

# Model TLC

# Installation Instructions

Sheet  
**S-1**

## Covering - Ceiling Support & Connections

Sizes 10"

Read Sheet GS for important clearance and safety precautions before installing any of the parts described in this sheet. Sheet GS is packaged with supports.

### CEILING SUPPORT (10")

The Model TLC ceiling supports are intended for installation below both finished and unfinished ceilings. The square firestop plate fits up against a ceiling, or a joist opening framed level on all four sides. It is adaptable to all types of chimney-connected appliances. To start a vertical ceiling-supported chimney, simply place a length of Model TLC pipe, at least 18 inches long, in this support. See Figure 1.

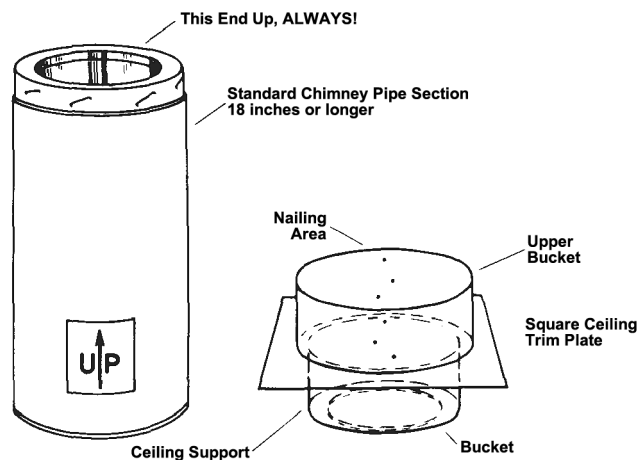


Figure 1 Ceiling Support

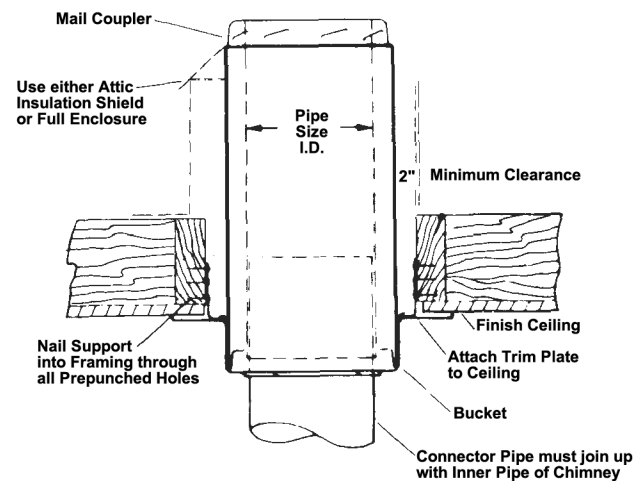
Follow these steps to install.

1. Frame a level square opening (all four sides), such that the inside dimensions are 6¼" larger than the diameter (ID) of pipe being installed.  
**Note:** The support must be underneath either the framed opening or the finished ceiling.  
**DO NOT INSTALL SUPPORT ABOVE THE FRAMING.** See Figure 2.
2. Install finish ceiling material. Cut a circular opening the same diameter as the framing dimension (or square) through the ceiling inside the framed opening, making it large enough to accept the support. (With an existing ceiling, the opening should be framed after cutting the hole.)
3. Place the support assembly up against the ceiling opening from below.

### IMPORTANT: 10" is non-HT.

#### WARNING

Failure to follow these Installation Instructions could cause FIRE, CARBON MONOXIDE POISONING, OR DEATH. If you are unsure of installation requirements, call the phone number listed on the back of these instructions.



CAUTION: Supports must be installed from below framing, as shown here.

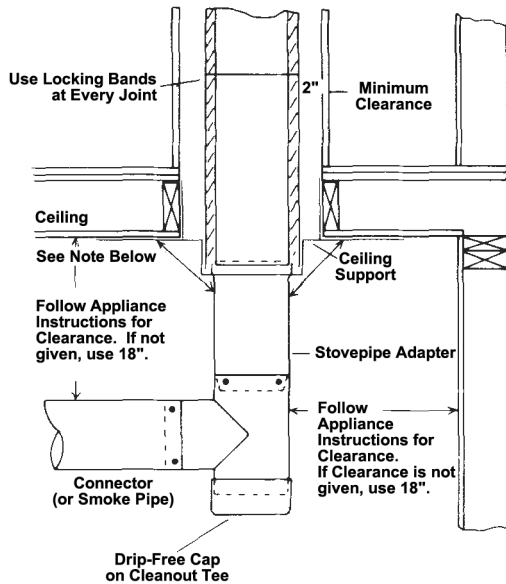
Figure 2 Installation of Ceiling Support

4. Put one 8 penny common nail part way into each of the four nailing areas of the assembly and check that the plate is level and flush to the ceiling.
5. Finish nailing with 8 penny nails through all prepunched holes.
6. Attach trim plate to ceiling or to framing at corners.

#### ATTACH CONNECTORS SECURELY AND OBSERVE CLEARANCE TO COMBUSTIBLE MATERIAL.

The connector or smoke pipe is the sheet metal pipe between the appliance and the chimney. Different types of fuels and appliances have different connector clearances to combustible walls and ceilings. These clearances will be shown in the appliance instructions.

Whatever clearances and connector arrangements are shown in the appliance instructions must be followed, rather than the arbitrary 18-inch dimension. This is important if tests have shown that more than 18 inches clearance is necessary, or if the location of the stove or heater necessitates more clearance. See Figure 3.



**NOTE:** The purpose of the diagonal arrows is to show that the 18-inch clearance DOES NOT APPLY to the vertical connector entering a ceiling support. This support is actually tested with a bare vertical connector and must pass the UL tests with very hot gases entering the bare single-wall pipe.

**Figure 3 Connector Clearances**

Combustible materials include such things as framing lumber, plywood, drywall (sheet rock, plaster board, lath and plaster, gypsum board) and also furniture and curtains. Building insulation of any kind, including batts, foams, boards and especially loose fill cellulose fiber, must also be kept away from the chimney in the same manner as combustible materials.

Besides following the appliance instructions for connectors, other rules for solid-fuel appliance connectors are:

1. Never enclose single-wall pipe, even at 18 inches clearance.
2. Never run single-wall pipe through ceilings or floors, or windows.
3. Don't use single-wall pipe outdoors.

4. Always secure all single-wall joints with at least 3 screws.
5. Obtain proper attachment parts for the appliance end for the entry to the chimney.
6. Locate or support the connector to avoid contact or damage.
7. Caps or plugs for single-wall tees should be secured against falling out and designed so they can't leak creosote or rain.
8. Heavyweight pipe lasts longer. Use 24-gauge if possible.
9. Porcelain enamel is the best high-temperature protective finish (but requires careful handling and may be difficult to assemble securely, except in a vertical position).
10. Galvanized steel pipe is no better than plain black or painted steel, because the galvanized zinc coating is ineffective once it has been overheated.
11. Operating the stove, heater or fireplace when the connector is red hot is very dangerous. This indicates overfiring or a chimney fire. Stop firing, close the dampers, let things cool off, and keep watching for problems on nearby walls and furnishings.
12. The slope of the horizontal portion of a connector of ¼ inch per foot is sometimes a building code requirement. This slope will have little effect on safety, appliance operation, or creosote drips. If the connector is vertical, it should be installed with the crimped end down. If it can be sloped between the stove and chimney, use 45-degree one-piece leakproof elbows (such as the corrugated type), and try to maintain sufficient slope so that any condensate liquid runs back toward the appliance. To keep liquids from coming out connector joints, the small (or crimped) end should always be down, or toward the stove or fireplace.
13. Passing a bare smoke pipe or connector of a wood-burning appliance through a combustible stud wall is not recommended, as the entire inside of the wall must be cut away to get 18-inch clearance (usually at least a 40-inch circle). Wherever possible, locate the chimney to avoid penetrating a wall with a single-wall connector.



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