



**Recommendations for Maintenance:**

Please, note it is important to make sure the tool has clean, dry and lubricated air at the recommended pressure supplied to it. (Please consult the service manual for further instructions)

The pulse tool requires preventive maintenance like oil changes and have the parts inspected periodically. It is recommended to make the first preventive maintenance at 250,000 pulses-seconds or 6 months, whichever one occurs first. The tool's performance should be evaluated. The oil needs to be changed. Inspect all the soft parts of the pulse unit (the soft parts are referenced as the "Repair Kit" - see parts list page 2). The Repair Kit includes all the necessary parts and it is recommended to be performed every six months (unless parts are in good condition). If the tool fails before the 250,000 pulses-seconds then the pulse unit needs to be rebuilt, with the "Repair Kit" and "Service Kit" (see parts list page 2).  
 Caution: prevailing torque, which makes that the tool start pulsing early, reduces the life of the Oil & O-rings of the pulse unit. A pulse-second is not every second the tool is running, only when it's "pulsing" and applying torque. On typical applications the tool should run down freely until fastener is snug and then the tool starts pulsing until it reaches the preset torque. When operating the tool on the fastener, start counting once the tool begins pulsing. You can use a watch with a second hand and time it until the tool shuts-off. Use the information to calculate how many pulse-seconds the tool performs per application each day. Then perform some basic math to calculate the tool's maintenance schedule. Use this formula.

$$\# \text{ Pulsing Seconds} \div \text{Total of Pulsing Time} = \text{No Cycles}$$

NOTE: Please include the rework, reverse, or retightening time is involve on the operation to calculate the accurate pulsing time. Here is an example:

Pulsing Time = 2 seconds  
 Pulses- seconds recommended = 250,000

$$250,000 \text{ pulses-sec} \div 2 \text{ sec} = 125,000 \text{ cycles}$$

Using the information above, you can estimate the maintenance period for the tool by using this formula:

No of Fasteners	Pulsing Time per Fastener	No of Parts Assembled per Day	Calculation	Maintenance Period
7	2 seconds	300	$125,000 / (300 \times 7) = 59$	59 days

Index No.	Part No.	Description	Qty	Index No.	Part No.	Description	Qty
1	63-I90-410	Greasing Screw	1	45	63-00-41181	O-Ring	2
2	63-00-4153	O-Ring	1	46	63-00-41138	O-Ring	1
3	63-I90-201	Pulse Unit Housing	1	47	63-IS100-307	Rear Cover	1
4	63-I100-202	Bushing	1	48	63-IS100-524	Valve Seat	1
5	63-I100-424	Washer	1	49	63-00-41127	O-Ring	2
6	63-I90-401	Pulse Cylinder Seat	1	50	63-IS100-312	Washer	1
7	63-I70-410	Greasing Screw	1	51	63-00-3824	Steel Ball	1
8	63-00-41113	O-Ring	4	52	63-IS100-313	Spring	1
9	63-00-3407	Pin	2	53	63-IS100-311	Valve	1
10	63-00-41163	O-Ring	2	54	63-IS100-518	Seat	1
11	63-I90-403	Front Cover	1	55	63-IS90-101	Motor Housing	1
12	63-I100-409	Back Up Ring	1	56	63-I40S-108	Bushing	4
13	63-00-2601	X-Ring	1	57	63-IS100-609	Screw	1
14	63-I40S-411	Valve Screw	1	58	63-I40S-102	Hanger	1
15	63-00-3435	Pin	2	59	63-00-41166	O-Ring	1
16	63-I90-408	Front Plate	1	60	63-I100-104	Nut	1
17B	63-I90-405	Anvil	1	61	63-I130-504	Trigger	1
18B	63-I90-406-B	Drive Blade	2	62	63-00-3354	Spring Pin	1
19B	63-I90-452	Roller	2	63	63-00-0505	Screw	2
20	63-I90-407	Spring	2	64	63-I100-503	Regulator Knob	1
21B	63-IS40-450	Block Valve	1	65	63-00-4101	O-Ring	1
22EA	63-IS90-412-C	Valve	1	66EA	63-IS100-505B	Valve Stem	1
23	63-00-41162	O-Ring	1	68EA	63-I100-508B	Bushing	1
24	63-00-3813	Steel Ball	2	69EA	63-00-41199	O-Ring	1
25EA	63-IS90-425-C	Spring	1	70EA	63-I100-507B	Spring	1
26C	63-I90-404-B	Pulse Cylinder	1	71	63-I100-506	Spring	1
27	63-00-3433	Pin	1	72	63-IS100-502	F/R Valve	1
28	63-00-3419	Pin	2	73	63-I100-501	Valve Sleeve	1
29EA	63-IS90-415-C	Rear Plate	1	74	63-00-41111	O-Ring	2
30C	63-00-41173	O-Ring	2	75	63-00-4158	O-Ring	1
31C	63-IS40S-421	Pressure Valve	2	76	63-I100-601	Muffler	1
32	63-IS90-314	Shut Off Stem	1	77	63-I100-603	Exhaust Deflector	1
33EA	63-IS150-317	Spring	1		63-I100-604A	Air Inlet 1/4"PF 19	
34	63-I100-423	Washer	1	78	63-I100-604B	Air Inlet 1/4"PT 19	1
35	63-I90-402	Lock Nut	1		63-I100-604C	Air Inlet 1/4"NPT 18	
36	63-I90-306	Lock Nut	1	79	63-I100-511	Pin	1
37	63-00-2351	Ball Bearing	1	80C	63-I90-453	Spring	1
38	63-00-3324	Spring Pin	1	81C	63-I40S-454	Block Cap	1
39	63-I90-302	Cylinder	1	*	63-IS90RK-E05A	Repair kit :Index No-	
40	63-00-3339	Spring Pin	1			8(2); 10(2); 12; 13; 20(2); 23; 30C(2)	
41	63-I90-304	Rotor Blade	9	*	63-IS90SK-E05A	Service kit :Index No-	
42	63-I90-303	Rotor	1			16; 18B(2); 19B(2); 29EA;	
43	63-I90-305	Rear Plate	1			41(9); 52; 68EA; 69EA; 70EA	
44	63-00-2358	Ball Bearing	1	*	63-IS90-400ASM	Pulse Unit	
					63-01-0502FL	Accessories Kits Included	
					63-Pulse Tool Fluid, 125ml	Pulse Tool Fluid, 125ml	