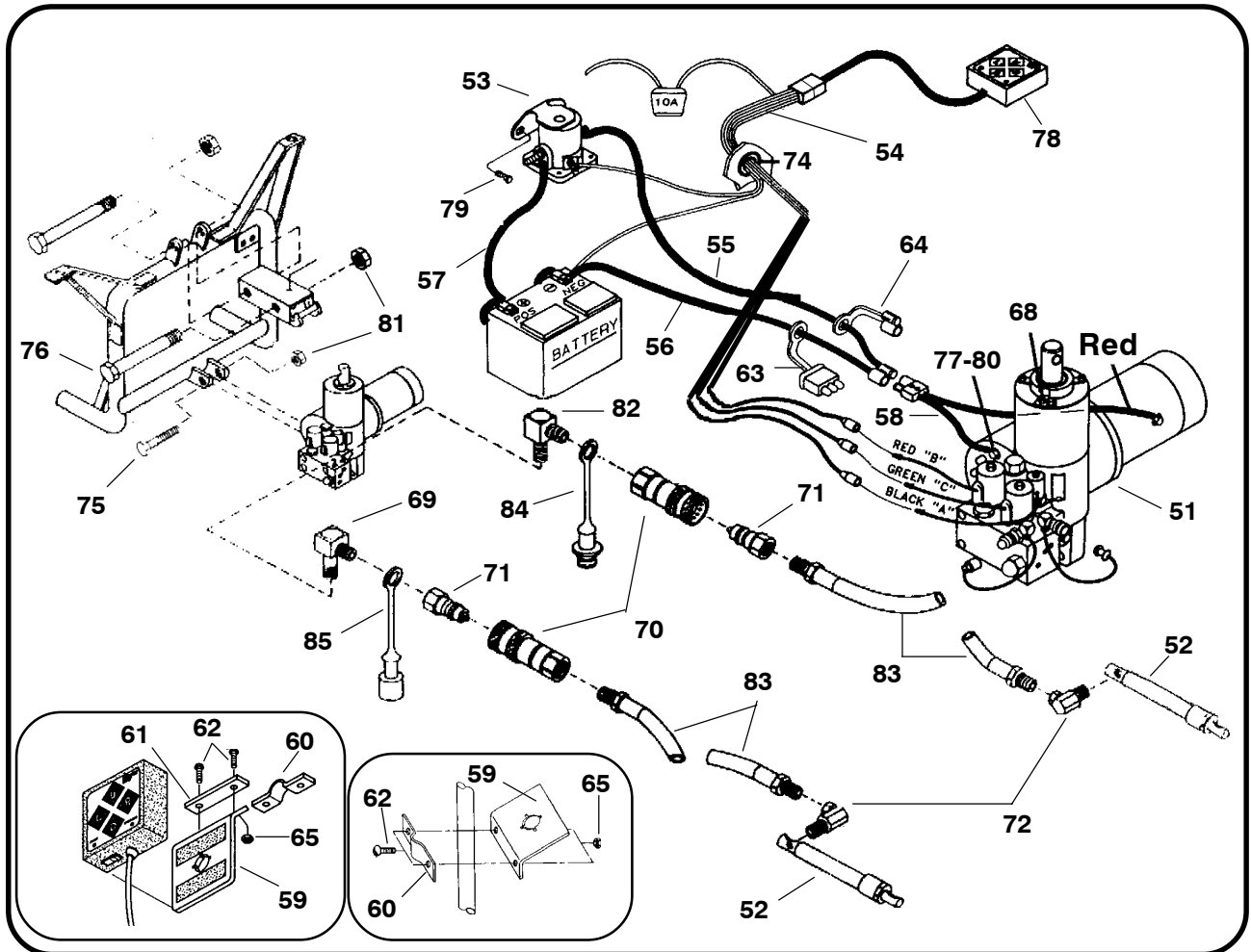


OUT FRONT ELECTRIC HYDRAULIC (E-60H) STRAIGHT TRIPEDGE PLOWS PULL AWAY MOUNTINGS

KIT NO. 80053
JULY 10,1997



ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.
51	80063	LIFT UNIT (E-60H)	1	71	** N/A***	QUICK DISCONNECT MALE	2
52	817000 020	10" CYLINDER	2	72	8752202 004 004	1/4 NPT 90 DEG SWIVEL ELB.	2
53	15370	POWER SOLENOID	1	73	* 21976	M.P.I. ADAPTOR	2
54	15764	HARNES & FUSE ASSEMBLY	1	74	* 21832	BUSHING SPLIT (GROMMET)	2
55	15671	POWER CABLE - 63" RED	1	75	* 20146	5/8"-11 X 3-1/4" CAPSCREW	1
56	15672	GROUND CABLE - 42" BLACK	1	76	* 20151	5/8"-11 X 4-3/4" CAPSCREW	1
57	05024	POWER CABLE 36"	1	77	* 15102	5/16"-18 X 1/2" CAPSCREW	1
58	15670	PIGTAIL ASSEMBLY	1	78	* 80115	TOUCHPAD SWITCH	1
59	* 15673	SWITCH BRACKET	1	79	* 21398	1/4" X 3/4" SELF TAP SCREW	2
60	* 15675	CLAMP PLATE	1	80	* 21400	5/16" INT / EXT LOCKWASHER	1
61	* 15676	BACK-UP PLATE	1	81	* 20309	5/8"-11 LOCKNUT	2
62	* 20863	1/4"-20 X 1" RD HD SCREW	2	82	** 22141	1/4" NPT 90 DEG M TO M ELB.	1
63	15669	WEATHER PLUG SOLE. WIRE	1	83	816000 095 034	1/4" HP HOSE 34" LONG	2
64	36248	WEATHER PLUG POWER CABLE	1	84	** 22142	DUST PLUG	1
65	* 20312	1/4" - 20 LOCKNUT	2	85	** 22143	DUST CAP	1
68	08473	RELIEF VALVE KIT	1	86	812000 022	DECAL (LIFT ARM)	1
69	** 21857	1/4" NPT 90 DEG M TO M ELB.	1		816000 009	OWNERS MANUAL	1
70	** N/A***	QUICK DISCONNECT FEMALE	2		82006	LIGHT SWITCH BRKT. KIT	1

* INCLUDED IN 80117 HARDWARE BAG ** INCLUDED IN 80063 ASSEMBLY *** DISCOUNTS AVAILABLE IN SETS ONLY # 15741

INSTALLATION INSTRUCTIONS FOR 80053

CAUTION: Disconnect vehicle battery before starting installation to prevent personal injury and damage to vehicle electrical system components.

NOTE: Frame and common attaching kits should be installed on vehicle before beginning hydraulic kit installation. Vehicle should be equipped with a heavy duty battery (70 AMP. HR. min.) and alternator (60 AMP. min.) to obtain best performance of electric hydraulic unit. Use only Meyer hydraulic fluid in electric hydraulic unit and cylinders. For added weather protection, grease and tape all electrical connections at front of vehicle.

1. **CONTROLS:** Drill two 7/8" diameter holes through firewall in an area approximately between clutch pedal and parking brake pedal for electric hydraulic unit wiring harness and fuse assembly and plow light wiring harness to pass through. From engine compartment, insert the six or twelve terminal end of the plow light harness through one of the 7/8" diameter holes. From inside of cab, insert the three terminal end of hydraulic unit harness and fuse assembly (54) through the remaining 7/8" diameter hole in firewall. Install grommets around both wiring harnesses where they pass through the firewall. Touchpad switch (78) can be mounted several different ways. It can be permanently mounted to the dash in a convenient location. It can be permanently mounted to the shift lever. It can also be used as a pendent type control.
 - A. **DASH MOUNTED:** Select a convenient location either to the left or right of steering column. Using the two 9/32" holes in switch bracket (59) as a guide, drill two 9/32" holes through dash and attach using two 1/4" 20 X 1" capscrews (62) backup plate (61) and 1/4" 20 locknuts (65). Peel the backing off the two velcro strips supplied with the touchpad switch (78) and stick them onto the switch bracket (79). Place the touchpad switch (78) onto the switch bracket (79) with the mateing velcro surfaces together. The touchpad switch (78) can also be mounted onto flat sections of the dash by sticking the velcro strips directly onto the dash then attaching the touchpad (78) with the mateing Velcro surfaces together.
 - B. **SHIFT LEVER MOUNTED:** Attach switch bracket (59) to a round section of shift lever in a convenient location using clamp plate (60), two 1/4" 20 X 1" capscrews (62) and locknuts (65). Peel the backing off the two velcro strips supplied with the touchpad (78) and stick them onto the switch bracket (79). Place the touchpad switch (78) onto the switch bracket (79) with the mateing velcro surfaces together.



- C. **PENDENT TYPE MOUNT:** Route switch end of harness and fuse assembly (54) along floor to a convenient location in front of seat.

After a convenient location is selected and touchpad switch (78) is mounted, attach the touchpad switch pigtail disconnect plug to the corresponding plug on the switch end of harness and fuse assembly (54). Attach the "power" wire with the "in line fuse" in it from the harness and fuse assembly (54) to an accessory terminal in the vehicle fuse box that has power to it only when the ignition switch is in the "on"/"acc" position. Route the three terminal end of the harness and fuse assembly (54) through the engine compartment, radiator web, and grill so that the three ends come out through the lower center of the grill and the small ring terminal end of black with white stripe wire ends near vehicle battery or starter solenoid. Attach the "ground" wire, with the large ring terminal end from the harness and fuse assembly (54) to a reliable ground in the engine compartment. Attach the plow light switch bracket to the lower lip of the dash using the supplied #12 screws. Stick the plow light switch decal onto the plowlight switch bracket. Attach the six or twelve terminals of the plow light wiring harness to the terminals of the plow light control switch according to the illustration in plow light kit. Install plow light switch with attached wiring harness into the previously installed plow light switch bracket on dash. Tape or tie the hydraulic harness and fuse assembly (54) and the plow light wiring harness away from any moving parts and heat sources in the engine compartment and passenger's compartment.

CAUTION: "Power" wire with "in line" fuse holder in it must be connected to a fused terminal that has power only when ignition is on. This will prevent unintentional lowering of plow and battery drainage when vehicle is not running.

2. **ELECTRIC HYDRAULIC UNIT:** Place lower mounting boss of electric hydraulic unit (51) between the lower ears on the lift frame (26).

NOTE: Motor of electric hydraulic unit (51) goes to the driver's side of vehicle and the disconnects in angle cylinder ports go to the front .

Attach the electric hydraulic unit (51) to the lower ears of lift frame using a 5/8"-11 X 3 1/4" capscrew (75) and 5/8"-11 locknut (81). Place the ram end of the electric hydraulic

unit (51) between the cylinder ears of the lift arm (24) and fasten using a 5/8"-11 X 4 3/4" capscrew (76) and 5/8"-11 locknut (81). Remove shipping plug from oil fill hole and install relief valve kit (68) in it's place. Tighten to 100-125 in. lb. only. Install pigtail assembly (58) to the hydraulic unit with the red wire attached to the motor power stud and the black wire attached to the tapped hole in base of unit using a 5/16"-18 X 1/2" capscrew (77) and toothed lockwasher (80). Place toothed lockwasher between ring terminal of wire and base of hydraulic unit to get a reliable ground. Attach the three female bullet connectors on end of harness assembly (54) to the three male bullet connectors on the color coded solenoid wires of hydraulic unit.

- 3. POWER SOLENOID:** Select a spot inside engine compartment near battery where power solenoid (53) can be bolted to a e metal "grounded" surface. Drill two 3/16" diameter holes to line up with the mounting holes in solenoid and attach using two 1/4" X 3/4" self-tapping screws (79). Attach ring terminal end of red 63" power cable (55) to one of the large studs of power solenoid (53). Route other end out through radiator web and grill to the plug of pigtail assembly (58). Install weather plug (64) over end of power cable (55) and plug it into pigtail assembly (58). Attach ring terminal end of black 42" cable (56) to the negative terminal of battery. Route other end out through radiator web and grill to the plug of pigtail assembly (58). Install weather plug (63) over end of ground cable (56) and plug it into pigtail assembly (58). Attach small ring terminal end of black with white stripe wire of hydraulic unit harness (54) to the small stud of power solenoid (53). Attach ring terminal on one end of 36" power cable (57) to the remaining large stud of power solenoid (53). Route other end to the vehicle battery and connect to the positive terminal. If battery is side terminal, attach power cable (57) and ground cable (56) to terminals using M.P.I. adaptors (73), then connect vehicle battery cables to tapped hole in M.P.I. adaptors. Power cable (57) can also be connected to the positive "always hot" terminal of vehicle starter solenoid.

CAUTION: Tape or tie all wires, harnesses and cables away from moving parts and heat sources.

- 4. CYLINDERS:** Install driver's side and passenger's side angle cylinder/hose assemblies onto corresponding sides of push frame and plow using pins and cotter pins from 81500 common attaching kit.

NOTE: Driver's side cylinder/hose assembly has a male disconnect half (71) on hose end. Passenger's side cylinder/hose assembly has a female disconnect half (70) on hose end. Route hose from driver's side cylinder assembly to front of



hydraulic unit (51) and connect to female disconnect. Route hose from passenger's side angle cylinder assembly to front of hydraulic unit (51) and connect to male disconnect. Electric hydraulic unit (51) and angle cylinder assemblies have been filled with the proper amount of fluid at factory. It should not be necessary to add any fluid during installation. If for any reason it is necessary to add fluid or to bleed trapped air from the angle cylinders, proceed as follows:

- a. Remove relief valve assembly (68) from fill hole of hydraulic unit (51).
- b. Temporarily loosen the swivel elbows (72) on the angle cylinder/hose assemblies.
- c. Leave lift chain loose and jack up front of vehicle so that hose ends of angle cylinders are higher than rod ends.
- d. Angle plow in both directions until no air bubbles appear in fluid leaking out of loosened fittings on angle cylinders.
- e. Re-tighten the fittings on angle cylinders, fill hydraulic unit with fluid to 1 1/2" below top of filler hole, (lift arm must be fully retracted), replace relief valve assembly (68), and let vehicle down off jack.

REMOVAL: When plow is removed from vehicle, hose from driver's side angle cylinder/hose assembly should be connected to the disconnect half on passenger's side angle cylinder/hose assembly. Dust plug (84) should be placed into female disconnect half (70) and dust cap (85) should be placed onto male disconnect half (71) on electric hydraulic unit (51). This will help prevent dust and moisture from entering system while not in use. If plow is not going to be used for long periods of time electric hydraulic unit can be easily removed from vehicle by un-plugging all electrical connections and pulling the bolts holding electric hydraulic unit (51) and lift arm (24) to vertical frame of vehicle attachments. Plug the three solenoid wires and the power cable and ground cable remaining on vehicle into the weather plugs (63, 64) installed on power and ground cables (55, 56).

NOTICE: Diamond Equipment or Meyer Products assume no responsibility for installations not made in accordance with these instructions.

Instructions are subject to change without notice.