



**WESTERN PRODUCTS**  
 7777 NORTH 73RD STREET  
 P.O. BOX 23045  
 MILWAUKEE, WISCONSIN 53223



A DIVISION OF DOUGLAS DYNAMICS, L.L.C.

Vehicle Installation Instructions and  
 Parts List

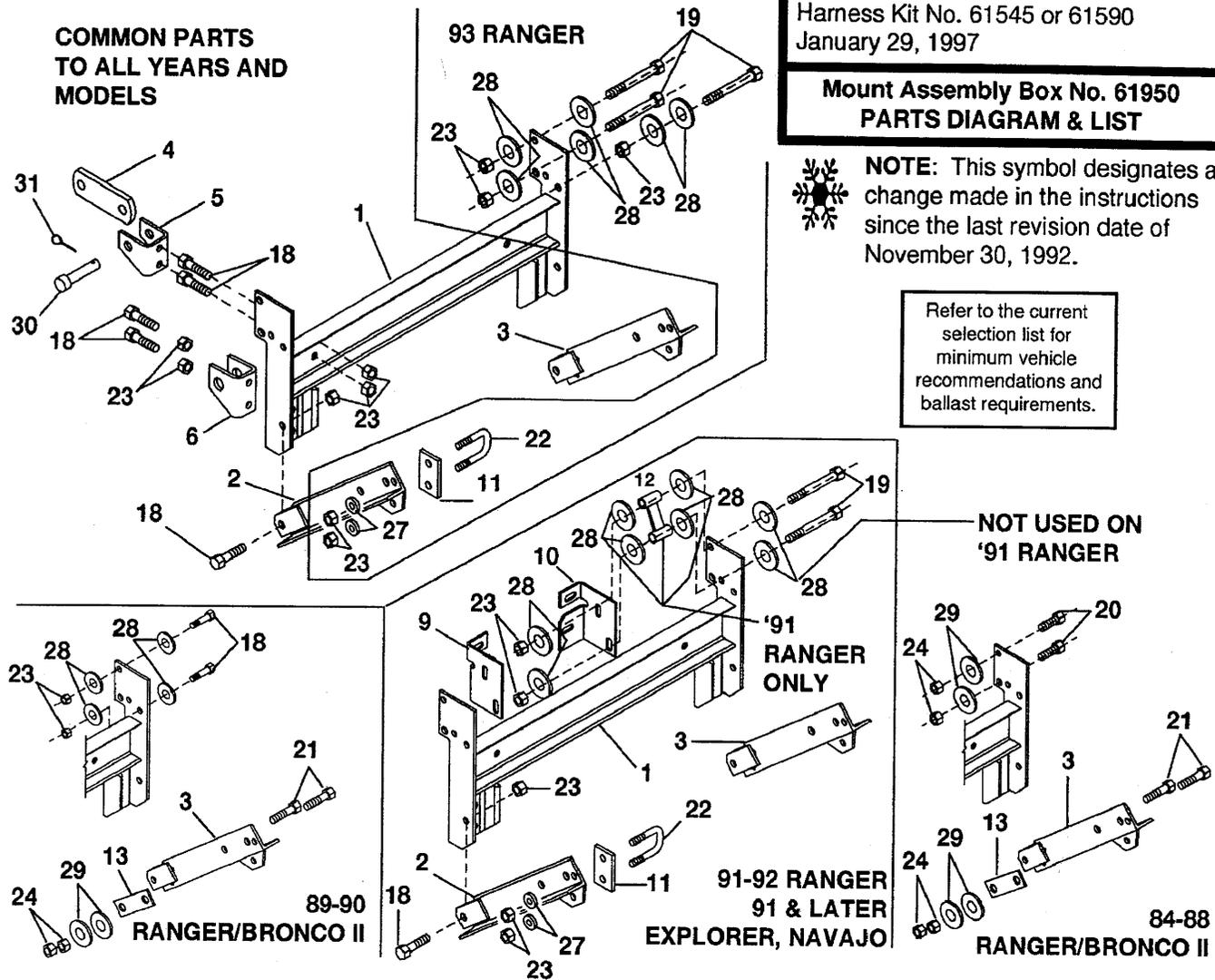
Model 1335  
 Mount Assembly Box No. 61950  
 Ford Ranger/Explorer/Bronco II 4 x 4  
 Mazda Navajo 4 x 4 — '84 & Later  
 Hydraulics Box No. 56355  
 Harness Kit No. 61545 or 61590  
 January 29, 1997

**Mount Assembly Box No. 61950**  
**PARTS DIAGRAM & LIST**



**NOTE:** This symbol designates a change made in the instructions since the last revision date of November 30, 1992.

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



ITEM	PART NO.	QTY	DESCRIPTION
1	61945	1	MOUNT FRAME 1335
2	61951	1	THRUST ARM DR
3	61952	1	THRUST ARM CU
4	61412	2	LINK ARM
5	61916	2	LINK ARM LUG
6	61917	2	COUPLING LUG
9	61612	1	BUMPER BRACKET DR
10	61613	1	BUMPER BRACKET CU
11	61327	2	THRUST ARM SPACER
12	61632	2	BRACKET SPACER
13	61614	2	FRAME SPACER
18	90100	14	1/2-13X1-1/2 HX CS G5 ZYC
19	90107	6	1/2-13X4 HX CS G5 ZP
20	90127	4	5/8-11X1-1/2 HX CS G5 ZYC
21	90128	4	5/8-11X1-3/4 HX CS G5 ZP
22	90499	2	1/2-13X1-9/16 U-BOLT SQ BEND
23	91335	20	1/2-13 PT HX LK NUT NYIS ZYC
24	91337	8	5/8-11 PT HX LK NUT NYIS ZYC
27	91160	4	WASHER - SPECIAL
28	91105	12	1/2 PLAIN WASHER TY A STD ZYC
29	91139	8	5/8 PLAIN WASHER TY A SAE ZP

ITEM	PART NO.	QTY	DESCRIPTION
30	93062	2	RIVET 3/4" X 3-1/4" G5 ZYC
31	91911	2	5/32X1-1/2 COTTER PIN ZYC

**NOT SHOWN**

93164	2	1/4-20X1 HX TRTS TY TT ZYC
61536	4	CABLE TIE - LONG
56080	1	DASH BRACKET



Parts listed above may be found in the following assemblies.

61931	1	BOLT BAG ASSY (61950)
61932	1	PARTS BAG ASSY (61950)

Abbreviations			
ASSY	Assembly	SAE	Society of Automotive Engineers
CS	Cap Screw	SQ	Square
CU	Curb-Side	STD	Standard
DR	Driver-Side	TRTS	Thread Rolling Tapping Screw
G	Grade	TY	Type
HX	Hex	ZP	Zinc Plate
LK	Lock	ZYC	Zinc Yellow Chromate
NYIS	Nylon Insert		
PT	Prevailing Torque		

Indented parts are included in the assembly under which they are listed. Quantities shown are included with the assembly.

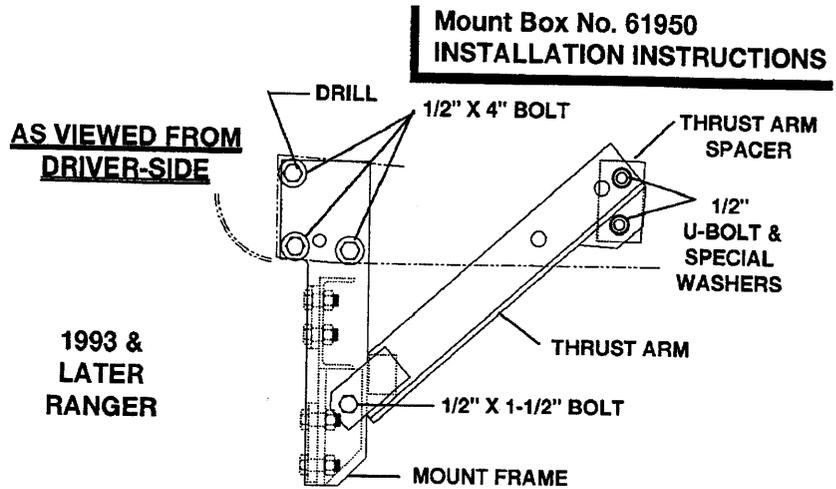
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Recommended Fastener Torque Chart (Ft.-Lb.)				
Size	SAE Grade 2		SAE Grade 5	
	SAE Grade 2	SAE Grade 5	SAE Grade 2	SAE Grade 5
1/4-20	6	9	13	28
5/16-18	11	18	28	46
3/8-16	19	31	46	68
3/8-24	24	46	68	75
7/16-14	30	50	75	115
1/2-13	45	75	115	165
9/16-12	66	110	165	225
5/8-11	93	150	225	370
3/4-10	150	250	370	591
7/8-9	202	378	591	893
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 mount assembly fasteners except those noted in the instruction.



**IMPORTANT:** Read instructions before assembling. Bolts should be finger tight until instructed to tighten to torque shown in torque chart. Use standard methods and practices when attaching snowplow including wearing safety glasses during drilling.

### 1993 & LATER RANGER

Remove bumper and optional running lights from vehicle. Remove lower bumper section along with optional air dam from bumper. Retain and reinstall whenever mount is removed from vehicle.

### THRUST ARM

On each side of vehicle, loop a 1/2" U-bolt through vehicle frame slots. Place a thrust arm spacer on each U-bolt, then the end of thrust arm, followed by two special washers. Retain with two locknuts.

### MOUNT FRAME

- Place mount frame onto vehicle frame horns aligning holes in mount frame side plates with triangular holes in vehicle frame. On each side of vehicle, install two 1/2" x 4" bolts with flat washers into lower mount frame side plate holes. Retain with two flat washers and locknuts on inside of vehicle frame rails.
- Straddle mount frame side plates with ends of thrust arms. Install a 1/2" x 1-1/2" bolt each side. Retain with locknuts installed on inside.
- Use top holes in mount frame side plates as a template to drill 1/2" holes through the inner walls of the vehicle frame. Install a 1/2" x 4" bolt with flat washer and retain with a flat washer and locknut to inside of vehicle frame.
- Attach bumper to bumper brackets and align with body of vehicle.

**TIGHTEN ALL FASTENERS TO CORRESPONDING TORQUE CHART VALUES.**

Continue with instructions — 1984 and Later All Vehicle Models, on page 4.

### 1991 & LATER EXPLORER/NAVAJO 1991 & 1992 RANGER

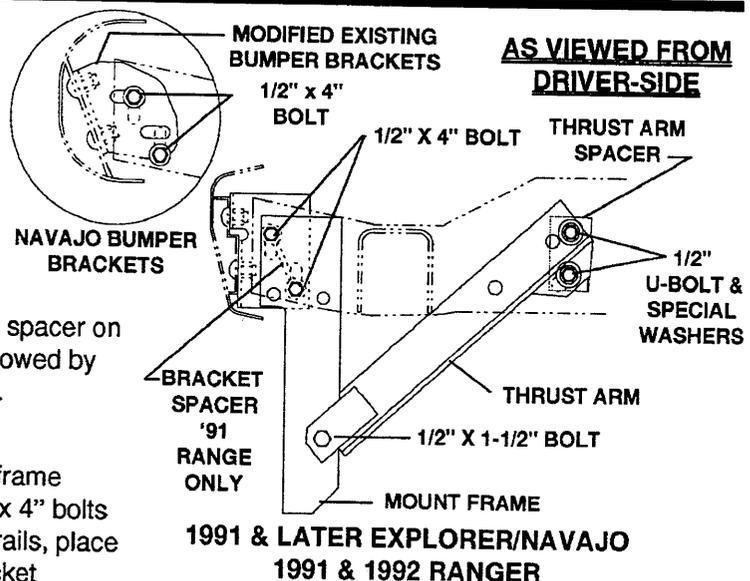
Remove bumper with bumper brackets from vehicle. Remove bumper brackets and air dam from bumper. Retain and reinstall whenever mount is removed from vehicle.

### THRUST ARMS

On each side of vehicle, loop a 1/2" U-bolt through vehicle frame slots. Place a thrust arm spacer on each U-bolt, then the end of the thrust arm, followed by two special washers. Retain with two locknuts.

### MOUNT FRAME

- 1991 RANGER:** Place mount frame to vehicle frame horns. On each side of vehicle, insert two 1/2" x 4" bolts through holes shown in diagram. Inside frame rails, place a flat washer on each bolt followed by one bracket spacer, a second flat washer on each bolt, a furnished bumper bracket (legs toward center of vehicle), a third flat washer and a locknut on each bolt.



EXPLORER & 1992 RANGER: Place mount frame to vehicle frame horns aligning holes shown with vehicle frame bumper bracket holes. On each side of vehicle, insert two 1/2" x 4" bolts with flat washers through holes shown in diagram. Inside vehicle frame rails, place furnished bumper brackets (legs toward center of vehicle). Retain with two flat washers to bumper brackets slots and two locknuts on each side.

NAVAJO: Use furnished paper template to remove material from existing bumper brackets as shown.

Place modified bumper brackets to outside of mount frame and attach to vehicle frame with two 1/2" x 4" bolts with flat washers in holes shown in inset. Retain with two flat washers and locknuts on inside of each vehicle frame rail.

2. Straddle mount frame side plates with ends of thrust arms. Install a 1/2" x 1-1/2" bolt each side. Retain with locknuts installed on inside.
3. Attach bumper to bumper brackets and align with body of vehicle.

**TIGHTEN ALL FASTENERS TO CORRESPONDING TORQUE CHART VALUES.**

Continue with instructions — 1984 and Later All Vehicle Models, on page 4.

1989 - 1990

**RANGER/BRONCO II**

Remove bumper with bumper brackets from vehicle. Remove bumper brackets and air dam from bumper. Retain and reinstall whenever mount is removed from vehicle.

**THRUST ARM**

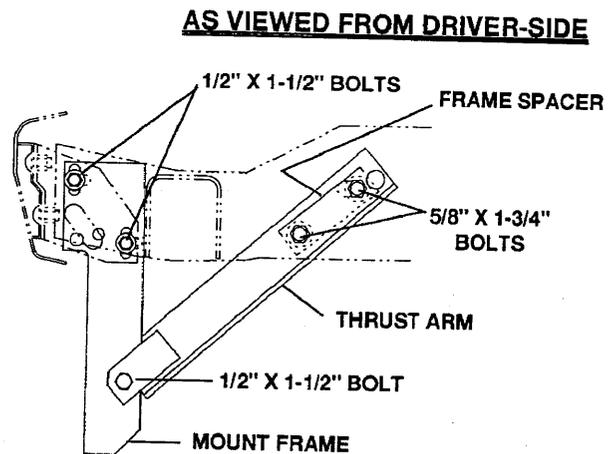
Attach thrust arms (use holes shown in diagram) to vehicle frame using two 5/8" x 1-3/4" bolts, one frame spacer between thrust arm and vehicle frame, two flat washers to vehicle frame and two locknuts on each side.

**MOUNT FRAME**

1. Place mount frame onto vehicle frame horns, aligning holes shown in diagram with vehicle frame bumper bracket holes. Position existing bumper brackets to outside of mount frame and insert two 1/2" x 1-1/2" bolts with flat washers. Retain with two flat washers and locknuts on inside of each vehicle frame rail.
2. Straddle mount frame side plates with ends of thrust arms. Install a 1/2" x 1-1/2" bolt each side. Retain with locknuts installed on inside.
3. Attach bumper to bumper brackets and align with body of vehicle.

**TIGHTEN ALL FASTENERS TO CORRESPONDING TORQUE CHART VALUES.**

Continue with instructions — 1984 and Later All Vehicle Models, on page 4.



1989-1990 RANGER/BRONCO II

1984 - 1988

**RANGER/BRONCO II**

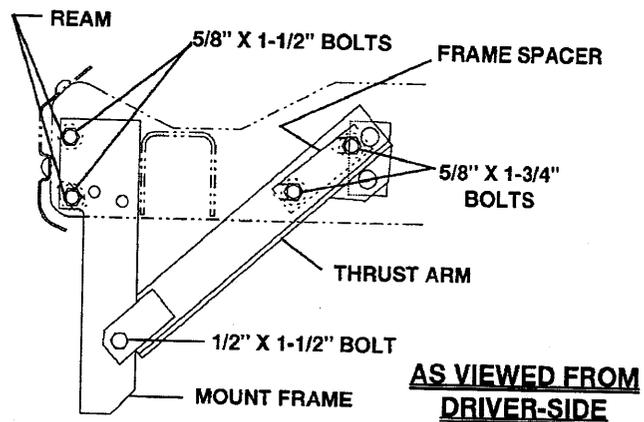
Remove air dam from bumper. Retain and reinstall whenever mount is removed from vehicle.

**THRUST ARM**

Attach thrust arms (use holes shown in diagram) to vehicle frame using two 5/8" x 1-3/4" bolts, one frame spacer between thrust arm and vehicle frame, two flat washers to frame and two locknuts per side.

**MOUNT FRAME**

1. Ream two front holes on each mount frame side bars (see diagram) to 5/8" diameter.



1984-1988 RANGER/BRONCO II

Continued on next page.

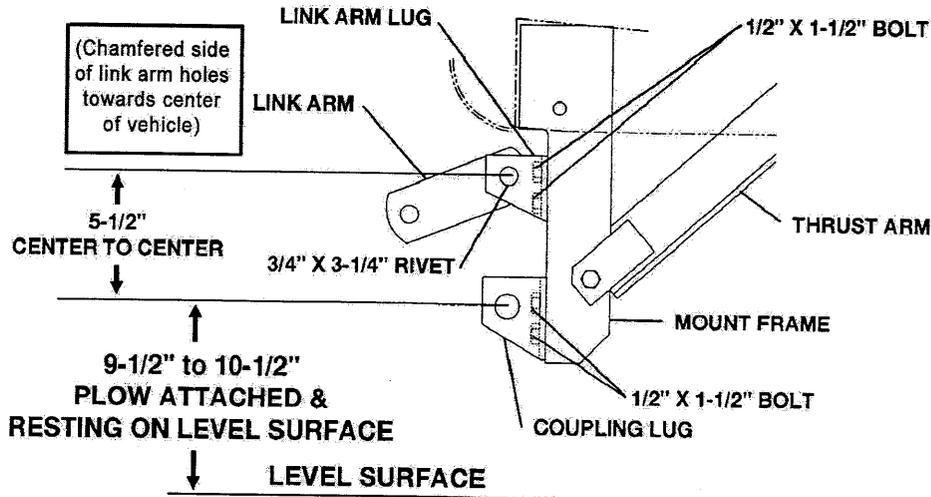
- Place mount frame to vehicle frame horns. Align holes and attach with two 5/8" x 1-1/2" bolts. Retain with two flat washer to inside of frame and two locknuts on each side of vehicle. (See diagram, previous page.)
- Straddle mount frame side plates with ends of thrust arms. Install a 1/2" x 1-1/2" bolt each side. Retain with locknuts installed on inside.

**TIGHTEN ALL FASTENERS TO CORRESPONDING TORQUE CHART VALUES.**

Continue with instructions — 1984 and Later All Vehicle Models, this page.

**1984 & LATER  
ALL VEHICLES**

**AS VIEWED FROM DRIVER-SIDE**



**1984 & LATER  
ALL VEHICLE MODELS  
COUPLING LUGS**

- Position the coupling lugs (1" diameter holes) against the outer set of holes in the front of the mount frame. (Turning lugs upside down changes height by 1".) During installation, allow for drop in vehicle height when weight of plow is added. Final coupling lug hole center to level surface distance should be 9-1/2" to 10-1/2" with plow attached and resting on the level surface. (See Coupling Lug Height Check near end of these instructions.)
- Secure each coupling lug with two 1/2" x 1-1/2" bolts and locknuts.

**LINK ARM LUGS**

- Install link arm lugs (3/4" diameter holes) so angled side is in the same position as the angled side of the coupling lugs. Position the link arm lugs to the inner holes on the front of the cross channel on the mount frame. NOTE: Centers of coupling lug holes to center of link arm lug holes should be 5-1/2".
- Secure each link arm lug with two 1/2" x 1-1/2" bolts and locknuts.

**TIGHTEN ALL FASTENERS TO CORRESPONDING TORQUE CHART VALUES.**

**LINK ARMS**

Fasten a link arm, chamfered side of link arm holes towards center of vehicle, between each pair of link arm lugs with a 3/4" x 3-1/4" grade 5 rivet and cotter pin.

**HARNES KIT SELECTION:**

For DUAL Type 2B/2D Headlamps, use Box No. 61540 Headlamp Kit 9-pin and 61545 Harness Kit 2B/2D 9-pin -A. For DUAL Type HB-5 Headlamps, use Box No. 61540 Headlamp Kit 9-Pin and 61590 Harness Kit HB-5 -A.

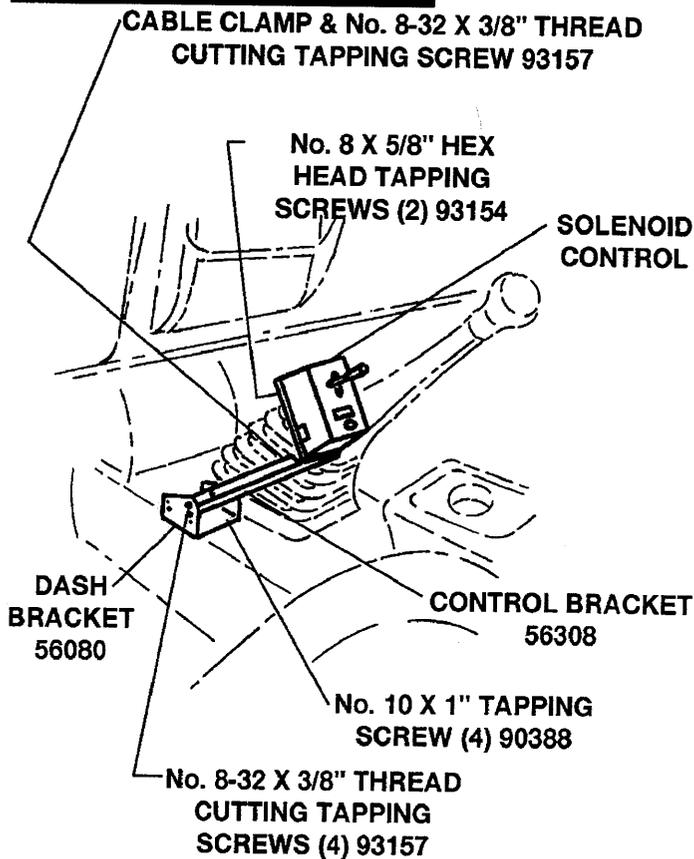
**CAUTION:** During electrical installation, THE LONG BATTERY GROUND CABLE (no stripe) MUST BE GROUNDED TO THE NEGATIVE BATTERY TERMINAL.

The 1/4" x 1" tapping screws may be used to mount the hydraulic unit motor relay to existing holes in curb-side inner fender sheet or drill two 7/32" holes as required.

**NOTE: After 5 to 10 hours of snowplow usage, retorque all mount assembly fasteners.**

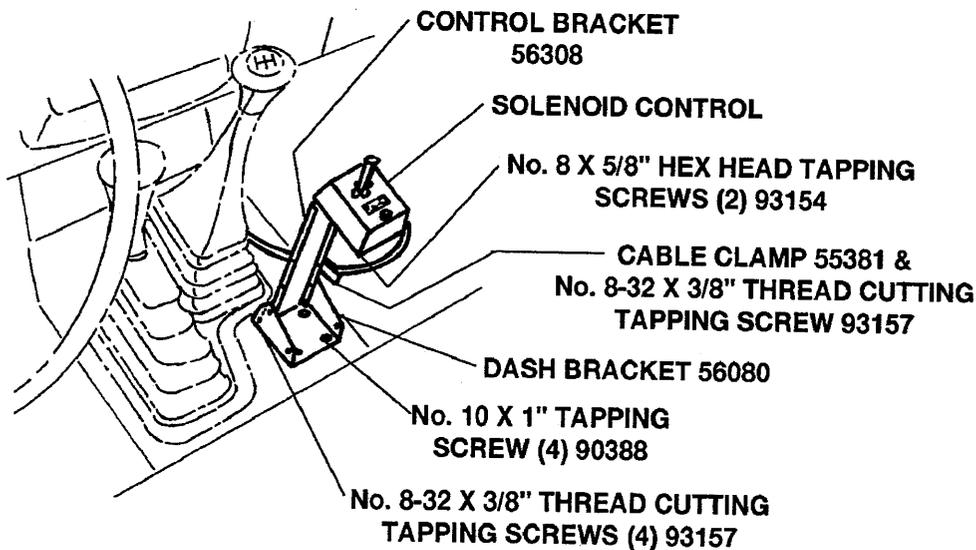
**INSTALLATION INSTRUCTIONS  
FOR — SOLENOID CONTROL  
1989 & 1990 RANGER  
1991 & LATER  
RANGER/EXPLORER/NAVAJO**

Parts to be installed are furnished in Hydraulics Box except as noted in ( ).



**Electrically Controlled 4WD**

1. Temporarily assemble solenoid control to control bracket using no. 8 x 5/8" hex head screws, and control bracket to dash bracket (Mount Box), using No. 8 x 3/8" hex head thread cutting screws.
2. Open ash tray and move drivers seat forward.  
**MANUAL TRANSMISSIONS:**  
Electrically Controlled 4WD - place shift lever in second gear. Locate control assembly to left of shift lever.  
Manually Controlled 4WD - place shift lever in reverse. Locate assembly to the right of shift lever. Drill additional holes in dash bracket and control bracket as required to obtain upright position.  
**AUTOMATIC TRANSMISSIONS:**  
place control on top of tunnel in a convenient location.  
Check for adequate control lever clearance and mark dash bracket location.
3. Disassemble control bracket from dash bracket. CHECK under marked location for wires or other interference. Place dash bracket in marked location and drill one 1/8" hole using bracket as a template. Loosely attach bracket with a No. 10 x 1" tapping screw and lock washer. One at a time, drill remaining holes and secure.  
Electrically Controlled 4WD **MANUAL TRANSMISSIONS** - drill two additional left side clearance holes in dash bracket, for flat surface mounting.



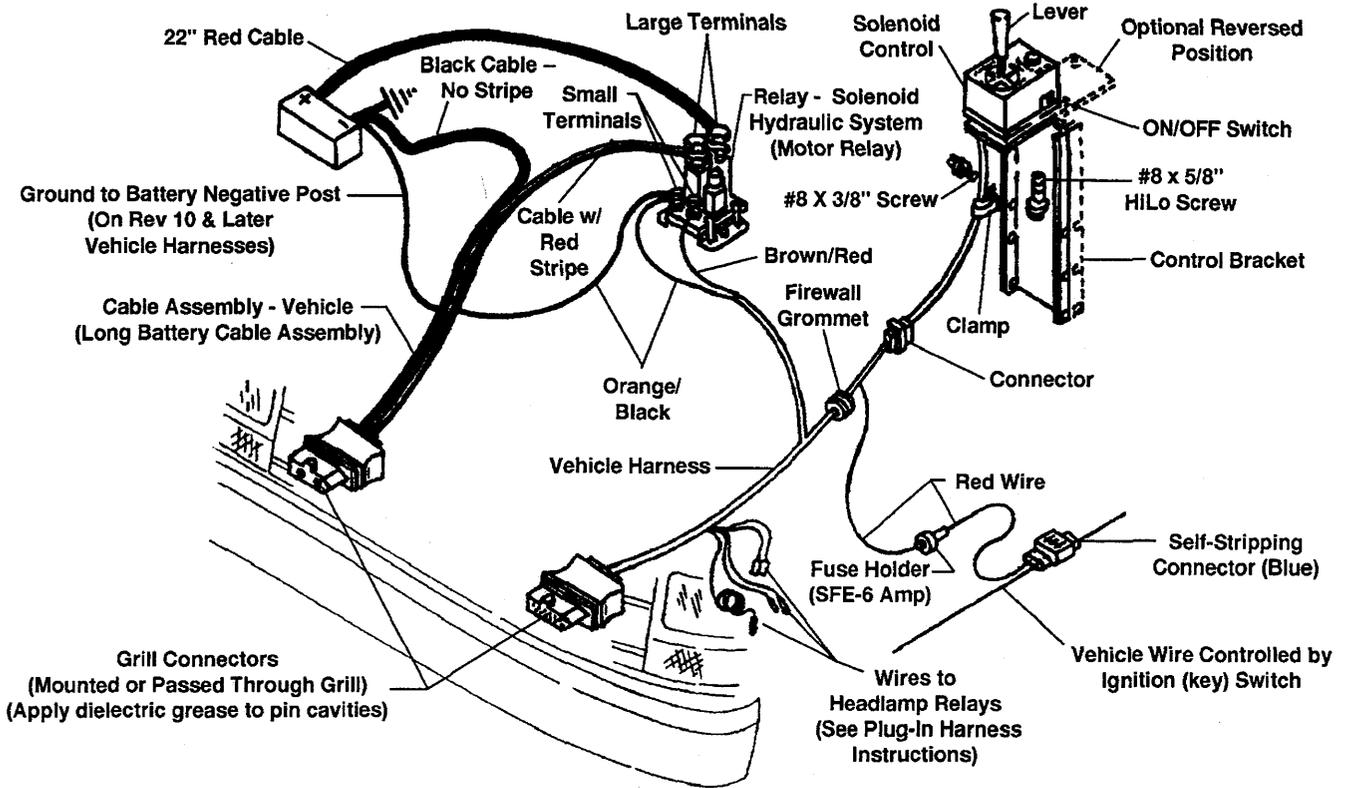
**Manually Controlled 4WD**

4. Reassemble control bracket to dash bracket. Bend top flange of control bracket to desired position.
5. Secure harness to control bracket with cable clamp and a #8 x 3/8" thread cutting tapping screw.

Installation instructions continued on next page.

# HARNESS, SOLENOID CONTROL & MOTOR RELAY INSTALLATION DIAGRAM

# Vehicle Underhood INSTALLATION INSTRUCTIONS



**WARNING:** The symbol at left identifies a safety warning that indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

## VEHICLE HARNESS AND MOTOR RELAY

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

**CAUTION:** To prevent corrosion on all under-hood electrical connections, use dielectric grease to fill receptacles and lightly coat ring terminals and blades before assembling, or lightly coat the connections after assembling.

1. Identify wires for the parking lamp 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.



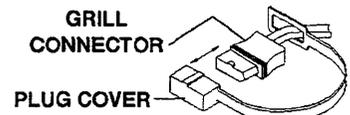
**WARNING:** Electrical shock hazard. Disconnect battery before beginning electrical installation.

3. Find a location for the motor relay where it will be protected from road splash and will be within 18" of the vehicle primary battery.

**NOTE:** Motor relay terminals must be up or horizontal.

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

4. Route 22" red battery cable between a large motor relay terminal and the POSITIVE battery terminal avoiding sharp edges, and hot or moving parts. Attach cable to motor relay terminal with a lock washer and 5/16"-24 jam nut. Attach cable to battery POSITIVE terminal with existing terminal fastener.
5. Stretch rectangular openings of plug cover straps (found in harness kit) over grill connector ends of long battery cable assembly (found in hydraulics box) and vehicle harness (found in harness kit). Place plug covers over molds on harnesses.





6. Find a location on the vehicle grill on the battery side for mounting the battery cable grill connector. The best location is at least 10-1/2" from the center of the grill and at a convenient height for connecting the plow plugs. Allow grill connector of each harness to hang out in front of grill. Allow enough cable so it is easy to mate and remove connector. Secure with long cable ties (found in mount box).
7. Route battery cable through the grill at the selected location and through or around the radiator bulkhead to the motor relay avoiding sharp edges, and hot or moving parts.
8. 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.



9. Route the battery cable without a stripe directly to the NEGATIVE battery terminal (carefully separate the two cables as needed to reach the battery ground). DO NOT attach cable to battery at this time.
10. Find a location in grill on driver side for mounting the vehicle harness (similar position to battery cable mount). See Steps 6 & 7 above for how to mount. Route vehicle harness through grill and around, or through radiator bulkhead (drill 5/8" hole if needed) into engine compartment.
11. Route the wires that break out of the vehicle harness to the area behind the driver-side headlamp. Route rest of harness to the firewall. Drill a 5/8" hole through the firewall in a convenient location away from sharp edges, and hot or moving engine parts.

**IMPORTANT:** On all vehicles with DRLs, insert fuse holder on pink wire of DRL Adapter Kit (PN 61584) through firewall first. Route end of pink wire with receptacles to area of driver-side headlamp.

Feed vehicle harness fuse holder through hole and then feed the plastic connector and harness through to the cab. Disassembling the fuse holder may make it easier to pass through 5/8" hole.

12. Route brown/red and orange/black (early revision harnesses have brown/red and black/orange wires) wire loom to motor relay. Early revision harnesses must be modified if the CabCommand control is being installed. (See instructions furnished with the CabCommand control.)

Attach the brown/red and orange/black (early revisions black/orange) wires small ring terminals to separate small terminals on motor relay using a lock washer and #10-32 nut for each connection.

13. Route the orange/black wire with 3/8" ring terminal to the battery negative post DO NOT attach wire to battery at this time.
14. Inside the cab, route vehicle harness connector to solenoid or CabCommand control and couple the connectors together.



15. Reconnect vehicle ground cable to the NEGATIVE battery terminal. Attach the hydraulic unit black battery cable and orange/black wire terminal to the negative clamp bolt.
16. Locate an accessory wire capable of carrying 7 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). If used, DRL pink wire requires 0.4 amps.

Open the 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 pliers and snap the locking tab in place. Repeat with DRL pink wire.

\* Early style harnesses have a 10-amp fuse which must be replaced with SFE-6 fuse for CabCommand control.

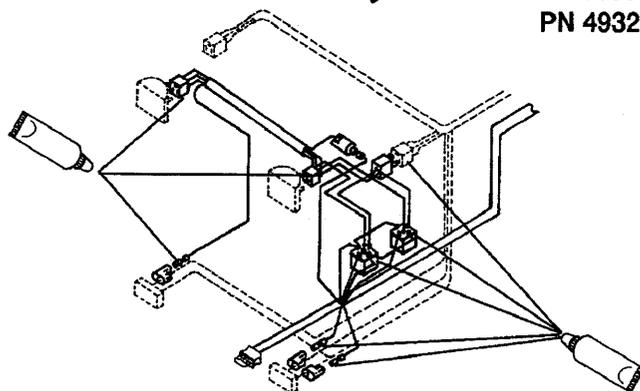
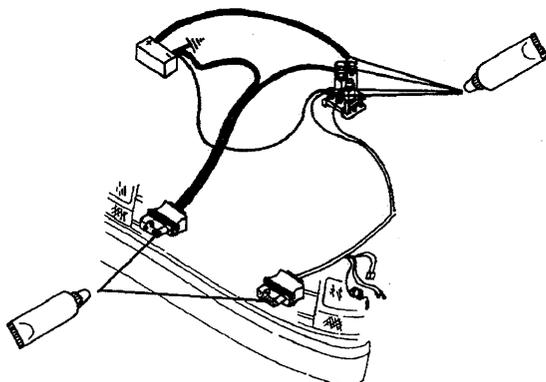
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**REMINDER:** To prevent corrosion on all underhood electrical connections, use dielectric grease to fill receptacles, including grill connectors, and lightly coat ring terminals and blades before assembly or lightly coat connections after assembling.

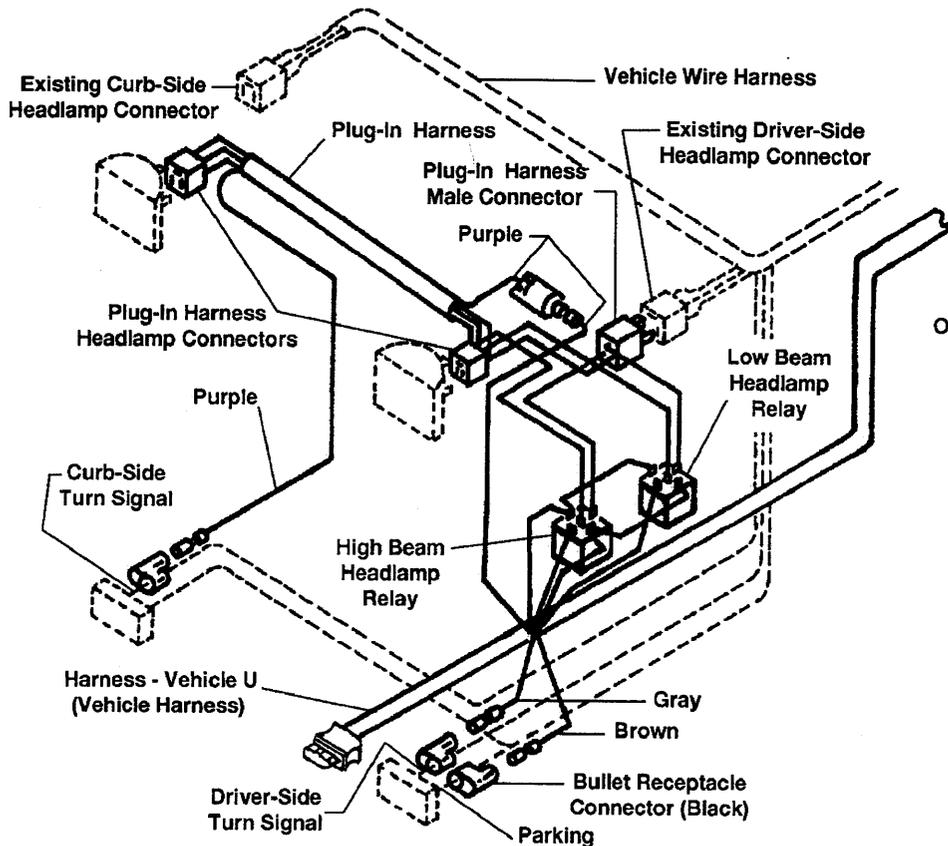


**DIELECTRIC GREASE -**  
PN 56099 or  
PN 49326



## DUAL VEHICLE HEADLAMP PLUG-IN HARNESS & HEADLAMP RELAY INSTALLATION

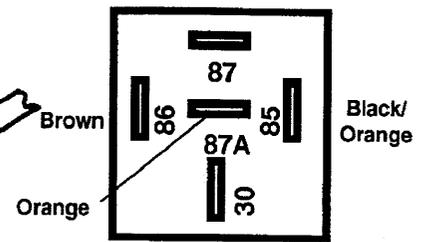
### VEHICLE HEADLAMP WIRING DIAGRAM



### HEADLAMP RELAY WIRING DIAGRAM

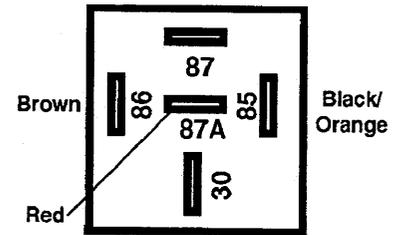
Type - A

Black



Low Beam Headlamp Relay

White



High Beam Headlamp Relay

### VEHICLE HEADLAMP PLUG-IN HARNESS & HEADLAMP RELAYS

**REMINDER:** Lubricate all receptacles and blades with dielectric grease before assembling.

1. In the engine compartment behind the driver-side headlamp, insert wire bullets from vehicle harness into black bullet connectors (installed in step one of previous section) with brown wire to parking lamp wire on driver side, and gray wire to left turn signal wire on driver side.
2. At the vehicle driver-side headlamp, remove the connector from the headlamp and couple with plug-in harness 3-wire male plug (plug-in harness found in harness kit). Attach plug-in harness headlamp connector to headlamp terminals.
3. Route other end of plug-in harness along radiator bulkhead or over radiator shroud to curb-side headlamp. Remove headlamp connector and secure connector with a cable tie (found in harness kit). Attach plug-in harness headlamp connector to headlamp terminals.
4. On the curb side, insert purple wire bullet from plug-in harness into vehicle turn signal black bullet connector installed in step one of the previous section.
5. At the driver-side headlamp, insert the purple wire bullet from the vehicle harness into the purple wire receptacle on the plug-in harness.
6. At driver-side headlamp, connect vehicle and plug-in harness wires with receptacles to the two headlamp relays (found in harness kit) as shown in the above diagram. (If vehicle has DRLs, replace brown wires with pink wire from DRL kit. Brown wires from vehicle harness are not used in DRL installations.)
7. Place grommet around vehicle harness and insert into firewall hole (also put a grommet in the hole in the radiator bulkhead if one was drilled). 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.
8. Replace vehicle turn signal flasher with flasher furnished in harness kit.
9. Lubricate terminal cavities of both grill connectors with dielectric grease. Give dielectric grease tube to vehicle owner for future lubrication of grill connectors.

## OPERATIONAL TESTS AND ADJUSTMENTS

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

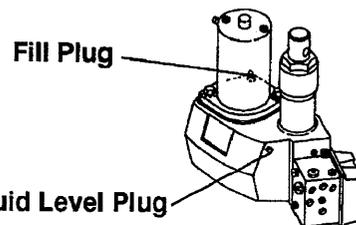
### Filling Hydraulic Unit

1. Push lift channel all the way down.
2. Remove fill plug and fluid level plug.
3. Fill unit through fill plug hole until fluid runs out of fluid level hole. Replace both plugs.

Use: automatic transmission fluid (ATF) Dexron III to -10° F (-23° C), or WESTERN® High Performance Fluid to -25° F (-32° C), or Texaco 1537 Aircraft Hydraulic Oil for temperatures below -25° F (-32° C).

4. Turn ignition (key) switch to the ON or ACCESSORY position.
5. Turn the control ON/OFF switch to the ON position.
6. Move control lever to angle left and angle right several times to remove air from Hydra-Turn® rams. **DO NOT raise blade. This may cause pump cavitation.**
7. Refill unit with fluid following the procedure in Step 3 of this section.
8. Move the control lever as indicated on label to control the plow. Raise and lower plow several times to remove air. Recheck fluid level according to Step 3 of this section.

Capacity: Solenoid ISARMATIC® Mark IIIa reservoir 1-3/4 quarts  
Equipped with 6" Hydra-Turn rams 1-7/8 quarts



**WARNING:** To prevent accidental movement of plow, always turn the solenoid control to the OFF position when the mounted plow is not in use.

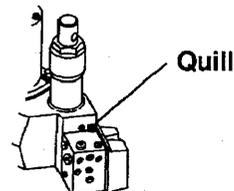
### Blade Drop Speed Adjustment

The quill on the top rear of the valve manifold (see diagram) adjusts blade drop speed.

Turn quill IN (clockwise) to decrease drop speed.

Turn quill OUT (counterclockwise) to increase drop speed.

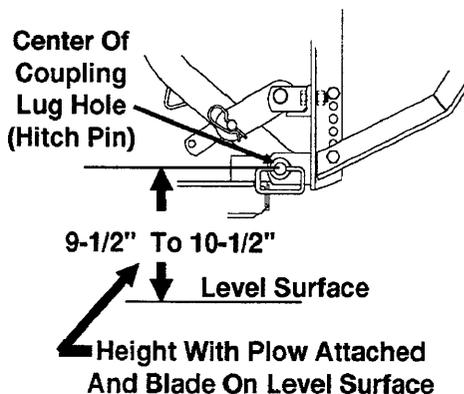
**NOTE:** Turning quill too far in can slow raise time.



### Coupling Lug Height Check

1. Mount plow to vehicle (see label on back of blade or Owner's Manual for mounting instructions). Add recommended ballast as found in selection list.
2. Lift plow and move vehicle a minimum of 10 feet. Lower blade.
3. After step 2, with blade on level surface, slack in lift chain, and rear ballast located behind rear wheels, the center of coupling lug holes (hitch pin shaft) to level surface should measure 9-1/2" to 10-1/2". To obtain height,
  1. Both coupling lugs and link arms may be turned over to change height 1".
  2. Install front air bag springs.

### COUPLING LUG HEIGHT CHECK



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

4. 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 lift channel. After it 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.

Installation instructions continued on next page.

**Final Hydraulic Inspection**

1. Make sure all fasteners and hydraulic and electrical connections are tight.
2. Check ram packing nuts for oil leakage. If any leakage is observed, tighten the packing nut 1/4 turn after you feel the nut contact the packing. Do not overtighten — overtightening 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.

**VEHICLE LIGHTING CHECK****Vehicle Lighting Check**

1. Check the operation of vehicle and plow lights with plow mounted to vehicle and both plow plugs connected.

**Turn signals and parking lamps**

Parking lamps ON	Both vehicle and plow parking lamps should be on at the same time.
Right Turn Signal ON	Both vehicle and plow right turn signal lamps should flash at the same time.
Left Turn Signal ON	Both vehicle and plow 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 plow plug from the grill connector should switch between vehicle and plow headlamps as follows:

9-pin plow plug DISCONNECTED	Vehicle headlamps should be on, plow headlamps off.
9-pin plow plug CONNECTED	Plow headlamps should be on, vehicle headlamps 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 or CabCommand Control**

9-pin vehicle harness revision 10 and later or

9-pin vehicle harnesses—earlier revisions modified for CabCommand control:

The control indicator light should light whenever the control ON/OFF switch and the ignition (key) switches are both in the ON position. The plow plugs do not need to be connected to the grill connectors.

**Solenoid Control used with earlier revision harnesses**

9-pin revision 7, 8, or 9 vehicle harnesses:

The control indicator light should light whenever the control ON/OFF switch and the ignition (key) switches are both turned ON and the plow plugs are connected to the grill connectors.

9-pin vehicle harnesses—all earlier revisions:

The indicator light will also light when the control and ignition (key) switches are on the plow plugs are disconnected. If the parking lights are turned on (with plow plugs disconnected), the indicator light will go out.

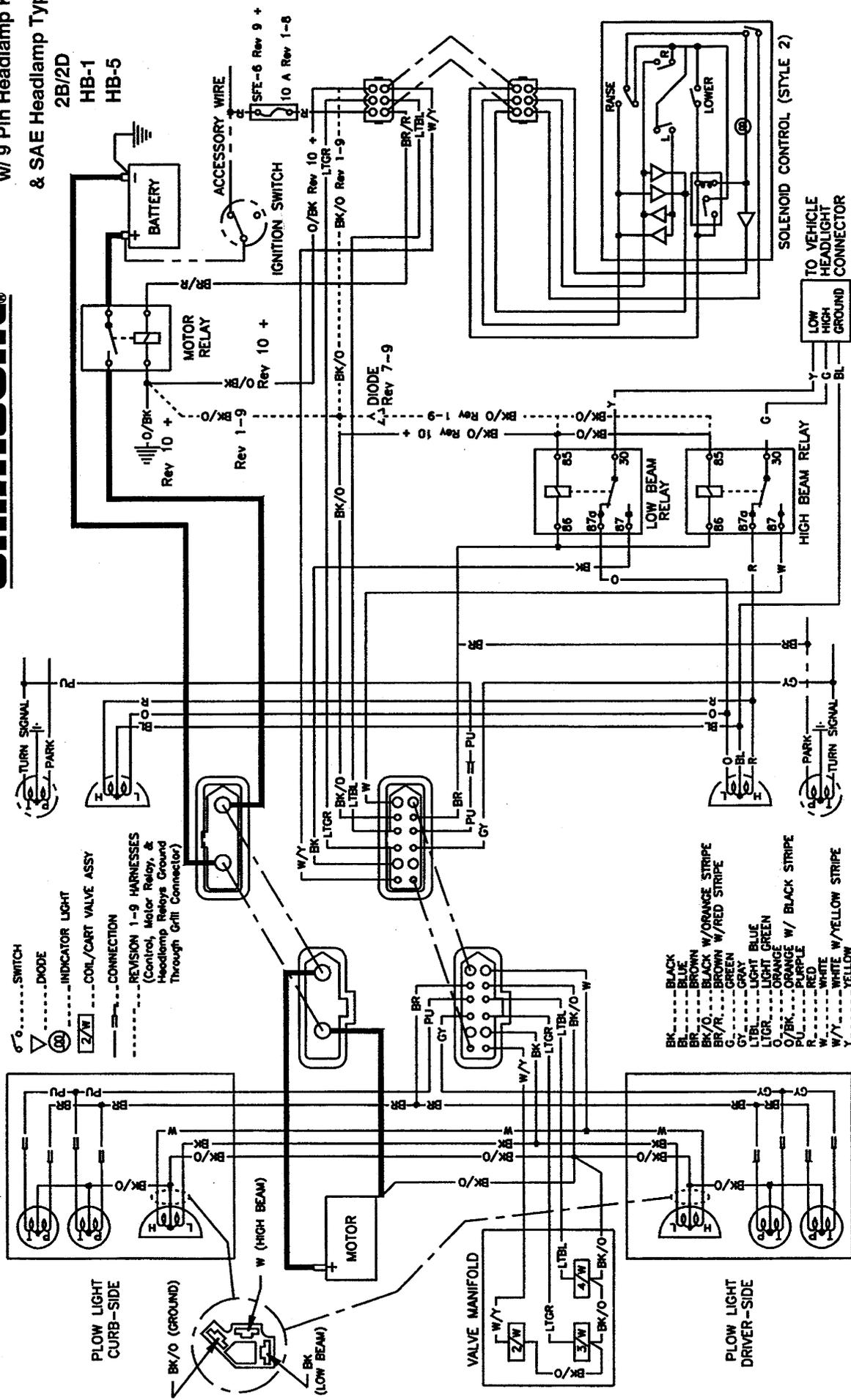
2. Connect plow plug to grill connector. Raise plow and aim plow headlamps according to SAE J599 Lighting Inspection Code (See Service Bulletin SP 608) and any applicable federal, state, or local regulations.
3. Check aim of vehicle headlamps with plow removed.
4. When plow is removed from the vehicle, install plug covers on grill connectors and insert the plow plugs into the boot on the hydraulic unit.

**NOTE: After 5 to 10 hours of snowplow usage, retorque all mount assembly fasteners.**

Solenoid Control — 9-Pin Vehicle Harness Revision 10 & later - The control indicator light will light whenever the control ON/OFF switch and the ignition (key) switch are both turned ON. The plow plugs and grill connectors do not need to be connected for the control light to be on.

# BY SYSTEM UniMount®

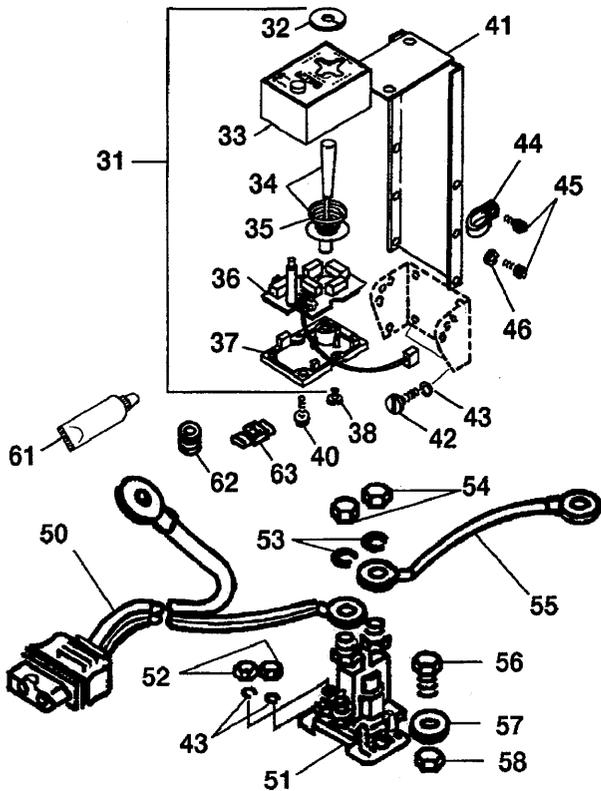
Wiring Diagram  
Harness Type -- A  
w/ 9 Pin Headlamp Kit  
& SAE Headlamp Type:  
2B/2D  
HB-1  
HB-5



Vehicle harnesses — 9 pin, P. N. 61437 rev. 7, 8, or 9 — The indicator light on the solenoid control will only light when the plow is attached to the vehicle and the ignition switch and control on/off switch are both turned on.

Vehicle harnesses with revision numbers prior to listed revisions at right — The indicator light will also be on when the control and ignition (key) switches are ON and the plow plugs are disconnected. If the parking lights are turned on (with plow plugs disconnected), the indicator light will go out.

**Mount Assembly Box No. 61950**  
**Harness Kit Box No. 61545 or 61590**  
**Hydraulics Box No. 56355**  
**PARTS DIAGRAM & LIST**



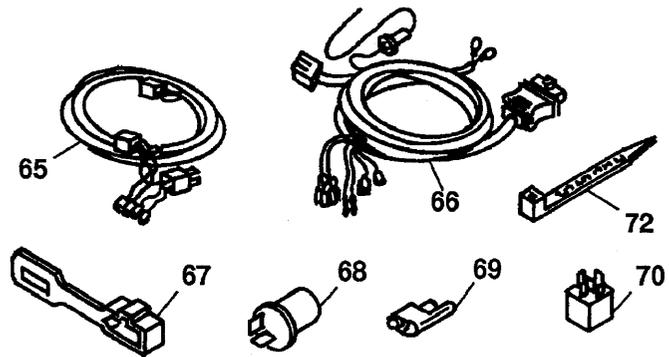
**ITEM PART NO. QTY. DESCRIPTION**

Found in Hydraulics Box No. 56355

31	56369	1	SOLENOID CONTROL (Style 2)
32	56283	1	SHIELD
33	49286	1	BODY W/LABEL & LENS (Style 2)
34	49287	1	LEVER, SPRING & ACTUATOR KIT (Style 2)
35	55923	1	SPRING - CONICAL
36	49283	1	PC BOARD ASSY MOLEX (Style 2)
37	56199	1	BASE
38	93153	2	#6-19X3/8 SL HXW TFTS HILO
40	93154	2	#8-18X5/8 SL HXW TFTS HILO
41	56308	1	CONTROL BRACKET
42	90388	4	#10X1 SL PN TFTS TY AB BZP
43	91242	4	#10 SP LK WASHER BPO
44	55381	1	CABLE CLAMP
45	93157	5	#8-32X3/8 SL HXW TCTS TY T BP
46	91231	4	#8 SP LK WASHER BP
50	61169	1	CABLE ASSEMBLY - VEHICLE
51	56134K	1	RELAY - SOLENOID HYDRAULIC SYS
43	91242	2	#10 SP LK WASHER BPO
52	91402	2	#10-32 HX NUT ZP
53	91202	2	5/16 SP LK WASHER ZP
54	92842	2	5/16-24 HX JAM NUT
55	22511	1	BATTERY CABLE 22" RED
56	90002	2	1/4-20X3/4 HX CS G2 ZP
57	91101	2	1/4 PLAIN WASHER TY A STD ZP
58	91331	2	1/4-20 PT HX LK NUT NYIS ZP
61	56099	1	DIELECTRIC GREASE TUBE (0.25 ounce)
49326		1	WESTERN DIELECTRIC GREASE TUBE (2 ounce)
62	66130	2	RUBBER GROMMET
63	59114	1	SELF STRIP WIRE CONNECTOR

Parts listed above may be found in one of these assemblies.

56368	1	CARTON ASSY LOOSE PARTS U
56367	1	BOLT BAG ASSY LARGE U
56358	1	BOLT BAG SMALL U



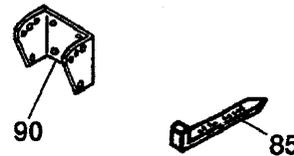
**ITEM PART NO. QTY. DESCRIPTION**

Found in Harness Kit Box No. 61545 or 61590

65	61546	1	PLUG-IN HARNESS 2B/2D U-A (For Harness Kit No. 61545)
	61591	1	PLUG-IN HARNESS HB-5-A (For Harness Kit No. 61590)
66	61437	1	VEHICLE HARNESS 9-PIN
67	61548	2	PLUG COVER
68	60109	1	FLASHER HD
69	59224	3	BULLET RECEPTACLE CONNECTOR
70	61535	2	RELAY SPDT
72	59223	8	CABLE TIE

Parts listed above may be found in the following assembly.

61547	1	PARTS BAG
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**ITEM PART NO. QTY. DESCRIPTION**

Found in Mount Box No. 61950

85	61536	4	CABLE TIE - LONG
90	56080	1	DASH BRACKET

Parts listed above may be found in the following assembly.

61932	1	PARTS BAG ASSY (61950)
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Indented part numbers are included in the assembly under which they are listed. Quantities shown are included with the assembly.

Abbreviations			
ASSY	Assembly	SL	Slotted
BP	Black Phosphate	SP	Spring
BPO	Black Phosphate & Oil	SPDT	Single Pole Double Throw
BZP	Black Zinc Plate	STD	Standard
CS	Cap Screw	SYS	System
G	Grade	TCTS	Thread Cutting Tapping Screw
HD	Heavy Duty	TFTS	Thread Forming Tapping Screw
HX	Hex	TY	Type
HXW	Hex Washer	U	UniMount® System
LK	Lock	W/	With
NYIS	Nylon Insert	ZP	Zinc Plate
PC	Printed Circuit		
PN	Pan		
PT	Prevailing Torque		

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