



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

**DD** A DIVISION OF DOUGLAS DYNAMICS, INC.

Box No. 60588  
 Model 2220 Nissan 4x4 86½ & Later  
 Hard Body Pick-Up & Pathfinder

**INSTALLATION INSTRUCTIONS**

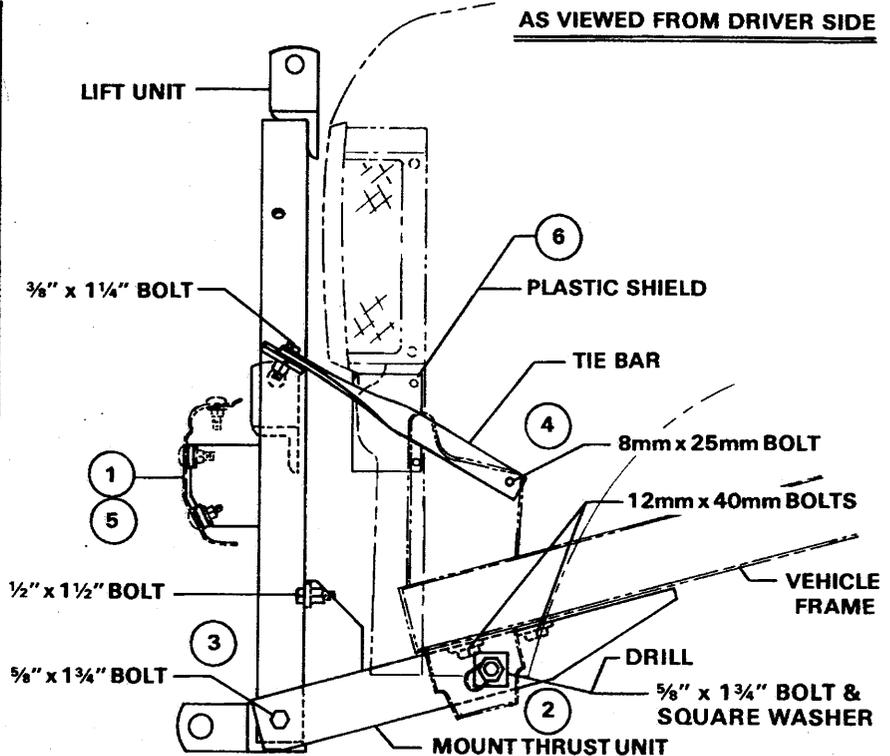
RECOMMENDED FASTENER TORQUE CHART			
SIZE	TORQUE IN FOOT POUNDS		
	GRADE 2	GRADE 5	GRADE 8
1/4 - 20	6	9	13
5/16 - 18	11	18	28
3/8 - 16	19	31	46
3/8 - 24	24	46	68
7/16 - 14	30	50	75
1/2 - 13	45	75	115
9/16 - 12	66	110	165
5/8 - 11	93	150	225
3/4 - 10	150	250	370
7/8 - 9	202	378	591
1 - 8	300	583	893

METRIC GRADE 8.8		TORQUE IN FOOT POUNDS	
SIZE	TORQUE	SIZE	TORQUE
M 6	7	M12	60
M 8	17	M14	95
M10	35	M16	155

These torque values apply to lift-mount fasteners except those noted in the instructions where motion is desired.

MINIMUM VEHICLE RECOMMENDATIONS
Aux. Light Kit
<b>REAR BALLAST-300 to 500 lbs. when blade is attached.</b>



**IMPORTANT:** Read instructions before assembling. Bolts should be finger tight until the installation is completed to allow sufficient adjustment for aligning holes and locating parts to vehicle frame. Preventive maintenance can prevent accidents. Regularly inspect all components and repair or replace any worn, loose, or damaged parts immediately. Remember to use standard methods and practices when attaching snowplow including wearing safety glasses during drilling.

**LIFT ASSEMBLY**

1. Remove bumper and brackets from vehicle, disconnecting park/turn plugs at lights. Remove brackets from bumper, and replace top flange fasteners. Remove tow hook from curb side frame. Remove Air Dam on Pathfinder. To assist with the installation the protection shield may be removed temporarily if necessary. **NOTE:** Retain tow hook, bumper brackets and Air Dam for reinstallation if Lift-Mount is removed from vehicle.
2. Install right and left mount thrust units to frame ends with trimmed ends rearward. To attach the mount thrust units flush to the underside of frame, remove the rubber shield retainer plugs from frame at the back end of mount thrust units and move the shields inwards. Save plugs for reinstallation if Lift-Mount is removed from vehicle. Fasten with furnished 12mm x 40mm capscrews, 7/16" flat washers to slots and lock washers into frame cagenuts in the location(s) that secured the tow hook. Drill 5/8" holes thru mount thrust units at rear end of frame tie down bracket slots. Fasten with 5/8" x 1 3/4" capscrews, Special Square Washers to slots, and locknuts.
3. Align the bottom holes of the Lift Unit side angles to the end holes of mount thrust angles and fasten with furnished 5/8" x 1 3/4" capscrews and locknuts. Complete Lift Unit lower attachment with furnished 1/2" x 1 1/2" capscrews, flat washers to slot side and locknuts thru lift angle and the upright angle of the mount thrust units.
4. Install lift stabilizing tie bars to the lower rear hole of the bumper anchors on the frame and to the tabs on the side of the Lift Unit. On Pickup use the tie bar with the short straight leg. On Pathfinder use those with the long straight leg. Secure tie bars at vehicle frame end with furnished 8mm x 25mm capscrews and 5/16" lock washers and to lift unit end with furnished 3/8" x 1 1/4" capscrews and locknuts.

**TIGHTEN ALL BOLTS TO CORRESPONDING TORQUE VALUES NOTED IN FASTENER TORQUE CHARTS.**

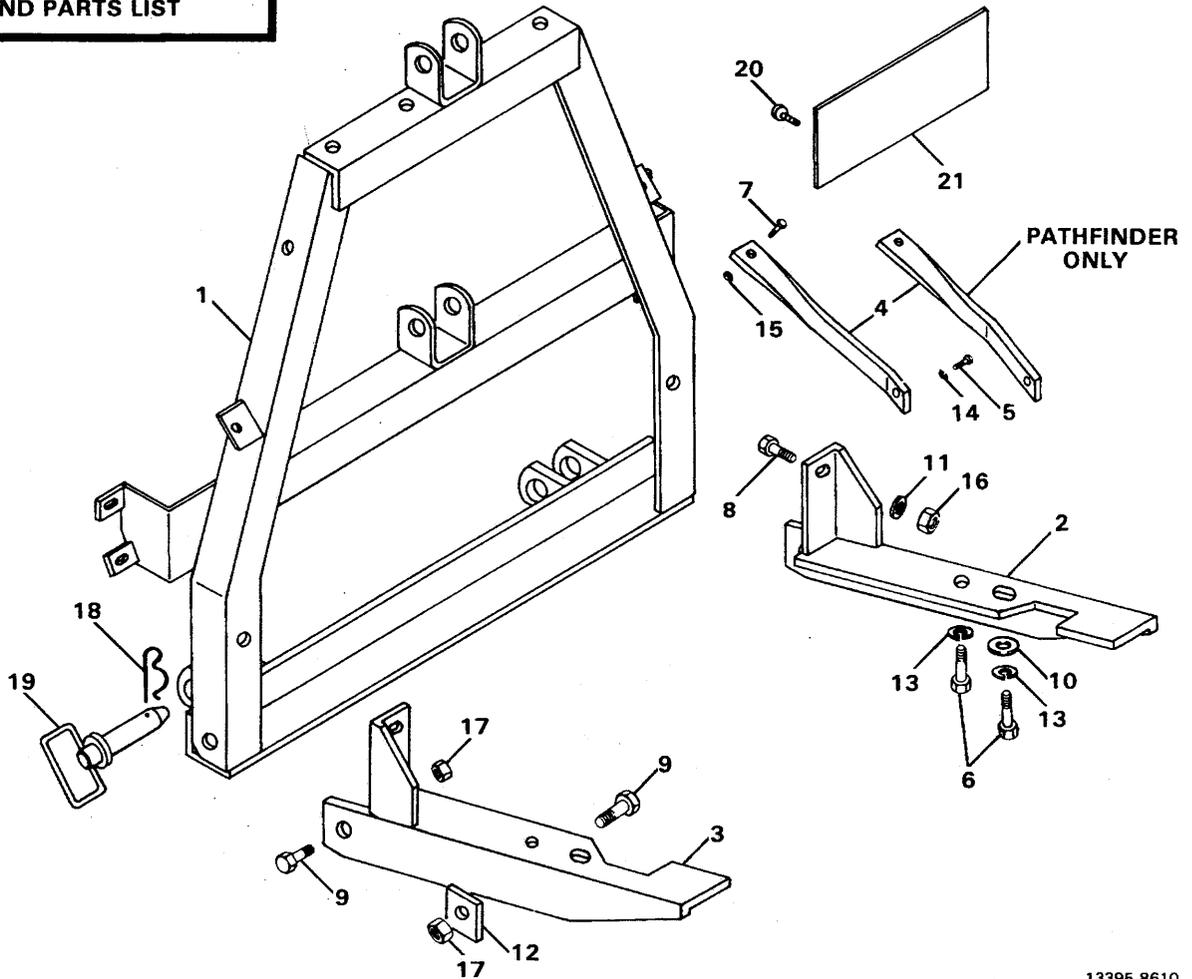
5. Install bumper to lift unit brackets using existing bumper fasteners. Reattach park and turn harness plugs to bumper lights.
6. Install plastic shields to cover the openings around the horns and to blend grille area to the lowered bumper. The shields can be cut and fit to suit and to wrap around under the parking lights if desired. Secure by drilling 9/64" diameter holes through the top corners and in the middle of the plastic shields and into the flange area directly below the vehicle headlights. Fasten with furnished No.10 x 1" tapping screws.

**CAUTION:** To prevent damage to gas lines, brake lines, gas tank vapor lines or wiring during drilling, move and replace as necessary.

**LIGHT KIT ASSEMBLY — USE LOW-PROFILE LIGHT KIT ASSEMBLY BOX No. 60010.** See back page of these instructions for installation.

Box No. 60588  
 Model 2220 Nissan 4x4 86½ & Later  
 Hard Body Pick-Up & Pathfinder

**DIAGRAM AND PARTS LIST**



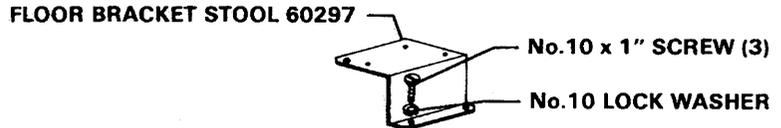
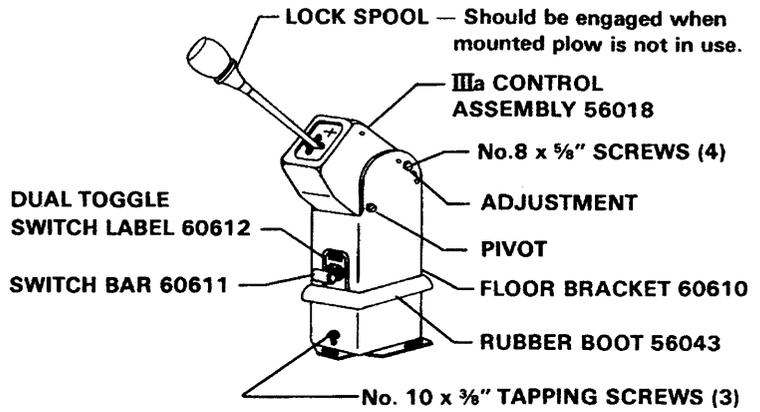
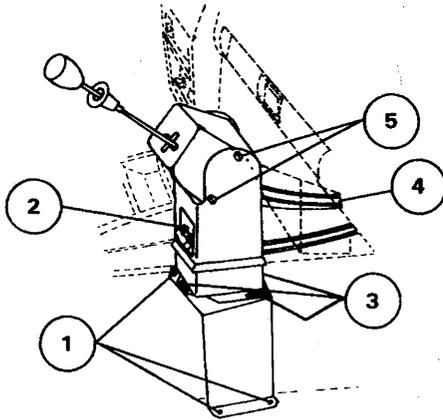
13395-8610  
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Item	Part No.	Quantity	Description
1	60594	1	Lift Unit
2	60705	1	Mount Thrust Unit — Curb Side
3	60707	1	Mount Thrust Unit — Driver Side
4	60704	2	Tie Bar
	60703	2	Tie Bar — (Pathfinder)
5	95035	2	Capscrew — 8mm x 1.25mm x 25mm Long — Grade 8.8
6	95072	4	Capscrew — 12mm x 1.25mm x 40mm Long — Grade 8.8
7	90040	2	Capscrew — 3/8"-16 x 1-1/4" Long — Grade 5
8	90100	2	Capscrew — 1/2"-13 x 1-1/2" Long — Grade 5
9	90128	4	Capscrew — 5/8"-11 x 1-3/4" Long — Grade 5
10		2	Flat Washer — 7/16"
11		2	Flat Washer — 1/2"
12	60709	2	Washer — Special Square
13	95174	4	Lock Washer — 12mm
14		2	Lock Washer — 5/16"
15	91333	2	Locknut — 3/8"-16 — Nylon Insert Type
16	91335	2	Locknut — 1/2"-13 — Nylon Insert Type
17	91337	4	Locknut — 5/8"-11 — Nylon Insert Type
18	91965	2	Hairpin Cotter — 5/32" x 2-15/16" O/A Length
19	93028	2	Hitch Pin — 1" x 3-1/2" Long
20		10	Tapping Screw — No. 10 x 1" Long
21	60449	2	Plastic Shield

**NOTE:** Only those items indicated with a **PART NUMBER** are available for service.

## INSTALLATION INSTRUCTIONS

For — IIIa Control and Floor Bracket  
 Model 2220 Nissan 4x4 86½ & Later  
 Hard Body Pick-Up & Pathfinder



1. Temporarily assemble Floor Bracket to Floor Bracket Stool, and IIIa Control to Floor Bracket. Position this assembly on the passenger side of tunnel in a convenient position for the driver (allow room for glove compartment door to open). Mark location of the three (3) mounting holes in Floor Bracket Stool. Check under hole locations for wires or other interference before drilling two (2) 9/64" diameter holes into the floor and one (1) 9/64" diameter hole into tunnel. Disassemble IIIa Control, Floor Bracket and Stool. Install Stool using three (3) No. 10 x 1" sheet metal screws and lock washers.
2. FOLLOW TWO HARNESS LIGHT KIT INSTALLATION INSTRUCTIONS ON BACK PAGE OF THIS LITERATURE before proceeding with installation of IIIa Control.
3. With Light Kit Harness wires attached to switches in Floor Bracket, attach Floor Bracket to Stool with three (3) No. 10 x 3/8" long hex head tapping screws. Rotate Floor Bracket to desired position before tightening screws. Slide rubber boot down to cover screws.
4. Pass control cables through holes drilled in passenger side of firewall. Drill per hydraulic system instructions.
5. Assemble the IIIa Control to the Floor Bracket using four (4) No. 8 x 5/8" long hex head screws.

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## INSTALLATION INSTRUCTIONS FOR 59700 BLADE GUIDE ASSEMBLY

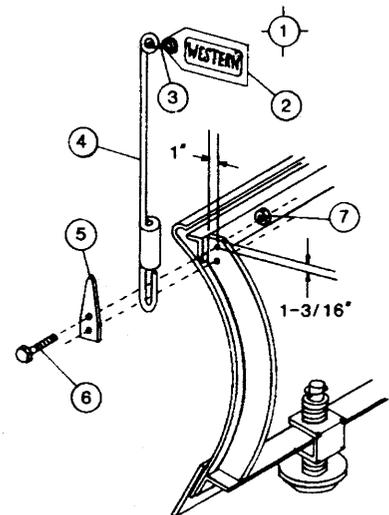
The following instructions simply outline the attachment of this blade guide assembly.

- Step 1. Lower blade to ground level.
- Step 2. If hole is not pre-drilled, drill one 11/32" hole, 1-3/16" down and 1" out on the outside rib of the blade. See diagram below.
- Step 3. Insert pointed end of clamp into coil of guide. Attach guide to rib using top hole of clamp. Secure assembly using supplied 5/16" x 1" bolt and locknut. Tighten until guide will stand alone perpendicular to road surface.
- Step 4. If hole is not pre-drilled, use lower hole of clamp as locator, drill bottom hole 11/32".
- Step 5. Bolt lower hole in place. Finish securing top bolt.
- Step 6. Attach other side following above steps.

Pictorial view supplied below. Remember to use standard methods and practices in attaching blade guides including wearing safety glasses during drilling.

### PARTS LIST 59700 — BLADE GUIDE ASSEMBLY

Item	Part No	Quan.	Description
1	59697	2	Blade Guide Rod, S-Hook & Flag
2	59694	1	Flag
3	59696	1	S-Hook
4	59691	1	Blade Guide Rod
5	59946	2	Clamp
6		4	Capscrew — 5/16"-18 x 1" Gr. 2
7		4	Locknut - 5/16"-18 Nylon Insert



## TWO HARNESS LIGHT KIT INSTALLATION INSTRUCTIONS

Use 60010 Light Kit Assembly and additional parts supplied in Lift-Mount box. Identify type or number of headlamps on vehicle (I.D. embossed in top of lens except 9004 removeable Halogen Bulb which is printed on side of base). SELECT CORRECT HARNESSES FOR TYPE OF VEHICLE HEADLAMP.

### TYPE 2B Rectangular or 2D Round Headlamps

Use 59805 Harness furnished in 60010 Light Kit and 60584 Harness supplied in Lift-Mount Box.

### No. 9004 Halogen Bulb Headlamps

Use two (2) 60591 Harness kits available thru Service Parts. Each kit contains one (1) 60586 Harness. Exchange Harnesses in Light Kit box and Lift-Mount box thru Customer Service.

Follow instructions on this page and wiring diagram in literature furnished in 60010 Light Kit.

The Light Kit and additional furnished parts include pre-assembled wiring harnesses with color coded wires, convenient connectors and switches to greatly simplify installation and provide performance equal to the existing system. Save time by following the instructions carefully. Always check to be certain the vehicle lights work properly before beginning the installation.

1. **ASSEMBLE LIGHT BRACKET TO LIFT FRAME**, using four (4) holes in lift frame as shown on parts diagram.
2. **ASSEMBLE LAMPS TO BRACKETS**, headlamps to inside, park/turn lamps to outside. Adjust headlamps after installation is completed. Route headlamp leads through vehicle grille. Secure leads with furnished cable ties.  
**CAUTION:** Before proceeding, disconnect battery ground to avoid possible electrical equipment damage.
3. **MODIFY WIRING HARNESSES:** Modify auxiliary harnesses selected above as follows: Locate headlamp sockets with six (6) wires. As close to six (6) wire socket as possible, cut the three (3) wires that go to three (3) wire socket (See Diagram Below). Protect ends of cut wires. (The three (3) wire socket is not used on this installation. Modify both harnesses.)
4. **INSTALL HEADLAMP CIRCUIT:** Drill two (2) 1/2" holes thru the firewall on the curb side of vehicle in alignment with Floor Bracket when installed (See IIIa Control Installation Instructions, this literature). Drill from the engine compartment side, if possible, checking before drilling to avoid wires, lines, and other items.

Install modified harnesses as follows:

**DRIVER SIDE** — Remove vehicle harness socket from back of vehicle headlamp (headlamp sockets with lock feature are removed by squeezing both sides of rubber boot on socket).

#### TYPE 2B or 2D Headlamps

Plug male end of **LONG** modified auxiliary harness (60584) into vehicle harness socket.

#### No. 9004 Halogen Bulb Headlamps

Plug male end of one 60586 modified auxiliary harness into vehicle harness socket.

Connect auxiliary harness socket to vehicle headlamp. Route harness to holes drilled in firewall. **NOTE:** Avoid hot or moving engine parts. Insert spade ends through the hole into the cab. Cut rubber grommet, place it around harness, and insert grommet into drilled hole.

**CURB SIDE** — Install remaining harness following above procedure.

**AUXILIARY LIGHT TO HARNESS CONNECTIONS** — Connect bullet ends of black and white wires on driver side auxiliary light to matching black and white connectors on auxiliary harness installed to driver side vehicle headlamp. Connect bullet ends of black and white wires on curb side auxiliary light to matching black and white connectors on auxiliary harness installed to curb side vehicle headlamp.

**INSTALL SWITCHES IN FLOOR BRACKET** — Slide rubber boot down past switch holes in Floor Bracket. Mount switches (one from 60010 Light Kit and one from Lift-Mount Box) into Floor Bracket furnished in Lift-Mount box. Affix label furnished in Lift-Mount box over switches on bracket. Slide Switch Bar over toggles of both switches. Connect six spade terminals of one harness to the appropriate terminals of one of the switches as shown in the wiring diagram. Connect the six spade terminals of the other harness to the other switch following the same wiring diagram.

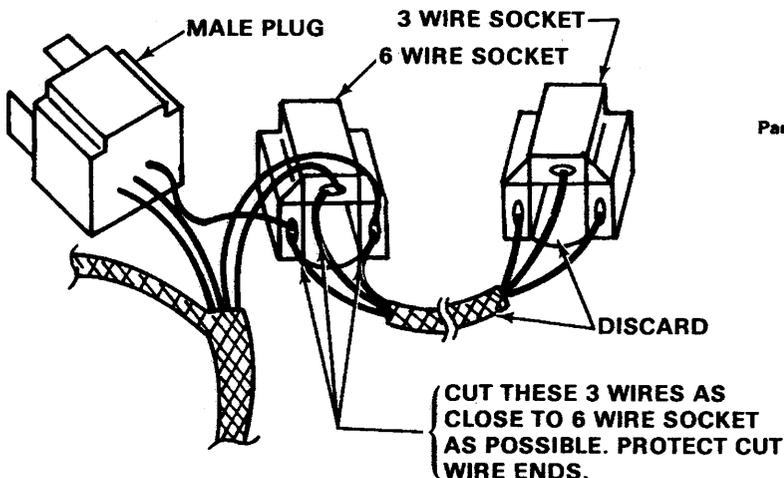
5. **INSTALL PARK/TURN LAMP CIRCUIT** — Identify the vehicle park and turn lamp wires from each lamp. **DO NOT CUT OR STRIP THESE WIRES** since the auxiliary park/turn lamps operate with the vehicle park/turn lamps. Attach a black self-stripping bullet receptacle connector to each of the four (4) wires adjacent to the vehicle park/turn lamps as shown in diagram by placing the outer groove of the bullet receptacle connector over the park or turn lamp wire. Fold the receptacle connector over the wire and snap into place to lock the connector. Insert the bullet end of the brown wire from each auxiliary park/turn lamp into the bullet receptacle connectors attached to the two (2) vehicle park wires, and the bullet end of each red wire into the bullet receptacle connectors attached to the two (2) vehicle turn wires. Extra grommets are furnished in the kit if 1/2" diameter holes must be drilled through radiator bulkhead for the park and turn wires. **NOTE:** Base mounting screw must be grounded for park/turn lamps and headlamps to work.

This vehicle is equipped with heavy duty flashers. A flasher change is not required.

**FINAL CHECK:** When the electrical circuit is completed per these instructions, reconnect the vehicle battery. Check the operation of all vehicle lights. The vehicle and auxiliary headlamps are controlled by the auxiliary toggle selector switches. The park/turn lamps are not. With the toggle switches in the auxiliary position, adjust the auxiliary headlamps in the brackets keeping in mind the higher position of the lights and any applicable Federal, State, or Local regulations. Finally, secure all wires and harnesses with cable ties so they do not interfere with hot or moving parts in engine compartment.

**CAUTION** — Auxiliary headlights and directional lights provide added safety and better lighting for nightwork and are a NHTSA requirement. In transit, adjust the raised blade height for maximum illumination for auxiliary lights. Auxiliary and vehicle headlamps will use headlamp fuses as designed by vehicle manufacturer (if one fuse is blown, either vehicle or auxiliary headlamp on that side of the vehicle will not light).

Complete IIIa Control installation.



### LIGHT KIT PARTS LIST (Lift-Mount Box)

Part Number	Quantity	Description
60610	1	Floor Bracket
56043	1	Rubber Boot
60584	1	Plug-In Light Harness — Long
53845	1	Toggle Switch DPDT
60611	1	Switch Bar
25301	1	Rubber Grommet
59223	2	Cable Tie
60612	1	Dual Switch Label
90661	3	Tapping Screw — No. 10 x 3/8" Long

Form No. 13398-8610

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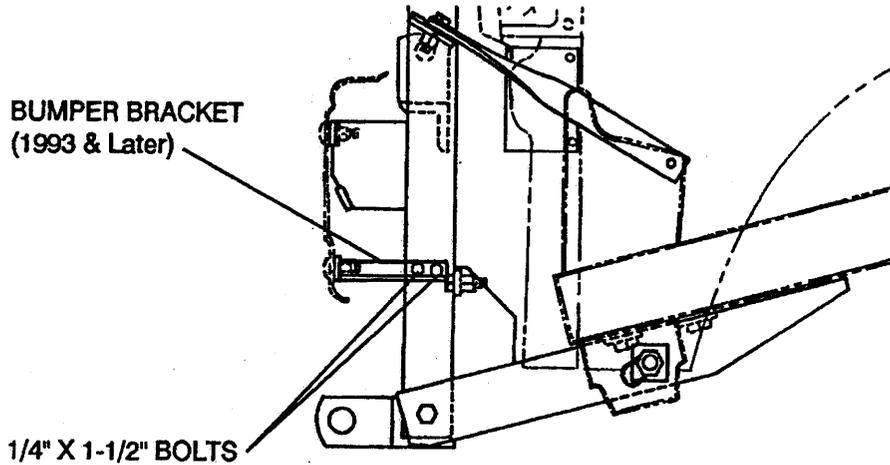
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Box No. 60588  
Supplement Instructions  
Model 2220  
Nissan 4 x 4 86-1/2 & Later  
Hard Body Pick-Up & Pathfinder  
March 24, 1993

### 1993 and Later Bumper Bracket Installation Instructions.

Follow installation instructions except before reattaching bumper in step 5:

Attach a furnished bumper bracket to each vertical side angle of the lift frame. Secure each bracket with two 1/4" x 1-1/2" capscrews and locknuts.



### Additional Parts Required For 1993 & Later Bumper Installation

