MOOG STEERING & SUSPENSION

NASCAR PERFORMANCE

THE PROBLEM SOLVER®

MOOG® STUD MATERIAL

PROBLEM:

Weaker Material and/or Improper Processing can Lead to Failure

- Improper or lack heat-treating can result in cracked/broken studs and steering loss.
- Some suppliers' studs are not induction-hardened, causing them to have 50% or more reduction in fatigue strength.
- Machining the stud end can leave crack-prone stress risers that may lead to stud fracture.

ALTERNATE SUPPLIER'S STUD, CRACKED DUE TO IMPROPER HEAT-TREATING

STUD WITH NO INDUCTION HARDENING IS 50% LOWER IN FATIGUE STRENGTH.

SOLUTION:

MOOG® Premium Full-Ball Metal Stud

MOOG studs are engineered with a hardened exterior and a soft core, which allows them to bend instead of break during a severe impact. This prevents the complete loss of steering that would occur if the stud actually broke. In addtion, through complete understanding of the OEM material and heat-treat, MOOG designs a stud to meet or exceed the OEM stud's strength.

MOOG studs also feature:

- Consistent-dimension forged alloy steel construction that eliminates taper-end machining.
- MOOG-specified steel composition that produces stronger consistency than commonly used larger-grain composition.
- MOOG ball construction that offers excellent core ductility with a hard, heat-treated outer shell.

HEAT-TREAT INDUCTION HARDENING CREATES A WEAR RESISTANT SURFACE ON THE BALL AND INCREASES THE FATIGUE STRENGTH OF THE STUD.

MOOG STUDS ARE DESIGNED TO BEND, NOT BREAK, IN CASE OF SEVERE IMPACT.

Be Car Care Aware®

FEDERAL-MOGUL MOTORPARTS

Learn more about performance suspension parts we have.