



PARTS & INSTALLATION INSTRUCTIONS MEYER SNOW PLOW MOUNTING 1987 THRU 1991 FORD F-150 4 x 4 VEHICLES & SUPER DUTY 4X2 VEHICLES

IMPORTANT NOTICE

End user must be given this information 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 Preparation 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.

PARTS LIST

Item	Part No.	Qty.	Description		
	17096	1	MOUNTING CARTON		
1	11348	1	• Clevis Frame		
2	11234	1	• Side Member, R.H.		
3	11235	1	• Side Member, L.H.		
4	11404	1	• R.H. Brace		
5	11405	1	• L.H. Brace		
6	11396	1	• Brace Connector		
7	11400	2	• Shim		
8	10514	1	• Lift Arm		
9	11544	2	• Receiver Tube Cap		
	08626	1	• Kit - Light Elevation		
10	11368	2	•• Bracket		
11	20095	2	•• Bolt 1/2-13 x 1-1/2" Gr. 5		
12	20307	2	•• Locknut Esna 1/2-13		
	08606	1	• Hardware Bag		
13	11006	2	•• Hinge Pin		
14	10797	2	•• Spacer		
15	14595	2	•• Special Bolt 3/4"		
16	14718	1	•• Spacer		
17	20095	2	•• Bolt H 1/2-13 x 1-1/2" Gr. 5		
18	20097	4	•• Bolt H 1/2-13 x 2" Gr. 5		
19	20140	2	•• Bolt H 5/8-11 x 1-3/4" Gr. 5		
20	20141	4	•• Bolt H 5/8-11 x 2" Gr. 5		
21	20144	1	•• Bolt H 5/8-11 x 2-3/4" Gr. 5		
22	20146	2	•• Bolt H 5/8-11 x 3-1/4" Gr. 5		
23	20164	6	•• Bolt H 3/4-10 x 2" Gr. 5		
24	20307	6	•• Locknut 1/2-13		
25	20309	9	•• Locknut 5/8-11		
26	20310	8	•• Locknut 3/4-10		
27	20353	2	•• Flatwasher 3/8		
28	20355	4	•• Flatwasher 1/2		
29	20357	2	•• Flatwasher 5/8		
30	22187	1	•• Bolt H 7/16-14 x 6" Gr. 8		
31	21984	2	•• Hair Pin Cotter		
32	11255	1	LIFT FRAME (Tubular)		
			11" Sector	15" Sector	
Item	Part No.	Qty.	Part No.	Qty.	Description
	16505	1	16504	1	SECTOR & A-FRAME CARTON
	12326	1	12793	1	• Sector
	13612	1	13608	1	• A-Frame
	07017	3	07017	4	• Trip Spring
	09916	1	09916	1	• Snow Plow Marker Kit
	08166	1	08341	1	• PLOW HARDWARE BAG
	09119	2	09119	2	•• Pivot Pin w/Cotter Pin
34	11101	2	11101	2	•• Hinge Pin
35	22083	2	22083	2	•• Linch Pin
	09122	1	09125	1	•• King Bolt w/Locknut
	09124	3	09124	4	•• Eye Bolt w/Locknuts

Parts indented are included in the carton, bag or assembly under which they are indented.

When ordering parts, furnish Part No., Name, and Description. Also furnish Vehicle Model and Year, Type of Hydraulic Unit and Moldboard Size.

Meyer Products 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.

GENERAL INFORMATION

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.

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 sheet 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.

When ordering parts, furnish Part No., Name and Description. Also furnish Vehicle Model and Year, Type of Hydraulic Unit and Moldboard Size.

Warning : This mounting is not designed for installation on Ford Bronco and F-150 vehicles with 1-A stabilizer bar. (Part of a handling package option on vehicle with a 3550 lb. Front Gross Vehicle Weight Rating).

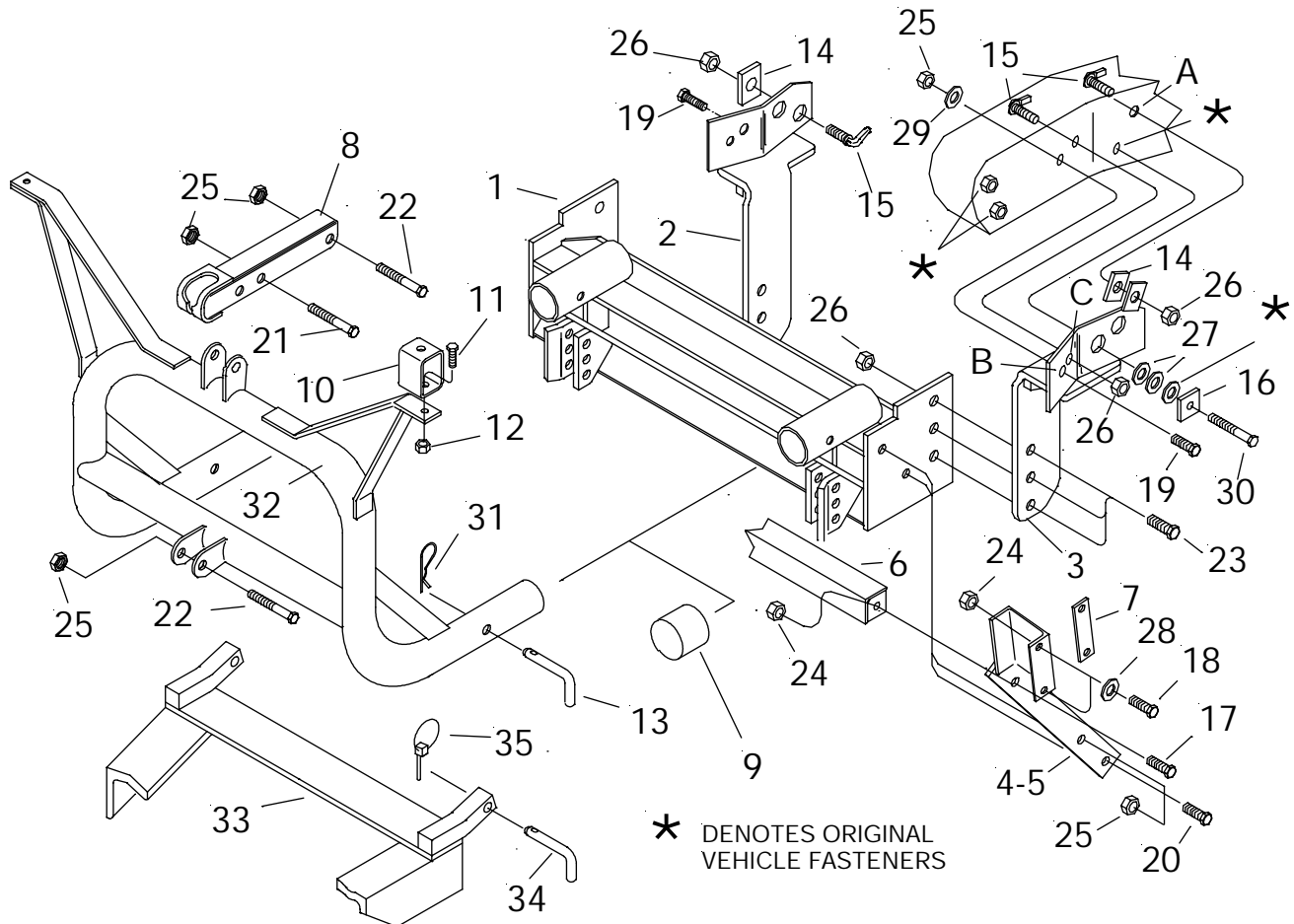
Vehicles must have heavy duty front end equipment as recommended by Ford Motor Company for snow plow applications.

1987 & later BRONCO	3800 lb. front suspension Option (674)
1987 & later F-150	3800 lb. front suspension Option (674)
F-450 SUPER DUTY Cab Chassis 4x2	5000 lb. front suspension Option (674)

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

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	



INSTALLATION INSTRUCTIONS

- A. Insert special 3/4 Bolt (15) in slotted hole "A" in vehicle frame. Attach side members (2 & 3) using spacer (14) on passenger side and locknut (26). **Do not tighten at this time.**

Note: Prior to tightening special bolt on the passenger side member, make certain spacer (14) is properly aligned over large hole in side member top plate. After the passenger side special bolt has been tightened to its recommended torque, the spacer should be tack welded in place onto the sidemember. This is to insure the proper installation of the Special bolt into the side of the vehicle frame.

B. **DIESEL ENGINE VEHICLES:**

Snow plow installation is not recommended on the F-250 with a 7.3L diesel engine. F 350 Cab Chassis Vehicles equipped with a Diesel Engine will require an additional hardware bag #08610.

Hold side members (2 & 3) flat against the bottom of vehicle frame. Using hole "C" in side member as a template, scribe hole C's location. Remove side member and drill a 1" hole in vehicle frame. Attach side members (2 & 3) at holes "A" and "C" using special 3/4 bolt (15), spacer (14), and locknuts (26).

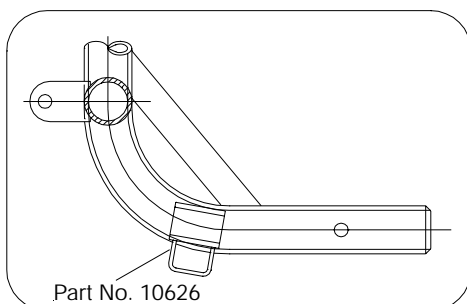
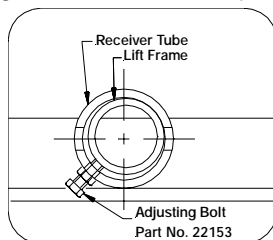
Make certain side members are flat against bottom of vehicle frame before tightening to proper torque.

B. **GAS ENGINE VEHICLES:**

With side members flat against bottom of vehicle frame, using the small hole "B" in the side members (2 & 3) as a guide, ream hole in vehicle frame using an 11/16" drill bit. Attach side members using 5/8-11 x 1-3/4" bolt (19), flat washer (29), and locknut (25).

Note: Additional hardware has been provided when installing the driver-side side member (3). Remove original steering gear box bolt and replace using 7/16-14 x 6" bolt (30), spacer (16), original vehicle washer (*) and flat washers (27) per illustration. **Do not tighten at this time.**

- C. Side members (2 & 3) must be held flat against bottom of vehicle frame. **Note:** Prior to tightening special bolt (15) on the passenger-side side member (2), make certain spacer (14) is properly aligned over large hole in side member top plate. Tighten all bolts to their proper torque.



Meyer Products assumes no responsibility for installations not made in accordance with these instructions.

- D. Position clevis frame (1) to the inside of side members (2 & 3). Attach using 3/4-10 x 2" bolts (23) and locknuts (26).
- E. Remove two bumper bracket mounting bolts (*) in vehicle frame. Retain all hardware. They will not be reused.
- F. Position side braces (4 & 5) on inside of vehicle frame. Attach using 1/2-13 x 2" bolts (18), flatwashers (28), and locknuts (24).
Note: On certain installations, it may be necessary to install an additional shim (7).
- G. Attach straps (4 & 5) to clevis frame (1) using 5/8-11 x 2" bolt (20) and locknut (25).
- H. Position brace connector (6) between braces (4 & 5). Attach using 1/2-13 x 1-3/4" bolt (17) and locknut (24).
- I. Tighten all fasteners to their proper torque. Tighten bolts in the same order they were assembled to the vehicle.

Note: Clevis frame (1) must be positioned so the lift frame receiver tubes are parallel with the ground before tightening.

Important Notice: Current production lift frames have additional stops (part no. 10626) tack welded to the existing stops. (See illustration.) Depending upon the S.A.F. carton being installed, additional stops may need to be added or removed.

- J. When installing S.A.F. Carton 16504/16505, lift frame should **NOT** have the additional stops (part no. 10626).

Note: Before installing lift frame tubing to clevis frame, liberally coat ends of lift frame with chassis grease / anti-seize lubricant.

- K. Install lift frame (32) into the tubes on the clevis frame (1).

Caution: Do not over tighten adjustment bolts. Adjust bolts for minimum clearance between lift frame and receiver tubes while still allowing for ease of lift frame removal. See illustration.

- L. Secure lift frame (32) to clevis frame (1) using hinge pin (13) and hair pin cotter (31).
- M. Attach lift arm (8) to lift frame (32) using 5/8-11 x 3-1/4" bolt (22) and locknut (25). Mount E-47 unit to lift frame with 5/8-13 x 3-1/4" bolt (22) and locknut (25), and to lift arm (8) using 5/8-11 x 2-3/4" bolt (21) and locknut (25).

Install hydraulic system and snowplow lights per separate instructions.

- N. Assemble moldboard to sector and A-frame per separate instructions.
- P. Attach A-frame chain to lift arm (8) allowing sufficient slack to enable moldboard to follow ground contour while plowing.

Note: When the lift frame module (32) is removed from the vehicle, the insides of clevis frame (1) receiver tubes and outside ends of the lift frame should be coated with chassis grease anti-seize lubricant and the protective receiver tube caps (9) installed over the clevis frame receiver tubes.