

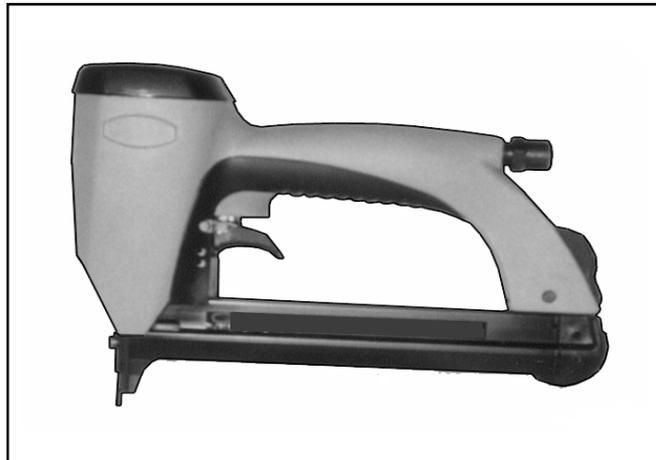
# U.S. GENERAL

## AIR STAPLER

1/4" CROWN

Model 54425

### ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011  
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For technical questions, please call 1-800-444-3353.

## PRODUCT SPECIFICATIONS

| Item                       | Description             |
|----------------------------|-------------------------|
| Staple Gauge Size          | 18 Gauge                |
| Staple Capacity Size       | 1/2" to 1"              |
| Staple Crown Size          | 1/4"                    |
| Operating PSI              | 60 to 115 PSI           |
| Maximum Operating Pressure | 130 PSI                 |
| CFM Required               | 4 to 6 CFM @ 90 PSI     |
| Magazine Capacity          | 110 Staples             |
| Load Style                 | Bottom Loading Magazine |
| Air Inlet Size             | 1/4"-18 NPT             |
| Inlet Screen               | 20-Mesh or Finer        |
| Safety Trigger Type        | Push-On Contact Arm     |
| Dimensions                 | 10" x 7-1/4" x 2-1/4"   |
| Weight                     | 2.9 Pounds              |

### SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

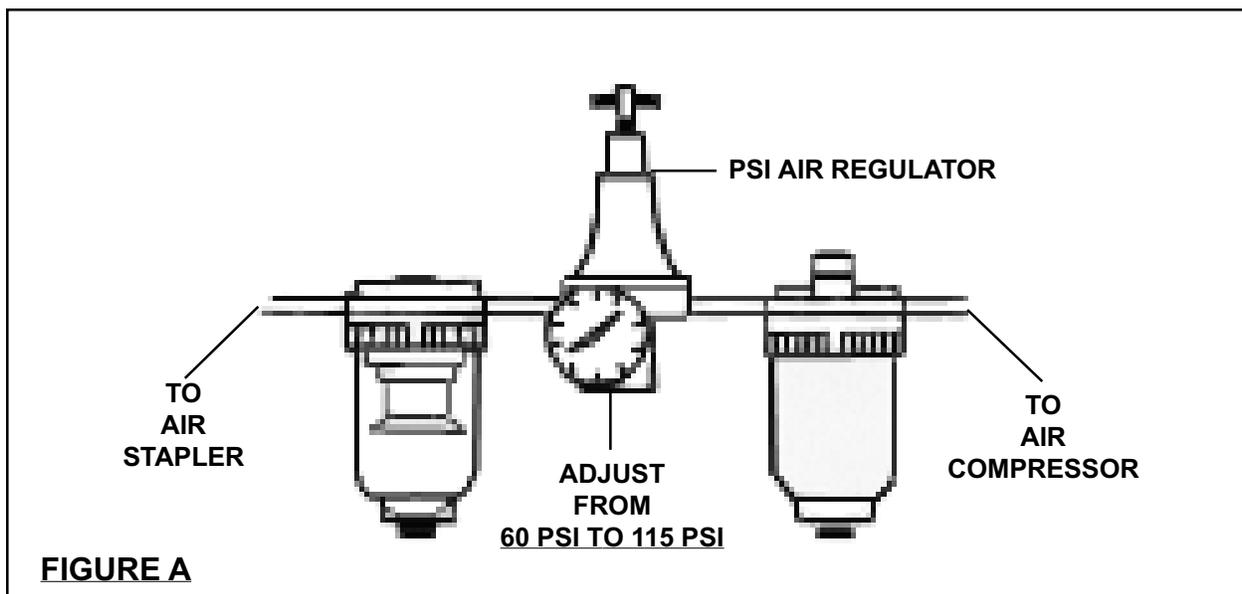
### GENERAL SAFETY WARNINGS AND PRECAUTIONS

1. **KEEP WORK AREA CLEAN AND DRY.** Cluttered, damp, or wet work areas invite injuries.
2. **KEEP CHILDREN AWAY FROM WORK AREA.** Do not allow children to handle this product.
3. **STORE IDLE EQUIPMENT.** When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment, and keep out of reach of children.
4. **DO NOT USE THIS PRODUCT IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this product.

5. **USE EYE AND HEARING PROTECTION.** Wear an ANSI approved, safety impact, full face shield and hearing protectors when using this product. An ANSI approved, safety impact, full face shield and hearing protectors are available from Harbor Freight Tools.
6. **DRESS SAFELY.** Do not wear loose clothing or jewelry, as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long-sleeve shirt, roll sleeves up above elbows.
7. **DO NOT OVERREACH.** Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.
8. **INDUSTRIAL APPLICATIONS MUST FOLLOW OSHA REQUIREMENTS.**
9. **STAY ALERT.** Watch what you are doing at all times. Use common sense. Do not use this product when you are tired or distracted from the job at hand.
10. **CHECK FOR DAMAGED PARTS.** Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace or repair damaged or worn parts immediately.
11. **REPLACEMENT PARTS AND ACCESSORIES:** When servicing, use only identical replacement parts. Only use accessories intended for use with this product. Approved accessories are available from Harbor Freight Tools.
12. **MAINTAIN THIS PRODUCT WITH CARE.** Keep this product clean and dry for better and safer performance. For your safety, service and maintenance should be performed regularly by a qualified technician.
13. **USE THE RIGHT TOOL FOR THE JOB.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.
14. **WARNING:** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors, which cannot be built into this product, but must be supplied by the operator.

## SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS

1. **IMPORTANT CONSUMER INFORMATION:** This Air Stapler is equipped with a **Contact Trip Trigger**. This Trigger mechanism is designed primarily for high volume work where exact placement of the Staple is not critical. By holding the Trigger, the Air Stapler will fire each time the nosepiece contacts the wood. A characteristic of this design is the tendency to “double-fire” if used to shoot one Staple at a time. This can be caused by the recoil produced and lingering finger pressure on the Trigger. To avoid this occurrence, hold the Air Stapler firmly against the wood and give the Trigger one quick squeeze. A single shot Air Stapler, equipped with a sequential Trip Trigger, may be considered if high volume, rapid stapling is not required. This Air Stapler should give the owner long, dependable service. However, failure to understand its operating characteristics, or careless use, can result in property damage or serious personal injury.
2. **USE ONLY CLEAN, DRY, REGULATED, COMPRESSED AIR AT BETWEEN 60 TO 115 PSI.** Never use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.
3. **NOTE:** An air compressor is not provided. You will need an air compressor with a minimum rating of **4 to 6 CFM delivery at 90 PSI.**
4. **WHEN CONNECTING TO THE AIR SUPPLY:** Prior to each use, if an automatic oiler is not used, add two drops of Air Tool Oil (part #95) into the Air Plug (part #33) of the Air Stapler. Attach the air compressor hose to the Air Plug. Turn on the air compressor, and set the regulator to the recommended **60 to 115 PSI** for this tool. (See Figure A.)



5. **ALWAYS DISCONNECT THE AIR SUPPLY HOSE FROM THE AIR STAPLER BEFORE LOADING THE STAPLES TO PREVENT A STAPLE FROM BEING ACCIDENTALLY FIRED DURING CONNECTION.** The Air Stapler's driving mechanism may cycle when the tool is connected to the air supply. When not in use, disconnect from air supply and remove all Staples from the Moving Rail (part #76) of the Air Stapler.
6. **DO NOT LOAD STAPLES WITH THE TRIGGER (part #31) OR SAFETY ELEMENT (part #55) DEPRESSED.** Doing so may cause accidental firing of a Staple.
7. **ALWAYS KEEP YOUR FINGER OFF THE TRIGGER (part #31) WHEN NOT DRIVING STAPLES.** Never carry the Air Stapler with your finger on the Trigger, as the tool will fire a Staple if the Safety Element (part #55) is bumped while the Trigger is depressed.
8. **ALWAYS ASSUME THE AIR STAPLER IS LOADED.** Keep the tool pointed away from yourself and others at all times.
9. **NEVER ATTEMPT TO DRIVE A STAPLE INTO MATERIAL THAT IS TOO HARD, AT TOO STEEP AN ANGLE, OR NEAR THE EDGE OF THE WORKPIECE.** The Stapler may ricochet, causing personal injury to you or others nearby.
10. **GRIP THE AIR STAPLER FIRMLY WITH BOTH HANDS TO MAINTAIN CONTROL, WHILE ALLOWING THE TOOL TO SLIGHTLY RECOIL AWAY FROM THE WORKPIECE AS A STAPLE IS DRIVEN.**
11. **MAKE SURE ALL ADJUSTING WRENCHES ARE REMOVED FROM THE AIR STAPLER BEFORE USING.**
12. **MAINTAIN A SAFE WORKING ENVIRONMENT.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use the Air Stapler in areas near flammable chemicals, dusts, and vapors.
13. **ALWAYS DISCONNECT THE AIR STAPLER FROM ITS AIR SUPPLY** before performing any maintenance or cleaning of the tool, leaving the work area, moving the tool to another location, or handing the tool to another person.

## UNPACKING

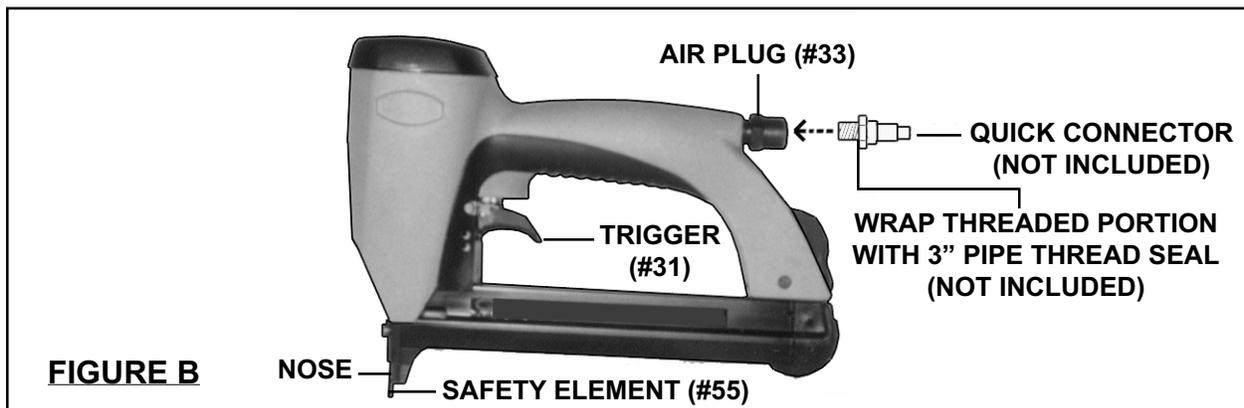
When unpacking, check to make sure all the parts shown on the **Parts List on page 9** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

## ASSEMBLY INSTRUCTIONS

**NOTE:** For additional references to the parts listed on the following pages, refer to the **Assembly Diagram on page 10.**

### ***To Attach A Quick Connector To The Air Stapler:***

1. The Air Stapler requires the attachment of a 1/4"-18 NPT Quick Connector (not included) to the Air Plug (part #33) of the Air Stapler. To do so, wrap the threaded portion of the Quick Connector with about 3" of pipe thread seal tape (not included). Then, wrench tighten the Quick Connector into the Air Plug **(See Figure B.)**

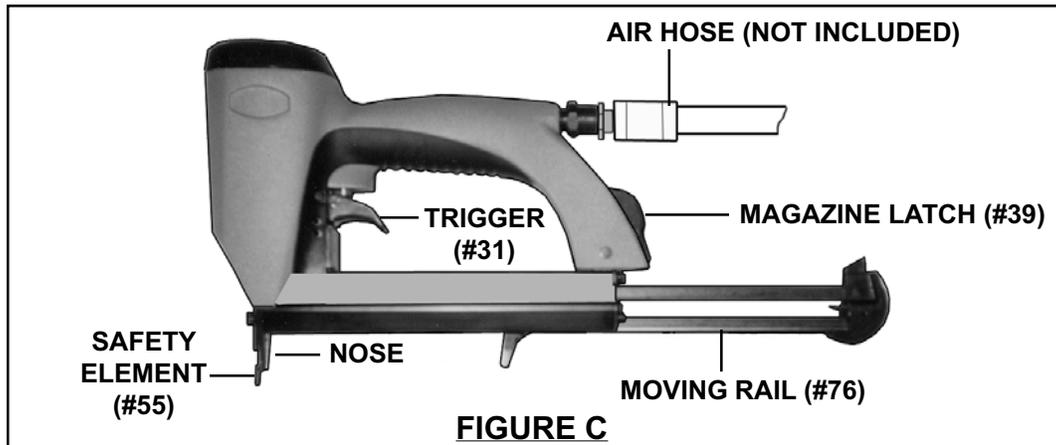


## OPERATING INSTRUCTIONS

### ***To Prepare The Air Stapler For Use:***

1. **CAUTION:** Make sure to keep the Air Stapler pointed away from you and others at all times. Always disconnect the Air Stapler to its air supply *before* loading nails. Do not load nails with the Trigger (part #31) or Safety Element (part #55) depressed. (See Figure C, next page.)
2. Lift the Magazine Latch (part #39) up, and pull the Moving Rail (part #76) all the way to the rear until it latches. (See Figure C.)
3. Orient a strip of Staples with the points down, and drop the strip of Staples into the Moving Rail (part #76). (See Figure C.)

4. Slide the strip of Staples forward in the Moving Rail (part #76). **NOTE:** The Moving Rail will hold up to 110, 18 gauge, Staples. **(See Figure C.)**
5. Push the Moving Rail (part #76) forward, and allow the Magazine Latch (part #39) to lock the Moving Rail in place. **(See Figure C.)**



#### **To Use The Air Stapler:**

1. The Air Stapler can be used in *two* different ways.
2. The first way to use the Air Stapler is to place the Safety Element (part #55) on the working surface. Lightly push down on the Air Stapler until the Safety Element is depressed. Then, depress the Trigger (part #31) to drive a Staple. This “trigger fire” method provides the most accurate Staple placement. **(See Figures B, and C.)**
3. The second way to use the Air Stapler is to depress the Trigger (part #31), and repeatedly impact the Safety Element (part #55) on the work surface in order to repeatedly drive the Staples. The Air Stapler will drive one Staple each time the Safety Element is impacted on the work surface. This “quick fire” method allows very fast, repetitive Staple placement. **(See Figures B, and C.)**

#### **To Remove A Jammed Staple:**

1. **CAUTION:** Make sure to disconnect the Air Stapler from its air supply before performing this procedure.
2. Lift up on the Magazine Latch (part #39) and pull the Moving Rail (part #76) all the way to the rear until it latches. Then, remove all of the Staples from the Moving Rail). **(See Figure C.)**

3. Use a pair of needle nose pliers and/or a screwdriver (both not included) to remove the jammed Staple from the lower portion of the Nose of the Air Stapler. **(See Figure C.)**

## INSPECTION, MAINTENANCE, AND CLEANING

1. **CAUTION: Always disconnect the Air Stapler from its compressed air supply source before performing any inspection, maintenance, or cleaning.**
2. **BEFORE EACH USE**, inspect the general condition of the Air Stapler. Check for loose screws, misalignment or binding of moving parts, jammed Staples, cracked or broken parts, damaged air supply hose, and any other condition that may affect the safe operation of this tool. If abnormal noise or vibration occurs, immediately disconnect the Air Stapler from its compressed air supply source and have the problem corrected before further use.  
**Do not use damaged equipment.**
3. **PERIODICALLY**, use a premium quality, lightweight oil to lubricate all moving parts.
4. When necessary, wipe with a damp cloth, using a mild detergent.
5. When storing, keep the Air Stapler covered with a clean cloth.

### PLEASE READ THE FOLLOWING CAREFULLY

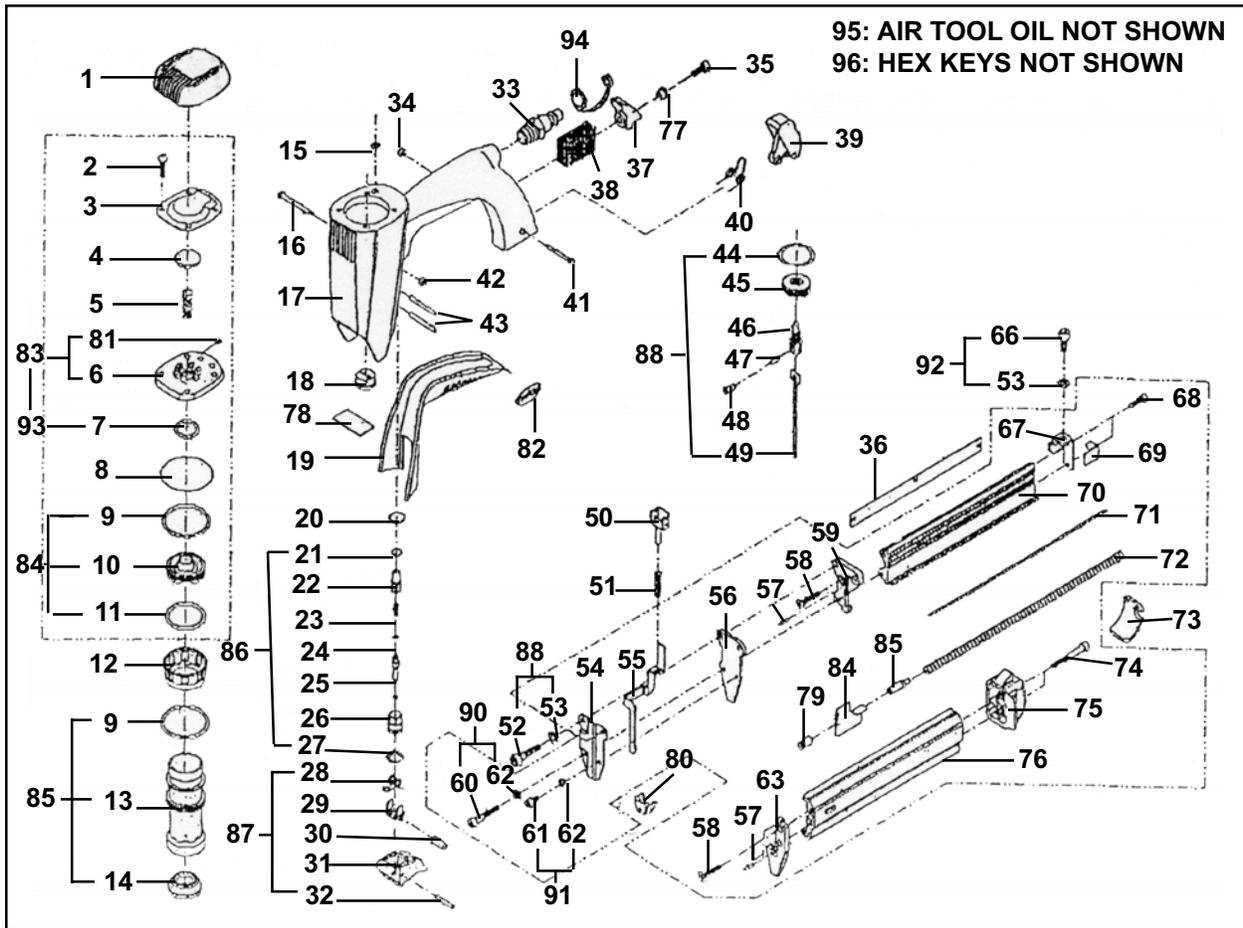
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

## PARTS LIST

| Part # | Description          | Part # | Description            | Part # | Description                     |
|--------|----------------------|--------|------------------------|--------|---------------------------------|
| 1      | Cylinder Cap Cover   | 33     | Air Plug               | 65     | Spring Holder                   |
| 2      | Screw                | 34     | Pin Retainer           | 66     | Screw                           |
| 3      | Exhaust Deflector    | 35     | Screw                  | 67     | Magazine Support                |
| 4      | Air Seal             | 36     | Warning Decal          | 68     | Nylon Screw                     |
| 5      | Spring               | 37     | Exhaust Cover          | 69     | Magazine Stop                   |
| 6      | Cylinder Cap         | 38     | Muffler                | 70     | Fixed Rail                      |
| 7      | O-Ring               | 39     | Magazine Latch         | 71     | Wear Strip                      |
| 8      | O-Ring               | 40     | Latch Spring           | 72     | Feeder Spring                   |
| 9      | O-Ring               | 41     | Latch Pin              | 73     | Mag. Heel Cushion               |
| 10     | Firing Valve Piston  | 42     | Pin Retainer           | 74     | Screw                           |
| 11     | O-Ring               | 43     | Spring Pin             | 75     | Latch Plate                     |
| 12     | Sleeve Retainer      | 44     | O-Ring                 | 76     | Moving Rail                     |
| 13     | Cylinder Sleeve      | 45     | Main Piston            | 77     | Spacer                          |
| 14     | Piston Stop          | 46     | Piston Driver Coupling | 78     | Serial Label                    |
| 15     | O-Ring               | 47     | Inner Spring Pin       | 79     | Stopper                         |
| 16     | Trigger Pin          | 48     | Outer Spring Pin       | 80     | Grip                            |
| 17     | Main Body            | 49     | Driver Blade           | 81     | Screw                           |
| 18     | Driver Bushing       | 50     | Safety Guide           | 82     | Logo Plate                      |
| 19     | Handle Grip          | 51     | Safety Spring          | 83     | Cylinder Cap Assy.              |
| 20     | O-Ring               | 52     | Screw                  | 84     | Head Valve Piston Set           |
| 21     | O-Ring               | 53     | Washer                 | 85     | Cylinder Set                    |
| 22     | Upper Remote Housing | 54     | Safety Cover           | 86     | Trigger Valve Set               |
| 23     | Conical Spring       | 55     | Safety Element         | 87     | Trigger Set                     |
| 24     | O-Ring               | 56     | Front Plate            | 88     | Piston Set                      |
| 25     | Remote Core          | 57     | Spring Pin             | 89     | Screw                           |
| 26     | Remote Housing       | 58     | Screw                  | 90     | Screw Set                       |
| 27     | O-Ring               | 59     | Fixed Backplate        | 91     | Screw                           |
| 28     | Extension Spring Set | 60     | Screw                  | 92     | Screw                           |
| 29     | Trigger Guide        | 61     | Screw                  | 93     | Cylinder Cap Assy.              |
| 30     | Pin Bushing          | 62     | Washer                 | 94     | Duster                          |
| 31     | Trigger              | 63     | Moving Backplate       | 95     | Air Tool Oil (not shown)        |
| 32     | Pin                  | 64     | Feeder Shoe            | 96     | Hex Keys<br>(Qty. 2, not shown) |

**NOTE:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

# ASSEMBLY DIAGRAM



**NOTE:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.