



PARTS & INSTALLATION INSTRUCTIONS

E-78 MEYER ELECTRO-LIFT®



PARTS LIST

Item	Meyer Part No.	Qty.	Description
	15989		E-78 P.A. 12V 1.5 X 10 Carton w/ Controls
	15995	1	•• E-78 Lift & P.A. Assembly (Hydraulic Unit Only)
	22474	1	•• PCM (Plow Control Module)
	22478	1	•• PCM Cable Set
	22479	1	•• PCM Plow Light Cable
	15370	1	•• Motor Solenoid
	22480	1	•• Current Monitor Cable
	22501	1	•• Ground Cable
1	22487	1	•• Truck Side-Trailer Style Harness
2	22488	1	•• Plow Side-Trailer Style Harness
	22470	1	•• Front Cover Mounting Bracket
	22469	1	•• Rear Cover Mounting Bracket
3	22472	1	•• Front Hydraulic Cover
4	22471	1	•• Rear Hydraulic Cover
	22612	1	•• E-78 Name Plate
	80476	1	•• Daimond Name Plate
	22506	1	•• Strap Spacer
	22508	1	•• Threaded Spacer
	22509	1	•• Washer #10 Internal Tooth (18-8 SS)
	22510	10	•• Washer 1/4" Internal Tooth (18-8 SS)
	22511	1	•• Locknut Esna #10-32 (18-8 SS)
	22514	2	•• Screw 1/4-20 x 1/2" Phillips Rd (18-8 SS)
	22515	4	•• Screw 1/4-20 x 1/2" Phillips Pan Head (18-8 SS)
	22516	2	•• Screw 1/4-20 x 1" Phillips Pan Head (18-8 SS)
	22517	4	•• Bolt H 1/4-20 x 1/2" (18-8 SS)
	22248	2	•• Flatwasher 1/4" (18-8 SS)
	22249	2	•• Locknut 1/4-20 (18-8 SS)
5	07253	1	• PS. Ram Assembly 1-1/2 x 10" SA SAE
	07968	1	•• Ram 1-1/2 x 10" SA SAE-6
6	22395	1	•• Hose Assembly
7	22444	1	•• Nipple Female SAE-6
8	22460	1	•• Elbow 90° SAE 6
9	07254	1	• D.S. Ram Assembly 1-1/2 x 10" SA SAE
	07968	1	•• Ram 1-1/2 x 10" SA SAE-6
10	22395	1	•• Hose Assembly
11	22443	1	•• Coupler Female SAE-6
12	22460	1	•• Elbow 90° SAE 6
13	08364	1	• Hardware Bag E-Z Mount Plus Rams
14	20146	4	•• Bolt H 5/8-11 x 3-1/4" Gr. 5
	20309	4	•• Locknut Esna 5/8-11
	08473	1	• Kit - Pressure Relief Valve
	21805	1	•• Reducing Bushing 1/4 x 1/8
	21806	1	•• Pressure Relief Valve 1/8 NPT
15	08202	1	• Hardware Bag E-78 Plug Bracket
16	19607	1	•• Angle
17	19609	1	•• Plate
18	20027	2	•• Bolt H 5/16-18 x 1 Gr. 2
19	22658	2	•• Bolt H 5/16 x 3 Full Thread Gr. 2
20	20525	4	•• 5/16-18 Finish Nut
	20326	4	•• 5/16 Lockwasher
21	08836	1	• RCM Kit w/ Receiver Plug and Pouch
	22664	1	•• RCM (Remote Control Module)
	22477	1	•• Nylon Pouch
22	22593	1	•• Receiver Plug w/ Self Tap Screws
23	22475	1	• HCM (Headlight Control Module)
24	22504	1	• HCM Cable Set
25	22505	1	• T - Adapter Cable
26	22595	1	• Fused "Y" Wire Harness (2.5 Amp, 3 AG Type)
	22502	1	• Headlight Inductor
27	07305	1	Xpress Nite Saber Carton
	07224	1	•• Plow Light P.S.
28	07225	1	•• Plow Light D.S.
29	08822	1	•• Hardware Bag

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 Size.

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

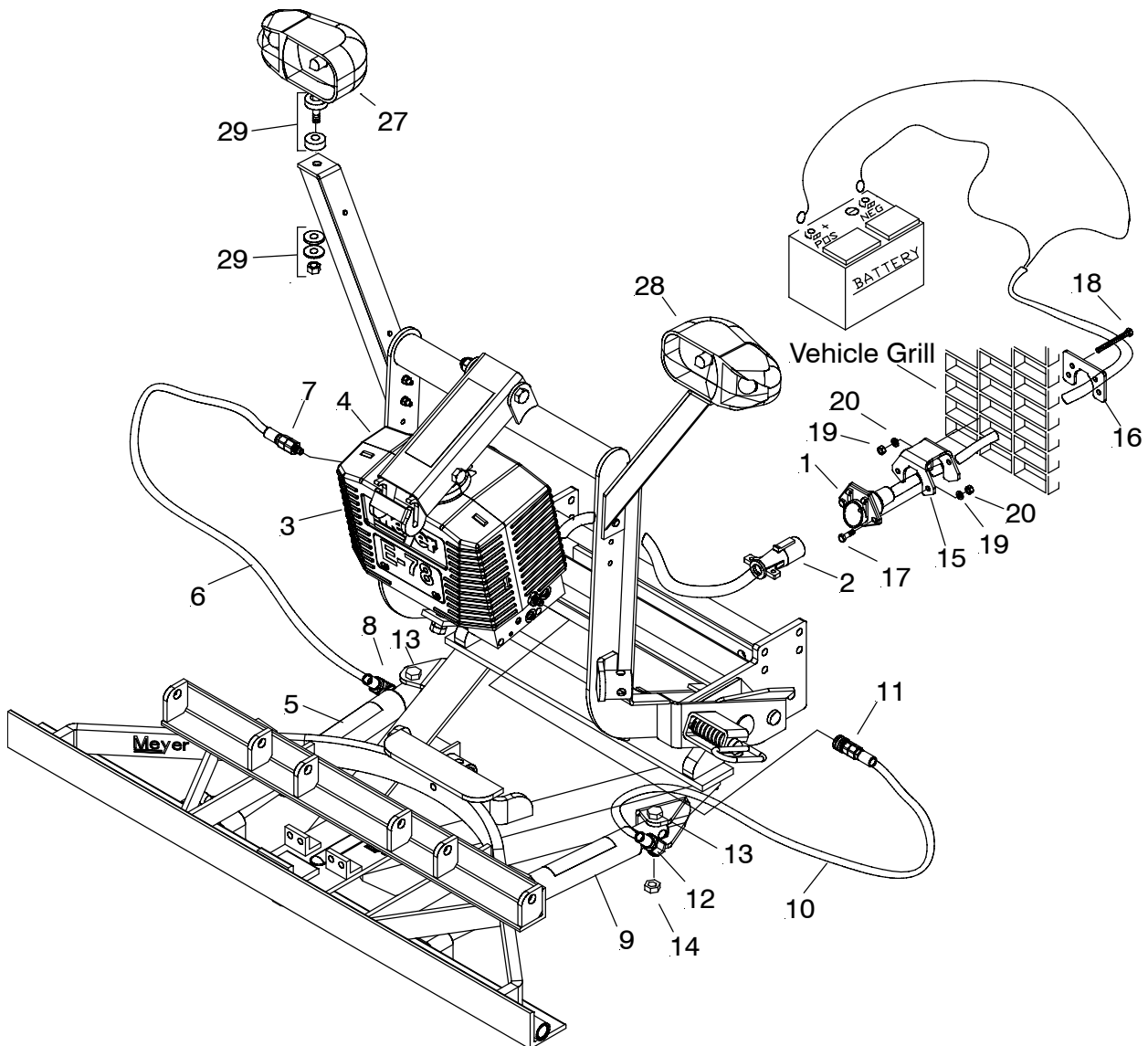
1. Vehicle specific mounting instruction - Form Varies
2. Snow plow assembly - Form Varies
3. Hydraulic/ lights / controls install - This Form
4. Operation and Maintenance Manual - Form 4-611

INSTALLATION INSTRUCTIONS

- A. Install E-78 Lift Assembly (1) to Lift Frame (using bolts supplied in the mounting carton), attach the lift ram to the Lift Arm.

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 is removed.

- B. 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 (08473) by screwing both parts together and then tighten valve to 100-125 in. lbs. Replace plastic cap.



- C. Attach hose end of Power Angling Cylinders (5 & 9) to the A-Frame with a 5/8-11 x 3-1/4" bolt (13) and 5/8-11 locknut (14) on each side.
- D. Attach rod end of Power Angling Cylinders (5 & 8) to the Sector using a 5/8-11 x 3-1/4" bolt (13) and 5/8-11 locknut (14) on each side.

Note: Make certain Ram (5) with hose (6) and Male-half of coupler (7) is on passenger side and Ram (9) with Hose (10) and female-half of coupler (11) is on the driver's side.

- E. Attach PS Cylinder's Nipple (7) to the coupling on the back side of unit towards the truck. Attach DS Cylinder's Coupler (11) to the right nipple on the drivers side of unit.

Power Angling Cylinders furnished with this 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 (In Kit 08473) from reservoir to add fluid during charging and bleeding.
- b. 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.
- c. 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.

- F. Run Truck Side Harness (1) through a hole in grille and over to the vehicle battery. Sandwich vehicle grill between Angle (15) and Plate (16) using Bolt H 5/16-18 x 3" (18), 5/16 Lockwasher (20) and 5/16-18 Finish nut (19). Secure Truck Side Harness (1) to Angle (15) using Bolt H 5/16-18 x 1" (17), 5/16 Lockwasher (20) and 5/16-18 Finish nut (19). **Caution: Secure Truck Side Harness (1) from any hot / moving part with tie wraps as needed.** Make connections to the battery in step 10.

- H. Mount the lights (27 & 28) to the light brackets using supplied hardware (29) in the following order from top to bottom: Collar, thick rubber bushing, light bracket, thin rubber bushing, metal washer, and nut as shown. Note: The wire harness exiting from the light housings should be secured against the inside of light brackets and away from any pinch points using tie wraps (supplied). **Note: Driver's side light harness should be labeled with a small white tag.**

- I. 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" (on picture to the left) and adjust in to slow the drop speed and out to make it faster. After ideal drop speed it achieved, retighten the hex nut.

ADDITIONAL BATTERY CONNECTIONS FOR NEXT PAGE

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

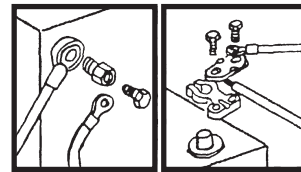
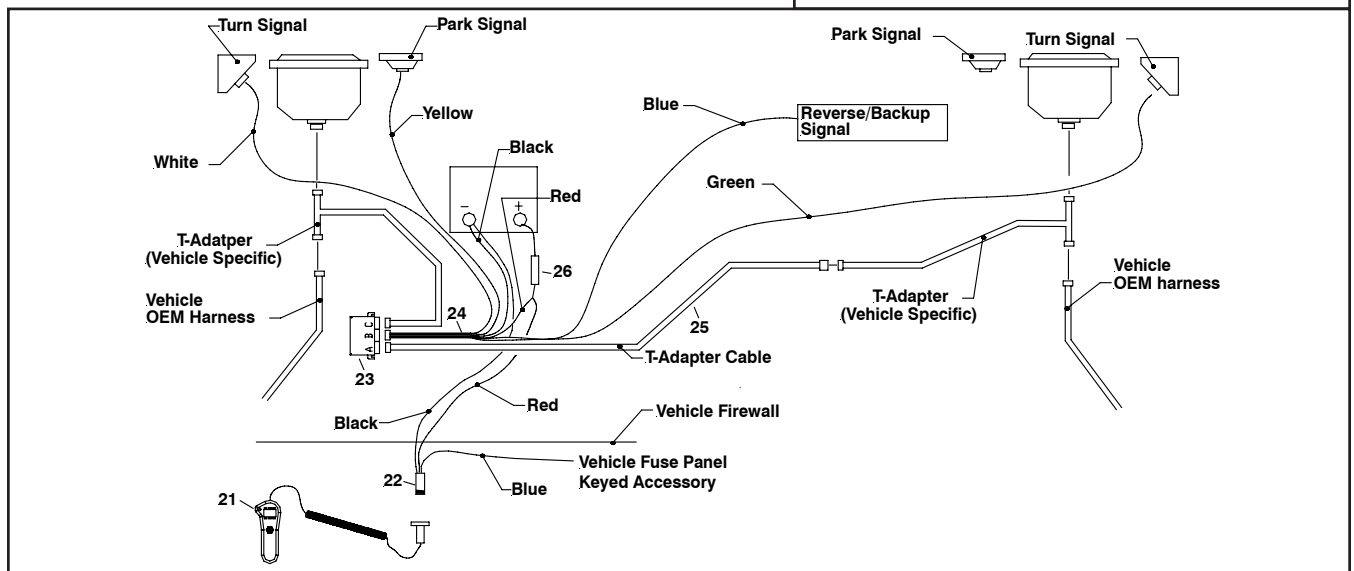
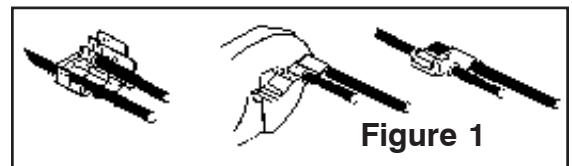


Fig. 2 Fig. 3

WIRING INSTRUCTIONS

1. First identify vehicle headlamp type per Adapter Cross Reference Chart on the back side of this form. **Confirm the exact T-adapter kit that is needed for your vehicle.** Installation of an improper adapter kit may result in damage to the headlamp control module, and/or improper operation of lamps. **Use of improper adapter kits will void all warranties applicable to this product.** There will be two T-adapter harnesses, one for the left and one for the right. The adapters are packaged separately.
2. Disconnect the vehicle OEM Harness from the back of the headlamp on each side. Take one of the T-Adapter harnesses and locate the connector for the back of the headlamp and connect. Repeat for the other headlamp using the remaining T-Adapter harness.
3. Locate the opposite connector on the T-Adapter harness. Connect it to the vehicle's OEM harness that was disconnected from the vehicle headlamp. Repeat on the other side.
4. Install Headlight Control Module (23) in the engine compartment on the battery side of the vehicle behind the headlamp. Locate the module as close as possible to the headlamp and try to mount with connectors facing downward. Make sure that they do not interfere with any moving parts and they are surely fastened. Use the nylon tie straps provided to secure the Modules in two places. **DO NOT mount module on any engine component that will get HOT.**
5. Connect T-Adapters to the Headlight Control Module (23) at connector "A" and "C". Use T-Adapter cable (25) as an extension to reach the headlight on the opposite side of the battery. Route the cable to the front of the truck grill so that it is accessible from the front and outside of the grill. **Secure the all cables keeping them away from all hot / moving parts.**
6. Connect HCM Cable Set (24) at connector "B" of Headlight Control Module (23).
7. Locate vehicle's park signal wire on the side of vehicle where the Headlight control module is mounted using a test light. Using the blue tap connectors, connect the vehicle's park signal wire to the Yellow wire on the HCM Cable Set (24). Repeat connections to driverside turn signal with the White wire (24) and the passenger side turn signal to the Green wire (24). **Refer to Figure 1 for proper tap splice connector use.**
8. **Optional for ALM Mode:** Locate a vehicle reverse / brake light signal and connect to the Blue wire (24) using a blue tap splice connector.














9. Locate a in-cab mounting area for Receiver Plug (22) that will not interfere with the operator when entering or exiting the vehicle. Install using Self Tapping screws provided. Route the red & black wire (24) through the firewall into the engine compartment. Leave sufficient length of these wires in the engine compartment to connect the red to the Fused "Y" Wire Harness (26) and the black to the negative on battery.
10. Connect Red wire from Receiver Plug (22) and Red wire of HCM Cable Set (24) to Fused "Y" Wire Harness (26) using the blue tap splice connectors. Connect single end of Fused "Y" (26) to the positive on battery along with the red wire from the truck side harness (1). The Black wires from HCM Cable Set (24) and (22) will be connected to the negative on battery along with the black wire from the truck side harness (2). The Blue wire (22) is connected to the vehicle fuse panel to any keyed accessory. This Blue wire will only sense 12 volts when the vehicle ignition is turned on, there will be no load. When the vehicle ignition is turned off the Blue wire will no longer have 12 volts applied and the RCM will turn off.
11. Plug RCM Power Cable (21) into Receiver Plug (22).
12. Verify that installation is correct by turning on the vehicle headlamps, and switching from high to low beam on the vehicle set. Switch over to the plow headlamp set by turning on RCM (22) and check for high and low beam. At any one time, only the plow or vehicle lights should be on, never both sets at once. Verify DRL headlamp function in outdoor light by turning off the vehicle headlamps switch and turning on the ignition key, starting the engine if necessary. You should have DRL function on only one headlamp set at a time except 99 & later Chevy/GMC's. With plow attached and all switches off the plow lights will be in DRL mode automatically.
13. Refer to Operation and Maintenance Manual - Form 4-611 for complete controller operation.



⚠ WARNING	
	Read the Meyer Owner's Manual before operating or servicing a snowplow. FOLLOW THESE INSTRUCTIONS EXPLICITLY.

SABER HEADLIGHTS

ADAPTER CROSS REFERENCE

HEADLIGHT BULB NO.	CONFIGURATION	SYSTEM TYPE	ADAPTER KIT NO.
2D1 2B1 HB2 6014 6052 H9003 H6014 H6052 6015 H6054 H6017 HP6054 H6024 H5054 H6054LL	 	2 Lamp Round 2 Lamp Rectangular	(07180) (07099) (07100)
2A1 1A1 Low High 4652 4651 H4656 H4651		4 Lamp Rectangular	07101
HB5 H9007		Replacement Bulb	07102
LF UF Low High H4703 H4701		4 Lamp Rectangular	07103
HB4 HB3 Low High H9006 H9005		Replacement Bulb 2003 & up Chevy / GMC	07104
2E1 H4666 H6545 H P6545		2 Lamp Rectangular	07105
HB1 H9004		Replacement Bulb	07106
HB4 HB3 Low High H9006 H9005		1999 thru 2002 Chevy Silverado GMC Sierra Excludes Classic & Older Body Styles	07185
HB5 HB1 H9007 H9004		Dodge Ram Sport Quad Headlamps For 1999 US Model Only	07190
HB5 HB1 H9007 H9004		Dodge Ram Sport Quad Headlamps For 1999 and up US & Canadian Models	07221
HB4 HB3 Low High H9006 H9005		1998 and up Chevy Blazer, S10 & Sonoma	07213
H9008		Replacement Bulb	07417