

# NEWMAR CORPORATION WARRANTY DEPARTMENT

| <b>TECHNICAL SERVICE BULLETIN</b>   |                                     |               |                          |  |                          |       |                                     |
|---|-------------------------------------|---------------|--------------------------|--|--------------------------|-------|-------------------------------------|
| DATE ISSUED   | MODEL YEAR(S) AFFECTED              |               | MODEL(S) AFFECTED        |  |                          | TSB # |                                     |
| 5/17/07   | 2007                                |               | X-Aire FW                |  |                          | 316   |                                     |
| BRAND   |                                     |               |                          |  |                          | TYPE  |                                     |
| All   | <input type="checkbox"/>            | American Star | <input type="checkbox"/> | Mountain Aire  | <input type="checkbox"/> | All   | <input type="checkbox"/>            |
|   |                                     | Dutch Star    | <input type="checkbox"/> | Kountry Aire   | <input type="checkbox"/> | FW    | <input checked="" type="checkbox"/> |
| X-Aire  | <input checked="" type="checkbox"/> | Kountry Star  | <input type="checkbox"/> | Essex  | <input type="checkbox"/> | DP    | <input type="checkbox"/>            |
| Scottsdale  | <input type="checkbox"/>            | Northern Star | <input type="checkbox"/> | London Aire  | <input type="checkbox"/> | DB    | <input type="checkbox"/>            |
| <input type="checkbox"/> Air Conditioning & Heating<br><input type="checkbox"/> Appliances & Accessories<br><input type="checkbox"/> Cabinets & Furniture<br><input checked="" type="checkbox"/> Chassis Components<br><input checked="" type="checkbox"/> Construction Components  |                                     |               |                          | <input type="checkbox"/> Electrical Components<br><input type="checkbox"/> Exterior Components<br><input type="checkbox"/> Interior Components<br><input type="checkbox"/> Plumbing & Bath Components<br><input type="checkbox"/> Windows, Awnings, Vents, & Doors |                          |       |                                     |
| DESCRIPTION OF PROBLEM  |                                     |               |                          |  |                          |       |                                     |
| Fuel fills for generator and "Fueling Station" have insufficient slope to promote complete fueling.   |                                     |               |                          |  |                          |       |                                     |
| RECOMMENDED SOLUTION  |                                     |               |                          |  |                          |       |                                     |
| Repair per attached procedure. Repairs include relocation of fuel tanks and fuel fills.<br><br><b><u>WARNING: THIS PROCEDURE INCLUDES WELDING. EXTREME CAUTION SHOULD BE EXERCISED WHEN WELDING ON OR AROUND FUEL STORAGE OR DELIVERY EQUIPMENT. THE RISK OF FIRE IS VERY HIGH IN THESE AREAS. ALWAYS HAVE SAFETY EQUIPMENT ON HAND DURING THIS REPAIR PROCEDURE, INCLUDING FIRE EXTINGUISHERS AND/OR OTHER FIRE SUPPRESSION DEVICES.</u></b><br><br>Also note the kits required are different for generation 1 and generation 2 X-Aire units. Generation 1 units have exposed ramp door hardware on the outside of the unit; Generation 2 units have covered exterior ramp door hardware. See attached parts details for additional information. |                                     |               |                          |  |                          |       |                                     |
| <b>Labor Code: 6123</b><br><br><b>Allowed Time: 6.0 hours</b>   |                                     |               |                          |  |                          |       |                                     |

If you have any questions regarding this T.S.B., please contact a Warranty Service Representative at Newmar Corporation.

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## Technical Service Bulletin 316 Parts Information How to determine which kit to order for the fuel fill modification



“Generation 1” X-Aire units will have exposed hardware on the exterior of the ramp door.

**For the TSB 316 Fuel Fill Updates to a Generation 1 unit, order Kit # 012594.**

This kit consists of :

- 4’ - 35376 Gas Hose w/wire
- 4’ - 52647 Gas Hose ½” diameter
- 8’ - 105858 Foam Tape .25 x 1 EPDM Adhesive
- 5.75’ - 44919 Tubing 2” x 2” 11 ga.
- 4 - 012589A Fuel Tank Top Straps
- 4 - 012589B Fuel Tank Bottom Straps

This kit should be used only on generation 1 X-Aire units.

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**Generation 2 X-Aire units** have covered rear ramp door hardware. The rear looks more like a conventional fifth wheel rear cap when closed.

For Generation 2 units, order **kit #012589**.

This kit contains the following components:

- 4 - 12589A Top Fuel Tank Straps
- 4 - 12589B Bottom Fuel Tank Straps
- 2 - 105730 Bucket Fuel Fill 07 XAFW
- 4’ - 35376 Gas Hose w/wire
- 4’ - 52647 Gas Hose ½” ID (4 feet)
- 8’ - 105858 Foam Tape .25 x 1 EPDM Adhesive
- 5.75’ - 44919 Tubing 2” x 2” 11ga.
- 8 - 012589C Pan QDX 8 x 1 Gray
- 4 - Hex Wash Tek Screws 8 x 3/4



# Modifications To Improve Fuel Tank Filling

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**NOTE: All steps marked with an asterisk (\*) DO NOT apply to the Generation 1 X-Aire units.**

1. IMPORTANT: Be sure that the tanks are emptied before beginning these modifications. Take extreme caution when welding near fuel tanks. Work in well ventilated area.
2. Weld a 2 x 2 tube along the bottom of the frame cross-member that is behind the rear tank. Before welding make sure no gas fumes are present and take extreme caution.
3. If the unit has the optional Power Twins stabilizer jacks those will need to be removed before lowering the fuel tanks.
4. Disconnect the fill hose and vent hose from the tank.
5. \*Remove the ABS fuel fill bucket from the side of the unit and pull it out along with the hoses attached. Remove the hoses from the fill being sure to keep the hose clamps to reuse. Discard the hoses.
6. \*Remove the fuel fill and the gas cap retainer and grommet from the bucket and discard the ABS bucket.
7. Cut any zip tie straps that are holding the black plastic wire protectors for the tank wires to the underside of the unit. Cut the zip tie straps that hold the top vent hose to the underside of the unit also.
8. The new tank brackets will be mounted 3" closer to the center of the unit than the current brackets on each side. Measure over 3" from the current bolt and drill a 1/2" hole. Repeat at all 4 bolts.
9. Brace one end of the tank and remove the bolts to the bracket at that end. The bottom bracket will drop free while the top bracket remains in place as it is tack welded on.
10. Lower the end of the tank enough to position the new top bracket between the tank angles and the tank. Line up the holes in the bracket with the holes you drilled in the angle. Lift the bottom bracket into place aligning all three holes and then insert the bolt and start the nut. Do not tighten the nuts until both brackets have been installed. Repeat at other end of the tank.
11. The electrical wires can now be secured back to the underside of the unit.
12. \*Attach the gas fill to the new ABS bucket. Be sure that the vent tube of the fill is at the top and that the slight curve of the bucket face is at the bottom. Attach the new hoses to the gas fill.
13. \*Insert the rubber grommet for the gas cap retainer and insert the gas cap retainer.
14. \*Feed the fuel hose and the vent hose through the appropriate holes in the I-beam. Pull the hose through until the bucket fits to the skirt. Attach the ABS bucket to the skirt of the unit using 4 painted screws.

## Modifications To Improve Fuel Tank Filling

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15. Trim the hoses to length if needed and attach to the fuel tank using the original hose clamps.
16. If the unit was equipped with the optional power stabilizer jacks then foam tape will need to be applied to the top surface of the jacks to create a soft barrier between the jacks and the tank. Clean the top surface of the jacks before applying the foam tape.
17. Put the Power Twins back on.