



Model: DUAL-3412
EEAC112B
UNIT SETUP

Page: 1 of 7

Installation Instructions

**INSTALLATION MUST BE PERFORMED
BY QUALIFIED
SNAP-ON/SUN/EQUISERV PERSONNEL ONLY**

INSTALLATION OVERVIEW:

The Installation Procedure listed is for the Sun Dual-3412 (EEAC112B). The unit is shipped as a fully assembled unit, with the exception for the items listed in the Parts & Accessories.

PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE SETTING UP UNIT

PARTS & ACCESSORIES:

PART NUMBER	DESCRIPTION	QTY
0647019601	Adapter, GM	1
0647019701	Adapter, Quick-Disconnect, GM/Ford	1
0647019901	Adapter, Quick-Disconnect, Large GM	1
0647020001	Adapter, Ford	1
0647028707	Adapter, Vehicle, High Side	1
0647028708	Adapter, Vehicle, Low Side	1
0692191401	MACS Form, Mail-in	1
0692192801	Product Registration Form	1
0692224201	MACS Certification Form	1
0692229101	Product & Warranty Registration Form	1
115080	Adapter, Low Side	1
1285	Beaker, Disposable 5oz.	2
4719005501	Anti-Blow Back Valve	1
4719005502	Anti-Blow Back Valve	1
EAA0157C00A	Recovery Tank Assembly (R-12)	1
EAA0158C00A	Recovery Tank Assembly (R-134a)	1
EAH0013C00A	Gauge Set, R-12	1
EAH0014C01A	Gauge Set, R134a	1
EAK0027C00AS	Kit, Vehicle Adapter O-Ring	1
ZEEAC112B	User's Manual	1
TEEAC112B	Installation Instructions	1

REQUIRED TOOLS: _____

- Safety Goggles (0001-5005)
- Refrigerant Oil (Mineral) or Superlube (0681-0193-02 or -03)
- R-12 Virgin Tank (Supplied by Customer)
- R-134a Virgin Tank (Supplied by Customer)



CAUTION!

THIS UNIT MUST BE PLUGGED INTO A PROPER AC OUTLET FOR UNIT TO OPERATE CORRECTLY. REFER TO THE UNIT ID PLATE LOCATED ON BACK OF UNIT. EXTENSION CORDS ARE NOT RECOMMENDED, BUT IF AN EXTENSION CORD MUST BE USED, USE A CORD THAT IS LESS THAN 50 FEET WITH A 16 AWG, OR ABOVE 50 FEET AND LESS THAN 100 FEET WITH A 14 AWG.



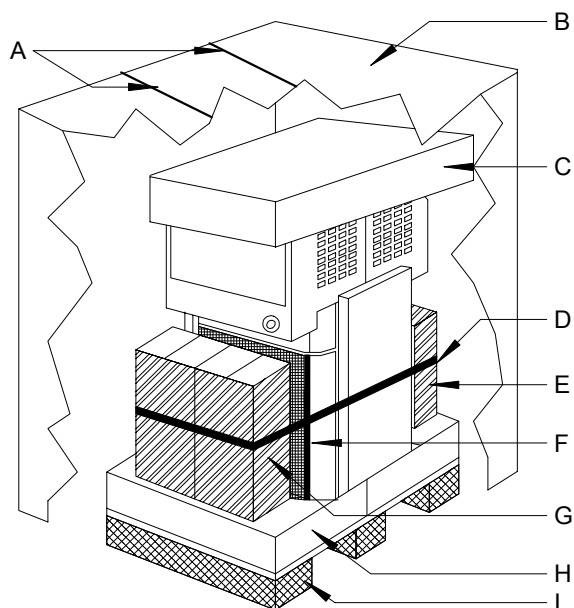
WARNING!

**USE STANDARD REFRIGERANT HANDLING
SAFETY PROCEDURES WHEN PERFORMING INSTALLATION**

ALWAYS WEAR SAFETY GOGGLES, DON'T SPILL OR TOUCH LIQUID REFRIGERANT, AVOID FLAMES, AND EXCESSIVE HEAT. USE ONLY IN WELL VENTILATED AREA.

INSTALLATION INSTRUCTIONS: _____

1. Cut Straps (A), and slide the carton (B) off the pallet (H).
2. Remove the protective pad (C).
3. Remove the packing tape (D).
4. Remove the accessory & gauge set box (E).
5. Remove the packing material (F) from unit.
6. Remove the plastic bag (NOT SHOWN) from unit.
7. From one side of the unit, carefully lean the unit upwards and pull out one-half of the bottom foam runner assembly (H).
8. Gently return the unit to the pallet (I). Lock the locking caster to prevent the unit from rolling.
9. From the other side of the unit, carefully lean the unit upwards and pull out the other half of the bottom foam runner assembly (H).
10. Gently return the unit to the pallet (I).
11. Unlock the caster and gently roll the unit off the pallet.

**FIGURE 1 Unit Package**

12. Inventory all items using the Parts & Accessories list and inspect for damage.

PARTS & ACCESSORIES SETUP FOR THE R-12 SIDE: _____

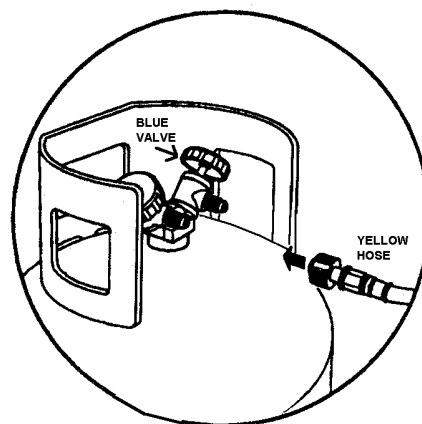
1. Remove the Gauge Set Assembly (EAH0013C00A) from the gauge set box and place on one of the gauge set brackets. (Brackets are part of side panels.)
2. Remove the Blue and Red Hoses from the gauge set box and **OIL** the seals on each end.
3. Connect the open end of the Blue and Red Hoses to the Gauge Set respectively.
4. Remove the Beaker (1285) and slide it in the slot under the oil drain valve.
5. Place the four GM/FORD adapters in the upper compartment.
6. Remove the User's Manual, MAC Form/Certification, Product Registration Form, and Warranty Registration from the box. Hand these items to the Owner or Manager.
7. Remove Recovery Tank (EAA0157C00A) from its box. Remove cardboard wrap from Recovery Tank. Set on floor in front of unit.

PARTS & ACCESSORIES SETUP FOR THE R-134a SIDE: _____

1. Remove the Gauge Set Assembly (EAH0014C01A) from the gauge set box and place on the other gauge set bracket.
2. Remove the Blue and Red Hoses from the gauge set box and **OIL** the seals on each end.
3. Connect the open end of the Blue and Red Hoses to the Gauge Set respectively.
4. Remove the second Beaker (1285) and slide it in the slot under the oil drain valve.
5. Connect the Red and Blue adapters (0647028707 and 0647028708) to the Red and Blue Hoses from the Gauge Set respectively.
6. Place the O-Ring Kit (EAK0027C00AS) and Adapter Fitting (115080) in the upper compartment.
7. Remove Recovery Tank (EAA0158C00A) from its box. Remove cardboard wrap from Recovery Tank. Set on floor in front of unit.

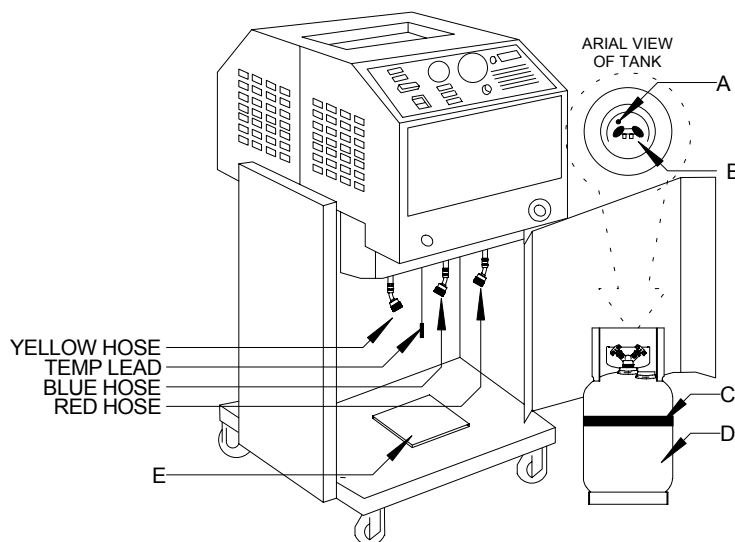
PREPARING NEW R-12 RECOVERY TANK:

1. Referring to FIGURE 2, open the **BLUE** valve on Recovery Tank to release ALL COMPRESSED AIR.
2. Remove the Yellow Hose from the gauge set box. OIL the seals on each end of hose.
3. Add the anti-blow back valve (4519005501) to the short side of yellow hose.
4. Attach open end of Yellow Hose to **BLUE** valve on Recovery Tank (Refer to FIGURE 2). Attach other end of Yellow Hose with the anti-blow back valve to the service port on side of unit **Marked R-12 Recycle**. Open ball valve on yellow hose.
5. Plug AC Cord to a 115VAC outlet. Turn compressor switch to ON, and turn the 3-way valve to VACUUM.
6. Pull a vacuum for about 15 minutes.
7. Once completed, close Recovery Tank valve (**BLUE**).
8. Turn the 3-way valve to OFF, then the compressor switch to OFF.
9. Remove Yellow Hose from Recovery Tank. Re-OIL seal on Yellow Hose and connect to center port on Gauge Set.
10. Referring to FIGURE 3, open the Recovery Tank access panel. Place Recovery Tank (D) on Scale (E). Tank fittings should face straight out the front of unit.
11. Connect the Yellow Hose from the bottom of unit to the purge valve (A) shown in FIGURE 3 on top of the Recovery Tank. Connect the Red and Blue Hose from the bottom of the unit to the **RED & BLUE** valve (B) respectively on the Recovery Tank.

**FIGURE 2 RECOVERY TANK**

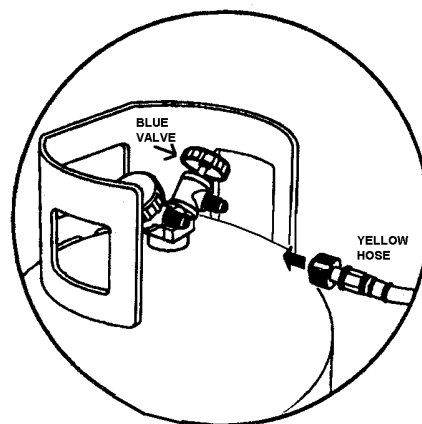
NOTE: *To avoid scale error due to stresses by improper positioning of the Blue Hose, position the Blue Hose at a 3 o'clock angle coming from the Recovery Tank valve.*

12. Slide the Temperature Lead between the Velcro Strap (C) on the Recovery Tank. Ensure that the velcro strap is 2" above the weld of the tank.

**FIGURE 3 TANK INSTALLATION**

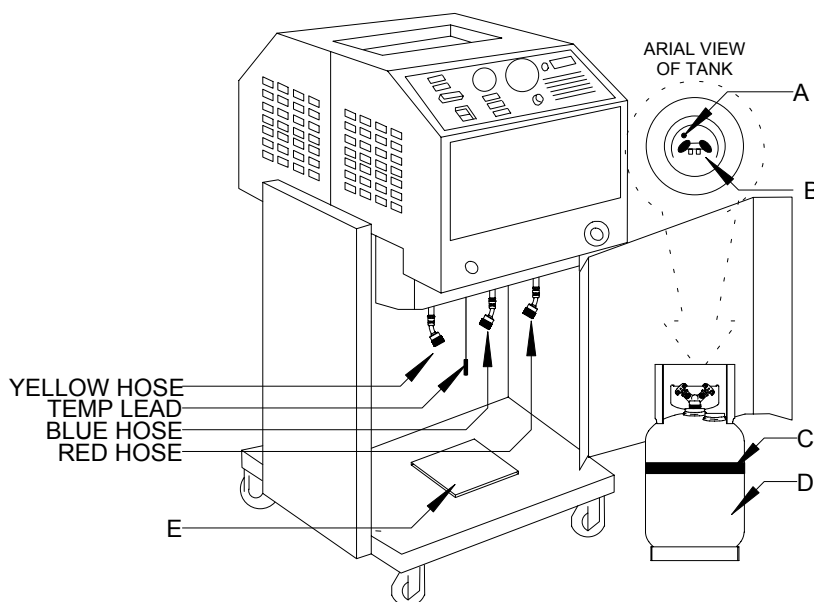
PREPARING NEW R-134a RECOVERY TANK:

1. Referring to FIGURE 4, open the **BLUE** valve on Recovery Tank to release ALL COMPRESSED AIR.
2. Remove the Yellow Hose from the gauge set box. OIL the seals on each end of hose.
3. Add the anti-blow back valve (4519005502) to the short side of yellow hose.
4. Attach open end of Yellow Hose to **BLUE** valve on Recovery Tank (Refer to FIGURE 4). Attach other end of Yellow Hose with the anti-blow back valve to the service port on side of unit **Marked R-134a Recycle**. Open ball valve on yellow hose.
5. Plug AC Cord to a 115VAC outlet. Turn compressor switch to ON, and turn the 3-way valve to VACUUM.
6. Pull a vacuum for about 15 minutes.
7. Once completed, close Recovery Tank valve (**BLUE**).
8. Turn the 3-way valve to OFF, then the compressor switch to OFF.
9. Remove Yellow Hose from Recovery Tank. Re-OIL seal on Yellow Hose and connect to center port on Gauge Set.
10. Referring to FIGURE 5, open the Recovery Tank access panel. Place Recovery Tank (D) on Scale (E). Tank fittings should face straight out the front of unit.
11. Connect the Yellow Hose from the bottom of unit to the purge valve (A) shown in FIGURE 5 on top of the Recovery Tank. Connect the Red and Blue Hose from the bottom of the unit to the **RED & BLUE** valve (B) respectively on the Recovery Tank.

**FIGURE 4 RECOVERY TANK**

NOTE: *To avoid scale error due to stresses by improper positioning of the Blue Hose, position the Blue Hose at a 3 o'clock angle coming from the Recovery Tank valve.*

12. Slide the Temperature Lead between the Velcro Strap (C) on the Recovery Tank. Ensure that the velcro strap is 2" above the weld of the tank.

**FIGURE 5 TANK INSTALLATION**

PRE-CHARGING RECOVERY TANKS USING GRAVITY METHOD: _____

NOTE: THIS PROCEDURE IS USED TO SETUP THE UNIT FOR CHARGING. RECOVERY TANK SHOULD HAVE AT LEAST A 25" VACUUM. THIS PROCEDURE IS DONE WHEN RECOVERY TANK IS ON THE SCALE

NOTE: START THIS PROCEDURE WITH THE R-12 SIDE. DO NOT ATTEMPT TO PERFORM THIS PROCEDURE ON BOTH TANKS AT THE SAME TIME.

1. Be sure Recovery Tank valves (B) are closed. Refer to FIGURE 6.
2. Disconnect the Red hose from the Recovery Tank.
3. Disconnect and **Re-Oil** both the seals on Yellow hose (C). Connect the long side of the Yellow Hose to the Virgin Tank (A).
4. Connect the short side of the Yellow Hose to the Red Valve on the Recovery Tank (B).
5. Open the Red Valve on the Recovery Tank.
6. Raise the Virgin Tank to a higher level than the Recovery Tank. Invert the Virgin Tank (A) and open valve.
7. Open Hand Valve (D) on the Yellow Hose to allow the refrigerant to flow. Gravity and vacuum will transfer the liquid refrigerant to the Recovery Tank faster than reclaiming it.
8. Refer to the LCD Display to view the amount of refrigerant that has been transferred.
9. After the desired amount of refrigerant has been transferred, close valves on Virgin Tank and Recovery Tank. Set Virgin Tank on ground upright.
10. Close Hand Valve on Yellow Hose. Disconnect Yellow Hose from Recovery Tank.
11. **Re-Oil** seals on anti-blow back valve on the Red Hose from unit and connect to Recovery Tank. Open Recovery Tank valve (RED).

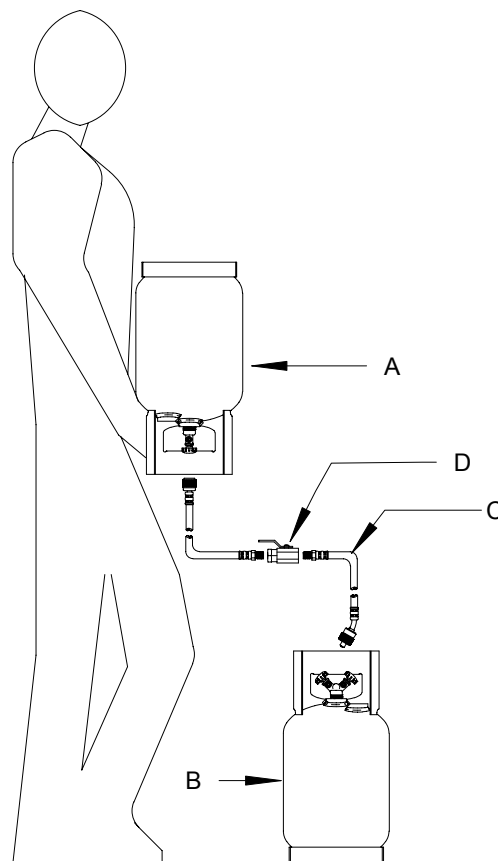


FIGURE 6 CHARGING TANK

12. **Re-Oil** seal on Yellow Hose and connect to service port on side of unit **Marked Recycle**. Open Hand Valve on Yellow Hose.
13. Plug the unit into a 115VAC outlet. Turn the compressor switch to ON, and the 3-way valve to RECYCLE. This will reclaim the refrigerant from the hose. (Optional: Opening Virgin Tank valve will recover the rest of the refrigerant.)
14. Once complete, turn the 3-way valve and compressor switch to OFF. Disconnect Yellow Hose from Virgin Tank.
15. **Re-Oil** seals on Yellow Hose and connect to center port on Gauge Set.

REPEAT THE "PRE-CHARGING RECOVERY TANK" FOR OTHER RECOVERY TANK!

REMEMBER TO OIL O-RINGS AND SEALS WHEN ATTACHING HOSES OR FITTINGS

CHARGING RECOVERY TANK USING THE UNIT: _____

NOTE: THIS PROCEDURE IS USED TO SETUP THE UNIT FOR CHARGING. RECOVERY TANK SHOULD HAVE AT LEAST A 25" VACUUM. THIS PROCEDURE IS DONE WHEN RECOVERY TANK IS ON THE SCALE

1. Be sure the **RED** Recovery Tank valve is open.
2. For the R-12 side, connect the blue service hose from manifold gauge set to the R-12 virgin tank.
3. For the R-134a side, connect the tank adapter (115080) to the R-134a virgin tank. Then connect the blue service adapter from the manifold gauge set to the backside of the tank adapter.
4. Open both Virgin tank valve, blue service hose hand valve (For R-12), or coupler (For R-134a), and low side gauge set hand valve.
5. Turn both compressor switches ON, and turn both 3-way valves to RECYCLE.
6. Press the MODE button on both sides until "Tare Weight" is displayed. Monitor weight on LCD display until desired amount of virgin refrigerant has been transferred.
7. Once the desired amount of refrigerant has been transferred, close the virgin tank valves.
8. Allow recycler to run until 15"Hg vacuum is reached.
9. Once the recycler reaches 15"Hg of vacuum, close the blue service hose hand valve (For R-12), or coupler (For R-134a).
10. Turn both 3-way valves to OFF.
11. Turn both compressor switches to OFF.
12. Compare recovery tank pressure/temperature relationship with the chart and bleed off any non-condensables (air) by pressing the PURGE button.

**REMEMBER TO OIL O-RINGS
AND SEALS WHEN ATTACHING
HOSES OR FITTINGS**

INSTALLATION COMPLETE/SETUP COMPLETE