

PARTS & INSTALLATION INSTRUCTIONS

MEYER HYDRAULIC TEST STAND

PARTS LIST

ITEM	PART NO.	QTY.	DESCRIPTION
1	47120	1	CARTON - Test Stand & Controls
2	47147	1	• Test Stand Assembly
3	47121	1	•• Test Stand - Weldment
4	47150	1	•• Lift Bar
5	07017	2	•• Spring
6	12150	2	•• Eye Bolt
7	20144	2	•• Bolt, 5/8 - 11 x 2-3/4" Lg. Gr. 5
8	20309	4	•• Locknut, ESNA 5/8 - 11
9	47127	2	•• Set Collar
10	21959	1	•• Decal (Danger)
	47163	1	•• Weldment, Panel
11	08441	1	• Carton - Test Stand Instruments
12	47134	1	•• Control Box
13	47159	3	•• Pressure Gauge, Hydraulic
14	47160	1	•• Ampere Meter - DC
15	22148	1	•• Hose Assembly
16	22145	1	••• Coupler - Female Half
17	22146	1	••• Coupler - Male Half
18	22149	1	•• Hose Assembly
19	21848	1	••• Coupler - Male Half
	22147	1	••• Coupler - Female Half
20	08442	1	• Hardware Bag - Test Stand
21	21384	2	•• Pipe, Tee 1/4
22	21504	2	•• Pipe, Nipple 1/4 x 1 - 1/2" Lg.
23	21511	3	•• Coupling, Straight 1/4
24	21832	3	•• Split Bushing
25	22145	2	•• Coupler - Female Half
26	22146	2	•• Coupler - Male Half
27	21895	13	•• # 6 - 32 Hex Nut
28	21896	9	•• # 6 - 32 x 1" Screw
29	47191	1	•• Adapter, 1/2 - 20 x 1/4 NPT
30	47192	1	•• Adapter, 9/16 - 18 x 1/4 NPT
31	47148	1	•• Key, Locator
	47181	1	•• Adaptor, Test Stand
32	21856	5	• Hose Assembly 1/4 x 45" Lg.
33	05024	1	• Cable, 36" Lg. (ground)
34	47164	1	• Test Stand - Power Angling
35	47165	1	•• Base
36	47168	1	•• Arm
37	47149	1	•• Pivot Assembly
38	05810	2	•• P.A. Ram 1 - 1/2" x 10"
39	20357	8	•• Washer, Flat 5/8
40	20149	5	•• Bolt, 5/8 - 11 x 4" Lg. Gr. 5
41	20147	2	•• Bolt 5/8 - 11 x 3 - 1/2 Lg. Gr. 5
42	20309	7	•• Locknut, ESNA 5/8 - 11
43	07017	2	•• Spring
44	12150	2	•• Eye Bolt
	20318	4	•• Nut, Eslok 5/8 - 11

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

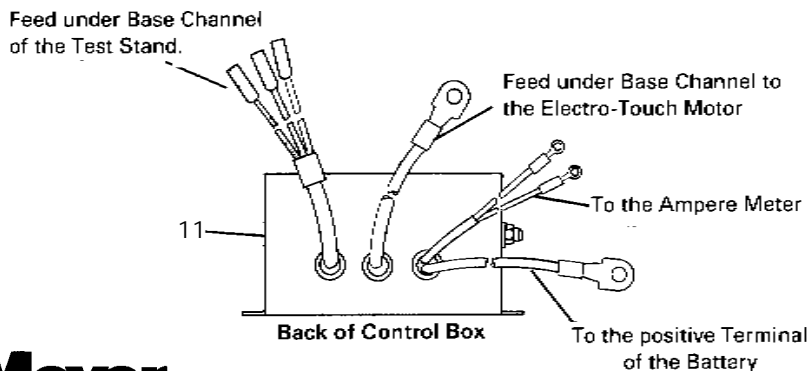


Figure 2

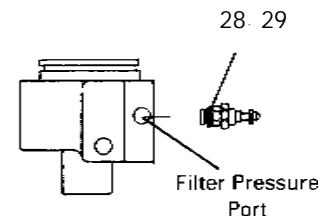


Figure 3

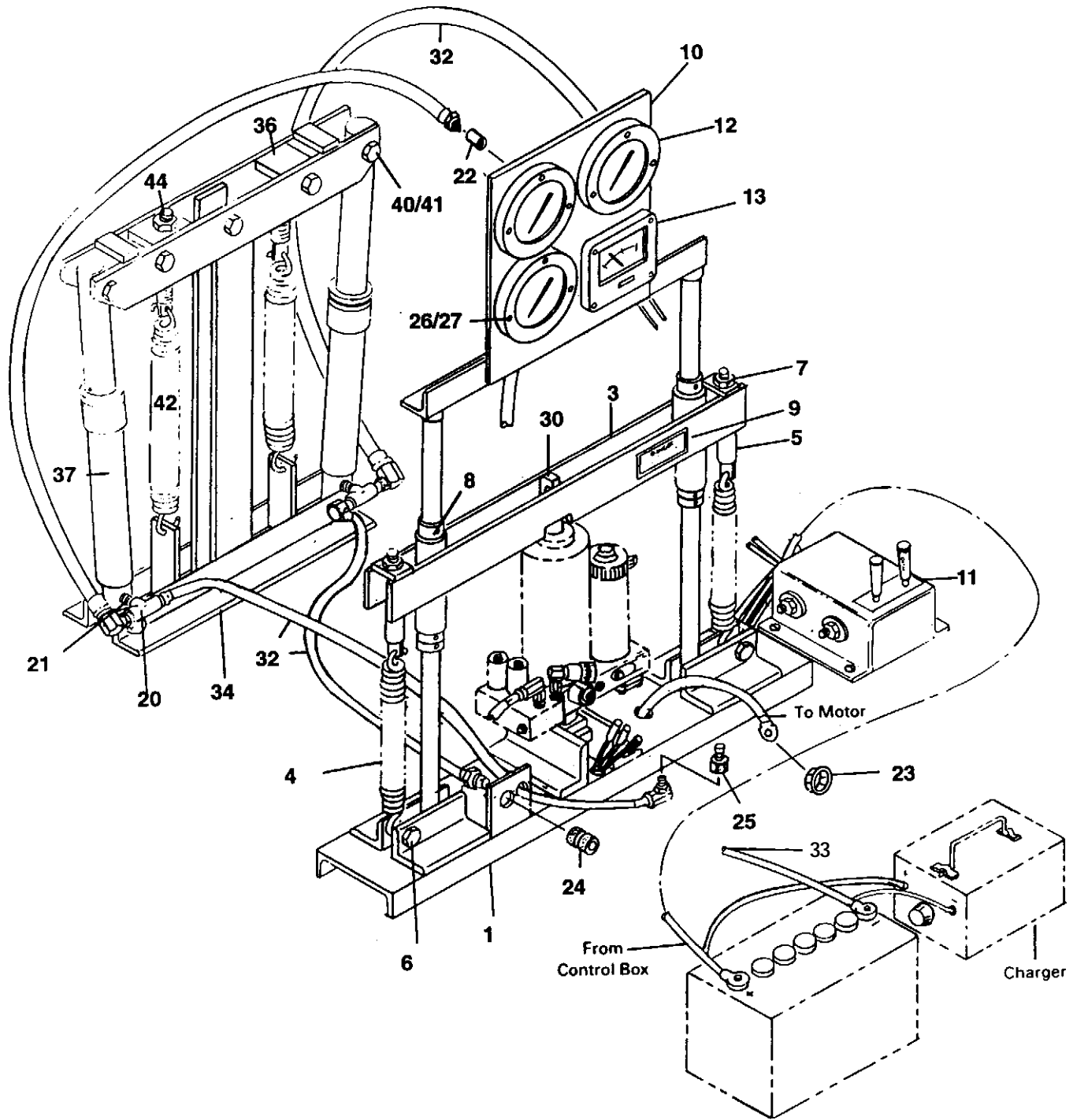


Figure 1

Meyer Products, 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.

TEST STAND SET-UP

1) Set up the test stand as shown in Fig. 1. Choose a bench that is approximately 36" high. Locate the test stand unit (1) on the test bench approximately 6" back from the front edge and to either side of the bench leaving a space for a work area. Position the power angling base approximately 8" - 10" behind the test stand unit. Secure both the test stand unit (1) and power angling base to the test bench.

2) Assemble gauges to the test panel (10) and install test panel assembly to the test stand (1). Tighten the Allen Srews securely.

NOTE: Use a pipe joint compound on all pipe fittings in the following steps.

3) Assemble 1/4" straight couplings (22) to the gauges (12).

4) Assemble the 1/4" x 1 1/2" pipe nipples (21) and the 1/4" pipe tees (20) to the power angling cylinders (37).

5) Connect the straight end of the hoses (32) to each hydraulic pressure gauge. Connect the hose coming from the right gauge to the right power angling cylinder. Connect the hose coming from the left gauge to the left power angling cylinder. Attach the female end of a coupler (24) to the end of the remaining hose coming from the gauge directly below the left gauge. This gauge is used to measure the pressure on the raise operation on the Electro-Touch® / Quik Lift® Units.

NOTE: Make certain hoses are attached to the 1/4" Pipe Tees (20) on the power angling cylinders as shown in the drawing.

6) Connect the straight end of the hoses (32) to the 1/4" pipe tee (20) on the left hand power angling cylinder feeding the hose thru the split bushing (23) and the 7/8" hole in plate welded to the base of the test stand. Attach a male half of a coupler (25) to the swivel end of the hose as shown in the drawing. Connect the swivel end of the remaining hose(32) to the 1/4" pipe tee (20) in the right hand power angling cylinder and insert the straight end of the hose into the 9/16" hole in the plate. Thread the female end of a coupler (24) to the straight end of the hose sandwiching the plate between the hose and the coupler as shown in the drawing.

7) Locate and secure control box (11) to either the test stand or to the test bench (the control box must be grounded to the test stand). See Fig. 2 for the following connections. Attach the two small wire leads coming out of the control box to the ampere meter. (If the ampere meter gives a negative reading, switch the wires around). Also be certain to remove the wire clip from the terminals on the ampere meter. Feed the three wires (red, black, green) under the base channel of the test stand (1) and pull the wires thru the split bushing (23) and the 7/8" hole in the base channel. Attach the short black cable coming out of the control box to the positive terminal of the battery. Feed the longer black cable under the base channel of the test stand and pull it thru the split bushing; this cable will attach to the Hydraulic unit motor. Attach the ground cable (33) to the negative terminal of the battery and the other end to the test stand.

8) Put a Hydraulic Unit that is known to operate properly in the test stand using the special adaptor (31) and locator key (30). When testing an "H" unit, this special adaptor is not used. Plug the black, red and green wires coming from the unit to the matching colored wire in the test stand wiring harness. Attach the black power cable to the motor stud on the hydraulic unit. Loosen the upper stop collars and activate the raise switch. (If unit does not raise, see Form #1-634R). When unit is at full stroke in the raised position, tighten the upper stop collars. Be certain the lower stop collars are set so the unit can be removed. Adjust if necessary.

Caution: Never put a Hydraulic unit into the test stand without first checking the oil supply for contamination (water, not Meyer oil). If a contaminated unit were cycle tested, the test stand and all future hydraulic units brought in for testing would also become contaminated. If the oil should become contaminated flush the complete system (Unit, Power Angling Cylinders and hoses) with Kerosene. Add new Meyer M-1 Oil to system.

The following information will verify that the test stand is operating properly:

1) Use a screwdriver or other small tool to check the magnetism of the solenoid coils "A", "B", "C". Place the tool on the nut securing the coil and operate the switch. You should feel a strong magnetic attraction on each coil as follows:

A) Test the "A" solenoid coil (black wire) with the R/L switch in the **down** (lower/float) position.

B) Test the "B" solenoid coil (red wire) with the R/L switch in the **up** position. You may notice that when the R/L Switch is **released** the power angling pivot bar will angle slightly to the left (right power angling cylinder extends slightly) — this is normal.

C) Test the "C" solenoid coil (green wire); push the angle switch to the right. When angling to the right, the left power angling cylinder will extend. You will notice that when the angle switch is released, the pivot bar will stop abruptly. When the power angling cylinder is at full stroke, the **left** pressure gauge should read 1650±50 PSI (E-46/E-47 Units) or 2500 PSI (E-60/E-60H Units). When at full stroke and the switch is released, the pressure gauge will drop from the recommended operating pressure, to approximately 500 PSI. This is normal and will not affect the Cross-over relief operation.

D) To test angle **left**, there are no solenoid coils in operation; only the motor is in operation. When angling to the left, the **right** P.A. cylinder will extend. When the switch is released, the pivot bar will stop smoothly. The pressure is read from the **right** pressure gauge. You will notice that when the right P.A. cylinder is at full stroke, and the pressure reading is at the recommended operating pressure, and the switch is released, the pressure reading of the gauge will remain at approximately the same; this is normal.

The male and female sections of different types of couplers are NOT intermixable, and care must be taken to make certain that the couplers in any system are compatible with each other. Externally the couplers are quite similar so it will be necessary to check them to make sure they are compatible with those on the test stand. Items 14 & 17 have been provided for this purpose. Coupler type may vary depending on current production.