

TITLE: Sear Block XP100

## Process Header

## Process Header

|                               |                                      |
|-------------------------------|--------------------------------------|
| Document ID: Sear Block XP100 | Remington Arms Company               |
| Part Name: Sear Block XP100   |                                      |
| Product Line: C/F Rifle       | Effective Date: 03-Nov-1992-09:00:00 |
| Engineering Group: Rifle      | Origination Date: 08-Oct-1992        |

## Process Revision Reasons

| Date:       | Reason For Revision:                                                                                     | Eng Log #: |
|-------------|----------------------------------------------------------------------------------------------------------|------------|
| 08-Oct-1992 | Retype Entire Process from 283490 - Replaces Old Paper Process - Remove Op.#20 - Chg. Description Op.#25 | GLC 293112 |

## Process Approval List

| Approved By: | Badge #: | Date: | Designation: |
|--------------|----------|-------|--------------|
| Jacksora     |          |       |              |

## Process General Notes

## Notes:

## Process Material

| Part Number | Qty | Description        |
|-------------|-----|--------------------|
| 15461       | 1   | Sear Block - XP100 |
| 15718       | 1   | Blank              |

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 1

OF 8

TITLE: Sear Block XP100

## Process Routing

| Op   | Oper | Operation Description                                                                                             | Part Numbers |
|------|------|-------------------------------------------------------------------------------------------------------------------|--------------|
| 8575 | 5    | Spot Drill and Ream Sear Block Pin Hole and Trigger Link Roller Hole - Spot, Drill, and Ream Sear Block Stud Hole | 15461        |
| 8502 | 8    | File to Deburr                                                                                                    | 15461        |
| 8575 | 10   | C'Sink (3) Holes Both Sides                                                                                       | 15461        |
| 8567 | 15   | Grind Radius                                                                                                      | 15461        |
| 8551 | 25   | Degrease, Carbo-Nitride (Micro-Carb), Oil Quench, Degrease                                                        | 15461        |
| 8551 | 30   | Lindberg Draw                                                                                                     | 15461        |
| 9257 | 35   | Inspect for Rockwell Hardness                                                                                     | 15461        |
|      |      | To MRP Crib #29                                                                                                   | 15461        |

## Operation Step Detail

Operation: 5

## Step

## Operation / Step Description

|  |                                                                                                                   |
|--|-------------------------------------------------------------------------------------------------------------------|
|  | Spot Drill and Ream Sear Block Pin Hole and Trigger Link Roller Hole - Spot, Drill, and Ream Sear Block Stud Hole |
|--|-------------------------------------------------------------------------------------------------------------------|

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 2

OF 8

TITLE: Sear Block XP100

Operation Tool Detail

Operation: 5

| Tool Number | Tooling Description                                                              |
|-------------|----------------------------------------------------------------------------------|
| Std         | 5 Spindle Drill Press                                                            |
| Std         | Spot Drill - (.126 Dia.)                                                         |
| Std         | Reamer - RS-4 - (.1263 Dia.)                                                     |
| Std         | Drill - (.122 Dia.)                                                              |
| Std         | Drill - #42 (.0935 Dia.)                                                         |
| Std         | Drill - #44 (.086 Dia.)                                                          |
| Std         | Reamer - RS-2 - (.0938 Dia.)                                                     |
| D-85090     | Drill Jig                                                                        |
| Gages:      |                                                                                  |
| B-80219-A   | Plug Gage - .127/.126 - Dia.<br>- Trigger Link Roller Hole & Sear Block Pin Hole |
| B-80252-H   | Plug Gage - .0942/.0932 - Dia. Sear Block Stud Hole                              |

Operation Procedure Notes

Operation: 5

Description

\*\*\*\*\*SKETCH NEEDED\*\*\*\*\*

Operation Step Detail

Operation: 8

Step Operation / Step Description

|                |
|----------------|
| File to Deburr |
|----------------|

Operation Tool Detail

Operation: 8

| Tool Number | Tooling Description |
|-------------|---------------------|
| Std         | File                |

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 3

OF 8

TITLE: Sear Block XP100

## Operation Step Detail

Operation: 10

Step

Operation / Step Description

C'Sink (3) Holes Both Sides

## Operation Tool Detail

Operation: 10

Tool Number

Tooling Description

Std

Drill Press

Std

C'Sink - 3/16" Dia.

Std

Holding Block

## Operation Procedure Notes

Operation: 10

Description

NOTE: .010 x 45 Degree Max. Chamfer (3) Holes Both Sides

\*\*\*\*\*SKETCH NEEDED\*\*\*\*\*

## Operation Step Detail

Operation: 15

Step

Operation / Step Description

Grind Radius

## Operation Tool Detail

Operation: 15

Tool Number

Tooling Description

Std

#2 B&amp;S Surface Grinder

Std

Grinding Wheel

B-85093

Grinding Fixture

Std

320 Grit Paper

D-85092

Dial Base Gage - .454/.452 - Position of Radius from  
Centerline of Sear Block Pin Hole

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 4

OF 8

TITLE: Sear Block XP100

Operation Procedure Notes      Operation: 15

Description

\*\*\*\*\*SKETCH NEEDED\*\*\*\*\*

Note: Deburr Both Sides In Direction From Radius Toward Sear Block Pin Hole  
Using #320 Paper - See Photo Sample

Note: Grind in the Direction Towards the Sear Block Stud Hole with a Required  
Finish of 32 Microinches

Procedure:

1. Establish .453 +/- .001 Dim. After Wheel Dress
2. Raise Wheel .010 Before 1st Pass Grind
3. Feed Wheel in .002 Increments per Pass Rotation until Dim. .453 +/- .001  
is Attained

Operation Step Detail      Operation: 25

Step      Operation / Step Description

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

Operation Tool Detail      Operation: 25

Tool Number      Tooling Description

Std      Micro-Carb Furnace

Std      Basket - 12"x20"x2" Deep

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 5

OF 8

TITLE: Sear Block XP100

Operation Procedure Notes      Operation: 25

Description

PROCESS RECORD - HEAT TREAT SPECIFICATION

MATERIAL & SPECIFICATION: C-1018

TEMPERATURE: .75 Carbon Pot. @ 1700 Degrees F

MAXIMUM LOAD: 2000 Pcs. - 2 Baskets - 1000 Pcs per Basket

TIME: 3.5 Hours

QUENCH: Oil

REMARKS: Degrease

INSPECT FOR: File Hard to Insure Proper Quench

HEAT TREAT INSPECTION:

STANDARD PRACTICE NO:

HARDNESS LIMITS:

APPEARANCE OF PARTS: Clean & Free of Oil

Operation Step Detail      Operation: 30

Step      Operation / Step Description

Lindberg Draw

Operation Tool Detail      Operation: 30

Tool Number      Tooling Description

Std      Lindberg Furnace

Std      Basket - 12"x20"x2" Deep

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 6

OF 8

TITLE: Sear Block XP100

Operation Procedure Notes      Operation: 30

Description

PROCESS RECORD - HEAT TREAT SPECIFICATION

MATERIAL & SPECIFICATION: C-1018

TEMPERATURE: 350 - 400 Degrees F

MAXIMUM LOAD: 2000 Pcs. - Same Baskets as Used for Heat Treat Op.

TIME: 1 Hour @ Temp.

QUENCH: Air Cool

REMARKS:

INSPECT FOR:

HEAT TREAT INSPECTION:

STANDARD PRACTICE NO:

HARDNESS LIMITS:

APPEARANCE OF PARTS:

Operation Step Detail      Operation: 35

Step      Operation / Step Description

Inspect for Rockwell Hardness

Operation Tool Detail      Operation: 35

Tool Number      Tooling Description

Std Rockwell Hardness Tester

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 7

OF 8

TITLE: Sear Block XP100

Operation Procedure Notes      Operation: 35

Description

PROCESS RECORD - HEAT TREAT SPECIFICATION

MATERIAL & SPECIFICATION: C-1018

TEMPERATURE:

MAXIMUM LOAD:

TIME:

QUENCH:

REMARKS:

INSPECT FOR: Rockwell Hardness

HEAT TREAT INSPECTION:

STANDARD PRACTICE NO:

HARDNESS LIMITS: 15N - 88-92

APPEARANCE OF PARTS: Clean & Free of Oil

Document Number: Sear Block XP100

Rev:

VAXcamps V2.1 Hardcopy Utility

Page: 8

OF 8