

**Molex Standard Manual Assembly Press
Instruction Manual
Order No. 11-31-6356
Engineering No. AM-60026-50**

- Description
- Operation
- Maintenance

WARNING

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

WORK SAFELY AT ALL TIMES

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

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Section 1

General Description

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

General Description

1.1 Description

The Molex Standard Manual Assembly Press (11-31-6356) is versatile, reliable, and inexpensive to operate. It is designed to provide an effective method of apply force to a wide variety of terminating and crimping dies. The Press is easily converted from right to left hand operation. When the combinations of crimping dies have been installed the operator pulls the handle down and then returns it to the original position. A ratchet mechanism insures that the press goes through a full cycle for a complete termination. The press is suited for low to mid-volume production requirements.

1.2 Features

- Press and tooling is easily portable.
- Accepts a wide variety of terminating and crimping tools kits.
- Full cycle ratchet assures complete termination
- Easily setup for left or right hand operation.
- Tooling changeover is simple and quick.
- Termination height is easily adjusted in the upper tooling holder.
- Manually operated, no shop air or electricity required.
- Low handle force to reduce operator fatigue.

1.3 Technical Specifications

Dimensions	Press with tooling
Height	533mm (21.00")
Width	152mm (6.00")
Depth	267mm (10.50")
Unpacked weight	23.2kg (50.5 lbs)

Production Rate

300 cycles per hour maximum, depending on operator skill and tool kit installed.

Operating Parameters

Maximum Force	13.3kN (3,000lbs)
Shut Height	42.0mm (1.65")
Stroke Length	43.0mm (1.69")
Adjustment	5.26mm (.207")

1.4 Delivery Check

The following items are included in this package :

<u>Decription:</u>	<u>Quantity</u>
Molex Standard Assembly Press 11-31-6356 (AM-60026-50)	1
Instruction Manual TM-011316356	1

1.5 Tools

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

- ✓ Adjustable wrench
- ✓ Needle nose pliers
- ✓ English hex wrench set for some non-metric tools.

Section 2

Installation

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

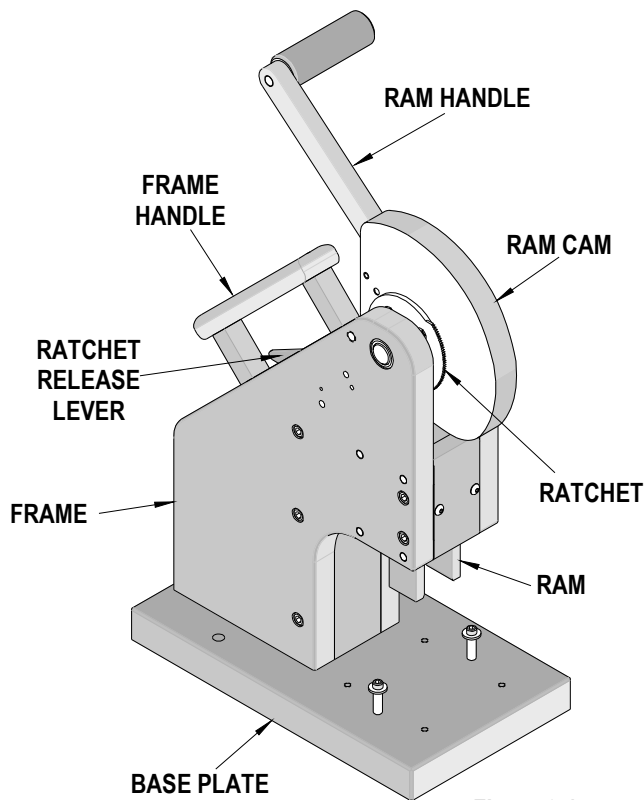


Figure 2-1

2.1 Installation

The Molex Standard Assembly Press 11-31-6356 (AM-60026-50) will need to be secured to a work surface.

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" screws provided in the press base for fastening the press to the workbench.

2.2 Set Up

Left of Right Handed Operation

The Molex Standard Manual Press can be set up for either left or right handed operators by simply reversing the handle on the press lever by following these steps:

1. Remove the #1/4-20 X 1.0" Long SHCS at the base of the Ram Handle.

2. Remove the Ram Handle Assembly and rotate it 180°.
3. Replace the Ram Handle Assembly to the Ram Cam.
4. Replace the #1/4-20 X 1.0" Long SHCS and tighten securely.

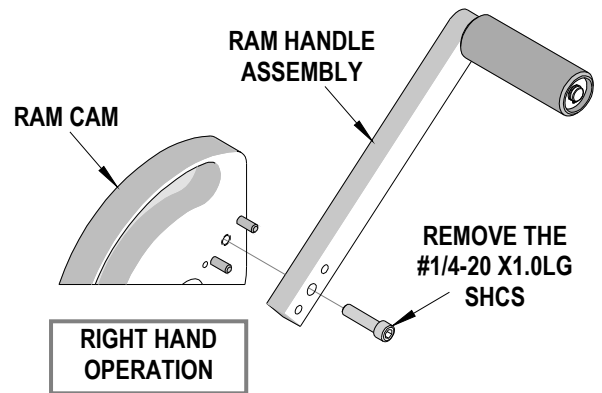
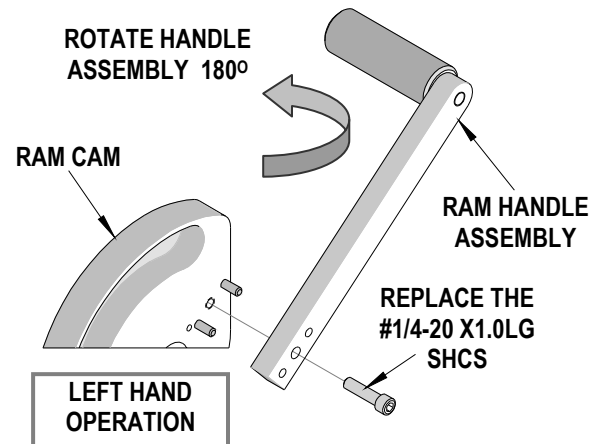


Figure 2-2



Ram Stroke Adjustment

The Ram Stroke Adjustment is made only when there is a tool kit installed.

1. Place the proper tooling into the press.
2. Loosen the #8-32 set screw in the Ram which locks the Ram Adjusting Screw into place. See Figure 2-3.

2.3 Operation

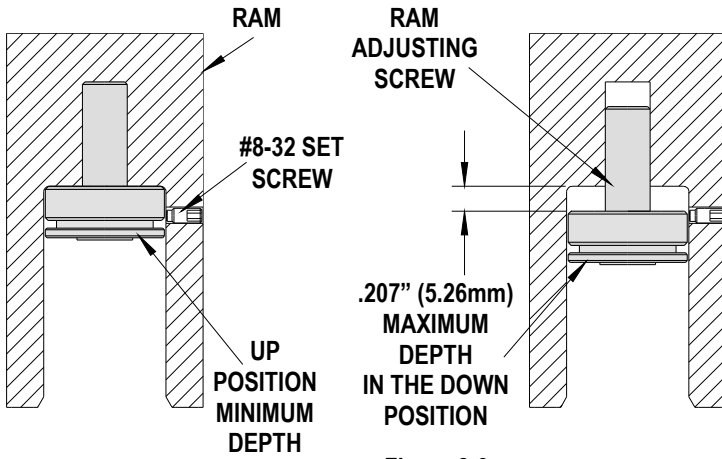


Figure 2-3

- There is an indicator engraved on the ram just above the Ram Adjusting Screw. 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. See Figure 2-4.

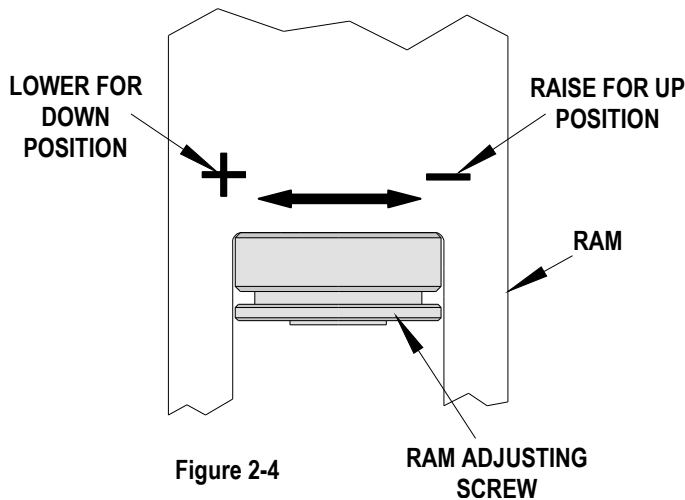


Figure 2-4

- Once the correct stroke is set, tighten the locking #8-32 set screw.

All tool kits are different and may need additional adjustments. Refer to the individual Instruction Manuals for the proper tool kit.

Ram

To cycle the press, pull the press ram handle down and then return it to its original position.

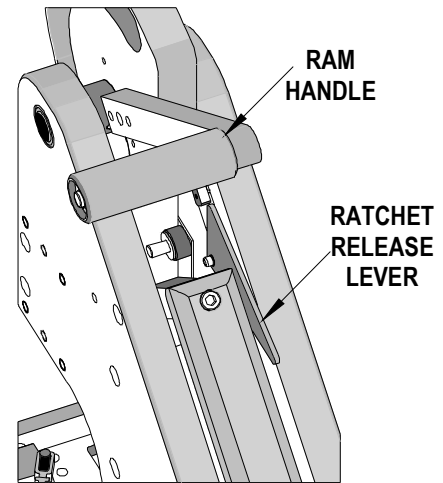


Figure 2-5

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 2-5.

Section 3

Maintenance

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

3.1 Cleaning

For efficient operation, the tooling should be cleaned daily. Use a soft bristle brush to remove debris from critical areas. For best results, remove the tooling dies from the press. Brush and then use a clean cloth to wipe off the upper and lower tooling mounting areas. Before reinstalling tooling, wipe all sides of the forms with a clean cloth.

See Chart 3.1 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 up and down stroke feed arm.
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 10 non-detergent oil or 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).

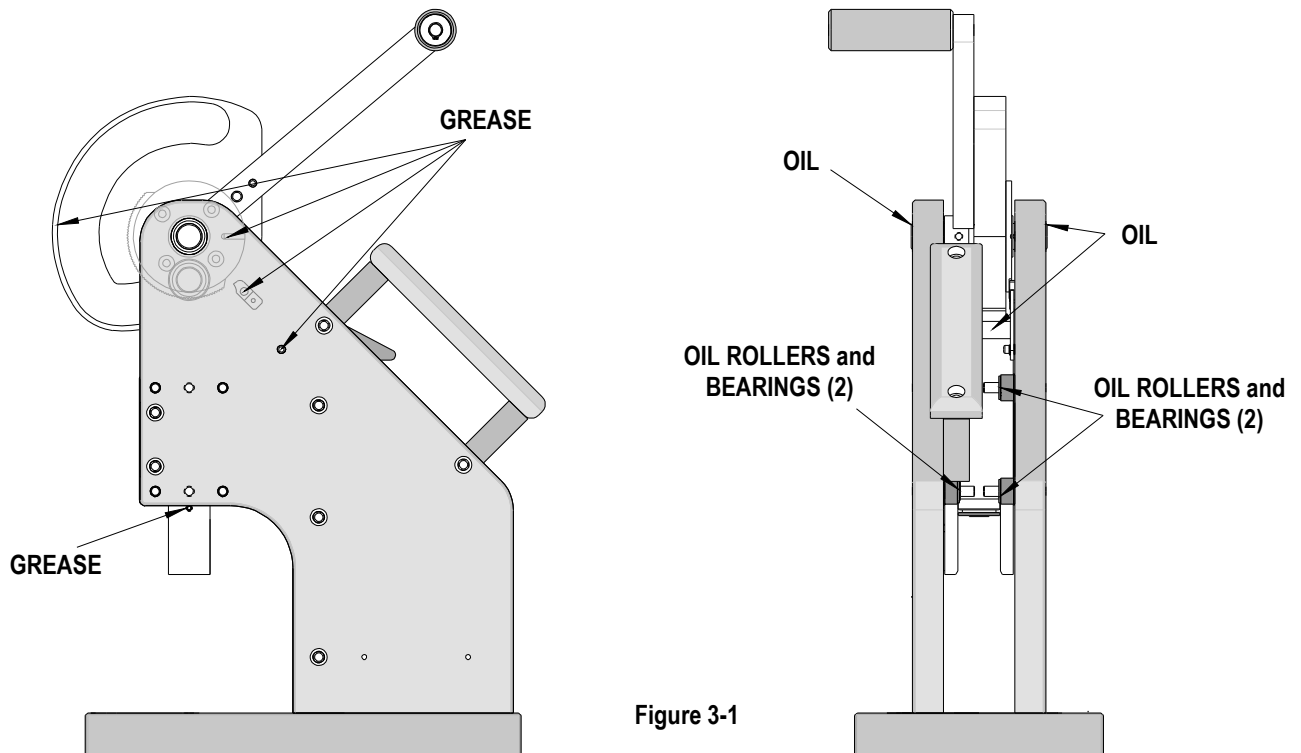


Figure 3-1

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 your 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

Perishable parts are those parts that come in contact with the product and will wear out over time. Customers are responsible for maintaining these parts.

There are no perishable parts for Molex Standard Manual Assembly Press. The various tooling kits will have perishable parts. 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 Individual Instruction Manual supplied with the Tooling Kits.**

3.4. Spare Parts

Customers are responsible for maintaining the Molex Standard Manual Assembly Press. Spare parts are moving and functioning parts that 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 in Section 4.

3.5. Troubleshooting

▪ Symptom	▪ Cause	▪ Solution
Wire does not terminate properly in terminal	▪ Improper gauge wire	See product for wire gauge
	▪ Termination punch set to high or too deep	Adjust the ram stroke. See Ram Stroke Adjustment See Set-Up. Section 2.2
Ram goes down but will not go up.	▪ Sticking ratchet pawl or debris in mechanism	Clean and lubricate pivot points. See Section 3 Maintenance.
	▪ Ram set too low	Release the ram with the ratchet release lever and re-adjust the ram stroke. See Ram Stroke Adjustment See Set-Up. Section 2.2
Full stroke ratchet mechanism not engaging	▪ Sticking ratchet pawl or debris in mechanism	Clean and lubricate pivot points. See Section 3 Maintenance
	▪ Broken or damaged ratchet pawl or spring	Repair and replace.
	▪ Worn Anti-Backup Sprocket	Replace.

Section 4

4.1 Parts List

4.2 Assembly Drawings

4.1 Parts List

Molex Standard Manual Assembly Press 11-31-6356 (AM-60026-50)				
Item No.	Order No.	Engineering No.	Description	Quantity
1	11-31-7100	AM-60026-1	Base	1
2	11-31-7101	AM-60026-2	Frame Right Hand	1
3	11-31-7102	AM-60026-3	Frame Left Hand	1
4	11-31-7103	AM-60026-4	Tension Column	1
5	11-31-7104	AM-60026-5	Frame Spacer	1
6	11-31-7105	AM-60026-6	Ram	1
7	11-31-7106	AM-60026-7	Ram Adjustment Screw	1
8	11-31-7107	AM-60026-8	Ram Guide Plate	2
9	11-31-7110	AM-60026-11	Ram Cam	1
10	11-31-7111	AM-60026-12	Ram Cam Shaft	1
11	11-31-7113	AM-60026-14	Cam Follower Nut	1
12	11-31-7114	AM-60026-15	Anti-Backup Sprocket	1
13	11-31-7115	AM-60026-16	Anti Backup Pawl	1
14	11-31-7117	AM-60026-18	Anti-Backup Release	1
15	11-31-7118	AM-60026-19	Anti-Backup Release Pivot	1
16	11-31-7119	AM-60026-20	Frame Handle	1
17	11-31-7120	AM-60026-21	Handle Support	2
18	11-31-7121	AM-60026-22	Ram Arm	1
19	11-31-7122	AM-60026-23	Ram Arm Handle	1
20	11-31-7123	AM-60026-24	Handle Shaft	1
21	11-31-7124	AM-60026-25	Front Cover	1
22	11-31-7125	AM-60026-26	Compression Spring .240" OD	2
23	11-31-7126	AM-60026-27	Washer 7/32" ID	2
24	11-31-7128	AM-60026-29	Spacer	2
25	11-31-7132	AM-60026-33	Flat Washer .260" ID	8
26	11-31-7133	AM-60026-34	Flat Washer .340" ID	2
27	11-31-7134	AM-60026-35	Ram Cam Hub	1
28	11-31-7135	AM-60026-36	Spring Anchor	2
29	11-31-7313	AM-60026-37	Hub Spacer	1
30	11-32-4494	AM-60026-98	#8-32 Socket Head Set Screw	1
31	11-32-5278	AM-60026-38	E-Ring .168 ID	1
32	11-32-5279	AM-60026-39	E-Ring .281 ID	1
33	11-32-5280	AM-60026-40	E- Ring .238 ID	8
Spare Parts				
34	11-31-7108	AM-60026-9	Roller	8
35	11-31-7109	AM-60026-10	Bearing 1/4" ID	8
36	11-31-7112	AM-60026-13	Cam Follower	1
37	11-31-7116	AM-60026-17	Extension Spring .187" OD	1
38	11-31-7127	AM-60026-28	Bearing 5/8" ID	2
39	11-31-7131	AM-60026-32	Detent	1
Hardware				
40	N/A	N/A	#8-32 by 3/8" Long FHCS	4**
41	N/A	N/A	#8-32 by 1/4" Long BHCS	2**
42	N/A	N/A	#8-32 by 3/4" Long SHCS	2**
43	N/A	N/A	#10-32 by 1/4" Long SSS	1**
44	N/A	N/A	#1/4-20 by 1.0" Long SHCS	16**
45	N/A	N/A	#1/4-28 by 3/8" Long SSS Half Dog	2**
46	N/A	N/A	#5/16-18 by 1-1/2" Long SHCS	6**
47	N/A	N/A	1/8 by 5/8" Long Dowel Pin	1**
48	N/A	N/A	3/16 by 3/4" Long Dowel Pin	3**

Molex Standard Manual Assembly Press 11-31-6356 (AM-60026-50)				
Item No.	Order No.	Engineering No.	Description	Quantity
49	N/A	N/A	5/16 by 1.0" Long Dowel Pin	2**
50	N/A	N/A	1/4 by 1-1/2" Long Dowel Pin	8**

** Available from an industrial supply company such as MSC (1-800-645-7270).

4.2 Assembly

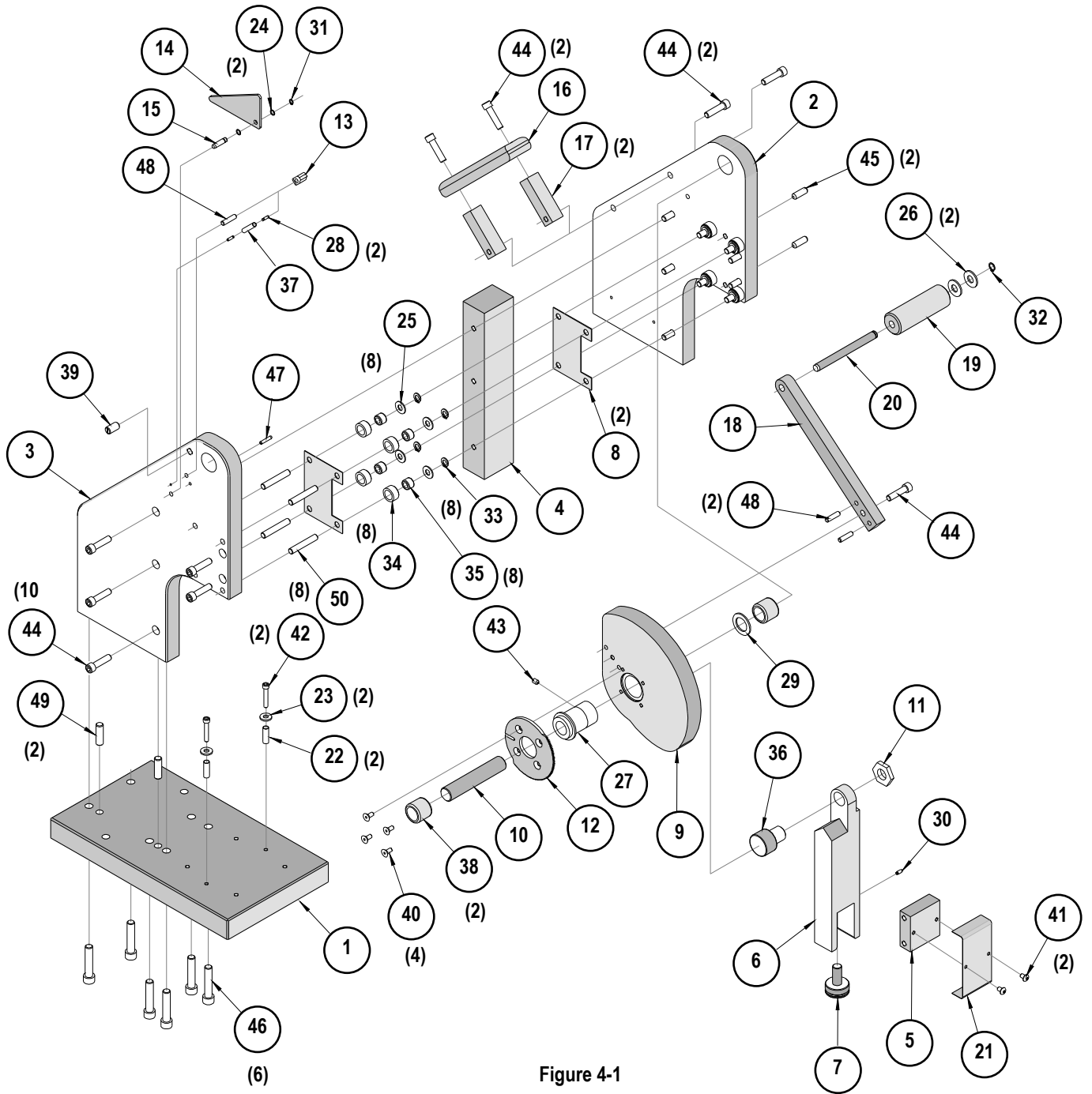


Figure 4-1

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