



# MANUAL: 4.5" Quick Connect Inlets for Elbows and Monitors

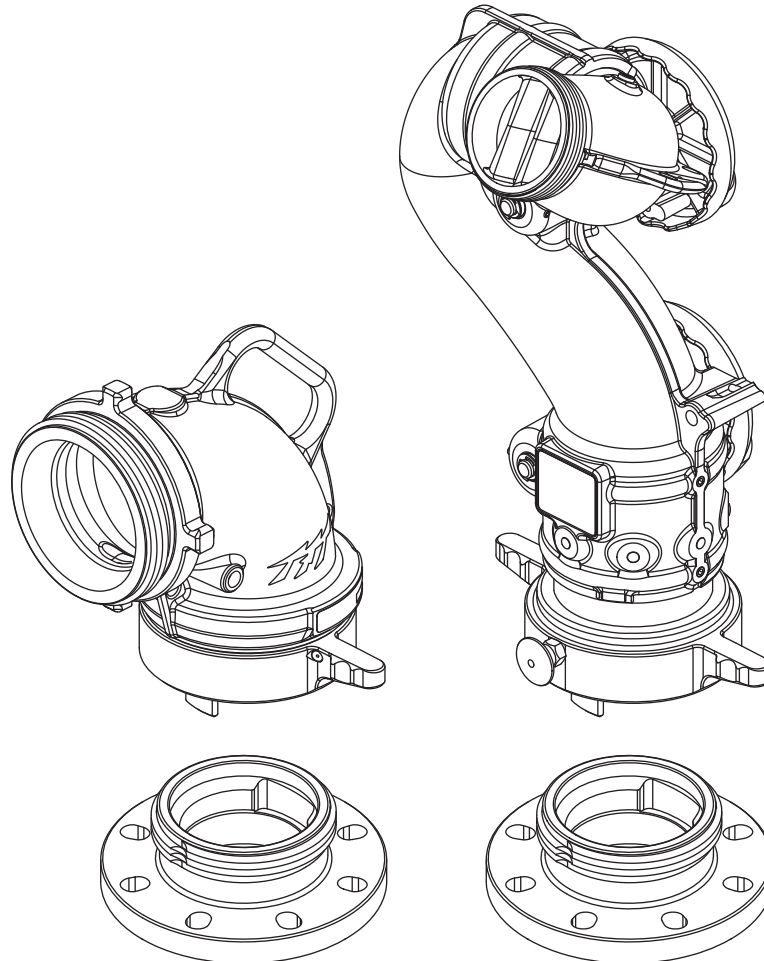
Supplemental Instructions for use with Monitor Manuals  
Compatible with Monsoon, Typhoon and Hurricane

## INSTRUCTIONS FOR INSTALLATION, SAFE OPERATION AND MAINTENANCE

### **⚠ WARNING**

Read instruction manual before use. Operation of this device without understanding the manual and receiving proper training is a misuse of this equipment. A person who has not read and understood all operating and safety instructions is not qualified to operate the 4.5" Quick Connect. Call 800-348-2686 with any questions.

This instruction manual is intended to familiarize firefighters and maintenance personnel with the operation, servicing and safety procedures associated with the 4.5" Quick Connect. This manual should be kept available to all operating and maintenance personnel.



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## Table Of Contents

- 1.0 MEANING OF SIGNAL WORDS
- 2.0 GENERAL INFORMATION
- 3.0 SPECIFICATIONS
- 4.0 INSTALLATION
  - 4.1 STRUCTURAL REQUIREMENTS
  - 4.2 INLET ADAPTER MOUNTING
- 5.0 USE
  - 5.1 USE OF QUICK CONNECT MONITORS
  - 5.2 USE OF QUICK CONNECT ELBOWS
- 6.0 DRAWINGS AND PARTS LISTS
  - 6.1 EXPLODED VIEW DRAWING
  - 6.2 PARTS LIST
- 7.0 MAINTENANCE
- 8.0 WARRANTY



### PERSONAL RESPONSIBILITY CODE

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
3. It is your responsibility to know that you have been properly trained in Firefighting and /or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufacturers and Service Association  
P.O. Box 147, Lynnfield, MA 01940 • [www.FEMSA.org](http://www.FEMSA.org)

## 1.0 MEANING OF SAFETY SIGNAL WORDS

A safety related message is identified by a safety alert symbol and a signal word to indicate the level of risk involved with a particular hazard. Per ANSI standard Z535.6-2006, the definitions of the four signal words are as follows:



**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



**NOTICE** is used to address practices not related to personal injury.

## 2.0 GENERAL INFORMATION

The 4.5" Quick Connect allows a monitor or elbow to be quickly and easily installed, removed and replaced. Applications include front bumper mounts for tilt-cab chassis maintenance and sharing monitors between multiple standpipes. A ratcheting pull pin prevents loosening of 4.5"NH threads due to vibration. The elbow may be used to supply a fire pump in lieu of a hydrant. Maximum operating pressure for elbow is 250 psi (17 bar), with a hydrostatic proof test pressure of 900 psi (62 bar). See monitor instruction manuals for maximum operating pressure of Monsoon, Typhoon and Hurricane.

## 3.0 SPECIFICATIONS

PRIMARY MATERIAL:	Hardcoat anodized and powder coated aluminum
ADDITIONAL MATERIALS:	316 Stainless Steel, Nylon, Nitrile rubber
MONITOR HEIGHT INCREASE: *	0.3 - 3.2" (0.7 - 8.1 cm) vs. model w/o quick connect
MONITOR WEIGHT INCREASE: *	3.9 - 6.7 lb (1.8 - 3.0 kg) vs. model w/o quick connect
ELBOW SIZE, H x W x D: **	12.3 x 8.6 x 12.3" (31 x 21 x 31 cm) with 5" Storz
ELBOW WEIGHT: **	13.7 lb (6.21 kg) with 5" Storz
OPERATING PRESSURE:	250 psi (17 bar) max. for Elbow; See monitor manuals
OPERATING TEMPERATURE:	-25°F to 135°F (-32°C to 57°C)

\* Monitor specifications assume same inlet adapter is installed for comparison.

\*\* Elbow specifications do not include inlet adapter and vary by outlet coupling.

See LOT-022 Price List and Product Specifications for details of each inlet adapter option.

## 4.0 INSTALLATION

### 4.1 STRUCTURAL REQUIREMENTS

The structure to which the Inlet Adapter is mounted must withstand the internal pressure of the monitor, as well as shear and bending forces due to nozzle reaction. Nozzle reaction can be as high as 1800 lbs (820 kg) (2500 gpm at 200 psi), depending on the particular monitor and nozzle installed. See monitor and nozzle manuals to determine actual nozzle reaction.

For flanged connections, the use of flat flanges without raised faces is recommended. Use a ring gasket as defined in ASME 16.21 or ISO 7483. Tighten flange bolts in an alternating sequence as shown in figure 4.1. Sequentially tighten each bolt three times to 76-80 ft-lb (100-110 Newton-Meters).

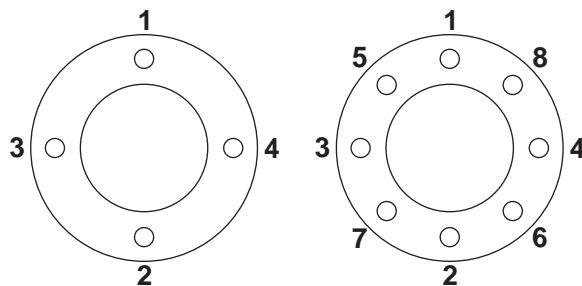


Figure 4.1  
Flange Bolt Tightening Sequence



**Injury can result from an inadequately supported monitor. Monitor mount must be capable of supporting nozzle reaction force which can be as high as 1800 lbs (820 kg). Flanges and pipes made from plastic are inadequate for monitor mounting and must not be used.**

### 4.2 INLET ADAPTER MOUNTING

The figure below shows the various Inlet Adapters used for 4.5" Quick Connect Monitors and Elbows. These Inlet Adapters must be oriented upon installation so a monitor will point in the desired direction. Figure 4.2 shows examples of Inlet Adaptors and the location of a "Straight Ahead Reference Mark" recessed into the threads. In the case of the VUM, the hex head trunnion between ports C2 and C3 serves as the Straight Ahead Reference Mark. Travel ranges relative to the Straight Ahead Reference Mark can be modified by using "Stop Bolts," which are used to limit the travel. See instruction manual for monitor for use of Stop Bolts.

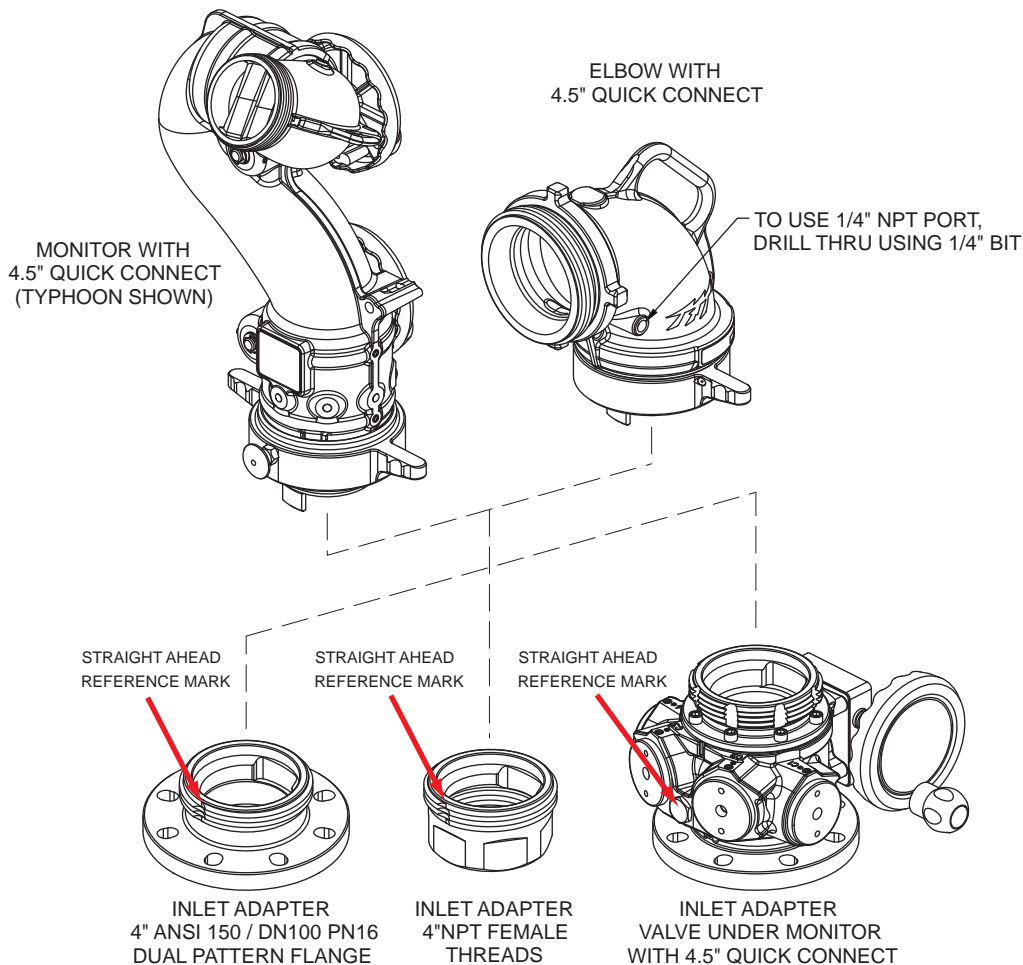


Fig 4.2 Inlet Adapters

## 5.0 USE

### 5.1 USE OF QUICK CONNECT MONITORS

#### TO INSTALL MONITOR ON INLET ADAPTER:

1. Hold locking pin out. Push coupling up as far as it will go, then release locking pin. This will hold the coupling out of the way while mounting the monitor onto inlet base.
2. Align narrow tongue with straight ahead reference mark, then slide into inlet adapter.
3. Hold locking pin out. Rotate coupling clockwise until threads engage on inlet adapter, then release locking pin. Continue to rotate coupling until tight. Locking pin will ratchet across detents, but it is not necessary to over-tighten coupling if locking pin ends up between detent positions. To prevent damage, do not use locking pin as a lever to tighten or loosen coupling.

#### TO REMOVE MONITOR FROM INLET ADAPTER:

1. Hold locking pin out. Rotate coupling counter-clockwise at least a half-turn to clear the detents, then release locking pin. Continue to rotate coupling until threads are no longer engaged.
2. Lift the monitor out of the inlet adapter.

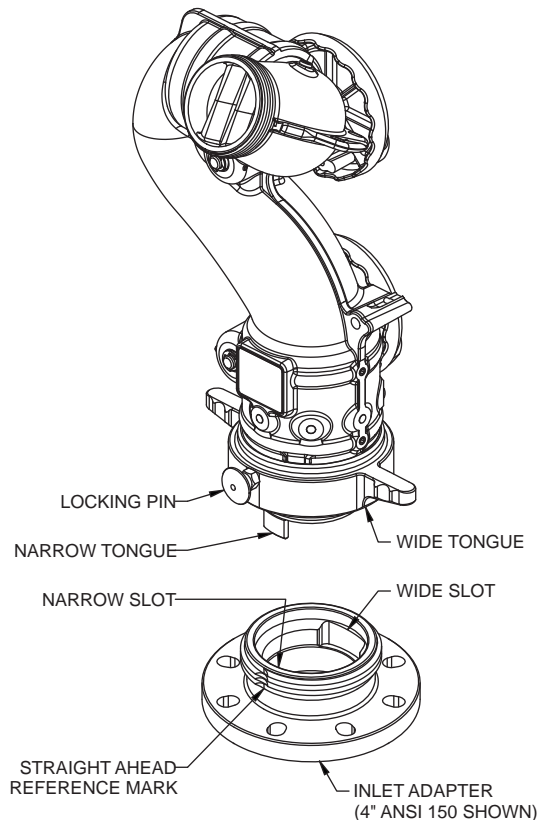


Fig 5.1 Monitor on Quick Connect

### 5.2 USE OF QUICK CONNECT ELBOWS

Elbow is intended for temporary installation only, so a locking pin is not needed.

The fulltime swivel joint and tongues engaged into slots are able to prevent accidental disassembly due to forces acting on the hose line. If desired, a 1/4" NPT pressure gage may be installed in the elbow by drilling thru the blind port shown in section 4.2 using a 1/4" drill bit.

#### TO INSTALL ELBOW ON INLET ADAPTER:

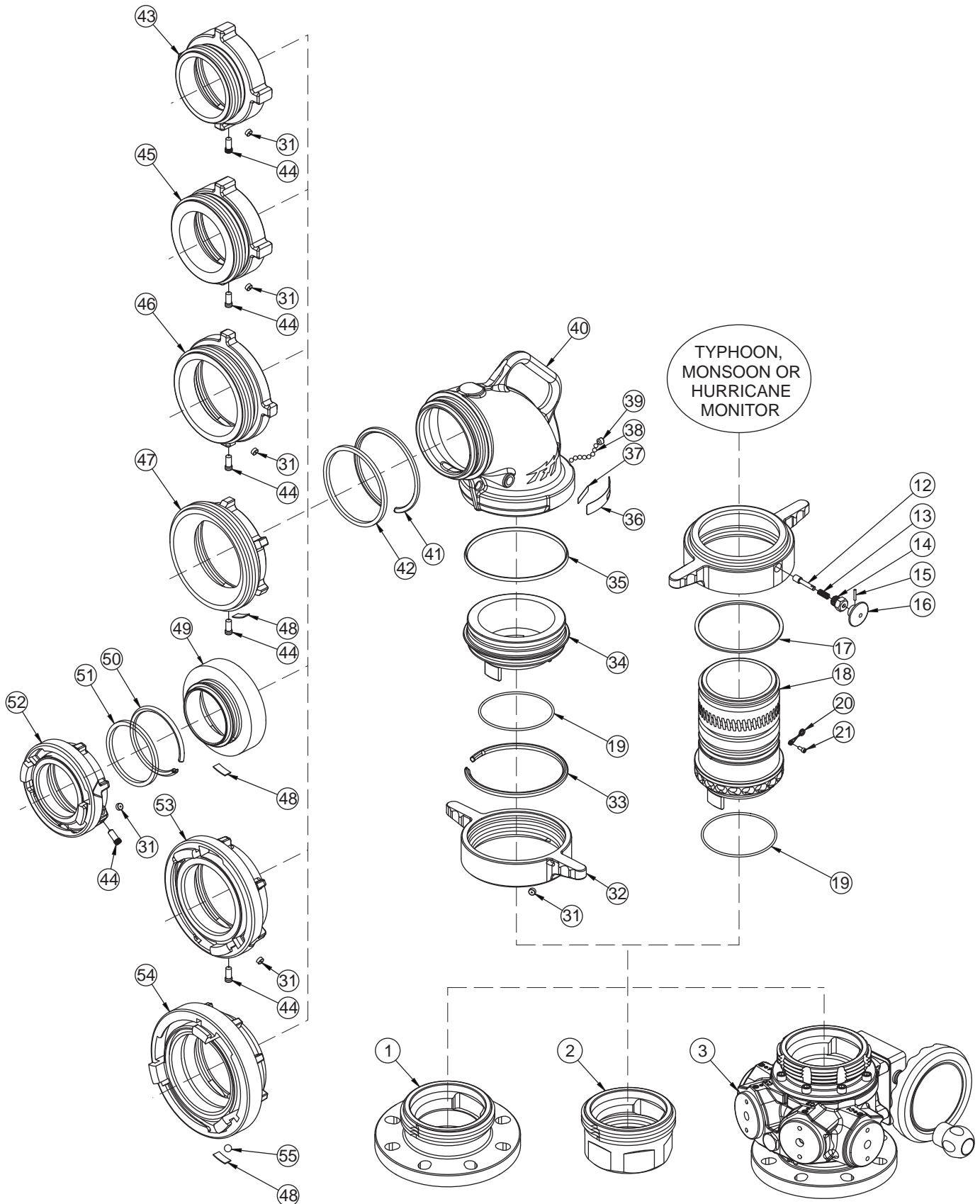
1. Align narrow tongue with straight ahead reference mark, then slide into inlet adapter.
2. Rotate coupling clockwise until tight.

#### TO REMOVE ELBOW FROM INLET ADAPTER:

1. Rotate coupling counter-clockwise until threads are no longer engaged.
2. Lift the elbow out of the inlet adapter.

## 6.0 DRAWINGS AND PARTS LISTS

### 6.1 EXPLODED VIEW DRAWING



## 6.2 PARTS LIST

INDEX	DESCRIPTION	QTY	PART #
1	QUICK CONNECT 4"ANSI X 4.5"NHM	1	Y4482
2	QUICK CONNECT 4"NPTF X 4.5"NHM	1	Y4483
3	VALVE UNDER MONITOR	1	AK*
11	COUPLING 4.5"NHF QUICK CONNECT	1	Y4480
12	PULL PIN	1	XXL340
13	PULL PIN SPRING	1	X345
14	PULL PIN HOUSING	1	X350
15	1/8 X 3/4 HDP SPIROL PIN	1	VP125X750H
16	PULL KNOB	1	XX341
17	BEARING RING	1	Y4481
18	BASE 4.5" QUICK CONNECT	1	Y4407
	BASE 4.5" QUICK CONNECT TILLER	1	Y4408
19	O-RING-245	1	VO-245
20	CABLE CLAMP TORSION SPRING	1	Y4485
21	8-32x3/8 SOCKET HEAD SCREW	1	VT08-32SH375
31	PORT PLUG	2	A1299
32	COUPLING HNDL 4.5"NHF X PSF6.0A	1	A4568
33	PLASTIC STRIP 6.00"	1	A1293
34	MATE 4.5" QUICK CON X HSBGM60	1	A1056
35	CUP SEAL	1	A1545
36	WYE AND HYDRANT VALVE LABEL	1	AY305
40	ELBOW HSBGF60 X PSM5.25	1	A1051
41	PLASTIC STRIP 5.25"	1	A1291
42	CUP SEAL LOADED	1	A1596
43	SPOUT 4.0"NHM X PSF5.25	1	A4620N
44	LOCK-OUT SCREW	1	A1294
45	SPOUT 4.5"NHM X PSF5.25	1	A4625N
46	SPOUT 5.0"NHM X PSF5.25	1	A4630N
47	SPOUT 6.0"NHM X PSF5.25	1	A4635N
48	LABEL; PORT COVER	1	A1298
49	MATE PSM 4.25 x PSF 5.25	1	A4730
50	PLASTIC STRIP	1	A1292
51	CUP SEAL LOADED	1	A1597
52	4" STORZ SUBASSEMBLY	1	A4124
53	5" STORZ SUBASSEMBLY	1	A4125
54	6" STORZ SUBASSEMBLY	1	A4126
55	7/16" SS BALL	1	VB.437



## 7.0 MAINTENANCE

The 4.5" Quick Connect should be kept clean and free of dirt. Moving parts such as couplings and pull pins should be checked periodically for freedom of movement. Any missing or damaged parts should be repaired or replaced before returning to service. Any scrapes that expose bare aluminum should be cleaned and touched up with an enamel paint such as Rust-Oleum.

To reduce friction during installation and removal, silicone-based grease such as Dow Corning 112 may be applied to the inlet o-ring (index #19 in figure 6.1) and the cylindrical area surrounding the o-ring groove. Silicone-based grease may also be applied to other seals as needed.

### **⚠ CAUTION**

**Dissimilar metals coupled together can cause galvanic corrosion that can result in the inability to unscrew the threads of complete loss of thread engagement over time. Per NFPA 1962 (1998 edition), if dissimilar metals are left coupled together an anti-corrosive lubricant should be applied to the threads. Also the coupling should be disconnected and inspected at least quarterly.**

### **⚠ CAUTION**

**Any alterations to the Ball Intake Valve and its markings could diminish safety and constitutes a misuse of this product.**

## 8.0 WARRANTY

Task Force Tips, Inc., 3701 Innovation Way, Valparaiso, IN 46383-9327 USA ("TFT") warrants to the original purchaser of its 4.5"NH Quick Connect, and to anyone to whom it is transferred, that the equipment shall be free from defects in material and workmanship during the five (5) year period from the date of purchase.

TFT's obligation under this warranty is specifically limited to replacing or repairing the equipment (or its parts) which are shown by TFT's examination to be in a defective condition attributable to TFT. To qualify for this limited warranty, the claimant must return the equipment to TFT, at 3701 Innovation Way, Valparaiso, IN 46383-9327 USA, within a reasonable time after discovery of the defect. TFT will examine the equipment. If TFT determines that there is a defect attributable to it, it will correct the problem within a reasonable time. If the equipment is covered by this limited warranty, TFT will assume the expenses of repair.

If any defect attributable to TFT under this limited warranty cannot be reasonably cured by repair or replacement, TFT may elect to refund the purchase price of the equipment, less reasonable depreciation, in complete discharge of its obligations under this limited warranty. If TFT makes this election, claimant shall return the equipment to TFT free and clear of any liens and encumbrances.

This is a limited warranty. The original purchaser of the equipment, any person to whom it is transferred, and any person who is an intended or unintended beneficiary of the equipment, shall not be entitled to recover from TFT any consequential or incidental damages for injury to person and/or property resulting from any defective equipment manufactured or assembled by TFT. It is agreed and understood that the price stated for the equipment is in part consideration for limiting TFT's liability. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

TFT shall have no obligation under this limited warranty if the equipment is, or has been, misused or neglected (including failure to provide reasonable maintenance) or if there have been accidents to the equipment or if it has been repaired or altered by someone else.

THIS IS A LIMITED EXPRESS WARRANTY ONLY. TFT EXPRESSLY DISCLAIMS WITH RESPECT TO THE EQUIPMENT ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

THERE IS NO WARRANTY OF ANY NATURE MADE BY TFT BEYOND THAT STATED IN THE DOCUMENT.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.