

TECHNICAL BULLETIN

TB102309

ATRO is an ISO 9001 Registered Manufacturer of Polyurethane Components for the Heavy-Duty Suspension Industry

ATRO's UB20500 and New UB20500-OS in the Freightliner Air Liner II Suspension

The OE *rubber* pivot bushing, RB205/RB234/RB268, for the Freightliner Airliner II suspension has had problems with the bushings rotating and migrating out of position within the eye of the spring. This was due to the spring eye weakening with stress and use causing the eye to open up beyond the OE specifications. As the eye of the spring gets larger, the grip on the bushing gets correspondingly weaker and the bushing will begin to rotate and walk out of position. The most recent OE *rubber* bushing design, the RB268, is crimped (one end) with the opposite end flared to prevent the bushing from migrating out of the spring when the eye begins to weaken. However, this OE rubber bushing does not address the root causes of

the problem. The stress put on the spring eye and the wear due to the suspension articulation and the <u>non-rotating</u> OE rubber bushing pin results in the <u>entire</u> bushing rotating and laterally walking (migrating) out of position.

ATRO has two solutions to the problem:

UB20500 with our original <u>unique rotating pin design</u>, if the spring is not worn out and the eye has not already been enlarged, the outer sleeve of the bushing will stay securely in place while only the pin rotates within the body of the bushing. (ATRO's UB20500 bushing only requires approximately 25 - 40 ft. lbs. of torque to rotate the pin.)

NEW UB20500-OS – our <u>unique rotating pin design</u>, oversized, anti-walk bushing. This bushing is .060" oversized and takes up the gap in most enlarged eyes. ATRO is offering a one-year warranty on the oversized bushing.

Important Notes:

If any UB 20500 or UB20500-OS is found rotating freely within the spring eye - the entire bushing, not just the pin - the cause is a worn spring eye. ATRO strongly recommends spring replacement.

Bushings found to be within specification on the outer sleeve outer dimension, are not subject to warranty.



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Some products shown here are covered by Canadian Patent 1,327,979; Australian Patent 630,358.