

Automatic Screw Hopper

自動ネジ補給機

NEJIKURA Floor Type

(SR-80 · NJ-80 · NJ-80F)

Operation Manual

- Read these instructions for the proper use of this machine
- After having read these instructions, keep them in a convenient place so you or the operator can refer to them whenever necessary.

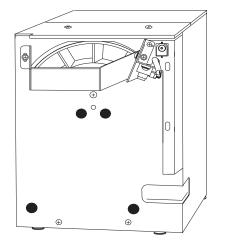
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To use the unit safely, be sure to follow the instructions.

•The following marks specify the extent of hazard and hazard evasion.

WARNING	This mark implies possibility of serious injury caused by the wrong handling in disregard of the instructions.
CAUTION	This mark implies possibility of the accidental injury or physical damage caused by the wrong handling in disregard of the instructions.

Other precaution marks

\bigcirc	Prohibited operations.
•	Be sure to follow the instructions.
®	Never disassemble or repair
€	Unplug the power source from a wall outlet
	Do not touch

1) Before you operationg the machine Check whether it conforms to the feeder with which the part number of Nejikura.

Check that the following accessories are supplied with Nejikura:

- * Instruction Manual 1 copy * AC Adapter 1 unit
- * Screw retaining Cover 1 unit

[Only for NJ-80F:]

Nejikura Type	Corresponding Automatic Screw Feeder
SR-80	NSB/NSR/NSBI/NSRI Series
NJ-80	NJ/NJR Series
NJ-80F	FM-36/FME-36 Series

* Stand 1 unit * Weld bolt 2 unit * Screws to fix the stand (M2.6×5) 3 unit

^{*}For this machines purchased outside of Japan, no adaptor will be supplied with the feeder. Please purchase separate adapter with quivalent output specification as required.

2) Note on operation

In case of trouble

A wasawa If your

WARNING If you run into any trouble using the unit, turn off the power switch and unplug the AC power adapter. If you keep using it without corrections, it may cause electric shock, injury or fire. Contact your dealer immediately.

Installation

CAUTION Setup the unit on the flat and stable surface. Unstable installation can cause falling, overturning, or breakdown of the unit and cause injury.

Screws not be used

Do not feed the nonstandard screws or screws stained with oil or dust.

Rotor

warning (

Never touch the rotor while main power is turned on. It may cause serious injury.

Screw inlet and outlet

WARNING (

Never insert your fingers into the screw inlet and outlet while the power is turned on.

Upper cover

CAUTION

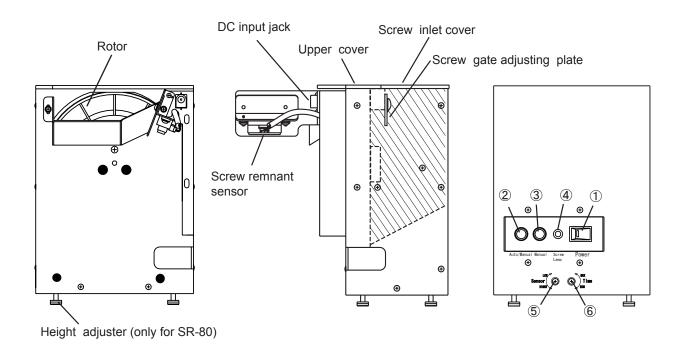
Do not remove the upper cover. If a screw drops inside the machine, it would clog the rotation and may cause breakdown of unit.

After work and out of operation



When the unit is not used for a long time, unplug the power adaptor from wall outlet.

3) Name of components



(This illustration above is for SR-80 . For NJ-80, NJ-80F, the location for DC-juck and sensor accessories will be on opposite side.)

Switch Function

- ① Power: Power source switch (red LED turns on)
- ② Auto/Manual: A changeover switch for the automatic and manual modes (green LED turns on when it is in the automatic mode and off in manual mode.)
- Manual: A switch to supply the screws with the manual mode. When it is in the manual mode, press the blue switch to supply the screws to Automatic Screw Feeder. This switch is unavailable in the automatic mode.
- 4 Screw Lamp: LED to show the empty screw in Automatic Screw Feeder.
- (5) Sensor (detecting screw amount in feeder): An adjuster for the sensor responding from the amount of screws in Automatic Screw Feeder. LED turns on when the sensor functions.
- Time (adjusting screw supply amount): An adjuster to regulate the amount of screw to be supplied. It adjusts the rotating time of rotor.
 - Hopper capacity of Nejikura

The hopper of Nejikura can be filled with the screws up to its brim (See photo 1.)

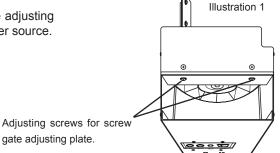
Screw gate adjusting plate

If the screw clogs at the screw gate of rotor, lower the screw gate adjusting plate. (See illustration 1.)





When you adjust the screw gate adjusting plate, be sure to unplug the power source.





4) Adjusting & checking before use.

1. Adjusting screw sensor.

To keep an appropriate amount of screws in Automatic Screw Feeder, adjust the screw sensor. (See illustration 2.)

How to adjust

- 1) Empty all the screw in Automatic Screw Feeder and turn on power switch.
- 2) Turn on Auto/Manual Changeover Switch of Nejikura and identify that the green lamp turned on.
- Turn the adjuster of screw sensor with a Philips screwdriver from MIN to MAX direction slowly and stop turning at the point where the LED starts to blink.
- 4) After the above adjustment, operate Automatic Screw Feeder and identify that LED lamp blinks in response to up and down movement of the scooper of Automatic Screw Feeder.

2. Adjusting rotor (impeller) rotating time.

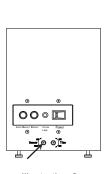
To supply appropriate screws to Automatic Screw Feeder, set the rotating time of rotor with the timer. (See illustration 3.) It will be easy to adjust the rotor (impeller) as seeing it through the screw supply port of Automatic Screw Feeder (See illustration 4.)

How to adjust

- 1) Turn the timer adjuster from MIN to MAX direction slowly.
- 2) The standard adjustment is to make the impeller moves clockwise(from A to B as shown in illu. 4.) per turn. Thereafter, make the minor adjustment according to the actual flow of screws.

Note: for the long size screws,

set the rotating distance wider than that of the standard.



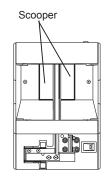
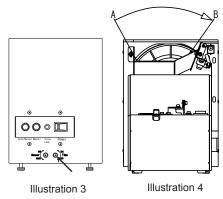


Illustration 2



- 5 -

- 3. Minor adjustment
- 1) After the adjustments of screw sensor and rotating time specified in paragraphs 1 and 2, fill Nejikura with the screws.
- 2) Operate the unit and check how it works. Adjust the screw sensor and timer if it is necessary. It is recommended to set the amount of screw in Automatic Screw Feeder small to avoid the clogging of screws.

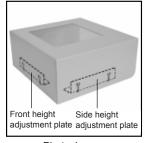
Appropriate amount of screw in Automatic Screw Feeder



4. Screw containing cover

When mount the screw containing cover, loose the screw of two height adjustment plates. (Refer to photo 1)

Although a cover is inserted from this side of an Automatic Screw Feeder, the adjustment plate of the side enters between a sensor and an Automatic Screw Feeder then. (Refer to photo 2)As shown in Fig. 2, two adjustment plates are fixed after a set in the stabilized position, looking at the level of a cover. (Refer to photo 3)



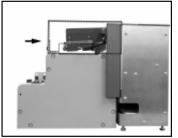






Photo 1

Photo 2

Photo 3

Photo 4

The photograph above is with application of "SR-80." The opposite position has the side height adjustment plate of the screw spill-out prevention cover of "NJ-80 and NJ-80F."

5) Troubleshooting

Please check the following items, if problems occurred during operation. If the problem is still not resolved, please consult your dealer.



Before you conduct the corrective action, be sure to turn off power source switch.

SYMPTOM	CAUSE	CORRECTIVE ACTION
The unit does not work despite power switch is turned on.	 No power source is supplied. Automatic Screw Feeder is not working. Screw or solid object is stuck to rotor. Failure of AC power adapter. Other problem. 	 Identify if AC power adapter is properly connected. Remove screw at stopper of Automatic Screw Feeder. Remove solid object from rotor. Contact your dealer.
Motor is running but rotor does not work.		Contact your dealer.
Automatic Screw Feeder contains enough screws, but Nejikura keeps supplying screws.	Position of screw sensor is not set correctly.	Readjust screw sensor.

SYMPTOM	CAUSE	CORRECTIVE ACTION
A green lamp blinks while in use by automatic mode.	There are no screws in the Neji-kura hopper.	Fill Nejikura with screws.
No supply the screw is contained in the Nejikura hopper.	Screw is stuck between rotor and screw gate.	Remove stucked screws.
Rotor does not rotate.	Screw or solid object is stuck between rotor and screw gate.	1) Turn on manual mode and press rotor rotating switch for about 5 seconds. If you still can not remove solid object, try following corrective action. 2) Unplug AC power adapter and rotate rotor manually to reversal direction just a little and remove solid object.

6) Specifications

Power AC adapter (linear type)	Input:AC100V 50/60Hz Output:DC12V 500mA
Dimensions	NJ-80,NJ-80F: 142(W) × 191(D) × 188(H) (mm) SR-80: 142(W) × 191(D) × 189~198(H) (mm)
Weight	Approx. 2. 9Kg
Following accessories	Operation Manual 1 copy AC Adapter 1 unit Screw spill-out prevention cover 1 unit [Below, only for NJ-80F] Stand 1 unit Weld bolt 2 unit Screws to fix the stand (M2.6 × 5mm) 3 pieces

Compatible screw size	M2. 0~M6. 0
Compatible screw lengths	Up to 15 mm
Screw sensor	Pphotometric sensor
Screw capacity	Approx. 800cc
	M2.3 × 5 / About 20,000 screws M3.0 × 6 / About 5,600 screws

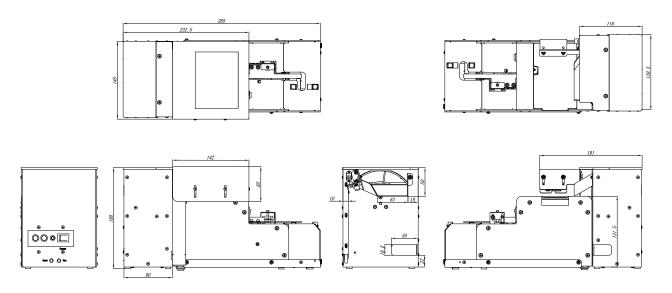
Nejikura Type	Corresponding Automatic Screw Feeder
SR-80	NSB/NSR/NSBI/NSRI
	NSB ² /NSR ² /NSBI ² /NSRI ²
NJ-80	NJ/NJR
	NJ ² /NJR ²
NJ-80F	FM-36/FME-36
	$FM^2 - 36/FME^2 - 36$

Note)

- •The transformer-type AC adapter attached with the machine has nominal output of DC12V-500-mA; during application, it is designed to supply an average output at about 15V to the screw feeder. In the case where a different type of adapter or external power source is used, it is recommended to use a 15V switching type adapter, or regulated power supply which can provide constant output at 15V.
- •For this machines purchased outside of Japan, no adaptor will be supplied with the feeder. Please purchase separate adapter with quivalent output specification as required.
- Within the specified range of screw dimensions, instances may occur where unique shape or type of screws which cannot be compatible with the automatic screw hopper. Please adjust the amount of screws stored in the hopper, so the supply of screws can be more efficient.
- There may be additional changes or modifications to the machine, which are not included in this operation manual.

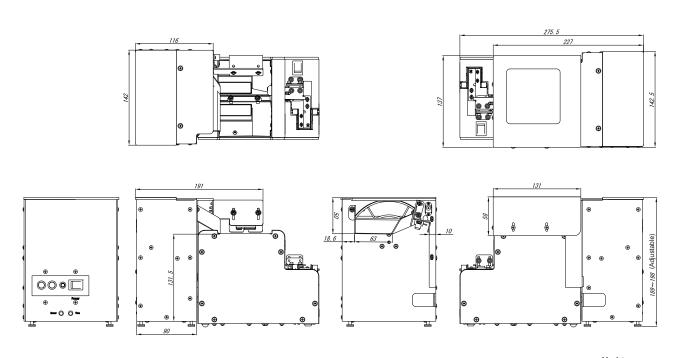
7) Assembly Dimensions

NJ-80 with NJR



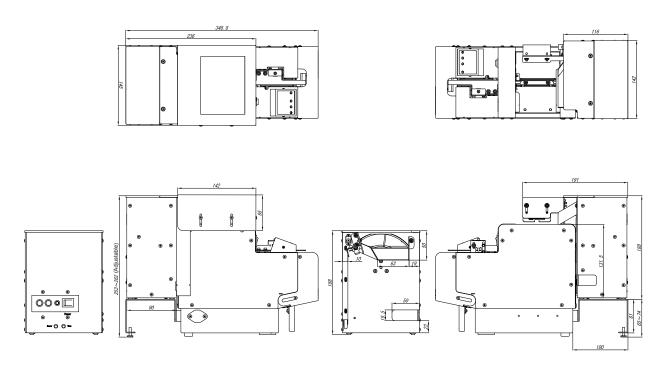
 ${\tt Unit:mm}$

SR-80 with NSR



Unit:mm

NJ-80F with FM-36



Unit:mm

8) Warranty

For users within Japan, the effective term of warranty is 6 months after delivery.

Such warranty will not be applicable to purchases or users outside of Japan.

If any troubles should occur, please contact your dealer.

After the warranty period, repair services will be completed.

In the following cases, the purchaser shall pay for parts and labor regardless of the terms of warranty:

- 1) Failure due to improper handling.
- ② Failure due to product modification or improper processing.
- 3 Failure due to causes beyond control (for example earthquake or fire).
- 4 Failure attributable to any cause other than this product.
- © Consumables (Driving gear, Driving motor) and replaceable parts and replacement work expenses.

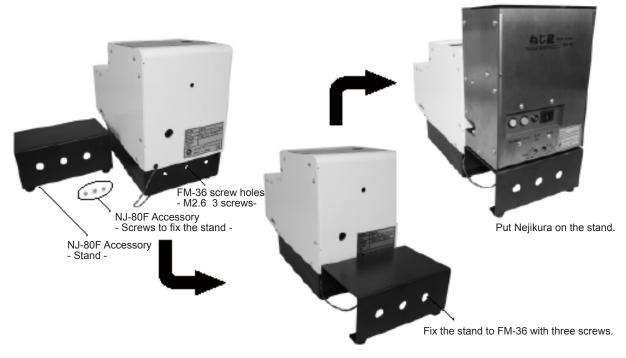
As a rule, we keep performance parts for repair (parts required to maintain the product function) of this machine for 5 years after discontinuation of production.

After the lapse of the parts possession period, some failures may be reparable.

Consult your dealer or our service section.

9) How to set up Nejikura (NJ-80F) with FM-36

Note) SR-80 & NJ-80 doesn't need the stand.



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