



# INSTALLATION INSTRUCTIONS

## C554A PHOTOCELL FLAME DETECTOR

### APPLICATION

The C554 is a photoconductive flame-sensing cadmium sulfide cell for sequencing oil burner systems using Protectorelay\* primary controls such as the R4118, R8184 or R8185. The primary control must be one which is specifically designed for use with cad cell detectors.

### INSTALLATION

**MOUNTING:** The cad cell is generally mounted by the burner manufacturer.

**WIRING:** Connect the #18 leadwires to the primary control as shown on the respective Protectorelay instruction sheet. A typical hookup of the cad cell used with an R8184 is shown in the diagram.

**CELL REPLACEMENT:** No. 120320 or 130367 can be used to replace either #120320 or 124607 in C554 Flame Detector.

### OPERATION

Follow the procedure listed in the Protectorelay instruction sheet for system operation.

\*Trademark  
Rev. 4-68 J.S.

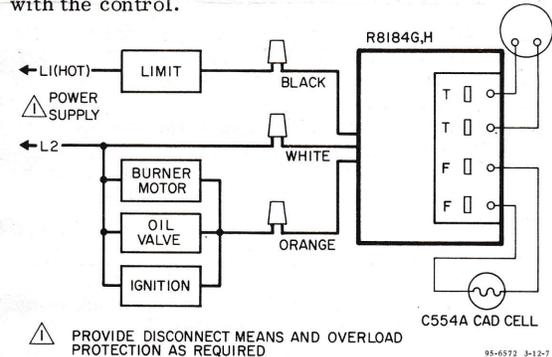
Form Number **95-5204**  
Residential Div.

# CHECKOUT

1. Remove cad cell leadwires, then start burner. Shortly after burner starts, place a temporary jumper between terminals F-F. Connect ohmmeter across cad cell leadwires—resistance should be under 1600 ohms.
2. Stop burner and remove temporary jumper.
3. With burner off, check dark cell resistance across cad cell leadwires—should be greater than 1 megohm (1,000,000 ohms).
4. Beam flashlight through air shutter, around cover plates and hinges, or other cracks or openings in the furnace. Dark cell resistance should be greater than 20,000 ohms.

If cell resistances are different from above, re-check wiring, location of cell, etc. If necessary, replace plug-in portion of cell (Part No. 120320).

5. Reconnect cad cell leadwires. Check out the Protectorelay according to the instructions packed with the control.



HONEYWELL

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