



# Component Manual

**Jog Lever  
Model: JO100**



**Document No.: MAN01401W**

**Revision: -**

This manual is subject to change without prior notice.



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# 1 INTRODUCTION

## 1.1 Description

The Wagner Jog Lever is a permanently mounted, waterproof, electrical switch specifically designed for marine service.

The spring-centered lever is moved to port or starboard as desired to provide non follow-up (time dependent) electric control of the steering gear. It is pre-wired with 5 ft (1.5 m) of cable.

There are two models of Jog Levers and an adaptor:

- Model JO100-1 is supplied with one set of micro switches.
- Model JO100-2 is supplied with two sets of micro switches where redundancy is required.
- Adaptor Plate WA-950078-1 is used to adapt new Jog Lever to fit foot print of the old style Wagner Jog Lever (see Figure 3).

## 1.2 Specifications

### Enclosure

Plastic Construction  
Stainless Steel Handle Shaft  
Water Resistant Cable Gland

### Cable

5 ft. of Pre-Wired Cable 18 AWG, 3 Conductor, Stranded, Copper Wire.

### Port / Starboard Switching

Current Rating	10 Amp
Voltage Rating	250 VAC
Operating Cycles	10 million

**CAUTION:** All specifications are subject to change without prior notice.



## 2 INSTALLATION

### 2.1 Mounting and Connection

The jog lever controller may be mounted vertically or horizontally in any convenient location.

Refer to Figure 1 for overall dimensions.

**WARNING: TO AVOID ACCIDENTAL OPERATION, USE A MECHANICAL GUARD AROUND THE JOG LEVER HANDLE.**

The cable and the watertight cable gland can be relocated to the bottom of the housing. To do this:

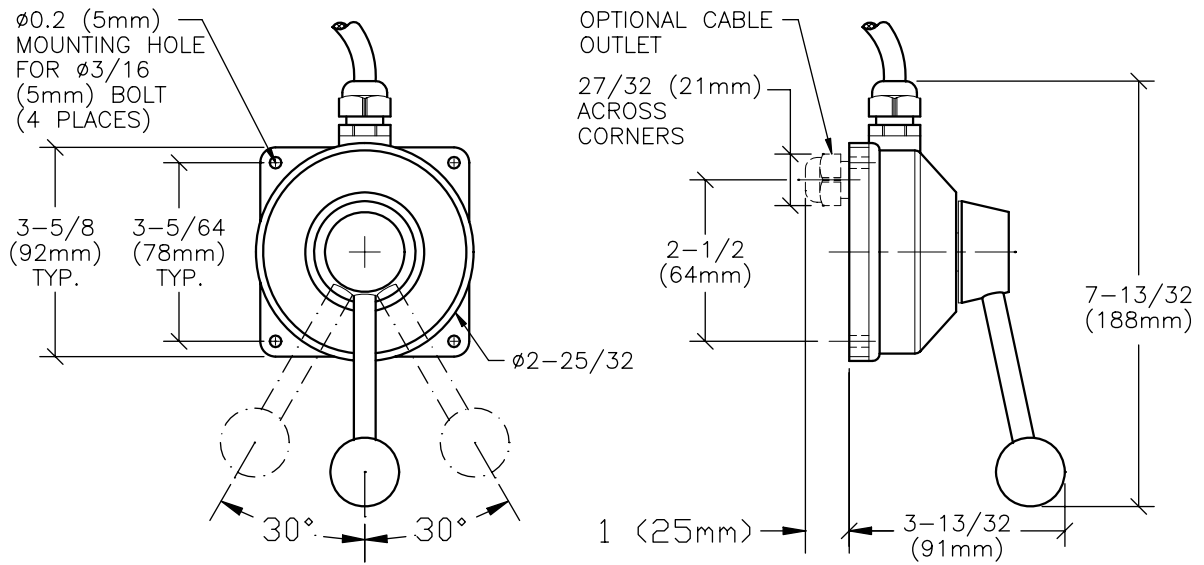
- a) Remove the bottom plate
- b) Interchange the gland fitting and the plug
- c) Re-route the cable through the fitting on the bottom. Be certain all the O-ring seals are replaced in their correct locations when re-assembling.

**WARNING: ALL JOG LEVER CONTROLLER WIRES MUST BE SECURELY CONNECTED. A LOOSE WIRE OR SHORT CIRCUIT MAY CAUSE AN ERRONEOUS STEERING COMMAND.**

Refer to Figure 2 for wiring of the jog lever to a 4-way directional solenoid valve.

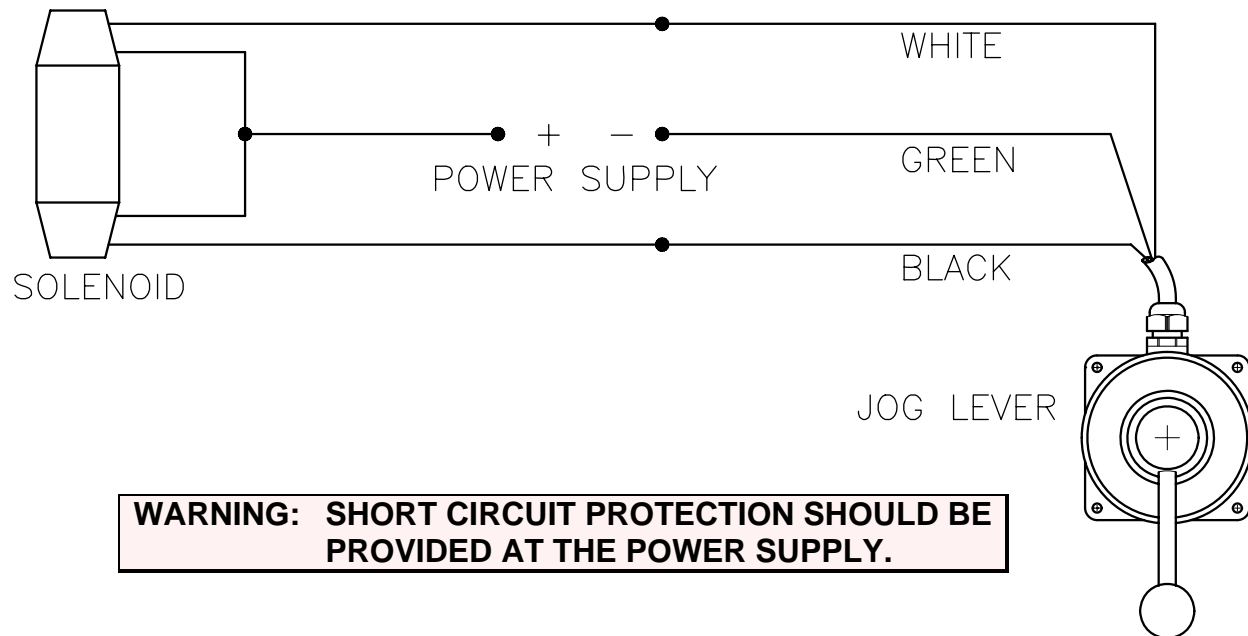
**CAUTION:** It is highly recommended that short circuit protection be provided on the power supply to the jog lever controller.

Additional jog levers are connected in parallel.



**NOTE:** 1. JOG LEVER COMES PRE-WIRED WITH 4' (1.2m) OF CABLE.

**Figure 1 – Jog Lever Overall Dimensions**



**Figure 2 – Jog Lever Wiring Diagram**



### 3 MAINTENANCE AND PARTS LISTS

**WARNING: ALL INSPECTION AND MAINTENANCE MUST BE PERFORMED WHILE THE VESSEL IS STATIONARY AND NOT UNDERWAY.**

The Wagner Jog Lever does not contain any components that require routine maintenance.

The most common components replaced are:

Jog Spring	Part No. JB-605002
Jog Micro Switch	Part No. JB-857002

These components are available from any of our distributors.

### 4 TROUBLESHOOTING

**WARNING: FAILURE TO CORRECT ANY PROBLEM CAN CAUSE SUDDEN LOSS OF STEERING.**

The table below gives some general solutions for simple problems. If a problem cannot be resolved, contact the factory.

SYMPTOM	CAUSE	CORRECTION
Jog does not return to center.	Spring not working.	Replace spring.
Jog does not function.	Micro switch not working.	Replace micro switch.
	No power.	Check power source.
	Solenoid not working.	Refer to manufacturer's manual for corrections.
Jog operates steering in the wrong direction.	Solenoid wires are reversed.	Reverse the port and starboard connections at the solenoid. Refer to Figure 2.
Jog operates steering in only one direction.	Solenoid is wired incorrectly.	Check that the positive wire from the power supply is going to both port and starboard solenoids. Refer to Figure 2.



## 5 CONVERSION KIT

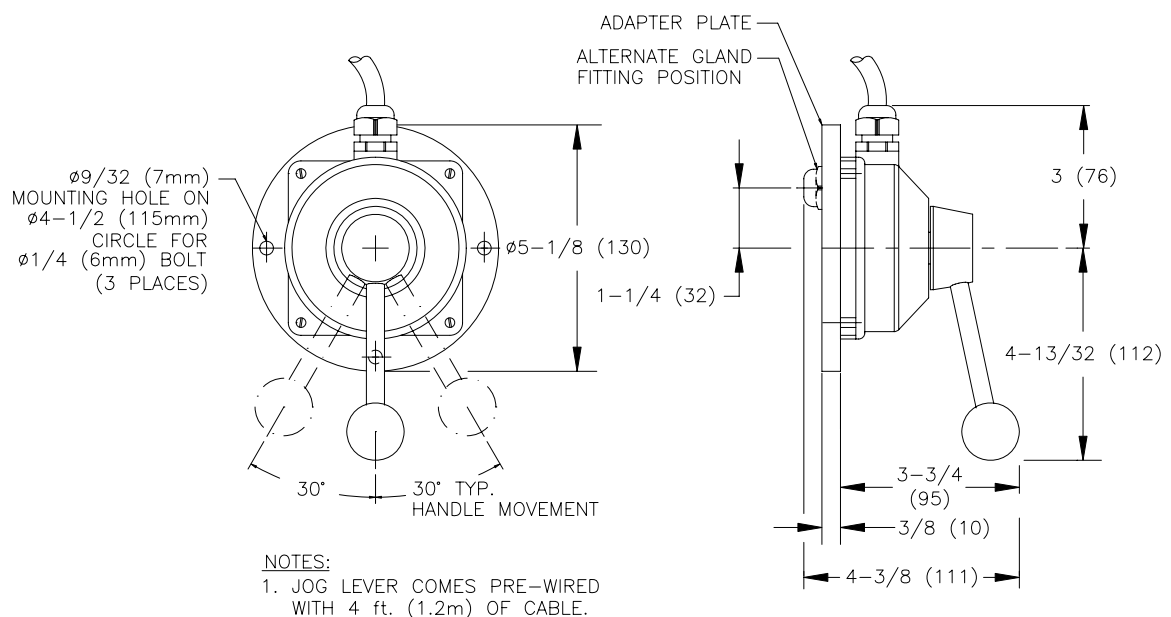
### 5.1 Description

The adaptor plate kit WA-950078-1 allows the use of the 'new style' jog switches to fit into the foot print of the 'old style' jog switches.

### 5.2 Installation

Insert O-ring into groove of adaptor plate. Place new style jog on top of O-ring with cable gland facing nipple. Secure with 4 screws to adaptor plate.

If required, cable and watertight cable gland can be relocated through the bottom of the adaptor plate.



**Figure 3 – Jog Lever Adaptor plate**

