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Troubleshooting Diptronic tankers:

- Before analysing each pot, check there is no faulty wiring - no short circuits between the positive, negative & shield wires.
- Check the delay line gold connector is attached to the gold connector of the stick. There should be no kinks in the delay line.
- Ensure the lid is not hitting the terminal connector and damaging or causing a short circuit. These short circuits can cause COMMUNICATION ERROR messages.
- The shield wire for each communication should run from each pot to at least the junction box near the CPU.
- There should also be a DCC100 power conditioner connected to the BIS via a fuse in the cab. This may need to be ordered from Liquip.

1. COMMUNICATION ERROR message:

Each radar pot needs to be connected individually to the CPU to help diagnose the problem.

Disconnect the blue positive wires of pots 2 & 3. Note that if a pot has more than 1 blue positive wire going into the terminal strip on the pot you need to temporarily ensure they are touching so the single connected pot can still communicate with the CPU.

- With pot 1 now only connected:
 1. Check the voltage across the pos & neg terminal on the pot. Should be >19v and steady.
 2. If the compartment is empty the CPU should show MIN-. There should be no COMMUNICATION ERROR messages.
 3. Go into the DIAGNOSTICS section in the CPU & identify the sensor, should be a 1 for temperature sensor and radar (you will probably need to contact me on how to do this).
 4. In DIAGNOSTICS check the mm, Fiducials & Ticks (you will probably need to contact me on how to do this). The mm & Ticks should both be very stable. The Fiducials should be within approx 10 ticks.
 5. Record the WINDOW & SCOFF setting of each pot in the DIGITAL SETTINGS.
 6. Disconnect the positive of pot 1 & reconnect the positive of pot 2.



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- With pot 2 now only connected:

1. Check the voltage across the pos & neg terminal on the pot. Should be >19v and steady.
2. If the compartment is empty the CPU should show MIN-. There should be no COMMUNICATION ERROR messages.
3. Go into the DIAGNOSTICS section in the CPU & identify the sensor, should be a 2 for temperature sensor and radar.
4. In DIAGNOSTICS check the mm, Fiducials & Ticks. The mm & Ticks should both be very stable. The Fiducials should be within approx 10 ticks.
5. Record the WINDOW & SCOFF setting of each pot in the DIGITAL SETTINGS.
6. Disconnect the positive of pot 2 & reconnect the positive of pot 3.

- With pot 3 now only connected:

1. Check the voltage across the pos & neg terminal on the pot. Should be >19v and steady.
2. If the compartment is empty the CPU should show MIN-. There should be no COMMUNICATION ERROR messages.
3. Go into the DIAGNOSTICS section in the CPU & identify the sensor, should be a 3 for temperature sensor and radar.
4. In DIAGNOSTICS check the mm, Fiducials & Ticks. The mm & Ticks should both be very stable. The Fiducials should be within approx 10 ticks.
5. Record the WINDOW & SCOFF setting of each pot in the DIGITAL SETTINGS.



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2. Fluctuating pot:

If the indicated level by the CPU is fluctuating (greater than 10 litres) or a compartment displays MAX+ when there is no product present:

1. Remove the sensor lid if not already.
2. Make sure there are no kinks in the delay line. Straighten as necessary using one spanner to hold the delay line connector in the same direction as the delay line and the other to tighten/loosen the connector.
3. If this does not help, remove the gold plated connector in the stick:
 - Disconnect the delay line from the stick.
 - Unscrew the plastic screw in the side of the stick.
 - Use an allen key to loosen (1 turn) the grubscrew in the stick.
 - Unscrew the cap.
 - Check for corrosion on the shaft of the gold connector. If there is corrosion or damage, then replace.
 - Apply a small amount of silver paste through the hole in the top of the rod in the stick.
 - Clean and dry the compression and sealing bushes.
 - Reinsert the connector & screw the cap into place making sure both bushes are in place in the correct orientation. Refer P7388 for correct cap fitment.
 - Retighten the grubscrew firmly.
 - Replace the plastic screw.
 - Reattach the delay line making sure there are no kinks.
4. Check the Fiducials and Ticks are now stable after replacing the connector. The Fiducials & Ticks should be stable. If the compartment is empty the ticks should be considerably higher than the Fiducials. The CPU should give a MIN- message if empty. Neither ticks nor Fiducials should be 0.