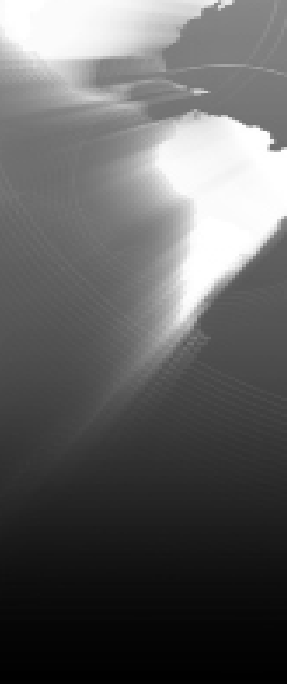


WorldSID 50th Pelvis Screw and Washer

W50-42013

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This bulletin covers a provisional solution to alleviate a loosely secured hip socket problem in the pelvis using a modified screw and washer assembly.

Background

Under certain conditions, the M8 hex head bolt that fastens the pelvic bone to the hip joint socket may not tighten correctly, creating a loose fit (Figure 1). This can occur when the thickness of the pelvic bone is on the low end of the tolerance and the screw length is on the high side of its tolerance, causing the bolt to bottom out on the mating post of the hip joint socket and thereby preventing the socket from fitting securely against the bone.

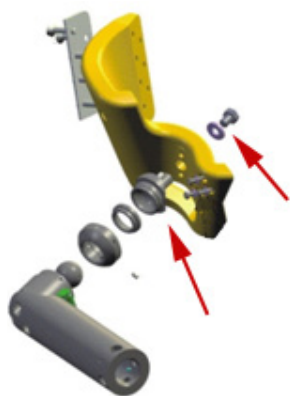
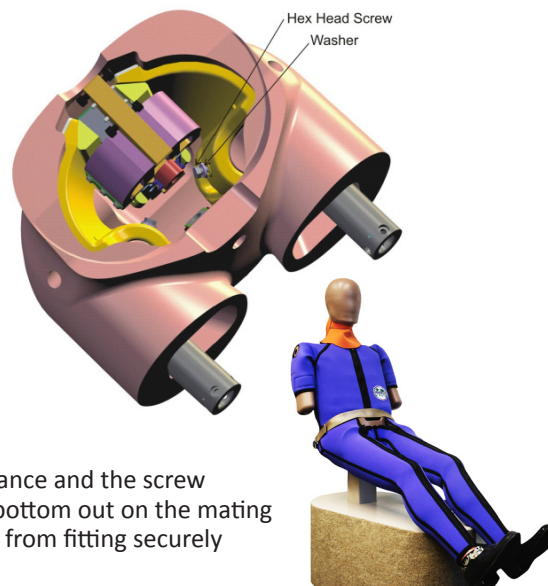


Figure 1

Improvements

To provide a solution for existing dummies in the field that exhibit a loose leg fit, a new bolt and washer assembly has been created that allows the bolt to tighten properly on the hip socket component, thereby creating a secure fit against the bone. The thread length is modified and the washer component has a recessed channel which allows the lip of the pelvic bone hole to seat within it (Figures 2 & 3).

The shaft on the hip joint socket (W50-42005) is being shortened as a long term solution to avoid the problem altogether. New dummies will have the updated socket installed upon delivery and will not utilize the modified screw and washer. Because the plastic hip bone has a tendency to dampen noise produced from the loose joint, there have been no reports of data anomalies during testing.

Recommendations

Customers are encouraged to check their dummies for loose leg fit, and if it exists, to replace their existing screws and washers with the new screw assembly. To check for a loose fit, observe the socket bolt head against the bone while moving the femur or leg assembly. The screw or socket may move if the end of the socket post or the bolt head sits above the bone surface after being tightened down. Affected components are listed below.



Figure 2

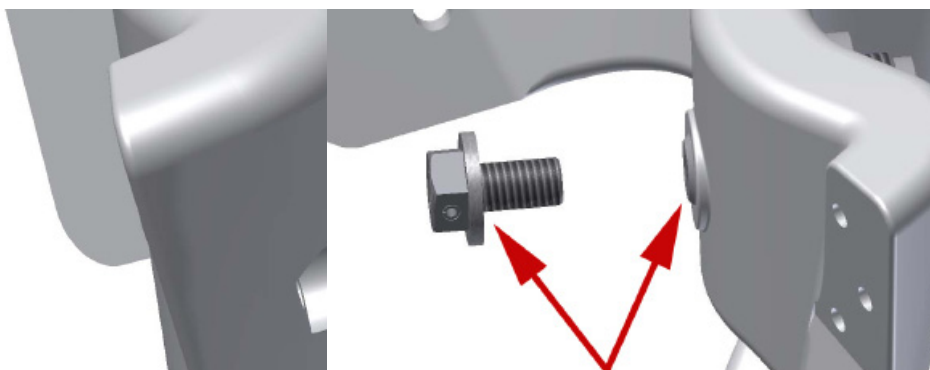


Figure 3

Service Bulletin

Components Affected		
New Replacement Part	Description	Qty
W50-42013	M8 SCREW AND WASHER ASSEMBLY	2
Old part	Description	Qty
5000123	WASHER, FLAT M8 (8.9 ID X 18.8 OD X 2.3 THICK)	2
5000569	SCREW, HH BOLT M8 X 1.25 X 10	2

For further inquiries please contact Humanetics Customer Service or your account manager.