

# PNEUMATIC C-RING TOOL HC1511



### HC1511 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, water free, lubricated compressed air, not to exceed 110 P.S.I. (7.6 bar)

- ⇒ Air consumption for HC1511 is 12 SCFM @ 110
   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**

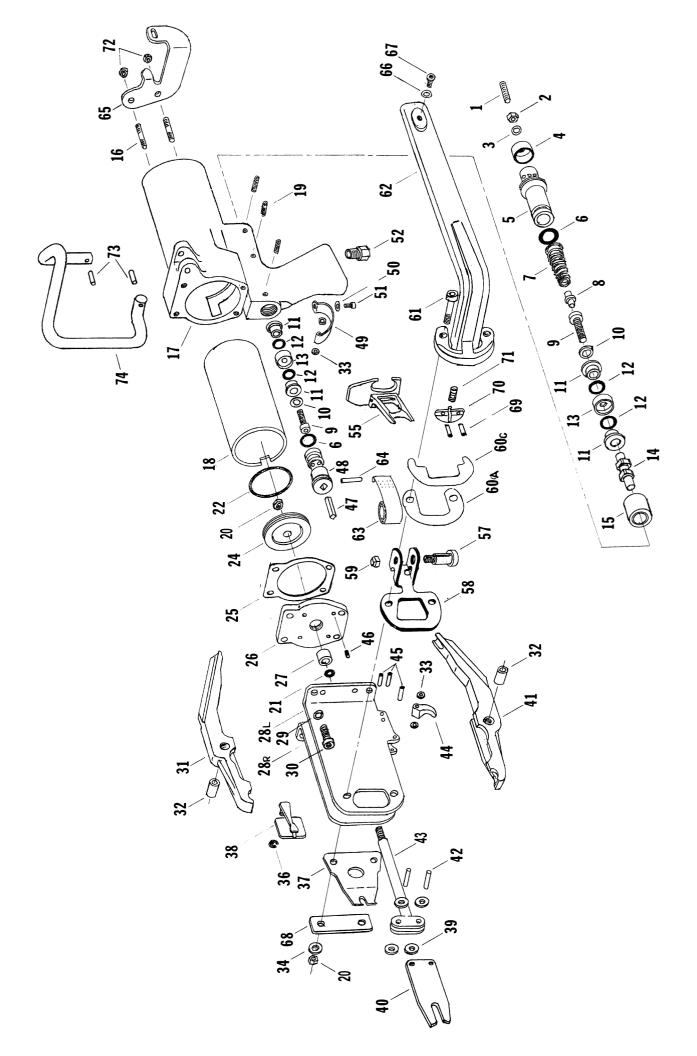
- **⇒** Always handle tool with care.
- ⇒ Never engage in horseplay.
- ⇒ Never pull trigger unless tool is pointed toward the work piece.
- ⇒ Keep the hands and bodies of the operator and all other personnel away from the tool jaws at all times.

#### 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

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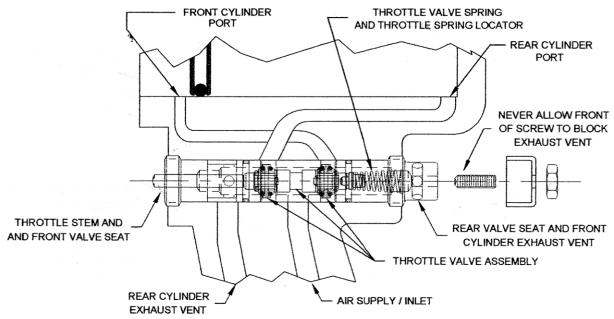
# HC1511 PARTS LIST

ITEM NO.	M NO. PART NO. DESCRIPTION		QTY.	
1	HC1511-001	Set Screw	1	
2	HC1511-002	Jam Nut	1	
3	HC1511-003	Lock Washer	1	
4	HC1511-004	Air Deflector	1	
5	HC1511-005	Rear Valve Seat	1	
6	HC1511-006	O-Ring	2	
7	HC1511-007	Throttle Valve Spring	1	
8	HC1511-008	Throttle Spring Locator	1	
9	HC1511-009	Socket Head Cap Screw	2	
10	HC1511-010	Throttle Valve Washer	2	
11	HC1511-011	O-Ring End Support	4	
12	HC1511-012	O-Ring	4	
13	HC1511-013	O-Ring Center Support	2	
14	HC1511-014	Throttle Valve Spacer	1	
15	HC1511-015	Throttle Valve Bushing	1	
16	HC1511-016	Magazine Support Stud	2	
17	HC1511-017	Cylinder Housing	1	
18	HC1511-018	Cylinder Liner	1	
19	HC1511-019	Set Screw	3	
20	HC1511-020	Flexloc Nut	3	
21	HC1511-021	Piston Rod O-Ring	1	
22	HC1511-022	Piston O-Ring	1	
24	HC1511-024	Piston	1	
25	HC1511-025	Cylinder Gasket	1	
26	HC1511-026	Piston Stop Spacer	1	
27	HC1511-027	Piston Rod Bushing	1	
28L	HC1511-028L			
28R	28R HC1511-028R Right Side Plate		1	
29	HC1511-029	High Collar Lock Washer	4	
30	HC1511-030	Socket Head Cap Screw	4	
31	HC1511-031	Upper Jaw	1	
32	HC1511-032	Jaw Bushing	1	
33	HC1511-033	Spacer	4	
35	HC1511-034	Washer	2	
36	HC1511-036	Latch Post Clip	1	
37	HC1511-037	Latch Spring	1	
38	HC1511-038	Latch	1	
39	HC1511-039	Roller	4	
40	HC1511-040	Feeder Blade	1	

42 43 44 45 46 47 48	HC1511-041 HC1511-042 HC1511-043 HC1511-044 HC1511-045 HC1511-047 HC1511-048 HC1511-049	Lower Jaw Roller Pin Piston Rod Trigger Trigger Group Pin Pin Throttle Stem Front Valve Seat Trigger Guard Lock Washer	1 2 1 1 3 4 1 1
43 44 45 46 47 48	HC1511-043 HC1511-044 HC1511-045 HC1511-046 HC1511-047 HC1511-048 HC1511-049 HC1511-050	Piston Rod Trigger Trigger Group Pin Pin Throttle Stem Front Valve Seat Trigger Guard	1 1 3 4 1
44 45 46 47 48	HC1511-044 HC1511-045 HC1511-046 HC1511-047 HC1511-048 HC1511-049 HC1511-050	Trigger Trigger Group Pin Pin Throttle Stem Front Valve Seat Trigger Guard	1 3 4 1
45 46 47 48	HC1511-045 HC1511-046 HC1511-047 HC1511-048 HC1511-049	Trigger Group Pin Pin Throttle Stem Front Valve Seat Trigger Guard	3 4 1
46 47 48	HC1511-046 HC1511-047 HC1511-048 HC1511-049 HC1511-050	Pin Throttle Stem Front Valve Seat Trigger Guard	4 1 1
47 48	HC1511-047 HC1511-048 HC1511-049 HC1511-050	Throttle Stem Front Valve Seat Trigger Guard	1 1
48	HC1511-048 HC1511-049 HC1511-050	Front Valve Seat Trigger Guard	1
	HC1511-049 HC1511-050	Trigger Guard	
49	HC1511-050		1
		Lock Washer	
50	HC1E14 AE4	LOOK TTUOTIO	1
51	HC1511-051	Button Head Cap Screw	1
52	HC1511-052	Inlet Bushing	1
55	HC1511-055	Pusher	1
57	HC1511-057	Pusher Spring Split Bolt	1
58	HC1511-058	Spring Spool Bracket	1
59	HC1511-059	Flexloc Nut	1
60A	HC1511-060A	.030" Shim	1
60C	HC1511-060C	.010" Shim	A/R
61	HC1511-061	Jaw Bolt	2
62	HC1511-062	Magazine	1
63	HC1511-063	Pusher Spring	1
64	HC1511-064	Pusher Spring Anchor Pin	1
65	HC1511-065	Magazine Support	1
66	HC1511-066	Lock Washer	1
67	HC1511-067	Button Head Cap Screw	1
68	HC1511-068	Support Plate	1
69	HC1511-069	Magazine Shoe Pin	2
70	HC1511-070	Magazine Shoe	1
71	HC1511-071	Magazine Shoe Spring	1
72	HC1511-072	Nylock Jam Nut	2
73	HC1511-073	Handle Pin	2
74	HC1511-074	Handle	1
75	HC1511-075	Label	1
100	HC1511-100	Owner's Manual	1

# HC1511 AVAILABLE RINGS

PART NO.	MATERIAL	POINT TYPE	WIRE GAGE	PER CARTON	RING SIZE OPEN / CLOSED
11RG40	LOW TENSILE GALVANIZED	SHARP	11	1600	1½ / %
11RG40B	LOW TENSILE GALVANIZED	BLUNT	11	1600	1½ / %6
11G40	HIGH TENSILE GALVANIZED	SHARP	11	1600	1½ / %6
11GF40	HIGH TENSILE GALFAN	SHARP	11	1600	1½ / %6
11SS40	HIGH TENSILE STAINLESS STEEL	SHARP	11	1600	1½ / %6
11AL40	ALUMINUM	SHARP	11	1600	1½ / %6



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, remove lower jaw and bushing, remove magazine screw (item #67), remove trigger guard screw (item #51), remove screws and washers (items #29 and #30). Lift away magazine, side plate, upper jaw and trigger guard assembly. Set 4 rollers (item #39) aside.

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 #9). 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 the rest of the tool needed to complete assembly.

## TROUBLESHOOTING

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

- √ Check air pressure (100-110 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:**

✓ Because the tool is primarily designed to be used on projects in the outside environment, 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 140 in. lb. (12 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 HC1511, 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 HC1511 tool:

The most common reason for jamming in the HC1511 tool is **short cycling** and **insufficient air**.

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 jaw 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 HC1511. 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.

### 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 HC1511 is designed to be trouble-free 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 oil into the inlet fitting where the supply line connects on the bottom of the handle.

	US	METRIC
Operating Pressure (at tool)	100 psi	6.9 bar
Maximum Pressure (at tool)	110 psi	7.6 bar
Air Consumption @ 50 cycles/min	12 SCFM	0.33 m <sup>3</sup> /min
Recommended Air Line	3/8"	9.5 mm
Jaw Bolt Torque	140 in. lb.	16 Nm
	12 ft. lb.	16 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

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