



LINSTRUMENT

3/4 hp recovery unit

TREK-ONE



Quick start guide

1. TECHNICAL SPECIFICATIONS

Refrigerants	Cat III: R134a, 1234yf ... Cat IV: R22, R407C, R407D ... Cat V: R404A, R410A, R507, R32 ...			
Power supply	220-240V - 50/60Hz			
Motor	HP single piston			
Motor speed	1450 rpm @ 50Hz			
Max. current	220V – 4A			
Compressor	Oil-less, air-cooled, piston			
HP pressure switch	38.5 bar (558 psi)			
Operating temp.		Cat III	Cat IV	Cat V
	Vapor	0,20	0,25	0,25
	Liquid	1,60	1,80	2,20
	Push-pull	4,60	5,60	6,30
Environment	0 – 40°C / 32 – 104°F			
Dimensions	400 x 250 x 360 mm			
Net weight	13.5 kg			

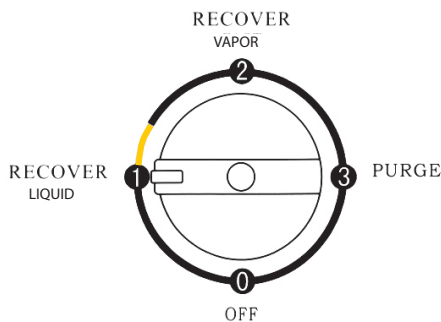
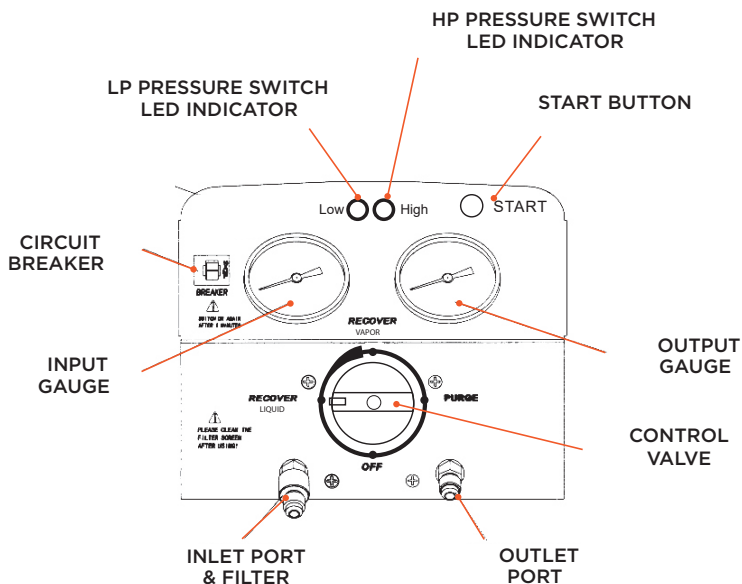
2. SAFETY RECOMMENDATIONS

- **Read this user manual carefully and become familiar with the functions of the equipment before commissioning TREK-ONE.**
- TREK-ONE is strictly reserved for professional use by operators holding the certificate of competence for handling refrigerants, within the meaning of **article R. 543-99 of the environmental code.**
- TREK-ONE must only be used with transfer and recovery cylinders intended for this use.
- Recovery and transfer cylinders must never be filled to more than 80% of their capacity in order to allow gas expansion in case of high temperatures and prevent any risk of explosion. For this it is mandatory to use a scale that allows at any time to monitor the filling level of the cylinder.
- The recovery unit is equipped with a safety pressure switch set at 38.5 bar which stops the machine if the pressure exceeds this threshold. In such a case, it is possible that the recovery cylinder is filled to 100% in liquid, which may represent a serious danger for the operator and the environment. It is imperative to transfer the excess liquid to another cylinder.
- It is recommended to wear safety glasses and protective gloves each time TREK-ONE is used.

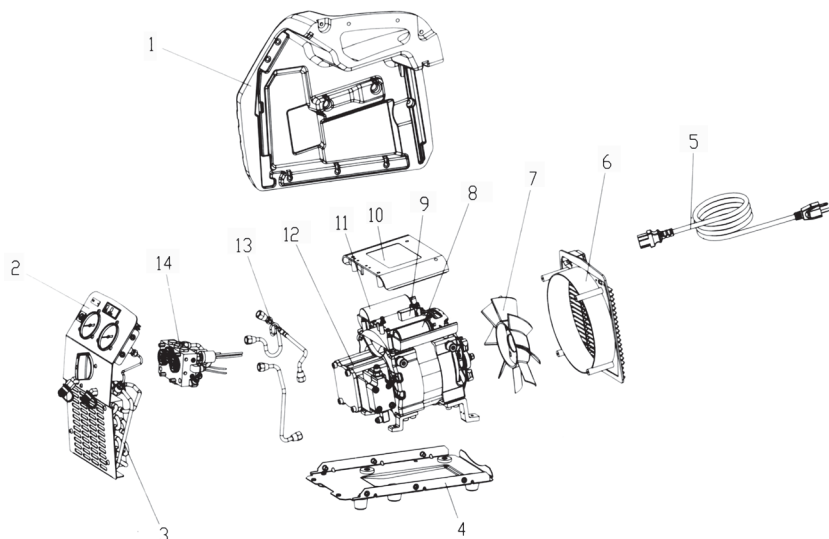


- TREK-ONE must be used in a well-ventilated place protected from rain and direct sunlight.
- TREK-ONE **must not be used** with highly flammable A3 category refrigerants (e.g. R290, R600a...).
- In order to protect the equipment, it is recommended to always connect the filter to the inlet port of the recovery unit (suction side).

3. INTERFACE



4. EXPLODED VIEW



N°	COMPONENTS
1	Housing
2	Interface panel
3	Condenser
4	Base
5	Power cable
6	Fan grille
7	Fan

N°	COMPONENTS
8	Start capacitor
9	Electrical board
10	Electrical box
11	Run capacitor
12	Compressor
13	Copper tubes
14	Control valve

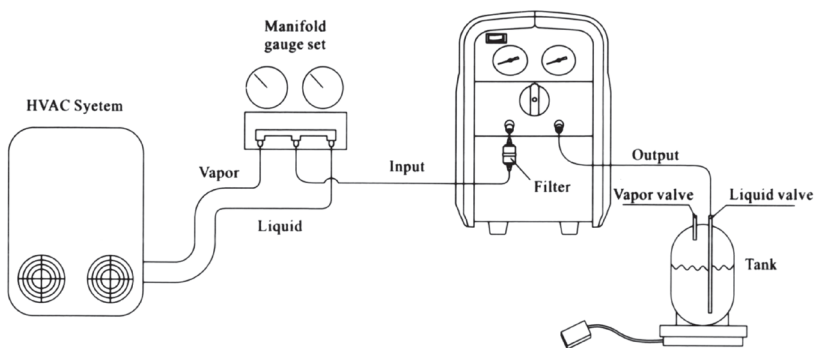
5. RECOVERY MODE

1. Set the valve to position “1”
2. Connect the hoses correctly and firmly (see diagram below).
3. Switch on the recovery unit.
4. Open the gas cylinder valve.
5. Open the liquid valve (HP) of the manifold.
6. Open the liquid valve of the system.
7. Press the START button.
8. Once the liquid has been recovered, open the vapor valve (LP) of the manifold as well as that of the system.
9. Slowly turn the control valve to position “2”.

Note :

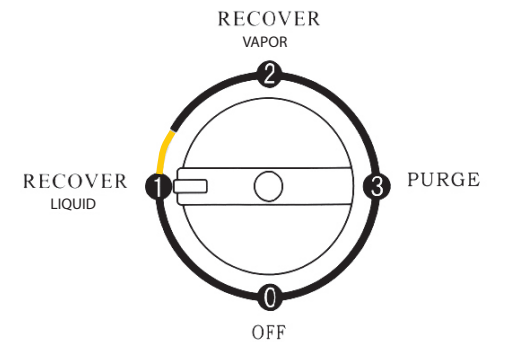
In case of liquid slugging in the compressor, return the control valve to position “1” until the impacts in the compressor stop.

10. The recovery unit will stop automatically when the recovery is completed. Then proceed with purging the equipment.



6. SELF-PURGE MODE

1. Turn the control valve to position “3”
2. When the desired vacuum is reached, finish the operation as follows :
 - Close the recovery cylinder valve,
 - Close the hose valves,
 - Close the LP and HP manifold valves,
 - Close the system valves,
 - Set the valve to position “0”,
 - Screw the caps onto the inlet and outlet of the recovery unit.

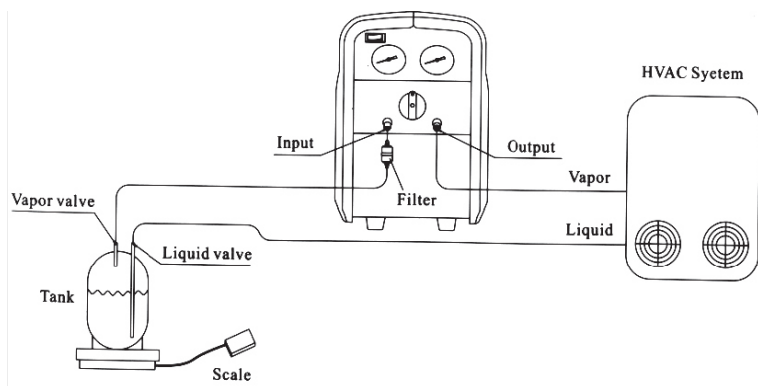


⚠ WARNING: After each use of the recovery unit, make sure that no refrigerant remains inside the machine. Liquid refrigerant could under certain conditions expand and damage the equipment and/or cause leaks.

7. PUSH-PULL MODE

It is recommended to use this method when the quantity of liquid to be recovered is greater than 10 kg.

1. Set the control valve to position “1”,
2. Connect the hoses according to the diagram below,
3. Press START,
4. Open the gas and liquid valves of the cylinder,
5. Set the control valve to position “2” to start push-pull recovery.
6. When the scale indicates a stable or slightly varying value, this means that the entire liquid phase has been recovered. Close the gas valve of the recovery cylinder and press START again.
7. Close all valves, disconnect the hoses then reconnect them according to the standard recovery method in order to recover the remaining gas in the system.
8. Finish the operation by purging the recovery unit.



⚠ WARNING : Due to the siphon effect produced by this method, it is possible that fluid transfer continues even after the machine has been stopped. It is therefore imperative to carefully monitor the quantity of fluid transferred into the cylinder and manually close its valves in order to avoid overfilling.

8. TROUBLESHOOTING

FAULT	PROBABLE CAUSE	SOLUTION
The fan does not rotate	Mechanical damage	Replace the fan and/or return the product to the factory for repair
The compressor does not operate	The HP pressure switch has tripped (red LED on)	1. Reduce the pressure in the recovery unit 2. Check that the hose valves are not closed 3. Turn the central valve two turns and set to position "1"
The compressor is blocked	1. The discharge pressure is too high 2. The motor or a component is damaged	1. Turn the valve two turns and set to position "1" 2. Return the product to the factory for repair
The compressor starts but stops after a few minutes	1. The HP pressure switch trips due to improper handling such as: outlet valve closed, cylinder valve closed... 2. The motor protection trips 3. The recovery is completed and the green LED is on 4. Overload during liquid recovery, the LED lights up then goes off 5. The circuit breaker has tripped	1. Read the manual carefully and follow the indicated procedures 2. Wait at least 15 minutes before restarting the motor 3. Proceed with purging the system 4. Turn the control valve two turns and set to position "1" during liquid phase recovery 5. Let rest at least 5 minutes before resetting the circuit breaker and starting the recovery unit
The recovery is abnormally slow	1. The pressure in the cylinder is too high 2. The piston is damaged	1. Cooling the cylinder may allow the pressure to decrease 2. Return the machine to the factory for repair
The vacuum is not deep enough	1. An air intake comes from the hoses 2. The recovery unit leaks	1. Tighten all hoses properly 2. Return the machine to the factory for repair

NOTES

LINSTRUMENT
8 Chemin des Tards-Venus
69530 Brignais - FRANCE
www.linstrument.com



N.B. LINSTRUMENT reserves the right to make changes without prior notice.