



Correct Installation Orientation- 2021-2004 Ford Truck and SUV Front Upper Ball Joint

Brand	TTX	Product	Ball Joint	Date	November 2021
Part Number(s)	TXMS40546				

To ensure proper part performance and avoid premature failure, it is critical to press-in the below noted ball joint in the correct orientation when mating it to the OEM stamped steel front upper control arm.

The identified part number is a directional type ball joint, since it is designed to allow for an increased swing angle in a particular direction. Incorrect installation orientation may allow over travel of the ball stud in the wrong direction, resulting in contact with the ball joint housing.

Part Number:
TXMS40546

For a successful repair outcome, adhere to the following:

- Before installing ball joint, ensure all mating surfaces are clear of rust, debris and burrs. Inspect control arm mounting flange for cracks, deformation and/or an out-of-round condition. Do not reuse control arm body if these are found. **See Figure 1.**

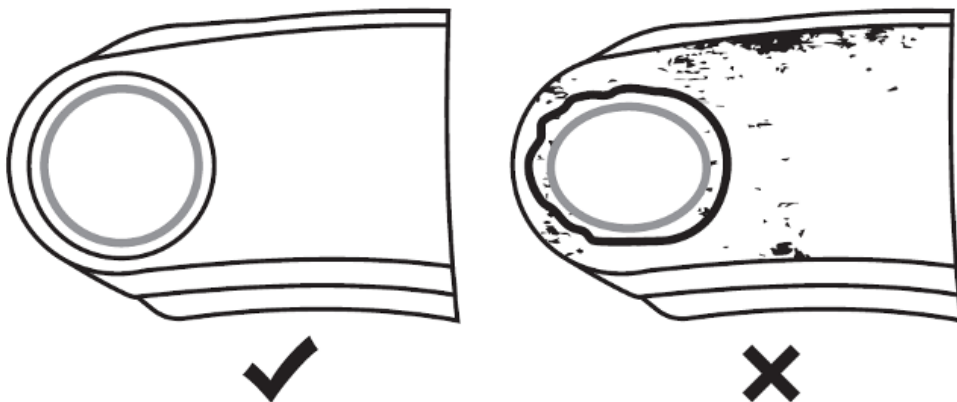


Figure 1.

- Verify press-in diameters and stud tolerances, including steering knuckle. Replace all damaged and/or out-of-specification mating components.
- When pressing in ball joint, ensure pressure is applied to the mounting flange and not the ball joint back plate. Contact with the back plate during installation may lead to damage and/or compromised performance of the ball joint.
- Locate machined flat on ball joint housing. **See Figure 2.**



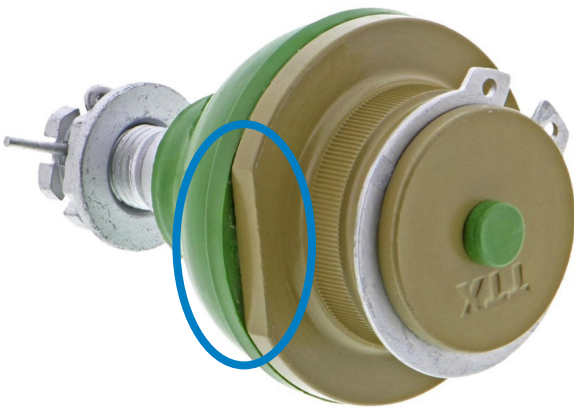


Figure 2. Machined flat on ball joint housing (circled)

- During press-in, flat must be oriented so that it is perpendicular to the wheel. For an illustration of correct installation orientation, see **Figure 3**.

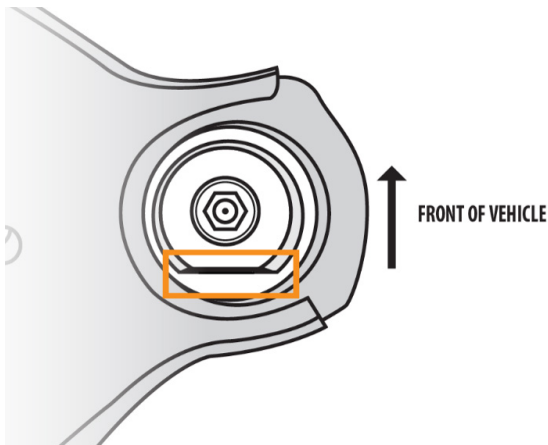


Figure 3. Correct ball joint installation orientation when mated to OEM stamped steel front upper control arm. Note machined flat position (highlighted orange box).

- Use included Bootstaller™ tool to securely seat dust boot after press in of ball joint to control arm. See **Figure 4**.



Figure 4. Bootstaller™ tool is included in the box as part of the hardware package