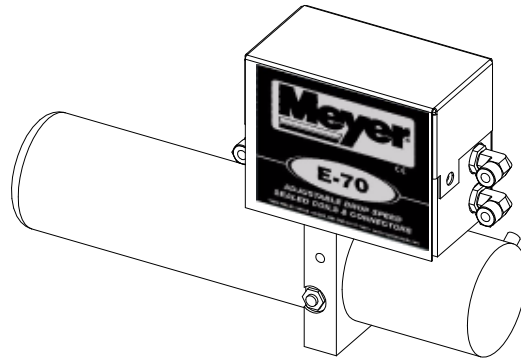


PARTS & INSTALLATION INSTRUCTIONS

E-70 (12V & 24V) OUT FRONT ROAD PRO HYDRAULICS



PARTS LIST

Item	Part No. 12V	Part No. 24V	Qty	Description
	15825	16000	1	E-70 Out Front Hydraulic Carton
1	15826	16001	1	•E-70 Out Front Hydraulic Unit w/ Cover
2	22690	22690	1	•Pistol Grip Controller
3	22691	22691	1	•Universal Vehicle Side Harness
4	22692	22692	1	•Hydraulic Side Harness
5	05872	05872	1	•Lift Ram 3 x 8 DA
6	15370	15446	1	•Motor Solenoid
7	05024	05024	1	•Power Cable 36"
8	07707	07707	2	•Ram Assy 2-1/2" x 11-1/2" Stroke SA
9	05874	05874	1	•• Ram 2-1/2" x 11-1/2" Stroke SA
10	22722	22722	1	•• Elbow
11	22723	22723	1	•• Hose
12	08782	08782	1	• Hardware Bag E-70 Hydraulic Unit
13	22723	22723	1	•• Hose
14	22722	22722	4	•• Elbow
15	08474	08474	1	•• Relief Valve
16	22323	22323	4	•• 1" x 4-1/4" Cylinder Pin
17	20420	20420	4	•• 1/4 Dia. x 2 Cotter Pin CP
18	21262	21262	2	•• Washer Flat 1" SAE CP
19	22324	22324	2	•• 1" x 3-1/2" Cylinder Pin
20	22083	22083	2	•• Lynch Pin
21	20050	20050	3	•• Bolt H 3/8-16 x 1-1/4" Gr.2
22	20353	20353	3	•• Flatwasher 3/8"
23	20327	20327	3	•• Lockwasher 3/8"
24	21398	21398	2	•• Self Tapping Screw 1/4-14 x 3/4"
25	08202	08202	1	•Hardware Bag Plug Bracket
26	19607	19607	1	•• Plug Bracket
27	19609	19609	1	•• Plate
28	20027	20027	2	•• Bolt H 5/16-18 x 1 Gr. 2
29	22658	22658	2	•• Bolt H 5/16-18 x 3 Full Thread Gr. 2
30	20326	20326	4	•• 5/16 Lockwasher
31	20525	20525	4	•• 5/16-18 Finish Nut
32	13032	13032	1	• Plate
33	13035	13035	1	• Bracket
34	20140	20140	2	• Bolt H 5/8-11 x 1-3/4" Gr. 5
35	20309	20309	2	• Locknut 5/8-11
36	22791	22791	1	• Hose

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

Meyer Products LLC 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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Figure 1

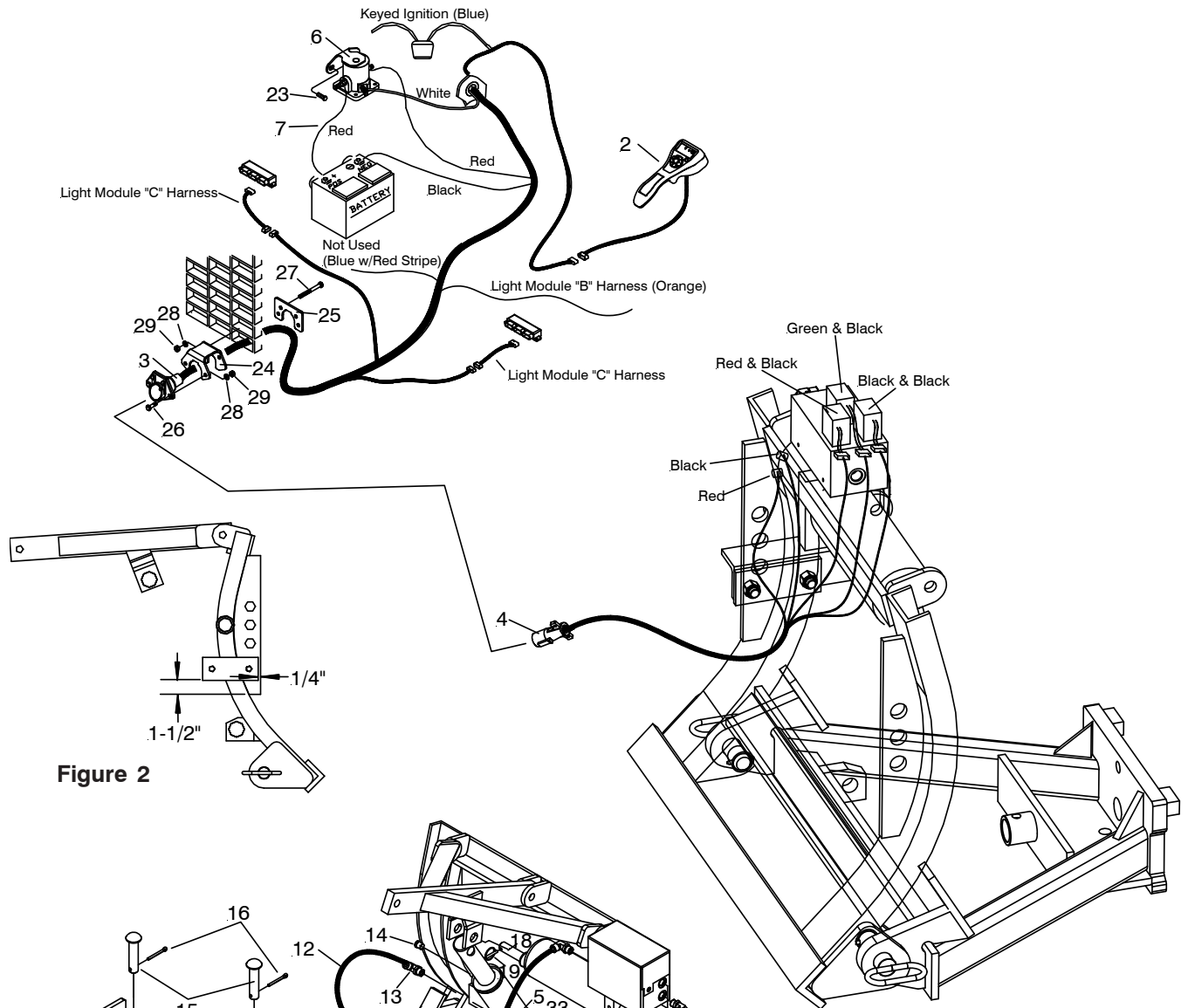


Figure 2

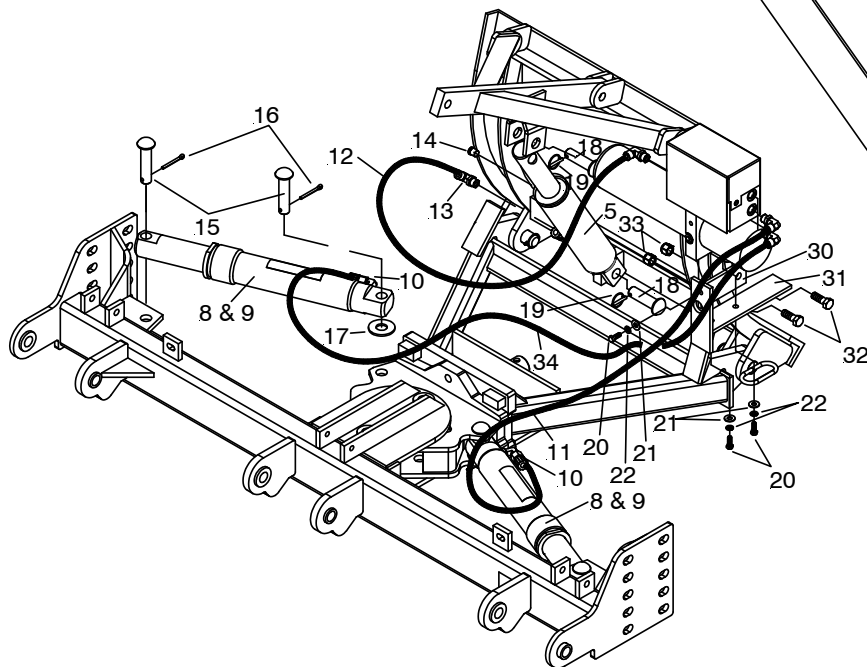


Figure 3

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

GENERAL INFORMATION

This kit is intended to be used with a vehicle equipped with a E-70 Out Front Hydraulic System.

Note: All Hydraulic cylinders have a maximum operating pressure of 2500 PSI.

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 **any Hydraulics are in OPERATION** and plow is in a **RAISED** position. **Lower plow to ground when vehicle is PARKED.**

SERVICE INFORMATION is covered on separate instruction.

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

INSTALLATION INSTRUCTIONS

- A. Install Lift Ram (5) to Lift Frame/Lift Arm with the ports facing toward the right hand side (passenger side) using 1" x 3-1/2" Cylinder Pins (18) and Lynch Pins (19).
- B. Remove shipping plugs from both ports on Lift Ram (5). Install Elbow (13) in the lower port and Relief Valve (14) in the upper port.
- C. Position Plate (30) as shown in figure 2 and weld into place. Fasten Bracket (31) to Plate (30) with 5/8-11 x 1-3/4" Bolt (32) and 5/8-11 Locknut (33). Bolt E-70 Hydraulic Unit (1) to Plate (30) using 3/8-16 x 1" Bolt (20), 3/8 Flatwasher (21) and 3/8 Lockwasher (22) as shown in figure 3.
- D. Attach Power Angling Ram Assemblies (8) to Pivot Bar and Push Plate Weld using 1" x 4-1/2" Cylinder Pins (15), and Cotter Pins(16).

NOTE RPDE ONLY: Pins to attach power angling cylinders to moldboard are packed in the 08795 Hardware Bag, part of the 81505 Common Attaching Kit.

NOTE RP ONLY: One 1" Washer (17) should be installed on each side between the bottom of the ram's dead end and the top surface of the lower plate on the Push Plate Weld.

- E. Attach Hose (12) and Elbow (13) from the E-70 (1) that controls the plow raise to the lower port of Lift Ram (5) as shown in figure 3. Attach Hose (34) and Elbow (10) from the E-70 (1) to the Right Angle Ram Assembly (8) and Attach Hose (11) and Elbow (10) from the E-70 (1) to the Left Angle Ram Assembly (8) as shown in figure 3.

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.

Note: When the Moldboard Assembly is removed from the vehicle, to prevent contamination to Hydraulic system, the hoses and hose receiving ports should be capped.

Power Angling Cylinders are not filled with any hydraulic fluid. It may be necessary to bleed the Power Angling Cylinders, proceed as follows:

- a. Temporarily loosen both hose connections at the Power Angling Cylinder's elbows. Base end of Cylinder must be higher than Rod end to enable trapped air to escape.
- c. Angle the Plow in both directions until fluid leaks out at both points in a steady flow.
- d. Retighten the connections.

WIRING INSTRUCTIONS

- A. Run Universal Truck Side Harness (3) through a hole in grille and into the engine compartment. Sandwich vehicle grill between Plug Bracket (24) and Plate (25) using Bolt H 5/16-18 x 3" (27), 5/16 Lockwasher (28) and 5/16-18 Finish nut (29). Secure Universal Truck Side Harness (3) to Plug Bracket (24) using Bolt H 5/16-18 x 1" (26), 5/16 Lockwasher (28) and 5/16-18 Finish nut (29). **Caution: Secure Universal Truck Side Harness (3) from any hot / moving parts with tie wraps as needed.**
- B. Drill a 1-1/4" Diameter Hole thru firewall to extend the harness into the cab of the vehicle. Fused lead from Universal Truck Side Harness (3) must be attached to terminal in fuse panel that is activated only when the ignition key is "on."
- C. Install Motor Solenoid (6) to metal surface in engine compartment using Self Tapping Screws (23). (Solenoid must be grounded to operate). Attach Red Power Cable (3) to a large terminal on Motor Solenoid (6). Attach Black Ground Cable (3) to negative (-) terminal of battery. Attach Red Power Cable (7) to positive (+) terminal of battery and remaining large terminal on Motor Solenoid (6). Attach small white wire from harness (3) to small terminal on Motor Solenoid (6). Note: Blue wire with Red Stripe is not used.

For snow plow light installation see separate instructions.




Orange wire on Harness (3) will attach to both orange wires of the "B" harness supplied in the 07223 Plow Light kit. Reference Form 1-757

Route Cables "C" (Yellow) Gr. from module to Harness (3). Connect both "C" Harness female ends to the male corresponding ends of the Harness (3).

Connect both male ends from the snow plow light to the female ends on the Super-V Plow Side Harness (3).

Check snow plow light blinkers to make sure the wires have not been reversed.

TORQUE CHART FOOT

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