

WEEDSEEKER OPERATION GUIDE

GENERAL INFORMATION

- LED lights indicate when the sensor is firing (spraying).
- Jockey wheel pressure is 20 psi
- Operating height is 65 to 75 cm above the ground, at 70cm it gives the sensor a 60cm field of view, this is the same width as the nozzle sprays.
- Don't leave folded up, 1 day in the sun will damage the sensors
- Maximum operating speed is 16 to 17 KPH
- Do not exceed 3 bar operating pressure on the Weedseeker spray line (the goyen solenoids are direct acting plunger type)
- Every 3 to 4 hours check sensors & solenoids by passing a green leaf under the sensors
- Changing light conditions will require regular recalibration.
- When working in variable soil types, calibrate over the lightest coloured soil.
- Voltage is most important, any change in voltage will effect the sensitivity of the sensors
- The recommended sensitivity setting is 4 to 5 in stubble conditions, a lower setting will cause misfires.

WIRING INFORMATION

100 amp blade fuse	Located at the tractor battery on 2 pin grey lead for trickle charge
100 amp mega fuse	From battery to isolation switch
40 amp midi fuse	To power goyen solenoids, 1 for each section 1,2 & 3.
15 amp blade fuse	To power line controllers 1,2 & 3.

The largest wiring harness is 1 long continuous cable to give power to the sensors, when they see green the valve driver acts as a switch and sends power to the goyen solenoids & LED lights .

The main harness is wired like Christmas tree lights.

Line controllers:

- The left hand 2 pin plug is to power up the line controller, direct from the weedseeker battery.
- The right hand side 21 pin deutsch plug is from the in cab control box.
- The middle 2 plugs are the daisy cables linking each sensor.

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If a sensor fails, complete the following checks.

- 1. Restart by shutting down the power switch in the console (each sensor has a computer circuit board, these will get glitches in them like any computer). If this fails.
- 2. Shut down all the power to the Weedseeker by turning off the master switch at the battery for 5 minutes, then restart.
- 3. **VOLTAGE** Check you have at least 12.2 volts in the power cable at the line controller (12.1 volts or below will not work).
- 4. Check fuses in the battery box.
- 5. Check the voltage at the battery.
- 6. Check the voltage in the main harness at each end
- 7. Check the voltage in the main harness at each end, with the console in the flush position. (minimum is 11 volts)

If a bank of sensors stop working, we need to find out which sensor or valve driver or daisy cable has failed, or if the line controller itself has failed.

First disconnect the daisy cable from one side of the line controller to see if the sensors on the other side of the line controller turn on. If they don't turn on replace this cable and remove the daisy cable from the opposite side of the line controller to see if the sensors on the other side of the line controller turn on.

When you have found which side won't turn on, disconnect the daisy cable half way along from the line controller & see if the sensors prior to this one turn on.

If they don't turn on replace the daisy cable and remove the next daisy cable closer to the line controller, keep testing toward the line controller until you find the faulty sensor.

If the sensors turn on, this sensor is the fault, or the fault is further away from the line controller, keep testing toward the end of the section, away from the line controller until you find the faulty sensor.

When you find the faulty sensor we need to find out if it is the valve driver, the daisy cable or the sensor itself.

- 1. Swap the Daisy cable with a new one or one you know does work, to see if this fixes the problem.
- 2. Swap the valve driver with one you know does work, to see if the problem moves.
- 3. Swap the sensor with one you know works, to see if the problem moves.
- 4. If the line controller fails, swap it with one you know does work, to see if the problem moves.

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