

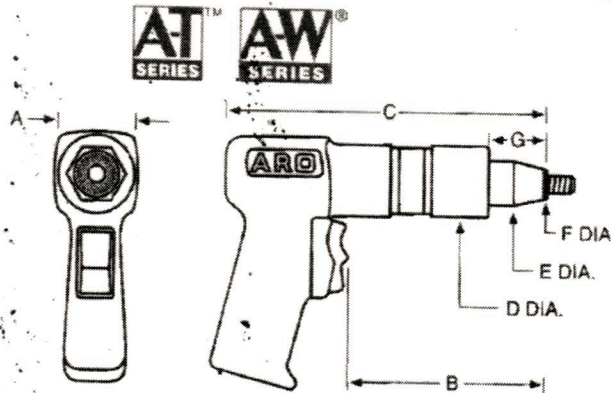


PNEUMATIC TOOLS

AVK PNEUMATIC TOOL SPECIFICATIONS

The tool shown on this page has been specifically designed to install the A-T and A-W Series Inserts.

Once you have selected the type of insert and thread size required for your application, select the appropriate RPM tool from the chart below.



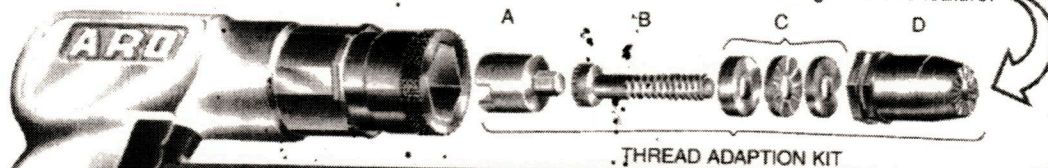
DIMENSIONAL DATA/TOOL SET-UP REQUIREMENTS

PROPER AIR SUPPLY SET-UP REQUIRES:

- ◆ 90-110 PSI (6.2-7.5 BARS) dynamic (tool running) air pressure at 25 S.C.F.M.
- ◆ In-line oiler/separator
- ◆ Air pressure gauge and regulator
- ◆ 5/16 or 7.92 mm minimum hose ID
- ◆ 5/16 or 7.92 mm minimum fittings ID

RPM	WEIGHT LBS.-Kg	A	B	C	D DIA.	E DIA.	F DIA. MAX.	G
3,000	2.55	1.86	4.75	7.75	1.57	1.00	.350	1.3
	1.15	47.24	120.6	196.8	39.87	25.4	8.89	33.0
1,500	2.58	1.86	4.75	7.75	1.57	1.00	.600	1.3
	1.17	47.24	120.6	196.8	39.87	25.4	15.24	33.0
600	3.18	1.86	6.00	9.0	1.57	1.00	.625	1.3
	1.44	47.24	152.4	228.6	39.87	25.4	15.87	33.0
350	3.25	1.86	6.00	8.37	1.50	1.43	.900	NA
	1.46	47.24	152.4	212.5	38.1	36.32	22.86	NA

SPECIAL FEATURE—This NPT nose cone design incorporates a special serrated tip that is essential to proper insert installation. The "N" prefix in the tool part number designates this feature.



AIR TOOL SELECTION/SPARE PARTS

THREAD SIZE	TOOL R.P.M.	COMPLETE TOOL PART NUMBER	THREAD ADAPTION KIT	A HEX DRIVE	B MANDREL 10 PER BAG	C BEARING SET	D NOSE CONE	DYNAMIC AIR PRESSURE SETTINGS PSI - BARS
4-40 UNC	3000	NPT30P440	NPT440TAK	29NPT1	B3SH440-750	30NPT 4	77NPT 4	36-40
6-32 UNC	3000	NPT30P632	NPT632TAK	29NPT2	B3SH632-875	30NPT 6	77NPT 6	70-80
8-32 UNC	3000	NPT30P832	NPT832TAK	29NPT3	B3SH832-875	30NPT 8	77NPT 8	60-85
10-24 UNC	1500	NPT15P1024	NPT1024TAK	29NPT4	B3SH1024-1500	30NPT 10	77NPT 10	60-85
10-32 UNF	1500	NPT15P1032	NPT1032TAK	29NPT4	B3SH1032-1500	30NPT 10	77NPT 10	60-85
1/4-20 UNC	1500	NPT15P420	NPT420TAK	29NPT5	B3SH420-1250	30NPT 250	77NPT 250	70-95
5/16-18 UNC	600	NPT6P518	NPT518TAK	29NPT6	B3SH518-1750	30NPT 3125	77NPT 3125	80-100
3/8-16 UNC	600	NPT6P616	NPT616TAK	29NPT7	B3SH616-1750	30NPT 375	77NPT 375	90-110
1/2-13 UNC	350	NPT3P813	NPT813CTA	29NPT26	B3SH813-2000	30NPT 500	77NPT 500	95-110
M3x0.5 ISO	3000	NPT30P350	NPT350TAK	29NPT8	B3SH350-20	30NPT M3	77NPT M3	2.4-2.7
M4x0.7 ISO	3000	NPT30P470	NPT470TAK	29NPT9	B3SH470-20	30NPT M4	77NPT M4	4.1-5.5
M5x0.8 ISO	1500	NPT15P580	NPT580TAK	29NPT10	B3SH580-40	30NPT M5	77NPT M5	4.1-5.5
M6x1.0 ISO	1500	NPT15P610	NPT610TAK	29NPT11	B3SH610-35	30NPT M6	77NPT M6	4.8-6.5
M8x1.25 ISO	600	NPT6P8125	NPT8125TAK	29NPT12	B3SH8125-45	30NPT M8	77NPT M8	5.5-6.8
M10x1.5 ISO	600	NPT6P1015	NPT1015TAK	29NPT25	B3SH1015-45	30NPT M10	77NPT M10	6.2-7.5
M12x1.75 ISO	350	NPT3P12175	NPT12175CTA	29NPT27	B3SH12175-50	30NPT 500	77NPT M12	6.2-7.5

This chart designates the tool, spare parts and dynamic (tool running) air pressure requirements for our most popular steel product. Consult the AVK tool catalog or contact AVK for tool RPM and air pressure settings for aluminum, brass and stainless product.

NOTE: UNF FINE THREADS COMPONENTS ARE AVAILABLE

PREVENTATIVE MAINTENANCE REQUIREMENTS:

- ◆ The bearing set must be kept in a WET lubricated condition to assure proper tool operation. AVK suggests the use of high temperature grease such as LUBRIPLATE BRAND 930 AA.
- ◆ The tool mandrel should be inspected for thread wear or damage and replaced. To test the condition of the mandrel, thread an AVK insert onto the mandrel backwards until it touches the knurled nose cone. If any drag is still felt, replace the mandrel with Unbrako socket head cap screws.



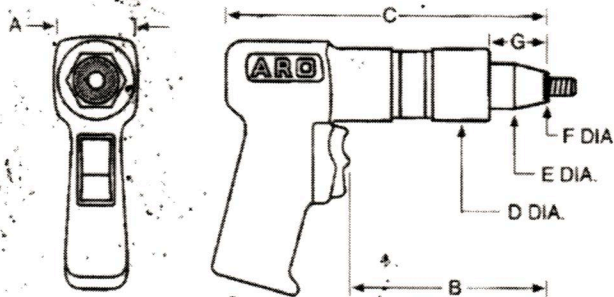
PNEUMATIC TOOLS

PREVIOUS PAGE

PRODUCT INDEX

NEXT PAGE

AVK PNEUMATIC TOOL SPECIFICATIONS



The tool shown on this page has been specifically designed to install the A-L, A-K, A-H, A-P and A-O Series Inserts.

Once you have selected the type of insert and thread size required for your application, select the appropriate RPM tool from the chart below.

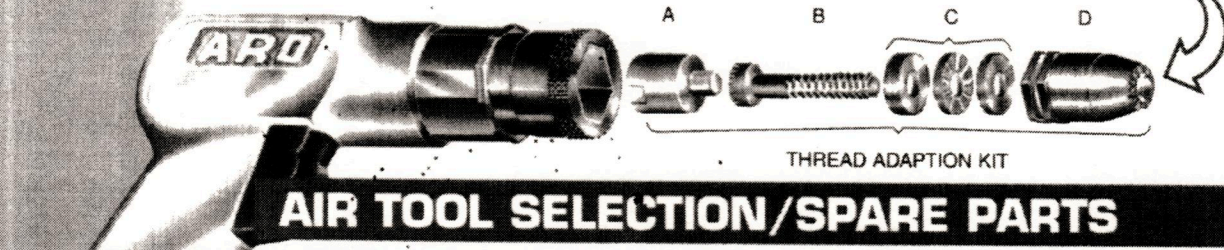
DIMENSIONAL DATA/TOOL SET-UP REQUIREMENTS

RPM	WEIGHT LBS.-Kg	A	B	C	D DIA.	E DIA.	F DIA. MAX.	G
3,000	2.55 1.15	1.86 47.24	4.75 120.6	7.75 196.8	1.57 39.87	1.00 25.4	1.00 400 10.16	1.3 33.0
1,500	2.58 1.17	1.86 47.24	4.75 120.6	7.75 196.8	1.57 39.87	1.00 25.4	1.00 400 10.16	1.3 33.0
900	3.18 1.44	1.86 47.24	6.00 152.4	9.00 228.6	1.57 39.87	1.00 25.4	500 12.7	1.3 33.0
600	3.18 1.44	1.86 47.24	6.00 152.4	9.00 228.6	1.57 39.87	1.00 25.4	640 16.25	1.3 33.0
350	3.25 1.46	1.86 47.24	5.37 136.3	8.37 212.5	1.50 38.1	1.42 36.06	900 22.86	NA NA

PROPER AIR SUPPLY SET-UP REQUIRES:

- ◆ 90-110 PSI (6.2-7.5 BARS) dynamic (tool running) air pressure at 25 S.C.F.M.
- ◆ Inline oiler/separator
- ◆ Air pressure gauge and regulator
- ◆ 5/16 or 7.92 mm minimum hose ID
- ◆ 5/16 or 7.92 mm minimum fittings ID

SPECIAL FEATURE—The AKPT nose cone design incorporates a special pilot/serrated tip that is essential to proper insert installation. The "A-K" prefix in the tool part number designates this feature.



THREAD ADAPTION KIT

AIR TOOL SELECTION/SPARE PARTS

THREAD SIZE	TOOL R.P.M.	COMPLETE TOOL PART NUMBER	THREAD ADAPTION KIT	A HEX DRIVE	B MANDREL 10 PER BAG	C BEARING SET	D NOSE CONE	DYNAMIC AIR PRESSURE SETTINGS PSI - BARS
6-32 UNC	3000	AKPT30P632	AKPT632TAK	29NPT22	B3SH632-1500	32PT 1	77AKPT6	70-80
8-32 UNC	3000	AKPT30P832	AKPT832TAK	29NPT23	B3SH832-1500	32PT 2	77AKPT8	75-90
10-24 UNC	1500	AKPT15P1024	AKPT1024TAK	29NPT4	B3SH1024-1750	32PT 4	77AKPT10	60-80
10-32 UNF	1500	AKPT15P1032	AKPT1032TAK	29NPT4	B3SH1032-1750	32PT 4	77AKPT10	60-80
1/4-20 UNC	900	AKPT9P420	AKPT420TAK	29NPT5	B3SH420-1500	32PT 5	77AKPT250	70-90
5/16-18 UNC	600	AKPT6P518	AKPT518TAK	29NPT6	B3SH518-2000	32PT 7	77AKPT3125	80-110
3/8-16 UNC	600	AKPT6P616	AKPT616TAK	29NPT7	B3SH616-2000	32PT 8	77AKPT375	80-110
1/2-13 UNC	350	AKPT3P813	AKPT813CTA	29NPT26	B3SH813-2500	30NPT500	77AKPT500	80-110
M4 x 0.7 ISO	3000	AKPT30P470	AKPT470TAK	29NPT24	B3SH470-40	32PT 3	77AKPTM4	4.8-5.5
M5 x 0.8 ISO	1500	AKPT15P580	AKPT580TAK	29NPT10	B3SH580-45	32PT 4	77AKPTM5	4.1-5.5
M6 x 1.0 ISO	900	AKPT9P610	AKPT610TAK	29NPT11	B3SH610-40	32PT 6	77AKPTM6	4.8-6.2
M8 x 1.25 ISO	600	AKPT6P8125	AKPT8125TAK	29NPT12	B3SH8125-50	32PT 7	77AKPTM8	5.5-7.5
M10 x 1.5 ISO	600	AKPT6P1015	AKPT1015TAK	29NPT25	B3SH1015-50	32PT 10	77AKPTM10	5.5-7.5
M12 x 1.75 ISO	350	AKPT3P12175	AKPT12175CTA	29NPT27	B3SH12175-60	30NPT500	77AKPTM12	5.5-7.5

This chart designates the tool, spare parts and dynamic (tool running) air pressure requirements for our most popular steel product. Consult the AVK tool catalog or contact AVK for tool RPM and air pressure settings for aluminum, brass and monel product.

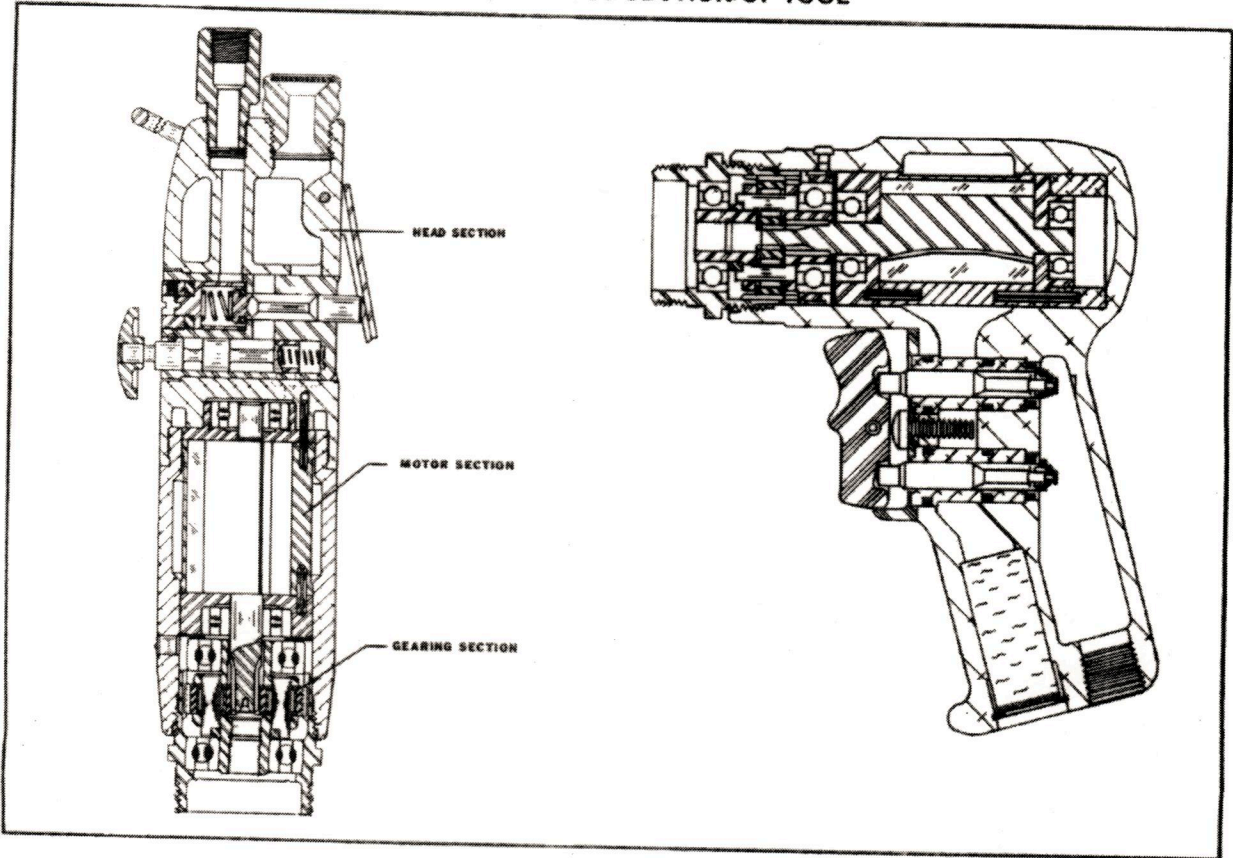
NOTE: UNF FINE THREAD COMPONENTS ARE AVAILABLE.

PREVENTATIVE MAINTENANCE REQUIREMENTS:

- ◆ The bearing set must be kept in a WET lubricated condition to assure proper tool operation. AVK suggests the use of high temperature grease such as LUBRIPLATE BRAND 930 AA.
- ◆ The tool mandrel should be inspected for thread wear or damage and replaced. To test the condition of the mandrel, thread an AVK insert onto the mandrel backwards until it touches the pilot. If any drag is still felt, replace the mandrel with Unbrako socket head cap screws.

ARO AIRMOTOR PARTS AND ASSEMBLY BREAKDOWNS

TYPICAL CROSS-SECTION OF TOOL



GEARING SECTION DRIVE GEARING

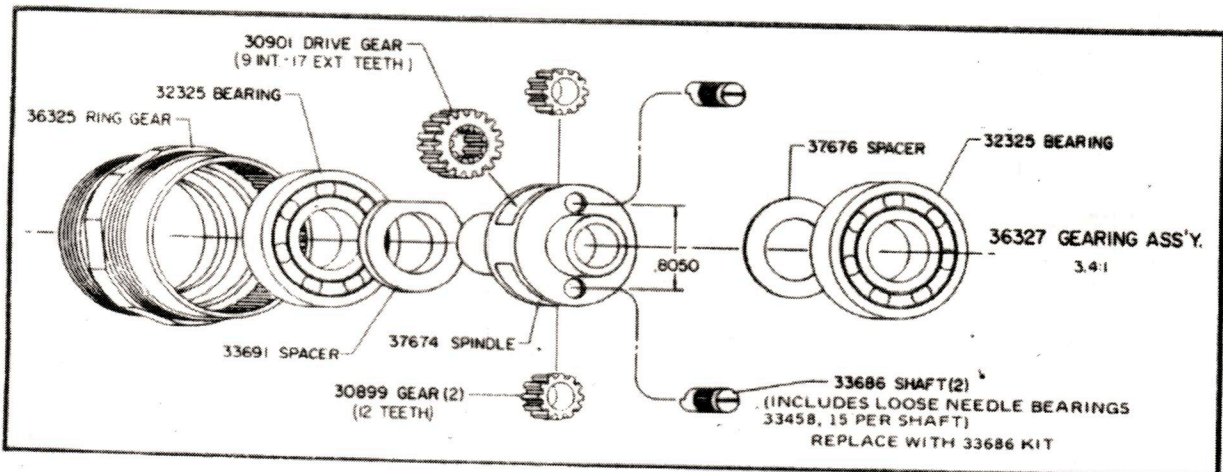
DISASSEMBLY

- Remove Spindle and components from Ring Gear.
- To remove Gears from Spindle, remove Bearing, Spacer and Shafts.

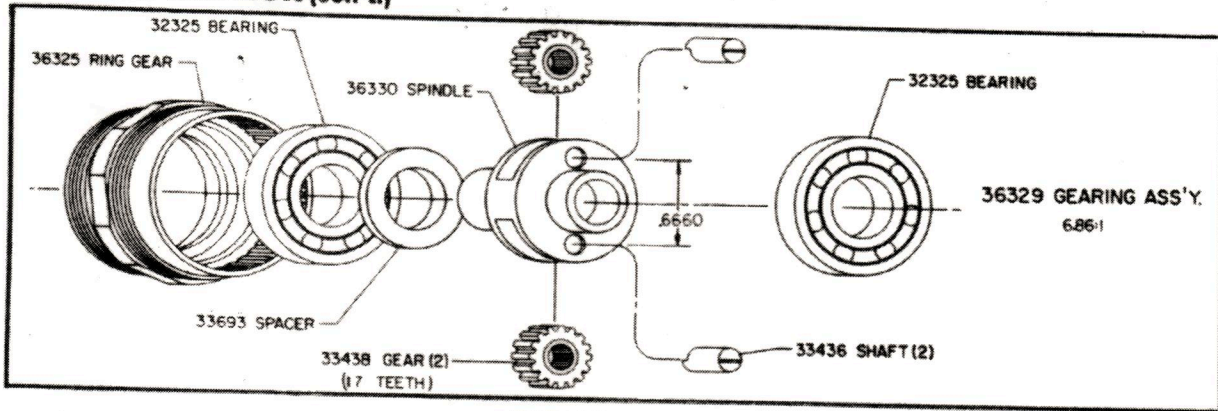
REASSEMBLY

NOTE: Pack bearings and lubricate gears liberally with 33153 grease or equivalent upon assembly. Gearing assembly should contain approx. 1/8 oz. grease.

- Assemble Spacer (33691) or (33693) and Gears to Spindle and secure with Shafts, aligning notch in Shafts with Spacer. NOTE: Shafts (33686) contain fifteen (15) loose Needle Bearings (33458) per shaft.
- Assemble Spacer (37676), where applicable, and Bearings to Spindle and assemble to Ring Gear.

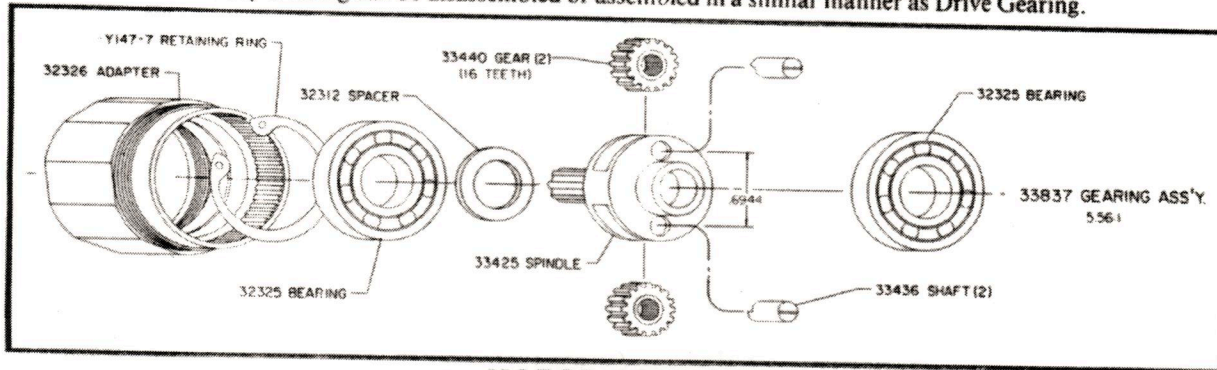


GEARING SECTION (con't.)



AUXILIARY GEARING

Auxiliary Gearing can be disassembled or assembled in a similar manner as Drive Gearing.



MOTOR SECTION

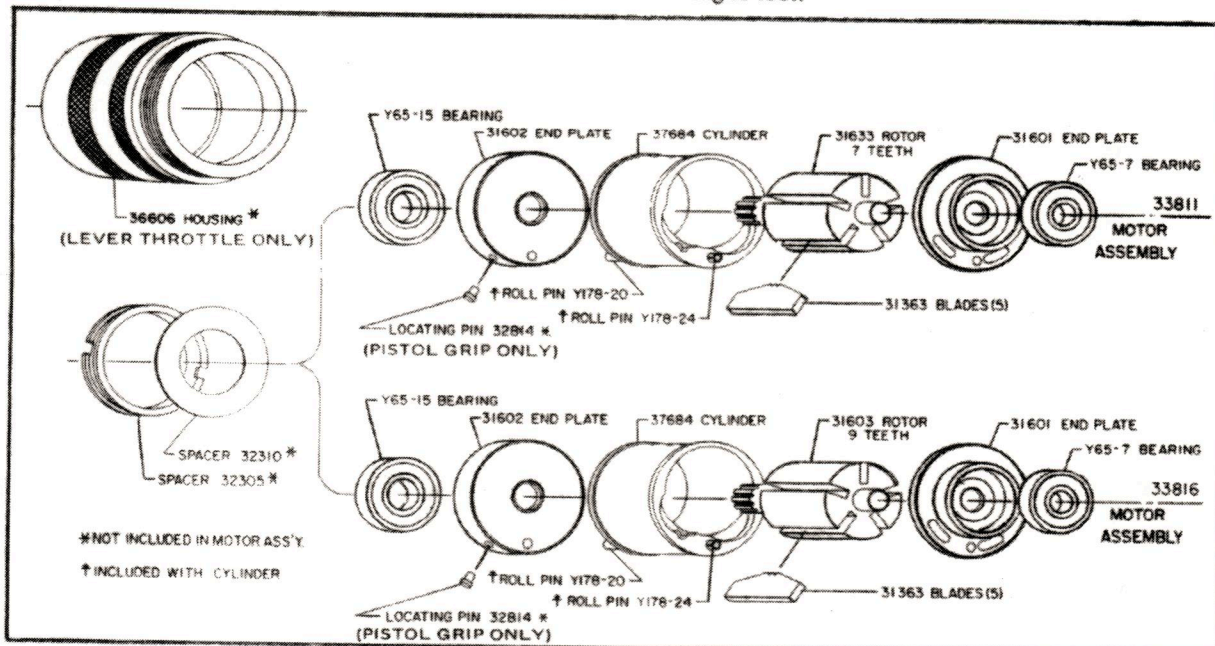
DISASSEMBLY

- a. Remove Motor from Housing. Grasp Cylinder in one hand and tap splined end of Rotor with a non-metallic hammer; motor will come apart.

REASSEMBLY

- a. Pack bearings with grease (33153), or equivalent, and coat I.D. of cylinder with spindle oil upon assembly.
- b. Assemble Bearings into End Plates and assemble rear End Plate (31601) to Rotor.
- c. Assemble Cylinder over Rotor to rear End Plate

- d. Assemble front End Plate (31602) to Rotor and Cylinder, aligning Roll Pin in Cylinder with hole in End Plate.
- e. Insure Rotor does not bind (if Rotor binds, lightly tap splined end with a non-metallic hammer to loosen) and assemble motor to housing with Locating Pin (32814) and Porting Block (45471).
- f. Assemble Spacer (32310), Spacer (32305) and gearing to tool.



HEAD SECTION

LEVER HEAD

DISASSEMBLY

- Remove Nut (36609) and Valve Parts may be removed from Head.
- To remove Reversing Valve (39207), remove Roll Pin (Y178-7).

Motor assemblies for Lever Throttle tools: with Motor Housing removed from Head; place Head in a suitable holding device with the motor end in an upright position. Place Motor assembly on Head align-

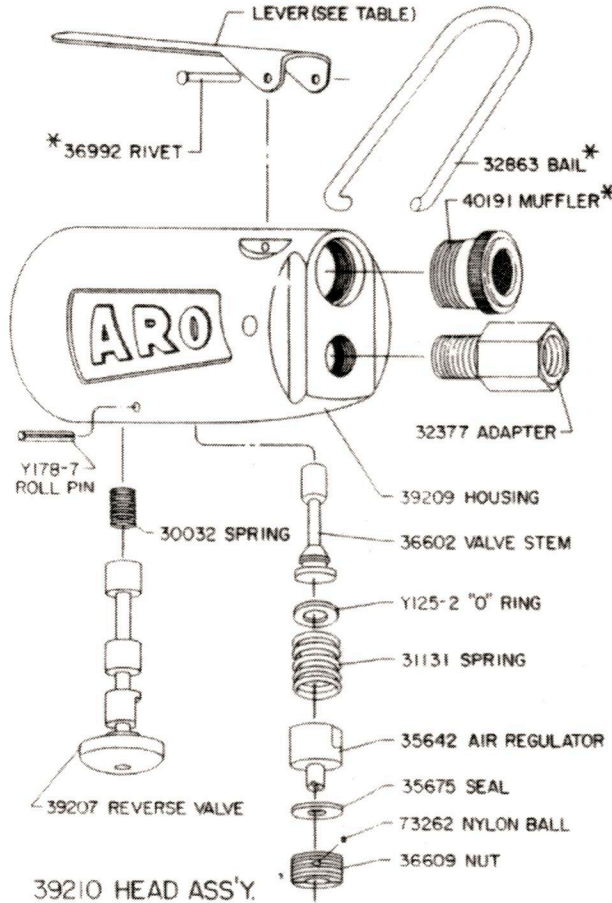
ing Roll Pin (Y178-24) with hole in Head. Slip Motor Housing over Motor and secure to Head. Assemble Spacers (32310), (32305) and Gearing to tool.

REASSEMBLY

- Assemble "O" Ring (Y125-2) to Valve Stem (3) and assemble to Head.
- Assemble Spring (31131), Regulator (35642) Seal (35675) to Head and secure with Nut (3660

*NOT INCLUDED IN HEAD ASS'Y.

"A"	LENGTH
* 36603	3-5/8 INCHES
* 36778	7 INCHES



AVK INDUSTRIAL PRODUCTS

A DIVISION OF AVIBANK MFG., INC.

25323 RYE CANYON ROAD • VALENCIA, CALIFORNIA 91355-1271
 TELEPHONE: (661) 257-2329 FAX: (661) 257-8043

HEAD SECTION

DISASSEMBLY

- a. Drive out Roll Pin (Y178-25) and remove Trigger (45469).
- b. Remove Screw (Y222-156-C) and Shroud (45468).
- c. Grasp end of Valve Stem (45466) with pliers or similar tool and pull to remove Valve Assembly with Bushing (45465). Bushing must be removed from housing to service valve components.
- d. Remove "O" Ring (Y325-3) to remove Valve (45473) with "O" Ring (Y325-7).
- e. To remove Muffler Pad (45474), remove Retaining Ring (Y147-68) and Screens (42911).

NOTE: Muffler Pad (45474) should be replaced periodically and Screens cleaned to insure they do not become clogged impairing the function of the tool.

REASSEMBLY

- a. Assemble "O" Rings (Y325-13), (Y325-12), and (Y325-11) to Bushing (45465).

NOTE: Whenever a part containing an "O" Ring(s) has been removed from tool it is recommended the "O" Ring(s) be replaced with new ones before reassembling part to tool. Lubricate all "O" Rings with "O" Ring Lubricant (36460) when assembling.

- b. Assemble "O" Ring (Y325-7) to Valve (45473).
- c. Assemble "E" Ring (Y180-13) and Valve to Valve Stem and secure with "O" Ring (Y325-3).
- d. Assemble Valve Assembly (45460) to Bushing and assemble Bushing to Housing. NOTE: Flat on face of Bushing must be positioned so it aligns with flat of Shroud (45468).
- e. Assemble Shroud (45468) to Housing, insuring flats on face of both Bushings (45465) are properly aligned to match flats of Shroud and secure Shroud with Screw (Y222-156-C).
- f. Assemble Trigger (45469) to Shroud and secure with Roll Pin (Y178-25).

