AUTOMOTIVE HEATING & AIR CONDITIONING

For years Winnebago Industries has utilized Specific Climate Systems/Frigette as our primary automotive heat and air conditioning system.

Class A Motor Homes

Chassis supplied components on a Chevrolet, Ford and Workhorse gas powered chassis:
- Condensor
- Compressor and mounting hardware
- Receiver/Dryer
- High Pressure line from compressor to condenser
- Condensor fan and wiring (Chevrolet and Workhorse only)

Chassis supplied components on a Freightliner and Spartan diesel pusher:
- Compressor and mounting hardware, drivebelt

The remainder of each system is installed by Winnebago Industries, as provided by SCS.

Class C Motor Homes

The automotive air conditioner/heater is a chassis supplied system on Ford and Chevrolet Class C chassis. The exception is the Winnebago Rialta, which has both Volkswagen and Winnebago supplied components. Winnebago Industries installs the overhead evaporator assembly, the remainder of the system is Volkswagen installed.

As a general rule, a 1994 chassis and newer would use the R134A refrigerant. Prior to the 1994 chassis, an R12 was used. These systems are not interchangeable.

If you are experiencing an auto air conditioning problem, you should contact your local Winnebago or Itasca dealer for service. Following is a summary of heater/air conditioning components and vacuum and electrical diagrams for the two systems we have used most recently.
VACUUM & ELECTRICAL DIAGRAMS FOR CLASS-A MOTORHOMES WITH PUSH-BUTTON CONTROLS

![Diagram of vacuum and electrical systems for Class-A motorhomes with push-button controls.]

- **White/Red**
- **Green**
- **Purple**
- **Black**
- **Red**
- **Blue/Red**
- **Black**
- **Light Blue**
- **Binary Pressure Switch**
- **Light Blue/White**
- **Thermostat**
- **Compressor Clutch**
- **High-Blower Relay**
- **Resistor**
- **Blue/Black**
- **White**
- **Black/White**
- **87**
- **85**
- **30**
- **87A**
- **6-Pin Connector** (View from wire insertion side)
- **Insulated Terminal**
- **Ground Terminal**
- **BLOWER MOTOR**
- **Blower Motor on Motor Mounting Plate**
- **6-Pin Connector**
- **Vacuum Switch**
- **Vacuum Switch**
- **Temperature Lever**
- **D-Models with Cable Operated Water Valves**
- **DO NOT have this Switch**

**Vacuum & Electrical**

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**D-Models with Cable Operated Water Valves DO NOT have this Switch.**
VACUUM & ELECTRICAL DIAGRAMS FOR CLASS-A MOTORHOMES WITH ROTARY CONTROLS

NOTE: ELECTRICAL CONNECTORS ARE ILLUSTRATED FROM THE WIRE INSERTION SIDE

VACUUM CONNECTOR AT VACUUM ELECTRIC SWITCH
(WITH VACUUM PORT NUMBER CODES)

VACUUM PORT NUMBER CODE

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<th>MODE</th>
<th>VACUUM MOTOR POSITION CODE</th>
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<td>VENT</td>
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<td>DEF</td>
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● WITH VACUUM  ○ WITHOUT VACUUM

SCS/FRIGETTE
KIT #          WINNEBAGO
P/N            P/N
093-0554       103930-49-000
(CURRENT PRODUCTION)

CONTROL PANEL
VAC/ELECT SWITCH
PRESSURE SWITCH CONNECTOR
CONTROL PANEL LAMP CIRCUIT
POTENTIOMETER SWITCH
BLEND AIR DOOR SERVO MTR CONNECTOR
BLOWER MTR RESISTOR CONNECTOR
HIGH BLWR RELAY CONNECTOR
POWER TO BLOWER MTR
BLOWER MOTOR GROUND

6-PIN CONNECTOR VEHICLE INTERFACE

BLOWER MTR RESISTOR CONNECTOR
HIGH BLWR RELAY CONNECTOR
POWER TO BLOWER MTR
BLOWER MOTOR GROUND

NOTE: ELECTRICAL CONNECTORS ARE ILLUSTRATED FROM THE WIRE INSERTION SIDE

CONTROL PANEL LAMP CIRCUIT

VACUUM ELECTRIC SWITCH (WITH VACUUM PORT NUMBER CODES)

TO ENGINE VACUUM SOURCE

YELLOW
BLUE
RED
WHITE
GREEN

2-STAGE VACUUM MTR A/C HEAT DOOR ON PLENUM
A, B, C
D, E, F, G

VACUUM WATER VALVE CLOSED IN MAX A/C AND OFF, OPEN IN ALL OTHER MODES
F
G

3-STAGE VACUUM MTR A/C-DEF DOOR ON PLENUM
A, B, C, D, E

VACUUM MOTOR POSITION CODE

BLOWER MTR SWITCH

VACUUM WATER VALVE

VACUUM CONNECTOR AT VACUUM ELECTRIC SWITCH (WITH VACUUM PORT NUMBER CODES)

VACUUM MOTOR PORT NUMBER CODE

MODE

MAX A/C
NORM A/C
VENT
OFF
FLOOR
MIX
DEF

VACUUM MOTOR POSITION CODE

WITH VACUUM

C-4
ORIGIN OF COMPONENTS & WARRANTY RESPONSIBILITY

SCS/FRIGETTE manufactures components (not complete systems) for Winnebago air conditioners. Depending on the chassis manufacturer and type of vehicle, the percentage of SCS/FRIGETTE’s content can vary. Proper identity of the components manufacturer is essential for satisfactory sourcing of replacement parts and warranty responsibility.

In order to facilitate the identification of the components, the following information is provided:

### A/C-HEAT - DEF COMPONENTS

<table>
<thead>
<tr>
<th>CHASSIS MFG</th>
<th>C/ C, HEAT, DEF UNIT, PLEUM, AND CONTROLS</th>
<th>LIQUID AND SUCTION HOSES</th>
<th>CONDENSER</th>
<th>CONDENSER FAN</th>
<th>DISCHARGE HOSE</th>
<th>RECEIVER/ DRIER</th>
<th>COMPRESSOR AND MOUNT/DRIVE</th>
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</table>
| Note 1 Rear, Under floor Heat/Cool Unit. Short refrigerant hoses to connect with Ford A/C - Prep Package.
| Note 2 Overhead Auxiliary 134-a A/C System, Suction and discharge hoses provided to connect (near front system expansion valve) to VW front unit.

### REFRIGERANT CHANGE INFORMATION (R134-a)

R134-a systems must be charged with a predetermined amount of refrigerant; the sight-glass CANNOT be used for accurate charging information. The following chart provides total system requirements:

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<thead>
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<th>CHASSIS MFG</th>
<th>REFRIGERANT</th>
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<td>Freightliner</td>
<td>40 oz.</td>
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<tr>
<td>Spartan</td>
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<td>VW H-Body</td>
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<td>VW H-Body</td>
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