# M154B Series

# Yanmar T4F Control Panel

# For TNV Series Engines

# **Description**

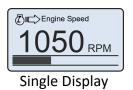
The M154B10-Y20 Series Control Panels are specifically designed for operation with Yanmar T4i, T4F and Stage V Engines equipped with DPF or DPF SCR with DEF. With a family of configurations ranging from a panel mount with and without an enclosure and NEMA 4X enclosure, virtually any installation can be met. If a panel or enclosure is not required the M154B series offers a kit containing all necessary parts that can be mounted in a customer specific panel design.

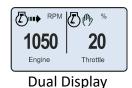
With a full featured J1939 interface the M154B series panels provide a complete interface for virtually any SAE J1939 T4F data. The M154B provides the most features in its price range.



### **DISPLAY**

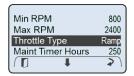
The 2.3" Graphical high resolution LCD Display provides an easy to read Viewing area for either a single or dual display of virtually any data



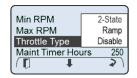


# Throttle Control

A single momentary rocker switch adjusts the engine speed via CANBus communications to the engine. The throttle functionality is user selected, allowing the rocker switch to provide a smooth ramp function or a fixed rpm 2-state setting.









(Actual Size)

### **STANDARD**

- 2.3" Monochrome Graphical LCD Display
- Adjustable backlighting
- 3 buttons provide easy navigation through software screens
- Tier 4, 4i, 4F and Stage V Ready
- Engine Maintenance Timer
- User configurable engine speed limits
- Visual alarms
- SAE J1939 configurable throttle control
- SAE J1939 standard Diagnostics
- Inc/Dec or 2-State throttle switch

#### **OPTIONAL M300DP MODULE**

- Auto Start
- Configurable input for oil pressure (Analog or CANBus)
- Configurable input for fuel level (Analog or CANBUS)
- 2 configurable discrete inputs (start protect, Engine Stop, Engine speed)
- External engine shutdown

#### **MECHANICAL**

- Sealed Keyswitch, 4 Position
- Throttle Switch
- CE Approved Design
- Sealed 21 pin interface connector



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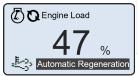
### **DPF REGENERATION CONTROL**

The M154B supports all four Yanmar T4F engines DPF Regeneration States; Auto or Reset, Manual, Stationary and Recovery. Under normal operating conditions, Reset Regens are performed automatically. For Manual, Stationary and Recovery regens, the M154B Series panels provide user friendly on screen instructions.

Standard icons inform the operator of the regeneration status.



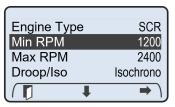




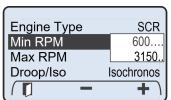
# 2" (51mm) Diameter **Mounting Hole** Round Punch 3.13" (79.5mm) 2.73 (69.4mm) 1.365" (34.7mm)

# CONFIGURABLE ENGINE SPEED LIMITS

The M154B Series Control provides the user with two configurable engine speed settings. These speed settings can be set to any engine RPM within the min and max RPM range of the engine. One speed setting for minimum engine speed (i.e. Min RPM) and the other speed setting for maximum engine speed (i.e. engine Max RPM).







### **Faults**

The M154B displays diagnostic messages from the ECU per the J1939 format. All DM1, DM2, DM12 and DM23 diagnostic messages from the Engine ECU are reported. Engine specific diagnostic messages are available for specified engines. Faults are indicated with either a Red or Amber blinking indicator (determined by severity).







# **DB VIEWER**

The Db Viewer feature provides a listing of all data supported by the M154B System and the operator may select which values to be viewed.

### **MAINTENANCE TIMER**

User configurable maintenance timer. When programmed system provides warning message when maintenance timer has expires.

### **M154B SPECIFICATIONS**

General:	
Operating Voltage	10VDC to 32 VDC
Operating Temperature	30C to +80C
Storage Temperature	30C to +85C
Degree of Protection	IP66 (front) and IP67 all around

#### THROTTLE CONFIGURATION:

Ramp - operate within engine range Two State - Set two operating speeds

### **OPTIONAL EXPANSION MODULE:**

The M300DP Dual Programmable I/O control expands the M154B capabilities with 2 additional analog inputs for Oil Pressure, Fuel or Water Level and 2 additional discrete inputs for remotely controlling engine speed.

Part Number	Description
M154B00-Y2017A	CP, Eng Ctrl, J1939, Kit of Parts
M154B01-Y2017A	CP, Eng Ctrl, J1939, 8 x 6 NEMA Panel
M154B02-Y2017A	CP, Eng Ctrl, J1939, 8x7 Black Panel
M154B10-Y2017A	CP, Eng Ctrl, J1939, 8x7 Blk Enclosure
M154B20-Y2017A	CP, Eng Ctrl, J1939, NEMA 4X Enclosure

# **ENCLOSURE**

All M154B Series Control Panels are made from .074" thick CRS with welded seams. All units are powder coated to provide durability under extreme conditions.



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