

(c) The neck force-moment transducer shall have the dimensions, response characteristics, and sensitive axis locations specified in drawing SA572-S23 and shall be mounted for testing as shown in drawing 921022-000 and in figures R3 and R4 of this subpart.

(d) The shoulder force transducers shall have the dimensions and response characteristics specified in drawing SA572-S25 and are allowed to be mounted as optional instrumentation in place of part No. 921022-022 in the torso assembly as shown in drawing 921022-000.

(e) The thorax accelerometers shall have the dimensions, response characteristics, and sensitive mass locations specified in drawing SA572-S4 and be mounted in the torso assembly in triaxial configuration as shown in drawing 921022-000.

(f) The lumbar spine and lower neck force/moment transducer shall have the dimensions and response characteristics specified in drawing SA572-S23 and are allowed to be mounted as optional instrumentation in the torso assembly in place of part No. 910420-003 as shown in drawing 921022-000.

(g) The pelvis accelerometers shall have the dimensions, response characteristics, and sensitive mass locations specified in drawing SA572-S4 and are allowed to be mounted as optional instrumentation in the pelvis in triaxial configuration as shown in drawing 921022-000.

(h) The pubic force transducer shall have the dimensions and response characteristics specified in drawing SA572-S24 and is allowed to be mounted as optional instrumentation in place of part No. 921022-050 in the torso assembly as shown in drawing 921022-000.

(i) The outputs of acceleration and force-sensing devices installed in the dummy and in the test apparatus specified by this part are recorded in individual data channels that conform to the requirements of SAE Recommended Practice J211/1, Rev. Mar95

“Instrumentation for Impact Tests—Part 1—Electronic Instrumentation” (refer to §572.150(a)(3)), with channel classes as follows:

(1) Head and headform acceleration—Class 1000.

(2) Neck :

(i) Forces—Class 1000;

(ii) Moments—Class 600;

(iii) Pendulum acceleration—Class 180;

(iv) Rotation potentiometer response (if used)—CFC 60.

(3) Thorax:

(i) Spine and pendulum accelerations—Class 180;

(ii) Shoulder forces—Class 600;

(4) Lumbar:

(i) Forces—Class 1000;

(ii) Moments—Class 600;

(5) Pelvis:

(i) Accelerations—Class 1000;

(ii) Pubic—Class 1000.

(j) Coordinate signs for instrumentation polarity shall conform to SAE J1733, 1994-12, “Sign Convention For Vehicle Crash Testing, Surface Vehicle Information Report,” (refer to §572.150(a)(4)).

(k) The mountings for sensing devices shall have no resonance frequency within a range of 3 times the frequency range of the applicable channel class.

(l) Limb joints shall be set at 1 g, barely restraining the weight of the limb when it is extended horizontally. The force required to move a limb segment shall not exceed 2 g throughout the range of limb motion.

(m) Performance tests of the same component, segment, assembly, or fully assembled dummy shall be separated in time by period of not less than 30 minutes unless otherwise noted.

(n) Surfaces of dummy components may not be painted except as specified in this subpart or in drawings referenced in §572.150.

[65 FR 17188, Mar. 31, 2000, as amended at 66 FR 45784, Aug. 30, 2001]

FIGURES TO SUBPART R OF PART 572

Figure R 1  
FRONTAL HEAD DROP TEST SET-UP SPECIFICATIONS

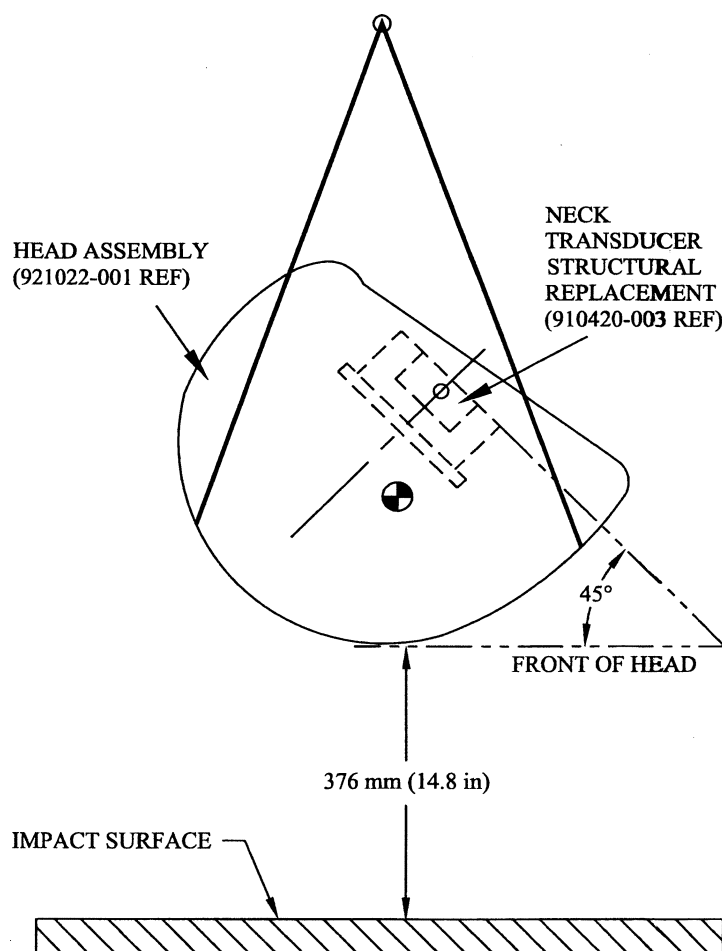


Figure R 2  
REAR HEAD DROP TEST SET-UP SPECIFICATIONS

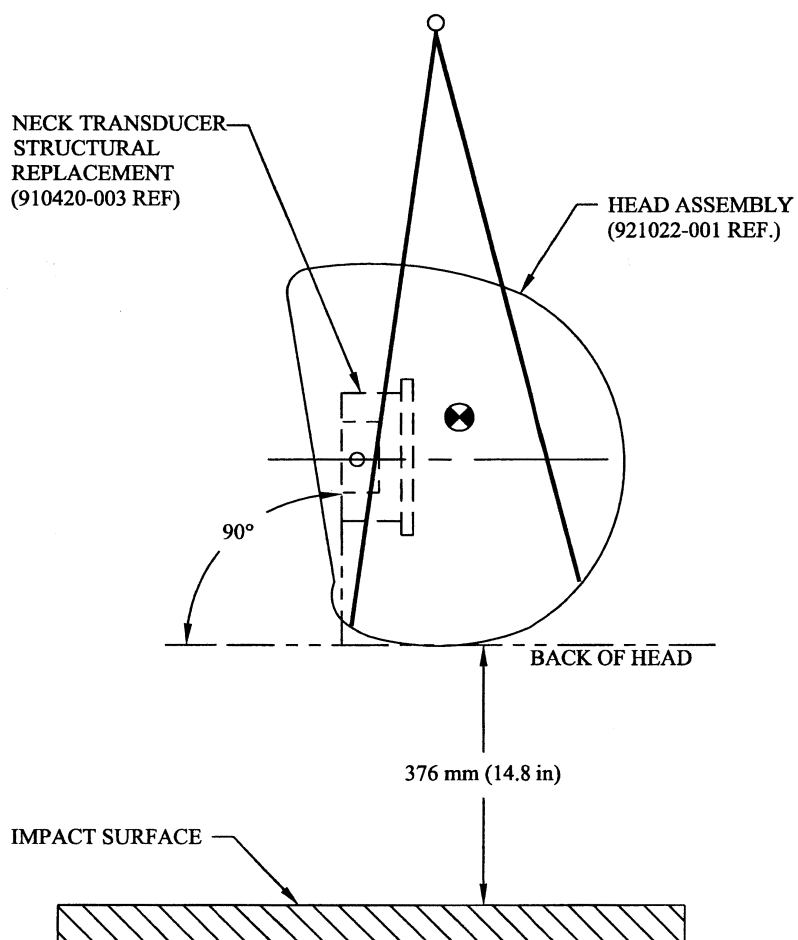
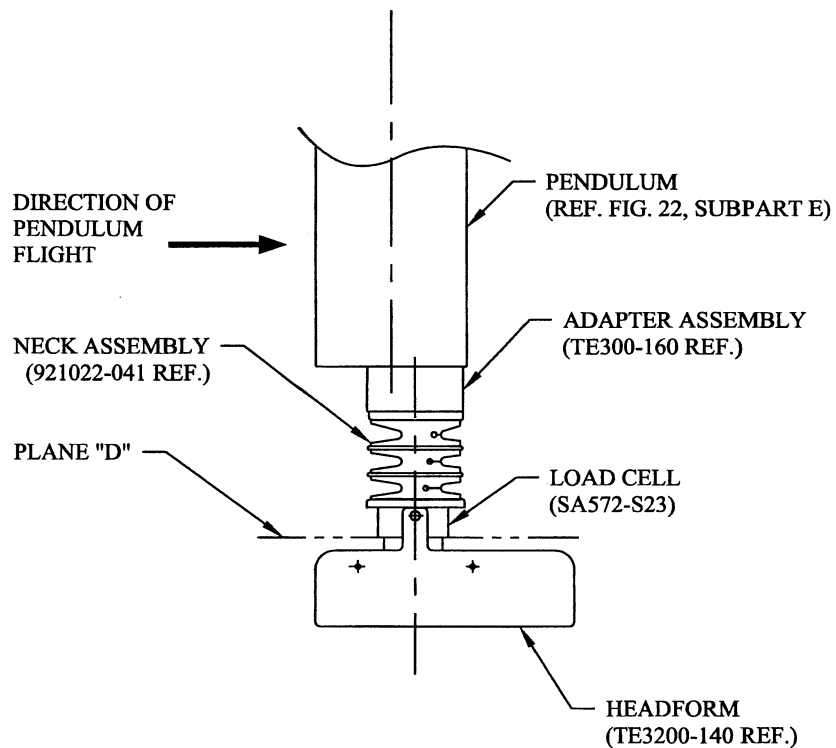
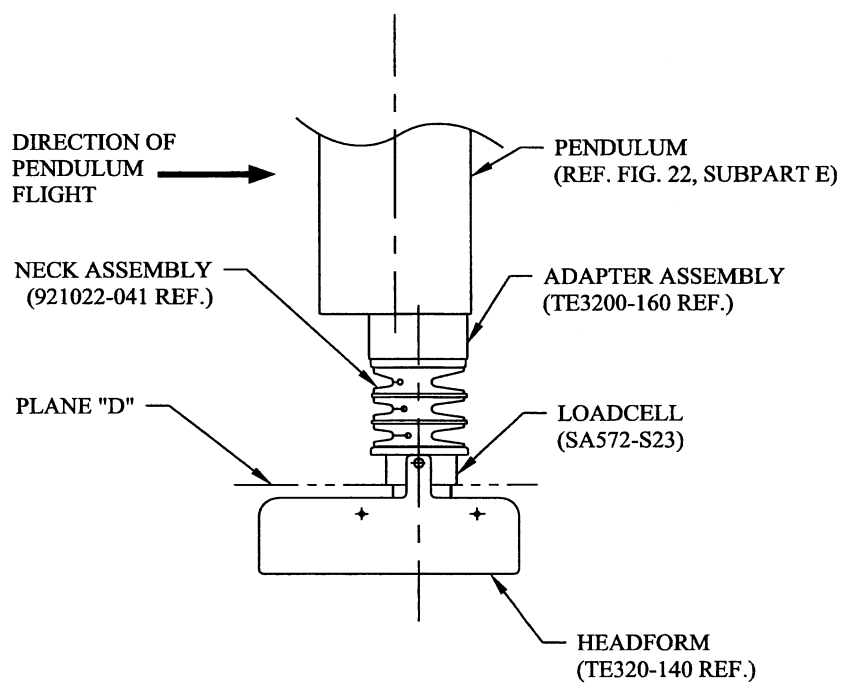


Figure R3  
NECK FLEXION TEST SET-UP SPECIFICATIONS



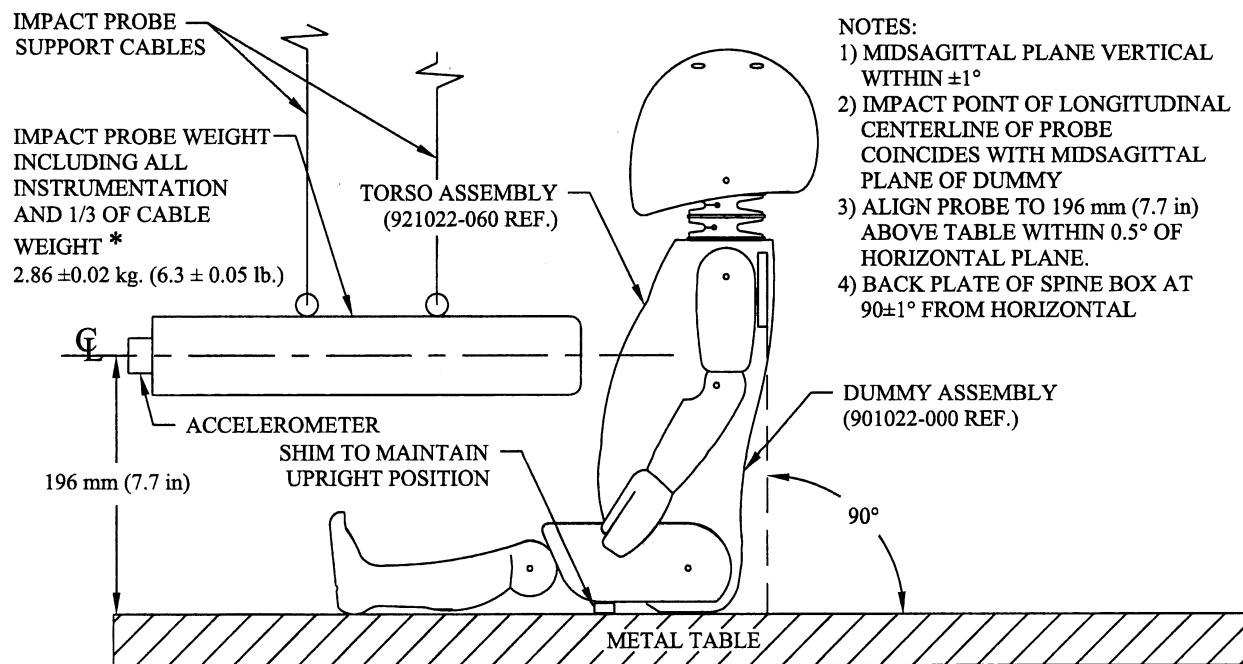
NOTE: MOUNT NECK AT LEADING EDGE OF PENDULUM TO  
AVOID INTERFERENCE.

Figure R4  
NECK EXTENSION TEST SET-UP SPECIFICATIONS



NOTE: MOUNT NECK AT LEADING EDGE OF PENDULUM TO AVOID INTERFERENCE.

**Figure R 5**  
**THORAX IMPACT TEST SET-UP SPECIFICATIONS**



**NOTES:**

- 1) MIDSAGITTAL PLANE VERTICAL WITHIN ±1°
- 2) IMPACT POINT OF LONGITUDINAL CENTERLINE OF PROBE COINCIDES WITH MIDSAGITTAL PLANE OF DUMMY
- 3) ALIGN PROBE TO 196 mm (7.7 in) ABOVE TABLE WITHIN 0.5° OF HORIZONTAL PLANE.
- 4) BACK PLATE OF SPINE BOX AT 90±1° FROM HORIZONTAL

\* 1/3 OF CABLE WEIGHT NOT TO EXCEED 5% OF THE TOTAL IMPACT PROBE WEIGHT.