

Axle Wheel Bearing Installation Specifications

Conventional Wheel-End System					
Axle	Initial Adjusting Nut Torque ①	Final Adjusting Nut Torque ③	Spindle Thread Diameter	Jam Nut Torque Specification	Acceptable End Play Range ③
Drive axles without lock washers	200 lb-ft (272 N•m) Back off 1 turn	50 lb-ft (68 N•m) Back off 1/4 turn	Less Than 2-5/8" (66.67 mm) 2-5/8" (66.67 mm) and over	200-300 lb-ft (272-408 N•m) 300-400 lb-ft (408-544 N•m)	0.001"-0.005" (0.025-0.127 mm)
Drive axles with bendable lock washers	200 lb-ft (272 N•m) Back off 1 turn	50 lb-ft (68 N•m) Back off 1/4 turn	Less Than 2-5/8" (66.67 mm) 2-5/8" (66.67 mm) and over	100-150 lb-ft (136-204 N•m) 100-200 lb-ft (136-272 N•m)	0.001"-0.005" (0.025-0.127 mm)
Front non-drive steer axles	150 lb-ft (203 N•m) Back off 1 turn	50 lb-ft (68 N•m) Back off 1/3 turn for 1-1/8" (28.6 mm), 1-1/2" (38.1 mm)	1-1/8" (28.6 mm) MFS-06, MFS-07, MFS-08 Over 1-1/8" (28.6 mm), Less Than 2-5/8" (66.67 mm)	150-225 lb-ft (203-305 N•m) 200-300 lb-ft (272-408 N•m)	0.001"-0.005" (0.025-0.127 mm)
		Back off 1/4 turn for 1-3/4" (44.45 mm) and over	2-5/8" (6.67 mm) and over	250-400 lb-ft (339-542 N•m)	
Trailer axles	200 lb-ft (272 N•m) Back off 1 turn	50 lb-ft (68 N•m) Back off 1/4 turn	2-5/8" (66.67 mm) and over	200-300 lb-ft (272-408 N•m)	0.001"-0.005" (0.025-0.127 mm)
PRO-TORQ™ front and drive axles	200 lb-ft (272 N•m) Back off 1 turn	100 lb-ft (136 N•m) Back off 1/6 turn	Less than 2-5/8" (66.67 mm)	NA	0.001"-0.005" (0.025-0.127 mm)
		Back off 1/8 turn	2-5/8" (66.67 mm) and over		
Unitized Wheel-End System					
PRO-TORQ™ front and tag axles	600 ±75 lb-ft (813 ±102 N•m)	NA	FH941/946 MC14 and MC16 wheel ends	NA	0-0.002" (0-0.051 mm)
ConMet Wheel-End System					
PRO-TORQ™ drive axles	330 ±30 lb-ft (447 ±41 N•m)	NA	RC23162 wheel end	NA	0-0.006" (0-0.152 mm)

Long-Life Wheel-End Systems					
	Inner Nut Torque Specification ①	Outer Nut Torque Specification	Out-of-Service End Play Criteria ②		
Front non-drive steer (Easy Steer Plus™)	500-700 lb-ft (680-952 N•m)	200-300 lb-ft (272-408 N•m)	0.006" (0.1524 mm) or more		
	Inner Nut Torque ①	Outer Nut Torque	Out-of-Service End Play Criteria ②		
Trailer (TB Series)	700-750 lb-ft (952-1020 N•m)	250-300 lb-ft (340-408 N•m)	0.006" (0.1524 mm) or more		
	Initial Adjusting Nut Torque	Tighten Adjusting Nut	Install Tab Washer and Retainer Nut	Final Adjusting Nut Torque (Counter-clockwise) ④	Acceptable End Play
Trailer (TRIAD™ wheel-end system)	150-200 lb-ft (204-272 N•m) Back off until loose	50-60 lb-ft (68-82 N•m) Back off 1/8 turn	20-25 lb-ft (27-34 N•m)	50 lb-ft (68 N•m)	0.000" to 0.005" (0.000-0.127 mm)
	Adjusting Nut Torque ①⑤		Out-of-Service End Play Criteria ②		
Trailer (TL Unitized)	825-875 lb-ft (1120-1154 N•m)		Greater than 0.003" (0.08 mm)		
	Inner Spindle Nut Torque ①	Outer Nut Torque	Out-of-Service End Play Criteria		
Trailer two-piece nut system (PreSet® by Meritor)	300 lb-ft (408 N•m)	200 lb-ft (272 N•m)	0.006" (0.1524 mm) or more, service the PreSet hub assembly		
	Nut Torque		Acceptable End Play Criteria ②		
Trailer single-nut system (PRO-TORQ™)	200 lb-ft (272 N•m) Back off until loose Apply 100 lb-ft (136 N•m) Back off 1/6, 1/8, and 1/4 turn for TN/TQ, TP and TR axle spindle type		0.001" (0.025 mm) to 0.005" (0.127 mm)		
Trailer single-nut system (Temper Loc)	200 lb-ft (272 N•m) Back off until loose Apply 100 lb-ft (136 N•m) Back off 1/6, 1/8, and 1/4 turn for TN/TQ, TP and TR axle spindle type		0.001" (0.025 mm) to 0.005" (0.127 mm)		

NOTE: For disc brake wheel ends, back off the brake caliper until the rotor is clear from the pad linings about 1/16-inch (1.588 mm) gap or more. Refer to Maintenance Manual MM-0467, DiscPlus™ EX225 Air Disc Brake, for more information. To obtain this publication, visit Literature on Demand at meritor.com.

- ① Rotate the hub a minimum of five complete turns while tightening the nut.
- ② After the retightening procedure is complete.
- ③ The nut may need to be slightly tightened or loosened to meet the required end play.
- ④ Rotated counterclockwise against the retainer nut.
- ⑤ Use a hammer and staking tool to stake the stake washer to the spindle nut in **three** positions.



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