

Hydra-Q.I.K. Quick Installation Kit

Setup Instructions

QIK-SETUP v1.0 Revised September 2017
Specifications subject to change without notice.



 **HYDRA-STOP**[®]
SOLUTIONS FOR CONTROL

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Have questions or need assistance?

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Table of Contents

Section	Title	Page
1.0	Hydra-Q.I.K. Materials	1
2.0	Hydra-Tapper P3 Replacement	1
3.0	Drive Motor Restraint	2
4.0	Quick Equalizer	3
5.0	Quick Pressure Test Plug	4
6.0	Insta-Valve 250 Patriot Installation Instructions utilizing the Hydra-Q.I.K.	7

Hydra-Q.I.K. - Quick Install Kit

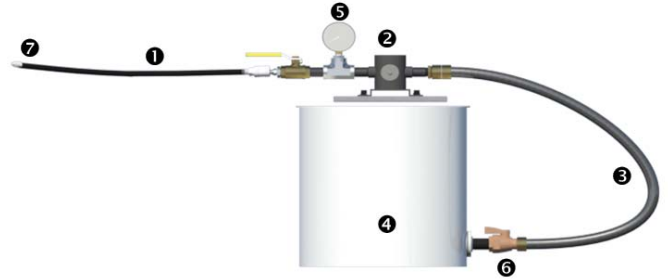


Setup and Operating Instructions

SECTION 1 - MATERIAL LIST

Hand-Drill-Powered Equalization assembly

Item	Description	Quantity
1	1/4" quick-disconnect 15', hose (black)	1
2	Quick Equalizer Pump Assembly	1
3	5' steel-braided hose	1
4	Food Safe bucket with Bulk Head fitting	1
5	0-400psi Pressure Gauge	1
6	3/4" GHT brass ball valve	1
7	1/4" quick-connect nipple	1



Guide Plate Assembly

8	Standard guide plate with holes for lifting assist handles	1
9	Lifting assist handles	2



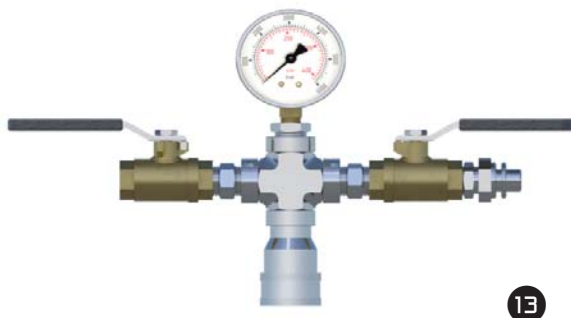
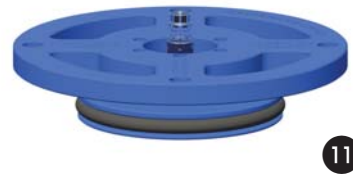
Flange Lifting Magnets

10	Flange Lifting Magnets (rated at 220 lbs)	2
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Pressure Test Plug Assembly

11	8" Quick-Pressure-Test Plug	1
12	12" Quick-Pressure-Test Plug	1
13	Pressure Test Tree	1



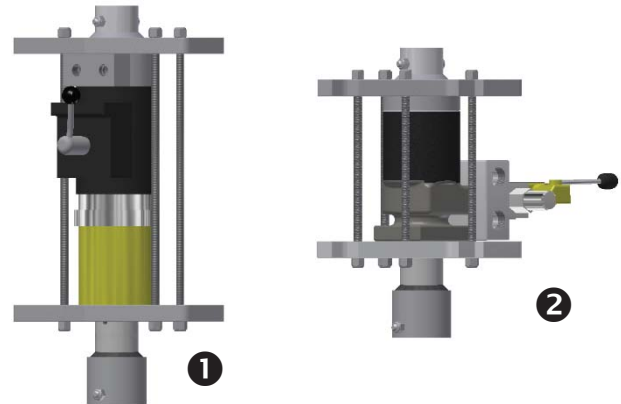
Hydra-Q.I.K. - Quick Install Kit



Setup and Operating Instructions

Drive Motor Restraint System (Air OR Hydraulic)

❶	Air Motor Restraint System	1
❷	Hydraulic Motor Restraint System	1



OS&Y Rising Stem Assembly

❸	OS&Y Rising Stem Assembly	1
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Additional Parts

❹	4-8" Insertion Spacer	1
❺	12" Temporary Gate Valve Lifting Assist	1
❻	8" Temporary Gate Valve Lifting Assist	1
❼	Three Cans Spray-On Food-Grade Lubricant	3



I. Tool List (not included)

- (1) Adjustable crescent wrench
- (1) Pipe wrench
- (1) Lifting strap
- (1) Hand drill – 3/8" chuck
- (1) 3/8" wrench



Setup and Operating Instructions

SECTION 2 - HYDRA-TAPPER P3 REPLACEMENT

Materials List

1) Rising Stem P3 Assembly

Note: Handle bars, feed screw and guide plate will be packaged separately, but easily assembled

2) Existing Hydra-Tapper

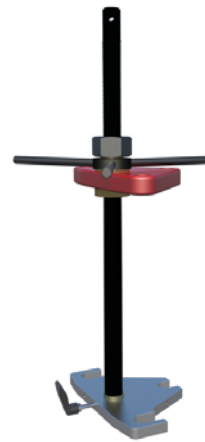
3) Included Tool/Hardware List

- (1) 5/8" Allen Wrench
- (3) 5/8" Socket-Head Cap Screws
- (1) Loctite Heavy Duty Threadlocker Blue 242

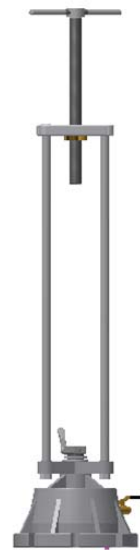
4) P3 Replacement Procedure

- Remove the existing P3 by removing the (3) 5/8" socket head cap screws from the P3 and guide posts as seen in Figure 1.
- Use the new 5/8" socket head cap screws included with to assemble the Rising Stem P3 Assembly onto the tapping machine as seen in Figure 2.
- Apply Loctite to threads of cap screws and install into P3 and thread into guide posts.
- Use allen wrench to securely tighten cap screws as tight as possible

NOTE: Hydra-Stop requires the use of Loctite to hold cap screws in place.



Rising Stem P3 Assembly



Existing Hydra-Tapper

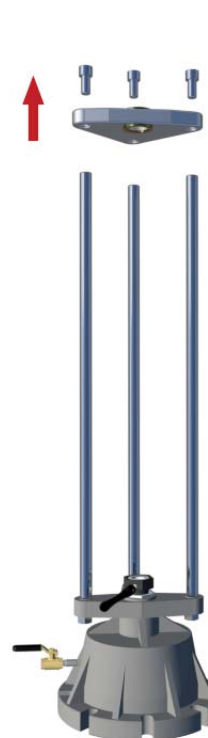


Figure 1

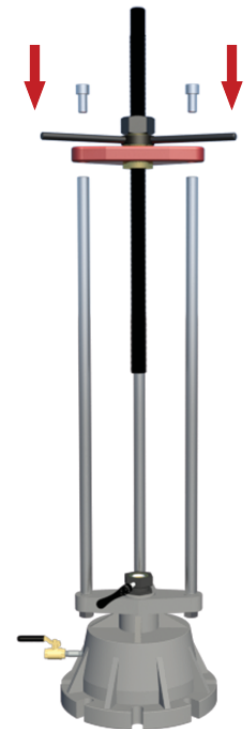


Figure 2

Setup and Operating Instructions

SECTION 3 - DRIVE MOTOR RESTRAINT

I. Hydraulic Drive Restraint Setup

Materials List

1) Hydraulic Drive Restraint Kit (Figure 1)

2) Hydraulic Drive (Figure 2)

3) Tool List

- (2) 9/16" wrenches
- (1) 5/32" allen wrench (included)
- (1) hack saw or grinder

4) Hydraulic Drive Restraint Assembly

NOTE: HYDRA-STOP Recommends shipping your hydraulic motor to its facility in Burr Ridge, IL so that our staff may perform this assembly for you.

a. Use hack saw or grinder to cut off one inch of top motor pin so that only one inch remains. (See Figure 3).

b. Use 5/32" allen wrench to remove 5/16"-18 cone-point set screw from bottom driver piece of motor, then remove bottom driver piece. (See Figure 4).

c. Use the two 9/16" wrenches to assemble the (2) motor restraint plates, (4) threaded rods and (8) lock nuts as seen in figure 5. (See Figure 5).

d. Replace bottom driver piece of motor with the Motor to Saw Mandrel Restraint piece provided with the Air Motor Restraint Kit. Use 5/32" allen wrench to tighten the (3) cone-point set screws **as tight as possible**. Use included Loctite Thread-locker to secure set screws. (See Figure 6).

e. Use of drive restraint requires a .390" through hole be drilled in the saw mandrel. You have two modification options.

Option 1) Take your 4-8" and 10-12" saw mandrels to your local machine shop to have .390" holes drilled in the saw mandrels. (Detailed instructions on next page.)

Option 2) Ship saw mandrels to our facility in Burr Ridge, IL for .390" hole modifications. Holes will be drilled at no charge to customer. Customer only responsible for shipping charges to and from Hydra-Stop.



Figure 1

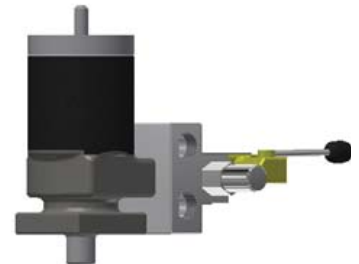


Figure 2

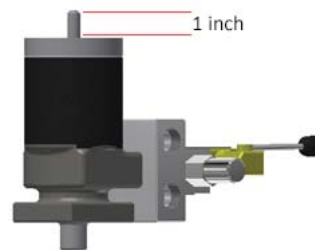


Figure 3



Figure 4

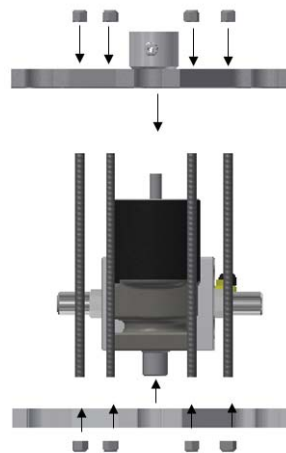


Figure 5

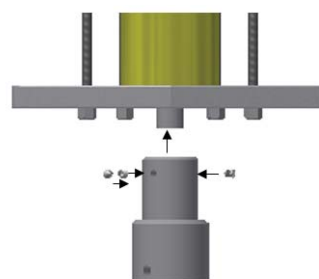


Figure 6

Setup and Operating Instructions

f. Line up 3/8" thru hole on bottom of feed screw with the 3/8" thru hole on the top motor restraint plate and place 3/8"x2" shoulder bolt through the lined-up holes. (See Figure 12).

g. Line up 3/8" thru hole on top of saw mandrel with the 3/8" thru hole on Air Motor to Saw Mandrel Restraint piece and place 3/8"x2.75" shoulder bolt through the lined-up holes. (See Figure 13c).

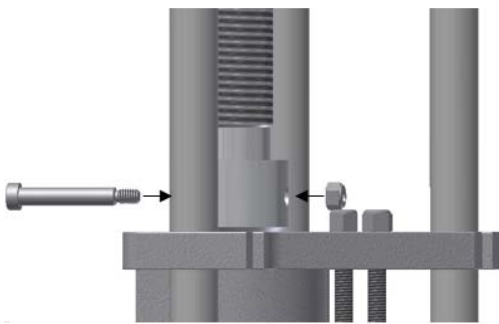


Figure 12

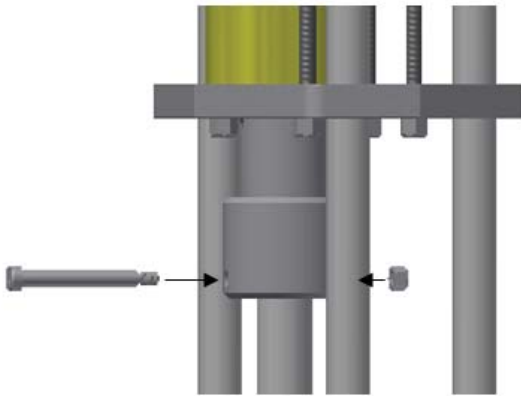


Figure 13

Saw Mandrel Modification Instructions

1) .390" thru-hole is to be drilled aligned with a hex flat as show in the drawing. (See Figure 7). A drill press and a v-block are required for this procedure.

Saw Mandrel Modification Process

A) Place the Saw Mandrel restraint over the saw mandrel (see Figures 8 and 9).

B) Mark the location of the thru-hole on the saw mandrel with a paint marker or permanent marker. (See Figure 10). This ensures that the saw mandrel thru-hole is correctly positioned.

C) Remove restraint from saw mandrel and drill thru-hole. (See Figure 11).

D) Continue with restraint assembly.

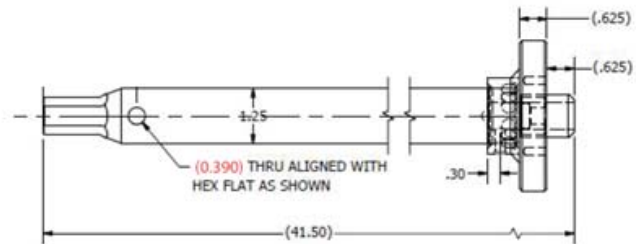


Figure 7



Figure 8

Figure 9



Figure 10

Figure 11

Setup and Operating Instructions

I. Air Motor Restraint Setup

Materials List

1) Air Drive Restraint Kit (Figure 1)

2) Air Drive (Figure 2)

3) Tool List

- (2) 9/16" wrenches
- (1) 5/32" allen wrench (included)
- (1) pipe wrench

4) Air Drive Restraint Assembly

NOTE: HYDRA-STOP Recommends shipping your air motor to its facility in Burr Ridge, IL so that our staff may perform this assembly for you.

a. Use pipe wrench to remove 2.6" top pin from motor and replace with the 1.6" top pin provided with Kit. (See Figure 3).

b. Use 5/32" allen wrench to remove 5/16"-18 cone-point set screw from bottom driver piece of motor, then remove bottom driver piece. (See Figure 4).

c. Use the two 9/16" wrenches to assemble the (2) motor restraint plates, (4) threaded rods and (8) lock nuts as seen in figure 5. (See Figure 5).

d. Replace bottom driver piece of motor with the Air Motor to Saw Mandrel Restraint piece provided with the Air Motor Restraint Kit. Use 5/32" allen wrench to tighten the (3) cone-point set screws **as tight as possible**. Use included Loctite Thread-locker to secure set screws. (See Figure 6).

e. Use of drive restraint requires a .390" through hole be drilled in the saw mandrel. You have two modification options.

Option 1) Take your 4-8" and 10-12" saw mandrels to your local machine shop to have .390" holes drilled in the saw mandrels. (Detailed instructions on next page.)

Option 2) Ship saw mandrels to our facility in Burr Ridge, IL for .390" hole modifications. Holes will be drilled at no charge to customer. Customer only responsible for shipping charges to and from Hydra-Stop.

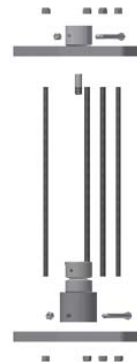


Figure 1



Figure 2

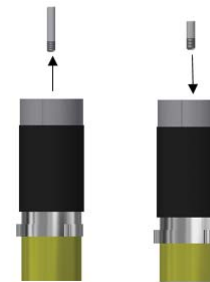


Figure 3

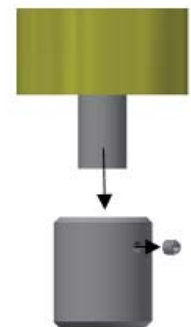


Figure 4

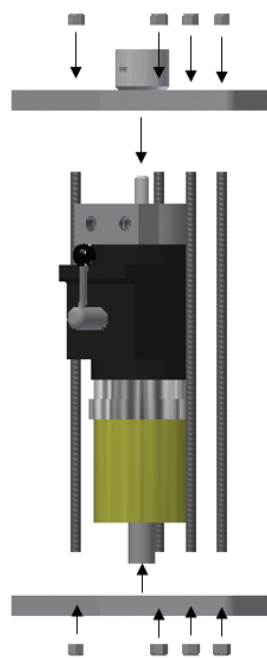


Figure 5

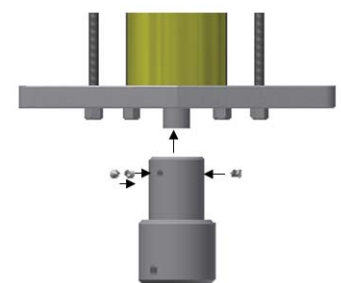


Figure 6

Setup and Operating Instructions

f. Line up 3/8" thru hole on bottom of feed screw with the 3/8" thru hole on the top motor restraint plate and place 3/8"x2" shoulder bolt through the lined-up holes. (See Figure 12).

g. Line up 3/8" thru hole on top of saw mandrel with the 3/8" thru hole on Air Motor to Saw Mandrel Restraint piece and place 3/8"x2.75" shoulder bolt through the lined-up holes. (See Figure 13).

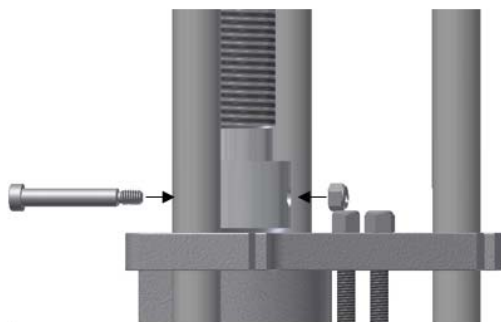


Figure 12

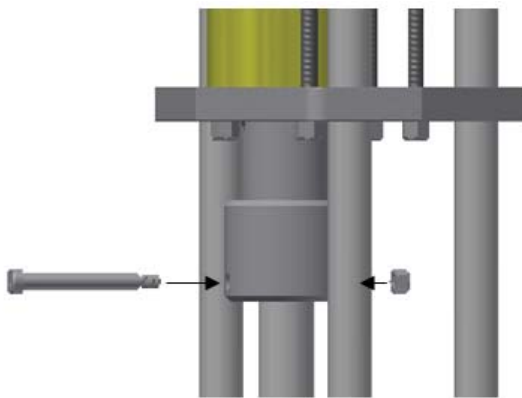


Figure 13

Saw Mandrel Modification Instructions

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Saw Mandrel Modification Process

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C) Remove restraint from saw mandrel and drill thru-hole. (See Figure 11).

D) Continue with restraint assembly.

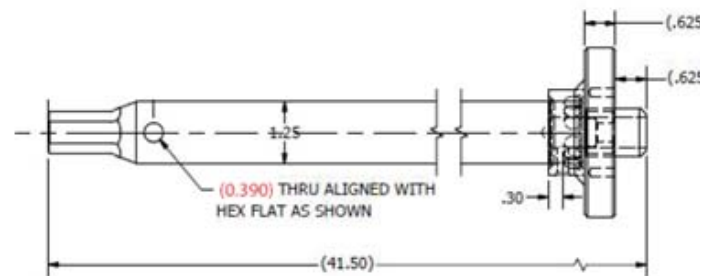


Figure 7



Figure 8

Figure 9



Figure 10

Figure 11

Hydra-Q.I.K. - Quick Install Kit



Setup and Operating Instructions

SECTION 4 - QUICK EQUALIZER SETUP

1) Materials List

1	1/4 quick-disconnect 15', hose (black)	1
2	Quick Equalizer Pump Assembly	1
3	5' steel-braided hose	1
4	Food Safe bucket with Bulk Head fitting	1
5	0-400psi Pressure Gauge	1
6	3/4" GHT brass ball valve	1



1



2



3



4



5



6

2) Tool List

- a. (1) hand drill - 3/8" chuck

Setup and Operating Instructions

3) QUICK EQUALIZER ASSEMBLY

a. Hand-Drill-Powered Equalization Assembly (see Figure 7)

- 1) Thread 0-400 psi, 1/4 NPT gauge into top of tee fitting on outlet side of pump
- 2) Connect 15' reinforced rubber hose to 1/4 quick-disconnect
- 3) Thread brass GHT ball valve onto brass thread protruding from food-safe bucket
- 4) Thread one end of 5' steel-braided hose onto brass GHT ball valve and the other end onto intake of pump.

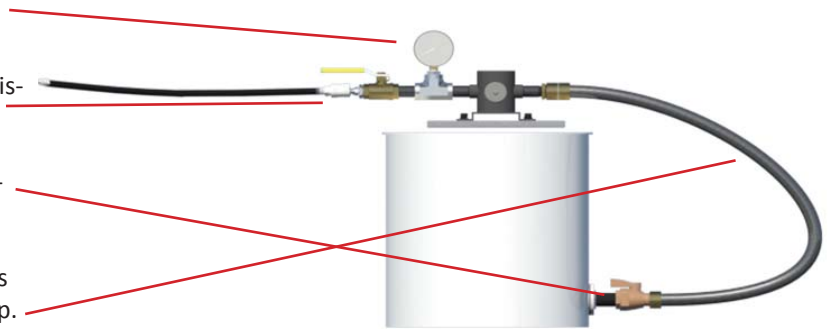


Figure 7

b. P2 Tap Housing upgrade

- 1) Locate brass 1/4" quick-connect nipple. Nipple should be connected to one end of the 15' reinforced rubber hose. (See Figure 8).
- 2) Thread brass 1/4" quick-connect nipple into the 1/4 NPT ball valve found on your existing P2 Tap Housing. (See Figure 9).



Figure 8

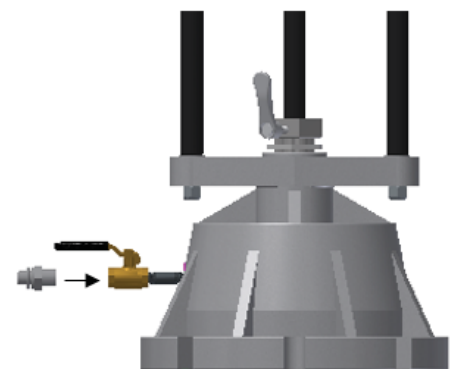


Figure 9

NOTE: Teflon tape or thread sealant is recommended.

Setup and Operating Instructions

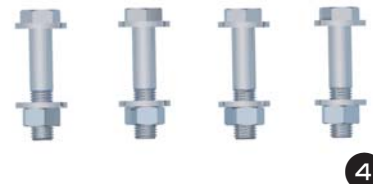
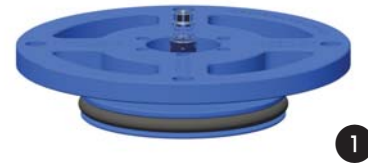
SECTION 5 - QUICK PRESSURE TEST PLUG SETUP

1) Materials List

1	8" Pressure Test Plug with 1/2" quick-connect nipple	1
2	12" Pressure Test Plug with 1/2" quick-connect nipple	1
3	Pressure Test Tree with 1/2" quick-connect coupler and 1/4" quick-connect nipple	1
4	4 sets flange bolts, nuts and washers from Insta-Valve 250 Patriot	4

2) Tool List

a. No additional tools required



Setup and Operating Instructions

3) PRESSURE TEST PLUG ASSEMBLY AND USAGE

- 1) Spray pressure test plug o-ring with spray-on food-grade lubricant.
- 2) Press-fit pressure test plug into top of valve body. (See Figure 1).
- 3) Insert 4 flange bolts into the 4 mounting holes of the pressure test plug assembly. Finger tighten a washer and nut onto each of the four bolts. (See Figure 2).
- 4) Connect 1/2" quick-connect coupler on Pressure Test Tree to 1/2" quick-connect nipple on Pressure Test Plug.
- 5) Connect pressure test tree to your pressure source for pressure testing. Hydra-Stop recommends using the "Quick Equalizer" that comes with the Quick-Install kit. (See Figure 3).
- 6) Follow pressure test instructions in the Insta-Valve 250 Patriot Valve Body Mounting installation document. (Appendix C in the Insta-Valve 250 Patriot Installation Instructions.)
- 7) Use ball valve to blow-off pressure before removing pressure test plug.

NOTE: Do not exceed recommended pressure test specifications. Minimum Test Pressure: 1.5 times the system working pressure. Maximum Test Pressure: 375 psi.



Figure 1

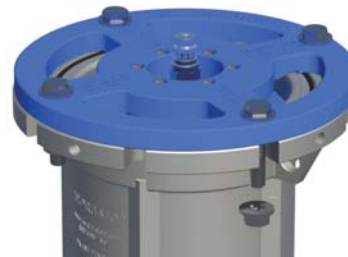


Figure 2



Figure 3