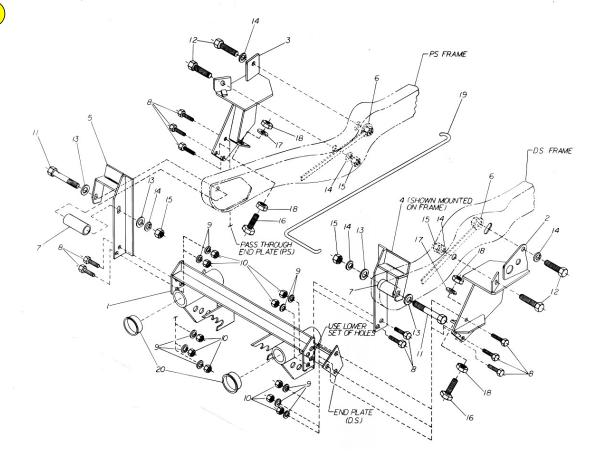
FORD 1987 - 1991 F250 W/O SWAY BAR 4X4



PARTS LIST

ITEM		STOCK	DESCRIPTION	QTY.	ITEM		STOCK	DESCRIPTION	QTY.
		81008	MOUNTING CARTON	1	11	*	81500003 395	5/8"-11 X 6-1/2" CAPS.	2
1		815000 175	FRONT MOUNTING FRAME	1	12	*	20139	5/8-11 X 1-1/2" CAPS.	4
2		815000 187	PUSHARM, DR. SIDE	1	13	*	20357	5/8" FLATWASHER	4
3		815000 186	PUSHARM, PS. SIDE	1	14	*	20331	5/8" FLATWASHER	6
4		815000 038 001	FRONT HANGER DR. SIDE	1	15	*	20530	5/8-11 NUT	4
5		815000 038 002	FRONT HANGER PS. SIDE	1	16	*	20164	3/4-10 X 2" CAPSCREW	2
6		815000 046	5/8"-11 NUT W/HANDLE	2	17	*	20333	3/4" LOCKWASHER	2
7		815000 039	PIPE SPACER	2	18	*	5201003 015	3/4-10 JAM NUT	4
8	*	20095	1/2-13 X 1-1/2" CAPSCREW	10	19		819000 013	RELEASE HOOK	1
9	*	20329	1/2" LOCKWASHER	10	20		815000 146	REC. TUBE END CAP	2
10	*	8501001 009	1/2-13 NUT	10					

ITEMS PACKED IN 80110 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 inncurring any obligation.



Diamond Equipment Old Route 1 RR #1 • Damariscotta, ME 04543-9720 Phone 563-2227(Area Code 207) www.diamondplow.com • email info@diamondplow.com

Diamond

 $\widehat{\mathcal{O}}$

PARTICULAR ATTACHMENTS INSTRUCTIONS FOR 81008 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 <u>any</u> 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.
- PRELIMINARY: Jack the vehicle up from under the center of the frame until the front tires just clear the ground. Place jack stands under the frame to prevent accidental lowering of the vehicle. Screw a 3/4"-10 jam nut (18) all the way on to each of the 3/4"-10 X 2¹¹ capscrews (16). 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 arms (2),(3), with the heads of the capscrews (18) toward the front of the vehicle. Fasten with a 3/4¹¹ lockwasher (17) and 3/4"-10 jam nut (18) on each capscrew (16).
- 2. **DRIVER'S SIDE PUSH ARM:** Place the rear upper section of the driver's side push arm (2) up and out through the space between the top of driver's side spring and the bottom flange of the vehicle frame rail. Align the hole in the rear of the upper section of the push arm with the slotted hole in the outside flange of the vehicle frame rail. Install a 5/8"-11 X 1-1/2" capscrew (12) and 5/8" lockwasher (14) through the hole in the rear ear of pusharm and the slotted hole in the vehicle frame rail. Fasten using a 5/8¹¹-11 nut with handle (6) inside the boxed section of the vehicle frame rail.
- 3. **PASSENGER'S SIDE PUSH ARM:** Install the passenger's side push arm (3) in the same manner and with the same number and type of fasteners as used for attaching the driver's side push arm.
- 4. FRONT HANGERS: Install the driver's side and passenger's side front hangers (4),(5) over the top of the vehicle frame rails just behind the front bumper. Line up the slotted holes in the short tabs of the front hangers with the holes through the vehicle frame rails and front spring hangers. Attach the front hangers (4),(5) using a 5/8"-11 X 6-1/2" capscrew (11) and 5/8" flatwasher (13) through the short tab of each front hanger, each vehicle frame rail and spring hanger. Place the pipe spacers (7) onto the ends of the 5/8"-11 X 6-1/2" capscrews (11) between the spring hangers and the inner legs of the front hangers (4),(5). Slide the 5/8"-11 X 6-1/2" capscrews (11) through the pipe spacers (7) and the slotted holes in the inner legs of the front hangers (4),(5). Fasten using a 5/8" flatwasher (13), 5/8" lockwasher (14), and a 5/8"-11 nut (15) on each 5/8"-11 X 6-1/2" capscrew (11).



87-91 FORD F-250 4 X 4 81008 (WITH REGULAR CAB), W/O DIESEL, W/O SWAY BAR

- 5. **MOUNTING FRAME:** Place the front mounting brackets of the mounting frame (1) between the inner legs of the front hangers (4),(5) with the end plates of the push angle on the mounting frame between the push arms (2),(3). Line up the lower set of holes in each front mounting bracket of the mounting frame (1) with the two holes in the inner leg of each of the front hangers (4),(5). Attach the mounting frame (1) using two 1/2"-13 X 1-1/2" capscrews (8), two 1/2" lockwashers (9) and two 1/2"-13 nuts (10) to the inner leg of each front hanger (4),(5). Line up the three holes in the front section of each push arm (2),(3) with the three holes in the end plates of the push angles on the mounting frame (1). Attach each of the push arms (2),(3) to the mounting frame (1) using three 1/2"-13 X 1-1/2" capscrews (8), three 1/2" lockwashers (9) and three 1/2"-13 nuts (10). Remove jack stands from under the frame and lower vehicle to the ground.
- 6. FASTENERS: Tighten the 5/8"-11 X 6-1/2" capscrews (11) and 5/8"-11 nuts (15) holding the front hangers (4),(5) to the vehicle frame rails. Tighten the 1/2"-13 X 1-1/2" capscrews (8) and 1/2"-13 nuts (10) holding the mounting frame (1) to the front hangers (4),(5). Hold the push arms (2),(3) tight against the outside and bottom flange of the vehicle frame rails and tighten the 5/8"-11 X 1-1/2" capscrews (12) holding them to the vehicle frame rails. Adjust the 3/4"-10 X 2" capscrews (16) with the 3/4"-10 jam nuts (18) so that the heads of the capscrews are tight against the push angle of the mounting frame (1). Lock the 3/4"-10 X 2" capscrews (16) in place using the rear 3/4"-10 jam nuts (18). Tighten the 1/2"-13 X 1-1/2" capscrews (8) and 1/2"-13 nuts (10) holding the push arms (2),(3) to the mounting frame (1). Using the hole in the front ear on the upper rear section of each push arm (2),(3) as a guide, drill a 5/8" DIA. hole through the outer surface of each frame rail. Install and tighten a 5/8"-11 X 1-1/2" capscrew (12), 5/8" lockwasher (14), and 5/8"-11 nut (15) into each push arm front ear and vehicle rail.
- 7. **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 surface of the receiver 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 out of the receiver tubes. Secure the lift frame to the front mounting frame using 5/8" hinge pin (26) and hairpin cotter (27).

- 8. 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).
- 9. **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).



87-91 FORD F-250 4 X 4 81008 (WITH REGULAR CAB), W/O DIESEL, W/O SWAY BAR

- 10. **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).
- 11. **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 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.

В.



