Description:

The **Spincat** is a self-rotating swivel designed for coil tubing well service. The powerful rotating jets cover a large area for efficient cleaning. Jet reaction force powers rotation of the head. An internal fluid speed control maintains rotation speeds of 30 to 70 rpm. The Spincat uses a synthetic silicone viscous fluid for lubrication. The fluid is available from StoneAge as part number BJ 048-S.

The tool has a straight flow-through design with a leak-free high pressure seal so pump power is not wasted. It has a 7/8" AMMT inlet thread. The tool can be used at temperatures up to 200°C, and can be used with up to 30% HCL and Nitrogen injection. (Note: if used with HCL, flush tool with clean water after use.)

If the Spincat will be used with high external borehole pressures, make certain that the body of the tool is completely full of lubricating fluid; air pockets are compressible and this could lead to oil seal failure and loss of lubrication.

The Spincat can be used at operating pressures of 1000 to 5000 psi and flow rates of .5 to 1.25 bpm (21 to 53 gpm).

The standard nozzle head has five drilled ports; one at 15 degrees forward, two at 45 degrees forward and two at 90 degrees to the axis of rotation. Customized heads are available with variable drilled patterns to concentrate the flow in a particular direction.

Troubleshooting:

SC125 006 Shaft Seal (2)

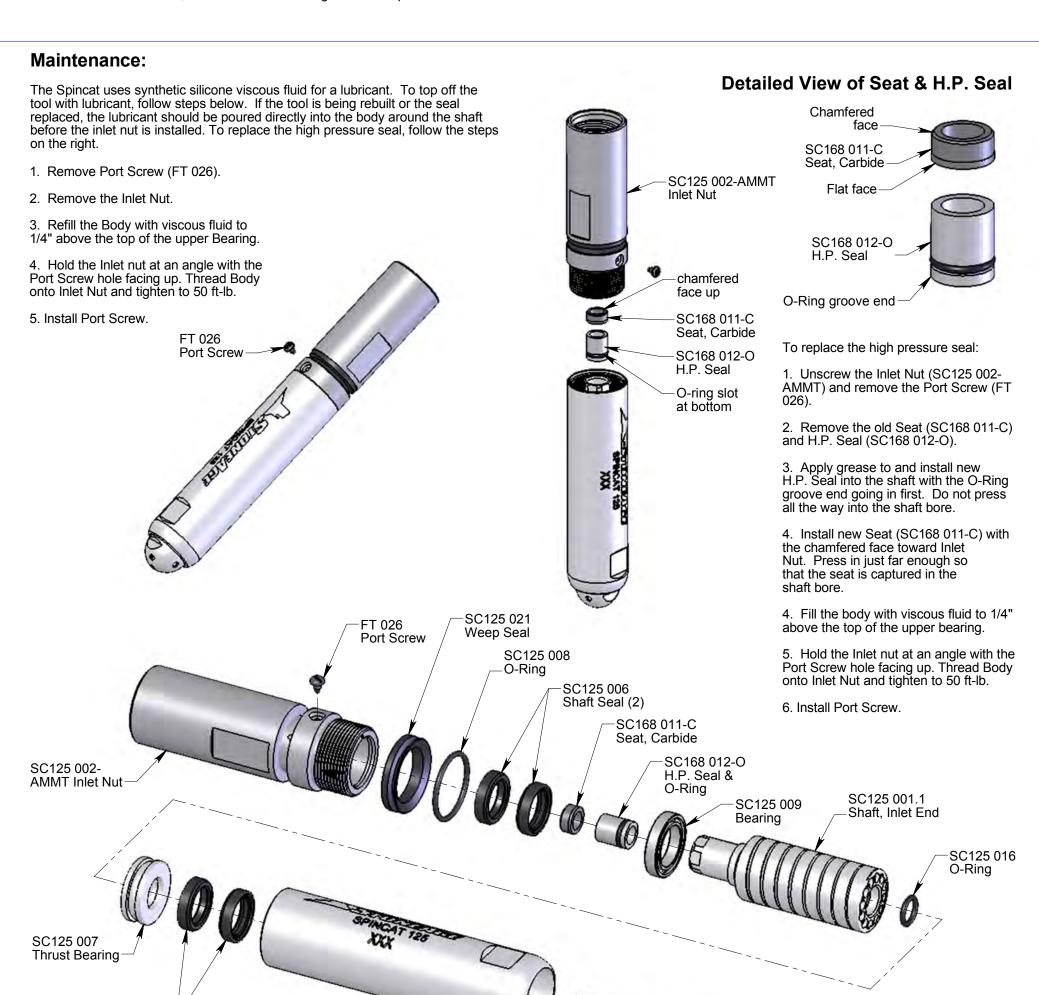
SC125 003

Body

If the head will not rotate when at operating conditions, check head by hand to make sure it rotates freely. If it does not rotate freely by hand, the tool needs to be disassembled and repaired.

If the head rotates freely by hand, check the head configuration and calculate pressure loss thru the coil tubing. Check with your distributor or StoneAge to make certain there is enough jet torque to provide rotation.

If the head rotates too fast, clean out old lubricating fluid and replace with fresh lubricant.

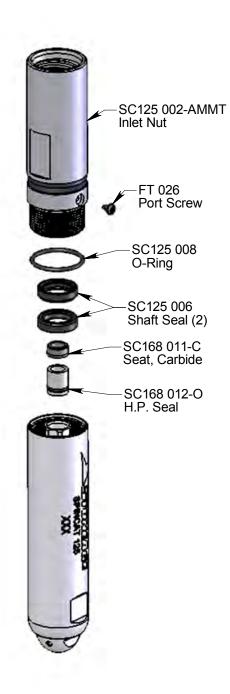


SC125 001.2 Shaft, Outlet End Head

SC125 043-.5 or -1.0

Disassembly:

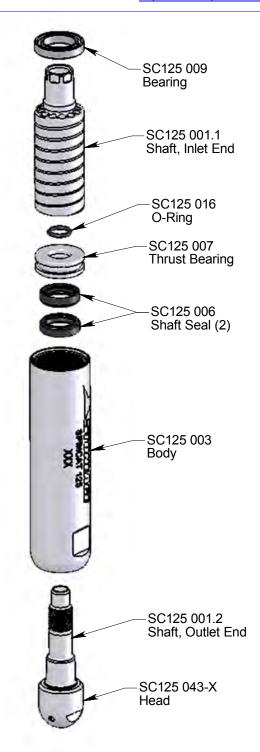
- 1. Unscrew the Inlet Nut (SC125 002-AMMT) from the
- 2. Remove the Port Screw (FT 026) from the Nut.
- 3. Remove the Seat (SC168 011-C) and the H.P. Seal (SC168 012-O) from the bore of the shaft.
- 4. If the Shaft Seals (SC125 006) are damaged, remove them from the Nut using snap ring pliers.
- 5. If the O-Ring (SC125 008) is damaged, remove it from the Nut.
- 6. If the Weep Seal (SC125 021) is damaged, removed it from the Nut.



- 7. Unscrew the Inlet End Shaft (SC125 001.1) from the Outlet End Shaft/Head assembly and remove both from the Body.
- 8. Pull the Bearing (SC125 009) from the Inlet End Shaft.
- 9. If the O-Ring (SC125 016) is damaged, remove it from the bore of the Inlet End Shaft.
- 10. Remove the Thrust Bearing (SC125 007) from the Body.
- 11. If the Shaft Seals (SC125 006) are damaged, remove them from the Body.

SC125 009

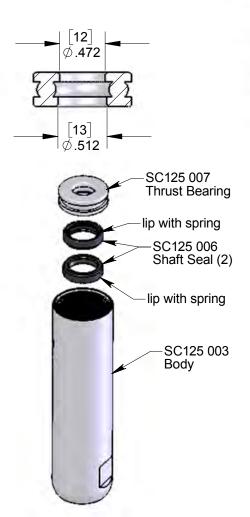
Bearing

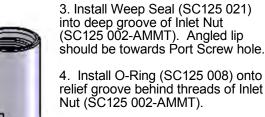


Assembly:

A StoneAge Seal Tool (SC125 050) is available to aid in installing the Seals in the Body and Nut.

- 1. Install Shaft Seals (SC125 007) into Body (SC125 003). Note direction of lip with spring on each Seal. Apply Armour-All to lips of seals.
- 2. Install Thrust Bearing (SC125 007) into Body. The end of the Bearing with the slightly larger bore (13mm) should go in facing down and towards the Seals as shown in detail.





5. Install Shaft Seals (SC125 006) into Inlet Nut. Note direction of lip with spring on each Seal. Apply anti-seize to Inlet Nut threads. Apply Armour-All to lips of seals.



6. Thread the Head (SC125 043-X) onto Outlet End Shaft (SC125 001.2). Use Threadmate and fluorocarbon tape on the pipe threads.

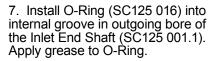
NOTE: there is a 1/4" hex on the inside diameter of the Shaft for holding the Shaft when tightening. Tighten to 30 ft-lbs. Apply anti-seize to straight threads of the Shaft.

SC125 001.1

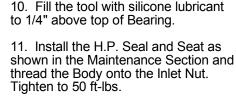
Shaft, Inlet End

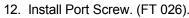
O-Ring

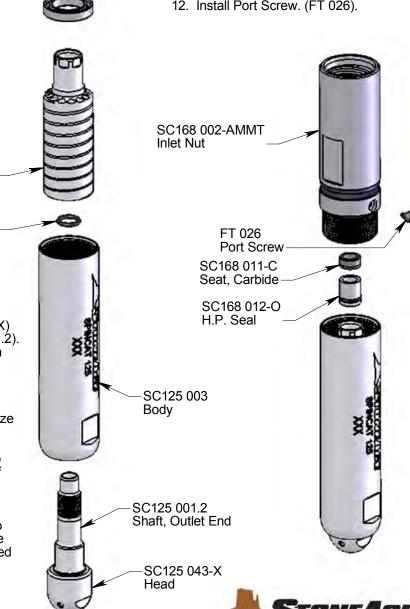
SC125 016



- 8. Slide Head/Shaft assembly into the rounded end of the Body. Slide the Inlet End Shaft into the threaded end of the body and tighten shafts together to 30 ft-lbs.
- 9. Slide Bearing (SC125 009) into inlet end of Body.







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