



## Mechanical Jet Engine Lift

### Features and Benefits

- 4 programmed stop positions aligning to the test fixture.
- Linear actuator driven pins that engage in the fixture

**Industry Group:** MHI INDUSTRY GROUP  
LMPS

OPTIONAL QUOTE FROM CASE STUDY



### Challenge

A major manufacturer of aircraft engines wanted a better solution for inspecting their test engines at their new test facility. They had been using an overhead crane to move the engines into the test fixture, but they needed a better solution – one that offered high precision and repeatability. In addition, they required the lift to be installed in a pit, so they had the option of reusing the floor space when the lift was not in operation.

### Solution

Autoquip designed a custom mechanical Tork 2 scissor lift with programmable control operations to meet the requirements of the customer's application. We built the lift with a "floating" platform that when in lowered position stays above grade to allow for loading jet engine for transfer. Once the test engine is loaded onto the floating platform the lift is programmed to raise to (4) programmed stop positions aligning to the test fixture. The platform includes linear actuator driven pins that engage in the fixture for precise positioning. Handrails along the side of the platform are fold down spring assist for ease of operation by a single person and include a sensor to limit the lift movement only when the handrails are in the up position. When the platform is lowered it becomes part of surrounding floor and the pit walls have fold down plates to bridge the gap from the pit wall to the floating platform.

### Result

Autoquip designed a lifting solution that perfectly met the requirements of the customer's application. The lift enables workers to line up the engine to the test fixture with higher accuracy and precision. Safety has been improved as well since the engine can easily be loaded onto the lift for transfer. Autoquip offered a reliable and capable lifting solution to



**In Position.**

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