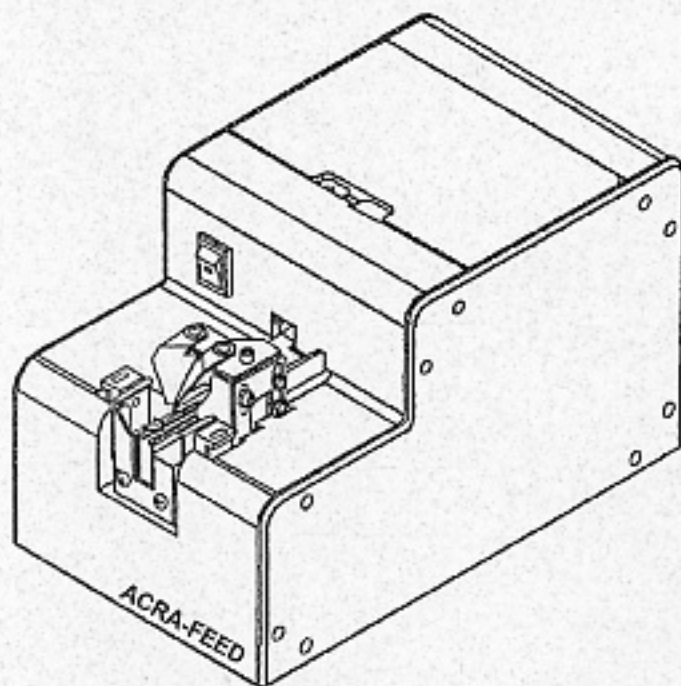


*Automatic Screwfeeder*

**OPERATOR'S MANUAL**

**ACRA-FEED®**

A-50 Series



**AcraDyne**

PO BOX 16460, PORTLAND, OR 97292-0460 • 503-254-6600 • FAX 503-254-7215

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## BEFORE OPERATING

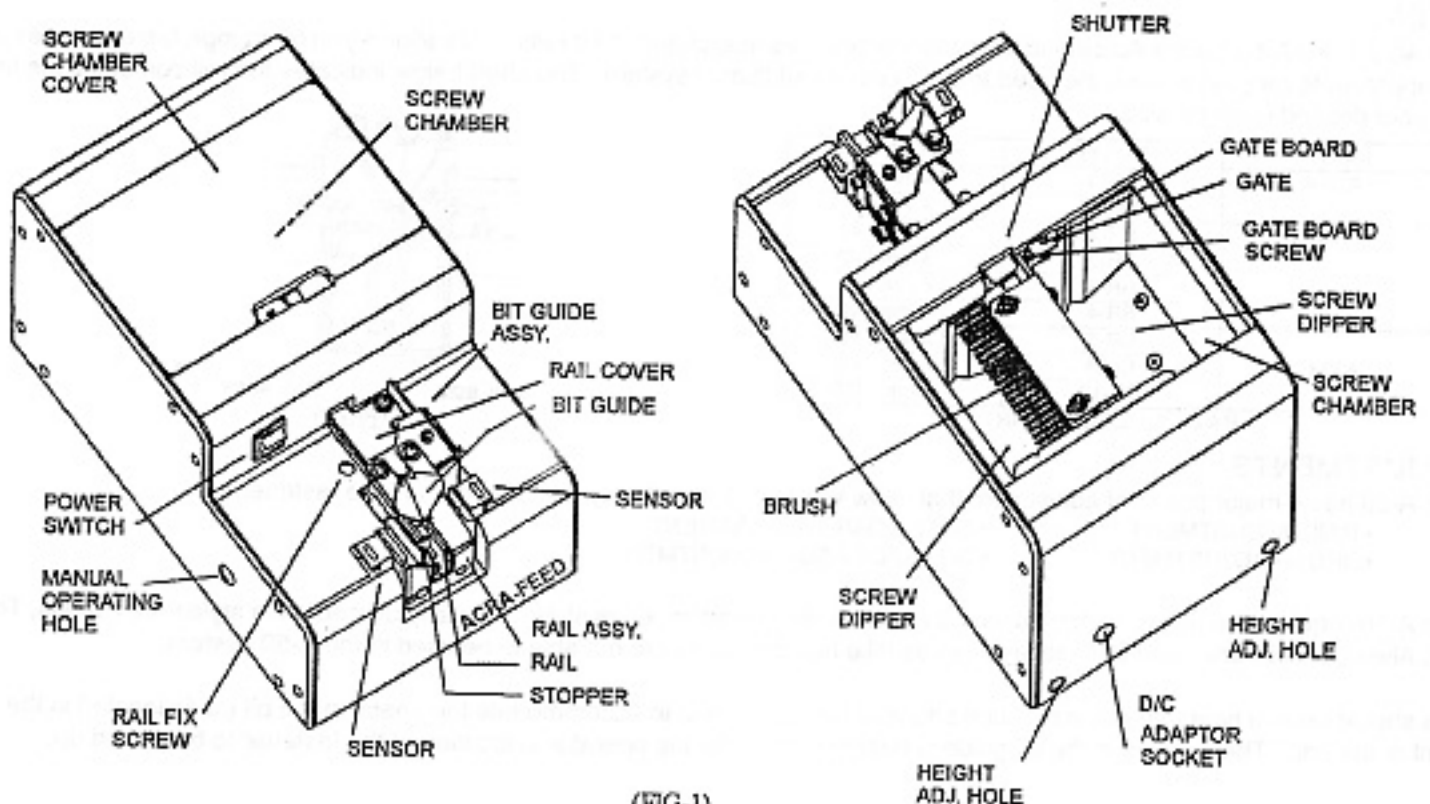
Thank you for choosing the Acra-Feed A-50 Series Automatic Screwfeeder. Please be sure and read this entire manual and familiarize yourself with the unit before operating. When setup and utilized correctly, this system will provide years of trouble free service.

Please check to be sure 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

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## PARTS IDENTIFICATION



(FIG-1)

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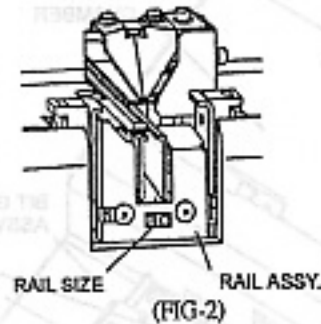
# SIZING AND ADJUSTMENTS

## SIZING

The Acra-Feed A-50 Series Automatic Screwfeeder features interchangeable rails. This allows you to change fastener sizes (in the 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
A50-A	AR-0	1.4 mm / #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
A50-C	CR-6	3.5 mm / #5
	CR-8	4.0 mm / #8
	CR-10	5.0 mm / #10

RAIL SELECTION CHART



## ADJUSTMENTS

The A-50 has 4 major points of adjustment that allow you to optimize the system for your unique fastener.

- RAIL ADJUSTMENT
- BRUSH ADJUSTMENT
- GATE BOARD ADJUSTMENT
- BIT GUIDE ASSY. 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 (like 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.**

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## BRUSH ADJUSTMENT

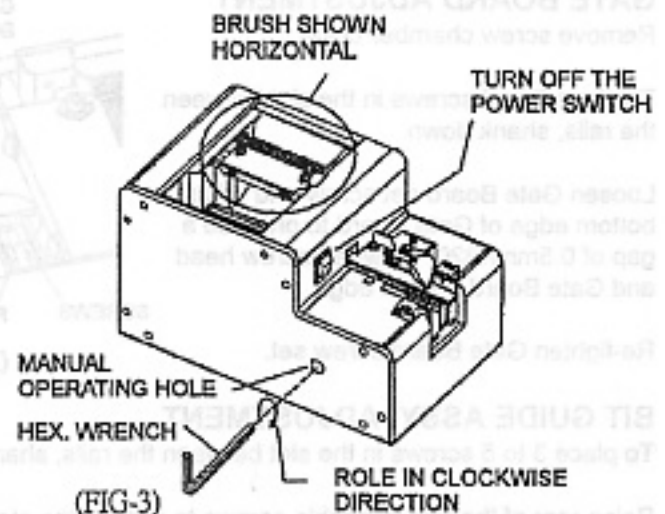
Brush needs to be oriented horizontally before adjustment. If the brush is not oriented horizontally, use the adjustment tool to manually move the brush. Accessing the manual operating hole, turn the adjuster clockwise until the brush reaches horizontal (Fig 3).

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.

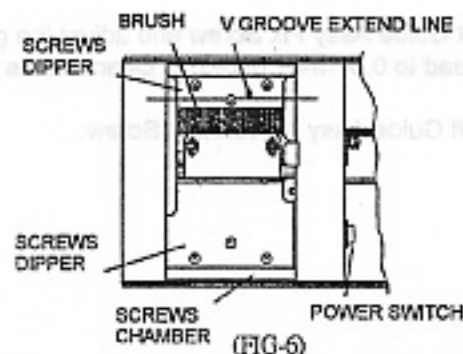
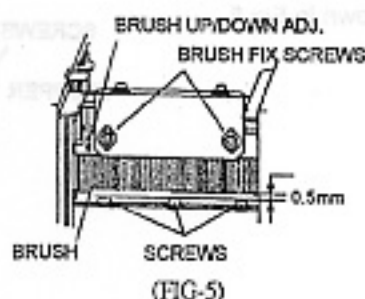
Loosen brush fix screws.

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

Tighten brush fix screws.



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



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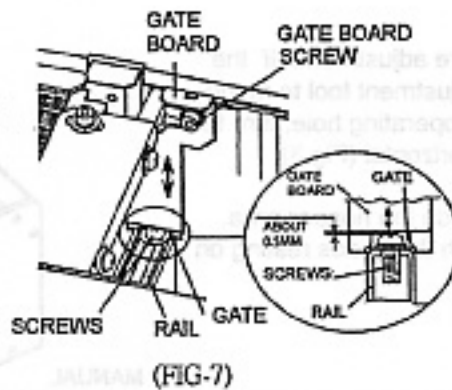
## GATE BOARD ADJUSTMENT

Remove screw chamber cover.

To place 3 to 5 screws in the slot between the rails, shank down.

Loosen Gate Board set screw and adjust bottom edge of Gate Board to produce a gap of 0.5mm/.020" between screw head and Gate Board bottom edge.

Re-tighten Gate Board screw set.



(FIG-7)

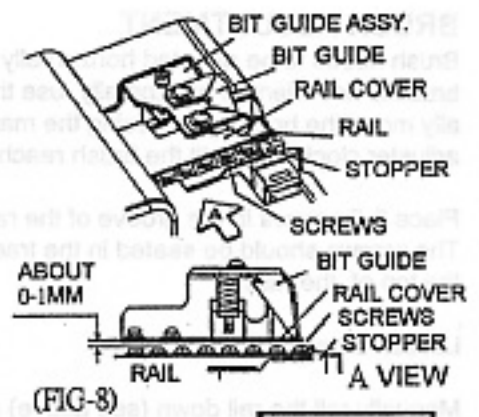
## BIT GUIDE ASSY. ADJUSTMENT

To place 3 to 5 screws in the slot between the rails, shank down.

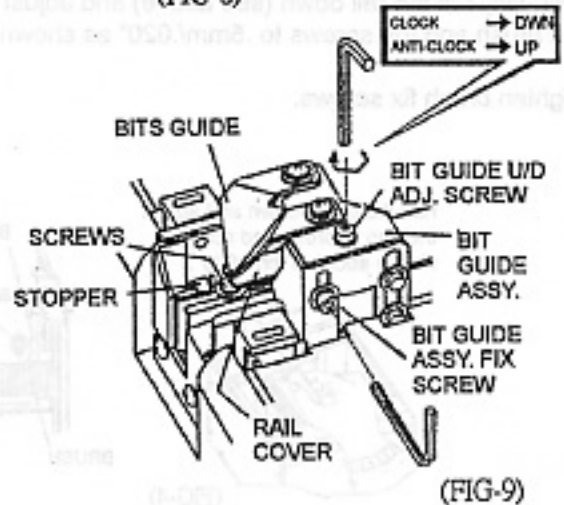
Raise rear of the unit to enable screws to slide to the stopper.

To loosen Bit Guide Assy Fix Screw and adjust the gap between rail cover and screw head to 0.5-1mm/.020-.040 clearance as shown in Fig 8.

Re-tighten Bit Guide Assy Adjustment Screw.



(FIG-8)



(FIG-9)

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## BIT GUIDE ASSY. ADJUSTMENT (cont.)

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

Loosen bit guide fixture screw.

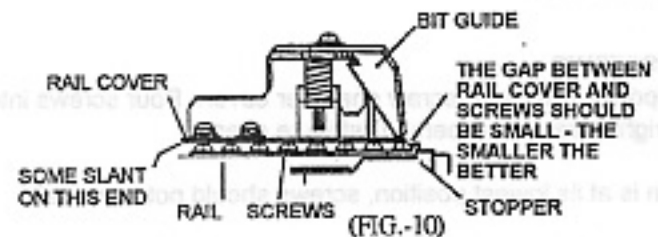
Adjust center of V groove to line with center of rail groove. Align and secure bit guide fixture screws.

## RAIL ADJUSTMENT

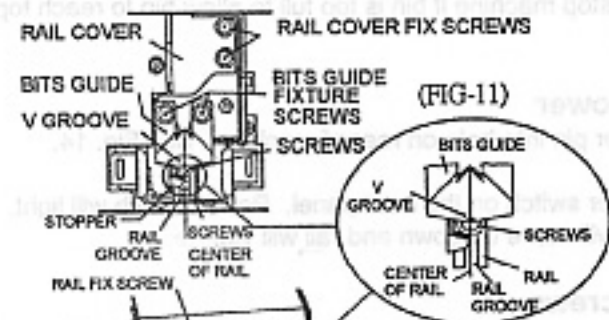
Place 3-5 screws in rail groove. Slope machine to make screws slide to the stopper.

Insert the hex wrench into the rail. Find screw on left side of front and loosen panel.

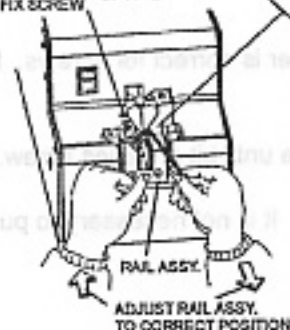
Adjust the bottom end of bit guide to align with center of screw. Secure bit guide fixture screw.



(FIG-10)



(FIG-11)



(FIG-12)

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## OPERATION

### Put in screws

Turn off power. Remove screw chamber cover. Pour screws into left and right screw chambers. Distribute evenly.

When bin is at its lowest position, screws should not cover rail.

A circuit will stop machine if bin is too full to allow bin to reach top of the travel.

### Turn on power

Insert adapter pin into hole on rear of machine. See Fig. 14.

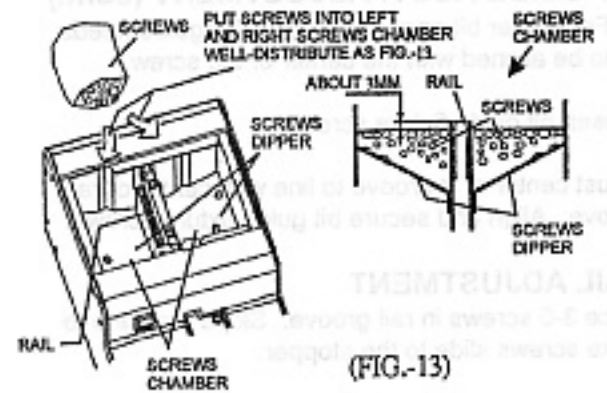
Turn on power switch on the front panel. Power switch will light. Screw's bin will move up/down and rail will vibrate.

### Pick up screws

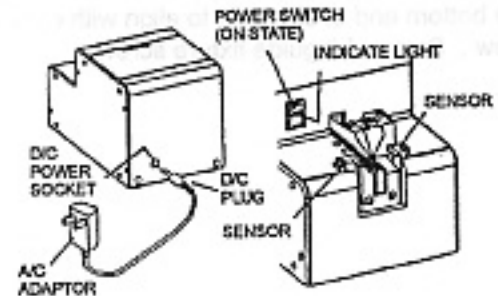
Make sure the type of bit on driver is correct for screws. Make sure bit is magnetized.

Slide bit down in front of bit guide until bit engages screw.

Pull screws out toward the user. It is not necessary to push down on screw.



(FIG.-13)



(FIG.-14)

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## MACHINE INCLINE ADJUSTMENT

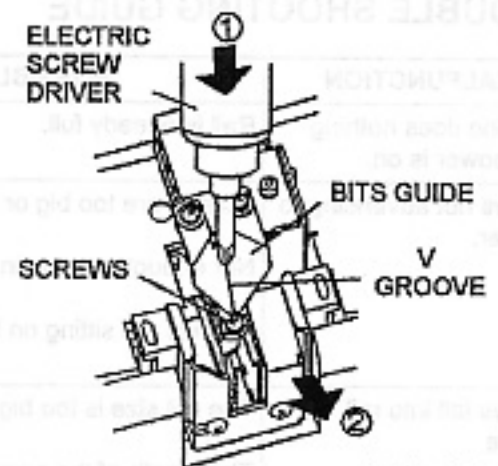
Some shape screws may not move smoothly on the rail. To improve screw delivery, there is an adjustment to increase the rail incline.

### How to Incline Machine

Use hex wrench to loosen foot bracket screws on machine.

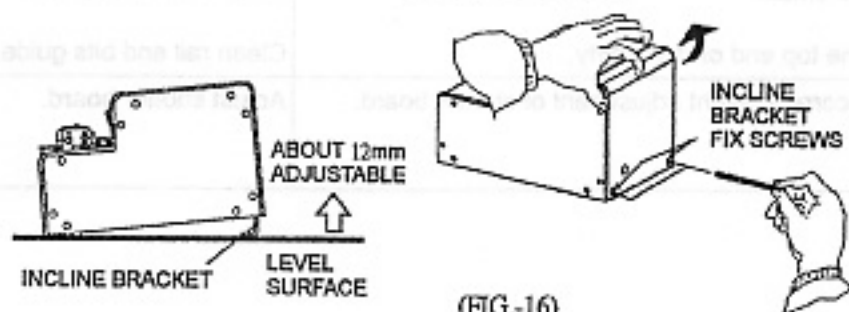
Raise up rear side of machine to proper position. Fasten two fix screws.

Do not insert loose objects under foot bracket for more incline. It can cause a screw lock problem.



(FIG.-15)

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



(FIG.-16)

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# TROUBLE SHOOTING GUIDE

MALFUNCTION	POSSIBLE PROBLEM	REMEDY
Machine does nothing after power is on.	Rail is already full.	Begin system use.
Screws not advancing to stopper.	Screws are too big or too small for rail. Not enough screws in chamber. Screws are sitting on top of the rail.	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	The rail size is too big. The length of the screw is shorter than the width of the rail's groove.	Change to the correct rail. Screws will not work in machine.
Screws cannot move smoothly on rail	The gap between rail cover and screw head is too small. The top end of rail is dirty.	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.

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MALFUNCTION	POSSIBLE PROBLEM	REMEDY
Screws cannot move to the stopper.	Screws were stopped on the way to the stopper. Incorrect front/rear adjustment of rail.	Adjust bit guide assembly (rail cover adj.). Rail front/rear adjustment (see adj. #1).
Bit not engaging screw head easily.	Rail position incorrect. Bit guide position incorrect.	Adjust rail to proper position (see adj. #1). Adjust bits guide end rail cover to proper position (see adj. #4).
Machine does not work suddenly	Protection circuit caused by overload. Did not pick up the screw which was located on the stopper for more than 1 second.	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.		Shake out screws through holes in bottom of machine.

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## MAINTENANCE

Remove power supply plug.

Turn off the power before maintenance.

Take out all the screws on screw's chamber and rail before maintenance.

## CLEANING

### Clean Rail

Take rail out of machine. Loosen the rail fix screw located on the upper left side of the front panel shown in Fig. 17.

Clean the surface of the rail with a soft cloth moistened with alcohol.

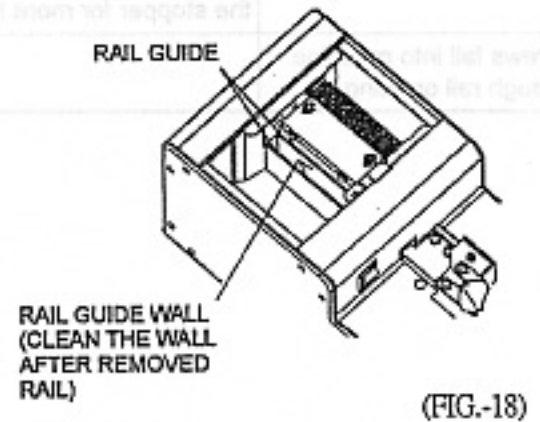
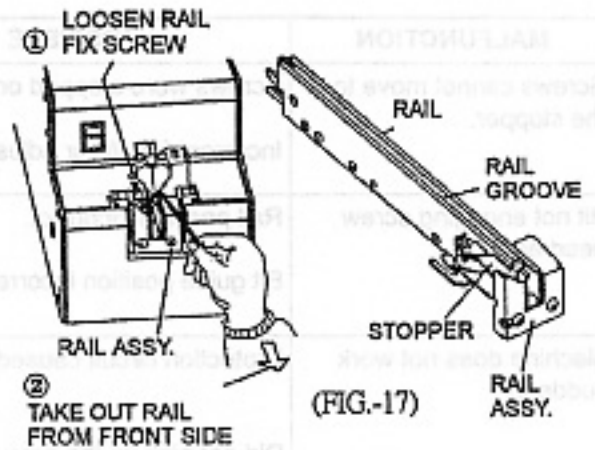
### Clean Rail Guide's Wall

Clean the surface of rail guide's wall with a soft cloth moistened with alcohol shown in Fig. 18.

## REPLACEMENTS

### Rail Replacement

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



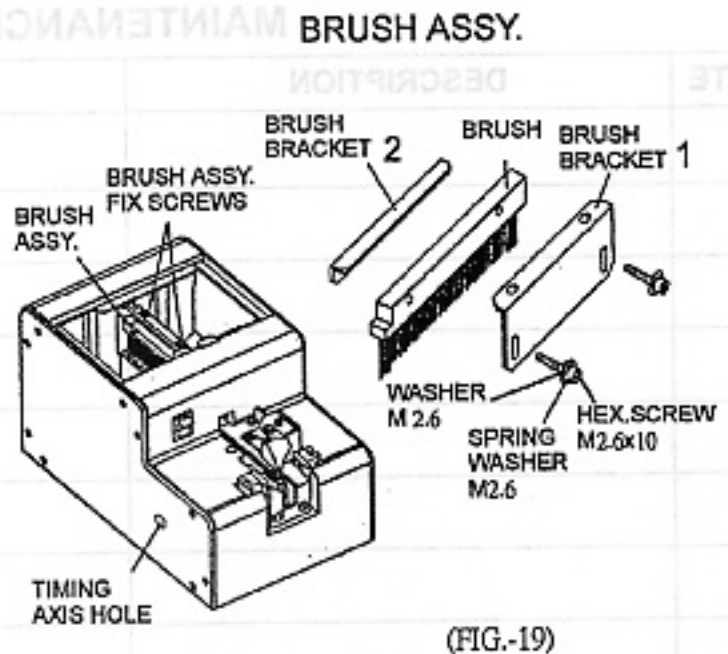
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## BRUSH REPLACEMENT

Turn the brush face down. Insert 2mm hex wrench in timing axis. Hold and turn clockwise until brush is in vertical position.

Loosen brush fix screws. Remove and replace brush with new brush as shown in Fig. 19.

Rotate brush assy. back to horizontal position by turning hex wrench clockwise.



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