



SNOWPLOWS
by Meyer

Frame Attachment Kit

1999 GMC and Chevrolet K2500

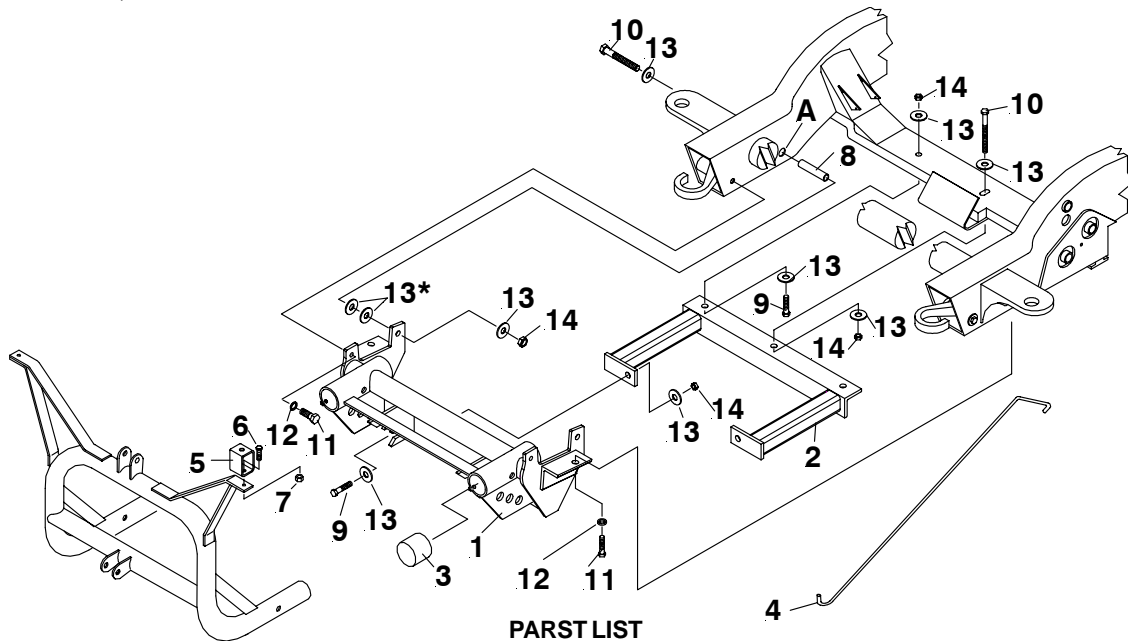


IMPORTANT NOTICE

End user must be given this instruction sheet prior to delivery of this Snow Plow.

The equipment you have just purchased should only be used on vehicles equipped with the Manufacturer's Snow Plow Preparation Packages. Snow Plowing without the original Snow Plow Preparation Package may damage your vehicle and the added weight to the equipment may impair the operation and control of the vehicle. Snow Plowing with a vehicle that the manufacturer does not recommend for that purpose may void your new vehicle warranty. If your vehicle is not originally equipped with the Snow Plow Package, additional parts may be necessary before snow plowing. Owners of these vehicles should consult their dealers before purchase or installation of such parts. CAUTION: the installation, on any vehicle, of these parts is not a full substitute for the original equipment Snow Plow Preparation Package.

Warning: Lift Arm extends beyond bumper of vehicle. To minimize damage from a front-end collision, Lift Arm should be removed from vehicle when Snow Plow is removed.



PARSTLIST

Item	Part No.	Qty.	Description
	81018	1	MOUNTING CARTON
1	80339	1	• Mounting Frame
2	80338	1	• Under Frame
3	815000146	2	• Receiver Tube Cap
4	819000013	1	• Release Hook
	08626	1	• Light Elevation Kit
5	11368	2	•• Light Elevation Bracket
6	20095	2	•• Bolt H 1/2-13 x 1-1/2" Gr. 5
7	20307	2	•• Locknut 1/2-13
	80341	1	• HARDWARE BAG
8	11636	2	•• Sleeve
9	20141	4	•• Bolt H 5/8-11 x 2" Gr. 5
10	20152	3	•• Bolt H 5/8-11 x 5" Gr.5
11	22182	4	•• Bolt H M12x1.75x 40mm Gr.10.9
12	20355	4	•• Flatwasher 1/2"
13	20357	18	•• Flatwasher 5/8"
14	20309	7	•• Locknut Esna 5/8-11
	21976	2	•• Battery Connectors

Parts indented are included in the assembly under which they are indented.

Diamond Equipment reserves the right, under its continuing product improvement program, to change construction or design details, specifications and prices without notice or without incurring any obligation.

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GENERAL INSTRUCTIONS

CAUTION: Always disconnect battery before beginning installation.

DO NOT BURN holes or **WELD** vehicle frame. This may cause frame failure.

After first use, retighten all mounting bolt connections to specified torque. All mounting bolt connections to be checked periodically for tightness.

Locknuts are furnished **DO NOT** tighten bolts and nuts until installation is complete (unless otherwise specified), then be sure to tighten all attaching parts per specified torque chart.

SAFETY PRECAUTIONS should be used when **Hydraulic Unit is in OPERATION** and plow is in a **RAISED** position. **Lower plow to ground when vehicle is PARKED.**

NOTE: It is important that the Meyer harness, all wires from the Meyer light switch, and all other electrical wires be routed around hot or moving engine parts, and any sharp metal. Protection must be provided to guard against wire damage at these points. All excess or loose wires must be neatly secured using wire ties.

Check contents against the parts list to determine all are correct and included, and also to familiarize yourself with them.

FOLLOW THESE INSTRUCTIONS EXPLICITLY.

Warranty does not apply to a Meyer or Diamond product which has been negligently or improperly assembled or installed.

OVERHAUL and **SERVICE INFORMATION** are covered on separate instructions.

VEHICLE RECOMMENDATIONS

General Motors recommends snowplow usage for only those trucks that have the option "VYU" Snow Plow Preparation Package.

General Motors recommends that when a snow plow is mounted that only one passenger should accompany the driver. More than one passenger may exceed front gross axle weight ratings.

1999 thru 2000 Regular/Extended Cab

	<u>Model</u>	<u>G.V.W.</u>	<u>Opt.Code</u>	<u>Frnt. G.V.W.R.</u>
	C 2500	7200 lb.	(C5Z)	4100 lb.
	C 2500	8600 lb.	(C6P)	4100 lb.
	K 2500	8600 lb.	(C6P)	4500 lb.
2001	All Models	9200 lb.	(C6W)	4800 lb.
	C/K 3500	8600 lb.	(C6P)	4500 lb.
2001	All Models	11,400 lb.	(C7W)	4800 lb.

Cab Chassis Regular Cab only

	C 3500	8600 lb.	(C6P)	4100 lb.
	K 3500	8600 lb.	(C6P)	4500 lb.
2001	C/K 3600	12,000 lb.	(C7L)	4800 lb.

Sport Utility Vehicles

	<u>Model</u>	<u>G.V.W.</u>	<u>Opt.Code</u>	<u>Frnt. G.V.W.R.</u>
2000	C2500	8600	(VYU)	4100 lb.
2000	K2500	8600	(VYU)	4500 lb.

INSTALLATION INSTRUCTIONS

- PRELIMINARY:** Remove Air Dam. Retain all hardware. The Air Dam may be reinstalled.
 - Splash Shield:** Remove splash shield. Retain with all hardware, it will not be reused.
 - Tow Hooks:** Remove inner and lower Tow Hook fasteners they will not be reused.
 - Mounting Frame:** Position mounting frame (1) between the frame rails and align holes to where tow hook bolts were removed. Attach mounting frame to inside of frame and bottom tow hook hole under the rails with M12 x 1.75 x 40mm bolts (11), flatwashers (12).
Note: Snug, but do not torque down at this time.
 - Mounting Frame continued:** Using the mounting frame as a template, drill a 21/32" hole "A" all the way through the frame. Remove mounting frame and re-drill the inside of the frame only with a 27/32" bit. This will allow for the installation of sleeve (8).
 - Reposition the mounting frame (1) between the vehicle frame rails and attach mounting frame to the inside of the vehicle frame **only** using M12 x 1.75 x 40mm Bolts (11), flatwashers (12).
Note: Snug, but do not torque down at this time.
 - Attach mounting frame (1) at hole "A" using 5/8-11 x 5" bolts (10), sleeve (8), washers (13) and locknut (14). **See illustration.** Note: Four * extra washers (10) have been provided (two for each side) to take up space between the vehicle frame and mounting frame if needed due to frame variances.
Do not tighten mounting frame at this time.
 - Attach mounting frame to the bottom of vehicle frame using M12 x 1.75 x 40mm Bolts (11), flatwashers (12).
Do not tighten at this time.
 - Underframe:** Position underframe (2) behind mounting frame rear channel. Attach underframe (2) to mounting frame (1), using 5/8-11 x 2" bolts (9), flatwashers (13), and locknuts (14).
 - Attach rear of underframe (2) to the three holes in the vehicle crossmember. Attach underframe (2) at the outer two holes, in crossmember, using 5/8-11 x 2" bolts (9), flatwashers (13), and locknut (14), and at the center hole using a 5/8-11 x 5" bolts (10), flatwasher (13), and locknut (14).
Note: Bolt (10) is installed from the top.
- Note before tightening the fasteners, the clevis frame should be pushed back as far as possible under the vehicle.**
- Tighten all fasteners to their proper torque. Tighten bolts in the same order they were assembled to the vehicle.
 - Reinstall air dam if desired, notch out around clevis frame as needed.
 - LIFT FRAME:** Clean paint and burrs from the outside tube ends of the lift frame and the inside surfaces of the receiver tubes of the front mounting frame (1).

SPECIAL NOTE: Liberally coat the entire tube ends of the lift frame, the inside surfaces of the receiver tubes and threads of the slack adjusting bolts on the receiver tubes with chassis or anti-seize lubricant.

Back off the slack adjusting bolts on the receiver tubes until they no longer protrude inside the tubes. Slide the lift frame into the receiver tubes of the front mounting frame (1) until the fastening holes line up. Tighten the slack adjusting bolts on the receiver tubes until the lift frame will just slide in and out of the receiver tubes. Secure the lift frame to the front mounting frame using 5/8" hinge pins (26) and hairpin cotters (27).

14. **LIFT ARM:** Install the lift arm (24) and lift cylinder or electric hydraulic unit onto the lift frame using the 5/8"-11 x 5- 1/2" capscrew (25) through the upper lift frame ears and the rear lift arm hole. Place a 5/8"-11 x 4-3/4" capscrew through the front lift arm hole and the ram end of the lift cylinder or electric hydraulic unit. Place a 5/8"-11 x 3-1/4" capscrew through the lower lift frame ears and stationary end of the lift cylinder or electric hydraulic unit. Fasten the three 5/8"-11 capscrews using three 5/8"-11 locknut (32).
15. **LIFT CHAIN:** Attach each end of the lift chain (40) to the two holes in each of the diagonal braces of the push frame using 7/16" -14 "U" bolts (41), 7/16" lockwashers (43), and 7/16"-14 nuts (42).
16. **PUSH FRAME:** Install the push frame onto the plow blade with the upper and lower pivot holes lined up with the pivot holes in the back of the plow blade. Insert the shorter pivot pin (36) down through the upper pivot holes. Insert the longer pivot pin (39) down through the lower pivot holes. Secure the pivot pins (36) & (39) using 1/4" x 2" cotter pins (23).
17. **ANGLE CYLINDERS:** Install the angle cylinders between the push frame and the ears on the back side of the plow blade with the rod end of the cylinders toward the plow blade. The elbows in the ports of the angle cylinders should be between the angle cylinders and the push frame.

NOTE: When installing the angle cylinders on 8' and 8-1/2' plow blades, place four 1-1/4" flatwashers (30) between each lower push frame ear and the stationary end of each angle cylinder.

Attach the stationary end of the angle cylinders to the push frame using the two shorter cylinder pins (22). Attach the rod ends of the angle cylinders to the back side of the plow blade using the two longer cylinder pins (44). Secure the cylinder pins using 1/4" x 2" cotter pins (23).

18. **PLOW MARKERS:** Attach each plow marker (33) to the two holes in the upper outer surface of each end rib of the plow blade using two 5/16"-18 x 1" capscrews (35), 5/16" lockwashers (37), and 5/16"-18 nuts (38).
19. **HOOK UP PINS:** Compress each hook up pin spring (50) slightly and place them between the inner most ear and the center ear on each side of the push frame with the hole through the center of each spring lined up with the pin holes in the push frame ears. Insert each hook up pin (48) through the pin hole in each inner most ear of the push frame, through the center of the springs (50), and out through the center and outside ears on each side of the push frame. Compress the hook up pin springs (50) slightly and secure the hook up pins (48) using a ill snap ring (49) in the snap ring groove of each hook up pin (48). (The snap rings should be between the end of the spring and the inner surface of each of the center ears on the push frame.)

20. **PLOW TO VEHICLE ATTACHING:** Pull back and lock the spring loaded hook up pins (48) on each side of the push frame. Attach the lift chain to the lift arm hooks and lift the back end of the push frame up level using the vehicle hydraulics. Line up the spring loaded hook up pins with the corresponding set of holes in the lower part of the mounting frame. Unlock the spring loaded hook up pins so that they go completely through the holes in the mounting frame and the push frame ears. Adjust the lift chain at the lift chain hooks on the lift arm so that the plow blade will lift fully and also be able to follow the ground contour while plowing.

NOTE: If the lift chain does not pull evenly, shorten the longer side by attaching at a different link or at half a link where the chain is attached to the push frame with the 7/16" "U" bolts.




21. **PUSH FRAME STOP BOLTS:** Screw a 5/8"-11 jam nut (29) all the way onto each of the 5/8"-11 x 3" full thread capscrews (28). Place the capscrew / jam nut assemblies up through the ears on each side of the lower lift frame with the heads of the capscrews down. Fasten with a 5/8" lockwasher (31) and jam nut (29). Adjust the 5/8"-11 x 3" full thread capscrews (28) with the jam nuts (29) so that the heads of the capscrews (28) contact the push frame before the upper pivot section of the push frame contacts the lift arm or the lift cylinder / out front electric hydraulic unit while lifting plow or stacking snow.

NOTE: The push frame is attached to a different set of connecting holes on the mounting frame, the push frame stop bolts should be checked and may need to be readjusted to prevent the push frame from contacting the lift arm, or the lift cylinder / out front electric hydraulic unit while lifting plow or stacking snow.

CAUTION:CHECK THE TRIPEDGE ADJUSTMENT AT THIS TIME.

- A. The springs are properly adjusted when a piece of paper can be placed between each coil.
- B. If the Tripedge springs need adjustment, loosen the bottom locknut on both spring assemblies. Rotate the top nut until the springs are properly adjusted.
- C. Be sure to tighten the bottom locknut securely on both assemblies to the top nut to prevent loosening of the assemblies.

TORQUE CHART FOOT LBS.

Bolt Nut Size	Gr. 2 	Gr. 5 	Gr. 8 
1/4 - 20	4 - 5		
5/16 - 18	9 - 11		
3/8 - 16	17 - 20	26 - 29	
7/16 - 14		42 - 46	60 - 66
1/2 - 13		64 - 72	90 - 100
5/8 - 11		127 - 141	179 - 198
3/4 - 10		227 - 251	

Diamond Equipment or Meyer Products assume no responsibility for installations not made in accordance with these instructions.