

Low Intensity Parts Instruction Sheet

TP-36[N,P] Kit Replacement Instructions

NOTE: Replaced/converted parts are not returnable for a refund. Verify that all parts listed in the Kit Contents below are present prior to beginning service on the unit.

Models Affected

DTH, DTHS, DTH-2,
DTHS-40-100[N, P]-2

Kit Contents

- TP-78B - Wiring Harness
- TP-78D - Circuit Board
- TP-107 - VR-1324 Nat. Gas Valve Assembly (TP-36N Kit)
- TP-107P - VR-1357 Prop. Gas Valve (TP-36P Kit)
- TP-390 - Circuit Board Adapter

WARNING



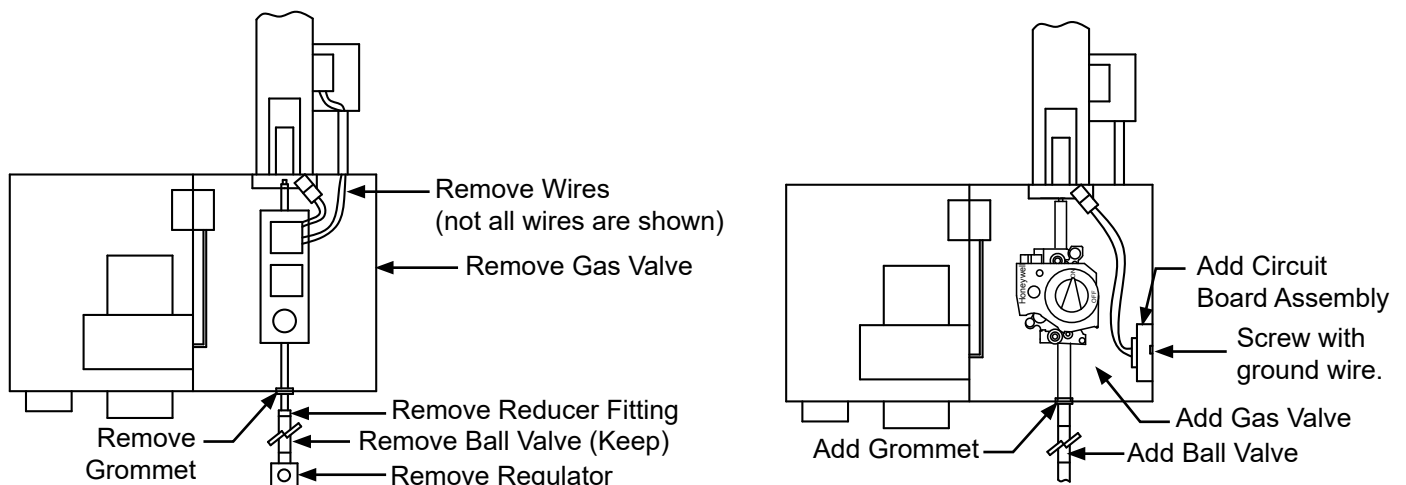
The following installation **MUST** be performed by a qualified service person. Improper installation, adjustment, service, or maintenance can cause property damage, injury, or death.

NOTE: If flame sense problems are experienced after installing this kit, check the polarity of the electrical connection to the burner box. If polarity is reversed, the ability to sense flame can be lost.

Installation Instructions

- 1 Open electrical circuit to heater and shut off gas supply to heater.
- 2 Remove external TP-33 or TP-33P regulator and ball valve originally supplied with the heater. Remove 3/8" reducer bushing from ball valve; set aside ball valve. **NOTE:** The external regulator (TP-33/TP-33P) must be removed when utilizing this kit.
- 3 Remove the control box cover. Remove the faulty TP-36 gas valve by removing the nut at the gas orifice and disconnecting the wires from the wire nuts (to the radiant sensor and the fan), pressure switch, and igniter.
- 4 Disconnect the electrical wires from the radiant sensor. The external sensor will no longer be utilized for flame sensing; however, **DO NOT** remove the radiant sensor (TP-64) from the tube.
- 5 Install TP-78D (circuit board) by drilling a hole approximately 2" down from the top of the control box into the end panel adjacent to the valve. Snap on the TP-390 (adaptor) to the circuit board and connect the TP-78B (wiring harness). Mount the circuit board with the wiring harness towards the top of the control box and attach with the screw and nut provided. Attach grounding wire to this screw.
- 6 Connect the male glo-bar connector from the end of the wiring harness to the female glo-bar connector inside the box.
- 7 **IMPORTANT: Remove the gas orifice from the faulty valve and transfer to the new valve train assembly.** Install the new valve train assembly along with the ball valve from the old assembly. Secure with nut provided.
- 8 Wire the control box according to the wiring diagram found on the reverse side of this page.
- 9 Restore gas and electrical supply to the heater. Check to make sure all gas connections are tight and that there are no leaks.

Figure 1 • Component Replacement



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Figure 2 • Burner Box BEFORE Conversion

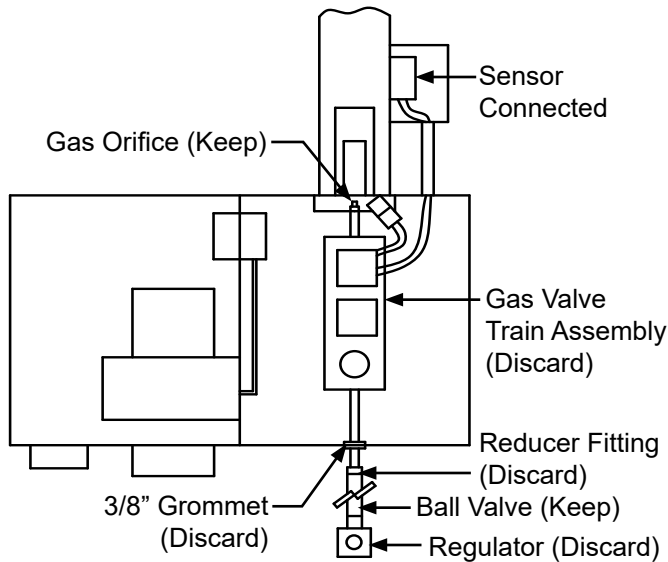


Figure 3 • Burner Box AFTER Conversion

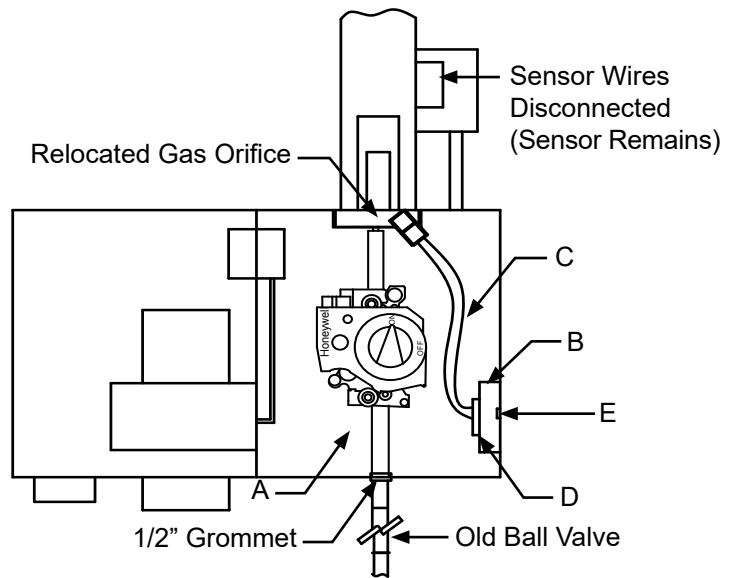


Figure 4 • Wiring Diagram

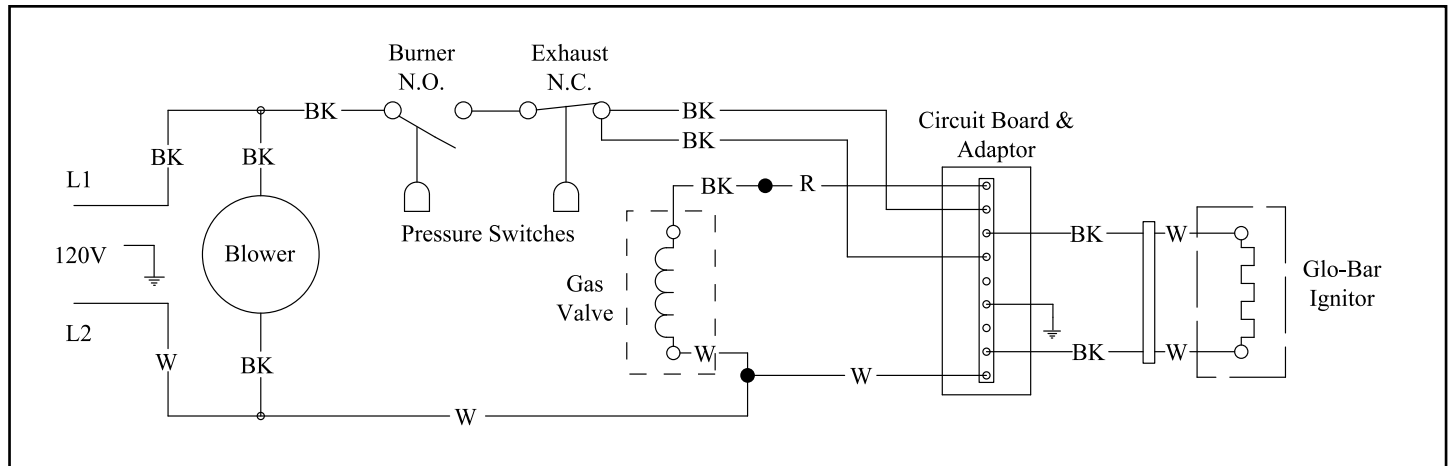


Figure 5 • Block Diagram

