



Hybrid III 50th Percentile Male

H-III50M (Model 78051-218-R99)



The Hybrid III-50th Percentile Male ATD was developed by General Motors Corporation under NHTSA contract beginning in 1973. This development program was undertaken to improve the impact response of the test dummy to more closely approximate that of humans, based upon the biomechanical data available.

Having nearly twenty years of test and evaluation history behind it, the Hybrid III-50th Percentile Male ATD can accommodate a wide range of instrumentation and transducers. Optional equipment is available from, literally, the head to the feet, making this device one of the most versatile test devices for compliance testing, research and development, or aerospace applications.

This ATD is specified under Title 49 CFR Part 572, Subpart E and is the test device of choice for FMVSS 208 testing. This ATD is provided in a Tested and Certified condition.

The calibration tests performed prior to shipment include:

- Head Drop
- Neck Flexion and Extension
- Thorax Impact
- Knee Impact and Knee Slider
- Hip Joint Range of Motion
- Foot Compression

Standard equipment included in the base price of this device:

- Chest Deflection Potentiometer
- Knee Slider Potentiometers
- Accelerometer mounts for head, chest and pelvis*
- Structural replacements for all load cells.

*User must specify the accelerometer manufacturer and type at the time of order placement

WEIGHTS:	Pounds (lbs.)	Kilograms
Head	10.0	4.54
Neck	3.4	1.54
Upper Torso	37.9	17.19
Lower Torso	50.8	23.04
Upper Arms	8.8	4.00
Lower Arms	10.0	4.54
Upper Legs	26.4	11.98
Lower Leg	24.0	10.88
Total Weight	171.3	77.70

DIMENSIONS:	Inches	Centimeters
Head Circumference	23.5	59.7
Head Width	6.1	15.5
Head Length	8.0	20.3
Shoulder to Elbow	13.3	33.8
Elbow to Finger	11.7	29.7
Buttock to Knee	23.3	59.2
Knee Pivot	19.5	49.5
Sitting Height	34.8	88.4

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Creating the New Standard in ATDs

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