

How to Repair a High-Pressure Swivel, 1/4" Using Kit #12609

These instructions will demonstrate how to replace components of an AccuStream High-Pressure Swivel, 1/4" with kit #12609

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TOOLS:

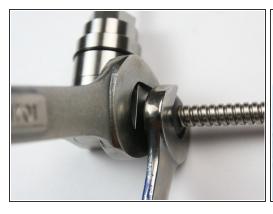
- 3/4" wrench (1)
- 5/8" wrench (1)
- Pick (1)
- Gauge pin .300-.360 (1)

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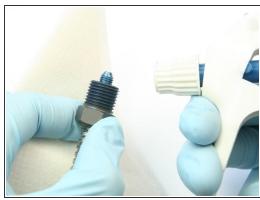
PARTS:

- Major Swivel Repair Kit #12609 (1)
- Swivel Bearing Back-up #13642 (included in kit) (1)
- Swivel Shaft #13633 (Included in kit) (1)
- Thrust Bearing #13644 (included in kit)
 (1)
- Thrust Bearing Washer #13645 (included in kit) (2)
- Seal, 1/4" Swivel #12867 (included in kit)(1)
- O-ring, "Red" #12662-008 (included in kit) (1)
- O-ring #11679-022 (included in kit) (1)
- High-Vacuum Grease #11447 (included in kit) (1)
- Wiper, .250 ID X .500 OD 70D #13651
 (1)
- Swivel Bearing #13646 (1)
- Swivel Housing, Bearing Half, 1/4" #13650 (1)
- Swivel Housing, Seal Half #13641 (1)
- Swivel Collar #13643 (1)
- Blue Goop #11111 (1)
- Lithium Grease (1)
- Isopropyl Alcohol (1)

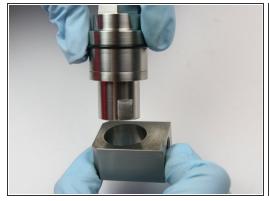
Step 1 — How to Repair a High-Pressure Swivel, 1/4" Using Kit #12609







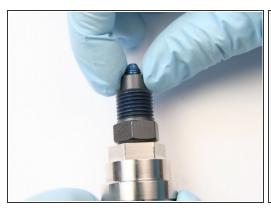
- Loosen the high-pressure gland from the swivel collar with 5/8" and 3/4" wrench.
- Unthread the high-pressure gland from the swivel collar.
- Clean the high-pressure gland and the high-pressure tubing cone with isopropyl alcohol or a similar cleaning agent.







- Remove the swivel collar from the swivel housing.
- Loosen the high-pressure gland from the coupling with 1-1/16" and 5/8" wrench.
- Unthread the high-pressure gland at the top of the swivel shaft from the coupling.







- Uthread the high-pressure collar from the threads of the swivel shaft.
- Remove the high-pressure gland and the collet from the swivel shaft.
- Clean the high-pressure gland of all Blue Goop with isopropyl alcohol.







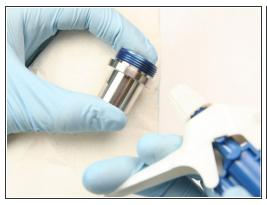
- Use two 3/4" wrenches to separate the bearing half and the seal half of the swivel housing.
- Unthread the bearing half from the seal half of the swivel housing.
- Remove the swivel shaft from the bearing half of the swivel housing by pushing down through the wiper.
 - When removing the swivel shaft, the top thrust washer could stick to the inside top of the bearing half.

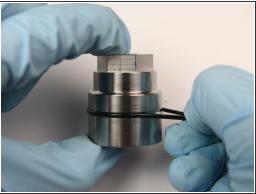






- Remove the thrust washers and the thrust bearing from the swivel shaft.
- Remove the bearing back-up from the seal half of the swivel housing.
- Remove the high-pressure seal assembly from the seal half of the swivel housing with a pick.
 - ↑ Be sure to not scratch the ID of the swivel housing with the pick.

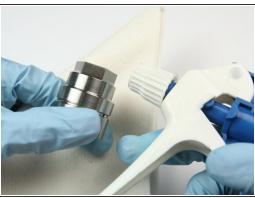






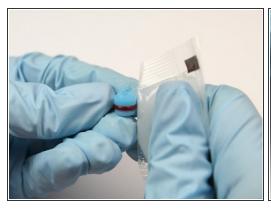
- Clean the seal half of the swivel housing of all Blue Goop with isopropyl alcohol or a similar cleaning agent.
- Remove the O-ring from the bearing half of the swivel housing.
- Remove the wiper from the top of the bearing half of the swivel housing with a pick.







- Remove the swivel bearing from the bearing half of the swivel housing by pushing a .300-.360 gauge pin through the bearing half.
- Clean the swivel bearing half of the swivel housing with isopropyl alcohol or a similar cleaning agent.
- Apply a layer of <u>high vacuum grease</u> into the cavity of the seal half of the swivel housing.







- Apply a layer of high vacuum grease to the high-pressure seal from the kit.
- Put the high-pressure seal from the kit, with the O-ring down, into the cavity of the seal half of the swivel housing.
- Apply a layer of <u>Blue Goop</u> to the threads of the seal half of the swivel housing.







- Put the bearing back-up into the seal half of the swivel housing on the top of the high-pressure seal with a .300-.360 gauge pin until it bottoms out.
- Be sure that the swivel bearing is flush with the bottom of the cavity of the bearing half of the swivel housing.
- Apply lithium grease to the shelf of the new swivel shaft from the kit.



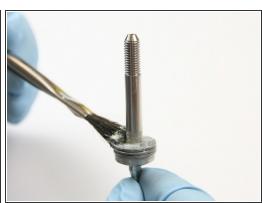




- Put the first thrust washer from the kit onto the swivel shaft.
- Apply lithium grease to the top of the first thrust washer.
- Put the thrust bearing onto the swivel shaft.







- Apply lithium grease to the top of the thrust bearing.
- Put the second thrust washer onto the swivel shaft.
- Apply lithium grease to the top of the thrust washer.







- Apply high vacuum grease to the short end of the swivel shaft.
- Put the back-up bearing into the top of the seal half of the swivel housing.
- Put the short end of the swivel shaft into the back-up bearing until it bottoms out.

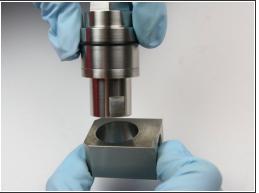






- Thread the bearing half of the swivel housing onto the seal half of the swivel housing.
- Tighten both seal half and bearing half of swivel housing using two 3/4" wrench.
- Put the wiper over the swivel shaft and down into the top of the bearing half of the swivel housing.







- Put the O-ring over the swivel shaft and into the groove of the swivel body.
- Put the swivel housing into the swivel collar with the high-pressure inlet hole facing through the collar hole.
- Apply Blue Goop to the high-pressure gland threads.







- Thread the high-pressure gland into the swivel collar.
- Tighten the high-pressure gland with 3/4" and 5/8" wrench.
- Apply Blue Goop to the high-pressure gland threads.







- Place the collet with the tapered side down into the high-pressure gland.
- Apply Blue Goop to the swivel shaft threads.
- Slide the high-pressure gland with the collet onto the swivel shaft.







- Thread on the collar to the bottom of the threads of the swivel shaft.
- Thread the high-pressure gland into the coupler.
- Tighten the high-pressure gland into the coupler using 1-1/16" and 5/8" wrench.