

Automatic Screw Hopper

自動ネジ補給機

NEJIKURA Floor Type

(SR-80・NJ-80・NJ-80F)

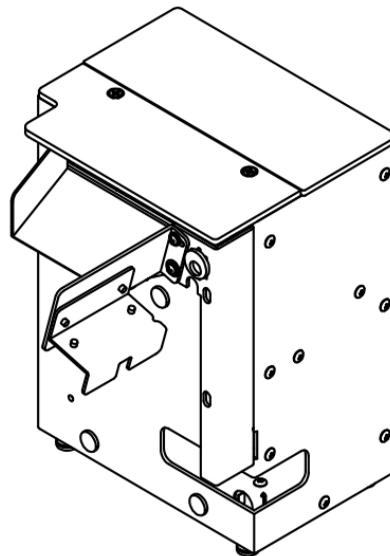
Operation Manual

- 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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We do not have any branches in China.

各位顾客请注意! : 「www.ohtake-root.co.jp 是敝司唯一的官方网站,
目前, 敝司在中国没有办事处与所谓的中国官网。」

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弊社の名を騙る偽サイトにご注意下さい。現在、当社は中国国内に支店はございません。



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1. OVERVIEW OF THIS MACHINE

By using this product in combination with our screw feeder, you can increase the capacity of stocking screws. This hopper can automatically detect the remaining amount of screws in the feeder with a sensor and automatically replenishes the screws.

2. BEFORE USE

Please confirm the feeder type with which the part number of Nejikura, as the table below.

Check that the following accessories are supplied with Nejikura:

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

【Only for NJ-80F:】

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

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

※ The design, performance and specifications are subject to change without prior notice for the sake of improvement.

3. OPERATING PRECAUTIONS

This manual contains safety alert symbols and signal words to help prevent injuries to the user or damage to property.

◎ Indications



WARNING

This indicates there is a chance of death, serious injury or fire if the instructions are not followed.



CAUTION

This indicates there is a chance of personal injury or damage to property if the instructions are not followed.

◎ Symbols indicating type of danger and preventative measures



Prohibited operation. Never do this!



Do not disassemble, modify or repair.



Do not touch with wet hands.



This indicates to stop operations.

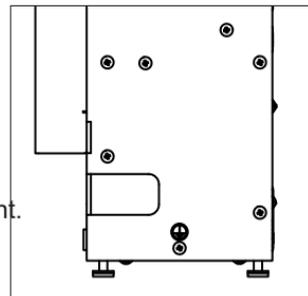


Unplug power supply from wall outlet.



General caution.

Attach the ground wire by loosening the screw near the mark  of the equipment.



the side of the main body

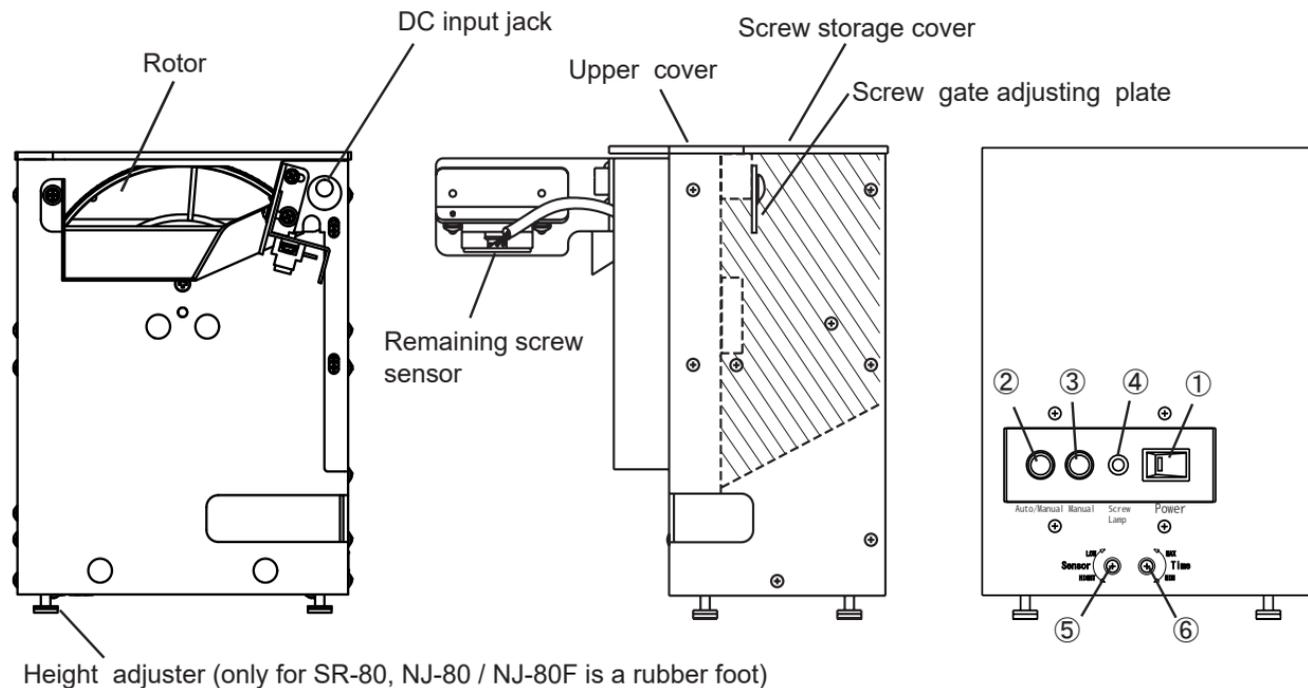
WARNING

-  Never touch the rotating drum while the power is on.
Never reach into the inlet and outlet. It may lead to injury or serious accident.
-  Do not remove the upper fixing cover. If the screw falls onto the rotating drum, the "screw" locks and breaks.
-  Do not disassemble the AC adapter as there is a risk of electric shock, fire or malfunction.
-  Do not damage, alter or change the power cord. Do not place heavy objects on the cord. Do not pull hard on the cord or twist the cord as it could be damaged, thereby causing a risk of fire or electric shock.
-  Do not handle the AC adapter with wet hands as it could cause an electric shock.
-  When using an outlet with AC100 ~ 240V, don't overload the electrical circuit.
Do not modify or remodel this machine as this may cause a fire or electric shock.
-  Do not operate this machine near flammable liquids, gasses or materials as there could be a risk of fire or explosion.
-  Stop operating the machine and unplug the AC adapter from the wall outlet when you detect overheating, smoke, a pungent odor or any other unusual condition, as there may be a risk of fire or electric shock. Contact the dealer, from which you purchased the machine and have it examined and repaired.
-  In the case of a thunderstorm, stop operating the machine, turn off the power and unplug the AC adapter from the wall outlet. If there is lightning and thunder nearby, move away from the machine and do not touch it or the AC adapter. After the thunder stops, and when it is safe to do so, check the machine. If there is any abnormality, contact your dealer.
-  When performing maintenance, changing parts or when you sense an abnormality in the machine, turn the power off and pull the AC adapter from the wall outlet.
In addition, there are parts that become hot in the circuit board. When performing maintenance around the circuit board, turn off the power for at least 5 minutes before performing work. There is a risk of burns.

 CAUTION

-  Properly adjust the amount of screws replenished from the machine to the automatic screw feeder. If the replenishment is excessive, the automatic screw feeder may stop. Refer to 5-1 for adjustment. Adjustment of screw sensor and 5-2. Adjustment of rotating drum operation time.
-  Use only the AC adapter supplied with this machine otherwise it may result in a fire or electric shock.
-  Do not install this machine in an unstable location otherwise it may fall causing damage or injury.
-  Always operate the machine with the upper cover in place, otherwise it may result in injury.
-  Do not allow any foreign material to enter the machine while in operation.
-  Do not put your fingers into the machine while in operation, otherwise an injury will result.
-  Do not operate this machine in overly humid or dusty conditions.
-  Keep the plug socket clean at all times otherwise it may cause a fire or electric shock.
-  When moving the machine, always disconnect the AC adapter from the wall outlet or it may result in damage to the cord, or cause a fire or electric shock.
-  Turn off the machine and unplug the AC adapter from the wall outlet during closing hours or if the machine will be unused for any extended period of time.
-  When moving the machine, be sure to hold it with both hands and be careful not to drop it. Dropping the machine at your feet may cause injury.
-  Do not operate the machine with tension on the AC adapter cord. Keep the cord loose and untangled.
-  Do not use any screw that is out of the specified range nor any screw that is oily or dirty.

4. NAMES OF MACHINE PARTS



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

Switch Function

- ① Power : Power source switch (red LED turns on)
- ② Auto : 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.)
- ③ 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 sees no screw.
- ⑥ 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

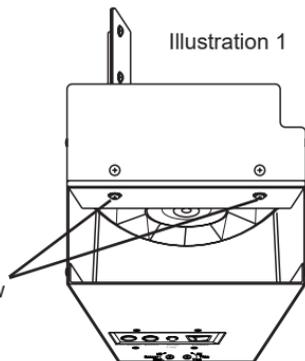
If the screw clogs at the screw gate of rotor, lift the screw gate adjusting plate.
(See illustration 1.)



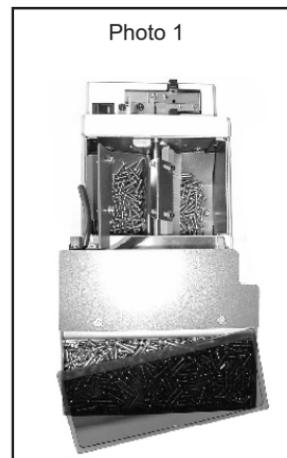
WARNING



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



Adjusting screws for screw gate adjusting plate.



5. HOW TO USE ADJUST

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.
- 3) 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.

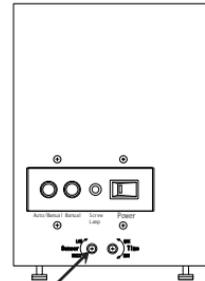
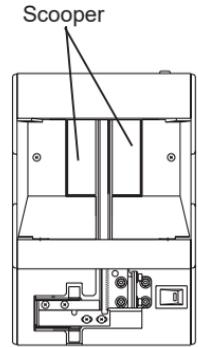


Illustration 2



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 3~4 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 longer than that of the standard.

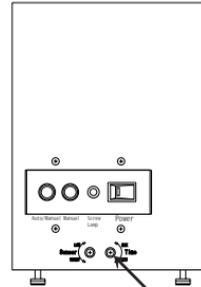


Illustration 3

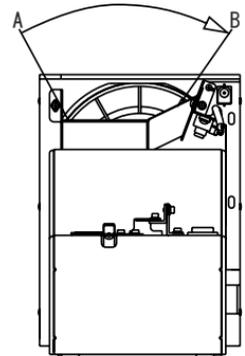
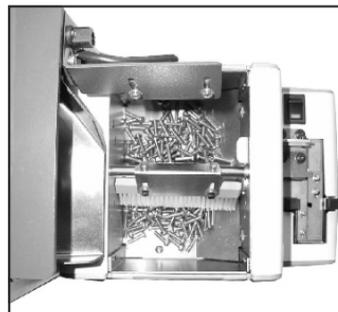


Illustration 4

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 supplied amount of screw in Automatic Screw Feeder small to avoid the clogging of screws.

Appropriate amount of screw
in Automatic Screw Feeder



4. Screw retaining cover

When mount the screw retaining 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 photo 2, two adjustment plates are fixed after a set in the stabilized position, looking at the level of a cover. (Refer to photo 3)

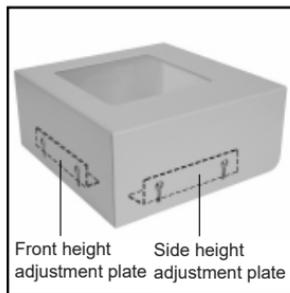


Photo 1

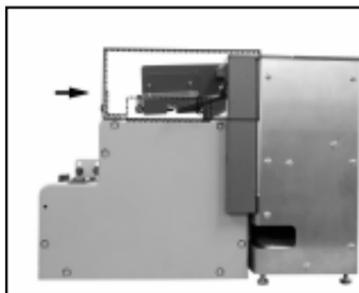


Photo 2

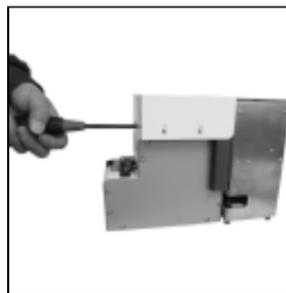


Photo 3

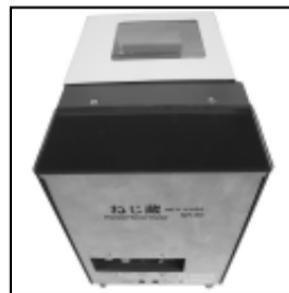


Photo 4

6. TROUBLESHOOTING

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

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

SYMPTOM	CAUSE	CORRECTIVE ACTION
The switch lamp does not light even when the power switch is turned on.	<ul style="list-style-type: none">• Power is not supplied.• The AC adapter has failed.	<ul style="list-style-type: none">• Please confirm that AC100-240V is supplied to the outlet and if AC power adapter is properly connected.• Contact your dealer.
The unit does not work despite power switch is turned on.	<ul style="list-style-type: none">• There is enough screw in the automatic screw feeder.	<ul style="list-style-type: none">• In the automatic mode, check if the automatic screw feeder operates when the number of screws decreases.
Screw does not come out. The rotating drum does not rotate even if the manual switch is pressed in the manual mode.	<ul style="list-style-type: none">• A screw or foreign matter is caught in the rotating drum at the discharge port.	<ul style="list-style-type: none">• Remove the adapter and remove the screws and foreign matter from the rotating drum. If there is no screw in the discharge port, remove the screw in Nejikura and check if the screw is caught at the bottom of the rotating drum.

SYMPTOM	CAUSE	CORRECTIVE ACTION
The machine does not supply screws even if the number of screws in the automatic screw feeder is low.	<ul style="list-style-type: none"> • Auto switch is off (LED lamp is off) • The screw detection sensor is dirty. • The screw detection sensor adjustment is incorrect. 	<ul style="list-style-type: none"> • Turn on the Auto switch (LED lamp lights). • Clean the sensor. • Make the adjustment referring to 5-1.
The supply does not stop even though there is an appropriate amount of screws in the automatic screw feeder.	<ul style="list-style-type: none"> • The screw detection sensor is dirty. • The screw detection sensor adjustment is incorrect. 	<ul style="list-style-type: none"> • Clean the sensor. • Make the adjustment referring to 5-1.
A green lamp blinks while in use by automatic mode.	<ul style="list-style-type: none"> • There are no screws in the Nejikura hopper. • A screw is caught on the way. • Automatic screw feeder not working. 	<ul style="list-style-type: none"> • Fill Nejikura with screws. • Check that the screws are not caught on the rotating drum. • If the sensor does not change even if the drum rotates three times, the operation stops once to prevent overfilling. When the automatic screw feeder operates and the sensor changes, it resumes operation.
The motor is rotating, but the rotating drum is not rotating.	<ul style="list-style-type: none"> • The drive belt is damaged. 	<ul style="list-style-type: none"> • Contact your dealer.

7. SPECIFICATIONS

Power AC adapter (Switching type)	Input: AC100~240V 50/60Hz Output: DC15V 1A
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 retaining cover 1 unit Adjustment screw driver 1 pc Ground wire 1 unit 【Below, only for NJ-80F】 Stand 1 unit Screws to fix the stand (M2.6 × 5mm) 3 pieces
Installation location	Level stable place
Installation and storage condition	Temperature 0~40°C Humidity 10 to 85% (without condensation)
Compatible screw size	M2.0~M6.0
Compatible screw lengths	Up to 18 mm in total length
Screw sensor	Photometric sensor
Screw capacity	Approx. 800cc
Possible number of screw stored	M2.3 × 5 / About 20,000 screws M3.0 × 6 / About 5,600 screws

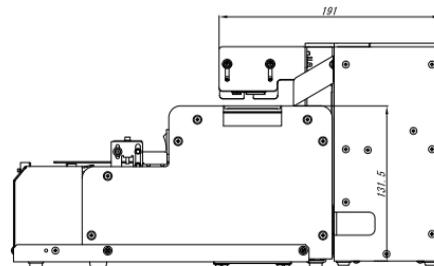
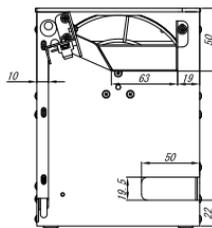
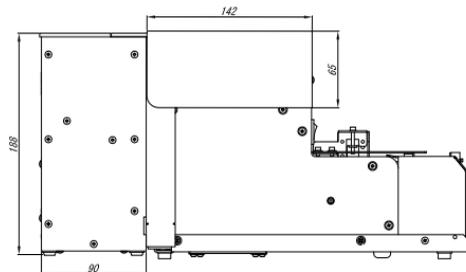
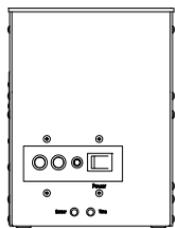
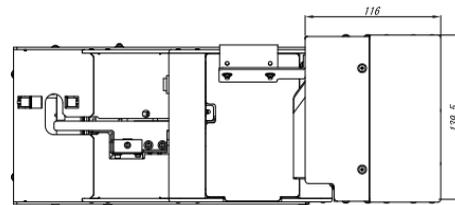
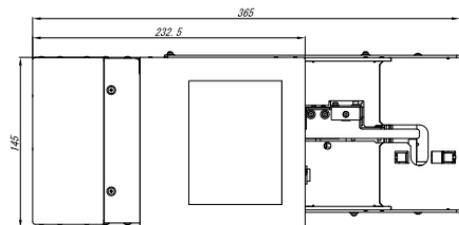
Nejikura Type	Corresponding Automatic Screw Feeder
SR-80	NSB/NSR/NSBI/NSRI Series
NJ-80	NJ/NJR Series
NJ-80F	FM-36/FME-36 Series

Note)

- 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.

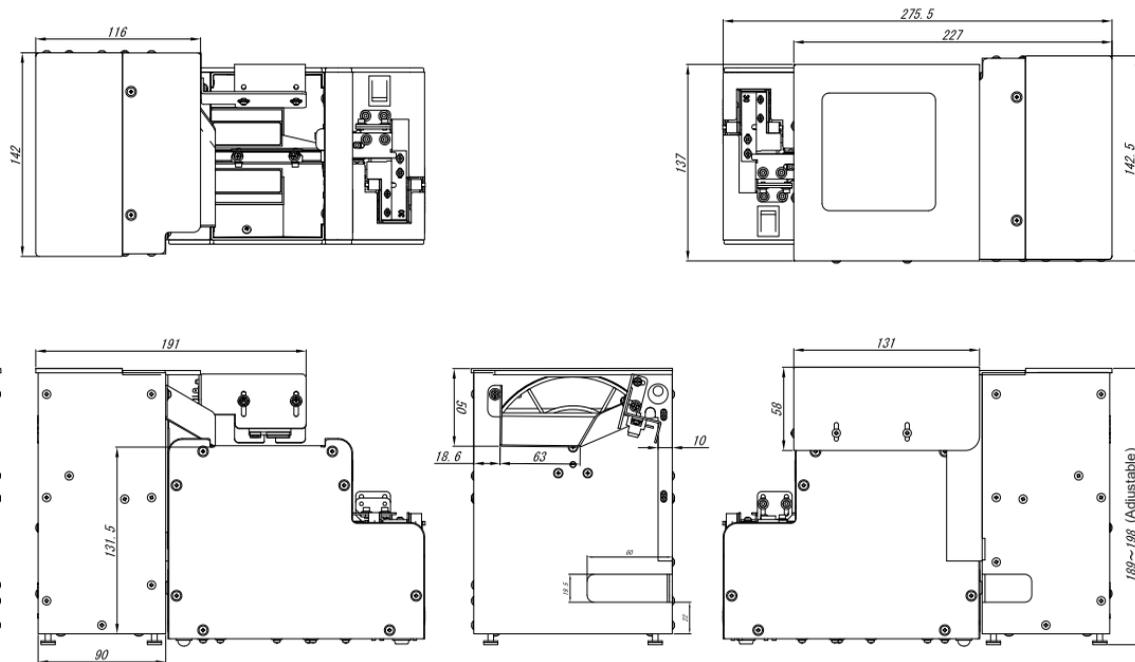
8. EXTERNAL DIMENSIONS

NJ-80 with NJR



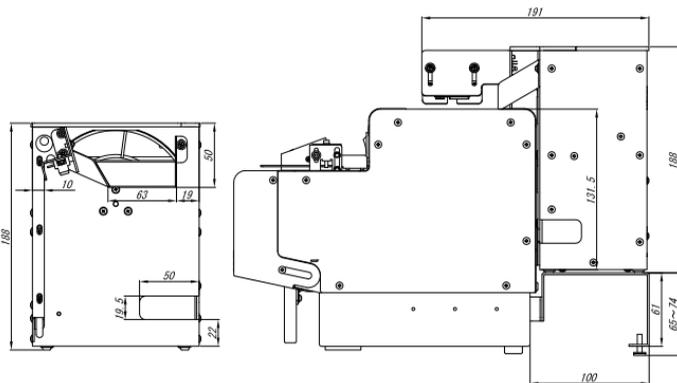
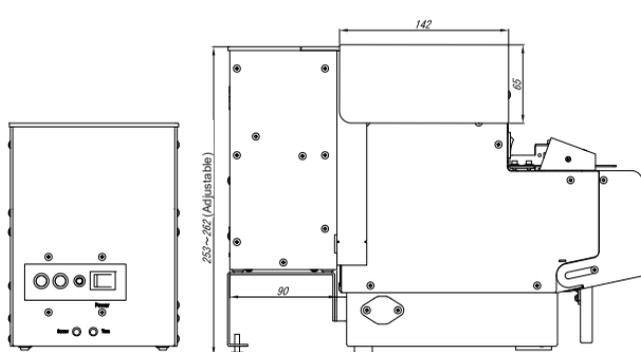
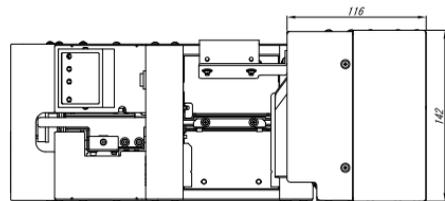
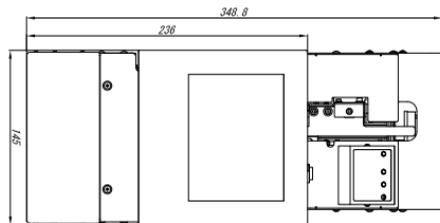
Unit : mm

SR-80 with NSR



Unit : mm

NJ-80F with FM-36



Unit : mm

9. 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 provided.

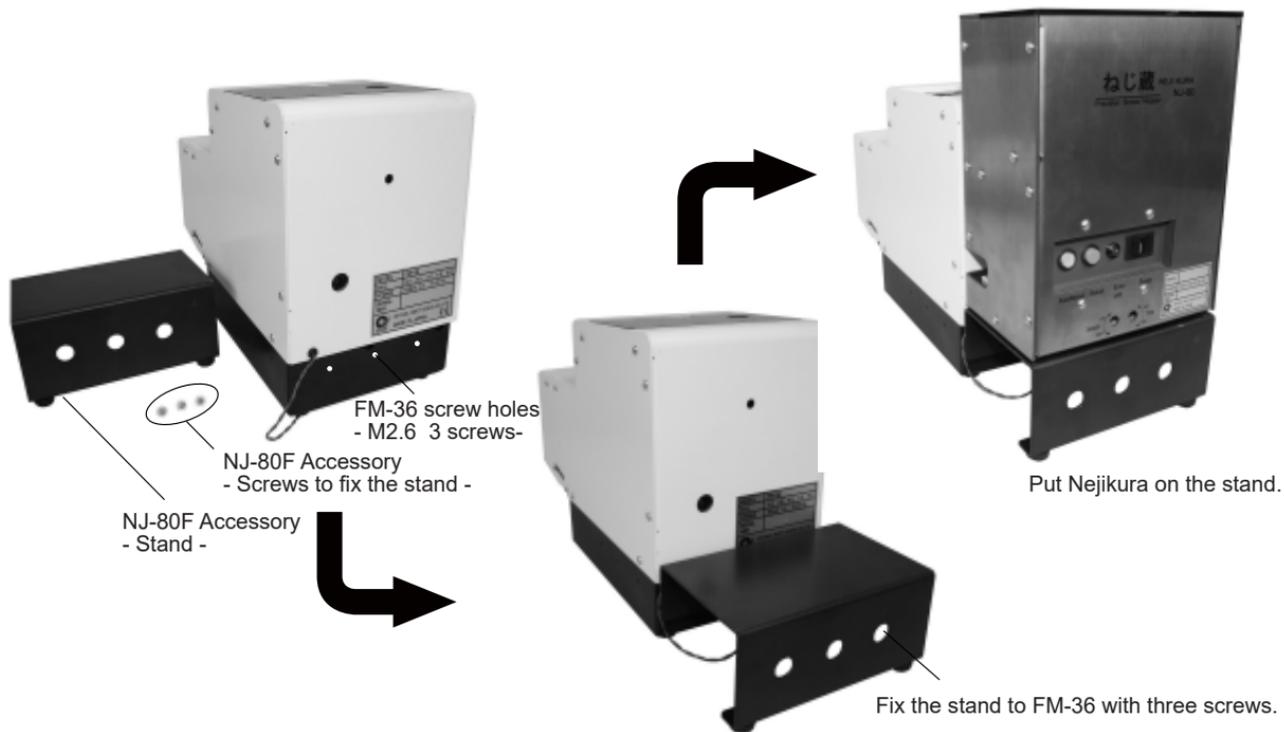
In the following cases, the customer shall be responsible for parts and labor regardless of the terms of warranty:

- 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.
- ⑤ Consumables (Driving gear, Driving belt, Driving motor) and replaceable parts and replacement work expenses.

The repair parts shall be available within 5 years after purchase.

10. HOW TO SETUP NEJIKURA(NJ-80F) WITH FM-36

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



RoHS



Please note that on disposal, this product may be safely recycled in accordance with the relevant national legislation relating to electrical/ electronic products. If in doubt please contact your retailer for guidance.

部品名称	有毒有害物質或元素					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
驱动齿轮,轴心部件	×	○	○	○	○	○
铆钉	×	○	○	○	○	○
六角铜柱	×	○	○	○	○	○
电路板元件	×	○	○	○	○	○
连接器	×	○	○	○	○	○

○: 表示該有害物質在該部件中的含量均在GB/T 26572-2011規定的限量要求以下。
 ×: 表示該有害物質至少在該部件中的某一均質材料中的含量超出GB/T 26572-2011標準規定的限量要求。

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(2020年4月現在)