

FORMAX[®]

FD 8906B

Cross-Cut Shredder with Baler

Machine Specs	
Model: FD 8906B	Shredder Serial #: _____ Baler Serial #: _____
Motor	7.5KW (10HP)
Power	220V / 60Hz / 3-Phase
Sheet Capacity	Up to 650 Sheets
Throat Width	21"
Weight	3,086 lbs.

The machine number is specified on the nameplate on the shredder, shown above. Guarantee claims and inquiries cannot be processed if you do not quote the machine number.

Enter this number and the other data into the relevant fields of the nameplate shown here immediately after receipt of the shredder.

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SAFETY PRECAUTIONS

“Work safety” symbol



This symbol marks all work safety notes in this manual which can endanger the health or life of operators. Please pay attention to this symbol and exercise particular care in such cases. Please also forward all work safety notes to other users. Apart from the instructions in this manual, you should also follow generally applicable safety and accident prevention guidelines.

“Attention” notes



This icon marks information in this manual which requires particular attention including guidelines, regulations, instructions and correct working procedures intended to prevent damage to the machine and/or other equipment.

Notes on work safety

The FD 8906B shredder / baler has been inspected for safety. However, improper operation and misuse risk the following:

- the health or life of the operator
- the machine and other valuable equipment
- the efficient operation of the shredder.

The FD 8906B employs state-of-the-art technology and is safe to operate. However, this machine can become hazardous if used incorrectly, by untrained staff or for purposes other than those for which it is designed.

- Material with a tendency to curl, e.g. tapes, cords, etc. should not be processed.
- Keep long hair, loose clothes, ties, scarves, etc. away from paper feed opening.
- Only one person should operate the shredder at a time.
- Always follow local safety and accident prevention regulations when operating the shredder.
- No pedestals or other raised surfaces may be placed in the vicinity of the machine if they alter the safety clearances.
- All connecting cables must be laid in such a way that they cannot be tripped over.
- Mechanical wearing parts must be inspected once a year.

The FD 8906B shredder / Baler is intended for shredding paper, cardboard, archive files, tapes, ribbons, CDs and magnetic disks. The hardened, solid-steel cutting rollers are unaffected by loose-leaf binders, paper clips and staples contained in these materials.

Any other use beyond the scope described here is regarded as **not being in accordance with the instructions**. The manufacturer will not be held liable for damage resulting from incorrect use; the user alone is responsible.

Users must also follow the assembly, dismantling, re-assembly, operation and maintenance procedures specified by the manufacturer. The operation, maintenance and repair of the machine must be performed only by trained personnel who are aware of the potential dangers.

The relevant accident prevention regulations as well as other generally recognized rules concerning safety engineering and occupational safety must be observed.

- Each person responsible for assembling, dismantling and reassembling and maintenance (inspection, servicing, repair) of the shredder must have read and fully understood the entire operating manual, in particular the "Safety" section.
- The shredder may only be operated, serviced and repaired by authorized, trained personnel.
- The shut-down procedures specified in this manual must be followed during all assembly, dismantling and re-assembling, cleaning, and maintenance work. This type of work must be performed only when the machine is idle.
- The drive of the FD 8906B must be secured against unintentional switching-on before performing work on the machine. Set the main switch to "Off" and unplug machine from wall outlet.
- After repair, check all protective devices to be sure they have been re-installed before operation.
- Do not perform any work which may impair your safety while operating the machine.
- Immediately report any changes which impair your safety to the person responsible. Shut the machine down until such damage has been resolved.
- Before operating the shredder, ensure that it is in perfect working condition.
- Ensure that the workplace around the FD 8906B is always clean and safe.
- The user must not make any conversions or changes on his own initiative which impair the safety of the FD 8906B. Protective devices must not be removed or rendered inoperative.
- All work which is not directly connected to the normal operation of the machine must always be performed when the machine is idle.
- Doors and flaps must not be opened until the machine is motionless. Observe safety labels!
- Test the safety features after installing or repairing electrical components.

Checking the safety devices

Check the safety devices:

- at the start of each work shift (when operation is sporadic)
- at least once a week in continuous operation
- after each maintenance or repair

Check the safety devices for:

- specified condition
- specified location
- safe attachment
- specified function

Correct defects before you operate the shredder.

1. Immediately shut down the shredder if defects occur during operation and make sure the defects are corrected.
2. Do not modify or remove protective devices. Do not switch off protective devices. For safety reasons, modifications of the machine are not allowed.



Danger: Defective safety devices can cause serious accidents. If safety devices are not working properly, the shredder should immediately be put out of operation.

Never reach into the cutting system while it is operating; you risk serious injury!

Only when all safety devices are operating correctly can the shredder be used again.

Operate the shredder only when these devices have been checked and are in order.

1. Check the **Safety Bar** push switch (A) in front of the feeding table:

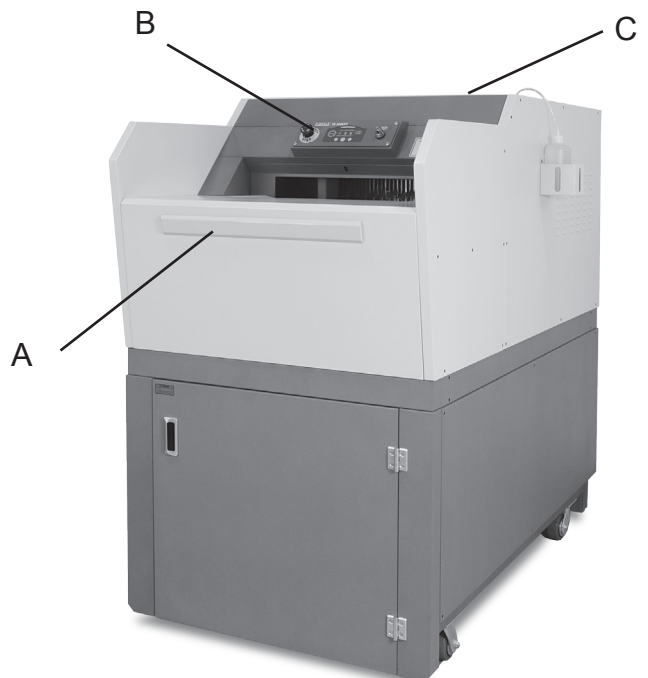
The shredder must switch off immediately when you press the **Safety Bar** and the Emergency Stop Light (B) must go on.

2. Check the **Emergency Stop Button** (B) on the left of the control panel:

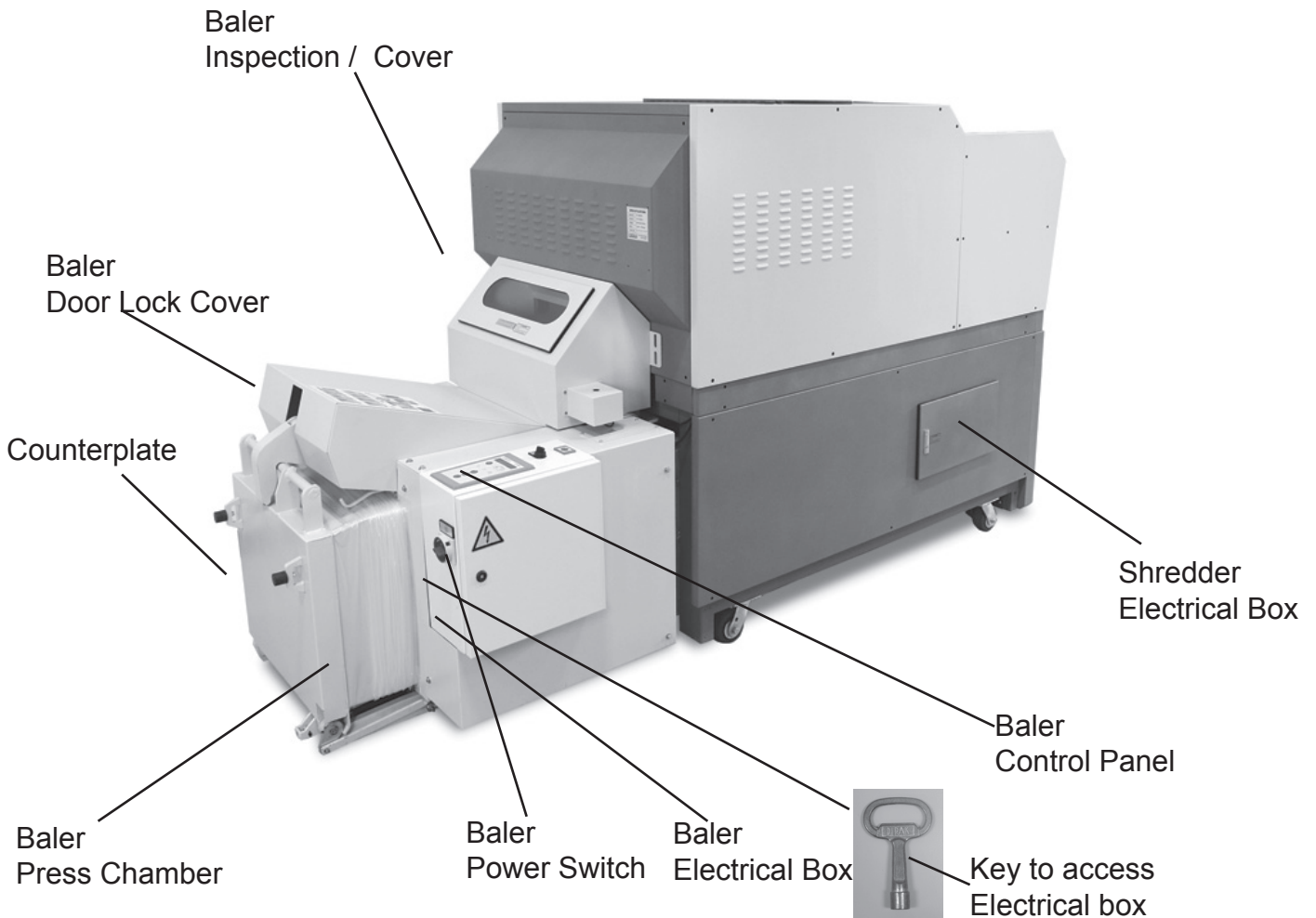
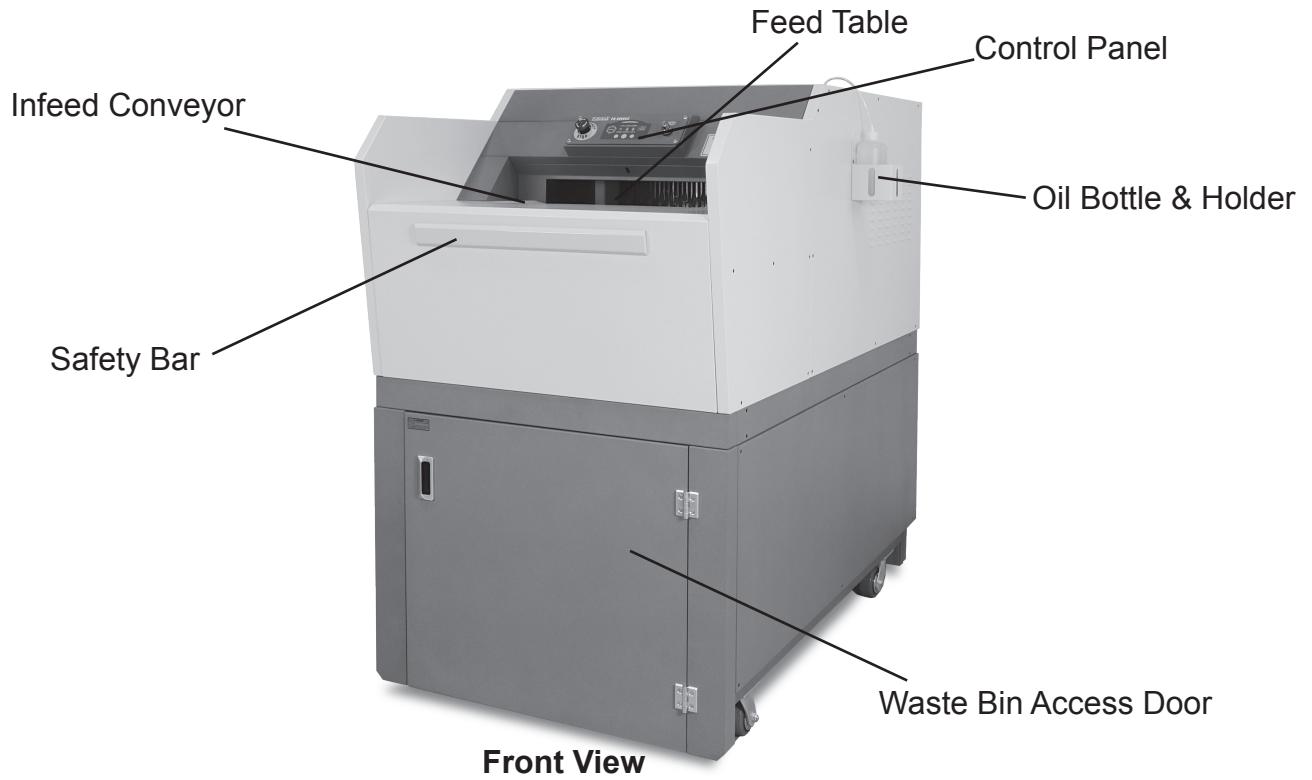
The shredder must switch off immediately when the button is pushed, and the Emergency Stop Light must go on.

3. Check the **Safety Switch** inside the Cutting Block Access Door at the top of the shredder (C). Press the door handle release. Handle will rotate up. Pull up on handle.

The shredder must switch off immediately when the door is opened, and the Emergency Stop Light must go on.



General Overview



MACHINE SPECIFICATIONS

Machine designation: FD 8906B

Machine type: conveyor-belt paper shredder and Baler FD 8906B

Technical equipment: large feeding table, infeed conveyor belt, outfeed Baler

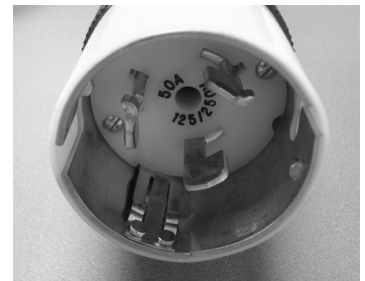
Cutting Data, Speed, Dimensions, Weight

Cutting Style:	Cross Cut
Shred Size:	5/16" x 1-1/2" - 3"
Sheet Capacity:	Up to 650
Speed:	Up to 35 feet per minute
Feed Opening:	21"
Dimensions:	47" W x 129" L x 63" H Counterplate up 47" W x 149" L x 63" H Counterplate down
Feed Table Dimensions:	47" W x 23.5" D x 49.5" H
Space Requirements:	79" W x 200" L x 118" H
Bale Capacity:	154 lb compressed bale
Baler Pressing Power:	80.8 kN
Bale Size:	31" W x 22" L x 19" H
Bale Weight:	110 - 154 lbs. (material dependent)
Weight:	3,086 lbs.

Motor Specifications, Power Requirements

Motor Type	Horizontal Geared
Rated Power	7.5KW (10HP)
Operating Voltage	220/380V
Phase	3-Phase
Frequency	50/60Hz
Plug/Receptacle	CS8365 plug included CS8369 receptacle required
Rated Current	25.5A/14.7A
Output RPM	25 RPM/35 RPM
Number of Poles	4
Total Rated Power Pn	7.5KW
Total Rated Current In	26A
Total Fuse Protection	35A

1. Appropriate power receptacle must be available at installation site.
2. The FD 8906B is delivered in two crates. During transport, be aware of the shredder's high center of gravity.
3. The shredder can be moved on its casters. If a fork-lift is used to transport the machine, be sure to use the designated pick-up points.
4. Install the shredder on a flat and even floor without carpeting.
5. Once the shredder is in place, lock the caster brakes, and plug in power cable to appropriate power source.

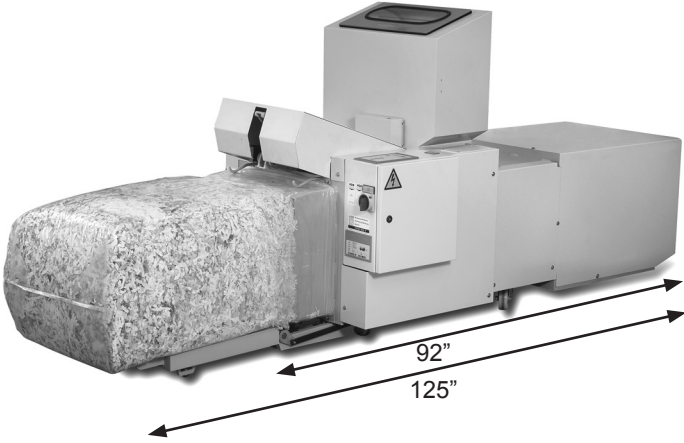
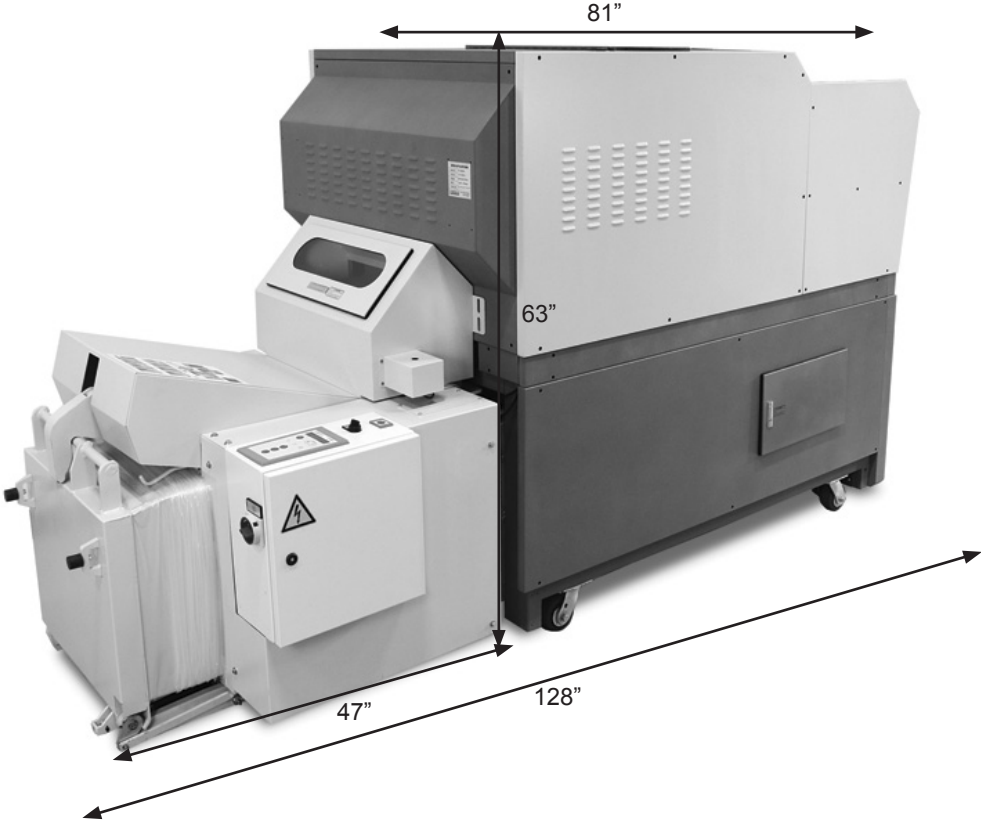


Power Plug

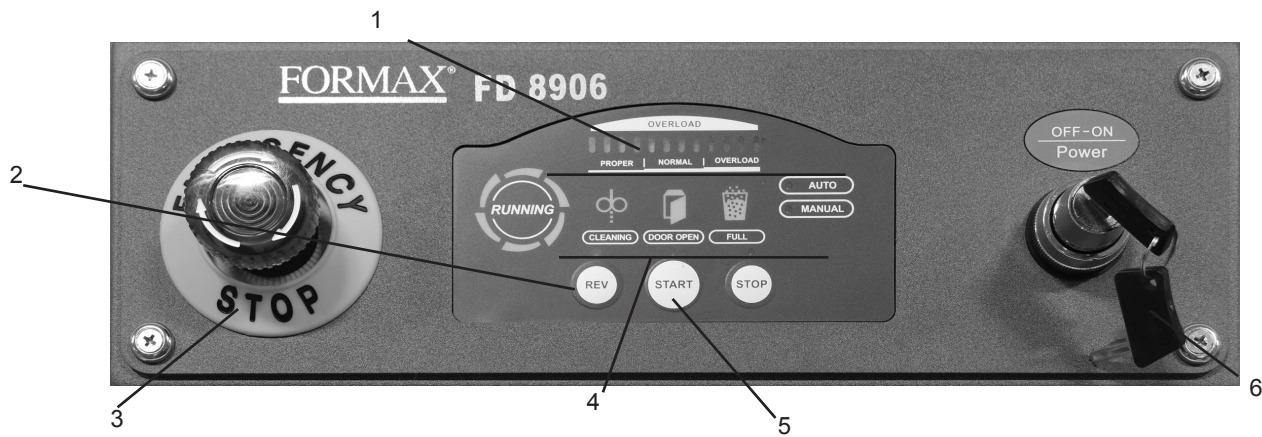
INSTALLATION

Dimensions

Left Side View



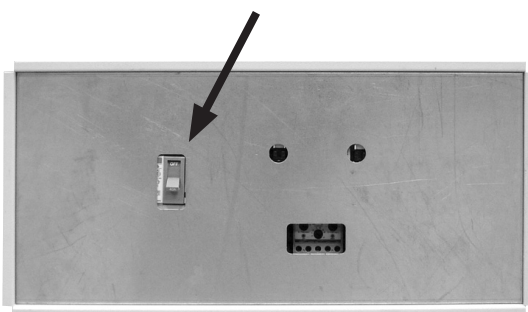
SHREDDER CONTROL PANEL & MAIN POWER SWITCH



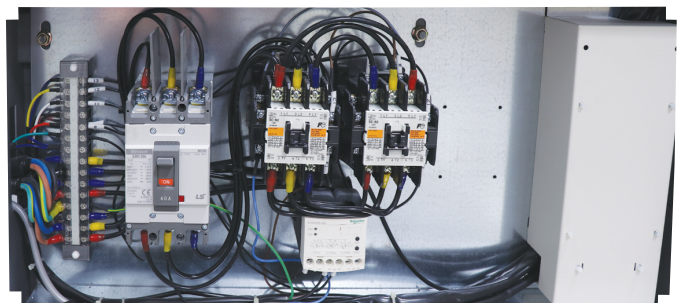
1	LOAD INDICATOR	<i>LED Display</i> - Displays load to provide maximum capacity and avoid paper jams.
2	REVERSE	<i>Blue Touch Pad</i> - Push button to reverse direction of cutting blades.
3	EMERGENCY STOP	<i>Red Push Button</i> - Push button to stop cutting system. Shredder remains in standby mode until Start button is pressed. (Shredder can also be stopped by pressing red Stop touch pad on right of control panel or large orange Safety Bar on front of shredder.)
4	MODE/FULL/OPEN INDICATORS	<i>LED Displays</i> - Lights signify mode (Auto/Manual/Stop/Reverse) and indicate when bin is full or door is open.
5	START A/M	<i>Green Touch Pad</i> - Push once to start Auto Mode: optical sensors cause conveyor and cutting blade to operate. Push twice to choose Manual Mode: conveyor and blades operate continuously.
6	OFF/ON	<i>Key-Operated Toggle Switch</i> - Turn key to right to turn on cutting system.

Main Switch

Main Power Switch

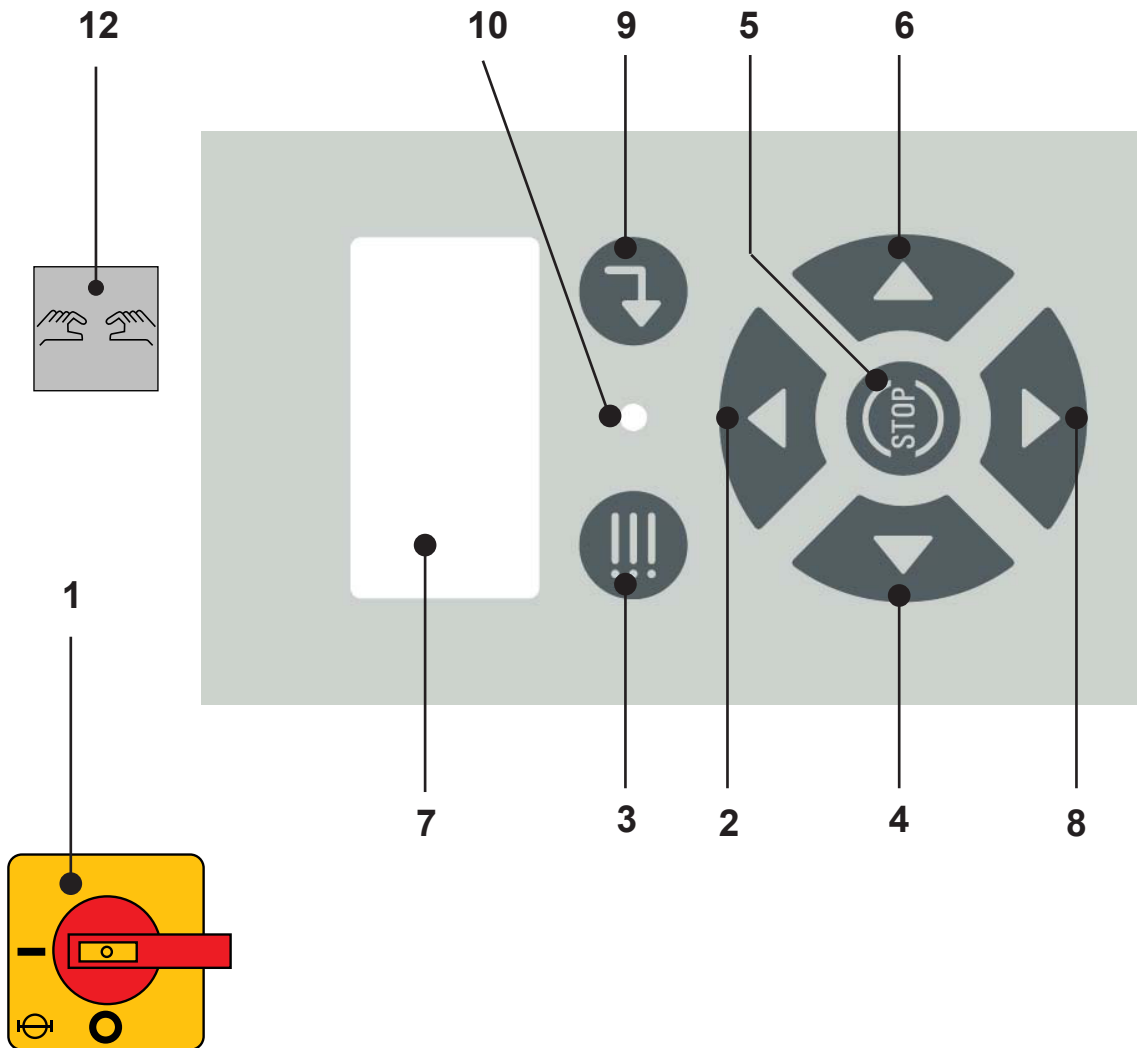


Breaker Panel



Breaker Panel Interior

BALER CONTROL PANEL & MAIN POWER SWITCH



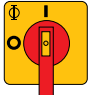
- 1 Main switch
- 2 Vertical navigation
- 3 Menu button
- 4 Horizontal navigation
- 5 Stop button
- 6 Horizontal navigation
- 7 Display
- 8 Vertical navigation
- 9 Enter (input button / acknowledge fault)
- 10 LED (2 colours) green / red

Only in setup mode or during bale ejection:

- 12 Two-hand operation button
- 2 + 12 Open door lock
- 8 + 12 Close door lock

Only with counterplate open:

- 2 + 12 Press ram forwards
- 8 + 12 Press ram back



Main switch

The main switch is on when it is turned 90° to the right.
The main switch can be secured with a padlock when in the “Off” position.

Display

Messages are shown in the display. (-> see also “Malfunctions”)



Menu button

Open the menu.



Enter

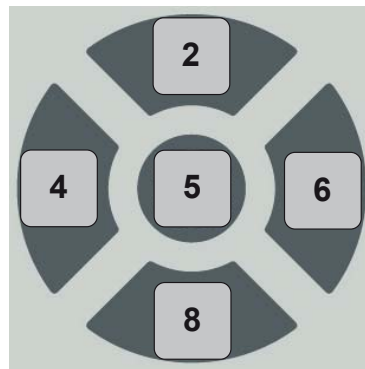
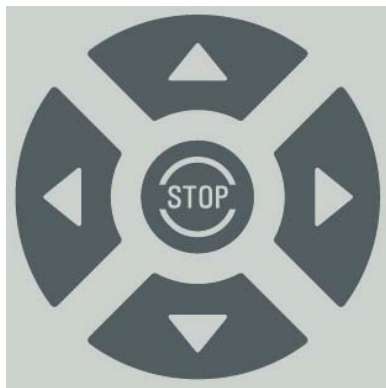
This button confirms the entry.



Control keys ()

These buttons are used for making service settings.

The buttons are assigned in the same way as on a numerical block.



Two-hand operation



Note

Only works if the “Bale ready” symbol is lit up or in setup mode.



Two hand control: Opening the hydraulic door lock (+)

If you press the two buttons at the same time (within 0.6 seconds) the door lock opens. If you let go of one of these buttons, the movement stops.



Two hand control: Closing the hydraulic door lock (+)

If you press the two buttons at the same time (within 0.6 seconds) the door lock closes. If you let go of one of these buttons, the movement stops.



Two hand control: Press ram forward (+)

If you press the two buttons at the same time (within 0.6 seconds), you can move the press ram forward **when the counterplate is open**. If you let go of one of these buttons, the press ram stops.




Two hand control: Press ram reverse (+)

If you press the two buttons at the same time (within 0.6 seconds), you can move the press ram backward **when the counterplate is open**. If you let go of one of these buttons, the press ram stops.

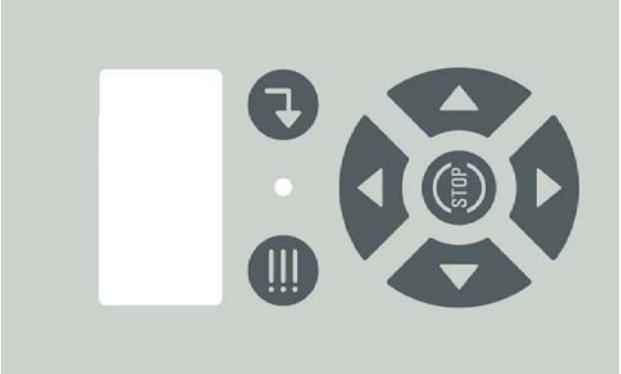




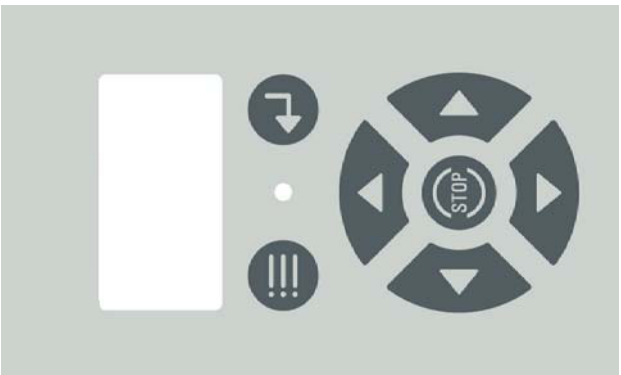





Opening the menu

- Press the  menu button.

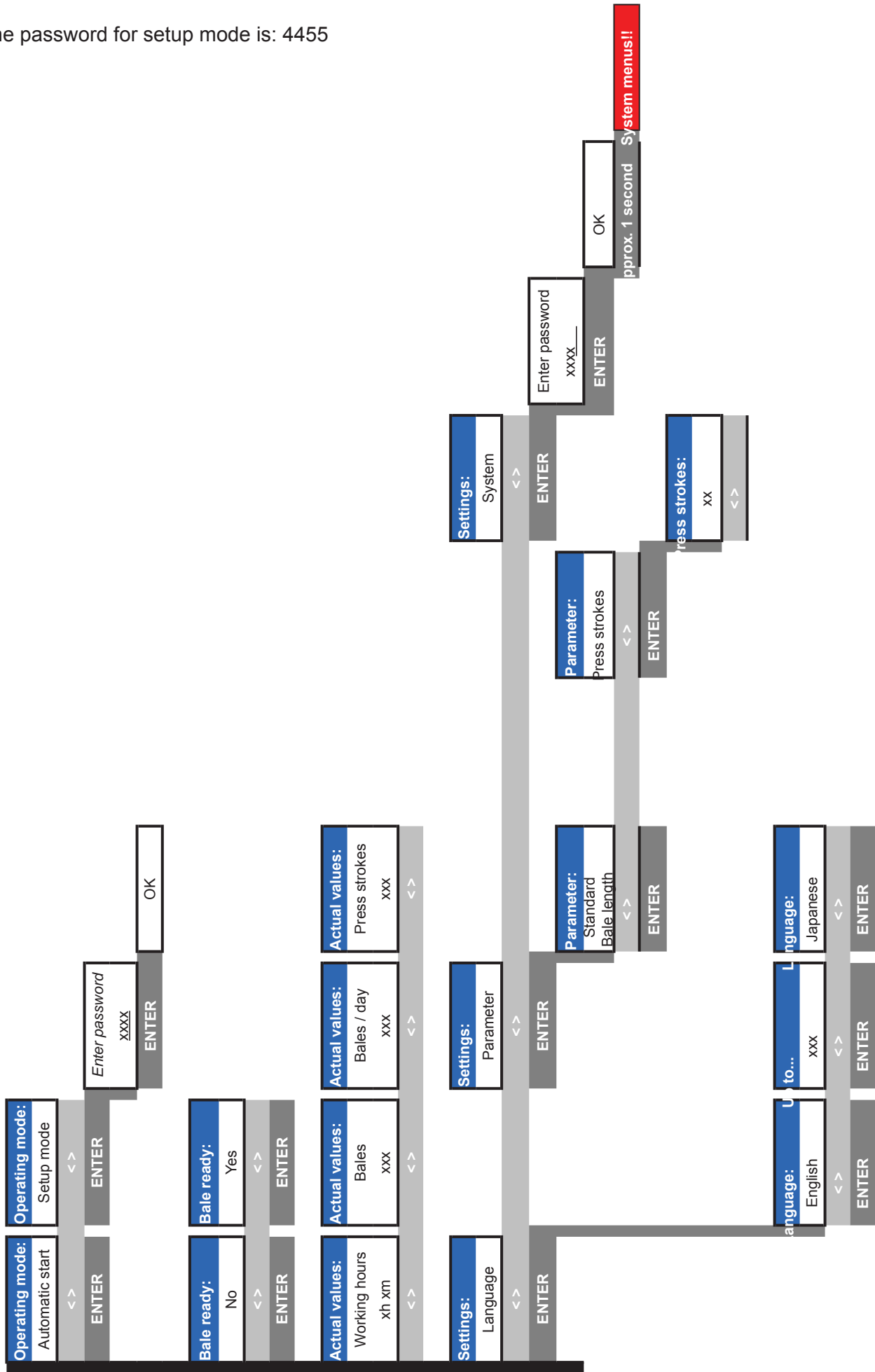
Use the control buttons  to switch between the menu items:

Operating mode - Bale ready - Actual values - Settings - Language - Bale length - Press stroke - System

The System menu is only accessible for service engineers.

<p>Selecting menu items:</p> 	<ul style="list-style-type: none"> • Press the  menu button. • Use the  or  buttons to scroll through the menus. • Press the  Enter button to select the menu item.
<p>Selecting sub-menus:</p> 	<ul style="list-style-type: none"> • You can scroll through the sub-menus using the  and  buttons. • Press the  Enter button to select a sub-menu item.
	<ul style="list-style-type: none"> • This button is only available for Actual values: Bales / Day • Press the  for two seconds to reset the value to zero.

The password for setup mode is: 4455



Selecting the setup mode





Caution!



*In setup mode, certain electrical safety functions are disabled.
Only specially trained staff may operate the machine in setup mode.*

This section is password-protected.



Moving the press ram forwards (button)

If you press the  button, the press ram moves forwards. If you release the  button, the press ram stops.

Moving the press ram backwards (button)

If you press the  button, the press ram moves backwards. If you release the  button, the press ram stops.



1 Opening the press channel

- Select the press channel menu item
- Open the press channel 
- Press the  button to open the press channel.

2 Setting the user language

The text display can be set to various languages.

Press the  menu button and go to the “**User language**” using the  control keys.

Use the  and  control buttons to scroll to the required language “E”.

Press the Enter button () to save the required language.



3 Actual values

You can call up the following actual values:

- Working hours
- Bales
- Bales / day
- Press strokes

4 Automatic start operating mode

Automatic start operating mode means:

- The Baler is switched on and ready for operation.
-  “Automatic start” operating mode has been selected.
- In the display, the  symbol appears.
- The pressing cycle runs automatically as long as the light barrier in the hopper is broken by material to be pressed.


The press ram moves forward and compresses the material. After the compression time has expired, the press ram automatically moves back to the rear limit position.

The motor switches off automatically after a set run-on time.

Once the set bale length has been reached, the “Bale ready” message appears in the display.





Note:



If you press the  menu button twice, the “Automatic Start” switches off immediately.

The press goes into manual mode and the press ram can be moved forwards or backwards.





The automatic start must be reset again each time it is switched on using the main switch!




5 Displaying actual values

- Press the  button.
- Use the  buttons to switch to the “Actual values” menu item.
- The following actual values can be selected:
- **Operating hours - Bales - Bales / Day - Press stroke**

Actual values:	
Operating hours	<ul style="list-style-type: none"> • The operating hours are shown in hours and minutes.
Bales	<ul style="list-style-type: none"> • Total number of bales is shown. • This value cannot be reset.
Bales / day	<ul style="list-style-type: none"> • Bales per day is shown. • You can reset this value to zero by pressing the  button. • Hold down the  button for two seconds.
Press strokes	<ul style="list-style-type: none"> • Total number of press strokes is shown.

7 Settings

Settings: Language			
	Language: English	Up to... XXX	Language: Japanese
 or 			

Parameter: Press strokes		
	Press strokes: xx	<ul style="list-style-type: none"> • min. 1 • Max. 20
 or 		

Settings:	
Language	<ul style="list-style-type: none"> • Setting the language
Parameter	<ul style="list-style-type: none"> • The following parameters can be def ned here. • Press strokes
Press strokes	<ul style="list-style-type: none"> • from a minimum of 1 press stroke • to a maximum of 20 press strokes
System	<ul style="list-style-type: none"> • For HSM Service only

Control panel

1 **Display: Baling press not in automatic mode**

This symbol lights up red if the press is not in the automatic mode.

2 **Display: Baling press operating state**

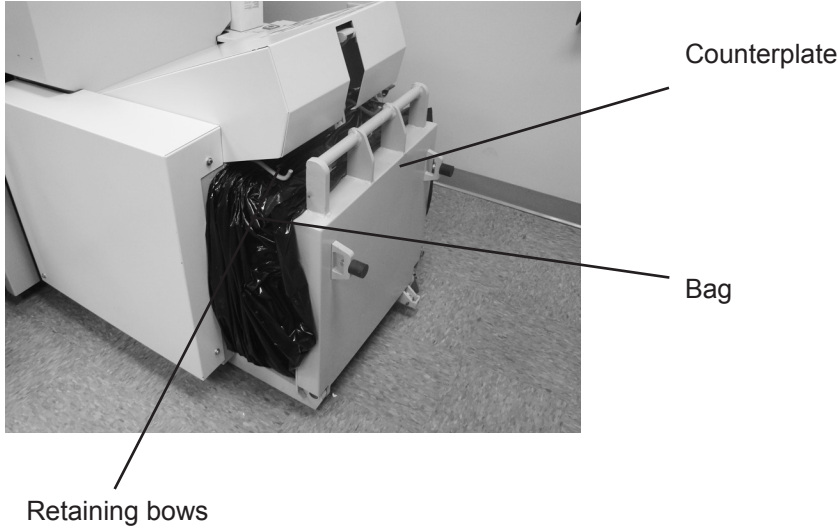
This symbol lights up

green when the baling press is in automatic mode.

yellow when the bale is ready for strapping.

red if a fault occurs in the baling press.

INSTALLING BALER BAG



1. Simultaneously press the +/- keys for approx. 3 seconds
Screen display: Menu Service - Set-up mode
 2. Simultaneously press the +/- keys once more for approx. 3 seconds
Screen display: Attention! - Set-up mode (blinks)
- (See step by step pictures on next page)
3. Open the hydraulic door lock device -
Simultaneously press "Both Hands" Button and "Press Ram Backwards Button"
 4. Grab the counterplate handles with both hands and lower it completely down
 5. Pull the plastic bag over the outlet opening and push it under the 2 retaining bows
 6. Close the counter plate manually
Simultaneously press "Both Hands" Button and "Press Ram Forwards Button"
 7. Close the hydraulic door lock device
 8. Press the "Automatic operation" key on the combination press • the yellow light symbol "Automatic operation" comes up:
Screen display: Automatic operation - starting position

1



2



3



4



5



6



7



8



SHREDDER / BALER OPERATION

1. Set main switches to ON. Turn the shredder Key OFF/ON toggle switch on the control panel to the ON position.
2. Press the START button. The conveyor will begin to move in the forward direction.
3. Place the material to be shredded on the feed table, then slide it onto the infeed conveyor belt, in appropriate stacks. (Up to 650 sheets.)

NOTE: If material is accidentally placed onto the conveyor belt, DO NOT REACH FOR IT. Instead, press the red STOP button (left side of control panel) or the Safety Stop Bar (front of feed table). When the shredder stops, press and hold the REVERSE button. The conveyor will operate in reverse, allowing safer access to the materials. The shredder will stop when the REVERSE button is released. To resume shredding, press STOP button, then the START button.

Turning off the shredder

1. To shut down the shredder, press the STOP button on the control panel.
2. Turn Key OFF/ON toggle switch on the control panel to the OFF position (to the left).
3. Open the electrical control panel door, and flip the main power switch DOWN to the off position.

Overloading the motor

If the shred capacity of the machine is exceeded (too large a stack of paper, etc), the shredder will stop automatically. To resume shredding:

1. Push and hold the REVERSE button until the paper or other material backs completely out of the shredder.
2. Press the red STOP button or the SAFETY BAR on the front of the machine, then divide the materials into smaller stacks.
3. Press the START button. The conveyor and cutting blades will begin to move.
4. Continue shredding, feeding less paper or fewer materials at a time.

Frequent Overloading

If the shredder is repeatedly overloaded, the motor can overheat, which will cause the shredder to switch off automatically. To resume shredding:

1. Allow the motor to cool down for approximately 20 - 30 minutes before using.
2. Once the motor has cooled sufficiently, resume shredding by following standard operating procedure (see Operation).



NOTE:

To maintain optimum performance and allow constant operation, avoid repeatedly overloading the shredder. This will prevent time-consuming reversing cycles, and will provide the highest possible throughput.

EJECTING FILLED BALER BAG

1. Put a larger piece of cardboard at the end of the baler so that it will sit under the counterplate.
2. Open the hydraulic door lock device.
3. Grab the counterplate handles with both hands and lower it completely down.



4. Now press both the “Both Hands Button” and “Press Ram Forwards Button”, keep them pressed until the press ram stops automatically.
5. The baler ram moves forwards and pushes the bale into the plastic bag.




6. Take the plastic bag at the bottom of the press and then pull it carefully down from the outlet opening
7. Lift the plastic bag at its opening, so that you can tip over the bale
8. Fold the edges to the middle and seal the bag with adhesive tape




9. Attach a new plastic bag (see section 7.1)
10. Swivel the counter plate upwards again
11. Open the baler Inspection/ safety over, remove the cardboard underneath the bale and empty the particles that may have fallen out back into the baler.
12. Lock hydraulic door.
13. Press the “Automatic operation” key on the combination press
 - the “Automatic operation” symbol lights up
 - the press ram moves into starting position
 - the baler is ready for operation again

Baler Error Codes

As soon as a malfunction occurs in the baling press, the red malfunction symbol  lights up. Switch off the baling press and an error message appears in the text display.

The previous error message is saved in the error memory.

By pressing the  button or switching on and off, the system can delete various error messages displayed.

Error numbers

Code	Description	Remedy
100	Communication PIC <-> ATMEL	Electrician! Call Service!
101	Contactor defective	Electrician! Call Service!
102	Motor protection has been triggered.	Electrician! Call Service!
103	Press cylinder feedback	Electrician! Possible cable rupture or defective solenoid valve!
104	Hydraulic locking mechanism feedback	Electrician! Possible cable rupture or defective solenoid valve!
105	Hydraulic channel adjustment feedback	Electrician! Possible cable rupture or defective solenoid valve!
106	Press timeout	Call Service!
107	Reversed rotation	Phase is reversed Electrician! Replace phase!
108	Phase fault	Electrician! Phase missing
109	EEPROM CRC fault	Electrician! Call Service!
110	Pressure switch defective	Electrician! Call Service!
111	Excess hydraulic oil temperature	Let motor cool down - wait approx. 20 minutes
112	Open/ruptured hydraulic oil temperature sensor	Electrician! Call Service!
113	Short circuit in hydraulic oil temperature sensor	Electrician! Call Service!
114	Door switch defective	Electrician! Call Service!
115	Channel switch not seen	Electrician! Call Service!
116	Maximum motor runtime achieved	Switch off for 5 minutes and wait! Call Service!
117	Light barrier interrupted	Remove material bridge / clean light barrier
118	Shearing fault	Remove material jam
119	UPPER proximity switch defective	Electrician! Call Service!
120	LOWER proximity switch defective	Electrician! Call Service!
121	FRONT proximity switch defective	Electrician! Call Service!
122	REAR proximity switch defective	Electrician! Call Service!
123	Oil cooler contactor does not tighten	Electrician! Call Service!

SHREDDER MAINTENANCE AND INSPECTION



NOTE: The maintenance procedures which follow should be performed only by authorized and trained technicians.

Removing & Reinstalling Side Covers

Side covers are attached by Phillips head screws.

1. To remove covers, insert screwdriver through access holes (Fig. 1), and remove screws. Lift covers off frame hooks.
2. To reinstall, rest panels on hooks, replace screws.



Figure 1

Conveyor Belt Maintenance

- **Checking Belt Tension**
When loaded with material, the conveyor belt must not slip, i.e. stand still when material is loaded. If the belt slips, it must be tightened. Contact the Formax Service Department for assistance.
- **Checking Belt for Wear**
The upper surface of the conveyor belt can become worn over time. The belt must be replaced when the woven fabric inlay becomes visible. Contact the Formax Service Department for assistance.
- **Cleaning the Conveyor Belt area**
The conveyor belt area must be cleaned once a month, or as needed to maintain optimal performance.
 1. Switch off the shredder and unplug from wall outlet.
 2. Remove the covers on both sides, revealing the cleaning openings in the conveyor belt area.
 3. Use compressed air to blow out particles, or a vacuum to remove dirt and dust.
 4. Re-install side covers.

NOTE: Paper clips in the shredded materials may increase the frequency of cleaning necessary, and may become caught in the sides of the belt.

- Cleaning the Conveyor Belt Tensioning Station

The tensioning station must be cleaned once a month, or as needed to maintain optimal performance.

1. Switch off the shredder and unplug from wall outlet.
2. Remove the feed table and front panel of tensioning station (Fig. 2).
3. Remove particles and dirt.
4. Re-install the feed table and front panel of tensioning station.

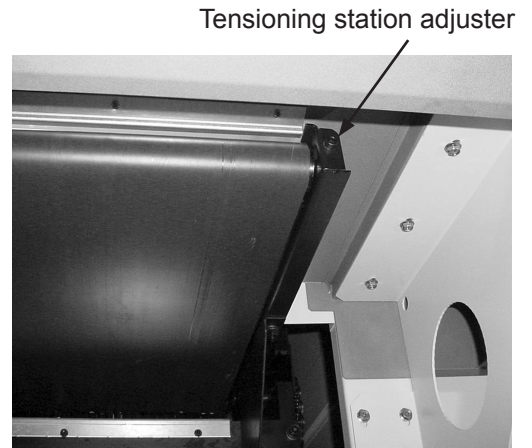


Fig. 2 Underside View of Feed Table and Infeed Conveyor

- Checking the Cutting Head Chain Tension

Check the chain tension once every week in the first month, then once a month thereafter.

1. Switch off the shredder and unplug from wall outlet.
2. Remove the top right side cover.
3. The sagging of the chain (see Fig. 3) should be 9 - 14 mm, measured from the top inside of the frame to the cutting head chain.
If it is not within this range, loosen the tension screws until the sagging reaches the correct level. Retighten the tension nuts.
4. Replace the side cover, plug in the shredder.



NOTE:

Excessive tensioning of the chain can cause premature wear of the chain and bearings. The smallest allowed chain sagging in the first month of operation is 5 mm. After that, 9 mm.

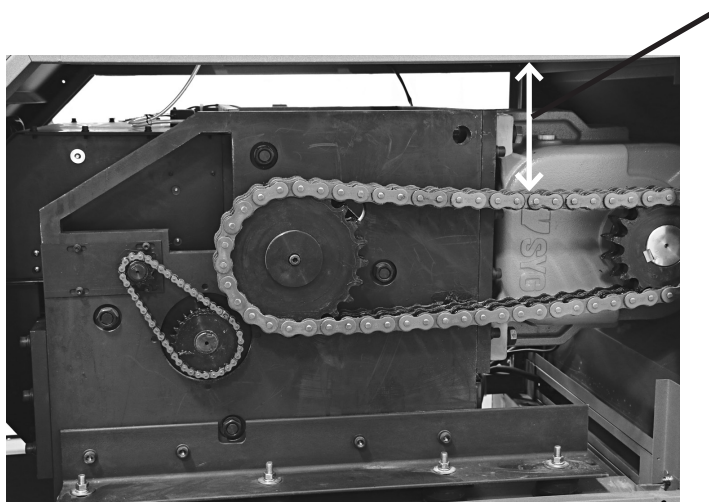
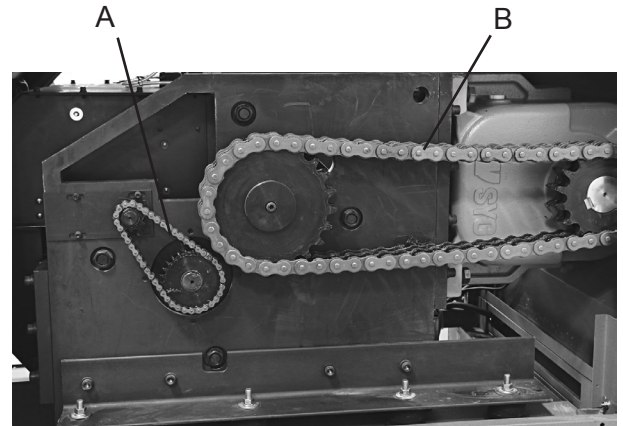


Fig. 3

Lubricating Shredder Mechanisms

- Drive Chains: The drive chains should be checked during PMs, and greased as needed.

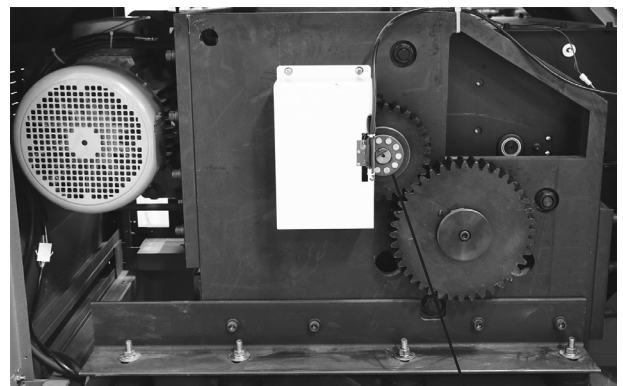
1. Switch off the shredder and unplug from wall outlet.
2. Remove both top side covers.
3. Grease the cutting system conveyor belt drive chain (A) and the motor cutting system drive chain (B).
4. Replace side covers and plug in shredder.



Right Side

- Synchronizing Wheels:

1. Switch off the shredder and unplug from wall outlet.
2. Remove left top side cover.
3. Remove the gear cover.
4. Grease the synchronizing toothed wheel (C).
5. Replace covers and plug in shredder.



Left Side

Exterior cleaning

- Turn shredder off and unplug from wall outlet.
- Wipe the exterior surfaces with a soft cloth. If the surfaces are very dirty, use a neutral detergent, then wipe again with a soft cloth.

CAUTION:

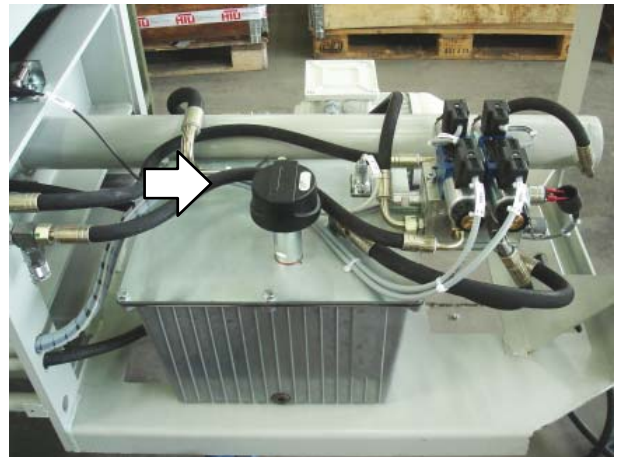
- Never put water directly on the surface of the shredder.
- Never clean the case with benzene or thinner, since it will cause discoloration.

BALER MAINTENANCE

Changing the hydraulic fluid/ventilation filter

Change the hydraulic oil and venting filter **every 2 years**

- Move the press ram to its rear limit position
- Turn off the main switch and pull the red CEE plug out
- Remove the cover (H)



Ventilation filter
Order no. 6.116.195.090



- Remove the lid of the tank and drain off the oil with a fluid suction unit
 - The capacity of the hydraulic oil tank is 20 l
- If the tank is very dirty, clean it
- Put the lid back on again
- Fill up with oil until the oil level is between the two notches on the oil level dipstick

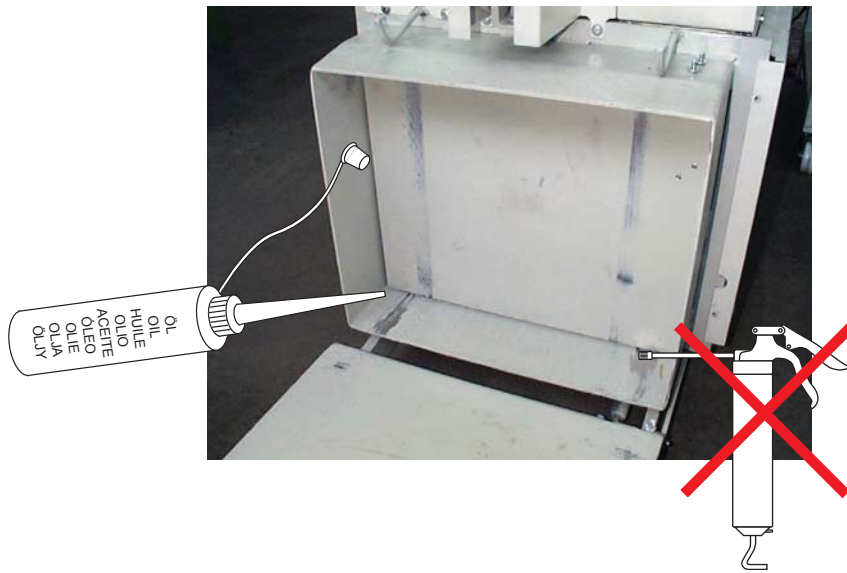
Oil type:

- Multigrade oil according to DIN 51524-T3 viscosity class HVI 32
- Move the press ram forwards and backwards several times and check the oil level again with the press ram in its front limit position
- Top up with more oil if required
- Screw in a new ventilation filter
- Fit the cover (H) back on again

Lubricating the movable parts

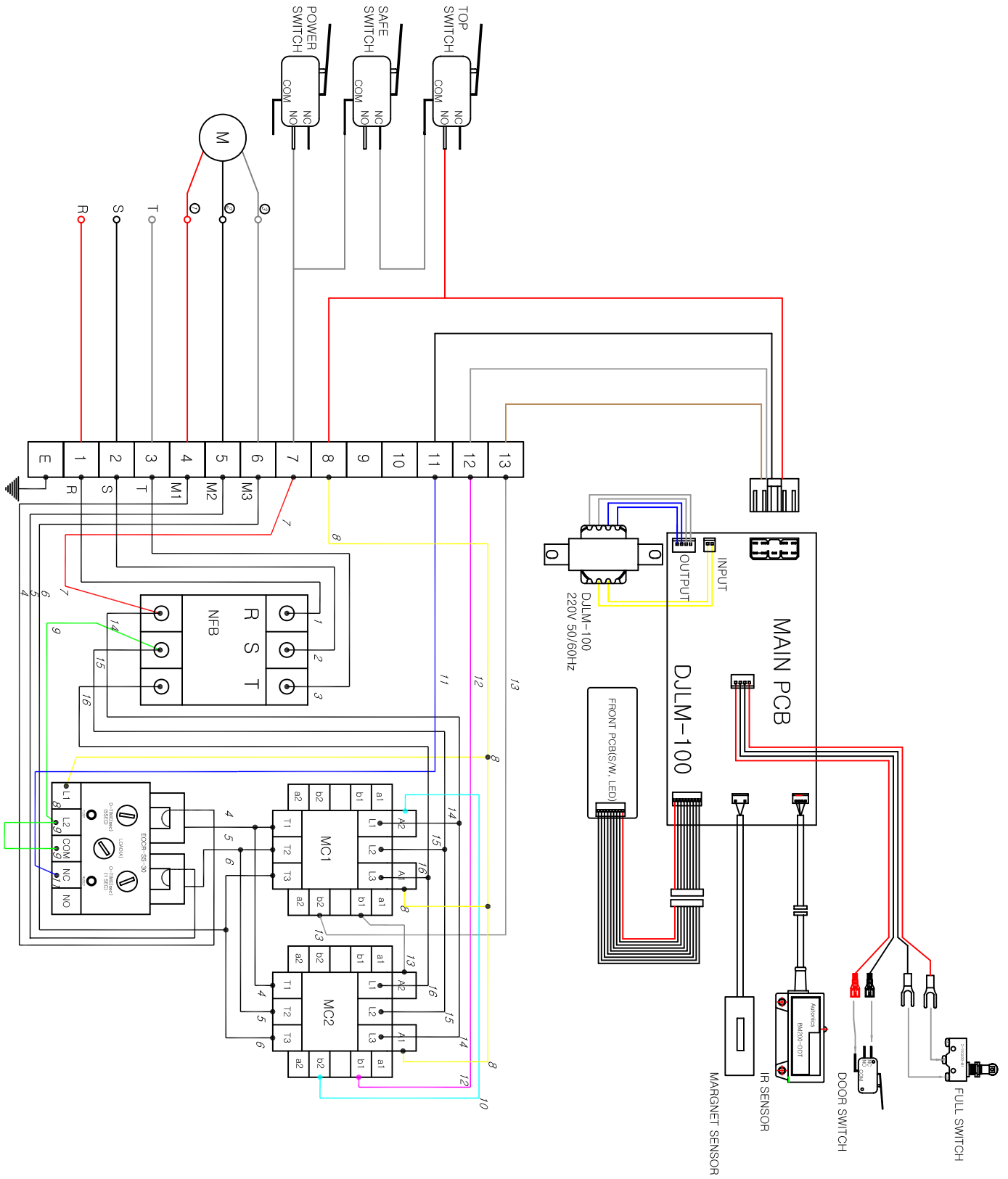
The press ram guidance (black plastic block) is maintenance-free.
Do not lubricate the track in the press chamber!

- If grinding or buzzing sounds occur, then apply a drop of biodegradable lubricating oil on the bare tracks on the bottom of the press chamber.
- Replace the plastic blocks on the press ram guidance every 2 years.
- Consult our HSM customer service about this.

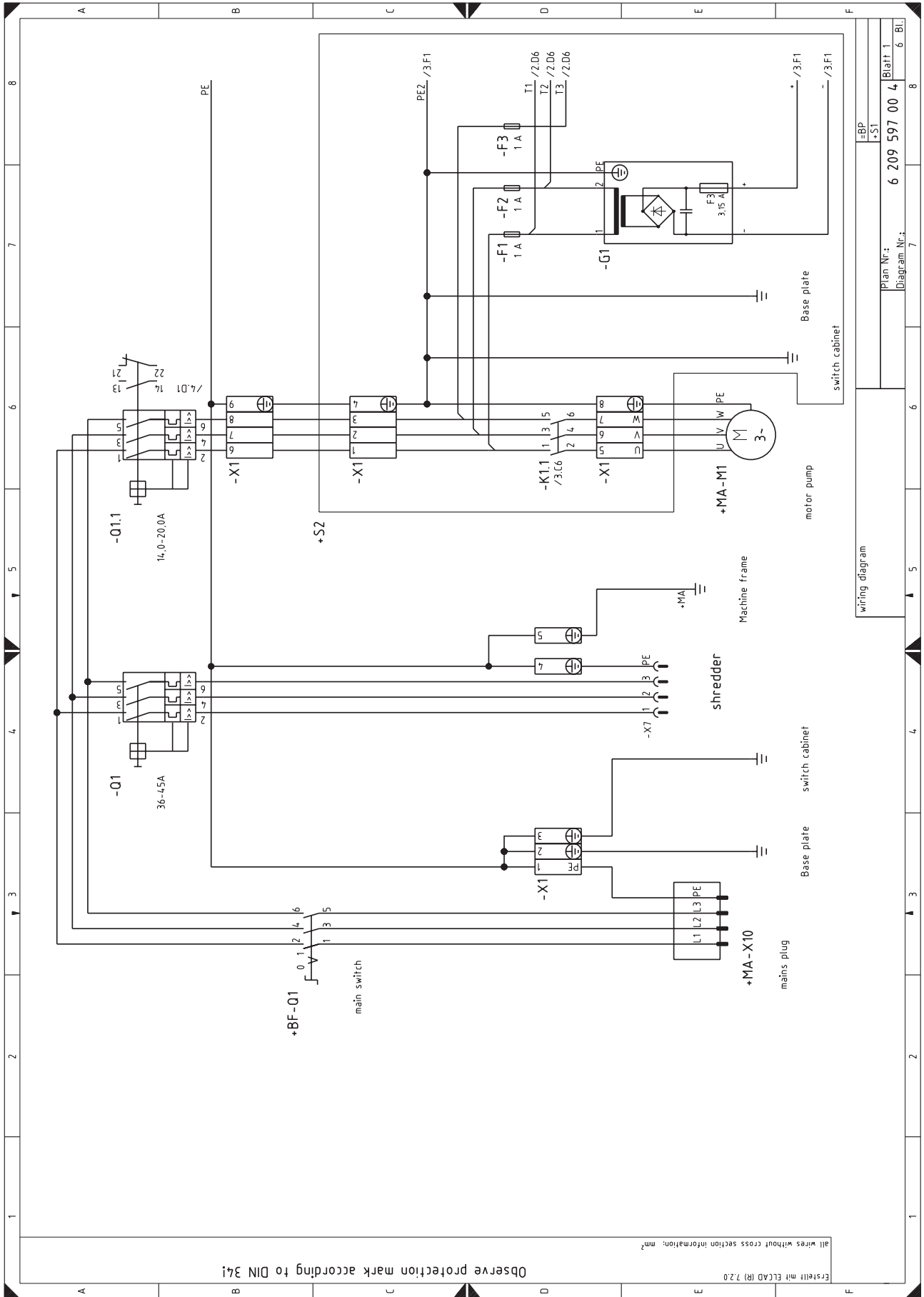


- Lubricate all movable parts and hinges as required, especially the door hinges and the bearings of the door locks with multi-purpose grease or a universal lubricating oil.

SHREDDER WIRING DIAGRAM



BALER WIRING DIAGRAM

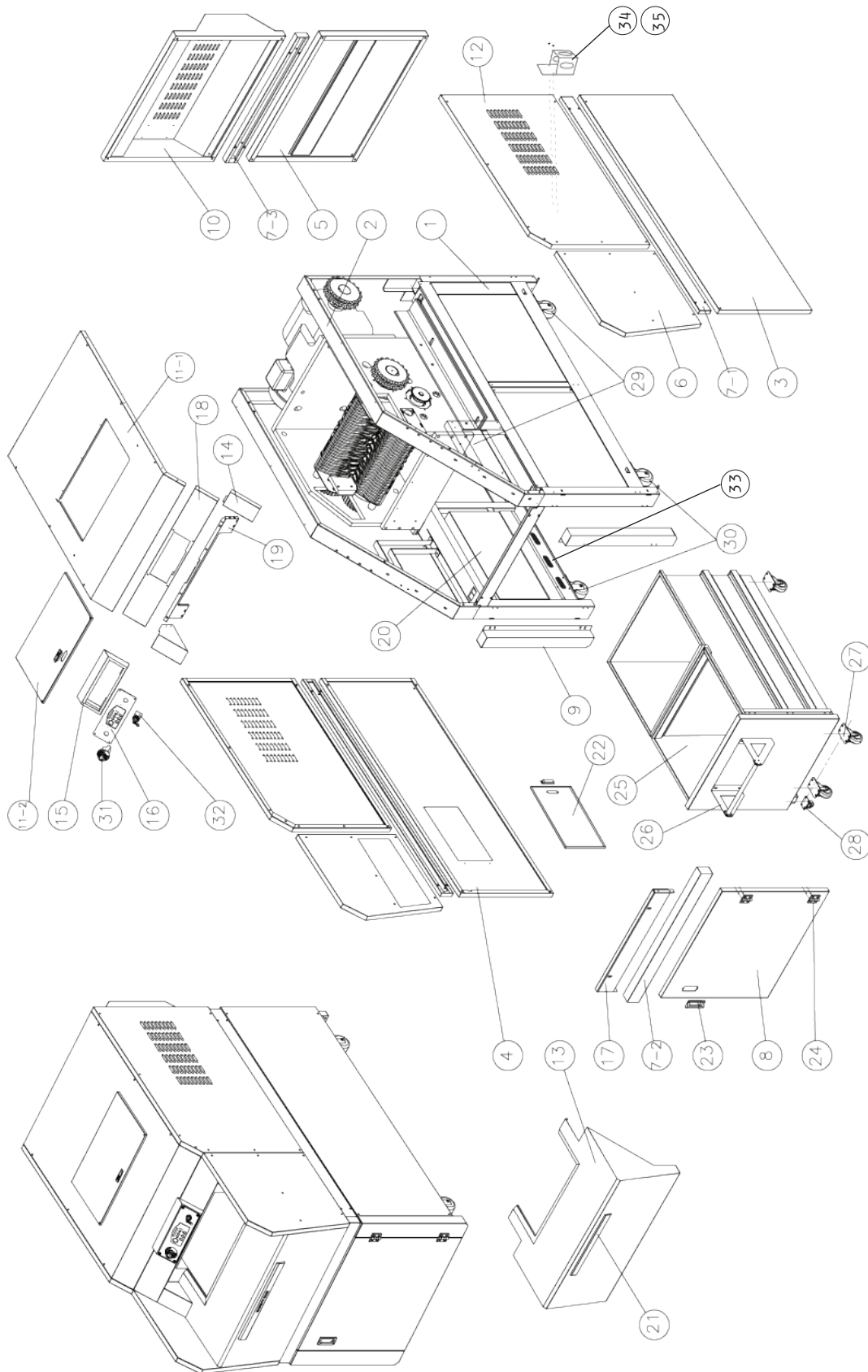


Plan Nr.:	6 209 597 00 4	Blatt 1
Diagram Nr.:		6 - Bl.

wiring diagram

SHREDDER PARTS

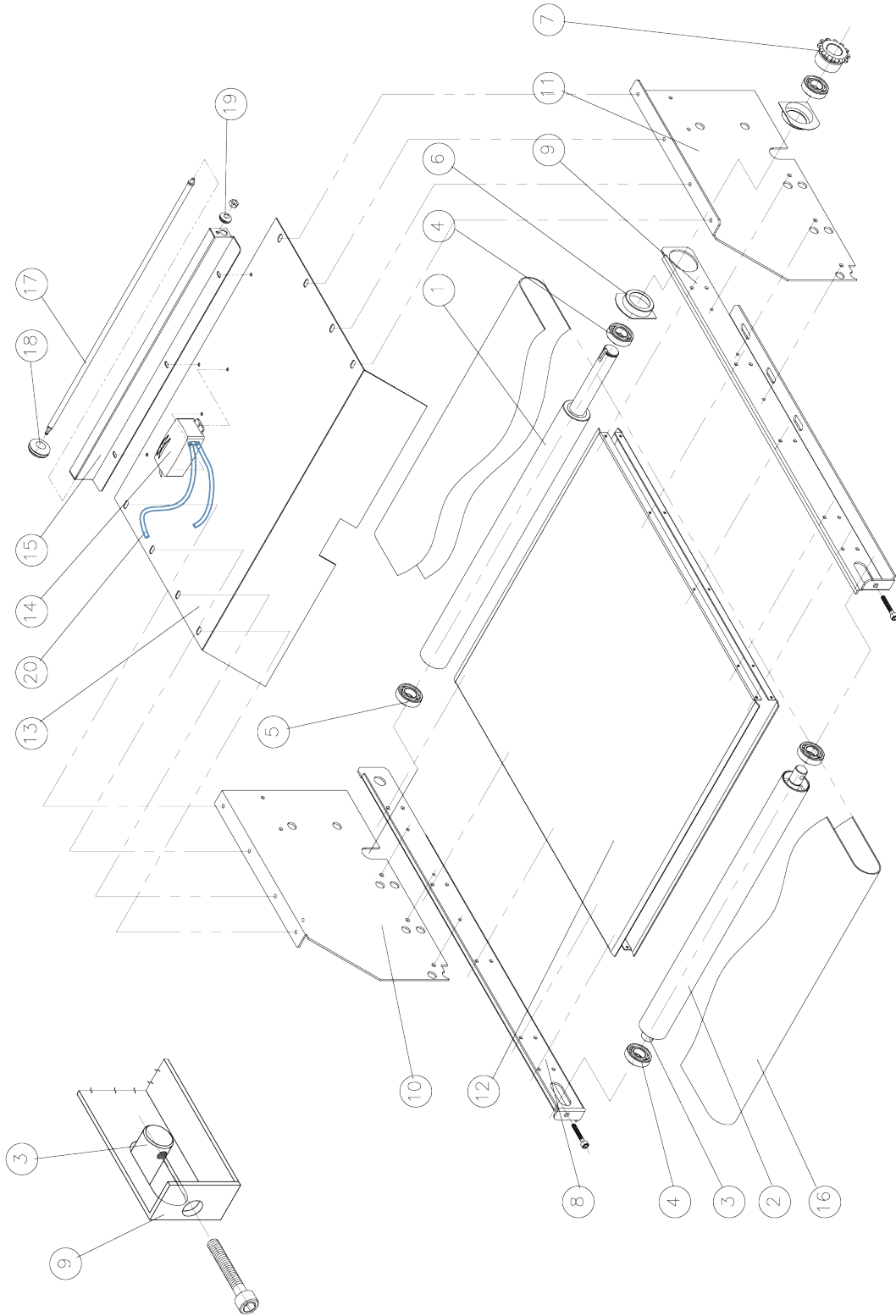
PARTS - EXTERIOR



PARTS - EXTERIOR

No.	Part No.	Description
1	FD8906CC A 001	BOTTOM CASE
2	FD8906CC A 002	UPPER CASE
3	FD8906CC A 003	SIDE COVER RIGHT (BOTTOM)
4	FD8906CC A 004	SIDE COVER LEFT (BOTTOM)
5	FD8906CC A 005	BACK COVER (BOTTOM)
6	FD8906CC A 006	FEED TABLE SIDE COVER
7	FD8906CC A 007	SIDE DECO
8	FD8906CC A 008	DOOR
9	FD8906CC A 009	DOOR FRAME
10	FD8906CC A 010	BACK COVER (UPPER)
11-1	FD8906CC A 011-1	TOP COVER
11-2	FD8906CC A 011-2	TOP COVER DOOR
12	FD8906CC A 012	SIDE COVER (UPPER)
13	FD8906CC A 013	INFEED TABLE
14	FD8906CC A 014	TOP CASE SUPPORTER
15	FD8906CC A 015	CONTROL PANEL FRAME
16	FD8906CC A 016	CONTROL PANEL
17	FD8906CC A 017	INFEED TABLE SUPPORTER
18	FD8906CC A 018	FEED OPENING COVER
19	FD8906CC A 019	FEED OPENING
20	FD8906CC A 020	BREAKERS/MAIN PCB CASE
21	FD8906CC A 021	SAFETY BAR
22	FD8906CC A 022	BREAKERS/MAIN PCB DOOR
23	FD8906CC A 023	DOOR HANDLE
24	FD8906CC A 024	DOOR HINGE
25	FD8906CC A 025	WASTE BIN
26	FD8906CC A 026	WASTE BIN HANDLE
27	FD8906CC A 027	CASTER
28	FD8906CC A 028	CASTER
29	FD8906CC A 029	CASTER(W/STOPPER)
30	FD8906CC A 030	CASTER(WO/STOPPER)
31	FD8906CC A 031	EMERGENCY STOP BUTTON
32	FD8906CC A 032	KEY SWITCH
-	KEY-8902	SET OF TWO KEYS
33	FD8906CC A 033	WASTE BIN GUIDE ROLLERS
34	8906-OIL-25	OIL BOTTLE BRACKET
35	8906-OIL-26	OIL BOTTLE BRACKET SCREWS

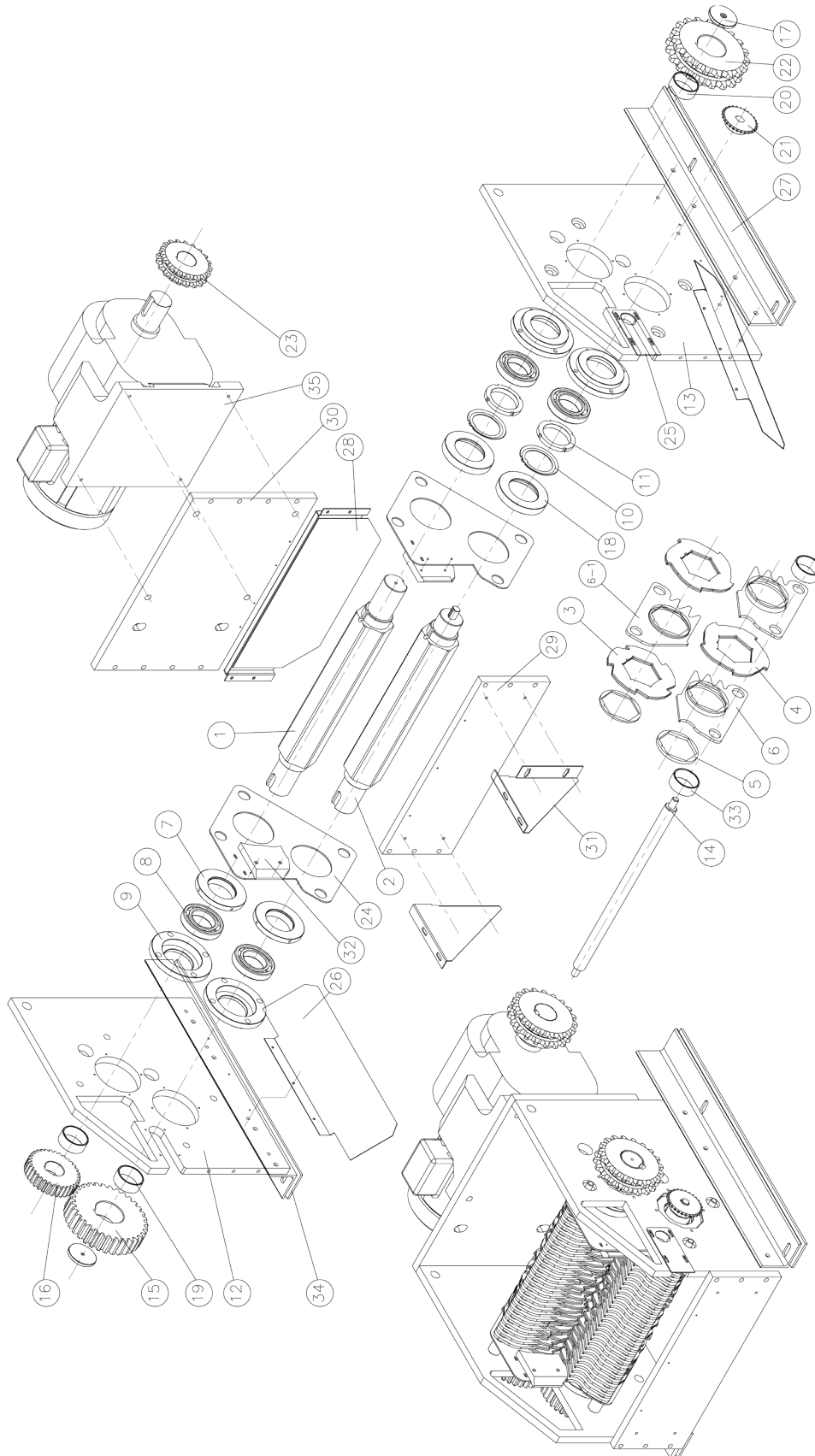
PARTS - INFEED TABLE



PARTS - INFEED TABLE

No.	Part No.	Description
1	FD8906CC B 001	CONVEYOR ROLLER A
2	FD8906CC B 002	CONVEYOR ROLLER B
3	FD8906CC B 003	CONVEYOR POST
4	FD8906CC B 004	BEARING
5	FD8906CC B 005	BEARING
6	FD8906CC B 006	BEARING HOUSING
7	FD8906CC B 007	SPROCKET
8	FD8906CC B 008	CONVEYOR SIDE (LEFT)
9	FD8906CC B 009	CONVEYOR SIDE (RIGHT)
10	FD8906CC B 010	CONVEYOR SIDE COVER (LEFT)
11	FD8906CC B 011	CONVEYOR SIDE COVER (RIGHT)
12	FD8906CC B 012	CONVEYOR PAD
13	FD8906CC B 013	CONVEYOR TOP COVER
14	FD8906CC B 014	OIL PUMP
15	FD8906CC B 015	OIL BRACKET
16	FD8906CC B 016	CONVEYOR BELT
17	FD8906CC B 017	NOZZLE
18	FD8906CC B 018	LARGE RUBBER BUSHING
19	FD8906CC B 019	SMALL RUBBER BUSHING
20	FD8906CC B 020	OIL TUBE

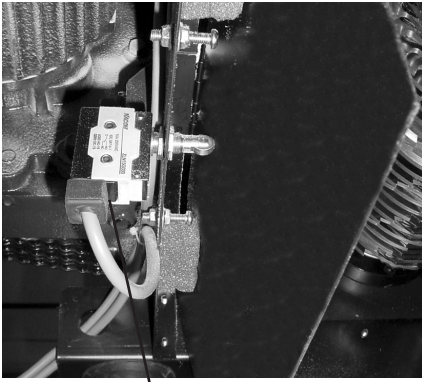
PARTS - INTERIOR



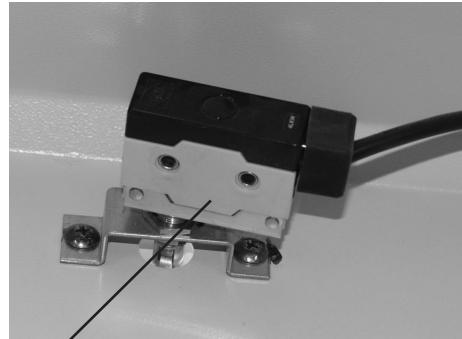
PARTS - INTERIOR

#	Part Number	Description
1	FD8906CC C 001	SHAFT (SHORT)
2	FD8906CC C 002	SHAFT (LONG)
3	FD8906CC C 003	CUTTER (A)
4	FD8906CC C 004	CUTTER (B)
5	FD8906CC C 005	RING
6	FD8906CC C 006	GUIDE
7	FD8906CC C 007	CUTTER NUT
8	FD8906CC C 008	BEARING
9	FD8906CC C 009	BEARING HOUSING
10	FD8906CC C 010	BEARING WASHER
11	FD8906CC C 011	BEARING NUT
12	FD8906CC C 012	SIDE PLATE (LEFT)
13	FD8906CC C 013	SIDE PLATE (RIGHT)
14	FD8906CC C 014	POST
15	FD8906CC C 015	SPUR GEAR (A)
16	FD8906CC C 016	SPUR GEAR (B)
17	FD8906CC C 017	SNAP WASHER
18	FD8906CC C 018	CUTTER WASHER
19	FD8906CC C 019	RING (A)
20	FD8906CC C 020	RING (B)
21	FD8906CC C 021	SPROCKET (A)
22	FD8906CC C 022	SPROCKET (B)
23	FD8906CC C 023	SPROCKET (MOTOR POST)
24	FD8906CC C 024	GUIDE PLATE
25	FD8906CC C 025	COVER
26	FD8906CC C 026	WASTE BIN GUIDE
27	FD8906CC C 027	VIBRATION-PROOF RUBBER PLATE
28	FD8906CC C 028	FULL PLATE
29	FD8906CC C 029	FRONT COVER
30	FD8906CC C 030	MIDDLE COVER
31	FD8906CC C 031	BELT BRACKET
32	FD8906CC C 032	PAPER GUIDE
33	FD8906CC C 033	GUIDEPOST RING
34	FD8906CC C 034	VIBRATION-PROOF PAD
35	FD8906CC C 035	MOTOR
36	FD8906CC C 036	CHAIN

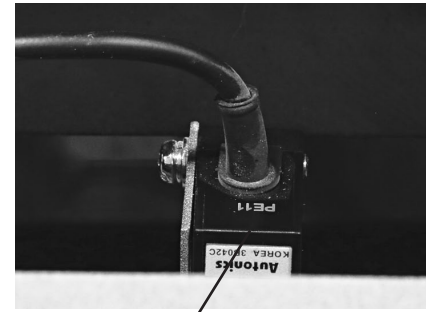
ELECTRICAL PARTS



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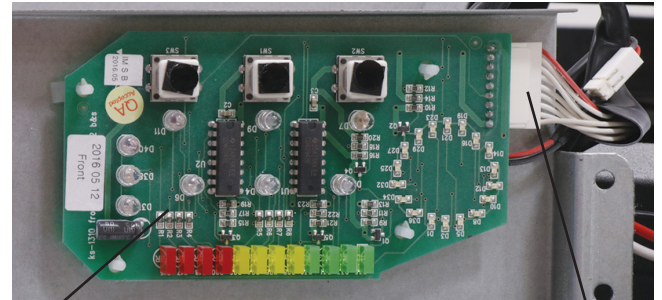
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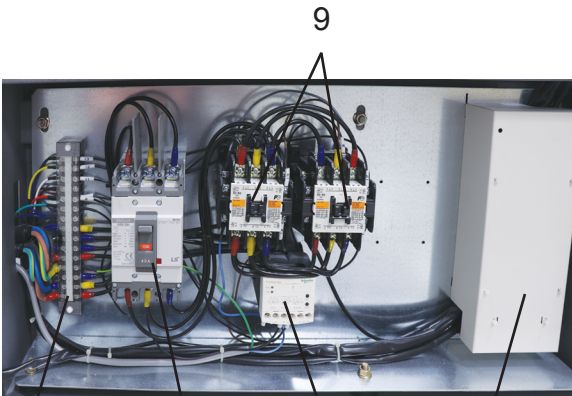
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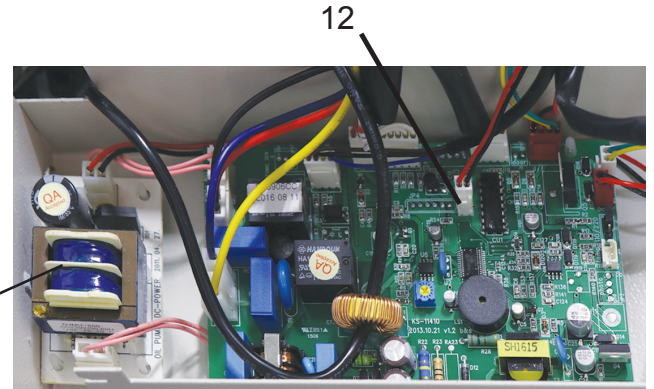


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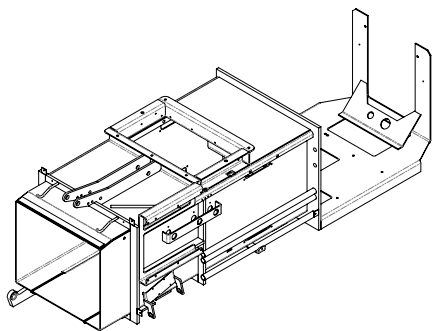
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No.	Part No.	Description
1	8906-PCB-08	MICRO SWITCH, WASTE BIN FULL
2	8906-PCB-20	MICRO SWITCH, SAFETY STOP BAR
3	8906-PCB-24	PHOTO EYE, INFEEED
4	8906-PCB-23	MICRO SWITCH, DOOR
5	8906-PCB-12	CONTROL PANEL PCB
6	8906-PCB-16	BODY CABLE
7	8906-PCB-05	WIRE TERMINAL PLATE
8	8906-PCB-09	BREAKER
9	8906-PCB-06	MAGNETIC CORE
10	8906-PCB-04	EOCR
11	8906-PCB-11	MAIN PCB CASE
12	8906-PCB-12	MAIN PCB
13	8806-PCB-07	TRANSFORMER

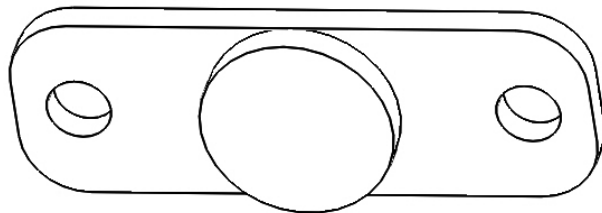
BALER PARTS

0010 6209005040 - *Press unit*

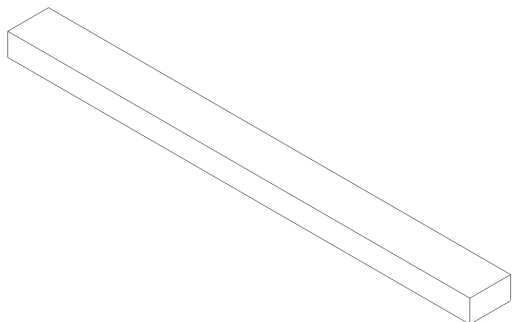
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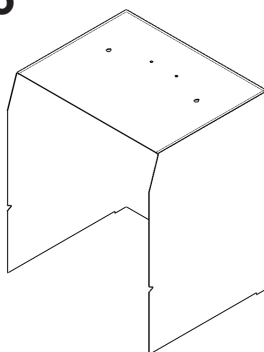
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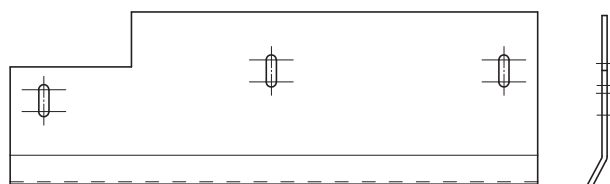
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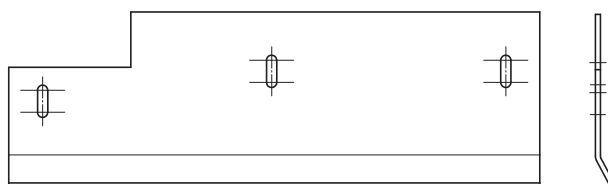
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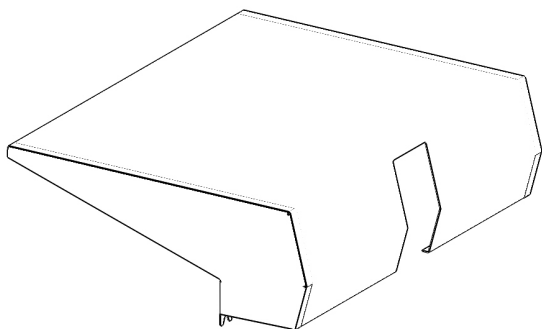
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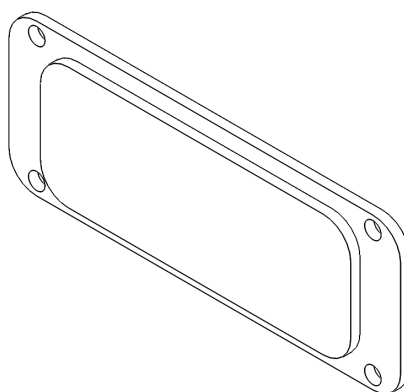
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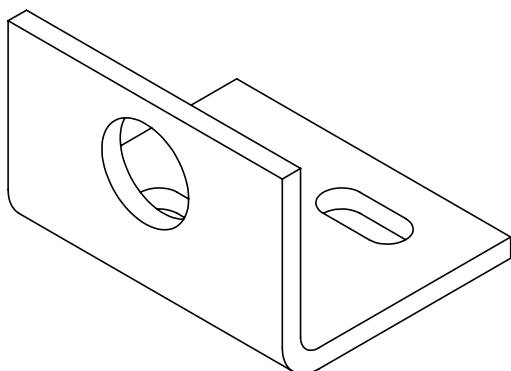
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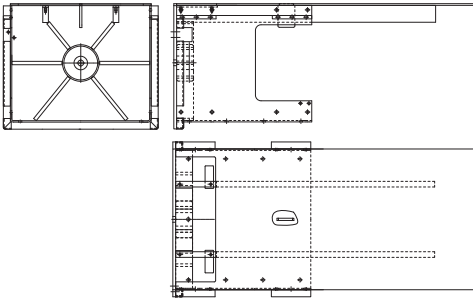
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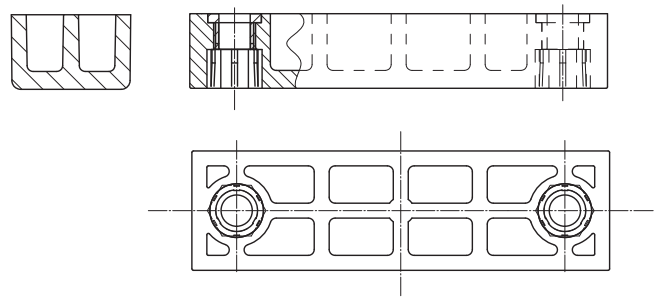
0010 6209005040 - Press unit

Item	Part. No.	Designation	Dimension	Qty.
0001	6209010080	Assy PR chamber	2290X715X696	1
0002	1605012150	Steering roller with stop-top	85X130X185	2
0002	6309012970	Steering roller		2
0003	9910912062	Cylinder bolt	M 6X16	16
0005	6209005024	Assy cover	90X30X10	1
0010	6209080001	Die plate COMP	1070X560X450	1
0011	6209190100	Hydraulic cylinder 70/50x1000 travel		1
0012	9910125010	Washer B 10,5	B 10,5	8
0012	9910933160	Hexagon bolt M10X50mm	M 10X50	4
0012	9910934010	Hexagon Nut M10	M 10	8
0014	9911481024	Tensio-pin	12X80	1
0020	6209005013	Wiper		1
0025	6209150066	Assy cover back		1
0026	6515150155	Handle EMKA 1095-05	26X42,6X142	1
0027	9910933096	Hexagon bolt M6X20mm	M 6X20	2
0035	9917985060	Fillister head screw	M6X10	4
0040	6209005011	Sheet left		1
0041	6209005012	Sheet right		1
0042	9910933065	Hexagon bolt	M 5X16	6
0043	9910439005	Hexagon nut	B M 5X0,80	6
0044	9916797016	Toothed lock washer galvanized	A 5,3	6
0050	6209150060	Assy cover door latch centre		1
0060	6209005030	Assy cover		4
0061	9910933122	Hexagon bolt M8X12mm	M 8X12	16
0081	9910933125	Hexagon bolt M8x25mm	M 8X25	2
0082	9910934008	Hexagon Nut M8	M 8	2
0083	9910125008	Washer B8.4	B 8,4	4
0090	6209005019	Angle		1
0100	6413250110	DU-Bundbuchse BB 2522 DU	D1=25 D2=28 D3=35 B=21,5	1

1



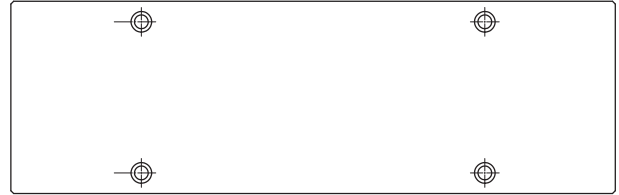
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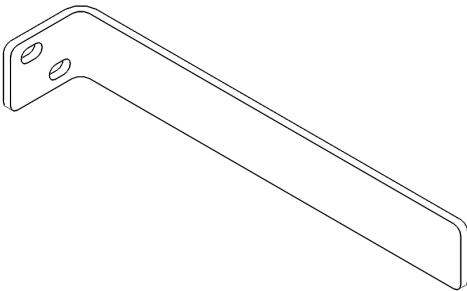
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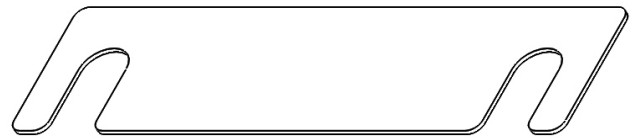
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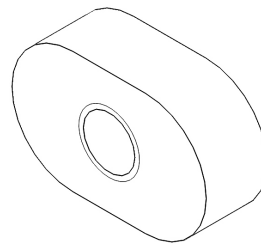
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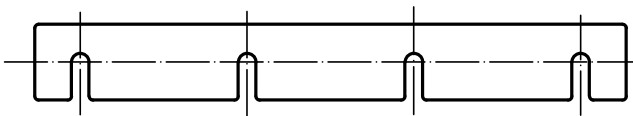
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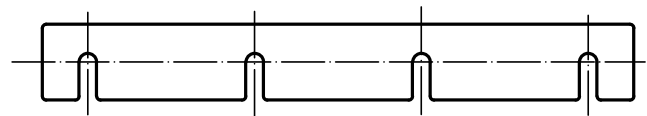
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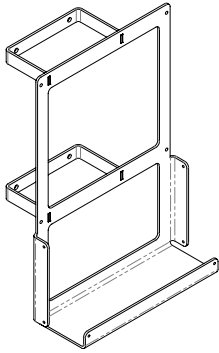


0010 6209080001 - Die plate

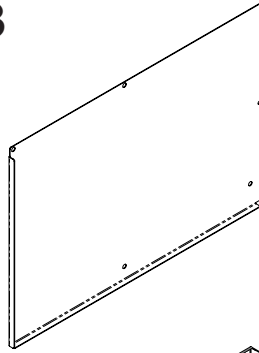
Item	Part. No.	Designation	Dimension	Qty.
0001	6209080010	Assy die plate KP 80		1
0002	6411080023	Assy steering plate	140X40X25	8
0003	6209080003	Scaler of a sheet		16
0004	9910912125	Cylinder bolt	M 10X30	8
0006	6209080006	Cover		1
0007	9910933122	Hexagon bolt M8X12mm	M 8X12	4
0008	6209080009	Cam switch		1
0009	6243086013	Spacer		1
0020	7209080040	Guide bar	60X25X467	2
0021	6209080041	Thread plate		8
0022	6209080042	Spacer sheet 2mm		4
0023	6209080043	Spacer sheet 1mm		2
0024	9910933172	Hexagon bolt galva- nized	M 10X30	8

0015 6209150086 - Covers

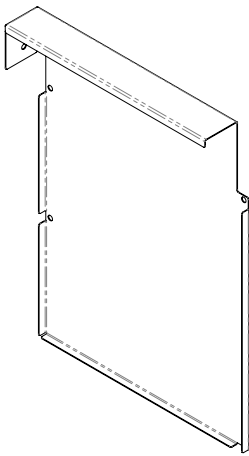
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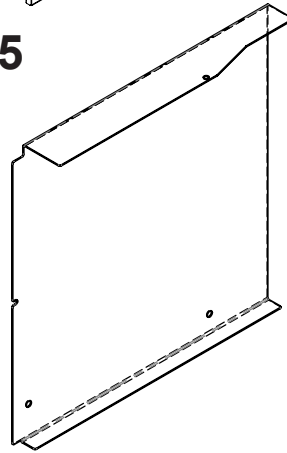
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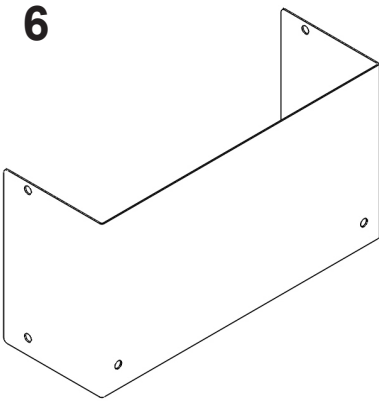
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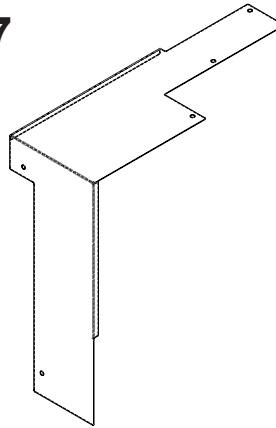
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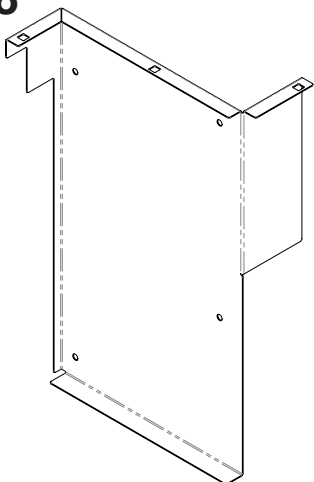
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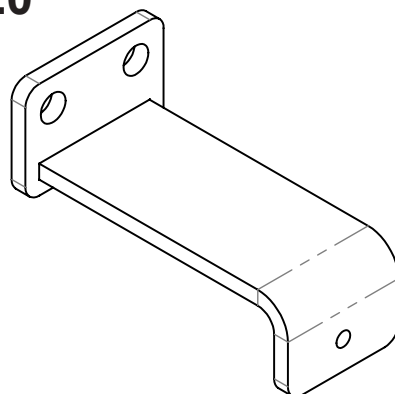
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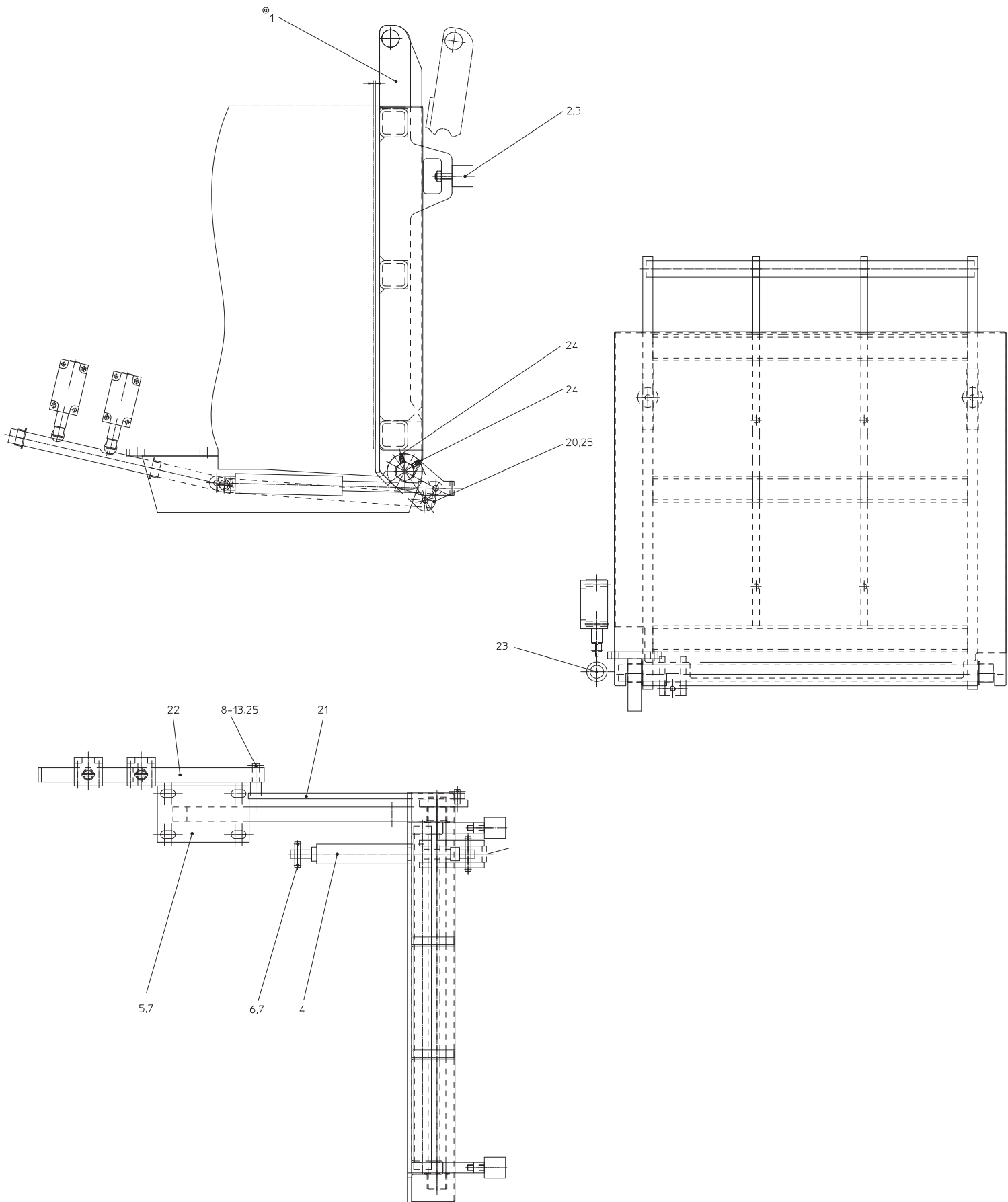
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0015 6209150086 - Covers

Item	Part. No.	Designation	Dimension	Qty.
0001	6209071000	Assy bracket for the CTRL box	595X398X260	1
0002	1400020900	Lock screw galvanized	M 8X16	4
0003	6209150091	Cover right		1
0004	6209150092	Cover right in front		1
0005	6209150069	Cover links		1
0006	6209150097	Cover sheet bottom CTRL box		1
0007	6209150106	Cover sheet left in front		1
0008	6209150107	Cover sheet left centre		1
0009	6408150005	Cage nut M6 (C4811-B)	M6 (C4811-B)	3
0010	9917985061	Fillister head screw galvanized	M6X12	26
0011	9919021006	Washer	A 6,4	26
0015	6209150099	Lug screwable 100		1
0016	6209150103	Thread plate		1
0017	1400040900	Flange Head Bolt M8x20mm	M 8X20	2
0020	6209150101	Assy lug screwable 100	100X50X55	1
0021	1400020920	Lock screw	M 8X12	2

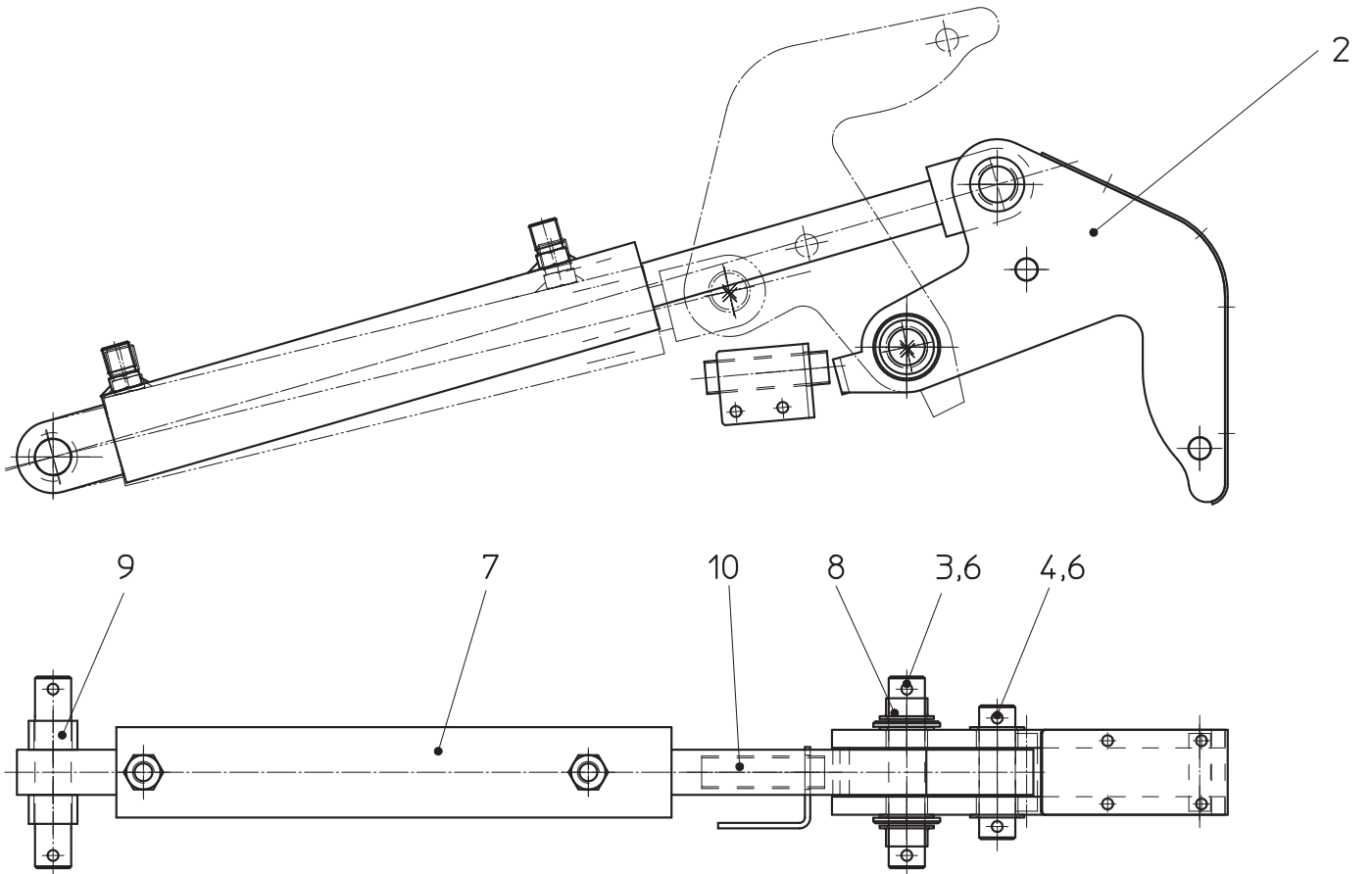
0020 6209120000 - Counter plate



0020 6209120000 - Counter plate

Item	Part. No.	Designation	Dimension	Qty.
0001	6209120010	Assy counter plate		1
0002	1425060200	Gum-metal-bump stop	D=30 H=30 M8X24	2
0003	9910934008	Hexagon Nut M8	M 8	2
0004	6209110004	Gas compression spring		1
0005	6209120005	Gas spring bolt in front		1
0006	6209120006	Gas spring bolt back		1
0007	9911481002	Tensio-pin	3X14	4
0009	9910933154	Hexagon bolt M10X20mm	M 10X20	4
0010	9910912039	Cylinder bolt M5x50mm (8.8)	M 5X50	4
0012	9910916017	Threaded pin	M 8X16	2
0020	6209120030	Assy bracket		1
0021	6209120033	Assy bracket		1
0022	6209120034	Round		1
0024	9910915011	Threaded pin	M 6X10	2
0025	9911481021	Tensio-pin	3X16	2

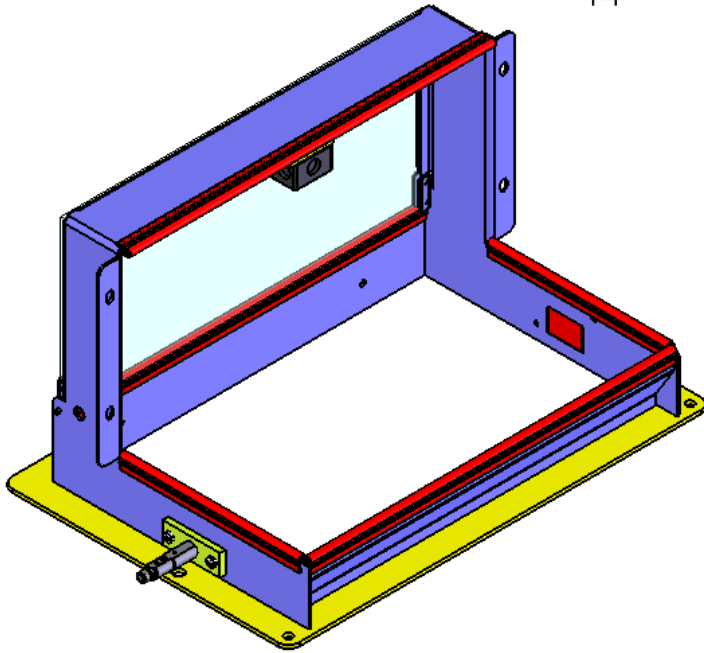
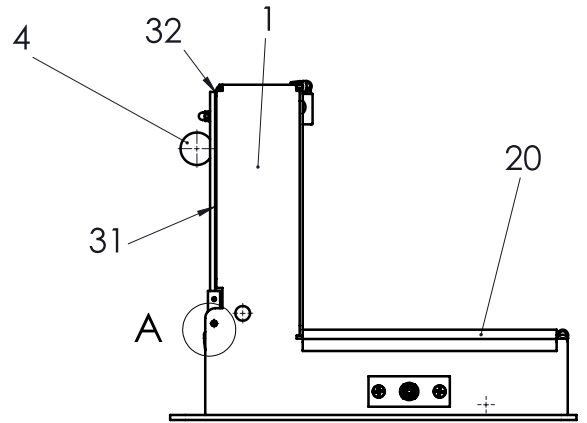
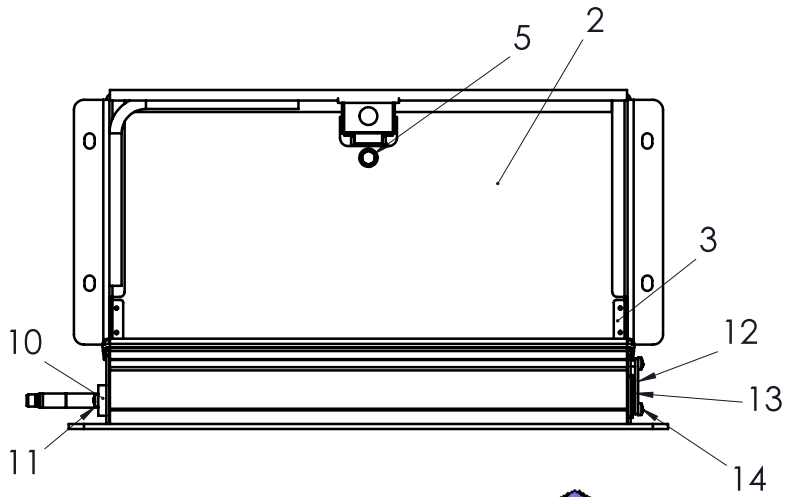
0030 6209115060 - *Door latch*



0030 6209115060 - Door latch

Item	Part. No.	Designation	Dimension	Qty.
0002	6209115050	Assy strap		1
0003	6209115026	Bolt		2
0004	6209115055	Bolt for cylinder		1
0005	9910125020	Washer	B 21	4
0006	9911481007	Dowel Pin 6x36mm	6X36	6
0007	6209190009	Hydraulic cylinder 160 Hub		1
0008	6127130197	DU	D1=20 D2=23 D3=30 B=11,5	8
0009	6209115029	Spacer		2
0010	6209115054	Bracket for proximity switch		1

0040 6209138110 - Feed shaft



0040 6209138110 - Feed shaft

Item	Part. No.	Designation	Dimension	Qty.
0001	6209138120	Assy feed shaft COMP KP80 - FA500.3	400X590X330	1
0002	6414138570	Flap	5X236X504	1
0003	1535050020	HINGE DOOR FA400 (rear plexiglass)		1
0004	9910319002	Ballhead	29X32	1
0005	1400020900	Lock screw galvanized	M 8X16	1
0010	6648138029	Bracket		1
0011	9917985061	Fillister head screw galvanized	M6X12	2
0012	6505140090	Cover plate (light barrier)		1
0013	6204138066	Intermediate metal sheet for reflector		1
0014	9917985060	Fillister head screw	M6X10	2
0020	1535996010	Sealants-profile black		
0030	6209005017	Sheet		1
0031	6209138132	Cut magnetic tape self sticking		2
0032	6209138131	Cut magnetic tape self sticking		1

0050 6209599005 - *Hydraulic*

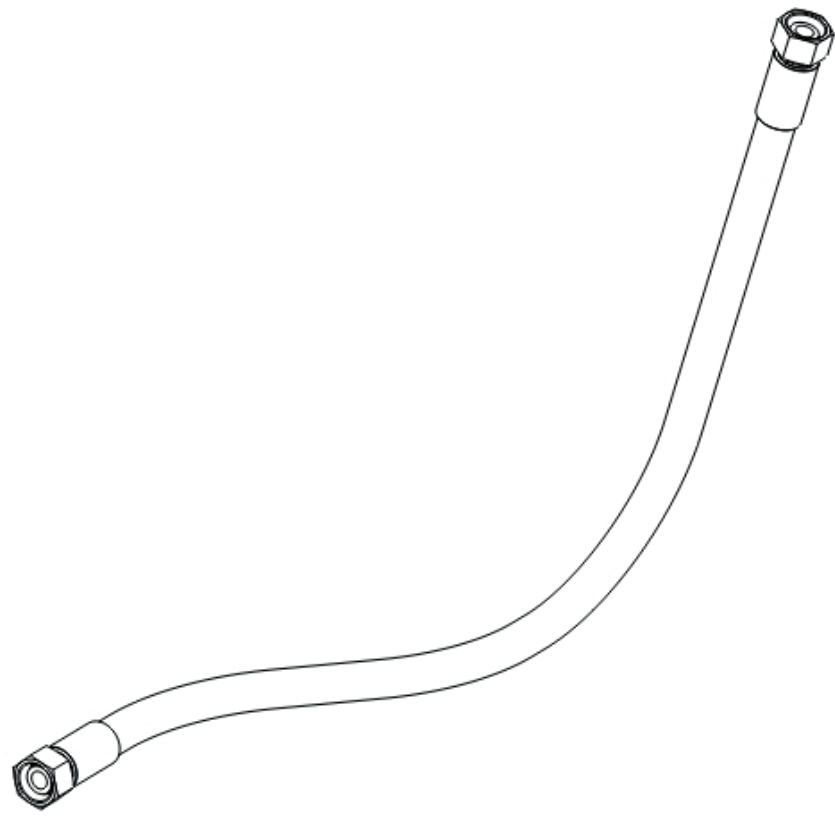
HD- Hose

DN XX / XXX / XXmm

Inside Diameter

Quality

Overall Length

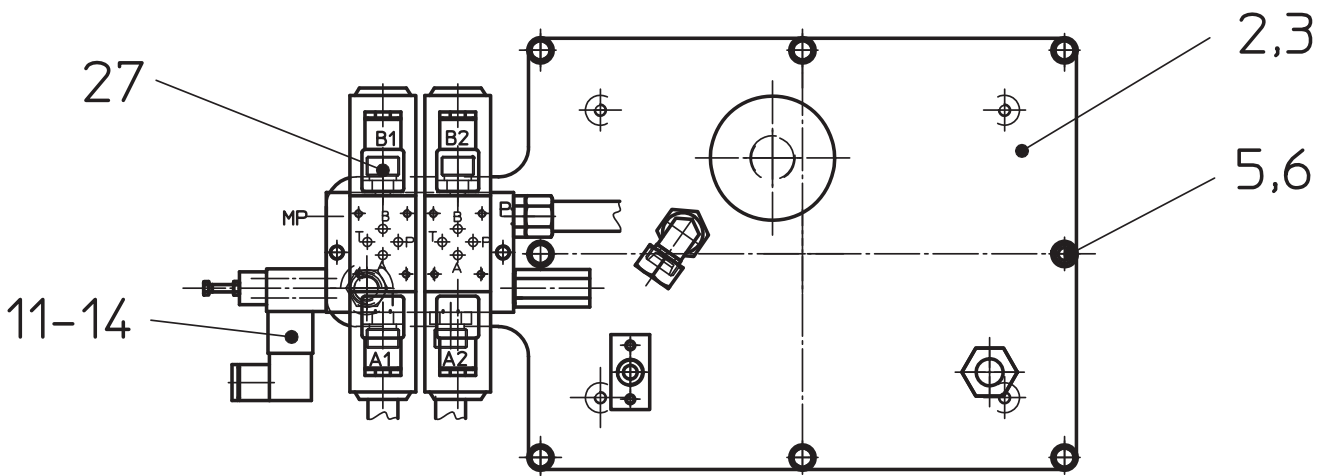
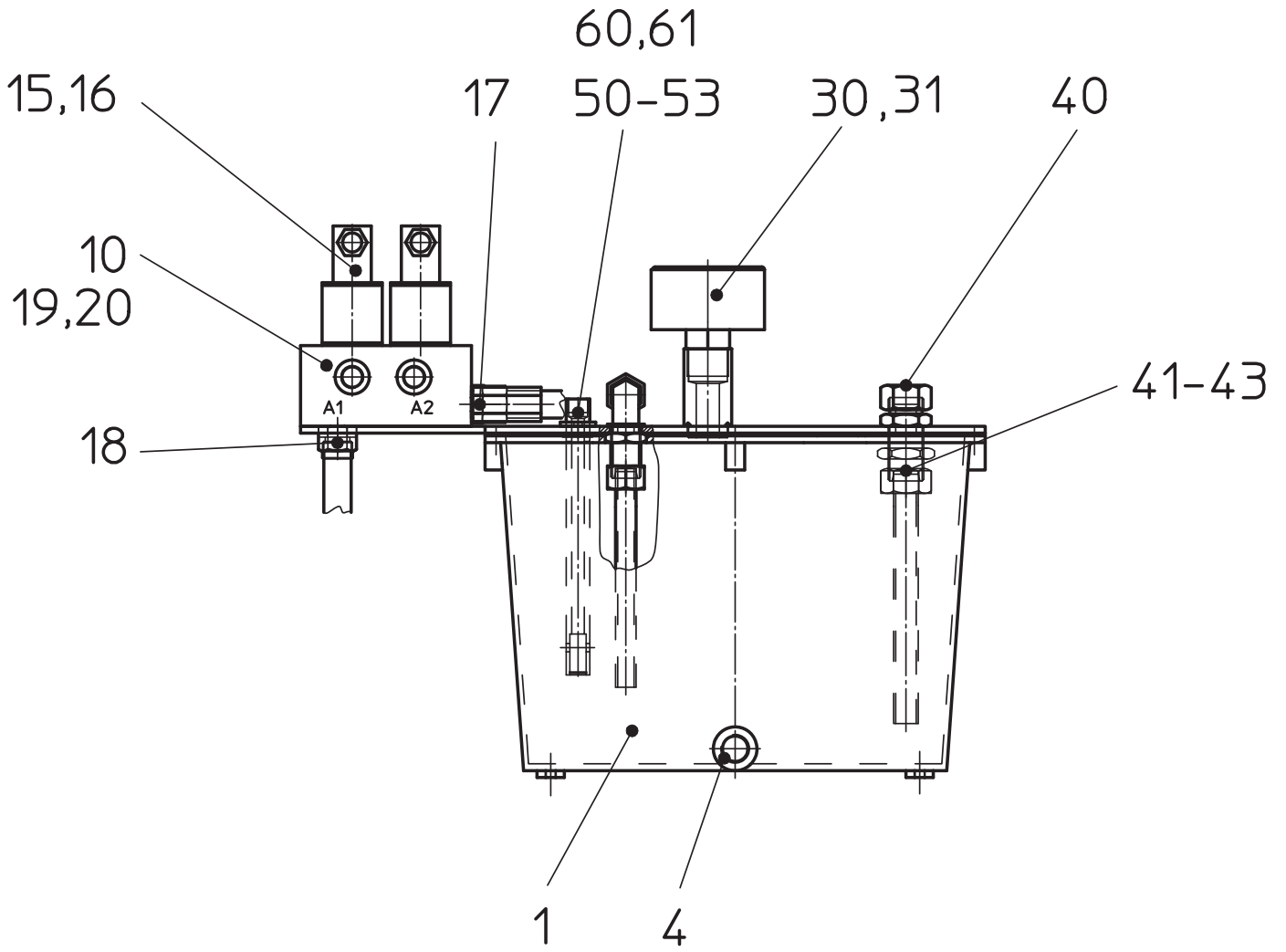


0050 6209599005 - Hydraulic

Item	Part. No.	Designation	Dimension	Qty.
0001	6209195006	OILTANK COMP 4,0 kW		1
0002	6125500000	Motor+pump COMP		1
0003	9910933155	Hexagon bolt M10X25mm	M 10X25	4
0004	9910125010	Washer B 10,5	B 10,5	4
0005	9910934010	Hexagon Nut M10	M 10	4
0006	9910933122	Hexagon bolt M8X12mm	M 8X12	4
0010	6415190215	Hydraulic tube DN 16/2 SN/600mm		1
0011	6116190130	Adjustable elbow connection connector	49X4735X32	1
0020	6515190160	Hydraulic tube DN 10/2 SN/600mm		1
0025	6658190101	Pipe saddle RAP-112		2
0026	6658190104	Cover plate		2
0030	6232190270	Hydraulic tube DN 12/2 SN/500mm	50 CM LANG	1
0040	6100190140	Hydraulic tube DN 10/2 SN/350mm		1
0041	6306190455	Angled screw coupling	35X35X19	2
0042	6116190190	HYD tube HST 2 NW10X HST 2 NW10X 1200mm		1
0050	6515190160	Hydraulic tube HST 2 NW 10X 600mm		1
0051	6515190150	Hydraulic tube HST 2 NW 10X 800mm		1
0052	6515190065	Straight bulkhead fitting	24X27,2X53	2
0053	6209190022	HYD pipe		1
0054	6209190023	HYD pipe		1
0055	6515190220	Cap nut	21,9X25X16,5	4
0056	6515190230	Cutting ring	15X9,9	4
0058	6515190160	Hydraulic tube HST 2 NW 10X 600mm		2
0059	6306190010	Adjustable elbow connection connector		1
0065	6652190250	Adjustable L-connection nozzle		1
0070	6654190150	MEAS CONN+screw coupling VKA 3/12L		1

0001

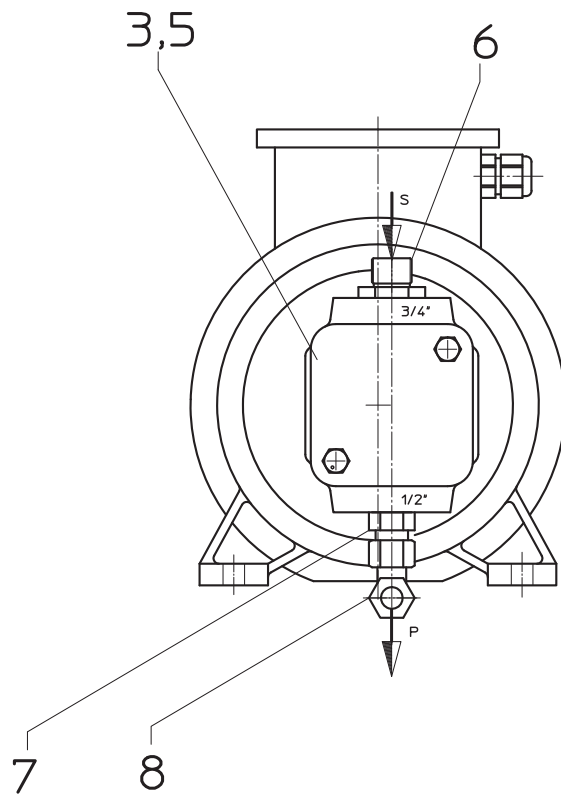
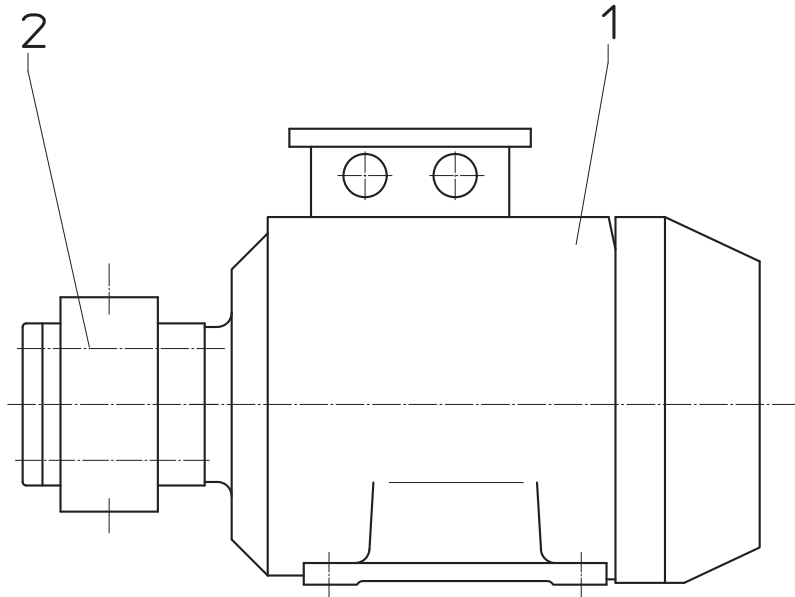
6209195006 - Oil tank



0001 6209195006 - Oil tank

Item	Part. No.	Designation	Dimension	Qty.
0001	6129195500	Tank NG 20		1
0002	6129195515	Gasket for oil tank NG 20	2X288X366	1
0003	6209195003	Petrol cap		1
0004	6205190250	Locking screw	R1/2"X13,75	1
0005	9910933123	Hexagon bolt M8X16mm	M 8X16	8
0006	9910125008	Washer B8.4	B 8,4	8
0010	6209190006	Control block		1
0012	9910125008	Washer	B 8,4	4
0012	9910912103	Cylinder bolt	M 8X80	2
0012	9910934008	Hexagon Nut M8	M 8	2
0013	6116190140	4/3 Control valve	205X45X75	2
0016	9910912045	Cylinder bolt M5x50 mm (10.9)	M 5X50	4
0017	6100190121	Straight screw-in connection	22X25,3X31,6	5
0018	6116190091	Straight screw-in connection	24X27,2X32,5	1
0019	6116190030	Measuring couper		1
0020	6140190011	PR switch		1
0030	6116195090	Air filter with dipstick		1
0031	6100195075	Climate gland		1
0031	9917603005	Copper gasket	A 36X30X2	1
0041	6118195028	Suction pipe		1
0042	6515190210	Cap nut	31,8X36,5X19	1
0043	6515190200	Cutting ring	22X10,3	1
0050	6217190200	Bulkhead union elbow		1
0051	6118190003	Return pipe		1
0052	6314190150	Cap nut	26,8X31X18	1
0053	6314190200	Cutting ring	19X10,1	1
0060	6515195088	Stay tube COMP for thermal sensor		1
0061	6420510075	PTC KU70 complete		1
0065	6116190120	Straight bulkhead fitting	36X41,4X61,3	1
0070	6100997000	Multigrade oil HVLP 22		17

0002 612550000 - *Motor with pump*



0002 6125500000 - *Motor with pump*

Item	Part. No.	Designation	Dimension	Qty.
0001	6414500051	Rotary current 3x230/400V/50Hz 4,0kW IE2		1
0002	6414500555	Internal gear pump		1
0003	9910912105	Cylinder bolt galva- nized	M 8X100	2
0005	9916797018	Toothed lock washer	A 8,4	2
0007	6230190213	Straight screw-in con- nection	32X36X38	1
0008	6306190010	Adjustable elbow con- nection connector		1
0120	6116190071	Straight screw-in con- nection		1
0130	6116555404	ISO-reduction M25/ M20x1,5		1
0140	6116555320	Cable gland M20x1,5	M20X1,5	1