


Service Bulletin #TAS-106

Special Poppet Adjusting Procedure for TAS40019 Steering Gears

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This TRW Commercial Steering Division service bulletin has been written to help you repair commercial vehicles more efficiently. This bulletin should not replace your manuals; you should use them together. These materials are intended for use by properly trained, professional mechanics, NOT "Do-it-yourselfers". You should not try to diagnose or repair steering problems unless you have been trained, and have the right equipment, tools and know-how to perform the work correctly and safely.

1. Set axle stops to manufacturer's wheelcut or clearance specifications.
2. Install a pressure gage or Power Steering System Analyzer (PSSA) into the supply line from the pump to the gear. Make sure the pressure gage or PSSA can withstand pump relief pressure. Start the engine and idle for 10 minutes to elevate the system temperature.
3. Look at the output shaft timing marks, and note which mark is nearest the housing piston bore. Turn the steering wheel in the direction that makes this timing mark move toward the adjusting screw. Pull hard on the steering wheel when full turn is reached. (Put 40 lb rim pull on a 20" dia. steering wheel.)
4. Loosen the poppet adjusting screw jam nut and the poppet adjusting screw until the pressure gage reads pump relief pressure. The driver should still be pulling hard on the steering wheel at full turn.
5. Manually screw in the poppet adjusting screw until the gage shows a drop of about 200-400 psi below pump relief pressure, and tighten the jam nut.
6. Test the poppet to confirm it is set correctly by backing off the steering wheel, and steering into a full turn in the same direction two or three times. Pressure should be 200-400 psi below pump relief, and flow should remain within normal ranges for the gear.
7. Torque the jam nut to **12-18 ft. lbs.**

 **CAUTION** Never operate a vehicle at pump relief pressure for longer than 10 seconds at a time, the pump may be damaged.