

**TRANE™**

General Service Bulletin

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Literature Change(s): Added pertinent Trane mnemonic part nos. for several service valve parts. Also added illustrations of valve parts manufactured by Henry Valve Company.

Subject: Service Valve Part Identification and Repair for Reciprocating Compressors

Introduction:

This service bulletin provides component parts identification and ordering information for reciprocating compressor service valves; it also outlines the recommended seat disc replacement procedure for these valves.

Discussion:

A majority of the service valves used on Trane compressors are supplied by 2 manufacturers: Mueller Brass Company and Henry Valve Company. Service valve replacement parts cannot be selected until the manufacturer is known.

Service valves specifically covered by this bulletin are as follows:

VAL-0008	VAL-0043
VAL-0009	VAL-0059
VAL-0035	VAL-0076
VAL-0042	VAL-0975

Tables 1 and 2 detail the component parts of each of these compressor service valves by part number and manufacturer. Notice that Table 1 covers Mueller Brass Company valves, while Henry Valve Company valves are covered in Table 2.

Instructions for replacing the valve seat disc are outlined on page 4 for your reference.

Table 1
Service Valve Component Parts
for Mueller Brass Company Valves (See Note)

Compressor Service Valve Component	Refrigerant Charge Valve Service (2100 PSI) - 1/2" NPT						
	VAL-0004	STM-0006	STM-0007	STM-0008	STM-0009	STM-0010	STM-0011
Valve Stem	STM-0006	STM-0007	STM-0007	STM-0009	STM-0008	Not supplied by Mueller	
Seat Assembly	SET-0028	SET-0029	SET-0029	SET-0031	SET-0030	" " " " " "	SET-0032
Packing	PKG-0004	PKG-0005	PKG-0005	PKG-0003*	PKG-0006	" " " " " "	PKG-0002
Packing Gland	GLN-0009	GLN-0010	GLN-0010	GLN-0007	GLN-0011	" " " " " "	GLN-0008
Packing Washer	WAS-0381	WAS-0380	WAS-0380	WAS-0382	WAS-0383	" " " " " "	WAS-0384
Cap	CAP-0113	CAP-0114	CAP-0114	CAP-0115	CAP-0112	" " " " " "	CAP-0116
Cap Gasket	GKT-1136	GKT-1137	GKT-1137	GKT-1135	GKT-1138	" " " " " "	GKT-1143
Retaining Ring	-----	RNG-0564	RNG-0564	RNG-0565	RNG-0563	Not supplied by Mueller	
Spring	SPG-0123	SPG-0125	SPG-0125	SPG-0124	SPG-0125	" " " " " "	SPG-0123
Coupling Gasket	GKT-1142	-----	-----	-----	-----	" " " " " "	-----
Stem Lockwasher	WAS-0385	-----	-----	-----	-----	" " " " " "	-----
Flange Collar	CLR-0052	CLR-0054	CLR-0055	CLR-0056	CLR-0057	" " " " " "	-----
Flange Gasket	-----	GKT-1140	GKT-1140	GKT-1141	GKT-1139	" " " " " "	-----
Brass Adapter	CPL-0204	CPL-0206	CPL-0207	CPL-0205	CPL-0203	" " " " " "	-----

* 2 required.

Note: Drawings of Mueller service valve component parts are not available.

Table 2
Service Valve Component Parts
for Henry Valve Company Valves (See Note 1)

Compressor Service Valve Component	Reciprocating Compressor Service Valve Part Nos. (Trane Applications)							
	VAL-0008	VAL-0008	VAL-0008	VAL-0008	VAL-0008	VAL-0008	VAL-0008	
Valve Stem (Figure 2)	STM-0011	STM-0012	STM-0012	STM-0014	STM-0013	Note 2	Note 2	Not Supplied by Henry Valve Company
Lead Seat Disc Assembly	SET-0037	SET-0038	SET-0038	SET-0040	SET-0039	Note 2	Note 2	
Nylon Seat Disc Assembly (Figure 3)	SET-0033	SET-0034	SET-0034	SET-0036	SET-0035	Note 2	Note 2	
Packing (Figure 4)	PGK-0007*	PKG-0008*	PKG-0008*	PKG-0009*	PKG-0010*	PKG-0007	PKG-0007	
Steel Cap Assembly incl. Cap Gasket (Figure 5)	Note 3	CAP-0118	CAP-0118	CAP-0119	CAP-0120	Note 3	Note 3	
Flange Adapter Gasket (Figure 6)	GKT-1144	GKT-1145	GKT-1145	GKT-1146	GKT-1147	GKT-1148	GKT-1148	
Flange Adapter (Figure 7)	ADP-0147	ADP-0148	ADP-0149	ADP-0151	ADP-0150	ADP-0152	ADP-0153	

* 2 required.

Notes:

1. To simplify parts selection for Henry service valves used in Trane reciprocating compressor applications, see Figures 2 thru 7.
2. Stem and seat disc assemblies (whether lead or nylon) for VAL-0059 and VAL-0076 are no longer available from Henry Valve Company. When replacing either of these components, be sure to order 1 of each of these components:

STM-0017 (valve stem)
 SET-0043 (seat disc)
 RNG-0678 (retainer ring)
 SPG-0168 (disc spring)

See Figure 1 for seat disc replacement instructions.

3. Cap and gasket assemblies for VAL-0008, VAL-0059 and VAL-0076 are no longer available from Henry Valve Company. When replacing either of these components, be sure to order 1 of each of these components:

CAP-0135 (plastic cap)
 GKT-1194 (cap gasket)

Seat Disc Replacement Procedure (See Figure 1)

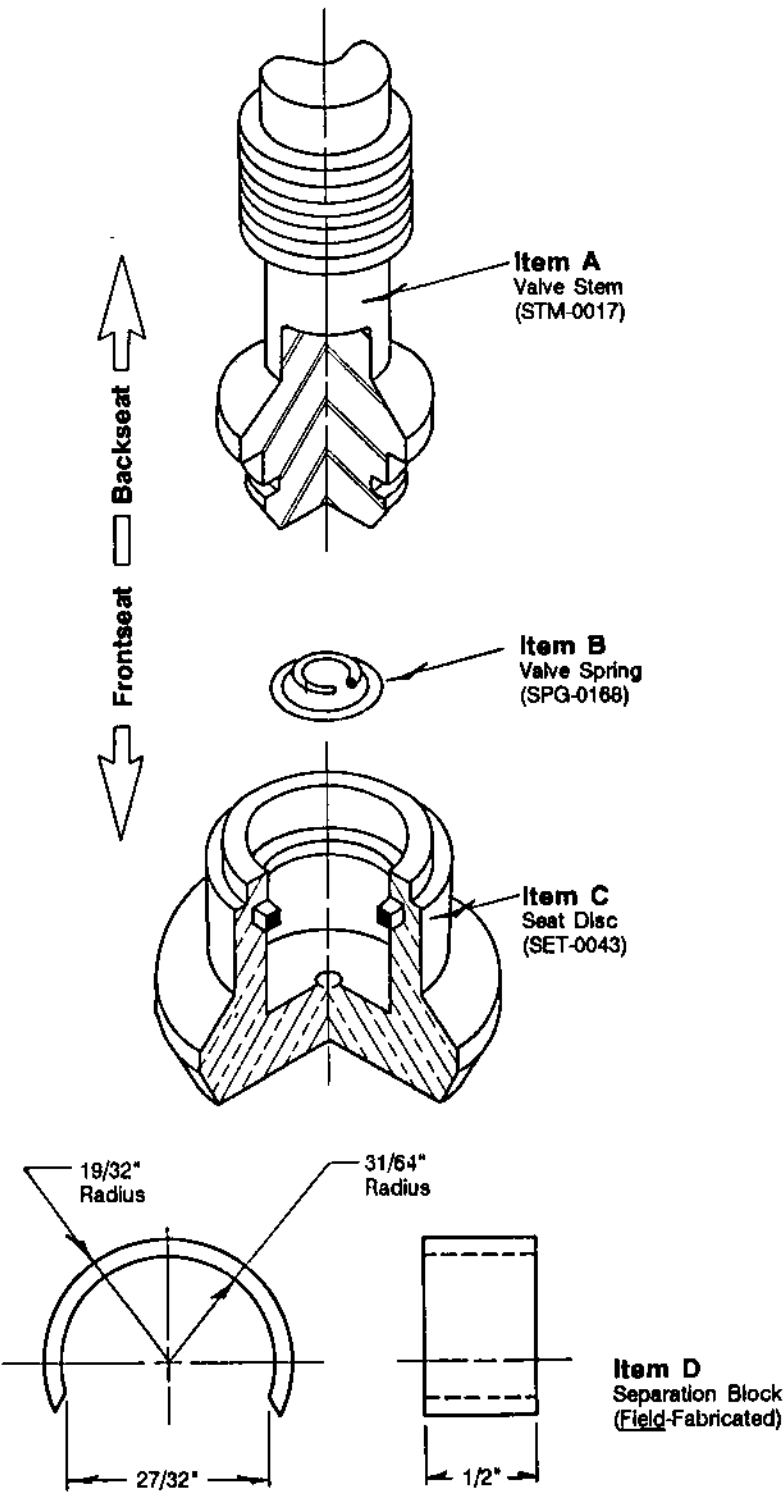
Seat Disc Removal

1. Install a cylindrical separation block (Figure 1, Item D) between the back surface of the seat disc (Figure 1, Item C) and the backseat of the valve body.
2. Backseat the stem until it separates from the seat disc.
3. Remove the separation block and seat disc from the valve chamber.
4. Remove the stem from the valve body; then check the valve chamber for debris before installing the new stem and seat disc assembly.

Seat Disc Installation

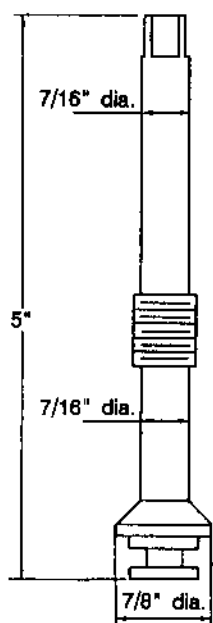
1. Backseat the valve stem (Figure 1, Item A) into the valve chamber and insert the seat disc.
2. Place the valve spring (Item B) into the seat disc, large end first.
3. Align the seat disc so that the solid end faces toward the valve seat; then insert the seat disc assembly into the valve through the outlet port.
4. Frontseat the valve stem until it snaps through the retainer ring inside the seat disc.
5. Back the stem and disc away from the valve seat, and check for proper alignment and fit.

Figure 1
Seat Disc Replacement

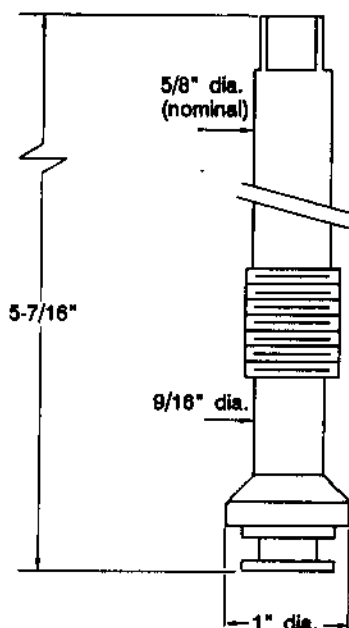


Note: Inset field-fabricated separation block between back surface of seat disc and backseat of valve body during seat disc removal.

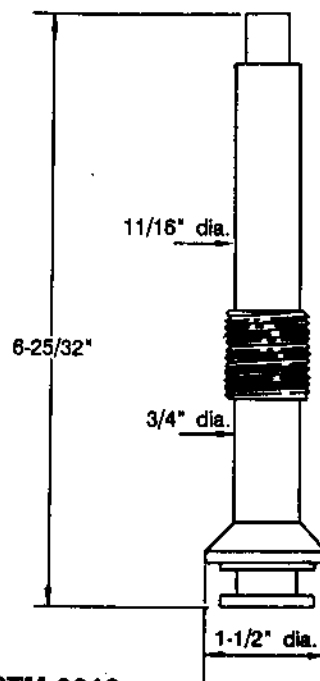
Figure 2
Stems for Henry Service Valves



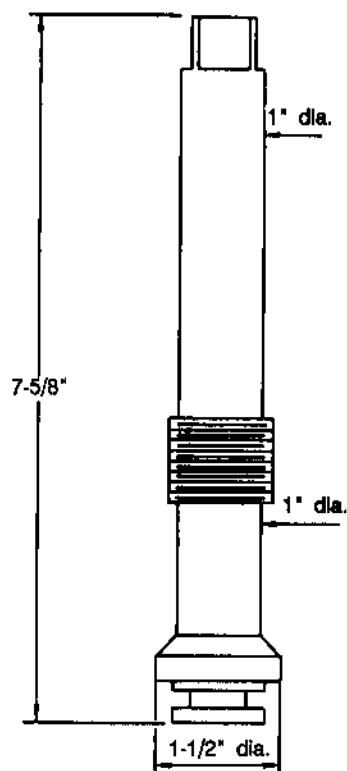
STM-0011



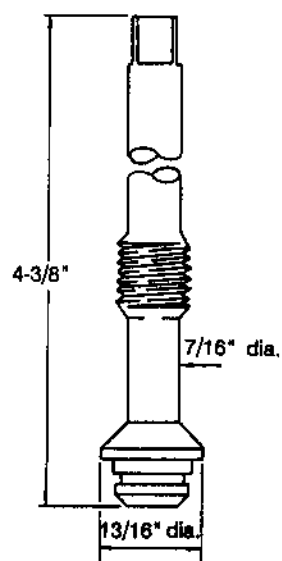
STM-0012



STM-0013



STM-0014



STM-0017

Figure 3
Nylon Seat Disc Assemblies
for Henry Service Valves

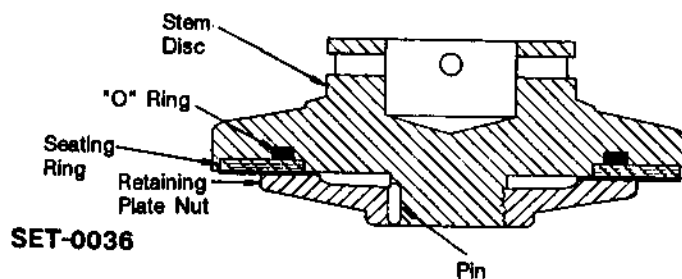
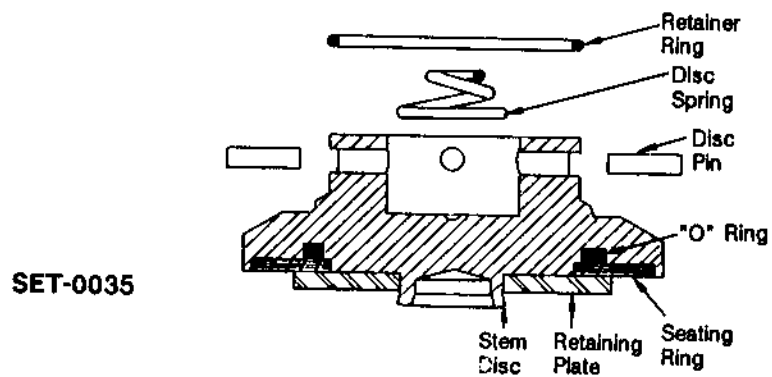
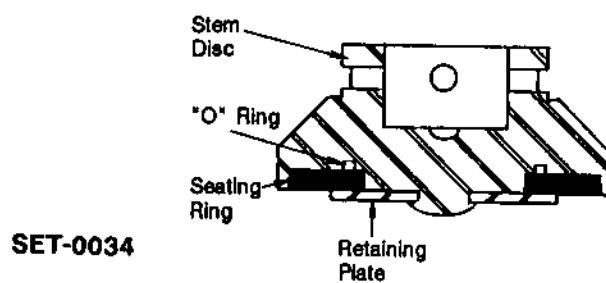
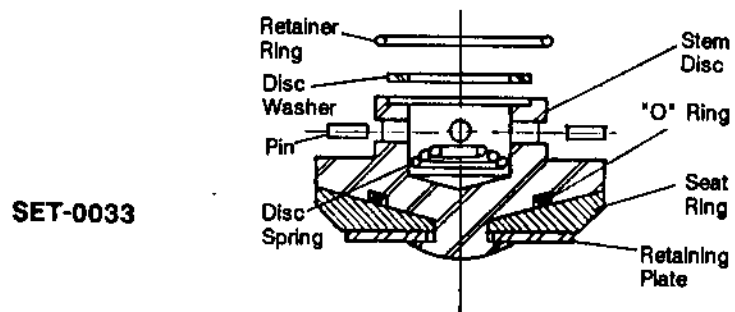
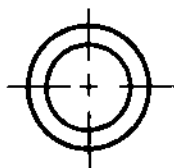
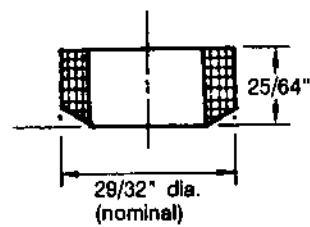
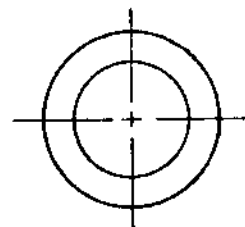


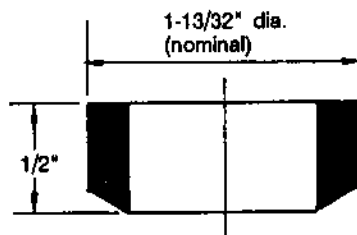
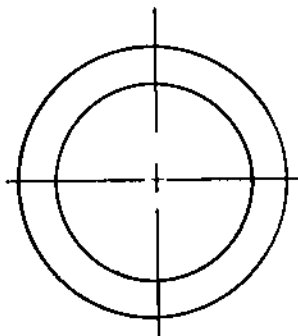
Figure 4
Packing for Henry Service Valves



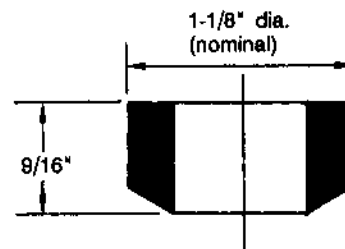
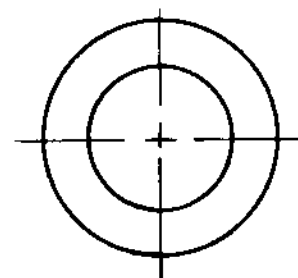
PKG-0007



PKG-0008

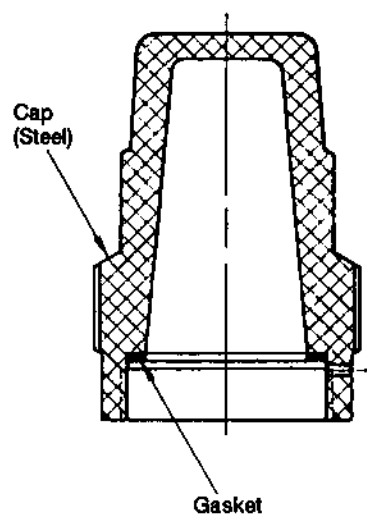


PKG-0009

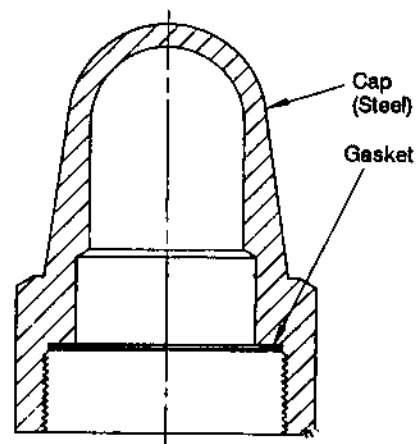


PKG-0010

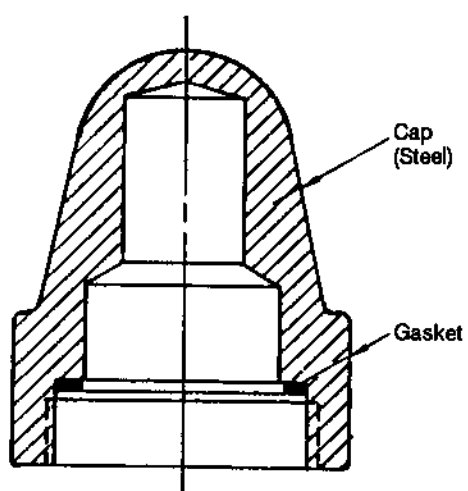
Figure 5
Cap Assemblies
for Henry Service Valves



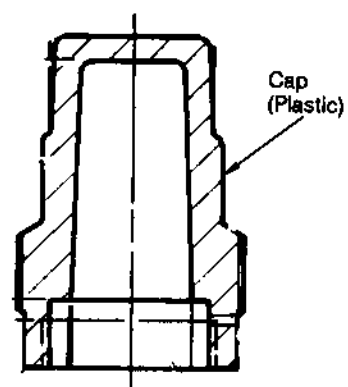
CAP-0118



CAP-0119

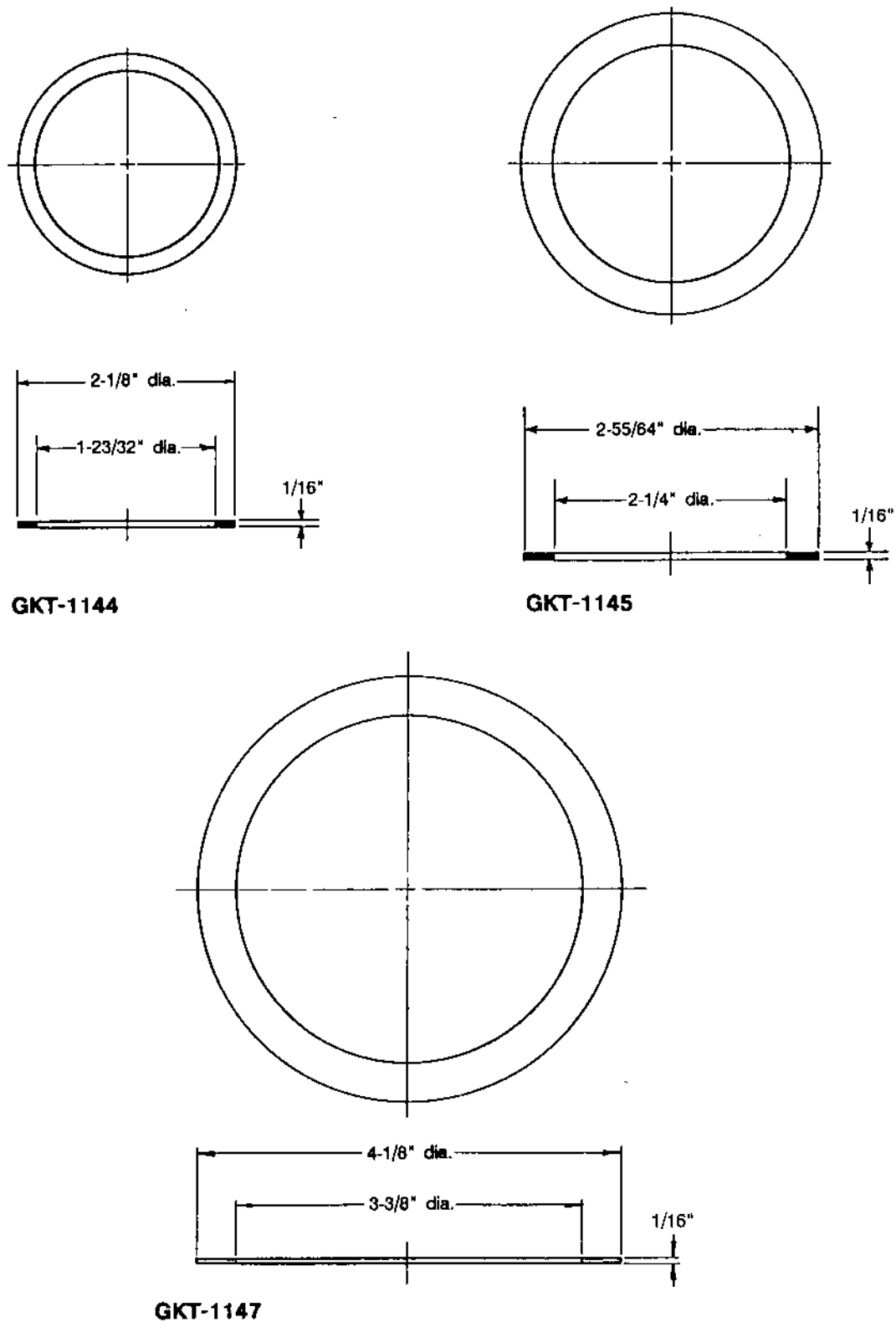


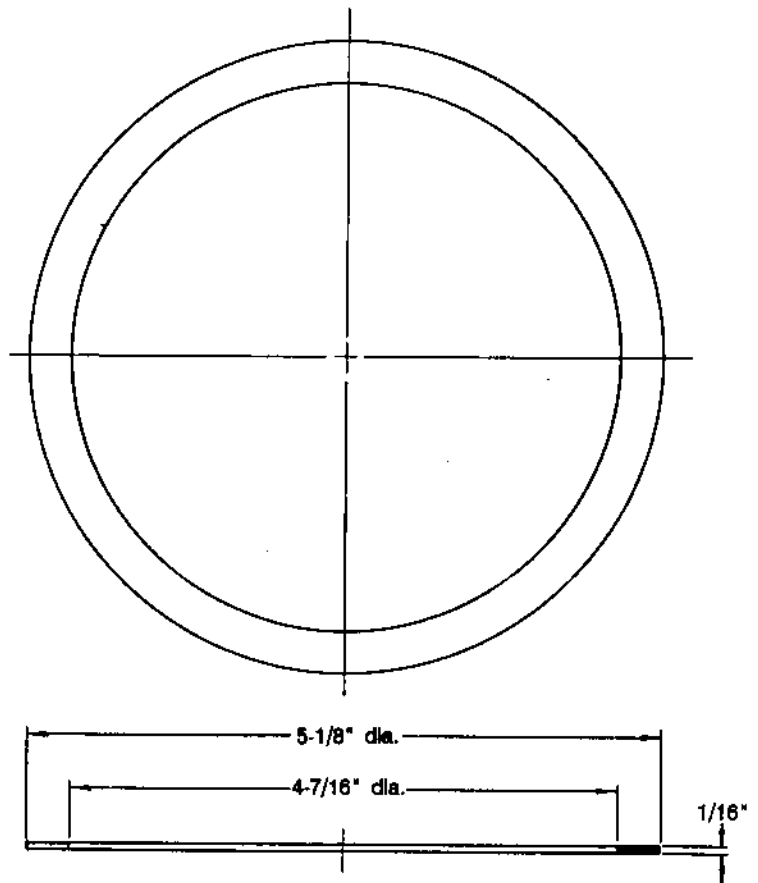
CAP-0120



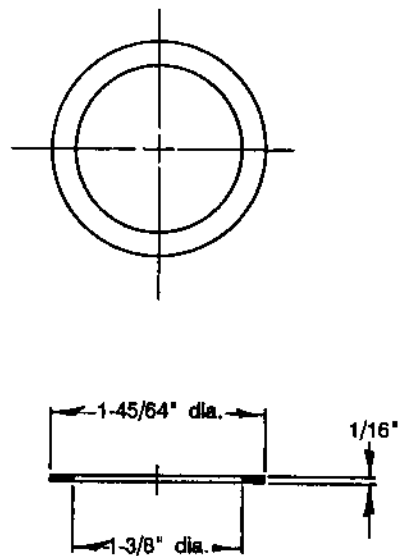
CAP-0135

Figure 6
Flange Adapter Kits
for Henry Service Valves



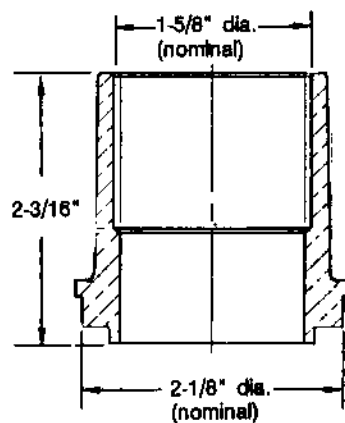


GKT-1146

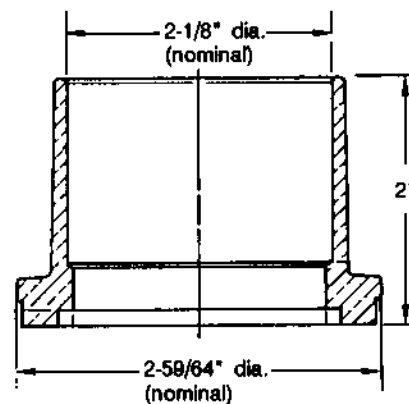


GKT-1148

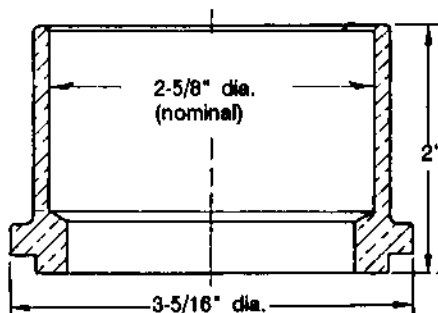
Figure 7
Flange Adapters
for Henry Service Valves



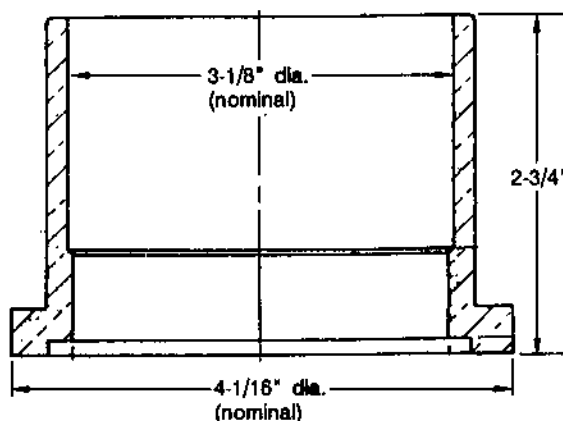
ADP-0147



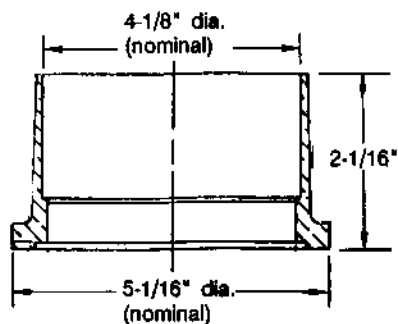
ADP-0148



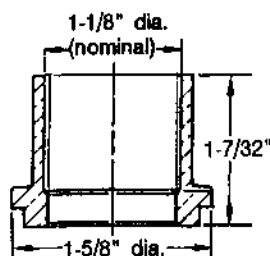
ADP-0149



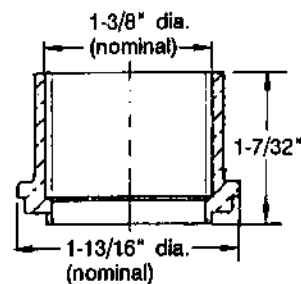
ADP-0150



ADP-0151



ADP-0152



ADP-0153