

TOOL USE INSTRUCTION

RIVIAN

TOOL NUMBER TSN00541-300

TITLE HV BATTERY LIFT BEAM

REV - DATE REV 3 - 4/13/2026

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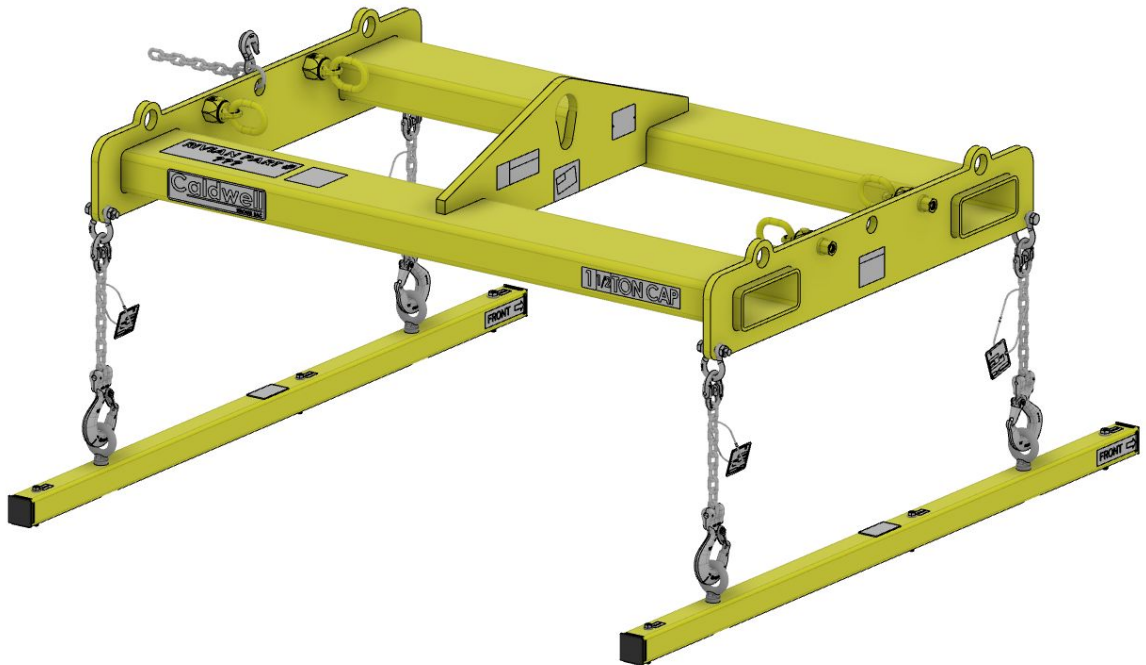
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TOOL FUNCTION

LIFT BEAM TO ASSIST WITH LIFTING BATTERY PACK VIA FORKLIFT OR OVERHEAD GANTRY



OVERVIEW

SPECIFICATIONS

RATED CAPACITY: 3000 lbs
MODEL NO: 27F-1.5-37/53
WEIGHT: 260 lbs
CERTIFICATION: ASME BTH-1, DESIGN CATEGORY B, SERVICE CLASS 2

LABOR CODES

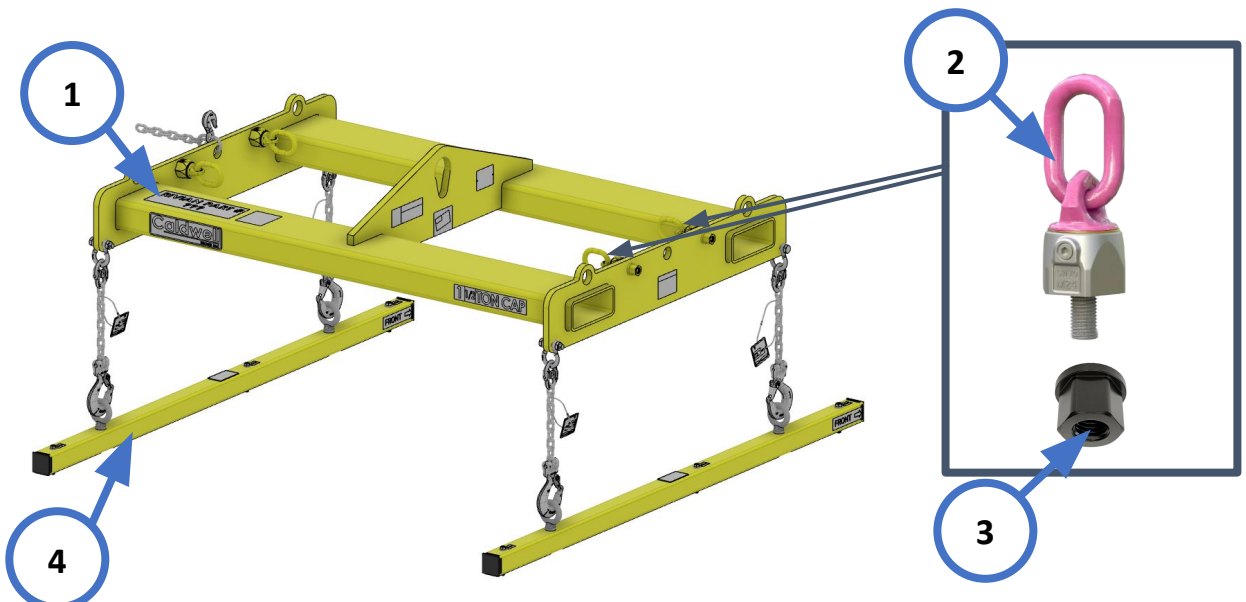
301010010 HV Battery (Remove and Replace)
301010011 HV Battery (Remove and Reinstall)

OTHER TOOLS REQUIRED

[TSN00553 - BATTERY LIFT TABLE JIG](#)
TSN00523 - PORTABLE GANTRY, 2 TON CAP
TSN00522 - CHAIN HOIST
TSN00519 - FORK LIFT

COMPONENT GUIDE

ITEM	QTY	RIVIAN TOOL ID	DESCRIPTION
1	1	TSN00541-300	BATTERY LIFT BEAM ASSEMBLY
2	4	TSN00541-202	M16 SWIVEL HOIST RING
3	4	TSN00541-203	M16 FLANGE NUT (DIN 6331)
4	2	TSN00541-207	BATTERY LIFT ADAPTER RAIL - R2





DANGER

Do not perform procedure if tool is damaged or missing parts. Consult the Rivian Service Tool Catalog for replacement components.



Failure to follow guidelines outlined in this document could result in property damage, injury, and death.

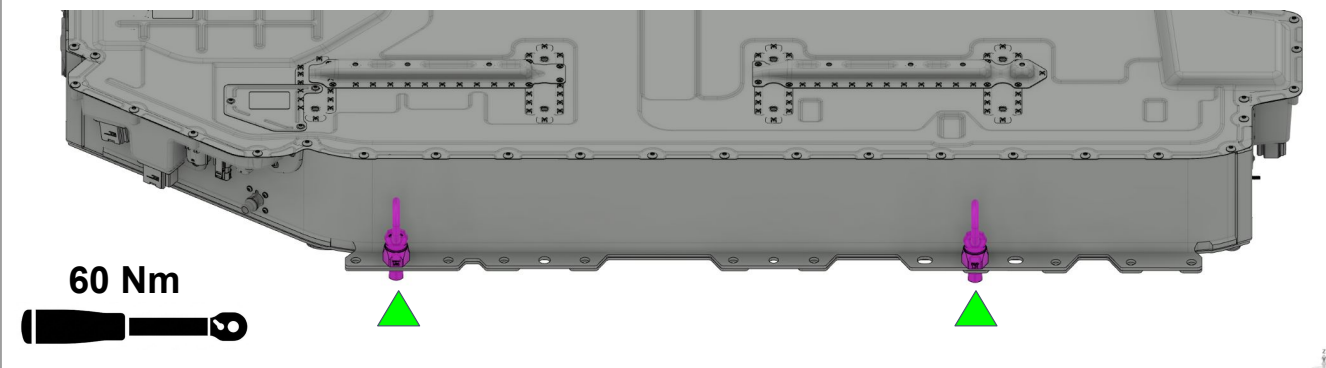
SAFETY GUIDELINES



1	Do not exceed rated capacity marked on lifting hardware
2	Inspect all chain slings and lift hardware for signs of damage prior to every use. Remove from service if any damage is found.
3	Ensure chain slings are straight and free of twists prior to loading.
4	Ensure pathway is clear before transporting with forklift or lift table.
5	Do not move gantry while pack is lifted.
6	Do not use tool for purposes other than those outlined in this document.

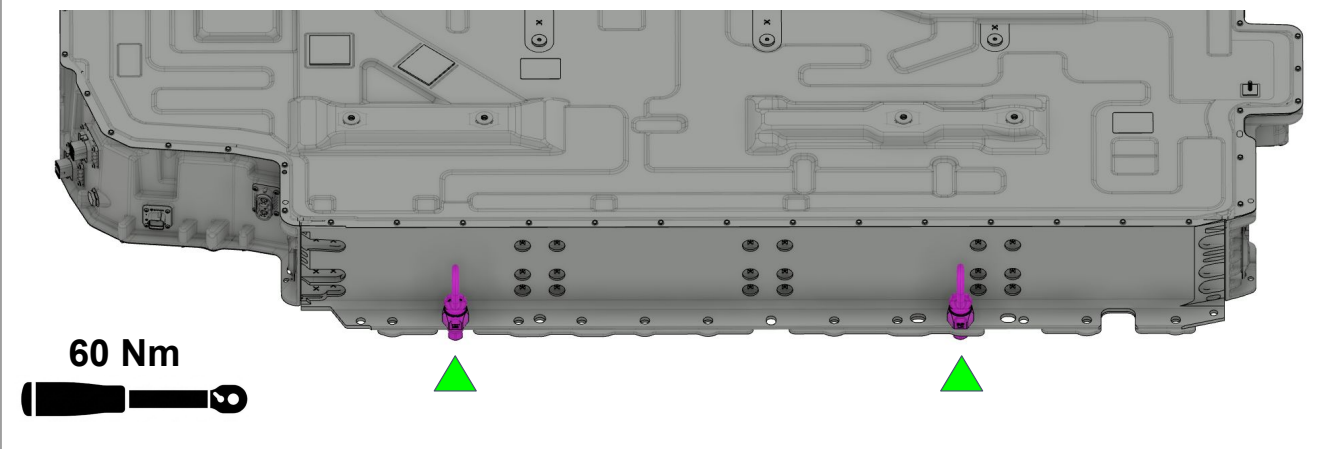


INITIAL SETUP




PACK VARIANT	VEHICLE	LIFT METHOD	REQUIRED ACCESSORIES
<p>C1</p> <p>9 Module NCA</p>	<p>R1 2022-2024</p> <p>EDV 2022</p>		<p>4x TSN00541-202</p> <p>4x TSN00541-203</p> 

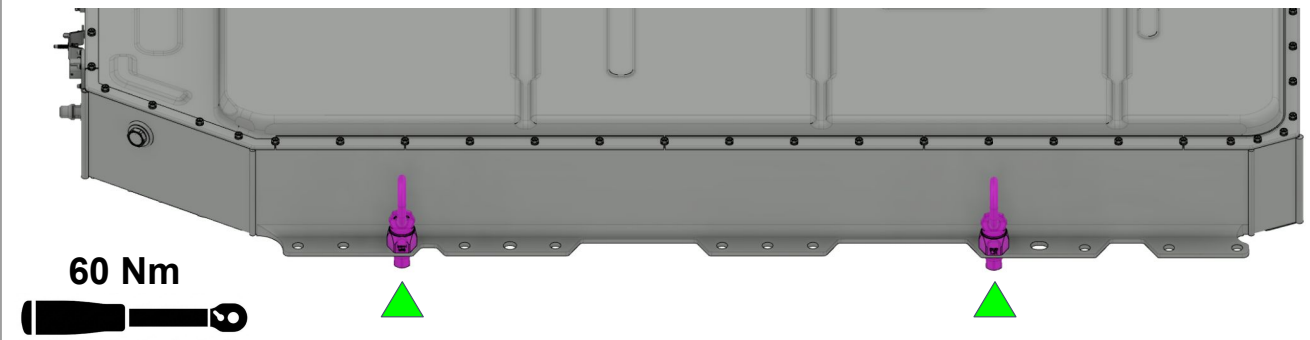


<p>C3</p> <p>7 and 9 Module NCA</p>	<p>R1 2025+</p>		<p>4x TSN00541-202</p> <p>4x TSN00541-203</p> 
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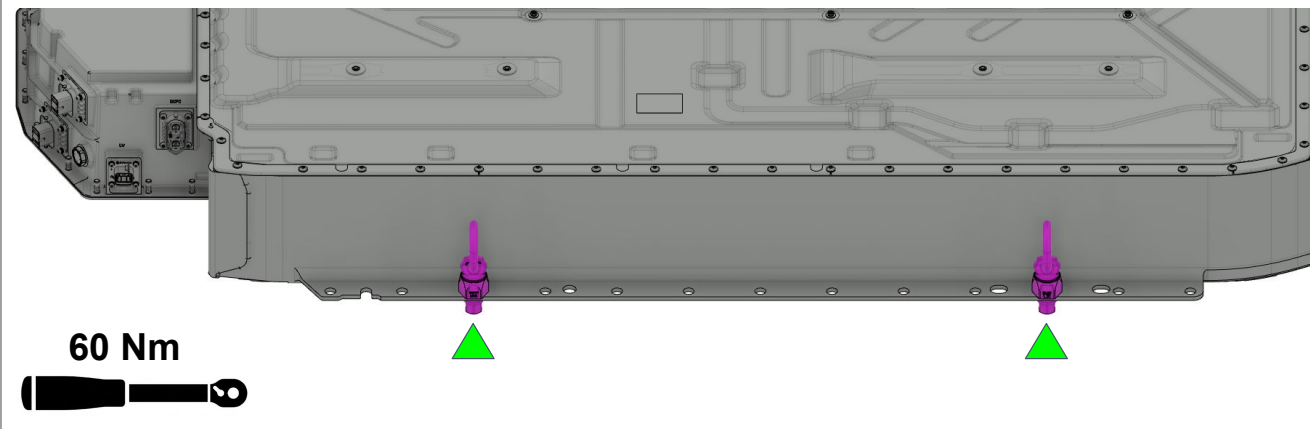


INITIAL SETUP


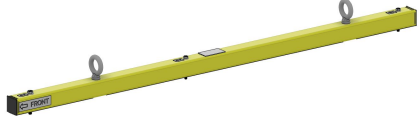
PACK VARIANT	VEHICLE	LIFT METHOD	REQUIRED ACCESSORIES
<p>BENGAL</p> <p>LFP</p>	<p>EDV 2023+</p>		<p>4x TSN00541-202 </p> <p>4x TSN00541-203 </p>

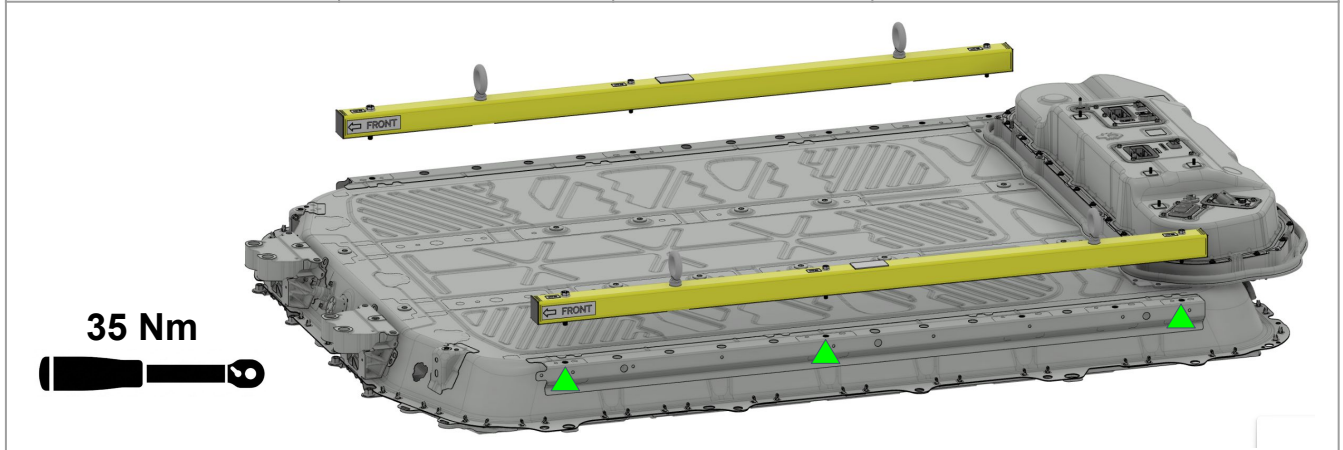


<p>BALTIC</p> <p>LFP</p>	<p>R1 2025+</p>		<p>4x TSN00541-202 </p> <p>4x TSN00541-203 </p>
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INITIAL SETUP

PACK VARIANT	VEHICLE	LIFT METHOD	REQUIRED ACCESSORIES
GOBI NMCA	R2 2026+		2x TSN00541-207 










<p>1</p>	<p>Review INITIAL SETUP to confirm lift method and attach points for the battery variant you are lifting.</p> <p>If using FORK LIFT > proceed to step 2</p> <p>If using GANTRY > jump to next section</p>	
<p>2</p>	<p>Install required accessory hardware to pack interfaces specified in INITIAL SETUP. Torque lift hardware to spec.</p>	
<p>3</p>	<p>Use forklift to pick up lift beam in orientation shown</p> <p>Wrap chain around the forklift mast and clip to secure the tool to the lift.</p>	





<p>4</p>	<p>Use forklift to raise the lift beam and position over the center of the pack.</p>	
<p>5</p>	<p>Attach the (4x) lift beam chain sling hooks to the lifting hardware attached during INITIAL SETUP.</p>	 
<p>6</p>	<p>Slowly begin to raise the hoist until the chains are taut and then PAUSE</p> <ul style="list-style-type: none"> • Check chains, hooks, and hoist rings to ensure there are no twists or binding • Check that lift hardware is not clashing with the pack enclosure • Confirm load is well balanced <p>Lower the load to correct any problems before proceeding.</p>	
<p>7</p>	<p>Lower pack either into crate or onto Battery Lift Table for transport as needed.</p> <p>Ensure pack is properly seated on support surfaces before releasing load and removing lift beam.</p>	

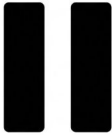




<p>1</p>	<p>Review INITIAL SETUP to confirm lift method and attach points for the battery variant you are lifting.</p> <p>If using GANTRY > proceed to step 2</p> <p>If using FORK LIFT > refer to previous section</p>	
<p>2</p>	<p>Install required accessory hardware to pack interfaces specified in INITIAL SETUP. Torque lift hardware to spec.</p>	
<p>3</p>	<p>Attach the hoist lift hook to the center point of the lift beam.</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p>IMPORTANT</p> <p>For REV A tools, ensure lift point is in center position and pin is fully engaged</p> </div> <p>NOTE</p> <p>Center lift point is fixed for later revisions of the tool</p>	

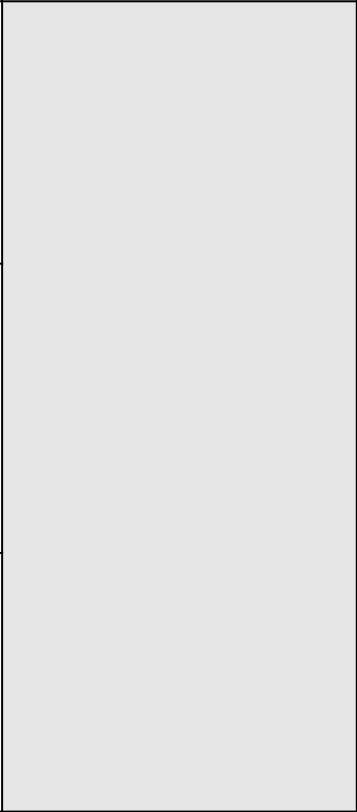






<p>4</p>	<p>Use hoist to raise the lift beam and position over the center of the pack.</p>	
<p>5</p>	<p>Attach the (4x) lift beam chain sling hooks to the lifting hardware attached during INITIAL SETUP.</p>	
<p>6</p>	<p>Slowly begin to raise the hoist until the chains are taut and then PAUSE</p> <ul style="list-style-type: none"> • Check chains and hoist rings to ensure there are no twists or binding • Check that lift hardware is not clashing with the pack enclosure • Confirm load is well balanced <p>Lower the load to correct any problems before proceeding.</p>	<div style="text-align: center;">  <p>PAUSE</p> </div> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin-top: 10px;"> <p>IMPORTANT</p> <p>If using REV A tool, the center lift point should not be adjusted to balance the load</p> </div>
<p>7</p>	<p>Lower pack either into crate or onto Battery Lift Table for transport as needed.</p> <p>Ensure pack is properly seated on support surfaces before releasing load and removing lift beam.</p>	





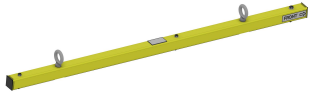
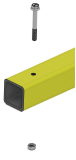
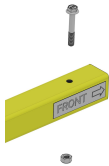
BASIC MAINTENANCE GUIDE

TASK	FREQUENCY	IMAGE
<p>Visually inspect all lift attachments and chain slings for signs of damage, cracks, elongation.</p> <p>Replace as necessary.</p>	<p>Before every use</p>	
<p>Verify presence of (4x) Chain slings, (4x) swivel hoist rings and (4x) flange nuts</p>	<p>Before every use</p>	
<p>Visually inspect the threads of the swivel hoist rings and flange nuts for cross-threading, damage, or bending</p>	<p>Before every use</p>	
<p>Clip 4x lift hooks to the loops provided at the top of the lift beam for safe storage</p>	<p>After every use</p>	
<p>Remove the 4x hoist rings from the pack and store them facing inward at locations shown</p>	<p>After every use</p>	



SERVICE & REPLACEMENT COMPONENTS

FOR OTHER ITEMS NOT SHOWN, CONTACT RIVIAN SERVICE TOOL ENGINEERING

DESCRIPTION	SUPPLIER + PART NUMBER	IMAGE
Swivel Hoist Ring 1.3t M16 35mm L	RUD VWBG-V - or - McMaster-Carr 4137N14	
M16 Flange Nut DIN6331	McMaster-Carr 90360A117	
Battery Lift Adapter Rail - R2	TSN00541-207	
M8 Flange Head Bolt + M8 Lock Nut	McMaster-Carr 95735A167 + 94645A210	
M10 Flange Head Bolt + M10 Lock Nut	McMaster-Carr 98093A227 + 94645A213	





DANGER

Risk of major injury such as

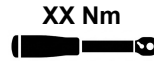
- fire
- chemical or poison
- crushing / maiming
- death



Gantry Crane



Fork Lift



Torque Spec

IMPORTANT

Instructions to successfully complete a task

NOTE

Useful information

REVISION LOG

REV	DATE	CHANGE DESCRIPTION
1	11/26/2024	Initial release
2	06/03/2025	Updated to Rev C config, added McMaster PN for swivel hoist ring
3	4/13/2026	Updated to Rev D config of tool that adds BATTERY LIFT ADAPTER RAIL - R2

