General Equipment Safety Bulletin

Technical Support Department

Bulletin 015/2013

Subject: Off-Highway Truck, Motor Grader & Excavator Access Systems installed by Hastings Deering.

Affected Product

24M		793F			
B9K00325	B9K00552	SSP00124	SSP00200	SSP00321	SSP00498
B9K00386	B9K00552	SSP00125	SSP00201	SSP00324	SSP00503
B9K00419	B9K00563	SSP00126	SSP00202	SSP00325	SSP00504
B9K00427	B9K00563	SSP00127	SSP00203	SSP00326	SSP00515
B9K00431	B9K00575	SSP00128	SSP00204	SSP00332	SSP00519
B9K00434	B9K00586	SSP00129	SSP00243	SSP00335	SSP00525
B9K00437	B9K00588	SSP00130	SSP00244	SSP00336	SSP00530
B9K00458	B9K00590	SSP00131	SSP00245	SSP00337	SSP00532
B9K00473	B9K00593	SSP00137	SSP00246	SSP00338	SSP00533
B9K00489	B9K00599	SSP00138	SSP00247	SSP00339	SSP00534
B9K00540	B9K00601	SSP00139	SSP00248	SSP00341	SSP00535
B9K00542	B9K00624	SSP00152	SSP00249	SSP00342	SSP00543
B9K00547	B9K00625	SSP00157	SSP00251	SSP00343	SSP00545
B9K00548		SSP00182	SSP00252	SSP00349	SSP00546
		SSP00183	SSP00253	SSP00442	SSP00547
		SSP00184	SSP00254	SSP00462	SSP00564
		SSP00185	SSP00255	SSP00463	SSP00566
		SSP00186	SSP00256	SSP00464	SSP00571
		SSP00193	SSP00257	SSP00465	SSP00604
		SSP00194	SSP00258	SSP00466	SSP00606
320D		SSP00197	SSP00261	SSP00472	SSP00607
GPX00461		SSP00198	SSP00265	SSP00481	SSP00608
		SSP00199	SSP00270	SSP00482	SSP00609
			SSP00271	SSP00483	SSP00790

Risks identified

Failure of the access system stair pivot point.

Problem Overview

One of the pivot points on a wheel loader access system failed. Figures 1 and 2 on page 2 show a general view of failed stairs and a close up of the problem area. Investigation has determined that there was insufficient clamping force on the inner race of the pivot bearing. This allowed the loads encountered during normal operation to be borne by an area of the pivot that was not intended to carry these loads.

The Hastings Deering access system stair pivot joint on the above listed machines requires a modification to ensure the loads in the pivot area are distributed correctly.

Problem Overview – continued

Figure 1

Figure 2

Recommended Interim Actions

- Immediately conduct a visual inspection in the area of the access system pivot point, for cracking around the stairway pivot point flanges.

- If no cracks are found, perform the Permanent Corrective action listed below at the next scheduled maintenance interval. Continue to conduct visual inspections at 250 hour intervals, until the Permanent Corrective action has been performed.

- If cracks are found, immediately tag-out the stairway in accordance with site procedures and contact your Mining Support Representative for the re-work procedure required to repair the stairway pivot joint. The permanent corrective action below will form part of the repair instructions.

Permanent Corrective Actions

1. Order four hardened shims, Hastings Deering part number A244601 and two shims, Hastings Deering part number A107607-01.

2. There are two pivot points where the stairs are attached to the machine. One will have smaller gaps between stairway stringers and the bearing mounted in the frame mounting lugs. Support the stairs and remove the mounting bolt on the pivot point with the smaller gaps, and insert one A244601 hardened shim (0.8mm thick) between the stair stringer inner surface and the bearing outer surface on both sides of the pivot point mount (refer figure 3). Reinstall the mounting bolt and nut.

Permanent Corrective Actions - continued

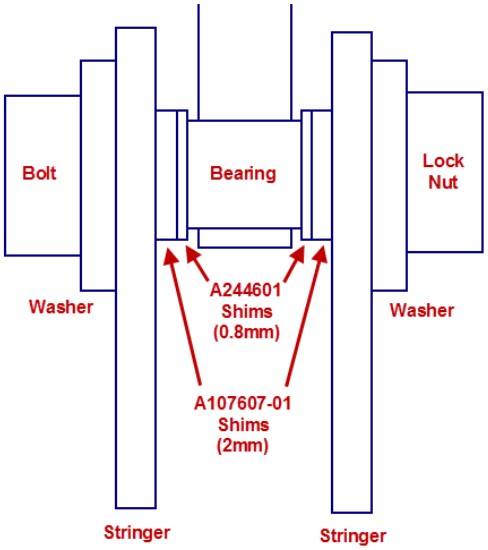
3. On the other pivot point where the gap is the largest, remove mounting bolt and insert one A244601 hardened shim (0.8mm thick) and one A107607-01 shim (2mm thick) between the bearing outer surface and the stair stringer inner surface on both sides of the pivot point mount. NOTE: The smaller 0.8mm thick A244601 hardened shims MUST be the shims which contact the bearing on both side of the pivot point because they are hardened to suit contact with the bearing race (refer figure 4). Reinstall the mounting bolt and nut.

4. Re-torque both bolted joints to 120Nm ±20Nm.

Do not operate the machine until any defects identified in this inspection task are corrected.

Figure 3 – "Smaller gap joint"

Figure 4 – "Larger gap joint"



Contact Details

If further information is required in regard to this bulletin, contact your nearest Hastings Deering Business Centre on 131 228 and ask to speak to your Mining Support Representative.

This bulletin is to inform you of the recommendations of the supplier in respect of issues dealt with in the bulletin and should not be used as specific advice in respect of any particular events. Advice from a qualified repairer should be sought in respect of any particular events and Hastings Deering (Australia) Limited accepts no responsibility for any loss or damage occasioned by a party using this general bulletin.