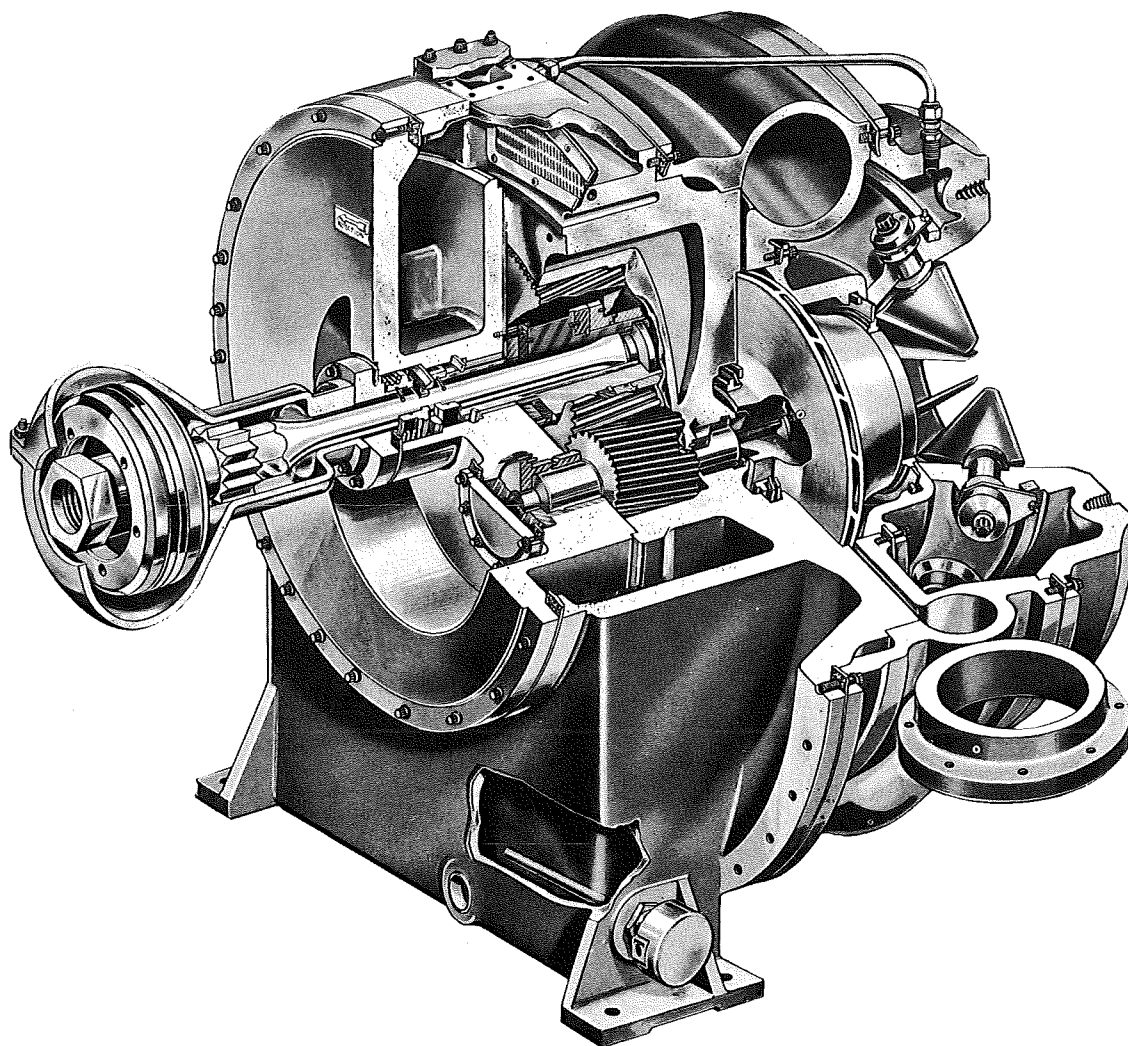


OPEN TURBOPAK CENTRIFUGAL LIQUID CHILLING UNITS

**MODELS OT M1 G1 THRU OT T2 G2(STYLE A)
650 THRU 1250 TONS**

**COMPRESSOR PARTS
MODEL LKA 65 AND LKA 73**



COMPRESSORS

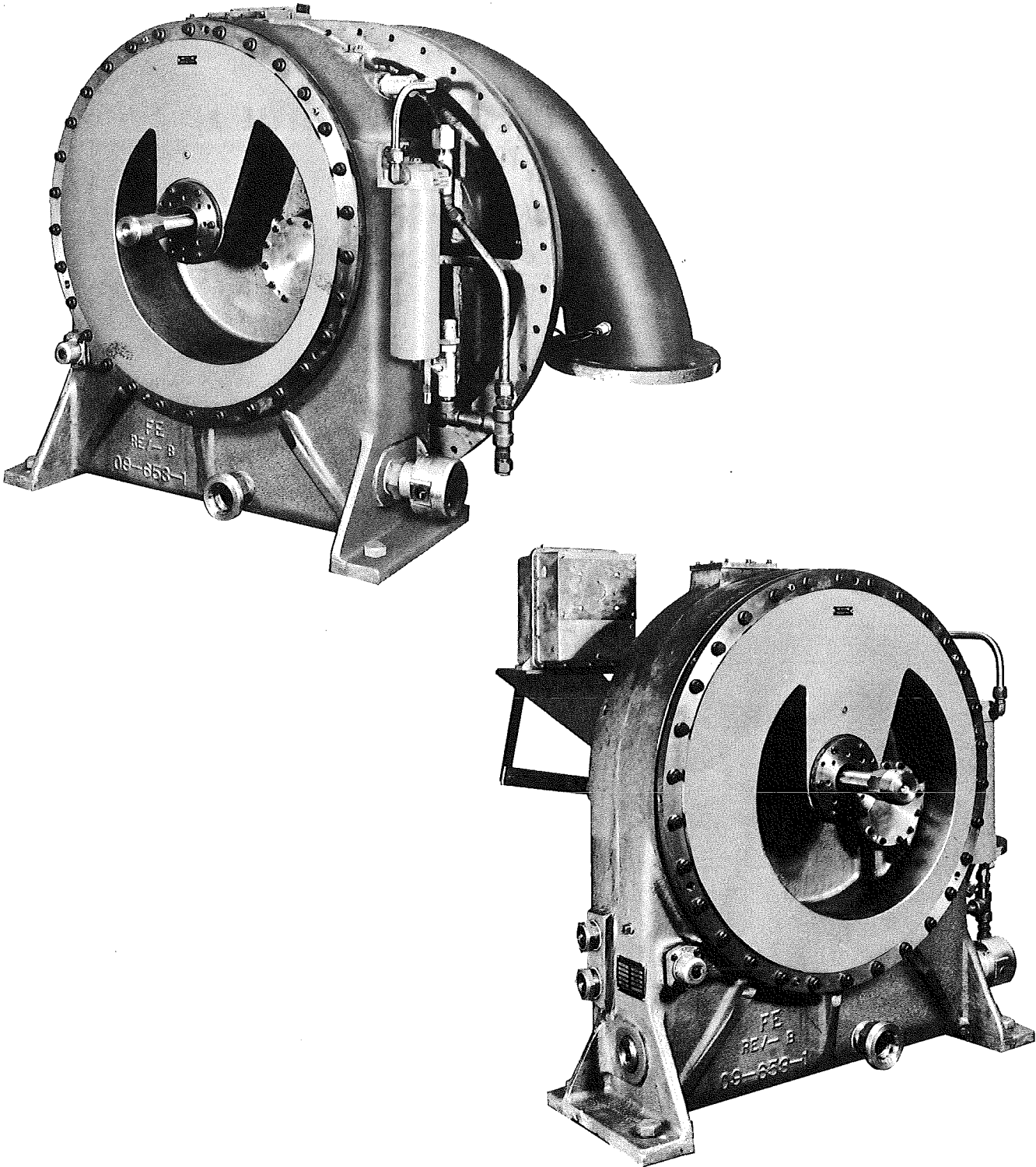


FIG. 1 – OPEN TYPE COMPRESSOR, MODEL LKA

Code	Compressor Part No.	Common Parts	Variable Parts
		See Page No.	
G1	364-35292-002		
G2	364-35292-003		

COMPRESSORS

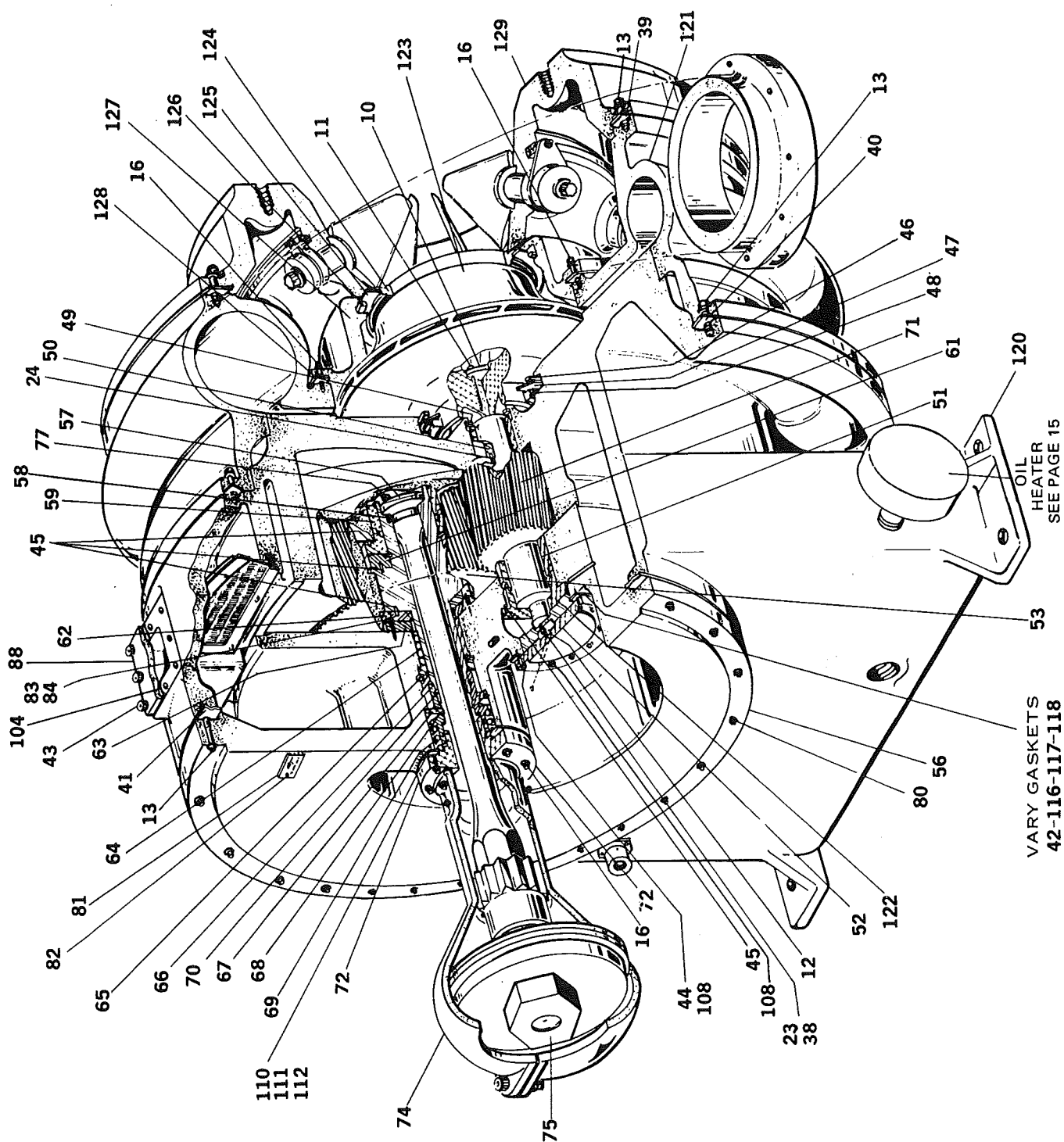


FIG. 2 – MODEL LKA65 & LKA73 COMPRESSORS, PARTS LOCATION

COMPRESSORS

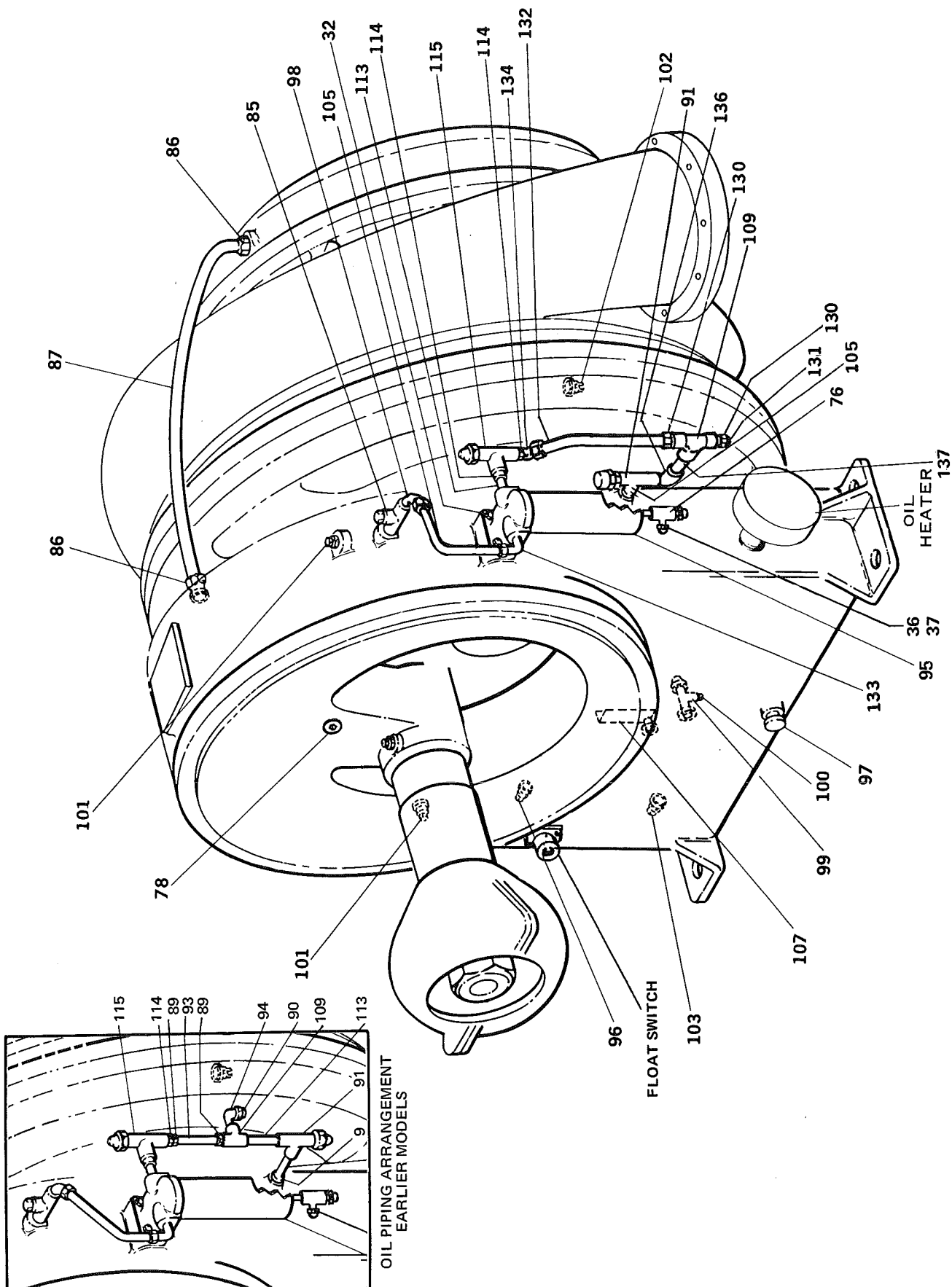
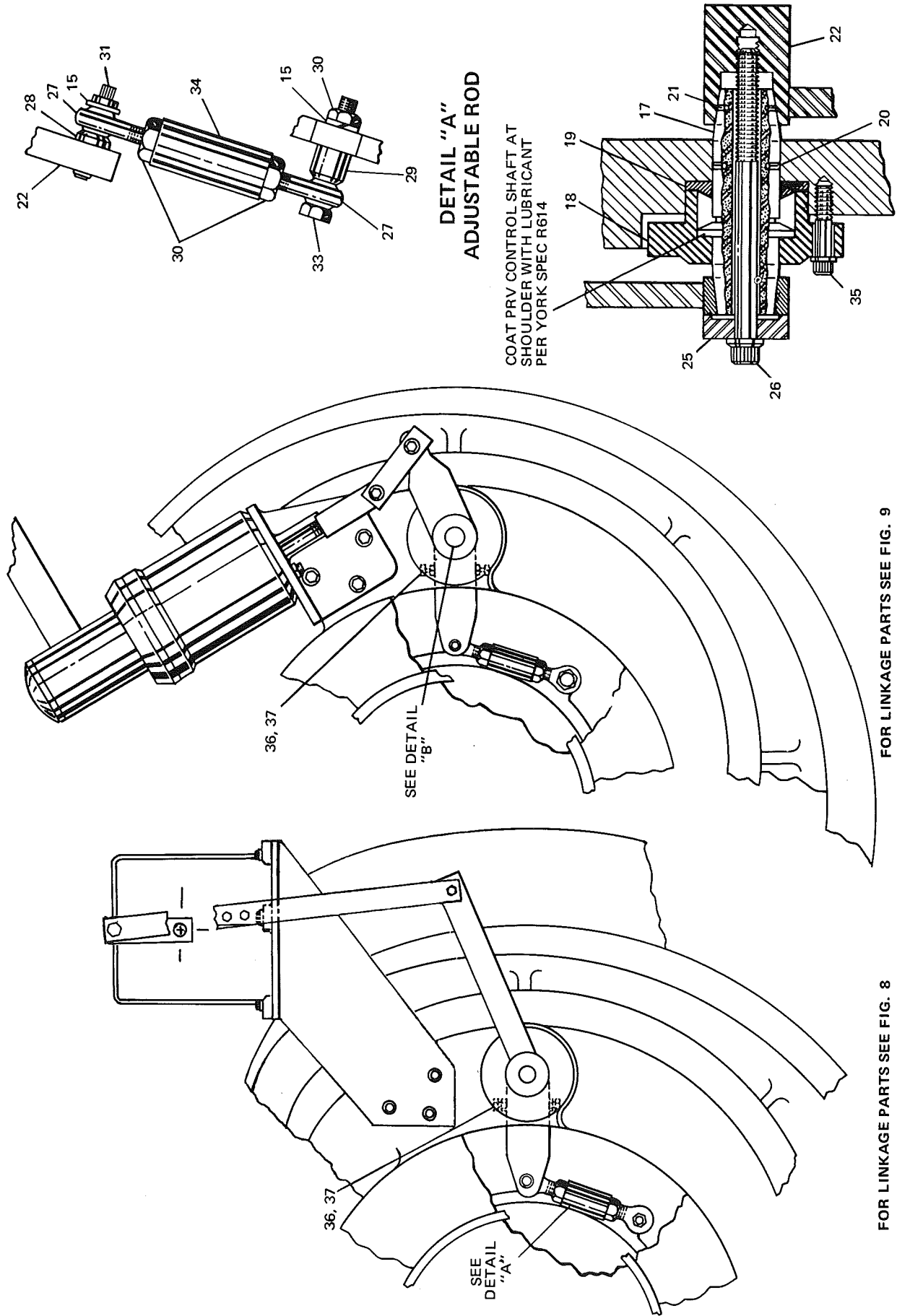


FIG. 3— MODEL LKA65 & LKA73 COMPRESSORS, EXTERIOR VIEW, PARTS LOCATION

COMPRESSORS



COMPRESSOR COMMON PARTS LIST

6

Item	Description	Quan.	Part No.	Item	Description	Quan.	Part No.
1	Eliminator, Oil	1	364-28144	43	Screw, Cap 12 Pt. Hd. 5/16-18 UNC-3A X 1 Lg.	8	021-12039
2	Nameplate, Patent	1	029-13270-002	44	Washer, 11/32 I.D. X 11/16 O.D. X .065 Th.	12	021-05166
3	Tube, 1/4 O.D. X .049 W X 27-1/16 Lg.	1	067-91500	45	Pin, Insert, 1/4 Dia. X 5/8 Lg.	6	029-03989
4	Elbow, 90°, 1/8 MPT X 1/4 Tube	1	023-07170	46	Ring, Retaining	1	029-10336
5	Screw Mach. Rd. Hd. Recd. #10-24 UNC X 1/2 Lg.	3	021-02459	47	Washer, Flat Spring	1	064-31191
6	Screw Mach. Rd. Hd. Recd. #8-32 UNC X 3/8 Lg.	1	021-09988	48	Ring, Seal, Balance Piston	1	064-31189
7	Clamp, Tube 1/4 O.D.	1	023-07202	49	Ring, Retaining	1	029-13854
8	Tube, 5/8 O.D. X .049 W X 6 Lg.	1	064-19162	*50	Bearing, Main (Pinion)	1	064-31190†
9	Adapter, 1 MPT X 1/2 FPT Both Ends	1	064-28148	*51	Bearing, Thrust & Journal (Pinion)	1	064-31188†
10	Collar, Imp. Clamping	1	064-24116	*52	Cover, Thrust	1	064-24124
11	Screw Cap 12 Pt. Hd. 1/2-20 UNF-3A X 3 Lg.	3	021-11515	53	Gear	1	See Data
12	Screw Cap 12 Pt. Hd. 5/16-18 UNC-3A X 3/4 Lg.	2	021-11394	54	Screw, Set (Special)	1	Nameplate
13	Screw Cap 12 Pt. Hd. 5/8-11 UNC-3A X 1-3/4 Lg.	90	021-11127	55	Plug, Sight	2	064-29707
14	Compound Sealer	.050	013-01671	56	Housing, Bearing	1	026-16556
15	Lockwasher, Spg. 3/8	2	021-05291	57	Shaft, Drive	1	064-24066
16	Screw Cap 12 Pt. Hd. 3/8-16 UNC-3A X 1-1/4 Lg.	24	021-11141	*58	"O" Ring, 2-3/8 O.D. X 2-1/8 I.D. X 1/8 Sect.	1	064-23831
17	Shaft Control PRV	1	029-11856	*59	Bearing, Thrust & Journal (Gear)	1	028-04478
18	Cover, Shaft Control	1	064-13909				064-23741
19	Gasket, 2-1/2 O.D. X 2 I.D. X 1/16 Thk.	1	028-00781	61	Collar, Thrust, Front (Gear)	1	064-24125
20	"O" Ring, 1-3/8 O.D. X 1-1/8 I.D. X 1/8 Sect.	1	028-04353	62	Collar, Thrust, Rear (Gear)	1	064-24126
21	"O" Ring, 1-1/4 O.D. X 1" I.D. X 1/8 Sect.	1	028-04522	*63	Bearing, Thrust (Gear)	1	064-24127
22	Lever, PRV Device Int.	1	364-23745	*64	Bearing, Rear (Gear)	1	064-24105
*23	Scr. Set Hex Soc. Cup Rd. #10-24 UNC-3A X 1/4 Lg.	1	021-11313	65	Ring, Retaining	1	029-08780
*24	Pin, Insert 1/8 Dia. X 9/16 Lg.	2	029-03990	66	Collar, Shaft Seal	1	064-16649-011
25	Washer, Spl. 1-3/4 Dia. X 1/2 Lg.	1	064-08815	67	Carbon, Shaft Seal	1	064-16651-011
26	Screw, Cap 12 Pt. Hd. 1/2-20 UNF-3A X 6 Lg.	1	021-11998	68	Ring, Shaft Seal	1	064-16650-011
27	Bearing, Rod End Spher.	2	029-08343	69	Spring, Helical	1	029-09095
28	Fillpiece, 3/4 Dia. X 1/4 Lg.	1	064-10821	70	"O" Ring, 3" O.D. X 2-5/8 I.D. X 3/16 Sect.	2	028-05194
29	Fillpiece, 3/4 Dia. X 23/32 Lg.	1	064-09288	71	Pinion		See Data
30	Nut, Hex Reg. 3/8-24 UNF-2B	3	021-00474	72	Cover, Shaft Seal	1	Nameplate
31	Screw Cap, 12 Pt. Hd. 3/8-24 UNF-3A X 1-1/2 Lg.	1	021-11720				064-22975
32	Screw Cap Hex Hd. 1/2-13 UNC-2A X 1-1/4 Lg.	2	021-01567	74	Guard, Coupling (Half)	2	See Sales
33	Screw Spec. 3/8-24 UNF X 2-1/2 Lg.	1	064-09287				Order
34	Rod, Adjustable	1	064-24117	75	Coupling, 1-7/8	1	See Table
35	Screw Cap 12 Pt. Hd. 3/8-16 UNC-3A X 1-1/2 Lg.	2	021-11175	76	Valve Stop Angle 1/4 FLA X 1/4 NPTE	1	022-03836
36	Nut Flare 1/4	1	021-05675	77	Screw Cap 12 Pt. Hd. 5/16-24 UNF-3A X 1 Lg.	12	021-13137
37	Bonnet, Flare	1	023-01024	78	Plug, Pipe Hex Soc. Csk. 3/8	3	023-04298
38	Locktite "Nut-Lock"	.004	013-01678	*79	"O" Ring, 7/8 O.D. X 11/16 I.D. X 3/32 Sect.	1	028-05404
*39	Gasket, PRV Hsg. to Scroll	1	064-24118	80	Pin, Dowel, Str. 1/2 Dia. X 2 Lg.	3	029-10646
40	Gasket, Scroll to Rotor Supp.	1	064-24119	81	Nameplate, Rotation	1	029-00334
*41	Gasket, Rotor Supp. to Bearing Housing	1	064-24120				
*42	Gasket, Cover, Thrust 1/32 Thk.	1	064-24121-004				

† Item 50 — Part No. 064-23923

Item 51 — Part No. 064-23736

Part No's. used on first production compressors

*Parts Included Field Kit — 364-34338

◆ Shaft Seal Kit — 464-29632

COMPRESSOR COMMON PARTS LIST

Item	Description	Quan.	Part No.	Item	Description	Quan.	Part No.
82	Screw Drive #4 X 1/4 Lg.	6	021-03720	105	Tube 5/8 O.D. X .049 Wall X 16 Lg.	1	064-31776
83	Screw Cap Hex Soc. #10-24 UNC X 1 Lg.	2	021-10153	107	Thermometer	1	026-16555
84	Washer, Plain, 7/32 I.D. X 1/2 O.D. X .049	5	021-05164	108	Screw, Cap 12 Pt. Hd. 5/16-18 UNC-3A X 1-3/8 Lg.	12	021-12465
85	Valve, Check 1/2 MPT X 1/2 FPT	1	022-01464	109	Tee, Screw 1/2 NPT	1	023-04336
86	Connection, 1/2 Tube X 1/2 MPT	2	023-06804	110	Gasket, Shaft Seal Cover	1	064-16652-021
87	Tubing 1/2 O.D. X .049 Wall X 21" Lg.	1	064-31771	111	Gasket, Shaft Seal Cover	1	064-16652-022
88	Cover, Oil, Reservoir	1	064-27411	112	Gasket, Shaft Seal Cover	1	064-16652-023
89	Connection, 5/8 Tube X 1/2 MPT	2	023-06805	113	Nipple, Pipe 1/2 Sch. 80 X 1-1/8 Lg.	3	067-39601
90	Cap, 5/8 Tube	1	023-08892	114	Bushing, 3/4 X 1/2	2	023-04010
91	Valve, Pressure Relief 1/2 FPT	1	022-03427	115	Valve, Stop Angle 3/4 - Type 2	1	368-00008
93	Tubing, 5/8 O.D. X .049 Wall	1	064-31774	*116	Gasket, Cover Thrust .005 Thk.	1	064-24121-001
94	Elbow, 90°, 5/8 Tube X 1/2 MPT	3	023-06818	*117	Gasket, Cover Thrust .010 Thk.	1	064-24121-002
95	Filter, 1/2 FPT	1	026-13831	*118	Gasket, Cover Thrust .015 Thk.	1	064-24121-003
96	Plug, Pipe Sq. Hd. 1/2	1	023-03822	130	Conn, Cinch 3/4 Tube X 3/4 NPTE	1	023-06807
97	Cap, Sealing 2-1/8	1	028-04653	131	Cap, 3/4 Tube	1	023-09072
98	Elbow, 45°, 5/8 Tube X 1/2 MPT	1	023-07197	132	Tube, 3/4 O.D. X .049 Wall X 18" Lg.	1	064-31781
99	Valve, Stop, Angle 3/8-Type 1	1	368-00003	133	Ell, 90°, 5/8 Tube X 1/2 MPT	2	023-06818
100	Plug, Pipe, Sq. Hd. 3/8	1	023-01983	134	Tee, Scr. 3/4 X 3/4 X 1/2	1	023-4351
101	Plug, Pipe, Sq. Hd. 1/4	2	023-01972	135	Ell, Cinch 4J 3/4 Tube X 3/4 NPTE	1	023-07264
102	Plug, Pipe, Sq. Hd. 3/4	1	023-04053	136	Ell, 90° 1/2 X 1/2 X NPTI	1	023-04312
103	Plug, Pipe, Hex Skt. Csk. 2"	1	023-02027	137	Nipple, Pipe 1/2 Sch. 80 X 3 Lg.	1	067-39604
*104	Gasket, Cover Oil Reservoir	1	064-27412	*138	Filter, Cartridge	1	026-11225

*Parts Included Field Kit — 364-34338

◆ Shaft Seal Kit — 464-29632

COMPRESSOR VARIABLE PARTS LIST

Item	Description	Model LKA 65 (G1) 364-35292-002		Model LKA 73 (G2) 364-35292-003	
		Part No.	Quan.	Part No.	Quan.
119	Common Parts	See Pg. &	1	See Pg. &	1
120	Support, Rotor	064-35290	1	064-35291	1
121	Scroll, Rotor	064-23755	1	064-23754	1
122	Collar, Thrust (Pinion)	064-24130	1	064-24131	1
123	Impeller	064-31194	1	064-31195	1
124	Ring, Impeller Seal	064-23977	1	064-23980	1
125	Washer, Flat Spring	064-23978	1	064-23981	1
126	Ring Int. Retaining	064-23979	1	064-23982	1
127	Plate, Imp. Seal Retaining	064-23726	1	064-23727	1
128	Gasket Retaining Plate	*064-24122	1	*064-24123	1
129	Device, P.R.V.	364-27407	1	364-27408	1

COMPRESSORS

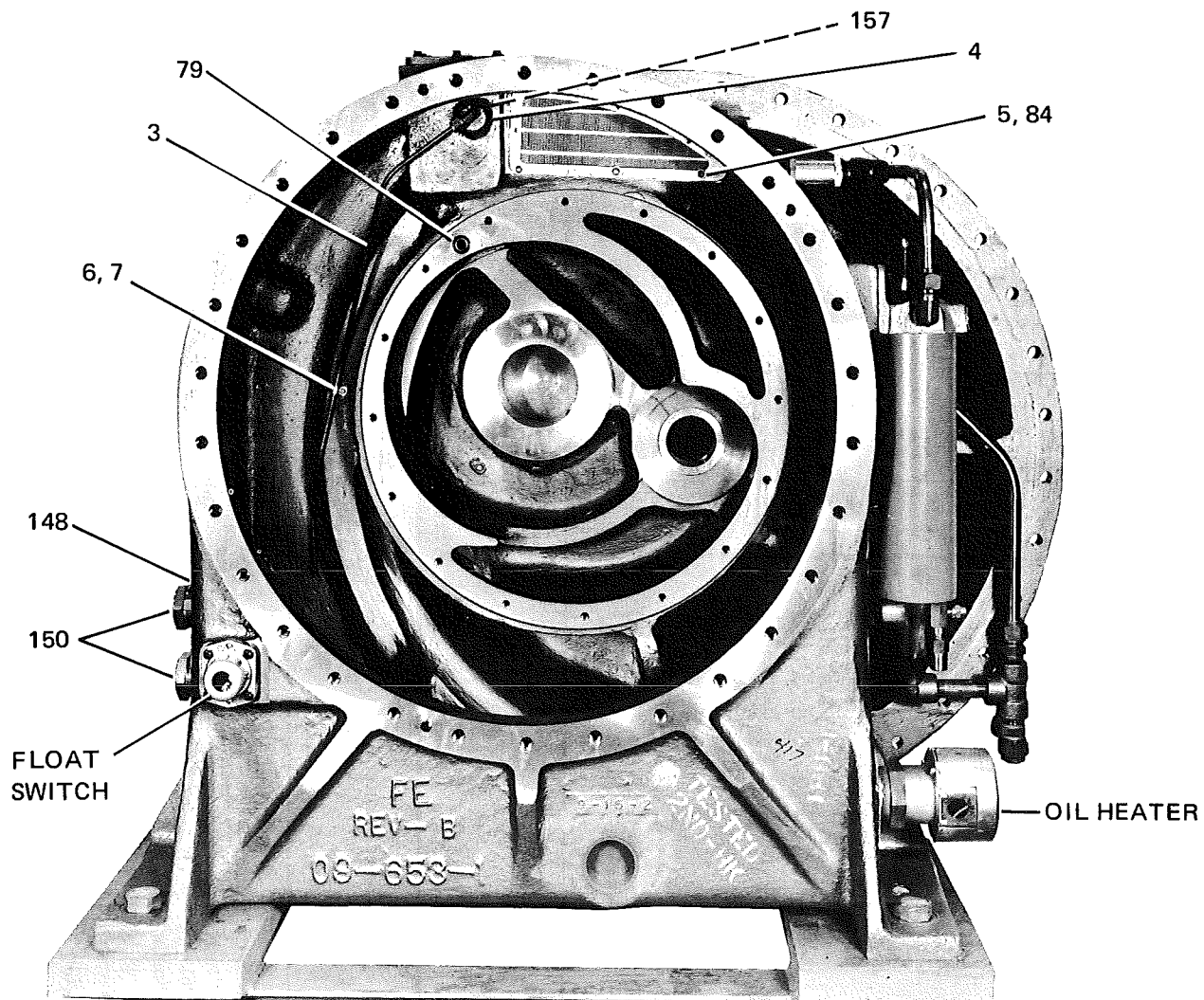


FIG. 6 – COMPRESSOR INTERNAL VIEWS, PARTS LOCATION

COMPRESSORS

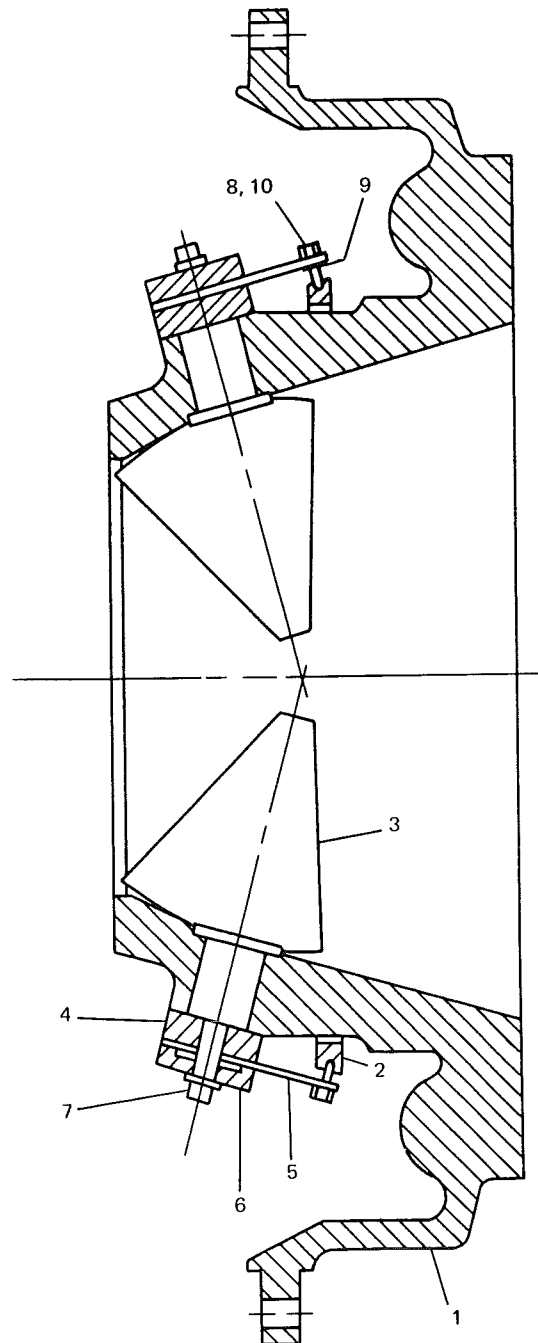
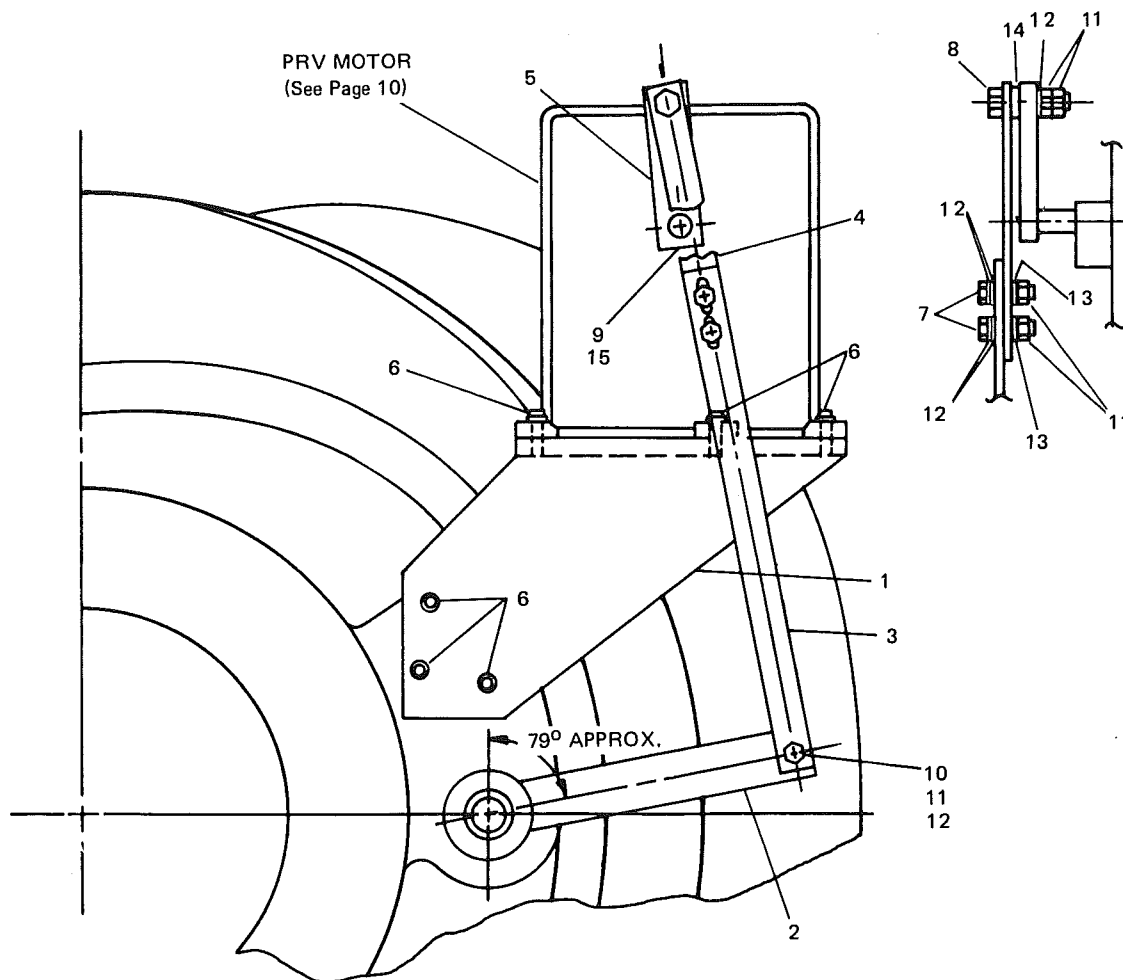


FIG. 7— PRV ASSEMBLY

Item	Description	Models			
		LKA-65		LKA-73	
		Part No.	Quan.	Part No.	Quan.
1	Hsg.-Pre-Rotation	064-23747	1	064-23748	1
2	Ring-Vane Driving	064-10815	1	064-10815	1
3	Vane-Pre-Rotation	064-18781	9	064-18781	9
4	Washer	064-10819	9	064-10819	9
5	Arm-Vane	064-10818	9	064-10818	9
6	Washer-Special	064-09289	9	064-09289	9
7	Scr, Cap 12 Ft, 5/8-18 X 2-3/4 Lg.	021-11956	9	021-11956	9
8	Screw-Ball	029-07017	9	029-07017	9
9	Washer	021-11973	10	021-11973	10
10	Nut, Hex; 1/4-28 UNF 3B	021-12943	9	021-12943	9



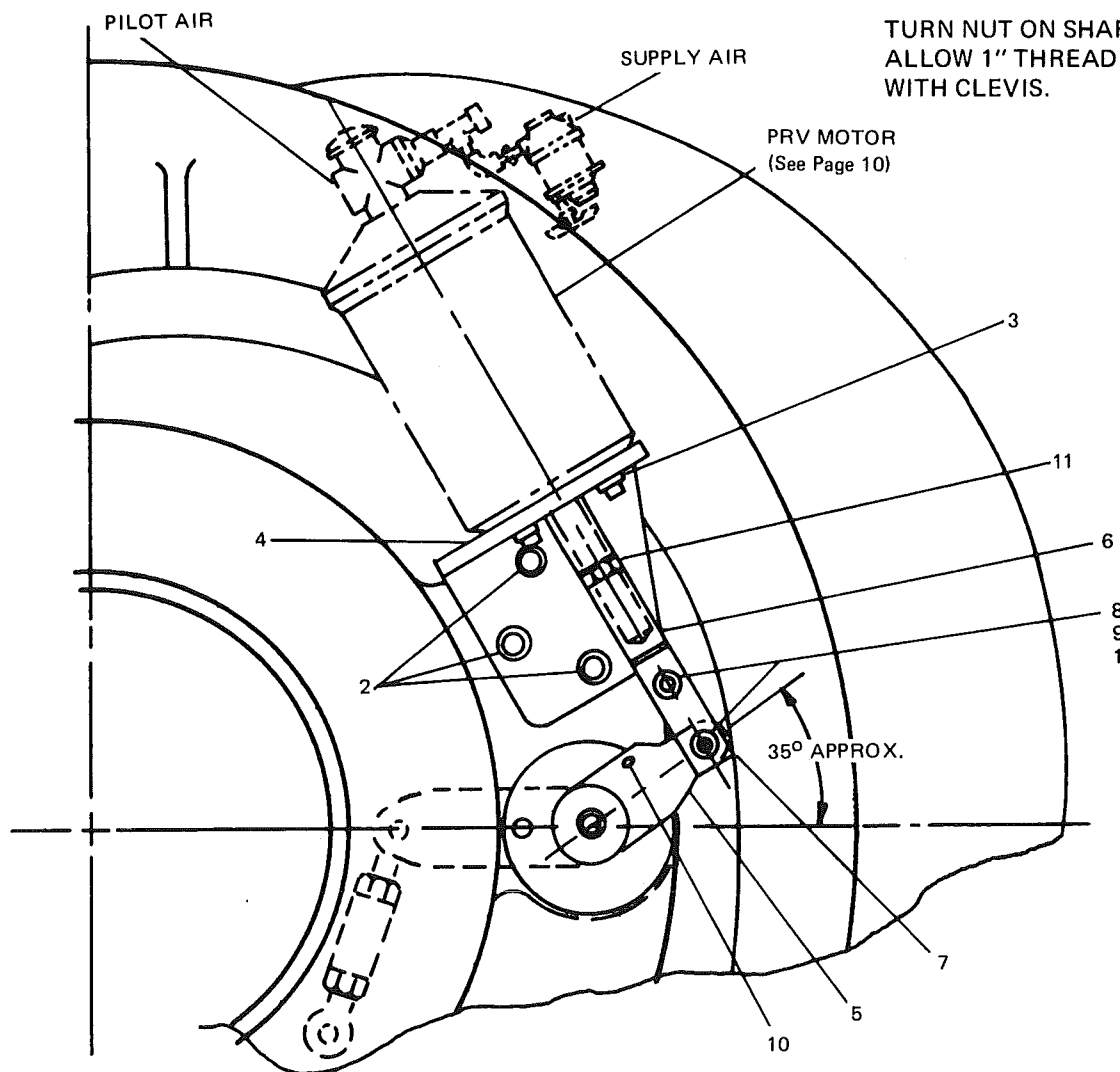
Item	Description	Quan.	Part No.
1	Bracket, Mounting P.R.V. Motor	1	064-39185
2	Lever, P.R.V. External	1	364-28252
3	Link, External P.R.V. Motor	1	064-39186
4	Link, External P.R.V. Motor	1	064-28237
5	Lever, P.R.V. Motor	1	064-39187
6	Screw, Cap 12 Pt. Hd. 3/8-16 X 1-1/8 Lg.	6	021-11148
7	Screw, Cap Hex. Hd. 1/4-20 X 1 Lg.	2	021-11914
8	Bolt, Shoulder 1/4-20 X 1-5/8 Lg.	1	064-28286
9	Screw, Set Hex. Soc. #10-24 X 3/8 Lg.	1	021-03910
10	Bolt, Shoulder 1/4-20 X 1-3/8 Lg.	1	064-28262
11	Nut, Hex 1/4-20 UNC	6	021-00450
12	Washer, Plain 9/32 I.D.	6	021-05165
13	Lockwasher, Spring 1/4	2	021-05267
14	Ring, Fill	1	064-29258
15	Sealer, Grade CV	.010	013-01678

NOTE: VIEW SHOWING LINKAGE IN CLOSED POSITION.
VANES MUST BE FULLY CLOSED WHEN MOTOR IS AT ITS
CCW STOP (FACING CRANK ARM END) POSITION. VANE
MUST TRAVEL TO OPEN OR BEYOND AT THE EXTREME
CW MOTOR POSITION.

FIG. 8— PRV PNEUMATIC EXTERNAL LINKAGE

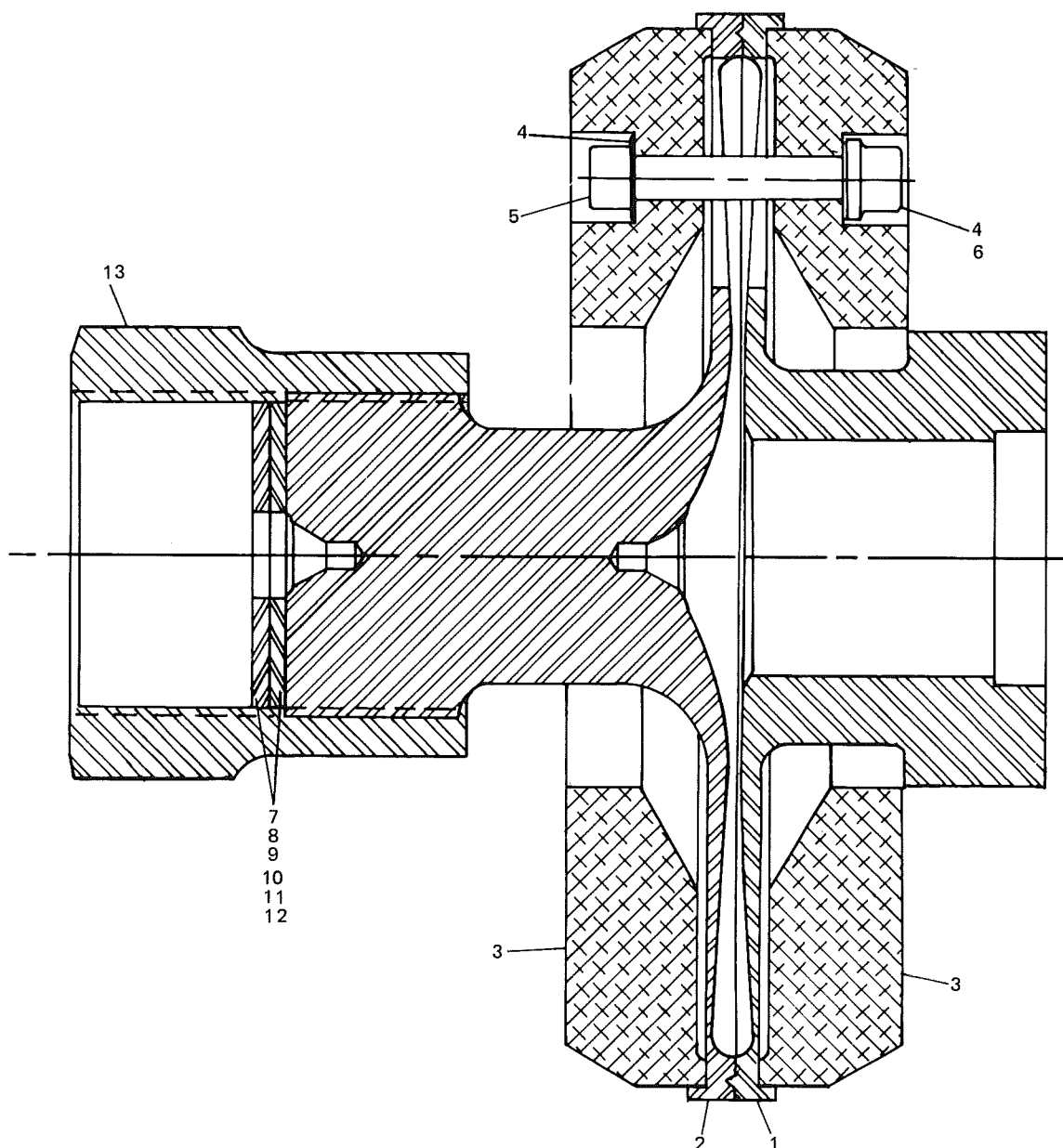
VANES & MOTOR ARE TO BE IN
CLOSED POSITION WHEN
ASSEMBLING.

TURN NUT ON SHAFT TO
ALLOW 1" THREAD ENGAGEMENT
WITH CLEVIS.



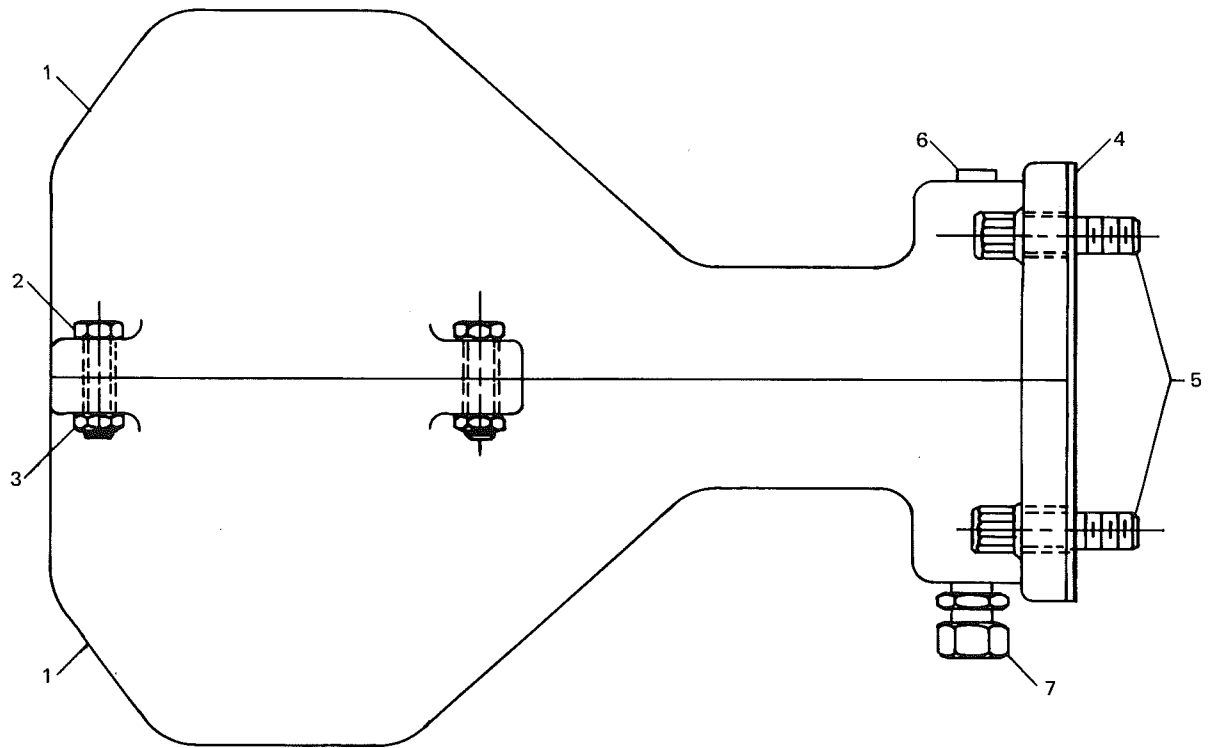
Item	Description	Quan.	Part No.
1	Cot. Pin 3/32 Dia. X 3/4 Lg.	4	021-01083
2	Screw Cap 12 Pt. Hd. 3/8-16 UNC-3A X 1-3/8 Lg.	3	021-11986
3	Screw Cap 12 Pt. Hd. 3/8-16 UNC X 3A X 1-1/4 Lg.	4	021-11141
4	Bracket, Mounting	1	064-27596
5	Lever	1	064-25791
6	Clevis	1	064-07125
7	Link	2	064-25792
8	Pin 3/8 Dia. X 1-1/2 Lg.	2	064-07127
9	Washer, 13/32 I.D. X 13/16 O.D.	4	021-01274
10	Pin Insert 3/32 Dia. X 1-1/8 Lg.	1	029-05900
11	Nut, Hex, Heavy 5/8-18UNF	1	021-07787

FIG. 9-PRV ELECTRONIC EXTERNAL LINKAGE



Item	Description	Quan.	60 Cycle 1-7/8-Coupling Part No.	50 Cycle 2-1/2 X 1-7/8-Coupling Part No.
1	Complete Coupling Assembly		364-24655	364-29693
2	Hub, Compressor	1	064-14386	064-13862
3	Hub, Driver	1	064-14389	064-29691
4	Ring, Clamp	2	064-24651	064-24652
5	Washer, Coupling	10	064-13865	064-13834
6	Screw, Soc.	5	021-13191	021-11662
7	Nut	5	021-11675	021-10260
8	Spacer .105 Thk.	1	064-14395-001	064-14395-001
9	Spacer .110 Thk.	1	064-14395-002	064-14395-002
10	Spacer .115 Thk.	1	064-14395-003	064-14395-003
11	Spacer .120 Thk.	1	064-14395-004	064-14395-004
12	Spacer .130 Thk.	1	064-14395-005	064-14395-005
13	Spacer .150 Thk.	1	064-14396-006	064-14395-006
	Nut 12 Pt.	1	064-14392	064-14392

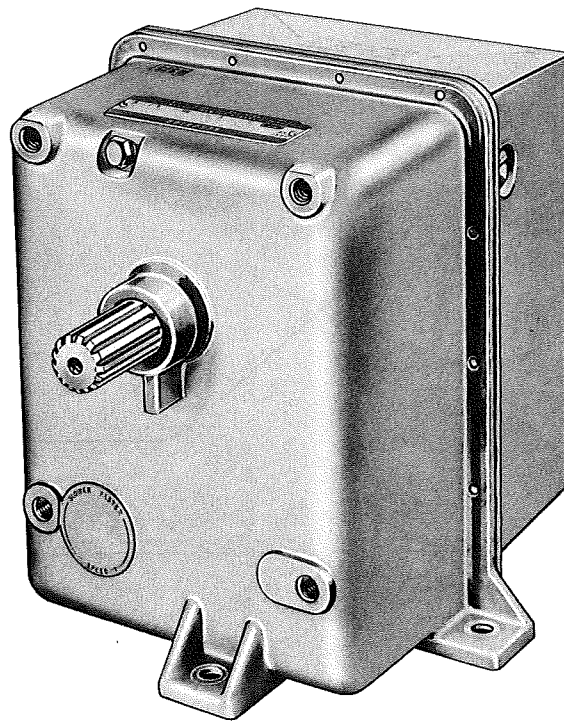
FIG. 10— YORK-FLEX COUPLING PARTS



Item	Description	Quan.	60 Cycle 1-7/8-Coupling Part No.	50 Cycle 2-1/2 X 1-7/8-Coupling Part No.
1	Complete Coupling Guard Assembly		364-33575	364-33579
2	Guard, Coupling	2	364-23999	064-29692
3	Screw, Cap Hex Hd. 1/4-20 UNC 3 X 3/4 Lg.	4	021-01379	021-01379
4	Nut, Hex 1/4-20 UNC	4	021-00450	021-00450
5	Gasket	1	064-22745	064-22745
6	Screw, Cap 12 Pt. Hd. 3/8-16 X 3/4 Lg.	4	021-12120	021-12120
7	Plug, Pipe 1/8 MPT CTS'K.	1	023-01970	023-01970
	Connector, 1/4 Tube X 1/8 MPT	1	023-07151	023-07151

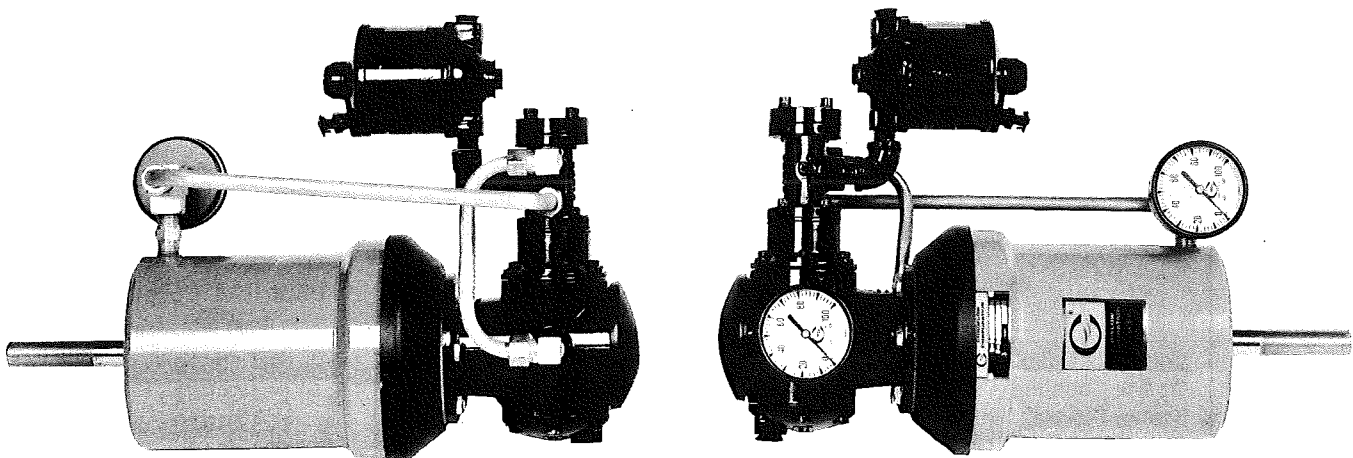
FIG. 11— YORK-FLEX COUPLING GUARD PARTS

PRV—ELECTRIC MOTOR ACTUATORS



Compr. Model	Part No.	Quan.
LKA-65	025-18411	1
LKA-73	025-18411	1

FIG. 12— ELECTRIC MOTOR ACTUATORS



Compr. Model	Part No.	Quan.
LKA-65	024-09425	1
LKA-73	024-09425	1

FIG. 13— PRV – AIR OPERATED (PNEUMATIC) POSITIONERS

COMPRESSORS

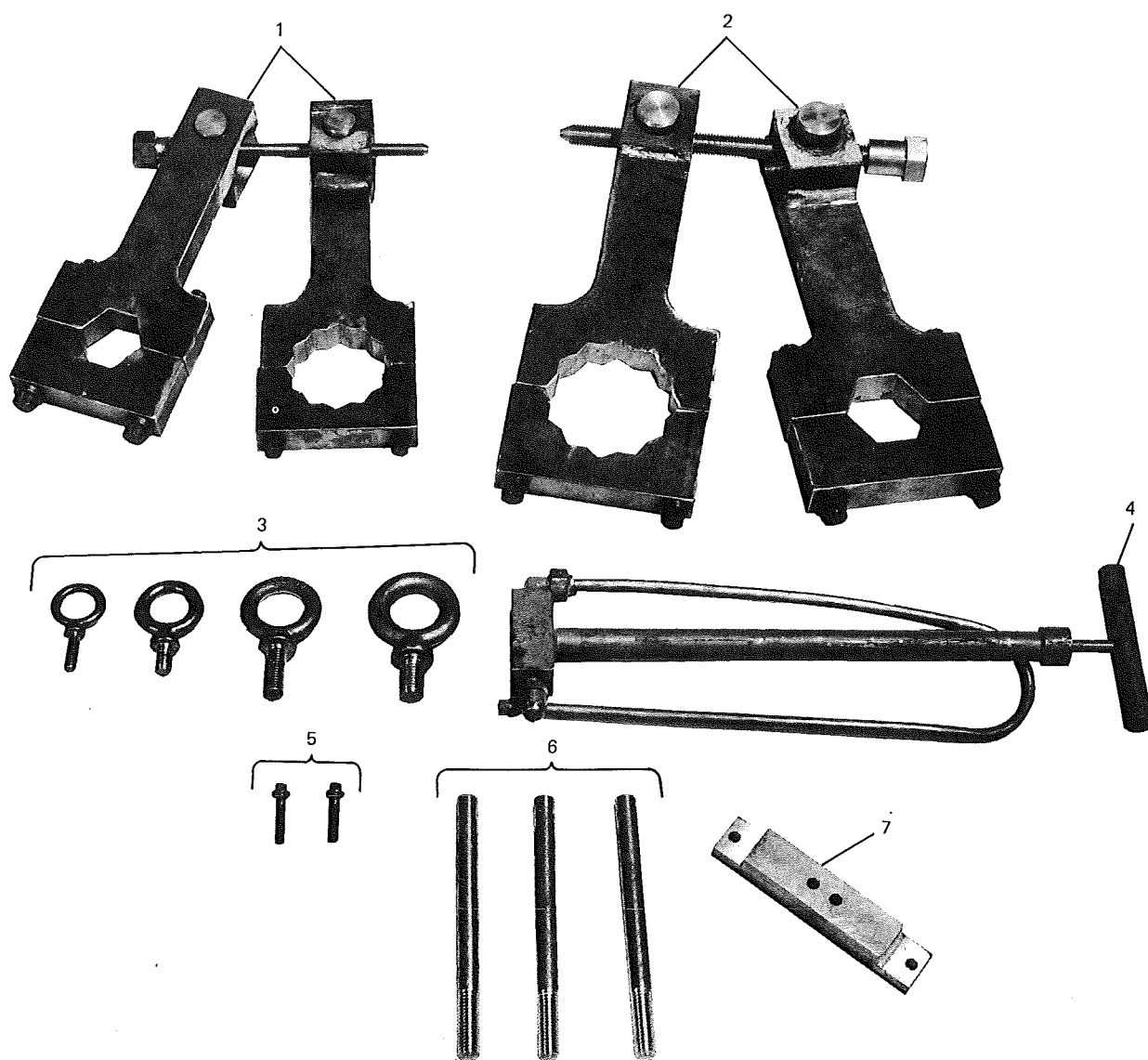


FIG. 14— COMPRESSOR TOOLS FOR MODELS LKA65 & LKA73

Item	Tool Description	Quan.	Tool Kit for 60 Cycle	Tool Kit for 50 Cycle
1	Complete Tool Kit	1	464-27541	464-29700
1	Wrench, Coupling 1-7/8	1	364-14916	364-14916
2	Wrench, Coupling 2-1/2	1		364-13875
3	Eyebolts,			
	1/2"	1	021-00306	021-00306
	3/8"	1	021-13498	021-13498
	5/8"	1	021-12366	021-12366
	3/4"	1	021-00307	021-00307
4	Pump, Hand Oil	1	470-10654	470-10654
5	Screw, Cap 12 Pt. Hd. 5/16-18UNC-2A X 1-3/8 Lg.	2	021-12465	021-12465
6	Guide Studs 5/8" X 7-1/2" Lg.	3	064-06798	064-06798
7	Tool, H.S. Shaft Locking 1" thk. X 1-1/4" X 6-1/2"	1	064-27542	064-27542

OIL PUMP AND MOTOR ASSEMBLY

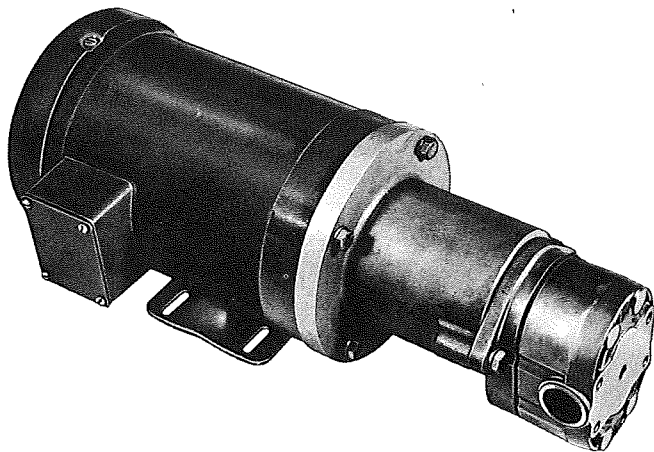
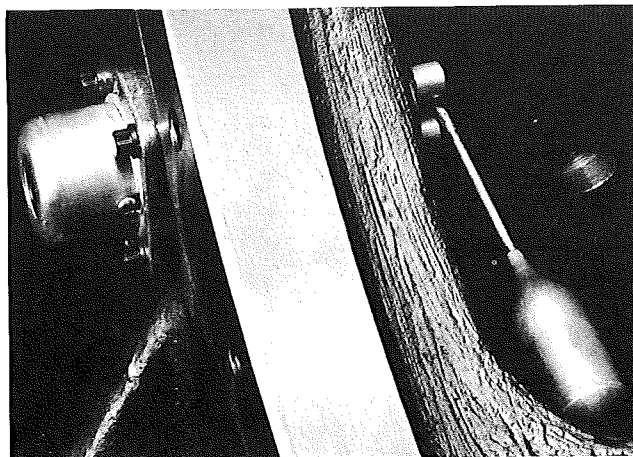


FIG. 12— OIL PUMP AND MOTOR ASSEMBLY



FLOAT SWITCH OIL RETURN

Voltage	Part No.
208-3-60	026-16027
220/440, 230/460, 240/480	026-16441
550/575/600-3-60	026-16442
380-3-50	026-17098
415-3-50	026-17099
500-3-50	026-17922

Part No.
024-16762

FIG. 13— FLOAT SWITCH

OIL PUMPS

Model	Part No.
3 PH, 60 Hz.	026-17179
3 PH, 50 Hz.	026-17180

SEAL KIT

SEAL KIT (Consists of seal, retainer plate, special seal retainer plate, "O" ring, and three screws.)	026-17178
---	-----------

MOTORS

Voltage	Part No.
230/460-3-60	024-16705
208-3-60	024-16706
575-3-60	024-16707
230/460-3-60 (explosion proof)	024-16708

OIL HEATERS

Description	Part No.	Quan.
1500W, 120V	025-17700	1

Note: Special heater, emersion style 2, 2500 watt, 120 volt, used per outdoor installation. Part Number 025-16137.

HIGH OIL TEMP. CONTROL (HOT)

Description	Part No.	Quan.
High Oil Temperature (Hot)	025-15381-003	1
High Discharge Temperature Control (HDTC)	025-15381-002	1

LUBRICANTS, OILS AND COMPOUNDS

Description	Part No.
Thread Compound, Air High Pressure—1/4 Pt. Can	464-14934
Coating Lubricant-Molykote, Type Z—2 Oz. Can	364-21508
Oil, York Refrigeration-Type B,—5 Gal. Can	011-00309



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