

THOR-M Tilt Sensor Mounts

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Humanetics has improved the mounting accuracy of several tilt sensor mounts located within the THOR-M ATD.

Background

After investigating the tolerances in the mounting of tilt sensors within the body of the THOR-M, Humanetics found that there was enough ‘play’ with the leveling of the mounts to cause zeroing errors when installing the sensors.

Improvement

The differences in diameter of the bolt holes in the mounts and the actual bolts can allow up to 6 degrees of variance in the leveling of the mount on the base parts. This variance can affect the positioning of the tilt sensors and change the accuracy of the readings.

The mounts and the base parts have been updated to use locating dowel pins to decrease variance. The addition of dowel pins will position the mount more accurately with less than 0.25 degrees of tolerance, reducing the effect of the bolt holes in the leveling of the mounts.

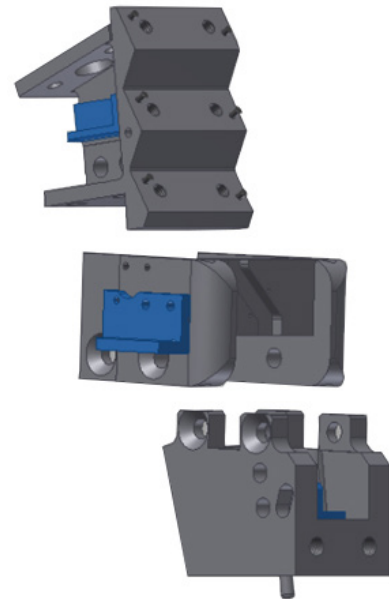


Figure 1 - upgraded components

Updated Components

The following chart lists the components required to update the THOR-M with the improved mounting capabilities (shown in figure 1). See page 2 for component rework options.

New Part Number	Qty	Description	Replaces
472-3781	1	TILT SENSOR MOUNT, LUMBAR SPINE	472-3771
472-3787	1	TILT SENSOR ASSEMBLY, PELVIS	472-3772
472-3783	1	TILT SENSOR MOUNT, LOWER THORAX	472-3773
472-3655	1	LOWER THORACIC SPINEBOX	472-3650 (reworkable)
472-3733	1	THORACIC SPINE ADAPTOR PLATE	472-3731
472-3765	1	PELVIS & LUMBAR MOUNTING BLOCK	472-3760 (reworkable)

THOR-M Tilt Sensor Mounts (Con't)

Existing Part Rework Options

Existing lower thoracic spine boxes (figure 1) and pelvis and lumbar mounting blocks (figure 2) can be reworked to install the locating pin updates (example figure 4).

The thoracic spine adaptor plate (figure 3) cannot be updated and must be replaced to get the new mounting accuracy.

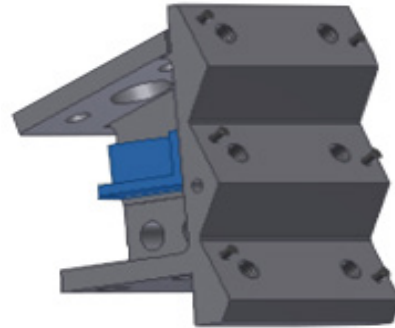


Figure 1: 472-3650 Lower Thoracic Spine Box

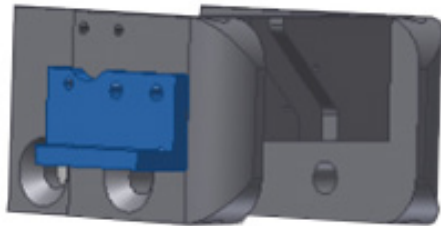


Figure 3: 472-3731 Thoracic Spine Adaptor Plate

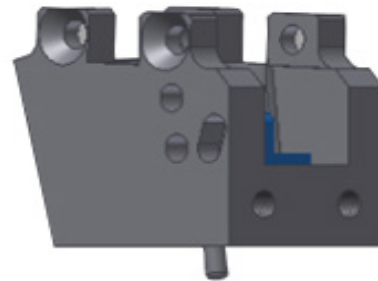


Figure 2: 472-3760 Pelvis and Lumbar Mounting Block

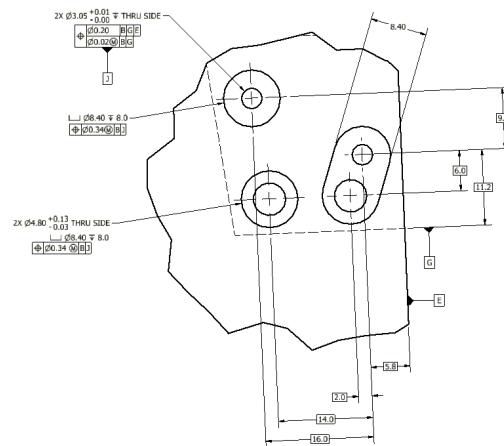
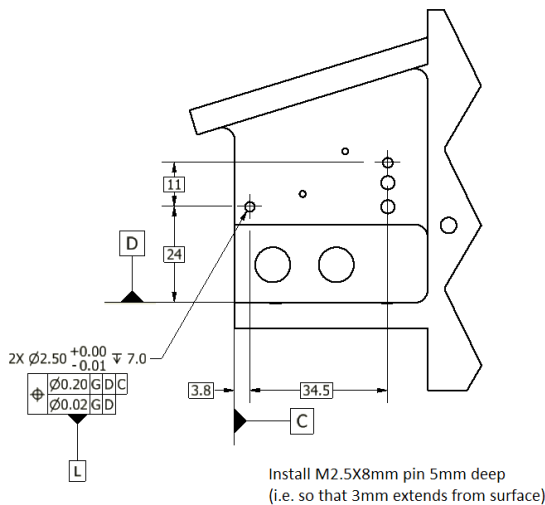


Figure 4: Adding Locating Pin to the Lower Thoracic Spine Box and the Pelvis & Lumbar Mounting Block

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