

Steering Knuckle

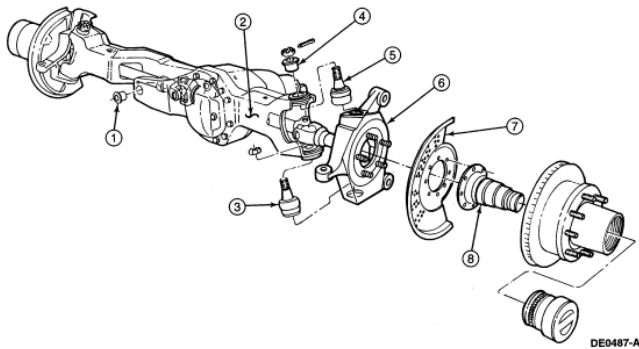
**SPECIAL SERVICE TOOL(S)
REQUIRED**

Description	Tool Number
Pitman Arm Puller	T64P-3590-F
U-Joint Tool	T74P-4635-C
4WD Ball Joint Tool Set	T80T-3010-A
Includes:	
Replacer	T80T-3010-A1
Receiving Cup	T80T-3010-A2
Receiving Cup	T80T-3010-A3
Plug	T80T-3010-A4

Removal

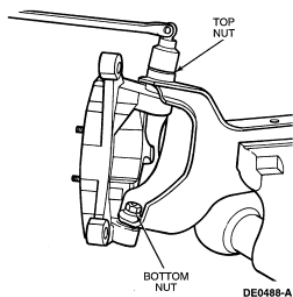
1. Remove the front wheel spindle (3105) and the right and left shaft and joint assembly. Refer to [Spindle, RH and LH Shaft and Joint Assembly](#) in the Removal and Installation portion of this section.
2. Disconnect the steering linkage, if necessary, from the knuckle. Refer to [Section 11-03](#) in the Body, Chassis Manual.

Steering Knuckle Installation



Item	Part Number	Description
1	3B177	Pivot Bushing
2	3B403	Axle Arm
3	3050	Front Suspension Lower Ball Joint
4	3B440	Camber Adjuster
5	3049	Front Suspension Upper Ball Joint
6	3130	Knuckle
7	2K004	Front Disc Brake Rotor Shield
8	3105	Front Wheel Spindle

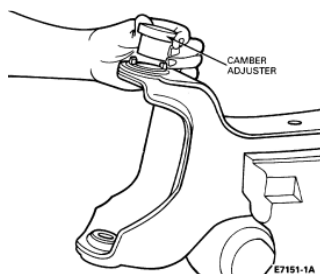
3. Remove the cotter pin from the stud of the front suspension upper ball joint (3049). Loosen the nut on the top stud and the bottom nut inside the steering knuckle. Remove the top nut.



4. Sharply hit the top stud with a plastic or rawhide hammer to free the knuckle from the axle arm. Remove and discard bottom nut.

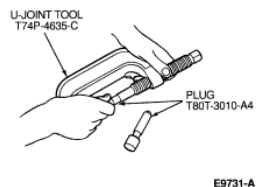
5. **NOTE: Note the orientation of the camber adjuster to make sure of the same camber setting.**

Remove camber adjuster by hand or, if difficulty is encountered, use Pitman Arm Puller T64P-3590-F.

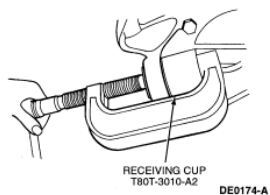


6. Place steering knuckle in vise and remove snap ring from bottom ball joint socket if so equipped.

7. Remove plug from U-Joint Tool T74P-4635-C and replace with Plug T80T-3010-A4 (part of 4WD Ball Joint Tool Set T80T-3010-A).



8. Assemble U-Joint Tool T74P-4635-C and Receiving Cup T80T-3010-A2 (part of 4WD Ball Joint Tool Set T80T-3010-A).



9. **NOTE: Always remove front suspension lower ball joint first.**

Turn forcing screw clockwise until front suspension lower ball joint is removed from steering knuckle.

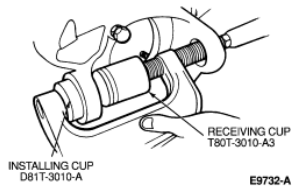
10. Repeat procedure and remove front suspension upper ball joint.

Installation

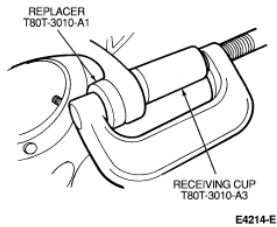
1. Clean steering knuckle bore and insert front suspension lower ball joint as straight as possible.


2. **NOTE: If ball joint cannot be installed to the proper depth, realign Receiving Cup T80T-3010-A3.**

To replace the front suspension lower ball joint, assemble U-Joint Tool, Receiving Cup T80T-3010-A3 (part of 4WD Ball Joint Tool Set T80T-3010-A) and Installing Cup from Ball Joint Adapter Set D81T-3010-A or equivalent.



3. Turn forcing screw clockwise until front suspension lower ball joint is firmly seated.
4. Install the snap ring on the front suspension lower ball joint.
5. To install front suspension upper ball joint, assemble the C-Frame, Receiving Cup T80T-3010-A3 and Replacer T80T-3010-A1 (both part of 4WD Ball Joint Tool Set T80T-3010-A).



6. Turn forcing screw clockwise until front suspension upper ball joint is firmly seated.
7. Assemble knuckle to axle arm assembly. Install camber adjuster on the stud of the front suspension upper ball joint with the arrow pointing outboard for positive camber, pointed inboard for negative camber.
8. Install new nut on bottom socket finger-tight. Install and tighten nut on top socket finger-tight. Tighten bottom nut to 47 Nm (35 lb-ft).
9.  **CAUTION: If the tightening sequence is not followed in this step and Step 10, ball joint life will be reduced.**

NOTE: Do not loosen top nut to install cotter pin.

Tighten top nut to 136 Nm (100 lb-ft), then advance nut until castellation aligns with cotter pin hole. Install cotter pin.

10. Retighten bottom nut to 123-149 Nm (91-110 lb-ft).
 11. Install the front wheel spindle and the right and left shaft and joint assembly as described in this section.
 12. Connect steering linkage, if necessary, to the knuckle. Refer to [Section 11-03](#) in the Body, Chassis Manual.
-