§ 572.166 Knees and knee impact test procedure.

The knee assembly is assembled and tested as specified in 49 CFR 572.126 (Subpart N).

§ 572.167 Test conditions and instrumentation.

The test conditions and instrumentation are as specified in 49 CFR 572.127 (Subpart N).

FIGURES TO SUBPART S OF PART 572
FIGURE S1

THORAX IMPACT TEST SET-UP SPECIFICATIONS

- Impact probe support cables
- Pendulum with sensitive axis parallel to pendulum
- Complete assembly (167-0000)
- Pelvic lumbar joining surface
- Impact probe weight not to exceed 5% of the total impact probe weight
- Pelvis lumbar joining surface
- Pelvic angle ** 8° ±1° from horizontal
- Pelvic angle ** 8° ±1° from horizontal (127-3012)
- Pendulum accelerometer mounted with sensitive axis parallel to pendulum longitudinal centerline

Legal references:
- 49 CFR Ch. V (10-1-12 Edition)
FIGURE S2
TORSO FLEXION TEST SET-UP SPECIFICATIONS

ATTACH LOADING ADAPTER BRACKET TO
MACHINED SURFACE
(127-8000, DETAIL IN
127-2022) WITH FOUR 6-32
SCREWS TO MATCH THE
POINT OF LOAD APPLICATION WITH THE
LEVEL OF THE
UNDISTURBED NECK OCCIPITAL CONDYLE
PIVOT AXIS

COMPLETE DUMMY ASSEMBLY (167-0000)

ATTACH PELVIS (REF. 127-3012)
TO TABLE MOUNTED FIXTURE
WITH FOUR 1/4-20 x 1/2" BOLTS

PELVIS-LUMBAR JOINING
SURFACE HORIZONTAL ±1°

VERTICAL

FINAL POSITION OF ANGLE REF. PLANE 45°

LOAD CELL

PULL CABLE

METAL TABLE

INITIAL POSITION OF ANGLE REF. PLANE

PIVOT PIN

(78051-339 REF.)

CENTERLINE OF PIVOT PIN

90.4mm
(3.56in)

175.5mm
(6.91in)

COMBINED WEIGHT OF LOAD CELL, LOADING ADAPTER BRACKET, PULL CABLE AND ATTACHMENT
HARDWARE ≤ 0.77 kg (1.7 lb)