

**FLEETWOOD FOLDING TRAILERS, INC.  
INSTALLATION INSTRUCTIONS**

1968E447  
February 2006

**PART NUMBER: 4737L8091  
MINI-MACH/SUPER-MACH AIR CONDITIONER INSTALLATION KIT**

**NOTE:** The 4737L8091 kit is designed for installation on:  
1986 - 1997 Pioneer and Destiny Series trailers with aluminum top assembly  
1986 - 1988 Americana Series  
1993 - 1995 Four Seasons Series  
1998 to current Taos models  
2004 to current Tucson models; and,  
2006 to current Cobalt and Graphite models

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**IMPORTANT NOTICE**

These instructions are intended for the use of qualified individuals specially trained and experienced in installation of this type equipment and related system components.

Installation and service personnel are required by some states to be licensed. Persons not qualified should not attempt to install this equipment nor interpret these instructions. Improper installation may cause damage to the equipment and may cause a hazard.

**These instructions are for the installation of the air conditioner kit and the air conditioner unit itself. Refer to the instructions included with each air conditioner model for additional mounting details.**

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**This package contains:**

1 - 4767A430	Roof brace, 76 ½ " (pre-drilled for power cord)		
1 - 4767A431	Roof brace, 76½"		
9 - 4741B965	Expansion rivet	4 - 4738A089	3/4" Hex bolt
3 - 4741C936	Screw (painted)	4 - 4746E053	Machine bolt ½" S/S x 1 ½"
4 - 4749E109	Flat washer	1 - 1202B269	Flat Washer
4 - 4747-232	Sealing washer	4 - 4749A212	Channel extension
4 - 4744-311	1" Bushing	26' - 435-00-000-22	Thick foam tape
1 - 1212-013	Grommet	1 - 4748A659	Power Cord
1 - 4744A130	Shear pin	8 - 4733-413	3/4" Tek screw
1 - 4723-337	Velcro Strap	2 - 4741-497	Bumper
3 - 4739-415	Nylon clamp	8 - 4772A455	1 ½" Tek screw
1 - 4752-244	Caution decal	2 - 1107B1012	3/4" Screw
4 - 4754A703	Roof brace mounting brkt.	8 - 100-103	Peel rivet

## A. INSTRUCTIONS (AIR CONDITIONER KIT)

Prior to top brace installation you will need to remove the valances at the mounting locations.

1. Locate the white plastic accordion rivets in the side cove of the top on each side. Remove these rivets. Prior to drilling holes, hold roof brace mounting brackets up to check the hole alignment and that the roof brace will not interfere with air conditioner unit or other ceiling mounted items. Using a 1/4" drill bit, drill through the top completely at these pre-drilled locations.
2. Using the mounting brackets (4754A703), four 1 1/2" machine bolts (4746E053), four sealing washers (4747-232), and four stainless steel flat washers (4749E109), fasten two mounting brackets to each side of the top using the holes drilled in step 2. See figure 1.

**NOTE:** The machine bolt, flat washer, and sealing washer will be inserted through the top sidewall externally.

3. Fasten the mounting brackets to the top of each cove by inserting a 3/4" stainless steel Tek screw (4733-413) in each of the pre-drilled holes of the mounting brackets.

**NOTE:** On older models, the roof brace mounting bracket's top holes will not align with the cove in the ceiling. Using a 3/16" drill bit and the roof brace mounting bracket as a template, drill through the luan ceiling panel. Attach using the peel rivets (100-103) provided.

4. Set the appropriate top brace into position on the ceiling. Insert the four hex bolts (4738A089) provided through the holes at the ends of the brace and fasten to the mounting brackets installed in steps 3 and 4.
5. Reinstall the valances removed prior to step 1. Route the valances below the top braces. On each side of each top brace pull the valances up against the brace, and with a sharp utensil (such as an awl), put a small hole (approximately 1/8") in the elastic. Then, attach the valances to the valance track using the 1 1/2" Tek screws (4772A455) provided.
6. Route the power cord through the pre-drilled roof brace after loosening the roof brace from the mounting bracket on the side closest to the 20 amp electrical outlet. Allow 18" to 24" of the power cord (non-plug end) to remain at the air conditioner cut-out location for later attachment to the ceiling assembly.

**IMPORTANT:** A 20 amp receptacle is located within the interior wall paneling at the front, rear, or sides of the trailer and can be identified by the short horizontal notch in one leg of the outlet.

7. Remove four accordion rivets from within the ceiling paneling of the top assembly. Carefully mark the air conditioner cut-out opening on the top interior. For ease of cutting, it is recommended that a 1/2" - 3/4" circular hole be drilled through each corner of the disposable section of the cut-out. This will allow ample room for the sabre saw blade to miter each corner.

**WARNING:** Always check location of the pre-determined accordion rivets prior to cutting to ensure proper clearances from the air conditioner top braces for installation of the air conditioner unit.

**NOTE:** The cut-out must be 11" from the screen door track for proper air conditioner alignment.

8. Cut out the opening for the air conditioner with the use of a sabre saw or other suitable cutting tool.

**IMPORTANT:** Due to the various types of commercial air conditioners available, check each individual manufacturers recommendations for the exact air conditioner cut-out size to measure.

9. Place the four channel extensions into the air conditioner hole cut-out, one in each side between the interior ceiling paneling and the exterior metal skin of the top assembly. Align the edges of the channel extensions with the hole cut-out.

**IMPORTANT:** Insert the channel extensions between the ceiling panel and the outer aluminum skin. Do NOT remove the foam from the top core.

10. Once the air conditioner hole is completely cut, lower the top assembly to enable easy access to the exterior portion.
11. Cut the exterior metal center seam strip 2" back on each side of the opening. This will allow the air conditioner unit to properly seal against the exterior portion of the top assembly. See Figure 2.

**CAUTION:** Failure to cut the center seam strip back 2" on each side may create a water leak on one or both sides of the A/C unit.

12. Cut away any double-stick tape that remains between the end of the center seam strip and the edge of the cut-out opening. Measure 3/8" back from the edges of the center seam strip you cut in Step 11. Drill a 3/16" hole in the bottom of the center seam strip at these locations. Secure the center seam strip edges with the screws provided in this kit. See Figure 2.
13. Place a bead of caulking along the cut edge of the center seam strip. See Figure 2.
14. Re-seal the exposed 2" section of the center seam with caulking. See Figure 2.
15. You are now ready to begin the actual air conditioner installation.

## **B. Instructions (Roof Air Conditioner Unit)**

1. Remove the carton and packaging from the roof air conditioning unit.
2. Lift the air conditioning unit off its wooden skid and set directly on the prepared roof opening cut-out with the pointed end of the unit facing the front of the trailer and the condensing coil facing the rear. The air conditioning unit may be lifted by its plastic cover. The roof seal gasket located on the air conditioner unit itself will provide a sufficient seal between the air conditioner and the smooth camper roof when secured properly.

**NOTE:** The centering flange on the underside of the air conditioning unit must be centered over the roof opening cut-out.

**IMPORTANT:** Different brands of roof air conditioners and ceiling assemblies are not interchangeable. Check individual manufacturers recommendations.

**C. Installing the Air Conditioner Interior Ceiling Assembly**

1. Place the "CAUTION" decal on the ceiling assembly.

Specific instructions for this part of the air conditioner installation can be found in your mini-mach installation booklet. Follow these as indicated for proper installation.

**CAUTION:** When tightening the air conditioner anchor bolts, do not exceed 50% of gasket compression or irreversible cell damage to the gasket material will occur. Periodically check tightness of all anchor bolts. (On 8000 series Coleman air conditioners, it will be necessary to remove the ceiling assembly to access the anchor bolts.)

**D. Wiring Procedure**

**D A N G E R -- S H O C K H A Z A R D**

**MAKE SURE THAT THE POWER SUPPLY TO THE UNIT IS DISCONNECTED BEFORE PERFORMING ANY WORK ON THE UNIT TO AVOID THE POSSIBILITY OF SHOCK, INJURY, OR DAMAGE TO THE EQUIPMENT.**

1. A wiring access hole through the interior plastic ceiling assembly cover of the air conditioner should be located 1" down from the top and 2 ½" in from the curbside on the front of the ceiling assembly cover. This hole is located directly adjacent to the pre-drilled hole in the front ceiling brace. See individual manufacturers recommended hole locations included with the ceiling assembly instructions.

**NOTE:** The electrical control box is located on the curbside of the ceiling assembly cover.

2. Insert wire through enclosed white rubber grommet and the interior plastic ceiling assembly cover.
3. Splice wires color for color with the enclosed wire nuts. Reference air conditioner manual.
4. Using electrician's tape, tape the wire nuts securely to the wires.
5. Tighten the strain-relief clamp to secure the 115 volt supply wire in place (see air conditioner booklet). Coil the two connected wire ends and place inside the control box. Reinstall the control box cover. Be sure the thermostat probe is in position, routed through the rubber grommet and not touching any metal. See air conditioner manual.
6. Make sure the filters are in position in the ceiling assembly cover and are held in place by elastic cords around four retainer pins; if they are not, install them at this time. See air conditioner manual.
7. Reinstall the interior ceiling assembly and secure with the two screws taken out earlier. Put the control knobs back on the ceiling assembly and turn the selector switch to "OFF."
8. Route the power cord along the top of the roadside or curbside aluminum canvas track toward the 20 amp receptacle, then fasten the cord to the top with the three nylon clamps and three screws provided.

9. Route the power cord along the seat bench frame or curbside cabinet assembly and into the 110 volt, 20 amp receptacle.
10. Drill a 13/64" hole in the corner of the top assembly (through ceiling panel only) coinciding with the routing of the power cord. Fasten the power cord retaining Velcro strap with the expanda-rivet and flat washer provided.

**NOTE:** Store power cord looped at corner of top assembly prior to closing.

FIGURE 1  
 (CROSS-SECTIONAL VIEW OF TOP)

