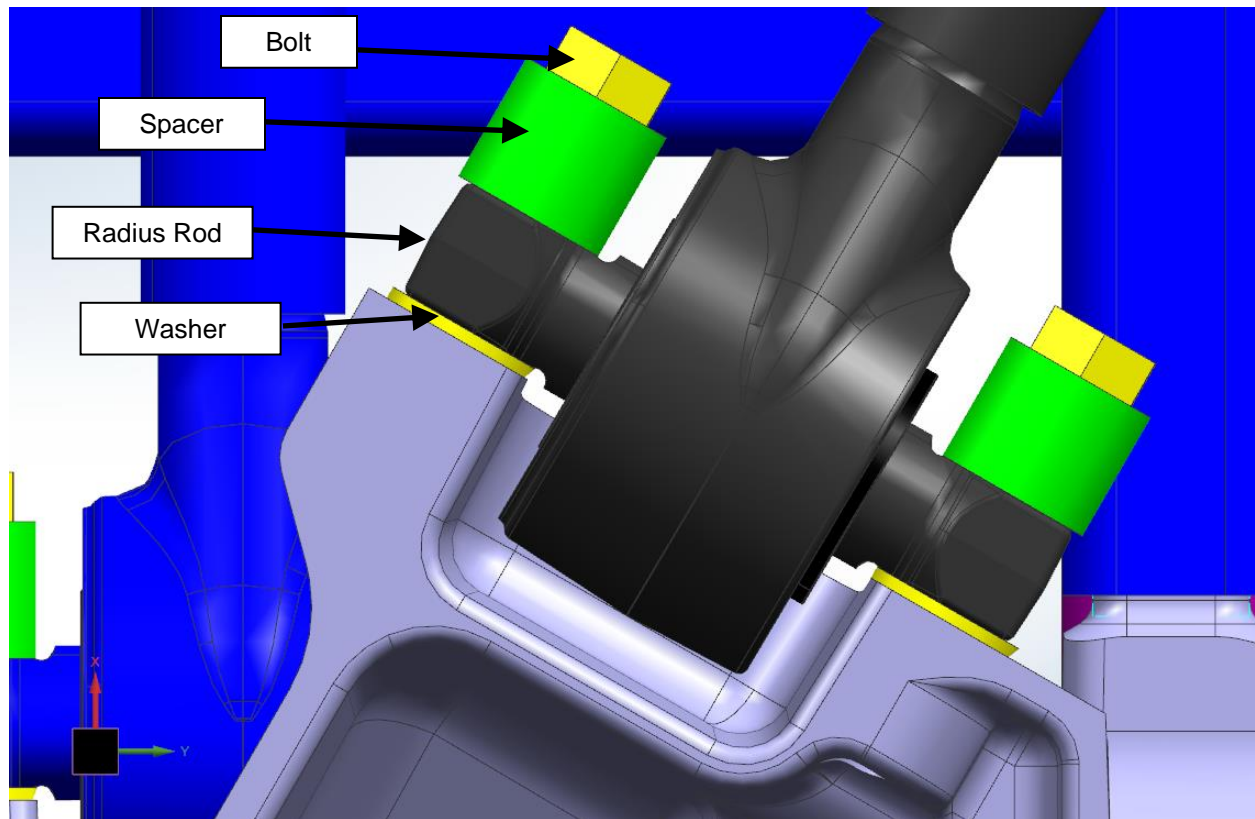


Figure 4: Enlarged View of Gap to Measure



5. If the tool can be inserted into all four gap locations as shown in Figures 3 and 4 on both the SS and CS center axle radius rods support castings, this bus is a pass and can go back into service. Please complete the inspection document in Appendix A and document that the bus has been inspected and is a pass.
6. If the tool can't be inserted into any one of the gap locations as shown in Figure 3 and 4 on both the SS and CS center axle radius rods support castings, please follow these instructions:
  - a. On the inspection document in Appendix A, mark which location(s) were a pass and which location(s) are suspect. If either the SS or CS has one suspect gap, that lower radius rod will need to be removed from the center axle radius rod support casting side only and the mounting holes in the casting will need to be further inspected.
  - b. Once the lower radius rod has been removed from the casting in the suspected mounting location, the mounting hole walls will need to be measured using a caliper. If the mounting hole wall thickness is **LESS** than the minimum thicknesses shown in Appendix A, the casting **is not a pass** and the bus will **require to be reworked using the instructions documented in ITS-60969 before going back into service**. ITS-60969 to rework the center axle radius rod support castings can be obtained from your New Flyer Regional Product Support Manager.
  - c. Once the lower radius rod has been removed from the casting in the suspected mounting location, the mounting hole walls will need to be measured using a caliper. If the mounting hole wall thickness is **EQUAL to or MORE** than the minimum thicknesses shown in Appendix A, the casting **is a pass** and the radius rod can be reinstalled and the bus can go back into service.
  - d. 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 6 and torque the hardware to 300Ft/Lbs.



**Figure 6: Radius Rod Hardware Stack Up**

7. Clean up all tools and debris and return the bus to service condition.
8. Safely lower the bus and turn the main battery disconnect switch to the "ON" position.



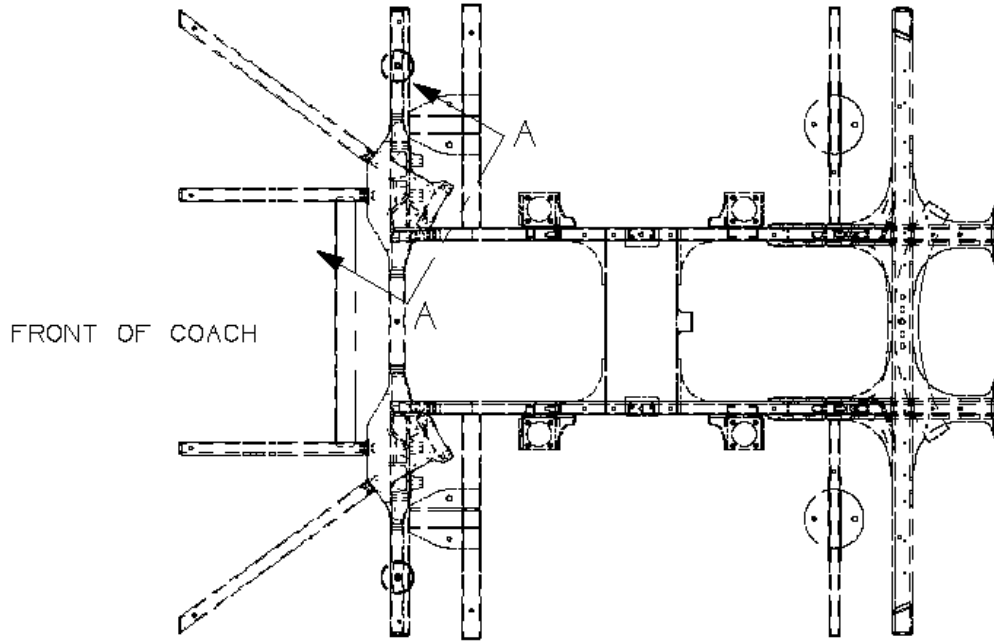
<b>LABOUR ESTIMATE</b>				
	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Inspect Center Axle Radius Rod Support Castings with Go/No Go Tool	1	0.5	0.5
2	Remove & Install Radius Rod to Inspect Suspect Lower Radius Rod Mounting Holes	1	1.0	1.0

<b>PARTS REQUIRED</b>					
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

<b>SPECIAL TOOLS REQUIRED</b>					
Item	Part Number	Description	Qty.	Units	Notes
1	NPN	GO / NO GO TOOL	1	EA	Supplied by New Flyer Service

**Appendix A**

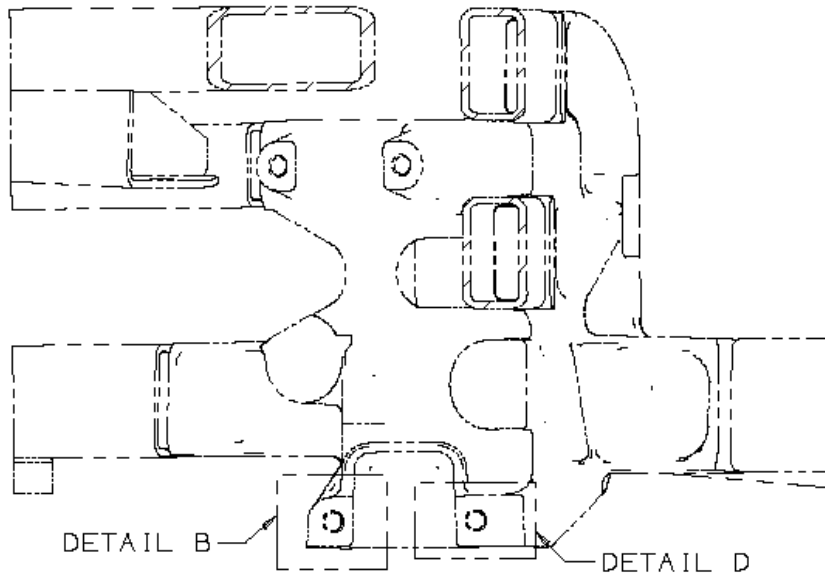
STREET SIDE



CURBSIDE

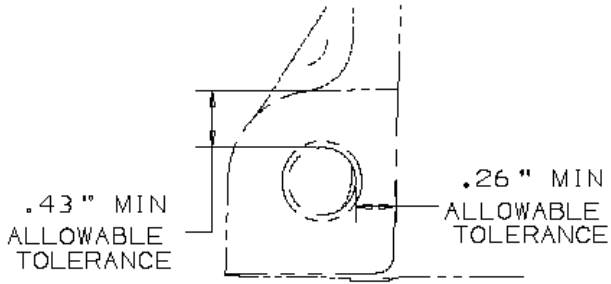
VIEW FROM BOTTOM  
OF COACH

ALLOWABLE PARAMETERS

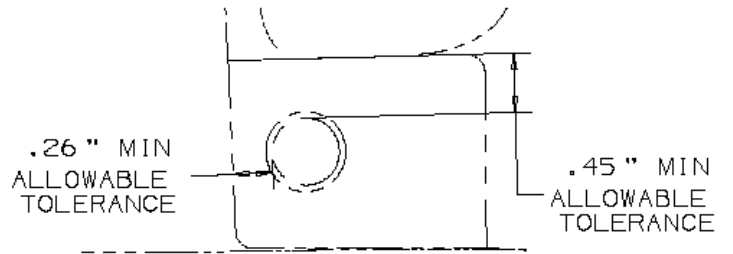


SECTION A - A  
SCALE 1:4  
VIEW ROTATED 120.5° CCW

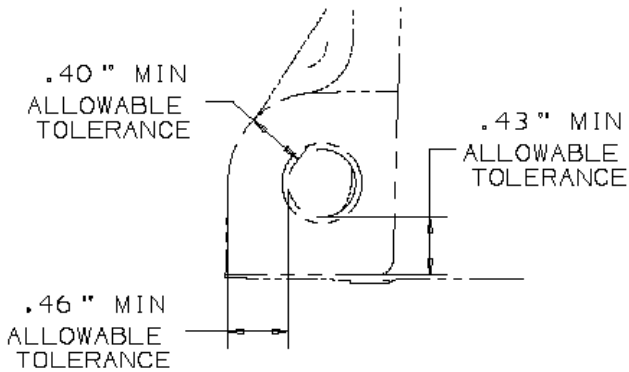
**Appendix A**



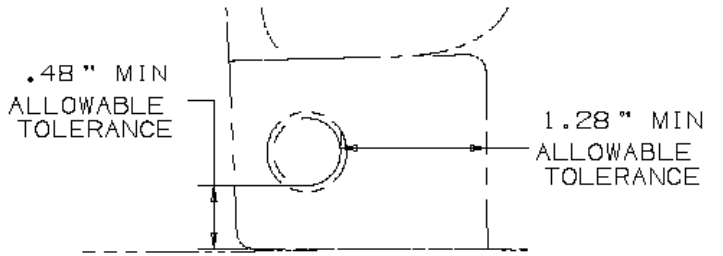
DETAIL B  
SCALE 1:1  
TYP STREET SIDE AND CURBSIDE



DETAIL D  
SCALE 1:1  
TYP STREET SIDE AND CURBSIDE



DETAIL C  
SCALE 1:1  
COPY OF DETAIL B  
TYP STREET SIDE AND CURBSIDE



DETAIL E  
SCALE 1:1  
COPY OF DETAIL D  
TYP STREET SIDE AND CURBSIDE