

**Manual Press with IDT Ribbon Cable Tool Kit  
Instruction Manual  
Order No. 62100-2200  
For 2.00mm (.079") Pitch Milli-Grid™  
Cable-to-Board Receptacle, Dual Row, 87568 Series**

- Description
- Operation
- Maintenance

## **WARNING**

**NEVER OPERATE, SERVICE, OR ADJUST THIS PRESS OR INSTALL TOOLING WITHOUT PROPER INSTRUCTION AND WITHOUT FIRST READING AND UNDERSTANDING THE INSTRUCTIONS IN THIS MANUAL.**

**CAUTION MOLEX CRIMP SPECIFICATIONS ARE VALID ONLY WHEN USED WITH MOLEX TERMINALS AND TOOLING.**

**WORK SAFELY AT ALL TIMES**

**For Service, Contact Your  
Local Molex Sales Office**

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## Section 1

### General Description

- 1.1. Description
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- 1.3. Technical Specifications
- 1.4. Delivery Check
- 1.5. Tools

### Principal Mechanical Parts of the 62100-2200 Manual Press

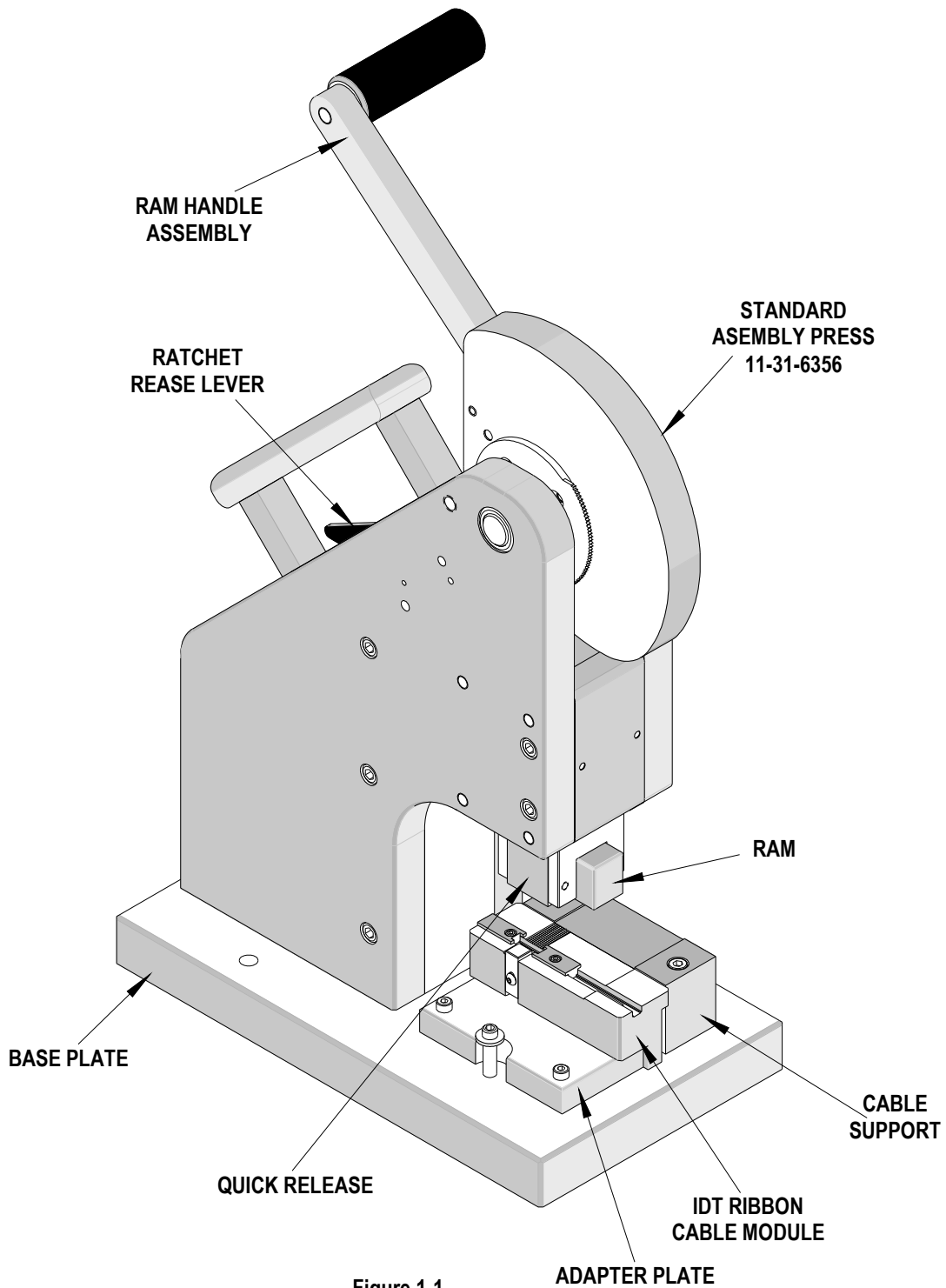


Figure 1-1

## General Description

### 1.1 Description

The 62100-2200 is the 11-31-6356 Molex Standard Manual Assembly Press with the 62100-3200 tool kit installed.

It is designed to terminate flat cable into the Molex 2.00mm (.079") Pitch Milli-Grid™ Cable-to-Board Receptacle, Dual Row, 87568 Series. It will accommodate 10 to 50 circuit connectors. A connector is placed into the module, and then the length of flat cable is inserted into the connector. When the press is actuated, the cable is terminated into the connector.

### 1.2 Features

- Tooling will accommodate Milli-Grid™ Cable-to-Board Receptacles from 10 to 50 circuits.
- It is a high force press with low handle force.
- Full cycle ratchet assures complete crimp.
- Handle is easily changed to suit right or left handed operators.
- Modular tooling is quickly installed into the Molex Standard Manual Assembly Press 11-31-6356.
- Manually operated, no shop air or electricity required.
- Accommodates "Feed To", Feed Through, or "Daisy Chain" type harness assemblies.

### 1.3 Technical Specifications

<b>Dimensions</b>	<b>Press with tooling</b>
Height	533.0mm (21.00")
Width	152mm (6.00")
Depth	267mm (10.50")
Unpacked weight	23.2kg (50.5 lbs)

#### Production Rate

300 terminations per hour maximum, depending on operator skill and board size.

### 1.4 Delivery Check

The following items are included in this package :

<u>Decription:</u>	<u>Quantity</u>
Molex Standard Manual Assembly Press	
11-31-6356	1
Tooling Kit	
62100-3200	1
Instruction Manual	
TM-011316356	1
Instruction Manual	
TM-621002200	1
Specification Sheet	
ATS-621003200	1

### 1.5 Tools

The following tools are recommended for setup and adjustments to the this tool.

- ✓ Metric hex wrench set
- ✓ Inch hex wrench set
- ✓ Small standard screwdriver
- ✓ Adjustable wrench

## Section 2

### Installation

- 2.1. Installation
- 2.2. Set-Up
- 2.3. Operation

## 2.1 Installation

The 62100-2200 comes with the tooling already installed. See Figure 1-1. If the 62100-3200 Tooling Kit is not installed in the Press, follow the steps below:

1. Mount the Milli-Grid™ ram (62100-2401) to the quick release (11-20-1314).
2. Slide the quick release into the bottom of the press ram, until it comes to a stop. See Figure 2-1.

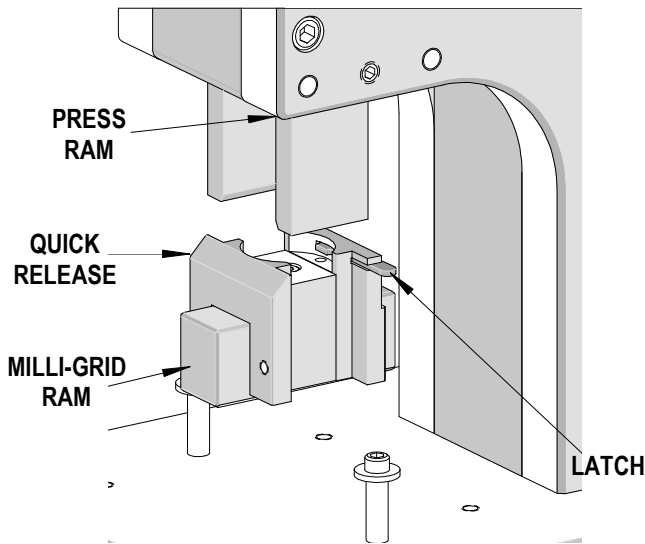


Figure 2-1

**NOTE:** Lowering the press ram slightly may assist in installing the upper tooling.

3. Push the latch backward (away from the operator). The upper tooling will now slide up into the ram an additional 4.0mm (0.16”).
4. Release the latch, the upper tooling will stay in place.
5. With the press ram in the up position, place the lower tooling onto the press base.
6. For the lower tooling, mount the adapter plate (62100-2402) to the underside of the tool module (62100- 2000).
7. Mount this assembly to the press base plate with the two (2) M4 SHCS. See Figure 1-1.

**NOTE:** The tooling can be mounted for left or right hand operation. Figure 1-1 shows the tooling mounted for left hand operation. There is

clearance in both the adapter plate and the cable support for the spring loaded screws that are in with the Molex Standard Manual Assembly Press base plate. Note also that the press lever must be changed to agree with the tooling setup. (See left or right handed operation.)

8. Mount the cable support to the press base with two (2) M5 SHCS.
9. To secure the press, use a bench capable of supporting at least 150 pounds, with adequate lighting for easy operation. There are two (2) holes for 5/16” lag screws provided in the press base for fastening the press to the workbench.

### Left or Right Handed Operation

Molex Standard Manual Assembly Press can be set up for either left or right handed operators by simply reversing the handle on the press lever. For complete instructions see the press manual, Order No. TM-011316356.

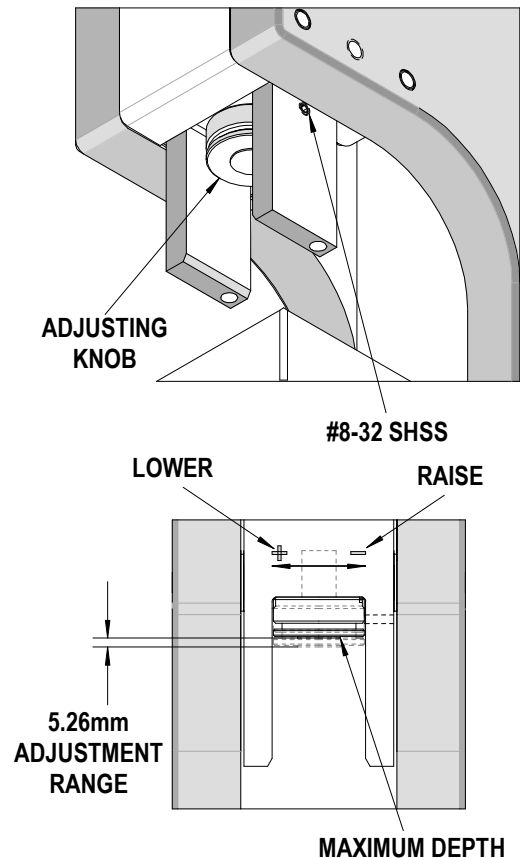


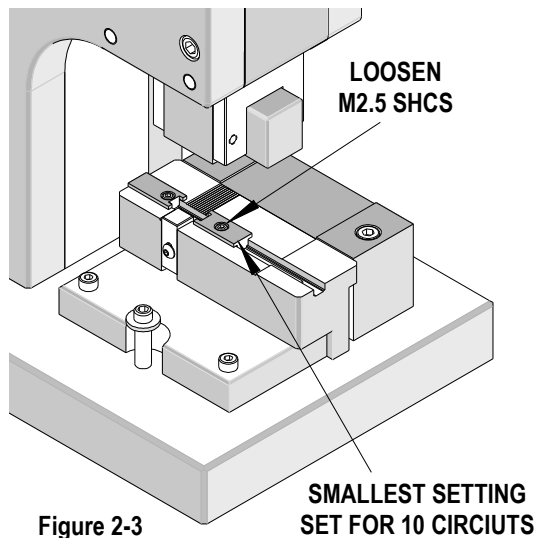
Figure 2-2



## 2.2 Set Up

### Ram Stroke Adjustment

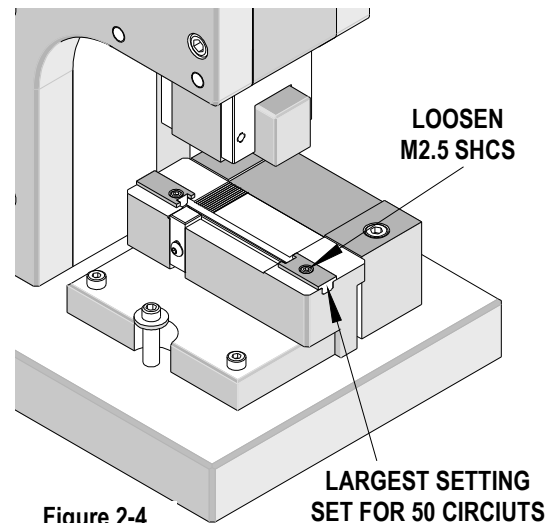
1. Use a 5/64" hex wrench to loosen the #8-32 set screw in the Ram which locks the Ram Adjusting Knob into place. See Figure 2-2.
2. There is an indicator engraved on the ram just above the Ram Adjusting Knob. Turn the Ram Adjusting Screw clockwise (CW) toward the "+" sign to increase the ram stroke. To decrease the stroke, turn the Ram Adjusting Screw counterclockwise (CCW) toward the "-" sign. Stroke adjustment controls the shut height of the connector assembly. Ram stroke is set so that the connector measures a specific shut height when terminated. See Molex drawing number SD-87568-003 for proper shut height dimension and related information.
3. Once the correct stroke is set, tighten the #8-32 set screw. Do not over tighten as the setscrew can damage the adjusting knob.



### Nest Adjustment

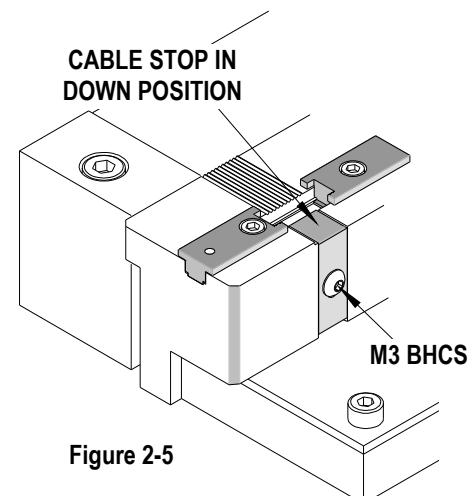
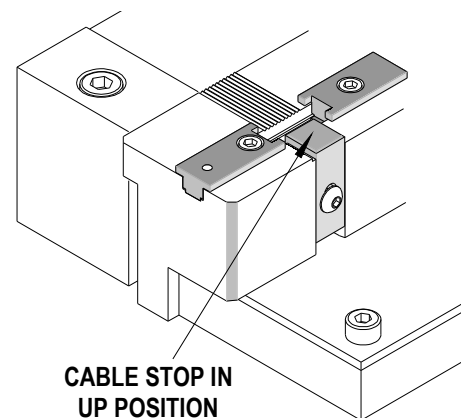
1. To adjust the nest for connector size, loosen the M2.5 SHCS in the adjustable stop and slide the stop away from the end stop. See Figure 2-3 and 2-4.
2. Place a proper size connector in the nest and slide it up against the end stop.
3. Slide the adjustable stop up to the connector just tight enough to hold the connector in

- position but not make it difficult to install and remove.
4. Retighten the M2.5 SHCS.



### Cable Stop Adjustment

1. For "Feed-To" harnesses, loosen the M3 BHCS and slide the cable stop up.
2. Retighten screw. See Figure 2-5.



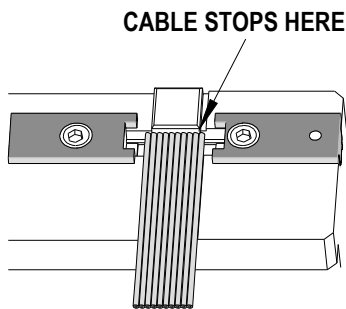
3. For "Feed-Through" or "Daisy-Chain" harnesses, loosen the M3 BHCS and slide the cable stop down.

## 2.3 Operation

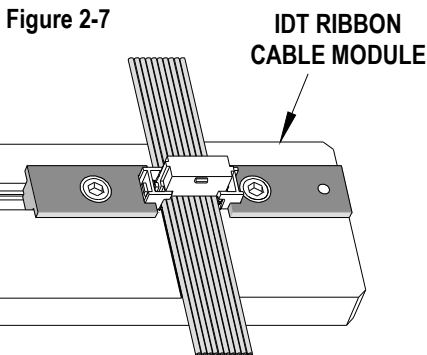
### Press Operation

Once the tooling is set up (Section 2.2), follow the steps below:

1. With the ram in the up position, place a 2.0mm Milli-Grid™ IDT Dual Row connector in the nest. Make sure the lower housing of the connector is facing up. See Figure 2-6.



CABLE IN 'FEED TO' POSITION



CABLE IN 'FEED THROUGH' OR 'DAISY CHAIN' POSITION

2. Load the cable by locating it in the cable guides and sliding it into the connector until it hits the cable stop or is at the desired length. See Figure 2-7.
3. Cycle the press by pulling the press lever forward and down to the full down position. Then return it to the full up position. This will terminate the connector.

4. An anti-backup ratchet insures a complete termination. However, in case of a jam, the ratchet mechanism can be released by pulling up on the release lever on the upper left side of the press. See Figure 2-8.
5. Remove the terminated connector.

LOWER HOUSING FACES UP

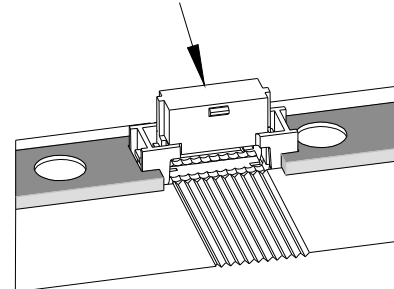


Figure 2-6

**Warning:** Once the press ram handle has started to descend, it cannot be returned to the up position until the full stroke of the press has been completed. In case of a jam or some other problem, should the press ram ever need to be returned to the up position before completing the full stroke, pull up on the ratchet release lever and raise the press ram handle. The ratchet release lever is located on the upper left side of the press frame. See Figure 2-8.

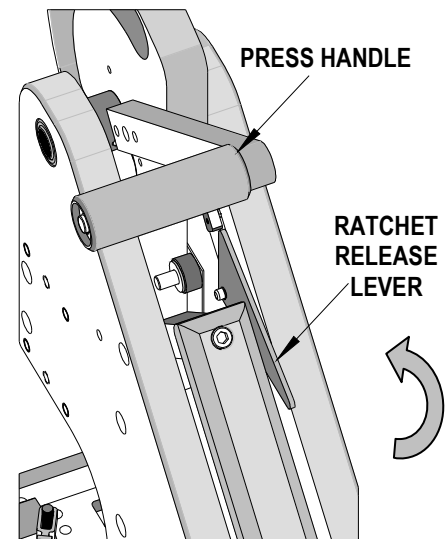


Figure 2-8

## Section 3

### Maintenance

- 3.1. Cleaning
- 3.2. Lubrication
- 3.3. Perishable Parts
- 3.4. Spare Parts
- 3.5. Troubleshooting

### 3.1 Cleaning

The IDT Ribbon Cable Tool Kit should be cleaned daily. Use a soft bristle brush to remove debris from critical areas such as the crimp tooling.

See the Chart on next page for recommended Preventive Maintenance Schedule.

**NOTE:** Using compressed air to clean tooling is *not* recommended. Chips can wedge in the tooling and/or fly at an operator.

### 3.2 Lubrication

1. Grease the ram including the cam follower groove.
2. Oil all moving parts of the press.
3. Lubricate with multipurpose synthetic lubricant with Teflon or an equivalent. Molex ships its presses pre-greased with Permatex multi-purpose synthetic grease with Teflon No. 82329. A SAE 30W non-detergent oil, light spindle oil, or 3-in-1 oil should be used on pivot points.

**WARNING:** Never use penetrants such as WD40 for any lubrication on the press.

4. Lubricate all points shown in Figures 3-1 with the specified oil and grease (or equivalent).

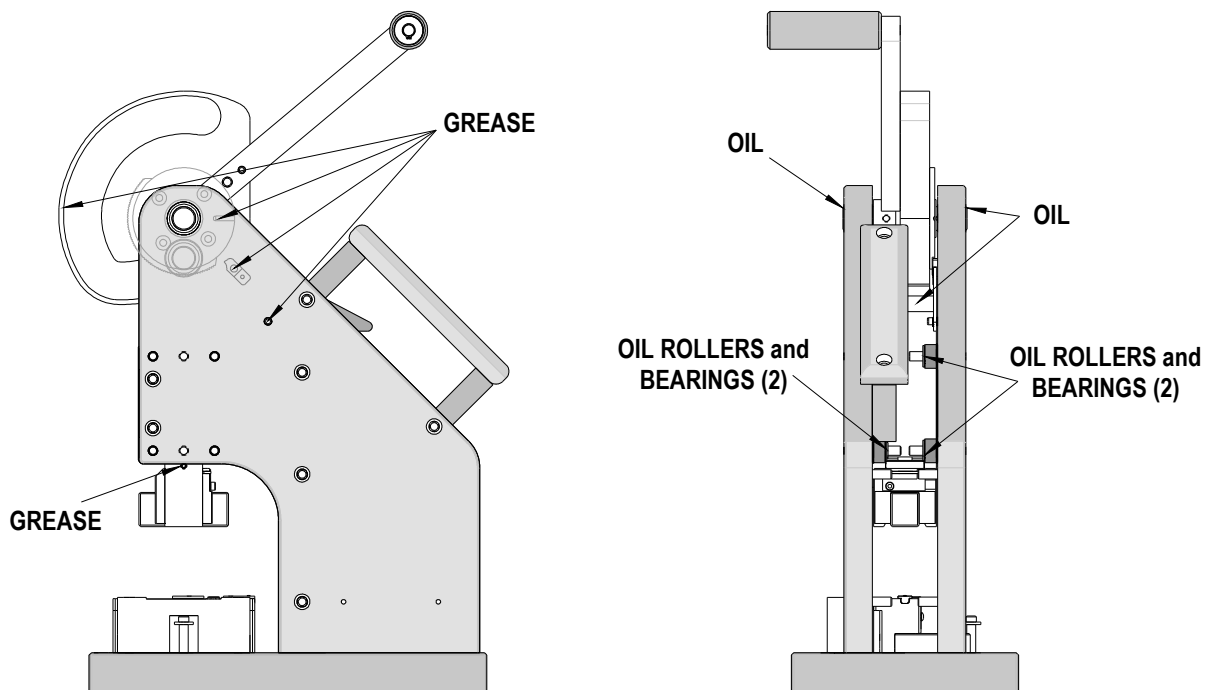


Figure 3-1

An example of a maintenance chart is shown below. Copy and use this chart to track the maintenance of your Press or use this as a template to create you own schedule or use your company’s standard chart, if applicable.

**Preventive Maintenance Chart**

**Daily:** Clean. See Section 3.1.

**As Required:** Lubricate. See Section 3.2.

**CHECK SHEET**    MONTH \_\_\_\_\_ YEAR \_\_\_\_\_

Week	Daily Clean	Days of the Week							Solution
		MON	TUE	WED	THU	FRI	SAT	SUN	
1									
2									
3									
4									
Cleaning Lubricate	Yes								Soft Brush Industrial
Inspect all tooling for wear	Yes								Replace if signs of wear.

Schedule should be adjusted up or down depending on usage. Molex recommends that a log of preventive maintenance be kept with the press.

**3.3 Perishable Parts**

Customers are responsible for maintaining the Complete Manual Press and with the Tool Kit Assembly. Perishable parts are those parts that come in contact with the product and will wear out over time. Molex recommends that all customers keep at least one set of the perishable tool kit in stock at all times. This will reduce the amount of production down time.

**For the proper perishable tool kit information, refer to the Specification Sheet supplied with the Press.**

**3.4 Spare Parts**

Customers are responsible for maintaining the Complete Manual Press and with the Tool Kit Assembly. Spare parts are available. Moving and functioning parts can be damaged or wear out over time and will require replacement. Molex recommends that the customer keep some or all of them in stock to reduce production down time. These parts are identified in the Parts List. See Section 4.

**3.5. Troubleshooting**

Symptom	■ Cause	Solution
Connector not terminating to correct height	Ram stroke improperly adjusted	Readjust ram stroke per Section 2.2.
Press lever will not release	Press ram stroke set too long. Ram comes down too far.	Readjust ram stroke per Section 2.2.
Consult Press Manual order number TM-011316356 for other press problems.		

## Section 4

- 4.1 Parts List
- 4.2 Assembly Drawings

## 4.1 Parts List

Manual Press with IDT Ribbon Cable Tool Kit 62100-2200				
Item	Order No.	Engineering No.	Description	Quantity
1	62100-3200	62100-3200	IDT Ribbon Cable Tooling Kit	1
2	11-31-6356	AM60026-50	Molex Standard Manual Assembly Press	1

## 4.2 Assembly

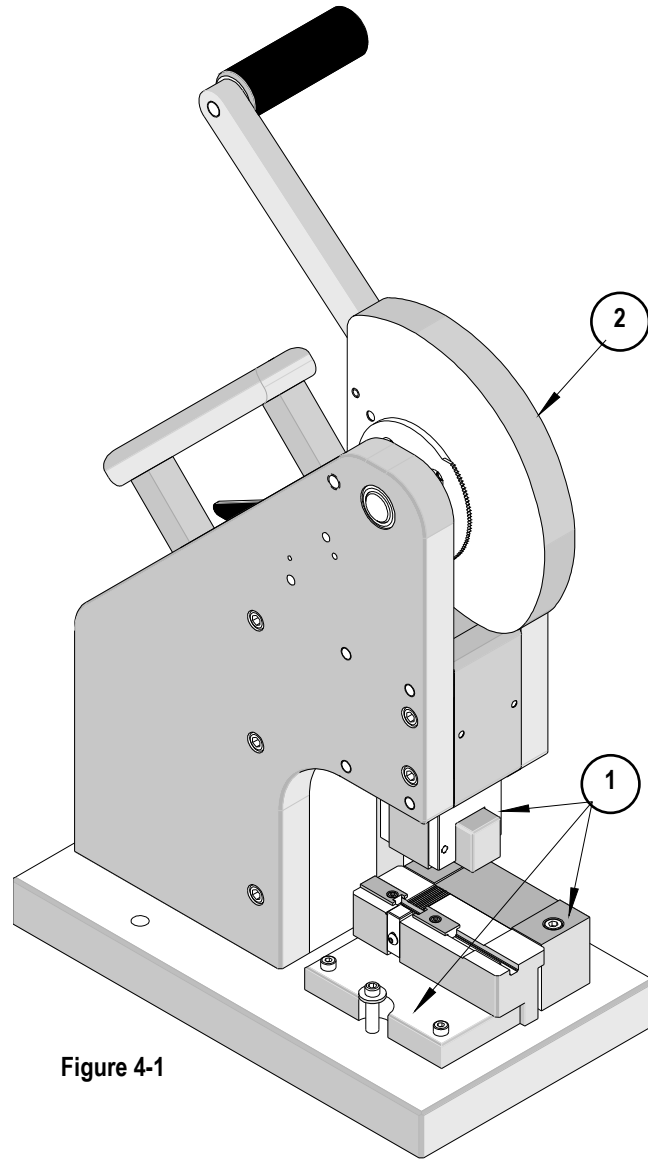


Figure 4-1

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