

REPAIR REPORT

AT744 – CAT 740 – B1P01666 – 18058 Hours

Date: 20/12/2023

The following is a report on the damage and repairs to Articulated Dump Truck 744 for Garraway Group, Douglas Mine Site, VIC



The machine was inspected on site and the following damages were observed:

- Oil pooling in P3 wheel due leaking centre axle output yoke. Upon further inspection the centre axle track rod had contacted the drive shaft/yoke – damage to the seal.
- LH hose guide bracket has been bent.
- P3 had dirt pushed between the tyre bead and the rim bead ring, damaged the lock ring protector on the bead seat.
- Damage to the LH front of the tipping body.
- P1 guard had been pushed towards the wheel by the spilling load.

The machine was driven to the workshop and washed for further inspections and thereafter, repairs.

The axle suspension mounts were measured and physically inspected as per required/suggested by Caterpillar guidelines in the event a trailer is overturned.

Check the Integrity of the Center Bolt

To inspect the mounts, use a suitable lifting device under the equalizer arm. Raise the arm until the mount that is being inspected is fully extended.



Illustration 9
Typical example g01242349

Check the overall Height (H) of the mount. The overall height of the mount should be within the tolerance that is given in Table 2. If the height of the mount is less than the value that is given in the Table, this indicates that the bolt is no longer aligned with the center axis of the mount. If the height of the mount is greater than the value that is given in the Table, this could indicate that the bolt is deformed or that the nut on the bolt has loosened.

Table 2

Mount	Height (H)
195-5789 Mount (1)	182 ± 4 mm (7.17 ± 0.16 inch)
211-4987 Mount (2)	203 ± 2 mm (7.99 ± 0.08 inch)

(1) D250E, D300E, D350E Series II, D380E Series II, 725, 730 and 730 EJECTOR
(2) D350 Series II, D400E Series II, D400E Ejector Series II, 735, 740 and 740 EJECTOR

The bolt can be damaged if the trailer is overturned. It is important to inspect the mounts for damage if a trailer has been overturned. If the trailer has been overturned, remove the mounts in order to inspect the mounts for damage to the bolts in the center of each of the mounts.

- P3. 212mm Center bolt broken, see photo below.
- P4. 210mm Center bolt intact, stretched.
- P5. 210mm Center bolt intact, stretched.
- P6. 210mm Center bolt intact, stretched.



The following repairs were completed:

- P3 tyre was removed, cleaned and inspected. It was then re-mounted with new bead seat and lock ring.



- All four suspension mounts have been replaced with new ones.
P3,P4,P5,P6



- Centre axle output yoke has had the bearings and seals replaced.
- Uni-joints were replaced on the driveshaft.



- LH hose guide bracket was repaired.
- Damage to the LH front of the tipping body was not structural as per below, exterior scratches only.
- P1 guard has been repaired.





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- AT744 now upright and back in working condition.



I am satisfied that the machinery has been repaired and is safe to return to operation.

If you have any questions regarding this report, including damages and repairs, please don't hesitate to contact me.

Lucas Smith

Sparks N Spanners Maintenance