Figure U1

NECK/LUMBAR SPINE ATTACHED TO HEADFORM

MOUNTING BASE, LOWER
(PART #175-9027),
FASTEN TO TOP OF LUMBAR
SPINE USING
(3) 1/4-20 x 1 SHCS
OR
FASTEN TO BASE OF NECK
USING (4) M6 x 40 SHCS

LUMBAR SPINE
(PART #175-5500)
OR
NECK ASSEMBLY
(PART #175-2000)

(4) M6 x 20.5 SHCS

NECK AND LUMBAR SPINE
MOUNTING BASE
(PART #175-9029)
FASTEN TO BASE OF SPINE
OR
FASTEN TO TOP OF NECK
USING (4) M6 x 12 SHCS

ES-2pc HEADFORM
ASSEMBLY
(PART #175-9000)
Figure U2-A
NECK/LUMBAR SPINE/HEADFORM ATTACHED TO PENDULUM

DIRECTION OF MOTION

PART 572
SUBPART E
PENDULUM
(Figure #22)

(4) M6 x 12 SHCS
MOUNTING BASE LOWER

AFT BASE ANGLE POT ASSEMBLY

FORE BASE ANGLE POT ASSEMBLY
(CONNECT TO HEADFORM ANGLE POT)

LUMBAR SPINE
(PART #175-5500)
OR
NECK ASSEMBLY
(PART #175-2000)

HEADFORM
(PART #175-9000)
Figure U2-B
ANGLE MEASUREMENTS WITH HEADFORM SET-UP

DIRECTION OF MOTION

PENDULUM BASE PLATE
FORE BASE ANGLE POT ASSEMBLY
AFT BASE ANGLE POT ASSEMBLY

HEADFORM FLEXION ANGLE EQUATION:
\[ \beta = d\theta_a + d\theta_c \]
WHERE:
- \( d\theta_a \) = CHANGE IN FORE BASE ANGLE
- \( d\theta_c \) = CHANGE IN HEADFORM ANGLE

HEADFORM (PART #175-9000)
Figure U3
SHOULDER IMPACT

Figure U4
THORAX IMPACT

RIB DETAIL
(REF. DWO. 175-4004)
Figure U5
ABDOMEN IMPACT

[Diagram showing the abdomen impact test setup]

100
AXLE-TO-ANKLE

SEE FIGURE U5-A

PART 572
SUBPART E
PENDULUM

PENDULUM
HORIZONTAL
AT IMPACT ±0.5°

THORAX
VERTICAL
±2°

TWO SHEETS
OF 2mm
THICK PTFE
(TEFLON®)

LEGS
HORIZONTAL

ARMS
HORIZONTAL
Figure U5-A

ABDOMEN IMPACT - VIEW A

ABDOMEN TEST SET-UP

IMPACTOR FACE (SIDE VIEW)

PENDULUM

IMPACTOR FACE (FRONTAL VIEW)

CENTERLINE OF FORCE TRANSUDER AND IMPACTOR ±5mm
Figure U6
PELVIS IMPACT

- ANKLE-TO-ANKLE: 100 ± 5mm
- PENDULUM CENTERLINE ALIGNED WITH H-POINT CENTER ±5mm
- PART 572 SUBPART E PENDULUM
- PENDULUM HORIZONTAL AT IMPACT ±0.5°
- ARMS HORIZONTAL
- THORAX VERTICAL ±2°
- LEGS HORIZONTAL
- TWO SHEETS OF 2mm THICK PTFE (TEFLON)
§ 572.190 Incorporated materials.

(a) The following materials are hereby incorporated into this Subpart by reference:

(1) A parts/drawing list entitled, “Parts/Drawings List, Part 572 Subpart V, SID–IIhsD, July 1, 2008,”

(2) A drawings and inspection package entitled “Drawings and Specifications for the SID–IIhsD Small Female Crash Test Dummy, Part 572 Subpart V, July 1, 2008,” consisting of:

(i) Drawing No. 180–0000, SID–IIhsD Complete Assembly;
(ii) Drawing No. 180–1000, 6 Axis Head Assembly;
(iii) Drawing No. 180–2000, Neck Assembly;