



### BEFORE SERVICING THE EXCELA-WYND™ HOSE REEL PLEASE READ THESE IMPORTANT SAFETY WARNINGS

WARNING! Risk of injury from pinch points – Keep hands and fingers away from hose guide.





WARNING! Risk of injury from pinch points – Do Not operate reel without gear and chain guards in place.





**WARNING!** Risk of injury from pinch / sever points – Keep fingers away from inlet flange.





**WARNING!** - Risk of injury - The hose reel is very heavy. Use a suitable mechanical hoist or crane to lift, move and set reel.



WARNING! - Risk of injury Disconnect power and relieve system
pressure prior to servicing reel and
controller





WARNING! This product contains a chemical known to the state of California to cause cancer and birth defects or reproductive harm.



**WARNING!** - Failure to follow these instructions or to properly install and maintain this equipment could result in an explosion and/or fire causing property damage and personal injury or death. MEC equipment must be installed, operated and maintained in accordance with federal, state and local codes, and manufacturer's instructions. The installation in most states must also comply with NFPA No. 58 and ANSI/CGA-2.1. Only personnel trained in the proper procedures, codes, standards and regulations of the LP-Gas industry should install and service this equipment. Installation or service inconsistent with these instructions may damage the reel, increase the risk of injury or void the warranty.

These instructions cover the ME9000-FFK Firmware Flashing Kit for use with the VSC9000 Hose Reel Controller.

#### **KIT CONTENTS:**

### Programming Hardware:



### **Connector Adapters**



USB Drive (1176-FFK w/ download links) (Programming Sofware)



#### Instructions



GETTING STARTED - Requires a web browser and USB port on an internet-connected laptop or tablet (device), not included.

- 1. Instructions and Links
  - a. Insert the USB Drive provided into a USB port of the laptop or tablet that will be used to flash firmware to VSC9000 controller.
  - b. Open the file: "Form 1176-FFK, Rev X.PDF" (this document) and use hyperlinks to access software and firmware downloads.
- 2. Install Programming Software (If not already installed)
  - a. From the USB Drive provided, open the file "as-installer-7.0.2542-full.exe". You can also download the file from this link: <a href="https://www.microchip.com/en-us/tools-resources/develop/microchip-studio#Downloads">https://www.microchip.com/en-us/tools-resources/develop/microchip-studio#Downloads</a>. Scroll down, select and download:

Title	Version Number	Date	
Microchip Studio for AVR and SAM Devices- Offline Installer	7.0.2594	20 Jun 2022	♣ Download

- b. Run the installation program and follow prompts to install Microchip Studio.
- Download and Save VSC9000 Controller Firmware (If not already downloaded and saved)
  - a. Use the website: <a href="https://www.marshallexcelsior.com/excela-wynd-hose-reel-0#">https://www.marshallexcelsior.com/excela-wynd-hose-reel-0#</a> to download the VSMC\_vmmddyy.elf

    Note: The firmware version is a six digit date code where "mm" is the two digit month, "dd" is the two digit day and "yy" is the two digit year (i.e.: VSMC v080423.elf is the August 4<sup>th</sup>, 2023 version).
  - b. Select and download the desired firmware version.
  - c. Save the firmware file to the USB Flash drive provided, or to the device drive in a readily accessible folder.





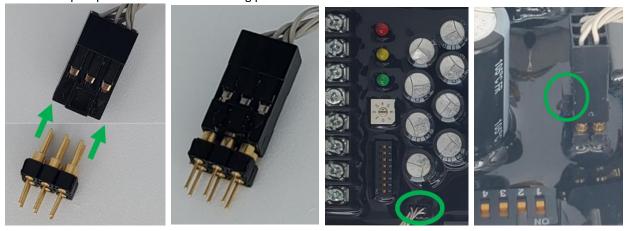
#### **CONNECT CABLES**

1. Remove the cover from the BASE Engineering enclosure.

Note: The VSC9000 controller is located in the BASE Engineering enclosure near the truck cab. (Enclosure contents may vary.)



- 2. Connect the larger pins of the Adapter to the six socket connector on the programming cable.
- 3. Connect the adapter pins to the firmware flashing port on the VSC9000 controller with the connector tab towards the inside.

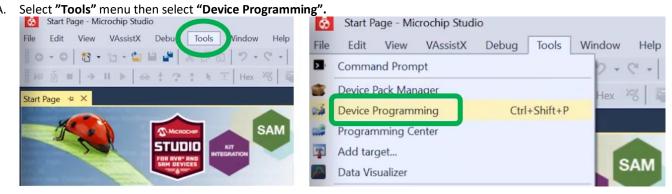


- 4. Connect the programming cable to the AVR port of the programming module.
- 5. Connect the USB cable to the programming module and to a USB port on the laptop or tablet (not shown).



### **FLASH FIRMWARE**

1. Open Microchip Studio.

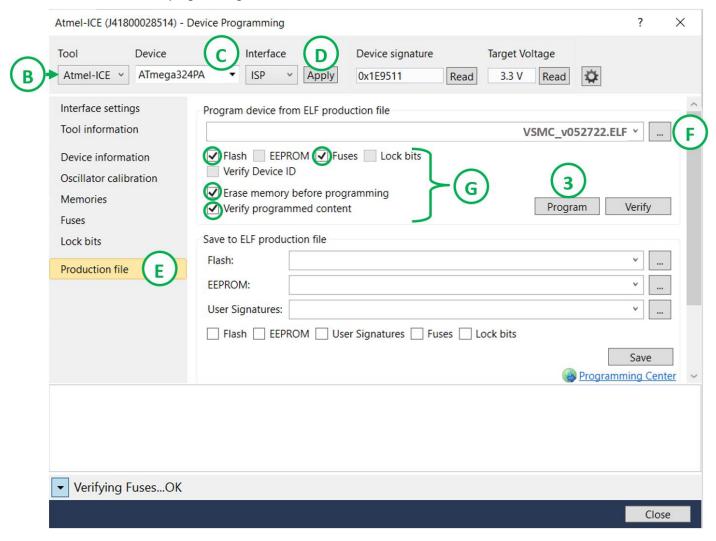






#### FLASH FIRMWARE (Continued)

- B. Select the connected "Atmel-ICE" tool
- C. Set the device to "ATmega324PA"
- D. Select "Apply"
- E. Select "Production File"
- F. Browse to the firmware file and Open.
- G. Check the 4 boxes in the programming device area, as shown:



2. **Turn power on to the VSC9000 controller** by turning truck ignition on and setting parking brake. The two lights on the programming module should be illuminated.

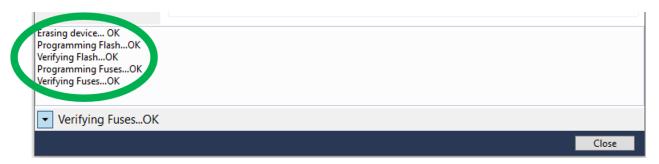


3. Select "Program" to flash the selected firmware to the VSC9000 controller. Programming will only take a few seconds.



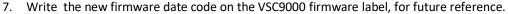


4. When programming is successful, the message below will be displayed on the Microchip Studio screen:



NOTE: If programming was not successful, confirm the following and repeat the "FLASH FIRMWARE" procedure:

- a. The tab on the programming connector is facing toward the inside of the controller.
- b. The VSC9000 controller is powered on before programming.
- c. The two lights on the programming module are illuminated.
- 5. Turn off truck ignition.
- 6. Disconnect the cable from the VSC9000 controller, making sure the adapter remains connected to the cable, and not the VSC9000 firmware flashing port.





8. Reinstall cover on BASE Engineering enclosure and disconnect USB cable from laptop or tablet.

Use the camera on your smart phone or device to scan the following QR codes to access additional instructions and videos.





