

SEAKEEPER CAN CORRECTION - 90504

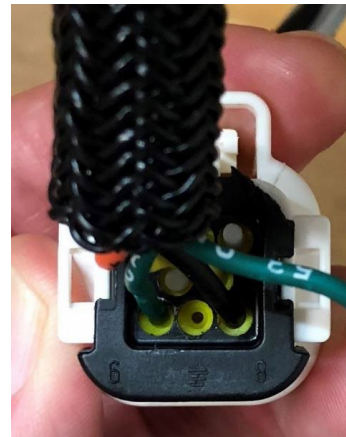
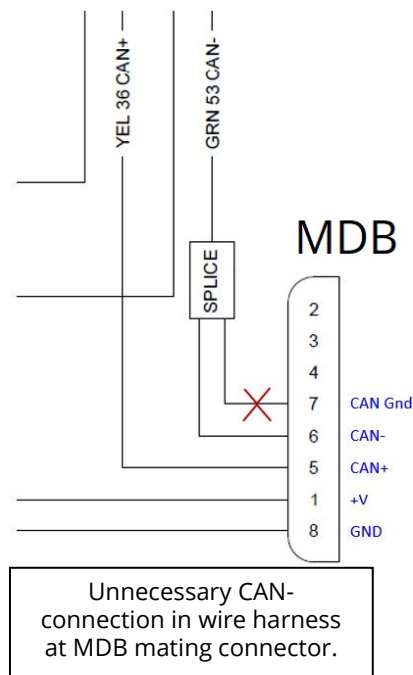
PRODUCT SEAKEEPER 2 & 3

PURPOSE

To correct a CANbus CAN LOW connection problem in Seakeeper 2 and Seakeeper 3 stabilizer wire harnesses.

BACKGROUND

The original wire harnesses for both the Seakeeper 2 and the Seakeeper 3 have a parallel connection of the CAN LOW (CAN-) line at the Sevcon DC-DC/Inverter control connector to both the CAN- pin and the CAN GND pin. This does not connect the CANbus terminating resistor. Instead, it prevents operation of the CAN- signal which is half of the CANbus transmission and reception. The incorrect CAN1 connection is shown with a red X in the figure below.



Rear view of MDB connector.
Position 6 at lower left and position 8 at lower right, green wire removed from position 7.
This procedure will cut the position 7 wire.

REFERENCES (Available upon request)

- 20365 – Seakeeper 2 Wire Harness Assembly Drawing
- 20273 – Seakeeper 3 Wire Harness Assembly Drawing

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TOOLS/PARS REQUIRED

- Wire cutter, small
- Long-nose pliers, small
- Screwdriver, flat blade, small
- Permanent marker, fine point
- Heat-shrink tubing, 1/8" dia. X 1" length (dual wall, adhesive filled, heat shrink preferred)

PRECAUTIONS

1. **PERSONNEL INJURY MAY RESULT** if Seakeeper is NOT locked and at zero RPM before removing covers or accessing unit for service.
2. **PERSONNEL INJURY MAY RESULT** if attempting to perform maintenance on Seakeeper without removing flywheel motor power and applying lockouts due to remote start capabilities.
3. **PERSONNEL SHOCK HAZARD EXISTS** in Motor Drive when flywheel rotating OR at zero speed for minimum of ten minutes.
4. **PERSONNEL CRUSHING HAZARD EXISTS** when working near operating Seakeeper when in UNLOCKED/SEA mode.

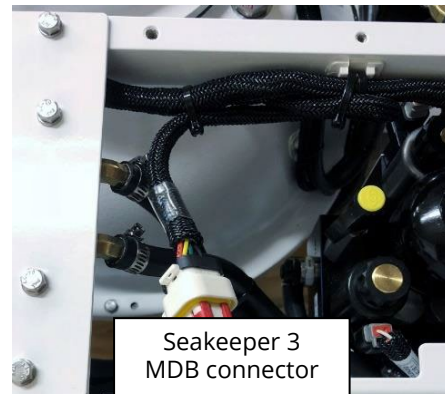
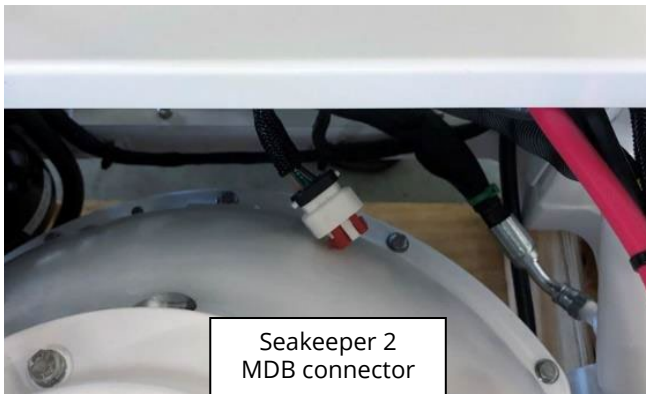
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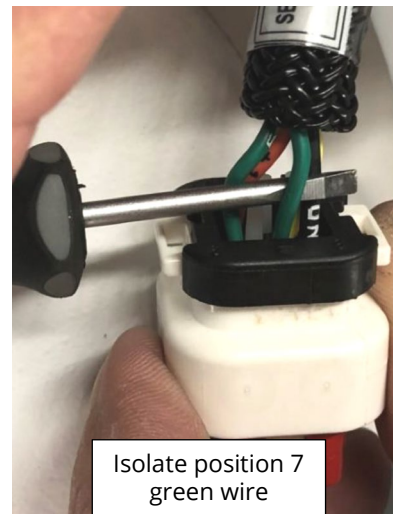
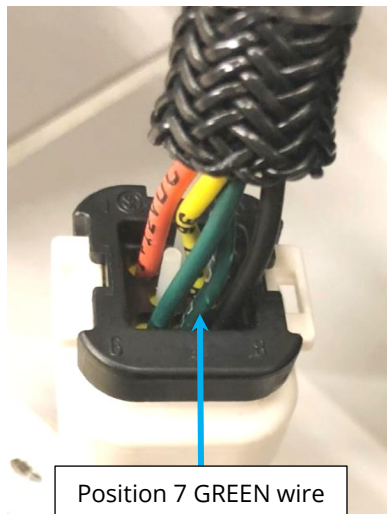
PRODUCT SEAKEEPER 2 & 3

PROCEDURE

1. **ENSURE** Seakeeper flywheel at zero RPM at display/MFD app.
2. **OPEN/TURN OFF** all DC power breaker to Seakeeper.
3. **DISCONNECT** MDB wire harness connector.



4. **LOCATE AND SEPARATE** green wire at position 7 from other wires with small flat-blade screwdriver.



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CAUTION:

CUTTING OTHER WIRES WILL AFFECT OPERABILITY OF SEAKEEPER.

5. **CUT** position 7 green wire.



6. **PLACE** ½" pieces of 1/8" heat shrink over two cut wire ends with tubing extending beyond wire ends (to be pinched together later).

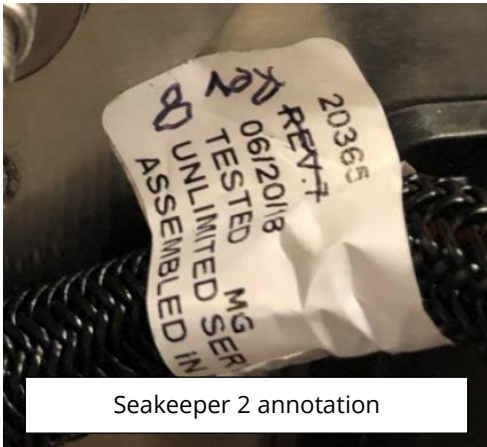


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PRODUCT SEAKEEPER 2 & 3

- 7. **APPLY** heat to tubing **AND PINCH** ends of tubing with long-nose pliers to create seal.
- 8. **TUCK** sealed wire ends back into wire bundle.
- 9. **RECONNECT** MDB connector.
- 10. **LOCATE** Seakeeper GCM inside front cover **AND DISCONNECT** GCM connector from GCM.
- 11. On tag of wire bundle to GCM connector, **ANNOTATE** new revision number for harness with fine point permanent marker (**Rev 8** for Seakeeper 2 or **Rev 5** for Seakeeper 3).



Seakeeper 2 annotation



Seakeeper 3 annotation

- 12. **RECONNECT** GCM connector securely on GCM.
- 13. **REINSTALL** covers, if removed.
- 14. **RESTORE** all power to Seakeeper, if desired.

***** **END** *****

Revision	Description	Approval	Date
1	Initial Release	S Goss	04OCT2018
2	Updated logo/letterhead. Added precautions.	A Patricio	04JAN2023