

INSTALLATION INSTRUCTIONS

MODULITE® HD PLUS



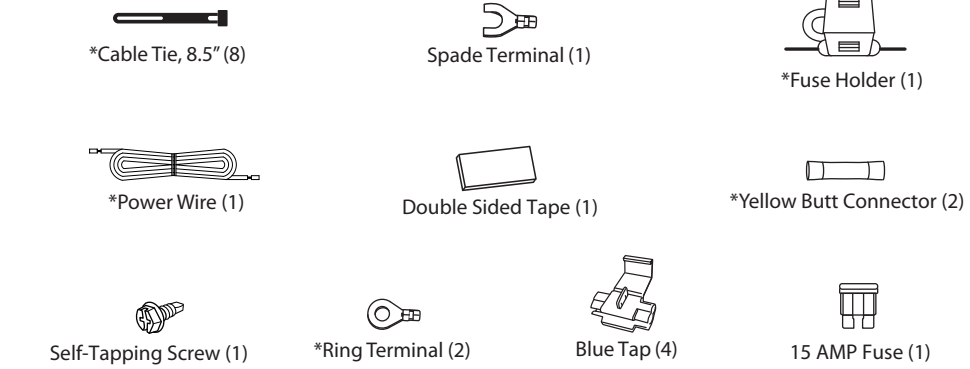
Approximate Install Time: 45 minutes

READ THIS FIRST:

Read and follow all vehicle warnings and installation instructions before beginning installation. Wear safety glasses and use all safety precautions during installation.

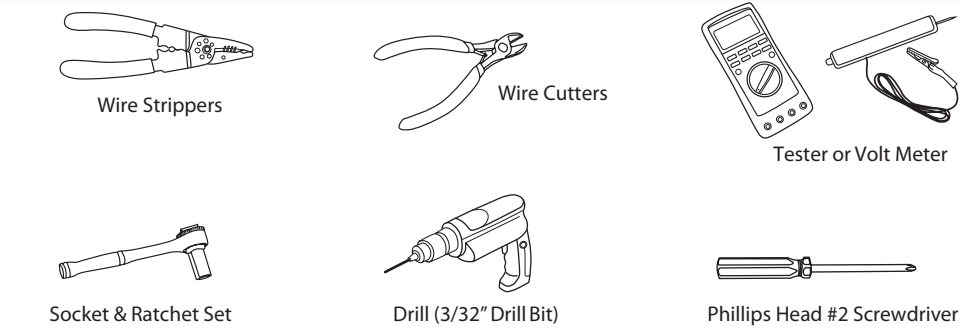


HARDWARE OVERVIEW



* Item not included in 119190. Wire kit 118150 or 118151 sold separately.

REQUIRED TOOLS



WARNING

Overloading circuit can cause fires. DO NOT exceed lower of towing manufacturer rating or:
 • Max. stop/turn light: 2 per side (4.2 amps)
 • Max. tail lights: (7.5 amps)
 Read vehicle's owners manual & instruction sheet for additional information.

TESTING:

- When using a volt meter or circuit tester, carefully probe one wire at a time.
- CAUTION** Do not probe across two wires or across vehicle structure.

- Determine type of Vehicle wiring system and location of required input functions.

TOW VEHICLE INPUTS – DETERMINATION:

Vehicle Wiring Code & Description	Description of Vehicle's Electrical System	Input Wires Used	Input Wires Exceptions
A - 2 wire system	The vehicle's turn & brake functions are combined on one wire and the tail light function is on a separate wire.	Yellow to vehicle Left Turn/Brake wire, Green to vehicle Right turn/Brake wire & Brown to vehicle Tail wire.	Brake wire (red) is not used.
B - 3 wire system	The vehicle's turn, brake and tail light function are on separate wires.	Yellow to vehicle Left Turn wire, Green to vehicle Right turn wire, Brown to vehicle Tail wire & Red to vehicle Brake wire.	NONE - Use all wires.
BT - Brake/Tail multiplexed wiring system	The vehicle's brake & tail functions are combined on one wire and the turn functions are on separate wires.	Yellow to vehicle Left Turn wire, Green to vehicle Right turn wire & Red to vehicle Brake/Tail wire.	Tail wire (brown) is not used.
BTT - Brake/Tail/Turn multiplexed wiring system*	The vehicle's brake, tail & turn functions are combined on one wire.	Yellow to vehicle Brake/Tail/Left Turn wire & Green to vehicle Brake/Tail/Right turn wire.	Tail wire (brown) & Brake wire (red) are not used.

* Module may not work with some BTT wiring systems. To alleviate, you may need to route tail wire to rear license plate illumination circuit and/or brake to center high stop light.

TOW VEHICLE INPUTS - INSTALLATION:

- Disconnect and isolate the vehicle's negative battery terminal.
- WARNING** Read and follow all warnings and cautions printed on the tow vehicle's battery.

- Splice the tow harness input wires to the vehicle as determined.
- CAUTION** When splicing use appropriate gauge wire splices. Provided blue taps are for 16-18 gauge wire only.

HARNESS INSTALLATION:

- NOTE:** Required wiring kit may be sold separately
- Determine mounting location of the module. Secure using the double-sided tape provided. Using butt connector, connect module's black wire and 12 gauge (or larger gauge) wire.
- WARNING** Make sure module is mounted so that the epoxy side of the module is pointed towards the ground to prevent any water buildup.
- Locate a suitable grounding point near the module such as an existing ground stud or drill a 3/32" hole and secure the white wire using the eyelet and screw provided. (Do not drill into vehicle floor or bed.) Clean dirt and rustproofing from area.

- CAUTION** Verify what is behind any surface prior to drilling to avoid damage to the vehicle and/or personal injury. Do not drill into any exposed surfaces.
- Route power wire to vehicle's positive side of battery. Using fuse holder, butt connector and ring terminal, connect to battery. **DO NOT** insert 15 amp fuse.
- CAUTION** Module must be connected to a constant power source. Do not use an alternative power source that is interrupted when the vehicle is off.
- CAUTION** Route the wire being careful to avoid any hot pipes, heat shields, the fuel tank or any other points that may pinch or break the wire.

COMPLETION:

- Secure harness with the cable ties provided, to prevent damage or rattling. Be careful to avoid any areas that would pinch, cut or melt the wire.
- Reconnect the vehicle's Negative (-) battery cable.

- Insert 15amp fuse into fuse holder and close cap.
- Test and verify installation with a test light or trailer once installed. Test each function independently and in combination.

TROUBLE SHOOTING GUIDE:

4-Flat not functioning properly	Ensure input wires are installed per the Tow Vehicle Inputs - Determination findings. Remove 15 amp fuse for 10 seconds and repeat test.	Ensure blue taps are installed correctly. Using a tester or volt meter check for voltage on each input wire, near the module. Remove 15 amp fuse for 10 seconds and repeat test.	Ensure 15 amp fuse is fully inserted into fuse holder. Fuse should have no breaks. Fuse holder connected properly to positive post of battery. Remove 15 amp fuse for 10 seconds and repeat test.	Ensure module is connected to B+. Using a tester or volt meter check for voltage on either side of the yellow butt connector near the module. Remove 15 amp fuse for 10 seconds and repeat test.
No Power to 4-Flat	Check chassis ground. Ensure ring terminal is in full contact with bare metal of the vehicle's chassis. Remove 15 amp fuse for 10 seconds and repeat test.	Installation may have activated circuit protection. Remove 15 amp fuse for 10 seconds and repeat test.		

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TOW VEHICLE INPUTS

