

# WATER MOTOR GONG MODEL "E"



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# MODEL "E" WATER MOTOR GONG

## DESCRIPTION

The "ASTRA" Model "E" Water Motor Gong is a self contained, water operated alarm which sounds continuously whenever the sprinkler system is activated. Designed with functional simplicity and sound engineering practice, the Astra Model "E" Water Motor Gong is always ready to function in the event of fire.

## INSTALLATION

1. Cut a hole in the wall to accommodate  $\frac{3}{4}$ " pipe.
2. Cut driveshaft housing (item 9) to appropriate length.
3. Attach driveshaft housing to bracket (item 13) without removing bolt (item 14), and position this assembly on outside wall with the driveshaft housing through the wall.
4. Remove the six cover screws (item 6), cover (item 4), cover gasket (item 7), and impeller (item 2) from the impeller housing (item 1).
5. Insert driveshaft (item 8) through the driveshaft housing into engagement with the striker shaft (item 15).
6. Cut driveshaft even with the top flange of bearing (item 3) in the impeller housing.
7. Insert impeller and rotate by hand to assure proper alignment.
8. Attach cover and cover gasket to impeller housing with six cover screws.

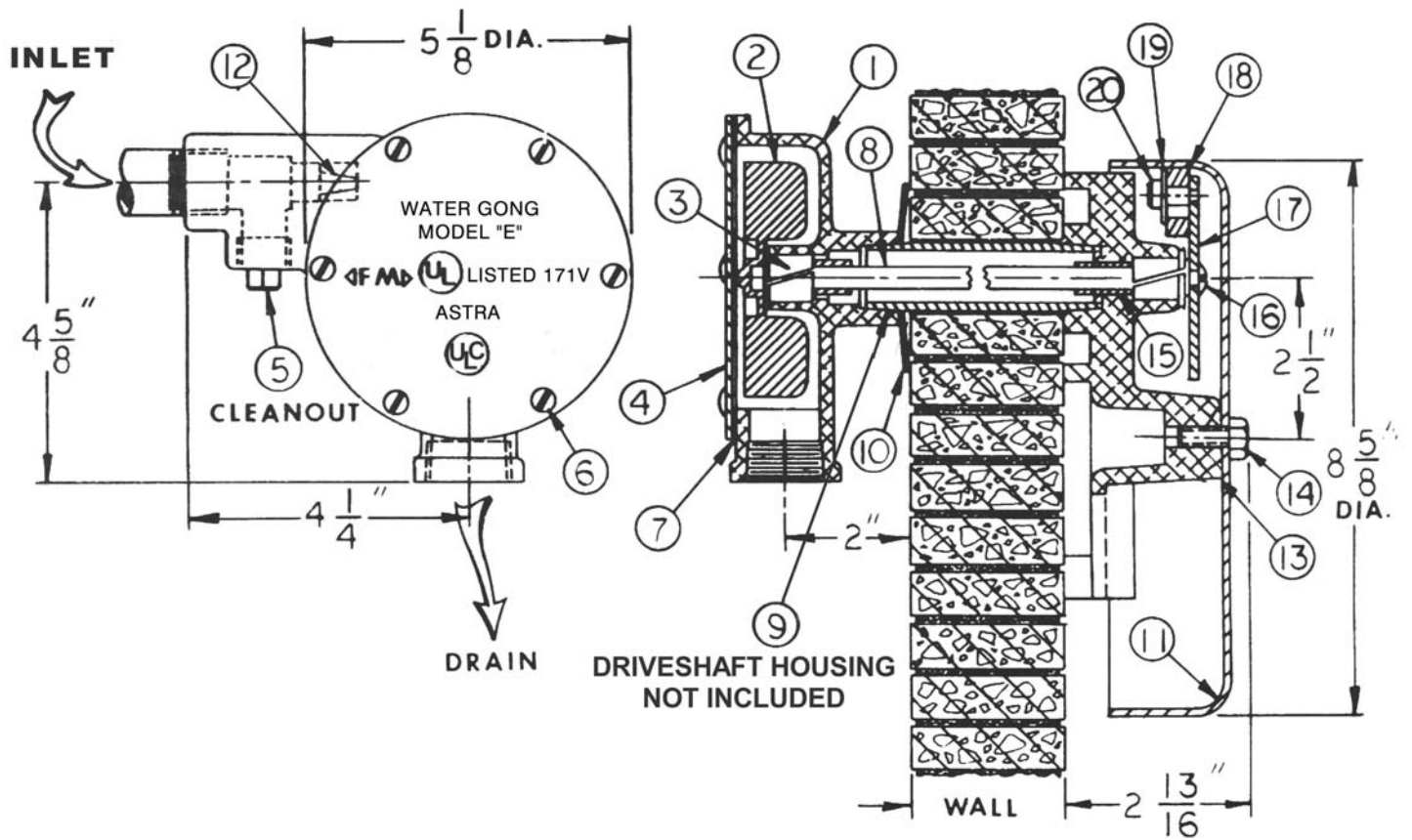
## OPERATION

When, in the case of a fire emergency, the sprinkler system is activated, flowing water enters the Water Motor Gong inlet and strikes the impeller. Rotating in a turbine fashion, the impeller transmits its torque to the striker assembly which sounds the alarm. The water, after it impinges on the impeller, flows through the drain outlet in the impeller housing.

## MAINTENANCE

1. The  $\frac{3}{4}$ " strainer, located at the dry pipe valve or alarm valve in the alarm line, should be periodically cleaned to assure sufficient flow to the Water Motor Gong.
2. The cleanout plug (item 5) should be periodically removed to avoid any accumulation of trash and scale that may have passed through the strainer.
3. The inside of the gong (item 11) should be checked, periodically, for accumulation of foreign material.

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## Parts list

ITEM	PART No.	DWG No.	DESCRIPTION
1	501-038	WMG 006	Impeller housing
2	501-036	WMG 018	Impeller
3	101-103	WMG 016	Bearing
4	101-109	WMG 014	Cover, impeller housing
5	101-207	WMG 012	Cleanout plug
6	101-115	WMG 019	Cover screw
7	101-110	WMG 013	Gasket, cover
8	101-107	WMG 026	Driveshaft
9	101-108		Driveshaft housing
10	101-304	WMG 011	Spacer

ITEM	PART No.	DWG No.	DESCRIPTION
11	301-046	WMG 023	Gong
12		WMG 025	Brass bushing
13	501-037	WMG 003	Bracket
14	101-117	WMG 021	Bolt
15	101-104	WMG 024	Striker shaft
16	101-116	WMG 020	Striker bracket screw
17	101-100	WMG 009	Striker bracket
18	101-101	WMG 010	Striker
19	101-113	WMG 008	Striker washer
20	101-303	WMG 007	Shoulder rivet

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## LIGHTWEIGHT - EASY TO INSTALL - EFFICIENT - DEPENDABLE

ASTRA'S Water Motor Gong is for the Sprinkler Contractor who wants a quality, efficient and dependable water-alarm. It is lightweight (less than 15 lbs.), rugged and easy to install. ASTRA'S design is the result of many requests from sprinkler contractors for the type Water Motor Gong that they felt would answer their needs.

### NFPA Pamphlet No. 13 WATER MOTOR GONG RULES

Water-motor-operated devices shall be located as near the alarm valve, dry-pipe valve or other waterflow detecting device as practicable in order to avoid long runs or many fittings in the pipe to the water-motor operated device. The total length of the pipe should not exceed 75 feet nor shall the water-motor-operated device be located over 20 feet above the alarm device or dry-pipe valve. If absolutely necessary to exceed 75 feet, the pipe line to the water-motor-operated device shall be increased one or more sizes to compensate for loss of pressure due to hydraulic friction. For all types of sprinkler systems employing water-motor-operated alarms, an approved 3/4 inch strainer shall be installed at the alarms outlet of the waterflow detecting device except that when a retarding chamber is used in connection with an alarm valve, the strainer shall be located at the outlet of the retarding chamber unless the retarding chamber is provided with an approved integral strainer in its outlet. Water-motor-operated devices shall be protected from the weather, and shall be properly aligned and so installed as not to get out of adjustment. All piping to these devices shall be galvanized or brass of a size not less than 3/4 inch, and larger for long runs of piping or where pressures are low. Piping shall be arranged to drain properly through a brass brushed orifice not larger than 1/8 inch. Drain shall be conducted to a proper place.

No single mechanical alarm device should be connected to more than three sprinkler systems and the systems controlled by the valves should be in the same fire area.