

# PARTS & INSTALLATION INSTRUCTIONS E-68 XPRESS MEYER ELECTRO-LIFT® 15820

### **PARTS LIST**

Item Part No. Qtv. Description			
item	Part No.	Qty.	Description
	15820		E-68 P.A. 12V 1.5 X 10 Carton w/ Controls
4	15971	1	E-68 Lift & P.A. Assembly (Hydraulic Unit Only)     Motor Solenoid
1	15370	1	
2	05024	1	Power Cable     Truck Side Truiter State Harrage
3	22691	1	Truck Side-Trailer Style Harness
4	22694	1	Plow Side-Trailer Style Harness
5	22503	1	• • E-Z Mount Switch
6	22635	1	• • E-Z Mount Switch Rubber Boot
7	22470	1	Front Cover Mounting Bracket
8	22469	1	Rear Cover Mounting Bracket
9	22472	1	Front Hydraulic Cover
10	22471	1	Rear Hydraulic Cover
11	22506	1	Strap Spacer
12	22508	1	• • Threaded Spacer
13	22509	1	• • Washer #10 Internal Tooth (18-8 SS)
14	22510	10	• • Washer 1/4" Internal Tooth (18-8 SS)
15	22511	1	•• Locknut Esna #10-32 (18-8 SS)
16	22514	2	•• Screw 1/4-20 x 1/2" Phillips Rd (18-8 SS)
17	22515	4	•• Screw 1/4-20 x 1/2" Phillips Pan Head (18-8 SS)
18	22516	2	•• Screw 1/4-20 x 1" Phillips Pan Head (18-8 SS)
19	22517	5	•• Bolt H 1/4-20 x 1/2" (18-8 SS)
20	07298	1	<ul> <li>P.S. Ram Assembly 1-1/2 x 10" SA SAE</li> </ul>
21	07968	1	•• Ram 1-1/2 x 10" SA SAE-6
22	22461	1	• • Hose Assembly 1/4 x 39" Long MxM SAE-6
23	22444	1	• Nipple Female SAE-6 (OPTIONAL)
24	07299	1	<ul> <li>D.S. Ram Assembly 1-1/2 x 10" SA SAE</li> </ul>
25	07968	1	•• Ram 1-1/2 x 10" SA SAE-6
26	22420	1	• • Hose Assembly 1/4 x 33" Long MxM SAE-6
27	22443	1	• • Coupler Female SAE-6 (OPTIONAL)
28	08819	1	Hardware Bag Express Rams
29	20028	2	•• Bolt H 5/16-18 x 1-1/4 " Gr. 2
30	20304	2	• • Locknut Esna 5/16-18
31	20352	4	• • 5/16 Flatwasher
32	20145	1	•• Bolt H 5/8-11 x 3" Gr. 5
33	20146	1	•• Bolt H 5/8-11 x 3-1/4" Gr. 5
34	22002	2	•• Bolt H 5/8-11 x 3-3/4" Gr. 8
35	22481	2	•• Bolt H 5/8-11 x 3-1/4" Gr. 8
36	20309	6	• • Locknut Esna 5/8-11
37	22134	4	• • Special Washer 5/8
38	08473	1	Kit - Pressure Relief Valve
39	21805	1	• • Reducing Bushing 1/4 x 1/8
40	21806	1	Pressure Relief Valve 1/8 NPT
41	22693	1	Xpress Hardwire Controller
42	08134	1	Hardware Bag
43	21398	2	•• Self Tapping Screw 1/4-14 x 3/4"
44	07125	6	Blue Butt Connector w/Heat Shrink
45	07996	10	Cable Tie

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

Meyer Products and Diamond Equipment 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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## **GENERAL INFORMATION:**

**CAUTION:** Always disconnect battery prior to installation.

Check contents against the parts list to determine all are correct and included. When ordering parts, furnish Part No., Name and Description, Type of Hydraulic Unit and Moldboard

SAFETY PRECAUTIONS should be used when Electro- Lift® is in OPERATION and plow is in a RAISED position. LOWER plow to ground when vehicle is PARKED.

OVERHAUL and SERVICE INFORMATION is covered on separate instructions.

For Electro-Lift® Unit maintenance, refer to "Owner's Manual."

#### **NOTES:**

- 1. Connect ground cable to negative side of battery for a solid connection to ground.
- 2. Caution: Route all cables away from moving engine parts, Manifolds, and sharp sheet metal.
- 3. For weather protection, tape all electrical connections at front of vehicle.
- 4. The vehicle must be equipped with a "Heavy Duty Battery" (70 Amp. Hr. Min.) 550 C.C.A. and "Alternator" (60 amp. Min.) to obtain maximum performance.
- 5. Follow these instructions explicitly. Warranty does not apply to a Meyer product which has been negligently or improperly assembled or installed.

### SUGGESTED ORDER OF NEW PLOW **INSTALLATION**

- 1. Vehicle specific mounting instruction Form Varies
- Snow plow assembly Form 1-839
- 3. Hydraulic, lights, controls install this form 1-878 and 1-757.
- Operation and Maintenance Manual Form 4-545

### INSTALLATION INSTRUCTIONS

Note: Mount cylinder should always be collapsed when installing a new hydraulic unit.

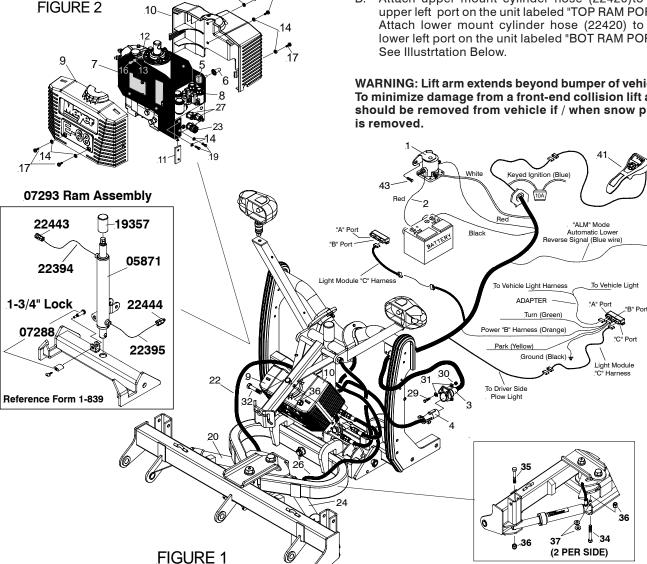
- Install lower boss of the E-68 Lift Assembly w/ Cover to Mount Cylinder using a 5/8-11 x 3-1/4" bolt (33) and 5/8-11 locknut (36).
- Swing E-68 hydraulic unit upward and insert lift ram into slot on the bottom of Lift Arm. Attach to Lift Arm using a 5/8-11 x 3" bolt (32) and 5/8-11 locknut (36).

NOTE: Route Plow Side harness (4) up and around the back side of the mount/dismount cylinder towards the driver's side of the vehicle.

- C. Remove black plastic cap on the top of the cover on the passenger side. Remove red shipping plug from filler hole and install Relief Valve Kit (38) by screwing both parts together and then tighten valve to 100-125 in. lbs. Replace plastic cap.
- Attach upper mount cylinder hose (22420)to the upper left port on the unit labeled "TOP RAM PORT". Attach lower mount cylinder hose (22420) to the lower left port on the unit labeled "BOT RAM PORT".

WARNING: Lift arm extends beyond bumper of vehicle. To minimize damage from a front-end collision lift arm should be removed from vehicle if / when snow plow

FIGURE 3



- E. Attach hose end of Power Angling Cylinders (20 & 24) to the Pushframe using a 5/8-11 x 3-3/4" bolt (34) and 5/8-11 locknut (36) on each side. Note: Be sure to sandwich two special washers (37) between the top of the cylinders and bottom of pushframe plate on each side.
- F. Attach rod end of Power Angling Cylinders (20 & 24) to the Pivot Bar using a 5/8-11 x 3-1/4" bolt (33) and 5/8-11 locknut (36) on each side.

Note: Make certain Ram (20) with hose (22) and Malehalf of coupler is on passenger side and Ram (24) with Hose (26) and female-half of coupler is on the driver's side.

G. Attach P.S. Cylinder's hose to the port on the back side of unit towards the truck. Attach D.S. Cylinder's hose to the port on the side of unit labeled "DS RAM". See Illustration.

Power Angling Cylinders furnished with this 15820 carton have been factory filled with the proper amount of fluid. If for any reason it is necessary to add fluid to reservoir or to bleed the Power Angling Cylinders, proceed as follows:

- a. Remove Relief Valve (38) from reservoir to add fluid during charging and bleeding.
- Temporarily loosen both hose connections at the Power Angling Cylinders. Base end of Cylinder must be higher than Rod end to enable trapped air to escape.
- Angle the Plow in both directions until fluid leaks out at both points in a steady flow.
- d. Retighten the hose connections.

# NOTE: Proper fluid level is 1/2" below filler hole. It must be checked with the lift arm and mount cylinder fully retracted.

- H. Route Truck Side trailer Style Harness (3) through the vehicle grill. Install Truck Side trailer Style Harness (3) to lift frame using Bolt H 5/16-18 x 1-1/4" (29), 5/16" Flatwasher (31) and 5/16-18 Locknut (30). Be certain to route all wiring 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 wire must be neatly secured using wire ties. Drill a 1/1/4" Diameter Hole thru firewall to extend the harness into the cab of the vehicle. Fused lead from Wiring Harness (3) must be attached to terminal in fuse panel that is activated only when the ignition key is "on."
- I. Install Motor Solenoid (1) to metal surface in engine compartment using Self Tapping Screws (43). (Solenoid must be grounded to operate). Attach Red Power Cable (2) to a large terminal on Motor Solenoid (1). Attach Black Ground Cable (3) to negative (-) terminal of battery. Attach Red Power Cable (2) to positive (+) terminal of battery and remaining large terminal on Motor Solenoid (1). Attach small white wire from harness (3) to small terminal on Motor Solenoid (1).
- J. Optional for ALM Mode: Locate a vehicle reverse / brake light signal and connect to the Light Blue wire of the Harness (3) using a blue tap splice connector.

# For snow plow light installation see separate instructions.

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

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

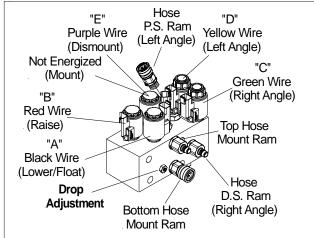
Connect both male ends from the snow plow light to the female ends on the Plow Side Trailer Style Harness (4).

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

**Note:** All electrical connections should have both ends coated with a dielectric grease prior to final installation. This will ensure a good connection and help in preventing corrosion.

- K. Refer to Operation and Maintenance Manual -Form 4-545 for complete controller operation.
- L After all electrical connections have been made the drop speed of the plow may be evaluated / adjusted. To adjust, loosen up the hex nut labeled "DROP ADJUSTMENT" shown below and adjust in to slow the drop speed and out to make it faster. After ideal drop speed it acheived, retighten the hex nut.

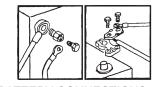
## SHOWN WITH OPTIONAL COUPLERS



# P.A. BLOCK IS MARKED (STAMPED) WITH SOLENOID AND HOSE LOCATIONS.

### **ADDITIONAL BATTERY CONNECTIONS**

- a. When atteching cables to battery with side post terminals, use M.P. Adaptor Part #21976 and attach as shown in Figure 2.
- Figure 3 illustrates the method of using a repair type terminal connector which is original equipment on some vehicles.



**BATTERY CONNECTIONS** 

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

## 07293 Mounting Cylinder addendum.

As part of our continuing product improvement program we have removed the quick couplers from our 15820 Hydraulic Carton for all Meyer Xpress plows packaged on or after April 1st 2009. We have added (2) 22420 1/4" x 33" SAE 6 Face Seal hose assemblies to this carton for replacement of the old hose assemblies currently mounted to the 07293 mounting cylinder which is packed in either the 16535 or 16545 PAF Carton. The old hoses **DO NOT** need to be returned. See below.

