

## SERVICE BULLETIN 1-800-237-0022

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## SUBJECT: AIR SENSOR SYSTEM ACCURACY

EFFECTIVITY: ALL AIR SENSORS USED ON SLIP SPRING SUSPENSIONS

## AIR SENSOR APPLICATION WARNING

**PROBLEM**: The air sensors are designed to sense air pressure changes in truck or trailer air suspensions. When the suspension is regulated by the special Vulcan height control valve, the air pressure corresponds very closely with vehicle weight. There are some truck and trailer designs where the amount of air pressure does not correspond very well with weight. These suspensions are the "**Slip spring and torque arm type suspension**", see figure S-103A.

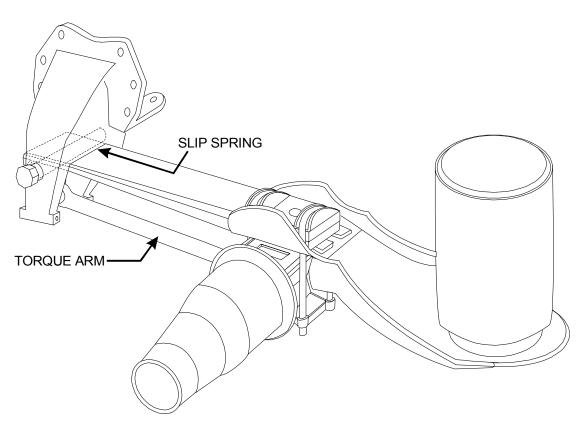


Figure S-103A Typical Slip spring and torque arm air suspension



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This " **Slip spring and torque arm**" design allows the spring connected to the air bag to move while the torque arm keeps the axle in alignment. When there is movement in this component, the amount of air pressure that corresponds to weight can vary. This variance is a result of pressure transferring to the front suspension hanger, therefore bypassing the air bag and the height control system.

If an air sensor is installed in a "**Slip spring and torque arm**" design, the scale will usually have a + or - 2000 to 3000 lb error and the scale will most likely never repeat even with the approved height control valve. All of the truck manufacturers and some trailer manufacturers have air suspensions that are susceptible to this type of problem.

**SOLUTION:** It will be necessary to use another type of load cell to properly scale this type of vehicle. The installer must ensure that air sensors are not used on "**Slip spring and torque arm**" type suspensions.

Please contact our service department if you have any questions regarding the proper application of our sensors.