



**STOW FEATURE OPERATIONS  
MANUAL FOR THE ELECTRIC**

*Scorpion*<sup>®</sup>

**MONITORS**

**8294-04 ALUMINUM**

**&**

**8394-04 BRASS**

# PRODUCT SAFETY



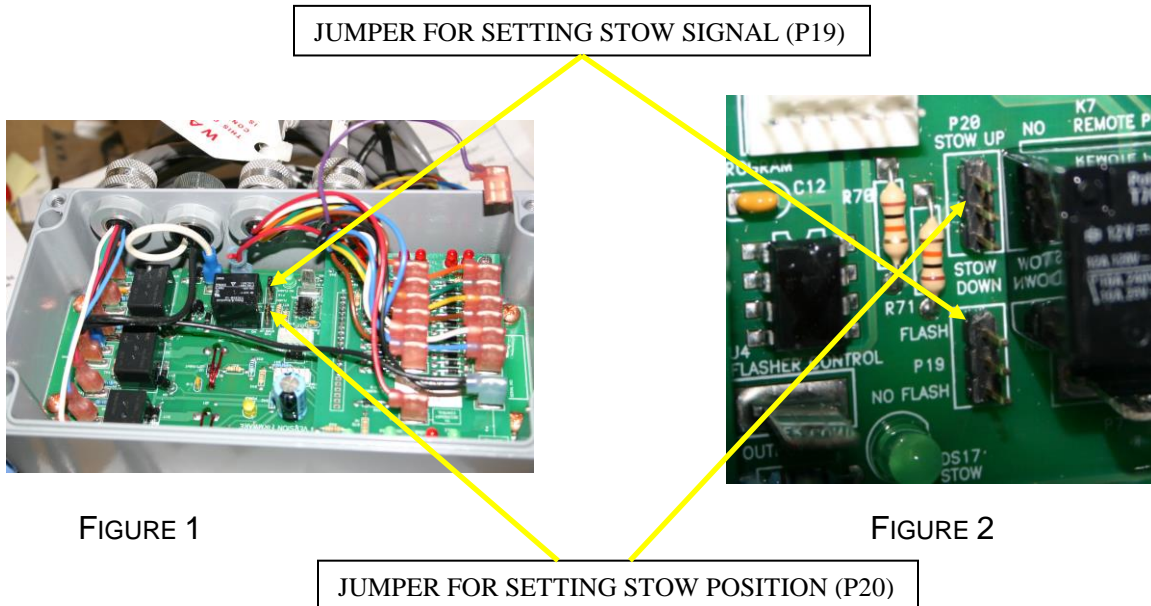
## **Important:**

**Before operating this equipment, read & study these documents thoroughly. Thorough knowledge of this equipment is essential to safe operation. In addition, the following points should be adhered to in order to ensure the safety of equipment and personnel:**

- All personnel who may be expected to use this equipment must be thoroughly trained in its safe and proper use.
- Before flowing water from this device, check that all personnel (fire service and civilian) are out of the stream path. Also, check to make sure stream direction will not cause avoidable property damage.
- Before activating stow routine make absolutely sure that there is **no** water flowing from this device.
- Become thoroughly familiar with the hydraulic characteristics of this equipment, and the pumping system used to supply it. To produce effective fire streams operating personnel must be properly trained.
- Open the water valve supplying this equipment slowly to prevent a possible water hammer occurrence.
- After each use, and on a scheduled basis, inspect equipment for proper operation.

## SETTING THE JUMPERS ON CIRCUIT BOARDS 81455000, 81479000, 81479010, & 81479020

**ATTENTION:** ALL POWER TO THE CIRCUIT BOARD MUST BE REMOVED BEFORE CHANGING JUMPER POSITIONS.



Figures 1 and 2 show the position of both the “**STOW**” and “**STOW SIGNAL**” jumpers.

### **1. Stow position jumper P20 (located on large mother board)**

- With the jumper across the **STOW UP** and **CENTER** pins of P20 (See figure 2) the unit will stow the discharge of the monitor at the upper travel limit.
- With the jumper across the **STOW DOWN** and **CENTER** pins of P20 (See figure 2) the unit will stow the discharge of the monitor at the lower travel limit.

### **2. Stow signal jumper P19 (located on large mother board)**

- With the jumper across the **NO FLASH** and **CENTER** pins of P19, (See figure 2) the stow signal, during the stow routine, will remain at ground. Once the monitor has completed the stow routine the signal will be a constant 12VDC.
- With the jumper across the **FLASH** and **CENTER** pins of P19 (See figure 2) the stow signal will alternate between 12VDC and ground at approximately a one second rate during the stow routine. Once the monitor has completed the stow routine the signal will be a constant 12VDC.

**NOTE:** ANY COMBINATION OF VERTICAL STOW POSITION AND STOW SIGNAL MAY BE USED.

3. **8294-04 RELAY CONTROL BOX 81480001 (HORIZONTAL STOW POSITION, CENTER ):**
  - a. **STANDARD:** The stowed position from the factory is with the monitor discharge stopped at its upper travel limit and the monitor centered within the set horizontal travel limits.
  - b. **NOTE -** (See instructions for setting the **OPTIONAL** stowed position with the monitor discharge stopped at its lower travel limit and the monitor centered within the set horizontal travel limits.)
  
4. **8294-04 RELAY CONTROL BOX 81480011 (HORIZONTAL STOW POSITION, LEFT ):**
  - a. **STANDARD:** The stowed position from the factory is with the monitor discharge stopped at its lower travel limit and the monitor rotated to the left horizontal travel limit.
  - b. **NOTE -** (See instructions for setting the **OPTIONAL** stowed position with the monitor discharge stopped at its upper travel limit and the monitor rotated to the left horizontal travel limit.)
  
5. **8294-04 RELAY CONTROL BOX 81480021 (HORIZONTAL STOW POSITION, RIGHT ):**
  - a. **STANDARD:** The stowed position from the factory is with the monitor discharge stopped at its lower travel limit and the monitor rotated to the right horizontal travel limit.
  - b. **NOTE -** (See instructions for setting the **OPTIONAL** stowed position with the monitor discharge stopped at its upper travel limit and the monitor rotated to the right horizontal travel limit.)
  
6. **8394-04 RELAY CONTROL BOX 81480101 (HORIZONTAL STOW POSITION, CENTER ):**
  - a. **STANDARD:** The stowed position from the factory is with the monitor discharge stopped at its lower travel limit and the monitor centered within the set horizontal travel limits.
  - b. **NOTE -** (See instructions for setting the **OPTIONAL** stowed position with the monitor discharge stopped at its upper travel limit and the monitor centered within the set horizontal travel limits.)

## 7. STOW INDICATOR SIGNALS (FOR ALL RELAY CONTROL BOXES):

- a. **STANDARD:** The stow indication signal mode from the factory is set for the stow indicator signal, (stow light supplied by others), to come on solid once the monitor has reached the stowed position.
- b. **NOTE -** (See instructions for setting the **OPTIONAL** stowed indication signal mode. In the optional mode the signal pulses, (The optional stow indicator would flash) during the stow cycle and remain on solid once the monitor has reached the stowed position. The stow signal voltage is 12VDC. Stow position setting and signal mode may be used in any combination.

## 8. TO INITIATE THE STOW ROUTINE:

- a. Make absolutely sure that **NO** water is flowing through the monitor. Push and hold the button labeled "STOW" down for a minimum of 2 seconds and release to activate the stow feature routine. (The 2 second delay is a safety feature to avoid accidental activation of the stow routine) The stow feature can be activated with the monitor in any position. (**ATTENTION: IN CASE OF ACCIDENTAL STOW ROUTINE ACTIVATION - OPERATION OF ANY MONITOR CONTROL SWITCH OR BUTTON WILL ABORT THE STOW ROUTINE !!!!!**)



### **Warning:**

Never activate the "Stow" feature while water is flowing. Serious injury to personnel and/or damage to property could result.

## 9. DESCRIPTION OF STOW ROUTINE:

- a. The monitor discharge will move up or down to the set travel limit depending on the P20 jumper position. (See step 1)
- b. The monitor will move to the left, center, or right stow position depending on the relay box part number.
- c. For part numbers 81480001 & 81480101 the monitor will rotate to the left travel limit and reverse direction rotating to the right travel limit and reverse direction and rotate back to the left and center itself between the left and right travel limits and stop.
- d. For p/n 81480011 the monitor will rotate to the left travel limit and stop.
- e. For p/n 81480021 the monitor will rotate to the right travel limit and stop.
- f. Stow signal operation will depend on P19 jumper setting (see step 7).

**NOTE:** Regardless of stow position setting or stow signal setting; once the monitor reaches the stowed position the stow signal will be a constant 12VDC. The 12VDC signal will stay on until a nozzle or monitor function (including stow) is activated. Removing power to the relay box will interrupt the stow signal but when power is restored to the relay box the 12VDC stow signal will come back on.



**Caution:** Use of the manual override(s) to move the monitor out of its stowed position will result in a false stow indication. Activating the stow feature and allowing the monitor to go through it's stow routine can reestablish the true stowed position and indication.

#### **10. TO STOP THE STOW ROUTINE:**

- a. Momentary activation of ANY nozzle or monitor function (including stow) at ANY time while the monitor is performing it's stow routine will abort the stow command and the monitor will stop. Once the monitor's stow routine has been stopped the monitor is ready for normal operation.