



ACRA-FEED®

A-50 Series Screw Presenter Operations Manual



PO Box 16460, Portland OR 97292-0460 • 800-852-1368 • Fax 800-582-9015

www.aimco-global.com

Table of Contents

	<u>Page</u>
Before Operating	1
Parts Identification	2
Sizing & Adjustments	3
Brush Adjustment	4
Gate Board Adjustment	5
Bit Guide Adjustment	5-6
Rail Adjustment	6
Operation	7-8
Troubleshooting	9-10
Maintenance	11-12
Specifications	13
Maintenance Records	14
Notes	15
Warranty	16

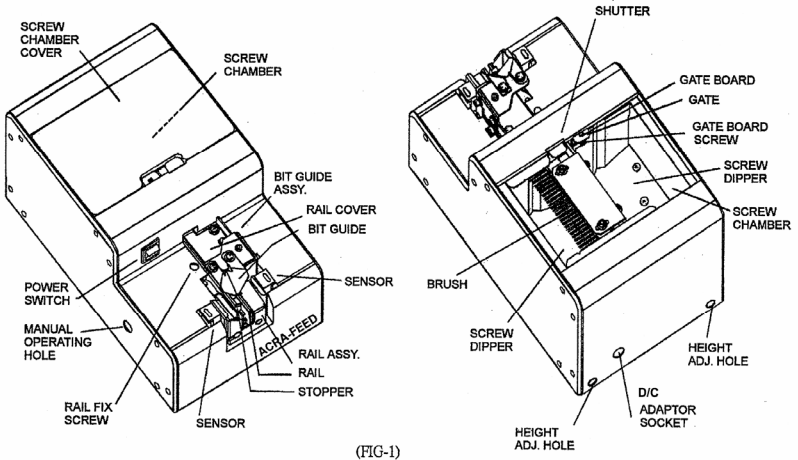
Before Operating

Thank you for choosing the **Acra-Feed[®] A-50 Series Automatic Screwfeeder**. Please be sure and read this entire manual and familiarize yourself with the unit prior to operating. When set up and used correctly, this system will provide you with superior service.

Please check to verify that the following components are with the system:

- (1) A-50 Series Base unit
- (1) Rail Cartridge (mounted in base unit)
- (1) AC Power Adapter
- (1) 2mm Hex Adjustment Tool

Parts Identification



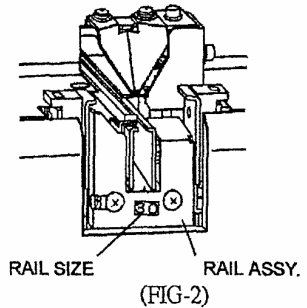
Sizing & Adjustments

SIZING

The Acra-Feed A-50 Screw Presenter features interchangeable rails. This allows for easy changing of the fastener sizes (in appropriate ranges) without the need to purchase an additional system. The chart below indicates the rail combinations to suit your desired fastener size.

MODEL	RAIL TYPE	SCREW SIZE
A-50-A	AR-0	1.4mm / #0
	AR-1.7	1.7 mm
A50-B	BR-1	2.0 mm / #1
	BR-2	2.3 mm / #2
	BR-3	2.6 mm / #3
	BR-4	3.0 mm / #4
A-50C	CR-6	3.5 mm / #6
	CR-8	4.0 mm / #8
	CR-10	5.0 mm / #10

RAIL SELECTION CHART



ADJUSTMENTS

The A-50 has four (4) major points of adjustment that allow you to optimize the system for your own unique fastener:

- **RAIL ADJUSTMENT**
- **BRUSH ADJUSTMENT**
- **GATE BOARD ADJUSTMENT**
- **BIT GUIDE ADJUSTMENT**

The A-50 requires the use of fasteners with an internal, easy leading, drive style. Typically utilized drive styles are Phillips, Torx, and Allen. Slotted drive and socket-style drives (such as hex bolt style) are not able to be used in the A-50 system.

Bits should be of a type that has a reduced shank at the tip. This is to accommodate the space in the bit guide located in the front of the unit. The spacing in the bit guide is designed to assist the operator in location of the fastener to be picked up.

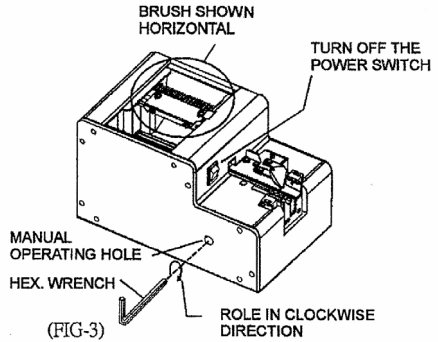


TURN OFF POWER BEFORE EACH ADJUSTMENT.

Sizing & Adjustments (cont.)

BRUSH ADJUSTMENT

1. Brush needs to be oriented horizontally before adjustment. If the brush is not oriented horizontally, use the adjustment tool to manually move the brush. Accessing the manual operating hole, turn the adjuster clockwise until the brush reaches horizontal position (Figure 3).



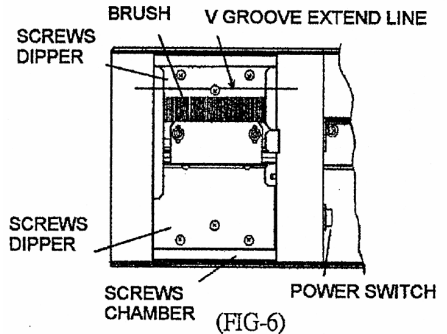
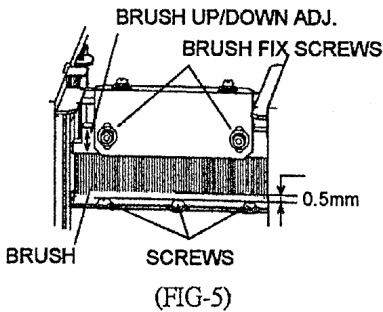
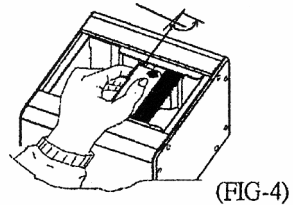
2. Place 3-5 screws in the groove of the rail inside the hopper area. The screws should be seated in the track with the heads resting on the top of the rails.

3. Loosen brush fix screws.

4. Manually roll the rail down (see above) and adjust the gap between the brush and the screws to .5mm/.020" as shown in Figures 4 & 5.

5. Tighten brush fix screws.

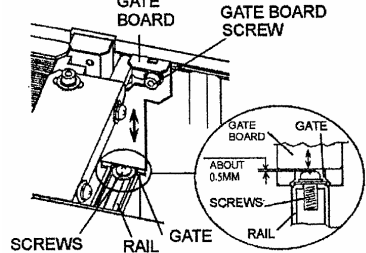
Roll the brush down and adjust the gap of brush and screws shown about .5 mm/.020".



Sizing & Adjustments (cont.)

GATE BOARD ADJUSTMENT

1. Remove screw chamber cover.
2. To place 3 to 5 screws in the slot between the rails, shank down.
3. Loosen gate board set screw and adjust bottom edge of gate board to produce a gap of 0.5mm/0.20" between screw head and gate board bottom edge.

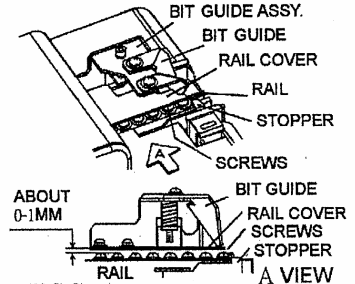


(FIG-7)

4. Re-tighten gate board screw set.

BIT GUIDE ASSEMBLY & ADJUSTMENT

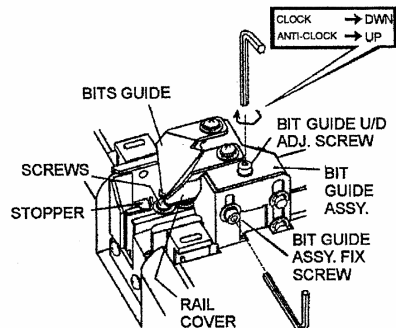
1. To place 3 to 5 screws in the slot between the rails, shank down.
2. Raise rear of the unit to enable screws to slide to the stopper.
3. Loosen bit guide assembly fix screw and adjust the gap between rail cover and screw head to 0.5-1mm/.020-.040 clearance as shown in Figure 8.



(FIG-8)

4. Re-tighten bit guide assembly adjustment screw.

- For proper bit engagement, the bit guide needs to be aligned with the center of the screw.

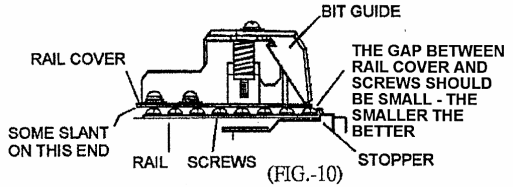


(FIG-9)

Sizing & Adjustments (cont.)

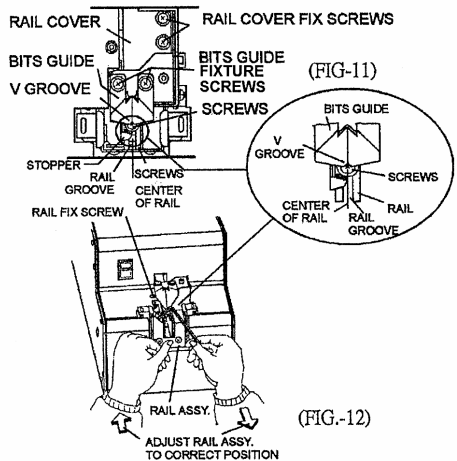
BIT GUIDE ASSEMBLY & ADJUSTMENT (cont.)

5. Loosen bit guide fixture screw.
6. Adjust center of V groove to line with center of rail groove. Align and secure bit guide fixture screws.



RAIL ADJUSTMENT

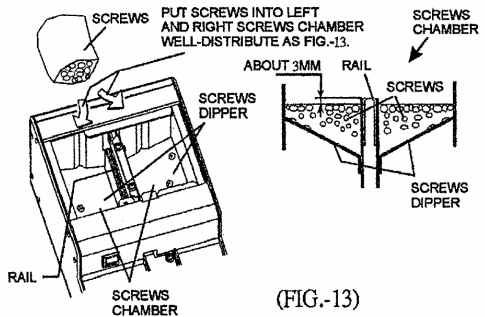
1. Place 3-5 screws in rail groove. Slope machine to make screws slide to the stopper.
2. Insert the hex wrench into the rail. Find screw on left side of front and loosen panel.
3. Adjust the bottom-end of bit guide to align with center of screw. Secure bit guide fixture screw.



Operation

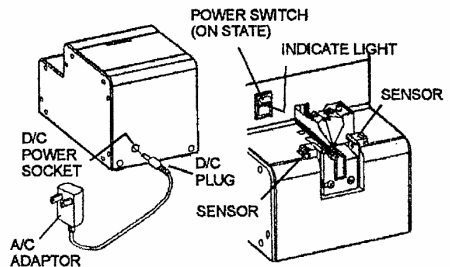
Install Screws

1. Turn off power. Remove screw chamber cover. Pour screws into left and right screw chambers. Distribute evenly.
2. When bin is at its lowest position, screws should not cover rail.
3. A circuit will stop machine if bin is too full to allow bin to reach top of the travel.



Turn on Power

1. Insert adapter into hole on rear of machine (see Figure 14).
2. Turn on power switch on the front panel. Power switch will illuminate. Screw's bin will move up/down and rail will vibrate.



Pick up Screws

1. Make sure the type of bit on driver is correct for screws. Make sure bit is magnetized.
2. Slide bit down in front of bit guide until bit engages screw.
3. Pull screws out toward the user; it's not necessary to push down on screw.

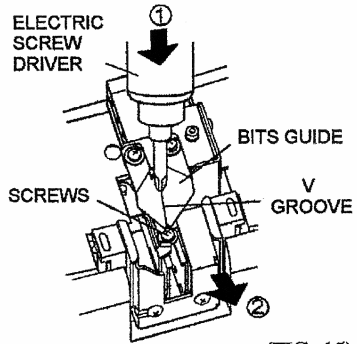
Operation (cont.)

MACHINE INCLINE ADJUSTMENT

Some screws may not move smoothly on the rail. To improve screw delivery, there is an adjustment to increase the rail incline.

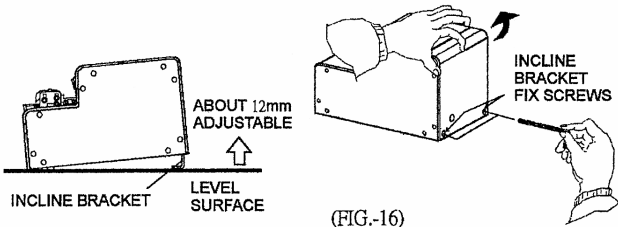
How to Incline Machine

1. Use hex wrench to loosen foot bracket screws on machine.
2. Raise up rear side of machine to proper position. Fasten two fix screws.
3. Do not insert loose objects under foot bracket for more incline. It can cause a screw to lock problem.



(FIG.-15)

INCLINE REAR OF MACHINE
TO PROPER POSITION, AND
FASTEN FIX SCREWS



(FIG.-16)

Troubleshooting Guide

MALFUNCTION	POSSIBLE PROBLEM	REMEDY
Machine does nothing when power is on.	Rail is already full.	Begin system use.
Screws not advancing to stopper.	<ul style="list-style-type: none"> • Screws are too big or too small for rail. • Not enough screws in chamber. • Screws are sitting on top of rail. 	<ul style="list-style-type: none"> • Use a suitable rail. • Add screws. • Adjust the height of the brush (see adj. #2). • Adjust the height of the shutter board (see adj. #3).
Screws fall into rail groove.	<ul style="list-style-type: none"> • Rail size is too big. • Length of screw is shorter than width of rail's groove. 	<ul style="list-style-type: none"> • Change to the correct rail. • Screws will not work in machine.
Screws do not move smoothly on rail.	<ul style="list-style-type: none"> • The gap between the rail cover and the screw head is too small. • The top-end of the rail is dirty. 	<ul style="list-style-type: none"> • Adjust the bits guide assembly (see adj. #2). • Raise incline machine. • Clean rail and bits guide.
A wrong posture screw passed through shutter board.	Incorrect height adjustment of shutter board.	Adjust shutter board.
Screws do not move to stopper.	<ul style="list-style-type: none"> • Screws were stopped on the way to the stopper. • Incorrect front/rear adjustment of rail. 	<ul style="list-style-type: none"> • Adjust bit guide assembly (rail cover adj.). • Rail front/rear adjustment (see adj. #1).

Troubleshooting Guide (cont.)

MALFUNCTION	POSSIBLE PROBLEM	REMEDY
Bit not engaging screw head easily.	<ul style="list-style-type: none">• Rail position incorrect.• Bit guide position incorrect.	<ul style="list-style-type: none">• Adjust rail to proper position (see adj. #1).• Adjust bits guide and rail cover to proper position (see adj. #4).
Machine suddenly does not work.	<ul style="list-style-type: none">• Protection circuit caused by overload.• Did not pick up the screw which was located on the stopper for more than one second.	<ul style="list-style-type: none">• Turn off power then on again. If machine still does not work, overload screws on chamber.• Take some screws out of chamber.
Screws fall into machine through rail opening.		<ul style="list-style-type: none">• Shake out screws through holes in bottom of machine.

Maintenance

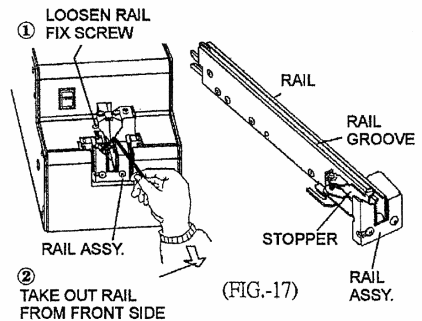
MAINTENANCE

1. Remove power supply plug.
2. Turn off power before maintenance.
3. Remove all screws from the screw chamber and rail prior to maintenance.

CLEANING

Clean Rail

1. Remove rail from machine.
Loosen rail fix screw located on the top left of front panel (see Figure 17).
2. Clean rail surface with soft cloth moistened with alcohol.



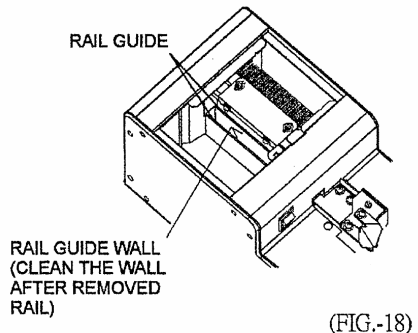
Clean Rail Guide's Wall

Clean the surface of rail guide's wall with a soft cloth moistened with alcohol (see Figure 18).

REPLACEMENTS

Rail Replacement

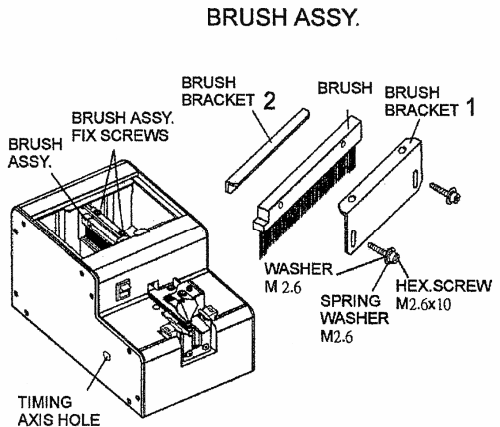
After cleaning, if screws do not advance more smoothly, rail replacement may be necessary.



Maintenance (cont.)

BRUSH REPLACEMENT

1. Turn the brush face down. Insert 2mm hex wrench in timing axis. Hold and turn clockwise until brush is in the vertical position.
2. Loosen brush fix screws. Remove and replace brush with new brush as shown in Figure 19.
3. Rotate brush assembly back to horizontal position by turning hex wrench clockwise.



(FIG.-19)

Warranty

ACRA-FEED[®] A-50 WARRANTY

AIMCO/AcraDyne warrants the A-50 Screwfeeder to be free of material or manufacturing-related defects (except for normal wear) for a period of one (1) year from original shipment. This warranty is based on usage generated in an eight-hour workday.

Notes



AIMCO

Corporate Headquarters

1204 E Maple Road
Troy, MI 48083
248-583-1180
FAX 248-583-7115

10000 SE Pine Street
Portland, OR 97216
800-852-1368
FAX 800-582-9015
www.aimco-global.com

Ave. Morones Prieto 2110 Pte.
Col. Loma Larga
Monterrey, NL CP 64710, Mexico
52-81-1001-1600
FAX 52-81-1001-1630

Global Assembly Solutions™

LIT-MAN830
Printed in USA

Rev. 01/2007
©2007 AIMCO