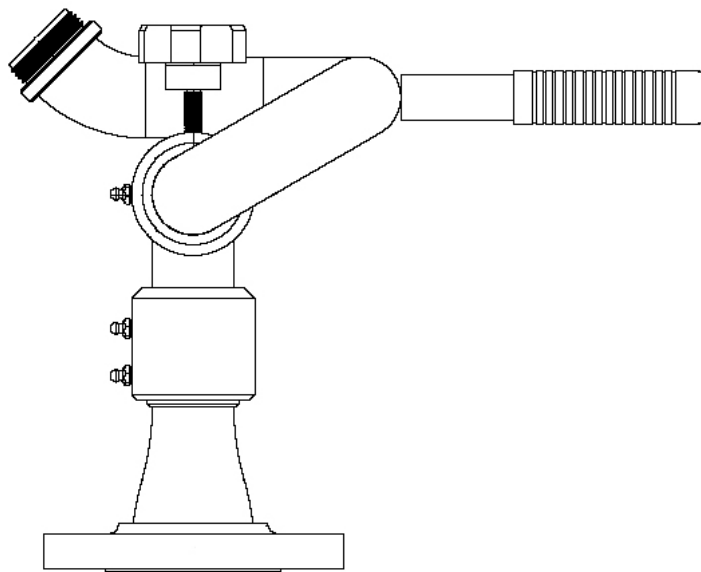




Installation, Operation & Maintenance Manual



Stang 1.50" Manual Station Monitor Model # 915050

2616 Research Drive Unit B
Corona, Ca 92882 USA
www.stangindustries.com

05/2008

1. Introduction

The Stang 1.50" Station Monitor is a manually controlled water monitor that has a vertical & horizontal rotation. The welded single waterway design allows for an efficient & performance enhanced flow as well as a heavy duty construction. Horizontal & vertical rotation is controlled via a tiller bar handle and the locking of both axes is accomplished via lock knobs on the swivels. This monitor is available with various intake options. Please refer to the list below for dash numbers.

2. General Features

- Schedule 40 Steel Waterway
- Aluminum Nickel Bronze Rotation Swivels
- Flow: Up 350GPM/ 80 M³/H
- Operating Pressure: 50-150PSI/ 3.5-10.3BAR
- ANSI Flange or NPT Inlet
- 1.50NH Threaded outlet
- Molded Handgrip for Rotation Operation
- Lock Knob Travel Locks

3. Dash Number Reference

Dash #	Inlet Type
-1	1.50" Male NPT
-11	1.50" Female NPT
-21	1.50" 150# Raised Face Ansi Flange
-31	2.50" 150# Raised Face Ansi Flange
-41	3.00" 150# Raised Face Ansi Flange
-51	4.00" 150# Raised Face Ansi Flange
-61	1.50" 150# Flat Face Ansi Flange
-71	2.50" 150# Flat Face Ansi Flange
-81	3.00" 150# Flat Face Ansi Flange
-91	4.00" 150# Flat Face Ansi Flange

4. Installation

****Warning****

Installation should be conducted by qualified personnel only. Improper installation can be hazardous & deadly to property & life.

a. Flange Installation:

When installing to a flanged connection, make sure the mating flange is the same size as the flange on the monitor. Use the proper flange gasket to make a watertight seal. Use a minimum of grade 5 bolts with galvanized finish. Make sure each hole in flange has been used and the thread engagement is 1.5 x bolt diameter. It is advisable to

use a locking mechanism such as lock washers underneath the nuts. Tighten to proper torque.

If installing with a butterfly valve, use Stang butterfly flange installation kit. See part number 9684xx series.

5. Operation

****Warning****

Operation should be conducted by qualified personnel only. Water jet & reaction forces can be hazardous & deadly to property & life. Use with extreme caution.

1. Make sure all connections to the monitor are tight as per above instructions.
2. All travel rotations are locked.
3. Monitor outlet is not pointed to people, property or animals.
4. Open water supply valve slowly.
5. Check for leaks.
6. At this point slowly loosen the travel locks so you can rotate the monitor.
7. For shutdown lock travel locks in position. Slowly turn off water supply.

6. Maintenance

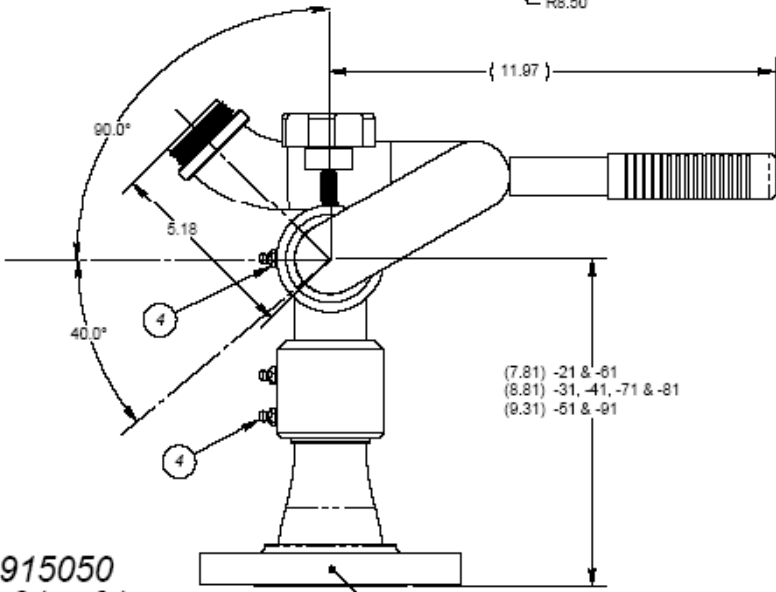
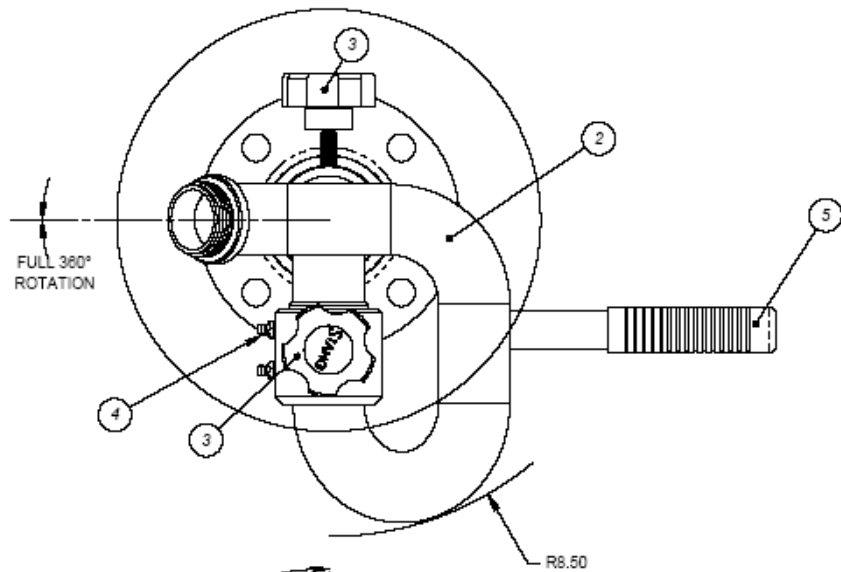
- a. For swivel maintenance refer to TB-17 at the end of this document.
- b. Threads on lock knobs need to stay lubricated with anti seize lubricant.

7. Storage

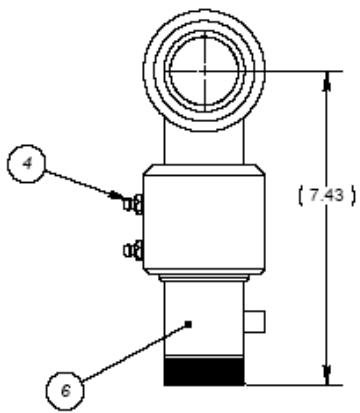
- a. Make sure all water is removed from waterway.
- b. Swivel is well greased.
- c. Outlet/Inlet is closed (to prevent animals or debris from collecting inside).

8. Parts Breakdown

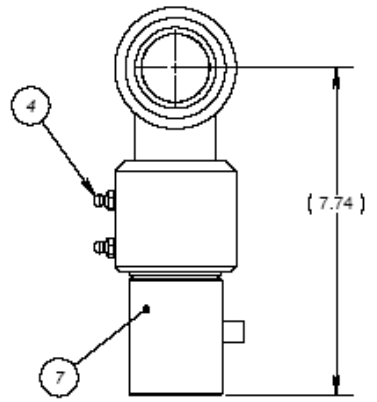
1	-	-	-	-	-	-	-	-	-	15	802039-71	BASE INTAKE, 1.50" W/4.0-150#FF FLG, STL-AB
-	1	-	-	-	-	-	-	-	-	14	802039-61	BASE INTAKE, 1.50" W/3.0-150#FF FLG, STL-AB
-	-	1	-	-	-	-	-	-	-	13	802039-51	BASE INTAKE, 1.50" W/2.5-150#FF FLG, STL-AB
-	-	-	1	-	-	-	-	-	-	12	802039-41	BASE INTAKE, 1.50" W/1.5-150#FF FLG, STL-AB
-	-	-	-	1	-	-	-	-	-	11	802039-31	BASE INTAKE, 1.50" W/4.0-150#RF FLG, STL-AB
-	-	-	-	-	1	-	-	-	-	10	802039-21	BASE INTAKE, 1.50" W/3.0-150#RF FLG, STL-AB
-	-	-	-	-	-	1	-	-	-	9	802039-11	BASE INTAKE, 1.50" W/2.5-150#RF FLG, STL-AB
-	-	-	-	-	-	-	-	1	-	8	802039-1	BASE INTAKE, 1.50" W/1.5-150#RF FLG, STL-AB
-	-	-	-	-	-	-	-	-	1	7	802043-91	BASE INTAKE, 1.50" W/1.5NPT(F), SS-AB
-	-	-	-	-	-	-	-	-	1	6	802043-81	BASE INTAKE, 1.50" W/1.5NPT(M), SS-AB
1	1	1	1	1	1	1	1	1	1	5	100256-2	GRIP,HAND,BLK PLSTC,#RG14055
2	2	2	2	2	2	2	2	2	2	4	103828-1	SWIVEL KIT, 1.5 NOM.
2	2	2	2	2	2	2	2	2	2	3	101128-3	KNOB, 3/8-16UNC, BLACK PHENOLIC
1	1	1	1	1	1	1	1	1	1	2	801301-11	ELL, UPPER, 1.50" STATION, STL-AB
1	1	1	1	1	1	1	1	1	1	1	801292-11	ELL, LOWER, 1.50" LR, STL-AB
-81/QTY.	-81/QTY.	-71/QTY.	-61/QTY.	-51/QTY.	-41/QTY.	-31/QTY.	-21/QTY.	-11/QTY.	-1/QTY.	ITEM NO.	PART #	DESCRIPTION



915050
 -21 -61
 -31 -71
 -41 -81
 -51 -91



915050-1



915050-11

Disclaimer: This advice is given in good faith but not without liability

Technical Bulletin

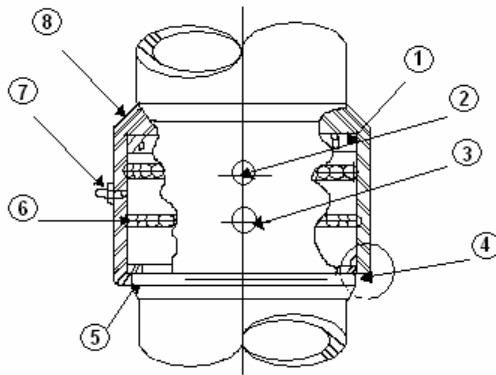


Stang Industrial Products

951-479-9810

www.stangindustrial.com

Technical Bulletin #: TB-17
Part #: N/A
Description: Swivel Joint Service Instructions
TB Description: For the repair & service of Stang swivels



Parts

1. Pressure Seal
2. Ball Retainer Plug
3. Retaining Ring (For Plug)
4. Dirt Seal
5. Inner Race
6. Steel Balls
7. Grease Zerk
8. Outer Race

Equipment needed

1. Retaining ring pliers (Truarc or equal: #1 internal rings on joints up to 4", and #3 for 6" joints and larger)
2. Sharp pointed tool (Example: alignment punch or ice pick).
3. Solvent to soften grease in ball races.
4. Cleaning material-rags.
5. Lubricant: All purpose grease, grade #2.
6. New Seals.

Maintenance

1. Lubricate swivel joint through grease zerk (7) after each 24 hours of accumulated use.

Caution: Excessive grease pressure can cause packing displacement and consequent leakage.

2. Inspect swivel joint at regular intervals for water leakage. If leakage is detected, replace packing as described in the repair procedure.

REPAIR

1. Disassembly:
 - A. With retaining ring pliers, remove the two retaining rings (3).
 - B. Insert sharp pointed tool into middle of the ball retainer plug (2) and lift at slight angle. The ball retainer plug has a metal plate on top with a small hole in the middle of the plate to aid in removal.
 - C. Rotate swivel joint to allow balls (6) to roll out of races. If grease is thick and heavy, balls may not fall free. Use solvent to clean. Balls will always roll out if races are clean. Parts will disassemble when all the balls have been removed, and the seals will be exposed. A flexible polyethylene rod or similar tool may be used to push balls from race.
2. Cleaning:
 - A. Remove old seals (1 & 4) and replace with new parts.
 - B. Thoroughly clean all parts and apply a thin coat of lubricant around the packing.

Reassembly

1. Replace pressure seal with new part if necessary. Lips must face away from ball grooves. Put small amount of grease on seal to ease reassembly.
2. Replace dirt seal. (Item 4)
3. Press the separate swivel joint races together and drop in the balls until the races are filled.
4. Replace the ball retainer plugs (2).
5. Replace retainer rings (3) with retaining ring pliers.
6. Lubricate the ball race area by using a small hand grease gun to force a small amount of the lubricant through grease zerk (7). Then rotate one portion of the 90° and regrease. Repeat 2 more times.
 - a. **Caution:** Do not over grease. Excessive grease pressure can cause leakage and/or difficult rotation.

Product Recommended Spares List

Document # prs915050
Part # 915050-xx
Description MONITOR, 1.50" STATION, STL-AB
Latest Update Date 05/20/08

Item No.	Qty.	Part No.	Description
1	2	103828-1	KIT, 1.50" NOMINAL SWIVEL
2	1	101128-3	KNOB, 3/8-16UNC, BLACK PHENOLIC

Stang Industrial Inc.
2616 Research Drive Unit B
Corona, CA 92822
951-479-9810



2616 Research Drive Unit B
Corona, CA 92822
PH: 951-479-9810
FX: 951-479-9817
www.stangindustries.com

Certificate of Conformance

Product Group: Stang Station Monitors
Part Number: All 915xxx Series
Basic Description: 1.50" Standard Station Water Cannon
Certificate Date: 05/20/08

Stang Industries hereby certifies that the equipment as described on your purchase order has been manufactured & supplied in accordance with Stang Industries Inc. design and manufacturing procedures. The design has been based on dimensional data provided by the customer and/or end user. Further we hereby certify that each assembly has been functionally tested and pressure tested.

Deviations from Standard: None

Date: May 20, 2008

Signed: Charles Ronie

Print: Charles Ronie

Position: President