BARBER - PRESALE R 0119661 TITLE: Bolt Handle XP100

Process Header

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Document ID: Bolt Handle XP100 Part Name: Bolt Handle XP100 Product Line: C/F Rifle Engineering Group: Rifle
Process Revision Reasons Date: Reason For Revision: Eng Log #: 06-Oct-1992 Retype Entire Process From 279170 - Replaces Old Paper GLC 293091 Process
Process Approval List Approved By: Badge #: Date: Designation: Jacksora
Process General Notes: Notes:
Process Material Part Number Onty Description 15408 1 Bolt Handle - XP100 D-16510 1 Blank
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Process Routing

Dept O	per	Operation	Description		Part Numbers	
8551 2	Carb	urize and Anneal		15408		
8579 3	Lorc	o Vibrate (To Re	move Deposit)	15408		
8560 4	Mill	Radius and Debu	rr	15408		
8560 1	2 Poli		Marks, Pits, Etc.	on 15408		
	Stam	ping To Bolt Asse	mbly	15408		
		10 2010 11880				***************************************

Operation Step Detail

Operation: 2

Step

Operation / Step Description

Carburize and Anneal

Operation Tool Detail

Operation: 2

Tool Number

Tooling Description

Pit Type "Micro Carb" Furnace

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Operation Procedure Notes Operation: 2

Description

PROCESS RECORD - HEAT TREAT SPECIFICATION
MATERIAL & SPECIFICATION: AISI C-1010 TEMPERATURE: 1700 Degrees F MAXIMUM LOAD: TIME: Carbuize @ .45C for 8 Hrs. QUENCH: Cool Under Atmosphere to 300 Degrees F REMARKS: INSPECT FOR: HEAT TREAT INSPECTION: STANDARD PRACTICE NO: HARDNESS LIMITS: APPEARANCE OF PARTS:
TEMPERATURE: 1700 Degrees F .
MAXIMUM LOAD:
TIME: Carbuize @ .45C for 8 Hrs.
QUENCH: Cool Under Atmosphere to 300 Degrees F
REMARKS:
INSPECT FOR:
HEAT TREAT INSPECTION:
STANDARD PRACTICE NO:
HARDNESS LIMITS:
APPEARANCE OF PARTS:

Operation Step Detail Operation: 3

Step

Operation / Step Description

Lorco Vibrate (To Remove Deposit)

Operation Tool Detail Operation: 3

Tool Number

Tooling Description

4

Chip - (#-1/2 AL Oxide)

std

Hand Magnetic Screen

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Operation Procedure Notes

Operation: 3

Description

Procedure:

- With Drain Cover On Rinse Chips Until Clean and Drain Off All Water
 Chip #4 (3-1/2 AL Oxide) No. Parts per Load 1000 Max.
- 2. Mix Compound (5 Mil.) and Measured Amount of Water (12 Qts.)
- 3. Start Vibrator and Run at 900 V.P.M.
- 4. Pour in Cpompound Mixture and Run 5 Min. to Mix Chip and Compound
- 5. Place Parts in Vibrator and Run at 900 V.P.M. - 15 Min. Forward & 15 Min. Reverse
- 6. Use Hand Magnetic Screen to Separate Parts and Oil
- Replace Chip in Vibrator

Operation Step Detail

Operation: 4

Step

Operation / Step Description

Mill Radius and Deburr

Operation Tool Detail

Operation: 4

Т	0	οl	Num	ber	

Tooling Description

Std	ise
Std C-85969 Std C-37099 B-85970 D-35108 Std A-83423	ise Jaws
std	ile Form Cutter
c-37099	form Cutter
B-85970	Disc (Use with Form Cutter C-37099)
	Gages:
D-35108	Dial Base Gage
std .	BBl. Mics140/.136 - (Set-Up Only)
A-83423	Snap Gage

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Operation Step Detail

Operation: 12

Step

Operation / Step Description

Polish to Remove Die Marks, Pits, Etc. on Stamping

Operation Tool Detail

Operation: 12

Tool Number

Tooling Description

Std

Polishing Jack

\$180 Grit

Belt

Std

1x14 Formed Rag Wheel - 150 Grit

§Std

3" Ball Formed Rag Wheel - 150 Grit

§std

Rawhide Wheel

Operation Procedure Notes

Operation: 12

Description

Procedure:

1. Polish Part of Front and Back Edges, Also Edges of Ball

2. Polish Bolt Handle

3. Polish Ball

4. Polish Braze Locating Surface

NOTE: Polish per Temporary Sample

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