Tie-Rod End Inspection and Replacement

Meets ASE Task: (A4-B-17) P-1 Inspect, replace, and adjust tie rod ends (sockets), tie rod sleeves and clamps.

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_ Time on Task \_\_\_\_\_\_\_\_\_\_**

**Make/Model/Year \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ VIN \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Evaluation: 4 3 2 1**

**\_\_\_\_\_ 1.** Verify that the tie-rod end(s) requires replacement. Check all that apply.

 \_\_\_\_\_ Torn boot

 \_\_\_\_\_ Joint has side-to-side movement

 \_\_\_\_\_ Physically damaged

 \_\_\_\_\_ Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_ 2.** Hoist the vehicle safely.

**\_\_\_\_\_ 3.** Compare the replacement tie-rod end with the original to be sure that the new end is

 correct.

**\_\_\_\_\_ 4.** Remove the retaining nut and use a tie-rod puller to separate the tie-rod end from the

 steering knuckle and/or center link.

**HINT:** Often a hammer can be used to jar loose the tie-rod end especially if a downward force is exerted on the tie-rod while an assistant taps on the steering knuckle at the tie-rod end.

**\_\_\_\_\_ 5.** Measure the distance between the center of the tie-rod end and the adjusting sleeve

 and record this distance so the replacement tie-rod end can be installed in

 approximately the same location so that the wheel alignment (toe setting) will be close

 to being correct.

**\_\_\_\_\_ 6.** Unscrew the old tie-rod end and discard.

**\_\_\_\_\_ 7.** Install the replacement tie-rod end and adjust to the same distance as measured and

 recorded in #5.

**\_\_\_\_\_ 8.** Install the tie-rod end onto the steering knuckle and torque the retaining nut to factory

 specifications.

 Torque specifications for the tie-rod retaining nut = \_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_ 9. Lower the vehicle and align the vehicle before returning it to the customer.