

INSTALLATION INSTRUCTIONS

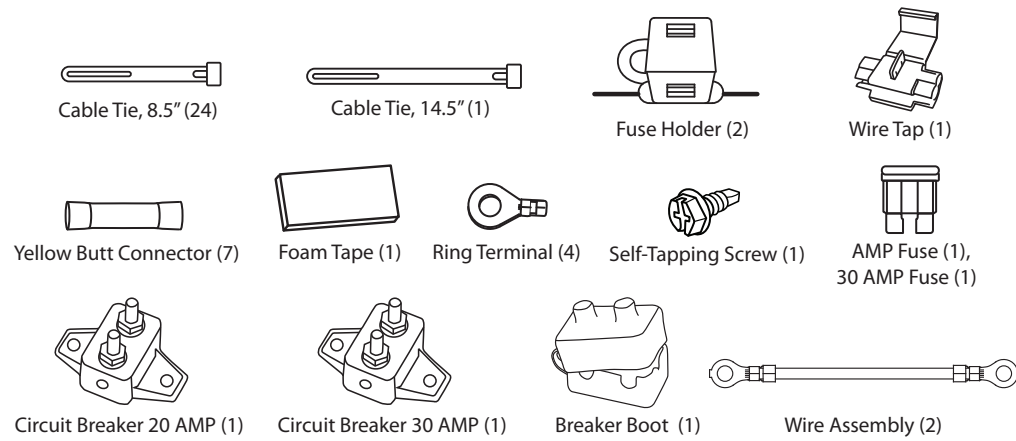
7-WAY VEHICLE COMPLETE KIT

Approximate Install Time: 120 minutes

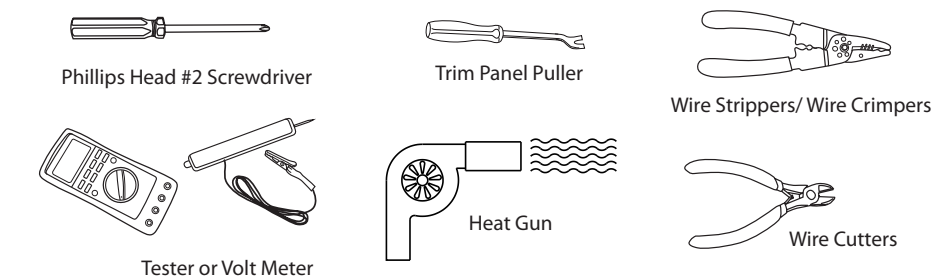
READ THIS FIRST:

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

HARDWARE OVERVIEW:



REQUIRED TOOLS :



WARNING

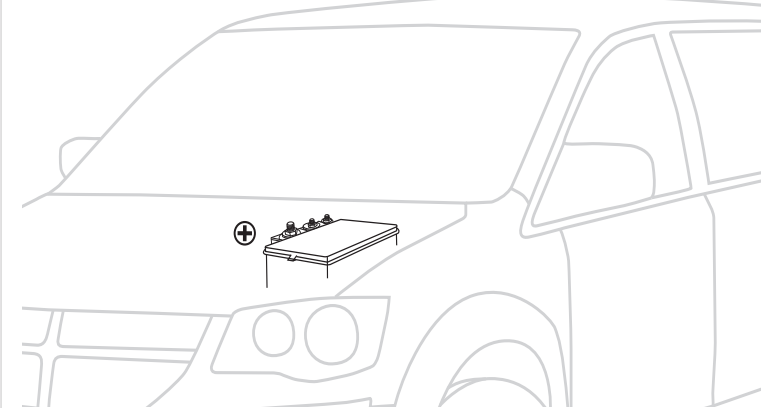
Overloading circuit can cause fires. DO NOT exceed:

- Max. stop/turn/backup light: 2 per side (4.2 amps)
- Max. tail lights: (12 amps)
- Max. 7 Way 12 Volt +: (30 amps)

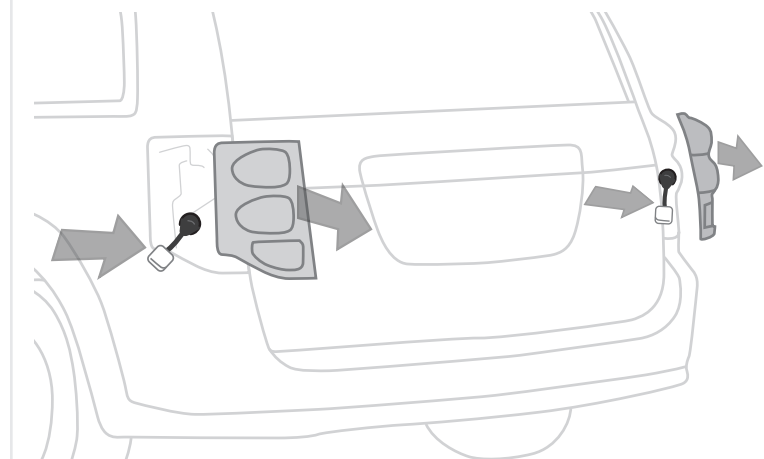
Read vehicle's owners manual & instruction sheet for additional information.

PREP VEHICLE:

- Disconnect and isolate the vehicle's negative battery terminal.
- Locate positive post underneath hood, on drivers side.

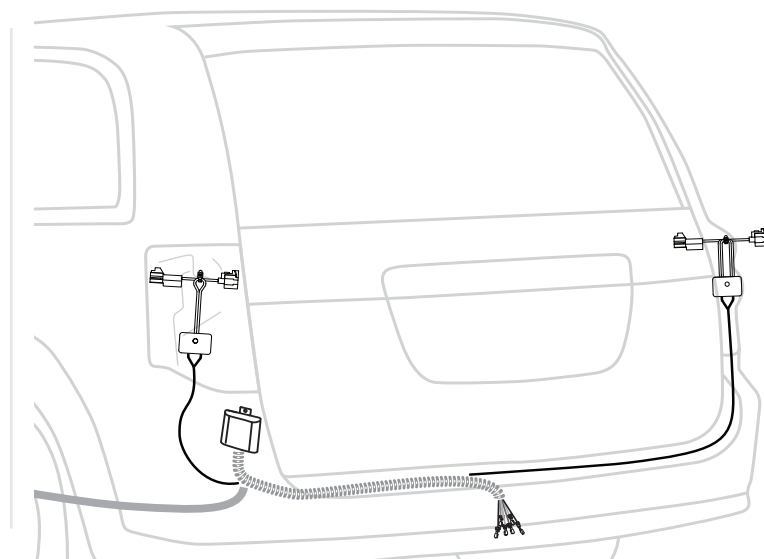


- Open hatch, remove both drivers and passenger taillight assemblies and set aside.



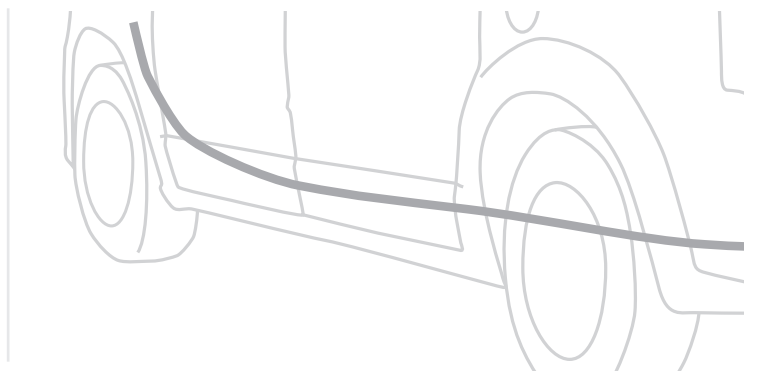
T-ONE® T-CONNECTOR ENDS AND MODULITE®:

- Beginning at the driver's side tail light pocket, connect housing containing the T-one® T-connector ends with the yellow and brown wires to the vehicle wiring connector. All connector surfaces should be clean and free of dirt.
- Route body harness, 7-way harness and T-one® T-connector with green and red wires down the opening in the tail light pocket to area behind rear bumper.
- Starting on the driver's side tail light pocket, locate a suitable grounding point near the Modulite® such as the vehicle frame or cross member. (Do not drill into vehicle floor or bed.) Clean dirt and rustproofing from area. Drill a 3/32" hole and secure white wire using eyelet and screw provided.
- Mount modulite box with supplied double sided tape and/or cable tie.
- Route T-one® T-connector end, with the red and green wires behind rear bumper fascia to passenger side access point and up into the tail light pocket. Repeat T-one T-connector step from driver's side.
- Connect the T-One® T-Connector ends to the rear combination lights. Be careful not to damage the locking tabs and be sure that connector is fully inserted with locking tabs in place. Replace rear combination lights.

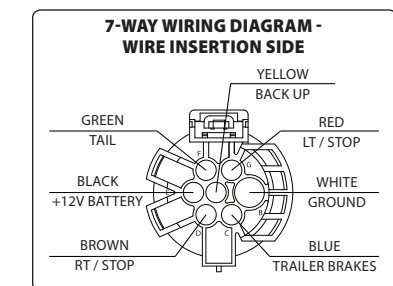
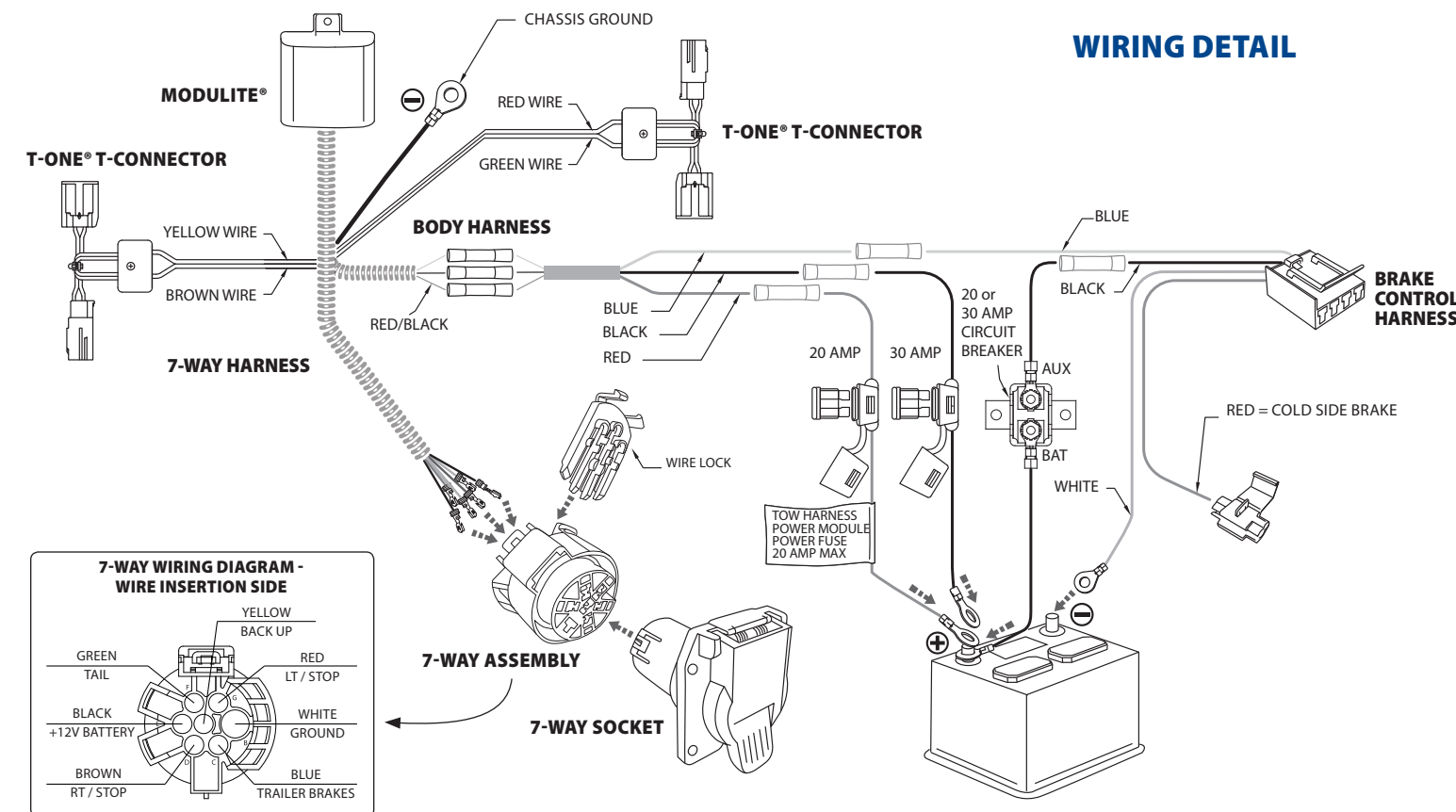


BODY HARNESS:

- Beginning underneath vehicle, on driver's side, route body harness with red/black/blue wires down the frame rails following existing body harness to engine compartment. Use butt connectors to connect body harness (jacketed wire) to Modulite®, connect red/black wire to red wire (jacketed wire). See wiring detail.
- WARNING** 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.
- Route body harness' Black wire to vehicle's positive post underneath hood. Using 30 amp fuse holder (7-Way), butt connector, and ring terminal, connect to battery.
 - Route Red wire to vehicle's positive post underneath hood. Using 20 amp fuse holder (Tow Harness), butt connector and ring terminal, connect to battery.



WIRING DETAIL



BRAKE CONTROL HARNESS:

- Determine a suitable mounting point on the tow vehicle for the Electric Brake Control Harness.
Note: Brake Control not included. Brake Control Harness designed to work with Tekonsha® Brake Controls such as: 90195, 90885 or 90160. Go to www.tekonsha.com for more details or where to buy.
- Route the Brake Control Harness' White/Blue/Black wires through an existing grommet on the fire wall and into the engine compartment. Route wires through grommet by creating a small hole in the grommet to pass the wires through.
- Route the Brake Control Harness' white wire to existing vehicle chassis ground point. Using provided ring terminal, mount.
- Route the brake control harness black wire to vehicles positive battery post underneath hood. Using 30 amp circuit breaker, breaker boot, wire assembly, butt connect and ring terminal, connect to battery.

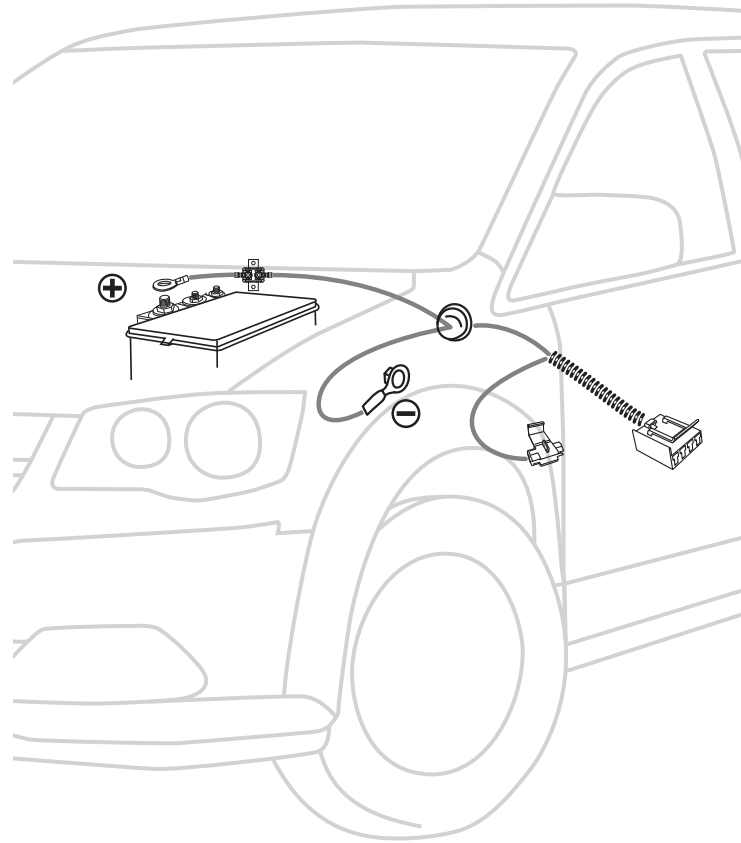
CAUTION When towing using trailers with one to three axles, use included 20 amp circuit breaker.

- Route Blue wire (Electric Brake Output) to Body Harness Blue wire. Using butt connector, connect blue wires.
- Route the red wire to the cold side switch of the brake pedal. Connect using supplied wire tap or the best suited alternative.
- 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.

CAUTION When splicing use appropriate gauge wire splices. Provided blue tap are for 16-18 gauge wire only.

- Secure the brake harness connector near desired Brake control mounting location.



7-WAY HARNESS:

- Determine 7-Way mounting location.
- Route the 7-Way Harness containing the 7 wires behind rear bumper fascia and over bumper support bracket, towards the Mounting location.

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.
- Apply heat directly to butt connectors, working from the center out to the edges, using a hot air gun or other source, until the tubing recovers and the adhesive flows. Allow to cool before inspecting splice and checking integrity.
- Replace all coverings, grommets or any other components that were removed for ease of installation. Some grommets will need to be altered to allow wires to pass through. Seal altered grommets with silicone.
- Reconnect the vehicle's Negative (-) battery cable.
- Test and verify installation with a test light or trailer once installed.

TROUBLE SHOOTING GUIDE:

7-Way not functioning properly	Ensure T-One® T-Connector ends are fully inserted and locked in place. Remove Tow Harness power Module 25 amp fuse for 10 seconds and repeat test.	Check chassis grounds. Ensure ring terminals are in full contact with vehicle's chassis. Remove Tow Harness power Module 25 amp fuse for 10 seconds and repeat test.
No Power to 7-Way	Installation may have activated circuit protection. Start vehicle and turn all functions off: Tail (head lights), brake and turns. Remove Tow Harness power Module 25 amp fuse for 10 seconds and repeat test.	Ensure 25 amp fuse is fully inserted into fuse holder. Fuse should have no breaks. Fuse holder connected properly to positive post of battery. Remove 25 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 Tow Harness power Module 25 amp fuse for 10 seconds and repeat test.

- Using wire insertion detail, pin 7-Way Connector.
- Connect 7-Way connector and 7-Way socket. Mount 7-Way (Bracket not included).

