

Tulsa, Oklahoma

November 20, 1953

MACHINERY SALES BULLETIN NO. P-49

SUBJECT: CABOT "AC" UNIT SALES DRAWINGS  
AND SPECIFICATION SHEETS

DISTRICT SALES MANAGERS  
LOCAL STORE MANAGERS  
SALES OFFICE MANAGERS  
SALESMEN - GENERAL PRODUCTS

Gentlemen:

We are attaching the following Cabot Adjustable Crank Unit sales drawings and specification sheets:

ACD9 - 40D Sales Drawing  
ACD9 - 57D Sales Drawing  
ACD16-160D Sales Drawing  
ACD9 - Structure Specifications  
ACD16- Structure Specifications

The attached sheets should be inserted in your Cabot Catalog. Specification sheets on the AC32 Structure and 456D Gear Reducer will be available soon.

Yours very truly,

*C. J. Watson*

C. J. Watson  
Sales Engineer  
Machinery Sales

CJW:bl

MR. J. R. CUSTER, SALESMAN 1-S  
JONES & LAUGHLIN STEEL CORP., SUPPLY DIV  
BOX 1741  
MIDLAND, TEXAS 1-D8

**BRIEF SPECIFICATIONS**

A.P.I. BEAM RATING	3880 LB'S
LENGTH OF STROKES	12"-16"-20"
A.P.I. PEAK TORQUE @ 20 S.P.M.	54000 LB.FT.
A.P.I. NOMINAL H.P. @ 20 S.P.M.	1.3
REDUCER - SINGLE REDUCTION	G.A.
RATIO	39:879:1
STANDARD SHEAVE	10" P.D. - 2"
HIGH SPEED SHAFT EXTENSION	18 1/2"
KEYWAY	3/16"

**EFFECTIVE CO-BALANCE - BEAM WEIGHT**

SETS OF WEIGHTS COUNTERBALANCE OPERATING SET	TOTAL WEIGHT OF BEAM, LIFTNER, PUMP, ECT.	EFFECTIVE COUNTERBALANCE OF OPERATING SET	TOTAL WEIGHT OF BEAM, LIFTNER, PUMP, ECT.
0	190	310	388
1	380	295	577
2	570	280	551
3	760	265	1222
4	950	250	1472
5	1140	235	1707

**EFFECTIVE ROTARY COUNTERWEIGHT**

LENGTH OF STROKE	12"	16"	20"
2 - 17312 OUTER WEIGHTS	434	329	270

CERTIFIED FOR CONSTRUCTION

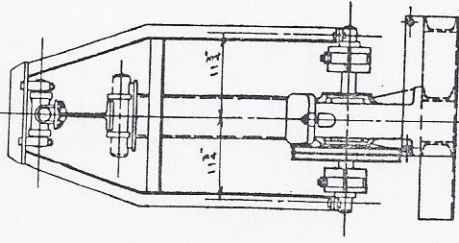
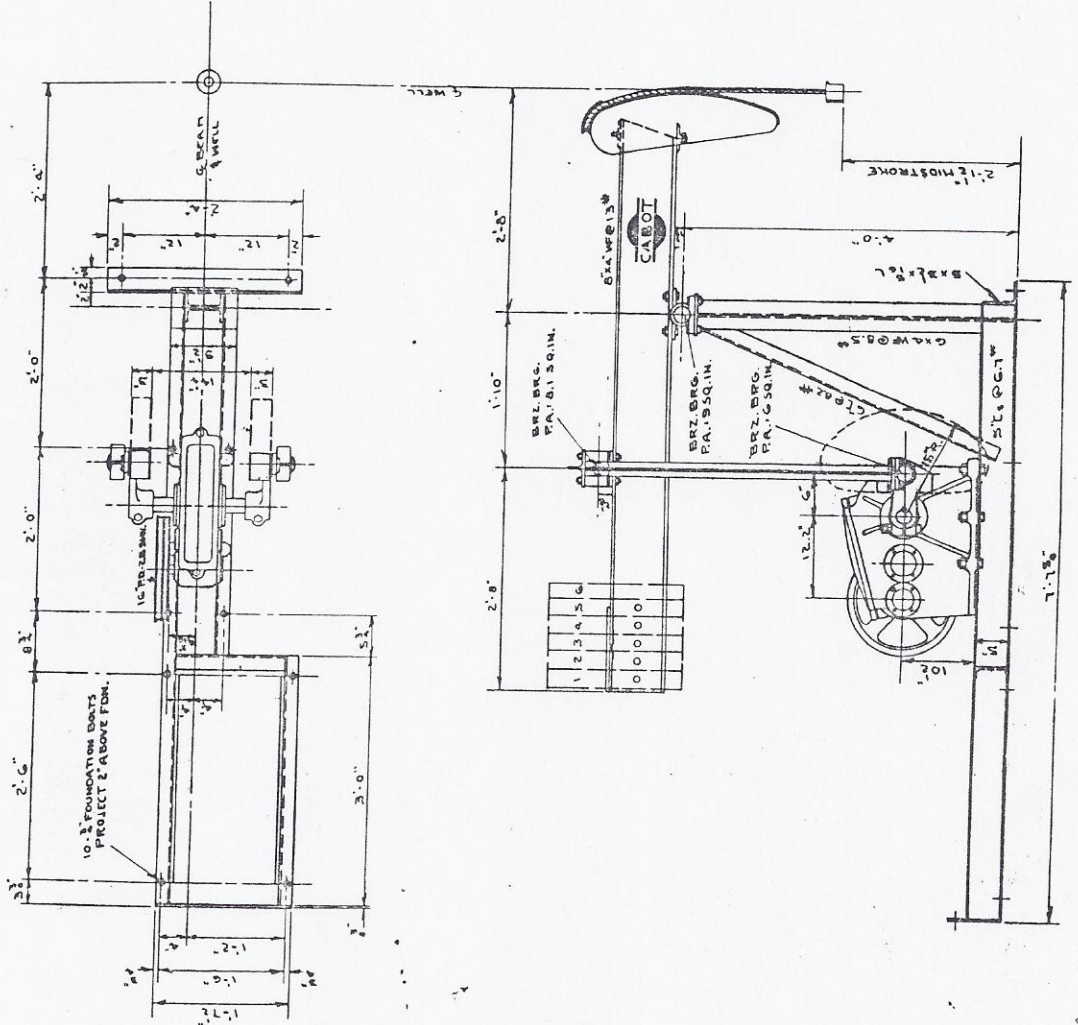
BY \_\_\_\_\_ DATE \_\_\_\_\_ SERIAL NO. \_\_\_\_\_

CABOT SHOPS, INC.  
 PAMPER, TEXAS  
 ASSEMBLY

BY \_\_\_\_\_ DATE \_\_\_\_\_

B3-640 PUMPING UNIT

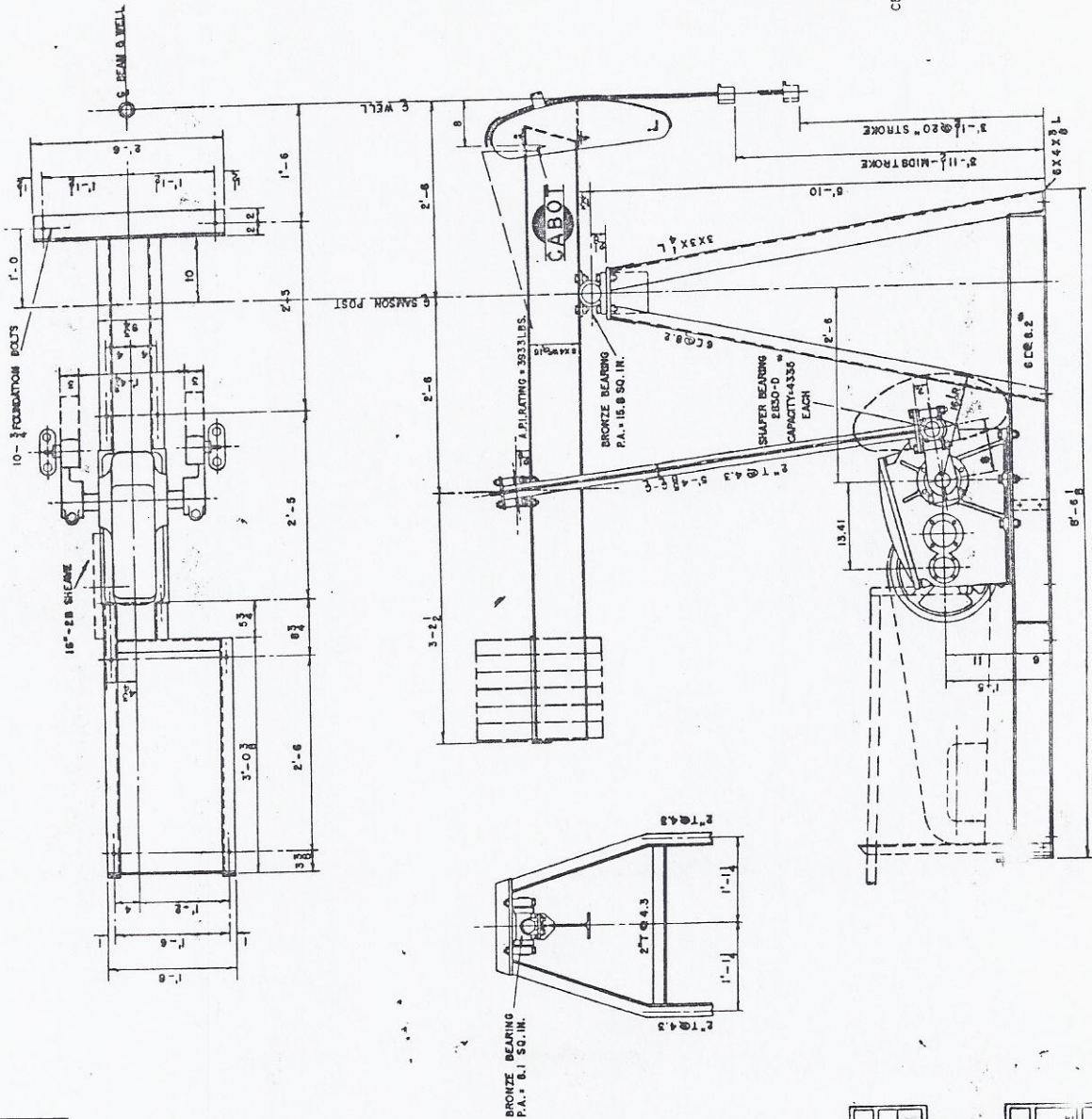
B3-6.4D



*Sales Drawing Only  
 Not To Be Used for  
 Installation*

### BRIEF SPECIFICATIONS

A.P.L. BEAM RATING	3933 LBS.
LENGTH OF STROKES	18" TO 80" IN.
A.M. PEAK TORQUE AT 20 S.P.M.	10,000 IN.-L.B.
REDUCER	10-10D
RATIO	30.78 TO 1
STANDARD SHAFT	1 1/2" X 3"
SHAFT EXTENSION	1 1/2" X 3"
ACTUATOR	1 1/2" X 3"



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 BY \_\_\_\_\_  
 DATE \_\_\_\_\_  
 SERIAL NO. \_\_\_\_\_

#### CO-BALANCE EFFECT OF CRANK WEIGHTS

LENGTH OF STROKE	18"	16"	80"
CRANK WEIGHTS	571	407	313

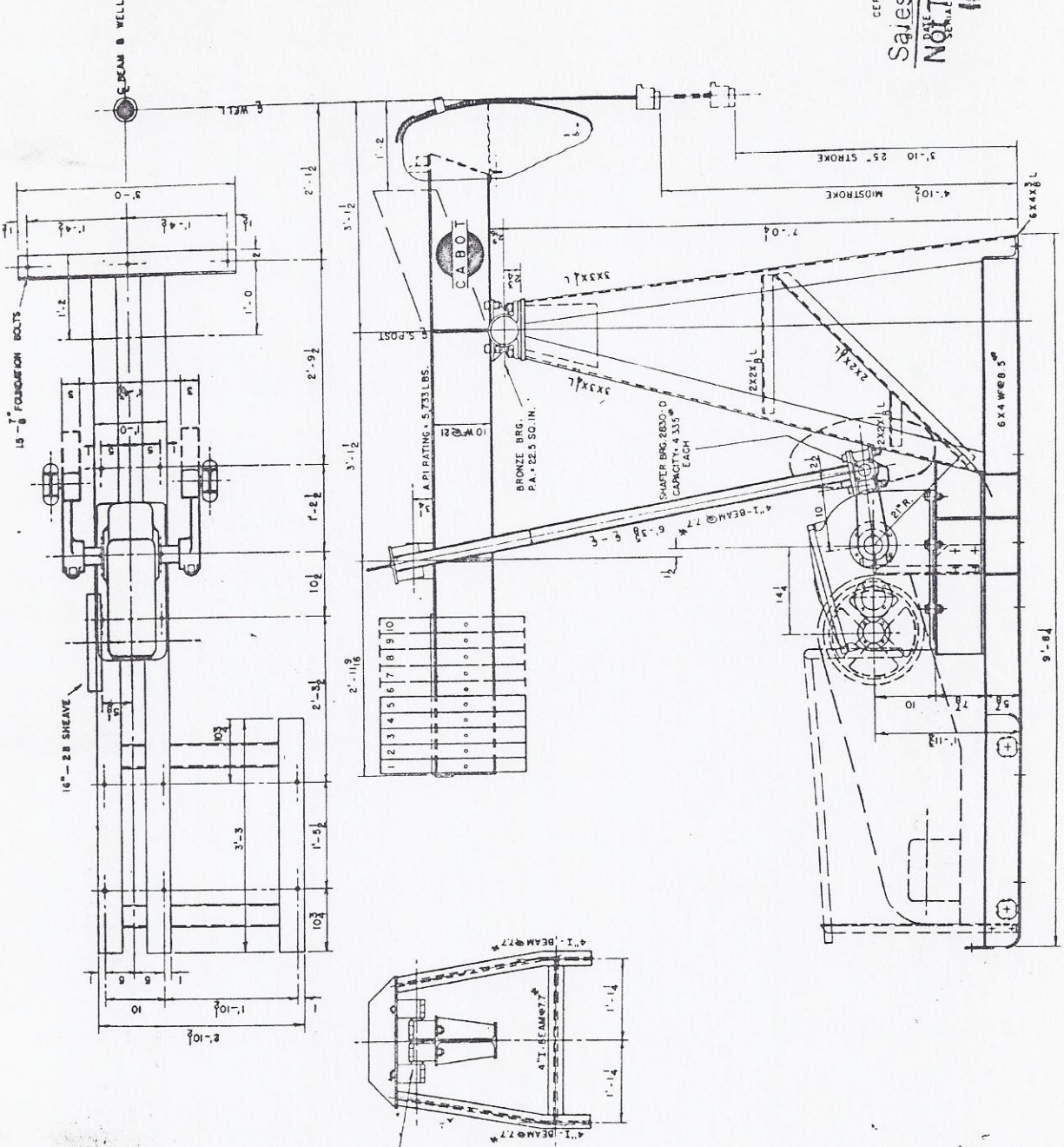
#### EFFECTIVE CO-BALANCE OF BEAM WEIGHTS

SET	TOTAL WEIGHT	EFFECTIVE CO-BALANCE	TOTAL EFFECTIVE
WT. OF BEAM (LITHIUM EYELETS, CRANKS)	130		
1	180	428	558
2	380	410	968
3	570	394	1360
4	760	378	1738
5	950	362	2100
6	1140	346	2446

<b>CABOT SHOPS, INC.</b> PAMPA, TEXAS	
ASSEMBLY B4-10D PUMPING UNIT	
DRAWN BY: J.R.S.	DATE: 1-31-58
B4-100	

**BRIEF SPECIFICATIONS**

LINK BEAM WEIGHT	6733 LBS
LENGTH OF STROKES	20'-02"
MAX. SHAF. TORQUE AT 20 R.P.M.	19,000 IN. LB.
REVISION	160
DATE	22.9 TO 1
STANDARD SHEAVE	16"-28
HIGH SPEED SHAFT EXTENSION	1/2" X 2"
KEYWAY	1/2" X 3/8"



CERTIFIED FOR CONSTRUCTION  
 Sales Drawing Only  
 NOT TO BE USED FOR  
 Installation

CABOT SHOPS, INC.  
 PAMPAS, TEXAS  
 ASSEMBLY  
 B5-16D PUMPING UNIT  
 MULTI-CYL. ENG.  
 DRAWN BY J. H. [unclear] DATE 6-7-54

EQUALASTIC BEARING  
 P.A. 4.24 SQ. IN.  
 DO NOT LUBRICATE

CO-BALANCE EFFECT OF CRANK WEIGHTS	20°	25°
LENGTH OF STROKES	2-11 3/8	365
CRANK WEIGHTS	456	365

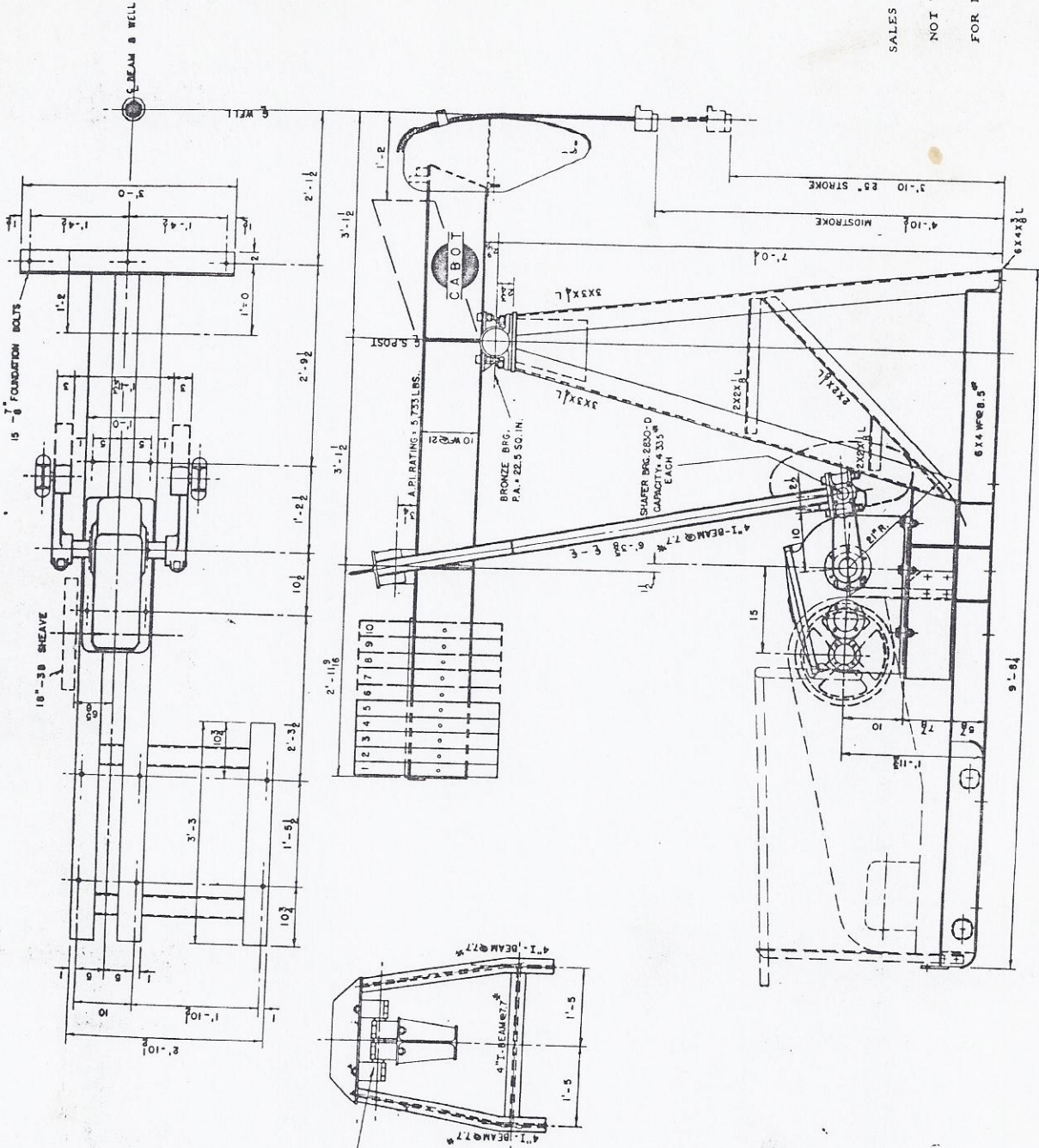
SET NO.	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTERBALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE	
			PITMAN CRANKS	95
1	250	475	570	
2	500	460	1030	
3	750	440	1470	
4	1000	425	1895	
5	1250	405	2300	
6	1500	390	2690	
7	1750	370	3060	
8	2000	355	3415	
9	2250	335	3750	
10	2500	320	4070	

FOR SERIAL NO. B552 B ABOVE

B5-16D

**BRIEF SPECIFICATIONS**

A.P.L. BEAM RATING	5733 LBS.
LENGTH OF STROKES	20" - 25"
A.P.I. PEAK TORQUE AT 20 S.P.M.	25,000 IN. LB.
REDUCER	250
RATIO	20.9 TO 1
STANDARD SHEAVE	18"-30"
HIGH SPEED SHAFT EXTENSION	1 1/2" X 3"
KEYWAY	1 1/2" X 3/8"



EQUALASTIC BEARING  
P.A. 24 SO. IN.  
DO NOT LUBRICATE

**CO-BALANCE EFFECT OF CRANK WEIGHTS**

LENGTH OF STROKES	20"	25"
CRANK WEIGHTS	456	365

**EFFECTIVE CO-BALANCE OF BEAM WEIGHTS**

SETS OF BEAM, EXCITER, PITMAN, CRANKS	TOTAL WEIGHT	EFFECTIVE CO-BALANCE	TOTAL EFFECTIVE CO-BALANCE
1	250	47.5	95
2	500	48.0	310
3	750	44.0	1030
4	1000	42.5	1860
5	1250	40.5	2800
6	1500	39.0	2990
7	1750	37.0	3060
8	2000	35.5	3415
9	2250	33.5	3750
10	2500	32.0	4070

SALES DRAWING ONLY:  
NOT TO BE USED  
FOR INSTALLATION

**PROJECT**

SETS TO	WEIGHTS	BALANCE	EXT. COUNTER	SOVAL
COUNTER	WTS EACH	SET	BALANCE	
0	WT. OF BEAM EXTENSION	155		
1	310	640	695	
2	610	1280	1390	
3	910	1920	2085	
4	1210	2560	2780	
5	1510	3200	3475	
6	1810	3840	4170	
7	2110	4480	4865	
8	2410	5120	5560	
9	2710	5760	6255	
10	3010	6400	6950	

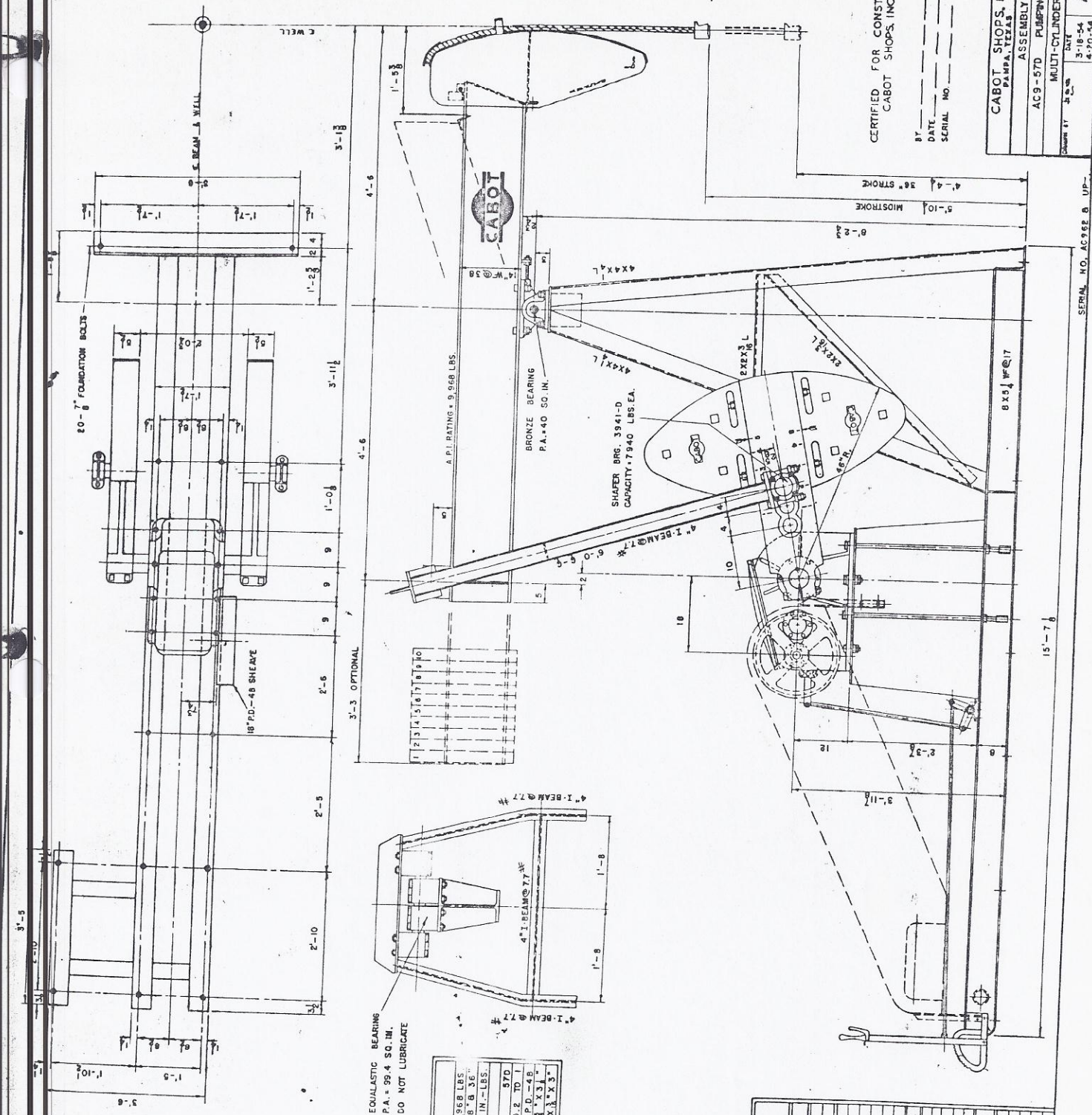
**BRIEF SPECIFICATIONS**

API BEAM POLISH ROD LOAD RATING 9,968 LBS.  
 LENGTH OF STROKES 20" x 28" x 36"  
 API PEAK TORQUE AT 20 S.P.M. 57,000 IN.-LBS.  
 REDUCER RATIO 30.2 TO 1  
 STANDARD SHEAVE 18" P.D. - 4B  
 HIGH SPEED SHAFT DIA. & LENGTH OF EXTENSION 1.8" x 3.1"  
 HIGH SPEED SHAFT KEYWAY - SIZE & LENGTH 3/8" x 3/32" x 3"

**Sales Drawing Only  
 Not To Be Used For  
 Installation**

**CRANK WEIGHT COUNTER-BALANCE EFFECT**

DESCRIPTION	STROKES	
	20"	36"
<b>MASTER WEIGHTS ONLY</b>		
MINIMUM P.W. & CRANKS ONLY	2,015	1,570
WEIGHTS - POSITION 1	5,150	3,815
2	5,700	4,205
3	6,240	4,585
4	6,780	4,970
5	7,320	5,355
<b>MASTER WEIGHTS AND (1) SET INNER WEIGHTS</b>		
WEIGHTS - POSITION 1	6,290	4,675
2	7,025	5,150
3	7,760	5,670
4	8,495	6,195
5	9,225	6,720
<b>MASTER WEIGHTS AND (2) SETS INNER WEIGHTS</b>		
WEIGHTS - POSITION 1	7,375	5,400
2	8,300	6,060
3	9,125	6,680
4	10,135	7,370
5	11,055	8,025



CERTIFIED FOR CONSTRUCTION  
 CABOT SHOPS, INC.

BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SERIAL NO. \_\_\_\_\_

CABOT SHOPS, INC. PAMPA, TEXAS	
ASSEMBLY	AC9-57D
PUMPING UNIT	MULTI-CYLINDER
DATE	3-18-54
REV.	4-20-54
SHEET	AC9-57D

SERIAL NO. AC962 B UP-

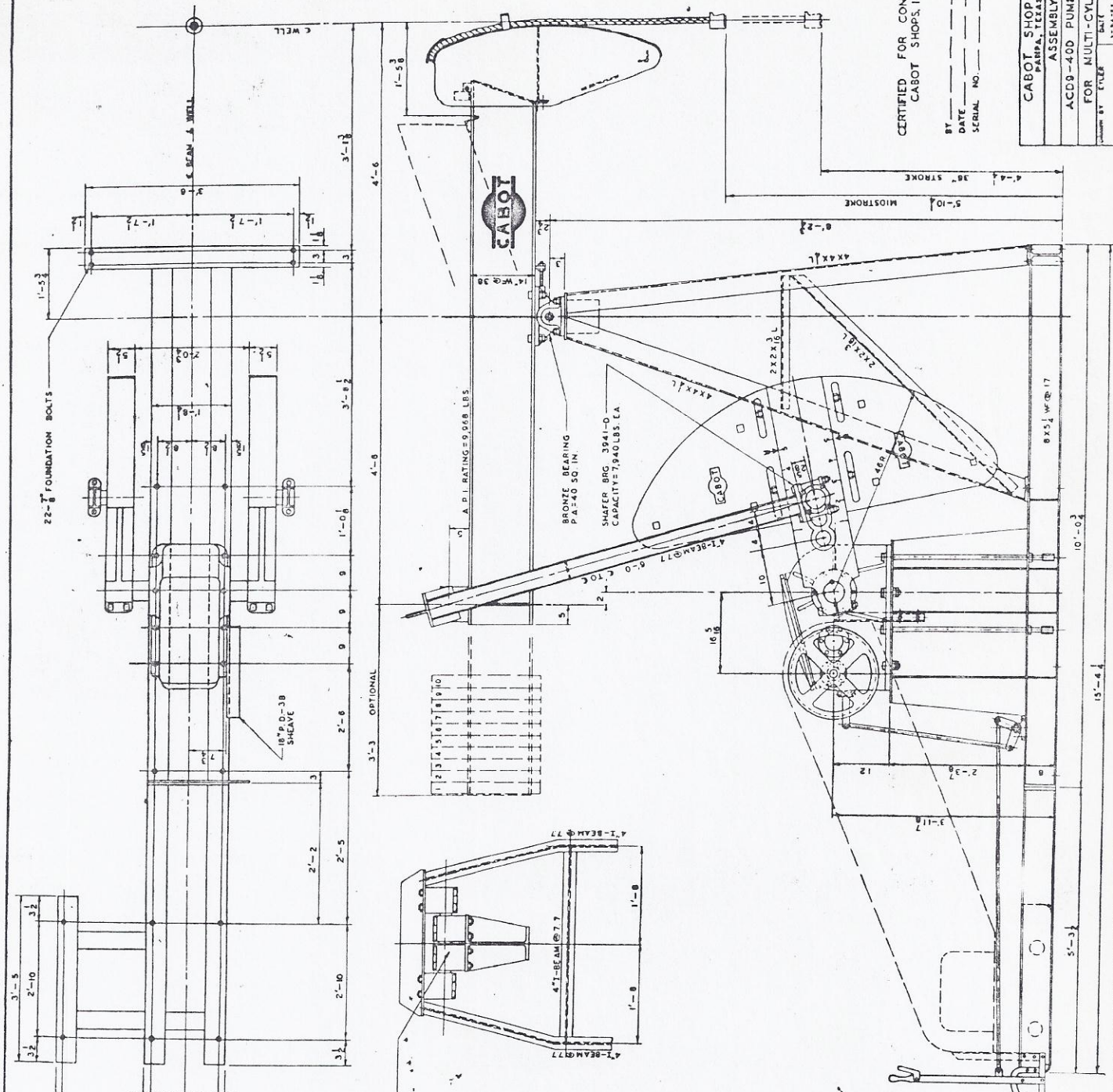
BEAM WEIGHTY COUNTER-BALANCE EFFECT		
SETS OF WEIGHTS	TOTAL WT. OF COUNTER BALANCE WITH EACH SET	TOTAL EFF. COUNTER BALANCE
0	320	125
1	640	605
2	960	1220
3	1280	1725
4	1600	2210
5	1920	2680
6	2240	3130
7	2560	3565
8	2880	3980
9	3200	4380
10	380	4780

**BRIEF SPECIFICATIONS**

A.P.L. BEAM POLISH ROD LOAD RATING 9,968 LBS.  
 LENGTH OF STROKES 20.28" A.38"  
 A.P.L. PEAK TORQUE AT 80 S.P.M. 40,000 IN.-LBS.  
 A.P.L. NOMINAL H.P. AT 22 R.P.M. 400  
 REDUCER RATIO 30:1 TO 1  
 STANDARD SHAFT 18 P.D. - 38  
 HIGH SPEED SHAFT DIA. & LENGTH OF EXTENSION 1.83 IN. X 3.31  
 HIGH SPEED SHAFT KEYWAY - SIZE & LENGTH 1/8 X 3/2

*Notes Drawing Only*  
 Not To Be Used For  
 Installation

DESCRIPTION	MASTER WEIGHTS ONLY	
	20" STROKES	38" STROKES
PITMAN W.PINS BEAM/CRANKS ONLY	2,015	1,570
WEIGHTS - POSITION 1	5,630	4,200
WEIGHTS - POSITION 2	6,690	4,910
WEIGHTS - POSITION 3	7,555	5,525
WEIGHTS - POSITION 4	8,415	6,140
WEIGHTS - POSITION 5	9,280	6,755
MASTER WEIGHTS AND (1) SET INNER WEIGHTS	6,950	5,095
WEIGHTS - POSITION 1	6,070	4,485
WEIGHTS - POSITION 2	7,030	5,195
WEIGHTS - POSITION 3	7,895	5,805
WEIGHTS - POSITION 4	8,760	6,415
WEIGHTS - POSITION 5	9,625	7,025
MASTER WEIGHTS AND (2) SETS INNER WEIGHTS	8,015	5,960
WEIGHTS - POSITION 1	7,135	5,270
WEIGHTS - POSITION 2	8,000	6,080
WEIGHTS - POSITION 3	8,865	6,690
WEIGHTS - POSITION 4	9,730	7,300
WEIGHTS - POSITION 5	10,595	7,910



CERTIFIED FOR CONSTRUCTION  
 CABOT SHOPS, INC.

BY \_\_\_\_\_  
 DATE \_\_\_\_\_  
 SERIAL NO. \_\_\_\_\_

CABOT SHOPS, INC.  
 PAMPA, TEXAS  
 ASSEMBLY

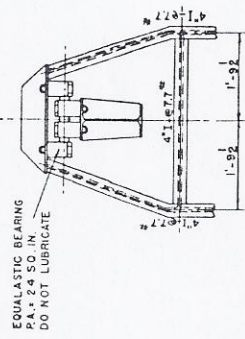
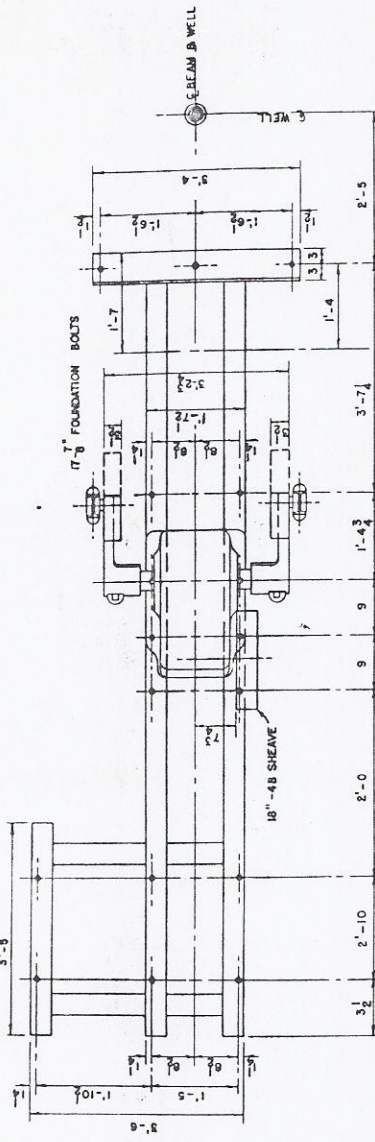
ACD9-400 PUMPING UNITS  
 FOR MULTI-CYL. ENGINES

DESIGNED BY: T.C.M.  
 DRAWN BY: J.W.S.  
 CHECKED BY: J.W.S.  
 APPROVED BY: J.W.S.

ACD9-4

**BRIEF SPECIFICATIONS**

A.P.I. BEAM RATING	7,580 LBS.
LENGTH OF STROKES	18"-24"-30"
A.P.I. PEAK TORQUE AT 20 S.P.M.	40,000 IN.LB.
REDUCER	40D
RATIO	3.0:1 TO 1
STANDARD SLEAVE	18"-48"
HIGH SPEED SHAFT EXTENSION	1" X 3"
KEYWAY	1/2" X 1/2" X 3"

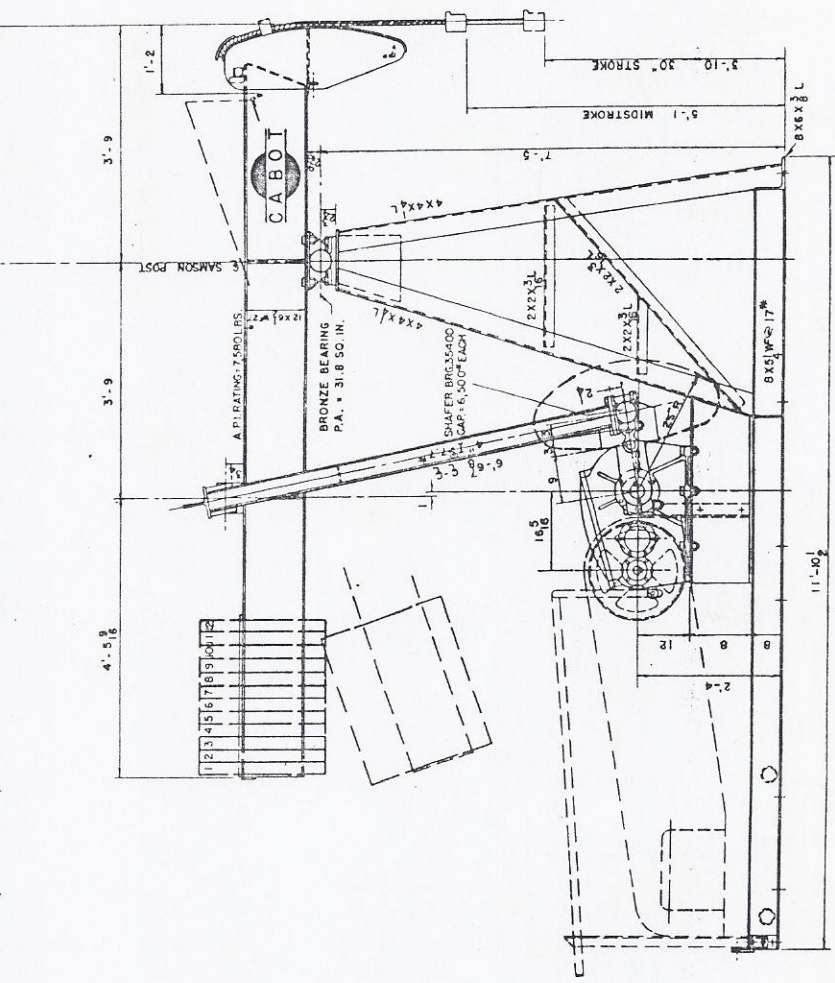


**CO-BALANCE EFFECT OF CRANK WEIGHTS**

LENGTH OF STROKE	18"	24"	30"
CRANK WEIGHTS	1390	1040	835

**EFFECTIVE CO-BALANCE OF BEAM WEIGHTS**

SETS TOTAL WEIGHT OF WTS. COUNTERWEIGHTS OF EACH SET	EFFECTIVE COUNTERBALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE
WT. OF BEAM PITMAN, EYER, CRANKS	400	400
1	250	540
2	500	940
3	750	1465
4	1000	2175
5	1250	2970
6	1500	3850
7	1750	4815
8	2000	5865
9	2250	7000
10	2500	8315
11	2750	9715
12	3000	11200



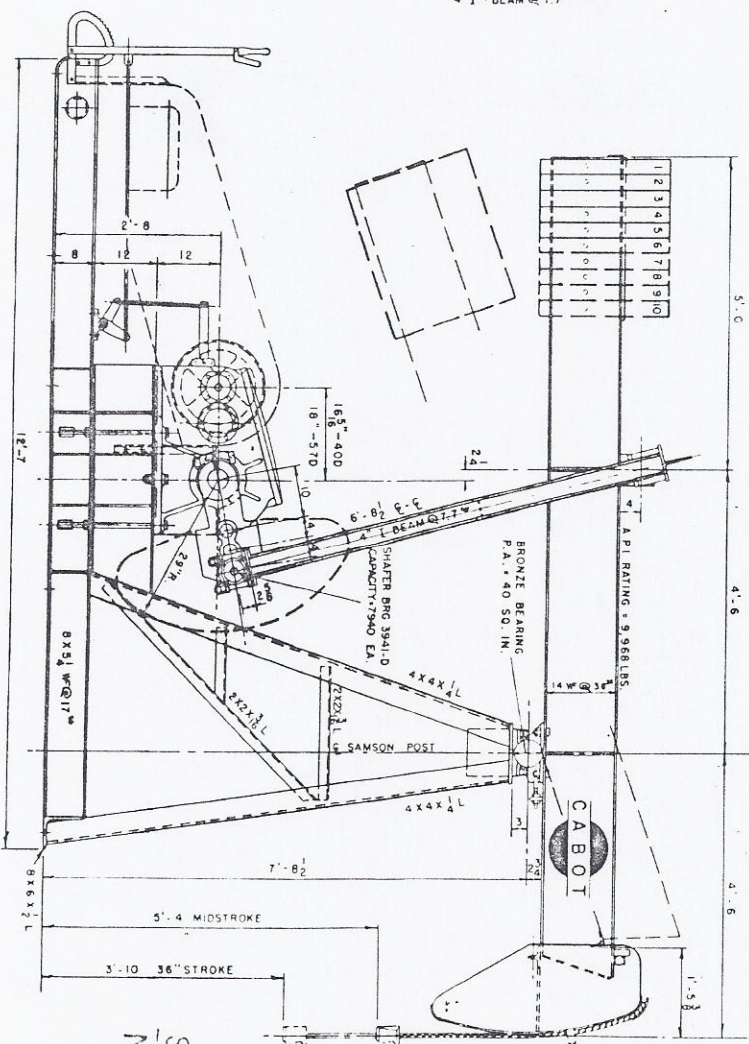
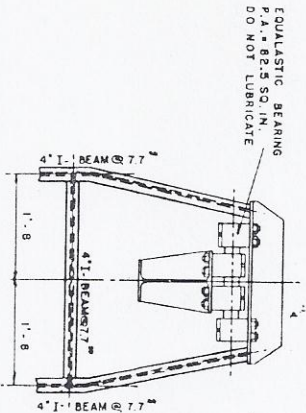
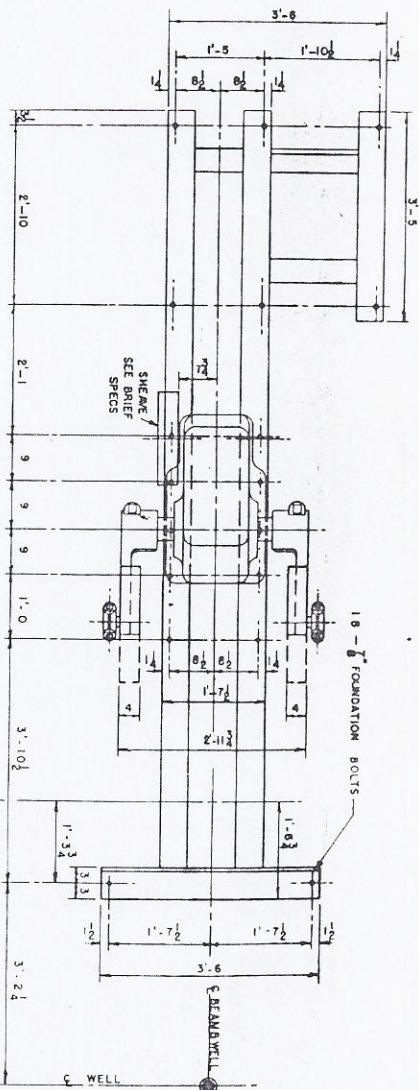
SALES DRAWING ONLY  
NOT TO BE USED  
FOR INSTALLATION

CABOT SHOPS, INC.  
PAMPA, TEXAS  
ASSEMBLY UNIT  
MULTI-CYLINDER  
DATE 1-12-56  
DRAWN BY E.R.B.  
FOR SERIAL NO. B782-5 & ABOVE  
BTS-400



**BRIEF SPECIFICATIONS**

A.P.I. BEAM POLISH ROD LOAD RATING	9,988 LBS.
LENGTH OF STROKES	20" 26" 36"
A.P.I. PEAK TORQUE AT 20 S.P.M.	700,000 LBS. IN.
REDUCERS & RATIO	40:1 YOKO 11.1 40:1 YOKO 11.1 40:1 YOKO 11.1 40:1 YOKO 11.1
STANDARD SHAFT	4.0 DIA. 1.0 FT. 4000 RPM
HIGH SPEED SHAFT DIA. & EXT.	1.75" 1.0 FT. 4000 RPM
HIGH SPEED SHAFT KEYWAY	0.125" 0.125" 0.125"



**EFFECTIVE CO-BALANCE OF CRANK WTS.**

LENGTH OF STROKES	20"	26"	36"
CRANK WEIGHTS	2123	1520	1180

**EFFECTIVE CO-BALANCE OF BEAM WEIGHTS**

SETS OF BEAM, PULLEY, EVEREY, CRANKS.	TOTAL WEIGHT OF EFFECTIVE WTS. COUNTERWEIGHTS OF EACH SET	EFFECTIVE COUNTERBALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE
1	320	658	1410
2	640	643	2060
3	960	630	2695
4	1280	610	3295
5	1600	590	3890
6	1920	575	4460
7	2240	555	5015
8	2560	535	5550
9	2880	515	6070
10	3200	500	6565

States Department of the Interior  
 NORTH TEXAS DISTRICT  
 Inspector

CERTIFIED FOR CONSTRUCTION

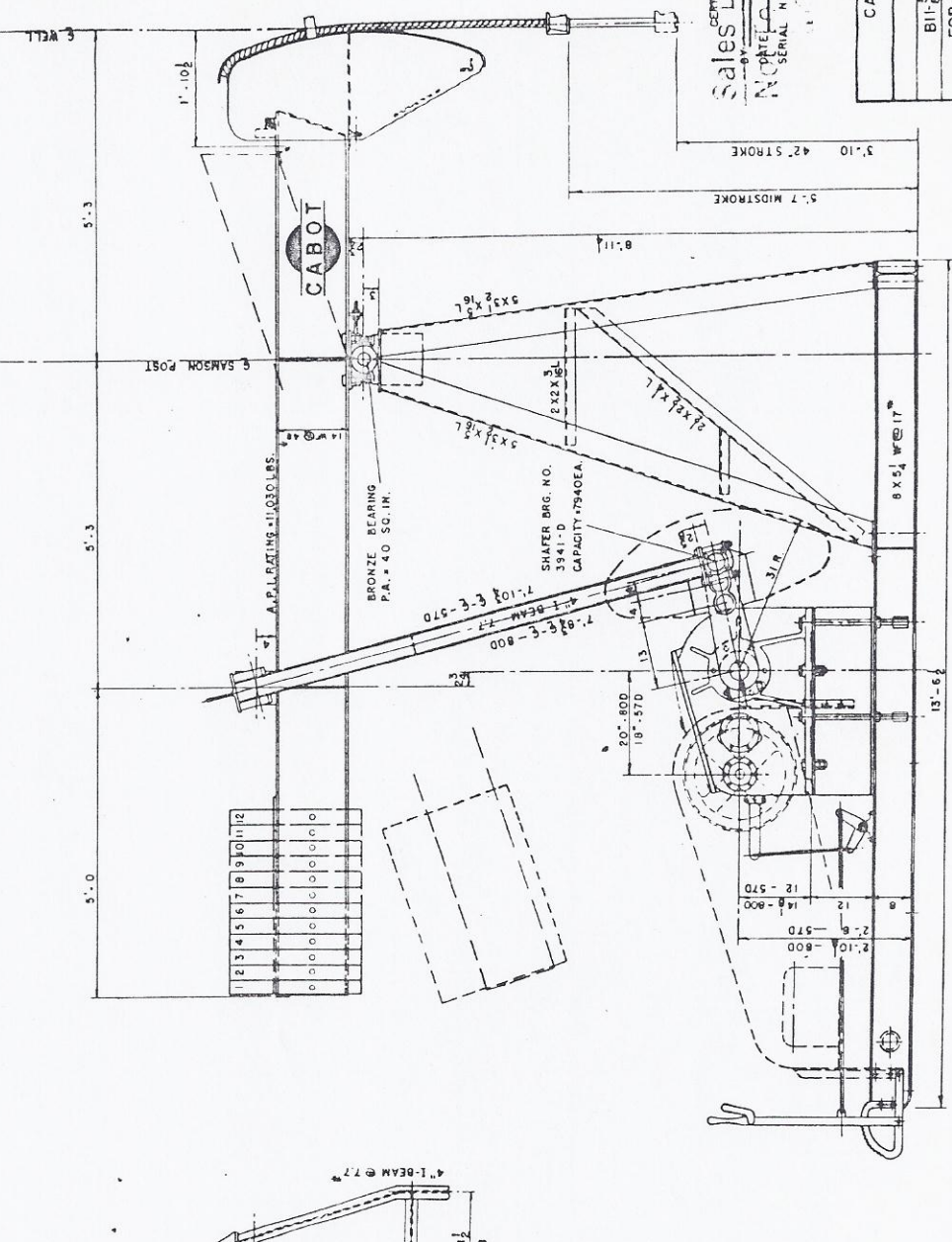
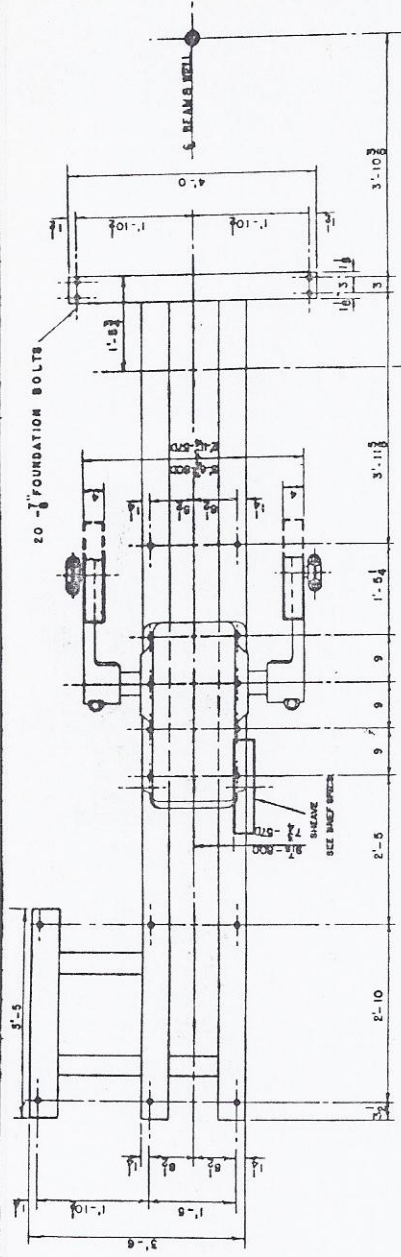
CABOT SHOPS, INC.  
 FAMPAL, TEXAS  
 ASSEMBLY

B9-400 PUMPING UNITS  
 B9-470 ENGINE

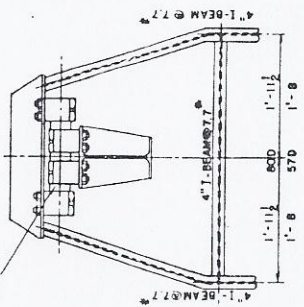
4900  
 512-54 B9-57D

**BRIEF SPECIFICATIONS**

ALL BEAM P.O. IN INC. LOAD RATING	11,030 LBS.
LENGTH OF STROKES	26" 34" @ 42"
APPROX. TORQUE AT 205 P.M.	185-1,000 H.P.L.B.
RODNESS @ RATIO	30.2 TO 1 - 570 IN. BOD
STANDARD SHAFT	3" 2.6" 2.5" - 100
NON-SPEC. SHAFT DIA. & EXT.	3" 2.6" 2.5" - 100
NON-SPEC. SHAFT KEYWAY	3" 2.6" 2.5" - 100



EQUALASTIC BEARING  
P.A. 2 40 SQ. IN.  
DO NOT LUBRICATE



**EFFECTIVE CO-BALANCE OF CRANK WTS.**

LENGTH OF STROKES	26"	34"	42"
CRANK WEIGHTS	1910	1460	1180

**EFFECTIVE CO-BALANCE OF BEAM WEIGHTS**

SET	TOTAL WEIGHT OF WTS. CO-BALANCING LEVER CRANKS	EFFECTIVE CO-BALANCE OF BEAMS SET	TOTAL EFFECTIVE CO-BALANCE
1	320	515	1790
2	640	600	1240
3	960	585	1530
4	1280	570	1810
5	1600	550	2110
6	1920	535	2440
7	2240	520	2800
8	2560	505	3175
9	2880	490	3570
10	3200	475	3990
11	3520	455	4430
12	3840	440	4890

Sales Department  
NOTED FOR CONSTRUCTION  
SERIAL NO. 1115-54

CABOT SHOPS, INC.  
PAMPA, TEXAS  
ASSEMBLY  
FOR MULTI-CYL. ENGINE  
BY #2, 7-15-54 B11-57D  
B11-80D

FOR SERIAL NO. B1125 & ABOVE