TRANE

General Service Bulletin

OCOM-SB-6E

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Literature Changes:
OCOM-SB-6 – Original issue of service bulletin.
OCOM-SB-6A –
OCOM-SB-6B –
OCOM-SB-6C – Revised Tables 1 and 2.
OCOM-SB-6D – Revised "Disc Pack" column heading in Tables 1 & 2; reformatted bulletin.
OCOM-SB-6E – Revised pilot-bored motor flange to solid flange.

Subject: Flexible Couplings for Model A, B, E and F Open Reciprocating Compressors

Introduction:

This service bulletin provides a listing of flexible coupling assemblies for use with Model A, B, E and F open reciprocating compressors. Replacement disc pack assemblies for the couplings are also listed along with information for field-boring couplings that have solid motor flanges.

Discussion:

All flexible couplings have the compressor flange bored to fit Trane compressors. Table 1 lists couplings stocked with motor flanges bored to fit most standard frame motors. Table 2 lists additional couplings stocked by Trane or direct shipped, but with a "blank" or solid motor flange. Couplings with a pilot bore are no longer available. Motor flanges on the latter couplings are to be bored to fit by the customer. Refer to Table 3 and Figures 1 and 2 for flange machining and keyway information.

Note: The Trane Company will not bore the motor flange.

The following information is required to select a replacement flexible coupling:

1. Compressor shaft size.

   Note: Model A and E compressors have a 2" diameter shaft;
   Model B and F compressors have a 1-1/2" diameter shaft.

2. Motor shaft size and horsepower.

3. Vendor's flexible coupling part number, if available.

Table 1
Flexible Couplings with Finished Motor Bores

Coupling Part No. (Trane Mnemonic)	Coupling HP Rating 1450 RPM	Coupling HP Rating 1750 RPM	Thomas Coupling No.	Compressor Shaft Bore	Motor End Bore	Replacement Disc Pack Assemblies (Trane Mnemonic)
CPL-0001	15	15	163D8Z-8 *	1.485"	1.625"	RNG-0110
CPL-0002	30	30	201D8Z-8 **	1.500"	1.875"	RNG-0113
CPL-0003	30	30	201D8Z-8 **	2.000"	1.875"	RNG-0113
CPL-0004	60	75	226D8Z-8	2.000"	2.125"	RNG-0112
CPL-0038	15	15	163D8Z-8 *	1.485"	1.375"	RNG-0110
CPL-0039	30	30	201D8Z-8 **	1.500"	1.625"	RNG-0113
CPL-0050	40	40	201D8Z-8	2.000"	2.125"	RNG-0113
CPL-0051	40	40	201D8Z-8	2.000"	1.875"	RNG-0113
CPL-0052	125	150	262AMR	2.000"	2.125"	RNG-0518
CPL-0054	40	40	201D8Z-8	1.500"	2.125"	RNG-0113
CPL-0058	40	40	201D8Z-8	1.500"	1.875"	RNG-0113
CPL-0156	60	75	226D8Z-8	2.000"	1.875"	RNG-0112

* Coupling was part number 162MT-8; see Note 6.
** Coupling was part number 200MT-8; see Note 7.

Table 2
Flexible Couplings with Solid Motor Flange

Coupling Part No. (Trane Mnemonic)	Coupling HP Rating 1450 RPM	Coupling HP Rating 1750 RPM	Thomas Coupling No.	Compressor Shaft Bore	Motor End Bore	Replacement Disc Pack Assemblies (Trane Mnemonic)
CPL-0145 +	40	40	201D8Z-8	2.000"	2.125"	RNG-0113
CPL-0151	30	30	201D8Z-8 *	1.500"	2.000"	RNG-0113
CPL-0152	60	75	226D8Z-8	2.000"	2.250"	RNG-0112
CPL-0153 +	40	40	201D8Z-8	1.500"	2.125"	RNG-0113
CPL-0154 +	15	15	163D8Z-8 **	1.485"	1.625"	RNG-0110
CPL-0155	100	120	263D8Z-8	2.000"	2.625"	RNG-0519

* Coupling was part number 200MT-8; see Note 7.
** Coupling was part number 162MT-8; see Note 6.
\+ No longer stocked, see Note 1.

Notes for Tables 1 and 2:

1. Couplings not stocked by Trane are to be ordered on a "DS" type of order.
2. Replacement couplings are furnished with disc packs. When replacing disc packs on existing couplings, two are required.
3. Replacement couplings and disc pack assemblies are furnished with stainless steel or "Inconaloy" discs, depending on availability.
4. Component parts of couplings, other than disc pack assemblies, are not stocked by Trane.
5. Trane mnemonic part numbers for the compressor crankshaft screws and washers needed to install the couplings are as follows:
   a. Screws (A, B, E & F compressors) = SCR-0007
   b. Washers (A & E compressors) = WAS-0007
      (B & F compressors) = WAS-0008
6. CPL-0001, CPL-0038 and CPL-0154 were originally Thomas Coupling Part No. 162MT-8, with a 6-hole bolt pattern. The current coupling (Thomas Part No. 163D8Z-8) has an 8-hole pattern. Replacement disc pack assemblies for the 162MT-8 style couplings are RNG-0920.
7. CPL-0002, CPL-0003, CPL-0039 and CPL-0151 were originally Thomas Coupling Part No. 200MT-8, with a 6-hole bolt pattern. The current coupling (Thomas Part No. 201D8Z-8 has an 8-hole pattern. Replacement disc pack assemblies for the 200MT-8 style couplings are RNG-0111.

Coupling Bore Instruction

A coupling is a rotating member used to connect two shafts. It is important that proper centering of the hub bores be maintained to help minimize unbalance in the coupling. The recommended procedure and set up readings at indicator locations are given for each size of coupling as listed. All finished bores are to have a surface finish of 125 RMS or better.

DBZ-8 coupling hubs are bored using set up procedures as shown in Figure 1. Figure 1 shows the proper method for checking that the hub is square in the chuck of the lathe. Once the hub is square it can properly be bored.

Be certain that when setting up the dial indicator for indicating the flange face surface (B) that it is placed as far out on the back face diameter as possible to get the best overall indication of total indicated runout (TIR). Dial indicator run-out on bored surfaces (flange O.D. and flange face) should be within the tolerances provided in Table 3.

Table 3
DBZ-8 Coupling Hub
Runout Readings

163	.0010 TIR (3)	.0015 TIR
201, 226, 263	.0015 TIR	.0020 TIR

Notes:
1. Refer to dial indicator "A" in Figure 1.
2. Refer to dial indicator "B" in Figure 1.
3. TIR = Total indicator reading in inches.

Figure 1
Proper Set-up Procedure
for Boring DBZ Hub

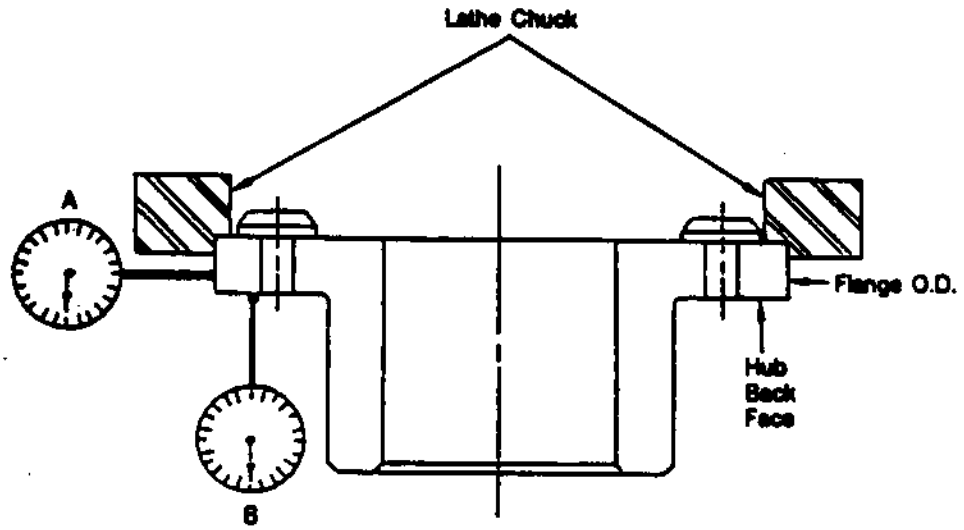
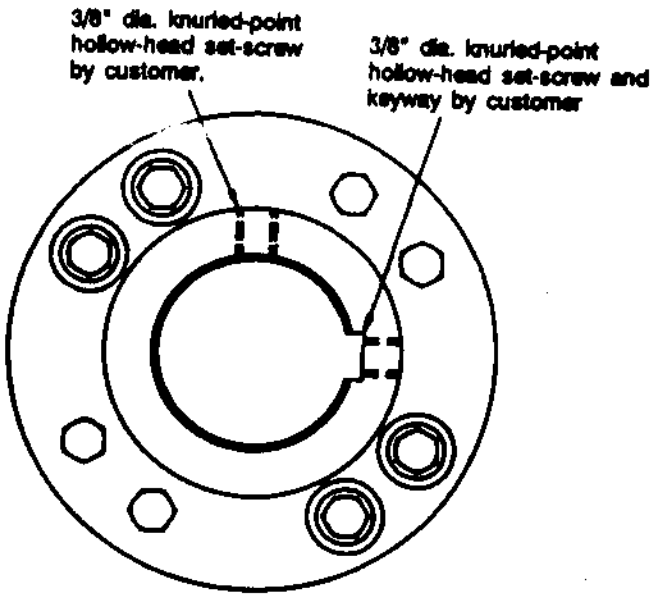


Figure 2
Typical Keyway and
Set-screw Information



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