

COLUMBIA FORGE AND MACHINE WORKS

MARINE CLOSURE HARDWARE PARTS CATALOGUE

www.columbiaforge.com

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COLUMBIA FORGE & MACHINE WORKS, INC.

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W.T.Q.A. HATCHES SPR. BAL. - 24X30 ENG. & BOILER RM DESTROYERS - DET'S

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SCUTTLE, WTQA 18", 21" & 25" DIA. RAISED - 3 & 4 DOG

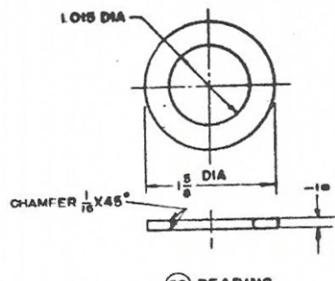
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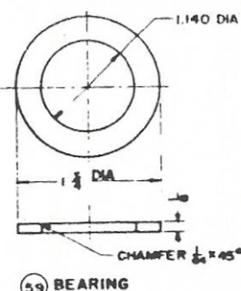
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
B-105	BEARING	HATCH WT FLUSH INDIVIDUALLY DOGGED	BRASS - OILITE

REF. DWG. #1624105



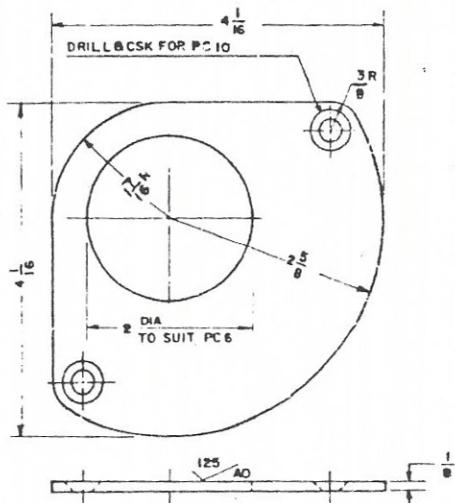
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
B-119	BEARING	HATCH WT FLUSH INDIVIDUALLY DOGGED	BRASS - OILITE

REF. DWG. #1624119



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BP-163	BEARING PLATE	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	BRASS

REF. DWG. #1630163



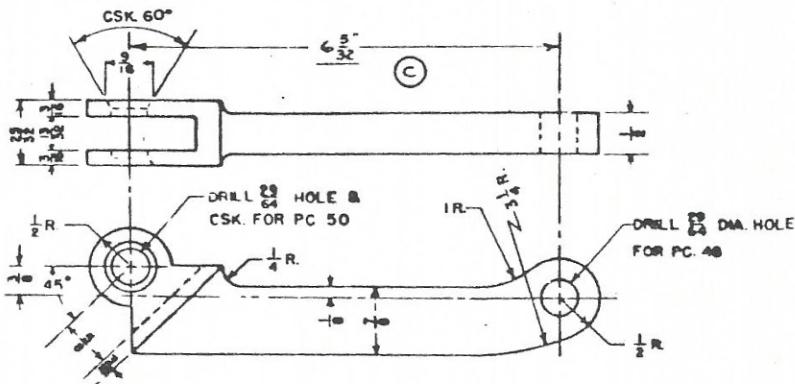
BEARING PLATE ⑧
SCALE: 12" = 1'-0"



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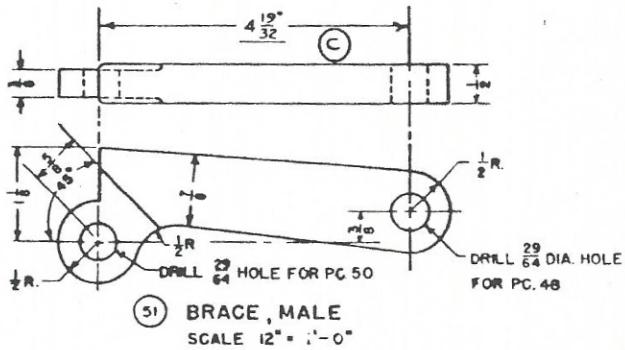
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BRF-022	BRACE, FEMALE	W.T.Q.A. HATCHES	S.S. 303 OR M.S. 1020

REF. DWG. #1626022



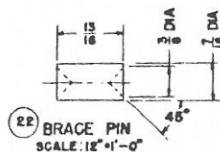
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BRM-022	BRACE, MALE	W.T.Q.A. HATCHES	S.S. 303 OR M.S. 1020

REF. DWG. #1626022



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BP-943	BRACE PIN	SCUTTLE, WTQA 18", 21" & 25" DIA. RAISED 3 & 4 DOG	NAVEL BRASS

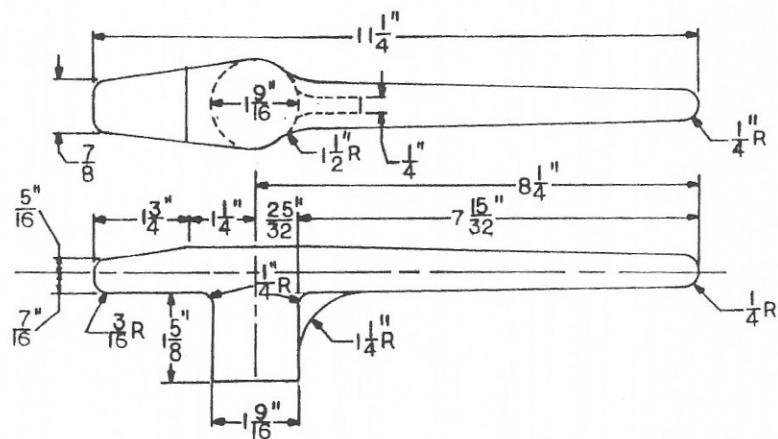
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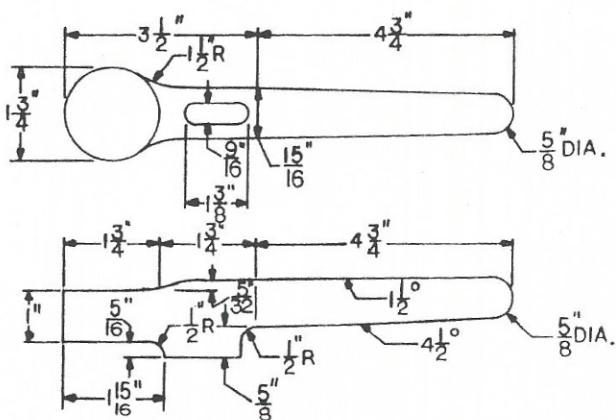


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PART NO.	DESCRIPTION	APPLICATION	MATERIAL
CD-001	COMMERCIAL DOG	HATCH W.T.Q.A.	M.S. 1020 S.S. 303



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
CDH-001	COMMERCIAL DOG HANDLE	HATCH W.T.Q.A.	M.S. 1020 S.S. 303

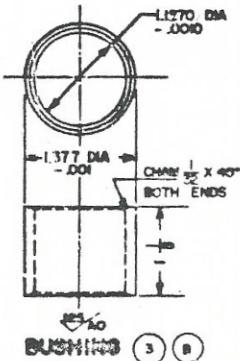




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PART NO.	DESCRIPTION	APPLICATION	MATERIAL
B-067	BUSHING	DOORS W.T. INDIVIDUALLY DOGGED	OIL IMPREGNATED BRZ

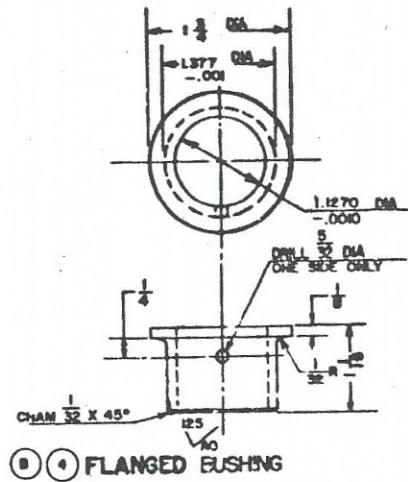
REF. DWG. #1400067



1.1270 ± .0010
1.377 ± .001
CHAM 32 X 45°
BOTH ENDS
1.1270 ± .0010
BUSHING

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BF-067	BUSHING (FLANGED)	DOORS W.T. INDIVIDUALLY DOGGED	OIL IMPREGNATED BRZ

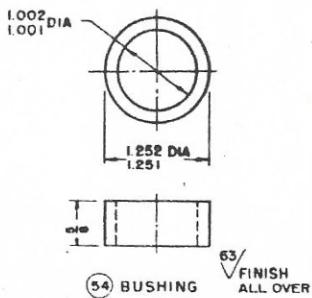
REF. DWG. #1400067



1.1270 ± .0010
1.377 ± .001
5
DRILL 32 DIA
ONE SIDE ONLY
CHAM 32 X 45°
1.1270 ± .0010
FLANGED BUSHING

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BU-105	BUSHING	HATCH WT FLUSH INDIVIDUALLY DOGGED	BRZ

REF. DWG. #1624105



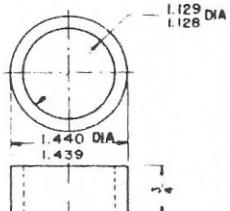
1.002 ± .001
1.252 ± .001
1.251
1.002 ± .001
BUSHING
FINISH
ALL OVER



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PART NO.	DESCRIPTION	APPLICATION	MATERIAL
B-119	BUSHING	HATCH WT FLUSH INDIVIDUALLY DOGGED	BRASS

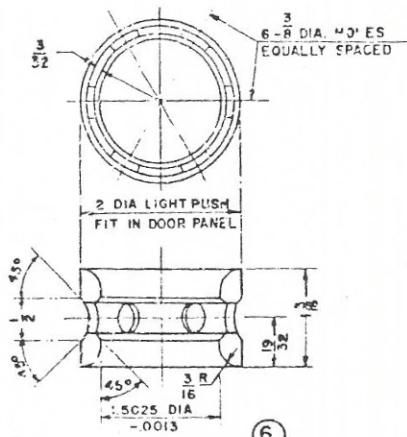
REF. DWG. #1624119



(34) BUSHING

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BH-163	BUSHING (IN HALVES)	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	BRZ MN

REF. DWG. #1630163

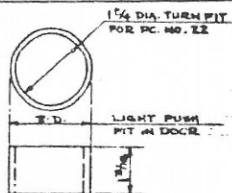


(6) BUSHING (IN HALVES)

SCALE: 12'-0"

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BC-163	CONN. ROD BUSHING	COORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	BRZ MN

REF. DWG. #1630163



CONN. ROD BUSHING

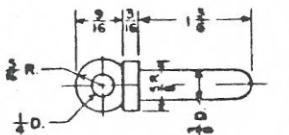
SCALE: 1 1/2" x 1'-0"



COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
E-022	EYE BOLT	W.T., Q.A. HATCHES SPR. BAL-24x30 ENG. & BOILER RM. DESTROYERS-DET'S	S.S. 303 OR M.S. 1020

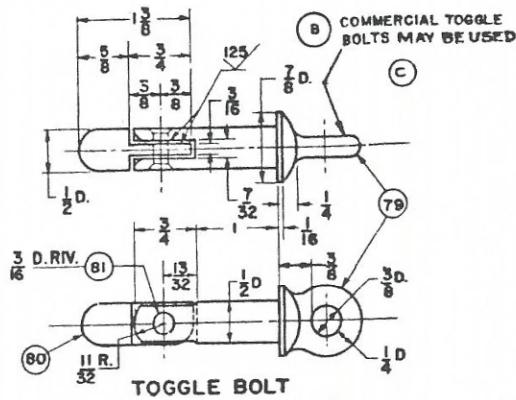
REF. DWG. #1626022



(64) EYE BOLT
SCALE 12" = 1'-0"

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
TB-072	TOGGLE BOLT	HATCH W.T. RAISED INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020

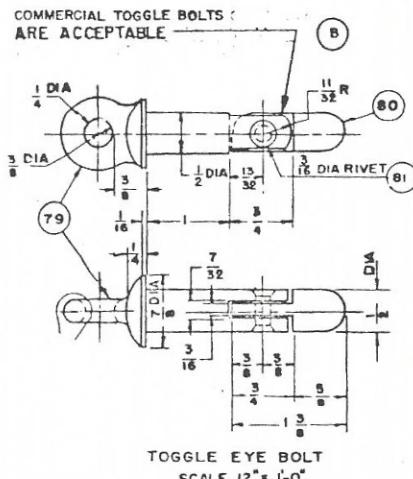
REF. DWG. #1624072



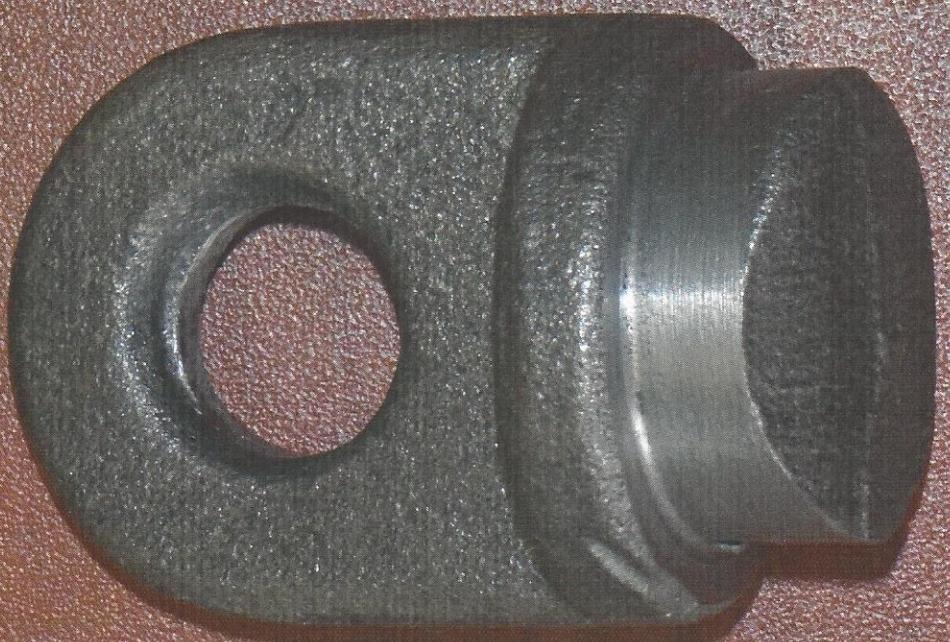
TOGGLE BOLT

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
TE-106	TOGGLE EYE BOLT	HATCH W T FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020

REF. DWG. #1624106



TOGGLE EYE BOLT
SCALE 12" = 1'-0"

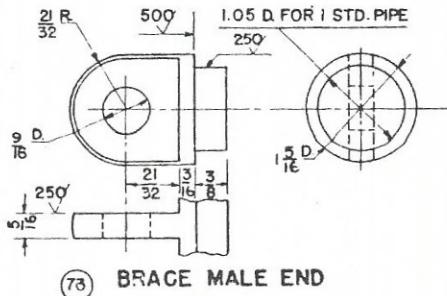




COLUMBIA FORGE & MACHINE WORKS, INC.

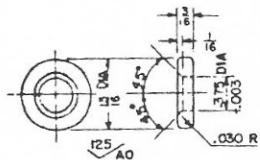
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
BR-071	BRACE MALE END	HATCH W.T. RAISED INDIVIDUALLY DOGGED	S.S. 303 OR M.S. 1020

REF. DWG. #1624071



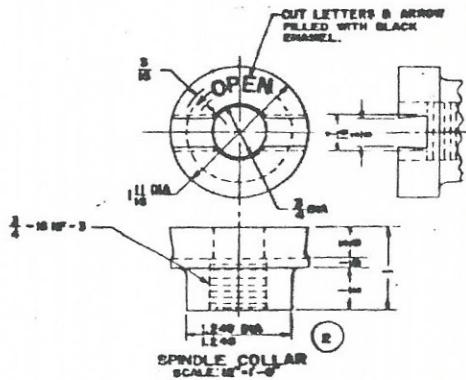
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
C-054	COLLAR	DOORS WTQA, WT, AT, & MT	BRASS S.S. 303 M.S. 1020

REF. DWG. #1400054



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
C-055	COLLAR, SPINDLE	SCUTTLE, WTQA 18", 21" & 25" DIA. FLUSH 3 & 4 DOG	S.S. 303 OR 304 M.S. 1020 BRASS

REF. DWG. #1623055

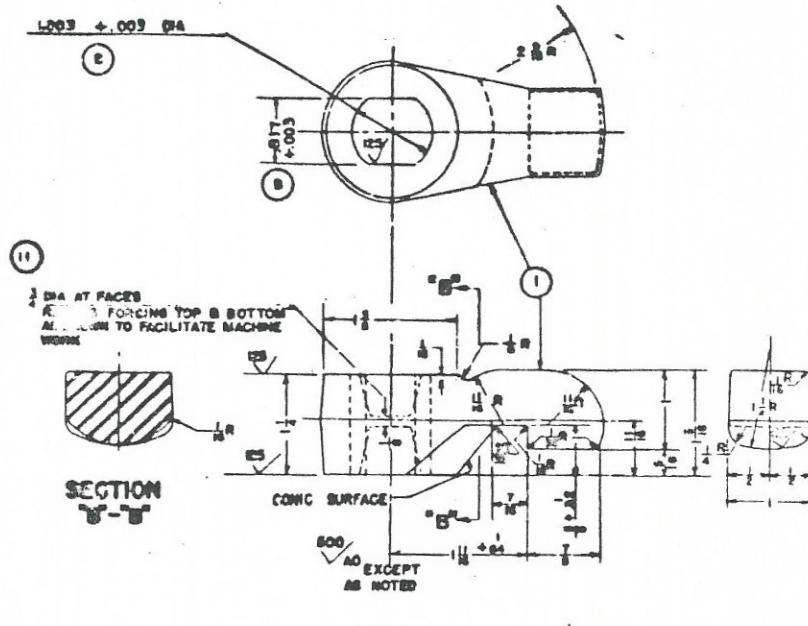






COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
D-051	DOG	DOORS W.T.Q.A. (OPERATING MECH. IN FRAME) MEDIUM STEEL & CRES	M.S. 1020 S.S. 303



DOG

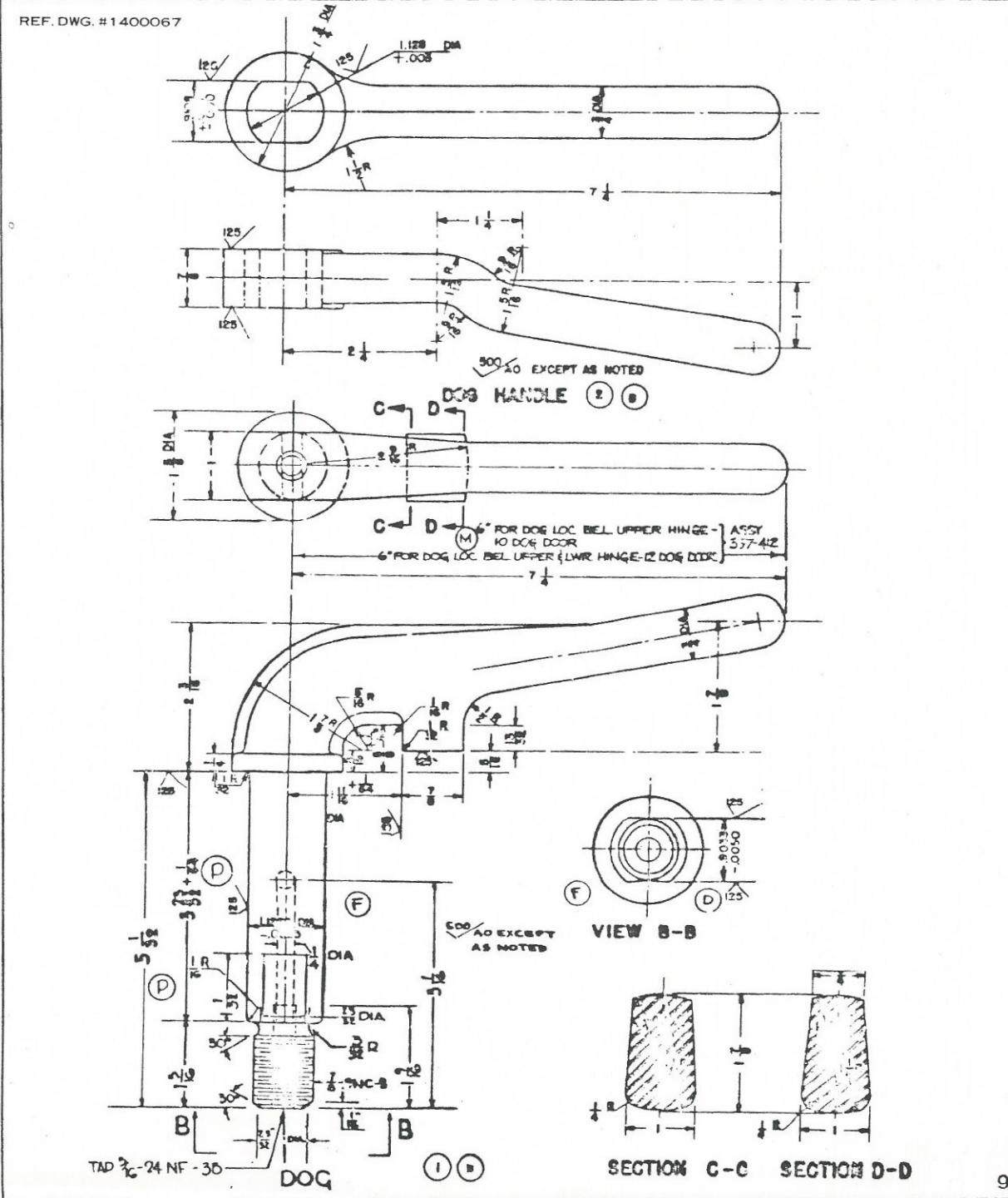






COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
D-067	DOG	DOORS W.T. INDIVIDUALLY DOGGED	S.S. 303 OR M.S. 1020
DH-067	DOG HANDLE	DOORS W.T. INDIVIDUALLY DOGGED	S.S. 303 OR M.S. 1020



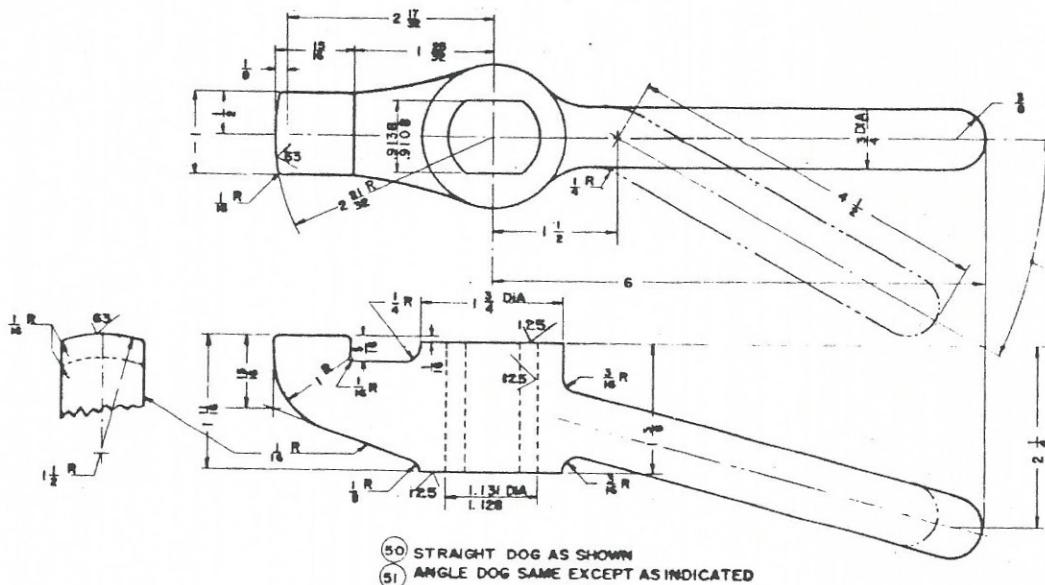




COLUMBIA FORGE & MACHINE WORKS, INC.

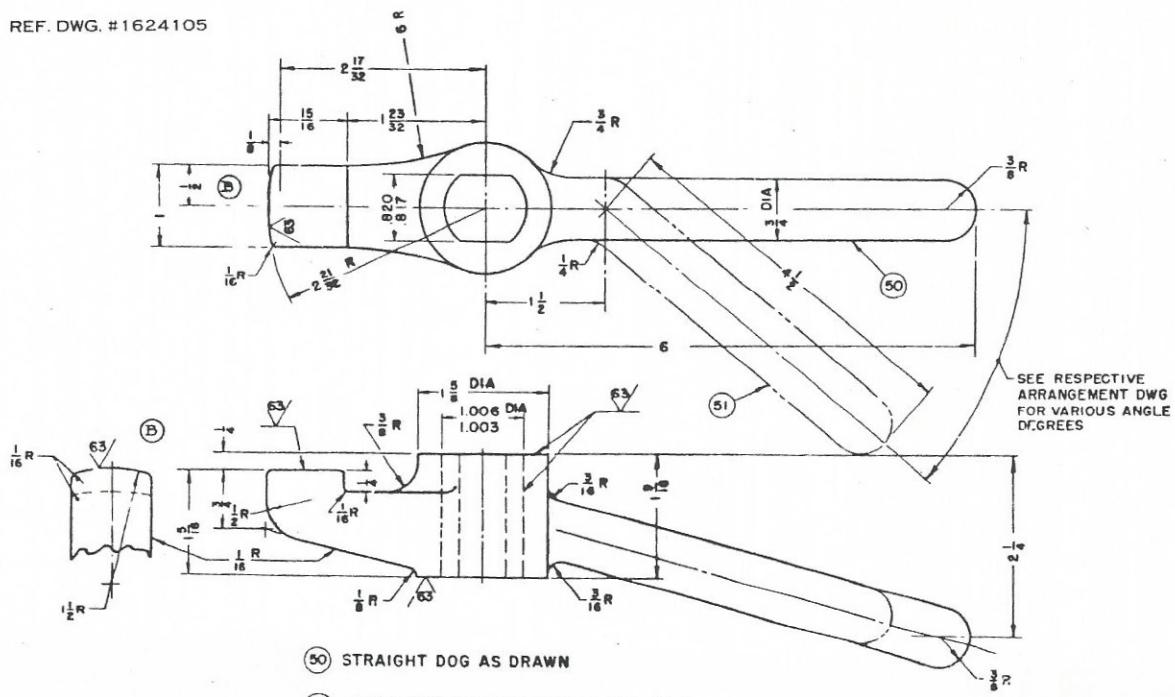
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DST-119	DOG (STRAIGHT)	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020
DA-119	DOG (ANGLE)	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020

REF. DWG. #1624119



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DST-105	DOG (STRAIGHT)	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020
DA-105	DOG (ANGLE)	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020

REF. DWG. #1624105

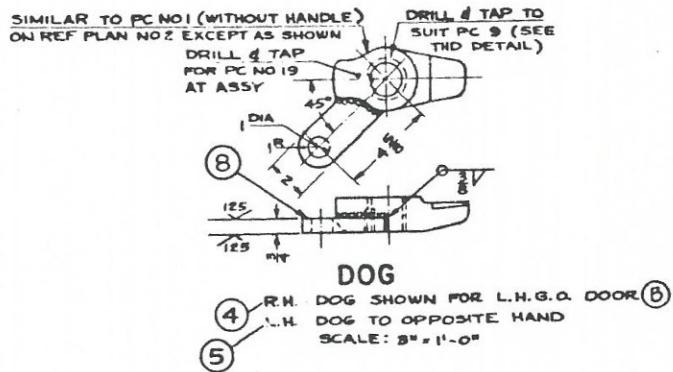




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
D-161	DOG	DOORS W.T. (30 LB STS) GANG OPERATED DOG & HANDLE	STEEL 8615

REF. DWG. #1630161





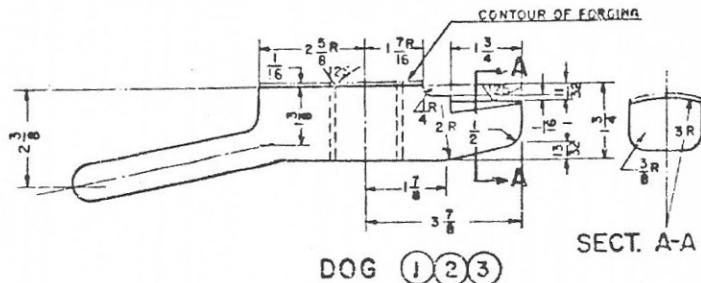




COLUMBIA FORGE & MACHINE WORKS, INC.

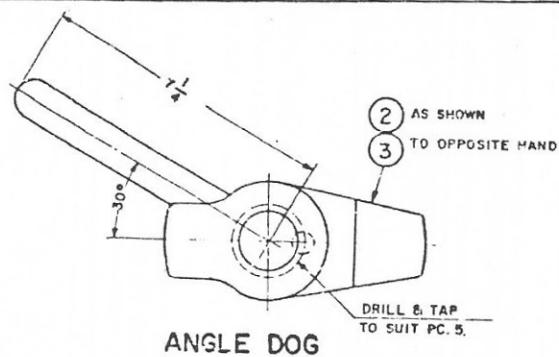
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
D-163	DOG	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	STEEL 8615

REF. DWG. #1630163



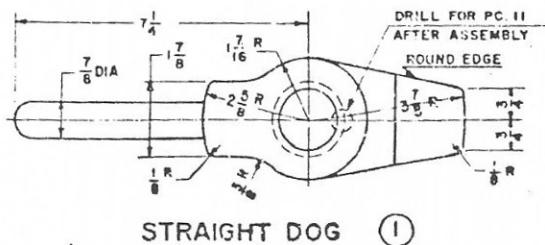
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DA-163	DOG (ANGLE)	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	STEEL 8615

REF. DWG. #1630163



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DST-163	DOG (STRAIGHT)	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	STEEL 8615

REF. DWG. #1630163



STRAIGHT DOG (1)

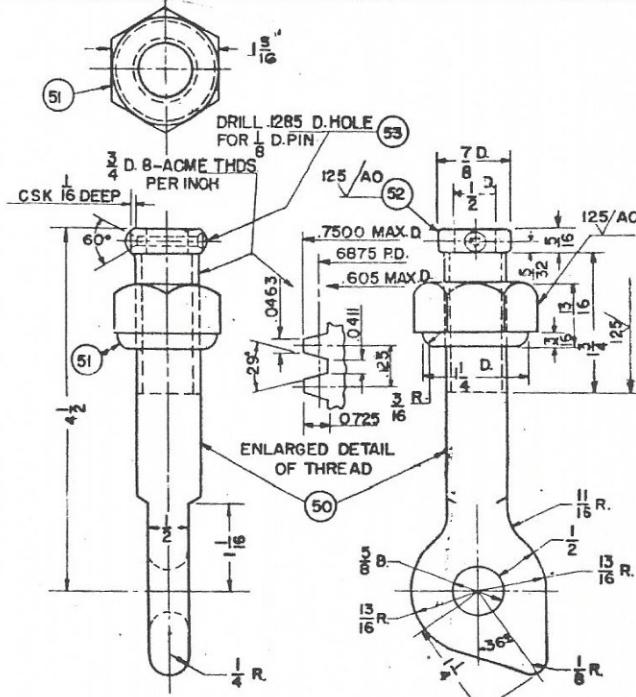




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DB-071	DOG BOLT, NUT, COLLAR, & COLLAR PIN	HATCH W.T. RAISED INDIVIDUALLY DOGGED,	s.s. 303 OR 304 M.S. 1020

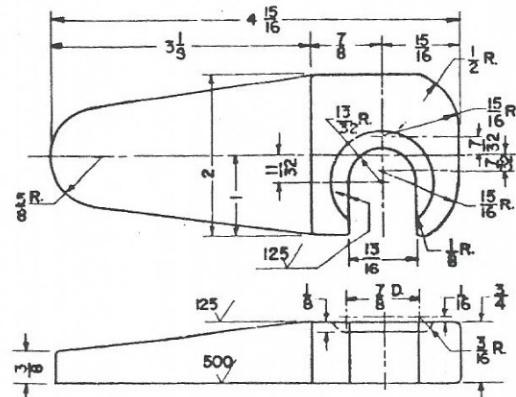
REF. DWG. #1624071



DOG BOLT, NUT, COLLAR & COLLAR PIN

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DL-071-R.H.	DOG LUG (RIGHT HAND)	HATCH W.T. RAISED DOGGED	s.s. 303 OR 304 M.S. 1020
DL-071-L.H.	DOG LUG (LEFT HAND)	HATCH W.T. RAISED INDIVIDUALLY DOGGED	s.s. 303 OR 304 M.S. 1020

REF. DWG. #1624071



(57) DOG LUG R.H.-AS DRAWN

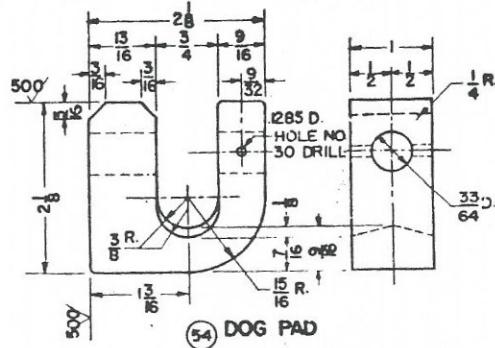
(58) DOG LUG L.H.-TO OTHER
HAND.



COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DP-071	DOG PAD	HATCH W.T. RAISED INDIVIDUALLY	S.S. 303 304 M.S. 1020

REF. DWG. #1624071



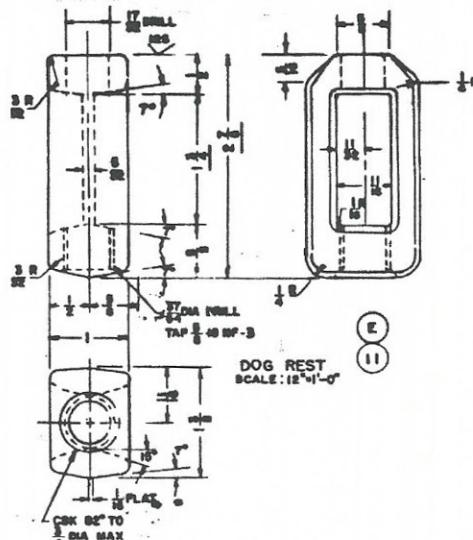




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DR-055	DOG REST	SCUTTLE, WTQA 18", 21", & 25" DIA. FLUSH 3 & 4 DOG	STL. A7 M.S. 1020 S.S. 303 OR 304

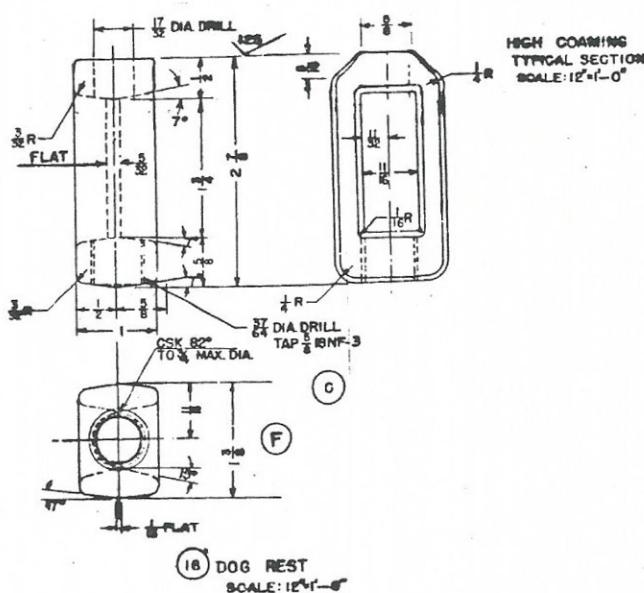
REF. DWG. #163055



DOG REST
SCALE: 12'-1"-0"

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DR-944	DOG REST	SCUTTLE, WTQA 18", 21", & 25" DIA. RAISED-3 & 4 DOG	STL. A7 M.S. 1020 S.S. 303 OR 304

REF. DWG. #1623944



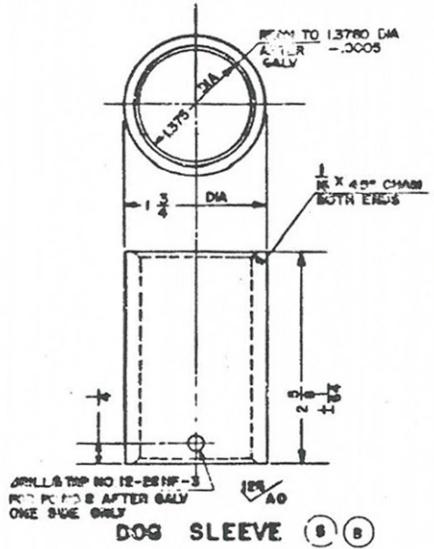
(16) DOG REST
SCALE: 12'-1"-0"



COLUMBIA FORGE & MACHINE WORKS, INC.

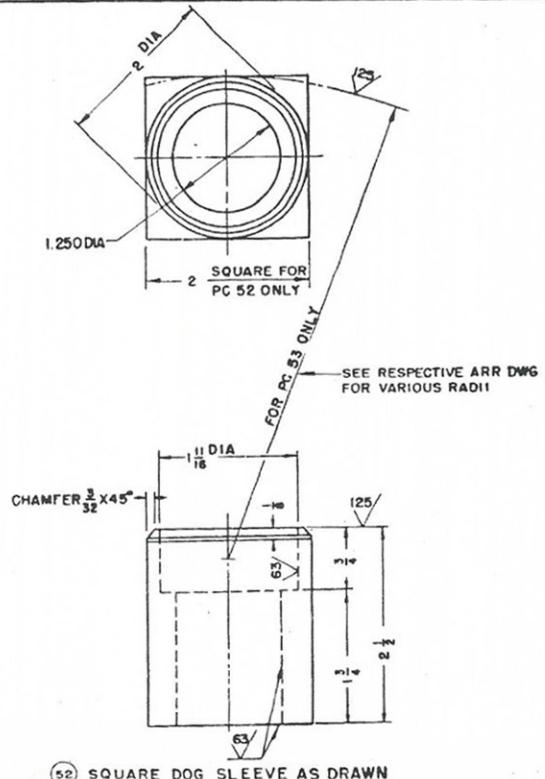
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSL-067	DOG SLEEVE	DOORS W.T. INDIVIDUALLY DOGGED	STL. MECH. TUBING CL-35 MAX M.S. 1020

REF. DWG. #1400067



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSL-105-C	DOG SLEEVE (CURVED)	HATCH WT FLUSH INDIVIDUALLY DOGGED	M.S. 1020
DSL-105-S	DOG SLEEVE (SQUARE)	HATCH WT FLUSH INDIVIDUALLY DOGGED	M.S. 1020

REF. DWG. #1624105



52 SQUARE DOG SLEEVE AS DRAWN

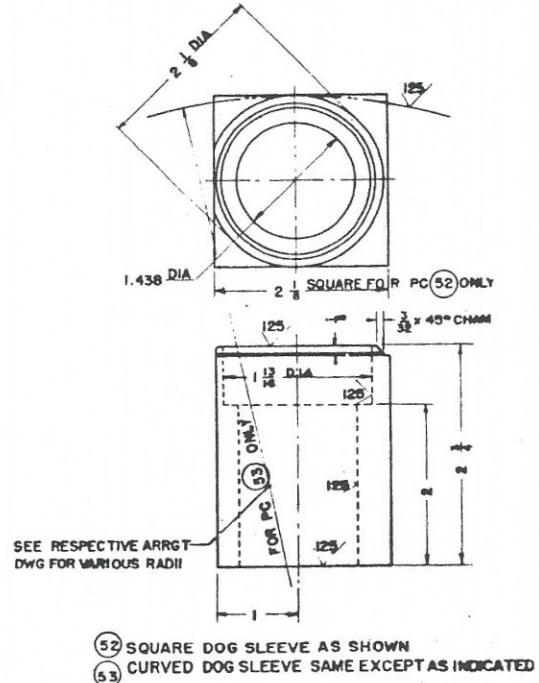
53 CURVED DOG SLEEVE SAME EXCEPT AS INDICATED



COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSLS-119	DOG SLEEVE (SQUARE)	HATCH WT FLUSH INDIVIDUALLY DOGGED	M.S. 1020
DSLC-119	DOG SLEEVE (CURVED)	HATCH WT FLUSH INDIVIDUALLY DOGGED	M.S. 1020

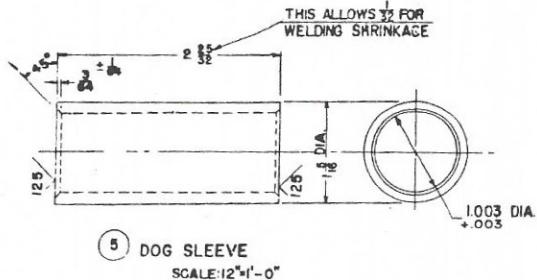
REF. DWG. #1624119



(52) SQUARE DOG SLEEVE AS SHOWN
(53) CURVED DOG SLEEVE SAME EXCEPT AS INDICATED

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSL-944	DOG SLEEVE	SCUTTLE, WTQA 18", 21", & 25" DIA. RAISED-3 & 4 DOG	STL. MECH. TUBING C. - .35 MAX M.S. 1020

REF. DWG. #1623944

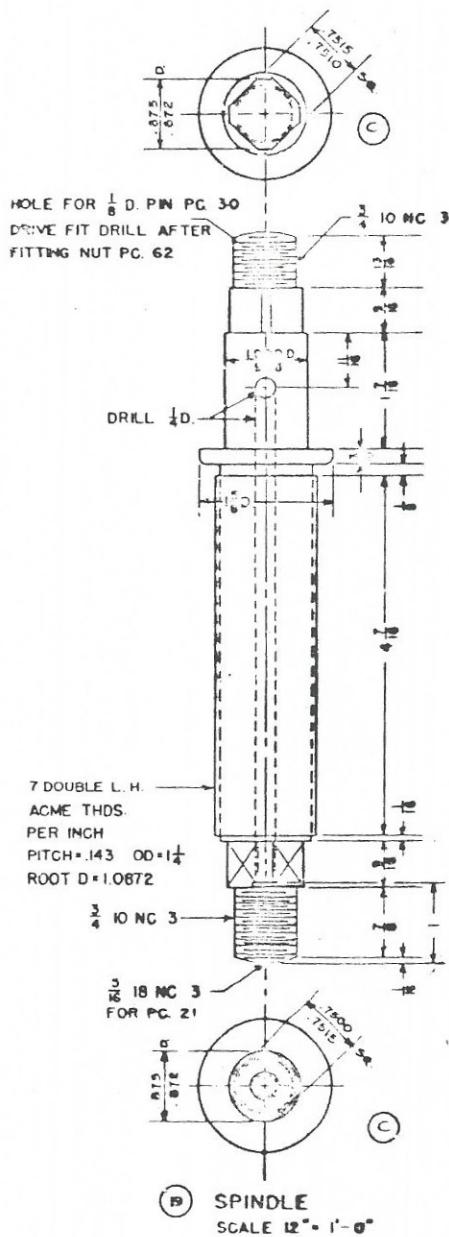




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPN-022	SPINDLE	W.T., Q.A. HATCHES SPR. BAL.-24x30 ENG. & BOILER RM. DESTROYERS-DET'S	S.S. 303 M.S. 1020

REF. DWG. #1626022

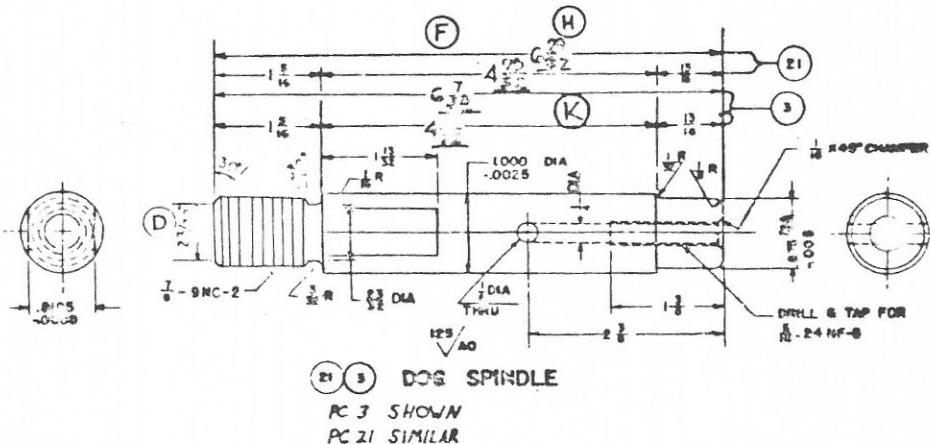




COLUMBIA FORGE & MACHINE WORKS, INC.

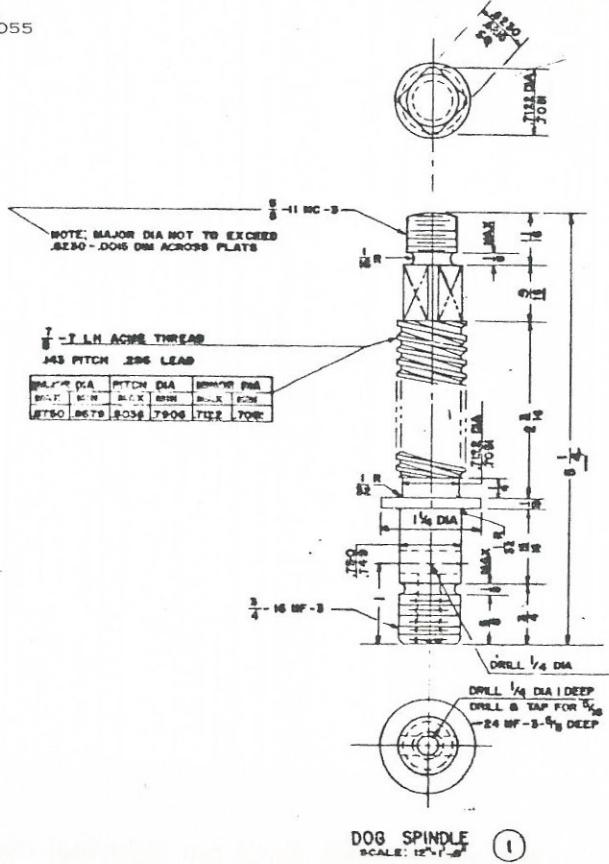
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSP-051	DOG SPINDLE	DOORS W.T.Q.A. (OPERATING MECH. IN FRAME) MEDIUM STEEL & CRES	S.S. 303 M.S. 1020

REF. DWG. #1400051



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSP-055	DOG SPINDLE	SCUTTLE, WTQA 18", 21", & 25" DIA. FLUSH 3 & 4 DOG	S.S. 303 M.S. 1020

REF. DWG. #163055

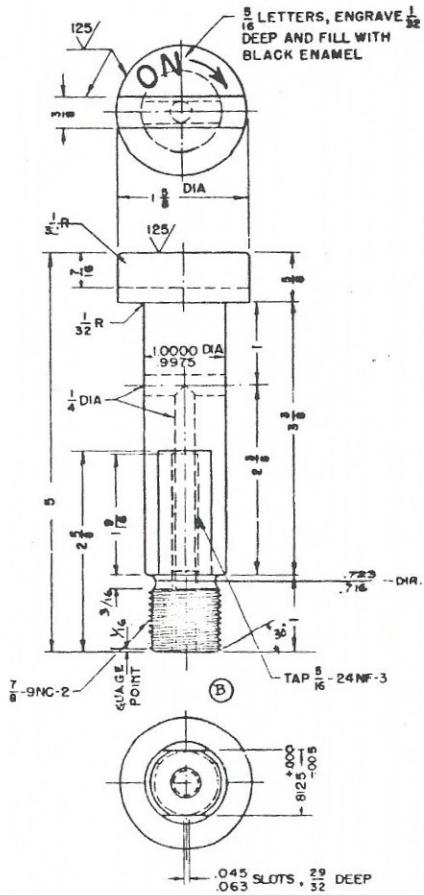




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSP-105	DOG SPINDLE	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020

REF. DWG. #1624105



⑤5 DOG SPINDLE ⑥3
✓ FINISH ALL OVER
EXCEPT AS NOTED

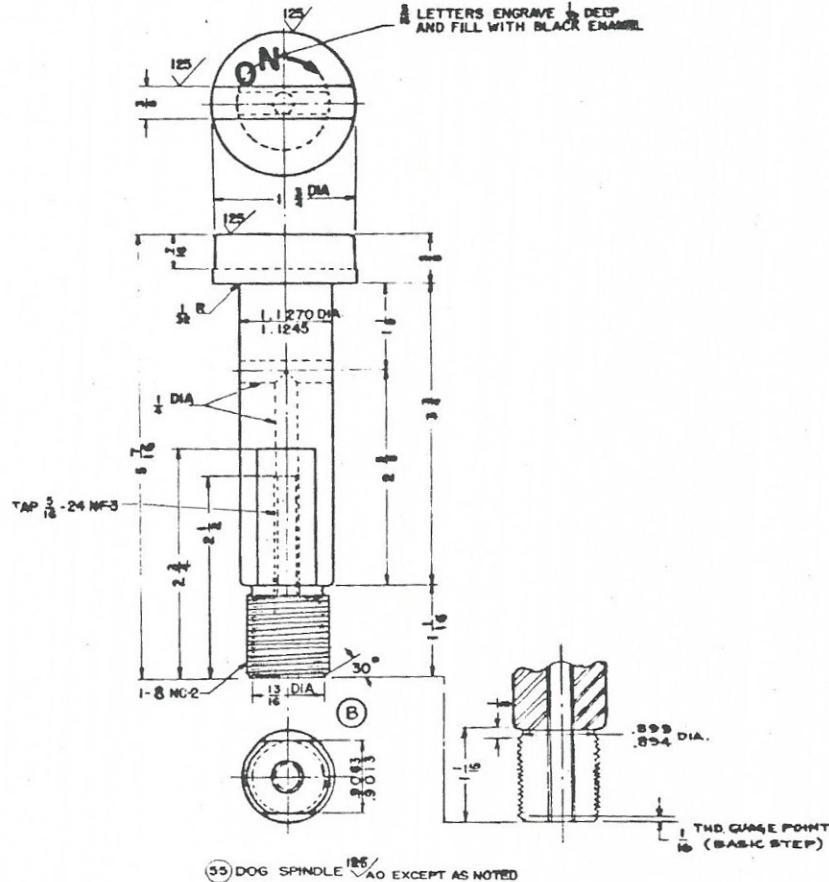




COLUMBIA FORGE & MACHINE WORKS, INC.

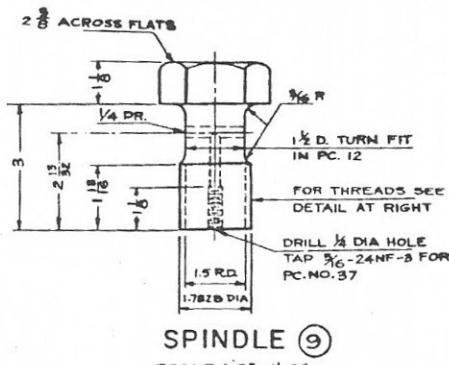
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSP-119	DOG SPINDLE	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020

REF. DWG. #1624119



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPN-161	SPINDLE	DOORS W.T. (30 LB. STS) GANG OPERATED DOG & HANDLE	STL GR 4340

REF. DWG. #1630161



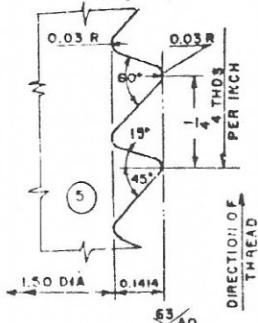




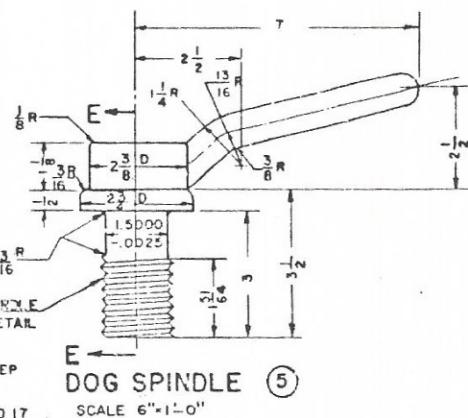
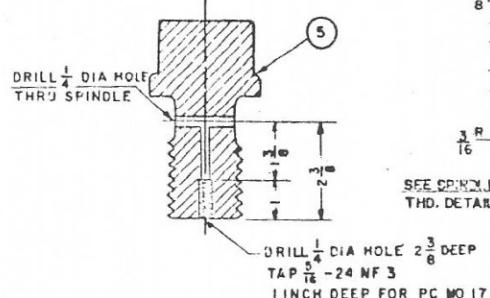
COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DSP-163	DOG SPINDLE	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	STL GR 4340

REF. DWG. #1630163



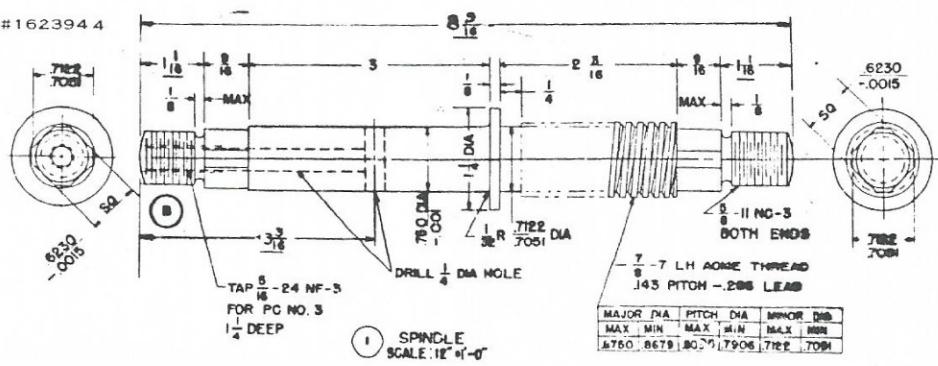
SPINDLE
THD DETAIL
NO SCALE



SECTION E-E

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPN-944	SPINDLE	SCUTTLE, WTQA 18", 21" & 25" DIA. RAISED- 3 & 4 DOG	CRES. COND A. GR. 303

REF. DWG. #1623944



MAJOR_DIA	PITCH_DIA	MINOR_DIA
.6750	.6679	.6029
.7906	.7829	.7091

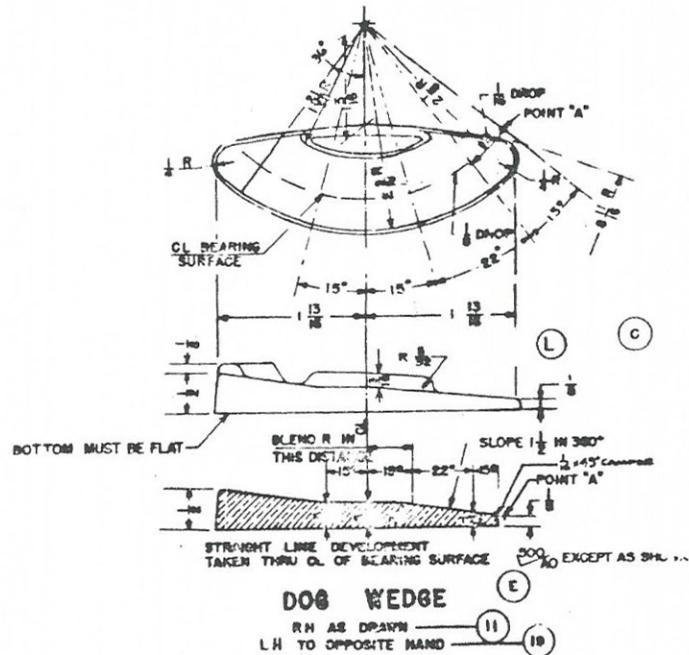




COLUMBIA FORGE & MACHINE WORKS, INC.

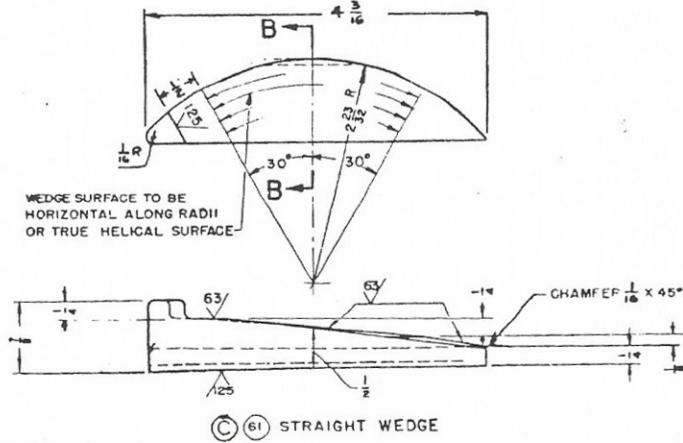
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DW-067	DOG WEDGE	DOORS W.T. INDIVIDUALLY DOGGED	BRZ AL GRADE 1 OR 2 S.S. 303 304

REF. DWG. #1400067



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
WS-105	WEDGE (STRAIGHT)	HATCH WT FLUSH INDIVIDUALLY DOGGED	BRZ OR S.S. 303 304

REF. DWG. #1624105

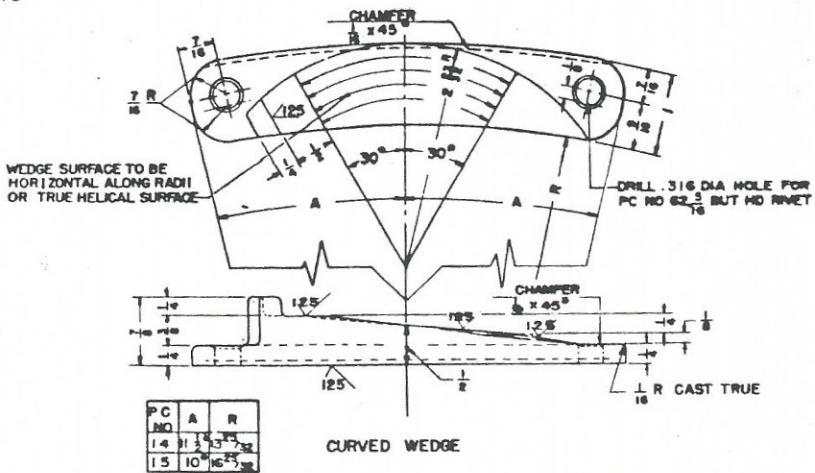




COLUMBIA FORGE & MACHINE WORKS, INC.

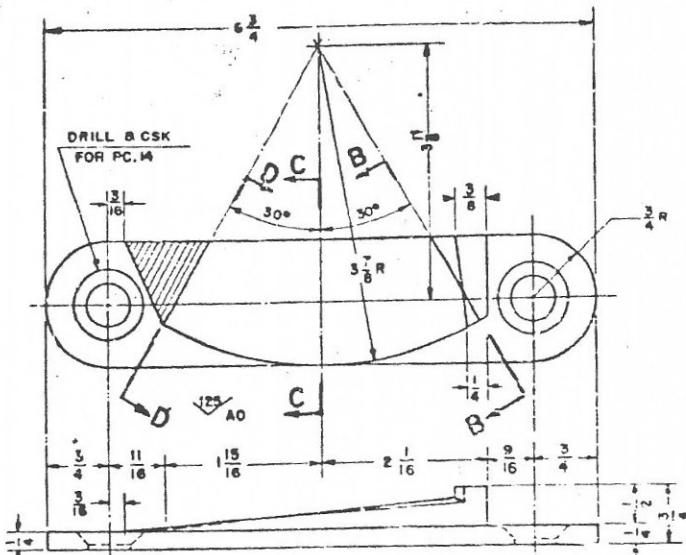
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
WC-119	WEDGE (CURVED)	HATCH WT FLUSH INDIVIDUALLY DOGGED	BRZ S.S. 303 304

REF. DWG. #1624119



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
DW-163	DOG WEDGE	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	BRONZE AL MANGANESE CLZ S.S. 303 OR 304

REF. DWG. #1630163



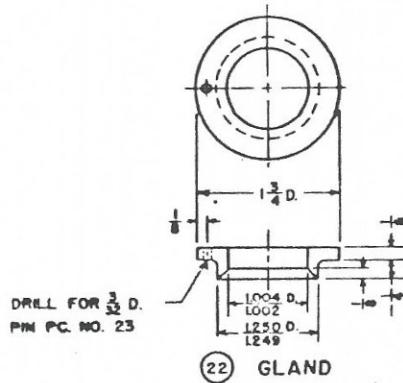
SCALE 12¹/₂ 1/16"



COLUMBIA FORGE & MACHINE WORKS, INC.

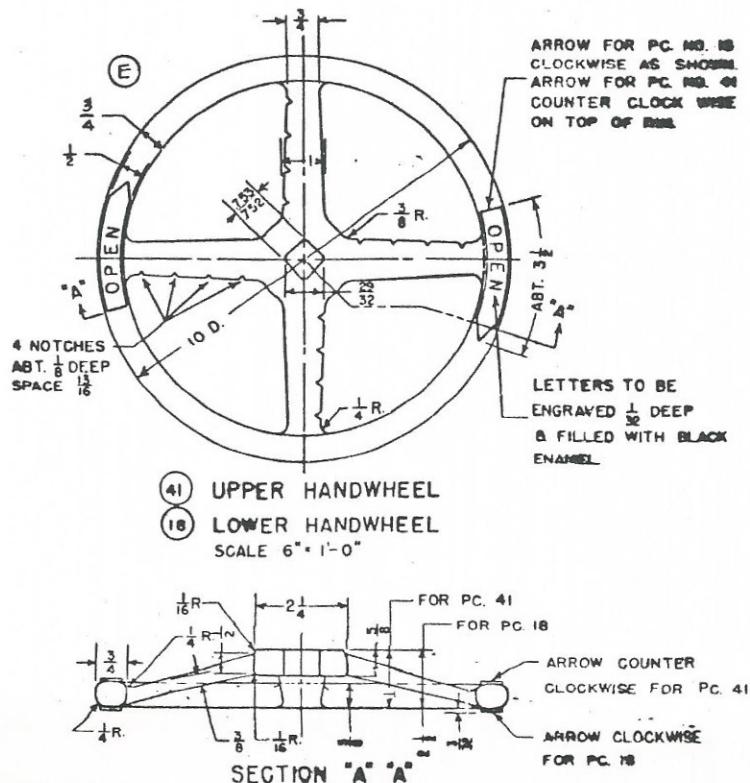
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
G-022	GLAND	W.T., Q.A. HATCHES SPR. BAL.-24x30 ENG. & BOILER RM. DESTROYERS-DET'S	

REF. DWG. #1626022



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HW-022	HANDWHEEL	W.T., Q.A. HATCHES SPR. BAL.-24x30 ENG. & BOILER RM. DESTROYERS-DET'S.	BRASS S.S. 303 OR 304

REF. DWG. #1626022

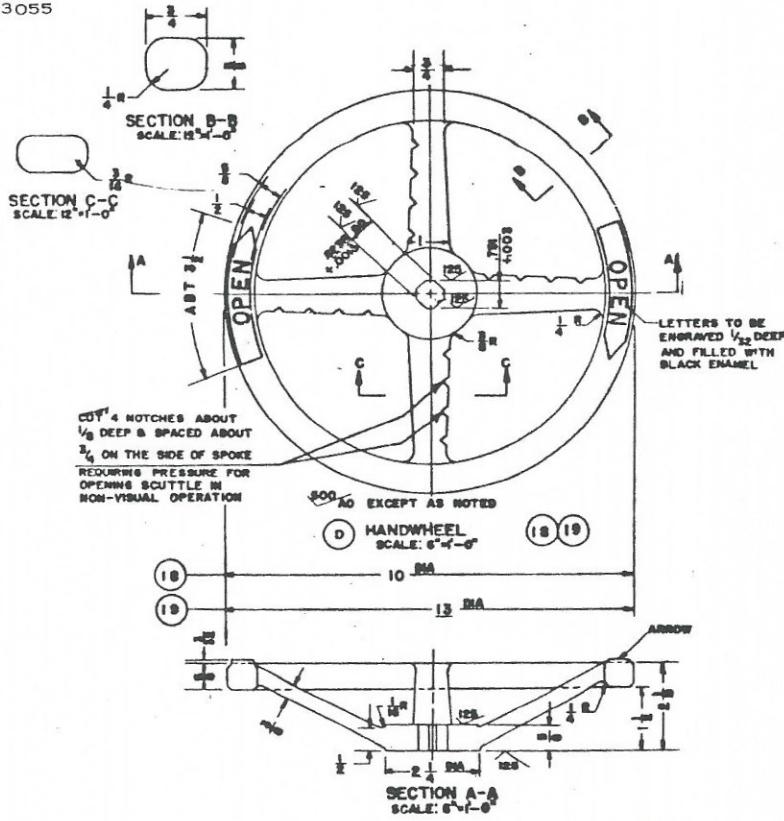




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HW-055	HANDWHEEL	SCUTTLE, WTQA 18", 21", & 25" DIA. FLUSH 3 & 4 DOG	BRASS (NAVAL) S.S. 303 OR 304

REF. DWG. #1623055

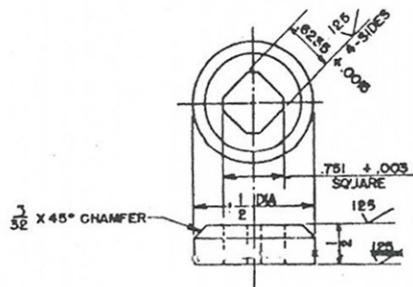




COLUMBIA FORGE & MACHINE WORKS, INC.

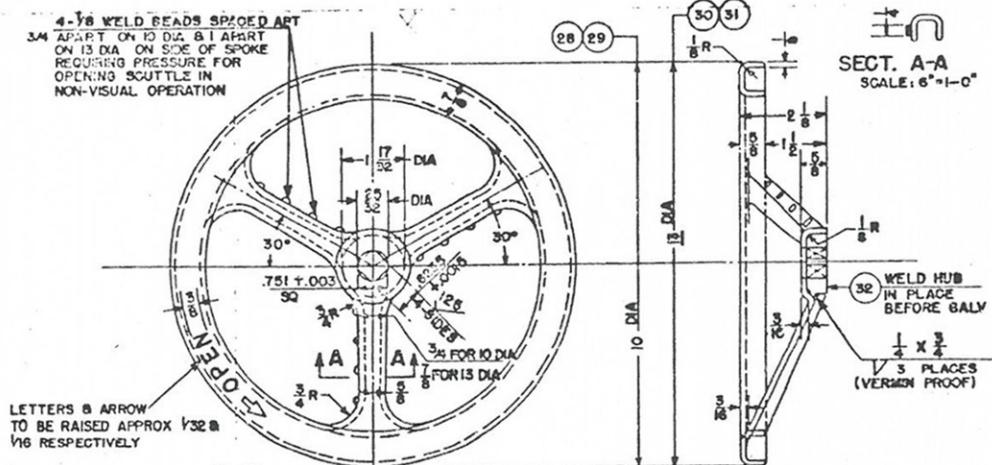
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HH-943	HUB HANDWHEEL	SCUTTLE, WTQA 18", 21", & 25" DIA RAISED - 3 & 4 DOG	STL. A7 O.H. BRASS

REF. DWG. #1623943



③ HUB-HANDWHEEL
SCALE: 12"=1'-0"

4-1/8 WELD BEADS SPACED APART
3/4" APART ON 10 DIA. & 1" APART
ON 13 DIA. ON SIDE OF SPOKE
REQUIRING PRESSURE FOR
OPENING SCUTTLE IN
NON-VISUAL OPERATION



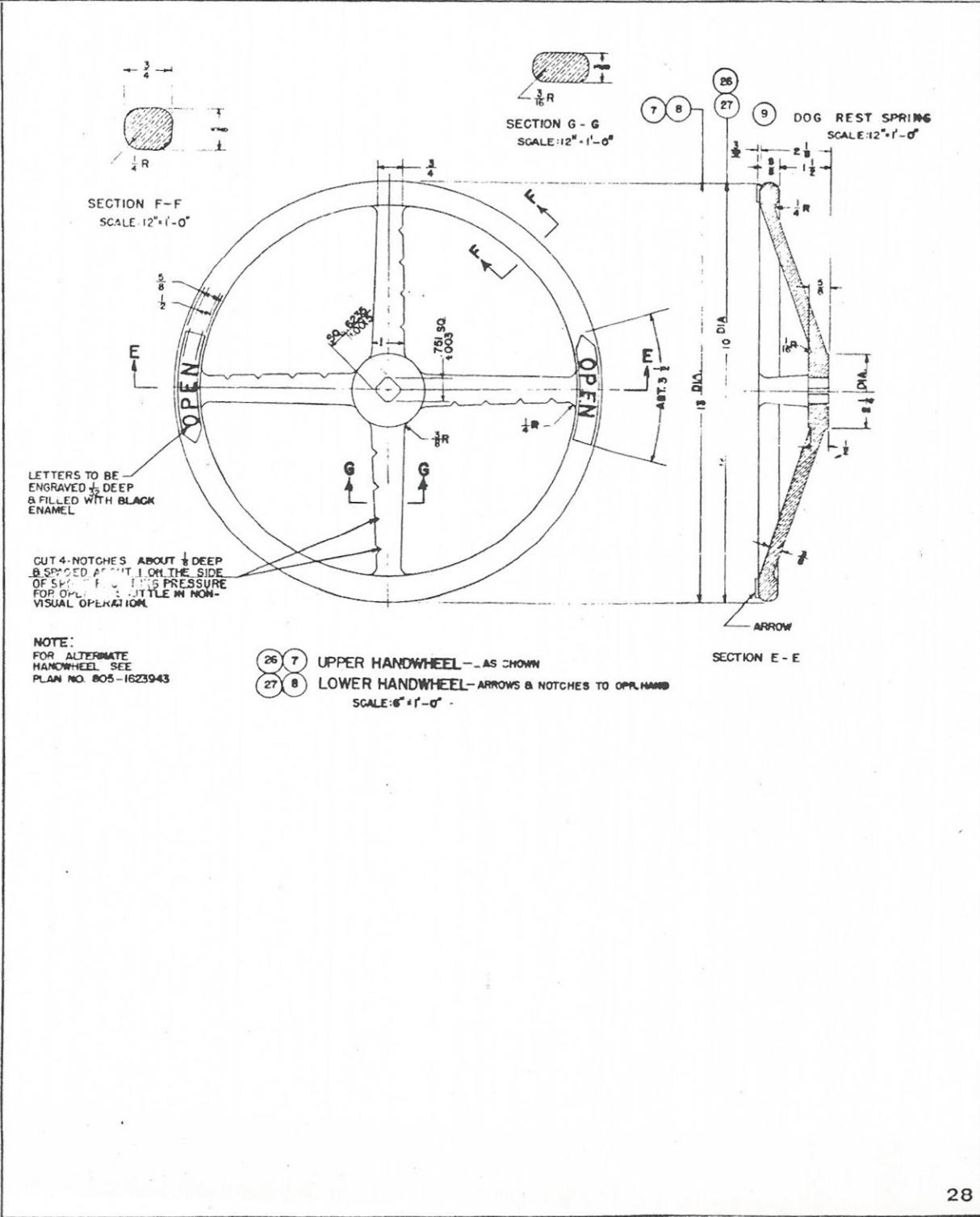
②8 ③0 ALTERNATE UPPER HANDWHEEL-AS SHOWN
②9 ③1 ALTERNATE LOWER HANDWHEEL ARROW& WELD BEADS TO OPP HAND





COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HW-944	HANDWHEEL	SCUTTLE, WTQA 18", 21", & 25" DIA. RAISED-3 & 4 DOG	BRASS CASTING (NAVAL)

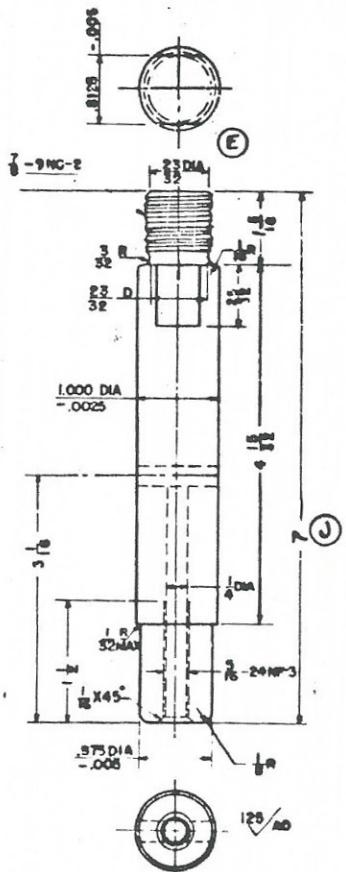




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HS-053	HAND LEVER SHAFT	DOORS W.T.Q.A. (OPERATING MECH. IN FRAME) MEDIUM STEEL & CRES	S.S. 303 OR 304 M.S. 1020

REF. DWG. #1400053



HAND LEVER SHAFT ③

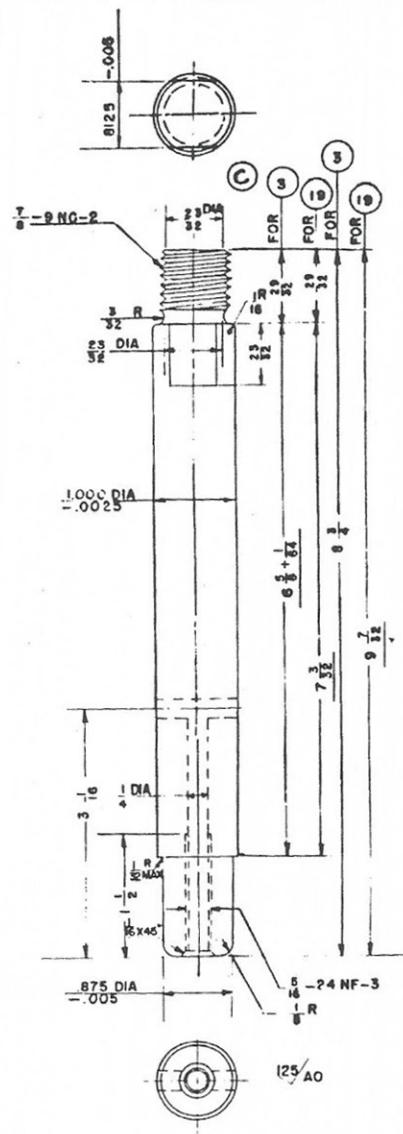
SCALE 12'-1'-0"



COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HS-406	HAND LEVER SHAFT	DOORS W.T.Q.A. (OPERATING MECH IN FRAME) MEDIUM STEEL	S.S. 303 OR 304 M.S. 1020

REF. DWG. #1623406



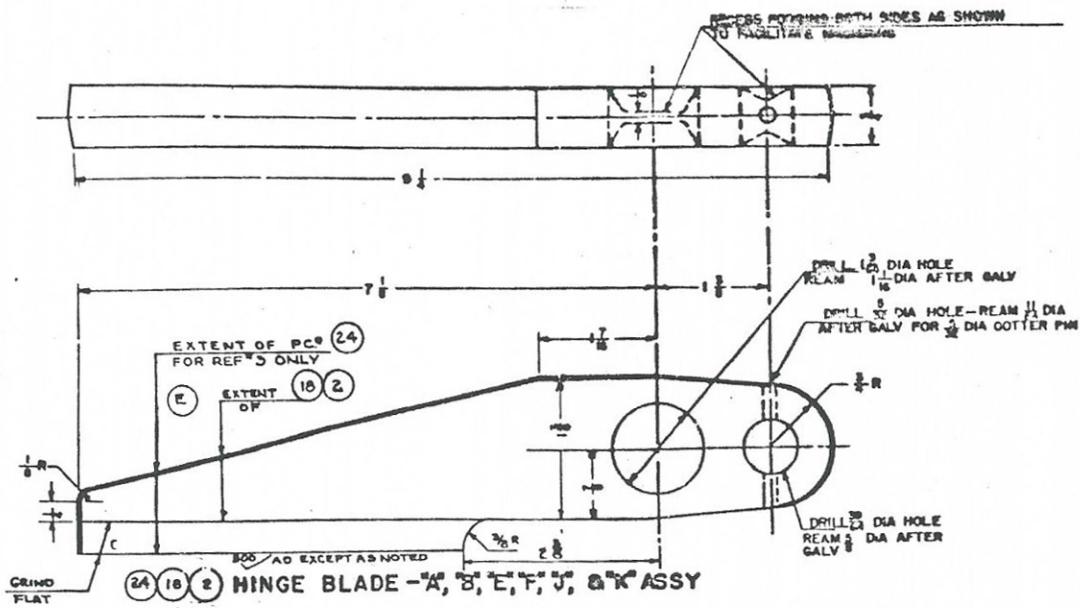
HAND LEVER SHAFT 3 19
SCALE 12' = 1'-0"



COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HB-054A	HINGE BLADE - "A", "B", "E", "F", "J", & "K" ASSY	DOORS WTQA, WT, AT, & MT) MEDIUM STEEL & CRES) HINGE	STEEL A7 OM S.S. 303 OR 304 M.S. 1020 ALUMINUM

REF. DWG. #1400054



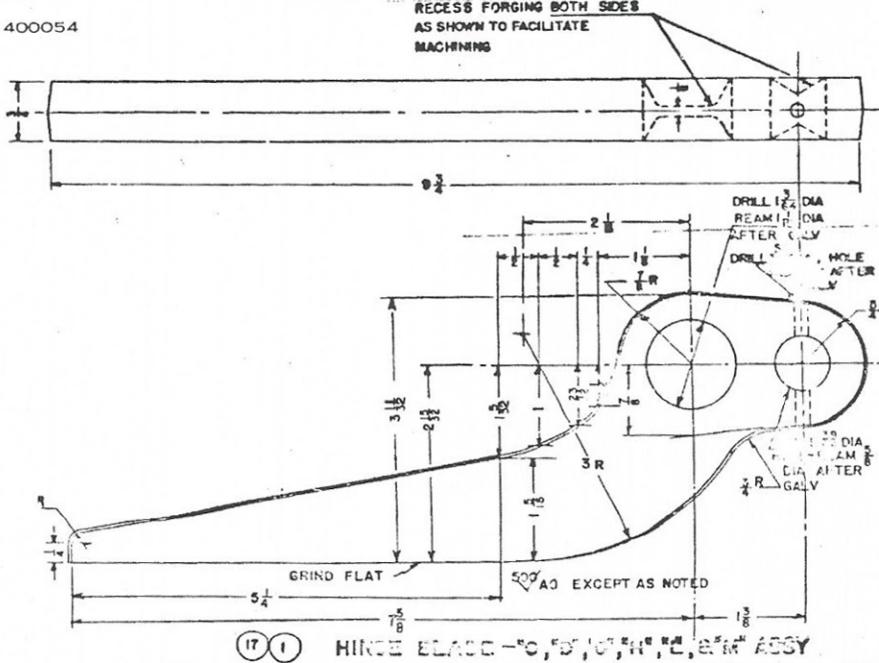




COLUMBIA FORGE & MACHINE WORKS, INC.

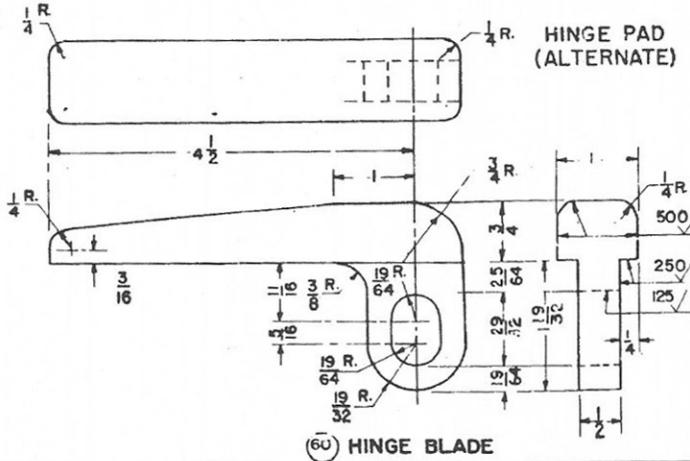
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HB-054B	HINGE BLADE - "C", "D", "G", "H", "L" & "M" ASSY	DOORS WTQA, WT, AT, & MT (MEDIUM STEEL & CRES) HINGE	STEEL A-7 OM C .35 MAX ALUMINUM

REF. DWG. #1400054

RECESS FORGING BOTH SIDES
AS SHOWN TO FACILITATE
MACHINING

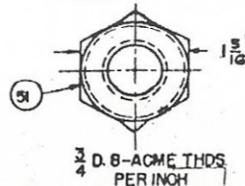
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HB-071	HINGE BLADE	HATCH W.T. RAISED INDIVIDUALLY DOGGED	S.S. 303 OR 304 M.S. 1020 ALUMINUM

REF. DWG. #1624071



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
N-071	NUT	HATCH W.T. RAISED	S.S. 303 M.S. 1020 BRASS

REF. DWG. #1624071



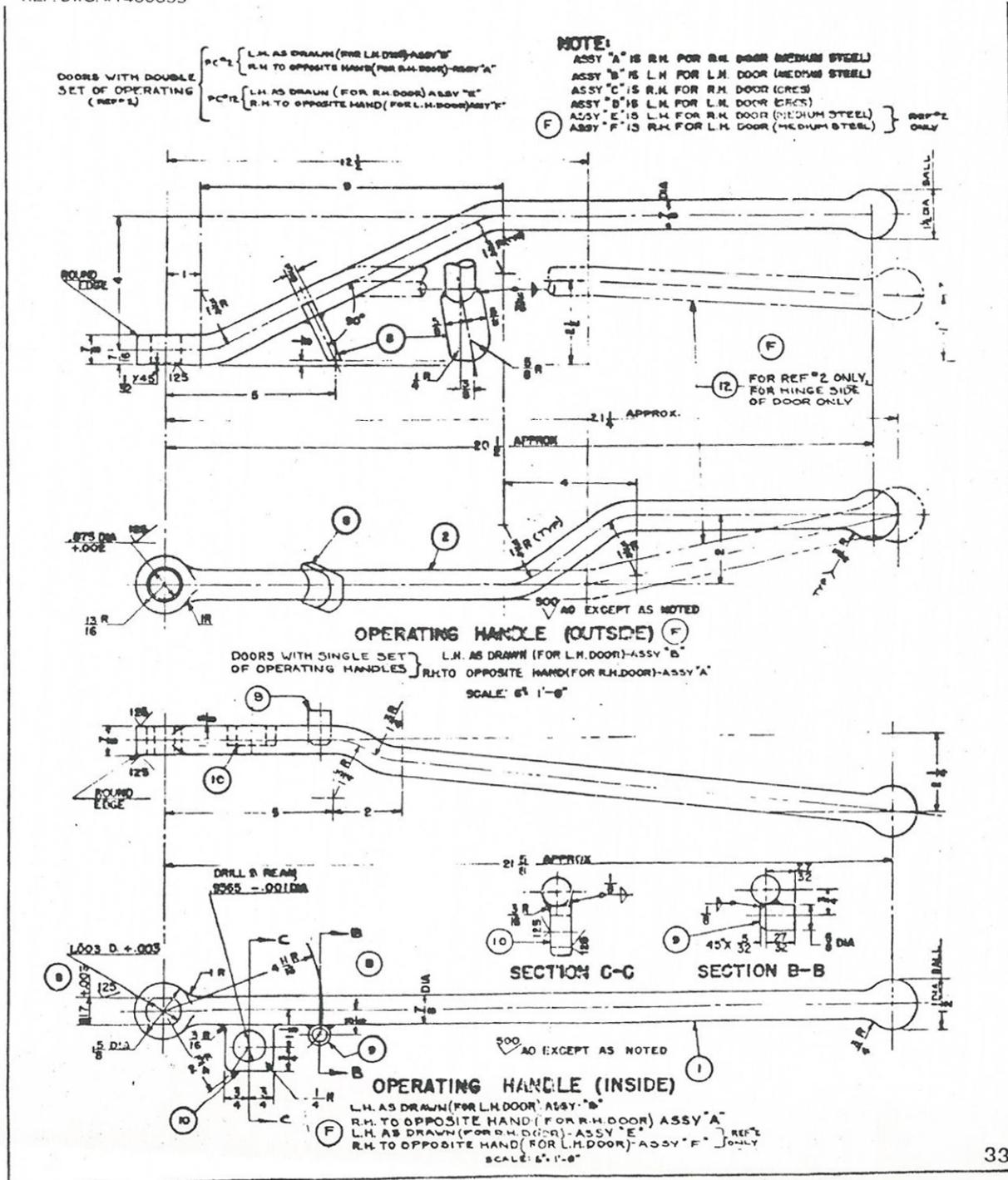




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
OO-053	OPERATING HANDLE (OUTSIDE)	DOORS W.T.Q.A. (OPERATING MECH. IN FRAME) MEDIUM STEEL & CRES	S.S. 303 OR 304 M.S. 1020
OI-053	OPERATING HANDLE (INSIDE)	DOORS W.T.Q.A. (OPERATING MECH. IN FRAME) MEDIUM STEEL & CRES	

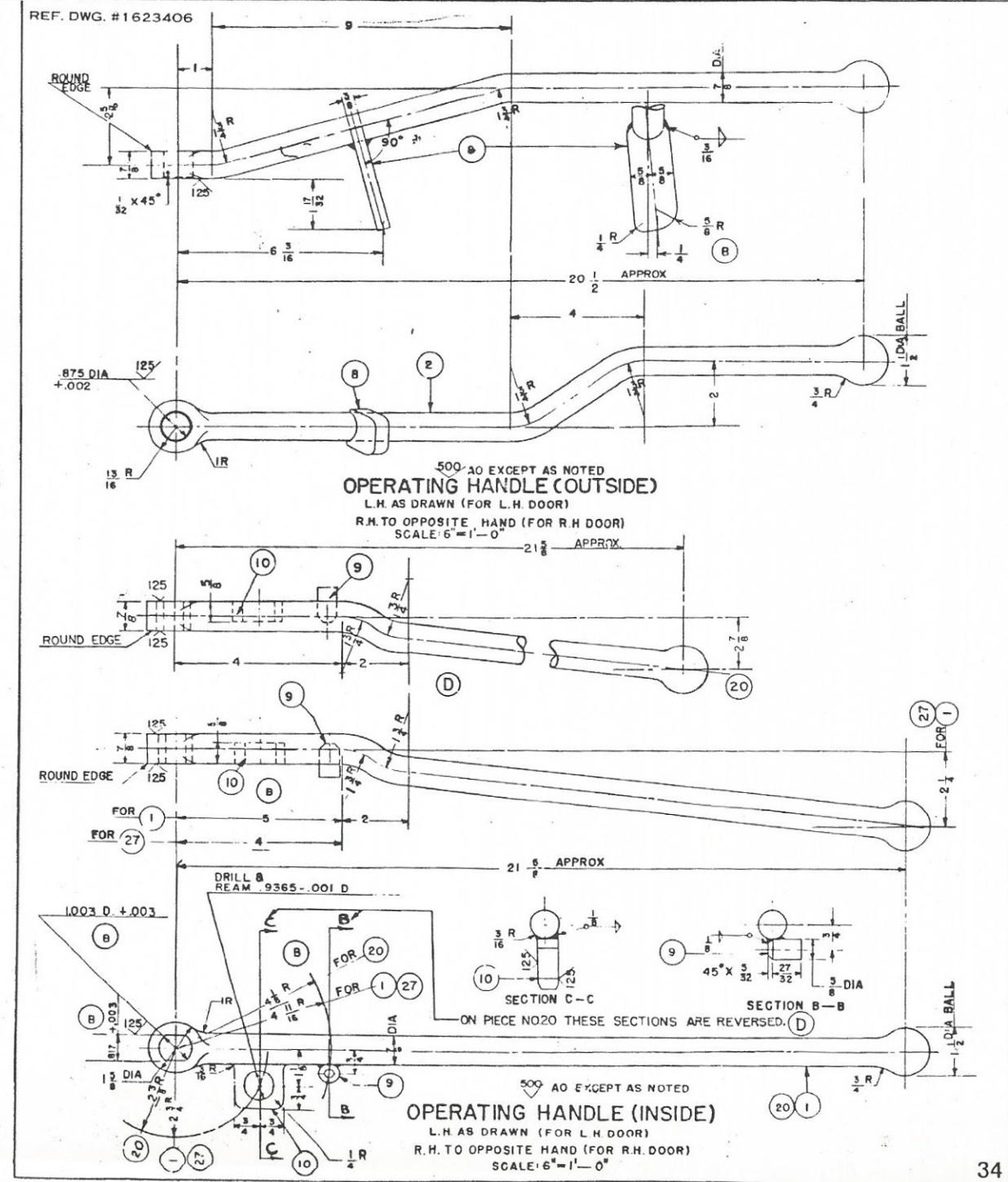
REF. DWG. #1400053





COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
OO-406	OPERATING HANDLE (OUTSIDE)	DOORS W.T.Q.A. (OPERATING MECH IN FRAME) MEDIUM STEEL	FORGED STEEL S.S. 303 OR 304
OI-406	OPERATING HANDLE (INSIDE)	DOORS W.T.Q.A. (OPERATING MECH IN FRAME) MEDIUM STEEL	FORGED STEEL S.S. 303 OR 304

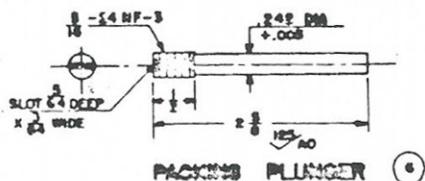




COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
PP-067	PACKING PLUNGER	DOORS W.T. INDIVIDUALLY DOGGED	S.S. 303 OR 304 M.S. 1020 BRZ

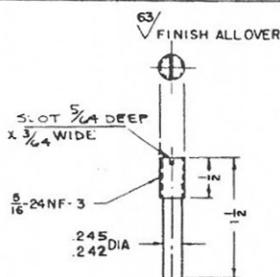
REF. DWG. #1400067



PACKING PLUNGER (6)

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
PP-105	PACKING PLUNGER	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 OR 304 M.S. 1020 BRZ

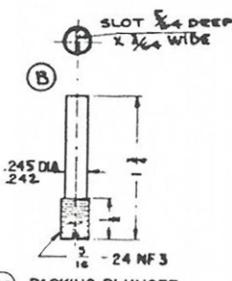
REF. DWG. #162410



(B) (56) PACKING PLUNGER

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
PP-119	PACKING PLUNGER	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 OR 304 M.S. 1020 BRZ

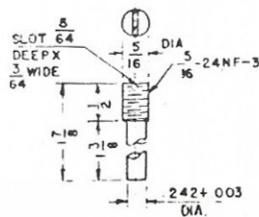
REF. DWG. #1624119



(56) PACKING PLUNGER

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
PP-163	PACKING PLUNGER	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	S.S. 303 OR 304 M.S. 1020 BRZ

REF. DWG. #1630163



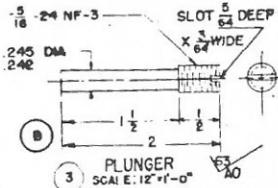
PACKING PLUNGER (17)



COLUMBIA FORGE & MACHINE WORKS, INC.

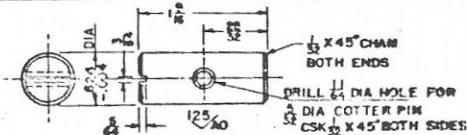
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
PL-944	PLUNGER	SCUTTLE, WTQA 18", 21", & 25" DIA. RAISED - 3 & 4 DOG	M.S. 1020 S.S. 303 BRZ

REF. DWG. #1623944



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
P-054	PIN, ADJUSTING YOKE	DOORS WTQA, WT, AT, & MT (MEDIUM STEEL & CRES) HINGE	NAVAL BRASS S.S. 303 M.S. 1020

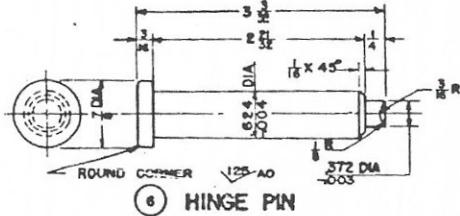
REF. DWG. #1400054



(6) ADJUSTING YOKE PIN

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HP-054	HINGE PIN	DOORS WTQA, WT, AT, & MT	S.S. 303 M.S. 1020

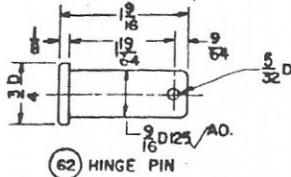
REF. DWG. #1400054



(6) HINGE PIN

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
HP-071	HINGE PIN	HATCH W.T. RAISED	S.S. 303 M.S. 1020

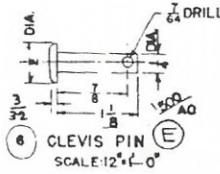
REF. DWG. #1624071



(6) HINGE PIN

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
CP-944	CLEVIS PIN	SCUTTLE, WTQA 18", 21" & 25" DIA. RAISED 3 & 4 DOG	S.S. 303 M.S. 1020

REF. DWG. #1623944



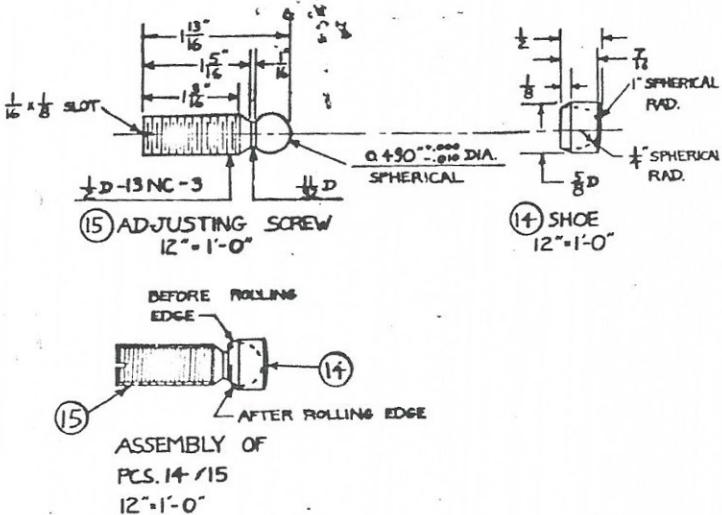
(6) CLEVIS PIN (E)



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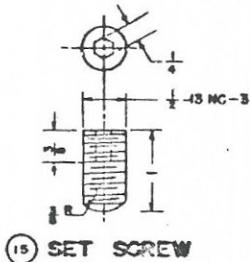
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
AS-023	ADJUSTING SCREW	W.T., Q.A. HATCHES SPR. BAL. - 24x30 ENG. & BOILER RM. DESTROYERS - DET'S.	S.S. 303 M.S. 1020 BRASS

REF. DWG. #1626023



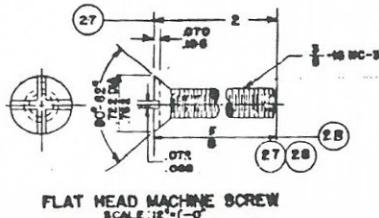
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SS-054	SET SCREW	DOORS WTQA, WT, AT, & MT (MEDIUM STEEL & CRES) HINGE	S.S. 303 OR 304 M.S. 1020

REF. DWG. #1400054



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
MS-055	MACHINE SCREW (FLAT HEAD)	SCUTTLE, WTQA 18", 21", & 25" DIA. FLUSH 3 & 4 DOG	BRONZE S.S. 303 M.S. 1020

REF. DWG. #1400055





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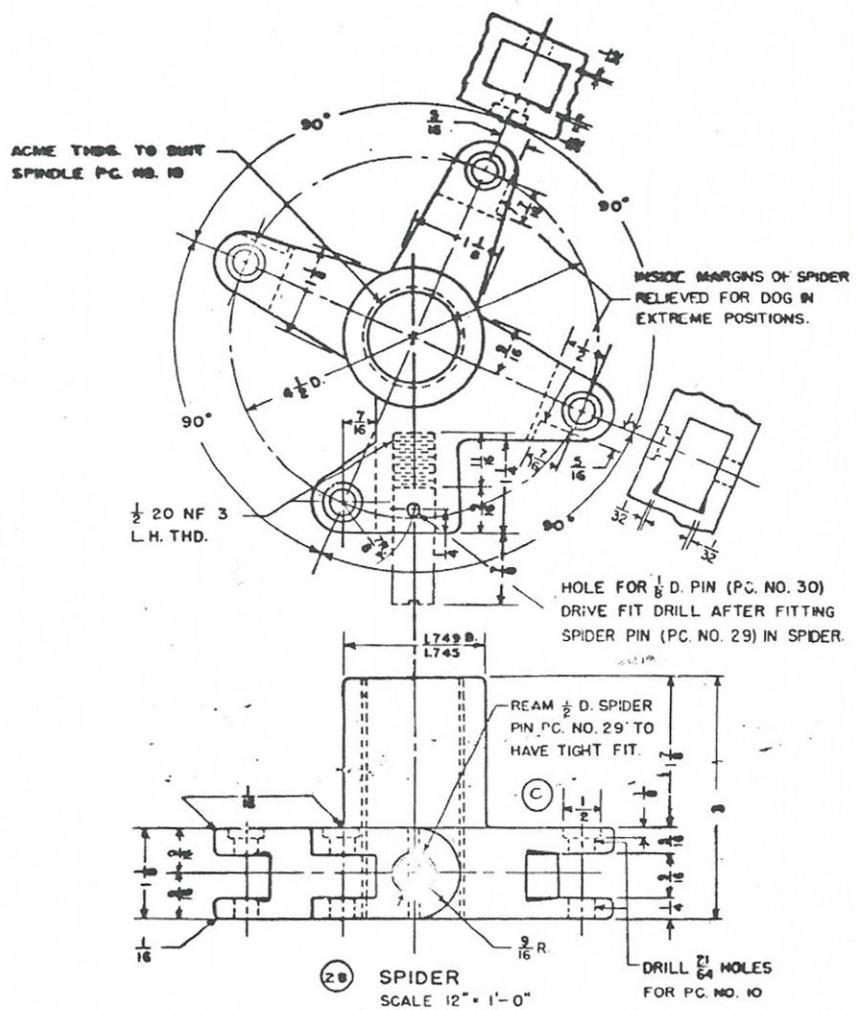
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SS-067	SET SCREW	DOORS W.T. INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020 BRASS
REF. DWG. #1400067			
		SET SCREW ⑧	
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SS-163	SET SCREW	DOORS W.T. (30 LB. STS) INDIVIDUALLY DOGGED	BRASS S.S. 303 M.S. 1020
REF. DWG. #1630163			
		SET SCREW ⑪	
		SCALE: 12'-1"-0"	
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPC-105	SPACER	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020 BRASS
REF. DWG. #1624105			
		(60) SPACER	
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPC-119	SPACER	HATCH WT FLUSH INDIVIDUALLY DOGGED	S.S. 303 M.S. 1020 BRASS
REF. DWG. #163055			
		(60) SPACER	
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SB-055	STUD, BRACE	SCUTTLE, WTQA 18", 21" & 25" DIA. FLUSH 3 & 4 DOG	S.S. 303 M.S. 1020
REF. DWG. #163055			
		SPACE STUD ⑫	



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PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPI-022	SPIDER	W.T., Q.A. HATCHES SPR. BAL.-24x30 ENG. & BOILER RM. DESTROYERS-DET'S.	MANG. BRZ.

REF. DWG. #1626022

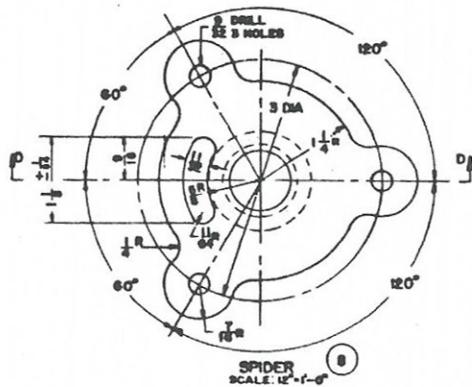




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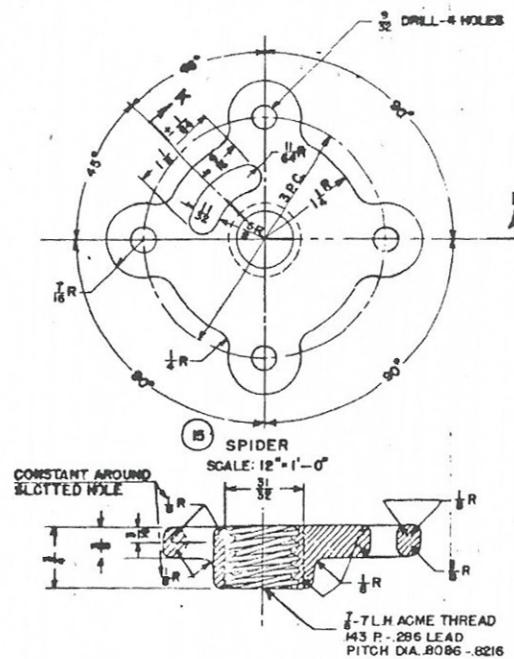
PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPI-055	SPIDER	SCUTTLE, WTQA 18", 21", & 25" DIA. FLUSH 3 & 4 DOG	MANG. BRZ.

REF. DWG. #1400055



PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPI-944 A	SPIDER	SCUTTLE, WTQA 18", 21", & 25" DIA. RAISED-3 & 4 DOG	MANG. BRZ.

REF. DWG. #1623944



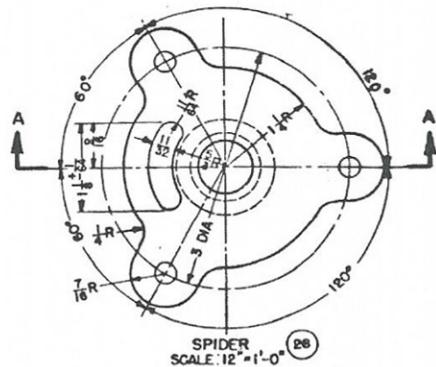
SECTION K - K



COLUMBIA FORGE & MACHINE WORKS, INC.

PART NO.	DESCRIPTION	APPLICATION	MATERIAL
SPI-944-B	SPIDER (FOUR HOLE)	SCUTTLE, WTQA 18", 21", & 25" DIA. RAISED-3 & 4 DOG	MANG. BRONZE

REF. DWG. #1623944





HINGE LEVER



DOG GEAR



90 DEGREE DOG



135 DEGREE DOG



HAND LEVER



DROP BOLT