



**Figure 1** – Frame 1 or TR3 Bolt-tightening Sequence

Step 1: Make sure mating surfaces of cover and case do not have any nicks or dings

Step 2: Use 1/2-13 hex head cap screw (grade 5) with 1/2" spring lock washers to bolt the cover to the gear case. Do not use plated bolts.

Step 3: Tighten the cover bolts to a torque of 20 ft-lbs in the sequence 1 through 6 as indicated in Figure 1.

Step 4: Retighten the cover bolts to a torque of 40 ft-lbs in same sequence as previous.

Step 5: Fill the gearcase with oil to the proper oil level. Step 6:

Test the hoist without load and with load.

Step 7: Check the tightness of the cover bolts at a torque of 40 ft-lbs.

Before removing the cover from the hoist-mounted gearcase, screw four 5" long studs (without bolt heads) into positions 2, 3, 5, and 6. This will help hold the cover during removal and align the cover during installation.