

From: [Debra M. Butchart](#)
To: [BR](#)
Subject: Bridge Advertisement (DSI 24-033) Torque and Angle (TNA) Fixed Spline Bolts
Date: Thursday, July 24, 2025 10:08:59 AM

The [EPG](#) and [Missouri Standard Specifications](#) have been updated as described below:

Implementation Statement: Effective for the October 2025 letting.

(The Implementation Statement is a recommendation by the Development Section. The SPM is responsible for the level of implementation for any particular job.)

Revision Date	Items Revised	Description of Change
July 2025	EPG: 712.1.5 ; 751.50 ; 1080.1	<ul style="list-style-type: none"> • Installation and testing practices for Torque and Angle (TNA) fixed spline bolts are added to the specifications and EPG. TNA fixed spline bolts are governed by ASTM F3148 and are available in grade 144 only. • The combined method is introduced specifically for tightening of TNA fixed spline bolts. • Minor changes were made to current practices for high-strength (ASTM F3125) bolt installation and testing. • Changed the terminology for load indicator bolts to twist off tension control bolts. • Direct tension indicator (DTI) washers are not permitted by specification. • Design information for the Grade 144 bolts are not included with this DSI, but will be introduced in a future update to EPG 751.14.3. Grade 144 bolts may be substituted directly for a design with A325 bolts due to their higher strength.
	Bridge Standard Drawings: NA	
	MicroStation Cells: NA	
	Std. Specifications: 712 ; 1080	
	Standard Plans: NA	
	Bridge Special Provisions: NA	

Follow links above for more information (internal only).

Debra (Debbie) Butchart
 (formerly Debra Beckwith)
 Structural Specialist
 Development Section
 Bridge Division
 MoDOT- 105 West Capitol Ave
 573-522-8718