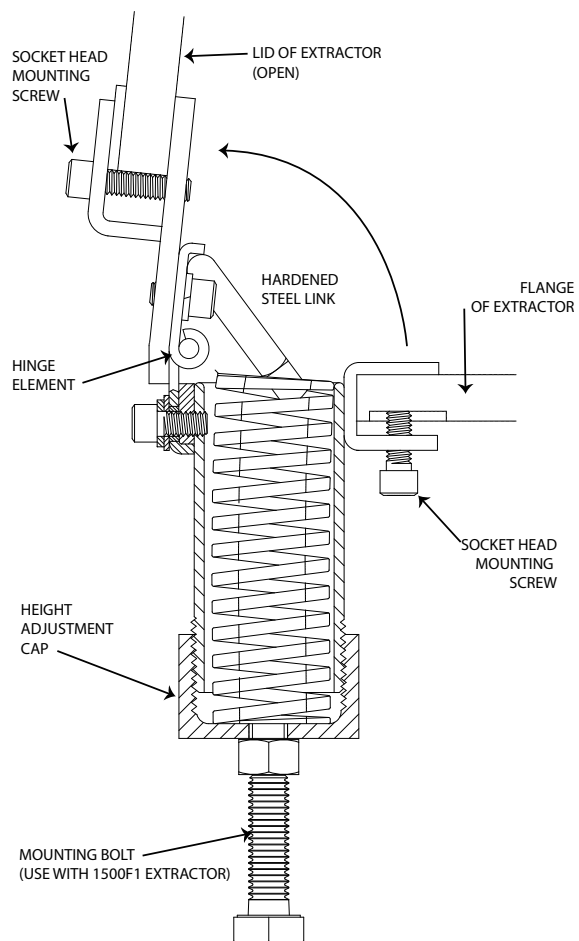


1080G1

INSTALLATION INSTRUCTIONS

1080 PM HINGE FOR USE WITH MODELS 1000 AND 1500F1 EXTRACTORS

Jan 2010



(Figure 1) - PM Hinge parts (section view)

The PM Hinge (or Pressure Membrane Counterbalanced Hinge) is an optional accessory item for both the 1000 and 1500F1 Extractors.



(Figure 2) - PM HINGE (SHOWN WITH MOUNTING BOLT)

The PM Hinge provides a counterbalanced support for the Lid of the Extractor so that it can be opened without much effort. The Hinge Element is mounted so that it is free to move vertically through a confined space of 1/8 inch. This allows ample compensation or the variation in spacing between the top and bottom sections of the extractor when they are bolted together for an extraction run.

The Height Adjustment Cap is screwed up or down at the time of installation to match the height of the extractor legs.

WARRANTY & LIABILITY

Soilmoisture Equipment Corp. (SEC) warrants all products manufactured by SEC to be free from defects in materials and workmanship under normal use and service for twelve (12) months from the date of invoice provided the section below has been met.

Soilmoisture Equipment Corp. (SEC) is not liable for any damages, actual or inferred, caused by misuse or improper handling of its products. SEC products are designed to be used solely as described in these product operating instructions by a prudent individual under normal operating conditions in applications intended for use by this product.

ASSEMBLY / INSTALLATION

The PM Hinge is shipped completely assembled and ready to install. It should not be disassembled. However, if for some reason the hinge does need to be disassembled, you must first unscrew the Height Adjustment Cap to relieve the spring pressure from the various parts of the assembly. A wrench is provided to fit the socket head mounting screws and should be used when mounting the Hinge to the extractor.

FOR USE WITH MODEL 1000 MEMBRANE EXTRACTOR

Mounting is accomplished in two simple steps. Pictures have been provided to facilitate the mounting process.



(Figure 3) - STEP ONE

STEP ONE: MOUNTING THE HINGE TO THE BOTTOM PORTION OF THE EXTRACTOR

Remove the lid of the Extractor. Remove any packing tape from the PM Hinge. Loosen the Socket Head Mounting Screws of the PM Hinge's lower mounting bracket and slip the lower mounting bracket over the edge of the bottom portion of the extractor (*see Fig. 3 above*). Center the lower mounting bracket between the two bolt slots adjacent to the outlet stem of the pressure membrane extractor.

Now, securely tighten the mounting screws using the wrench provided. The ends of the screws enter the same groove in the bottom section of the Extractor provided used for the clamping bolt heads (*see section view Fig. 1*). Now, screw the height adjustment cap up or down to match the height of the Extractor legs and to make the Extractor sit evenly on the lab bench.

ASSEMBLY / INTSALLATION (CONT.)

STEP TWO: INSERT LID INTO THE PM HINGE



(Figure 4) - STEP TWO

Holding the Extractor Lid firmly with both hands, slide the lid into the top mounting bracket of the PM Hinge as shown in *Fig. 4*. Orient the Extractor Lid in such a way so that the handle is parallel to the bench and the pressure fitting next to the PM Hinge. Center the mounting bracket in the section between two bolt slots in the lid. Lightly tighten the two mounting screws. The Extractor Lid may now be closed and the PM Hinge will counteract its weight.

The Extractor Lid should be adjusted so that it is properly oriented and aligned with the bottom portion of the Extractor. Finally, the mounting screws of the PM Hinge on the Extractor Lid can be attached and securely tightened.

HELPFUL HINTS

Additional torque is needed when using the PM Hinge in order to properly compress the counterbalancing spring in the Hinge when the lid is closed. (Both clamping screws and wrench are made of heat-treated steel and they will not be damaged by secure tightening). Before attaching the clamping bolt assemblies, apply a thin coat of heavy grease (such as wheel-bearing grease) on the underside of each wing nut and top of each washer.

Close the Extractor Lid and insert two clamping bolt assemblies, one on either side of and immediately adjacent to the PM Hinge. Tighten first one wing nut until it is snug and then tighten the other one until also snug. Work back and forth tightening first one and then the other until the Extractor Lid is pressing down against the top of the extractor vessel. Next, insert the six remaining clamping bolt assemblies and firmly tighten all wing nuts.

Reverse this process to open the Extractor after a run. First, loosen and remove all clamping bolt assemblies except the two on either side of the PM Hinge. Then loosen one of the two remaining bolts about 1/8 turn initially, and then loosen the other about 1/8 turn. Work back and forth slightly loosening first one and then the other until they turn easily (after about 2-3 full turns), and can be removed.

ADDITIONAL MOUNTING INSTRUCTIONS FOR USE WITH MODEL 1500F1 15 BAR CERAMIC PLATE EXTRACTOR

PM Hinge Mounting Instructions are the same for mounting it on the 1500F1 15 Bar Ceramic Plate Extractor, with two exceptions. In order for the PM Hinge to be properly adjusted and to ensure a tight seal, you will also need the Adapter Plate and the supplied nut and bolt for stabilization as pictured (*fig.5*).

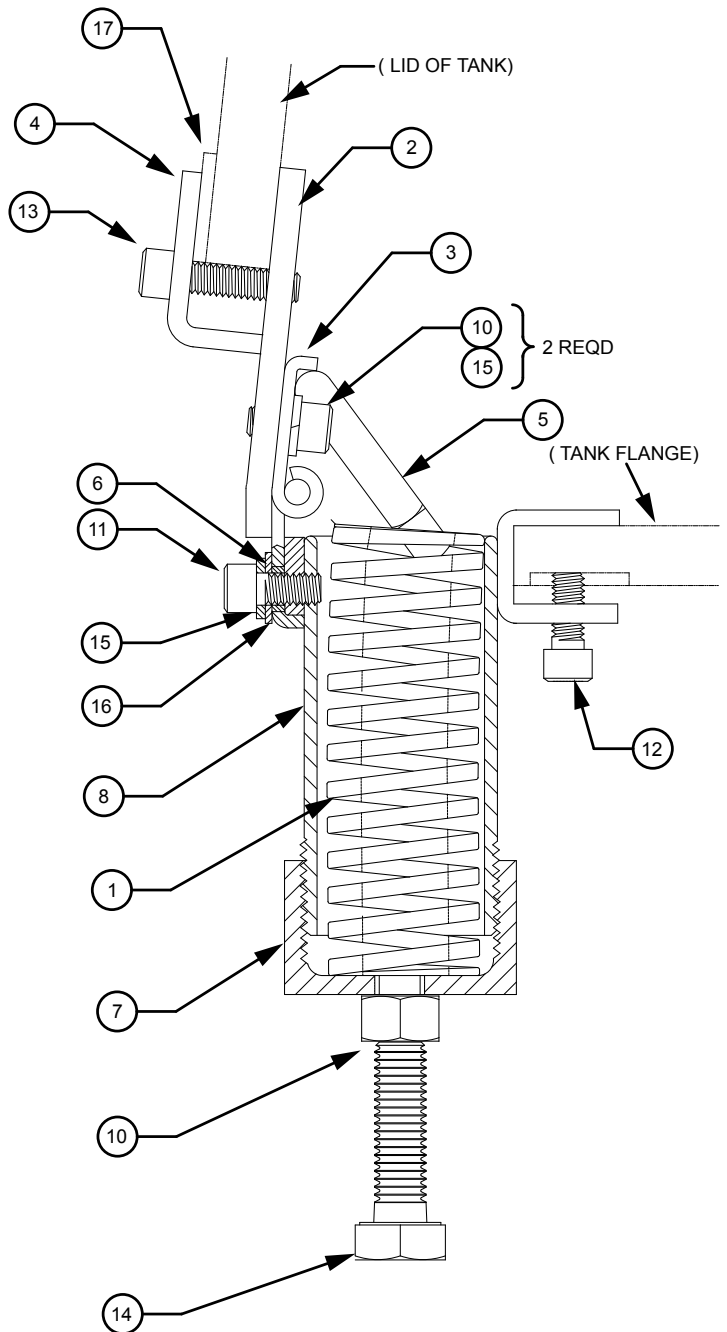
The Adapter Plate fits underneath the top clamp of the PM Hinge and provides the proper spacing to match the clamp height (*see Fig. 6*). The PM Hinge should be mounted to the back of the 15 Bar Ceramic Plate Extractor with the pressure inlet fitting spaced 45° to the right.



(Figure 5) - Mounted on 1500 Extractor

COMPONENT PARTS

	ITEM PART #	DESCRIPTION
1.	1080-003	SPRING
2.	1080-004	HINGE PLATE
3.	1080-005	HINGE
4.	1080-006	TOP CLAMP
5.	1080-007	LINK
6.	1080-008	BUSHING
7.	1080-009	ADJUSTABLE CAP
8.	1080-100L3.875	TUBE BODY ASSEMBLY
9.	MSL009	1/4 HEX ALLEN WRENCH
10.	Q2518CAF08	5/16-18 X 1/2 SOCKET HEAD CAP SCREW
11.	Q2518CAF10	5/16-18 X 5/8 SOCKET HEAD CAP SCREW
12.	Q2518CAF12	5/16-18 X 3/4 SOCKET HEAD CAP SCREW
13.	Q2518CAF20	5/16-18 X 1 1/4 SOCKET HEAD CAP SCREW
14.	Q2813CAH40	1/2"-13 X 2-1/2" LONG STAINLESS STEEL CAP SCR. (Mounting Bolt for 1500)
	R2813CAH	1/2"-13 SS HEX NUT
15.	RW050CAL	5/16 STAINLESS STEEL LOCKWASHER
16.	RW050SCR-001	5/16" SAE CUT STEEL WASHER CAD OR ZINC PLATE
17.	Z1081	ADAPTER PLATE



(Figure 6) - PM Hinge Replacement Parts

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