



JIB-HV User Manual

Flash Drive Motors

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CAUTION: Please read the entirety of this manual before attempting any installation or configuration of the JIB-HV system.



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1. Included Parts

- JIB-HV High Voltage Junction Box
- SurLok 10.3mm Power Connectors x 4
- 6 Pin Molex Signal Connector
- Aux HV Connector x 2

2. Technical Overview / Functionalities

Technical Overview / Functionalities

The JIB-HV is a purpose-built high voltage junction box designed to simplify the high voltage side of a conversion using Hyper 9 kits. Its core functionalities include:

- **Simplifying HV Connections:** It condenses the high voltage connections into a single unit, providing connectors for easy hookup.
- **Controller Logic Support:** It is designed to support both **Isolated** and **Non-Isolated Logic Controllers**.
- **System Integration:** It performs a similar role for the high voltage system as the Flash Drive Motors JIB-H9 VCU Module does for the 12V side of a conversion. The combination of the two provides a cost-effective and simple solution for electric vehicle conversion.

3. Safety & Critical Configurations

- **High Voltage Safety:** The JIB-HV handles high voltage. Exercise extreme caution during installation to prevent serious injury. Make sure the service disconnect switch is in the Off position until the system is ready.
- **Non-Isolated Logic Wiring:** Do not connect K1-1 to chassis ground for Non-Isolated Logic controllers, as this could result in high voltage isolation issues. Make sure to pin the signal connector according to the correct instructions.
- **Contactor PWM Settings (SmartView):** The JIB-HV has a 12V coil contactor installed. The contactor PWM settings will need to be changed in SmartView or you will get an error. If you do not have the OEM version of SmartView, we can provide a baseline clone file with the adjusted settings.

4. Fuses

Located inside the enclosure

- **Fuses (3):**
 - Main - A15QS450-4
 - Aux HV - ATM 30/40
 - Aux HV - ATM 30/40



5. Connector Pin-Outs

Pay special attention to this connector as it is different for Isolated and Non-Isolated Logic controllers.

5.1 Signal Connector For Isolated Logic Controller

If you are using a JIB-H9 VCU in conjunction with the JIB-HV with Isolated Logic, it is recommended to tee the K1-1 and K1-24 connectors. If not, you must provide your own fuse for K1-24.

Pin	Color	Gauge	Isolated Logic Function
1	Black	20	K1-1 (GND)
2	Blue	20	K1-24 (+12V Key)
3	Blue/White	20	K1-25 (Contactor Out)
4	Orange/White	20	K1-26 (Contactor Return)
5	–	–	–
6	Orange	20	B+ Precharge on controller

5.2 Signal Connector For Non-Isolated Logic Controller

Pin	Color	Gauge	Non-Isolated Logic Function
1	Black	20	Chassis Ground
2	Red/Blue	20	+12V Key
3	Blue/White	20	K1-25 (Contactor Out)
4	Orange/White	20	K1-26 (Contactor Return)
5	–	–	–
6	Blue	20	K1-24 (Key In)



5.3 Aux HV Connector x 2

There are 2 fused HV connectors. These can be used to connect to the onboard charger, DC-DC converter, or other HV accessories as needed. They are internally fused with ATM30/40 fuses.

Pin	Color	Gauge	Function
1	Orange (or Black)	12/14	HV -
2	Red/Blue	12/14	HV +

5.4 HV Out

The large HV Out + and HV Out - connectors connect to the +B and -B connectors on the Hyper 9 Controller. Use the provided SurLok 10.3mm connectors. This is a fused output with a 400 Amp continuous fuse that can support 10 second bursts of up to 800 Amps. This will support both the Hyper 9 and Hyper 9HV motors.

5.5 Battery In

The battery in connects HV + IN + and HV - IN to the traction battery pack. Use the provided SurLok 10.3mm connectors.

6. Operational Details

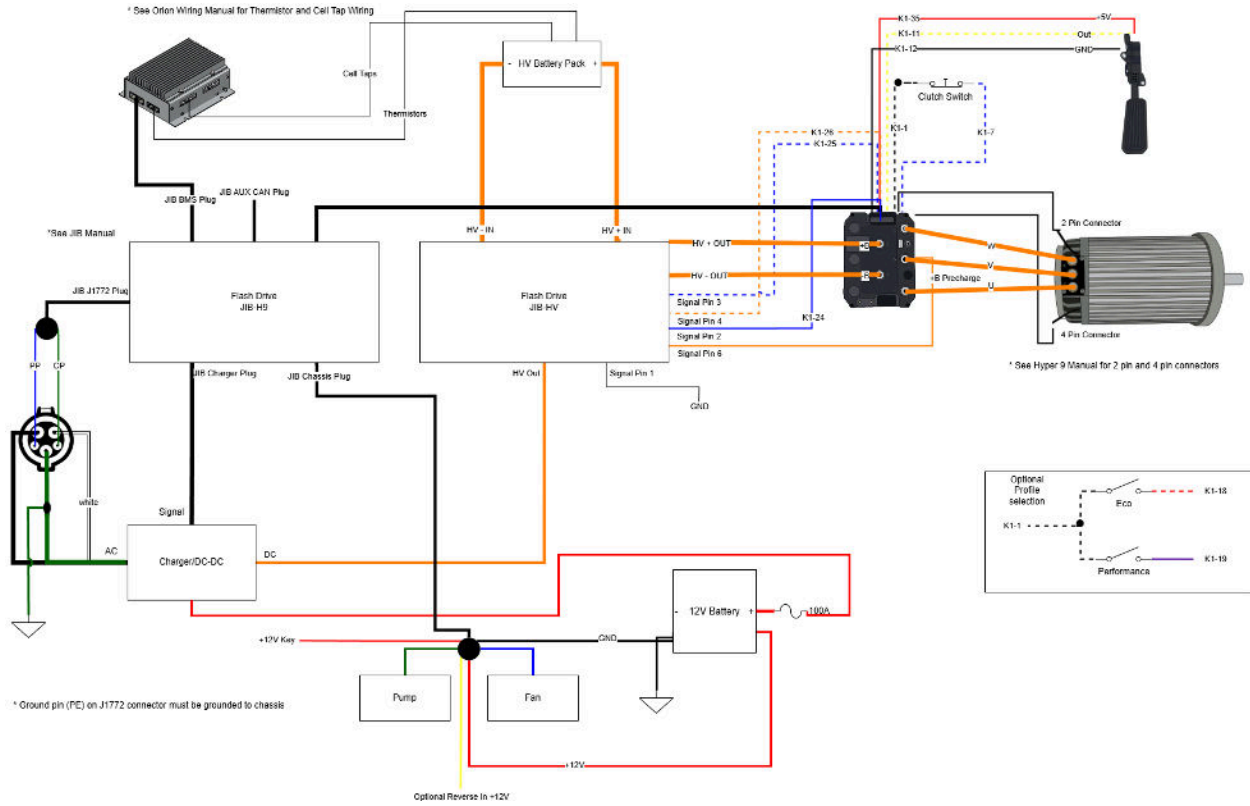
When wired to a controller, the JIB-HV operates as follows:

- **Hyper 9 ISO or Hyper 9HV Controller:**
 - The JIB-HV will start the precharge sequence when the key is turned on.
 - The controller will then close the main contactor after the startup is complete.
- **Hyper 9 X1 Controller:**
 - The JIB-HV will provide key-on, high-voltage power directly to the K1-24 pin controller.
 - The controller will then close the main contactor after the startup is complete.

7. Example Wiring Diagrams

The example diagrams in this document might be difficult to read in printed format. Please use the digital version of this document to zoom in.

7.3 Hyper 9 Isolated Logic System With JIB-H9



7.4 Hyper 9 Non-Isolated Logic System With JIB-H9

