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In Space Robotic Assembly with Lemur IIa

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Abstract

Lemur IIa, the second-generation Limbed Excursion Mechanical Utility Robot, is a six-limbed walking robot developed at NASA's Jet Propulsion Laboratory. Lemur is distinct in part because each limb was designed be used for *both* walking *and* manipulation. It is intended to be a prototype of a dexterous, operationally flexible robot for on-orbit assembly, inspection, and maintenance.

This video illustrates Lemur completing an autonomous assembly task. Lemur, as part of a robotic team, is helping to assemble a structure. In this demonstration, Lemur autonomously walks through a truss, locates a task board, and tightens a bolt on that board.

These demonstrations represent a sample of the current tasks Lemur is performing. Please see www-robotics.jpl.nasa.gov for more information and demonstrations about Lemur.