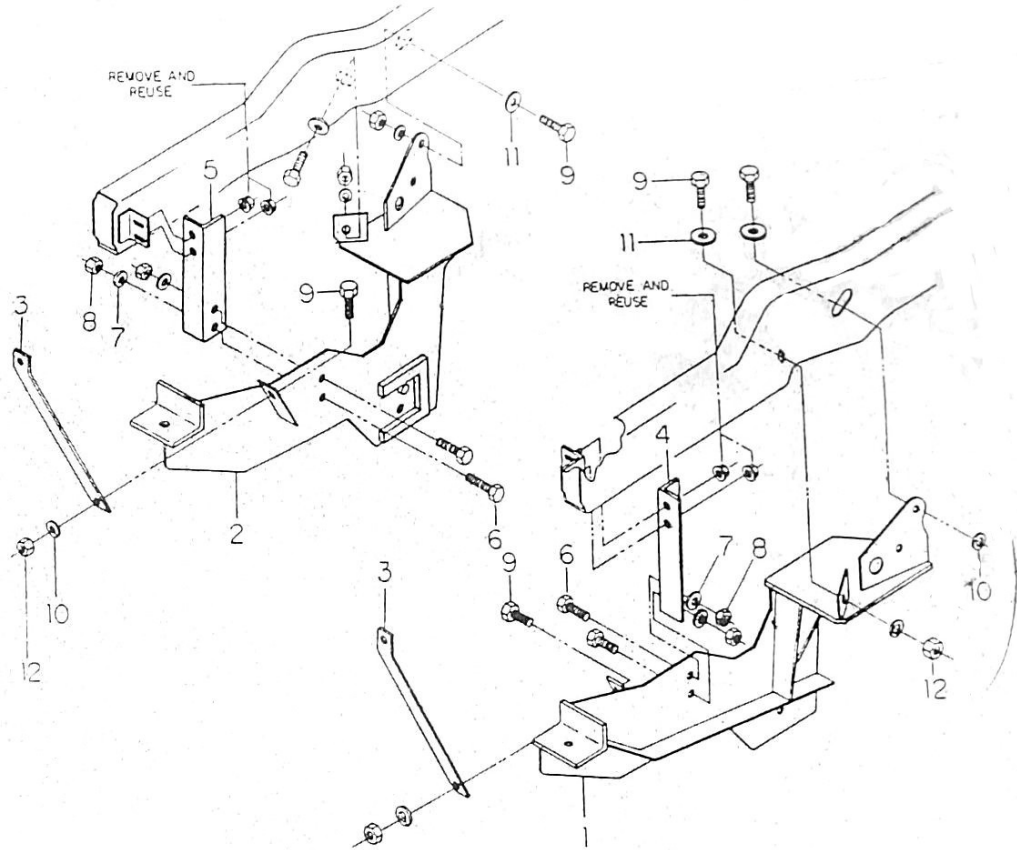


PARTICULAR ATTACHMENTS  
1992 FORD F-250 4WD

KIT # AP-115  
OCTOBER 11, 1991



ITEM #	STOCK #	DESCRIPTION	QTY	ITEM #	STOCK #	DESCRIPTION	QTY
1	015000-052-001	PUSHPLATE DRIVER SIDE	1	7	507001-013	1/2 LOCKWASHER	4
2	015000-052-002	PUSHPLATE PASS. SIDE	1	8	501001-009	1/2-13 NC NUT	4
3	012000-019	VERTICAL FRAME BRACE	2	9	500003-247	5/8-11 X 1-1/2 CAPSCREW	6
4	015000-050-017	DRIVER SIDE HANGER	1	10	507001-015	5/8 LOCKWASHER	6
5	015000-050-018	PASSENGER SIDE HANGER	1	11	507002-008	5/8 FLATWASHER	4
6	500003-061	1/2-13 X 1-1/2 NC CAPSCREW	4	12	501001-013	5/8-11 NC NUT	6

DIAMOND SNOWPLOW AUBURN, MAINE (207-786-0981) SUBJECT TO CHANGE

PARTICULAR ATTACHMENTS INSTRUCTIONS FOR AP-115

**CAUTION:** VEHICLE MUST BE EQUIPPED WITH VEHICLE MANUFACTURER'S MAXIMUM CAPACITY FRONT SUSPENSION OPTIONS.

1. **PRELIMINARY:** Install a 5/8 x 1-1/2 NC capscrew (9) out through the vertical frame brace tab of each pushplate. (These fasteners may not always be installed after pushplates are on vehicle). Jack vehicle up from under center of frame until front tires just clear the ground. Place jack stands under frame to prevent accidental lowering of vehicle. Turn steering wheel all the way to the right.

**NOTE:** TIGHTEN ALL FASTENERS ONLY "FINGER TIGHT" UNTIL INSTRUCTIONS INDICATE FINAL TIGHTENING.

2. **DRIVER SIDE PUSHPLATE:** Remove and save the two flange nuts holding the bumper to the driver side frame rail. Install the driver side pushplate hanger (4) on over these bumper bolts as shown in the illustration and fasten with the original flange nuts. Carefully guide the rear end of the driver side pushplate (1) up and out through the space between the top of the driver side spring and the bottom of the frame. Align the holes in the ears on the rear end of the pushplate with the two slotted holes on the outside of the frame. Place a 5/8" x 1-1/2" NC capscrew (9) and flatwasher (11) out through the forward slotted hole in the frame and the forward ear on the pushplate. Fasten with a 5/8" lockwasher (10) and NC nut (12). Align the two 17/32" holes in the center of the pushplate with those in the pushplate hanger. Attach the pushplate to the hanger with two 1/2" x 1-1/2" NC capscrews (6), 1/2" lockwashers (7) and nuts (8). Insert another 5/8" x 1-1/2" NC capscrew (9) and flatwasher (11) out through the frame and the hole in the rear ear on the pushplate.

**NOTE:** Access to this hole is limited because of the frame being boxed. Although not easy, it is possible to install the capscrew and washer in through the rectangular hole in the outer side of the frame and then out through the frame and pushplate. If unsuccessful, try snaking a 12" length of small diameter mechanics wire in through the ear on the pushplate, through the frame and out through the rectangular hole in frame. Attach the wire to the threaded end of the 5/8" capscrew (with the washer in place) and use the wire to fish the bolt out through the frame and pushplate. Secure the capscrew with a 5/8" lockwasher (10) and nut (12).

3. **PASSENGER SIDE PUSHPLATE:** Install the passenger side hanger (5) and pushplate (2) in the same manner and with the same fasteners as described for the driver side. **NOTE:** The same problem of access to the rear 5/8" capscrew exists because of the boxed section of frame on the passenger side. The solution is the same as on the driver side except that the rectangular access hole is located on the inside face of frame.

4. **PUSHBEAM:** Install pushbeam (42) between pushplates with end plates of pushbeam locked into pushplate blocks. Attach with a

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5/8 NC drilled capscrew (48) out through each pushplate with slotted nut (49) on outside.

**5. VERTICAL FRAME:** Place vertical frame support angle (39) onto front angles of pushplate with holes lined up and flange to the front and pointing down. Place vertical frame (40) on top of support angle (39). Align holes and attach vertical frame and support angle to pushplates using two 5/8 x 2" NC capscrews (43), lockwashers (47), and nuts (45).

**6. VERTICAL FRAME BRACES:** Install bent ends of vertical frame braces (3) to the upper outer holes in each side of vertical frame using two 5/8 x 1-1/2" NC capscrews (44), lockwashers (47), and nuts (45). Attach the other end of vertical frame braces to the vertical frame brace tabs of pushplates using two 5/8 x 1-1/2" NC capscrews (9), lockwashers (10), and nuts (12).

**7. FASTENERS:** Tighten all fasteners installed up to this point starting with the pushbeam and vertical frame mounting capscrews. Install cotter pins (50) through pushbeam capscrews and slotted

NOTE: 1/2" NC GRADE 5 CAPSCREWS SHOULD BE TORQUED TO 75 FT LBS.  
5/8" NC GRADE 5 CAPSCREWS SHOULD BE TORQUED TO 150 FT LBS.

**8. LIFT ARM:** Install lift arm (34) and lift cylinder onto vertical frame (40) by using the 5 1/16" long clevis pin (35) through lift arm and upper vertical frame ears. Use the 4-7/16" long clevis pin (36) through lift arm and rod end of lift cylinder. The 3-1/16" long clevis pin (37) should be placed through bottom end of lift cylinder and lower vertical frame ears. Install 1/4" x 2" cotter pins (33) into the end of each pin (3 places). Be sure to bend the end of the cotters to keep them in place.

**9a. PIVOT FRAME AND CHAINS (STRAIGHT PLOWS):** Place upper pivot frame (57) on over end of pushframe (31). Locate bottom angle of pivot frame into stops on push frame and loosely attach using two 5/8 x 3-1/2" NC capscrews (64), and locknuts (65). Attach each end of the longest piece of chain (lift chain) (59) to the upper two holes in each side of upper pivot frame using two 7/16 "U" bolts (60), four lockwashers (62), and nuts (61). Attach one end of the shorter piece of chain (carrying chain) (58) to the lower two holes in the passenger's side of upper pivot frame using one 7/16 "U" bolt (60), two lockwashers (62), and nuts (61).

**b. CHAINS ("V" PLOWS):** Attach each end of the longest piece of chain (lift chain) (59), to the upper two holes in each side of the diagonal brace angles of pushframe (31), using two 7/16 "U" bolts (60), four lockwasher (62), and nuts (61). Attach one end of the shorter piece of chain (carrying chain) (58), to the lower two holes in the passenger's side diagonal brace angle of pushframe (31) using one 7/16 "U" bolt (60), two lockwashers (62), and nuts (61).

10. a. **PUSHFRAME (STRAIGHT PLOWS):** Install pushframe and upper pivot frame onto blade with upper and lower pivot holes lined up with pivot holes in blade. Install shorter pivot pin (53) down through upper pivot and longer pivot pin (56) down through lower push frame pivot. Secure pivot pins with cotter pins (33). Tighten the two 5/8" capscrews (64) holding the upper pivot frame (57) to the push-frame (31).

b. **PUSHFRAME ("V" PLOWS):** Line up the pivot holes in the passenger's side and driver's side plow sections with the pivot holes in the pushframe. Insert pivot pin, into pushframe and plow sections pivot holes from top of pushframe. Line up hole in head of pivot pin with the tapped hole in top of pushframe and secure using a 5/8-11x2 NC capscrew, and 5/8-11 NC locknut. Install a 1/4x2 cotter pin through the hole in the lower end of pivot pin.

11. **ANGLE CYLINDERS:** Install angle cylinders between push-frame ears and ears on blade with rod end of cylinders toward blade. Install elbows in ports of cylinder between the angle cylinders and pushframe. Attach cylinders to pushframe (31) using two short cylinder pins (32) and cotter pins (33). Attach cylinders to blade using two longer cylinder pins (63) and cotter pins (33).

12. **MARKERS:** Attach plow markers (51) to the two holes in the top of each end rib of the blade using 5/16 x 1" NC capscrews (52), lockwashers (54), and nuts (55).

13. **PLOW TO VEHICLE ATTACHING:** Pull back and lock the spring loaded pins on pushbeam. Place ears of push frame between ears of pushbeam. Level push frame and release push beam pins into the nearest set of holes in the pushframe ears. Attach the lift chain to the lift arm hooks so there is approximately 2" of slack in the chain and both sides pull evenly. Attach the carrying chain to the chain plate on the passenger's side of vertical frame. Adjust carrying chain so there is approximately 2" slack when the blade is in plowing position. For transporting blade over the road, lift blade and adjust carrying chain as tight as possible.