

FAA HY-III

Model Number: **FAA-H3-M001**



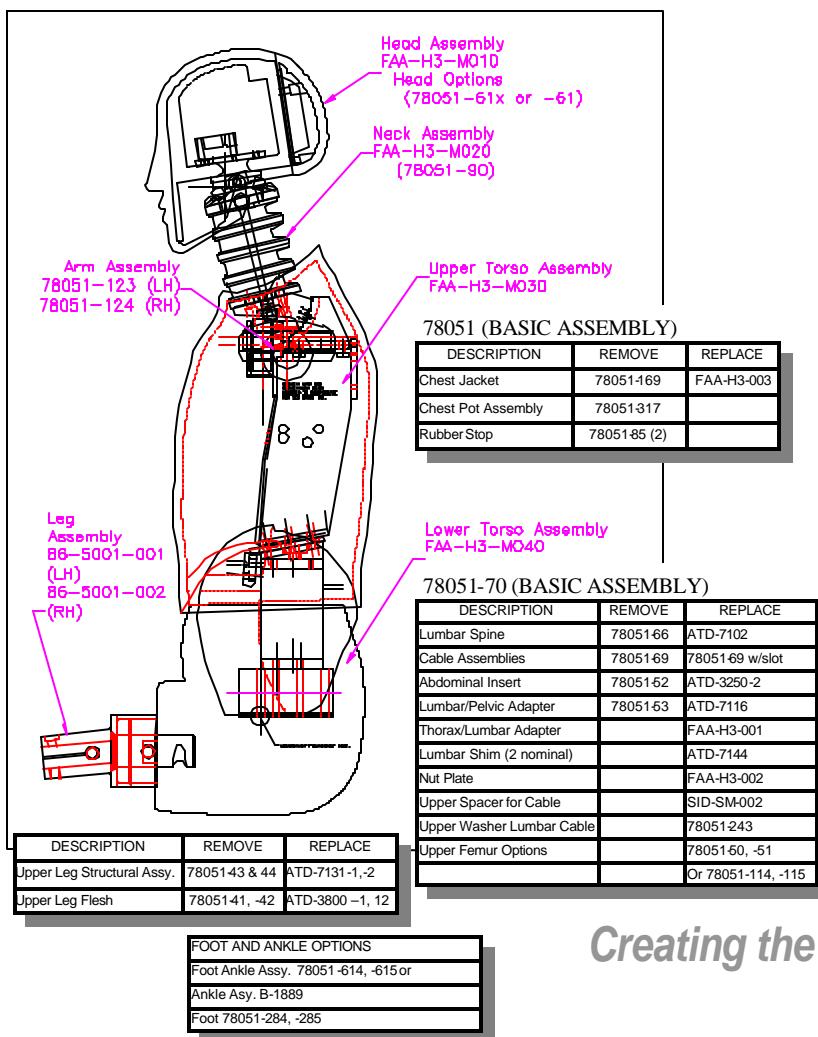
The FAA Hybrid-III 50th percentile male ATD is a dummy produced under a cooperative between the Federal Aviation Administration (FAA), Civil Aeromedical Institute (CAMI), Denton ATD, Inc., and Robert A. Denton, Inc., for the sole purpose of Federal Aviation seat certifications.

The FAA dummy utilizes standard components from both the Hybrid II and Hybrid III ATD's. The primary design goal was to create a Hybrid III dummy that would produce equivalent lumbar spine responses as that of the Hybrid II and may be used as an optional dummy in aviation seat certification. FAA regulations utilize pass/fail criteria on lumbar and pelvic loading during vertical test con-

ditions. The straight lumbar spine of the Hybrid II is important to aircraft seat certification based on the desired compressive axial force and the kinematics of the erect-spine seated posture and resultant head trajectory.

The head, neck, thorax and lower limbs of the FAA ATD are standard Hybrid III. (See illustration for complete assembly components.)

For a complete design review and validation testing, see SAE paper 1999-01-1609 "A Lumbar Spine Modification to the Hybrid III ATD for Aircraft Seat Tests."



The FAA Hybrid III modifications consist of:

- ◆ A unique new upper lumbar-thorax adapter.
- ◆ Modified Hybrid II chest flesh jacket.
- ◆ Standard Hybrid II lumbar column.
- ◆ Standard Hybrid II abdominal insert.
- ◆ Hybrid II upper leg elements.
- ◆ Denton model 1891 Hybrid II lumbar load cell and pelvic adapter block.

For information about additional instrumentation available for this test device or test dummy configurations specific to your needs, please contact the Customer Service Department at DENTON ATD, Inc.

Creating the New Standard in ATD's