

VNS2/VNSB2 SERVICE BULLETIN

Mill Duty AC & DC Master Switch

Description:

The type VNS2 (AC) and VNSB2 (DC) Mill duty master switches and Joysticks are available in vertical and horizontal designs. Designs are configured to accommodate your specific space requirements.

The VNS2 and VNSB2 controllers provide the operator with a manually selectable step or stepless output for controlling the operation of heavy equipment and machinery.

Installation:

The VNS2 and VNSB2 controllers require a 5 hole mounting pattern (see panel hole detail). It is not necessary to remove the operation knob or boot to install the VNS2 or VNSB2 controller.

The device should be mounted to provide the operator with comfortable and unobstructed access. Care should also be taken in console and cab design to

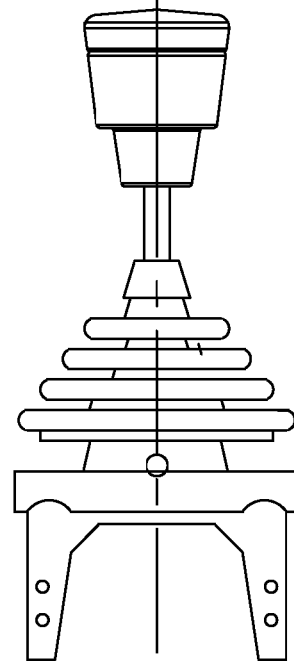
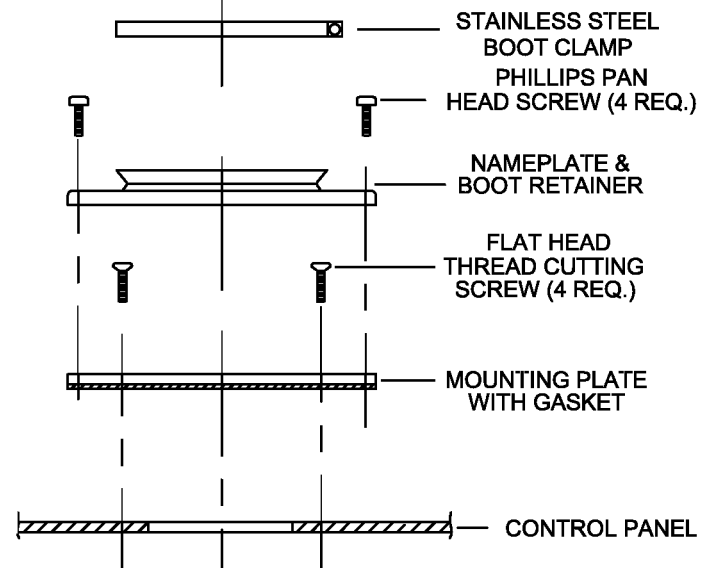
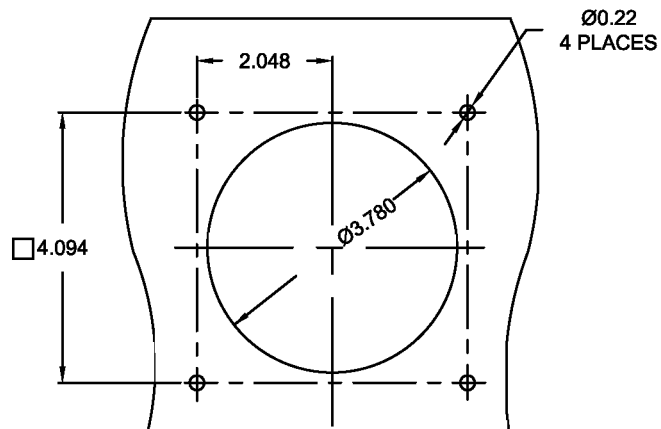
AVOID LOCATIONS WHERE:

- Inadvertent operation is possible
- Operator is able to apply an excessive amount of force to the control lever
- Control handle could be used as a means of supporting entrance and exit from the cab area
- Hand and knuckle clearance is limited

Important:

Remove clear tape covering the contacts after wiring and before powering up.

PANEL HOLE DETAIL



VNS2 BASIC SWITCH

TYPE VNS2/VNSB2 MILL DUTY AC & DC MASTERSWITCH SERVICE BULLETIN


IMPORTANT:
DISCONNECT ALL POWER
PRIOR TO SERVICING CONTROLLER

Service

Periodic lubrication is recommended. A light grease should be applied to active components, such as spring return arms, yokes, gear drives and detent rollers.

Inspect for torn or damaged boots and replace them immediately.

Check assembly and mounting bolts for tightness.

 Immediately report any abnormal operation characteristics of the controller to the proper authority.

Wiring

The type VNS2 and VNSB2 contacts utilize a saddle clamp type terminal. It is recommended when using bare copper wire that all terminal connections are re-tightened after a short interval to "cold flow" the conductor. Cold flowing the copper through re-tightening will insure a non-resistive connection.

Proportional Control

Potentiometers, Rotary Inductive Transformers, Encoders, Rheostats, etc. are field replaceable but may require calibration and alignment by a field service technician. Before operating, the device should be tested by an authorized technician for proper alignment and calibration.

Disclaimer

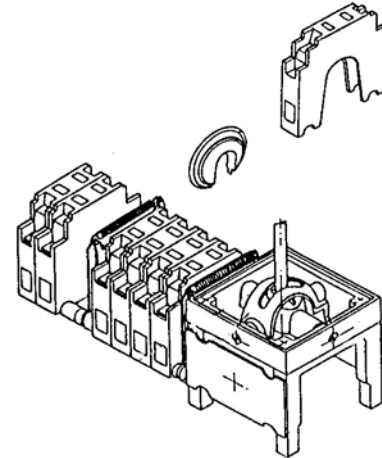
Joysticks are supplied with deadman spring return of handles to neutral. For safety reasons, electronic deadman equipment control is recommended for applications with maintained handle action. (Consult factory).

The customer is responsible for meeting OSHA compliance of deadman safety devices, providing operator safety and proper equipment use training, and for maintaining the equipment and controls in a safe working condition. Customer agrees to indemnify and hold J.R. Merritt Controls, Inc. harmless and defend at its expense, all claims and suits asserted or brought against J.R. Merritt Controls, Inc. due to the absence, removal, tampering, improper installation or improper use of this equipment and associated deadman safety

Contacts and Cams

Cam-operated contacts are field replaceable and can be removed by removing screws at the base of the contact block (note direction of terminals). Reinstall with terminals facing in proper directions. For VNSB2 DC models, magnet polarity must be observed for proper arc quenching (See Fig. 1). If contacts are to be cleaned, it is recommended that a low residue spray contact cleaner be used. Test cleaner to insure it is compatible with plastic. Do not sand or file contact tips.

Fig. 1



Contact AC Ratings

Rating AC:

TYPE VNS2

AC continuous	25 amps @ 600 volts
AC resistive	20 amps @ 240 volts
AC inductive	14 amps @ 240 volts

Rating DC:

TYPE VNSB2

(with magnetic blow-out)

Resistive	5 amps @ 250 volts
Inductive	2 amps @ 250 volts

Arc suppression may be needed with size 5 or larger contactors.



Important: 1 and 2 axis Joysticks are supplied with deadman spring return of handles to neutral. Electronic deadman control is available for applications requested with maintained handle action (Consult factory).

J.R. MERRITT
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