

PACKET ONLY


Installation Instructions Supplement

This book is a supplement to the 48 and 50HJ,TJ Installation, Start-Up and Service Instructions, and is to be used for the rooftop units designed specifically for Home Depot Stores.

GENERAL

The Home Depot rooftop units are the same as the Carrier standard HJ015-025 and TJ016-028 units with the following custom-design modifications:

- Hinged filter access panels
- Hinged evaporator-fan motor and blower access panels
- Hinged control box access panels
- Novar control with airflow switch (AFS) and compressor relays for fan and compressor status inputs, discharge temperature sensor (DTS), and 3-position economizer dampers. (See Fig. A for AFS and DTS locations.)

All data and instructions presented in the Carrier base unit installation instructions included in the literature packet apply to the Home Depot units with the exception of the information included in this supplement.

NOTE: All titles used in this supplement correlate with the Carrier standard unit Installation, Start-Up and Service Instructions included with the 48/50HJ,TJ units.

INSTALLATION

Make Electrical Connections

FIELD CONTROL WIRING — Install auxiliary temperature sensor as specified in job requirements.

Make field control wiring connections directly to the factory-installed Novar control board. Refer to the unit wiring diagram (on the unit).

Make Outdoor-Air Inlet Adjustments — All units are equipped from the factory with a 3-position outdoor-air damper. Refer to Carrier standard unit Installation, Start-Up and Service Instructions for more details. Set the minimum damper position setting ON THE ECONOMIZER MOTOR at the full clockwise position.

The damper position adjustment is made on the separate potentiometer located next to the economizer motor. Rotate the adjustment knob clockwise to increase damper open position, and counterclockwise to decrease damper open position. See Fig. B for potentiometer location.

START-UP

Evaporator Fan and Damper Operation — On a call for evaporator fan operation from the Novar control, fan starts and AFS closes. Outdoor-air dampers move to minimum position. On a call for outdoor air from the Novar control, outdoor-air dampers move to the fully-open position. When the Novar control night mode switch closes, the outdoor-air dampers move to the fully-closed position.

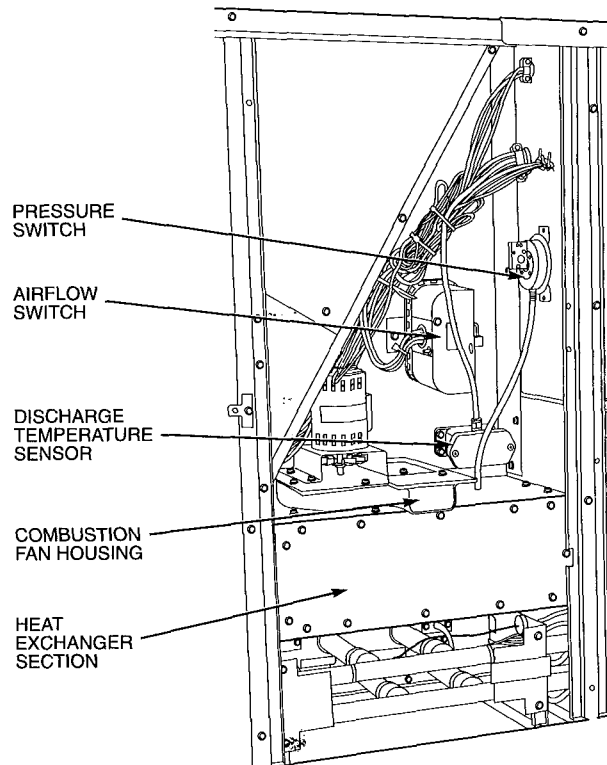


**Fig. A — Airflow Switch and Discharge Temperature Sensor Location
(48 Series Unit Shown)**

Cooling and Heating Operation — Cooling and heating operation are the same as described in the Carrier standard unit Installation, Start-Up and Service Instructions in the Cooling, Units Without Economizer and Heating, Units Without Economizer sections, respectively. The only exception is that the Novar control takes the place of the thermostat in the Home Depot custom units. See Fig. C and D for Home Depot Typical Wiring Schematic and Component Arrangement.

SERVICE

Economizer Adjustment — To make adjustments to the economizer:

1. Turn off unit power. The outdoor-air dampers should be fully closed, and the return-air dampers should be fully open.
2. Turn on unit power.
3. Adjust the Novar control to call for fan operation (or place a jumper between terminals R and G on terminal block no. 2 [TB2]). The outdoor-air damper will move to the vent position.
4. Adjust the vent position using the minimum position potentiometer mounted next to the economizer motor.
5. Adjust the Novar control to call for damper operation (or place a jumper between terminals 3 and 7 on the Novar control). The outdoor-air dampers will move to the fully-open position.
6. Adjust the Novar control to call for night mode operation (or place a jumper between terminals 25 and 26 on the Novar control). The outdoor-air dampers will move to the fully-closed position.
7. Adjust mechanical linkage, if necessary, for correct positioning. It may be necessary to remove the filters to adjust the linkage.

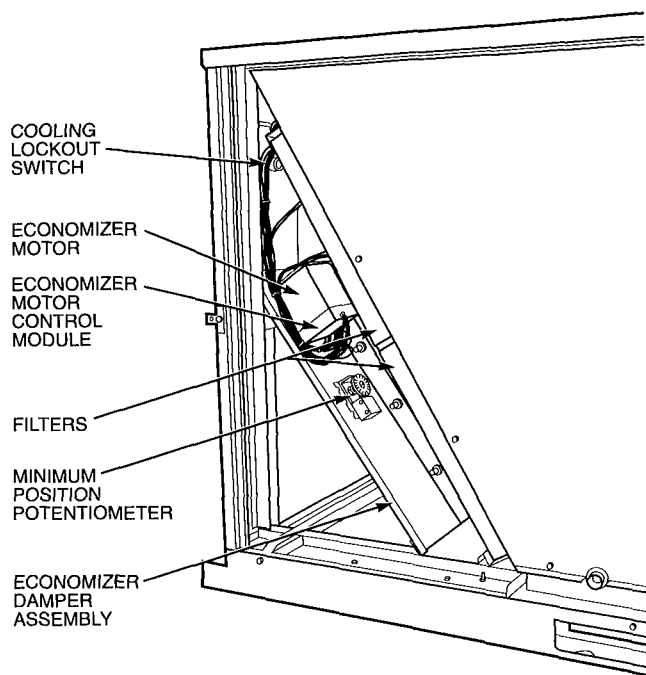


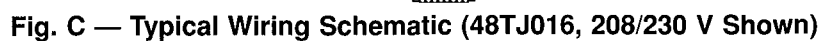
Fig. B — Potentiometer Location

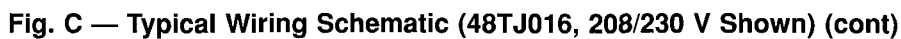
LEGEND FOR FIG. C AND D

AFS	— Airflow Sensor
BRK W/AT	— Breaks With Amp Turns
C	— Contactor
CAP	— Capacitor
CB	— Circuit Breaker
CCW	— Counterclockwise
CH	— Crankcase Heater
CLO	— Compressor Lockout
COMP	— Compressor
CR	— Cooling Relay
CT	— Current Transformer
CW	— Clockwise
DM	— Damper Motor
DTS	— Discharge Temperature Sensor
DU	— Dummy Terminal
EQUIP	— Equipment
ER	— Economizer Relay
FPT	— Freeze Protection Thermostat
FU	— Fuse
GND	— Ground
HPS	— High-Pressure Switch
HR	— Heater Relay
ICP	— Ignitor Control Pilot
IDM	— Induced Draft Motor
IDR	— Induced Draft Relay
IFC	— Indoor (Evaporator) Fan Contactor
IFR	— Indoor (Evaporator) Fan Relay
IP	— Internal Protector
LLS	— Liquid Line Solenoid
LOR	— Lockout Relay
LPS	— Low-Pressure Switch
LS	— Limit Switch
MGV	— Main Gas Valve

MPP	— Minimum Position Potentiometer
NMR	— Night Mode Relay
NR	— Novar Relay
NVC	— Novar Control
OFC	— Outdoor (Condenser) Fan Relay
OFM	— Outdoor (Condenser) Fan Motor
PGV	— Pilot Gas Valve
PL	— Plug
PRI	— Primary
PS	— Pressure Switch
RS	— Rollout Sensor
SN	— Sensor
SR	— Sensor Relay
TB	— Terminal Block
TDR	— Time Delay Relay
TRAN	— Transformer
U	— Unloader
UR	— Unloader Relay

	Marked Wire
	Terminals (Marked)
	Terminal (Unmarked)
	Terminal Block
	Splice
	Factory Wiring
	Accessory or Optional Wiring
	Field Control Wiring





COMPONENT ARRANGEMENT

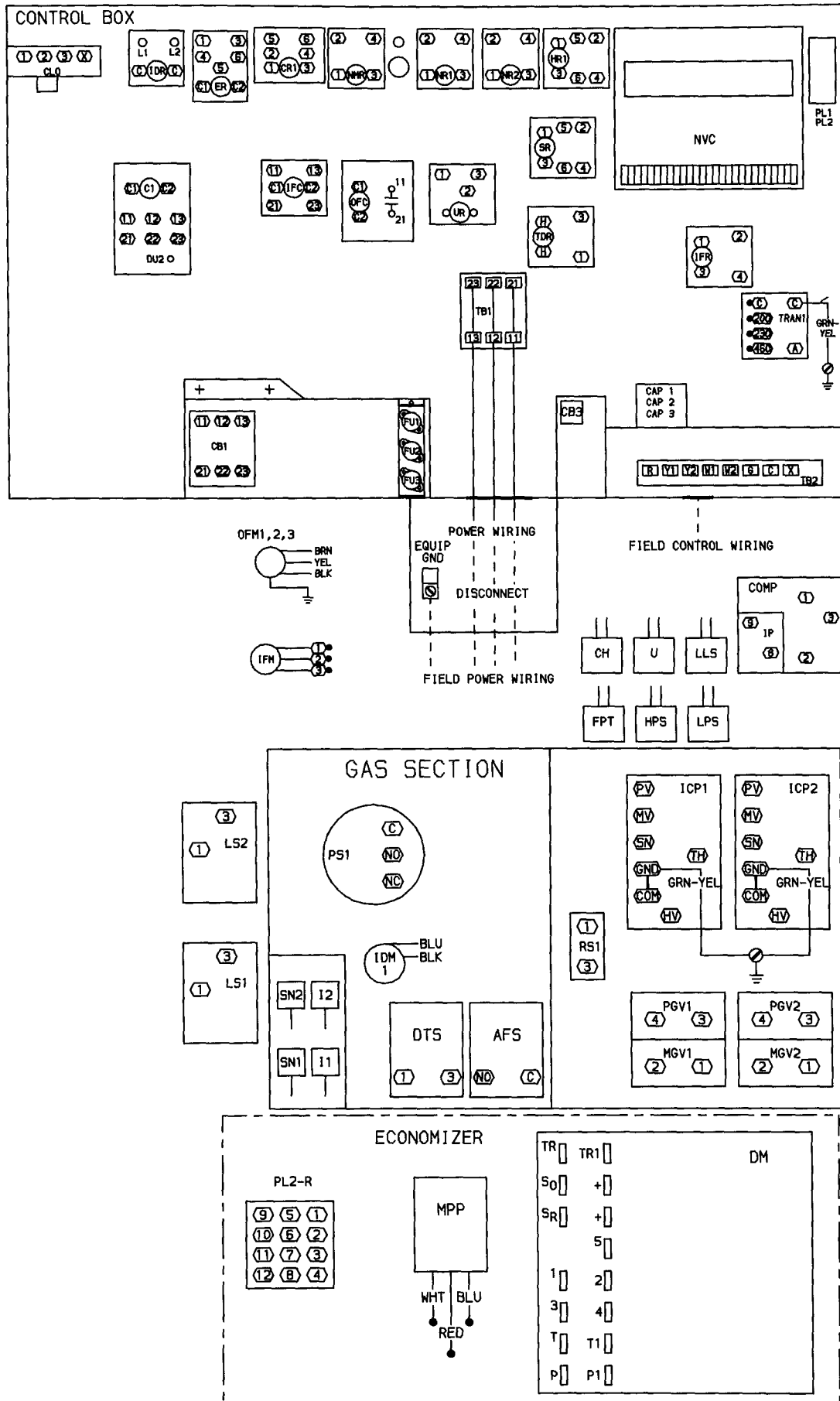


Fig. D — Typical Unit Component Arrangement (48TJ016, 208/230 V Shown)

