

FILE

OPERATOR'S MANUAL

HS-1652 HYDRAULIC SHEAR

JET Equipment & Tools



1901 JEFFERSON AVENUE / TACOMA WASHINGTON 98402 / (206) 572-5000

PREPARATION

CONTINUOUS EFFORTS IN PREPARATION, REGULAR MAINTENANCE AND PROPER OPERATION ENSURE PERFECT FUNCTION AND EFFICIENCY. PLEASE NOTE THE FOLLOWING:

UNPACKING:

Unpack the machine as soon as received. Check to see whether there was any damage caused during transportation. If so, notify the transportation company, insurance company or us immediately.

INSTALLATION:

A space of approximately one yard or wider must be reserved on the front, rear, left and right sides. The lighting must be not less than 100W. When installing, please pay attention to the machine's level.

CLEANING:

Use a liquid solvent such as kerosene or white spirit to remove the protective coating and any dirt from the unpainted surfaces of the machine. Do not disturb any moving parts until all surfaces have been cleaned.

LUBRICATING:

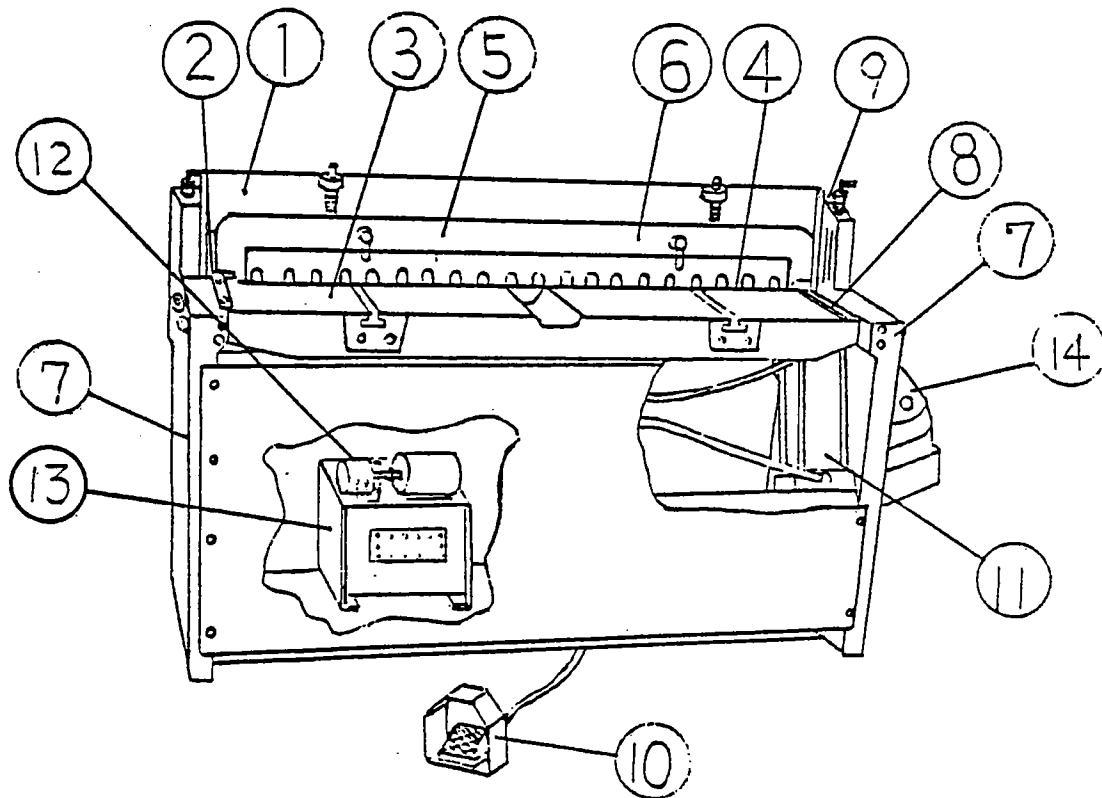
Lubricate the moving parts with light grease or heavy oil. Lasting accuracy depends on proper lubrication.

HS-1652

CONSTRUCTION

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- | | |
|---------------------|------------------------|
| 1. Cutter Bar. | 2. Upper Blade. |
| 3. Bed. | 4. Lower Blade. |
| 5. Hold down. | 6. Finger Guard. |
| 7. Side Plate. | 8. Side Gauge. |
| 9. Stroke Adj. Rod. | 10. Foot Pedal Switch. |
| 11. Oil Cylinder. | 12. Oil Pump. |
| 13. Oil Tank. | 14. Control Box. |



FEATURES

The rigid cast iron frame construction is comprised of a bed, cutter bar and two side plates. One pair of high carbon, high chrome steel blades is standard; both blades are retained in position by countersunk screws and nuts.

Front, back, side and protractor gauges are supplied as standard equipment.

The front gauge includes two support arms and a cross gauge bar. The cross gauge bar is secured in the tenons of the support arms by dovetailed tee nuts and set screws.

The back gauge consists of two gauge rods and two adjustable block and bracket assemblies. The support gauge rods are secured to the mounting holes of the shearing beam and are fitted with Imperial/Metric scales having a measuring range of 0 - 25" (0 - 650mm). The block and bracket assemblies are independently clamped to a gauge bar and interconnected by a micro-adjusting screw.

The side gauge consists of two scaled gauge plates mounted on the two ends of the table and provides a facility for making short distance cuts.

The Protractor gauge can be fitted to either front gauge arm and provides a facility for making specific angular cuts.

Tightly press the work piece on the table by means of down moving the Hold-Down Assembly, thus preventing the area to be cut from bending and/or deforming.

A remote foot pedal control switch gives the operator complete control of the machine work cycle while having both hands free for material handling.

OPERATION

Before connecting the power source, please open the machine's front cover and lubricate oil tank with 40 liters of hydraulic oil.

Hydraulic Oil:

We recommend two kinds of hydraulic oil: (1) MOBIL No. 28, and (2) SHELL tullus No. 25.

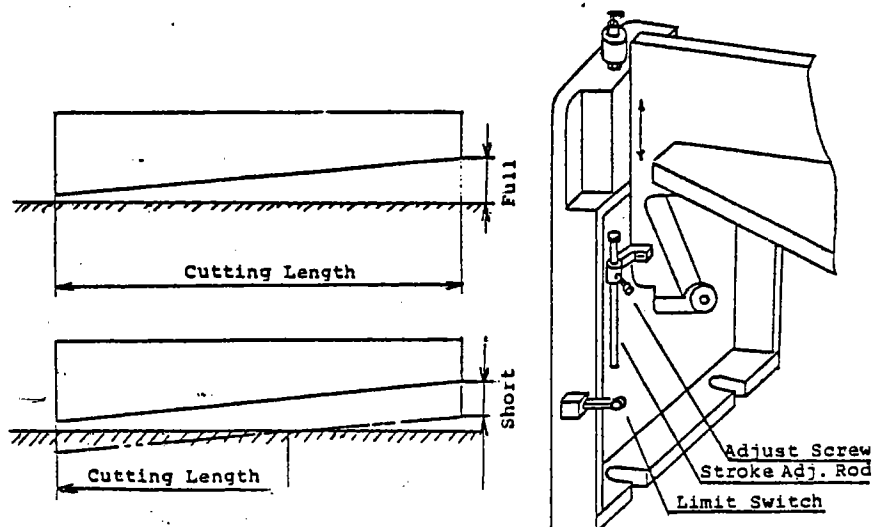
Grease:

Select a heat-resistant, water-resistant, non-corrosive and stable grease having a high film strength and capable of being applied with a grease gun.

After connecting the power source, make sure that the motor pump is running the same direction as indicated by an arrow. If the direction of running is opposite to the indication, switch over one of the three phases.

While pressing on the foot pedal switch, the top blade beam will go to the down position thus making a single stroking operation. After pressing the foot pedal switch, remove your foot at once.

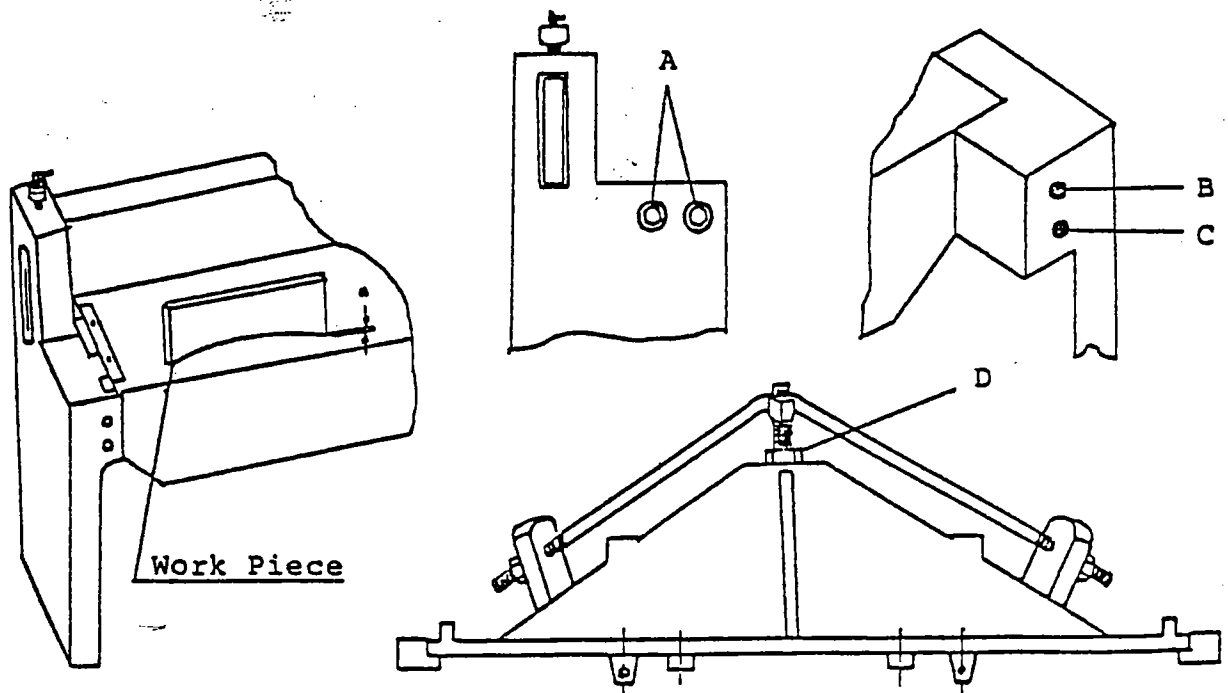
Before adjusting the Stroke Adjust Rod, loosen the Adjust Screw first and tighten it after adjustment is completed.



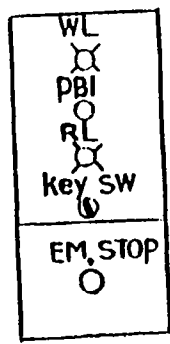
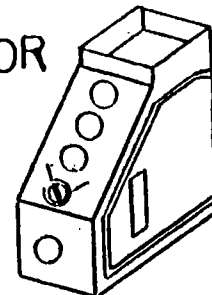
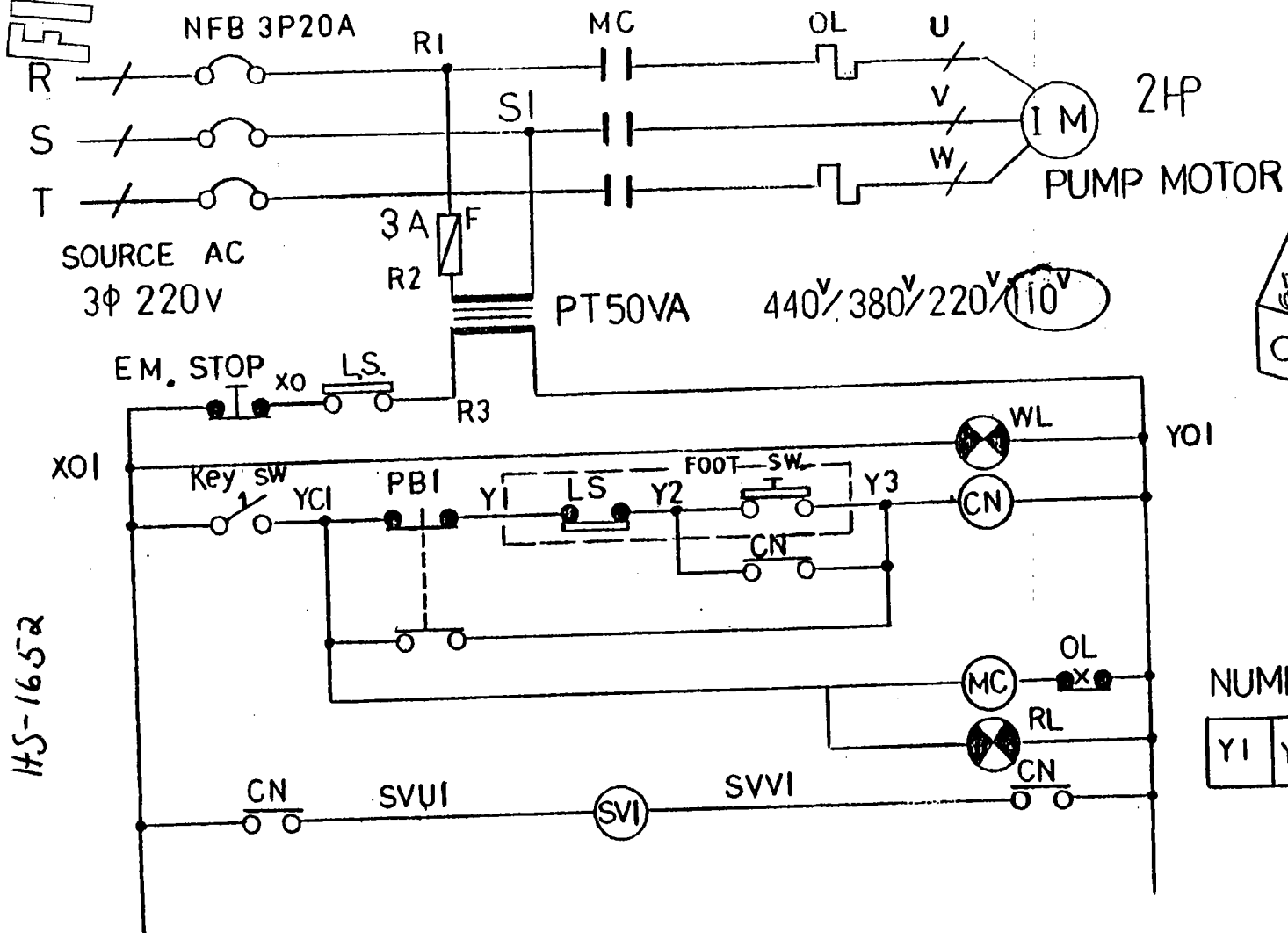
To adjust the blades for shearing (after setup or changing blades), make sure leg to Bed Bolts (A) is snug/tight. Move the bed toward the crosshead blade by adjusting screws (B) and (C). Screw (C) moves the bed out thereby increasing clearance between the upper and lower blades; screw (C) moves the bed in thereby decreasing clearance.

Position the lower blade within a few thousandths of the upper blade being careful that the lower blade does not overlap the upper. Place a sheet of heavy paper (approximately .005") the full length of the cut between the blades and slowly depress the foot pedal switch. If the shear does not cut the paper, move the blade in toward the upper blade as necessary by carefully readjusting screws (B) and (C) at either or both sides.

If the shear cuts the paper on the ends but not in the center, it will be necessary to turn the crosshead tie rod Adjusting Nut (D) clockwise until the paper cuts the full length of the blade. If the shear cuts in the center but not on the ends, reverse the direction of turn on the crosshead tie rod Adjusting Nut (D). When the blades are adjusted properly, tighten the leg to the Bed



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ARRANGMENT PLAN
OF CONTROL BOX

NUMBERS OF CONNECTION:

Y1	Y2	Y3	SVUI	SVVI	U	V	W
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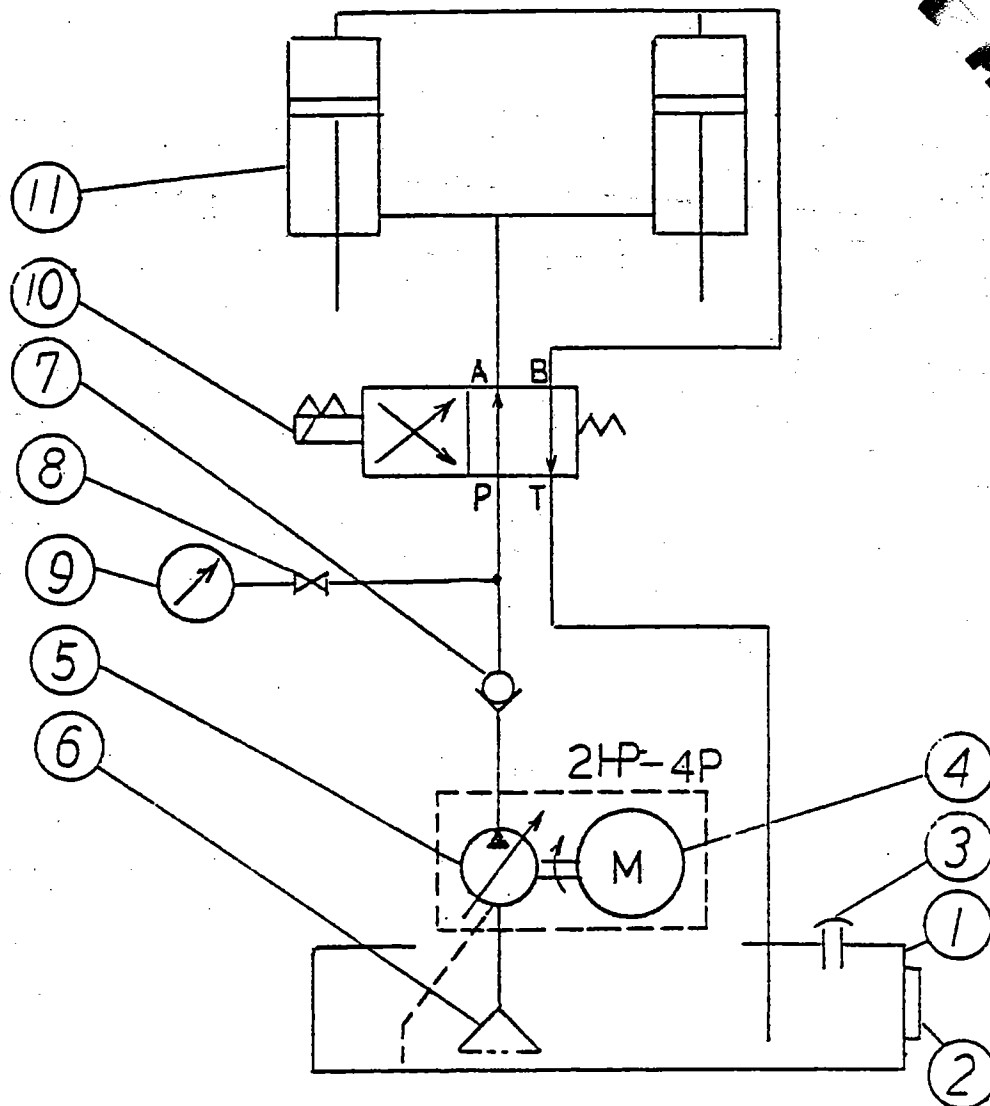
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SOP

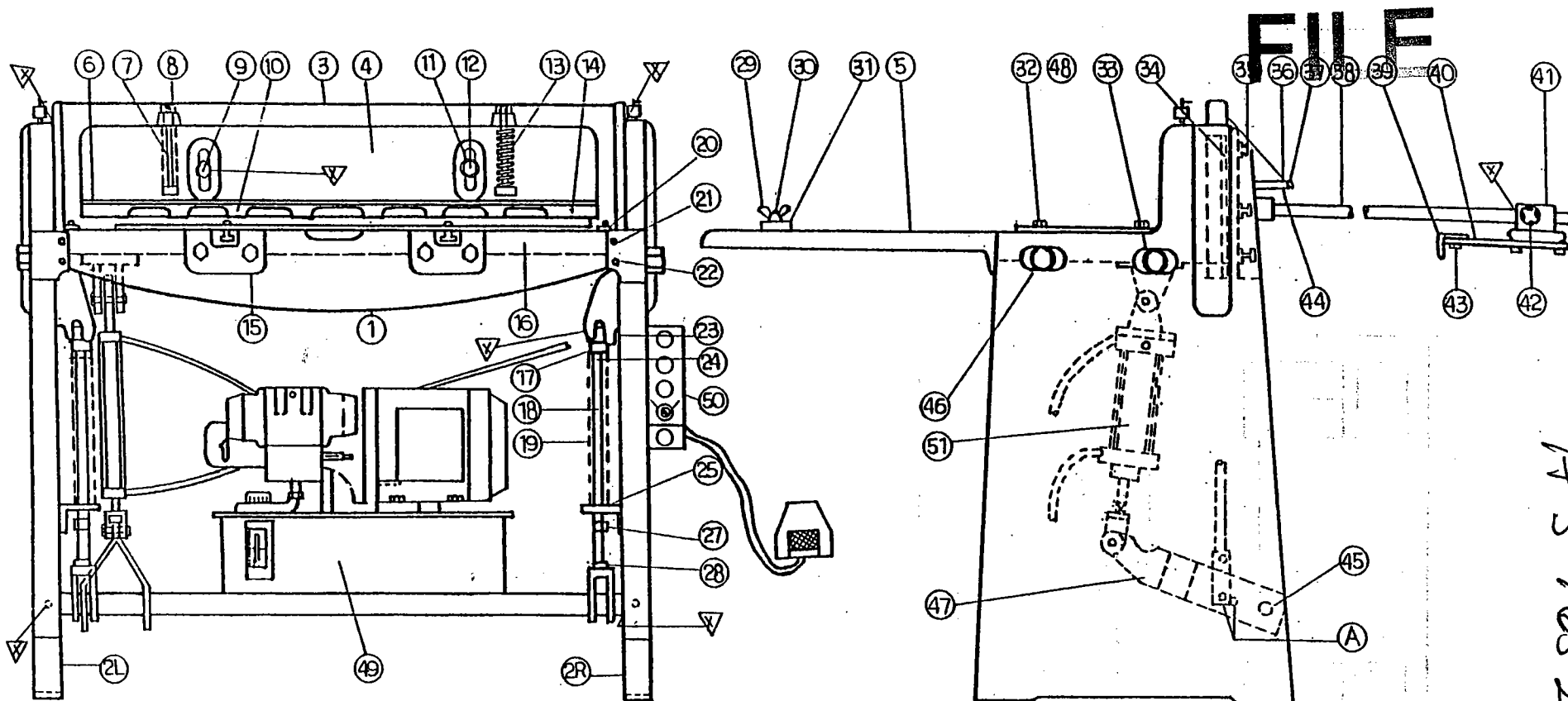
HYDRAULIC CIRCUIT DIAGRAM

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No.	Parts	Description	Note
1.	Tank	40 l.	
2.	Level Gauge	YF-3"	
3.	Air Breather	TOYO-50	
4.	Motor	2 HP x 4 P	
5.	Pump	HVP-VC1-G30-2A	
6.	Suction Filter	SFW-08	
7.	Check Valve	CIT-03	
8.	Cock	GCLT-03	
9.	Pressure Gauge	2½"x100kg/cm ²	Set 40kg/cm ²
10.	Solenoid Valve	D4-03-2B2-A1	
11.	Oil Cylinder	CB40x200st.	



HS-1652 HYDRAULIC SHEAR / PARTS LIST

No.	Part	Qty.	No.	Part	Qty.	No.	Part	Qty.
1	Bed	1	18	Spring Rod	2	35	Gib Nut & Bolt	6
2	Leg R. & L.	2	19	Spring	2	36	Cross Head Adj. Nut	1
3	Cross Head	1	20	Scale, Side Gauge	2	37	Cross Head Adj. Bolt	1
4	Hold Down	1	21	Set Screw	2	38	Back Gauge Rod	2
5	Front Arm	2	22	Bolt	2	39	Back Gauge Angle	1
6	Upper Blade	1	23	Bolt & Nut	2	40	Link R. & L.	2
7	Spring Stud	2	24	Spring Collar Top	2	41	Back Gauge Holder	2
8	Nut	2	25	Spring Collar Bottom	2	42	Lock Knob	2
9	Bolt	2	27	Lock Nut	4	43	Bolt	5
10	Finger Guard	1	28	Bottom Clevis	2	44	Cross Head Adj. Rod	1
11	Washer	2	29	Wing Nut	3	45	Hinge Pin	2
12	Bolt	2	30	T - Nut	3	46	Bolt	4
13	Spring	2	31	Front Gauge Bar	1	47	Link Ass'y.	1
14	Finger Guard Screw	4	32	Bolt	4	48	Bevel Gauge	1
15	Bolt	4	33	Washer	4	49	Hydraulic Unit	1
16	Lower Blade	1	34	Gib	2	50	Control Box	1
17	Top Clevis	2	▽	Lubricating Point		51	Oil Cylinder	2