

PNEUMATIC
INSTALLATION TOOL

FOR MODEL

PLG-801/802/803/804/808

PLG-901/902/903/904/908

Operation
Instructions

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General Description

801/802/803/804 pneumatic spin-spin installation tools for rivet nut are a precise mechanical assembly. Under an easy pneumatic operation, a high performance can be achieved efficiently.

The advantages are as follows:

(1)small size, (2)large working torque, (3)long life, (4)safety; no electrical shock; no heat generated and (5)low energy consumption.

Technical Data

	801	802	803	804	808
Air Pressure(Static)	2.5~6.4 Kg/cm ² (36~90 PSI)	6.0~7.8 Kg/cm ² (85~110 PSI)	6.9~7.8 Kg/cm ² (95~110 PSI)	6.9~7.8 Kg/cm ² (95~110 PSI)	6.9~7.8 Kg/cm ² (95~110 PSI)
Air Consumption per Cycle	5 CFM	5 CFM	5 CFM	5 CFM	5 CFM
Mortor Speed	3000 RPM	1500 RPM	600 RPM	400 RPM	280 RPM
Noise Level					
Weight	1.05Kg (2.3 lbs)	1.05Kg (2.3 lbs)	1.20 Kg (2.6 lbs)	1.20 Kg (2.6 lbs)	1.40 Kg (3.1 lbs)
Vibration					
Hose Size	3/8"(9.5m/m)	3/8"(9.5m/m)	3/8"(9.5m/m)	3/8"(9.5m/m)	3/8"(9.5m/m)
Rivet Nut Size	M3x0.5 M4x0.7 #4-40 UNC #6-32 UNC #8-32 UNC	M5x0.8 M6x1.0 #10-24 UNC #10-32 UNF 1/4-20 UNC 1/4-28 UNF	M8x1.25 M10x1.5 5/16-18 UNC 5/16-24 UNF 3/8-16 UNC 3/8-24 UNF	M8x1.25 M10x1.5 5/16-18 UNC 5/16-24 UNF 3/8-16 UNC 3/8-24 UNF	M12x1.75 1/2-13 UNC
	901	902	903	904	
Air Pressure(Static)	2.5~6.4 Kg/cm ² (36~90 PSI)	6.0~7.8 Kg/cm ² (85~110 PSI)	6.9~7.8 Kg/cm ² (95~110 PSI)	6.9~7.8 Kg/cm ² (95~110 PSI)	
Air Consumption per Cycle	5 CFM	5 CFM	5 CFM	5 CFM	
Mortor Speed	3000 RPM	1500 RPM	600 RPM	400 RPM	
Noise Level					
Weight	0.9 Kg (2.0 lbs)	0.9 Kg (2.0 lbs)	1.0 Kg (2.2 lbs)	1.0 Kg (2.2 lbs)	
Vibration					
Hose Size	3/8"(9.5m/m)	3/8"(9.5m/m)	3/8"(9.5m/m)	3/8"(9.5m/m)	
Rivet Nut Size	M3x0.5 M4x0.7 #4-40 UNC #6-32 UNC #8-32 UNC	M5x0.8 M6x1.0 #10-24 UNC #10-32 UNF 1/4-20 UNC 1/4-28 UNF	M8x1.25 M10x1.5 5/16-18 UNC 5/16-24 UNF 3/8-16 UNC 3/8-24 UNF	M8x1.25 M10x1.5 5/16-18 UNC 5/16-24 UNF 3/8-16 UNC 3/8-24 UNF	

Safety Notes

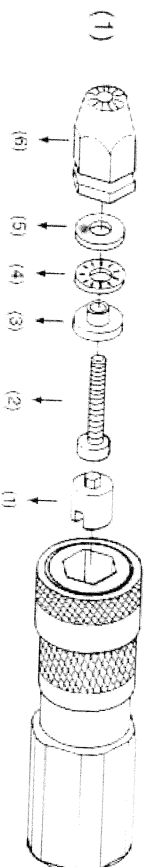
This instruction manual must be read with particular attention to the following safety rules, by any person installing, operation, or servicing this tool.

- DO NOT USE OUTSIDE THE DESIGN INTENT.
- DO NOT USE EQUIPMENT WITH THIS TOOL/MACHINE OTHER THAN THAT RECOMMENDED AND SUPPLIED BY NAFCO.
- THE PRECAUTIONS TO BE OBSERVED WHEN USING THIS TOOL/MACHINE MUST BE EXPLAINED BY THE CUSTOMER TO ALL OPERATORS.
- ALWAYS DISCONNECT THE AIRLINE FROM THE TOOL/MACHINE INLET BEFORE ATTEMPTING TO ADJUST, FIT OR REMOVE A NOSE ASSEMBLY.
- DO NOT OPERATE A TOOL/MACHINE THAT IS DIRECTED TOWARDS ANY PERSON(S).
- ALWAYS ADOPT A FIRM FOOTING OR A STABLE POSITION BEFORE OPERATING THE TOOL/MACHINE.
- ENSURE THAT VENT HOLES DO NOT BECOME BLOCKED OR COVERED AND THAT HOSES ARE ALWAYS IN GOOD CONDITION.
- ALWAYS SETTING THE OPERATING PRESSURE AT RECOMMENDED VALUE LISTED IN TECHNICAL DATA.
- DO NOT OPERATE THE TOOL WITHOUT FULL NOSE EQUIPMENT.
- WHEN USING THE TOOL, THE WEARING OF SAFETY GLASSES IS REQUIRED BOTH BY THE OPERATOR AND OTHERS IN THE VICINITY TO PROTECT AGAINST FASTENER PROJECTION, SHOULD A FASTENER BE PLACED 'IN AIR'. WE RECOMMEND WEARING GLOVES IF THERE ARE SHARP EDGES OR CORNERS ON THE APPLICATION.
- WHEN CARRYING THE TOOL FROM PLACE TO PLACE KEEP HANDS AWAY FROM THE TRIGGER/LEVER TO AVOID INADVERTENT START UP.

Operation Instructions

A. Tool Preparation

(1) First, assemble the bearing set (part 2,3,4,5) shown as figure.



(2) Insert part 1 into gun body. Rotate part 1 until the slot connects with gun body shown as figure



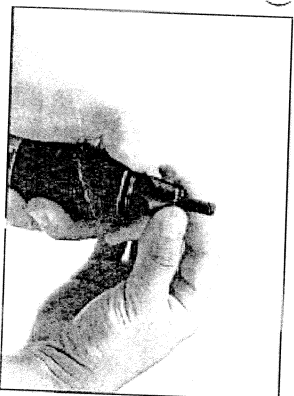
(3) Install the pre-assembled bearing set with part 1.



(4) Insert part 6 into hexagon slot of gun body.



(5) Push quick releasing ring of gun body backward and push part 6 into gun body completely. Release the quick releasing ring to complete the tool assembly.

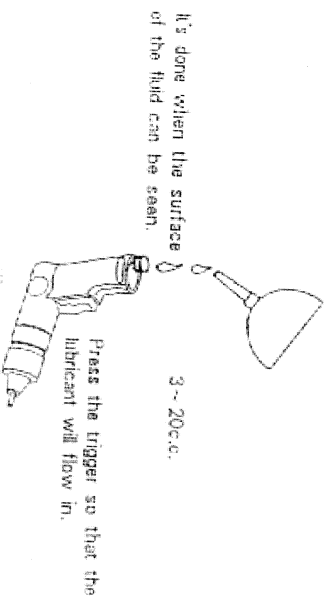


B. Tool Operation

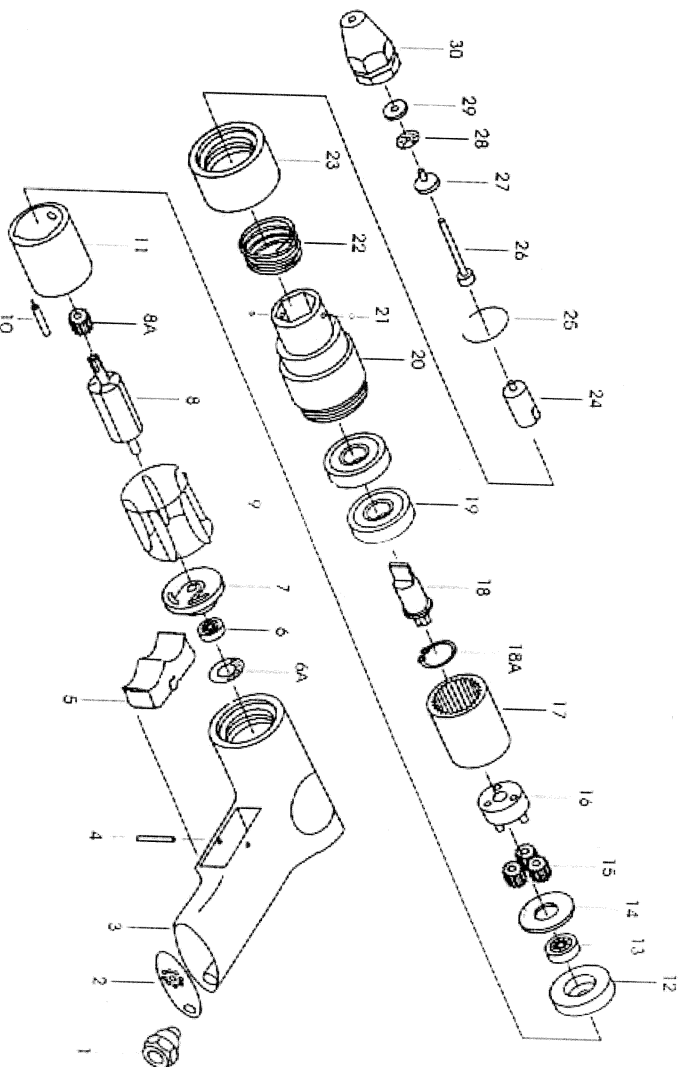
1. Check if the screw length of thread adaptation set is proper for the use of installation application. We recommend at least on thread of the screw to extend beyond the end of the insert after fully engagement. If the screw is not long enough, measure what is required and get a screw that is long enough.
2. Connect the airline to the tool. Hold the fastener to the tool mandrel. Pressing Trigger position 'F' to engage the insert threads on to the tool mandrel. Stop engagement just before the head of the insert comes in contact with the anvil face.
3. Insert the fastener into the installation hole of a workpiece. Press and hold Trigger position 'F' until the fastener is deformed and clinched securely into the workpiece.
4. Actuate position 'R' of the trigger to disengages the tool mandrel from the installed fastener.

C. Maintenance

1. Before a long-term storage of the pneumatic tool, there must be a maintenance for the tool.
2. Drop in approximately 3 to 20 c.c. (depending on the size of the tool) lubricant into the gas inlet of the pneumatic tool. Usually when a user presses against the end of trigger, if the lubricant can be seen (as shown in the right illustration), it is completed.
3. Press on the trigger so that the lubricant will flow in and then connect to the high pressure gas about 10 to 20 second operation.



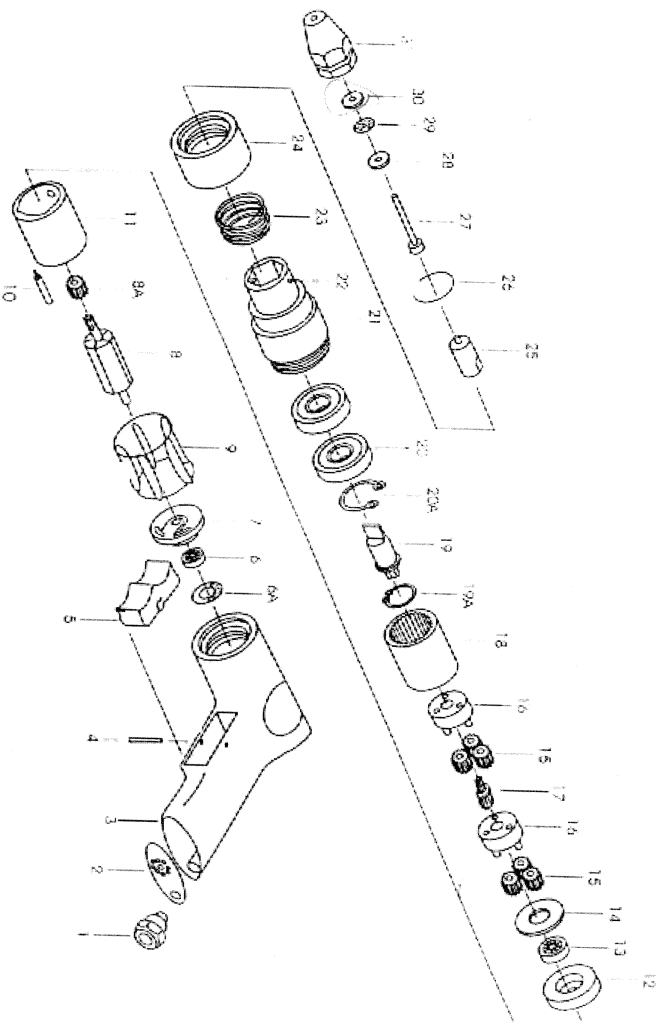
MODEL PLG-801/802



PART NO.	Description	NO. Req'd	PART NO.	Description	NO. Req'd
PLG-802-1	AIR INLET	1	PLG-801-16	GEAR CAGE	1
PLG-802-2	DIFUSER-EXHAUST	1	PLG-802-16	GEAR CAGE	1
PLG-802-3	HANDLE ASSEMBLY	1	PLG-802-17	INTERNAL GEAR	1
PLG-802-4	PIN($\varphi 3 \times 28$)	1	PLG-802-18	DRIVE SPINDLE	1
PLG-802-5	TRIGGER	1	PLG-802-18A	RETAINING RING	1
PLG-802-6A	GASKET	1	PLG-802-19	BALL BEARING(6200z)	2
PLG-802-6	BALL BEARING(696zz)	1	PLG-802-20	NOSE HOUSING	1
PLG-802-7	REAR PLATE	1	PLG-802-21	LOCKING BALLS	2
PLG-802-8	ROTOR(6T)	1	PLG-802-22	CHANGE VALUE SPRING	1
PLG-801-8A	SUN GEAR(12T)	1	PLG-802-23	QUICK CHANGE SLEEVE	1
PLG-802-9	ROTOR BLADE	5	*PLGH-xxx-24	DROW BOLT DRIVER	1
PLG-802-10	ROLL PIN($\varphi 2.5 \times 10$)	2	PLG-802-25	CIRCLIP	1
PLG-802-11	CYLINDER	1	*PLGH-xxx-26	SCREW	1
PLG-802-12	FRONT END PLATE	1	*PLG-802-27	REAR THRUST PLATE	1
PLG-802-13	BALL BEARING(626zz)	1	*PLGH-xxx-28	ROLLER BEARINGS	1
PLG-802-14	WASHER	1	*PLGH-xxx-29	WASHER	1
PLG-801-15	PLANET GEAR(15T)	3	*PLGH-xxx-30	NOSE PICE	1
PLG-802-15	PLANET GEAR(18T)	3			

*FOR THREAD ADAPTATION SET PART NO. PLEASE SEE APENDEX I

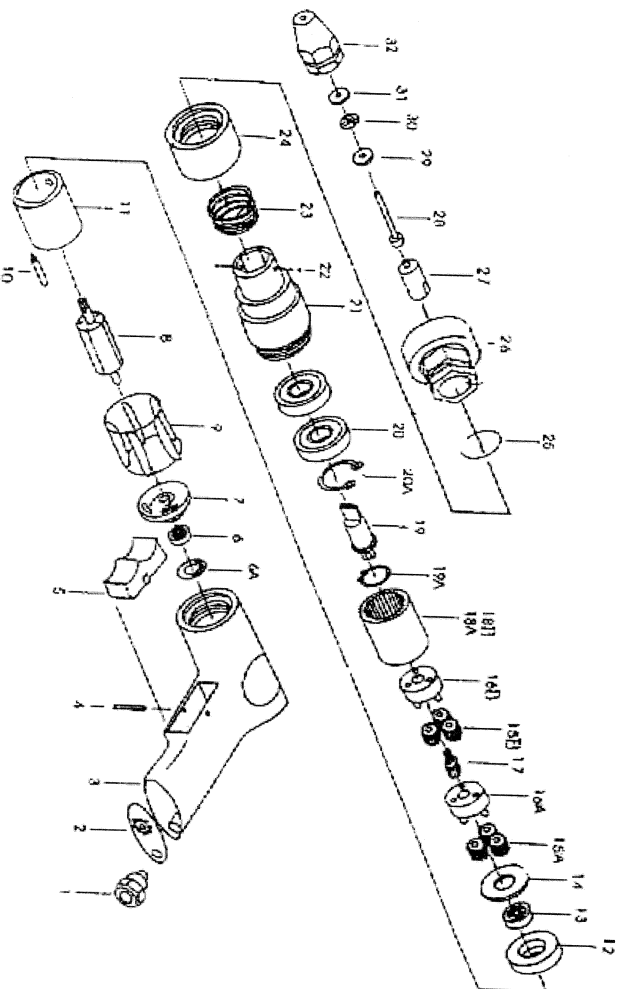
MODEL PLG-803/804



PART NO.	Description	NO. Req'd	PART NO.	Description	NO. Req'd
PLG-803-1	AIR INLET	1	PLG-803-16	GEAR CAGE	2
PLG-803-2	DIFFUSER-EXHAUST	1	PLG-804-16	GEAR CAGE	2
PLG-803-3	HANDLE ASSEMBLY	1	PLG-803-17	SUN GEAR(12T)	1
PLG-803-4	PIN(ψ3x28)	1	PLG-804-17	SUN GEAR(9T)	1
PLG-803-5	TRIGGER	1	PLG-803-18	INTERNAL GEAR	1
PLG-803-6A	GASKET	1	PLG-804-18	INTERNAL GEAR	1
PLG-803-6	BALL BEARING(696zz)	1	PLG-803-19	DRIVE SPINDLE	1
PLG-803-7	REAR PLATE	1	PLG-803-19A	RETAINING RING	1
PLG-803-8 A	SUN GEAR	1	PLG-803-20	BALL BEARING(6200z)	2
PLG-803-8	ROTOR(6T)	1	PLG-803-20A	RETAINING RING	1
PLG-804-8	ROTOR(9T)	1	PLG-803-21	NOSE HOUSING	1
PLG-803-9	ROTOR BLADE	5	PLG-803-22	LOCKING BALLS	2
PLG-803-10	ROLL PIN(ψ2.5x10)	2	PLG-803-23	CHANGE VALVE SPRING	1
PLG-803-11	CYLINDER	1	PLG-803-24	QUICK CHANGE SLEEVE	1
PLG-803-12	FRONT END PLATE(ψ34xψ6)	1	*PLGH-xxx-25	DROW BOLT DRIVER	1
PLG-804-12	FRONT END PLATE(ψ34xψ8)	1	PLG-803-26	CIRCLIP	1
PLG-803-13	BALL BEARING(626zz)	1	*PLGH-xxx-27	SCREW	1
PLG-804-13	BALL BEARING(698zz)	1	*PLG-xxx-28	REAR THRUST PLATE	1
PLG-803-14	WASHER	1	*PLG-xxx-29	ROLLER BEARINGS	1
PLG-803-15	PLANET GEAR(15T)	6	*PLG-xxx-30	WASHER	1
PLG-804-15	PLANET GEAR(16T)	6	*PLG-xxx-31	NOSE PIECE	1

*FOR THREAD ADAPTATION SET PART NO. PLEASE SEE APENDEX I

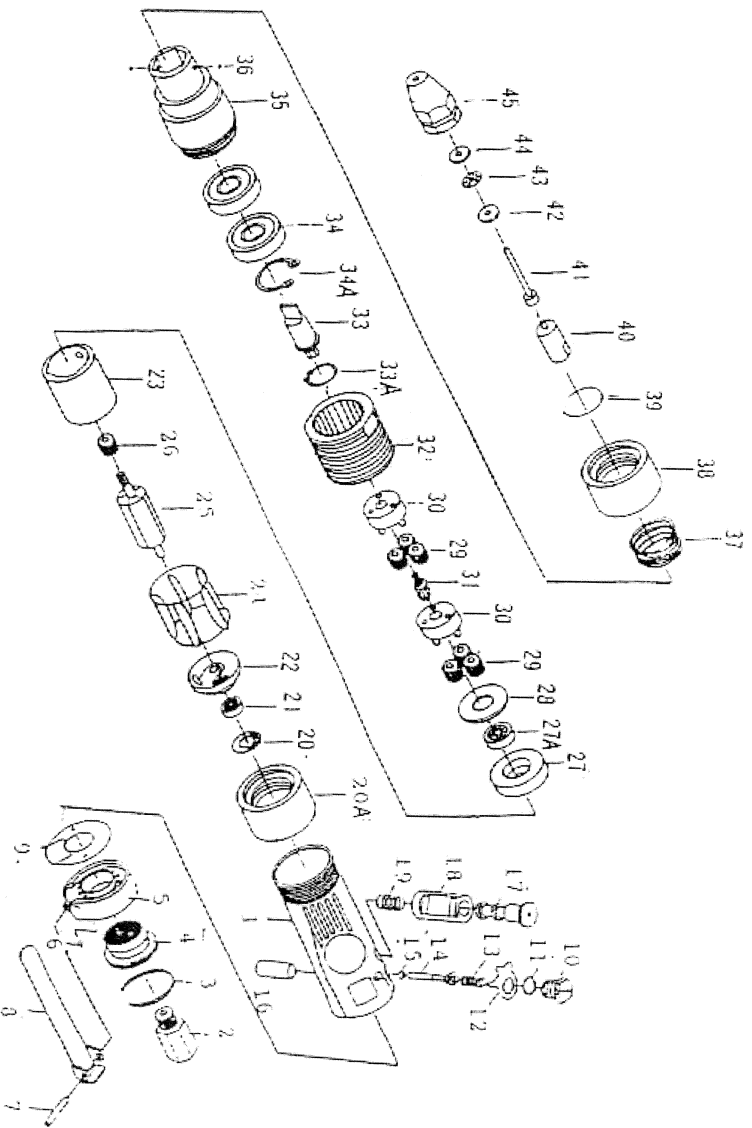
MODEL PLG-808



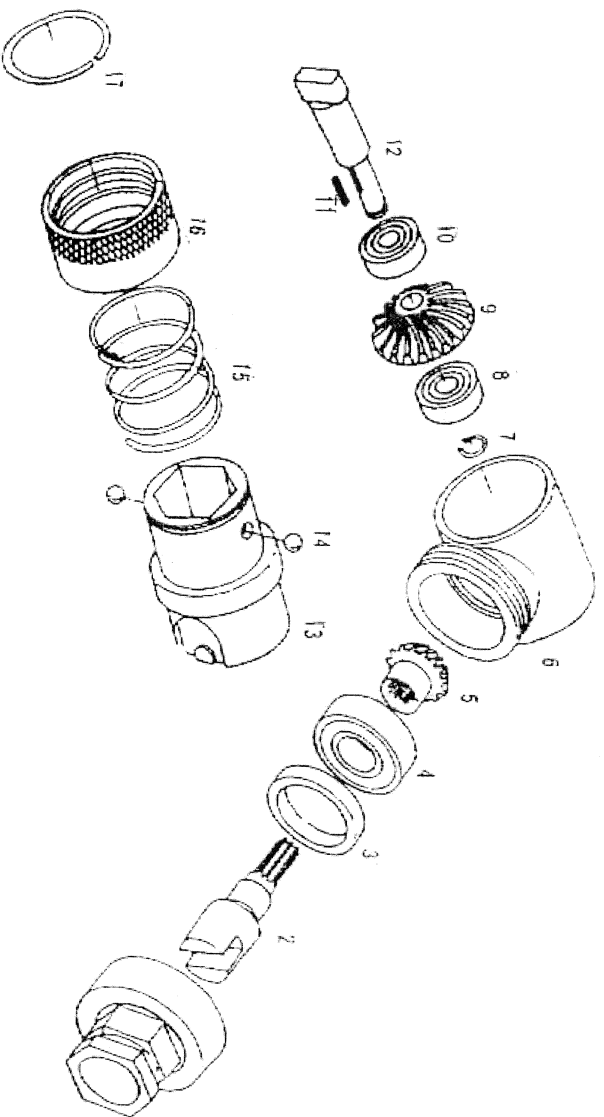
PART NO.	Description	NO. Req'd	PART NO.	Description	NO. Req'd
PLG-808-1	AIR INLET	1	PLG-808-17	SUN GEAR(9T)	1
PLG-808-2	DIFUSER-EXHAUST	1	PLG-808-18A	INTERNAL GEAR	1
PLG-808-3	HANDLE ASSEMBLY	1	PLG-808-18B	INTERNAL GEAR	1
PLG-808-4	PIN(φ3x28)	1	PLG-808-19	DRIVE SPINDLE	1
PLG-808-5	TRIGGER	1	PLG-808-19A	RETAINING RING	1
PLG-808-6A	GASKET	1	PLG-808-20	BALL BEARING(6200z)	2
PLG-808-6	BALL BEARING(696zz)	1	PLG-808-20A	RETAINING RING	1
PLG-808-7	REAR PLATE	1	PLG-808-21	NOSE HOUSING	1
PLG-808-8	ROTOR(6T)	1	PLG-808-22	LOCKING BALLS	2
PLG-808-9	ROTOR BLADE	5	PLG-808-23	CHANGE VALVE SPRING	1
PLG-808-10	ROLL PIN(φ2.5x10)	2	PLG-808-24	QUICK CHANGE SLEEVE	1
PLG-808-11	CYLINDER	1	PLG-808-25	CIRCLIP	1
PLG-808-12	FRONT END PLATE	1	PLG-808-26	SPINDLE COVER	1
PLG-808-13	BALL BEARING(626zz)	1	PLGH-xxx-27	DRAW BOLT DRIVER	1
PLG-808-14	WASHER	1	PLGH-xxx-28	SCREW	1
PLG-808-15A	PLANET GEAR(18T)	3	PLGH-xxx-29	WASHER	1
PLG-808-15B	PLANET GEAR(16T)	3	PLGH-xxx-30	ROLLER BEARINGS	1
PLG-808-16A	GEAR CAGE	1	PLGH-xxx-31	WASHER	1
PLG-808-16B	GEAR CAGE	1	PLGH-xxx-32	NOSE PIECE	1

*FOR THREAD ADAPTATION SET PART NO. PLEASE SEE APENDEX I

MODEL PLG-901/902/903/904



MODEL PLG-908



MODEL PLG-901/902/903/904

PART NO.	Description	NO. Req'd	PART NO.	Description	NO. Req'd
PLG-903-1	MOTOR HOUSING	1	PLG-903-27A	BALL BEARING(626zz)	1
PLG-903-2	INLET BUSHING	1	PLG-904-27A	BALL BEARING(698zz)	1
PLG-903-3	STOP RING	1	PLG-903-28	WASHER	1
PLG-903-4	DEFLECTOR	1	PLG-901-29	PLANET GEAR(15T)	3
PLG-903-5	HOUSING CAP	1	PLG-902-29	PLANET GEAR(18T)	3
PLG-903-6	SCREW	2	PLG-903-29	PLANET GEAR(15T)	6
PLG-903-7	SPRING PIN	1	PLG-904-29	PLANET GEAR(16T)	6
PLG-903-8	LEVER	1	PLG-901-30	GEAR CAGE	1
PLG-903-9	GASKET	1	PLG-902-30	GEAR CAGE	1
PLG-903-10	VALVE SCREW	1	PLG-903-30	GEAR CAGE	2
PLG-903-11	"O" RING	1	PLG-904-30	GEAR CAGE	2
PLG-903-12	REVERSE RETAINER	1	PLG-903-31	SUN GEAR(12T)	1
PLG-903-13	VALVE SPRING	1	PLG-904-31	SUN GEAR(9T)	1
PLG-903-14	THROTTLE VALVE	1	PLG-901-32	INTERNAL GEAR	1
PLG-903-15	'O' RING	1	PLG-902-32	INTERNAL GEAR	1
PLG-903-16	VALVE BUSHING	1	PLG-903-32	INTERNAL GEAR	1
PLG-903-17	REVERSE VALVE	1	PLG-904-32	INTERNAL GEAR	1
PLG-903-18	REVERSE VALVE BUSHING	1	PLG-903-33A	RETAINER RING	1
PLG-903-19	REVERSE VALVE SPRING	1	PLG-903-33	DRIVE SPINDLE	1
PLG-903-20A	LOCK RING	1	PLG-903-34A	RETAINER RING	1
PLG-903-20	GASKET	1	PLG-904-34A	RETAINER RING	1
PLG-903-21	BALL BEARING(696zz)	1	PLG-903-34	BALL BEARING(6200z)	2
PLG-903-22	REAR END PLATE	1	PLG-901-35	NOSE HOUSING	1
PLG-903-23	CYLINDER	1	PLG-902-35	NOSE HOUSING	1
PLG-903-24	ROTOR BLADE	5	PLG-903-35	NOSE HOUSING	1
PLG-901-25	ROTOR(6T)	1	PLG-903-35	NOSE HOUSING	1
PLG-902-25	ROTOR(6T)	1	PLG-903-36	LOCKING BALLS	2
PLG-903-25	ROTOR(6T)	1	PLG-903-37	SPRING	1
PLG-904-25	ROTOR(9T)	1	PLG-903-38	QUICK CHANGE SLEEVE	1
PLG-901-26	SUN GEAR	1	PLG-903-39	CIPCLIP	1
PLG-903-26	SUN GEAR	1	*PLGH-xxx-40	DRAW BOLT DRIVER	1
PLG-901-27	FRONT END PLATE(ψ34xψ6)	1	*PLGH-xxx-41	SCREW	1
PLG-902-27	FRONT END PLATE(ψ34xψ6)	1	*PLGH-xxx-42	REAR THRUST PLATE	1
PLG-903-27	FRONT END PLATE(ψ34xψ6)	1	*PLGH-xxx-43	ROLLER BEARINGS	1
PLG-904-27	FRONT END PLATE(ψ34xψ8)	1	*PLGH-xxx-44	WASHER	1
PLG-901-27A	BALL BEARING(626zz)	1	*PLGH-xxx-45	NOSE PIECE	1
PLG-902-27A	BALL BEARING(626zz)	1			

*FOR THREAD ADAPTATION SET PART NO. PLEASE SEE APPEINDEX II

MODEL 908

PART NO.	Description	NO. Req'd	PART NO.	Description	NO. Req'd
PLG-908-1	SPINDLE COVER	1	PLG-908-9	GEAR	1
PLG-908-2	INTERNAL GEAR	1	PLG-908-10	BALL BEARING	1
PLG-908-3	SPACER	1	PLG-908-11	KEY	1
PLG-908-4	BALL BEARING	1	PLG-908-12	SPINDLE	1
PLG-908-5	PINION	1	PLG-908-13	NOSE HOUSING	1
PLG-908-6	ANGLE HOUSING	1	PLG-908-14	CAN RIDER BALL	2
PLG-908-7	RETAINER RING	1	PLG-908-15	CAHNGE VALVE SPRING	1
PLG-908-8	BALL BEARING	1	PLG-908-16	PIT STOPPER WASHER	1
			PLG-908-17	SPRING RECEIVER	1

APPENDIX I

Selection Guide for Thread Adaptation Set (800 SERIES)

Thread Size	Thread adaptation set	Draw Bolt Driver	Screw	Rear Thrust Plate	Roller Bearings	Washer	Nose piece
#6-32 UNC	PLGH-632	-P801-24	-P801-26	-P801-27	-P801-28	-P801-29	-P801-30
#8-32 UNC	PLGH-832	-P801-24	-P801-26	-P801-27	-P801-28	-P801-29	-P801-30
#10-24 UNC	PLGH-1024	-P802-24	-P802-26	-P802-27	-P802-28	-P802-29	-P802-30
#10-32 UNF	PLGH-1032	-P802-24	-P802-26	-P802-27	-P802-28	-P802-29	-P802-30
1/4-20 UNC	PLGH-420	-P802-24	-P802-26	-P802-27	-P802-28	-P802-29	-P802-30
1/4-28 UNF	PLGH-428	-P802-24	-P802-26	-P802-27	-P802-28	-P802-29	-P802-30
5/16-18 UNC	PLGH-518	-P803-25	-P803-27	-P803-28	-P803-29	-P803-30	-P803-31
5/16-24 UNF	PLGH-524	-P803-25	-P803-27	-P803-28	-P803-29	-P803-30	-P803-31
3/8-16 UNC	PLGH-616	-P803-25	-P803-27	-P803-28	-P803-29	-P803-30	-P803-31
3/8-24 UNF	PLGH-624	-P803-25	-P803-27	-P803-28	-P803-29	-P803-30	-P803-31
1/2-13 UNC	PLGH-813	-P808-27	-P808-28	-P808-29	-P808-30	-P808-31	-P808-32
M4x0.7 ISO	PLGH-M4	-P801-24	-P801-26	-P801-27	-P801-28	-P801-29	-P801-30
M5x0.8 ISO	PLGH-M5	-P802-24	-P802-26	-P802-27	-P802-28	-P802-29	-P802-30
M6x1.0 ISO	PLGH-M6	-P802-24	-P802-26	-P802-27	-P802-28	-P802-29	-P802-30
M8x1.25 ISO	PLGH-M8	-P803-25	-P803-27	-P803-28	-P803-29	-P803-30	-P803-31
M10x1.5 ISO	PLGH-M10	-P803-25	-P803-27	-P803-28	-P803-29	-P803-30	-P803-31
M12x1.75 ISO	PLGH-M12	-P808-27	-P808-28	-P808-29	-P808-30	-P808-31	-P808-32

APPENDIX II

Selection Guide for Thread Adaptation Set (900 SERIES)

Thread Size	Thread adaptation set	Draw Bolt Driver	Screw	Rear Thrust Plate	Roller Bearings	Washer	Nose piece
#6-32 UNC	PLGH-632	-P901-40	-P901-41	-P901-42	-P901-43	-P901-44	-P901-45
#8-32 UNC	PLGH-832	-P901-40	-P901-41	-P901-42	-P901-43	-P901-44	-P901-45
#10-24 UNC	PLGH-1024	-P902-40	-P902-41	-P902-42	-P902-43	-P902-44	-P902-45
#10-32 UNF	PLGH-1032	-P902-40	-P902-41	-P902-42	-P902-43	-P902-44	-P902-45
1/4-20 UNC	PLGH-420	-P902-40	-P902-41	-P902-42	-P902-43	-P902-44	-P902-45
1/4-28 UNF	PLGH-428	-P902-40	-P902-41	-P902-42	-P902-43	-P902-44	-P902-45
5/16-18 UNC	PLGH-518	-P903-40	-P903-41	-P903-42	-P903-43	-P903-44	-P903-45
5/16-24 UNF	PLGH-524	-P903-40	-P903-41	-P903-42	-P903-43	-P903-44	-P903-45
3/8-16 UNC	PLGH-616	-P903-40	-P903-41	-P903-42	-P903-43	-P903-44	-P903-45
3/8-24 UNF	PLGH-624	-P903-40	-P903-41	-P903-42	-P903-43	-P903-44	-P903-45
M4x0.7 ISO	PLGH-M4	-P901-40	-P901-41	-P901-42	-P901-43	-P901-44	-P901-45
M5x0.8 ISO	PLGH-M5	-P902-40	-P902-41	-P902-42	-P902-43	-P902-44	-P902-45
M6x1.0 ISO	PLGH-M6	-P902-40	-P902-41	-P902-42	-P902-43	-P902-44	-P902-45
M8x1.25 ISO	PLGH-M8	-P903-40	-P903-41	-P903-42	-P903-43	-P903-44	-P903-45
M10x1.5 ISO	PLGH-M10	-P903-40	-P903-41	-P903-42	-P903-43	-P903-44	-P903-45