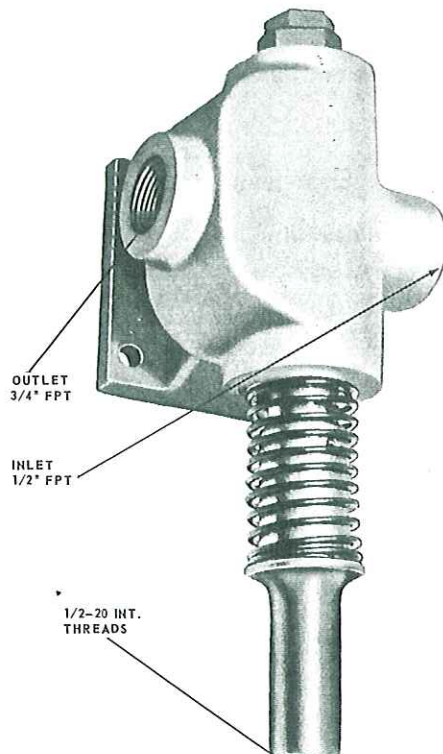


DENISON

Division

installation and service information

ABEX Corporation . Columbus, Ohio 43216

MULTIPRESS**CONTROL VALVE****Model C61****DESCRIPTION**

Model C61 is a basic manual control valve incorporating a differential fast approach speed circuit. This feature increases approach speed of ram approximately 65%. Pressing and return speeds remain unchanged. The shift from approach speed to pressing speed occurs when the ram contacts the work.

SERVICE TIPS

1. If ram fails to go into fast speed.	<ul style="list-style-type: none"> a. Remove plug (4) in top of spool (16) and check for broken spring (10). b. Spring (10) may have lost some of its tension. Replace with new spring or add 1/32 - 1/16 in. steel washer on top shuttle spring stop (6).
2. Ram returns slowly to "up" position.	<ul style="list-style-type: none"> a. Check lower stop collar. Be sure shipper rod collar does not contact frame at bottom when handles are released. Shipper rod could also be binding in frame.
3. With dual hand tie-up, ram descends with one handle.	<ul style="list-style-type: none"> a. Adjust shipper rod into valve.
4. Spool sticks in valve.	<ul style="list-style-type: none"> a. Remove spool and polish with crocus cloth.
5. Press overheats.	<ul style="list-style-type: none"> a. Lower the upper stop collar. b. Excessive hold down under pressure will also cause overheating. c. Add cooler coils.
6. Leaks around spool either at top or bottom of valve.	<ul style="list-style-type: none"> a. Remove spool from valve and replace "O" rings after breaking all sharp edges on spool including port opening.

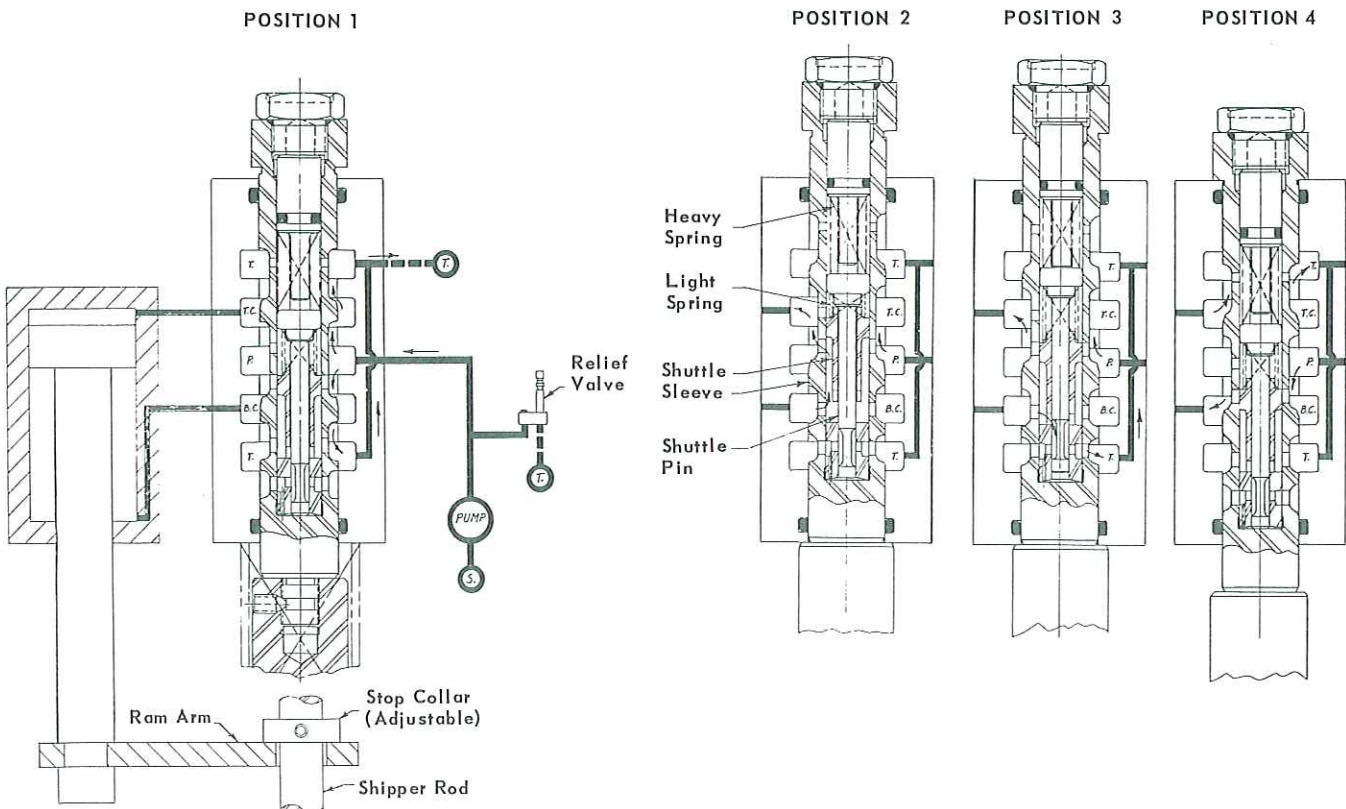
OPERATION

IDLE POSITION (Position 1). Pump volume is directed past the top cylinder port and bottom cylinder port to tank.

DIFFERENTIAL SPEED DESCENT (Position 2). Pump volume is directed to the top cylinder port. The bottom cylinder exhaust flow lifts the shuttle against its light spring force and exhausts into the top cylinder port, thus giving a differential circuit until the work is contacted by the ram.

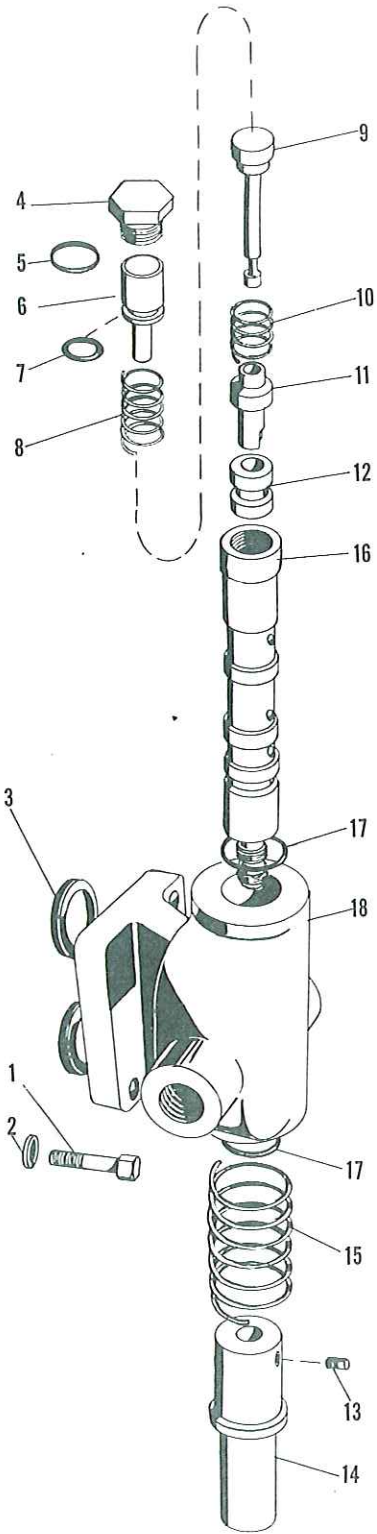
PRESSING SPEED DESCENT (Position 3). When the work is contacted and pressure is raised in the top cylinder port, the valve automatically goes into pressing speed for the shuttle pin is raised against the heavy spring force which opens a path for bottom cylinder exhaust oil to return to tank thus cutting out the differential circuit.

FULL SPEED RETURN (Position 4). Pump volume is directed to the bottom cylinder port and the top cylinder port is open to tank. The ram continues up until the stop collar is contacted.



PARTS LIST

Model C61



3.20
 14.00
 4.20
 30.00
 1.90
 30.50
 23.50

ITEM	PART NO.	DESCRIPTION	QTY
1	306-16160	Hex hd. cap screw 3/8-16 x 1	4
2	346-10024	Lock washer 3/8"	4
3	630-42305	Vickerseal No. 42305	2
4	488-14080	AN-814-8 plug	1
5	602-02712	"O" ring 90-6227-12 <i>691-00114</i>	1
6	031-13400	Shuttle pin stop	1
7	601-02708	"O" ring 70-6227-8 <i>671-00110</i>	1
8	031-13245	Spring	1
9	031-13398	Shuttle pin	1
10	031-22194	Spring	1
11	031-13401	Shuttle	1
12	031-13399	Valve spool collar	1
13	311-12060	Soc. set screw 1/4-20 x 3/8 cup point	1
14	031-10003	Spring retainer <i>030-25555</i>	1
15	031-22386	Spring	1
16	031-13397	Spool	1
17	602-02719	"O" ring 90-6227-19 <i>671-00214</i>	2
18	031-10001	Valve body	1