

# PNEUMATIC C-RING TOOL HC715 / HC716



### HC715 / HC716 WARNINGS!

- **⇒** Always read tool manual before operating tool.
- ⇒ Always wear safety glasses when operating or while in the area where a tool is being used.
- ⇒ When test cycling tool always point tool away from work piece and away from personnel.
- ⇒ Operate tool in an unobstructed area.
- Disconnect air supply before maintenance or adjustment and service.
- ⇒ Use only clean, dry compressed air, not to exceed 100 P.S.I. (7 bar)

- ⇒ Air consumption for HC715 / HC716 is 8 SCFM
  @ 100 PSI for 50 cycles / rings per minute.
- Do not use bottled gases like, oxygen, hydrogen, carbon dioxide, acetylene or other combustible gasses.
- ⇒ Tool must be operated using a quick disconnect or fitting that allows all compressed air to be discharged from the tool when disconnected.



The employer or user must insure the use of eye protection during tool use. All eye protection shall conform to ANSI Z87.1-2003 and provide frontal and side protection; all personnel located in the work area are required to use eye protection during loading, service or operation of the tool. Eye protection is needed to guard against possible flying particles and debris that could cause severe eye injury.

#### **WARNING! TOOL OPERATION**

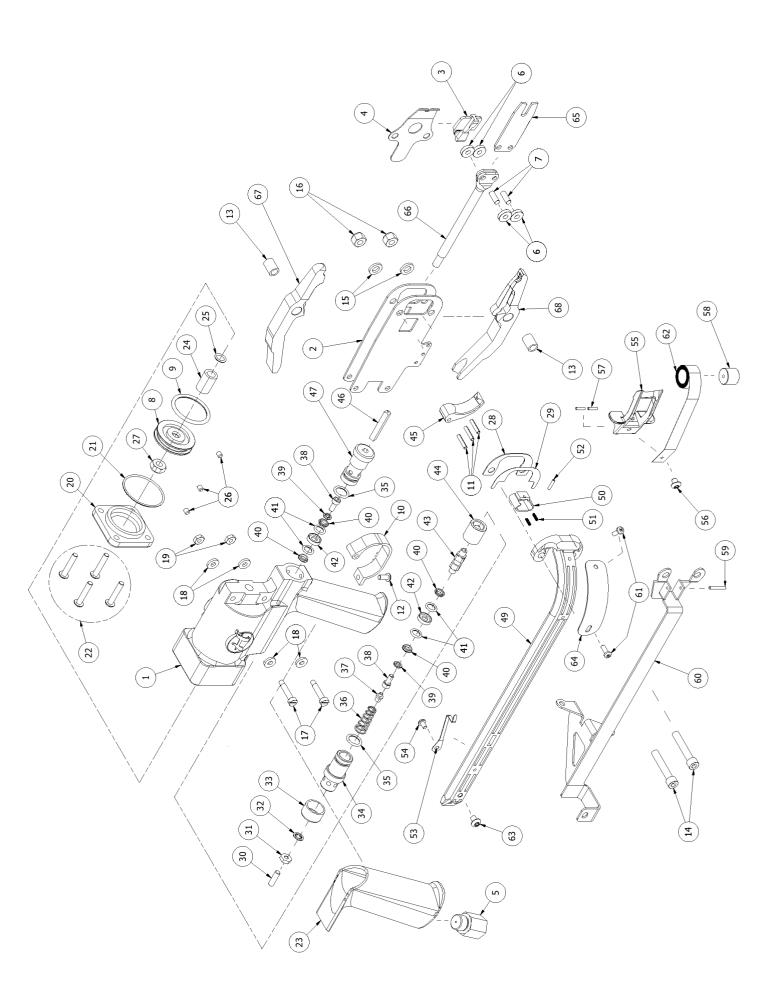
- **⇒** Always handle tool with care.
- ⇒ Never engage in horseplay.
- ⇒ Never pull trigger unless tool is pointed toward the work piece.
- ⇒ Keep the hands and bodies of the operator and all other personnel away from the tool jaws at all times.

#### WARNING! LOADING TOOL

- ⇒ Never place hands or other body parts in the tool jaws while loading tool. Never point tool toward anyone.
- ⇒ Never actuate tool while loading as accidental injury may occur.

This tool is compliant with or conforms to the following: ANSI, SNT-101-2002

 $\epsilon$ 



# HC715 / HC716 PARTS LIST

| ITEM NO. | PART NO.    | DESCRIPTION             | QTY. |
|----------|-------------|-------------------------|------|
| 1        | HC5075-001  | Housing                 | 1    |
| 2        | HC5075-005  | Side Plate              | 2    |
| 3        | HC5075-006  | Latch                   | 1    |
| 4        | HC5075-007  | Latch Spring            | 1    |
| 5        | HC5075-008  | Air Inlet Bushing       | 1    |
| 6        | HC5075-010  | Roller                  | 4    |
| 7        | HC5075-011  | Roller Pin              | 2    |
| 8        | HC5075-012  | Piston                  | 1    |
| 9        | HC5075-013  | Piston O-Ring           | 1    |
| 10       | HC5075-015  | Trigger Guard           | 1    |
| 11       | HC5075-016  | Trigger Group Pin       | 3    |
| 12       | HC5075-017  | Trigger Guard Screw     | 1    |
| 13       | HC5075-020  | Jaw Bushing             | 2    |
| 14       | HC5075-021  | Jaw Bolt                | 2    |
| 15       | HC5075-022  | Jaw Bolt Washer         | 2    |
| 16       | HC5075-023  | Jaw Bolt Nyloc          | 2    |
| 17       | HC5075-024  | Side Plate Bolt         | 2    |
| 18       | HC5075-025  | Side Plate Bolt Washer  | 4    |
| 19       | HC5075-026  | Side Plate Bolt Locknut | 2    |
| 20       | HC5075-042  | End Cap                 | 1    |
| 21       | HC5075-043  | End Cap O-Ring          |      |
| 22       | HC5075-044  | End Cap Screw           | 4    |
| 23       | HC5075-048  | Rubber Handgrip         |      |
| 24       | HC5075-049  | Piston Rod Bushing      |      |
| 25       | HC1511-012  | O-Ring                  |      |
| 26       | HC5075-053  | Set Screw               |      |
| 27       | HC5075-054  | Piston Rod Locknut      |      |
| 28       | HC5075-055A | .030 Shim               |      |
| 29       | HC5075-055C | .010 Shim               |      |
| 30       | HC1511-001  | Set Screw               |      |
| 31       | HC1511-002  | Jam Nut                 |      |
| 32       | HC1511-003  | Lock Washer             | 1    |

| ITEM NO. | PART NO.   | DESCRIPTION             | QTY. |
|----------|------------|-------------------------|------|
| 33       | HC1511-004 | Air Defelector          | 1    |
| 34       | HC1511-005 | Rear Valve Seat         | 1    |
| 35       | HC1511-006 | O-Ring                  |      |
| 36       | HC1511-007 | Throttle Valve Spring   | 1    |
| 37       | HC1511-008 | Throttle Spring Locator | 1    |
| 38       | HC1511-009 | SOC. HD. Cap Screw      | 2    |
| 39       | HC1511-010 | Throttle Valve Washer   | 2    |
| 40       | HC1511-011 | O-Ring End Support      | 4    |
| 41       | HC1511-012 | O-Ring                  | 4    |
| 42       | HC1511-013 | O-Ring Center Support   | 2    |
| 43       | HC1511-014 | Throttle Valve Spacer   | 1    |
| 44       | HC1511-015 | Throttle Valve Bushing  | 1    |
| 45       | HC1511-044 | Trigger                 | 1    |
| 46       | HC1511-047 | Throttle Stem           | 1    |
| 47       | HC1511-048 | Front Valve Seat        | 1    |
| 48       | HC1511-075 | CE Marker Label         | 1    |
| 49       | HC750-027  | Magazine                | 1    |
| 50       | HC750-028  | Magazine Shoe           |      |
| 51       | HC750-029  | Magazine Shoe Spring    |      |
| 52       | HC750-030  | Magazine Shoe Pin       |      |
| 53       | HC750-031  | Anti-Backup Clip        |      |
| 54       | HC750-032  | Anti-Backup Screw       | 1    |
| 55       | HC750-033  | Pusher                  | 1    |
| 56       | HC750-034  | Pusher Spring Screw     |      |
| 57       | HC750-035  | Pusher Pin              |      |
| 58       | HC750-036  | Spring Spool            |      |
| 59       | HC750-037  | Spring Spool Pin        | 1    |
| 60       | HC750-040  | Pusher Guide Rail       |      |
| 61       | HC750-041  | Magazine Guard Screw    |      |
| 62       | HC750-045  | Pusher Spring           |      |
| 63       | HC750-046  | Magazine Screw Rear     |      |
| 64       | HC750-052  | Magazine Guard          | 1    |

## **HC715 ONLY PARTS**

| ITE | EM NO. | PART NO.  | DESCRIPTION  | QTY. |
|-----|--------|-----------|--------------|------|
|     | 65     | HC715-008 | Feeder Blade | 1    |
|     | 66     | HC15G-009 | Piston Rod   | 1    |
|     | 67     | HC715-018 | Upper Jaw    | 1    |
|     | 68     | HC715-019 | Lower Jaw    | 1    |

## **HC716 ONLY PARTS**

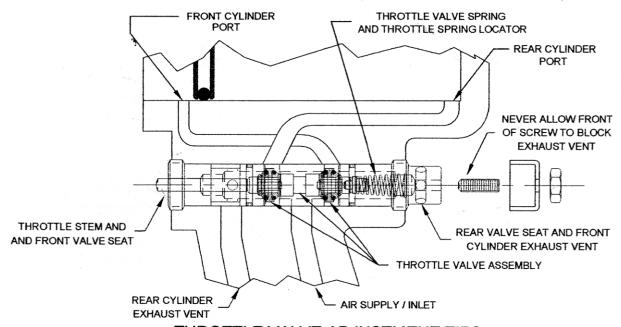
| ITEM NO. | PART NO.  | DESCRIPTION  | QTY. |
|----------|-----------|--------------|------|
| 65       | HC716-008 | Feeder Blade | 1    |
| 66       | HC16G-009 | Piston Rod   | 1    |
| 67       | HC716-018 | Upper Jaw    | 1    |
| 68       | HC716-019 | Lower Jaw    | 1    |

# **HC716 AVAILABLE RINGS**

| PART NO. | MATERIAL   | POINT TYPE | WIRE GAUGE | PER CARTON | RING SIZE OPEN/CLOSED |
|----------|------------|------------|------------|------------|-----------------------|
| 16G110   | GALVANIZED | SHARP      | 16         | 11,000     | 3/4" / 3/16"          |
| 16G110B  | GALVANIZED | BLUNT      | 16         | 11,000     | 3/4" / 3/16"          |
| 16GF110  | GALFAN     | SHARP      | 16         | 11,000     | 3/4" / 3/16"          |
| 16SS110  | STAINLESS  | SHARP      | 16         | 11,000     | 3/4" / 3/16"          |
| 16AL110  | ALUMINUM   | SHARP      | 16         | 11,000     | 3/4" / 3/16"          |

# **HC715 AVAILABLE RINGS**

| PART NO. | MATERIAL   | POINT TYPE | WIRE GAUGE | PER CARTON | RING SIZE OPEN/CLOSED |
|----------|------------|------------|------------|------------|-----------------------|
| 15100    | BRIGHT     | SHARP      | 15         | 10,000     | 3/4" / 5/16"          |
| 15100B   | BRIGHT     | BLUNT      | 15         | 10,000     | 3/4" / 5/16"          |
| 15G100   | GALVANIZED | SHARP      | 15         | 10,000     | 3/4" / 5/16"          |
| 15G100B  | GALVANIZED | BLUNT      | 15         | 10,000     | 3/4" / 5/16"          |
| 15SS100  | STAINLESS  | SHARP      | 15         | 10,000     | 3/4" / 5/16"          |
| 15SS100B | STAINLESS  | BLUNT      | 15         | 10,000     | 3/4" / 5/16"          |



THROTTLE VALVE ADJUSTMENT TIPS.

Refer to tool diagram for valve component orientation.

To remove the front valve seat, remove all hog rings from the magazine and jaws. Next remove all of the following parts: both jaw bolt nuts (item #16), jaw bolt washers (item #15), latch spring (item #4), latch (item #3), jaw bolts (item #14), and magazine shims (item #28 & #29) if applicable. Next remove the jaws: on HC516 (item #51 & #52), on HC715 & HC716 (item #67 & #68). Please note that the jaw bushings (item #13) will come out with the jaws. Next remove the trigger guard screw (item #12). Next remove the side plate bolt locknut (item #19), side plate bolts washers (item #18), and side plate bolts (item #17). Next remove the following parts as a single assembly and set aside: side plates (item #2), trigger guard (item #10), trigger (item #45), and trigger group pins (item #11). Finally set aside the set of four rollers (item #6).

To remove the throttle valve assembly, or adjust valve, follow the directions below. Loosen front set screw, unscrew valve seat and stem using a 3/16" open end wrench. To remove rear valve seat, first remove air deflector then loosen rear set screw. Now unscrew rear seat using 3/32" dia. pin in vent holes. To remove throttle valve assembly you will need 2 hex key wrenches to fit screws (item #38). Use caution as the valve components are very small. While the valve is disassembled replace all O-rings. Reverse order to assemble trigger valve.

Presetting Valve: With throttle valve assembly install rear valve seat and turn completely in until it stops. Now turn rear valve seat out 1-1/2 turns. Now place throttle stem into front valve seat and install into valve bore using a 3/16" open end wrench. Now turn stem and front valve seat in until it stops. Now turn front valve seat out 1-1/2 turns and preset is complete. Now replace all items in reverse order. Do not attach trigger guard screw at this time.

Valve Adjustment: First connect air supply to air inlet. To stop leak at bottom of handle / rear cylinder exhaust vent, turn front valve seat in slowly until leak stops. Now pull trigger fully back and check for leak at rear valve seat / front cylinder exhaust vent. If leaking, keep trigger pulled back and turn in rear valve seat slowly until leak stops. Now tighten front and rear set screws sung but not over tightened. Install trigger guard and screw to complete assembly.

## **TROUBLESHOOTING**

#### **Ring Does Not Form Correctly:**

- √ Check air pressure (90-100 PSI)
- ✓ A 3/8" (9.5mm) air line should be used.
- ✓ Check for foreign debris in the jaw area, especially in the area between the side plates and rollers.
- ✓ The jaws may be worn from extended use. Check the land between the receiving grooves on the jaws. If the land area is worn excessively, replacing the jaws is recommended.
- √ When the tool is used in corrosive applications, light oil should be applied on a regular basis to the jaws, bushings and rollers.
- √ When the ring "teardrops", the latch is not backing the ring up properly. Replace the latch or latch spring to provide correct ring shape.

#### **General Care:**

✓ Keeping the tool clean is essential for extending the tool life. Care should be taken to prevent the tool jaws and magazine from contacting dirt and sand. The abrasive effect of sand will greatly reduce the jaw life.

#### **Feeding Problems:**

- ✓ If the rings do not feed smoothly down the magazine, check the pusher spring for proper tension. If the magazine is covered with dirt and debris, clean the magazine.
- ✓ When rings feed properly across the magazine, but do not feed into the jaws without spitting out of the magazine side of the tool, remove all rings from magazine. Pull pusher back and place on hook. Now cycle the tool to remove ring from jaws. Now disconnect the air supply. With a blunt object, push the feeder blade rearward about 2 inches (51mm). This will allow you to check for jaw clearance between the side plates. The jaws should be easily moved by hand. If there is resistance, tighten jaw bolt and nut tension tightened to 40 in. lb. (3.3 ft. lb.)
- ✓ If the pusher fingers show signs of spreading, this will cause the last few rings to not feed properly into the jaws. You may try to bend the fingers of the pusher back to original shape or replace with a new pusher at this time.

# **CUSTOMER SERVICE**



Congratulations!!! You have just purchased the finest pneumatic hog ring tool available worldwide. Your tool was proudly engineered and built without compromise, in the U.S.A.!!

For additional information on the HC715 / HC716, contact King-Hughes Fasteners, Inc. using the following numbers:

Phone: 1-810-721-0300 or Toll Free: 1-800-779-3762

Factory service on your tool can normally be completed within 48 hours. A recommended spare parts list is available from King-Hughes Fasteners, Inc. Your tool has been calibrated by the factory. If you are experiencing any problems, contact the King-Hughes Customer Service Department.

### Tips on using the HC715 / HC716 tool:

Because of tool design, the trigger *must* be pulled completely to the rear to insure positive valve function. If the tool is short cycled, the feeding system will most likely jam.

If a jam occurs, pull the pusher back and remove remaining rings from the magazine. Point the tool away from yourself and others, and cycle the tool slowly. This should push the jammed ring(s) from the iaw mechanism.

If this does not clear the tool. disconnect the air supply, lay the tool on a clean flat surface and remove the top jaw nut and bolt. Remove bushing and jaw. Jammed ring(s) are now exposed and can be removed from the tool. Reassemble in reverse order.

Replace worn or damaged parts to keep tool in top operating condition.

Always use *genuine*, King-Hughes Hog Rings in the HC715 / HC716. King-Hughes rings are manufactured to precise tolerances to ensure smooth operation. Competitor's rings may be of inferior design causing the tool to jam.

Keep the tool clean and dry, using clean, dry air not exceeding the recommended PSI.

Use the tool with the minimum air pressure to do the job; this will greatly extend the life of the tool.

**Do not drop** the tool; this is the most common cause for parts replacement and repair.

**Never** use **loose rings** in the HC715 / HC716 Tool!

### Filter and Regulator:

The air supply line must be equipped with a *filter* and regulator to provide a constant supply of clean dry air. If moisture and contamination is allowed to enter the tool, the service life will be decreased.

### **Tool Lubrication:**

The HC715 / HC716 is designed to be troublefree with minimal lubrication. It is recommended that an inline lubricator be used and adjusted to a low setting. If an oiler is not available an alternative oiling method should be used. On a daily basis, place 2 drops of pneumatic tool oil into the inlet fitting where the supply line connects on the bottom of the handle.

|                                 | US          | METRIC                   |
|---------------------------------|-------------|--------------------------|
| Operating Pressure (at tool)    | 90 psi      | 6.2 bar                  |
| Maximum Pressure (at tool)      | 100 psi     | 6.9 bar                  |
| Air Consumption @ 50 cycles/min | 8 SCFM      | 0.23 m <sup>3</sup> /min |
| Recommended Air Line            | 3/8"        | 9.5 mm                   |
| Jaw Bolt Torque                 | 40 in. lb.  | 4.5 Nm                   |
|                                 | 3.3 ft. lb. | 4.5 Nm                   |

#### LIMITED WARRANTY

The manufacturer warrants this tool to be free of manufacturing defects. The warranty period is 90 calendar days from date of purchase. The warranty is issued to the original purchaser exclusively. The tool or part will be repaired or replaced at the manufacturers discretion. The warranty does not cover failure due to neglect, damage or normal wear. The manufacturer shall not be liable for any incidental or consequential damage due to tool failure.



KHF King-Hughes Fasteners, Inc. Made in the USA

550 Fourth St., P.O. Box 98 Imlay City, MI 48444 • USA Phone: 1-810-721-0300

Toll Free: 1-800-779-3762

Fax: 1-810-721-0400