



## INSTRUCTION TO SERVICE

|                    |   |
|--------------------|---|
| <b>ITS: 6063</b>   |   |
| <b>SECTION:</b>    | Chassis   |
| <b>WRITTEN BY:</b> | Kevin Robinson  |
| <b>SUBJECT:</b>    | MIDI – Cut structure at curbside front wheel well and weld pocket to eliminate tire scrub |

# ITS6063

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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.



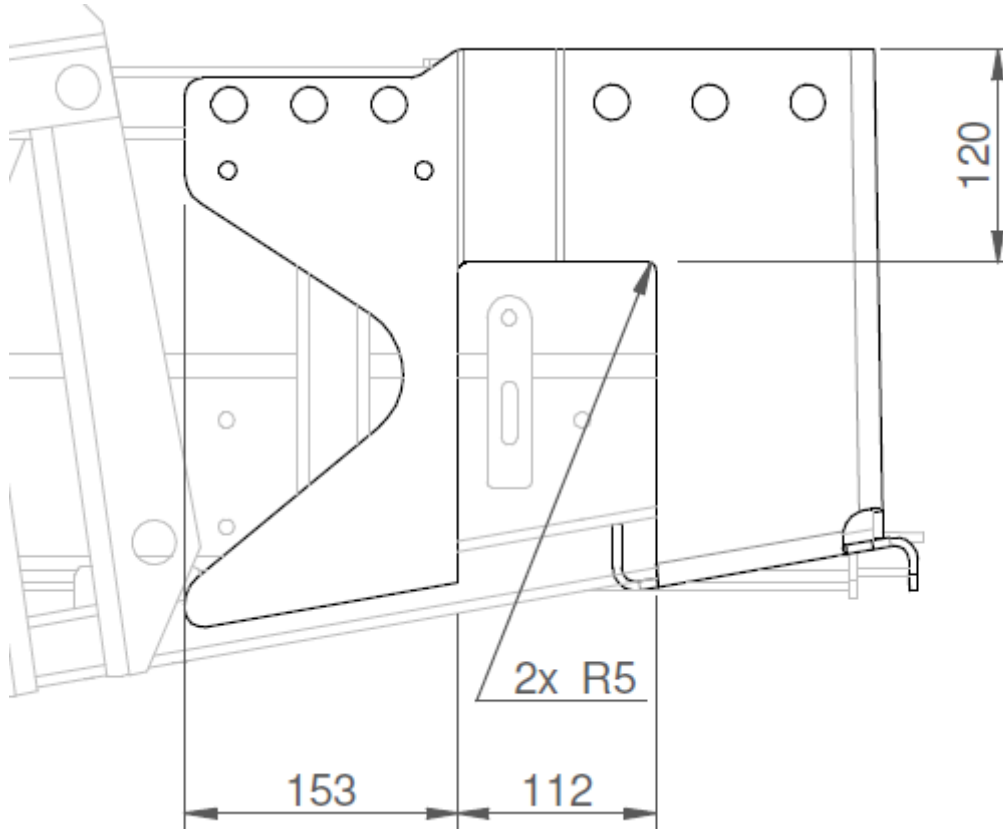
3. With the steering straight, remove the curbside front wheel to provide accessibility.





## NEW FLYER

- Using the provided template, mark out and cut the section. Where no template is available, use the dimensions shown below. Dimensions are in millimeters.



- Remove the marked section with a cut off wheel.

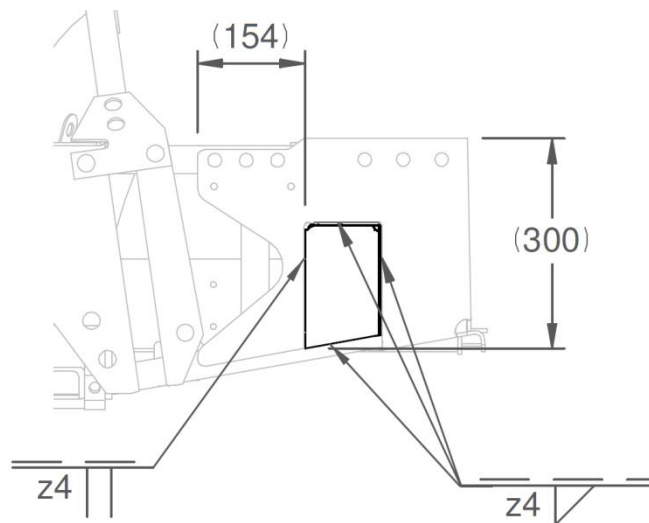


**NEW FLYER**

6. Prep the area for welding by removing the existing Undercoating and primer beneath it. Refer to Appendix A for welding procedures.



7. BEFORE WELDING disconnect battery cables, ECUs for engine, transmission, electronic level control, ABS, destination signs, all multiplex modules (6), the ZR-32 module in the dash, DEF control module, radios, and any other sensitive electronics.
8. Tack weld the supplied plate (NF PN A-471237) into place then finish weld per the drawing below. Dimensions are in millimeters.



9. Apply zinc primer and undercoating to the new plate and surfaces where coatings have been removed. Refer to Appendix B for instructions.



10. Re-install the curbside wheel, removed previously.
11. Lower coach in accordance with the New Flyer Service Manual.
12. Reconnect all electronic devices, disconnected previously.
13. Re-attach the battery cables to the batteries, disconnected previously.
14. Turn the main battery disconnect switch to the "ON" position.

## **Appendix A**

### **WELDING PROCEDURE**

1. Remove old weld by grinding as required. Oxy-acetylene torches must not be used.
2. Area enclosed by welded zone plus 2" either side to be cleaned to base metal by wire brush, removing all grease, oil, rust and scale from surfaces to be joined.
3. Disconnect battery cables when welding. Also disconnect ECUs for engine, transmission, electronic destination signs, ABS, articulated joint (black box and pressure sensors) and VCM.
4. Temperature of steel parts to be welded must be at or above 68°F (20°C) before welding.
5. All welds to be made with E7018, low hydrogen welding rods. Gas metal arc welding (semi-automatic) may be used where practicable, provided AWS A5.18 standard E70S-3 or E70S-6 wire is used, with argon-carbon dioxide shielding gases.
6. Welder shall meet qualifications for "all position" welding as per AWS D1.1 or CSA W59 standard qualification for metal arc welding.



## Appendix B

# UNDERCOATING APPLICATION INSTRUCTIONS

### Primer Mixing Instructions

1. Clean area to be primed per painting and priming procedures in the New Flyer Service Manual under section: Chassis and Structure.
2. Mix 1 part of PPG Catalyst S28079 (NFIL P/N 108936) with 2 parts of PPG Green 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).  
Pot life of mixture is approx. 3 to 4 hours, BUT is significantly reduced with exposure to air (moisture).

### Undercoating Protective Coating Application

1. Remove excess dirt, dust and debris from substrate using clean, dry cloth or air stream.
2. Coating to be applied at ambient air temperature between 50 to 99°F (10 to 32°C).
3. Substrate temperature must not exceed 212°F (100°C) during application.
4. Keep parts above freezing within first 24 hours after application.
5. Using a 50:1 ratio or higher stainless steel pump, Reverse-A-Clean tungsten carbide tipped (0.021" to 0.027" in diameter) stainless steel airless spray gun and disposable brush or trowel, apply a single coating of Undercoating (NFIL P/N 6407448). Spray distance 12 to 15" (30 to 38cm).  
**ALTERNATELY:** Apply undercoating by brush.
6. Allow to air dry at room temperature.



**LABOUR ESTIMATE**

|   | Operation   | Men | Hours | Labour Time<br>M X HR |
|---|---|-----|-------|-----------------------|
| 1 | MIDI – cut structure at curbside front wheel well and weld pocket to eliminate tire scrub | 1   | 5.0   | 5.0                   |

**PARTS REQUIRED**

| Item | Part Number | Description                   | Qty.<br>per<br>Coach | Units | Notes |
|------|-------------|-------------------------------|----------------------|-------|-------|
| 1    | A-471237    | PLATE_INFIL                   | 1                    | EA    |       |
| 2    | 108936      | PRIMER-MOISTURE CURE URETHANE | 0.125                | EA    |       |
| 3    | 115956      | PRIMER-ZINC POWDER RED        | 0.25                 | EA    |       |
| 4    | 6407448     | UNDERCOAT PPG 7972-W 5GALLON  | 0.25                 | EA    |       |