

GM-092018M



HYDRAULIC SHEARS

MODEL: HS-0412MD, HS-0410MD

HS-0610MD, HS-0810MD

HS-1014MD, HS-1010MD

Operation & Parts Manual



Table of contents

A. Structure and function	3
B. Specifications	3-4
C. Safety warnings	5-8
D. Transport and Assembly	9
E. Preparation and test drive	9-10
F. Adjustment	11-13
G. Lubrication chart	13-14
H. Operation and adjustment for back gauge	15-16
I. Maintenance and troubleshooting	17-18
J. Hydraulic schematic, electrical diagrams	19-27
K. Parts breakdown and parts list	28-53
L. Warranty and return	54

A. Structure and function

This machine is best suitable for sheet metal processing plants, electrical appliances, automobile manufacturing and sheet cutting processing, metal fabrication facilities, and any facilities that require to cut 2

This shear is driven by a hydraulic system. The body frame, upper blade frame, worktable are all steel welded structures. This machine has a strong construction and is easy to operate and can be used for many years with routine and proper maintenance, changing the oil after 1st 100 hours of use, and then 1 time every year. Properly grease and lubricate the shear as per guidelines.

B. Main specifications by Model#

GMC Deluxe Hydraulic Shears

- ISO 9001 certified
- HD all steel construction for maximum rigidity
- German logic quiet hydraulic system
- Adjustable stroke from 16-20 strokes per minute
- 60" long squaring arm with inch / mm scale
- spring hold-downs
- high grade carbon/chrome alloy steel blades and hardened to 62 hrc,
- 2-edge indexable upper blade and 2-edge indexable bottom blade
- Full length with full view finger guard
- Front supports and (2) side gauges
- Safety type foot pedal control
- Jog, single continuous auto operation modes

EQUIPPED WITH:

- 26" manual back gauge with inch/metric dual scale & one side operated hand wheel
- 60" long squaring arm with inch / mm scale
- 2 each 24" front support arms
- 2 each 14" Side gauges with inlaid inch/metric dual scale
- Spring independent hold-downs
- full length finger guard
- Removable safety foot pedal control
- Tool box
- One set blades

GMC Deluxe Hydraulic Shears

Specifications:	HS-0412MD	HS-0410MD	HS-0610MD	HS-0810MD	HS-1014MD	HS-1010MD
Cutting capacity: mild steel	4 FT x 12 Ga.	4 FT x 10 Ga	6 FT x 10 Ga	8 FT x 10 Ga	10 FT x 14 Ga	10 FT x 10 Ga
stainless steel	4 FT x 16 Ga.	4 FT x 14Ga.	6 FT x 14 Ga	8 FT x 14 Ga	10 FT x 18 Ga	10 FT x 14 Ga
Blade length	52 in	52 in	6 ft 6 in	8 ft 2 in	10 ft	10 ft
Strokes	16-20	16-20	16-20	14-18	14-18	14-18
Throat depth	16 IN					
Work height	30-1/2 IN					
Front spt arm	24 IN					
Back gauge	26 IN manual					
blade rake angle	1.5 degree					
oil tank cap.	15Gal.	15 Gal.	20 Gal	20 Gal	20 Gal	25 Gal
Main motor	3HP, 3Ph	5-1/2 HP	5-1/2 HP	7-1/2 HP	5-1/2 Hp	7-1/2 Hp
Voltage	220V / 440V - 3 Phase					
Weight	1,950 LBS	3,050 LBS	4150 lbs	5650 lbs	5200 Lbs	6350 lbs
Dimensions (in)	68x33x51	68x35x52	98x35x52	118x35x52	139x35x52	139x35x52

C. Safety Warnings

This is very dangerous machine ! WARNING to reduce the risk of electric shock or injury to persons

1. All Operators must read manual the entire owner's manual before attempting assembly or operation.
2. This machine is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a shear, do not use until proper training and knowledge have been obtained. All operators agree that by operating the shear GMC is not liable for any misuse and all operators agree to hold GMC Machine tools and its authorized distributor harmless of any liability while using this machine.
3. Do not use this machine for other than its intended use.
4. Always wear safety glasses/face shields while using this shear.
5. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Wear OSHA approved protective hair covering to contain long hair.
Non-slip footwear or anti-skid floor strips are recommended.
6. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
7. Do not exceed the rated capacity of this shear; use hand tools for small or narrow parts. Do not attempt to shear hardened materials.
8. Sheet metal stock has sharp edges. To prevent cuts, use leather work gloves
9. Keep hands and fingers clear of the area in front and rear of the shear.
10. Do not place your hands between material being sheared and the shear table.
11. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after maintenance is complete.

12. Check damaged parts as part of our regular maintenance program. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
13. Provide adequate space surrounding work area and non-glare, overhead lighting.
14. Keep the floor around the machine clean and free of scrap material, oil and grease.
15. Keep visitors a safe distance from the work area. **KEEP CHILDREN AWAY.**
16. Make your workshop child proof with padlocks, master switches or by removing starter keys.
17. Give your work undivided attention. Looking around, carrying on a conversation, CELL PHONES, tablets, laptops are distractions that can cause serious injury
18. Maintain a balanced stance at all times so that you do not fall or lean against moving parts. Do not overreach or use excessive force to perform any machine operation.
19. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do job better and safely
20. Use recommended accessories; improper accessories may be hazardous.
21. Maintain tools with care. Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
22. Do not stand on the machine. Serious injury could occur if the machine tips over.
23. Unplug or lock out power to the machine when not in use.

WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support

D. Transport and Assembly

Transport: please keep the proper weighted balance when transporting the machine! If transporting the machine with a fork truck, please refer to following Figure 1 below

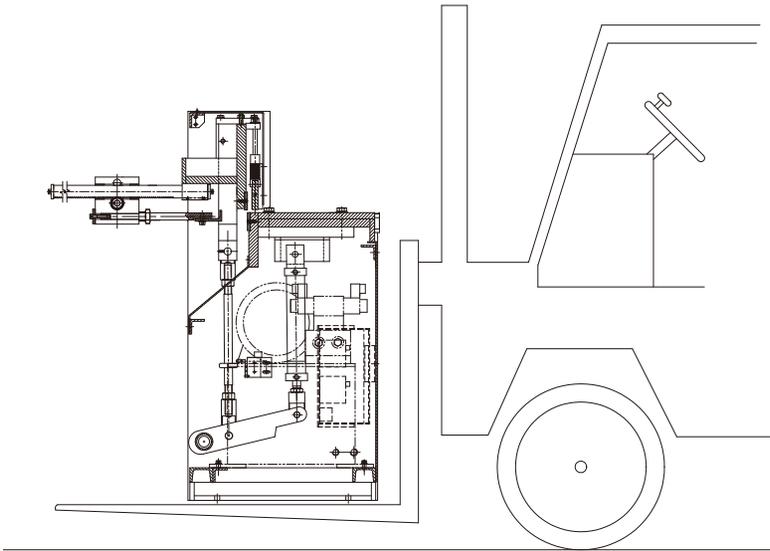


Fig. 1

E. Preparation and test drive

LEVELING:

THIS SHEAR MUST BE PROPERLY LEVELED AND BOLTED TO THE FLOOR. IF YOUR MODEL IS A LONG SHEAR 6 TO 10 FEET THERE MAY BE DEFLECTION AND TWIST IN THE BODY. THE SHEAR MUST BE SET ON A LEVEL FLOOR AND OR HEAVY STEEL PLATES UNDER EACH FOOT. A MINIMUM OF 12" X 12" AND 1/2" THICK

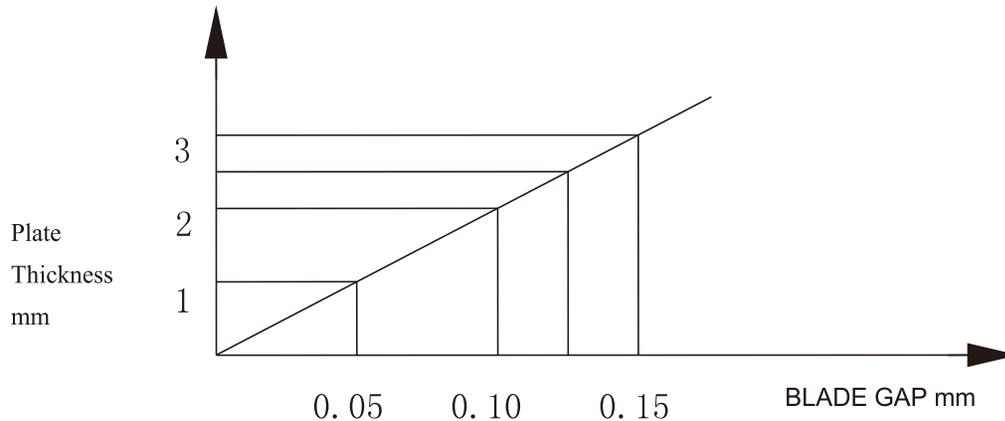
Jack screws and shim stock should be used along with a precision level to ensure the shear is level, and there is no twist in the blades from end to end. Failure to properly level the machine will result in poor cutting performance and may damage the blades and or machine. There is NO warranty for these items due to improper install. Please consult your local mill right for properly setup and leveling / anchoring

1. After assembly, please clean the protectant or dust from all exposed metal surface with a mild solvent or kerosene, and a soft rag. Do not use lacquer thinner, paint thinner, or gasoline, as these may damage painted surface.
2. Check all nuts and bolts and wire connections prior to powering on and or operating. These may have come loose in transport
3. Please fill the oil tank with **NEW** clean hydraulic oil. In the Summer (high environment temperatures) please use 46# hydraulic oil; In the Winter (low environment temperature) it's better to use 32# hydraulic oil. Oil lever position should be at 80 to 90% of the gauge
4. Lubricate According to the lubrication chart
5. Make sure there isn't any loosing from the electrical components, then connect the power and properly grounded, jog the motor (look out the direction it is turning, check if there is something abnormal. Please also check if the system pressure is adjusted well or not (about 5Mpa, is already adjusted before shipping), if not please readjust. Please start the motor for and check rotation. If Shearing Beam goes up and down with the correct foot pedal then shear is good.. If the Shearing Beam does not go up and down it is possible the pump motor is running in the wrong direction.. Have your Certified Licensed industrial electrician check the wiring for proper installation in the correct terminal Legs and try again
6. Check whether upper and bottom blade's edge is set tot the proper gap for the required material thickness **SEE BELOW CHART**

F. Adjustment

1) Adjustment for the shearing edge gap

The corresponding relationship between plate thickness and cutting edge data, please refer to following drawing:

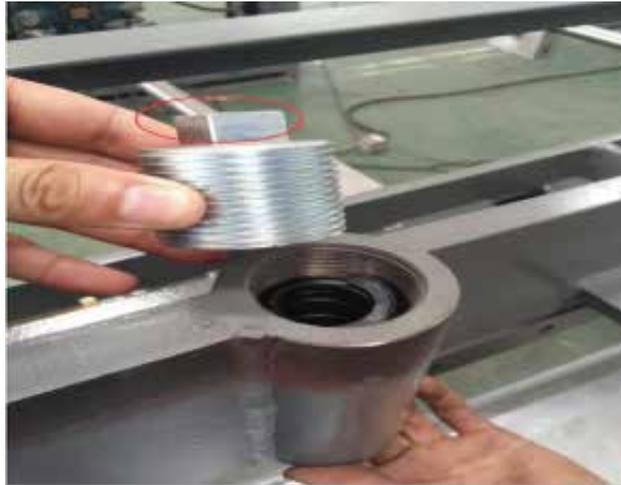


Adjusting GAP: See the drawing below : Loosen bolt 1, 2, 3, tighten bolt 4, then the cutting blade gap will increase; Loosen bolt 4 & tighten bolt 3, then the cutting blade gap data will decrease . Check cutting edge data with feeler, gauge to match the chart requirements for gap thickness

Tighten bolt 2, 1, when the desired gap clearance and the shear plate thickness is achieved (**NOTE: Failure to adjust blade gap to proper clearance for changing material thickness may result in poor cutting performance and or damage the shear blades**)



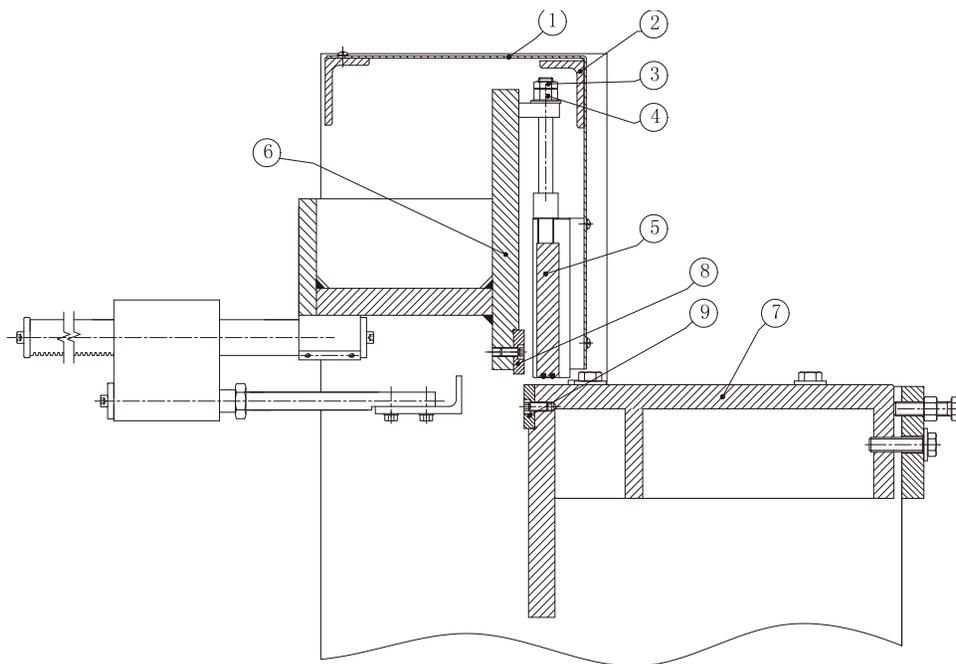
2) Adjustment the hold down plate



turn the two big screw(3) to adjust the holddown springs

First remove (1)protect guarding (2)connecting Angle plate and ,loosen (3) (4) screw, at the same time. Then press the plate down, the distance between press plate and working table is smaller, tightly screw(3) and (4), then the press plate will move up,at the same time the distance between the press plate and working table is larger.

Attention: please tight or loose the screws (3) and (4) when the (6)upper blade frame move downment,in order to save effort.But the adjust is not too large.



3) Replace the blades

Replace the upper blade (8): remove the hold down bar (5) and other components, move the (6) upper blade frame to the top of the stroke , loosen the screws on the blade, then remove the blade.

Replace bottom blade (9) : move the upper blade to top of stroke (6) move the backgauge to end of travel if in your way, loosen the screws fixed on the work table, move the working table to increase the distance between the blade, loosen the screws on the down blade, then remove the down blade.

Notes:

1. ALWAYS WEAR PROTECTIVE GLOVES WHEN CHANGING BLADES DISCONNECT POWER BEFORE PUTTING HANDS ON BLADES
2. SHEAR BLADES MUST BE RE GAPPED AFTER REPLACEMENT

G. Lubrication Chart See Below Fig 2

	Lubricate position	quantity	period	Oil type	Remark
1	Back gauge slider	2	Once per shift	Way Oil (Vactra 2)	
2	Pin shaft on upper blade frame	2	Once per shift	Way Oil (Vactra 2)	
3	Lower joints of cylinder	2	Once per shift	Way Oil (Vactra 2)	
4	Pin shaft	2	Once per shift	Way Oil (Vactra 2)	
5	Middle seat of the shaft	1	Once per shift	Way Oil (Vactra 2)	
6	Pin shaft on rotate	4	Once per shift	Way Oil (Vactra 2)	
7	Head left and right slide guide	2	Once per shift	Way Oil (Vactra 2)	

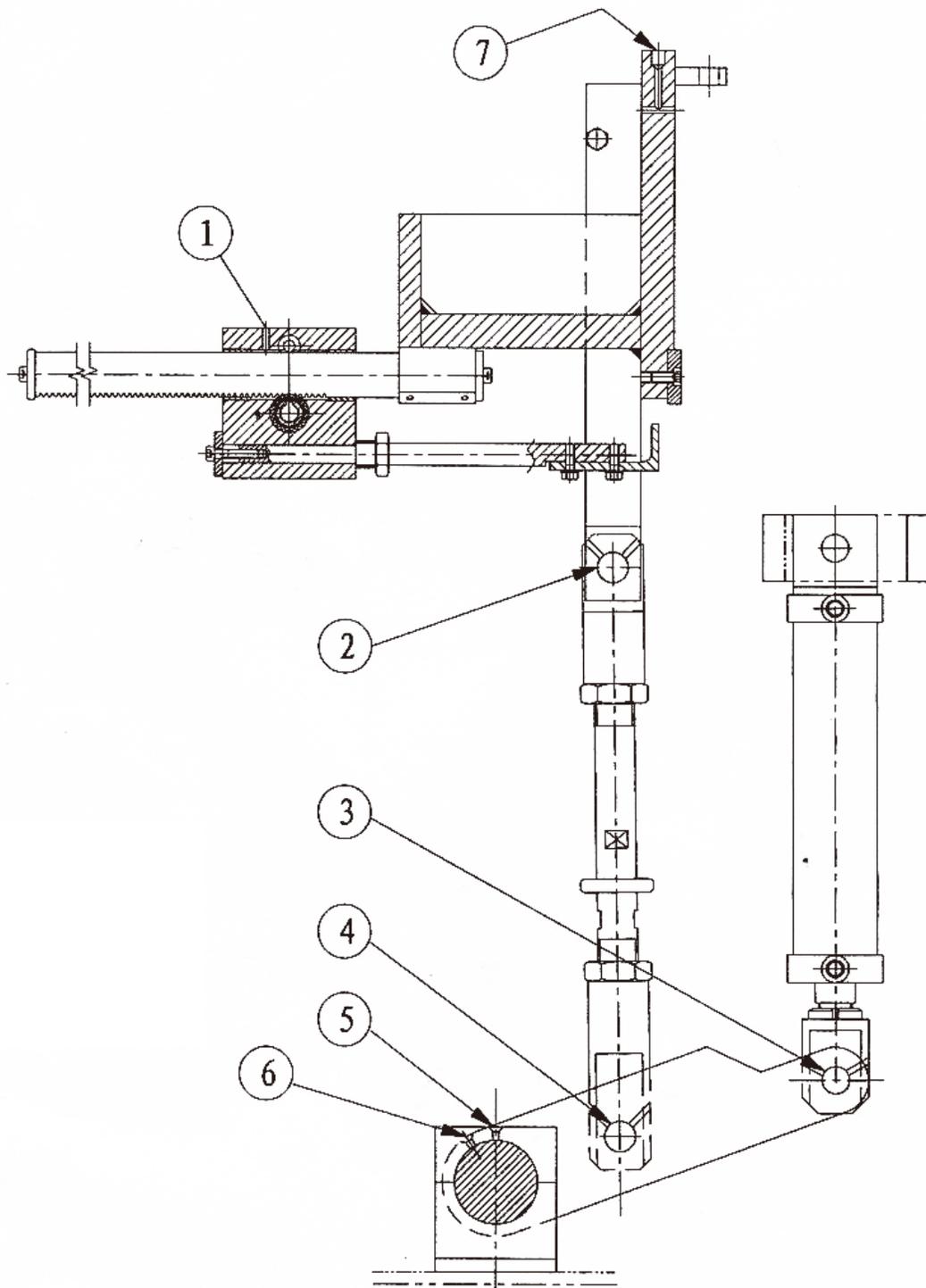
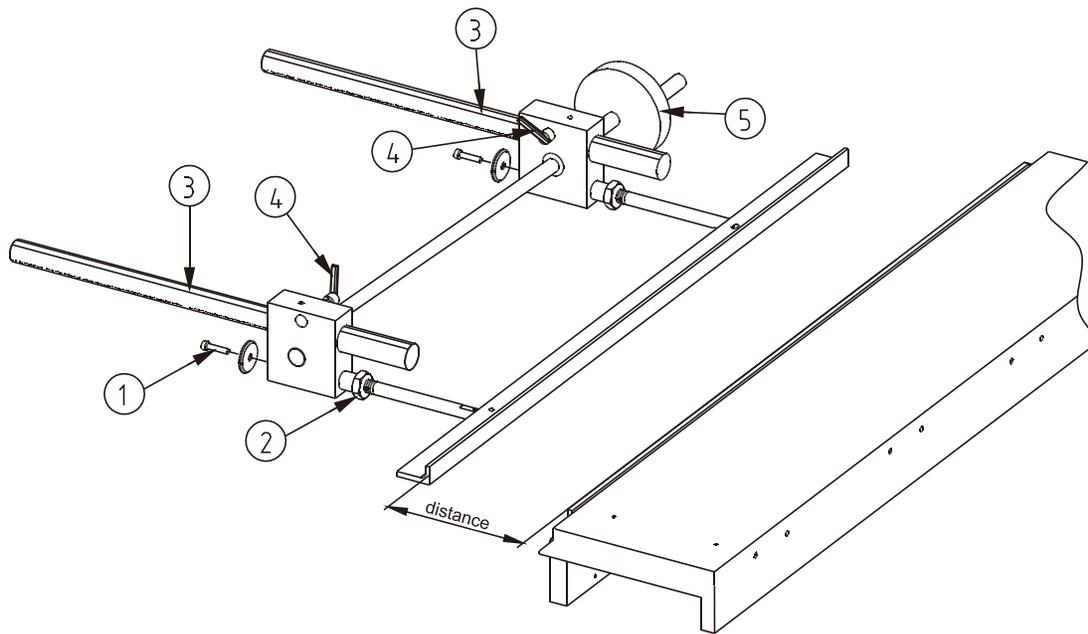


FIG 2: Lubrication location

H. Operation and adjustment for back gauge

- 1) This machine is equipped with manual back gauge.
- 2) Make small test cuts at 1" or 2" to check the correct distance is achieved all the way across the cutting table.
- 3) Adjust # 1 and 2 on each side if the piece is not squared even across the whole cutting length
- 4) Adjusting back gauge distance: loosen handle 4, then rock handle 5 to change the distance, finally lock handle 4 at the required distance.



POWER ON:

Turn the switch to “ON”, then press the green button.



INCH MODE IS FOR CHECKING BLADE GAP AND CLEARANCE ONLY

AUTO MODE IS FOR ONE FULL CYCLE CUT

THERE IS A TIMER REPLY TO ADJUST THE CUTTING STROKE.

IF STROKE LENGTH DOES NOT GO ACROSS THE ENTIRE CUTTING LENGTH THEN ADJUST TIMER REPLY TO ABOUT 3 SECONDS, WHICH IS LOCATED INSIDE THE ELECTRICAL BOX UNTIL THE COMPLETE STROKE IS MADE.

NOTE : IF STROKE IS TOO LONG THE UPPER BLADE WILL STAY ON BOTTOM AND REPEAT THE CUT , WHICH MEANS THE TIMER RELAY IS SET UP TOO MANY SECONDS, REDUCE 1-2 SECONDS



I. Maintenance

1. Keep machine clean, please use RUST prohibitor to protect all machined surfaces when not in use for longer periods
2. Wipe the knives lightly with oil.
3. Lubricate all pivot points on the machine daily.
4. Keep shearing blade edge sharp. If you find any damage or wear or nicks, please re-grind the blade or change a new blade. DO NOT CUT broken material, too thick material, materials with welds or seams, damaged edges and so on.
5. Clean the protectant from all exposed metal surface with a mild solvent or kerosene, and a soft rag. Do not use lacquer thinner, paint thinner, or gasoline, as these may damage painted surface.
6. While using the shear, should any abnormal circumstance happen, the operator must stop working at once. Then turn the power off, inspect the issue by a qualified repair technician.
7. Please turn off the power when finished working, and carefully clean the machine.
8. Inspect the electric system periodically.

ATTENTION: At first installation and debugging, please look out the oil level in the tank. After a few cycles please note if additional oil may be required to be added.. Please change 1st after 1st 100 hours of use.. Then 1 time per year approx. 1500 hours of use. Tank should be wiped clean 1 time per year as well so NO foreign particles are in the closed hydraulic system.

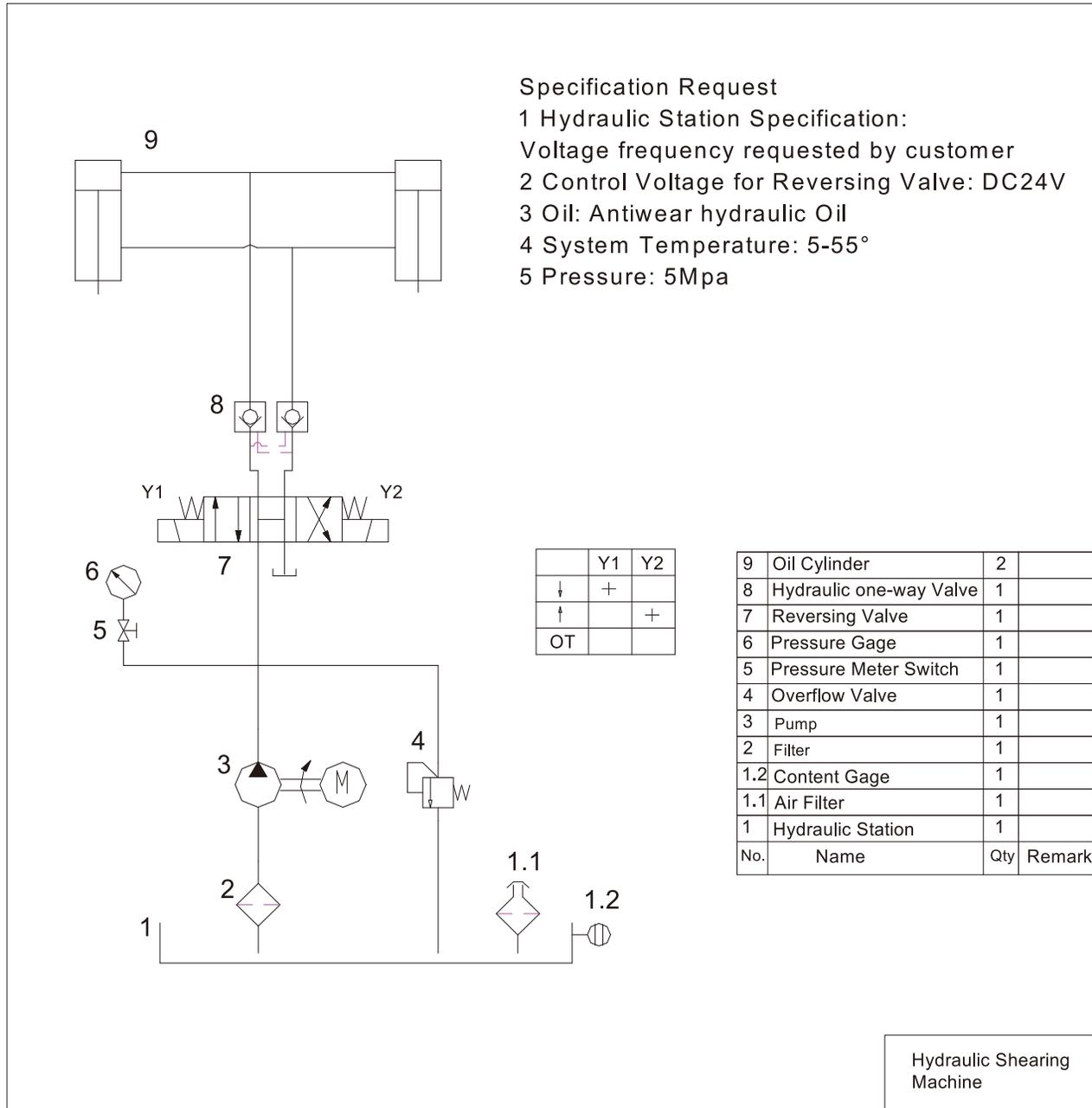
TROUBLESHOOTING FOR GMC HS-1010MD SERIES

CALL GMC SERVICE AT 909-947-7787

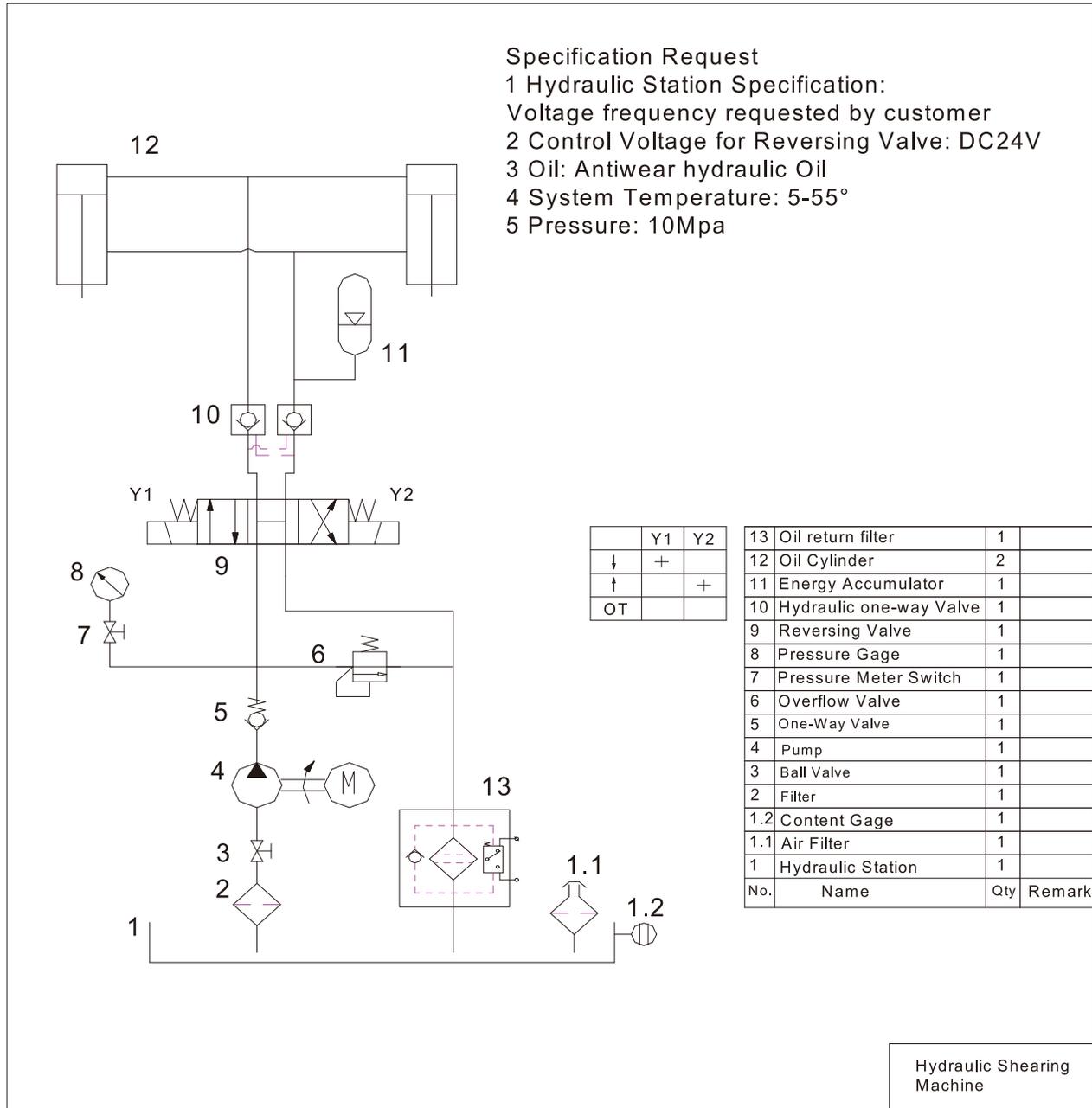
PROBLEM	SOLUTION
The motor runs and no function	Check and make sure the motor rotation correct
	Check the power voltage, 220V or 440V, +- 10%
	Voltage can not be lower than 208V
The upper blade only comes down 1/2 way	Need to adjust the timer inside electrical cabinet, more seconds
The upper blade comes down but do not return back to up position	Check the down limit switch
	Check the selection switch of auto & inch
	Clean the solenoid valve
The upper blade does not come down	Check the upper limit switch
	Check the up & down limit switches
	Clean the solenoid valve
When cut the material, the overload relay trips	Set the overload relay #FR1 to higher Amp
	Lubricate all guideways
When cut the 20Ga. Stainless steel, roll the material	Check the clearance first, make sure the clearance in the middle 0.002" and sides 0.003" If the clearance is set up right, and still roll the material, need to adjust the tension bar on the back of the upper beam, tighten the nut a little bit, the double check or repeat if needed
When cut the 12Ga mild steel, has burrs	Need to check the blades clearance based on the chart, smaller the clearance
	Make sure the middle clearance is 0.001" smaller than the both sides
	First set up the clearance on the right & left sides, then check the middle clearance, if the middle clearance is bigger than sides clearance, need to adjust the tension bar on the back of the upper beam, tighten the nut a little bit, then double check or repeat if needed
How to change hydraulic oil	Drain the old hydraulic oil out and clean the filter inside the tank
	Replace the outside fine filter
	Clean the oil tank

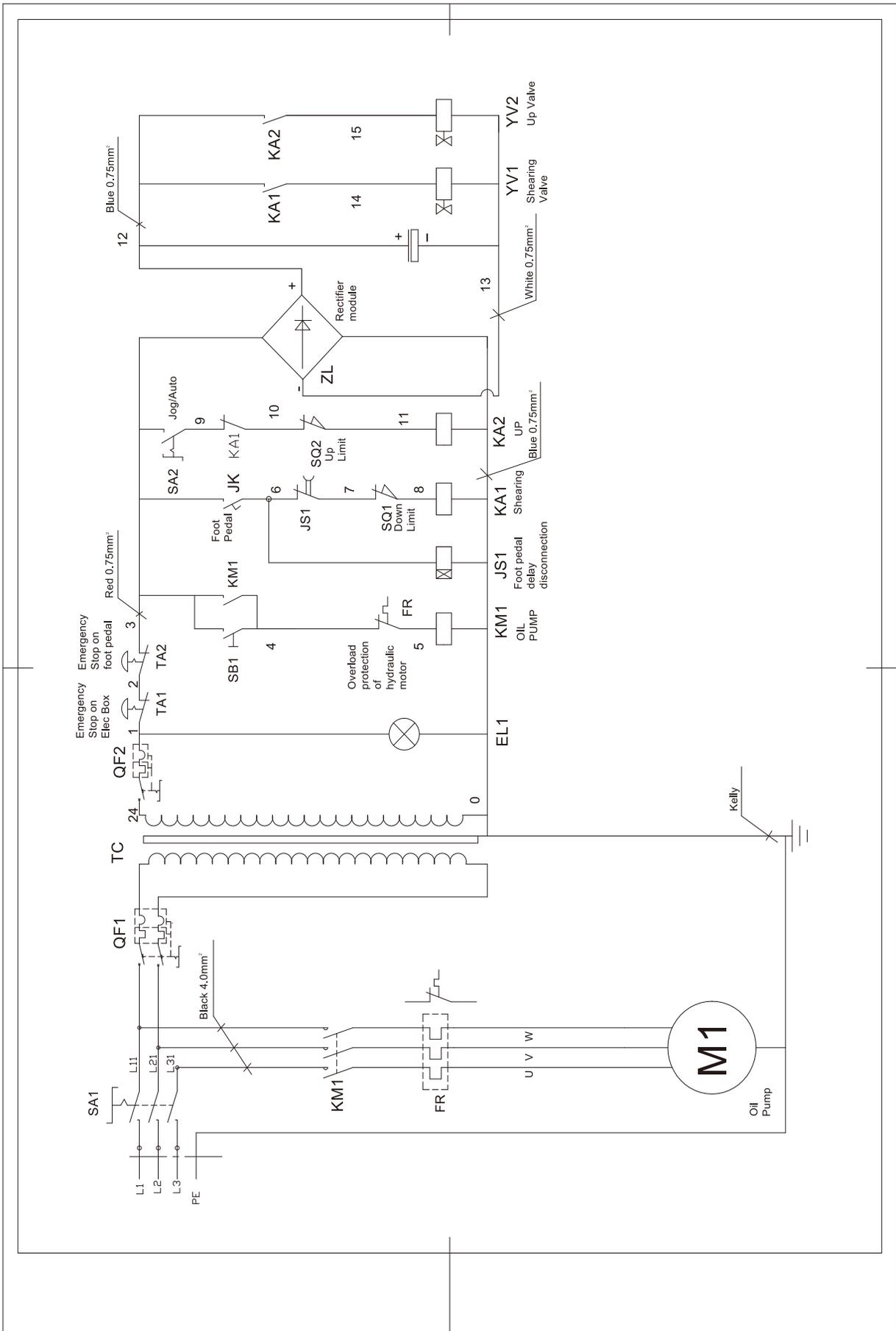
J. Hydraulic schematic and electrical diagrams

This is for HS-0412MD

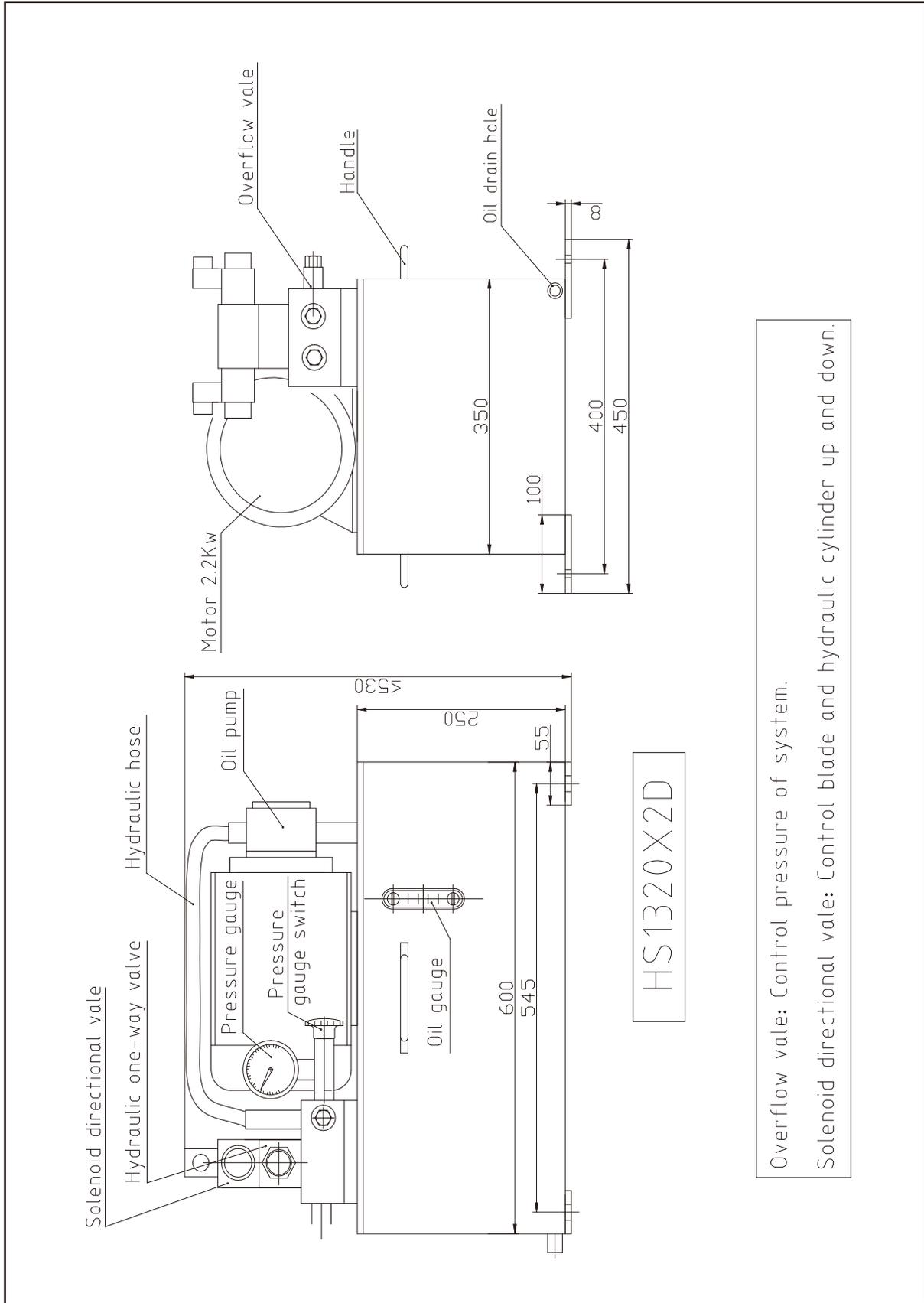


This is for HS-0410MD,HS-0610MD,HS-0810MD,HS-1010MD,HS-1014MD

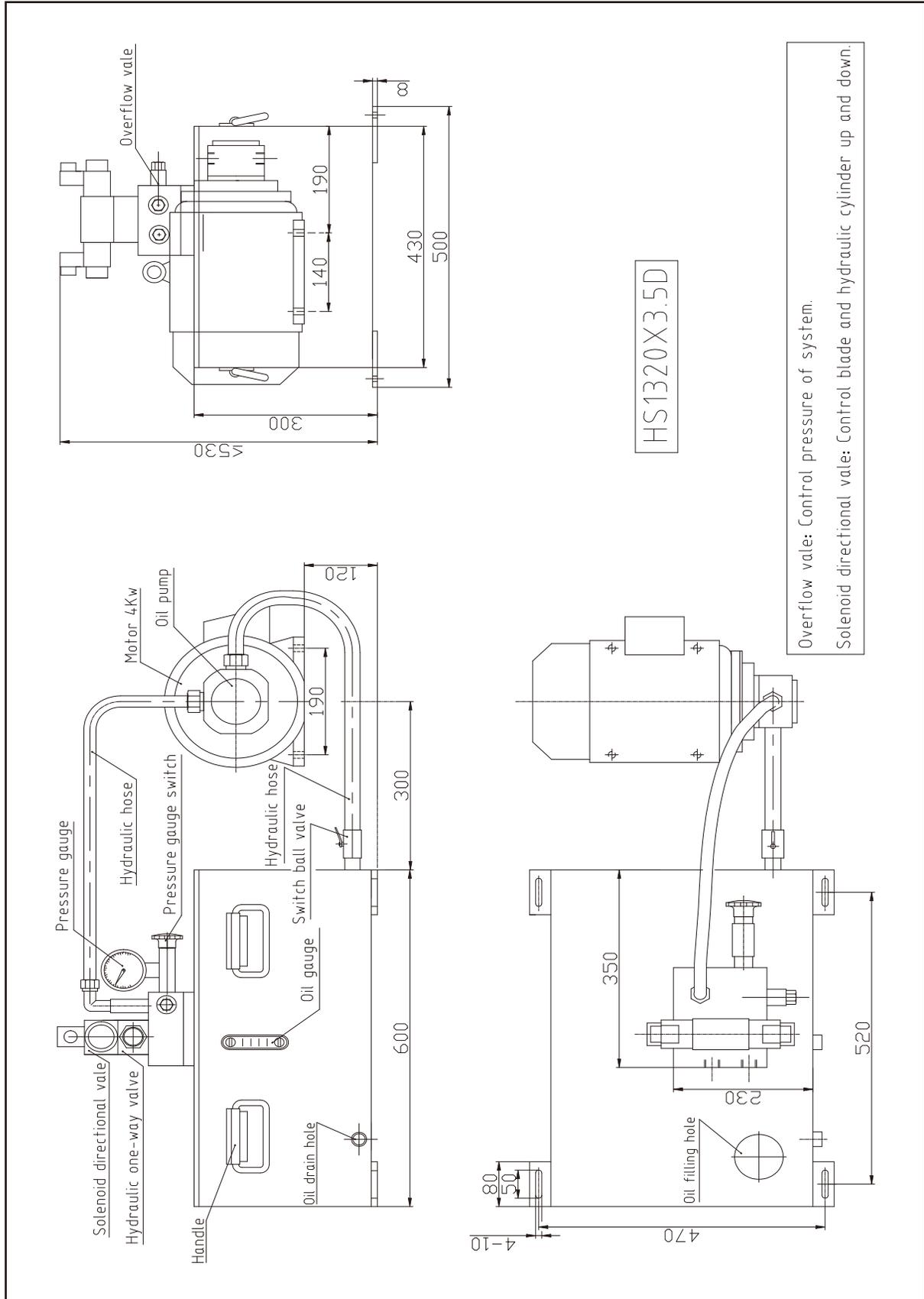




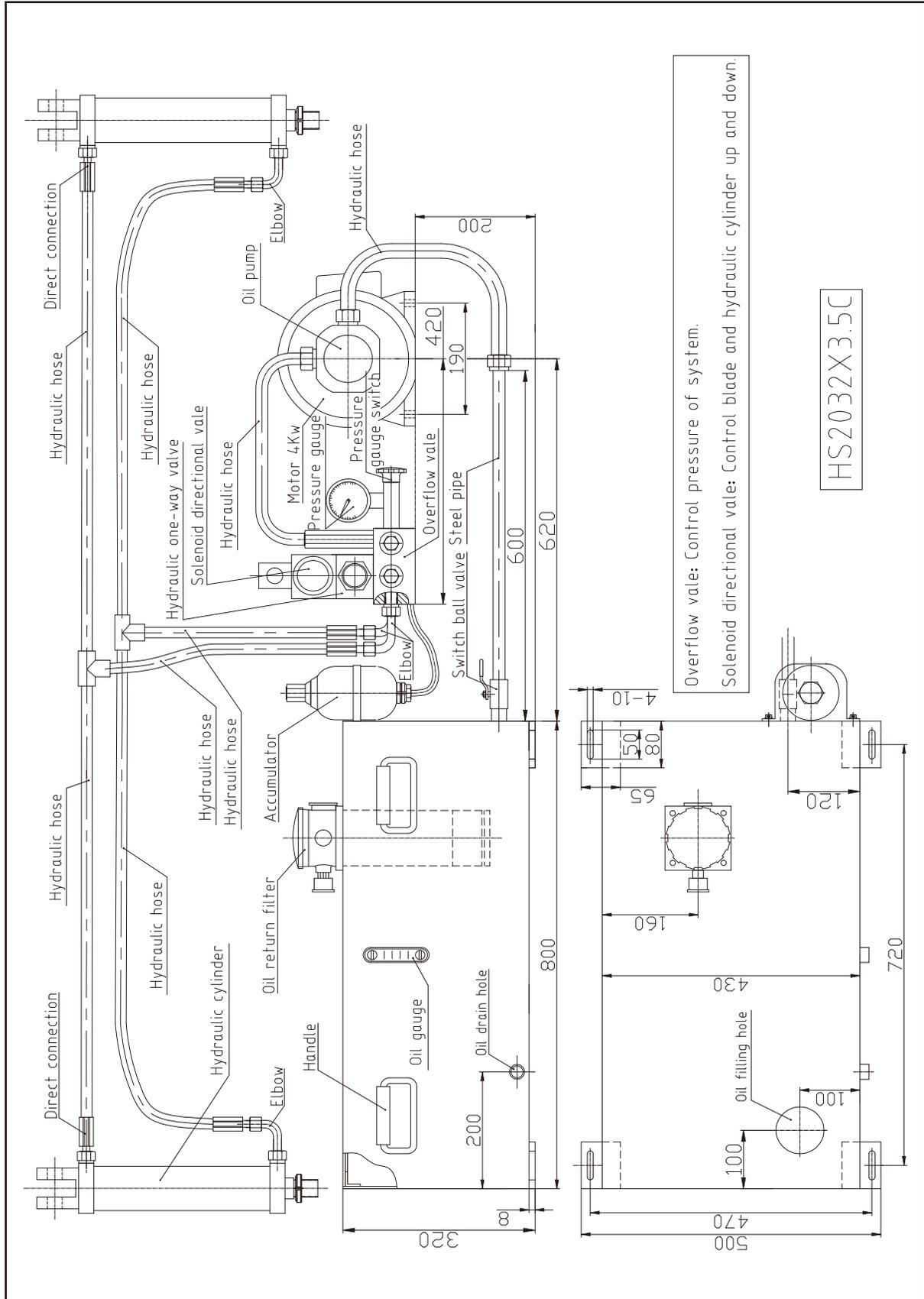
Layout of hydraulic system for HS-0412MD



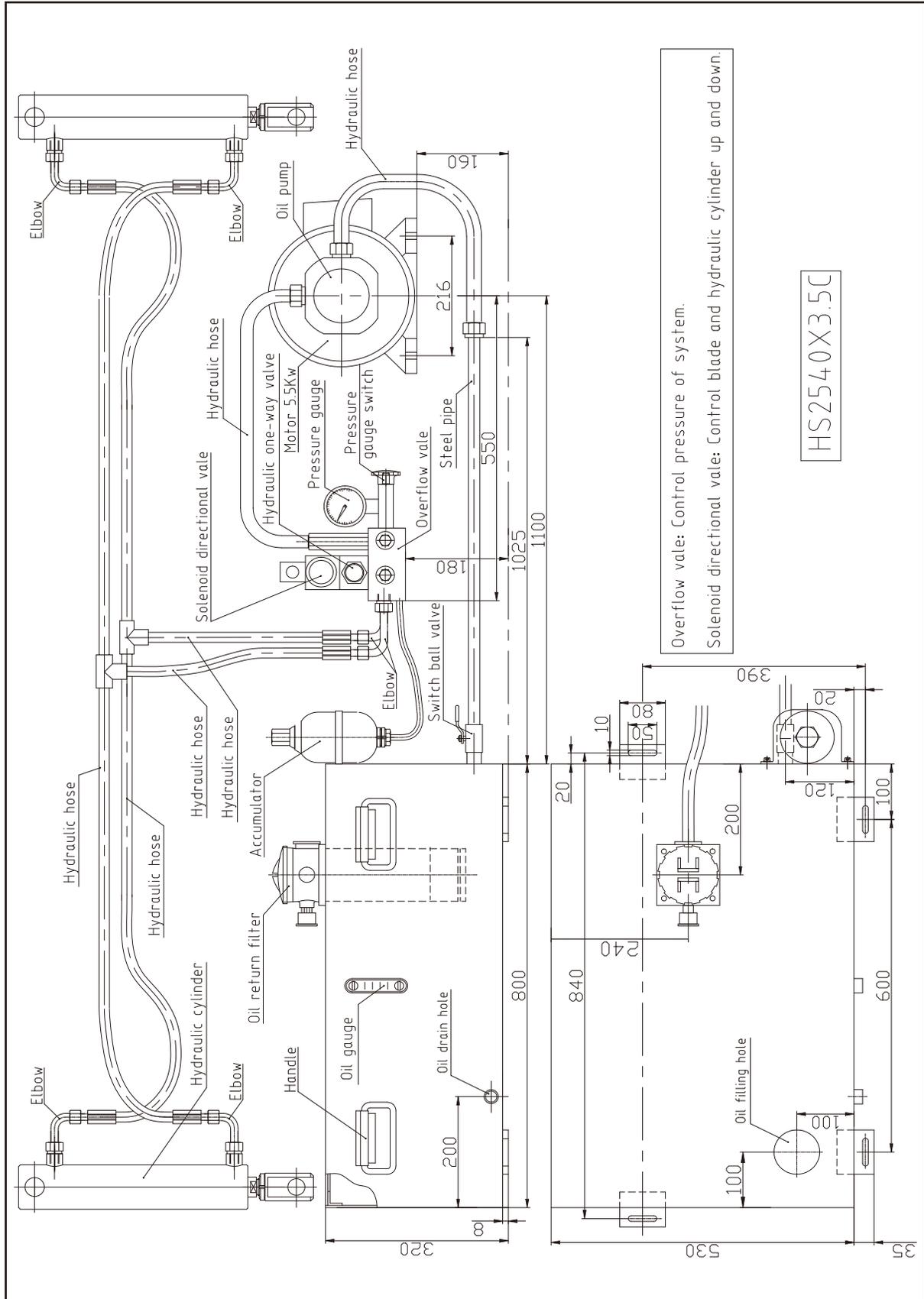
Layout of hydraulic system for HS-0410MD



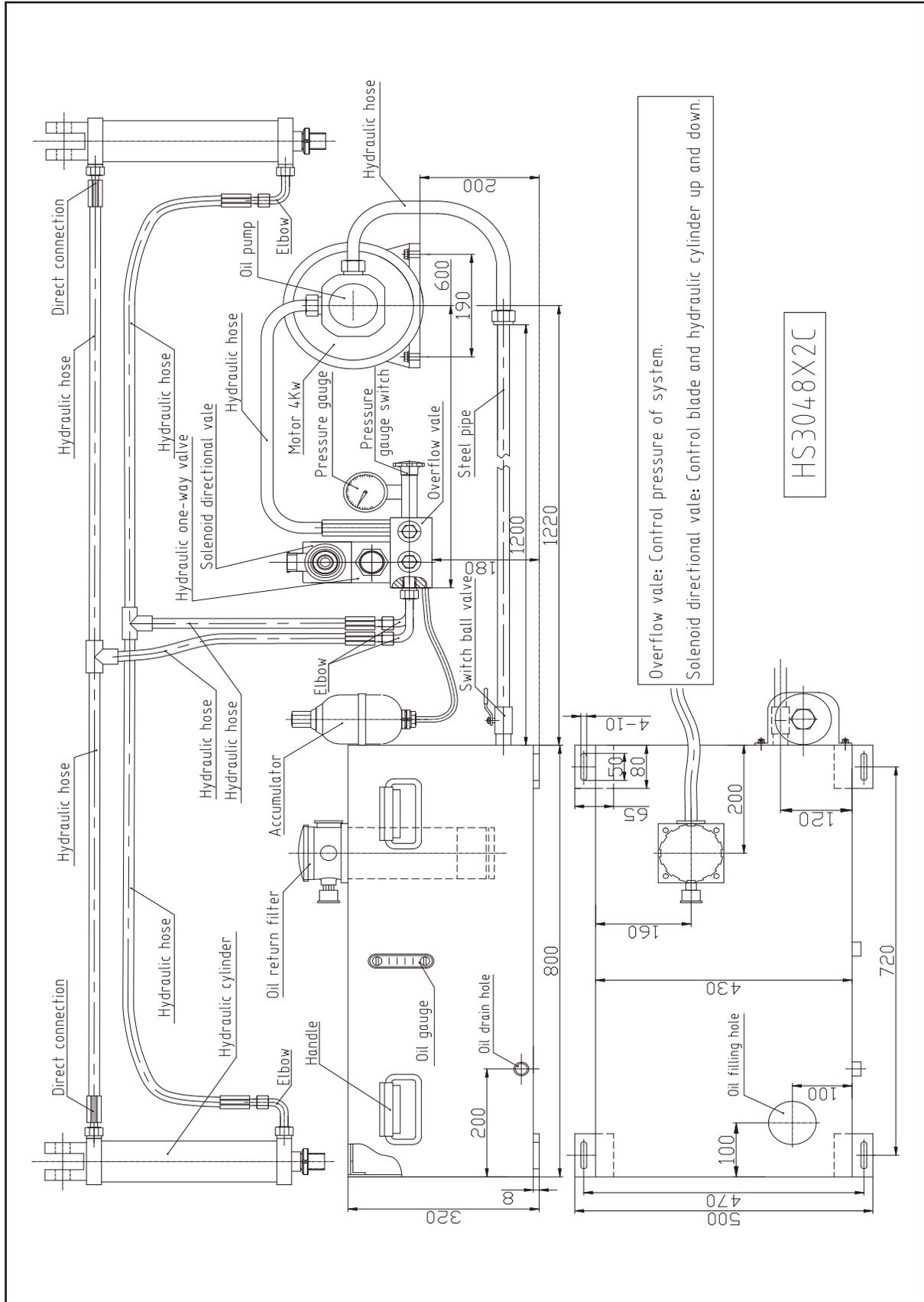
Layout of hydraulic system for HS-0610MD



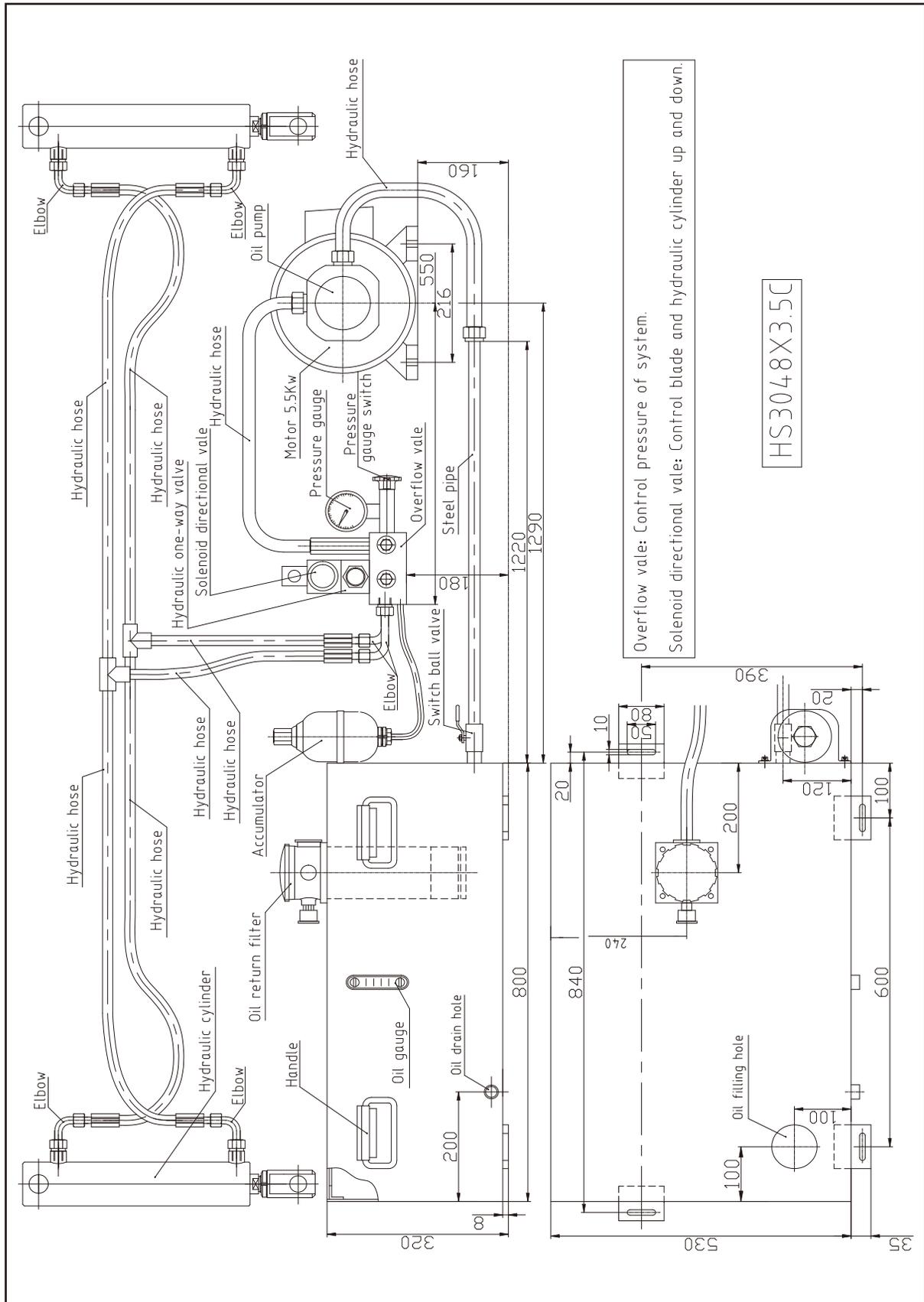
Layout of hydraulic system for HS-0810MD



Layout of hydraulic system for HS-1014MD

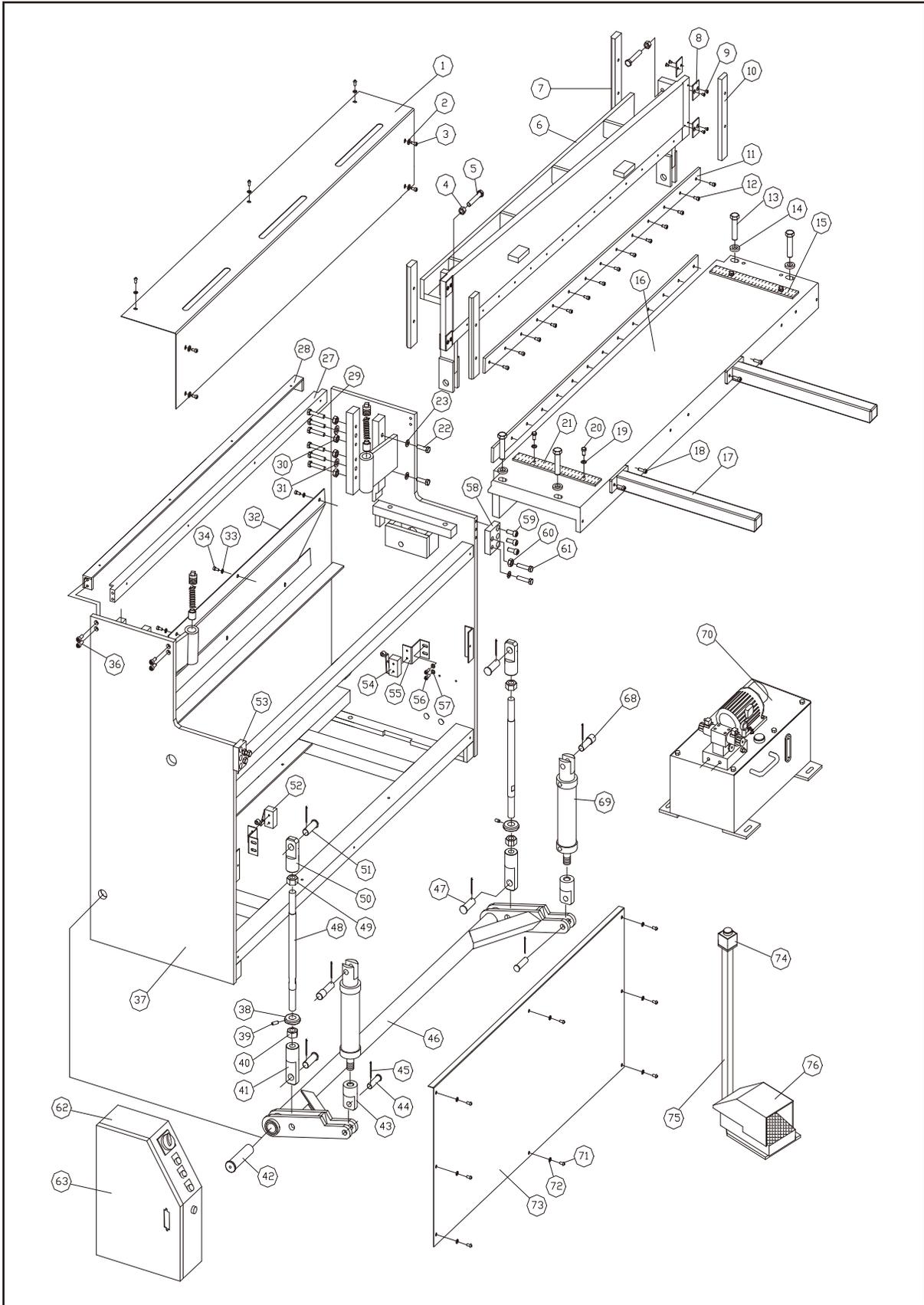


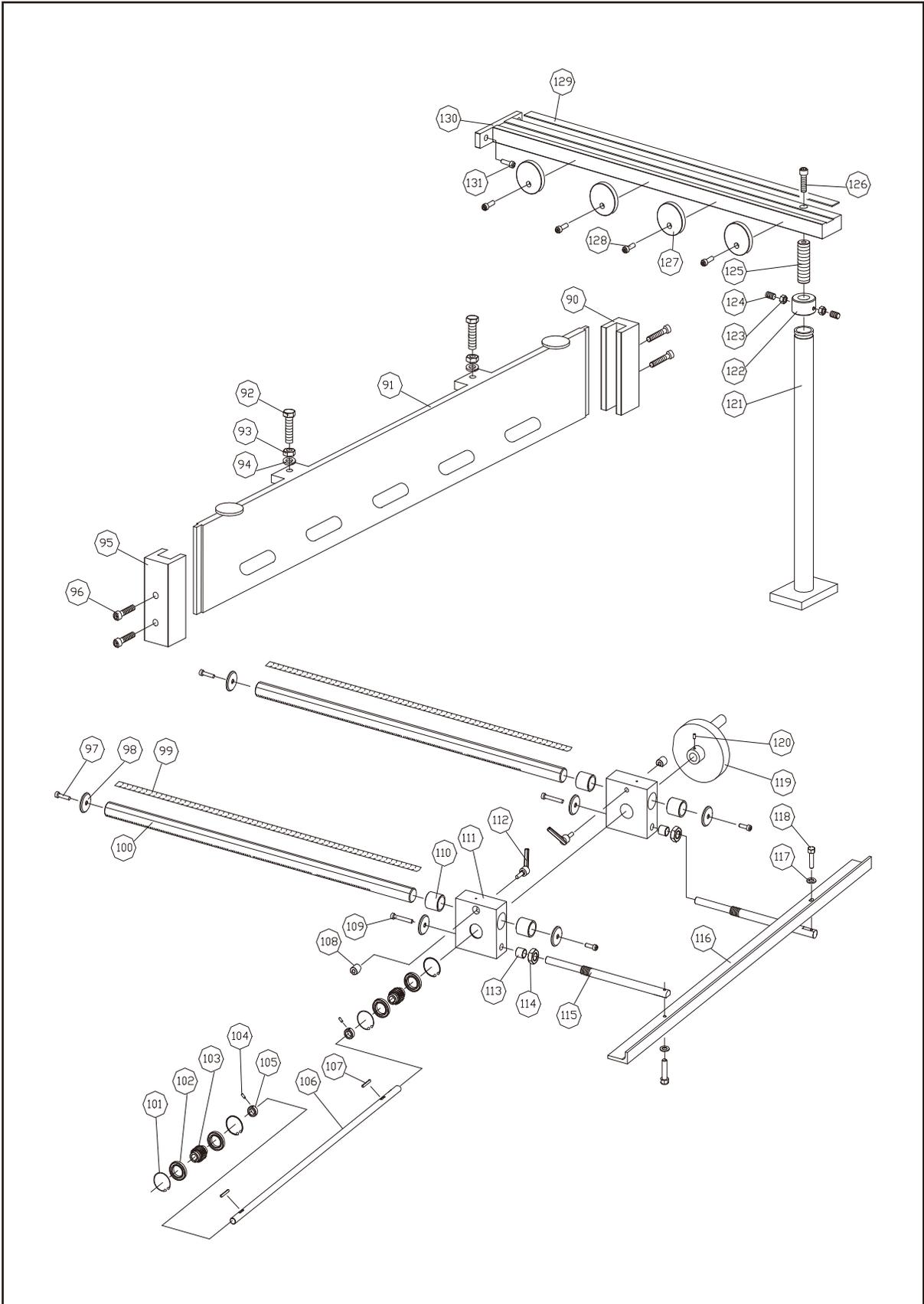
Layout of hydraulic system for HS-1010MD



Parts Breakdown and parts list

For Model HS-0412MD





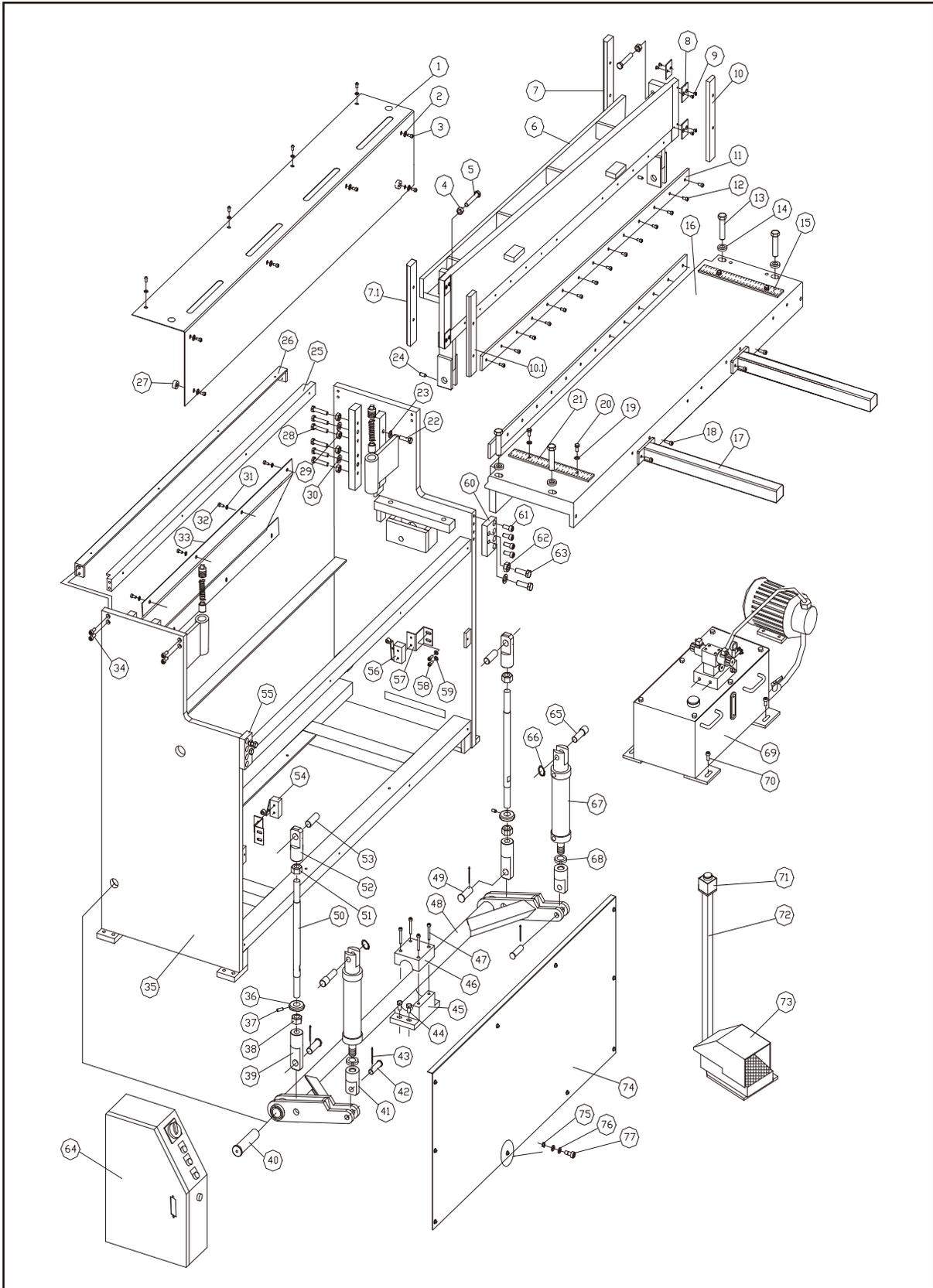
Part #	Desc.	Size	Q'ty
1	Cover		1
2	Washer	6	7
3	Bolt	M6X12	7
4	Copper Nut	M12	2
5	Copper Bolt	M12X70	2
6	Upper Beam		1
7	Top block		2
8	Friction Block		8
9	Bolt	M5X8	16
10	Top Block		2
11	Shearing Blade		2
12	Bolt	M6X12	28
13	Bolt	M16X70	4
14	Washer		4
15	Right Scale		1
16	Working Table		1
17	Support Rod		2
18	Bolt	M10X25	4
19	Washer	8	4
20	Bolt	M8X16	4
21	Left Scale		1
22	Bolt	M10X35	4
23	Washer	10	4
27	Front supporting angle steel		1
28	Upper and rear supporting angles		1
29	Bolt	M10X50	12
30	Nut	M10	8
31	Washer	10	4
32	Sliding Plate		1
33	Washer	6	6
34	Bolt	M6X12	6
36	Bolt	M8X20	4
37	Body		1
38	plate		2
39	Bolt	M6X16	2
40	Nut	M20	2
41	Lower connector		2
42	Pin		2
43	Hydraulic cylinder joint		2
44	Pin		2
45	Cotter pin	3.2X45	8

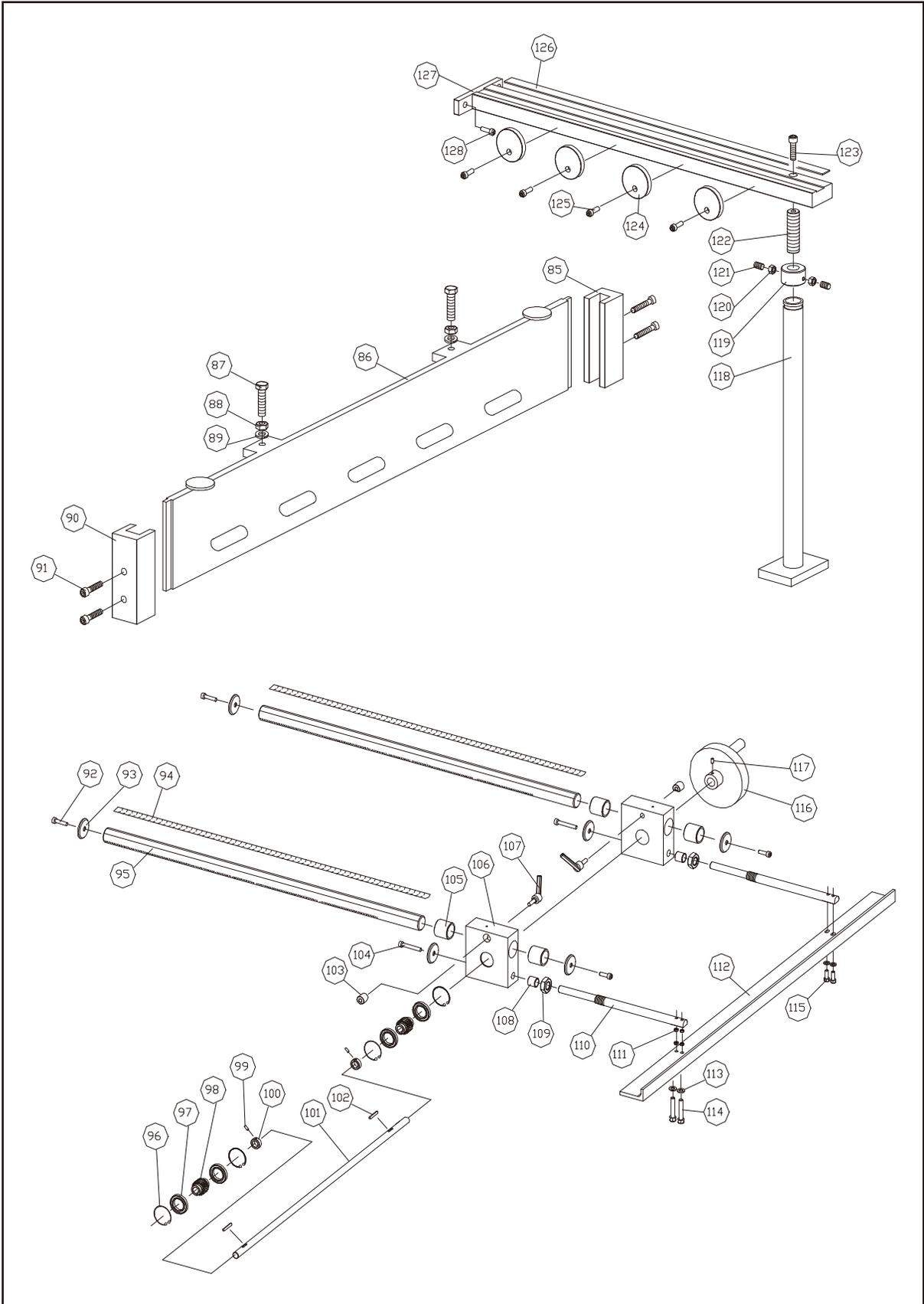
46	Connection frame		1
47	Pin Shaft		2
48	Draw Bar		2
49	Nut	M20-左	2
50	Up Connector		2
51	Pin Shaft		2
52	Lower Limited Switch		1
53	Adjust Clearance fixing block		1
54	Up limited switch		1
55	Limited switch bracket		2
56	Bolt	M6X12	4
57	Washer	6	4
58	Adjust Clearance fixing block		1
59	Bolt	M10X25	6
60	Nut	M10	2
61	Bolt	M10X45	2
62	Elec. Box		1
63	Electric box door		1
68	Pin Shaft		2
69	Hydraulic cylinder		2
70	Hydraulic station		1set
71	Bolt	M6X12	8
72	Washer	6	8
73	Front Cover		1
74	Emergency Stop		1
75	Foot switch bracket		1
76	Foot Pedal		1
90	Right guide groove		1
91	Pressure Beam		1
92	Bolt	M16X70	2
93	Nut	M16	2
94	Washer	16	2
95	Left Guide Groove		1
96	Bolt	M10X30	4
97	Bolt	M8X20	4
98	Big Washer		6
99	Scale for Back Gauge		2
100	Tooth Rod		2
101	Ring	37	4
102	Bearing	61805	4
103	Small Gear		2
104	Bolt	M5X6	2
105	Ring		2

106	Connecting Shaft		1
107	Key	5X20	2
108	Oblique intercalation block		2
109	Bolt	M8X40	2
110	Copper sleeve		4
111	Control slider		2
112	Adjustable tight handle	M10X50	2
113	Spacer		2
114	Nut	M20X1.5	2
115	Fixed Shaft		2
116	Baffle plate		1
117	Washer	8	2
118	Bolt	M8X20	2
119	Handle	Φ150XΦ16	1
120	Bolt	M6X8	1
121	Support Stand		1
122	Adjust Nut		1
123	Nut	M8	2
124	Bolt	M8X16	2
125	Adjusting screw		1
126	Bolt	M12X35	1
127	Limited Plate		4
128	Bolt	M8X20	4
129	Scale for Side Gauge		1
130	Side gauge		1
131	Bolt	M10X35	2

Parts Breakdown and parts list

For Model HS-0410MD





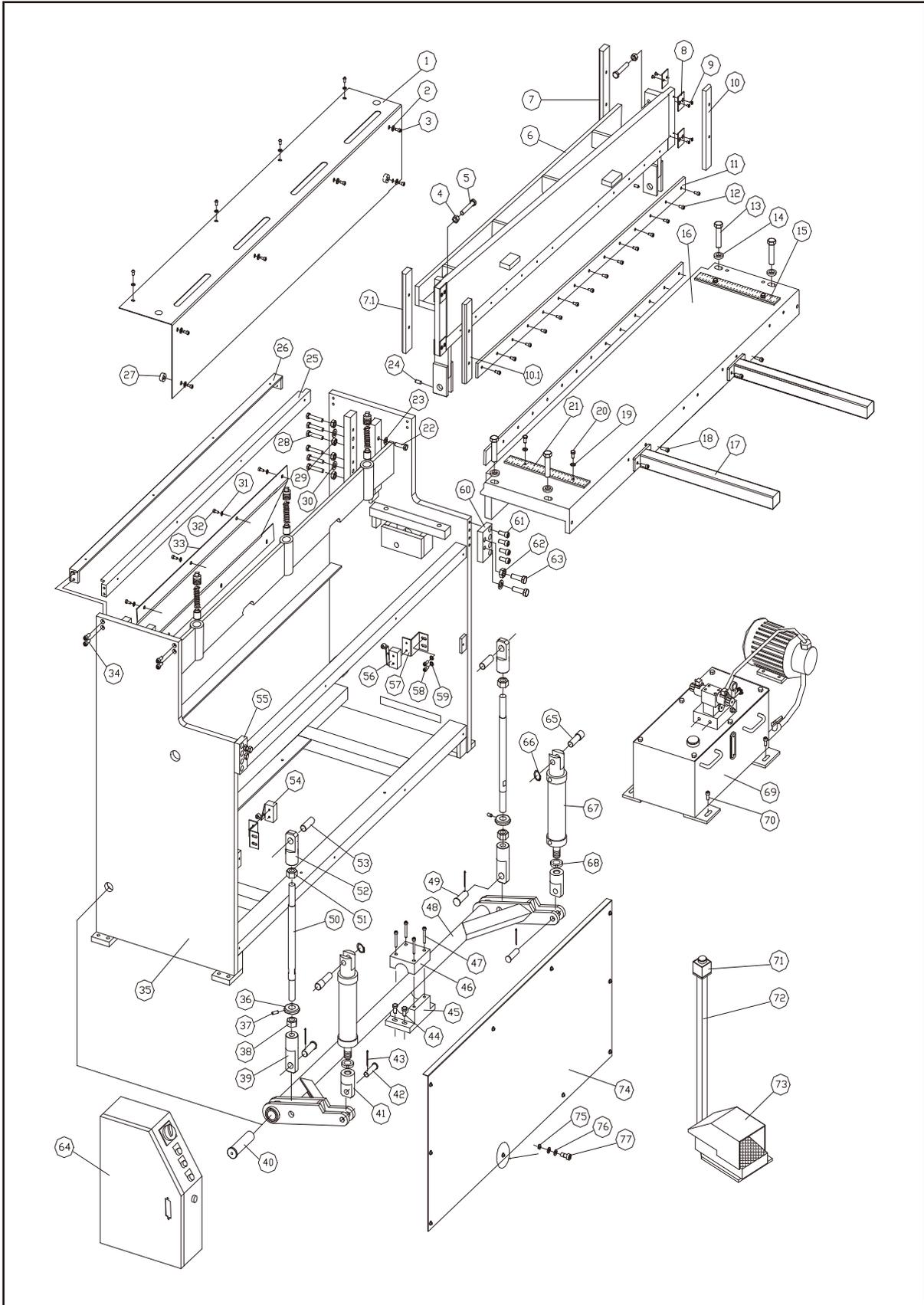
Part#	Desc.	Desc.	Q'ty	Note
1	Cover		1	
2	Washer	6	12	
3	Bolt	M6X12	12	
4	Copper Nut	M12	2	
5	Copper Bolt	M12X70	2	
6	Upper Beam		1	
7	Top block		1	
7.1	Friction Block		1	
8	Friction Block		8	
9	Bolt	M5X8	16	
10	Top Block		1	
10.1	Top Block		1	
11	Shearing Blade		2	
12	Bolt	M10X20	42	
13	Bolt	M16X80	4	
14	Washer		4	
15	Right Scale		1	
16	Working Table		1	
17	Support Rod		2	
18	Bolt	M10X25	4	
19	Washer	8	4	
20	Bolt	M8X16	4	
21	Left Scale		1	
22	Bolt	M10X40	4	
23	Washer	10	4	
24	Bolt	M6X12	2	
25	Front supporting angle steel		1	
26	Upper and rear supporting angles		1	
27	Bush		2	
28	Bolt	M10X55	12	
29	Nut	M10	8	
30	Washer	10	4	
31	Washer	6	8	
32	Bolt	M6X12	8	
33	Slide Plate		1	
34	Bolt	M10X25	8	
35	Body		1	
36	Plate		2	
37	Bolt	M6X16	2	
38	Nut	M36X3	2	
39	Lower connector		2	

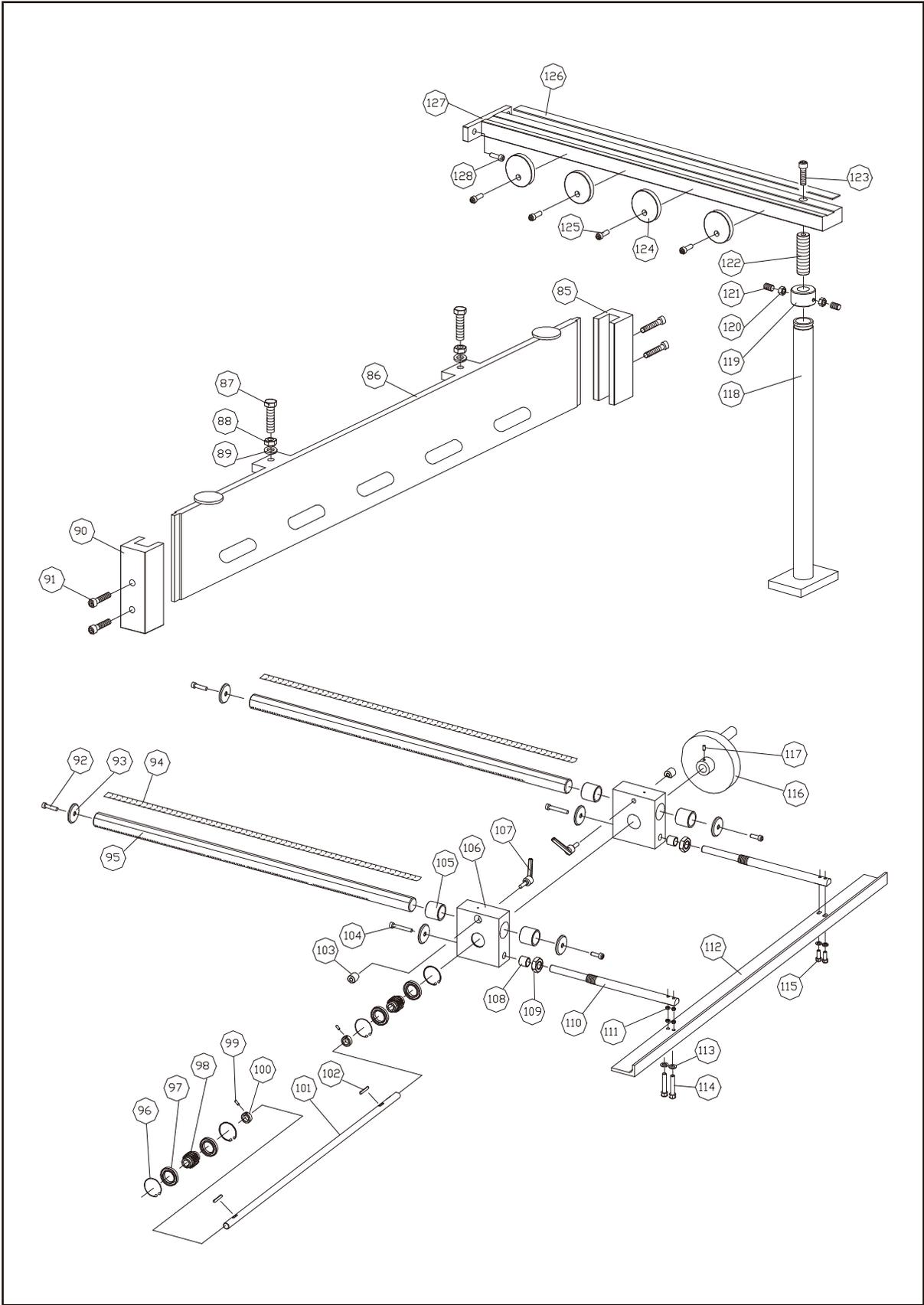
40	Pin		2	
41	Hydraulic cylinder joint		2	
42	Pin		2	
43	Cotter pin	3.2X45	4	
44	Bolt	M10X25	4	
45	Sub block under support seat		1	
46	Block on support seat		1	
47	Bolt	M8X50	4	
48	Connecting Frame		1	
49	Pin Shaft		2	
50	Screw		2	
51	Nut	M36X3-left	2	
52	Upper connector		2	
53	Pin Shaft		2	
54	Lower Limited Switch		1	
55	Adjust Clearance fixing block		1	
56	Up limited switch		1	
57	Limited switch bracket		2	
58	Bolt	M6X12	4	
59	Washer	6	4	
60	Adjust Clearance fixing block		1	
61	Bolt	M12X35	8	
62	Nut	M16X1.5	2	
63	Bolt	M16X1.5X65	2	
64	Electric Box		1	
65	Pin Shaft		2	
66	Ring	25	2	
67	Hydraulic Cylinder		2	
68	Nut	M30X1.5	2	
69	Hydraulic Station		1set	
70	Bolt	M8X20	4	
71	Emergency Stop		1	
72	Foot switch bracket		1	
73	Foot Pedal		1	
74	Front Cover		1	
75	Ring	5	10	
76	Washer	6	20	
77	Bolt	M6X12	10	
85	Right Guide Groove		1	
86	Pressure Beam		1	
87	Bolt	M16X70	2	
88	Nut	M16	2	
89	Washer	16	2	

90	Left Guide Groove		1	
91	Bolt	M10X30	4	
92	Bolt	M8X20	4	
93	Big Washer		6	
94	Scale for Back Gauge		2	
95	Tooth Rod		2	
96	Ring	37	4	
97	Bearing	61805	4	
98	Small Gear		2	
99	Bolt	M5X6	2	
100	Ring		2	
101	Connecting Shaft		1	
102	Key	5X20	2	
103	Oblique intercalation block		2	
104	Bolt	M8X40	2	
105	Copper sleeve		4	
106	Control slider		2	
107	Adjustable tight handle	M10X50	2	
108	Spacer		2	
109	Nut	M20X1.5	2	
110	Fixed Shaft		2	
111	Nut	M8	4	
112	Baffle plate		1	
113	Washer	8	4	
114	Bolt	M8X60	2	
115	Bolt	M8X20	2	
116	Handle	Φ150XΦ16	1	
117	Bolt	M6X8	1	
118	Support Rod		1	
119	Adjust Nut		1	
120	Nut	M8	2	
121	Bolt	M8X16	2	
122	Adjust Screw		1	
123	Bolt	M12X35	1	
124	Limited Plate		4	
125	Bolt	M8X20	4	
126	Scale for Side Gauge		1	
127	Side gauge		1	
128	Bolt	M10X35	2	

Parts Breakdown and parts list

For Model HS-0610MD





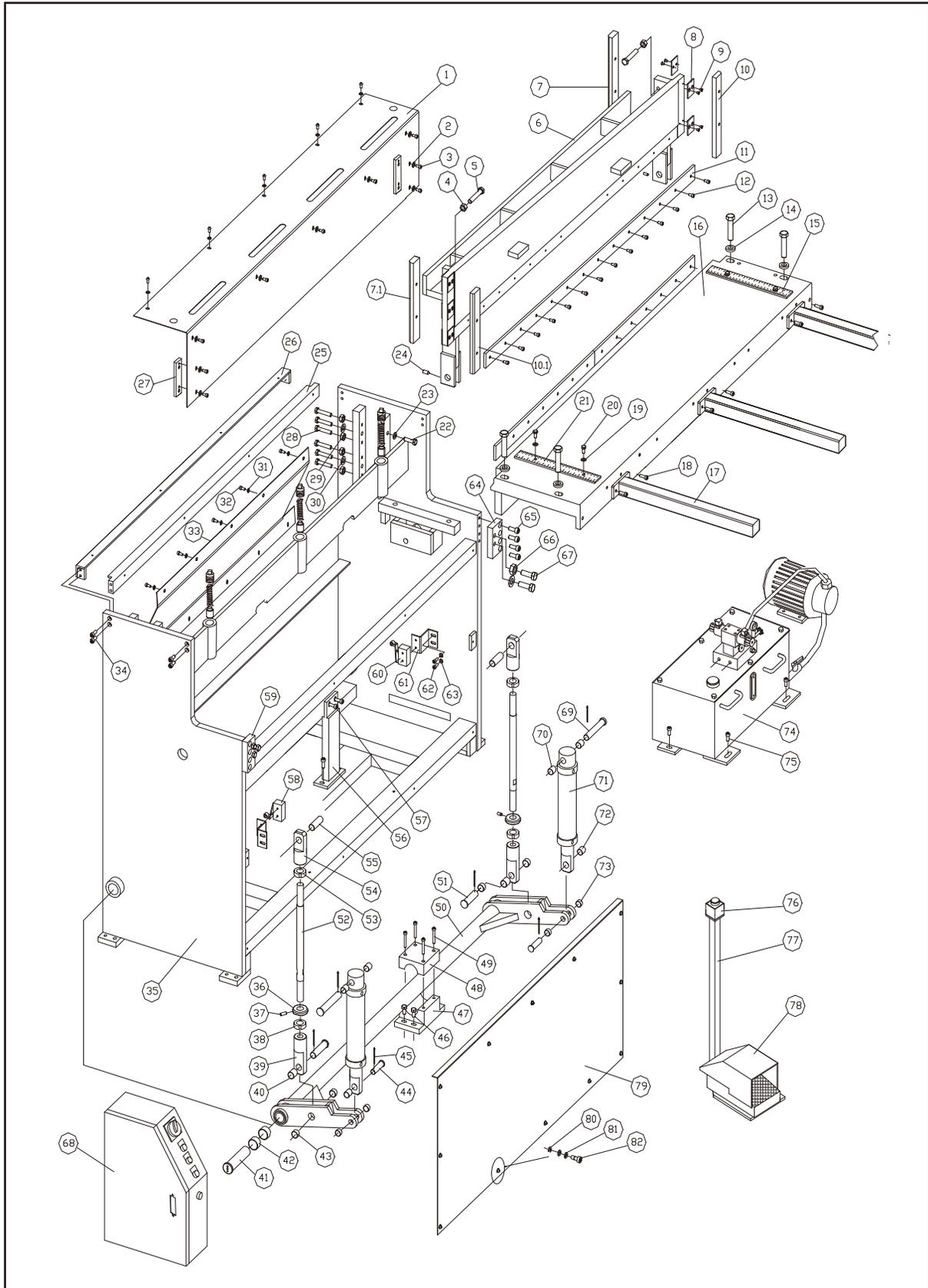
Part #	Desc.	Size	Q'ty	Note
1	Cover		1	
2	Washer	6	12	
3	Bolt	M6X12	12	
4	Copper Nut	M12	2	
5	Copper Bolt	M12X70	2	
6	Upper Beam		1	
7	Top block		1	
7.1	Top block		1	
8	Friction Block		8	
9	Bolt	M5X8	16	
10	Top block		1	
10.1	Top block		1	
11	Shearing Blade		2	
12	Bolt	M10X20	42	
13	Bolt	M16X80	4	
14	Washer		4	
15	Right Scale		1	
16	Working Table		1	
17	Support Rod		2	
18	Bolt	M10X25	4	
19	Washer	8	4	
20	Bolt	M8X16	4	
21	Left Scale		1	
22	Bolt	M10X40	4	
23	Washer	10	4	
24	Bolt	M6X12	2	
25	Front supporting angle steel		1	
26	Upper and rear supporting angles		1	
27	Sleeve		2	
28	Bolt	M10X55	12	
29	Nut	M10	8	
30	Washer	10	4	
31	Washer	6	8	
32	Bolt	M6X12	8	
33	Slide Plate		1	
34	Bolt	M10X25	8	
35	Body		1	
36	Plate		2	
37	Bolt	M6X16	2	
38	Nut	M36X3	2	
39	Lower connector		2	

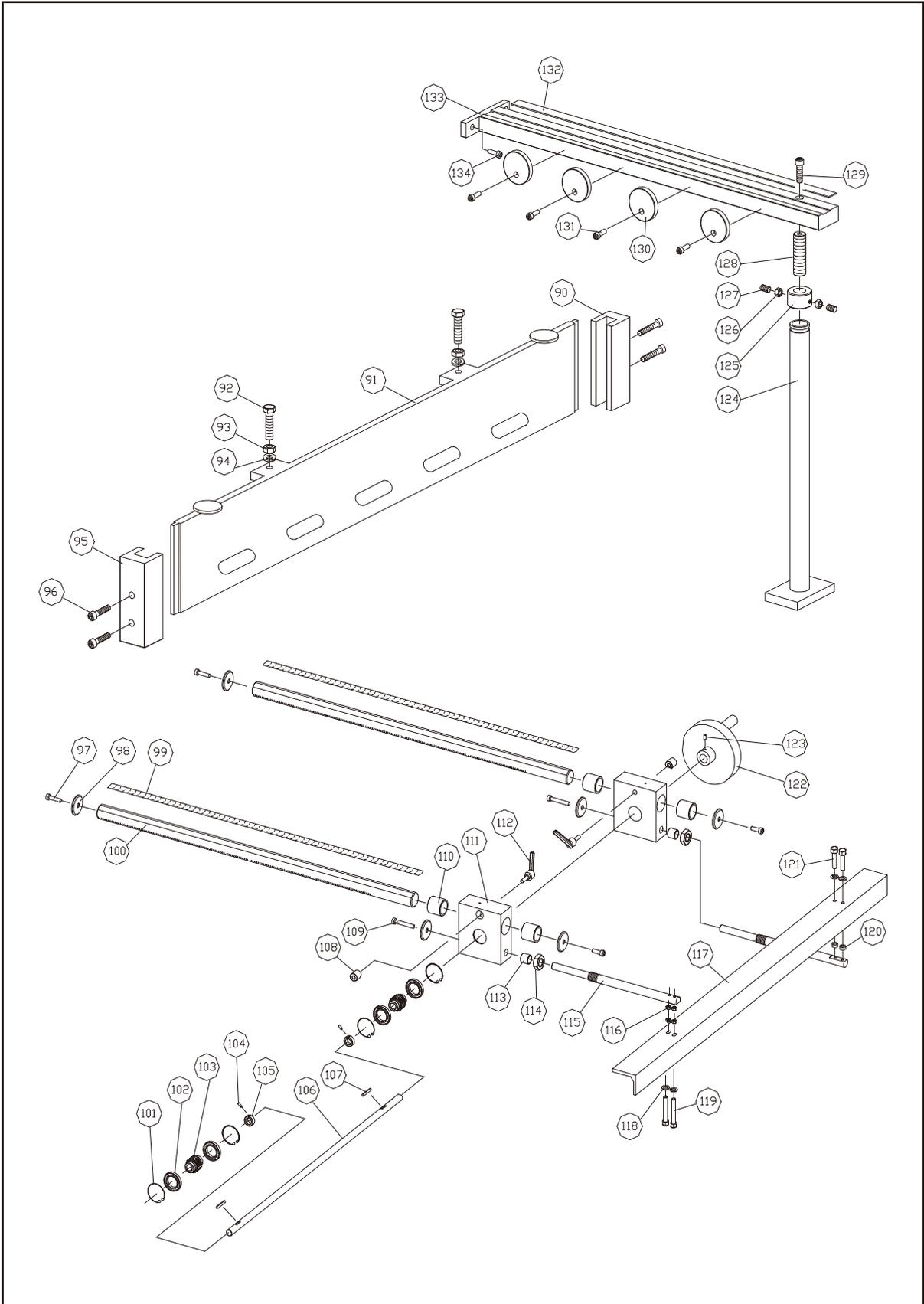
40	Pin Shaft		2	
41	Hydraulic cylinder joint		2	
42	Pin Shaft		2	
43	Cotter Pin	3.2X45	4	
44	Bolt	M10X25	4	
45	Sub block under support seat		1	
46	Block on support seat		1	
47	Bolt	M8X50	4	
48	Connecting Frame		1	
49	Pin Shaft		2	
50	Screw		2	
51	Nut	M36X3-left	2	
52	Up Connecting Plate		2	
53	Pin Shaft		2	
54	Lower limited Switch		1	
55	Adjust Clearance fixing block		1	
56	Up limited Switch		1	
57	Limited switch bracket		2	
58	Bolt	M6X12	4	
59	Washer	6	4	
60	Adjust Clearance fixing block		1	
61	Bolt	M12X35	8	
62	Nut	M16X1.5	2	
63	Bolt	M16X1.5X65	2	
64	Elec. Box		1	
65	Pin Shaft		2	
66	Ring	25	2	
67	Hydraulic Cylinder		2	
68	Nut	M30X1.5	2	
69	Hydraulic Station		1set	
70	Bolt	M8X20	4	
71	Emergency Stop		1	
72	Foot switch bracket		1	
73	Foot Pedal			
74	Front Cover		1	
75	Ring	5	10	
76	Washer	6	20	
77	Bolt	M6X12	10	
85	Right Guide Groove		1	
86	Pressure Beam		1	
87	Bolt	M16X70	2	
88	Nut	M16	2	
89	Washer	16	2	

90	Left Guide Groove		1	
91	Bolt	M10X30	4	
92	Bolt	M8X20	4	
93	Big Washer		6	
94	Scale for Back Gauge		2	
95	Tooth Rod		2	
96	Ring	37	4	
97	Bearing	61805	4	
98	Small Gear		2	
99	Bolt	M5X6	2	
100	Ring		2	
101	Connecting Shaft		1	
102	Key	5X20	2	
103	Oblique intercalation block		2	
104	Bolt	M8X40	2	
105	Copper Sleeve		4	
106	Control Slider		2	
107	Adjustable tight handle	M10X50	2	
108	Spacer		2	
109	Nut	M20X1.5	2	
110	Fixed Shaft		2	
111	Nut	M8	4	
112	Baffle plate		1	
113	Washer	8	4	
114	Bolt	M8X60	2	
115	Bolt	M8X20	2	
116	Handle	Φ150XΦ16	1	
117	Bolt	M6X8	1	
118	Support Rod		1	
119	Adjust Nut		1	
120	Nut	M8	2	
121	Bolt	M8X16	2	
122	Adjust Screw		1	
123	Bolt	M12X35	1	
124	Limited Plate		4	
125	Bolt	M8X20	4	
126	Scale for Side Gauge		1	
127	Side gauge		1	
128	Bolt	M10X35	2	

Parts Breakdown and parts list

For Models HS-0810MD, HS-1010MD and HS-1014MD





Parts list for HS-0810MD

Part #	Desc.	Size	Q'ty
1	Cover		1
2	Washer	6	14
3	Bolt	M6X12	14
4	Copper Nut	M12	2
5	Copper Bolt	M12X80	2
6	Upper Beam		1
7	Top block		1
7.1	Top block		1
8	Friction Block		10
9	Bolt	M5X8	20
10	Top block		1
10.1	Top block		1
11	Shearing Blade		2
12	Bolt	M10X20	64
13	Bolt	M20X90	4
14	Washer		4
15	Right Scale		1
16	Working Table		1
17	Support Rod		3
18	Bolt	M10X25	6
19	Washer	8	4
20	Bolt	M8X16	4
21	Left Scale		1
22	Bolt	M10X40	5
23	Washer	10	5
24	Bolt	M6X16	2
25	Front supporting angle steel		1
26	Upper and rear supporting angles		1
27	Sleeve		2
28	Bolt	M12X60	12
29	Nut	M12	8
30	Washer	12	4
31	Washer	6	10
32	Bolt	M6X12	10
33	Slide Plate		1
34	Bolt	M12X30	8
35	Body		1
36	Plate		2
37	Bolt	M6X16	2
38	Nut		2
39	Lower connector		2
40	Sleeve	Φ35XΦ39X40	2

41	Pin Shaft		2
42	Sleeve	Φ65XΦ70X40	2
43	Sleeve	Φ35XΦ39X20	4
44	Pin Shaft		2
45	Pin Shaft	4X50	6
46	Bolt	M12X30	4
47	Sub block under support seat		1
48	Block on support seat		1
49	Bolt	M10X65	4
50	Connecting Frame		1
51	Pin Shaft		2
52	Screw		2
53	Nut		2
54	Up Connector		2
55	Pin Shaft		2
56	Support column		1
57	Bolt	M12X55	4
58	Lower Limited Switch		1
59	Adjust Clearance fixing block		1
60	Up limited Switch		1
61	Limited switch bracket		2
62	Bolt	M6X12	4
63	Washer	6	4
64	Adjust Clearance fixing block		1
65	Bolt	M16X35	8
66	Nut	M20X1.5	2
67	Bolt	M20X1.5X85	2
68	Elec. Box		1
69	Pin Shaft		2
70	Sleeve	Φ30XΦ34X40	4
71	Hydraulic Cylinder		2
72	Sleeve	Φ30XΦ34X40	2
73	Sleeve	Φ30XΦ34X20	4
74	Hydraulic Station		1set
75	Bolt	M8X20	4
76	Emergency Stop		1
77	Foot switch bracket		1
78	Foot Pedal		1
79	Front Cover		1
80	Ring	5	12
81	Washer	6	24
82	Bolt		12
90	Right Guide Groove		1
91	Pressure Beam		1
92	Bolt	M16X70	2

93	Nut	M16	2
94	Washer	16	2
95	Left Guide Groove		1
96	Bolt	M12X35	4
97	Bolt	M8X20	4
98	Big Washer		6
99	Scale for Back Gauge		2
100	Tooth Rod		2
101	Ring	37	4
102	Bearing	61805	4
103	Small Gear		2
104	Bolt	M5X6	2
105	Ring		2
106	Connecting Shaft		1
107	Key	5X20	2
108	Oblique intercalation block		2
109	Bolt	M8X40	2
110	Copper Sleeve		4
111	Control Slider		2
112	Adjustable tight handle	M10X50	2
113	Spacer		2
114	Nut	M20X1.5	2
115	Fixed Shaft		2
116	Nut	M8	4
117	Baffle plate		1
118	Washer	8	4
119	Bolt	M8X45	2
120	Spacer		2
121	Bolt	M8X30	2
122	Handle	Φ150XΦ16	1
123	Bolt	M6X8	1
124	Support Rod		1
125	Adjust Nut		1
126	Screw	M8	2
127	Bolt	M8X16	2
128	Adjust Screw		1
129	Bolt	M12X35	1
130	Limited Plate		4
131	Bolt	M8X20	4
132	Scale for Side Gauge		1
133	Side gauge		1
134	Bolt	M10X35	2

Parts list for HS-1014MD

Part #	Desc.	Size	Q'TY	Note
1	Cover		1ea	
2	Washer	6	14	
3	Bolt	M6X12	14	
4	Copper Nut	M12	2	
5	Copper Bolt	M12X80	2	
6	Upper Beam		1	
7	Top block		1	
7.1	Top block		1	
8	Friction Block		10	
9	Bolt	M5X8	20	
10	Top block		1	
10.1	Top block		1	
11	Shearing Blade		2	
12	Bolt	M10X20	64	
13	Bolt	M20X90	4	
14	Washer		4	
15	Right Scale		1	
16	Working Table		1	
17	Support Rod		3	
18	Bolt	M10X25	6	
19	Washer	8	4	
20	Bolt	M8X16	4	
21	Left Scale		1	
22	Bolt	M10X40	5	
23	Washer	10	5	
24	Bolt	M6X16	2	
25	Front supporting angle steel		1	
26	Upper and rear supporting angles		1	
27	Sleeve		2	
28	Bolt	M12X60	12	
29	Nut	M12	8	
30	Washer	12	4	
31	Washer	6	10	
32	Bolt	M6X12	10	
33	Slide Plate		1ea	
34	Bolt	M12X30	8	
35	Body		1	
36	Plate		2	
37	Bolt	M6X16	2	
38	Nut	M36X3	2	
39	Lower connector		2	
40	Sleeve	Φ35XΦ39X40	2	
41	Pin Shaft		2	

42	Sleeve	Φ65XΦ70X40	2	
43	Sleeve	Φ35XΦ39X20	4	
44	Pin Shaft		2	
45	Cotter Pin	4X50	6	
46	Bolt	M12X30	4	
47	Sub block under support seat		1	
48	Block on support seat		1	
49	Bolt	M10X65	4	
50	Connecting Frame		1	
51	Pin Shaft		2	
52	Screw		2	
53	Nut	M36X3-left	2	
54	Up Connector		2	
55	Pin Shaft		2	
56	Support column		1	
57	Bolt	M12X55	4	
58	Lower Limited Switch		1	
59	Adjust Clearance fixing block		1	
60	Up limited Switch		1	
61	Limited switch bracket		2	
62	Bolt	M6X12	4	
63	Washer	6	4	
64	Adjust Clearance fixing block		1	
65	Bolt	M16X35	8	
66	Nut	M20X1.5	2	
67	Bolt	M20X1.5X85	2	
68	Elec. Box		1	
69	Pin Shaft		2	
70	Sleeve	Φ30XΦ34X40	4	
71	Hydraulic Cylinder		2	
72	Sleeve	Φ30XΦ34X40	2	
73	sleeve	Φ30XΦ34X20	4	
74	Hydraulic Station		1set	
75	Bolt	M8X20	4	
76	Emergency Stop		1	
77	Foot switch bracket		1	
78	Foot Pedal		1	
79	Front Cover		1	
80	Ring	5	12	
81	Washer	6	24	
82	Bolt		12	
90	Right Guide Groove		1	
91	Pressure Beam		1	
92	Bolt	M16X70	2	
93	Nut	M16	2	

94	Washer	16	2	
95	Left Guide Groove		1	
96	Bolt	M12X35	4	
97	Bolt	M8X20	4	
98	Big Washer		6	
99	Scale for Back Gauge		2	
100	Tooth Rod		2	
101	Ring	37	4	
102	Bearing	61805	4	
103	Small Gear		2	
104	Bolt	M5X6	2	
105	Ring		2	
106	Connecting Shaft		1	
107	Key	5X20	2	
108	Oblique intercalation block		2	
109	Bolt	M8X40	2	
110	Copper Bush		4	
111	Control Slider		2	
112	Adjustable tight handle	M10X50	2	
113	Spacer		2	
114	Nut	M20X1.5	2	
115	Fixed Shaft		2	
116	Nut	M8	4	
117	Baffle plate		1	
118	Washer	8	4	
119	Bolt	M8X45	2	
120	Washer		2	
121	Bolt	M8X30	2	
122	Handle	Φ150XΦ16	1	
123	Bolt	M6X8	1	
124	Support Rod		1	
125	Adjust Nut		1	
126	Nut	M8	2	
127	Bolt	M8X16	2	
128	Adjust Screw		1	
129	Bolt	M12X35	1	
130	Limited Plate		4	
131	Bolt	M8X20	4	
132	Scale for Side Gauge		1	
133	Side gauge		1	
134	Bolt	M10X35	2	

Parts list for HS-1010MD

Part#	Desc.	Size	Q'ty	Note
1	Cover		1ea	
2	Washer	6	14	
3	Bolt	M6X12	14	
4	Copper Nut	M12	2	
5	Copper Bolt	M12X80	2	
6	Upper Beam		1	
7	Top block		1	
7.1	Top block		1	
8	Friction Block		10	
9	Bolt	M5X8	20	
10	Top block		1	
10.1	Top block		1	
11	Shearing Blade		2	
12	Bolt	M10X20	64	
13	Bolt	M20X90	4	
14	Washer		4	
15	Right Scale		1	
16	Working Table		1	
17	Support Rod		3	
18	Bolt	M10X25	6	
19	Washer	8	4	
20	Bolt	M8X16	4	
21	Left Scale		1	
22	Bolt	M10X40	5	
23	Washer	10	5	
24	Bolt	M6X16	2	
25	Front supporting angle steel		1	
26	Upper and rear supporting angles		1	
27	Sleeve		2	
28	Bolt	M12X60	12	
29	Nut	M12	8	
30	Washer	12	4	
31	Washer	6	10	
32	Bolt	M6X12	10	
33	Slide Plate		1ea	
34	Bolt	M12X30	8	
35	Body		1	
36	Plate		2	
37	Bolt	M6X16	2	
38	Nut		2	
39	Lower connector		2	
40	Sleeve	Φ35XΦ39X40	2	
41	Pin Shaft		2	

42	Sleeve	Φ65XΦ70X40	2	
43	Sleeve	Φ35XΦ39X20	4	
44	Pin Shaft		2	
45	Cotter Pin	4X50	6	
46	Bolt	M12X30	4	
47	Sub block under support seat		1	
48	Block on support seat		1	
49	Bolt	M10X65	4	
50	Connecting Frame		1	
51	Pin Shaft		2	
52	Screw		2	
53	Nut		2	
54	Up Connector		2	
55	Pin Shaft		2	
56	Support column		1	
57	Bolt	M12X55	4	
58	Lower Limited Switch		1	
59	Adjust Clearance fixing block		1	
60	Up limited Switch		1	
61	Limited switch bracket		2	
62	Bolt	M6X12	4	
63	Washer	6	4	
64	Adjust Clearance fixing block		1	
65	Bolt	M16X35	8	
66	Nut	M20X1.5	2	
67	Bolt	M20X1.5X85	2	
68	Elec. Box		1	
69	Pin Shaft		2	
70	Sleeve	Φ30XΦ34X40	4	
71	Hydraulic Cylinder		2	
72	Sleeve	Φ30XΦ34X40	2	
73	sleeve	Φ30XΦ34X20	4	
74	Hydraulic Station		1set	
75	Bolt	M8X20	4	
76	Emergency Stop		1	
77	Foot switch bracket		1	
78	Foot Pedal		1	
79	Front Cover		1	
80	Ring	5	12	
81	Washer	6	24	
82	Bolt		12	
	Right Guide Groove			
90	Pressure Beam		1	
91	Bolt		1	
92	Nut	M16X70	2	

93	Washer	M16	2	
94	Left Guide Groove	16	2	
95	Bolt		1	
96	Bolt	M12X35	4	
97	Big Washer	M8X20	4	
98	Scale for Back Gauge		6	
99	Tooth Rod		2	
100	Ring		2	
101	Bearing	37	4	
102	Small Gear	61805	4	
103	Bolt		2	
104	Ring	M5X6	2	
105	Connecting Shaft		2	
106	Key		1	
107	Oblique intercalation block	5X20	2	
108	Bolt		2	
109	Foot Pedal	M8X40	2	
110	Copper Bush		4	
111	Control Slider		2	
112	Adjustable tight handle	M10X50	2	
113	Spacer		2	
114	Nut	M20X1.5	2	
115	Fixed Shaft		2	
116	Nut	M8	4	
117	Baffle plate		1	
118	Washer	8	4	
119	Bolt	M8X45	2	
120	Washer		2	
121	Bolt	M8X30	2	
122	Handle	Φ150XΦ16	1	
123	Bolt	M6X8	1	
124	Support Rod		1	
125	Adjust Nut		1	
126	Nut	M8	2	
127	Bolt	M8X16	2	
128	Adjust Screw		1	
129	Bolt	M12X35	1	
130	Limited Plate		4	
131	Bolt	M8X20	4	
132	Scale for Side Gauge		1	
133	Side gauge		1	
134	Bolt	M10X35	2	

WARRANTY & RETURNS

GMC Machine Tools Corp. warrants every product it sells for 1 year parts to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is GMC sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall GMC liability under this warranty exceed the purchase price paid for the product and any legal actions brought against GMC shall be tried in the State of California, County of S.B.

We GMC shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.