

Hawkeye® Quick Start Guide

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Overview

This quick guide provides directions for machine configuration and the first-time setup of a Hawkeye™ system on a Viper® 4. If installing a Hawkeye system on an machine with an existing Viper 4, only perform the steps in the **Initial Hawkeye Configuration** section.

*Note: Since Hawkeye utilizes an ISO control platform, the directions in the **Initial Hawkeye Configuration** should be similar on other computers than Viper 4.*

The steps in this document should only be performed after the Hawkeye system has been installed in accordance with the machine specific Hawkeye installation manual.

At Raven Industries, we strive to make your experience with our products as rewarding as possible. One way to improve this experience is to provide us with feedback on this manual. Your feedback will help shape the future of our product documentation and the overall service we provide. We appreciate the opportunity to see ourselves as our customers see us and are eager to gather ideas on how we have been helping or how we can do better. To serve you best, please send an email with the following information to:

techwriting@ravenind.com

-Hawkeye Start-Up Guide

-Manual No. 016-0171-598 Rev. B

-Any comments or feedback (include chapter or page numbers if applicable).

-Let us know how long have you been using this or other Raven products.

We will not share your email or any information you provide with anyone else. Your feedback is valued and extremely important to us.

Thank you for your time.

Requirements

- Hawkeye Hardware Installed on the Machine
- Viper 4 with ROS 2.1.0 or Newer
- Virtual Terminal and Task Controller Unlocks Installed.

Machine Configuration

If this is the first time using a Viper 4 on this machine:

1. Power on the Viper 4.

2. Select the desired language from the drop-down menu.



3. Read the end user License Agreement.

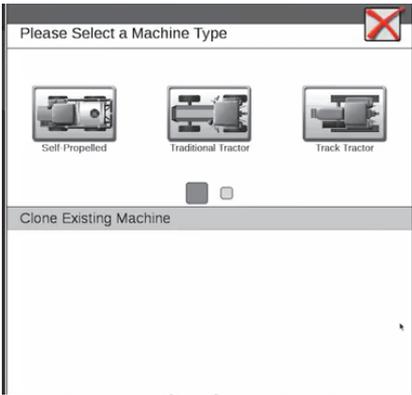


4. Press OK to accept. A New Machine Configuration Detected Window will open.



5. Press OK. The Please Select a Machine Type window will open.

6. Select the appropriate machine type from the machine icons.

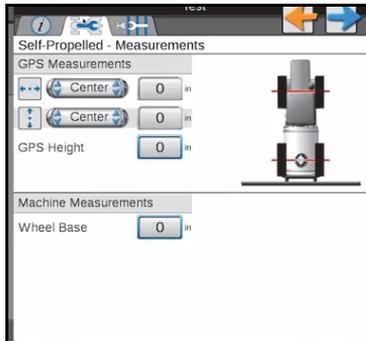


7. Press OK. The Machine Configuration Name window will open. Enter the desired name and press the check mark to accept. The Machine Profile window will open.



*Note: If you pick a machine from the machine database, do not select one of the standard boom configurations. The boom setup will be setup during the **Initial Hawkeye Configuration** process.*

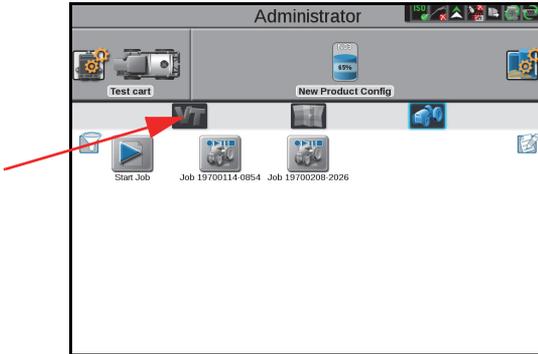
- 8. Select the machine Type, Sub-Type, Manufacturer, and Model.
- 9. Press OK. The Self-Propelled-General Information tab will open.
- 10. Select the Self-Propelled - Measurements (second) tab.



- 11. Enter the location in relation to the machine in addition to the GPS unit height.
- 12. Enter the machine Wheel Base information.

Initial Hawkeye Configuration

1. Press the VT Menu button.



2. Walk through all of the steps in the setup wizard. For this you will need the following information:

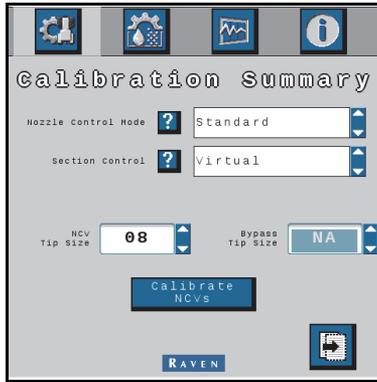
- Number of Nozzle Control Valves
- Applicator Type
- Nozzle Spacing
- Tip Size
- Fence Rows (if needed)
- Number of Sections
- Section Widths
- Boom Offset
- Switch Mapping (if needed)
- Boom Pressure Calibration
- Valve Calibration
- Flow Meter Calibration
- Target Rate
- Target Pressure

Note: If, at any point during the setup wizard you have a question, press the ??? button by the item for more information.

3. Press the tools button.

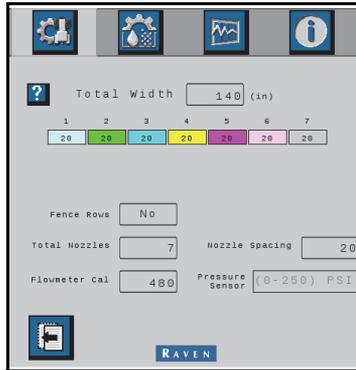


4. Review and adjust the settings on the Calibration Summary page.



5. Press Next Page.

6. Review and information on the second Calibration Summary page. Any adjustments to these settings must be done through the machine settings.



7. Press Previous Page.

8. Press Calibrate NCVs. The NCV calibration process will begin.

Finalizing Machine Configuration

1. Press the Machine icon. The machine Setup window will open.

2. Select the Self-Propelled - Equipment (third) tab.

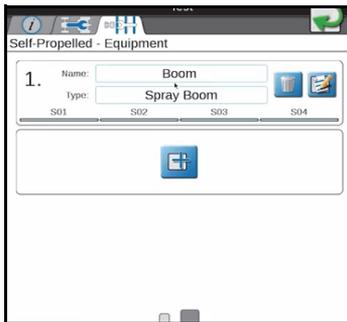


3. Press the plus (+) sign. The boom configuration will generate.

Note: If a boom configuration already exists, delete it before importing a new boom configuration, To do so, press the trash can by the profile.

The boom configuration should automatically populate the boom group without any additional information from the user. If asked to name the boom group and enter the number of sections, stop the configuration process. Exit out of the boom group configuration, cycle power on the machine, and restart the machine.

4. Press the modify button.



5. Verify the boom offset.

6. Verify red boom is no longer visible on the machine icon.

7. Initial set-up and calibration is complete.

Additional Information

For additional information on advanced Hawkeye settings, refer to the Hawkeye Calibration and Operation manual included with the kit.

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Limited Warranty

What Does this Warranty Cover?

This warranty covers all defects in workmanship or materials in your Raven Applied Technology Division product under normal use, maintenance, and service when used for intended purpose.

How Long is the Coverage Period?

Raven Applied Technology Division products are covered by this warranty for 12 months from the date of retail sale. In no case will the Limited Warranty period exceed 24 months from the date the product was issued by Raven Industries Applied Technology Division. This warranty coverage applies only to the original owner and is non-transferable.

How Can I Get Service?

Bring the defective part and proof of purchase to your Raven dealer. If the dealer approves with the warranty claim, the dealer will process the claim and send it to Raven Industries for final approval. The freight cost to Raven Industries will be the customer's responsibility. The Return Materials Authorization (RMA) number must appear on the box and all documentation (including proof of purchase) must be included inside the box to be sent to Raven Industries.

What Will Raven Industries Do?

Upon confirmation of the warranty claim, Raven Industries will (at our discretion) repair or replace the defective product and pay for the standard return freight, regardless of the inbound shipping method. Expedited freight is available at the customer's expense

What is not Covered by this Warranty?

Raven Industries will not assume any expense or liability for repairs made outside our facilities without written consent. Raven Industries is not responsible for damage to any associated equipment or products and will not be liable for loss of profit, labor, or other special damages. The obligation of this warranty is in lieu of all other warranties, expressed or implied, and no person or organization is authorized to assume any liability for Raven Industries.

Damages caused by normal wear and tear, misuse, abuse, neglect, accident, or improper installation and maintenance are not covered by this warranty.

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Extended Warranty

What Does this Warranty Cover?

This warranty covers all defects in workmanship or materials in your Raven Applied Technology Division product under normal use, maintenance, and service when used for intended purpose.

Do I Need to Register My Product to Qualify for the Extended Warranty?

Yes. Products/systems must be registered within 30 days of retail sale to receive coverage under the Extended Warranty. If the component does not have a serial tag, the kit it came in must be registered instead.

Where Can I Register My Product for the Extended Warranty?

To register, go online to www.ravenhelp.com and select Product Registration.

How Long is the Extended Warranty Coverage Period?

Raven Applied Technology products that have been registered online are covered for an additional 12 months beyond the Limited Warranty for a total coverage period of 24 months from the date of retail sale. In no case will the Extended Warranty period exceed 36 months from the date the product was issued by Raven Industries Applied Technology Division. This Extended Warranty coverage applies only to the original owner and is non-transferable.

How Can I Get Service?

Bring the defective part and proof of purchase to your Raven dealer. If the dealer approves with the warranty claim, the dealer will process the claim and send it to Raven Industries for final approval. The freight cost to Raven Industries will be the customer's responsibility. The Return Materials Authorization (RMA) number must appear on the box and all documentation (including proof of purchase) must be included inside the box to be sent to Raven Industries. In addition, the words "Extended Warranty" must appear on the box and all documentation if the failure is between 12 and 24 months from the retail sale.

What Will Raven Industries Do?

Upon confirmation of the product's registration for the Extended Warranty and the claim itself, Raven Industries will (at our discretion) repair or replace the defective product and pay for the standard return freight, regardless of the inbound shipping method. Expedited freight is available at the customer's expense.

What is Not Covered by the Extended Warranty?

Raven Industries will not assume any expense or liability for repairs made outside our facilities without written consent. Raven Industries is not responsible for damage to any associated equipment or products and will not be liable for loss of profit, labor, or other damages. Cables, hoses, software enhancements, and remanufactured items are not covered by this Extended Warranty. The obligation of this warranty is in lieu of all other warranties, expressed or implied, and no person or organization is authorized to assume any liability for Raven Industries.

Damages caused by normal wear and tear, misuse, abuse, neglect, accident, or improper installation and maintenance are not covered by this warranty.