

**MOOG**

The Problem Solver®

# THE NEW STANDARD FOR **SEALED**

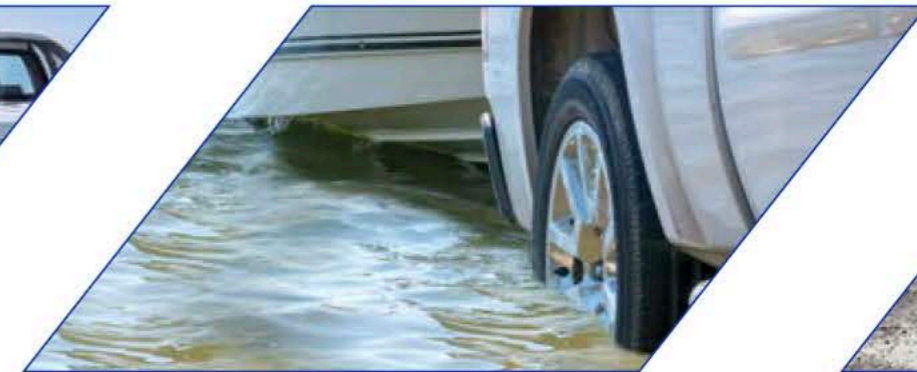


**HUB ASSEMBLIES**



**MOOG:**  
ALWAYS MAKING  
*great*  
**PARTS**  
EVEN BETTER

MOOG knows it takes knowledge, technical expertise, commitment to quality, and a drive for continuous innovation to make the MOOG difference. Dedicated MOOG engineers continually refine designs, perfect materials, and hone manufacturing techniques to build in more quality and durability. The result: A hub assembly that can resist premature wear under the most demanding operating conditions. That can beat back damaging water, dirt, and contaminants. That can take whatever the road can dish out—and keep going strong.










# WHERE QUALITY IS **CRITICAL,** *it has to be* **MOOG**

Hub assemblies are critical for safe and reliable operation of a vehicle—and they're subject to some of the harshest punishment the road can dish out. High temperatures, extreme stresses, water, and contaminants can take a toll on hub assemblies that aren't up to the challenge. That's why MOOG engineers continually introduce purpose-specific innovations that stand strong against harsh conditions—and make MOOG hub assemblies durable and reliable for years of hassle-free operation.

## When **HUB ASSEMBLIES** **FAIL**

Signs of worn and failing  
hub assemblies include...

-  GRINDING SOUND WHEN VEHICLE IS TURNING
-  CLICKING OR SNAPPING SOUNDS WHEN TURNING
-  KNOCKING OR CLUNKING SOUNDS
-  STEERING WHEEL VIBRATION
-  WORSENING STEERING ABILITY
-  BRAKES STICKING
-  ABS LIGHT IS ON



# MOOG ENHANCEMENTS: YOUR *Advantage*

MOOG engineers continually assess the quality, reliability, and performance of hub assembly designs, finding any points of vulnerability and developing effective solutions. The result: Application-specific design enhancements that deliver improved durability and performance.

Where needed, MOOG's latest hub assembly innovations provide state-of-the-art resistance against damaging water, dirt, chemicals, and contaminants—multiple layers of protection that raise the bar for hub assembly quality, and set a new standard for sealed.

## QUAD-LIP INBOARD SEAL

to provide optimal  
moisture protection

## MOLDED GROMMET

to protect ABS cable and  
ensure integrity of the  
Traction Control and Anti-  
Lock Braking Systems

## PRIMARY OUTBOARD SEAL

to protect components  
from mud, sand, and  
road chemicals

**NEW!**

## GRIME DEFENSE OUTBOARD SEAL

help prevent contaminant buildup  
on the assembly exterior,  
working to shield bearings from  
friction- and corrosion-causing  
moisture and grime.

# A CONTINUING LEGACY *of* QUALITY

The latest innovations build upon a long history of MOOG-exclusive enhancements that set MOOG hub assemblies apart for lasting performance and strength, even in the most challenging conditions.



**Abrasion-Resistant ABS Cord** for superior strength and resistance to abrasion, contamination, and vibration



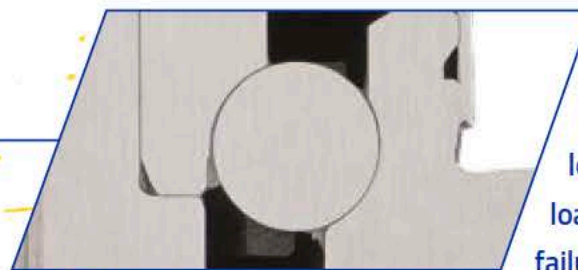
**ABS Molded Shield and Socket Connections** for superior contamination resistance



**4-Layer Seal Design** to help prevent contaminant damage to internal components



**Roll Form Design** for consistent and optimal preload



**Increased Ball Size, Advanced Raceway Design, and Precision Matched Components** for lower friction, increased load capacity, reduced risk of failure, and longer service life



**Protective Wheel Stud Coating** to resist corrosion, enable easier removal, and enable proper torquing

# TESTED *and* PROVEN

MOOG is the one brand that applies its proven Problem Solver design methodology to every hub assembly we make—and backs it up with comprehensive five-stage testing to ensure optimal real-world performance:

- BEARING ENDURANCE
- ROTARY FATIGUE
- BEARING SEALING PERFORMANCE
- ELECTRICAL CONNECTOR STRENGTH AND RESILIENCE
- CONSISTENT WHEEL SPEED SIGNAL

**The result:** Premium hub assemblies that install easily, outperform expectations, and can be counted on to last.



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FOR MORE INFORMATION



The Problem Solver<sup>®</sup>