

# ARIAZONE 601

## RECOVERY-RECYCLING SYSTEM

Thank you for choosing **ARIAZONE** as your workmate, I am sure that if treated with reasonable care and regular maintenance it will assist you in your daily air conditioning maintenance and repairs for years to come.

### **PLEASE NOTE**

**All the information in this service manual was current when it was printed. Because of continuous design upgrades and model improvements, it is not possible to guarantee that the information in this manual is correct.**

**The manufacturer provides the following information in good faith and will not accept any liability because of omissions due to the passage of time.**

**All users should check with the manufacturer or their local distributor if they have any queries not covered in this manual.**

### **WARNING!**

#### **FROSTBITE & BLINDNESS**

**Always use protective gear when handling refrigerant.**

**Refrigerants are extremely dangerous. They can cause serious frostbite or blindness; therefore they MUST be handled correctly.**

**Disconnect lines and hoses with extreme caution! Pressurised refrigerant may be present in lines and hoses. Always point lines and hoses away from you and anyone nearby.**

#### **HIGH VOLTAGE**

**This unit operates at high voltage, 240v.ac use extreme care.**

**DO NOT use this equipment in wet environment, which can cause injury or death**

**DO NOT use equipment with damaged power leads, which can cause injury or death.**

**Replace power lead if any damage occurs.**

**Always disconnect unit from power point before removing cover or beginning any service work**

#### **GOOD VENTILATION**

**Always work in a well-ventilated area when handling refrigerants.**

**Inhaling refrigerant and oil vapours can be harmful to your health or fatal.**

## PREPARING 601 FOR USE

[1] Connect 601 **suction port** to **A/C** or refrigeration system, via hand manifold **or** suitable suction hose.

[2] Connect a suitable clean refrigerant cylinder to the discharge port on 601.

[3] Connect power lead to a suitable mains power point [240v].

[4] Open cylinder valve.

[5] Open hand manifold suction valve slightly.

[6] Check that there is positive pressure indicating on 601 suction gauge **NOTE 601 WILL NOT START IF THERE IS NO PRESSURE IN A/C OR REFRIGERATION**

**SYSTEM.** The suction gauge must indicate a positive pressure above 0.4 bar [5psi] in order for the 601 to be activated.

## RECOVERY PROCEDURE

[1] Switch on 601, on/ off switch located on front panel, a flow of refrigerant should be seen flowing through the sight glass-moisture indicator after 1-1/2 to 2 minutes. At this time open discharge hand valve on hand manifold and allow 601 to recover from the suction and discharge side of A/C or refrigeration system.

[2] Allow the 601 to run through its cycle, once the 601 has recovered all the refrigerant and has pulled a vacuum of -0.4bar [10 in Hg] the 601 will automatically stop and the recovery complete indicator will illuminate.

At this stage open the ball valve located on left side of oil separator, this action will allow oil separator to be pressurised, so that any oil that may have been removed from the A/C system can be drained by opening the ball valve located below the oil separator.

**NOTE YOU MAY NOT RECOVER OIL FROM THE A/C SYSTEM AT ALL TIMES.**

## HIGH PRESSURE INDICATOR

The 601 will cut out and the high-pressure indicator [red], will illuminate if the discharge pressure exceeds the preset level [360psi-25bar], for the following conditions;

[1] Cylinder valve restricted or closed.

[2] Restriction between 601-discharge port and refrigerant cylinder that may be caused by the following conditions.

[a] Damaged or crushed hose seals.

[b] Damaged hose.

[c] Using incorrect refrigerant cylinder with one-way directional valve.

[d] Having high concentration of non-condensables [air] in refrigerant cylinder.

[e] Using recovery system in a very hot environment.

[f] Refrigerant cylinder over filled.

## SERVICE AND MAINTANANCE

Every 100kg [241lb] of refrigerant recovered, carry out the following service and maintenance.

- [1] Replace filter.
- [2] Remove drain and refill recovery pump with oil.
- [3] Test recovery and discharge cut out pressure.
- [4] Test and reset suction and discharge gauge zero point.
- [5] Drain oil separator [if fitted].
- [6] Test system for leaks.
- [7] Check power lead for any damage; replace if any damage exist.
- [8] Test all earth connections.
- [9] Secure earth lead to main cover before re-fitting to unit.
- [10] Clean unit.

## SPECIFICATIONS

- [1] Filter 1/4-1/4 flare.
- [2] Gauge - suction 1/8 bsp 0-17 bar. [0-250 psi]
- [3] Gauge - discharge 1/8 bsp 0-34 bar. [0-500 psi]
- [4] Heat exchanger oil separator - sealed. [if fitted]
- [5] Heat exchanger - primary single coil.
- [6] Oil capacity - recovery pump [300ml.]
- [7] Pump - recovery with cap start thermally protected.
- [8] Switch - dual control adjustable.
- [9] Switch - liquid control [1.7-2.4]
- [10] Solenoid - liquid control [1.2m.m. ported]

Weight 16.5 kg [39.6 lb]

Dimensions W 230mm [9"] L 480mm [18-7/8"] H 280mm [11"]

## SERVICE RECORD

Service #	Date	Technician	Comments
1			
2			
3			
4			
5			
6			

