



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



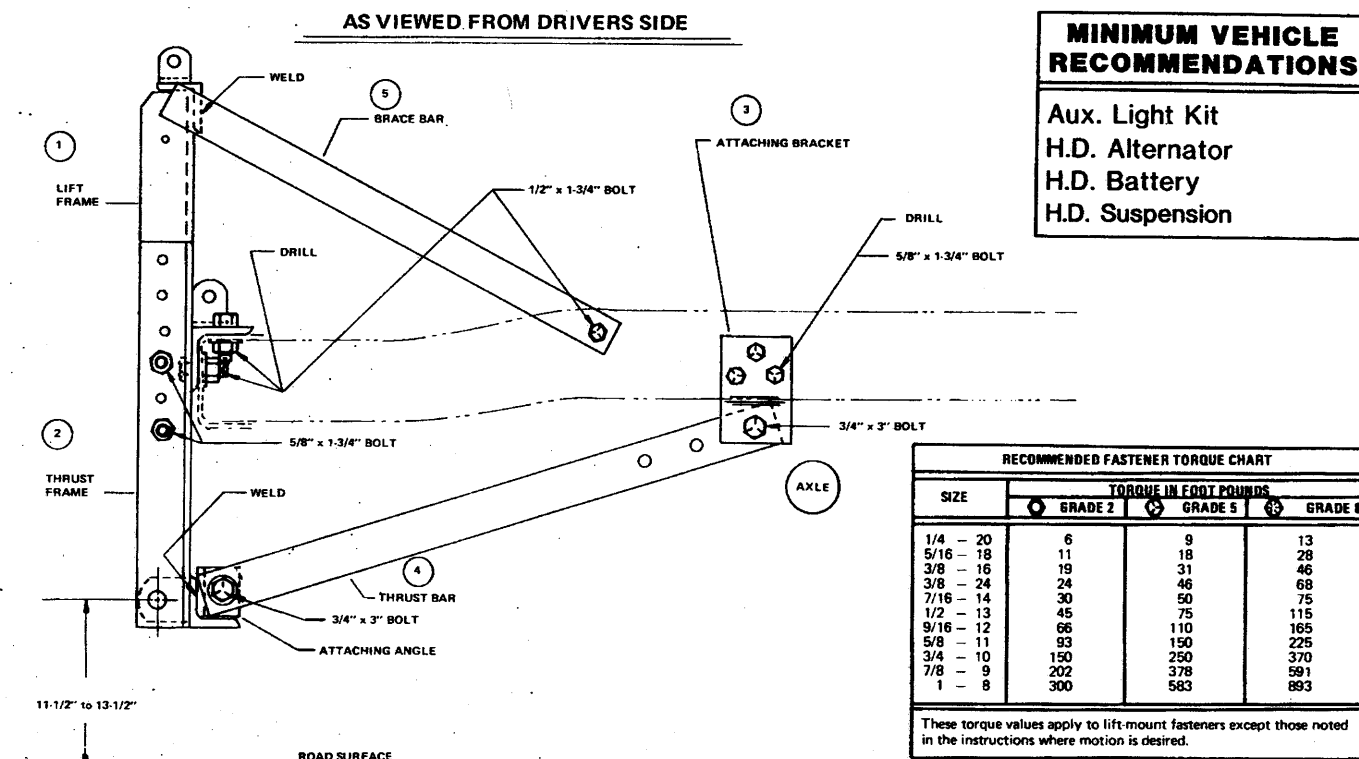
A DIVISION OF DOUGLAS DYNAMICS, INC.

Box No. 59713
Model No. 2910
Universal Standard
Front Frame
Lift-Mount

INSTALLATION INSTRUCTIONS

MINIMUM VEHICLE RECOMMENDATIONS

Aux. Light Kit
H.D. Alternator
H.D. Battery
H.D. Suspension



RECOMMENDED FASTENER TORQUE CHART				
SIZE	TORQUE IN FOOT POUNDS			
	GRADE 2	GRADE 5	GRADE 8	GRADE 9
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	

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

IMPORTANT: Remember to use standard methods and practices when installing snowplows, including wearing safety glasses during drilling. Read instructions before installing. Proper maintenance can prevent accidents. Regularly inspect all components and repair or replace any worn, loose or damaged parts immediately. Bolts should not be tightened until the installation is completed to allow sufficient adjustment for aligning holes and locating parts to vehicle frame. Disconnect vehicle electrical system to protect wiring, alternator, etc., before welding.

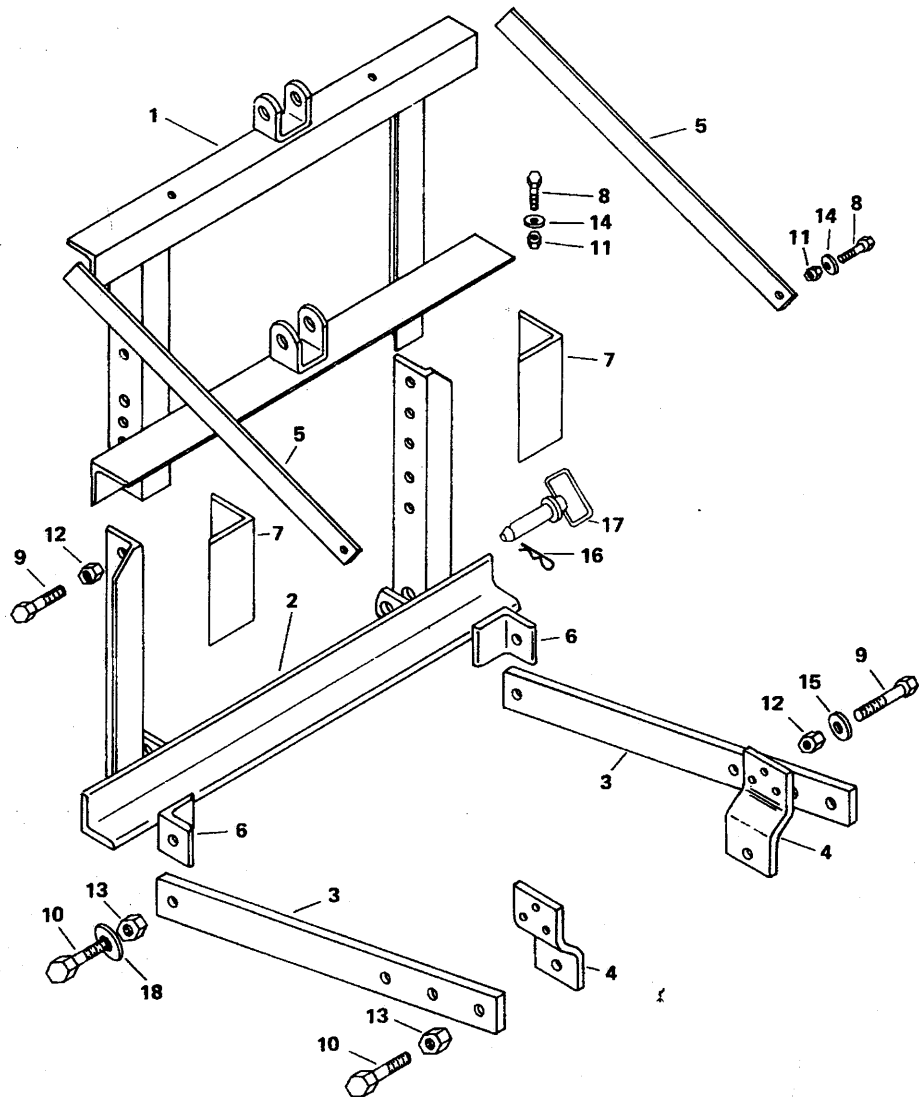
1. Attach the lift frame to the bumper. Whenever possible, drill 1/2" holes through the base angle of the lift, to align to existing holes in the bumper and/or frame. Four bolts through the top and two through the front are suggested. Fasten with furnished 1/2" x 1-3/4" bolts and locknuts. Use flatwashers as shims between the lift base angle and the bumper if the contour of the bumper causes excessive gaps. Two bumper angles are furnished, they can be bolted to the bumper and welded to the lift-mount or bolted to the side of the vehicle frame and welded to the lift-mount.
2. Assemble the lower thrust frame to the lift frame. Align the holes in the angle and adjust to hold the 11-1/2" to 13-1/2" dimension from the road surface to the center of the A-frame coupling lug holes. Fasten with the furnished 5/8" x 1-3/4" bolts and locknuts. Space these bolts as far apart as possible.

TIGHTEN ALL BOLTS TO CORRESPONDING TORQUE VALUES NOTED IN FASTENER TORQUE CHART.

3. Install the frame attaching brackets to the outside of the vehicle frame, choosing a position that is clear of frame brackets or obstructions. The offset can be positioned to the inside or outside whichever is most convenient for making the installation. Keep in mind that the thrust bars will be attached to this bracket and to the thrust frame by means of the attaching angles. These parts must be positioned to miss steering, springs and tie rod. Use whichever hole in the thrust bar is most convenient to accomplish this. After determining location for attaching brackets mark and drill three holes per side for 5/8" x 1-3/4" bolts. Check inside of frame for gas line, brake line, etc. before drilling. Fasten, using locknut and flatwasher inside of frame.
4. Secure top of thrust bar to bracket just installed using 3/4" x 3" bolts and locknuts. If other than end hole is used excess material should be cut off. Fasten attaching angle to bottom of thrust arm using 3/4" x 3" bolts, flatwashers and locknuts. Position attaching angle onto back of thrust frame and weld in place with minimum 1/4" welds. Tighten all bolts securely.
5. Top diagonal braces are furnished and should be installed to top of lift and vehicle frame. Top cross angle of lift may be cut for desired frame or radiator clearance when installing braces. Holes will have to be neatly cut into the grill or sheet metal to accomplish this. The farther back they are attached to the frame the more support they will give the lift. Drill 1/2" holes in the frame and fasten using 1/2" x 1-3/4" bolts and weld to top cross angle of lift.

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 Front Frame
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DIAGRAM & PARTS LIST



3022-8312

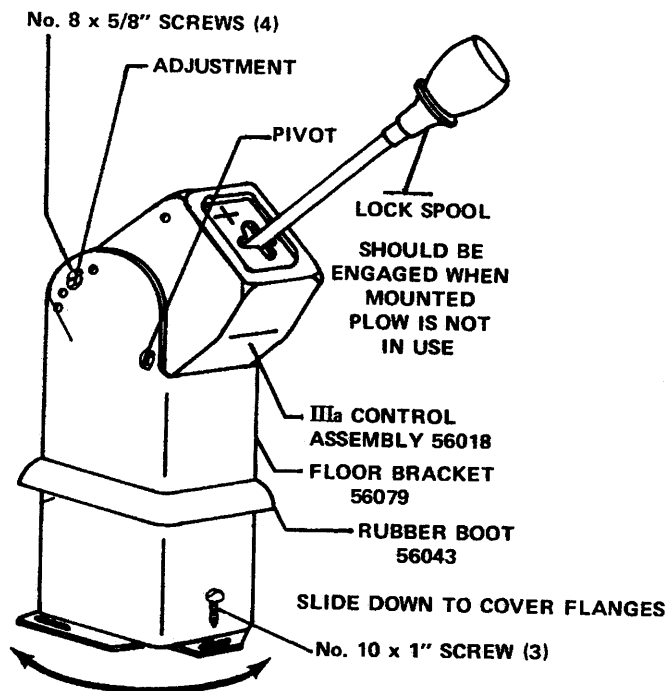
3023-8312

Item	Part No.	Quan.	Description
1	59721	1	Lift Frame Unit
2	59726	1	Thrust Frame Unit
3	59727	2	Thrust Bar
4	59623	2	Attaching Bracket
5	59739	2	Brace Bar
6	59625	2	Attaching Angle
7	59740	2	Bumper Angle
8	90101	8	Cap Screw — 1/2"-13 x 1-3/4" Long — Grade 5
9	90128	10	Cap Screw — 5/8"-11 x 1-3/4" Long — Grade 5
10	90157	4	Cap Screw — 3/4"-10 x 3.0" Long — Grade 5
11	91335	8	Locknut — 1/2"-13 Nylon Insert Type
12	91337	10	Locknut — 5/8"-11 Nylon Insert Type
13	91338	4	Locknut — 3/4"-10 Nylon Insert Type
14		8	Flat Washer — 1/2" Std.
15	91139	6	Flat Washer — 5/8" SAE
16	91965	2	Hairpin Cotter — 5/32" x 2-15/16" O/A Length
17	93028	2	Hitch Pin 1" x 3-1/2" Long
18		2	Flat Washer — 3/4" Std.

NOTE: Only those items indicated with a **Part Number** are available for service.

INSTALLATION INSTRUCTIONS FOR - IIIa CONTROL TO VEHICLE TRANSMISSION TUNNEL

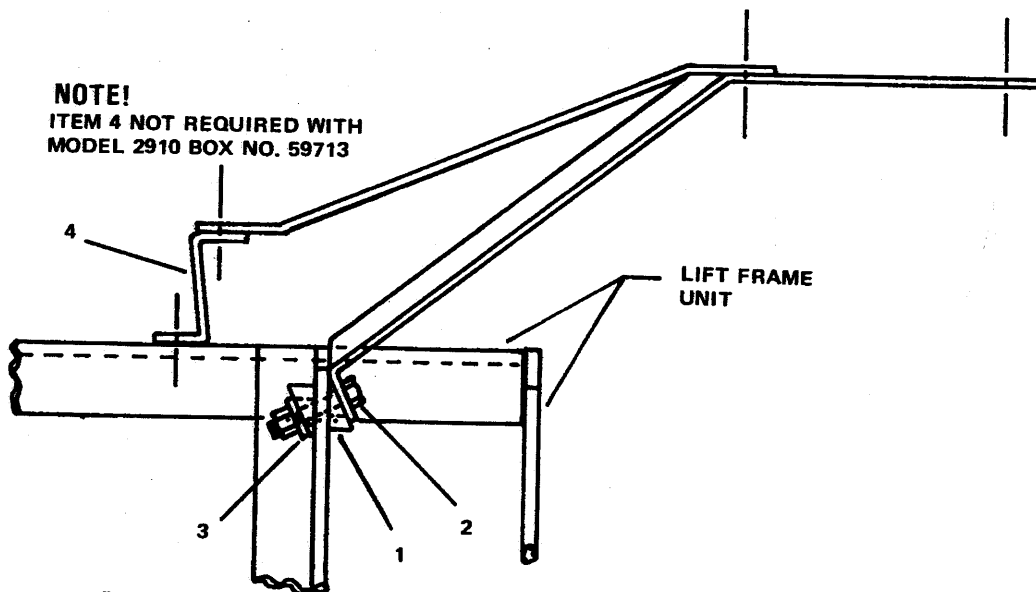
The IIIa Control should be placed in the vehicle so it is convenient to the operator without interfering with shift levers or the seat when it is fully forward. Use the bracket in the location you select as a locating template to drill three 9/64" diameter holes through the floorboard. These holes should be drilled in the center of the floor bracket slots, this will permit the bracket to be adjusted at the operators discretion. Fasten using No. 10 x 1" screws and lockwashers. Slide the rubber boot down to cover the flanges. Align forward holes of bracket and IIIa Control, place No. 8 x 5/8" long slotted hex head screws in these holes. Select best position for the IIIa Control and secure using two more of the same size screws after cable installation is completed.



BRACKET MAY BE ROTATED WITHIN SLOTS

LIGHT KIT SUPPLEMENT DIAGRAM - PARTS LIST INSTRUCTIONS

3088-8003
2948-7704



Item	Part No.	Quan.	Description
1	54565	4	Tube Spacer
2		2	Capscrew - 3/8"-16 x 2-1/4" Long
3		2	Flatwasher - 3/8"
4	59413	2	Light Bracket - Extension Bar

NOTE: Only those items indicated with a **Part Number** are available for Service.

Follow these instructions, together with Light Kit Instructions. Spacers and some bolts are furnished in Mount Bolt Bag, discard extra bolts from Light Kit.

1. Attach the lower end of the long bracket, placing a spacer between it and the lift side angle.
2. Insert 3/8" x 2-1/4" bolt and place another spacer inside of lift angle. Secure with flatwasher, lockwasher and hexnut.
3. Fasten short light bracket bar to top of extension bar with 3/8" x 1-1/4" bolt, lockwasher and hexnut. Weld or drill hole and attach extension bar to lift.

INSTALLATION INSTRUCTIONS FOR 59700 BLADE GUIDE ASSEMBLY

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

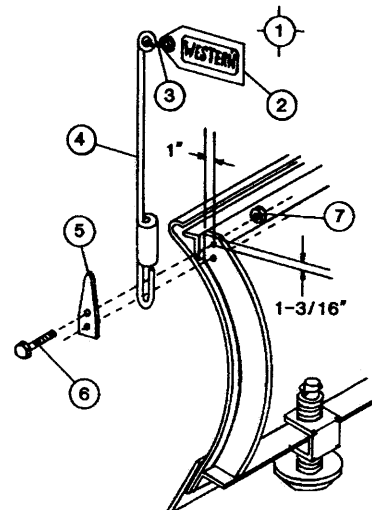
- Step 1. Lower blade to ground level.
- Step 2. If hole is not pre-drilled, drill one 11/32" hole, 1-3/16" down and 1" out on the outside rib of blade. See diagram below.
- Step 3. Insert pointed end of clamp into coil of guide. Attach guide to rib using top hole of clamp. Secure assembly using supplied 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



3009-7911

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