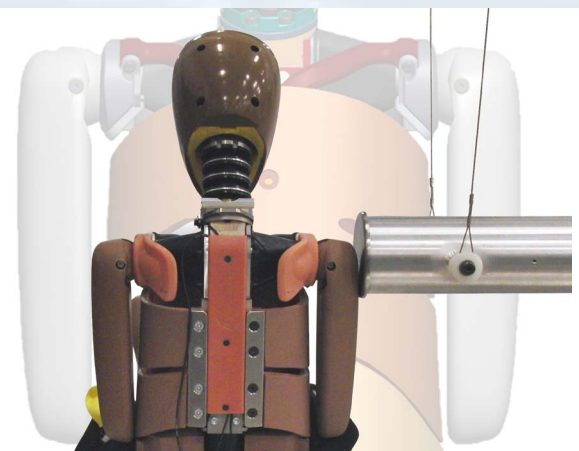


Q10 ATD Side Impact Shoulder Kit

(010-4500)

Publication Date: Dec., 2014



Humanetics offers a Q10 dummy with an add-on side impact shoulder kit needed for Euro NCAP testing. Retrofit kits for existing ATDs are now available.

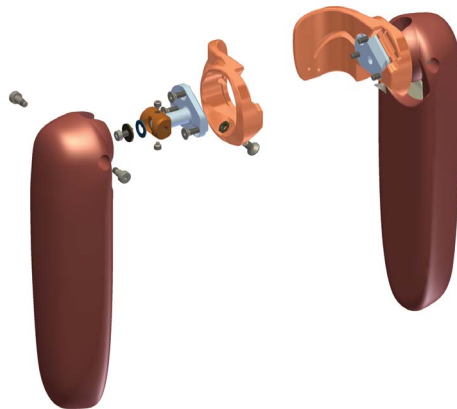
Q10 Background

Extensive evaluations of the Q10 ATD prototypes were carried out worldwide. Multitudes of data were collected and assessed following the completion of these projects. As a result, an updated version of Q10 was developed based on the test results as well as feedback from experts within the industry.

In their meeting on September 19, 2014 the Euro NCAP Child Safety Working Group decided to use the Q10 with the full arm in their frontal tests and the Q10 with the side impact kit in their lateral impact tests. The new protocol will be effective in 2016.

Q10 Side Impact Shoulder Kit 010-4500

Humanetics offers a complete Side Impact Shoulder Kit (010-4500) for installation on existing Q10 dummies.



010-4500 Q10 Side Impact Shoulder Kit

When the impact direction of the Q10 is switched from the frontal to the side impact configuration, a change in the IRTRACCs, the full arm, the shoulder joint, and the scapula is required. The side impact components are easily mounted and exchanged with the frontal arms. The kit is delivered certified with provisional corridors for T1 acceleration and pendulum force in the lateral shoulder impact test.

For internal development studies, optional left and right hand side shoulder load cells are available that are compatible with the side impact shoulder kit.

A complete Q10 ATD part number that includes the side impact kit may be available in the near future.

010-4500 Kit Components		
10969	Structural Repl Q10 RH Shoulder	1
10979	Structural Repl Q10 LH Shoulder	1
010-4501	Scapular Left- Side Impact	1
010-4502	Scapular Right - Side Impact	1
010-4503	Shoulder Pivot - Side Impact	2
010-4504	Shoulder Washer - Side Impact	2
010-4510	Arm Assy Molding - Side Impact	2
Misc.	Fasteners	
Optional		
IH-10980JI4	LC, 3X, LH Q10 SHOULDER	1
IH-10970JI4	LC, 3X, RH Q10 SHOULDER	1
ATD		
010-0000	DUMMY ASSY, Q10, NON-INST	1

(Con't on page 2)

Q10 ATD Side Impact Shoulder Kit (Con't)

Q10 Shoulder Update

Customers who have a Q10 dummy that was purchased prior to August 2013 and wish to fit the side impact shoulder will need the updated rubber shoulders (010-3501 and 010-3502). These parts have a new end plate to fit the shoulder load cell or its structural replacement. This along with a revised neck interface plate to attach a T1 accelerometer constituted the change to Standard Build Level C (SBL C).

New Standard Update Components		
010-3501	Shoulder Interface Assy Left, Q10	1
010-3502	Shoulder Interface Assy Right, Q10	1
010-2010	Neck Interface Assembly, Q10	1
010-4505	T1 Accel Mount	1

SBL Definitions

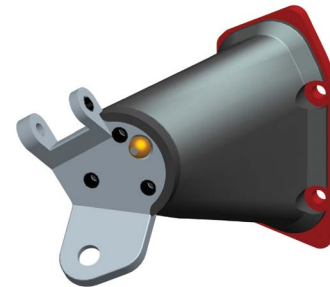
010-0000, Q10 ATD	
SBL A	Prototype
SBL B	Production dummy -Frontal only, not able to accept side impact kit
SBL C	<p>Production dummy with updates that allow side impact kit installation.</p> <p>Parts Required for SBL C:</p> <ol style="list-style-type: none"> Rubber shoulders that have load cell interface update <ul style="list-style-type: none"> 010-3501 & 010-3502 Neck Interface Ring for T1 mount <ul style="list-style-type: none"> 010-2010 T1 Mount <ul style="list-style-type: none"> 010-4505

Q10 DAS Integration

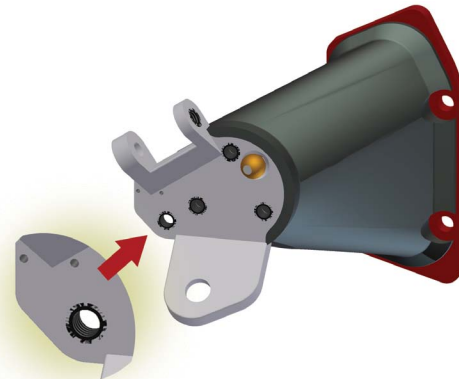
DAS integration solutions are available for frontal and side impact configurations. Specific DAS products can be considered for integration upon customer request.



Q10 Side Impact Shoulder and Arm



OLD Shoulder Rubber Interface



NEW Shoulder Rubber Interface



Neck Interface Ring and T1 mount

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