

**TRANE™**

General Service Bulletin

HCOM-SB-76

Library	Service Literature
Product Section	Refrigeration
Product	Compressor-Condensing Units
Model	Model E Hermetic
Literature Type	General Service Bulletin
Sequence	76
Date	6/21/89
File No.	SV-RF-COM-SB-76-689
Supersedes	

Subject: Model E Reciprocating Compressor Discharge Valve-Seat Failure

Introduction:

A problem has been identified with the discharge valve-seat on Model E open and semihermetic reciprocating compressors manufactured from November 1988, thru and including February 1989. Since failure of the discharge valve-seat will result in compressor mechanical failure, all units equipped with compressors affected by this bulletin must be identified and the compressors repaired.

Discussion:

The use of an improper heat treatment process by a vendor causes the discharge valve-seat to become hard and brittle. The valve-seat will crack and fragmentize. In addition to the likelihood of these fragments falling into the cylinder, discharge valve-seat failure allows discharge pressure to bypass the valve and exert a continuous downward pressure on the piston, which will result in an overloaded bearing journal and/or wrist-pin failure. The required repair procedure consists of replacing all discharge valve-cage assemblies on the compressor.

Corrective Action

1. Secure the compressor electrically from operating.
2. Close the compressor suction and discharge service valves. Relieve refrigerant pressure from discharge-, and suction-sides of the compressor.
3. Remove all compressor cylinder-heads and replace all discharge valve-cage assemblies. Refer to Compressor Service and Overhaul manuals 2D3E or 2C1C.

WARNING: To prevent injury or death be certain to use proper removal techniques for the spring-loaded cylinder-heads.

4. Reassemble compressor and evacuate to 500 microns.
5. Open compressor suction and discharge service valves and put compressor back into operation.

Units Affected

The types of units that may be equipped with compressors affected by this bulletin were shipped during November 1988 thru February 1989 and include the following models:

Product Code 055

MODELS:

CCAC, CCWC, CGWC-C75E, D10E, D15E, D18E, D20E
CGOA, CCOA-032E, 075E, 100E
CCKC, CGHC, CGRC-C75E, D10E

Product Code 056

MODELS:

CGAC-D15E, D18E, D20E

Product Code 057

MODELS:

CUAB, CUWB, RWUB-C75E, D10E
CUOA, RWOA-C75E, D10E

Parts Required Information

Refer to Table 1 to determine quantities and identify parts required for discharge valve-cage replacement.

Table 1
Replacement Discharge Valve-Cage
Assemblies and Cylinder-Head Gaskets
for Model E Open and Semihermetic
Reciprocating Compressors

Valve-Cage Assembly	4	VAL-1090	6	VAL-1090	8	VAL-1090
Cyl. Head Gasket	2	GKT-202	3	GKT-202	4	GKT-202

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La Crosse, Wisconsin 54601-7599
Printed in U.S.A.

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