

PRE-INSTALLATION PROCEDURE

Prior to installing the Model 950 or 951 air suspension it is important to confirm several characteristics of the trailer suspension. This may help you avoid unexpected problems during the installation process.

Step 1. Assure that you have the correct air suspension model by confirming the following dimensions:

Leaf Spring Dimensions	Superide
3" width on 44" centers	Model 950
3" width on 38" centers	Model 951

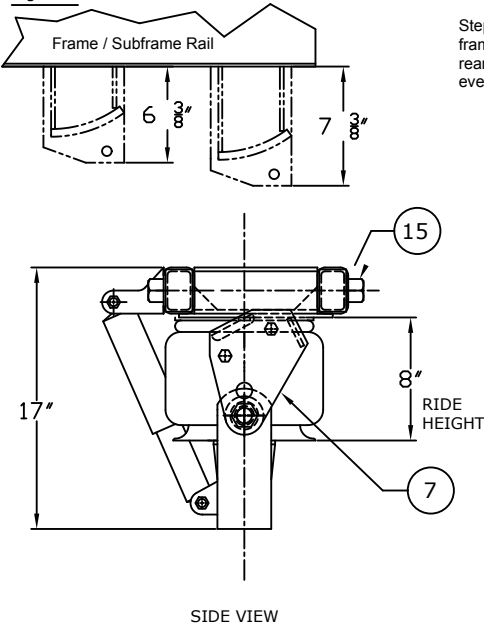
Step 2. The spring bracket (see item 7) for the models 950 and 951 has been specifically designed to mount on the Fruehauf UCD 0511-1 three leaf spring. Other brackets are available for leaf springs with different design characteristics; if necessary, consult the manufacturer for assistance (1-800-344-2174).

Step 3. The spring bracket can be connected to the air spring beam (see item 22) through either one of two pivot holes in the bracket. If the spring hanger on the trailer is "shallow," use the lower hole. If it is "deep," use the top hole (see Figure 1).

Spring Hanger	Overall Height	Spring Bracket
Shallow	6 3/8"	Lower Hole
Deep	7 7/8"	Upper hole

Determine which of the two holes is appropriate for your installation and connect the spring bracket accordingly.

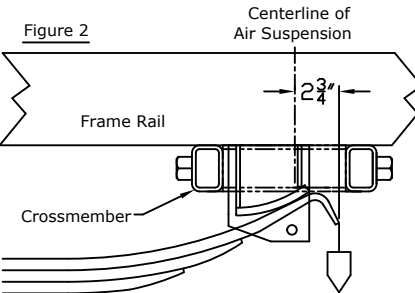
Figure 1



Step 4. Confirm that the axles are accurately aligned. If the leaf springs are not square under the trailer, the air suspension will not "square up" under the frame rails.

INSTALLATION INSTRUCTIONS

Step 1. With the trailer level, brakes released, and the full weight of the trailer on the leaf springs, drop a plumb bob off the rear end of the main leaf (see figure 2).

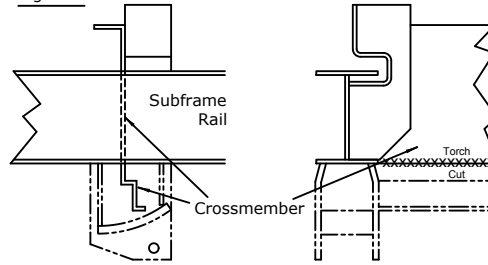


Transfer this vertical line up to the frame rail. Then, measure 2 3/4" forward on the frame / subframe rail and scribe a vertical line; this establishes the centerline for the air suspension crossmember.

Confirm by measurement from the center spring hanger that the crossmember centerline is symmetrical on both sides of the trailer.

Step 2. Next, place a straight edge over the flanges of the frame rails (subframe rails on a slider) and behind the existing rear crossmember. Scribe a line and torch cut the crossmember even with the bottom flange on the rails (see Figure 3).

Figure 3



Step 3. Remove the rear spring hangers; grind the exterior of the frame / subframe rails smooth.

Step 4. With a floor jack, lift the air suspension and place the spring brackets over the end of the leaf springs. Secure the brackets on the springs and clamp the crossmember to the frame rails.

Step 5. Simulate the operating ride height by jacking the air suspension toward the frame until the height of both air springs (bags) is set at 8" (see side view illustration).

Step 6. Center the air suspension crossmember on the vertical centerline scribe marks. Also, confirm that the crossmember is centered from side to side under the frame rails.

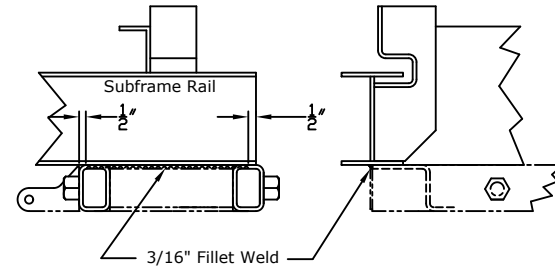
Step 7. Weld the air suspension in place. Use a 3/16 inch fillet weld. Weld approximately 10 inches on each side as shown in Figure 4. Important: Do not weld across the frame flanges.

Step 8. Plumb the air suspension for air. Note that dual height control valves are recommended for certain applications. See ACS Service Bulletin No. 134.

Step 9. Confirm by measurement that the ride height is correctly set at 8 inches. Adjust the height control valve(s) as necessary.

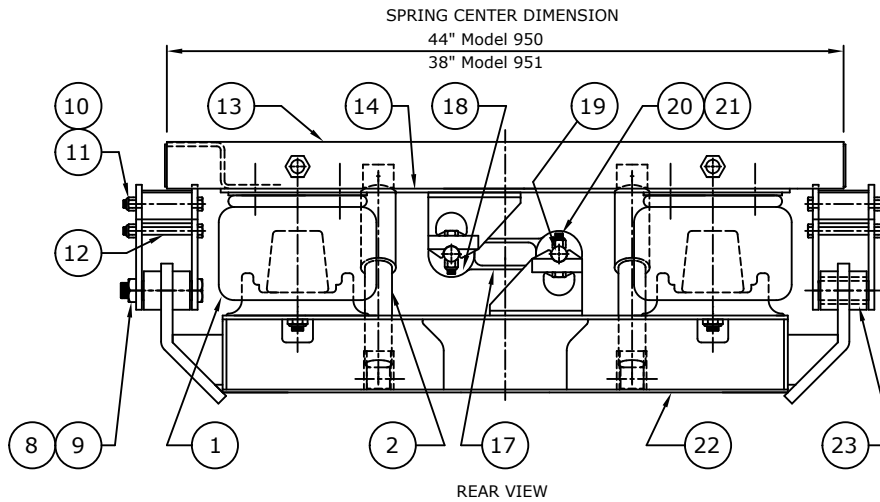
Step 10. Check air fittings for leaks and all bolts for tightness. Torque the spring bracket retainers bolts (see Item 10) to 60 ft. lbs. and the beam bushing bolts (Item 8) to 450 ft. lbs.

Figure 4



SERVICE PARTS LIST

ITEM	QTY	DESCRIPTION
1	2	AIR SPRING
2	2	SHOCK ABSORBER
3	1	HEIGHT CONTROL VALVE
4	1	HEIGHT CONTROL LINK
5	1	VALVE LINK BRACKET
6	1	HOLD BACK VALVE
7	2	SPRING BRACKET
8	2	BEAM BUSHING BOLT (Gr. 8)
9	2	BEAM BUSHING NUT (Gr. 5)
10	4	SPRING RETAINER BOLT (Gr. 8)
11	4	SPRING RETAINER NUT (Gr. 5)
12	2	SPRING BRACKET SPACER
13	1	CROSSMEMBER
14	1	ADJUSTER PLATE
15	2	ADJUSTER BOLT & NUT
16	2	FLAT STRAP WASHER 1/2"
17	1	TRANSVERSE ROD
18	4	TRANSVERSE ROD BUSHING
19	2	STRADDLE PIN
20	4	STRADDLE PIN BOLT (Gr. 8)
21	4	STRADDLE PIN NUT (Gr. 5)
22	1	AIR SPRING BEAM
23	2	HARRIS BUSHING



SERIES 900/SINGLE or TANDEM AXLE TRAILERS
Superide Models: 950, 951



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