

TOOL USE INSTRUCTION

RIVIAN

TOOL NUMBER

TSN00548-300

TITLE

HV BATTERY COMMUNICATION HARNESS

REV - DATE

REV 01 4/22/2026

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TOOL FUNCTION

BREAKOUT HARNESS USED TO COMMUNICATE WITH HV BATTERY DURING DISCHARGE



**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 injury and/or property damage.

SAFETY GUIDELINES

1	Harness is intended for use by trained personnel only.
2	Read and follow all service manual procedures and precautions prior to use.



SPECIFICATIONS

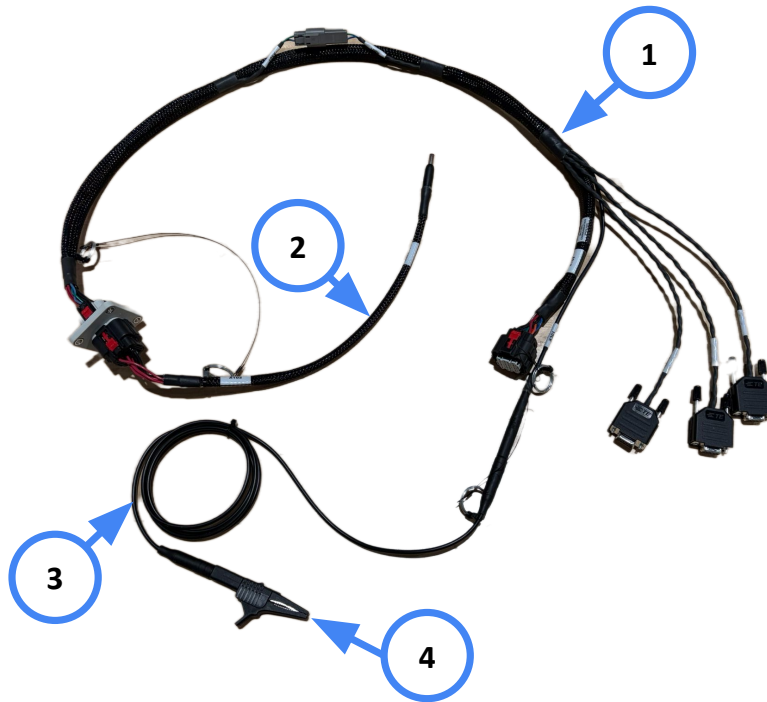
Voltage Rating: 15 VDC

LABOR CODES

300070026 - HV Battery (Discharge)
 300099012 - HV Battery General Diagnostic

OTHER TOOLS REQUIRED



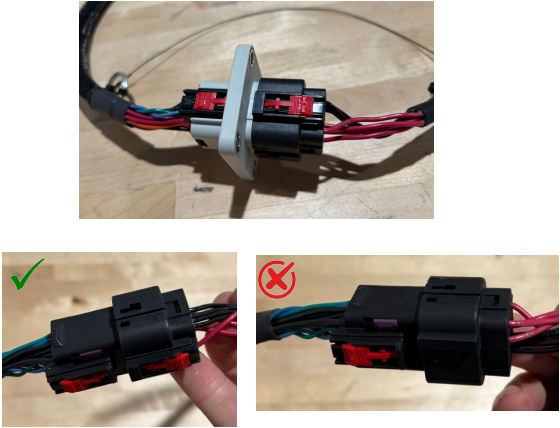


TSN01115-300-A - HIGH VOLTAGE BATTERY DISCHARGER, 480V
 TSN00326-100-A - MICRO-START XP10



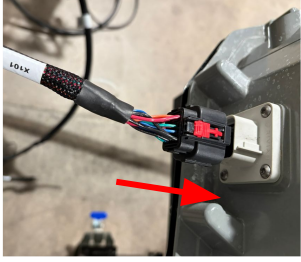

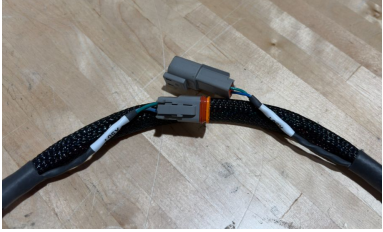

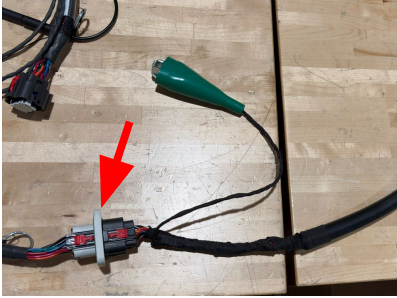
COMPONENT GUIDE

ITEM	QTY	DESCRIPTION
1	1	HV BATTERY COMM HARNESS
2	1	12V EXTERNAL POWER ADAPTER
3	1	GROUND CLIP EXTENSION
4	1	GROUND CLIP


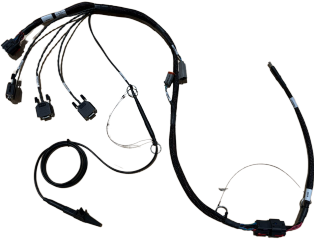




<p>1</p>	<p>FOR GENERAL DIAGNOSTICS:</p> <p>Attach the connector labeled X101 on the HV COMM HARNESS to the low voltage port on the HV battery pack.</p>	
<p>2</p>	<p>Ensure the ground clip extension + ground clip are connected to the comm harness.</p> <p>Attach the ground clip to an unpainted metallic surface on the vehicle chassis or pack enclosure.</p>	
<p>3</p>	<p>Attach the connector labeled X201 on the comm harness to the 12V power adapter</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p>IMPORTANT</p> <p>Ensure connectors are oriented with red tabs on the same side. Failure to do so on early harness revisions may cause permanent damage to the BMS.</p> </div>	
<p>4</p>	<p>Connect external power adapter to compatible 12V power supply:</p> <p>TSN00326-100-A - Micro-Start XP10</p>	
<p>5</p>	<p>Once BMS powers on, the 3X breakout connectors can be paired with a compatible PCAN-USB adapter to read signals off the CAN bus.</p> <p>Note that each breakout connector is labeled with the CAN network name.</p>	



<p>6</p>	<p>FOR HV BATTERY DISCHARGING:</p> <p>Attach the connector labeled X101 on the HV COMM HARNESS to the low voltage port on the HV battery pack.</p>	
<p>7</p>	<p>Connect the ground clip extension + ground clip to the comm harness.</p> <p>Attach the ground clip to an unpainted metallic surface on the vehicle chassis or battery enclosure.</p>	
<p>8</p>	<p>Disconnect mid-harness connector to disable the Battery CAN circuit.</p> <p>NOTE Battery CAN network is not required for discharging - failure to disconnect may cause issues with discharger comms.</p>	
<p>9</p>	<p>Connect discharger low voltage adapter stub (A1001) to the discharger low voltage harness (A996).</p>	
<p>10</p>	<p>Attach the connector labeled X201 on the comm harness to the open end of the A1001 LV adapter.</p> <p>NOTE Green ground clip on A1001 harness does NOT need to be connected if black clip on comm harness is attached to ground</p>	
<p>11</p>	<p>Proceed with discharging procedure, following step-by-step instructions provided on the discharger screen.</p>	



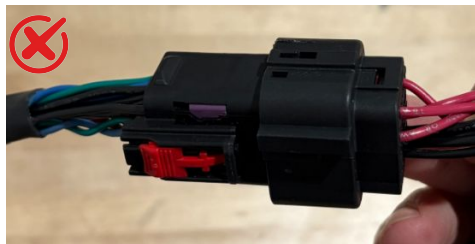
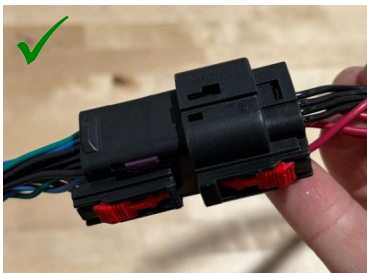
TOOL REVISION	IMAGE	WHAT CHANGED?
A		Initial release
B		Separated 12v external power adapter as stub harness Updated to Aptiv 24 way connector for pack and discharger interface
C		Added assembly frame to the Aptiv 24 way connector to control orientation. 

IMPORTANT

When using Rev B harness, it is critical to ensure correct connector orientation when mating comm harness to external power or discharger adapters.

Ensure Aptiv 24 way connectors are oriented with red tabs on the same side.



Failure to do so may cause permanent damage to the BMS.



BASIC MAINTENANCE GUIDE

TASK	FREQUENCY
Inspect harness for signs of damage (frayed cable shielding, bent terminal pins, cracked connector housings). Replace as needed.	Before each use
Coil harness and store in a dry tool box or cabinet.	After each use

SPARE PARTS

ITEM	DESCRIPTION	SUPPLIER + PART NUMBER	PHOTO
1	ALLIGATOR CLIP (GROUND)	MUELLER BU-65-0	
2	TEST LEAD EXTENSION	POMONA 4911A-60-0	



FOR OTHER ITEMS NOT SHOWN, CONTACT RIVIAN SERVICE TOOL ENGINEERING





DANGER

Risk of electrocution or electric shock

IMPORTANT

Instructions to successfully complete a task

NOTE

Useful information

DOCUMENT CHANGE LOG

REV	DATE	CHANGE DESCRIPTION
01	4/22/2026	Initial release

