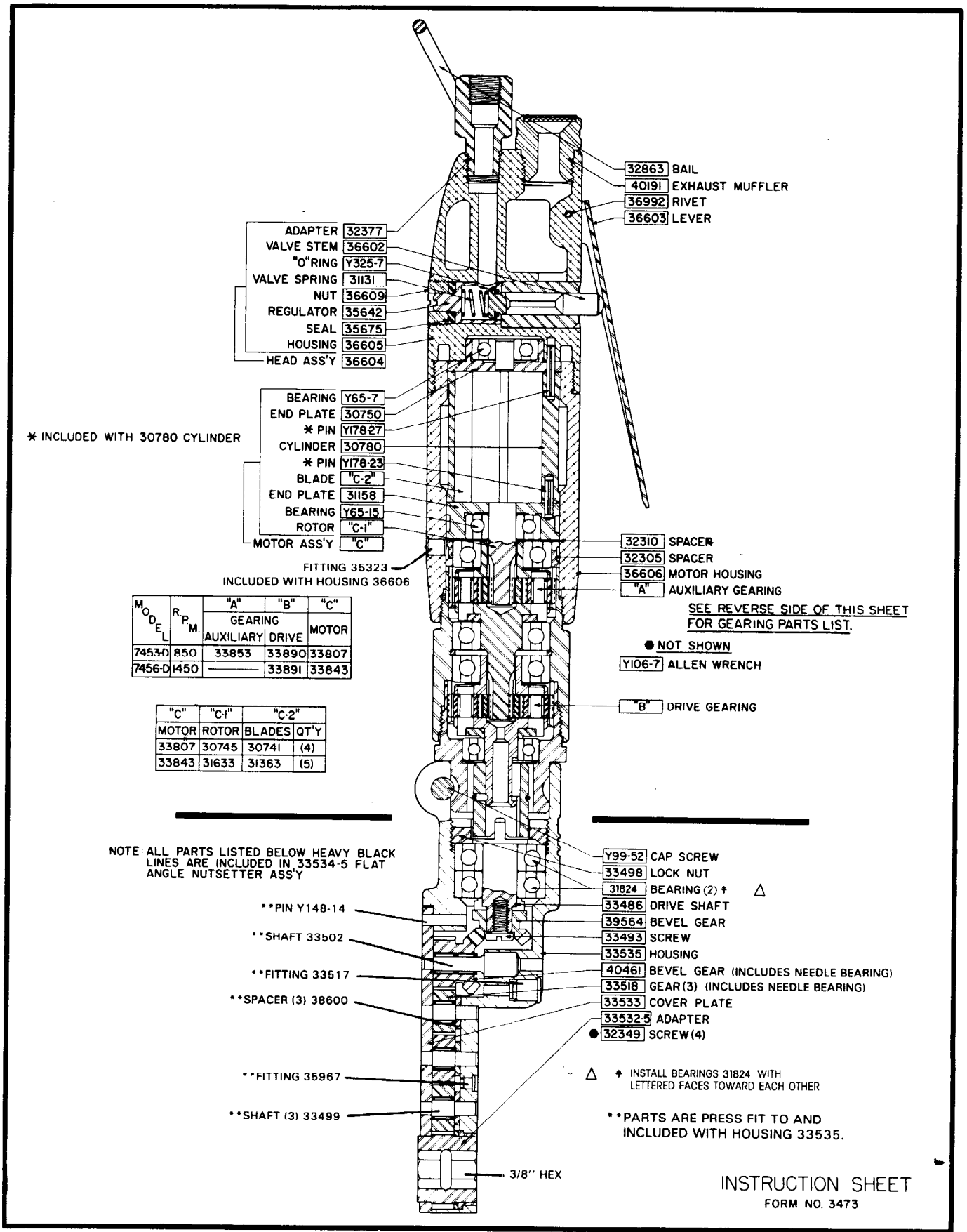
SALES AND ENGINEERING DATA

"O" SERIES F/A NUTSETTERS
MODELS 7453-D AND 7456-D
LEVER THROTTLE



MODEL	R.P.M.	"A" GEARING AUXILIARY	"B" GEARING DRIVE	"C" MOTOR
7453-D	850	33853	33890	33807
7456-D	1450	———	33891	33843

"C" MOTOR	"C-1" ROTOR	"C-2" BLADES	QT'Y
33807	30745	30741	(4)
33843	31633	31363	(5)

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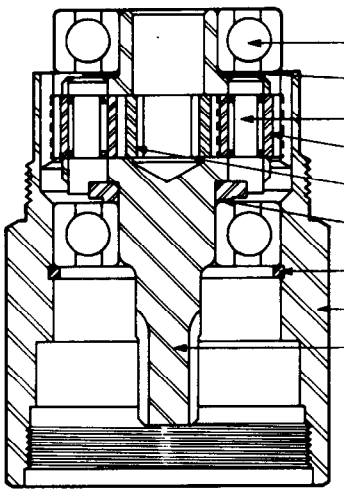
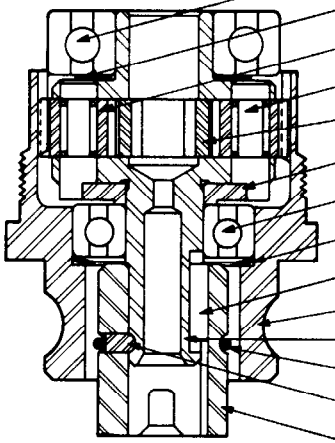


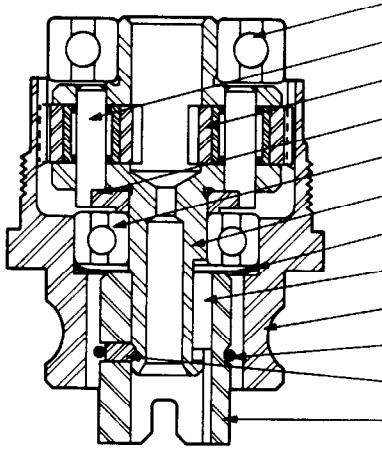
32325	BEARING (2)
37676	SPACER
33686	SHAFT (2)
30899	GEAR (2)
30901	DRIVE GEAR
32314	SPACER
Y147-7	RET. RING
32326	ADAPTER
37667	SPINDLE
33853	GEARING ASS'Y

(3.4:1)



32325	BEARING
37676	SPACER
30899	GEAR (2)
33686	SHAFT (2)
30901	DRIVE GEAR
32315	SPACER
Y65-13	BEARING
32544	WASHER
31409	KEY
33485	ADAPTER
37668	SPINDLE
31551	LOCK SPRING
31552	PIN
33496	DRIVER
33890	GEARING ASS'Y

(3.4:1)



32325	BEARING
33436	SHAFT (2)
33438	GEAR (2)
32311	SPACER
Y65-13	BEARING
33426	SPINDLE
32544	WASHER
31409	KEY
33485	ADAPTER
31551	LOCK SPRING
31552	PIN
33496	DRIVER
33891	GEARING ASS'Y

(6.9:1)

OPERATING PRECAUTIONS

WARNING: Repeated prolonged operator exposure to vibrations which may be generated in the use of certain hand-held tools may produce Raynaud's phenomenon, commonly referred to as Whitefinger disease. The phenomenon produces numbness and burning sensations in the hand and may cause circulation and nerve damage as well as tissue necrosis. Repetitive users of hand-held tools who experience vibrations should closely monitor duration of use and their physical condition.

AIR AND LUBE REQUIREMENTS

AIR PRESSURE OF 90 p.s.i.g. (6 bar) at the air inlet of the tool is required for maximum motor efficiency. If necessary, an air regulator should be installed to maintain this pressure when tool is in operation.

FILTERED AND OILED AIR will allow the tool to operate more efficiently and yield a longer life to operating parts and mechanisms. A line filter capable of filtering particles larger than 50 microns should be used with a line oiler.

FILTER-REGULATOR-LUBRICATOR (F-R-L) assembly model 128231-800 is recommended for use with this air tool. The capacity of this F-R-L is adequate to provide clean (40 micron) oiled and regulated air for the tool.

FLUSH TOOL with a solution of three parts cleaning solvent and one part light oil after each 40 hours of operation. After flushing, apply a small amount of spindle oil in air inlet and run free for one minute to insure proper lubrication.

RECOMMENDED HOSE SIZE – 3/8" (9 mm) nominal inside diameter.

RECOMMENDED LUBRICANTS: Spindle Oil 29665, 1 qt. (.9 liter) container for oiler and air inlet; Grease 33153, 5 lb. (2.3 kg) can for gears and bearings, "O" Ring Lubricant 36460, 4 oz. (113 g) tube for lubrication and installation of "O" rings.

MAINTENANCE

DISCONNECT AIR SUPPLY from tool or shut off air supply line to tool and exhaust (drain) air line to tool of compressed air BEFORE performing service or maintenance to tool.

AIR TOOLS are made of precision parts and should be handled with reasonable care when servicing. Excessive pressure exerted by a holding device may cause distortion of a part. Apply pressure evenly when disassembling (or assembling) parts which have a press fit. When removing or installing bearings, apply pressure to the bearing race that will be the press fit to the mating part; if this is not practiced, Brinelling of the bearing races may occur making replacement necessary. It is important that the correct tools and fixtures are used when servicing this air tool.

DISASSEMBLY should be done on a clean work bench with a clean cloth spread to prevent the loss of small parts. After disassembly is completed, all parts should be thoroughly washed in a clean solvent, blown dry with air and inspected for wear levels, abuse and contamination.

Double sealed or shielded bearings should never be placed in solvent unless a good method of relubricating the bearing is available. Open bearings may be washed but should not be allowed to spin while being blown dry. When REPLACEMENT PARTS are necessary, consult drawing containing the part for identification.

BEFORE REASSEMBLING, lubricate parts where required. Use 33153 grease, or equivalent, in bearings. Use 36460 lubricant for "O" ring assembly. When assembling "O" rings, care must be exercised to prevent damage to the rubber sealing surfaces. A small amount of grease will usually hold steel balls and other small parts in place while assembling.

WHEN ORDERING PARTS, be sure to list PART NUMBER, PART NAME, MODEL NUMBER AND SERIAL NUMBER OF TOOL. USE ONLY GENUINE ARO® REPLACEMENT PARTS.

DISASSEMBLY AND REASSEMBLY OF TOOLS

DISASSEMBLY

FLAT-ANGLE ATTACHMENT – To remove from tool; remove cap screw (Y99-52) and pull attachment off gearing. To remove shaft (33486) and/or components, remove lock nut (33498). For access to gears and components, remove four (4) screws (32349) and cover plate (33533).

GEARING – Remove flat-angle attachment. Remove drive gearing assembly from auxiliary gearing and remove auxiliary gearing from motor housing. Further disassembly should not be done unless damage is evident. Remove spindle and components from gear housing. Remove bearings, shafts and gears from spindle. Remove lock spring, pin, driver, and key from spindle.

MOTOR – The motor assembly can be removed after the removal of the gearing or head assembly. Grasp motor cylinder in one hand and tap splined end of rotor with a non-metallic hammer; motor will come apart.

THROTTLE VALVE – The throttle components can be removed without removing the head section from the tool. Remove nut (36609), seal, regulator, spring, and valve stem.

ASSEMBLY

FLAT-ANGLE ATTACHMENT – Lubricate gears and bearings liberally with ARO 33153 grease. Assemble gears to shafts and assemble cover plate (33533). Secure with four (4) screws (32349). Assemble gear (39564) to shaft (33486) and secure with screw (33493). Lubricate bearings (31824) with ARO 33153 grease and assemble to shaft (33486). NOTE: Assemble bearings with identification markings towards each other. Lubricate Gear (39564) liberally with ARO 33153 grease and assemble components to housing. Secure with lock nut (33498).

GEARING – Lubricate shafts and needle bearings with ARO grease 33153. Be sure shafts (33686) contain fifteen (15) needle bearings per shaft. Assemble gears to spindle and secure with shafts. Lubricate bearings with ARO 33153 grease and assemble spacers and bearings to spindle. Assemble key, driver, pin, and lock spring to spindle. Lubricate gears liberally with ARO 33153 grease and assemble to gear housing (adapter). Assemble gearing to tool.

MOTOR – Assemble bearings to end plates and assemble end plate (30750) to rotor. Coat i.d. of cylinder with spindle oil and assemble over rotor. Coat rotor blades with spindle oil and assemble to blade slots of rotor. Assemble end plate (33158), with bearing, to rotor and cylinder. Be sure rotor turns without binding. If rotor binds, tap splined end lightly with a soft face hammer to loosen.

With motor housing removed from head, assemble motor to head aligning roll pin of motor with .106 dia. blind hole in head. Slip motor housing over motor and thread to head. Assemble spacers (32310), (32305), and gearing to tool.

THROTTLE VALVE – Lubricate "O" ring (Y325-7) and assemble to valve stem. Assemble valve, spring, regulator, seal, and nut to housing.