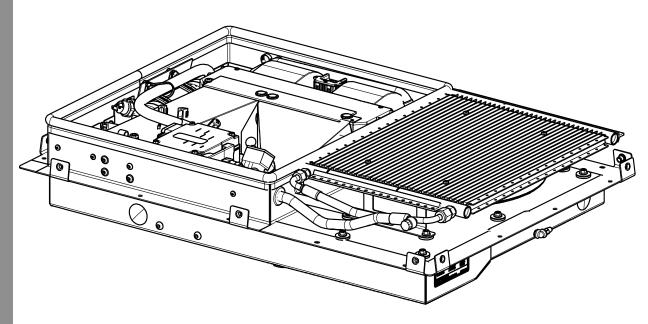


# **Air Conditioner**

p/n: 1ACUNIT-G2

Fits with Curtis Roof Kit: Contact Curtis for Details. Fits with Curtis Alternator Kit: Contact Curtis for Details.



Product Specifications
25" x 36" x 7"
Weight: 47 lbs.
Air Flow: 260 CFM
Cooling Capacity: 12,000 BTU / hr
Voltage: 12 VDC
Amp Draw: 63
Refrigerant: R134a, 2.1 lbs. charge

#### Approximate Installation Time \*

Experienced Dealer Technician - 1 Hour

Average Dealer Technician - 1.5 Hours

Do-It-Yourself - 2 Hours

The contents of this envelope are the property of the owner. Leave with the owner when installation is complete.

Rev. E, 07/08/2019

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## **WARNINGS**

Curtis air conditioners feature an assembly of parts designed for your vehicle which require adjustment and alignment of components to accommodate vehicle variations. For accurate installation, proper operation, and years of satisfaction, please read and understand the Service & Owner's Manual fully prior to installing the air conditioner.

From all of us at Curtis, we thank you for choosing our product.



Curtis Cabs, blades and general accessories add additional weight to the base vehicle. All Curtis accessory weights are listed in product brochures. Deduct the accessory's total weight from the vehicle's rated capacity and never exceed the vehicle's rated capacity including driver and passenger.



Exposure to Carbon Monoxide can Cause illness, serious injury or death. Never operate vehicle if suspicious of Carbon Monoxide. Inspect exhaust system for leaks monthly. Leaks can result from loose connections, corrosion, cracks or other damage to the exhaust manifold. If leaks are found, repair or replace exhaust system. Do not use vehicle until repair or replacement is complete.

**California Health and Safety Proposition 65 Warning:** This product may contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

**Shock Hazard:** Always disconnect the negative lead of the battery before servicing.

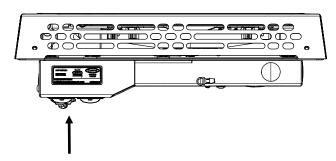
**Disclaimer:** Always discharge air conditioner refrigerant in accordance with all federal, state, and local laws.

# **GENERAL INFORMATION BEFORE YOU START**

#### **HELPFUL HINTS:**

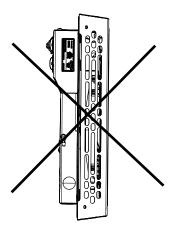
- Read and understand all instructions before beginning.
- Apply a silicone sealant to seal any minor gaps that may occur due to vehicle variations.
- Use caution to avoid damaging installed threaded inserts or weld nuts. Begin the thread engagement by hand to avoid or correct potential cross threading.
- Plastic washers have been supplied to provide a weather seal under the heads of some exterior bolts. The plastic
  washer should be installed under each bolt head directly against the outside cab surface. Care should be taken not to
  over tighten the fasteners and damage the plastic washer.

# **WARNINGS**



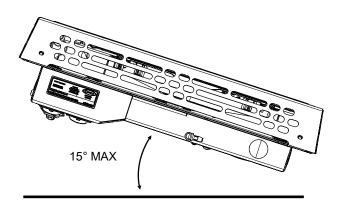
Your new air conditioner should arrive laying down flat.

Take care to protect the switches and louvers at the bottom of the unit when handling.



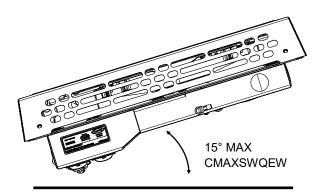
Do not receive the air conditioner from the shipping company if the air conditioner is standing up on end as shown.

Doing so will drain the oil from the compressor.



Do not tip the air conditioner more than  $15^{\circ}$  in the direction shown above during installation and service.

Doing so will drain the oil from the compressor.



Do not tip the air conditioner more than 15° in the direction shown above during installation and service.

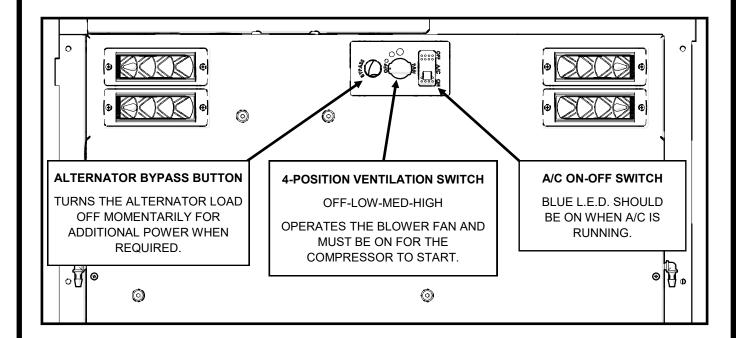
Doing so will drain the oil from the compressor.

## **FEATURES & OPERATION**

Your new Curtis Air Conditioner is designed to make your driving experience more comfortable in hot weather.

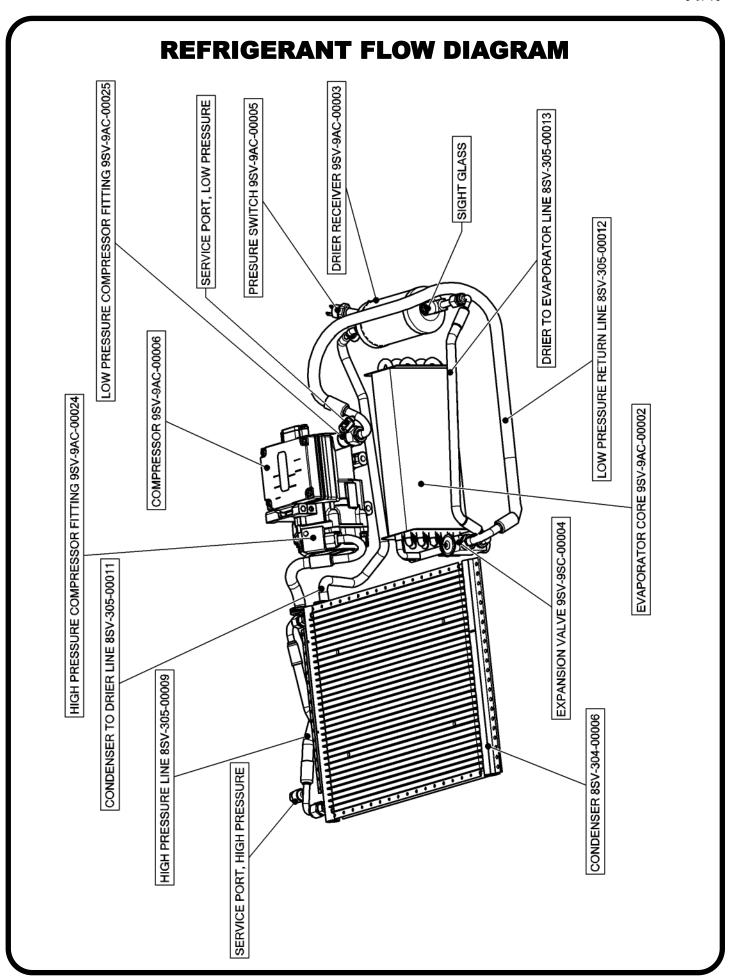
Turn the 4-POSITION VENTILATION SWITCH to activate the blower. The air conditioner may be used as a fan in this manner.

Toggle the A/C ON-OFF SWITCH to activate the compressor for chilled air. The blower must be turned on before the compressor will activate.



## **CARE AND MAINTENANCE**

- Clean the exterior of the condenser after every 50 hours of operation, or as needed depending on usage conditions.
- Periodically inspect and tighten hardware after every 40 hours of operation for the entire life of the air conditioner.
- This product is designed with the use of R134a as a refrigerant. Never substitute other refrigerants, use of any other refrigerant will void warranty.
- Charge unit with 2.1 lbs. of R134a refrigerant.
- Apply vacuum for a minimum of 20 minutes prior to charging the air conditioner with R134a.
- Do not vent refrigerant to the atmosphere. If the unit has to be discharged for any reason, recover the refrigerant in compliance with federal, state, and local laws.
- Refrigerant Oil use only ZEROL ESTER 68SL to replenish any oil lost during refrigerant recovery.
- Replace the drier receiver (9SV-9AC-00003) when replacing a compressor (9SV-9AC-00006).
- Wash the painted surfaces of the air conditioner with commercial automotive cleaning products.



# If the A/C unit is not functioning as you expect it should, review the following bullet points for guidance and important notes.

- Some units have a delayed start to allow the vehicle's motor to get up to speed before engaging.
- Some applications have a delayed turn-off feature. This can be overridden by turning off the blower switch.
- The air conditioner's compressor has a built in reset time between stopping and restarting in order to allow refrigerant pressure to equalize. This is done to prevent starting against high pressures, which will extend the life of the compressor.
- If a heater will be installed along with an A/C, be aware that when switching quickly between heat and A/C with the rocker switch on the heater mount, it is possible to run both at the same time. It is recommended to shut one accessory off before switching to the other to prevent additional drain on the battery.
- Check all electrical connections to ensure that proper connections are made and terminals are all tight.
- Check Battery Condition:

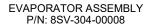
Resting/No Load Voltage should be 12.35V or greater.

Terminals should be clean and tight.

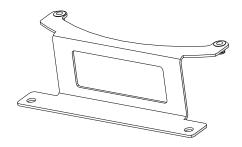
- Check all fuses:
  - ♦ 15 amp ATC blade fuse located at Relay 4, located inside the air conditioner.
  - 25 amp ATC blade fuse located at Relay 3, located inside the air conditioner.
  - ♦ 10 amp fuse on the wire connected to the solenoid.
  - ♦ Two 100 amp fuses located along 2AWG red wire between battery and alternator. Refer to the alternator kit for details.
- Diodes
  - - $\triangleright$
  - ♦ There are two diodes in what look like mini blade fuse holders, located inside the A/C unit as part of the wire harness.
  - ♦ Do not replace diodes with fuses. The unit will not turn off, draining the battery.
  - If a diode is removed for any reason, it must be re-installed so that the symbol points towards the main power solenoid.
- Check all relays:
  - ♦ Relays, located under the cover of the A/C unit.
  - ♦ Timed relays, located under the cover of the A/C unit.
- Check alternator output. The alternator should put out 12-14 volts DC.
- Check the tension of the alternator and drive belts.

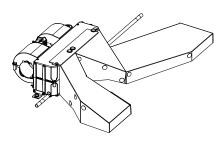
# 1ACUNIT-G2 SERVICE PARTS

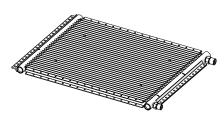
CONDENSER FAN BRACKET P/N: 8SV-110-00040



CONDENSER P/N: 8SV-304-00006





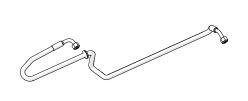


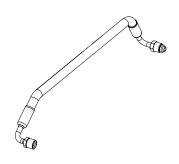
HIGH PRESSURE LINE P/N: 8SV-305-00009

CONDENSER TO DRIER LINE P/N: 8SV-305-00011

DRIER TO EVAPORATOR LINE P/N: 8SV-305-00013





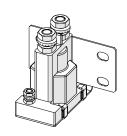


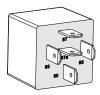
EVAPORATOR TO COMPRESSOR REFRIG LINE; P/N: 8SV-305-00012

12V SOLENOID P/N: 9SV-1TBP61A

RELAY, 12V, 20/40A, SPDT, MINI ISO P/N: 9SV-85-01-0022





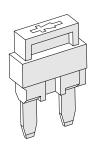


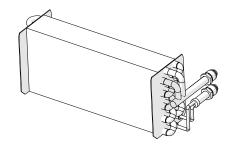
NOTE: SOME VEHICLES MAY REQUIRE DIFFERENT OR ADDITIONAL RELAYS. REFER TO THE ALTERNATOR KIT MANUAL SPECIFIC TO YOUR VEHICLE.

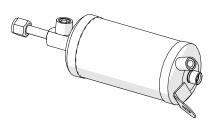
DIODE, 1 AMP, MINI P/N: 9SV-85-10-0027

EVAPORATOR CORE P/N: 9SV-9AC-00002

DRIER RECEIVER P/N: 9SV-9AC-00003





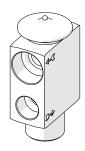


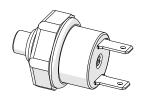
# 1ACUNIT-G2 SERVICE PARTS

EXPANSION VALVE P/N: 9SV-9AC-00004



COMPRESSOR, 12 VDC P/N: 9SV-9AC-00006



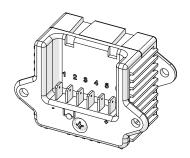


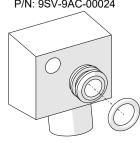
AXIAL FAN P/N: 9SV-9AC-00007

THERMOSTAT P/N: 9SV-9AC-00008

HIGH PRESSURE COMPRESSOR FITTING W/ O-RING P/N: 9SV-9AC-00024



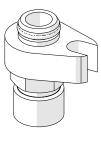


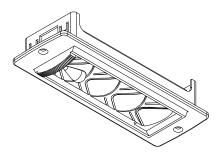


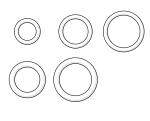
LOW PRESSURE COMPRESSOR FITTING W/ O-RING P/N: 9SV-9AC-00025

REPLACEMENT LOUVER P/N: 9SV-9HR-L

A/C UNIT O-RING KIT P/N: 9SV-9OR-01



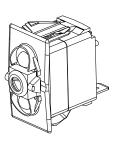


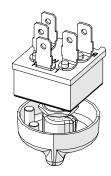


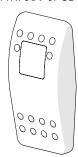
SWITCH, SPST P/N: 9SV-OHC5

4-WAY ROTARY SWITCH W/ KNOB P/N: 9SV-OHC-26

CONSOLE ROCKER SWITCH COVER, BLUE LENS P/N: 9SV-9PCD1-P





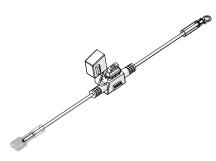


# 1ACUNIT-G2 SERVICE PARTS

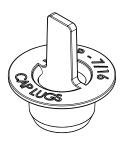
WIRE HARNESS, A/C ROOF UNIT, G2 P/N: 9SV-WH-00106 WIRE HARNESS, LEADS FOR SIGNAL WIRE & CONTROLLER P/N: 9SV-WH-00066 WIRE HARNESS, TIME DELAY OFF DIODE P/N: 9SV-WH-00069







CAP/PLUG (QTY.: 2) P/N: 9SV-74-12-0008



3/8" PVC HOSE, BLACK, 1/2" OD	5/8" STD BULB, 1/16" GRIP	ARCH PSA RUBBER .20WDX.15TALL	CORK TAPE
			(NOT PICTURED)
9SV-AC-00019-15	9SV-PRO2-15	9SV-PR53-15	9SV-9AC-00022-5