

INTRODUCING
REFRIGERATED
AUTOMOTIVE
AIR CONDITIONING
BY



HOME OFFICE

frigiquip
CORPORATION

P. O. BOX 7207 • OKLAHOMA CITY, OKLAHOMA

WESTERN DIVISION OFFICE AND WAREHOUSE

FRIGIQUIP CORPORATION
2263 W. WASHINGTON BLVD.
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OWNERS OPERATING AND SERVICE MANUAL

REGIONAL OFFICE AND WAREHOUSE

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frigiquip
CORPORATION



Dear Frigette Owner:

My congratulations to you! Your purchase of a Frigette Automobile Air Conditioner means that you have selected a product engineered to a standard . . . not a price — by a pioneer in the manufacturing of auto air conditioners. It also means that now, wherever you go and no matter how hot it is outside, you can travel in comfort.

It is important that you read this manual in order to understand the proper operation and service of your Frigette. This manual is divided into two sections. The first section is directed to you, the owner, and explains the operation and care of your Frigette. The second section gives more technical information about installation and service. This information is furnished so that you can be sure of getting proper service no matter where you are.

On the last page of this manual you will find warranty information and the warranty card. The factory registration card is provided by your dealer at the time of installation. We welcome you as a Frigette owner and will be happy to be of service to you at any time.

Sincerely,

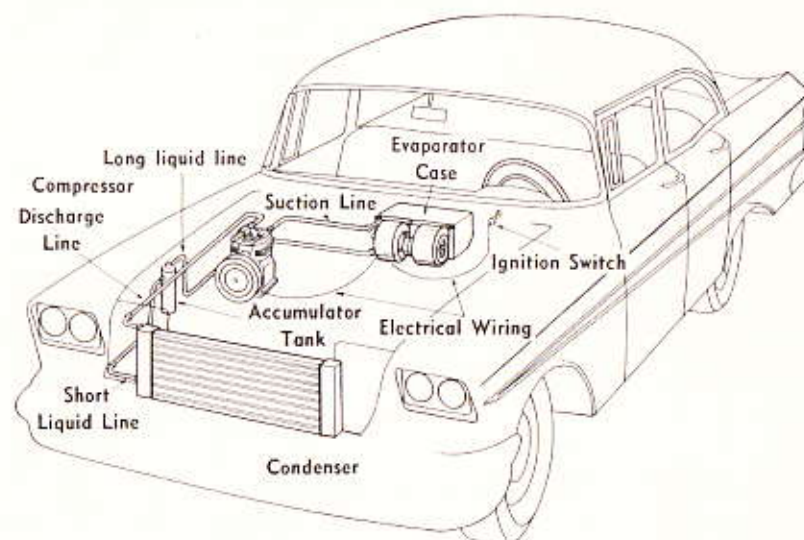
A handwritten signature in cursive script that reads "H. Dale Jordan".

H. Dale Jordan
President
Frigiquip Corporation

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frigette REFRIGERATED AUTO AIR CONDITIONER



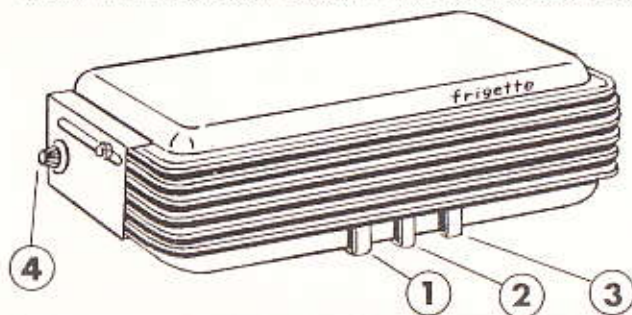
Some models require horizontal compressors and mounts. See Accessory Kit Instructions for details.

PRINCIPLES OF OPERATION

The FRIGETTE automobile air conditioner operates on a heat removal and transfer process. Any air conditioner or refrigeration unit merely removes the heat content of a substance, thereby lowering its temperature. The rate at which heat is removed is dependent upon the original temperature or heat content, the speed at which the system is operated, and the quality of the components being used.

Beginning with the liquid accumulator tank, the complete refrigerating cycle may be traced through the system and back to the accumulator tank. This is done as follows: The refrigerant 12 is in a high-pressure liquid state in the tank, and it completely fills the liquid line back to the evaporator unit. Its direction of flow will be toward the evaporator unit because of the pressure imposed by the compressor. The liquid refrigerant flows through the expansion valve which throttles the refrigerant, thereby metering its flow into the evaporator coil. Immediately, the refrigerant loses pressure and begins to expand in the evaporator coil. A liquid changing from a liquid to a vapor must absorb heat, and this is what happens in the evaporator. The refrigerant absorbs the heat from the evaporator, which in turn absorbs heat from the warm air flowing across its surfaces. The air feels cold because it has less heat content than the surrounding air. The heat-laden refrigerant then is drawn to the compressor by the normal suction that the compressor develops under operation. The Frigette compressor then raises the pressure of the refrigerant 12 and forces it into the condenser. The air flowing over the condenser removes the heat from the hot gas, and thereby causes the refrigerant 12 to condense, or return to a liquid state. The pressure flow forces it into the liquid accumulator tank. This completes the basic refrigerant cycle. To control the temperatures involved in the evaporator coil, it is necessary to employ some means of controlling the flow of refrigerant. The FRIGETTE system uses an adjustable thermostat that samples discharge air temperature. When the temperature becomes too cold, the thermostat will interrupt an electric current and we use this interruption to control a magnetic clutch on the compressor. This will stop the compressor and halt the flow of refrigerant. When the evaporator temperature returns to a warmer condition, the thermostat contacts will close and the magnetic clutch will then engage the compressor, starting the flow of refrigerant once again into the evaporator coil. It must be remembered that any liquid will tend to turn into a vapor if the pressure is lowered or the temperature raised. On the other hand, a vapor will tend to condense into a liquid if the pressure is raised and the temperature is lowered.

The function and service of the individual component parts will be dealt with at greater length in the component section.



SEE STRATO-DAWN
OPERATING
INSTRUCTIONS
PAGE 5

OPERATING INSTRUCTIONS / STRATO-DAWN

| AIR CONDITIONER 1 | BLOWER 2 | THERMOSTAT 3 |
|---|---|--|
| | | |
| 1. To Start Air Conditioner Move Switch To "On". 2. When Air Conditioner Is Not in Use, Move Switch to "Off". | 1. For Maximum Cooling Move Blower Switch to "High". 2. If Less Air Is Desired Move Blower Switch to "Med" or "Low". | 1. For Maximum Cooling, Move Thermostat Switch to "Manual". 2. For Controlled Temperature, (without freeze up), Move Switch to "Auto". 3. For Air Circulation (no Refrigeration) Move Switch to "Off". |
| 4. If cooler controlled temperature is desired, turn thermostat knob, on left rear of case, clockwise. If warmer controlled temperature is desired, turn knob counter clockwise. | | |

OPERATING INSTRUCTIONS ASTRO-DAWN, COOL QUEEN & ECONOMY

TO TURN BLOWER ON:

Turn the rheostat-type CONTROL dial (marked BLOWER) to the right. Regulate the speed of the air flow to suit your requirements by turning this dial to the right for lower speed or to the left for higher speed. To shut off the air flow, move this dial to full left, with the pointer mark at the "OFF" position.



TO TURN AIR CONDITIONER ON:

To start the compressor and FRIGETTE's refrigerant cycle, turn the TEMPERATURE CONTROL to the right. To get the exact degree of coolness you want, turn the dial to the right for colder temperature, and to the left for more moderate cooling. Coldest setting is recommended for city driving. During road trips, if you observe a tendency for ice to form on the coils in the underdash evaporator, adjust the thermostat by turning the TEMPERATURE dial back to the left until the clutch clicks off. This will cause the coils to defrost.



TO ADJUST AIR DIRECTION:

FRIGETTE'S scientifically-designed MULTI-ADJUSTABLE LOUVERS move in all directions. Quick adjustments let you put the refreshing flow of cool air right where you want it. General cooling of the entire car can be accomplished by directing the air toward the roof. If your direction of travel and the location of the sun makes one side of the car hotter, the louver on that side should be adjusted to direct air in that direction to counteract radiation of heat through the windows.



MISCELLANEOUS OPERATING INSTRUCTIONS

INITIAL COOLING. Always park in the shade when possible. But if your car has been parked in open sun with the windows up, remove overheated air inside by driving with windows down for one or two city blocks. You can turn on the FRIGETTE dial controls at the time you start the car engine. After the short distance with the windows down, roll them up again—all the way—adjust air flow and temperature to your liking, and relax in refreshing cool comfort.

STALE AIR AND SMOKE. To rid your car of stale air or smoke while FRIGETTE is operating, you may want to open a fresh-air vent or window vent slightly, for a short period of time.

NON-COOLING OPERATION. Even when your car is comfortable without cooling, you can enjoy a quieter ride by leaving the windows up and operating the FRIGETTE air flow. The ladies prefer this for another reason—no more windblown hairdos. FRIGETTE lets you drive fresh and arrive fresh.

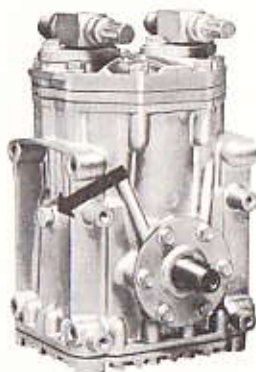
SERVICE CHECKUPS

Have your authorized FRIGETTE dealer service the unit each spring to add refrigerant if needed and check compressor oil level and belt tension. Compressor belt tension should also be checked about three other times during the year.

— IMPORTANT —

Instruct your service station operator to wash the FRIGETTE condenser and radiator when your car is washed, to keep bugs cleaned out. Do not cover the condenser in front of radiator with a screen wire. Water draining out under your car is normal and represents condensed moisture which FRIGETTE has removed from the air inside your car. Air conditioning sometimes causes the engine of the car to run slightly warmer than usual.

CARE OF FRIGETTE



LUBRICATION

The compressor oil level should be checked at the beginning of each season by competent air conditioner technician. It is necessary for a technician to do this because the refrigerant must be blocked off from the compressor when it is opened to check the oil level and the air must be removed from the

compressor after the oil has been checked, otherwise your FRIGETTE would not operate properly. The oil fill and check plug is located at either side of the compressor as indicated by the arrow. The oil change chart (page 22) gives the proper oil level according to the position of the compressor.

REFRIGERANT LEVEL

The FRIGETTE air conditioner has a total capacity of two lbs. of Refrigerant 12. The proper amount in the system may be checked through the small circular window located in the outlet of the drier-receiver tank mounted in the engine compartment. When the system is fully charged, only occasional bubbles may be seen flowing past the window. If no liquid flow is indicated or a frothy condition appears, then FRIGETTE needs refrigerant added to the system. The system should also be checked for leaks by your service technician.





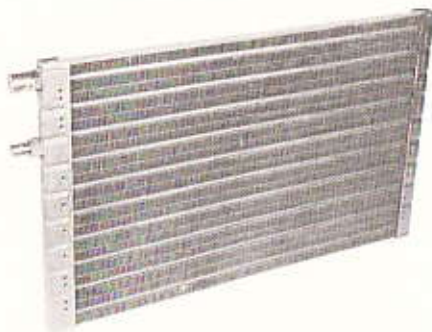
COMPRESSOR BELT ADJUSTMENT

The belt that drives the air conditioning compressor should be checked occasionally for wear and proper tension. It must be borne in mind that over-tensioning of the belt is just as injurious to it as operating it in an under-tension condition. Proper belt tension can be checked by your service technician

from time to time and adjusted to proper tension if necessary. The owner may check the belt tension himself if he prefers by pressing inward at the center of the longest belt span. This deflection should be approximately $\frac{3}{8}$ inch under a fifty pound load. More deflection than this is an indication of insufficient belt tension.

CONDENSER CLEANLINESS

The condensing coils of FRIGETTE are located between the front grill of the automobile and the radiator. Due to its sturdy construction, the condenser requires very little in the way of maintenance; however, dirt and bug accumulation in the fins of the condenser will cause a sharp decrease in its efficiency and therefore affect the operation of FRIGETTE. It is suggested that the owner have his service station attendant blow the bug and dirt accumulation from the condenser fins with an air hose every two weeks during the air conditioning season and oftener if necessary during a high bug infested season. The placement of a bug screen in front of the condenser or automobile is not recommended due to the stoppage of air flow over the condenser and automotive radiator when the bug screen becomes coated with bugs.



WINTER CARE

Simply leave Air Cond. control at full left "OFF" position, ready for year-round use. Do not remove compressor belt or make any other adjustments. It is advisable to operate the compressor a few minutes each week regardless of season. Simply turn the switch (marked AIR COND.) to the right. Leave five or ten minutes, then turn back to "OFF" position. This periodic operation will keep the compressor seal from drying out, a condition which could cause the loss of refrigerant and possible damage to the compressor.

APPEARANCE CARE

The vinyl finish on FRIGETTE is scratch and stain resistant and should give years of trouble-free service. An occasional cleaning to remove dirt accumulation is recommended. This may be accomplished by wiping the surface with a mild soap and lukewarm water.

The chrome front of FRIGETTE may be cleaned by wiping with a soft cloth and, if necessary, washed with a mild soap and lukewarm water to remove stains. Strong alkali soaps or abrasive cleaners should never be used.

For faster warm-ups inside your car in the winter, leave switch far right in "OFF" position, turn on blower switch and air conditioner switch to circulate warm air from heater outlet.

SECTION TWO

SERVICE

INSTALLATION

WARRANTY

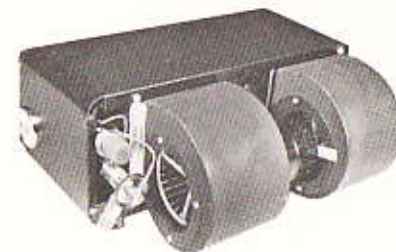
Your FRIGETTE is best serviced by one of the many FRIGETTE service centers located throughout the country. He will be most happy to assist you in the proper operation and service of your FRIGETTE air conditioner. Should you be in an area where FRIGETTE trained technicians are not available, then it is recommended that the services of a trained air conditioning technician be obtained. Technical information is given in the second section of this manual to assist those not familiar with the FRIGETTE installation to properly service the air conditioner. Should you have any questions regarding the service or installation of your FRIGETTE, please contact the factory for proper instructions. In-warranty service is specifically covered in the back page of this manual. A labor allowance is given by the factory to cover certain in-warranty service operations and this should be checked with your service technician.

STRATO-DAWN EVAPORATOR



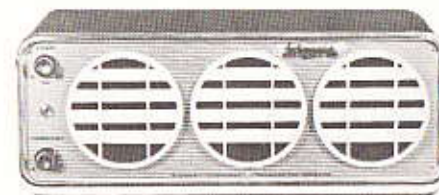
BLOWER

ASTRO-DAWN EVAPORATOR



BLOWER

ECONOMY EVAPORATOR



COOL QUEEN EVAPORATOR



FRIGETTE STRATO-DAWN, ASTRO-DAWN AND ECONOMY MODEL EVAPORATOR

The evaporator unit installs directly below the instrument panel using a special hanger bracket and bolt assembly. To install the evaporator case, the mechanic must determine whether the installation is a dash or a floor mount. This information is contained in the technical instructions supplied with the accessory kit for the particular model car involved.

The evaporator installation instructions supplied with the evaporator (and on Page 25) show a diagram of the hanger bracket assembly which includes the slotted channel, the square head bolt, the slotted hanger bracket, bearing washer and acorn nut. The slotted channel should be assembled to the evaporator case first. This may be done by inserting the square head bolt through the slot allowing the bolt head to seat into the channel. This prevents the bolt head from turning. The slotted channels are then fastened to the ends of the evaporator case with No. 6 x $\frac{3}{8}$ sheet metal screws. **FOR A DASH MOUNT**, the top edge of the slotted channel should be located ($\frac{3}{4}$ inch below the top of the case) but not beyond the curved portion at the top. You will note that one end of the channel has a larger piece of metal closing the end of the channel. This is to fit against the back edge of the case. This safety measure was incorporated to prevent drilling into the return bends when installing the channels.

This same procedure is followed **FOR A FLOOR MOUNT** installation except the channels are located on the bottom of the sides ($\frac{3}{4}$ inch above the bottom of the case). The hanger bracket is fastened beneath the instrument panel or on the transmission tunnel as the case may be, using No. 10 x $\frac{3}{8}$ sheet metal screws for a dash mount and No. 10 x 2 screws for the floor mount. The floor mount brace must be installed on the right end of the hanger bracket using a No. 6 x $\frac{3}{8}$ sheet metal screw and a No. 10 x 2 sheet metal screw in the bottom. The evaporator case is now placed between the ends of the hanger bracket by inserting the bolts protruding from the channels into the slots on the hanger bracket. The bearing washer and acorn nuts are then assembled on the bolts. The evaporator case may be tilted slightly, if needed, to present a more pleasing appearance.

Once properly positioned, the acorn nuts should be tightened securely to prevent the case from moving. The back straps are then installed from the evaporator case to the heater duct or firewall as the case may be. A No. 6 x $\frac{3}{8}$ sheet metal screw is used at the rear edge of the evaporator case and a No. 10 x $\frac{3}{4}$ sheet metal screw is used to fasten the brace to the firewall or heater duct. The brace should be trimmed to provide the necessary length for a particular installation. A floor mount type of installation will require this brace to be fastened from the top rear edge of the evaporator case to the firewall or the heater duct.

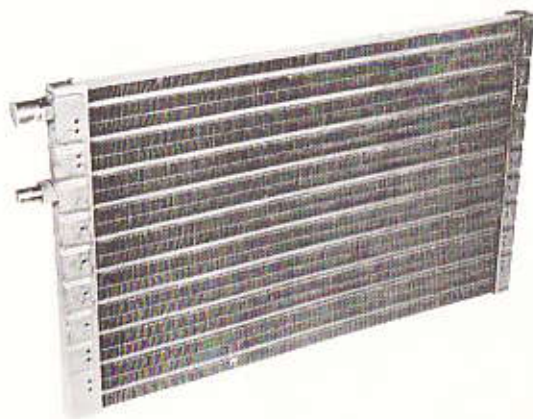
The evaporator installation brace is designed to permit easier and faster removal when servicing other automotive components or for the care of the evaporator itself.

Two drains are used on deluxe models. To install the drain hose, two $\frac{3}{4}$ inch holes are punched or drilled through the floor board beneath the evaporator case **DIRECTLY** below the evaporator drains. Attach the hose to the tubes and out through the $\frac{3}{4}$ inch holes. **DO NOT KINK THE HOSE.**

THE FRIGETTE CONDENSER

The FRIGETTE condenser coil is mounted in front of the automobile radiator and generally fastens directly to the radiator side panels with sheet metal screws. In some automobiles, the radiator projects forward and will not allow the frame ends of the condenser to

contact the side panels directly. It will be necessary in this event, to space the condenser coil forward a sufficient amount to provide proper clearance. Also, it will be necessary in those automobiles where the radiator side panels are wider than the condenser, to lengthen the condenser frame to mount the condenser to the side panels. For this purpose, metal braces are supplied with the accessory kit, and are



used with additional screws to fasten the condenser to the automobile. Additional installation instructions for mounting the condenser coil will be given in the accessory instructions supplied in the accessory kit for the individual automobile.

Servicing of the condenser coil consists mainly of removing bugs and dirt accumulation. Head pressure increase will be evident when foreign material is allowed to collect on the fin surface. Straighten any bent fins to allow maximum efficiency of the coil. *In the event of overheating of the automobile engine, the condition and position of the condenser coil should be checked immediately to determine that it is correctly installed.*

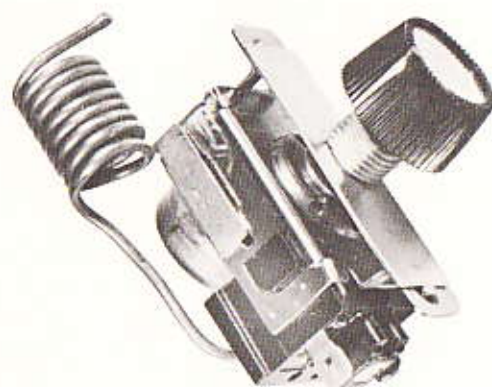


**FRIGETTE
EXPANSION
VALVE**

The FRIGETTE expansion valve is a small, compact unit located at the right end of the evaporator coil. The internal mechanism is extremely sensitive to heat causing the valve to function more rapidly than previous types used for this purpose. The FRIGETTE expansion valve is a non-adjustable valve and the superheat setting is pre-set at the factory for maximum capacity. The feeler bulb on the capillary tube on the expansion valve is fastened to the suction line immediately above the valve body.

Should trouble shooting indicate the valve is defective, it should be replaced by a new valve. Defective valves should be removed from the evaporator coil and returned to the factory for replacement. Do not send the complete evaporator to the factory as this causes needless expense in freight charges and extra handling. Before removing an

expansion valve, the refrigerant should be removed from the system by pumping the unit down or by releasing the gas to the atmosphere. As a routine service function, the feeler bulb should be checked to determine if it is tightly clamped to the suction line. A loose feeler bulb may cause flooding of the evaporator with refrigerant or a high suction pressure with little or no cooling. Should the service technician encounter low or no suction pressure, he may find a restriction in the valve inlet. The expansion valve should be the **LAST PART CHANGED WHEN DOING SERVICE WORK**. This is because expansion valves very rarely, if ever, require replacement.



**FRIGETTE
THERMOSTAT
CONTROL**

This is an electro-mechanical device used to control the temperature in the automobile by cycling the magnetic clutch off and on. This effectively controls the flow of refrigerant into the system. The thermostat control is also used to prevent freeze-up of the coils during high humidity conditions. It has a sensitive power element that activates a switch to control the clutch. The FRIGETTE thermostat is located at the left end of the evaporator. In this position, the discharge air will blow directly on the sensitive element. The adjustment shaft controls the temperature at which the switch is activated and is adjusted clockwise for cooler temperature, thereby allowing the operator to set the thermostat for his best comfort level.

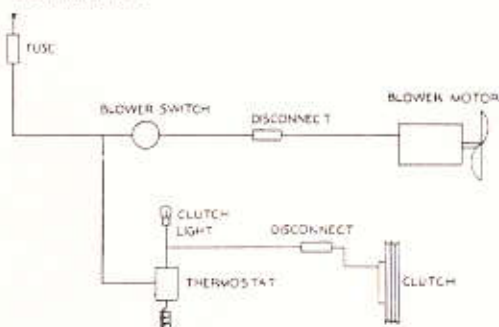
Certain humidity conditions may cause the evaporator coil to frost over before the thermostat control has had time to take effect. It is suggested that under these conditions, the thermostat be turned off

and the blowers allowed to blow air across the coil at maximum speed until the coil is defrosted. This action will take only a few seconds, and then the thermostat may be reactivated to provide cool air in the automobile.

In the event that malfunction of the thermostat control is noted, the only repair that can be made is replacement of the control. Access to the control may be obtained by removing the control knob and shaft nut from the thermostat. Do not send complete evaporator assemblies to the factory for replacement of the thermostat.

ASTRO-DAWN – COOL QUEEN & ECONOMY FRIGETTE ELECTRICAL SYSTEM

ELECTRICAL INLET



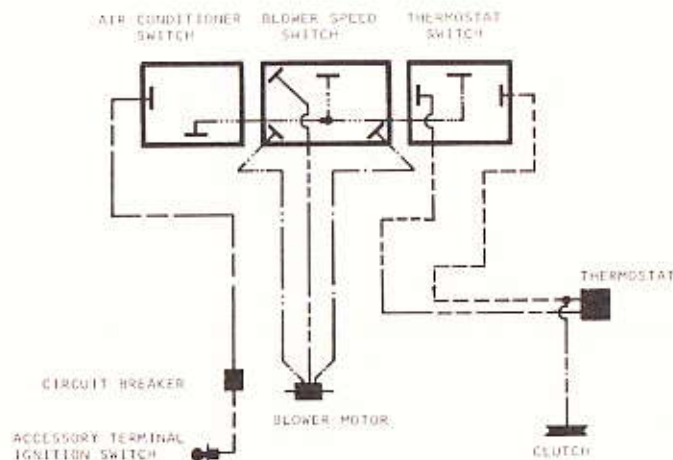
The red wire at the back of the evaporator case is to be fastened to the accessory terminal of the ignition switch whenever possible. A No. 10 terminal is provided for this purpose. In the event it is not possible to fasten the red wire to the accessory terminal of the ignition switch, then it should be spliced

into one of the wires fastened to the accessory terminal or fastened to a terminal block found on the firewall of some makes of automobiles. This wire is the inlet lead to the FRIGETTE air conditioner and should not be fastened to any electrical circuit in the automobile that would overload the wiring and fuses of the automobile accessories.

The Frigette Electrical System is fused in the red lead. It is an in line type that comes apart by pushing together and twisting the cap. The fuse is then exposed for replacement.

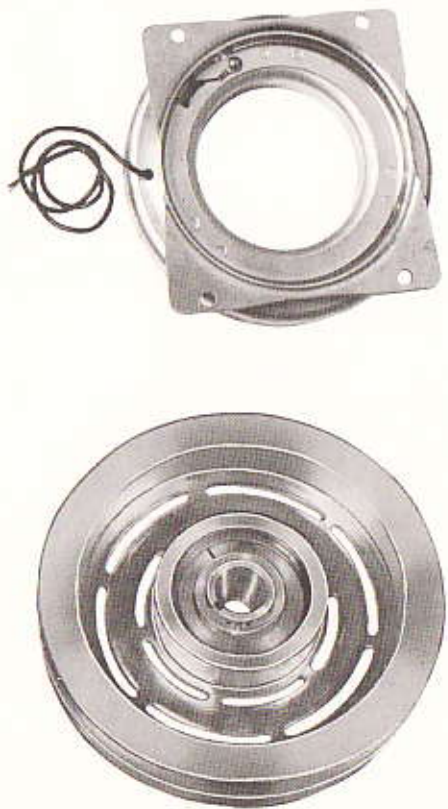
The blower switch may be found on the left hand side of the evaporator face plate. The wire from it is black and through a quick disconnect to the blower motor. Quick fastening connectors are used where ever possible to allow for easier service. The thermostat may be found on the left side of the face plate and the wire coming from it is green, going through a quick disconnect to the clutch. The clutch light is found at the left side of the evaporator. To change the bulb it is necessary to remove the faceplate, pull the bulb socket from the clutch light housing and replace the bulb with a G.E. 1445 or equivalent. Upon completion of the installation of the electrical system, all splices and connections should be taped to prevent shorts, and the wires permanently fastened in such a manner that they will not be cut or frayed by moving parts, or the insulation melted by hot engine parts. Service of the electrical system is not difficult. In the event that defective parts in the electrical system are found, no attempt should be made to repair them in the field, and they should be returned to the factory for replacement if they are still in warranty. In the event that warranty has expired, new parts should be ordered from the factory to replace them.

STRATO-DAWN FRIGETTE ELECTRICAL SYSTEM



FRIGETTE ELECTRIC CLUTCH

The Frigette electric compressor clutch has been developed especially for automobile air conditioning applications, and when properly installed, will provide maintenance-free service for the life of the compressor unit. The clutch design is based on a stationary field principle, and does not require slip-rings or brushes.



The unit consists of two major components, a stationary magnetic field mounted on the compressor and a rotor pulley assembly driven by the V-belt from the engine crankshaft. Electrically energizing the clutch field magnetically couples the clutch plates, and drives the compressor; de-energizing the field releases the clutch plate, uncoupling the compressor from the V-belt drive.

To install the Frigette clutch, the compressor has incorporated four mounting bosses on the front of the casting. Use the four bolts provided in the clutch package and bolt clutch coil securely to these four bosses. The seal ring bolts need never be touched. When the field is installed, place the rotor pulley assembly over the tapered shaft, fitting it over and around the field. Secure it with the washer and special capscrew provided in the clutch box. The Frigette electric clutch has been adjusted at the factory, and once properly installed will require no further adjustments. It is self-adjusting for wear, and unless mechanical or electrical difficulties are incurred, will not require service. If the clutch should fail to operate, check the electrical circuit to be sure that six or twelve volts, depending on the automobile's electrical system, are available at the field lead wires. If the necessary voltage is available and the unit is still inoperative, it must be removed from the compressor and replaced. In the event a defective part is found, only that part of the clutch should be replaced. Do not attempt to make any mechanical adjustments on the clutch. To remove the unit from the compressor, disconnect the leads and then remove the capscrew and washer retaining the pulley on the crankshaft. Insert a $\frac{3}{8}$ " NC capscrew into the threaded portion of the rotor hub and turn it in. The pressure of this capscrew on the end of the compressor shaft will force the entire assembly off, acting as a puller against the compressor shaft.

CAUTION—

The unit should slide off with minimum force. **DO NOT USE A BEARING PULLER ON THE OUTSIDE DIAMETER OF THE CLUTCH, NOR SHOULD THE OUTSIDE DIAMETER BE HAMMERED TO REMOVE THE CLUTCH.** Excessive pressure can result in damage to both the compressor and the clutch.

Now remove the field coil by removing the capscrews holding it to the compressor. Replace the new unit by observing carefully the installation instructions outlined in paragraph three above.

THE FRIGETTE COMPRESSOR

Die cast aluminum head. **1**

Heavy wall cast iron cylinder liners, permanently cast into crankcase body. Micromatic honed finish. **2**

High density, leak-free, lightweight die cast aluminum compressor body. **3**

Bronze bushed, steel backed rear main bearing. **4**

"O" Ring sealed rear bearing plate. **5**

Die Cast aluminum base, heavily ribbed for strength. **6**

Shaft seal specially designed for high-speed operation, with sealing surfaces flat within $\frac{23.2}{1,000,000}$ inch. **7**

Cast perlitic malleable iron crankshaft, carefully balanced, with large connecting rod and main bearing surfaces. **8**

High load capacity ball type main bearing, combination shrink and press fit into place. **9**

Heavy section, vacuum die cast aluminum connecting rods with super-finished bearing surfaces. **10**

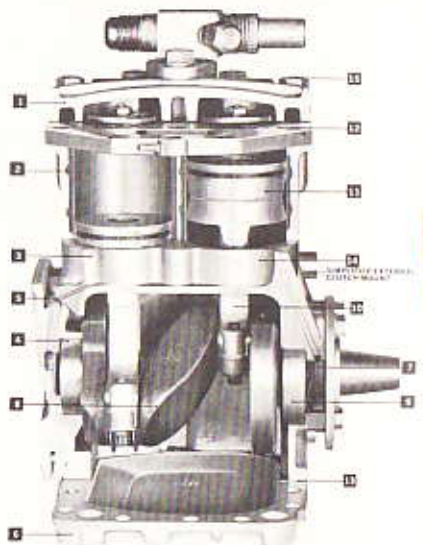
Single ring aluminum pistons. Specially designed rings for optimum oil control and quiet operation. **11**

Valve plate: lapped, perfect valve seats; Swedish steel suction and discharge valves. 32 suction and 16 discharge orifices for low gas friction losses, greater efficiency. **12**

Long asbestos fiber neoprene bonded gaskets throughout for extra strength, long life. **13**

Generous suction and discharge muffler cavities—reduces possibilities of slugging and contribute to quiet operation. **14**

If service is required all parts of the compressor can be removed with standard tools—no special equipment is required. **15**

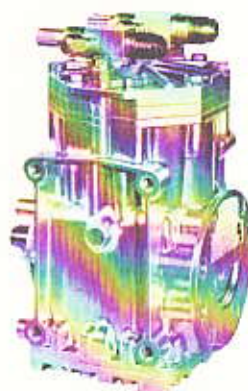


Lightest Automotive Compressor Available . . . Pounds Lighter Than Any Comparable Compressor
 . . . a new die cast crankcase has replaced the permanent mould case, which means less stripping weight, lower shipping costs, easier handling and far less weight on the front suspension, especially important with "compact" automobiles.

The standard Frigette compressor is supplied in a universal mount type with a ball and race front main bearing. This compressor can be installed and operated in any position from a vertical position to a horizontal left to a horizontal right with no field adjustments necessary. UNIVERSAL ROTATION . . . compressor can be operated either clockwise or counter-clockwise rotation. This means only one compressor is required for all of the installations.

When mounting the compressor, care must be taken to attach the refrigerant lines to the proper service valves. Refer to the compressor head before installing the refrigerant lines. The compressor head has the letter "D" embossed beside the discharge valve and the letter "S" embossed beside the suction valve.

Before attempting repairs to the compressor, the service manual should be thoroughly studied.



OIL CHARGE AND CHECKING PROCEDURE

The oil furnished with each compressor is Suniso 5-G. The factory oil charge is $\frac{5}{8}$ pints or $1\frac{3}{8}$ " when checked with a measuring rod through one of the two oil fill openings located at either side of the compressor. The compressor oil level should be checked at the time of installation and again after the system has been in operation for a period of not less than fifteen minutes. To check for correct oil level prior to installation, remove the oil fill plug (on either side of the compressor), rotate the compressor shaft until a clean $\frac{1}{16}$ inch steel rod can be inserted through the oil filler opening to the bottom of the crankcase. The oil should be $1\frac{5}{8}$ " up on the rod. Install the oil fill plug and the rubber "O" ring gasket.

Checking the oil level after the system has been in operation is very important, in view of the fact that oil will be absorbed into the system by the refrigerant. When this check is made, the system and the compressor will be under pressure; therefore, the following procedure must be followed:

The compressor must be running and the crankcase must be warm, with service gauges connected to the service fittings on the compressor suction and discharge service valve. Pump down the compressor by slowly closing (clockwise) the suction service valve until the pressure gauge, which has been connected to the valve, reads zero or slightly lower. (It is important that the suction valve be closed slowly during pump-down. Otherwise, an abnormal amount of oil may leave the compressor because of the pressure reduction on refrigerant saturated

oil in the crankcase. This will result in the wrong (low) oil level reading.) Stop the engine at this point and quickly finish closing the suction service valve. Also close the discharge service valve (clockwise). After you have closed both valves, you will notice that the gauge connected to the suction valve will be above zero by five or more pounds. You must now relieve this pressure slowly by unscrewing the suction gauge connection. Let the pressure bleed off until the gauge again reads zero, then remove the oil fill plug and check the oil level. It should not be less than $\frac{3}{8}$ inch. Re-install the oil fill plug and the rubber "O" ring gasket. Install the suction gauge port cap. Remember that you are working with a high-speed compressor. Its satisfactory operation depends largely on lubrication, the failure of which will result in quick destruction of the bearings. REFER TO OIL CHARGE CHART.

Evacuate the compressor by removing the discharge valve port cap. BOTH THE SERVICE VALVE STEMS MUST BE ALL THE WAY IN. Start the engine and run it three or four minutes. The air that was permitted to enter the compressor through the oil fill plug opening will be expelled through the discharge valve port. Without shutting off the engine, replace the discharge valve port cap, turn off the engine and THEN open both the service valves fully, counter-clockwise position (all the way out). The compressor is now ready to operate.

Oil Charge Chart

| POSITIONS (See Note) | | OIL LEVEL | | | | | |
|-------------------------|---------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | Minimum | | Normal Running | | Initial Charge | |
| Mounts | Range | Dip Stick Depth | Fractional Pints | Dip Stick Depth | Fractional Pints | Dip Stick Depth | Fractional Pints |
| Vertical | 90°—70° | $\frac{7}{8}$ " | $\frac{3}{8}$ Pt. | 1 $\frac{1}{4}$ " | $\frac{1}{2}$ Pt. | 1 $\frac{3}{8}$ " | $\frac{5}{8}$ Pt. |
| Inclined | 50°—15° | 1 $\frac{3}{8}$ " | $\frac{1}{2}$ Pt. | 2" | $\frac{3}{8}$ Pt. | 2 $\frac{3}{4}$ " | $\frac{5}{8}$ Pt. |
| Horizontal | 10°—0° | $\frac{3}{4}$ " | $\frac{1}{4}$ Pt. | $\frac{7}{8}$ " | $\frac{1}{4}$ Pt. | 1 $\frac{5}{8}$ " | $\frac{5}{8}$ Pt. |

(Type Oil — "Suniso" #5, "Texaco" Copella E, or equivalent)

Note: Each pump may be inclined to any angle between 90° and 0° but only toward the side for which it adjusted. (Right or Left.)



COMPRESSOR SHAFT SEAL

If the shaft seal parts are intended for re-use, use extreme care in their removal and protect against damage to the lapped surfaces until reassembly. Scratches across the seal face cause leaks which no amount of compressor running will correct. The seal end of the crankshaft must be free of scratches, burrs and dirt, or it may leak.

SHAFT SEAL—REMOVE

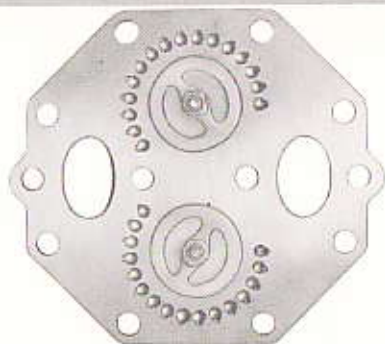
- Remove clutch bolt and clutch.
- Clean the seal plate and cap screws to prevent dirt entering the compressor.
- Remove the seal plate capscrews.
- Remove the seal plate. Upon removal of the seal plate, note the polished lapped surfaces and protect accordingly.
- Carefully remove the carbon ring from the seal housing and examine it for cracks.
- Remove seal spring.

SHAFT SEAL—INSTALL

- Apply clean oil to the crankshaft where the seal must fit.
- Install the seal spring and carbon retainer.
- Dip the carbon seal ring in clean oil and place it in the ring retainer.
- Apply clean oil to the seal surface of the end plate.
- Install end plate gasket. (A little oil will hold it in place.)
- Replace end plate and capscrews.
- Tighten capscrews evenly to prevent seal plate distortion.

VALVE PLATE

The valve plate is the heart of the compressor. Failure of the compressor to pump at proper pressures generally may be attributed to valve plate or valve plate gasket failure. Care must be taken in changing the valve plate to prevent dirt or foreign matter getting on or under the valve plate during its replacement. Gaskets must be correctly installed to insure proper operation. The aligning pins will provide correct installation of the head, valve plate and cylinder assembly, provided their location is not changed during the replacement.



VALVE PLATE—REMOVE

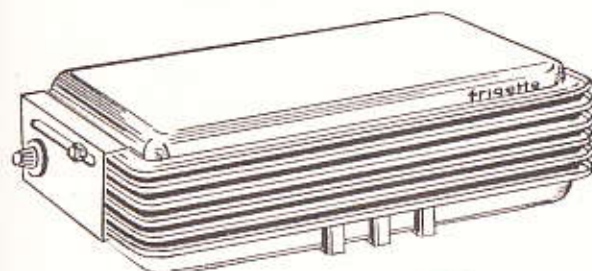
- Remove the service valves.
- Remove the head bolts.
- Carefully remove the cylinder head and note the position of the aligning pins.
- Remove the valve plate.
- Clean the top of the cylinder and the top and bottom surfaces of the cylinder head. The valve plate must be cleaned thoroughly if it is to be re-used. All gasket material must be removed. Care must be taken in removing the gasket material to prevent nicks or burrs in the polished surfaces.

VALVE PLATE—INSTALL

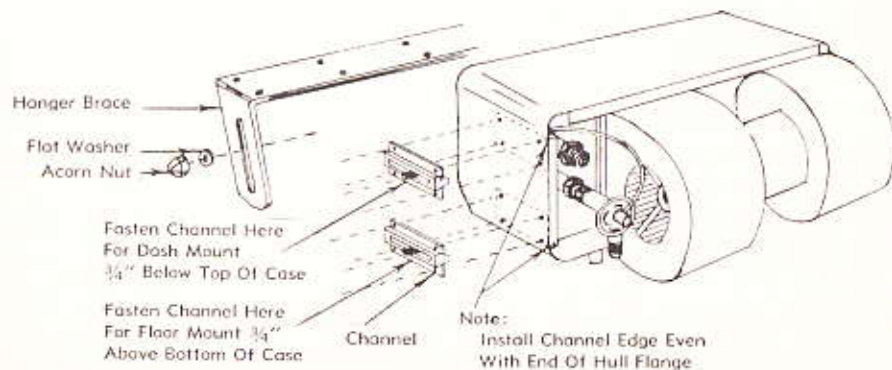
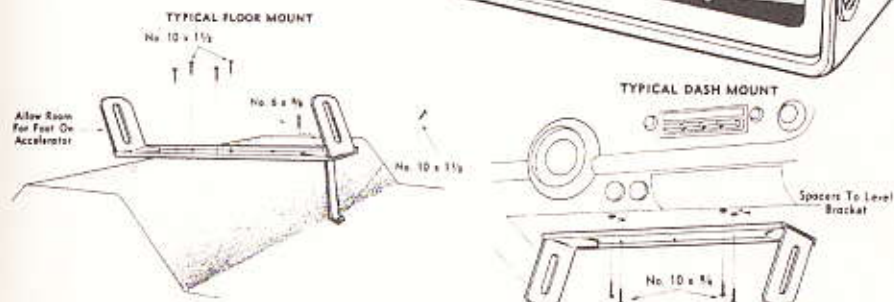
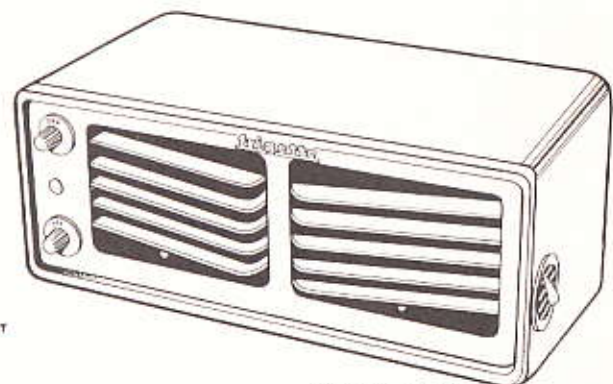
- Place a new gasket on the cylinder with proper side up and over the alignment pins.
- Place the valve plate over the gasket and the alignment pins in the proper position.
- Place the head gasket over the valve plate and the alignment pins.
- Place the head in position and tighten securely in place torquing the cylinder head bolts to 180 in. lbs.
- Install the service valve and service valve gaskets to the cylinder head.

In-warranty compressors are not to be returned to the factory for seal or valve plate replacement. It is only necessary to order a seal or a valve plate and the gaskets to replace them in the field. There will be less delay for the customer and for the installing dealer. Other repairs to the compressor should be made at the factory on an exchange basis.

EVAPORATOR MOUNTS



STRATO-DAWN
ASTRO-DAWN
ECONOMY MODEL



SYSTEM INSTALLATION OF THE FRIGETTE AIR CONDITIONER

After the evaporator, condenser and compressor have been installed according to the instructions given previously, the installation of the circulatory system (or the refrigerant lines) should be undertaken. This may be done as follows:

1. Cut one 1 $\frac{3}{4}$ inch diameter hole in the firewall in an area that will clear the engine components. This may vary according to the individual automobile, and locations for the holes will be given in the accessory instructions sheet. Install a large grommet in this hole. Cut another hole in the firewall 1 $\frac{1}{4}$ inch in diameter, close to the first, or larger hole, and install a small grommet in this hole.
2. Insert one end of the $\frac{3}{8}$ suction hose (5' long) through the large grommet in the firewall and attach it to the $\frac{3}{8}$ male fitting on the rear of the evaporator case. **WRAP THIS LINE WITH THE PRESSTITE INSULATING TAPE SUPPLIED IN THE FREON LINES PACKAGE. THE LINE SHOULD BE WRAPPED FROM THE EVAPORATOR CASE FITTING TO THE FIREWALL.** This will prevent water formation or condensation drip from the hose.
3. Connect the elbow fitting of the $\frac{3}{8}$ liquid line (5' long) to the expansion valve on the evaporator case. Insert the straight end of the hose through the small grommet in the firewall and pull the hose into the engine compartment.
4. Cut one 1 $\frac{3}{4}$ inch diameter hole in the radiator side panel in a convenient location for routing the lines. Install a large grommet in this hole. In a location close to this, in the same radiator side panel, cut another hole 1 $\frac{1}{4}$ inch in diameter and install the small grommet. This is for the short liquid line that is fastened to the bottom fitting of the condenser.
5. Install the accumulator tank to the fender apron in a convenient open position close to the radiator side panel. When installing the accumulator tank, the installer must see that proper flow directions are observed on the accumulator tank. The long $\frac{3}{8}$ " liquid line previously routed through the firewall should be fastened to the "OUT" fitting on the accumulator tank.

6. Connect the short $\frac{3}{8}$ inch liquid line from the lower fitting on the condenser, to the top side fitting of the accumulator tank. The fitting on the accumulator tank is marked "IN."
7. Connect the $\frac{3}{8}$ " suction line (5' long), previously routed through the firewall, to the suction valve of the compressor. The suction valve is identified on the head of the compressor, and the installer must be certain that the suction line is attached to the suction valve.
8. Connect the discharge line (4' long) to the discharge valve on the head of the compressor. This valve is also identified on the compressor head. The discharge line should be routed so as not to interfere with any moving parts, making certain that it is low enough to clear any braces beneath the hood of the automobile that might cut the hose. The discharge line is routed forward through the large grommet in the radiator side panel, and then to the top fitting of the condenser. For additional convenience, a 90 degree swivel elbow is provided on the discharge hose to allow more freedom in the installation. The 90 degree swivel elbow may be fastened to the condenser or to the compressor discharge valve, whichever is more convenient. See the accessory instructions for additional information.
9. Fasten all refrigerant lines to the automobile body with the clamps and screws provided for this purpose. The accumulator tank has a large clamp to hold it securely in place. All of the clamps are to be found in the refrigeration lines package. The installer should try to run the lines parallel to each other wherever possible to provide a neat, workmanlike installation.
10. The installer may prefer to use regular refrigeration oil to lubricate the threads of fittings as they are connected.
11. The air conditioning system should now be checked for refrigeration leaks. See section on "Evacuating, Leak Testing and Charging."



EVACUATING, LEAK TESTING AND CHARGING

Before attempting the charging of a FRIGETTE air conditioner, a thorough understanding of the compressor service valves must be had. The compressor service valves have two connections, a $\frac{5}{8}$ " male connection on one end, and a $\frac{1}{4}$ " male connection on the side of the valve. The $\frac{5}{8}$ " male connection has the system line attached to it and the $\frac{1}{4}$ " connection is covered with a cap. The $\frac{1}{4}$ " connection is called a gauge port and is used to test the system pressures and also to charge the unit. Under the large cap at the end opposite the $\frac{5}{8}$ " connection is a valve stem. This is used to control the flow of refrigerant in the system. By turning this stem clockwise, all the way in, it will shut off the line coming to the compressor. In other words, it will shut off the system. By turning the valve stem counter-clockwise, all the way out, it will shut off the gauge port and will allow full flow from the line into the compressor (suction valve).

In the case of a discharge valve, the flow is out of the compressor. The action of the valve stem is the same as the suction valve.

LEAK TESTING:

To leak test the FRIGETTE air conditioner, proceed as follows:

1. Remove the hex cap from the compressor DISCHARGE valve gauge port. Remove the SUCTION and DISCHARGE valve stem caps. Back out (counter-clockwise) the SUCTION stem until it seats. Set the discharge valve stem to an intermediate position, four full turns from either closed or open position.
2. Attach a charging line between the DISCHARGE valve gauge

port and one pound refrigerant 12 charg-a-can container. Open the valve on the charg-a-can while holding the can upright so only the vapor will flow into the system. Close the valve after sufficient gas for testing has entered (about $\frac{1}{2}$ minute).

3. Use a halide torch or similar leak detector to check the hose connection for leaks. Correct any leaks by further tightening, if possible; otherwise, open (after first shutting off the charging valve) and check for damaged flare seats, gaskets or any other damaged components. If they are apparently OK, apply a film of refrigeration oil on the gasket or flange. Tighten the connection again. Open the refrigerant can valve and again check for leaks.
4. In the event that leaks are found, an indication in the halide torch will be a green or purple flame. CAUTION: DO NOT BREATHE THE FUMES FROM THE HALIDE TORCH IF A LEAK IS INDICATED—THESE FUMES ARE TOXIC.

TO TEST FOR LEAKS

1. Hold a thumb over opening in the pickup tube of the leak detector.
2. Open valve of the detector and ignite the gas with a lighted match.
3. After five seconds, remove thumb from the pick-up tube.
4. Allow leak detector to generate for one minute or until the element in the torch head becomes red hot.
5. Adjust the flame height to a minimum. This increases the sensitivity of the torch.
6. Hold the pickup tube near all connections, seals and gaskets.
7. Observe the flame color. No color change indicates a leak-proof connection. A green or purple flame shows evidence of a leak. CAUTION: DO NOT BREATHE FUMES FROM LEAK DETECTOR WHEN A LEAK IS FOUND. THESE FUMES ARE TOXIC.
8. Repair leaks as necessary. Follow evacuation and charging procedure as outlined in the installation instructions.

EVACUATION PROCEDURE

1. When the system is definitely leak tight, shut the charg-a-can valve off and remove the charging line from the compressor, allowing the gas in the system to escape. Screw in (clockwise) the DISCHARGE valve stem until seats. Be sure the DISCHARGE valve gauge port cap is off, then start the engine and run at fast idle for five to ten minutes until the air stops flowing from the gauge port. A slight amount of oil loss is OK. Cap the DISCHARGE valve gauge port tightly and shut off the engine. The SUCTION valve stem should be in the full counter-clockwise position.
2. As an alternative to the above, an evacuation pump may be used, and its use is recommended highly. To use the vacuum pump, it should be attached to the DISCHARGE valve gauge port and the DISCHARGE valve should be set at an intermediate position. The SUCTION service valve should be backed all the way out (counter-clockwise) until it seats. The vacuum pump should be started and run for at least ten to fifteen minutes. After the system has been evacuated and while the vacuum pump is still running, the DISCHARGE valve should be backed all the way out (counter-clockwise). The vacuum pump then may be turned off and the DISCHARGE valve gauge port cap installed and tightened securely in place.

CHARGING THE FRIGETTE AIR CONDITIONER

The FRIGETTE air conditioner requires at least two pounds of refrigerant 12 to fully charge the system. Either bulk refrigerant from a large tank, or two one-pound containers may be used.

1. If the system is to be charged from a bulk refrigerant, weighing scales are required. Support the tank on the scales with the charging hose attached from the tank valve to the SUCTION service valve gauge port. The SUCTION service valve is then opened (clockwise) and the refrigerant 12 allowed to flow into the system. The engine should be started and the clutch engaged. Then, with the engine running at fast idle, allow at least two pounds of refrigerant 12 to flow into the system. The clutch may

then be disengaged and the service valve stems backed all the way out (counter-clockwise). Check the system for leaks.

2. If the one pound refrigerant 12 containers are used, the following procedure should be used.
 - a. Connect the charging line between the charg-a-can valve and the SUCTION valve gauge port. Attach the charging valve and puncture the container seal. Then back the charging valve stem out and allow the refrigerant to enter the charging line. The SUCTION valve should be turned five turns in (clockwise) and the engine started. Engage the clutch and the refrigerant will be pumped into the system. Invert the container and grasp it firmly in both hands, shaking vigorously while doing so. This will expel all the refrigerant into the system. While shaking the can, the mechanic may determine when it is empty. When all the refrigerant has been expelled into the system, the charging valve can be turned in fully (clockwise) and the container removed from the valve.
3. Charge one more pound can of refrigerant as outlined in paragraphs one and two above. Back out SUCTION valve stem fully. Remove the charging line from the gauge port and install the hex gauge port cap and the two valve stem caps. The valve stems of both service valves should be in the full outward position (counter-clockwise), for proper operation.
4. After the system has been in operation from 10 to 15 minutes, the installing mechanic should check the sight glass for proper refrigerant charge. Occasional bubbles at 1500 rpm are permissible; however, if a frothy indication is seen in the sight glass, additional refrigerant must be charged into the system. It may be necessary to top off the unit with an additional ½ lb. of refrigerant.
5. A thorough high pressure leak check should be made at this time to determine that there are no leaks present in the system.

TO PUMP REFRIGERANT OUT

In the event component parts must be replaced, the unit will have to be pumped down or the refrigerant removed. Two methods may be used.

A.

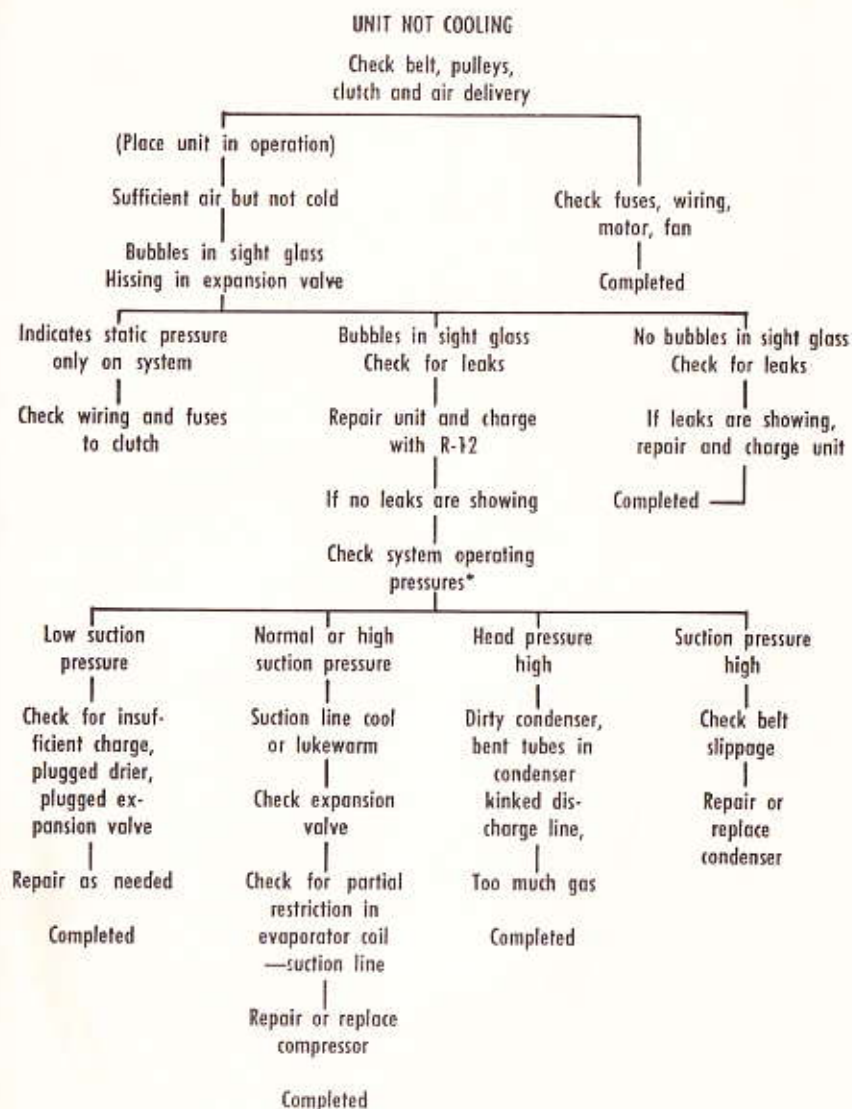
1. Remove hex cap from suction and discharge service valves. Attach one charging hose to each service valve port.
2. Connect the compound (low side) gauge to the charging hose on the suction service valve. Open valve (clockwise) one turn. Notice pressure on gauge. Unscrew the gauge slightly and allow a little refrigerant to escape. This bleeds off the air. Tighten gauge in place.
3. Connect the charging hose on the discharge service valve to an EMPTY refrigerant drum. Open the discharge service valve all the way in (clockwise) to the front seat. Unscrew the charging hose slightly from the drum and allow the air to bleed off. Tighten charging hose to drum.
4. Open (counter-clockwise) drum valve fully. Place the drum in a bucket or tub of cold water to aid the condensing action.
5. Start the automobile engine. The refrigerant will start to enter the drum.
6. Observe the suction pressure on the compound (low side) gauge. It will drop steadily as refrigerant enters the drum.
7. When the suction pressure reaches the zero or no pressure point, close the drum valve (clockwise). IMMEDIATELY stop automobile engine.
8. Back seat (counter-clockwise) both service valves. The defective parts may now be removed with minimum gas loss.

B.

As an alternate method, the refrigerant may be released to the atmosphere. To do this, follow step No. 1 outlined above.


1. Grasp both hoses firmly near the outer end and slowly open (clockwise) both service valves four turns. After the gas has escaped, close both valves (counter-clockwise).
2. It will be preferable to do this outside to avoid contamination of the air in the service area.

TROUBLE-SHOOTING CHART



* RECOMMENDED SYSTEM PRESSURES
(High Pressures may vary 10 lbs.)

| | |
|--------------------------|-------------------------|
| 180 lb. Hi Side Pressure | 10 lb. Lo Side Pressure |
| 200 lb. Hi Side Pressure | 12 lb. Lo Side Pressure |
| 220 lb. Hi Side Pressure | 15 lb. Lo Side Pressure |

| | | |
|---|--|---------------------------|
| ORIGINAL No. 1400 THIS TAG MUST BE WIRED TO ANY DEFECTIVE PARTS RETURNED ATTACH ONE TAG TO EACH ITEM |  FRIGIQUIP CORPORATION No. 1400 3805 N. W. 36 ST. OKLAHOMA CITY 12, OKLA. | |
| | NAME OF PART | |
| | REASON FOR RETURN | |
| | REPAIRS MADE BY | AUTHORIZED SERVICE CENTER |
| | CUSTOMER WARRANTY REGISTRATION NO. | |
| | EVAPORATOR MODEL NO. | COMPRESSOR NO. |
| | DATE INSTALLED | MILEAGE |
| | DATE REMOVED | MILEAGE READING |
| | OWNER'S NAME | |
| | RETURNED BY | (DISTRIBUTOR NAME) |
| ADDRESS | | |
| WHITE COPY: FOR INSTALLING DEALER YELLOW COPY: FOR DISTRIBUTOR PINK COPY: MAIL TO FRIGIQUIP CORPORATION TAG COPY: TO REMAIN WITH RETURNED PART | | |

PARTS ORDERING AND WARRANTY

For defective parts to be returned in warranty, please use the warranty tag. A warranty tag should be attached to each item returned under warranty in order that we may evaluate the defective parts properly. Please do not return parts to FRIGIQUIP CORPORATION in warranty that do not have proper information with them, as this results in loss of time and additional cost in parts replacement. A supply of warranty tags will be sent free of charge upon request. A packing list should accompany all parts returned.

Some consideration should be given to the method of transportation for defective warranty parts. It is not feasible to send less than 100 lbs. by motor freight because of the 100 lbs. minimum weight rule. For small parts, we recommend parcel post and in some areas, the bus line may give faster and cheaper service.

The Parts Department of the FRIGIQUIP CORPORATION will be happy to assist you in handling of warranty merchandise and should you desire information, do not hesitate to write us.

LABOR ALLOWANCE

Labor performed in connection with replacement of defective parts within the warranty period as described on Page 9, and as covered otherwise under the General Conditions of Sale will be reimbursed in accordance with the following conditions, and at the rate specified under Schedule "c" following:

- (a) Frigiquip Corporation will pay to the Authorized Distributor or Dealer such warranty labor as described herein, and at the rates contained herein for such warranty labor performed by any authorized Dealer operating under and for said Distributor or Dealer.
- (b) A Frigiquip Return Material Order and Labor Claim form number 12 must be completely filled out with distribution made as indicated on the four copies. When mailed to the factory, this shall constitute proper claim for the authorized warranty labor allowance covering the defective part being returned. Such claims for warranty labor allowance will not be considered until the defective part is received at the factory, has been inspected, and its defectiveness determined.

(c) WARRANTY LABOR ALLOWANCE SCHEDULE — REMOVE AND REPLACE Includes Freon where required

| ACCESSORY | | Labor | Amount |
|-----------|--|--------------|--------|
| (1) | Compressor Mounting Plate Includes removing and replacing plate from engine, compressor from plate. | 1.7 hour | \$8.50 |
| (2) | Drive Pulley Includes removal of any component parts including radiator if necessary. | 1.2 hour | 6.00 |
| (3) | Idler Pulley and/or Bearing | .2 hour | 1.00 |
| (4) | Drive Belt | No Allowance | |

| | Labor | Amount |
|--|----------|--------|
| CONDENSER | | |
| (5) Condenser Includes removal of radiator, grill and any other components necessary & recharging system. | 1.5 hour | 7.50 |

COMPRESSOR

| | | |
|--|--------------------|--------------|
| (6) Compressor Includes removal and replacement of drive belt and clutch and recharging system. | 1.2 hour | 6.00 |
| (7) Seal drive belt and clutch and compressor if necessary and recharge system. | 1.0 hour | 5.00 |
| (8) Valve Plate Includes gasket replacement. | 1.0 hour | 5.00 |
| (9) Gaskets Includes plate, cylinder head, base plate. | 1.0 hour | 5.00 |
| (10) Clutch (Rotor & Field Coil) Rotor Only | .3 hour .2 hour | 1.50 1.00 |

EVAPORATOR UNIT

| | | |
|--|----------|------|
| (11) Evaporator Case Includes disconnecting the hot electrical lead, liquid line and suction line, removing and replacing case and recharging system. | 1.2 hour | 6.00 |
| (12) Blower Motor or Fan Motor | 1.0 hour | 5.00 |
| (13) Fan Blade or Blower Wheel Items (12) and (13) include removing case from dash or floor mounting, removing and replacing motor and/or fan. | 1.0 hour | 5.00 |

| | Labor | Amount |
|--|----------|--------|
| (14) Expansion Valve Includes operation described in Item (11) plus replacement of new expansion valve & recharging system. | 1.4 hour | 7.00 |
| (15) Thermostat | .3 hour | 1.50 |
| (16) Switch Assembly | .3 hour | 1.50 |
| (17) Clutch Indicator Light Items (15), (16) and (17) include removing evaporator from its mounting if necessary. | .2 hour | 1.00 |

LINES SYSTEM

| | | |
|---------------------|----------|------|
| (18) Receiver-Drier | .8 hour | 4.00 |
| (19) Liquid Line | 1.0 hour | 5.00 |
| (20) Suction Line | 1.0 hour | 5.00 |
| (21) Discharge Line | 1.0 hour | 5.00 |

Includes recharging system.

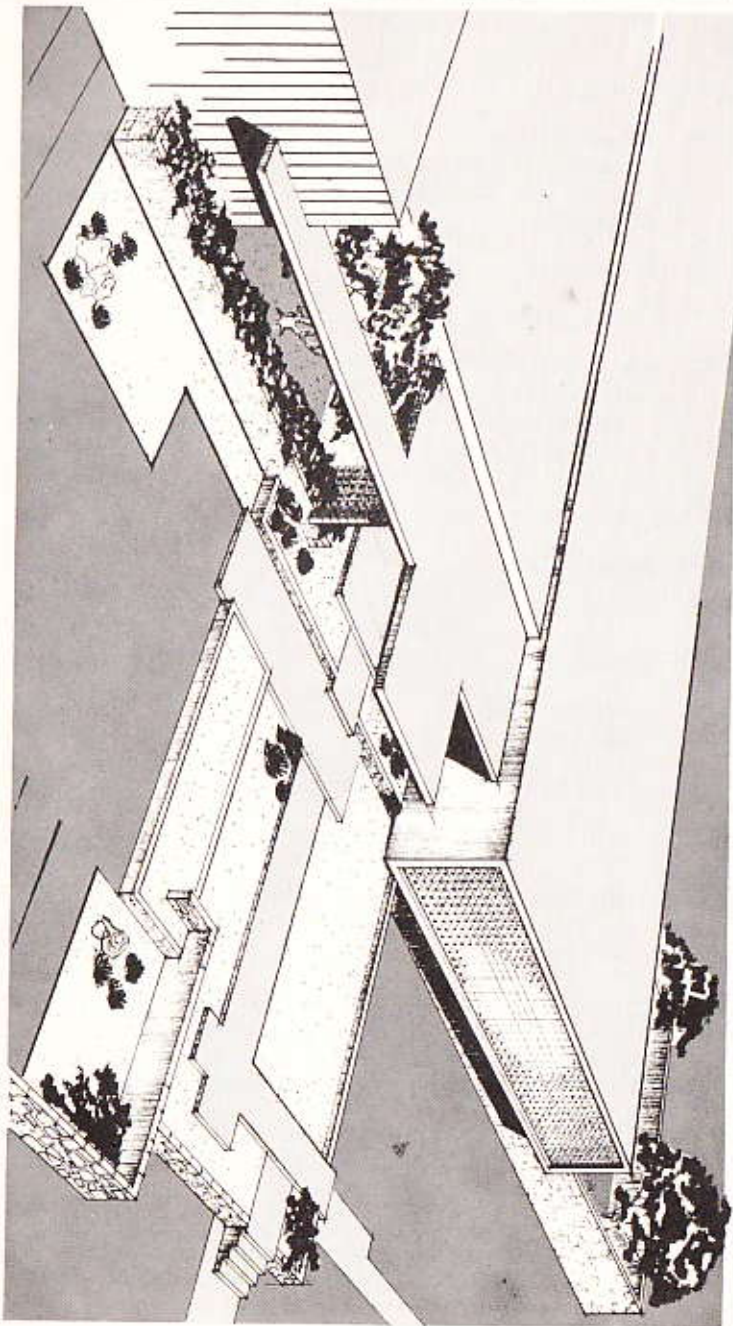
- (d) No credit will be issued for loss of refrigeration in conjunction with any of the above operations under any circumstances as Freon allowance has been considered in this price.

This warranty is in lieu of all other warranties expressed or implied, and it neither assumes nor authorizes any other person to assume for it any other obligations or liability in connection with the sale of this equipment or any part thereof.

This warranty will not apply to any FRIGETTE unit or any part thereof which has been subject to any accident, alteration, abuse, or misuse or faulty installation.

- (e) Installation of an accessory kit or any component part other than that furnished by Frigiquip Corporation VOIDS labor warranty.

HOME OF FRIGETTE



NOTES

PARTS WARRANTY

Each new unit manufactured by Frigiquip Corporation is warranted to be free from defective material and workmanship for a period of twelve (12) months from date of delivery to customer, or 12,000 miles, whichever occurs first. The Corporation's obligation under this warranty shall be limited to the repair or replacement of parts by Frigiquip Corporation found defective within the twelve (12) months or 12,000 miles from date of original installation, subject to the limitations contained herein. Loss of refrigerant for any reason is not covered under this warranty. Said defective parts are to be shipped "Freight Collect" to the manufacturer's plant in Oklahoma City, Oklahoma. The manufacturer shall be the sole judge as to whether such returned parts are defective under this warranty. The Corporation will not be responsible for transportation charges incidental to the replacement of defective parts, other than provided herein.

This warranty does not cover the cost to replace refrigerant gas regardless of cause of loss, even though loss of gas is caused by a defective part.

This warranty is in lieu of all other warranties expressed or implied, and it neither assumes nor authorizes any other person to assume for it any other obligation or liability in connection with the sale of this equipment or any part thereof.

This warranty will not apply to any FRIGEFTE unit or any part thereof which has been subject to any accident, alteration, abuse, or misuse, or faulty installation.

Comp. No. _____

Frigiquip Corporation

**WARRANTY NOT VALID
UNLESS REGISTERED
AT FACTORY**

Date of Installation _____ Mileage reading _____

Installed in _____
Make Year Style

Dealer Name _____

Address _____

Owner Name _____

Address _____

Owner Copy