



Air Filter Soaking, Restriction, and Intake System Issues in 2011–2024 Ram 2500/3500 6.7L Turbo Diesel Applications NAPA Gold Engine Air 6930

OVERVIEW:

Field reports from service providers working on 2011–2024 Ram 2500 and 3500 trucks equipped with the 6.7L Turbo Diesel engine have identified operating conditions that may affect engine air filter performance and airflow. These issues are commonly influenced by environmental exposure, water intrusion, and the configuration of the vehicle's intake system.

While not present on every vehicle, these conditions have been observed frequently enough in certain environments—such as heavy rain or off-road use—to warrant regular inspection. This bulletin outlines key contributing factors, including moisture exposure, restricted airflow, and intake hose collapse, and provides inspection and maintenance guidance to support optimal engine performance.

BACKGROUND:

These applications utilize an intake system that sources air from behind the passenger-side front fender. During wet or off-road driving, rainwater or road spray may enter the intake path, potentially exposing the air filter to moisture. This can reduce airflow through the system and, in some cases, contribute to performance-related concerns.

ACTIVE AIR SYSTEM (2013–2018 MODELS):

Certain 2013–2018 models feature an “Active Air” system that automatically selects between two air sources

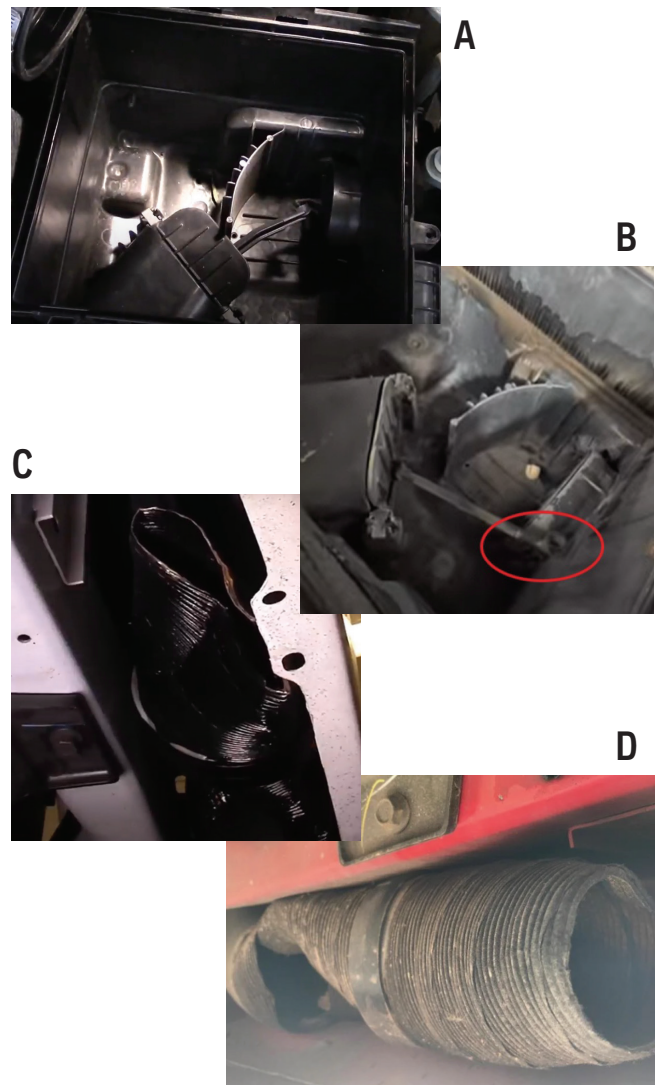
- Primary intake: Located behind the passenger-side wheel well
- Secondary intake: Located behind the front grille, used during high airflow demand

Under wet conditions, the system typically defaults to the wheel well intake. If the actuator becomes stuck or fails to seal, moisture can enter through the grille intake as well (see Images A and B). Ensuring proper function of this system is an important part of intake system maintenance.

COMMONLY OBSERVED ISSUES:

1. **Moisture Accumulation in the Air Box**
The air box is equipped with drain holes intended to release any moisture that enters the housing. If these drains become clogged with mud, dust, or debris, water may accumulate and saturate the filter, which can affect airflow and may alter the filter media over time.
2. **Intake Hose Deformation or Collapse (see Images C and D)**
The flexible hose connecting the wheel well intake to the air box may deform or collapse under the following conditions:
 - High engine load
 - Long-term material fatigue
 - Accidental pinching or compression during unrelated service work

When airflow is restricted by a collapsed or deformed hose, performance issues and system alerts may result.





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POSSIBLE SYMPTOMS:

Performance Concerns:

- Reduced engine power or hesitation
- Engine performance fluctuations under load

System Alerts:

- False air restriction indications
- Intake-related dashboard warning lights or diagnostic trouble codes (DTCs)

Visual or Physical Filter Concerns:

- Saturated or damaged filter media
- In extreme cases, partial filter collapse or displacement, which could affect nearby components

RECOMMENDED SERVICE ACTIONS:

- Inspect and clean air box drain holes to ensure moisture can evacuate properly
- Examine the air filter for signs of water exposure, particularly following heavy rain, water crossings, or dusty/off-road use
- Inspect the intake hose between the wheel well and air box for soft spots, pinching, deformation, or collapse
- Verify operation of the Active Air actuator (2013–2018 models) to confirm proper switching between intake paths
- Respond to any DTCs or restriction warnings by conducting a full intake system inspection

PREVENTIVE MAINTENANCE RECOMMENDATIONS:

To help maintain system performance and reduce the likelihood of airflow issues:

- Inspect the air filter and intake system at every oil change
- Perform additional inspections after exposure to rain, deep water, off-road use, or high-dust environments
- Confirm that air box drain holes are clear and that the intake hose is properly aligned and free of damage
- Educate customers operating in severe environments on the importance of regular filter and intake inspections

SUMMARY:

The NAPA Gold 6930 air filter is engineered to perform in tough conditions. However, a combination of environmental exposure and intake system layout in certain Ram applications can introduce variables that affect air filter and system performance. While not universal, these conditions are common enough to justify routine inspections. Regular maintenance—including filter checks, hose inspection, and drainage verification—supports consistent airflow, helps protect engine components, and reduces the risk of costly issues down the line.