

# SOK10 and SOK17 SHUTOFF AND DRAIN KIT

## READ ALL DIRECTIONS CAREFULLY BEFORE BEGINNING INSTALLATION

**REPAIR PARTS LIST FOR SOK10 -** See Exhibit A for location of parts. See Exhibit E on page 3 for SOK17 instructions.

<b>Ref. No.</b> 1 2	<b>Part No.</b> OP211 OP212	<b>Description</b> 3/4" NPT 1/4 Turn Ball Valve, PVC 3/4" NPT Close Nipple, PVC
3	OP212	3/4" NPT "KING DRAIN". KD104
4	OP114	3/4 x 3/4 x 3/4 PVC Tee
5	OP214	1/2" – 1" SS Worm Gear Clamp
6	OP215	3/4 NPT x 3/4" Hose Barb, PVC
7	OP216	3/4" FPT x 3/4" Hose Barb, PVC
8	WPM127	PVC Connector
9	OF481	10-24 x 2 Slotted Round Machine Screw, SS
10	OF415	10-24 Nylon Insert Locknut, SS
11	OP119	13/4" ID x 21/8" OD "O" Ring, Rubber
12	WPM128	1/2 Sch. 40 PVC Pipe, 60" Handle Extension
13	WPM129	11/2" Sch. 40 PVC Pipe, 24" Riser
14	WPM130	3/4" ID Nylon Braided Hose, 48" Supply Line
15	OP217	Tee Handle 1/2" x 1/2" x 1/2"
	ISHSOK10	Instruction Sheet

### **INSTALLATION INSTRUCTIONS**

STEP 1: Review Exhibit A. Note how parts are assembled and through which hole in the bottom of the drinker each "branch" of the assembly is inserted. Use either hole on model WPM120, the 6 hole cattle drinker.

You will find the words "INLET" or "SHUTOFF" marked next to the holes in the bottom of most of our energy free drinkers except WPM120. Not all earlier manufactured units are marked. Also, our earliest manufactured unit did not have 2 holes in the bottom and thus, this SOK10 kit cannot be used. If you need assistance, call 800-553-1791 and ask for one of our sales people.

Be sure to install foam pipe insulation, Part No. WT208, Ref. No. 23, as shown in Hawkeye Steel Products, Inc. Instruction Sheet ISHWPM. Pipe insulation slips over Part No. WPM130 (Ref. No. 14), the  $^3/_4$ " nylon braided hose supply line. Foam pipe insulation is furnished with our energy free drinkers, but not with this kit. Pipe insulation is 36" (91.4cm) long and is  $^1/_4$ " ID x 3  $^3/_8$ " OD.

Ref. No. 7 connects to Part No. OP116P, a <sup>3</sup>/<sub>4</sub>" schedule 40 male adapter, standard, PVC. This adapter is marked as Ref. 18 in Installation Instruction Sheet No. ISHWPM on each of our models shown in that instruction sheet.

## **MODEL NUMBER**

The Model Number is: SOK10 Shutoff and Drain Kit

## WHEN ORDERING PARTS

(1) Show MODEL NUMBER and NAME: Example - SOK10 Shutoff and Drain Kit (2) Show PART NUMBER and FULL DESCRIPTION of part: Example - OP217 Tee Handle,  $^1/_2$  x  $^1/_2$ 

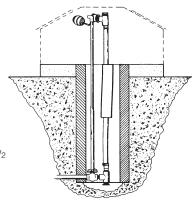
## **HOW TO ORDER PARTS**

Repair parts may be ordered from your dealer.



# Quantity Insert thru hole marked "SHUTOFF" Connects to 3/4 inch Schedule 40 Male Adapter, PVC thru hole marked "INLET" Tom Pipe Insulation (Not Included) Insert thru hole marked "SHUTOFF" Tom Pipe Insulation (Not Included) Insert thru hole marked "SHUTOFF" Tom Pipe Insulation (Not Included) Total Tom Pipe Insulation (Not Included)

## **EXHIBIT A**



**EXHIBIT D** 

PO BOX 2000 • HOUGHTON, IOWA 52631 • USA
PH: 319-469-4141 FAX: 319-469-4402
WEB: www.hawkeyesteel.com E-MAIL: sales@hawkeyesteel.com

STEP 2: The top of the 11/2" riser (Ref. No. 13) should extend about 1 inch (2.54cm) above flood stage. Flood stage is the edge of the drink opening where overflow can occur. You will need to cut Ref. No. 13 to the proper length. See Exhibit B. The proper lengths are as follows:

 WPM10/MPM10/WPM10A/MPM10A (2 hole, 10 gallon)
 10.25 inches (26.0 cm)

 WM14/WPM14A (4 hole, 14 gallon)
 9.75 inches (24.8 cm)

 WPM16 (1 hole, 16 gallon)
 17.50 inches (44.5 cm)

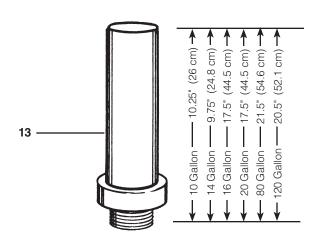
 WPM20/MPM20 (2 hole, 20 gallon)
 17.50 inches (44.5 cm)

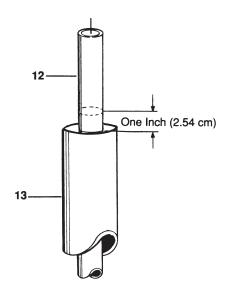
 WPM80 (4 hole, 80 gallon)
 21.50 inches (54.6 cm)

 WPM120 (6 hole, 120 gallon)
 20.50 inches (52.1 cm)

Note that you should measure the distance from the bottom of the adapter NOT INCLUDING THE THREADS.

# EXHIBIT B EXHIBIT C





STEP 3: Cut the 1/2" diameter handle extension (Ref. No. 12) after installation. The handle extension should extend beyond the top of Ref. No. 13 about 1" (2.54cm). See Exhibit C. Place the tee handle (Ref. No. 15) on the top of the 1/2" diameter handle extension (Ref. No. 12). Place cover in position and make sure you have clearance. If so, drill a 1/4" diameter hole through tee handle and handle extension and then attach tee handle on top of 1/2" handle extension using 10-24 x 2 screw and locknut. (Ref. Nos. 9 and 10).

STEP 4: Turn the tee handle one quarter turn to the right (clockwise) and water shuts off. Turn tee handle one quarter turn to the left (counter-clockwise) and water flows. DO NOT OVERTURN.

**CONTINUOUS** With our energy free drinker, in the vast majority of applications, you do not need continuous flow. We **FLOW** generally do not recommend continuous flow. However, continuous flow may be helpful where an energy free drinker is supplied by a cold water source.

PLEASE NOTE: As we say on our literature, IF ENTERING WATER IS LESS THAN ABOUT 40°F (4.4°C), SUCH AS WATER FROM A POND, MOUNTAIN SPRING WATER OR COLDER GROUND WATER, YOU MAY EXPERIENCE ICING IN THE DRINKER OPENINGS. Most pond water is less than 40°F (4.4°C) (as low as 34°F (1.1°C) after the pond is iced over. We do not guarantee results where the entering water is less than 40°F (4.4°C). Drinkers can work in such cases. Chances for success increase if the drinker is sheltered and if you have an abundance of drinking activity (50 head+). Most likely, the valve will stay open but under severe conditions you may have to remove ice from your drinker openings daily. Severe conditions are where windchills or actual temperatures are consistently below about 10°F (-12°C) day and night.

Icing can also be avoided by using continuous flow. Continuous flow can be achieved by drilling a 1/4 inch to 3/8 inch hole in Ref. No. 13 riser at the same level as the "FILL TO THIS LINE" marker in the drink opening. If you later do not want continuous flow, the hole can be plugged, or you can set your float slightly lower to avoid water flowing through the hole. Don't set the float so low that the water level is below the baffle in the valve cover. Continuous flow water should be tiled off away from the drinker.

You may also want to consider installing an "ice preventer valve". Again, we do not recommend it in the vast majority of applications. However, such a valve can be easily installed and used with our SOK10 Kit (or by installing only the riser, Ref. No. 13). Use an "Ice Preventer" model or a "Water Master Ice Preventer Combo" model -- or their equivalents. Contact Walters Control Company, Box 594, Cleveland, Oklahoma 74020. (918) 358-3596.

REPAIR PARTS LIST FOR SOK17 - See Exhibit E for location of parts. Model SOK17 is designed for our poly electrically heated PERFORMANCE ONE drinker series. Model numbers include WPO17E, WPO17N, MPO17E, MPO17N, WPO40E, WPO40N, MPO40E and MPO40N.

Ref. No.	Part No.	Description
1	OP211	<sup>3</sup> / <sub>4</sub> " NPT 1/4 Turn Ball Valve, PVC
2	OP212	3/4" NPT Close Nipple, PVC
3	OP213	3/4" NPT "KING DRAIN", KD104
4	OP114	3/4 x 3/4 x 3/4 PVC Tee
5	OP214	1/2" - 1" SS Worm Gear Clamp
6	OP215	3/4 NPT x 3/4" Hose Barb, PVC
7	OP216	3/4" FPT x 3/4" Hose Barb, PVC
8	WPM127	PVC Connector
9	OF481	10-24 x 2 Slotted Round Machine Screw, SS
10	OF415	10-24 Nylon Insert Locknut, SS
11	OP119	1 <sup>3</sup> / <sub>4</sub> " ID x 2 <sup>1</sup> / <sub>8</sub> " OD "O" Ring, Rubber
12	WPM128	1/2 Sch. 40 PVC Pipe, 60" Handle Extension
13	WPO1718	1 <sup>1</sup> / <sub>2</sub> " Sch. 40 PVC Female Pipe Assembly
14	WPM130	3/4" ID Nylon Braided Hose, 48" Supply Line
15	OP217	Tee Handle 1/2" x 1/2" x 1/2"
16	WPO1719	11/2" Sch. 40 PVC Male Pipe Assembly
	ISHSOK10	Instruction Sheet

## **INSTALLATION INSTRUCTIONS**

STEP 1: Review Exhibit E. Note how parts are assembled and through which hole in the bottom of the drinker each "branch" of the assembly is inserted.

> You will find the words "WATER" or "SHUTOFF" marked next to the holes on the bottom of your PERFORMANCE ONE drinker.

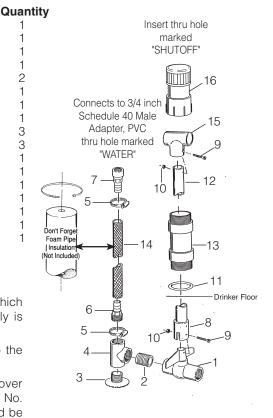
> We recommend installing foam pipe insulation (not included) over your water line. Pipe insulation slips over Part No. WPM130 (Ref. No. 14), the <sup>3</sup>/<sub>4</sub>" nylon braided hose supply line. Pipe insulation should be 36" (91.4cm) long and is  $1^{1}/4$ " ID x 3  $^{3}/8$ " OD. Pipe insulation can be ordered from Hawkeye Steel Products, Inc. as part number WT208.

> Ref. No. 7 connects to Part No. OP116P, a 3/4" schedule 40 male adapter, standard, PVC. This adapter is marked as Ref. 15 in Installation Instruction Sheet No. ISHWPO on each of our models shown in that instruction sheet.

- STEP 2: Assemble Ref. Nos. 1 through 7 as shown in Exhibit E.
- STEP 3: Install Ref. No. 13 female assembly to the base in to the hole marked "SHUTOFF". Be sure to use Ref. No. 11 O-Ring.
- STEP 4: Install Ref. Nos. 8, 9, 10 and 12 as shown in Exhibit E. Ref. No. 12 Handle Extension will extend beyond Ref. No. 13 female assembly and it needs to be cut.

## IMPORTANT! Before cutting Ref. No. 12 handle extension in STEP 5, read STEPS 5, 6 and 7 to make sure you understand how the total assembly looks when you are done.

- STEP 5: Cut the Ref. No. 12 1/2" diameter handle extension so that it extends beyond Ref. No. 13 by about 2 inches. The proper length of Ref. No. 12 should be about 56" (142.24 cm). Place the tee handle (Ref. No. 15) on top of the 1/2" diameter handle extension (Ref. No. 12). Drill a hole through tee handle and handle extension. Make sure you can attach tee handle to the extension using 10-24 x 2 screw and locknut (Ref. Nos. 9 and 10) but do not assemble yet as the tee handle is only assembled with the Ref. No. 16 Male Pipe Assembly removed. Also make sure that Ref. No. 12 handle extension will fit into Ref. No. 16 Male Pipe Assembly when Ref. No. 16 is tightened against Ref. No. 13 sufficiently to get a water tight seal.
- STEP 6: With the tee handle (Ref. No. 15) removed, you should be able to screw Ref. No. 16 Female Adapter Assembly onto Ref. No. 13 assembly. Hand tighten enough to get a water tight seal. Assemble Ref. Nos. 9 and 10 screw and locknut to the tee handle and drop in the bottom of your drinker base or store separately.
- STEP 7: To shut off your water supply, first drain the drinker and prop the float up so the valve is not filling. Remove Ref. No. 16 assembly being careful to not also loosen Ref. No. 13 assembly. Add your tee handle. Turn handle one guarter turn to the right (clockwise) and water shuts off. Turn tee handle one quarter turn to the left (counter-clockwise) and water flows. DO NOT OVERTURN.



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**EXHIBIT E**