Form 1-970
May 2009

PARTS & INSTALLATION INSTRUCTIONS
MEYER SNOW PLOW MOUNTING
1997 JEEP WRANGLER (TJ) 4 X 4 VEHICLE

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.

PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
	18080DP	1	**MOUNTING CARTON**
1	11550	1	• Clevis Frame
2	11548	1	• Side Plate R.H .
3	11549	1	• Side Plate L.H .
4	11555	1	• Brace L.H .
5	11556	1	• Brace R.H .
6	10514	1	• Lift Arm
7	12959	1	• Pivot Bar
8	13778	1	• A-Frame
9	12978	2	• Trip Springs
10	11462	2	• Receiver Tube Caps
	08674	1	• **Hardware Bag**
11	10797	2	•• Spacer
12	11006	2	•• Hinge Pin
13	14595	6	•• Special Bolt 3/4"
14	20139	4	•• Bolt H 5/8 - 11 x 1 1/2" Gr. 5
15	20140	2	•• Bolt H 5/8 ' - 11 x 3/4" Gr. 5
16	20144	1	•• Bolt H 5/8 - 11 x 2 3/4" Gr. 5
17	20146	2	•• Boll H 5/8 - 11 x 3 1/4" Gr . 5
18	20309	9	•• Locknut Esna 5/8 - 11
19	20310	6	•• Locknut Esna 3/4 - 10
20	21984	2	•• Hair Pin Cotter
21	11545	1	**LIFT FRAME (Tubular)**
	08156	1	**SNOW PLOW HARDWARE BAG**
	08852	1	**SNOW PLOW MARKER KIT**

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

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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 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.

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**.

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

Follow these instructions explicitly. Warranty does not apply to a Meyer product which has been negligently or improperly assembled or installed.

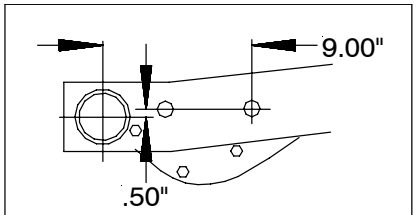
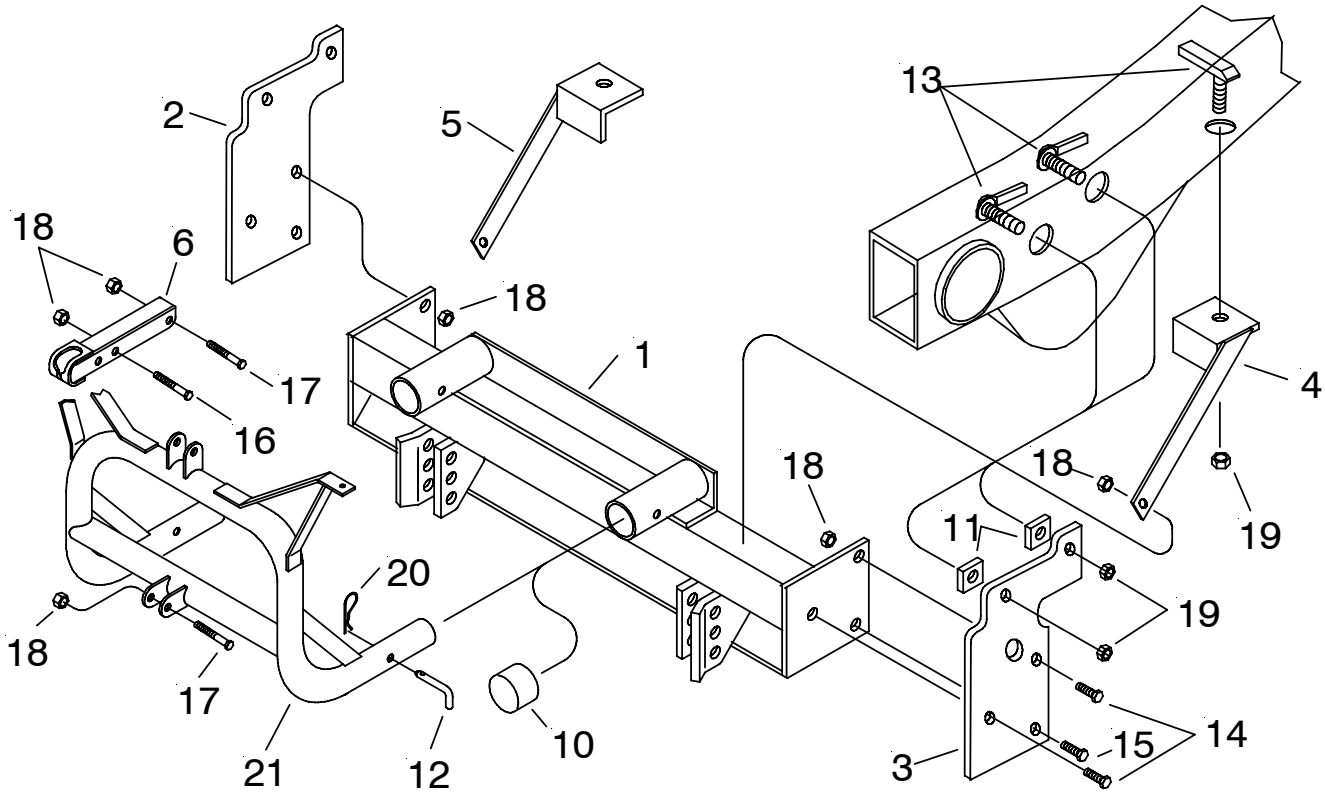


FIGURE 2



INSTALLATION INSTRUCTIONS

Installation instructions below are for L.H. Drive vehicles; for R.H . Drive vehicles installation should be symmetrically opposite .

IMPORTANT:
Vehicle must be equipped with Front Air Shocks, Kit Part No. 82202562. With plow set at 90 P.S .I . Without plow set at 40 P.S .I .

Note: Should interference of the bumper fascia (Trim Strip) occur while installing Side Plates 2 & 3, it may be necessary to loosen the screws and re-adjust fascia . (Trim if necessary).

A. Using Side Plate (2 & 3) as a template, drill two 1" diameter holes in vehicle frame rails per Figure 2.

B. Attach Driverside Side Plate (3) to vehicle frame using Special Bolts (13), Spacers (11) and Locknuts (19) .

C. Attach Passenger Side Plate (2) to vehicle Frame using Special Bolts (13), and Locknuts (19).

D. Attach Clevis Frame (1) to Side Plates (2 & 3) using 5/8-11 x 1 1/2" Bolts (14) and Locknuts (18).

E. Attach Driver/Passenger Side Braces (4 &5) to bottom flange of vehicle frame using Special Bolts (13), Locknut (19) . Attach other end of braces to Clevis Frame (1) and Side Plates (2 & 3) using 5/8-11 x 1 3/4" Bolts (15) and Locknuts (18).

NOTE: Before tightening the fasteners the clevis frame should be pushed back as far as possible under the vehicle.

F. Tighten all fasteners to their proper torque. Tighten bolts in the same order they were assembled to the vehicle.

G. Install Lift Frame (21) into the tubes on the Clevis Frame (1) using Hinge Pins (12) and Hair Pin Cotters (20).

Note: Before installing Lift Frame tubing to Clevis Frame, liberally coat ends of Lift Frame with chassis grease / Anti-sieze lubricant.

H. Install lights making certain there is clearance behind the lights for opening the vehicle hood. Lights must be aimed to comply with Federal Regulations.

I. Install plow light wiring per separate instructions .

J. Attach Lift Arm (6) to Lift Frame (21) using 5/8-11 x 3-1/4" Bolt (17) and Locknut (18). Mount the Hydraulic Unit to Lift Frame with 5/8-11 x 3 1/4" Bolt (17), and to Lift Arm (6) using 5/8-11 x 2 3/4" Bolt (16) and Locknut (18).

K. Install Electro-Touch wiring system per separate instructions .

L. Attach pivot bar (7) to moldboard (35) using pivot bolts (26) coated with chassis grease / Anti-sieze lubricant and locknut (29) .

M. Attach trip springs (9) to pivot bar (7) and moldboard (35) with eye bolts (24) and locknuts (25) . Flat end of eye bolt (24) must be in vertical position as shown in Figure 1, to hinge properly when moldboard trips. Proper tension is attained when trip spring coils begin to separate and then tightening top locknut four more additional turns. Tighten bottom locknut. Refer to Figure1.

N. Assemble A-frame (8) to pivot bar (7) using king bolt (27) and locknut (29). Grease king bolt (27) prior to installation.

O. Install power angling cylinders to A-frame (8) and pivot bar (7) using 5/8 x 3 1/4" bolts and 5/8 locknuts. (Packed in hardware bag # 08363 in Electro-Touch Carton). Attach piston end of ram to Pivot Bar (7) using 5/8-11 x4 1/2" bolts (28) and Locknuts (29).

P. Straighten end of plow markers (30) so they will be vertical after installation . Attach using 1/4-20 x 1“ bolt (32), clamp (31), lockwasher (34) and locknut (33) .

Q. Secure moldboard-pivot bar A-frame assembly to vehicle at clevis frame using hinge pins (22) and Linch Pins (23). Attach lift chain to lift arm (6) allowing sufficient slack to allow moldboard to follow ground contour.

NOTE: When the Lift Frame module (21) is removed from the vehicle, the insides of the 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 (10) installed over the clevis frame receiver tubes. Meyer Products assumes no responsibility for installations not made in accordance with these instructions.

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		
7/16 - 14		26 - 29	
1/2 -13		42 - 46	60 - 66
5/8 - 11		127 - 141	179 - 198
3/4 - 10		227 - 251	

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

4. Summary

The snowplough retaining device to be fitted onto N1 category vehicles, the specimen presented and tested, and the further types presented as per the documentation, are compliant in terms of design and safety.
The salt spreader retaining device to be fitted onto N1 category vehicles, the specimen presented and tested, and the further types presented as per the documentation, are compliant in terms of design and safety.

The snowplough retaining devices can be installed onto motor vehicles of the following types:

Car type	Meyer Classic Type Cod	Year
Toyota Hilux (since 2005)	18092	2005-2009
Toyota Hilux (1997-2005)	18091	1997-2005
Mitsubishi L200 (1987-2006)	18090	1997-2005
Nissan NP 300 (1998-2005)	18111	1998-2005
Ford Ranger (since 1998-2006)	18099/181	1999-
Mazda B2500 (1998-2006)	18099/181	1993-
Jeep Wrangler TJ (1997-2006)	18080	1997-
Jeep Wrangler JK (since 2007)	18119	2007-
Land Rover Deffender (1990-1994)	18096	1990-1994

Installation of the snowplough retaining device leaves the width and length of the vehicle unchanged.