



Technical Service Bulletin 05T08 5RP Finger Bit Retainer Rings

Proper orientation of the retainer rings on the finger bit assembly is important for good wear and performance. See SSI drawing number B-4114-73A attached.

The retainer rings are manufactured with a right-hand wind as shown in the picture at left below. We removed the ring from the groove and expanded it to exaggerate the coils. A right-hand winding is correct for the upper retainer ring on the assembly. The bottom retainer ring should have a left-hand winding as exaggerated in the center picture below.

A proper winding is necessary to reduce wear of the bushing and unwinding and detachment of the retainer rings. If you are having these problems be sure to examine your assembly. If you look closely at the orientation detail view in the above drawing you will notice the retainer rings have an off-set bend between the upper and lower winding. This bend serves as a ramp to cause a hydroplaning action as the shank of the tool turns clockwise relative to the bushing. Cooling water that exits out the ends of the bushing rides up this ramp to provide lubrication between the retainer ring and the bushing. The lubrication prevents wear. The turning action of the parts tend to wind the ring up tight rather than unwind it and cause it to come off.

Please examine your finger bit assembly to determine if the winding of your retainer rings agrees with the drawing and the pictures below. The ring is small so you may need a magnifying glass.

The top retainer ring is probably wound correctly, but the lower retainer ring (nearest the tip) may be incorrect. If incorrect, remove the ring by prying up the tip and walking it off the end of the shank. To change the direction of winding, grab one coil end and lift it up and over the adjacent coil as shown in the picture below at right. Run a knife around the perimeter to flip the coil entirely to the opposite side. Expand your coil and confirm that the winding direction agrees with the pictures. Reinstall the retainer ring over the end of the shank and slide it fully into the appropriate groove.

