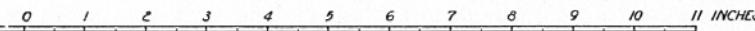


HANDLE, CARRYING, ASSEMBLY  
LIST OF DRAWINGS AND SPECIFICATIONS  
SHOWING REVISIONS IN EFFECT ON

SUPERSEDES B224864 WITH CHANGE 8-17-45<sup>E</sup>



C7312973

SYMBOL		
DFTSMAN <i>WB</i>	TRACER <i>OK</i>	L'DG DFTSMAN <i>2-1</i>
CHECAR <i>Cook</i>		CHIEF D FTSMAN <i>JL</i>
SUBMITTED:- <i>J. G. Murphy</i> BARRING O.R.D. DEPT.		
APPROVED BY ORDER OF THE CHIEF OF ORGANIZATION - <i>R. A. Stellato</i> LT COL O.R.D. DEPT.		
ORDNANCE DEPT., U. S. A.		

A 7312896

**Drawing # A7312897, Ferrule  
is not in the government's  
drawing file**

A 7312900

HEAT TREATMENT & FINAL FINISH		PHYSICAL PROPERTIES					JAN. 25, 1945															
CYANIDE .003 DEEP		Y.P.	RED		ROCK		REVISIONS															
		T.S.		BR			1	4-23-45														
TYPE II, CLASS B		EL. 2					2	7-4-45														
<p>.190 (NO. 10) 32NF-2-</p> <p>.005R+.005</p> <p>3/15-.005</p> <p><math>\frac{3}{8}</math></p> <p><math>\frac{15}{32}</math></p> <p><math>\frac{7}{8}</math></p> <p><math>\frac{1}{16}</math></p> <p>.04/.+0.0</p>																						
<p><b>DR'G PERTAINS TO</b></p> <table border="1"> <tr> <td>C7312902</td> <td>HANDLE, CARRYING, ASSEM.</td> </tr> <tr> <td>C7312973</td> <td>HANDLE, CARRYING, ASSEM.</td> </tr> <tr> <td>C7313084</td> <td>HANDLE, CARRYING, ASSEM.</td> </tr> <tr> <td>51-10</td> <td>30BMG-M1917A1</td> </tr> <tr> <td>51-84</td> <td>30BMGM1919A4FLEX</td> </tr> <tr> <td>51-102</td> <td>30BAR-M1918A2</td> </tr> <tr> <td>51-125</td> <td>30BMG M1919A6</td> </tr> </table> <p>TOLERANCE ON DIMENSIONS NOT OTHERWISE SPECIFIED</p> <p>DECIMAL <math>\pm .01</math></p> <p>FRACTIONAL <math>\pm \frac{1}{64}</math></p> <p>ANGULAR <math>\pm</math></p>									C7312902	HANDLE, CARRYING, ASSEM.	C7312973	HANDLE, CARRYING, ASSEM.	C7313084	HANDLE, CARRYING, ASSEM.	51-10	30BMG-M1917A1	51-84	30BMGM1919A4FLEX	51-102	30BAR-M1918A2	51-125	30BMG M1919A6
C7312902	HANDLE, CARRYING, ASSEM.																					
C7312973	HANDLE, CARRYING, ASSEM.																					
C7313084	HANDLE, CARRYING, ASSEM.																					
51-10	30BMG-M1917A1																					
51-84	30BMGM1919A4FLEX																					
51-102	30BAR-M1918A2																					
51-125	30BMG M1919A6																					
DFTSMAN PICK	TRACER D.E.P.	ENGINEER J.C.																				
CHECKER M.S.B.	QC O.O.	ENGINEER J.G.																				
SUBMITTED:																						
 APPROVED BY ORDER OF THE CHIEF OF ORDNANCE  LT. COL., ORD. DEPT., U. S. A. ORDNANCE DEPT., U. S. A.																						

SCREW, CARRYING HANDLE GRIP      7312900

STEEL WD 1020

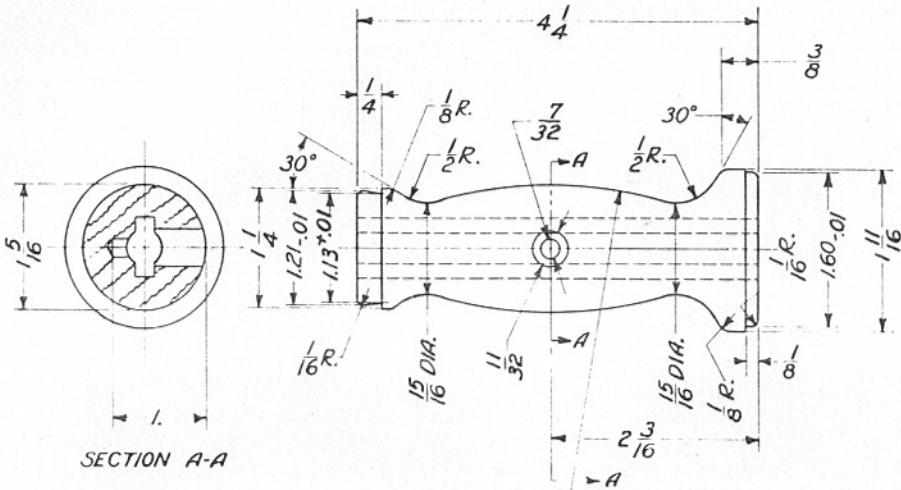
FINISH X

REF. SA18618

SCALE  $\frac{2}{7}$ 

A 7312900

**HEAT TREATMENT AND FINAL FINISH**  
**DIP IN GUN STOCK PROTECTIVE FINISH COM-  
POUND. ALTERNATIVE, RAW LINSEED OIL.**



**SECTION A-A**

GRIP, CARRYING HANDLE (7312901  
WOOD - BLACK WALNUT

## *MANUFACTURING COMPONENT*

TOLERANCE  $\pm \frac{1}{64}$  ALLOWED ON ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED.

PHYSICAL PROPERTIES	JAN. 25, 1945		
	REVISIONS		
Y.P.	1 <sup>2</sup>	4-23-45	
T.S.	2'	7-4-45	
EL.2			
RED.			
BR.			
ROCK.			
	DRAFTS PERTAINING TO		

**DRG. PERTAINS TO**

C7312902	HANDLE, CARRY ING, ASSEM.
C7312973	HANDLE, CARRYING, ASSEM.
C7313084	HANDLE, CARRYING, ASSEM.
B7313098	GRIP, CARRYING HANDLE, ASM.
51-10	.308MG M1917AI
51-84	.308MG M1919A4FLEX
51-102	.30BAR M1918A2
51-125	.308MG M1919C5

D'FTSMAN TRACER L'DG D'FTSMAN

142B D.C.P. 7.S.E

CHECKER

CHECKER  
CHIEF OF STAFF

*map*  *spa*

**SUBMITTED:-**

## ambition

ORD. ENG. ORD. DEPT.

APPROVED BY ORDER OF THE  
CHIEF OF STAFF

CHIEF OF ORDNANCE:

W.W. Mulliken  
15 JUL 1958

L.T. COL. ORD. DEPT.

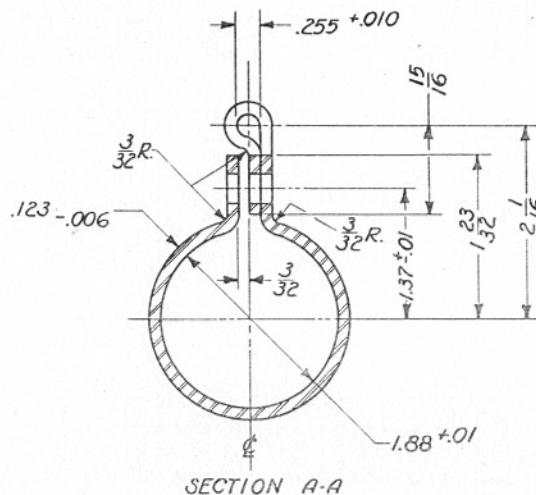
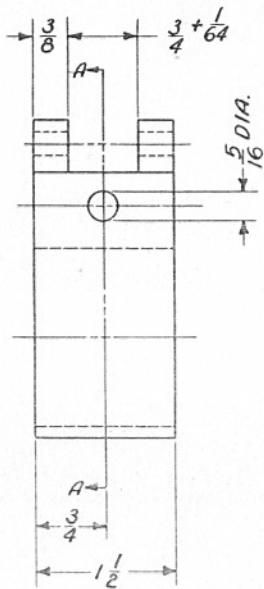
ORDNANCE DEPT., U.S.A.

REF. SA 18616  
SPRINGFIELD ARMORY

SCALE 1

B7312901

HEAT TREATMENT AND FINAL FINISH
FINISH TYPE II CLASS "A" OR "B"



CLAMP, CARRYING HANDLE      7312974  
STEEL - WD-1020  
FINISH S

TOLERANCE  $\pm \frac{1}{64}$  ALLOWED ON ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED.

SCALE 1

SPRINGFIELD ARMORY

B 7312974

PHYSICAL PROPERTIES	APRIL 23, 1945
Y.P.	REVISIONS
T.S.	1' 817-45
EL.2	
RED.	
BR.	
ROCK.	

DRG. PERTAINS TO

C7312973	HANDLE, CARRYING, ASSEMBLY
51-125	BM.G.CAL..30.M19A6

DFTSMAN	TRACER	L'DG DFTSMAN
W.B.	D.C.P.	L.S.C.
CHEKER Carl	<i>[Signature]</i>	CHIEF DFTSMAN <i>[Signature]</i>

SUBMITTED:

<i>[Signature]</i>	ORD. ENG. ORD. DEPT.
APPROVED BY ORDER OF THE CHIEF OF ORDNANCE: <i>[Signature]</i>	LT.COL. ORD. DEPT.
	ORDNANCE DEPT., U.S.A.

HEAT TREATMENT AND FINAL FINISH

BODY, CARRYING HANDLE, L.H.  
STEEL - WD 1020  
FINISH  
MANUFACTURING COMPONENT

TOLERANCE  $.01$  ALLOWED ON ALL DIMEN-  
SIONS UNLESS OTHERWISE SPECIFIED.

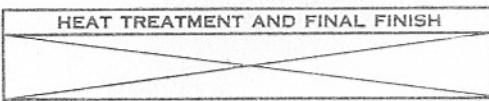
PHYSICAL PROPERTIES		APRIL 23, 1945	
REVISIONS			
Y.P.		1 <sup>2</sup>	8-17-45
T.S.			
EL.2			
RED.			
BR.			
ROCK.			
DRG. PERTAINS TO			
B7312977	BODY, CARRYING		
	HANDLE, ASM.		
C7312973	HANDLE, CARRYING,		
	ASSEMBLY		
51-125	B.MG, CAL..30,		
	M1919A6		
DFTSMAN	TRACER	L'DG DFTSMAN	
W.B	D.E.P	J. S.C.	
CHECKER		CHIEF DFTSMAN	
Kaw	1/10.00	J.P.T.	
SUBMITTED:			
<i>E. W. Hopkins</i>			
ORD. ENG. ORD. DEPT.			
APPROVED BY ORDER OF THE			
CHIEF OF ORDNANCE:			
<i>B. B. Miller</i>			
LT. COL., ORD. DEPT.			
ORDNANCE DEPT., U.S.A.			

SCALE 1

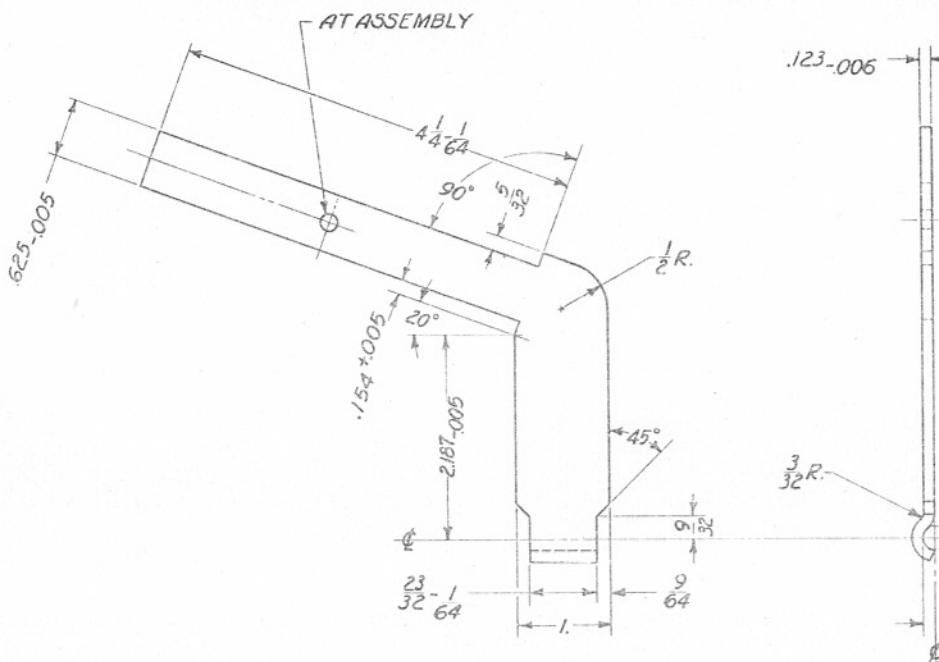
B7312975

SPRINGFIELD ARMORY

(7312975)



HEAT TREATMENT AND FINAL FINISH



BODY, CARRYING HANDLE, R.H.  
STEEL-WD 1020  
FINISH f  
MANUFACTURING COMPONENT

TOLERANCE +.01 ALLOWED ON ALL DIMEN-  
SIONS UNLESS OTHERWISE SPECIFIED.

PHYSICAL PROPERTIES	
Y.P.	
T.S.	
EL.2	
RED.	
BR.	
ROCK.	

APRIL 23, 1945

REVISIONS

1 B-17-45

DRG. PERTAINS TO

B7312977	BODY, CARRYING
	HANDLE, ASM.
C7312913	HANDLE, CARRYING,
	ASSEMBLY
51-125	B.M.G., CAL..30,
	M1919A6

DFTSMAN	TRACER	L'DG DFTSMAN
---------	--------	--------------

MEB	DCP.	L.A.G.
-----	------	--------

CHECKER	CHIEF DFTSMAN
---------	---------------

Caro	JU
------	----

SUBMITTED:

/ Ensign

ORD ENG. ORD. DEPT.

APPROVED BY ORDER OF THE  
CHIEF OF ORDNANCE:

/ Whitaker

LT. COL. ORD. DEPT.

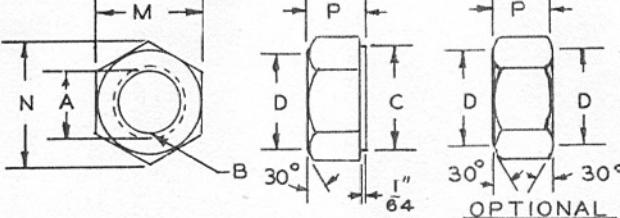
ORDNANCE DEPT., U.S.A.

7312976

SPRINGFIELD ARMORY

SCALE 1

B7312976

NUT, HEXAGON, NC-2 REGULAR, SEMI-FINISHED					BBAXI
ORDNANCE DEPARTMENT STANDARD (COMMERCIAL)					H3K APPROVED 7-7-31 DATE
					
A DIAMETER, NOMINAL MAJOR THD. DIAMETER MIN.	1/4 .2500	5/16 .3125	3/8 .3750	7/16 .4375	1/2 .5000
B THREADS PER INCH	20	18	16	14	13
M WIDTH ACROSS FLATS N ACROSS CORNERS	{ Nom. Max. Min. Nom. Max. Min.	7/16 .4375 .425 .485	9/16 .5625 .547 .624	5/8 .6250 .606 .691	3/4 .7500 .728 .830
P THICKNESS	{ Nom. Max. Min.	13/64 .219 .187	1/4 .267 .233	5/16 .330 .294	23/64 .378 .340
MATERIAL AND FINISH	ORDNANCE PART NUMBER - STANDARD				
<u>STEEL, COMMERCIAL</u> PLAIN FINISH CADMIUM OR ZINC PLATED PHOSPHATE COATED SEEZ PRUF THD. COATED	220064 220069 426395 503163	220065 220070 503164	220066 220071 427195 503165	220067 220072 503166	220068 220073 503167
<u>BRASS, COMMERCIAL</u> PLAIN FINISH TIN PLATED	220074	220075	220076 427193	220077	220078
<u>STEEL, ALLOY *</u> PLAIN FINISH					426874
<u>STEEL, CORROSION RESISTING</u> PLAIN FINISH	427262	426748	427263		427018
MATERIAL AND FINISH	ORDNANCE PART NUMBER - LIMITED STANDARD				
<u>STEEL, COMMERCIAL</u> LEAD COATED	426394		426396		
<u>MATERIAL:</u> STEEL, COMMERCIAL, ROCKWELL HARDNESS B-78. DIMENSIONS IN INCHES. BRASS, COMMERCIAL. STEEL, ALLOY IN ACCORDANCE WITH DRAWING AEAX8. STEEL, CORROSION RESISTING, GRADE 7A, SPEC. QQ-S-763. <u>EXAMPLE FOR ORDERING:</u> NUT, HEX., S-FIN., S., REG., CD-PLTD., 1/2"-13NC-2, DRG. BBAX1, PART NO. 220073. <u>REFERENCE:</u> A.S.A. B18.2-1941. DIAMETER OF WASHER FACE C = M MAX. -5%. DIAMETER OF TOP CIRCLE D = M MAX. -15%. <u>NOTE:</u> ALLOY STEEL NUTS SHALL BE STAMPED WITH THE LETTER H ON ONE SIDE OF THE HEXAGON.					

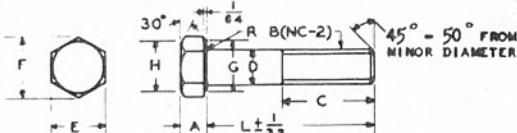
SUPERSEDES OLD TRACING BCAXI UNDER REVISION DATE OF 6-24-44

# SCREW, CAP, HEX. HD., NC-2 (AUTOMOTIVE HEX. HEAD BOLT)

BCAXI.I

ORDNANCE STANDARD (COMMERCIAL)

Holt APPROVED 6-24-44 DATE



NOMINAL DIAMETER	1/4	5/16	3/8	7/16	1/2	9/16	
THREADS PER INCH	20	18	16	14	13	12	
D BODY DIAMETER { MAX. MIN.	.2500 .2460	.3125 .3085	.3750 .3710	.4375 .4335	.5000 .4960	.5625 .5575	
E ACROSS FLATS { NOM. MAX. MIN.	7/16 .4375 .428	1/2 .5000 .489	9/16 .5625 .551	5/8 .6250 .612	3/4 .7500 .736	13/16 .8125 .798	
F WIDTH ACROSS CORNERS MIN.	.488	.557	.628	.698	.840	.910	
A THICKNESS { NOM. MAX. MIN.	3/16 .104 .091	15/64 .242 .227	5/32 .292 .273	21/64 .338 .319	3/8 .396 .364	27/64 .433 .410	
C FULL THREAD LENGTH { MAX. MIN.	15/16 3/4	1-1/16 7/8	1-3/16 1	1-5/16 1-1/8	1-7/16 1-1/4	1-9/16 1-3/8	
R RADIUS MAX.	1/64	1/64	1/64	1/64	1/64	1/64	
* UNTHREADED LENGTH MAX.	1/16	3/32	3/32	3/32	1/8	1/8	
L LENGTH	ORDNANCE PART NUMBER, PLAIN FINISH						
7/16	193970						
1/2							
5/8							
11/16							
3/4	216916	193991 216920 216959		193999 216971	213607 216972	216982 216983	
7/8	216958						
L LENGTH	ORDNANCE PART NUMBERS, CADMIUM OR ZINC PLATED						
7/16	193971						
1/2							
5/8							
11/16	214002	193992 216921 193990		214386 213600	214498 213608	213652 213653	
3/4	193955						
7/8							
L LENGTH	ORDNANCE PART NUMBER, PHOSPHATE COATED						
7/16				216398			
1/2							
5/8							
11/16							
3/4							
7/8							
L LENGTH	ORDNANCE PART NUMBER, CORROSION RESISTING STEEL						
7/16							
1/2	213615	213622	213628				
5/8	213616	213623	213629				
11/16							
3/4	213618	213625	213631	213637	213643		
7/8	213620	213626	213632	213638	213644		

FOR ADDITIONAL LENGTHS SEE DRAWINGS BCAX1.2, BCAX3, BCAX3.1, BCAX3.2

DIMENSIONS IN INCHES

MATERIAL: CARBON STEEL - MIN. YIELD STRENGTH - 60,000 P.S.I.

CORROSION RESISTING STEEL - GRADE 7D, SPEC. QQ-S763

EXAMPLE FOR ORDERING: SCREW, CAP, HEX. HD., STEEL (PLAIN FINISH), 1/4" - 20NC-2 X 7/16", DRG. BCAX1.1, ORD. PART NO. 193970.

## TOLERANCES

MINIMUM BODY DIAMETER: MINUS .004" ON SIZES 1/4" TO 1/2" INCL., MINUS .006" ON SIZES ABOVE 1/2".

MINIMUM FULL THREAD LENGTH = 2D + 1/4", MAX. = MIN. + 3/16".

\* MAXIMUM UNTHREADED LENGTH = 1-1/2 X PITCH FOR CAP SCREWS TOO SHORT TO ALLOW FULL THREAD LENGTH.

DIAMETER OF WASHER FACE G = E MAX. -5% DIAMETER OF TOP CIRCLE H = E MAX. -15%

# WASHER, LOCK S.A.E. STANDARD

BECX2

ORDNANCE STANDARD (COMMERCIAL)

H.S.K 1-29-38  
APPROVED DATE

NOMINAL SIZE	DIAMETER		WASHER SECTIONS		FREE HEIGHT -E-	ORDNANCE PART NUMBER FOR THE FINISH SPECIFIED		
	INSIDE -A-	OUTSIDE -B-	WIDTH -C-	THICKNESS -D-		PLAIN FINISH	CADMIUM OR ZINC PLATED	LEAD PLATED
#2 (.086)	.089	.133	.022	.022	192298	192300		
#4 (.112)	.115	.177	1/32	.022	118871	131180		
#6 (.138)	.143	.205	1/32	1/32	118872	131181		
#8 (.164)	.169	.263	3/64	1/32	118869	131182		
#10 (.190)	.200	.294	3/64	3/64	118873	131183		
#12 (.216)	.226	.351	1/16	3/64	118874	131184		
1/4	.265	.453	3/32	3/64	113114	121637		
5/16	.328	.578	1/8	3/64	112723	120379		
3/8	.390	.640	1/8	1/16	110730	120381		
7/16	.453	.767	5/32	1/16	110405	121621	218329	
1/2	.515	.859	11/64	1/16	106500	120239		
9/16	.593	.968	3/16	3/32	112724	131204		
5/8	.655	1.062	13/64	3/32	103334	131205		
11/16	.718	1.155	7/32	1/8	115006	131206		
3/4	.780	1.280	1/4	1/8	103335	131207		
7/8	.905	1.437	17/64	5/32	103336	131208		
1	1.030	1.655	5/16	3/16	117661	131209		
1-1/8	1.155	1.905	3/8	3/16	118027	131210		
1-1/4	1.280	2.155	7/16	3/16	117613	131211		
1-3/8	1.405	2.280	7/16	1/4	118028	131212		
1-1/2	1.530	2.530	1/2	1/4	118029	131213		

MATERIAL: STEEL, COMMERCIAL.

DIMENSIONS IN INCHES.

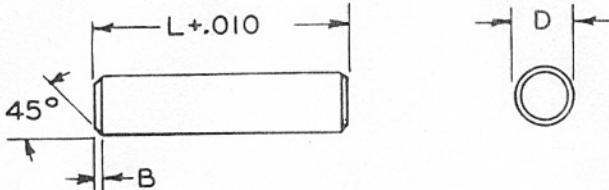
NOTE: LOCK WASHERS CONFORMING TO THESE GENERAL DIMENSIONS, WHETHER NON-TANGLING, POSITIVE OR SIMILAR COMMERCIAL TYPES, MAY BE PURCHASED UNDER THE SYMBOL SHOWN.EXAMPLE FOR ORDERING: WASHER, LOCK, STEEL, 1/2" X 11/64" X 1/16", (PLAIN), DRG. BECX2, ORD. PART NUMBER 106500.

SUPERSEDES OLD TRACING BFDX2 UNDER REVISION DATE OF 10-10-44

## PIN, STRAIGHT, STEEL

BFDX2

ORDNANCE STANDARD (ORDNANCE DESIGN)

HBH 1-31-34  
APPROVED DATE

DIA. D OF PIN B CHAMFER	DIAM. NOM. MAX. MIN.	1/4 .2505 .2495 1/64	5/16 .3130 .3120 1/32				

LENGTH  
-L-ORDNANCE PART NUMBER  
PLAIN FINISH

3/4	505520	505532	$\frac{3}{8}$ $\frac{7}{16}$ & $\frac{1}{2}$ DIAM. PINS ARE TRANSFERRED TO DRAWING BFKXI.				
7/8	505522	505533					
1	505523	505534					
1-1/8	505524	505535					
1-1/4	505525	505536					
1-3/8	505526	505537					
1-1/2	505527	505538					
1-5/8	505528	505539					
1-3/4	505529	505540					
1-7/8	505530	505541					
2	505531	505542					
2-1/8		505543					
2-1/4		505544					
2-3/8		505545					
2-1/2							
2-3/4							
3							
3-1/4							
3-1/2							
3-3/4							
4							

PHOSPHATE COATED

3/4 505521

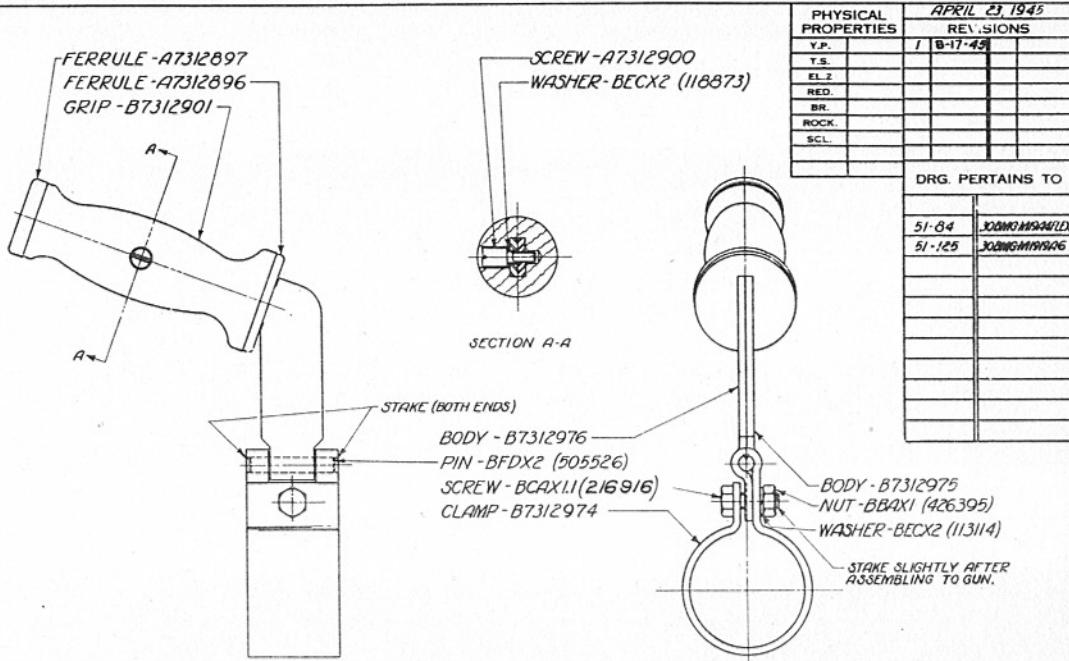
MATERIAL:

DRILL ROD, COMMERCIAL.

DIMENSIONS IN INCHES.

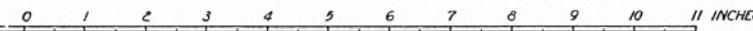
TOLERANCE ON DRILL ROD  $\pm .0005^{\text{in}}$ .  
EXAMPLE FOR ORDERING: PIN, STRAIGHT, DRILL ROD, 1/4" X 3/4", PLAIN,  
DRG. BFDX2, PART NO. 505520.NOTE: PINS SHOULD BE  $.0005^{\text{in}}$  TO  $.001^{\text{in}}$  DRIVE FIT.

REVISION (3) 10-10-44 (4) 2-21-45



HANDLE, CARRYING, ASSEMBLY  
LIST OF DRAWINGS AND SPECIFICATIONS  
SHOWING REVISIONS IN EFFECT ON

SUPERSEDES B224864 WITH CHANGE 8-17-45<sup>E</sup>



C7312973

SYMBOL		
DFTSMAN <i>WB</i>	TRACER <i>OK</i>	L'DG DFTSMAN <i>2-1</i>
CHECAR <i>Cook</i>		CHIEF D FTSMAN <i>JL</i>
SUBMITTED:- <i>J. G. Murphy</i> BARRING O.R.D. DEPT.		
APPROVED BY ORDER OF THE CHIEF OF ORGANIZATION - <i>R. A. Stellato</i> LT COL O.R.D. DEPT.		
ORDNANCE DEPT., U. S. A.		