#### Process Header

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Document ID: Trig Hous Scr Front XP100 Part Name: Trigger Housing Screw Front XP100

Remington Arms Company

Product Line: C/F Rifle

Effective Date: 03-Nov-1992-09:00:00

Engineering Group: Rifle

Origination Date: 31-Oct-1992

Process Revision Reasons

Date:

Reason For Revision:

Eng Log #:

31-Oct-1992 Retype Entire Process from 285852 - Replaces Old Paper GLC 293289 Process - Chg. Description Op.#5

Process Approval List

Approved By:

Badge #:

Date:

Designation:

JacksoRA

Process General Notes

Notes:

Process Material

Part Number

Qnty

Description

15469

Trigger Housing Screw, Front - XP100

16504

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#### Process Routing

pt Oper	Operation Description	Part Numbers
8551 5	Degrease, Wash, Carbo-Nitride Harden (Micro-Carb), Oil Quench, Degrease, Wash	15469
8551 10	Lindberg Draw, Air Cool	15469
9257 12 8579 15	Inspect for Hardness	15469
8579 15	Black Oxide, Oil with Steelgard	15469
	(To Trigger Housing Assembly)	15469
	To MRP Crib #29	

Operation Step Detail

Operation: 5

Step

Operation / Step Description

Degrease, Wash, Carbo-Nitride Harden (Micro-Carb), Oil Quench, Degrease, Wash

Operation Tool Detail

Operation: 5

Tool Number

Tooling Description

######################################	
<b>a</b> td	<pre>Micro-Carb Furnace</pre>
	***************************************
	<b>2</b>
≋std	Basket - 12"x20"x2" Deep
***************************************	SDUSICC 12 A20 A2 Deep

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Operation Procedure Notes Operation: 5

Description

PROCESS RECORD - HEAT TREAT SPECIFICATION

MATERIAL & SPECIFICATION: .08/.20 Carbon Steel

TEMPERATURE: .75 Carbon Pot. @ 1600 Degrees F

MAXIMUM LOAD: 5000 Pcs. - 2 Baskets 2500 Pcs. per Basket

TIME: 1.5 Hrs. @ Temp.

QUENCH: Oil

REMARKS: Wash

INSPECT FOR: File Hard to Insure Proper Quench

HEAT TREAT INSPECTION:

STANDARD PRACTICE NO:

HARDNESS LIMITS:

APPEARANCE OF PARTS: Free of Oil

Operation Step Detail

Operation: 10

Step

Operation / Step Description

Lindberg Draw, Air Cool

Operation Tool Detail Operation: 10

Tool Number

Lindberg Furnace

Sťa

Std

Basket - 12"x20"x2" Deep

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Tooling Description

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Operation Procedure Notes Operation: 10

Description

PROCESS RECORD - HEAT TREAT SPECIFICATION

MATERIAL & SPECIFICATION: .08/.20 Carbon Steel

TEMPERATURE: 350 - 400 Degrees F

MAXIMUM LOAD: 5000 Pcs. - 2 Baskets 2500 Pcs. per Basket

TIME: 1 Hr. @ Temp.

QUENCH: Air Cool

REMARKS:

INSPECT FOR:

HEAT TREAT INSPECTION:

STANDARD PRACTICE NO:

HARDNESS LIMITS:

APPEARANCE OF PARTS: Free of Oil

Operation Step Detail

Operation: 12

Step

Operation / Step Description

Inspect for Hardness

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Operation Procedure Notes Operation: 12

Description

PROCESS RECORD - HEAT TREAT SPECIFICATION

MATERIAL & SPECIFICATION: .08/.20 Carbon Steel

TEMPERATURE:

MAXIMUM LOAD:

TIME:

QUENCH:

REMARKS:

INSPECT FOR: File Hardness

HEAT TREAT INSPECTION:

STANDARD PRACTICE NO:

HARDNESS LIMITS:

APPEARANCE OF PARTS: Free of Oil

Operation Step Detail

Operation: 15

Step

Operation / Step Description

Black Oxide, Oil with Steelgard

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Operation Procedure Notes Operation: 15

# Description

# SMALL PARTS BLACK OXIDE COLOR

BLACK OXIDE RACK/FIXTURE:

LOAD SIZE:

STEP	PROCESS SEQUENCE	TEMPERATURE	CONCENTRATION	IMERSION TIME
1	Alkaline Clean	212 F	7-9%	3-5 Minutes
2	Cold Water Rinse	Ambient		1 Minute
3	Muriatic Acid	Ambient	15-17%	10-15 Seconds
4	Cold Water Rinse	Ambient		1 Minute
5	Black Oxide #1	290 F	6.5-6.8 lbs/gal	30 Minutes
6	Cold Water Rinse	Ambient		1 Minute
7	Black Oxide #2	300 F	7.0-7.3 lbs/gal	30 Minutes
8	Hot Water Rinse	212 F		1 Minute
9	Braze Color	185 F	1.0-1.3 lbs/gal	30 Minutes
10	Hot Water Rinse	212 F		1 Minute
11	Steelgard	Ambient	15-20%	30 Seconds

## NOTE FOR POWDER METAL AND M.I.M. PARTS

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<sup>\*</sup> Increase immersion time on step #3 to 30-45 seconds.

<sup>\*</sup> Increase immersion time on step #8 to 30 minutes.