

Duff Norton

Air Motor Jack Co.

BOSSMAN



Operating and Maintenance Instructions with Parts List Publication Part No. X4896



Model Numbers

528AMJ	528CMJ
536AMJ	536CMJ
126AMJ	126CMJ
132AMJ	132CMJ
144AMJ	144CMJ

distributed by



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IMPORTANT--CAUTION

This manual contains important information regarding the correct installation, operation, and maintenance of the equipment described herein. All persons involved in such installation, operation, and maintenance should be thoroughly familiar with the contents. To safeguard against the possibility of personal injury or property damage, follow the recommendations and instructions of this manual and keep it for further reference.

WARNING

The equipment shown in this manual is intended for industrial use only and should not be used to lift, support, or otherwise transport people.

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Duff Norton Air Motor Jack Warranty Policy

Subject to the condition stated herein, Duff Norton Air Motor Jack Co. will repair or replace, without charge, any parts proved to our satisfaction to have been defective in material or workmanship. Claims must be made within one year after the date of shipment.

The warranty is null and void for:

1. Units or any parts that become inoperative because of improper maintenance, eccentric loading, overloading, chemical or abrasive action, excessive heat, or other abuse.
2. Equipment which has been altered or modified by anyone without DNAMJ Co.'s authorization.
3. Equipment and accessories not of DNAMJ Co.'s manufacture are warranted only to the extent of the original manufacturer's warranty and subject to the same conditions as stated above regarding improper maintenance, abuse, overloading, etc.
4. Except as stated herein, DNAMJ Co. makes no other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose.

Section I

Introduction

1-1. General

- a. This manual provides instructions for operating, inspection, testing, and maintenance, as well as an illustrated parts list for the following Duff Norton Air Motor Jacks:

528AMJ	528CMJ
536AMJ	536CMJ
126AMJ	126CMJ
132AMJ	132CMJ
144AMJ	144CMJ

- b. This publication is written in accordance with standards set forth in the current ANSI B30.1. To ensure reliable and long, satisfactory use of the air motor jacks, the instructions contained in this publication should be closely followed. **Safety precautions to protect against accidental injury or property damage should be observed at all times while using the jacks.** All personnel concerned with the installation, operation, inspection, and maintenance of the jacks are urged to read the American National Standard (ANSI B30.1). That standard contains important rules (some mandatory and some of an advisory nature) designed to prevent or minimize injury or otherwise protect life, limb, and property. You should especially be aware of the mandatory rules pertaining to inspection

requirements and advisability of maintaining written, dated, and signed inspection reports and records.

NOTE

The air motor jacks are recommended for general industrial use.

1-2. Construction

The Duff Norton Air Motor Jack consists of a cast shell, a lifting mechanism made up of gears, bearings, shafts, & pinions, and a lifting screw. These jacks are driven by an air motor and require a source of compressed air for operation. Carrying handles, wheels, and trundle handle for transporting and positioning the jacks are provided.

1-3. Technical Specifications and Operational Characteristics

- a. The user should be aware of the capabilities of air motor jacks, especially load capacity.

WARNING

Overloading can be hazardous to the jack, operating personnel, and the load in the event of jack failure.

- b. See Table 1-1 for technical specifications of the jacks.
c. See Table 1-2 for operational characteristics for the jacks.

TABLE 1-1. TECHNICAL SPECIFICATIONS

	528AMJ 528CMJ	536AMJ 536CMJ	126AMJ 126CMJ	132AMJ 132CMJ	144AMJ 144CMJ
Sustaining Capacity, Tons	50	50	100	100	100
Lifting Capacity, Tons	50	50	100	100	100
Height, Inches	28	36	26	32	44
Raise, Inches	17	25	13 ³ / ₄	18	30
Base Diameter, Inches	14	15	13	13	18
Head Diameter, Inches	5	5	6 1/8	6 1/8	6 1/8
Weight, Pounds	394	425	448	480	530

TABLE 1-2. OPERATIONAL CHARACTERISTICS

	Jack Load (Tons)	Average Rate* of Rise (in./min.)	Cu. Ft. of Free* Air Required Per Minute
528AMJ	0	11.2	190
528CMJ	25	7.1	170
536AMJ	50	2.6	120
536CMJ			
126AMJ	0	6.0	200
126CMJ	50	3.2	180
132AMJ	100	2.2	155
132CMJ			
144AMJ			
144CMJ			

*Values are for jacks supplied with air of 100 psi dynamic air pressure at the air valve entrance

Section II

Inspection, Testing, and Maintenance

2-1. Inspection

The inspection classifications herein are minimum requirements and should be augmented when experience from operating conditions indicate. See Table 2-1 for minimum inspection schedule.

general classifications designated as Frequent Inspection and Periodic Inspection based upon the intervals at which inspection should be performed. The intervals in turn are dependent upon the nature of the critical components of the jack and the degree of their exposure to wear, deterioration or malfunction.

2-2. Inspection Classification

The jack inspection classification consists of initial inspection prior to use and two

2-3. Initial Inspection

Any new or repaired jack shall be carefully inspected prior to initial use. An inspection shall be made by or under the direction of a person familiar with air motor jack operations and industrial safety standards.

- a. Check for proper service of grease and oil (refer to paragraph 2-9).
- b. Make a detailed external inspection for proper assembly. Check for any loose or missing parts, such as cotter pins, springs, or washers. Remove from service any jack incorrectly assembled or with missing parts.
- c. Operate the jack through at least one lifting and lowering cycle while observing lifting-mechanism operation. Remove from service any jack which shows evidence of erratic operation.

- d. Perform load test in accordance with paragraph 2-7.

2-4. Frequent Inspection

Visual examination by the operator or other qualified designated personnel with records not required.

- a. Normal service—one month
- b. Severe service—before each use or daily, whichever is less frequent.

FIGURE 2-1. INSPECTOR'S REPORT

Item	Remarks (List Deficiencies and Recommended Action)		
Inspector's Signature	Date Inspected	Approved By	Date

TABLE 2-1. MINIMUM INSPECTION SCHEDULE

Minimum Inspection Schedule	Normal Service		Severe Service	
	Visual Monthly*	Record Yearly**	Visual Before Use***	Record Yearly
Air Screen	X		X	
Scored or damaged control rod	X		X	
Lubrication (refer to para 2-9)	X		X	
Cracked or damaged housing	X		X	
Damaged threads	X		X	
Leaking oil	X		X	
Scored or damaged standard	X		X	
Improper functioning	X		X	
Damaged top	X		X	
Loose bolts or rivets	X		X	
Damaged or improperly assembled accessory equipment	X		X	
Motor blades	As per Paragraph 2-6.a			
Lifting Nut	As per Paragraph 2-6.b			
Periodic Inspection				
Same as Frequent Inspection	X			X
Disassemble and check for wear	X****			X

*By Operator or designated personnel without records

**By appointed person making records of apparent external conditions to provide the basis for continuing evaluation

***Or daily, whichever is longer

****If external conditions indicate internal difficulty

CAUTION

Any unsafe condition disclosed by the inspection shall be corrected before operation of the jack is resumed. Repairs should be performed only by designated qualified personnel.

- c. The following items shall be visually inspected and observed during operation for any deficiencies which might appear between frequent inspections. The deficiencies listed shall be carefully examined and determination made

whether or not they constitute a hazard. If such a determination is made, the jack shall be removed from service until the deficiency is corrected.

- (1) Check for scored or damaged control rod.
- (2) Check for scored or damaged standard and keys.
- (3) Check for any abnormal conditions, loose cotter pins, cap screws, and nuts.
- (4) Inspect all visible components for condition and security of all parts.
- (5) Check for adequate lubrication. (Refer to paragraph 2-9).
- (6) Check for foreign substance which may damage or interfere with proper operation of the jack.

NOTE

A jack that has been idle for one year or more shall be inspected in accordance with Frequent Inspection (Table 2-1).

2-5. Periodic Inspection

Visual inspections by designated qualified personnel, making records of apparent external conditions, provide the basis for a continuing evaluation.

- a. Normal service—one year
- b. Severe service—before each use or daily, whichever is less frequent, unless external conditions indicate that disassembly should be done to permit detailed inspection.
- c. Perform inspection in the same manner as Frequent Inspections, except that records are kept. A dated and signed inspection record shall be kept on all Periodic Inspections. See Figure 2-1 for a typical “Inspector’s Record.”

NOTE

It is recommended that the Periodic Inspection be performed by and Authorized Warranty Service Center or appropriate trained authorized individuals.

- a. During Periodic Inspection, if external appearance indicates possible internal difficulty, the jack shall be disassembled for cleaning and examination for internal wear or damage.

See Table 2-1 for Minimum Inspection Schedule.

2-6. Special Inspection Requirements

- a. Air motor blades:

Motor blades should be inspected for wear after each 100 jack lifting cycles. When blades are worn to a thickness of 25/32 inch or less, they should be replaced.

- b. Lifting Nut:

The jack’s lifting nut should be inspected for wear after every 100 jack lifting cycles. In applications where the jack is exposed to dirt, dust, metal chips, or other contaminants, the inspection frequency should be increased.

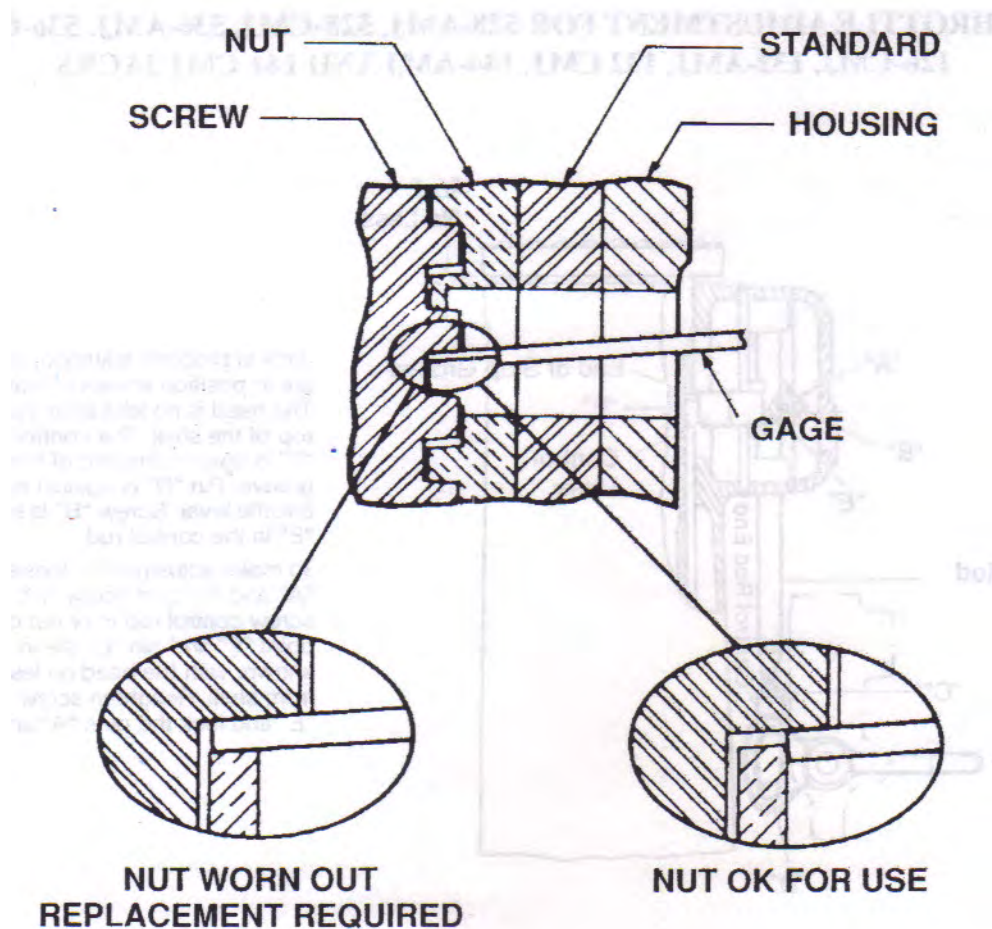
WARNING

Failure to properly inspect and maintain the lifting nut could result in a dropped load and serious worker injury.

To inspect the lifting nut refer to Figures 4-1 through 4-8 and Figure 2-2, and proceed as follows:

- (1) Fully extend the upright unloaded jack.
- (2) Loosen the two screws and remove the gage from the jack.
- (3) Clean grease from the hole which had been covered by the gage.
- (4) Insert the slender end of the gage into the hole.
- (5) If the thin tip of the gage can be made to enter the space between the top flank of the lifting nut thread and the bottom flank of the lifting screw thread, the lifting nut is worn out. (Refer to Figure 2-2).
- (6) **Remove jack with worn out lifting nut from service and ensure that it is properly repaired before returning to service.**

Figure 2-2. LIFTING NUT INSPECTION



2-7. Load Test

Any new, altered, or repaired jack shall be tested for its ability to sustain its rated load prior to regular use. The jack shall be operated to 100 percent of its capacity. See Table 1-1 for applicable load capacity.

2-8. Maintenance

The maintenance of the jack shall include lubrication, cleaning, and replacement of defective parts during disassembly and assembly.

2-9. Lubrication

a. Air motor:

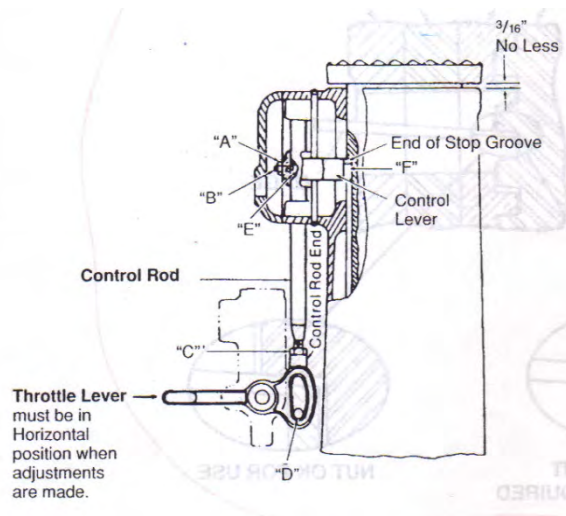
Remove the filler plugs and fill with Mobil DTE Oil Light (Duff p/n X6002) or equivalent oil after every eight hours of use. Air line filter lubrication should be used for this

jack. Rotor ball bearings should be coated with grease each time the motor is disassembled.

- b. Weekly lubrication for the jack:
 - (1) Standard, keys, and shut-off rod. Use a light oil.
 - (2) Control valve parts. Use a light oil.
- c. Monthly lubrication of the jack:
 - (1) Lubricate lifting screw through hole in standard. Use Mobil DTE Oil Light (Duff p/n X6002).
 - (2) Clean and lubricate handle latch and throttle control parts. Use Mobil DTE Oil Light (Duff p/n X6002).
 - (3) Remove grease level plug and check grease level. Fill with Mobilgrease XHP 461 or equivalent.

- d. After repair or overhaul:
 - Drain, flush, and refill internal jack mechanism with Mobilgrease XHP 461 or equivalent.
- e. Clean and grease wheels regularly.
- f. Screw lubrication under heavy load use.
 - When operating the jack under heavy loading, pump Mobilgrease XHP 461 grease into the standard every few jack lifting cycles.

FIGURE 2-3. THROTTLE ADJUSTMENT FOR 528AMJ/CMJ, 536AMJ/CMJ, 126AMJ/CMJ, 132AMJ/CMJ, AND 144AMJ/CMJ



Jack is properly adjusted when parts are in position shown in drawing at left. The head is no less than 3/16 from the top of the shell. The control lever end "F" is against the end of the stop groove. Pin "D" is against the end of the throttle lever. Screw "B" is in the hole "E" in the control rod.

To make adjustments, loosen lock nuts "A" and "C" and screw "B." Then screw control rod in or out of end until point "F" and pin "D" are in the position shown, with the head no less than 3/16 from shell. Retighten screw "B" in hole "E" and lock the nuts "A" and "C."

SECTION III

OPERATION

3-1. Operational Requirement

- a. Operators shall be instructed in the proper use of the jack.
- b. The operator shall familiarize himself with the jack, its capabilities, and its operation. He/she should also know and understand the mandatory requirements of American National Standard (ANSI B30.1).
- c. The throttle lever is located on the control valve above the air motor.
 - (1) To raise a load, pull the throttle lever to UP.

- (2) To lower a load, push the throttle lever to DOWN.
- (3) To cease movement of a load, place the throttle lever in the horizontal position.
- (4) The throttle lever will automatically move to the horizontal position when the jack has extended or lowered to its limit.

3-2. Operating Procedures and Precautions

The following precautions shall be followed in operation of the jack:

- a. Visually inspect the jack before each shift or each use, whichever is less frequent.

- b. Clean any jack exposed to rain, sand, or grit—then oil before use.
- c. Determine if the load is within the load rating of the jack. Refer to Table 1-1 for load rating of the jack.
- d. Support the jack at the base in such a manner that it cannot shift under the load.
- e. Use shims or constraints to prevent slippage of base or load.
- f. Avoid off-center loading of the jack. Assure that it is centered, plumbed, and properly blocked.
- g. Do NOT use an extender.
- h. Follow the load with cribbing or blocking.
- i. Take measure to prevent personnel from working or passing under the load until the load is secured against accidental lowering by cribbing, blocking, or other means.
- j. Ensure that all personnel are clear of the load before lowering.
- k. Ensure that all operators are instructed as to signals and other procedures for multiple jacks or other special lifts.

- l. Ensure that the lifting nut is inspected for wear as per paragraph 2-6.b.

SECTION IV

ILLUSTRATED PARTS LIST

4-1. General

This section contains exploded view illustrations. The number adjacent to each part is the index number. Keyed to this index number on the parts listing is the part name, part number, and quantity required. When ordering parts for a particular jack, please specify part name, part number, quantity desired, and full jack description, and serial number, if known.

LIST OF ILLUSTRATIONS

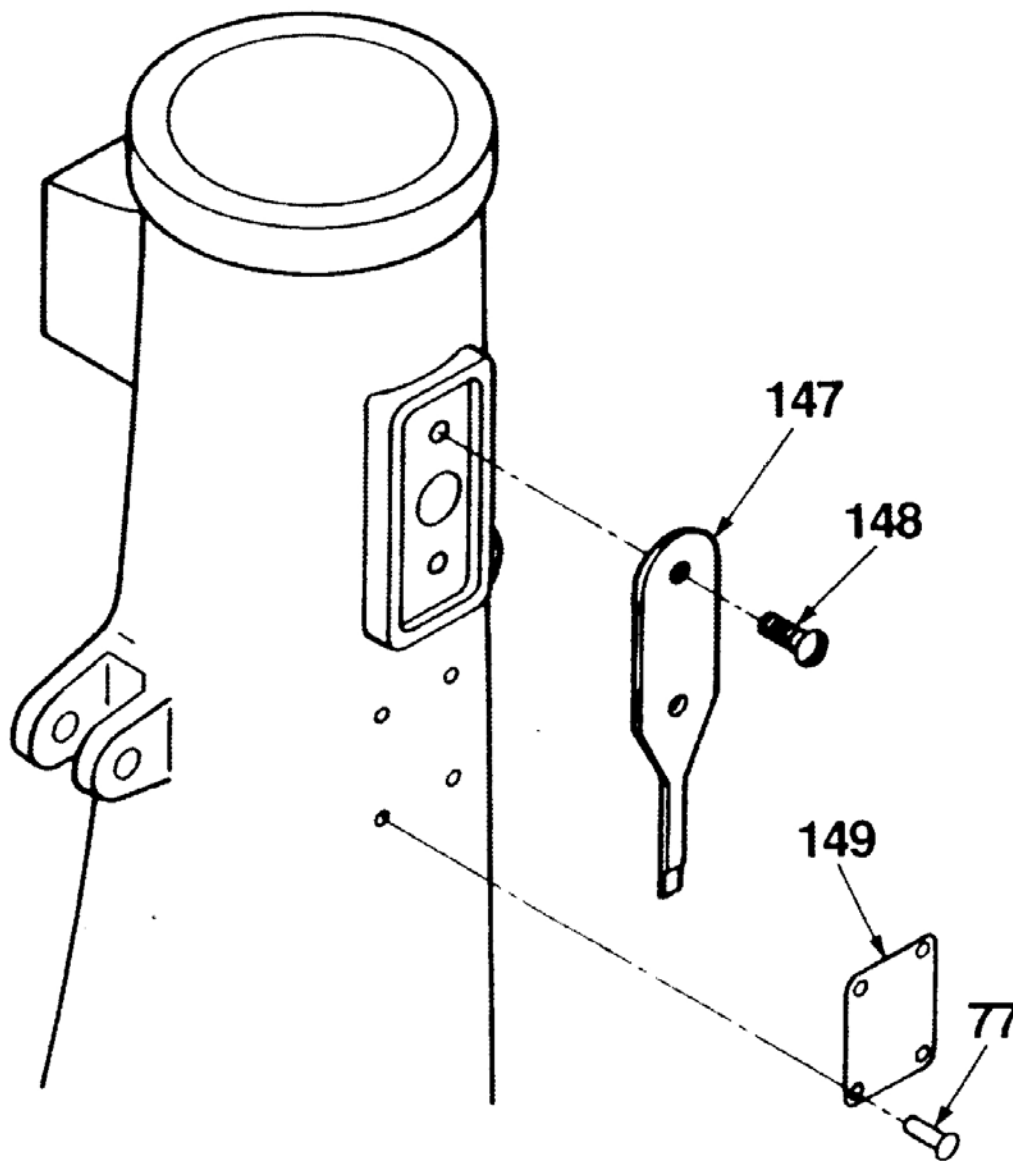
Figure No.	Jack/Air Motor No.	Page No.
4-1	528AMJ/536AMJ	9
4-2	Gage Area for 528AMJ/536AMJ	10
4-3	528CMJ/536CMJ	15
4-4	Gage Area for 528CMJ/536CMJ	16
4-5	126AMJ/132AMJ/144AMJ	21
4-6	Gage Area for 126AMJ/132AMJ/144AMJ	22
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4-9	X6000 Air Motor	33
4-10	X4153 Air Motor	35

Exploded view diagram of a mechanical assembly, likely a pump or motor. The diagram shows various components and their assembly sequence, indicated by numbered callouts (1 through 146). Key components include:

- Motor Housing (144):** The main outer casing.
- Shaft Assembly (25):** The central rotating component.
- Pump Head (146):** The component that houses the pump mechanism.
- Seals and O-Rings (141, 142, 143, 145):** Components used for sealing the assembly.
- Fasteners (140, 141, 142, 143, 145):** Screws and bolts used to secure the assembly.
- Internal Components (1-146):** Various internal parts including bearings, gears, and structural elements.

The diagram includes a reference to "SEE FIG. 4-2" for additional details. The assembly is shown in a disassembled state to illustrate the relationship between the various parts.

FIGURE 4-2. EXPLODED ILLUSTRATION OF GAGE AREA FOR 528AMJ AND 536AMJ



FIGURES 4-1 AND 4-2 INDEX NO.	PART NAME	PART NUMBER		QUANTITY REQUIRED
		528AMJ	536AMJ	
*1	Standard Top	X3630	X3630	1
2	Shell Key	X4857		2
	Shell Key		X4857	1
3	Shell Key Cap Screw	S44-40		6
			S44-40	3
4	Carrying Handle	X2579	X2579	2
5	Cotter Pin	S2-19	S2-19	2
6	Carrying Handle Pin	X3038	X3038	2
7	Shell Filler Plug	H6253	H6253	1
8	Worm Bearing	N581	N581	1
9	Bearing Shim	N579-1	N579-1	A/R
10	Worm Rear Cover	N554	N554	1
11	Lockwasher	H4084	H4084	4
12	Worm Cover Cap Screw	S44-9	S44-9	4
13	Cover Filler Plug	S25-2	S25-2	1
14	Bridge Bushing	X3512	X3512	1
15	Bevel Pinion (Incl. Item 15A)	X4854A	X4854A	1
15A	Race	X4852	X4852	1
16	Worm Gear Key	S13-34	S13-34	2
17	Worm Gear	X3415	X3415	1
18	Worm Gear Spacer	X3418	X3418	1
19	Pinion Bearing	X3453	X3453	1
20	Pinion Cover Gasket	X3419	X3419	1
21	Pinion Cover	X3417	X3417	1
22	Lockwasher	H4085	H4085	5
23	Pinion Cover Cap Screw	S44-41	S44-41	5
*24	Standard Top Pin	S1-188	S1-188	1
*25	Standard	X4845	X4858	1
*27	Nut Assembly	X4843A	X4843A	1
*28	Dowel Pin, Nut	H5411	H5411	2
29	Lifting Screw (Incl. Item 29A)	X4851A	X4853A	1
29A	Race	X4852	X4852	1
30	Lifting Screw Key	S10-53	S10-53	1
31	Bevel Gear	X3344	X3344	1
32	Ball Plate	X466	X466	2
33	Ball	X479	X479	9

34	Lifting Screw Pin	S50-42	S50-42	1
35	Ball Cage	X2589	X2589	1
36	Ball Plate Bushing	X3747	X3747	1
37	Base	X3334	X3772	1
38	Cotter Pin, Wheel	S2-42	S2-42	2
39	Washer, Wheel	S3-68	S3-68	2

40	Washer, Filler (Incl. with Item 41)	X4455	X4455	4
41	Bearing (Incl. Item 40)	X4454	X4454	2
42	Wheel (Incl. Items 40 and 41)	X3776	X3776	2
*43	Axle, Wheel	X3777	X3777	2
*44	Wheel Support	X3934	X3934	1
45	Socket Head Cap Screw	S49-38	S49-38	3
46	Lockwasher	S42-36	S42-36	3
47	Rivet	S5-45	S5-45	2
48	Air Motor (See figure 4-9 for details)	X6000	X6000	1
49	Air Motor Gasket	X3432	X3432	1
50	Motor Gear Shaft Pin	X3725	X3725	1
51	Motor Spur Gear	X3461	X3461	1
53	Grease Level Plug	S25-2	S25-2	1
54	Hex Head Cap Screw	S44-41	S44-41	6
55	Lockwasher	H4085	H4085	6
56	Air Motor Cover	X3348	X3348	1
57	Lockwasher	H4066	H4066	8
58	Hex Head Cap Screw	S44-23	S44-23	8
59	Motor Cover Gasket	X3428	X3428	1
60	Worm Cotter Pin	S2-25	S2-25	1
61	Worm Spur Gear	X4159	X4159	1
62	Worm Key	S23-26	S23-26	1
63	Flat Head Screw	S9-22	S9-22	4
64	Worm Front Cover	X3479	X3479	1
65	Worm Bearing W/ Race	N581	N581	1
66	Worm	X3340	X3340	1
67	Motor Cover Dowel Pin	N522	N522	2
68	Shell	X4838	X4839	1
69	Gear Sleeve Bushing	X3367	X3367	2
70	Motor Gear Sleeve	X3370	X3370	1
71	Key	S10-47	S10-47	1
72	Worm Spur Pinion	X4158	X4158	1
73	Motor Gear Shaft	X3734	X3734	1
74	Base Locking Screw	X3200	X3200	1

75	Lockwasher	H4083	H4083	1
76	Nameplate	X4680	X4680	1
77	Drive Screw	S40-28	S40-28	12
78	Check Nut	S12-15	S12-15	1
79	Control Lever Set Screw	S7-23	S7-23	1
80	Control Lever	X3542	X3542	1
81	Plunger Spring	S37-74	S37-74	1
82	Plunger	X2482	X2482	1
*83	Handle Bracket	X3505	X3505	1
84	Handle Pin	X4229	X4229	1
*85	Latch Plunger Knob	X2853	X2853	1
*86	Latch Plunger Sleeve	X2854	X2854	1
*87	Latch Plunger Spring	S37-26	S37-26	1
*88	Latch Plunger	X4141	X4141	1
89	Handle Bracket Cap Screw	S44-35	S44-35	4
90	Lockwasher	H4085	H4085	4
91	Handle Assembly	P586-2	P587-2	1
92	Throttle Lever Guard Screw	S36-26	S36-26	2
93	Lockwasher	H4084	H4084	2
94	Throttle Lever Guard	X3406	X3406	1
95	Throttle Lever Check Nut	S12-15	S12-15	1
96	Throttle Lever Set Screw	S7-23	S7-23	1
97	Throttle Lever	X3407	X3407	1
98	Control Rod Pin	X3409	X3409	1
99	Control Rod End	X3420	X3420	1
100	Control Rod Check Nut	S12-22	S12-22	1
101	Control Rod	X3410	X3411	1
*102	Valve Body Cap	X3384	X3384	1
*103	Body Cap Bushing	X3385	X3385	1
*104	Throttle Valve	X3396	X3396	1
*105	Valve Spring Cap	X3408	X3408	1
*106	Poppet Valve Spring	X3499	X3499	1
*107	Poppet Valve	X3395	X3395	1
*108	Poppet Valve Bushing	X3388	X3388	1
109	Body Stud Nut	S12-27	S12-27	2
110	Valve Body Stud	S33-46	S33-46	1
*111	Valve Body	X4793	X4793	1
*112	Valve Bushing	X3387	X3387	1
*113	Stop Pin Plug	H6267	H6267	1
*114	Stop Pin Spring	X5300	X3500	1
*115	Stop Pin	X3386	X3386	1

116	Valve Connection Gasket	X3727	X3727	1
117	Valve Connection	X4835	X4835	1
118	Lockwasher	H4066	H4066	4
119	Hex Head Cap Screw	S44-23	S44-23	4
120	Valve Body Nut	X3392	X3392	1
121	Connection Nut	X3391	X3391	1
122	Connection Nut	S1-198	S1-198	1
123	Valve Body Gasket	X3390	X3390	1
124	Tapered Closure	X6681	X6681	1
*125	Screen Clip	X3533	X3533	1
*126	Screen	X3514	X3514	1
*127	Hose Connection	X3513	X3513	1
128	Warning Plate	X4822	X4822	1
129	Elbow	X4781	X4781	1
130	Muffler	X4779	X4779	2
131	Bushing	X4866	X4866	1
132	Elbow	X4778	X4778	1
139	O-Ring	X6477-113	X6477-113	1
140	Half Bushing	X4861	X4862	2 1
141	Felt Seal	X4863	X4863	1
142	Seal Cap	X4864	X4864	1
143	Screw	S9-12	S9-12	4
146	Lifting Eye	X4856	X4856	1
147	Gage	X4840	X4840	1
148	Gage Screw	H2999-16	H2999-16	2
149	Gage Instructions	X4819	X4819	1

133	Standard, Top, Nut Assembly (Consisting of Items 1, 24, 25, 27, and 28)	X4845A	X4858A	1
134	Handle Bracket (Consisting of Items 83, 85, 86, 87, and 88)	P584	P584	1
135	Control Valve (Consisting of Items 102-108 and 111-115)	P588	P588	1
136	Hose Connection (Consisting of Items 125, 126, and 127)	P595	P595	1
137	Wheel Support Assembly (Consisting of Items 43, 44, and 47)	P618	P618	1
138	Valve Body and Bushings Assembly (Consisting of Items 108, 111, and 112)	P657	P657	1

FIGURE 4-3. EXPLODED ILLUSTRATION OF 528CMJ AND 536CMJ JACKS

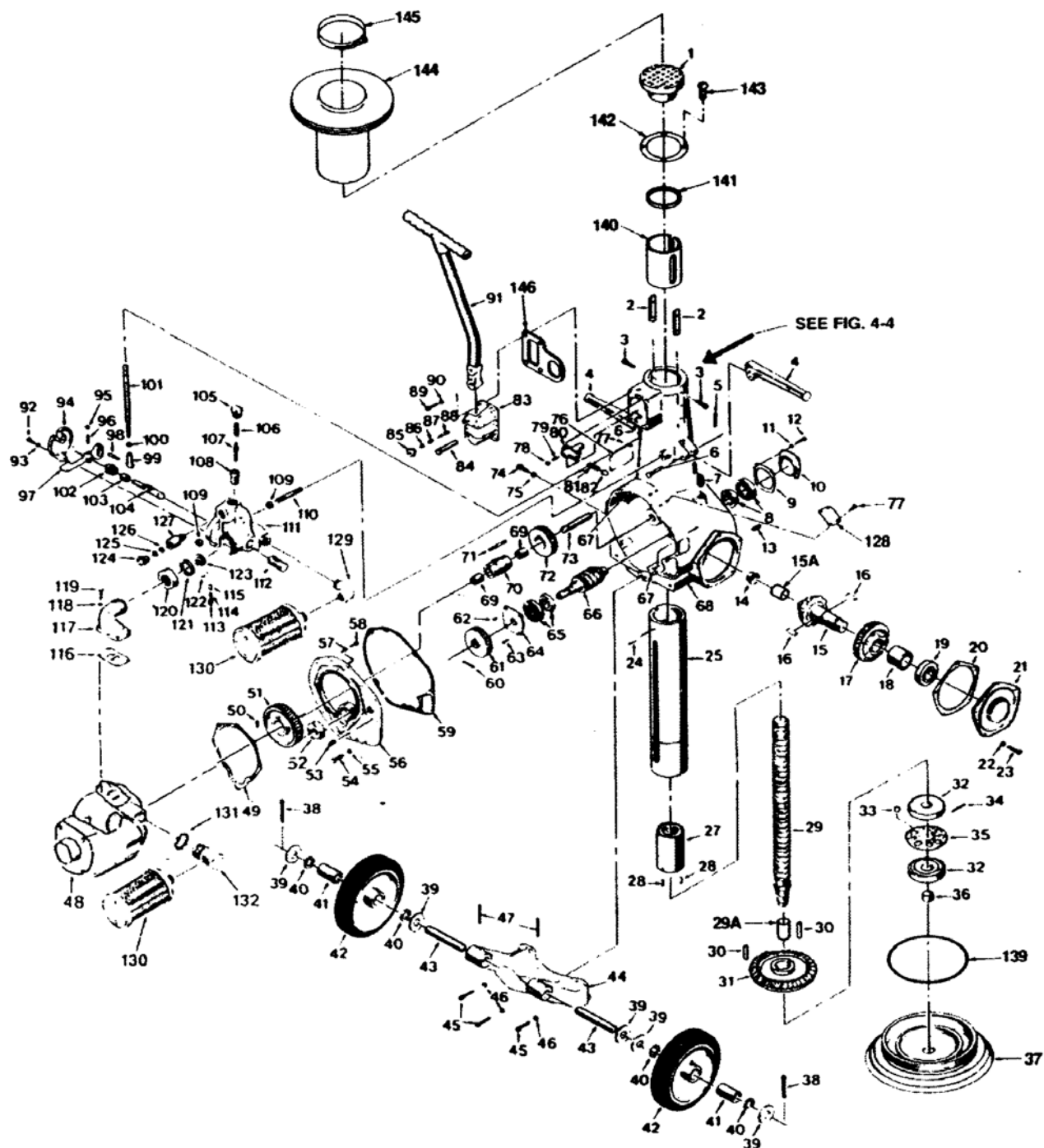
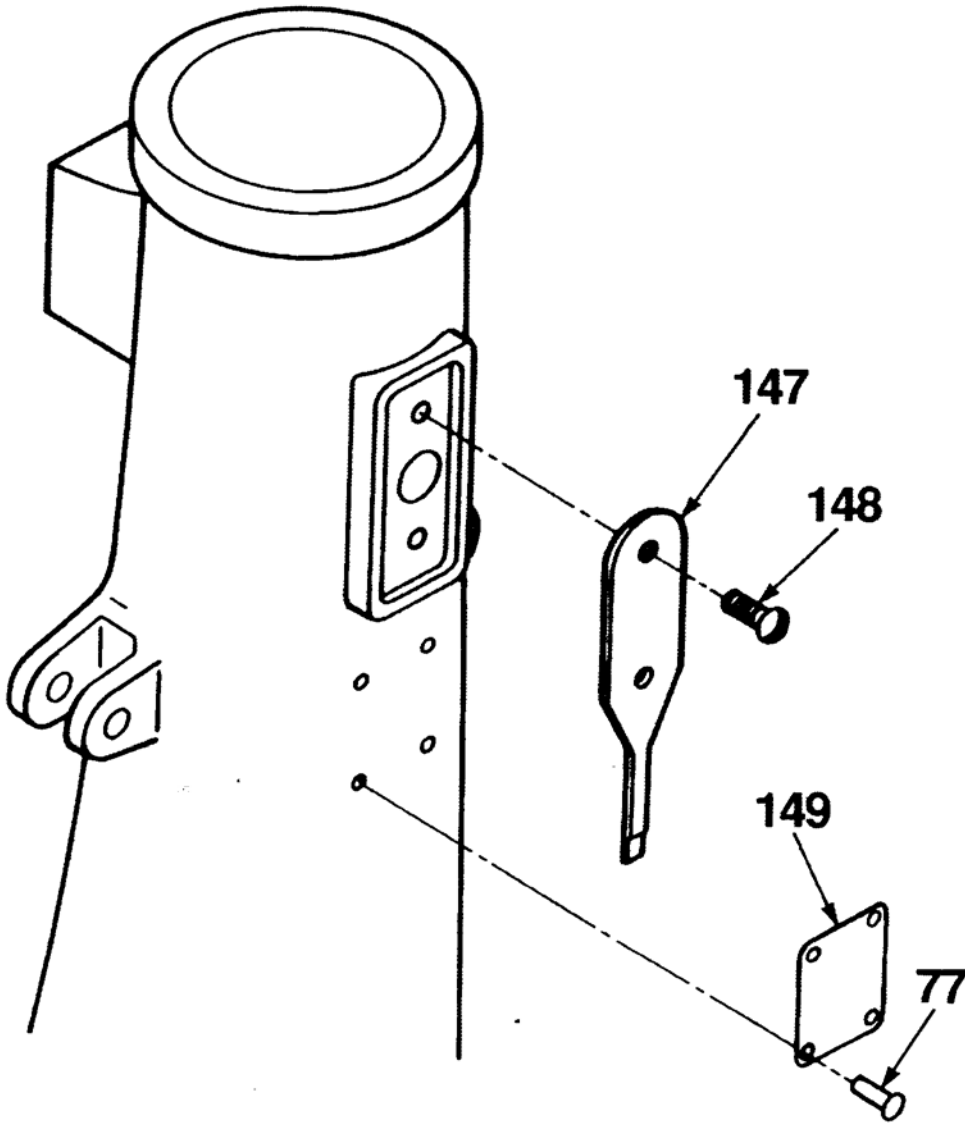


FIGURE 4-4. EXPLODED ILLUSTRATION OF GAGE AREA FOR 528CMJ AND 536CMJ JACKS



FIGURES 4-3 AND 4-4 INDEX NO.	PART NAME	PART NUMBER		QUANTITY REQUIRED
		528CMJ	536CMJ	
*1	Standard Top	X3630	X3630	1
2	Shell Key	X4857	X4857	2 1
3	Shell Key Cap Screw	S44-40	S44-40	6 3
4	Carrying Handle	X2579	X2579	2
5	Cotter Pin	S2-19	S2-19	2
6	Carrying Handle Pin	X3038	X3038	2
7	Shell Filler Plug	H6253	H6253	1
8	Worm Bearing	N581	N581	1
9	Bearing Shim	N579-1	N579-1	A/R
10	Worm Rear Cover	N554	N554	1
11	Lockwasher	H4084	H4084	4
12	Worm Cover Cap Screw	S44-9	S44-9	4
13	Cover Filler Plug	S25-2	S25-2	1
14	Bridge Bushing	X3512	X3512	1
15	Bevel Pinion (Includes Item 15A)	X4854A	X4854A	1
15A	Race	X4852	X4852	1
16	Worm Gear Key	S13-34	S13-34	2
17	Worm Gear	X3415	X3415	1
18	Worm Gear Spacer	X3418	X3418	1
19	Pinion Bearing	X3453	X3453	1
20	Pinion Cover Gasket	X3419	X3419	1
21	Pinion Cover	X3417	X3417	1
22	Lockwasher	H4085	H4085	5
23	Pinion Cover Cap Screw	S44-41	S44-41	5
*24	Standard Top Pin	S1-188	S1-188	1
*25	Standard	X4845	X4858	1
*27	Nut Assembly	X4843A	X4843A	1
*28	Dowel Pin, Nut	H5411	H5411	2
29	Lifting Screw (Includes Item 29A)	X4851A	X4853A	1
29A	Race	X4852	X4852	1
30	Lifting Screw Key	S10-53	S10-53	2
31	Bevel Gear	X3344	X3344	1
32	Ball Plate	X466	X466	2
33	Ball	X479	X479	9

34	Lifting Screw Pin	S50-42	S50-42	1
35	Ball Cage	X2589	X2589	1
36	Ball Plate Bushing	X3747	X3747	1
37	Base	X3334	X3772	1
38	Cotter Pin, Wheel	S2-42	S2-42	2
39	Washer, Wheel	S3-68	S3-68	4
40	Washer, Filler (Incl. with Item 41)	X4455	X4455	4
41	Bearing (Incl. Item 40)	X4454	X4454	2
42	Wheel (Incl. Items 40 and 41)	X3776	X3776	2
*43	Axle, Wheel	X3777	X3777	2
*44	Wheel Support	X3934	X3934	1
45	Socket Head Cap Screw	S49-38	S49-38	3
46	Lockwasher	S42-36	S42-36	3
*47	Rivet	S5-45	S5-45	2
48	Air Motor (See Figure 4-10 for details)	X4153	X4153	1
49	Air Motor Gasket	X3432	X3432	1
50	Motor Gear Shaft Pin	X3725	X3725	1
51	Motor Spur Gear	X3461	X3461	1
52	Air Motor Cover Bearing	X3454	X3454	1
53	Grease Level Plug	S25-2	S25-2	1
54	Hex Head Cap Screw	S44-41	S44-41	6
55	Lockwasher	H4085	H4085	6
56	Air Motor Cover	X3348	X3348	1
57	Lockwasher	H4066	H4066	8
58	Hex Head Cap Screw	S44-23	S44-23	8
59	Motor Cover Gasket	X3428	X3428	1
60	Worm Cotter Pin	S2-25	S2-25	1
61	Worm Spur Gear	X4159	X4159	1
62	Worm Key	S23-26	S23-26	1
63	Flat Head Screw	S9-22	S9-22	4
64	Worm Front Cover	X3479	X3479	1
65	Worm Bearing	N581	N581	1
66	Worm	X3340	X3340	1
67	Motor Cover Dowel Pin	N522	N522	2
68	Shell	X4838	X4839	1
69	Gear Sleeve Bushing	X3367	X3367	2
70	Motor Gear Sleeve	X3370	X3370	1
71	Key	S10-47	S10-47	1
72	Worm Spur Pinion	X4158	X4158	1
73	Motor Gear Shaft	X3734	X3734	1

74	Base Locking Screw	X3200	X3200	1
75	Lockwasher	H4083	H4083	1
76	Nameplate	X4680	X4680	1
77	Drive Screw	S40-28	S40-28	12
78	Check Nut	S12-15	S12-15	1
79	Control Lever Set Screw	S7-23	S7-23	1
80	Control Lever	X3542	X3542	1
81	Plunger Spring	S37-74	S37-74	1
82	Plunger	X2482	X2482	1
*83	Handle Bracket	X3505	X3505	1
84	Handle Pin	X4229	X4229	1
*85	Latch Plunger Knob	X2853	X2853	1
*86	Latch Plunger Sleeve	X2854	X2854	1
*87	Latch Plunger Spring	S37-26	S37-26	1
*88	Latch Plunger	X4141	X4141	1
89	Handle Bracket Cap Screw	S44-35	S44-35	4
90	Lockwasher	H4085	H4085	4
91	Handle Assembly	P586-2	P587-2	1
92	Throttle Lever Guard Screw	S36-26	S36-26	2
93	Lockwasher	H4084	H4084	2
94	Throttle Lever Guard	X3406	X3406	1
95	Throttle Lever Check Nut	S12-15	S12-15	1
96	Throttle Lever Set Screw	S7-23	S7-23	1
97	Throttle Lever	X3407	X3407	1
98	Control Rod Pin	X3409	X3409	1
99	Control Rod End	X3420	X3420	1
100	Control Rod Check Nut	S12-22	S12-22	1
101	Control Rod	X3410	X3411	1
*102	Valve Body Cap	X3384	X3384	1
*103	Body Cap Bushing	X3385	X3385	1
*104	Throttle Valve	X3396	X3396	1
*105	Valve Spring Cap	X3408	X3408	1
*106	Poppet Valve Spring	X3499	X3499	1
*107	Poppet Valve	X3395	X3395	1
*108	Poppet Valve Bushing	X3388	X3388	1
109	Body Stud Nut	S12-27	S12-27	2
110	Valve Body Stud	S33-46	S33-46	1
*111	Valve Body	X4793	X4793	1
*112	Valve Bushing	X3387	X3387	1
*113	Stop Pin Plug	H6267	H6267	1
*114	Stop Pin Spring	X3500	X3500	1

*115	Stop Pin	X3386	X3386	1
116	Valve Connection Gasket	X3727	X3727	1
117	Valve Connection	X3726	X3726	1
118	Lockwasher	H4066	H4066	4
119	Hex Head Cap Screw	S44-23	S44-23	4
120	Valve Body Nut	X3392	X3392	1
121	Connection Nut	X3391	X3391	1
122	Connection Pin	S1-198	S1-198	1
123	Valve Body Gasket	X3390	X3390	1
124	Tapered Closure	X6681	X6681	1
*125	Screen Clip	X3533	X3533	1
*126	Screen	X3514	X3514	1
*127	Hose Connection	X3513	X3513	1
128	Warning Plate	X4822	X4822	1
129	Elbow	X4781	X4781	1
130	Muffler	X4779	X4779	2
131	Lock Nut	H7597	H7597	1
132	Muffler Adapter	X4778	X4778	1
139	O-Ring	X6477-113	X6477-113	1
140	Half Bushing	X4861		2
140	Bushing		X4862	1
141	Felt Seal	X4863	X4863	1
142	Seal Cap	X4864	X4864	1
143	Screw	S9-12	S9-12	4
146	Lifting Eye	X4856	X4856	1
147	Gage	X4840	X4840	1
148	Gage Screws	H2999-16	H2999-16	2
149	Gage Instructions	X4819	X4819	1

133	Standard, Top, Nut Assembly (Consisting of Items 1, 24, 25, 27, and 28)	X4845A	X4858A	1
134	Handle Bracket (Consisting of Items 83, 85, 86, 87, and 88)	P584	P584	1
135	Control Valve (Consisting of Items 102-108 and 111-115)	P588	P588	1
136	Hose Connection (Consisting of Items 125, 126, and 127)	P595	P595	1
137	Wheel Support Assembly (Consisting of Items 43, 44, and 47)	P618	P618	1
138	Valve Body and Bushings Assembly (Consisting of Items 108, 111, and 112)	P657	P657	1

FIGURE 4-5. EXPLODED ILLUSTRATION OF 126AMJ, 132AMJ, AND 144AMJ JACKS

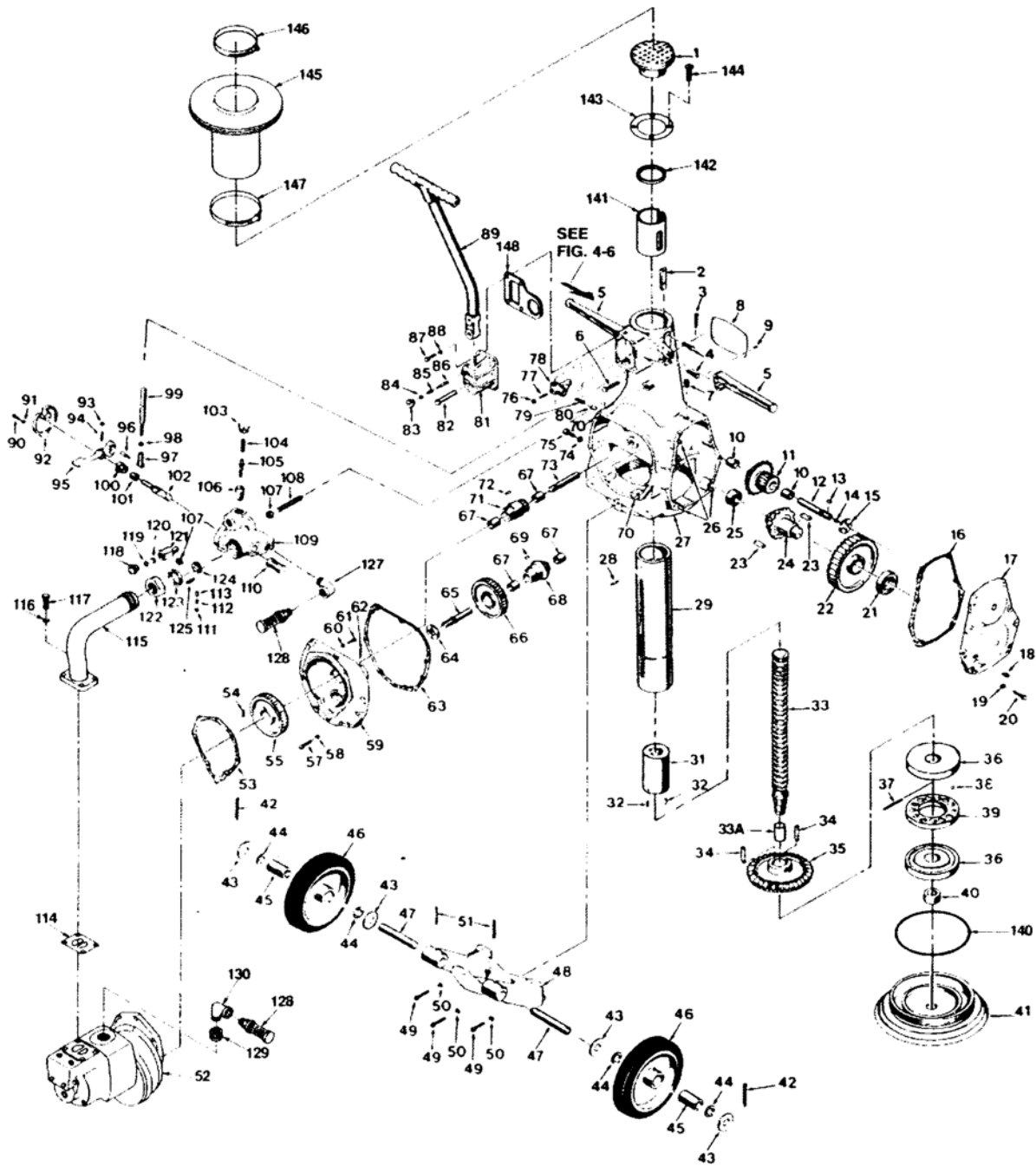
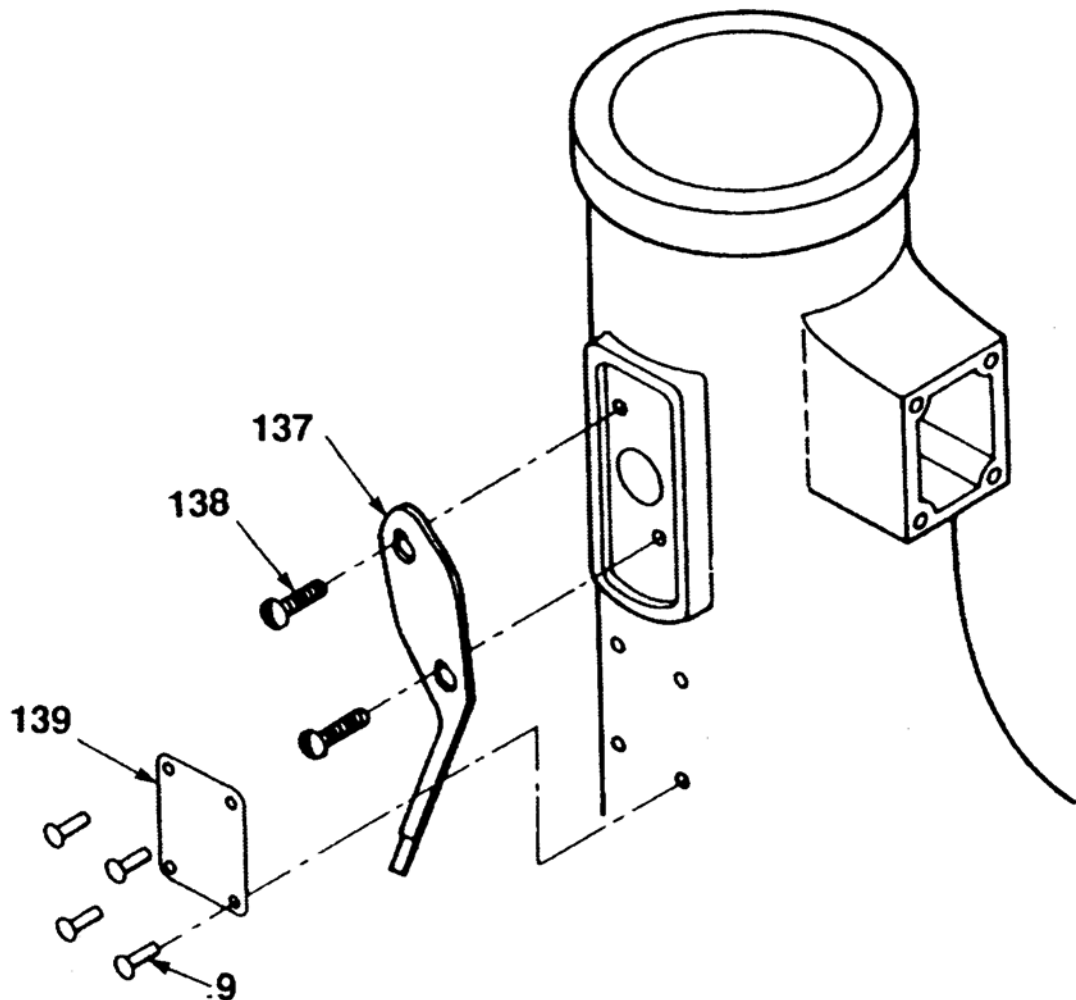


FIGURE 4-6. EXPLODED ILLUSTRATION OF GAGE AREA FOR 126AMJ, 132AMJ, AND 144AMJ JACKS



FIGURES 4-5 AND 4-6 INDEX NO.	PART NAME				QUANTITY REQUIRED
		126AMJ	132AMJ	144AMJ	
*1	Standard Top	X2338	X2338	X2338	1
2	Shell Key	X4876	X4876	X4876	1
3	Cotter Key	S2-19	S2-19	S2-19	2
4	Shell Key Cap Screw	H2314	H2314	H2314	2
5	Carrying Handle	X2579	X2579	X2579	2
6	Carrying Handle Pin	X3038	X3038	X3038	2

7	Shell Filler Plug	H6253	H6253	H6253	1
8	Nameplate	X4681	X4681	X4681	1
9	Drive Screw	S40-28	S40-28	S40-28	12
10	Combination Gear Bushing	X3446	X3446	X3446	2
11	Combination Gear	X4156	X4156	X4156	1
12	Combination Gear Shaft	X3447	X3447	X3447	1
13	Combination Gear Shaft Key	S23-26	S23-26	S23-26	1
14	Oiler	X2609	X2609	X2609	1
15	Thrust Washer	X3497	X3497	X3497	1
16	Pinion Cover Gasket	X3471	X3471	X3471	1
17	Pinion Cover	X3426	X3426	X3426	1
18	Grease Level Plug	S25-2	S25-2	S25-2	1
19	Lockwasher	H4085	H4085	H4085	8
20	Pinion Cover Cap Screw	S44-41	S44-41	S44-41	8
21	Bevel Pinion Bearing (Pinion Cover)	X3453	X3453	X3453	1
22	Spur Gear #1	X3440	X3440	X3440	1
23	Key, Spur Gear #1	S29-38	S29-38	S29-38	2
24	Bevel Pinion #1	X3433	X3433	X3433	1
25	Bevel Pinion Bearing (Shell)	X3456	X3456	X3456	1
26	Pinion Cover Dowel Pin	N522	N522	N522	3
27	Shell	X4836	X4875	X4837	1
*28	Standard Top Pin	S1-65	S1-65	S1-65	1
*29	Standard	X4872	X4873	X4874	1
*31	Lifting Nut	X4870	X4870	X4870	1
*32	Dowel Pin, Nut	S51-9	S51-9	S51-9	2
33	Lifting Screw (Includes Item 33A)	X4867A	X4868A	X4869A	1
33A	Race	X4855	X4855	X4855	1
34	Lifting Screw Key	S29-59	S29-59	S29-59	2
35	Bevel Gear	X3431	X3431	X3431	1
36	Ball Plate	X2070	X2070	X2070	2
37	Lifting Screw Pin	S50-46	S50-46	S50-46	1
38	Ball	X479	X479	X479	13
39	Ball Cage	X2012	X2012	X2012	1
40	Ball Plate Bushing	X2358	X2358	X2358	1
41	Base	X3427	X3427	X3773	1
42	Wheel Cotter Pin	S2-42	S2-42	S2-42	2
43	Washer, Wheel	S3-68	S3-68	S3-68	4
44	Washer, Filler (Included with Item 45)	X4455	X4455	X4455	4
45	Bearing (Included with Item 44)	X4454	X4454	X4454	2
46	Wheel (Includes Items 44 and 45)	X3776	X3776	X3776	2

*47	Axle, Wheel	X3777	X3777	X3777	2
*48	Wheel Support	X3934	X3934	X3934	1
49	Socket Head Cap Screw	S49-38	S49-38	S49-38	3
50	Lockwasher	S42-36	S42-36	S42-36	3
*51	Rivet	S5-45	S5-45	S5-45	2
52	Air Motor (See Figure 4-9 for Details)	X6000	X6000	X6000	1
53	Motor Gasket	X3432	X3432	X3432	1
54	Motor Gear Shaft Pin	X3725	X3725	X3725	1
55	Motor Spur Gear	X3461	X3461	X3461	1
57	Hex Head Cap Screw	S44-41	S44-41	S44-41	7
58	Lockwasher	H4085	H4085	H4085	7
59	Air Motor Cover	X3422	X3422	X3422	1
60	Lockwasher	H4066	H4066	H4066	8
61	Hex Head Cap Screw	S44-23	S44-23	S44-23	8
62	Pinion Shaft Pin	S1-29	S1-29	S1-29	1
63	Motor Cover Gasket	X3472	X3472	X3472	1
64	Thrust Washer	X3497	X3497	X3497	1
65	Bevel Pinion Shaft	X3448	X3448	X3448	1
66	Spur Gear #2	X4155	X4155	X4155	1
67	Motor Pinion Bushing	X3367	X3367	X3367	4
68	Bevel Pinion #2	X4157	X4157	X4157	1
69	Key, Spur Gear #2	S23-26	S23-26	S23-26	1
70	Motor Cover Dowel Pin	N522	N522	N522	2
71	Motor Pinion	X4154	X4154	X4154	1
72	Key, Motor Spur Gear	S10-25	S10-25	S10-25	1
73	Motor Gear Shaft	X3724	X3724	X3724	1
74	Lockwasher	H4083	H4083	H4083	1
75	Base Locking Screw	X3922	X3922	X3922	1
76	Check Nut	S12-15	S12-15	S12-15	1
77	Control Lever Set Screw	S7-23	S7-23	S7-23	1
78	Control Lever	X3542	X3542	X3542	1
79	Plunger Spring	S37-74	S37-74	S37-74	1
80	Plunger	X2482	X2482	X2482	1
*81	Handle Bracket	X3505	X3505	X3505	1
82	Handle Pin	X4229	X4229	X4229	1
*83	Latch Plunger Knob	X2853	X2853	X2853	1
*84	Latch Plunger Sleeve	X2854	X2854	X2854	1
*85	Latch Plunger Spring	S37-26	S37-26	S37-26	1
*86	Latch Plunger	X4141	X4141	X4141	1
87	Handle Bracket Cap Screw	S44-35	S44-35	S44-35	4

88	Lockwasher	H4085	H4085	H4085	4
89	Handle Assembly	P586-2	P586-2	P587-2	1
90	Throttle Lever Guard Screw	S36-26	S36-26	S36-26	2
91	Lockwasher	H4084	H4084	H4084	2
92	Throttle Lever Guard	X3406	X3406	X3406	1
93	Throttle Lever Check Nut	S12-15	S12-15	S12-15	1
94	Throttle Lever Set Screw	S7-23	S7-23	S7-23	1
95	Throttle Lever	X3407	X3407	X3407	1
96	Control Rod Pin	X3409	X3409	X3409	1
97	Control Rod End	X3420	X3420	X3420	1
98	Control Rod Check Nut	S12-22	S12-22	S12-22	1
99	Control Rod	X3473	X4817	X3698	1
*100	Valve Body Cap	X3384	X3384	X3384	1
*101	Body Cap Bushing	X3385	X3385	X3385	1
*102	Throttle Valve	X3396	X3396	X3396	1
*103	Valve Spring Cap	X3408	X3408	X3408	1
*104	Poppet Valve Spring	X3499	X3499	X3499	1
*105	Poppet Valve	X3395	X3395	X3395	1
*106	Poppet Valve Bushing	X3388	X3388	X3388	1
107	Body Stud Nut	S12-27	S12-27	S12-27	2
108	Valve Body Stud	S33-46	S33-46	S33-46	1
*109	Valve Body	X4793	X4793	X4793	1
*110	Valve Bushing	X3387	X3387	X3387	1
*111	Stop Pin Plug	H6267	H6267	H6267	1
*112	Stop Pin Spring	X3500	X3500	X3500	1
*113	Stop Pin	X3386	X3386	X3386	1
114	Valve Connection Gasket	X3727	X3727	X3727	1
115	Valve Connection	X4833	X4833	X4833	1
116	Lockwasher	H4066	H4066	H4066	4
117	Hex Head Cap Screw	S44-23	S44-23	S44-23	4
118	Tapered Closure	X6681	X6681	X6681	1
*119	Screen Clip	X3533	X3533	X3533	1
*120	Screen	X3514	X3514	X3514	1
*121	Hose Connection	X3513	X3513	X3513	1
122	Valve Body Nut	X3392	X3392	X3392	1
123	Connection Nut	X3391	X3391	X3391	1
124	Valve Body Gasket	X3390	X3390	X3390	1
125	Connection Pin	S1-198	S1-198	S1-198	1
126	Warning Plate	X4822	X4822	X4822	1
127	Elbow	X4781	X4781	X4781	1
128	Muffler	X4779	X4779	X4779	2

129	Bushing	X4866	X4866	X4866	1
130	Elbow	X4778	X4778	X4778	1
137	Gage	X4818	X4818	X4818	1
138	Gage Screws	H2999-16	H2999-16	H2999-16	2
139	Gage Instructions	X4819	X4819	X4819	1
140	O-Ring	X6477-114	X6477-114	X6477-114	1
141	Bushing	X4877	X4878	X4878	1
142	Felt Seal	X4879	X4879	X4879	1
143	Seal Cap	X4880	X4880	X4880	1
144	Screw	S9-12	S9-12	S9-12	4
148	Lifting Eye	X4856	X4856	X4856	1

*Indicates part may be purchased in sub-assembly. See listing of sub-assemblies as follows:

131	Standard, Top, Nut Assembly (Consisting of Items 1, 28, 29, 31, and 32)	X4872A	X4873A	X4874A	1
132	Handle Bracket (Consisting of Items 81, 83, 84, 85, and 86)	P584	P584	P584	1
133	Control Valve (Consisting of Items 100-106 and 109-113_	P588	P588	P588	1
134	Hose Connection (Consisting of Items 119, 120, and 121)	P595	P595	P595	1
135	Wheel Support Assembly (Consisting of Items 47, 48, and 51)	P618	P618	P618	1
136	Valve Body and Bushings Assembly (Consisting of Items 106, 109, and 110)	P657	P657	P657	1

FIGURE 4-7. EXPLODED ILLUSTRATION OF 126CMJ, 132CMJ, AND 144CMJ JACKS

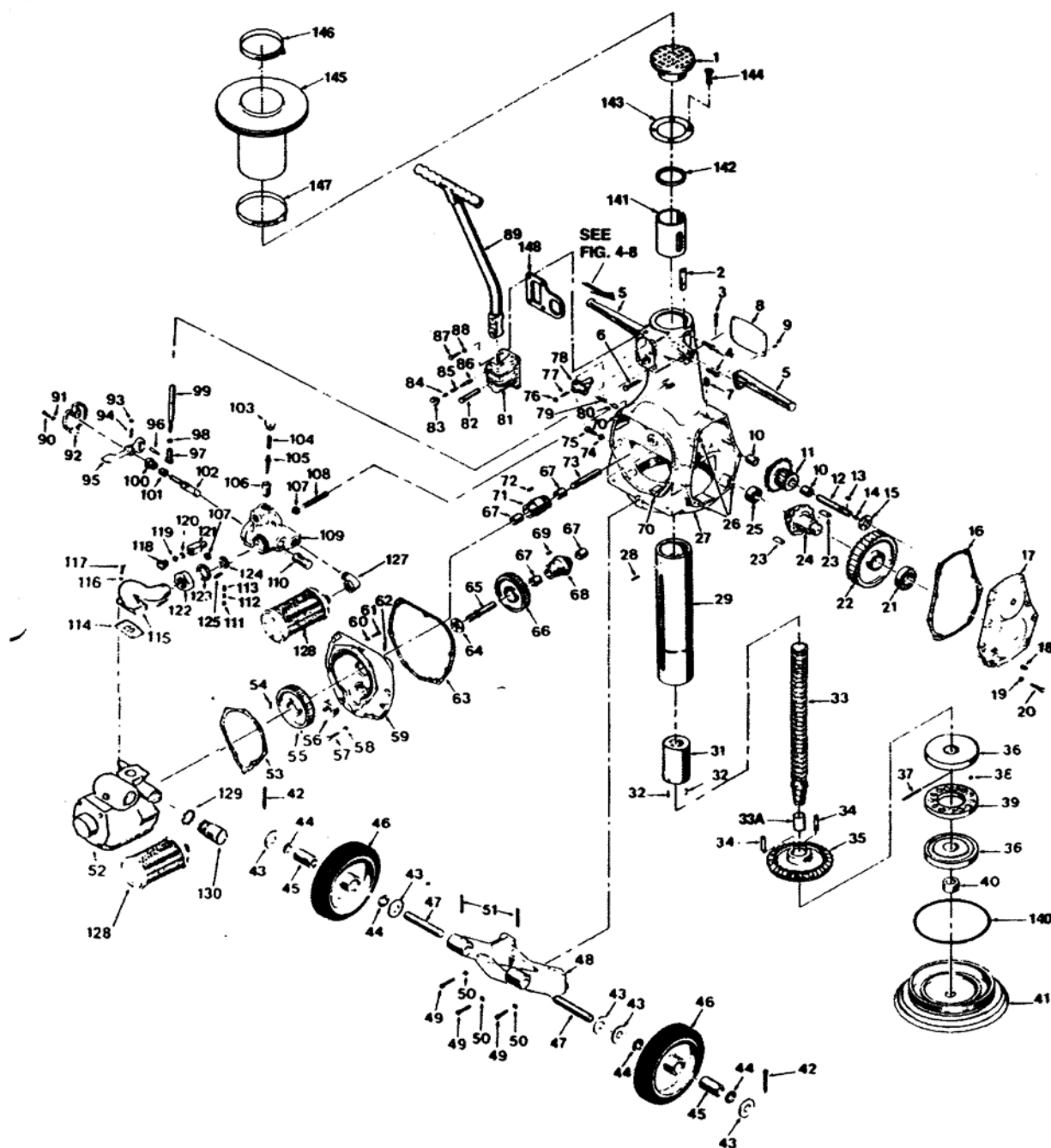
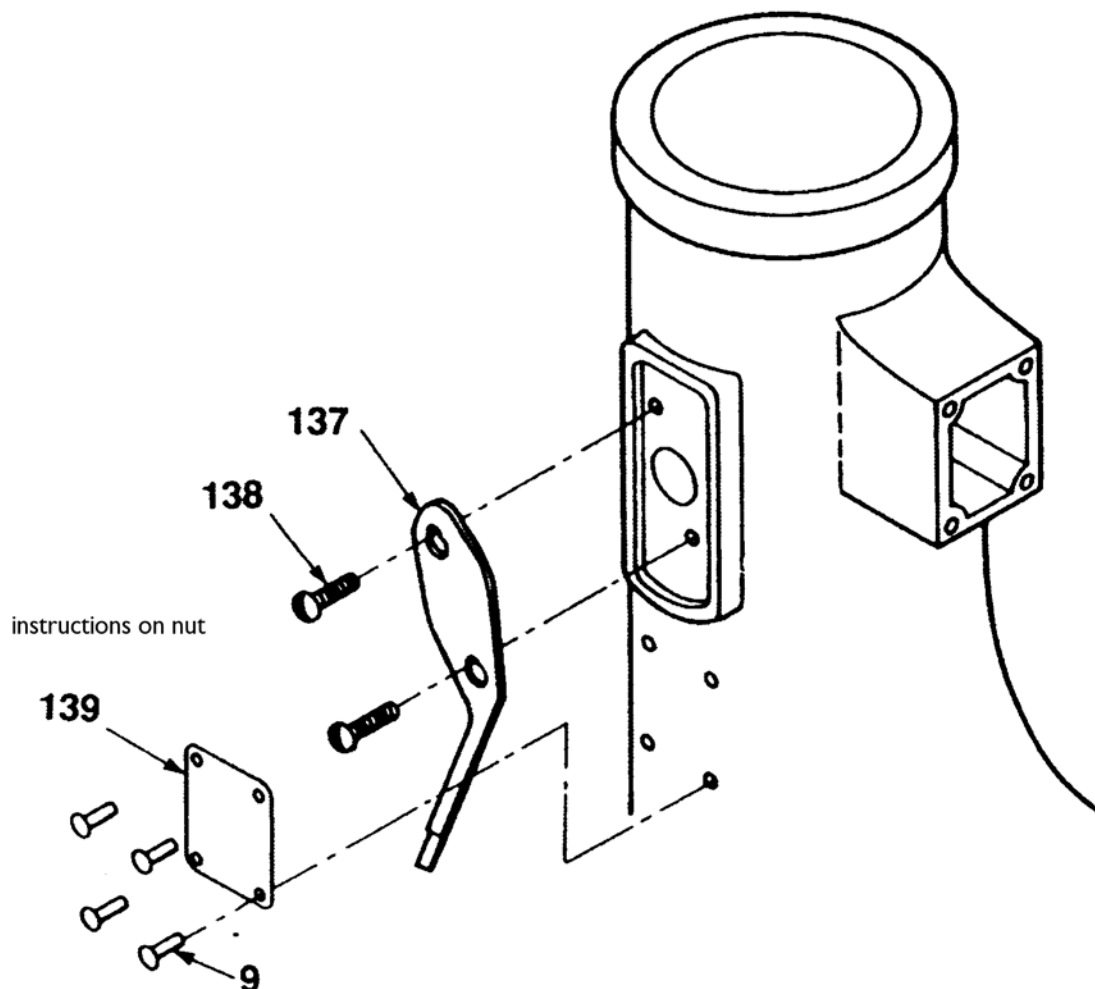


FIGURE 4-8. EXPLODED ILLUSTRATION OF GAGE AREA FOR 126CMJ, 132CMJ, AND 144CMJ JACKS



FIGURES 4-7 AND 4-8 INDEX NO.	PART NAME				QUANTITY REQUIRED
		126CMJ	132CMJ	144CMJ	
*1	Standard Top	X2338	X2338	X2338	1
2	Shell Key	X4876	X4876	X4876	1
3	Cotter Key	S2-19	S2-19	S2-19	2

4	Shell Key Cap Screw	H2314	H2314	H2314	2
5	Carrying Handle	X2579	X2579	X2579	2
6	Carrying Handle Pin	X3038	X3038	X3038	2
7	Shell Filler Plug	H6253	H6253	H6253	1
8	Nameplate	X4681	X4681	X4681	1
9	Drive Screw	S40-28	S40-28	S40-28	12
10	Combination Gear Bushing	X3446	X3446	X3446	2
11	Combination Gear	X4156	X4156	X4156	1
12	Combination Gear Shaft	X3447	X3447	X3447	1
13	Combination Gear Shaft Key	S23-26	S23-26	S23-26	1
14	Oiler	X2609	X2609	X2609	1
15	Thrust Washer	X3497	X3497	X3497	1
16	Pinion Cover Gasket	X3471	X3471	X3471	1
17	Pinion Cover	X3426	X3426	X3426	1
18	Grease Level Plug	S25-2	S25-2	S25-2	1
19	Lockwasher	H4085	H4085	H4085	8
20	Pinion Cover Cap Screw	S44-41	S44-41	S44-41	8
21	Bevel Pinion Bearing (Pinion Cover)	X3453	X3453	X3453	1
22	Spur Gear #1	X3440	X3440	X3440	1
23	Key, Spur Gear #1	S29-38	S29-38	S29-38	2
24	Bevel Pinion #1	X3433	X3433	X3433	1
25	Bevel Pinion Bearing (Shell)	X3456	X3456	X3456	1
26	Bevel Cover Dowel Pin	N522	N522	N522	3
27	Shell	X4836	X4875	X4837	1
*28	Standard Top Pin	S1-65	S1-65	S1-65	1
*29	Standard	X4872	X4873	X4874	1
*31	Lifting Nut	X4870	X4870	X4870	1
*32	Dowel Pin, Nut	S51-9	S51-9	S51-9	2
33	Lifting Screw (Includes Item 33A	X4867A	X4868A	X4869A	1
33A	Race	X4855	X4855	X4855	1
34	Lifting Screw Key	S29-59	S29-59	S29-59	2
35	Bevel Gear	X3431	X3431	X3431	1
36	Ball Plate	X2070	X2070	X2070	2
37	Lifting Screw Pin	S50-46	S50-46	S50-46	1
38	Ball	X479	X479	X479	13
39	Ball Cage	X2012	X2012	X2012	1
40	Ball Plate Bushing	X2358	X2358	X2358	1
41	Base	X3427	X3427	X3773	1
42	Wheel Cotter Pin	S2-42	S2-42	S2-42	4
43	Washer, Wheel	S3-68	S3-68	S3-68	4
44	Washer, Filler (Included with Item	X4455	X4455	X4455	4

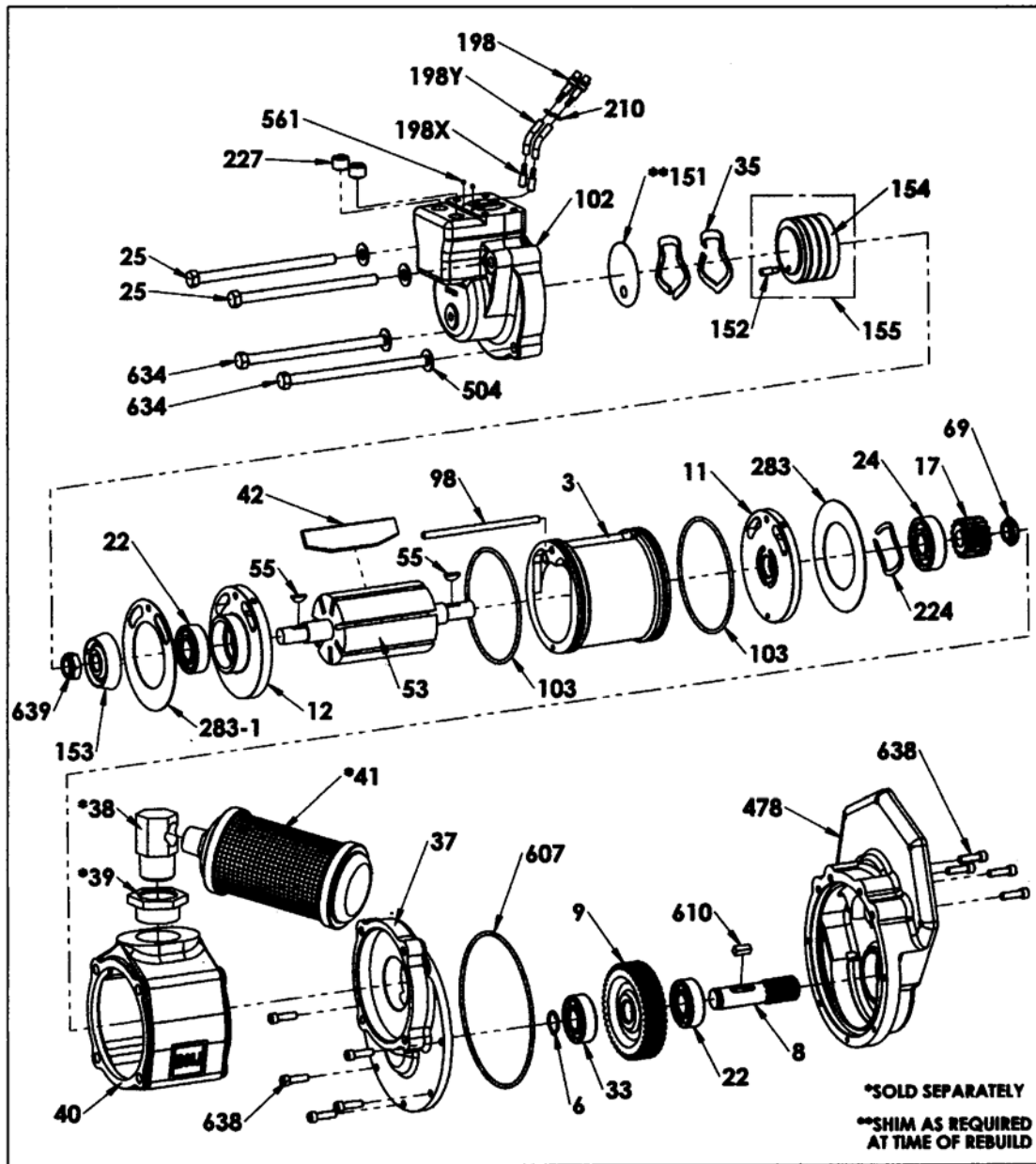
	45)				
45	Bearing (Included with Item 44)	X4454	X4454	X4454	2
46	Wheel (Includes Items 44 and 45)	X3776	X3776	X3776	2
*47	Wheel Axle	X3777	X3777	X3777	2
*48	Wheel Support	X3934	X3934	X3934	1
49	Socket Head Cap Screw	S49-38	S49-38	S49-38	3
50	Lockwasher	S42-36	S42-36	S42-36	3
*51	Rivet	S5-45	S5-45	S5-45	2
52	Air Motor (See Figure 4-9 for details)	X4153	X4153	X4153	1
53	Motor Gasket	X3432	X3432	X3432	1
54	Motor Gear Shaft Pin	X3725	X3725	X3725	1
55	Motor Spur Gear	X3461	X3461	X3461	1
56	Air Motor Cover Bearing	X3454	X3454	X3454	1
57	Hex Head Cap Screw	S44-41	S44-41	S44-41	7
58	Lockwasher	H4085	H4085	H4085	7
59	Air Motor Cover	X3422	X3422	X3422	1
60	Lockwasher	H4066	H4066	H4066	8
61	Hex Head Cap Screw	S44-23	S44-23	S44-23	8
62	Pinion Shaft Pin	S1-29	S1-29	S1-29	1
63	Motor Cover Gasket	X3472	X3472	X3472	1
64	Thrust Washer	X3497	X3497	X3497	1
65	Bevel Pinion Shaft	X3448	X3448	X3448	1
66	Spur Gear #2	X4155	X4155	X4155	1
67	Motor Pinion Bushing	X3367	X3367	X3367	4
68	Bevel Pinion #2	X4157	X4157	X4157	1
69	Key, Spur Gear #2	S23-26	S23-26	S23-26	1
70	Motor Cover Dowel Pin	N522	N522	N522	2
71	Motor Pinion	X4154	X4154	X4154	1
72	Key, Motor Spur Gear	S10-25	S10-25	S10-25	1
73	Motor Gear Shaft	X3724	X3724	X3724	1
74	Lockwasher	H4083	H4083	H4083	1
75	Base Locking Screw	X3922	X3922	X3922	1
76	Check Nut	S12-15	S12-15	S12-15	1
77	Control Lever Set Screw	S7-23	S7-23	S7-23	1
78	Control Lever	X3542	X3542	X3542	1
79	Plunger Spring	S37-74	S37-74	S37-74	1
80	Plunger	X2482	X2482	X2482	1
*81	Handle Bracket	X3505	X3505	X3505	1
82	Handle Pin	X4229	X4229	X4229	1
*83	Latch Plunger Knob	X2853	X2853	X2853	1
*84	Latch Plunger Sleeve	X2854	X2854	X2854	1

*85	Latch Plunger Spring	S37-26	S37-26	S37-26	1
*86	Latch Plunger	X4141	X4141	X4141	1
87	Handle Bracket Cap Screw	S44-35	S44-35	S44-35	4
88	Lockwasher	H4085	H4085	H4085	4
89	Handle Assembly	P586-2	P586-2	P587-2	1
90	Throttle Lever Guard Screw	S36-26	S36-26	S36-26	2
91	Lockwasher	H4084	H4084	H4084	2
92	Throttle Lever Guard	X3406	X3406	X3406	1
93	Throttle Lever Check Nut	S12-15	S12-15	S12-15	1
94	Throttle Lever Set Screw	S7-23	S7-23	S7-23	1
95	Throttle Lever	X3407	X3407	X3407	1
96	Control Rod Pin	X3409	X3409	X4625	1
97	Control Rod End	X3420	X3420	X3420	1
98	Control Rod Check Nut	S12-22	S12-22	S12-22	1
99	Control Rod	X3473	X4817	X3698	1
*100	Valve Body Cap	X3384	X3384	X3384	1
*101	Body Cap Bushing	X3385	X3385	X3385	1
*102	Throttle Valve	X3396	X3396	X3396	1
*103	Valve Spring Cap	X3408	X3408	X3408	1
*104	Poppet Spring Valve	X3499	X3499	X3499	1
*105	Poppet Valve	X3395	X3395	X3395	1
*106	Poppet Valve Bushing	X3388	X3388	X3388	1
107	Body Stud Nut	S12-27	S12-27	S12-27	1
108	Valve Body Stud	S33-46	S33-46	S33-46	1
*109	Valve Body	X4793	X4793	X4793	1
*110	Valve Bushing	X3387	X3387	X3387	1
*111	Stop Pin Plug	H6267	H6267	H6267	1
*112	Stop Pin Spring	X3500	X3500	X3500	1
*113	Stop Pin	X3386	X3386	X3386	1
114	Valve Connection Gasket	X3727	X3727	X3727	1
115	Valve Connection	X3735	X3735	X3735	1
116	Lockwasher	H4066	H4066	H4066	4
117	Hex Head Cap Screw	S44-23	S44-23	S44-23	4
118	Tapered Closure	X6681	X6681	X6681	1
*119	Screen Clip	X3533	X3533	X3533	1
*120	Screen	X3514	X3514	X3514	1
*121	Hose Connection	X3513	X3513	X3513	1
122	Valve Body Nut	X3392	X3392	X3392	1
123	Connection Nut	X3391	X3391	X3391	1
124	Valve Body Gasket	X3390	X3390	X3390	1
125	Connection Pin	S1-198	S1-198	S1-198	1

126	Warning Plate	X4822	X4822	X4822	1
127	Elbow	X4781	X4781	X4781	1
128	Muffler	X4779	X4779	X4779	2
129	Lock Nut	H7597	H7597	H7597	1
130	Muffler Adapter	X4778	X4778	X4778	1
137	Gage	X4818	X4818	X4818	1
138	Gage Screws	H2999-16	H2999-16	H2999-16	1
139	Gage Instructions	X4819	X4819	X4819	1
140	O-ring	X6477-114	X6477-114	X6477-114	1
141	Bushing	X4877	X4878	X4878	1
142	Felt Seal	X4879	X4879	X4879	1
143	Seal Cap	X4880	X4880	X4880	1
144	Screw	S9-12	S9-12	S9-12	4
148	Lifting Eye	X4856	X4856	X4856	1

131	Standard, Top, Nut Assembly (Consisting of Items 1, 28, 29, 31, and 32)	X4872A	X4873A	X4874A	1
132	Handle Bracket (Consisting of Items 81, 83, 84, 85, and 86)	P584	P584	P584	1
133	Control Valve (Consisting of Items 100-106 and 109-113)	P588	P588	P588	1
134	Hose Connection (Consisting of Items 119, 120, and 121)	P595	P595	P595	1
135	Wheel Support Assembly (Consisting of Items 47, 48, and 51)	P618	P618	P618	1
136	Valve Body and Bushings (Consisting of Items 106, 109, and 110)	P657	P657	P657	1

**FIGURE 4-9. EXPLODED ILLUSTRATION OF X6000 AIR MOTOR
USED ON 528AMJ, 536AMJ, 126AMJ, 132AMJ, AND 144AMJ JACKS**



**FIGURE 4-11. EXPLODED ILLUSTRATION OF X-6000 AIR MOTOR
USED ON 528-AMJ, 536-AMJ, 126-AMJ, 132-AMJ AND 144-AMJ JACKS**

NOTE: IF REPLACING X-4153 WITH X-6000 AIR MOTOR ON 528-CMJ AND 536-CMJ, X-4835 VALVE CONNECTION IS REQUIRED
IE REPLACING X-4153 WITH X-6000 AIR MOTOR ON 126-CMJ, 132-CMJ, 144-CMJ, X-4833 VALVE CONNECTION IS REQUIRED

FIGURE 4-9. INDEX NO.	PART NAME	PART NUMBER	QUANTITY REQUIRED
3	Cylinder	DNJ-3	1
6	Retainer Clip	DNJ-6	1
8	Output Gear	DNJ-8	1
9	Gear	DNJ-9	1
11	End Plate	DNJ-11	1
12	End Plate	DNJ-12	1
17	Pinion	DNJ-17	1
22	Bearing	DNJ-22	2
24	Bearing	DNJ-24	1
25	Upper Bolt	DNJ-25	2
33	Bearing	DNJ-33	1
35	Spring	DNJ-35	2
37	Gear Case	DNJ-37	1
*38	Muffler Adaptor	X4778	1
*39	Reducer	X4866	1
40	Housing	DNJ-40	1
*41	Muffler	X4779	1
42	Vane	DNJ-42	7
53	Rotor	DNJ-53	1
55	Key	DNJ-55	2
69	Stepped Lock Nut	DNJ-69	1
98	Cylinder Dowel	DNJ-98	1
102	Brake Housing	DNJ-102	1
103	Seal	DNJ-103	2
151-1	Shim 0.030"	DNJ-151-1	A/R
151	Shim 0.010"	DNJ-151	A/R
152	Pin	DNJ-152	1
153	Brake Cone	DNJ-153	1
154	Brake Piston	DNJ-154	1
155	Brake Piston w/ Pin (Includes Items 152 and 154)	DNJ-155	1
198	Lubricator Body	DNJ-198	2
198X	Lubricator Clunk	DNJ-198X	2
198Y	Lubricator Tube	DNJ-198Y	2
210	O-ring Seal	DNJ-210	2
224	Spring	DNJ-224	1
227	Oil Filler Plug	DNJ-227	2
283	Gasket	DNJ-283	1
283-1	Gasket	DNJ-283-1	1
478	Cover	DNJ-478	1
504	Washer	DNJ-504	4
561	Set Screw	DNJ-561	2
607	Seal	DNJ-607	1
610	Key	DNJ-610	1
634	Lower Bolt	DNJ-634	2
638	Socket Head Bolt	DNJ-638	9
639	Lock Nut	DNJ-639	1

**FIGURE 4-10. EXPLODED ILLUSTRATION OF X4153 AIR MOTOR
USED ON 528CMJ, 536CMJ, 126CMJ, 132CMJ, 144CMJ JACKS**

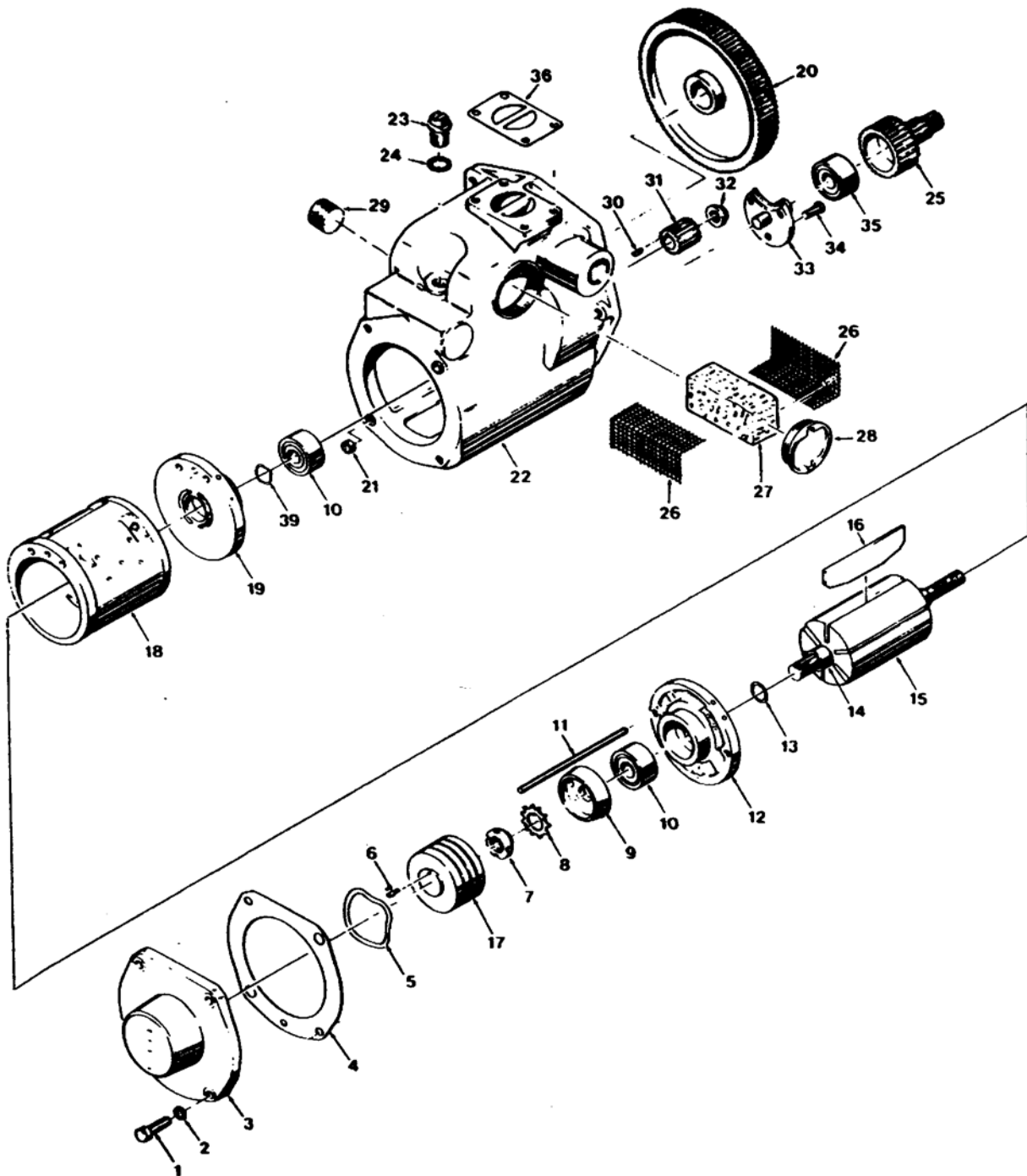


FIGURE 4-10. INDEX NO.	PART NAME	PART NUMBER	QUANTITY REQUIRED
1	Screw	S44-41	4
2	Lockwasher	H4085	4
3	Cylinder Cover	C76746	1
4	Gasket, Rotor Housing	C75584	1
5	Spring, Piston	C76574	1
*6	Pin	C76573	1
*7	Lock Nut, Bearing	C77657	1
*8	Washer	S18958	1
9	Rotor Brake Cone	C76570	1
10	Rotor Bearing (comes in set of 2 when reordering)	C66968	1 SET of 2
11	Liner and End Plate Dowel	C75585	1
12	End Plate	C76576	1
*13	Shim 0.001"	X4890	A/R
*13	Shim 0.002"	X4891	A/R
*13	Shim 0.003"	X4892	A/R
*13	Shim 0.005"	X4893	A/R
*14	Rotor Bearing Spacer	X4889	2
15	Rotor	C75587	1
**16	Rotor Blade	X4280	6
*17	Piston	C76571	1
18	Liner	C79206	1
19	End Plate	C75586	1
***20	Gear	X3461	1
21	Tube Dowel	C76575	2
22	Rotor Housing	C75579	1
23	Oil Filler Plug	C62531	1
24	Gasket	C35614	1
25	Pinion	C60033	1
26	Oiler Sponge Guard	C75580	2
27	Oiler Sponge	C75583	1
28	Cylinder Head	C11017	1
29	Plug	H6289	1
30	Rotor Key	S23-12	1
31	Rotor Pinion	C60017	1
32	Rotor Pinion Nut	H3973	1
33	Bearing Post	C75582	1
34	Bearing Post Screw	C75610	3
35	Bearing	S16025	1
***36	Gasket	X3727	1
39	Bearing Spring	C145853	1

*Indicates items may be purchased in a sub-assembly

**For motors with serial numbers prior to #424083, use X4263 rotor blades

***Items NOT sold as part of air motor assembly

37	Piston and Pin (Consisting of Items 6 and 17)	C76572	1
38	Bearing Lock Nut and Washer (Consisting of Items 7 and 8)	S15405	1
40	Bearing Spacer and Shim Set (Consisting of Items 13 and 14, 1 each)	X4889A	1