

Spreader and Vehicle Battery Kits

Hopper Spreaders

Parts Lists and Installation Instructions

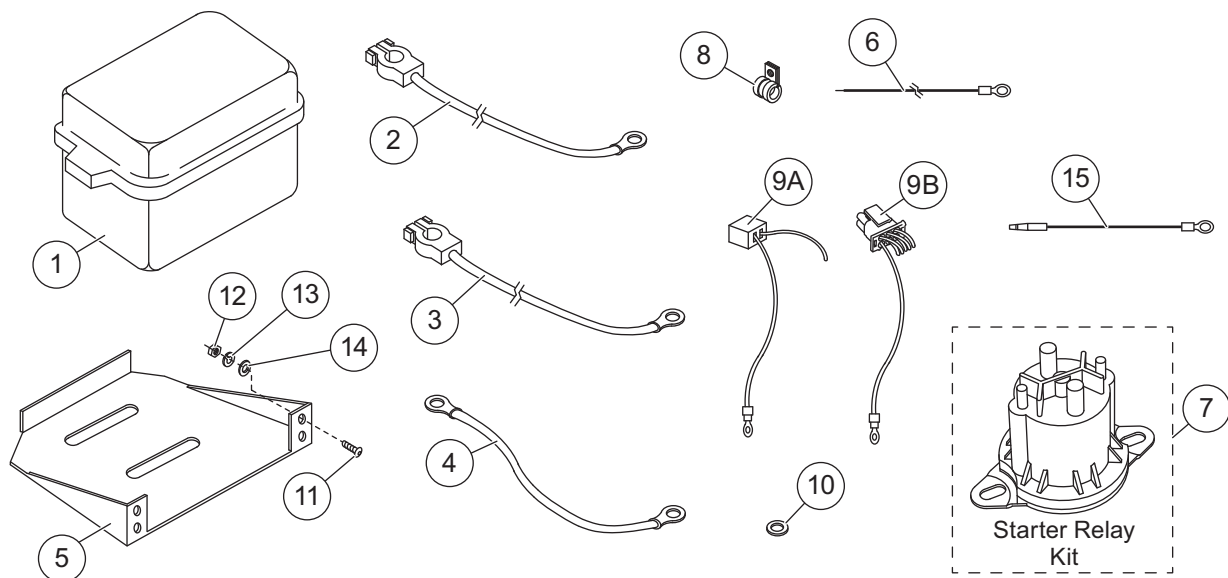
⚠ CAUTION

Read this document before installing the
Spreader and Vehicle Battery Kit.

⚠ CAUTION

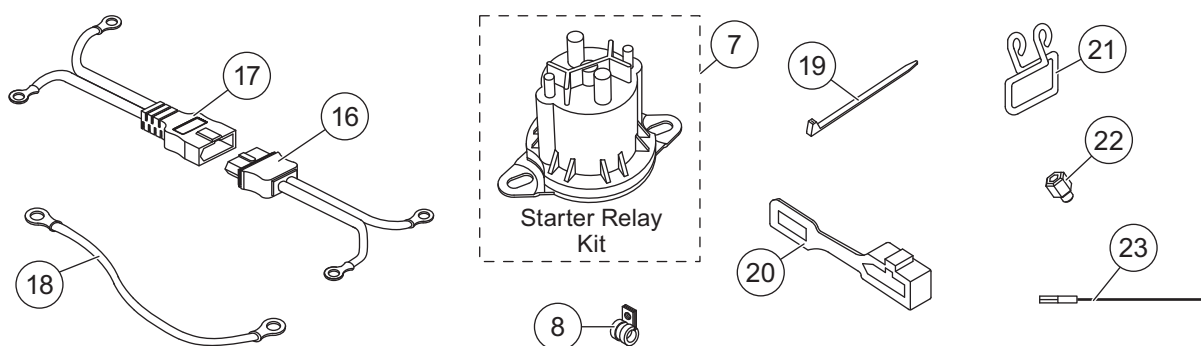
Use standard methods and practices when
attaching spreader and installing accessories,
including proper personal protective safety
equipment.

SPREADER AND VEHICLE BATTERY KITS PARTS LIST



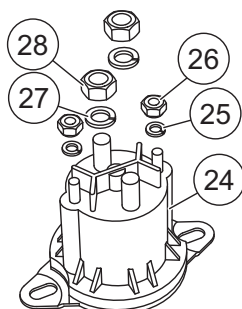
65605-2 Spreader Battery Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	65251	1	Battery Case w/Strap	5	65800	1	Battery Tray
2	65246/9226	1	Battery Cable – Red (Positive)	6	68869	1	Hopper Spreader Ground Wire
3	67239	1	Battery Cable – 53" Black	7	56131K/5794K-1	1	Starter Relay Kit
4	65247/9227	1	Cable, Starter	ns	65990-1	1	Parts Bag
65990-1 Parts Bag							
8	65340	2	Clamp Loop #10	11	90375	4	3/8-16 x 1 Carriage Bolt
9 A	65380/20194	1	Alternator Wire – Red w/Plug, Tecumseh	12	91431	4	3/8-16 Hex Nut SS
9B	95584	1	Alternator Wire, 6-Pin, Tecumseh	13	91123	4	3/8 Flat Washer SS
10	90980	1	5/16 Flat Washer SS	14	91282	4	3/8 Spring Lock Washer SS
ns = not shown				SS = Stainless Steel			

SPREADER AND VEHICLE BATTERY KITS PARTS LIST

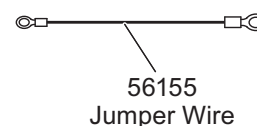
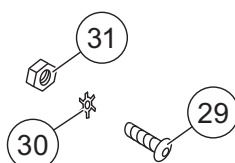


94680 Vehicle Battery Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
16	66424	1	Battery Cable, Vehicle End	7	56131K/5794K-1	1	Starter Relay Kit
17	66425	1	Battery Cable, Spreader End	ns	94892	1	Parts Bag
18	22511	1	Battery Cable – 22" Red				
94892 Parts Bag							
8	65340	2	Clamp Loop #10	21	49304K/62057	1	Hook
19	59223	6	Cable Tie	22	55928/22381K	1	Battery Cable Adapter
20	61548K/8291K	1	Plug Cover	23	67537	1	Relay Wire, Premium Control
ns = not shown							

Starter Relay Kit



Installation Hardware



Item 7 56131K/5794K-1 Starter Relay Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
24		1	Relay	27	91202	2	5/16 Spring Lock Washer
25	91242	2	#10 Spring Lock Washer	28	92842	2	5/16-24 Hex Jam Nut G5
26	91402	2	#10-32 Hex Machine Screw Nut				
Installation Hardware							
29	90381	2	1/4-20 x 3/4 Hex Cap Screw	31	91429	2	1/4-20 Hex Nut
30	67083	2	1/4 External Tooth Lock Washer				
G = Grade							

SPREADER BATTERY KIT INSTALLATION INSTRUCTIONS

SPREADER BATTERY KIT INSTALLATION

NOTE: Apply dielectric grease to all electrical terminals before assembly.

Battery Safety

⚠ CAUTION

Batteries normally produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

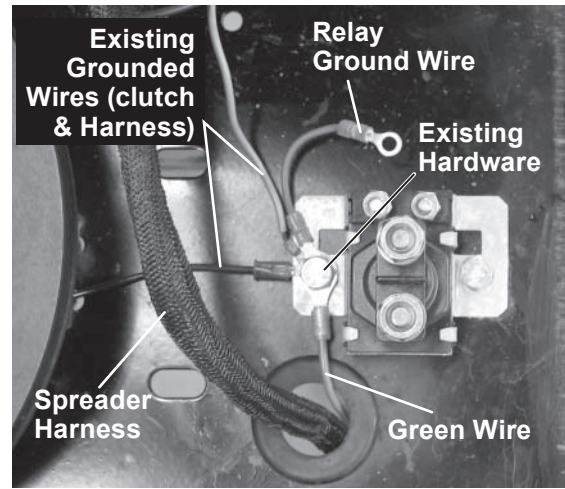
- Batteries contain sulfuric acid, which burns skin, eyes and clothing.
- Disconnect the battery before removing or replacing any electrical components.

1. Install the battery tray with the four supplied 3/8" x 1" carriage bolts, flat washers, lock washers and nuts.
2. Install a 12-volt battery with a minimum of 400 cold cranking amps rating. The battery box will accept any group 22-, 24-, 27-, 64- or 65-series top-terminal battery.

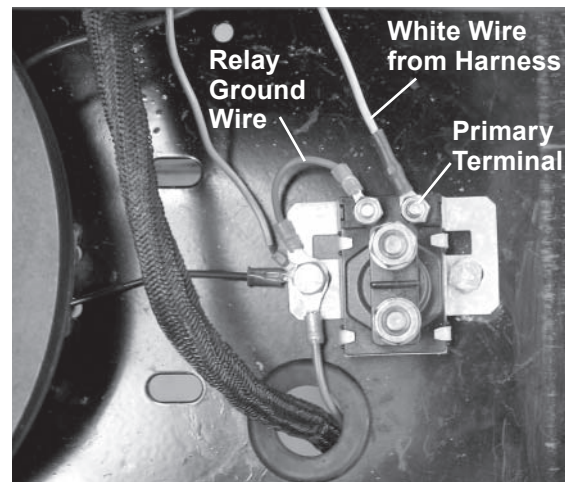


3. Mount the starter relay to the engine base using the existing hardware and an additional 1/4" x 3/4" cap screw, external tooth lock washer, and nut. Reconnect the black wire from the clutch and the green wire from the harness. Connect the supplied relay ground wire (red) and the spreader ground wire (green).

NOTE: Starter relay styles may vary.

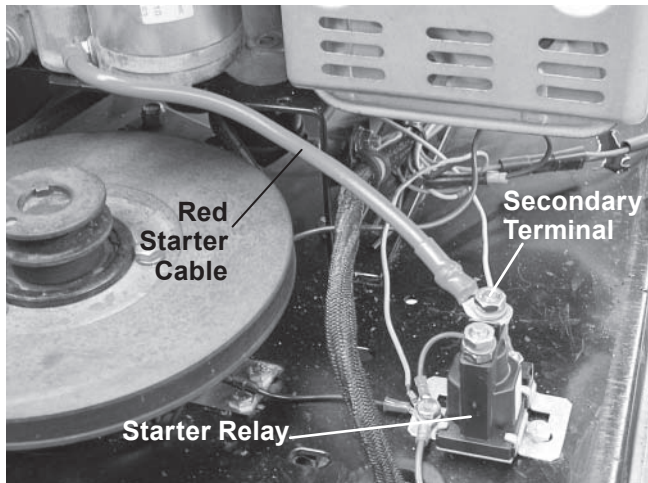


4. Connect the white wire from the spreader harness to the primary terminal of the starter relay and connect the relay ground wire to the lower small terminal on the relay.



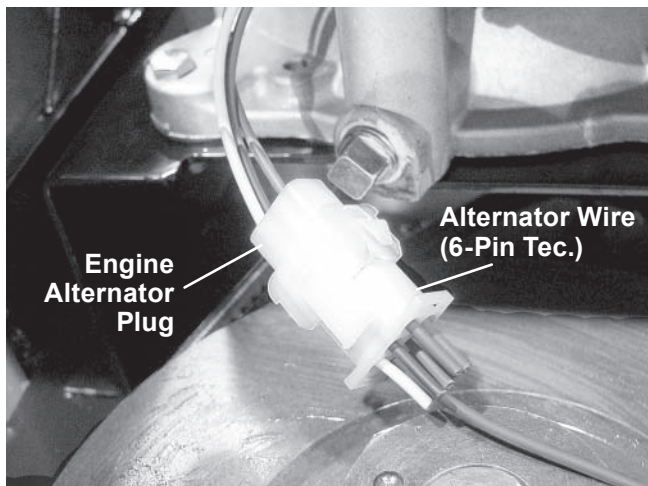
SPREADER BATTERY KIT INSTALLATION INSTRUCTIONS

5. Connect the red starter cable from the starter to one of the large secondary terminals on the starter relay.



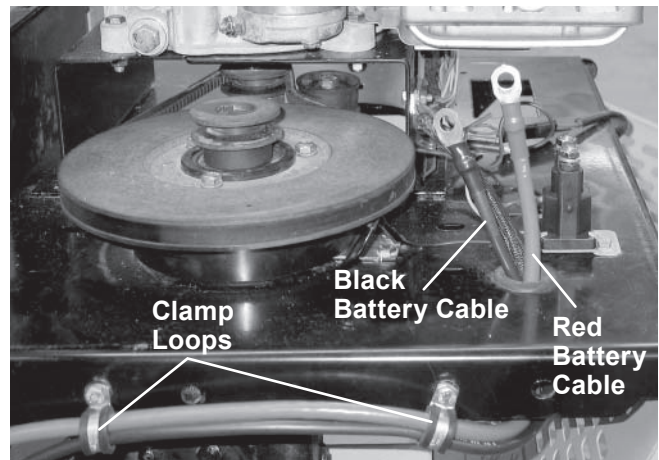
For Honda engines, connect the charge wire to the plug on the engine.

For Tecumseh engines, connect the alternator wire with plug to the alternator plug on the engine.



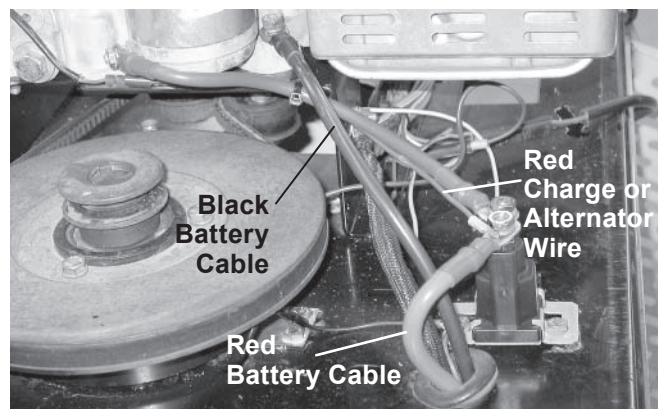
6. Route the battery cables through the rubber grommet in the engine base. Secure with #10 clamp loops.

NOTE: Use the fasteners that secure the spreader harness for securing the spreader cable.



7. Connect the charge wire (Honda) or alternator wire (Tecumseh) and the red battery cable to the unused secondary terminal of the starter relay.

NOTE: The white alternator wire included with the Tecumseh engine is not used.



8. Connect the red battery cable to the POSITIVE (+) terminal of the battery.
9. Attach one end of the black battery cable to the spreader engine mounting flange using the existing 5/16" cap screw, nut, lock washer and supplied 5/16" flat washer.
10. Connect the unused end of the black battery cable to the NEGATIVE (–) terminal of the battery.

VEHICLE BATTERY KIT INSTALLATION INSTRUCTIONS

VEHICLE BATTERY KIT INSTALLATION

Battery Safety

⚠ CAUTION

Batteries normally produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

- Batteries contain sulfuric acid, which burns skin, eyes and clothing.
- Disconnect the battery before removing or replacing any electrical components.

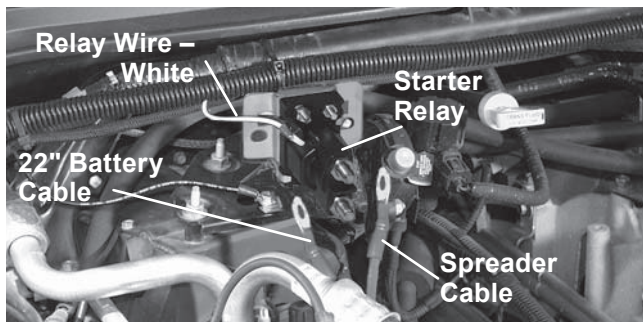
NOTE: Apply dielectric grease to all electrical terminals before assembly.

Battery

1. Verify that vehicle battery is in good condition.
2. Disconnect the ground cable from the battery.

Starter Relay

NOTE: Starter relay styles may vary.



1. For the starter relay, locate an area protected from road splash and within 18" of the vehicle's primary battery. The mounting surface needs to be grounded.

NOTE: If a grounded surface is not available, install a 16-gauge wire (not supplied) between a known ground and the starter relay mounting flange after starter relay installation.

2. Connect the relay ground wire to one of the small primary terminals of the relay.

⚠ CAUTION

Before drilling holes, check to be sure that no vehicle wiring or other components could be damaged.

3. Using the starter relay mounting flange as a template, drill two 9/32" holes, connect the relay ground wire, and fasten with two 1/4" x 3/4" cap screws, lock washers and nuts.

Battery Cable

1. Install the 22" red battery cable to one of the large secondary terminals of the starter relay and the POSITIVE (+) battery terminal. Use the supplied side-post battery adapter if necessary. Attach the battery adapter to the battery, and tighten the adapter to 124–178 in-lb. Attach the OEM battery cable to the adapter with the OEM fastener. Hold the battery adapter with a wrench while tightening the OEM fastener to 124–178 in-lb.

NOTE: A battery cable adapter kit is provided for side-terminal batteries.

2. Verify that the cable is protected or secured away from all sharp edges and hot or moving parts.

Relay Wire

1. Install and secure the white relay wire between the cab control and the unused primary terminal of the starter relay. See cab control diagram supplied with the control for connection of the white wire to the start switch.
2. Verify that the wire is protected or secured away from all sharp edges and hot or moving parts.

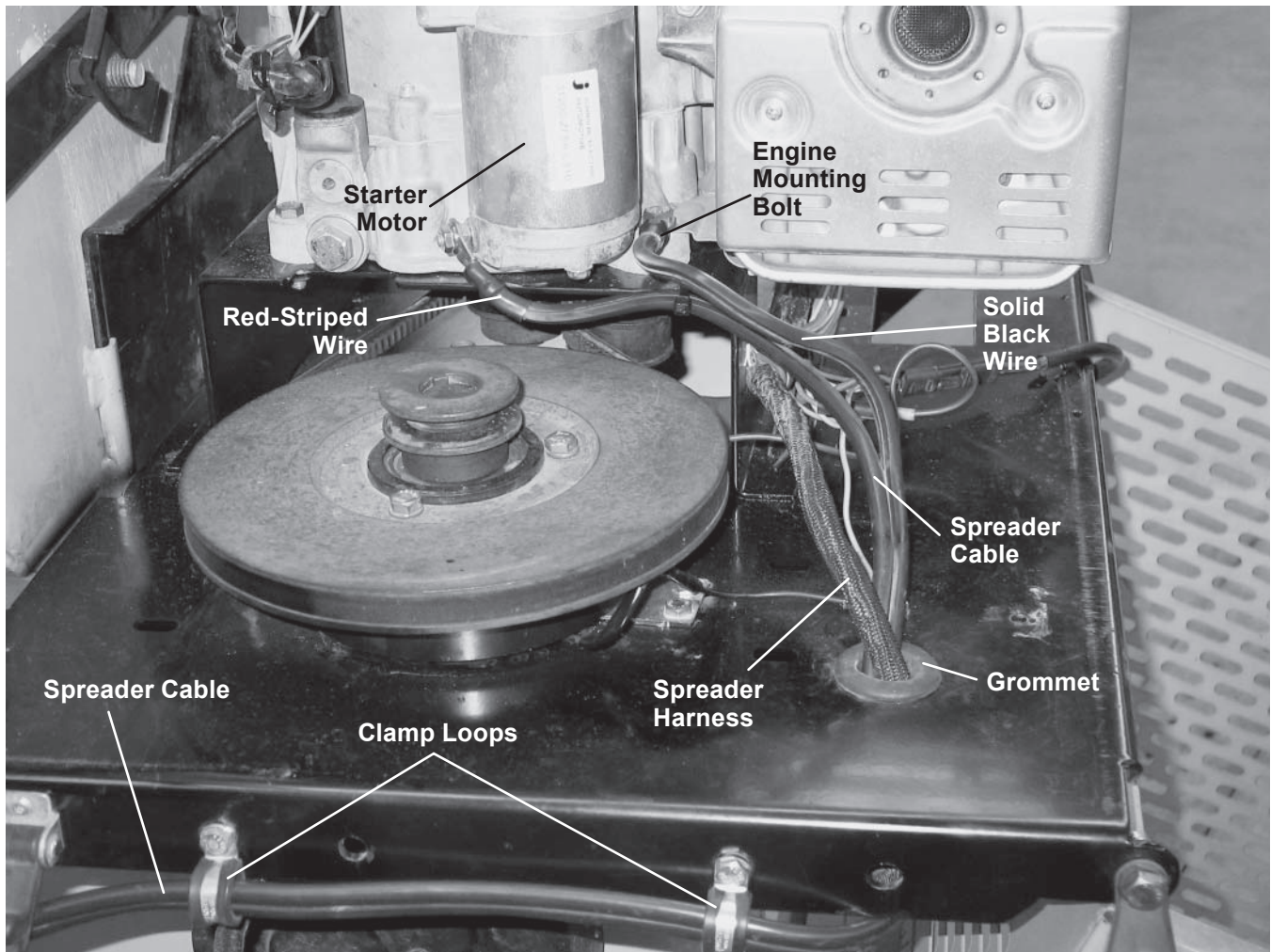
VEHICLE BATTERY KIT INSTALLATION INSTRUCTIONS

Spreader Cable

1. At the rear of the spreader, feed the spreader cable up through the 1" grommet in the engine base used by the spreader harness.
2. Attach the solid black wire of the spreader cable to the engine flange using the existing 5/16" cap screw, nut, lock washer and supplied 5/16" flat washer.

3. Connect the red-striped wire of the spreader cable to the starter motor terminal.
4. Route the spreader cable along the base and secure with #10 clamp loops.

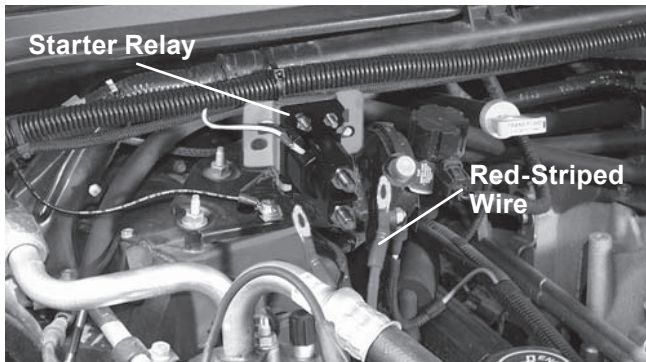
NOTE: Use the fasteners that secure the spreader harness for securing the spreader cable.



VEHICLE BATTERY KIT INSTALLATION INSTRUCTIONS

Vehicle Cable

1. Beginning at the rear bumper, route the vehicle cable along the frame, into the vehicle engine compartment, and over to the starter relay.
2. Secure the vehicle cable to the vehicle, avoiding sharp edges and hot or moving parts.
3. Verify that the vehicle cable cannot drop onto the road when it is disconnected from the spreader.
4. Connect the solid black wire of the vehicle cable to the NEGATIVE (–) battery terminal. Use the supplied side-post battery adapter if necessary. Attach the battery adapter to the battery, and tighten the adapter to 124–178 in-lb.
5. Connect the red-striped wire to the unused secondary terminal of the starter relay.
6. Reconnect the ground cable to the battery or battery adapter using the OEM fastener. If using an adapter, hold the battery adapter with a wrench while tightening the OEM fastener to 124–178 in-lb.
7. Connect the spreader cable to the vehicle cable.



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