FILTER JUDGE ASSEMBLY INSTRUCTIONS

The Filter Judge has been designed to fit together without the need to force pieces together. It was assembled at the factory to make sure that it fits. If something does not appear to be fitting during assembly, then take it apart and try again—the use of force may break or damage parts that are made to easily fit together.

Please read these instructions all the way through before starting to assemble the unit. Failure to do so may result in injury to the person assembling the tool and / or may result in damage to the tool itself.

Although assembly of the tool with only one operator is possible, it is easier if two people are involved.

Allow the tool to reach room temperature before assembly (approximately 70 degrees F).

<u>Step 1</u>: Open the carrying case or cases (units in excess of 12 feet in length will have more than one carrying case). Remove all packing tape and cushioning material from each piece. Inspect for any damage. If there is any damage please notify Lamar Solutions for replacement parts (a one-year warranty applies to all newly delivered units) at info@lamarsolutions.com or 903-782-2677.

<u>Step 2</u>: Begin assembly by connecting the very bottom (slotted) piece to the next unit. For 8 foot basic units, the bottom piece will be connected to the top piece (the one with the handles). For all other units (12 foot and longer), start by connecting the bottom piece to the first extension piece. (The 12 foot unit has only one extension, the 16 foot has two extensions, etc.).

<u>Step 3</u>: Pull the lower inner piece out of the lower outside piece so that it can be screwed into the inner part of the next piece. (Extension pieces have female lower threads on the inside piece).

<u>Step 4</u>: The inner bottom and the inner next piece should screw together by hand. Once the threads have bottomed out, do not force the units together any tighter. Hand tight is all that is necessary—any tighter will be very difficult to disassemble and could damage the unit.

<u>Step 5</u>: Assemble the bottom section to the next section by connecting the cam lever couplings of the bottom section and the next section. Screw the handles into the threaded sockets on the branch of the tees (hand tight).

<u>Step 6</u>: Repeat this process until all of the inner and outer section are together. Each of the inner pieces must be fully bottomed out before the outer sections can be coupled together. Do not use the machined shoulders (or "flats") on the male and female inner couplings for assembly—these shoulders are for ease of disassembly only. Support the unit at four foot intervals on saw horses or pipe stands so that the entire unit is linear and concentric. This will help the operator assemble the tool quicker and easier.

<u>Step 7</u>: While the inner units are being threaded together, do not use your fingers to keep the bottom inside unit from turning while the next higher unit is being twisted onto the lower inside unit. This may result in injury to the operator's fingers when the units bottom out. Instead, insert a ³/₄" wooded dowel or similar object into the slot to keep it from moving and to reduce the opportunity of hurting the operator's fingers.

<u>Step 8</u>: Once all of the pieces are assembled, turn the top and bottom handles such that they are aligned with each other. Next, open the cam lever coupling between the bottom and the next higher piece.

<u>Step 9</u>: While holding the two handles in alignment with each other, turn the outer bottom piece until the slots of the outer piece line up with the slots of the inner piece. Fold the handles of the cam lever coupling back down to lock it in place. Step 9 causes the inner and outer slots of the bottom unit to be aligned when the handles of the top section are aligned.

<u>Step 10</u>: Take samples, evaluate media depth, look for mudballs, look for uneven layers of media, etc. per the operating instructions.

<u>Step 11</u>: When finished sampling, clean out all remaining media from inside the bottom tube. Wipe all moisture from the inside and outside, and place back into the carrying case. It is important to store the unit in the carrying case while not in use so that the PVC pipe components do not warp or become brittle. Warped and / or brittle units will result in a Filter Judge that is no longer easy to use and / or results in a unit that provides undependable samples.