

WSID 50th New Clevis & Arm

W50-63112, W50-63111, W50-63100

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In conjunction with the WorldSID ISO Task Group, Humanetics has designed an updated clevis with larger holes and plunger ball for the WorldSID 50th Side Impact ATD.

Background

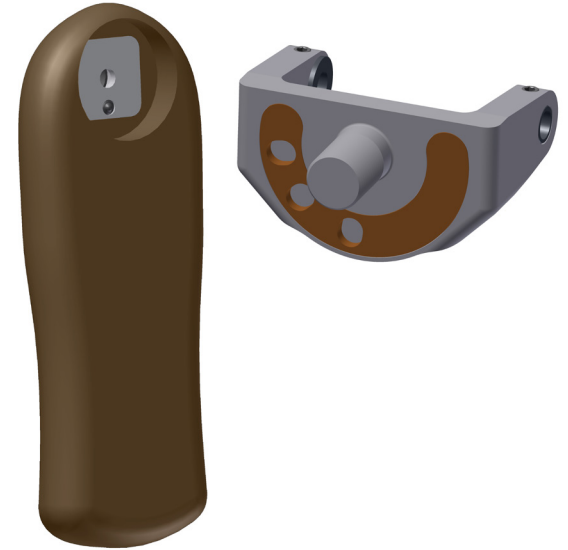
Users of the current WorldSID 50th ATD have noted that arm positioning can be difficult because it can be hard to feel the intermittent click stops that set the arm into one of several positions. In addition, the arm would sometimes move from suit tension after setup.

The issue was presented to the WorldSID ISO Task Group in 2014 and a new prototype design was prepared shortly thereafter. The ISO Task Group approved the new design in November of 2015 under the premise that testing variability will be reduced due to the more distinct positioning achievable from the new components. This change will be included in the ISO/PDTS 15830-5 (ISO Part 5) update to be published in 2016.

New Design for Better Arm Positioning

Under the direction of the Task Group, Humanetics beefed up the design of the clevis, using larger plunger ball holes that seat the arm into position. The number of holes was decreased and limited to three per side to eliminate possible handling issues such as mounting the clevis upside down, and positioning the arms incorrectly during certification testing. These new click stops improve the set-up performance as the arm position is better defined. This redesign also necessitated the creation of a right and left side clevis, thus making the current universal component obsolete.

The plunger ball in the arm was also made more robust by increasing its size to match the new



clevis click stops.

Humanetics is also working on a sleeveless suit in close cooperation with the Task Group. If approved, the new suit will eliminate additional uncertainties in the arm positioning.

Individual Part Numbers

The new clevis and arm will be worked into normal ATD production, but will also be sold individually for those interested in updating their dummies. Old arms are not compatible with the new clevis design and must be replaced with the new arm to assemble correctly.

New Part No.	Description	Obsolete
W50-63112	Shoulder Clevis Assy Left	W50-61130
W50-63111	Shoulder Clevis Assy Right	W50-61130
W50-63100	Half Arm Molded	W50-62000

For questions please contact your Account Manager or Customer Service Representative.