

# StoneAge® 44 kpsi Air (UH-40) and Hydraulic (UH-50) Belt Drive Assemblies

## Description:

The **UH-40** and **UH-50 Belt Driven Assemblies** are powered rotary waterblast tools designed for fast rotation applications, such as surface cleaning, scarification and coating removal. An assembly consists of a UH swivel driven by a belt connected to either an air motor (UH-40) or a hydraulic motor (UH-50). The belt reduction is 2:1, producing maximum head rotation speeds of between 750 and 1000 rpm. The motor may be throttled to reduce the rotation speed. The swivel assembly is rated up to 44,000 psi with a maximum flow rate of 20 gpm. Various head types may be used, from one piece bar type heads to multiple bent arms on a manifold. The stub shaft has a 9/16 high pressure male end. For further information on the UH swivel, refer to the UH Swivel insert sheet.

## Operation:

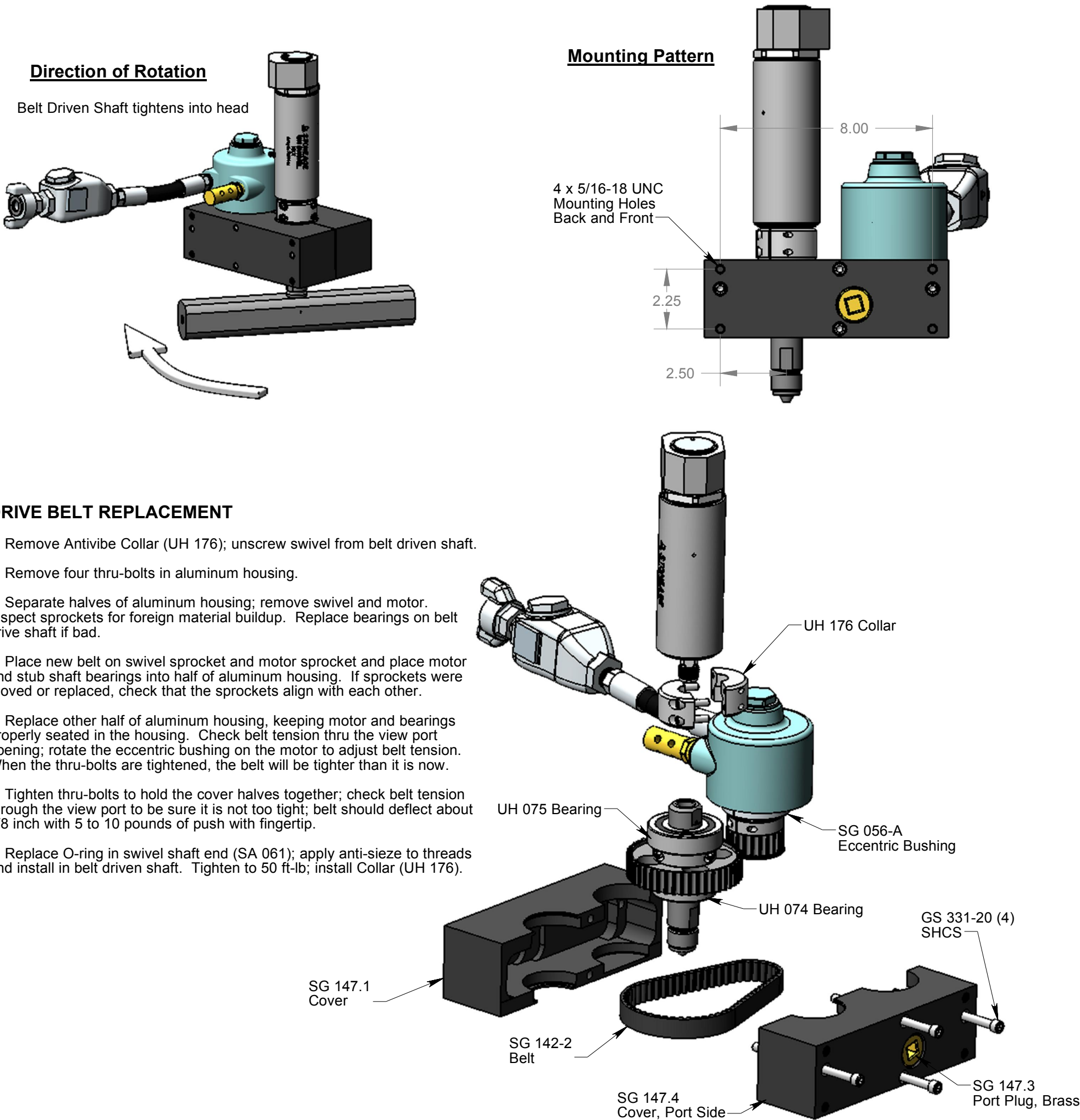
The assembly must be firmly mounted to support the jet reaction force, which could be several hundred pounds of thrust. Rotate the head by hand to make certain it clears the surface being cleaned as well as any shields or guards. Connect the air line or hydraulic lines to the motor so that the rotation direction will tighten the swivel shaft into the head. The air motor used in the UH-40 requires an air supply of 25 to 40 cfm at 80 psi; the air motor needs to be provided with lubrication, and an air dryer is recommended. The hydraulic motor used in the UH-50 requires between 3 and 4.5 gpm at a maximum continuous pressure of 1500 psi; do not exceed this pressure. When using the hydraulic version, we recommend using a valve that prevents sudden stops of the motor, such as a cushion valve.

Do not rotate the swivel without water passing through; there should be at least low pressure water supplied to the swivel to prevent excessive heat buildup. Always flush the high pressure water hose before connecting to swivel inlet to avoid plugging nozzles. Once at operating pressure and desired rotation speed, the unit should not severely vibrate or shake. (If arms of different lengths are used, there will be a small amount of vibration.)

**Important Note: Run the assembly at 500 rpm or less for the first half hour of use on a new swivel or new swivel shaft.**

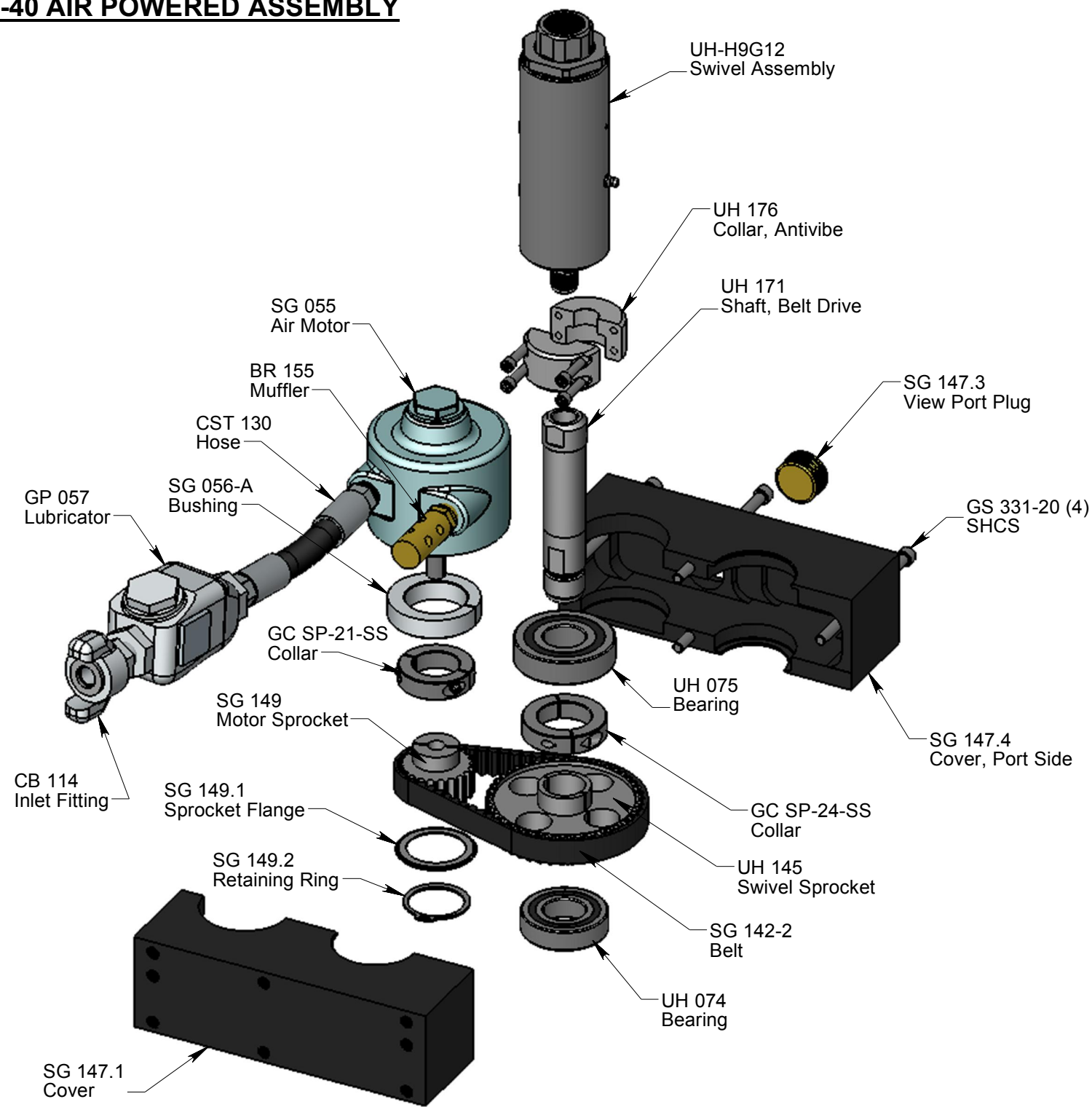
## Maintenance:

Grease the swivel after every 100 hours of use; the high pressure seal may leak intermittently during operation, but when the swivel leaks continuously at operating pressure, replace the high pressure seal- refer to the UH Swivel insert sheet. Maintain sufficient lubrication for the air motor drive; if the unit will be stored for more than a few days without use, squirt some air tool oil into the air motor inlet and operate briefly to distribute the oil in the motor. If the unit vibrates and wear or cracking is occurring on the aluminum flange that retains the swivel, check nozzles for plugging or wear, which creates unbalanced jet thrust and vibration. The most common failures of the belt are stripping of teeth and breaking of the belt; both are frequently caused by abrupt stopping of the rotation, particularly with the hydraulic drive.



# StoneAge® 44 kpsi Powered Belt Driven Assemblies

## UH-40 AIR POWERED ASSEMBLY



## UH-50 HYDRAULIC POWERED ASSEMBLY

