

# DUO-THERM®

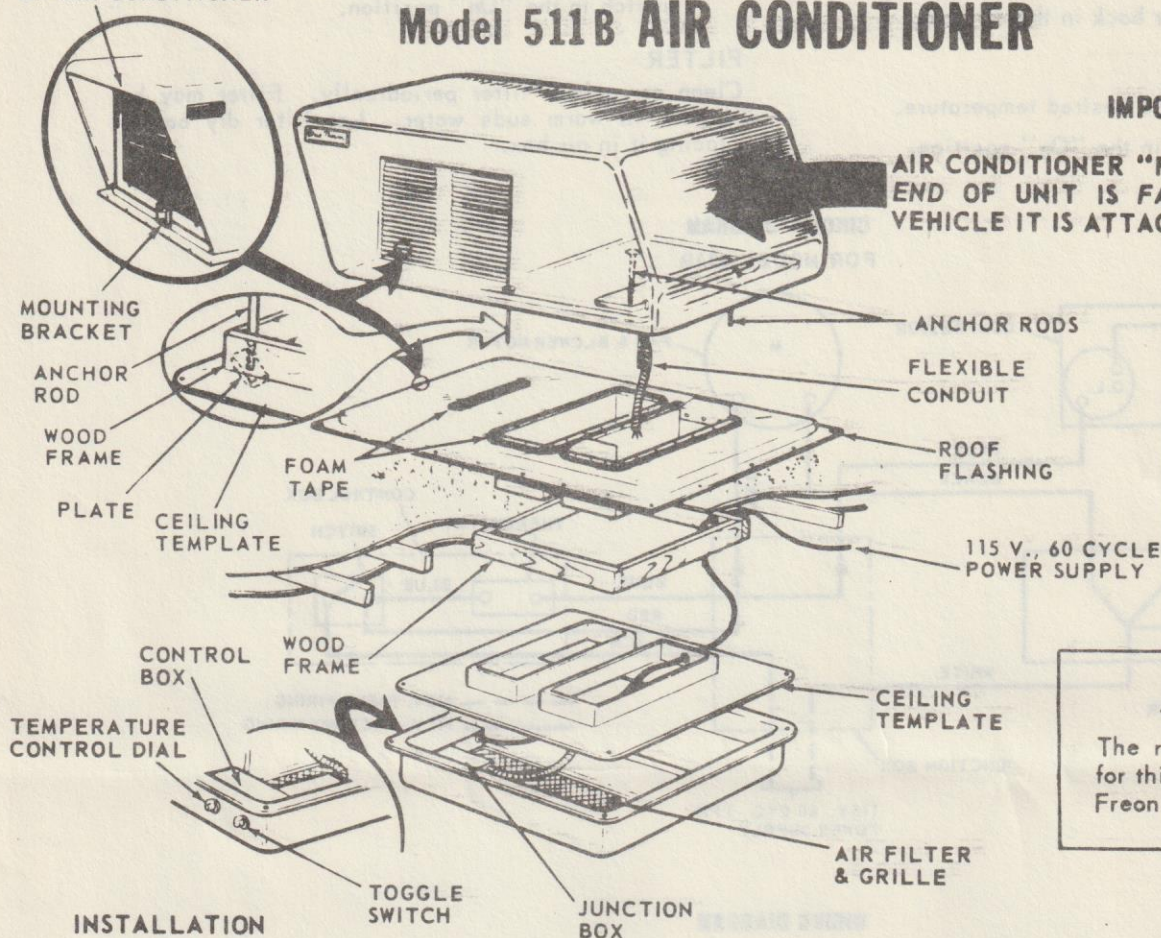
## INSTALLATION & OPERATING INSTRUCTIONS

### Model 511B AIR CONDITIONER

#### IMPORTANT

AIR CONDITIONER "FRONT". BE SURE THIS END OF UNIT IS FACING THE FRONT OF VEHICLE IT IS ATTACHED TO.

REAR VIEW  
OF AIR CONDITIONER



#### RECHARGING

The recommended charge for this unit is 16.5 oz. of Freon 22.

#### INSTALLATION

##### IMPORTANT

The air box will protrude from ceiling 2" - be sure to check for possible interference with cupboard doors, refrigerator doors, bathroom doors, etc.

1. There must be a hole in the roof 14" x 14". In some applications the ceiling vent fan can be removed and the air conditioner installed in vent opening. If the vent opening is larger than 14" x 14" it should be framed down to 14" x 14".
2. If opening has to be cut in roof, be sure it is framed in to 14" x 14". Also, framing stock should be the same thickness as ceiling.
3. Slide ceiling template into hole and mark location on wood framing for power line.
4. Remove ceiling template and drill a large enough hole in wood frame for power line.
5. All wiring must comply with the "A.S.A." standards and the "N.E.C." code. The power line to the air conditioner must be a separate circuit, with a minimum of 15 amps.

Wire Lengths & Size } For runs up to 15 ft., use No. 14 AWG.  
                                      } For runs up to 24 ft., use No. 12 AWG.

**NOTE:** A fuse box with 15 amp. time delay fuses or a breaker must be installed in the power line.

6. Apply caulking to underside of roof flashing and set flashing in roof opening. Secure flashing to roof with sheet metal screws. Apply the foam

tape (as provided) to the top of roof flashing as illustrated.

7. Set air conditioner on roof flashing and attach anchor rods as shown in illustration.
8. Install ceiling template in opening, making sure all 4 anchor rods come through the plate.
9. In the bag of parts supplied there are 4 nuts, 4 small plates and 8 screws. Place 1 plate and 1 nut on each anchor rod. The plates should be located across the corners of the wood frame and attached by screws. Tighten nuts securely. (See illustration.) Tape joints between telescoping parts.
10. Attach air box to ceiling template with 1 screw in each corner and sides.
11. Attach mounting bracket to back of air conditioner and flashing, with sheet metal screws. This bracket holds down the back of the air conditioner. (See illustration.)
12. Remove return air grille and filter.
13. Connect the flexible conduit, leading from the compressor section, to the junction box, inside the air box. Conduit connector provided.
14. Connect the red wire and the blue wire, inside the conduit, to the red wire and the blue wire, inside the junction box, using the connectors provided.



15. The black wire inside conduit, and the white wire inside the junction box are the power supply wires. Connect these wires to the 115V. 60 cycle supply line.

16. Place grille and filter back in the air box.

## OPERATION

1. Set temperature dial to desired temperature.
2. Place toggle switch in the "On" position.

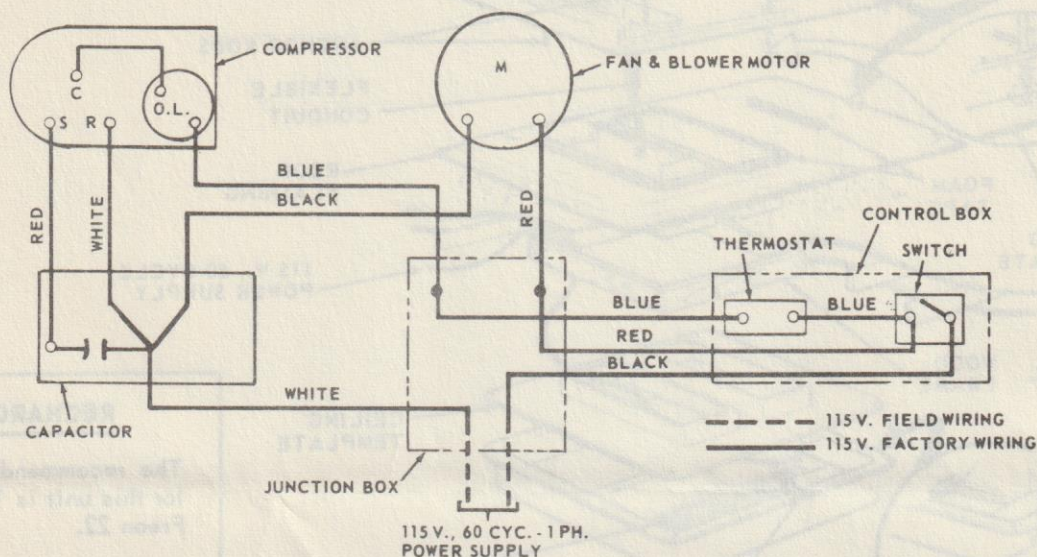
3. To shut off air conditioner, place toggle switch in the "Off" position.

4. To have air circulation without cooling set temperature dial to warmest setting and place toggle switch in the "On" position.

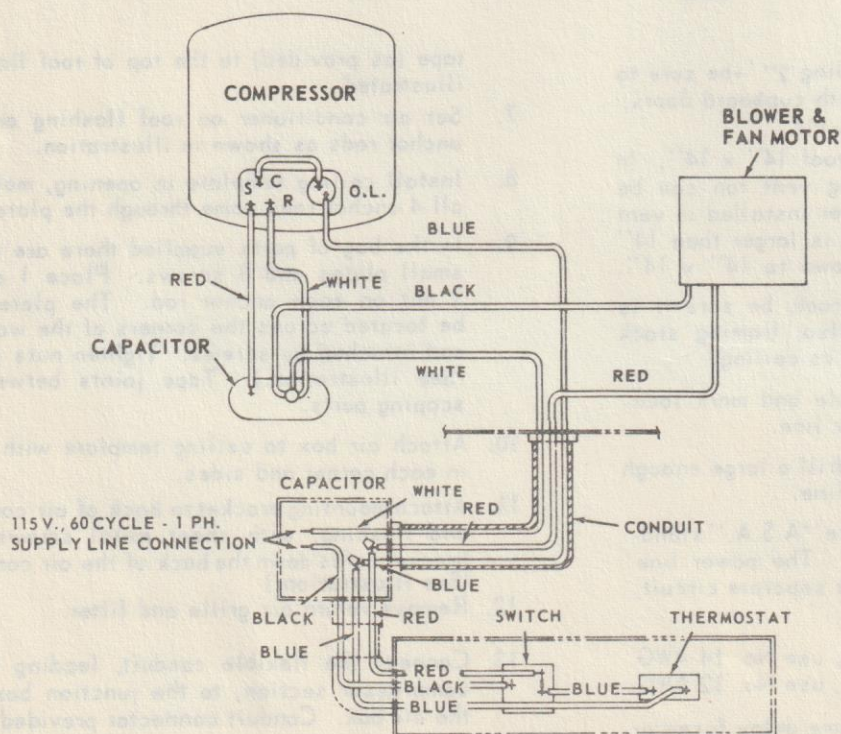
## FILTER

Clean or replace filter periodically. Filter may be cleaned in warm suds water. Let filter dry before placing it in air box.

**CIRCUIT DIAGRAM  
FOR MODEL 511B**



**WIRING DIAGRAM**



DUO-THERM DIVISION  
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