



**SPIERS
NEW
TECHNOLOGIES**

**SNT Laser Focused
Lithium-Ion Battery Recycling Prize**

Energy Storage | Battery 4R | Logistics

North America | Europe

Challenges - Pack Disassembly

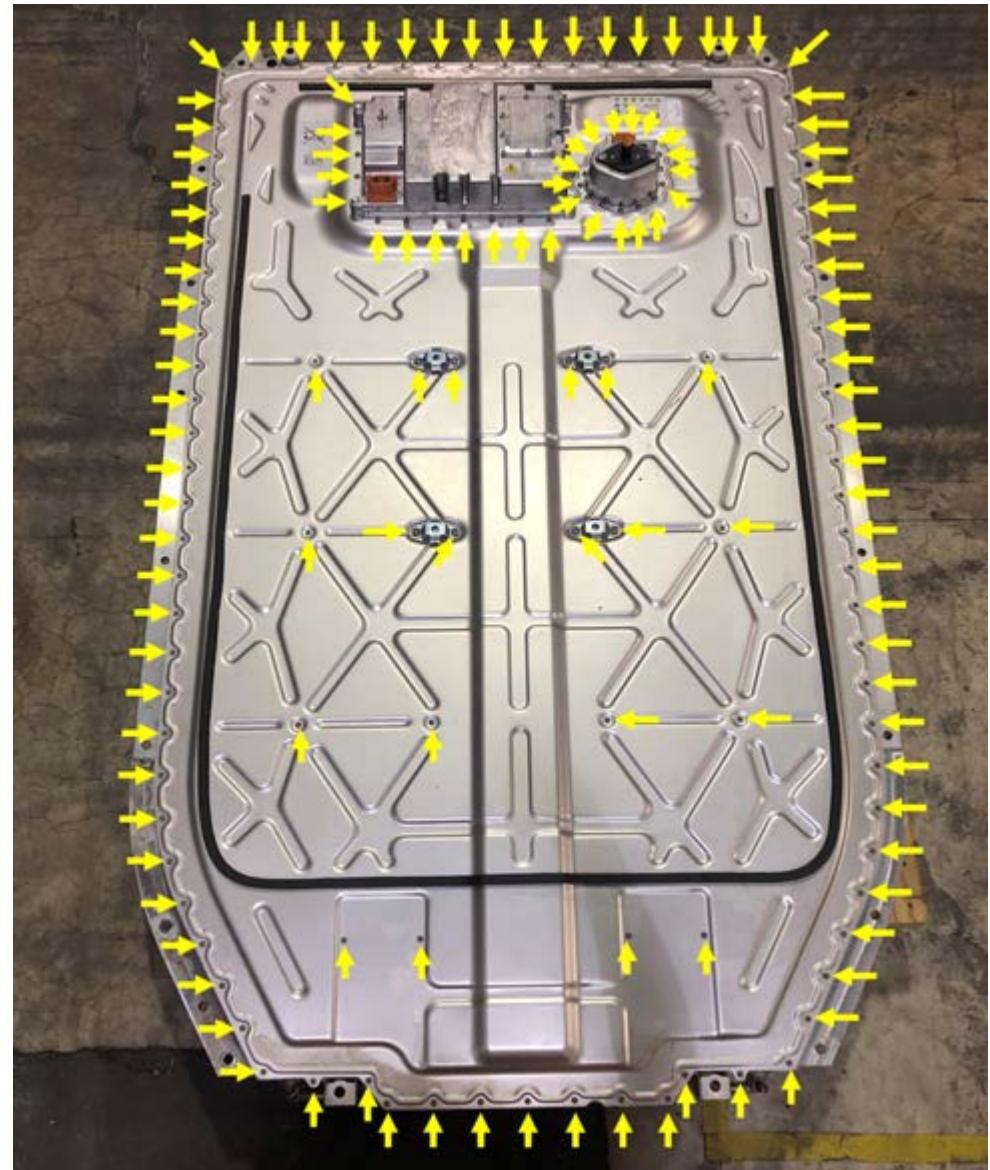
Pack lid removal is the longest step in most disassembly operations

Some packs have 100+ bolts in the lid alone

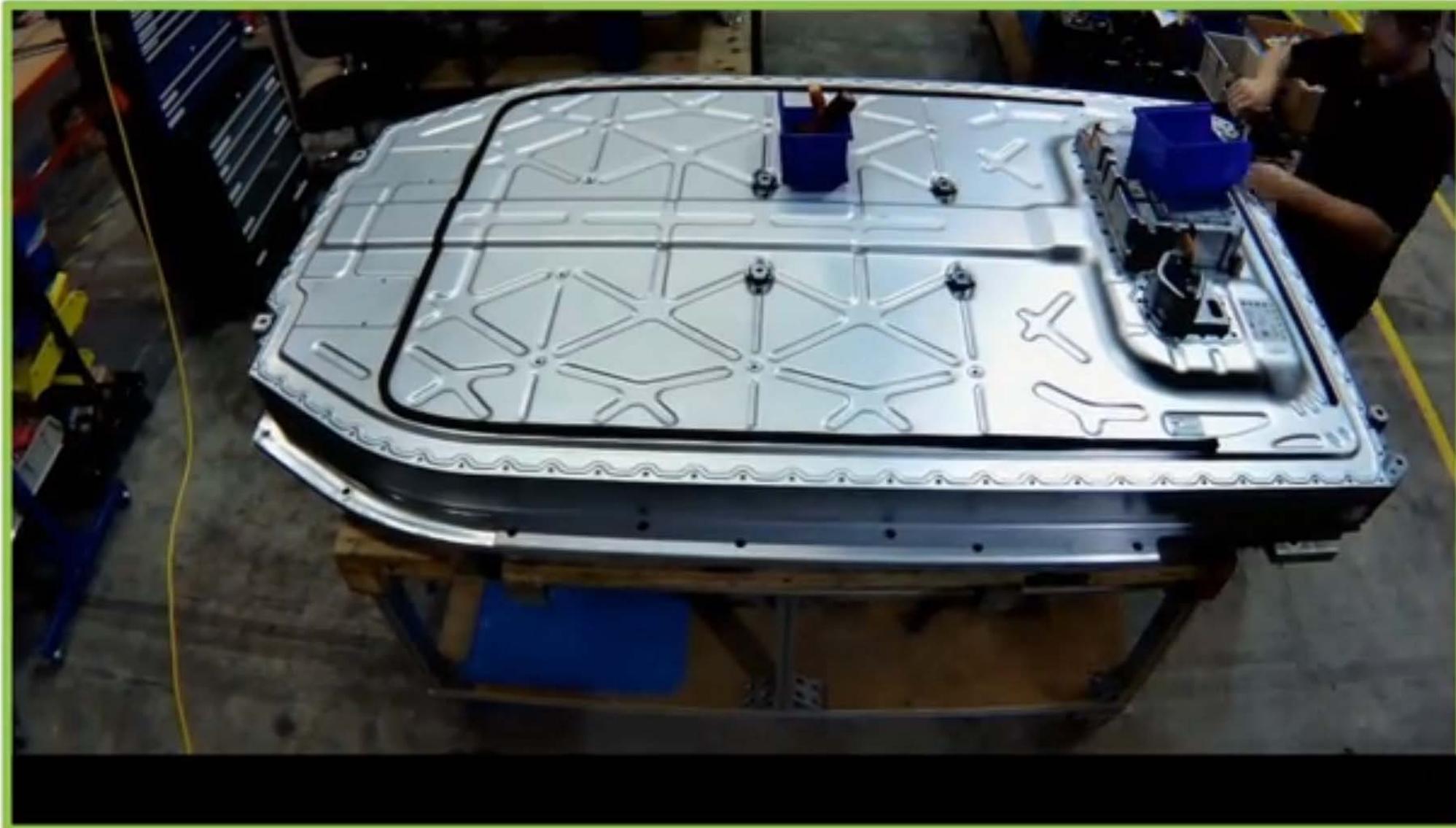
Others are glued down to the base of the pack

Both options are time consuming to remove

Old packs get more difficult to disassemble as they age



Pack Disassembly Automation



Lasers for Disassembly

Lasers can bypass the need to remove bolts and glue

The goal is to program cuts around the bolts and glue allow the lid to be removed with out touching

Current work is being done on modules to identify potential issues

Time studies on existing disassembly methods have been done with more pack types in the works

