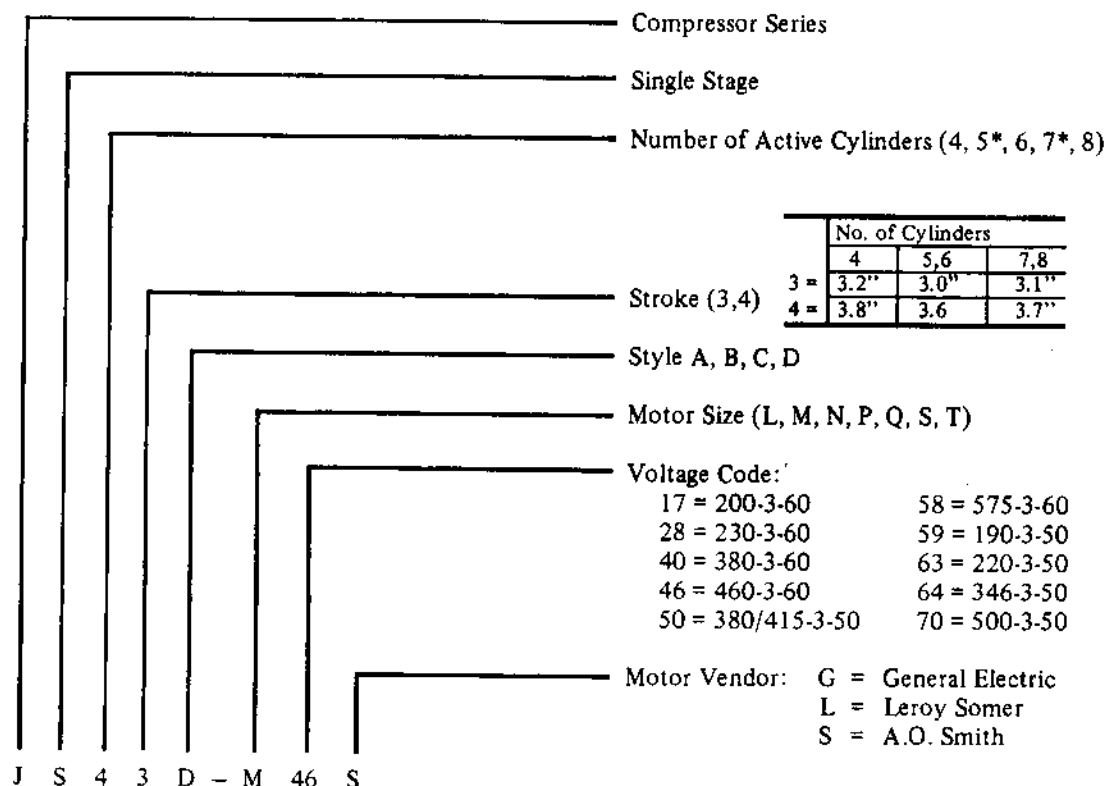


MODELS

JS43, JS53, JS63, JS73, JS83 (STYLE A, B, C, D — SHORT STROKE)**JS44, JS54, JS64, JS74, JS84 (STYLE C & D — LONG STROKE)**

NOMENCLATURE



*The 5 and 7 cylinder compressors each have one cylinder which is permanently unloaded. The unloaded cylinder does not contain suction valve, suction valve springs, unloader sleeve, unloader device or lift pins.

ORDERING INSTRUCTIONS

1. Locate compressor model number from data plate on pump end of compressor.
2. When ordering renewal parts, identify each part by part number obtained from Tables. Also include required quantity and compressor model number. Parts are common for Styles A, B, C & D except where noted. Be sure to read DESIGN HISTORY (page 9) before ordering parts.
3. Read carefully any notes accompanying tables.

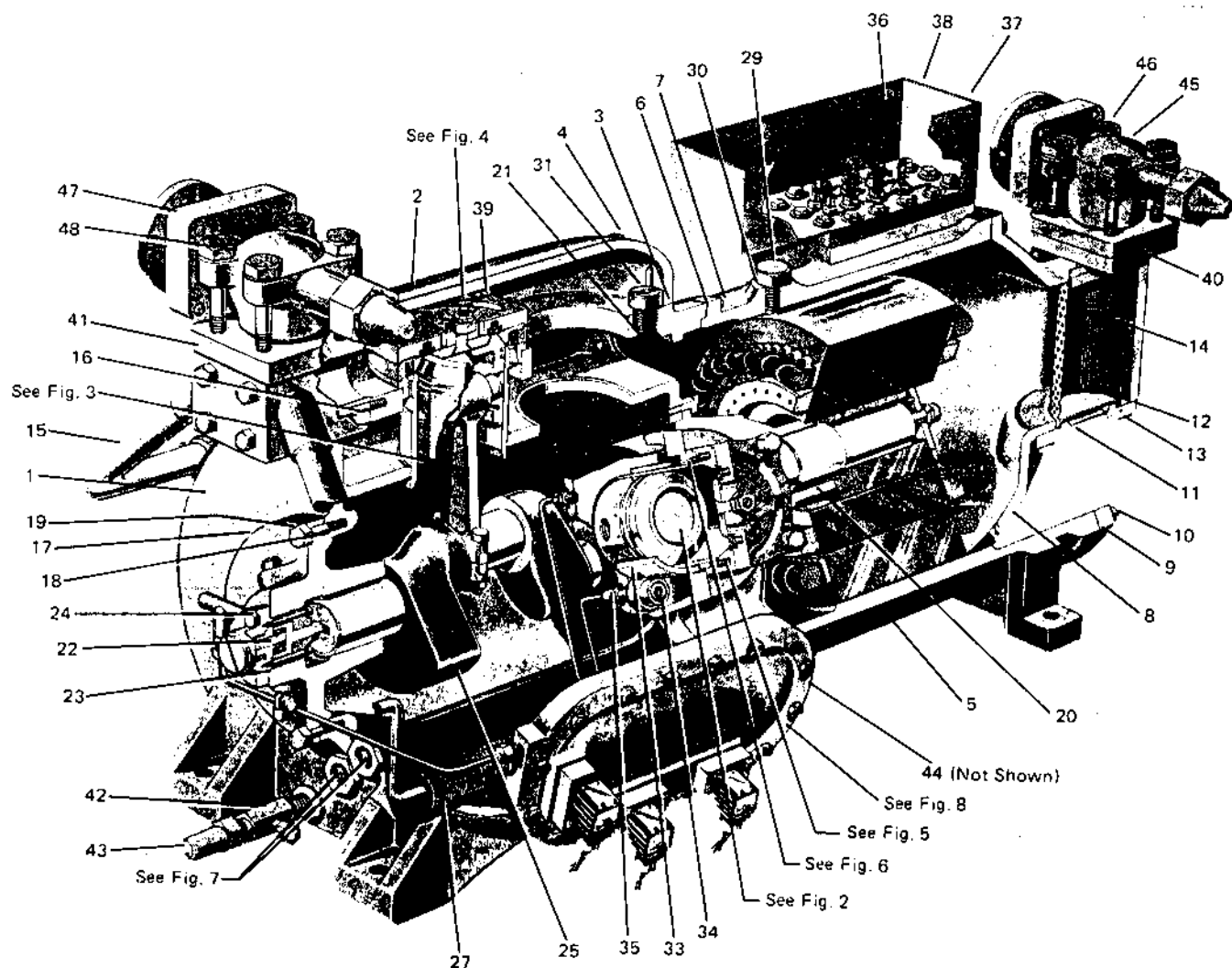


FIG. 1— COMPRESSOR CUT-A-WAY

TABLE 1

ITEM NO.	DESCRIPTION	COMPRESSOR MODEL				
		4 Cyl.	5 Cyl.	6 Cyl.	7 Cyl.	8 Cyl.
1	Housing, Compressor	064-23032	064-23029	064-23029	064-26505	064-26505
2	Head, Compressor No. Req'd.	064-21612 2	064-21612 3	064-21612 3	064-21612 4	064-21612 4
3	Gasket, Top Head No. Req'd.	064-21700 2	064-21700 3	064-21700 3	064-21700 4	064-21700 4
4	Screw, Top Head 7/16 - 14 x 3-3/4 No. Req'd.	021-12704 32	021-12704 48	021-12704 48	021-12704 64	021-12704 64
5	Housing, Motor	064-21595	}			
6	Gasket, Motor Housing to Compressor	064-21699				
7	Screw, Motor Housing 3/8-16 x 1-1/2 (32 req'd.)	021-01497				
8	Cover, Motor Housing	064-23062	064-23062	064-23062	064-21625	064-21625
9	Gasket, Motor Housing Cover to Motor Housing	064-21706				
10	Screw, Motor Housing Cover 3/8 - 16 x 1-1/2 (32 req'd.)	021-01497				

TABLE 1— (CONTINUED)

ITEM NO.	DESCRIPTION	COMPRESSOR MODEL				
		4 Cyl.	5 Cyl.	6 Cyl.	7 Cyl.	8 Cyl.
11	Cover, Suction Strainer	064-28860				
12	Gasket, Suction Strainer Cover	064-30111				
13	Screw, Suction Strainer Cover 3/8 - 16 x 1-1/8 (6 Req'd.)	021-01483				
14	Strainer, Suction	029-13435				
15	Manifold, Discharge	364-23147	364-23064	364-23064	364-21709	364-21709
16	Gasket, Discharge Manifold No. Req'd.	064-21838 2	064-21838 3	064-21838 3	064-21838 5	064-21838 5
17	Head, Bearing Assembly, Pump End (Style A, B & C) (See DESIGN HISTORY) Includes:	364-31878				
17A	Head, Bearing	064-21639				
17B	Bearing	029-11097				
17C	Pin, Roll	029-05395				
17D	Cap, Relief Valve	065-16729				
17E	Gasket, Relief Valve	065-21657				
17F	Plunger, Relief Valve	065-01331				
17G	Spring, Relief Valve	029-16893				
17H	Valve, Access (2 Req'd.)	022-04060				
17	Head, Bearing Assembly, Pump End (Style D) (See DESIGN HISTORY) Includes:	364-47219				
17A	Head, Bearing	064-47218				
17B	Bearing	029-11097				
17C	Valve, Access (2 Req'd.)	022-04060				
18	Gasket, Bearing Head, Pump End	064-21703				
19	Screw, Bearing Head, Pump End 7/16 - 14 x 1-3/8" (10 Req'd.)	021-01541				
20	Head, Bearing Assembly, Motor End (See DESIGN HISTORY) Includes:	364-47221				
20A	Head, Bearing	064-47220				
20B	Bearing (2 Req'd.)	029-11097				
20C	Pin, Roll	029-05395				
20D	Cap, Relief Valve	065-06394				
20E	Spring, Relief Valve	029-06143				
20F	Plunger, Relief Valve	065-01331				
21	Screw, Bearing Head, Motor End 7/16 - 14 x 1-3/8" (4 Req'd.)	021-01541				
22	Pump, Oil (Complete)	026-20437				
23	Gasket, Oil Pump	070-07166				
24	Screw, Oil Pump 5/16 - 18 x 1 (5 Req'd.)	021-01433				
25	Crankshaft (Style D) (See DESIGN HISTORY) "3" Stroke	364-47209	364-47210	364-47210	364-47211	364-47211
	"4" Stroke	364-47215	364-47216	364-47216	364-47217	364-47217
25A	Key, Motor	064-26560				
25B	Washer, Shaft	064-21835				
25C	Lockwasher, Shaft	021-05295				
25D	Cap Screw 5/8" - 11 x 2"	021-01630				
26	Collar, Thrust (See DESIGN HISTORY)	029-11098				
27	Strainer, Oil (Includes 27A)	364-46953				
27A	Strainer Screen	029-05592				
29	Plug, Stator Locking	064-21737				
30	Gasket, Stator Locking Plug	065-19004				
31	Valve, Relief No. Req'd.	022-03871 1	2	2	2	2

(CONTINUED ON NEXT PAGE)

TABLE 1— (CONTINUED)

ITEM NO.	DESCRIPTION	COMPRESSOR MODEL				
		4 Cyl.	5 Cyl.	6 Cyl.	7 Cyl.	8 Cyl.
33	Sleeve Unloader (See DESIGN HISTORY, No. Req'd.)	064-47195 3	3	4	5	6
34	Device Unloader No. Req'd.)	364-21681 3	3	4	5	6
35	Union, Unloader Device 3/16" Tube x 3/8-24 UNF No. Req'd.)	023-05839 3	3	4	5	6
35A*	Union Cap No. Req'd.)	— 1	064-30612 1	—	064-30612 1	—
36	Cover, Terminal Box	064-46993	}			
37	Bottom, Terminal Box	364-46994				
38	Screw, Terminal Box Cover (4 Req'd.)	021-08197				
39	Screw, Discharge Valve Cage 3/8" - 16 x 2-1/2" No. Req'd.)	021-10037 16		24	32	32
40	Gasket, Suction Valve to Suction Strainer	064-22018			064-22017	064-22017
41	Gasket, Discharge Valve to Disch. Manifold Styles A, B, C Style D	028-00864 064-47078		064-47078	064-47078	064-47079
42	Valve, Oil Charging	022-01582	}			
43	Cap, Oil Charging Valve	023-00977				
44	Heater, Crankcase (350 watt, 120 volt) (350 watt, 240 volt)	025-10462 025-13553				
45	Valve, Suction Stop	022-02844	022-02844	022-02844	022-02845	022-02845
46	Screw, Cap-Suction Stop Valve (4 Req'd.)	021-10839			021-13958	021-13958
47	Valve, Discharge Stop	022-01394	022-01394	022-01394	022-02844	022-02844
48	Screw, Cap-Discharge Stop Valve (4 Req'd.)	021-14248	021-14248	021-14248	021-10839	021-10839

*Not Shown

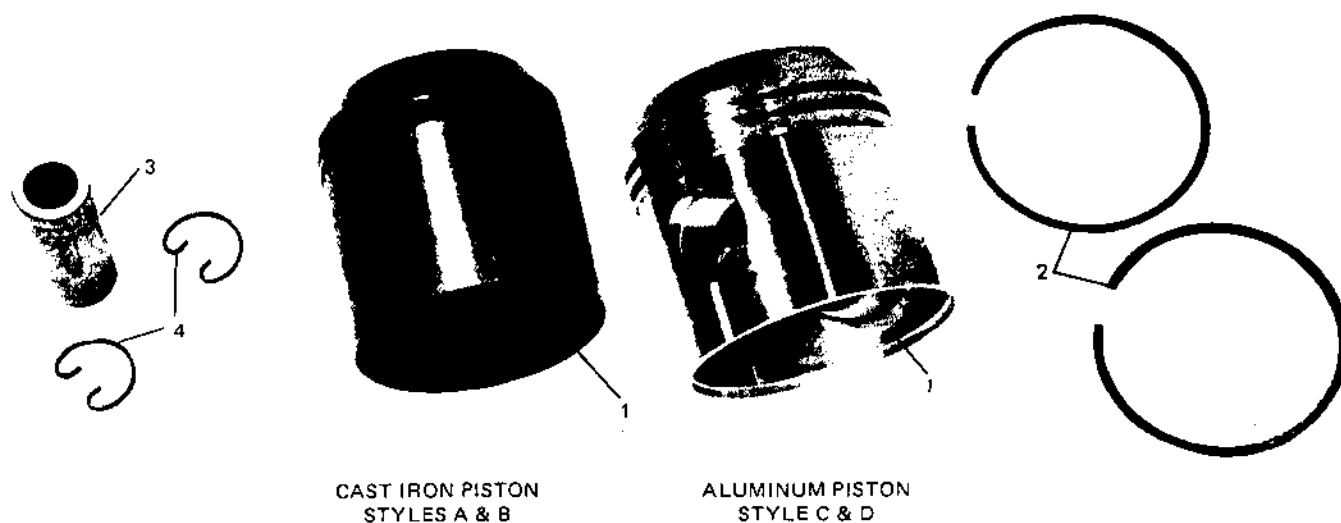


TABLE 2 (See DESIGN HISTORY)

ITEM NO.	DESCRIPTION	PART NO.	
		STYLE A & B	STYLE C & D
	Piston Assembly Includes:	364-36603	364-46757
1	Piston, Bare	064-21653	064-46538
2	Ring, Piston (2 Req'd.)	029-15175	021-15175
3	Pin, Piston	029-13090	029-13090
4	Retainer (2 Req'd.)	029-13091	029-13091

FIG. 2 — PISTON ASSEMBLY

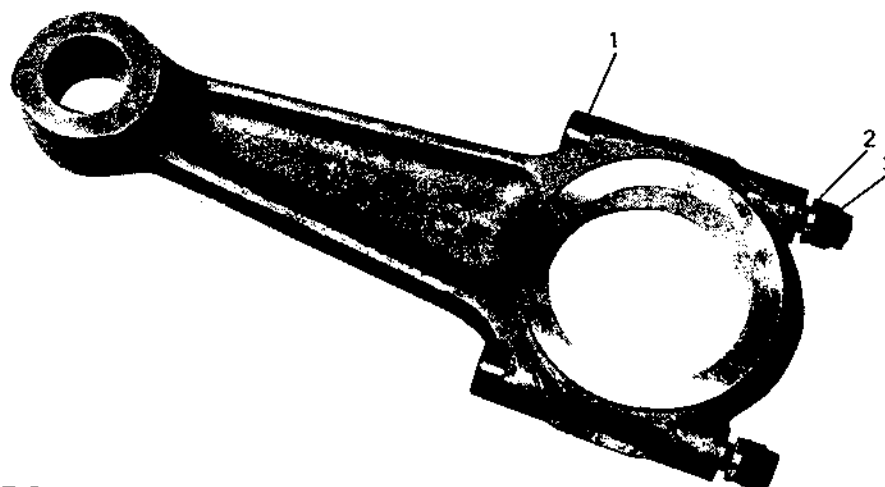


TABLE 3

ITEM NO.	DESCRIPTION	PART NO.	
		"3" STROKE	"4" STROKE
	Rod, Connecting (Assembly)	364-21611	364-46679
1	Bolt (2 Req'd.)	064-22949	064-22949
2	Washer (2 Req'd.)	021-01274	021-01274
3	Nut (2 Req'd.)	021-09932	021-09932

FIG. 3— CONNECTING ROD

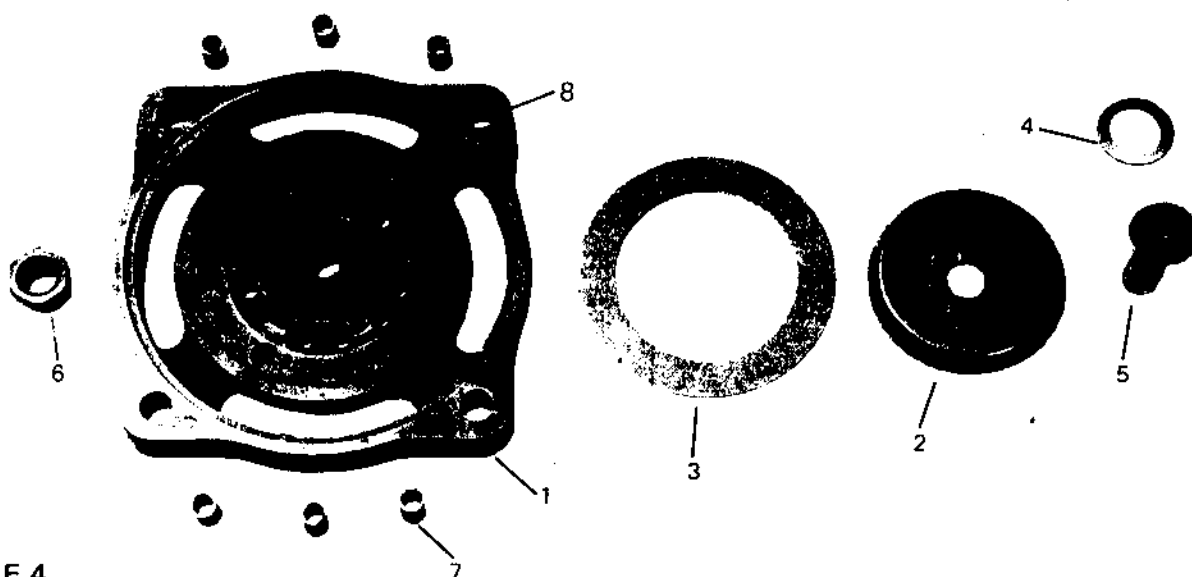


TABLE 4

ITEM NO.	DESCRIPTION	PART NO.
	Cage, Discharge Valve Assy. Includes items 1—7.	364-42306
1	Cage, Disch. Valve	*
2	Plate, Inner Valve	064-46281
3	Valve, Discharge	064-43012
4	Gasket	028-08386
5	Screw	021-13856
6	Nut, Self-Locking	021-09932
7	Spring (6 Req'd Per Valve Ass'y)	029-13248
8**	Bolt 3/8"x2-1/2" (4 per Valve)	021-10037

*Discharge Valve Cage, Item 1, not available separately. Order assembly #364-42306.

**When installing new valve cage assembly always order 4 of item 8 for each valve cage.

FIG. 4 — DISCHARGE VALVE CAGE ASSEMBLY

TABLE 5

ITEM NO.	DESCRIPTION	PART NO.
	Cage, Suction Valve Ass'y	364-42718
	Includes:	
1	Plate, Valve	064-42716
2	Valve, Suction	064-43011
3	Spring (6 Req'd Per Valve Ass'y)	029-13813
4	Plate, Suction Valve (For Permanently Unloaded Cylinder)	064-42716

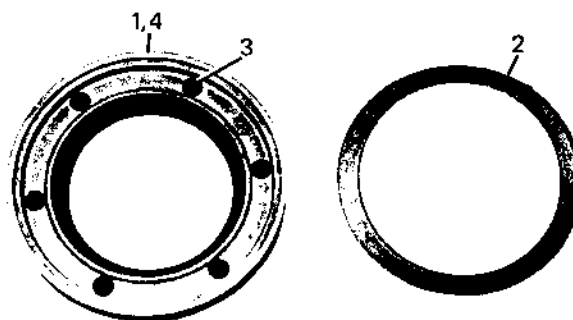


FIG. 5 — SUCTION VALVE PLATE ASSEMBLY

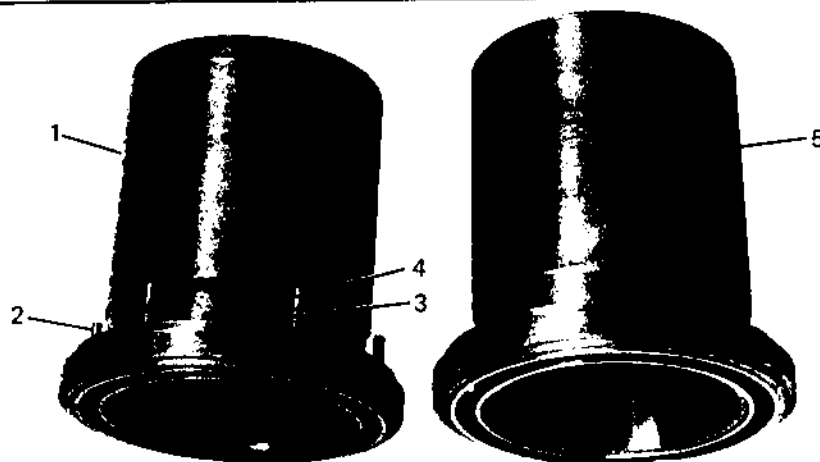


TABLE 6 (See DESIGN HISTORY)

ITEM NO.	DESCRIPTION	PART NO.				
		COMPRESSOR MODEL				
		4 Cyl.	5 Cyl.	6 Cyl.	7 Cyl.	8 Cyl.
	Sleeve, Cylinder Assembly, Unloading No. Req'd.	364-47224 3	3	4	5	6
	Includes:					
1	Sleeve, Cyl. Bare	064-21667				
2	Pin, Lift (6 Req'd. Per Cyl. Ass'y.)	029-19841				
3	Spring (6 Req'd. Per Cyl. Ass'y.)	029-13487				
4	Ring, Retainer (12 Req'd. Per Cyl. Ass'y.)	029-09016				
5	Sleeve, Cylinder, Non-Unloading No. Req'd.	064-21667 1	3	2	3	2

FIG. 6—CYLINDER SLEEVE ASSEMBLY

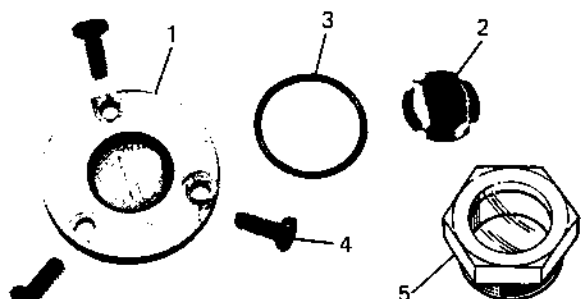


FIG. 7—OIL SIGHT GLASS

TABLE 7

ITEM NO.	DESCRIPTION	PART NO.
1	Sight Glass, Oil	026-10797
2	Reflector, Sight Glass	064-25874
3	O-Ring, Sight Glass	028-06791
4	Screw, Sight Glass (3 Req'd)	021-01372
5	Sight Glass, Plug Type (2 Req'd)	026-17581

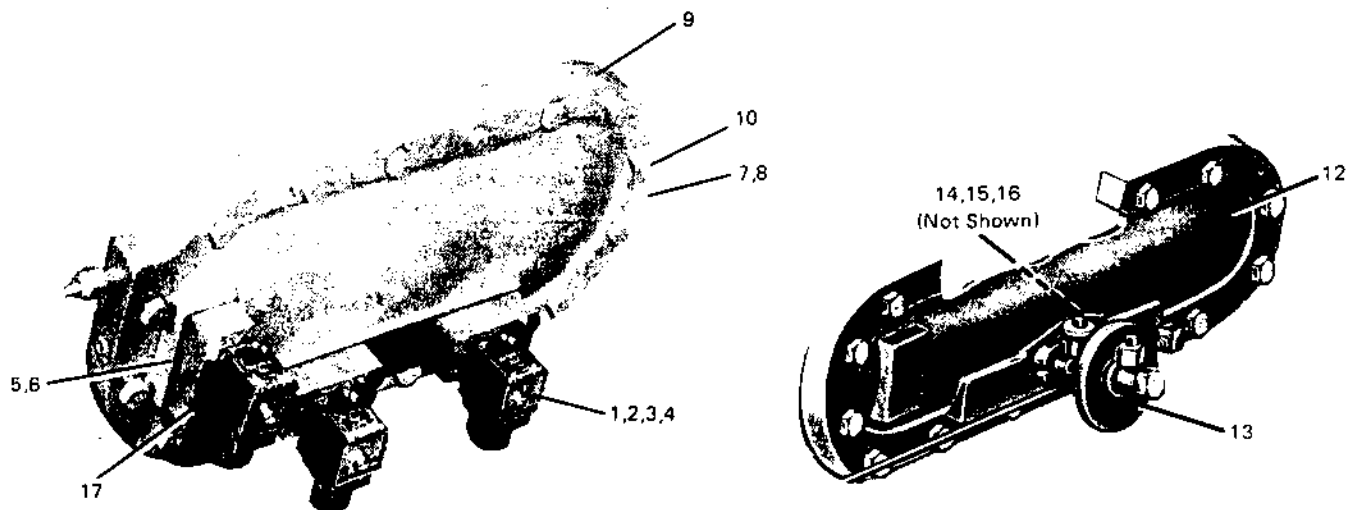


TABLE 8

ITEM NO.	DESCRIPTION	4 Cyl.	5 Cyl.	6 Cyl.	7 Cyl.	8 Cyl.
1*	Valve, Solenoid (Less Coil) Styles A, B & C (3 Req'd./Compressor)	025-15539				
2*	Coil for Item #1 (120V) Styles A, B & C	025-16572-003				
3*	Valve, Solenoid (Less Coil) Style D Sporlan P.E.	025-26270-011 025-26270-012				
4*	(3 Req'd./Compressor) Coil for Item #3 Sporlan - 120V Sporlan - 240V P.E. - 120V P.E. - 240V	025-25146 025-26268 025-16572-003 025-16572-001				
5*	Gasket, Solenoid Valve to Handhole Cover Styles A, B & C (3 Req'd./Compressor)	064-26671				
6*	Gasket, Solenoid Valve to Handhole Cover Style D (3 Req'd./Compressor)	064-47327				
7*	Handhole Cover for Use With Item #1 Styles A, B & C	064-26588				
8*	Handhole Cover for Use With Item #3 Style D	064-47222				
9	Gasket, Handhole Cover to Compressor	064-21700				
10	Screw, Handhole Cover (16 Req'd./Cover)	021-10387				
11	Handhole Cover, Plain (Not Shown)	064-21645				
12	Handhole Cover For Use With Suction Pressure Capacity Control	Not Available				
13	Valve, Pressure Regulating	025-09980				
14	Valve, Capacity Control	365-13975-002				
15	"O" Ring	028-04754				
16	Ring, Retainer	029-08659				
17	Screw, Solenoid Valve to Handhole Cover Styles A, B & C Style D	021-01392 021-13223				

*Items 1 and 2 are not interchangeable with items 3 and 4. Sporlan and P.E. solenoid valves (item #3) are interchangeable, but coils (item #4) are not interchangeable. Items 5 and 6 are not interchangeable. Items 7 and 8 are not interchangeable.

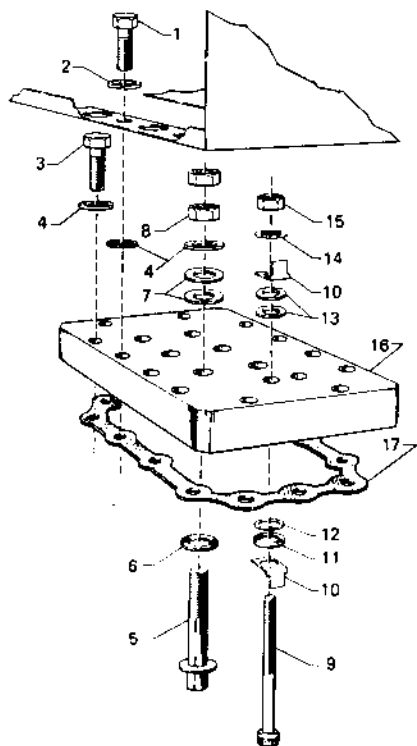


TABLE 9

ITEM NO.	DESCRIPTION	PART NO.	
1	Screw--7/16 X 1-3/4 (4 Req'd.)	021-01545	
2	Lockwasher - 7/16 (4 Req'd.)	021-01161	
3	Screw - 7/16 X 1-5/8 (10 Req'd.)	021-08579	
4	Washer, Plain - 7/16 (20 Req'd.)	021-14111	
5	Bolt, Terminal (6 Req'd.)	021-12696	
6	Gasket, Terminal Bolt (6 Req'd.)	064-36151	
7	Washer, Terminal Bolt (12 Req'd.)	028-09410	
8	Nut, Hex (12 Req'd.)	021-12724	
9	Screw, Overload Protector (2 Req'd.)	021-14817	
10	Terminal, Overload (4 Req'd.)	025-18650	
11	Washer, Plain (2 Req'd.)	021-01240	
12	Seal, O-Ring (2 Req'd.)	028-09347	
13	Washer, Terminal (4 Req'd.)	028-09525	
14	Lockwasher (2 Req'd.)	021-01133	
15	Nut, Hex (2 Req'd.)	021-09991	
16	Block, Terminal	025-19978	
17	Gasket, Terminal Block	064-21839	
18	Hex Connector (Short)	Not Shown	064-26799
19	Hex Connector (Long)		064-21677

FIG. 9—TERMINAL PLATE

TABLE 10 — STYLE D STANDARD REPLACEMENT COMPRESSORS*

MODEL NO.	PART NO.	MODEL NO.	PART NO.
JS43	364-47286	JS44	364-47293
JS53	364-47287	JS54	364-47294
JS63	364-47288	JS64	364-47295
JS73	364-47289	JS74	364-47296
JS83	364-47290	JS84	364-47297

* Compressors are evacuated, dehydrated, and charged with nitrogen before being sealed for shipment. Compressor part numbers listed do NOT include motor, motor housing, discharge manifold, crankcase heater, capacity control devices or oil charge. Crankcase is closed with blank hand-hole covers on both sides. For parts not included with replacement compressors, use parts from original compressor (if usable) or order new parts listed separately in this manual.

STYLE D REPLACEMENT COMPRESSORS FOR USE ON YCHA CHILLERS.* (These compressors have fewer unloading steps than the standard compressors.)

MODEL NO.	PART NO.	MODEL NO.	PART NO.
JS43	364-47291	JS44	364-47298
JS63	364-47292	JS64	364-47299

TABLE 11 — REPLACEMENT MOTORS

VOLTAGE	MOTOR SIZE CODE**					
	M	N	P	Q	S	T
200-3-60	364-43271-008	364-43271-015	364-43271-022	364-43271-029	364-43271-036	364-43271-043
190-3-50/230-3-60	364-43271-009	364-43271-016	364-43271-023	364-43271-030	364-43271-037	364-43271-044
380/415-3-50/460-3-60	364-43271-010	364-43271-017	364-43271-024	364-43271-031	364-43271-038	364-43271-045
500-3-50/575-3-60	364-43271-011	364-43271-018	364-43271-025	364-43271-032	364-43271-039	364-43271-046
220-3-50	364-43271-012	364-43271-019	364-43271-026	364-43271-033	364-43271-040	364-43271-047
346-3-50/380-3-60	364-43271-013	364-43271-020	364-43271-027	364-43271-034	364-43271-041	364-43271-048
440-3-50	—	—	—	—	364-43271-042	364-43271-049

**As indicated by sixth digit of model number. Replacement motor must be same size as original.
 "L" size motor no longer available. Use "M" motor of same voltage.

TABLE 12 — SERVICE AIDS

GASKET KIT				
COMPRESSOR MODEL				
4 Cyl.	5 Cyl.	6 Cyl.	7 Cyl.	8 Cyl.
364-36600	364-36601	364-36601	364-36602	364-36602

VALVE RETAINING CLIP 064-37274
 BEARING REMOVAL TOOL 364-37260
 ROTOR MANDREL* 364-37273
 STATOR REMOVAL TOOL 029-13597

*Screws into end of crankshaft to aid in removing and installing rotor.

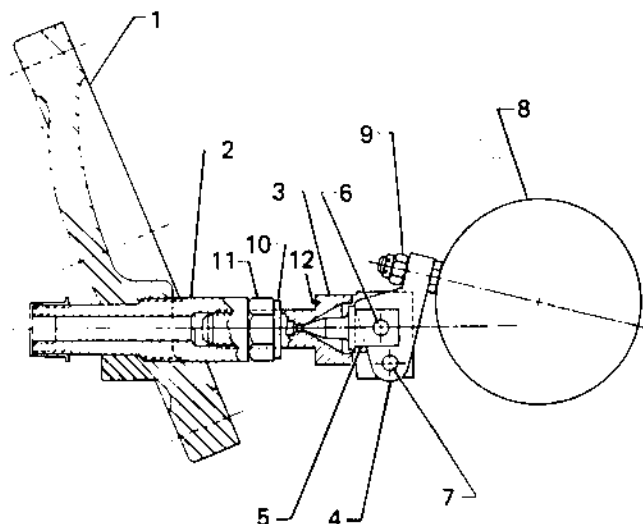


FIG. 13— CRANKCASE FLOAT

TABLE 13— CRANKCASE FLOAT

ITEM NO.	DESCRIPTION	PART NO.
	Crankcase Float Includes:	364-26809
1	Cover, Handhole	064-26808
2	Adapter	064-26807
3	Valve Body	064-45531
4	Lever, Float	068-04542
5	Valve, Float	068-04545
6	Pin, Valve	068-01594
7	Pin, Lever	065-02071
8	Ball, Float	022-00530
9	Nut-Hex Self Locking	021-09610
10	Lockwasher	021-05273
11	Nut, Hex Jam	021-08073
12	Pin, Roll	029-08228

DESIGN HISTORY

Since the introduction of the J Series compressors, several design changes have been made to improve performance and/or reliability. These changes are described below. Be sure to read this section thoroughly before ordering renewal parts.

1. Driveline Components — Styles A, B & C compressors were equipped with a thrust collar at both ends of the compressor. Style D compressors are equipped with a thrust collar on the motor end only. On Style D compressors the pump end bearing housing has been increased in length to compensate for the elimination of the thrust collar on that end.

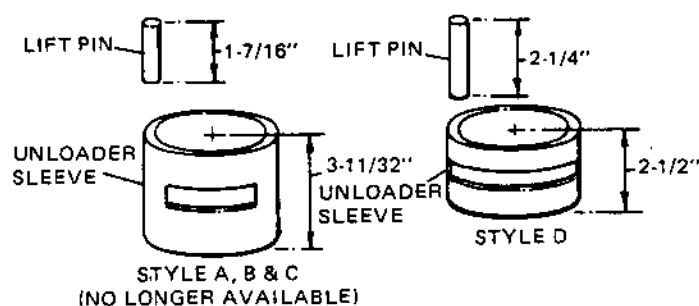
Crankshaft Part No's. listed are for Style D as these can also be used in Style A, B & C compressors. The Style D crankshaft can be used as a direct substitution in a Style C compressor (but not vice versa).

However, when substituting a Style D crankshaft in a Style A or B compressor, it is also necessary to replace original cast iron pistons with aluminum pistons. (See Para. #3). Style A, B & C crankshafts are no longer available.

Motor End bearing assembly Part No's. listed are for Style D. These can also be used in Style A, B or C; however an increase in oil pressure (approx. 20 lb. increase) will occur.

Pump End bearing assembly Part No's. are listed for Style A, B & C, and also for Style D. These parts are not interchangeable.

2. Unloader Sleeves, and Unloader Lift Pins — The length of the unloader sleeve and the length of the unloader lift pin have been changed on Style D compressors. See following sketch:



Unloader lift pins and unloader sleeves are no longer available for Style A, B or C compressors. If either the lift pins or the unloader sleeve must be replaced on a Style A, B or C compressor, both the lift pins and the unloader sleeve must be replaced with the Style D design.

3. Pistons — Style A & B compressors were equipped with cast iron pistons. Style C & D compressors are equipped with aluminum pistons. Cast iron and aluminum pistons cannot be mixed within a compressor due to the difference in weight. Also pistons must be used with the proper crankshaft. (See Paragraph 1.)

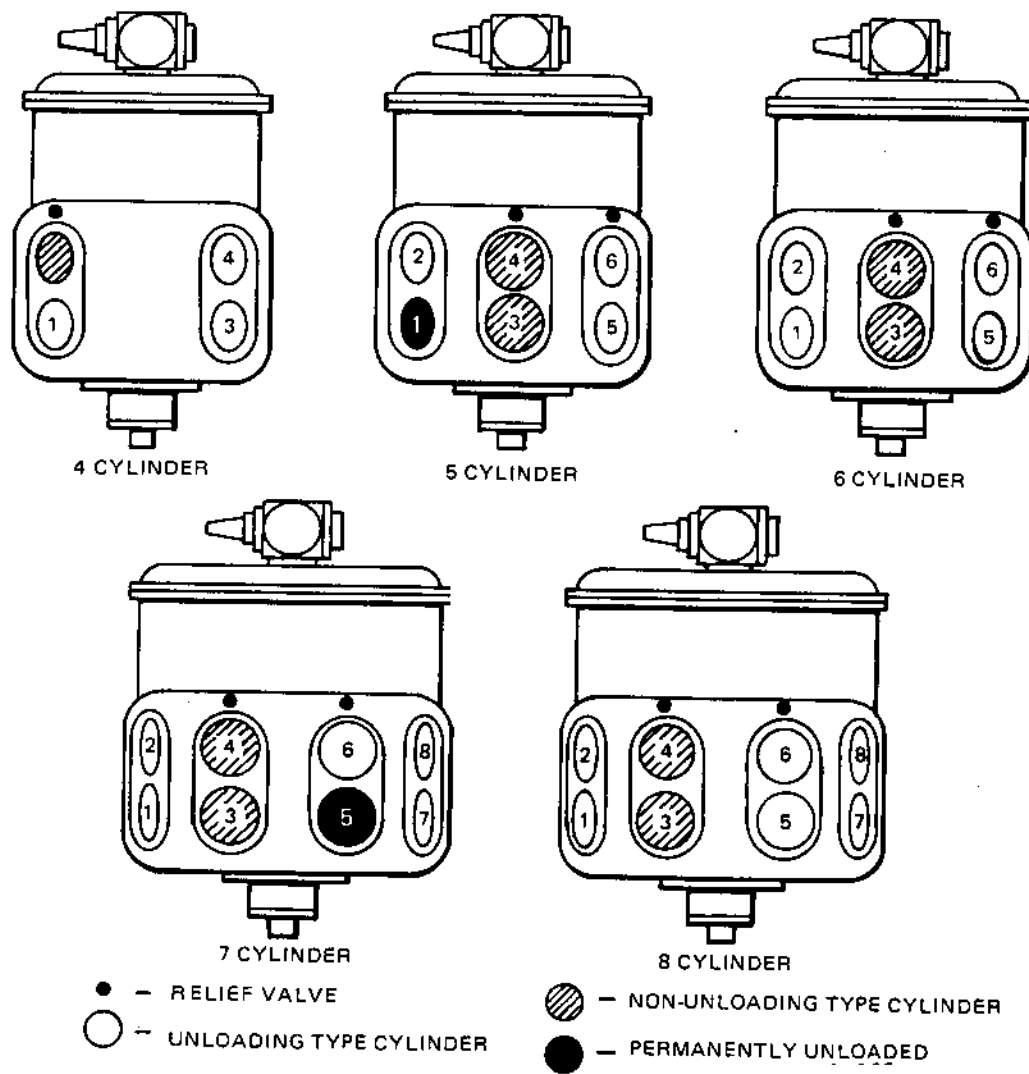


FIG. 14 - UNLOADER LOCATIONS

MODELS JS43, JS53, JS63, JS73, JS83 (STYLE C)

This SUPPLEMENT is to be used
with Form 180.23-RP1.

This supplement lists part numbers of only those items that are unique to Model J Style C compressors. For all other part numbers refer to Form 180.23-RP1.

Crankshaft:

4 cyl. — 664-46667

5, 6 cyl. — 664-46668

7, 8 cyl. — 664-46669

Style C crankshaft can
be identified by a single groove
cut into the bottom of
each counterweight.

Piston:

Piston, Bare — 064-46538

Piston Assy. — 364-46757

(Includes piston rings, piston pin,
and retainers)

Style C piston can be
identified by material (Aluminum).

REPLACEMENT COMPRESSORS*

COMPRESSOR MODEL	PART NO.
JS43C	364-46915
JS53C	364-46916
JS63C	364-46917
JS73C	364-46918
JS83C	364-46919

*Compressors are evacuated, dehydrated, and charged with nitrogen before being sealed for shipment. Compressor part numbers listed do NOT include motor, motor housing, discharge manifold, crankcase heater, capacity control devices or oil charge. Crankcase is closed with blank handhole covers on both sides. For parts not included with replacement compressors, use parts from original compressor (if usable) or order new parts listed separately in Form 180.23-RP1.

