


RECOVERY UNITS - CPS

CPS - TR21E Recovery Unit

Airefrig Part Number	Description	List Price Ex GST
TR21E	 Oil-Less Refrigerant Recovery Machine Flow Rate for Direct Vapour : Up to 56 kg/hr Flow Rate for Direct Liquid : Up to 271 kg/hr Flow Rate for Push Pull Liquid : Up to 768 kg/hr	\$2,678.40

Features

- Maintenance free oil-less compressor design
- Aesthetically unique industrial type styling
- Precision machined from aluminum and steel components
- Permanently lubricated and sealed main bearings
- Improved piston seal design for less leakage and deeper vacuums
- 550 psig / 37.9 Bar high pressure cutoff switch with LED indicator
- Cleanable 100 mesh inlet filter
- Weighs less than 11.3 kg
- Fastest recovery rates in its class



Specifications

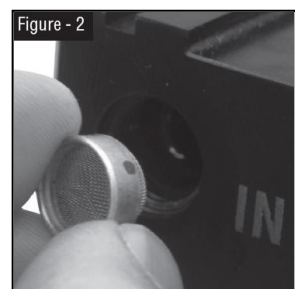
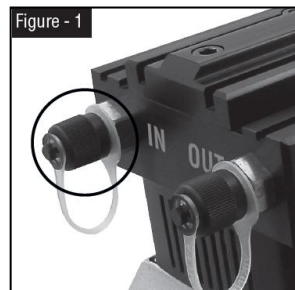
Compressor Type:	2 Cylinder Oil-less Reciprocating Compressor
Dimensions:	15cm Wide x 30cm Long x 23cm High
Weight:	11.3 kg / 25 lbs.
Operating Temperature Range:	0°C to 49°C
Power Source:	220-240V 50/60Hz
Power Consumption:	850 W
Filtration:	Cleanable 100 - mesh screen integrated into Suction Port
Overload Protection:	Motor Thermally Protected
High Pressure Shut-Off:	550 psig / 37.9 Bar
Refrigerants:	R-12, R-134a, R-401C, R-406A, R-500, R-401A, R-409A, R-401B, R-412A, R-411A, R-407D, R-22, R-411B, R-502, R-407C, R-402B, R408A, R-509, R-407A, R-404A, R-402A, R-507, R-407B, R-410A

Filter Maintenance

The TR21 is equipped with a 100-mesh screen filter which should be checked periodically as a partially clogged filter will slow down the recovery rate of this unit.

Check the filter cartridge as follows

1. Use a 5/8" socket or wrench to remove the IN port as shown in Figure – 1
2. Remove the suction port-filter cartridge as shown in Figure - 2
3. Either clean the current cartridge or replace with new cartridge (P/N 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 the TR21
7. Use a 5/8 socket or boxed end wrench to tighten 1/8 of a turn (Do Not over tighten – over tightening may damage the O-ring)
8. Check the connection for leaks




Piston Seal Maintenance

In cases where a customer is using this unit for virgin refrigerant recovery, it is recommended to add 0.25 ounce of refrigerant oil to the inlet port before each use.

RECOVERY UNITS - CPS

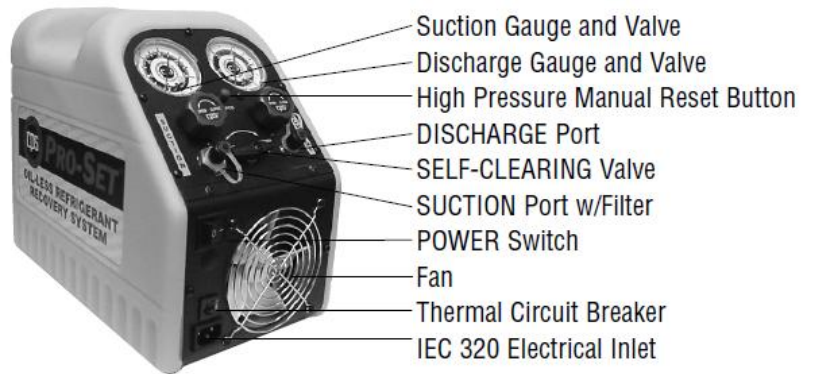
CPS – CR500E Recovery Unit

Airefrig Part Number	Description	List Price Ex GST
CR500E	 Oil-Less Refrigerant Recovery Machine Flow Rate for Direct Vapour : Up to 20 kg/hr Flow Rate for Direct Liquid : Up to 42 kg/hr Flow Rate for Push Pull Liquid : Up to 187 kg/hr	\$2,386.20

The CR500E is an oil-less refrigerant recovery machine designed to pump liquid or vapour refrigerant for commercial & residential refrigeration systems.

Features

- Maintenance free oil-less compressor
- On board SUCTION and DISCHARGE gauges.
- 0 to 55 bar discharge gauge (suit R-410A)
- Compact physical size.
- Lightweight only weighs 9.1 kg
- Integrated easy to use carrying handle.
- High Pressure manual reset button set at 38 bar.
- Easy access & secure filter accesses
- Replaceable or cleanable filter cartridge
- “On the Run” SELF-CLEARING valve.
(no need to turn off the unit when switching from recovery to self-clearing)



Specifications

Compressor Type:	1/2 HP Oil-less Reciprocating Compressor
Dimensions:	20cm wide x 37cm long x 30.5cm high
Weight:	9.1 kg
Operating Range:	0°C to 49°C
Power Source:	220/240 VAC 50Hz 1Ph
Power Consumption:	500 W
Suction Pressure Gauge:	-1 to 35 bar
Discharge Pressure Gauge:	0 to 55 bar
Filtration:	Cleanable 100-mesh screen integrated into Suction Port
Shut-off Valves:	Suction piston type & Discharge diaphragm type manifold valves
Construction:	Heavy gauge aluminum chassis with high density polyethylene case
Overload Protection:	5A thermal circuit breaker
High Pressure Shut-off:	38 bar (550 psig)
Control System:	Dependable electro-mechanical interlock system
Refrigerants:	R-12, R-134a, R-401C, R-500, R-401A, R-409A, R-401B, R-407D, R-22, R-502, R-407C, R-402B, R408A, R-509, R-407A, R-404A, R-402A, R-507, R-407B, R-410A



Note: CPS CR500 Recovery Unit maintenance and service info is in the following pages.

RECOVERY UNITS

CR500 Recovery Unit - Maintenance and Service Information

The CR500 and CR600 are both oil-less recovery machine designed for high performance with minimal maintenance, there are some simple procedures which form a routine to keep peak performance.

Filter Maintenance:

The CR Series is equipped with a 100-mesh screen filter. The filter should be checked periodically. A particularly clogged filter will slow down the recovery rate of this unit.

Replace the filter cartridge as follows:

- Use a 7/8" socket or boxed end wrench to loosen the suction port as shown in fig 1.
- Once loose, remove the suction port filter cartridge assembly as shown in fig 2.
- Either clean the current cartridge or replace with new cartridge.
- Inspect O ring. Re-lubricate with compressor oil or equivalent.
- Place filter back into suction port fitting.
- Hand tighten this assembly back on to the CR unit.
- Use a 7/8" socket or boxed wrench to tighten 1/8 of a turn. Do not over tighten, damage to the O ring may occur.
- Check the connection for leaks.



Fig 1



Fig 2

Service of control valves (diaphragm type)

Depending on the age of the unit the CR500 and CR 600 can use either piston or diaphragm control valves. The service kit for the piston type is part number MXPVO and the service kit for the diaphragm is M2XRK.

The CR500 and CR600 use two Teflon disc type valves. The valves are used only for the manifold assembly valves and can be easily replaced without removing this assembly from the unit.

Peel the label on the valve knob back to expose a Phillips head screw. Remove the screw. Use a 1" socket wrench to remove brass valve body. Remove and discard the Mylar disc, Teflon disc, brass pin and spring from valve cavity. Install new valve parts in the order they were removed. Tighten the brass valve body as follows: Hand tighten, then use 1" socket wrench until snug. Turn 1/8 of a turn. Do not over tighten. Check for leaks. Secure valve knob on valve stem. Detailed instructions are included in the M2XRK packet.

Service of Control Valves (piston type)

Locate and undo the screw securing the valve handle to the shaft. Remove the screw. Remove the handle using a 5/8" A/F spanner, undo the hex nut and remove assembly. Remove the spindle from collet piece. Remove O rings and undo screw which holds in the Teflon seal. Replace the Teflon seal and O rings. Lightly grease O rings and screw shaft. Re-assemble valve assembly and place in manifold. Tighten hex nut to 25 foot pounds. (tight !!) Attach control knob and re-fit screw.

SUBMERSIBLE RECOVERY SUB-COOLER

CPS – Submersible Recovery Sub-Cooler

Airefrig Part Number	Description	List Price Ex GST
SC410A	Submersible Recovery Sub-Cooler (supplied with bucket)	\$314.40

The effects of ambient temperature and elevated tank pressures on the speed of the refrigerant recovery process are in many cases more important than the speed of the recovery machine itself.

As the ambient temperature increases, the pressure in the recovery cylinder increases, significantly reducing the recovery speed and in many cases can lead to a high pressure shutdown as the recovery equipment and tank pressure limits are reached.

The Pro-Set SC410A submersible sub-cooler significantly reduces the temperature and pressure of recovered refrigerant during the recovery process, dramatically improving the recovery speed and high ambient performance of all commercially available recovery machines in addition to extending the life of the equipment.

The Pro-Set SC410A is a patent pending "Innovation in Design" from CPS, intended for use with all major brands of refrigerant recovery equipment.

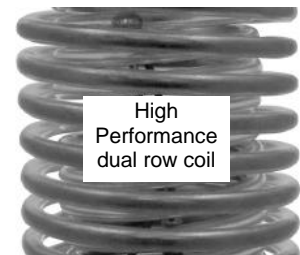
It is engineered for harsh field conditions and is extremely easy to use.

- Dramatically improves the recovery speed & high ambient performance of all commercially available recovery machines.
- Engineered to significantly reduce temperature and pressure of recovered refrigerants, including R-410A.
- Please refer to the diagrams shown for details on the proper operation of the SC410A.

Specifications

- Gauge : PSI/Bar oil filled
- Fittings : 1/4" SAE male flare
- Construction: Environmentally treated metal
- Dimensions: 110mm Diameter x 230mm High

Integrated liquid filled pressure gauge



High Performance dual row coil

