



Maintenance and Parts List

- Ringblaster® Industrial Tool
- Western™ Industrial Tool
- Ringblaster® Industrial Tool Mount
- Industrial Tool Accessories



Preface

The Maintenance & Parts manual is designed as a comprehensive service manual for cleaning your Ringblaster® or Western™ Industrial Tool and for identification of replacement parts.

If you are familiar with the part names used in the Tool, you can check the list on page 5 for reference on specific parts. It will guide you directly to the page with the spare parts you need, along with exact part number and name for your order.

To ensure the the Industrial Tool is kept in operating condition at all times, it should be stripped down, cleaned, and inspected in accordance with this manual once a year or every 10,000 shots, by a Winchester trained technician or machinist. During maintenance it is preferred to use the tools supplied in the optional W15034 Tool Kit (page 45); which is available through Winchester® Industrial Dealers. Remember all fasteners used on the Industrial Tools are in **inches**, therefore use of metric tools may damage the Tool. Use of the W15035 Cleaning Kit (page 45), is also highly recommended.

It is very important that oil is NOT used anywhere on the Tool. Use only fully evaporating solvents and dry silicone based lubricant on all parts, and wipe clean with a rag prior to assembly. Use grease inside the gearbox of the Mount only.

Follow page by page through Section 1 in this manual as indicated below, in order to disassemble and clean the Tool:

Ringblaster	Pages 6, 7, and 11 through 18
Western	Pages 10 through 18

After full disassembly and cleaning, work your way backwards through the booklet until the Tool is completely assembled. Cut away views of each Tool showing most of the parts are on page 25 (Ringblaster) and page 26 (Western) for reference.

The parts on pages marked with the (X) should never be disassembled during normal cleaning and service. These pages are only included for the rare occasion where these parts get worn or damaged and therefore need replacement.

Section 2 (pages 29 – 42) describes the steps for disassembly of the Mount for the Ringblaster Tool. Complete disassembly should not be needed, but instructions are included for those occasions when it is necessary to replace damaged or broken parts.

Section 3 (pages 43 – 48) lists a variety of optional accessories. It is recommended that the Tool be kept out of the weather and covered in between use, with a tarp or the optional W15062 Industrial Tool Cover (page 47).

Troubleshooting sections are included for the Tool (page 27) and the Mount (page 42) to give suggestions for some of the more common problems that may be encountered.



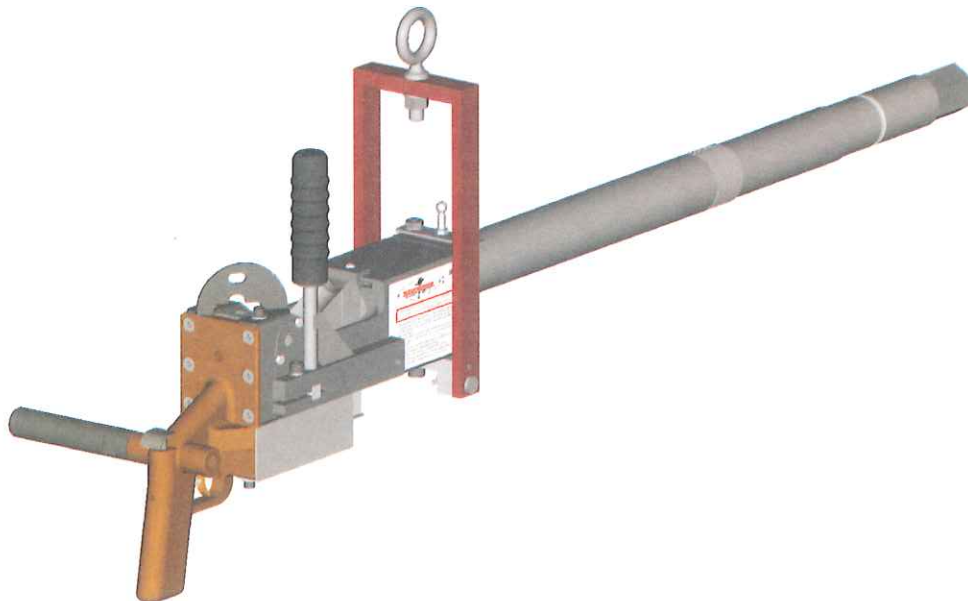


SECTION 1

- **Ringblaster® Industrial Tool**



- **Western™ Industrial Tool**







SECTION 1

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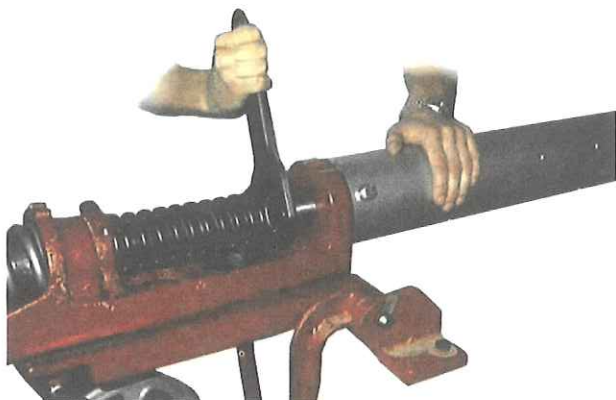
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Ringblaster® Tool

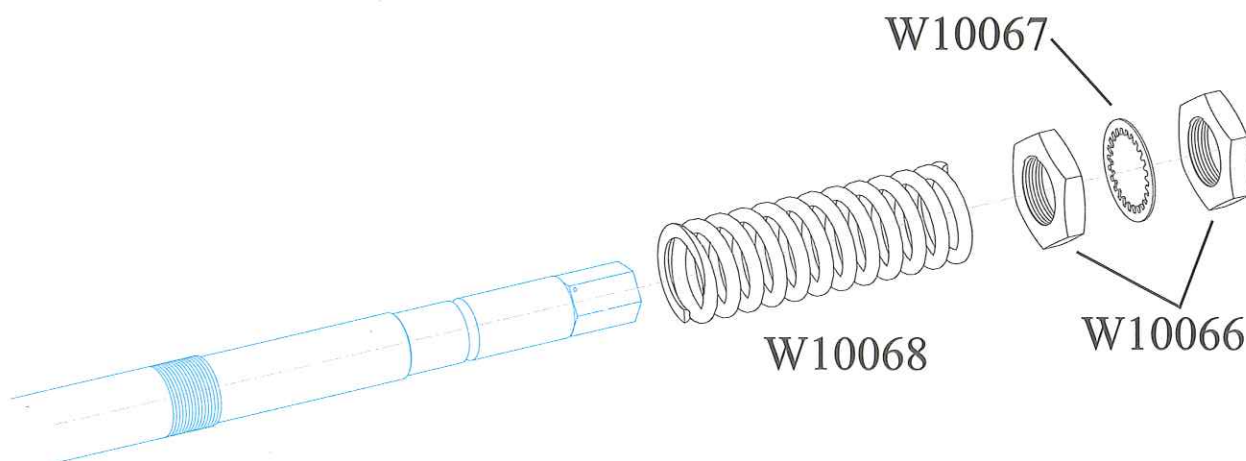
To disassemble Recoil Spring:

Loosen the W12027 Wing Nuts from the W12026 Spring Guard. (For more information on Mount, see Section 2.) Swing W12026 Spring Guard away from barrel assembly. Unscrew the two W10066 Barrel Recoil Check Nuts which are in front of the W10068 Recoil Spring. Close the Breech Block and pull the Tool out the rear of the Mount.



To assemble Recoil Spring:

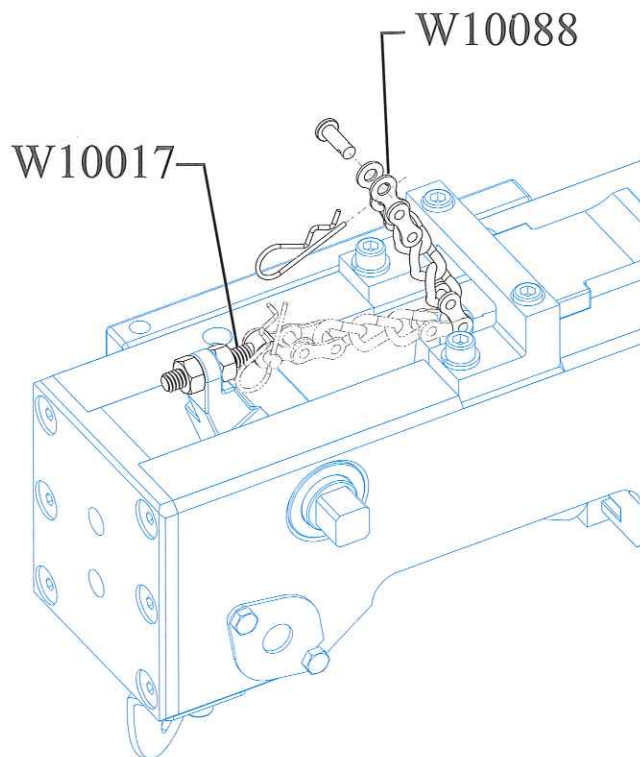
Make sure that Tool is aligned in the mount so that the brass W10038 Guide Block underneath the Tool slides into its slot in the mount. Check position of W10059 Camming Link on the Tool and W12020 Cocking Link on the mount, so that they slide together when the Tool is pushed forward into the mount. Tighten the two W10066 Barrel Recoil Check Nuts firmly with the wrench to the end of the threads. Hit the wrench once or twice with a hammer to lock the nuts.



No.	Name of Part	Required
W10066	Barrel Recoil Check Nut	2
W10067	Tooth Lock Washer	1
W10068	Recoil Spring	1



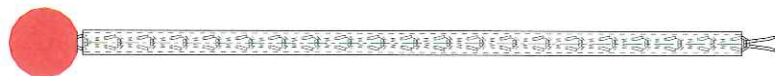
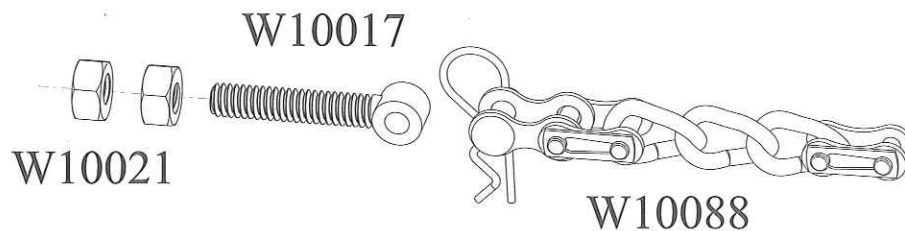
Ringblaster® Tool



To disassemble Connecting Chain:

If the tool is assembled for auto fire, remove W10088 Connecting Chain Assembly from W10017 Adjusting Bolt.

If the Tool is installed with a W10071 Lanyard Assembly for manual fire, then disassemble W10088 Connecting Chain from W10071 Lanyard and remove Lanyard.



W10071

No.	Name of Part	Required
W10017	Adjusting Bolt	1
W10021	Hex Nut	2
W10071	Lanyard Assembly	1
W10088	Connecting Chain Assy.	1

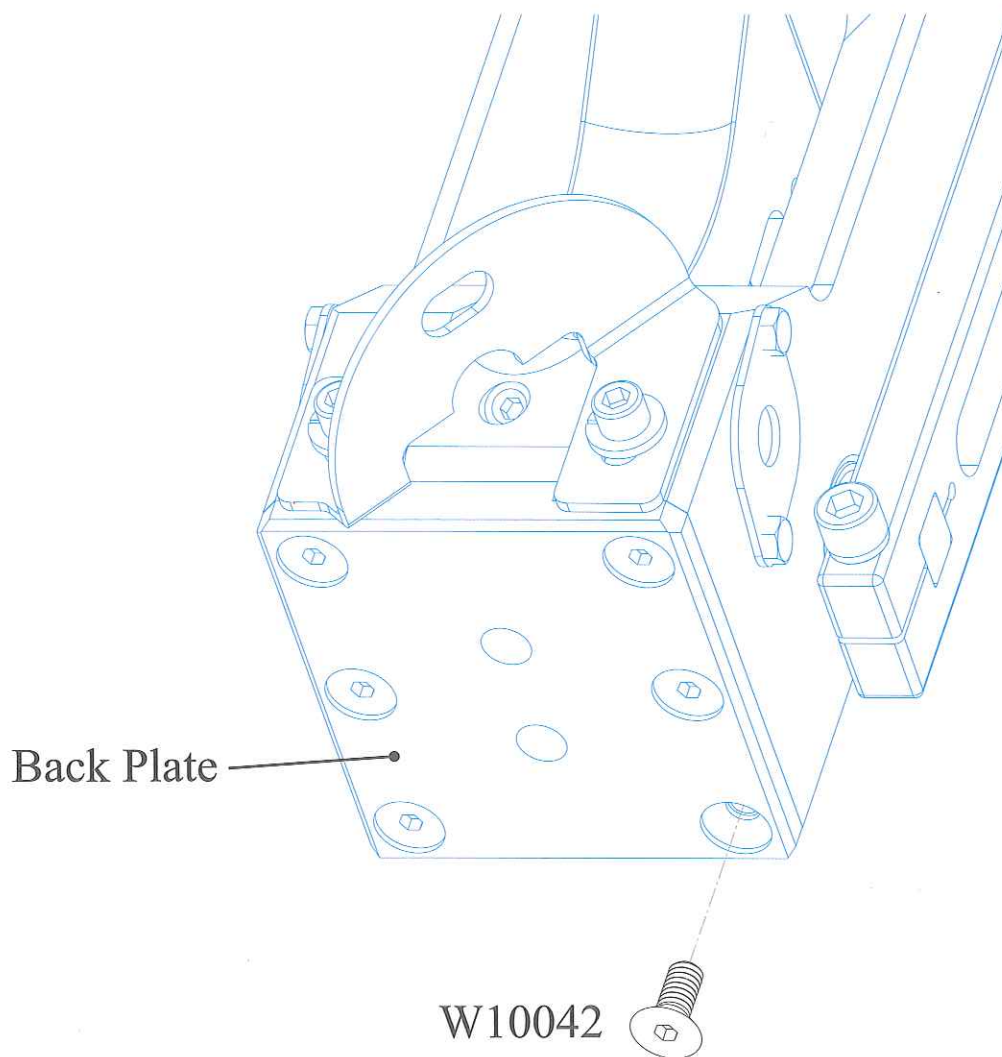


Ringblaster® Tool

Back Plate:

The Back Plate should never be removed.

If one of the W10042 Flat Head Screws comes loose, apply red Loctite® and tighten firmly.



No.
W10042

Name of Part
Flat Head Socket Screw

Required
6



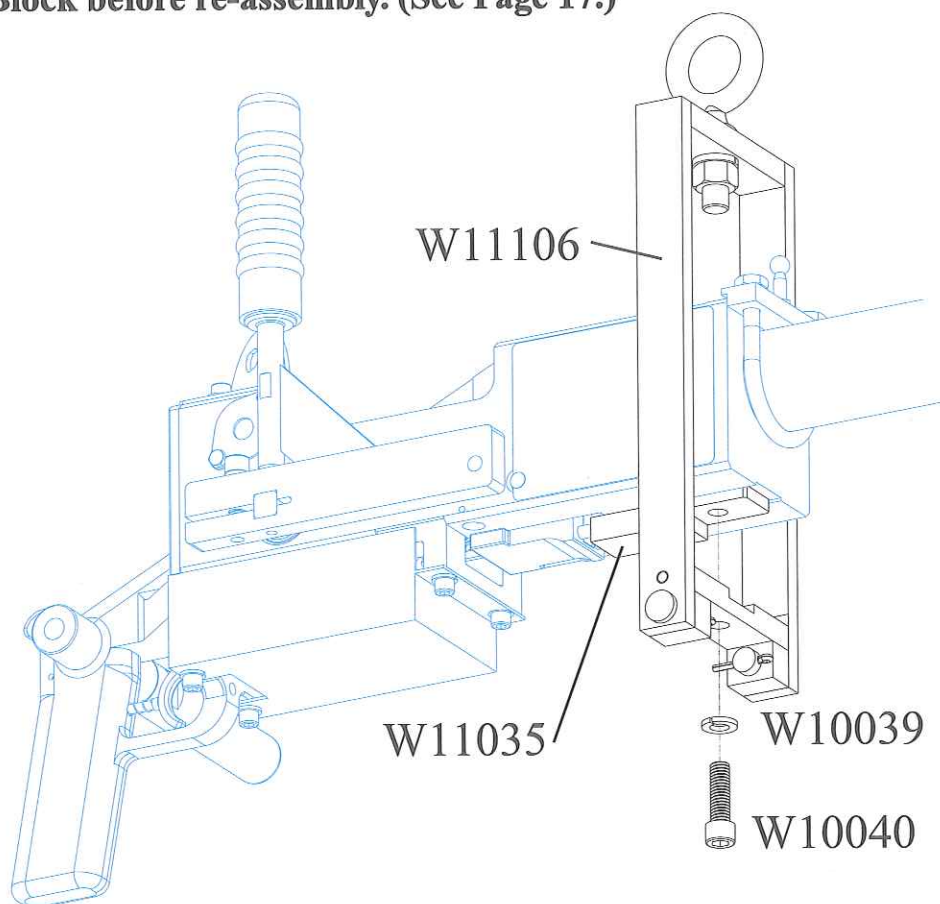
Western™ Tool

To disassemble Hanger:

Removal of Hanger not required during routine maintenance of the Tool.

While holding the brass W11035 Block firmly in place, loosen and remove W10040 Socket Head Cap Screw and W10039 Lock Washer. Now remove the W11106 Hanger Frame Assembly. If a new Hanger Frame Assembly is not immediately available, reassemble the Socket Head Cap Screw and Lock Washer and tighten to hold Block in place.

Note: If the Block is removed, the springs and pins will need to be inserted into the holes in the Block before re-assembly. (See Page 17.)



To reassemble Hanger:

While holding the brass W11035 Block in place, position the W11106 Hanger Frame Assembly with all holes aligned and firmly tighten the W10040 Socket Head Cap Screw and W10039 Lock Washer.

No.	Name of Part	Required
W10039	Lock Washer	1
W10040	Socket Head Cap Screw	1
W11106	Hanger Frame Assy	1



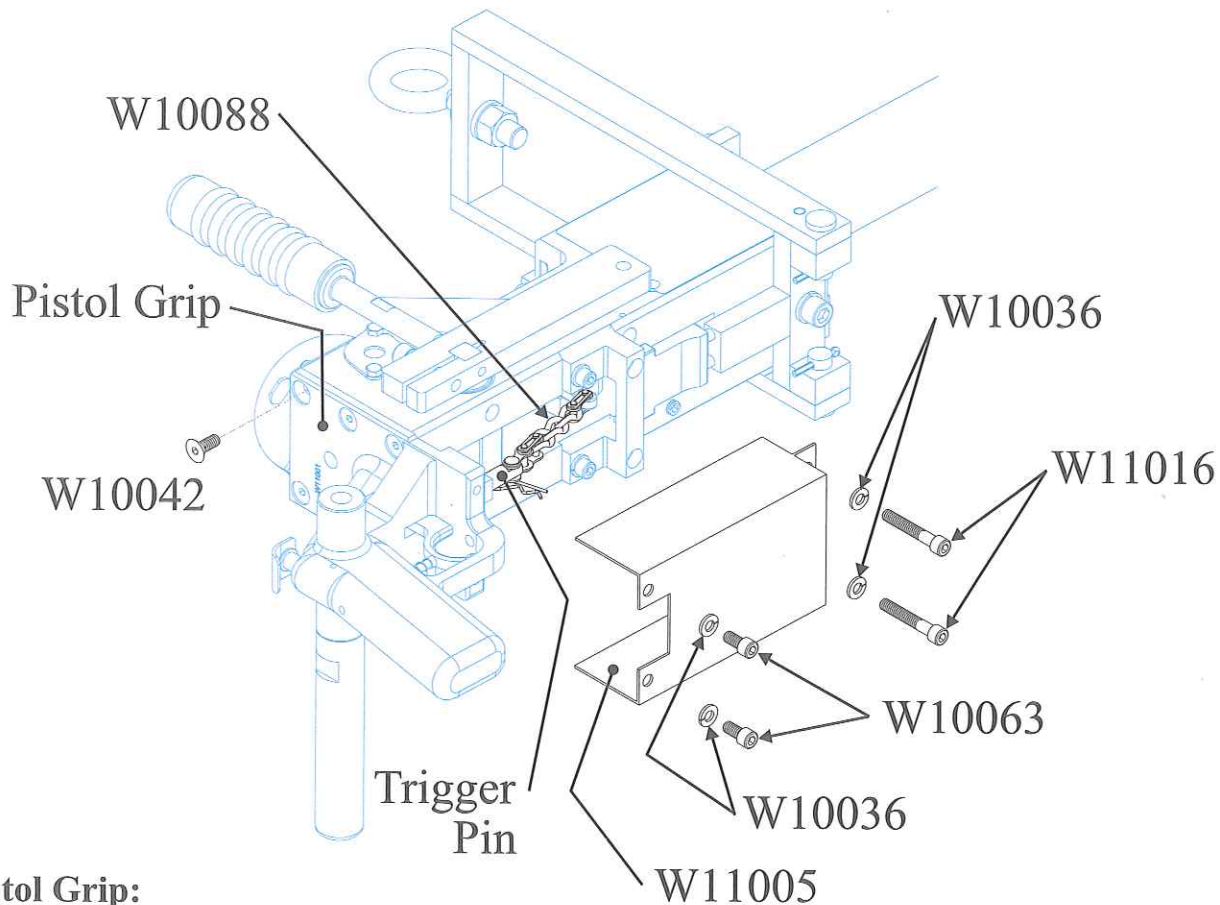
Western™ Tool

To disassemble guard:

Turn the Tool upside down. Unscrew two W10063 Socket Head Cap Screws and two W11016 Socket Head Cap Screws and remove four W10036 Lock Washers and W11005 Guard.

To disassemble Connecting Chain:

Remove W10088 Connecting Chain Assy. from the Trigger Pin.



Pistol Grip:

The Pistol Grip should never be removed.

If one of the W10042 Flat Head Socket Screws comes loose, apply red Loctite ® and tighten firmly.

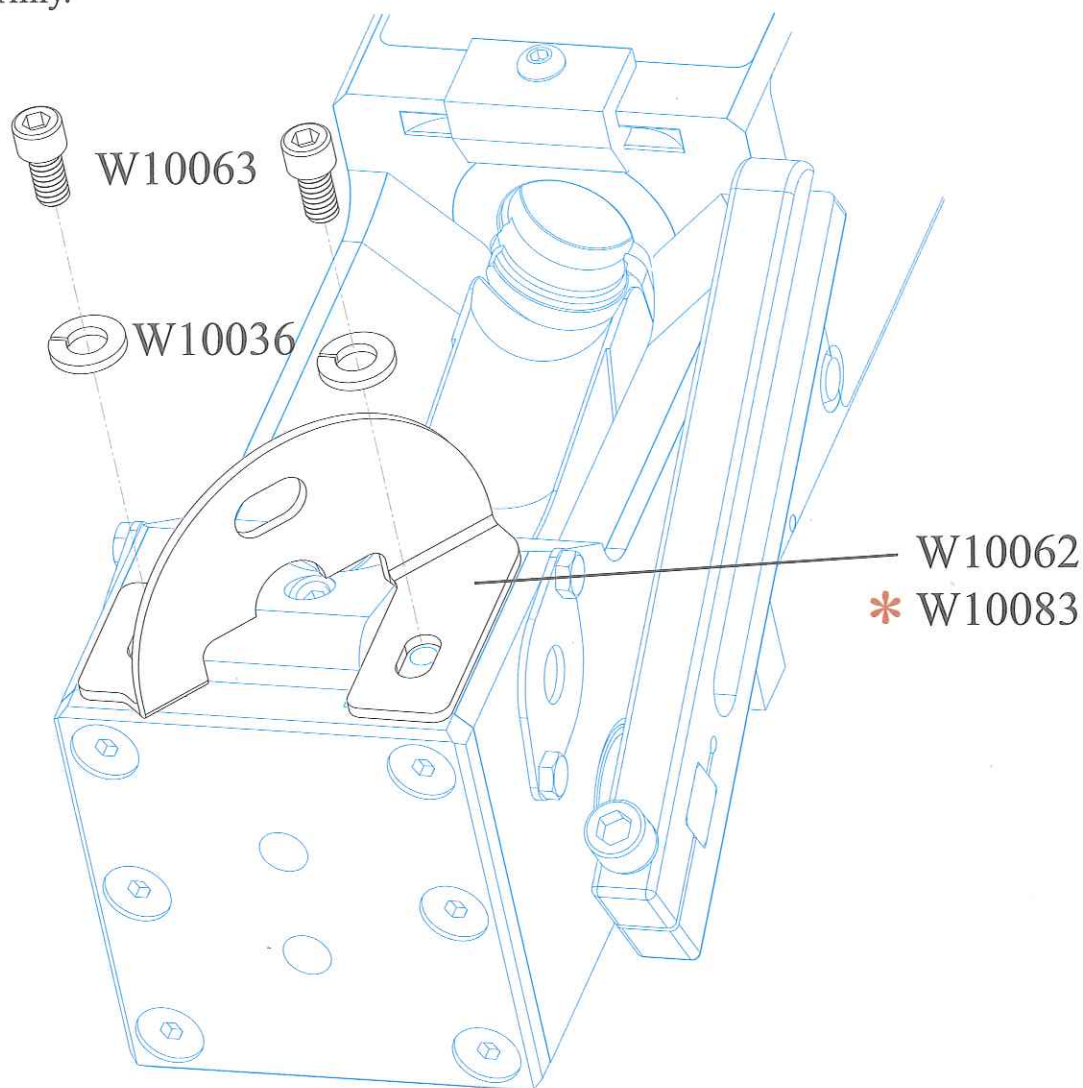
No.	Name of Part	Required
W10036	Lock Washer	4
W10042	Flat Head Socket Screws	6
W10063	Socket Head Cap Screw	2
W10088	Connecting Chain Assy.	1
W11005	Guard	1
W11016	Socket Head Cap Screw	2



Ringblaster® and Western™ Tools

To assemble Deflector:

When installing the W10062 Deflector, the W10003 Breech Block should be in the open (down) position, to make sure that the Deflector does not hinder the free movement of the Breech Block. Use W10063 Socket Head Cap Screws and W10036 Lock Washers and tighten firmly.



* To accommodate left-hand shooters, a W10083 Deflector Right-Hand is available, which deflects empty cartridges towards the right.

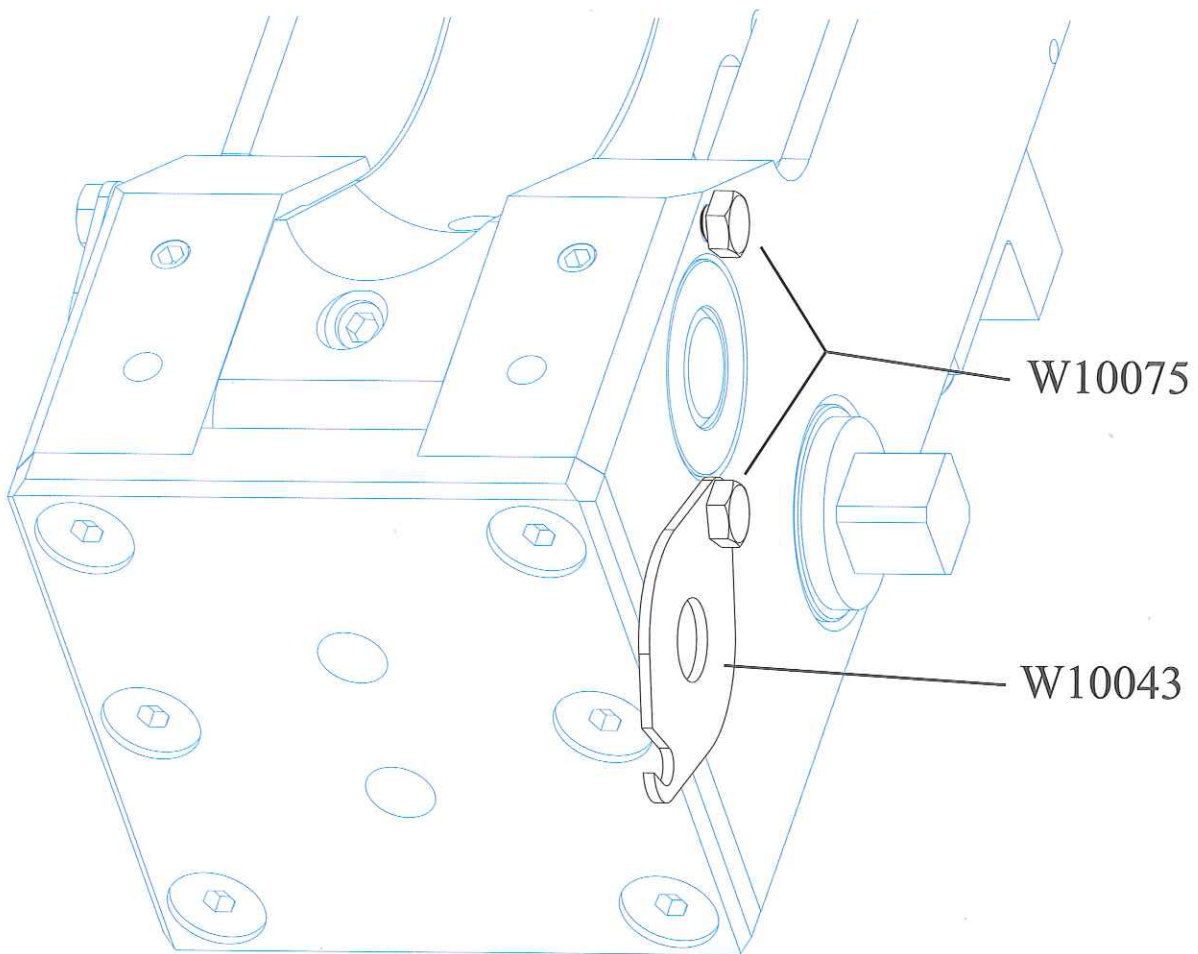
No.	Name of Part	Required
W10036	Lock Washer	2
W10062	Deflector Left-Hand (Normal)	1
W10063	Socket Head Cap Screw	2
* (W10083	Deflector Right-Hand)	(1)



Ringblaster® and Western™ Tools

To disassemble Breech Pin Retainer:

W10075 Hex Head Screws should only be loosened to allow W10043 Breech Pin Retainer to be swiveled to the rear.



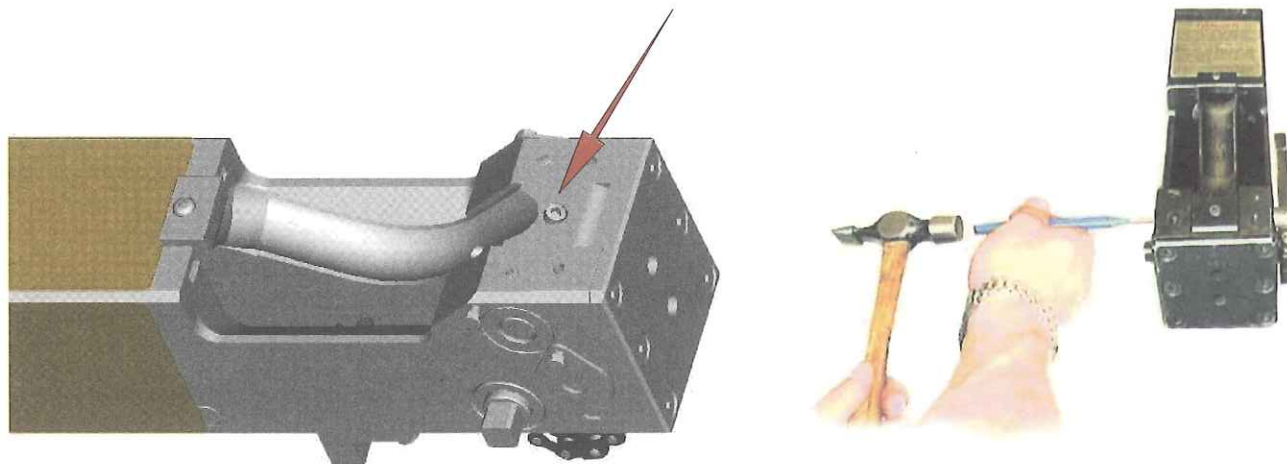
No.	Name of Part	Required
W10043	Breech Pin Retainer	2
W10075	Hex Head Screw	4



Ringblaster® and Western™ Tools

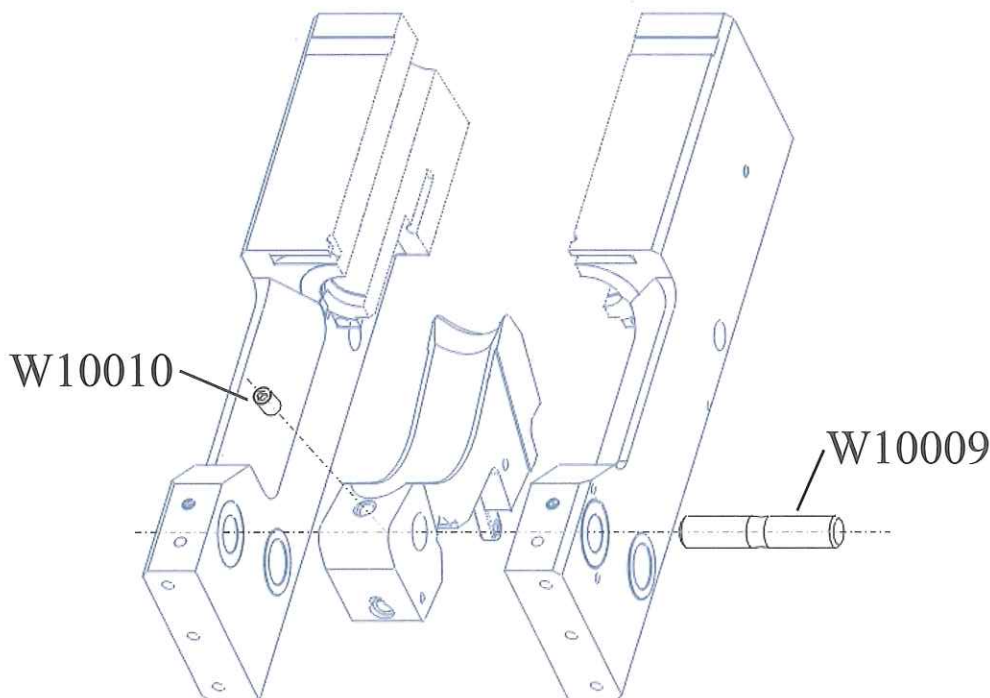
To disassemble Breech Block Pivot Pin:

Unscrew W10010 Socket Head Set Screw halfway before tapping W10009 Breech Block Pivot Pin out with a punch and hammer.



To assemble Breech Block Pivot Pin:

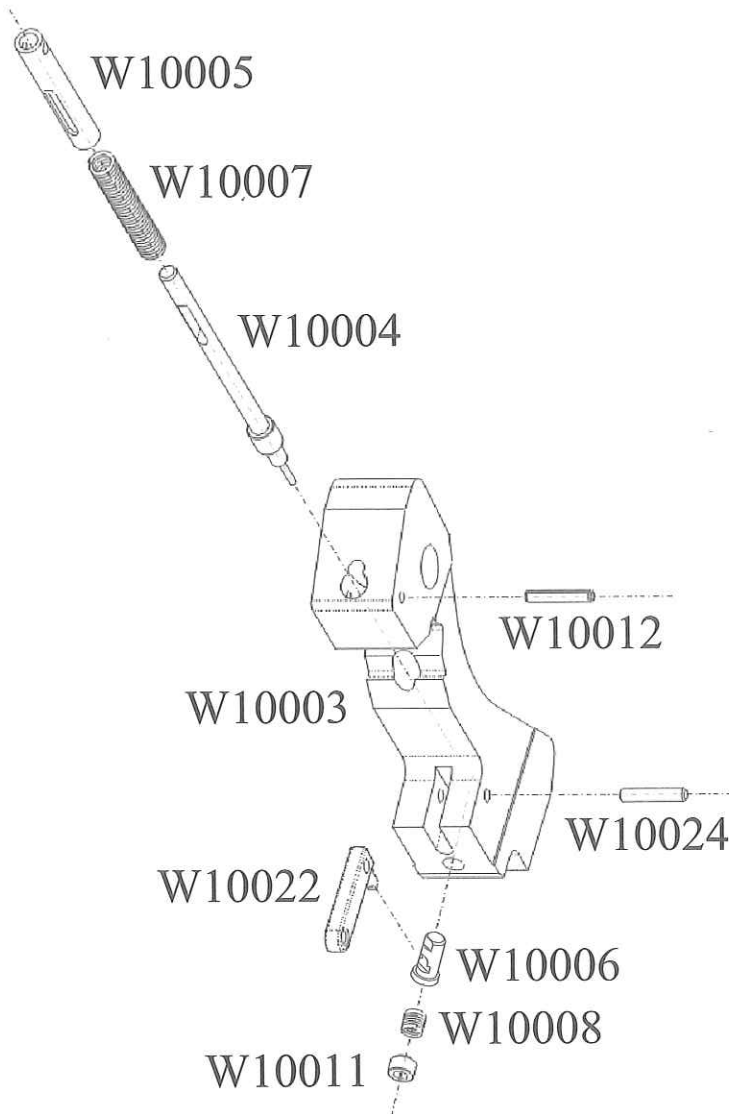
Make sure that W10009 Breech Block Pivot Pin is absolutely in center before tightening W10010 Socket Head Set Screw. Tighten until the screw just contacts the pin. **Do not over tighten.** Pin should be free to spin when Breech Block is raised and lowered.



No.	Name of Part	Required
W10009	Breech Block Pivot Pin	1
W10010	Socket Head Set Screw	1



Ringblaster® and Western™ Tools

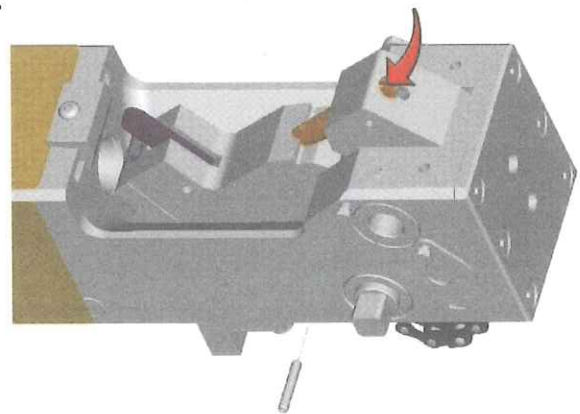


To disassemble Breech Block:

Remove W10003 Breech Block and place it upside down in receiver as illustrated.

Drive W10012 Spring Pin out using a 5/32" pin punch.

Caution: Cover rear of Breech Block with a gloved hand when removing the punch, as the W10005 Firing Pin Sleeve is under spring pressure and will eject forcefully.

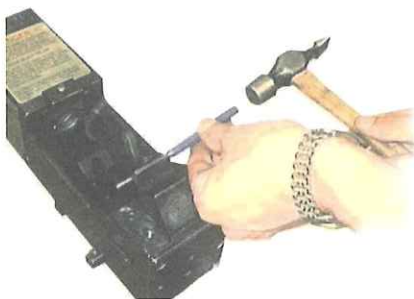


Now remove W10005 Firing Pin Sleeve, W10007 Firing Pin Spring, and W10004 Firing Pin from W10003 Breech Block, and clean firing pin hole in Breech Block with compressed air. If dirt is jammed, use the W15047 Firing Pin Hole Cleaner included in the W15034 Tool Kit or if unavailable turn with your fingers a 13/32" drill bit with a ground off tip in the firing pin hole.

Check W10004 Firing Pin and W10007 Firing Pin Spring for wear. Firing Pin must be straight and without wear from the Sear, and with a round smooth surface on the front tip. Check if Firing Pin Spring is straight by rolling it on a table and inspect visually for wear. Replace if necessary.



Ringblaster® and Western™ Tools

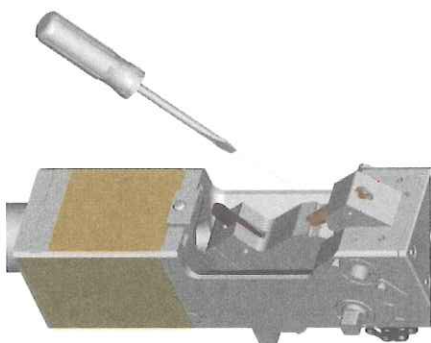


To disassemble Trigger:

Turn W10003 Breech Block and place it with W10011 Socket Head Set Screw upward as illustrated. Drive out W10024 Trigger Pin and remove W10022 Trigger. Unscrew W10011 Socket Head Set Screw and remove W10008 Sear Spring and W10006 Sear. (Use of torch may be necessary for removing the set screw.) Check parts for wear and blow Sear and trigger slot in the Breech Block clean with compressed air.

To assemble Trigger:

Insert W10006 Sear into the Breech Block and make sure the flat side is facing the W10022 Breech Block Trigger. Insert the Breech Block Trigger in slot and align holes with 3/16" dia. pin punch before W10024 Trigger Pin is driven back in place. Now check that the W10022 Trigger can move freely. Insert W10008 Sear Spring and W10011 Socket Head Set Screw into the Breech Block. Tighten W10011 Socket Head Set Screw until it stops or is flush with the Breech Block and stake at edges of the threads using a center punch or apply Loctite® to prevent the screw from vibrating loose.



To assemble Breech Block:

Insert W10004 Firing Pin, W10007 Spring and W10005 Sleeve in Breech Block with the oval slot in Firing Pin and Sleeve upward. Adjust the slots in Sleeve and Firing Pin by pushing down a screwdriver tip in the slot. Retain Spring, Sleeve and Firing Pin within the Breech Block using a pin punch so that holes are aligned before driving in the W10012 Spring Pin.

Check that Trigger works by pulling it to the rear which should release Firing Pin with a click. Re-cock Firing Pin before installing Breech Block in the Tool by inserting the tip of a screwdriver in the Firing Pin slot and pulling towards the rear of the Breech Block.



No.	Name of Part	Required
W10003	Breech Block	1
W10004	Firing Pin	1
W10005	Firing Pin Sleeve	1
W10006	Sear	1
W10007	Firing Pin Spring	1
W10008	Sear Spring	1
W10011	Socket Head Set Screw	1
W10012	Spring Pin	1
W10022	Breech Block Trigger	1
W10024	Trigger Pin	1

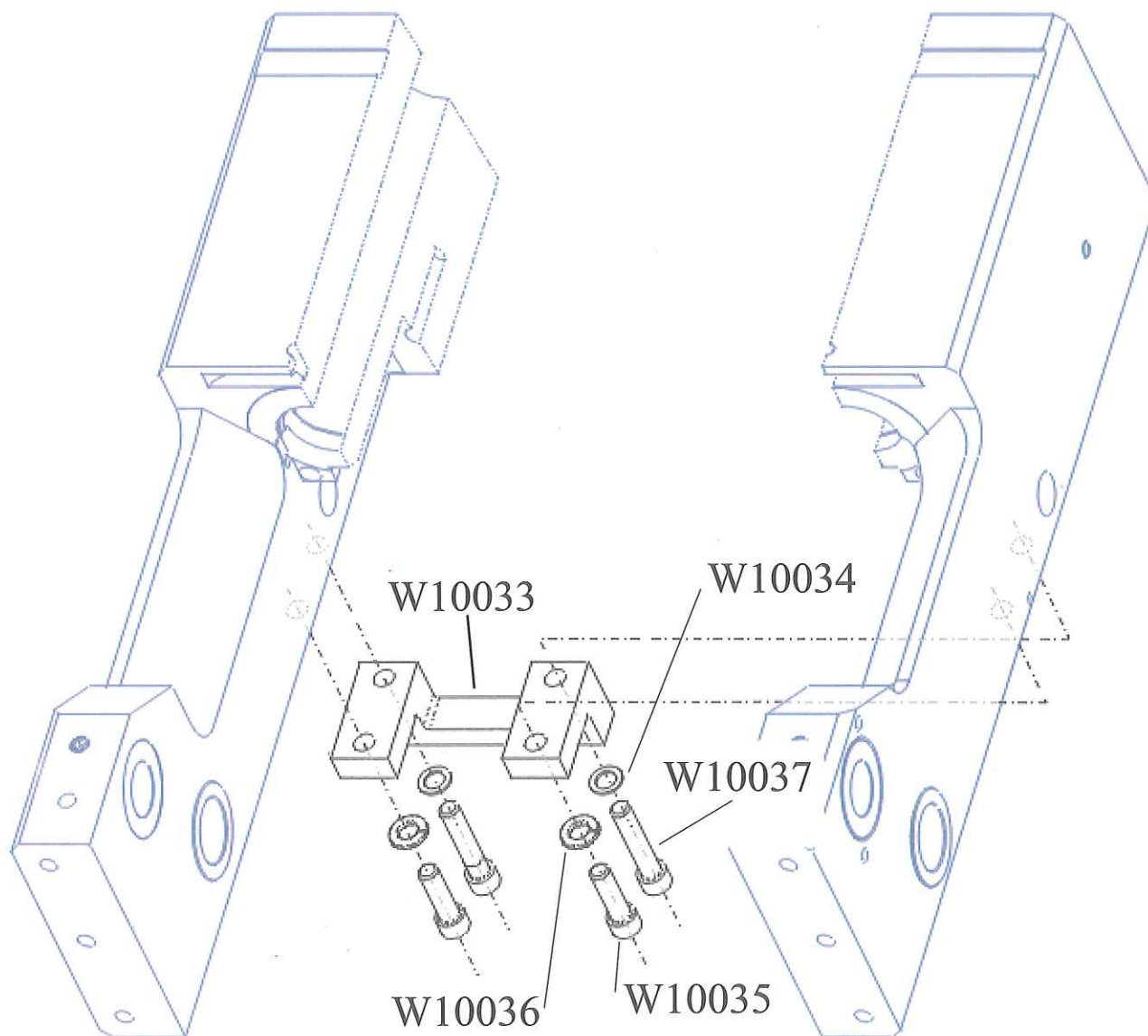


Ringblaster® and Western™ Tools

To disassemble Breech Block Stop Bracket: Turn the Tool upside down.

For **Ringblaster Tool** unscrew W10035 and W10037 Socket Head Cap Screws and remove W10034 and W10036 Lock Washers and W10033 Breech Block Stop Bracket .

For **Western Tool** unscrew W10035 Socket Head Cap Screws and remove W10036 Lock Washers and W10033 Breech Block Stop Bracket. (Note: First two screws removed with Guard, see page 10.)



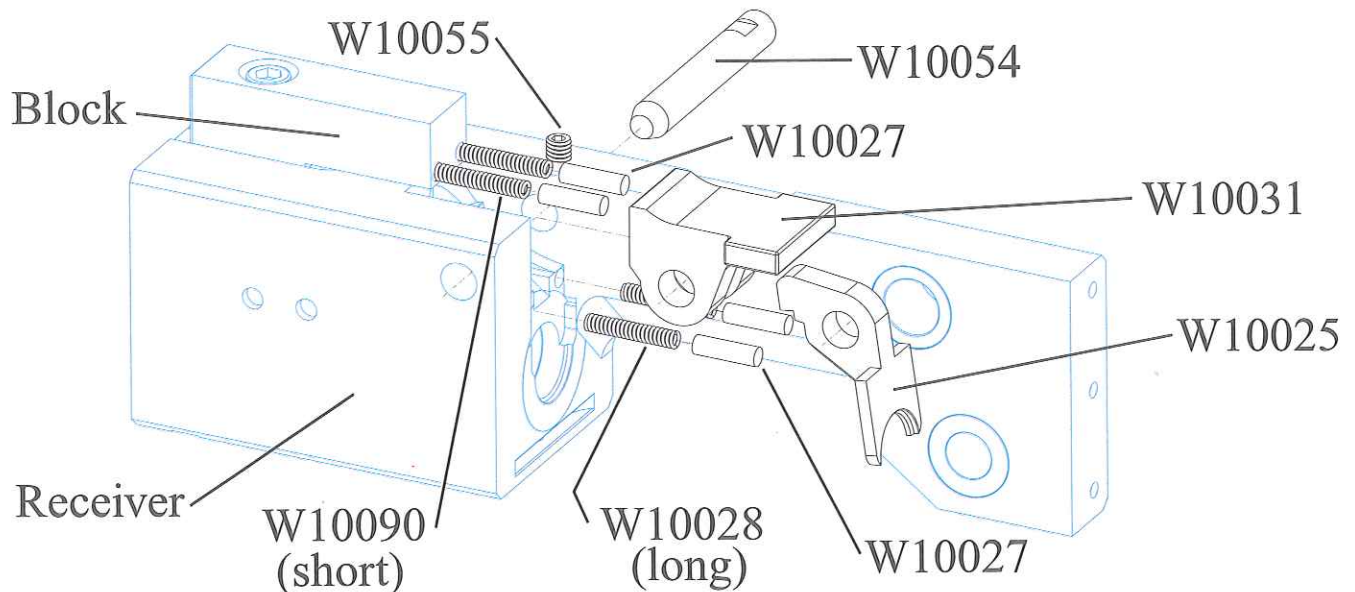
No.	Name of Part	Required
W10033	Breech Block Stop Bracket	1
W10034	Lock Washer (Ringblaster Only)	2
W10035	Socket Head Cap Screw	2
W10036	Lock Washer	2
W10037	Socket Head Cap Screw (Ringblaster Only)	2



Ringblaster® and Western™ Tools

To disassemble Extractor:

Loosen W10055 Socket Head Set Screw halfway. While pressing thumb against W10025 Extractor, drive out the W10054 Extractor Pivot Pin with a pin punch. When Extractor Pivot Pin is removed, the springs and pins will push W10031 Extractor Release Cam and Extractor to the back. Remove the two W10027 Extractor Pins and the two W10028 Extractor Springs from the holes in the Receiver. Remove the two W10027 Extractor Pins and W10090 Extractor Cam Springs from the Block. Clean holes for all four springs and the extractor recess in the chamber with compressed air. Clean barrel and chamber with cleaning rod and brushes provided in the W15035 Cleaning Kit.



To assemble Extractor:

Reassemble the W10028 Extractor Springs (longer springs) and W10027 Extractor Pins into the holes in the Receiver. Reassemble the W10090 Extractor Cam Springs (shorter springs) and W10027 Extractor Pins into the Block. Make sure that W10025 Extractor and W10031 Extractor Release Cam are aligned before driving W10054 Extractor Pivot Pin back into place with its flat area aligned with the W10055 Socket Head Set Screw. Apply blue Loctite ® and screw in W10055 Socket Head Set Screw until tight.

No.	Name of Part	Required
W10025	Extractor	1
W10027	Extractor and Release Pin	4
W10028	Extractor and Release Spring	2
W10031	Extractor Release Cam	1
W10054	Extractor Pivot Pin	1
W10055	Socket Head Set Screw	1
W10090	Extractor Cam Springs	2

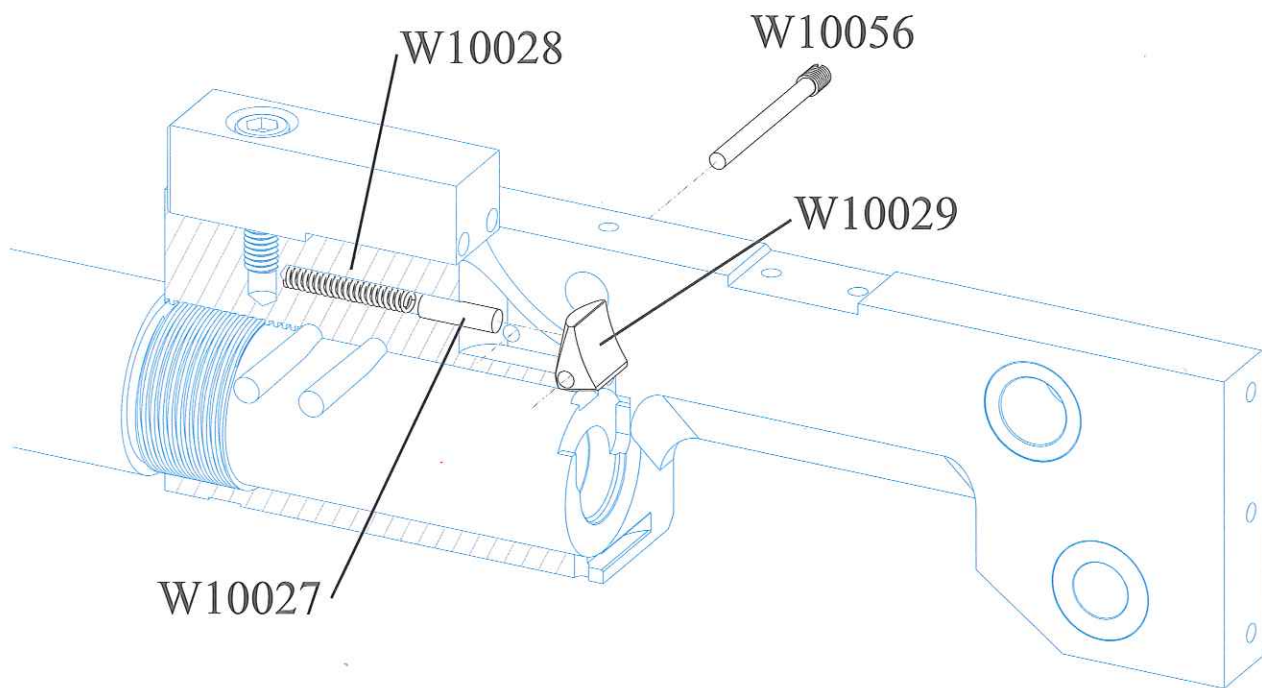


Ringblaster® and Western™ Tools

To disassemble Extractor Release:

Hold back W10029 Extractor Release with a thumb while unscrewing W10056 Extractor Release Screw. Then remove W10029 Extractor Release, W10027 Extractor Release Pin and W10028 Extractor Release Spring.

Clean hole for Extractor Release Spring with compressed air.



To assemble Extractor Release:

Reassemble W10028 Extractor Release Spring and W10027 Extractor Release Pin then make sure that hole in W10029 Extractor Release is aligned with hole in receiver before W10056 Extractor Release Screw is screwed back in place. Recommend application of blue Loctite ® to threads.

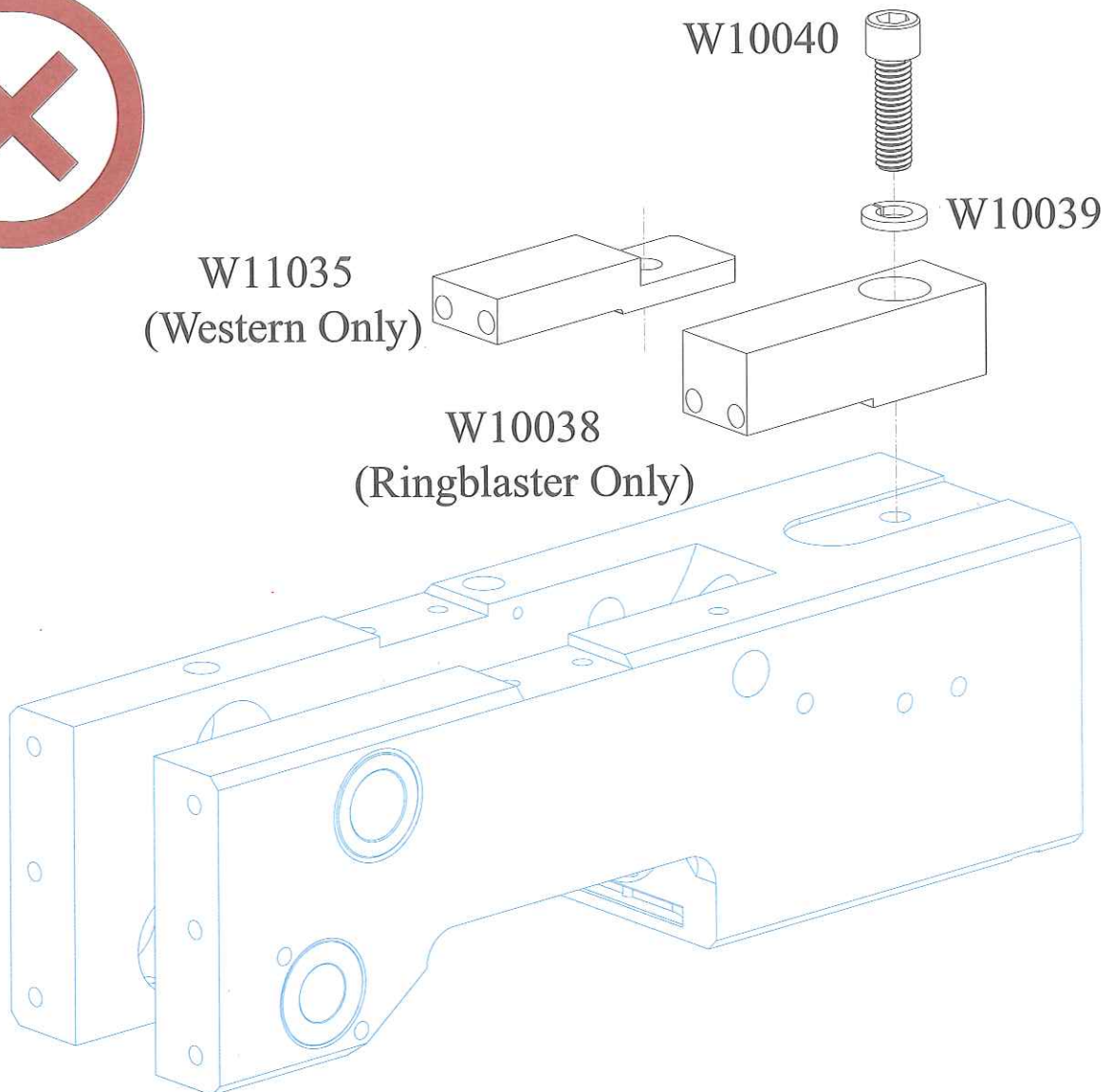
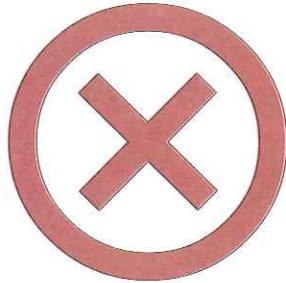
No.	Name of Part	Required
W10027	Extractor Release Pin	1
W10028	Extractor Release Spring	1
W10029	Extractor Release	1
W10056	Extractor Release Screw	1



Ringblaster® and Western™ Tools

Guide Block:

Remove the W10040 Socket Head Cap Screw and W10039 Lock Washer to allow removal of the W10038 Guide Block (Ringblaster) or W11035 Block (Western). Block should only be removed if damaged.

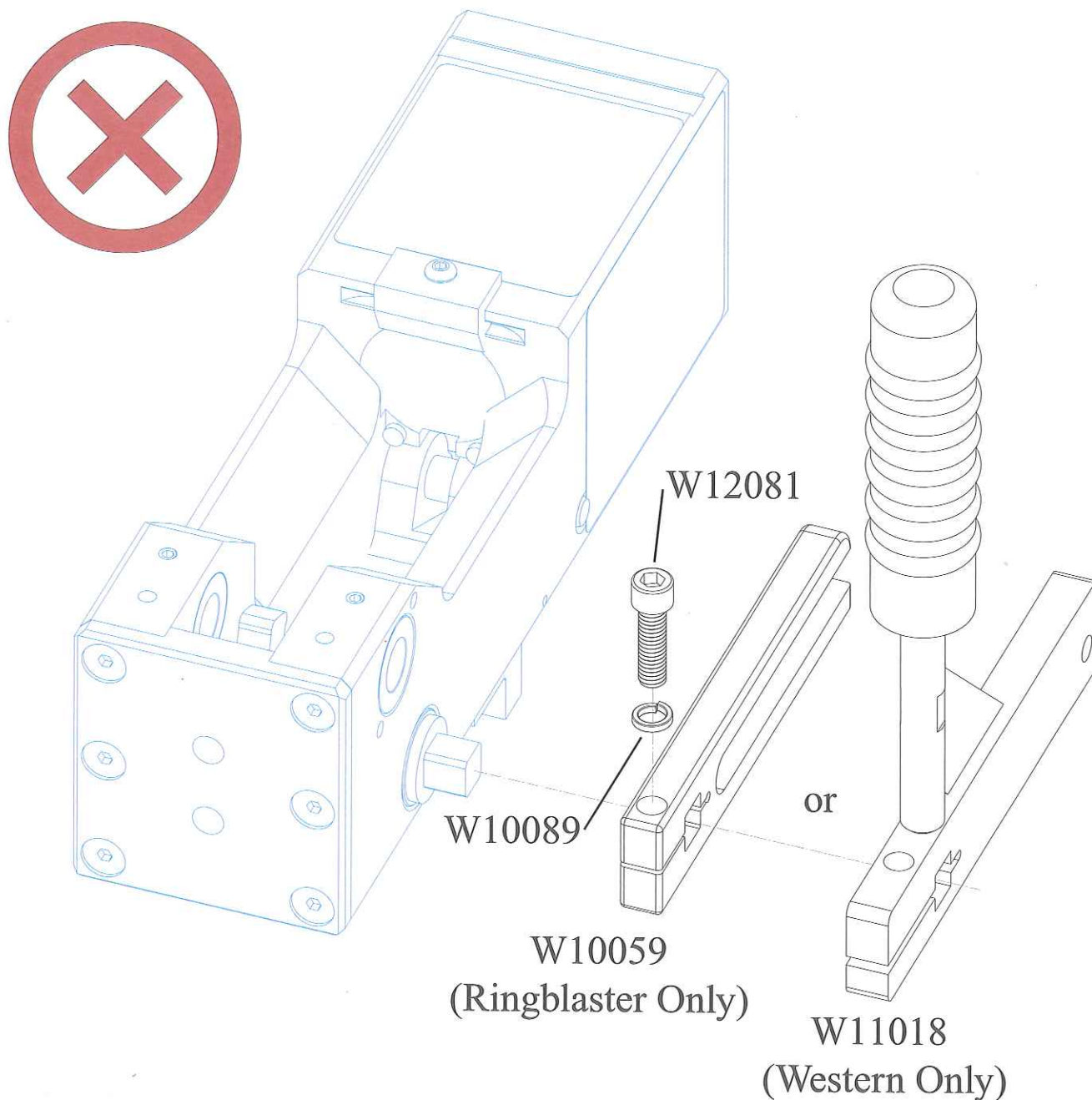


No.	Name of Part	Required
W10038	Guide Block (Ringblaster only)	1
W10039	Lock Washer	1
W10040	Socket Head Cap Screw	1
W11035	Block (Western only)	1



Ringblaster® and Western™ Tools

Camming Link W10059 (Ringblaster) / Operating Handle Assy. W11018 (Western):
To remove, loosen W12081 Socket Head Cap Screw and slide off.



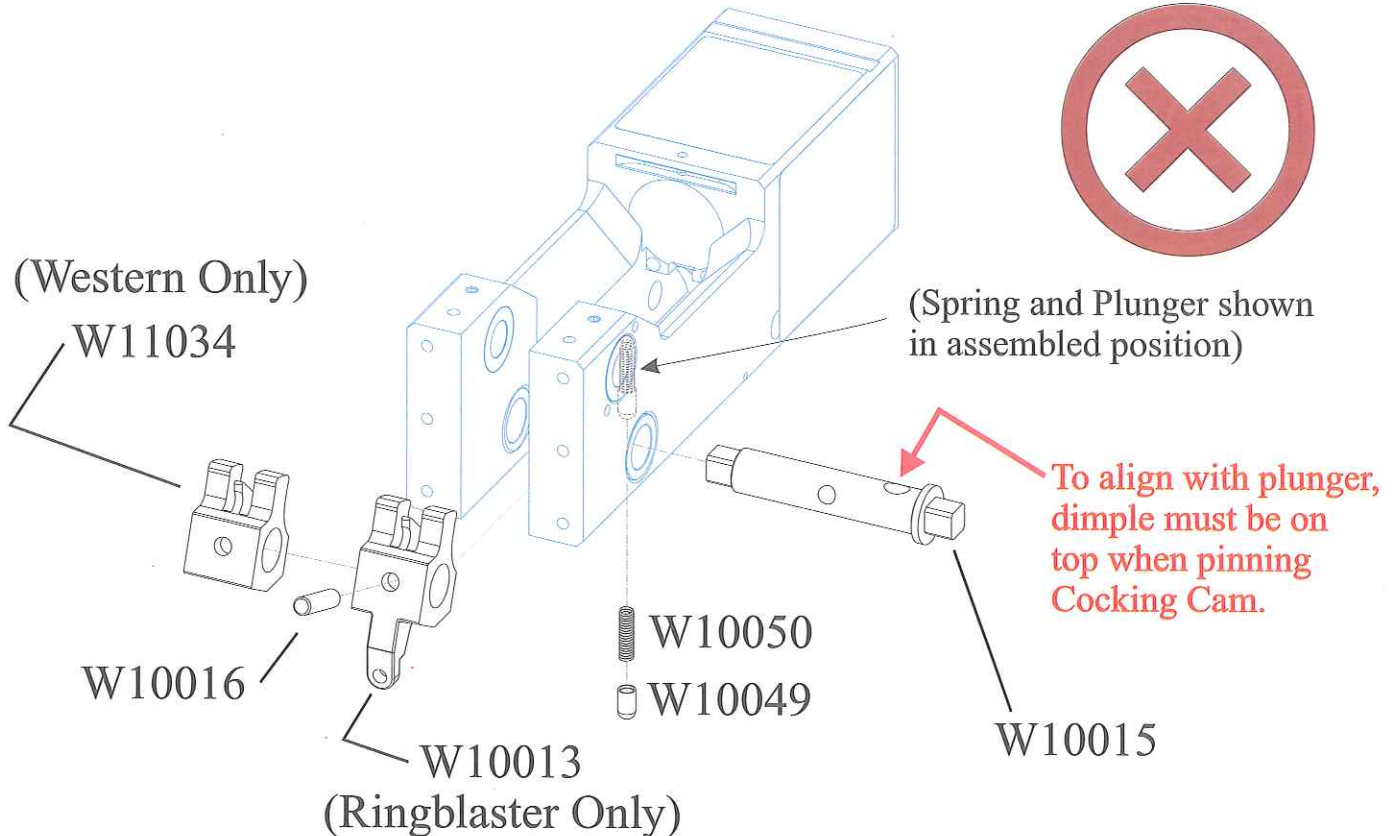
No.	Name of Part	Required
W10059	Camming Link (Ringblaster Only)	1
W10089	Lock Washer	1
W11018	Operating Handle Assy. (Western Only)	1
W12081	Socket Head Cap Screw	1



Ringblaster® and Western™ Tools

To disassemble Cocking Cam:

Drive W10016 Cocking Cam Pin out of W10013 Cocking Cam (Ringblaster) or W11034 (Western) with a pin punch. Then drive W10015 Cocking Cam Shaft out from the left towards the right. When Cocking Cam Shaft is removed, W10049 Cocking Cam Plunger will jump out since it is under pressure from W10050 Cocking Cam Plunger Spring.



To assemble Cocking Cam:

Insert W10050 Cocking Cam Plunger Spring and W10049 Cocking Cam Plunger and then start to push W10015 Cocking Cam Shaft into Bushing. Use the corner of the square end to help guide the Plunger up onto the cylindrical portion of the shaft. After putting Cam in place, drive Shaft all the way in. Make sure that holes in W10013 (or W11034) Cocking Cam and W10015 Cocking Cam Shaft are aligned before driving W10016 Cocking Cam Pin in place.

No.	Name of Part	Required
W10013	Cocking Cam (Ringblaster Only)	1
W10015	Cocking Cam Shaft	1
W10016	Cocking Cam Pin	1
W10049	Cocking Cam Plunger	1
W10050	Cocking Cam Plunger Spring	1
W11034	Cocking Cam (Western Only)	1



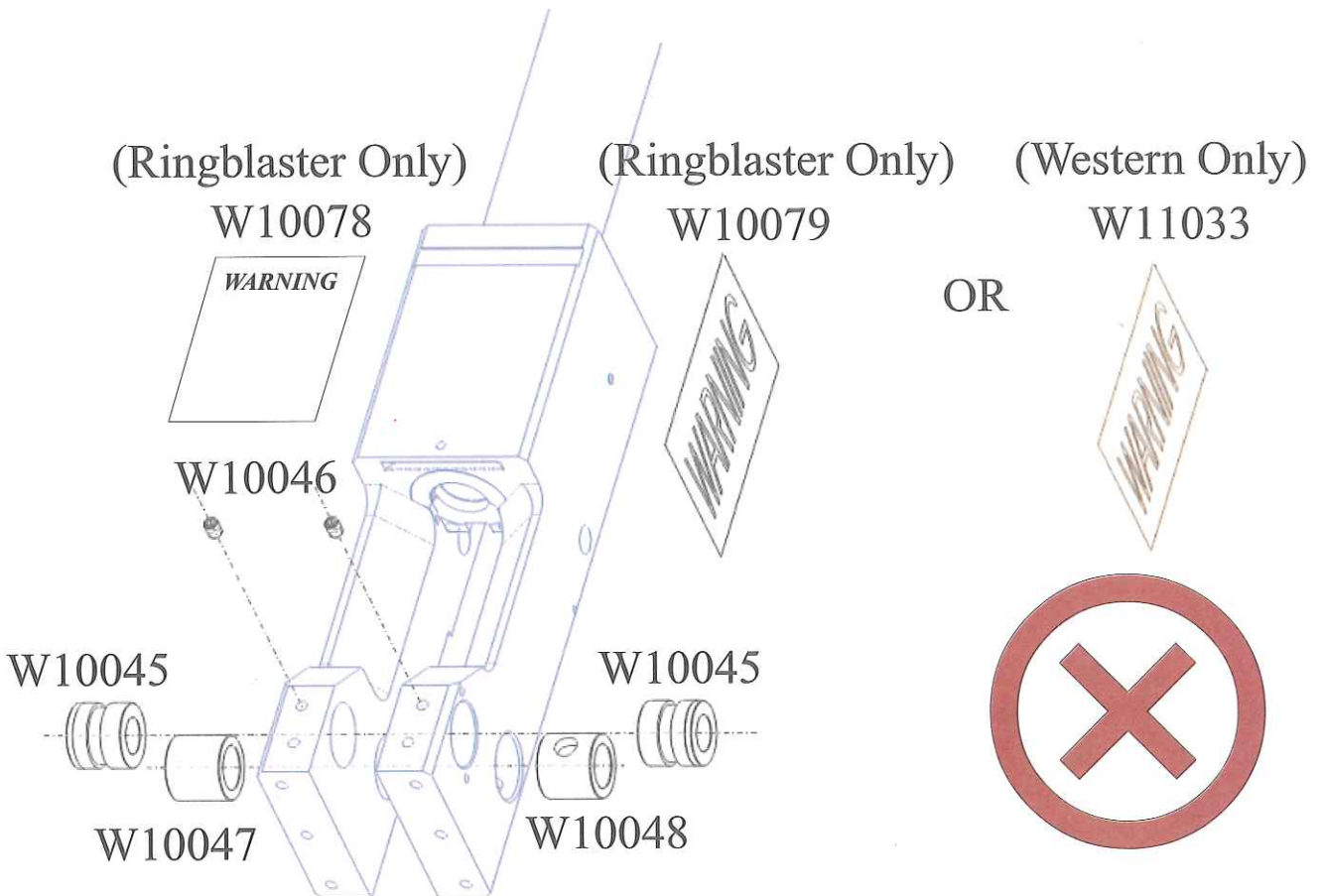
Ringblaster® and Western™ Tools

Receiver:

If Warning Label W10078, W10079 (Ringblaster Only) or W11033 (Western Only) needs replacement, be sure to remove any oil and clean surface carefully before adding the new Label.

The W10003 Breech Block can be adjusted sideways by moving the W10045 Breech Block Pivot Bushing. Prior to adjustments, loosen W10046 Socket Head Set Screws and remember to tighten them again when adjustment is completed.

If Cocking Cam Bushings (W10047 & W10048) need to be replaced, remember that left- and right-hand bushings are **NOT** interchangeable. The vertical hole in the Cocking Cam Bushings must be aligned with holes in Receiver when assembled.



No.	Name of Part	Required
W10045	Breech Block Pivot Bushing	2
W10046	Socket Head Set Screw	2
W10047	Cocking Cam Bushing (L.H.)	1
W10048	Cocking Cam Bushing (R.H.)	1
W10078	Warning Label (Ringblaster Only)	1
W10079	Warning Label (Ringblaster Only)	2
W11033	Warning Label (Western Only)	2

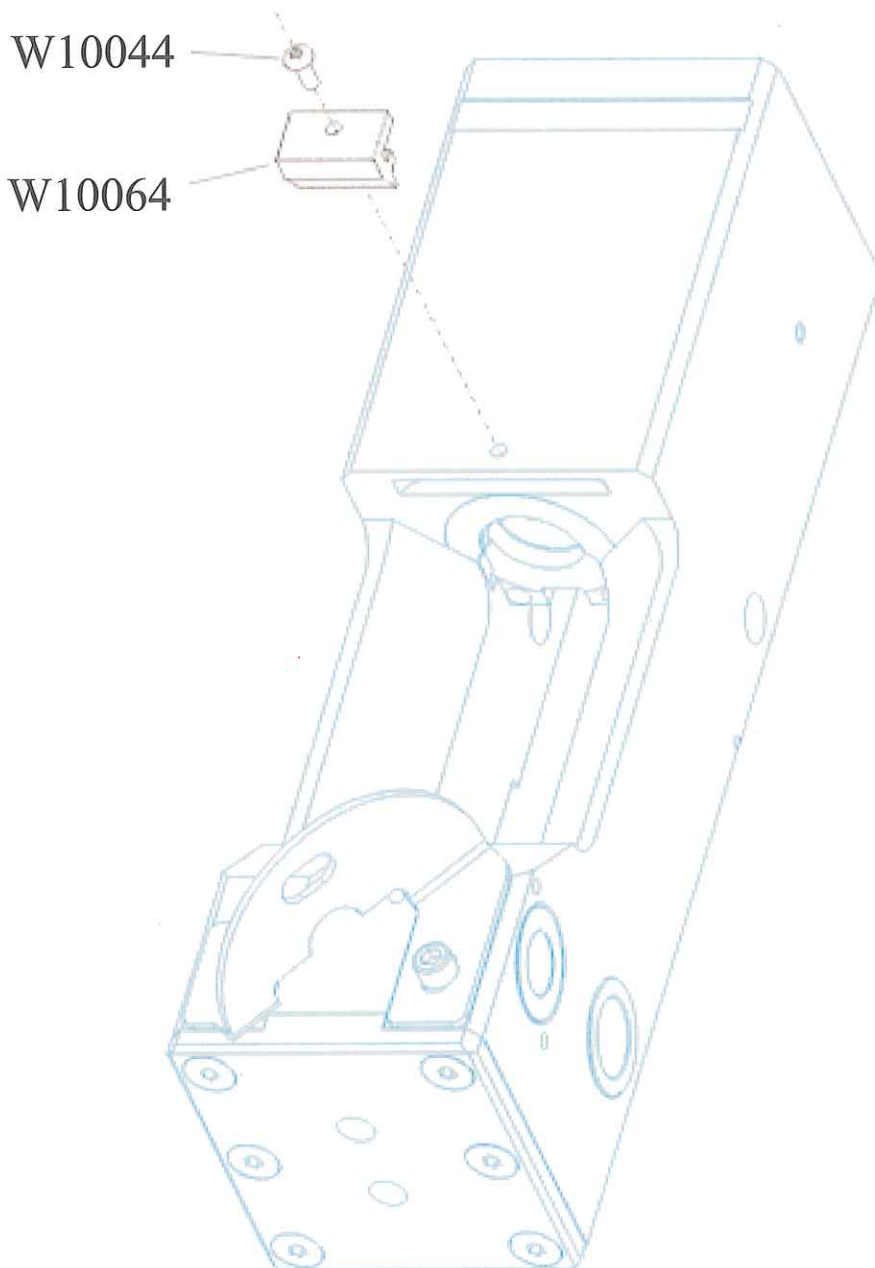


Ringblaster® and Western™ Tools

Breech Block Stop:

Should not be removed during normal maintenance and cleaning of the Tool.

If W10064 Breech Block Stop comes loose by itself, apply Loctite® and tighten W10044 Button Head Screw firmly.



No.	Name of Part	Required
W10044	Button Head Screw	1
W10064	Breech Block Stop	1



Ringblaster® and Western™ Tools

Barrel Accessory Installation: **Note:** Always hold barrel in vice when installing or removing threaded extensions to avoid turning barrel in receiver.

W15046 Long Barrel Extension Kit (Ringblaster and Western Tools)

Remove the two socket head screws and push the Long Barrel Extension over the barrel until the two socket head screws fit into the groove in the barrel. Tighten screws.

W15006 Rifled Barrel Extension Zinc Slugs Only (Ringblaster Only)

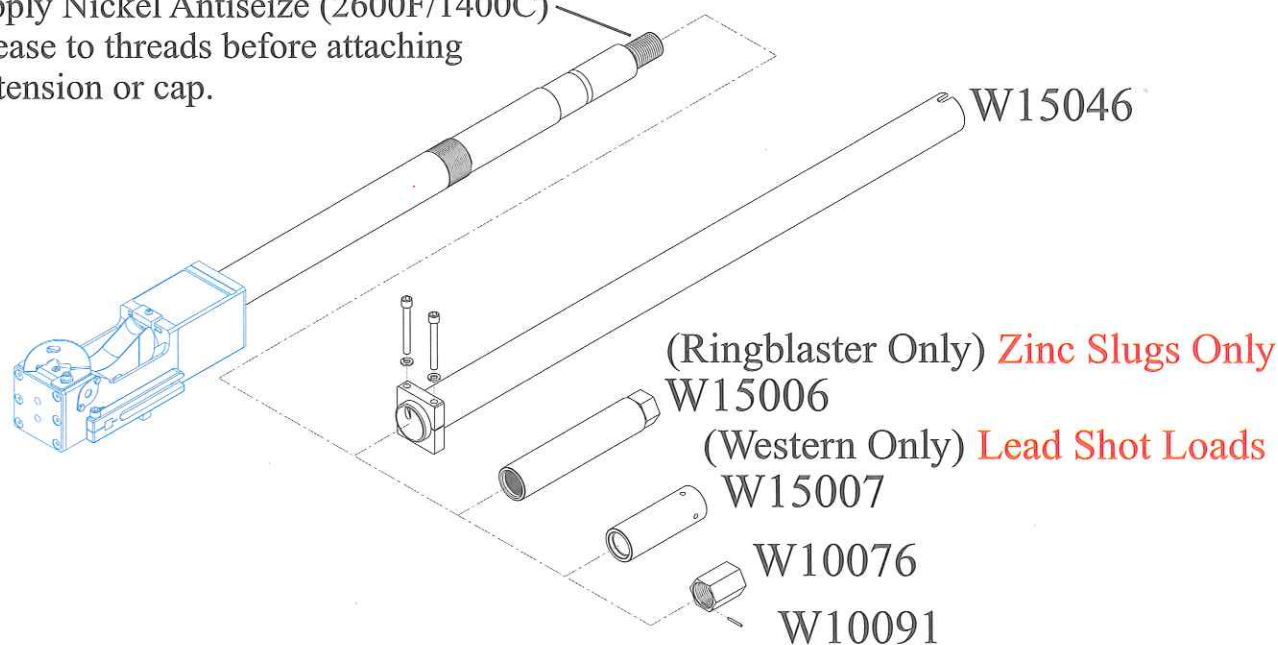
Drive out W10091 Spring Pin. Then unscrew W10076 Barrel Cap. Screw the W15006 Rifled Barrel Extension on and tighten it with 150 foot pounds of force, then make a burr over into the two grooves of the Rifled Barrel Extension with a Center Punch.

W15007 Full Choke Extension Lead Shot Only (Western Only)

Drive out W10091 Spring Pin. Then unscrew W10076 Barrel Cap. Screw the Full Choke Extension on and tighten with spanner or pipe wrench.

When removing the Rifled Barrel Extension, or Full Choke Extension, the Barrel Cap must be re-installed to protect the threads. It is important that the W10091 Spring Pin is driven back in place to prevent the Barrel Cap from unscrewing during use.

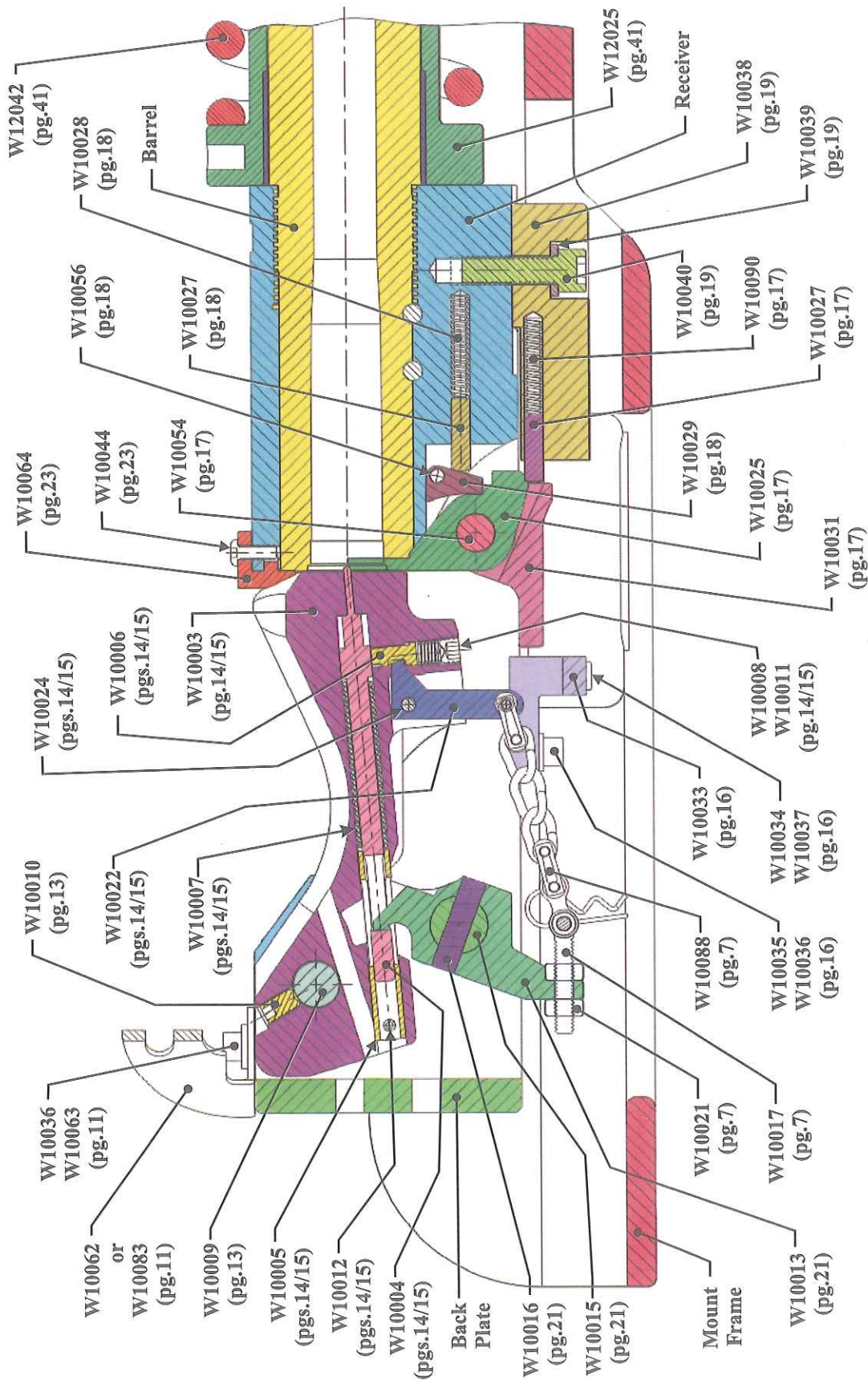
Apply Nickel Antiseize (2600F/1400C) grease to threads before attaching extension or cap.



No.	Name of Part	Required
W10076	Cap	1
W10091	Spring Pin	1
W15006	Rifled Barrel Extension (Ringblaster Only)	1
W15007	Full Choke Extension (Western Only)	1
W15046	Long Barrel Extension Kit	1



Ringblaster® Tool Cut Away View

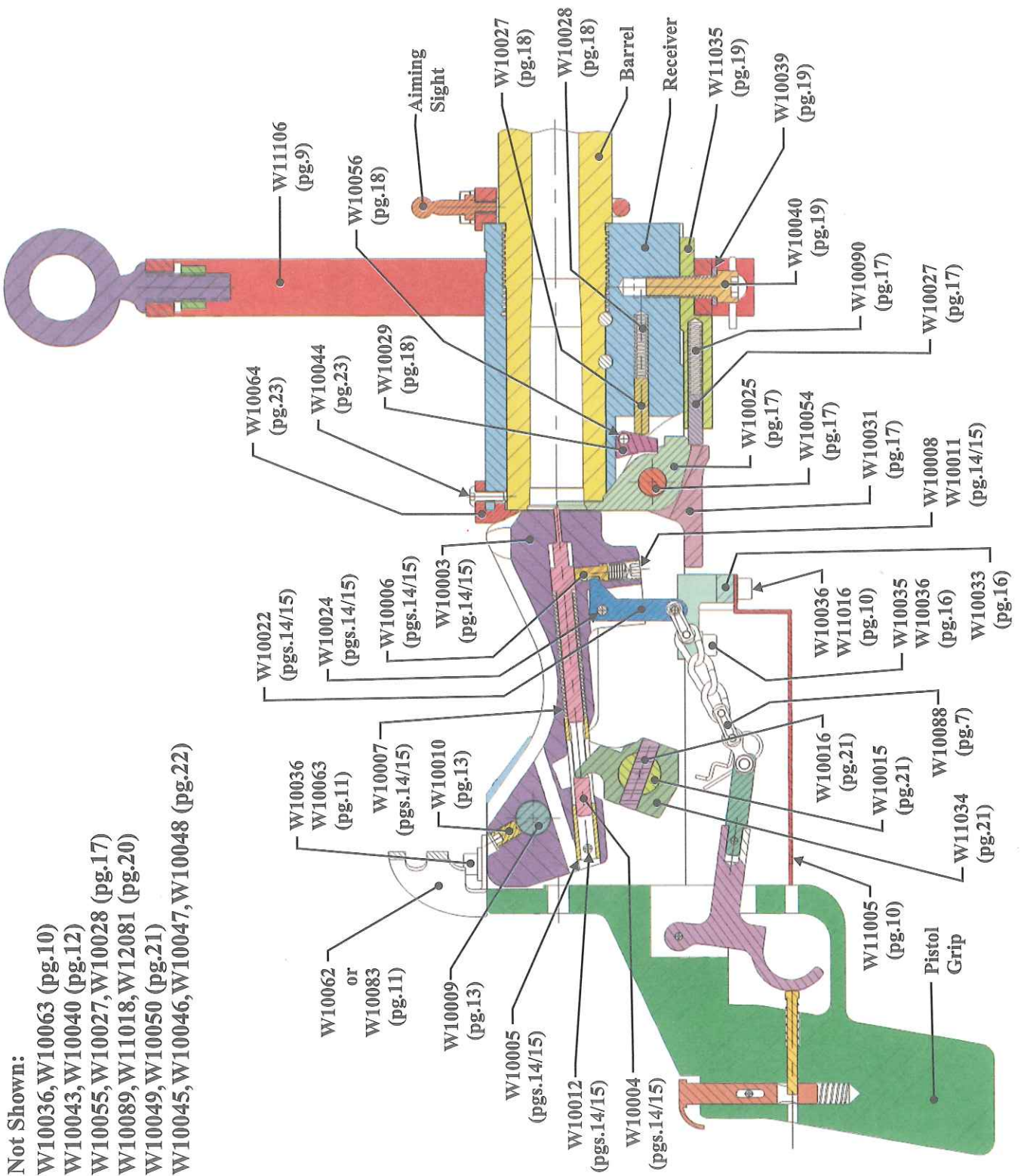


Not Shown:

W10071 (pg.7) W10043, W10040 (pg.12) W10055, W10027, W10028 (pg.17) W10059, W10089, W12081 (pg.20)
 W10049, W10050 (pg.21) W10045, W10046, W10047, W10048 (pg.22)



Western™ Tool Cut Away View





Troubleshooting

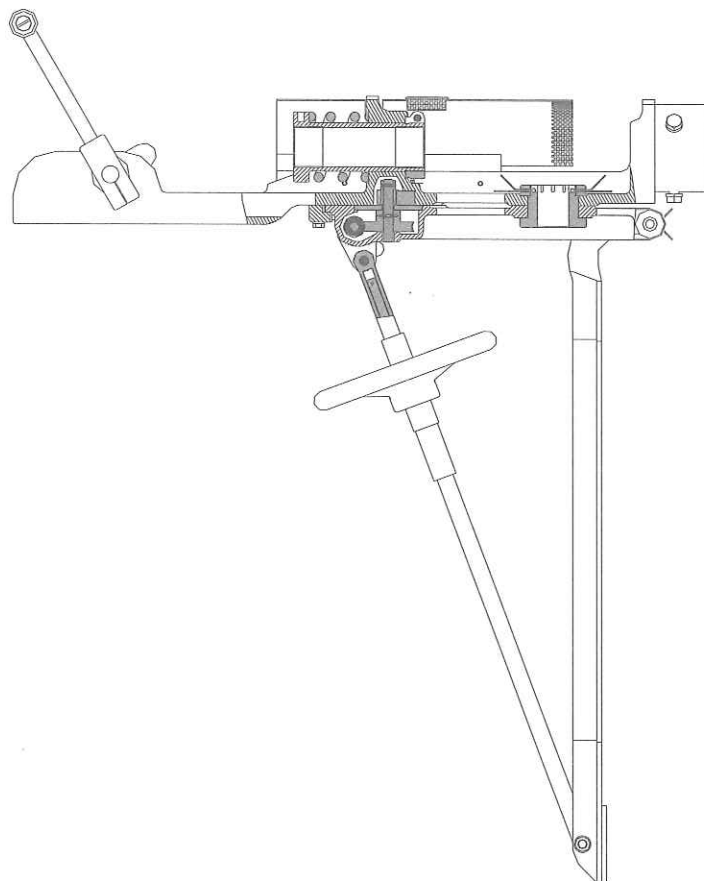
Problem	Fault	Remedy	Page
Tool Will Not Fire	1. Pitted, bent or broken Firing Pin.	1. Replace Firing Pin (W10004).	14/15
	2. Weak or broken Firing Pin Spring.	2. Replace Spring (W10007).	14/15
	3. Contamination between Firing Pin and Breech Block.	3. Disassemble, clean and re-assemble.	14/15
	4. Broken Trigger or Trigger Pin.	4. Replace Trigger (W10022) or Pin (W10024).	14/15
	5. Set Screw W10011 has come out and Spring W10008 has fallen out.	5. Locate parts W10011 and W10008 and re-assemble.	14/15
	6. Set Screw W10011 is tightened to far in.	6. Back out Screw until flush with the block surface. Then stake to keep from turning.	14/15
	7. Incorrect use of Lanyard.	7. Pull the Lanyard to the rear to fire. Pulling downward may not fire the Tool.	-
	8. Loose Breech Block Stop.	8. Apply blue Loctite ® and tighten screw.	23
	9. Auto fire connecting chain assembly binding or not adjusted correctly.	9. Correct any binding of chain/connecting links. Adjust Bolt W10017 to proper chain length to release Firing Pin as breech block just closes.	7
Shells Do Not Extract	1. Dirty chamber or dirt between Extractor and Receiver.	1. Clean behind the Extractor with spray solvent (*), use Wire Brush W15041 inside chamber and wipe dry.	17
	2. Broken Extractor.	2. Replace Extractor W10025.	17
	3. Broken Extractor Spring(s).	3. Replace Springs W10028.	17
	4. Extraction problems related to Tool mount.	4. Reference "Troubleshooting Mount Problems" on page 42.	42
Hard Opening and Closing of Breech	1. Dirt between Breech Block, Receiver, Breech Block Pin, and Receiver Bushing.	1. Remove Breech Block and Pin, clean all surfaces with spray solvent (*), wipe dry and re-assemble.	13
	2. Dirty Cocking Cam, Cocking Cam Shaft and Receiver Bushings.	2. Clean Cocking Cam, Shaft and Bushings with spray solvent (*), wipe dry and re-assemble.	21
	3. Cocking Cam Shaft Pin (W10016) worked loose.	3. Clean hole and pin, apply red Loctite ® and replace pin.	21
	4. Breech Block not opening fully because binding on Deflector.	4. Loosen and adjust alignment of Deflector to clear Breech Block when open.	11
* Never use petroleum based spray oils to clean the Industrial Tool.			





SECTION 2

- Ringblaster® Industrial Tool Mount







SECTION 2

Contents

Ringblaster® Industrial Tool Mount:

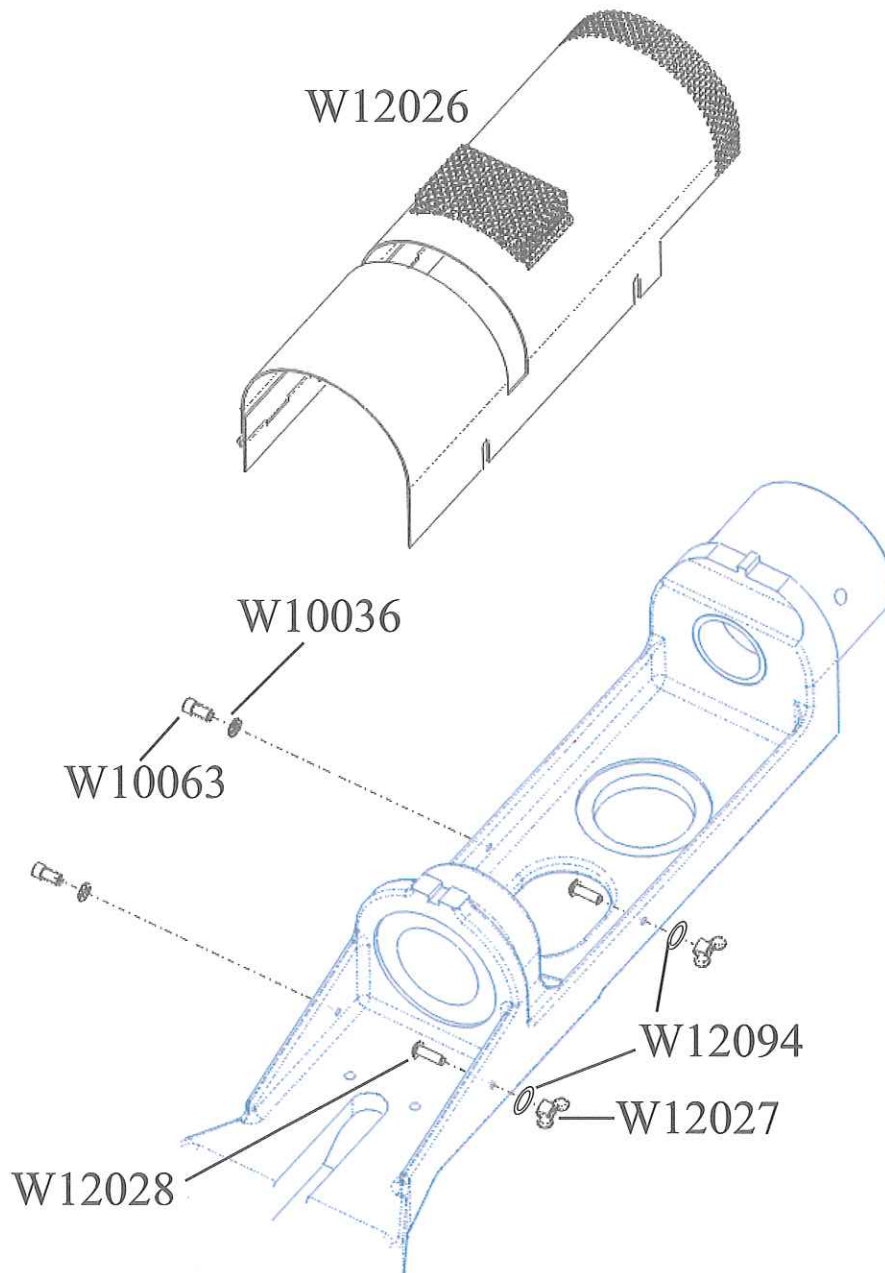
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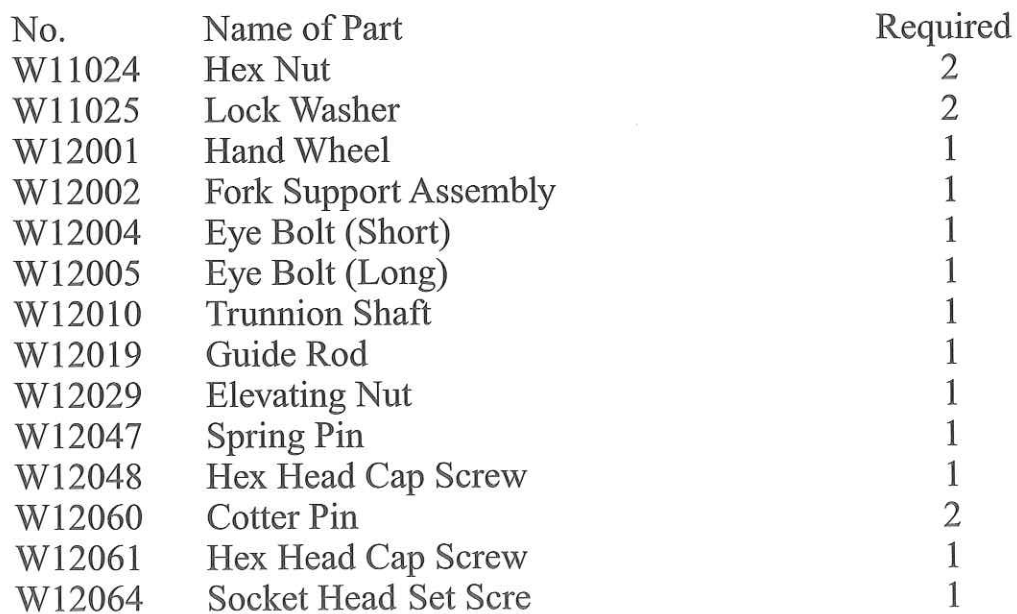
Ringblaster® Industrial Tool Mount

To disassemble Spring Guard:

Loosen W12027 Wing Nuts and swing W12026 Spring Guard away from Mount assembly.



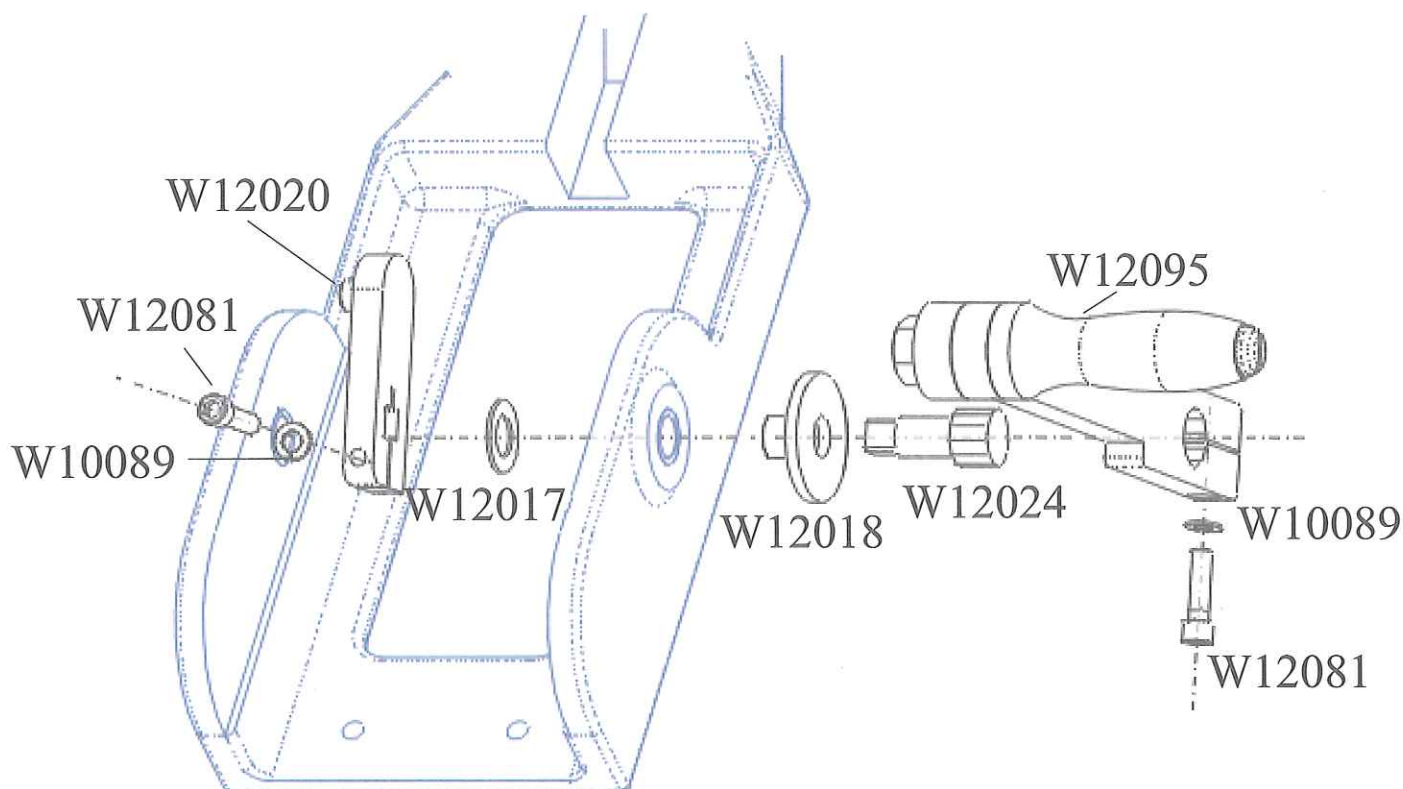
No.	Name of Part	Required
W10036	Lock Washer	2
W10063	Socket Head Cap Screw	2
W12026	Guard Assembly	1
W12027	Wing Nut	2
W12028	Button Head Cap Screw	2
W12094	Plain Flat Washer	2





To disassemble Handle Assembly:

Drive W12095 Handle Assembly away from the Mount after having unscrewed its W12081 Socket Head Cap Screw halfway. Drive W12020 Cocking Link away from the Mount after having unscrewed its W12081 Socket Head Cap Screw halfway. Drive out W12024 Handle Stud.



To assemble Handle Assembly:

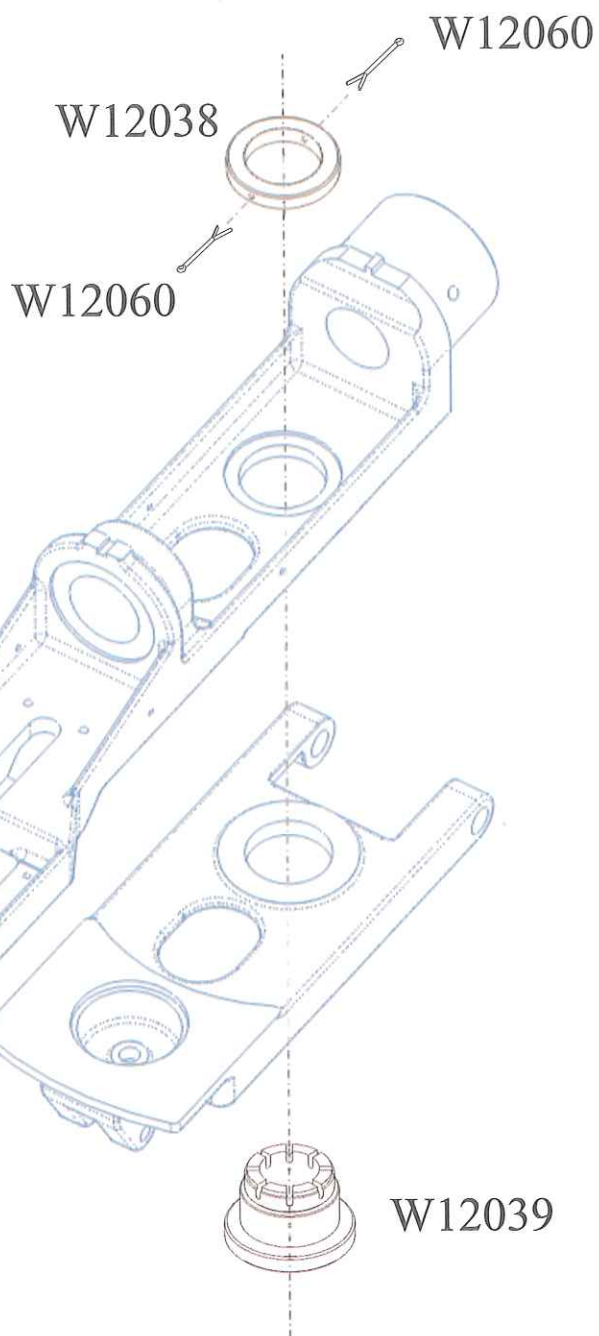
During assembly make sure that W12020 Cocking Link and W12095 Handle Assembly are pushed tight towards W12024 Handle Stud before the two W12081 Socket Head Cap Screws are tightened.

No.	Name of Part	Required
W10089	Lock Washer	2
W12017	Washer	1
W12018	Barrel Guide Handle Bushing	1
W12020	Cocking Link	1
W12024	Handle Stud	1
W12081	Socket Head Cap Screw	2
W12095	Handle Assembly	1



To disassemble Swivel Stud:

Remove the two W12060 Cotter Pins and unscrew W12038 Swivel Stud Nut. W12039 Swivel Stud can now be lifted out of the mount.



To assemble Swivel Stud:

Assemble W12039 Swivel Stud and W12038 Swivel Stud Nut. W12039 Swivel Stud and W12038 Swivel Stud Nut may be assembled upside down. After assembly it is important to remember to install the two W12060 Cotter Pins.

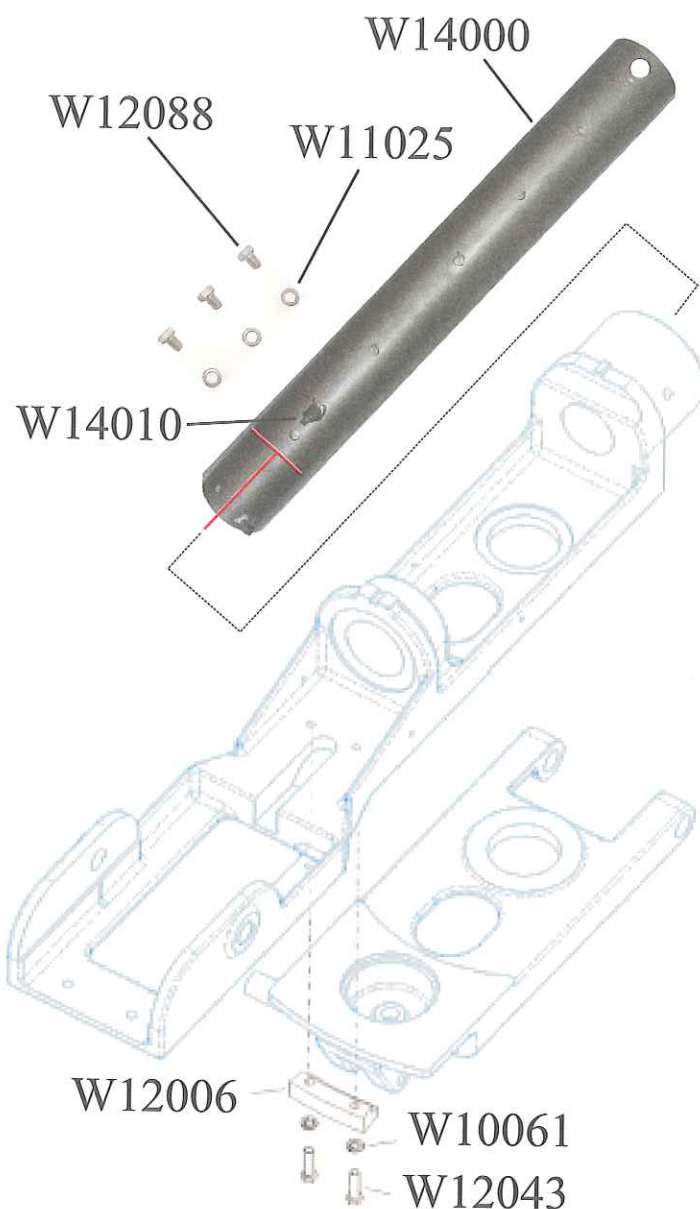
No.	Name of Part	Required
W12038	Swivel Stud Nut	1
W12039	Swivel Stud	1
W12060	Cotter Pin	2



To disassemble Sound Reducer:

Unscrew the three W12088 Hex Head Cap Screws and pull W14000 Sound Reducer off the Mount. An old Sound Reducer may be extremely difficult to remove. First try with an iron bar through the front holes in the Sound Reducer to turn left and right while pulling. If Sound Reducer still refuses to come off, cut it open as indicated with two red lines on the drawing. Begin with the one across the Sound Reducer 4 in. (100mm) from the Mount, then cut from the Mount out to the first cut.

WARNING ! Sound Reducer is only .135 in. (3.5 mm) thick. If you cut any deeper you will damage the Mount. Never start to cut the Sound Reducer off while the Tool is in the Mount.



To assemble Sound Reducer:

Clean front end of Mount thoroughly. Apply Nickel Antiseize (2600 F/ 1400 C) grease and slide Sound Reducer onto Mount. Before screwing on the three W12088 Hex Head Cap Screws, align holes in Sound Reducer with holes in the Mount. Use iron bar through front holes in Sound Reducer to align holes.

To disassemble Barrel Guide Clamp:

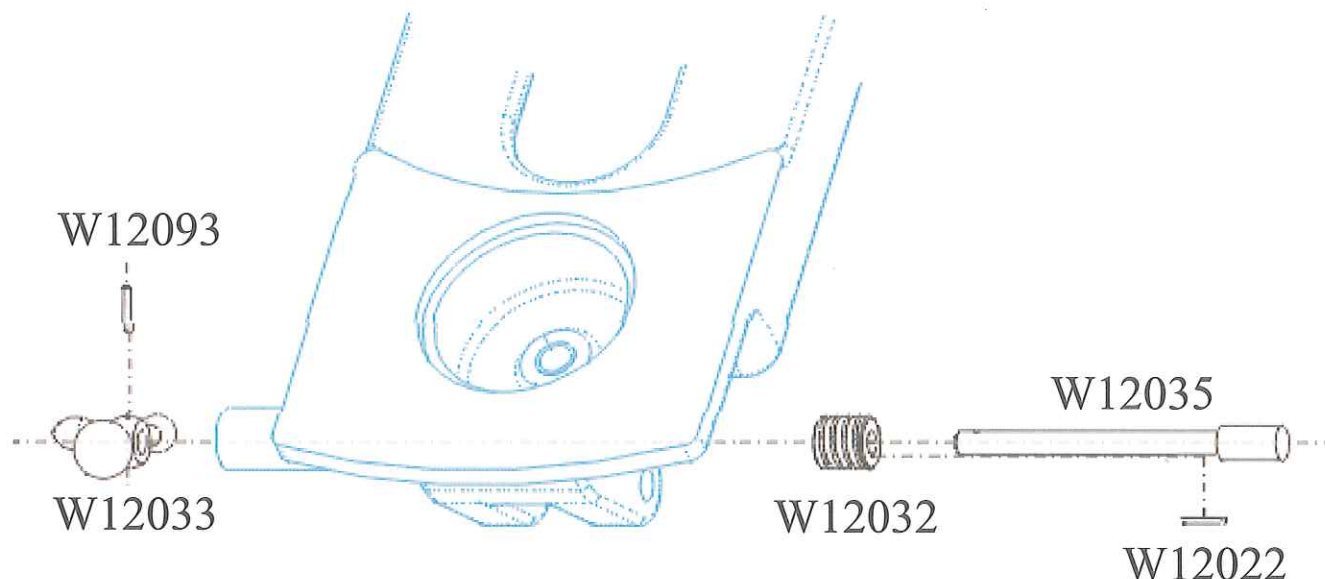
Unscrew W12043 Hex Head Cap Screw and W12006 Barrel Guide Clamp can be removed.

No.	Name of Part	Required
W10061	Lock Washer	2
W11025	Lock Washer	3
W12006	Barrel Guide Clamp	1
W12043	Hex Head Cap Screw	2
W12088	Hex Head Cap Screw	3
W14000	Sound Reducer	1
W14010	Pipe Plug	1



To disassemble Traverse Adjustment Handle:

Drive W12093 Pin Assembly out with a pin punch and pull off W12033 Traverse Adjustment Handle. Now pull W12035 Worm Shaft towards the right with one hand underneath, in case W12022 Worm Shaft Key falls off. W12032 Worm Gear cannot be taken out before Elevating Plate Gearing has been removed (See next page).



To assemble Traverse Adjustment Handle:

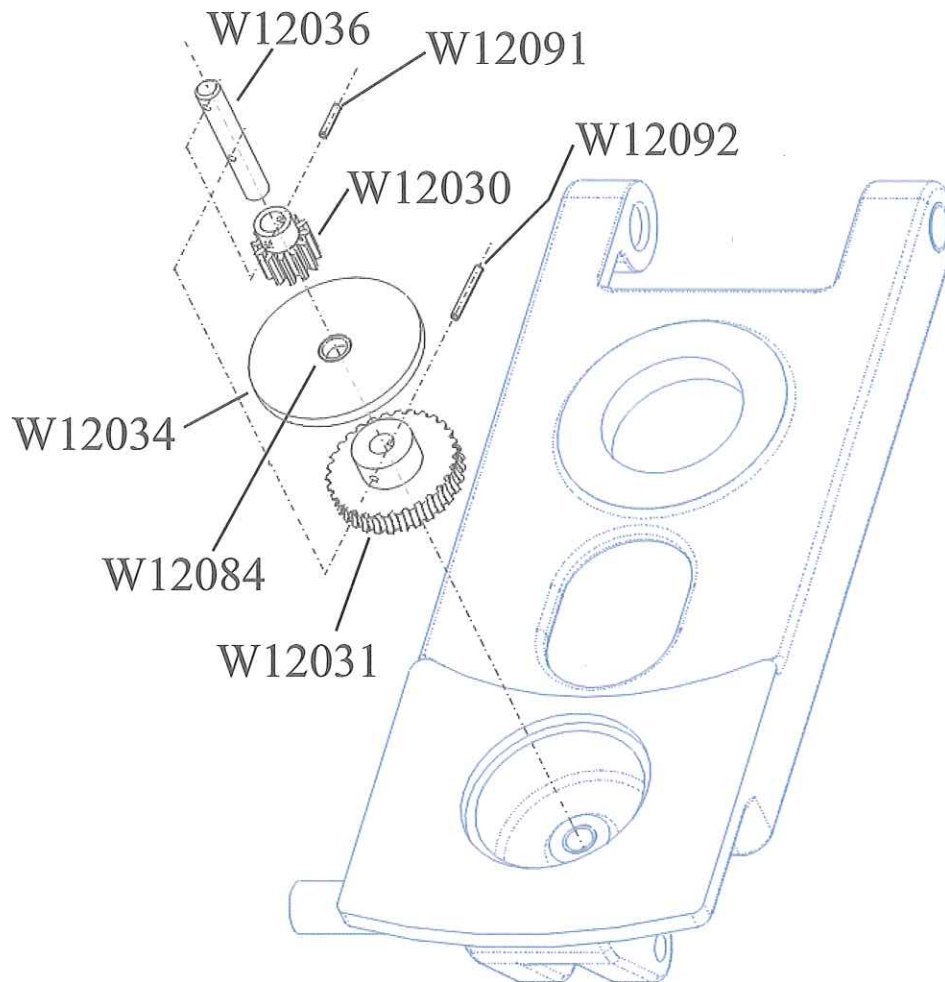
Make sure to align the slot in W12032 Worm Gear and W12022 Worm Shaft Key. Align hole in W12033 Traverse Adjustment Handle and W12035 Worm Shaft before driving in W12093 Pin Assembly.

No.	Name of Part	Required
W12022	Worm Shaft Key	1
W12032	Worm Gear	1
W12033	Traverse Adjustment Handle	1
W12035	Worm Shaft	1
W12093	Pin Assembly	1



To disassemble Elevating Plate Gear:

First remove W12033 Traverse Adjustment Handle (see previous page) then drive out the Elevating Plate Gear Assembly by hitting the W12036 Worm Gear Shaft from beneath with a pin punch. The Elevating Plate Gear can now be taken apart by driving out the two Pin Assemblies W12091 and W12092. Remove/wipe off old grease.



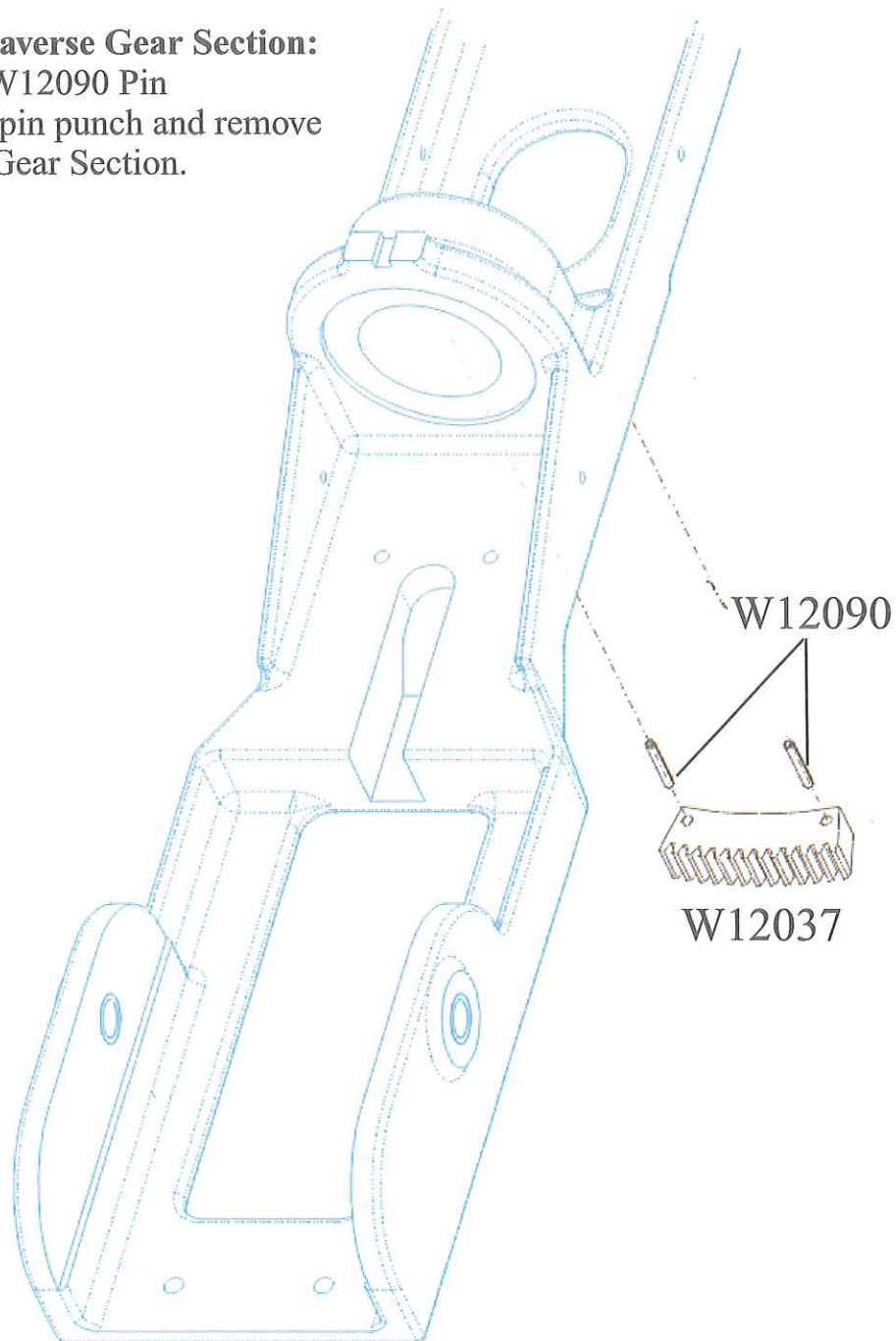
To assemble Elevating Plate Gear:

Reverse disassembly procedure above. Insert assembly back into Elevating Plate and tap W12036 Worm Gear Shaft down. Pack #2 Lithium based grease (or equivalent) around Gear Assembly until all air pockets are eliminated. Fill entire cavity.

No.	Name of Part	Required
W12030	Traverse Pinion	1
W12031	Traverse Worm Gear	1
W12034	Cover Plate Assembly	1
W12036	Worm Gear Shaft	1
W12084	Upper Gear Shaft Bearing	1
W12091	Pin Assembly	1
W12092	Pin Assembly	1



To disassemble Traverse Gear Section:
Drive out the two W12090 Pin
Assemblies with a pin punch and remove
W12037 Traverse Gear Section.



To assemble Traverse Gear Section:

Remember to align holes in the Mount and the W12037 Traverse Gear Section before the two W12090 Pin Assemblies are driven back in place.

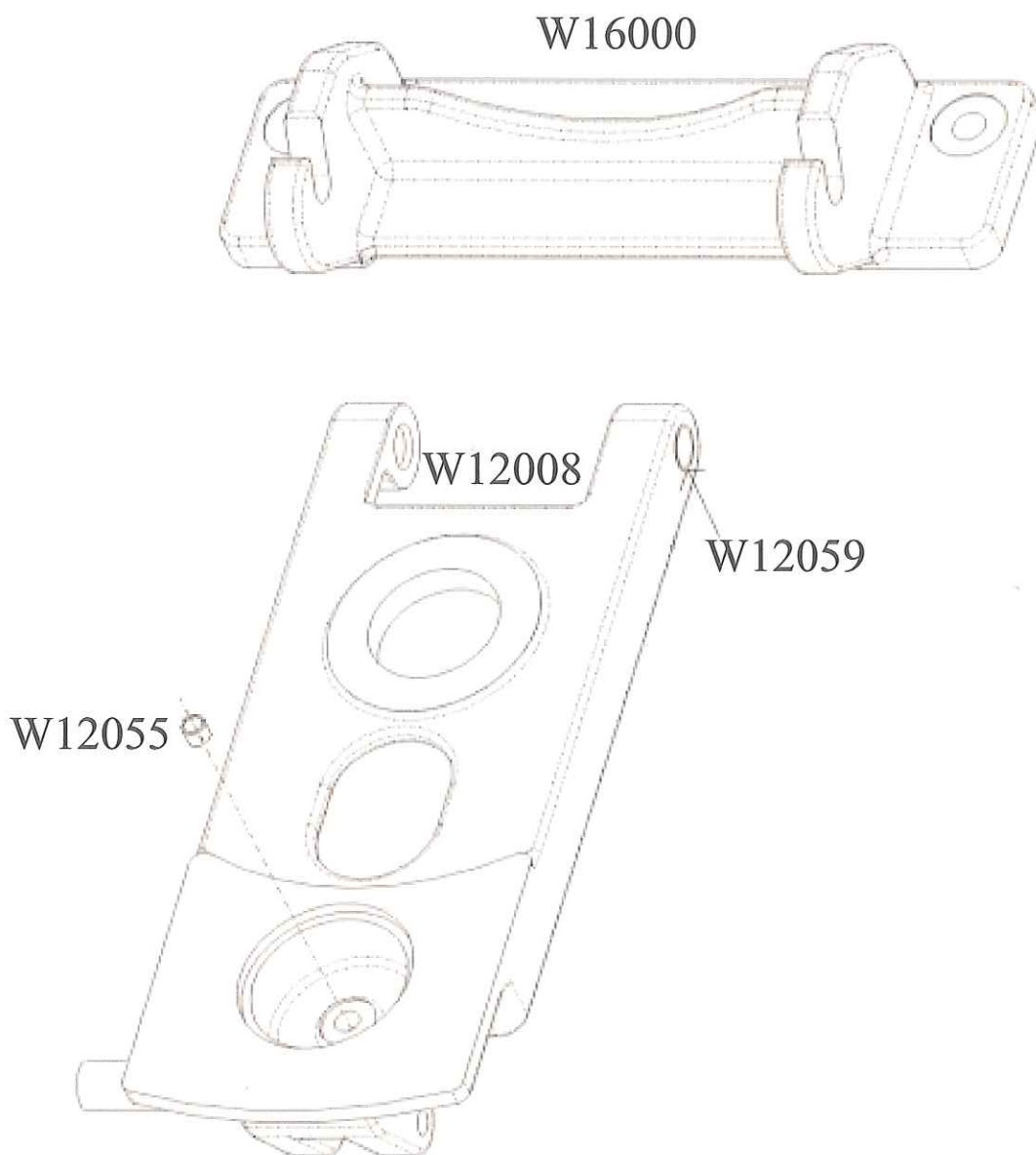
NOTE: If shims were included in original assembly, always replace to original position during reassembly.

No.	Name of Part	Required
W12037	Traverse Gear Section	1
W12090	Pin Assembly	2

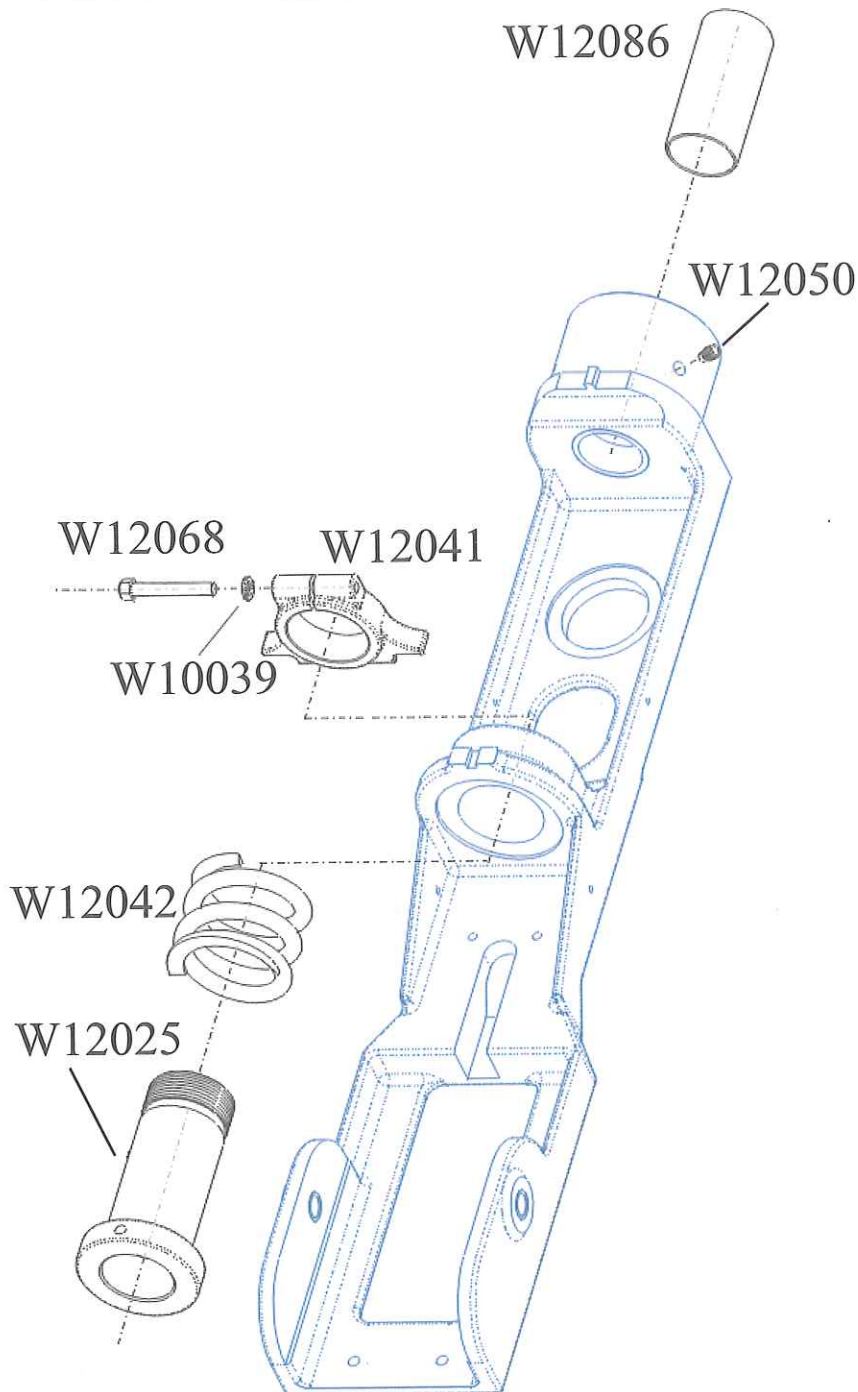


To disassemble Lower Gear Shaft Bearing:

W12055 Lower Gear Shaft Bearing should be driven out with a pin punch prior to installing a new W12055 Lower Gear Shaft Bearing .



No.	Name of Part	Required
W12008	Elevating Plate Assembly	1
W12055	Lower Gear Shaft Bearing	1
W12059	Bushing	2
W16000	Trunnion Plate	1



To replace Front Barrel Support Bushing:

Remember to unscrew W12050 Socket Head Set Screw before trying to drive out W12086 Front Barrel Support Bushing. When the new Front Barrel Support Bushing has been pushed in, a hole should be drilled in it to make room for the W12050 Socket Head Set Screw.

To replace Rear Barrel Support Bushing:

Unscrew W12068 Hex Head Cap Screw, then unscrew W12025 Rear Barrel Support Bushing. After re-assembly remember to tighten W12068 Hex Head Cap Screw.

No.	Name of Part	Required
W10039	Lock Washer	1
W12025	Rear Barrel Support Bushing	1
W12041	Rear Barrel Support Bushing Nut	1
W12042	Recoil Spring	1
W12050	Socket Head Set Screw	1
W12068	Hex Head Cap Screw	1
W12086	Front Barrel Support Bushing	1



Troubleshooting Mount Problems

Problem	Fault	Remedy	Page
Shells Do Not Extract	1. Barrel Guide Handle Bushing W12018 worn oversize.	1. Replace Bushing W12018.	34
	2. Worn Cocking Link W12020.	2. Replace Link W12020.	34
	3. Damaged or worn Handle Stud W12024.	3. Replace Stud W12024.	34
Tool Will Not Traverse - Floats Freely	1. Sheared Pin in Traverse Pinion W12030.	1. Replace Pin W12091.	38
	2. Sheared Pin in Traverse Worm Gear W12031.	2. Replace Pin W12092.	38
Tool Hard to Traverse	1. Dirt corrosion between Elevating Plate, Barrel Guide and Swivel Stud.	1. Remove, clean and grease lightly and reassemble.	35/36

CONTACT WINCHESTER SERVICE REPRESENTATIVE IF PROBLEMS PERSIST.



SECTION 3

• Industrial Tool Accessories

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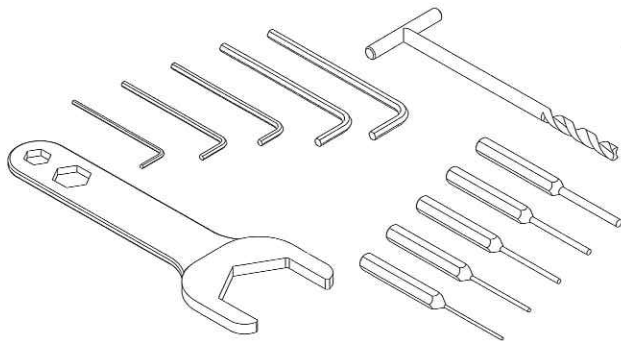




Accessories

Tool Kit W15034

The W15034 Tool Kit, designed specifically for the Winchester Industrial Tool is available at an additional charge. The Tool Kit includes all the special tools that you need to disassemble your Winchester Industrial Tool.



The Tool Kit includes the following items:

1	W15024	Barrel Nut Wrench
1	W15026	1/4" Hex Key
1	W15027	3/16" Hex Key
1	W15028	5/32" Hex Key
1	W15029	1/8" Hex Key
1	W15030	1/4" Pin Punch
1	W15031	1/8" Pin Punch
1	W15032	5/32" Pin Punch
1	W15033	3/16" Pin Punch
1	W15047	Firing Pin Hole Cleaner
1	W15059	3/32" Pin Punch
1	W15067	5/16" Hex Key

Cleaning Kit W15035



The W15035 Cleaning Kit contains everything you need to maintain the Winchester Industrial Tool in top working order.

The Cleaning Kit includes following items:

2	W15037	Extension Rods
1	W15038	Barrel Brush
1	W15039	Shop Cloth
1	W15040	Bag of Cleaning Patches
1	W15041	Chamber Brush for Drill
1	W15050	Set of Cleaning Rods

Locking Frame W15000

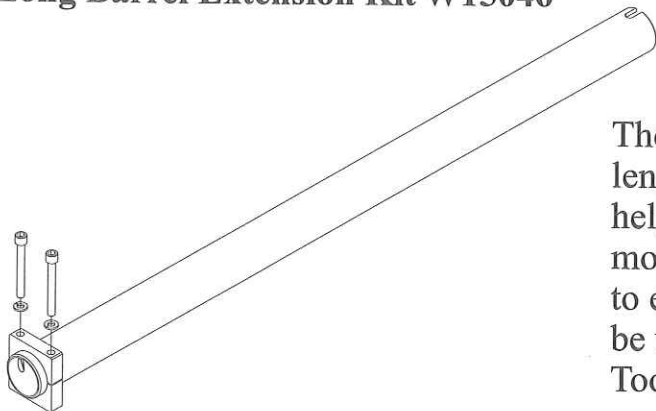


Winchester recommends using a security device for the 8 Ga. Industrial Tool. When the W15000 Locking Frame Assembly is installed, it ensures both that the chamber is kept free of foreign dust and dirt, and prevents anyone from chambering a live round of ammunition. This safety device should only be removed from the Tool, when the Tool is ready to be operated from the firing site.



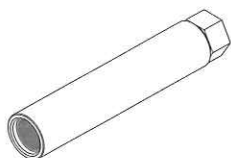
Accessories

Long Barrel Extension Kit W15046



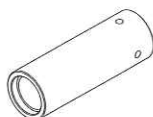
The W15046 Long Barrel Extension extends the length of the barrel by 30" (760mm). This is helpful when the Industrial Tool needs to be mounted further away from the shooting port due to extreme temperature or mounting issues. It can be used on both the Ringblaster® and Western™ Tools, with all slug and shot loads.

Rifled Barrel Extension W15006



The W15006 Rifled Barrel Extension adds a rifled length of 7" (175mm) to the barrel. It is designed to spin the fired projectile; resulting in improved accuracy. **For use on the Ringblaster Tool with Zinc Slug Loads only.**

Full Choke Extension W15007



The W15007 Full Choke Extension adds a length of 3" (75mm) to the barrel. It is designed to tighten the pattern of lead shot loads. It is recommended when firing at distances greater than 40 feet (12 meters). **For use on the Western Tool with Lead Shot Loads only.**



Accessories

Industrial Tool Cover W15062



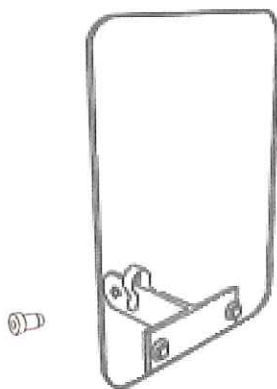
The W15062 Industrial Tool Cover is a vinyl cover designed to keep dirt and dust off the Ringblaster® Tool when mounted in the Industrial Mount. Velcro strips are attached to keep the cover in place.

Furnace Tapping Kit W15051



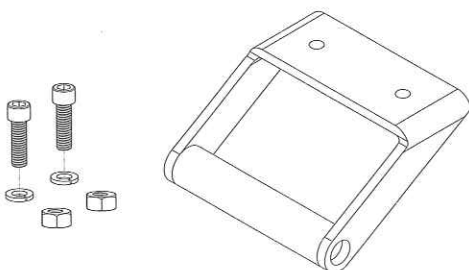
The W15051 Tapping Application Accessory Kit is available to all users requiring positive elevation and traversing locking while firing the Ringblaster Industrial Tool.

Viewing Plate W16009



The W16009 Viewing Plate is an optional accessory that is attached to the back of the Industrial Tool Mount. This clear 11" (279mm) wide by 15" (381mm) high Plexiglas plate provides additional protection to the operator's face while sighting up the tool. **Caution:** This accessory is for an additional level of face protection and is NOT meant as a substitute for the operator wearing a full-face shield.

Industrial Mount Handle Kit W16047

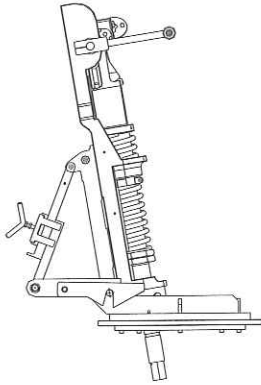


The W16047 Industrial Mount Handle attaches to the two holes on the back end of the Mount. It gives a place where the operator can rest his hand for stability and/or comfort when sighting or operating the Tool.



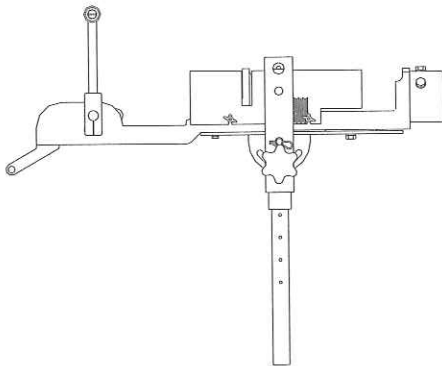
Accessories

Silo Mount W16011



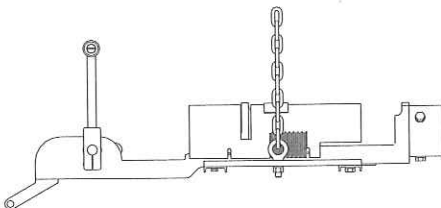
The W16011 Silo Mount is an optional accessory for mounting the Ringblaster® Tool to the top of a silo. It allows incline adjustment from near vertical and 360 degrees of rotation to allow access to cleaning the build up on the inner wall of the silo.

Universal Swivel Mount W16012



The W16012 Swivel Mount is an optional accessory for mounting the Ringblaster Tool that gives a greater range of movement than the standard Industrial Tool Mount. On this Mount, the standard mount assembly is attached to the top of a 1.5" diameter pole that can be anchored in concrete or to a platform. When mounted, the Tool can then be swiveled 360 degrees while also being able to be inclined within a range of 60 degrees upward to 60 degrees downward.

Universal Hanging Mount W16013



The W16013 Hanging Mount is an optional accessory for mounting the Ringblaster Tool when it is important to suspend the Tool from above. On this Mount the standard mount assembly is attached to a plate with a row of holes on each side for attachment of two rings. Two pieces of chain are then hooked to these rings and come together above the Tool to a single piece of chain or cable that can be attached to an over head structure. By selecting the proper set of holes the Tool can be balanced to be generally pointing up, level or down depending on the application.

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