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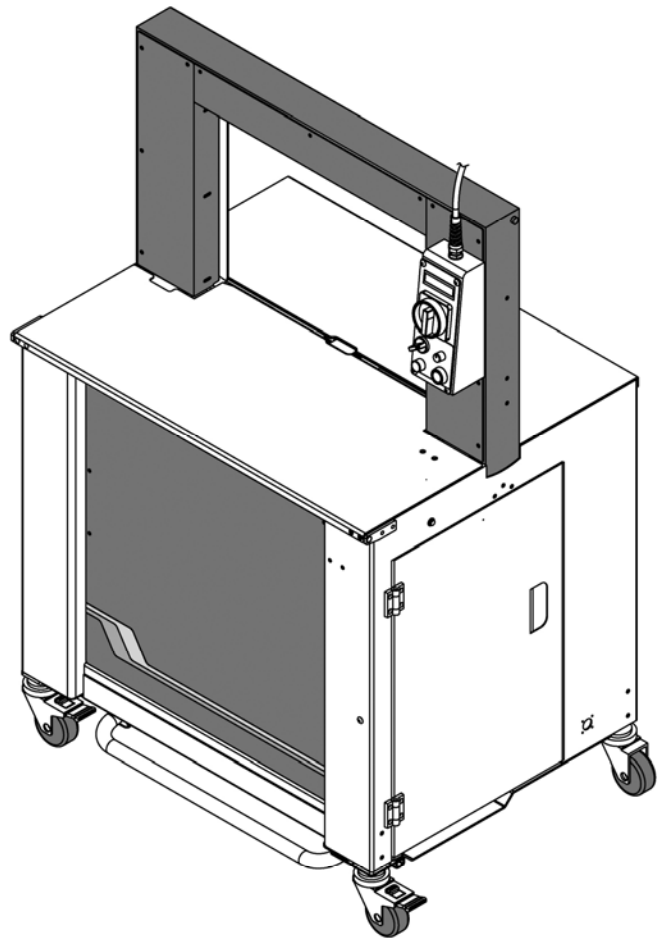
AUTOMATIC STRAPPING MACHINE

MERCURY

TP-702-59

IMPORTANT
Keep it Well

OPERATION, SAFETY
& SPARE PARTS
MANUAL



Made in Taiwan

Read All Instructions Before Operating This Product

Original Instruction

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PART I

1 General Safety Instructions

1.1 Basic Operation

- Read the operation and safety manual prior to using the strapping machine.
- The operation and safety manual should remain attached to the machine at all times.
- The machine may only be operated in accordance with its designated use.
- The strapping machine was built in accordance with state-of-the-art standards and recognized safety rules. Nevertheless, improper use can still result in injury to personnel or damage to the machine and other material property.
- Machine shall only be operated by trained personnel.
- Perform inspections and maintenance at regular intervals. Refer to the Maintenance section of the manual.
- The machine may not be put in operation before checking the respective devices.
- Safety devices must never be bridged or eliminated by any means.
- To transport the equipment only use lifting apparatus and loading devices with sufficient capacity.
- Always disconnect from external power supply when changing the location of the machine, even if the location should only be slightly changed. Connect power supply properly before returning to service.
- Do not alter or bypass protective interlocks.
- Do not alter circuits and machine unless authorized to do so by the manufacturer.

1.2 Basic Safety Precautions

- In addition to the instructions for operation, the user is to be instructed in all generally applicable legal or mandatory regulations relevant to safety or the environment.
- Long hair, loose-fitting garments, or jewelry can be a safety hazard. These items must be secured prior to equipment operation.
- Use protective equipment whenever appropriate or when required by law.
- Carefully observe all safety instructions and warnings attached to the machine. Keep safety labels clean and legible.
- People that are being trained to operate or service the equipment must be supervised by experienced personnel.
- Any electrical work performed on the equipment must be conducted by a skilled electrician or under the supervision of a skilled electrician. All work must be observed good electrical engineering practice and follow safety rules and local wiring standards.

1.3 Safety Instructions Governing Specific Operational Phases

- Avoid unsafe operation of the equipment.
- The machine is only to be operated when it is in good running order. Only operate the equipment in a safe manner; all protective and safety devices must be in place and fully functional. This includes removable safety devices, emergency shut-off equipment, noise-protection devices and exhaust fans.
- The machine is to be checked for damage and defects at least once each work shift. Any changes, including the working behavior of the machine, are to be reported immediately. If necessary, the machine is to be stopped and locked-out immediately.
- In case of a malfunction, the strapping machine is to be immediately stopped and locked-out until the fault has been eliminated.
- Before starting the strapping machine, make sure that the area is clear and safe.
- Do not place any tools or parts onto the machine.
- Operating personnel needs to be well trained before executing special operations and maintenance work; this work needs to be done with the proper supervision.
- Always check and tighten connections after maintenance or repair.
- After completing maintenance or repair, all safety devices must be replaced and checked for functionality before operating the equipment.
- To minimize the environmental impact, all consumables and replaced parts must be disposed of safely.
- Before starting the machine, check that the accessories have been stowed away safely.
- Avoid operating the machine in a fashion that could upset its stability.

1.4 Warning of Electrical Dangers

- Immediately remove power to the machine in case of trouble in the electrical system. Replace a fuse with one with the same style and ratings; pay particular attention to matching the specified current.
- Any electrical work performed on the equipment must be conducted by a skilled electrician or under the supervision of a skilled electrician. All work must be observed good electrical engineering practice and follow safety rules and local wiring standards.
- Inspect the electrical equipment of the machine at regular intervals. Tighten any loose connections. Check wiring for scorch marks; replace scorched wiring and determine and correct the reason for the overheating.
- When working on live equipment, ensure that a second person is available to cut power in case of an emergency. When appropriate, secure the working area with safety tape and a warning sign. Use insulated tools for electrical work.
- Before working on high-voltage assemblies, turn off the power supply. Carefully discharge the supply cable and short-circuit any energy-storage components such as capacitors.
- If the equipment was moved, carefully refit and refasten all parts removed for transport before reapplying power.
- Before moving the machine, remember to disconnect the power cable.

1.5 Grounding Instructions Shall Include the Following

- This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock. This product is equipped with a cord that has a grounding wire and an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- If repair or replacement of the cord or plug is necessary, connect the ground wire to the ground terminal of the plug. The wire with green insulation (with or without yellow stripes) is the grounding wire.
- Check with a qualified electrician or service person if the grounding instructions are not clear or if in doubt about the proper grounding of the machine. Do not modify the plug provided; if it will not fit the power outlet, have the proper outlet installed by a qualified electrician.

DANGER!

Improper installation of the grounding can result in electrocution.

1.6 Before Operating

- Read the instruction manual before operating the machine for your safety.
- Wear eye protection and safety gloves before operating this machine.



Eye protection must be worn



Safety gloves must be worn

- Verify that the power line voltage is correct.
- The machine must be properly grounded to avoid a shock hazard. All wiring must be in accordance with local wiring standards.
- The strapping machine can only be operated with polypropylene (PP) strapping; do not use polyester (PET) strapping or polyethylene (PE) cord strap.

1.7 During Operation

- The weight of the package cannot exceed 25kg (55 lbs).
- It may be necessary to use lifting aids for handling products that exceed 25kg(55 lbs).
- The size of the package should not be less than 70 mm × 20 mm (2.75 inches × 0.75 inches).
- While running, check the unit for any unusual sounds or smoke emissions.
- Keep away from the inside of the arch while the machine is operating; do not put your hands or body into the arch when the machine is running.

NOTE: it is normal for the heater tongue to smoke during the sealing operation.

1.8 After Operating

- Remove dust and dirt from the unit; pay particular attention to the interior of the arch.
- Turn off the power when the machine is not in use.

1.9 Signs and Symbols

Symbol	Meaning
	<p>Warning for dangerous voltage! Contact with live electrical parts will result in severe injury or death.</p>
	<p>Warning for hot surface! Welding area is approximately 270°C(520°F) Allow sufficient time for the heater to cool down before any work in welding area.</p>
	<p>Warning for danger! Do not put your hands or body into arch working area when machine is operating.</p>
	<p>Caution for Transportation! When using forklift truck to lift the machine, be sure that forks must be placed within the interior of two arrows.</p>

2 Machine Information

2.1 Areas of Application

The strapping machine is to be used for strapping packages, cartons, paper boxes, newspapers, magazines and those materials using a polypropylene (PP) strapping for stabilizing purposes when in transportation. Be careful for rigidity of working materials, and don't try to pack agri-foodstuffs or other such material.

This machine was designed for certain applications only. We strongly recommend that this machine **NOT** be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application **DO NOT** use the machine until you have had detail instruction from your dealer.

2.2 Environment Information

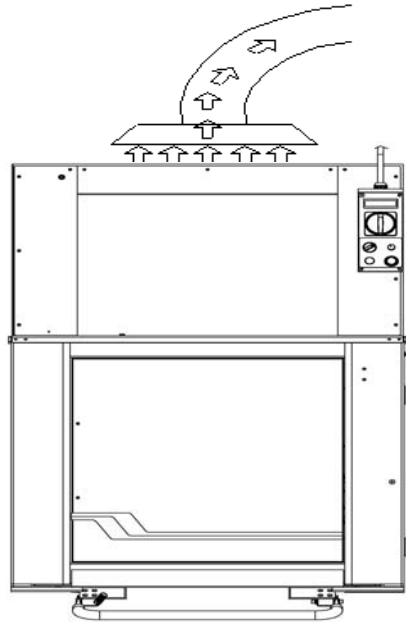
The strapping machine shall be installed in the following conditions:

- Supply voltage: 0.9 - 1.1 nominal supply voltage
- Source frequency: 0.99 - 1.01 nominal frequency
- Ambient temperature: 5°C - 40°C (41°F-104°F).
- Altitude: shall be at altitudes up to 1000m above mean sea level.
- Relative humidity: not exceed 50% at 40°C.
- Atmosphere: Free from excessive dust, acid fume, corrosive gases and salt.
- Avoid exposing to abnormal vibration.
- Don't use machine in dangerous environment.
- Don't use machines in damp or wet locations, or expose them to rain.
- Please provide a suitable illumination around the machine for safety operation.
- Work place of user should have a fire extinguisher or other devices that meet their local safety regulations, and always be careful.
- Internal parts requiring frequent inspection and adjustment, and maintenance areas must be provided with a suitable illumination around the machine.

If there may be harmful gases, fumes or dust generated during heating, user or system integrator must install exhaust system for the extraction of harmful substances.

The exhaust system shall be positioned according to the vent location. Please refer to the figure.

And the user should refer to a professional expert or relevant authority to prevent the dangerous substance/ gas emitted by suitable means according to local /national environmental/health codes/regulations.



2.3 Storage

- The store room must be dry
- Do not expose the machine to extreme cold or heat environment
- Place the machine on an even floor in order to avoid any distortion

2.4 Machine Description

- Automatic strapping machine for polypropylene (PP) strapping material.
- Strap width from 5mm to 9mm.
- Electronic heater temperature control.
- Hinged front table.
- Automatic strap loop ejection in case of strapping cycle without package.
- Extra tough construction.
- Simple, safe and user-friendly operation.
- Automatic strap feeding system.
- Automatic strap end detection.
- Mobile, with large table area and high capacity strap reel
- Table surface made of stainless steel.
- Strap tension adjustable from soft to extremely high.

2.5 Safety Devices



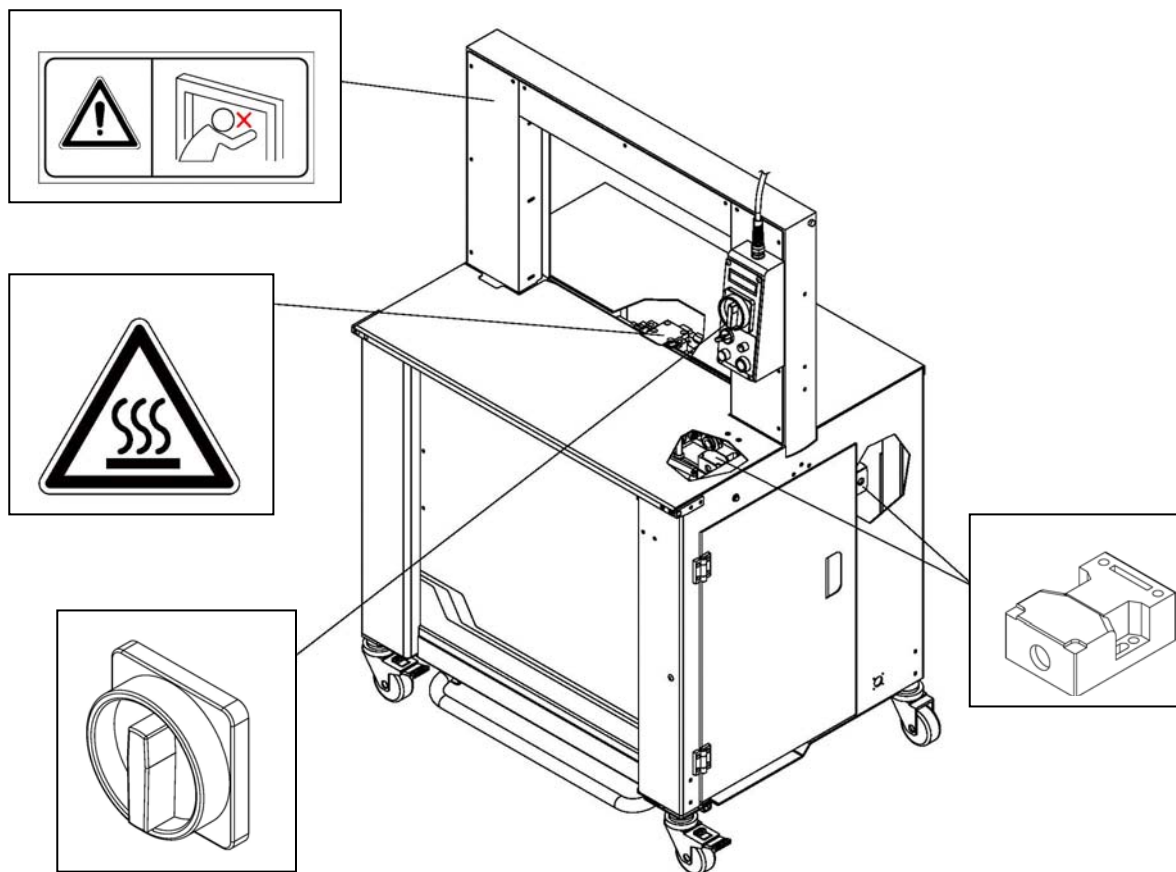
Danger!

Operate the machine only when all safety devices are at their place and are functioning correctly.

The machine has been constructed in accordance with the applicable legal regulations. The machine is reliable in operation. Nevertheless the machine may constitute a danger if it is operated in improper or undue condition.

Danger points that cannot be avoided due to equipment design are equipped with safety devices. If necessary, these points are marked on the machine with warning signs, and in the manual under working safety instructions.

The machine is equipped with the following safety devices:	
1.	Warning signs at the danger points of the machine
2.	Automatic shunt down of machine when front table opening
3.	Live parts are secured by cover



If it is necessary to make adjustments inside the machine during operation, after a strap jam for example, the rear table top can be unscrewed. Observe caution as the machine is still fully functional with the covers removed. When the front table top is opened, safety switch B6-1 is activated. This will remove power but the heating element will keep heating.

CAUTION!

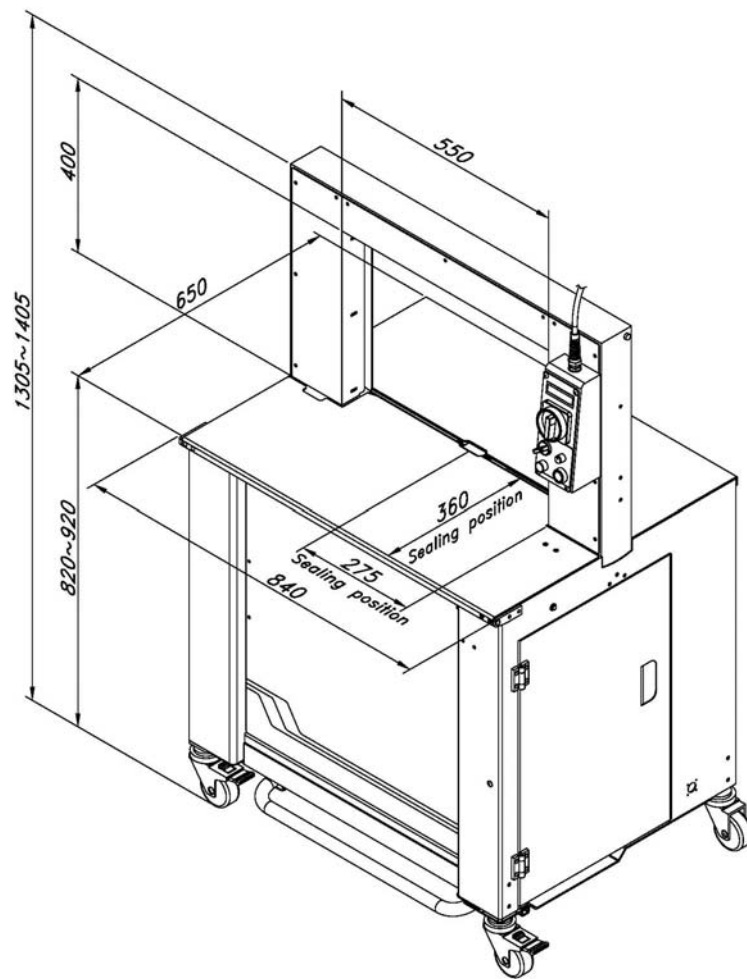
The heating unit operates at a very high temperature in order to melt the PP strapping. To prevent burns, avoid contact with this area.

2.6 Technical Specification

2.6.1 Electrical Specification

System configuration:	1L+N+PE (Ground)	1L+N+PE (Ground)
Nominal power:	0.5kW	0.5kW
Rated current:	3A	5A
Rated voltage:	220V/230V/240V	110V
Rated frequency:	50Hz	60Hz
Type of current	AC - single phase	AC - single phase

2.6.2 Technical Data

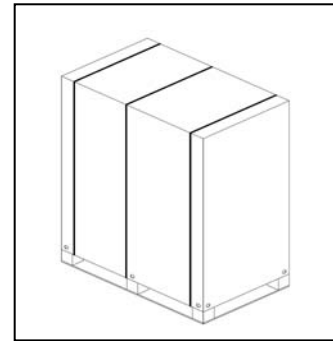


Strap width	5mm, 6mm, 9mm
Strap thickness	0.35mm up to 0.65mm (0.014" – 0.026")
Strap coil diameter	Coil diameter 200mm (8" nominal) Outside diameter 420mm (16.5") Width(Face) 190mm (7.5")
Table height	Minimum – 820mm (32.3") Maximum – 920mm (36.2")
Weight	157kg (346 lbs.)
Noise emission	78dBA
Ambient temp	5°C ~ 40°C (41°F ~104°F)
Minimum package size:	70mm W × 20mm H (2.75" W × 0.75" H)
Maximum package size:	arch size minus 50mm (1.97") EX: arch size: 550W×400H Max. package size: 500mm W×350mm H (19.7" W × 13.8" H)

3 Preparation Before Operating the Machine

3.1 Shipping

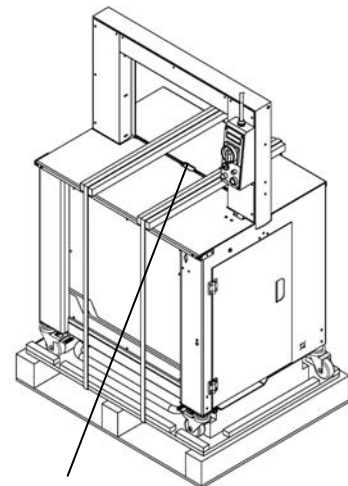
The equipment is delivered in transport units.
Each transport unit is loaded onto a wooden pallet,
secured by polyester strapping.



3.2 Transportation & Centre of Gravity

Transport-the strapping machine on a pallet. Lift
the unit using forklift truck or other lifting device.
Proper packaging requires that the casters rest in a
recess. Cover the machine with a sturdy box for
protection. Secure the unit to the pallet with
plastic strapping. Place the strapping across the
top plates. Use cardboard to avoid marring. Use
plastic strapping to hold the cover to the pallet.

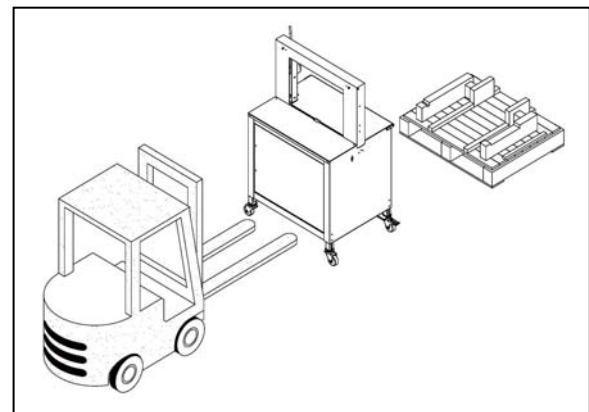
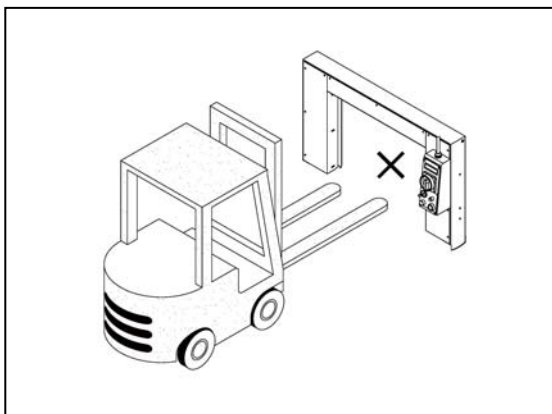
The machine can be removed from the pallet
using forklift truck or other lifting device.



Center-of-gravity position

CAUTION!

**Do not carry machine by having the
forklift's fork under the arch, but only
under the machine frame.**





Danger to Lift!

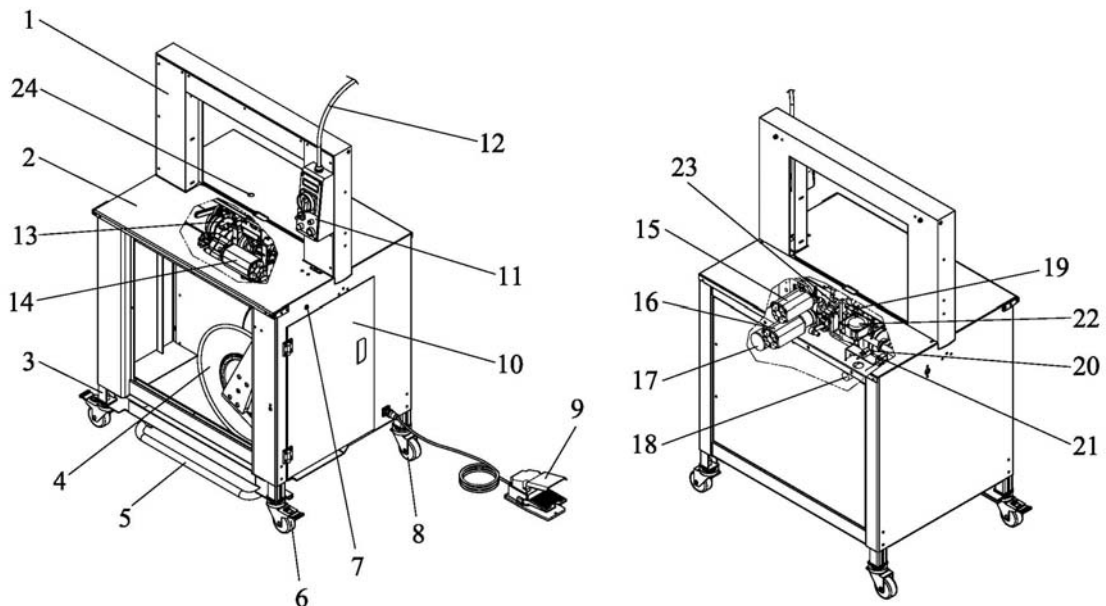
Suspend loads can fall down.

By inappropriate mounting or fracture of hoisting device the load can fall down and cause serious injuries or death.

Do not step under suspended loads!

Use appropriate hoisting devices and fasteners.

3.3 Construction Layout



1. Arch
2. Upper Table Front
3. Adjustment Leg
4. Reel
5. Foot Bar
6. Caster (Brake)
7. Reel Brake Release
8. Caster (Free)
9. Foot Pedal (Option)
10. Side Door
11. Control Panel
12. Power Cord
13. Strapping Head Unit
14. Main Motor M1

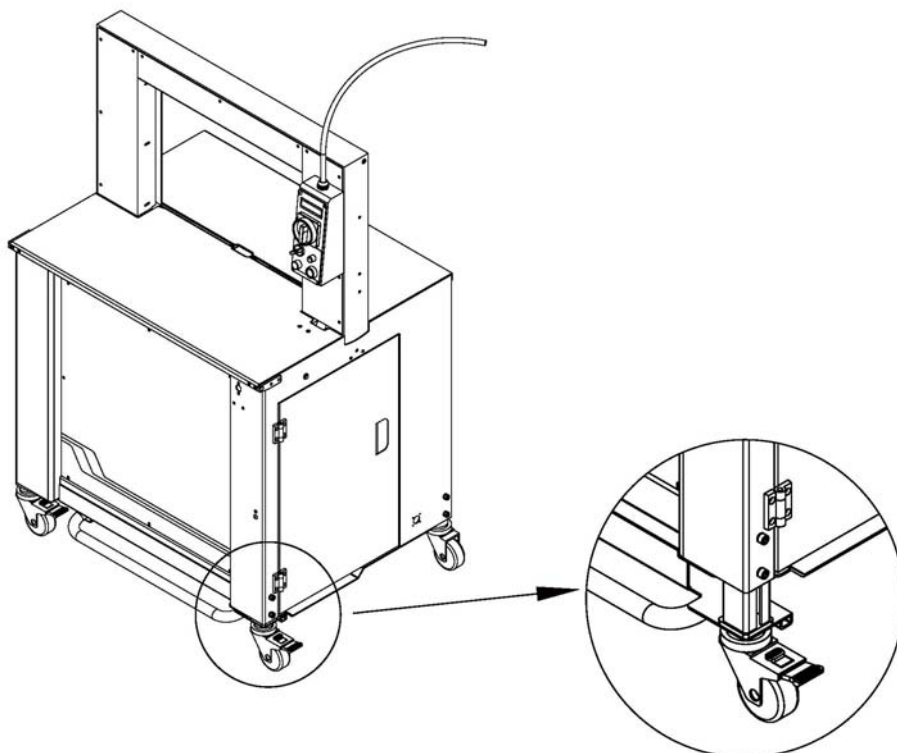
- 15. Feed Motor M2
- 16. Tension Motor M3
- 17. Strap Accumulator M4
- 18. Automatic Feed Motor M5
- 19. Proximity Sensor SQ1
- 20. Proximity Sensor SQ2
- 21. Proximity Sensor SQ3
- 22. Fan (M11)
- 23. Heater
- 24. Photo Eye (Option)

3.4 Installation

1. Remove the packing material and check that the machine is complete and without any shipping damage.
2. Adjust the table height by repositioning the screws underneath the machine frame (refer to below drawing). After adjustments, be sure to tighten all the fixing screws.

Caution!

Be sure to take out the wire for the proximity switch underneath the left side of machine to avoid any damage before adjusting the table height.



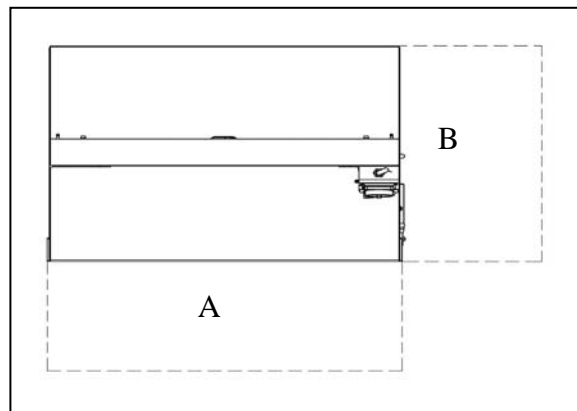
3. After positioning the machine ready for working, be sure to lock two front casters (with brake) to avoid machine's movements.
4. When moving the machine, be sure to un-lock the two lockable casters. Re-lock the two casters after re-positioning the machine.
5. Do not move the machine unless it's necessary. Before movement, be sure to turn off the power, unplug it, put the power cord on the machine and un-lock the front two lockable casters.
6. Minimum Requirements to the Electrical Supply
 - The electrical supply cord for the machine must have a minimum cross-section of at least 1.0 mm^2 (16 AWG).
 - The maximum power line fuse must not exceed 16 Amp.

3.5 Operation Space

Keep the area (A) and (B) free for the operator.

The area (A) is necessary for operation strapping machine.

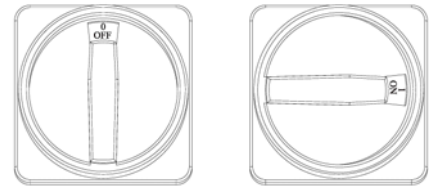
The area (B) is necessary for changing the strap or adjusting strap amount in the accumulator.



3.6 Operating Elements

1. Main Power Switch:

- Provides the machine with power.
Switch to “1” position for turning the main power on.
After strapping, switch it to “0” to turn off the machine.



2. LCD Display:

Display strapping message.

3. Soft - High Tension Switch:

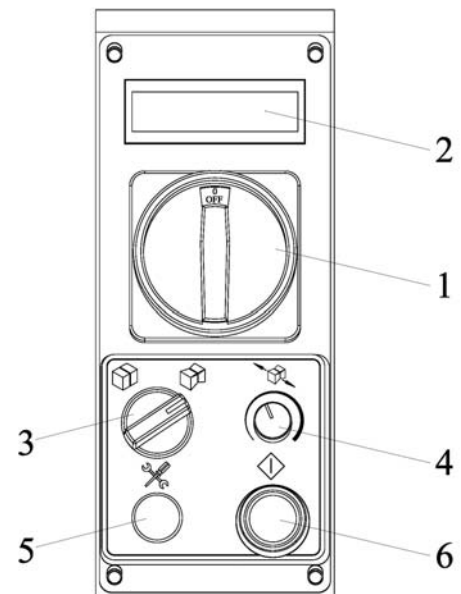
Switch to right for High strapping tension.
Switch to left for soft strapping tension.

4. Strap Tension Potentiometer:

Turn clockwise to increase strapping tension;
turn counter-clockwise to reduce strapping tension. This potentiometer is only functional under High tension mode)

5. Function Encoder:

Turn clockwise or counterclockwise to change strapping settings.



Also!

It offers settings for weld cooling time and photo eye timers (photo eye timer is available only if the machine come with photo eye switch option) (expressed in page A22). Other settings can only be changed by technicians with password.

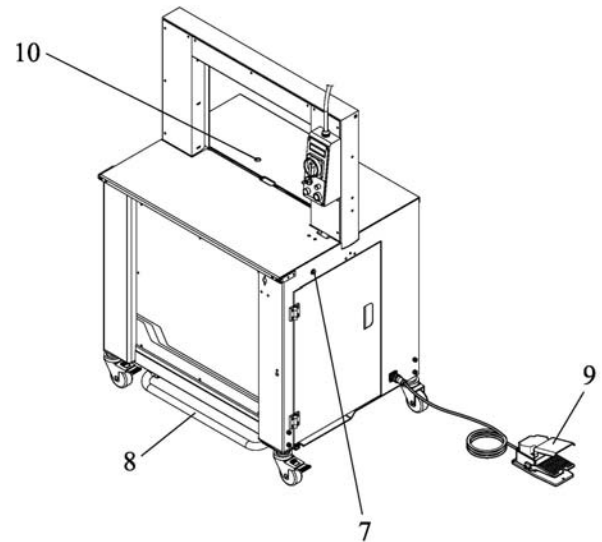
6. Start Switch:

- When the machine is ready for working, and after turning on **Main Power Switch**, you must push the Start switch for activating other controls.
- To initiate a strapping cycle.
- To clear up machine fault.(reset)

7. Reel Release Switch:
To release the dispenser for easily taking out strapping from it.

8. Foot Bar :
To initiate a strapping cycle.
To clear up machine fault. (reset)

9. Foot Pedal Switch (Option) :
To initiate a strapping cycle.
To clear up machine fault. (reset)



10. Photo Eye Switch (Option)

The purpose of the photo-eye switch is to automatically initiate strapping cycles when a package is detected.

The controls for the photo-eye are shown in the figure below.

Function	Function
1	A single strapping cycle: initiates a cycle when a package covers the photo-eye. Delay time for initiating the cycle is controlled by TIMER 1.
N	Multiple strapping cycles: initiates a cycle when a package covers the photo-eye. Cycling continuously until the photo-eye no longer “sees” a package. The cycle timing is determined by TIMER 1 and TIMER 2.
Timer 1	Sets the delay time from the moment that a package is detected until the 1 st strapping cycle initiates . This allows an operator to properly position a package for the first strap. It is adjustable from zero to five seconds.
Timer 2	It’s the delay time (interval) between strap cycles. When multiple strapping cycles are needed, this timer is for an operator to determine the interval between each straps. It is adjustable from zero to five seconds.

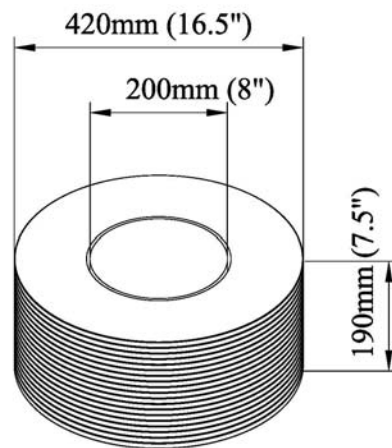
3.7 Instructions for Loading PP Strap

3.7.1 Specifications

Polypropylene Strap

Width: 5, 6 or 9mm

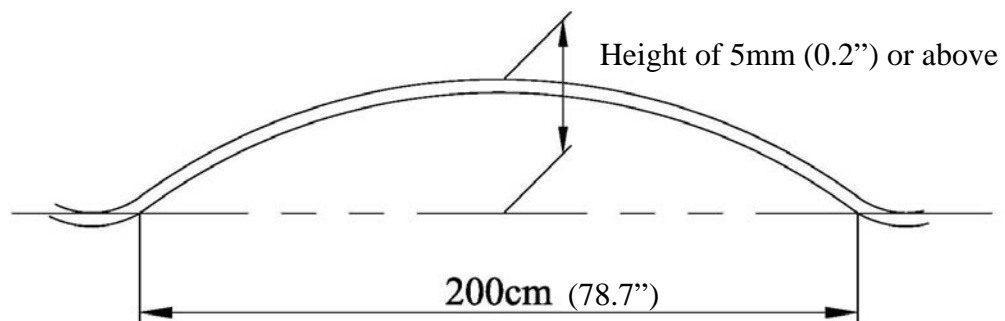
Thickness: 0.35-0.65 mm (0.014" –0.026")



Note:

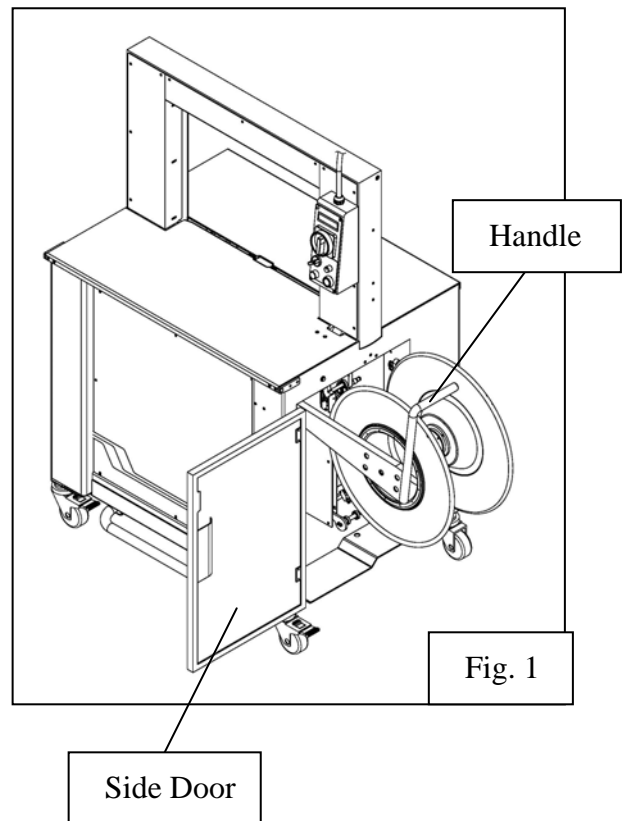
Strap coil should not be heavier than 12kg (27 lbs). Too heavy strap would damage the Reel support system.

Strap which has excessive camber as illustrated in figure below cannot be used.



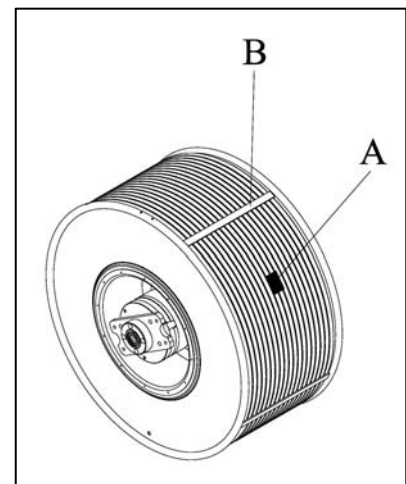
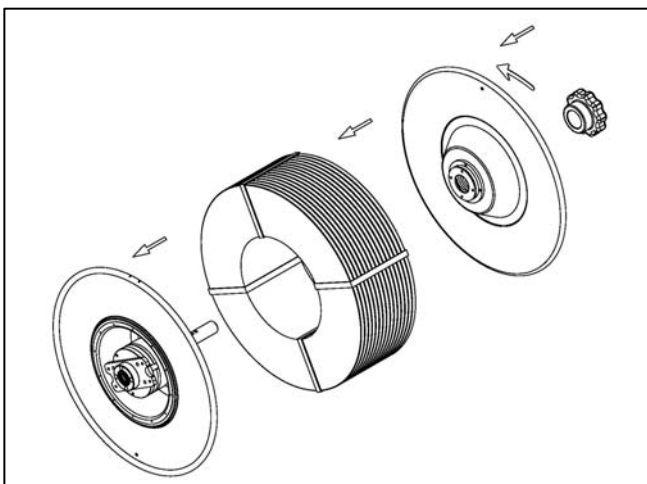
3.7.2 Strap Reel Installation

1. Open the side door on the right of the machine (fig. 1).
2. Lift the reel handle up all the way to the end (fig. 1).
3. Release the Reel Nut Handle by pressing and turning it to the left.
4. Take out the Outer Flange.
5. Install a new strap coil onto the drum according to the instructions on the reel.
6. Put Outer Flange back and the Reel Nut Handle. Turning the Reel Nut Handle to the right to lock it.
7. Remove the protective straps (B) and the stickers (A)
8. Press down the reel handle to put the reel back into the machine.



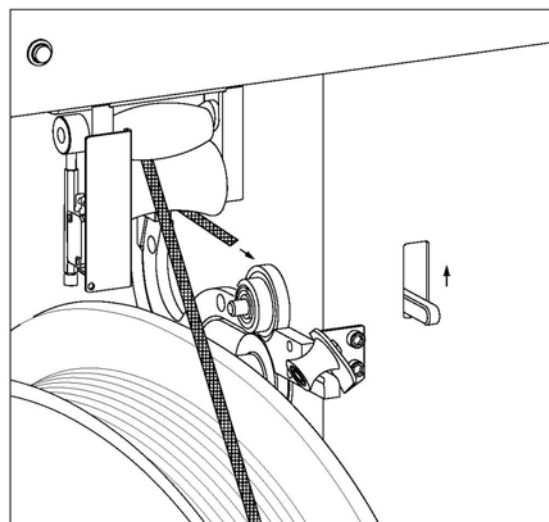
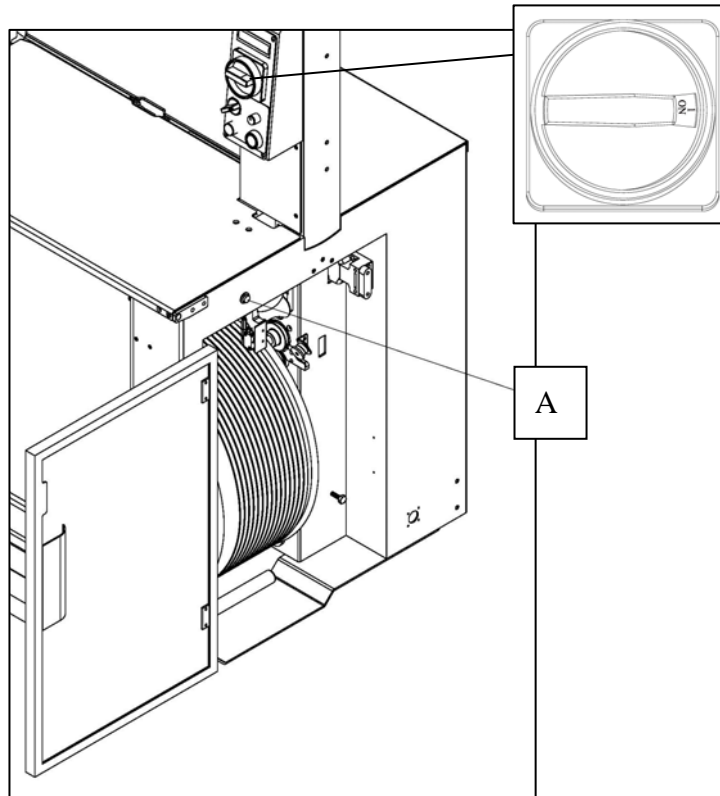
Note:

The Reel Nut Handle is released by pressing and turning to the left. Tighten it by turning it to the right.

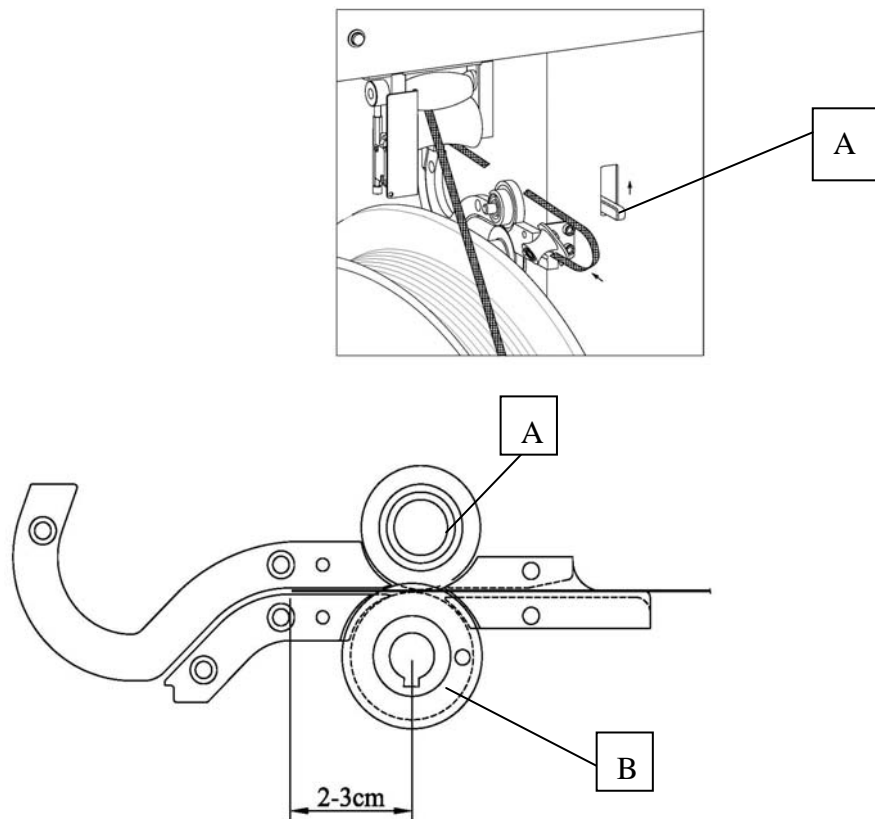


3.8 Auto Strap Feeding Process

1. Turn Main Power Switch on the control panel to the right (at 1 position), and press Start Switch.
2. Open the side door on the right.
3. Press “Reel Release Switch A” and pull out around 90cm strap.
4. Thread the strap between the 2 rollers from front side and then to the rollers before the insert inlet.

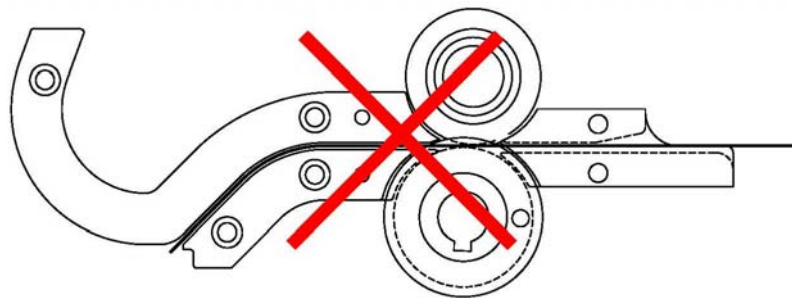


5. Lift the lever A and insert strap between the rollers A & B. Feed strap for around 2-3cm ahead the rollers.



Caution:

If strap is fed more than 6cm ahead the rollers, it could make Auto Strap Feeding failed.



6. Close the side door and press Start Switch. Machine will complete the Auto Strap Feeding in 5 sec. and have the strap feeding to the sealing point.

Caution!

In the process of Auto Strap Feeding, only the Start Switch is functional. Neither Foot bar switch nor foot pedal switch will function.

Caution!

The cut edge of the strap must be free from burrs to avoid failure in Auto Strap Feeding.

4. Operating the Machine

After switching on the strapping machine, heater starts to warm up and LCD display continues to be on until the heater reaches its operating temperature (about 2 minutes).

Caution!

Machine will not operate until heater reaches to operating temperature.

The heater fans continue to run until heater reaches operating temperature.

Switch **Main Power Switch** to Position “1”



Heater warms up and LCD display keeps on lightening



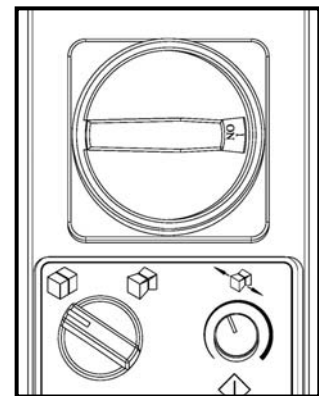
Ready!
LCD display is off

4.1 Soft Tension Operation

1. Place a package in the middle of table beneath the chute.
2. Push start switch or actuate foot bar switch or foot pedal switch (option) to start strapping.

NOTE!

When operating in soft tension mode, the strap tension potentiometer does not function.

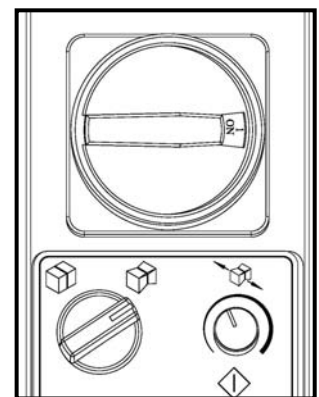


4.2 High Tension Operation

1. Place a package in the middle of table beneath the chute.
2. Properly adjust the strap tension potentiometer according to various package.
3. Push start switch or actuate foot bar switch or foot pedal switch (option) to start strapping.

Attention!

Keep hands away from the strapping area.



If hands are caught by P.P. strap accidentally, be sure to turn off the Main Power Switch first and then cut the strap.

4.3 Function Encoder

LCD display will show various timers such as cooling time, timer 1, timer 2...etc. After pressing the function encoder for over 2 seconds, turn the knob to choose the timer needed to be changed. Press this knob to confirm the timer needed altered and turn it again to alter the value, and then press it again to confirm this alteration.

T5: cooling time timer, Range 0-0.6S

T1: see A16 timer 1

T2: see A16 timer 2

T4: Press bar delay time, Range 0-3S

PH1> 0: Photo eye no function (Disable)

1: Photo eye has function (Enable)

PH1-N> 0: only one strap cycle when PH1 is activities.

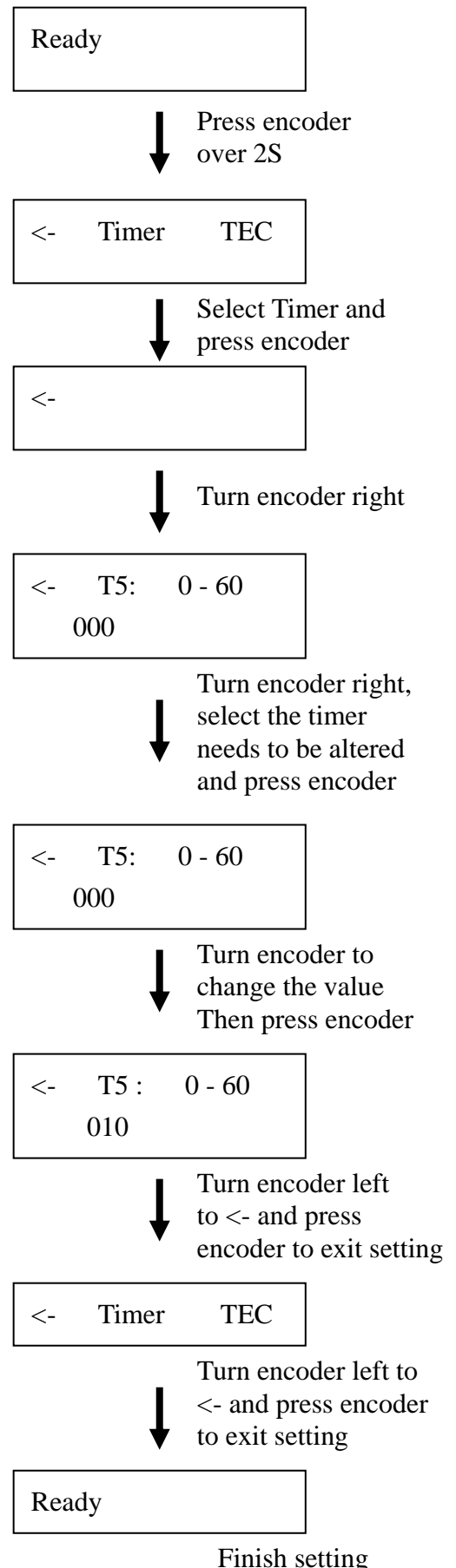
1: continuous strap cycles when PH1 is activated and cycle will stop until the package leaves.

SQ6> 0: sensor for chute home position no function (Disable)

1: sensor for chute home position has function (Enable)

Press>0: Press device no function (Disable)
(for TP-702P only)

1: Press device has function (Enable)
(for TP-702P only)



5. Adjustments

5.1 Strap Amount in the Accumulator Box

The machine has been already well set for storing enough amount of strap in accumulator Box.

However, some adjustments may be required, depending on the actual quality or thickness of the strap used.

The strap supply in the accumulator box should be sufficient for about 2-5 strapping cycle.

(It depends on the package size and the arch size. Fewer cycles are available for bigger arch or bigger package.)

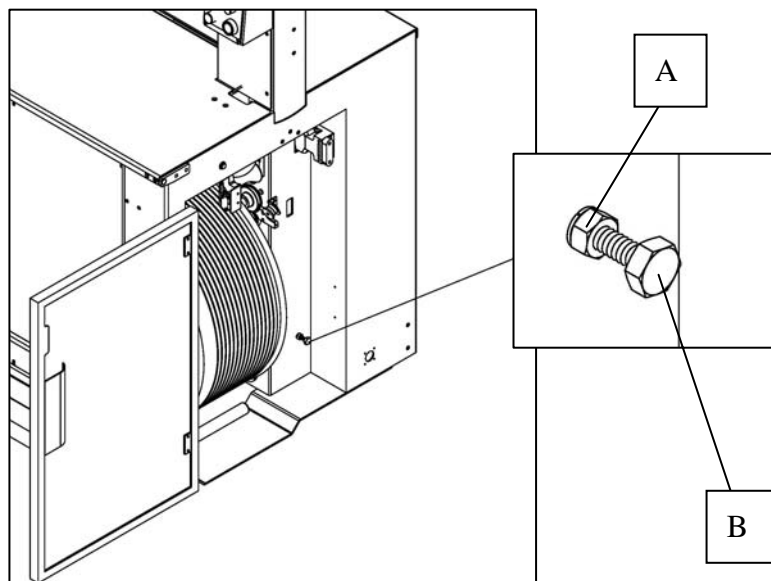
Caution!

Excessive amount of strap in the Accumulator Box can lead to the strap jam (too curved) and cause feeding problem.

Insufficient amount of strap in the Accumulator Box can lead to short feed problem or decrease strapping speed.

In case that there is an insufficient amount of strap in the Accumulator Box, loosen the Nut A and turn the Screw Bolt B counterclockwise. After adjustments, be sure to tighten the Nut A to avoid unstable strap accumulation.

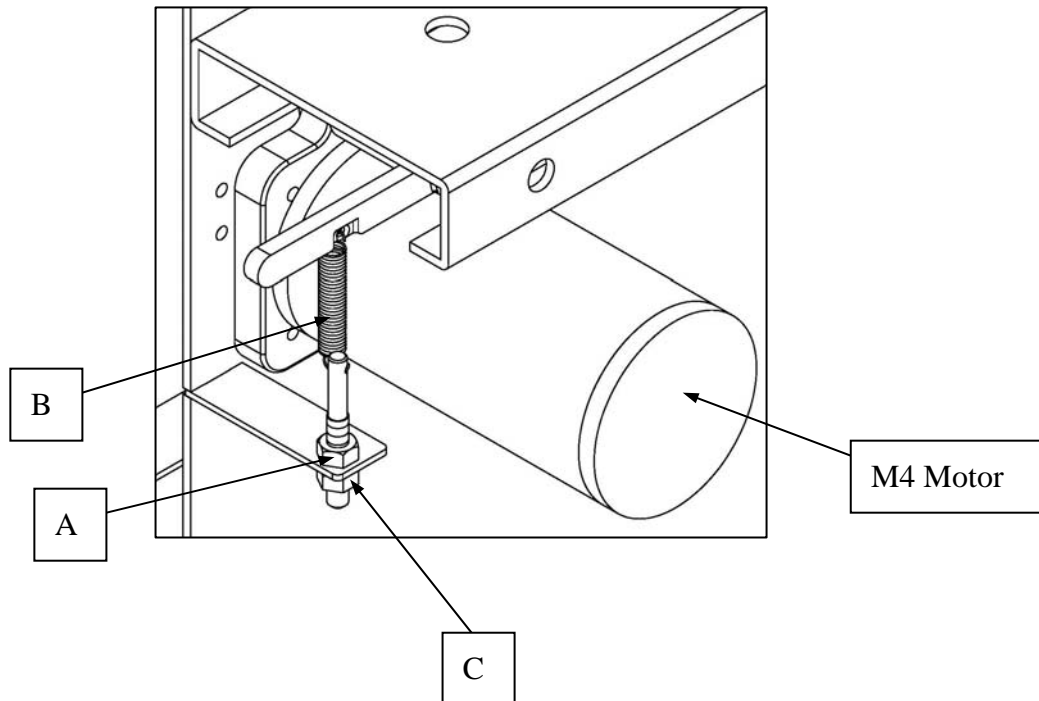
In case that there is an excessive amount of strap in the Accumulator Box, loosen the Nut A and turn the Screw Bolt B clockwise. After adjustments, be sure to tighten the Nut A to avoid unstable strap accumulation.



5.2 Adjustment for Feeding Pressure to the Accumulator Box

The machine has been already well set for enough feeding pressure offering enough strength for pulling strap from strap coil to accumulator box. It might be necessary for some adjustments to increase feeding pressure if you are using smooth strap.

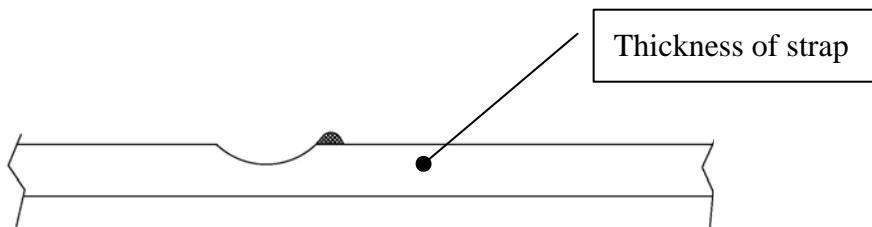
When it's necessary for increasing the feeding pressure, please loosen the Nut A and turn Nut C upwards to increase the strength of Spring B. Be sure to tighten Nut A by turning it counterclockwise after adjustments.



Caution!

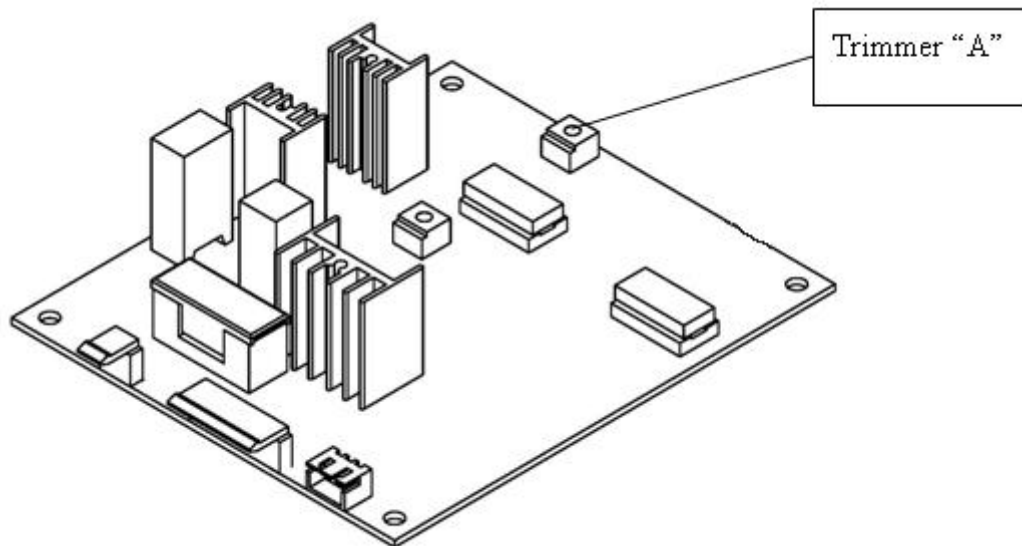
Too much feeding pressure could lead to feeding problem as the strap would be scraped by the rollers easily.

Insufficient feeding pressure would lead to short feed problem as the strap is insufficient in the accumulator box.



5.3 Adjustment for Heater Temperature

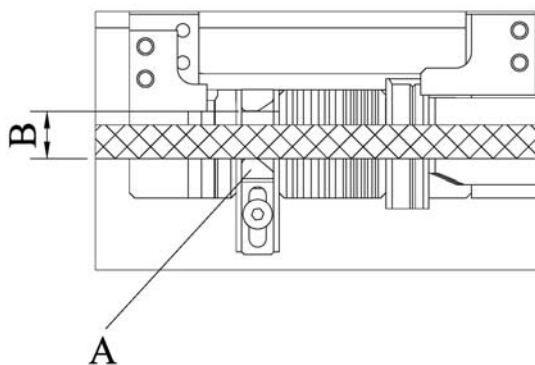
The machine has been already well set for proper heater temperature. It might be necessary to do some adjustments according to temperature in working environment, and the quality of PP strap to ensure better sealing efficiency. Turn "A" clockwise to increase the heater temperature and turn it counterclockwise to decrease the heater temperature.



5.4 Necessary Adjustments After Changing Strap Width Between 5mm and 6mm and 9mm

1. Adjusting "Cutter Holder"

Adjusting the A (Cutter Holder) according to the strap and make sure the width B is around 0.5mm (0.02") wider than the strap.

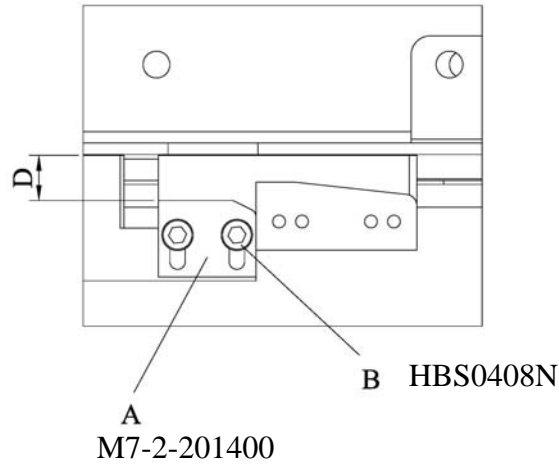


Caution:

If B is too wide, it would lead to sealing problem. However, if it's too narrow, it would lead to feeding problem.

2. Adjusting “Right Strap Guide”

Loosen the screws on the “Right Strap Guide” and take it out. Then loosen the 2 screws B (HBS0408N) and adjust A according to the strap. Be sure D is about 0.1mm wider than the strap. After adjustment, tighten screws B and put the “Right Strap Guide” back.



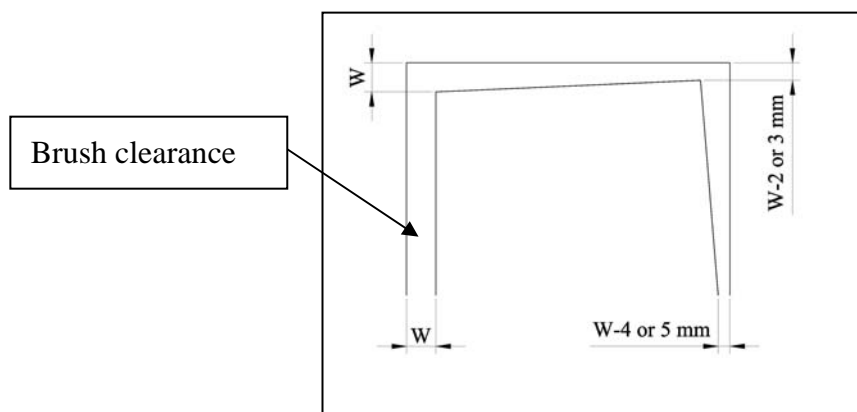
Caution:

If D is too wide, it would lead to sealing problem. However, if it's too narrow, it would lead to feeding problem.

3. Adjusting Brush Clearance in the Arch

The brush clearance in the left side and upper left should be about the strap width. The brush clearance in the upper right should be about 2-3mm narrower to the strap.

The brush clearance in upper side of right chute should be the same to the clearance in right side of upper arch. The brush clearance in the lower right should be 4-5mm narrower to the strap.



Note:

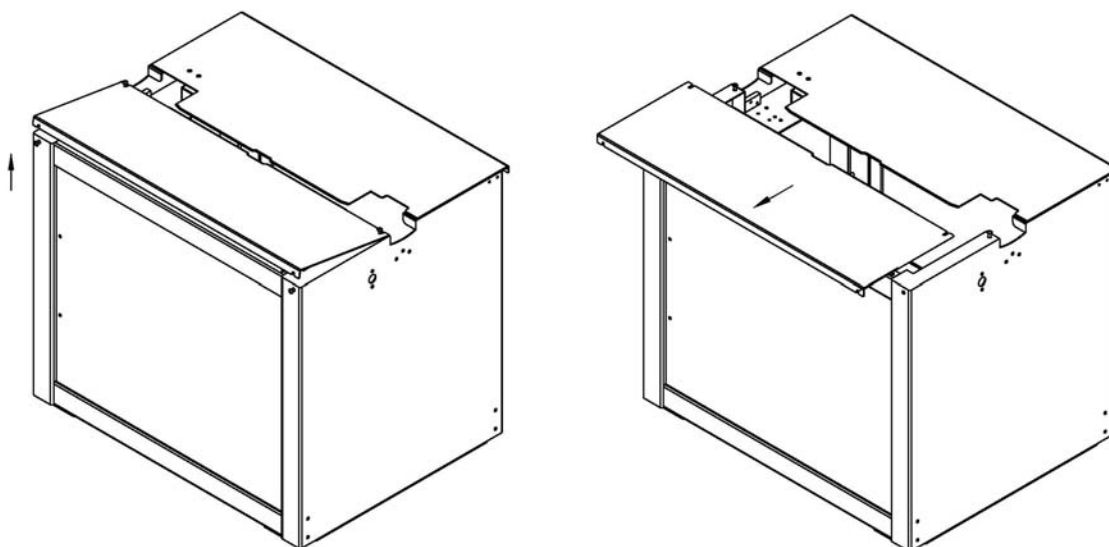
The brush clearance could be various according to different package size. The brush clearance needs to be bigger for not having any effect on reversing especially when the package size is close to the arch size.

4. Adjusting Strap Amount in the Accumulator Box

Different strap widths might have effects on the strap amount in the accumulator box. Please do the adjustment according to 5.1 if necessary.

5.5 Adjustment for Feeding/Reversing Pressure

The upper table rear was screwed by captive screws. To take it out, please loosening the captive screws about 5mm first and then lift the end side of rear side up and slide it out.

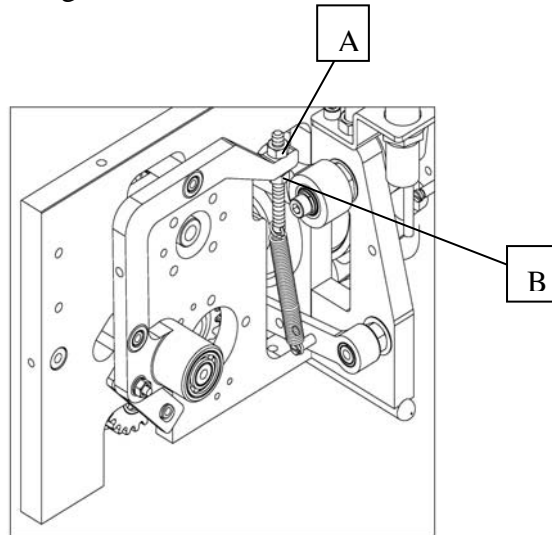


1. Adjusting the Pressure for Feeding

The machine is already well set for proper feeding pressure. However, according to different strap characteristics (such as smoother surface or different thickness), some adjustments for feeding pressure are still necessary.

If short feed problem happens a lot, and it is a result of improper feeding pressure, please do the following adjustments:

Loosen Nut B and turn Nut A clockwise to increase the feeding pressure. Or loosen Nut A and turn Nut B counterclockwise to decrease the feeding pressure. After adjustments, be sure to tighten these 2 Nuts well.

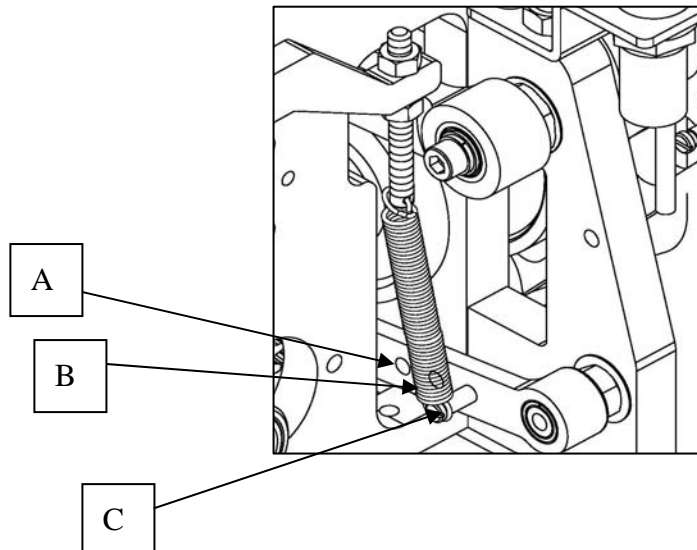


2. Adjusting the Pressure for Reversing

The machine is already well set for proper reversing pressure. However, according to different strap characteristics (such as smoother surface or different thickness), some adjustments for reversing pressure are still necessary.

If machine often has incomplete reversing problem, and it is a result of improper reversing pressure, please do the following adjustments:

Take out the part (TA-073 Spring Hook) from C position to B or A position in order to increase the reversing pressure.



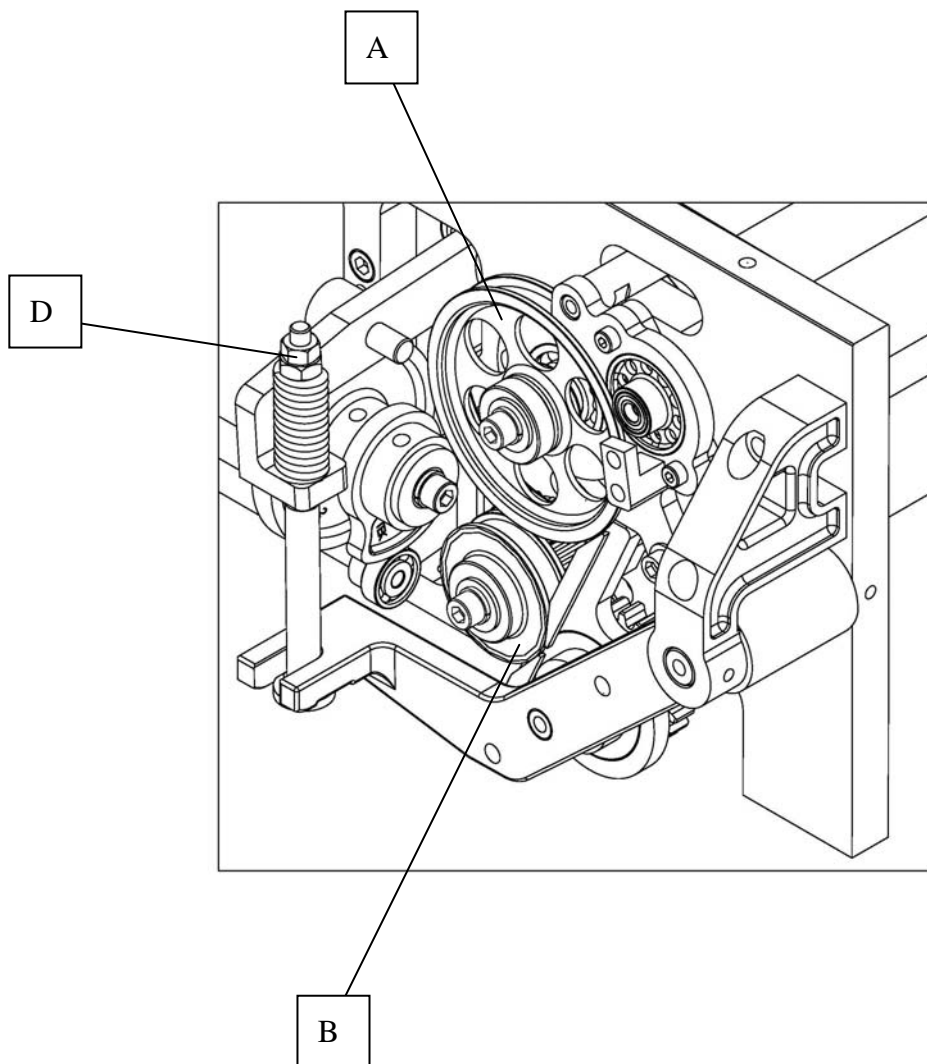
5.6 Adjustment on Tensioning Rollers for High Tension

The machine is already well set for proper feeding pressure for high tension. However, according to different strap characteristics (such as smoother surface or different thickness), some adjustments on feeding pressure for high tension might be necessary.

When insufficient strapping tension occurs even the Soft-High tension switch is on “high” position and it is a result of feeding pressure for high tension, please turn Nut D clockwise. This can solve the problem of insufficient strapping tension at high tension and strap slipping between A & B due to this.

Note:

When the feeding pressure for high tension is set too high, the tension for strapping would get lower.



6. Troubleshooting

6.1 LCD Display

When the machine has a malfunction, the LCD will flash and display a failure message. Message shown on the LCD could be as follows:

1. Reminder message:
 - a. Push Start: Please press the Start Switch to make machine function. This is especially necessary after the Safety Switch is released or after you just turn on the machine.
 - b. Load Strap: Load a new roll of strap or re-do the Auto Strap feeding again.
 - c. B6 open; K1 open: When it shows this message after you press the Start Switch, it means the Emergency Switch might not be released or the K1 in the control box is abnormal.

2. Malfunction from switches:
 - a. Start Switch Error: This means the Start Switch or the Foot Pedal is continuously triggered before activating them. Please check if any of these 2 Switches is defective.
 - b. Reel Release Error: This means the Reel Release Switch is continuously triggered before activating it. Try to press it by hand to see if it's defective.
 - c. SQ1 on Error: The SQ1 is triggered when doing Auto Strap Feeding. Check if the SQ1 or the Switch lever is defective.
 - d. Foot bar failed: Foot bar is not able to function properly and cause it not able to go back to home position.

3. Malfunction from procedures:
 - a. ASF failed: Auto Strap Feeding failed. It might be caused by wrong inserting direction or inserting strap too much. Please re-do the Auto Strap Feeding.
 - b. Feed jam: Resulting from not being able to feed strap to the sealing position. When Feed jam occurs, solve it by pressing the Start Switch or Foot bar. If this does not solve the problem, the following causes have to be checked as well:

Fault	Cause	Remedy
1. Feed jam	Strap is too curved	Change strap
	Insufficient feeding pressure	Adjust feeding pressure according to 5.5
	Too much strap amount in the accumulator box and has caused strap to be curved	Adjust to proper strap amount in the accumulator box according to 5.1

Other malfunctions

1. Sealing failure	Too much debris on both sides of heater plate	Clean both sides of the heater plate by fine sandpaper
	Insufficient heater temperature	Increase the heater temperature according to 5.3
	Insufficient cooling time	Increase cooling time according to 4.3
2. Insufficient strap tension	Soft-High tension switch is at "soft" position	Turn it to "high" position
	Lubricant drops into tension roller incautious	Clean the lubricant
	Too much debris in the gear of tension roller	Clean the debris

7. Maintenance

Warning:

Before any maintenance or repairs on the machine, set the Main Power Switch to "O" (OFF). Wait about 5 minutes for cooling down the heater to avoid burns with this area.

1. Cleaning and Lubrication

The high reliability and long service life of the strapping machine will depend on regular cleaning and maintenance.

ATTENTION!

All the important strap transport components, such as the drive rollers and the strap guides, must be kept free from oil and grease. (lubricant)

The lubricant has to be non-resinous.

The lubricant is SAE 30

2. Maintenance

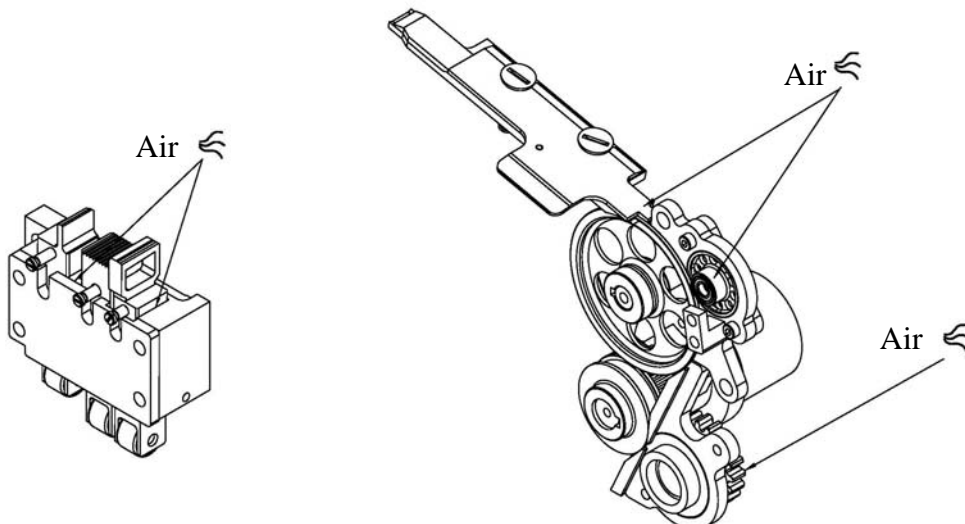
Only use original spare parts supplied by manufacturer.

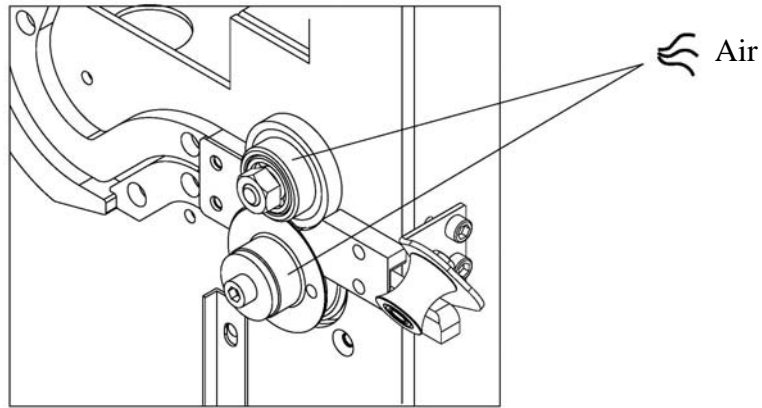


Daily:

Use air gun to clean the circled positions (nearby the cutters, strap guide and accumulating feeding rollers) daily

Remove plastic residue in the machine.

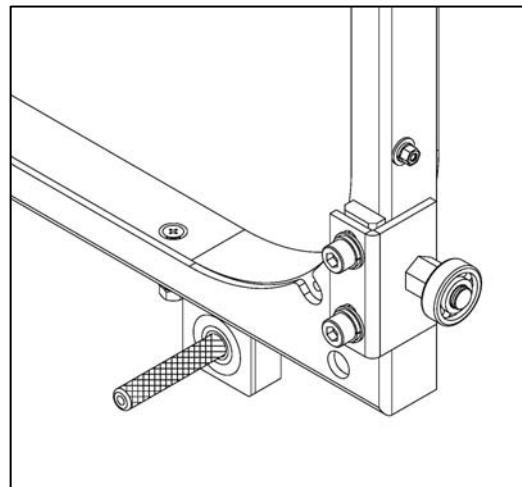
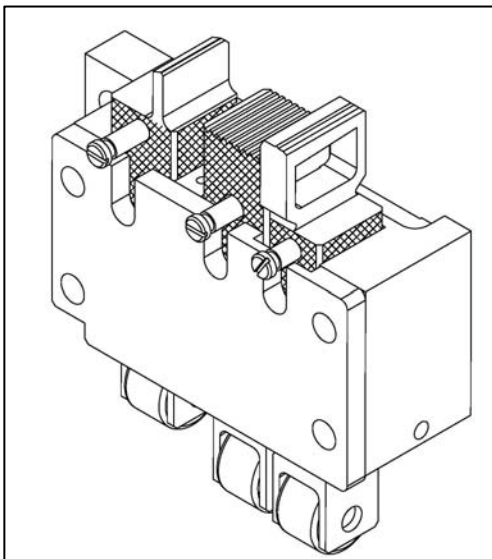




Weekly:

Lubricate (front bar, press bar and rear bar) and shifts in arch weekly.
Please refer to the following mesh areas for instruction.

Before lubricating, be sure to clean the parts first to avoid mixing oil and debris which might have a bad effect on machine's function.



Test strapping with several bundles, paying attention to audible and visible failures and check for correct function.

Monthly :(or 100,000 strapping cycles)

Clean both sides of heater plate and polish with fine sandpaper if necessary

ATTENTION: Make sure the welding plate is cool first!!

Check supporting and cam rollers of seal head for easy movement. The pressure plate must be moved back to home position automatically by the spring tension.

Be sure to clean any debris in the tension roller

6 Months: (or 500,000 strapping cycles)

Check heater plate, replace and readjust it if necessary.

Check strap cutter in seal head, replace it if necessary.

Check that connector at wiring loom to printed circuit board is firmly fixed.

Check function of front table or right door safety switch.

Make machine ready for operation. Strap one bundle manually several times, paying attention to mal-functions, repeat procedure.

Check strap accumulating function. If necessary, replace the assistant rollers, do proper adjustments to accumulating feeding pressure or to the clearance in the reel brake.


































Slightly oil lever at sealing head at bearing points.

1 year :(or 1,000,000 strapping)

Replace deflection roller if it shows visible changes.

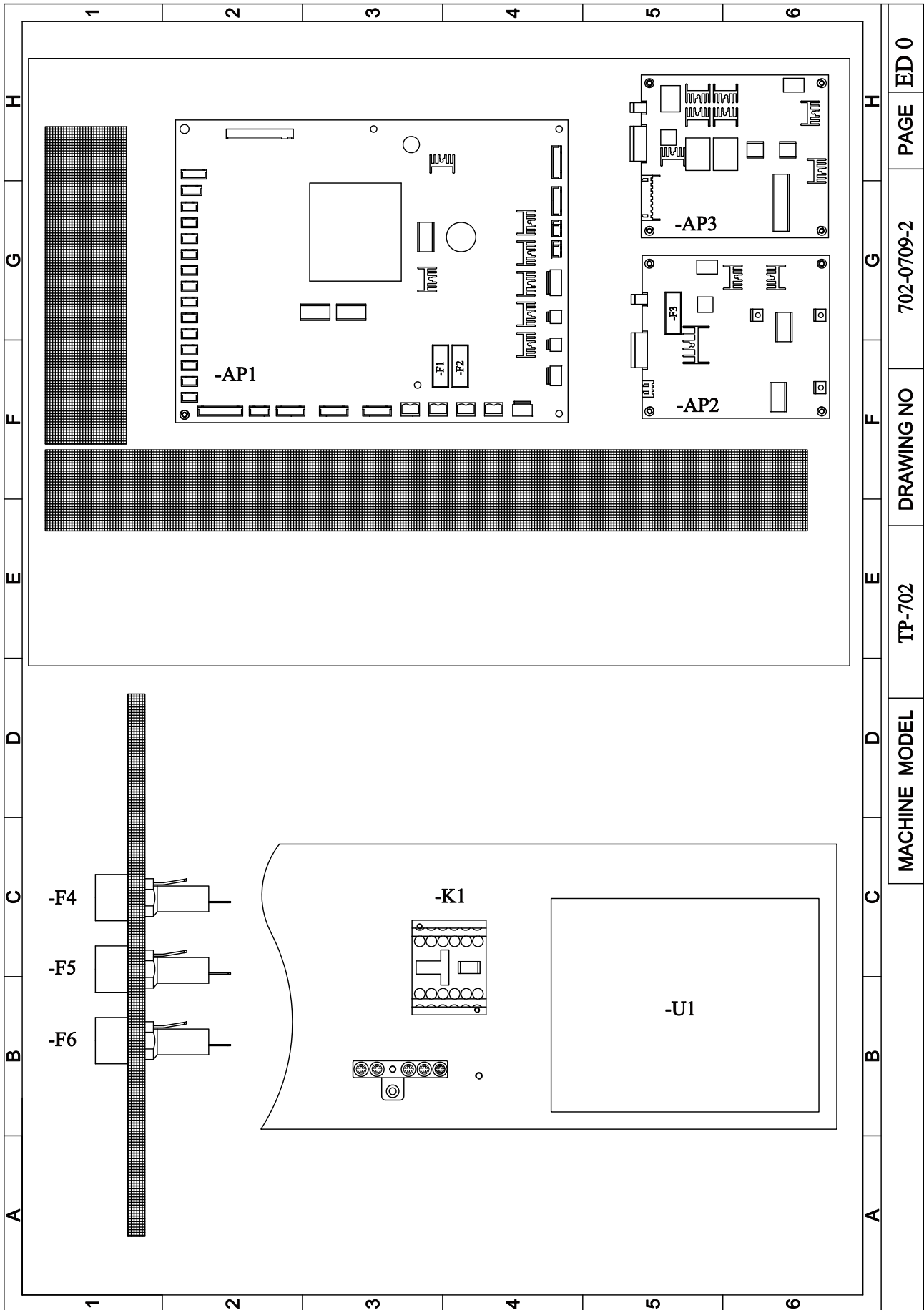
In case of loud noise at bearings: locate them, replace the bearings.

Get machine ready for operation again, strap one bundle manually several times, paying attention to malfunctions.

shape	classification	shape	classification
	HBS		ER
	TMS		RR
	PMS		SR
	FMS		SP
	HB		BR
	THS		MB
	HSS		KYA
	CAP		KYB
	HN		KYC
	WN		HBW
	FLG		PWA ϕ 8x ϕ 12~ ϕ 16x0.4~0.8t ϕ 6x ϕ 13~ ϕ 14x0.8~1.5t
	NTE		PWB ϕ 8x ϕ 14~ ϕ 16x1.3~1.5t ϕ 6x ϕ 15~ ϕ 16x1.0~1.5t
	PN		PWC ϕ 8x ϕ 20~ ϕ 23x2.0t ϕ 6x ϕ 16~ ϕ 19x2.0t
	PW		DS
	SW		TTP
	TW		FTP
	BWW		

PART II

1. Wiring Diagram



PAGE ED 0

PAGE ED 0

DRAWING NO 702-0709-2

MACHINE MODEL TP-702

DRAWING NO 702-0709-2

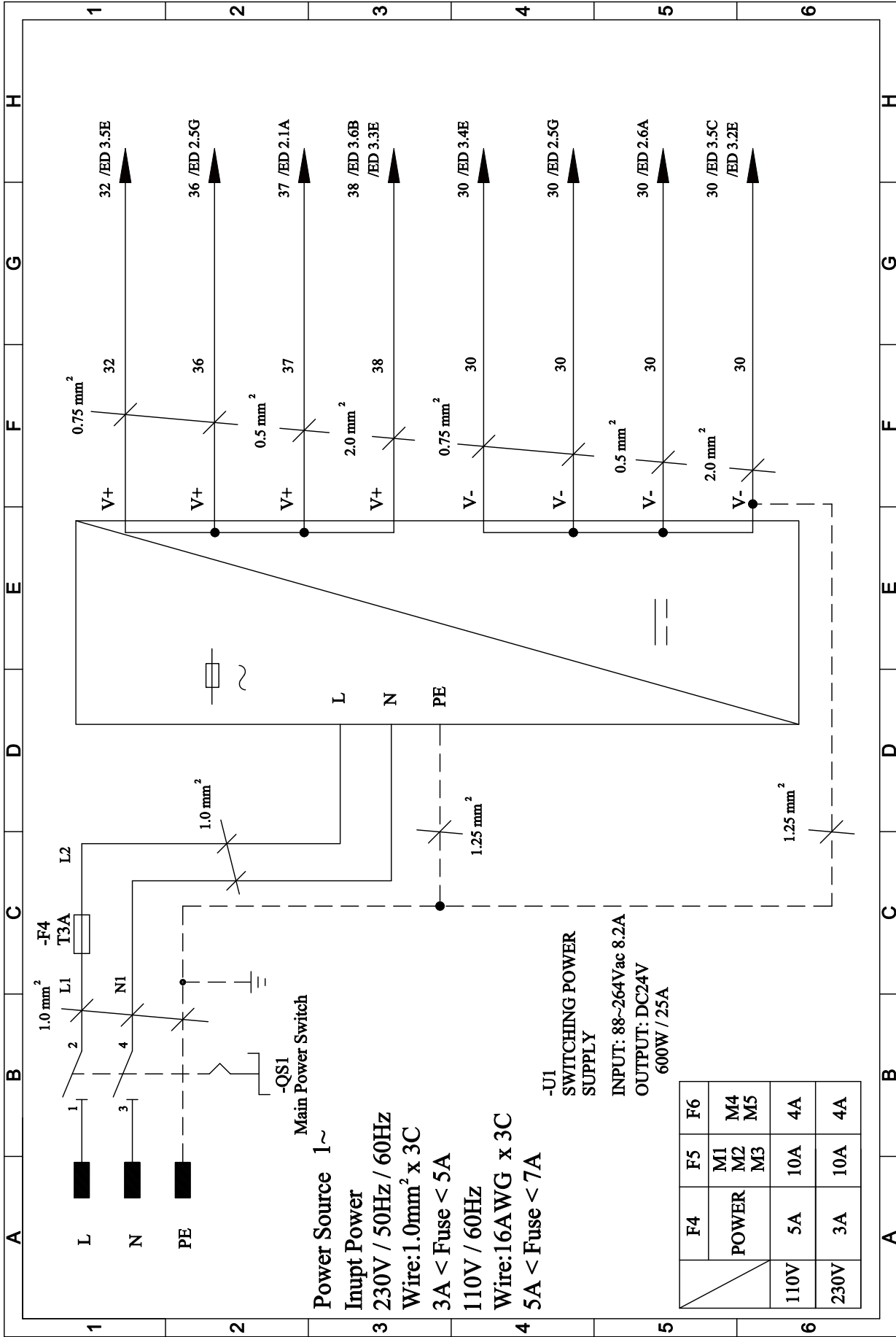
MACHINE MODEL TP-702

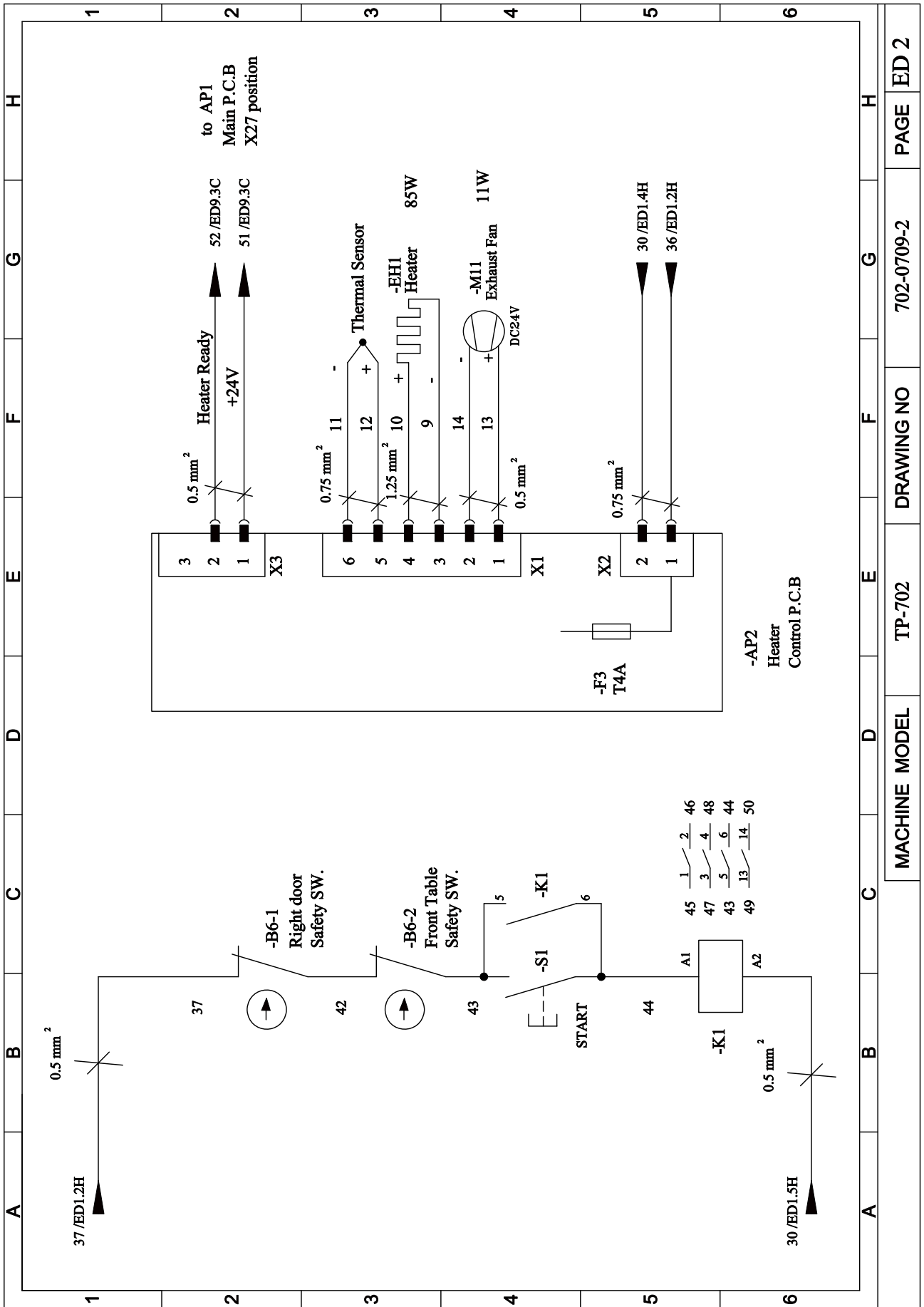
DRAWING NO 702-0709-2

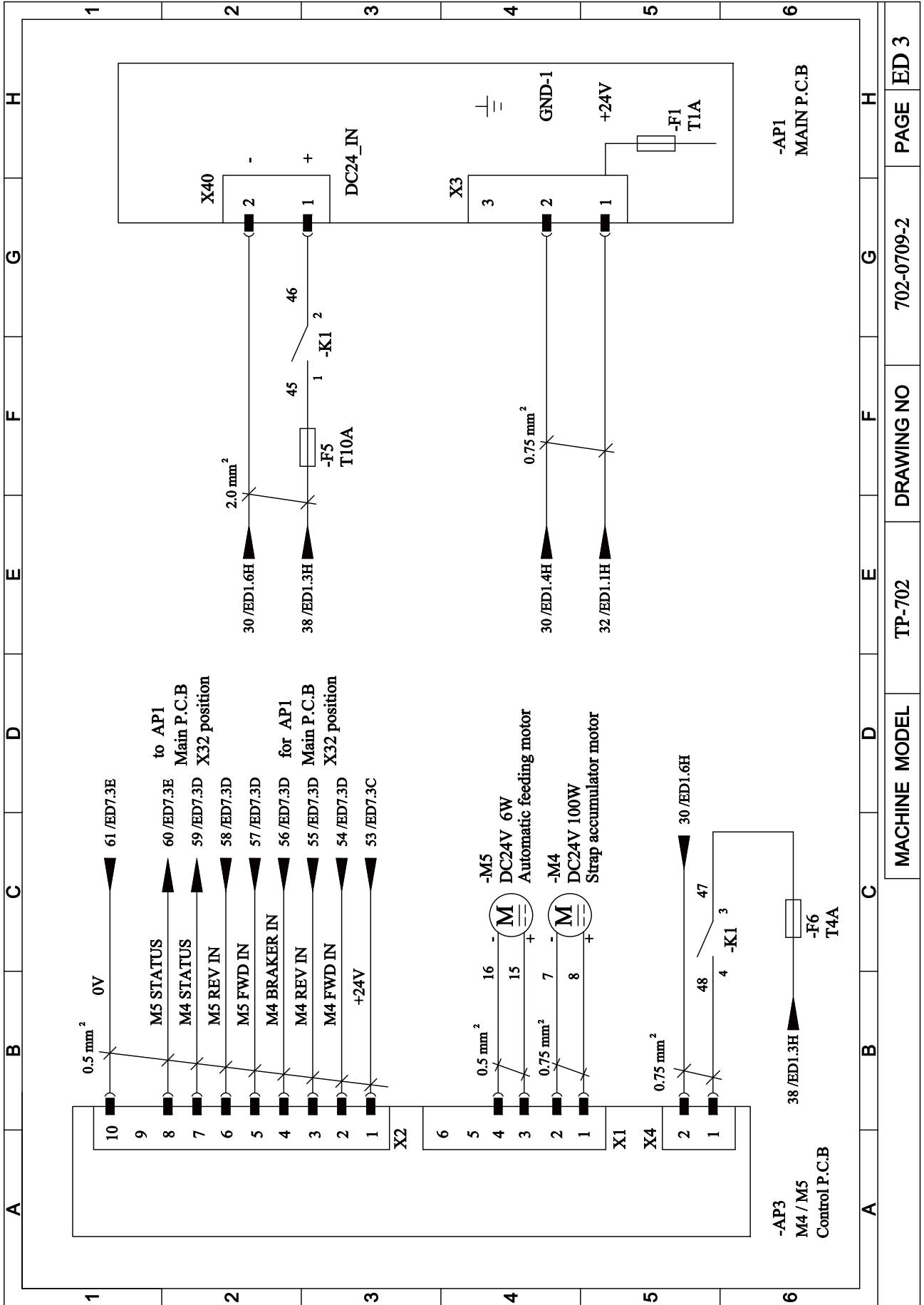
MACHINE MODEL TP-702

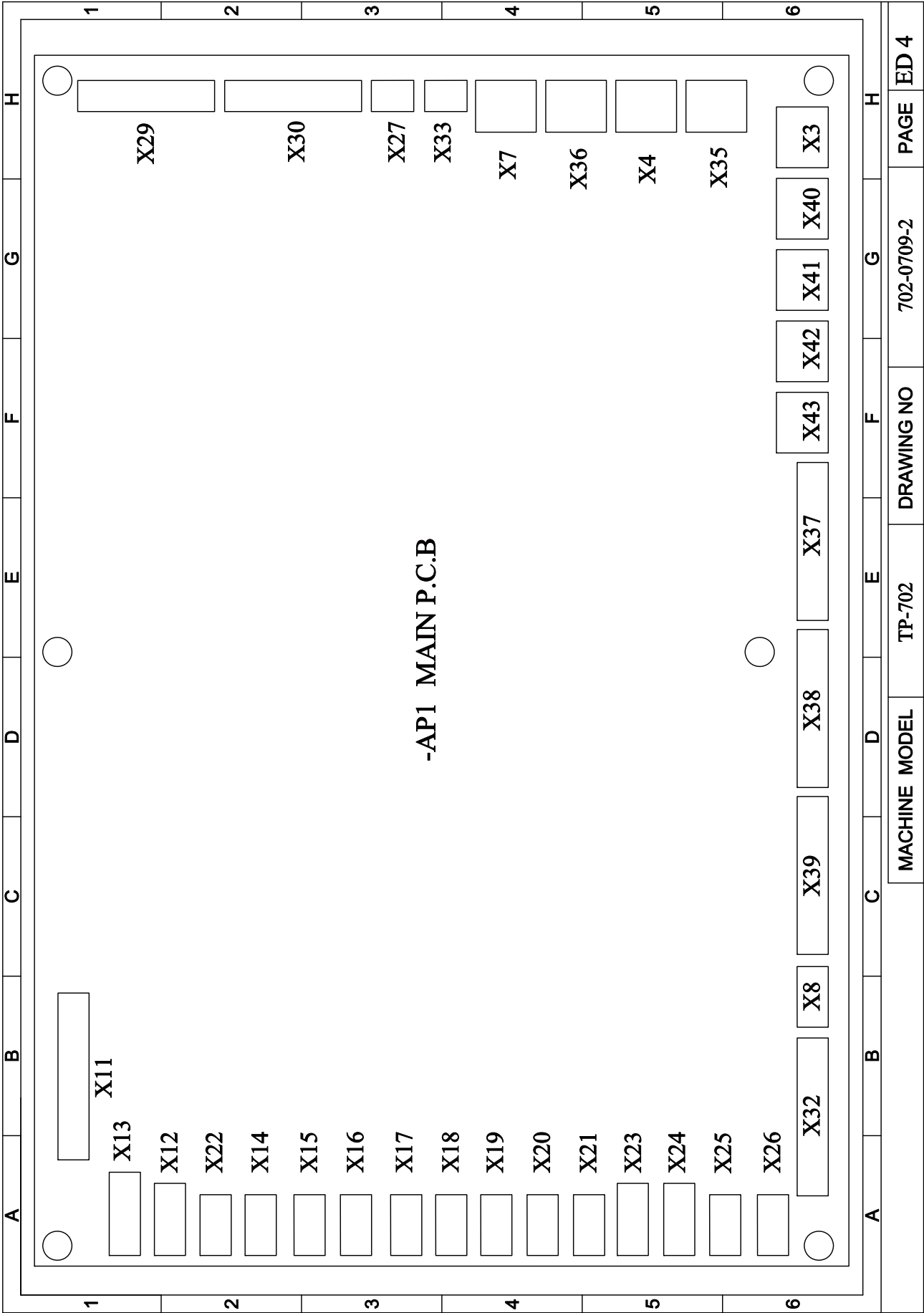
DRAWING NO 702-0709-2

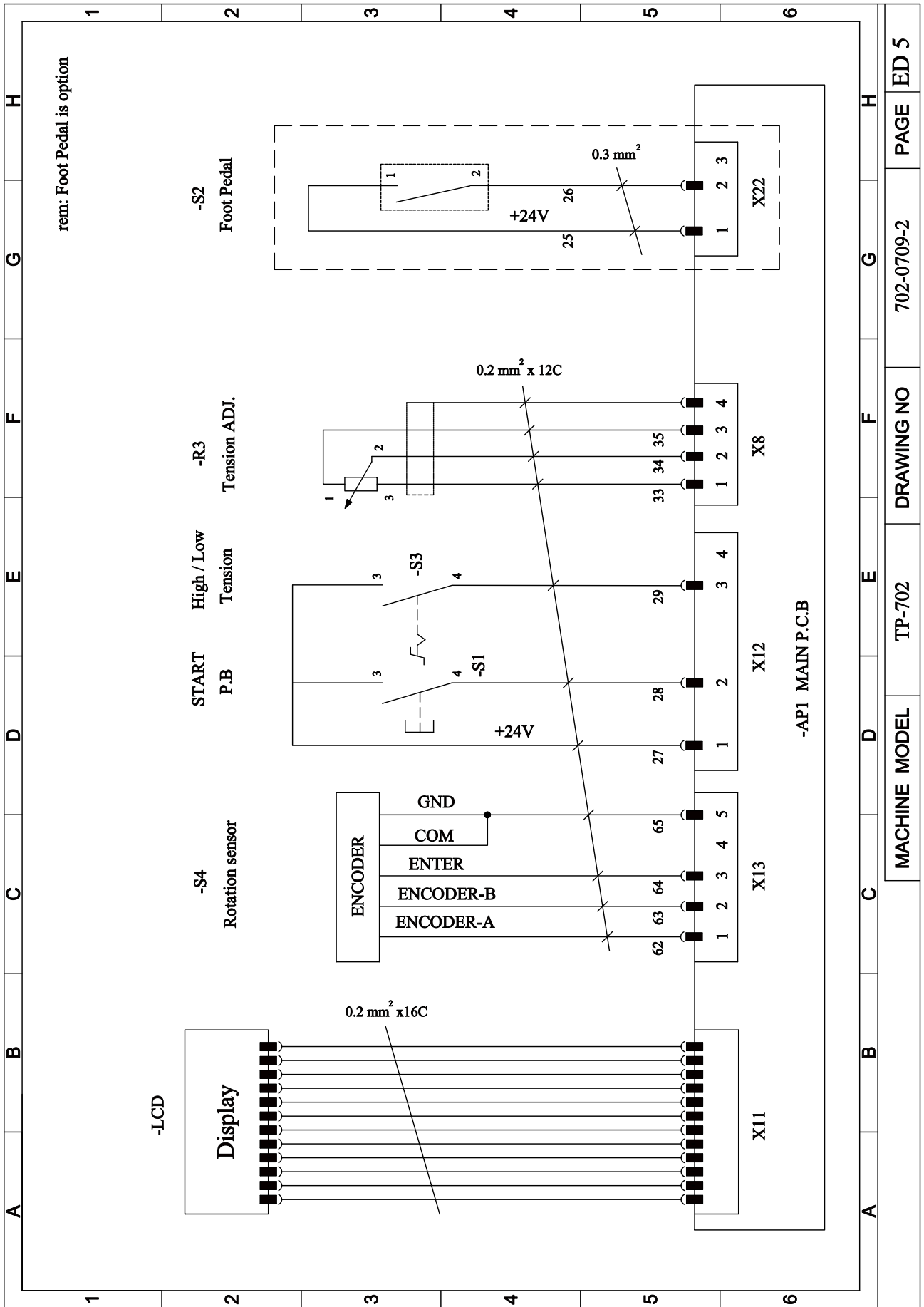
MACHINE MODEL TP-702

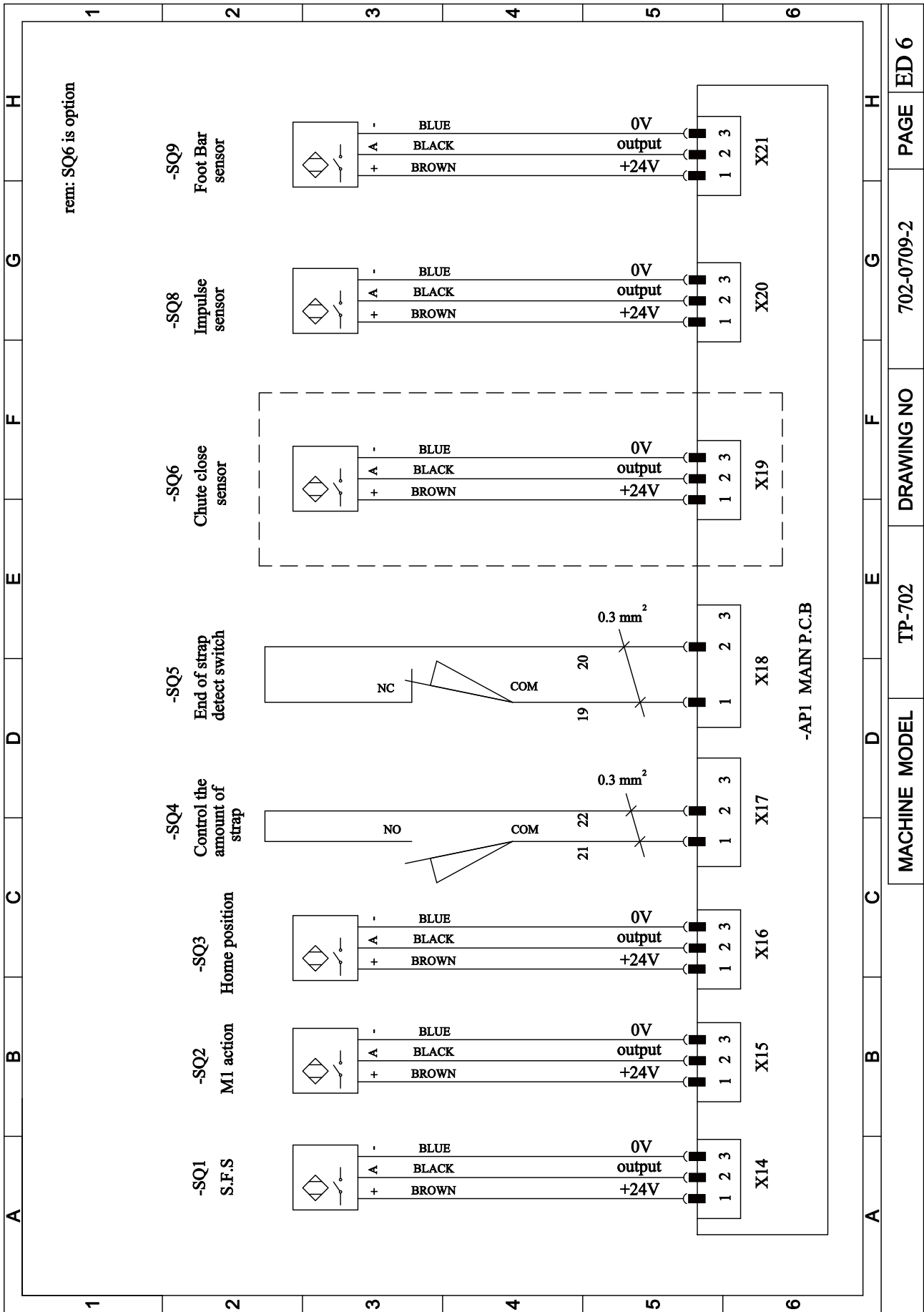


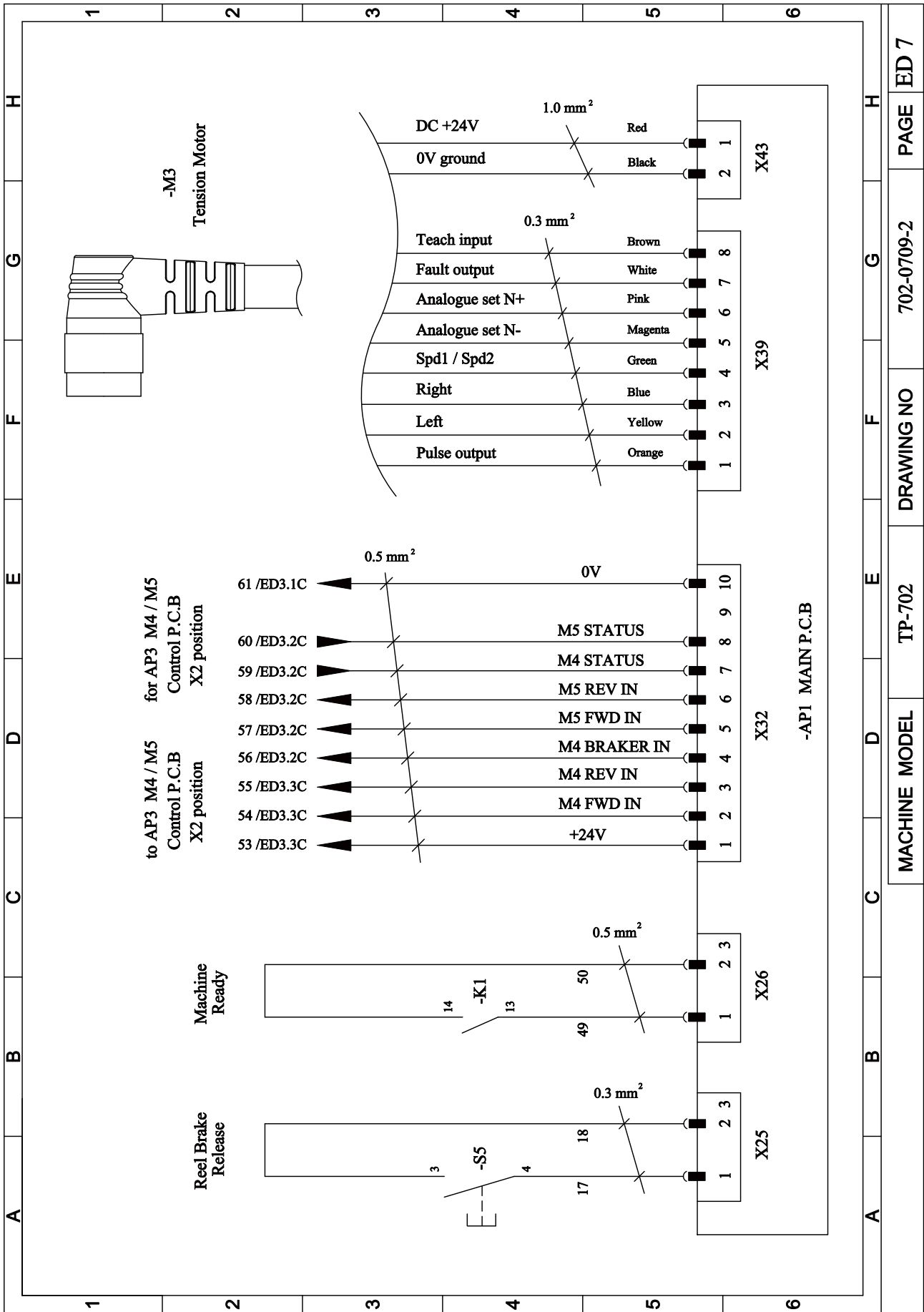


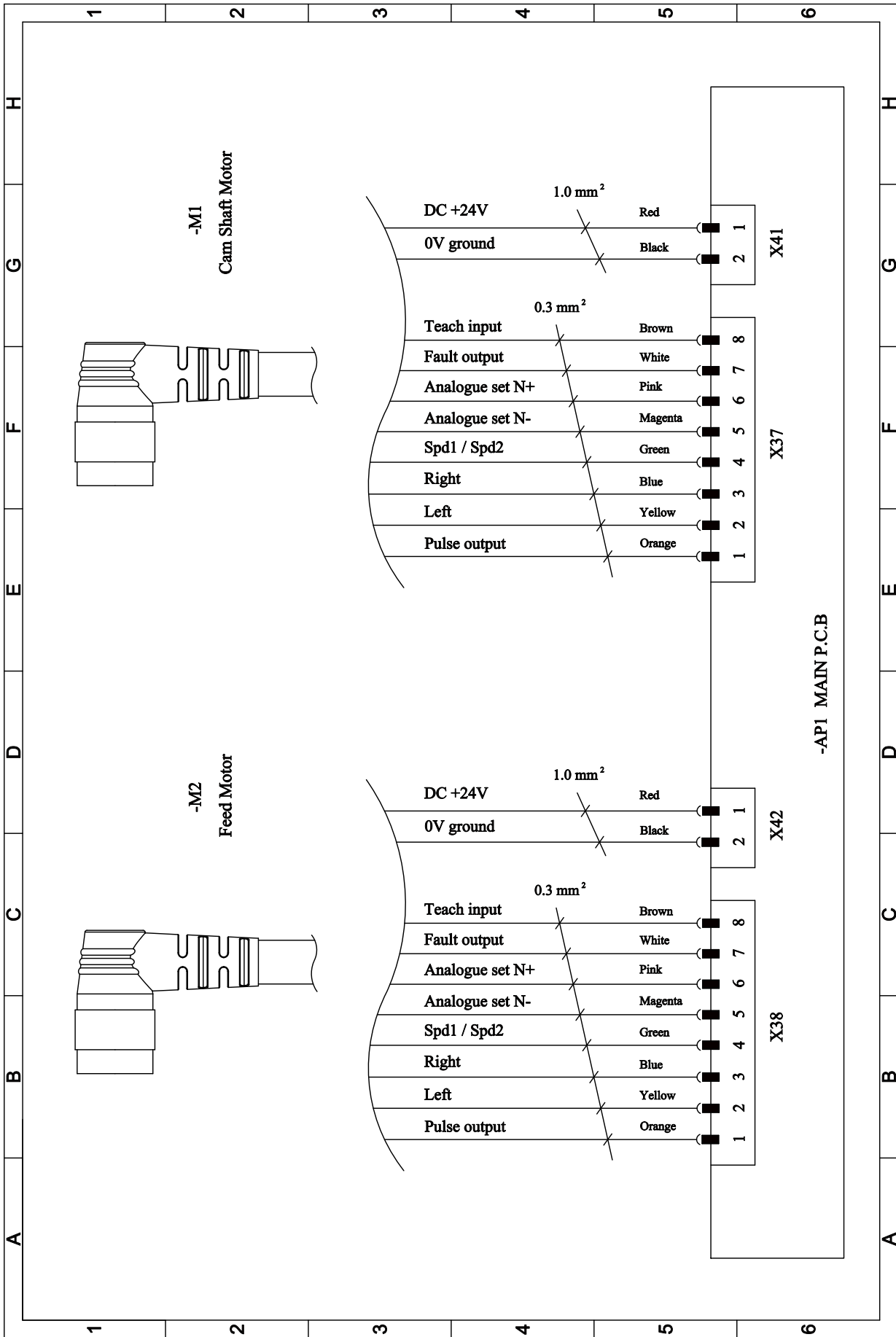


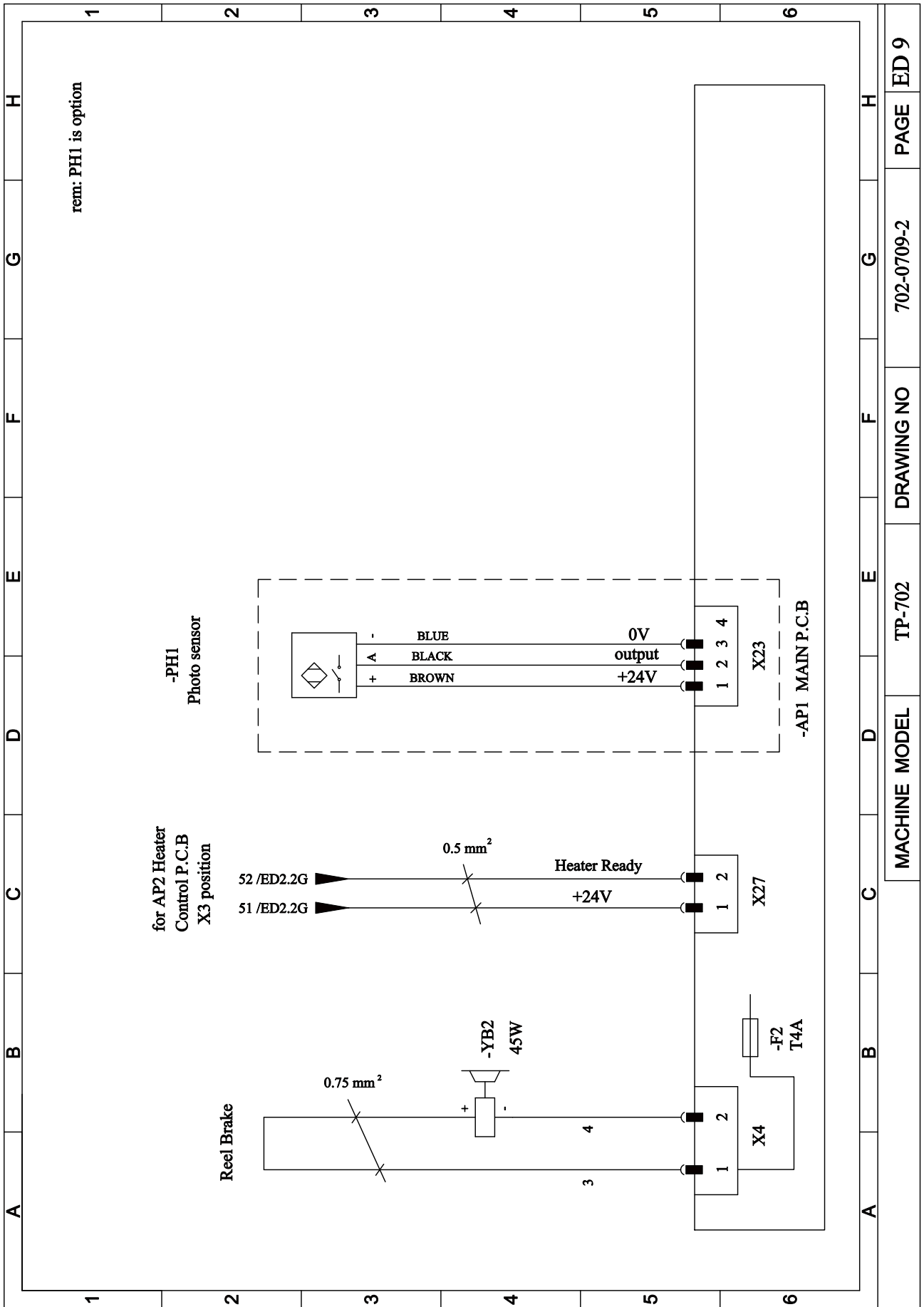












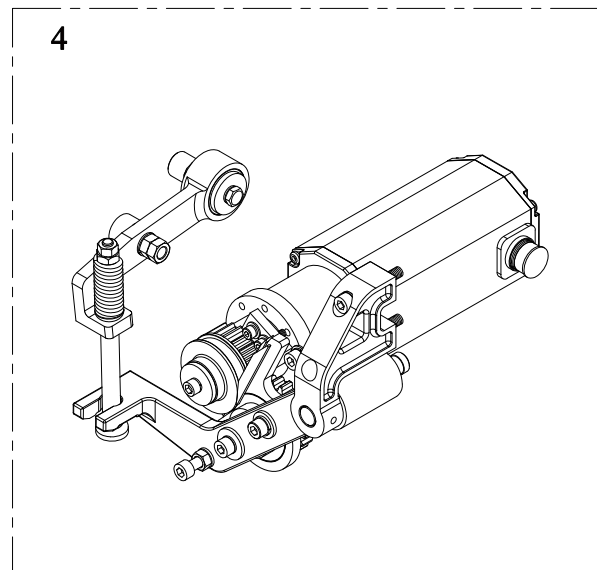
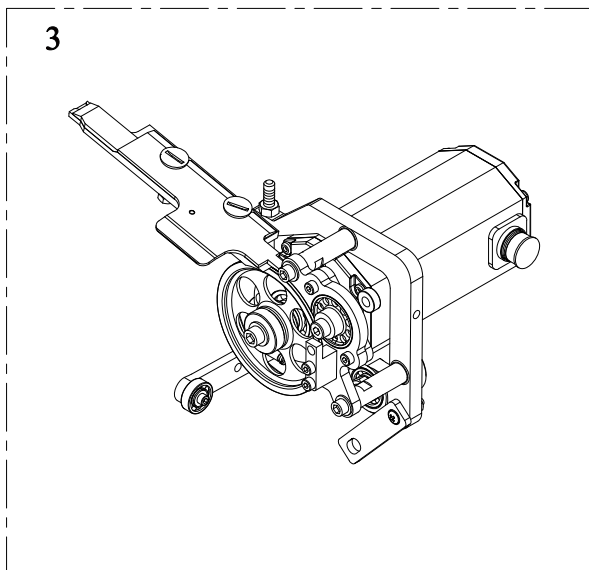
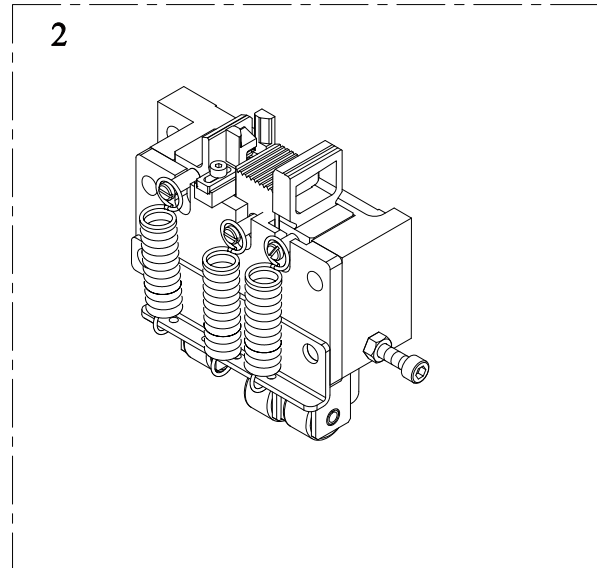
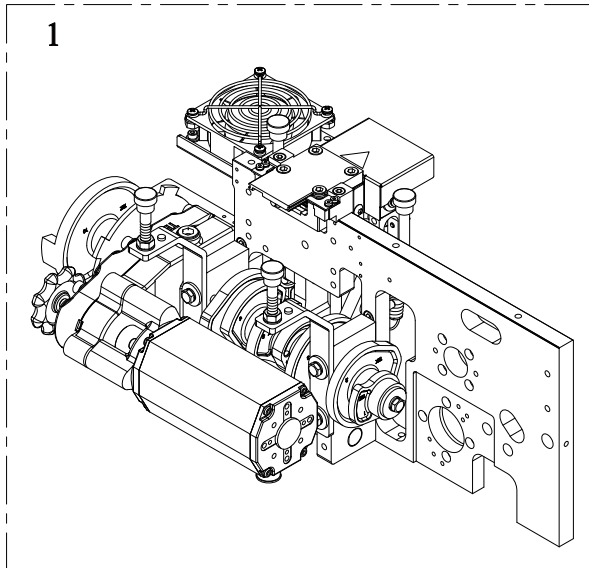
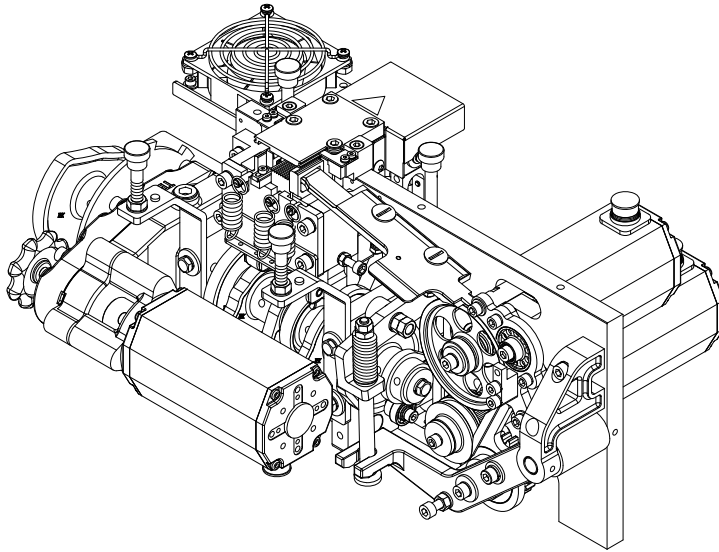
PART III

1

STRAPPING HEAD UNIT

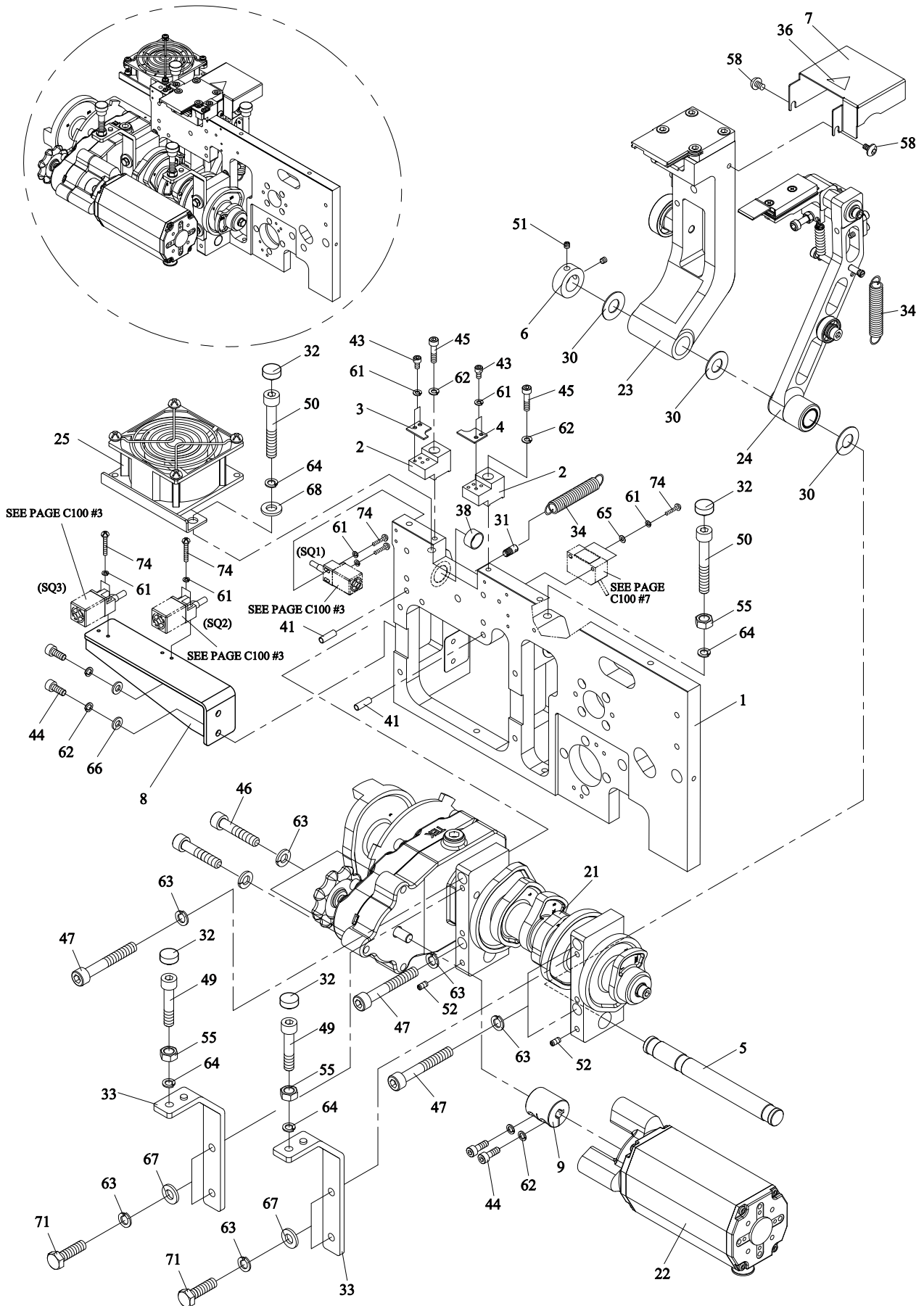
M7-1-900000

M7-1-900010



1**STRAPPING HEAD UNIT****M7-1-900000****M7-1-900010**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-1-900000	Strapping Head Unit (For 5-6mm)	1	
	M7-1-900010	Strapping Head Unit (For 9mm)	1	
1	M7-1-100000	Cam Group	1	SEE PAGE C3
2	M7-1-200000	Bar Guide Group	1	SEE PAGE C15
3	M7-1-300000	Feed Group (For 5-6mm)	1	SEE PAGE C23
	M7-1-300010	Feed Group (For 9mm)	1	
4	M7-1-400000	Tension Group (For 5-6mm)	1	SEE PAGE C33
	M7-1-400010	Tension Group (For 9mm)	1	



1-1

CAM GROUP

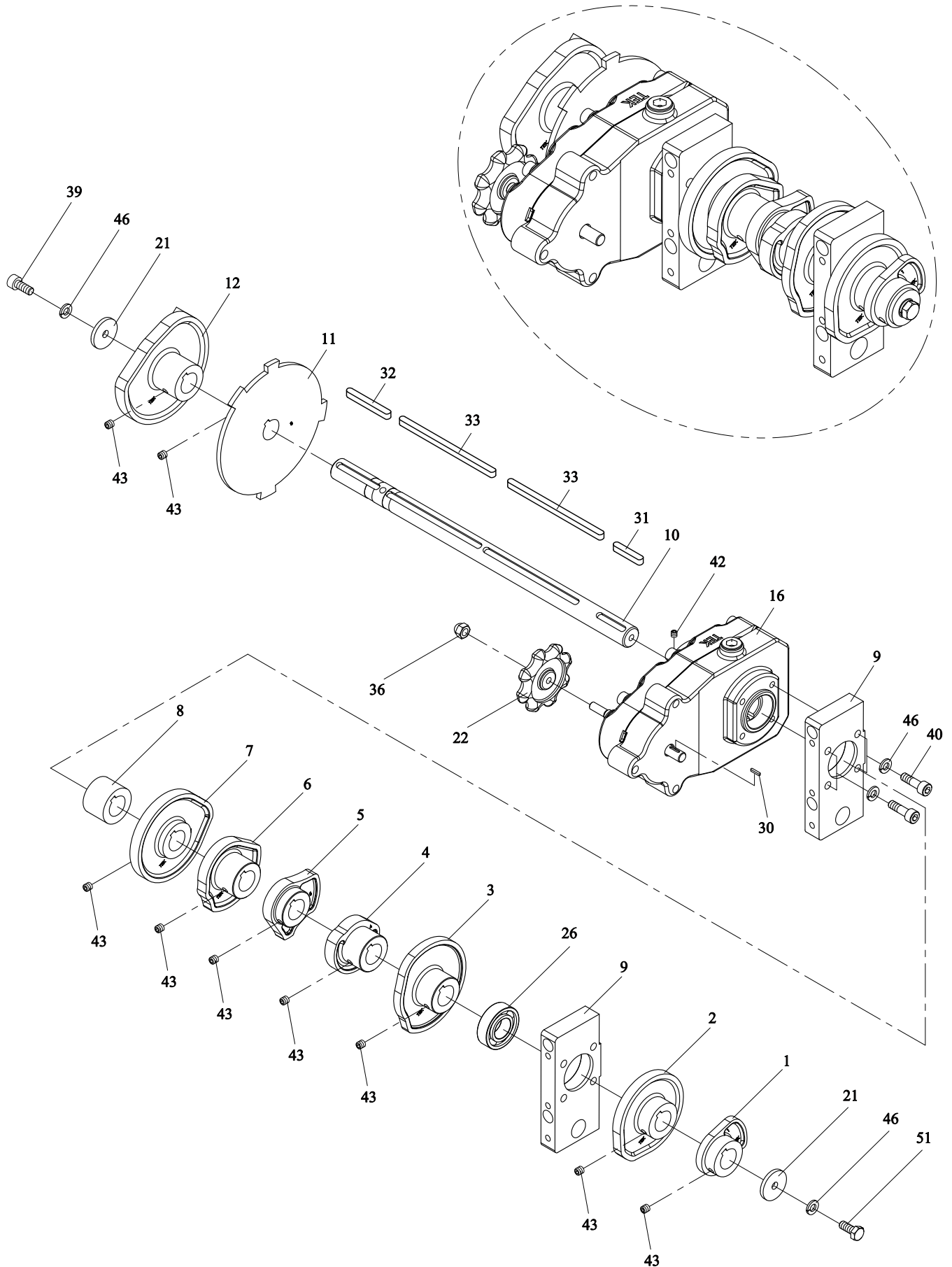
M7-1-100000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-101100	Strapping Head Frame	1	
2	M7-1-101200	Guide	2	
3	M7-1-101300	Ejector Plate (L)	1	
4	M7-1-101400	Ejector Plate (R)	1	
5	M7-1-101500	Shaft	1	
6	M7-1-101600	Collar	1	
7	M7-1-101700	Cover	1	
8	M7-1-101800	Sensor Base	1	
9	M7-1-101900	Coupling	1	
21	M7-1-110000	Gear Box and Cam Ass'y	1	SEE PAGE C5
22	M7-1-120000	M1 Motor Ass'y	1	SEE PAGE C7
23	M7-1-130000	Slide Table Frame Ass'y	1	SEE PAGE C9
24	M7-1-140000	Heater Arm Ass'y	1	SEE PAGE C11
25	M7-1-150000	Exhaust Fan Ass'y	1	SEE PAGE C13
30	H42-1227	Washer	3	
31	TA-089	Spring Hook	1	
32	T7-1-10330	Bumper	4	
33	T7-1-10360	Bumper Bracket	2	
34	T7-1-64130	Return Spring	2	
36	LA-40002	Label	1	
38	MB1515	Metal Bush, 1515	1	
41	SP0514	Spring Pin, 5x14	2	
43	HBS0308N	HBS, M3×8 (N)	4	
44	HBS0516N	HBS, M5×16 (N)	4	
45	HBS0525HN	HBS, M5×25 (H)(N)	2	
46	HBS0640HN	HBS, M6×40 (H)(N)	3	
47	HBS0645HN	HBS, M6×45 (H)(N)	4	
49	HBS0840HN	HBS, M8×40 (H)(N)	2	
50	HBS0865HN	HBS, M8×65 (H)(N)	2	
51	HSS0606GN	HSS, M6×6 (G)(N)	2	
52	HSS0610GN	HSS, M6×10 (G)(N)	2	
55	HN08	HN, M8	4	
58	THS0508N	THS, M5×8 (N)	2	
61	SW03	SW, M3	10	
62	SW05	SW, M5	6	
63	SW06	SW, M6	11	
64	SW08	SW, M8	4	
65	PW03	PW, M3 (Option)	2	
66	PW05	PW, M5	2	
67	PW06C	PW, M6 (C)	4	
71	HB0616	HB, M6×16	4	
74	PMS0320	PMS, M3×20	6	
		PMS, M3×20 (Option)	8	

1-1-1

GEAR BOX AND CAM ASS'Y

M7-1-110000



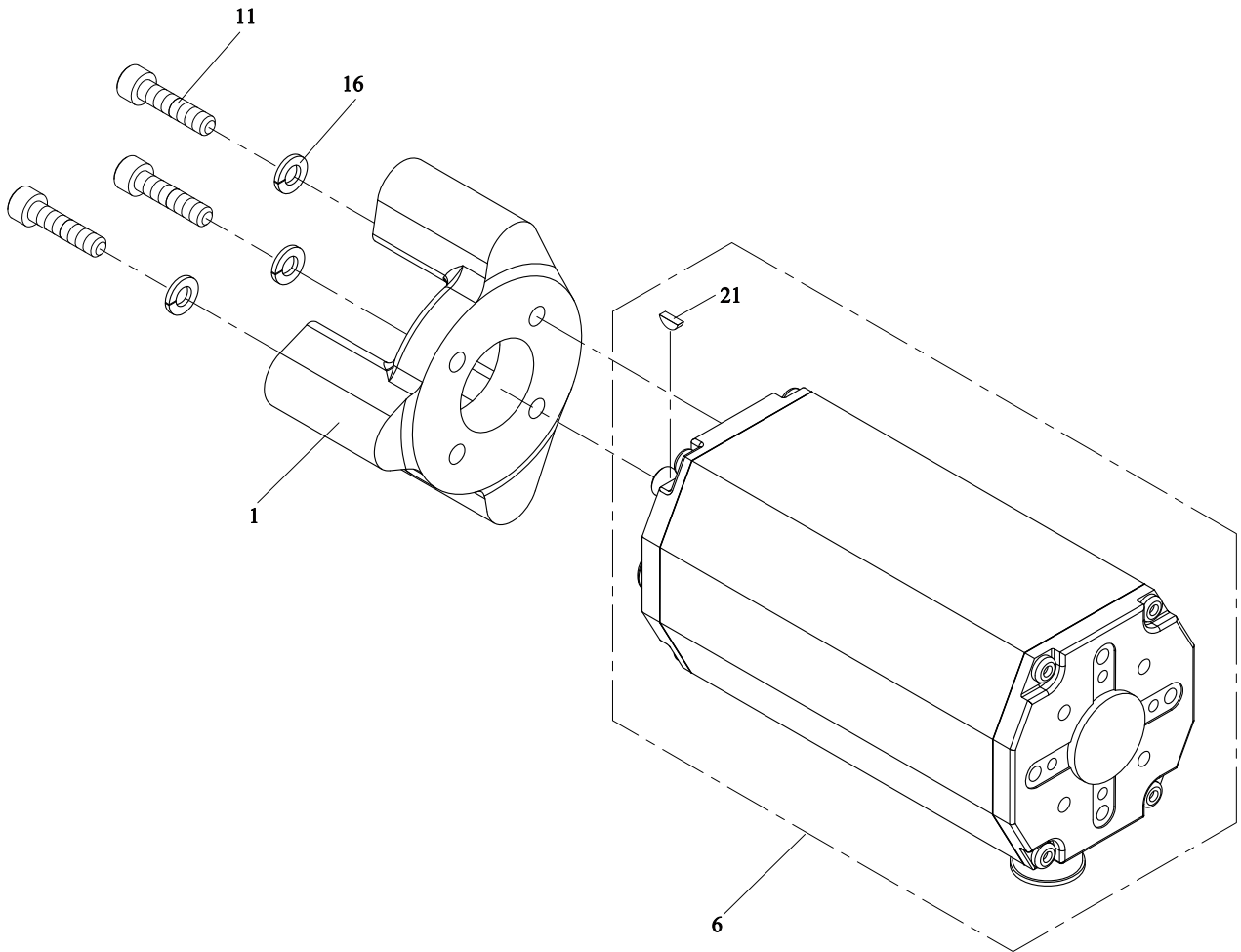
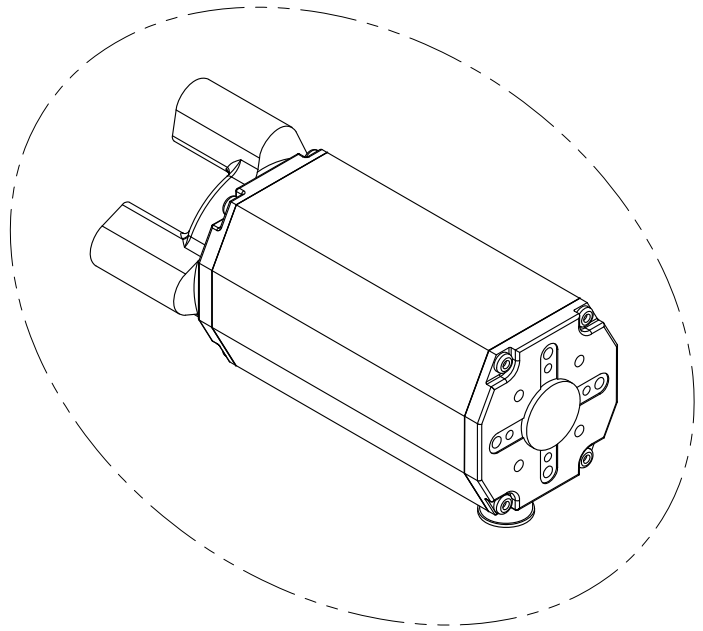
1-1-1**GEAR BOX AND CAM ASS'Y****M7-1-110000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-111100	Retracting Cam	1	
2	M7-1-111200	Tension Cam	1	
3	M7-1-111300	Heater Cam	1	
4	M7-1-111400	Front Bar Cam	1	
5	M7-1-111500	Press Bar Cam	1	
6	M7-1-111600	Rear Bar Cam	1	
7	M7-1-111700	Slide Table Cam	1	
8	M7-1-111800	Collar	1	
9	M7-1-111900	Support	2	
10	M7-1-112000	Cam Shaft	1	
11	M7-1-112100	Position Cam	1	
12	M7-1-112200	Arch Cam	1	
16	M7-1-110100	Gear Box	1	
21	TB-223	Washer	2	
22	T7-1-11240	Handle	1	
26	BR6003ZZ	Bearing, 6003ZZ	1	
30	KYA020210	Key, 2×2×10	1	
31	KYA050530	Key, 5×5×30	1	
32	KYA050545	Key, 5×5×45	1	
33	KYA0505101	Key, 5×5×101	2	
36	CAP06	CAP, M6	1	
39	HBS0616N	HBS, M6×16 (N)	1	
40	HBS0625N	HBS, M6×25 (N)	4	
42	HSS0505GN	HBS, M5×5 (G)(N)	1	
43	HSS0606GN	HBS, M6×6 (G)(N)	9	
46	SW06	SW, M6	6	
51	HB0616	HB, M6×16	1	

1-1-2

M1 MOTOR ASS'Y

M7-1-120000



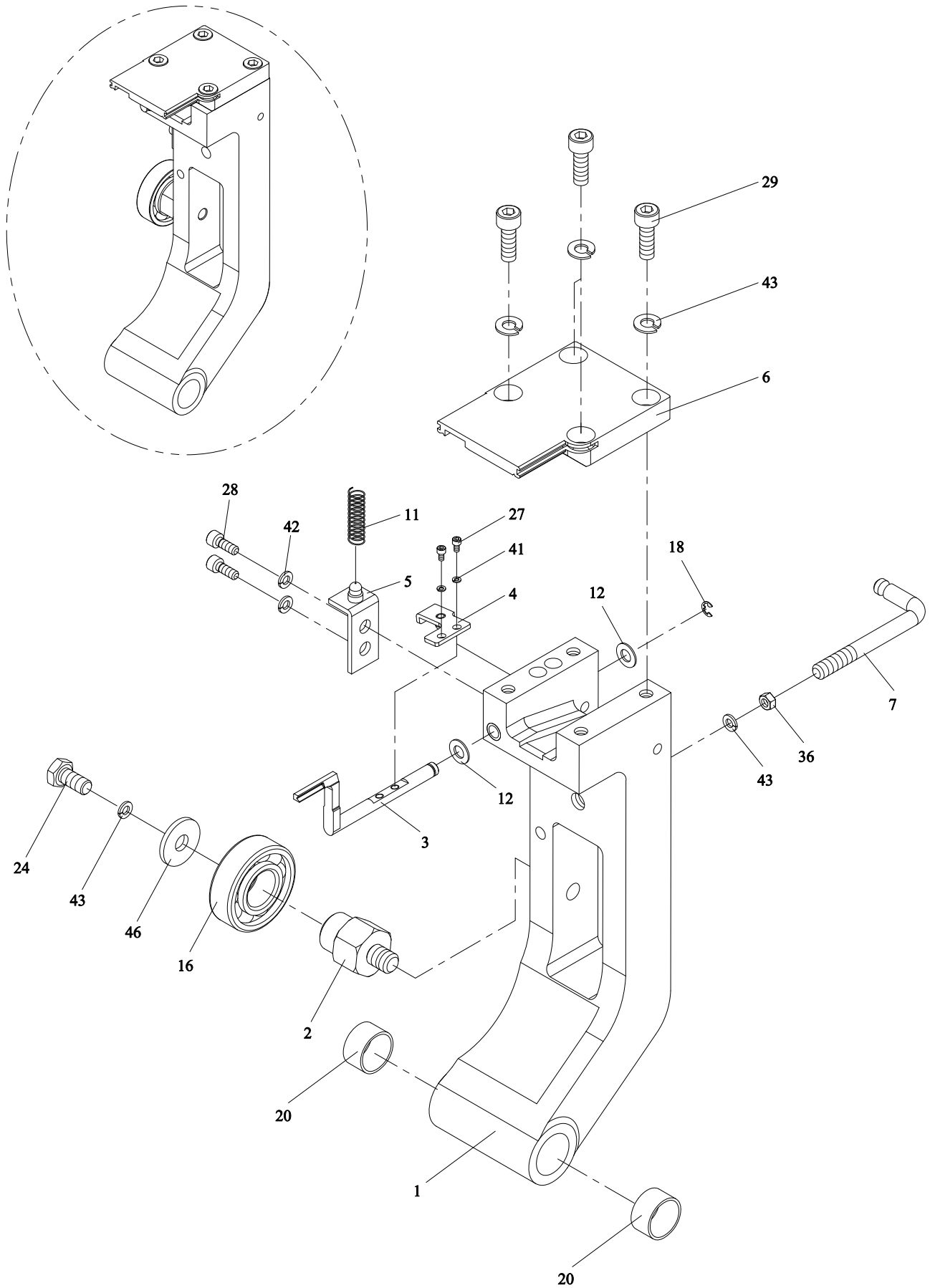
1-1-2**M1 MOTOR ASS'Y****M7-1-120000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-121100	Gear Box Support	1	
6	M7-1-221100	M1 Motor	1	
11	HBS0520N	HBS, M5×20 (N)	4	
16	SW05	SW, M5	4	
21	KYC0210	Key, 2×10	1	

1-1-3

SLIDE TABLE FRAME ASS'Y

M7-1-130000

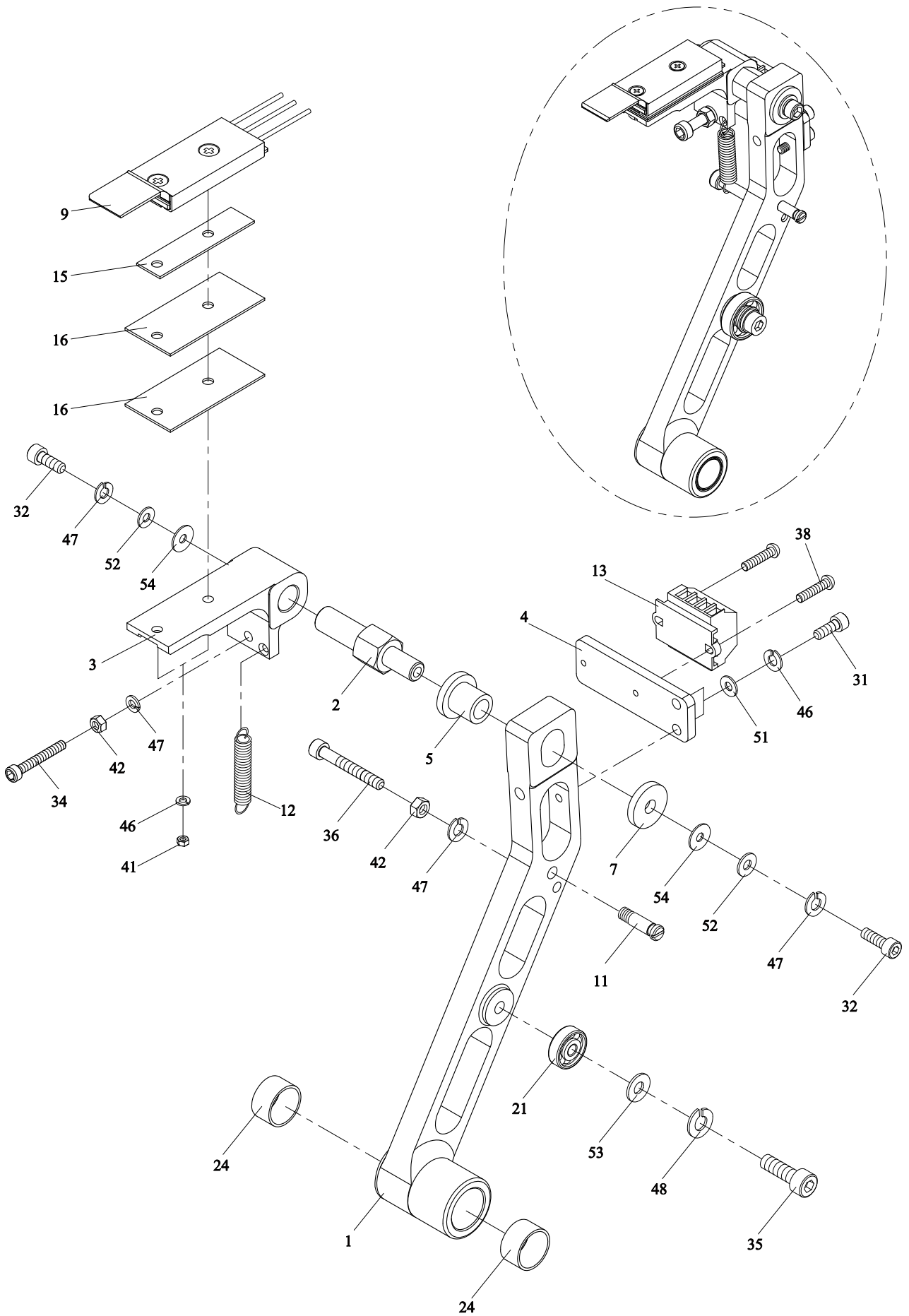


1-1-3

SLIDE TABLE FRAME ASS'Y

M7-1-130000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-131100	Slide Table Frame	1	
2	M7-1-131200	Shaft	1	
3	M7-1-131300	Switch Lever	1	
4	M7-1-131400	Sensor Plate	1	
5	M7-1-131500	Spring Base	1	
6	M7-1-131600	Slide Table	1	
	M7-1-131600S	Slide Table (Stainless Steel Model)(Option)	1	
7	M7-1-131700	Spring Hook	1	
11	T7-1-10140	Spring	1	
12	T7-3-40470	Washer	2	
16	BR6202ZZ	Bearing, 6202ZZ	1	
18	ER04	Snap Ring, E-4	1	
20	MB1515	Metal Bush, 1515	2	
24	HB0612	HB, M6×12	1	
27	HBS0306N	HBS, M3×6 (N)	2	
28	HBS0512N	HBS, M5×12 (N)	2	
29	HBS0616N	HBS, M6×16 (N)	4	
36	HN06	HN, M6	1	
41	SW03	SW, M3	2	
42	SW05	SW, M5	2	
43	SW06	SW, M6	6	
46	PW06C	PW, M6 (C)	1	

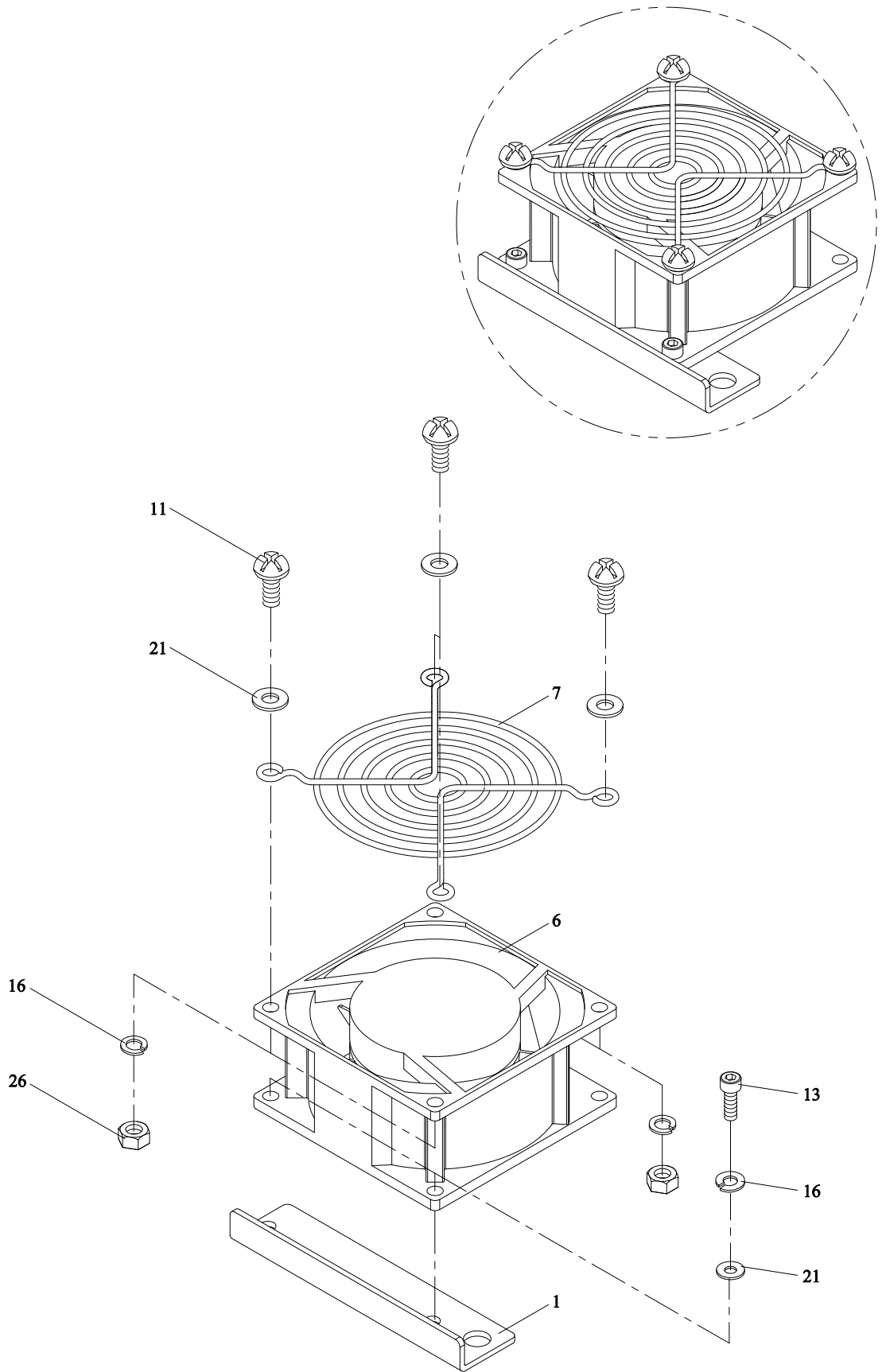


1-1-4

HEATER ARM ASS'Y

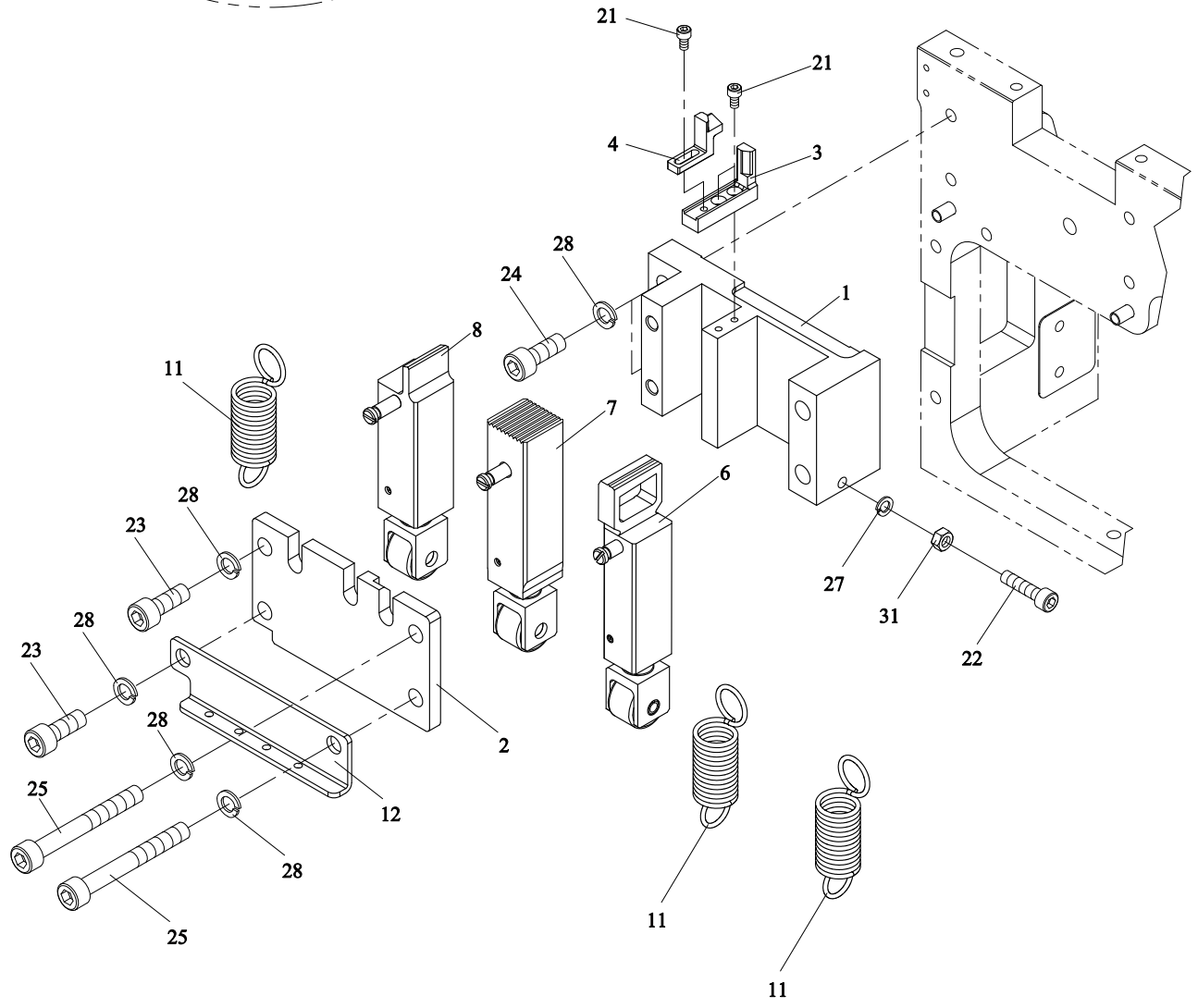
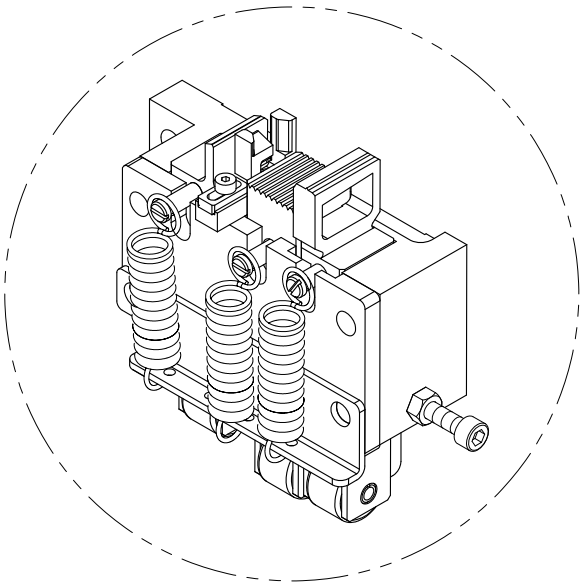
M7-1-140000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-141100	Heater Crank	1	
2	M7-1-141200	Heater Shaft	1	
	M7-1-141200S	Heater Shaft (Stainless Steel Model)(Option)	1	
3	M7-1-141300	Heater Bracket	1	
	M7-1-141300S	Heater Bracket (Stainless Steel Model)(Option)	1	
4	M7-1-141400	Terminal Bracket	1	
5	M7-1-141500	Isolator	1	
7	WA-030501	Washer (φ 5.5 \times φ 18 t=3)	1	
9	M7-1-140100	Heater Set	1	
11	TA-073	Spring Hook	1	
12	TB-115	Spring	1	
13	T5-1-12451	Heater Terminal	1	
15	T7-1-12411	Heater-Insulation	1	
16	T7-1-12412	Heater-Insulation	2	
21	BR636ZZ	Bearing, 636ZZ	1	
24	MB1510	Metal Bush, 1510	2	
31	HBS0412N	HBS, M4 \times 12 (N)	2	
32	HBS0512N	HBS, M5 \times 12 (N)	2	
34	HBS0530N	HBS, M5 \times 30 (N)	1	
35	HBS0620N	HBS, M6 \times 20 (N)	1	
36	HBS0540HN	HBS, M5 \times 40 (H)(N)	1	
38	PMS0310	PMS, M3 \times 10	2	
41	HN04	HN, M4	2	
42	HN05	HN, M5	2	
46	SW04	SW, M4	2	
47	SW05	SW, M5	4	
48	SW06	SW, M6	1	
51	PW04	PW, M4	2	
52	PW05	PW, M5	2	
53	PW06A	PW, M6 (A)	1	
54	PW06C	PW, M6 (C)	2	



1-1-5**EXHAUST FAN ASS'Y****M7-1-150000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-151100	Fan Bracket	1	
6	T5-1-12370	Fan	1	
7	T7-6-10930	Fan Cover	1	
11	TMS0412	TMS, M4×12	4	
13	HBS0410N	HBS, M4×10 (N)	2	
16	SW04	SW, M4	6	
21	PW04	PW, M4	6	
26	HN04	HN, M4	4	



1-2

BAR GUIDE GROUP

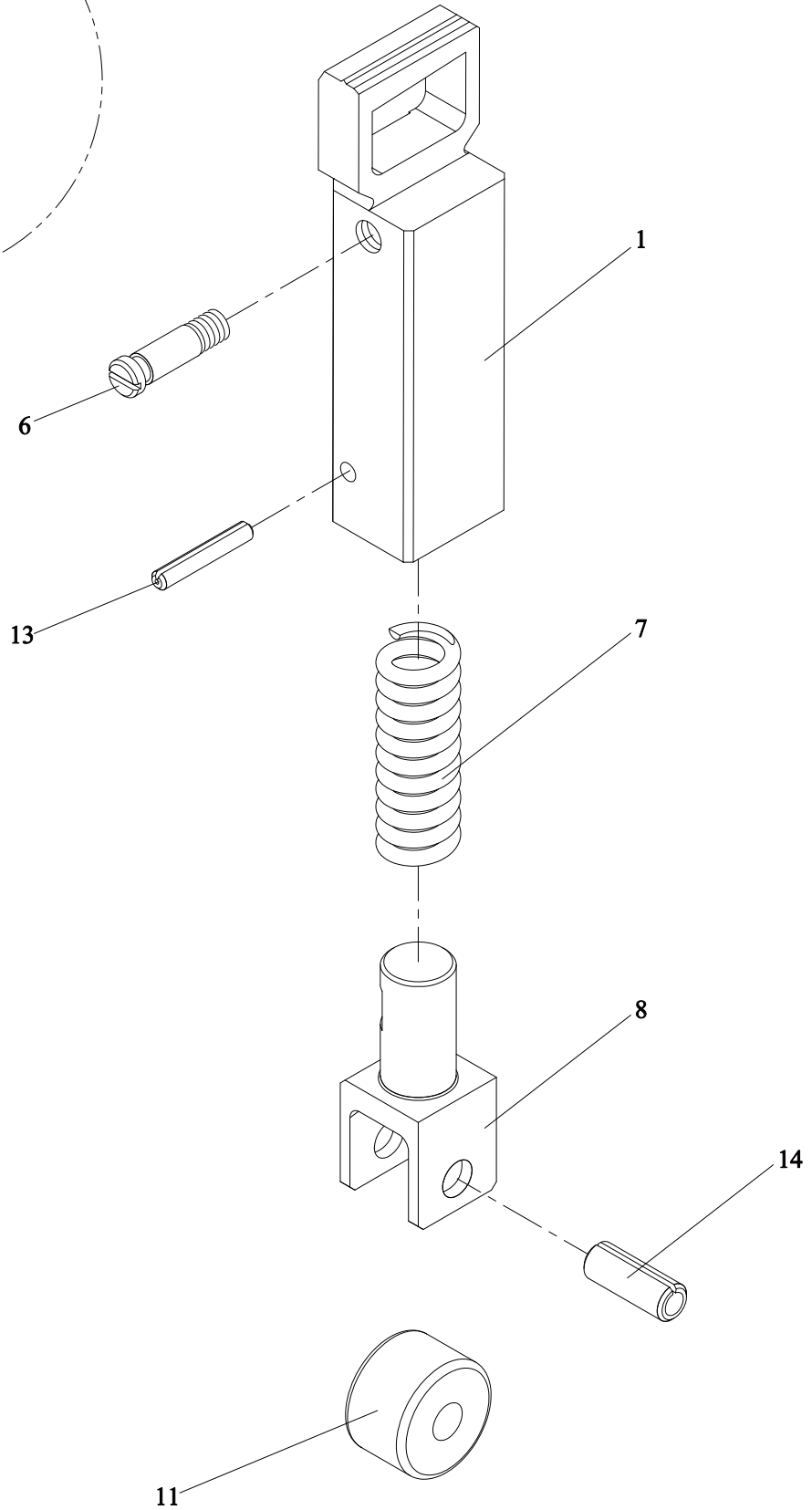
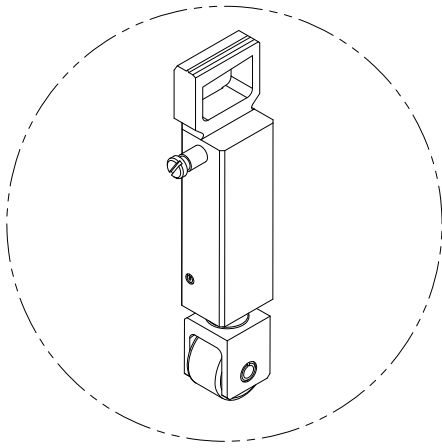
M7-1-200000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-201100	Bar Guide	1	
2	M7-1-201200	Bar Guide Lid	1	
	M7-1-201200S	Bar Guide Lid (Stainless Steel Model)(Option)	1	
3	M7-1-201300	Cutter Holder	1	
	M7-1-201300S	Cutter Holder (Stainless Steel Model)(Option)	1	
4	M7-1-201400	Strap Guide	1	
	M7-1-201400S	Strap Guide (Stainless Steel Model)(Option)	1	
6	M7-1-210000	Front Bar Ass'y	1	SEE PAGE C17
	M7-1-210000S	Front Bar Ass'y (Stainless Steel Model)(Option)	1	
7	M7-1-220000	Press Bar Ass'y	1	SEE PAGE C19
	M7-1-220000S	Press Bar Ass'y (Stainless Steel Model)(Option)	1	
8	M7-1-230000	Rear Bar Ass'y	1	SEE PAGE C21
	M7-1-230000S	Rear Bar Ass'y (Stainless Steel Model)(Option)	1	
11	TA-071	Return Spring	3	
12	T7-1-10180	Spring Hook	1	
21	HBS0308N	HBS, M3×8 (N)	3	
22	HBS0520N	HBS, M5×20 (N)	1	
23	HBS0616N	HBS, M6×16 (N)	2	
24	HBS0620N	HBS, M6×20 (N)	2	
25	HBS0650HN	HBS, M6×50 (H)(N)	2	
27	SW05	SW, M5	1	
28	SW06	SW, M6	6	
31	HN05	HN, M5	1	

1-2-1

FRONT BAR ASS'Y

M7-1-210000
M7-1-210000S



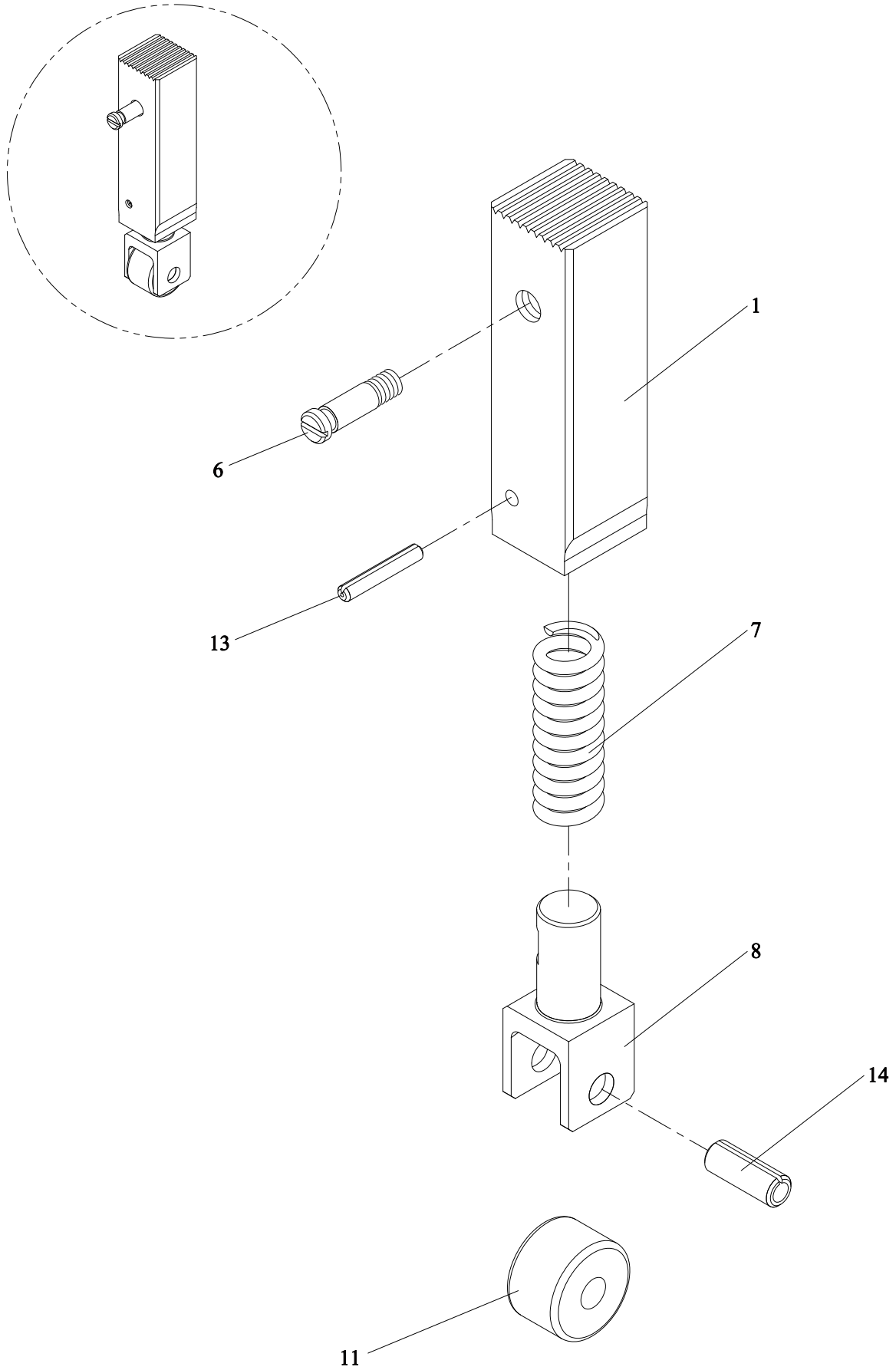
1-2-1**FRONT BAR ASS'Y****M7-1-210000
M7-1-210000S**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-210000	Front Bar Ass'y	1	
	M7-1-210000S	Front Bar Ass'y (Stainless Steel Model)(Option)	1	
	M7-1-211100	Front Bar	1	
	M7-1-211100S	Front Bar (Stainless Steel Model)(Option)	1	
6	TA-073	Spring Hook	1	
7	TA-078	Spring	1	
8	T7-1-13121	Plunger	1	
11	BRNART6VR	Bearing, NART6VR	1	
13	SP0318	Spring Pin, 3x18	1	
14	SP0616	Spring Pin, 6x16	1	

1-2-2

PRESS BAR ASS'Y

M7-1-220000
M7-1-220000S



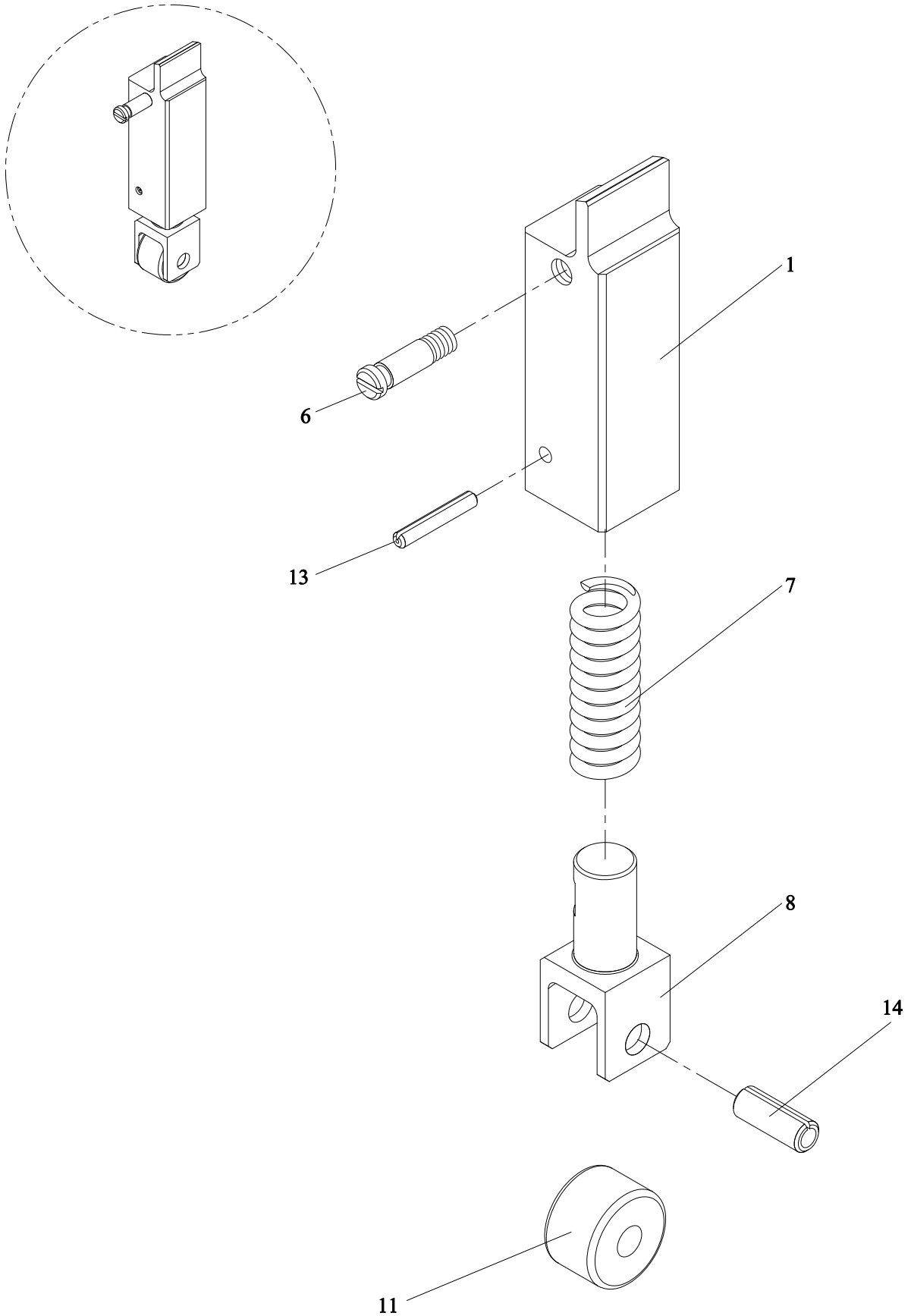
1-2-2**PRESS BAR ASS'Y****M7-1-220000
M7-1-220000S**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-220000	Press Bar Ass'y	1	
	M7-1-220000S	Press Bar Ass'y (Stainless Steel Model)(Option)	1	
	M7-1-221200	Press Bar	1	
	M7-1-221200S	Press Bar (Stainless Steel Model)(Option)	1	
6	TA-073	Spring Hook	1	
7	TA-078	Spring	1	
8	T7-1-13121	Plunger	1	
11	BRNART6VR	Bearing, NART6VR	1	
13	SP0318	Spring Pin, 3x18	1	
14	SP0616	Spring Pin, 6x16	1	

1-2-3

REAR BAR ASS'Y

M7-1-230000
M7-1-230000S



1-2-3**REAR BAR ASS'Y****M7-1-230000
M7-1-230000S**

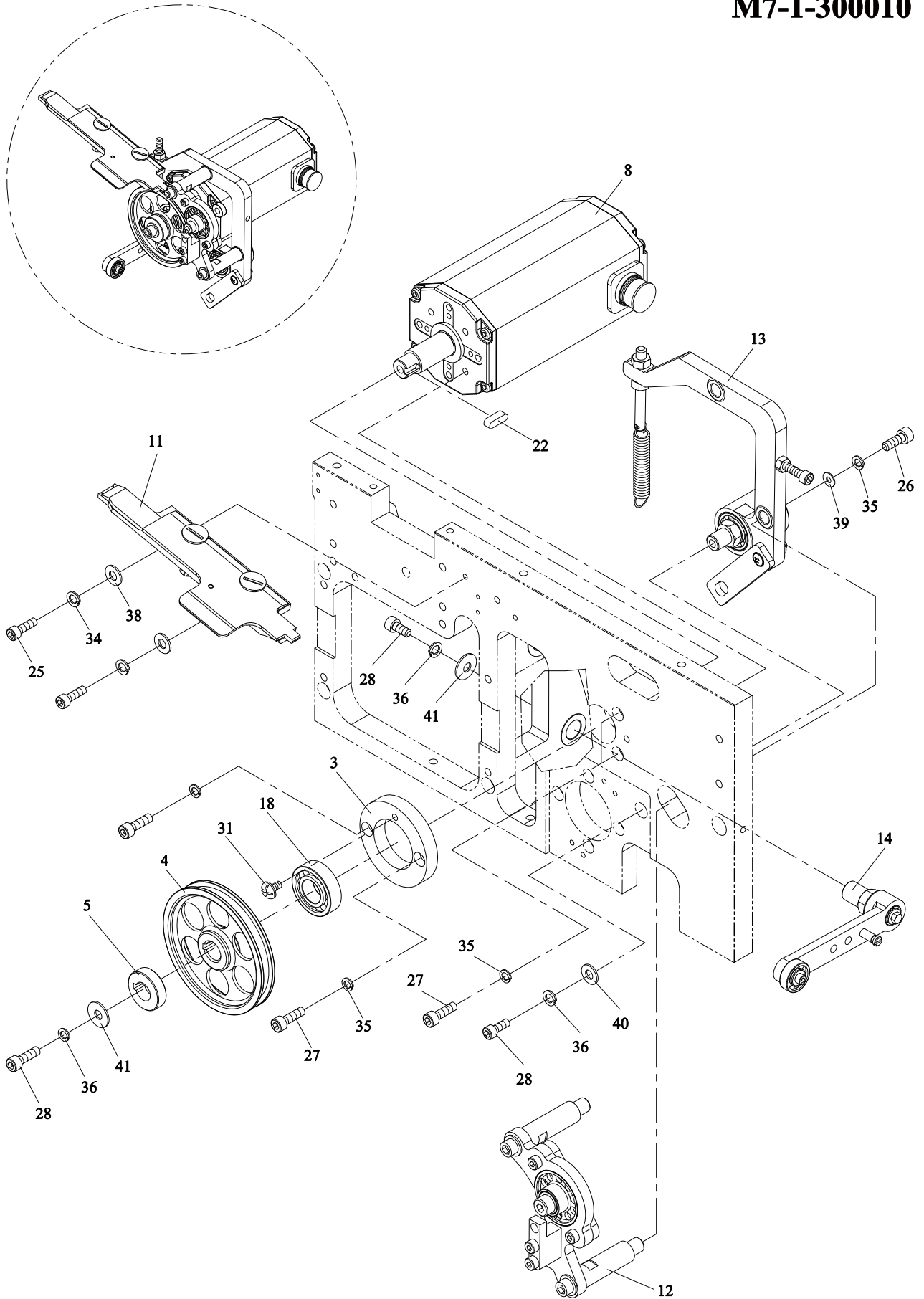
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-230000	Rear Bar Ass'y	1	
	M7-1-230000S	Rear Bar Ass'y (Stainless Steel Model)(Option)	1	
	M7-1-231100	Rear Bar	1	
	M7-1-231100S	Rear Bar (Stainless Steel Model)(Option)	1	
6	TA-073	Spring Hook	1	
7	TA-078	Spring	1	
8	T7-1-13121	Plunger	1	
11	BRNART6VR	Bearing, NART6VR	1	
13	SP0318	Spring Pin, 3x18	1	
14	SP0616	Spring Pin, 6x16	1	

1-3

FEED GROUP

M7-1-300000

M7-1-300010



1-3

FEED GROUP

M7-1-300000

M7-1-300010

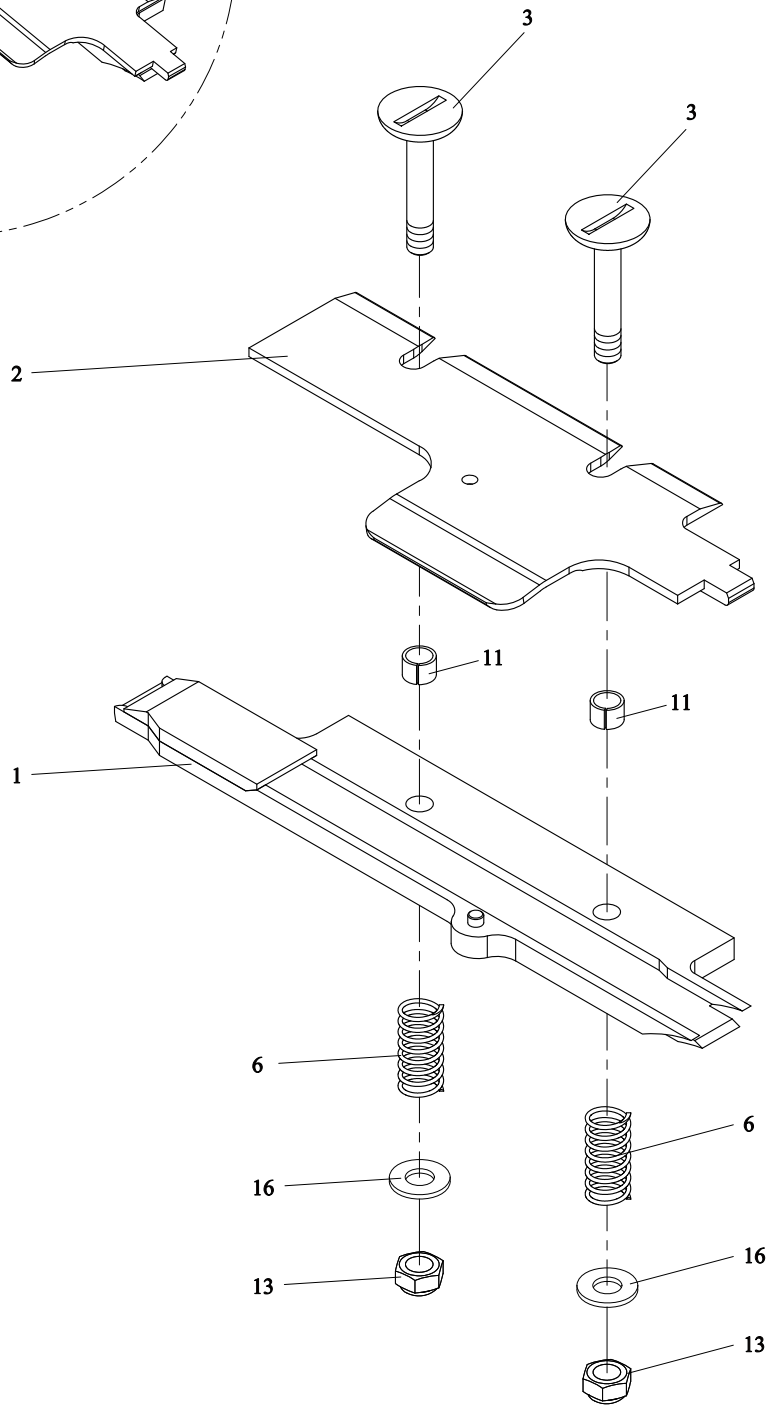
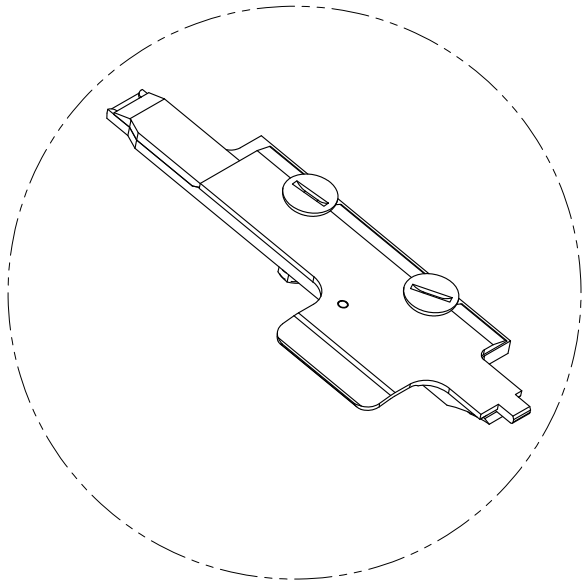
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-1-300000	Feed Group (For 5-6mm)	1	
	M7-1-300010	Feed Group (For 9mm)	1	
3	M7-1-301300	Bearing Housing	1	
4	M7-1-301400	Guide Wheel (For 5-6mm)	1	
	M7-1-301410	Guide Wheel (For 9mm)	1	
5	M7-1-301500	Spacer (For 5-6mm)	1	
	M7-1-301510	Spacer (For 9mm)	1	
8	M7-1-300100	Feeding Motor (M2) Set	1	
11	M7-1-310000	Upper Guide Ass'y (For 5-6mm)	1	SEE PAGE C25
	M7-1-310000S	Upper Guide Ass'y (Stainless Steel Model)(For 5-6mm)(Option)	1	
	M7-1-310010	Upper Guide Ass'y (For 9mm)	1	
	M7-1-310010S	Upper Guide Ass'y (Stainless Steel Model)(For 9mm)(Option)	1	
12	M7-1-320000	Assistant Roller Ass'y (For 5-6mm)	1	SEE PAGE C27
	M7-1-320010	Assistant Roller Ass'y (For 9mm)	1	
13	M7-1-330000	Feeding Arm Ass'y	1	SEE PAGE C29
14	M7-1-340000	Retracting Arm Ass'y	1	SEE PAGE C31
18	BR6002ZZ	Bearing, 6002ZZ	1	
22	KYA040415	Key, 4×4×15	1	
25	HBS0416N	HBS, M4×16 (N)	2	
26	HBS0512N	HBS, M5×12 (N)	2	
27	HBS0516N	HBS, M5×16 (N)	6	
28	HBS0612N	HBS, M6×12 (N)	3	
31	TMS0510	TMS, M5×10	1	
34	SW04	SW, M4	2	
35	SW05	SW, M5	8	
36	SW06	SW, M6	3	
38	PW04	PW, M4	2	
39	PW05	PW, M5	2	
40	PW06A	PW, M6 (A)	1	
41	PW06C	PW, M6 (C)	2	

1-3-1

UPPER GUIDE ASS'Y

M7-1-310000

M7-1-310010



1-3-1**UPPER GUIDE ASS'Y****M7-1-310000****M7-1-310010**

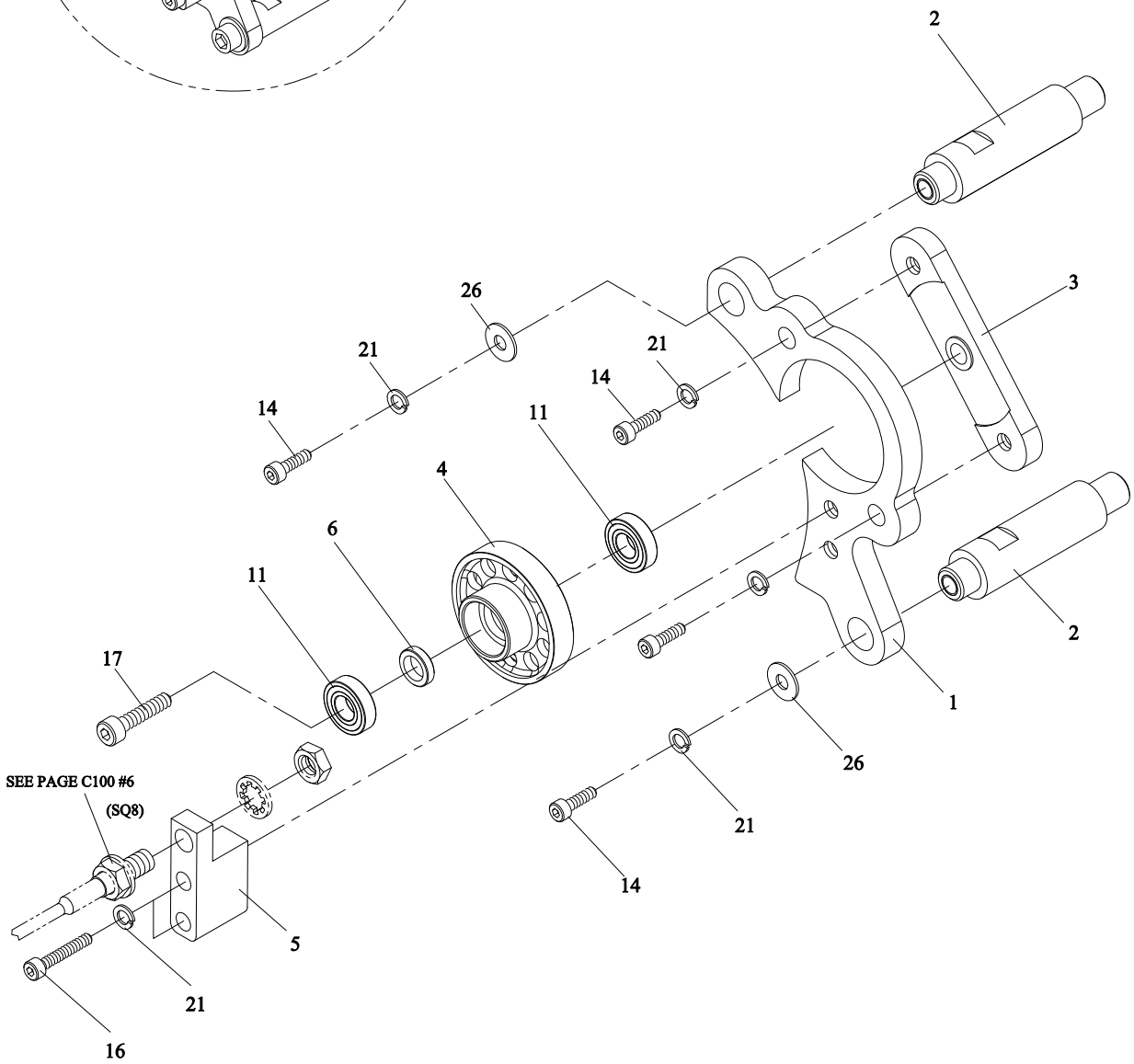
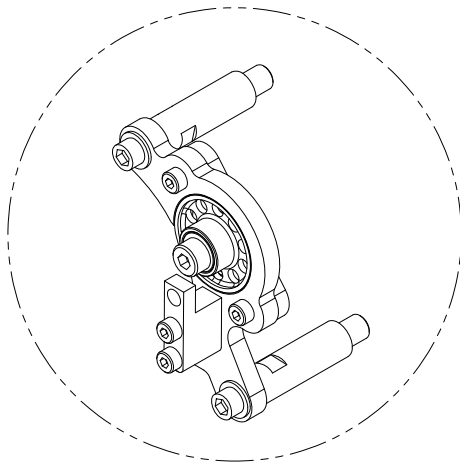
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-1-310000	Upper Guide Ass'y (For 5-6mm)	1	
	M7-1-31000S	Upper Guide Ass'y (Stainless Steel Model)(For 5-6mm)(Option)	1	
	M7-1-310010	Upper Guide Ass'y (For 9mm)	1	
	M7-1-31001S	Upper Guide Ass'y (Stainless Steel Model)(For 9mm)(Option)	1	
1	M7-1-311100	Upper Guide (For 5-6 mm)	1	
	M7-1-31110S	Upper Guide (Stainless Steel Model)(For 5-6 mm)(Option)	1	
	M7-1-311110	Upper Guide (For 9 mm)	1	
	M7-1-31111S	Upper Guide (Stainless Steel Model)(For 9 mm)(Option)	1	
2	M7-1-311200	Cover (For 5-6mm)	1	
	M7-1-31120S	Cover (Stainless Steel Model)(For 5-6mm)(Option)	1	
	M7-1-311210	Cover (For 9mm)	1	
	M7-1-31121S	Cover (Stainless Steel Model)(For 9mm)(Option)	1	
3	M7-1-311300	Bolt	2	
	M7-1-31130S	Bolt (Stainless Steel Model) (Option)	2	
6	H44-10940	Spring	2	
11	MB0505	Metal Bush, 0505	2	
13	NTE05	NTE, M5	2	
16	PW05	PW, M5	2	

1-3-2

ASSISTANT ROLLER ASS'Y

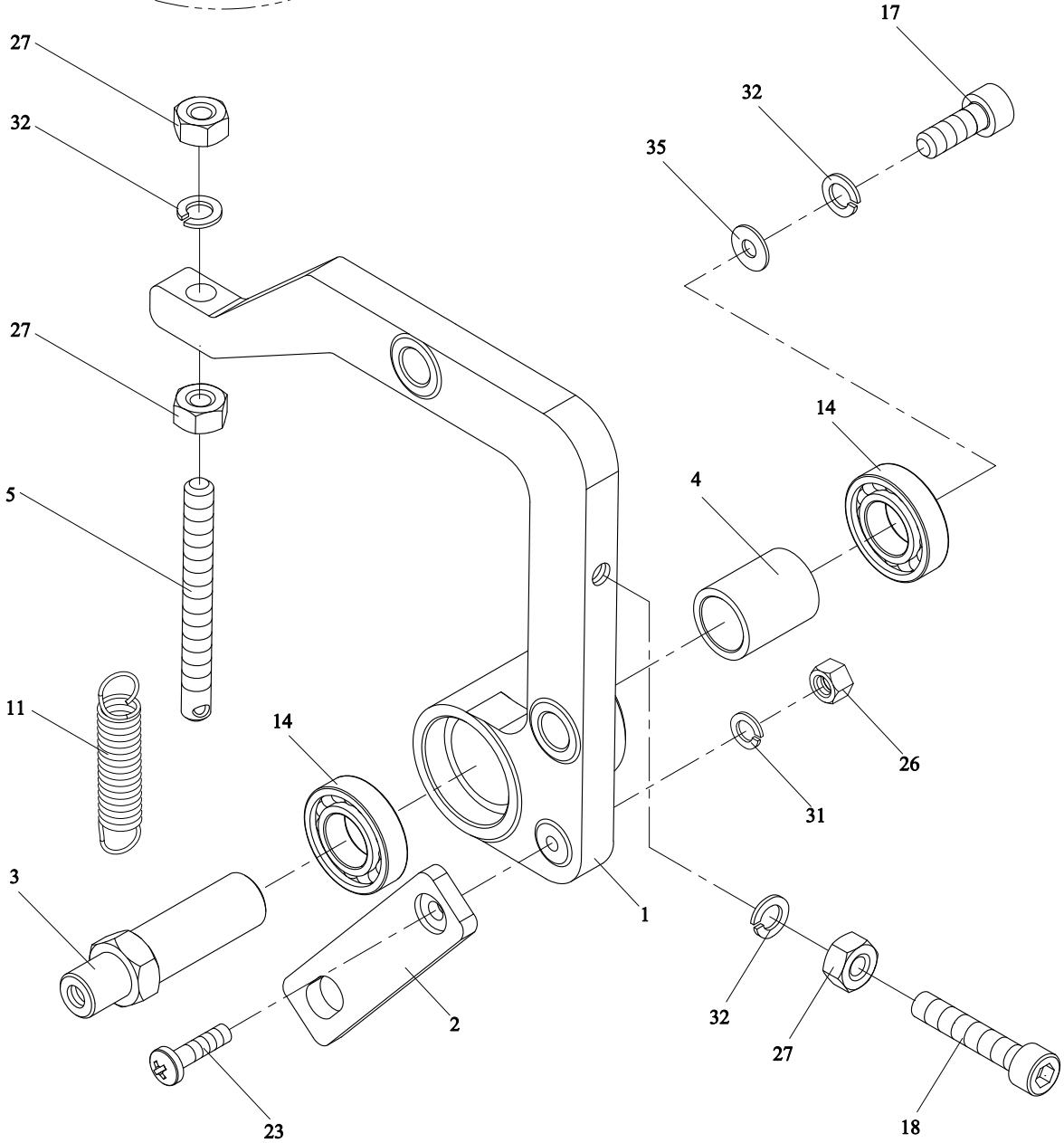
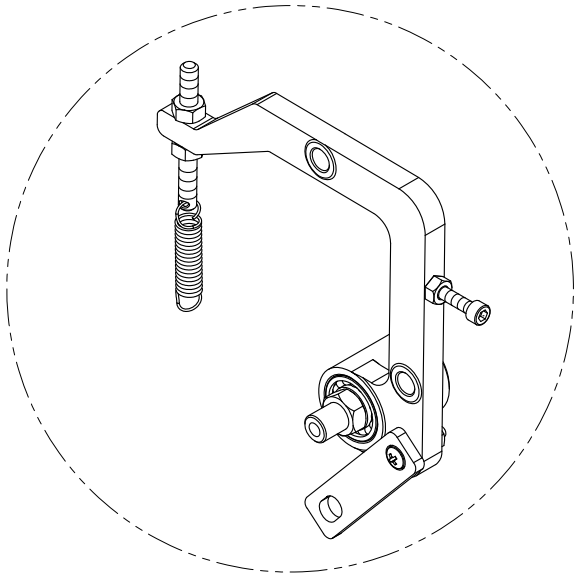
M7-1-320000

M7-1-320010



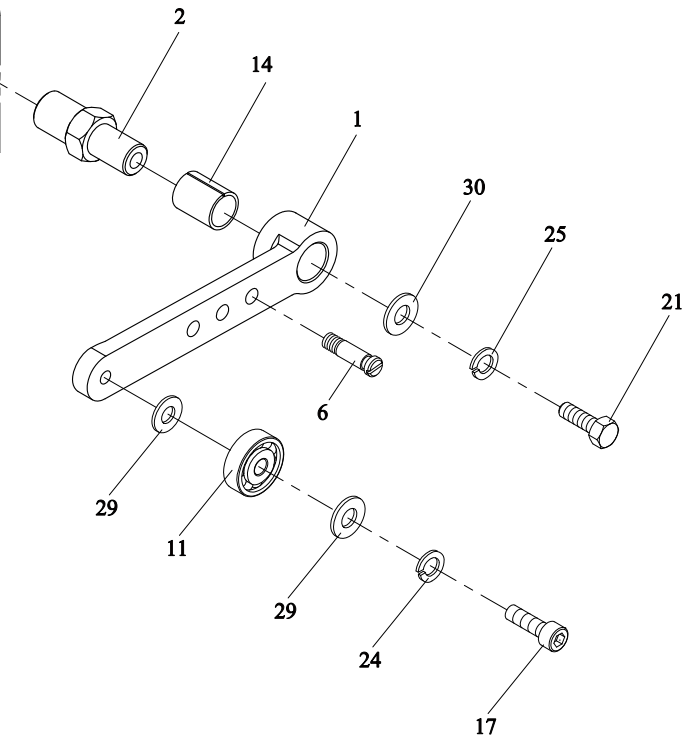
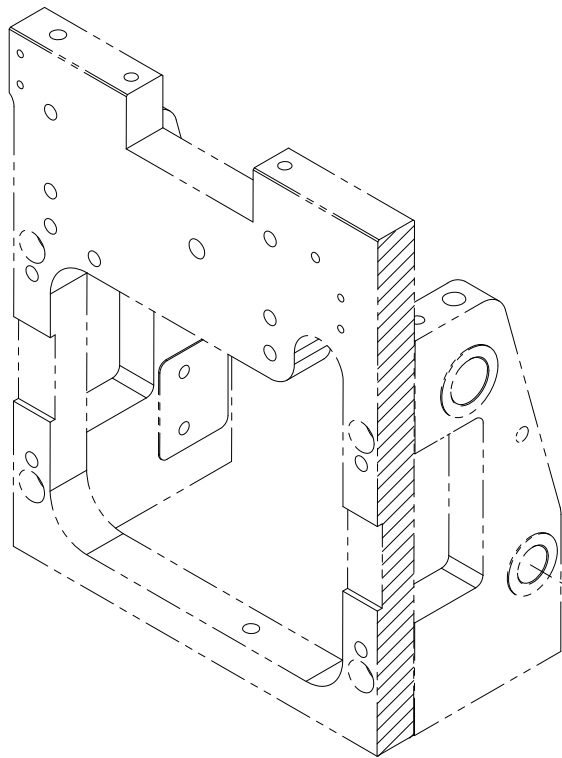
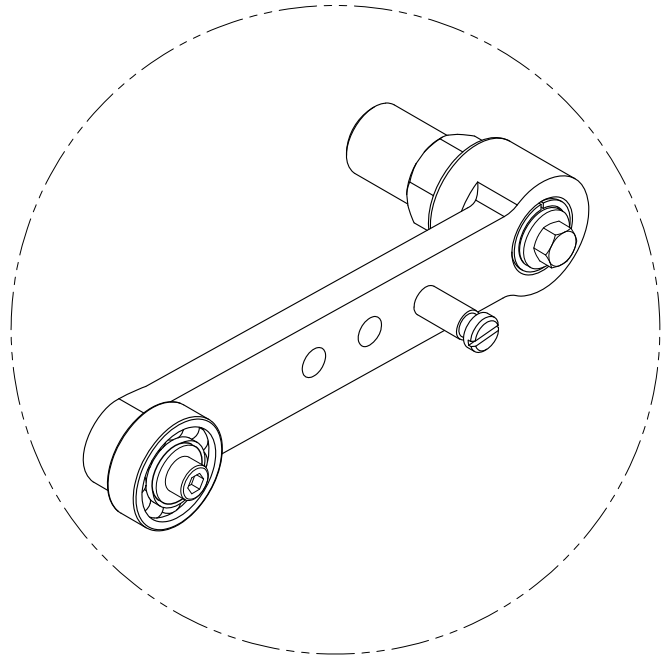
1-3-2**ASSISTANT ROLLER ASS'Y****M7-1-320000****M7-1-320010**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-320000	Assistant Roller Ass'y (For 5-6mm)	1	
	M7-1-320010	Assistant Roller Ass'y (For 9mm)	1	
	M7-1-321100	Assistant Roller Bracket (For 5-6mm)	1	
	M7-1-321100S	Assistant Roller Bracket (Stainless Steel Model)(For 5-6mm)(Option)	1	
	M7-1-321110	Assistant Roller Bracket (For 9mm)	1	
	M7-1-321110S	Assistant Roller Bracket (Stainless Steel Model)(For 9mm)(Option)	1	
2	M7-1-321200	Shaft	2	
3	M7-1-321300	Assistant Roller Base	1	
4	M7-1-321400	Assistant Roller (For 5-6mm)	1	
	M7-1-321410	Assistant Roller (For 9mm)	1	
5	M7-1-321500	SQ8 Sensor Base	1	
6	M7-1-321600	Spacer	1	
11	BR686ZZ	Bearing, 686ZZ	2	
14	HBS0516N	HBS, M5×16 (N)	4	
16	HBS0525N	HBS, M5×25 (N)	2	
17	HBS0620N	HBS, M6×20 (N)	1	
21	SW05	SW, M5	6	
26	PW05	PW, M5	2	



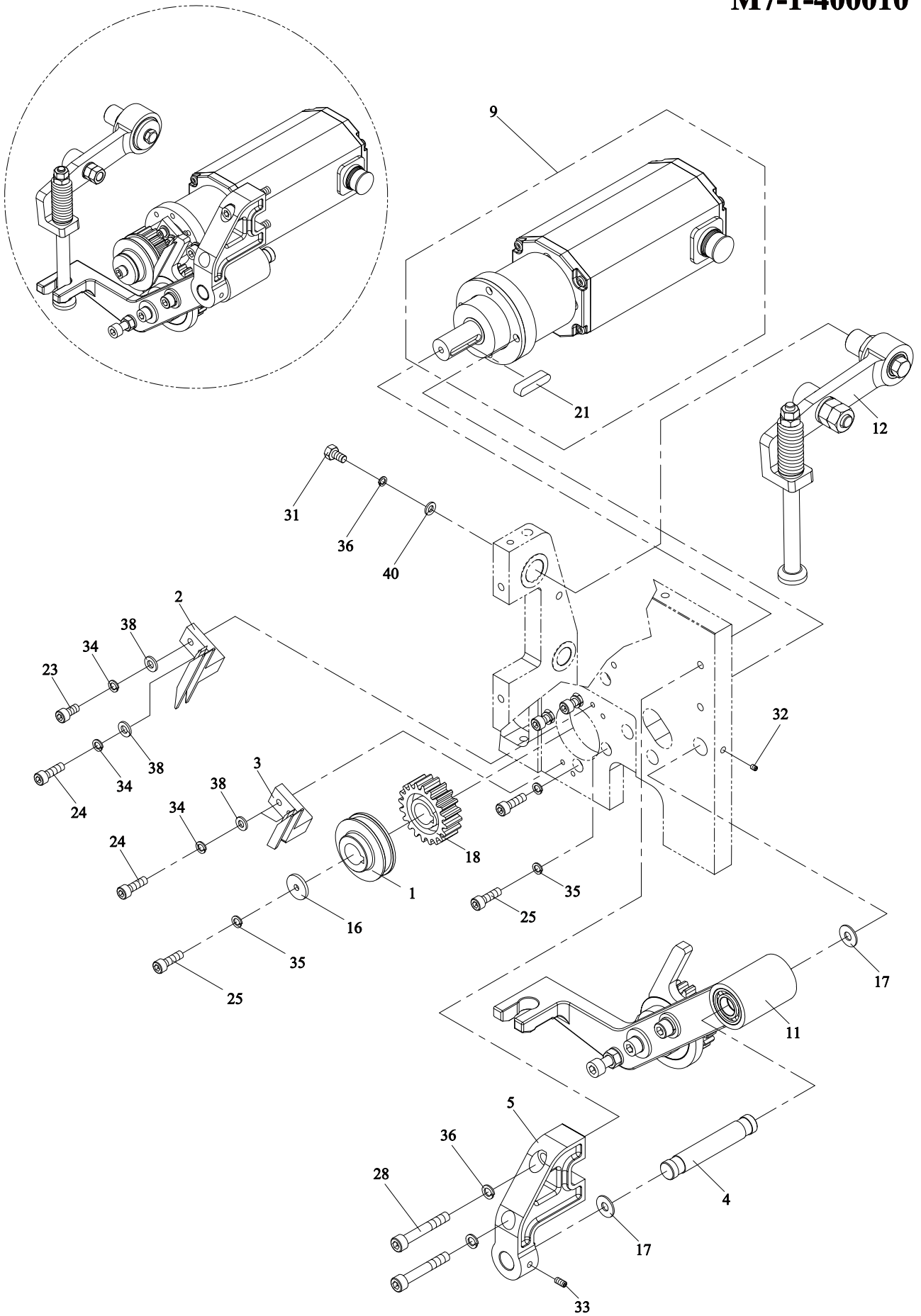
1-3-3**FEEDING ARM ASS'Y****M7-1-330000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-331100	Feeding Arm	1	
2	M7-1-331200	Linkage	1	
3	M7-1-331300	Shaft	1	
4	M7-1-331400	Collar	1	
5	M7-1-331500	Spring Hook	1	
11	T7-1-64130	Return Spring	1	
14	BR6901ZZ	Bearing, 6901ZZ	2	
17	HBS0616N	HBS, M6×16 (N)	1	
18	HBS0640N	HBS, M6×40 (N)	1	
23	PMS0420	PMS, M4×20	1	
26	HN04	HN, M4	1	
27	HN06	HN, M6	3	
31	SW04	SW, M4	1	
32	SW06	SW, M6	3	
35	PW06C	PW, M6 (C)	1	



1-3-4**RETRACTING ARM ASS'Y****M7-1-340000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-341100	Retracting Arm	1	
2	M7-1-341200	Shaft	1	
6	TA-073	Spring Hook	1	
11	BR635ZZ	Bearing, 635ZZ	1	
14	MB1015	Metal Bush, 1015	1	
17	HBS0520N	HBS, M5×20 (N)	1	
21	HB0612	HB, M6×12	1	
24	SW05	SW, M5	1	
25	SW06	SW, M6	1	
29	PW05	PW, M5	2	
30	PW06B	PW, M6 (B)	1	



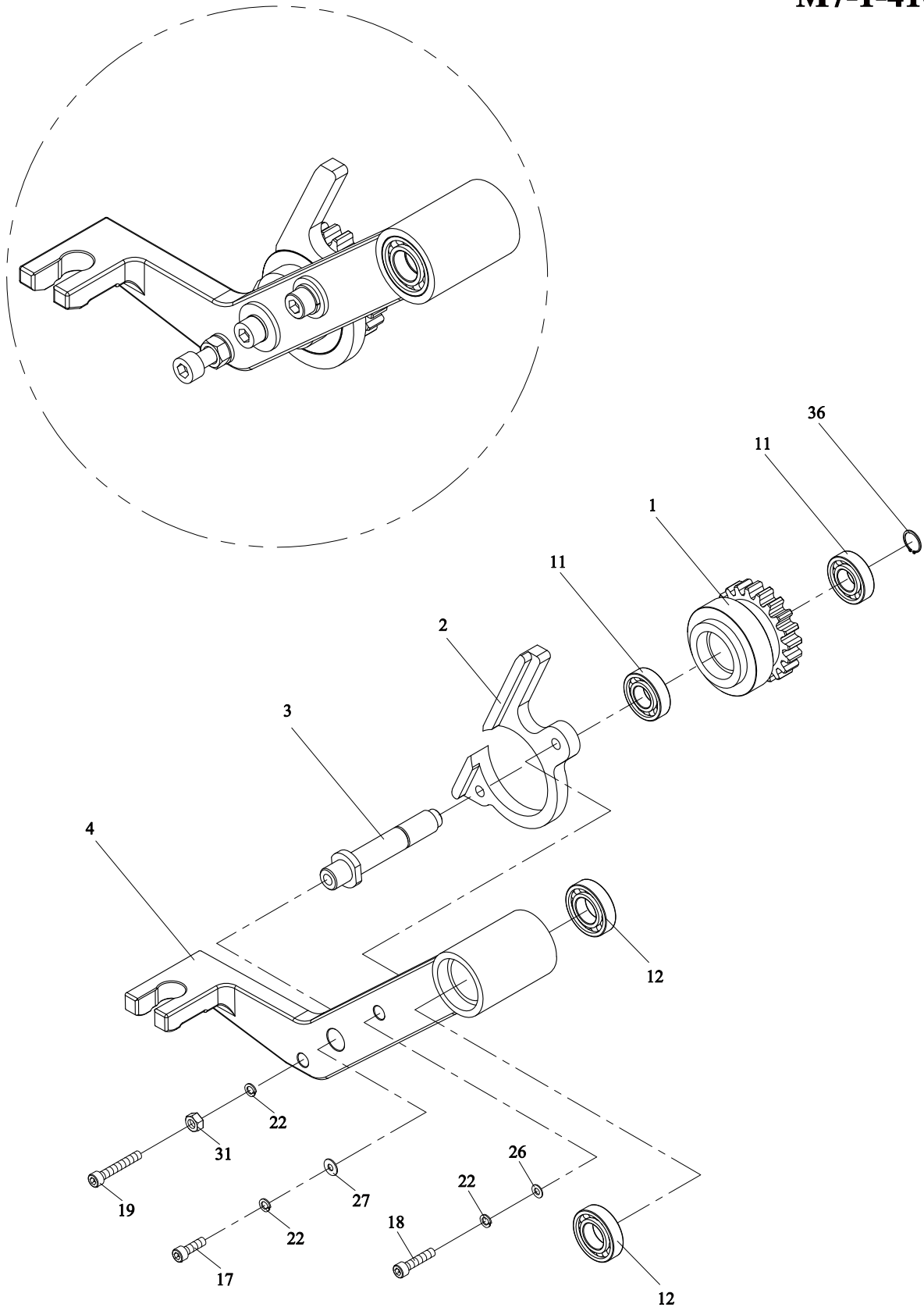
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-400000	Tension Group (For 5-6mm)	1	
	M7-1-400010	Tension Group (For 9mm)	1	
	M7-1-401100	Tension Guide Wheel (For 5-6mm)	1	
	M7-1-401100S	Tension Guide Wheel (Stainless Steel Model) (For 5-6mm)(Option)	1	
	M7-1-401110	Tension Guide Wheel (For 9mm)	1	
	M7-1-401110S	Tension Guide Wheel (Stainless Steel Model) (For 9mm)(Option)	1	
2	M7-1-401200	Guide (For 5-6mm)	1	
	M7-1-401200S	Guide (Stainless Steel Model) (For 5-6mm) (Option)	1	
	M7-1-401210	Guide (For 9mm)	1	
	M7-1-401210S	Guide (Stainless Steel Model) (For 9mm) (Option)	1	
3	M7-1-401300	Tension Guide (For 5-6mm)	1	
	M7-1-401300S	Tension Guide (Stainless Steel Model) (For 5-6mm)(Option)	1	
	M7-1-401310	Tension Guide (For 9mm)	1	
	M7-1-401310S	Tension Guide (Stainless Steel Model) (For 9mm)(Option)	1	
4	M7-1-401400	Shaft	1	
5	M7-1-401500	Bracket	1	
9	M7-1-301100	M3 Motor	1	
11	M7-1-410000	Tension Crank Ass'y (For 5-6mm)	1	
	M7-1-410010	Tension Crank Ass'y (For 9mm)	1	
12	M7-1-420000	Tension Arm Ass'y	1	SEE PAGE C37
16	TB-223	Washer	1	
17	H42-1227	Washer	2	
18	T7-1-21110	Gear	1	
21	KYA050527	Key, 5×5×27	1	
23	HBS0412N	HBS, M4×12 (N)	1	
24	HBS0416N	HBS, M4×16 (N)	3	
25	HBS0516N	HBS, M5×16 (N)	5	
28	HBS0640HN	HBS, M6×40 (H)(N)	2	
31	HB0612	HB, M6×12	1	
32	HSS0506GN	HSS, M5×6 (G)(N)	1	
33	HSS0612GN	HSS, M6×12 (G)(N)	1	
34	SW04	SW, M4	4	
35	SW05	SW, M5	5	
36	SW06	SW, M6	3	
38	PW04	PW, M4	4	
40	PW06C	PW, M6 (C)	1	

1-4-1

TENSION CRANK ASS'Y

M7-1-410000

M7-1-410010



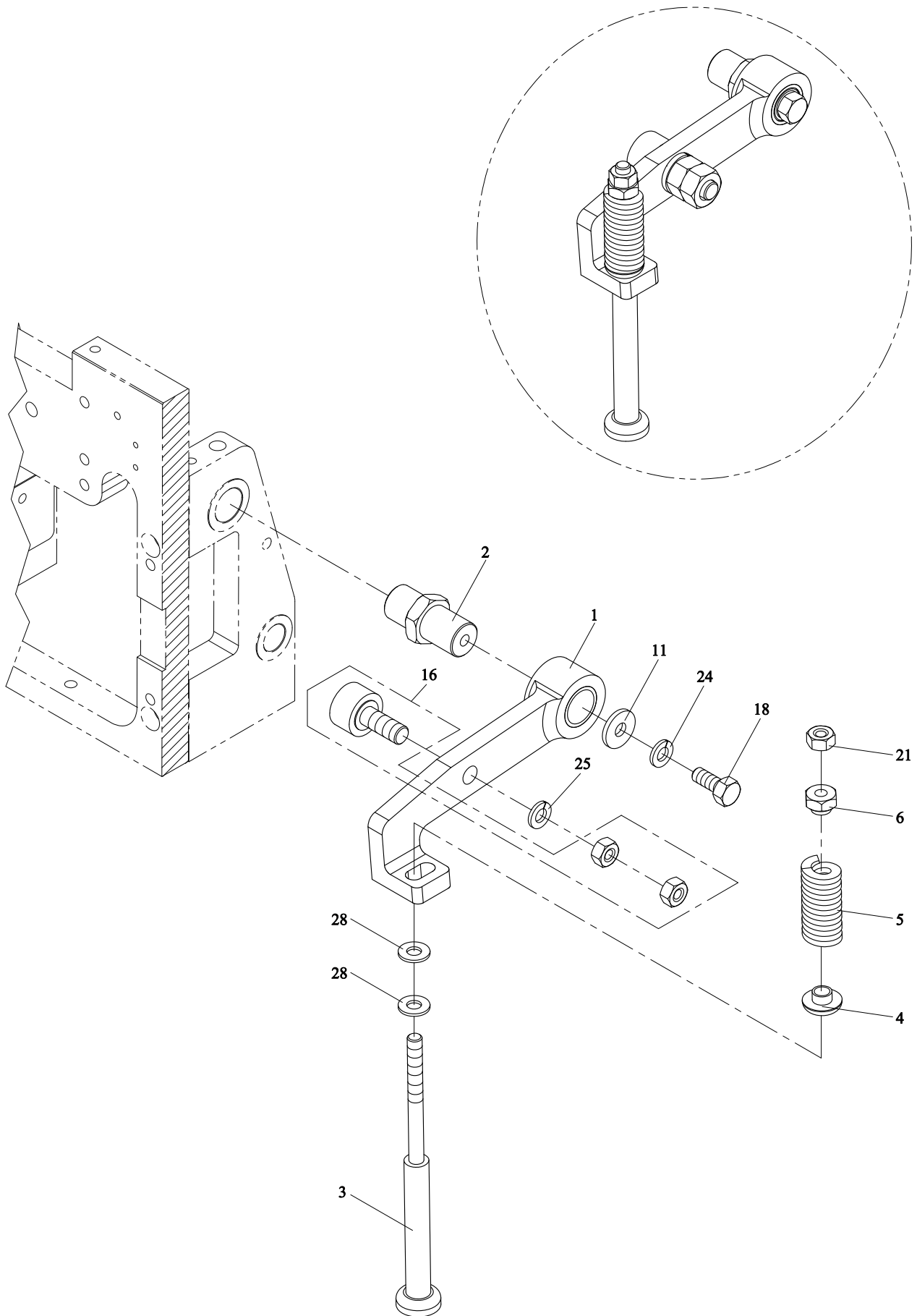
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TENSION CRANK ASS'Y

M7-1-410000

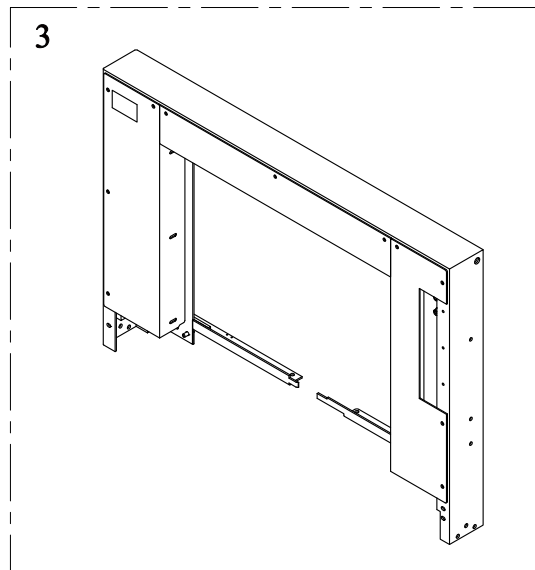
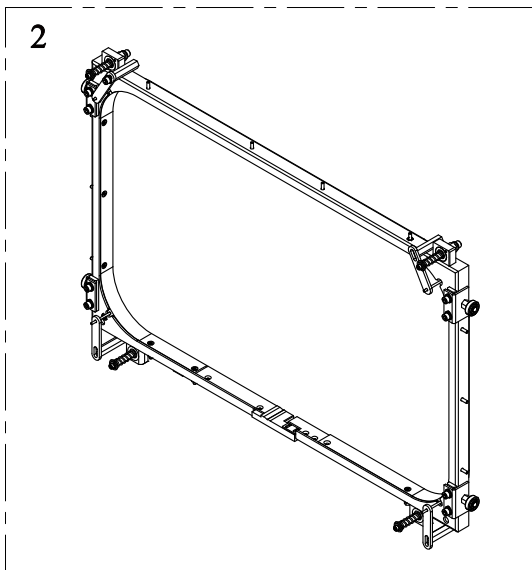
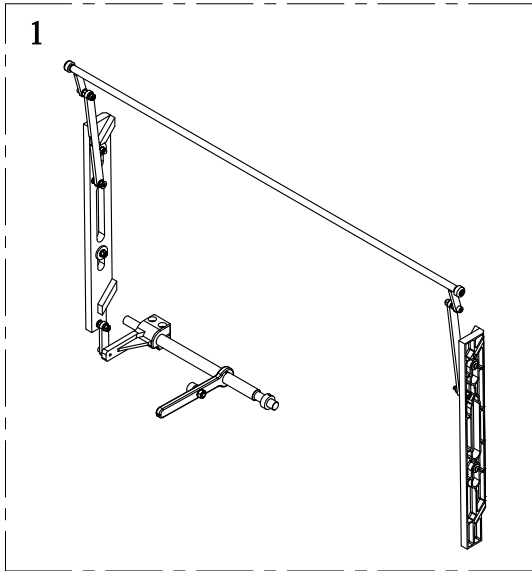
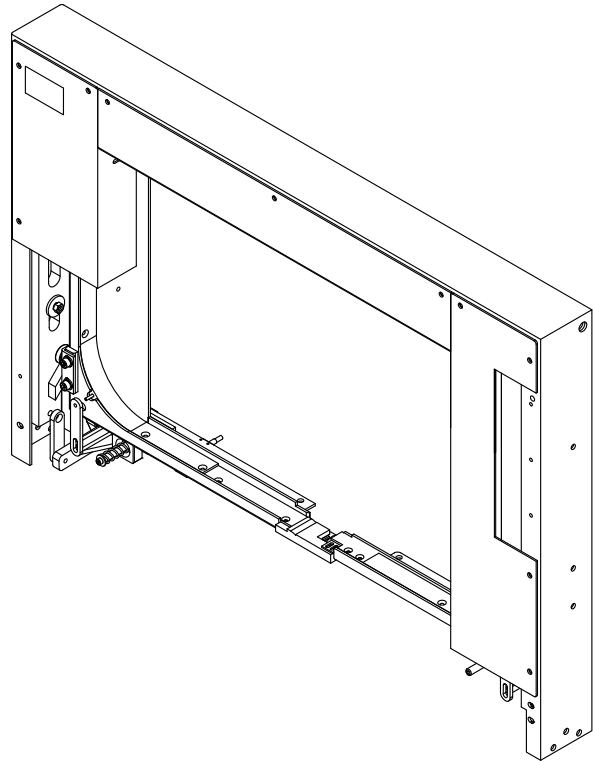
M7-1-410010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-410000	Tension Crank Ass'y (For 5-6mm)	1	
	M7-1-410010	Tension Crank Ass'y (For 9mm)	1	
	M7-1-411100	Assistant Roller (For 5-6mm)	1	
	M7-1-411100S	Assistant Roller (Stainless Steel Model) (For 5-6mm)(Option)	1	
	M7-1-411110	Assistant Roller (For 9mm)	1	
	M7-1-411110S	Assistant Roller (Stainless Steel Model) (For 9mm)(Option)	1	
2	M7-1-411200	Assistant Roller Housing (For 5-6mm)	1	
	M7-1-411200S	Assistant Roller Housing (Stainless Steel Model) (For 5-6mm)(Option)	1	
	M7-1-411210	Assistant Roller Housing (For 9mm)	1	
	M7-1-411210S	Assistant Roller Housing(Stainless Steel Model) (For 9mm)(Option)	1	
3	M7-1-411300	Shaft	1	
4	M7-1-411400	Tension Crank	1	
11	BR6900ZZ	Bearing, 6900ZZ	2	
12	BR6901ZZ	Bearing, 6901ZZ	2	
17	HBS0616N	HBS, M6×16 (N)	1	
18	HBS0630N	HBS, M6×30 (N)	1	
19	HBS0640N	HBS, M6×40 (N)	1	
22	SW06	SW, M6	3	
26	PW06A	PW, M6 (A)	1	
27	PW06C	PW, M6 (C)	1	
31	HN06	HN, M6	1	
36	SR08	Stop Ring, S-8	1	

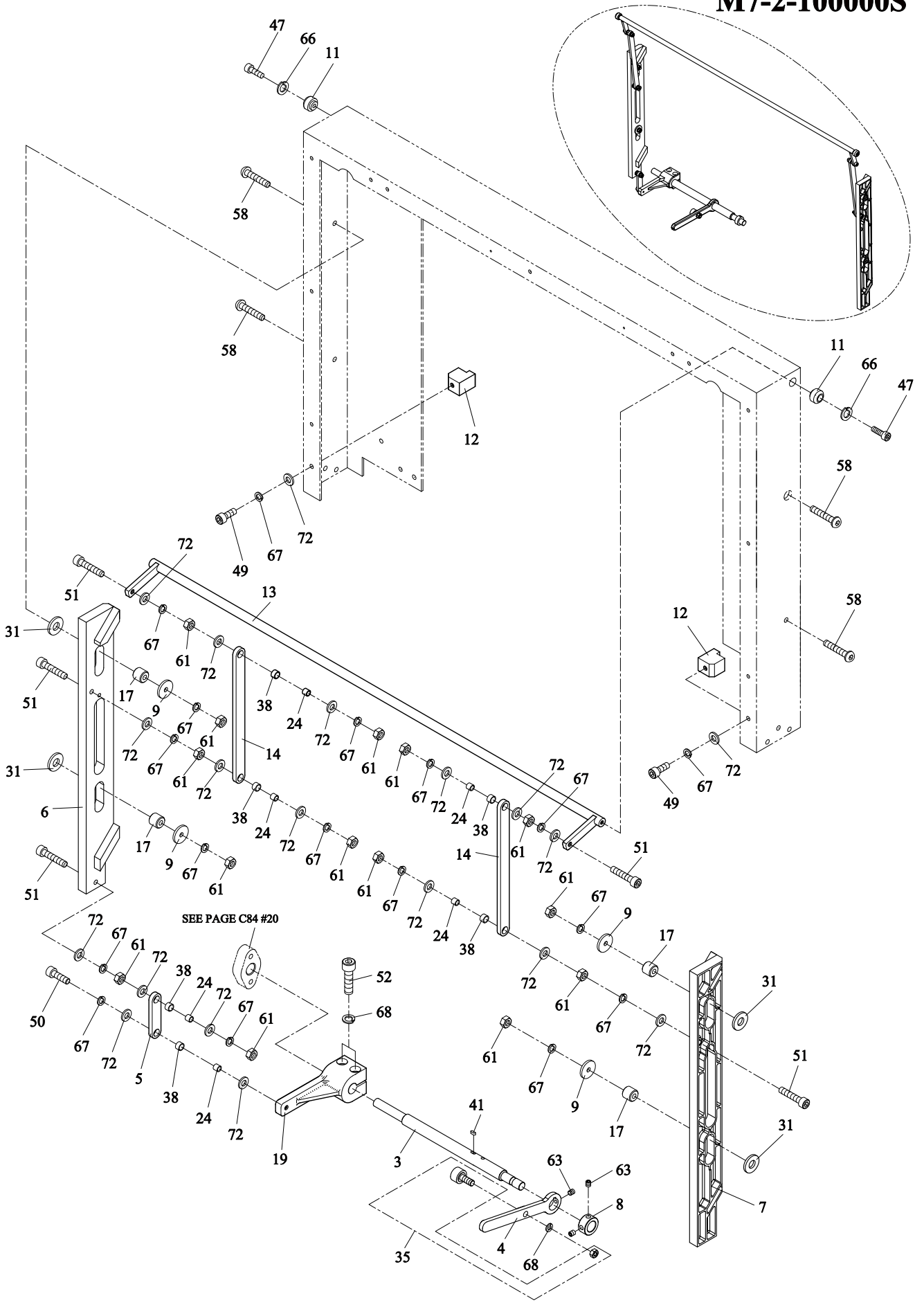


1-4-2**TENSION ARM ASS'Y****M7-1-420000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-1-421100	Tension Arm	1	
2	M7-1-421200	Shaft	1	
3	M7-1-421300	Connecting Rod	1	
4	M7-1-421400	Spring Support	1	
5	M7-1-421500	Spring	1	
6	M7-1-421600	Nut	1	
11	TB-223	Washer	1	
16	BRCF8	Bearing, CF8	1	
18	HB0612	HB, M6×12	1	
21	HN06	HN, M6	1	
24	SW06	SW, M6	1	
25	SW08	SW, M8	1	
28	PW06A	PW, M6 (A)	2	



REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-2-900000	Bandway Unit (For 5-6mm)	1	
	M7-2-900000S	Bandway Unit (Stainless Steel Model)(For 5-6mm)	1	
	M7-2-900010	Bandway Unit (For 9mm)	1	
	M7-2-900010S	Bandway Unit (Stainless Steel Model)(For 9mm)	1	
1	M7-2-100000	Arch Group	1	SEE PAGE C41
	M7-2-100000S	Arch Group (Stainless Steel Model)	1	
2	M7-2-200000	Bandway Group (For 5-6mm)	1	SEE PAGE C45
	M7-2-200000S	Bandway Group (Stainless Steel Model)(For 5-6mm)	1	
	M7-2-200010	Bandway Group (For 9mm)	1	
	M7-2-200010S	Bandway Group (Stainless Steel Model)(For 9mm)	1	
3	M7-2-300000	Arch Cover Group	1	SEE PAGE C49
	M7-2-300000S	Arch Cover Group (Stainless Steel Model)	1	



2-1**ARCH GROUP****M7-2-100000
M7-2-100000S**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-2-100000	Arch Group	1	
	M7-2-100000S	Arch Group (Stainless Steel Model)	1	
3	M7-2-101300	Rod	1	
4	M7-2-101400	Lever	1	
5	M7-2-101500	Plate	1	
6	M7-2-101600	Left Bar	1	
7	M7-2-101700	Right Bar	1	
8	M7-1-101600	Collar	1	
9	TB-223	Washer	4	
11	T7-2-10110	Bush	2	
12	T7-2-10120	Guide	2	
13	T7-2-10220	Connecting Rod	1	
14	T7-2-10230	Connector	2	
17	T7-2-10260	Spacer	4	
19	T7-2-10290	Arm	1	
24	T7-3-10530	Tube	6	
31	WT163015	Thrust Washer	4	
35	BRCF8	Bearing, CF8	1	
38	MB0806	Metal Bush, 0806	6	
41	KYA050510	Key, 5×5×10	1	
47	HBS0516N	HBS, M5×16 (N)	2	
	HBS0516S	HBS, M5×16 (Stainless Steel Model)	2	
49	HBS0616N	HBS, M6×16 (N)	2	
50	HBS0620N	HBS, M6×20 (N)	1	
51	HBS0630N	HBS, M6×30 (N)	5	
52	HBS0830N	HBS, M8×30 (N)	2	
58	THS0630N	THS, M6×30 (N)	4	
	THS0630S	THS, M6×30 (Stainless Steel Model)	4	
61	HN06	HN, M6	14	
63	HSS0606GN	HSS, M6×6 (G)(N)	3	

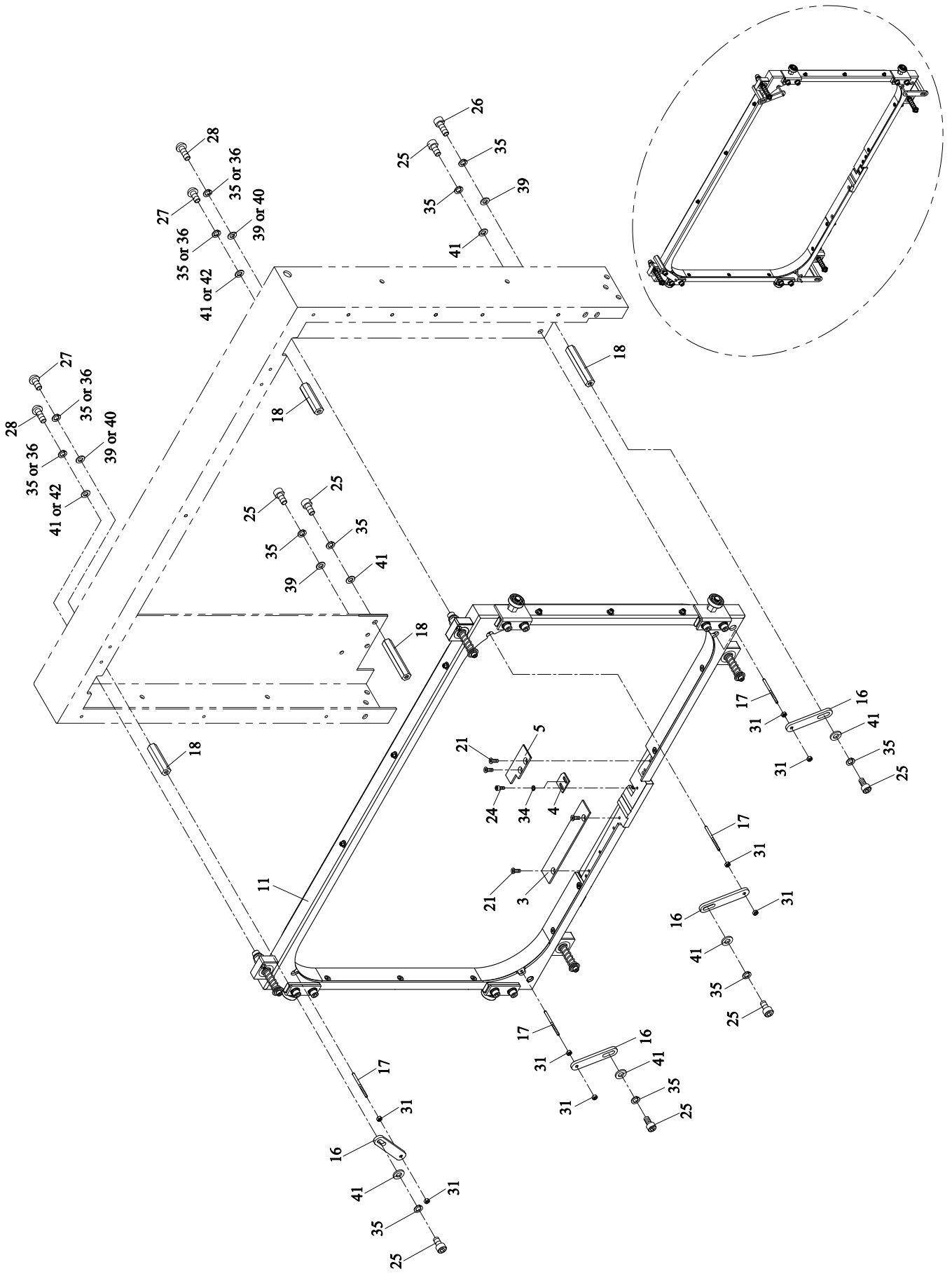
2-1

ARCH GROUP

**M7-2-100000
M7-2-100000S**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
66	SW05	SW, M5	2	
	SW05S	SW, M5 (Stainless Steel Model)	2	
67	SW06	SW, M6	17	
68	SW08	SW, M8	3	
72	PW06A	PW, M6 (A)	19	





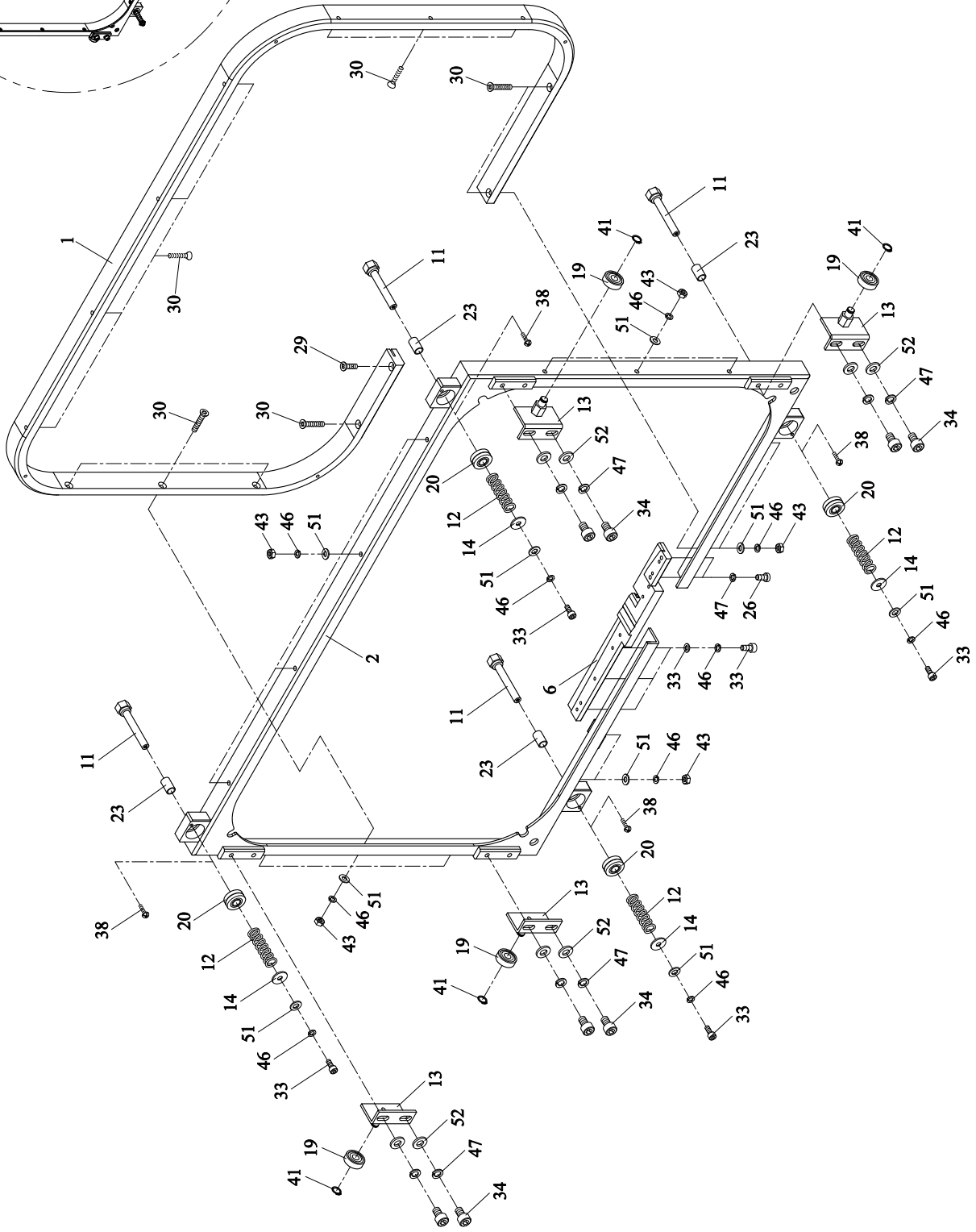
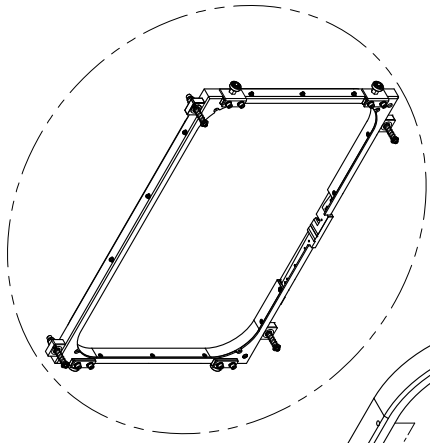
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-2-200000	Bandway Group (For 5-6mm)	1	
	M7-2-200000S	Bandway Group (Stainless Steel Model)(For 5-6mm)	1	
	M7-2-200010	Bandway Group (For 9mm)	1	
	M7-2-200010S	Bandway Group (Stainless Steel Model)(For 9mm)	1	
3	M7-2-201300	Cover (L)	1	
	M7-2-201300S	Cover (L) (Stainless Steel Model)(Option)	1	
4	M7-2-201400	Adjusting Plate	1	
	M7-2-201400S	Adjusting Plate (Stainless Steel Model)(Option)	1	
5	M7-2-201500	Cover (R)	1	
	M7-2-201500S	Cover (R) (Stainless Steel Model)(Option)	1	
11	M7-2-210000	Strap Track Frame Ass'y (For 5-6mm)	1	SEE PAGE C47
	M7-2-210000S	Strap Track Frame Ass'y (Stainless Steel Model)(For 5-6mm)	1	
	M7-2-210010	Strap Track Frame Ass'y (For 9mm)	1	
	M7-2-210010S	Strap Track Frame Ass'y (Stainless Steel Model)(For 9mm)	1	
16	T7-2-10190	Plate	4	
17	T7-2-10210	Pin	4	
	T7-2-10210S	Pin (Stainless Steel Model) (Option)	4	
18	T7-2-20130	Tube	4	
21	FMS0408	FMS, M4×8	4	
	FMS0408S	FMS, M4×8 (Stainless Steel Model)	4	
24	HBS0408N	HBS, M4×8 (N)	2	
	HBS0408S	HBS, M4×8 (Stainless Steel Model)	2	
25	HBS0616N	HBS, M6×16 (N)	7	
26	HBS0625N	HBS, M6×25 (N)	1	
27	THS0612N	THS, M6x12 (N)	2	
	THS0612S	THS, M6x12 (Stainless Steel Model)	2	
28	THS0616N	THS, M6x16 (N)	2	
	THS0616S	THS, M6x16 (Stainless Steel Model)	2	
31	NTE03	NTE, M3	8	
34	SW04	SW, M4	2	
	SW04S	SW, M4 (Stainless Steel Model)	2	
35	SW06	SW, M6	12	
36	SW06S	SW, M6 (Stainless Steel Model)	4	
39	PW06A	PW, M6 (A)	4	
40	PW06AS	PW, M6 (A) (Stainless Steel Model)	2	
41	PW06C	PW, M6 (C)	8	
42	PW06CS	PW, M6 (C) (Stainless Steel Model)	2	

2-2-1

STRAP TRACK FRAME ASS'Y

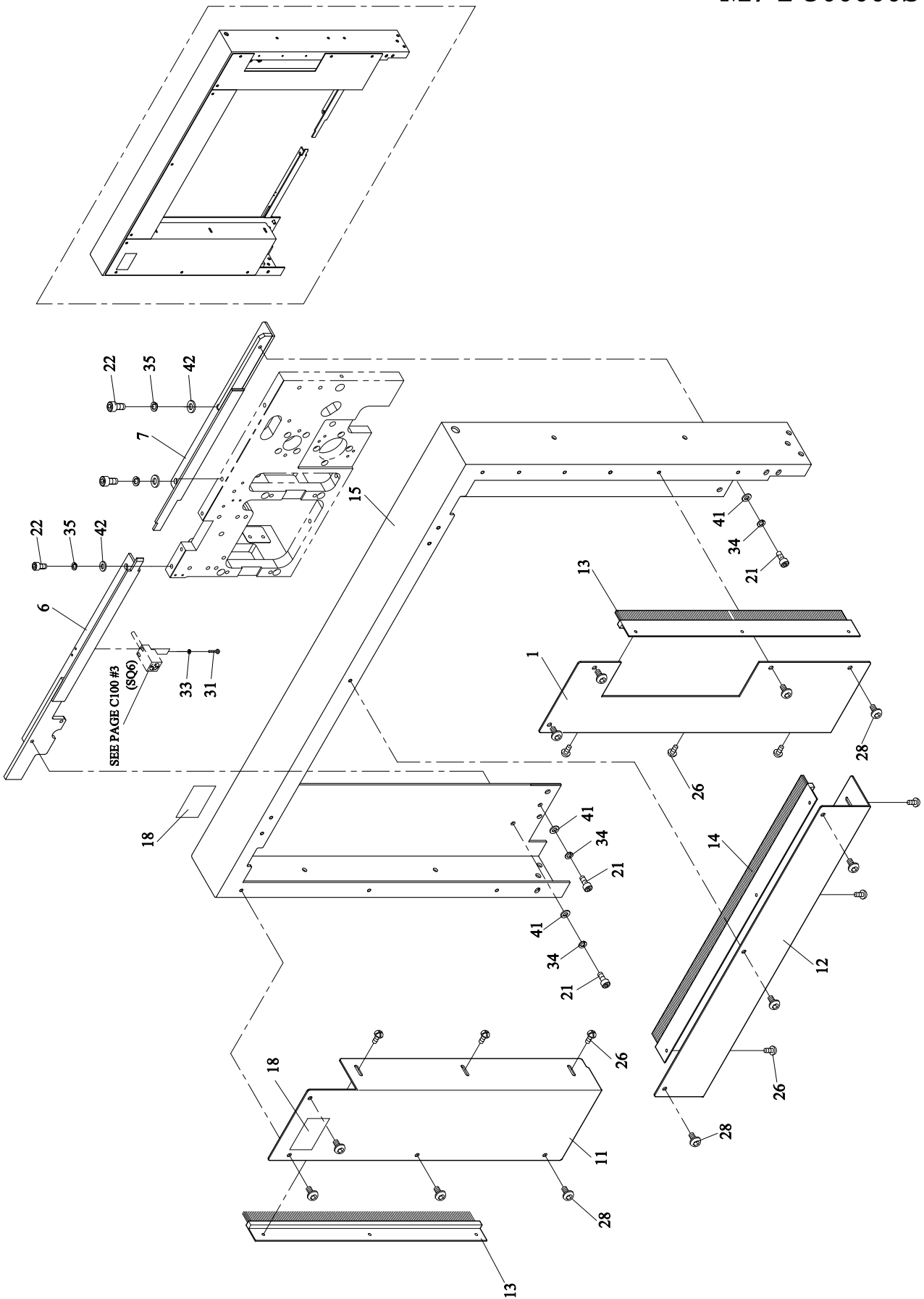
M7-2-210000

M7-2-210010

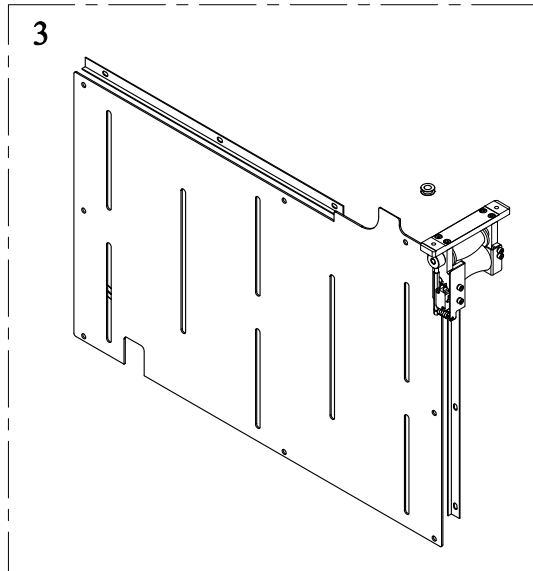
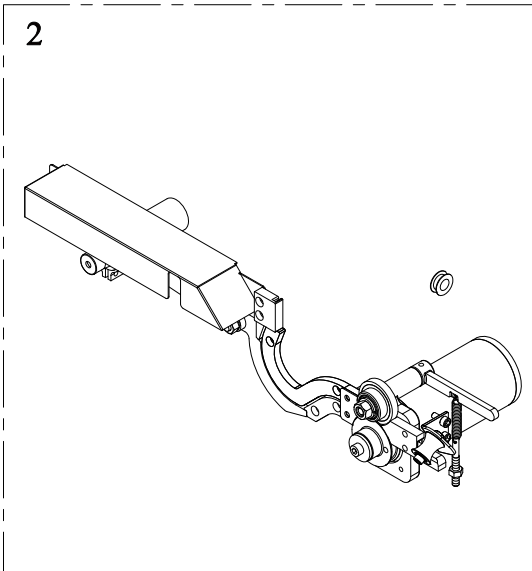
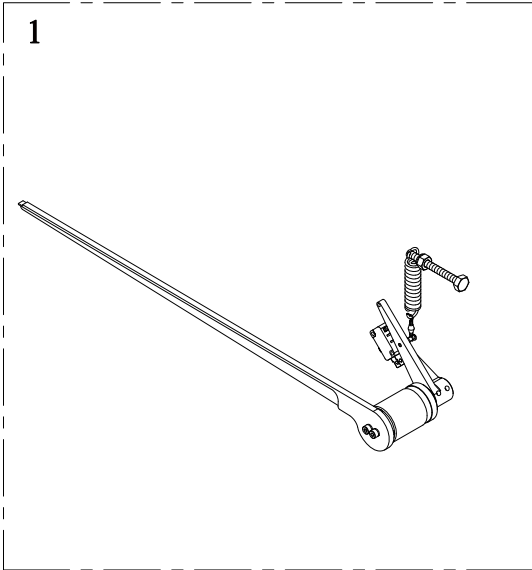
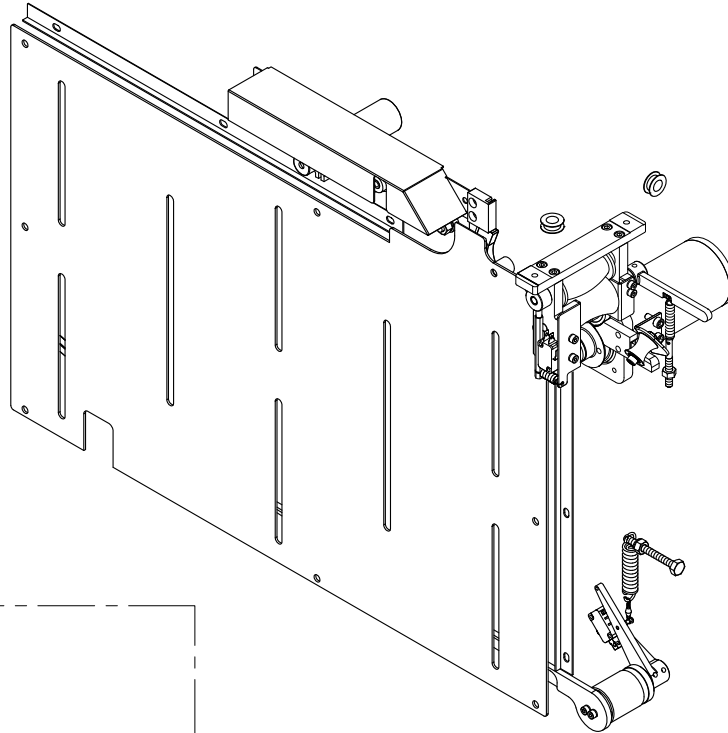


2-2-1**STRAP TRACK FRAME ASS'Y****M7-2-210000****M7-2-210010**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-2-210000	Strap Track Frame Ass'y (For 5-6mm)	1	
	M7-2-210000S	Strap Track Frame Ass'y (Stainless Steel Model)(For 5-6mm)	1	
	M7-2-210010	Strap Track Frame Ass'y (For 9mm)	1	
	M7-2-210010S	Strap Track Frame Ass'y (Stainless Steel Model)(For 9mm)	1	
1	M7-2-201100	Strap Track (For 5-6mm)	1	
	M7-2-201110	Strap Track (For 9mm)	1	
2	M7-2-201200	Strap Track Frame	1	
	M7-2-201200S	Strap Track Frame (Stainless Steel Model)	1	
6	M7-2-201600	Track Frame Connector (For 5-6mm)	1	
	M7-2-201600S	Track Frame Connector (For 5-6mm) (Stainless Steel Model)	1	
	M7-2-201610	Track Frame Connector (For 9mm)	1	
	M7-2-201610S	Track Frame Connector (For 9mm)(Stainless Steel Model)	1	
11	T7-2-20160	Shaft	4	
	T7-2-20160S	Shaft (Stainless Steel Model)(Option)	4	
12	T7-2-20170	Spring	4	
	T7-2-20170S	Spring (Stainless Steel Model)(Option)	4	
13	T7-2-20180	Bracket	4	
14	T7-2-20380	Washer ($\phi 5 \times \phi 14$)	4	
19	BR608ZZ	Bearing, 608ZZ	4	
20	BRPB8	Bearing, PB8	4	
23	MB0816	Metal Bush, 0816	4	
26	HBL0512	HBL, M5×12	2	
29	FMS0420	FMS, M4×20	1	
30	FMS0425	FMS, M4×25	13	
33	HBS0412N	HBS, M4×12 (N)	7	
34	HBS0612N	HBS, M6×12 (N)	8	
38	TMS0408	TMS, M4×8	4	
41	SR08	Stop Ring, S-8	4	
43	HN04	HN, M4	14	
46	SW04	SW, M4	22	
47	SW05	SW, M5	2	
48	SW06	SW, M6	20	
51	PW04	PW, M4	22	
52	PW06C	PW, M6 (C)	16	



REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-2-300000	Arch Cover Group	1	
	M7-2-300000S	Arch Cover Group (Stainless Steel Model)	1	
	M7-2-301100	Arch Cover RH (For 400H)	1	
	M7-2-301100S	Arch Cover RH (Stainless Steel Model)(For 400H)	1	
6	M7-2-101100	Guide LH	1	
	M7-2-101100S	Guide LH (Stainless Steel Model)	1	
7	M7-2-101200	Guide RH	1	
	M7-2-101200S	Guide RH (Stainless Steel Model)	1	
11	T7-5-11111	Arch Cover LH (For 400H)	1	
	T7-5-11111S	Arch Cover LH (Stainless Steel Model)(For 400H)	1	
12	T7-5-11120	Arch Cover (Upper, For 550W)	1	
	T7-5-11120S	Arch Cover (Stainless Steel Model) (Upper, For 550W)	1	
13	T7-5-11141	Brush (Side, For 400H)	2	
14	T7-5-11150	Brush (Upper, For 550W)	1	
15	T7-5-10614	Arch	1	
	T7-5-10614S	Arch (Stainless Steel Model)	1	
18	LA-40005	Label	2	
21	HBS0512N	HBS, M5×12 (N)	3	
	HBS0512S	HBS, M5×12 (Stainless Steel Model)	3	
22	HBS0612N	HBS, M6×12 (N)	3	
26	TTP0412BN	TTP, M4x12 (B) (N)	9	
	TTP0412BS	TTP, M4x12 (B) (Stainless Steel Model)	9	
28	THS0508N	THS, M5x8 (N)	11	
	THS0508S	THS, M5x8 (Stainless Steel Model)	11	
31	PMS0320	PMS, M3×20 (Option)	2	
33	SW03	SW, M3 (Option)	2	
34	SW05	SW, M5	3	
35	SW06	SW, M6	3	
41	PW05	PW, M5	3	
42	PW06A	PW, M6 (A)	3	



REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-3-900000	Accumulator Unit (For 5-6mm)	1	
	M7-3-900000S	Accumulator Unit (Stainless Steel Model)(For 5-6mm)	1	
	M7-3-900010	Accumulator Unit (For 9mm)	1	
	M7-3-900010S	Accumulator Unit (Stainless Steel Model)(For 9mm)	1	
1	M7-3-100000	Strap Amount Control Group (For 5-6mm)	1	SEE PAGE C53
	M7-3-100010	Strap Amount Control Group (For 9mm)	1	
2	M7-3-200000	Auto Strap Feeding Group (For 5-6mm)	1	SEE PAGE C55
	M7-3-200010	Auto Strap Feeding Group (For 9mm)	1	
3	M7-3-300000	Accumulator Box Group (For 5-6mm)	1	SEE PAGE C65
	M7-3-300000S	Accumulator Box Group (Stainless Steel Model)(For 5-6mm)	1	
	M7-3-300010	Accumulator Box Group (For 9mm)	1	
	M7-3-300010S	Accumulator Box Group (Stainless Steel Model)(For 9mm)	1	

3-1

STRAP AMOUNT CONTROL GROUP

M7-3-100000

M7-3-100010

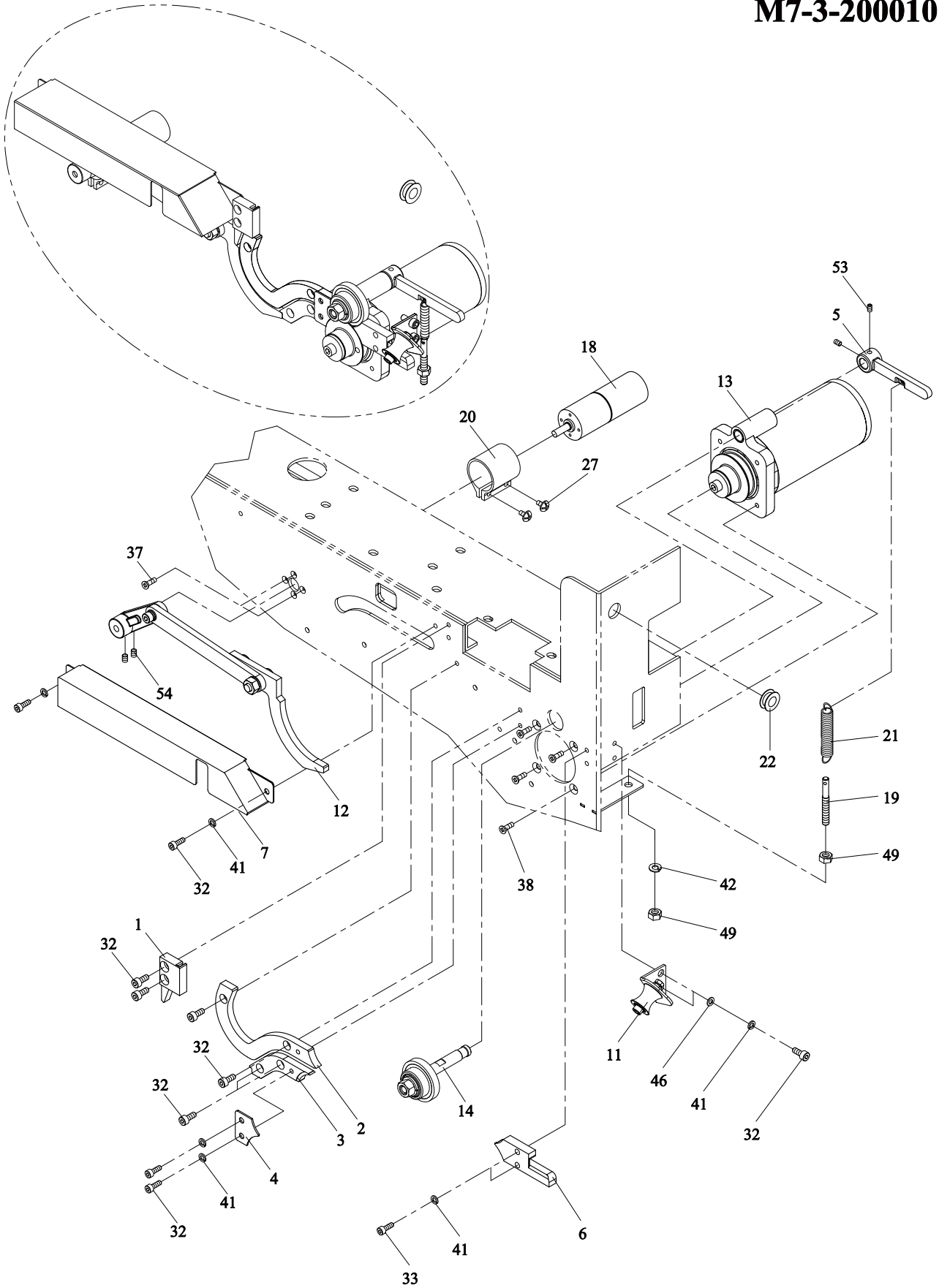
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-3-100000	Strap Amount Control Group (For 5-6mm)	1	
	M7-3-100010	Strap Amount Control Group (For 9mm)	1	
1	M7-3-101100	Shaft	1	
2	M7-3-101200	Spring	1	
6	TF-007	Micro Switch	1	
8	T6-3-10130	Accumulator Adjusting Bolt	1	
9	T6-3-10200	Twist Stopper	1	
10	T7-3-10140	Balance Bar (For 5-6mm)	1	
	T7-3-10141	Balance Bar (For 9mm)	1	
11	T7-3-10180	Tube	1	
12	T7-3-10200	Sensor Lever	1	
16	BR6900ZZ	Bearing, 6900ZZ	2	
21	HBS0408N	HBS, M4×8 (N)	2	
24	FMS0410	FMS, M4×10	4	
27	PMS0316	PMS, M3×16	3	
31	HSS0405GN	HSS, M4×5 (G)(N)	2	
34	HN03	HN, M3	1	
35	HN08	HN, M8	1	
39	SW03	SW, M3	3	
40	SW04	SW, M4	2	
41	SW08	SW, M8	1	

3-2

AUTO STRAP FEEDING GROUP

M7-3-200000

M7-3-200010



3-2

AUTO STRAP FEEDING GROUP

M7-3-200000

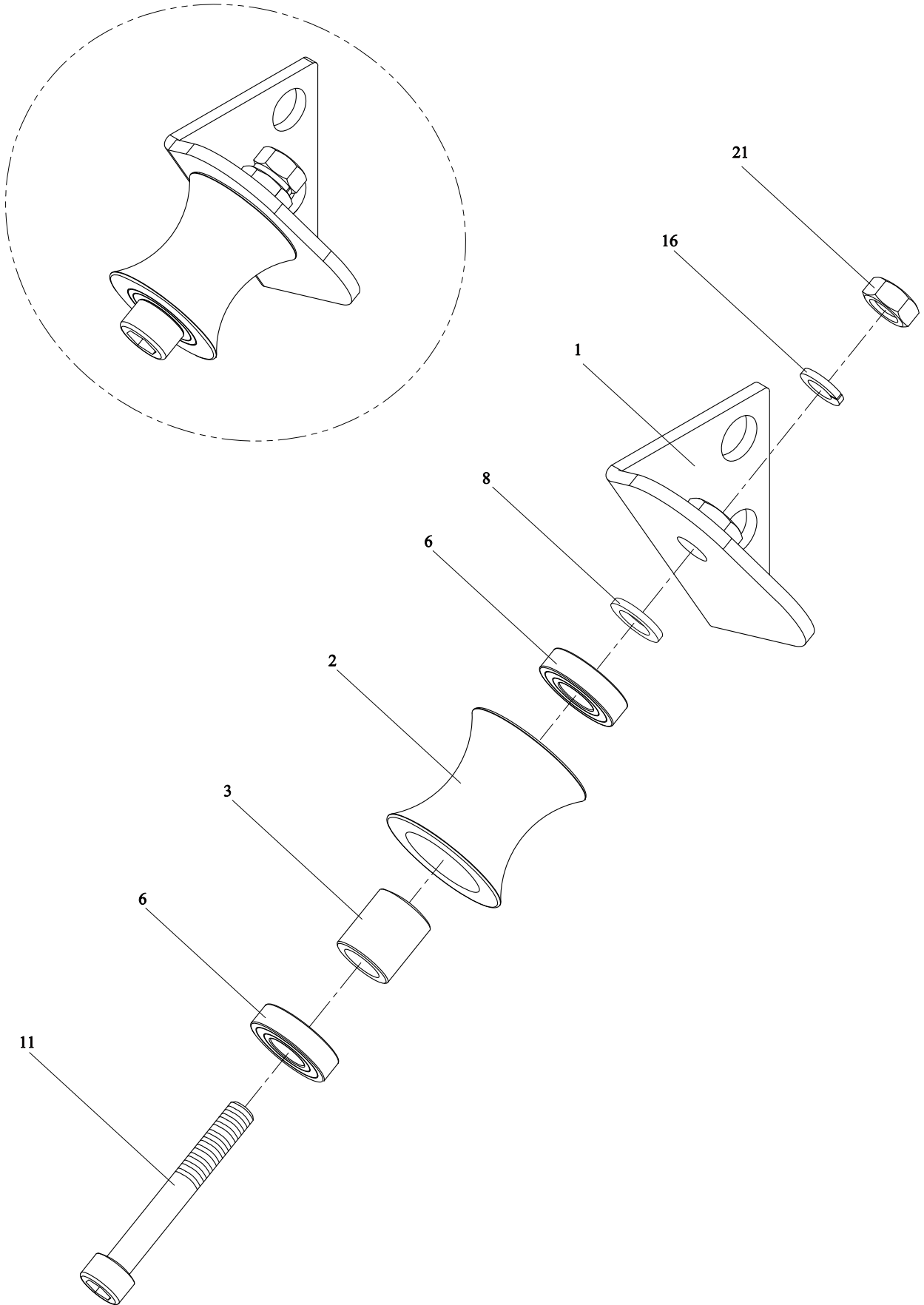
M7-3-200010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-3-200000	Auto Strap Feeding Group (For 5-6mm)	1	
	M7-3-200010	Auto Strap Feeding Group (For 9mm)	1	
1	M7-3-201100	Guide Block (For 5-6mm)	1	
	M7-3-201110	Guide Block (For 9mm)	1	
2	M7-3-201200	Upper Strap Guide (For 5-6mm)	1	
	M7-3-201210	Upper Strap Guide (For 9mm)	1	
3	M7-3-201300	Lower Strap Guide (For 5-6mm)	1	
	M7-3-201310	Lower Strap Guide (For 9mm)	1	
4	M7-3-201400	Strap Guide Cover	1	
5	M7-3-201500	Lever	1	
6	M7-3-201600	Inlet Guide (For 5-6mm)	1	
	M7-3-201610	Inlet Guide (For 9mm)	1	
7	M7-3-201700	Cover	1	
11	M7-3-210000	Roller Ass'y	1	SEE PAGE C57
12	M7-3-220000	Movable Strap Guide Ass'y (For 5-6mm)	1	SEE PAGE C59
	M7-3-220010	Movable Strap Guide Ass'y (For 9mm)	1	
13	M7-3-230000	M4 Motor Ass'y (For 5-6mm)	1	SEE PAGE C61
	M7-3-230010	M4 Motor Ass'y (For 9mm)	1	
14	T7-3-20080	Assistant Roller Shaft Ass'y (For 5-6mm)	1	SEE PAGE C63
	T7-3-20081	Assistant Roller Shaft Ass'y (For 9mm)	1	
18	T6-1-61211	Motor (M5)	1	
19	T6-1-72130	Upper Adjusting Spring Rod	1	
20	T6-8-10410	Motor Cover	1	
21	T7-1-70280	Spring	1	
22	T5-4-10580	Grommet	1	
27	TMS0408	TMS, M4×8	2	
32	HBS0508N	HBS, M5×8 (N)	12	
33	HBS0520N	HBS, M5×20 (N) (For 5-6mm)	2	
	HBS0525N	HBS, M5×25 (N) (For 9mm)	2	
37	FMS0410	FMS, M4×10	4	
38	FMS0512	FMS, M5×12	4	
41	SW05	SW, M5	8	
42	SW06	SW, M6	1	
46	PW05	PW, M5	2	
49	HN06	HN, M6	2	
53	HSS0506GN	HSS, M5×6 (G)(N)	2	
54	HSS0508GN	HSS, M5×8 (G)(N)	2	

3-2-1

ROLLER ASS'Y

M7-3-210000

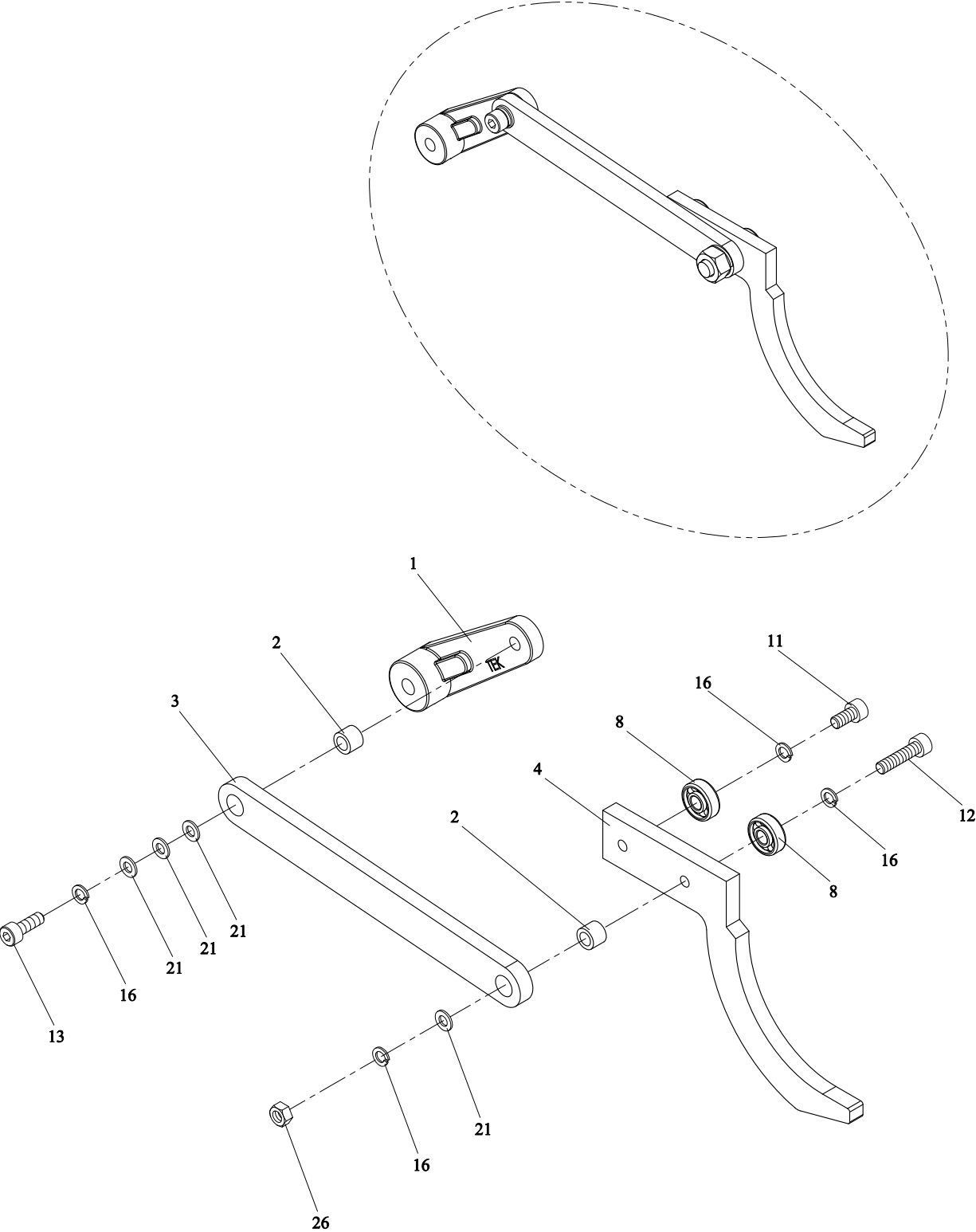


3-2-1**ROLLER ASS'Y****M7-3-21000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-3-211100	Bracket	1	
2	M7-3-211200	Roller	1	
3	M7-3-211300	Collar	1	
6	BR686ZZ	Bearing, 686ZZ	2	
8	WA-010601	Washer (φ 6 \times φ 10 t=1)	1	
11	HBS0635HN	HBS, M6 \times 35 (H)(N)	1	
16	SW06	SW, M6	1	
21	HN06	HN, M6	1	

3-2-2

**MOVABLE STRAP GUIDE ASS'Y M7-3-220000
M7-3-220010**



3-2-2**MOVABLE STRAP GUIDE ASS'Y****M7-3-220000****M7-3-220010**

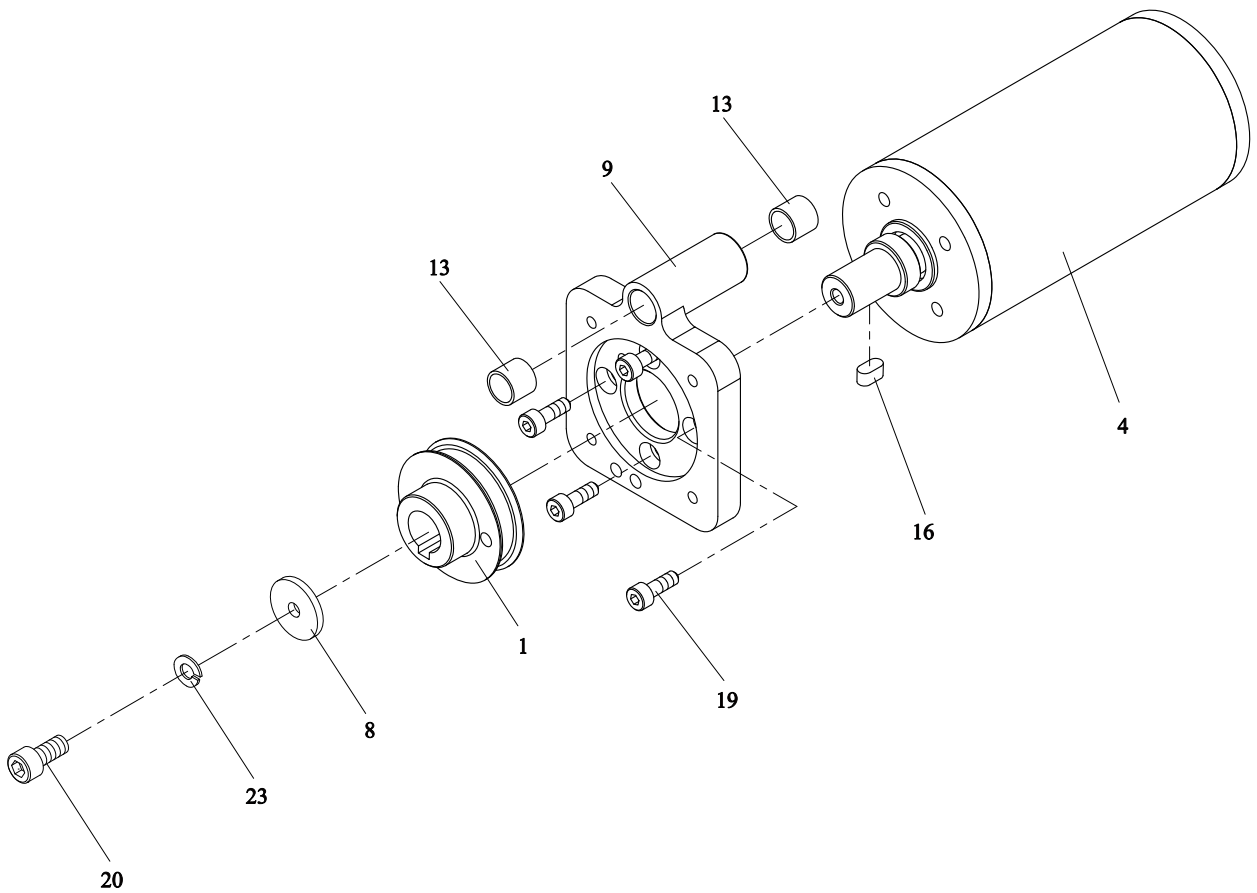
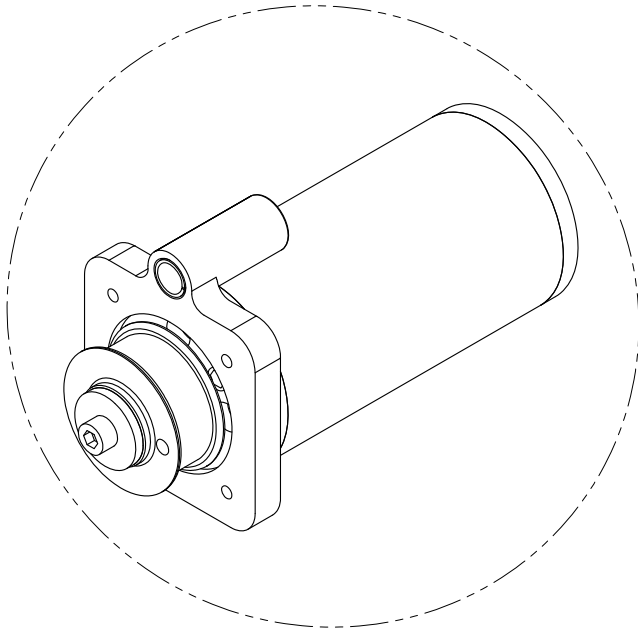
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-3-220000	Movable Strap Guide Ass'y (For 5-6mm)	1	
	M7-3-220010	Movable Strap Guide Ass'y (For 9mm)	1	
1	M7-3-221100	Rotary Arm	1	
2	M7-3-221200	Spacer	2	
3	M7-3-221300	Link	1	
4	M7-3-221400	Movable Strap Guide (For 5-6mm)	1	
	M7-3-221410	Movable Strap Guide (For 9mm)	1	
8	BR605ZZ	Bearing, 605ZZ	2	
11	HBS0512N	HBS, M5×12 (N)	1	
12	HBS0520N	HBS, M5×20 (N)	1	
13	HBS0516N	HBS, M5×16 (N)	1	
16	SW05	SW, M5	4	
21	PW05	PW, M5	4	
26	HN05	HN, M5	1	

3-2-3

M4 MOTOR ASS'Y

M7-3-230000

M7-3-230010



3-2-3**M4 MOTOR ASS'Y****M7-3-230000****M7-3-230010**

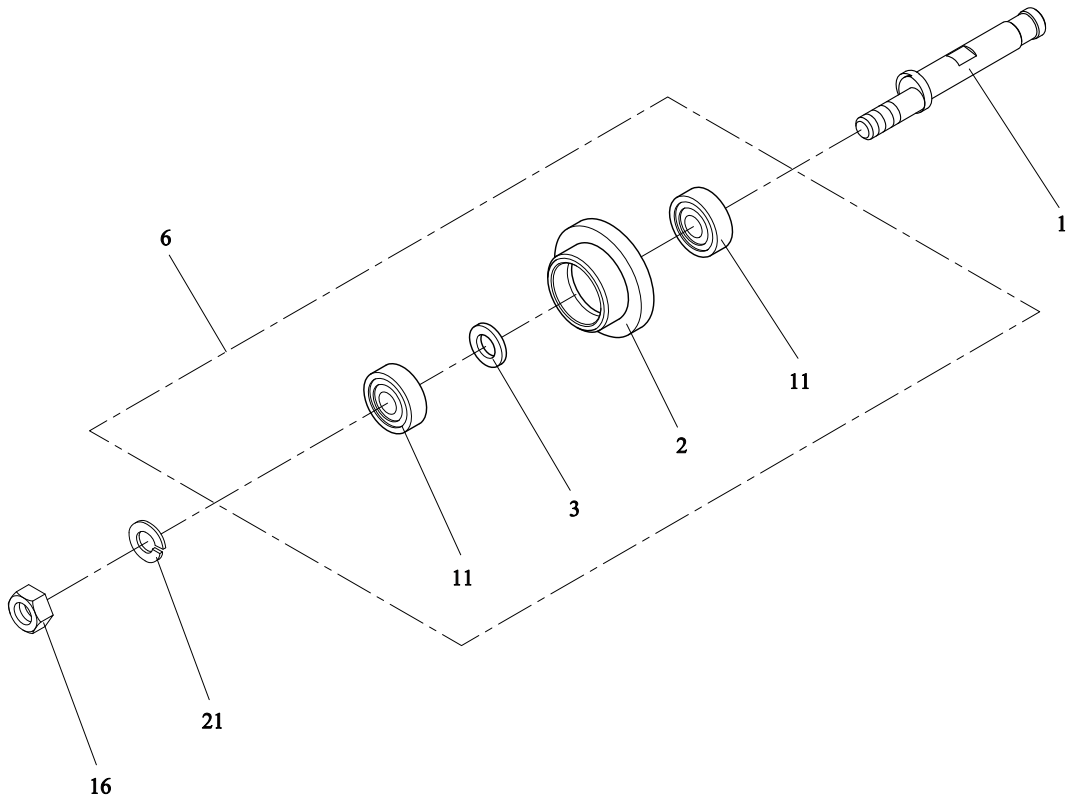
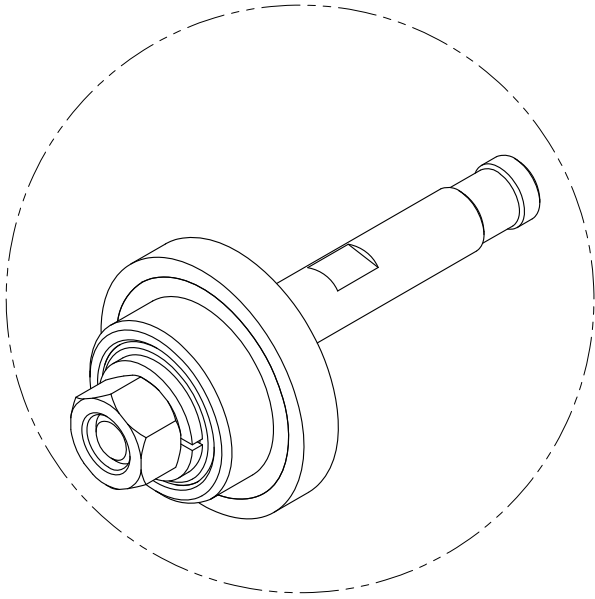
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-3-230000	M4 Motor Ass'y (For 5-6mm)	1	
	M7-3-230010	M4 Motor Ass'y (For 9mm)	1	
	M7-3-231100	Accumulator Main Roller (For 5-6mm)	1	
	M7-3-231110	Accumulator Main Roller (For 9mm)	1	
4	M7-3-230100	M4 Motor Set	1	
8	TB-223	Washer	1	
9	T7-3-20110	Motor Support	1	
13	MB1010	Metal Bush, 1010	2	
16	KYA050515	Key, 5×5×15	1	
19	HBS0512N	HBS, M5×12 (N)	4	
20	HBS0612N	HBS, M6×12 (N)	1	
23	SW06	SW, M6	2	

3-2-4

ASSISTANT ROLLER SHAFT ASS'Y

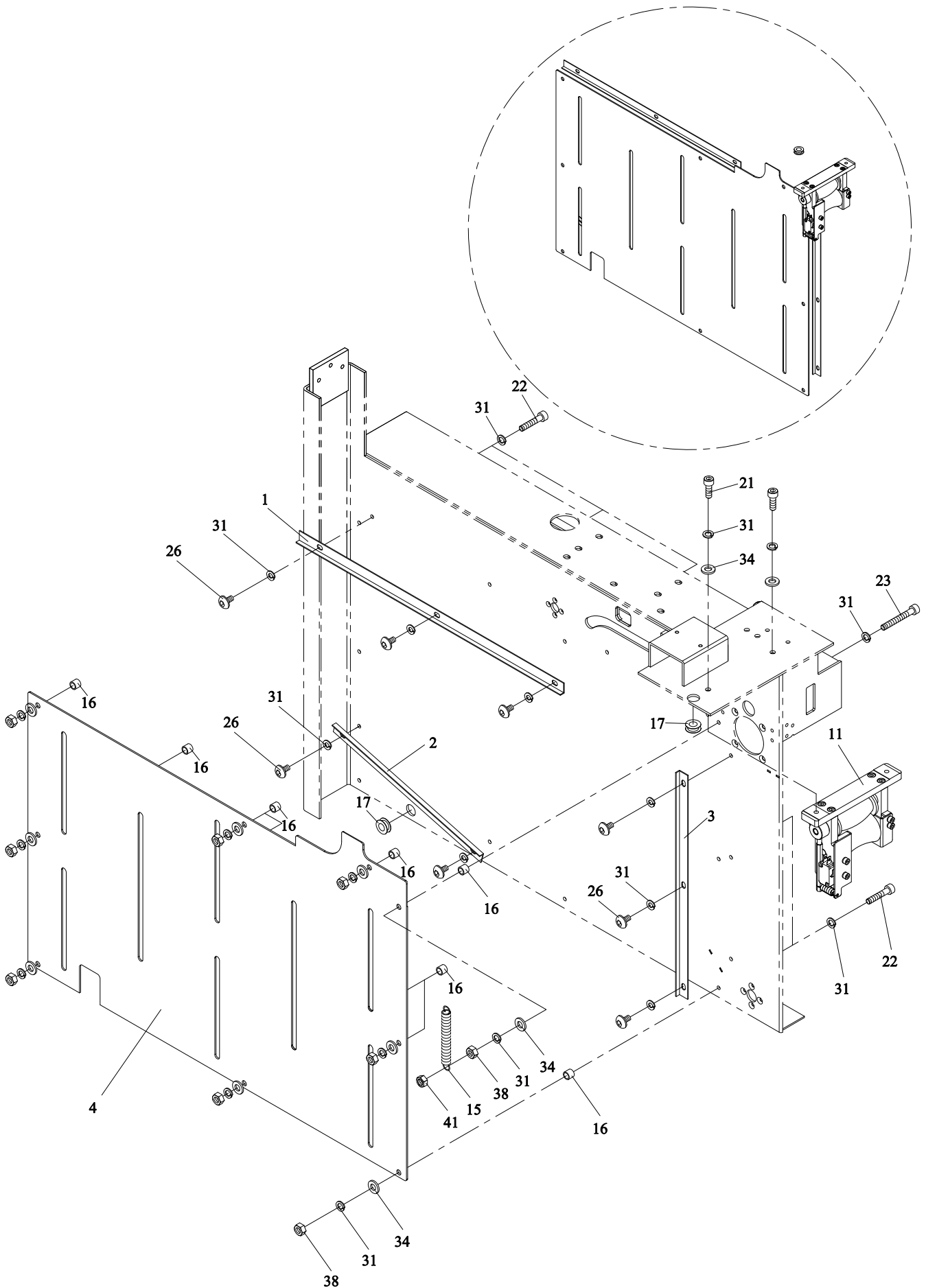
T7-3-20080

T7-3-20081



3-2-4**ASSISTANT ROLLER SHAFT ASS'Y****T7-3-20080****T7-3-20081**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T7-3-20080	Assistant Roller Shaft Ass'y (For 5-6mm)	1	
	T7-3-20081	Assistant Roller Shaft Ass'y (For 9mm)	1	
	T7-3-20150	Shaft	1	
	T7-3-20160	Assistant Roller (For 5-6mm)	1	
	T7-3-20162	Assistant Roller (For 9mm)	1	
3	T7-3-20200	Spacer	1	
6	T7-3-20100	Assistant Roller Ass'y (For 5-6mm)	1	
	T7-3-20101	Assistant Roller Ass'y (For 9mm)	1	
11	BR608ZZ	Bearing, 608ZZ	2	
16	HN08	HN, M8	1	
21	SW08	SW, M8	1	



3-3

ACCUMULATOR BOX GROUP

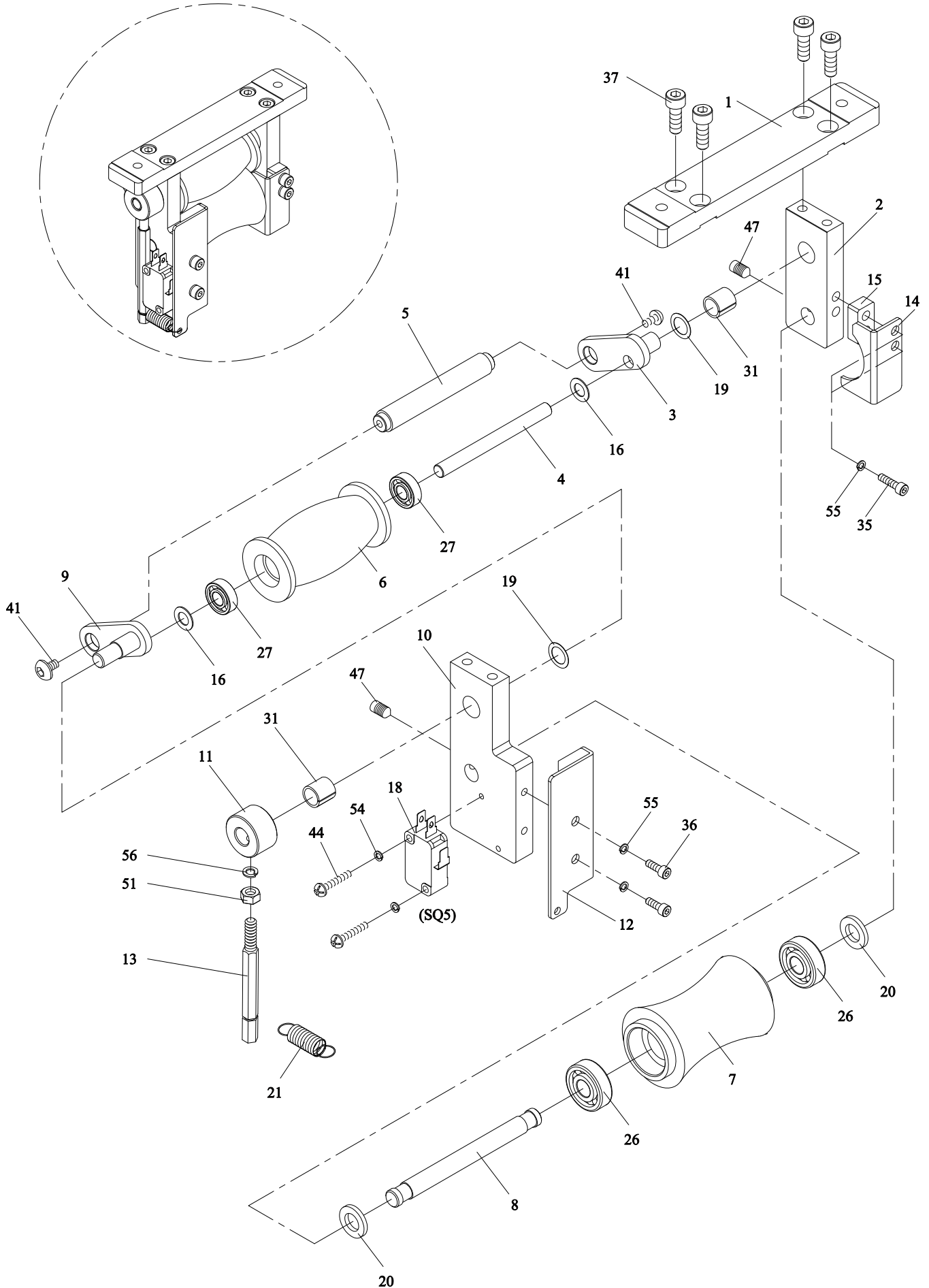
M7-3-300000

M7-3-300010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-3-300000	Accumulator Box Group (For 5-6mm)	1	
	M7-3-300000S	Accumulator Box Group (Stainless Steel Model)(For 5-6mm)	1	
	M7-3-300010	Accumulator Box Group (For 9mm)	1	
	M7-3-300010S	Accumulator Box Group (Stainless Steel Model)(For 9mm)	1	
1	M7-3-301100	Enclosed Plate (For 5-6mm)	1	
	M7-3-301110	Enclosed Plate (For 9mm)	1	
2	M7-3-301200	Enclosed Plate (For 5-6mm)	1	
	M7-3-301210	Enclosed Plate (For 9mm)	1	
3	M7-3-301300	Enclosed Plate (For 5-6mm)	1	
	M7-3-301310	Enclosed Plate (For 9mm)	1	
4	M7-3-301400	Accumulator Box Cover	1	
	M7-3-301400S	Accumulator Box Cover (Stainless Steel Model)	1	
11	M7-3-310000	Auto Strap Ejecting Ass'y	1	SEE PAGE C67
15	TC-025	Spring	1	
16	T7-3-10260	Collar (For 5-6mm)	9	
	T7-3-10262	Collar (For 9mm)	9	
17	T5-4-10580	Grommet	2	
21	HBS0616N	HBS, M6×16 (N)	2	
22	HBS0620N	HBS, M6×20 (N) (For 5-6mm)	8	
	HBS0625N	HBS, M6×25 (N) (For 9mm)	8	
23	HBS0640N	HBS, M6×40 (N)	1	
26	THS0608N	THS, M6×8 (N)	8	
31	SW06	SW, M6	20	
34	PW06A	PW, M6 (A)	12	
38	HN06	HN, M6	9	
41	NTE06	NTE, M6	1	

3-3-1

AUTO STRAP EJECTING ASS'Y M7-3-310000

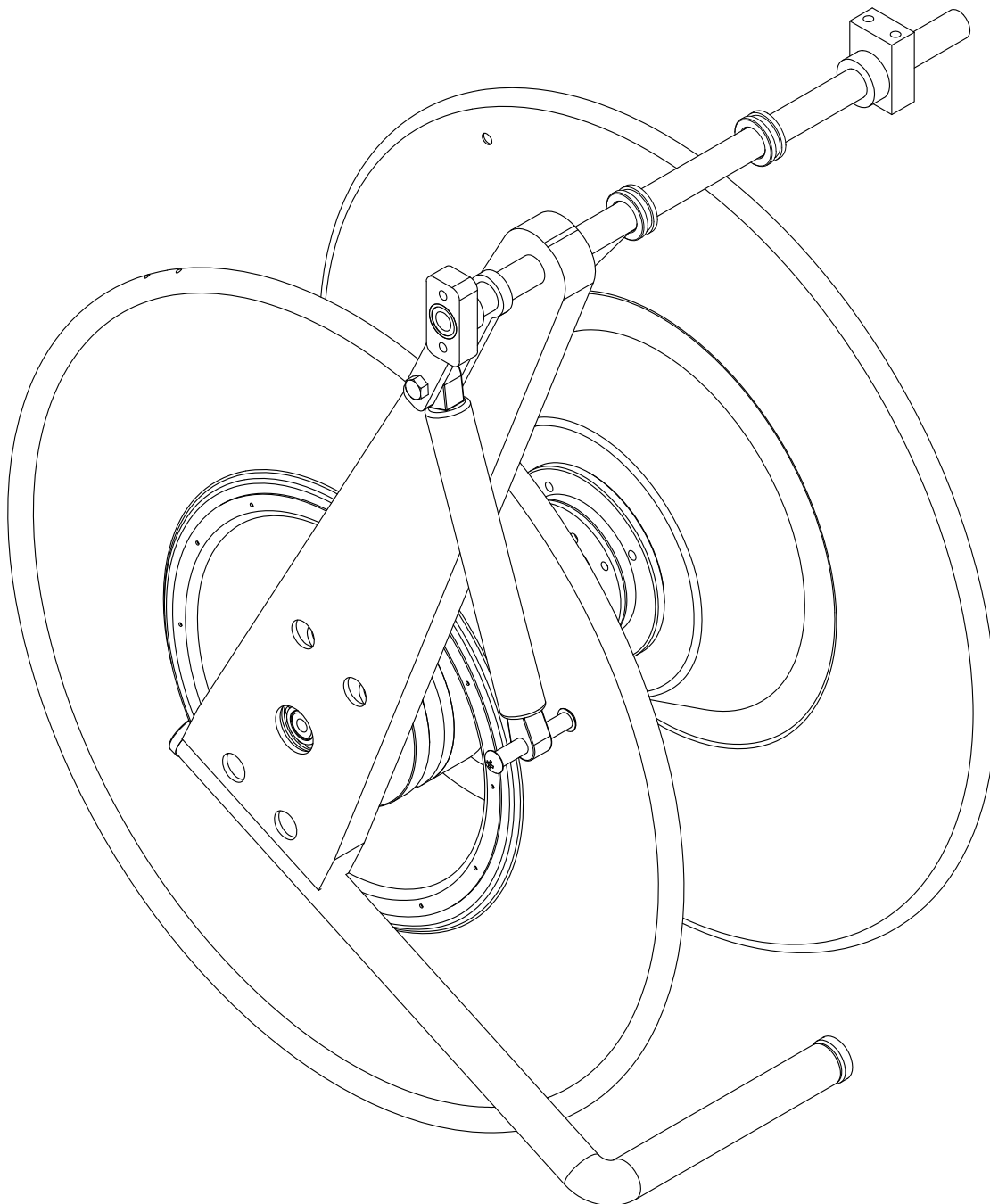


3-3-1

AUTO STRAP EJECTING ASS'Y

M7-3-310000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-3-311100	Roller Base	1	
2	M7-3-311200	Right Bracket	1	
3	M7-3-311300	Right Rack	1	
4	M7-3-311400	Shaft	1	
5	M7-3-311500	Shaft	1	
6	M7-3-311600	Upper Roller	1	
7	M7-3-311700	Roller	1	
8	M7-3-311800	Shaft	1	
9	M7-3-311900	Left Rack	1	
10	M7-3-312000	Left Bracket	1	
11	M7-3-312100	Collar	1	
12	M7-3-312200	Left Cover	1	
13	M7-3-312300	Lever	1	
14	M7-3-312400	Right Cover	1	
15	M7-3-312500	Spacer	1	
16	WA-010602	Washer ($\phi 6.2 \times \phi 11$ $t=0.5$)	2	
18	TF-007	Micro Switch	1	
19	H45-10250	Washer	2	
20	T7-3-20200	Spacer	2	
21	T7-3-40480	Spring	1	
26	BR608ZZ	Bearing, 608ZZ	2	
27	BR696ZZ	Bearing, 696ZZ	2	
31	MB0810	Metal Bush, 0810	2	
35	HBS0416N	HBS, M4×16 (N)	2	
36	HBS0412N	HBS, M4×12 (N)	2	
37	HBS0512N	HBS, M5×12 (N)	4	
41	THS0508N	THS, M5×8 (N)	2	
44	PMS0316	PMS, M3×16	2	
47	HSS0508GN	HSS, M5×8 (G)(N)	2	
51	HN05	HN, M5	1	
54	SW03	SW, M3	2	
55	SW04	SW, M4	4	
56	SW05	SW, M5	1	

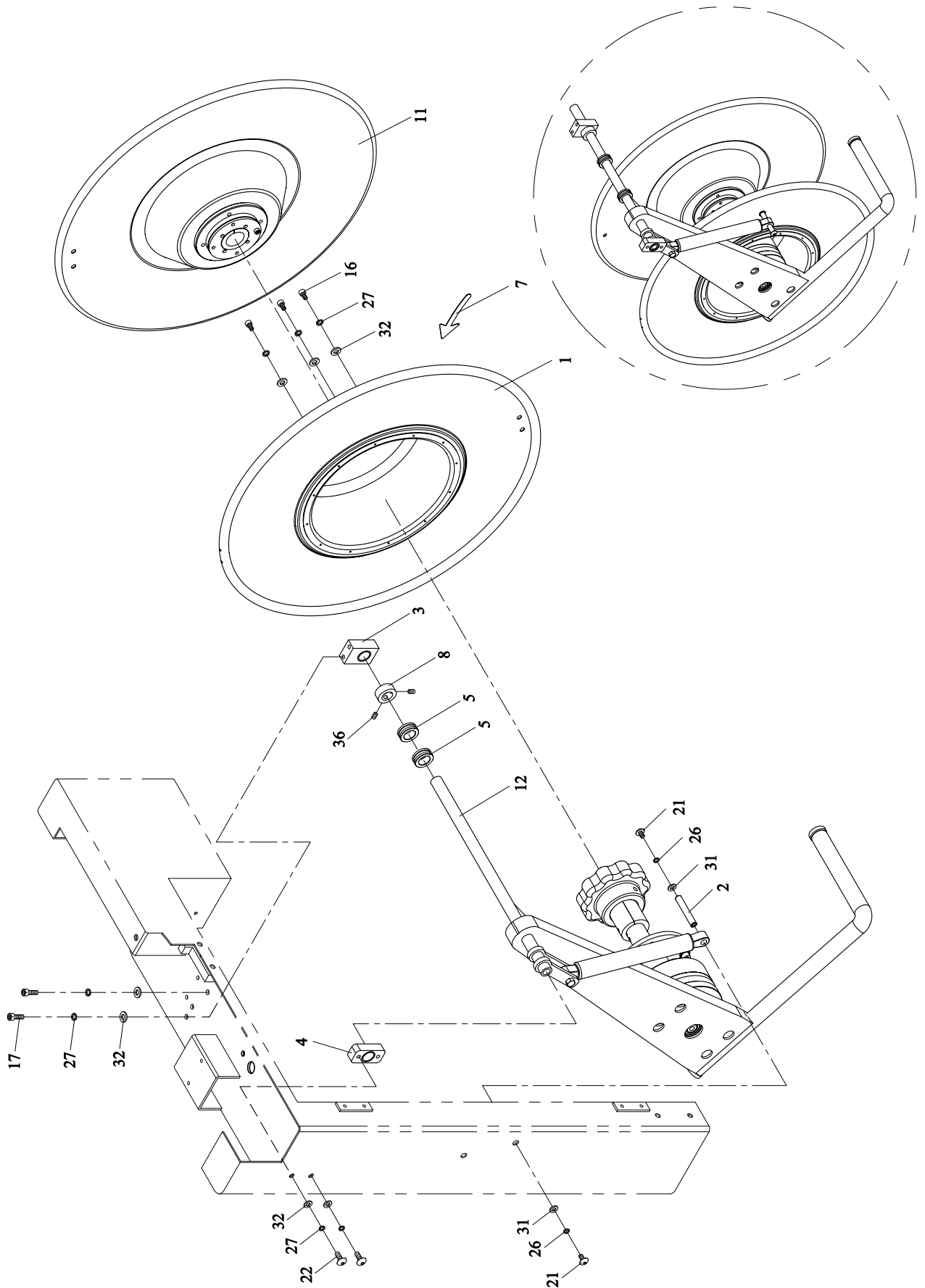


REEL CONTROL GROUP

M7-4-100000

M7-4-100010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-4-100000	Reel Control Group (For 200mm)	1	SEE PAGE C71
	M7-4-100010	Reel Control Group (For 150mm)(Option)	1	



4-1

REEL CONTROL GROUP

M7-4-100000

M7-4-100010

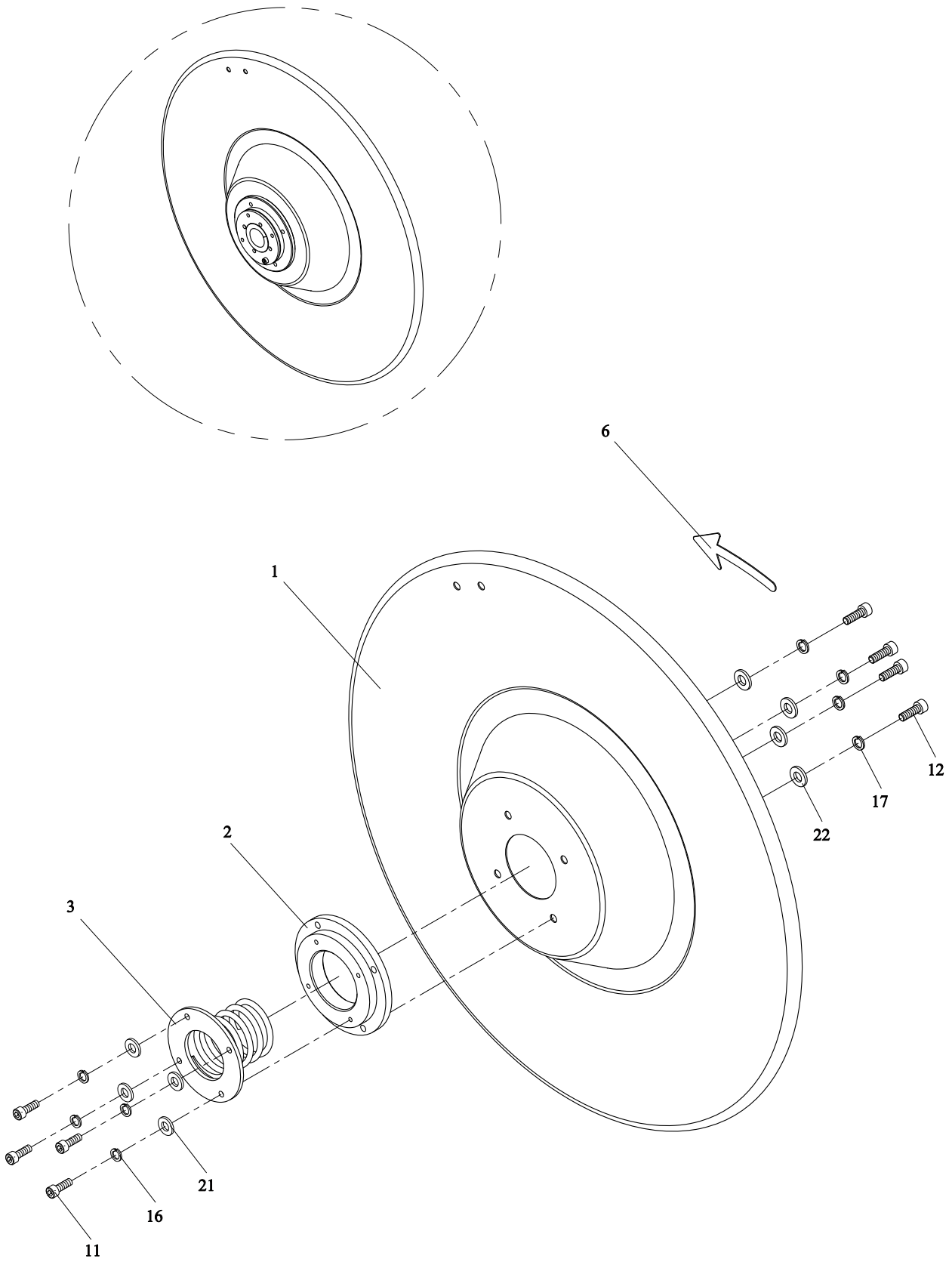
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-4-100000	Reel Control Group (For 200mm)	1	
	M7-4-100010	Reel Control Group (For 150mm) (Option)	1	
1	M7-4-101100	Inner Flange (For 200mm)	1	
	T7-4-10112	Inner Flange (For 150mm) (Option)	1	
2	M7-4-101200	Shaft	1	
3	M7-4-101300	Base (L)	1	
4	M7-4-101400	Base (R)	1	
5	M7-4-101500	Collar	2	
7	LA-30240	Label	1	
8	M7-1-101600	Collar	1	
11	M7-4-110000	Outer Flange Ass'y (For 200mm)	1	SEE PAGE C73
	M7-4-110010	Outer Flange Ass'y (For 150mm) (Option)	1	
12	M7-4-120000	Reel Crank Ass'y	1	SEE PAGE C75
16	HBS0610N	HBS, M6×10 (N)	4	
17	HBS0616N	HBS, M6×16 (N)	2	
21	THS0508N	THS, M5×8 (N)	2	
22	THS0612N	THS, M6×12 (N)	2	
26	SW05	SW, M5	2	
27	SW06	SW, M6	8	
31	PW05	PW, M5	2	
32	PW06A	PW, M6 (A)	8	
36	HSS0606GN	HSS, M6×6 (G)(N)	2	

4-1-1

OUTER FLANGE ASS'Y

M7-4-110000

M7-4-110010



4-1-1**OUTER FLANGE ASS'Y****M7-4-110000****M7-4-110010**

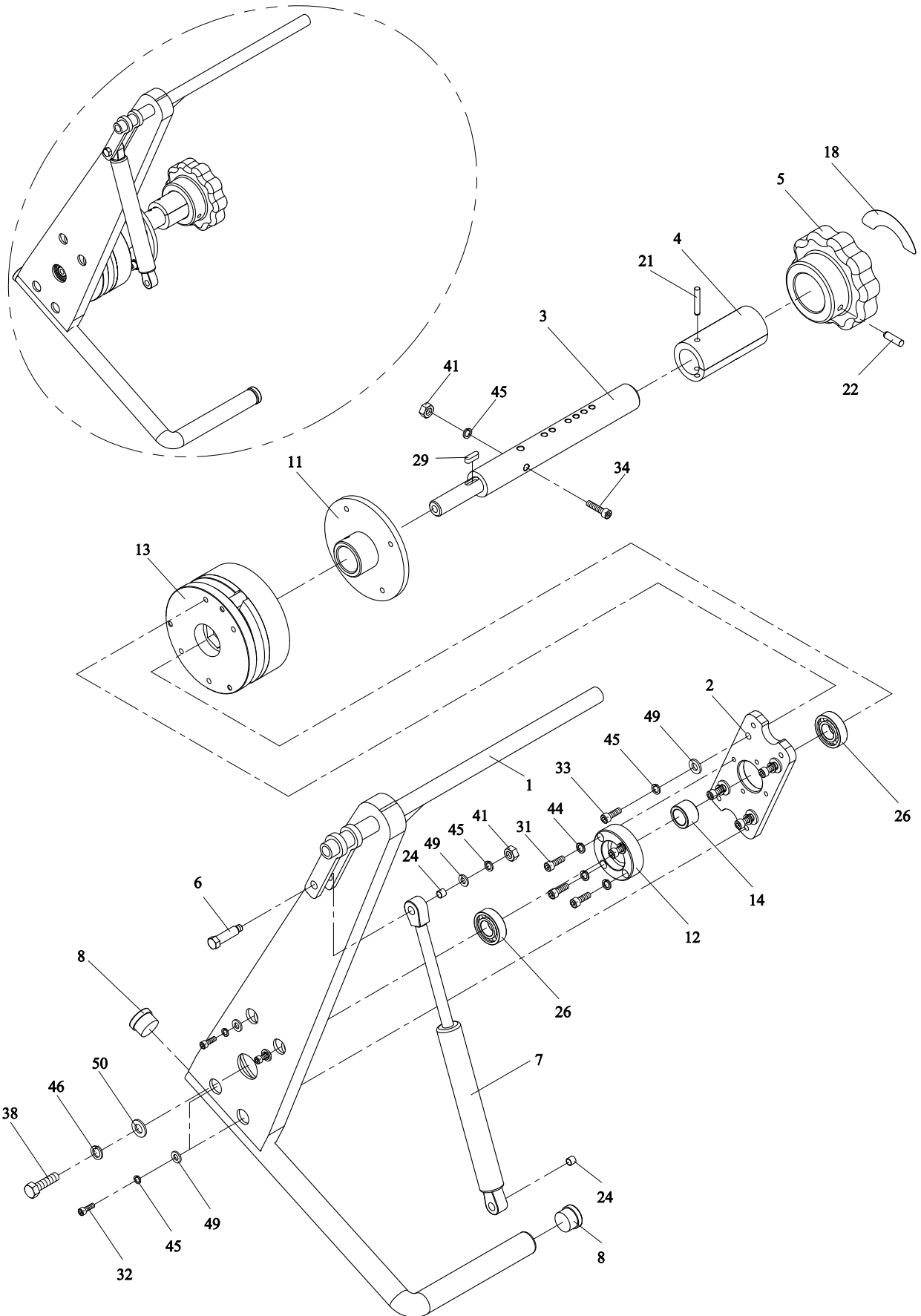
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	M7-4-110000	Outer Flange Ass'y (For 200mm)	1	
	M7-4-110010	Outer Flange Ass'y (For 150mm) (Option)	1	
	M7-4-111100	Outer Flange (For 200mm)	1	
	T7-4-10122	Outer Flange (For 150mm) (Option)	1	
2	M7-4-111200	Plate	1	
3	M7-4-111300	Spring	1	
6	LA-30240	Label	1	
11	HBS0416N	HBS, M4×16 (N)	4	
12	HBS0610N	HBS, M6×10 (N)	4	
16	SW04	SW, M4	4	
17	SW06	SW, M6	4	
21	PW04	PW, M4	4	
22	PW06A	PW, M6 (A)	4	

4-1-2

REEL CRANK ASS'Y

M7-4-120000

M7-4-120010



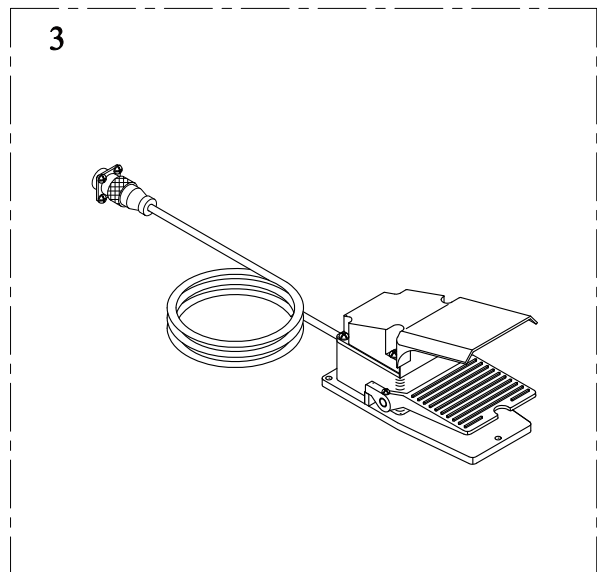
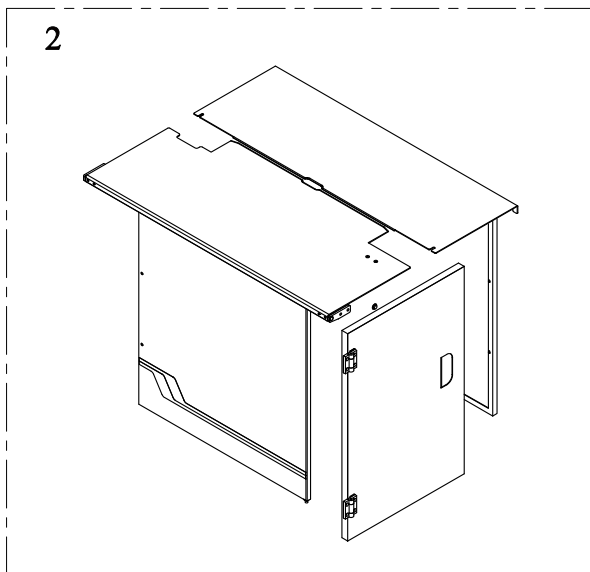
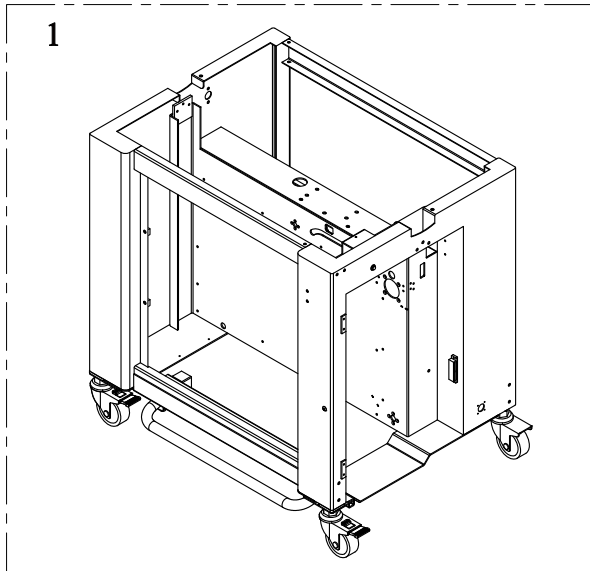
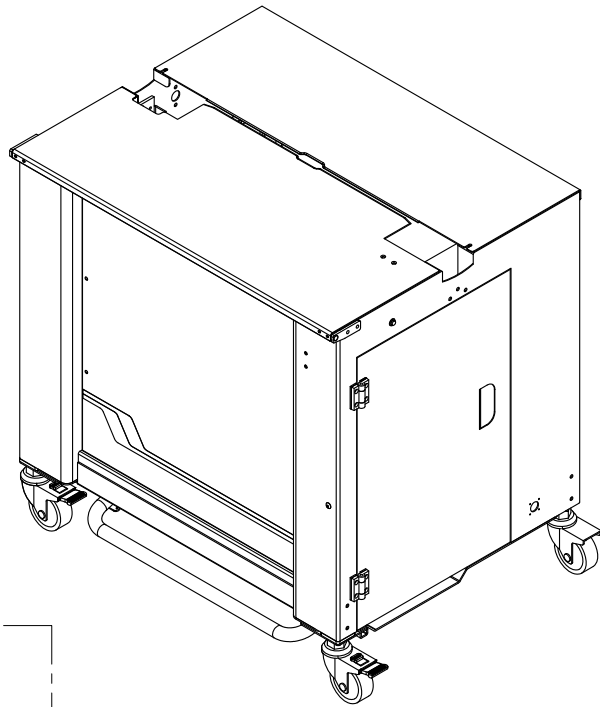
4-1-2

REEL CRANK ASS'Y

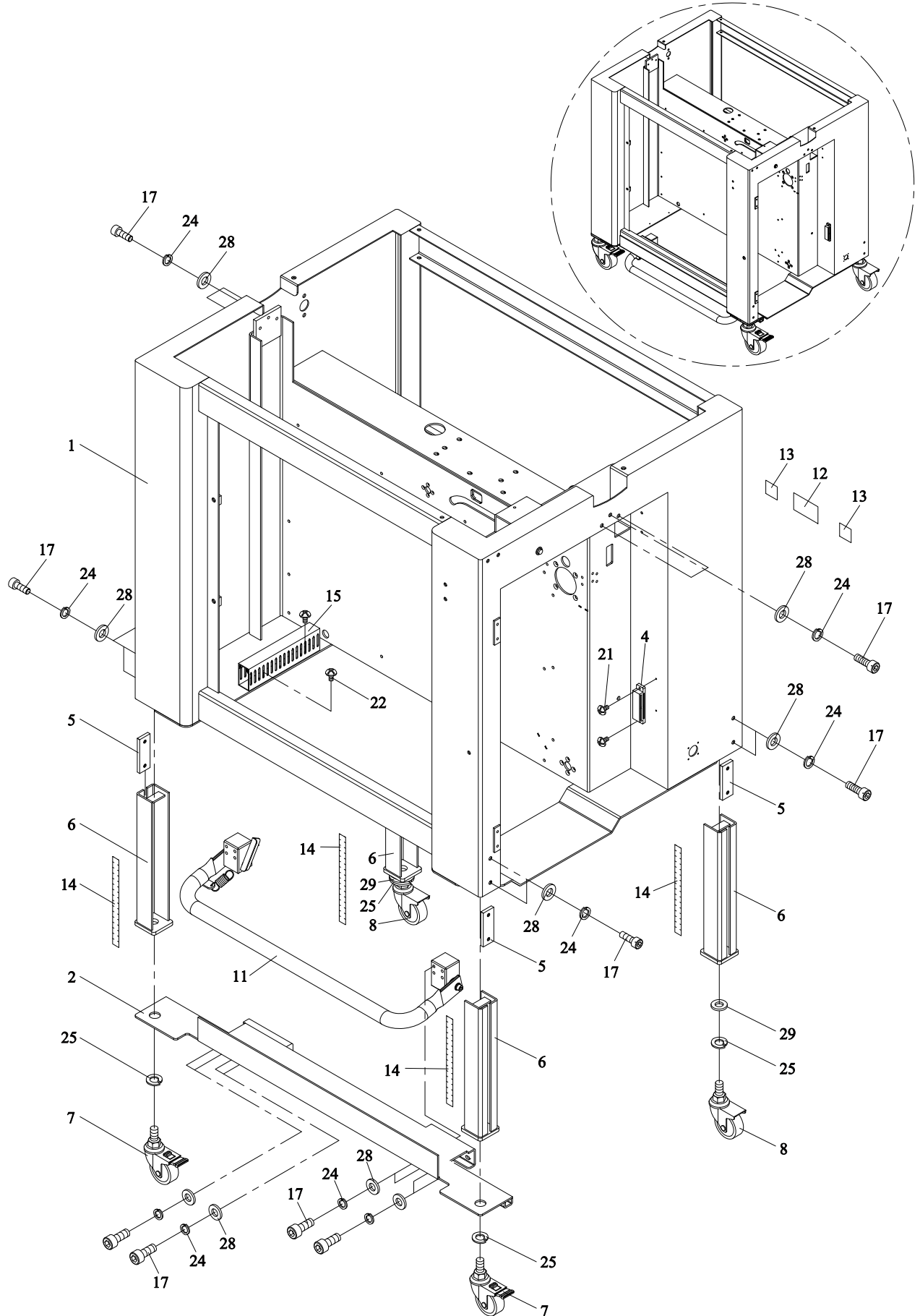
M7-4-120000

M7-4-120010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-4-120000	Reel Crank Ass'y (For 200mm)	1	
	M7-4-120010	Reel Crank Ass'y (For 150mm) (Option)	1	
1	M7-4-121100	Reel Crank	1	
2	M7-4-121200	Support	1	
3	M7-4-121300	Shaft (For 200mm)	1	
	M7-4-121310	Shaft (For 150mm)	1	
4	M7-4-121400	Shaft	1	
5	M7-4-121500	Reel Nut Handle	1	
6	M7-4-121600	Bolt	1	
7	M7-4-121700	Gas Spring	1	
8	M7-4-121800	Lid	2	
11	T7-4-10140	Plate	1	
12	T7-4-20160	Bearing Support	1	
13	T7-4-20170	Brake For Reel	1	
14	T7-4-20320	Spacer	1	
18	LA-30230	Label	1	
21	MSA0535	Lock Pin, ϕ 5×35	1	
22	MSA0620	Lock Pin, ϕ 6×20	1	
24	MB0812	Metal Bush, 0812	2	
26	BR6002ZZ	Bearing, 6002ZZ	2	
29	KYA050515	Key, 5×5×15	1	
31	HBS0516N	HBS, M5×16 (N)	4	
32	HBS0616N	HBS, M6×16 (N)	4	
33	HBS0620N	HBS, M6×20 (N)	4	
34	HBS0645N	HBS, M6×45 (N)	1	
38	HBW0820L	HBW, M8×20 (LH)	1	
41	HN06	HN, M6	2	
44	SW05	SW, M5	4	
45	SW06	SW, M6	10	
46	SW08	SW, M8	1	
49	PW06A	PW, M6 (A)	9	
50	PW08C	PW, M8 (C)	1	



REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-5-900000	Body Frame Unit (For 5-6mm)	1	
	M7-5-900000S	Body Frame Unit (Stainless Steel Model)(For 5-6mm)	1	
	M7-5-900010	Body Frame Unit (For 9mm)	1	
	M7-5-900010S	Body Frame Unit (Stainless Steel Model)(For 9mm)	1	
1	M7-5-100000	Foot Bar Group	1	SEE PAGE C79
	M7-5-100000S	Foot Bar Group (Stainless Steel Model)	1	
2	M7-5-200000	Cover Group (For 5-6mm)	1	SEE PAGE C83
	M7-5-200000S	Cover Group (Stainless Steel Model)(For 5-6mm)	1	
	M7-5-200010	Cover Group (For 9mm)	1	
	M7-5-200010S	Cover Group (Stainless Steel Model)(For 9mm)	1	
3	T7-6-40001	Pedal Control Set (Option)	1	SEE PAGE C89



5-1

FOOT BAR GROUP

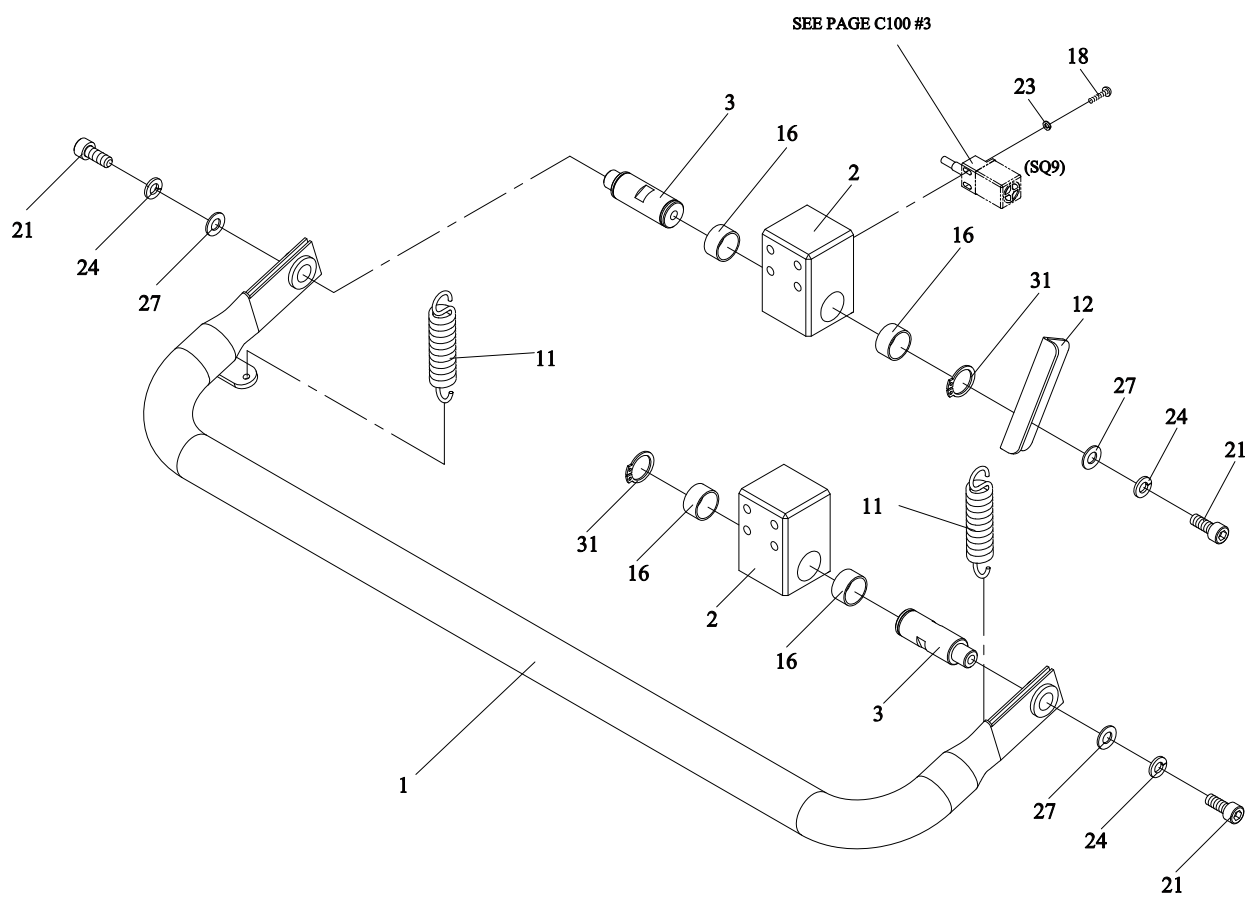
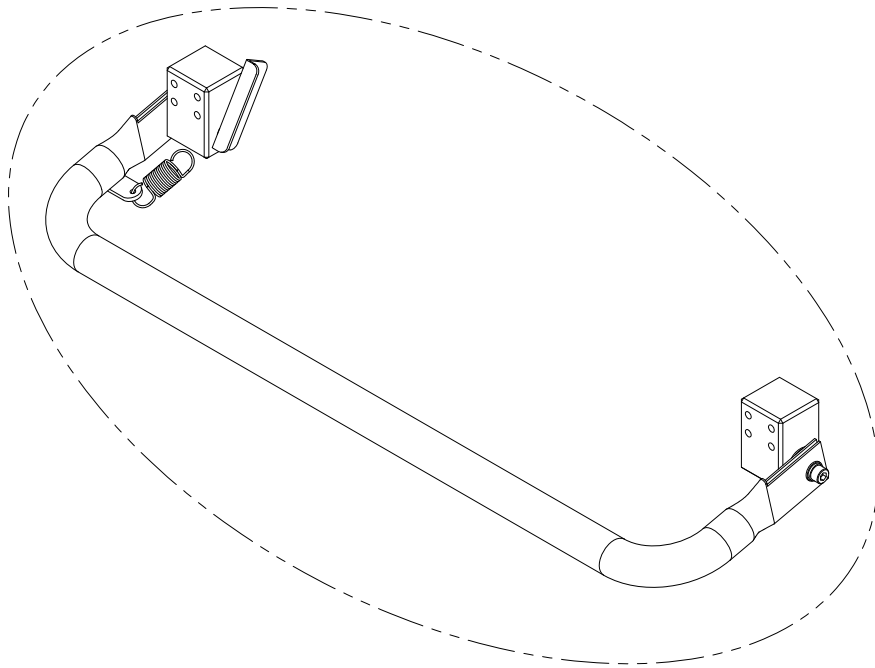
M7-5-100000
M7-5-100000S

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-5-100000	Foot Bar Group	1	
	M7-5-100000S	Foot Bar Group (Stainless Steel Model)	1	
1	M7-5-101100	Body Frame	1	
	M7-5-101100S	Body Frame (Stainless Steel Model)	1	
2	M7-5-101200	Support	1	
	M7-5-101200S	Support (Stainless Steel Model)	1	
4	T6-5-10160	Magnet Catch	1	
5	T7-5-10150	Fix Plate	4	
	T7-5-10150S	Fix Plate (Stainless Steel Model)	4	
6	T7-5-10160	Adjustment Leg	4	
	T7-5-10160S	Adjustment Leg (Stainless Steel Model)	4	
7	T7-5-10170	Caster (Brake)	2	
	T7-5-10170S	Caster (Brake) (Stainless Steel Model)	2	
8	T7-5-10180	Caster (Free)	2	
	T7-5-10180S	Caster (Free) (Stainless Steel Model)	2	
11	M7-5-110000	Foot Bar Ass'y	1	SEE PAGE C81
	M7-5-110000S	Foot Bar Ass'y (Stainless Steel Model)	1	
12	LA-50100	Label	1	
13	LA-50150	Label	2	
14	LA-50094	Label	4	
15	WD25450170	Wire Duct 25x45x170	1	
17	HBS0616N	HBS, M6×16 (N)	22	
	HBS0616S	HBS, M6×16 (Stainless Steel Model)	22	
21	TMS0308	TMS, M3×8	2	
22	TMS0406	TMS, M4×6	2	
24	SW06	SW, M6	22	
	SW06S	SW, M6 (Stainless Steel Model)	22	
25	SW16	SW, M16	4	
	SW16S	SW, M16 (Stainless Steel Model)	4	
28	PW06A	PW, M6 (A)	22	
	PW06AS	PW, M6 (A) (Stainless Steel Model)	22	
29	PW16	PW, M16	2	
	PW16S	PW, M16 (Stainless Steel Model)	2	

5-1-1

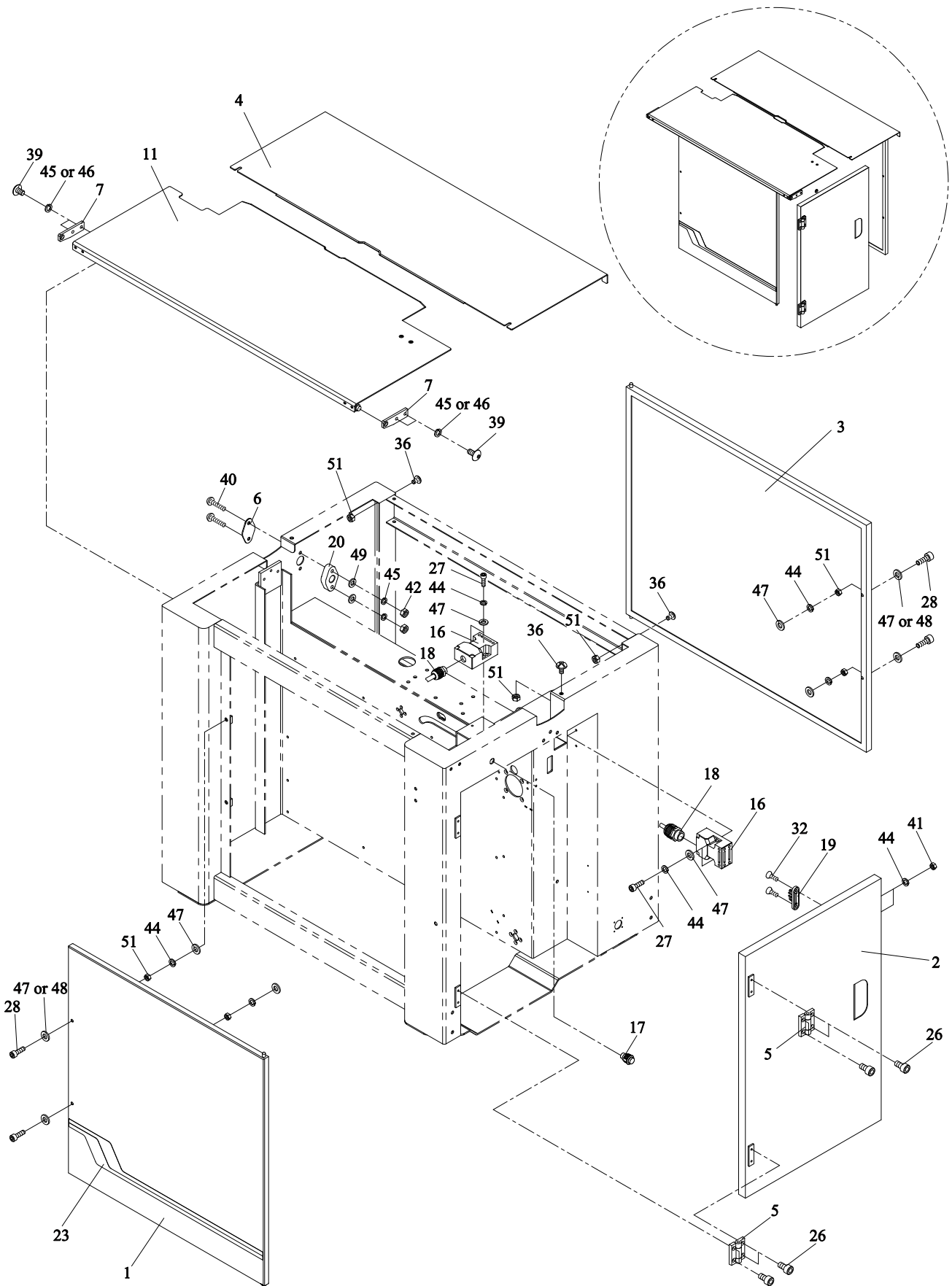
FOOT BAR ASS'Y

M7-5-110000
M7-5-11000S



5-1-1**FOOT BAR ASS'Y****M7-5-110000
M7-5-110000S**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-5-110000	Foot Bar Ass'y	1	
	M7-5-110000S	Foot Bar Ass'y (Stainless Steel Model)	1	
1	M7-5-111100	Foot Bar	1	
	M7-5-111100S	Foot Bar (Stainless Steel Model)	1	
2	M7-5-111200	Block	2	
3	M7-5-111300	Shaft	2	
	M7-5-111300S	Shaft (Stainless Steel Model)	2	
11	TB-114	Return Spring	2	
	TB-114S	Return Spring (Stainless Steel Model)	2	
12	T7-5-30141	Sensor Plate	1	
16	MB1510	Metal Bush, 1510	4	
18	PMS0320	PMS, M3×20	2	
	PMS0320S	PMS, M3×20 (Stainless Steel Model)	2	
21	HBS0612N	HBS, M6×12 (N)	3	
	HBS0612S	HBS, M6×12 (Stainless Steel Model)	3	
23	SW03	SW, M3	2	
	SW03S	SW, M3 (Stainless Steel Model)	2	
24	SW06	SW, M6	3	
	SW06S	SW, M6 (Stainless Steel Model)	3	
27	PW06C	PW, M6 (C)	3	
	PW06CS	PW, M6 (C) (Stainless Steel Model)	3	
31	SR15	Stop Ring, S-15	2	
	SR15S	Stop Ring, S-15 (Stainless Steel Model)	2	



5-2

COVER GROUP

M7-5-200000

M7-5-200010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-5-200000	Cover Group (For 5-6mm)	1	
	M7-5-200000S	Cover Group (Stainless Steel Model)(For 5-6mm)	1	
	M7-5-200010	Cover Group (For 9mm)	1	
	M7-5-200010S	Cover Group (Stainless Steel Model)(For 9mm)	1	
1	M7-5-201100	Front Door	1	
	M7-5-201100S	Front Door (Stainless Steel Model)	1	
2	M7-5-201200	Side Door	1	
	M7-5-201200S	Side Door (Stainless Steel Model)	1	
3	M7-5-201300	Rear Door	1	
	M7-5-201300S	Rear Door (Stainless Steel Model)	1	
4	M7-5-201400	Upper Table Rear	1	
	M7-5-201400S	Upper Table Rear (Stainless Steel Model)	1	
	M7-5-201410	Upper Table Rear (For Photo Eye) (Option)	1	
	M7-5-201410S	Upper Table Rear (For Photo Eye) (Stainless Steel Model) (Option)	1	
5	M7-5-201500	Hinge	2	
6	M7-5-201600	Cover	1	
	M7-5-201600S	Cover (Stainless Steel Model)	1	
7	M7-5-201700	Table Support	2	
	M7-5-201700S	Table Support (Stainless Steel Model)	2	
11	M7-5-210000	Upper Table Front Ass'y (For 5-6mm)	1	SEE PAGE C87
	M7-5-210000S	Upper Table Front Ass'y (Stainless Steel Model)(For 5-6mm)	1	
	M7-5-210010	Upper Table Front Ass'y (For 9mm)	1	
	M7-5-210010S	Upper Table Front Ass'y (Stainless Steel Model)(For 9mm)	1	
16	TK-035	Interlock Safety Switch	2	
17	H45-60160	Sealing Switch	1	
18	T5-2-10500	Cable Gland (PG9)	2	
19	T7-5-10210	Switch Actuator	1	
20	T7-2-10280	Block	1	
23	LA-60010	Colored Adhesive Stripes	1	
26	HBS0508N	HBS, M5×8 (N)	8	
	HBS0508S	HBS, M5×8 (Stainless Steel Model)	8	
27	HBS0520N	HBS, M5×20 (N)	4	
28	HBS0525N	HBS, M5×25 (N)	4	
	HBS0525S	HBS, M5×25 (Stainless Steel Model)	4	
32	FMS0512	FMS, M5×12	2	
36	TMS0520	TMS, M5×20	4	
	TMS0520S	TMS, M5×20 (Stainless Steel Model)	4	

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
39	THS0612N	THS, M6×12 (N)	4	
	THS0612S	THS, M6×12 (Stainless Steel Model)	4	
40	THS0630N	THS, M6×30 (N)	2	
	THS0630S	THS, M6×30 (Stainless Steel Model)	2	
41	HN05	HN, M5	2	
42	HN06	HN, M6	2	
44	SW05	SW, M5	10	
45	SW06	SW, M6	6	
46	SW06S	SW, M6 (Stainless Steel Model)	4	
47	PW05	PW, M5	12	
48	PW05S	PW, M5 (Stainless Steel Model)	4	
49	PW06A	PW, M6 (A)	2	
51	NTE05	NTE, M5	8	

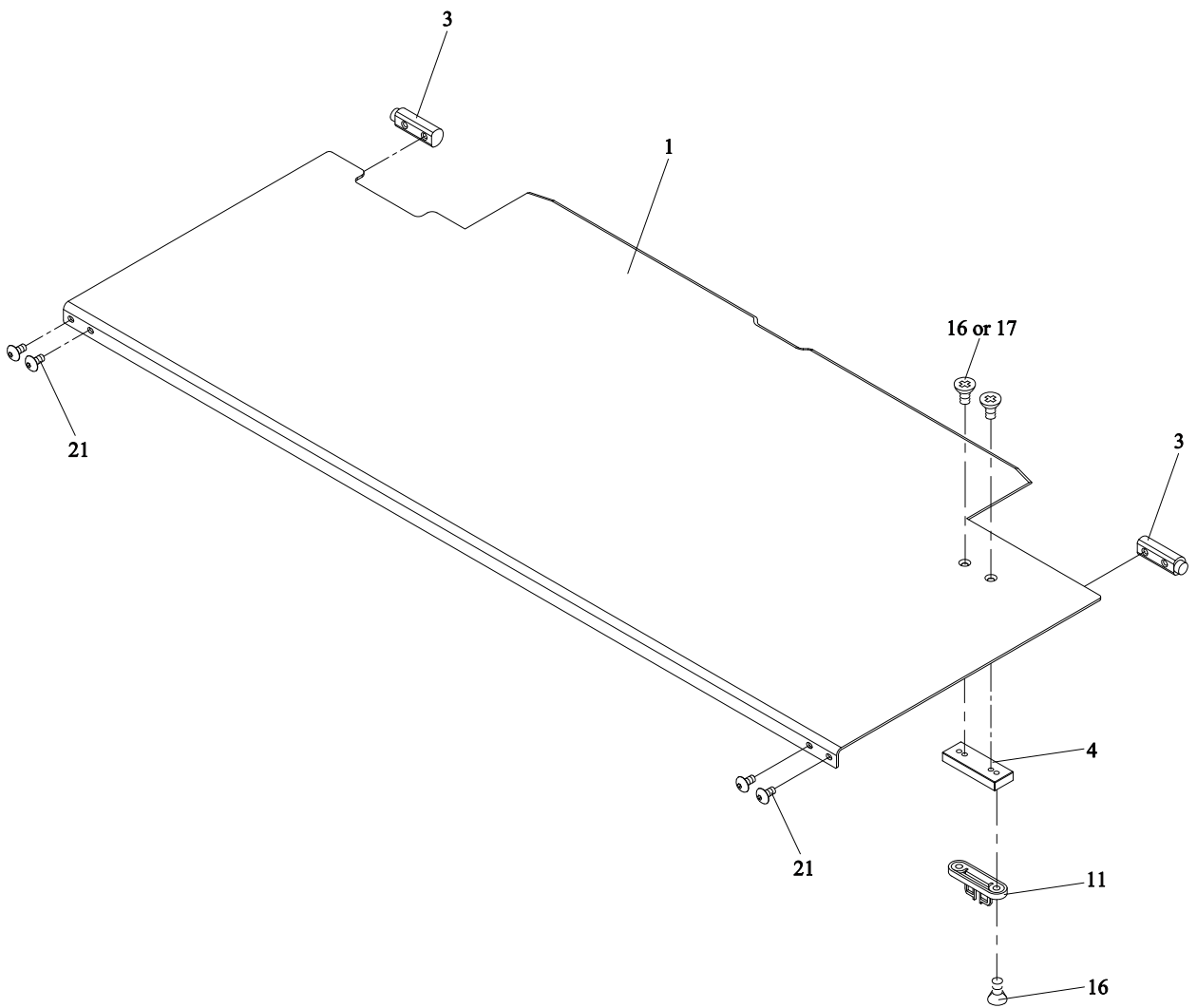
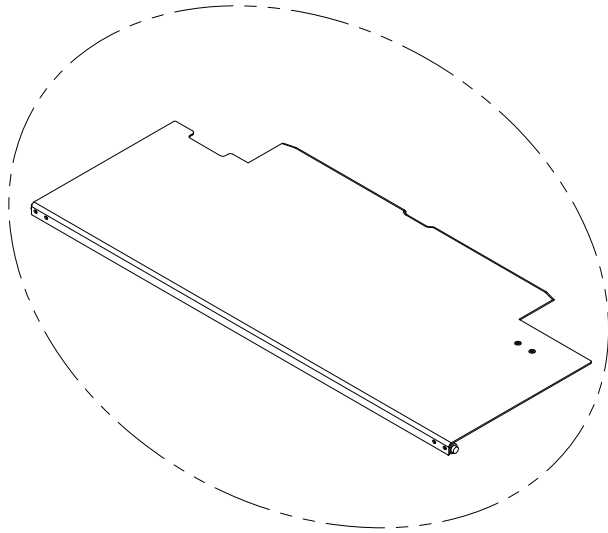


5-2-1

UPPER TABLE FRONT ASS'Y

M7-5-210000

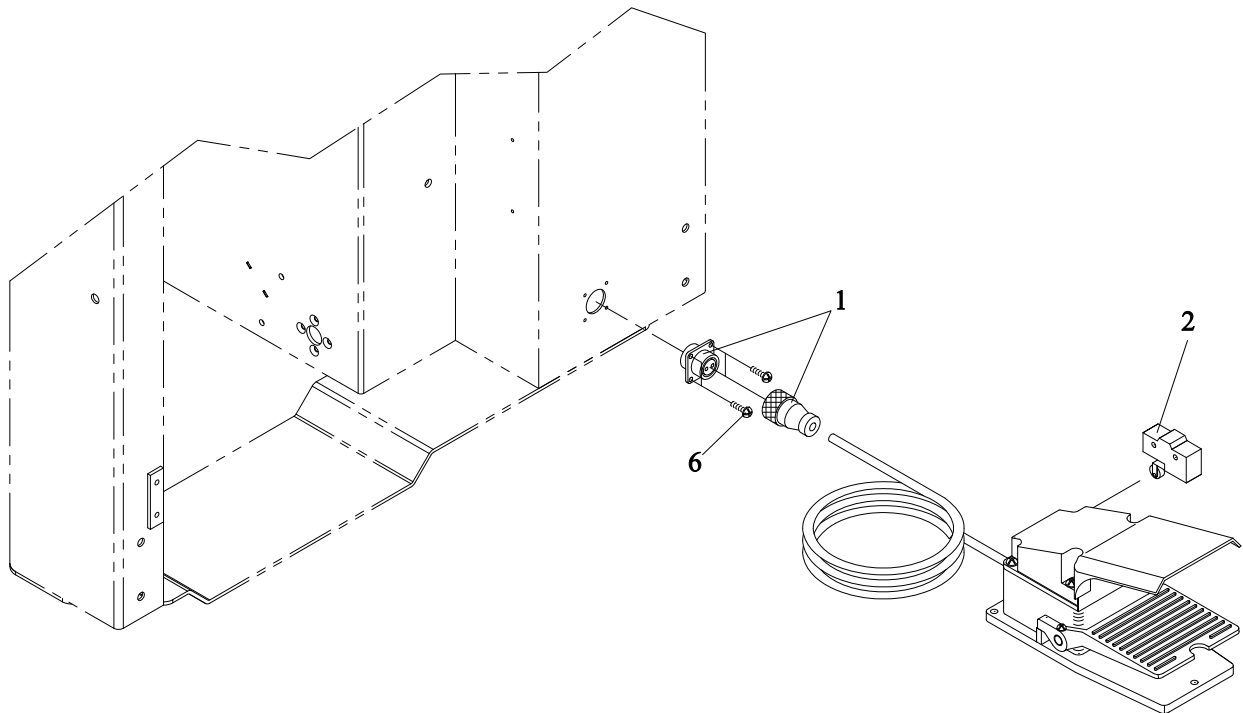
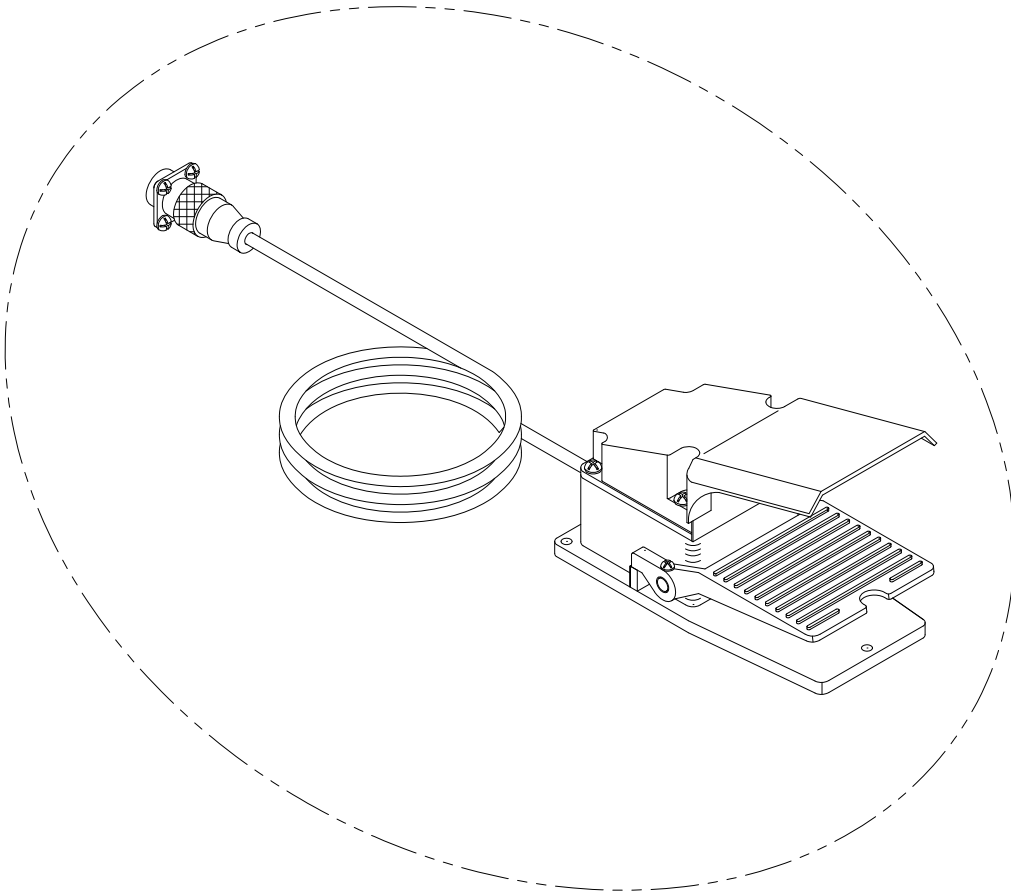
M7-5-210010



5-2-1**UPPER TABLE FRONT ASS'Y****M7-5-210000****M7-5-210010**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-5-210000	Upper Table Front Ass'y (For 5-6mm)	1	
	M7-5-21000S	Upper Table Front Ass'y (Stainless Steel Model)(For 5-6mm)	1	
	M7-5-210010	Upper Table Front Ass'y (For 9mm)	1	
	M7-5-21001S	Upper Table Front Ass'y (Stainless Steel Model)(For 9mm)	1	
1	M7-5-211100	Upper Table Front (For 5-6mm)	1	
	M7-5-21110S	Upper Table Front (Stainless Steel Model) (For 5-6mm)	1	
	M7-5-211110	Upper Table Front (For 9mm)	1	
	M7-5-21111S	Upper Table Front (Stainless Steel Model) (For 9mm)	1	
3	M7-5-211300	Shaft	2	
	M7-5-21130S	Shaft (Stainless Steel Model)	2	
4	M7-5-211400	Bracket	1	
11	T7-5-10210	Switch Actuator	1	
16	FMS0510	FMS, M5×10	4	
17	FMS0510S	FMS, M5×10 (Stainless Steel Model)	2	
21	THS0510N	THS, M5×10 (N)	4	
	THS0510S	THS, M5×10 (Stainless Steel Model)	4	

PEDAL CONTROL SET (OPTION)

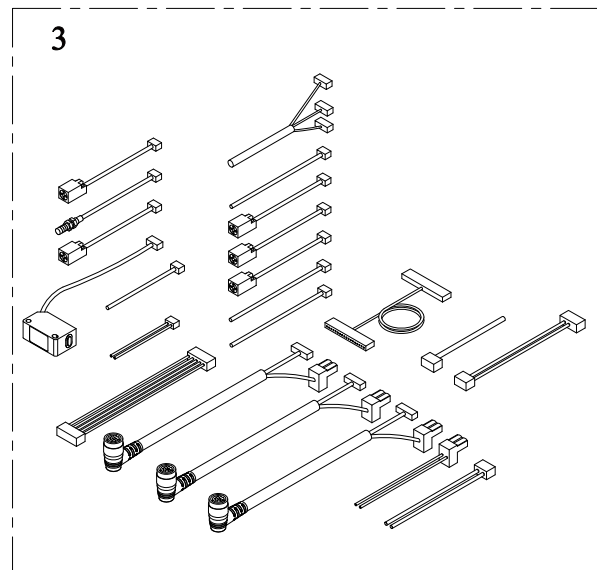
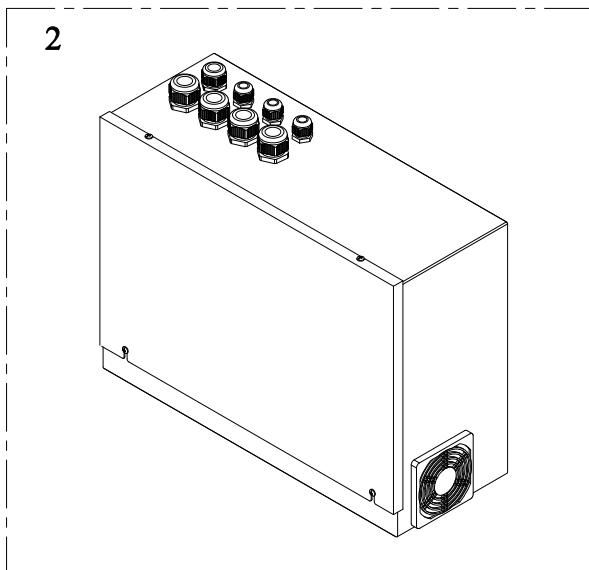
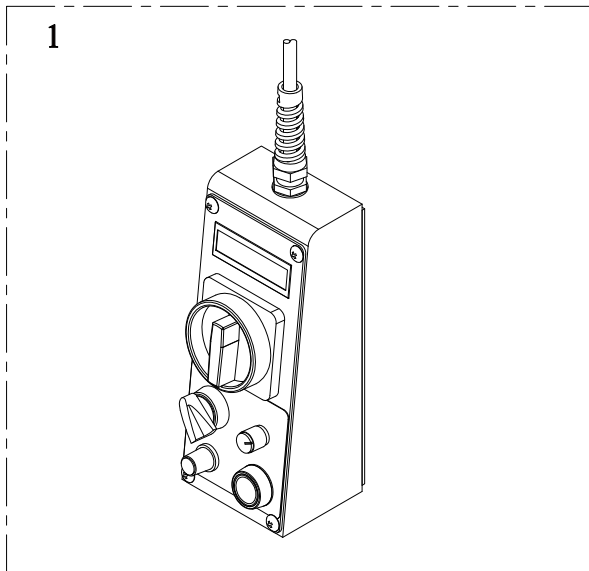
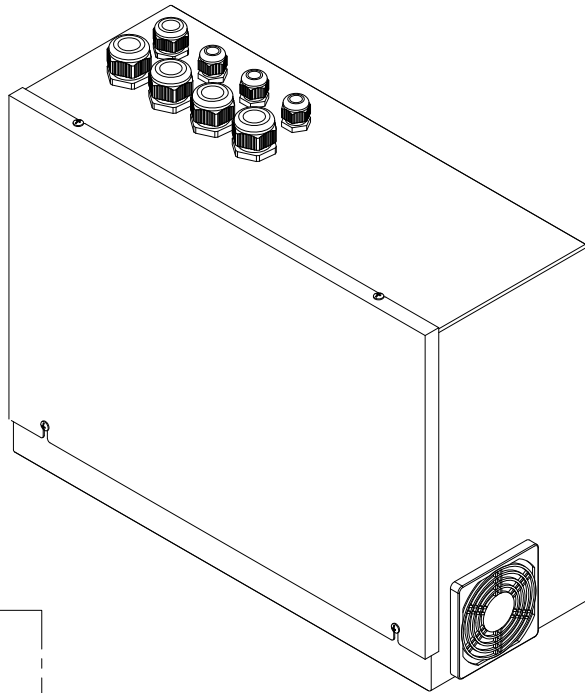
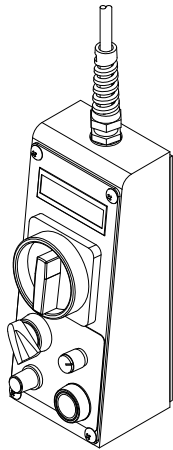


5-3

**PEDAL CONTROL SET
(OPTION)**

T7-6-40001

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T6-6-10350	Connector (Foot Switch)	1	
2	T7-5-20130	Micro Switch	1	
6	TMS0308	TMS, M3×8	4	
	TMS0308S	TMS, M3×8 (Stainless Steel Model)	4	



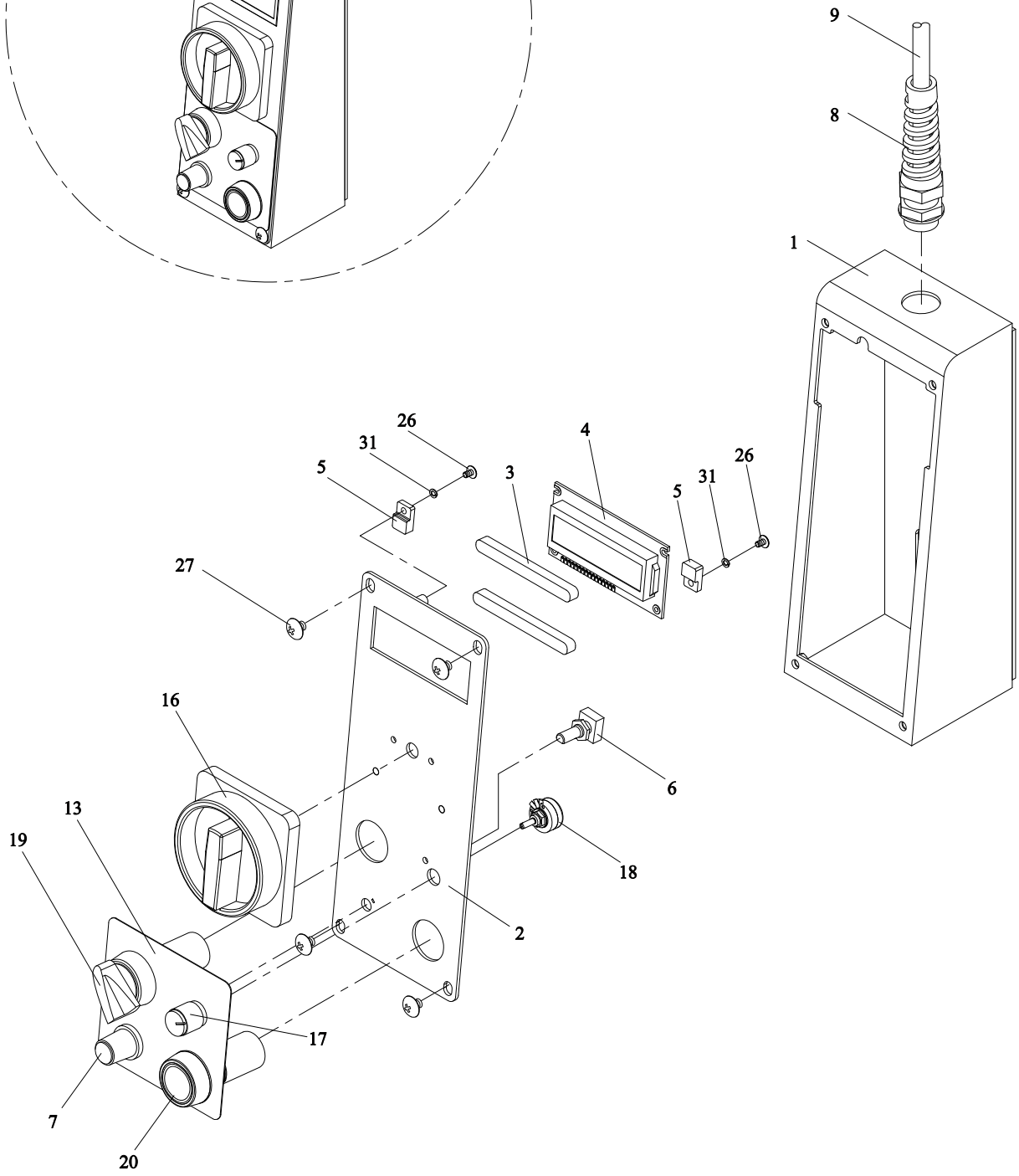
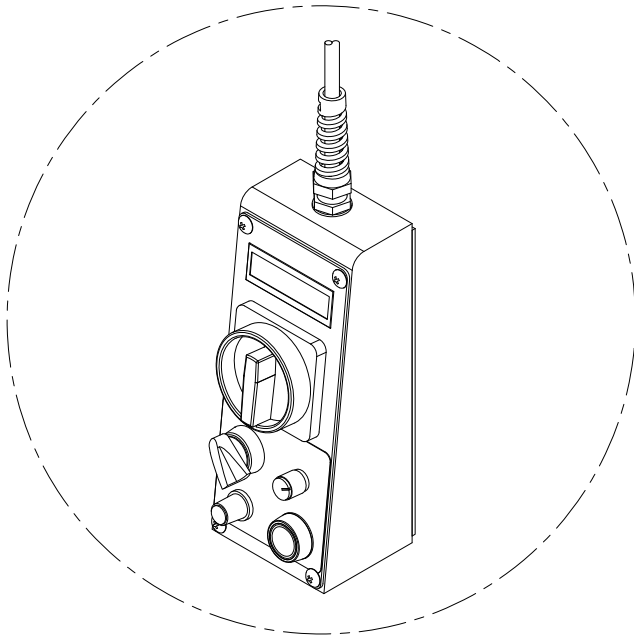
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-6-900000	Electric Control Unit (For 220V~ 240V)	1	
	M7-6-900000S	Electric Control Unit (Stainless Steel Model) (For 220V~ 240V)	1	
	M7-6-900010	Electric Control Unit (For 110V)	1	
	M7-6-900010S	Electric Control Unit (Stainless Steel Model) (For 110V)	1	
1	M7-6-100000	Control Panel Group (Europe)	1	SEE PAGE C93
	M7-6-100000S	Control Panel Group (Stainless Steel Model) (Europe)	1	
	M7-6-100010	Control Panel Group (America)	1	
	M7-6-100010S	Control Panel Group (Stainless Steel Model) (America)	1	
2	M7-6-200000	Electric Control Group (Without Wire) (For 220V~240V)	1	SEE PAGE C95
	M7-6-200000S	Electric Control Group (Without Wire) (Stainless Steel Model) (For 220V~240V)	1	
	M7-6-200010	Electric Control Group (Without Wire) (For 110V)	1	
	M7-6-200010S	Electric Control Group (Without Wire) (Stainless Steel Model) (For 110V)	1	
3	M7-6-300000	Wires Group	1	SEE PAGE C99

6-1

CONTROL PANEL GROUP

M7-6-100000

M7-6-100010



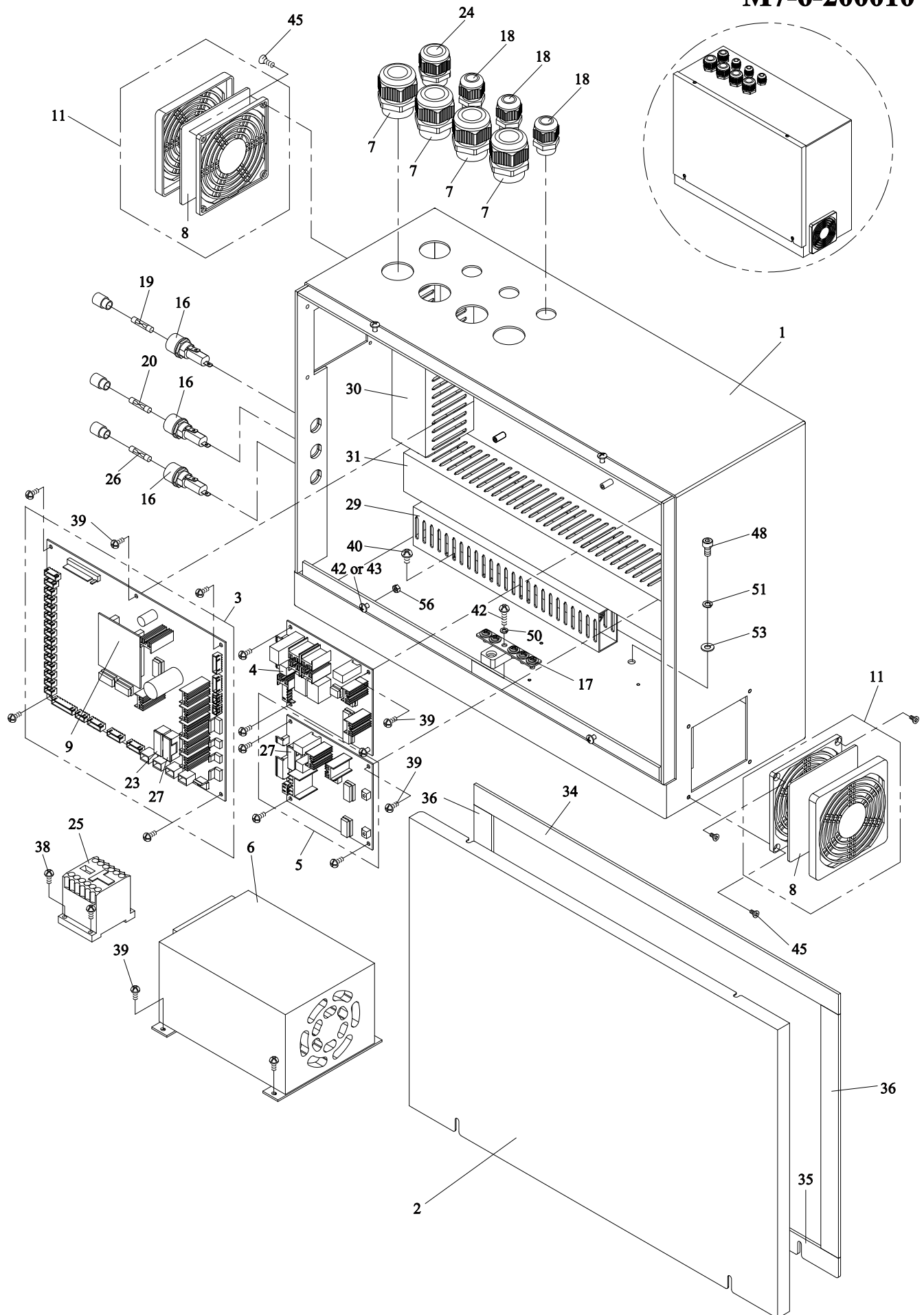
6-1

CONTROL PANEL GROUP

M7-6-100000

M7-6-100010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-6-100000	Control Panel Group (Europe)	1	
	M7-6-100000S	Control Panel Group (Stainless Steel Model) (Europe)	1	
	M7-6-100010	Control Panel Group (America)	1	
	M7-6-100010S	Control Panel Group (Stainless Steel Model) (America)	1	
1	M7-6-101100	Control Box	1	
	M7-6-101100S	Control Box (Stainless Steel Model)	1	
2	M7-6-101200	Control Plate	1	
	M7-6-101200S	Control Plate (Stainless Steel Model)	1	
3	M7-6-101300	Rubber	2	
4	M7-6-101400	LCD	1	
5	M7-6-101500	Bracket	2	
6	M7-6-101600	Encoder	1	
7	M7-6-101700	Knob	1	
8	M7-6-101800	Flex-Protection Cable Gland	1	
9	TT-5-20120	Power Cord (Europe)	1	
	T5-4-10324	Power Cord (America)	1	
13	LA-10190	Label	1	
16	TK-001	Main Power Switch	1	
17	T5-4-10222	Knob (Hole φ 6.0)	1	
18	T5-4-10232	Variable Resistor (5K) (φ 6.0)	1	
19	T6-6-40016	2P. Selector Switch	1	
20	T7-6-20480	Restart Switch (2NO)	1	
26	TMS0306	TMS, M3×6	2	
27	THS0508N	THS, M5×8 (N)	4	
	THS0508S	THS, M5×8 (Stainless Steel Model)	4	
31	SW03	SW, M3	2	



6-2

ELECTRIC CONTROL GROUP

M7-6-200000

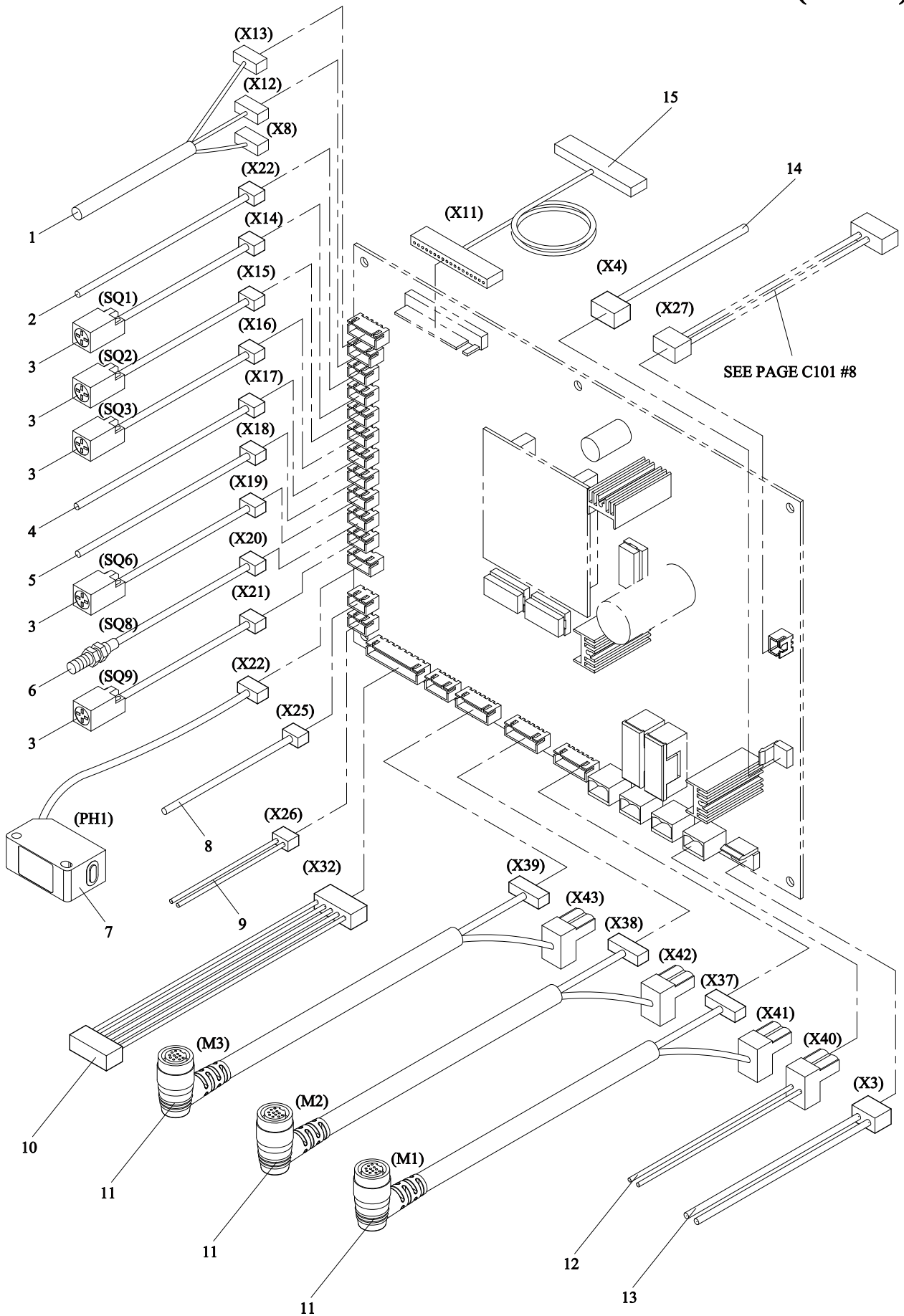
M7-6-200010

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	M7-6-200000	Electric Control Group (For 220V~ 240V)	1	
	M7-6-200000S	Electric Control Group (Without Wire) (Stainless Steel Model) (For 220V~240V)	1	
	M7-6-200010	Electric Control Group (For 110V)	1	
	M7-6-200010S	Electric Control Group (Without Wire) (Stainless Steel Model) (For 110V)	1	
1	M7-6-201100	Electric Box	1	
	M7-6-201100S	Electric Box (Stainless Steel Model)	1	
2	M7-6-201200	Cover	1	
	M7-6-201200S	Cover (Stainless Steel Model)	1	
3	M7-6-201300	Main P.C.B (AP1)	1	
4	M7-6-201400	M4/M5 P.C.B (AP3)	1	
5	M7-6-201500	Heater P.C.B (AP2)	1	
6	M7-6-201600	Power Supply	1	
7	M7-6-201700	Cable Gland (PG25)	4	
8	M7-6-201800	Filter	2	
9	M7-6-201900	CPU	1	
11	M7-6-200100	Filter Set	2	
16	T5-4-10160	Fuse Holder	3	
17	T5-4-10310	Earth Plate (5P)	1	
18	T6-6-10980	Cable Gland (PG11)	3	
19	T6-6-30032	Fuse (3A, 30mm) (For 220V~240V)	1	
	T6-6-30033	Fuse (5A, 30mm) (For 110V)	1	
20	T6-6-30133	Fuse (10A, 30mm)	1	
23	TT-5-10150	Fuse (1A, 20mm)	1	
24	T7-6-11250	Cable Gland (PG21)	1	
25	T7-6-10690	Magnetic Switch	1	
26	FU30040	Fuse (4A, 30mm)	1	
27	FU20040	Fuse (4A, 20mm)	2	
29	WD25450250	Wire Duct 25x45x250	1	
30	WD45650170	Wire Duct 45x65x170	1	
31	WD45650425	Wire Duct 45x65x425	1	
34	FR-24049600	Foam Rubber	1	
35	FR-24049601	Foam Rubber	1	
36	FR-24028700	Foam Rubber	2	
38	TMS0312	TMS, M3×12	2	
39	TMS0308	TMS, M3×8	17	
40	TMS0406	TMS, M4×6	7	
42	TMS0420	TMS, M4×20	5	
43	TMS0420S	TMS, M4×20 (Stainless Steel Model)	4	

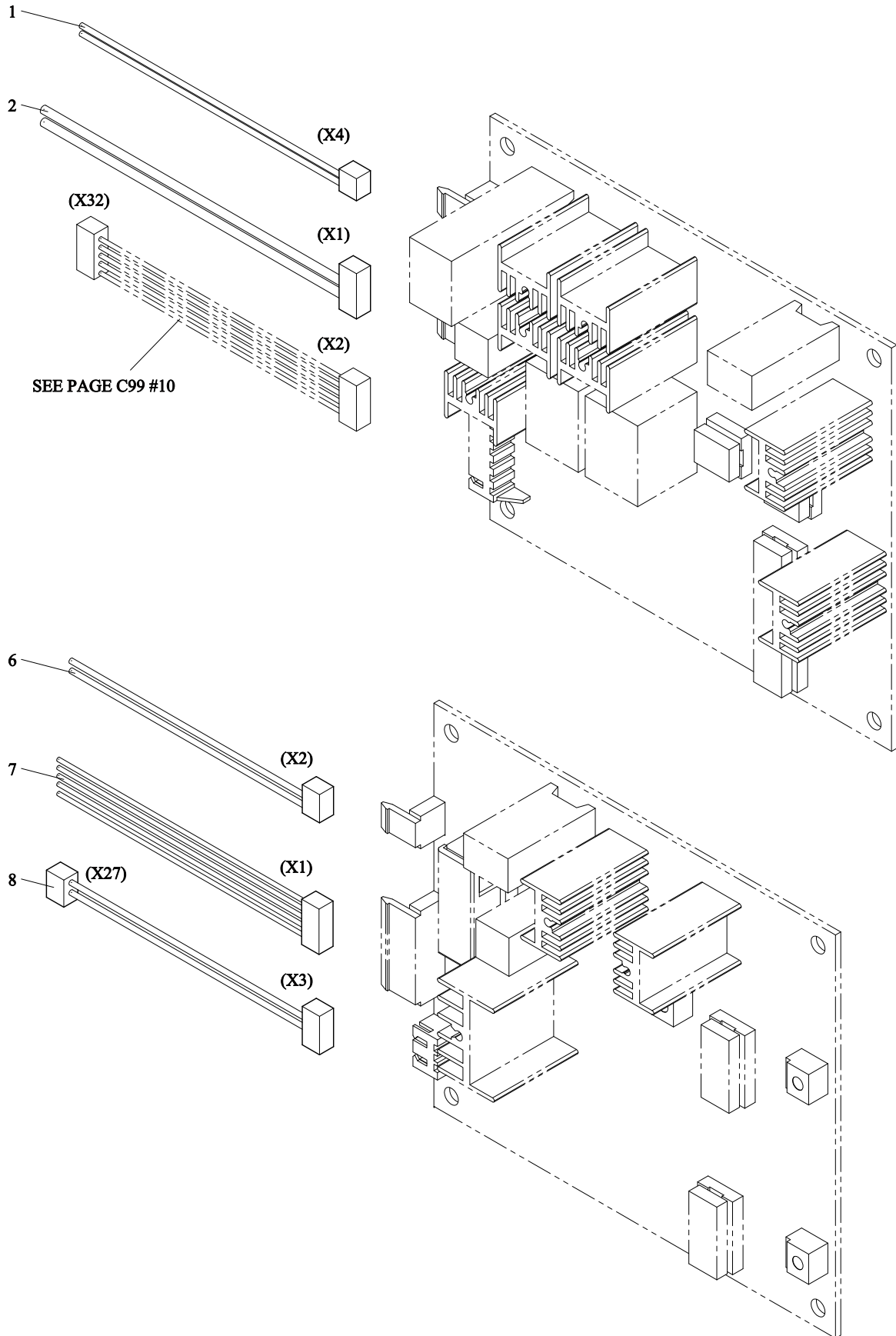
6-2**ELECTRIC CONTROL GROUP****M7-6-200000****M7-6-200010**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
45	FMS0406	FMS, M4×6	8	
48	HBS0510N	HBS, M5×10 (N)	4	
50	SW04	SW, M4	1	
51	SW05	SW, M5	4	
53	PW05	PW, M5	4	
56	NTE04	NTE, M4	4	





REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	EW720005BX12	Wire Ass'y X13/X12/X8 (Control Panel)	1	
2	EW720005BX22	Wire Ass'y X22 (Foot Switch) (Option)	1	
3	MV-6-20220	Sensor (SQ1, SQ2, SQ3, SQ9)	4	SEE PAGE C3, C81
		Sensor (SQ1, SQ2, SQ3, SQ9, SQ6) (Option)	5	SEE PAGE C3, C41, C81
4	EW720005BX17	Wire Ass'y X17 (SQ4)	1	
5	EW720005BX18	Wire Ass'y X18 (SQ5)	1	
6	M7-6-301100	Proximity Switch (SQ8)	1	SEE PAGE C27
7	M7-6-301200	Photo Eye (PH1)(Option)	1	SEE PAGE C3
8	EW720005BX25	Wire Ass'y X25 (Reel Release Switch)	1	
9	EW720005BX26	Wire Ass'y X26 (Machine Ready)	1	
10	EW720005BX32	Wire Ass'y X32 (Control Wire for M4/M5)	1	
11	M7-6-300100	Motor Cable (M1, M2, M3)	3	
12	EW720005BX40	Wire Ass'y X40 (Power I for Main PCB)	1	
13	EW720005BX03	Wire Ass'y X3 (Power II for Main PCB)	1	
14	EW720005BX04	Wire Ass'y X4 (Reel)	1	
15	EW720005BX11	Wire Ass'y X11 (LCD)	1	



REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	EW720005BM04	Wire Ass'y X4 (Power for M4/M5 PCB)	1	
2	EW720005BM01	Wire Ass'y X1 (Power for M4/M5)	1	
6	EW720005BH02	Wire Ass'y X2 (Power for H.T PCB)	1	
7	EW720005BH01	Wire Ass'y X1 (H.T/Sensor/Fan)	1	
8	EW720005BH03	Wire Ass'y X3 (Heater Ready)	1	