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TECHNICAL PUBLICATION #TP-0049A

STM GREASE HUB SEAL & A.B.S SENSOR/BRACKET INTEREFERENCE

This Technical Publication outlines potential STM Grease Hub Seal (Hand Fit) interference with some Trailer Axles fitted with Anti-Lock Braking Systems (A.B.S).

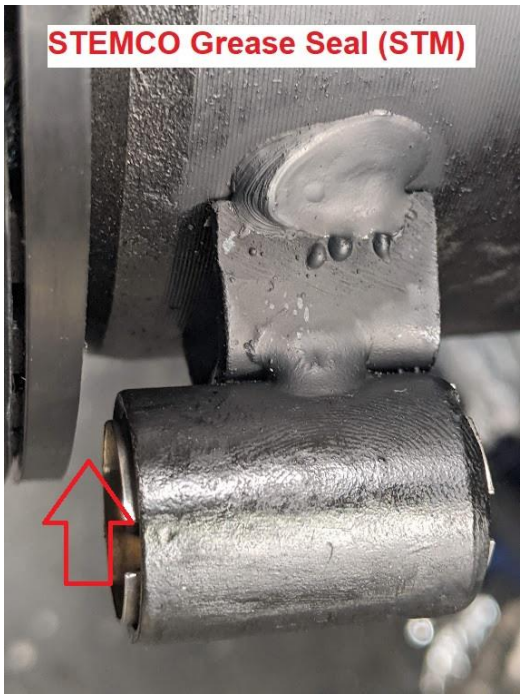
Reported Problem:

- The STM Grease Hub Seal (Hand Fit) can make contact against the A.B.S components fitted to the trailer axle. Damage to the STM Grease Hub Seal can be a direct result from the seal making contact to the external axle components (The STM Grease Hub Seal needs to rotate *without* any interference).
- Due to the design of the STM Grease Hub Seal & the height (28.80mm+/- 0.40mm) of the seal, it can protrude at a higher point.

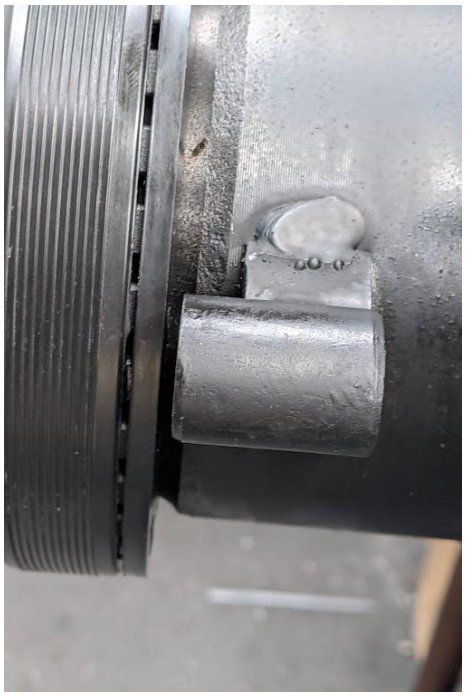
Considerations:

- As per normal maintenance procedures outlined in all wheel end recommended practices – the hub should be rotated after maintenance & inspection should be undertaken to ensure the wheel end rotates freely without any interference.
- Make sure to follow the STM Grease Hub Seal (Hand Fit) installation procedure and the STM Grease Hub Seal is fully seating into the hub bore.
- It is recommended that the wheel/hub is rotated & rear of the hub inspected to ensure the seal is not in contact with any axle components.
- Specific attention needs to apply to the A.B.S sensor & A.B.S bracket that is affixed to the axle (Pic #1-3)

Pic #1
Low Clearance



Pic #2
Low Clearance



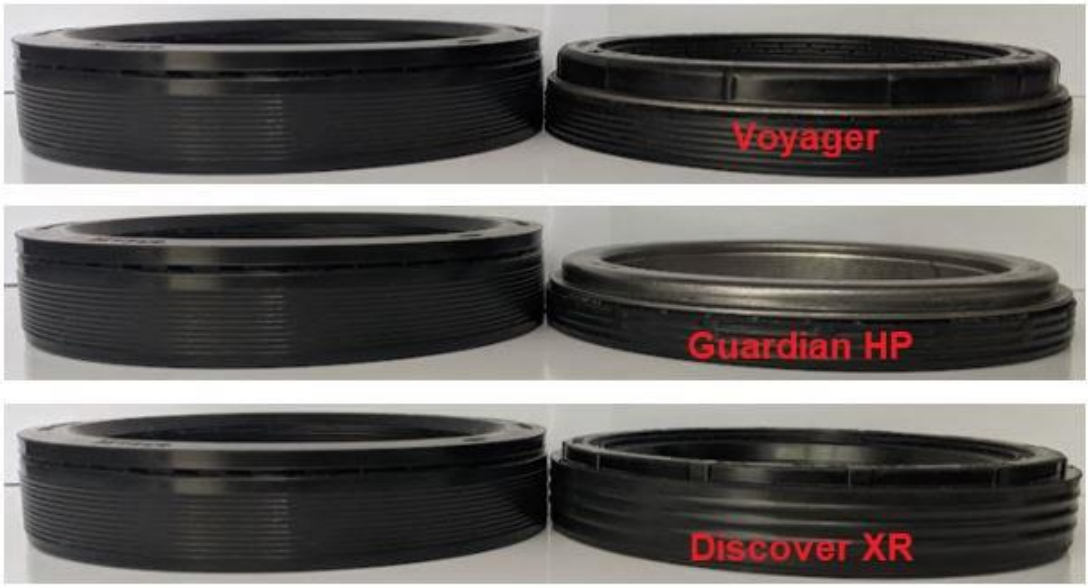
Pic #3
Low Clearance

Conclusion:

- If the STM Grease Hub Seal does not have adequate clearance (when the Hub Seal is fully seated into the hub bore) and makes contact with any A.B.S components when the hub is installed onto the axle, then it's recommended to replace the hub seal with an alternative STEMCO product.
- Alternative STEMCO tool fit hub installed (Voyager & Discover XR) & axle installed (Guardian HP) seals have a lower height profile (Pic #4).

Pic #4

STEMCO Height Profile



- As per below (Pic #5) other STEMCO seals can be used as a replacement with reasonable clearance & will not make contact A.B.S components.

Pic #5

Higher Clearance