



CHEVY/GMC 2500/3500 1999 AND LATER 4X4 INSTALLATION INSTRUCTIONS

Model No. 3525

Mount Assembly Box No. 63360-1

Hydraulics Box No. 56365

**2003 & Later: Harness Kit No. 64077 (HB-3 & HB-4 QUAD Lights)
Headlamp Kit 12-Pin (White) No. 64078**

**1999-2002: Harness Kit No. 63392 (HB-3 & HB-4 QUAD Lights)
Headlamp Kit 9-Pin No. 61540-1**

⚠ CAUTION

See your WESTERN® outlet for application recommendations. The Selection List has specific vehicle and snowplow requirements.

SAFETY

SAFETY DEFINITIONS

⚠ WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

⚠ CAUTION

Indicates a situation that, if not avoided, could result in damage to product or property.

NOTE: Identifies tips, helpful hints and maintenance information the owner/operator should know.

WARNING/CAUTION AND INSTRUCTION LABELS

Become familiar with and inform users about the warning and instruction labels on the back of the blade.

Warning and Caution Label

⚠ WARNING

LOWER BLADE WHEN VEHICLE IS PARKED.

REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.

DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE AND BALLAST.

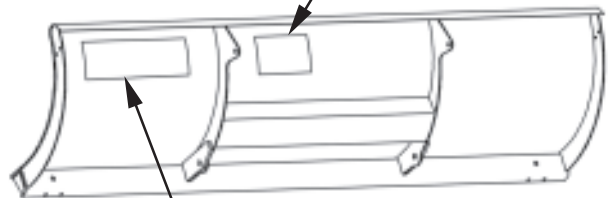
⚠ CAUTION

READ OWNER'S MANUAL BEFORE OPERATING OR SERVICING SNOWPLOW.

TRANSPORT SPEED SHOULD NOT EXCEED 45 MPH. REDUCE SPEED UNDER ADVERSE TRAVEL CONDITIONS.

PLOWING SPEED SHOULD NOT EXCEED 10 MPH.

SEE YOUR SALES OUTLET FOR APPLICATION RECOMMENDATIONS.



Instruction Label

⚠ WARNING: TO AVOID PERSONAL INJURY, FOLLOW STEPS IN SEQUENCE.

INSTRUCTIONS

REMOVING PLOW

<p>STEP 1</p> <ul style="list-style-type: none"> ✓ Adjust blade to straight position. ✓ Place cab control in LOWER. ✓ Push lift channel down. ✓ Disconnect electrical plugs. ✓ Pull stand pin and lock pin to release stand from A-frame. 	<p>STEP 2</p> <ul style="list-style-type: none"> • Place stand shoe on ground. If necessary, raise stand slightly to align hole in stand with hole in lift frame. Insert stand pin to attach stand to lift frame. 	<p>STEP 3</p> <ul style="list-style-type: none"> • Remove hairpin from lift frame stud. • Push lift frame toward vehicle to relieve tension on link arm, now slide link arm off stud. • Repeat above steps on other side. 	<p>STEP 4</p> <ul style="list-style-type: none"> • Pull 2 hitch pins to release A-frame from vehicle. (Move lift frame to relieve hitch pin tension) • Rotate lift frame toward blade. • Use lock pin to lock stand to A-frame. • Move plow away from vehicle. • Install electrical covers.
<p>STEP 4</p> <ul style="list-style-type: none"> • Rotate stand to storage position. • Use stand pin and lock pin to attach stand to A-frame. • Connect electrical plugs. 	<p>STEP 3</p> <ul style="list-style-type: none"> • Pull stand pin to release stand from lift frame. 	<p>STEP 2</p> <ul style="list-style-type: none"> • Rotate lift frame toward vehicle and swing link arm up to position link arm hole over lift frame stud. Now slide link arm onto stud. • Install hairpin onto stud. • Repeat above steps on other side. 	<p>STEP 1</p> <ul style="list-style-type: none"> • Remove electrical covers. • Position plow close to vehicle. • Pull lock pin to unlock stand from A-frame. • Rotate lift frame toward vehicle to align hitch pin holes. • Attach A-frame to vehicle using 2 hitch pins.

Patents:
US 4,999,935; 5,420,480;
5,008,215; 5,009,214;
6,283,470; RE 35,700;
CAN 2,069,335

MOUNTING PLOW

61740

SAFETY

SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury, and/or equipment and property damage. Read and understand labels and the *Owner's Manual* before installing, operating, or making adjustments.

WARNING

Lower blade when vehicle is parked. Temperature changes could change hydraulic pressure, causing the blade to drop unexpectedly or damaging hydraulic components. Failure to do this can result in serious personal injury.

WARNING

Remove blade assembly before placing vehicle on hoist.

WARNING

The driver shall keep bystanders clear of the blade when it is being raised, lowered or angled. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

WARNING

Do not exceed GVWR or GAWR including blade and ballast. The rating label is found on driver-side vehicle door cornerpost.

CAUTION

Refer to the current selection list for minimum vehicle recommendations and ballast requirements.

CAUTION

To prevent accidental movement of the blade, always turn the ON/OFF switch to OFF whenever the snowplow is not in use. The control indicator light will turn off.

PERSONAL SAFETY

- Wear only snug-fitting clothing while working on your vehicle or snowplow.
- Do not wear jewelry or a necktie, and secure long hair.
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

FIRE AND EXPLOSION

WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately.

Be careful when using gasoline. Do not use gasoline to clean parts. Store only in approved containers away from sources of heat or flame.

VENTILATION

WARNING

Vehicle exhaust contains deadly carbon monoxide (CO) gas. Breathing this gas, even in low concentrations, could cause death. Never operate a vehicle in an enclosed area without venting exhaust to the outside.

SAFETY

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.

HYDRAULIC SAFETY

⚠ WARNING




Hydraulic oil under pressure could cause skin injection injury. If you are injured by hydraulic oil, get medical attention immediately.

- Always inspect hydraulic components and hoses before using. Replace any damaged or worn parts immediately.
- If you suspect a hose leak, DO NOT use your hand to locate it. Use a piece of cardboard or wood.

TORQUE CHART

⚠ CAUTION

Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow including proper safety equipment.

Recommended Fastener Torque Chart (Ft.-Lb.)			
Size	 SAE Grade 2	 SAE Grade 5	 SAE Grade 8
1/4-20	6	9	13
5/16-18	11	18	28
3/8-16	19	31	46
3/8-24	24	46	68
7/16-14	30	50	75
1/2-13	45	75	115
9/16-12	66	110	165
5/8-11	93	150	225
3/4-10	150	250	370
7/8-9	202	378	591
1-8	300	583	893
Metric Grade 8.8 (Ft.-Lb.)			
Size	Torque	Size	Torque
M 6	7	M 12	60
M 8	17	M 14	95
M 10	35	M 16	155
These torque values apply to fasteners except those noted in the instruction.			

MOUNT INSTALLATION

REMOVE AIR DAM SECTION

Use a fine tooth saw blade to cut away a portion of the bumper lower air deflector as shown. **(See Photo 1.)**

Trim edges and remove excess material with a coarse file.

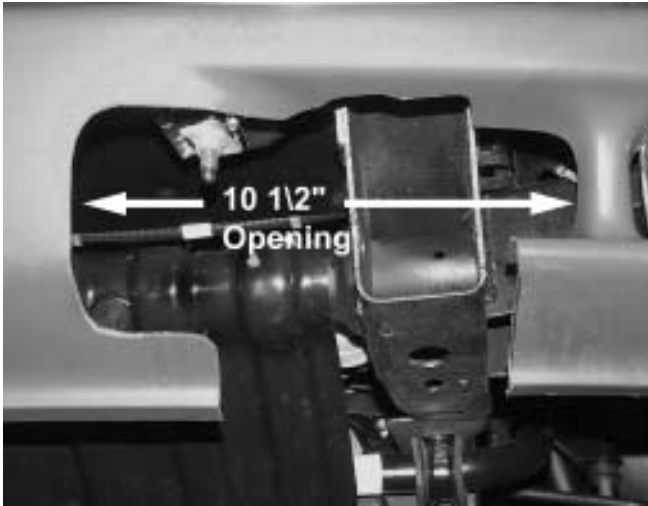


Photo 1

REMOVE TOW HOOKS

1. Remove side and bottom bolts holding tow hook.
2. Remove tow hooks from frame and retain for use if plow mount is removed.

MOUNT FRAME

1. Place spacer (U-shaped part) inside frame and align with tow hook holes. If holes do not line up, use a 1/2" drill to enlarge holes.
2. Place mount frame against end of frame and align with tow hook holes. **(See Photo 2.)**

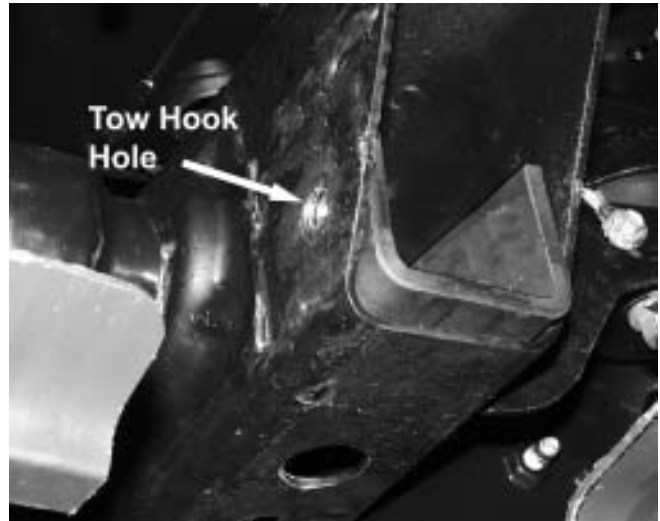


Photo 2

3. Attach mount frame to vehicle frame through side holes and frame brace with 1/2" x 1-3/4" and 1/2" x 1-1/2" bolts and locknuts as indicated. Repeat for other side. **(See Photo 3.)**

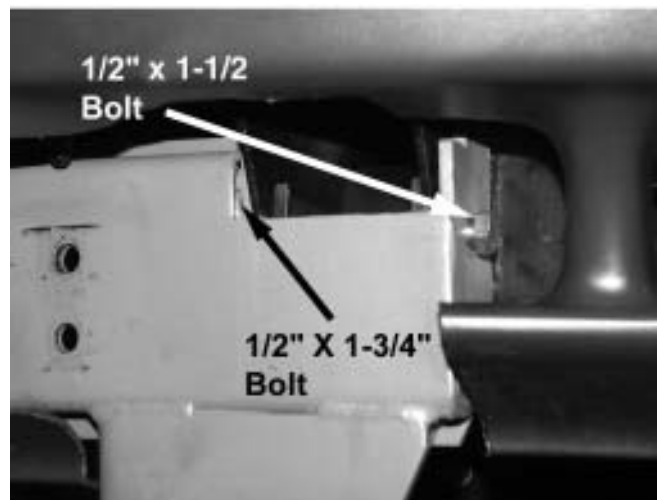


Photo 3

MOUNT INSTALLATION

THRUST ARMS

1. Remove five bolts holding lower splash guard. Save for reassembly.
2. Assemble thrust arms to bottom of mount frame with coupling lug bracket to outside using 1/2" x 1-3/4" bolts and locknuts. (See Photo 4.)



Photo 4

4. Align rear of thrust arm with 3/4" diameter hole in bottom of vehicle front cross member. Attach rear of thrust arm to cross member with 3/4" x 1-1/2" bolt and locknut. (Assemble bolts over the top of the lower control arm bushing with threads to the outside of the cross member.) (See Photo 6.)

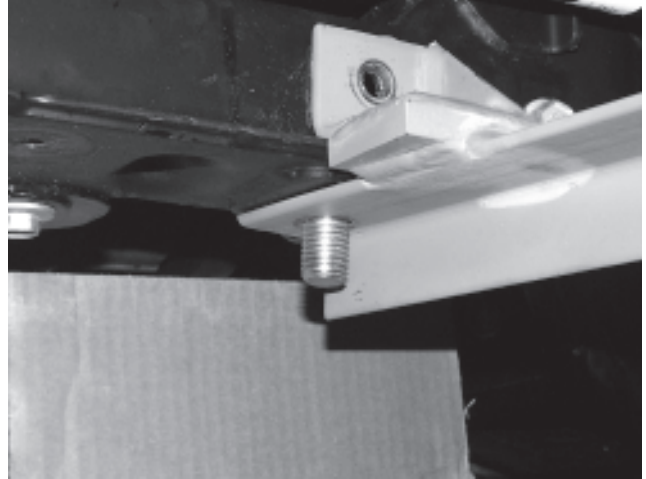


Photo 6

3. Place 1.254 OD x .766 ID x .156 washer in 1-3/8" hole in reinforcement plate of vehicle front cross member. Slide thrust arm over washer. (See Photo 5.)

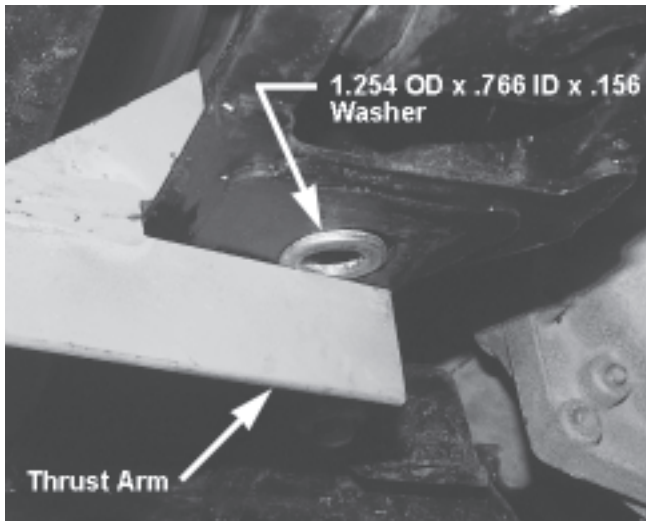


Photo 5

5. TIGHTEN ALL HARDWARE.
6. Drill a 1/2" diameter hole in each side of the cross member using the hole in the thrust arm rear bracket as a guide. (See Photo 7.)

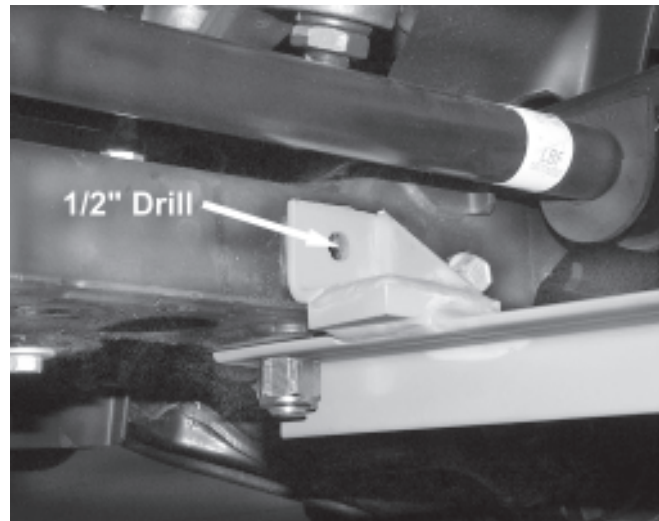


Photo 7

7. Attach thrust arm rear bracket to cross member with 1/2" x 1-1/4" flange bolt and locknut. (Assemble flange bolt over the top of the lower control arm bushing with thread to the outside.) Tighten the hardware.

MOUNT INSTALLATION

LINK ARM LUGS

Assemble the upper link arm lugs to mount frame with 1/2" x 1-1/2" bolts and locknuts. (See **Photo 8.**) Coupling lugs and link arms should be assembled to give 9-1/2" to 10-1/2" ground clearance at hitch pin with plow down and on level ground. Turning lugs upside down changes height by 1". (See COUPLING LUG HEIGHT CHECK on page 16 for diagram.)

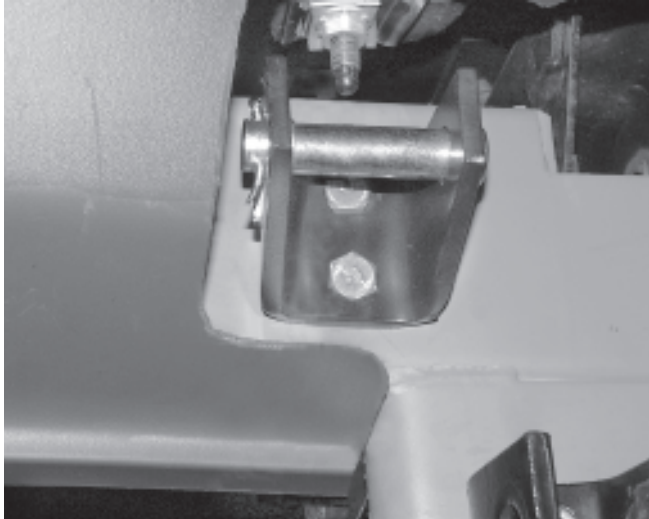


Photo 8

AIR DEFLECTOR ATTACHMENT

Drill 1/4" holes in bottom of air deflector near 1/4" holes in mount. Use nylon tie straps provided to attach deflector to mount. Reattach splash guard removed earlier. (See **Photo 9.**)

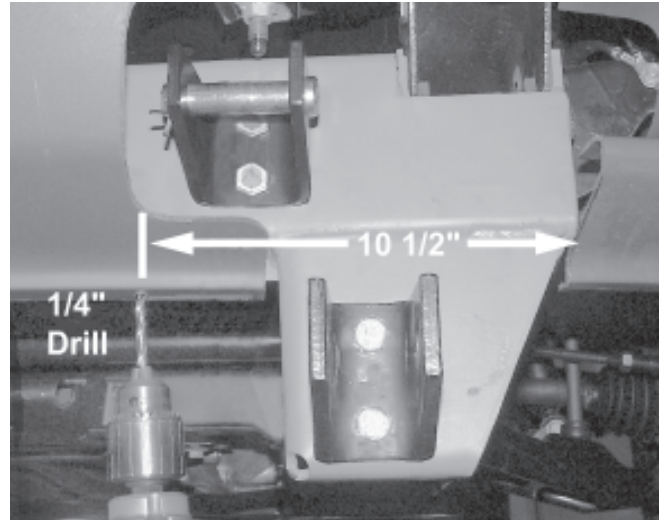


Photo 9

LINK ARM WITH RETURN SPRING ASSEMBLY INSTRUCTIONS

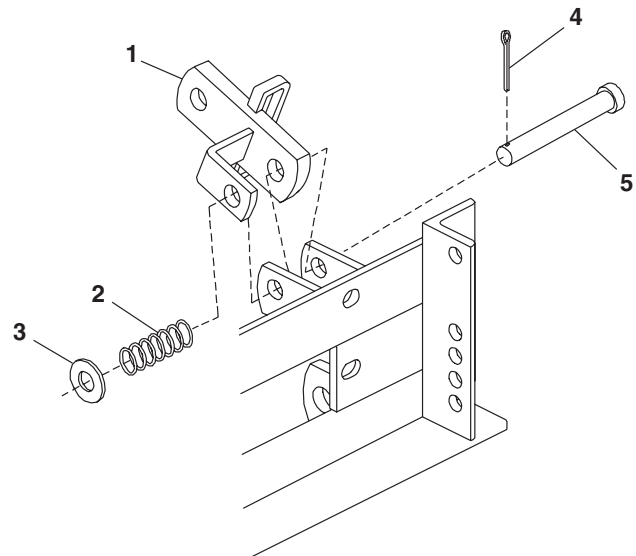
Assemble link arm assembly to mount with one 6" clevis pin, 3" spring, washer, and cotter pin. The spring should push the link arm assembly to the outside of the mount.

Passenger side shown, driver side opposite.

63940 - LINK ARM SERVICE KIT			
ITEM	PART	QTY	DESCRIPTION
1	63497	1	LINK ARM (Replaces 61412)
2	63356	1	SPRING 3/4 ID x 3.00 LG
3	91147	1	3/4 FLAT WASHER
4	91911	1	5/32 x 1-1/2 COTTER PIN ZYC
5	63354	1	CLEVIS PIN 3/4 x 6.00 HT ZYC

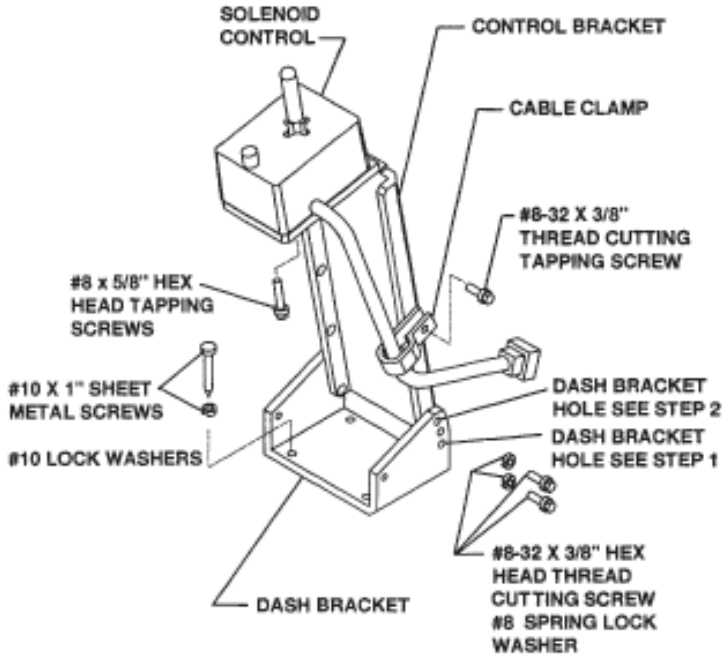
Abbreviations	
HT	Heat Treated
ID	Inside Diameter
LG	Long
ZYC	Zinc Yellow Chromate

NOTE: After five to ten hours of snowplow usage, retorque all mount assembly fasteners.



SOLENOID CONTROL INSTALLATION

SOLENOID CONTROL - FLOOR MOUNT



1. Align dash bracket hole shown in diagram to end hole of control bracket.

NOTE: Control bracket may be reversed in dash bracket from position shown in diagram. Attach with one #8 x 5/8" hex head thread cutting screw and lock washer on each side

2. Use top holes in dash bracket (see diagram) as a template to drill a 9/64" hole in each side of control bracket. Secure dash bracket to control bracket with a second screw and lock washer on each side.
3. Secure solenoid control to control bracket with two #8 x 5/8" hex head tapping screws.
4. Move seat forward. Locate control and bracket assembly on floor tunnel so that it does not interfere with the operation of vehicle controls. Mark this location.
5. Remove control bracket from dash bracket.
6. Place dash bracket in marked location. Use dash bracket as a template to drill four 1/8" holes in tunnel.

⚠ CAUTION

Before drilling any holes, check both sides of the material for any wires, fuel lines, fuel tanks, etc. that may be damaged by drilling.

7. Secure dash bracket to tunnel with four #10 x 1" sheet metal screws and lock washers.
8. Reassemble control bracket to dash bracket. Bend top flange of control bracket to desired position.
9. Secure harness to control bracket with cable clamp and one #8 x 3/8" hex head thread cutting screw.

HARNESS KIT SELECTION

NOTE: Plow may be removed from vehicle for installation of electrical components.

NOTE: During electrical installation, the LONG BATTERY GROUND CABLE (no stripe) MUST BE GROUNDED TO THE NEGATIVE (-) BATTERY TERMINAL.

Straight Blade

For QUAD composite replaceable bulb type HB-3 and HB-4 headlamps use:

2003 and Later - Box No. 64078 Headlamp Kit 12-Pin (White) and 64077 Harness Kit HB-3 and HB-4 -H

1999 to 2002 - Box No. 61540-1 Headlamp Kit 9-Pin and 63392 Harness Kit HB-3 and HB-4 -F

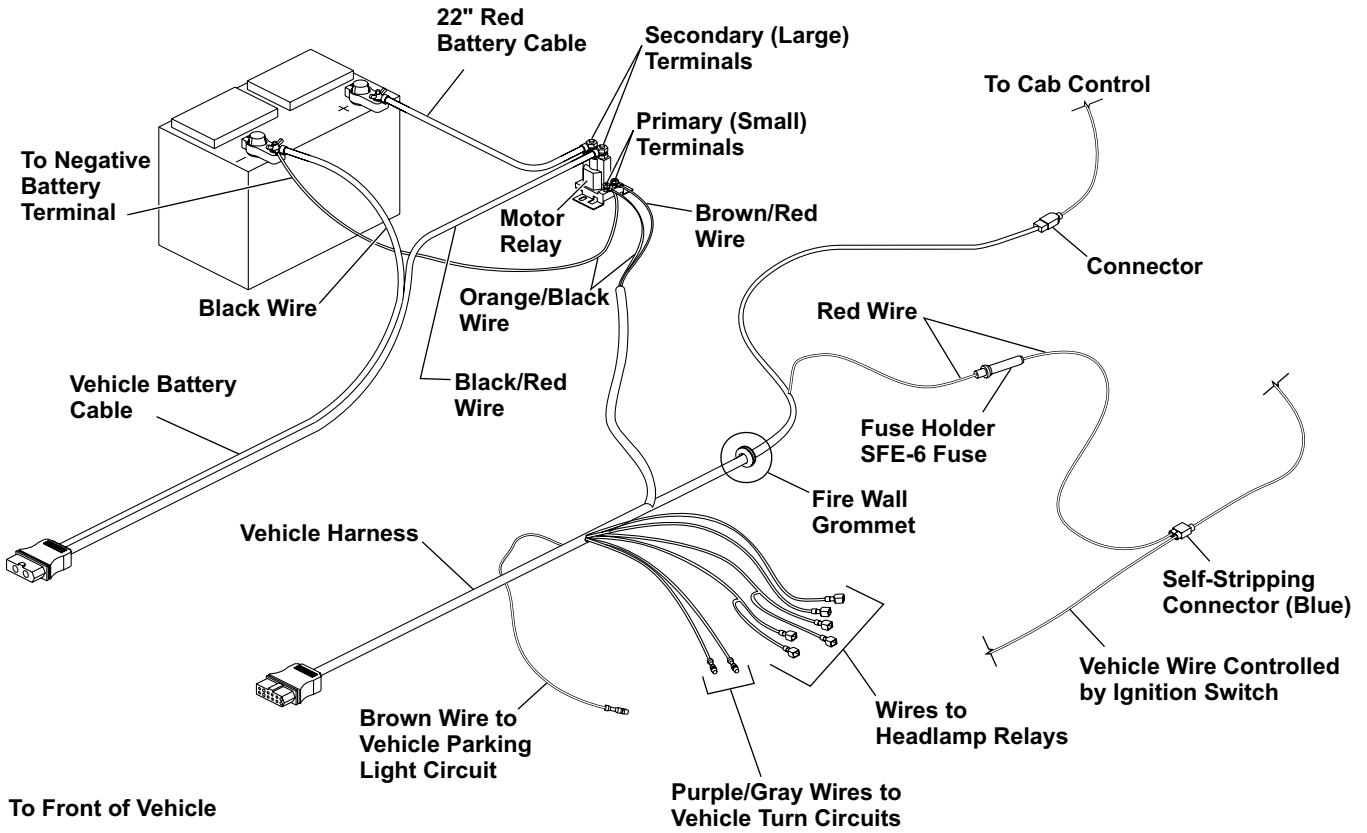
UNDER HOOD INSTALLATION

VEHICLE HARNESS AND MOTOR RELAY

Except as noted, parts to be installed are found in hydraulics box.

NOTE: Use dielectric grease to prevent corrosion on all under hood electrical connections. Fill receptacles and lightly coat ring terminals and blades before assembly.

HARNESS, SOLENOID CONTROL & MOTOR RELAY INSTALLATION DIAGRAM

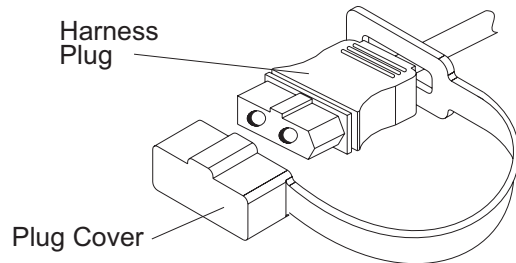


(Continued on next page)

UNDER HOOD INSTALLATION

VEHICLE HARNESS AND MOTOR RELAY (Continued)

1. Identify wires for the parking lamp on the driver side and the turn signals on both sides of the vehicle. Attach a black self-stripping bullet receptacle connector (found in harness kit) to each of these three wires.
2. Remove NEGATIVE (-) battery cable from battery.
3. Find a location for the motor relay where it will be protected from road splash and within 18" of the vehicle primary battery.
7. Stretch rectangular openings of plug cover straps (found in harness kit) over harness connector ends of long battery cable assembly (found in hydraulics box) and vehicle harness (found in harness kit). Place plug covers over harness ends.



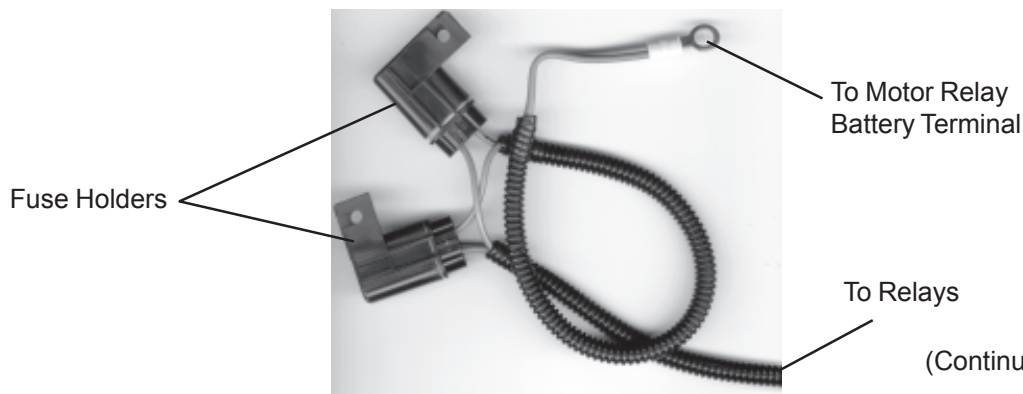
NOTE: Motor relay terminals must be up or horizontal.

4. Using the motor relay terminal as a template, drill two 9/32" holes, and mount motor relay to holes using 1/4" x 3/4" bolts, flat washers and lock nuts.

(For steps below refer to photo below and diagram on previous page.)

5. Route 22" battery cable between a large motor relay terminal and the POSITIVE (+) battery terminal taking care to avoid sharp edges and hot or moving parts. Place fuse holder eyelet on large relay terminal before 22" battery cable.
6. Attach cable and fuse holder wire to motor relay terminal with a lock washer and a 5/16"-24 jam nut. Attach other end of 22" battery cable to POSITIVE (+) battery terminal with furnished battery adapter. (Adapters found in mount box.) Position cable and tighten battery adapter to 124-178 in-lb. Attach OEM battery cable to adapter with original bolt. Position cable and hold adapter while tightening original battery bolt to 124-178 in-lb.
8. Find a location in the vehicle grille/bumper area on the battery side for mounting the battery cable connector. The best location is at least 10-1/2" from the center of the grille and at a convenient height for connecting the plug plugs.
9. Allow connector of each harness to hang out in front of grille or bumper openings. Allow enough cable so it is easy to mate and remove connector. Secure with long cable ties (found in mount box).
10. Route battery cable through the grille or bumper at the selected location and through or around the radiator bulkhead to motor relay taking care to avoid sharp edges, and hot or moving parts.
11. Attach cable with red stripe to the unused large terminal on the motor relay, and secure it with a lock washer and 5/16"-24 jam nut.

Fuse Holder Assembly



(Continued on next page)

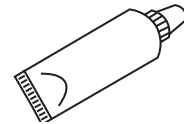
UNDER HOOD INSTALLATION

VEHICLE HARNESS AND MOTOR RELAY (Continued)

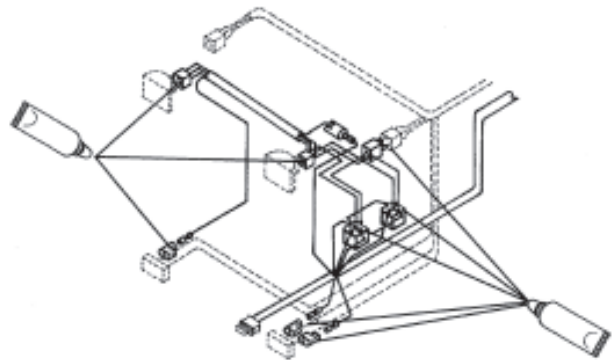
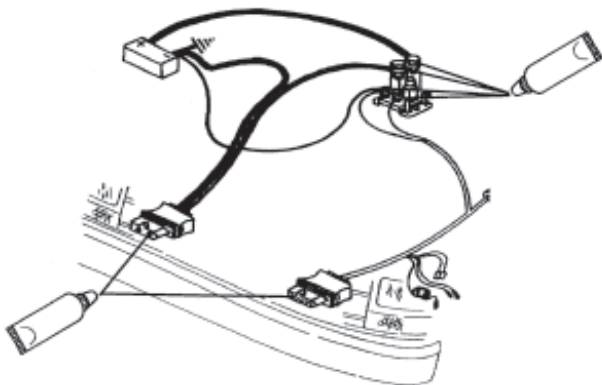
12. Route cable without a stripe directly to the NEGATIVE (-) battery terminal (carefully separate the two cables as needed to reach the battery ground connection). **DO NOT reconnect the battery ground at this time.**
13. Find a grille/bumper area location on driver side for the vehicle harness (similar position to battery cable mount). See Steps 8 and 9 for how to install. Route vehicle harness through grille or bumper and around, or through radiator bulkhead (drill 5/8" hole if needed) into engine compartment.
14. Route the wires that break out of the vehicle harness to the area behind the driver-side headlamp. Route rest of harness to the fire wall. Drill a 5/8" hole through the fire wall in a convenient location away from hot or moving engine parts.
15. Route brown/red and orange/black wire loom to motor relay.
16. Attach the brown/red and orange/black wires small ring terminals to separate small terminals on motor relay using a lock washer and #10-32 nut for each connection.
17. Route the 24" long orange/black wire with 3/8" ring terminal to battery NEGATIVE (-) terminal. **DO NOT attach wire to battery at this time.**
18. At the hole through the fire wall, feed vehicle harness fuse holder through hole and then feed the plastic connector and harness through to the cab.

Disassembly of the fuse holder may make it easier to pass through 5/8" hole.
19. Inside the cab, route vehicle harness connector to solenoid or CabCommand control and couple the connectors together.
20. Attach the black hydraulic unit battery cable and the orange/black wire ring terminal to the NEGATIVE (-) battery terminal with the second battery cable adapter. Position cable and wire, and tighten battery adapter to 124–178 in-lb. Attach OEM battery cable to adapter, position cable, and hold adapter while tightening original battery bolt to 124–178 in-lb.
21. **2003 and Later** - The mid Bussed Electrical Center (BEC) is located to the left of the brake pedal. The upper left corner has two pins controlled by the ignition switch. One is fused for 10 Amps in run/start, the other is fused for 10 Amps in accessory/run.
1999 to 2002 - Locate an accessory wire capable of carrying 6 Amps in addition to existing circuit loads and controlled by the ignition (key) switch. Route the vehicle harness SFE-6 fuse holder red wire to this location and trim off any excess length of wire (keep fuse holder in system).
22. **2003 and Later** - Attach a receptacle to the red wire that will fit the blade in the BEC and plug in the connection.
1999 to 2002 - Open blue self-stripping connector and place the end of the red wire against the inner groove stop (end of wire must not extend from the closed connector), and the accessory wire in the outer groove. Close connector over the wires using a pair of pliers and snap the locking tab in place.

DIELECTRIC GREASE (1/4 oz)
Part Number 56099



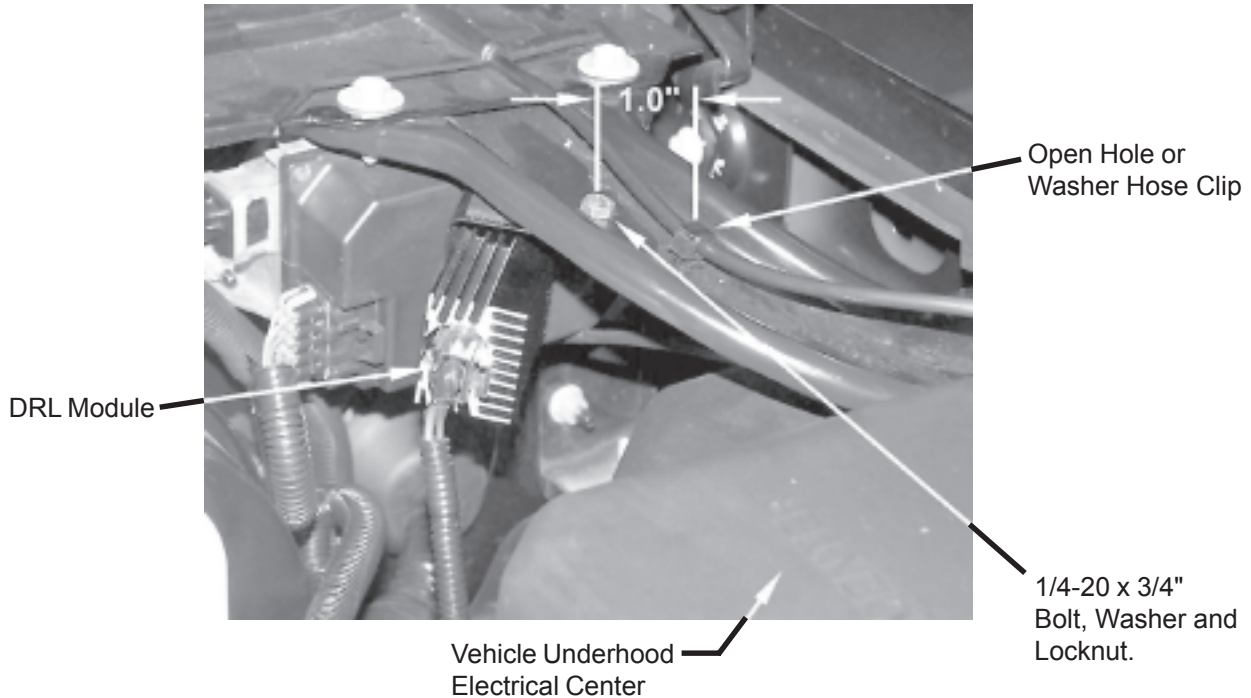
A larger tube (2 oz) of dielectric grease is available.
Part Number for larger tube is 49326.



UNDER HOOD INSTALLATION

PLUG-IN HARNESS AND HEADLAMP RELAY INSTALLATION

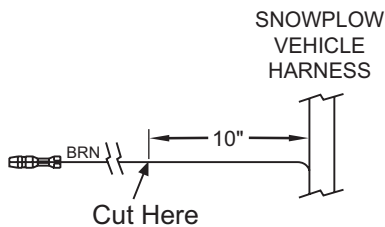
Driver Side of Vehicle



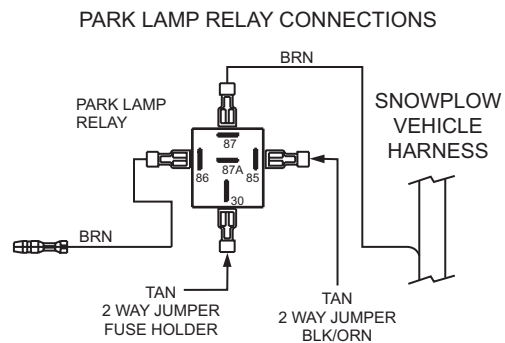
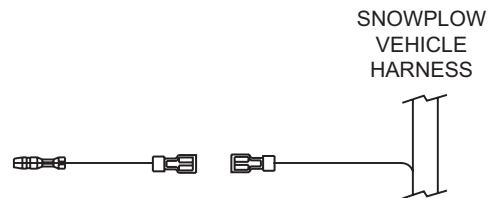
1. Use open hole in support bracket, or drill a 9/32" clearance hole, 1" from washer hose clip on the center line of the support bracket. Mount DRL module as shown in illustration, using 1/4-20 x 3/4" bolt, washer and locknut. Plug in supplied cable assembly, and route to headlamp relays. Connect red and black wire to relays as shown in schematic on page 13 for 2003 and Later, page 14 for 1999 to 2002.

2. **2003 and Later** - Skip to step 4.

1999 to 2002 - Modify the Park Lamp tap wire as shown below. Cut the brown Park Lamp wire approximately 10" from branch point at vehicle harness.



3. **1999 to 2002** - Strip the cut ends approximately 1/4" and install insulated receptacles.



(Continued on next page)

UNDER HOOD INSTALLATION

PLUG-IN HARNESS AND HEADLAMP RELAY INSTALLATION (Continued)

4. In the engine compartment behind the driver-side headlamp, insert wire bullets from snowplow vehicle harness into black bullet connectors (installed in step one of previous section) as follows:
 - Brown wire to parking lamp wire on driver side.
 - Gray wire to left turn signal wire on driver side.
5. Remove headlamp housing to access headlamp connectors on quad composite type headlamps. At the vehicle driver-side headlamp, remove the connectors from the headlamps and couple matching connectors with plug-in harness two 2-wire male plugs (plug-in harness found in harness kit). Attach plug-in harness headlamp connectors to headlamp terminals.
6. Route other end of plug-in harness along radiator bulkhead or over radiator shroud to passenger-side headlamps. Remove headlamp connectors. Couple matching connectors with plug-in harness male plugs. Attach plug-in harness headlamp connectors to headlamp terminals.
7. On the passenger side, insert purple wire bullet from plug-in harness into vehicle turn signal black bullet connector installed in step 1 on page 9.
8. At the driver-side headlamp, insert the purple wire bullet from the vehicle harness into the purple wire receptacle on the plug-in harness.
9. At driver-side headlamp, connect snowplow vehicle and plug-in harness wires with receptacles to relays (found in harness kit) as shown in wiring diagrams on following pages.
10. Place grommet around snowplow vehicle harness and insert into fire wall hole. Use cable ties (found in harness kit) to secure harnesses, relays and wires away from sharp edges, and hot or moving engine parts and to prevent accidental grounding of connections.
11. Use the pink self-stripping connector (found in harness kit) to attach the 24" long red wire with diode to the dark blue wire that feeds the DRL lamp.
12. Lubricate terminal cavities of both harness connectors with dielectric grease. **Give the dielectric grease tube to vehicle owner for future use.**

**PLEASE REFER TO A,Q&L ASSEMBLY
INSTRUCTIONS FOR ADDITIONAL INFORMATION
ON OPERATIONAL TESTS AND ADJUSTMENTS.**

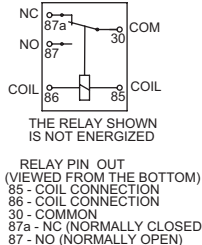
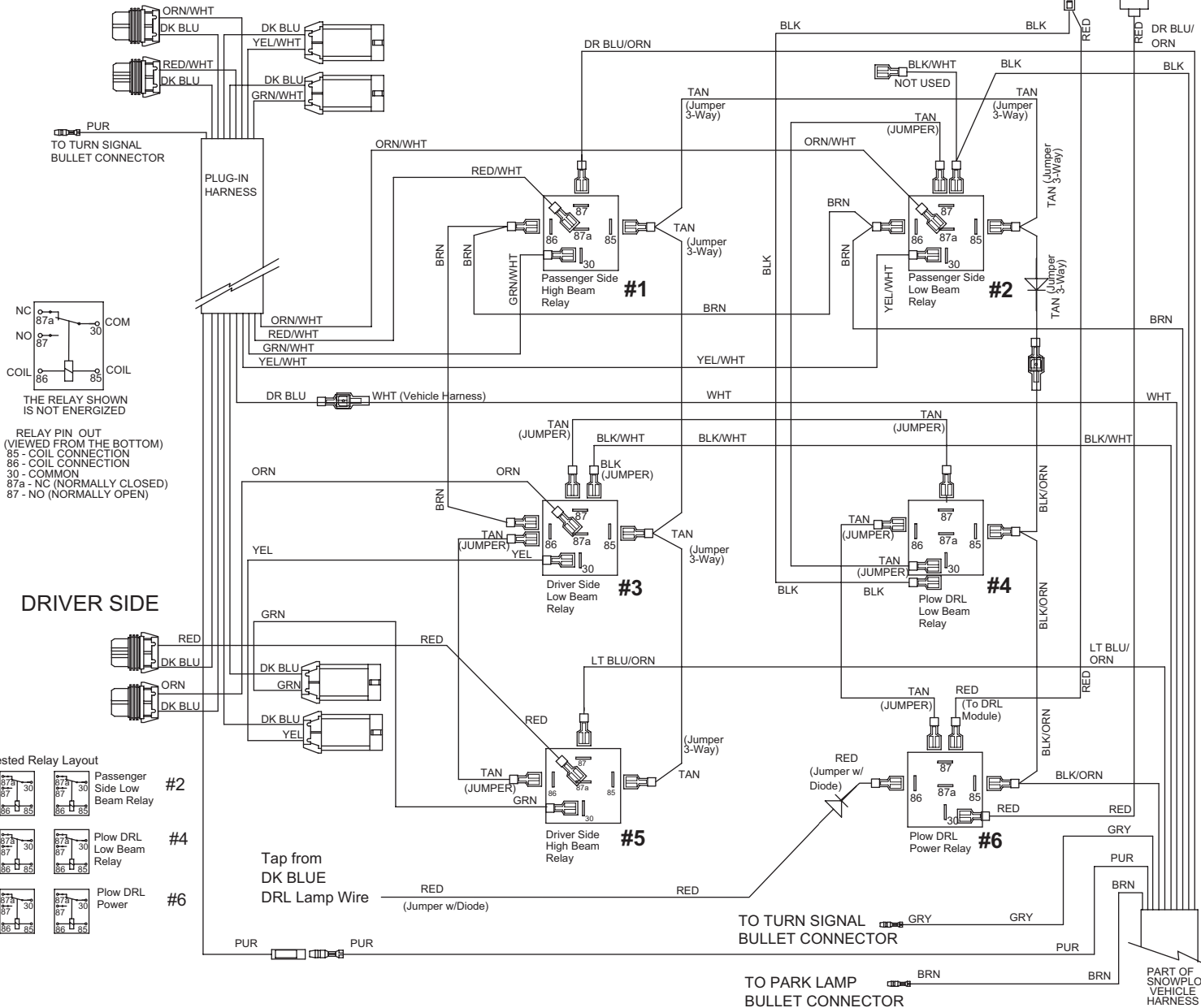
See wiring diagrams on following pages.

Harness Type - H With 12-Pin (White) Headlamp Kit & SAE Headlamp Type HB-3 and HB-4

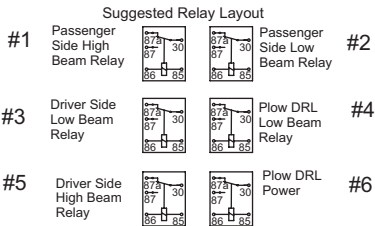
2003 GM with DRLs – 12-Pin (White) Headlamp Kit 64078



PASSENGER SIDE



DRIVER SIDE



WIRING DIAGRAM - STRAIGHT BLADE/MVP® BLADE

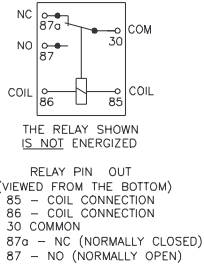
1999 – 2002 RELAY CONNECTION DIAGRAM



Harness Type - F
With 9-Pin Headlamp Kit
& SAE Headlamp Type HB-3 and HB-4

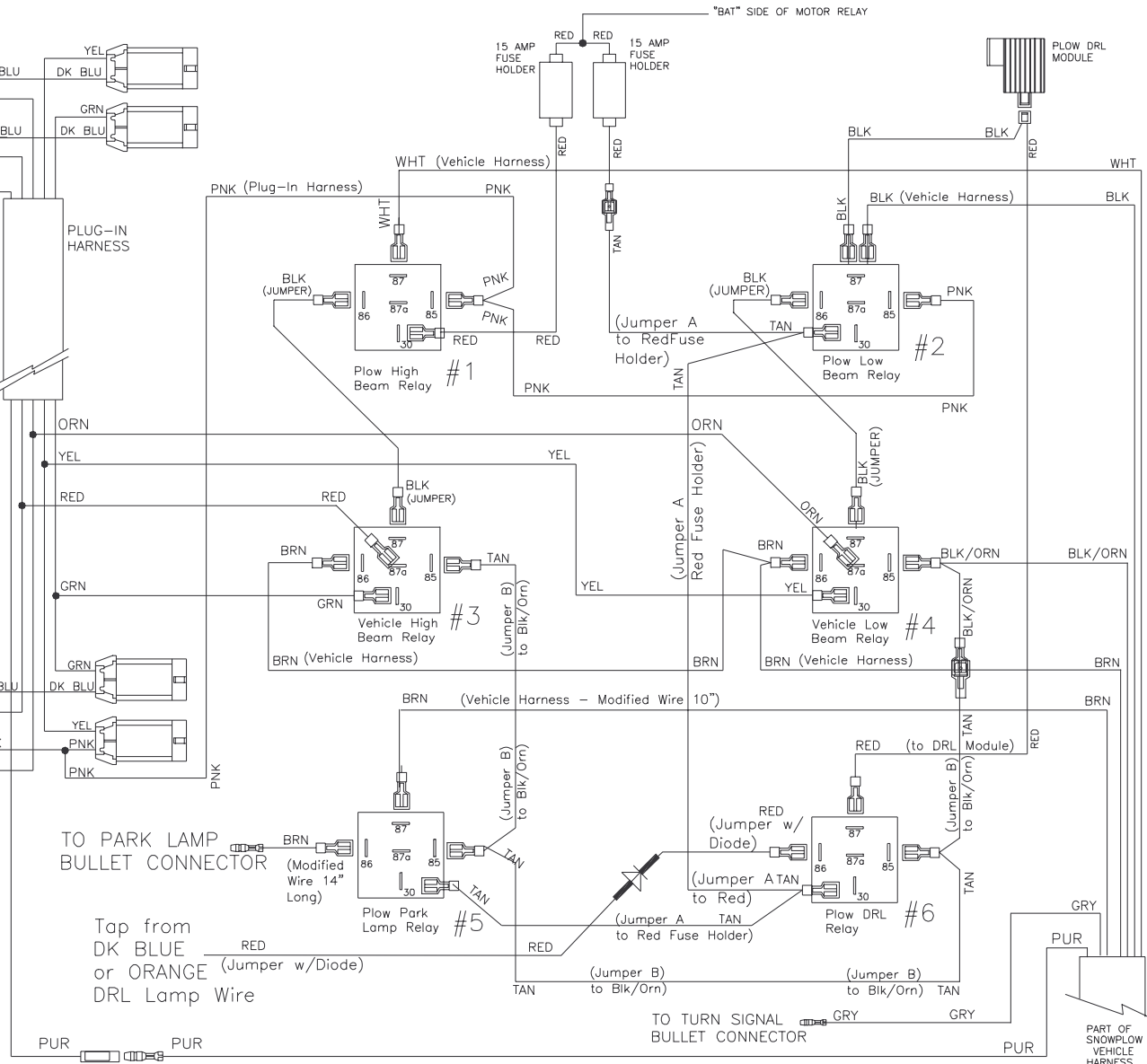
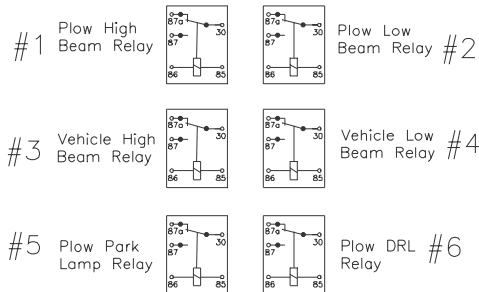
WIRING DIAGRAM

PASSENGER SIDE



DRIVER SIDE

Suggested Relay Layout



OPERATIONAL TESTS AND ADJUSTMENTS

FILLING HYDRAULIC UNIT

NOTE: Mount plow assembly to vehicle. (See label on back of blade or Owner's Manual for mounting instructions.)

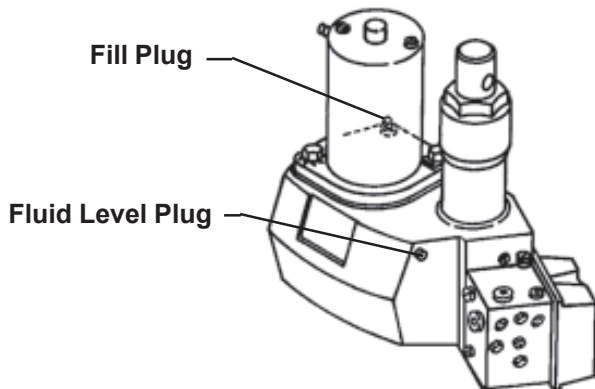
⚠ CAUTION

Remove fluid level plug slowly to allow any residual pressure in the reservoir to bleed off.

⚠ CAUTION

Do not mix different types of hydraulic fluid. Some fluids are not compatible and may cause performance problems or product damage.

1. Push lift channel all the way down.
2. Remove fluid level plug and fill plug.



3. Fill unit through fill plug hole until fluid runs out of fluid level plug hole.

USE

- Automatic transmission fluid (ATF) DEXTRON® III to -10° F (-23° C)
- WESTERN® High Performance Fluid to -25° F (-32° C)
- Texaco 1537 Aircraft Hydraulic Oil for temperatures below -25° F (-32° C)

4. Replace both plugs.

5. Turn ignition (key) switch to the ON or ACCESSORY position.
6. Turn the control ON/OFF switch to the ON position.

⚠ CAUTION

DO NOT raise blade as this may cause pump cavitation.

7. Move control lever to angle left and angle right several times to remove air from hydraulic rams.
8. Refill unit with fluid following the procedure in steps 1 - 4 of this section.
9. Move the control lever as indicated on label to control the plow. Raise and lower plow several times to remove air. Place control lever in float position. Push lift channel all the way down. Recheck fluid level according to steps 1 - 4 of this section.

FLUID CAPACITY

Solenoid ISARMATIC® Mark IIIa reservoir 1-3/4 quarts

Equipped with 10" hydraulic rams 2-3/8 quarts

⚠ WARNING

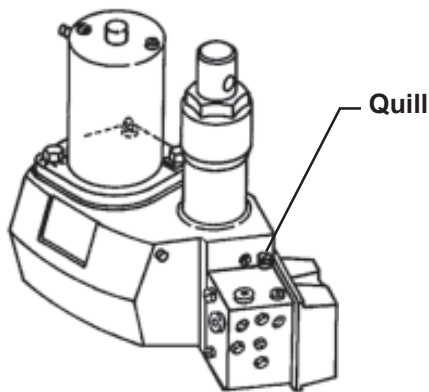
To prevent accidental movement of plow, always turn the solenoid control to the OFF position when not using the mounted plow.

OPERATIONAL TESTS AND ADJUSTMENTS

BLADE DROP SPEED ADJUSTMENT

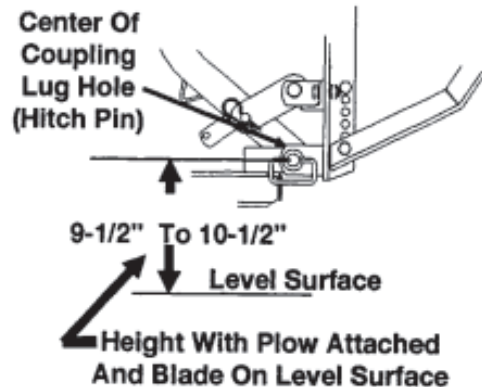
NOTE: The quill on the top rear of the valve manifold (see diagram) adjusts blade drop speed. Turning quill too far in can slow raise time and cause battery drain.

- Turn quill IN (clockwise) to decrease drop speed.
- Turn quill OUT (counterclockwise) to increase drop speed.



COUPLING LUG HEIGHT CHECK

1. Mount plow to vehicle. (See label on back of blade or Owners Manual for mounting instructions.) Add recommended ballast as found in selection list.
2. With the blade on a level surface, slack in lift chain and rear ballast located behind rear wheels, the center of the coupling holes (hitch pin) to level surface should measure 9-1/2" to 10-1/2". To obtain height, adjust spreader position.



FINAL INSPECTION

1. Make sure all fasteners and hydraulic and electrical connections are tight.
2. Check ram packing nuts for oil leakage. If excessive leakage is observed, tighten the packing nut 1/4 turn after you feel the nut contact the packing.

NOTE: Do not over tighten packing nuts. Over tightening affects cylinder operation and shortens the life of the packing. A short period of normal operation will allow chevron packings to become saturated, and leakage will normally stop. A small amount of leakage is necessary to properly lubricate the cylinder rod.

NOTE: Coupling height must be 9-1/2" minimum to allow stand to be pinned to frame.

3. Adjust chain slack with plow mounted to vehicle and lift channel pushed all the way down. To adjust, remove chain from hook, straighten chain and pull tight. Rehook it to the lift channel. After chain is hooked, it will have the correct amount of slack for blade "float". DO NOT remove chain from lift channel when removing plow from vehicle.

OPERATIONAL TESTS AND ADJUSTMENTS

VEHICLE LIGHTING CHECK

1. Check the operation of vehicle and snowplow lights with snowplow mounted to vehicle and all harnesses connected.

Turn signals and parking lamps

Parking lamps ON

- Both vehicle and snowplow parking lamps should be on at the same time.

Right turn signal ON

- Both vehicle and snowplow right turn signal lamps should flash at the same time.

Left turn signal ON

- Both vehicle and snowplow left turn signal lamps should flash at the same time.

Headlamps

Move vehicle headlamp switch to the ON position. Connecting and disconnecting the 9-pin snowplow plug from the vehicle harness connector should switch between vehicle and plow headlamps as follows:

9-pin or 12-pin snowplow plug DISCONNECTED

- Vehicle headlamps should be on.
- Snowplow headlamps should be off.

9-pin or 12-pin snowplow plug CONNECTED

- Snowplow headlamps should be on.
- Vehicle headlamps should be off.

Dimmer switch should dim whichever headlamps are operating. The high beam indicator on the dash should light when either set of headlamps is on high beam.

Solenoid Control or CabCommand Control

- The control indicator light should light whenever the control ON/OFF switch and the ignition (key) switches are both turned ON. The snowplow plugs do not need to be connected to the vehicle harness connectors.
2. Connect snowplow plug to vehicle harness connector. Raise snowplow and aim snowplow headlamps according to SAE J599 Lighting Inspection Code (**See Service Bulletin SP 608**) and any state or local regulations.
 3. Check aim of vehicle headlamps with snowplow removed.
 4. When plow is removed from the vehicle, install plug covers on vehicle harness connectors and insert the snowplow plugs into the boot on the hydraulic unit.

NOTE: After using the snowplow for 5–10 hours, retorque all mount assembly fasteners.

12-PIN HEADLAMP KITS

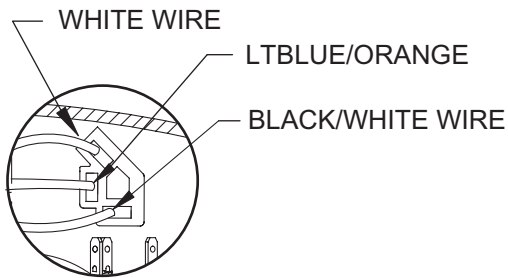
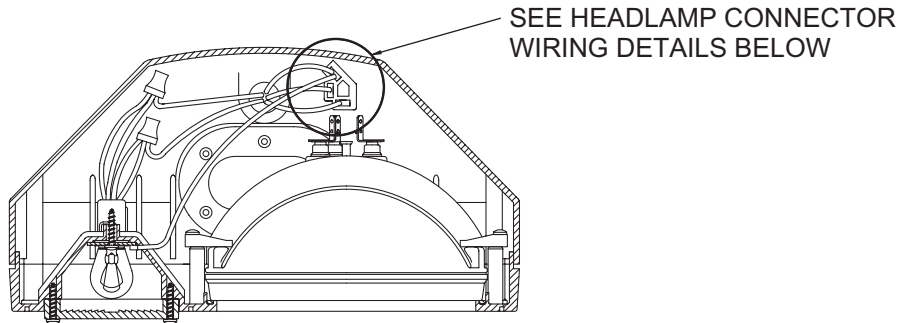
61550-1 HEADLAMP KIT 12-PIN 64078 HEADLAMP KIT 12-PIN (WHITE)

The 64078 Headlamp Kit 12-Pin (White) is being introduced for use on 2003 GM Pickups and 2003 Dodge Ram Trucks.

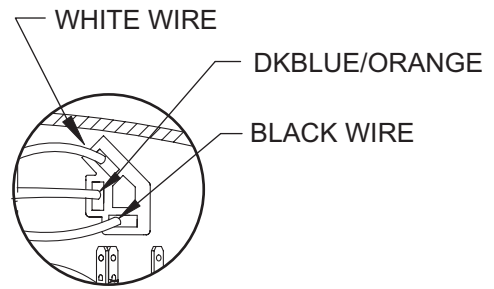
Both these kits have the same housings and wiring harness. The insertion of the WHITE and LIGHT BLUE/ORANGE or DARK BLUE/ORANGE wires into the seal beam connector is the difference between these two assemblies.

When wired for the 64078 kit at the factory, a white strain relief is inserted into the cable entrance opening to identify the internal wiring.

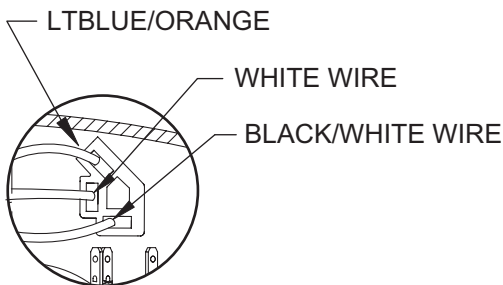
61550-1 Headlamp Kits can be field reworked into 64078 Headlamp Kits by switching the two wires in the sealed beam connector. See details below for correct positions of wires in connectors. If available, change strain reliefs to white to indicate that the internal wiring is changed.



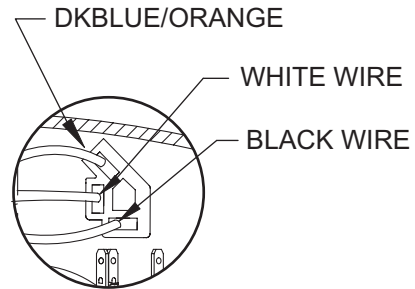
64078 12-Pin (White)
Driver Side



64078 12-Pin (White)
Passenger Side



61550-1 12-Pin
Driver Side



61550-1 12-Pin
Passenger Side



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