May 2020

Humanetics is now offering an improved 2D IR-TRACC mounting for the WorldSID-50M to increase the range of motion for far-side testing in updated Euro NCAP protocols.

Background

EURO NCAP FAR-SIDE TESTING

In the latest update to the Euro NCAP Far Side Occupant & Assessment Procedure (Version 2.0, June 2019), occupant-to-occupant protection is evaluated to demonstrate countermeasures for head protection in occupant interaction. The protocol uses a WorldSID-50M in the far-side seating position. It is worth noting that the WorldSID-50M was designed to be used in near-side tests. With the introduction of the new far-side application, damage to WorldSID-50M ATDs have been increasingly seen in the field. Humanetics has been actively working to develop design solutions that meet the performance criteria of near-side testing, but are also robust enough for use in far-side testing since the EuroNCAP far-side assessment will become an integral part of the rating for all vehicles launched in 2020 onwards.

Damage to IRTRACC potentiometer base

REAL WORLD TEST OBSERVATIONS

It has been observed that far-side test conditions induce larger rib vertical motion on the WorldSID-50M ribs, resulting in deformation to the potentiometer base (p/n #3700-03) (Figure 1).

Solution

UPDATED COMPONENTS

To eliminate damage to the potentiometer base, the yoke, thorax/ab bracket, and potentiometer cover were modified to allow for an additional 11 degrees of rotation of the 2D IR-TRACC. The new parts are direct replacements for the current components; all screw holes and the potentiometer are exactly in the same position as before.

<table>
<thead>
<tr>
<th>Component</th>
<th>Current P/N</th>
<th>Updated P/N</th>
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<tbody>
<tr>
<td>Yoke</td>
<td>3670-01</td>
<td>3670-01-1</td>
</tr>
<tr>
<td>Bracket, Thorax/Ab</td>
<td>3670-22</td>
<td>3670-22-1</td>
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<tr>
<td>Cover, Potentiometer</td>
<td>3670-03</td>
<td>3670-03-1</td>
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</tbody>
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AVAILABILITY

Currently the new Humanetics IR-TRACC parts are available to order as optional spare components for installation in WorldSID-50Ms used in far-side testing.

Figure 1 - Potentiometer base deformation shown (left), normal 2D IR-TRACC potentiometer base shown in red box on right photo. Pictures courtesy CTAG IDIADA.