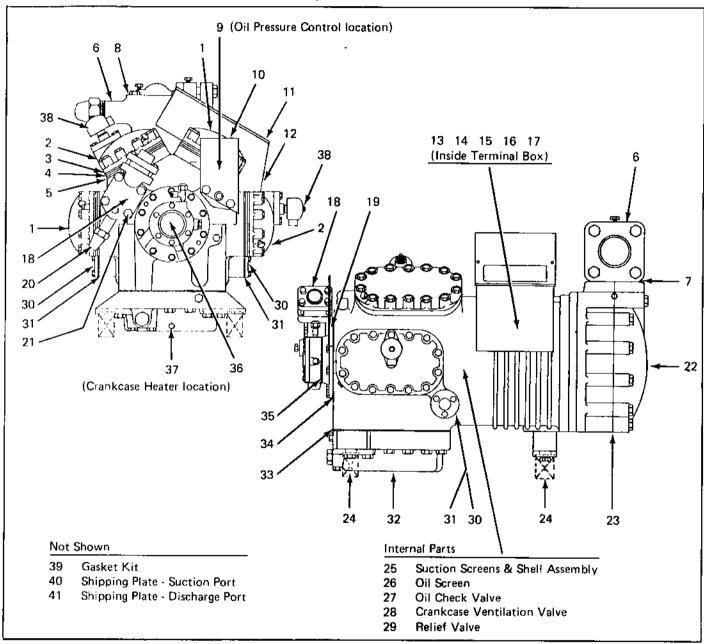


# "8D/8R" SERIES COPELAMETIC® COMPRESSOR PARTS LIST

# **Outline Drawing with Reference Numbers**



NOTE: The replacement parts identified in this parts list are listed in the sequence of the reference numbers on this drawing.

500 Conrad Harcourt Way Rushville, Indiana 46173-0218 Phone (317) 932-2956

Field Replacement Parts				
Ref. No.	Part Description	Part Number	Model Series	
1	Cylinder Head - Standard Bank	002-0160-00	8D	
	Cylinder Head - Standard Bank	002-0179-00	8RP	
	Cylinder Head - Standard Bank	002-0185-00	8RS	
2	Cylinder Head - Unloaded Bank	002-0192-00	8D	
_	Cylinder Head - Unloaded Bank	002-0184-00	8RP	
	Cylinder Head - Unloaded Bank	002-0185-00	8RS	
3	Gasket - Cylinder Head	020-0600-00	8D	
_	Gasket - Cylinder Head	020-0629-00	8R	
4	Valve Plate Kit - Standard Bank	998-1661-01	8D	
7	Valve Plate Kit - Unloaded Bank	998-1661-03	8D	
	Valve Plate Kit	998-0661-51	8RP	
	Valve Plate Kit	998-0661-60	8RS	
	(Valve plate kits include valve plate assemb			
		020-0664-02	8DP	
5	Gasket - Valve Plate to Body		8DS	
	Gasket - Valve Plate to Body	020-0664-04	8RP	
	Gasket - Valve Plate to Body	020-0627-00		
	Gasket - Valve Plate to Body	020-0628-01	8RS	
6	Suggested Suction Service Valve - 26/8" Swt.	510-0146-01	8DP, 8RP	
	Suggested Suction Service Valve - 31/8" Swt.	510-0146-00	8DS, 8RS	
7	Gasket - Suction Service Valve	020-0006-37	All	
8	Bolt - Suction Valve Mounting	100-0178-00	All	
	·	(4 required)		
9	Sentronic Oil Pressure Control (Includes Sentronic oil pressure control, oil mounting bracket; if required, order 998-02		All unting hardware. Does not include	
	• • • • • • • • • • • • • • • • • • • •		A.11	
	Sentronic and Oil Pump Retrofit Kit (Contains all parts necessary to convert to sensor, new oil pump kit and mounting has 998-0700-05.)			
	Capillary Tube Oil Pressure Control (Does not include mounting bracket; if requ	085-0062-00 uired, order 998-0700-05.	All )	
10	Mounting Bracket - Oil Pressure Control	998-0700-05	All	
11	Terminal Box Cover	005-0430-00	All	
12	Terminal Box	062-0135-01	All	
13	Terminal Board	580-0054-00	All	
14	Terminal Connection Parts	521-0065-00	All	
15	Terminal Plate, Stud, Insulation Assembly			
	FSD Electrical	521-0136-01	All	
	TSK Electrical	521-0138-01	All	
16	Gasket - Terminal Plate	020-0638-00	All	
17	Motor Protection Module			
• •	240 Voit	998-0424-00	All	
	120 Volt	998-0424-01	Ali	
18	Suggested Discharge Service Valve - 15/8" Swt.	510-0062-00	All	
19	Gasket - Discharge Service Valve	000 0000 00	A D	
	ricevet Theobarda Samuas Vakas	020-0006-33	All	

	Field Re	eplacement Parts		
Ref. No.	Part Description	Part Number	Model Series	
20	Cap - Discharge Valve (Henry only)	505-0251-00	All	
21	Bolt - Discharge Valve Mounting	100-0013-56 (4 required)	All	
22	Stator Cover	005-0563-00	All	
23	Gasket - Stator Cover	020-0597-00	All	
24	Mounting Parts Kit	527-0115-00	All	
25	Suction Screens & Shell Assembly	548-1051-00	All	
26	Oil Screen	998-0513-02	All	
27	Oil Check Valve	510-0257-00	All	
28	Crankcase Ventilation Valve	510-0003-00	All	
29	Relief Valve	998-0051-00	All	
30	Sight Glass Kit (Includes glass, gaskets and mounting screen	998-0002-02 ws. Note: 8D and 8R con	All npressors have two oil sight glasses.)	
31	Gasket - Sight Glass	020-0003-03	All	
32	Deep Bottom Sump	003-0586-00	All	
33	Gasket - Bottom Sump	020-0635-00	All	
34	Gasket - Housing Cover	020-0636-00	All	
35	Gasket - Oil Pump	020-0733-00	All	
36	Oil Pump Kit 998-0008-33 All (Includes oil pump, gaskets, adapter and mounting bolts. Accommodates both Sentronic and capillary tube type oil pressure controls.)			
<b>3</b> 7	Crankcase Heater with Clip 240 Volt 120 Volt	998-0518-01 998-0518-00	All All	
38	Capacity Control Valve - See Section listing Capacity Control Replacement Parts			
39	Complete Gasket Kit (Includes all gaskets used in compressor.)	998-1669-01	All	
40	Shipping Plate - Suction Port	003-0203-00	All	
	Gasket - Suction Shipping Plate Bolt - Suction Shipping Plate	020-0006-33 100-0013-51	AII All	
	Bott - Suction Shipping Flate	(4 required)	7.01	
41	Shipping Plate - Discharge Port	003-0055-01	All	
•	Gasket - Discharge Shipping Plate Bolt - Discharge Shipping Plate	020-0489-00 100-0013-48	All All	

# Internal Parts

Non-field replaceable internal components which are not included in this parts list, such as piston and rod assemblies, crankshafts and bearings, are not available.

# CAPACITY CONTROL REPLACEMENT PARTS

## Valve & Coil Assembly

Vendor	24 Volt	120 Volt	240 Volt	480 Volt
Alco	510-0212-01	510-0212-02	512-0212-03	512-0212-04
Sporlan	510-0243-01	510-0243-02	512-0243-03	510-0243-04

#### Coll

Vendor	24 Volt	120 Volt	240 Volt	480 Volt
Alco	023-0039-00	023-0039-01	023-0039-02	023-0039-03
Sporlan	023-0041-00	023-0041-01	023-0041-02	023-0041-03

## **Miscellaneous Capacity Control Components**

Vendor	Valve Only	Piston Assembly	Spring	Gasket
Alco	510-0212-00	504-0130-00	006-0200-00	020-0671-00
Sporian	510-0243-00	504-0130-00	006-0200-00	020-0671-00

The control valve and coil must be of the same manufacturer, either Alco or Sporlan.

Note: 8D and 8R Copelametic compressors are equipped on two cylinder banks with heads designed to accept capacity control. When one or two bank capacity control is needed, remove the cover plates from the heads and install capacity control valve and coil assemblies using new gaskets. The capacity control valve and coil assembly and new gasket must be ordered separately. When capacity control is not needed, the compressor can be operated with the cover plates in place.

## **OIL SPECIFICATIONS AND RECHARGE**

Refrigeration oils approved for use in the 8D and 8R series are Calumet R015, Suniso 3GS and Texaco WF32. The three oils are compatible if mixed and are suitable for both high and medium temperature applications.

All 8D and 8R series compressors take a field recharge of 244 fluid ounces of oil.

## **DUAL OIL LEVEL SIGHT GLASSES**

8D and 8R compressors are equipped with two oil level sight glasses to permit observation of oil level from either side.

## **NEW INSTALLATIONS**

For new installations order the following accessories as they are not included with the compressor:

- Mounting parts kit Reference number 24
- Service valves, valve mounting bolts and valve gaskets Reference numbers 6, 7, 8, 18, 19 and 21
- Motor protection module, if 120 volts is required (240 volt is standard and is included with the -800 bill of material compressor) - Reference Number 17
- Crankcase heater (specify voltage required) Reference number 37
- Capacity control (specify voltage if required) Reference number 38 (See Capacity Control Replacement Parts section)

ORDER GENUINE COPELAND REPLACEMENT PARTS THROUGH AUTHORIZED COPELAND WHOLESALERS ONLY