# INSTALLATION GUIDE

### WHAT'S IN THE BOX

- 1. TractionMAX Control Box
- 2. TractionMAX Wiring Harness
- 3. Dual Adjustment Dials
- 4. Double-Sided Adhesive Pad
- 5. Velcro Adhesive Pad Set
- 6. (4) Cable Tires
- 7. Male 3-pin Jumper (Connect to enable automated traction lockout feature)

8. Male 3-pin Connector with 2 Wires (Enable on-the-fly traction lockout by connecting to either a JMS momentary switch or regular switch)



### **OVERVIEW**

**TractionMAX** is designed to work with traction limited vehicles (High HP – Forced Induction Vehicles – Aftermarket/OE). Adjust to enhance traction & performance. Simple & quick install, the unit plugs in-line between your vehicle's pedal position sensor & vehicle harness. Use the included dual-dial to adjust Pedal (throttle) & Time (traction) response making performance adjustable on-the-fly! Beneficial dual-dial save feature is great for new drivers, adjust to reduce the ability to over-power the tires.

Please read the complete installation instructions before attempting to install this product.

## STEP 1

### **CONNECT THE ASSEMBLY**

1. Attach the **TractionMAX** device to the wiring harness; plug the device into the 26-pin connector firmly, until latched (in most cases the device has already been connected to the main harness at the factory prior to shipping).



### **STEPS 2 & 3**

2. Locate the Pedal position sensor assembly, it is usually located on the top side of the accelerator Pedal assembly.



3. UNPLUG THE WIRING HARNESS FROM THE PEDAL POSITION SENSOR.

NOTE: To separate most connectors from the sensor: slide back or release the locking tab on the harness connector or press the tab down on the connector and unplug from the pedal sensor.



IMPORTANT: Disconnect the positive terminal of the battery before installing this product. If you do not disconnect the battery the factory computer will not learn the correct starting Pedal position.

# STEPS 4, 5, 6, & 7

#### **CONNECT THE IN-LINE HARNESS**

4. Plug the TractionMAX device in-line between the pedal position sensor and OE wiring harness by connecting the male and female TractionMAX connectors to the Original Factory connector and sensor.



#### **SECURE TRACTIONMAX/HARNESS**

5. Secure the TractionMAX unit using the supplied cable ties. The device should not be hanging loosely or unsecured. Do not attach or mount to any moving assemblies such as the steering column or brake Traction assembly. Make sure that TractionMAX does not



come into direct contact with extreme heat (+370F) such as AC / Heater coolant lines.

### **DUAL ADJUSTMENT DIALS**

6. The remote mounted control dual-dial allows you to adjust the throttle Traction sensitivity on-the-fly, simply plug the dual-dials into the 4-pin connector on the TractionMAX main wiring harness and mount the dual-dial unit in a safe location where it is easily accessed by the driver for quick adjustment. Set the both dials for testing at ZERO.

### **TEST THE DEVICE**

7. Once the device is installed, for testing: Set both dials to ZERO. (Note: 0 on the left knob [pedal] is in the middle position) Start the vehicle, verify that the accelerator pedal functions normally. Verify that the instrument panel does not have any diagnostic trouble codes or warning icons illuminated (CEL - Check Engine Light). If the CEL is illuminated please refer to the Troubleshooting section. Take the vehicle for a test drive under normal driving conditions. When you increase Pedal Knob (clockwise), you should notice a significant improvement in throttle responsiveness and acceleration.

# **SAVING YOUR DIAL SETTINGS**

- 1. Turn the vehicle on.
- 2. Verify that the both of the dial settings are adjusted to your satisfaction.
- 3. Disconnect the 4-pin connector/remote dual-dial from the harness to save the settings.



### **ON-THE-FLY DUAL ADJUSTMENT DIALS**

The TractionMax gives you the ultimate control over Throttle Vs Traction.

The (PEDAL) dial on the left controls the throttle enhancement. The **throttle blade enhancement** in percent: 0 = stock, -50 = full torque reduction and +100 is full enhancement

or left "-" (counter clockwise) to reduce torque.

enhancement in percent: 0 = stock, -50 = full torque reduction and +100 is full enhancement.

Turn the dial to the right "+" (clockwise) to increase enhancement

0 = stock +50 = some enhancement +100 = full enhancement -25 = some torque reduction -50 = full torque reduction

The (**TIME**) dial on the right controls the **throttle blade opening rate**. Turn the dial to the right "+" (*clockwise*) to slow down the opening rate of the throttle blade. To reduce wheel-spin on marginal surfaces, increase the time dial (*clockwise*).

Increasing the (TIME) dial increases the time that it takes for the Throttle Blade to open. If the time dial is set to ZERO then the throttle blade will move at the normal speed.

Note: The close rate of the throttle blade IS NOT affected when you increase the TIME dial.

### **OPTIONAL FEATURES**

**AUTOMATED TRACTION OVERRIDE FEATURE** — Turn on by installing the 3-pin jumper (included- item 7 in "What's In the Box"). Typically used by a vehicle with a manual transmission.

### **OVERVIEW AUTOMATED TRACTION OVERRIDE**

Traction control works **ONCE** for launch and then it is locked out for 20 seconds.

### **USAGE EXAMPLE**

- Launch in first gear TractionMAX controls the rate of acceleration to keep the tires from spinning.
- Once you reach WOT, for the next 20 seconds AUTOMATED TRACTION OVERRIDE is active — the throttle functions like normal.
- During the 20 second lockout, the throttle responds like normal and you can power-shift the next gear.
- After 20 seconds the traction control feature is re-enabled.

NOTE: To enable the automated lockout, the 3-pin jumper must be installed and the throttle pedal must held be at wide open pedal (WOP) long enough for the engine throttle body to reach WOT (wide open throttle).

**MANUAL TRACTION OVERRIDE FEATURE** — Turn on by installing a on/off switch at the end of the 3-pin connector with the two wires (included - item 8 in "What's In the Box").

- To enable the manual lockout connect the two wires or turn on the switch.
- When the manual lockout is enable the throttle functions like normal.

### TROUBLESHOOTING

#### CHECK ENGINE LIGHT AFTER INSTALL

If you experience a check engine light and have no THROTTLE response after starting the vehicle immediately following installation:

- If you have a KEY: Turn the key back to the off position, remove the ignition key, wait 60 seconds for the ECU to reset and then restart the vehicle. When you restart the vehicle, the check engine light will be gone, and THROTTLE response will be restored.
- If you have a key FOB: Make sure that the vehicle is off and that the dash lights are off for at least 60 seconds. When you restart the vehicle, the check engine light should be gone, and the THROTTLE response restored.
- If cycling the key does not solve the issue: Verify that the connectors for the TractionMAX harness are full seated into the pedal and the factory harness. Disconnect the battery, wait 60 seconds, reconnect and test again.

NOTE: BEFORE disconnecting the battery. If you have a hybrid or EV please consult your owners manual for the procedure for disconnecting the battery.

### WARRANTY & CONTACT INFORMATION

### JMS warrants to the original purchaser:

Your product will be free from defects in materials & workmanship for a period of twelve (12) months from the original purchase date. The warranty only covers the product itself & not the cost of removal & re-installation of the product. We may extend the limited warranty on a case by case basis, based on the circumstances of the warranty claim. Our products are designed exclusively for use in racing applications. JMS products that are not installed according to the supplied instructions, may not be covered by warranty.

### Specific conditions that will VOID the product warranty:

- If the product case has been opened or the product has been modified or repaired.
- If the product was not installed or used correctly.
- · If the product has been tampered with by: negligence, misuse or accident.
- If the product is returned without explanation of the problem or Return Authorization.

### Contact us at 601-766-9424 for a Return Authorization Number:

All warranty returns should be returned freight pre-paid & should include inside of the box: Proof of Purchase & a Letter that contains both the Return Authorization Number and a Clear Explanation of the EXACT problem.

The Return Authorization Number should also be clearly written on the outside of the box.

#### **DIAGNOSTICS**

There is a 12V input on the main harness that can be used for diagnostic testing. In the event there is an issue with this product, please contact our tech support team for instructions on how to use the 12V diagnostic test port before making any connections to this port.

#### LED DIAGNOSTIC LIGHTS

Green LED light = Solid LED, device is powered ON and working **Blue LED light - status on Pedal Enhancement (LEFT KNOB)** 

- Solid Blue LED= Dial is plugged in and set to 0-25%
- Flashing <u>slow</u> Blue LED= Dial is plugged in and set to 25-60%
- Flashing <u>fast</u> Blue LED= Dial is plugged in and set to 60-100%

### **Yellow LED light - status on TRACTION Enhancement (RIGHT KNOB)**

- Solid Yellow LED= Dial is plugged in and set to 0-25%
- Flashing slow Yellow LED= Dial is plugged in and set to 25-60%
- Flashing fast Yellow LED= Dial is plugged in and set to 60-100%

Green, Yellow & Blue LED's Flashing = Pedal is not connected or it has an error.

#### Send all returns to:

### **JMS Returns**

240 Springview Commerce Drive, Bld 1, Ste J DeBary, FL 32713

JMS is not liable for any and all consequential damages arising from the breach of any implied or written warranty in regards to the sale of this product, in excess of the purchase price.

### **Technical Support & Contact Information:**

**JMS Performance Group** 240 Springview Commerce Drive, Bld 1, Ste J DeBary, FL 32713 601-766-9424

### **Technical Support Hours:**

Monday - Friday 9:00am - 5:00pm (Central Standard Time)

Installation videos available online: www.youtube.com/jmschip If you have any questions, please contact JMS technical support via email: tech@imschip.com

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