



Kit #92

Screw and Insert Kit

(3) 92-28 Cap Screws

(3) 92-31 Knurled Inserts

Instructions Inside

To upgrade from 40-28 cap screw and 40-31 knurled insert.

Modification for shear head part numbers 40-20, 41-20, 42-20, 92-20, 93-20, 94-20, and 95-20

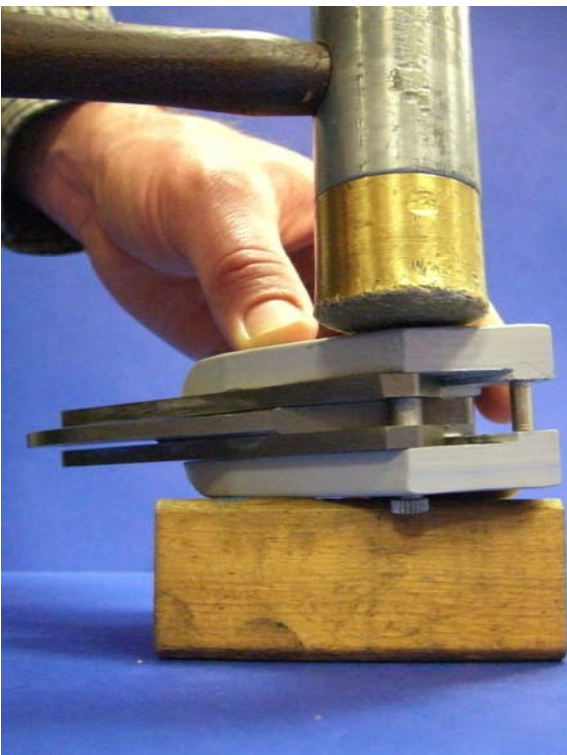
This shears modification involves using new screws with longer straight shank. Moving the first screw thread closer to the end locates the thread transition away from the shearing load path and inside the housing bore. This makes the screw much stronger and less prone to breakage. Screw life increases 3-4 times. Still, front and middle screws serve as a weak link in the shear assembly, preventing other, more expensive components from breaking in case of accidental tool overload.

Changeover requires replacing all three screws and knurled inserts.

- Old part numbers: 40-28 (screw) and 40-31 (knurled insert)
- New part numbers: 92-28 (screw) and 92-31 (knurled insert)

Screw changing procedure

- Loosen all three screws; remove the shear head from the motor.
- Re-snug the front and back screws.
- Loosen the middle cap screw approximately 7 turns.
- Lightly tap on the screw head, knocking out the insert from the housing seat (see Fig. 1).
- Remove old screw and insert, clean the housing counter bore.
- New inserts are a little shorter than the old ones; that's O.K.
- Position new knurled insert in the counter bore. Take care to pick the proper housing side with shallower counter bore, not the deeper.
- Lightly tap the insert in, preferably with a brass or hard plastic mallet, placing the head on a wood block (see fig. #1).
- Engage the new screw, making sure spacer bushing is still in place between side knives. Tighten it moderately to seat the insert all away in.
- Repeat procedure with the front and back screws.
- Assemble the shear head (see corresponding shear head part sheet). Torque the screws to 45-50 in-lb. with a torque gun, if available. If manually using 5/32" short-arm Allen wrench (2-19/32" long), tighten as tight as you can. Do not apply an extension bar! Using a long-arm wrench (4-7/32") will require less force.



Warning: always match new screws with new inserts. Mismatching the old parts (especially using the new screws with the old inserts) will result in wrong assembly and possible components breakage.

Fig. 1 Knocking out a knurled insert by tapping on the screw head