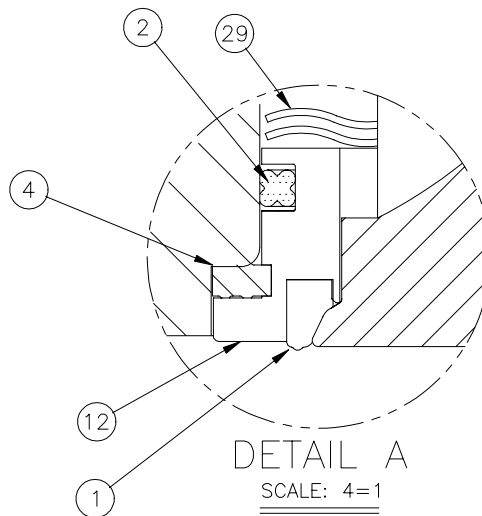
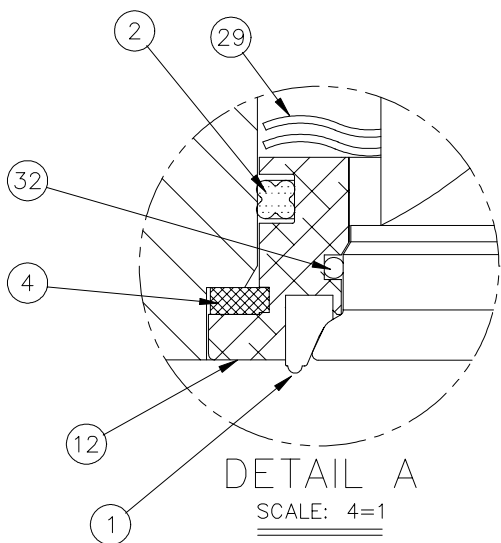
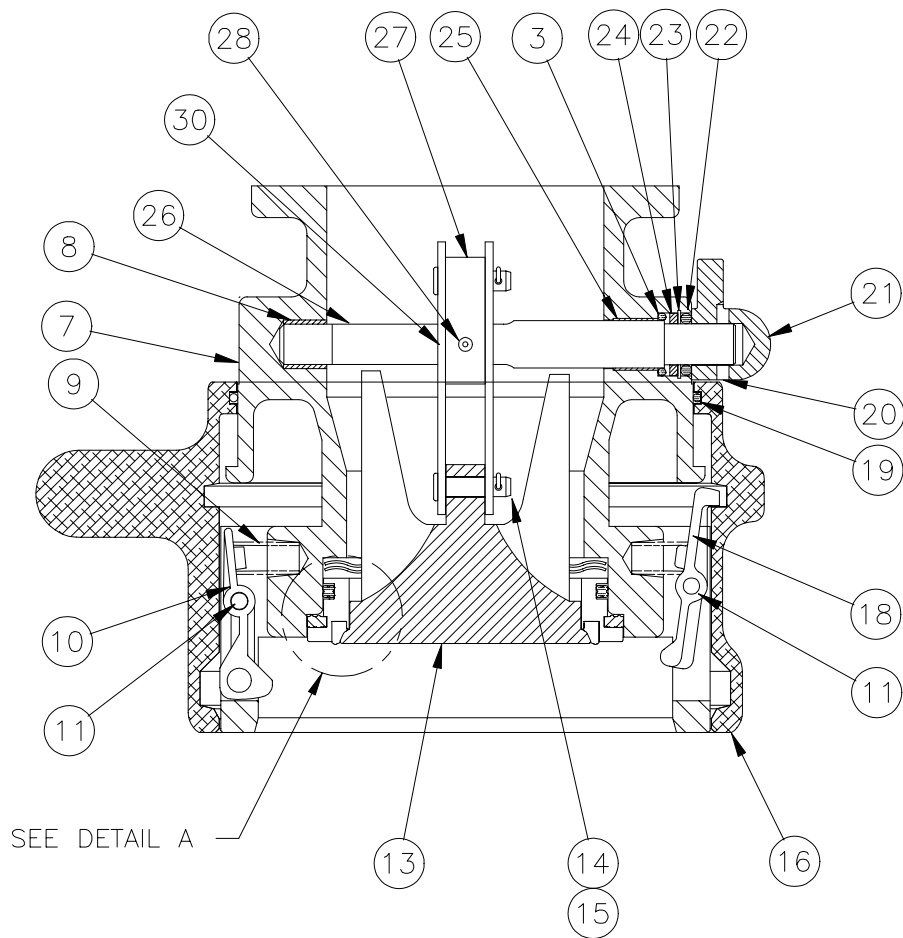


# J0451 API COUPLER



**HIGH PRESSURE POPPET (J0451-045 & 046)**

**STANDARD POPPET (J0451-022, 23, & 031)**

**EMCO WHEATON**™

A SYLTONE COMPANY

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# J0451 API COUPLER

## PARTS BREAKDOWN

Item	Part No.	Part Name	Mat'l	Qty
1	564759 564755 564757	NOSE SEAL	HP VITON BUNA CHEMRAZ	1
2	564760 564756 564758	QUAD RING	HP VITON BUNA CHEMRAZ	1
3	407433 564769 564768	O-RING (SHAFT)	HP VITON BUNA CHEMRAZ	1
4	565936 577369***	AXIAL SEAL*	HP VITON BUNA	1
7	408269	BODY	ALUM	1
8	560595 577796**	BEARING	NYLON TEFLON	1
9	408261	SPRING	SST	4
10	408256	LOCKING LUG	SST	3
11	470078	ROIL PIN	SST	4
12	564658 577070***	NOSE PIECE HIGH PRESSURE NOSE PIECE	ALUM	1
13	564657 532121203***	POPPET HIGH PRESSURE POPPET	ALUM	1
14	408252	LINK PIN	SST	2
15	560963	HITCH PIN	SST	2
16	565940	SLEEVE	ALUM	1
18	408258	INTERLOCK LUG	SST	1
19	408278	DUST SEAL	FELT	1
20	560295	SHEAR PROOF PIN	STEEL	1
21	565934 494006***	LEVER SUB-ASSEMBLY	ALUM	1
22	561320	DUST SEAL O-RING	BUNA	1
23	408169	RETAINING RING	SST	1
24	408167	SPACER	SST	1
25	560594 577840**	BEARING	NYLON TEFLON	1
26	408259 577054***	SHAFT HIGH PRESSURE SHAFT	SST	1
27	408254	LINK	SST	1
28	561852	COILED SPRING PIN	SST	1
29	564090	WAVE SPRING	SST	1
30	408262	BENT LINK	SST	2
32	577072***	O-RING (POPPET)	PTFE/VIT	1

\* AVAILABLE IN HP VITON ONLY ON STANDARD PRESSURE COUPLERS

\*\* TEFLON BEARINGS USED IN J0451-023 CHEMRAZ COUPLER

\*\*\* PARTS USED IN HIGH PRESSURE MODELS ONLY (J0451-045 & 046)



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# J0451 API COUPLER

**NOTE:** API couplers should always be used in conjunction with primary shutoff system such as a meter with preset valve. A relief valve must be provided for the trapped product between the primary shutoff and the API coupler.

**IMPORTANT:** Before changing nose seals, drain all product from line.

**TO CHANGE THE NOSEPIECE SEAL:**

1. Remove coupler from loading arm at flange.
2. Depress interlock lug (18) and turn lever. This opens the coupler without it being attached to an adapter and allows access to the poppet linkage assembly. (Poppet linkage assembly consists of the poppet (13), bent links (30) and link pins (14).
3. With no tension on the poppet assembly, use needle nose pliers to remove one set of the hitch pin (15) and link pins (14).  
**Note:** The set that is closest to the flange is easiest to access.
4. After the pin set has been removed, remove poppet assembly from the body bore.
5. Carefully remove the nosepiece (12) and wave spring (29). Do not nick the bore.
6. Without scratching the seal seats on the nosepiece, use a pick to carefully remove nosepiece seals.
7. Using a solvent, thoroughly clean the bore and nosepiece seal grooves. Make sure all grit is removed.
8. If shaft seal needs replacing, go to steps 10-17 before reattaching poppet and bent links.
9. Reassemble spring, nosepiece and poppet assembly in reverse order. This includes hitch and link connection. Refer to sketch for linkage alignment.

**TO CHANGE THE SHAFT O-RING:**

10. Open the coupler (refer to step 2 above) and rotate lever to gain access to roll pin that attaches handle to shaft (26).
11. Using a hammer and punch, remove shear groove pin (20) from lever (21). Slide lever off the end of the shaft.
12. Remove dust seal (22) with picking tool. Discard dust seal.
13. Remove retaining ring (23) with retaining ring pliers.
14. Slide shaft out to expose stainless steel spacer (10) and o-ring (3). Remove spacer and o-ring. Discard o-ring.
15. Lubricate new product seal with Parker SuperLube (or equivalent) and assemble in reverse order. Lubricate new dust seal (22) before installation.
16. While rotating lever, install lever and shear proof pin back through lever and shaft. Refer to drawing for proper alignment of bent links and lever.
17. Return to Step 9.

Part No.	Description	Kit Includes
494089	HP Viton seal kit	<ul style="list-style-type: none"> <li>• Nose seal</li> <li>• Quad ring seal*</li> </ul>
710050200	Buna seal kit	<ul style="list-style-type: none"> <li>• Axial seal</li> <li>• Shaft o-ring</li> </ul>
XXXXX	HP Viton high pressure seal kit	• Dust seal o-ring
XXXXX	Buna high pressure seal kit	• Poppet o-ring**
J1000-031	HP Viton Retrofit kit	• All seals from above kits
J1000-022	Buna Retrofit kit	<ul style="list-style-type: none"> <li>• Poppet</li> <li>• Nosepiece</li> </ul>
J1000-023	Chemraz Retrofit kit	• hitch pin

**NOTE:**  
*Installing a high pressure repair kit in to a standard J0451 will not increase the pressure rating of the coupler.*

\* Quad ring seal available in HP Viton only for standard pressure models. Available in Buna and HP Viton for high pressure coupler

\*\* Available in high pressure coupler only.



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