

CONTROL PROP SHAFT SCREWS

Sometimes it pays to be a control freak, mechanics. Like when you torque the eight prop shaft screws on a Bradley or MLRS.

If you don't do it right, those screws can vibrate loose. A loose shaft flails around, tearing up the transmission, brake linkage, and even the driver if it breaks through the firewall.

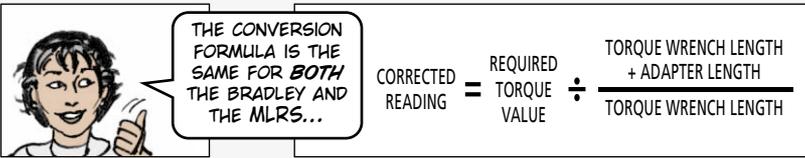
So take control of the situation. Check for loose prop shaft screws during semiannual services. Never reuse loose screws 'cause they won't stay tight. Replace them with new screws, NSN 5306-01-132-3369, and torque them to 86-94 lb-ft. Use the torque wrench to tighten once, loosen and then tighten again.

Some of the screws can't be reached with the end of the torque wrench, so you'll need the 4-in torque wrench adapter, NSN 5120-01-315-5708, called out in the Special Tools appendix in your -20-1-5 TMs.

The adapter keeps the torque wrench from touching the bearing cap and other parts. If it touches, you'll get an incorrect reading and the screws may not stay in place.

When you use the adapter, remember that it adds to the length of the torque wrench. So the actual applied torque will be less than what the torque wrench dial or scale shows.

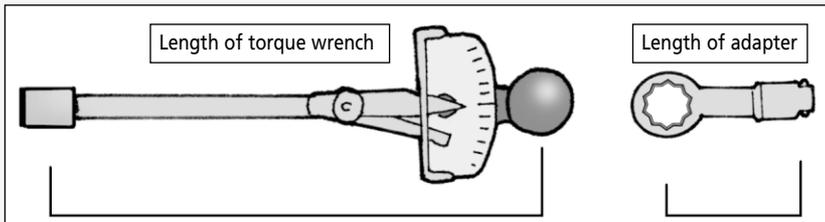
To use the adapter correctly, you must convert the torque value before you start. It'll keep you from under-torquing or over-torquing the screws.



THE CONVERSION FORMULA IS THE SAME FOR BOTH THE BRADLEY AND THE MLRS...

$$\text{CORRECTED READING} = \frac{\text{REQUIRED TORQUE VALUE} \times (\text{TORQUE WRENCH LENGTH} + \text{ADAPTER LENGTH})}{\text{TORQUE WRENCH LENGTH}}$$

Remember, the length of the torque wrench is measured from the center of the handle to the center of the drive. The length of the adapter is measured from the center of the drive to the center of the wrench.



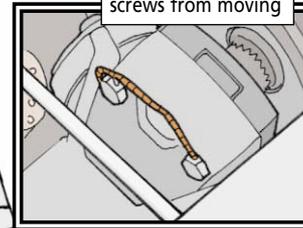
OH, NO!

WHAT A TIME TO DROP A PROP SHAFT!

AFTER YOU'VE TORQUED THE SCREWS PROPERLY, KEEP 'EM IN PLACE WITH SAFETY WIRE.

NEW SCREWS COME WITH HOLES PRE-DRILLED IN THE HEADS.

Safety wire keeps screws from moving



While the TM doesn't require safety wire on the final drive bolts, wire does help keep the bolts in place. It also gives operators something to look for when checking the bolts for looseness during their after-operation PMCS.