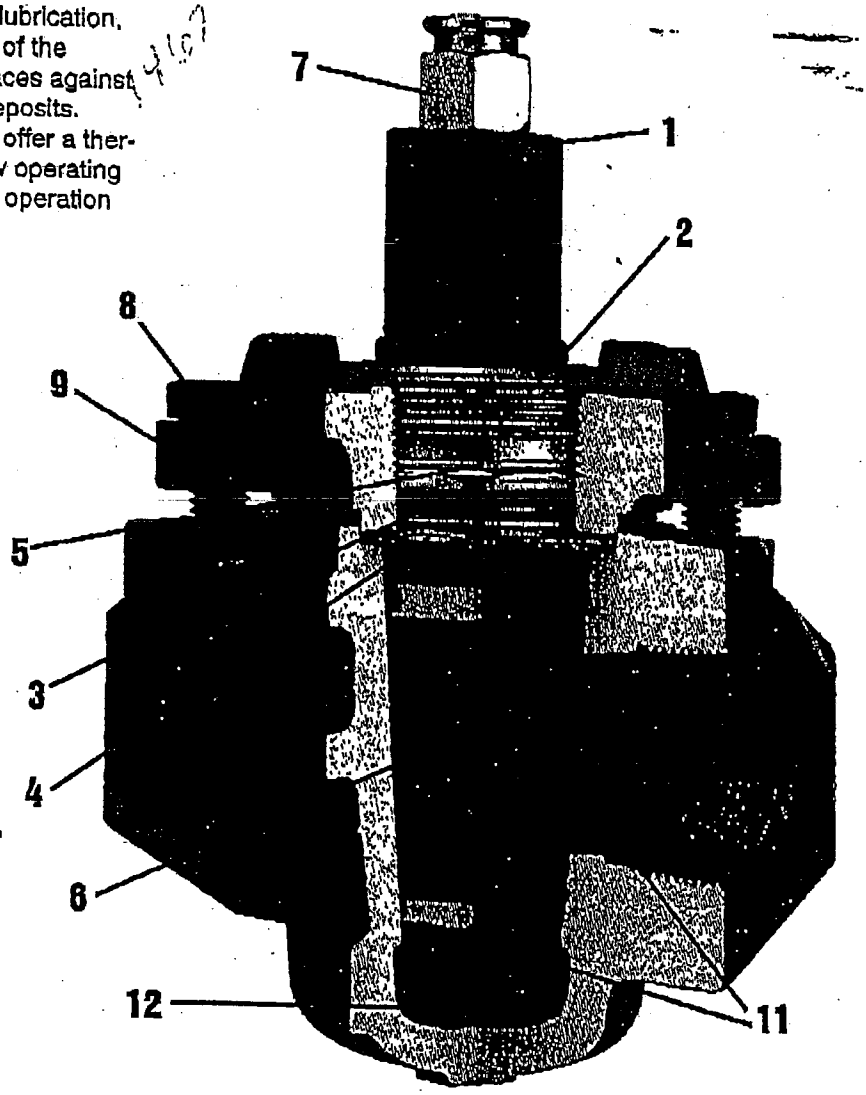
Nordstrom Screwed Gland Type Iron Plug Valves

2.3.1.1

In screwed gland type valves, controlled plug motion is provided by flexing of spring washers. Once the plug has been carefully adjusted by Nordstrom personnel during valve assembly, no adjustments are needed in the field.

The tapered plug is lapped individually with its matching body, providing perfect seating contact. The sealant channels in the plug and body seats provide lubrication, which together with the positive rotary action of the tapered plug valve, protects the seating surfaces against corrosion, erosion, or accumulation of solid deposits.

Nordstrom screwed gland type valves also offer a thermally bonded, low friction plug coating for low operating torque, and sealant jacking to insure positive operation and drop-tight closure.



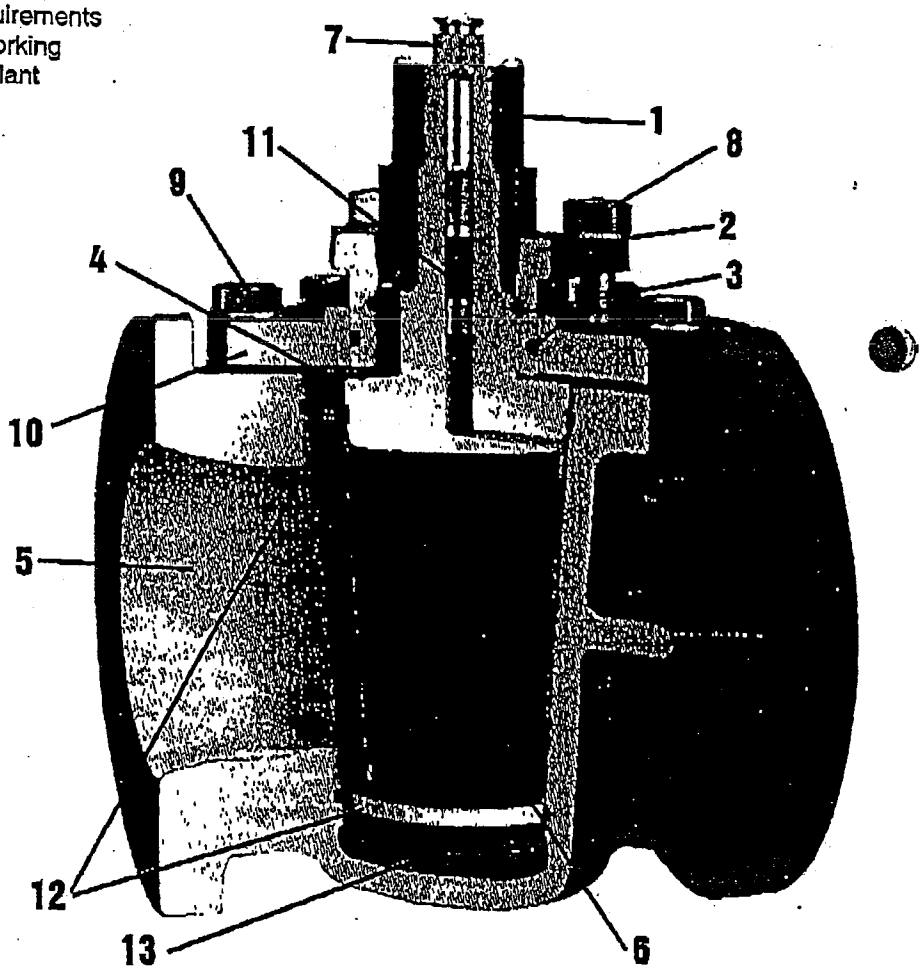
1. **Wrench Flats**
2. **Slotted Fixed Adjustment Gland**
3. **O-ring Holder With O-Rings**
4. **Flexible Metal Sealing**
   Diaphragm and Gasket
   Spring Washers
5. **Plug**
7. **Sealant Fitting**
   (Combination Sealant Screw and Giant Buttonhead Fitting)
8. **Cover Cap Screw**
9. **Cover**
10. **Sealant Check Valve (not shown)**
    (Double Ball-Check Prevents Escape of Sealant)
11. **Sealant Grooves** (Provides "Sealdport" Sealant System)
12. **Sealant Chamber** (Provides Plug "Jacking" Force)

Nordstrom Bolted Gland Type Iron Plug Valves

2.3.1.1

In bolted gland type valves, illustrated below, controlled plug motion is provided by flexing of the gland itself. The bolted type gland valves can be adjusted, if needed, but normally require little attention for leak-free, easy turning valve performance.

The tapered plug is lapped individually with its matching body, providing perfect seating contact. The sealant channels in the plug and body seats provide lubrication which, together with the positive rotary action of the tapered plug valve, protects the seating surfaces against corrosion, erosion, or accumulation of solid deposits. This valve is designed with a heavy wall body which is constructed beyond its requirements as a pressure vessel for its maximum rated working pressure to withstand the higher-than-line sealant pressure and expected line stresses.



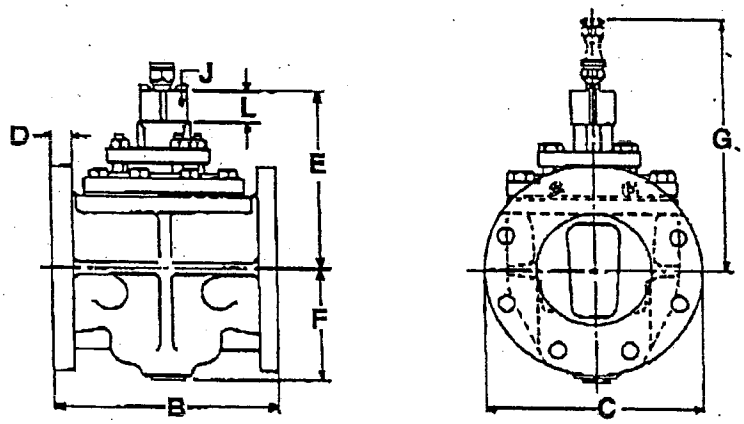
1. Wrench Square
2. Fixed Adjustment Gland
3. O-Rings
4. Flexible Metal Sealing Diaphragm and Gasket
5. Heavy Wall Body
6. Plug
7. Sealant Fitting (CombinationSealant Screw and Gun Fitting)
8. Gland Cap Screw
9. Cover Cap Screw
10. Cover
11. Sealant Check Valve (Double Ball-Check Prevents Escape of Sealant)
12. Sealant Grooves (Provides "Sealdport" Sealant System)
13. Sealant Chamber (Provides Plug "Jacking" Force)

Nordstrom Bolted Gland Type Iron Plug Valves

2.3.1.1

Pattern
Gate Length)
200 CWP (13.8 bar)
400 psig (27.6 bar) Test

Fig. 143 - Flanged, Wrench Operated, Sizes 6, 8 and 10



Size	NPS DN	6 150	8 200	10 250
Face to face, flanged, Fig. 143	B	10.50 267	11.50 292	13.00 330
Diameter of flange	C	11.0 279	13.5 343	16.0 406
Thickness of flange	D	1.06 27	1.19 30	1.25 32
*No. and size of tapped holes in each flange	-	two 3/4"	two 3/4"	two 7/8"
Center to top of stem	E	9.6 244	11.9 302	14.2 361
Center to bottom of body	F	5.4 137	7.1 180	9.2 234
Clearance required to remove sealant fitting	G	13.6 345	16.9 429	19.2 488
Width of stem square	J	1.75 44	2.00 51	2.00 51
Height of stem square	L	1.8 46	2.0 51	2.1 53
Size of wrench	-	P-2	T-2	T-2
Length of wrench	-	27.0 686	36.0 914	36.0 914
Size of Sealant Stick	-	D	G	G
Weight (approx.) Fig. 143	-	137 62	230 104	356 161

*Holes are drilled to ANSI Class 125 Cast Iron Flange Standard Template. For drilling and bolting data, See page 40.
Fig. 143 valves conform to the following standards where applicable: ANSI B16.1; ANSI B16.10; ASTM A126, Class B; and MSS SP-78. See page 34.
Fig. 143 face to face lengths are interchangeable with ANSI Class 125 and API 175 CWP Cast Iron Gate Valves.
Note: Studs or capscrews required. For sizes and lengths, see page 41.