Wheel Bearing Adjustment

TMC's Recommended Wheel Bearing Adjustment Procedure for Standard Spindle Nuts

Proper wheel bearing adjustment is critical to the performance of wheel seals and other related wheel end products. For that reason, we are proud to be a part of TMC's Wheel End Task Force.

We are happy to bring these standards to you in the form of this technical guide. Working together, in this way, STEMCO helps keep your rigs rolling.

The following seven step bearing adjustment recommendation for standard spindle nuts was developed by TMC's Wheel End Task Force. It represents the combined input of manufacturers of wheel end components.

For Technical Support, call: 1-800-527-8492.

STEP 1.

Bearing Lubrication:

Lubricate the wheel bearing with clean lubricant of the same type used in the axle sump or hub assembly.

STEP 2.

Initial Adjusting Nut Torque:

Tighten the adjusting nut to a torque of 200 ft-lbs, while rotating the wheel.

STEP 3.

Initial Back Off:

Back the adjusting nut off one full turn.

STEP 4.

Re-Torque Adjustment:

Re-Torque adjusting nut to 50 ft-lbs while rotating the wheel.

STEP 5.

Final Back Off:

AXLE TYPE	THREADS PER INCH	FINAL BACK OFF	
STEER (Single Nut)	12	1% Turn*	
	18	1⁄4 Turn*	
STEER (Double Nut)	14	½ Turn	
	18	½ Turn	
DRIVE	12	1⁄4 Turn	
	16	1⁄4 Turn	
TRAILER	12	1/4 Turn	
	16	1/4 Turn	
*Install cotter pin to lock axle nut in position.			

STEP 6.

Jam Nut Torque:

AXLE TYPE	NUT SIZE	TORQUE Specifications
STEER (Double Nut)	Less Than 25/8" 25/8" And Over	200-300 ft-lbs 300-400 ft-lbs
DRIVE	Dowel Type Washer Tang Type Washer	300-400 ft-lbs 200-275 ft-lbs
TRAILER	Less Than 25/8" 25/8" And Over	200-300 ft-lbs 300-400 ft-lbs

STEP 7.

Acceptable End Play:

Refer to page 21 of the STEMCO TQM Catalog for measuring endplay.

