

ODME SEIL – SERES S 3000

TESTING/ACROSS RUNNING/BACK FLUSHING AND CALIBRATION PROCEDURES

(AVOID POLLUTION, BE SURE IT IS SAFE TO OPEN OVERBOARD DISCHARGE VALVE)

System in STANDBY mode then Press: INPUT to set below parameters on Main Unit:

Key 0 – Kind of Operation (Overboard / Inboard Transfer)

Key 1 – Date and Time

Key 2 – Sampling Point and Flow Rate Range (Flow meter Channel 1 or 2)

Key 3 – PPM (Auto or Manual input)

Key 4 – Speed and GPS (Auto or Manual input)

Key 5 – Flow Rate (Auto or Manual input)

Key 6 – Total Oil Limit (1 / 30000 from cargo quantity)

Key 7 – Reset Total Oil (Reset oil previously discharged)

Key 8 – Discharge Condition (Proceeding or Clean ballast)

Key 9 – Type of Cargo (Light diesel, heavy oils, light crude oil, light distillate oil)

PRESS A :START ACROSS RUNNING

PRESS SAVE TO STOP

PRESS B :START BACK FLASHING

PRESS SAVE TO STOP

PRESS C :START CALIBRATION

AUTOMATIC STOP

Notes:

- 1) Across Running, Back Flushing and Calibration has to be done on Stand By Mode with PPM set to AUTO, see appropriate diagrams.
- 2) Do not let the sampling pump run dry. Open Fresh Water supply prior Calculation testing and Across Run/Back Flush/Calibration.
- 3) Open sampling points when running Calibration and Back Flushing.
- 4) Check system visually for leaks during testing.
- 5) If calibration failure alarm appeared, check Measuring lamp, it can be burned.
- 6) Calculation Tests to be done on Monitoring Mode, see step by step instructions below.
- 7) Verify if Discharge & Circulation valves are opening/closing in correct sequence during testing.
- 8) Check visually if printed data is well visible and paper enough to complete operation.

ODME Calculation formula for processing & testing

1. $\frac{\text{Quantity of oil in ppm} \times \text{m}^3/\text{h}}{\text{Speed of vessel} \times 1000} = \text{liters/nautical mile}$
2. $\frac{\text{Quantity of oil in ppm} \times \text{flow rate in m}^3/\text{h}}{1000} = \text{liters/nautical mile}$
3. Liters per hour x time in hours = total quantity in liters (total oil)

TEST No1 - 30 L/NM ALARM VERIFICATION

- | | |
|-------------------------------------|----------------------------------|
| 1. Key 3 | -290 ppm |
| 2. Key 4 | -10 knots |
| 3. Key 5 | -1000 m ³ /hr |
| 4. Key 8 | -Ship proceeding |
| 5. Key 6 | -10 liters |
| 6. Key 7 | -0000 liters |
| 7. Key SAVE | -end input data |
| <u>8. Switch to monitoring mode</u> | |
| 9. Discharge permitted | -discharge valve open, 29 L/NM |
| 10. Key 3 | -310 ppm |
| 11. Discharge prohibited | -discharge valve closed, 31 L/NM |
| 12. Audible alarm / on screen | -L/NM Limit Exceeded |
| 13. END TEST | -Reset to normal parameter |

TEST No2 - 15 P.P.M ALARM VERIFICATION

- | | |
|-------------------------------------|-----------------------------|
| 1. Key 3 | - 14 ppm |
| 2. Key 8 | - Clean ballast |
| 3. Key SAVE | - end input data |
| <u>4. Switch to monitoring mode</u> | |
| 5. Discharge permitted | -discharge valve, open |
| 6. Key 3 | - 16 ppm |
| 7. Discharge prohibited | - discharge valve closed |
| 8. Audible alarm / on screen | - PPM Range Exceeded |
| 9. END TEST | - Reset to normal parameter |

TEST No3. TOTAL OIL LIMIT VERIFICATION

- | | |
|-------------------------------------|----------------------------|
| 1. Key 3 | -290 ppm |
| 2. Key 4 | -10 knots |
| 3. Key 5 | -1000 m ³ /hr |
| 4. Key 8 | -proceeding |
| 5. Key 6 | -10 liters |
| 6. Key 7 | -0000 liters |
| 7. Key SAVE | -end input data |
| <u>8. Switch to monitoring mode</u> | -wait for a minute |
| 9. Discharge prohibited | -discharge valve, closed |
| 10. Audible alarm / on screen | -Total Oil Limit Exceeded |
| 11. END TEST | -Reset to normal parameter |