PRODUCT NOTICE

OBD2 Reader Compatibility

Last updated 11/01/2023

Models Affected

- **Toyota 150 Prado**
- **Toyota 200 series (Facelift 2015+ only)**
- **Toyota Hilux**
- **Mitsubishi Triton MN (4 speed only)**

Full compatibility – no issues

- **Toyota 200 series 2007-2015**
- **Mitsubishi Challenger 2009-2015**
- **Mitsubishi Pajero 2007+**
- **Mitsubishi Triton MQ 2016-2018**
- **Mitsubishi Triton MN (5 speed) 2009-2015**

The advanced features of MM4X4 lockup kits rely on the digital interface into the vehicle via the OBD2 connection.

One of our design goals is to ensure you are still able to use 3rd party OBD2 devices in conjunction the lockup kit. Both the lockup-kit and the OBD2 device must share the digital interface, a purpose for which the OBD2 protocol was not designed.

Our kits normally achieve this by avoiding the OBD2 protocol and relying on the CANBUS broadcasted messages for data from the ECUs. In some models our kits use complex multiplexing of OBD2 data request to share the OBD2 interface.

The affected vehicles above, however, do not broadcast all the parameters required by the lockup kit, thus some OBD2 messages must be used to obtain vehicle status.

This can cause a conflict with some ELM327 / smartphone apps.

In an affected model, **switching the lockup-kit OFF using the LED/switch will cease all OBD2 communication activity but the kit**, leaving the digital interface exclusively for the use of the OBD2 device.

For compatible devices you should increase the refresh rate – instructions are in this document

Confirmed Compatible Devices*

- UltraGauge MX (This is our recommended device)
- UltraGauge Blue
- ScanGauge2 (you must switch OFF **lockup-mate® PLUS+** before using for diagnostics)
- ScanGauge3 (you must switch OFF **lockup-mate® PLUS+** before using for diagnostics)
- ELM327 adapter (Bluetooth 4.0 and WiFi)

Compatible Apps for use with ELM327 devices

- Car Scanner (Android and iPhone)
- Dash Command (iPhone with WiFi)
- UltraGauge Blue (Android and iPhone)

The following do not to work:

- TorquePro (Car Scanner is a recommended alternative)
- Auto Doctor

Let us know if your app isn't listed and we can assess it.

INSTRUCTIONS: Increasing the Refresh Rate

Because the lockup kit synchronises with the OBD2 Reader, a fast refresh rate is recommended.

* The refresh rate for the OBD2 reader should be set to the maximum setting as follows:

Ultra-gauge Menu->
→ Gauge/Page Menu . .
→ Select Gauge/Page . .
→ Page settings . .
→ Page Refresh Time
Page Refresh Time 0.3 Seconds

Car Scanner Settings->Connection Advanced Settings ->

OPTION Delay before sending data to ELM (ms) 40

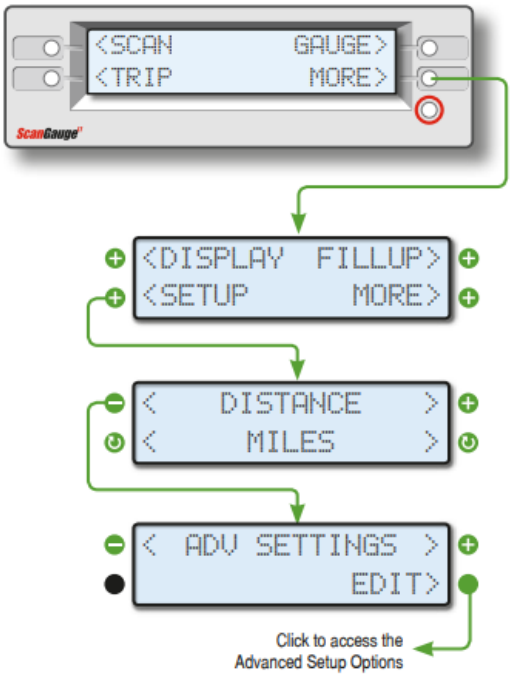
OPTION Ping ECU when idle OFF (unticked)

Scan Gauge II

Accessing the Advanced Setup Options

The Advanced Setup Options are located within the SETUP menu. To access the Advanced Setup Options screens, press the lower right function button next to MORE on the Home Screen. Next press the lower left function button next to SETUP.

Once on the Setup Screen, use the upper left or right function buttons to cycle through the available screens until the screen displays ADV SETTINGS. Press the lower right function button next to EDIT to enter the Advanced Setup Options.

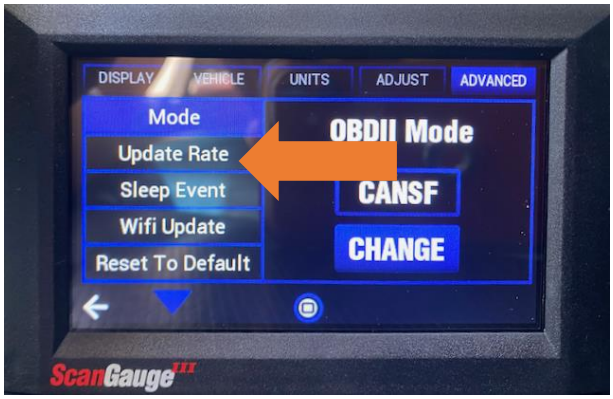


Set to ‘Fast’

Advanced Setup Parameters

Setup Parameter	Display	Options	Description
Data Update Rate	UPDATE RATE	Slow Normal Fast	Sets the rate in which ScanGauge reports data. See below.
Speed Adjustment	SPEED	-100%-100%	Sets the speed offset to compensate for inaccurate speed readings. See page 15 and 16.
Fuel Cutoff Setting	CUTOFF	0-99 (Default: 24)	Sets the fuel cutoff level. See page 16.
Parameter Identification Descriptor method	PIDS	ALL Supported	Sets the PID method. See page 16.
Liters per Hundred Kilometers	LHK	OFF ON (Default)	Displays fuel economy in Liters per Hundred Kilometers. See page 17.
Diagnostic Trouble Codes Clear Method	DTC	Normal ALT	See page 17.
Sleep Event	SLEEP EVENT	0 RPM (Default) NO COMM	Sets the ScanGauge power down event. See page 17.
Manifold Pressure Method	MAP OR BOOST	MAP (Default) BST	Allows you to set how Manifold Pressure is calculated. See page 17.
Horsepower Adjustment	HP	-99% - +99% (Default 0)	Sets the HP offset to compensate for in-accurate Horsepower readings. See page 17.

Scan Gauge^{III}



Set to 'Fast'

End