

# STAR ONLINE PUBLICATION

---

**Case Number:** S1819000004 Rev. P

**Release Date:** August 2024

**Symptom/Vehicle Issue:** Shimmy Felt In Front End

**Discussion:** If the customer complains of a shimmy in the steering wheel after hitting an irregularity in the road surface such as an expansion joint, pothole, bump etc. Follow the steps below. Read the entire document before performing a repair.

## Repair Checks:

1. Ensure correct tire pressures (very common to be low going from warm into cold weather). Inspect tires for wear or damage. Replace as needed.
2. Inspect the part number of the current installed damper.

Does the damper number match the latest replacement part from the Star Parts catalog?

Yes>>> If the current damper matches the latest Mopar service replacement part, do not replace. First, purge the damper on car using the Steering Cycling instructions below. Then proceed to step 4.

No>>> Replace damper with latest revision part. Refer to Star Parts Catalog for latest part information. Perform 5 “bicycle pump” purge cycle procedure before installation (Fig 1). Refer to Diagnostic Videos section in Service Library and or Service Info Group 19 steering damper installation. Also refer to 19 - Steering / Diagnosis and Testing STEERING SYSTEM DIAGNOSIS CHARTS to aid in diagnosis of a customer complaint.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found**

## STAR ONLINE PUBLICATION

---

NOTE>> Orientation instructions must be followed with bump down.

3. Once new damper is installed perform the 25 lock to lock procedure and drive vehicle performing as many turns as possible

NOTE>>> Always use new fasteners with the new damper to ensure correct install orientation of the damper with base cup towards the wheel and facing down.

4. Evaluate on highway for SUSTAINED shimmy.

5. If SUSTAINED shimmy still exists perform 25 lock to lock procedure again to further purge air out of damper.

Additional items to check that can help:

1. Alignment - Total Toe as far "IN" or "POSITIVE" as possible but remaining within specifications (Total Toe about 0.35° and individual 0.17°).

2. Road force tire balance (ensure no highfliers and that front tires are balanced and as low as possible).

Steering Cycling damper purge procedure:

1. Start with tires straight ahead and engine on
2. Turn steering wheel to the right until it hits the stop (turning rate – appx 180°/sec)
3. Turn the steering wheel to the left until it hits the steering stop (same rate)
4. Return steering wheel to straight ahead position
5. This constitutes 1-cycle, repeat for a total of 25 cycles
6. Test drive vehicle to confirm shimmy is no longer present
7. If shimmy is still present but improved, repeat steering cycling procedure

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found**

## STAR ONLINE PUBLICATION

---

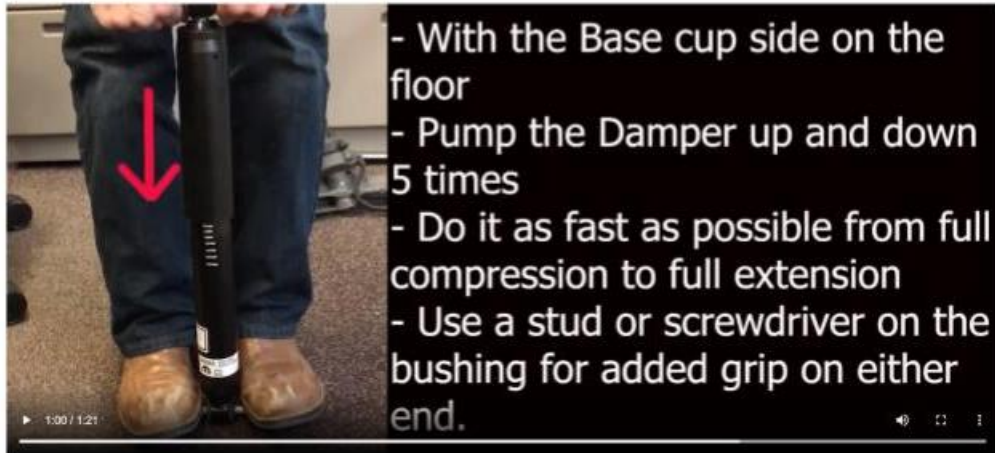


Fig 1.  
“Bicycle pump” purge process when replacing a damper.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found**