



## SPRING RETURN PNEUMATIC D-RING TOOL TR201 TR203

### SAFETY INSTRUCTIONS

#### WARNINGS

- **Always** read tool manual before operating.
- Always wear safety glasses while operating or while in the vicinity of a tool in operation.
- For testing, always cycle tool away from work to insure proper ring closure. For safety reasons, an improperly functioning tool **must not** be used. When operating tool, never point or actuate tool other than into work.
- Operate tool in an unobstructed work area.
- Disconnect air supply prior to maintenance and/or repair of tool.
- Use clean dry air to maximize efficiency. **Do Not Exceed 100 P.S.I. (7.0 kg/cm sq.)**
- Do not use bottled gases such as oxygen, hydrogen, carbon dioxide, acetylene, etc.
- Tools shall be operated with a fitting or hose coupling on or near the tool in such a manner that all compressed air in the tool is discharged at the time the fitting or hose coupling is disconnected.



#### WARNING:

The employer and/or user must ensure that proper eye protection is worn. Eye protection equipment must conform to the requirements of the American National Standard Institute, ANSI Z87.1-1989 and provide frontal and side protection. Eye protection should be worn by the operator and others in the work area when loading, operating, or servicing this tool. Eye protection is required to guard against possible flying particles and/or debris, which could cause severe eye injury.

NOTE: Non-side shielded prescription glasses and faceshields alone do not provide adequate protection.

#### OPERATION

##### **▲WARNING:**

Always handle tool with care:

- Never engage in horseplay.
- Never pull the trigger unless nose of tool is directed toward the work.
- Keep others at a safe distance from the tool while the tool is in operation as actuation occurs, possibly causing injury. Keep hands and body away from the jaw mechanism of the tool.

#### LOADING TOOL

##### **▲WARNING:**

When loading tool:

- Never place a hand or any part of body in jaw mechanism area of tool.
- Never point tool at anyone.
- Never actuate tool when loading, accidental injury may occur.

#### AIR CONSUMPTION

SC7 Series Tools require 1.6 cubic feet per minute (.045 cubic meters per minute) of free air to operate at a rate of 100 fasteners per minute, at 100 P.S.I. (7.0 kg/cm sq.).

**STANLEY** **Fastening Systems**

TR201  
TR203

ITEM	DESCRIPTION	PART NUMBER	QUANTITY
1	GRIP, PISTOL HOUSING	501201	1 1
2	SCREW, SOCKET HEAD CAP	TL710210	2 2
3	NUT, PISTON ROD	TR105004	1 1
4	PISTON	TR105006	1 1
5	O-RING PISTON	TR105005	1 1
6	ROD, PISTON	TR105008	1 1
7	BUMPER, SPACER	TR105009	1 1
8	SPRING, PISTON RETURN	TR105007	1 1
9	SPACER, FRONT STOP	TR105012	1 1
10	CLEVIS, FINISHED	TR105013F	1 1
11	SCREW, CLEVIS LOCK	TR105015	1 1
12	PIN, CLEVIS	TR105014	1 1
13	LINK, ARM LEFT	TR105016F	1 1
14	PIN, JAW	TR105020	2 2
15	JAW, LEFT	TR105018F	1 1
16	SLIDE	TR105021F	1 1
17A	WASHER, WAVY (.008 THK.)	TR105028A	1 1
17B	WASHER, CUP (.010 THK.)	TR105028B	A/R A/R
18	JAW, RIGHT	TR105019F	1 1
19	LINK, ARM RIGHT	TR105017F	1 1
20	PIN, ROLL FOR TEETH	TR105026	2 2
21	TEETH, REPLACEABLE	TR105025F	1 1
22	ASSEMBLY, MAGAZINE SHORT	TR417051F	1 0
	ASSEMBLY, MAGAZINE LONG	TR419051F	0 1
23	WASHER, #6 SPLIT LOCK	TL726000	4 4
24	SCREW, SOCKET HEAD CAP	TL716208	4 4
25	SCREW, SOCKET HEAD CAP	TL714206	1 1
26	ASSY, PUSHER SHORT	TR105A027F	1 0
	ASSY, PUSHER LONG	TR107A027F	0 1
27	ASSEMBLY, AIR VALVE	501410	1 1
28	VALVE BALL SEAL O-RING	TL620035	1 1
29	BALL, VALVE	501254	1 1
30	RETAINER, VALVE BALL	501213	1 1
31	"O" RING	SC08	1 1
32	CARRIAGE BODY	TR109024AF	1 1
33	SCREW, LOCK	TR105022	1 1
34	GRIP, MOLDED PISTOL	CO4044	1 1

"A/R" DENOTES AS REQUIRED FOR OPTIMUM PERFORMANCE.

### RECOMMENDED SPARE PARTS LIST

ITEM	DESCRIPTION	PART NUMBER	NO. OF TOOLS		
			1	5	10
1	GRIP, PISTOL HOUSING	501201	0	0	1
2	SCREW, SOCKET HEAD CAP	TL710210	0	0	2
3	NUT, PISTON ROD	TR105004	0	0	1
4	PISTON	TR105006	0	0	1
5	O-RING PISTON	TR105005	0	1	2
6	ROD, PISTON	TR105008	0	0	1
7	BUMPER, SPACER	TR105009	0	0	1
8	SPRING, PISTON RETURN	TR105007	0	1	2
11	SCREW, CLEVIS LOCK	TR105015	0	0	1
12	PIN, CLEVIS	TR105014	0	1	2
13	LINK, ARM LEFT	TR105016F	0	1	2
14	PIN, JAW	TR105020	0	2	4
15	JAW, LEFT	TR105018F	0	1	2
16	SLIDE	TR105021F	0	0	1
17A	WASHER, WAVY (.008 THK.)	TR105028A	1	2	4
17B	WASHER, CUP (.010 THK.)	TR105028B	1	2	4
18	JAW, RIGHT	TR105019F	0	1	2
19	LINK, ARM RIGHT	TR105017F	0	1	2
20	PIN, ROLL FOR TEETH	TR105026	0	0	1
21	TEETH, REPLACEABLE	TR105025F	0	1	2
24	SCREW, SOCKET HEAD CAP	TL716208	0	0	1
25	SCREW, SOCKET HEAD CAP	TL714206	0	0	1
26	ASSY, PUSHER SHORT	TR105A027F	0	1	1
	ASSY, PUSHER LONG	TR107A027F	0	1	1
27	ASSEMBLY, AIR VALVE	501410	0	0	1
28	VALVE BALL SEAL O-RING	TL620035	0	1	2
29	BALL, VALVE	501254	0	1	2
30	RETAINER, VALVE BALL	501213	0	0	1
31	"O" RING	SC08	0	1	2

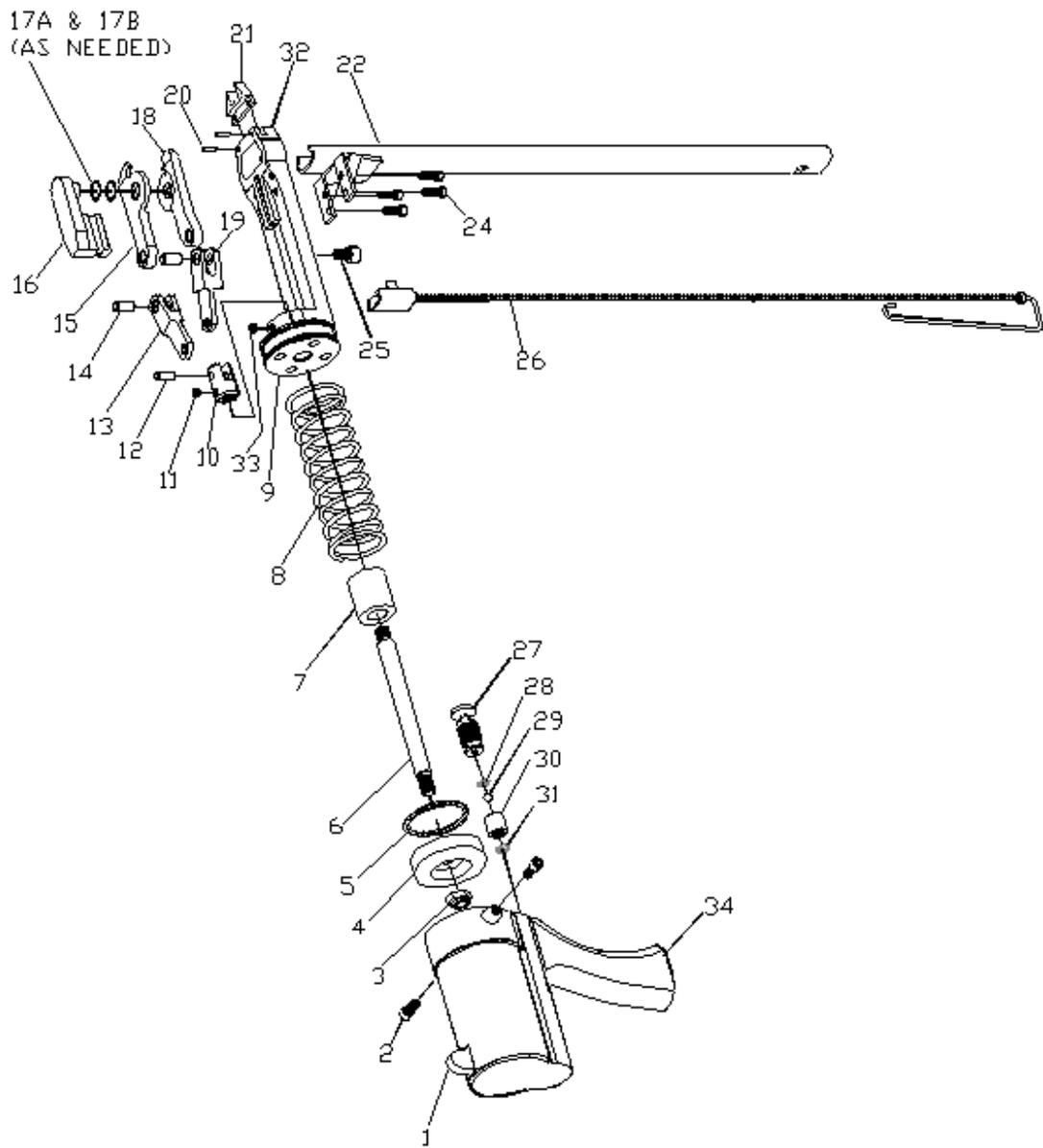
### RECOMMENDED TOOL LIST

- DESCRIPTION
- 3/8" Combination Wrench
- 1/2" Combination Wrench
- Long Hex. Key Set  
(Sizes: 5/64, 3/32, 1/8, 9/64, 5/32, 3/16)
- Spanner Wrench
- Pin Punch Set  
(Sizes: 3/32, 1/8, 3/16, 1/4)
- Hammer
- 8-1/2" Machinist Scribe

### SPECIFICATIONS AND TYPES OF MATERIALS AVAILABLE BY PART NUMBER

PART NUMBER	PER STRIP #	PER BOX #	MATERIAL	WIRE DIAMETER	RING I.D.	RING LEG OPENING	MAX. & MIN. I.D. RING SIZE
RINGSR15	50	10,000	BRIGHT BASIC	0.070	0.75	0.56	1/4 - 3/8
RINGSR15G	50	10,000	GALVANIZED	0.070	0.75	0.56	1/4 - 3/8
RINGSR15SS	50	10,000	STAINLESS STEEL	0.070	0.75	0.56	1/4 - 3/8
RING15N50P	50	10,000	BRIGHT BASIC	0.070	0.75	0.56	1/4 - 3/8

\* RINGS ARE ONLY AVAILABLE IN SHARP POINTS.



## TO DISASSEMBLE

### Carriage and magazine assembly

1. Remove (2) socket head cap screws (#2).
2. Remove carriage and magazine assembly from housing (#1) by turning counter clockwise.
3. Detach magazine assembly (#22) by removing (4) socket head cap screws (#24) from carriage assembly.

### Piston, jaws and teeth

1. Remove o-ring (#5).
2. Remove piston rod nut (#3) from piston rod (#6). Apply heat as needed to break down thread lock adhesive on threaded end of piston rod.
3. Remove piston, bumper and spring (#4, #7 and #8).
4. Remove socket head cap screw (#25).
5. Remove slide (#16) by sliding it away from teeth area and pulling it up through the carriage.
6. Remove jaw assembly from carriage.
7. Drive out pin (#14) from jaws (#15 and #18) and arm links (#13 and #19).
8. Drive out pin (#12) from arm links (#13 and #19) and clevis #10).
9. Remove clevis lock screw (#11) from clevis (#10).
10. Remove clevis (#10) from piston rod (#6). Apply heat as needed to break down thread lock adhesive on threaded end of piston rod.
11. Detach teeth (#21) by driving (2) roll pins (#20) from carriage and teeth (#32 and #21).
12. Apply heat as needed to break down thread lock adhesive on threaded end of piston rod.
13. Detach stop spacer (#9) by removing set screw (#33) and then use a spanner wrench to remove stop spacer (#9) from carriage (#32).

### Throttle

1. Remove air valve assembly (#27) from housing (#1).
2. Remove o-ring, ball, valve ball retainer and o-ring (#28, #29, #30 and #31).

## TO RE-ASSEMBLE

1. Assemble o-ring, valve ball retainer, ball and o-ring (#31, #30, #29 and #28) and insert into throttle bore of housing (#1).
2. Install air valve assembly (#27) into throttle bore of housing (#1). (Do Not Over-Tighten).
3. Install stop spacer (#9) onto the carriage (#32). Use Loctite #242 or equivalent.
4. Install set screw (#33) into carriage, locking stop spacer onto carriage.
5. Install teeth (#21) by driving in (2) roll pins (#20) until flush with carriage.
6. Connect outer jaw to left arm link (#15 and #13) by driving roll pin (#14) in aligned holes.
7. Connect inner jaw to right arm link (#18 and #19) by driving roll pin (#14) in aligned holes. (Make sure you match the correct jaw with the correct arm link for the tool to operate correctly.)
8. Connect jaws and arm link assemblies to clevis (#10) by driving roll pin (#12) into aligned holes.
9. Place piston rod (#6) into a vise with long threaded end sticking out.

10. Install piston (#4) onto long threaded end of the piston rod with piston rod nut (#3) and remove from vise. (Use Loctite #242 or equivalent on both piston and flexlock nut.)
11. Install bumper and return spring (#7 and #8) onto piston rod.
12. Place jaws, arm linkage and clevis assembly onto carriage.
13. Insert piston rod, return spring, bumper and piston assembly through the carriage and connect to the clevis. (Use Loctite #242 or equivalent.)
14. Install set screw (#11) into clevis locking piston rod to clevis.
15. Pivot jaws and arm linkage apart so that the slide (#16) can be installed onto carriage.
16. Install magazine assembly (#22) with (4) socket head cap screws (#24).
17. Install o-ring (#5) onto the piston.
18. Apply lubrication to piston, o-ring, threaded stop spacer, housing bore and thread in housing.
19. Install front end assembly into housing. (Be careful not to damage the o-ring during installation.) Do not over-tighten front end assembly onto the housing.
20. Install (2) socket head cap screws (#2), locking front end assembly into place. Do **not** over tighten as damage could occur to front end assembly.
21. Cycle tool to ensure everything operates freely.
22. Cycle tool with rings in magazine. If tool is picking up next ring or breaking next ring away from the strip, **disconnect air from tool**.
23. Push slide back toward the housing and remove slide.
24. Install wavy washer onto the post of the slide.
25. Re-install slide in tool.
26. Test tool again for picking up next ring. If picking up next ring, repeat steps 24 through 27.
27. Make sure tool is disconnected from air supply. Push slide toward teeth area. Install socket head cap screw (#25) into carriage. This keeps the slide from coming out during use. If the slide is **not** pushed forward during socket head cap screw installation, you **will** break the carriage.

## FILTER AND REGULATOR

1. The air line should always contain a filter and regulator unit to provide the tool with a constant flow of clean, dry air. If moisture and contaminants are allowed to enter the tool, the tool's serviceable life will be decreased.
2. The regulator should be set between 70 and 90 psi. (4.8 to 6.2 bar). Never operate this tool beyond 100 psi. (6.9 bar).

## LUBRICATION

1. The “TR” series D-Ring tools are designed for long, trouble-free service with minimal air line lubrication. (If an in-line lubricator is used, it should be set at the minimum rate of flow.)
2. Excess oil in the tool will attract dirt, lint, and the adhesive material used in collating the fasteners, preventing smooth operation. When lubrication is used, always use a good **grade of 5W non-detergent oil with no additives**.
3. When servicing or repairing tool use **lithium grease** on all moving parts.

## TIPS ON EXTENDING TOOL LIFE

The serviceable life of the “TR” series tools can be extended greatly by using the following guidelines:

1. Always use Stanley Fastening brand fasteners. Never replace worn or broken parts with anything other than genuine Stanley Fastening parts. **Generic fasteners** may shorten the life of your D-Ring tool and **will void** the manufacturer’s warranty.
2. Keep your tool(s) clean and dry. Always use clean, dry air and never exceed the recommended air pressure noted above.
3. Use of this tool at minimum air pressure required for the work at hand will greatly extend the life of the tool.
4. Exercise caution not to drop equipment. Tools dropping onto the floor or ground is a primary reason for parts replacement.
5. Should the tool leak air in both the triggered and rest positions, a damaged piston o-ring may be the cause. Once the piston o-ring has been replaced, lubricate with lithium grease.

## CARRIAGE ASSEMBLY ROTATION

### INSTRUCTIONS

The carriage is normally shipped in position #1, magazine pointing downward, parallel to the handle.

To rotate the carriage to new position, loosen (2) socket head cap screws (#2). Grasp the handle firmly in one hand, and the carriage (#32) in the other hand.

With steady force, rotate the two sections. This will enable you to put the front carriage assembly into any position you need. Tighten the (2) socket head cap screws (#2).

**DO NOT** use excessive force when tightening any of the screws. Screws should be snug but not over-torqued.

The most common reason for jamming problems in the TR tool is worn parts. The two most common replaced parts are the jaws and the pusher assembly.

If tool begins to close ring poorly or spit rings, check for worn parts.

## RING DOES NOT CLOSE COMPLETELY

1. Check air pressure. Line pressure at the tool should be between 70 and 90 psi (4.8 - 6.2 bar) for most applications. The tool should never be operated at pressures exceeding 100 psi (6.90 bar).
2. A 3/8” (9.5 mm) or larger air line should be used with the “TR” Series Tools. Air lines in excess of 100’ (30.5 meters) in length can cause air volume deficiencies at the tool which will prevent normal operation.
3. Check for foreign debris in the jaw area. This is especially true in the area between the jaws and the carriage.
4. The jaws may be worn from extended use. Check the ring groove of the jaws. If the grooves are worn excessively or have a chip out of them, replacing the jaw(s) is recommended.
5. The arm links or pivot pins may be worn excessively, replacing the part(s) is recommended.
6. When the tool is used in corrosive applications, light oil should be applied on a regular basis to the carriage, jaws, linkages and pins. Unlubricated and/or corroded jaw linkages may cause the tool to function poorly.

## FEEDING PROBLEMS

1. If rings do not feed smoothly through the magazine, check pusher spring for proper tension. If the magazine is covered with dirt from field use, clean the magazine and apply a light coating of oil.
2. When rings feed properly through the magazine but do not feed into the jaws without spitting out of the tool, or if the rings sit in the jaw grooves on an angle, check jaws to insure freedom of movement.
3. **NEVER USE LOOSE RINGS IN THE TR201 / TR203 TOOL.**

### NOTE:

Tool model number TR201 uses a short magazine/pusher combination, part numbers TR417051F and TR105A027F, measuring 6 inches long and capable of holding up to 50 rings.

Tool model number TR203 uses a long magazine/pusher combination, part numbers TR419051F and TR107A027F, measuring 11.25 inches long and capable of holding up to 100 rings.

SPECIFICATIONS AND TYPES OF MATERIALS AVAILABLE BY PART NUMBER							
Part Number	Per Strip #	Per Box #	Material	Wire Diameter	Ring I.D.	Ring Leg Opening	Operating Range of Tool TR201 TR203
RINGSR15	50	10,000	Bright Basic	0.070	0.75	0.56	1/4 – 3/8
RINGSR15SS	50	10,000	Stainless Steel	0.070	0.75	0.56	1/4 – 3/8
						0.56	

**RINGS ARE ONLY AVAILABLE IN SHARP POINTS**

### **LIMITED WARRANTY**

Stanley Fastening Systems warrants to the original retail purchaser that this product is free from defects in material and workmanship, and agrees to repair or replace, at Stanley Fastening Systems' option, any defective product within 60 days from the date of purchase. This warranty is not transferable. It only covers damage resulting from defects in material or workmanship, and it does not cover conditions or malfunctions resulting from normal wear, neglect, abuse, or accident.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THIS WARRANTY. STANLEY FASTENING SYSTEMS SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To obtain warranty service, you must return the product at your expense together with proof of purchase to a Stanley-Bostitch Regional warranty repair center or you may call us at 1-800-556-6696 or 1-800-832-3080 for the location of additional authorized warranty service locations in your area.

