

Pneumatic Auto-Cycle Unit 91112-3





#### 1. INTRODUCTION

This instruction sheet covers recommended procedures for frame setup, tooling assembly installation, and use and inspection of Pneumatic Auto-Cycle Unit 91112-3. Read these instructions thoroughly before using the pneumatic unit.

Reasons for reissue of this instruction sheet are provided in Section 9, REVISION SUMMARY.

#### 2. DESCRIPTION (Figure 1)

The pneumatic unit consists of a bench-mountable frame, a ram, a guard, a sensing port, a protected safety switch, an air hose, and a base plate.

#### 3. SETUP PROCEDURE

1. Secure the frame to a work bench to ensure stability during operation.

2. Connect the pneumatic unit to an air supply that will provide and maintain pressure of 550 to 620 kPa [80 to 90 psi] to the pneumatic unit.

Figure 1



The air line should be equipped with a filter that has an element with a maximum rating of 20 microns.

#### 4. INSTALLING TOOLING ASSEMBLY (Figure 1)

The tooling assembly includes upper and lower tooling. Refer to the instruction sheet packaged with the tooling assembly for a description of components and specific orientation of tooling in the pneumatic unit.

Proceed as follows:

1. Disconnect the air supply by shifting the air lockout valve. Apply a lock or tag to this valve per applicable workplace safety procedures. Remove the guard.

2. Secure the appropriate upper tooling to the ram using the hardware included with the tooling assembly.

3. Remove the tool stop from the base plate.

4. Slide the lower tooling into the track on the base plate.

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5. Re-install the tool stop onto the base plate.

6. Re-install the guard and reconnect the air supply by unlocking and shifting the air lockout valve.

### 5. OPERATION



Before attempting termination of any connectors, set the ram height as described in Paragraph 7.2, Ram Height Adjustment.

1. Set up the lower tooling, and insert the connector and cable according to the instructions packaged with the tooling assembly.

2. To actuate the ram, slide the lower tooling to the rear of the base plate until the sensing port closes. This will actuate the protected safety switch and allow the ram to automatically cycle and terminate the cable to the connector.

3. When the ram has moved to the top of its motion, slide the lower tooling forward and remove the terminated connector.

### 6. ADJUSTMENTS

#### 6.1. Unit Cycle Time Adjustment

1. Remove the controls cover by removing the four retaining screws.

2. Set the ram bottoming time by turning the slotted adjustment screw at the top of the ram control valve, CLOCKWISE to increase bottoming time, COUNTER-CLOCKWISE to decrease bottoming time. Check the operation time by sliding the lower tooling to the rear of the base plate to actuate the pneumatic unit.

3. Re-install the controls cover.

#### 6.2. Ram Height Adjustment

Keep hands away from the ram if the guard is removed and the air is connected.

If an adjustment of the ram height is required to properly terminate connectors in the tooling installed in the pneumatic unit, refer to Figure 2 and proceed as follows:

1. Connect the air supply (ram will rise). Slide the lower tooling, without a connector loaded into it, into the pneumatic unit frame until it contacts the sensing port (ram will descend). With the ram fully DOWN, disconnect the air with the air lockout valve, as described in Section 4, Step 1.

2. Measure the distance between the bottom surface of the upper tooling and the surface of the lower tooling inserts. Determine the closed height dimension required according to the application specification for the connector being used and the instruction sheet for the tooling assembly being used.

3. If adjustment is required, record the dimension and direction (UP or DOWN) that the ram must be moved.

4. Loosen the down-travel threaded stud locknut. Turn the down-travel threaded stud locknut COUNTERCLOCKWISE several turns. Rotate the down-turn threaded stud CLOCKWISE to lower the ram, or COUNTERCLOCKWISE to raise the ram.



One full turn of the threaded stud equals 1.57 [.062] of ram height movement.

5. After the height adjustment is made, tighten the threaded stud locknut.



6. Repeat Steps 1 and 2. If further adjustment is required, repeat Steps 3 through 5. Continue making adjustments until the proper height dimension is attained.

7. If the instruction sheet for the tooling assembly being used specifies an open height setting for the pneumatic unit, this may be accomplished in a similar fashion by adjusting the up-travel threaded stud (see Figure 2) CLOCKWISE to lower the ram open height, COUNTER-CLOCKWISE to raise the ram open height. Disconnect the air supply as described in Section 4, Step 1, while measuring and adjusting the ram height. Reconnect the air after each adjustment to make sure that the ram is in the full up position, then disconnect the air again for measurement.



One full turn of the up-travel threaded stud is equal to approximately 1.27 [0.05] of ram height movement.

8. After completing the ram height adjustment, tighten the threaded stud locknut.



After the proper height adjustments are reached, replace all applicable guards and covers in their original positions with the proper attachment hardware.

# 7. INSPECTION

The pneumatic unit should be inspected with the information provided in Figure 3. It is recommended that the unit be inspected immediately upon its arrival at your facility, and at regularly scheduled intervals, to ensure that the unit has not been damaged during handling.

## 8. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in Figure . Parts other than those listed should be replaced by Tyco Electronics to ensure quality and reliability. Order replacement parts through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035) TYCO ELECTRONICS CORPORATION PO BOX 3608 HARRISBURG PA 17105-3608

For customer repair service, call 1-800-526-5136.

## 9. REVISION SUMMARY

Revisions to this instruction sheet include:

• Updated instruction sheet to corporate requirements



ITEM	PART NUMBER	DESCRIPTION	QTY PER UNIT
1	126328-4	SUB-ASSEMBLY, Base Plate	1
2	126424-1	KIT, Guard	1
3	38111	HOSE, Air	1
4	18917-1	PORT, Sensing	1
5	1583207-1	COVER, Switch	1

Figure 3