



**TRANE**

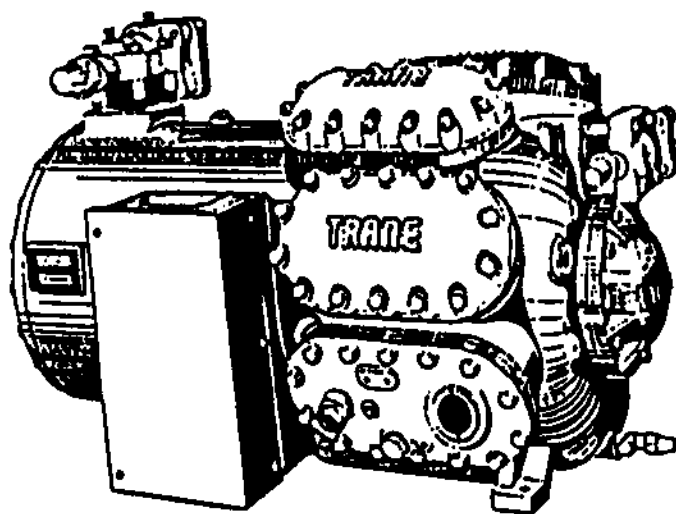
# SEMI-HERMETIC RECIPROCATING COMPRESSOR

**HCOM-UP-93**

## Unit Parts

Model(s)

CRHE  
6 & 8 Cylinder  
"M" Design Sequence



Library	Unit Parts Literature
Product Section	Refrigeration
Product	Compressor-Condensing Unit
Model	HCOM
Literature Type	Unit Parts
Sequence	93
Date	January, 1991
File No.	UP-RF-COM-HCOM-UP-93-191
Supersedes	

This parts list is designed for ease of parts selection. Wherever possible, the parts list allows parts selection without the use of the Trane model number. Parts may be selected from the illustrations and/or tables from the parts index located at the back of the parts list.

Contact your local Trane Parts Center for assistance or identification of any parts not identified in this parts list.

Since The Trane Company has a policy of continuous product improvement and parts standardization, it reserves the right to change specifications and design without notice. This parts list identifies known standardized parts and other parts changed by standardization. The installation and servicing of this equipment should be done by qualified, experienced technicians.

MODEL NUMBER DESCRIPTION

C R H E - 7 5 0 K - 4 M P 1

1 2 3 4 5 6 7 8 9 10 11 12

DIGIT 1

C = POSITIVE DISPLACEMENT  
REFRIGERANT COMPRESSOR

DIGIT 2

R = RECIPROCATING

DIGIT 3

H = HERMETIC, INTERNAL MOTOR

DIGIT 4

COMPRESSOR MODEL AND  
DEVELOPMENT SEQUENCE  
E = 1750 RPM HORIZONTAL SERVICEABLE, CAST IRON

DIGIT 5, 6, 7

NOMINAL COMPRESSOR SIZE SUCTION  
VALVE LIFT REFRIGERANT COMPATABILITY  
COMPRESSOR DIGITS 5, 6, 7  
MODEL SIZE REFRIGERANT

MODEL	SIZE	REFRIGERANT	CU. IN. PER REV.	NO. CYL.	SPECIAL FEATURE
E	750	R-22	173.3	6	STD. LIFT VALVES
	1C0	R-22	231.0	8	STD. LIFT VALVES
	751	R-22	173.3	6	LOW LIFT VALVES
	1C1	R-22	231.0	8	LOW LIFT VALVES

DIGIT 8

COMPRESSOR MOTOR FREQUENCY AND VOLTAGE

NOMINAL	MIN. VOLTS	MAX. VOLTS
A = 200-60-3	180	220
B = 230/460-60-3	207/414	254/506
C = 460-60-3	414	508
D = 575-60-3	518	635
E = 200/400-50-3	180/343	220/456
F = 220-50-3	198	254 (242 ON MODEL E)
G = 400-50-3	343	456
H = 208/230-60-1	197	254
J = 200/230-60-3	180	254
J = 200/220-50-3	180	254
K = 400-50-3/460-60-3	340/414	460/508
L = 208-50/60-3	198	229
M = 230-50/60-1	215	254
N = 115-60-1	109	128
P = 208-400-3	198	229
Q = 200-50-3/230-60-3	180/207	220/254
R = 208-60-3	187	254
S = SPECIAL		
U = 200-50/60-3	180	220
V = 346-50-3	308	381
W = 230-60-3	208	254
X = 380-60-3	342	418
Y = 200-50-3	180	220
Z = 363-50-3	327	399

BLANK = CAST IRON HERMETIC  
WITHOUT MOTOR (EPINAL)

DIGIT 9

COMPRESSOR UNLOADING  
NUMBER OF CYLINDERS THAT UNLOAD

0 =	NONE
1 =	1
2 =	2
3 =	3
4 =	4
5 =	5
6 =	6

DIGIT 10

DESIGN SEQUENCE FACTORY ASSIGNED DIGIT  
M = FIRST  
\* REMANUFACTURED COMPRESSORS WILL HAVE  
"R" AS THE 10TH DIGIT

DIGIT 11

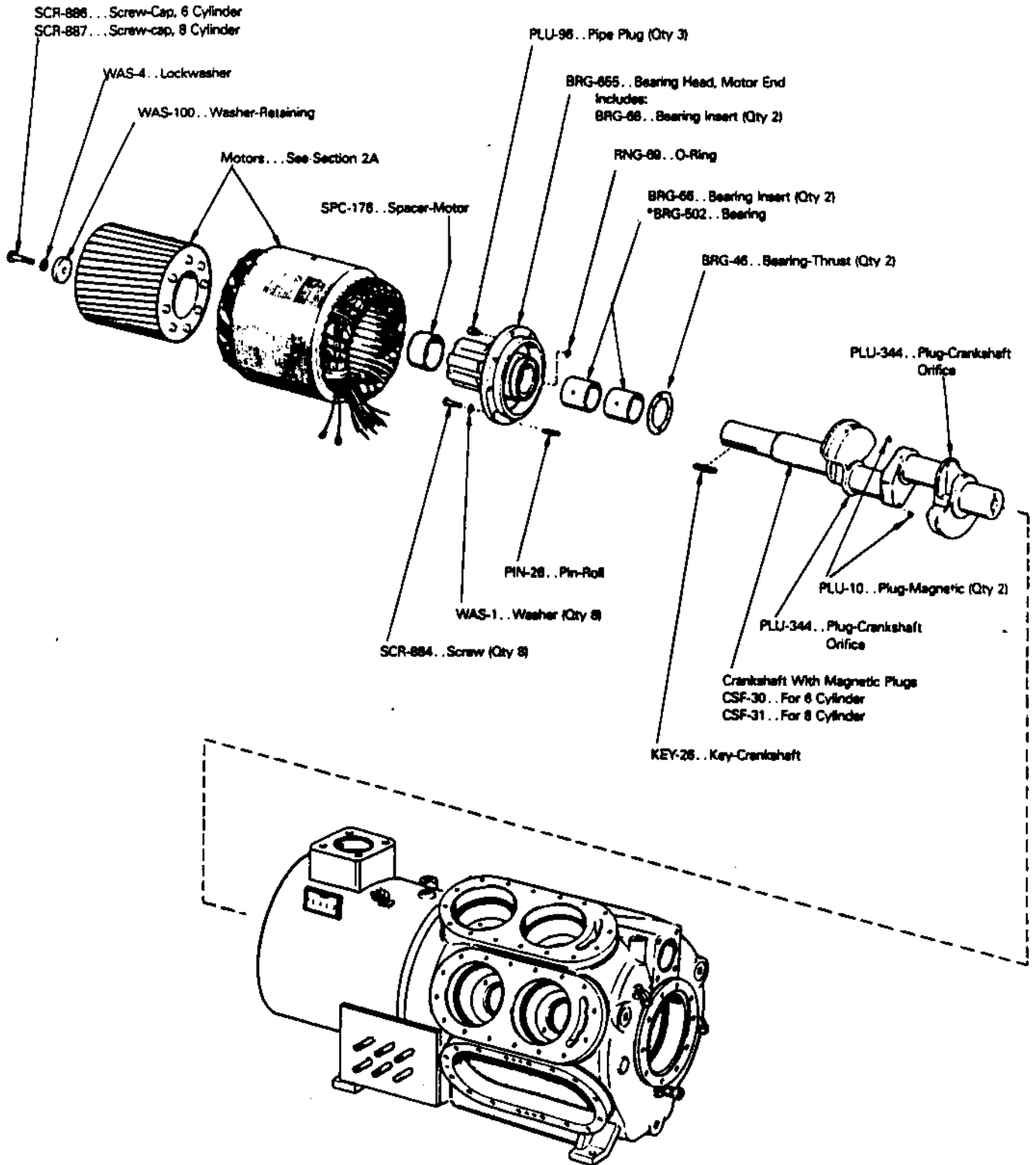
UNLOADER CONTROL AND  
UNLOADING METHOD

O = NO LOADING  
A = 115 VAC, ELECTRIC  
B = 230 VAC, ELECTRIC  
C = 12 VDC, ELECTRIC  
E = 32 VDC, ELECTRIC  
F = 64 VDC, ELECTRIC  
G = 187 VDC, ELECTRIC  
H = 24 VAC, ELECTRIC  
P = SUCTION PRESSURE UNLOADING  
R = REMOTE ELECTRIC, COMPRESSOR HANDHOLE  
COVER ONLY  
S = SPECIAL

DIGIT 12

BASIC COMPRESSOR VARIATION  
0 = STANDARD COMPRESSOR  
1 = 100% UNLOADED START  
2 = STANDARD COMPRESSOR -  
RIGHT HAND  
3 = 100% UNLOADED START -  
RIGHT HAND

## Section 2 - Motor and Crankshaft Assembly



\* Undersized Bearing. Used on remanufactured compressors.  
 Bearing must be used in conjunction with undersized crankshaft.  
 See Service Bulletin... HCOM-SB-58.

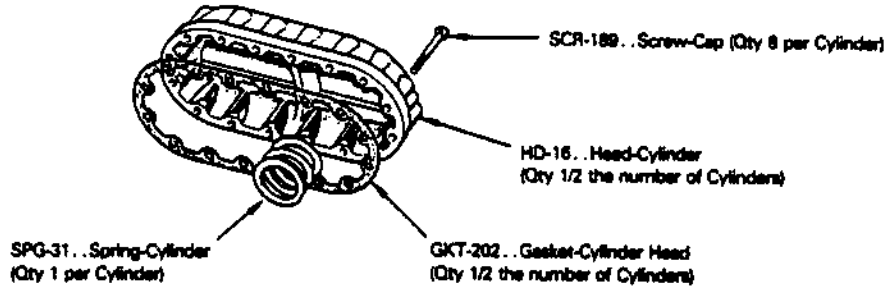
# Section 3 - Cylinder Head Assembly

## Discharge Valve Assembly . . VAL-1090

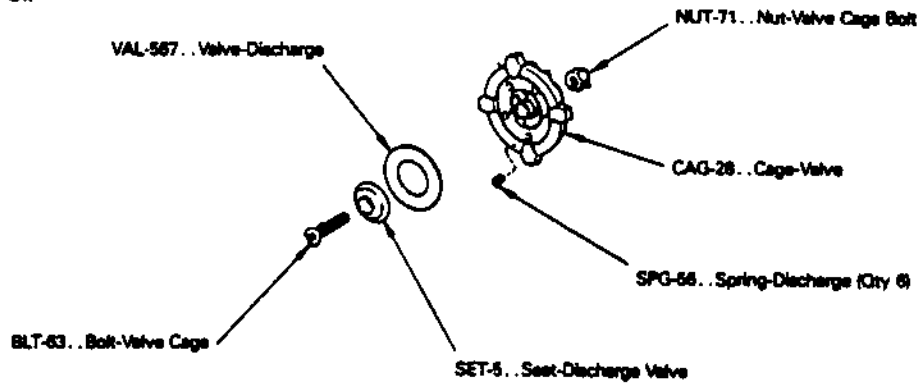
## Piston & Connecting Rod Assembly . . PST-17

Note: All Parts Shown Below Are PER CYLINDER Unless Otherwise Noted.

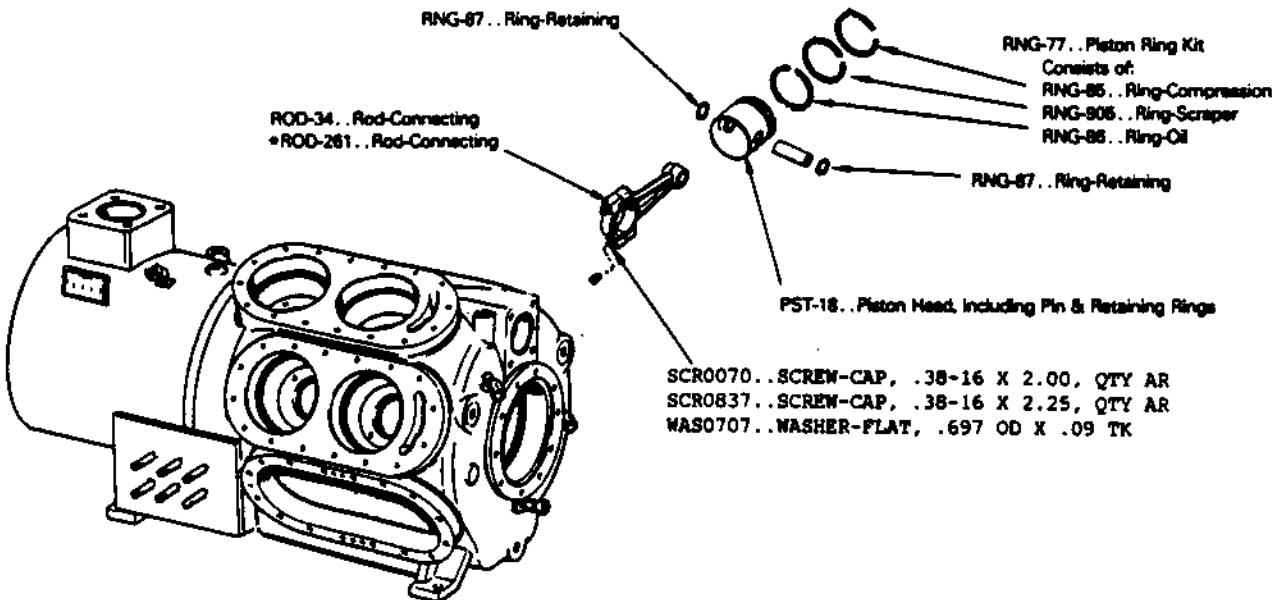
Cylinder Head Assy  
Consists Of:



VAL-1090 . . Discharge Valve Assy Complete  
Consists Of:

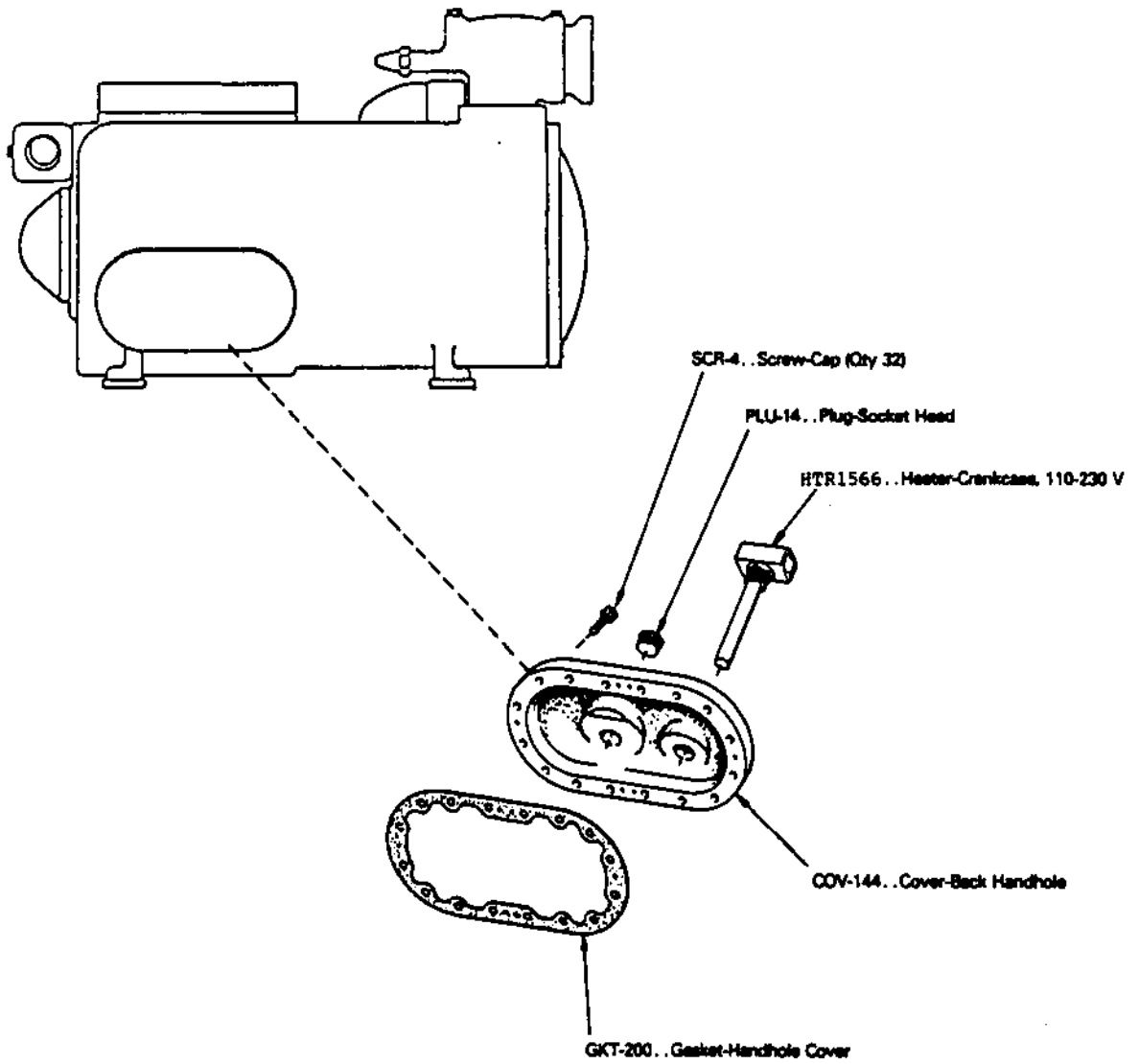


PST-17 . . Piston & Connecting Rod Assy  
Consists Of:

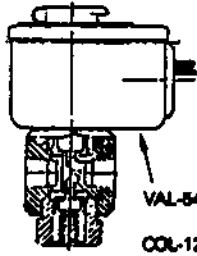


\* Undersized Rod. Used on remanufactured compressors. Rod must be used in conjunction with undersized crankshaft. See Service Bulletin . . HCOM-SB-59.

## Section 4 - Back Handhole Cover

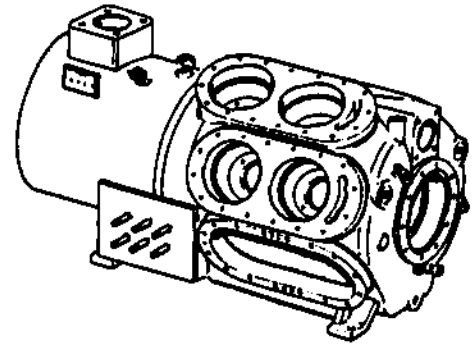


## Section 5A - Control Handhole Cover-Solenoid Valve Remote, 2 Step

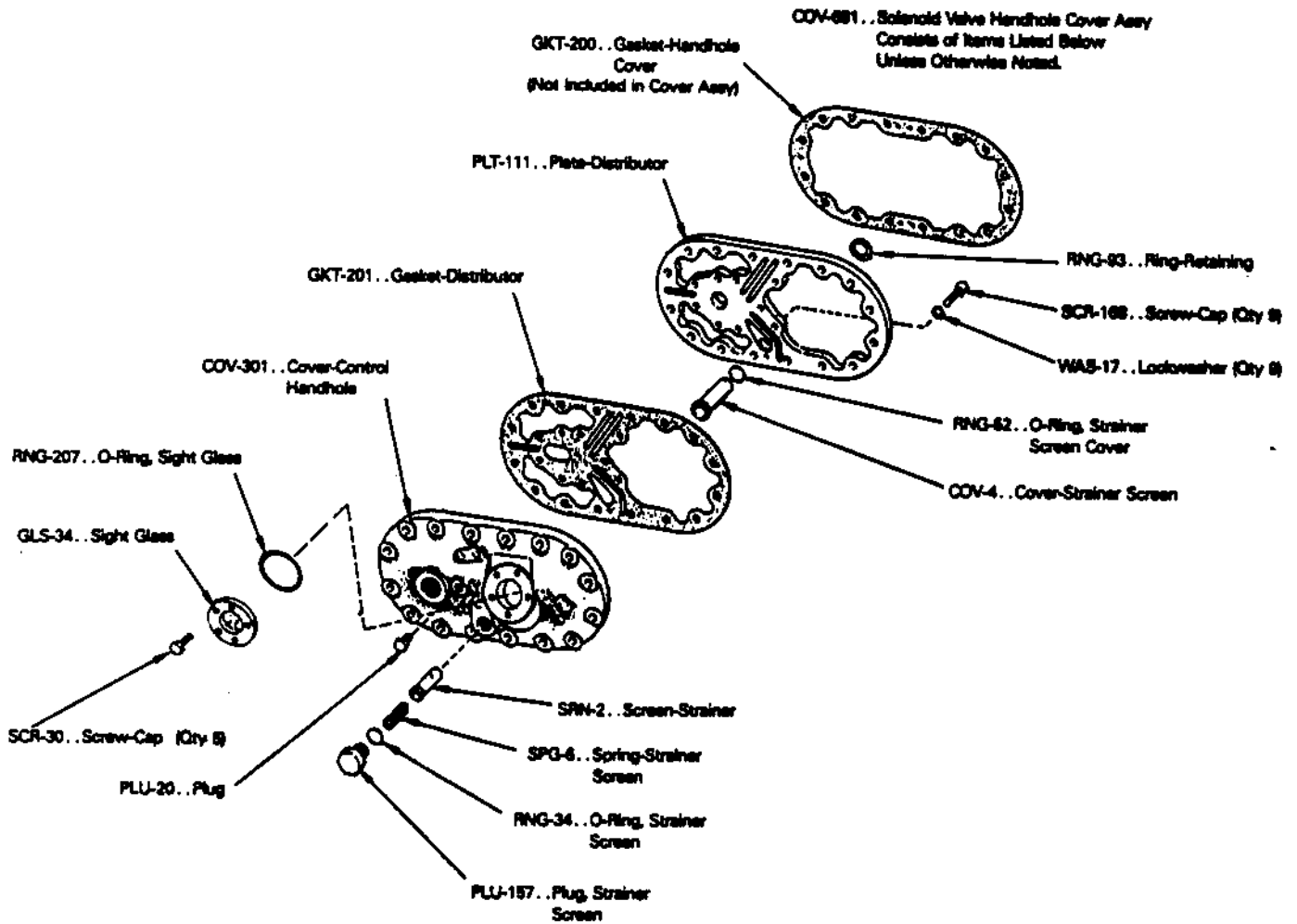


Remote Solenoid Valve Mounted on Unit  
& Connected To Compressor

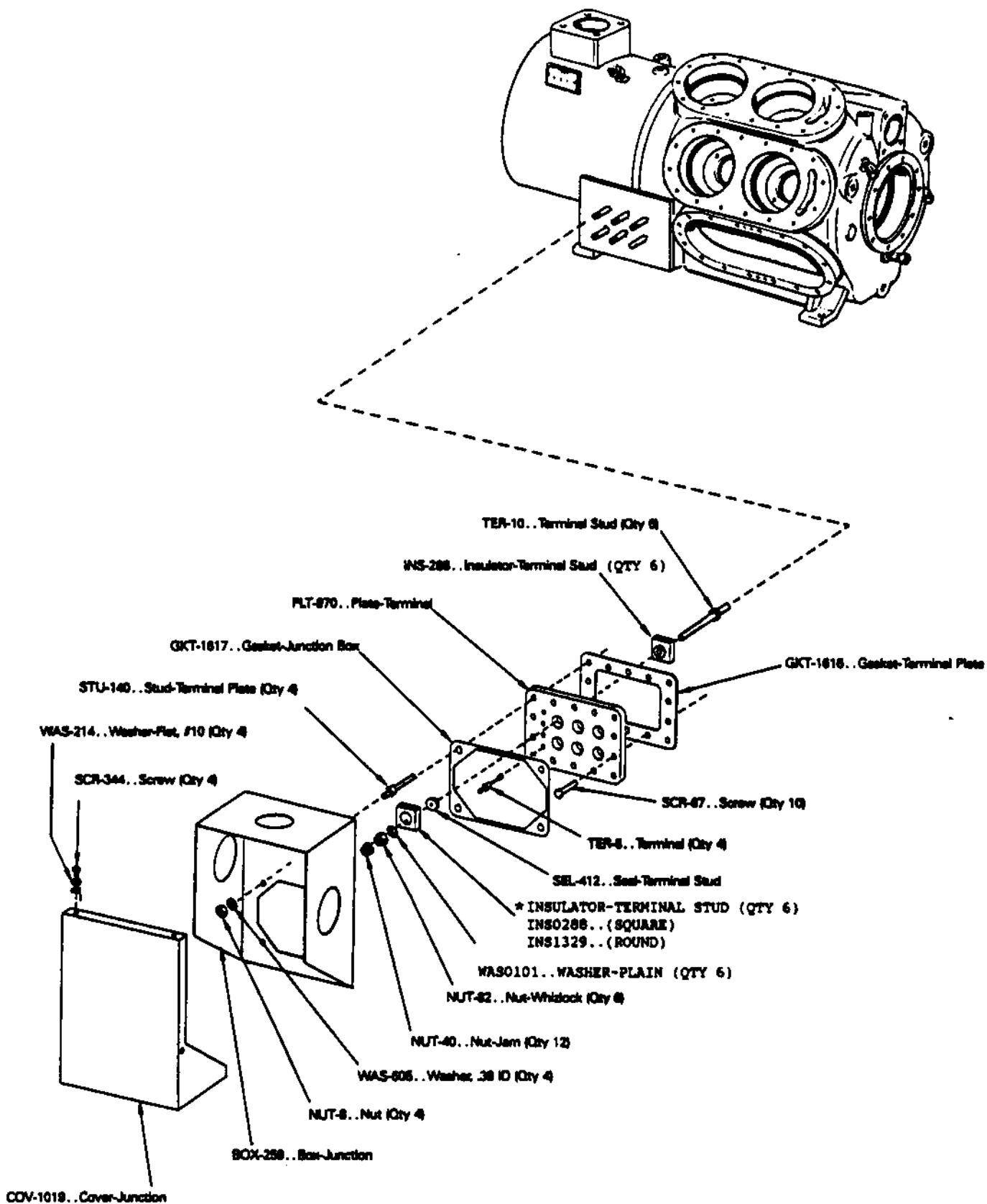
- VAL-545... Valve-Remote, Solenoid, 3 Way  
Asco 110-120/80-80
- COL-1232... Coil-Remote Solenoid Valve 110-120 V  
Asco No. 98-619-1D (Use with VAL-545)
- VAL-543... Valve-Remote, Solenoid, 3 Way  
Asco 220-240/80-80
- COL-1233... Coil-Remote Solenoid Valve 220-240 V  
Asco No. 98-619-2D (Use With VAL-543)



COV-681... Solenoid Valve Handhole Cover Assy  
Consists of Items Listed Below  
Unless Otherwise Noted.



## Section 6 - Junction Box Assembly



\* CURRENT PRODUCTION USES ROUND TERMINAL STUD INSULATORS (INS1329) ON THE FRONT AND SQUARE INSULATORS (INS0288) ON THE BACK OF THE TERMINAL PLATE. EITHER ROUND (INS1329) OR SQUARE (INS0288) INSULATORS CAN BE USED FOR REPLACEMENTS ON THE FRONT ONLY. SQUARE INSULATORS (INS0288) MUST BE USED ON THE BACK.

PART NO.	DESCRIPTION OF PART	SEC.	REQ.	RLS
COV0302	COVER-CONTROL HANDHOLE	5B	1	
COV0456	COVER-ELECTRIC HANDHOLE, 230 V, COMPLETE	5B	1	
COV0457	COVER-ELECTRIC HANDHOLE, 115 V, COMPLETE	5B	1	
COV0560	COVER-SUCTION HANDHOLE ASSEMBLY	5	1	
COV0681	COVER-SOLENOID VALVE HANDHOLE ASSY	5A	1	
COV1018	COVER-SUCTION	1	1	
COV1019	COVER-JUNCTION	6	1	
COV1181	ELECTRIC HANDHOLE COVER ASSEMBLY, 24V	5B	1	
COV1182	ELECTRIC HANDGOLE COVER ASSEMBLY, 12 VDC	5B	1	
COV1457	ELECTRIC HANDHOLE COVER ASSEMBLY, 24 VDC	5B	1	
CSF0030	CRANKSHAFT W/ MAGNETIC PLUGS, FOR 6 CYLINDER	2	1	
CSF0031	CRANKSHAFT W/ MAGNETIC PLUGS, FOR 8 CYLINDER	2	1	
ELLO002	ELBOW-FLARE	5/5B	1	
ELLO157	ELBOW	1	1	
FLG0109	FLANGE-CLOSURE, FOR 6 CYLINDER	1	1	
FLG0110	FLANGE-CLOSURE, FOR 8 CYLINDER	1	1	
FLG0111	FLANGE-CLOSURE	1	1	
GKT0015	GASKET-DISCHARGE, FOR 6 CYLINDER	1	1	+
GKT0024	GASKET-CAPACITY CONTROL	5	1	+
GKT0029	GASKET-BELLOWS ADJUSTIVE, SUCTION CONTROL HANDHOLE COVER	5	1	+
GKT0044	GASKET-DISCHARGE, FOR 8 CYLINDER	1	1	+
GKT0045	GASKET-SUCTION, FOR 6 & 8 CYLINDER	1	1	+
GKT0199	GASKET-OIL PUMP	1	1	+
GKT0200	GASKET-HANDHOLE COVER	5-5B	1	+
GKT0200	GASKET-BACK HANDHOLE COVER	4	1	+
GKT0201	GASKET-DISTRIBUTOR, HANDHOLE COVER	5/5A	AR	+
GKT0202	GASKET-CYLINDER HEAD (QTY 1/2 PER CYLINDER)	3	AR	+
GKT0283	GASKET-DISTRIBUTOR, ELECTRIC HANDHOLE COVER	5B	1	+
GKT1615	GASKET- SUCTION COVER	1	1	
GKT1616	GASKET-TERMINAL PLATE	6	1	
GKT1617	GASKET-JUNCTION BOX	6	1	
GLS0034	SIGHT GLASS, HANDHOLE COVER	5-5B	1	+
GRD0039	GUARD-PLATE, ELECTRIC HANDHOLE	5B	1	
HD0016	HEAD-CYLINDER (QTY 1/2 THE NUMBER OF CYLINDERS)	3	AR	
HTR1566	HEATER-CRANKCASE, 110-230 V	4	1	+
INS0288	INSULATOR-TERMINAL STUD	6	6	
INS1329	INSULATOR-TERMINAL STUD (ROUND)	6	6	
KEY0026	CRANKSHAFT KEY	2	1	
KIT0141	KIT-OIL LINE, 6 CYLINDER	1	1	
KIT0142	KIT-OIL LINE, 8 CYLINDER	1	1	
KIT0180	KIT-CYLINDER, O-RING	3A	AR	
KIT1370	KIT-COMPRESSOR GASKET & O-RING	2A	1	+
LNRO033	LINER-CYLINDER ASSEMBLY, WITHOUT UNLOADERS, STANDARD LIFT VALVE	3A	AR	
LNRO034	LINER-CYLINDER ASSEMBLY, WITH UNLOADERS, STANDARD LIFT VALVE	3A	AR	
LNRO035	LINER-CYLINDER ASSEMBLY, WITH UNLOADERS, LOW LIFT VALVE	3A	AR	
LNRO036	LINER-CYLINDER	3A	AR	



PART NO.	DESCRIPTION OF PART	SEC.	REQ.	RLS
RNG0038	O-RING, SOLENOID VALVE MOUNTING, ELECTRIC HANDHOLE COVER	5B	9	+
RNG0052	O-RING, STRAINER SCREEN COVER, SUCTION CONTROL HANDHOLE COVER	5-5B	1	+
RNG0061	RING-CAPACITY CONTROL	5	1	+
RNG0065	O-RING, SUCTION VALVE PLATE	3A	1	+
RNG0069	O-RING, BEARING HEAD MOTOR END & PUMP END	1/2	2	+
RNG0077	PISTON RING KIT (QTY 1 PER CYLINDER)	3	AR	+
RNG0085	RING-COMPRESSION FOR PISTON RING KIT	3	1	+
RNG0086	RING-OIL FOR PISTON RING KIT	3	1	+
RNG0087	RING-RETAINING, PISTON & CONNECTING ROD ASSY	3	2	+
RNG0088	RING-TAKE UP	3A	1	+
RNG0090	O-RING, UNLOADER SEAL RING	3A	1	+
RNG0092	O-RING, UNLOADER PISTON	3A	1	+
RNG0093	RING-RETAINING, HANDHOLE COVER	5-5B	1	+
RNG0099	O-RING, CYLINDER LINER TO UNLOADER	3A	2	+
RNG0229	RING-RETAINING	3A	1	+
RNG0128	O-RING, BEARING HEAD TO HOUSING	1	1	+
RNG0130	O-RING, OIL PUMP COVER TO HOUSING	1	1	+
RNG0133	O-RING, MOTOR MOUNTING, .06 X .69 X .81	1	1	+
RNG0207	O-RING, SIGHT GLASS FOR COV0300	5-5B	1	+
RNG0905	RING-SCRAPER FOR PISTON RING KIT	3	1	+
ROD0034	ROD-CONNECTING (QTY 1 PER CYLINDER)	3	AR	
ROD0261	ROD-CONNECTING (UNDERSIZED) (QTY 1 PER CYLINDER)	3	AR	+
	*UNDERSIZED ROD. USED ON REMANUFACTURED COMPRESSORS. ROD MUST BE USED IN CONJUNCTION WITH UNDERSIZED CRANKSHAFT. SEE SERVICE BULLETIN...HCOM-SB-59.			
SCR0003	SCREW, 5/8 - 11 X 2, HEX CAP	1	4	
SCR0004	SCREW-CAP, HEX HEAD, 9/16-12 X 2, BACK HANDHOLE COVER	4	32	
SCR0030	SCREW-CAP, HEX HD., 1/4-20 X 3/4, FOR COV0300	5-5B	5	
SCR0031	SCREW-CAP, HEX HD., 5/16-18 X 7/8, ELECTRIC HANDHOLE COVER	5B	3	
SCR0046	SCREW-CAP, 12 PT. HD., 3/8-24 X 1 3/4 SUCTION CONTROL HANDHOLE COVER ASSEMBLY	5	7	
SCR0047	SCREW-BELLOW ADJUSTING, SUCTION CONTROL HANDHOLE COVER	5	1	
SCR0060	SCREW, FOR 8 CYLINDER DISCHARGE SERVICE VALVE		4	
SCR0061	SCREW, FOR 6 & 8 CYLINDER SUCTION SERVICE VALVE		4	
SCR0067	SCREW	6	10	
SCR0070	SCREW-CAP, .38-16 X 2.00	3	AR	
SCR0121	SCREW	1	4	
SCR0160	SCREW-CAP, HEX HD., 7/16-14 X 1 1/2	1	10	
SCR0168	SCREW-CAP, 12 PT. HD., 3/8-24 X 1, HANDHOLE COVER	5-5B	AR	
SCR0189	SCREW-CAP, HEX., 9/16-12 X 3, CYLINDER HEAD QTY 8 PER CYLINDER	3	AR	
SCR0202	SCREW-SOLENOID VALVE	5B	6	
SCR0210	SCREW, SUCTION CONTROL HANDHOLE COVER	5	1	
SCR0215	SCREW-MOTOR MOUNTING	1	1	
SCR0344	SCREW	6	4	
SCR0346	SCREW-CAP	1	16	
SCR0582	SCREW FOR 6 CYLINDER DISCHARGE VALVE		4	

PART NO.	DESCRIPTION OF PART	SEC.	REQ.	RLS
WAS0004	LOCKWASHER, 3/4"	2	1	
WAS0017	LOCKWASHER, 3/8"	5	9	
WAS0100	WASHER-RETAINING	2	1	
WAS0101	WASHER-PLAIN	6	6	
WAS0110	LOCKWASHER	1	9	
WAS0214	WASHER-FLAT, #10	6	4	+
WAS0605	WASHER, .38 ID	6	4	
WAS0707	WASHER-FLAT, .697 OD X .375 ID X .09 TK	3	1	