



MECHANICAL MANIFOLD INSTRUCTION



Suit For:
ST-B168H/L
ST-B268 **ST-B280**



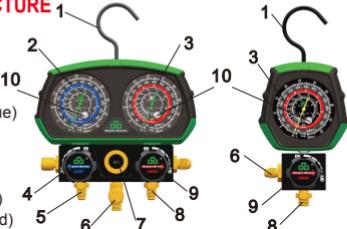
PREMIUM REFRIGERATION TOOL SERIES

Thanks for purchasing  products. For safe and correct using, please read this user instruction carefully before using the product.

1. EXTERNAL VIEW & STRUCTURE

PRODUCT DIAGRAM:

1. Hook
2. Low pressure gauge (blue)
3. High pressure gauge (red)
4. Low pressure valve switch (blue)
5. Low pressure in port (1/4SAE)
6. Out port (1/4SAE)
7. Sight glass
8. High pressure in port (1/4SAE)
9. High pressure valve switch (red)
10. Calibration screw



2. PRODUCT FEATURE, APPLICATION AND SAFETY WARNING

PRODUCT FEATURE:

1. 6 glades high accuracy damping shock proof gauge
2. Calibration screw
3. Ball valve
4. 90 degree limit valve switch
5. 100% inspected, no leakage

APPLICATION FIELD:

Used for refrigeration maintenance (refrigerants including CFC, HCFC, HFC etc), (such as R32/R600/R22/R134A/R404A/R410A etc) field of filling and evacuation work.

Application: to fill air-conditioner system and real-time system pressure display.

Main parts: hook, low side gauge(blue), high side gauge(red), low pressure port, high pressure port, filling port, low & high pressure valve hand wheel(optional: tri-color high pressure hoses, low & high side quick couplers).

SAFETY WARNING



To avoid personal injury,
please read carefully and follow this operation manual.

- Please wear safety glasses and gloves when using refrigerants.
- To prevent personal injury of refrigerants, Do NOT contact refrigerants directly.
- To prevent manifolds or charging hoses damage and refrigerants leakage, DO NOT contact manifolds to high temperature parts of machines.
- To avoid accidents, DO NOT aim sight glass to people.

3. OPERATION GUIDE

OPERATION MANUAL

★ LOW/HIGH PRESSURE GAUGE SELECT

Blue arrow LOW is low pressure valve, red arrow HIGH is high pressure valve

★ MECHANICAL MANIFOLD VALVE SWITCH

90 degree limit valve switch, arrow point to ON/OFF, blue low (red high) pressure valve switch turn in clockwise/counter clockwise to ON/OFF valve.

★ MECHANICAL SINGLE MANIFOLD

90 degree limit valve switch, arrow point to ON/OFF, blue low (red high) pressure valve switch turn in clockwise/counter clockwise to ON/OFF valve.

Before connect to system, please check if pressure gauge pointer is in ZERO position. If NOT, open gauge cover to calibrate (10) pointer to ZERO position.

CONNECT TO SYSTEM

- * Close low(4) & high(9) pressure valves first;
- * Connect port(5) to blue hose (low pressure quick coupler) and then connect to low pressure port of system and lock tightly;
- * Connect port(8) to red hose (high pressure quick coupler) and then connect to high pressure port of system and lock tightly;
- * Connect port(6) to yellow hose, vacuum and lock tightly.

EVACUATION(NOTE: this operation must be done when system is in ordinary atmosphere pressure. If NOT, you must release system pressure first.)

- * After above operation finished, turn on vacuum pump;
- * Open low pressure valve(blue)(4), high pressure valve(red)(9), and then open low & high pressure quick couplers system now start evacuation.
- * After 10~30mins, check system pressure if it's vacuum, if not, check if any leakage and fix it and then repeat evacuation.
- * Close low(4) & high(9) pressure valves together, then turn off vacuum pump.

③ REFRIGERANT FILLING TO SYSTEM

- * Disconnect yellow hose from vacuum pump, then connect yellow hose to refrigerant cylinder, open cylinder valve (place cylinder in positive position).
- * Open valve core in manifold to evacuate air in yellow hose.
- * Place cylinder in negative position (up side down), open low pressure valve (4), high pressure valve(9), now refrigerant is being filled to system
- * When requested refrigerant is filled (according to quantity which system manufacturer requested), close low pressure valve(4) and high pressure valve(9), then place cylinder in positive position.

* Start system for try (approx 5~10 mins), verify system pressure and temperature.

- * If filled refrigerant is not enough, place cylinder in positive position, open low pressure valve(4) slowly (now it's forbidden to open high pressure valve(9), filling appropriate quantity of refrigerant).

* If refrigerant had been filled too much, close cylinder, open high pressure valve(9) slowly, release refrigerant from manifold valve core (be careful of spray refrigerant injury), then close high pressure valve(9), recheck system pressure and temperature, repeat this step until system pressure reach ordinary pressure.

* After system running normally, close cylinder and valves (4)(9), disconnect quick couplers (low & high) from system (be careful of high temperature scald).

④ USE & MAINTAINCE

- * For high(9) & low(4) pressure valves testing, to avoid damage of gauges, choose wrong gauge is prohibited.
- * Using refrigerants which are not compatible with the manifolds is prohibited.
- * Don't use too much effort to close low(4) or high(9) pressure valves.
- * After using, open valves, safekeeping and avoid shocking or dropping.
- * Read this INSTRUCTION MANUAL carefully before using or operate under instruction of specialized persons.