Using Shut–Height Gage 679655–[ ]

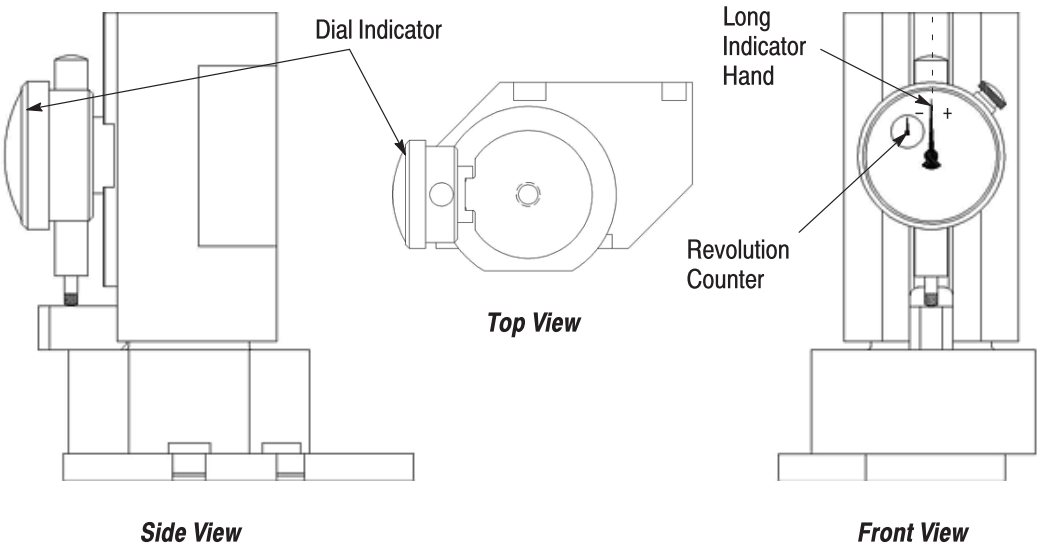

Figure 1

1. INTRODUCTION

This instruction sheet describes the use of Shut–Height Gage 679655–2 or –3 (see Figure 1) to verify or set the shut height in Model “K,” “KII,” and “G” AMP–O–LECTRIC* Terminating Machines, as well as the Entry Level Terminator (ELT) Machine, and the DT 3000 Machine. Refer to the instructions listed in Figure 2 for detailed operating and maintenance information on the terminating machines.

MANUAL NUMBER	TERMINATING MACHINE
409–5128	AMP–O–LECTRIC Model “K” Terminating Machine
409–5792	AMP–O–LECTRIC Model “KII” Terminating Machine
409–5842	AMP–O–LECTRIC Model “G” Terminating Machine
409–10016	Entry Level Terminator (ELT) Machine
409–10042	DT–3000 Machine

Figure 2

Read these instructions thoroughly before operating the shut–height gage.

2. DESCRIPTION

The shut height (which is pre–set at the factory) of a terminating machine may change over time due to wear or overloading. A machine with the correct shut height will allow the change of Heavy Duty Miniature applicators with minimal or no crimp height adjustments.

Shut–Height Gage 679655–2 is used to set the terminating machine shut height to the standard 5.346 inches at a load of 1800 pounds or 4.7047 inches @ 1800 pounds for the 679655–3 machine.

Shut–Height Gage 679655–2 and –3 is accurate to +/– 0.012 mm [.0005 In.], but is calibrated at only one point — 1800 pounds at 5.346 inches or 4.7047 inches @1800 pounds. The spring rate of each shut–height gage varies slightly and is not linear. Because of this, ***shut–height gages are not intended to calibrate any other height.*** Similarly, the spring rate of each type of terminating machine frame varies. The closer a given crimp is to 1800 pounds, the less crimp–height adjustment will be necessary. Best results are achieved when changing Heavy Duty Miniature applicators between like machines.

3. INSPECTION

1. Inspect the shut–height gage for damage it may have incurred during transit immediately upon its arrival at your facility. If damage is evident, file a claim against the carrier and notify Tyco Electronics immediately.

2. Inspect the shut–height gage for loose pieces, broken calibration seals and effective calibration date. If a shut–height gage is unfit for use, return the gage to Tyco Electronics as described in Section 8.

3. Inspect the terminating machine for damage or wear as described in the respective terminating machine machine manual (see Figure 2). Repair or replace as necessary.

4. PREPARATION

1. Allow Shut–Height Gage 679655–[ ] to normalize to room temperature. A minimum of 40 minutes is recommended if the temperature difference is greater than 22°C [40°F].

2. With a clean, lint–free cloth, wipe the top and bottom of shut–height gage and the mating surfaces (i.e., ram adapter and base plate) in the terminator.

3. ***Gently*** wipe Contact Support 1490476–1 and Modified Tip Indicator 679001–1.

4. Place the shut–height gage in the terminating machine and (where applicable) clamp it into place.

5. READING THE DIAL INDICATOR (Figure 1)

- The distance between the division marks (pointed to by the long indicator hand) equals .0001 inches.
- The distance between the numbers (pointed to by the revolution counter) equals .001 inches.
- If the long indicator hand is within +/– .001 inches of “0” and the revolution counter is closer to “0” than to any other number, the terminating machine shut height is within tolerance
- If the long indicator hand is on the *negative* side of “0,” the terminator ram should be shimmed (or adjusted *down*) by the amount shown.
- If the long indicator hand is on the *positive* side of “0,” then the terminator ram should be adjusted *up*, or have that amount of shims removed.

6. OPERATION

DANGER

To avoid personal injury, be sure to turn off the terminating machine and disconnect the power before continuing.

1. Manually cycle the terminating machine (as described in the applicable machine manual) three or four times in the normal operating direction until the gage settles to a consistent value. Disregard the first few reads.

NOTE

It is recommended that TWO people check the shut height. One person should read the shut–height gage (see Section 5) while the other manually cycles the terminating machine.

NOTE

It is recommended that a 3/4–inch socket wrench with a breaker bar be used to manually cycle the Model “G” Terminating Machine.

2. Manually cycle the terminating machine (in the same direction as Step 1) and record the shut–height gage reading. Repeat as necessary.

CAUTION

For accuracy, BE SURE to manually cycle the machine in the same direction as normal operation.

NOTE

It is NOT necessary to wait one minute between readings. However, the speed of rotation must be slow, smooth, and consistent. Otherwise, the indicator on the gage may overshoot the actual reading.

3. Remove the shut–height gage and adjust the machine shut height as necessary. Adjust the shut height *up* or *down*, as described in Section 5.

4. After adjusting the shut height, connect the machine power and cycle the machine under load for a minimum of 500 cycles before re–verifying the shut height.

7. MAINTENANCE

Shut–Height Gage 679655–[ ] should be periodically wiped with a light oil or a rust preventative to retard rust.

Do not break any calibration seals or disassemble any part of the shut–height gage. There are no customer serviceable components. If the shut–height gage is disturbed, it must be returned to Tyco Electronics for repair and re–calibration. See Section 8.

Store Shut–Height Gage 679655–[ ] in a dry location, isolated from vibrations and severe temperature cycles.

8. RETURNING THE TOOL

If the gage requires repair or re–calibration, the gage should be sent, along with the customer contact name and telephone number to the Tooling Service Center. Contact the TOOLING ASSISTANCE CENTER (toll free) at: 1–800–722–1111.

A free quote will be made by the Tyco Electronics Repair Technician and the Customer Service Department will contact the customer for further instructions.

Questions may be addressed to: tool repair@tycoelectronics.com

9. REVISION SUMMARY

Since the previous release, the format was updated to the current corporate requirements.