TRSA30 Scavenger Refrigerant Recovery Unit

FOR USE ON CONTAMINATED R-134a AND R-1234yf MOBILE AIR CONDITIONING SYSTEMS.

CERTIFIED BY INTERTEK (ITS) TO MEET SAE J2851 & UL1963

OPERATION MANUAL

GENERAL INFORMATION

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Introduction

Congratulations on your purchase of the all new TRSA30 Scavenger Refrigerant Recovery unit. The TRSA30 is especially designed to recover contaminated R-134a or R-1234yf for Mobile A/C systems. The TRSA30 utilizes 2/3 HP 2 cylinder oil-less compressor.

Features:

- Service hose with Low Side couplers for R-134a and R-1234yf system hook-up
- CPS's exclusive 1 HP 2-cylinder Oil-less compressor
- Small High Side volume eliminates pump down system
- Ignition proof design for use with Class A2L refrigerants
- Integrated tank overfill sensor cord to connect to float built into the CRX430TS recover tank.
- Easy to carry handle
- Indicator Lights for Tank Overfill and High Pressure activation.
- High Pressure cutout switch
- Integrated Low Side Pressure Gauge

This manual contains important information on the proper procedures for operating this equipment. Please pay close attention to the: **Safety Information, Warnings,** and **Cautions** provided throughout this manual.

ALWAYS REMEMBER "SAFETY FIRST"

General Safety Instructions

ONLY QUALIFIED SERVICE PERSONNEL SHOULD OPERATE THIS UNIT. SOME COUNTRIES MAY REQUIRE THE USER TO BE LICENSED. PLEASE CHECK WITH YOUR LOCAL GOVERNMENT AGENCY.

DANGER - The recovery tank used with this unit contains liquid refrigerant. Overfilling of the recovery tank may cause a violent explosion resulting in severe injury or even death. **As a minimum, use a scale to continuously monitor the recovery tank weight.**

DANGER - Avoid breathing refrigerant vapors and lubricant vapor or mist. Breathing high concentration levels may cause heart arrhythmia, loss of consciousness, or even cause suffocation.

DANGER - ELECTRICAL SHOCK HAZARD - Always disconnect power source when servicing this equipment.

DANGER - EXPLOSION RISK - Do not recover flamable refrigerants.

CAUTION - All hoses may contain liquid refrigerant under pressure. Contact with refrigerant may cause frostbite or other related injuries. Wear proper personal protective equipment such as safety goggles and gloves. When disconnecting any hose, please use extreme caution.

CAUTION- handle with care when moving and using this refrigerant recovery equipment to avoid damaging the refrigerant tubing and components ,or increasing the risk of a leak.

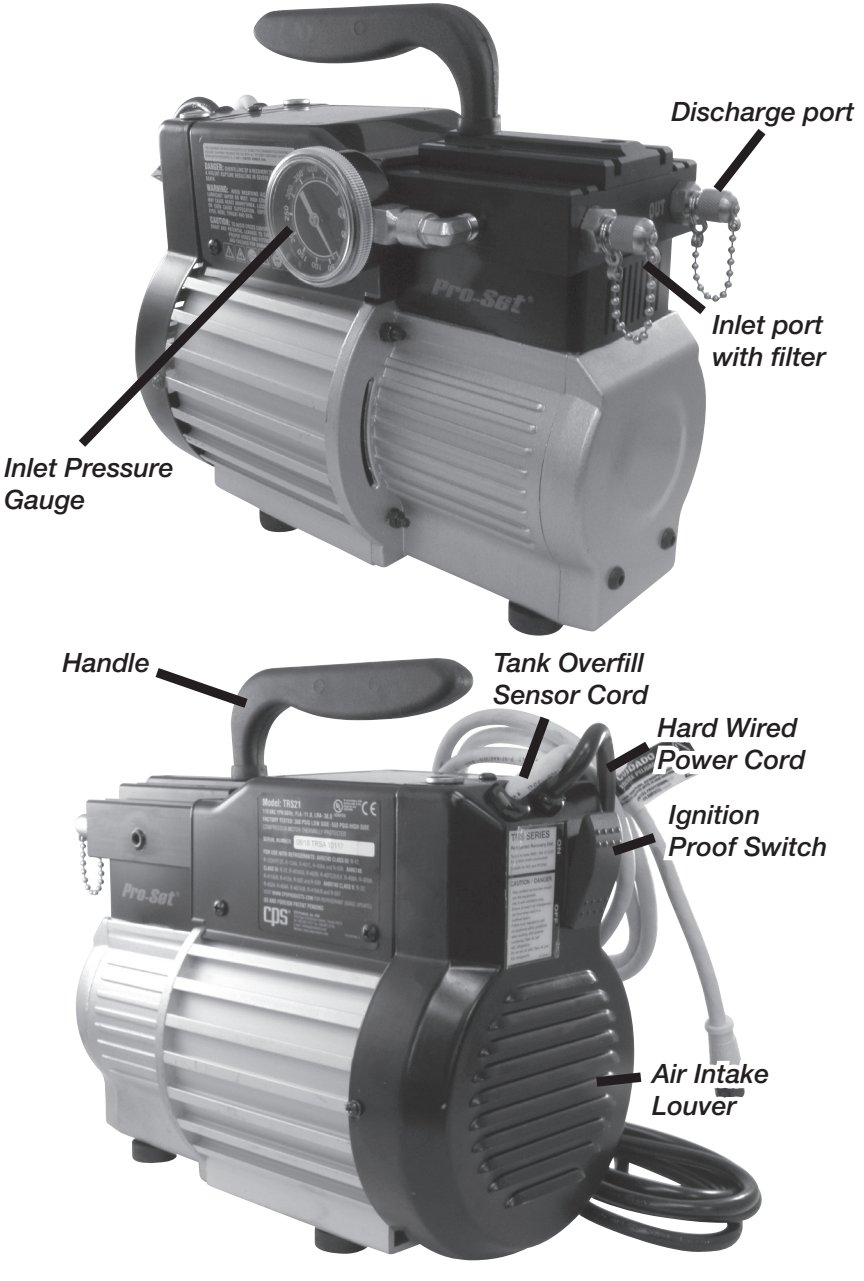
CAUTION - To reduce the risk of fire, avoid the use of extension cords thinner than NO. 14 awg. (2,5mm^2) to prevent the overheating of this cord please keep length to a minimum.

CAUTION - Do not use this equipment in the vicinity of spilled or open containers of gasoline or other flammable substances. Make certain that all safety devices are functioning property before operating the equipment.

CAUTION: R-1234yf is a Class A2 flammable refrigerant. Do not recover other flammable besides R-1234yf. Minimize leakage when recovering these refrigerants. USE IN A WELL VENTILATED AREA.

Model Number	TRSA30
Refrigerants	**Automotive:** R-134a, R-1234yf
Temperature Operating Range	32 ˚F - 120 ˚F (0 ˚C - 49 ˚C)
Power Source	115VAC 60Hz 1Ph
Maximum Power Consumption	1000 W
Weight	25.0 lb/ 11.4 kg
Motor Protection	Thermal Overload
High Pressure Shut-Off (PSI)	550 PSIG auto reset
Dimensions	12” Long x 1 O” High x 6” Wide
Contents Included	
30lb. DOT Recovery Tank with Overfill	
Low Side Service Hose	
R134a & R1234yf Low Side Service Manual Couplers	
Discharge Hose	

Unit Layout


Discharge port
Inlet port
with filter
Inlet Pressure
Gauge
Handle
Tank Overfill
Sensor Cord
Hard Wired
Power Cord
Ignition
Proof Switch
Air Intake
Louver
Pro-Set
OUT
Model: TR321
TR SERIES

OPERATION

REFRIGERANT RECOVERY

IMPORTANT: Before starting the recover of the refrigerant, a refrigerant identifier should be used to determine the type and purity of the refrigerant. Failure to properly identify the refrigerant could potentially expose the user to danger from flammable refrigerants and health hazards from toxic refrigerants. Cross contamination of refrigerants can also occur and would require special handling of the refrigerant.

1. Connect the TRSA30's discharge (OUT) port to the vapor port of the 30# DOT recover using the provided discharge refrigerant hose.

2. Connect the TRSA30 to the mobile A/C system using the provided low side service hose. Connect the low side service hose to the unit's inlet (IN) port. Connect either the R134a or R1234yf Low Side Coupler to the end of the service hose. Connect coupler to mobile A/C system low side port.

3. Connect the Yellow Overfill Sensor Cord to the float built into the 30# DOT recovery tank. Plug the unit's power cord into a suitable 115V power source.
   All connections should be done as shown in Diagram-1.
4. Open the vapor valve on the recovery tank.

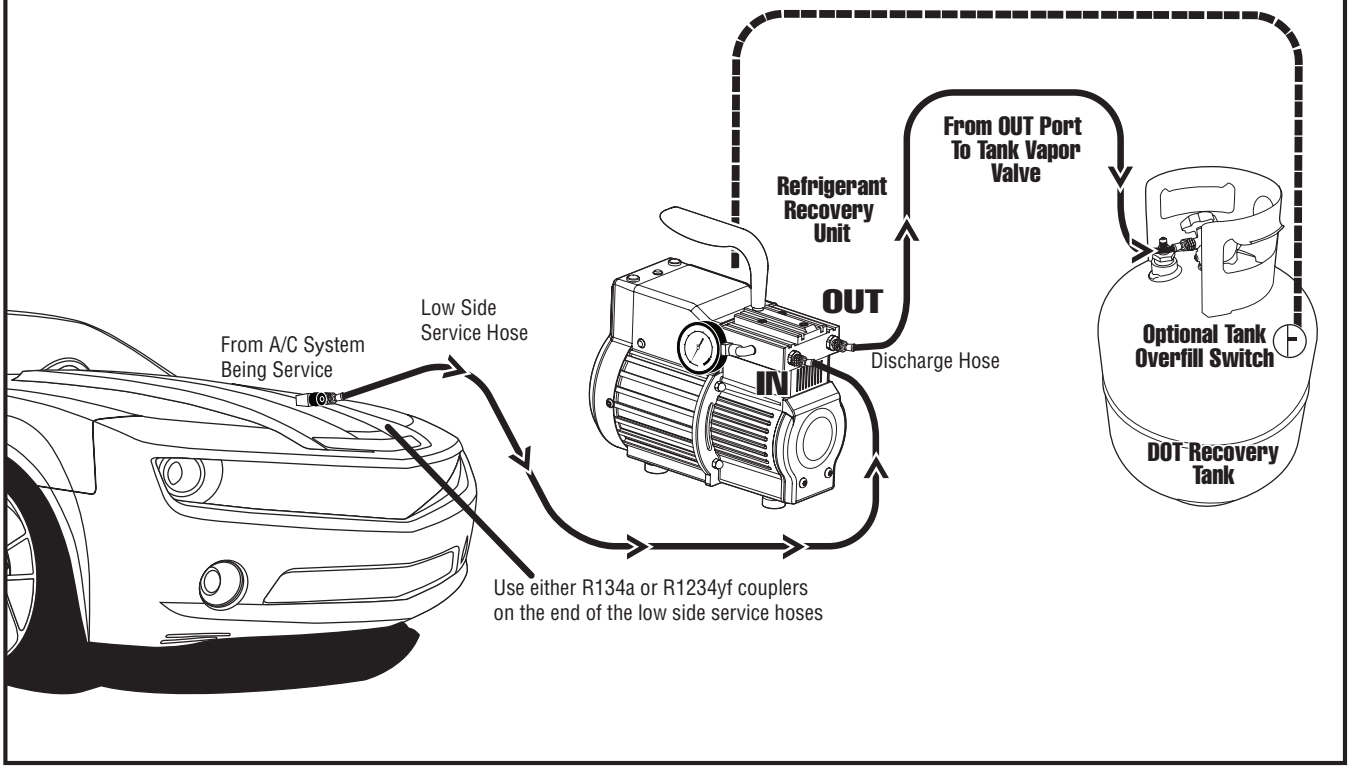
5. Start unit by pushing main power switch to the "ON" position. Open the Manual Low Side Coupler.

6. Monitor the A/C system pressure. Once the integrated low side gauge reaches 20" HG vacuum, turn the unit off. Disconnect the Low Side Coupler from the AC service port.

7. Close the vapor valve on the recovery tank.

8. Disconnect the discharge hose from the TRSA30 discharge port. A small amount of pressurized refrigerant will be released.

Diagram - 1


From OUT Port
To Tank Vapor
Valve
Refrigerant
Recovery
Unit
OUT
IN
Low Side
Service Hose
From A/C System
Being Service
Discharge Hose
Optional Tank
Overfill Switch
DOT Recovery
Tank
Use either R134a or R1234yf couplers
on the end of the low side service hoses

OPERATION

Routine Filter Maintenance

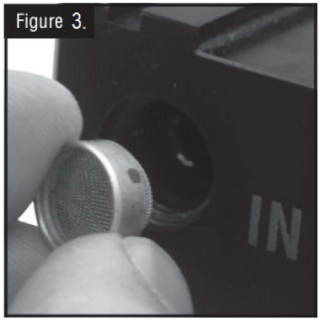
Filter Maintenance: The· unit is equipped with a 100-mesh screen filter. This filter should be checked periodically. A partially clogged filter will slow recovery rate.
Check filter cartridge as follows:

1. Use a 5/8" socket or boxed end wrench to remove IN port as shown in Figure 2.
2. Remove suction port-filter cartridge as shown in Figure 3.
3. Clean cartridge or replace with new cartridge. (CPS #CRXF3)
4. Inspect O-ring. Re-lubricate with compressor oil or equivalent.
5. Place filter cartridge back into suction port fitting.
6. Hand tighten this assembly back onto compressor IN port
7. Use 5/8" socket or boxed end wrench to tighten 1/8 of a turn. Do not over tighten; O-ring damage may occur.
8. Check connection for leaks.

FILTER DRIER REPLACEMENT IS NOW COMPLETE

Figure 2

Figure 3.



Service Parts and Repairs Cautionary Statement

This unit uses ignition proof components thus all service parts for this unit must be CPS certified and the repair work be done by CPS factory authorized service centers and personnel. This is to minimize the risk of ignition due to incorrect parts or improper service.

Trouble Shooting Chart

Problem:	**The unit will only pull down to 0 pressure or a slight vacuum.**
Solution:	Check all LO side connections for possible leaks. If problem persists, check vacuum level directly on the compressor inlet port.
Solution:	Check pressure differential at 400 PSIG discharge pressure. At 400 PSIG, the unit should pull a minimum of a 5" hg. vacuum. If compressor looses its capability of meeting this differential, the compressor seals may need to be replaced.
Problem:	**HP Red LED lights up, unit starts for a few minutes then shuts off.**
Solution:	The high pressure switch has activated. Make sure the discharge valve and recovery tank valve(s) are open. Check for any other restrictions on the discharge port of the unit. Correct restriction. Restart the unit.
Problem:	**TOS Red LED lights up and the unit shuts off or will not start.**
Solution:	1. Check to make sure TOS cord is properly plugged into the recovery tank float. 2. Check tank weight to verify that the tank is full. Empty or replaced tank.
Problem:	**The unit recovers at a very slow pace.**
Solution:	Check for restrictions on the suction side connections. Make sure manifold valves are open. Overtighted hose connections can collapse the rubber gaskets causing a restriction.