

RK-753-I2 Operation Manual



Air Supply pressure	(Minimum/Maximum)-----	5~7bar
Free Air Volume Required	(5.1bar)-----	2.6 liters
Stroke	(Minimum)-----	30mm
Pull force	(5.5bar)-----	3.89kn
Cycle Time	(Less than)-----	0.9second
Noise Level	(Less than)-----	70db(a)
Weight	-----	1.7kg
Vibration	(Less than)-----	2.5m/s2
Overall length	-----	540mm
Intensification Ratio	-----	30:1



CONTENTS

SAFTY	3
INTENT OF USE	4
PUTTING INTO SERVICE	5
AIR SUPPLY	5
CURSOR	6
LOADING THE TOOL	6-7
MOVING THE TOOL	8
FRONT JAWS & SPEAR PARTS	9
FRONT JAWS	9,10
MANDREL & MANDREL SPRING	11
MANDRELS FOR SPEED RIVET	11
MANDRELS FOR SPEED CHOVET	12
MAINTRANCE	13
WEEKLY & DAILY	13
EVERY 500,000CYCLES AND ANNUALLY	13
SERVICE KIT	13
PART LIST	14-18
GUN PART DRAWING	14
GUN PART LIST	15
INTENSIFIRE PART DRAWING	16
INTENSIFIRE PART LIST	17
PILOT VALVE PART DRAWING & PART LIST	18
DIAGNOSIS	19

◆SAFTY

SAFTY

This instruction must be read with particular attention to the following safety rules.

- USE ONLY FOR THE PERMITTED PURPOSE.
- ANY MODIFICATION SHOULD BE DONE UNDER HANBIT OR OUR AGENT' S CONTROL.
 IF NOT CUSTOMERS WILL TAKE ENTIRE RESPONSIBILITY.
- THE TOOL MUST BE MAINTENANCED IN A SAFE WORKING CONDITION AND BY TRAINED PERSON.
 HANBIT AND AGENT WILL BE PLEASED TO GET YOUR TRAINING REQUIREMENTS.
- THE PRECAUTIONS TO BE OBSERVED WHEN USING THIS TOOL MUST BE EXPLAINED BY THE CUSTOMER TO ALL
 OPERTORS.
- ALWAYS DISCONNECT THE AIR LINE FROM THE TOOL INLET BEFORE ATTEMPTING TO ADJUST FOR OR REMOVE A NOSE
 ASSEMBLY.
- DO NOT OPERATE A TOOL TOWARDS ANY PERSON.
- UAE THIS TOOL AT CLEAN AND STABLE POSITION.
- EVERY VENT HOLE SHOULD NOT BE BLOCKED OR COVERED
- THE COMBINATION OF FASTENER, MANDREL, HOLE SIZE AND SHEET
 THICKNESS SHOULD BE IN ACCORDANCE WITH HANBIT INSTRUCTION.
- IT IS THE CUSTOMER' S RESPONSIBILITY TO ENSURE THAT MANDRELS ARE REPLACED BEFORE ANY EXCESSIVE LEVELS
 OF WEAR AND ALWAYS BEFORE THE MAXIMUM RECOMMENDED NUMBER OF PLACINGS.
- WHEN USING THE TOOL, THE WEARING OF SAFTY GLASSES IS REQUIRED AND WE RECOMMEND WEARING GLOVES IF
 THERE ARE SHARP EDGE ON THE APPLICATION.
- WHEN CARRYING THE TOOL FROM PLACE TO PLACE KEEP HANDS AWAY FROM THE TRIGGER/LEVER TO AVOID
 INADVERTENT START UP.

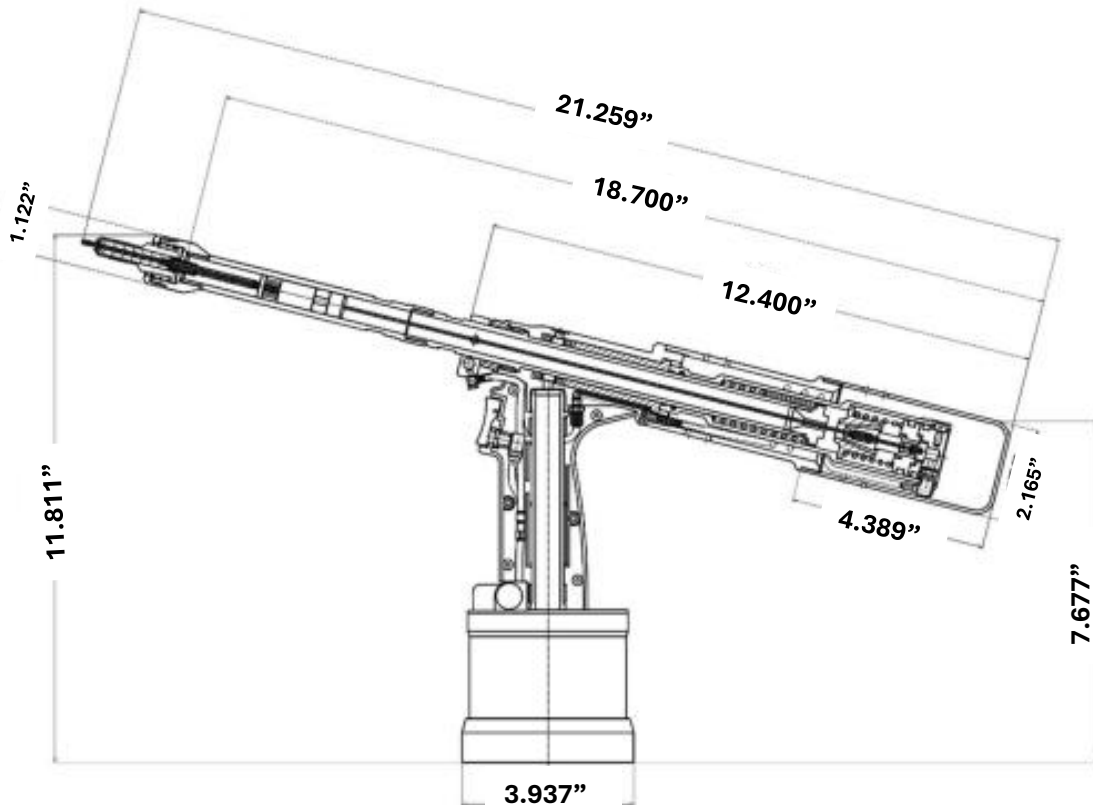
Intent of Use



	Rivet Type	Head Type	3/32" (2.4mm)	3.0mm	1/8" (3.2mm)	3.5mm	5/32" (4.0mm)	3/16" (4.8mm)	Finish
	ZipRiv	Dome	X		X		X	X	Zinc ROHS
		Counter Sunk			X		X		Black Anodized
									Black Zink ROHS
									Tin Plated
	Zipsho	Dome	X		X		X	X	Zinc ROHS
		Undersized			X				Black Anodized
		Low Profile	X					X	Black Zink ROHS
									Tin Plated
	ZipScrew	Dome		X		X	X		Zinc ROHS
		Pre-Formed		X		X	X		Black Zink ROHS
									Tin Plated

For Part Numbers please see QuickRiverting catalog

Tool Dimensions



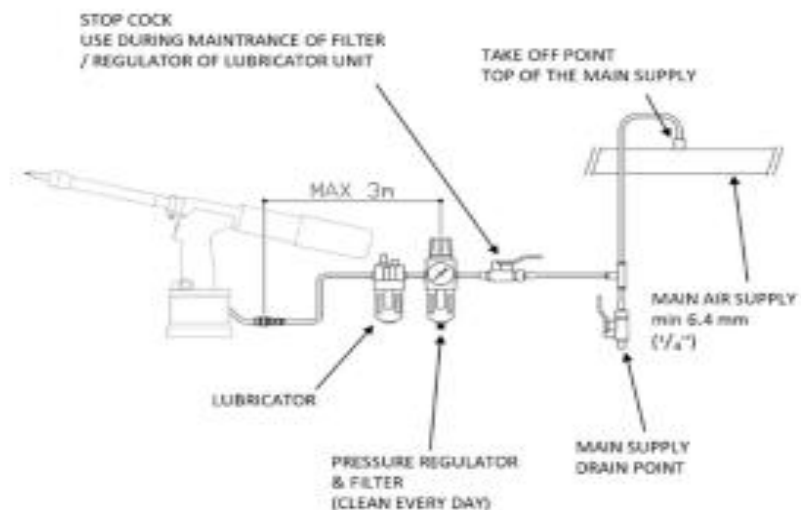
◆ PUTTING INTO SERVICE



AIR SUPPLY

Our tools are operated with compressed air at an optimum pressure of 5.5bar. We recommend the use of pressure regulators and automatic oiling/filtering systems on the main air supply.

Air supply hoses should have a minimum working effective pressure rating of 150% of the maximum pressure produced in the system or 10bar, whichever is the highest. Air hoses should be oil resistant, have an abrasion resistant exterior and should be armored where operating conditions may result in hoses being damaged. All air supply hoses must have a minimum bore diameter of 6.4 millimeters or 1/4 inch.

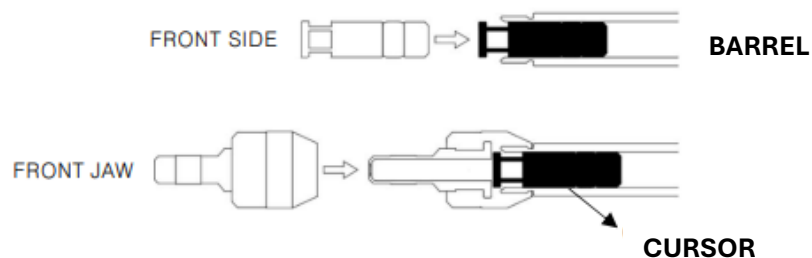


CURSOR

This cursor is pulling up the rivet

If fitted incorrectly the cursor will not allow the feeding of the rivet

The spring-loaded end of the cursor should point towards the front of the tool as illustrated below



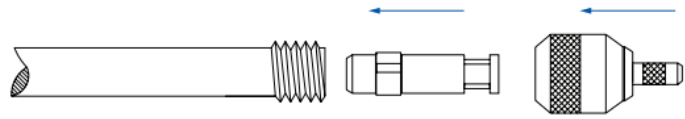
Set-Up and Assembly Process

Loading tool



STEP 1:

Install the indexing cursor into the barrel portion of the rivet tool making sure it is facing the proper direction. Then screw on the Nose Jaw assembly on to the barrel.



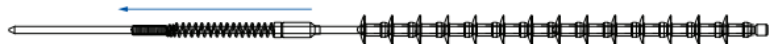
STEP 2:

Insert the mandrel into the hole of the podded rivets. Then tear off and dispose of the podding paper.



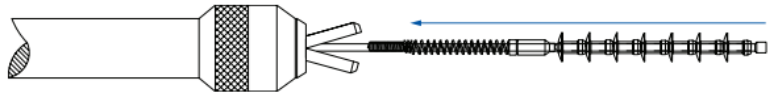
STEP 3:

Insert the mandrel into the hole of the podded rivets. Then tear off and dispose of the podding paper.



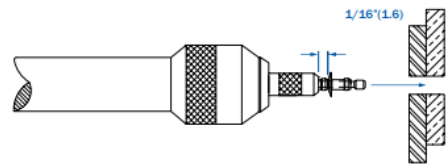
STEP 4:

Split the Nose Jaw open and insert the mandrel assembly (mandrel, spring and rivets), inside the Nose Jaw until the last rivet remains outside of the Nose Jaw.



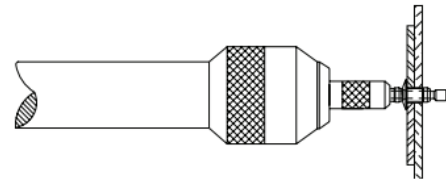
STEP 5:

Make sure the head of the rivet is about 1/16" away from the front of the Nose Jaw. Proper spacing must be assured.



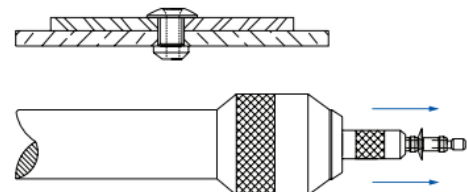
STEP 6:

Using the handle of the tool, insert the rivet and mandrel through the hole of your work piece until the head is sitting flush on the bearing surface. Pull the trigger to actuate the tools cycle and clinch the rivet.



STEP 7:

After proper assembly, the next rivet will automatically feed through the Nose Jaw to advance the next rivet.

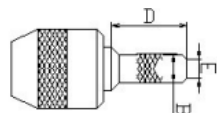


NOSE EQUIPMENT

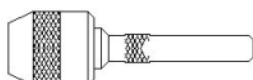
The nose equipment always consists of three elements 1: Nose Jaws 2: Mandrel, & 3: Spring.

All three items are matched to the rivet and hole size of the application

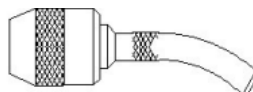
Rivet King can help you to select the correct equipment. For reference, please see chart below or see the QuickRiveting Catalog



Standard



Long



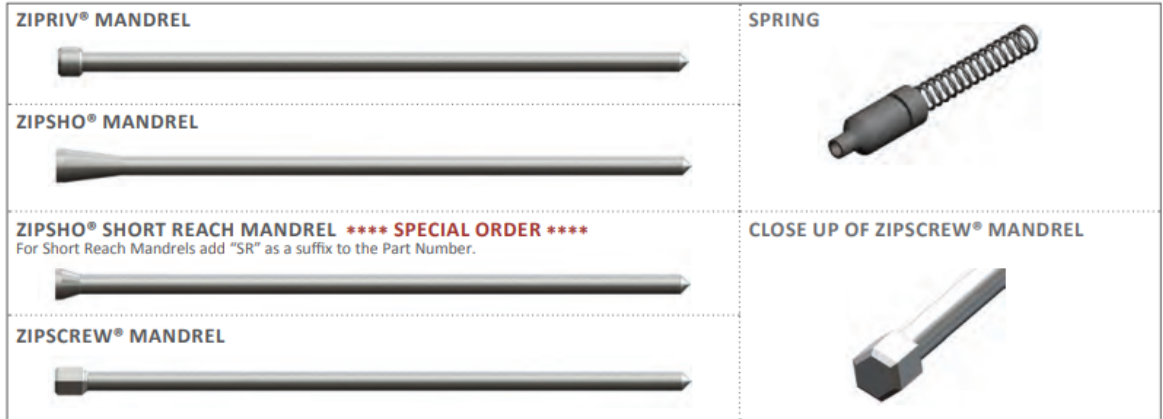
Curved



Flat Recessed

RIVET DIA.	PART NUMBER	NOSE TYPE & FORM	DIMENSIONS		
			B	D	E
3/32" (2.4)	Z-7150-3003	Standard Flat	.36" (9.14)	1.3" (33.02)	.16" (4.06)
	Z-7150-4003	Long Flat	.41" (10.41)	2.3" (58.42)	.16" (4.06)
	Z-7150-5003	Curved Long Flat	.41" (10.41)	2.28" (57.91)	.16" (4.06)
1/8" (3.2)	Z-7150-3004	Standard Flat	.41" (10.41)	1.18" (29.97)	.20" (5.08)
	Z-7170-3004	Standard Recessed	.41" (10.41)	1.20" (30.48)	.30" (7.62)
	Z-7150-4004	Long Flat	.41" (10.41)	2.18" (55.37)	.20" (5.08)
	Z-7170-3204	Long Recessed	.41" (10.41)	2.18" (55.37)	.30" (7.62)
	Z-7150-5004	Curved Long Flat	.41" (10.41)	2.22" (56.39)	.20" (5.08)
	Z-7170-3304	Curved Long Recessed	.41" (10.41)	2.22" (56.39)	.30" (7.62)
5/32" (4.0)	Z-7150-3005	Standard Flat	.48" (12.19)	1.30 (33.02)	.24" (6.10)
	Z-7170-3005	Standard Recessed	.48" (12.19)	1.32" (35.53)	.41" (10.41)
	Z-7150-4005	Long Flat	.48" (12.19)	2.30" (58.42)	.24" (6.10)
	Z-7170-3205	Long Recessed	.48" (12.19)	2.30" (58.42)	.41" (10.41)
	Z-7150-5005	Curved Long Flat	.48" (12.19)	2.23" (56.64)	.24" (6.10)
	Z-7170-3305	Curved Long Recessed	.48" (12.19)	2.23" (56.64)	.41" (10.41)
3/16" (4.8)	Z-7150-3006	Standard Flat	.56" (14.22)	1.18" (29.97)	.33" (8.38)
	Z-7170-3006	Standard Recessed	.56" (14.22)	1.20" (30.48)	.47" (11.94)
	Z-7150-4006	Long Flat	.56" (14.22)	2.30" (58.42)	.33" (8.38)
	Z-7170-3206	Long Recessed	.56" (14.22)	2.30" (58.42)	.47" (11.94)
	Z-7150-5006	Curved Long Flat	.56" (14.22)	2.21" (56.13)	.33" (8.38)
	Z-7170-3306	Curved Long Recessed	.56" (14.22)	2.21" (56.13)	.47" (11.94)

Mandrel & Spring Consumables



PRODUCT	RIVET DIAMETER	MANDREL PART NUMBER	DESCRIPTION	MINIMUM APPLICATION HOLE SIZE	TIP COLOR IDENTIFIER	DIMENSIONS		SPRING PART NUMBER
						TD	L	
ZipRiv® Alu./StAeel/Brass	3/32" (2.4)	ZRTM-093-S	Standard Tip, Standard Length	.093" (2.36)	Green	.072" (1.83)	19" (483)	ZSTS-093
		ZRTM-093-1	#1 Oversize Tip, Standard Length	.097" (2.46)	Yellow	.076" (1.93)		
		ZRTM-093-2	#2 Oversize Tip, Standard Length	.101" (2.56)	Blue	.079" (2.01)		
ZipRiv® Alu./Steel/Brass	1/8" (3.2)	ZRTM-125-S	Standard Tip, Standard Length	.1285" (3.26)	Green	.092" (2.34)	19" (483)	ZRTS-125
		ZRTM-125-1	#1 Oversize Tip, Standard Length	.1335" (3.39)	Yellow	.097" (2.46)		
		ZRTM-125-2	#2 Oversize Tip, Standard Length	.1385" (3.51)	Blue	.102" (2.59)		
ZipRiv® Alu./Steel/Brass	5/32" (4.0)	ZRTM-156-S	Standard Tip, Standard Length	.1562" (3.97)	Green	.110" (2.79)	19" (483)	ZRTS-156
		ZRTM-156-1	#1 Oversize Tip, Standard Length	.1612" (4.1)	Yellow	.115" (2.92)		
		ZRTM-156-2	#2 Oversize Tip, Standard Length	.1662" (4.22)	Blue	.120" (3.05)		
ZipRiv® Alu./Steel/Brass	3/16" (4.8)	ZRTM-187-S	Standard Tip, Standard Length	.191" (4.85)	Green	.140" (3.58)	19" (483)	ZRTS-187
		ZRTM-187-1	#1 Oversize Tip, Standard Length	.196" (4.98)	Yellow	.145" (3.71)		
		ZRTM-187-2	#2 Oversize Tip, Standard Length	.201" (5.1)	Blue	.151" (3.84)		
		ZRTM-187-3	#3 Oversize Tip, Standard Length	.203" (5.15)	Red	.153" (3.85)		
ZipRiv® Stainless Steel	All Sizes	Contact our application engineering department. A broachload test must be conducted by RivetKing staff to determine the best mandrel for the application. Warning: Use of standard mandrels in stainless steel ZipRiv® can cause a potentially hazardous condition.						
ZipSho®	3/32" (2.4)	ZSTM-093-S	Standard Tip, Standard Length	.098 (2.49)	Green	.0725" (1.84)	19" (483)	ZRTS-093
		ZSTM-093-1	#1 Oversize Tip, Standard Length	.0995 (2.53)	Yellow	.074" (1.88)		
		ZSTM-093-2	#2 Oversize Tip, Standard Length	.1015 (2.58)	Blue	.076" (1.93)		
ZipSho®	1/8" (3.2)	ZSTM-125-S	Standard Tip, Standard Length	.129 (3.28)	Green	.088" (2.24)	19" (483)	ZRTS-125
		ZSTM-125-1	#1 Oversize Tip, Standard Length	.133 (3.38)	Yellow	.092" (2.34)		
		ZSTM-125-2	#2 Oversize Tip, Standard Length	.139 (3.53)	Blue	.098" (2.49)		
		ZSTM-125-3	#3 Oversize Tip, Standard Length	.143 (3.63)	Red	.102" (2.59)		
ZipSho®	5/32" (4.0)	ZSTM-156-S	Standard Tip, Standard Length	.161 (4.09)	Green	.107" (2.72)	19" (483)	ZRTS-156
		ZSTM-156-1	#1 Oversize Tip, Standard Length	.169 (4.29)	Yellow	.115" (2.92)		
		ZSTM-156-2	#2 Oversize Tip, Standard Length	.176 (4.47)	Blue	.122" (3.10)		
		ZSTM-156-3	#3 Oversize Tip, Standard Length	.186 (4.72)	Red	.132" (3.35)		
ZipSho®	3/16" (4.8)	ZSTM-187-S	Standard Tip, Standard Length	.191 (4.85)	Green	.132" (3.35)	19" (483)	ZRTS-187
		ZSTM-187-1	#1 Oversize Tip, Standard Length	.205 (5.2)	Yellow	.146" (3.71)		
		ZSTM-187-2	#2 Oversize Tip, Standard Length	.215 (5.45)	Blue	.156" (3.96)		
ZipScrew®	3.0mm	ZWTM-300-S	Standard Tip, Standard Length	See ZipScrew®	Green	.065" (1.65)	19" (483)	ZWTS-300
ZipScrew®	3.5mm	ZWTM-350-S	Standard Tip, Standard Length	See ZipScrew®	Yellow	.0825" (2.10)		ZWTS-350
ZipScrew®	4.0mm	ZWTM-400-S	Standard Tip, Standard Length	See ZipScrew®	Blue	.103" (2.62)		ZWTS-400

NOTE: LONG MANDRELS AND LONG SPRINGS ARE AVAILABLE. FOR LONG MANDRELS AND SPRINGS ADD THE FOLLOWING TO THE PART NUMBER.

Standard Mandrels 19" (483) or Standard Springs: Specified Above

Long Mandrels 20" (508) or Long Springs: Add "L" to the Part Number

Extra Long Mandrels 21" (533): Add "XL" to the Part Number

METRIC DIMENSIONS ARE IN PARENTHESIS

◆ Fault Diagnosis

Fault Diagnosis

Tool will not place rivet	Low air pressure High broach load Worn tail jaws Tail jaws switched off	Increase air pressure Check application hole size Check mandrel size New tail jaws Switch on tail jaws
Jaws will not grip mandrel.	Worn or dirty jaws Low air pressure Tail jaw switch inoperable Air leaks to tail jaws Mandrel broken	Clean or renew Increase air pressure Replace switch Renew 'O' ring on piston 6. Replace mandrel
Jaws will not release mandrel	Dirty tail jaws or tail jaw housing Fault valve or tail jaw switch	Clean and lubricate Service or replace
Rivets will not feed Through nose jaws	Tail jaws not switch on Worn tail jaws Cursor orientation incorrect Unsuitable nose jaws Mandrel spring is not fitted Incorrect gap between rivet and nose jaws Cursor sticking Weak outer spring around cursor Incorrect M.F.Spring fitted	Switch on Renew tail jaws Refit Fit correct nose jaws Fit mandrel spring Set the gap again Clean cursor and oil Replace the cursor Fit correct mandrel spring
Feeding more than 1 rivet	Mandrel slip Incorrect gap between rivet and nose jaws when loaded	Check as for mandrel slip Set again the gap

◆ MAINTNANCE

Daily

- Check for air leaks. If damaged, hoses and couplings should be replaced.
- If there is no filter on the pressure regulator, bleed the airline to clear it of accumulated dirt or water before connecting the air hose to the tool.
- Check the nose equipment is correct.
- Check mandrels regularly for signs of wear or damage monitoring the number of placings.

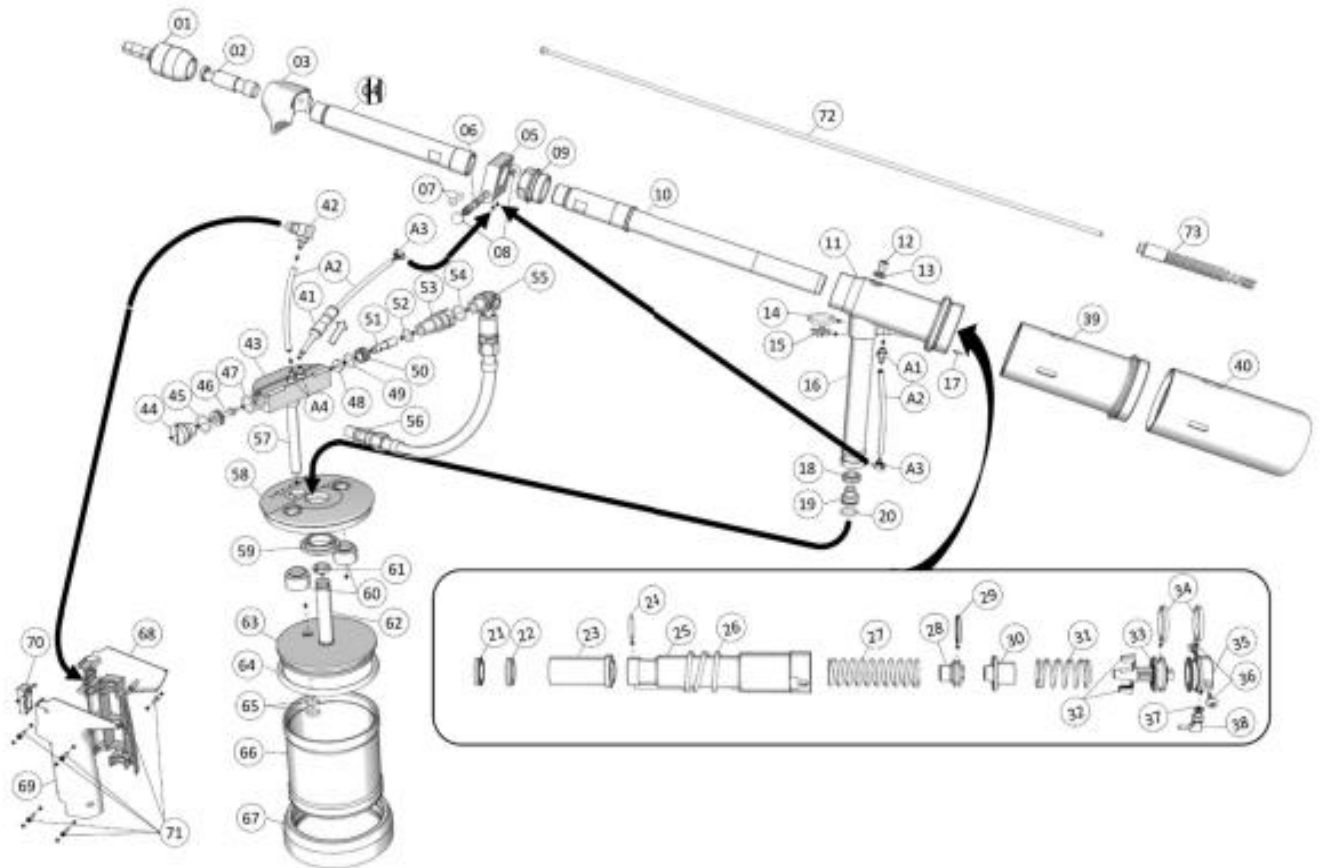
Weekly

- Remove, inspect, clean and grease the tail jaws.
- Check that the oil level in the intensifier reservoir is approximately 1/2" below the transparent cover plate

Every 500,000 Cycles

- Every 500,000 cycles the tool should be completely dismantled and components replaced where worn, damaged or when recommended all 'O' rings and seals should be renewed and lubricated with Moly Lithium Grease EP3753 before assembling.

PART LIST



PART LIST



Diagram NO.	IRF Part Number	IRF Description	Q'TY	Diagram NO.	IRF Part Number	IRF Description	Q'TY
01	RK75312-001	FRONT JAWS FOR RK-753-12	1	40	RK75312-040	COVER-R FOR RK-753-12	1
02	RK75312-002	CURSOR FOR RK-753-12	1	41	RK75312-041	NON RETURN VALVE FOR RK-753-12	1
03	RK75312-003	SWITCH BLOCK COVER FOR RK-753-12	1	42	RK8000S-34	ON/OFF BASE FOR RK8000S / RK-753-12	1
04	RK75312-004	BARREL-L FOR RK-753-12	1	43	RK8000S-40	AIR VALVE BODY FOR RK8000S / RK-753-12	1
05	RK75312-005	SWITCH BLOCK FOR RK-753-12	1	44	RK8000S-50	SCREW PLUG FOR RK8000S / RK-753-12	1
06	RK75312-006	SPOOL FOR RK-753-12	1	45	RK8000S-45	'O' RING FOR RK8000S / RK-753-12	1
07	RK75312-007	SPOOL 'O' RING FOR RK-753-12	2	46	RK8000S-49	AIR VALVE ROD FOR RK8000S / RK-753-12	1
08	RK75312-008	SCREW BUTTON FOR RK-753-12	2	47	RK8000S-42	'O' RING FOR RK8000S / RK-753-12	1
09	RK75312-009	BARREL NUT FOR RK-753-12	1	48	RK8000S-41	AIR VALVE RING FOR RK8000S / RK-753-12	1
10	RK75312-010	BARREL-R FOR RK-753-12	1	49	RK8000S-42	'O' RING FOR RK8000S / RK-753-12	1
11	RK75312-011	HYDRAULIC BODY FOR RK-753-12	1	50	RK8000S-43	AIR VALVE BASE FOR RK8000S / RK-753-12	1
12	RK75312-012	BODY SCREW FOR RK-753-12	1	51	RK8000S-44	SUBORDINATE TUBE FOR RK8000S / RK-753-12	1
13	RK75312-013	RUBBER WASHER FOR RK-753-12	1	52	RK8000S-45	'O' RING FOR RK8000S / RK-753-12	1
14		Included in RK75312-11	1	53	RK8000S-46	CONNECTING BASE FOR RK8000S / RK-753-12	1
15		Included in RK75312-11	1	54	RK8000S-53	'O' RING FOR RK8000S / RK-753-12	1
16		Included in RK75312-11	1	55	RK8000S-48	ON/OFF ASSEMBLY FOR RK8000S / RK-753-12	1
17	RK75312-017	JAW TUBE CONNECTOR FOR RK-753-12	1	56	1501	MALE - ON TOOL CONNECTOR 1/4 MPT	1
18		TBD	1	57	RK8000S-61	TRANSFER TUBE FOR RK8000S / RK-753-12	1
19		TBD	1	58	RK8000S-52	CYLINDER COVER FOR RK8000S / RK-753-12	1
20		TBD	1	59	RK8000S-55	LOCKNUT FOR RK8000S / RK-753-12	1
21	RK75312-021	U PACKING-L FOR RK-753-12	1	60	RK8000S-56	BUFFER FOR RK8000S / RK-753-12	2
22	RK75312-022	U PACKING-R FOR RK-753-12	1	61	RK8000S-60	PISTON RING FOR RK8000S / RK-753-12	1
23	RK75312-023	BODY PISTON FOR RK-753-12	1	62		TBD	1
24	RK75312-024	'O' RING FOR RK-753-12	1	63		TBD	1
25	RK75312-025	TAIL JAW CYLINER FOR RK-753-12	1	64	RK8000S-64	CYLINDER 'O' RING FOR RK8000S / RK-753-12	1
26	RK75312-026	TAIL JAW TUBE FOR RK-753-12	1	65	RK8000M-78	TRANSFER TUBE 'O' RING RK8000M / RK-753-12	2
27	RK75312-027	CYLINDER RETURN SPRING FOR RK-753-12	1	66	RK8000S-67	CYLINDER FOR RK8000S / RK-753-12	1
28	RK75312-028	BARREL PLUG FOR RK-753-12	1	67	RK8000S-68	BASE COVER FOR RK8000S / RK-753-12	1
29	RK75312-029	RUBBING STRIPE FOR RK-753-12	1	68	RK8000S-31	HANDLE MOLD-R FOR RK8000S / RK-753-12	1
30	RK75312-030	TAIL JAWS HOUSING FOR RK-753-12	1	69	RK8000S-30	HANDLE MOLD-L FOR RK8000S / RK-753-12	1
31	RK75312-031	TAIL JAWS RETURN SPRING FOR RK-753-12	1	70	RK8000S-32	TRIGGER BUTTON FOR RK8000S / RK-753-12	1
32	RK75312-032	TAIL JAWS FOR RK-753-12	2	71	RK8000S-39	TAPPING SCREW FOR RK8000S / RK-753-12	6
33	RK75312-033	TAIL JAWS TURRET ASS'Y FOR RK-753-12	1	72	RK75312-072	MANDREL FOR RK-753-12	1
34	RK75312-034	'O' RING FOR RK-753-12	2	73	RK75312-073	MF SPRING FOR RK-753-12	1
35	RK75312-035	TAIL JAWS PLUG FOR RK-753-12	1				
36	RK75312-036	PLUG BOLT FOR RK-753-12	2				
37	RK75312-037	WASHER FOR RK-753-12	1				
38	RK75312-038	ELBOW CONNECTOR FESTO FOR RK-753-12	1				
39	RK75312-039	COVER-L FOR RK-753-12	1				

Contact Information:



Industrial Rivet & Fastener Co.

200 Paris Avenue Northvale,

New Jersey 07647

Phone: 201-750-1040

Fax: 201-750-1050

Toll-Free: 1-800-BUY-RIVET

Website: www.rivet.com

Email: info@rivet.com