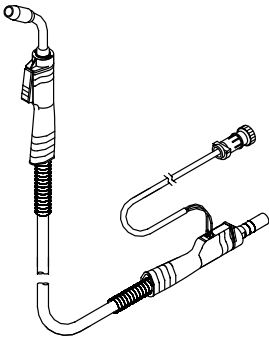



### M-10, M-15, M-25, And M-25M Guns





#### 1. Specifications

 <p>Ref. ST-800 797-C</p>	Air-Cooled Guns For GMAW And FCAW Welding <b>Note:</b> <i>Using gasless flux cored wire reduces gun duty cycle.</i>
	M-10 Feeds .023 To .045 in (0.6 To 1.1 mm) Hard Or Flux Cored Wires Duty Cycle Rating: 100%: 100 A With CO <sub>2</sub> Shielding Gas 60%: 100 A With Mixed Gases
	M-15 Feeds .023 To .045 in (0.6 To 1.1 mm) Hard Or Flux Cored Wires Duty Cycle Rating: 100%: 150 A With CO <sub>2</sub> Shielding Gas; 120 A With Mixed Gases 60%: 200 A With CO <sub>2</sub> Shielding Gas; 150 A With Mixed Gases
	M-25 And M-25M Feed .023 To .045 in (0.6 To 1.1 mm) Hard Or Flux Cored Wires Duty Cycle Rating: 100%: 200 A With CO <sub>2</sub> Shielding Gas; 150 A With Mixed Gases 60%: 300 A With CO <sub>2</sub> Shielding Gas; 200 A With Mixed Gases




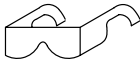

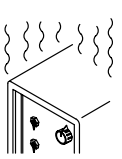

 M-25M is only a replacement gun for MM250MP welding power source

#### 2. Safety Precautions For GMAW Guns

##### A. Symbol Usage

 Means Warning! Watch Out! There are possible hazards with this procedure! The possible hazards are shown in the adjoining symbols.	 <b>Marks a special safety message.</b>
 Means NOTE; not safety related.	
 This group of symbols means Warning! Watch Out! Possible ELECTRIC SHOCK and HOT PARTS hazards. Consult symbols and related instructions below for necessary actions to avoid the hazards.	

##### B. GMAW Gun Hazards

 <b>WARNING</b>	
The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in wire feeder and welding power source manuals. Read and follow all Safety Standards.	
	<b>ELECTRIC SHOCK can kill.</b> <ol style="list-style-type: none"> <li>1. Always wear dry insulating gloves.</li> <li>2. Insulate yourself from work and ground.</li> <li>3. Do not touch live electrode or electrical parts.</li> <li>4. Repair or replace worn, damaged, or cracked gun or cable insulation.</li> <li>5. Turn off welding power source before changing contact tip or gun parts.</li> <li>6. Keep all covers and handle securely in place.</li> </ol>
	<b>HOT SURFACES can burn skin.</b> <ol style="list-style-type: none"> <li>1. Allow gun to cool before touching.</li> <li>2. Do not touch hot metal.</li> <li>3. Protect others from contact with hot metal.</li> </ol>
	<b>FLYING PIECES OF METAL or DIRT can injure eyes.</b> <ol style="list-style-type: none"> <li>1. Wear safety glasses with side shields or face shield.</li> </ol>
	<b>WELDING WIRE can cause puncture wounds.</b> <ol style="list-style-type: none"> <li>1. Keep hands and body away from gun tip when trigger is pressed.</li> </ol>
	<b>OVERUSE can damage gun and void warranty.</b> <ol style="list-style-type: none"> <li>1. Follow rated duty cycle.</li> <li>2. Allow cooling period.</li> <li>3. Reduce current or reduce duty cycle before starting to weld again.</li> </ol>
	<ol style="list-style-type: none"> <li>1. Read and follow these instructions and all safety blocks carefully.</li> <li>2. Have only trained and qualified persons install, operate, or service this unit.</li> <li>3. Call your distributor if you do not understand the directions.</li> <li>4. For WELDING SAFETY and EMF information, read wire feeder and welding power source manuals.</li> </ol>

### 3. Welding Gun Identification

Welding guns can be identified by diamonds on the cable jacket as follows:

M-10: No diamonds

M-15: ◆◆

M-25/M-25M: ◆◆◆

### 4. Installing Gun And Using The Gun Switch

**For M-25M Models Only**

Display On Power Source

Material Weld Timer >DualSchd	Switch A >Memory 1 Switch B Memory 2
--	---

Wire Speed  
(B) ← → + (A)

- 1 Gun Securing Knob
- 2 Gun End

Loosen knob. Insert gun end until it bottoms against drive assembly. Tighten knob.

- 3 Gun Trigger Plug

Insert into receptacle, and tighten threaded collar.

- 4 Friction Terminals

Some applications will require cutting off trigger plug and installing 0.250 female friction terminals onto end of leads.

See wire feeder manual for threading procedure.

- 5 Trigger Switch (All Models)

Press switch to feed energized wire and start gas flow.

- 6 Dual Schedule Mode (M-25M Models)

Select Dual Schedule to set any combination of the 9 available memories.

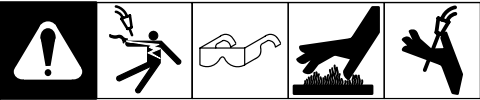
See welding power source for display data.

- 7 Switch A Or B And Increase/Decrease Function (M-25M Models)

Selects program A or B and changes wire feed speed.

Ref. ST-800 921-B / ST-801 031

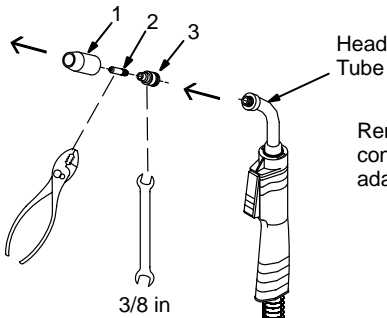
# 5. Removing Nozzle, Contact Tip, And Adapter, Changing Liner, And Cleaning Gun Casing



▲ Turn off welding power source/wire feeder.

- 1 Nozzle
- 2 Contact Tip
- 3 Adapter

☞ Wire size stamped on tip – check and match wire size.



Cut off wire and disconnect gun from feeder.

Blow out gun casing.

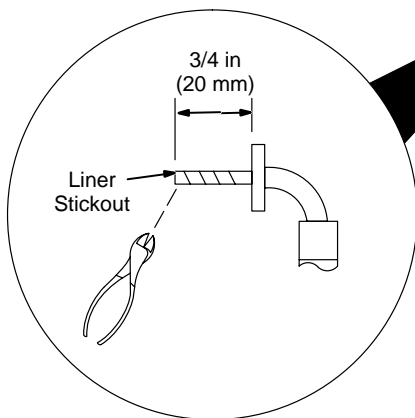
Lay gun cable out straight before installing new liner.

Unscrew and remove liner.

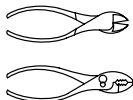
Reassemble gun in reverse order from taking it apart.

Install Liner

☞ Thread wire according to welding power source/wire feeder manual.



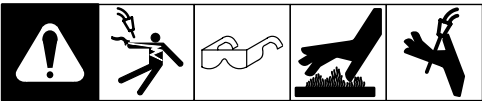
Tools Needed:



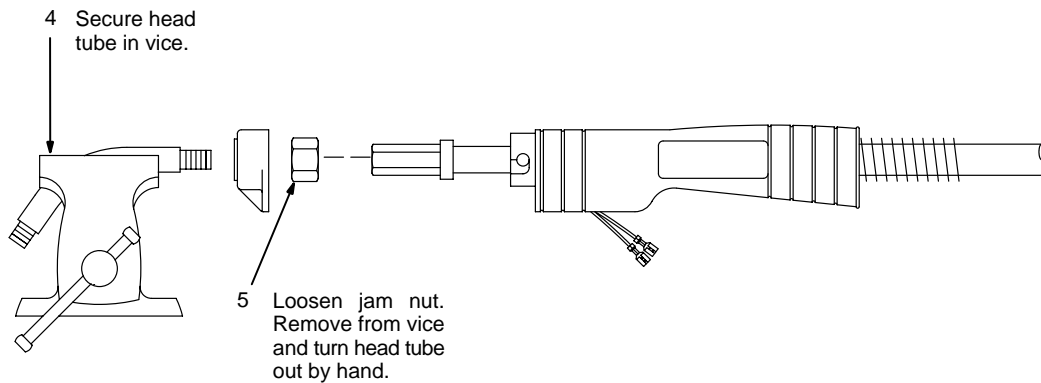
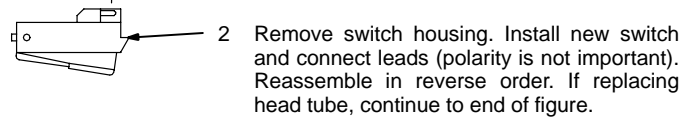
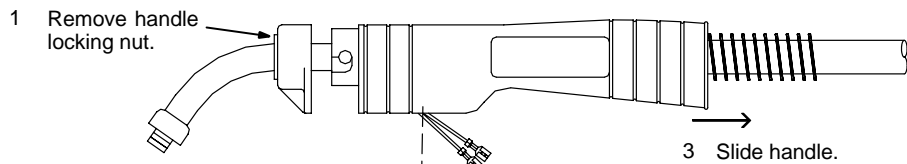
3/8 in (7/16 in for M-25 and M-25M)

Ref. ST-800 797-C

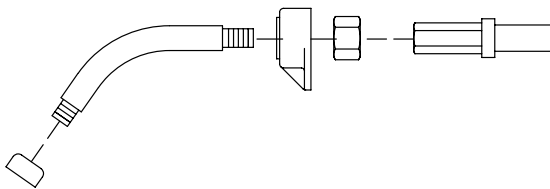
## 6. Replacing Switch And/Or Head Tube



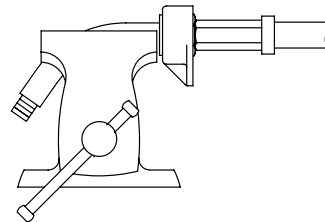
▲ Turn Off welding power source /wire feeder and disconnect gun.



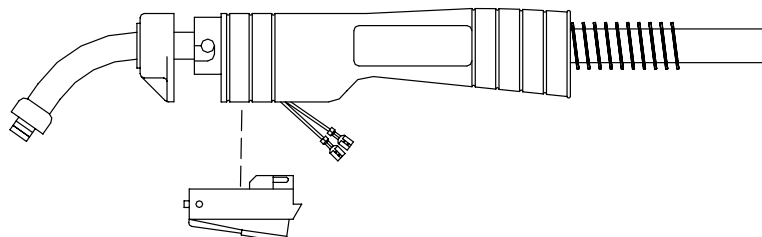
6 For M-25 and M-25M models only, install existing shock washer onto new head tube. Hand-tighten head tube into cable connector.



7 Place head tube in vice and tighten until nuts are tight.



8 Remove from vice. Reposition handle and install switch housing. Secure with handle locking nut.




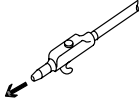
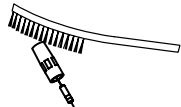

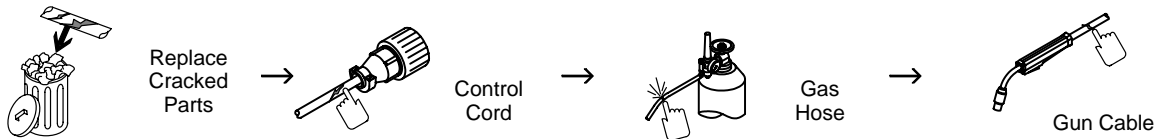
Tools Needed:



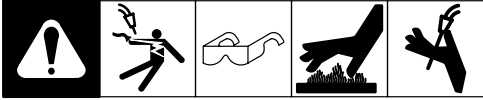
3/4 in

Ref. ST-800 795-C

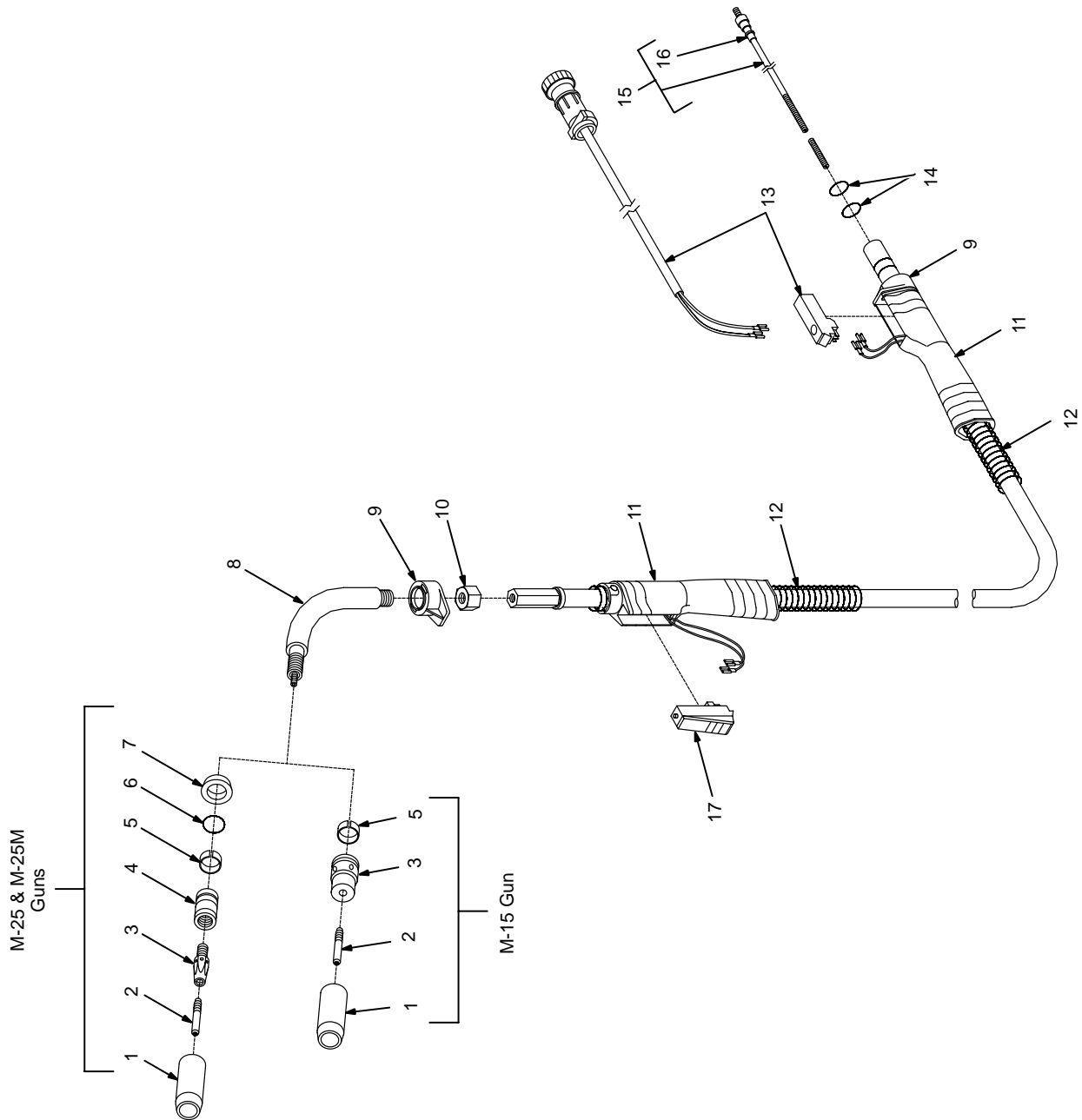
## 7. Routine Maintenance

	<p>▲ Turn Off welding power source and disconnect gun before maintaining.</p>
<b>Each Spool Of Wire</b>	
 <p>Blow Out Gun Casing</p>	 <p>Clean Nozzle And Check Contact Tip</p>
<p> <b>3 Months</b></p>	
	

## 8. Troubleshooting

	
Trouble	Remedy
Wire does not feed; wire is not energized; wire feeds unevenly.	Check contact tip. Check for kinks in gun cable.
	Check gun trigger plug connection at welding power source/wire feeder.
	Check, and if necessary, replace gun trigger switch (see Section 6).
	Check contact tip. Check for kinks in gun cable. Blow out liner and gun casing (see Section 5).
Weld porosity.	Remove weld spatter buildup in nozzle.
	Make sure inner head tube is tight in cable connector.
	Check shielding gas flow/supply.
Wire feeding stops or does not feed properly during welding.	Straighten gun cable and/or replace damaged parts (see Section 6).
	Adjust drive roll pressure (see wire feeder manual).
	Change to proper drive roll groove (see wire feeder manual).
	Readjust hub tension (see wire feeder manual).
	Clean or replace liner if dirty or plugged (see Section 5).
	Replace drive roll or pressure bearing if worn or slipping (see wire feeder manual).

## 9. Parts List



ST-800 792-B

Figure 9-1. M-15, M-25, & M-25M Gun (M-25 Model Illustrated)

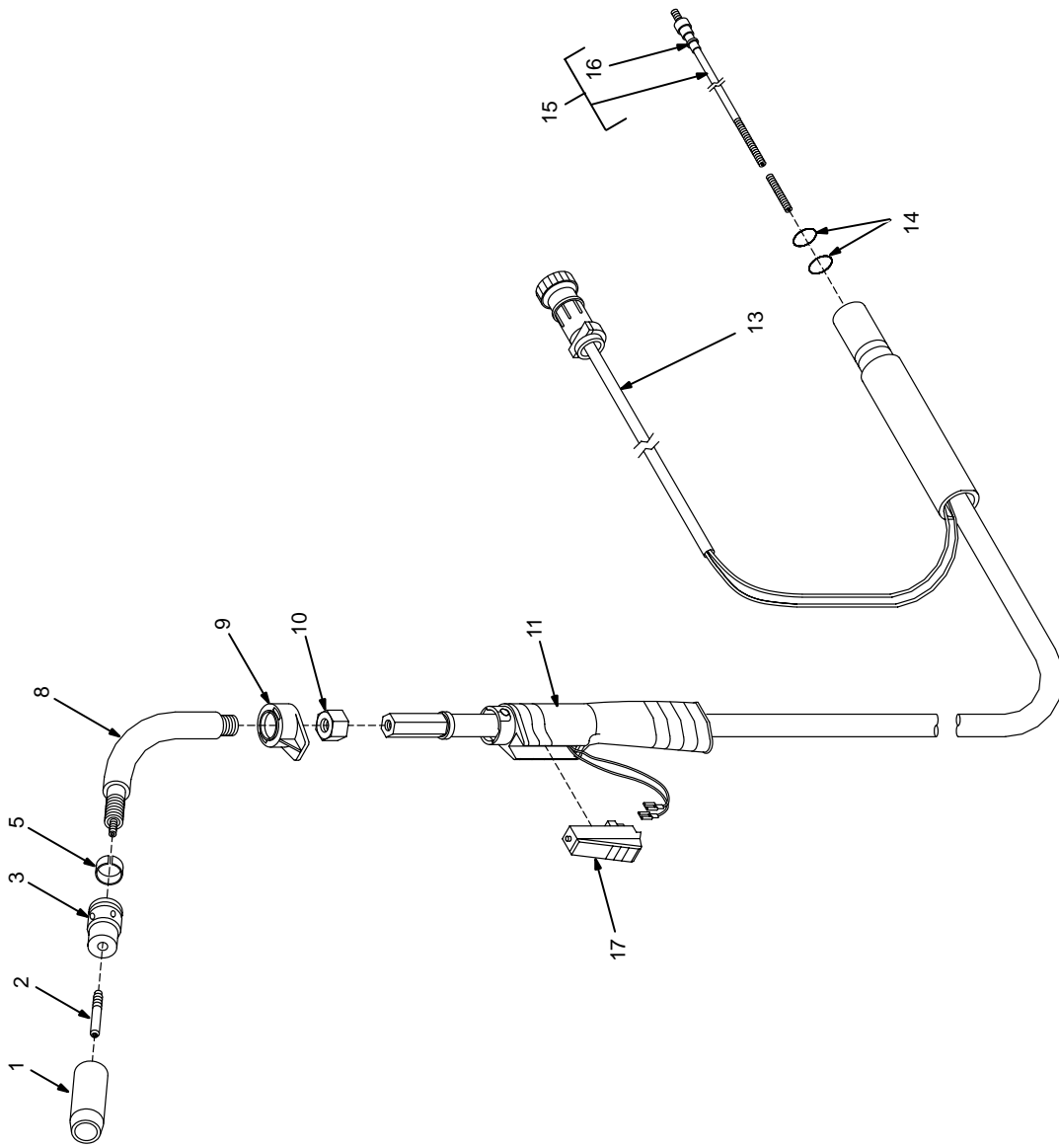


Figure 9-2. M-10 Gun

ST-802 388-A

Item No.	Part No.	Description	Quantity			
			Model			
			M-10	M-15	M-25	M-25M

**Figure 9-1. M-15, M-25, & M-25M Gun**  
**Figure 9-2. M-10 Gun**

...	1	169 715	.. NOZZLE, slip type .500 orf flush	1	...	1		
...	1	169 724	.. NOZZLE, slip type .500 orf .125 recess			1	...	1
...	1	+169 725	.. NOZZLE, slip type .625 orf .125 recess					
...	1	+169 726	.. NOZZLE, slip type .625 orf flush					
...	1	+169 727	.. NOZZLE, slip type .625 orf .125 stickout					
...	2	+087 299	.. TIP, contact scr .023 wire x 1.125					
...	2	+000 067	.. TIP, contact scr .030 wire x 1.125					
...	2	+000 068	.. TIP, contact scr .035 wire x 1.125					
...	2	+000 069	.. TIP, contact scr .045 wire x 1.125					
...	3	169 716	.. ADAPTER, contact tip	1	...	1		
...	3	169 728	.. ADAPTER, contact tip			1	...	1
...	4	169 729	.. ADAPTER, nozzle			1	...	1
...	5	170 470	.. RING, retaining	1	...	1		
...	5	170 467	.. RING, retaining			1	...	1
...	6	170 468	.. O-RING			1	...	1
...	7	169 730	.. WASHER, shock			1	...	1
...	8	169 718	.. TUBE, head	1	...	1		
...	8	169 731	.. TUBE, head			1	...	1
...	9	169 738	.. NUT, locking handle	1	...	2	...	2
...	10	194 524	.. NUT, jam	1	...	1		
...	10	194 523	.. NUT, jam			1	...	1
...	11	169 737	.. HANDLE	1	...	2	...	2
...	11	172 691	.. HANDLE, (gun end)					1
...		172 690	.. SWITCH ASSEMBLY, inc/dec					1
...		602 063	.. SCREW, 4-40 x .250rndhd slt stl					1
...	12	169 741	.. STRAIN RELIEF, cable			2	...	2
...	13	180 433	.. CORD, trigger assembly	1	...	1	...	1
...	13	180 431	.. CORD, trigger assembly					1
...	14	079 974	.. O-RING, .500 ID x .103CS rbr	2	...	2	...	2
...	15	+194 010	.. LINER, monocoil .023/.025 wire x 15ft (consisting of)	1	...	1	...	1
...	15	+194 011	.. LINER, monocoil .030/.035 wire x 15ft (consisting of)	1	...	1	...	1
...	15	+194 012	.. LINER, monocoil .035/.045 wire x 15ft (consisting of)					1
...	16	079 975	.. O-RING, .187 ID x .103CS rbr	1	...	1	...	1
...	17	196 255	.. SWITCH, trigger	1	...	1	...	1

+OPTIONAL

BE SURE TO PROVIDE MODEL AND STYLE NUMBER WHEN ORDERING REPLACEMENT PARTS.