FIGURE 01
NECK FLEXION TEST SETUP SPECIFICATIONS

PENDULUM CENTERLINE

PENDULUM (REF. FIG. 22 CFR 49 §572.33)

ACCELEROMETER

DIRECTION OF PENDULUM FLIGHT

3.2 ±0.5 mm
(0.125 ± 0.02 in)

PENDULUM STRIKER PLATE

BRACKET - NECK ADJUSTING - UPPER (P/N 880105-207)

BIB SIMULATOR (P/N 880105-210)

NECK ASSY (P/N 880105-250)

BRACKET - NECK ADJUSTING - LOWER (P/N 880105-208)

MOUNTING SCREW CENTERLINE

6-AXIS UPPER NECK LOAD CELL (SA572-S11)

D-PLANE * PERPENDICULAR TO PENDULUM CENTERLINE ±1°

OCCIPITAL CONDYLES

* D-PLANE IS DEFINED AS AN IMAGINARY PLANE PERPENDICULAR TO THE SKULL CAP/SKULL INTERFACE.

HEAD ASS'Y (P/N 880105-100X)
FIGURE O2
NECK EXTENSION TEST SETUP SPECIFICATIONS

PENDULUM CENTERLINE

PENDULUM STRIKE PLATE

DIRECTION OF PENDULUM FLIGHT

38.1 ± 0.5 mm
(1.50 ± 0.02 in)

PENDULUM (REF. FIG. 22 CFR 49 §572.33)

ACCELEROMETER

BRACKET - NECK ADJUSTING - LOWER
(P/N 880105-208)

BRACKET - NECK ADJUSTER - UPPER
(P/N 880105-207)

BIB SIMULATOR
(P/N 880205-210)

NECK ASS'Y
(P/N 880105-250)

MOUNTING BOLT CENTERLINE

6-AXIS UPPER NECK LOAD CELL
(SA572-S11)

D-PLANE * PERPENDICULAR TO PENDULUM CENTERLINE ±1°

OCCIPITAL CONDYLES

HEAD ASS'Y
(P/N 880105-100X)

* D-PLANE IS DEFINED AS AN IMAGINARY PLANE PERPENDICULAR TO THE SKULL CAP/SKULL INTERFACE.
FIGURE O4
TORSO FLEXION TEST SET UP SPECIFICATIONS

VERTICAL TRANSVERSE PLANE

LOADING ADAPTER BRACKET
ATTACH TO SPINE BOX WITH FOUR #10-32 SCREWS

PELVIS-LUMBAR JOINING SURFACE HORIZONTAL ±1°

ATTACH PELVIS BONE (880105-431) TO FIXTURE WITH FOUR 1/4-20 x 1/2 BOLTS

INITIAL POSITION OF ANGLE REF. PLANE

PIVOT PIN

FINAL POSITION OF ANGLE REF. PLANE 6°

25.4mm (1.00in)

220.7mm (8.69in)

LOADING ADAPTER BRACKET (TYP.)

117.5mm (4.62in)

DUMMY ASSEMBLY (880105-000)

METAL TABLE

LOAD CELL

59° FINAL POSITION

PULL CABLE

COMBINED WEIGHT OF LOAD CELL, LOADING ADAPTER BRACKET, PULL CABLE AND ATTACHMENT HARDWARE ≤ 1.07kg. (2.35 lb.)
FIGURE O5
KNEE IMPACT TEST SETUP SPECIFICATIONS

- MOUNTING BOLTS TORQUE TO 40.7 Nm (30 lb. ft.)
- IMPACT PROBE SUPPORT CABLES
- ADJUST KNEE PIVOT JOINT TO 1-2 g PRIOR TO EACH TEST
- ACCELEROMETER MOUNTED WITH SENSITIVE AXIS IN LINE WITH CENTERLINE OF TEST PROBE LONGITUDINAL AXIS
- TEST PROBE CENTERLINE HORIZONTAL ±2°
- IMPACT PROBE WEIGHT INCLUDING ALL INSTRUMENTATION AND 1/3 OF SUPPORT CABLE WEIGHT * 2.99 ±0.023 kg (6.6 ± 0.05 lb.)
- FEMUR LOAD CELL (SA572-S14, SINGLE AXIS, OR SA572-S29, SIX CHANNEL) OR STRUCTURAL REPLACEMENT (78051-319) HORIZONTAL ±0.5°
- COMPLETE LEG ASSEMBLY (880105-560-1 (LH), 880105-560-2 (RH)) WITH UPPER LEG WELDMENT AND UPPER LEG FLESH REMOVED.
- ANKLE PIVOT
- FOOT ASSEMBLY (880105-650 (LH), 880105-651 (RH))

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