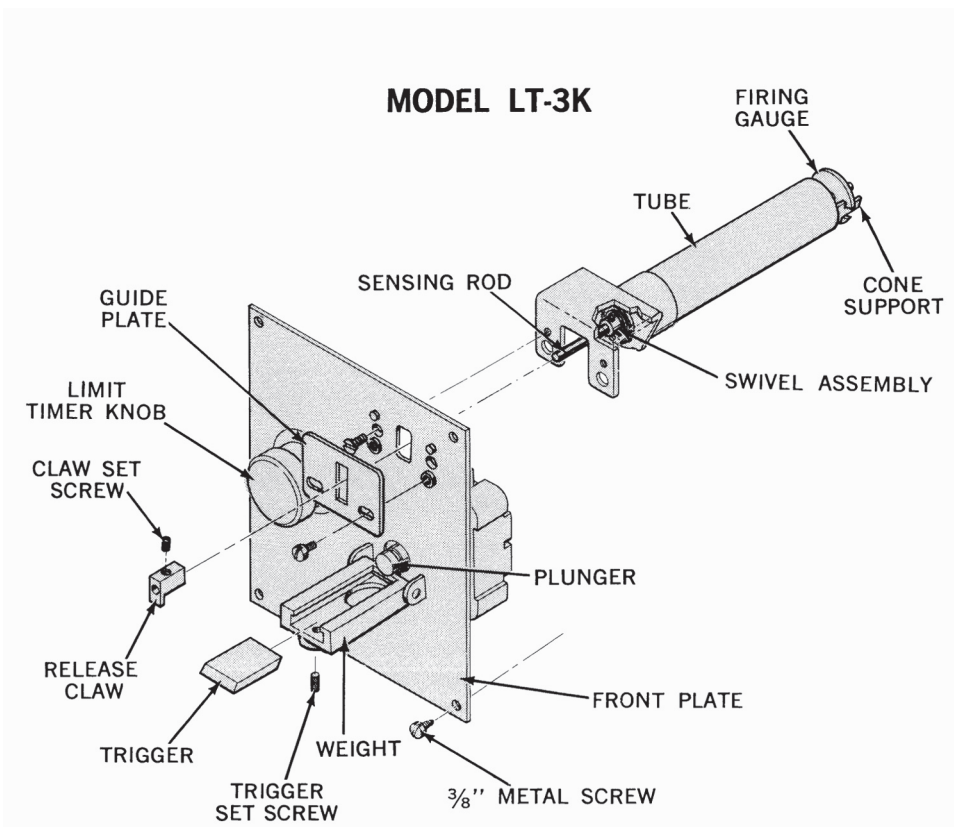# Type K - Tube Assembly Replacement

REMOVAL AND REPLACEMENT

1. Unplug the kiln

2. Remove the Claw. Save it you will need to use it on the new Sensing Rod. Depending on the age of your kiln the Claw will be held in place by either a standard or Allen set screw. (See Claw Identification, page 4)

3. Remove the Guide Plate

4. Remove the two screws that hold the Tube Assembly to the back of the face plate.

5. If your box is hinged on the right side, remove the 2 screws on the left and swing the box open. If you have an older model with sections that plug together, you will need to offset the sections before you can remove the box.

6. Remove the tube assembly from the kiln and replace with the new Tube Assembly

7. Close and secure box.

8. Attach screws that hold the Tube Assembly to the back of the Face Plate.

9. Attach Guide Plate.

10. Attach the Claw to the Sensing Rod.

MODEL LT-3K

REPAIRS

ADJUSTMENTS

Here are some simple adjustment checks for you to make before firing your kiln. We urge you to make them carefully and repeat this check every 30 firings during its lifetime.

1.   TURN ALL SWITCHES OFF

2.   INSTALL FIRING GAUGE

You should have received a Firing Gauge with your replacement tube assembly. Place it over the sensing rod and cone supports as shown in Figure 1.
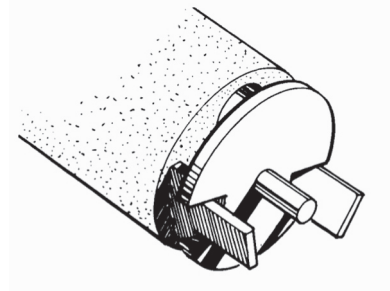
CAUTION: Remove firing gauge before operating kiln.

Figure 1

3. CHECK POSITION OF RELEASE CLAW AND WEIGHT TRIGGER

With the firing gauge in position, swing the weight up against the guide plate. Pull the claw forward (against the slight play in the swivel/pivot assembly) and check for a 1/16 inch clearance between the inside lip of the claw and face of the trigger as shown in Figure 2. Set screw on top claw, may be loosened if the adjustment of the claw position is necessary. Retighten set screw firmly
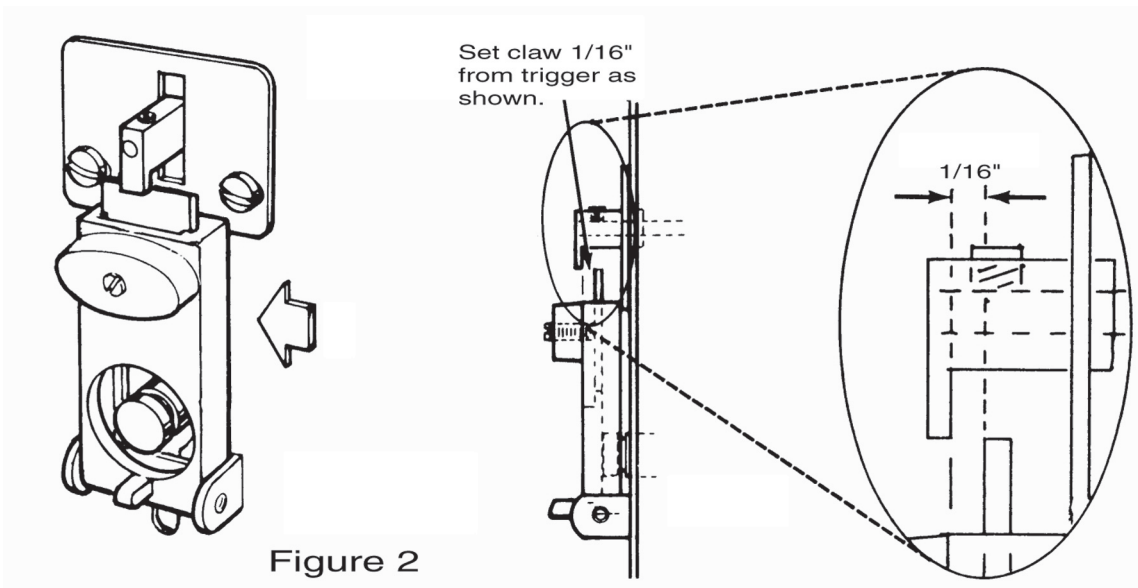

Set claw 1/16"
from trigger as
shown.

1/16"

Figure 2

When weight swings forward, the trigger should just clear the lip of the claw, as shown in Figure 3. The set screw in front of weight may be loosened to raise or lower trigger, as shown in Figure 4. Set screw must be firmly retightened or the force of repeated falling of the weight may cause the trigger to creep out of adjustment.
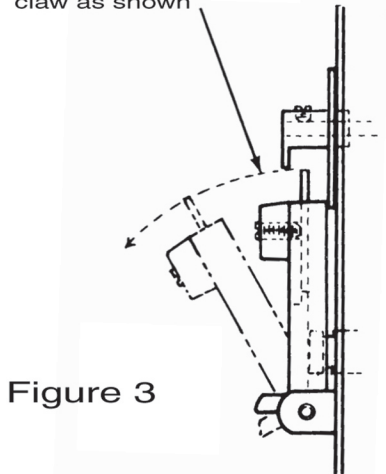
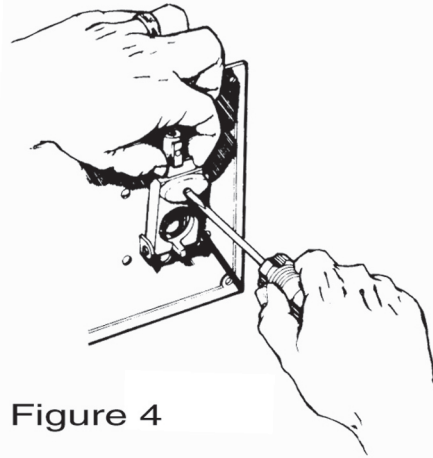Set trigger to just clear claw as shown

Figure 3

Figure 4

Check your kiln with a level to make sure it is not standing on an uneven floor. If this should occur your weight may not fall when released.

WARNING: Do not fire your kiln over or near FLAMMABLE material (i.e. wood floor, carpeting, etc.)

4. CHECK TRAVEL OF SENSING ROD

The firing gauge should now be removed but KEPT FOR FUTURE PERIODIC ADJUSTMENTS. The sensing rod is now free to travel vertically within the tube cavity. It should travel freely in the center of the cavity without touching the sides at any point, as shown in Figure 5 and 6.

If necessary, the sensing rod may be centered by loosening the two guide plate screws in front of the KILN-SITTER and moving the guide plate to right or left as required, as shown in Figure 7. Be sure guide plate screws are firmly retightened.
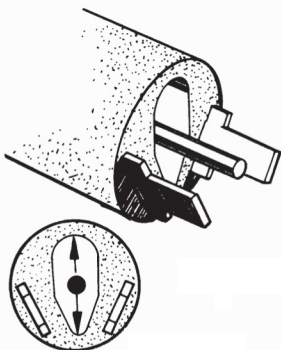
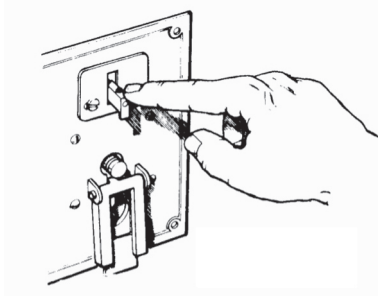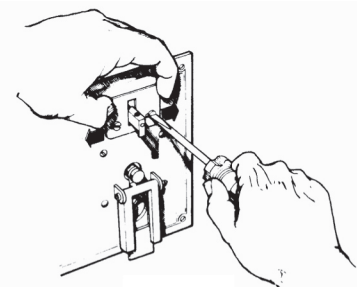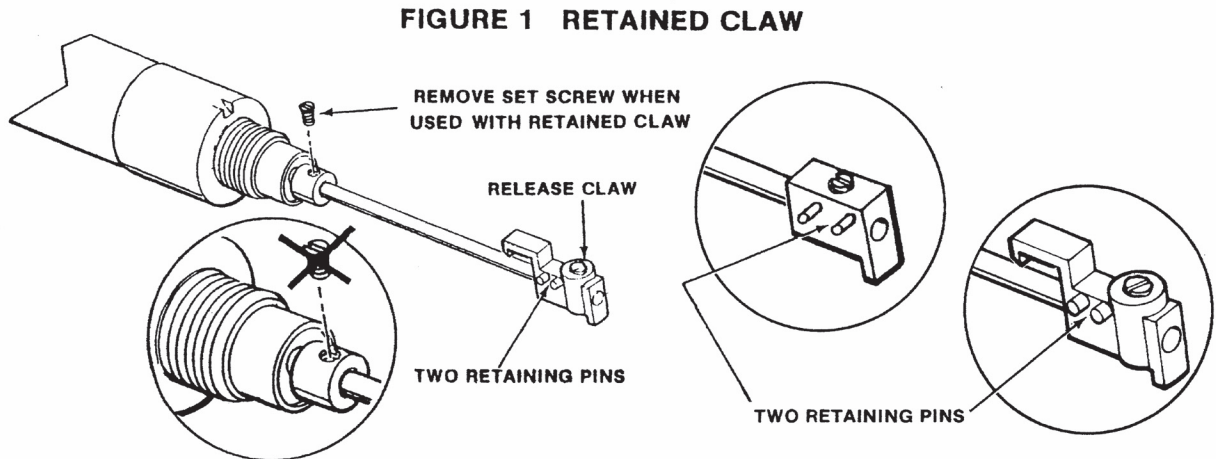When these adjustments have been made, you are ready to test fire.
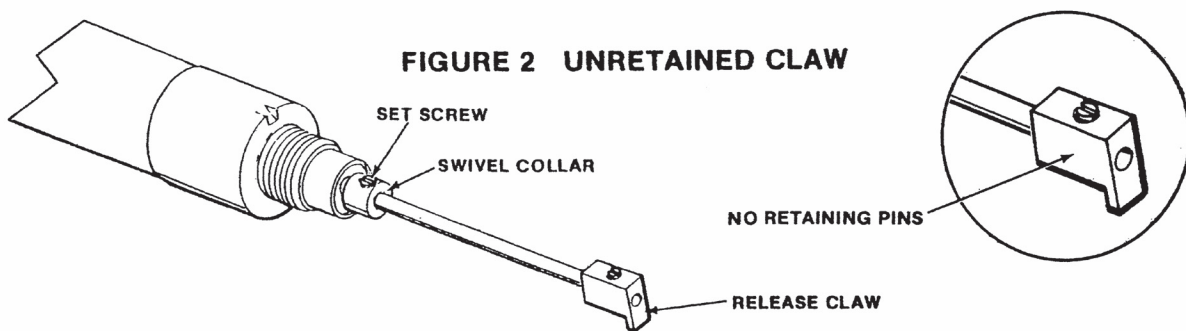
Figure 5

Figure 6

Figure 7

CLAW IDENTIFICATION

Every KILN SITTER model is designed with either a "RETAINED" or an "UNRETAINED" claw on the end of the sensing rod.

When replacing a tube assembly which has a "RETAINED" claw, as in Figure 1, REMOVE the set screw from the swivel collar. The "RETAINED" claw has two pins on the side and may be either aluminum or black nylon.

FIGURE 1   RETAINED CLAW

REMOVE SET SCREW WHEN USED WITH RETAINED CLAW

RELEASE CLAW

TWO RETAINING PINS

TWO RETAINING PINS

If the claw is an "UNRETAINED" style, as in Figure 2, then leave the set screw in the swivel collar. The "UNRETAINED" claw does not have any pins on the side and is available in aluminum only.

FIGURE 2   UNRETAINED CLAW

SET SCREW

SWIVEL COLLAR

NO RETAINING PINS

RELEASE CLAW

NOTE: The tube assemblies depicted in the above diagrams are "P" style; however, the directions apply to all KILN SITTER models. In addition, the release claw is not a part of the tube assembly replacement part.