



SID-IIsD

Model 180-0000



The SID-IIsD is a side impact test device, designed to the specifications stated in Title 49 CFR Part 572, Subpart V, to evaluate occupant protection during lateral impacts. The anthropometry and mass of the SID-IIs are based on the Hybrid III-5th percentile female dummy and generally match the size and weight of a 12- to 13-year-old child.

The SID-IIs head, neck, and legs are based on the Hybrid III-5th percentile female dummy design. The SID-IIs arm is an upper arm only, mounted on the struck side. The dummy can be configured for left or right side impact.

The SID-IIs torso construction is oriented for assessing the potential for side impact injury. The upper torso is made up of a rigid metallic spine, to which six spring steel bands lined with bonded polymer damping material are attached to simulate the impact performance of the human shoulder, thorax (3 ribs), and abdomen (2 ribs). Linear potentiometers are used to measure compression of the ribs relative to the spine. Provisions are available for mounting tri-axial accelerometer packs to the spine and at each rib. Replaceable foam pads are secured directly to the ribs, and a neoprene jacket covers the complete torso assembly.

The SID-IIs has a replaceable foam plug located on each side of the pelvis. Each pelvis plug undergoes a quasi-static test designed to measure its force-displacement characteristic. The pelvis plugs are replaced after each impact test.

Certification tests performed prior to shipment include:

- Head Drop (lateral)
- Neck Pendulum (lateral)
- Thorax Impact With Arm
- Thorax Impact Without Arm
- Shoulder Impact
- Abdomen Impact
- Acetabulum Impact
- Iliac Impact

Standard equipment included in the base price of this device:

- Chest Deflection Potentiometers (6 total)
 - Structural replacements for all load cells
 - Accelerometer mounts for head, arms, shoulder, spine, ribs, and pelvis
- (User must specify the accelerometer manufacturer and type at the time of order)*

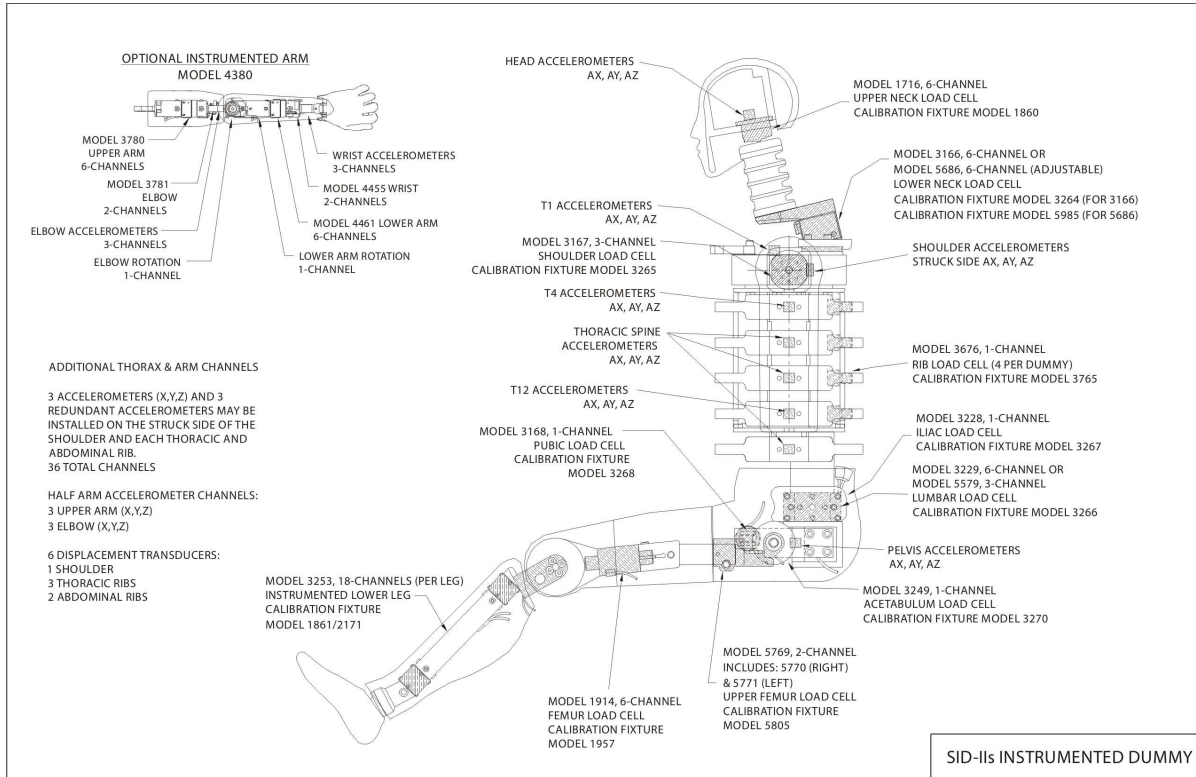
Weight	lbs	kg
Head	8.16	3.70
Neck	2.0	0.91
Upper Torso	24.65	11.18
Chest Jacket	1.4	0.64
Arm	2.0	0.91
Lower Torso	27.5	12.47
Leg (each)	15.85	7.19
Total Weight	97.41	44.18

Dimensions	in	cm
Seat to Shoulder Joint	17.50	44.5
Seat to H-Point	3.30	8.4
Buttock to Knee Length	20.75	52.7
Shoulder / Arm Width	13.75	34.9
Pelvis Width	12.50	31.8
Sole to Seat, Sitting	14.00	35.6
Seated Height	30.70	78.0

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SID-IIsD Instrumentation



SID-IIsD Certification Equipment

Test	Model No.	Description
Head Drop	TF-100-1058	SID-IIs Head Drop Kit
Neck Pendulum	180-9000	SID-IIs Head Form (<i>Includes 3 potentiometers</i>)
Thorax Impact	TF-300-0129	SID-IIs Probe Kit, "D" Version <i>Includes:</i> <ul style="list-style-type: none"> • Thorax Impact Probe Assembly (TF-450-3000) • Shoulder, Thorax, Acetabulum Impact Probe Adaptor (TF-450-0320) • Abdomen Impact Probe Adaptor (TF-450-0330) • Iliac Impact Probe Adaptor (180-9500) • Iliac Impact Probe Alignment Tool (180-9501) • Neck Bracket Leveling Setup Tool (TF-1303-02) • Thorax Impact Test Setup Tool (TF-450-3100) • SID-IIs / WorldSID Seat Adaptor (TF-300-2000) • Lift Table Side Extension (TF-376-1) • H-Point Measurement Pin (TF-1305-01) • Acetabulum Load Cell Removal Tool (TF-1306-01)
	180-4450	SID-IIs Pelvis Plug, Stiffness Range: 1361-1673 N @ 3mm crush
	180-4450-H	SID-IIs Pelvis Plug, Stiffness Range: 1570-1673 N @ 3mm crush
	180-4450-M	SID-IIs Pelvis Plug, Stiffness Range: 1465-1569 N @ 3mm crush
	180-4450-L	SID-IIs Pelvis Plug, Stiffness Range: 1361-1464 N @ 3mm crush