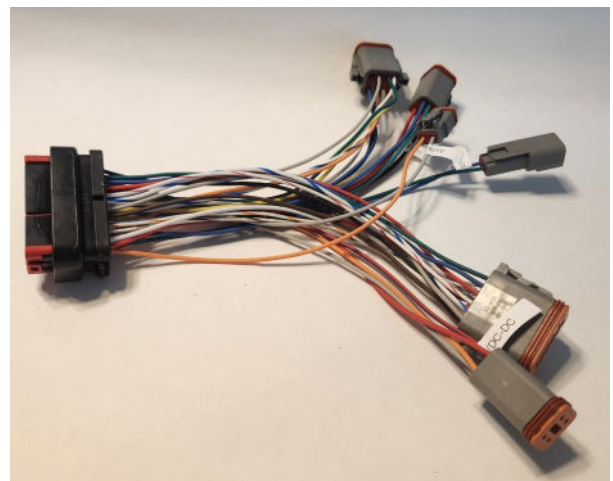


JIB-H9 User Manual

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- 6 Pin Deutsch connector Male
- 4 Pin Deutsch connector Male
- 2 Pin Deutsch connector Male (if Orion BMS purchased, this will be pre-wired with CANdapter)
- 2 Pin Deutsch Connector Female



1.Pin the Deutsch connectors

1.1 Chassis Connector – Male 6 pin Deutsch

These wires will connect to your vehicle’s chassis harness.

Pin	Color	Gauge	Function
1	Black	18	GND
2	Red	18	+12V
3	Red/Blue	20	+12V Key
4	Green	18	Pump
5	Blue	18	Fan
6	Yellow	20	Reverse In

1.2. BMS Connector – Male 12 pin Deutsch

This plug will connect to the Orion BMS IO harness. The wire colors will match the Orion BMS IO harness. Be careful as there are 2 red wires. One red wire is charger power and the other is CAN H. The CAN wires will be in a shielded pair and the charger power wire will be a 20 gauge standalone red wire from the IO harness.

The JIB requires the Discharge Enable, Charge Enable, and Charger Safety relays to be active in the Orion BMS configuration.

Pin	Color	Gauge	Function
1	Green	20	IO-1 (Always on power)
2	Blue	20	IO-2 (Key on power)
3	Red	20	IO-3 (Charger power)
4	White/Red	20	IO-6 (Charge enable out)
5	White/Blue	20	IO-7 (Discharge enable out)
6	Gray	20	IO-8 (Regen enable out)
7	Brown	20	IO-10 (Fan trigger)
8	White	20	IO-12 (Ground)
9	Red	20	CAN1_H
10	Black	20	CAN1_L
11	White/Orange	20	IO-13 (CP)
12	White/Brown	20	IO-14 (PP)

1.3. SME Connector – Male 8 pin Deutsch

The JIB now only supports the Isolated Logic (ISO) controllers for the Hyper 9. Please make sure you have an Isolated Logic controller. The easiest way to verify this is if the controller has a Precharge connector lug in between the phase wires. If you do not have a controller with a Precharge lug, do not use the JIB with this controller as it will cause a high voltage isolation fault.

This plug will connect to the Hyper 9 (SME) controller K1 harness. If you are not using the Reverse input and are wiring up a D-N-R switch, do not connect the Yellow and White wires to this plug and instead connect them to your D-N-R switch and leave the Yellow wire in the Chassis plug disconnected.

The Hyper 9 controller also requires the main contactor, throttle, and pre-charge relay to be wired as well. Please see the Hyper 9 manual.

Be careful with the Yellow wire as there is also a Yellow/White wire in the K1 harness that is used for the throttle. Make sure you are using the Yellow wire connected to K1-5.

Pin	Color	Gauge	Function
1	Black/Blue	20	K1-1 (Ground)
2	Gray	20	K1-2 (CAN L)
3	Green	20	K1-4 (Drive enable trigger in)
4	White	20	K1-5 (Forward trigger in)
5	Yellow	20	K1-6 (Reverse trigger in)
6	White/Blue	20	K1-7 (Regen enable trigger in)
7	Orange	20	K1-13 (CAN H)
8	Blue	20	K1-24 (12V Key in)

1.4. Charger/DC-DC Converter – Male 4 pin Deutsch

This plug will connect to your onboard charger. The wire colors might not match the colors on a pre-wired charger signal harness. So pay attention to the Function of the wires on this plug.

Pin	Color	Gauge	Function
1	Red/Gray	20	DC-DC Enable
2	Red	20	Charger Power
3	Orange	20	CAN_H
4	Gray	20	CAN_L

1.5. J1772 – Female 2 pin Deutsch

This plug will connect to the Control Pilot (CP) and Proximity Pilot (PP) pins of your J1772 or NACS charging port. The colors might not match from a pre-wired plug, so confirm the wire functions on the charging port itself.

Pin	Color	Gauge	Function
1	Blue	20	J1772 - PP
2	Green	20	J1772 - CP

1.6. CAN Aux – Male 2 pin Deutsch

This plug is used to connect additional CAN enabled components to the system. It is also used to connect the CANdapter when using the Orion BMS. If you purchased the Orion BMS from Flash Drive Motors, we provide a plug already connected to the CANdapter. If not, you will need to make a matching plug for the CANDapter.

Pin	Color	Gauge	Function
1	Orange	20	CAN_H
2	Gray	20	CAN_L

2. Direction Relay

The **Reverse In** input on the Chassis plug is an optional signal to reverse the rotation of the motor.

- By default, the JIB will put the motor into Forward mode.
- Providing +12V to this wire will put the motor into Reverse Mode
- During throttle mapping, the **Direction** relay should be removed to prevent the motor from spinning.
- If using the **Reverse In**, this wire can also be used to turn on the backup lights.

3. Sentinel

The JIB has a built-in Sentinel module that monitors and keeps the 12V battery charged. The Sentinel will monitor for low voltage and cycle the DC-DC converter on for 1 hour periods until the 12V battery is above 12.7 volts. This will prevent the 12V battery from dying while the vehicle sits for an extended time.

IMPORTANT: If you are going park the vehicle for longer periods of time (for example, 3-4 months), it is HIGHLY recommended to switch off the HV service disconnect switch and disconnect the 12V battery. The Sentinel does have built in protection to prevent overdischarge of the HV battery pack, but it could leave the battery pack in a very low SOC. It is best to store the vehicle with a battery pack charged around 80% for long periods of time.

4. Bluetooth module

The bluetooth module requires CAN messages to be added in the Orion BMS and Hyper 9 controller to provide the data to the Flash Drive App. We can provide clone and bms config files with these pre-populated or add them to your config files. Please reach out to info@flashdrivemotors.com when you are ready to set up the bluetooth module.