



A DIVISION OF GETZ FIRE EQUIPMENT

**GETZ EQUIPMENT INNOVATORS
PART NO.: 9G59554
MODEL: MS 36 SC-R
HYDROSTATIC TEST PUMP**

LIMITED WARRANTY

Getz Equipment Innovators warrants its products, and component parts of any product manufactured by Getz Equipment Innovators, to be free from defects in material and workmanship for a period of twelve (12) months from the date of purchase. During the warranty period, any such defects will be repaired or the defective parts replaced (**at Getz Equipment Innovators' option**). The warranty does not cover defects resulting from modification, alteration, misuse, exposure to corrosive conditions, extremely high temperatures, improper installation or maintenance. Warranties on component items not manufactured by Getz Equipment Innovators are provided by others whose warranty, evaluation and judgment will be final.

All implied warranties, including, but not limited to, warranties of fitness for purpose and merchantability, are limited to the time periods as stated above. In no event shall Getz Equipment Innovators be liable to incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts or the exclusions or limitations of incidental or consequential damages, so that the above limitations or exclusions may not apply to you. Getz Equipment Innovators neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than as expressly set forth herein.

Mobile Service Vehicles:

The warranty does not cover:

- Defects in the chassis and or power unit
- Defects in separately manufactured products not produced by Getz Equipment Innovators
- Deterioration due to normal wear, tear, and exposure
- Repairs made necessary by negligent use, misuse, abuse, loading the service vehicle beyond its gross vehicle weight limitations, accident, acts of God, or other contingencies beyond the control of Getz Equipment Innovators
- Repairs deemed necessary by reason of the failure to follow ordinary maintenance procedures
- Repairs deemed necessary by reason of alterations done without Getz Equipment Innovators' written approval.

Warranty Service:

- All warranty repairs will be performed by Getz Equipment Innovators in Pekin, IL, unless otherwise authorized by Getz Equipment Innovators.

Freight:

- Getz Equipment Innovators will not be liable for shipping or transportation charges to or from customer's location.

This warranty gives you specific legal rights, any you may also have other rights which vary from state to state. To obtain performance to the obligation of the warranty, write to Getz Equipment Innovators, 2320 Lakecrest, Pekin, IL 61554, USA for instructions.

GETZ AIR POWERED HYDROSTATIC TEST PUMP

MODEL #MS 36 SC-R

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OPERATING INSTRUCTIONS FOR FIRE EXTINGUISHER TESTING

1. Equipment needed prior to hydro testing fire extinguishers that are not provided with Getz model #MS36SC-R hydrostatic test pump:
 - A. Safety glasses
 - B. hydrostatic adapters
 - C. Air pressure regulator
2. **WARNING:**
 - A. Do not exceed 90 PSI incoming air supply pressure.
 - B. Do not operate without approved safety glasses.
 - C. Do not modify any components within this system. Any use of parts other than Getz Manufacturing components excludes all written and implied liabilities.
 - D. Maximum testing pressure for this pump, model #MS3SC, is 850 PSI.
 - E. The transformer takes 120V single phase electricity.

SETUP AND OPERATING PROCEDURES

1. Fill the reservoir (#50) with water up to 3 inches from the top through the inspection cap (#51).
2. Remove plastic connector (#10) from yellow tubing (#6) and apply thread tape or sealant on male pipe threads. Screw connector (#10) into the outlet port of your regulator and reconnect yellow tubing (#6) to the plastic connector (#10) in your regulator. Confirm that ball valve (#25) is closed and set regulator to 90 PSI.
3. Place overflow hoses (G & H) in an approved waste water drain and secure hoses to floor or wall.
4. Mount the transformer to a wall near your water tester. Connect the transformer cable (#56) to the pump cable (#43). Plug the power cord (#47) into a 120V AC single phase electrical outlet.
5. Open ball valve (#83) and close ball valve (#29). Turn on the toggle switch (#46) to start the electric pump.

NOTE: Refer to page (#5) for calibration procedure

6. Install test adapter in extinguisher needing tested. Install head gasket (#9) (only on adapter without O-rings) over the small threads on the test adapter. If needed place head assembly (#8) on top of the head gasket (#9) and tighten the head assembly on the extinguisher adapter by spinning the spin clamp (#7) down firmly on the head assembly (#8).
7. Check manufacturer's recommended test pressure on extinguisher to verify test pressure. Place extinguisher in test cage (#1) close and latch access door.
8. Connect quick coupler (#89) into the test adapter in the extinguisher. Make sure quick coupler is firmly attached to test adapter.
9. Place safety cage (#1) in upright position and open ball valves (#79, #80) then open ball valve (#29) and close ball valve (#83). As the sediment filter (#67) fills up, close ball valve (#80).
10. Push on air valve (#76) until manufacturer's recommended test pressure is shown on test pressure gauge (#81). If pressure rise stops release air valve and allow the pump piston to reset. Push the air valve again until test pressure is reached closed ball valve (#79)

SETUP AND OPERATING PROCEDURES CONTINUED

11. Maintain pressure in extinguisher until NFPA 10 and D.O.T requirements are met.
12. Close ball valve (#29); open ball valves (#79, #80). Invert safety cage (#1) and open ball valve (#25), allowing water to be forced out of extinguisher by air pressure.
13. When no water is apparent in sediment filter (#67), close ball valve (#25) and revert safety cage to upright position.
14. After verifying that no pressure is shown on test pressure gauge (#81), disconnect quick coupler (#78) from test adapter.
15. Remove extinguisher from test cage (#1) and remove head assembly and test adapter. Place extinguisher on drying rack.
16. At the end of the day, close ball valve (#29) and open ball valve (#83). Allow water to cycle through the carbon filter (54) for 15 minutes to remove acidity and impurities. After the filter cycle, turn off the toggle switch (#46) and shut off the air supply.

ALGAECIDE:

If you experience algae blooms in your water reservoir, Getz Equipment Innovators recommends the following product:

Nature's Way Instant Pro Algaecide

BY

N. Jonas and Co., Inc.

www.natureswaywaterchem.com

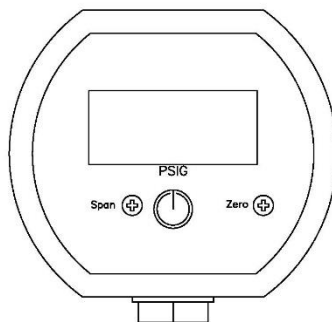
Apply one capful per month to a reservoir.

CAUTION: FOLLOW ALL SAFETY INSTRUCTIONS ON THE PACKAGE.

CALIBRATION TEST PROCEDURE

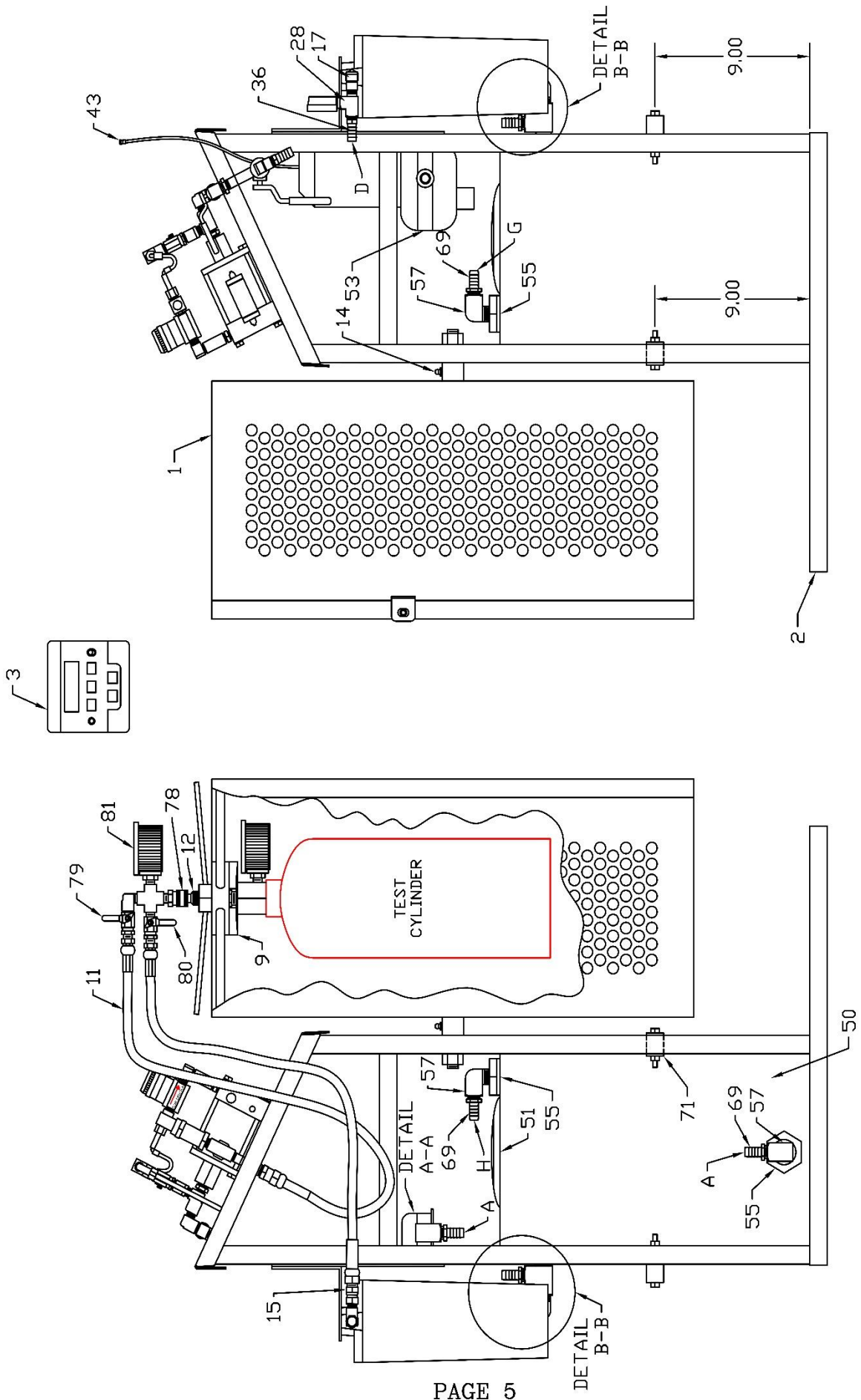
1. Insert calibration test cylinder (P/N 59160) into head assembly (#8). Screw the spin clamp (#7) onto the threads of the calibration adapter. Place the head assembly (#8) into the safety cage (#1).
2. Connect quick coupler (#78) into the calibration test cylinder. Make sure quick coupler is firmly attached to calibration adapter.
3. Push on/off button on master gauge, located on the calibration test cylinder. Allow master gauge to warm up for (1) minute; turn zero knob on master gauge so that the gauge indicates zero pressure.
4. Push on/off button on gauge (#81), allow gauge to warm up for (1) minute, and turn zero knob on gauge (#81) so that the gauge indicates zero pressure.
5. Place safety cage (#1) in upright position and open ball valves (#79, #80) then open ball valve (#29) and close ball valve (#83). As a steady stream of water appears in sediment filter (#67), close ball valve (#80).
6. Push on air valve (#76) until required calibration pressure is achieved on master gauge, if pressure rise stops release air valve and allow the pump piston to reset. Push the air valve again until test pressure is reached close valve (#79), check gauge (#81) to see if pressure is within 1 percent of master gauge. If calibration is needed, refer to (6B).
- 6B. Remove plastic cover screw and turn span adjustment screw on gauge (#81) left or right until pressure gauge is equal to master gauge. Release pressure on system and re-zero both gauges. Follow procedure (6) again.
(Do not calibration test cylinder gauge, zero adjust only)
7. Close ball valve (#29), open ball valve (#79, #80, & #83), to relieve pressure in cylinder replace all plastic cover screws on gauge (#81).
8. After verifying that no pressure is shown on test pressure gauge (#81), disconnect quick coupler (#78) from calibration adapter.
9. Remove calibration test cylinder and head assembly (#8) form safety cage (#1). Unscrew spin clamp (#7) from calibration adapter and lift head assembly (#8) away from calibration adapter.
10. Repeat calibration test procedure for every different pressure required.

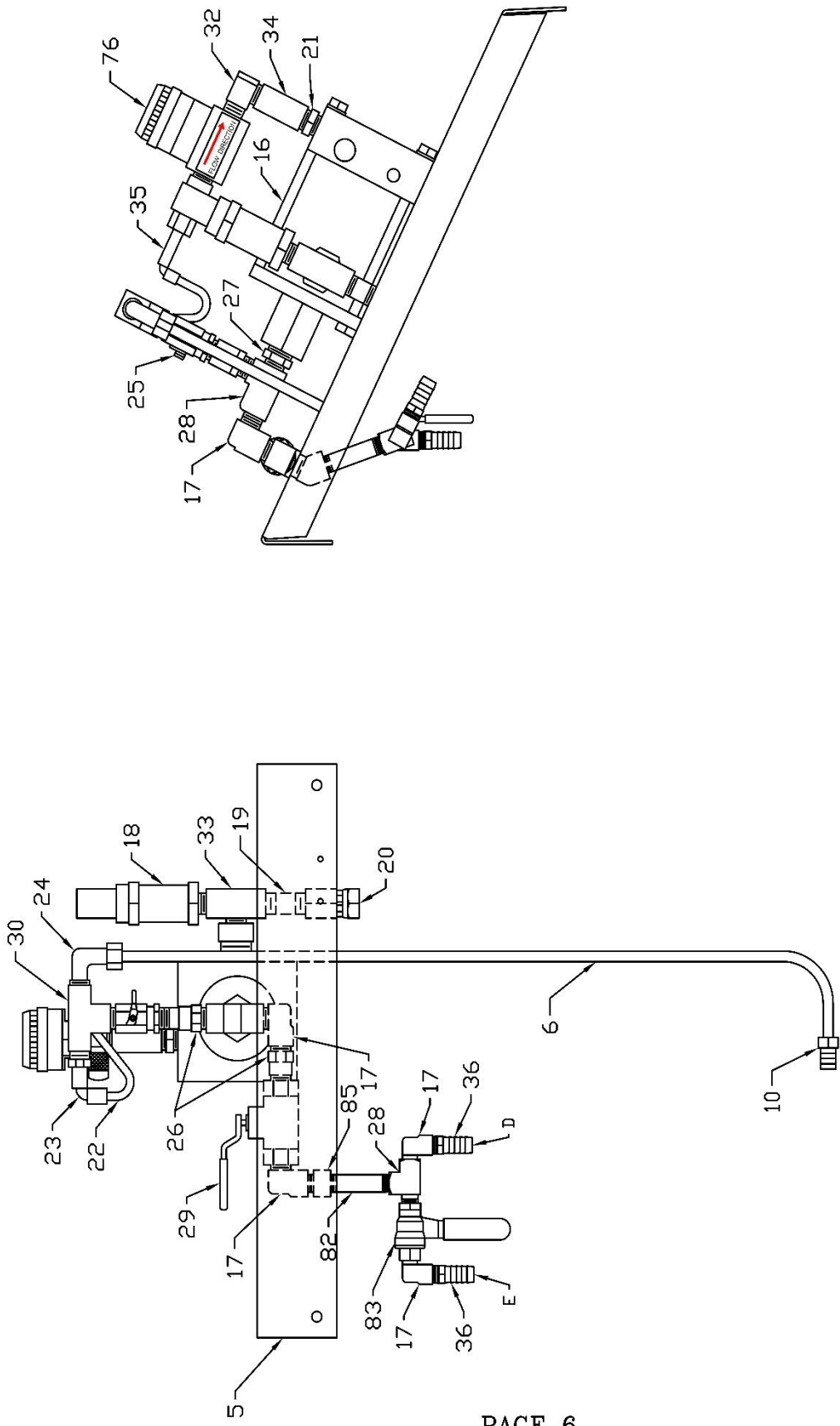
CALIBRATION TEST PROCEDURE

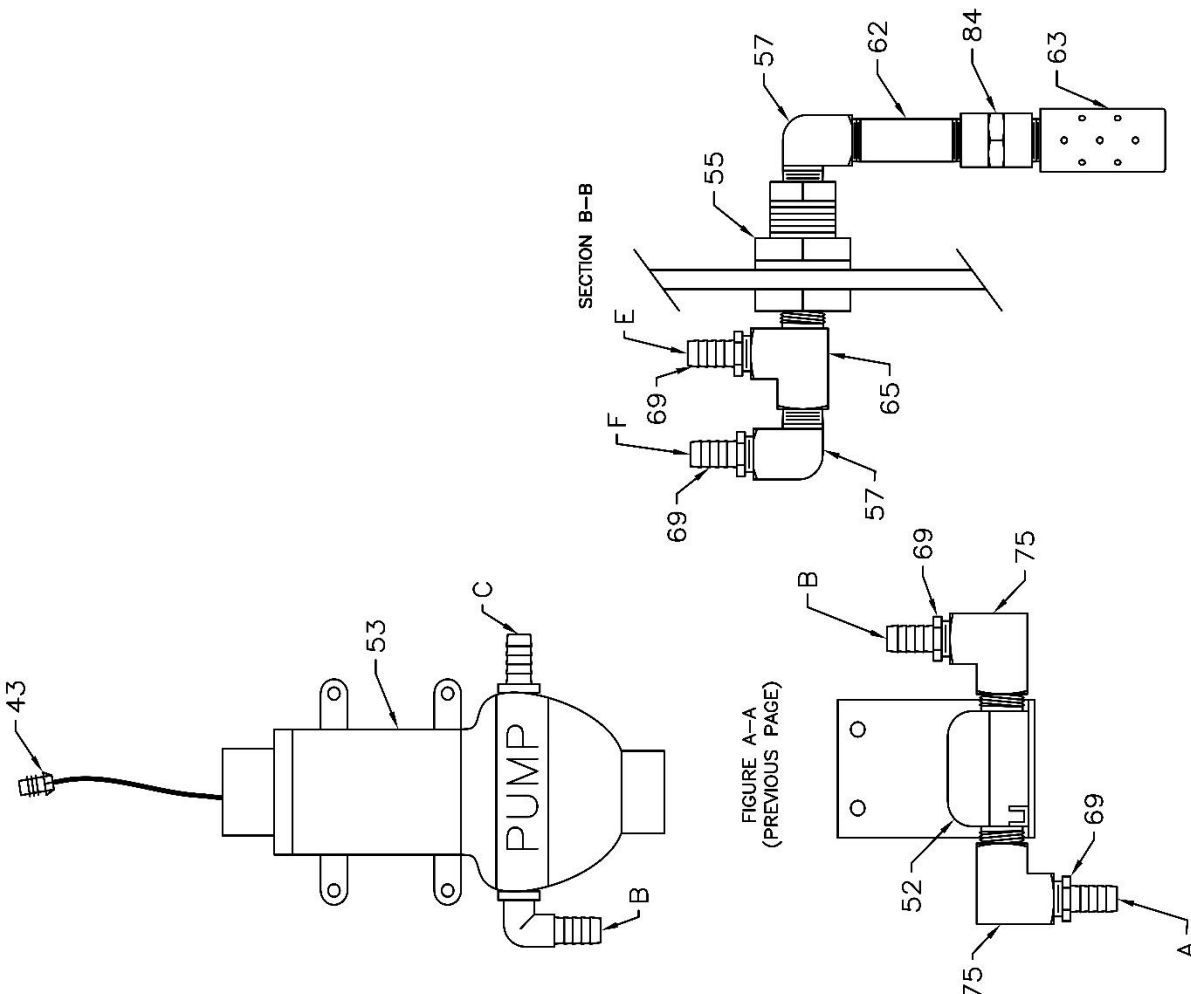
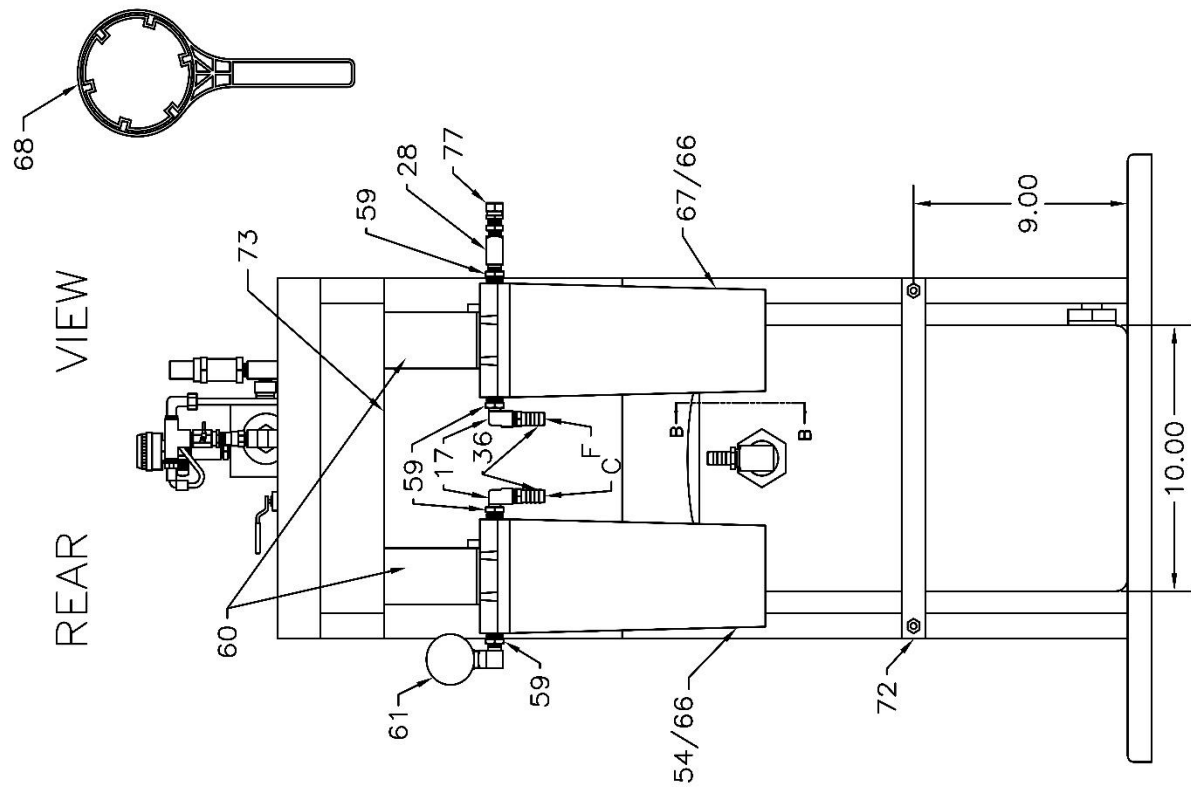


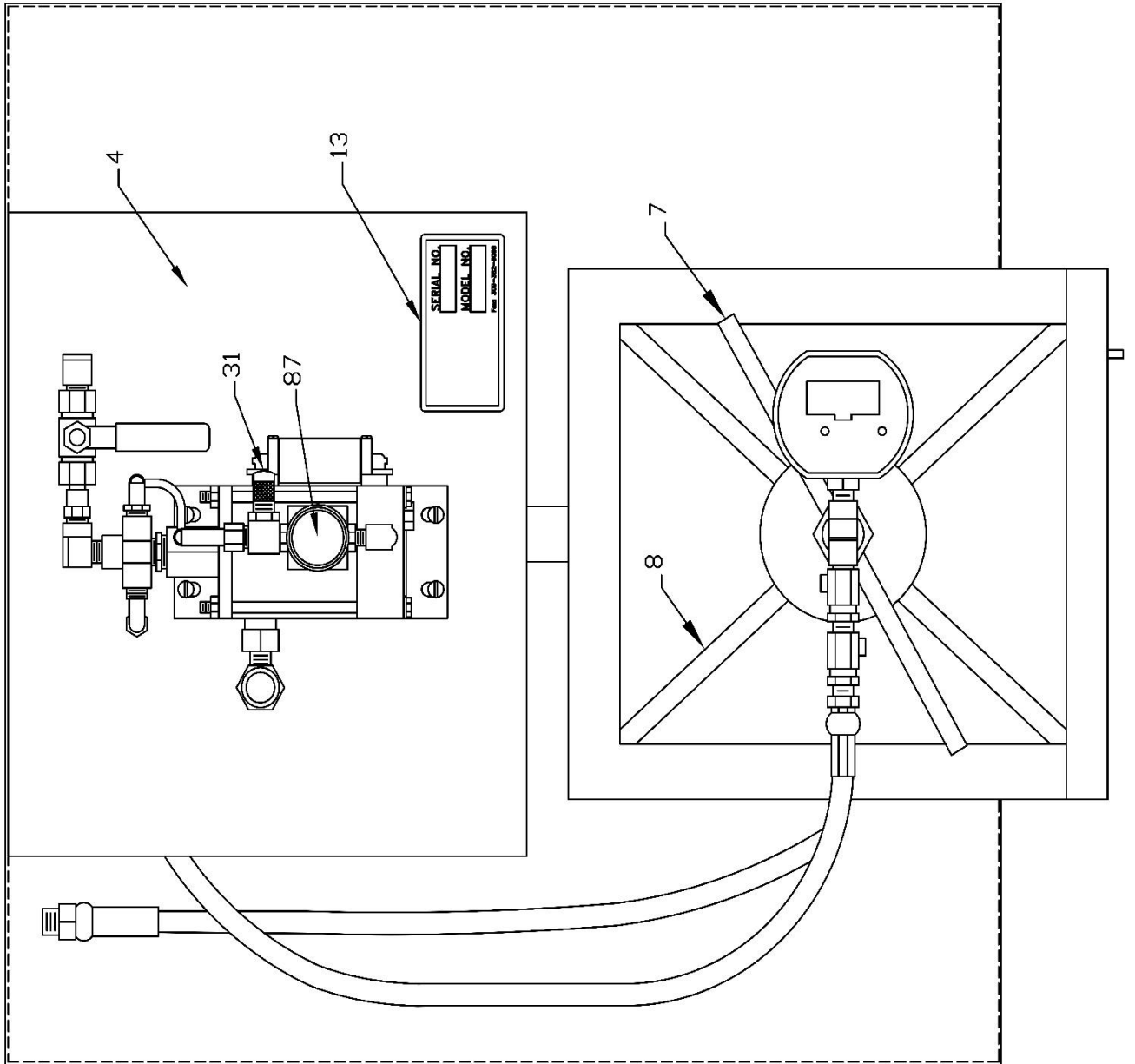
USE THE FOLLOWING INSTRUCTIONS FOR GAUGES THAT RESEMBLE THIS

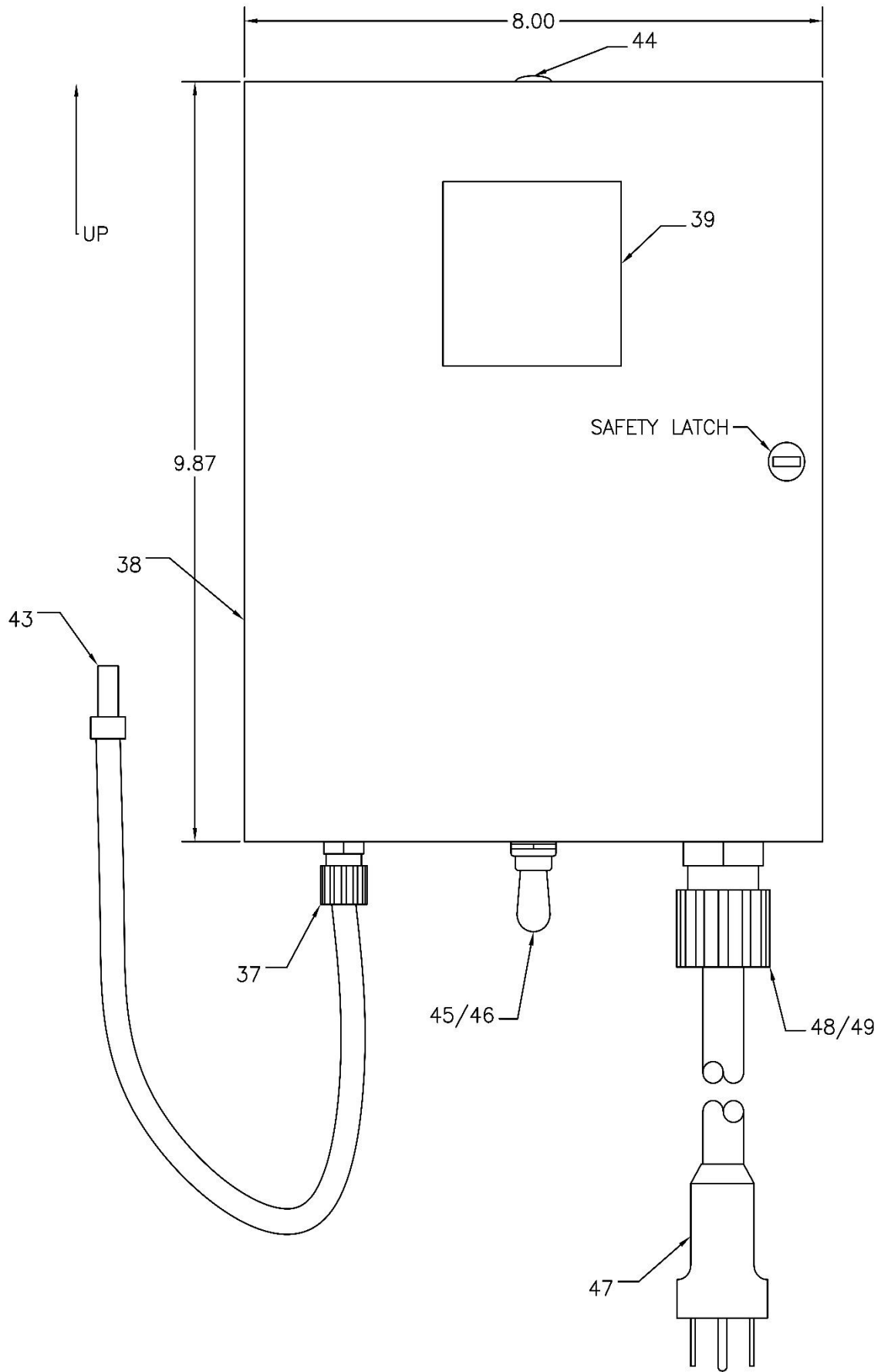
1. Insert calibration test cylinder (P/N 59160) into head assembly (#8). Screw the spin clamp (#7) onto threads of the calibration adapter. Place the head assembly (#8) into the safety cage (#1).
2. Connect quick coupler (#78) into the calibration test cylinder. Make sure quick coupler is firmly attached to calibration adapter.
3. Push on/off button on master gauge, located on the calibration test cylinder. Allow master gauge to warm up for (1) minute; remove plastic cover screw and turn the internal zero adjustment screw on master gauge so that the gauge indicates zero pressure.
4. Push on/off button on gauge (#81), allow gauge to warm up for (1) minute, remove plastic cover screw and turn the internal zero adjustment screw on gauge (#81) so that the gauge indicates zero pressure.
5. Place safety cage (#1) in upright position and open ball valves (#79, #80) then open ball valve (#29) and close ball valve (#83). As a steady stream of water appears in sediment filter (#67), close ball valve (#80).
6. Push on air valve (#76) until required calibration pressure is achieved on master gauge, if pressure rise stops release air valve and allow the pump piston to reset. Push the air valve again until test pressure is reached close valve (#79), check gauge (#81) to see if pressure is within 1 percent of master gauge. If calibration is needed, refer to (6B).
- 6B. Remove plastic cover screw on gauge (#81) and turn span adjustment screw left or right until pressure gauge is equal to master gauge. Release pressure on system and re-zero bot gauges. Follow procedure (6) again.
(Do not calibration test cylinder gauge, zero adjust only)
7. Close ball valve (#29), open ball valve (#79, #80, & #83) to relieve pressure in cylinder replace all plastic cover screws on gauge (#81).
8. After verifying that no pressure is shown on test pressure gauge (#81), disconnect quick coupler (#78) from calibration adapter.
9. Remove calibration test cylinder and head assembly (#8) from safety cage (#1). Unscrew spin clamp (#7) from calibration adapter and lift head assembly (#8) away from calibration adapter.
10. Repeat calibration test procedure for every different pressure required.









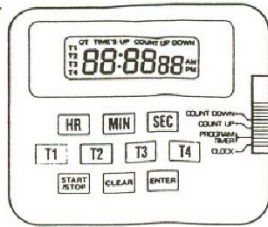


| ITEM | PART# | DESCRIPTION | UM | QPA | ITEM | PART# | DESCRIPTION | UM | QPA | ITEM | PART# | DESCRIPTION | UM | QPA | DESCRIPTION | UM | QPA |
|------|-------|--------------------------------|----|---------|------|-------|------------------------------|----|--------|------|-------|--------------------------------|----|---------|-------------|----|---------|
| 1 | 51171 | SAFETY GAGE | EA | 1.0000 | 32 | 52083 | PIPE ELB 1/8 STR BR | EA | 1.0000 | 63 | 52277 | MUFFLER PUMP HR-1 | EA | 1.0000 | | EA | 1.0000 |
| 2 | 51838 | STAND WATER TESTER | EA | 1.0000 | 33 | 51695 | PIPE TEE BR 1/4 BOX | EA | 1.0000 | 64 | 51694 | PIPE TEE BR 1/2 ST | EA | 1.0000 | | EA | 1.0000 |
| 3 | 52210 | TIMER DIGITAL FOR HYDROS | EA | 1.0000 | 34 | 51646 | PIPE NIP BR 1/8 x 1 1/2 | EA | 1.0000 | 65 | 51570 | MTL VINYL TUBE 1/2 CLR | FT | 13.0000 | | FT | 13.0000 |
| 4 | 58688 | LEXAN PANEL FOR WTESTER | EA | 1.0000 | 35 | 53564 | PIPE ELB 1/8 NPT x 5/32 TUBE | EA | 1.0000 | 66 | 54023 | FLTR WATER TESTER HSNQ NEW | EA | 2.0000 | | EA | 2.0000 |
| 5 | 51719 | PLATE BASE WATER TESTER | EA | 1.0000 | 36 | 51109 | BARB HOSE BR 1/2 x 1/4 | EA | 5.0000 | 67 | 54024 | ELEMENT WATER FILTER NEW | EA | 1.0000 | | EA | 1.0000 |
| 6 | 51553 | MTL NYCOIL 1/4 YL | FT | 10.0000 | 37 | 54096 | RELIEF STRAIN SMALL | EA | 1.0000 | 68 | 54025 | WRENCH FILTER WATER TESTER | EA | 1.0000 | | EA | 1.0000 |
| 7 | 51209 | CLAMP SPIN | EA | 1.0000 | 38 | 54098 | ENCLOSURE NEMA4 9.8x7.9x5.9 | EA | 1.0000 | 69 | 51108 | BARB HOSE BR 1/2 x 1/2 | EA | 7.0000 | | EA | 7.0000 |
| 8 | 51389 | HEAD ASSY | EA | 1.0000 | 39 | 54100 | LABEL WARNING VOLTAGE | EA | 1.0000 | 70 | 51207 | CLAMP OEIHKR 3/4 | EA | 14.0000 | | EA | 14.0000 |
| 9 | 51345 | GASKET HEAD | EA | 1.0000 | 40 | 54101 | PANEL MNT ENCLOSURE | EA | 1.0000 | 71 | 54126 | BRACE FRONT WT-R | EA | 1.0000 | | EA | 1.0000 |
| 10 | 51237 | CONN PLAS 1/4ML x 1/4 TUBE | EA | 1.0000 | 41 | | N/A | EA | 1.0000 | 72 | 54127 | BRACE REAR WT-R | EA | 1.0000 | | EA | 1.0000 |
| 11 | 56167 | TESTER WATER E & F DOT SUB | EA | 1.0000 | 42 | 54120 | BOLT M4x8 | EA | 3.0000 | 73 | 54128 | PLATE MNT FILTER/PUMP WT-R | EA | 1.0000 | | EA | 1.0000 |
| 12 | 59177 | AD #7 AMER STOPFIRE MAP | EA | 1.0000 | 43 | | N/A | EA | 1.0000 | 74 | 54129 | BKT MNT STRAINER WT-R | EA | 1.0000 | | EA | 1.0000 |
| 13 | 51292 | DECAL SERIAL NUMBER | EA | 1.0000 | 44 | 54123 | LIGHT INDICATOR PWR | EA | 1.0000 | 75 | 51629 | PIPE ELB BR 1/2 FMLE | EA | 2.0000 | | EA | 2.0000 |
| 14 | 51332 | FTNG GREASE ZERK | EA | 1.0000 | 45 | 51828 | SLASHCOVER SWITCH | EA | 1.0000 | 76 | 51943 | VLV MEAD PUSH BUTTON | EA | 1.0000 | | EA | 1.0000 |
| 15 | 51032 | SMVEL MALE 1/4 | EA | 1.0000 | 46 | 51863 | SWITCH TOGGLE | EA | 1.0000 | 77 | 53061 | VLV PRESS RLF 40 PSI | EA | 1.0000 | | EA | 1.0000 |
| 16 | 51738 | PUMP AIR HASKEL MS36 | EA | 1.0000 | 47 | 53391 | CORD DRYER DELTA | EA | 1.0000 | 78 | 51035 | AD Q/CONNECT HANSEN 1/4 | EA | 1.0000 | | EA | 1.0000 |
| 17 | 51624 | PIPE ELB BR 1/4 ST | EA | 8.0000 | 48 | 53377 | RELIEF STRAIN | EA | 1.0000 | 79 | 51899 | VLV BALL 1/4 x 1/4 ML | EA | 1.0000 | | EA | 1.0000 |
| 18 | 51937 | VLV PRESS RLF 850PSI | EA | 1.0000 | 49 | 53725 | NUT STRAIN RELIEF | EA | 1.0000 | 80 | 51899 | VLV BALL 1/4 x 1/4 ML | EA | 1.0000 | | EA | 1.0000 |
| 19 | 51650 | PIPE NIP 1/4 x 1 1/2 | EA | 1.0000 | 50 | 54092 | TANK WATER 18x11.5x10 | EA | 1.0000 | 81 | 59746 | GAUGE DIGITAL 100G# DOT w/CERT | EA | 1.0000 | | EA | 1.0000 |
| 20 | 51031 | SMVEL FEMALE 1/4 | EA | 1.0000 | 51 | 54093 | CAP INSPECTION 4IN FOR TANK | EA | 1.0000 | 82 | 51652 | PIPE NIP BR 1/4 x 2 1/2 | EA | 1.0000 | | EA | 1.0000 |
| 21 | 51681 | PIPE RDCR BR 1/4 x 1/8 | EA | 1.0000 | 52 | 54094 | STRAINER PUMP TANK | EA | 1.0000 | 83 | 51903 | VLV BALL BR 1/4 WATER TESTER | EA | 1.0000 | | EA | 1.0000 |
| 22 | 51556 | MTL NYLON TUBE 5/32 | FT | 0.5000 | 53 | 54095 | PUMP 12VDC WATER | EA | 1.0000 | 84 | 53999 | PIPE CPLG BR 1/2 NPT | EA | 1.0000 | | EA | 1.0000 |
| 23 | 51639 | PIPE ELB 1/4ML x 5/32 TUBE | EA | 1.0000 | 54 | 54097 | ELEMENT WATER FILTER CARBON | EA | 1.0000 | 85 | 51628 | PIPE ELB 45 DEG ST | EA | 1.0000 | | EA | 1.0000 |
| 24 | 51638 | PIPE ELB PLAS 1/4ML x 1/4 TUBE | EA | 1.0000 | 55 | 54099 | FTNG PLAS BLKHD TANK 1/2NPT | EA | 4.0000 | | | | | | | | |
| 25 | 51899 | VLV BALL 1/4 x 1/4 ML | EA | 1.0000 | 56 | | N/A | EA | 1.0000 | | | | | | | | |
| 26 | 51912 | VLV CHECK 1/4 M6 | EA | 2.0000 | 57 | 51619 | PIPE ELB BR 1/2ML x 1/2FMLE | EA | 6.0000 | | | | | | | | |
| 27 | 51683 | PIPE RDCR BR 3/8 x 1/4 | EA | 1.0000 | 58 | 51557 | MTL NYLON TUBE DCAL 5/8 | FT | 8.5000 | | | | | | | | |
| 28 | 51697 | PIPE TEE BR 1/4 ST | EA | 4.0000 | 59 | 51683 | PIPE RDCR BR 3/8 x 1/4 | EA | 4.0000 | | | | | | | | |
| 29 | 51903 | VLV BALL BR 1/4 WATER TESTER | EA | 1.0000 | 60 | 54026 | BKT WATER FILTER NEW | EA | 2.0000 | | | | | | | | |
| 30 | 51696 | PIPE TEE BR 1/4 FMLE | EA | 1.0000 | 61 | 51349 | GAUGE 160PSI 1/4 BTM | EA | 1.0000 | | | | | | | | |
| 31 | 52820 | VLV NEEDLE DOT PUMP | EA | 1.0000 | 62 | 53061 | PIPE NIP BR 1/2 x 3 | EA | 1.0000 | | | | | | | | |

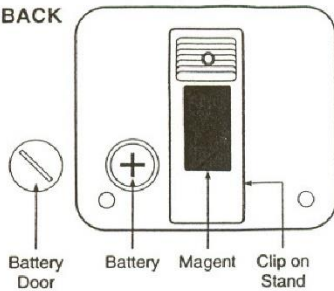
| HOSES BY CONNECTION | | | | |
|---------------------|-------|-------------------------|----|--------|
| CON | PART# | DESCRIPTION | UM | QPA |
| A | 51557 | MTL NYLON TUBE DCAL 5/8 | FT | 1.3333 |
| B | 51557 | MTL NYLON TUBE DCAL 5/8 | FT | 2.0000 |
| C | 51557 | MTL NYLON TUBE DCAL 5/8 | FT | 2.0000 |
| D | 51557 | MTL NYLON TUBE DCAL 5/8 | FT | 1.5000 |
| E | 51557 | MTL NYLON TUBE DCAL 5/8 | FT | 2.0000 |
| F | 51557 | MTL NYLON TUBE DCAL 5/8 | FT | 1.5000 |
| G | 51570 | MTL VINYL TUBE 1/2 CLR | FT | 6.5000 |
| H | 51570 | MTL VINYL TUBE 1/2 CLR | FT | 6.5000 |

Item #17015

FRONT



BACK



A. BATTERY INSTALLATION

To insert button cell battery (Maxell LR44, Union Carbide A-76 or equivalent), remove battery door on the back cover of case and insert battery in direction indicated.

B. TO SET CLOCK

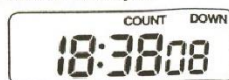
1. Adjust the sliding switch to the "CLOCK" position, 12:0000 will appear upon power-up.



2. Press "ENTER" for more than 2 seconds to set clock time. The clock display will be flashing.
3. Press "HR", "MIN", "SEC" buttons to set actual time. To fast advance, press and hold the desired button.
4. Press "CLEAR" to select 12/24 hour format.
5. Press "ENTER" to exit time setting. The unit will automatically return to normal time display if no input is detected for 3 seconds.

C. TO START COUNT DOWN

1. Adjust sliding switch to "COUNT DOWN" position, display shows "HOUR", "MINUTE", "SECOND" together with "COUNT DOWN" indicator. Press "HR", "MIN", "SEC" button to set desired time cycle.



eg. Counting down from 18 hr 38 min 8 sec

2. Press "START/STOP" to start count down, you can temporarily stop or re-start timing cycle by pressing the "START/STOP" button.

Please note, the timer can be activated to count down from 100 hours automatically when "START/STOP" is pressed.

3. A 60-second alarm signal and "TIME'S UP" flag will sound and flash when the timer has completed its operation reaching 0:0000.



eg. Upon completion of cycle, timer start counting up.

4. At the same time the timer will count up from 0:0000 and shows the "OT" (over time) flag simultaneously, it tells you how long it has been since timer alarm signal sounded.
5. Press "START/STOP" button to stop the alarm and pause "OT" timer, "TIME'S UP" flag will turn off.
6. Press "CLEAR" button to re-set timer to 0:0000. However, if you wish to continue counting up, press "START/STOP" to restart timer in "OT" mode.
7. A 60-second alarm will sound when timer count up to its maximum capacity of 99 hr 59 min 59 sec and stop at 0:0000.

Please note the timer can hold the latest display time when changing the slide switch position to different mode.

D. TO START COUNT UP

1. Adjust the sliding switch to "COUNT UP" position.



2. Press the "START/STOP" button to start timer from 0:0000. Alternatively, the timer can also count up from any desired time set by "HR", "MIN" and "SEC" keys.
3. The timer can be temporarily stopped by pressing "START/STOP" button and cleared by pressing the "CLEAR" button.
4. Timer can count up to 99 hr 59 min 59 sec and stop at 0:0000. A 60-second alarm signal and "TIME'S UP" flag will sound and flash simultaneously.



5. Press any button to stop alarm.

Please note the timer can hold the latest display time when changing the slide switch position to different mode.

E. PROGRAM TIMER

The unit allows 4 different count down timer settings to be stored in memory (T1, T2, T3 and T4) with respective alarm beeping sequence as below.

- "T1" alarm sound: "BEEP" in 1 second
- "T2" alarm sound: "BEEP BEEP" in 1 second
- "T3" alarm sound: "BEEP BEEP BEEP" in 1 second
- "T4" alarm sound: "BEEP BEEP BEEP BEEP" in 1 second

The 4 timers can be set TEMPORARILY or programmed into MEMORY.

T1, T2, T3 & T4 Count Down Setting

1. Adjust the sliding switch to the "PROGRAM TIMER" position.



2. Press "T1" to enter timer 1 setting. Indicator "T1" will appear on display steadily. Preset memory time can be re-called/checked by pushing "T1" button again. To clear the display press "CLEAR". Preset memory can be cleared by pressing "CLEAR" followed by "ENTER" button.

3. Press "HR", "MIN" and "SEC" keys to set desired time. The edited time setting will remain there as long as the counting cycle is not started/completed and user may switch to other operations.

4. Press "ENTER" to store setting into memory of T1 for future purpose. Please note, previous memory setting will be deleted when new setting is "ENTER".

5. Press "START/STOP" button to start counting down. To stop or pause the time running, press "START/STOP" button.

6. A 60-second alarm and "TIME'S UP" flag will sound when counting cycle is completed and timer reset to 0:0000. Press "START/STOP" or any button to stop alarm.

7. Repeat above for operations of T2, T3 and T4.

Count Up Function

All timers (T1, T2, T3 & T4) can be used as count up timer starting from 0:0000.

1. Simply press "START/STOP" to start count up or to pause and restart.



eg. Display showing T1 in counting up mode.

2. Timer can count up to 99 hr 59 min 59 sec and stop at 0:0000. A 60-second alarm signal and "TIME'S UP" flag will sound and flash simultaneously.

3. Press "START/STOP" to stop alarm.

Please note, timer only start counting up from 0:0000. Counting must first be stopped before display can be reset to 0:0000 by "CLEAR" button.

Simultaneous operations:

1. All 4 program timers can be activated individually to operate (count up/down) in parallel where any activated timer in background will have their corresponding flag flashing on display.



eg. Display showing T1 in counting down mode, with T2, T3 & T4 activated in the background.

2. To activate 4 program timers simultaneously, hold "ENTER" and press "START/STOP", timers will start counting down from the preset times stored in their respective memory. In case where there is no stored setting(s), timer(s) will count up instead.

3. To stop activated program timer(s) simultaneously, hold "ENTER" and press "START/STOP". (even though they are activated individually)

4. When the 4 timers are generated to sound at the same moment, timer T1 will be generated to sound first, channel 2, 3 and 4 timers will be generated to sound in order.

5. Press "START/STOP" or any button to stop alarm.

FILTER CHANGE INSTRUCTIONS

IMPORTANT: *IF THE WATER BECOMES SLUGGISH WHEN DRAINING THE CYLINDER OR IF WATER ESCAPES FROM RELIEF VALVE (#77) THEN THE FILTER ELEMENT (#67) MUST BE CHANGED.*

CAUTION: *FAILURE TO MAINTAIN A CLEAN FILTER MAY RESULT IN DAMAGE TO THE SYSTEM.*

1. Remove all water from the cylinder and make sure that pressure gauge (#81) shows no pressure then close the ball valve (#80).
2. Press the red button on top of the filter housing (#66) to equalize the pressure difference between the atmosphere and the inside of filter housing.
3. Using the filter wrench (#68) remove the transparent bowl from the filter housing (#66).
4. Remove the old filter element (#67). Discard or clean the old filter element.
5. Clean the interior of the transparent bowl and the filter housing with warm water and bleach.
6. Apply seal lubricant to the O-ring on the transparent bowl.
7. Put a new or cleaned filter element (#67) into the transparent bowl so that the boss at the bottom of the interior of the transparent bowl fits inside the bottom of the filter element.
8. Put the transparent bowl back onto the filter housing (#66) and tighten by hand. Make sure the boss on the bottom of the filter housing cap fits inside the top of the filter element.

CAUTION: *DO NOT USE THE FILTER WRENCH (#68) TO TIGHTEN THE TRANSPARENT BOWL. DAMAGE MAY OCCUR FROM OVER-TIGHTENING.*

9. Look at the filter element through the filter housing (#66). Check that it is seated securely at the top and bottom.
10. The hydro tester is now ready for use.

USE THE SAME PROCEDURE TO CHANGE THE CARBON FILTER ELEMENT (#54) WITH THE ELECTRIC PUMP OFF.