

heels touch the designated foot support surface and the feet are vertical and as close together as possible.

(7) Rotate the arm downward to the lowest detent.

(8) The impactor is specified in 49 CFR 572.200(a).

(9) The impactor is guided, if needed, so that at contact with the pelvis, its longitudinal axis is within ± 1 degree of a horizontal plane and perpendicular to the midsagittal plane of the dummy. The centerpoint of the impactor's face is in line within 2 mm of the longitudinal centerline of the $\frac{1}{4}$ -20x $\frac{1}{2}$ flat head cap screw through the center of the acetabulum load cell (SA572-S68), as shown in Figure V8-A in Appendix A to this subpart;

(10) The dummy's pelvis is impacted at the acetabulum at 6.7 ± 0.1 m/s.

(c) *Performance criteria.* While the impactor is in contact with the pelvis:

(1) Peak acceleration of the impactor is not less than 38 g and not more than 47 g;

(2) Peak lateral acceleration of the pelvis is not less than 41 g and not more than 50 g;

(3) Peak acetabulum force is not less than 3.8 kN and not more than 4.6 kN.

§ 572.199 Pelvis iliac.

(a) The iliac is part of the lower torso assembly shown in drawing 180-4000. The iliac test is conducted by impacting the side of the lower torso of the assembled dummy (drawing 180-0000). The dummy is equipped with a laterally oriented pelvis accelerometer as specified in 49 CFR 572.200(d), and acetabulum load cell SA572-S68, mounted as shown in sheet 2 of 5 of drawing 180-0000. When subjected to the test procedure as specified in paragraph (b) of this section, the pelvis shall meet performance requirements of paragraph (c) of this section.

(b) *Test procedure.* (1) Soak the dummy assembly (180-0000) in a test environment as specified in 49 CFR 572.200(j).

(2) Seat the dummy, without the torso jacket and without cotton underwear pants, as shown in Figure V9-A in Appendix A to this subpart, on a flat, rigid, horizontal surface covered with a 2-mm-thick PTFE (Teflon) sheet.

(3) The legs are outstretched in front of the dummy such that they are symmetrical about the midsagittal plane, the thighs touch the seated surface, the inner part of the right and left legs at the knees are as close as possible to each other, and the feet are in full dorsiflexion and as close together as possible.

(4) The midsagittal plane of the dummy is vertical and superior surface of the lower half neck assembly load cell replacement (180-3815) in the lateral direction is within ± 1 degree relative to the horizontal as shown in Figure V9-A.

(5) While maintaining the dummy's position as specified in paragraphs (b)(3) and (4) of this section, the top of the shoulder rib mount (180-3352) orientation in the fore-and-aft direction is within ± 1.0 degrees relative to horizontal as shown in Figure V9-B in Appendix A to this subpart.

(6) The pelvis impactor is specified in 49 CFR 572.200(c).

(7) The dummy is positioned with respect to the impactor such that the longitudinal centerline of the impact probe is in line with the longitudinal centerline of the iliac load cell access hole and the 88.9 mm dimension of the probe's impact surface is aligned horizontally.

(8) The impactor is guided, if needed, so that at contact with the pelvis, the longitudinal axis of the impactor is within ± 1 degree of a horizontal plane and perpendicular to the midsagittal plane of the dummy.

(9) The dummy's pelvis is impacted at the iliac location at 4.3 ± 0.1 m/s.

(c) *Performance criteria.* While the impactor is in contact with the pelvis:

(1) Peak lateral acceleration of the impactor is not less than 34 g and not more than 40 g;

(2) Peak lateral acceleration of the pelvis is not less than 27 g and not more than 33 g;

(3) Peak iliac force is not less than 3.7 kN and not more than 4.5 kN.

§ 572.200 Instrumentation and test conditions.

(a) The test probe for shoulder, lateral thorax, and pelvis-acetabulum impact tests is the same as that specified

§ 572.200

in 49 CFR 572.137(a) except that its impact face diameter is 120.70 ± 0.25 mm and it has a minimum mass moment of inertia of 3646 kg-cm^2 .

(b) The test probe for the lateral abdomen impact test is the same as that specified in 572.137(a) except that its impact face diameter is 76.20 ± 0.25 mm and it has a minimum mass moment of inertia of 3646 kg-cm^2 .

(c) The test probe for the pelvis-iliac impact tests is the same as that specified in 49 CFR 572.137(a) except that it has a rectangular flat impact surface 50.8×88.9 mm for a depth of at least 76 mm and a minimum mass moment of inertia of 5000 kg-cm^2 .

(d) Accelerometers for the head, the thoracic spine, and the pelvis conform to specifications of SA572-S4.

(e) Rotary potentiometers for the neck-headform assembly conform to SA572-S51.

(f) Instrumentation and sensors conform to the Recommended Practice SAE J-211 (March 1995), Instrumentation for Impact Test, unless noted otherwise.

(g) All instrumented response signal measurements shall be treated to the following specifications:

(1) Head acceleration—digitally filtered CFC 1000;

(2) Neck-headform assembly translation-rotation—digitally filtered CFC 60;

(3) Neck pendulum, T1 and T12 thoracic spine and pelvis accelerations—digitally filtered CFC 180;

49 CFR Ch. V (10-1-06 Edition)

(4) Neck forces (for the purpose of occipital condyle calculation) and moments—digitally filtered at CFC 600;

(5) Pelvis, shoulder, thorax and abdomen impactor accelerations—digitally filtered CFC 180;

(6) Acetabulum and iliac wings forces—digitally filtered at CFC 600;

(7) Shoulder, thorax, and abdomen deflection—digitally filtered CFC 600.

(h) Mountings for the head, thoracic spine and pelvis accelerometers shall have no resonant frequency within a range of 3 times the frequency range of the applicable channel class;

(i) Leg joints of the test dummy are set at the force between 1 to 2 g, which just support the limb's weight when the limbs are extended horizontally forward. The force required to move a limb segment does not exceed 2 g throughout the range of the limb motion.

(j) Performance tests are conducted, unless specified otherwise, at any temperature from 20.6 to 22.2 degrees C. (69 to 72 degrees F.) and at any relative humidity from 10% to 70% after exposure of the dummy to those conditions for a period of 3 hours.

(k) Coordinate signs for instrumentation polarity shall conform to the Sign Convention For Vehicle Crash Testing, Surface Vehicle Information Report, SAE J1733, 1994-12 (refer to § 572.191(a)(5)).

PT. 572, SUBPT. V, APP. A APPENDIX A
TO SUBPART V OF PART 572—FIGURES

FIGURE V1
NECK ATTACHED TO HEADFORM ASSEMBLY

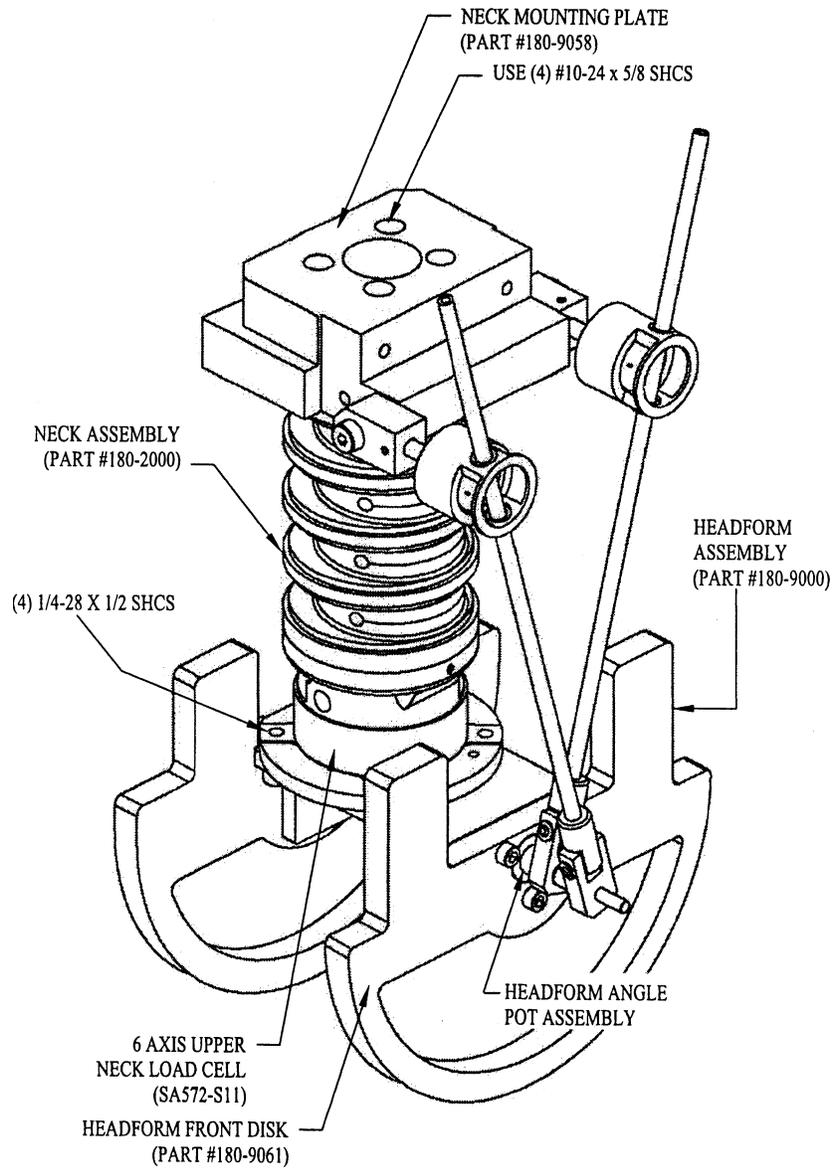


FIGURE V2-A
NECK/HEADFORM ATTACHED TO PENDULUM
FOR LEFT-SIDE IMPACT

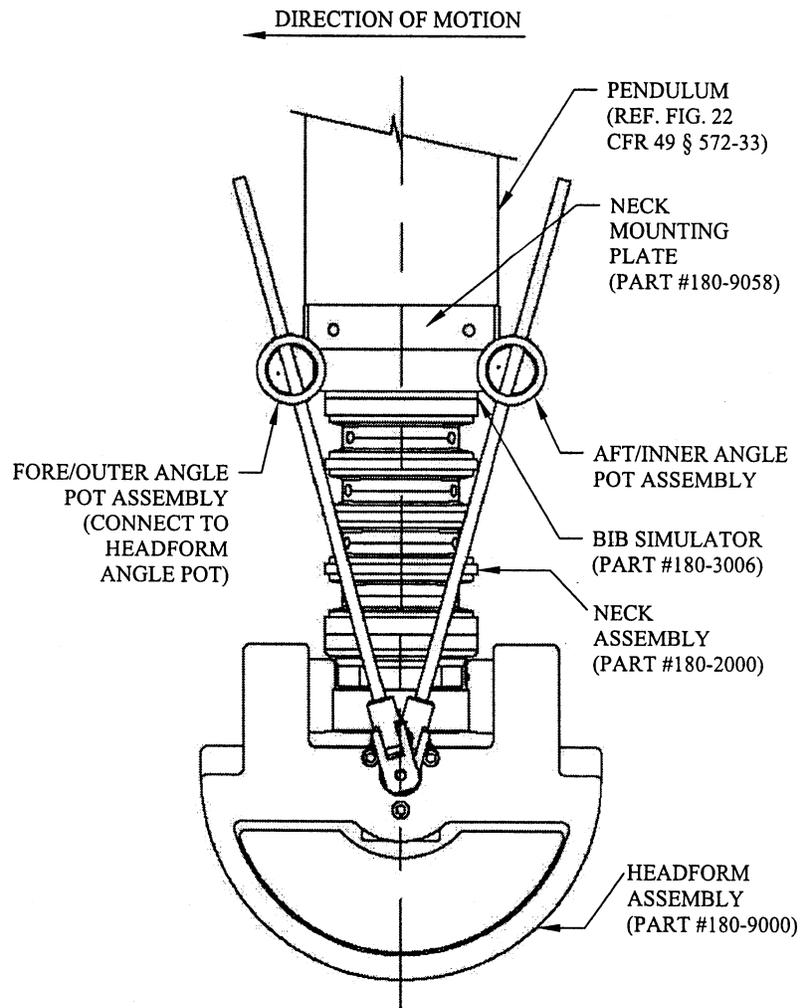


FIGURE V2-B
NECK/HEADFORM ATTACHED TO PENDULUM
FOR RIGHT-SIDE IMPACT

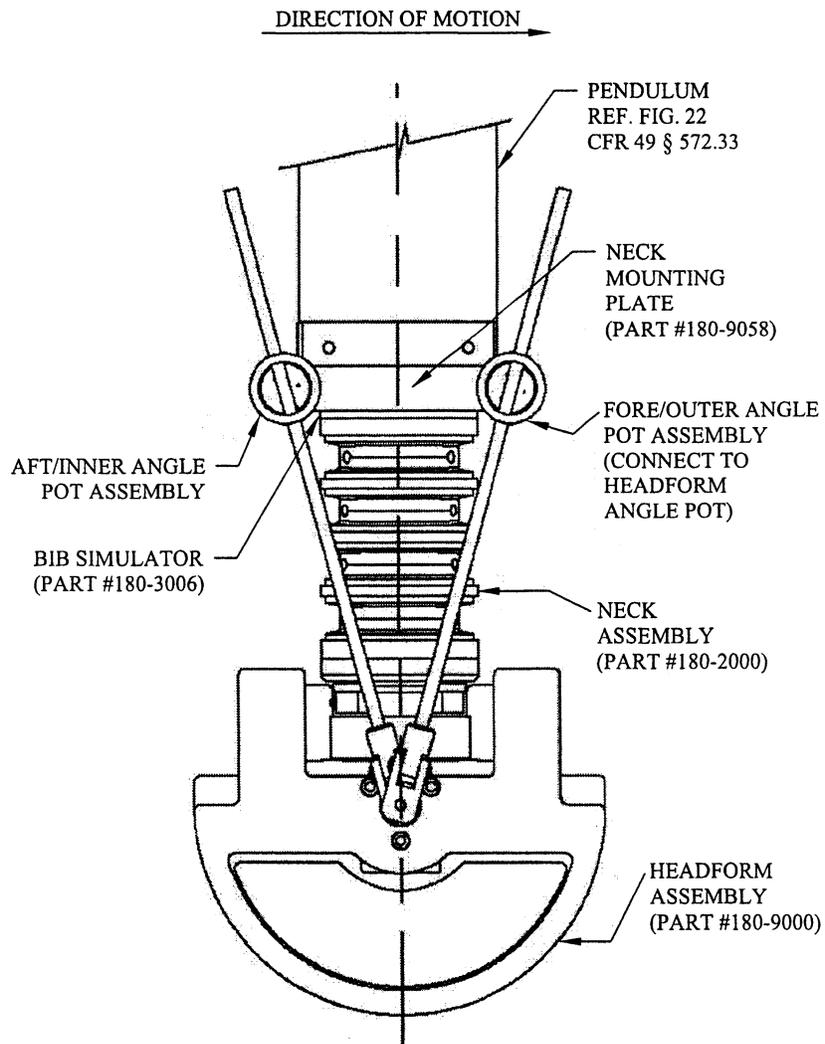
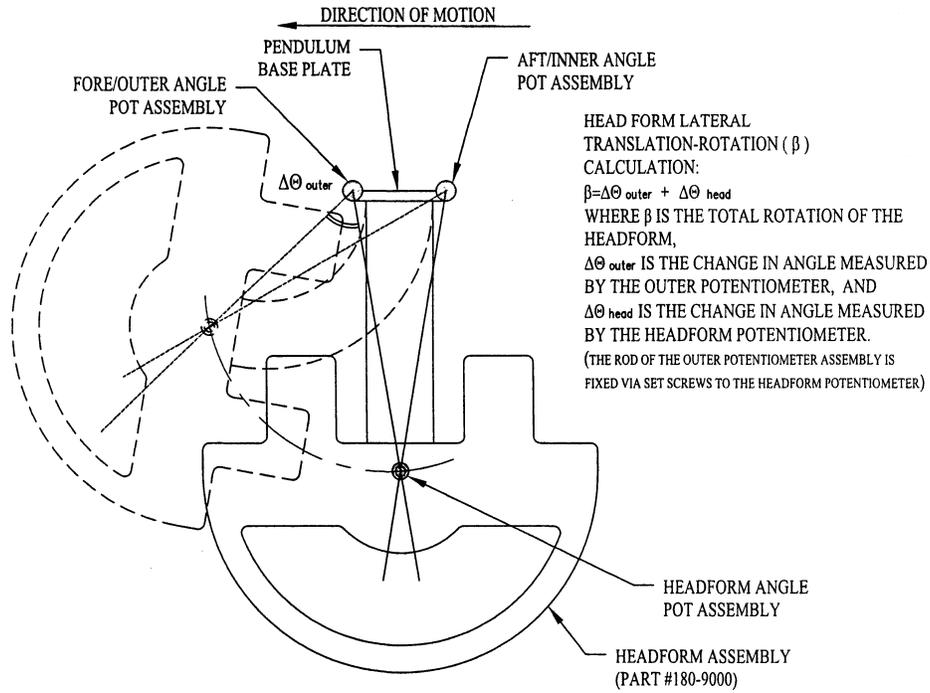
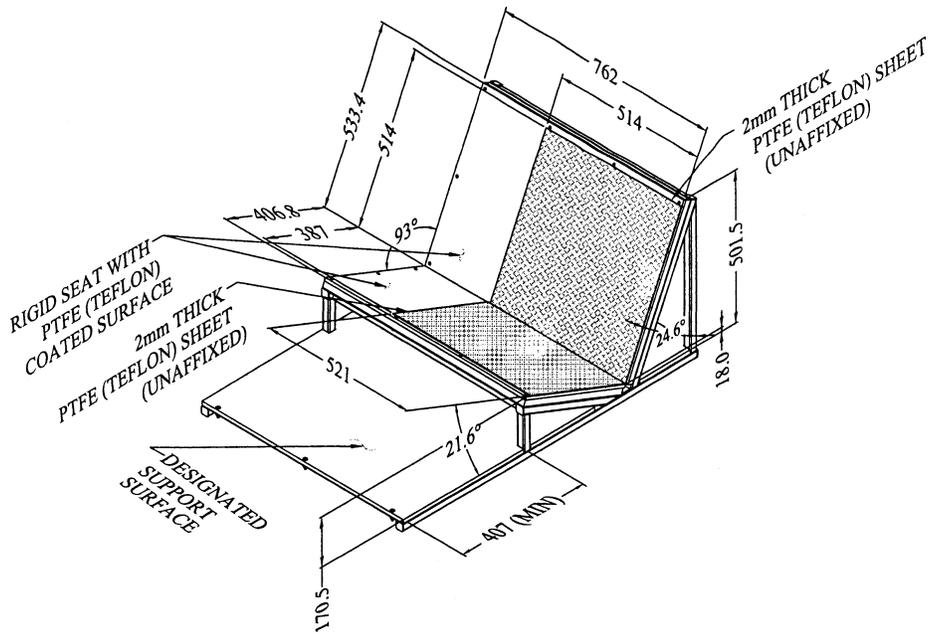


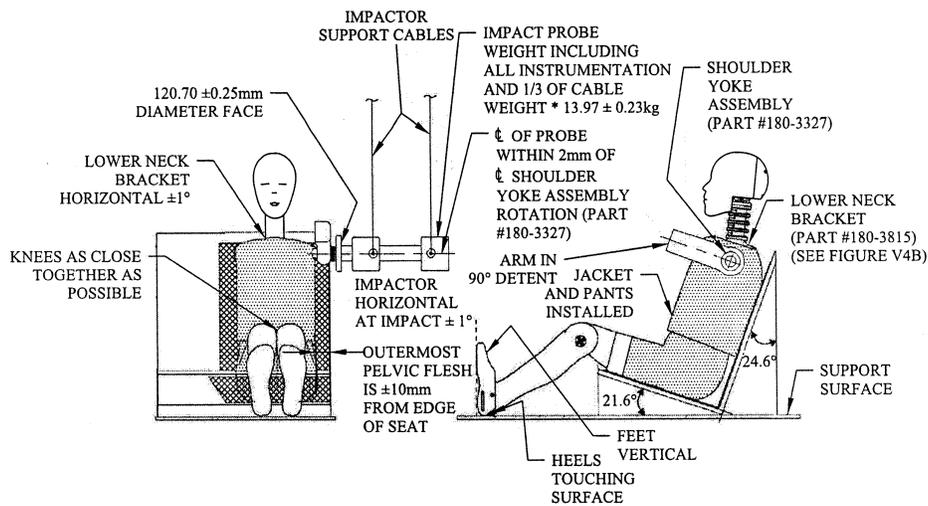
FIGURE V2-C
ANGLE MEASUREMENT WITH HEADFORM SET-UP



**FIGURE V3
CERTIFICATION BENCH**

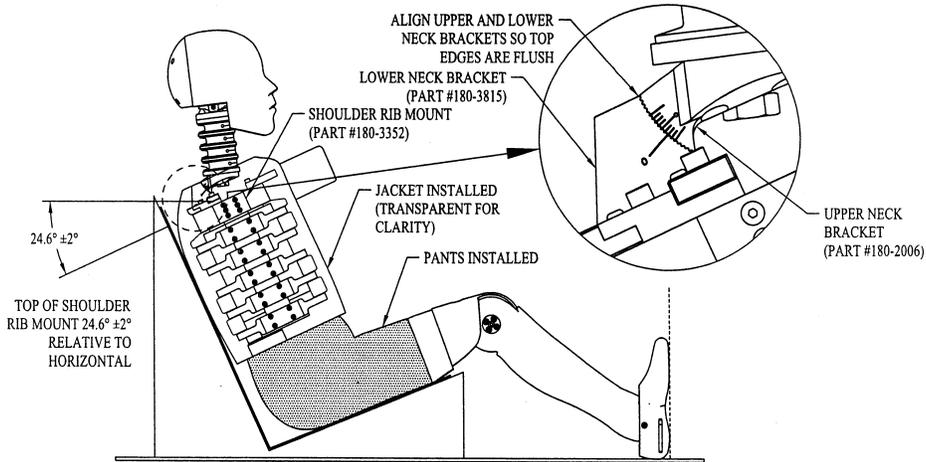


**FIGURE V4-A
SHOULDER IMPACT**

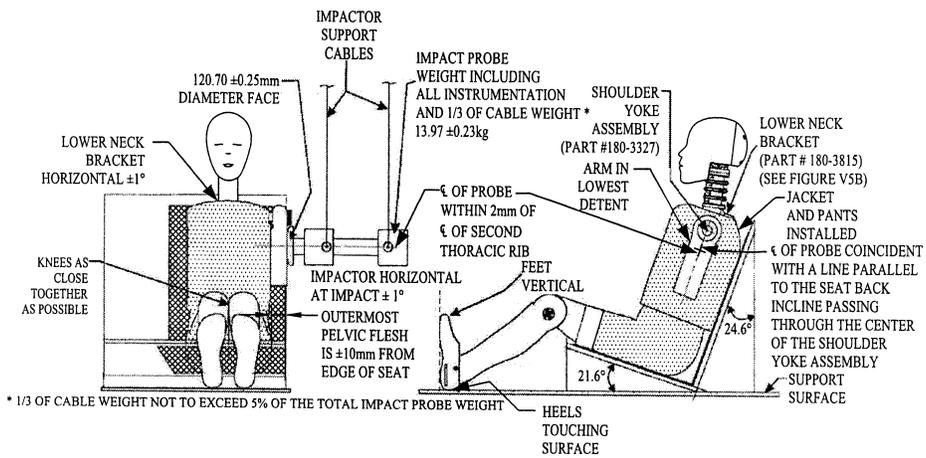


* 1/3 OF CABLE WEIGHT NOT TO EXCEED 5% OF THE TOTAL IMPACTOR PROBE WEIGHT

**FIGURE V4-B
SHOULDER IMPACT
(NON-IMPACT SIDE VIEW)**

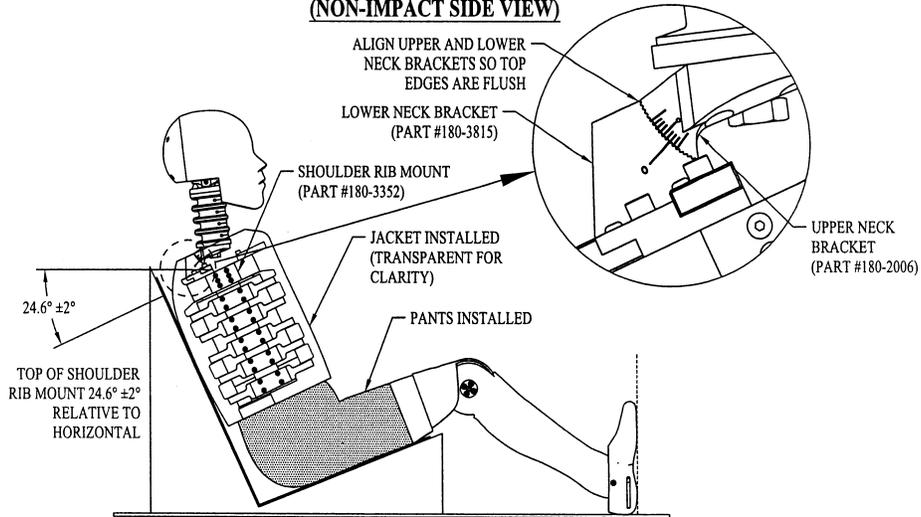


**FIGURE V5-A
THORAX WITH ARM IMPACT**

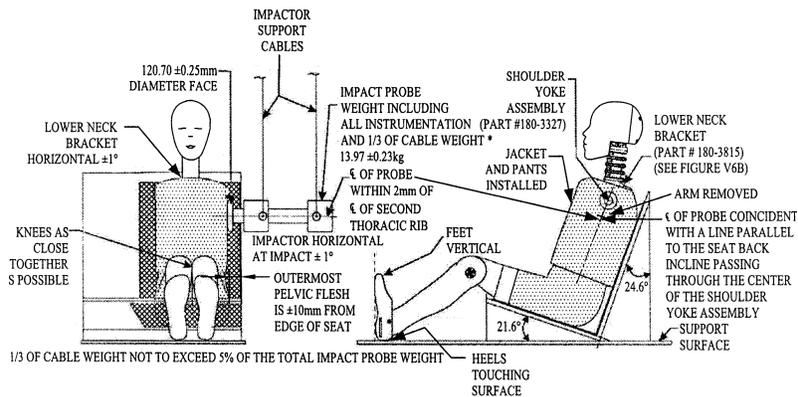


* 1/3 OF CABLE WEIGHT NOT TO EXCEED 5% OF THE TOTAL IMPACT PROBE WEIGHT

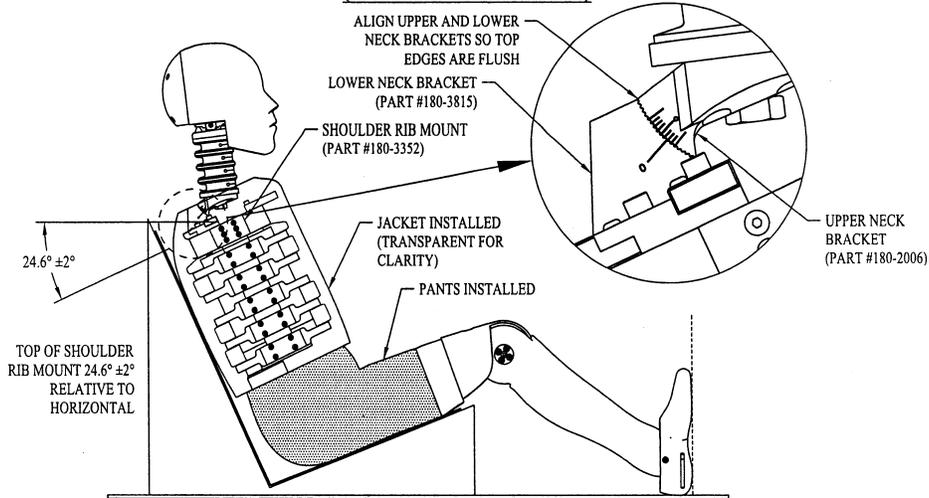
**FIGURE V5-B
THORAX WITH ARM IMPACT
(NON-IMPACT SIDE VIEW)**



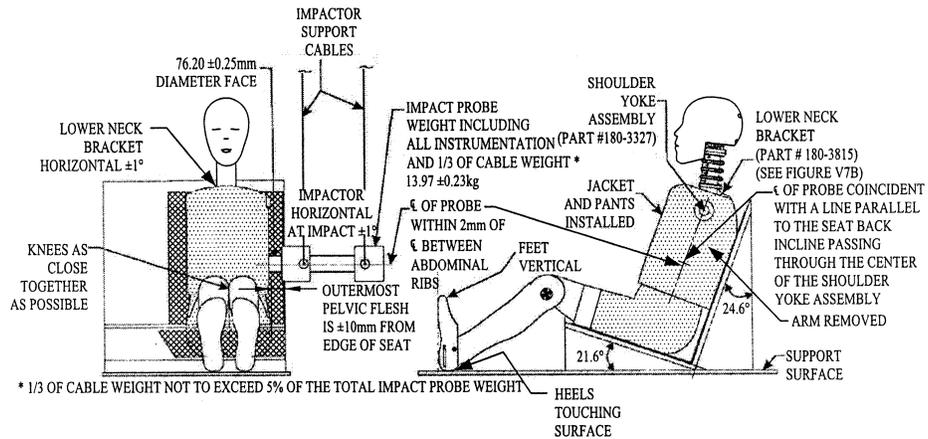
**FIGURE V6-A
THORAX WITHOUT ARM IMPACT**



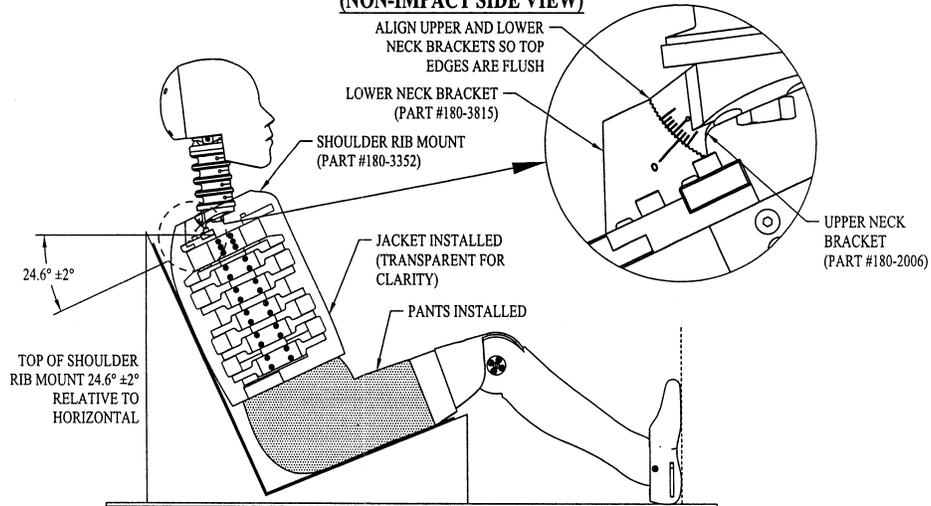
**FIGURE V6-B
THORAX WITHOUT ARM IMPACT
(NON-IMPACT SIDE VIEW)**



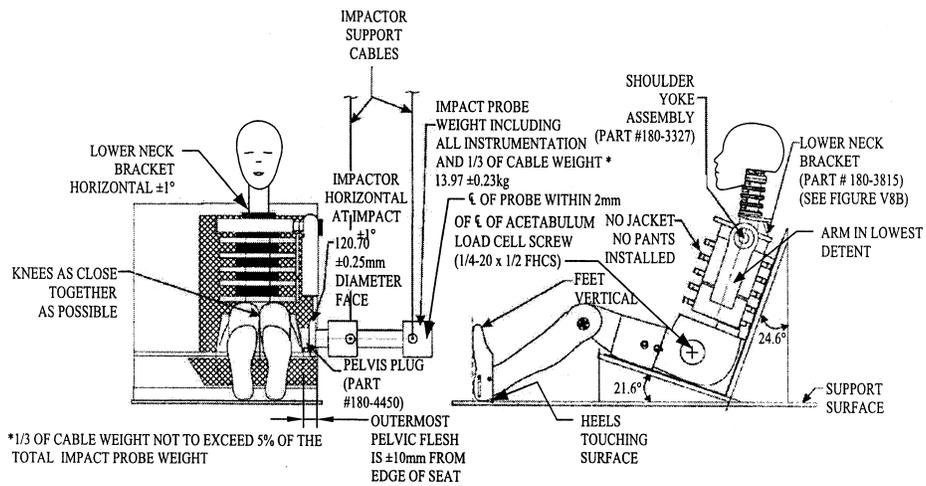
**FIGURE V7-A
ABDOMEN IMPACT**



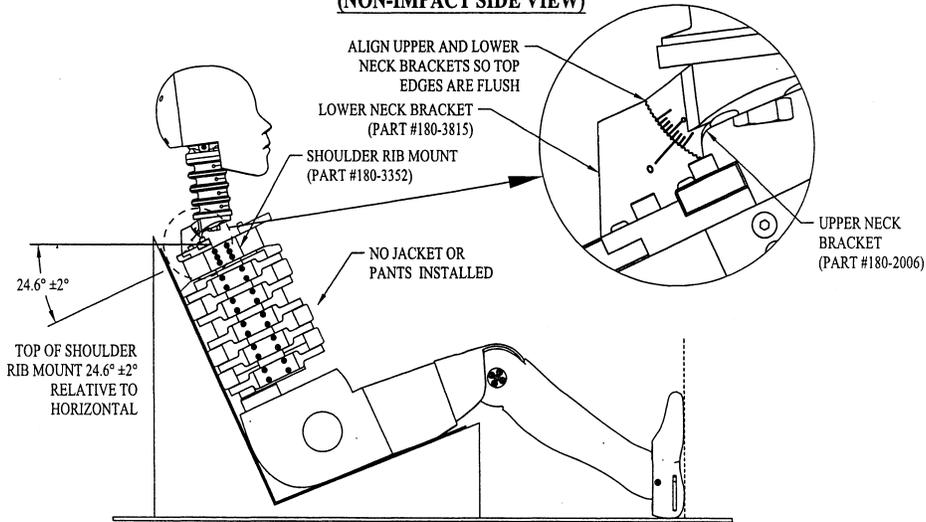
**FIGURE V7-B
ABDOMEN IMPACT
(NON-IMPACT SIDE VIEW)**



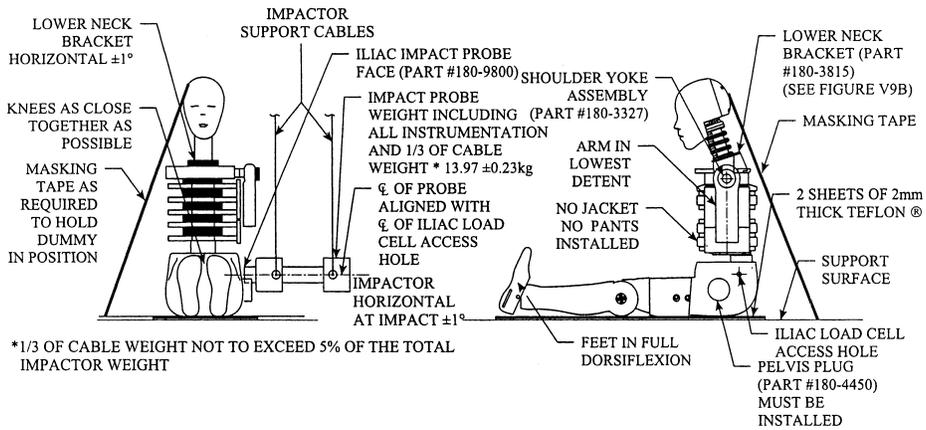
**FIGURE V8-A
ACETABULUM IMPACT**



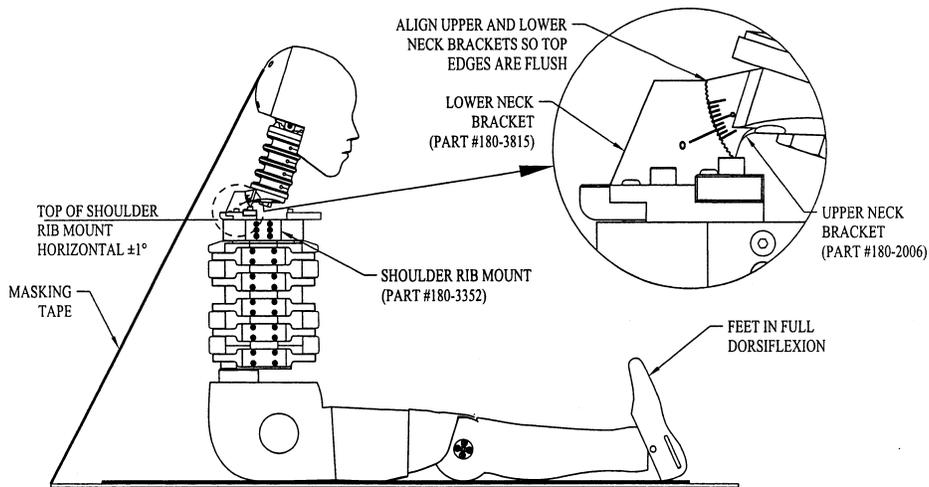
**FIGURE V8-B
ACETABULUM IMPACT
(NON-IMPACT SIDE VIEW)**



**FIGURE V9-A
ILIAC IMPACT**



**FIGURE V9-B
ILIAC IMPACT
(NON-IMPACT SIDE VIEW)**



PART 573—DEFECT AND NON-COMPLIANCE RESPONSIBILITY AND REPORTS

- Sec.
- 573.1 Scope.
- 573.2 Purpose.
- 573.3 Application.
- 573.4 Definitions.
- 573.5 Defect and noncompliance responsibility.
- 573.6 Defect and noncompliance information report.
- 573.7 Quarterly reports.
- 573.8 Lists of purchasers, owners, dealers, distributors, lessors and lessees.
- 573.9 Address for submitting required reports and other information.
- 573.10 Reporting the sale or lease of defective or noncompliant tires.
- 573.11 Prohibition on sale or lease of new defective and noncompliant motor vehicles and items of replacement equipment.
- 573.12 Prohibition on sale or lease of new and used defective and noncompliant motor vehicle equipment.
- 573.13 Reimbursement for prenotification remedies.
- 573.14 Accelerated remedy program.

AUTHORITY: 49 U.S.C. 30102, 30103, 30116-30121, 30166; delegation of authority at 49 CFR 1.50 and 49 CFR 501.8.

SOURCE: 43 FR 60169, Dec. 26, 1978, unless otherwise noted.

§ 573.1 Scope.

This part:

- (a) Sets forth the responsibilities under 49 U.S.C. 30116-30121 of manufacturers of motor vehicles and motor vehicle equipment with respect to safety-related defects and noncompliances with Federal motor vehicle safety standards in motor vehicles and items of motor vehicle equipment; and
- (b) Specifies requirements for—
 - (1) Manufacturers to maintain lists of owners, purchasers, dealers, and distributors notified of defective and non-complying motor vehicles and motor vehicle original and replacement equipment,
 - (2) Reporting to the National Highway Traffic Safety Administration (NHTSA) defects in motor vehicles and motor vehicle equipment and non-compliances with motor vehicle safety standards prescribed under part 571 of this chapter, and
 - (3) Providing quarterly reports on defect and noncompliance notification campaigns.

[69 FR 34959, June 23, 2004]