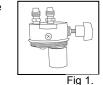
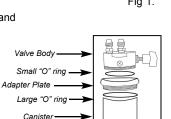
### FILTER CHANGE INSTRUCTIONS

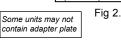
### When using refrigerants always wear safety goggles and gloves!!

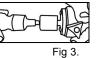
- 1. Disconnect all hoses and detach Recycle Guard™ from R/R/R machine
- Unscrew valve body (top) from Recycle Guard tank to access filter elements. (See Fig 1.) Valve body and adapter plate (some units may not contain adapter plate) will usually stay connected. If they stay connected, do step 3A. If adapter plate rotates, do both 3A and 3B.

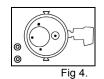


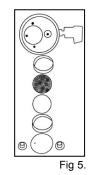
- 3A. Remove and replace the large "O" ring (between canister and adapter plate) with new one supplied in kit (See Fig 2.)
  - a. Clean threads with lint free cloth
  - b. Add a small amount of wax free refrigerant oil to threads (use clean brush) before tightening
- 3B. Replace small "O" ring (between valve body and adapter plate) (See Fig 2.)
  - a. Clean threads with lint free cloth
  - b. Add a small amount of wax free refrigerant oil to threads (use clean brush) before tightening
- 4. Unscrew primary (drum) filter from valve body and replace it with new element (See Fig 3.)
- 5. Remove two screws (1/8 hex) holding Secondary Filter Element Cover (the 1" round plate) in place, and remove cover (See Fig 4.)
- Remove top Capturing Ring, Secondary Filter, and Mesh Support Screen (Secondary filter and its Mesh Support Screen are under Element Cover, sandwiched between two Capturing Rings) (See Fig 5.)
- 7. Reinstall new Secondary Filter, Mesh Support Screen, and Capturing Rings in reverse order in Recycle Guard valve body
  - a. Put in one Capturing Ring (Looking down into Valve Body)
  - b. Put in Mesh Support Screen
  - c. Put in Secondary (paper) filter
  - d. Put in second Capturing Ring
  - e. Put in Secondary Filter Element Cover and hex screws
- 8. Clean any buildup of contaminant material from inside Recycle Guard tank and drain port
- 9. Reassemble unit
- 10. Remount Recycle Guard unit and connect all hoses to their respective locations
- 11. Proceed with normal operations





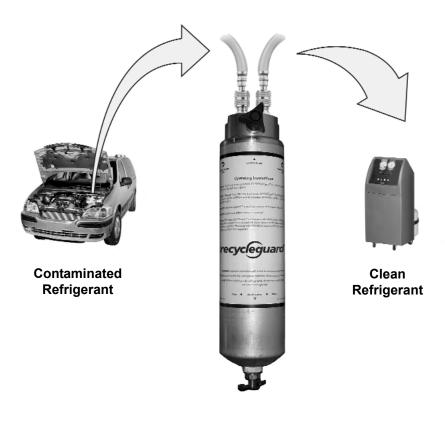






## **USE INSTRUCTIONS**

for the **Recycle Guard™** Sealant, Dye & Lubricant Separator <sub>(Patent Pending)</sub>



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### WARNINGS

WARNING:	Improper operation will result in machine contamination!
CAUTION:	Depressurize the unit before draining, disconnecting or disassembly!

*IMPORTANT:* We advise following your equipment manufacturer's recommended recovery and charging procedures.

### Using Recycle Guard

Recycle Guard removes sealant, dye, lubricant, and other contaminants from refrigerant during the recovery cycle, prior to refrigerant entering the recovery machine.

Recycle Guard will work with refrigerant in either a gas or liquid state. However, an excessive amount of refrigerant entering the Recycle Guard unit in a liquid state will increase recovery time.

Optimum results occur when refrigerant is being recovered while in the gas state. It is therefore recommended to connect Recycle Guard to vehicle ports which carry refrigerant in a gaseous state - such as the Low Side and/or the High Side Gas ports. Before starting Low Side recovery, verify that the High Side port is closed, either manually or through software setup.

### When using refrigerants always wear safety goggles and gloves!!

**IMPORTANT: DRAIN RECYCLE GUARD TANK AFTER EVERY RECOVERY!!** *IMPORTANT:* The Recycle Guard<sup>™</sup> filtration system should be changed after 30 hours of recovery/charging operation, or when the recovery rate of your A/C service machine slows significantly. Purchase Replacement Filtration System kits through your local A/C parts supplier.



# SIMULTANEOUS High & Low Recovery

(2 Recycle Guard Units)

### Equipment Connection

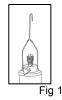
- Attach the enclosed bracket to Recycle Guard using the two provided screws (Recycle Guard MUST be mounted or used VERTICALLY) (See Fig 1.)
- 2. Disconnect blue (Low Side) hose and red (High Side) hose from recovery machine (See Fig 2.)
- Attach blue (Low Side) hose and red (High Side) hose to inlet fitting (center fitting) of each Recycle Guard Unit (See Fig 3.)
- Connect two extra refrigerant supply hoses (not provided) with ½" Acme x ½" Acme female fittings to remaining (outermost) fitting on top of two Recycle Guard Units (See Fig 4.)
- 5. Attach other ends each extra supply hoses to matching Low Side and High Side connections of recovery station

### **Recovery Operation**

- 1. Connect Low Side and High Side hoses to vehicle
- 2. Turn control knobs on both Recycle Guard Units **CLOCKWISE** (CW) until they seat (See Fig 5.)
- 3. Perform normal recovery procedures per your equipment manufacturer's instructions
- After recovery is complete, place two small 8-ounce containers under both Recycle Guard<sup>™</sup> Units
- Open Recycle Guard drains to remove any recovered sealant, oil, and dye (See Fig 6.)
- 6. Close both drains, once draining is complete
- 7. Dispose of the drained sealant, oil, and dye in accordance with local, state, and federal regulations

### Vacuum & Charging

- 1. Turn both control knobs COUNTERCLOCKWISE (CCW) until they seat (hand tighten only), to allow refrigerant to bypass filtration circuit (See Fig 7.)
- 2. Follow your R/R/R machine instructions for vacuum and charging procedures



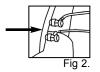








Fig 4.



Fig 5.



Fig 6.





### Equipment Connection

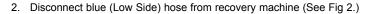
- Attach the enclosed bracket to Recycle Guard using the two provided screws (Recycle Guard MUST be mounted or used VERTICALLY) (See Fig 1.)
- Fig 1. Fig 2.

Fig 3.

Fig 4.

Fig 5.

Fia 6.



- 3. Attach blue (Low Side) hose to inlet fitting (center fitting) of Recycle Guard Unit (See Fig 3.)
- Connect an extra refrigerant supply hose (not provided) with ½" Acme x ½" Acme female fittings to remaining (outermost) fitting on top of Recycle Guard Unit (See Fig 4.)
- Attach other end of the extra supply hose to Low Side connection of Recovery Station

#### **Recovery Operation**

- 1. Connect Low Side hose to vehicle
- 2. Leave High Side hose DISCONNECTED (See Fig 5.)
- Turn control knob on Recycle Guard Unit CLOCKWISE (CW) until it seats (See Fig 7.)
- 4. Perform normal recovery procedures per your normal equipment manufacturer's instructions
- After recovery is complete, place a small 8-ounce container under Recycle Guard™ Unit
- Open Recycle Guard drain to remove any recovered sealant, oil, and dye (See Fig 6.)
- 7. Close drain, once draining is complete
- 8. Dispose of the drained sealant, oil, and dye in accordance with local, state, and federal regulations

#### Vacuum & Charging

- 1. Turn Control Knob **COUNTERCLOCKWISE** (CCW) until it seats (hand tighten only), to allow refrigerant to bypass filtration circuit (See Fig 8.)
- 2. CONNECT High Side service hose to vehicle (See Fig 9.)
- 3. Follow your R/R/R machine instructions for vacuum and charging procedures





### **External Pressure Gauges**

### **Equipment Connection**

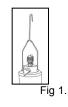
- 1. Attach the enclosed bracket to Recycle Guard using the two provided screws (Recycle Guard **MUST** be mounted or used **VERTICALLY**) (See Fig 1.)
- 2. Disconnect center hose from Manifold Gauge Set at the inner port of Recovery Machine
- Connect center hose (See Fig 2.) from External Manifold Gauge Set to the Recycle Guard inlet fitting (fitting at Recycle Guard<sup>™</sup> top center)
- Connect an extra refrigerant supply hose (not provided) with ½" Acme x ½" Acme female fittings to the outermost valve on top of Recycle Guard Unit (See Fig 3.)
- 5. Attach other end of the extra supply hose to Recovery Station

#### **Recovery Operation**

- 1. Turn Control Knob **CLOCKWISE** (CW) until it seats (hand tighten only) (See Fig 4.)
- 2. Open pressure manifold gauge valves
- 3. Follow your R/R/R machine instructions for recovery operation
- After recovery is complete, place a small 8-ounce container under Recycle Guard<sup>™</sup> Unit
- Open Recycle Guard drain to remove any recovered sealant, oil, and dye (See Fig 5.)
- 6. Close drain, once draining is complete
- 7. Dispose of the drained sealant, oil, and dye in accordance with local, state, and federal regulations

#### Vacuum & Charging

- Turn Control Knob COUNTERCLOCKWISE (CCW) until it seats (hand tighten only), to allow refrigerant to bypass filtration circuit (See Fig 6.)
- 2. Follow your R/R/R machine instructions for vacuum and charging procedures



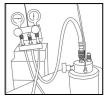












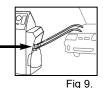
Fig 5.

2











# Shutoff Valves ON RECOVERY STATION

### Equipment Connection

- 1. Attach the enclosed bracket to Recycle Guard using the two provided screws (Recycle Guard **MUST** be mounted or used **VERTICALLY**) (See Fig 1.)
- Fig 1. Fig 2.

Fig 3.

Fig 4

- 2. Disconnect blue (Low Side) hose from recovery machine (See Fig 2.)
- 3. Attach blue (Low Side) hose to inlet fitting (center fitting) of Recycle Guard Unit (See Fig 3.)
- 4. Connect an extra refrigerant supply hose (not provided) with 1/2" Acme x 1/2" Acme female fittings to remaining (outermost) fitting on top of Recycle Guard Unit (See Fig 4.)
- 5. Attach other end of extra supply hose to Low Side connection of recovery station

### **Recovery Operation**

- 1. Connect High Side service hose from Recovery Station to vehicle
- 2. Connect Low Side service hose from Recycle Guard to vehicle
- 3. Close High Side control valve of Recovery Station (See Fig 5.)
- 4. Turn the control knob of Recycle Guard Unit CLOCKWISE (CW) until it seats (See Fig 6.)
- 5. Perform normal recovery procedures per your equipment manufacturer's instructions
- 6. After recovery is complete, place a small 8-ounce container under Recycle Guard<sup>™</sup> Unit
- 7. Open Recycle Guard drain to remove any recovered sealant, oil, and dye (See Fig 8.)
- 8. Close drain, once draining is complete
- 9. Dispose of the drained sealant, oil, and dye in accordance with local. state, and federal regulations

#### Vacuum & Charging

- 1. Turn Control Knob COUNTERCLOCKWISE (CCW) until it seats (hand tighten only), to allow refrigerant to bypass filtration circuit (See Fig 7.)
- 2. Open the recovery equipment's High Side control valve on recovery station (See Fig 9.)
- 3. Resume normal vacuum and recharge operation
- 4. Follow your R/R/R machine instructions for vacuum and charging procedures
- IMPORTANT: DRAIN RECYCLE GUARD TANK AFTER EVERY RECOVERY!! 3



## Shutoff Valves ON SERVICE HOSES

### Equipment Connection

- 1. Attach the enclosed bracket to Recycle Guard using the two provided screws (Recycle Guard MUST be mounted or used **VERTICALLY**) (See Fig 1.)
- 2. Disconnect blue (Low Side) hose from recovery machine (See Fig 2.)
- 3. Attach blue (Low Side) hose to inlet fitting (center fitting) of Recycle Guard Unit (See Fig 3.)
- 4. Connect an extra refrigerant supply hose (not provided) with <sup>1</sup>/<sub>2</sub>" Acme x 1/2" Acme female fittings to remaining (outermost) fitting on top of Recycle Guard Unit (See Fig 4.)
- 5. Attach other end of the extra supply hose to Low Side connection of Recovery Station

### **Recovery Operation**

- Connect High Side service hose from Recovery Station to vehicle 1.
- 2. Connect Low Side service hose from Recycle Guard to vehicle
- 3. For recovery, close High Side shutoff valve on red service hose (See Fia 5.)
- 4. Turn the control knob of Recycle Guard Unit CLOCKWISE (CW) until it seats (See Fig 7.)
- 5. Perform normal recovery procedures per your equipment manufacturer's instructions
- 6. After recovery is complete, place a small 8-ounce container under Recycle Guard<sup>™</sup> Unit
- 7. Open Recycle Guard drain to remove any recovered sealant, oil, and dye (See Fig 6.)
- 8. Close drain, once draining is complete
- 9. Dispose of the drained sealant, oil, and dye in accordance with local, state, and federal regulations

#### Vacuum & Charging

- 1. Once recovery is completed, turn control knob on Recycle Guard COUNTERCLOCKWISE (CCW) until it seats (See Fig 8.)
- Open shutoff valve on High Side service hose (See Fig 9.)
- 3. Follow your R/R/R machine instructions for vacuum and charging procedures





Fig 2.



















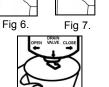






Fig 9.

