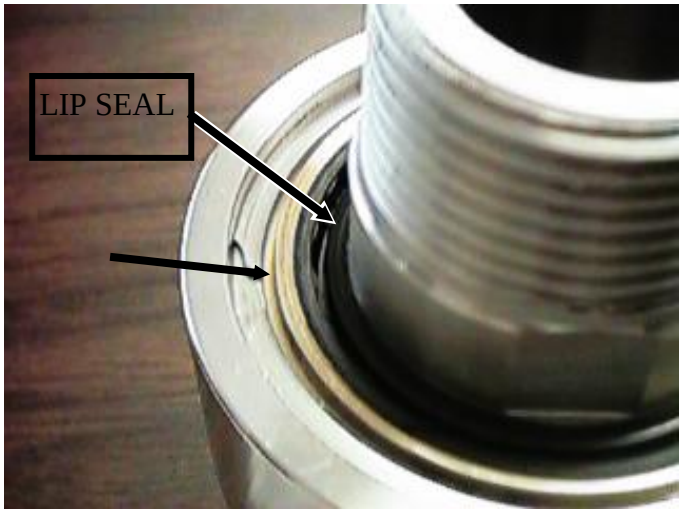
JO-1 hose-end swivel inspection recommendations

The recommended inspection involves a visual inspection as outlined below, and a rotation inspection

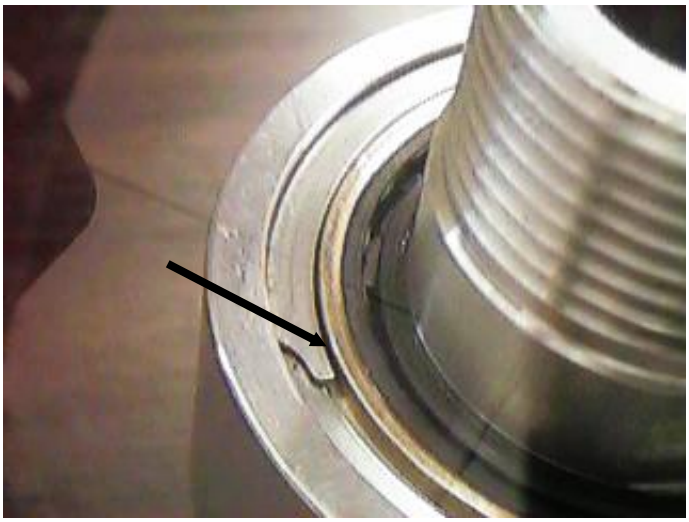
1.) The main housing as well as the male nipple, used in the JO-1 hose-end swivel, are fabricated from Stainless Steel. As such, the JO-1 is nearly corrosion resistant. However, a check for obvious signs of corrosion damage should be performed. Visually inspect the main housing for obvious signs of corrosion. This may be in the form of pitting, black streaks, or grainy cavities. If corrosion is found, take the swivel out of service and contact us at 805-498-2589.

2.) Check the condition of the lip seal on the end of the JO-1 hose-end swivel. It is black in color and contacts the outside diameter of the male nipple. The purpose of the lip seal is to help prevent moisture from contacting the ball bearing. If the lip seal is damaged, moisture may enter the ball bearing, and in severe cases, the seal components may corrode because of this and produce an eventual leak. Check the lip seal, visually, to see if it is cracked, obviously deformed, or damaged in any way. If it is, the swivel should be taken out of service and then taken apart to determine if any further damage has occurred. If further damage is noted, a seal kit should be installed as outlined in manuals CS-JO1 and IS-JO1. In any event, the lip seal should be replaced.

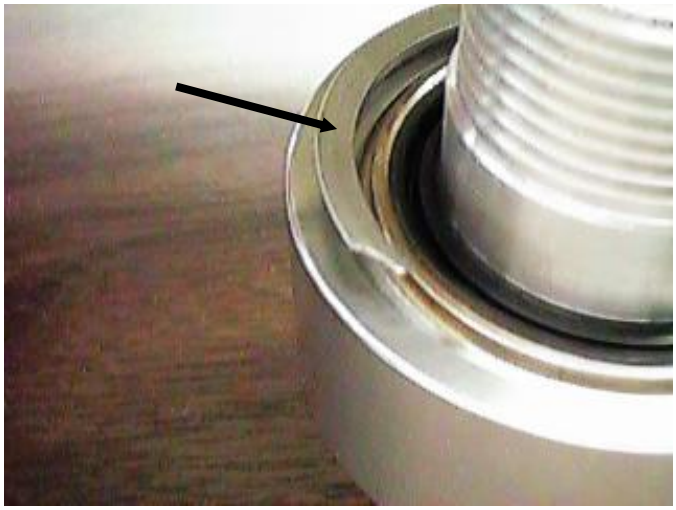
3.) Retaining rings in factory shipped JO-1 swivels are 100% inspected to ensure a proper fit. Because the retaining ring is deeply recessed into the end of the swivel, it would be highly unusual for the ring to become dislodged from its groove. However, proper fit should be checked periodically. Check the retaining ring at the male end of the swivel to ensure it is properly seated. Note the photographs below show a normally seated retaining ring and abnormally seated retaining ring. If the retaining ring appears to be abnormally seated, do not try to reseat the retaining ring while the swivel is installed and the system is under pressure. Remove the swivel from service and follow all directions as outlined in manuals CS-JO1 and IS-JO1. The retaining ring cannot be reseated properly unless the swivel is taken out of service and pressure is applied, such as putting the swivel in a vice and gently tightening the vice jaws. This relieves tension on the retaining ring, allowing for proper seating in its groove.



Normal retaining ring seat (note the distance between the inside diameter of the retaining ring and the shoulder of the bearing retainer plate)



Abnormal retaining ring seat (note the minimal distance between the inside diameter of the retaining ring and the shoulder of the bearing retainer plate)-take out of service



Abnormal retaining ring seat (note the retaining ring tang has come out of the retaining ring groove)-take out of service

4.) The entire swivel can be subject to damage from dragging along the ground. Sustained dragging, such as, but not limited to the delivery hose being inadvertently dragged behind a moving delivery truck, will cause severe damage, generally to one side of the swivel. Inspect the outside of the JO-1 hose-end swivel for areas that appear to be ground completely flat. If found, take the swivel out of service

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SMAC-1 hose-end swivel inspection recommendations

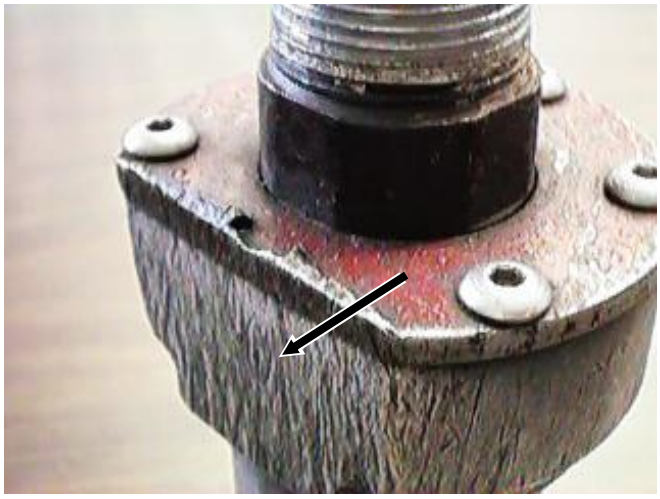
The recommended inspection involves a visual inspection as outlined below, and a rotation inspection.

1.) The main housing used for the SMAC-1 is fabricated from an Aluminum alloy. In certain geographic areas, especially severe winter areas, corrosion of the main housing may be accelerated principally due to chemicals applied to roads to melt snow and ice. Cleaning chemicals may also be a factor. Visually inspect the outside of the SMAC-1 main housing to look for corrosion damage. This could be in the form of a scaly, flaky appearance, or a white powdery appearance. It is normal for the main housing to take on a light to dark gray appearance. Pay close attention to any apparent corrosion damage such as described above in the vicinity of the Drag Guard™ safety plate that is held onto the main housing with Button-head Allen screws. If noticeable corrosion damage is found, take the swivel out of service.

2.) The entire swivel can be subject to damage from dragging along the ground. Sustained dragging, such as, but not limited to the delivery hose being inadvertently dragged behind a moving delivery truck, will cause severe damage, generally to one side of the swivel. Inspect the outside of the swivel for areas that are worn flat. If one or both sides of the swivel are worn flat, take the swivel out of service. If any of the Button-head Allen screw heads are ground off, take the swivel out of service.

3.) To make sure the swivel is operating properly, with pressure in the delivery hose, rotate the swivel once or twice. If the swivel is difficult to rotate or binds in certain positions, take the swivel out of service. This inspection should be done with the pump operating.

Note the corrosion, exposing one of the Button-head Allen screws-**take out of service**



Note the flat-sided wear due to dragging behind a delivery truck-**take out of service**

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