

SURFACE INFORMATION REPORT

SAE J2706 JUN2013

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Superseding J2706 AUG2007

Hybrid III Six-Year-Old Child Dummy User's Manual

RATIONALE

Updates to this Surface Vehicle Standard were made to be consistent with the Final Rule 49 CFR, Part 572, Subpart N, dated December 9, 2010, the NHTSA Parts List, dated June 2009, and the NHTSA Procedure for Assembly Disassembly and Inspection (PADI), dated June 2009.

All references to SAE J211 were changed to SAE J211-1.

Information to obtain the drawing package was moved from the INTRODUCTION to Section 2 REFERENCES

Test Definitions and the Abbreviations for Threaded Fasteners were moved from the INTRODUCTION to Section 3 **DEFINITIONS AND ABBREVIATIONS**

Section 3 DEFINITIONS AND ABBREVIATIONS and throughout the document - changed "Calibration Test" to "Certification Test" for all tests that are conducted for the purpose of assuring that the dummy responds within the specifications outlined in this document

General descriptions of the dummy's construction, clothing and available instrumentation were moved from the INTRODUCTION to Sections 4, 5 and 6, respectively. Part numbers were added to the instrumentation list.

Section 7 – Added part numbers for fasteners

Section 7.1 – Description of part number 78051-339 changed from "Load Cell Pivot Pin" to "Pivot Pin, Neck Transducer" for consistency with the NHTSA Parts List

Section 7.1, Section 7.2, and Section 7.4 – Description of part number 78051-383X changed from "6-Channel Replacement Load Cell" to "Neck Transducer, Structural Replacement" for consistency with the NHTSA Parts List

Section 7.1, Section 7.2, Figure 2, Item 10, and Figure 4, Item 1 – Description of fastener that holds the neck transducer pivot pin was changed from 10-32 x 1/4 SSCP to 8-32 x 1/4 SSCP for consistency with the NHTSA PADI

Section 7.1, Section 7.2 and Figure 3, Item 3 - Description of fasteners that attach the bottom of the neck to the neck bracket changed from 10-32 x ½ SHCS to part number 127-2107 (10-32 x 0.55 SHCS) for consistency with the NHTSA PADI

Section 7.1 – Description and part number changed from "Neck Bracket 127-2001" to "Neck Bracket Assembly 127-8221" for consistency with the NHTSA Parts List

Section 7.1 and Section 7.2 - Description of Item 1, Figure 4 changed from "SSCP 10-32 x 1/4" to "SSCP 8-32 x 1/4" for consistency with NHTSA PADI

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Section 7.1 – Part number for the Load Cell Spacer (Figure 5, Item 5) was corrected to 127-1003

Section 7.2 and 7.9 – Description of part number 127-2102 changed from "compression washer" to "yoke spring washer" for consistency with the NHTSA Parts List and PADI

Section 7.2 - "Flesh" was changed to "chest flesh"

Section 7.2 - "Neck tool" was changed to "neck compression tool"

Section 7.3 and Section 7.4 – Order was changed so that inspection of individual head and neck components appears prior to the directions to reassemble the head and neck

Section 7.3 – Corrected "adaptor plate" to "Load Cell Spacer" Section 7.5 – Added "taller" to description of the Back Nodding Block and added "shorter" to the description of the Front Nodding Block

Section 7.6 – Added "Remove the 5/16-24 hex nut (Item 7, Figure 6) and urethane washer (Item 10, Figure 6) from the neck cable" because the neck cable cannot be removed without first removing the hex nut.

Section 7.7 and Section 7.8 – Order was changed so that inspection of neck components appears prior to the directions to reassemble the neck

Section 7.9 – Added "Threaded" to the description of part number 127-8200

Section 7.9 - Added "Transducer" to the description of part number 127-8050

Section 7.9 – Changed the description of part number 127-2102 from "Compression Washer" to "Yoke Spring Washer" for consistency with the NHTSA Parts List

Section 7.9 – Changed the description of part 127-8221 from "Neck Bracket" to "Neck Bracket Assembly" for consistency with the NHTSA Parts List

Section 7.9 – Changed the description of part 127-8000 from "Spine Box" to "Spine Box, Welded" for consistency with the NHTSA Parts List

Section 7.9 – Changed the description of part 127-8180 from "Rear Rib Support" to "Rear Ribs Stiffener" for consistency with the NHTSA Parts List

Section 7.9, Section 7.10 and Section 7.12 – Changed the description of part 127-8061 from "Thorax Weight Weldment" to "Thorax C.G. Weight Assembly" for consistency with the NHTSA Parts List

Section 7.9 and Section 7.10 - Corrected the part number of the Shoulder Elevation Bushings

Section 7.9 – Changed the description of Item 24 Figure 9 from "10-32 x $\frac{1}{4}$ " to "10-32 x 5/16" for consistency with NHTSA PADI

Section 7.9 – Added "Assembly" to the description of part 127-8015 and added "-1 (Left), -2 (Right)" to the part number for consistency with the NHTSA Parts List

Section 7.9 – Added "-1 (Left), -2 (Right)" to the part 127-8030 for consistency with the NHTSA Parts List

Section 7.9 – Change the description of Item 37 Figure 9 from "10-32 x 3/8" to 10-32 x 3/4" for consistency with NTHSA PADI

Section 7.10 – Added "Note that once calibrated according to J2715, "Hybrid III Family Chest Potentiometer Calibration Procedure" the chest potentiometer assembly consisting of the transducer arm (Item 33, Figure 9), chest deflection assembly (Item 18, Figure 9) should not be mechanically adjusted or further disassembled."

Section 7.11 and Section 7.12 – Order was changed so that inspection of the upper torso components appears prior to the directions to reassemble the upper torso

- Section 7.11 Deleted "Make sure the arms are between 1 and 2 G tight" from the Upper Torso Inspection because the arms were removed in Section 7.10
- Section 7.12 Changed "joints should be tightened to between 1 and 2 G" to "joints should be adjusted to a 1G suspended setting"
- Section 7.13 Changed the description of part 127-2081 from "Bushing" to "Clavicle Link Bushing" for consistency with the NHTSA Parts List
- Section 7.13 Changed "Rib Protection" to "Rib Protection Pad" and corrected the part number for consistency with the NHTSA parts list
- Section 7.13 and Section 7.14 Changed the description of part 127-2101 from "Retaining Washer" to "Yoke Retaining Washer" for consistency with the NHTSA parts list
- Section 7.13 and Section 7.14 Changed the description of part 127-2102 from "Urethane Spring" to "Urethane Yoke Spring Washer" for consistency with the NHTSA parts list
- Section 7.14 Changed "yoke" to "shoulder yoke" for consistency with parts list in Section 7.13
- Section 7.15 and Section 7.16 Order was changed so that inspection of shoulder components appears prior to the directions to reassemble the shoulder
- Section 7.17 and Section 7.18 Changed "Transducer Mounting Plate" to "Transducer Mount Assembly" for consistency with the NHTSA parts list and corrected the part number
- Section 7.17 Changed part number "127-3016-1 and 2" to "127-3016-1S (Left), -2S (Right)" consistent with the modified femur assembly in the NHTSA Parts List
- Section 7.17 Changed the description of part 6C-1105 from "Femur Plunger Set Screws" to "Femur Friction Plunger Assembly" for consistency with the NHTSA Parts List
- Section 7.17 and Section 7.18 Changed "Hex Nut" to "Hex Jam Nut" for consistency with the NHTSA Parts List
- Section 7.17 Changed "A.S.I.S. Load Cell Simulator ... 127-3015-1 and -2" to "A.S.I.S. Load Cell ... SA572-S13-L and R" for consistency with the NHTSA Parts List
- Section 7.17 Changed the description of part 910420-048 from "Nylon® Insert" to "Nylon® Mounting Plate Insert" for consistency with the NHTSA Parts List
- Section 7.17 Changed "Bushing" to "Bushing, Nylon Shoulder for $5/16 \times 1/4$ Screw" for consistency with the NTHSA Parts List and corrected the part number
- Section 7.19 and Section 7.20 Order was changed so that inspection of lower torso components appears prior to the directions to reassemble the lower torso
- Section 7.19 Added directions to inspect the lumbar spine mounting plate insert, bushing, and lumbar cable
- Section 7.21 and Section 7.22 Changed the description of part 127-2102 from "Compression Washer" to "Yoke Spring Washer" for consistency with Section 7.13 and the NHTSA Parts List
- Section 7.21 Changed the description of part 127-2105-1 from "Bushing" to "Bushing, Elbow"
- Section 7.21 Changed the description of part 127-2106 from "Bushing Washer" to "Bushing Washer, Elbow"
- Section 7.21 Changed the description of part 127-5001 from "Upper Arm" to "Upper Arm, Molded Assembly" for consistency with the NHTSA Parts List