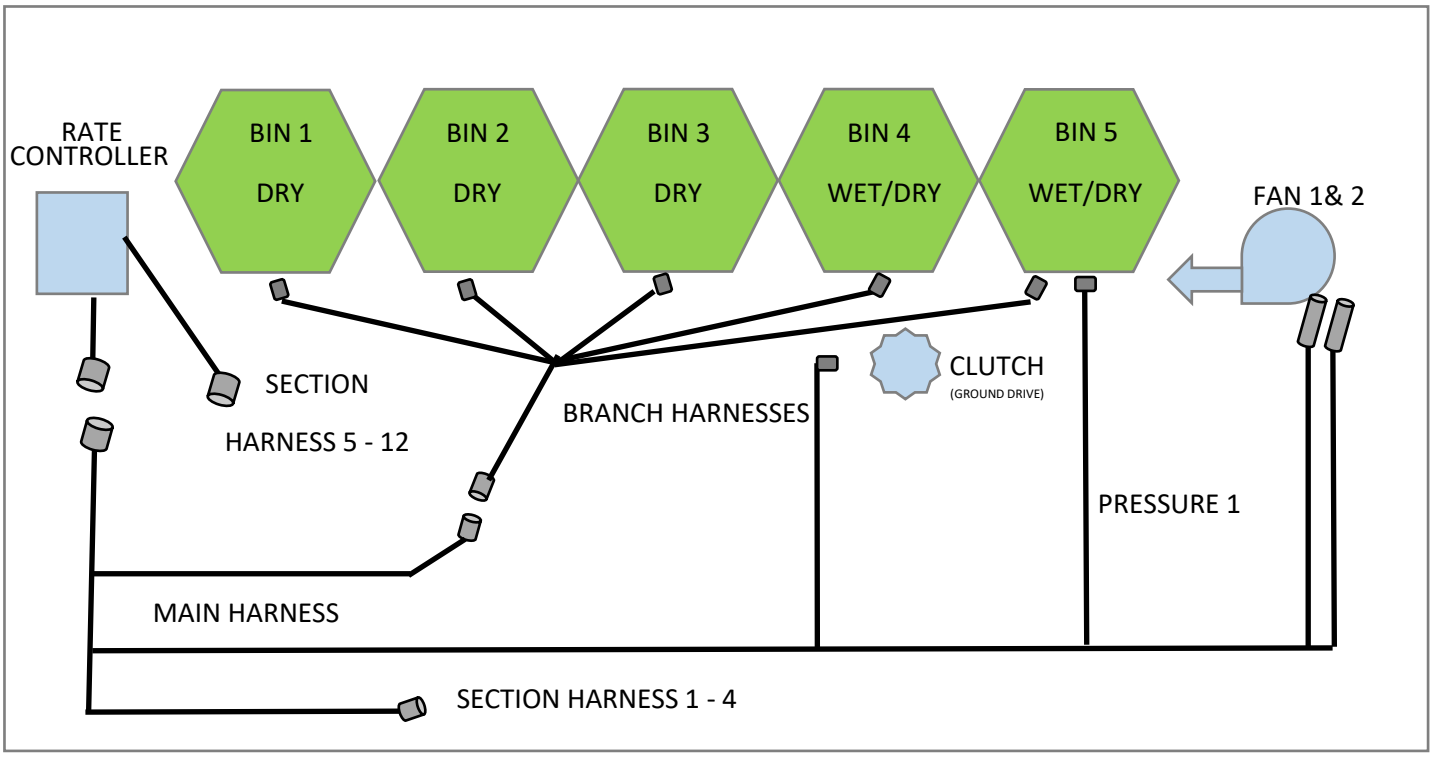
HARNESS KIT SUMMARY
RC 2000 TO GENERIC GROUND DRIVE AIR CART & HYDRAULIC DRIVE AIR CART

COMPONENTS

- Main Harness
- Branch Harness
- Sensors and Connectors as optional extras

BASIC LAYOUT



MAIN HARNESS
The Main Harness connects to the Rate Controller.
There is a 5.5 metre length with connector for 2 fans, clutch and a bin pressure sensor
There is a 1 metre length with 5 12pin Deutsch connectors which couple to the branch harnesses.
There is a 1 metre length with 1 8pin Deutsch connector for sections 1-4

MAIN HARNESS (SECONDARY PLUG)
On the secondary rate controller plug there is a 12pin deutsch for sections 5-12 as well as a 3 pin deutsch which connects to the main harness for the pressure sensors

BRANCH HARNESSES
There is one branch harness per bin. Each branch harness is 6m long
Each branch has a plug for Rate Sensor, Bin Level sensor, control +/-, on/off liquid, secondary shaft speed sensor and liquid pressure. (on/off liquid and liquid pressure will only work on bins 4 and 5)

CONNECTION

These kits are designed to be as generic as possible. Many air cart sensors/clutches/components do not conform to a standard pinout. Please check the pinouts during the installation, to ensure the components are wired correctly. The pinout descriptions are listed in this guide.

ERRATIC PRODUCT RATES

Meter sensors monitor the speed of the product delivery. These sensors must provide a high number of pulses per second. For machines with slow turning shafts (low rates like Canola/Clovers/Grass Seeds etc), they must be equipped with high resolution encoders, or high pulse tone wheels (or moved to high speed shaft).

SENSORS

The sensors are inductive proximity type, they will detect metal (they do not detect magnets). There should be approximately 2mm gap between the sensor and the tone wheel teeth. There is a diagnostic led in the rear of the sensor, which will light up when it detects metal (and sends a pulse signal).

FAN SPEED SENSOR

If the fan speed readout dies when the fan speeds up, it means the tag/bolt is flicking past the sensor too quickly. Use a larger tag for the sensor to read, or move the tag closer to the centre of the fan shaft.

LOW SHAFT SPEED SENSORS

These rate controllers can provide a low shaft speed sensor. Using the secondary rate sensor. This may be used in the case where the primary shaft speed needs to go on a high-speed shaft but will keep turning if a sheer bolt is broken in the metering system.

CORROSION

It's recommended to regularly apply a corrosion protectant to the connectors (electrical silicone spray / water dispersant / dielectric grease etc). Contact cleaner will clean the pins, but it will not prevent corrosion. Filling the rear of the connector with silicone sealant can trap moisture and cause premature failure.

CLUTCH CONNECTOR

PIN 1: 12v switched
PIN 2: Ground

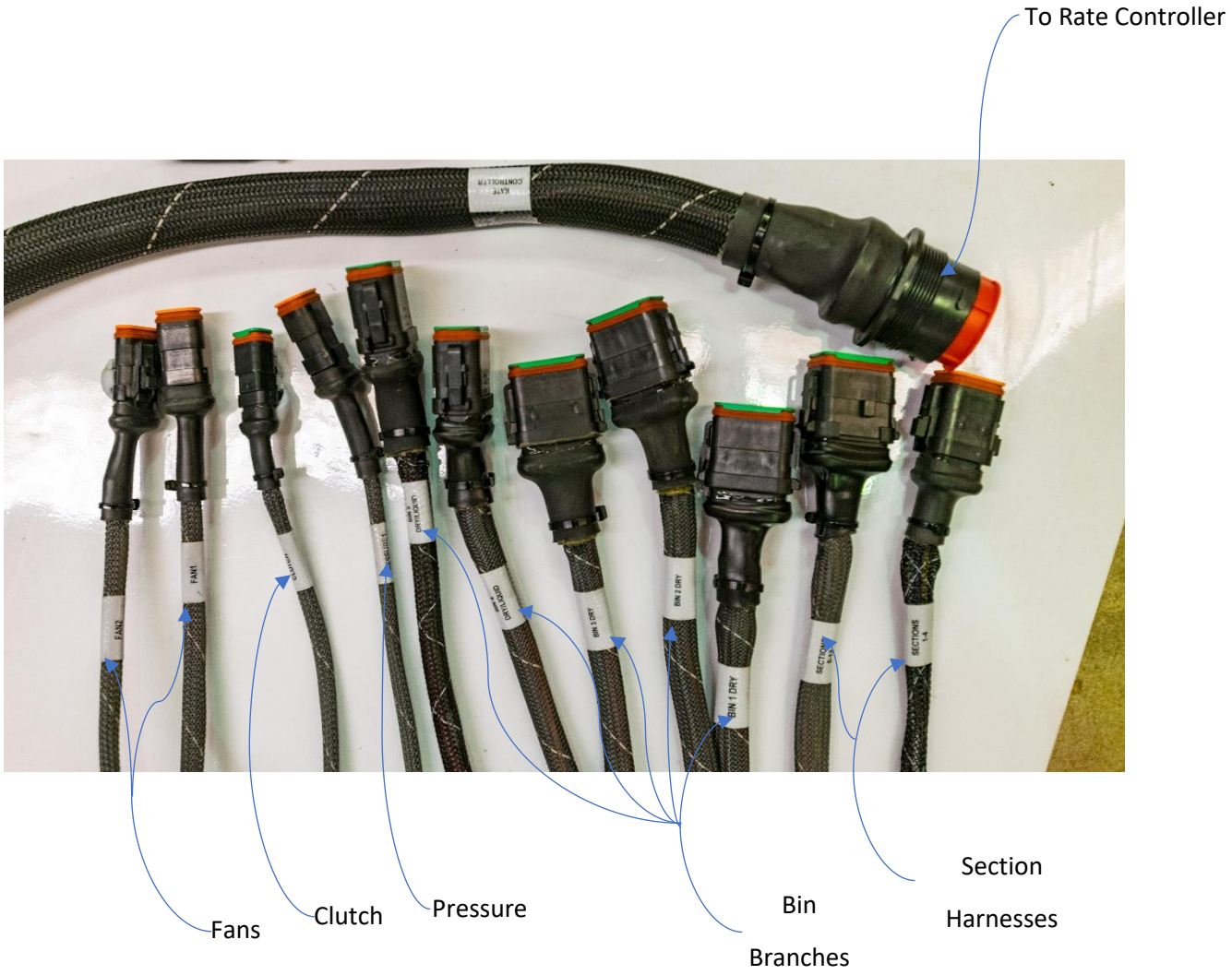
ACTUATOR CONNECTORS

PIN 1: Increase/Decrease
PIN 2: Decrease/Increase

SENSOR CONNECTORS

PIN A: Ground
PIN B: 12v sensor power
PIN C: Signal to Controller

MAIN HARNESS OVERVIEW



BRANCH HARNESS OVERVIEW