

ITEM NO.	QTY REQ'D	PART NO.	DESCRIPTION
1	1	C-7243	FLYWHEEL, 150 TON, 2'-3"-4" STROKE
		C-7247	FLYWHEEL, 150 TON, 5'-6"-7" STROKE
		C-7248	FLYWHEEL, 200 TON, 2'-3"-4" STROKE
		C-7259	FLYWHEEL, 200 TON, 5'-6"-7" STROKE
2	2		BALL BEARINGS. (SEE CHART)
3	1	B-7322	CLUTCH PLATE
4	1	B-7323	CLUTCH PRESSURE PLATE
5	1	B-1522	PISTON
6	8	A-7321	SPACER (SEE CHART FOR LENGTH)
7		B-7324	CLUTCH DISC (SEE CHART FOR QUANTITY)
8		68-09252-B2	FRICTION DISC (SEE CHART FOR QUANTITY)
9	8	A-7327	SPRING (SEE CHART FOR LENGTH)
10	1	B-7325	HUB GEAR (SEE CHART)
11	1	Q-390-1	BRIDGE, AIR SWIVEL
12	1	A-129	SPINDLE
13	1	A-406	'U' CUP SEAL
14	1	A-373	BALL BEARING
15	1	A-236	BRASS FITTING 1/2 x 3/8
16	1	B-7326	FRICTION DISC, 6 HOLE
17	2	900098502	1/2-13 x 1/4 H.H.C.S.
18	8		ASSY BOLT 1/2-13 S.H.C.S. (SEE CHART FOR LENGTH)
19	10	980131402	1/2" MED. L'WASHERS
20	1	A-125	EXTERNAL RETAINER RING 5105-50
21	2	900139002	3/4"-10 x 3/4" HOL. HD. SET SCREW
22	1		KEY, R.O.E (SEE CHART)
23	2	A-173-A	O-RING SEAL
24	1	A-121	SNAP RING.
25	1		CLUTCH HUB NUT (SEE CHART)
26	1	A-396	QUICK EXHAUST

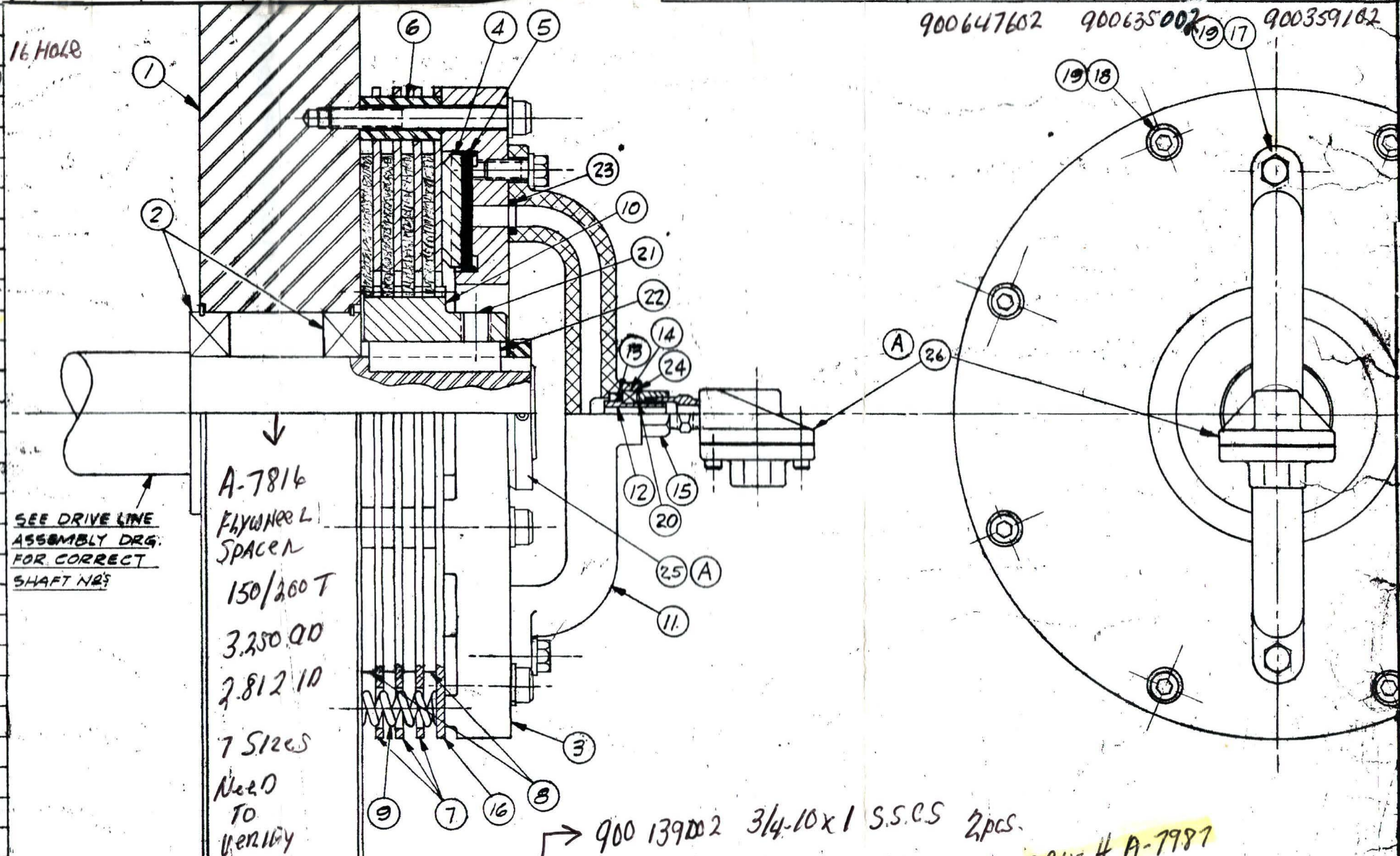
TORQUE BOLTS

80PSI

55T BQ OLD STYLE 23x3 3.541 10
70T BQ, OLD STYLE 24x4 4.918 10

PART NO.	A	FR. PL.	WHERE USED
A-7321-A-1	1.540	3	32, 55, 95, 120, 160 T. S/C FL. & B-G. 70 T. S/C B-G. & ALL PR. BR.
A-7321-A-2	2.050	4	150, 200, 250, 300, 400 T. S & S
A-7321-A-3	2.560	5	70 T. S/C FL, 200 T. S/C B-G

ITEM NO.	DESCRIPTION	70T-OB1-GAP-FLWL. 200T-OB1-GAP BACK GEAR	ALL STRAIGHT SIDE PRESSES	ALL OTHER PRESSES (EXCEPT 30-45T PB)
6	SPACER	2 1/2" LONG A-7321-3	2" LONG A-7321-2	1 1/2" LONG A-7321-1
7	CLUTCH DISC.	4 REQ'D	3 REQ'D	2 REQ'D
8	FRICTION DISC	5 REQ'D	4 REQ'D	3 REQ'D
9	SPRING	2 1/2" LONG A-7327-3	2" LONG A-7327-2	1 1/2" LONG 930921802
18	1/2" ASSY BOLT	5" LONG	4 1/2" LONG	4" LONG



ITEM	DESCRIPT.	USED ON	PART NO.
25	CLUTCH HUB NUT	70-200T-PB 30-70T-OB1-G BACK GEAR	32T FAC A-7694
		95-120-OB1-G BACK GEAR 150-300T-SS	A-7624
2	BALL BRNG	30-100T-PB 30-70T-OB1-G BACK GEAR	5-4A
		50-70T-OB1-G-FLWL 160-200T-OB1-G BACK GEAR 400T-SS	A-7329

ITEM NO.	DESCRIPT.	50-70T-OB1-GAP (BACK GEAR)	30T-OB1-GAP (FLYWH 95-120T-OB1-GAP (B.G.) 150-300T-SS	50-70T-OB1-GAP (FLYWH 160-200T-OB1-GAP (B.G.) 400T-SS
10	HUB GEAR	2 3/4" DIA. BORE B-7325-1	2 3/4" DIA. BORE B-7325-2	3 3/4" DIA. BORE B-7325-3
22	HUB KEY	1/2" SQ X 3 1/2" LG A-1581	3/4" SQ X 3" LG #3-31	1" X 3/4" X 3" LG 5-81

HEIM CORP. P. O. BOX R FRANKFORT, ILL. 60423			
DRAWN BY C.F.L.	DATE 3-12-74	CHECKED BY BH	DATE 3-18-74
DESCRIPTION CLUTCH ASSEMBLY			
PART NO. C-7320			

150/200 T P.B D-2576

Change 1984 S/N 3100

P0120001 5"

S0010002 2"

IF ITEM #2 IS
1 1/4 THICK IT WILL
TAKE 5" x 2" PADS
OLD STYLE IS 1" THICK

OS. ALUM PISTON

ITEM No	No REQ'D	PART No	DESCRIPTION
1	1	C-7351-1	BRAKE DISC ASSY. (SPECIFY BORE)
2	1	D-7350-A-C	BRAKE CYLINDER
3	1	D-7350-A-D	CALIPER - OUTSIDE
4	1	D-7350-A-J	CALIPER - INSIDE
5	1	D-7350-A-F	PISTON PLATE
6	1	D-7350-A-G	MOUNTING BAR
7	2	A-7358	DETAIL H, FRICTION PADS
8	1	A-7359R	DETAIL I, PISTON
9	2	A-7361	DETAIL L, SHOULDER SCREW
10	4	A-7362	DETAIL M, SPRINGS
11	1	SEE CHART BELOW	BRAKE HUB KEY (TO SUIT BORE SIZE)
12	1	SEE CHART BELOW	HOL. HD SET SCREW (TO SUIT KEY)
13	2	900230002	5/8"-11 x 3/4" HEX. HD. CAP SC.
14	2	980121562	5/8" MED. L' WASHER
15	2	90-02268-02	1"-8 x 6" HEX. HD. BOLT
16	2	85-01277-02	1"-8 HEX. NUT
17	2	98-01217-02	1" MED. L' WASHER
18	1		5/8"-11 x 3/4" HOL. HD. SET SC.
			(*18) REFER TO CHART
		A-7360	BRIDG
		D-7425	CALIPER ASSY
		C-7347-1	DISC G.B.I. & S.S.
		C-7347-2	DISC P.B.
		D-7348-A	BRAKE HUB 2 1/4"
		B	3"
		C	4"
		D	4 1/2"

980121502

SECTION A-A

thickness changed
from 1" to 1 1/4"

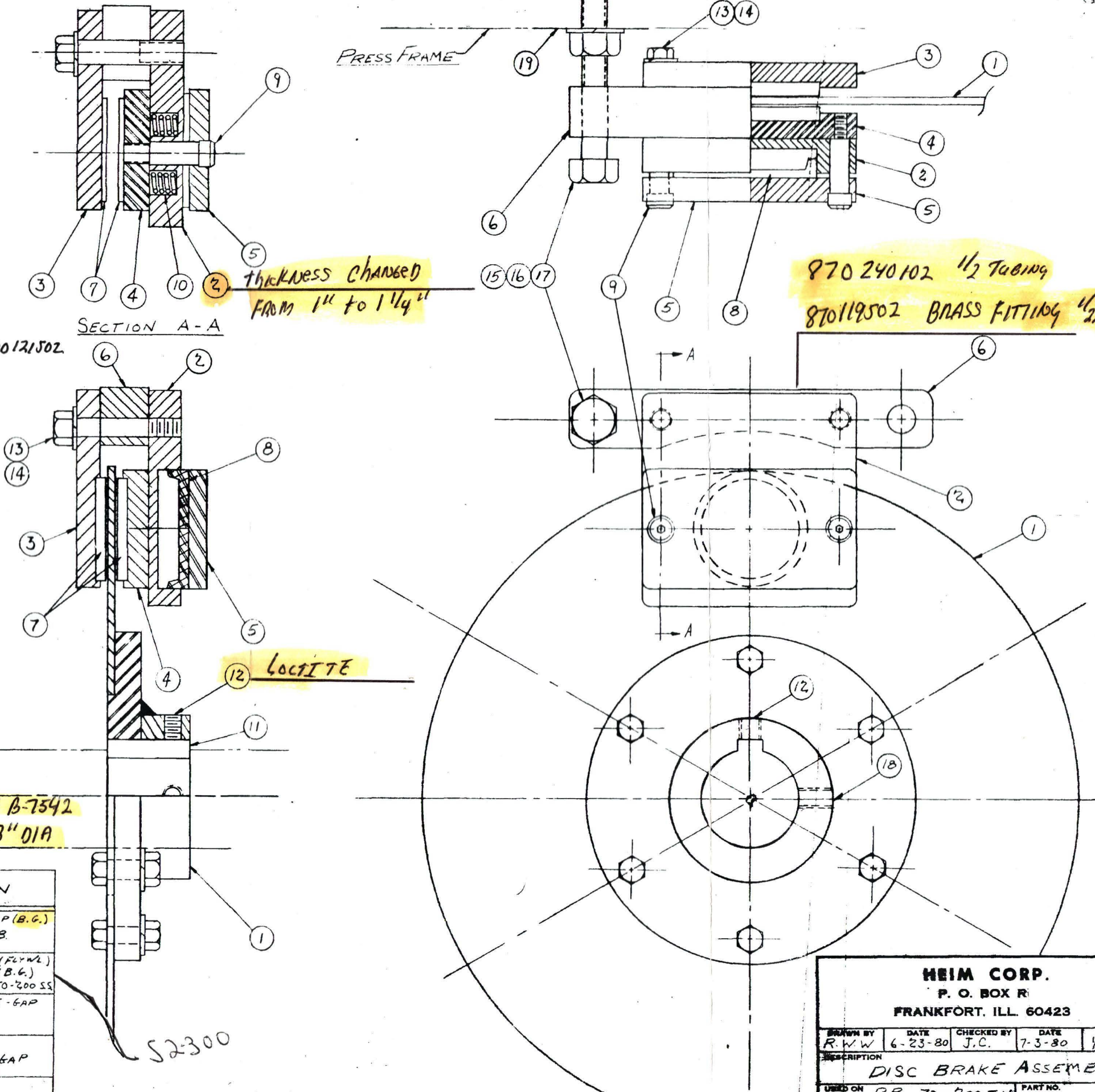
LOCITE

IF SHAFT B-7342
use 3" DIA

S2-300

Keys
A-1581
810320602
A1497
KEY

	BORE	KEY	THRD SIZE	USED ON
C-7351-1A	2 1/4" DIA	1/2 x 1/2 x 3/4	1/2-28	30-70T O.B.I.-GAP (B.G.) 70-100T P.B.
C-7351-1B	3" DIA	3/4 x 3/4 x 3/2	3/4-16	30T O.B.I.-GAP (FLYWL) 95-120T O.B.I. (B.G.) 150-200T P.B. 150-200 S.S.
C-7351-1C	4" DIA	1 x 1 x 3/2	3/4-16	160-200T O.B.I.-GAP (B.G.) 400T S.S.
C-7351-1D	4 1/2" DIA	1 x 1 x 3/2	1-12	50-70T O.B.I.-GAP (FLYWL)

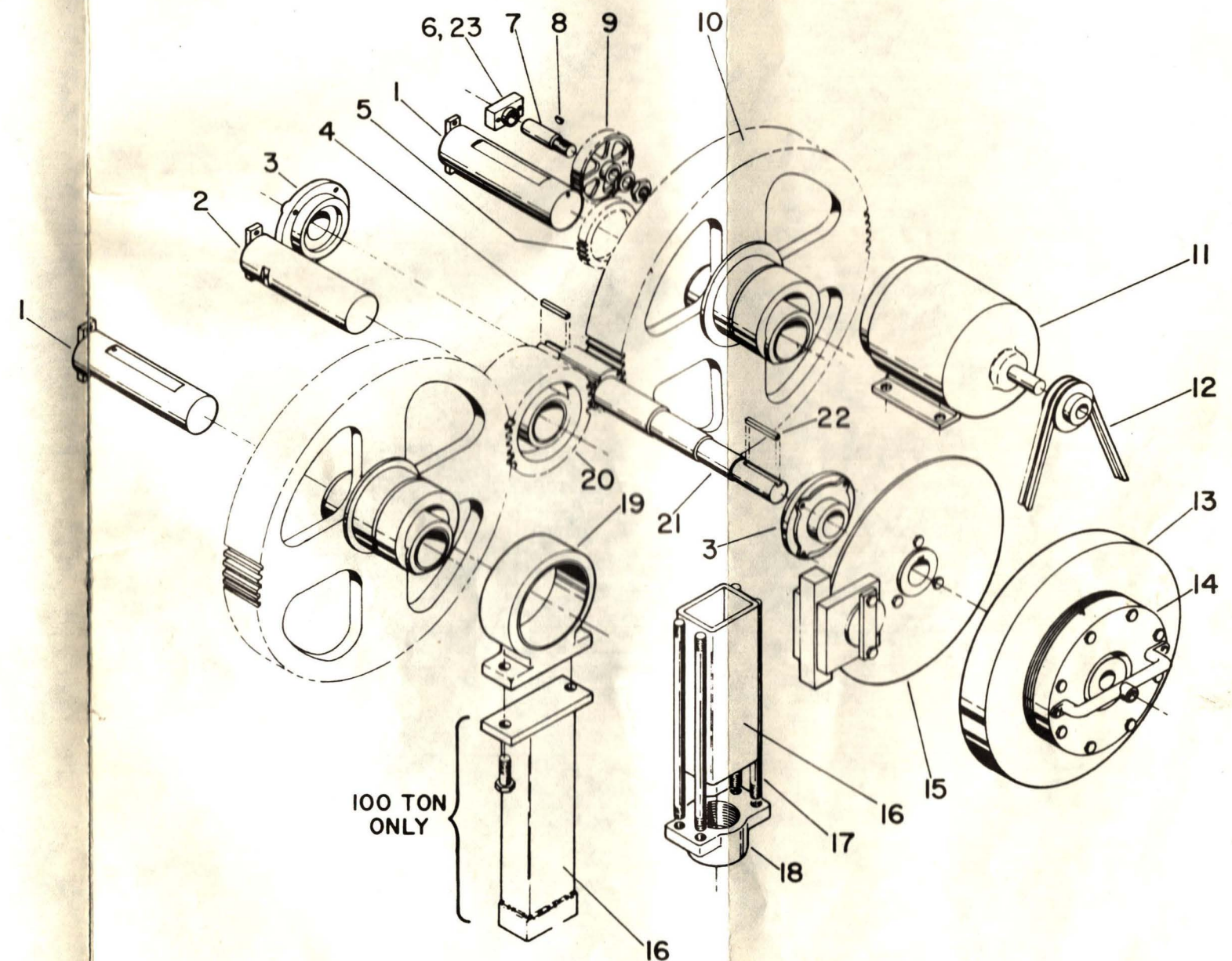


870240102 1/2 TABING
870119502 BRASS FITTING 1/2 x 1/4

HEIM CORP.				
P. O. BOX R				
FRANKFORT, ILL. 60423				
DRAWN BY	DATE	CHECKED BY	DATE	SCALE
R.W.W.	6-23-80	J.C.	7-3-80	1/2 = 1
DISC BRAKE ASSEMBLY				
USED ON	P.B. 70-200 TON		PART NO.	
ALL O.B.I., GAP, & S.S.		C-7350-A		

BILL OF MATERIAL, STRAIGHT SIDE SINGLE REDUCTION

ITEM NO.	DESCRIPTION	100 TON						150 TON		
		30" x 60"	QTY.	30" x 80"	QTY.	30" x 100"	QTY.	42" x 60"	QTY.	
1	SHAFT, bull gear	10-8000-12	2	10-8000-12	2	10-8000-12	2	15-B-7209	2	
2	SHAFT, idler gear	10-8000-12		10-8000-12		10-8000-12		15-B-7211A		
3	BEARING, flanged	10-B-2542	2	10-B-2542	2	10-B-2542	2	15-B-2542	2	
4	KEY	10-A-2576A	1	10-A-2576A	1	10-A-2576A	1	15-A-2576A	1	
5	GEAR,	10-B-7212	1	10-B-7212	1	10-B-7212	1	15-B-7212	1	
6	BRACKET, Timing Gear	10-A-7215	1	10-A-7215	1	10-A-7215	1	15-A-7215	1	
7	SHAFT, timing gear	10-A-7214	1	10-A-7214	1	10-A-7214	1	15-A-7214	1	
8	KEY, 9 Woodruff	STD.	1	STD.	1	STD.	1	STD.	1	
9	GEAR,	10-B-7238	1	10-B-7238	1	10-B-7238	1	15-B-7238	1	
10	BULL GEAR W/ECCENT.	2" Stroke	10-8000-2	2	10-8000-2	2	10-8000-2	2	15-7204-2	2
		3" "	—	2	—	2	—	2	15-7204-3	2
		4" "	10-8000-4	2	10-8000-4	2	10-8000-4	2	15-7204-4	2
		5" "	—	2	—	2	—	2	—	2
		6" "	10-8000-6	2	10-8000-6	2	10-8000-6	2	15-7204-6	2
		8" "	10-8000-8	2	10-8000-8	2	10-8000-8	2	—	2
11	MOTOR	10-EM-7	1	10-EM-7	1	10-EM-7	1	15-EM-8	1	
12	V-BELTS	10-B-21	3	10-B-21	3	10-B-6	3	15-B-10	3	
13	FLYWHEEL	10-C-7247	1	10-C-7247	1	10-C-7247	1	15-C-7247	1	
14	CLUTCH ASSEMBLY	10-C-7320	1	10-C-7320	1	10-C-7320	1	15-C-7320	1	
15	BRAKE ASSEMBLY	10-C-7350	1	10-C-7350	1	10-C-7350	1	15-C-7350	1	
16	TUBE, conn. rod	10-8000-14	2	10-8000-14	2	10-8000-14	2	15-B-7229	2	
17	TIE RODS	—	—	—	—	—	—	15-A-7237	8	
18	NUT, conn. rod	—	—	—	—	—	—	15-B-7231	2	
19	CONNECT. ROD ASSY.	2" Stroke	10-8050-2	2	10-8050-2	2	10-8050-2	2	15-B-7230	2
		3" "	—	2	—	2	—	2	15-B-7230	2
		4" "	10-8050-4	2	10-8050-4	2	10-8050-4	2	15-B-7230	2
		5" "	—	2	—	2	—	2	—	2
		6" "	10-8050-6	2	10-8050-6	2	10-8050-6	2	15-B-7240	2
		8" "	10-8050-8	2	10-8050-8	2	10-8050-8	2	—	2
20	GEAR, idler Assy.	10-8052	1	10-8052	1	10-8052	3	15-B-7210	0	
21	SHAFT, flywheel	10-8000-5	1	10-8000-5	1	10-8000-5	1	15-C-7208	1	
22	KEY	10-A-2576A	1	10-A-2576A	1	10-A-2576A	1	15-A-2576A	1	
23	BEARING, Timing Gear	10-A-7241	1	10-A-7241	1	10-A-7241	1	15-A-7241	1	
24										
25										
26										



HEIM CORP.				
P. O. BOX R				
FRANKFORT, ILL. 60423				
DRAWN BY	DATE	CHECKED BY	DATE	SCALE
CPL	12-22-76			
DESCRIPTION				
DRIVE ASSY, SINGLE REDUCTION				
USED ON				
STR. SIDE PRESSES D-7120-A				

BILL OF MATERIALS STRAIGHT SIDE DOUBLE REDUCTION

ITEM NO.	DESCRIPTION	400 TON				40	CONN. ROD BEARING	6 STK	9000-B2	2	9000-B2	2
		48"X102"	QTY	48"X120"	QTY			8 STK	9000-B4	2	9000-B4	2
1	SHAFT, BULL GEAR	B-9010	2	B-9010	2			10 STK	9000-B5	2	9000-B5	2
2	SHAFT, FLYWHEEL	D-9412-26	1	D-9412-26	1			12 STK	9000-B6	2	9000-B6	2
3	BEARING, FLANGED	16-78	4	16-78	4							
4	KEY	5-8ID	1	5-8ID	1							
5	BRACKET, TIMING GEAR	A-7215	1	A-7215	1							
6	SHAFT, TIMING GEAR	A-7214	1	A-7214	1							
7	KEY, WOODRUFF	K0060312	2	K0060312	2							
8	GEAR	9000-A9	1	9000-A9	1							
9	GEAR	9000-A8	1	9000-A8	1							
10	KEY	5-8ID	1	5-8ID	1							
11	MOTOR	20-60	1	20-60	1							
12	BULL GEAR W/ECCENTRIC ASSY.	6" STROKE	D-9410-1	2	D-9410-1	2						
		8" "	D-9410-2	2	D-9410-2	2						
		10" "	D-9410-3	2	D-9410-3	2						
		12" "	D-9410-4	2	D-9410-4	2						
13	CONNECTING ROD ASSY.	6" STROKE	D-9409-1	2	D-9409-1	2						
		8" "	D-9409-2	2	D-9409-2	2						
		10" "	D-9409-3	2	D-9409-3	2						
		12" "	D-9409-4	2	D-9409-4	2						
14	V BELTS	A-7290	3	A-7290	3							
15	FLYWHEEL	D-9420-38	1	D-9420-38	1							
16	CLUTCH ASSY	17-11	1	17-11	1							
17	BRAKE DISK & HUB ASSY	C-7351-1C	1	C-7351-1C	1							
18	TUBE, CONN. ROD ASSY	D-9415	2	D-9415	2							
19	NUT CONN ROD	D-9416	2	D-9416	2							
20	TIE ROD	D-9417	4	D-9417	4							
21	SHAFT 2ND REDUCTION	D-9411	1	D-9411	1							
22	PINION 1ST REDUCTION	D-9413	1	D-9413	1							
23	GEAR 1ST REDUCTION	D-9414	1	D-9414	1							
24	BEARING TIMING GEAR	A-7241	1	A-7241	1							
25	BRAKE CALIPER ASSY	C-7350	2	C-7350	2							
26	AIR SWIVEL BRIDGE ASSY	C-390-1	1	C-390-1	1							
27	NUT ADJ SCREW	10034A	2	10034A	2							
28	SOCKET UPPER	10033A	2	10033A	2							
29	ADJUSTING SCREW	10019	2	10019	2							
30	DRIVE PIN A-7540	A-7540	2	A-7540	2							
31	BEARING ADAPTER	A-7207	4	A-7207	4							
32	BALL BEARING	A-7243	4	A-7243	4							
33	KNUCKLE BOX ASSY	D-7368	2	D-7368	2							
34	WORM WHEEL	10033	2	10033	2							
35	SOCKET LOWER	10032A	2	10032A	2							
36	WORM	A-1448	2	A-1448	2							
37	BALL BEARING	A-7243	4	A-7243	4							
38	BEARING ADAPTER	A-7207	4	A-7207	4							
39	WORM SHAFT	A-7245	2	A-7245	2							

→ DRWG # B-7481

C-7592-1 ORP1 CLUTCH ~~2-10-1~~
 ✓ B-7395 → DRIVE ASSY D-7460-1 SEE ATTACHED (~~2-10-1~~)
 D-9412 - DRWG # D-9409-01 HEIM CLUTCH

9000-E3 } OLD DRWG.
 9000-E4 } C-8168
 9000-E5 }
 9000-B6 }

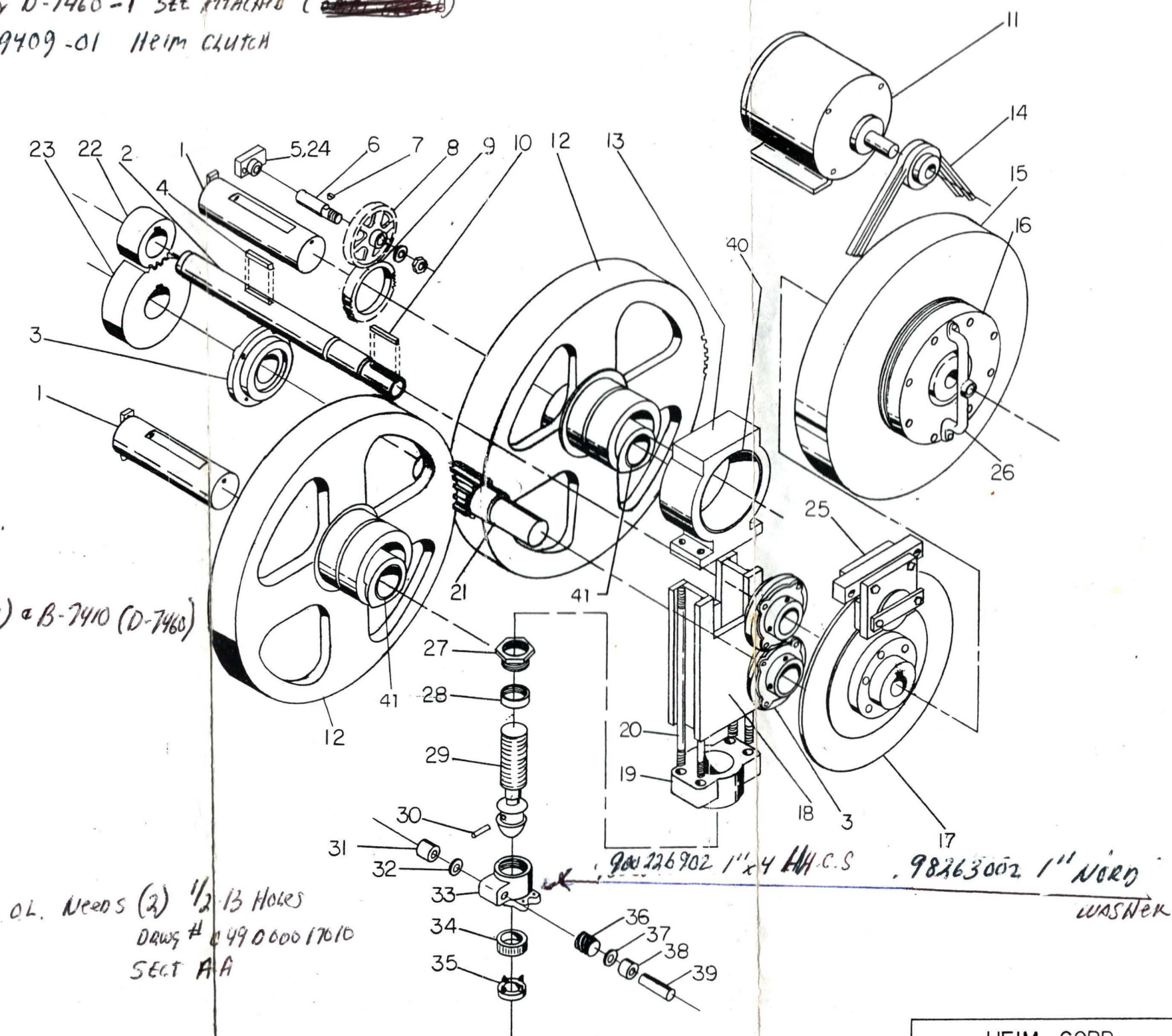
-B-7533

C-7591 (D-7578 DRIVE ASSY) & B-7410 (D-7460)
 3 DRAWING # D-9417

049000017873
 B-7660 - 049000017874
 B-7379-1A -

D-7368 ASSY → IF HVD OL. Needs (2) 1/2" 13 HOLES
 DRWG # 049000017010
 SECT AA
 049000017011

A-7207-A
 A-7245-A



900226902 1"X4 HH.C.S. 98263002 1" NORD WASNER

HEIM CORP	
P.O. BOX R	
FRANKFORT IL 60423	
R.W.W. 4-30-81	
DRIVE ASSY - DOUBLE REDUCT.	
400 TON S.S.	D-7130-

A-1477-1 SPLIT COLLAR

BILL OF MATERIAL A-1477 COLLAR 7/8" ID.

ITEM NO	NO. REQ'D	PART NUMBER	DESCRIPTION
1		B-1469-B	SPLIT COUPLING 7/8" I.D. B-1469-C 7/8" I.D.
2	2	D-7336	GEAR HOUSING - ADJ. SCREW
3	2	B-7333	WORM WHEEL 2 HOLE KB
4	4	A-7207-A	BEARING ADAPTER
5	2	B-7334A	SOCKET - UPPER ^{HEX 4"} 3" B-7334B
6	2	A-7332A	SOCKET - LOWER w/EYES
7	2	B-2517-D	ADJUSTING SCREW 4" x 18" 29
8	2	B-7229	TUBE, CONN. ROD 16 3/4" LG OLD STYLE
9	2	C-7230	CONN. ROD ASSY. 2", 3", 4" STROKE
	CONSIST OF:		
	1	C-7226	CONNECTING ROD RAW (NOT SOLD AS PART)
	1	B-7232	BRONZE BEARING
10	2	B-7231-A	NUT - CONN. ROD 150-200 TON
11	8	B-7237	STUD - CONN. ROD 1"-8 x 22"
12	2	C-7240	CONN. ROD ASSY. 6", 7", 8" STROKE
	CONSIST OF:		
	1	C-7227	CONNECTING ROD RAW (NOT SOLD AS PART)
	1	B-7233	BRONZE BEARING
13	4	A-7243	BALL BEARING
14	2	A-1448	WORM
15	2	A-7245-A	WORM SHAFT
16	1	B-7246	ELEVATING SHAFT ^{SIB B-7596}
17	6	K 0060312	NO. 9 WOODRUFF KEY
18	4	900094902	5/16"-18 x 5/16" HOLE HD. SET SCREW
19	4	900234002	1/2"-13 x 1" HEX HD CAP SCREW
20	4	980121402	1/2" MED. LOCKWASHERS
21	8	850127702	1"-8 HEX NUT
22	8	980121702	1" MED LOCKWASHER
23	4	900649902	1 1/4"-7 x 8" HEX. HD. MACH. BOLT
24	2	A-7510-1	DRIVE PIN - ADJ. SCREW 7/8" x 3 1/4"
25	4	980098902	1 1/4" MED. LOCKWASHERS

AKA 049600017873
10033 4 HOLE K-Box

B-7217
OLD STYLE 4"
B-7334
OLD STYLE 3"
A-7332
OLD STYLE

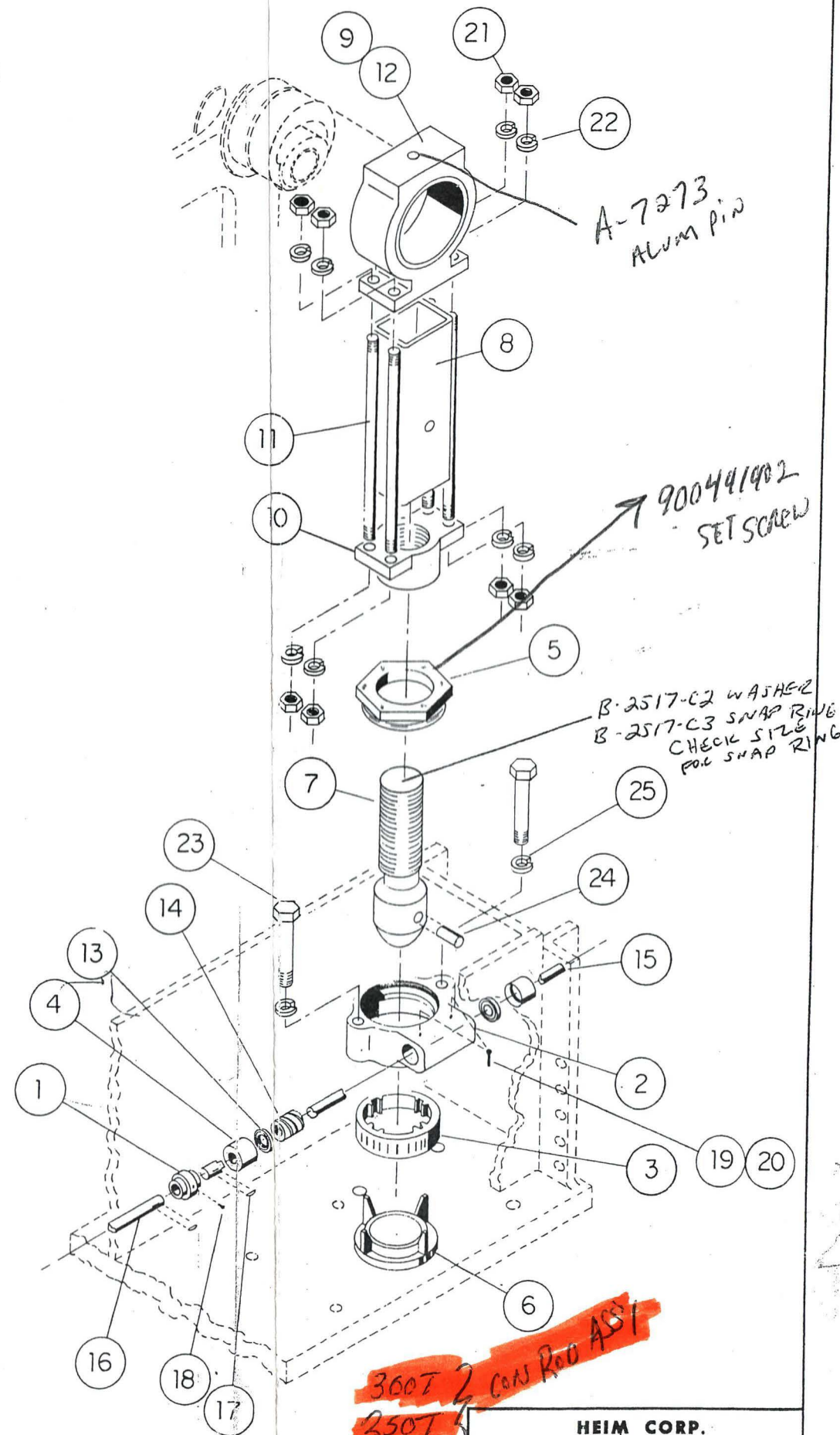
REAL OLD STYLE
15-19A

CONN ROD ASS'Y
250-300 TON
9009-C3 4"-6"
9009-C4 8"
9009-C5 10"

DRWG # D-9009

← TUBE B-7667-2 16 1/4" LG
B-7667-1 24 1/4" LG
B-7392-1 21" LG
250-300 TON

← STUD B-7391-1
250-300 TON
B-7237-1 1"-8 x 28 1/2"
B-7237-2 1"-8 x 20 1/2"
B-7237-3 1"-8 x 27 1/4"



300T 2 CON ROD ASSY
250T

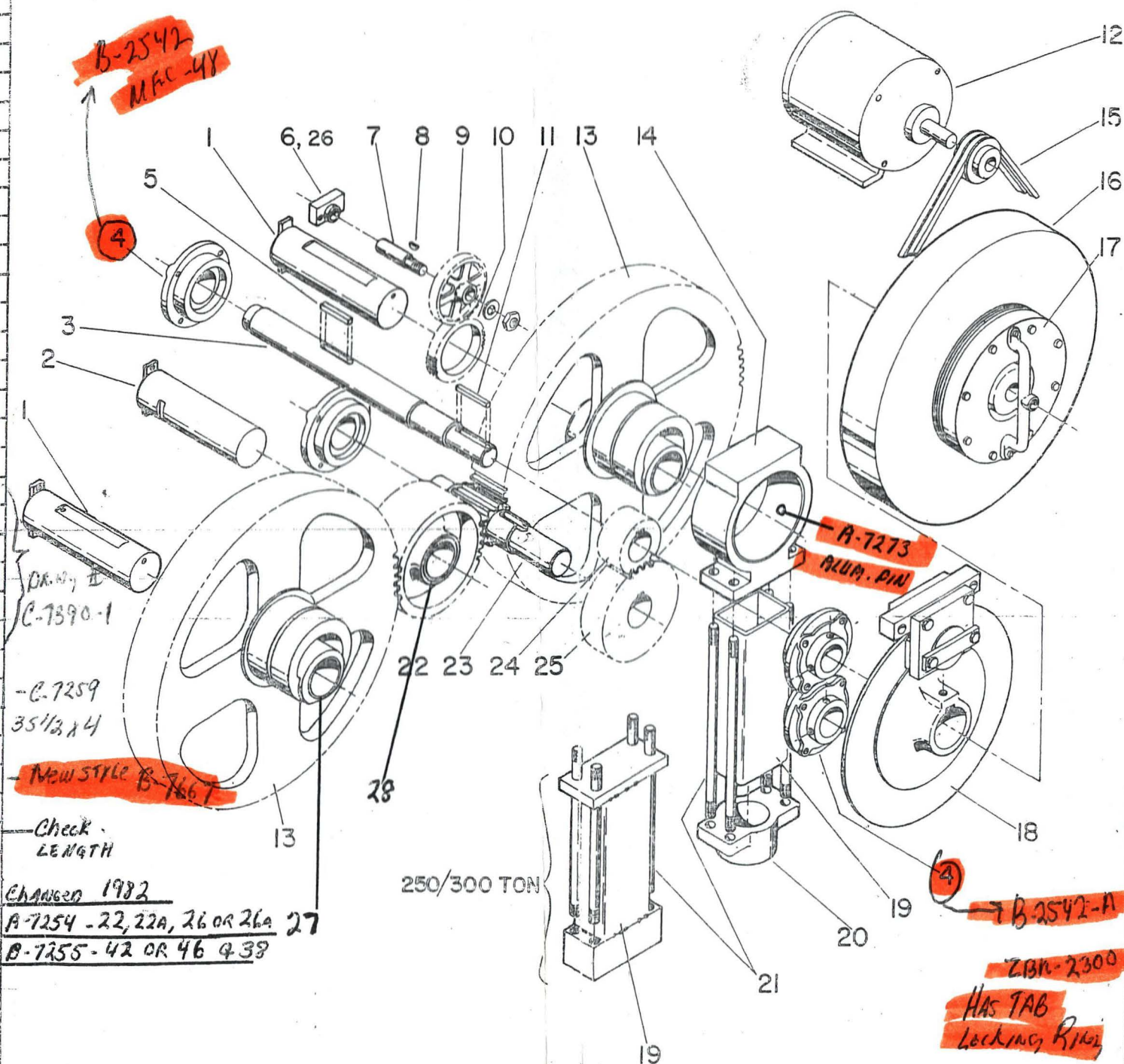
C-7390-1
SEE NEXT
PAGE

HEIM CORP.				
P. O. BOX R				
FRANKFORT, ILL. 60423				
DRAWN BY	DATE	CHECKED BY	DATE	SCALE
RWW	8-4-80			
DESCRIPTION				
CONN ROD RAM ELEVATING ASSEM.				
USED ON	150	200	TON	PART NO.
STRAIGHT SIDE PUNCH PRESS				D-7140-A

ITEM NO.	DESCRIPTION	150 TON				200 TON				250 TON				300 TON			
		42"x79"	QTY.	42"x102"	QTY.	42"x79"	QTY.	42"x102"	QTY.	42"x79"	QTY.	42"x102"	QTY.	42"x79"	QTY.	42"x102"	QTY.
1	SHAFT, Bull Gear	B-7209-A	2	B-7209-A	2	B-7209-A	2	B-7209-A	2	B-9010-1	2	B-9010-1	2	B-9010-1	2	B-9010-1	2
2	SHAFT, Idler Gear	15-B-7211A		15-B-7211A		20-B-7211A		20-B-7211A		25-B-7211A		30-B-7211A		30-B-7211A		30-B-7211A	
3	SHAFT, Flywheel	15-B-7258-A	1	15-B-7258-A	1	20-B-7258-A	1	20-B-7258-A	1	25-B-7258-A	1	30-B-7258-A	1	30-B-7258-A	1	30-B-7258-A	1
4	BEARING, Flanged	15-B-2542	4	15-B-2542	4	20-B-2542	4	20-B-2542	4	25-B-2542	4	30-B-2542	4	30-B-2542	4	30-B-2542	4
5	KEY	3-81															
6	BRACKET, Timing Gear	15-A-7215	1	15-A-7215	1	20-A-7215	1	20-A-7215	1	25-A-7215	1	30-A-7215	1	30-A-7215	1	30-A-7215	1
7	SHAFT, Timing Gear	15-A-7214	1	15-A-7214	1	20-A-7214	1	20-A-7214	1	25-A-7214	1	30-A-7214	1	30-A-7214	1	30-A-7214	1
8	KEY - WOODRUFF	K0010312	1														
9	GEAR, - TIMING	15-B-7238	1	15-B-7238	1	20-B-7238	1	20-B-7238	1	9000-A9	1	9000-A9	1	9000-A9	1	9000-A9	1
10	GEAR, - TIMING	15-B-7212	1	15-B-7212	1	20-B-7212	1	20-B-7212	1	9000-A8	1	9000-A8	1	9000-A8	1	9000-A8	1
11	KEY	3-81															
12	MOTOR	15-EM-8	1	15-EM-8	1	20-EM-9	1	20-EM-9	1	25-EM-12	1	30-EM-13	1	30-EM-13	1	30-EM-13	1
13	BULL GEAR W/ECCENTRIC	2" Stroke	D-7204-2	2	D-7204-2	2	D-7204-2	2	D-7204-2	2	—	—	—	—	—	—	—
		3" "	D-7204-3	2	D-7204-3	2	D-7204-3	2	D-7204-3	2	—	—	—	—	—	—	—
		4" "	D-7204-4	2	D-7204-4	2	D-7204-4	2	D-7204-4	2	9000-A2	2	9000-A2	2	9000-A2	2	9000-A2
		6" "	D-7204-6	2	D-7204-6	2	D-7204-6	2	D-7204-6	2	9000-A3	2	9000-A3	2	9000-A3	2	9000-A3
		7" "	D-7204-7	2	D-7204-7	2	D-7204-7	2	D-7204-7	2	—	—	—	—	—	—	—
		8" "	D-7204-8	2	D-7204-8	2	D-7204-8	2	D-7204-8	2	9000-A4	2	9000-A4	2	9000-A4	2	9000-A4
		10" "	—	—	—	—	—	—	—	9000-A5	2	9000-A5	2	9000-A5	2	9000-A5	2
14	CONNECTING ROD ASSY.	2" Stroke	E-7230	2	E-7230	2	20-E-7230	2	20-E-7230	2	—	2	—	2	—	2	—
		3" "	E-7230	2	E-7230	2	20-E-7230	2	20-E-7230	2	—	2	—	2	—	2	—
		4" "	E-7230	2	E-7230	2	20-E-7230	2	20-E-7230	2	9009-3	2	9009-3	2	9009-3	2	9009-3
		6" "	E-7240	2	E-7240												

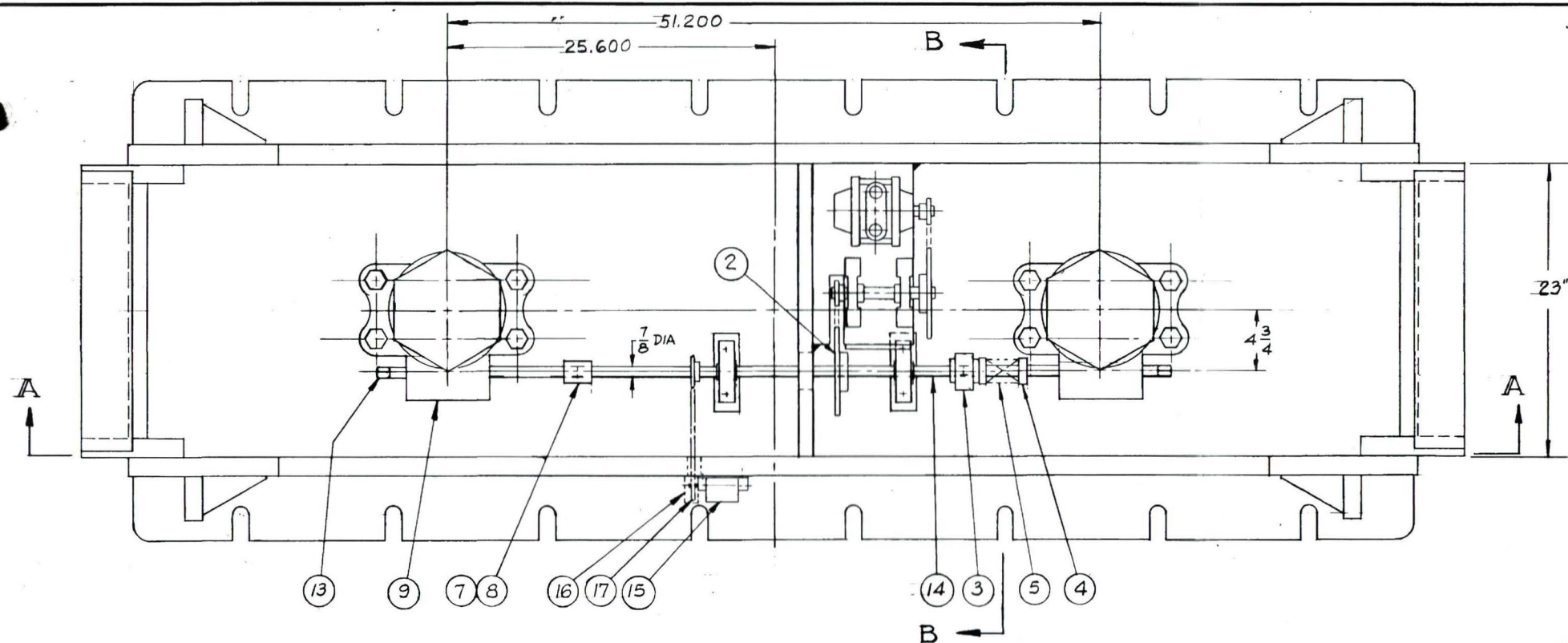
B-7395

STED Key A-5025 3-81 DRWY# A-7250



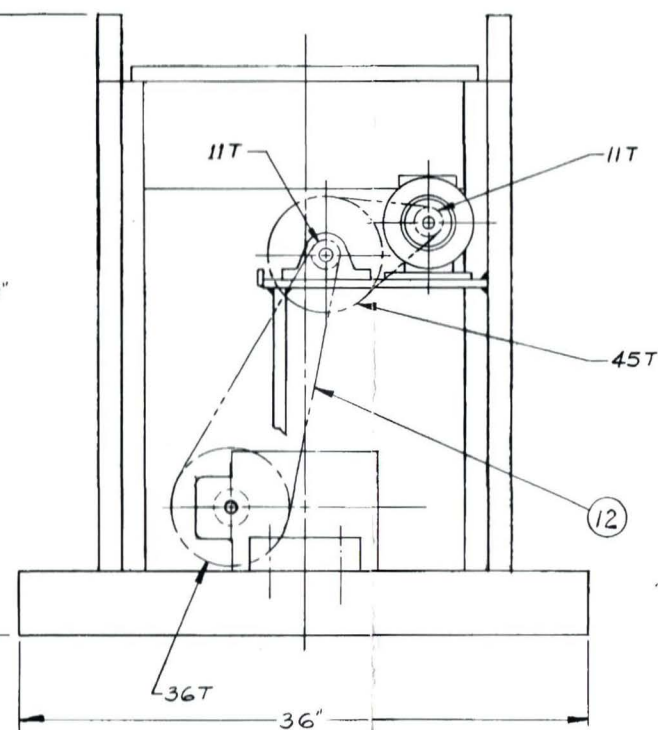
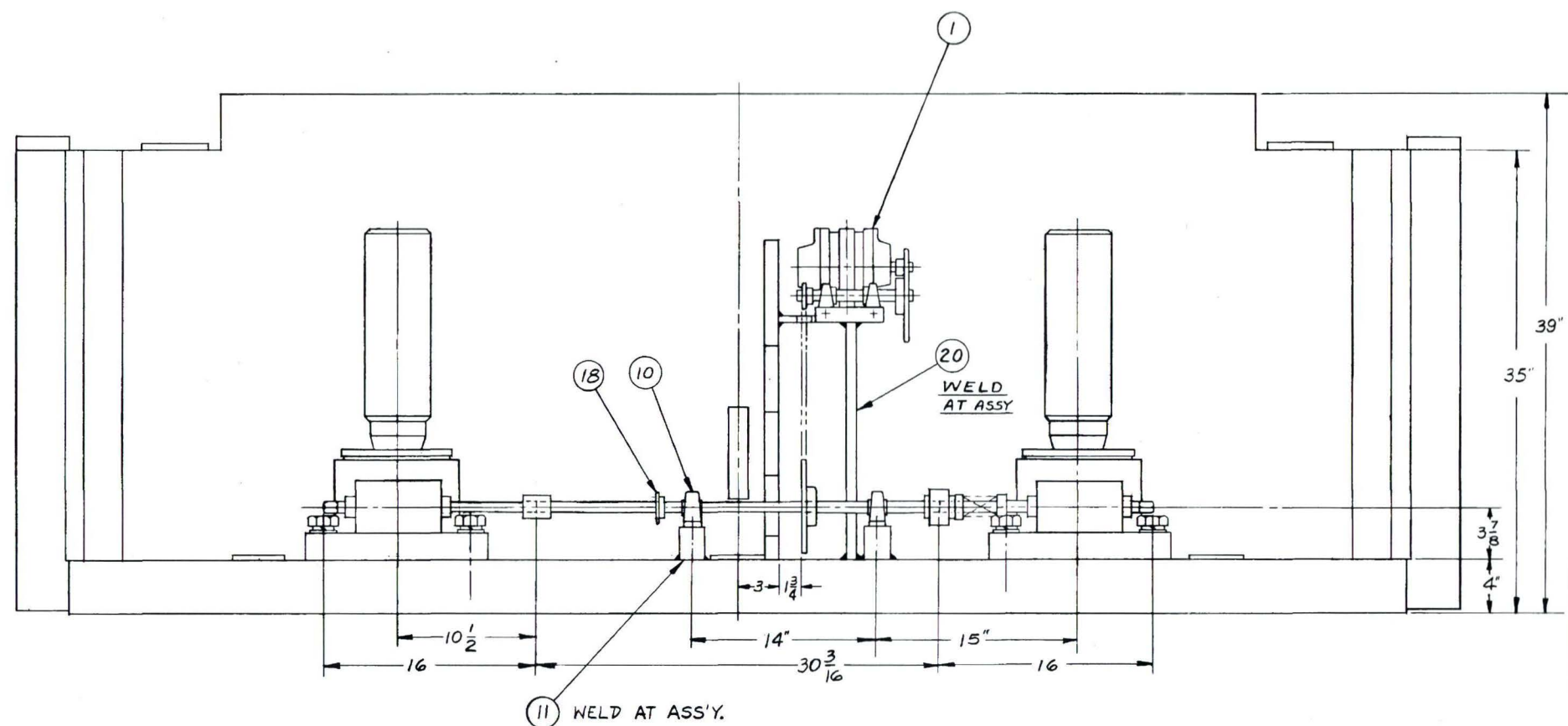
24 B-7418 or B-7391
25 B-7419 or B-7391

HEIM CORP.			
P. O. BOX R			
FRANKFORT, ILL. 60423			
DRAWN BY C. F. L.	DATE 12-22-78	CHECKED BY	SCALE "
DESCRIPTION DRIVE ASSY, Double Reduction			
USED ON STR. SIDE PRESSES	PART NO D-7130-A		



B-H69-B

DET	PART NO.	DESCRIPTION	MATERIAL	QTY
1	C-7619-1	AIR MOTOR ASSY	GAST 8AM-FRY-2B	1
2	A-824	SPROCKET 7/8 BORE, 36 T	41FB36	1
3	B-7553	COUPLING ASSY		1
4	A-7554	COUPLING COLLAR		1
5	A-1476	SPRING 7/8 I.D. x 2 5/16 LG.		1
6	A-1477	COLLAR, SHAFT 7/8 I.D.		5
7	A-1466	COUPLING - 7/8 DIA SHAFT	C-1018 C.R.S.	1
8	K-0660312	WOODRUFF KEY 3/16 x 3/4 DIA	STL.	8
9	C-7699-A	KNUCKLE BOX (DO-24412-C2)		2
10	B-1528	PILLOW BLOCK 7/8 DIA		2
11	A-7980	PILLOW BLK. MTG. PAD	2x2 1/2 x 6 H.R.S.	2
12	A-166	#41 CHAIN	STL.	3FT.
13	B-7598	WORM SHAFT 7/8 DIA x 16 LG.	C-1018 C.R.S.	2
14	B-8033	ADJ. SHAFT 7/8 DIA x 30 3/4 LG.	L TO R	1
15	G-0050001	COUNTER 5:1 DURANT	5CS-31057-466-LCL	1
16	A-7423	CHAIN COVER	16 GA STL.	1
17	A-337	SPROCKET 1/4 BORE, 18T	25FB18	1
18	A-1447	SPROCKET 7/8 BORE, 20T		1
19	A-159	#25 CHAIN		2FT.
20	C-7977-20	SUPPORT BAR 3/4 DIA	H.R.S.	1



SECTION B - B

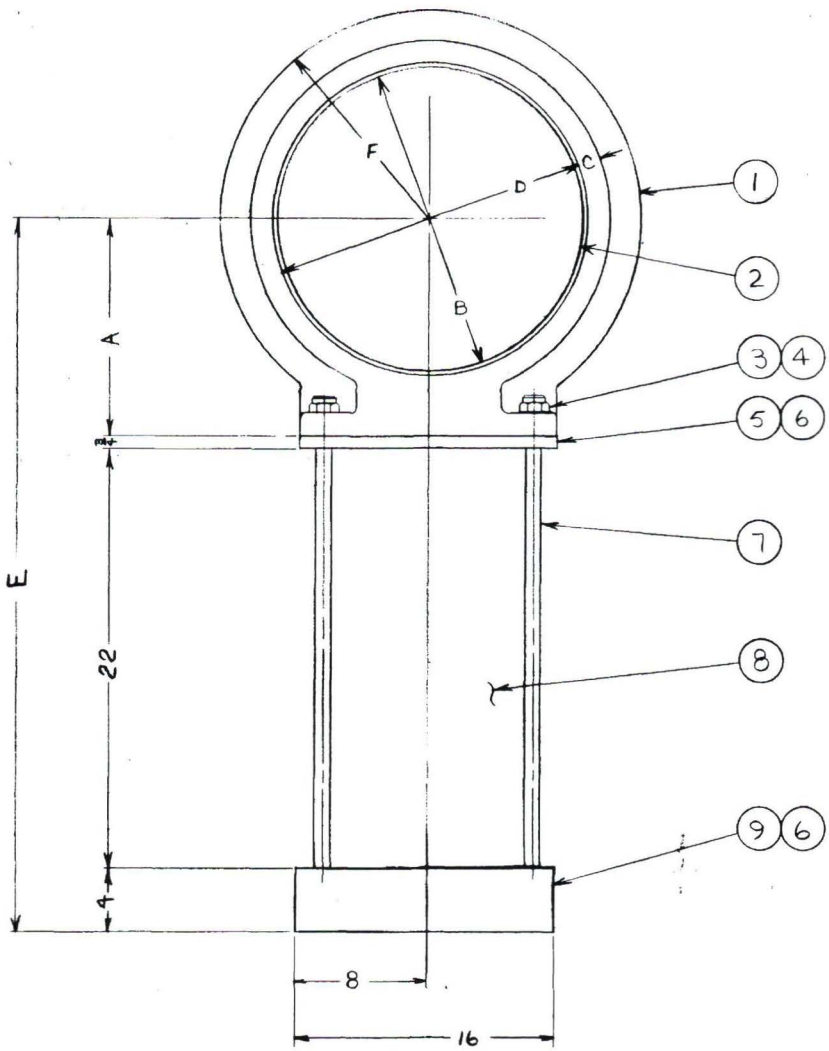
SECTION A - A

1 62423 VS. REDESIGNED & RELOCATED DET. 1		ECO NO.	
REV	DATE	BY	DESCRIPTION
HEIM P.O. BOX R. FRANKFORD, ILL. 60423 (815) 469-2335			
SUPERSEDES D-7977	THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP.		SCALE: 3/16 DATE: 12/7/89
FRACTION ± .015 DECIMAL ± .005 ANGLES ± 0° 30'	DESCRIPTION SLIDE ASS'Y 100 x 36		DRWN BY: EK. CHK BY: J.C.
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED	USED ON 52 - 400, 300, 250	DRWG. NO. D-7977-1	

STROKE					
DIM.	4"	6"	8"	10"	12"
A	10 1/2	10 1/2	11 1/2	12 1/2	13 1/2
B	13.004	13.004	15.006	17.008	19.010
C	1"	1"	1"	1 1/4	1 1/4
D	13.495	13.495	15.495	17.495	19.495
E	26 3/4 + A	26 3/4 + A	26 3/4 + A	26 3/4 + A	26 3/4 + A
F	9 3/4	9 3/4	10 3/4	12 1/4	13 1/2

BILL OF MATERIAL			
ITEM	PART NO.	DESCRIPTION	QUAN.
①	D-9009-C3	CONNECTING ROD FOR 4" 1/2" STK.	1
	D-9009-C4	" " " 8" "	
	D-9009-C5	" " " 10" "	
	D-9009-C6	" " " 12" "	
②	B-7481	CONN. ROD BEARING	1
③	F0171608	HEX FULL NUT 1"-8	4
④	F0251600	SPLIT LOCKWASHER 1"	4
⑤	A-7393	CONNECTING ROD PLATE	1
⑥	860445902	ROLL PIN 1/2 DIA X 1 1/4 LG	8
⑦	B-7237-3	TIE ROD 1"-8 X 27 1/4 LG.	4
⑧	B-7392-1	CONN. ROD TUBE 6 X 12 X 22 LG	1
⑨	B-7391-1	CONNECTING ROD NUT	1

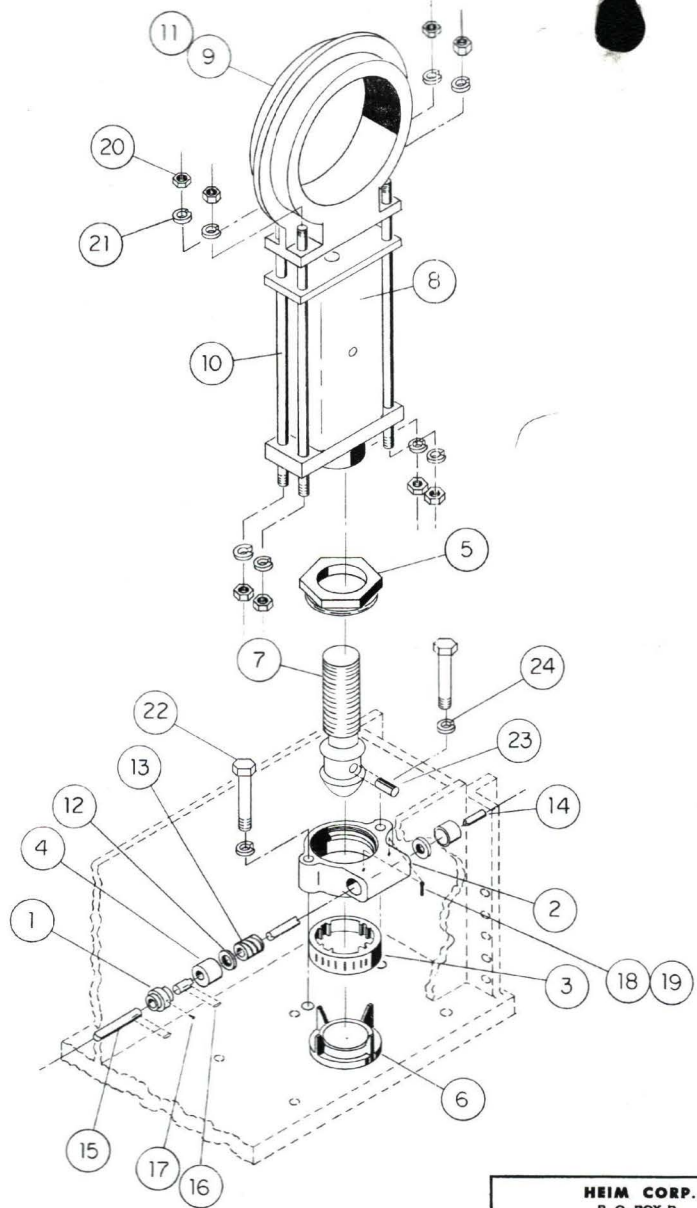
860445902



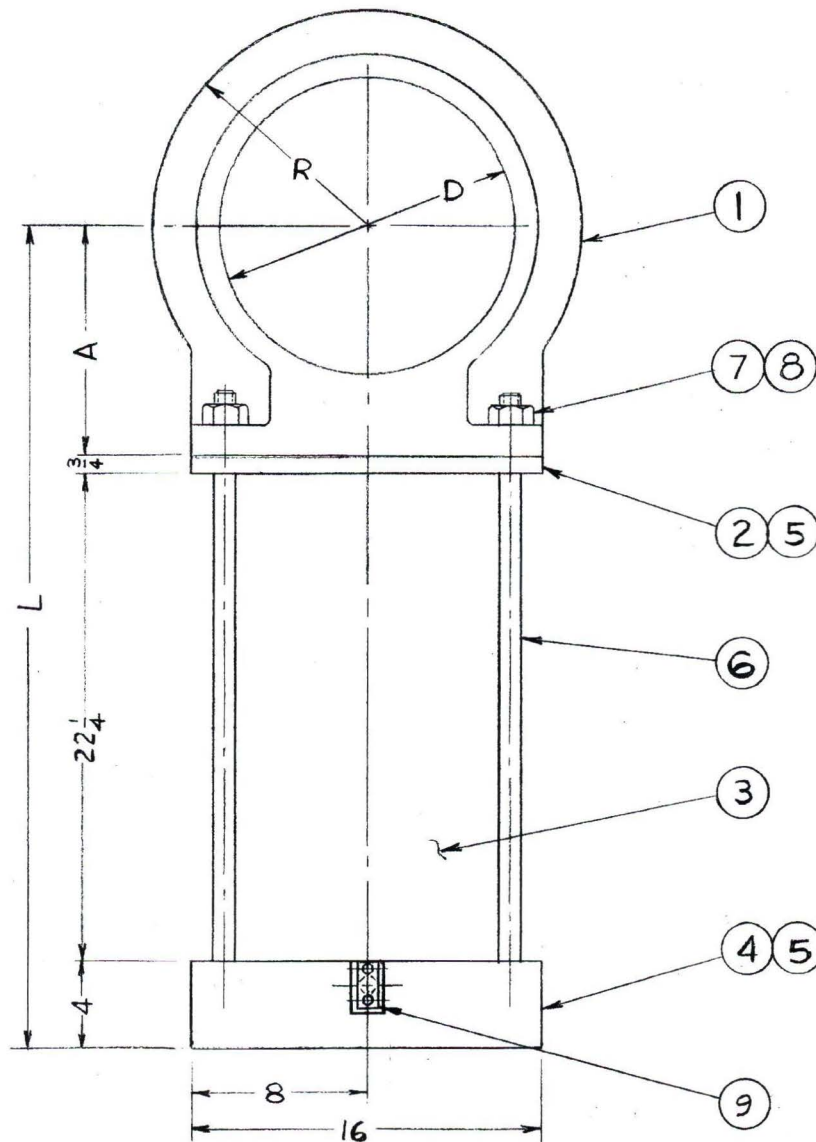
REV	DATE	BY	DESCRIPTION	ECO NO.
			P.O. BOX R, FRANKFORT, ILL. 60423 (815) 469-2335	
SUPERSEDES C-7390		THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP.		SCALE 3/16" DATE DRWN BY LK 2-27-89 CHK BY JC 5-2-85
FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED		DESCRIPTION		
FRACTION ± .015 DECIMAL ± .005 ANGLES ± 0° 30'		CONNECTING ROD ASSEMBLY		
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED		USED ON 250-300 TON S2		DRWG. NO. C-7390-1

OLD STYLE B-7390 see BEHIND

BILL OF MATERIAL			
ITEM NO.	NO REQ'D	PART NUMBER	DESCRIPTION
1		B-1469-B	SPLIT COUPLING
2	2	D-7205	GEAR HOUSING - ADJ. SCREW
3	2	B-7333	WORM WHEEL
4	4	A-7207	BEARING ADAPTER
5	2	D-7331	SOCKET - UPPER
6	2	D-7331	SOCKET - LOWER
7	2	B-2517-A	ADJUSTING SCREW
8	2	B-7229	TUBE, CONN. ROD
9	2	9000-B12	CONN. ROD ASSY. 4" STROKE
		9000-B13	CONN. ROD ASSY. 6" STROKE
		9000-B14	CONN. ROD ASSY. 8" STROKE
	1	CONSIST OF:	CONN. ROD 9009-2 FOR 4" STK 9009-3 FOR 6" STK 9009-4 FOR 8" STK
10	8	A-7237	STUD - CONN. ROD
11	2	9000-B15	CONN. ROD ASSY 10" STROKE
		9000-B16	CONN. ROD ASSY 12" STROKE
	1	CONSIST OF:	CONN. ROD 9009-5 FOR 10" STK 9009-6 FOR 12" STK
	1	BRONZE BEAR.	9000-B5 FOR 10" STK 9000-B6 FOR 12" STK
12	4	A-7243	BALL BEARING
13	2	B-7244	WORM
14	2	A-7245-A	WORM SHAFT
15	1	B-7246	ELEVATING SHAFT
16	6		NO. 9 WOODRUFF KEY
17	4		5/16"-18 X 5/16" HOL. HD. SET SCREW
18	4		1/2"-13 X 1 HEX. HD. CAP SCREW
19	4		1/2" MED. LOCKWASHERS
20	8	850127702	1"-8 HEX. NUT
21	8	980121702	1" MED. LOCKWASHER
22	4		1 1/4"-7 X 8" HEX. HD. MACH BOLT
23	2	A-7510-1	DRIVE PIN - ADJ. SCREW
24	4		1 1/4" MED. LOCKWASHER



HEIM CORP.			
P. O. BOX R.			
FRANKFORT, ILL. 60423			
DATE: 8-4-80	CHECKED BY:	DATE:	SCALE:
DESCRIPTION: CONN ROD+RAM ELEVATING ASSEM.			
250, 300 TON			
1 INCH PRESS			D-7140-B



860445902

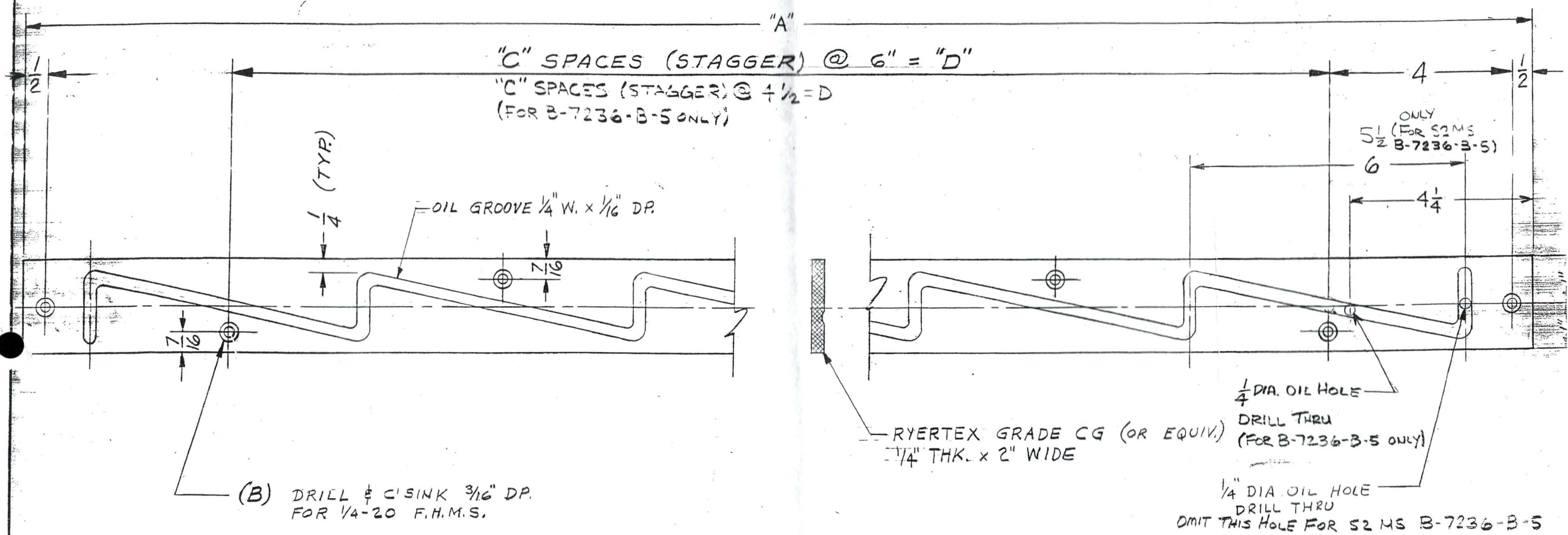
BILL OF MATERIAL			
ITEM	PART NO.	DESCRIPTION	QUAN
	9009-C3	CONNECTING ROD FOR 4+6" STRK.	
①	9009-C4	" " " 8" "	1
	9009-C5	" " " 10" "	
	9009-C6	" " " 12" "	
②	A-7393	CONNECTING ROD PLATE	1
③	B-7392	CONNECTING ROD TUBE (6x12x1/2)	1
④	B-7391	CONNECTING ROD NUT	1
⑤	860445902	ROLL PIN 1/2 DIA x 1 1/4 LG	8
⑥	A-7237	TIE ROD 1"-8 x 28 LG	4
⑦	F0171608	HEX FULL NUT 1"-8	4
⑧	F0251600	SPLIT LOCKWASHER 1"	4
⑨	A-7381	SLIDE ADJ. STOP ASSY	1

DIM.	STROKE			
	4+6"	8"	10"	12"
A	10 1/2	11 1/2	12 1/2	13 1/2
L	37 1/2	38 1/2	39 1/2	40 1/2
R	9 3/4	10 3/4	12 1/4	13 1/2
D	13 1/2	15 1/2	17 1/2	19 1/2

OBSOLETE as of 6-17-85
refer to C-7390
law

A 1-8-85 V.S.		ADDED ITEM 9		00095
REV	DATE	BY	DESCRIPTION	ECQ NO.
 P.O. BOX R, FRANKFORT, ILL. 60423 (815) 469-2335				
SUPERSEDES D-9000-A		THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP.		SCALE: 3/16 DATE DRWN. RSB BY 5/16/82 CHK. BY
FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED		DESCRIPTION CONNECTING ROD ASSEM. DRWG.		
FRACTION ± .015 DECIMAL ± .005 ANGLES ± 0° 30'		USED ON 250-300T. SS		
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED		DRWG. NO. B-7390		

MAXIS
T155 AK300 2"10 HOSE ACB



FOR GIB BACK-UP PLATE SEE
DRG. B-7236-C-3

USED ON	A	B	C	D	DRG. NO.
400 TON L. & R.	33"	7	4	24	B-7236-B-33
150-200 TON ALL 175 TON	27"	5	3	18	B-7236-B-27
250-300, 400 F. & B.; 250-300 L. & R.	29"	6	4	24	B-7236-B-29
52 BB-400, 500, 600 ALL	45"	9	6	36	B-7236-B-45
52-MS RAM REMOVABLE THRU FRONT	14 1/2"	4	3	13 1/2"	B-7236-B-5

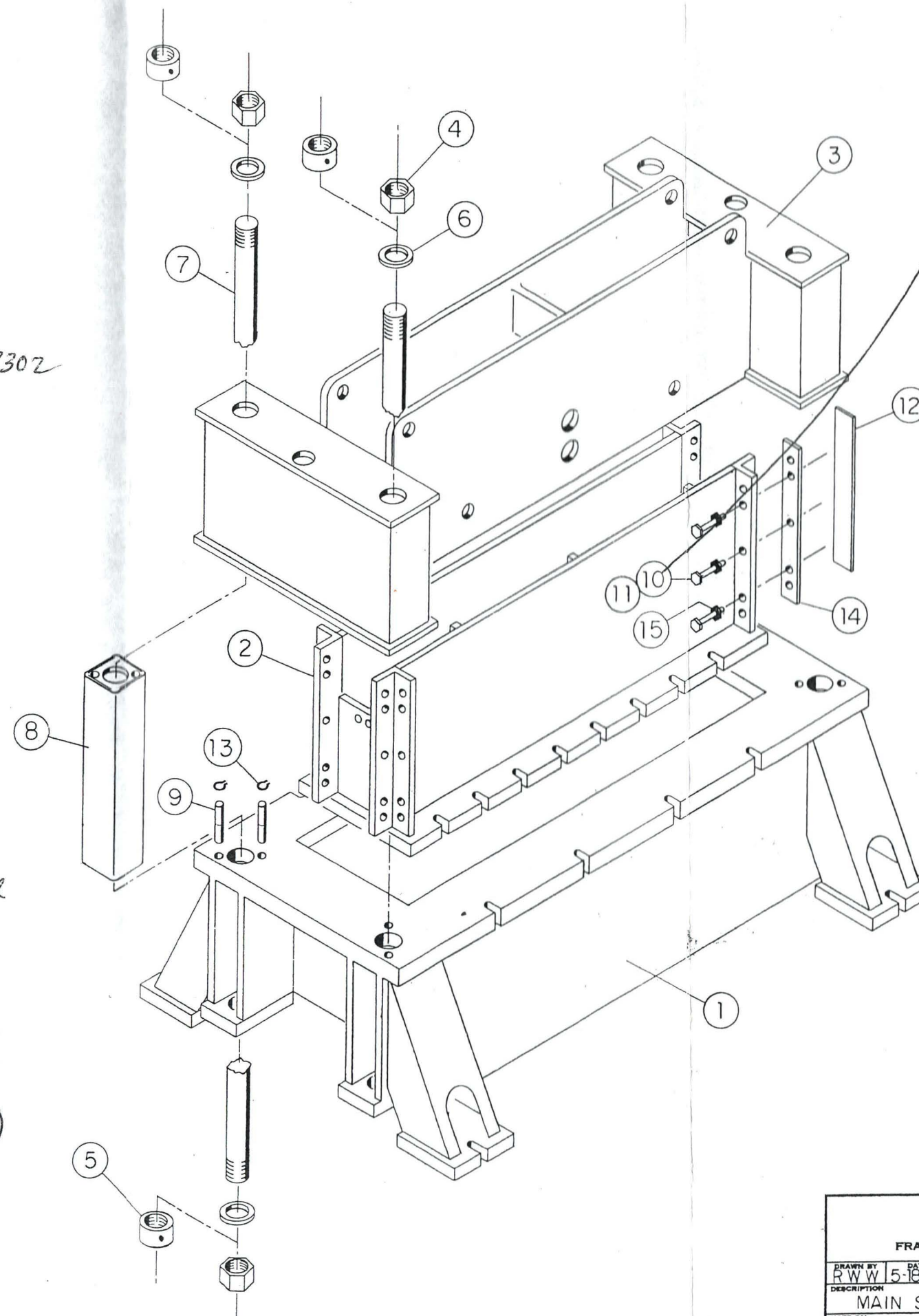
900648302 1/4-20 x 1/2
BRASS SCREWS

3	6-7-96	JCV	ADDED B-7236-B-5 SPECS. FOR REMOVABLE GIB APPLICATION	
2	9-13-89	L.K.	B-7236-B-1 REMOVED REF. 250-300; B-7236-B-3 ADDED 250-300 L. & R.; ADDED B-7236-B-4	00301
1	6-2-85	K.P.		00015
REV	DATE	BY		

HEIM CORP. P. O. BOX R FRANKFORT, ILL. 60423				
DRAWN BY J.C.	DATE 2-26-78	CHECKED BY	DATE	SCALE 1/2"
DESCRIPTION WAY OR GIB LINER				
USED ON STRAIGHT SIDE PRESS			PART NO. B-7236-B-5	

BILL OF MATERIAL

ITEM NO.	NO. REQ'D	PART NUMBER						DESCRIPTION	
		150 TON 42-78	150 TON 42-102	200 TON 42-78	200 TON 42-102	250 TON	300 TON		400 TON
1	1	D-8403	D-8503	D-8403	D-8503	D-9001	D-9001	D-9401	BED
2	1	D-8402	D-8502	D-8402	D-8502	D-9002	D-9002	D-9402	RAM
3	1	D-8401	D-8501	D-8401	D-8501	D-9003	D-9003	D-9403	CROWN
4	8	3"-8	3"-8	3"-8	3"-8	—	—	—	HEX NUT <i>F-0174808</i>
5	8	—	—	—	—	3½"-8	3½"-8	4"-8	CYLINDER NUT
6	4	A-7256	A-7256	A-7256	A-7256	A-7256	A-7256	A-7256	WASHER TIE ROD
7	4	B-8404	B-8404	B-8404	B-8404	9000-A17	9400-A17		TIE ROD <i>B-7224</i>
8	4	D-7223				9000-A16	9400-A16		POST
9	16	A - 7 2 2 5							DOWEL PIN
10	40	¾" x 3	¾" x 3	¾" x 3	¾" x 3	—	—	—	BOLT - WAY LINER
11	44	—	—	—	—	¾" x 3½	¾" x 3½	¾" x 4	" " "
12	8	B-7236-B-27				B-7236-B-33			WAY LINER <i>→ 9006</i>
13	16	<i>A-7271 - 890286302</i>							SNAP RING DOWEL PIN
14	8	<i>B-7236-C-2</i>				<i>B-7236-C-1</i>			GIB BACKING PLATE
15	—	40	40	40	40	44	44	44	¾"-10 HEX. JAM NUT
16									
17									
18									
19									
20									

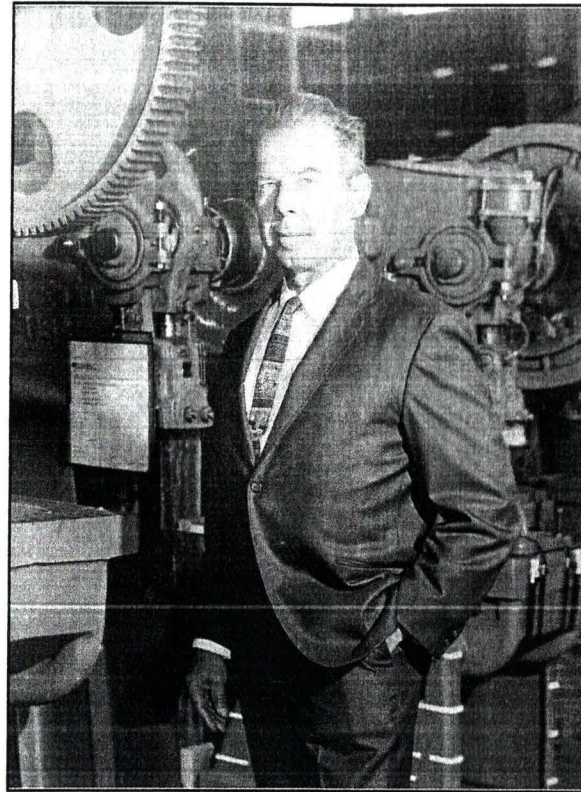


B-5021-1 39 1/2
B-5021-2 35 1/2 1/2

*6184-01/820634302 CANISTER FILTER
 FOR OLD MAXIS Y TRAP
 IN BED*
↓
FILTER ELEMENT PART NO (RITTON)
Y-25-149-2 FILTER (PIPC ITSELF)

HEIM CORP.			
P. O. BOX R			
FRANKFORT, ILL. 60423			
DRAWN BY	DATE	CHECKED BY	DATE
RWW	5-18-81		
DESCRIPTION			
MAIN STRUCTURE ASSEMBLY			
USED ON	150 TO 400 TON.	PART NO.	
STRAIGHT SIDE PUNCH PRS.		D-7110-A	

In Memory of
Mr. Heim
March 27, 1917 - May 28, 2007



Mr. Heim lived his final days Memorial Weekend.
He has loved and helped both family and friends
through out his life and will always be
remembered and loved in our hearts.

Sincerely,
The Heim & Ramsey Family

Services will be held at Lamb M J Funeral Home
Thursday May 31 at 5:00-8:00PM
4727 W 103rd Street Oak Lawn
708-636-1193

D 7720	GEN ASSY	OBS-32 F.A.C.
D 7721	" "	OBI-32 F.A.C.
D 7722	" "	OBS-32 G.A.C.
D 7723	" "	OBI-32 G.A.C.
D 7716	" "	OBS-55, 70T F.A.C.
D 7717	" "	OBI-55, 70T F.A.C.
D 7719	" "	OBI-55, 70T G.A.C.
D 7733	" "	OBS-95, 120T F.A.C.
D 7734	" "	OBI-95, 120T F.A.C.
D 7735	" "	OBS-95, 120T G.A.C.
D 7736	" "	OBI-95, 120T G.A.C.
D 7728	" "	OBS-250, 300T G.A.C.
D 10006-P	SINGLE POINT	OBS-250, 300T G.A.C.
D 7738	GEN. ASSY.	S2-40, S2-60 F.A.C.
D 8110	DRIVE ASSY.	S2-40, S2-60 F.A.C.
D 7739	GEN. ASSY	80B, 100B G.A.C.
D 7869	DRIVE "	S2-75, 100T
D 7981	SLIDE "	S2-75, 100T
D 7429-1	DRIVE "	SS-150, 200T
D 7576	" "	S2-150 200T SINGLE GEARED W/10M DI CL 332.
D 7729	GEN. ASSY DOUBLE GRD.	S2-150, 200T
D 7851	C' BAL MTG. ASSY	S2-150, 200T
D 7978	SLIDE ASSY	S2-150, 200T
D 7460-B	DRIVE ASSY	S2-250, 300T
D 7698	SLIDE ASSY	S2-250, 300T
D 7977	" "	S2-400
D 7741	GEN. ASSY	S2MS 600 120 X 60 3/4H-3746
D 7665-2	120 KNUCKLE BOX ASSY	S2-HBB-400, 500, 600
D 8017	DRIVE ASSY	S2-BB-400, 500, 600MS
D 8090-1	C' BAL SYSTEM	S2-HBB-400, 500, 600
D 8089	GEN. ASSY	S2-MS-400, 500, 600
D 8080	SLIDE ASSY	S2-HBB-(ALL)
D 7735	GEN. ASSY	S2-250, 300, 400T
D 7578-1	DRIVE ASSY	S2-400 SS NOT MS
D 7852	C' BAL MTG. ASSY.	S2-250 300, 400T

0-7727 an 002432402 160/200 - 41-001300

THE HEIM GROUP

OF QUALITY HEIM AND ROUSSELLE® PRESSES & SYSTEMS

July 22, 1997

Stamp One
600 Park Avenue
Cranston RI 02910
Fax: 401-461-1195

Attn: Bob Rivers.

Re: Flywheel Reversal. - *WATCH WHEN REQUEST*

Rouselle Model 3 S/N 20243 *CRANKSHAFT/BACKSHAFT*

Customer: G.E.

Dear Bob:

In 1979, Engineering reversed the flywheel so that the clutch is on the outside, this allows the customer to change the clutch parts without removing the flywheel. To do this the crankshaft needs to be replaced, the existing parts can be used. We will supply all parts and prints showing location of holes for fittings, also prints for assembly.

Cost is \$ ~~1,253.00~~

Delivery, 3 to 4 days

If you have any questions please call me.

Sincerely



Marty Johnson
Parts Manager

*8SS/10SS
8B/10K MOSTLY*

OMPI CLUTCH'S

PRESS MODEL	FLYWHEEL	BACKGEAR
32 TON	KB-0400C	KB-0100C
55 TON	KB-0500C	KB-0200C
70 TON	KB-0500C	KB-0200C
95 TON	KB-1200C	KB-0400C
120 TON	KB-1200C	KB-0400C
160 TON	HT-2150	KB-0500C
200 TON	HT-2150	KB-0600C
250 TON		KB-0800C
300 TON		KB-0800C
35-45 TON P.B.	KB-0100C	
70-100 TON P.B.	KB-0200C	
150-200 TON P.B.	KB-0400C	
150 TON SS	KB-0600C	
200 TON SS	KB-0600C	
250 TON SS	KB-0600C	
300 TON SS	KB-0600C	
400 TON SS	KB-0800C	
300 TON MS	HT-1000	
400 TON MS	HT-1500	
500 TON MS	HT-2150	
600 TON MS	HT-2150	
		BORE SIZE
		CLUTCH
		DIAMETER
		KB-0100C 55MM = 2.1654
		KB-0200C 55MM = 2.1654
		KB-0400C 70MM = 2.756
		KB-0500C 95MM = 3.741
		KB-0600C 95MM = 3.741
		KB-0800C 120MM = 4.7244
		KB-0800USB 95MM = 3.741
		KB-1200C 120MM = 4.7244

REV. 1 05/18/01

DRIVE ASSY WITH OMPI CL. & BR.

CAPACITY	DRG. NO.	CAPACITY	DRG. NO.
32 TON FAC	B-7821	150-200 GAC	D-7576
32 TON GAC	B-7493-1	DOUBLE GEARED	D-7429-1
55-70 T FAC	C-7820	HEIM	D-7577 D-7460
55-70 T GAC	B-7494-1A	HEIM	D-7578
95-120 T FAC	D-7882	HEIM	D-8020
95-120 T GAC	C-7495-1	HEIM	D-7579
160 TON FAC	00-2427-C2	HEIM	D-7869
160 TON GAC	C-7496-1	HEIM	D-8110
250-300 T GAC	C-7953	HEIM	
250-300 T FAC	KB-0100	30-45 T	D-7862
150-200 T FAC	KB-0200	70-100 T	D-7861
150-200 T GAC	KB-0400	150-200 T	D-7860
250-300 T FAC			
250-300 T GAC			

42.00
AN-20 LOCKNUT - USED ON 70/100 P.B. CRANKSHAFTS
LOCKWASHER 7.00
B-1481
A-394-1
AN-15 LOCKNUT - USED ON 30/45 P.B. CRANKSHAFTS
LOCKWASHER 12.00
34.00
A-392 AN-11 LOCKNUT - USED ON 2 1/4" SHAFTS, BACKSHAFTS
LOCKWASHER 7.00
A-393
F0410N14 N-14 LOCKNUT - USED ON S.S. FLYWHEEL SHAFTS
LOCKWASHER 150 - 300 TON B-7258-B
F0420W14
F0410N14
A-394-A
36.00
Course Thread 1-8 nut - USED ON 32 DB CRANKS
7040 SYNC A-7694
28.00
Course Thread 1-8 nut - USED ON 50/20 DB CRANKS
7040 SYNC A-7624
F0420W13
F0410N13
AN-13 LOCKNUT - USED ON FLYWHEEL SHAFTS OMPI
LOCKWASHER 150 - 300 S.S.
F0420W13
F0410N13
AN-19 LOCKNUT
LOCKWASHER 15.00
F0420W18
F0410N18
LOCKNUT 35.00
F0420W19
F0410N19
LOCKWASHER
USED ON H1-020. KB-0800C

REF
Ø4

Ø3.128
Ø3.127

REF
1 1/8

REVISION DESC.
MODEL
DESCRIPTION

150/200 TON SS
COLLAR-PINION SHAFT-2ND RED.

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USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM THE HEIM GROUP

DATE

ALL FINISHES 125
RMS UNLESS
OTHERWISE SPECIFIED

FINISHED DIMENSION TOLERANCE DECIMAL +/- .005,
FRACT. +/- .015, ANGLES +/- 0 DEG 30' UNLESS
SPECIFIED. REMOVE BURRS BREAK SHARP CORNERS

DR: BILL G

051407

OLD:
NEW:

MATERIAL: MAKE FROM X-136 COLLAR
3" I.D. X 4" O.D.

APPR:

The HEIM Group

6360 W. 73rd Street Chicago, Illinois 60638
708-496-7450
fax: 708-496-7428 parts fax 708-496-0708
http://www.theheimgroup.com

TITLE:

COLLAR-PINION SHAFT-2ND RED.

SCALE:

FULL

REV. NO.

0

DWG. NO.

074A00020184

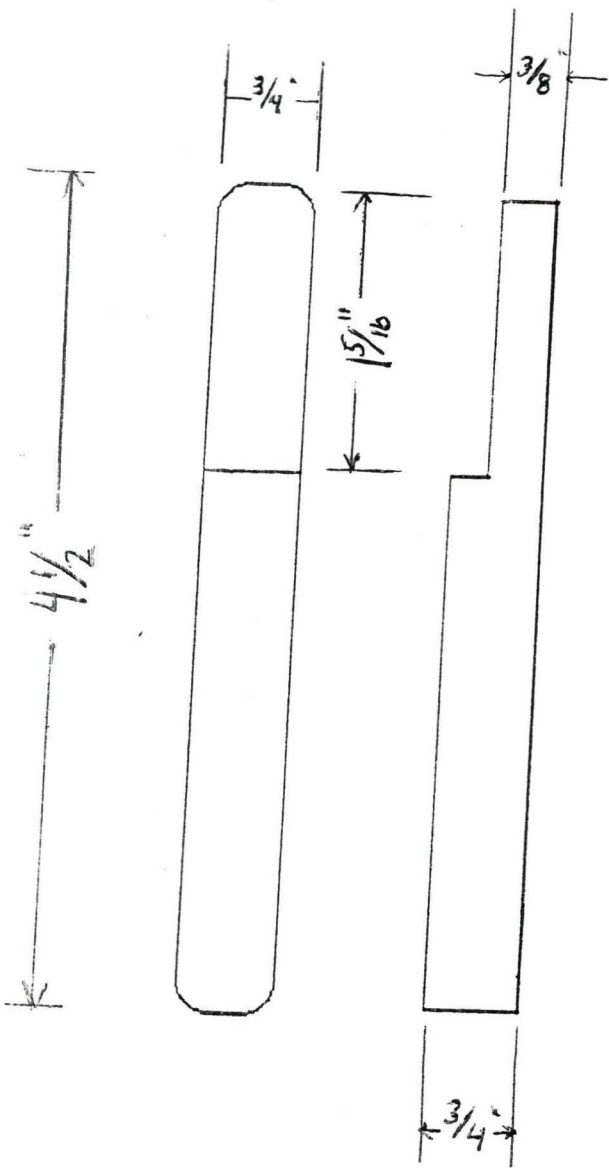
DRIVES FOR S.S. PRESSES

* STD. SPEED

R5B
2-24-8

CAPACITY	SPM	MOTOR	PULLEY & BELT	FLYWHL	1ST RED. PINION	1ST RED. GEAR	2ND RED. PINION & SHFT	BULL GEAR	FLYWHL SHAFT	ECC. SHAFT
150 TON	25	15 HP 1800 RPM 234T	12.4 P.D. SK BUSH 1 1/8 BORE 3/8 KEY 3B-428 BELTS	32 OD 4 W 597 RPM C-7247-150	18T-4.500PD B-7258-E	46T-11.500PD B-7255-46A	10T. 2.667 PD 3 DP B-7253-A	102T. 34.000 PD 3 DP 4 3/4 W D-7204	B-7258-E B-7258-B	4 OD 16 LG B-7209-A
	35				22T-5.500PD A-7254-22A	42T-10.500PD B-7255-42A				
	45				26T-6.500PD A-7254-26A	38T-9.500PD B-7255-38A				
200 TON	22	20 HP 1800 RPM 256T	12.4 P.D. SK BUSH 1 1/8 BORE 3/8 KEY 3B-144 BELTS	37 OD 4 W 597 RPM C-7247-200	18T-4.500PD B-7258-E	46T-11.500PD B-7255-46A	10T. 2.667 PD 3 DP B-7253-A	102T. 34.000 PD 3 DP 4 3/4 W D-7204	B-7258-E B-7258-B	4 OD 16 LG B-7209-A
	30				22T-5.500PD A-7254-22A	42T-10.500PD B-7255-42A				
	40				26T-6.500PD A-7254-26A	38T-9.500PD B-7255-38A				
250 TON	21	25 HP 1800 RPM 284T	12.4 P.D. SK BUSH 1 1/8 BORE 1/2 KEY 3B-144?	37 OD 5 W 597 RPM C-7247-250	32T-8.123PD B-7418-32	94T-23.813PD B-7419-94	12T 5.200 PD 2 1/2 DP 6 3/8 W B-7410	115T 46.000 PD 2 1/2 DP 5W D-9410-A	B-7395	6 OD 17 LG B-9410-1
	30				42T-10.662PD B-7418-42	84T-21.324PD B-7419-84				
	37				48T-12.185PD B-7418-48	78T-19.801PD B-7419-78				
300 TON	19	30 HP 1800 RPM 288T	12.4 P.D. SK BUSH 1 1/8 BORE 1/2 KEY 3B-150?	40 OD 5 W 546 RPM C-7247-300	32T-8.123PD B-7418-32	94T-23.813PD B-7419-94	12T 5.200 PD 2 1/2 DP 6 3/8 W B-7410	115T 46.000 PD 2 1/2 DP 5W D-9410-A	B-7395	6 OD 17 LG B-9410-1
	28				42T-10.662PD B-7418-42	84T-21.324PD B-7419-84				
	34				48T-12.185PD B-7418-48	78T-19.801PD B-7419-78				
400 TON	18	40 HP 1800 RPM 324T	12.4 P.D. SK BUSH 2 1/8 BORE 1/2 KEY 3B-158	43 OD 6 W 514.3 RPM C-7247-400	32T-8.123PD B-7418-32	94T-23.813PD B-7419-94	12T 5.200 PD 2 1/2 DP 6 3/8 W B-7410	115T 46.000 PD 2 1/2 DP 5W D-9410-A	B-7395	6 OD 17 LG B-9410-1
	26				42T-10.662PD B-7418-42	84T-21.324PD B-7419-84				
	32				48T-12.185PD B-7418-48	78T-19.801PD B-7419-78				

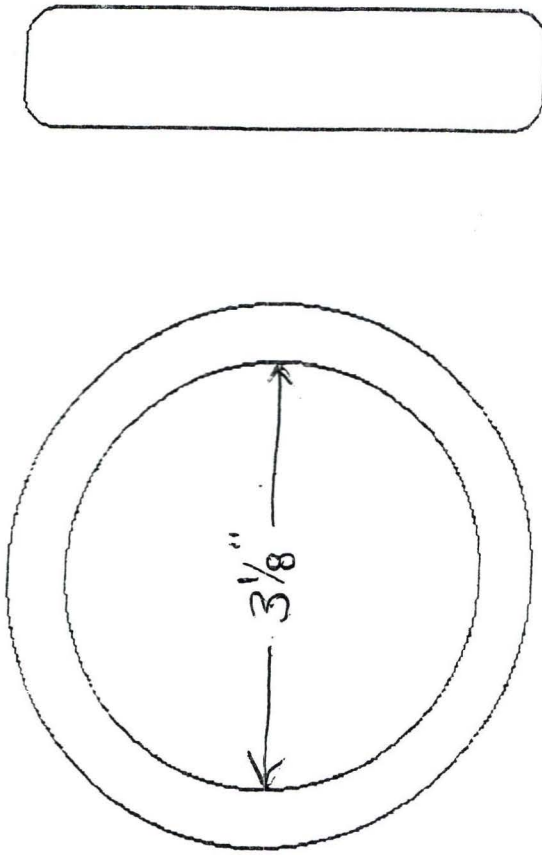
D / L / J / 1
2nd Reduction Shaft +
Additional Parts



New Part # 081A000 20183

USE: 810076602-W5509A3

KEY 3/4" x 3/4" x 4 1/2" lg



1/8"

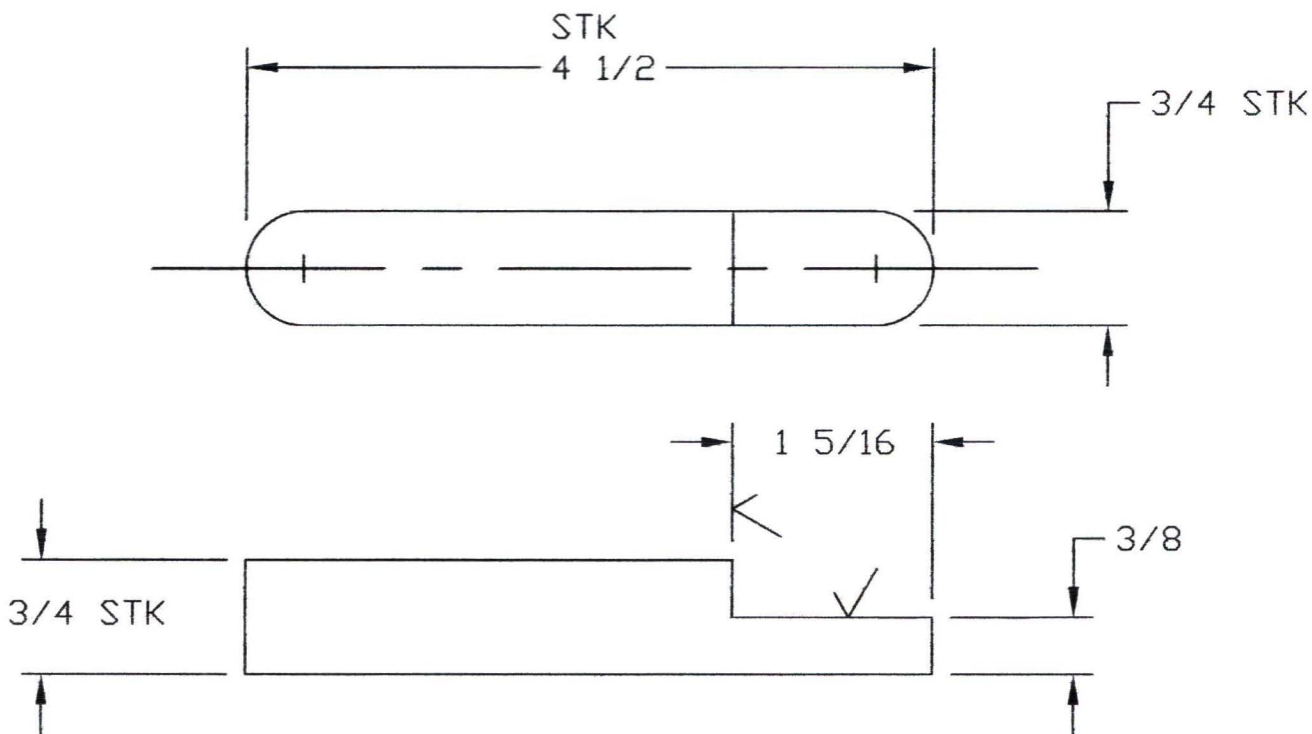


New Part # 074A000 20184

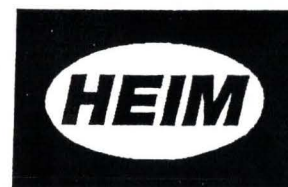
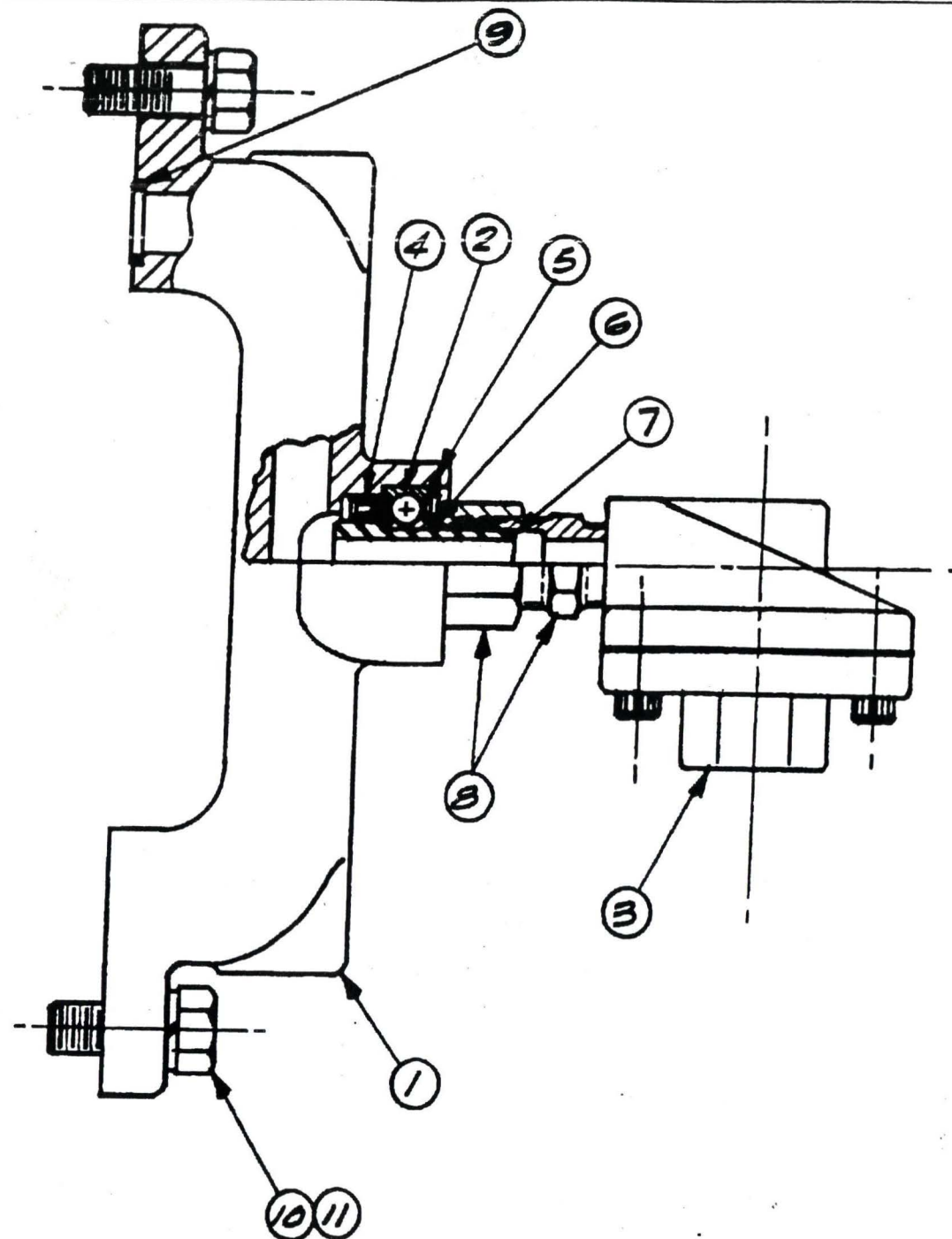
USE: X-136 H7-10

Collar 3" x 4" OD.

New Drawing BEHIND



REVISION DESC. MODEL DESCRIPTION	150/200 TON SS KEY-STEPPED .75 X .75 X 4.5		
THIS DRAWING IS THE PROPERTY OF HEIM L.P. AND MAY NOT BE COPIED, REPRODUCED, OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM THE HEIM GROUP			DATE
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED	FINISHED DIMENSION TOLERANCE DECIMAL +/- .005, FRACT. +/- .015, ANGLES +/- 0 DEG 30' UNLESS SPECIFIED. REMOVE BURRS BREAK SHARP CORNERS	DR: BILL G	051407
OLD:	MATERIAL: MAKE FROM KEY 810076602	CKD:	
NEW:	.75 X .75 X 4.5 DBL FEATHER KEY	APPR:	
The HEIM Group 6360 W. 73rd Street Chicago, Illinois 60638 708-496-7450 fax: 708-496-7428 parts fax 708-496-0708 http://www.theheimgroup.com		TITLE: KEY-STEPPED-.75 X .75 X 4.5	
SCALE: FULL		REV. NO. 0	DWG. NO. 081A00020183



6360 West 73rd Street
Chicago, IL 60638
708 / 496-7450
708 / 496-7428 fax

AIR SWIVEL BRIDGE ASSEMBLY

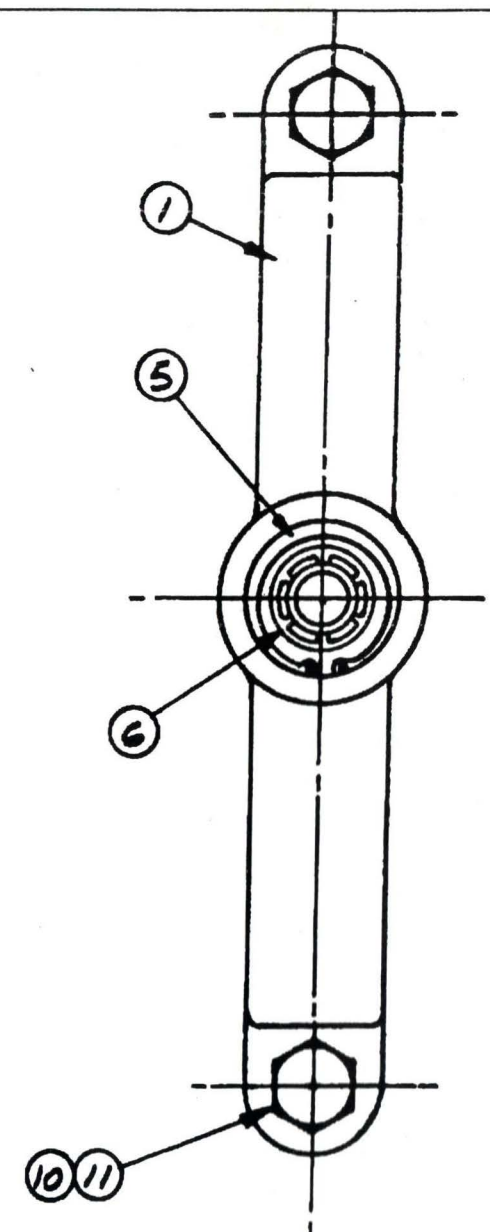
30 thru 45 ton Press Brakes

Part # C - 390-A

70 thru 400 ton Press Brakes

Part # C - 390-1

Drawn by C.F.L. 7-8-71

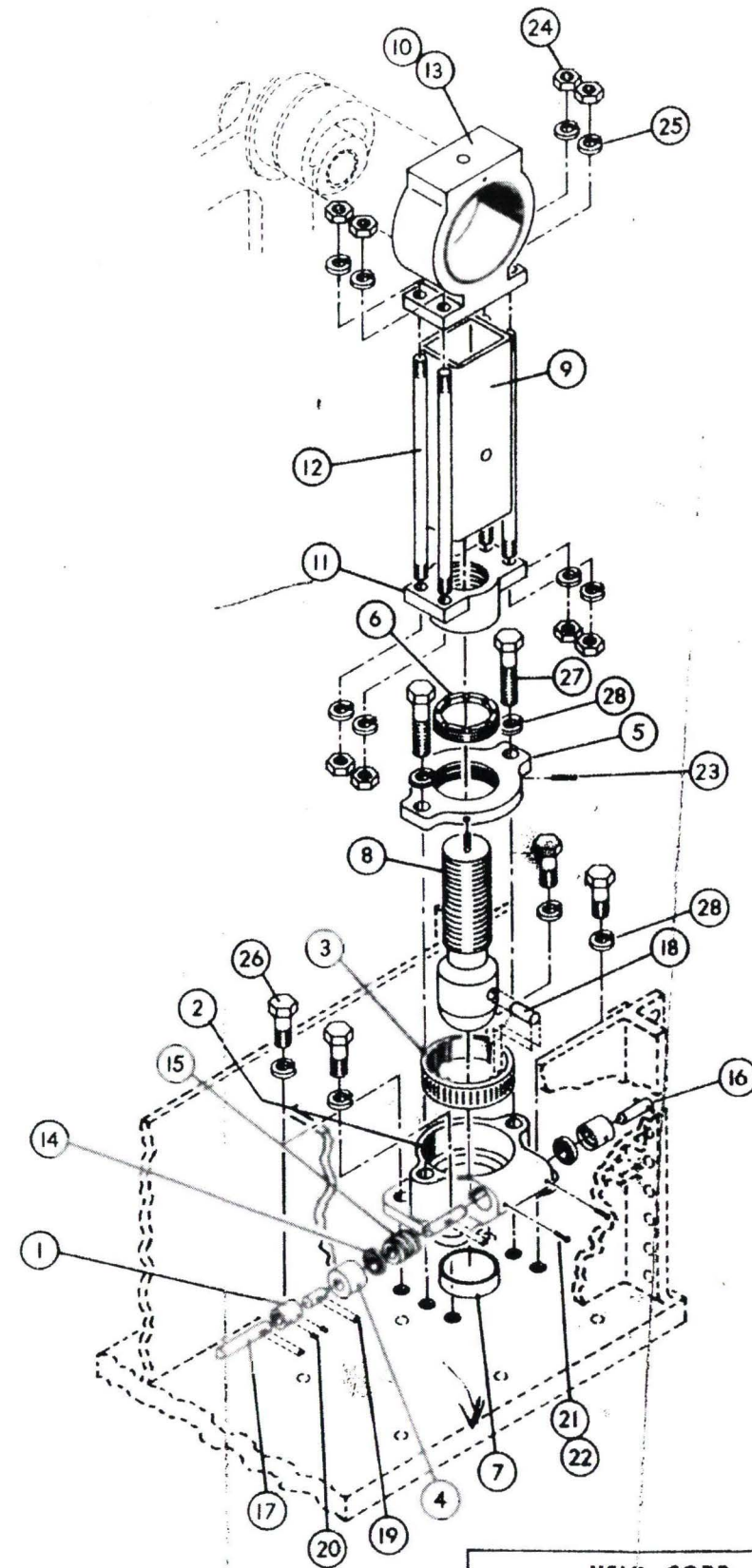


# Req'd	Used On		Description
	30 / 40 Ton	70 / 400 Ton	
1	C-390-A	C-390-1	Air Swivel Bridge
1	740051702		Ball Bearing
1	A-396		Quick Exhaust Valve
1	910051602		'U' Cup Seal
1	890051802		Internal Snap Ring #5100-112
1	890051902		External Retaining Ring #5100-50
1	6800515B2		Spindle
1	A-236		Parker Hannifin #68WT-8-6 Fitting
2	A-173	A-174 A-173-A	'O' Ring
-	2	0	3/8" - 16 x 1" H.H.C.S. 900107602
-	0	2	1/2" - 13 X 1" H.H.C.S. 900234002
-	2	0	3/8" Lockwasher 980106602
-	0	2	1/2" Lockwasher 980121402

Part # EATON-B3 - Roto Seal

WAVE SPECIAL SWIVEL See DWG IN FILE H-2700

Attn: George From: Rodger Hays



HEIM CORP.
P. O. BOX R
FRANKFORT, ILL. 60423
DRAWN BY: FC DATE: 4-1-72 CHECKED BY: DATE:
DESCRIPTION: CONN. ROD & RAM ELEVATING ASS
USED ON: 125 & 175 TON PART NO: D-71
STRAIGHT SIDE PUNCH PRESS

BILL OF MATERIAL

ITEM NO.	NO. REQ'D	PART NUMBER					DESCRIPTION
		S-125 42-60	S-125 42-78	S-125 42-102	S-175 42-78	S-175 42-102	
1	2						RIGID COUPLING
2	2						GEAR HOUSING, ADJ. SCREW
3	2						WORM WHEEL
4	4						BEARING ADAPTER
5	2						CAP, GEAR HOUSING
6	2						SOCKET, UPPER
7	2						SOCKET, LOWER
8	2						ADJUSTING SCREW
9	2						TUBE, CONN. ROD
10	2						CONN. ROD ASSY. 2", 3, 4" STROKE
		CONSISTS OF:					
	1						CONNECTING ROD
	1						BRONZE BEARING
11	2						NUT, CONNECTING ROD
12	8						STUD, CONNECTING ROD
	2						CONN. ROD ASSY. 6, 7, 8" STROKE
		CONSISTS OF:					
	1						CONNECTING ROD
	1						BRONZE BEARING
14	4						BALL BEARING
15	2						WORM
16	2						WORM SHAFT
17	1	B-7246	B-7246-A	B-7246-B	B-7246-A	B-7246-B	ELEVATING SHAFT
18	2						DRIVE PIN, ADJ. SCREW
19	6						#9 WOODRUFF KEY
20	4						5/16"-18x5/16" HOL. HD. SET SCREW
21	4						1/2"-13x1" HEX. HD. CAP SCREW
22	4						1/2" MED. LOCKWASHERS
23	4						3/8"-16x1" HOL. HD. SET SCREW
24	8						1"-8 HEX. NUT
25	8						1" MED. LOCKWASHER
26	8						1 1/2"-7x3" HEX. HD. MACH. BOLT
27	4						1 1/2"-7x8" HEX. HD. MACH. BOLT
28	12						1 1/2" MED. LOCKWASHERS

HEIM CLUTCH SPLINES

32 TON GAC W/ D-7307 2.164 B-7325-1

32 TON GAC W/B-7541 2.163 B-7325-1

55/70 TON GAC W/ D-7307 2.164 B-7325-1

55/70 TON GAC W/B-7542 2.754 B-7325-2

95/120 TON GAC W/D-7307 2.755 B-7325-2

95/120 TON GAC W/B-7543 2.754 B-7325-2

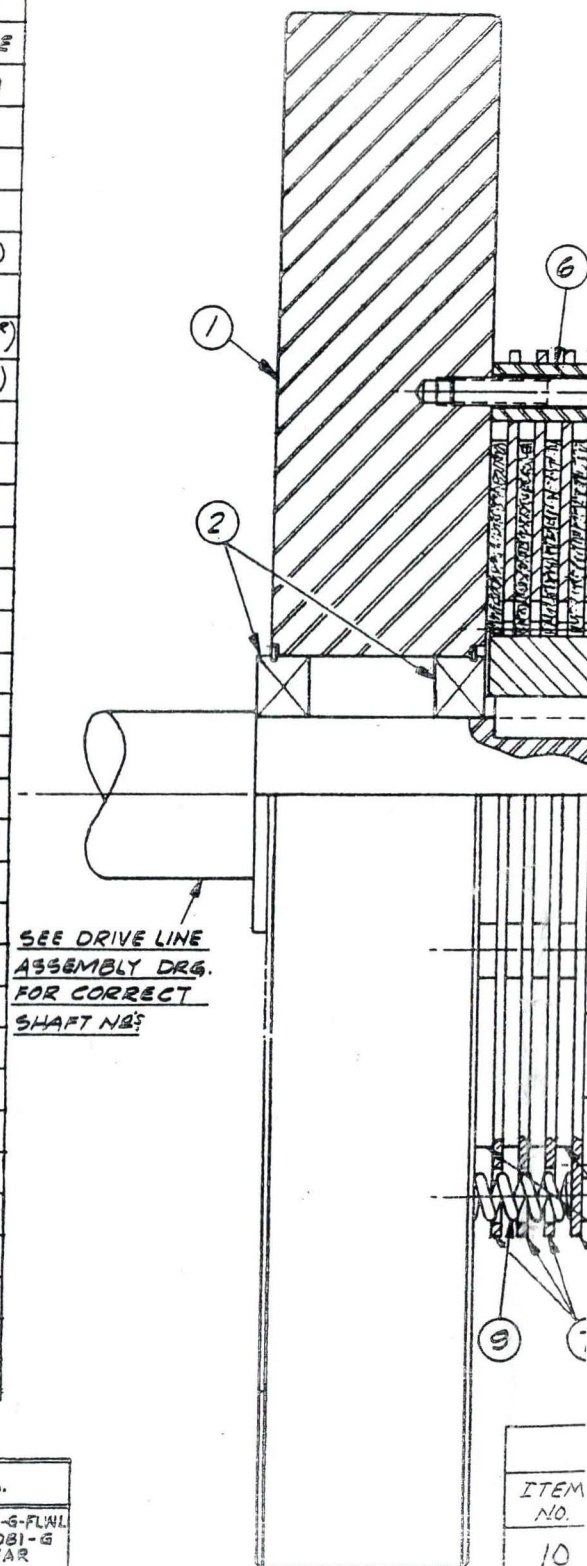
32TON FAC W/C-7545 2.755 B-7325-2

55/70 TON FAC W/C-7546 3.739 B-7325-3

160/200 TON GAC W/C-7544 B-7325-3

400 TON S.S. B-7325-3

ITEM NO	NO	PART NO	DESCRIPTION
		C-7247	FLYWHEEL, 150 TON, 5'-6"-7" STROKE
		C-7248	FLYWHEEL, 200 TON, 2'-3'-4" STROKE
		C-7253	FLYWHEEL, 200 TON, 5'-6"-7" STROKE
2	2		BALL BEARINGS. (SEE CHART)
3	1	B-7322	CLUTCH PLATE
4	1	B-7323	CLUTCH PRESSURE PLATE
5	1	B-1522	PISTON
6	8	A-7321-3	SPACER (SEE CHART FOR LENGTH)
7		B-7324	CLUTCH DISC (SEE CHART FOR QUANTITY)
8		680925762	FRICTION DISC (SEE CHART FOR QUANTITY)
9	8	A-7327-3	SPRING (SEE CHART FOR LENGTH)
10	1	B-7325-3	HUB GEAR (SEE CHART)
11	1	C-390-1	BRIDGE, AIR SWIVEL
12	1	680051582	SPINDLE
13	1	910051102	'U' CUP SEAL
14	1	740051702	BALL BEARING
15	1	A-236	BRASS FITTING
16	1	B-7326	8 HOLE CLUTCH PLATE
17	2	-	1/2"-13 x 1/4" H.H.C.S.
18	8	-	ASS'Y BOLT 1/2-13 S.H.C.S. (SEE CHART FOR LENGTH)
19	10	-	1/2" MED. L'WASHERS
20	1	890051902	EXTERNAL RETAINER RING 5105-50
21	2	-	3/4"-10 x 3/4" HOL. HD. SET SCREW
22	1	-	KEY, R.O.E (SEE CHART)
23	2	A-173	'O' RING SEAL
24	1	890051802	SNAP RING.
25	1		CLUTCH HUB NUT (SEE CHART)
26	1	A-396	QUICK EXHAUST



ITEM	DESCRIPT.	USED ON	PART NO.
25	CLUTCH HUB NUT	70-200T-PB 30-70T-031-G BACK GEAR	30T-031-G-FLWL 95-120T-031-G BACK GEAR 150-300T-SS A-394 A-394-A A-394-B
2	BALL BRNG	30-100T-PB 30-70T-031-G BACK GEAR	50-70T-031-G-FLWL 160-200T-031-G BACK GEAR 150-300T-SS A-1456 219322 214322 A-2544-A

A-7328

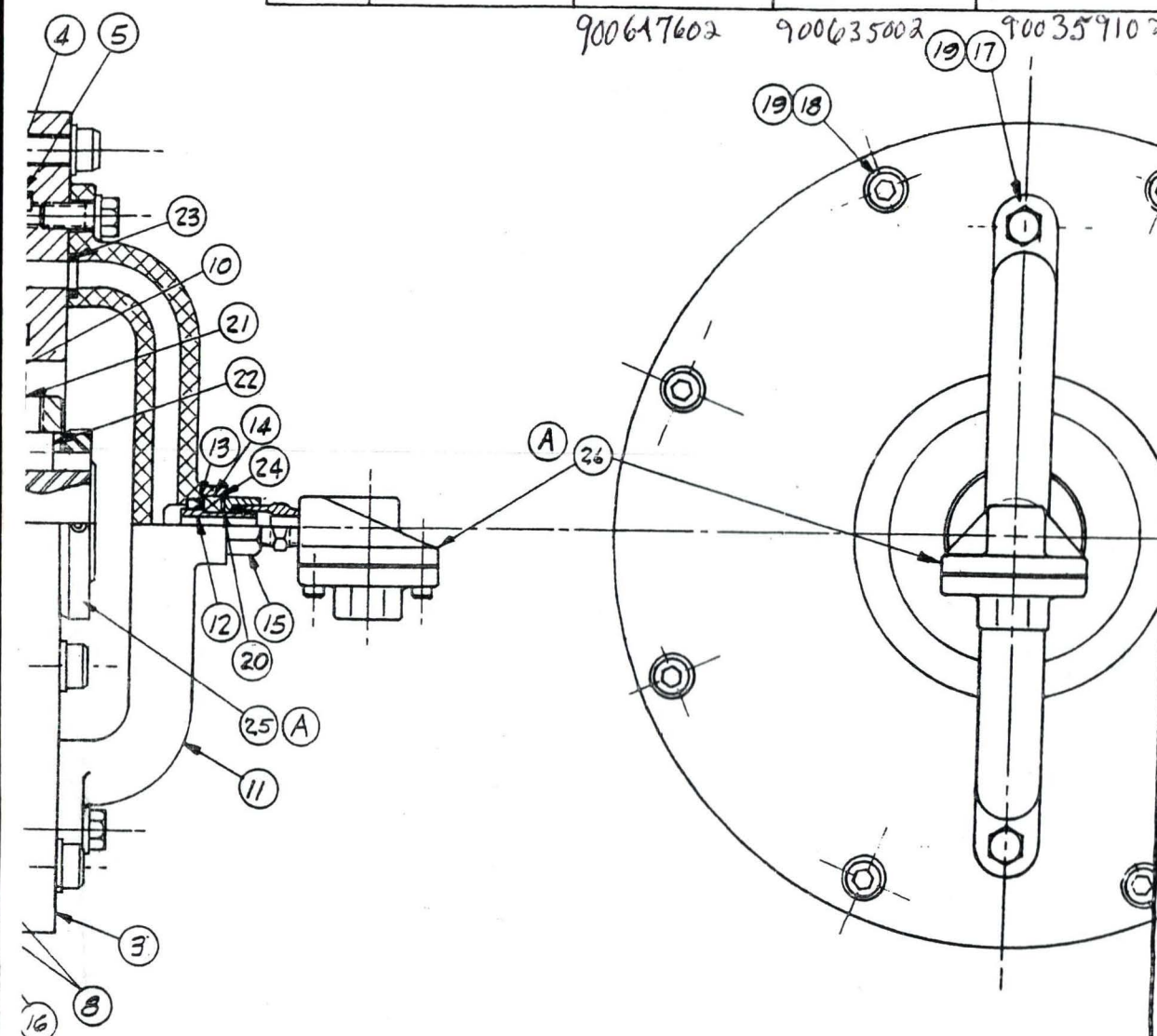
C-7320

ITEM NO	DESCRIPTION	70T-031-GAP-FLWL 200T-031-GAP BACK GEAR	ALL STRAIGHT SIDE PRESSES	ALL OTHER PRESSES EXCEPT 30-45T PB
6	SPACER	2 1/2" LONG A-7321-3	2" LONG A-7321-2	1 1/2" LONG A-7321-1
7	CLUTCH DISC	4 REQ'D	3 REQ'D	2 REQ'D
8	FRICTION DISC	5 REQ'D	4 REQ'D	3 REQ'D
9	SPRING	2 1/2" LONG A-7327-3	2" LONG A-7327-2	1 1/2" LONG A-7327-1
18	1/2" ASS'Y BOLT	5" LONG	4 1/2" LONG	4" LONG

900647602

900635002

900359102



DESCRIPT	50-70T OBI-GAP (BACK GEAR)	30T OBI-GAP (FLWL) 95-120T OBI-GAP (B.G.) 150-300T S.S.	50-70T OBI-GAP (FLWL) 160-200T OBI-GAP (B.G.); 400T S.S.
HUB GEAR	2 5/32" DIA. BORE B-7325-1	2 3/4" DIA. BORE B-7325-2	3 3/4" DIA. BORE B-7325-3
HUB KEY	1/2" SQ X 3" LG	3/4" SQ X 3" LG #3-21	1" X 3/4" X 3" LG

A

ADDED

BY R.W.W

7-1-80

HEIM CORP.
P. O. BOX R
FRANKFORT, ILL 60423

DRAWN BY C.F.L. DATE 3-12-74 CHECKED BY BH DATE 3-18-74 SCALE 1/2"=1"

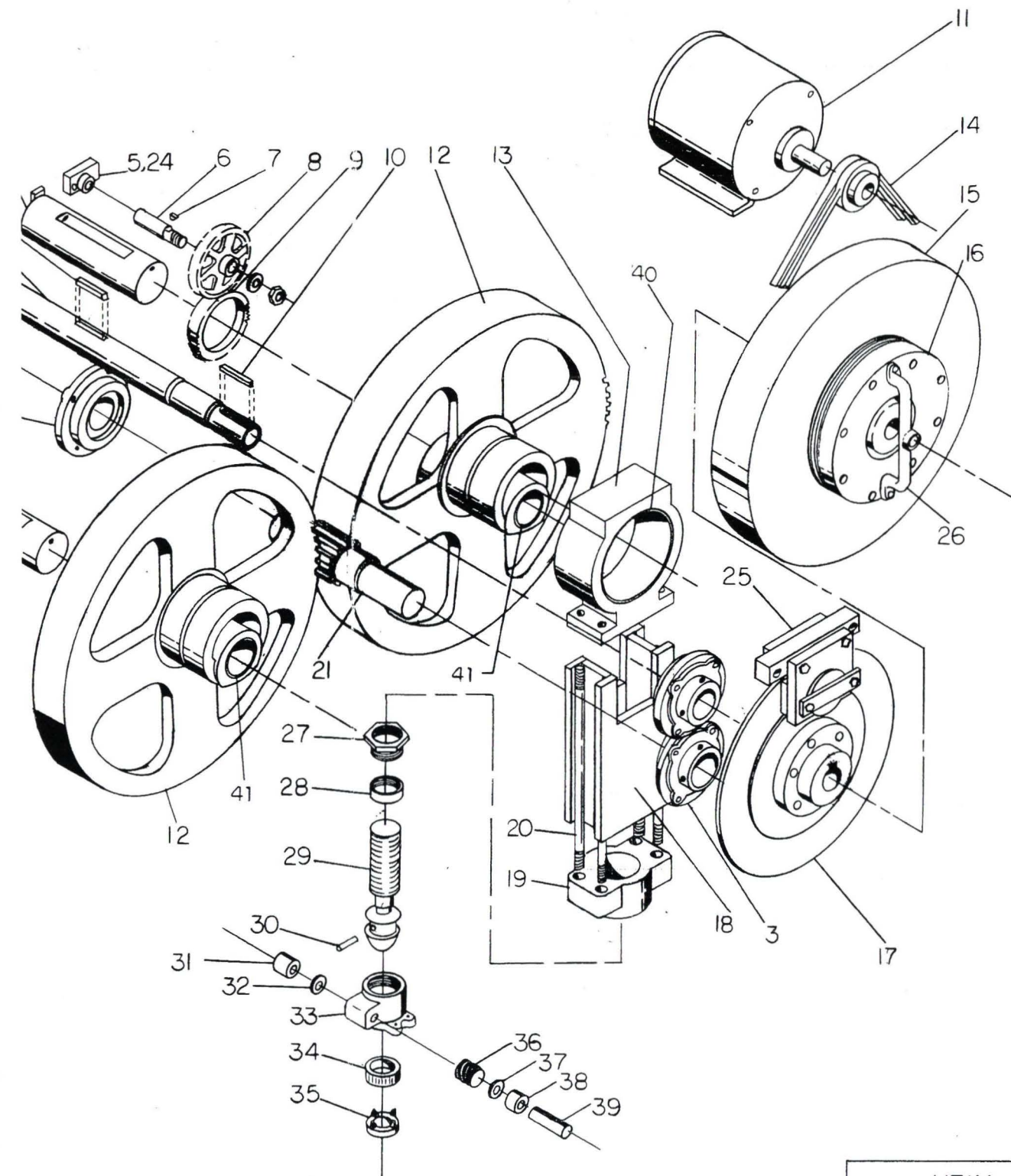
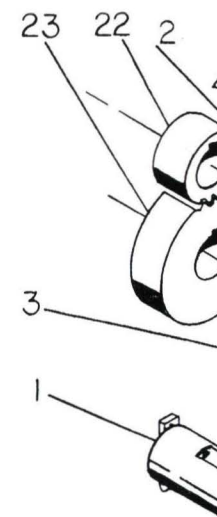
CLUTCH ASSEMBLY

USED ON PB 70-200 TON
ALL OBI GAP S.S.

REF D-7320

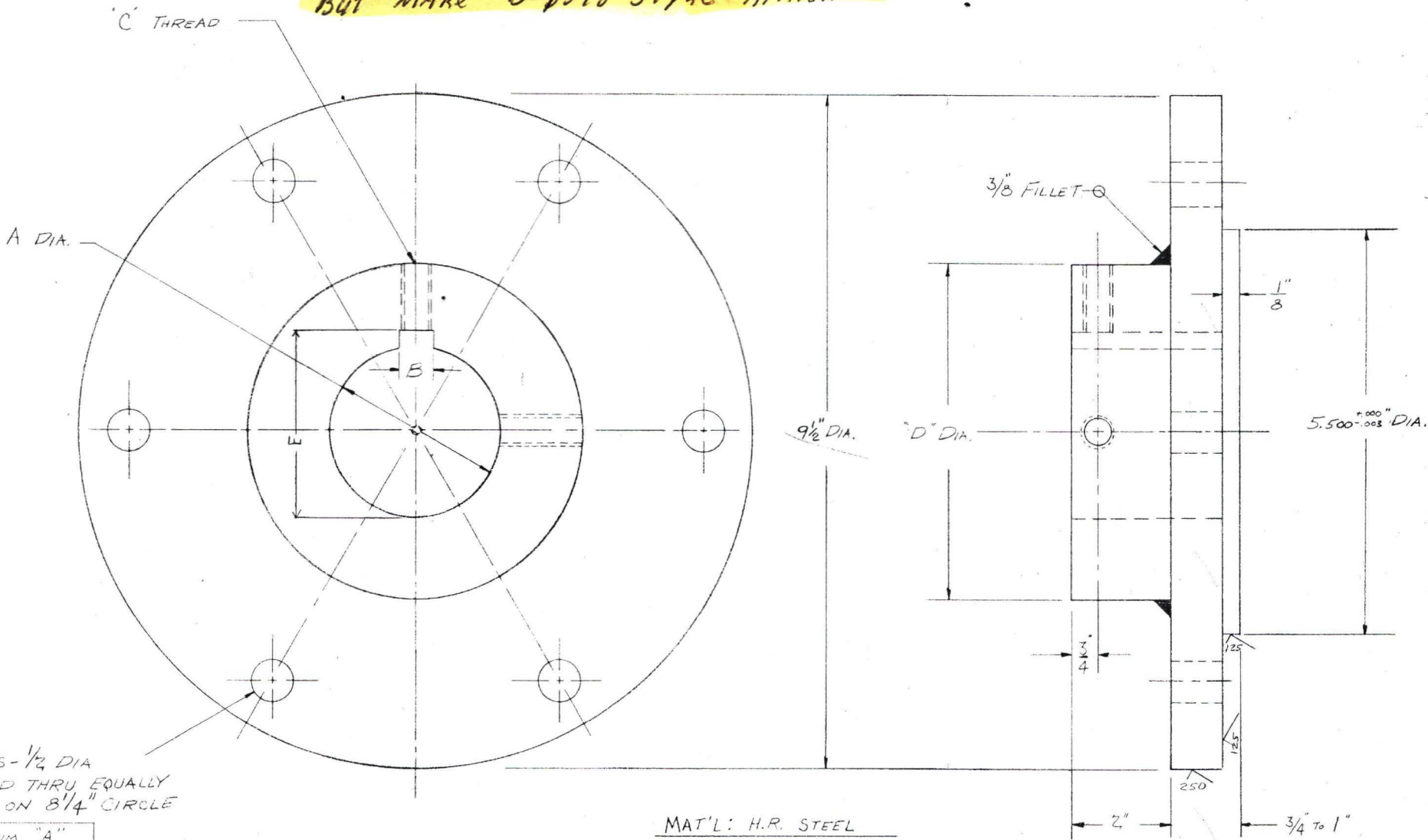
BILL OF MATERIALS STRAIGHT SIDE DOUBLE REDUCTION

ITEM NO.	DESCRIPTION	400 TON				40	CONN. ROD BEARING	6 STK	9000-B2	2	9000-B
		48"X102"	QTY	48"X120"	QTY			8 STK	9000-B4	2	9000-B
1	SHAFT, BULL GEAR	B-9010	2	B-9010	2			10 STK	9000-B5	2	9000-B
2	SHAFT, FLYWHEEL	D-9412-26	1	D-9412-26	1	41	BULL GEAR BEARING	12 STK	9000-B6	2	9000-B
3	BEARING, FLANGED	16-78	4	16-78	4						
4	KEY	5-81D	1	5-81D	1						
5	BRACKET, TIMING GEAR	A-7215	1	A-7215	1						
6	SHAFT, TIMING GEAR	A-7214	1	A-7214	1						
7	KEY, WOODRUFF	NO. 9	2	NO. 9	2						
8	GEAR	9000-A9	1	9000-A9	1						
9	GEAR	9000-A8	1	9000-A8	1						
10	KEY	5-81D	1	5-81D	1						
11	MOTOR	20-60	1	20-60	1						
12	BULL GEAR W/ECCENTRIC ASSY.	6" STROKE	D-9410-1	2	D-9410-1	2					
		8" "	D-9410-2	2	D-9410-2	2					
		10" "	D-9410-3	2	D-9410-3	2					
		12" "	D-9410-4	2	D-9410-4	2					
13	CONNECTING ROD ASSY.	6" STROKE	D-9409-1	2	D-9409-1	2					
		8" "	D-9409-2	2	D-9409-2	2					
		10" "	D-9409-3	2	D-9409-3	2					
		12" "	D-9409-4	2	D-9409-4	2					
14	V. BELTS	A-7290	3	A-7290	3						
15	FLYWHEEL	D-9420-38	1	D-9420-38	1						
16	CLUTCH ASSY	17-11	1	17-11	1						
17	BRAKE DISK & HUB ASSY	C-7351-1C	1	C-7351-1C	1						
18	TUBE, CONN. ROD ASSY	D-9415	2	D-9415	2						
19	NUT CONN ROD	D-9416	2	D-9416	2						
20	TIE ROD	D-9417	4	D-9417	4						
21	SHAFT 2 ND REDUCTION	D-9411	1	D-9411	1						
22	PINION 1 ST REDUCTION	D-9413	1	D-9413	1						
23	GEAR 1 ST REDUCTION	D-9414	1	D-9414	1						
24	BEARING TIMING GEAR	A-7241	1	A-7241	1						
25	BRAKE CALIPER ASSY	C-7350	2	C-7350	2						
26	AIR SWIVEL BRIDGE ASSY	C-390-1	1	C-390-1	1						
27	NUT ADJ SCREW	10034A	2	10034A	2						
28	SOCKET UPPER	100334	2	100334	2						
29	ADJUSTING SCREW	10019	2	10019	2						
30	DRIVE PIN	16-19D	2	16-19D	2						
31	BEARING ADAPTER	A-7207	4	A-7207	4						
32	BALL BEARING	A-7243	4	A-7243	4						
33	KNUCKLE BOX ASSY	10036	2	10036	2						
34	WORM WHEEL	10033	2	10033	2						
35	SOCKET LOWER	10032A	2	10032A	2						
36	WORM	A-1448	2	A-1448	2						
37	BALL BEARING	A-7243	4	A-7243	4						
38	BEARING ADAPTER	A-7207	4	A-7207	4						
39	WORM SHAFT	A-7245	2	A-7245	2						



HEIM CORP
P.O. BOX R
FRANKFORT IL 60423
R.W.W. 4-30-81
DRIVE ASSY - DOUBLE REDUCT.
400 TON S.S. D-7130-

REF ONLY TO MAKE 4" BORE WHICH IS NOT ON D-7348
BUT MAKE D-7348 STYLE ATTACHMENTS



MAT'L: H.R. STEEL

OBSOLETE AS OF 8-17-84
REFER TO DRWG. D-7348

B	1/2" R	TAR	ADDED "E" DIMENSION	00052
A	5/16" R	RSB	KEYWAY WAS .750 ^{ISS} _{1.002}	00047

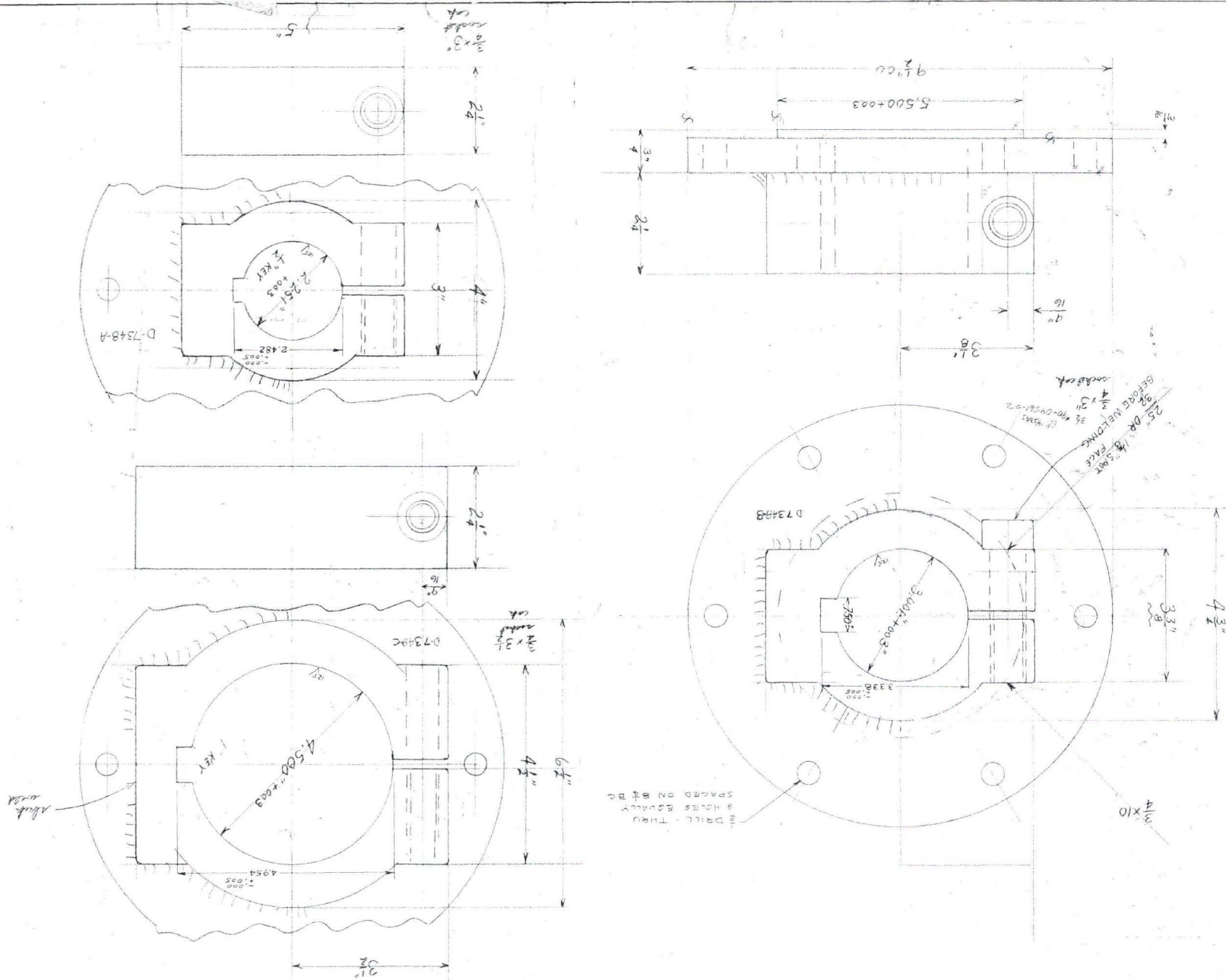
HEIM CORP.
P. O. BOX R
FRANKFORT, ILL. 60423.

DRAWN BY	DATE	CHECKED BY	DATE	SCALE
R/W/W	6-29-80	JJC	6-30-80	FULL
DESCRIPTION				
BRAKE HUB				
USED ON			PART NO.	
REFER TO CHART			C: 7348	

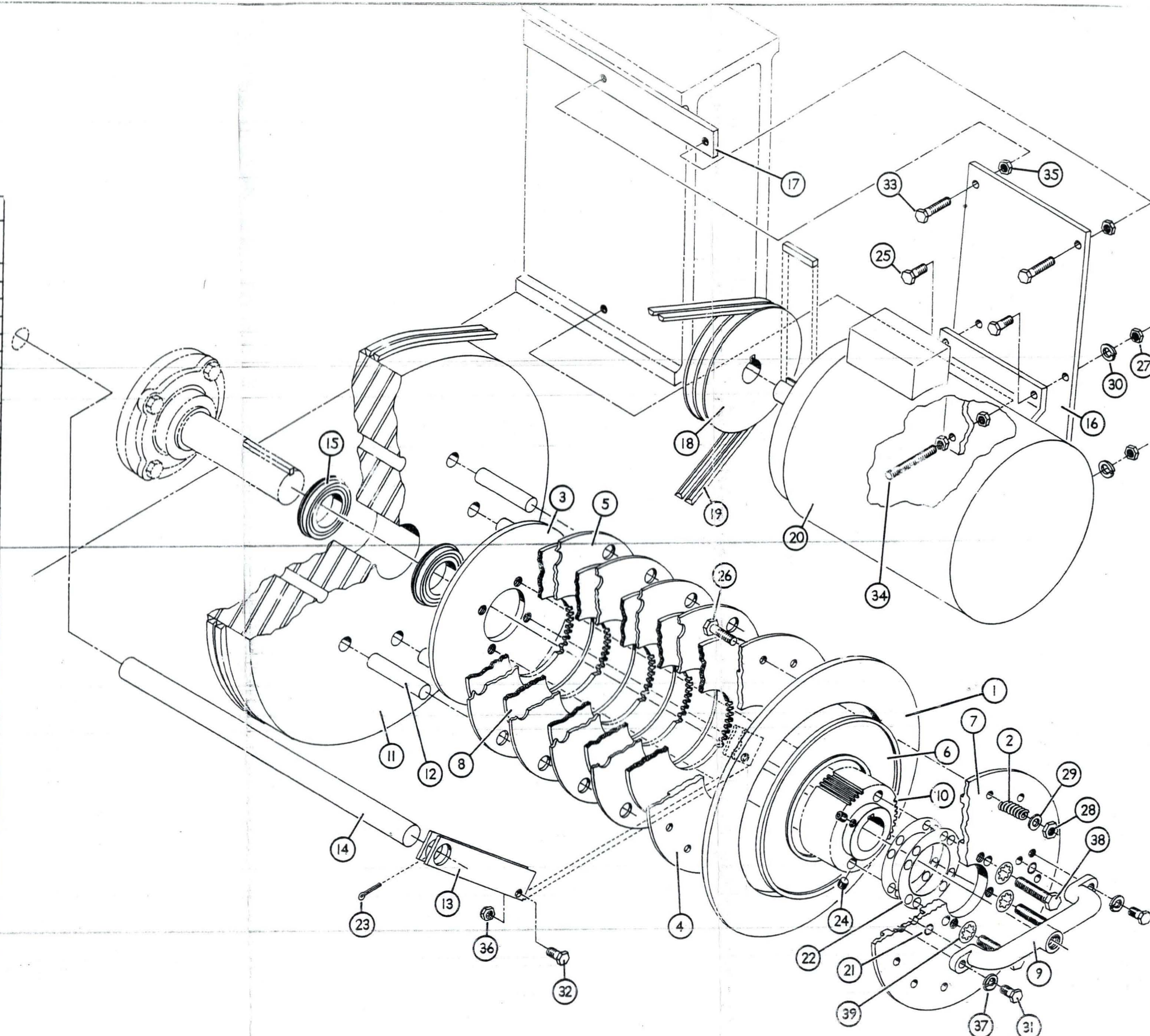
NOTE

CHUCK HUB & MACHINE
FLANGE AS SHOWN

HEIM CORP. P. O. BOX R FRANKFORT, ILL. 60423	DATE 11-11-83	CHECKED BY M.H.	DATE 11-11-83	DESIGNED BY M.H.	DATE 11-11-83	NO. OF 1	REV. 0	BY M.H.	DATE 11-11-83	DESCRIPTION BRAKE HUB	PART NO. D-7348
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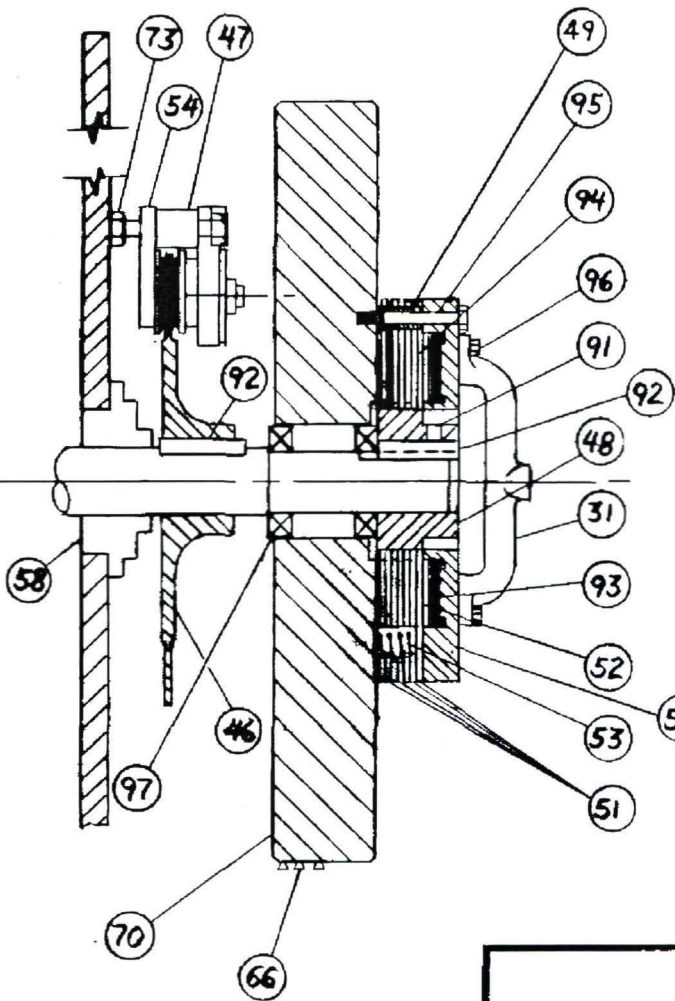


BILL OF MATERIAL						
ITEM NO.	NO.	PART NUMBER				DESCRIPTION
		125 TON 23.4" STROKE	125 TON 6.7.8" STROKE	175 TON 23.4" STROKE	175 TON 6.7.8" STROKE	
1	1	B-351-A				BRAKE DISC
2	12	A-387				CLUTCH SPRING
3	1	B-1464				BACKING DISC
4	1	B-1488-B				CLUTCH PLATE, LARGE
5	4	B-1521-A B-7326				CLUTCH PLATE, SMALL
6	1	B-1522				PISTON
7	1	C-1523-A				PISTON PLATE
8	5	B-1524 6809252B2				FRICITION DISC
9	1	B-1525 C-390-1				AIR SWIVEL BRIDGE
10	1	B-2558-4				CLUTCH HUB
11	1	C-7248	C-7247	C-7248	C-7259	FLYWHEEL
12	8	A-7261				DRIVE P. FLYWHEEL
13	2	A-7262				BRAKE ARM
	2		A-7263			
14	1	A-7264				BRAKE ROD
15	2	A-7265 A-7328				BALL BEARING, FLYWHEEL
16	1	B-7266		B-7267		MOTOR PLATE
17	1	A-7268				MOTOR PLATE BAN
18	1	3AB86	3AB74	3AB124	3AB94	MOTOR PULLEY
19	3					V-BELTS (MATCHED)
20	1	10 HP	10 HP	15 HP	15 HP	MOTOR, 1600 RPM
21	2	A-174				"O" RING
22	AS REQ'D	A-1564				SPACER
23	→	1	1	1	1	1/8" D. x 2 3/4" LG. COTTER PIN
24	→	2	2	2	2	3/8"-16x1 1/2" HD. HEX. CUP POINT SET SCREW
25	→	4	4	4	4	3/8"-16x1 1/2" HD. CAP SCREW
26	→	2	12	12	12	3/8"-16x2 1/2" HD. CAP SCREW
27	→	4	4	4	4	3/8"-16 HEX. NUT
28	→	12	12	12	12	3/8"-16 ESNA LOCKNUT F019616
29	→	12	12	12	12	3/8" MED. PLAIN WASHER
30	→	4	4	4	4	3/8" MED. LOCKWASHER
31	→	2	2	2	2	1/2"-13x1 1/2" HD. CAP SCREW
32	→	1	1	1	1	1/2"-13x1 1/2" HD. CAP SCREW
33	→	2	2	2	2	1/2"-13x2 1/2" HD. CAP SCREW
34	→	1	1	1	1	1/2"-13 THREADED ROD, 6" LONG
35	→	5	5	5	5	1/2"-13 HEX. NUT
36	→	1	1	1	1	1/2"-13 ESNA LOCKNUT
37	→	2	2	2	2	1/2" MED. LOCKWASHERS
38	→	4	4	4	4	3/4"-10x4" HD. CAP SCREW
39	→	4	4	4	4	3/4" INTERNAL LOCKWASHER



OLD
5/1/72

HEIM CORP.				
P. O. BOX R				
FRANKFORT, ILL. 60423				
DRAWN BY	DATE	CHECKED BY	DATE	SCALE
FC	4-1-72			
DESCRIPTION				
MOTOR DRIVE & CLUTCH ASSEMBLY				
USED ON				
125 & 175 TON				
STRAIGHT SIDE PUNCH PRESS				
PART NO. 6-7150				



Item #	Quantity	Description	Part #	
1	31	1	Air Swivel Bridge	C-390
2	46	1	Brake Disc	B-7351
3	47	1	Brake Spacer	A-7357
4	48	1	Clutch Hub	B-7325
5	49	8	Spacer	A-7321-2
6	50	1	Clutch Plate	B-7322
7	51	3	Clutch Disc. (16 H.)	B-7324
	51	1	Clutch Disc. (8 H.)	B-7326
8	52	1	Pressure Plate	B-7323
9	53	8	Spring	A-7321-2
10	54	1	Lining Support (Inboard)	A-7354
11	58	1	Piloted Flange Bearing	B-2542
12	66	3	V-Belts	B-120
13	70	1	Flywheel 34 x 4½	C-7259
14	73	2	Nut 3/4 x 10	
15	91	2	Set Screw 3/4 x 10 x 1"	
16	92	2	Key 3/4 x 3/4 x 3½	810320602
17	93	1	Piston	B-1522
18	94	4	Friction Disc	6809252 B2
19	95	8	Bolt ½-13x4½	
20	96	2	Bolt ½-13x1	
21	97	2	Ball Bearing MRC214SZZ	A-7328

HEIM CORP.

P. O. BOX R

FRANKFORT, ILL. 60423

DRAWN BY	DATE	CHECKED BY	DATE	SCALE
----------	------	------------	------	-------

DESCRIPTION
AIR CLUTCH-FLYWHEEL & DISC BRAKE ASS'Y.

USED ON
S.S. & G.F.

PART NO.
A-6008

REV	DATE	BY	DESCRIPTION
1	2-11-74	BH	AIR CLUTCH-FLYWHEEL & DISC BRAKE ASS'Y.

HEIM CORP. P.O. BOX R, FRANKFORT, ILL. 60423 (815) 469-2335

THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.

FINISHED DIMENSIONS ARE TO BE MAINTAINED THROUGHOUT THE ENTIRE LIFE OF THE PART.

ANGLES: 20° 30'

FRACTION: 1/16

DESCRIPTION: ROTARY CAM L.S. DRIVE 1/2"

BY: RSB

DATE: 2-11-74

DRW: TMR

DATE: 2-11-74

SCALE: 1/2"

ECO NO.:

DESCRIPTION:

REV: 1

DATE: 2-11-74

BY: RSB

DESCRIPTION: ROTARY CAM L.S. DRIVE 1/2"

BY: RSB

DATE: 2-11-74

DRW: TMR

DATE: 2-11-74

SCALE: 1/2"

ECO NO.:

DESCRIPTION:

REV: 1

DATE: 2-11-74

BY: RSB

DESCRIPTION: ROTARY CAM L.S. DRIVE 1/2"

BY: RSB

DATE: 2-11-74

DRW: TMR

DATE: 2-11-74

SCALE: 1/2"

ECO NO.:

DESCRIPTION:

REV: 1

DATE: 2-11-74

BY: RSB

DESCRIPTION: ROTARY CAM L.S. DRIVE 1/2"

BY: RSB

DATE: 2-11-74

DRW: TMR

DATE: 2-11-74

SCALE: 1/2"

ECO NO.:

DESCRIPTION:

REV: 1

DATE: 2-11-74

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DATE: 2-11-74

DRW: TMR

DATE: 2-11-74

SCALE: 1/2"

ECO NO.:

DESCRIPTION:

REV: 1

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BY: RSB

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SCALE: 1/2"

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DATE: 2-11-74

DRW: TMR

DATE: 2-11-74

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DESCRIPTION: ROTARY CAM L.S. DRIVE 1/2"

BY: RSB

DATE: 2-11-74

DRW: TMR

DATE: 2-11-74

SCALE: 1/2"

ECO NO.:

DESCRIPTION:

REV: 1

DATE: 2-11-74

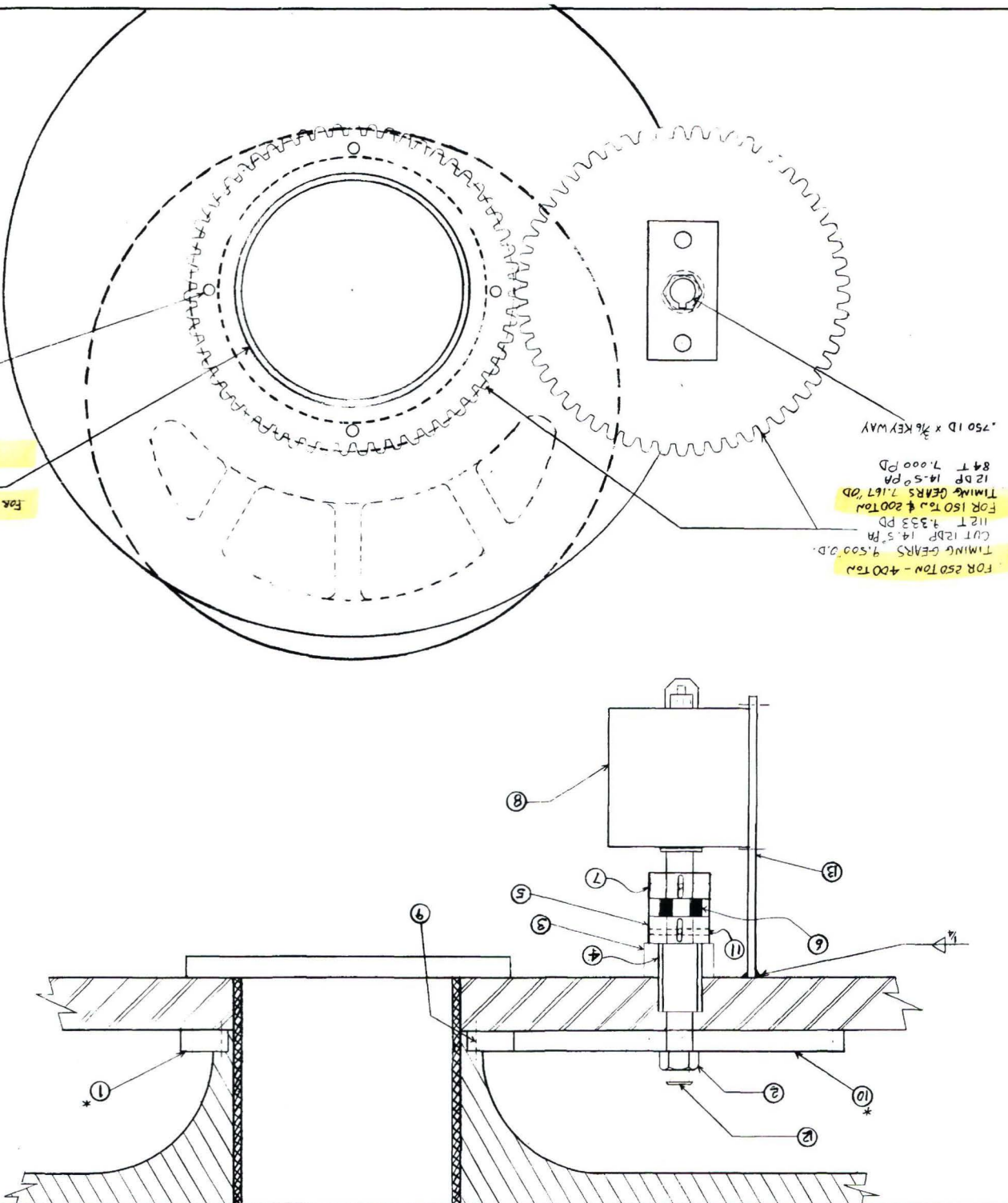
BY: RSB

DESCRIPTION: ROTARY CAM L.S. DRIVE 1/2"

BY: RSB

DATE: 2-11-74

DRW: TMR

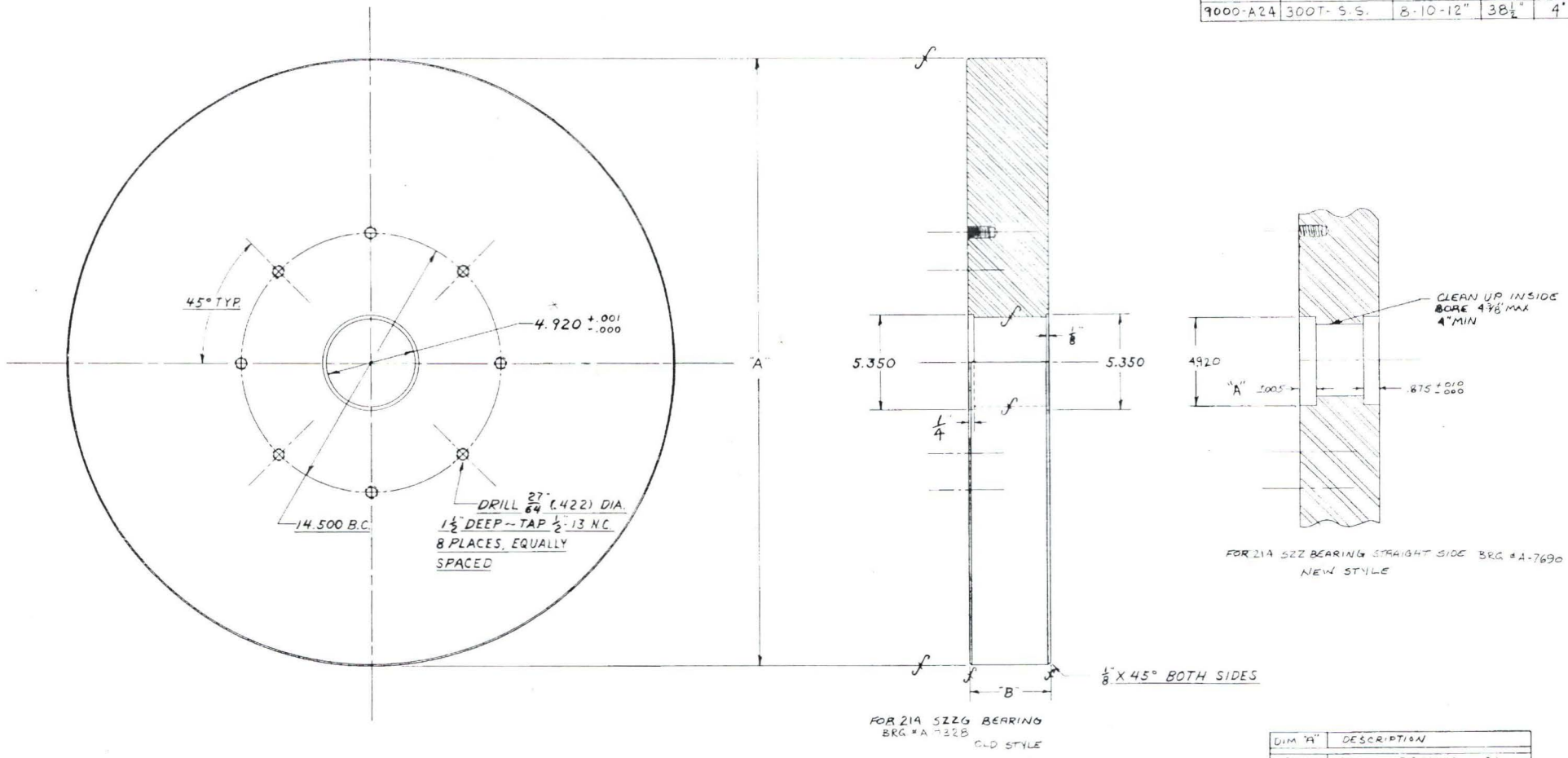


ITEM	PART NO.	DESCRIPTION
1	D-9000-A8	TIMING GEAR 112T
2	B-7212	TIMING GEAR 84T
3	A-7215	BEARING, TIMING GEAR SET
4	A-7241	BEARING, CAM GEAR SHAFT
5	50040002	JAW COUPLING HALF, 3/4 BORE
6	50040004	JAW COUPLING INSERT
7	50040003	JAW COUPLING HALF, 20--BORE
8	E0060014	S.S. CAM BSW 493-X17-6L
9	F-0320812	1/4 ROLL PIN
10	D-9000-A9	TIMING GEAR 112T
11	F-0320614	3/16 ROLL PIN
12	A-7214	TIMING GEAR SHAFT
13	B-7384	S.S. MTG BRKT/BALLUFF CAM

BILL OF MATERIALS

MATERIAL
H.R. MILD STEEL
BURNED TO SHAPE F.A.O.

PART #	PUNCH PRESS	STROKE	"A"	"B"
C-7247	150T-SS	2-3-4"	23"	4"
C-7259	150T-SS	6-7-8"	35 1/2"	4"
C-7259	200T-SS	2-3-4"	35 1/2"	4"
C-7259	200T-SS	6-7-8"	35 1/2"	4"
C-7259	250T-SS	4-6"	35 1/2"	4"
9000-A23	250T-SS	8-10-12"	37 1/2"	4"
9000-A23	300T-SS	4-6"	37 1/2"	4"
9000-A24	300T-SS	8-10-12"	38 1/2"	4"



DIM "A"	DESCRIPTION
.945	FOR SS # 95-120 TON OBI
1.885	FOR 38 1/2" 300TON FLYWHEEL

OBSOLETE (7-31-85)
REFER TO C-7247
(Use for replacement parts only)

HEIM CORP. P. O. BOX R FRANKFORT, ILL. 60423				
DRAWN BY BH	DATE 7-26-73	CHECKED BY	DATE	SCALE 1/4" = 1"
DESCRIPTION FLYWHEEL				
USED ON S.S.	PUNCH PRESSES		PART NO C-7247-F	

Link 501
100700 Power Supply
100704 BA. MON. CARD
501-5 CIRCUIT BOARD

Rockford Control
FTL-065 Module Gen II
FTL-56 Module Gen I
ROSS VALVE FITTING
870240902

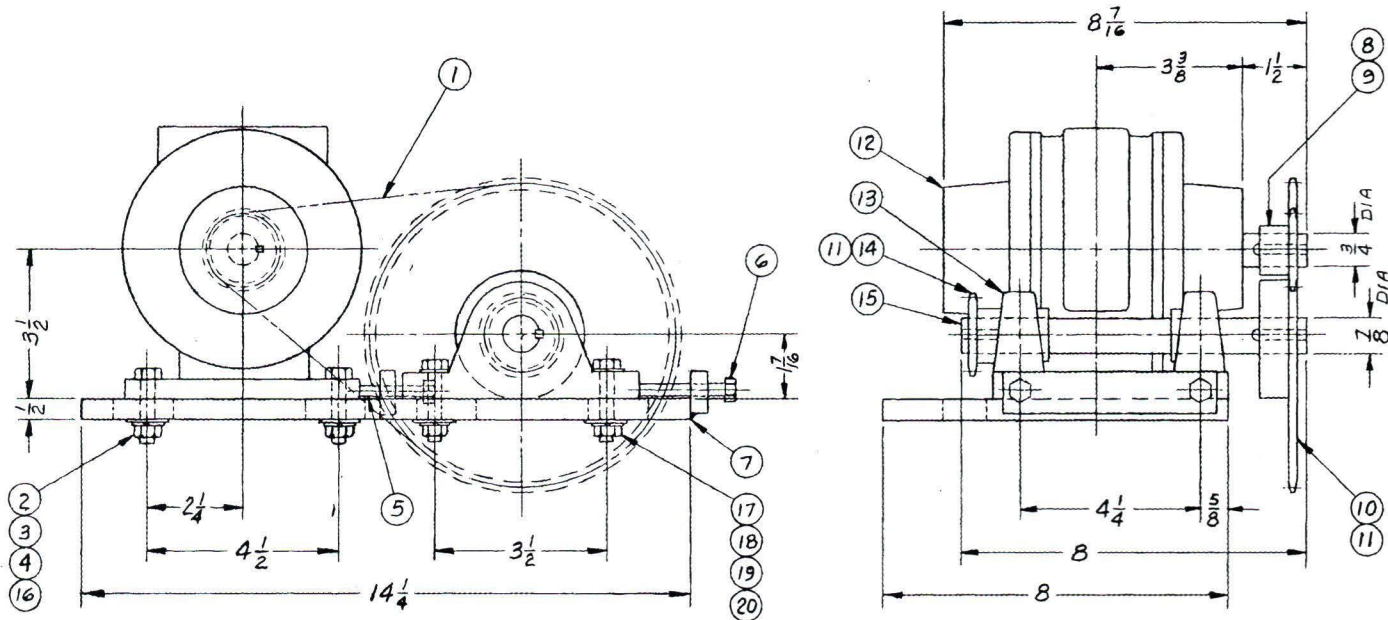
Rockford Lube Timer
RFS062

770640902 Prox Switch
OMRON E2E-X5Y1-534S
FOR
RAMADOT FOR MAXI

Float Switch - HYD OL
LUBE SYSTEM
LS-7 GEAR LUBE
LS-800 Double
LS-800-1 Single

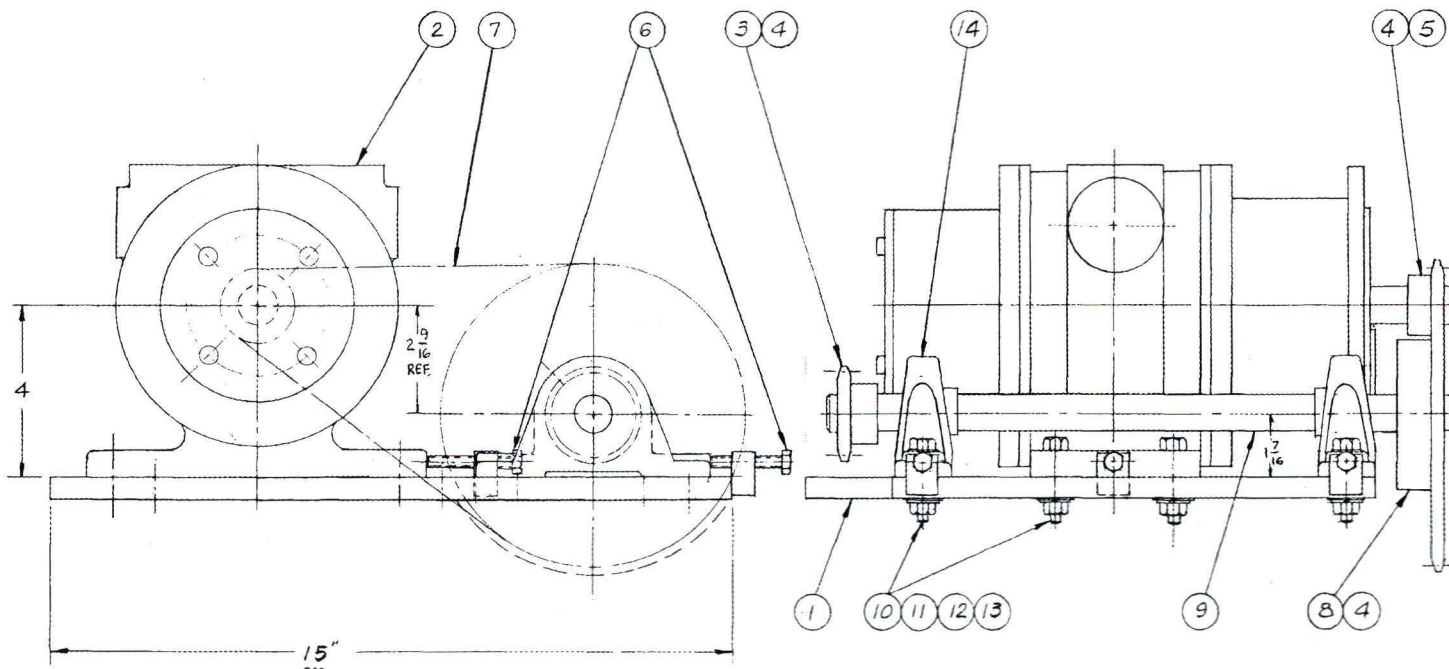
DET.	PART NO.	DESCRIPTION	MATERIAL	QTY.
17	F-0010614	3/8-16 x 1 3/4" LG. H.H. CAP SCREW	STL.	4
18	F-0240600	3/8 STD. PLAIN WASHER	STL.	8
19	F-0250600	3/8 SPLIT LOCKWASHER	STL.	4
20	F-0170616	3/8 HEX NUT	STL.	4

DET.	PART NO.	DESCRIPTION	MATERIAL	QTY.
1	A-166	#41 CHAIN	STL.	2 1/2 FT.
2	F-0010512	5/16-18 x 1 1/2" LG. H.H. CAP SCREW	STL.	4
3	F-0250500	5/16 SPLIT LOCKWASHER	STL.	4
4	F-0170518	5/16-18 HEX NUT	STL.	4
5	90-04867-02	1/4-20 x 1 1/2" LG. H. H. BOLT	STL.	1
6	90-06631-02	1/4-20 x 2" LG. H. H. BOLT	STL.	2
7	B-7995	AIR MOTOR MOUNTING BRACKET	STL.	1
8	A-1496-1	SPROCKET 3/4 BORE, 11 TEETH	41B11	1
9	K-0010308	SQUARE KEY 3/16 x 3/16 x 1" LG.	STL.	1
10	A-1527	SPROCKET 7/8 BORE, 45 TEETH	41B45	1
11	K-0060312	WOODRUFF KEY 3/16 x 3/4 DIA	STL.	2
12	P-0110001	AIR MOTOR GAST	8AM-FRV-2B	1
13	B-1528	PILLOW BLOCK 7/8 DIA	SC DODGE	2
14	A-1496	SPROCKET 7/8 BORE, 11 TEETH	41B11	1
15	A-1529	SPROCKET SHAFT 7/8 DIA x 8" LG.	C-1018 C.R.S.	1
16	F-0240500	5/16 STD. PLAIN WASHER	STL.	4



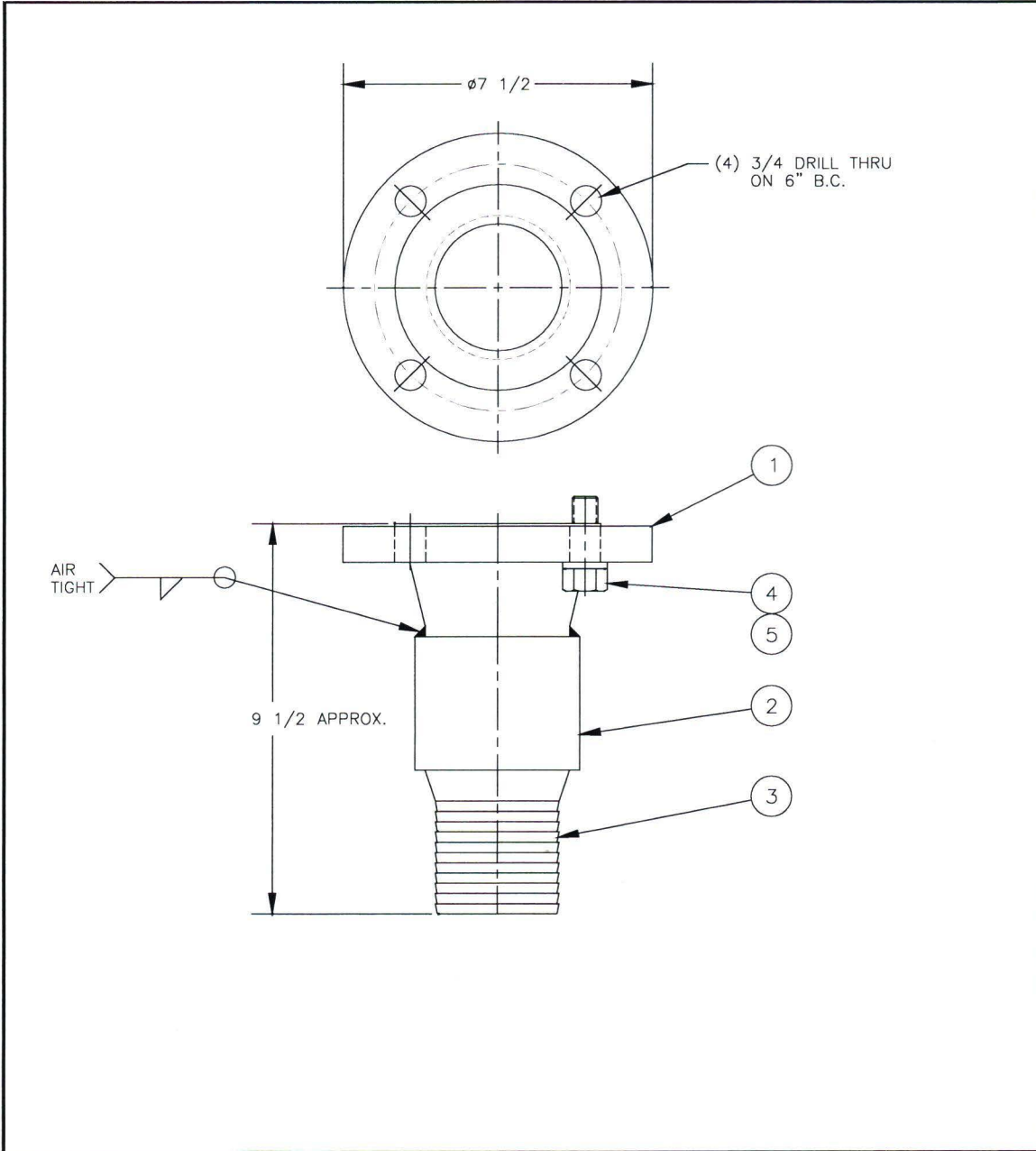
REV.	DATE	BY	DESCRIPTION	ECO NO.
HEIM HEIM CORPORATION 6360 W. 73rd Street Chicago, Illinois 60638				
SUPERSEDES	C-7619	THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP.	SCALE 1/2"	DATE
FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED			FRAC. ± .015 DECIMAL ± .005 ANGLES ± 0° 30'	6-8-99
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED			DESCRIPTION	
			8AM AIR MOTOR ASSY	
			USED ON D-5030-1 S2-150-400	DRAWG NO. C-7619-1

DET.	PART NO.	DESCRIPTION	MAT'L.	QTY.
1	B-7997	AIR MOTOR MTG. BRACKET	STL.	1
2	P-0110003	AIR MOTOR 16AM-FRV-13	GAST	1
3	41B12	SPROCKET 7/8 BORE	STL.	1
4	K-0010308	SQ. KEY 3/16 x 3/16 x 1" LG.	STL.	3
5	A-1496	SPROCKET 7/8 BORE 41B11	STL.	1
6	90-06631	1/4-20 x 2" LG. HEX. HD. BOLT	STL.	3
7	A-166	#41 CHAIN 2 1/2 FT. LG.	STL.	1
8	A-1527	SPROCKET 7/8 BORE 41B45	STL.	1
9	B-7638	SPROCKET SHAFT 7/8 DIA x 14" LG	C-1018 C.R.S.	1
10	F-0010614	3/8-16 x 1 3/4 LG. H.H. CAP SCR.	STL.	8
11	F-0250600	3/8 SPLIT LOCKWASHER	STL.	8
12	F-0170616	3/8-16 HEX NUT	STL.	8
13	90-00923-02	3/8 STD. PLAIN WASHER	STL.	12
14	B-1528	DODGE SC123804 7/8 SHAFT	STL.	2



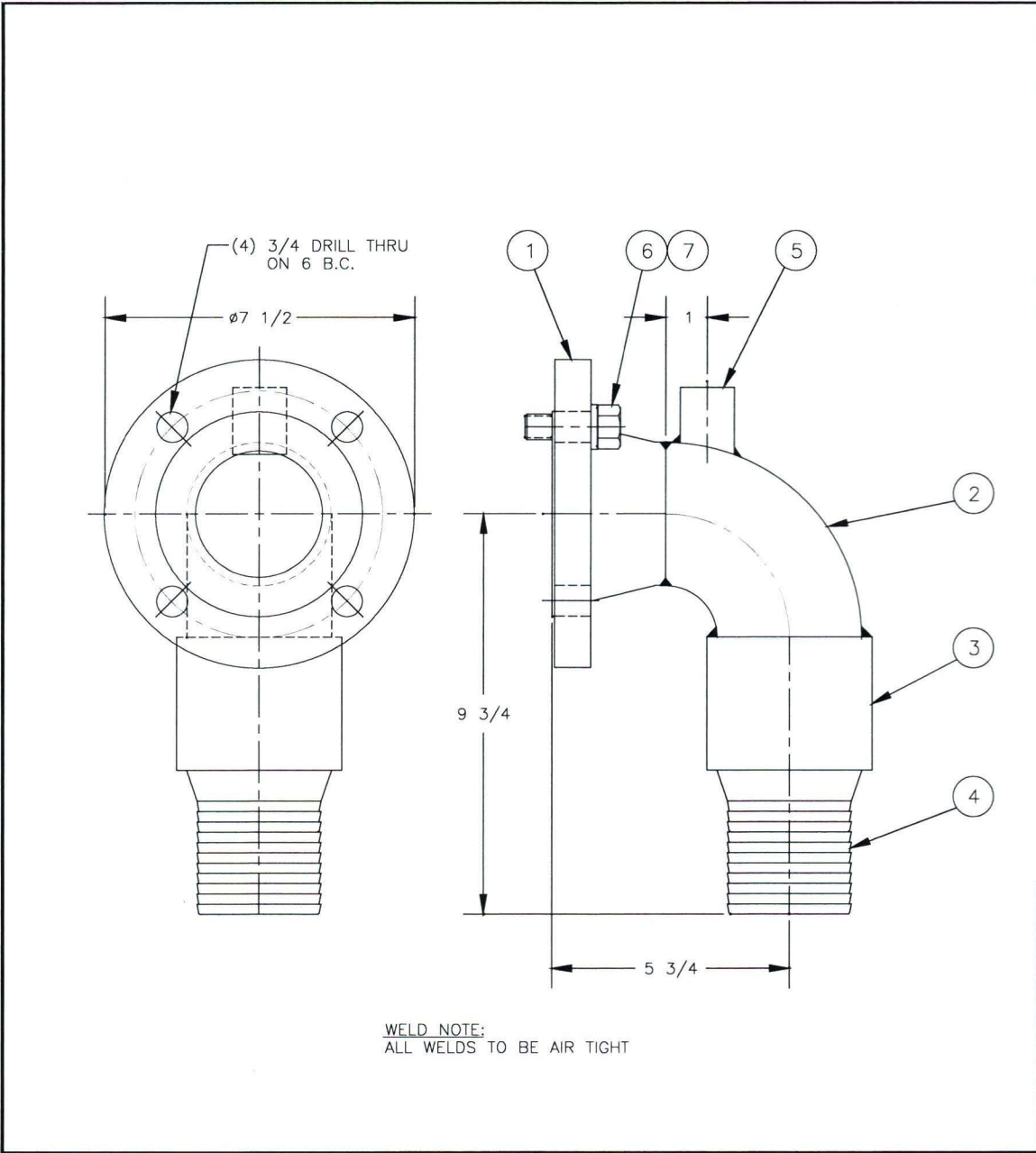
REV.	DATE	BY	DESCRIPTION	ECO NO.
HEIM HEIM CORPORATION 6360 W. 73rd Street Chicago, Illinois 60638				
SUPERSEDES		THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP.	SCALE 1/2"	DATE
FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED			FRAC. ± .015 DECIMAL ± .005 ANGLES ± 0° 30'	08/20/99
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED			DESCRIPTION	
			AIR MOTOR ASSY	
			USED ON D-8023-1 400,500,600 MS	DRAWG NO. C-7636-1

SN H-3784



DET	PART NUMBER	DESCRIPTION	MATERIAL	QTY
1	87-06920-02	3" X 150 LB WELD NECK FLANGE W/GASKET	STL. WELD FITTING	1
2	87-03485-02	3" PIPE COUPLING	STL.	1
3	87-06923-02	3" HOSE BARBED/N.P.T. FITTING	STL.	
4	90-02253-02	5/8-11 X 1 3/4 LG HEX HD CAP SCR.	STL.	
5	98-01215-02	5/8 SPLIT LOCKWASHER	STL.	

REVISION DESC. MODEL DESCRIPTION	18" AIR C' BAL - 3" CONNECTION ASSEMBLY TO SURGE TANK		
THIS DRAWING IS THE PROPERTY OF HEIM L.P. AND MAY NOT BE COPIED, REPRODUCED, OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM THE HEIM GROUP			DATE
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED	FINISHED DIMENSION TOLERANCE DECIMAL +/- .005, FRACT. +/- .015, ANGLES +/- 0 DEG 30' UNLESS SPECIFIED. REMOVE BURRS BREAK SHARP CORNERS	DR: BWG	05/22/01
OLD: NEW:	MATERIAL:	CKD:	
		APPR: YES	05/22/2001
The HEIM Group 6360 W. 73rd Street Chicago, Illinois 60638 708-496-7450 fax: 708-496-7428 parts fax 708-496-0708 http://www.theheimgroup.com		TITLE: AIR C' BAL. CONNECTION ASSEMBLY	
SCALE: 3/8		REV. NO.	DWG. NO. 066B00016718

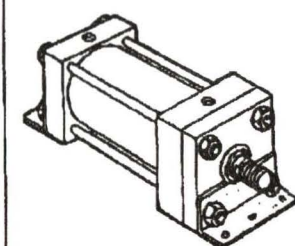


DET	PART NUMBER	DESCRIPTION	MATERIAL	QTY
1	87-06920-02	3" X 150 LB WELD NECK FLANGE W/GASKET	STL. WELD FITTING	1
2	87-06921-02	3" X 90° ELBOW STD WT. SHORT RAD.	STL. WELD FITTING	1
3	87-03485-02	3" PIPE COUPLING	STL.	1
4	87-06923-02	3" HOSE BARBED/N.P.T. FITTING	STL.	1
5	87-02576-02	3/4 PIPE COUPLING	STL.	1
6	90-02253-02	5/8-11 X 1 3/4 LG HEX HD CAP SCR.	STL.	4
7	98-01215-02	5/8 SPLIT LOCKWASHER	STL.	4

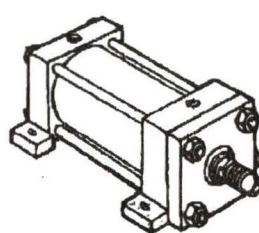
REVISION DESC. MODEL DESCRIPTION	18" AIR C' BAL - 3" CONNECTION ASSEMBLY TO SURGE TANK		
THIS DRAWING IS THE PROPERTY OF HEIM L.P. AND MAY NOT BE COPIED, REPRODUCED, OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM THE HEIM GROUP			DATE
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED	FINISHED DIMENSION TOLERANCE DECIMAL +/- .005, FRACT. +/- .015, ANGLES +/- 0 DEG 30' UNLESS SPECIFIED. REMOVE BURRS BREAK SHARP CORNERS	DR: BWG	03/31/99
OLD: NEW:	MATERIAL:	CKD:	
		APPR: YES	03/31/1999
The HEIM Group 6360 W. 73rd Street Chicago, Illinois 60638 708-496-7450 fax: 708-496-7428 parts fax 708-496-0708 http://www.theheimgroup.com		TITLE: AIR C' BAL. CONNECTION ASSEMBLY	
SCALE: 3/8		REV. NO. 0	DWG. NO. 066B00014968

1997	000C00011606	12" x 24"		150-16 PF	
1998	000D00014247	12" x 24"	PULL	100-600 TON	Pivot Mt.
1999	000D00014982	12" x 24"	PULL	100-300 TON	FLAT Mt.
1999	000D00014972	12" x 24"	PUSH	100-300 TON	
1998	000D00014257	12" x 30"	PULL	100-300 TON	FLAT Mt.
1998	000D00014246	12" x 30"	PULL	100-600 TON	Pivot Mt.
1999	000D00014978	12" x 30"	PUSH	100-300 TON	
1997	000C00009564	12" x 30"	PULL		Pivot Mt.
1997	000C00009545	12" x 36"	PULL		Pivot Mt.
1997	066C00012263	12" x 36"	PULL	(Special) 400 TON H-3879	Pivot Mt.
1998	000D00014256	12" x 36"	PULL	100-300 TON	FLAT Mt.
1998	000D00014244	12" x 36"	PULL	100-600 TON	Pivot Mt.
1988	D-7840	8"	PULL	150-200 T P.B.	
1988	D-7841	8"	PUSH	150-200 T P.B.	
1988	D-7846 - $\frac{1}{3}$	11 1/2" 12"	PULL		
1989	D-7847 - $\frac{1}{2}$	12"	PUSH	200-300 T S/C	
1997	000C00009564	12" x 30"			

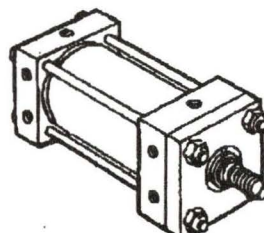
MOUNTING STYLES



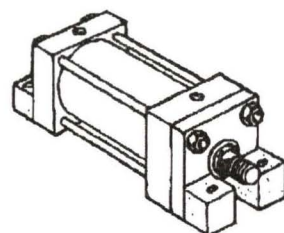
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End Angle Mount
MS1



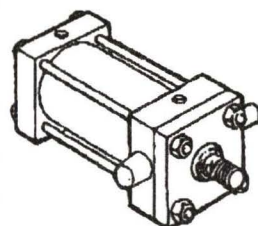
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Side Lug Mount
MS2



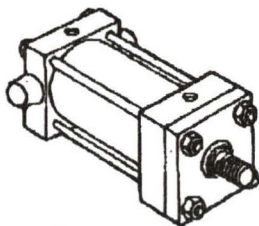
PAGE 5
Side Tapped Mount
MS4



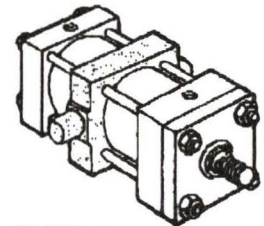
PAGE 7
End Lug Mount
MS7



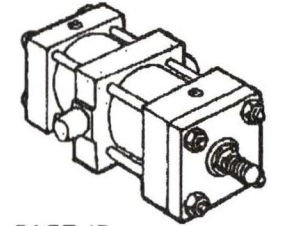
PAGE 9
Head Trunnion Mount
MT1



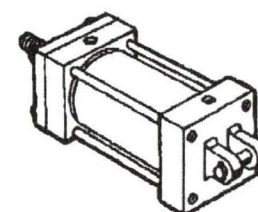
PAGE 11
Cap Trunnion Mount
MT2



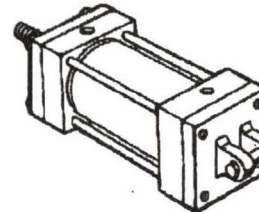
PAGE 13
Wide Cent. Trun. Mount
MT3



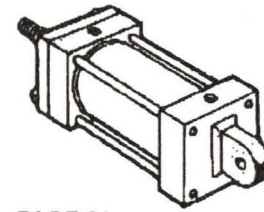
PAGE 15
Center Trunnion Mount
MT4



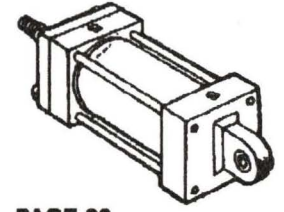
PAGE 17
Fixed Clevis Mount
MP1



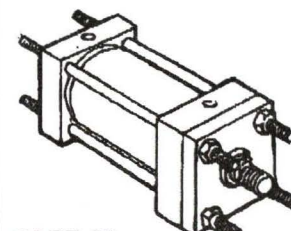
PAGE 19
Detachable Clevis Mount
MP2



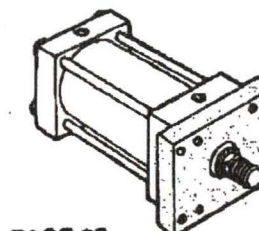
PAGE 21
Fixed Eye Mount
MP3



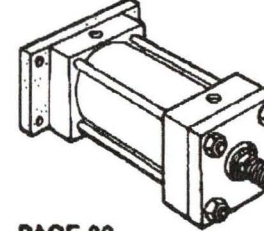
PAGE 23
Fixed Univ. Eye Mount
MPU3



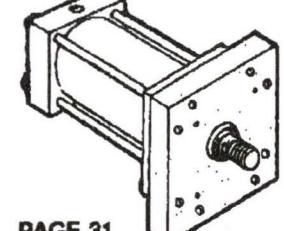
PAGE 25
Ext. Tie Rod Mts.
MX0,1,2,3



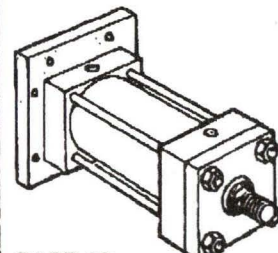
PAGE 27
Head Rect.Flange Mount
MF1



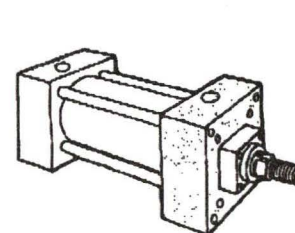
PAGE 29
Cap Rect.Flange Mount
MF2



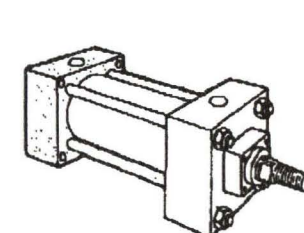
PAGE 31
Head Sq.Flange Mount
MF5



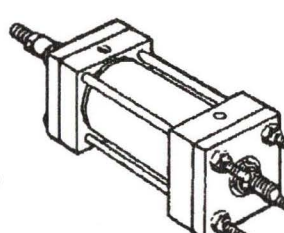
PAGE 33
Cap Sq.Flange Mount
MF6



PAGE 35
Head Square Mount
ME3

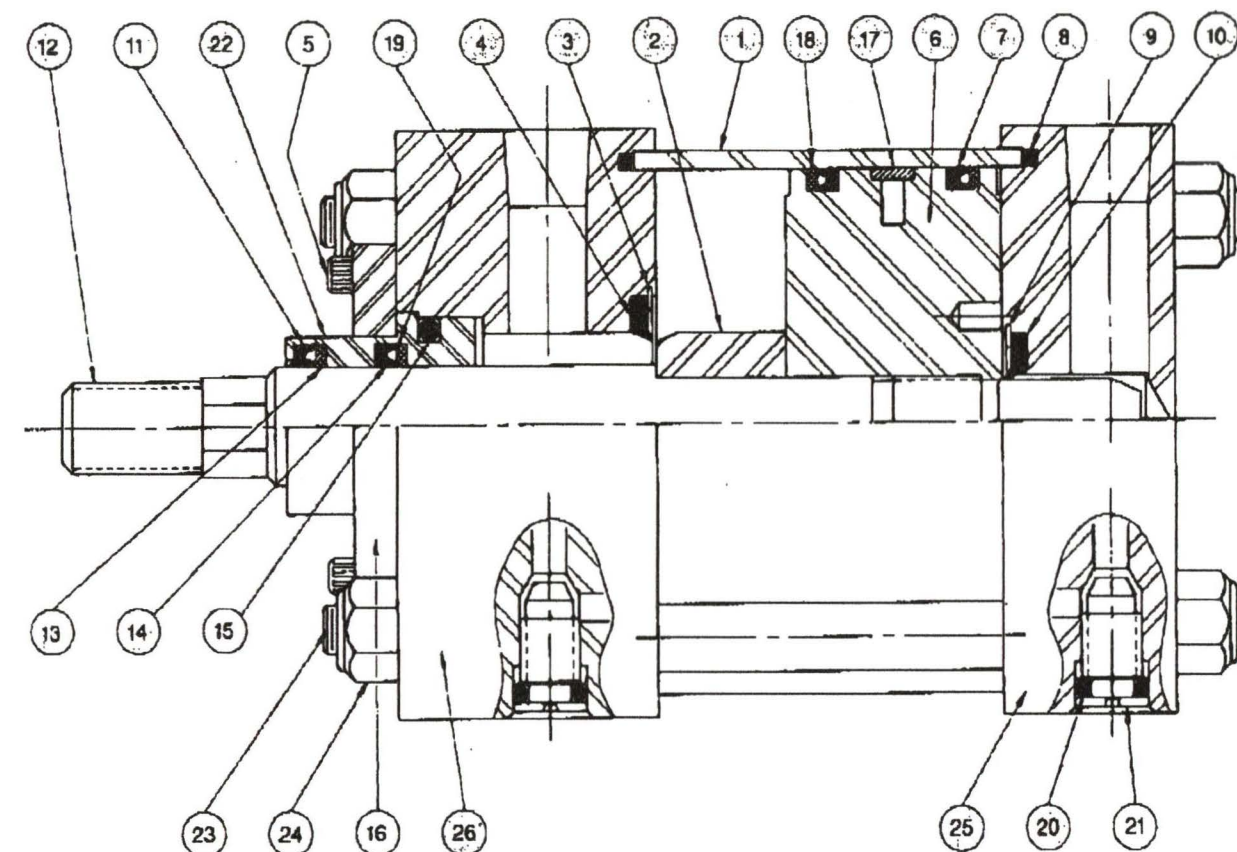


PAGE 35
Cap Square Mount
ME4



PAGE 37
Double Rod Cylinder
MD**

CYLINDER PARTS LIST



HA CYLINDER PARTS LIST

- | | | |
|--|---|-----------------------------|
| 1. Cylinder Tube | 10. Cap End Cushion Seal | 19. Felt, Rod Seal |
| 2. Rod Cushion Bushing | 11. Rod Wiper | 20. Cushion Screw O-ring |
| 3. Rod End Cushion Seal Retaining Ring | 12. Piston Rod; Specify Rod End Style And Cushion | 21. Cushion Adjusting Screw |
| 4. Rod End Cushion Seal | 13. Felt, Rod Wiper | 22. Rod Cartridge |
| 5. Retainer Screw | 14. Rod Seal | 23. Tie Rod |
| 6. Piston | 15. Cartridge O-ring | 24. Nut, Tie Rod |
| 7. Piston Seal | 16. Cartridge Retainer | 25. Cap |
| 8. Tube O-ring | 17. Wear Band | 26. Head |
| 9. Cap End Cushion Seal Retaining Ring | 18. Felt, Piston Seal | |

Hennells

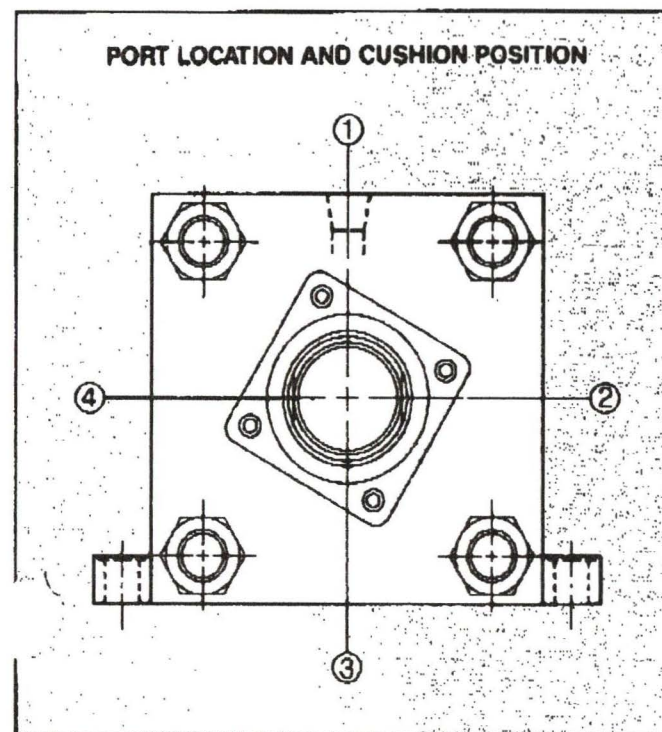
ORDER INFORMATION

MODEL NO.	DESCRIPTION
MS1	END ANGLE MOUNT
MS2	SIDE LUG MOUNT
MS4	SIDE TAPPED MOUNT
MS7	END LUG MOUNT
MT1	HEAD TRUNNION MOUNT
MT2	CAP TRUNNION MOUNT
MT3	WIDE CENTER TRUNNION MOUNT
MT4	CENTER TRUNNION MOUNT
MP1	FIXED CLEVIS MOUNT
MP2	DETACHABLE CLEVIS MOUNT
MP3	FIXED EYE MOUNT

MODEL NO.	DESCRIPTION
MPU3	FIXED UNIVERSAL EYE MOUNT
MX0	NO MOUNT
MX1	TIE RODS EXTENDED BOTH ENDS
MX2	TIE RODS EXTENDED CAP END
MX3	TIE RODS EXTENDED HEAD END
MF1	HEAD RECT. FLANGE MOUNT
MF2	CAP RECT. FLANGE MOUNT
MF5	HEAD SQUARE FLANGE MOUNT
MF6	CAP SQUARE FLANGE MOUNT
ME3	HEAD SQUARE MOUNT
ME4	CAP SQUARE MOUNT

N.P.T.F. PORTS ARE STANDARD
EXAMPLE: HA-MT2-BR-2 1/2 x 4.0-1.0SM-3

HA	MT2	BR	2 1/2	x 4.0	1.0	SM	3
SERIES 250psi AIR	MOUNTING CAP TRUN.	CUSH. BOTH ENDS B = BLIND (CAP) R = ROD (HEAD)	BORE INCHES	STROKE INCHES	ROD DIA. INCHES	ROD END SM-SMALL MALE	PORT POS.



- Cylinder Model And Mount
- Cylinder Bore And Stroke
- Piston Rod Dia. And Rod End Style
 - Style A Intermediate Male Long Thread, Auto
 - Style FM Full Male, Short Thread
 - Style IM Intermediate Male Short Thread
 - Style SM Small Male, Short Thread With Shoulder
 - Style SF Short Female
- Cushions And Locations
 - "B" Indicates Cap End Cushioned
 - "R" Indicates Head End Cushioned
 - Cushion Adjustment May Be At Position 1, 2, 3, or 4
 - Cushion Adjustment Is Standard At Position 2, Specify Other Position
 - Cylinders Are Supplied Non-Cushioned Unless Cushions Are Specifically Requested
 - The Rod End Cushion on Some Bore/Rod Combinations Is Non-Adjustable
 - See Table page 41
- Port Locations, Rod And Blind Ends May Be At Position 1, 2, 3, Or 4
 - Port Is Standard At Position 1, Specify Other Position

Hennells

PB 8B-5000

ADVANCE AUTOMATION

734-539-7633

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5000 X 18

Model 630-930 9171

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BUSHING 12
MILLER
FLUID POWER

MILLER FLUID POWER
AIR COUNTER 542 ASSM

8 X 18

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TRANSMISSION

FX X LTR

DATE: 6-15-98

TOTAL PAGES 2

TO: Mr. Marty Johnson

CO: HEIM Corp.

FROM: Hamp Crass

Re.: OMAG Sales and Service

It was a pleasure talking with you today. Hopefully we can
 have a mutually beneficial association.

Our 800 # also covers Arizona and Nevada.

Best regards,

Hamp

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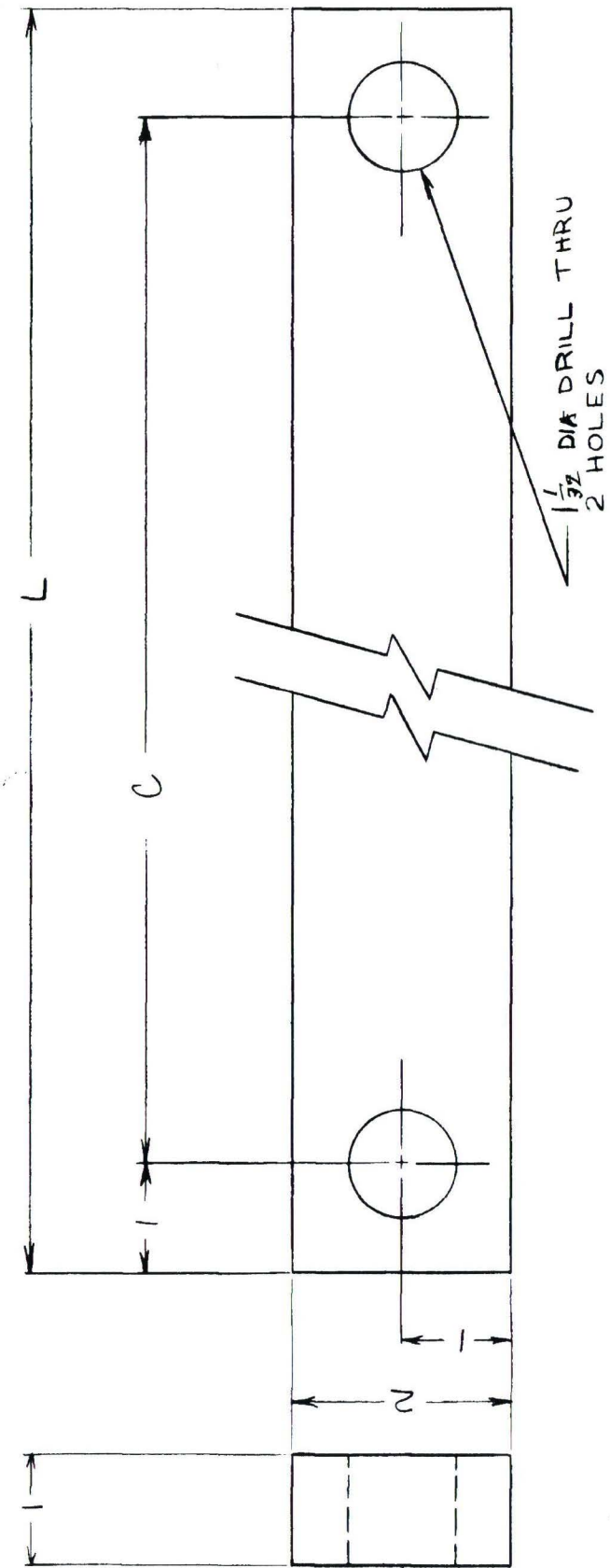
HYDRAULIC OVERLOAD CONVERSION CHART
FOR TWO POINT PRESSES
FROM 150 TO 500 TON

6 Boxes

OVERLOAD SETPOINT (PSI)		PRECHARGE PRESSURE (PSI)	
Tons	Hydraulic Overload Pressure	Air Pressure Setting	Hydraulic Overload Pressure
100	1160	16	*900
125	1440	20	*1100
150	1730	24	1400
175	2020	28	1600
200	2310	32	1800
225	2600	36	2000
250	2890	40	2000
275	3180	44	2000
300	3470	48	2000
325	3750	52	2000
350	4040	56	2000
375	4340	60	2000
400	4620	64	2000
425	4910	68	2000
450	5200	72	2000
475	5490	76	2000
500	5800	80	2000

0.18"

*Note: Pressure switch in slide for hydraulic pressure must be reset to 600 psi.



MATERIAL:
1x2 STEEL BAR

PART NO.	C	L	USED ON *
B-7349-30	28	30	
B-7349-31	29	31	
B-7349-32	30	32	150-200 T
B-7349-33	31	33	
B-7349-34	32	34	
B-7349-35	33	35	150-300 T
B-7349-37	35	37	250-300 T
B-7349-39	37	39	250-400 T
B-7349-42	40	42	400 T

* REFER TO ENGINEERING STANDARDS

REV	DATE	BY	DESCRIPTION	ECO NO.
			HEIM	
			P.O. BOX R. FRANKFORD, ILL. 60423 (815) 469-2335	
SUPERSEDES			SCALE: FULL	DATE
THIS DRAWING IS THE PROPERTY OF HEIM CORPORATION. IT IS TO BE USED ONLY FOR THE MANUFACTURE OR SALE OF EQUIPMENT WITHOUT PRIOR PERMISSION FROM HEIM CORP.			DRWN: LAV	7-1-85
FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED			CHK: RSB	8-2-85
FRACTION ± .015			DESCRIPTION	
DECIMAL ± .005			COUNT. BAL. BAR	
ANGLES ± 0° 30'			USED ON	
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED			150-400 T SS	
			DRWG. NO. B-7349-39	
			-30 - 34	
			-31 - 35	
			-36 - 39	
			-40 - 42	

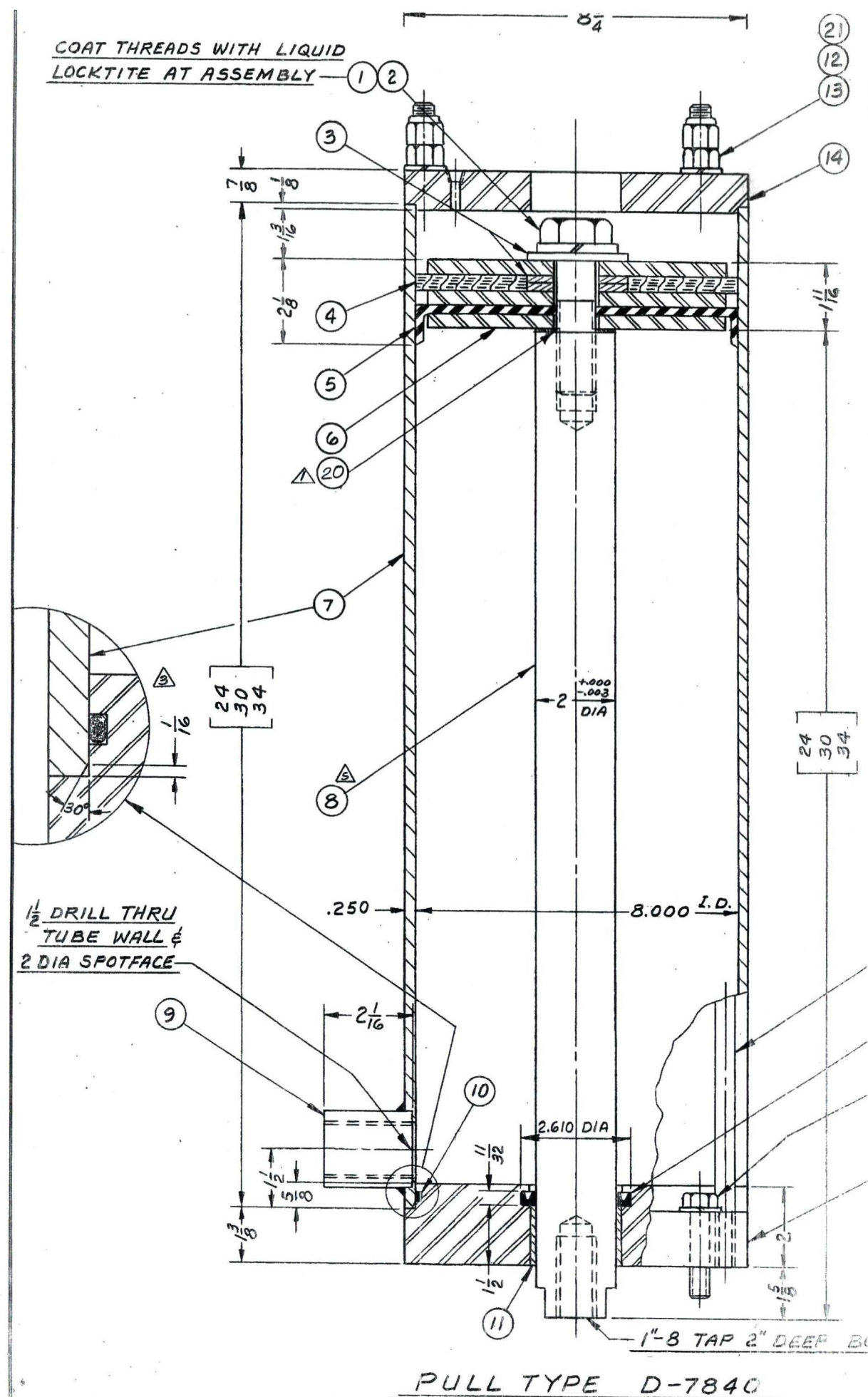
SUN VALVES

RQKB-XXX

Kick-down relief cartridges act similar to a circuit breaker in an electrical system. The valves will kick completely open and remain open once the pressure at the inlet (port 1) exceeds the valve setting, creating an unrestricted flow path from port 1 to tank (port 2). The valve remains open as long as the pressure at port 1 exceeds the pressure at port 2. To reset the valve, flow from port 1 to port 2 must cease and pressure at port 2 must be equal to or greater than the pressure at port 1.

RPKE-XXX

Fast-acting, pilot-operated, balanced piston relief cartridges are normally closed, pressure-limiting valves used to protect hydraulics components from pressure transients. Fast opening and closing is gained at the expense of smoothness. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to limit the pressure rise. These valves have low pressure rise vs. flow and are very fast.



DET.	PART NO.	DESCRIPTION	MATERIAL	QTY.	
	1	90-02292-02	1/4"-7x 4 1/2" LG. H. H. CAP SCR.	STL.	1
	2	98-00989-02	1/4 SPLIT LOCKWASHER	STL.	1
	3	98-01210-02	1/4 STD. PLAIN WASHER	STL.	3
	4	D-7846-4	FELT WASHER 1 1/2 O.D. x 3 I.D. x 1/2" THK.	FELT	1
	5	D-7846-5	PACKING CUP 11.500 x 1.500 x .250 x 5.000 HOLE	#1 1/2 JOHN CRANE DR EQUIVALENT	1
	6	D-7846-6	BACK-UP WASHER 11 O.D. x 1 9/32 I.D. x 1/2 THK.	H.R.S.	2
△	6A	85-01277-02	1"-8 HEX NUT - HEAVY	STL.	4
△	8	D-7846-8A	PISTON ROD 4"-10" STROKE 2 DIA x 30" LG. ENDS OF ROD TO BE SQUARE	C.R.S. C-1018	1
		D-7846-8B	PISTON ROD 12"-16" STROKE 2 DIA x 36" LG. ENDS OF ROD TO BE SQUARE	C.R.S. C-1018	
		D-7846-8C	PISTON ROD 18"-20" STROKE 2 DIA x 40" LG. ENDS OF ROD TO BE SQUARE	" "	
△	9	OBSELETE D-7840-9	1/4 STEEL COUPLING - STD. 1.900 O.D. x 2 1/16 LG. 1 1/2 THRD.	STL.	1
	10	D-7846-10	O" RING 1 1/2 O.D. #1 1/4 I.D. x 1/8	A5-568 NATIONAL-276	1
	11	75-09670-02	SINTERED BRONZE BUSHING 2" I.D. x 2 1/4" O.D. x 1 1/2" LG.	BUNTING P200-12	1
	12	85-01303-02	1"-8 HEAVY HEX LOCK NUT	STL.	4
△	13	98-01091-02	3/4 SPLIT LOCKWASHER	STL.	4
	13A	98-01217-02	1" SPLIT LOCKWASHER	STL.	4
	14	D-7846-14A D-7846-14B	CYLINDER CAP W.O. / EARS W / EARS	H.R.S.	1
△	15	D-7846-15A	TIE ROD 1"-8 x 34 3/4 LG.	C.R.S. C-1018	4
		D-7846-15B	TIE ROD 1"-8 x 40 3/4 LG.	" "	
		D-7846-15C	TIE ROD 1"-8 x 44 3/4 LG.	" "	
	16	91-09567-02	HOMOGENEOUS U-CUP-31 2" I.D. x 2 5/8" O.D. x 5/16 THK.	CRANE PACKING CO.	1
	17	90-02281-02	3/4-10 x 2 1/2 LG. H.H. CAP SCR.	STL.	4
	18	D-7846-18	CYLINDER BASE	H.R.S.	1
△	19	D-7846-19	5" SQ. SCREEN 8x8 x .032 No. 9219	PLAIN ST. WIRE CLOTH MC MASTER-CARR	3
△	20	83-B0002	ROD CLEVIS	STL.	1
△	21	86-B0001	CLEVIS PIN	TGP STL.	1
△	22	90-06490-02	1"-8 x 3 LG. SOC. HEAD SELF-LOCKING BOLT HOLOCHROME, UNBRACO OR EQUIV.	STL.	1
	23	A-7873	SEAL LOCATING WASHER	STL.	1
	24	D-7846-24	GASKET 2" O.D. x 1 1/4" I.D. x 1/16 THK.	FIBER	1
△	25	86-02668-02	1/4 DIA. x 2 1/4 LG. ROLL PIN	STL	2
7	D-7846-7A	CYLINDER 4"-10" STROKE 12 O.D. x .250 x 30" LG.	D.O.M. WELDED MECH. TUBE	1	
	D-7846-7B	CYLINDER 12"-16" STROKE 12 O.D. x .250 x 36" LG.	" "		
	D-7846-7C	CYLINDER 18"-20" STROKE 12 O.D. x .250 x 40" LG.	" "		

DRESS IN 9670

D-7846

РБК 000111

DET.	PART NO.	DESCRIPTION	MATERIAL	QTY.
1	90-01393-02	1"-8 x 3 1/2" LG. H. H. CAP SCR.	STL.	1
2	98-01217-02	1" SPLIT LOCKWASHER	STL.	1
3	98-01207-02	1" STD. PLAIN WASHER	STL.	3
4	66-10182-A2	FELT WASHER 8" O.D. x 2 1/2" I.D. x 1/2" THK.	FELT	1
5	91-09173-02	PACKING CUP #11543-405 8.000 x 1.000 x .188 x 1" HOLE	JOHNS MANVILLE	1
6	66-10183-A2	BACK-UP WASHER 7 1/2" O.D. x 1 1/32" I.D. x 3/8 THK.	H. R. S.	3
7	D-7840-7A	CYLINDER 4-6-8" STROKE 8 1/2 O.D. x .250 x 24" LG.	D.Q.M. WELDED MECH. TUBE	△ 1
	D-7840-7B	CYLINDER 10-12" STROKE 8 1/2 O.D. x .250 x 30" LG.	" "	1
	D-7840-7C	CYLINDER 14-16" STROKE 8 1/2 O.D. x .250 x 34" LG.	" "	1
△ 8	D-7840-8A	PISTON ROD 4-6-8" STROKE 2 DIA x 24" LG. ENDS OF ROD TO BE SQUARE	C.R.S. C-1018	1
	D-7840-8B	PISTON ROD 10-12" STROKE 2 DIA x 30" LG. ENDS OF ROD TO BE SQUARE	" "	
	D-7840-8C	PISTON ROD 14-16" STROKE 2 DIA x 34" LG. ENDS OF ROD TO BE SQUARE	" "	
9	D-7840-9	1 1/4 STEEL COUPLING - STD. 1.900 O.D. x 2 1/16" LG. 1 1/2 THRD.	STL.	1
10	91-02754-02	O" RING 8 O.D. x 7 3/4 I.D. x 1/8	#8265 / MINN. RUB. CO.	1
11	75-09670-02	SINTERED BRONZE BUSHING 2" I.D. x 2 1/4" O.D. x 1 1/2" LG.	BUNTING P200-12	1
△ 12	85-01733-02	1/2-13 STD. HEX. NUT	STL.	4
13	98-01214-02	1/2 SPLIT LOCKWASHER	STL.	8
14	B-7842	CYLINDER CAP - PULL TYPE	STL.	1
	B-7842-A			
	B-7843	CYLINDER CAP - PUSH TYPE	STL.	
▽ 15	D-7840-15A	TIE ROD 1/2 DIA x 28" LG.	C.R.S. C-1018	4
	D-7840-15B	TIE ROD 1/2 DIA x 34" LG.	" "	
	D-7840-15C	TIE ROD 1/2 DIA x 38" LG.	" "	
16	91-09567-02	HOMOGENEOUS U-CUP-31 2" I.D. x 2 5/8" O.D. x 5/16 THK.	CRANE PACKING CO.	1
17	90-00940-02	1/2-13 x 2" LG. H. H. CAP SCR.	STL.	4
18	B-7844	CYLINDER BASE - PULL TYPE		1
	B-7845	CYLINDER BASE - PUSH TYPE	STL.	
△ 19	D-7840-19	3" SQ. SCREEN 8x8x.032 IN. 9219	PLAIN ST. WIRE CLOTH MCMASTER-CARR.	1
20	D-7840-20	GASKET 2" O.D. x 1 1/4" I.D. x 1/16" THK	FIBER	1
△ 21	85-00939-02	1/2-13 HEAVY HEX LOCKNUT	STL.	4

D-7840 - RBK 000/14

D-7841 - RBK 000/15

11.5"

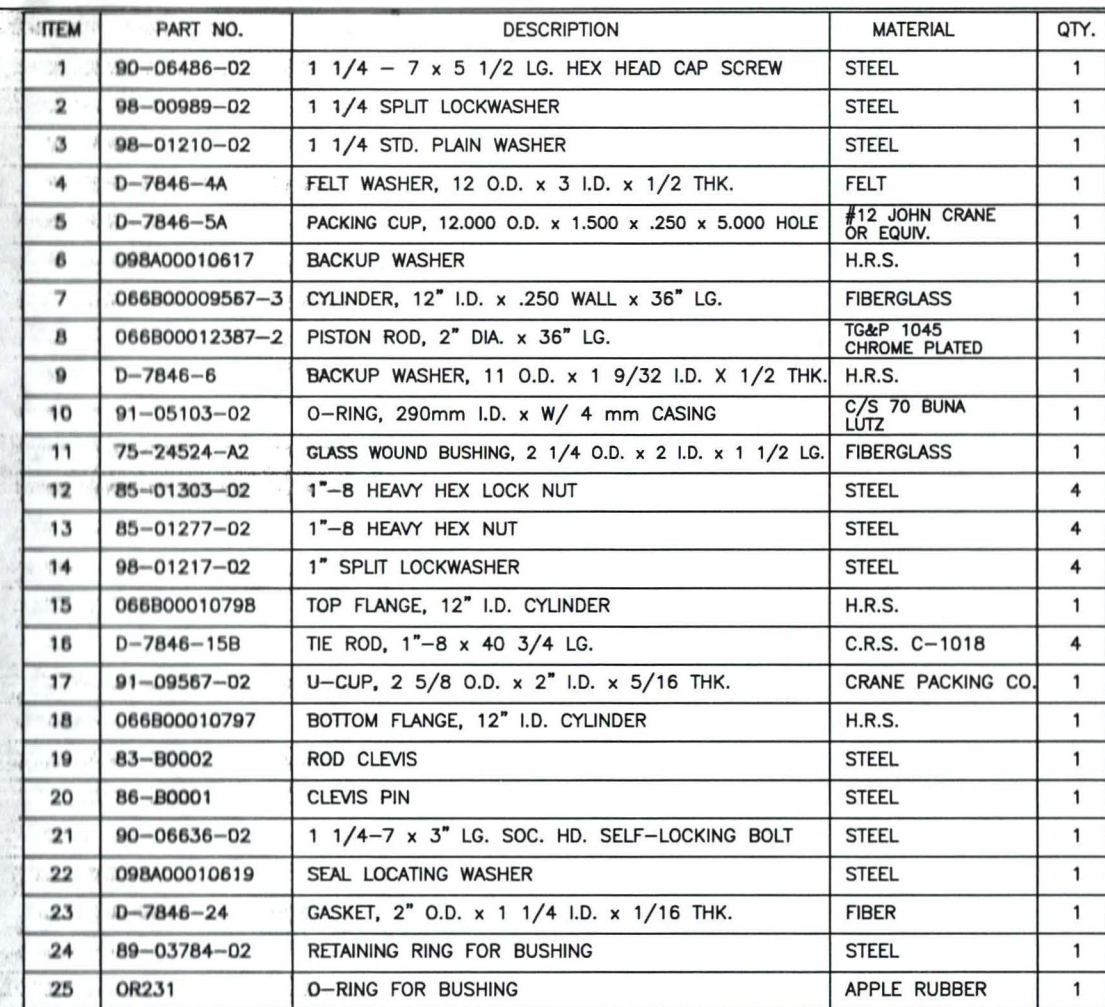
Inventory Assembly Explosion

The Heim Group

RBK000111

ACB REPAIR KIT (D-7846) HEIM 12" CYL

Parts Item #	Loc	Oty	In Stk	Description
750967002	A5-6	1	33	SINTERED BUSHING 2.00X2.25X1.50
900229202	V3S6B1	1	0	HEX MACHINE BOLT 1 1/4-7 X 4 1/2 GRAD
910956702	A2-8	1	165	U-CUP HOM 2.00X2.62X.312
980098902	Y3S2B4	1	0	1 1/4 LOCKWASHER
980121002	Y3S3B2	3	0	1 1/4 FLAT STAND. WASHER
A-7873	H15	1	13	SEAL LOCATING WASHER
D-7846-10	H7-9	1	23	O"RING 11.5X11.25X.12
D-7846-19	SHIPPING	1	0	5" SQ. SCREEN
D-7846-24	H7-9	1	20	GASKET 2"OD.X1 1/4"ID.X1/16 THK.
D-7846-4	H9-1	1	19	FELT WASHER 11.5" X 3"
D-7846-5	H9-1	1	8	#12 PIST CUP 6-HC-139-F9002
D-7846-6	G7-4	2	27	BACK UP WASH 11"X1 9/32"X1/2"

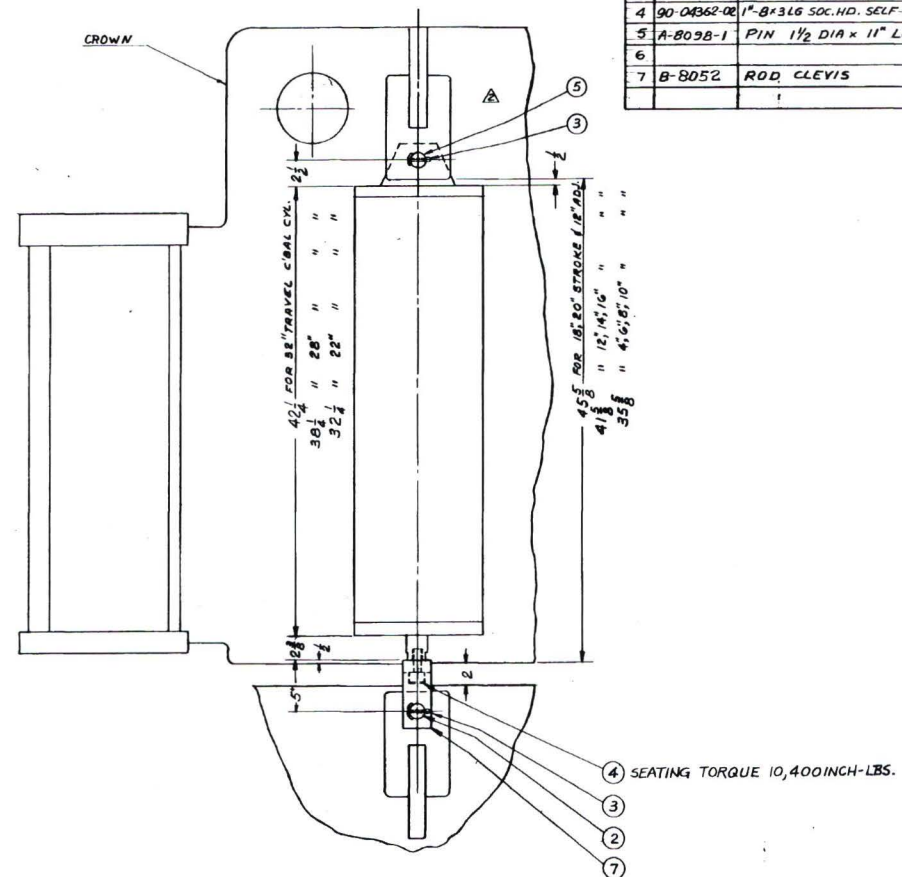
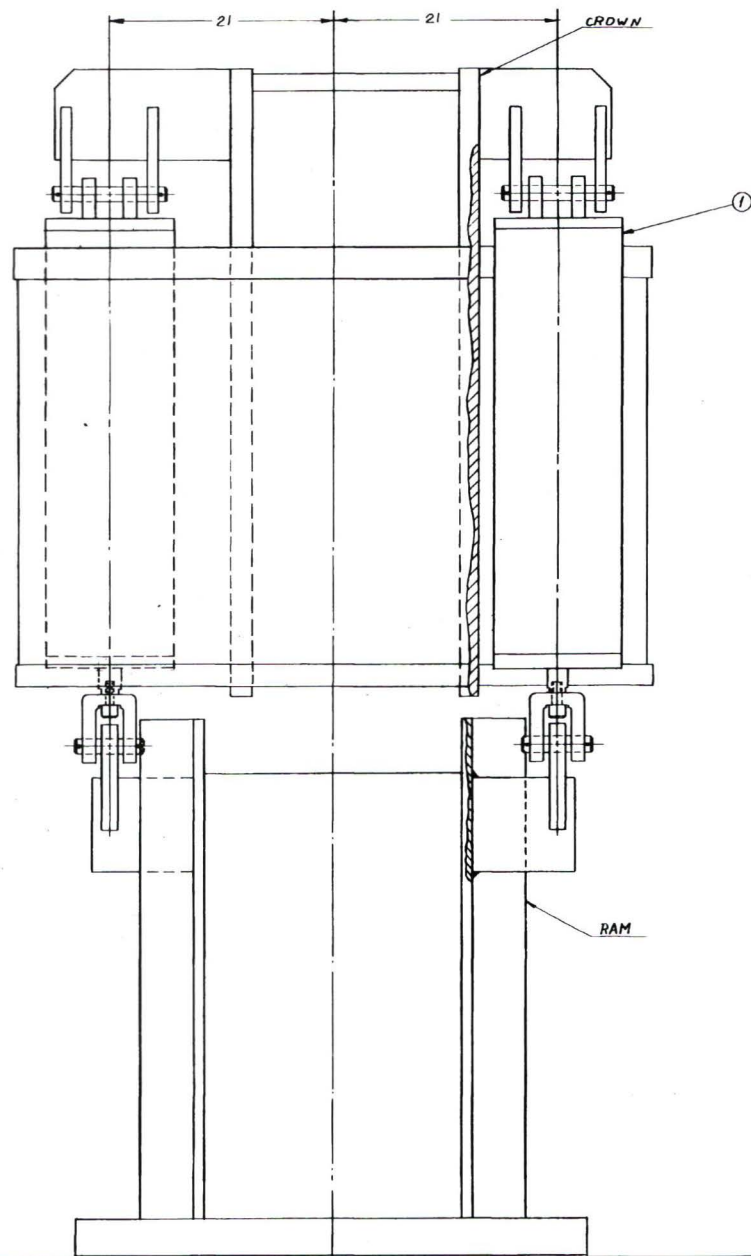


REVISION DESC. MODEL DESCRIPTION	 REVISED TO REFLECT CHANGES FOR 12" I.D. CYLINDER		
C'BAL CYL ASSMY-12" I.D. x 36" LG.			
THIS DRAWING IS THE PROPERTY OF HEIM L.P. AND MAY NOT BE COPIED, REPRODUCED, OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM THE HEIM GROUP			DATE
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED	FINISHED DIMENSION TOLERANCE DECIMAL +/- .005, FRACT. +/- .015, ANGLES +/- 0 DEG 30" UNLESS SPECIFIED. REMOVE BURRS BREAK SHARP CORNERS		DR: DML 02/12/1997
OLD: NEW:	MATERIAL:	APPR: YES	03/31/1997
THE HEIM GROUP 6360 W. 73rd Street Chicago, Illinois 60638 708-498-7450 fax 708-498-7428 parts fax 708-498-0708		TITLE: 12" I.D. x 36" C'BAL CYL ASS'Y	
SCALE: 1/4		REV. NO. 4	DWG. NO. 000C00009545

PART NO.	DESCRIPTION		MATERIAL	QTY.
90-02292-02	1/4-7 x 4 1/2" LG. H. H. CAP SCR.		STL.	1
98-00989-02	1/4 SPLIT LOCKWASHER		STL.	1
98-01210-02	1/4 STD. PLAIN WASHER		STL.	3
D-7846-4	FELT WASHER 11 1/2 O.D. x 3 I.D. x 1/2" THK.		FELT	1
D-7846-5	PACKING CUP 11.500 x 1.500 x .250 x 5.000 HOLE		*1 1/2" JOHN CRANE OR EQUIVALENT	1
D-7846-6	BACK-UP WASHER 11 O.D. x 1 9/32 I.D. x 1/2 THK.		H.R.S.	2
85-01277-02	1"-8 HEX NUT - HEAVY		STL.	4
D-7846-8A	PISTON ROD 4"-10" STROKE 2 DIA x 30" LG. ENDS OF ROD TO BE SQUARE		C.R.S. G1018	1
D-7846-8B	PISTON ROD 12"-16" STROKE 2 DIA x 36" LG. ENDS OF ROD TO BE SQUARE		C.R.S. C-1018	
D-7846-8C	PISTON ROD 18"-20" STROKE 2 DIA x 40" LG. ENDS OF ROD TO BE SQUARE		" "	
OBSELETE D-7840-9	1/4 STEEL COUPLING - STD. 1.900 O.D. x 2 1/16" LG. 1 1/2 THRD.		STL.	1
D-7846-10	O" RING 11 1/2 O.D. #11 1/4 I.D. x 1/8		A5-568 NATIONAL-276	1
75-09670-02	SINTERED BRONZE BUSHING 2" I.D. x 2 1/4" O.D. x 1 1/2" LG.		BUNTING P200-12	1
85-01303-02	1"-8 HEAVY HEX LOCK NUT		STL.	4
98-01091-02	3/4	SPLIT LOCKWASHER	STL.	4
98-01217-02	1"			4
D-7846-14A	CYLINDER CAP	W.O. / EARS	H.R.S.	1
D-7846-14B		W / EARS		
D-7846-15A	TIE ROD 1"-8 x 34 3/4" LG.		C.R.S. C-1018	4
D-7846-15B	TIE ROD 1"-8 x 40 3/8" LG.		" "	
D-7846-15C	TIE ROD 1"-8 x 44 3/4" LG.		" "	
91-09567-02	HOMOGENEOUS U-CUP-31 2" I.D. x 2 5/8" O.D. x 5/16 THK.		CRANE PACKING CO.	1
90-02281-02	3/4-10 x 2 1/2" LG. H. H. CAP SCR.		STL.	4
D-7846-18	CYLINDER BASE		H.R.S.	1
D-7846-19	5" SQ. SCREEN 8-8 .032 #10-928		PLAIN ST. WIRE CLOTH MC MASTER-CARR	3
83-B00002	ROD CLEVIS		STL.	1

000C 0000 9545 12" ACB

ITEM	PART NO.	DESCRIPTION	MATERIAL	QTY.
1	90-06486-02	1 1/4 - 7 x 5 1/2 LG. HEX HEAD CAP SCREW	STEEL	1
2	98-00989-02	1 1/4 SPLIT LOCKWASHER	STEEL	1
3	98-01210-02	1 1/4 STD. PLAIN WASHER	STEEL	1
4	D-7846-4A	FELT WASHER, 12 O.D. x 3 I.D. x 1/2 THK.	FELT	1
5	D-7846-5A	PACKING CUP, 12.000 O.D. x 1.500 x .250 x 5.000 HOLE	#12 JOHN CRANE OR EQUIV.	1
6	098A00010617	BACKUP WASHER	H.R.S.	1
7	066B00009567-3	CYLINDER, 12" I.D. x .250 WALL x 36" LG.	FIBERGLASS	1
8	066B00012387-2	PISTON ROD, 2" DIA. x 36" LG.	TG&P 1045 CHROME PLATED	1
9	D-7846-6	BACKUP WASHER, 11 O.D. x 1 9/32 I.D. x 1/2 THK.	H.R.S.	1
10	91-05103-02	O-RING, 290mm I.D. x W/ 4 mm CASING	C/S 70 BUNA LUTZ	1
11	75-24524-A2	GLASS WOUND BUSHING, 2 1/4 O.D. x 2 I.D. x 1 1/2 LG.	FIBERGLASS	1
12	85-01303-02	1"-8 HEAVY HEX LOCK NUT	STEEL	4
13	85-01277-02	1"-8 HEAVY HEX NUT	STEEL	4
14	98-01217-02	1" SPLIT LOCKWASHER	STEEL	4
15	066B00010798	TOP FLANGE, 12" I.D. CYLINDER	H.R.S.	1
16	D-7846-15B	TIE ROD, 1"-8 x 40 3/4 LG.	C.R.S. C-1018	4
17	91-09567-02	U-CUP, 2 5/8 O.D. x 2" I.D. x 5/16 THK.	CRANE PACKING CO.	1
18	066B00010797	BOTTOM FLANGE, 12" I.D. CYLINDER	H.R.S.	1
19	83-B0002	ROD CLEVIS	STEEL	1
20	86-B0001	CLEVIS PIN	STEEL	1
21	90-06636-02	1 1/4-7 x 3" LG. SOC. HD. SELF-LOCKING BOLT	STEEL	1
22	098A00010619	SEAL LOCATING WASHER	STEEL	1
23	D-7846-24	GASKET, 2" O.D. x 1 1/4 I.D. x 1/16 THK.	FIBER	1
24	89-03784-02	RETAINING RING FOR BUSHING	STEEL	1
25	OR231	O-RING FOR BUSHING	APPLE RUBBER	1



ITEM	PART NO.	DESCRIPTION	QTY.
1	D-7846-3	12 DIA C' BAL CYLINDER ASSY	4
2	A-8098	PIN 1 1/2 DIA x 6" LG.	4
3	86-03332-02	COTTER PIN 1/8 DIA.	16
4	90-04362-02	1" B x 3 LG SOC. HD. SELF-LOCK. BOLT	4
5	A-8098-1	PIN 1 1/2 DIA x 11" LG	4
6			
7	B-8052	ROD CLEVIS	4

2 PAGES (UPDATED C' BAL MTS. TO CROWN & RAM) 00357

ITEM 5 WAS A-7847-1, ITEM 6 WAS 03-02459-02, ITEM 7 WAS B-5083

REV DATE BY DESCRIPTION

ECO NO.

P.O. BOX R, FRANKFORT, ILL. 60423 (815) 466-2335

HEIM

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PROPOSED DIMENSIONS TO BE MADE TO THE FOLLOWING SPECIFICATIONS

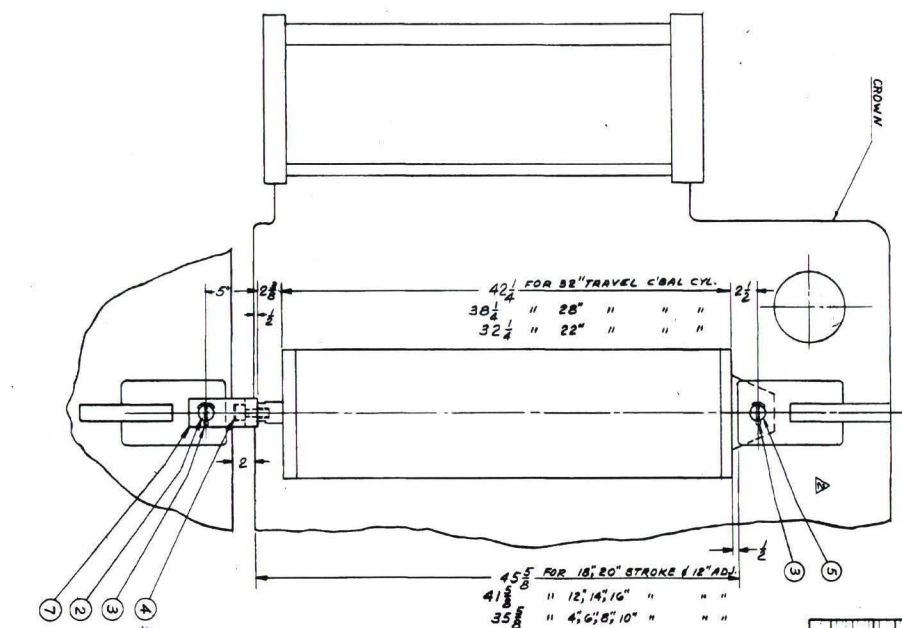
FRACTION 1/16 INCH DECIMAL 1/100 INCH ANGLES 1/4° BY ALL DIMENSIONS ARE TO BE MADE TO THE FOLLOWING SPECIFICATIONS

SCALE: 3/16" = 1" DATE: 5-2-69

DESCRIPTION: COUNTERBALANCE SYSTEM

DESIGNED BY: 52-HB-400,000 600

DRAWN BY: D-8090-1



NAME	DATE	REGISTRATION	DOB
1. <u>HEIM, P.O. BOX R, 60433</u>			
2. <u>FRANKFURT, AL. 60433</u>			
3. <u>(818) 460-2328</u>			
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83. <u>(818) 460-2328</u>			

S/N	MODEL	LUBE *	CUSTOMER	LOCATION	SHIP DATE
H-3746	S2-600MS		Dunlop Cox	England	5-92
H-3784	S2-400MS	R	Fayette Tool & Die	Connersville,	10-4-93
H-3750	S2-500MS	R	Durex, Inc.	Union, NJ	9-13-93
H-3806	S2-200MS	A	Sterling Die &	Sterling	5-3-94
H-3810	S2-300MS	A	Champion Products	Stafford, MO	7-13-94
H-3818	S2-300MS	E	Moen Mfg.	Fenton, MI	6-22-94
H-3820A	S2-400MS	R	Hudson Industries	Hudson, IN	11-7-94
H-3821	S2-400MS	R	Industrial Machine	Oxford, MI	10-3-94
H-3822A	S2-800MS	R	Hudson Industries	Hudson, IN	11-29-94
H-3823	S2-400MS	R	Anchor Tool & Die	Mt. Clemens,	9-19-94
H-3824	S2-400MS	R	Clover Tool	Concord, ON	8-17-94
H-3826	S2-400MS	R	Fayette Tool & Die	Connersville,	8-03-95
H-3829	S2-600MS	R	Midland Brake	Cuba, MO	3-23-95
H-3829	S2-600MS		Perfection Machinery sold used to: Stanco Metal Products	Grand Haven, MI	per letter 3/12/03
H-3830	S2-300MS	R	Ohio Gasket & Shim Co.	Akron, OH	5-3-95
H-3831	S2-600MS	R	Progress Tool & Die Inc.	Green Acres,	4-18-95
H-3836	S2-500MS	R	Mancelona Mfg.	Mancelona, MI	7-13-95
H-3837	S2-800MS	R	Majestic Industries	Clinton	9-15-95
H-3838	S2-200MS	R	Advanced Mfg. &	Willits, CA	8-23-95
H-3839	S2-300MS	R	Advanced Mfg. &	Willits, CA	10-27-95
H-3840A	S2-500MS	R	Majestic Industries	Clinton	12-11-95
H-3841	S2-400MS	R	Eberhard Manufacturing	Strongville,	10-30-95
H-3842	S2-400MS	R	Rockford Process	Rockford, IL	11-27-95
H-3844	S2-300MS	R	Precision tool & Die	Louisville, KY	7-24-96
H-3849	S2-400MS	R	Pruett Mfg. Co.	Terre Haute,	12-7-95
H-3852	S2-500MS	R	Friedrich Air Conditioning	San Antonio,	1-4-96
H-3853	S2-500MS	R	Proto Gage Tool & Die	Sterling	1-15-96
H-3854	S2-600MS	R	Fayette Tool & Die	Connersville,	3-19-96
H-3859	S2-400MS	R	Tottser Tool &	Huntingdon	2-24-97
H-3860	S2-1000MS	R	MMC Metal Corp./Voss	IN	4-1-97

Hebbon
Moorick
Petersen



Post Office Box 97
Benton Harbor, Michigan
Ph: 269/926-6171
Fax: 269/925-8288

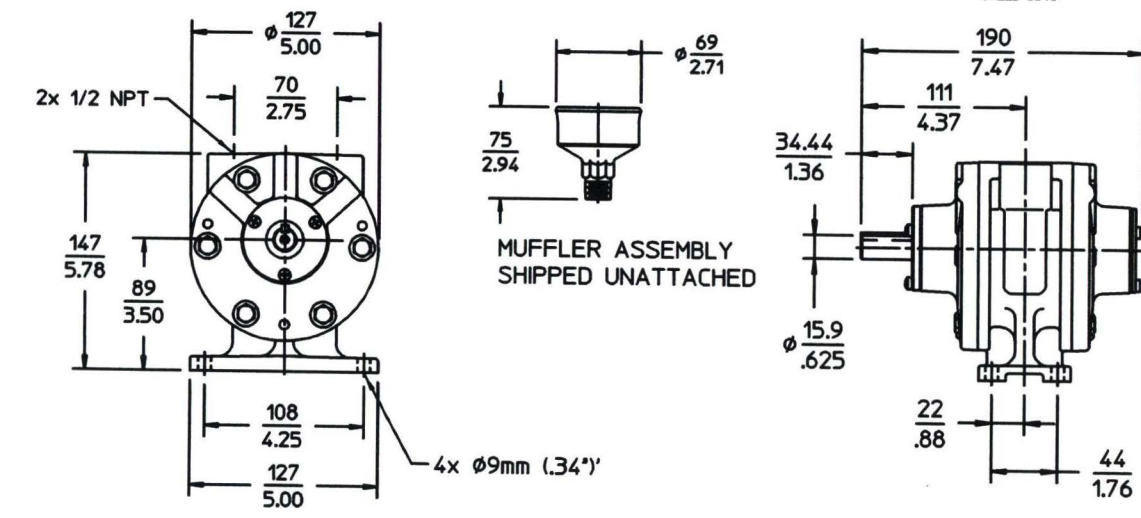
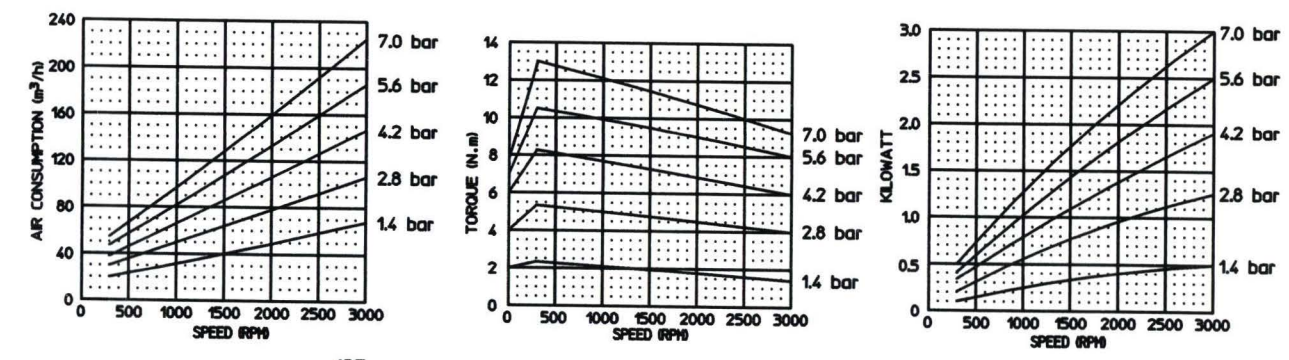
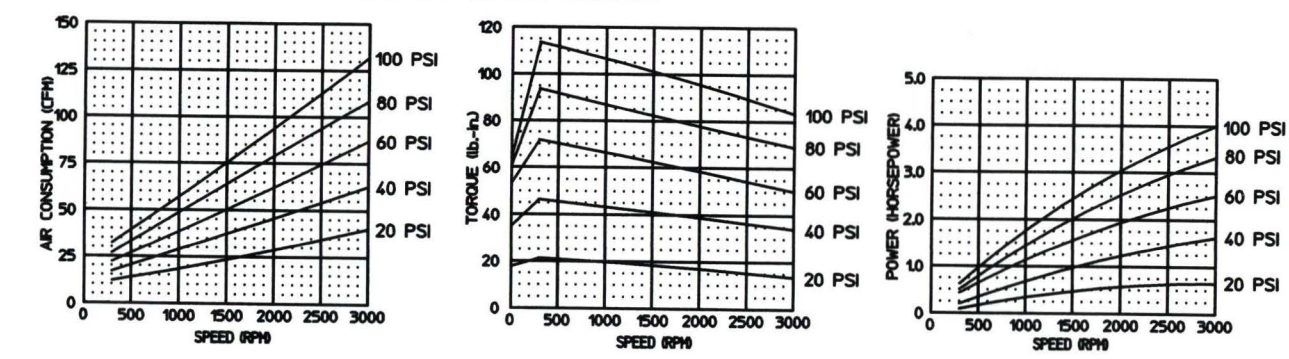
Product Specifications

PART NUMBER: STD132
REVISION: F

Model Number	MAX. PRESS.		MAX. SPEED	HP	kW	Net Wt.	
	bar.	PSI				lbs.	kg
6AM-FRV-5A	7.0	100	3,000 RPM	4.0	3.0	21	9.5
6AM-FRV-23A	7.0	100	3,000 RPM	4.0	3.0	21	9.5

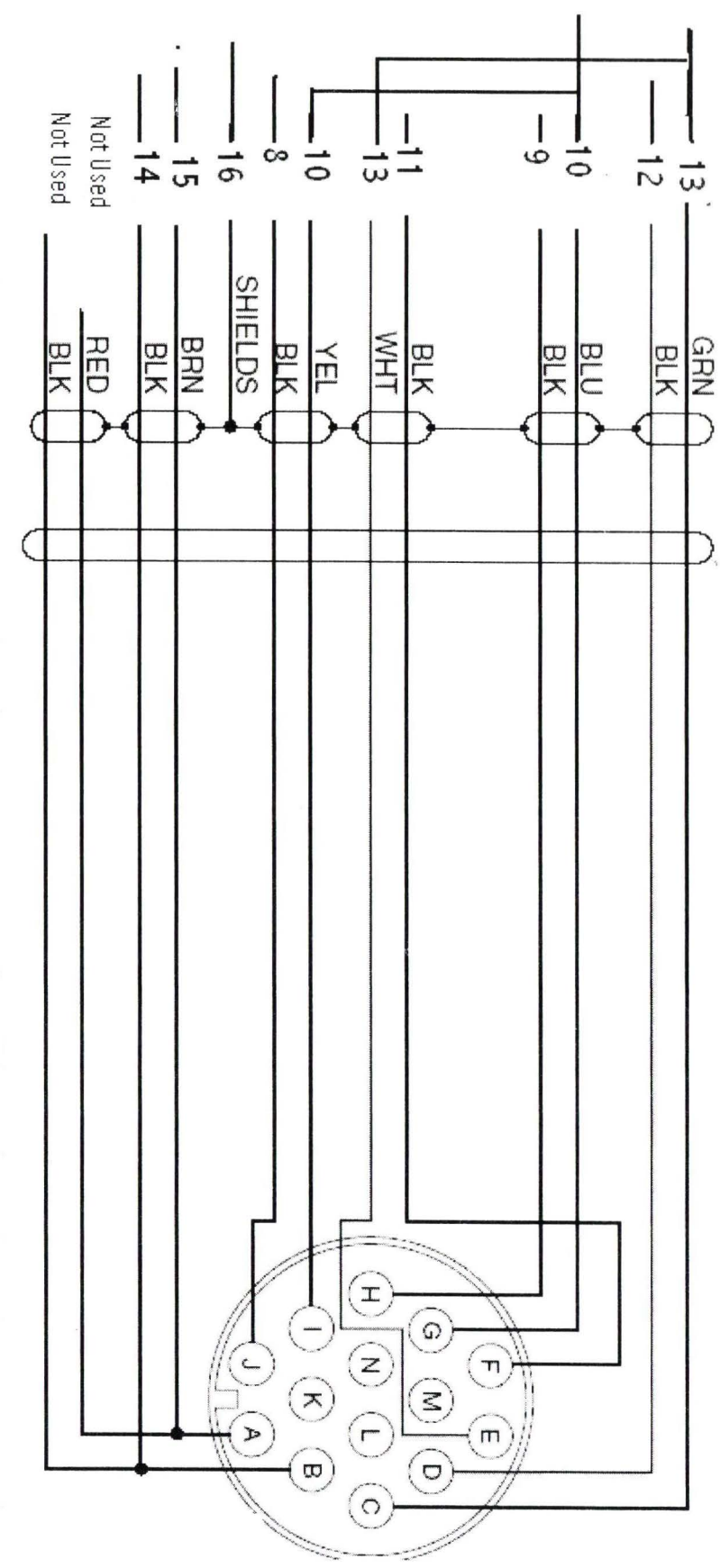
SOUND LEVEL 90 dba MAX.
NORMAL AMBIENT +1° C. - 120° C.
RELATIVE HUMIDITY 0% - 100%
ENVIRONMENT HAZARDOUS AMBIENT COMBUSTIBLE
GAS AND DUST +1°C TO +40°C

CONFORMS TO EUROPEAN STANDARD EN13463-1
NON-ELECTRICAL EQUIPMENT FOR EXPLOSIVE
ATMOSPHERES GROUP 11 CAT 2 (GAS & DUST),
PROTECTED BY CONSTRUCTION (SURFACE TEMP. RATED 135C).
* TECHNICAL DATA SUBJECT TO CHANGE
WITHOUT NOTICE.



Link Plug

AUTO SHUT HT. ADJUST CABLE FOR OMNI LINK 5000 "NOT A LINK PART" HEIM PART # **CM1-50**



CM1-50 Cable for Link Auto Shut Ht. Rotary Transducer Plug to Pin Connector
Cross reference Wiring Layout

Special Note--There are 5 BLACK WIRES used in this Cable. DO NOT MIX THEM UP
You can Be Sure you are using the correct one by Identifying the colored wire
twisted with it in the cable.
Terminal # 10 & 13 Have two wires on each screw.

ADV. Micro Controls
AMCI

AMCI ADVANCED MICRO CONTROLS INC.

20 GEAR DRIVE, PLYMOUTH INDUSTRIAL PARK, TERRYVILLE, CT 06786
TEL: (860) 585-1254 FAX: (860) 584-1973

CML-(x) Specification Sheet

SHEET # 940-2C020

DESCRIPTION

The CML-(x) cable is for use with all dual resolver, multi-turn transducers that are compatible with AMCI controllers. The part numbers of these transducers begin with "HTT" and end with the numbers 100, 180, 1000, or 1800. Therefore, the HTT-20-100, HTT-400-180 and HTT-425-A1E-1000 are all examples of compatible transducers, while the HTT-20-1 is not.

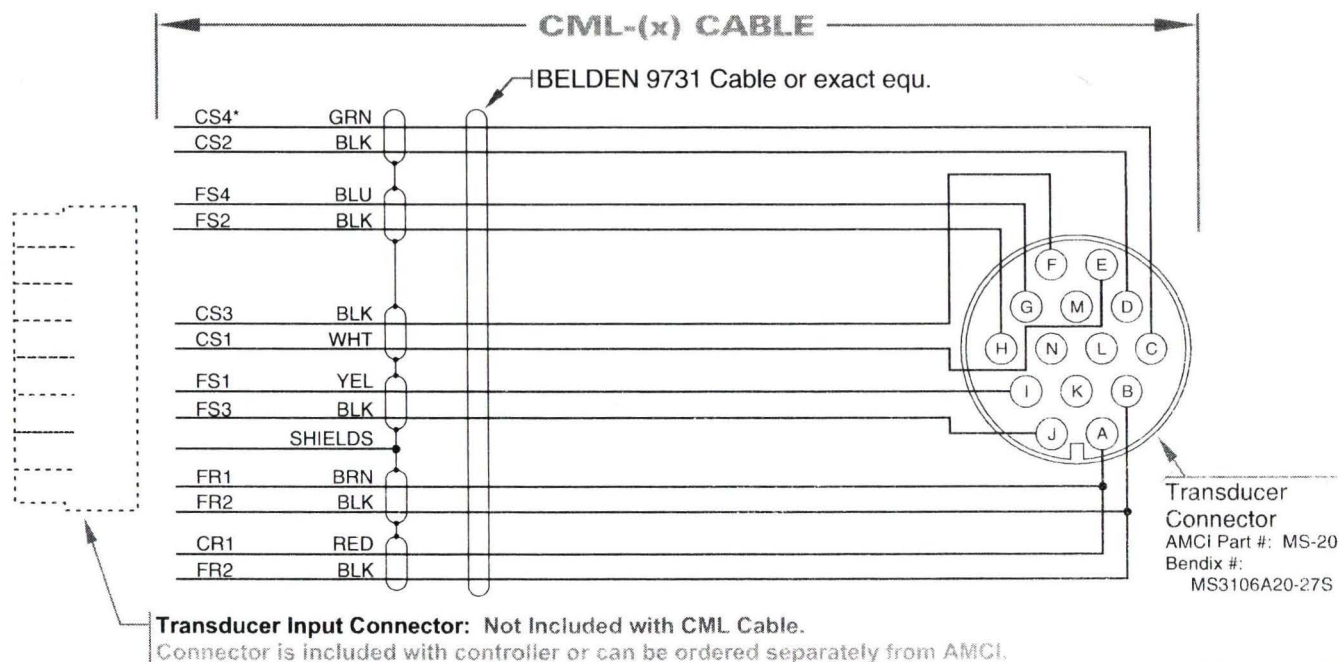
This cable cannot be used with the HTT-20-1 or HTT-400-1 redundant resolver transducers. Use the C1TR-(x) for the HTT-20-1 and the CTL-(x) cable for the HTT-400-1.

The (x) in the part number denotes the cable length in feet. {A CML-25 is 25 feet (7.6 meters) long.}

The CML-(x) cable replaces all CTT-(x) and C2TT-(x) cables in all documentation. Two CML cables can be wired together to replace the C2TT cable.

Note that the CML-(X) transducer cable does not include a mating connector for the controller. These connectors are supplied with the PLC plug-in module or controller. For correct connections, please see the cable wiring diagram in the installation section of the controller's manual.

PIN OUT DRAWING



*Industry standard resolver designations. The "F" or "C" prefix refers to the Fine or Coarse resolver in the transducer. The Fine resolver yields the position within the turn, while the difference in position between the Fine and Coarse resolvers yields the number of turns completed.

If you need a high temperature cable, AMCI suggests using Belden 89731 cable with foamed Teflon insulation. AMCI's FAQ "What Transducer Cable Can I Use In High Temp or High Flex Applications?" gives installation guidelines on the 89730 cable. This document can be found in the FAQ section of our website, www.amci.com.

Belden 9731	
Max. Cable Length	600 ft.
Wire Gauge	24 AWG (7X32 Stranded)
Nominal O.D.	0.421"
Jacket Insulation Material	PVC
Wire Insulation Material	Polyethylene
Temp. Rating	-20°C to +60°C
Capacitance	12.5 pF/ft.

LEADERS IN ADVANCED CONTROL PRODUCTS

March-16-2006

Attn: *Richard Cheney*
Fax: *310-599-0811*

Re: Parts for OMAG Model
Serial Number: OM

When ordering parts please contact the following.

Contact OMAG Direct.
20080 Cassinetta Di Lugagnano
Milano, Italy
Phone: 0113929420162
Fax: 0113929420740
Attn: Giovanni Scolari

Yours Truly

GEORGE HRAHA

gpc
Heim L. P.
Chicago IL 60638

The HEIM Group

OF QUALITY HEIM AND ROUSSELLE® PRESSES & SYSTEMS

March-18-2005

Federal Equipment
Ronkonkoma, NY

Attn: Ron Shuster
Fax: 631-467-8249

Re: Parts for OMAG Model
Serial Number: OM

When ordering parts please contact the following.

Crass Tooling & Machinery
1012 E. Orangefair Lane
Anaheim, CA 92801

Attn: Hamp Crass
Phone: 714-447-0076
Fax: 714-447-0076

Or Contact OMAG Direct.
20080 Cassinetta Di Lugagnano
Milano, Italy
Phone: 0113929420162
Fax: 0113929420740
Attn: Giovanni Scolari

Yours Truly

Marty Johnson
Heim L. P.
Chicago IL 60638



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www.TheHeimGroup.com

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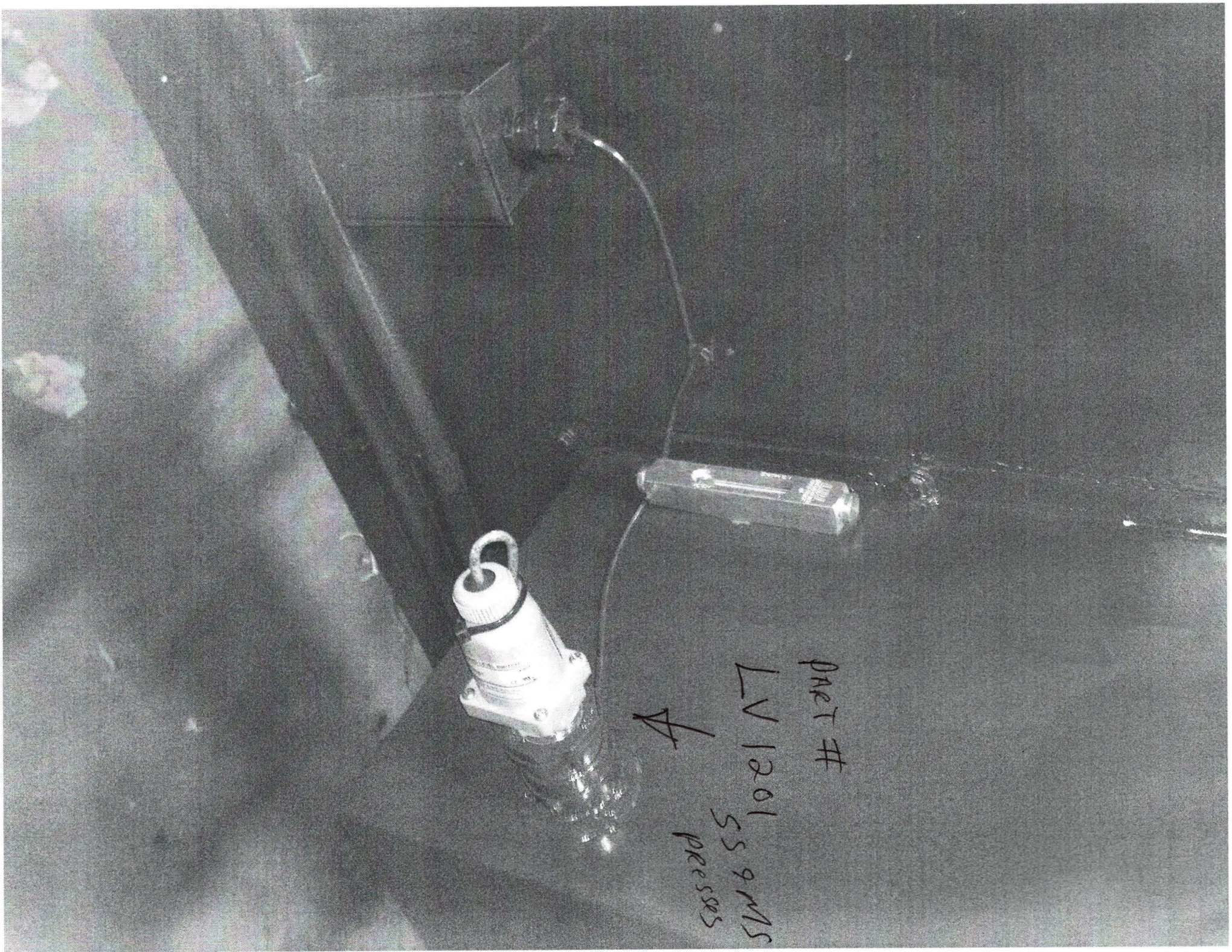
Also, OEM parts for **VERSON** presses.

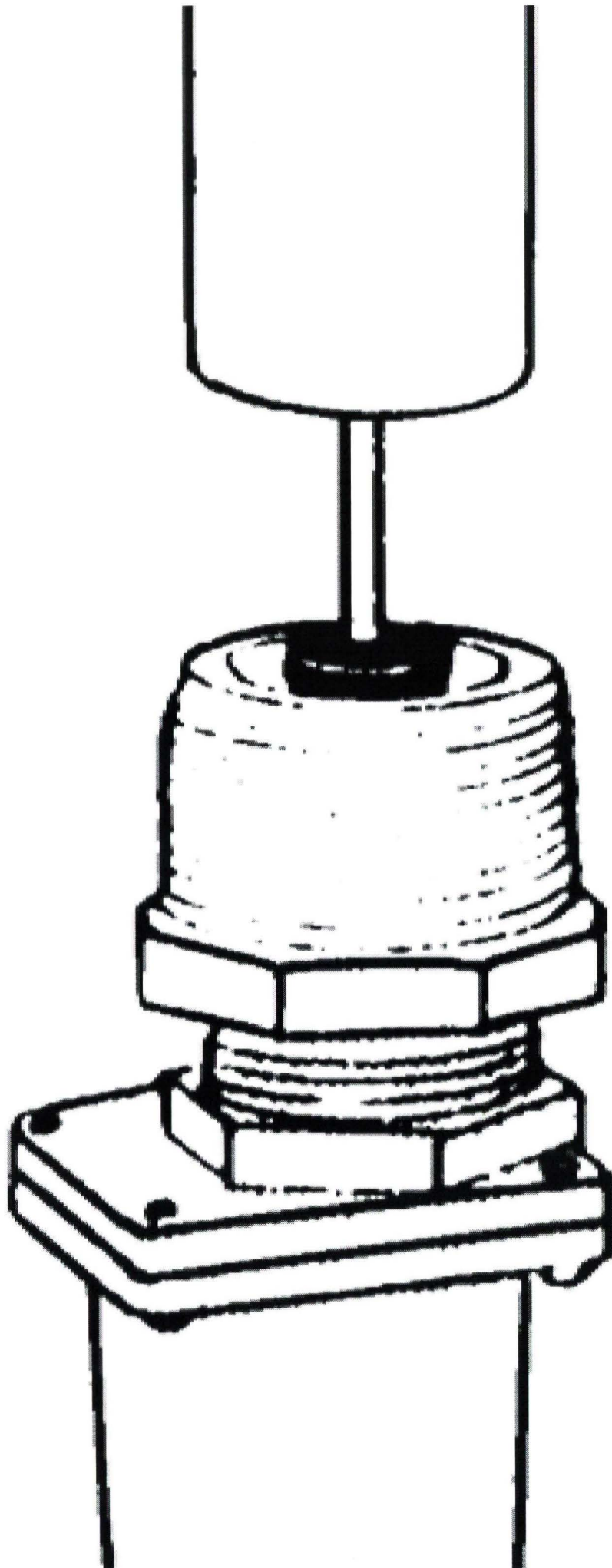
1004 East State St., Hastings, MI 49058, Fax: 616.948.3313

E-mail: sales@blissclearingniagara.com

write no. 37

10





OMEGA
Gear Lube Tank
New Style
PART # LV1201

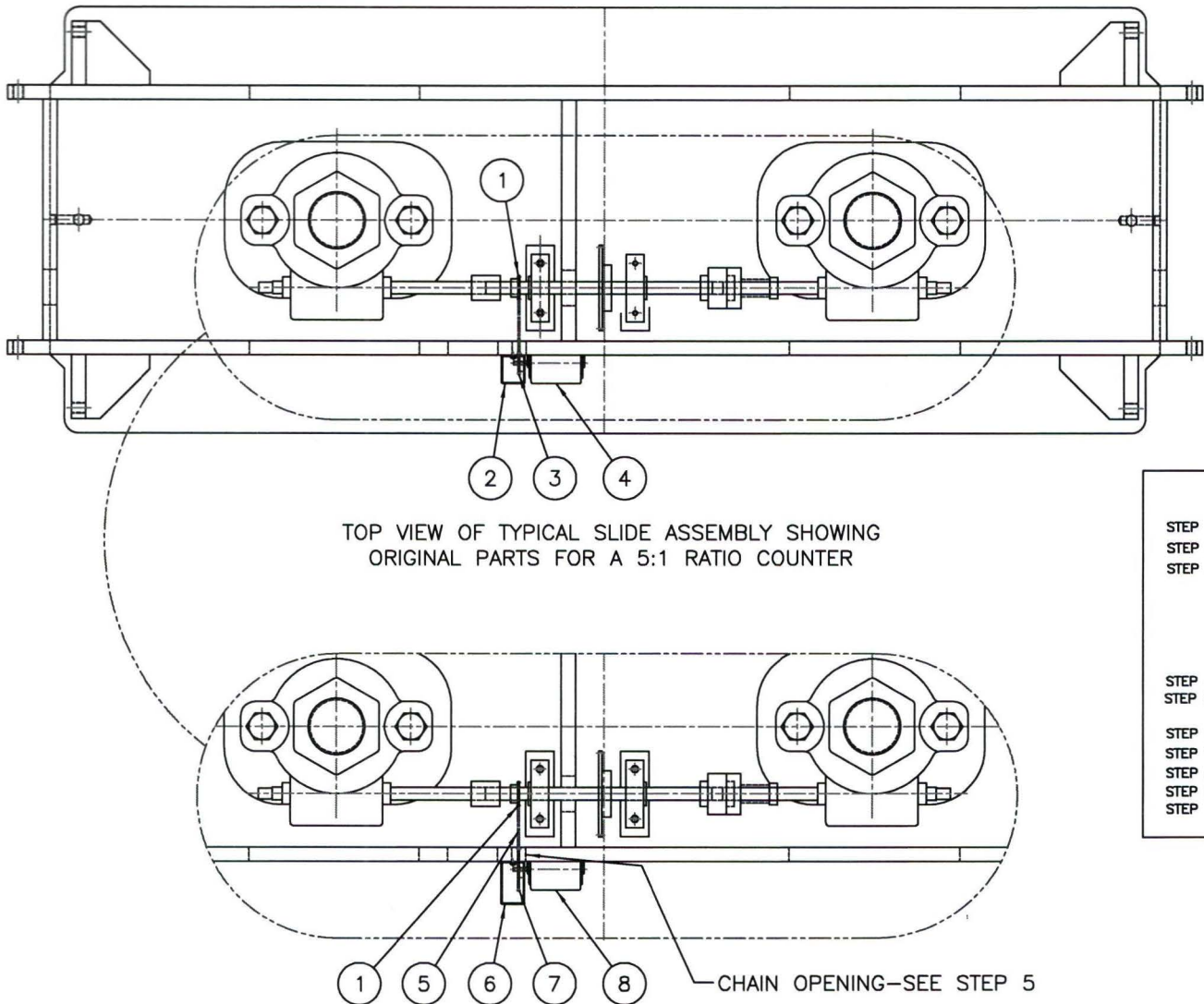
HEIM MAXI STAMPER FILTERS

NMO-250-P-3-S FILTER BAG

925023 SPIN ON FILTER

540-666-008 SUCTION FILTER - TOP HAT

930369Q ELEMENT



TOP VIEW OF TYPICAL SLIDE ASSEMBLY SHOWING ORIGINAL PARTS FOR A 5:1 RATIO COUNTER

VIEW OF TYPICAL SLIDE ASSEMBLY SHOWING NEW PARTS FOR A 10:1 RATIO COUNTER

DET	PART NO.	DESCRIPTION	MATERIAL	QTY
ORIGINAL PARTS				
1	A-1447	SPROCKET-7/8 BORE-20 TEETH	25B20	1
2	A-7423	CHAIN COVER	16 GA. STL.	1
3	A-337	SPROCKET-1/4 BORE-18 TEETH	25B18	1
4	830209002	COUNTER-5:1 RATIO-5 DIGIT-L.H.	DURANT 5-CS-7-3-L-S-CL	1
	832457102	COUNTER-5:1 RATIO-5 DIGIT-R.H.	DURANT 5-CS-7-3-R-S-CL	1

DET	PART NO.	DESCRIPTION	MATERIAL	QTY
NEW PARTS				
5	-	#25 CHAIN-98 PITCHES (24" LG.) WITH CONNECTING LINK	25B40	1
6	A-7423-1	CHAIN COVER	16 GA. STL.	1
7	000B00022407	SPROCKET-1/4 BORE-38 TEETH	STL.	1
8	830203202	COUNTER-10:1 RATIO-10 DIGIT-L.H.	DURANT 5-CS-7-3-R-S-CL	1
	830995002	COUNTER-10:1 RATIO-10 DIGIT-R.H.	DURANT 5-CS-00458-400-LAQ	1

PROCEDURE TO REMOVE 5:1 RATIO COUNTER

- STEP 1. REMOVE POWER FROM THE PRESS AND PERFORM LOCKOUT PROCEDURE.
STEP 2. RECORD THE SHUT HEIGHT SHOWN ON THE COUNTER (DET. 4).
STEP 3. DISCONNECT CHAIN AND REMOVE CHAIN COVER (DET. 2), COUNTER (DET. 4) WITH SPROCKET (DET. 3). REMOVE SPROCKET FROM COUNTER.

PROCEDURE TO INSTALL 10:1 RATIO COUNTER

- STEP 4. PLACE NEW SPROCKET (DET. 7) ON NEW COUNTER (DET.8).
STEP 5. CHECK OPENING IN SLIDE FOR CHAIN CLEARANCE. IF NECESSARY, ENLARGE OPENING BY GAS BURNING.
STEP 6. ROTATE COUNTER SHAFT TO MATCH SHUT HEIGHT RECORDED IN STEP 2.
STEP 7. INSTALL NEW COUNTER (DET. 8) WITH NEW SPROCKET (DET. 7) ON SLIDE.
STEP 8. ALIGN SPROCKETS (DET. 1 & 7). INSTALL NEW CHAIN (DET. 5).
STEP 9. INSTALL NEW CHAIN COVER (DET. 6).
STEP 10. COMPARE COUNTER WITH ACTUAL SHUT HEIGHT.

REVISION	DESC.	S2-180/200	REF. H-3840,41,3842,43
MODEL	DESCRIPTION	INSTALLATION PROCEDURE FOR 10:1 RATIO COUNTER	
DATE	BY	DATE	DATE
04/11/2011	0000000100004	0000000100004	4-2-15
The HEM Group			
SCALE:		1/8	0
REV. NO.		0	000D00022335

Approximate Weights (continued)

G1-32	4,700 lbs
G1-32 DT	4,900 lbs
G1-55	7,800 lbs. *
G1-55 DT	7,800 lbs.
G1-70	8,000 lbs.
G1-70 DT	8,100 lbs.
G1-95	14,000 lbs. *
G1-95 DT	14,450 lbs
G1-120	16,700 lbs.
G1-120 DT	20,100 lbs.
G1-150	30,000 lbs.
G1-200	33,000 lbs.
G1-250	34,000 lbs.
G1-300	35,000 lbs.

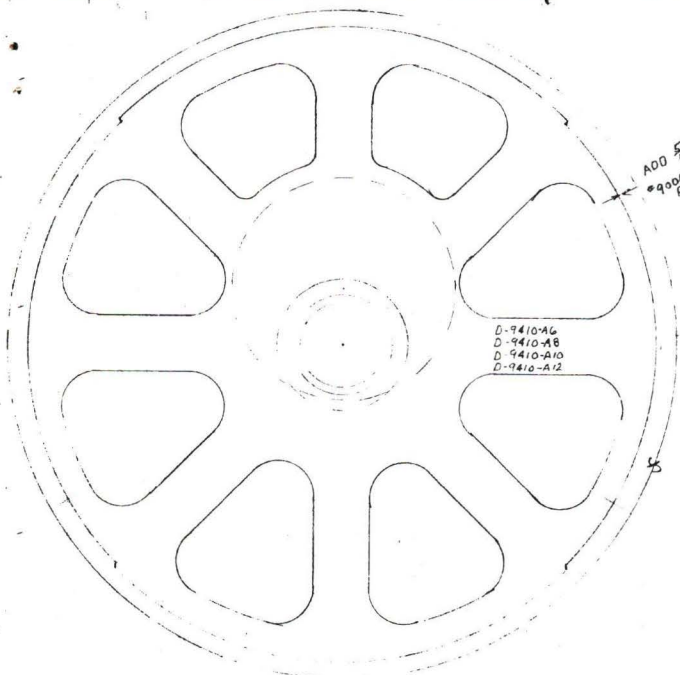
B1-32	5,000 lbs. *
B1-55	8,000 lbs. *
B1-70	7,000 lbs.
B1-95	14,000 lbs. *
B1-120	16,400 lbs.
B1-150	29,300 lbs.
B1-200	30,000 lbs.

* Updated in 1999

HEIM SERIAL NUMBERS

DATE OF MANUFACTURE

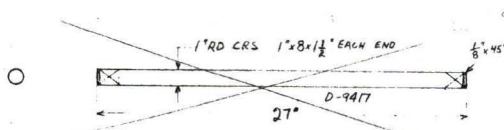
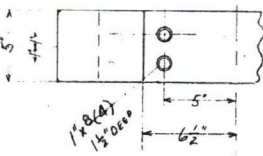
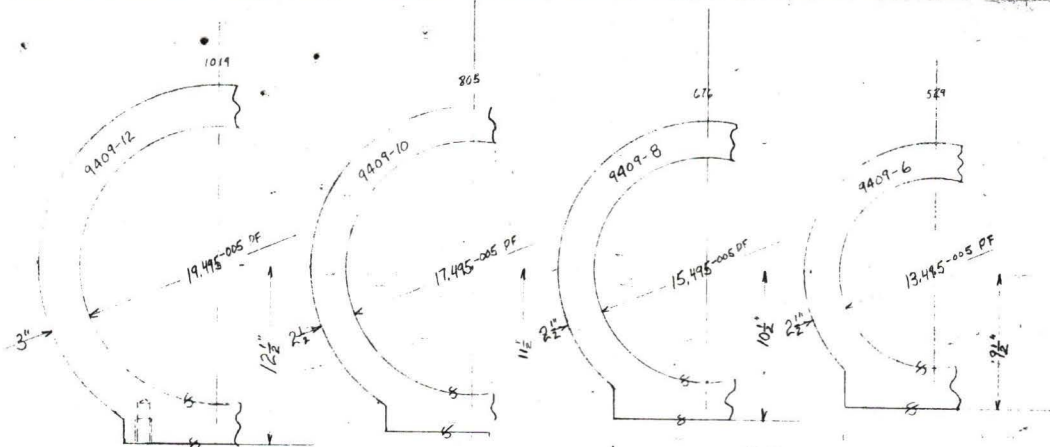
Serial Numbers			Year
100	to	225	1970
226	to	261	1971
262	to	337	1972
1300	to	1400	1973
1401	to	1600	1974
1601	to	1750	1975
1751	to	1950	1976
1951	to	2150	1977
2151	to	2400	1978
2401	to	2600	1979
2601	to	2800	1980
2801	to	2950	1981
2951	to	3025	1982
3026	to	3100	1983
3101	to	3225	1984
3226	to	3300	1985
3301	to	3400	1986
3401	to	3460	1987
3461	to	3540	1988
3541	to	3650	1989
3651	to	3720	1990
3721	to	3740	1991
3741	to	3780	1992
3781	to	3810	1993
3811	to	3840	1994
3841	to		1995



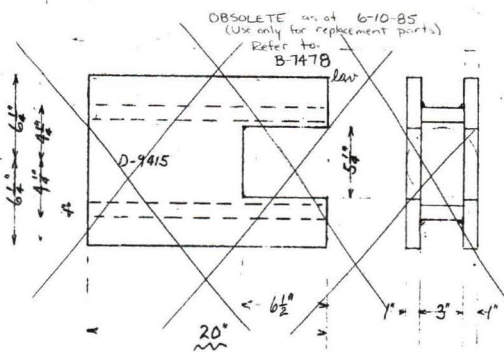
ADD $E = 290170$
 $\phi 9008A$
 PATTERN

D-9410-A6
 D-9410-A8
 D-9410-A10
 D-9410-A12

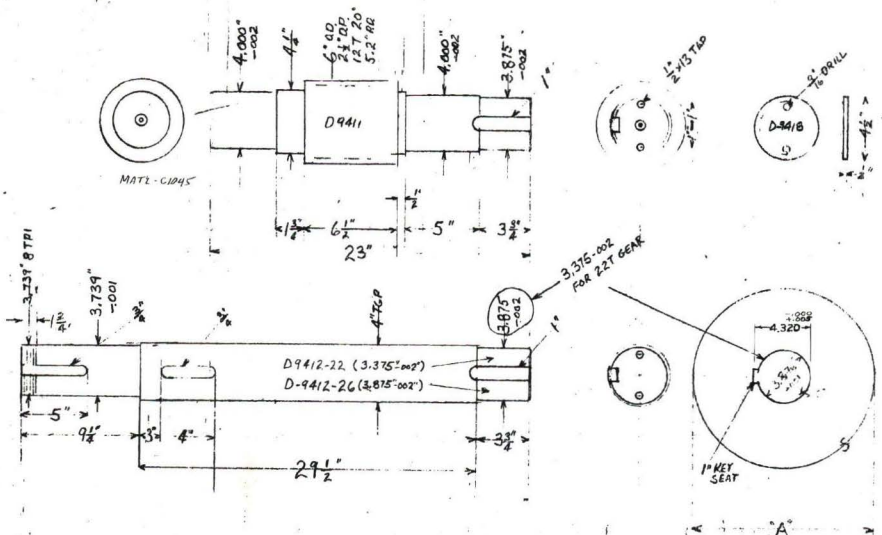
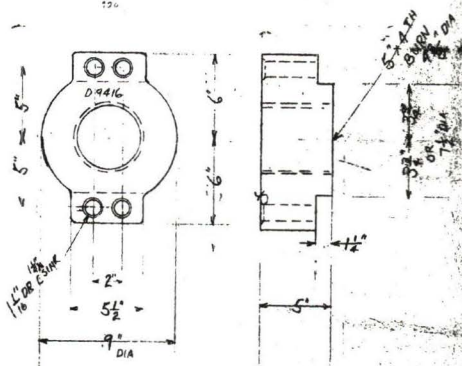
46.800\"/>



OBSOLETE as of 6-17-85
 Refer to B-7237
 Rev



OBSOLETE as of 6-10-85
 (Use only for replacement parts)
 Refer to B-7478
 Rev



4DP 20\"/>

NOTES	PD	OD	PART
22T	5.5"	6"	D-9413-22
26T	6.5"	7"	D-9413-26
32T	8"	8.5"	D-9413-32
64T	16"	16.5"	D-9414-64
70T	17.5"	18"	D-9414-70
74T	18.5"	19"	D-9414-74

FLYWHEEL SPEED 500

SPM	22T - 71T	36\"/>
15 SPM	22T - 71T	36\"/>
20 SPM	26T - 73T	40\"/>
25 SPM	32T - 64T	40\"/>

11-20-79

REV	DATE	BY	CHK
1	8-20-79	B-20-79	
2	8-20-79	B-20-79	

400T SS D-9417
 Pg 1 OF 2

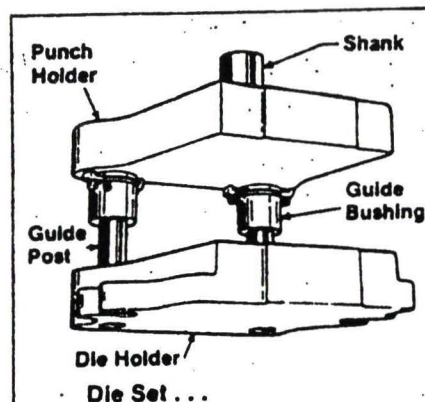
BULL GEARS

9000 DOUBLE # FOR STROKE

9800 A 200,300 & 400 TON

9800 B 500 & 600 TON

DIESETTING PROCEDURE



Removing dies

Dies should be removed from the press with the same care used in setting them up. Although modifications may be necessary in special cases, the safe procedure is as follows:

1. Make sure that the working space is cleared of all stock, containers, tools, and other items.
2. Disconnect or shut off the power and lock the switch. Turn the flywheel by hand or by means of the bar until the slide is at the bottom of the stroke. If the press cannot be turned over manually, jog it under power, then shut off the power and lock the switch.
3. Dismantle or disconnect the point-of-operation safety device only if absolutely necessary. Put aside the parts of a dismantled safety device so that it can be reinstalled in good condition as soon as the new die is in place.
4. Clean off the bolster plate, preferably with a brush.
5. If the die is to be operated with an air pad, shut off the air supply and open the release valve to permit the pins to go down. Also shut off the air supply to the automatic blowout system used in the die.
6. Loosen and remove bolts and clamps bolting the die to the slide and to the bolster plate. Place bolts, nuts, and clamps on a bench or in a special place on the die truck as soon as they have been removed from the press.
7. Make certain that the die is loose and that bolts, nuts, clamps, and other obstructions have been removed.
8. Raise the slide slowly, manually on light presses, and by jogging or inching under power on large presses, and make sure that the die does not hang in the slide.

9. Block the slide in its highest position, and if power was used, shut off the power and lock the switch.
10. Place the die truck close to the press, adjust the table to the same height as the bolster plate, and chock the wheels or set the brake of the truck to prevent movement. To pull the die onto the truck, use a hook engaged so that it cannot slip.
11. Dies should be inspected, repaired, and protected before being stored for the next run. Inspection should include pins, bushings, etc. Hardened dies and punches should be stored in closed position with a piece of soft wood between the cutting edges to protect them. Injuries have occurred when hardened dies were handled when open or partially open, as a sudden jolt can cause them to close and pinch a hand or finger.

Setup routine—light dies

The following procedure should be observed in setting up dies on light and intermediate presses and, as far as applicable, on heavy presses. (Additional instructions which apply to heavy dies and presses follow this list.)

1. Disconnect or shut off the power and lock the switch. Bring the slide down to its lowest position by turning the flywheel by hand or with a safety turning bar inserted into the flywheel or crankshaft. Measure the clear height between the bottom of the slide and the bolster plate.
2. If this distance is not slightly greater than, or at least equal to, the height of the die in the closed position, raise the slide to suitable height by means of the adjusting screw. Block the slide with metal blocks (props) provided for this purpose.
3. So that work space will be ample, clear away all stock, containers, tools, and other tripping hazards from the area around the press.
4. Dismantle or disconnect the point-of-operation safety device only if it is absolutely necessary to do so. For example, die enclosure guards fastened to the press, gate or movable barrier devices, and some types of sweep devices will have to be removed, but not all the pull-out or electronic controls.
5. Put aside the dismantled safety device so that the parts can be reinstalled in good condition as soon as the new dies have been placed.

6. Clean off the bolster plate, preferably with a brush. Tapped holes in the area between the slide and the bolster plates should be checked for good thread condition and cleaned out with a magnet rod inset to remove chips and slugs in order to make certain that the holding bolt will have ample holding thread depth. This type rod permits threads to be cleaned from outside the slide area. Burrs, however, should be removed with a flat file.
7. Make sure the die contains no overlooked chips, tools, or finished parts, and check it for good operating order.
8. Place the die truck close to the press, adjust the table to the same height as the bolster plate, and chock the wheels or set the brake of the truck to prevent movement. Push the die off the truck onto the bolster plate.
9. Line up the die in the correct operating position, manually control the flywheel, using a bar if necessary, remove the die blocks from under the slide and carefully lower the slide until it fits firmly against the top die. It is extremely important not to put too much pressure on pierce or trim dies. Tighten all bolts and clamps which secure the top half of the die to the slide.
10. Shim or block up the lower half of the die to the proper level, and bolt the shims to the die shoe. The shims must not be allowed to creep to a point of misalignment. If they do, the die will split and the operator may incur severe injuries and extensive machine damage will certainly result.
11. Make sure that bolts, bolt heads, and wrenches are of proper size and in good condition. Block up the outer ends of the clamps to a height slightly greater than that of the die surface on which the inner ends of the clamps will meet.
12. Check bolts and clamps to see that they are tight and that the dies are securely fastened to the press. Remove tools and equipment from the dies, bolster plate, or other ledges of the press. If the die is for forming or drawing, adjust the slide to almost the proper depth.
13. If it is a pierce or trim die, raise the slide slightly so that the punch will not shear when the crank is again brought over and the die entered. Turn the press over several times manually, checking it for satisfactory adjustment.
14. On deep draw operations, make certain that the stop blocks are properly adjusted.

"POWER-PRESSES"

Die Setting Procedure Continued

15. Raise the slide to its highest point and block it in that position. Wipe out the die and remove the safety blocks or posts. Replace the safety device and check it for adjustment and operation. If pull-out devices (wrist or elbow type) are to be used, make sure that they are adjusted for the operator assigned to operate the press. Use the pull-out devices when making trial runs.
16. Reconnect the power and try out several operations, using the proper stock on the press. Before making further adjustments, shut off the power and block up the slide.
17. After completing the adjustments, turn on the power and make certain that the air pressure in the air clutch, if used, is being maintained. Again try several operations on the press. If it is satisfactory, give the operator his instructions. Then turn the press over to him and observe his methods for a few minutes to see that he is operating the press correctly.

Setup routine—heavy dies

On large presses with heavy dies, it is not possible to turn the press over by hand during die setting operations. Many of the steps outlined for light presses may be followed in setting up heavy presses under power. The procedure is as follows:

1. After making sure that the electrical switches are set for jogging or inching, jog or inch the press to bring the slide to its lowest point and measure the clear height between it and the bolster plate. If this distance is not slightly greater than, or at least equal to, the height of the die in the closed position, adjust the slide until such clearance is obtained. Raise the slide, block it in position, shut off the power and lock the switch.
2. Proceed as in paragraphs 4 through 8 under instructions above for setting up light dies.
3. Except that power instead of hand operation is used, proceed as outlined in paragraph 9 preceding. When an air pad is used, keep the slide close to the top of the die until the air pad is properly seated on the pins.
4. Proceed as outlined before in paragraphs 10 through 14, except that the press is not to be turned over for manual setup.
5. Jog or inch the press to raise the slide to its highest point, block it in this position, shut off the power. Wipe off the die.
6. Remove the safety block and reconnect, check, and adjust, if necessary, all safety devices. Reconnect the power.
7. Obtain stock which is to be run on this job, and try out the press by making several pieces on it. Adjust the press and the safeguard as necessary, observing the precautions outlined above, and then instruct the operator before turning over the press to him.

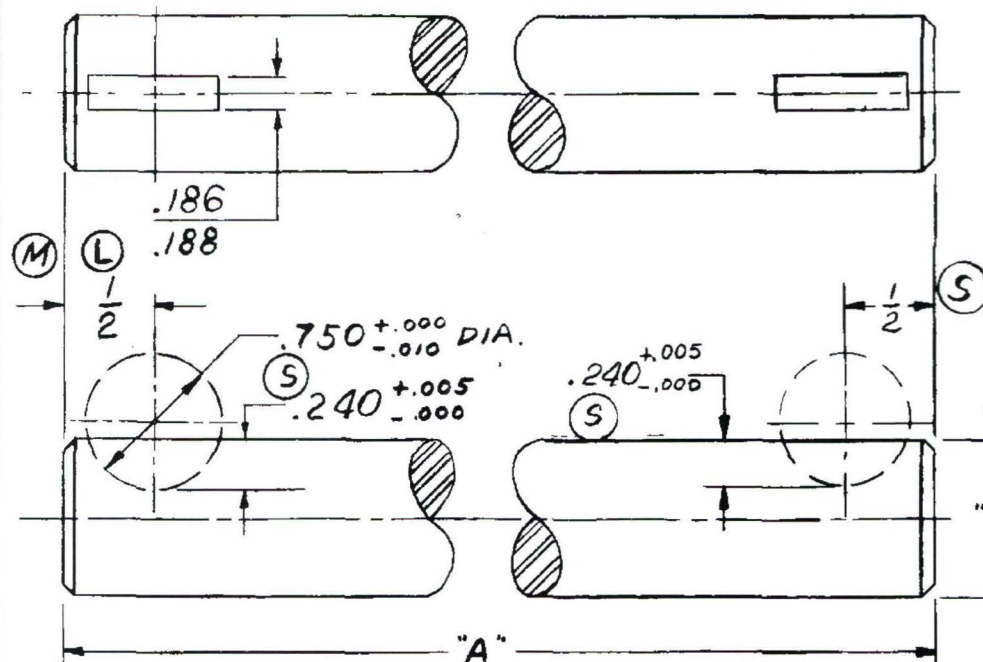
CONTINUED NEXT PAGE

HYTORC

TOOL MODEL:HY- 2 XLCT with HEX LINK

PRESSURE/TORQUE CONVERSION CHART

PRESSURE IN PSI	FT. LBS.	TORQUE IN		PRESSURE IN BAR
		KGM	NM	
1500	243	34	329	104
1600	259	36	352	110
1800	292	40	396	124
2000	325	45	441	138
2200	359	50	486	152
2400	392	54	532	165
2600	426	59	577	179
2800	459	64	623	193
3000	493	68	668	207
3200	526	73	713	220
3400	559	77	757	234
3600	591	82	802	248
3800	624	86	846	262
4000	657	91	891	276
4200	691	96	937	290
4400	726	100	984	303
4600	760	105	1031	317
4800	795	110	1077	331
5000	829	115	1124	345
5200	863	119	1170	358
5400	897	124	1216	372
5600	931	129	1262	386
5800	965	133	1308	400
6000	999	138	1354	414
6200	1033	143	1401	427
6400	1067	148	1447	441
6600	1102	152	1493	455
6800	1136	157	1540	468
7000	1170	162	1586	482
7200	1204	167	1633	496
7400	1239	171	1679	510
7600	1273	176	1726	524
7800	1308	181	1773	538
8000	1342	186	1819	552
8200	1377	190	1866	565
8400	1412	195	1914	579
8600	1446	200	1961	593
8800	1481	205	2008	607
9000	1516	210	2055	620
9200	1550	214	2101	634
9400	1584	219	2148	648
9600	1619	224	2194	662
9800	1653	229	2241	676
10000	1687	233	2287	690



MAT'L: #1018 STEEL

SIZE S.S.P.	DIM. "A"	DIM. "B"
125-42-60	17"	7/8"
125-42-78	32 3/4"	7/8"
125-42-102	56 1/2"	
125-42-126		
175-42-60	17"	7/8"
175-42-78	32 3/4"	7/8"
175-42-102	56 1/2"	
175-42-126		

SIZE G.F.P.	DIM. "A"	DIM. "B"
125-30-80	32-3/4	
125-30-100		
125-30-120	78	

NOTE:
ALL S.S.P. & G.F.P. USE
END "C"

S	WERE 1 1/4; .229 (+.005, -.000) LK	11.3.88
R	REMOVED HOLE 1/4 DIA LK	11.3.88
P	ALL DIM. "A" REDUCED 1/2 L.K.	11.3.88
N	88 WAS 88 1/2 I.C.	12.21.87
M	1/2 WAS 3/4 V.S.	11-5-87
L	WAS 1/2 BH	1-4-74
K	WAS 5/16 BH	11-5-73

SIZE P.B.	DIM. "A"	DIM. "B"	END C	END D
30T-4	28	5/8		X
30T-6	52 1/2	5/8		X
30T-8	76	5/8		X
30T-10	100	5/8		X
30T-12	124	5/8		X
45T-4	28	5/8		X
45T-6	52	5/8		X
45T-8	76	5/8		X
45T-10	100	5/8		X
45T-12	124	5/8		X
70T-6	40	7/8	X	
70T-8	64	7/8	X	
70T-10	88	7/8	X	
70T-12	112	7/8	X	
70T-14	126	7/8	X	
100T-6	40	7/8	X	
100T-8	64	7/8	X	
100T-10	88	7/8	X	
100T-12	112	7/8	X	
100T-14	136	7/8	X	
150T-6	43-1/4	7/8	X	
150T-8	67-1/4	7/8	X	
150T-10	91-1/4	7/8	X	
150T-12	115-1/4	7/8	X	
150T-14	139-1/4	7/8	X	
150T-16	164-1/4	7/8	X	
200T-6	43-1/4	7/8	X	
200T-8	67-1/4	7/8	X	
200T-10	91-1/4	7/8	X	
200T-12	115-1/4	7/8	X	
200T-14	139-1/4	7/8	X	
200T-16	163-1/4	7/8	X	

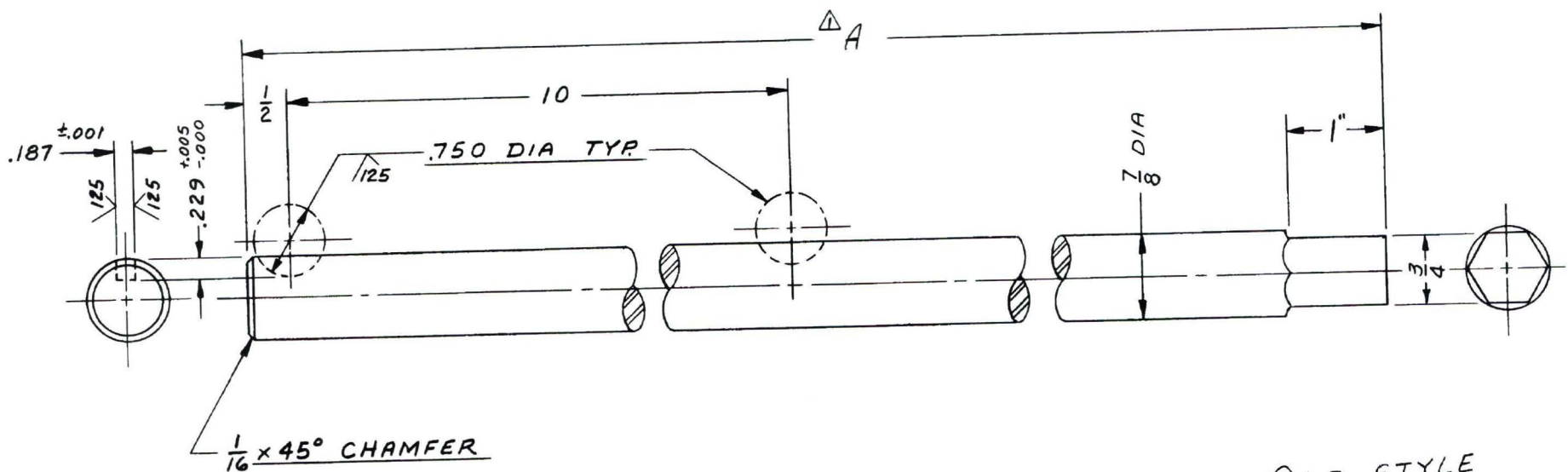
NOTE: FOR
CORRECT OPP-
OSITE END
MACH'G. OF
SHAFT USE
END MARKED
"X".

HEIM CORP.

P. O. BOX R
FRANKFORT, ILL. 60423

DRAWN BY	DATE	CHECKED BY	DATE	SCALE
BH	10-26-73			
DESCRIPTION SHAFT ~"RAM ELEVATING"				
USED ON P.B. - S S - G F			PART NO. A-1504-A	

For PASCAL Hyd O.L
SAFETY Valve 913747
CMS-115 - 70 689202



PRESS MOD.	DIM "A"
S2-STANDARD	35 3/4
S4-100 ALL	35 3/4
S4-120 ALL	45 3/4
S2-HBB-120	42
S2-HBB-144	54

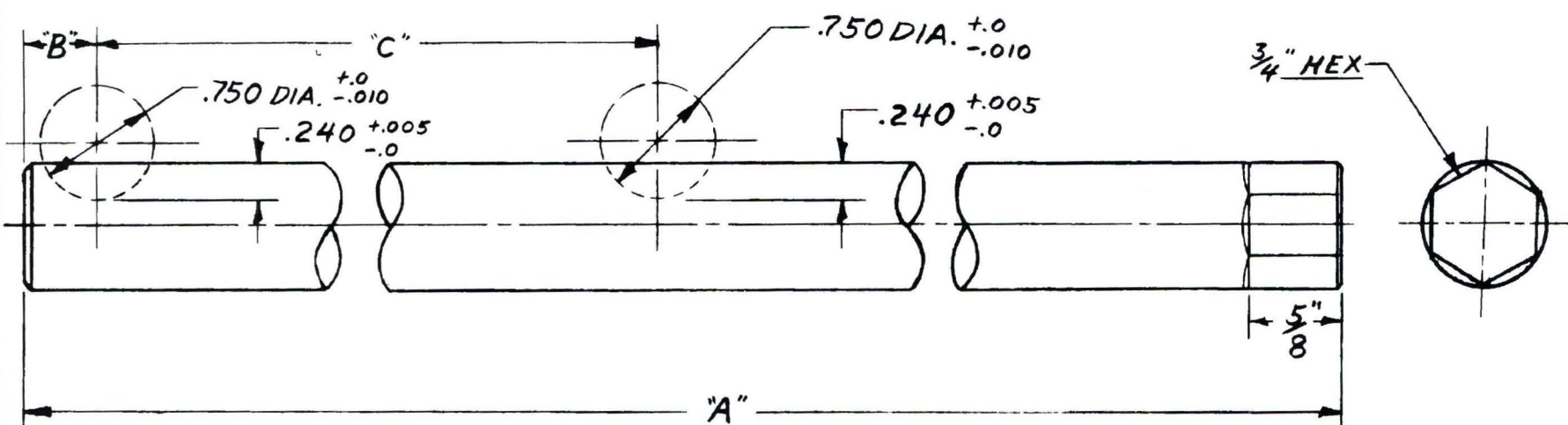
SEE DRWG. No.
 A-7245-A

MATERIAL:

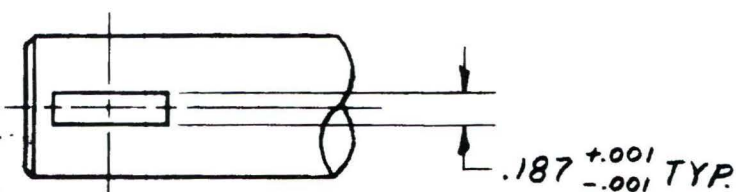
C-1018 C.R.S. 7/8 DIA x ALG.

OLD STYLE
USE NEW B-7598
7-9-93

1	9.8.88	J.C.	DIM. A WAS 35 3/4	252
REV	DATE	BY	DESCRIPTION	ECO NO
HEIM P.O. BOX R, FRANKFORT, ILL. 60423 (815) 469-2335				
SUPERSEDES		THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP.		SCALE FULL DATE
FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED		FRACTION ± .015 DECIMAL ± .005 ANGLES ± 0° 30'		DRWN BY V.S. 9-8-81 CHK BY RSB 9-9-81
ALL FINISHES 125 RMS UNLESS OTHERWISE SPECIFIED		DESCRIPTION WORM SHAFT USED ON D-7639 S2-400; S2-HBB S4-400, 500, 600		DRWG. NO. B-7595



MATL. 7/8 DIA. #1018 C.R. STEEL



USED ON	DIM "A"	DIM "B"	DIM "C"
S4-100-50,60,70,80	35 3/4	1/2	10 1/2
S4-120-50,60,70,80	45 3/4	1/2	10 1/2
S2-100/200 TON	24"	1/2"	8 1/2
S2-250/ TON	38 1/2"	1/2"	10"

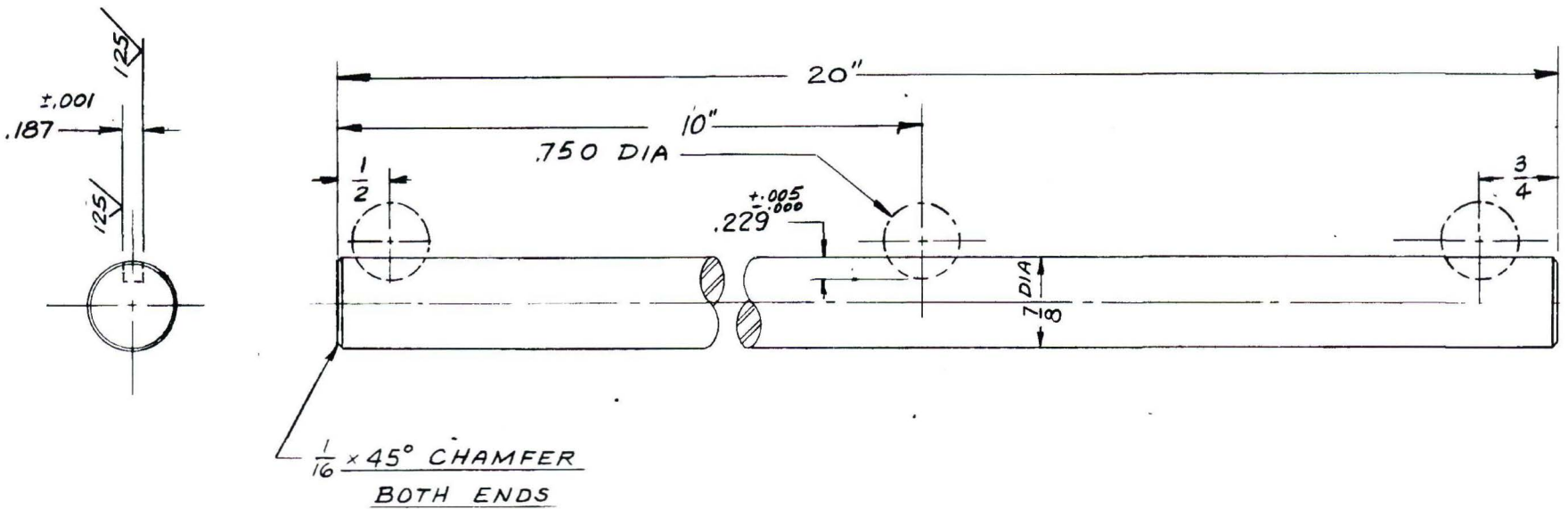
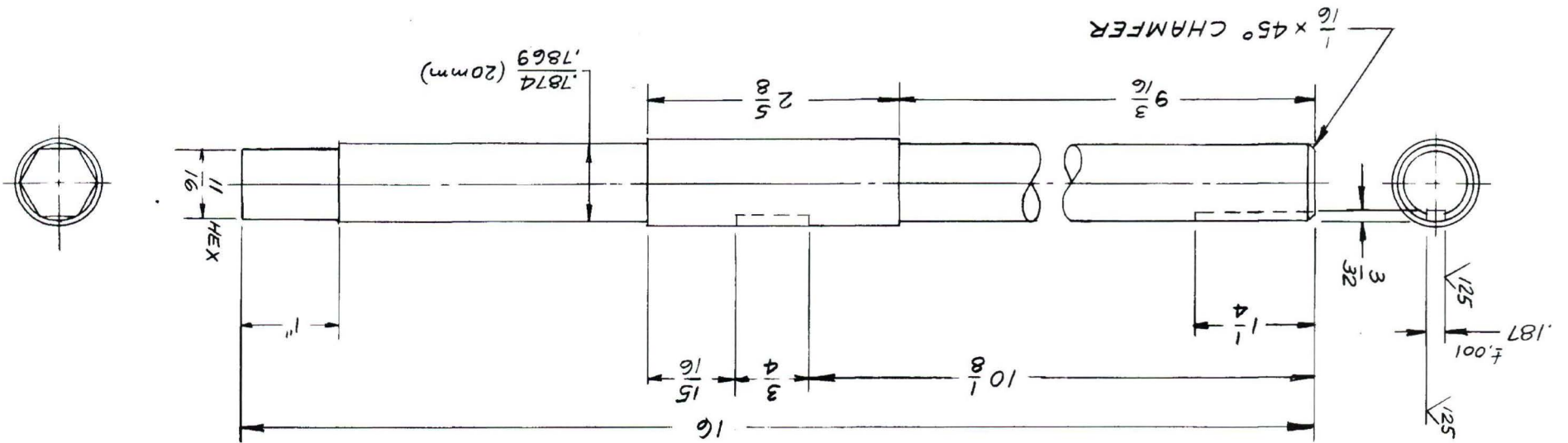
NEW B-7598
7-9-93

1	12-4-85	V.S.	38 1/2, 1/2, 10 WAS 38, 3/4, 18	00129
HEIM CORP. P. O. BOX R FRANKFORT, ILL. 60423				
DRAWN BY BH	DATE 8-15-74	CHECKED BY	DATE	SCALE
DESCRIPTION SHAFT, WORM ~ HGT. ADJT.				
USED ON 150 THRU TON S.S. S4-100 & S4-120			PART NO. A-7245-A	

HEIM CORPORATION 6360 W. 73rd Street Chicago, Illinois 60638				THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP. BY CHK DATE		SUPersedes EXPERIMENTAL FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED FRACTION ± .015 DECIMAL ± .005 ANGLES ± 0° 30'		USED ON D-7665 KNUCKLE BOX B-8161	
REV	DATE	BY	DESCRIPTION	ECO NO.					

1. 1141 T.G.P. $\frac{8}{7}$ DIA $\times$ 16" LG.
2. MRC 5204-C LIGHT SERIES BRG.

MATERIAL:



MATERIAL:

C-1018 C.R. S. $\frac{7}{8}$ DIA $\times$ 20" LG.

REV	DATE	BY	DESCRIPTION	ECO NO.
				
P.O. BOX R, FRANKFORT, ILL. 60423 (815) 469-2335				
SUPersedes FINISHED DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED FRACTION ± .015 DECIMAL ± .005 ANGLES ± 0° 30'		THIS DRAWING IS THE PROPERTY OF HEIM CORP. AND MAY NOT BE COPIED, REPRODUCED OR USED FOR DESIGN, MANUFACTURE OR SALE WITHOUT PRIOR PERMISSION FROM HEIM CORP. SCALE FULL DATE DRWN V.S. BY CHK BY		
DESCRIPTION WORM SHAFT		USED ON OBI & OBS 250 - 300 TON DRWG NO. E-7959-A		

ASS'Y. No. D-7665-2

MYLAR OF B-7638