BEST & DONOVAN

"AS4-P"
AIR PORK SCRIBE SAW
"AS5-P"
AIR PORK SCRIBE & LOIN SAW
"HB-6"
AIR HOG BREASTBONE OPENING SAW

FEATURING :
"*NEW*" ERGONOMIC GRIP

PARTS AND SERVICE MANUAL

USDA APPROVED	CE

BEST & DONOVAN
5570 CREEK ROAD, CINCINNATI, OHIO 45242, USA
TOLL FREE: 1-800-553-2378 TEL.: 1-513-791-9180
FAX: 1-513-791-0925 CABLE: WEPCO

WARRANTY

Best & Donovan warrants the machine against defective parts & workmanship for six (6) months from date of factory shipment. In the fulfillment of its warranty, the sole obligation of Seller shall be to repair or replace, at its option F.O.B. its factory, shipping charges prepaid, and which after inspection by Seller are found to be defective. Buyer shall notify Seller of defect in writing, promptly upon discovery, within the warranty period. This warranty does not cover defects caused by corrosion or normal deterioration. It does not extend to consequential damage, loss or delay associated with a warranty defect and it does not cover any costs of labor, travel or other expenses associated with the repair or replacement of defective parts. Seller assumes no liability for product loss or other claims whatsoever arising out of the use or application of the machine in Meat Slaughtering/Processing operations, whether the machine is used alone or in conjoint use with other Meat Slaughtering/Processing Machines or Processes.
This warranty is voided if repairs, replacements or alterations are made by others without prior authorization by Seller. Notwithstanding the foregoing, Seller's warranty obligations with respect to any items not manufactured by Seller shall not exceed the obligations undertaken by the manufacturer thereof under express warranty to the Seller. This express warranty is in lieu of all other warranties of fitness of the machine for any particular purpose.

WARNING : **Whenever you replace the blade or whenever your hands or any part of your body may come into contact with the blade, the tool must be disconnected from the power source to prevent accidental tool operation.**

WARNING

ALWAYS EXERCISE CARE WHEN OPERATING OR PERFORMING MAINTENANCE, REPAIRS AND ADJUSTMENTS. Always disconnect air connector before attempting to work on the tool. Never allow any part of your person or any other person to be in the path of the blade when the tool is in operation.

WEIGHT : 5 lbs. 13 ozs. (2.36 kilos.)
AIR REQUIREMENTS : 90 PSI MINIMUM FOR PEAK PERFORMANCE
*NOTE : **Use high volume air quick disconnects. B&D - Male #6349078 & Female #6349075.***

INSTALLATION

B & D recommends the installation 0f 3/4" Air filter-regulator-lubricator (part no. 6337793) as close to the flexible line connecting to the saw as possible. The flexible hose and fittings should be a minimum of 3/8" I.D. For the best performance of the tool, a working pressure of 90 psi or mare is recommended.
A Hanger needs to be installed for the non-use for the tool on the line. This will prevent damage from falling.

LUBRICATION

Air Oil - Use a high grade SAE #5 or #10 spindle oil set at approximately to 5 drops per minute. This setting is sufficient for proper motor lubrication through the production shift.
Flush the air motor with air oil after cleaning and leave hanging upside done out of contamination until needed for production. This practice will give more life to the motor bearing and internal parts of the saw.

Planetary Gears - Using a high grade of approved USDA grease, lubricate the grease fitting (ref. no. 3 on the motor parts page) with two to three shots every eight (8) hrs. of operation.

Saw Head - Using same grease as above, lubricate the grease fitting (ref. no. 17) in the Head Housing (ref. no. 13) with two to three shots every eight hrs. of operation.

SERVICE INSTRUCTIONS

DO NOT squeeze tool or parts in a vise except as specified. Care must be used in their assembly and disassembly. When pressing bearings onto a shaft, press only on the inner race. When pressing a bearing into a bore, press on the outer race only.

NOTE : Ball Bearings that are shielded by the manufacturer are lubricated for life. DO NOT wash these bearings out with any type of solvent.

MAINTENANCE

Preventative maintenance is the first step of good maintenance.
A periodic check should be made to replace worn parts and to inspect lubrication. A worn part replaced in time may save extensive repairs later.

THIS IS A PRECISION MACHINE made up of precision parts and should be handled with extreme care. DO NOT SQUEEZE MACHINE OR PARTS IN HOLDING DEVICE OR OTHERWISE MISUSE. To much pressure exerted in holding device may cause distortion of part. Be sure you have the correct tools and fixtures before assembling (or disassembling) this machine. When assembling (or disassembling) parts which have a press fit, apply pressure evenly to the parts. To assemble (or disassemble) bearings, the pressure should be applied to the face of the inner or outer race, whichever is adjacent to the matching part.

If this is not done, it will DAMAGE the bearing races making it necessary to replace them.

OPEN BEARINGS may be washed in only fresh clean solvent. Bearings should be washed in a container with a screened false bottom to prevent settling from being stirred up. After washing, blow solvent out of bearing with dry, clean air and repack with good grade bearing grease. DO NOT SPIN BEARING OR ALLOW IT TO SPIN WHEN BLOWING OFF SOLVENT. Do not attempt to wash a sealed or shielded bearing.

BEFORE DISASSEMBLING A MACHINE, the area around the work bench should be clean and free from metal chips and other foreign matter. It is a god practice to spread a clean cloth on the work bench to prevent the loss of small parts.

IT IS IMPORTANT that all parts are thoroughly cleaned and inspected before assembling. The slightest particles of dirt can create excessive run-out in spindle or out of square in the bearing mounting, causing vibrations and loss of speed, ultimately damaging the tool.

WHEN REPAIRS ARE NECESSARY, consult drawing containing part, for identification. When ordering repair parts, be sure to list Model Number, Part Number and Description of Part to assure prompt and accurate shipment of your order.

SAW BLADE MAINTENANCE

WARNING : If a tooth should break off a blade while the tool is in operation, the operator or someone else could be injured. Always inspect blades for fatigue cracks, missing teeth or any other deformity that could cause problems or injury.

B & D recommends that when the saw blades are sharpened, the face be filed flat, the gullets rounded, and the teeth have .005 set per side - alternately. To neglect this will cause an overload on the motor and the tool will be subject to severe strain with resultant wear.

BLADE REMOVAL & INSTALLATION

WARNING : Make sure that the air is disconnected from the saw before attempting to remove the blade.

CAUTION : If at any time a Blade Gear Pin is bent, broke off, or missing DO NOT mount a blade onto the saw until the pins are correctly repaired. A missing pin could cause the tool to malfunction.

REMOVAL-Loosen Depth Gauge Block Screws (no. 33) enough to swing Blade Guard Assembly out of way. Make sure that the Depth Gauge (B) is at its up most setting. Place a pin in one of the holes located in the blade and secure the pin against the lower part of the saw housing. Using the T-handle wrench (8514993) that came with the tool, unscrew the 7/16" bolt (6345206) in the center and remove the blade.

INSTALLATION - Place a saw blade onto the Gear (6345053) making sure that the slots in the blade fit down over the pins sticking out of the Gear. Make sure that you hold the blade in place over the pins while screwing the blade nut (6345132) down hand tight. Use the pin in one of the blade holes to brace it against the housing and tighten the blade down using the T-handle wrench. Tighten Guard Assembly.

REMOVAL OF PLANETARY GEARS & MOTOR

Unscrew Lock Screw (#6349869) ref. no. 12 on Motor Diagram; then, unscrew and remove Motor Adapter (#6345221) ref. no. 42. To remove the planetary assembly, grasp the end of the Drive Adapter (#6349803) ref. no. 41 or the threaded end of the planet cage and pull out the planetary assembly. To remove the motor assembly, grasp the end of the rotor and pull the motor out.

MOTOR DISASSEMBLY

To disassemble the motor, remove the Rear Bearing Plate (#6349875) ref. no. 16 and bearing by pressing on the rear of the rotor with an arbor press. The Front Bearing Plate (#6349881) ref. no. 22 can now be pressed off (be careful not to lose the rotor's spacer ref. no. 21).

MOTOR ASSEMBLY

Make sure that all parts are clean. Press pin, (no. 17) - if necessary - into Rear Plate, (no. 16). To correct for bearing tolerances, it is necessary to use shims to maintain correct clearances between the ends of the rotor and the bearing plates. Shim packet, (no. 23) contains a .001" shim and two .002" shims. Insert a .002 shim in the Front Bearing Plates pocket and install Ball Bearing (no. 24) into the Front Plate (no. 22). Also, install Ball Bearing, (no. 15) into the Rear Bearing Plate, (no. 16). Slip Spacer, (no. 21) onto the front of the rotor. Support the rotor on the *rear end* and assemble the front plate assembly onto the rotor by pressing on the bearing inner race.

Now hold the rotor in the left hand and the front end plate in the right hand. Apply an outward (pulling) pressure and observe the spacing between the end of the rotor and the bearing plate. This should be flush, not rubbing, to .002 maximum. *If the rotor rubs the bearing plate, reduce the spacing between the end of the rotor and bearing plate by removing the .002 shim entirely, or by substituting the .001 shim for the .002 shim. However, if there was more than .002 spacing between the end of the rotor and the bearing plate, then add .001 shim between the bearing and the bearing plate.*

Assemble Cylinder (no. 18) so that the inlet port will align with holes in the Rear Plate (no. 16). Insert the rotor blades (no. 19) into the rotor. Then, press on the Rear Bearing Plate (no. 16) - with bearing assembled - pressing on the inner race only. Press just enough to bring the bearing plate against the cylinder. There should be a slight drag between the bearing plate and the cylinder when these are moved with the fingers. Position the cylinder until the motor turns finger-free.

ASSEMBLE MOTOR INTO HOUSING

Be sure that the lock screw (no. 12) has been remover from the Motor Housing (no. 2) and that the Filter (no. 14) and Filter Retainer (no. 14) are installed in the bottom of the Motor Housing. Insert motor into housing.

PLANETARY GEAR DISASSEMBLY

Holding planetary in one hand, remove Rear Bearing (no. 27) by tapping rear end of Planet Carrier with a brass punch - NOTE : punch must be large enough so that it cannot enter into the open end of Carrier to damage gears. To remove the Drive Adapter (no. 41) from the Planet Carrier, hold the large diameter of the Carrier in soft vise jaws and unthread drive adapter (be sure that the carrier *does not turn* in vise and allow gears to touch vise jaws). Use an arbor press to press off front bearing (no. 34).
Pull planetary Shafts (no. 31) out of Planet Carrier. *NOTE : Normally, Needle Bearings (no. 28) - inside spur gears - will last the life of the spur gears. Replacement spur gears have needle bearings already pressed in.* If it is desired to replace the needle bearings only, *a pusher rod must be .249" (minus .005") in diameter. When pressing NEW needle bearings into spur gears, press ONLY on the TRADEMARK END of bearings.*

ASSEMBLING PLANETARY GEAR

Press Ball Bearing (no. 34) onto the threaded end of Planet Carrier until it seats. Thread on the Drive Adapter (no. 41)by holding the Carrier in soft vise jaws. *(Be sure to insert the Front Spacer (no. 44), with the counterbore toward the Carrier, before threading on the Drive Adapter).* Push Planet Shafts into Planet Carrier and spur Gears until end of shafts are flush with carrier face. Insert Ring Gear (no. 33) over spur gears and planetary assembly. Notches in ring gear are to face the open end of the planet carrier. Press Rear Bearing (no. 27) until there is a slight drag between the ring gear and the two bearings.

PLACING PLANETARY GEAR INTO TOOL HOUSING

Insert Spacer (no. 26) on top of the motor. Insert Planetary Assembly into motor housing, keeping slot in ring gear lined up with threaded hole for Lock Screw (no. 12). Thread Lock Screw down until snug, then back off 1/2 turn.
Thread Motor Adapter (no. 42) onto the Motor Housing. Insert the Drive Coupling (no. 43) through the Motor Adapter onto the Drive Adapter (no. 41). .Make sure that the Drive Coupler is seated down over the Drive Adapter.

DISASSEMBLY & REASSEMBLY OF FRONT HEAD

WARNING : DISCONNECT AIR SUPPLY BEFORE WORKING ON THIS TOOL.

The first step in disassembling is to loosen the Head Locking screw (no. 18) & Set Screws on opposing sides of the housing. Pull the two assemblies apart and place on a clean work area.

NOTE : Refer to the exploded view of the Front Head in the Manual.

GUARD DISASSEMBLY

1. To remove the Guard Assembly, unscrew the two (2) screws (no. 32).

GEAR ASSEMBLY - DISASSEMBLY

1. Remove the Saw Blade.
2. Remove the eight (8) screws (no. 16) that hold the Cap (no. 16) onto the housing and pull out the gear assembly (no. 4).
3. Using soft vise jaws, hold the Gear assembly so that the Screw(no. 12) can be removed.
4. Now hold the Gear Cartridge (ref. no. 8) so that the Gear can be tapped out.
5. Inspect the bearings and gear teeth. Replace the worn parts.

GEAR RE-ASSEMBLY

1. Press the bearings (no. 9) & Spacer (no. 10) back onto the Gear using the inner race of the bearing as a pressing point.
2. Tighten the assembly with the Locking Screw (no. 12).
3. Slide the assembly back into the housing.
4. The Pinion Cartridge should be inserted into the housing to correctly shim the Gears together. Use Shims (no. 14) as needed to get the proper backlash between the pinion & Blade Gear.
5. When shimming is correct, tighten the eight (8) screws back into the Cap.

PINION CARTRIDGE - DISASSEMBLY & RE-ASSEMBLE

1. With the Front Head apart from the Motor, tighten a Blade to the Blade Gear (no. 6).

NOTE : In this operation it is recommended to work with an old blade that has had the teeth removed and the edge has been dulled to prevent injury.

2. Put a pin through the hole in the blade, up against the housing like you would be taking a blade off.
3. Using a 9/16" socket, loosen the Pinion Shaft Adapter (no. 29) from the Pinion (no. 21).

NOTE : The threads are right handed on the Pinion Shaft Adapter.

4. Using the Pinion Cartridge Tool (6349842), remove the Cartridge (no. 28).

NOTE : Cartridge has Right Hand Thread.

5. Hold the Pinion Cartridge in a vise on the flat sides of the Pinion Shaft Adapter (no. 29) and unscrew the Pinion (no. 21) using the slot in the top. Right hand threads also.
6. Take the Set Screws (no. 27) out of Cartridge (no. 28).
7. Tap out the Bearings (no. 22), Inner Spacer (no. 23) & Outer Spacer (no. 24).
8. Inspect and replace worn parts.
9. Reassemble in opposite order of disassembly.
10. Insert the Assembly into the Housing and use Shims (no. 26) as needed to get the proper backlash.
11. Be sure to give the Pinion Shaft Adapter a snug tightening with a pin in the blade before the proper shimming is done.

NOTE : After tightening the Pinion Cartridge into the Housing check the distance between the under side of the blade gear shft to the top of the pinion. This distance must be .507" plus or minus .002" and can be set by using pinion gauge #6345088. It may be necessary to remove the Pinion Cartridge to add or remove Shims to get the correct distance.

PART ASSEMBLIES AVAILABLE

NOTE : REFER TO TOOL ASSEMBLY DIAGRAMS

PART NO.	DESCRIPTION
6349849	FRONT HEAD ASSEMBLY COMPLETE
6349844	FRONT HEAD PINION CARTRIDGE (includes 21 through 29)
6345056	FRONT HEAD GEAR ASSEMBLY (includes 5 through 12)
6345259	"AS-4" SAW GUARD COMPLETE (includes A,B,C & 32 through 35)
6352250	"AS-5" SAW GUARD COMPLETE (includes A,B,C & 32 through 35)

"AS-4" & "AS-5" RETRO FIT KIT #6349151 FOR CHANGING THE ORIGINAL MOTOR TO THE *"NEW"* ERGONOMIC AIR MOTOR

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	6349859	MOTOR COMPLETE (2 THROUGH 34)	1
29	6345224	PINION ADAPTOR SHAFT	1
41	6349803	DRIVE ADAPTER	1
42	6345221	MOTOR ADAPTER	1
43	6349801	DRIVE COUPLING	1
44	6349847	FRONT SPACER	1
N/S	6349670	TRIGGER GUARD	1
40	6349899	HOUSING WRENCH	1
N/S	6349842	PINION CARTRIDGE INSERT WRENCH	1

OPTIONAL OVERHOSE ATTACHMENT FOR DIRECTING THE EXHAUST AIR AWAY FROM THE OPERATOR. (ONLY USED WITH ERGONOMIC MOTOR.)

INDIVIDUAL PARTS (REFERENCE NUMBERS FROM MOTOR DIAGRAM)

REF. NO.	PART NO.	DESCRIPTION	QTY.
N/S	6349730	TRIGGER GUARD	1
11	6349709	INLET ADAPTER	1
10	6349715	MUFFLER	1
N/S	6349712	O-RING	1
N/S	6349703	4 ft. OVERHOSE	1
N/S	6349705	8 ft. OVERHOSE	1
N/S	6349706	8 ft. AIR HOSE	1

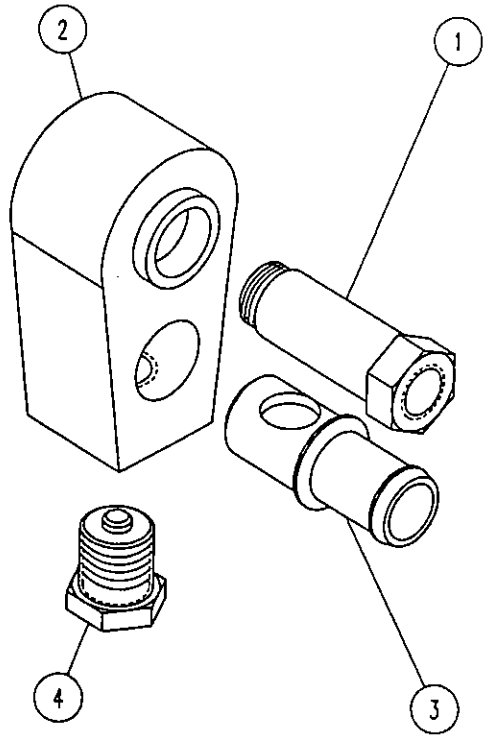
RETRO FIT KITS THAT CAN BE PURCHASED

KIT NUMBERS			6349727	6349718	6349719
6349730	TRIGGER GUARD	1		*	*
6349709	INLET ADAPTER	1	*	*	*
6349715	MUFFLER	1	*	*	*
6349712	O-RING	1	*	*	*
6349703	4 ft. OVERHOSE	1	*	*	
6349705	8 ft. OVERHOSE	1			*
6349706	8 ft. AIR HOSE	1		*	*

* DENOTES PARTS INCLUDED IN THE KIT

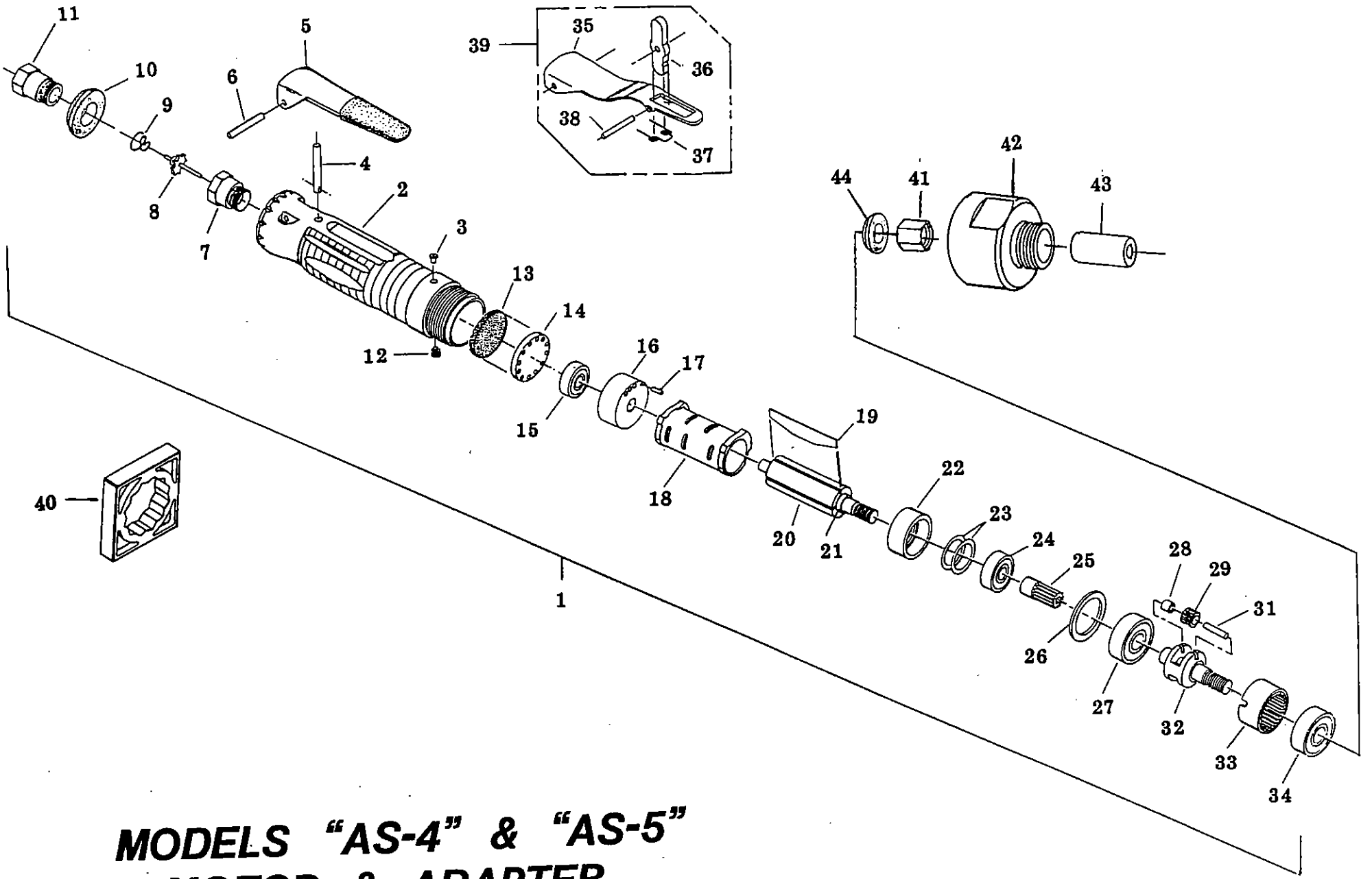
EUROPEAN STYLE INTAKE/EXHAUST ATTACHMENT

REF. NO	PART NO	DESCRIPTION
	6349903	**SUPPLY/EXHAUST ATTACHMENT ASSY.**
1	6349766	INLET PORT
2	6349763	ADAPTER
3	6349760	EXHAUST PORT
4	6349772	EXHAUST PORT RETAINING PLUG
N/S	6349905	"AS-4" & "AS-5" TRIGGER GUARD FOR EUROPEAN STYLE EXHAUST



"AS-4" & "AS-5" SCRIBE SAW MOTOR & ADAPTER

REF. NO.	PART NO.	DESCRIPTION	QTY.	RSP
1	6349859	MOTOR COMPLETE (2 THRU 34)	1	
2	6349867	MOTOR HOUSING & GREASE FITTING	1	
3	6349868	GREASE FITTING	1	
4	6349866	PUSH ROD	1	
5	6349871	LEVER	1	
6	6349870	LEVER PIN	1	
7	6349865	VALVE SEAT	1	
8	6349864	VALVE	1	
9	6349863	VALVE SPRING	1	*
10	6349862	DIFFUSER	1	
11	6349861	INLET ADAPTER	1	
12	6349869	SET SCREW	1	
13	6349872	FILTER	1	*
14	6349873	FILTER RETAINER	1	
15	6349874	BEARING	1	*
16	6349875	REAR PLATE & PIN	1	
17	6349876	PIN	1	
18	6349877	CYLINDER	1	
19	6349880	ROTOR BLADE	4	*
20	6349878	ROTOR & SPACER	1	*
21	6349879	SPACER	1	
22	6349881	FRONT PLATE	1	
23	6349882	SHIM PACKET	1	*
24	6349883	BALL BEARING	1	*
25	6349884	SUN GEAR	1	
26	6349885	SPACER	1	
27	6349886	BALL BEARING	1	*
28	6349887	NEEDLE BEARING	2	
29	6349888	PLANET GEAR & NEEDLE BEARING	2	*
30	6349889	BEARING RETAINER (NOT SHOWN)	2	
31	6349890	BEARING SHAFT	2	
32	6349891	CARRIER	1	
33	6349892	RING GEAR	1	
34	6349893	BALL BEARING	1	*
N/S	6349670	TRIGGER GUARD		
OPTIONAL LOCKING TRIGGER				
35	6349894	LEVER	1	
36	6349895	LOCK OFF	1	
37	6349896	SPRING	1	*
38	6349897	PIN	1	
39	6349898	LOCK OFF LEVER ASSEMBLY	1	
N/S	6349078	MALE QUICK DISCONNECT	1	
N/S	6349075	FEMALE QUICK DISCONNECT	1	
MOTOR ADAPTER & SPECIAL TOOLS				
40	6349899	HOUSING WRENCH		
41	6349803	DRIVE ADAPTER	1	
42	6345221	MOTOR ADAPTER	1	
43	6349801	DRIVE COUPLING	1	
44	6349847	FRONT SPACER	1	



MODELS "AS-4" & "AS-5"
MOTOR & ADAPTER

"AS-4" & "AS-5" SCRIBE SAW FRONT HEAD ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION	QTY.	RSP
A	6345206	"AS4-P" BLADE GUARD	1	
	6352200	"AS5-P" BLADE GUARD	1	
B	6345203	"AS4-P" DEPTH GAUGE	1	
	6352060	"AS5-P" DEPTH GAUGE	1	
C	6345200	"AS4-P" DEPTH GAUGE BLOCK	1	
	6352100	"AS5-P" DEPTH GAUGE BLOCK	1	
1	7027500	BLADE NUT LOCK SCREW	1	
2	6345132	BLADE FLANGE	1	
3	6105500	BLADE - 4"	1	*
	6119000	BLADE - 5"	1	*
5	6345130	GEAR PIN	2	
6	6345053	GEAR & PIN ASSEMBLY	1	
7	6345119	PIN	1	
8	6345118	GEAR CARTRIDGE	1	
9	6345121	BEARING	2	*
10	6345123	SPACER	1	
12	9801051	SOCKET SCREW	1	
13	6345098	HOUSING	1	
14	6345078	SHIM .003	AS NEEDED	*
	6345079	SHIM .005	AS NEEDED	*
	6345080	SHIM .010	AS NEEDED	*
15	6345076	CAP	1	
16	9802702	SCREWS	8	
17	6361201	GREASE FITTING	1	
18	9801412	SCREW	1	
19	9801935	LOCKWASHER	1	
21	6345133	PINION	1	
22	1222000	BEARINGS	2	*
23	6345113	SPACER - INNER	1	
24	6345111	SPACER - OUTER	1	
26	6345102	SHIM .003	AS NEEDED	*
	6345103	SHIM .005	AS NEEDED	*
	6345104	SHIM .010	AS NEEDED	*
27	9801845	SET SCREW - CONE SHAPED	2	
28	6345100	PINION CARTRIDGE	1	
29	6345224	PINION ADAPTOR SHAFT	1	
30	6356700	HANDLE	1	
31	9800439	SCREW	1	
32	9800438	SCREWS	2	
33	9800342	SCREWS	2	
34	9800674	SCREW	1	
35	9758700	PIVOT BUSHING	1	

ASSEMBLIES AVAILABLE

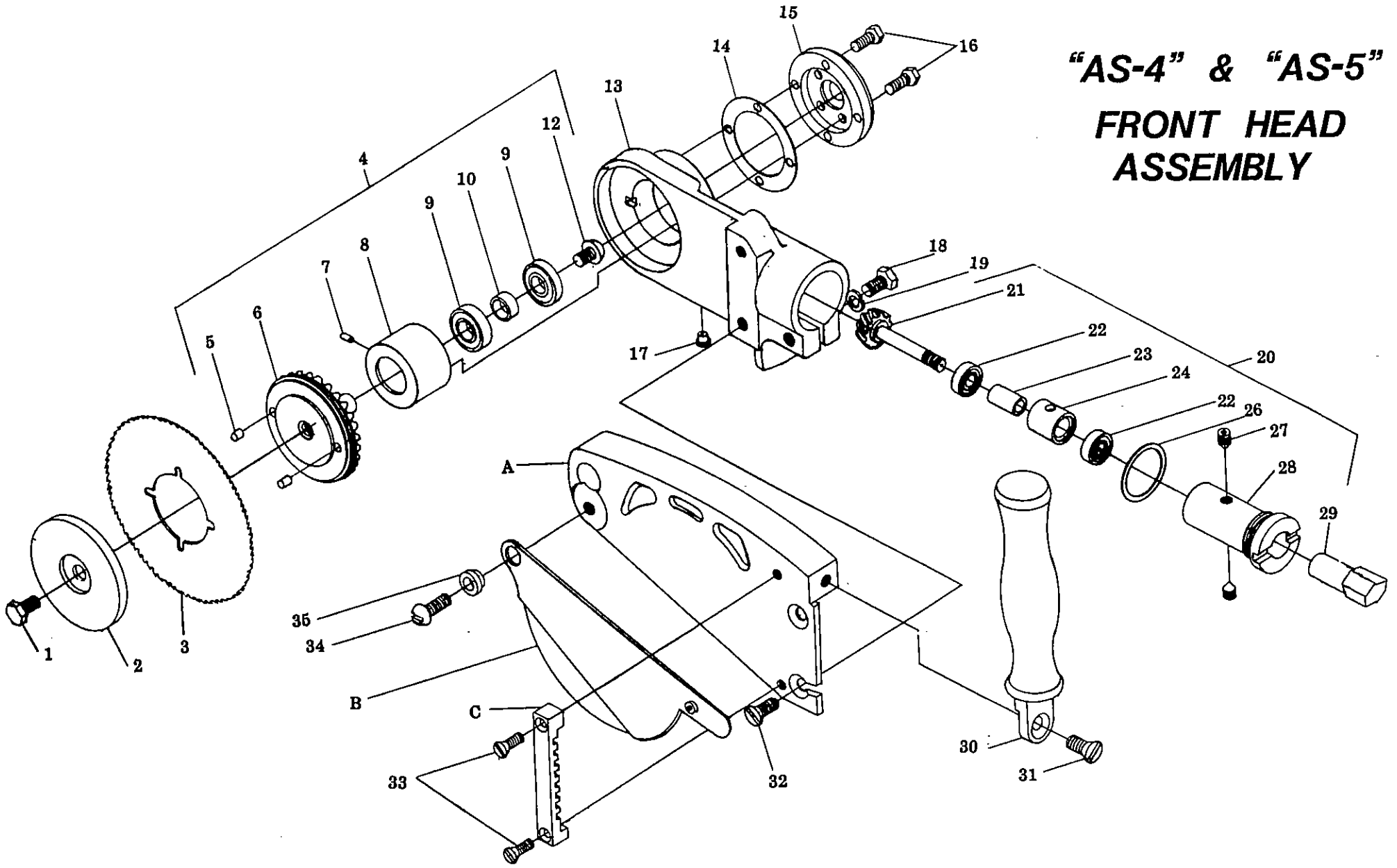
4	6345056	GEAR ASSEMBLY
20	6349844	PINION CARTRIDGE ASSEMBLY

SPECIAL TOOLS

N/S	6349842	PINION CARTRIDGE INSERT WRENCH	*
N/S	6345088	PINION SETTING GAUGE	*

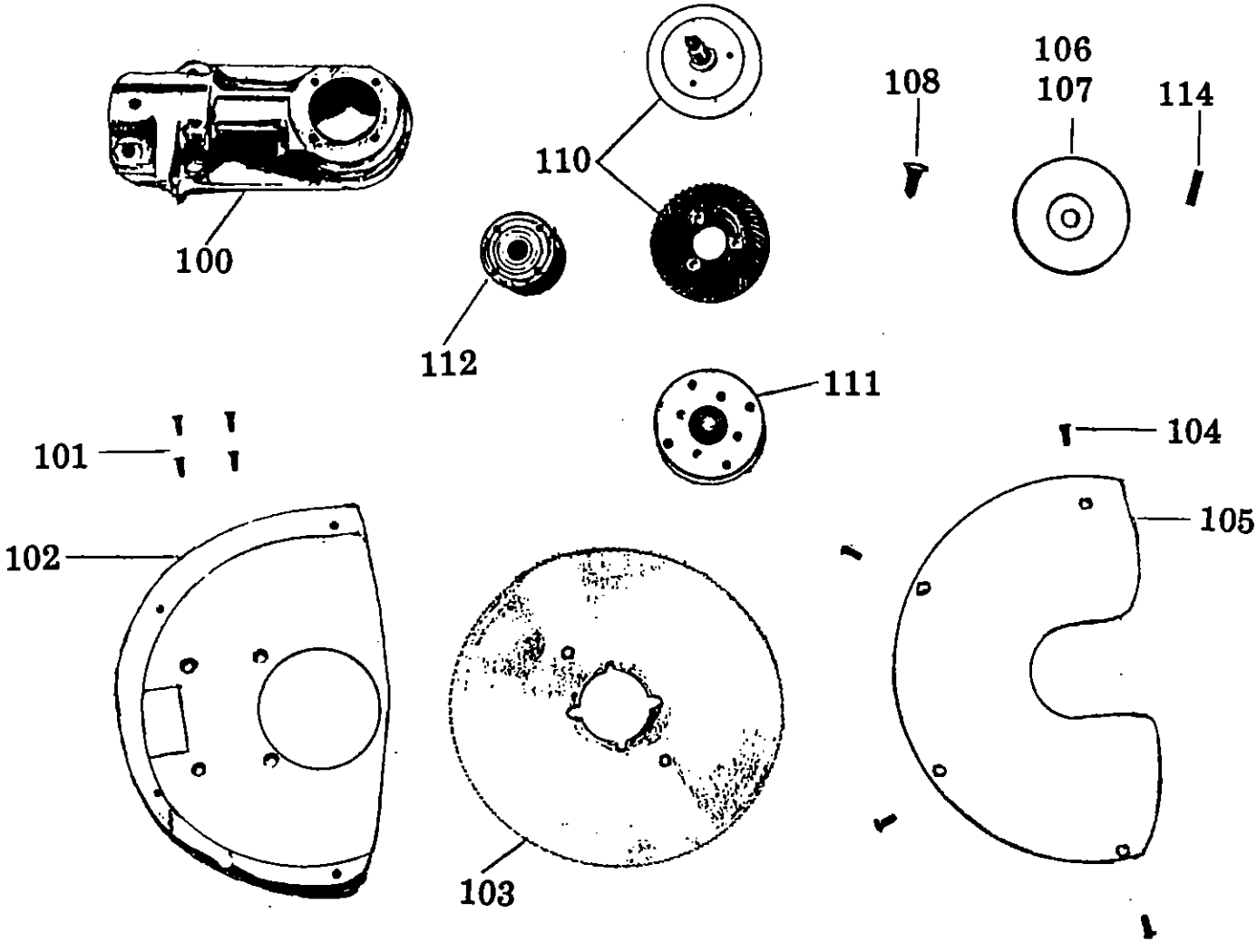
"AS-4" & "AS-5"

FRONT HEAD ASSEMBLY



AIR MODEL "HB-6" HOG BREASTBONE OPENER SAW
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	QTY.
100	6354198	HOUSING - HB-6 ONLY	1
101	9900357	SCREWS TO SECURE REF. NO. 102	4
102	6354200	LOWER GUARD	1
103	6109100	SAW BLADE 6 1/2" - FINE TOOTH	
	6119800	SAW BLADE 6 1/2" - COARSE TOOTH	
104	9900119	SCREWS TO SECURE REF. NO. 105	4
105	6354300	OUTER SHIELD	1
106	6345132	OUTER FLANGE	1
107	6354400	INNER FLANGE	1
108	9901493	SAW BOLT - 7/8" LENGTH	1
110	6345134	GEAR, SHAFT & FLANGE ASSEMBLY	1
111	6345076	CAP	1
112	6345118	GEAR CARTRIDGE	1
N/S	6345121	GEAR CARTRIDGE BEARING	2
114	9902030	PINS FOR REF. NO. 107	2
N/S	6349700	T-HANDLE (STANDARD)	1



ACCESSORIES

2110506	.....	Allen Wrench
2110605	.....	Allen Wrench
2111000	.....	Grease Gun
2111100	.....	1 Lb. (0.4536 Kilos) Can Grease
2111200	.....	8 Lb. (3.63 Kilos) Pail Grease
2111400	.....	Air Mist Oil 7¼ Lbs. (3.40 Kilos) Container
6337893	.....	Air Filter/Regulator/Lubricator Unit
* 6339000	.....	Counterbalancer 4-10 Lb. Capacity (1.8 - 4.5 Kgs.) Cable Travel = 8 Feet (2.4 Meters)
2110508	.....	Allen Wrench 1/8"
6357860	.....	Dual Purpose Wrench for removing #6355700 (Ref.#9) Locknut & #6355200 (Ref.#1) Blade Nut.

* NOT SHOWN