Overview

This document contains instructions for upgrading an existing Raven Viper Pro product control system to the AutoFarm FarmPRO system and installing the FarmPRO Power Adapter Kit (P/N 117-0171-195). The Power Adapter Kit allows a FarmPRO system to integrate with existing product control hardware using Raven cables already installed on the machine.

The following procedures may be necessary when upgrading an existing Viper Pro product control system to a FarmPRO:

1. Check existing Raven Viper Pro console for FarmPRO compatibility.
2. Verify existing product control system functionality.
3. Install the FarmPRO system components (Roof Array, Interface Box, etc.)

Power Adapter Kit Contents

The FarmPRO Power Adapter Kit (P/N 117-0171-195) contains cables necessary to connect power to the FarmPRO steering system components.

The Power Adapter Kit includes the following cables:

- 2-Pin Deutsch Extension Cable, 10' [P/N 117-0171-810]
- Switched Power Adapter Cable [P/N 117-0171-813]
- FarmPRO Power Adapter Cable [P/N 117-0171-830]

Depending upon the Raven cabling currently installed on your machine, some of these cables may not be required to complete the FarmPRO upgrade. Be sure to follow the instructions within this document to ensure proper installation of the Power Adapter Kit.

Preparation

Check Viper Pro Console Compatibility

Use the following procedure to ensure your Viper Pro system is ready for the FarmPRO upgrade.

1. Press the Power button on the Viper Pro console.
2. Approximately 30 seconds after the console is switched on, a screen with the Viper Pro logo will be displayed.
3. Check in the lower right corner of the screen for the Operating System ID number.
   - If an OSID version is displayed on this screen, your Viper Pro is ready for the FarmPRO upgrade. Download the latest Viper Pro software update from the Raven web site www.ravenprecision.com. Apply the software upgrade before proceeding with the FarmPRO system upgrade.
   - If no OSID is displayed on this screen, the console will require a hardware update. Return your Viper Pro console to your local Raven dealer for assistance.

Verify Existing Hardware Operation

Before adding or removing any components of the FarmPRO or existing Viper Pro systems, test the Viper Pro product control system to ensure that all existing product control hardware is operating correctly. Repair or replace any faulty hardware or cabling before upgrading to the FarmPRO system.
Installation

Before installing the FarmPRO Power Adapter Kit, be sure that the FarmPRO Roof Array and Interface Box have been installed according to the installation instructions provided with those components.

Power Adapter Kit Installation

The following instructions will guide you through installation of the cables included with the FarmPRO Power Adapter Kit (P/N 117-0171-195). For detailed installation instructions for other FarmPRO components, refer to the AutoFarm FarmPRO Users Manual.

Depending upon the Raven cabling currently installed on your machine, some cables included in the Power Adapter Kit may not be required to complete the FarmPRO upgrade. Read the following instructions carefully to help ensure proper installation of the Power Adapter Cables.

1. Locate the large round connector labeled Vehicle on the FarmPRO Power Adapter Cable (P/N 115-0171-830). Insert this connector to the vehicle's power outlet within the cab.
2. Connect the receptacle labeled AutoFarm Harness to the 3-Pin connector on the AutoFarm Main Harness (AutoFarm P/N 201-0153-01).
3. Locate the 2-Pin Deutsch plug labeled Auxiliary Power Output on the existing Viper Pro Interface Cable. Insert the plug into the receptacle labeled To Viper/Envizio Pro on the Power Adapter Cable (P/N 115-0171-830).
   - If the 2-Pin plug will not reach the Auxiliary Power Output plug, use the supplied 2-Pin Deutsch Extension Cable (P/N 115-0171-810) to make the connection.
   - If the existing Viper Pro Interface Cable does not include a 2-Pin Deutsch plug, install the Switched Power Adapter Cable (P/N 115-0171-813) as described in the following section. Connect the 2-Pin Deutsch plug on the Switched Power Adapter Cable to the receptacle labeled To Viper/Envizio Pro on the FarmPRO Power Adapter Cable (P/N 115-0171-830) using the supplied Extension Cable if necessary.

Switched Power Adapter Cable to Relay Installation

Some Viper Pro Interface Cables may not offer a 2-Pin Auxiliary Power Output plug. If your existing cable does not have a 2-Pin connector labeled Auxiliary Power Output, the Switched Power Adapter Cable (P/N 115-0171-813) will be required to complete the FarmPRO upgrade. The following instructions will guide you through installation of the Switched Power Adapter Cable.

1. Locate the relay installed on the existing Viper Pro Interface Cable. The relay is generally attached to the Interface Cable near the console connections and is a black cube with four wires (red, white, orange, and orange with white stripe) connected to it.
   - If the existing cable does not have a relay, refer to the back page of this document for instructions.
2. Disconnect the orange wire from the relay terminal labeled 86.
3. Insert the male spade connector of the Switched Power Adapter Cable (P/N 115-0171-813) to the wire disconnected in step 2.
4. Re-connect the female spade connector of the Switched Power Adapter Cable to the pin on the relay.
5. Insert the 2-Pin Deutsch plug into the receptacle labeled To Viper/Envizio Pro on the Power Adapter Cable (P/N 115-0171-830).
   - If the 2-Pin plug will not reach the To Viper/Envizio Pro receptacle, use the supplied 2-Pin Deutsch Extension Cable (P/N 115-0171-810) to make the connection.

Power Adapter System Example

The following cable diagram is an example of a possible scenario in which the FarmPRO Power Adapter Kit (P/N 117-0171-195) might be used. Be sure to review the instructions within this document to help ensure proper installation of the Power Adapter Kit and cables.