

# PREVOST

## Instruction Sheet

## IS-04009

### REPLACING THE SMALL A/C TECUMSEH COMPRESSOR WITH SELTEC COMPRESSOR ON XLII MTH (W0, WE) AND ON H3-45 VIP

#### MATERIAL FOR XLII MTH (W0)

**IMPORTANT: IN ADDITION TO KIT #454222, MAKE SURE THAT 220 ML OF PAG OIL IS AVAILABLE BEFORE PERFORMING THIS MODIFICATION; OTHERWISE ORDER PART #950382.**

Kit #454222 includes the following parts:

Part No.	Description	Qty
051992	Cap	1
3852496	Washer, Split Lock	3
450119	Support	1
453514	Refrigerant Moisture Indicator Assembly	1
454061	Valve Assembly, Low Pressure Service	1
454066	Valve Assembly, High Pressure Service	1
454067	Hose (37 13/16" long)	1
454071	Hose (30 3/4" long)	1
454072	Bracket, High Pressure Service Valve	1
454097	Hose (76 13/16" long)	1
454101	Decal, Refrigerant	1
454107	Hose (34 7/16" long)	1
454109	Hose (8 1/16" long)	1
454127	Tensioner, Compressor Belt	1
454137	Base, Compressor Pivot	1
454138	Pivot, Compressor	2
454141	Hose (17 3/4" long)	1
454142	Hose (47 13/16" long)	1
454143	Arm, Compressor Belt Tensioner	2
454229	Support, Condenser Rear	1
454230	Support, Condenser Front	1
500065	Screw, Cap, Hex Head M10 – 1.5 x 30 G10.9	3
5001565	Screw, Cap, Hex Head 1/2-13 x 1.0 G5	2
500211	Washer, Flat	4
500470	Washer, Split Lock	1

500574	Screw, Machine, Truss Head, Phillips SS ¼	1
500747	Washer, Split Lock	1
500786	Nut, Hexagonal ZP 10-24	1
500804	Washer, Flat	3
500832	Washer, Flat	3
500877	Washer, Flat	4
500944	Washer, Split Lock	2
500957	Screw, Tapping, Binding Head, Phillips #10 x ¾	6
502681	Nut, Hexagonal, Self Locking, Nylon Insert M6-1	4
502772	Screw, Cap, Hex Head ¼-20 x .5 G5	1
502830	Screw, Cap, Hex Head M6 x 20 G8.8	4
502851	Nut, Hexagonal M8-1.25	1
502927	Screw, Cap, Hex Head M8 x 50 G8.8	1
504026	Clamp, Hose SS 2.8125" – 3.75"	2
504339	Rivet, Pop, Dome Head SS	5
509805	Screw, Tapping, Pan Head, Phillips Black #10x½	3
560093	Terminal, Ring R16-12/5/16A3/8	1
560673	Wire, Electrical 16 gage Black (12" long)	1
561565	Seal, Cable	2
561566	Connector	1
561568	Pin, Male Contact	2
562060	Clamp, Retaining	1
871343	A/C Pipe	1
871344	Valve, Thermal Expansion c/w pipe	1
950370	Filter Dryer	1
950372	Compressor Seltec TH16HD	1
950381	Condenser	1
952629	Clamp, Retaining ZP	3
952631	Clamp, Retaining ZP	1
955920	Washer, Split Lock	3
970949	Screw, Cap Hex Head M10 x 35 G8.8	6
970970	Screw, Cap Hex Head M12 x 30 G8.8	3
971083	Nut, Hexagonal Stover M10-1.5	6
971084	Nut, Hexagonal Stover M12-1.75	2
IS-04009	Instruction Sheet	1
FI-04009	Feuille d'instructions	1

## MATERIAL FOR XLII MTH (WE)

**IMPORTANT: IN ADDITION TO KIT #454223, MAKE SURE THAT 220 ML OF PAG OIL IS AVAILABLE BEFORE PERFORMING THIS MODIFICATION; OTHERWISE ORDER PART #950382.**

Kit #454223 includes the following parts:

Part No.	Description	Qty
051992	Cap	1
3852496	Washer, Split Lock	3
450119	Support	1
453514	Refrigerant Moisture Indicator Assembly	1
454061	Valve Assembly, Low Pressure Service	1
454066	Valve Assembly, High Pressure Service	1
454067	Hose (37 13/16" long)	1
454071	Hose (30 3/4" long)	1
454072	Bracket, High Pressure Service Valve	1
454097	Hose (76 13/16" long)	1
454105	Decal, Refrigerant	1
454107	Hose (34 7/16" long)	1
454109	Hose (8 1/16" long)	1
454127	Tensioner, Compressor Belt	1
454133	Support, Condenser Rear	1
454134	Support, Condenser Front	1
454137	Base, Compressor Pivot	1
454138	Pivot, Compressor	2
454141	Hose (17 3/4" long)	1
454142	Hose (47 13/16" long)	1
454143	Arm, Compressor Belt Tensioner	2
500065	Screw, Cap, Hex Head M10 – 1.5 x 30 G10.9	3
5001565	Screw, Cap, Hex Head 1/2-13 x 1.0 G5	2
500211	Washer, Flat	4
500470	Washer, Split Lock	1
500574	Screw, Machine, Truss Head, Phillips SS 1/4	1
500747	Washer, Split Lock	1
500786	Nut, Hexagonal ZP 10-24	1
500804	Washer, Flat	3
500832	Washer, Flat	3
500877	Washer, Flat	4
500944	Washer, Split Lock	2
500957	Screw, Tapping, Binding Head, Phillips #10 x 3/4	6
502681	Nut, Hexagonal, Self Locking, Nylon Insert M6-1	4


502772	Screw, Cap, Hex Head ¼-20 x .5 G5	1
502830	Screw, Cap, Hex Head M6 x 20 G8.8	4
502851	Nut, Hexagonal M8-1.25	1
502927	Screw, Cap, Hex Head M8 x 50 G8.8	1
504026	Clamp, Hose SS 2.8125" – 3.75"	2
504339	Rivet, Pop, Dome Head SS	5
509805	Screw, Tapping, Pan Head, Phillips Black #10x½	3
560093	Terminal, Ring R16-12/5/16A3/8	1
560673	Wire, Electrical 16 gage Black (18" long)	1.5
561565	Seal, Cable	2
561566	Connector	1
561568	Pin, Male Contact	2
562060	Clamp, Retaining	1
871343	A/C Pipe	1
871344	Valve, Thermal Expansion c/w pipe	1
950370	Filter Dryer	1
950372	Compressor Seltec TH16HD	1
950381	Condenser	1
952629	Clamp, Retaining ZP	3
952631	Clamp, Retaining ZP	1
955920	Washer, Split Lock	3
970949	Screw, Cap Hex Head M10 x 35 G8.8	6
970970	Screw, Cap Hex Head M12 x 30 G8.8	3
971083	Nut, Hexagonal Stover M10-1.5	6
971084	Nut, Hexagonal Stover M12-1.75	2
IS-04009	Instruction Sheet	1
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### MATERIAL FOR H3-45 VIP

**IMPORTANT: IN ADDITION TO KIT #454231, MAKE SURE THAT 220 ML OF PAG OIL IS AVAILABLE BEFORE PERFORMING THIS MODIFICATION; OTHERWISE ORDER PART #950382.**

Kit #454231 includes the following parts:

Part No.	Description	Qty
051992	Cap	1
3852496	Washer, Split Lock	3
453514	Refrigerant Moisture Indicator Assembly	1
453711	Support	1
454118	Decal, Refrigerant	1

454127	Tensioner, Compressor Belt	1
454137	Base, Compressor Pivot	1
454138	Pivot, Compressor	2
454143	Arm, Compressor Belt Tensioner	2
454224	Hose (21 7/8" long)	1
454225	Hose (11 13/16" long)	1
454226	Hose (46¼" long)	1
454227	Hose (59¼" long)	1
454228	Hose (52 3/16" long)	1
454229	Support, Condenser Rear	1
454230	Support, Condenser Front	1
500065	Screw, Cap, Hex Head M10 – 1.5 x 30 G10.9	3
5001565	Screw, Cap, Hex Head ½-13 x 1.0 G5	2
500211	Washer, Flat	4
500747	Washer, Split Lock	1
500832	Washer, Flat	3
500877	Washer, Flat	4
500944	Washer, Split Lock	2
501304	Plug, Male Square Head ¼ NPT 	2
502681	Nut, Hexagonal, Self Locking, Nylon Insert M6-1	4
502830	Screw, Cap, Hex Head M6 x 20 G8.8	4
502851	Nut, Hexagonal M8-1.25	1
502927	Screw, Cap, Hex Head M8 x 50 G8.8	1
504026	Clamp, Hose SS 2.8125" – 3.75"	2
504339	Rivet, Pop, Dome Head SS	5
504379	Rivet, Pop, Dome Head SS	4
560093	Terminal, Ring R16-12/5/16A3/8	1
560673	Wire, Electrical 16 gage Black (18" long)	1.5
561565	Seal, Cable	2
561566	Connector	1
561568	Pin, Male Contact	2
950370	Filter Dryer	1
950372	Compressor Seltec TH16HD	1
950381	Condenser	1
955920	Washer, Split Lock	4
970949	Screw, Cap Hex Head M10 x 35 G8.8	6
970970	Screw, Cap Hex Head M12 x 30 G8.8	3
971083	Nut, Hexagonal Stover M10-1.5	6
971084	Nut, Hexagonal Stover M12-1.75	2

IS-04009	Instruction Sheet	1
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## PROCEDURE FOR XLII MTH (W0 OR WE)

**Warning:** Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

### REMOVAL

1. Remove Tecumseh compressor complete with its supports and belt tensioner.

**Note:** Set belt aside for later use.

2. Disconnect low pressure hose (453470) then remove by-pass valve, high and low pressure switches as well as non-return valve.
3. Remove hoses located on rear bulkhead, between former compressor and low pressure hose.
4. Remove hoses between former compressor and condenser.

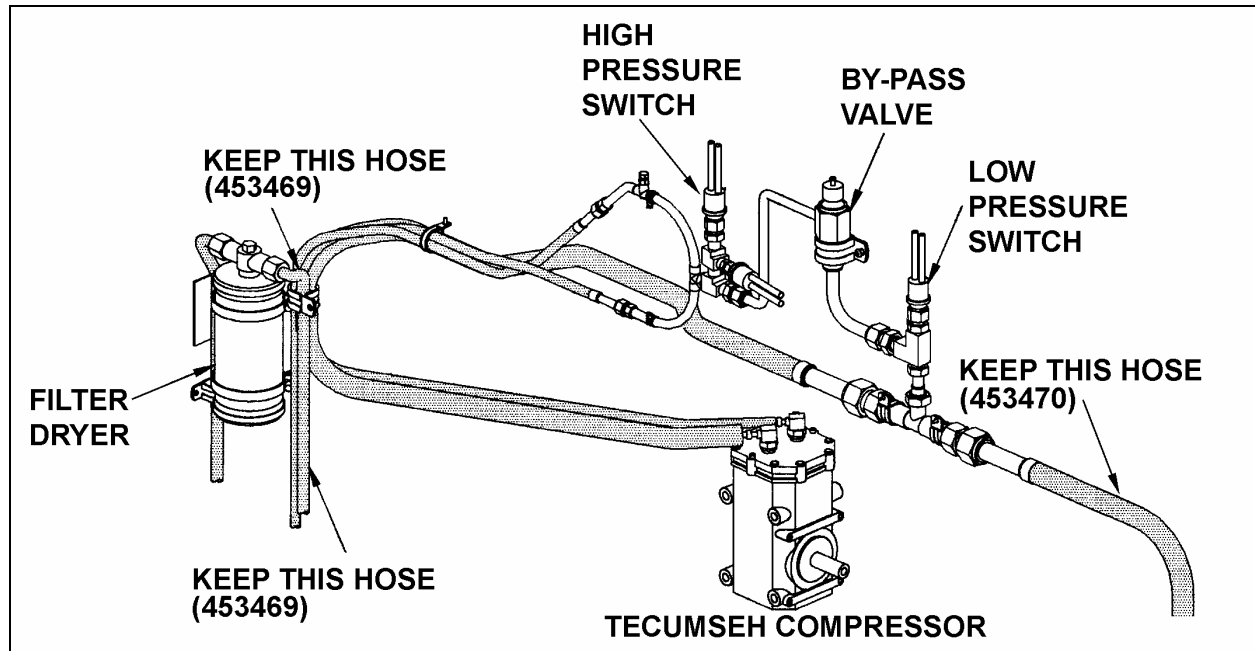


FIGURE 1: FORMER INSTALLATION

5. Remove condenser and its brackets and also the hose connecting condenser to filter-dryer.
6. Remove filter-dryer but keep the hose (453469) connecting filter-dryer to high pressure rigid tubing.
7. Disconnect hose and rigid tubing connectors located between driver's section evaporator and refrigerant solenoid valve. Remove thermal expansion valve c/w hoses located upstream and downstream of expansion valve (refer to figure 2).

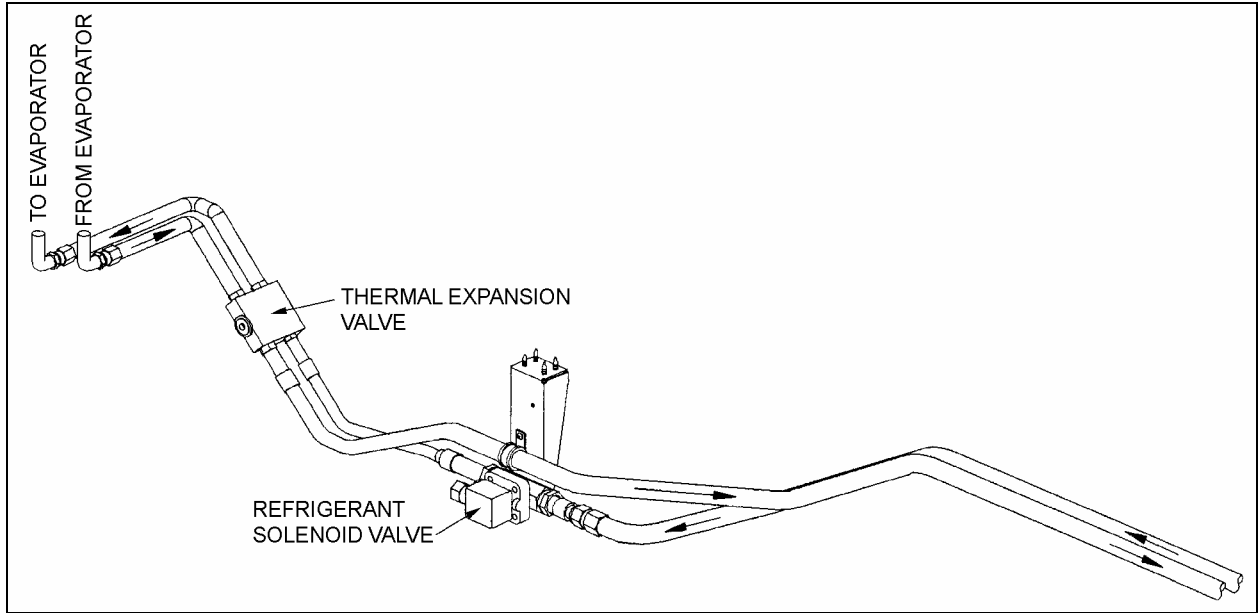


FIGURE 2: FORMER INSTALLATION – FRONT SECTION

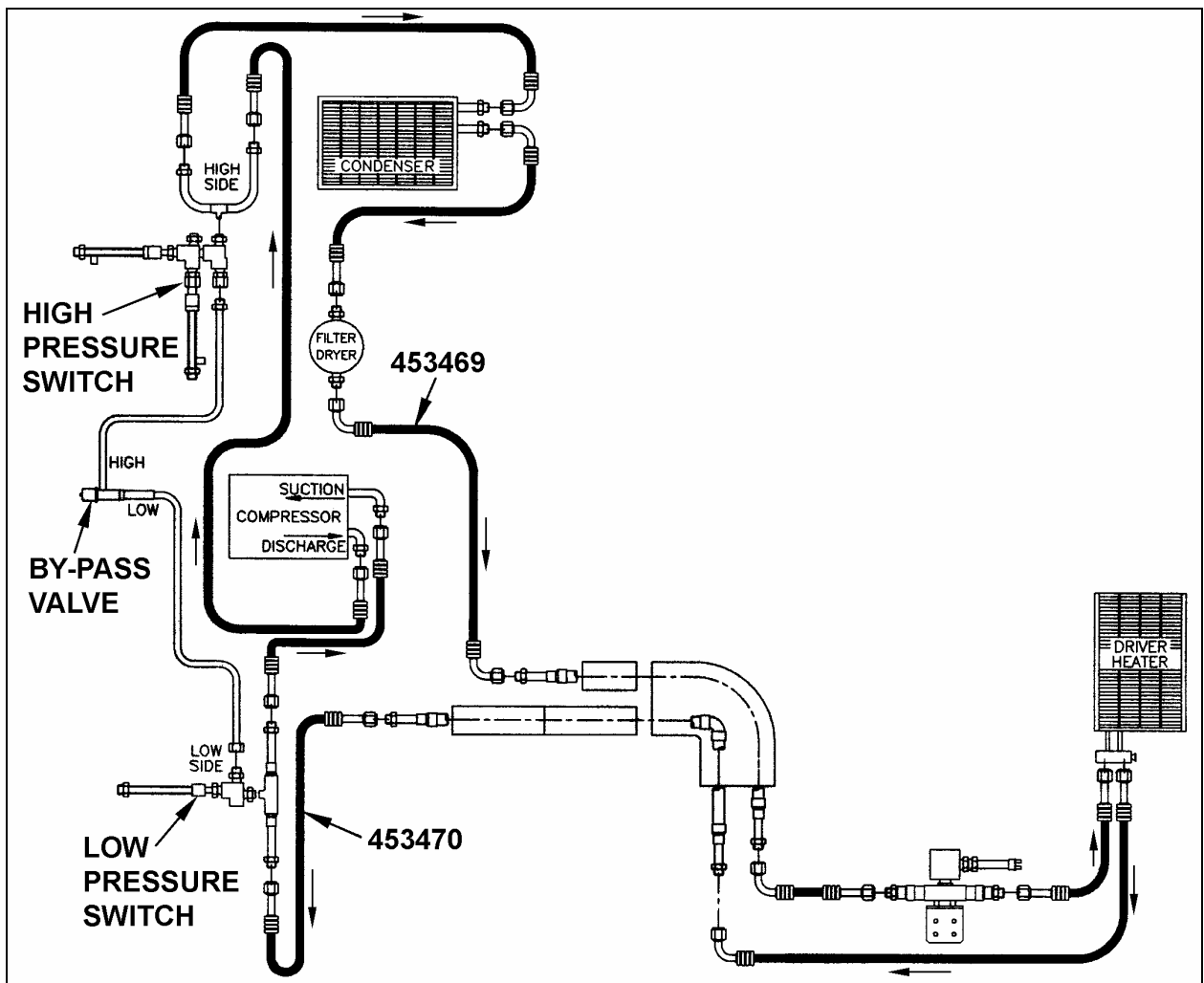


FIGURE 3: A/C DIAGRAM OF FORMER INSTALLATION

## INSTALLATION

1. Connect A/C pipe (871343) and also thermal expansion valve assembly c/w pipe (871344) to the evaporator connectors.
2. Install and connect hoses 454107 and 454109 as per figure 4.

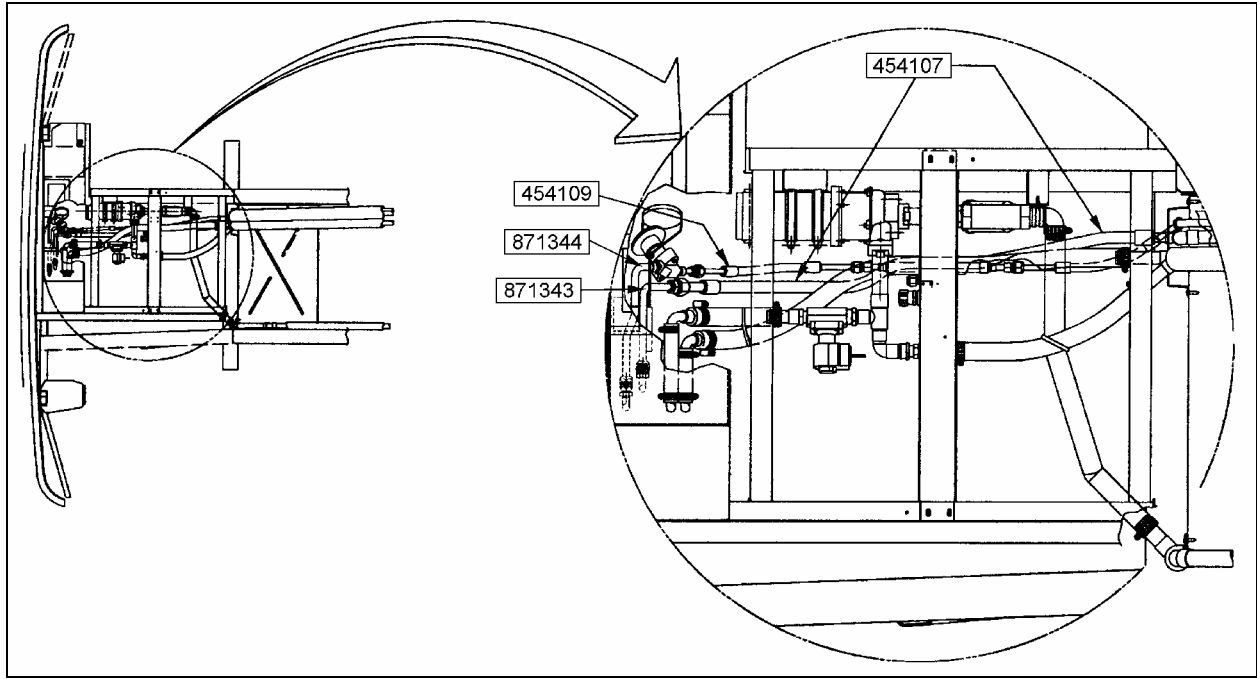


FIGURE 4: VIEW OF INSTALLATION – FRONT SECTION

3. The compressor being horizontal and the suction and discharge ports upwards, slowly rotate the compressor's magnetic clutch several times by hand to distribute the oil which has settled in the cylinders then install Seltec compressor (950372) in vehicle onto its support.
4. Align radiator fan gearbox pulley with compressor pulley.
5. Using the supplied cap (051992), close off the refrigerant hose hole in the plastic sealing frame.
6. Assemble the new condenser (950381) with its supports (454229, 454230) or (454133, 454134).
7. Position the new condenser to mark the hose hole through the plastic sealing frame. Drill a 1½" hole in line with the condenser lower fitting.
8. Drill another 1½" hole over the first one.
9. Install the condenser and a retaining clamp for the fuel hoses.
10. Install O-ring (507280) then temporary connect the low pressure service valve assembly with the new low pressure hose (454062).
11. Position low pressure service valve assembly to mark mounting holes and service port. Drill three 9/64" mounting holes for the screws (509805) and also drill a 1½" hole in the metal sheet for the service port.  
**Note:** Instead of drilling a 1½" hole, you can cut the metal sheet.
12. Position high pressure service valve assembly to mark mounting holes. Drill and mount assembly.



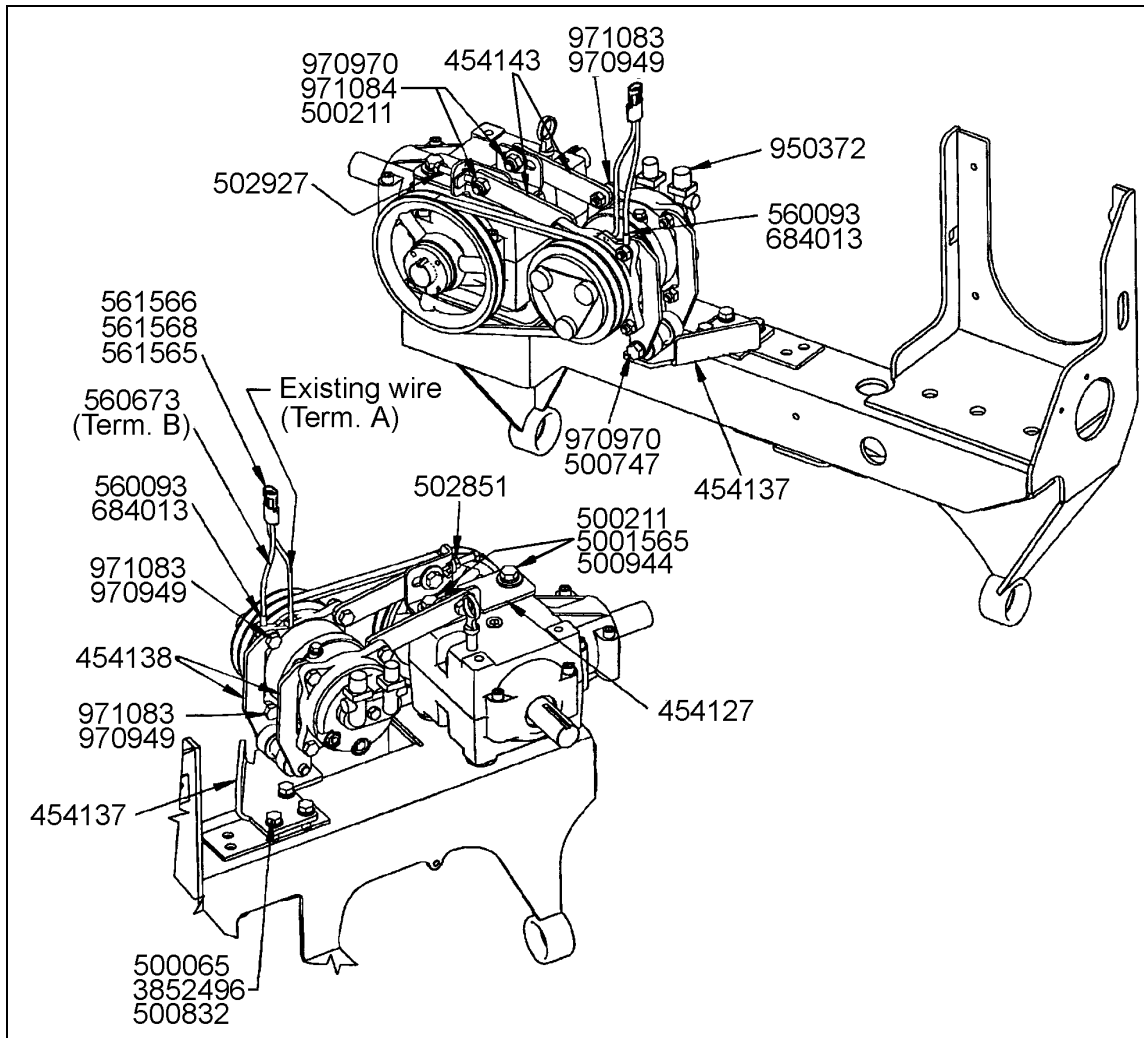


FIGURE 5: COMPRESSOR INSTALLATION

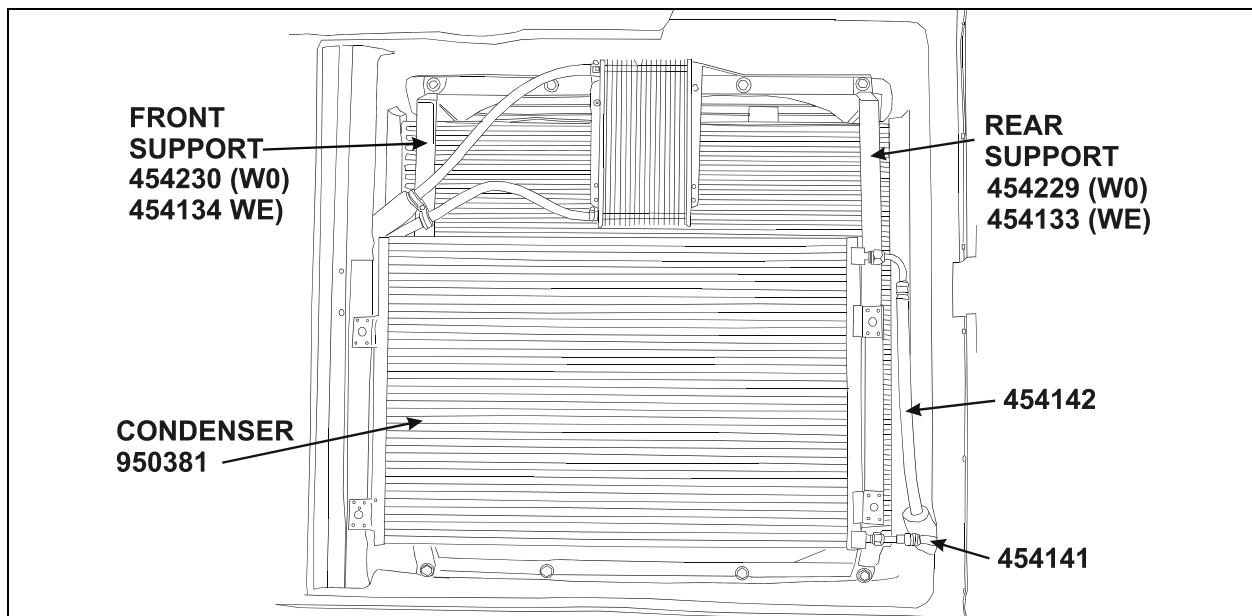


FIGURE 6: CONDENSER SUPPORTS

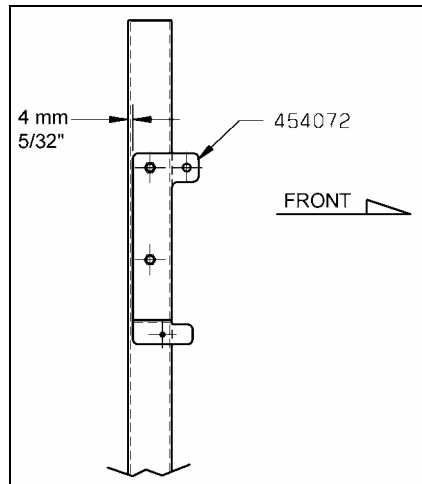


FIGURE 7

13. Position filter dryer bracket, mark mounting holes, drill and mount bracket. Install filter dryer and moisture indicator complete with O-ring.

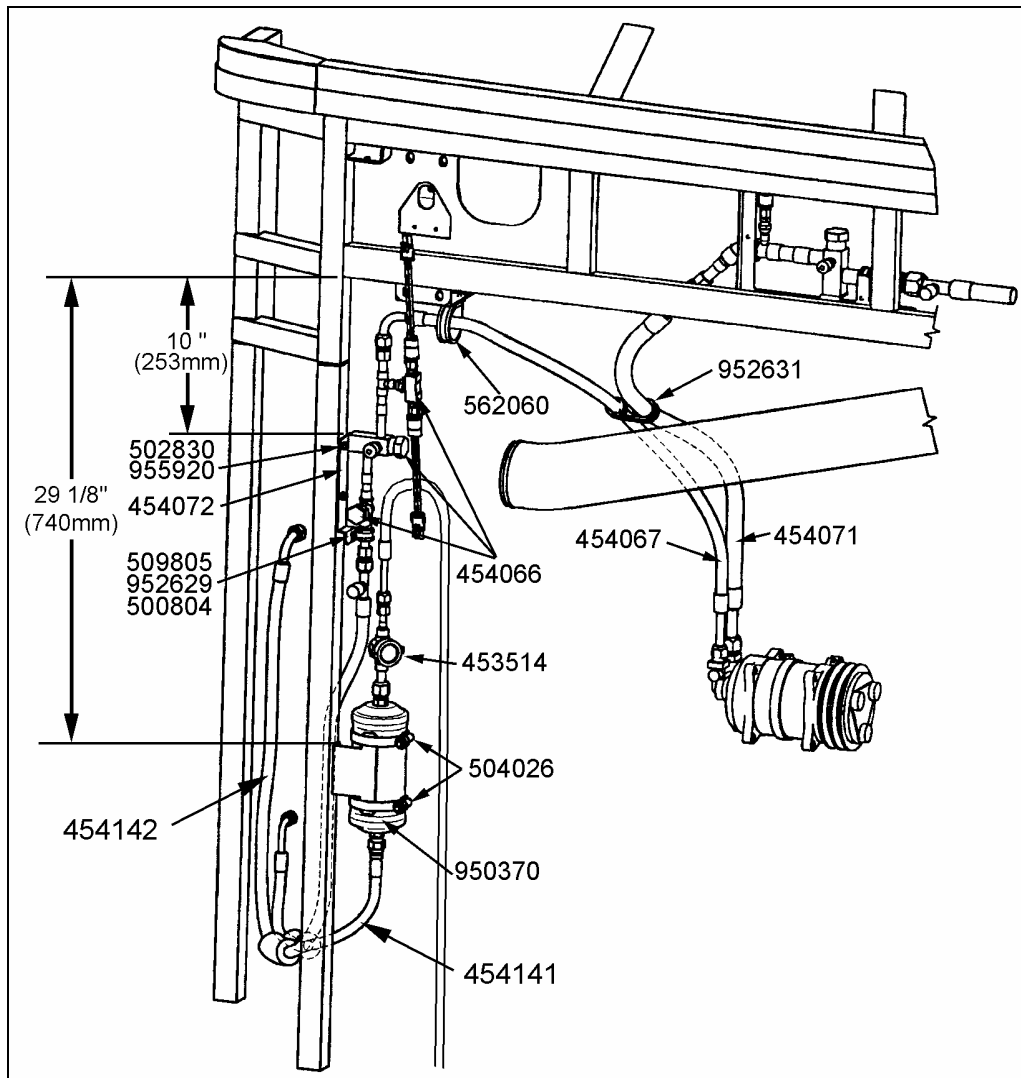


FIGURE 8: HIGH PRESSURE SERVICE VALVE & FILTER DRYER ASSEMBLY

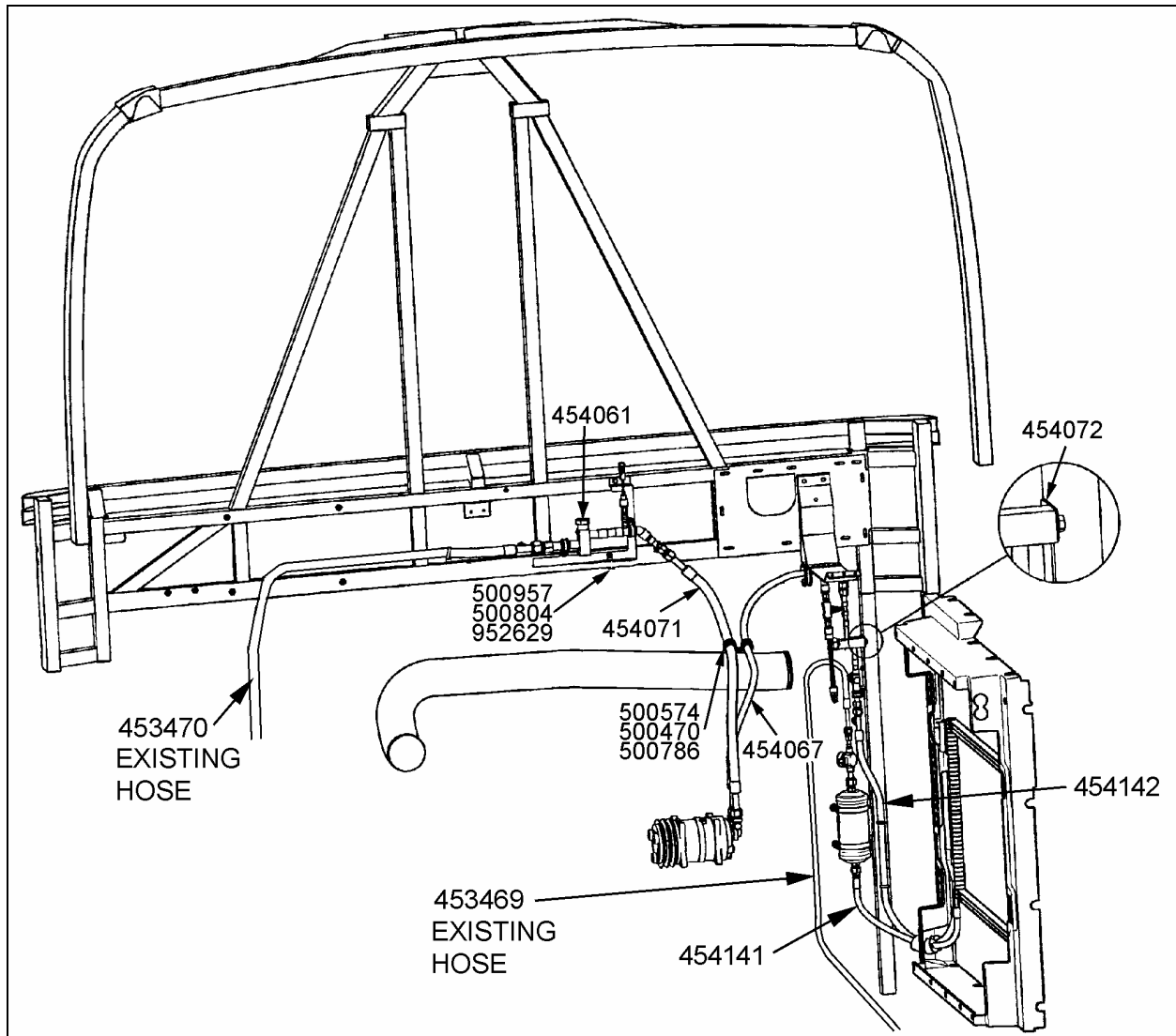


FIGURE 9: VIEW OF INSTALLATION – LOOKING AFT FROM INSIDE THE VEHICLE

14. Install compressor electrical wires and connect to compressor mounting (Refer to figure 5). Due to harness length, the high pressure switches may have to be inverted. If they are not connected properly the fan goes into high speed immediately on start-up.
15. Pressurize the system at 150 psi and check for leaks using soapy water.
16. Vacuum and charge the system with 5.5 lbs of 134a and 220 ml of PAG oil (Prévost #950382), at room temperature.

**Caution:** Use only PAG oil with this compressor. **DO NOT MIX PAG AND POE OR MINERAL OILS!**

17. Operate the system on high load for at least 20 minutes. The moisture sight glass should show  $\frac{3}{4}$  to full.

**Warning:** Warranty will be void if you fill the compressor with POE or mineral oil.

## PROCEDURE FOR H3-45 (VIP)

**Warning:** Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

### REMOVAL

1. Remove Tecumseh compressor complete with its supports and belt tensioner.

**Note:** Set belt aside for later use.

2. Remove condenser and its brackets.
3. Remove hoses connected to condenser.
4. Remove filter dryer.
5. Remove hoses located between former compressor and high and low pressure switches.
6. Disconnect low pressure hose then remove by-pass valve, screw on male plug (501304) to the low pressure switch "T" connector. Also, screw on male plug (501304) to the high pressure side "cross" connector (refer to figure 17).

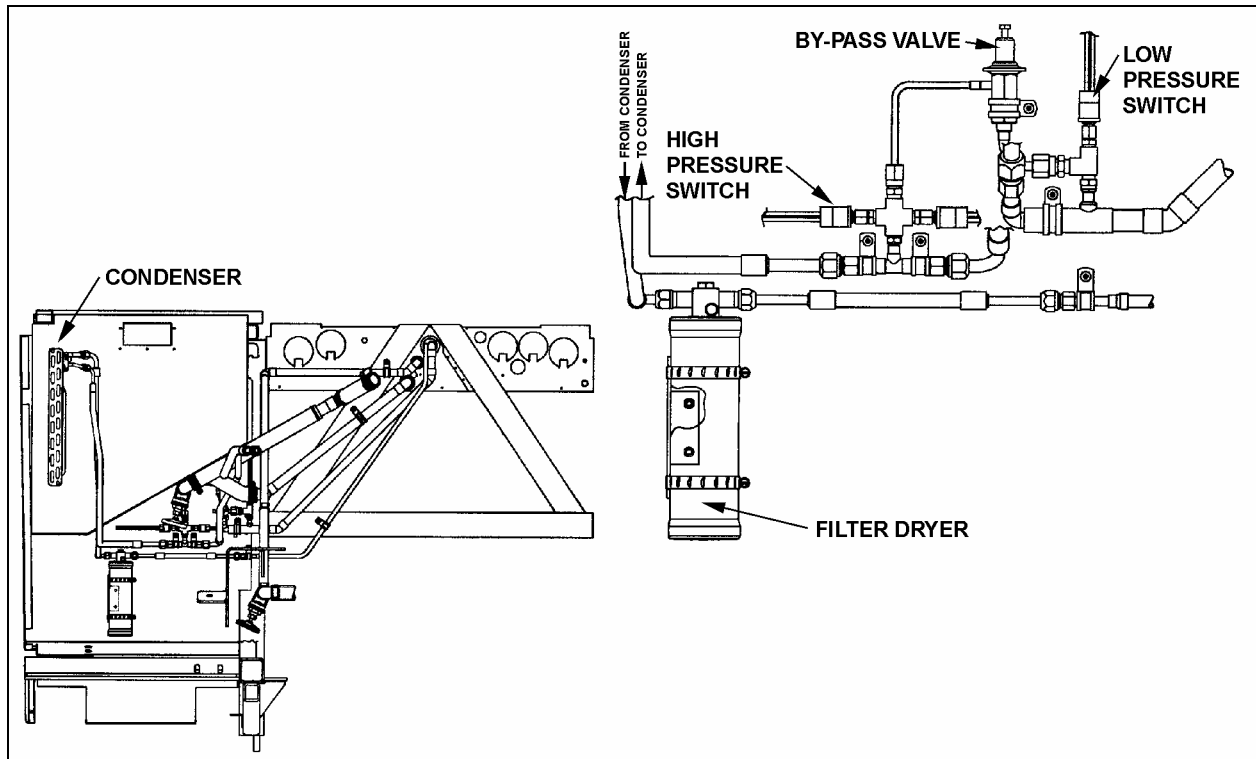
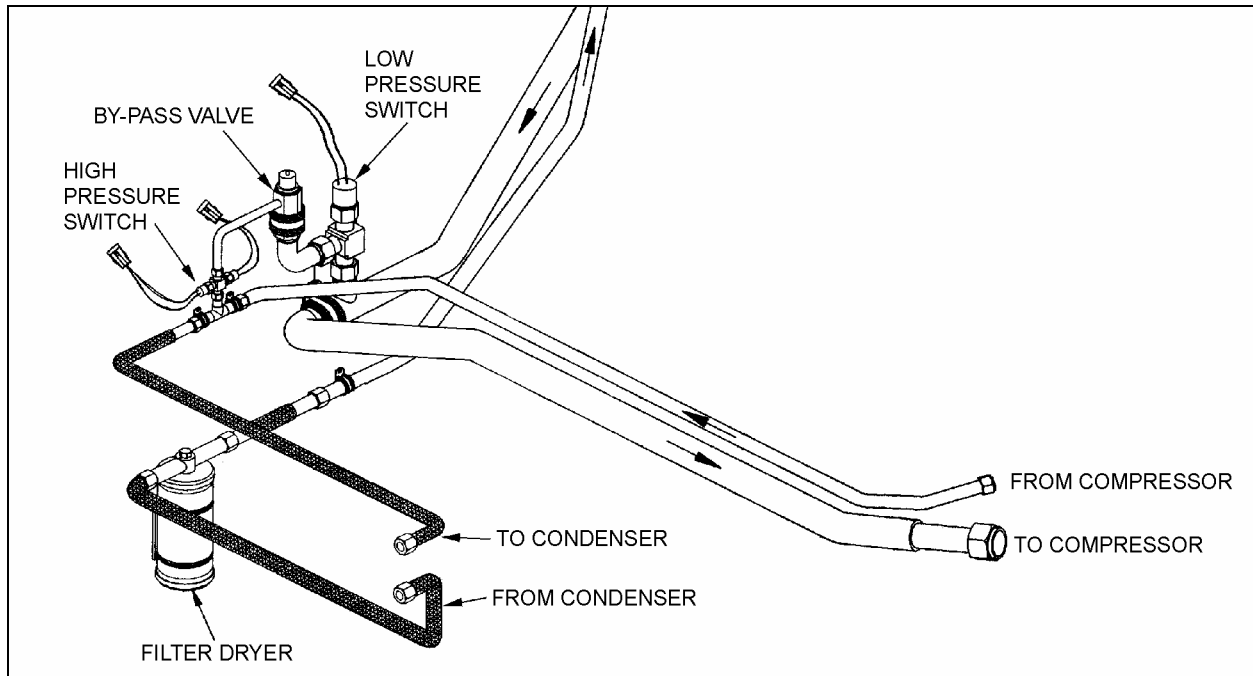


FIGURE 10: FORMER INSTALLATION



**FIGURE 11: PARTS TO BE REMOVED**

## INSTALLATION

**(Refer to figures 14, 15, 16 and 17 for more information on installation)**

1. The compressor being horizontal and the suction and discharge ports upwards, slowly rotate the compressor's magnetic clutch several times by hand to distribute the oil which has settled in the cylinders then install Seltec compressor (950372) in vehicle onto its support.
2. Align radiator fan gearbox pulley with compressor pulley.
3. Using the supplied cap (051992), close off the refrigerant hose hole in the radiator plastic sealing frame.
4. Assemble the new condenser (950381) with its supports (454229, 454230).
5. Route the hoses through the radiator plastic sealing frame, secure the condenser then install a retaining clamp for the fuel hoses.
6. Install then connect low pressure hose (454228) between compressor and low pressure switch. Install then connect high pressure hose (454227) between compressor and high pressure switch.
7. Line up filter dryer support (453711) with metal sheet bend and mark mounting holes (refer to figure 16). Drill four mounting holes for the rivets (504379) then secure support. Install filter dryer (950370) and refrigerant moisture indicator (453514).
8. Install then connect hose (454226) between condenser and high pressure switch then install and connect hose (454224) between condenser and filter dryer.
9. Install then connect hose (454225) between refrigerant moisture indicator (453514) and high pressure rigid tubing.
10. Install and secure all hoses.

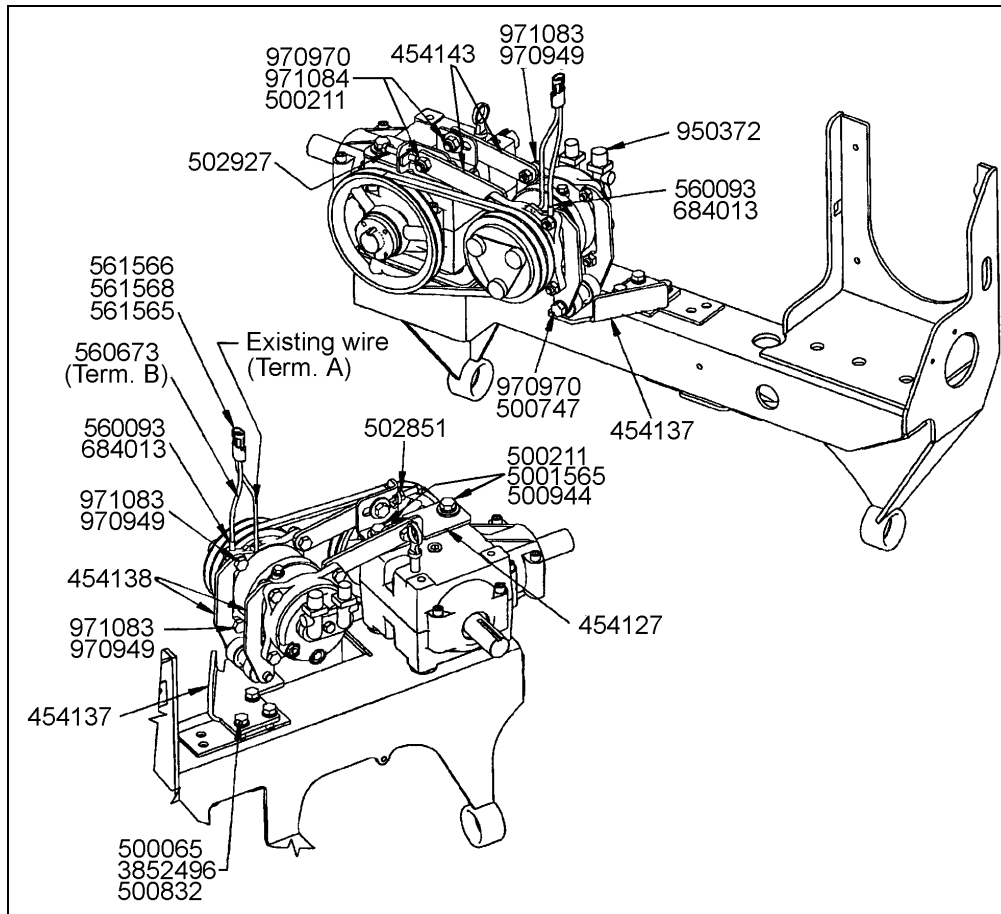


FIGURE 12 COMPRESSOR INSTALLATION

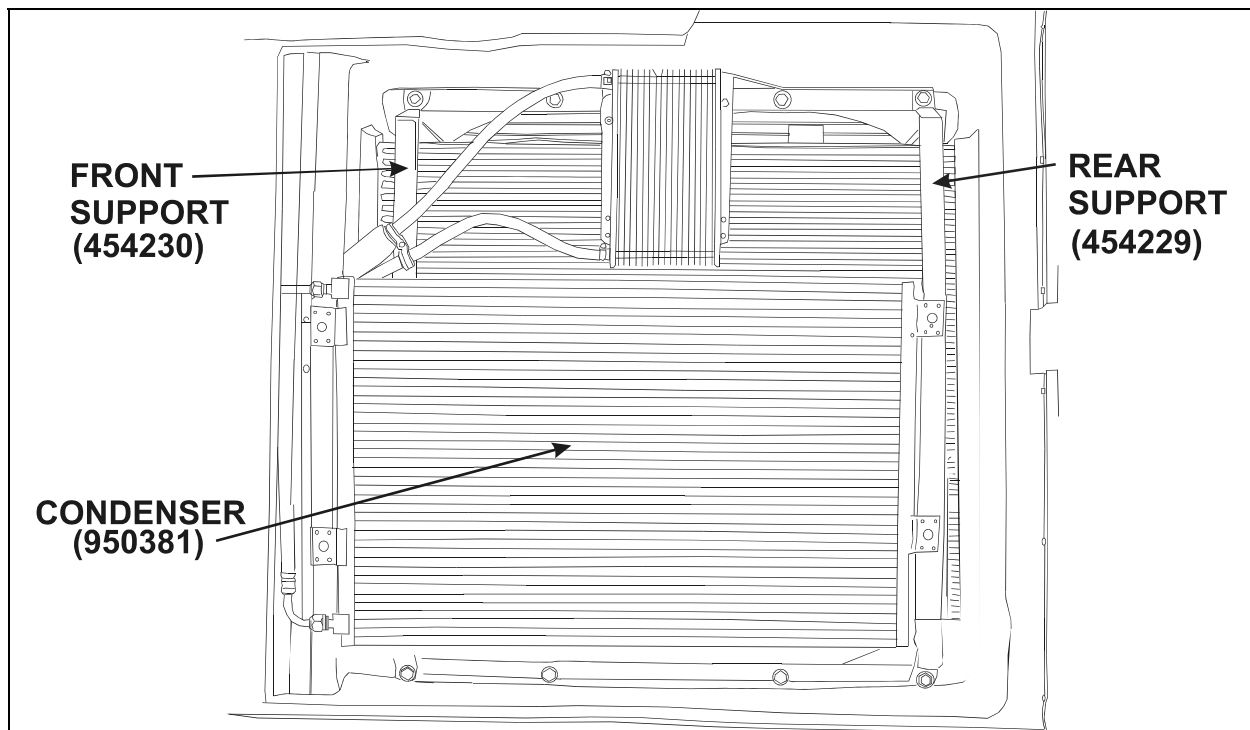


FIGURE 13: CONDENSER SUPPORTS

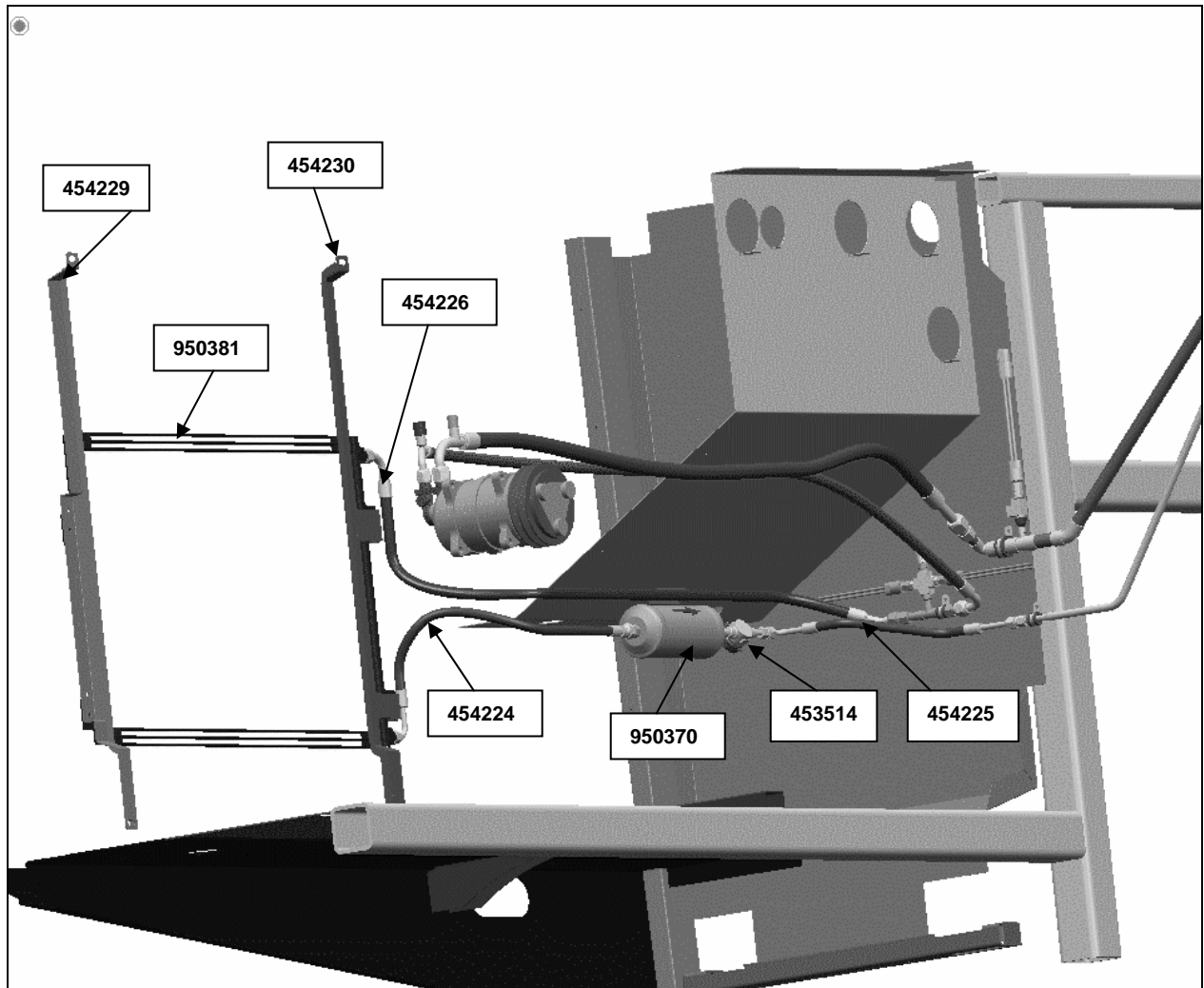


FIGURE 14

11. Install compressor electrical wires and connect to compressor mounting (Refer to figure 12).
12. Pressurize the system at 150 psi and check for leaks using soapy water.
13. Vacuum and charge the system with 5.5 lbs of 134a and 220 ml of PAG oil (Prévost #950382), at room temperature.

**Caution:** Use only PAG oil with this compressor. **DO NOT MIX PAG AND POE OR MINERAL OILS!**

14. Operate the system on high load for at least 20 minutes. The moisture sight glass should show  $\frac{3}{4}$  to full.

**Warning:** Warranty will be void if you fill the compressor with POE or mineral oil.

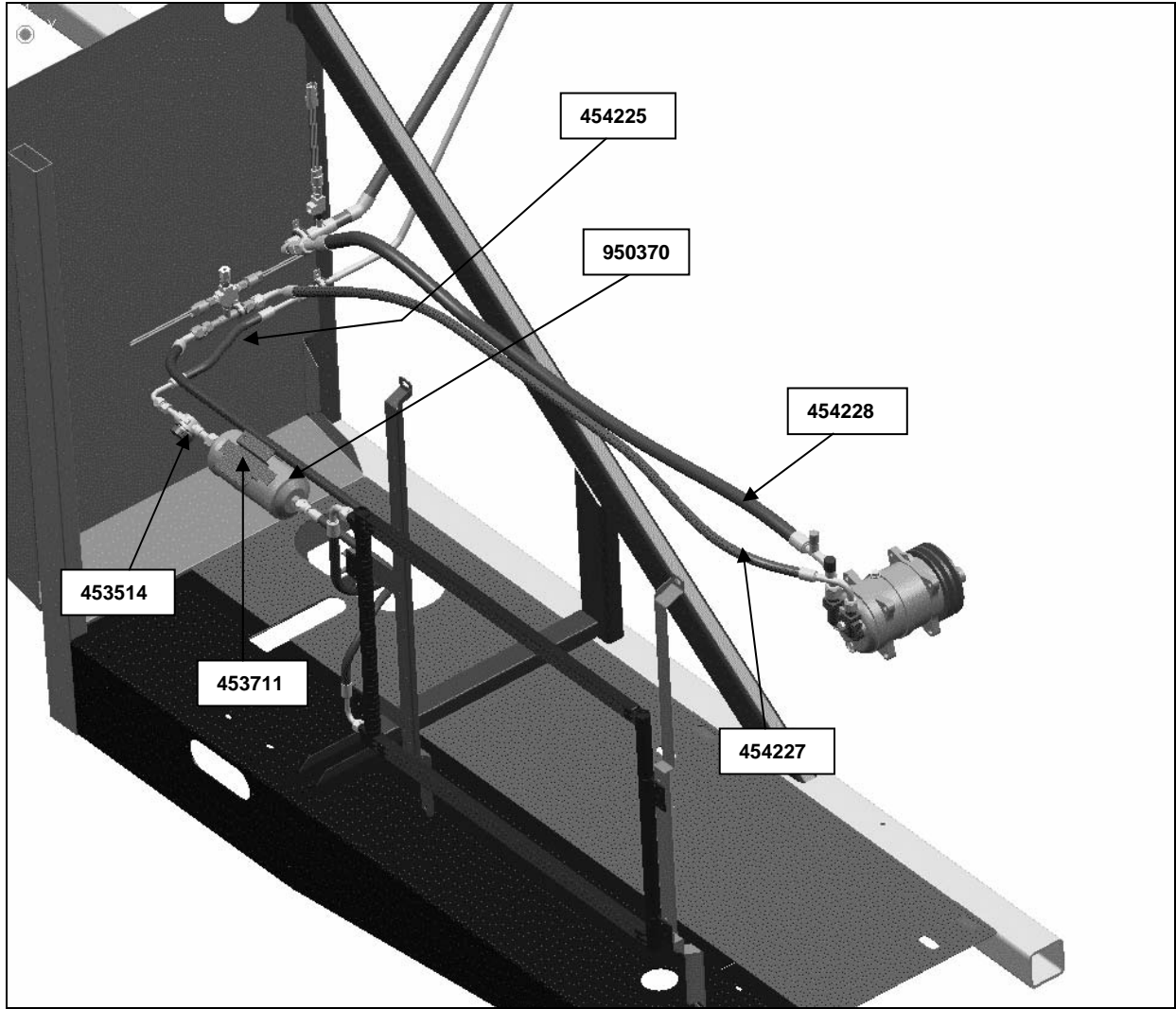


FIGURE 15



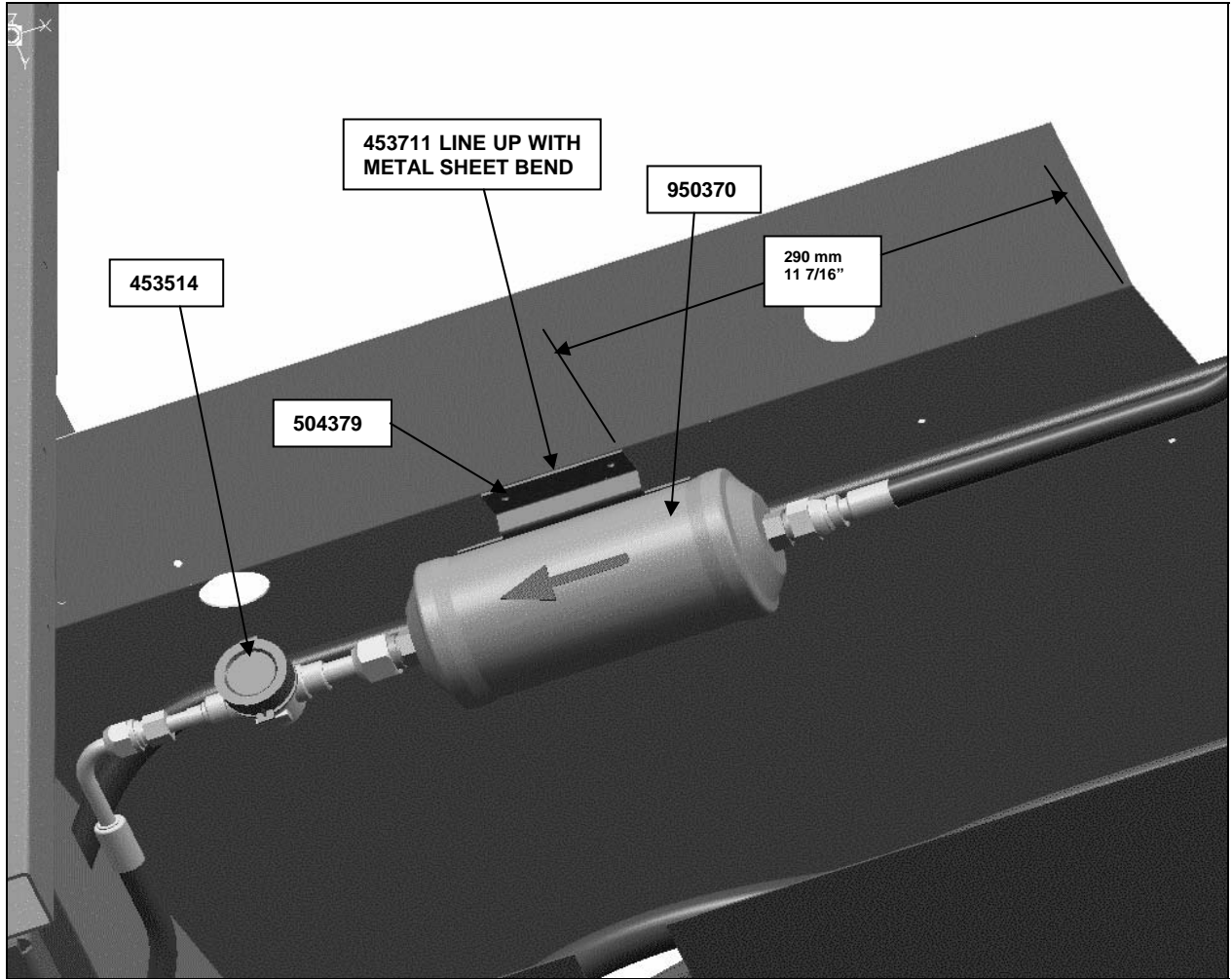


FIGURE 16

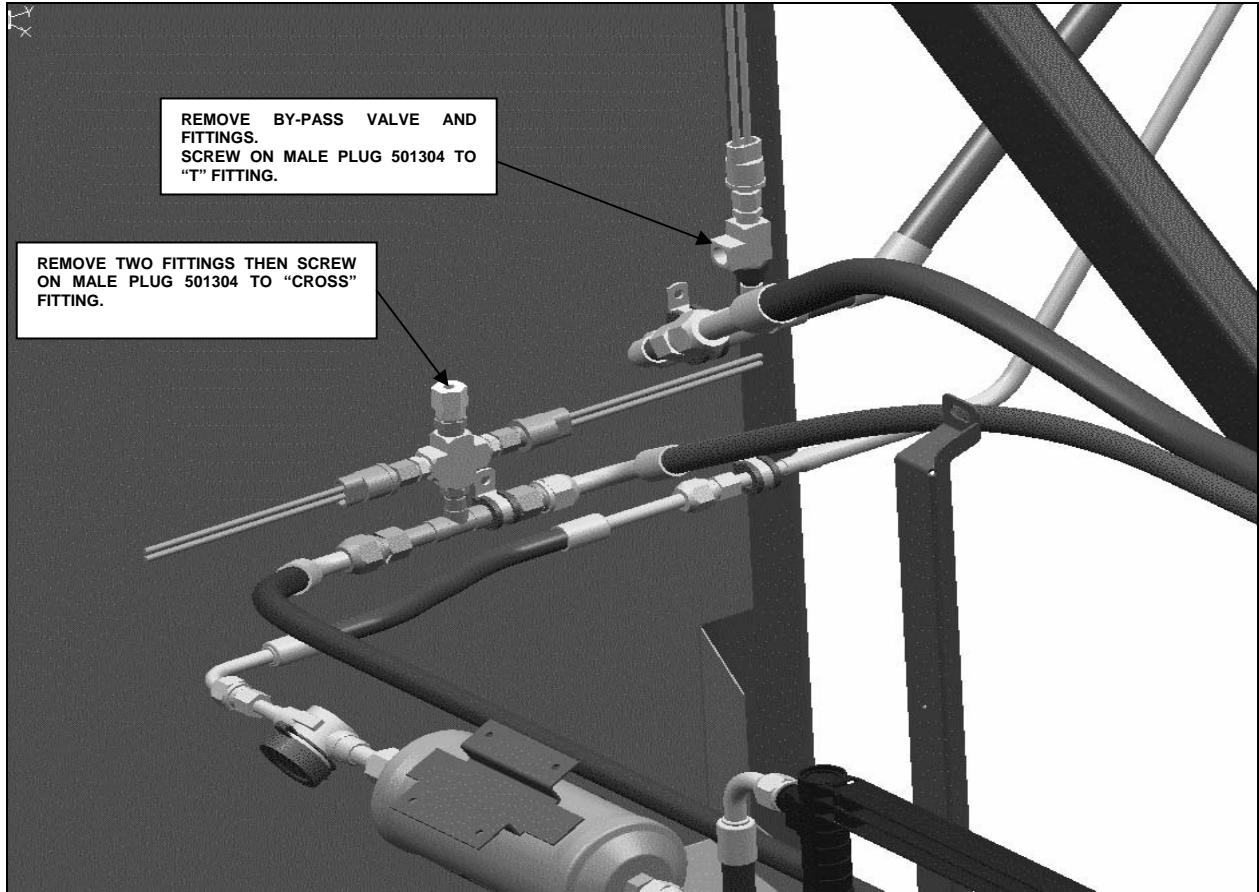


FIGURE 17