

PARTS & INSTALLATION INSTRUCTIONS

E-46 & E-47 ELECTRO-LIFT®

PARTS LIST

ITEM	STANDARD-UP THROUGH C-9		QTY.	DESCRIPTION	ITEM	STANDARD-UP THROUGH C-9		QTY.	DESCRIPTION
	1-1/8" x 6" Stroke E-46	1-1/8" x 8" Stroke E-47				1-1/8" x 6" Stroke E-46	1-1/8" x 8" Stroke E-47		
1	15153	15153	1	PUMP & MOTOR ASSY.	46	22293	22293	1	• Coupler, Male Half
	15054	15054	1	• Motor - 12 Volt	47	15606	15606	1	• Kit-Crossover Valve
2	15026	15026	1	• Pump Assy.	48			1	•• O-ring
3	15581	15581	1	•• Shaft Seal	49			1	•• O-ring
4	15045	15204	1	Cylinder Tank	50			1	•• Cage
5*	15131	15131	1	O-Ring 3-1/2 I.D.	51			1	•• O-ring w/Glyd. Ring
6*	15163	15163	1	O-Ring 1-15/16 I.D.	52			1	•• Poppet
7*	15198	15198	1	O-Ring 1-1/8 I.D.	53			1	•• Washer
8	15194	15194	1	Cover & Seal Assy.	54			1	•• Guide
9	05119	05119	1	• Wiper	55			1	•• Spring
10*	15131	15131	1	• O-Ring 3-1/2 I.D.	56			1	•• Spacer
11	15199	15199	1	• Sleeve	57			1	•• Disc
	08473	08473	1	PRESSURE RELIEF VALVE KIT	58			1	•• Plug
12	21805	21805	1	• Reducer Bushing 1/4 - 1/8	59			1	•• Adj. Screw
13	21806	21806	1	• Pressure Relief Valve	60			1	•• O-ring
14	15207	15205	1	Cylinder	61			1	•• Acorn Nut 9/16-18
15	15209	15209	1	Washer	*	15610	15610	1	•• Seal Kit-Crossover Valve
16a	15335	15761	1	RAM ASSEMBLY					(includes items 48, 49, 51, 60)
16	15208	15206	1	• Ram	62	15639	15639	1	• Kit-Pilot Check Valve
17	15158	15158	1	• Piston	63			1	•• Ball, Steel
18	15219	15219	1	• Piston Follower	64			1	•• Spring
19		15760	1	• Spacer	65			1	•• Plug
20*	15162	15162	1	• Packing Cup	66	15609	15609	1	• Piston
21*	15125	15125	1	• O-Ring 7/16 I.D.	67	15359	15359	1	• Plug Valve Block
22			1	• Locknut 1/2-13	68*	15126	15126	1	•• O-ring 9/16 I.D.
23			3	Locknut 5/16-24	69	15697	15697	1	• "B" Solenoid Assembly
24	15573	15573	1	Base & Strainer Assy.	70	15382	15382	1	•• "B" Coil, Red Wire
25	15326	15326	1	• Strainer	71	15698	15698	1	•• "B" Cartridge Valve
26	15042	15203	3	Stud	*	15432	15432	1	•• Seal Kit-"B" Cartridge
27	15043	15043	3	Stud	72	15358	15358	1	• "C" Solenoid Assembly
28	15574	15574	1	PUMP CHECK VALVE KIT	73	15430	15430	1	•• "C" Coil, Green Wire
29*			1	• O-Ring 3/8 I.D.	74	15381	15381	1	•• "C" Cartridge Valve
30			1	• Seat	*	15433	15433	1	•• Seal Kit-"C" Cartridge
31			1	• Ball, 9/32	75	15576	15576	1	• Kit-"B" Solenoid Check Valve
32			1	• Spring	76			1	•• Ball, 7/16
33*	15122	15122	3	O-Ring 1/4 I.D.	77			1	•• Spring
34	15620	15620	1	FILTER KIT - 1/2"	78	21826	21826	4	Scr., Soc. Head 5/16-18 x 1-1/2"
35	15619	15619	1	• Filter	79	15646	15646	1	End Plate
36	21827	21827	1	• Plug w/O-Ring - 1/2"	80	21859	21859	4	Scr., Soc. Head 5/16-18 x 3/4
36	21827	21827	2	Plug w/O-Ring - 1/2"	81	15621	15621	1	Baffle
34	15641	15641	1	FILTER KIT - 9/16"	82	21980	21980	2	Retainer Ring
35	15619	15619	1	• Filter		15556	15556	1	VALVE ASSEMBLY
36	21999	21999	1	• Plug w/O-Ring - 9/16"	83	15578	15578	1	• Kit - Crossover Valve
36	21999	21999	2	Plug w/O-Ring - 9/16"	84			1	•• Poppet
34	15620	15620	2	FILTER KIT - 1/2"	85			1	•• Spring
35	15619	15619	1	• Filter	86			1	•• O-Ring 1/4 I.D.
36	21827	21827	1	• Plug w/O-Ring - 1/2"	87			1	•• Plug
36	21827	21827	1	Plug w/O-Ring - 1/2"	88	15577	15577	1	• Kit - "C" Solenoid Check Valve
34	15641	15641	2	FILTER KIT - 9/16"	89			1	•• Ball 3/16
35	15619	15619	1	• Filter	90			1	•• Spring
36	21999	21999	1	• Plug w/O-Ring - 9/16"	91			1	•• Plug
36	21999	21999	1	Plug w/O-Ring - 9/16"	92	15575	15575	1	• Kit - Pilot Check Valve
37*	15127	15127	1	O-Ring 5/8 I.D.	93			1	•• Ball
38*	21929	21929	3	Washer, Nyltite 5/16	94			1	•• Spring
39	20697	20697	3	Locknut 5/16 - 24	95			1	•• Plug
					96	15366	15366	1	• Piston
40	15356	15356	1	"A" Solenoid Assembly	97			4	Scr., Soc. Head
41	15392	15392	1	• "A" Coil, Black Wire	98	15611	15611	1	Kit - Pump Relief Valve
42	15393	15393	1	• "A" Cartridge Valve	99			1	• Poppet
*	15431	15431	1	•• Seal Kit, "A" Valve	100			1	• Spring
					101			1	• Guide
40a	15661	15661	1	"A" Solenoid Assembly	102			1	• O-Ring
41a	15659	15659	1	• "A" Coil, Black Wire	103			1	• Retainer
42a	15660	15660	1	• "A" Cartridge Valve	104			1	• Set Screw
*	15431	15431	1	•• Seal Kit, "A" Valve	105			2	• Washer w/O-Ring
43	15758	15758	1	• VALVE ASSY. w/COUP.	106			1	• Jam Nut
44	22295	22295	1	•• Forged 90 Degree Elbow	107			1	• Acorn Nut
45	22294	22294	1	•• Coupler, Female Half					

Parts indented are included in assembly under which they are indented.

- NOTES:**
- *Parts included in Master Seal Kit Part No. 15456.
 - Set Crossover Relief Valve @ 3800 ± 400 P.S.I. @ 2-1/2 G.P.M. flow.
 - Set Pump Relief Valve @ 1650 ± 50 P.S.I. full flow.

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

Before the Meyer Electro-Lift® unit is disassembled for repairs, make certain that all the maintenance procedures have been checked; refer to Owner's Manual.

When the unit is to be overhauled, Master Seal Kit Part No. 15456 is required. This Kit contains all necessary Seals for rebuilding. **NOTE: DO NOT REUSE OLD O-RINGS.**

When ordering parts, furnish Type of Unit, Part No., Name and Description.

These instructions are intended as a guideline for overhaul of an E-46/E-47 Electro-Lift® unit.

More detailed information covering principles of Operation, Troubleshooting, Disassembly and Repair are found in Electro-Lift® Service Manual 1-562. This is available for a nominal fee from your Meyer Distributor or directly from Meyer Products.

DISASSEMBLY AND INSPECTION OF UNIT

Drain fluid from the unit by removing Pressure Relief Valve (13) or Drain Plug (36). Clamp Sump Base (24) firmly into vise.

1. To disassemble COVER ASSEMBLY, TANK, RAM & CYLINDER PARTS, remove three Locknuts (39).

2. To disassemble MOTOR from PUMP, loosen Motor mounting bolts, but **DO NOT REMOVE**.

Note: Motor end plate to be held in place. Temporarily install two 1/4-20 nuts on the motor mounting bolts to keep motor intact. Remove nuts when reinstalling Motor to pump.

3. To disassemble Pump from Base, remove three Locknuts (23).

4. To disassemble VALVE BLOCK from BASE, remove Soc. Hd. Screws (78, 80 or 97).

SUBASSEMBLIES - INSPECTION

1. **COVER ASSEMBLY, TANK, RAM & CYLINDER PARTS:**

a) Check Cover (8), and Base (24) castings for cracks and damage.

b) Replace Wiper Seal (9) pressed in Cover (8).

c) Inspect Sleeve (11), Piston (17), the Piston Follower (18), Spacer (19) for excessive wear. Replace Packing Cup (20). Inspect Cylinder (14) for scoring and pitting in bore.

d) Inspect Ram (16) for nicks and rust.

2. **MOTOR (1)**

Note: Complete Motor Assemblies are only available from Meyer Products. Service and repair parts can be purchased from your nearest authorized Prestolite or American Bosch Service Stations.

a) Prestolite Motor can be identified by a "Domed Top Cover" and name "Prestolite" stamped on Motor Body.

b) American Bosch Motors have a "Flat Top Cover" and no identifying marks.

3. **PUMP (2)**

DO NOT at any time disassemble this Pump. This will void the warranty.

a) The damaged pump drive Shaft Seal (3) may be removed by careful extraction with a pointed tool. Dip new Seal in oil and with lip down, press into Pump Housing flush to 1/32 inch below face of boss.

4. **BASE (24)**

a) Remove and clean Solenoid (40) and inspect for external damage.

b) Test Coil (41) for electrical continuity. Nominal Coil resistance is 9.6 ohms. Replace O-rings from Seal Kit Part No. 15431 contained in Seal Kit No. 15456.

c) To reassemble, carefully guide the Coil (41) over the Valve Cartridge (42) and use the original External Brass Nut.

d) Remove and clean the Filter Screen (34) using kerosene and blow out with air. Replace O-rings (33) from Seal Kit No. 15456.

5. **VALVE BLOCKS**

a) Remove items (69), (76) & (77). Clean "B" Solenoid (69) and inspect for damage. Disassemble Cartridge Valve (71) and replace O-rings from Seal Kit No. 15432 contained in Seal Kit No. 15456.

b) Remove and clean "C" Solenoid (72) and inspect for damage. Disassemble Cartridge Valve (74) and replace O-rings and nylon back-up rings from Seal Kit No. 15433 contained in Seal Kit No. 15456. Be certain O-rings and spacers are oriented properly.

c) Test both Coils (70 & 73) for electrical continuity. Nominal Coil resistance is 3.7 ohms.

d) Remove Plug (67) and Piston Assembly (66 or 96) and inspect the Piston for scratches. Replace O-ring (68) from Seal Kit No. 15456.

e) Remove Pilot Check Valve Parts (62 or 92) and inspect all parts for damage.

f) Remove Plugs (87) with caution as these are spring loaded.

g) Remove all parts of Item 47 or 83 and inspect for damage. Replace O-rings from Seal Kit No. 15456. Set adjustable crossover to 3800 P.S.I. ± 400 P.S.I.

h) Remove all parts of Item 88 and inspect for damage.

i) With parts removed from Valve Block, clean and blow out with air to remove any foreign particles in Block.

6. **UNIT REASSEMBLY**

a) Before reassembling, make certain all components and sub-assemblies are clean and free from all dirt and other foreign material.

b) When replacing parts, install (63), (64) & (65) or (93), (94) & (95) before installing Piston (66 or 96) and Plug (67).

c) Motor mounting bolts must be sealed with Permatex or an all weather Type sealant.

d) **USE NEW SEALS AND M-1 FLUID WHEN REASSEMBLING THE UNIT.**

d) Proper fluid level is 1-1/2" below filler hole. It must be checked with Lift Ram fully retracted.