

# PREVOST

## Instruction Sheet

## IS-03045

### REPLACING THE SMALL A/C TECUMSEH COMPRESSOR WITH SELTEC COMPRESSOR ON XLII-45 COACHES

#### MATERIAL

**IMPORTANT: IN ADDITION TO KIT #454140, MAKE SURE THAT 220 ML OF PAG OIL IS AVAILABLE BEFORE PERFORMING THIS MODIFICATION; OTHERWISE ORDER PART #950382.**

Kit #454140 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
454062	Hose	1
454066	Valve Assembly, High Pressure Service	1
454067	Hose (37 13/16" long)	1
454068	Hose (65 15/16" long)	1
454071	Hose (30¾" long)	1
454072	Bracket, High Pressure Service Valve	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 (17¾" long)	1
454142	Hose (47 13/16" long)	1
454143	Arm, Compressor Belt Tensioner	2
500063	Screw, Cap, Hex Head M10 x 30 G10.9	3
5001565	Screw, Cap, Hex Head ½-13 x 1.0 G5	2
500211	Washer, Flat	4
500470	Washer, Split Lock	1
500574	Screw, Machine, Truss Head, Phillips SS	1

500747	Washer, Split Lock	1
500786	Nut, Hexagonal ZP 10-24	1
500804	Washer, Flat	3
500832	Washer, Flat	3
500877	Washer, Flat	2
500944	Washer, Split Lock	2
500957	Screw, Tapping, Binding Head, Phillips #10 x ¾	6
502681	Nut, Hexagonal, Self Locking, Nylon Insert M6-1	2
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
507280	O'Ring	1
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
561565	Seal, Cable	2
561566	Connector	1
561568	Pin, Male Contact	2
562060	Clamp, Retaining	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-03045	Instruction Sheet	1
FI-03045	Feuille d'instructions	1

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## PROCEDURE

**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. If system must be emptied, jump relay R36 in order to empty the parcel rack evaporators.
2. Remove Tecumseh compressor complete with its supports and belt tensioner.

**Note:** Set belt aside.

2. Remove by-pass valve, high and low pressure switches as well as non-return valve. Remove hose between low pressure switch and bulkhead fitting.
3. Remove hoses located on rear bulkhead, between former compressor and fittings.
4. Remove hoses between former compressor and condenser.

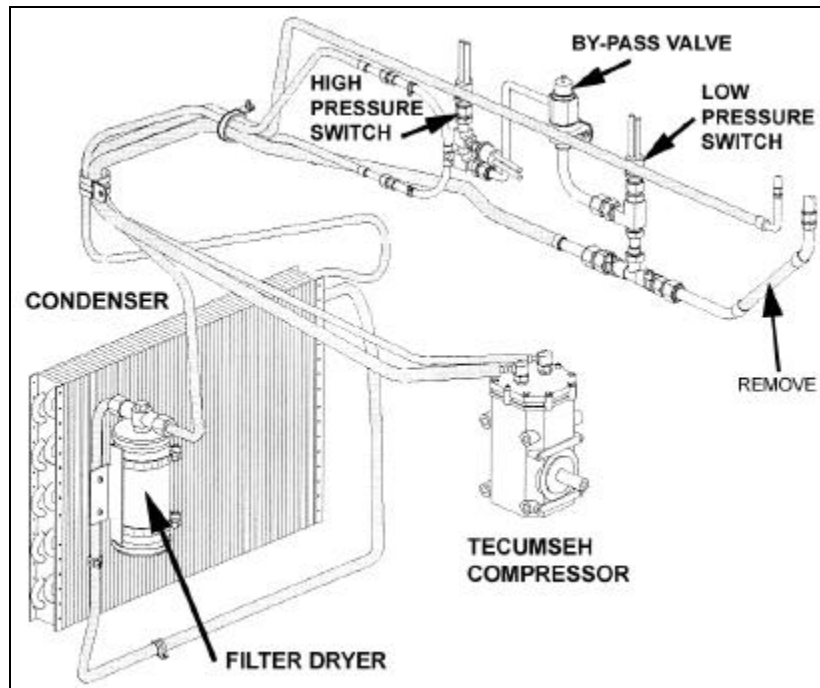


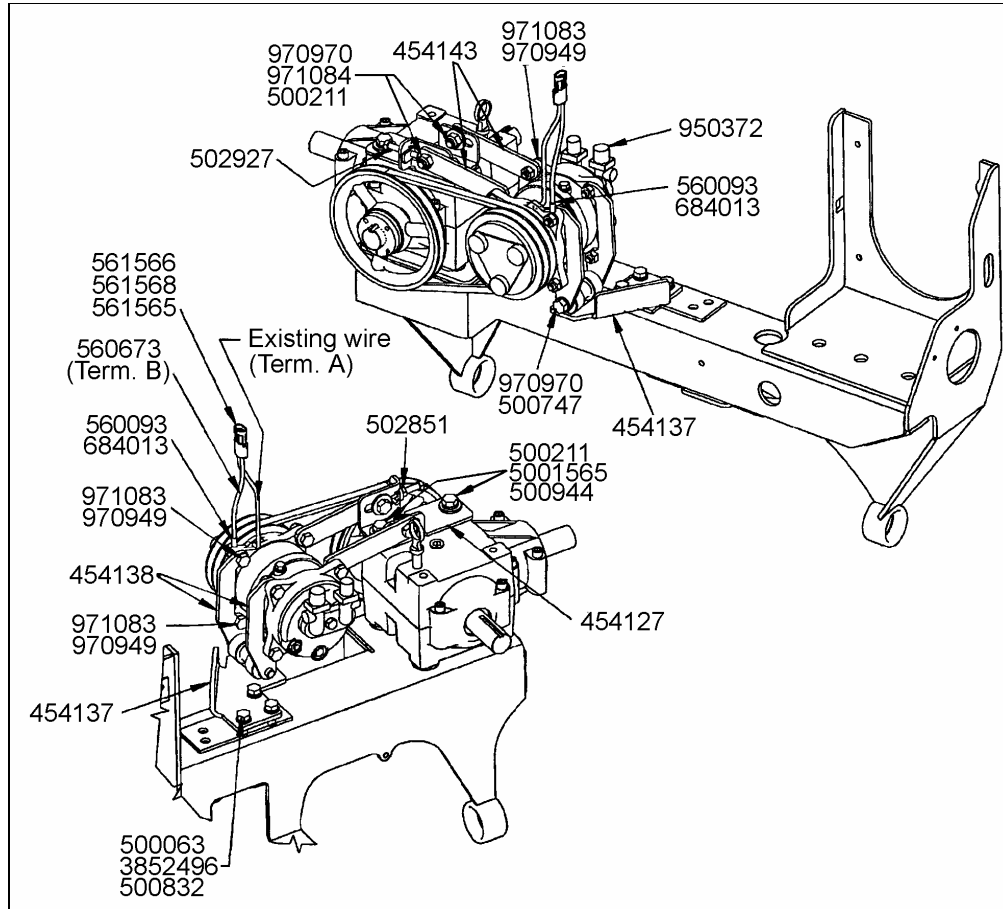
FIGURE 1: FORMER INSTALLATION

5. Remove condenser and its brackets and also the hose connecting condenser to filter-dryer.
6. Remove filter-dryer and also the hose connecting filter-dryer to rear bulkhead rigid tubing.

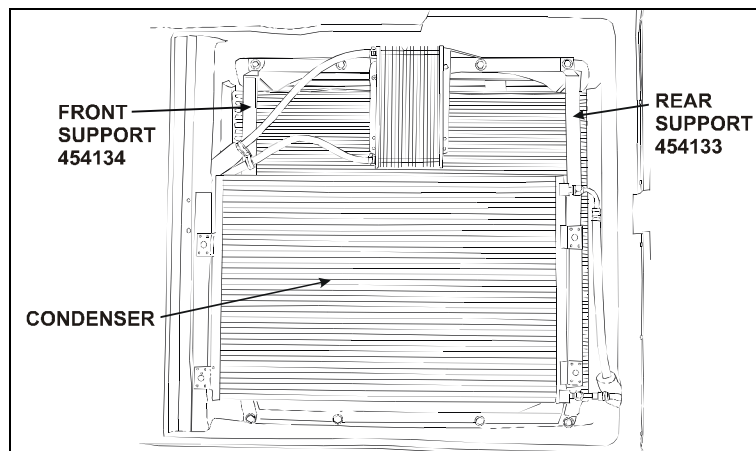
### INSTALLATION

1. 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 in vehicle onto its support.
2. Align radiator fan gearbox pulley with compressor pulley.
3. Using the supplied cap, close off the refrigerant hose hole supplying the former condenser.
4. Assemble the new condenser with its supports.
5. 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.

6. Drill another 1½” hole over the first one.
7. Install the condenser and a retaining clamp for the fuel hoses.
8. Install O’ring (507280) then temporary connect the low pressure service valve assembly with the new low pressure hose (454062).
9. 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.



**FIGURE 2: COMPRESSOR INSTALLATION**



**FIGURE 3: CONDENSER SUPPORTS**

**Note:** Instead of drilling a 1½" hole, you can cut the metal sheet.

10. Position high pressure service valve assembly to mark mounting holes. Drill and mount assembly.

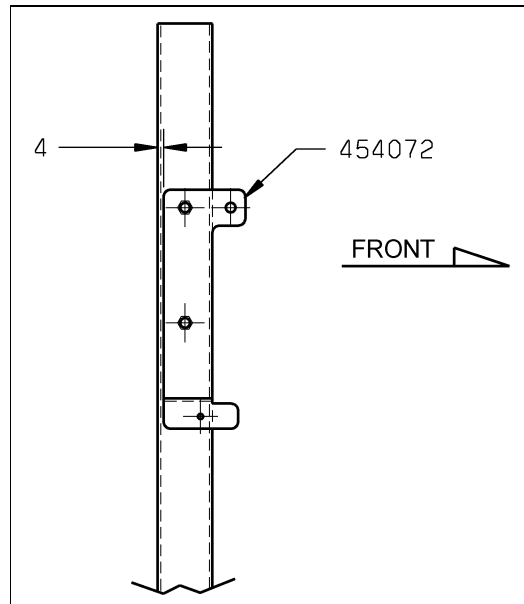


FIGURE 4

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

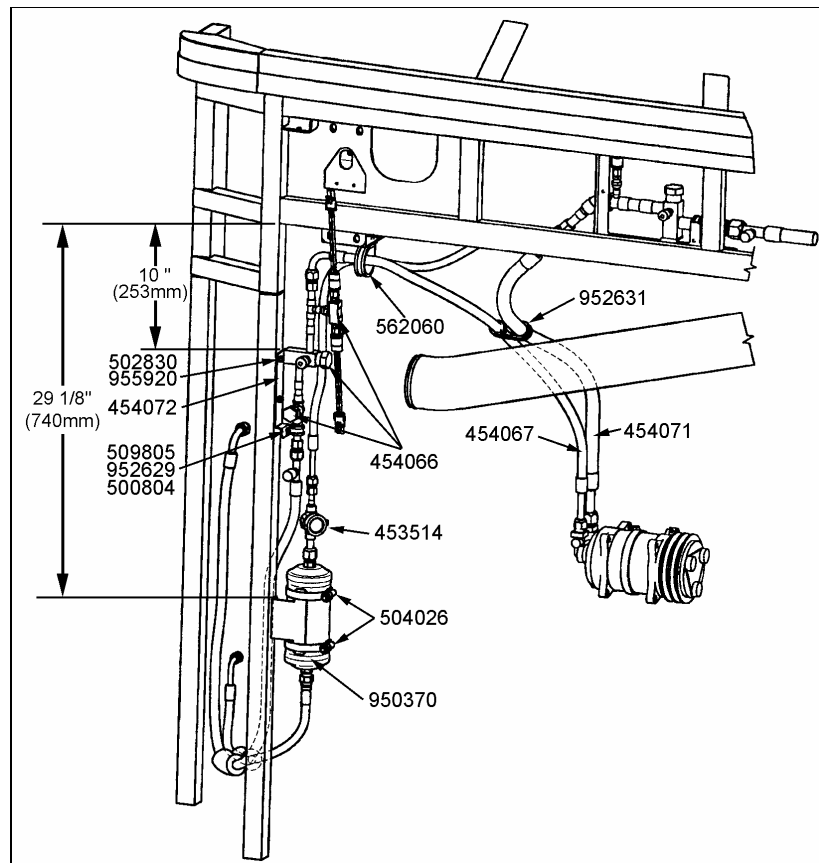


FIGURE 5: HIGH PRESSURE SERVICE VALVE & FILTER DRYER ASSEMBLY

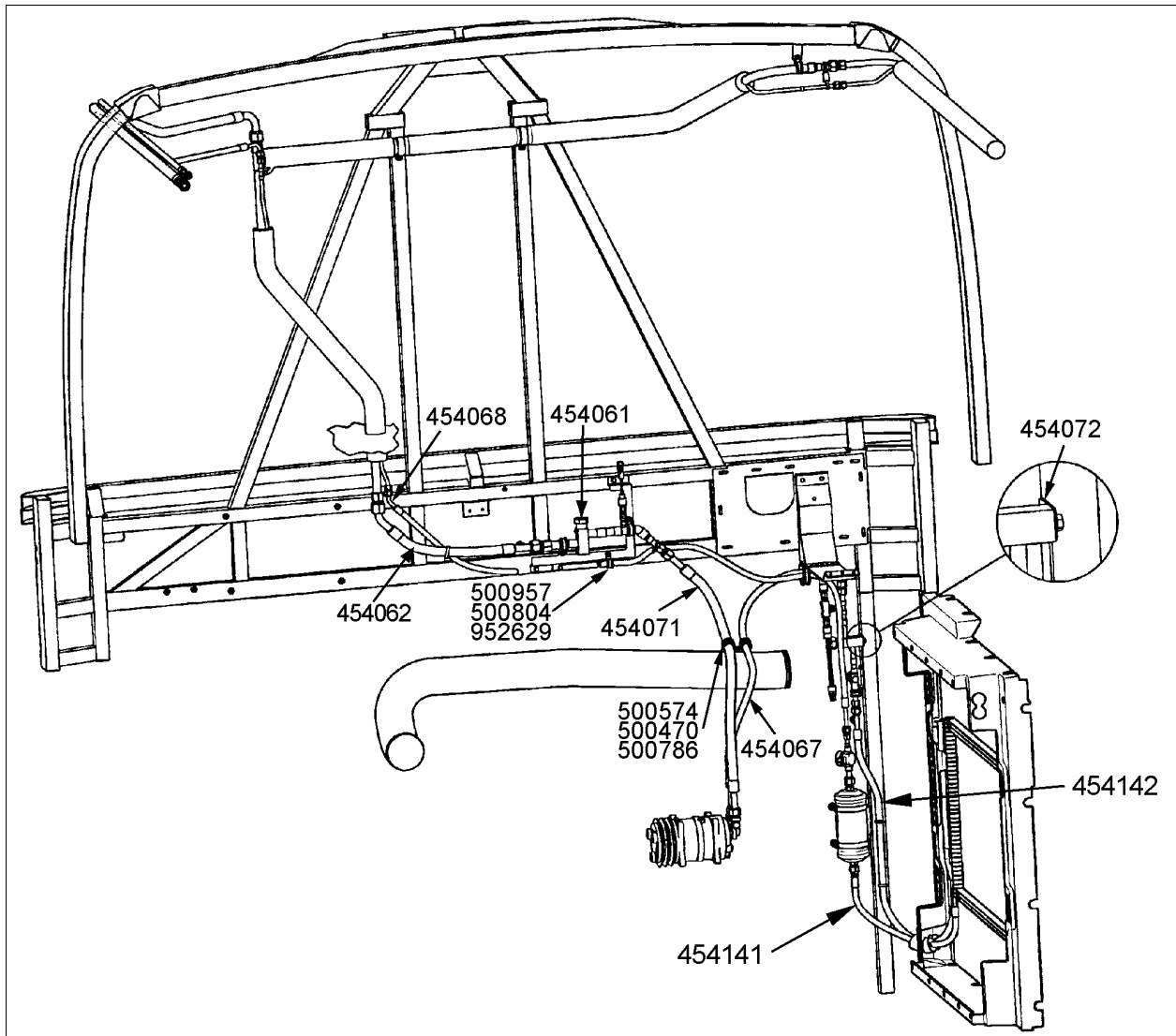


FIGURE 6: VIEW OF INSTALLATION – LOOKING AFT FROM INSIDE THE VEHICLE

12. Install hoses and secure.
13. Install compressor electrical wires and connect to compressor mounting (Refer to figure 2). Due to harness length, the high pressure switches may have to be inverted. If they are connected incorrectly the fan goes into high speed immediately on start-up.
14. Pressurize the system at 150 psi and check for leaks using soapy water.
15. Vacuum and charge the system with 5.5 lbs of 134a and 220 ml of PAG oil (Prévost #950382), at room temperature. The moisture sight glass should show  $\frac{3}{4}$  to full.

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

16. Operate the system on high load for at least 20 minutes.

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