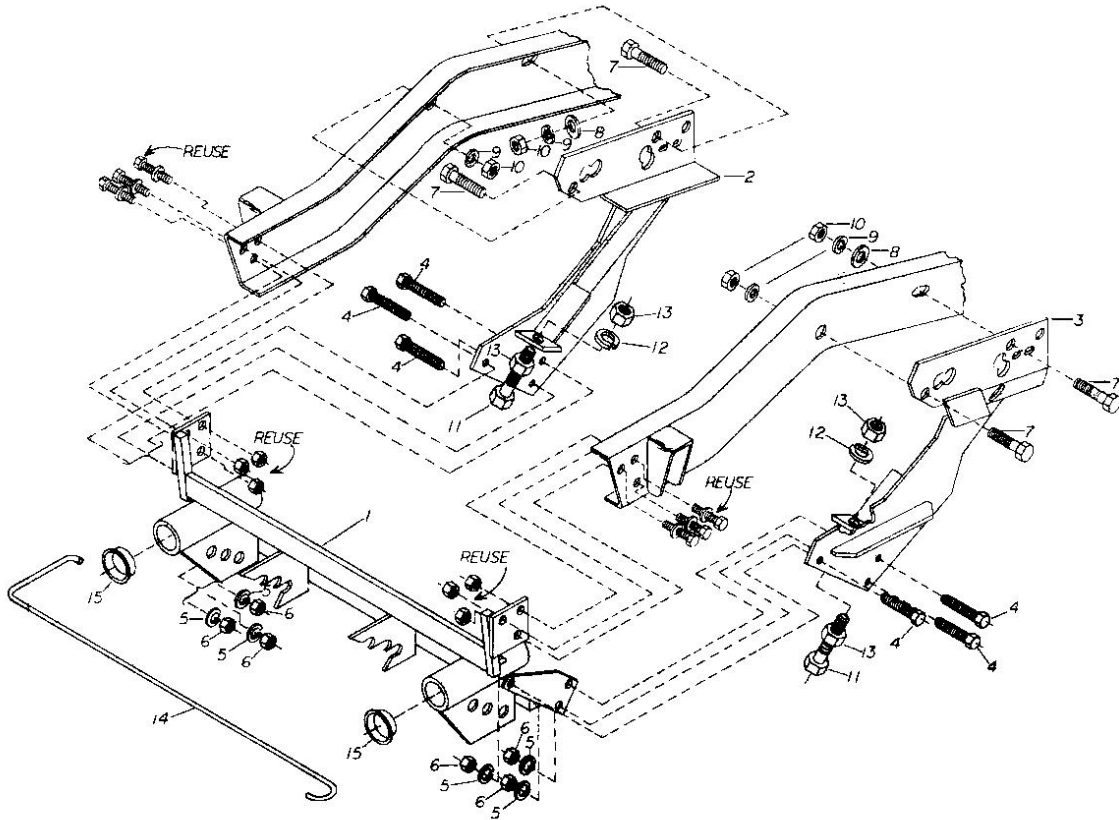




DODGE
1978 - 1993 W150, W250, W350
1992 - 1993 DIESEL
4X4



PARTS LIST

ITEM	STOCK	DESCRIPTION	QTY.	ITEM	STOCK	DESCRIPTION	QTY.
	81006	MOUNTING CARTON		9	* 20331	5/8" FLATWASHER	4
1	815000 163	FRONT MOUNTING FRAME	1	10	* 20530	5/8-11 NUT	4
2	815000 164	PUSHARM, PS SIDE	1	11	* 20166	3/4-10 X 2-1/2" CAPSCREW	2
3	815000 165	PUSHARM, DR SIDE	1	12	* 20333	3/4" LOCKWASHER	2
4	* 20095	1/2-13 X 1-1/2" CAPSCREW	6	13	* 5201003 015	3/4-10 JAM NUT	4
5	* 20329	1/2" LOCKWASHER	6	14	819000 013	RELEASE HOOK	1
6	* 8501001 009	1/2-13 NUT	6	15	815000 146	REC. TUBE END CAP	2
7	* 20139	5/8-11 X 1-1/2" CAPSCREW	4				
8	* 20357	5/8" FLATWASHER	2				

ITEMS PACKED IN 80095 BOLT BAG

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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**PARTICULAR ATTACHMENTS INSTRUCTIONS
FOR 81006 PULL AWAY MOUNTING**

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.

GENERAL INSTRUCTIONS: Disconnect the vehicle battery or batteries before beginning installation. (Reconnect after installation is complete.) Do not burn holes into or weld pieces onto the vehicle frame. Use extreme caution when drilling any holes in the vehicle to prevent damage to brake lines, fuel lines, wiring, or any other vehicle components. Assemble parts and fasteners "finger tight" until instructions indicate final tightening. After first usage and periodically thereafter, retighten all fasteners to correct torque.

NOTE: 1/2"-13 GRADE 5 fasteners should be torqued to 75 ft. lbs.
 5/8"-11 GRADE 5 fasteners should be torqued to 150 ft. lbs.
 3/4"-10 GRADE 5 fasteners should be torqued to 250 ft. lbs.

1. **PRELIMINARY:** If vehicle has a sway bar, place a jack under transmission cross member and lift vehicle up until front tires are off the ground. Be certain jack stands are placed under vehicle before work begins to prevent accidental lowering. If vehicle does not have a sway bar the vehicle does not have to be lifted up. If the vehicle has an air dam, either remove it completely or cut approximately 35" out of the center of it. Remove and save the three 7/16" bolts, washers, and nuts at the front of each vehicle frame rail holding the front bumper brackets to the frame rails. Remove and save the front bumper and brackets as an assembly from the frame rails. Screw a 3/4"-10 jam nut (13) all way on to each of the 3/4"-10 X 2-1/2" capscrews (11). Place each of the 3/4"-10 X 2-1/2" capscrew/jam nut assemblies through the hole in the lower front ear of the driver's side and passenger's side push arm (3),(2), with the heads of the capscrews (11) toward the front of the vehicle. Fasten with a 3/4" lockwasher (12) and 3/4"-10 jam nut (13) on each capscrew (11).

VEHICLES WITH DIESEL ENGINES: Remove and discard the "bolt on" bumper bracket stiffeners and fasteners holding them to the bumper brackets.

ON VEHICLES WITH V/6 ENGINES: Remove and save the 3/8" nuts from the two motor mount bracket bolts just behind the motor mount cross member on the outside of each frame rail.



- DRIVER'S SIDE PUSH ARM:** Place the rear angle section of the driver's side push arm (3) up between the sway bar (if so equipped) and inside of the vehicle spring to the outside surface of the frame rail. Line up the front hole in the rear angle section of the push arm with the round hole through the vehicle frame rail. Attach using a 5/8"-11 X 1-1/2" capscrew (7), lockwasher (9), and nut (10).

VEHICLES WITH V/8, IN-LINE 6 CYL., OR DIESEL ENGINES: Line up the middle 11/16" DIA. hole in the rear angle section of the push arm (3) with the slotted hole in the vehicle frame rail. Attach using a 5/8"-11 X 1-1/2" capscrew (7), flatwasher (8), lockwasher (9), and nut (10).

NOTE: If on older vehicles, the holes do not line up, leave this fastener out and proceed on through the instructions to step /5.

VEHICLES WITH V/6 ENGINES: Reinstall the two 3/8" nuts previously removed from the motor mount bracket bolts. An additional hole must be drilled in frame rail and a fastener installed but not before proceeding on through the instructions to step #5.

- PASSENGER'S SIDE PUSH ARM:** Install the passenger's side push arm (2) in the same way that the driver's side was installed using the same amount and types of fasteners. If vehicle was lifted and placed on jack stands, it can now be lowered back onto the ground.
- MOUNTING FRAME:** Lift the mounting frame (1) up until the driver's side and passenger's side front hangers will slide between the vehicle frame rails. Place the vehicle front bumper and brackets assembly back onto the frame rails. Line up the three holes in each front hanger of the mounting frame (1) with the three holes in each frame rail and bumper bracket. Fasten the front hangers of the mounting frame (1) and bumper brackets to the vehicle frame rails using the 7/16" bolts, washers, and nuts removed from the vehicle earlier. Align the three holes in the front section of each push arm (2),(3) with the holes in the end plates of the lower push angle on the mounting frame (1). Fasten each of the push arms (2),(3) to the mounting frame (1) using three 1/2"-13 X 1-1/2" capscrews (4), lockwashers (5), and nuts (6).
- FASTENERS:** Align the front bumper with the vehicle grill and tighten the 7/16" fasteners holding the front mounting frame (1) and bumper brackets to the vehicle frame rails. Hold the push arms (2),(3), tight against the outside and bottom flange of the vehicle frame rails and tighten the 5/8" fasteners holding them to the frame rails. Adjust the 3/4" capscrews (11) using the 3/4" jam nuts (13) so that the heads of the capscrews are tight against the push angle of the mounting frame (1). Lock the 3/4" capscrews (11) in place using the rear 3/4" jam nuts (13). Tighten the 1/2" fasteners holding the push arms (2),(3) to the mounting frame (1). If the vehicle has a V/6 engine, or if the middle 11/16" DIA. holes in the rear angle section of the push arms (2),(3) do not line up with the holes in the vehicle frame rails, drill 5/8" DIA. holes through the frame rails using the rear most 11/16" DIA. holes in the rear angle section of the push arms (2),(3) as guides. Fasten using 5/8"-11 X 1-1/2" capscrews (7), lockwashers (9), and nuts (10) in the drilled holes. If the vehicles has a V/6 engine, tighten the two 3/8" motor mount nuts on each side.

6. **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 receiving tubes and threads of the slack adjusting bolts on the receiver tubes with chassis grease 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).

7. **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 locknuts (32).
8. **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).
9. **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).
10. **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).

11. **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).

12. **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 1" 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.)

13. **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 pushframe with the 7/16" "U" bolts.

14. **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: If 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 the coils.
- B. If the tripedge springs need adjustment, loosen the bottom lock nut on both spring assemblies. Rotate the top nut until the springs are properly adjusted.
- C. Be sure to tighten the bottom lock nut securely on both assemblies to the top nut to prevent loosening of the assemblies.

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

Instructions are subject to change without notice.

