# BOOSTMAX

# Installation Instructions • EcoBoost 1.6L Fiesta ST Plug & Play

# Thank you for your purchase.

Please read the complete installation instructions or view the video instructions on YouTube before attempting to install this product.

If not installed properly, BoostMAX will not function and may be damaged. View install videos at http://www.jmschip.com/ boostmax-plug-and-play/

BoostMAX will increase the power output of your Ecoboost vehicle. BoostMAX has been designed to be mounted with plastic zip ties near the OEM ECU. The wiring harness plugs into two sensors on the engine and then runs into the vehicle cabin through a drivers side firewall hole and connects to the pedal sensor.



Reasons to choose BoostMAX!	BoostMAX 3.5L	BoostMAX 2.7L	BoostMAX 2.3L	BoostMAX 2.0L	BoostMAX 1.6L	BoostMAX 1.6L Fiesta ST	BoostMAX 1.5L
Quick HP•80rwhp gain on 3.5L engine	X	X	X	X	X	X	X
Simple to Install • Plug & Play	X	x	x	X	X	x	x
Adjust Boost Increase "on-the-fly" via Remote Adjustment Knob	x	x	x	x	x	x	x
User Adjustable Boost Increase (0-5psi)	X	x	X	x	X	x	x
87 Octane Plug-In Module	X	X	X	x	X	x	x
Works with 87, 89, 91 & 93 Octane	x	x	x	x	x	x	x
JMS Exclusive • Digital Technology	X	X	X	X	X	X	X
Heavy-Duty Sealed Unit	x	x	x	x	x	x	X
Stack with PedalMAX for more power! Combine BoostMAX with JMS Pedal- MAX for additional low-end and part throttle performance.	x	x	x	x	x	x	x
Stack with a Custom JMS ECU Tune! BoostMAX has been designed to be stacked with a Custom JMS ECU Tune for MORE performance!	x	x	x	x	x	x	x
Stack with PedalMAX & Custom Tune! Stack BoostMAX with PedalMAX and a Custom ECU Tune for MAX performance	x	x	x	x	x	x	x



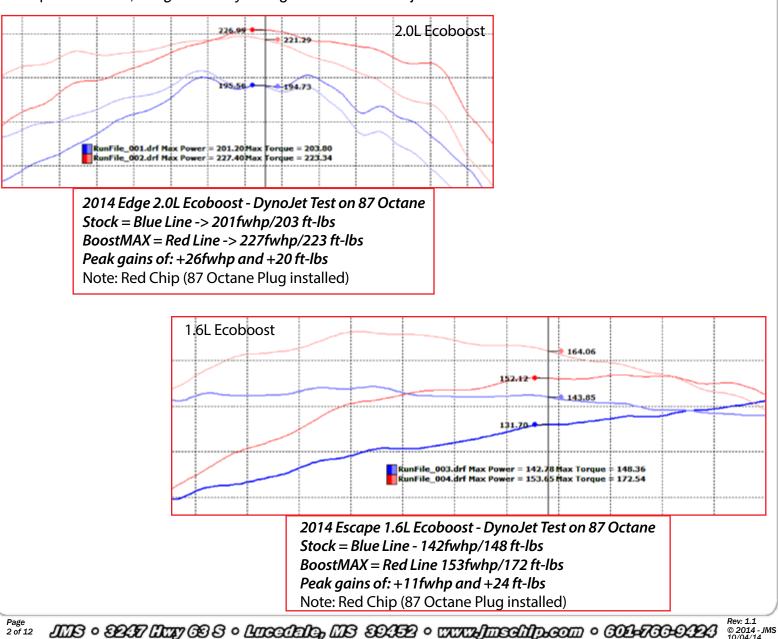
# The concept behind BoostMAX:

- Add additional horsepower without reprogramming the ECU.
  - BoostMAX connects to the MAP, TIP and Pedal Position sensors via a plug & play harness.
  - Remote boost knob allows the user to add up to 5psi of additional boost (on the fly).
  - 2.0L Ecoboost customers have reported gaining +26fwhp with the stock vehicle and BoostMAX (87 Octane).
  - 1.6L Ecoboost customers have reported gaining +11fwhp with the stock vehicle and BoostMAX (87 Oct).

• Add additional boost "on the fly" and when you want it.

- Use the remote boost knob to "dial-in" additional boost on the fly.
- Replace the remote boost knob with the Red Chip: 87 octane boost curve.
- Or remove the remote knob and red chip and enjoy the optimized 93 octane boost curve and more power!

• Simple to install, *Plug and Play* design that installs in just minutes.





#### STEP 1

- Ignition key off, remove key from ignition.
- Open the vehicle's hood.
- · Remove the plastic engine cover and set aside
- Note: On some models, it may be necessary to remove the engine oil fill cap before you can remove the plastic engine cover.
- Replace the engine oil fill cap

### STEP 2

- Remove the Battery from the vehicle (to aid in routing the wire harness)
- Disconnect the positive battery terminal (10mm)
- Disconnect the negative battery terminal (10mm)
- Disconnect the small two in connector on the negative terminal (if equiped)

• Unbolt the two battery hold downs located on the top of each side of the battery. Remove the Battery from the vehicle

### Step 3

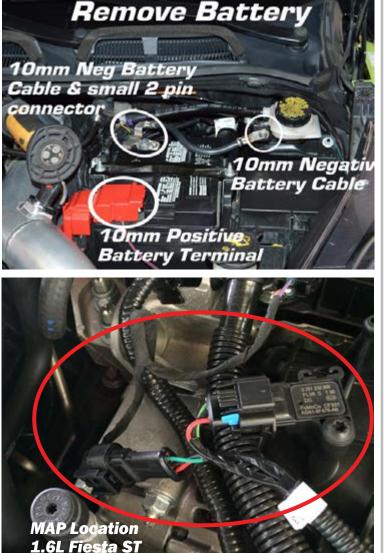
• Locate the MAP Sensor (Located on top of the black plastic intake manifold)

• Disconnect the OE MAP Sensor connector from the MAP sensor.

• Connect the BoostMAX Wire Harness Labeled "MAP Sensor" in-between the MAP Sensor and the OE Connector.

• Use zip-ties to secure the MAP sensor wiring.





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#### **S**TEP **4**

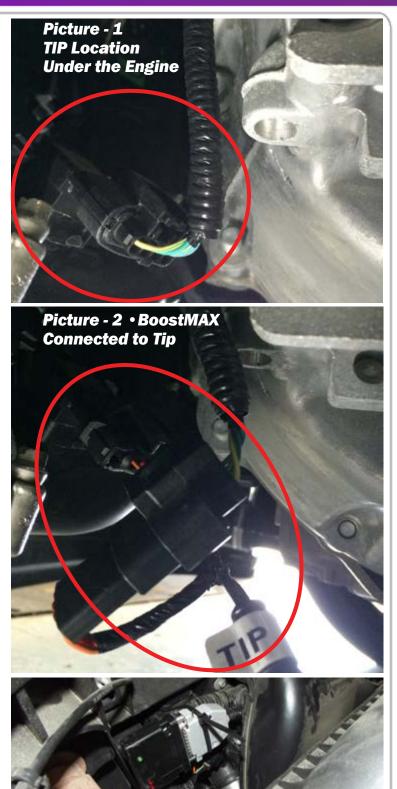
• Locate the TIP Sensor on your vehicle.

It is located directly under the engine on the turbo pressure side pipe.

• Connect the BoostMAX Wire Harness Labeled "TIP Sensor" in-between the TIP Sensor and the OE Connector.

- Use zip-ties to secure the TIP sensor wiring.
- Picture 1 show the location of the TIP under the engine.

• Picture 2 - BoostMAX connected in-between the TIP and the Factory Harness.



# STEP 5

• Apply the included dielectric grease to the 25 pin connector. Liberal application is fine.

• Connect the BoostMAX Module to the 25 pin connector, secure the screws with the screwdriver.

• Route the BoostMAX wiring harness alongside the battery.

• Use zip-ties to secure the BoostMAX Module near the battery away from water.

• When routing the wiring, be sure to stay away from high heat sources (exhaust or air conditioning).

• Install away from sources of water.

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### STEP 6

• Route the Pedal Harness across the firewall to the drivers side of the vehicle.

• Route the Pedal Position Harness through the large firewall grommet behind the battery. (Note: other factory wires already use this grommet. If you pop it slightly out of the firewall you can pass the wire harness throught the hole).

• Two people may aid in passing the wire.

It may help to attach the wire harness with tape to a stiff wire (coat hanger) in order to fish it through the firewall opening (use two people).

• Use zip-ties to secure the wiring.



• Connect the Pedal Position Harness to the main BoostMAX Harness (via flat four pin connector, left side connector in the picture)

• Choose between connecting the Pedal Position Harness to the Remote Boost Knob OR to the "87 Octane Red Chip". (Right side connector in picture)

Note: In the picture the Pedal Position harness is in the center, the main harness plugs into the Pedal Harness and then the Remote Knob Plugs into the Pedal harness.





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#### STEP 8

• Locate the Accelerator Pedal Position Sensor (Located on top of the Accelerator Pedal bracket)

• Disconnect the OE Pedal Position Sensor connector from the Pedal Position sensor (pull the red tab out).

• Connect the BoostMAX Wire Harness Labeled "Pedal Sensor" in-between the Pedal Position Sensor and the OE Connector.

• Use zip-ties to secure the Pedal Position Sensor wiring.

#### STEP 9

• Route the Remote Boost Knob up and near the center console. We recommend routing the cable along side the center console (push the cable up behind it) so you can adjust the knob "on the fly".

• Use zip-ties to secure the Remote Boost Knob wiring.

• Adjust the BoostKnob to the desired performance level.

• Recommended knob settings: 87 octane = 50%, 91 octane = 65%, 93 octane = 75%, 93 octane + Boostane octane booster = 100%. STEP 10

• Start and test the vehicle, it should function like normal with additional WOT power. If the Ignition Key is "ON" the Green LED on the BoostMAX will illuminate ON.

• If the vehicle has a wrench light and no throttle: it is due to disconnecting the Pedal Position Sensor.

• Turn the vehicle off, remove the key, wait 30 seconds and restart the vehicle (the wrench light will automatically clear itself on restart).

Enjoy the extra plug & play BoostMAX power.





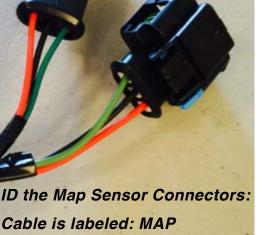


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#### BoostMAX plugs into the Grey 25 pin connector





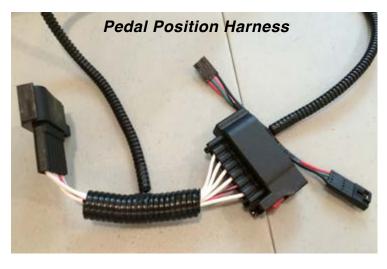
Only three wires

ID the Tip Sensor Connectors: Cable is labeled: TIP Look for the Orange Wires Four wires



Remote Boost Adjustment Knob





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# Installation Instructions • EcoBoost 1.6L Fiesta ST Plug & Play

### RECOMMENDED SPARK PLUG AND SPARK PLUG GAP FOR BOOSTMAX

This information applies to all 2011-2015 Ford F150 3.5L EcoBoost equipped trucks and 2010-2015 Ford Taurus SHO 3.5L EcoBoost equipped cars. To eliminate the potential for ignition misfires commonly known as "spark blowout" at high RPM levels when running a JMS BoostMAX we recommend replacing the sparkplugs and setting the plug gaps as listed below in the chart.

### ECOBOOST 3.5L

Year	Model	Plug OEM Part Number	<b>Recommend GAP</b>
2011-2015	F150 EcoBoost 3.5L	SP-534	0.030 in
2010-2015	Taurus EcoBoost 3.5L	_ SP-534	0.030 in

### **ECOBOOST 2.0L**

This information applies to all 2013-2014+ Ford Focus, Fusion, Taurus, Edge, Escape 2.0L EcoBoost equipped vehicles. To eliminate the potential for ignition misfires commonly known as "spark blowout" at high RPM levels when running a JMS BoostMAX we recommend replacing the sparkplugs and setting the plug gaps as listed below in the chart.

Year	Model	Plug OEM Part Number	<b>Recommend GAP</b>
2013-2015	ALL - EcoBoost 2.0L	M-12405-20T (Ford Racing)	0.028 in
2013-2015	ALL - EcoBoost 2.0L	ITV22 (Denso 5340) (Denso Iridium	) 0.028 in

Please call us at 601-766-9424 for more information on Ecoboost 1.6L, 2.3L & 2.7L engines.

### NOTE TO FOCUS ST 2.0L ECOBOOST OWNERS

If you stay under high boost for longer than 15 seconds, your vehicle may go into overboost mode and the power/boost will be automatically pulled back by the factory ECU. This is a feature of your control system. To solve this issue, you will need a custom JMS ECU tune via an X4 stacked with your BoostMAX unit. The two units together provide the ultimate in performance for the Focus ST.

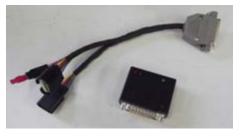


Different BoostMAX versions are available. Each are specific to the engine family. The product guide below details the different versions and applications.

Product Guide • BoostMAX • Plug & Play							
	Есовоозт 1.5L	Есовооsт 1.6L	Ecoboost 2.0L	Ecoboost Fiesta ST	Ecoboost 2.3L	Ecoboost 2.7L	EcoBoost 3.5L
BX-6000-15	X						
BX-6000-16-FS		X		X			
BX-6000-20-16		X	X				
BX-6000-23					X		
BX-6000-27						X	
BX-6000-35							x

# What is PedalMAX?

- Increases "off idle" throttle response
- Improve vehicle acceleration & torque
- Designed to be stacked with BoostMAX and a JMS Custom Tune File
- Simple to Install product that supports all Ford Gas & Diesel vehicles
- Does not void vehicle warranty
- Optional Single or Dual Remote Pedal Knob
- Sealed Enclosure
- Compact, Rugged design
- Plug & Play design



	2005-10 Ford	2011 - 15 Ford	2015 Ford	2008 - 15 Мозт GM	2014 - 15 GM LSA	2011 - 14 CHRYSLER	REMOTE KNOB OPTION
PX-5000-1114F		x	x		X		x
PX-5000-0510F	x						X
PX-5000-1415GM					X		X
PX-5000-1015GM				X			X
PX-5000-1114DCX						X	



#### **ABOUT JMS CHIP & PERFORMANCE**

For more than 20 years, JMS Chip & Performance has been an industry leader in late model domestic and import vehicle tuning. JMS brand electronics components are some of the most technologically advanced in the automotive industry and feature



innovative high quality engineering, materials and workmanship. The JMS technical center in Lucedale, MS is one of North America's premier automotive and motorcycle tuning, manufacturing, and turn key automobile development facilities, producing numerous custom high performance vehicles each year. JMS is also a pioneer in domestic vehicle calibrations and highly regarded as a foremost expert in Ford, GM and Chrysler powertrain and drivetrain systems.



### JMS TECHNICAL CENTER • LUCEDALE, MS

A state of the art facility that integrates custom and specialty vehicle manufacturing, race car production, electronics development and manufacturing, custom tuning and vehicle calibrations engineering, prototype development, and aftermarket component sales and distribution.

#### LIGHT VEHICLE ASSEMBLY

JMS produces countless custom or specialty vehicles ranging from contemporary late model domestic performance cars to full blown turn key race cars, each year. Our teams of professionals are experts in supercharging, turbocharging, engine assembly, chassis production, suspension upgrades, and specialty equipment integration.





#### **CUSTOM ECU CALIBRATION ENGINEERING**

Since 1993, JMS has been a pioneer and industry-leader in Ford vehicle calibrations and instrumental in helping to develop the modern custom tuning aftermarket. Our tech center's tuning facility features two chassis dynamometers specifically for car and truck calibrations and engineering, and one motorcycle dyno to service the growing powersports market.





### **JMS POLICIES**

#### How to order

Retail orders for JMS products can be placed through our website at: www.jmschip.com or by calling us factory direct at (601) 766-9424. JMS products can also be purchased through our network of warehouse distributors, dealers, jobbers, and installers. To locate a wholesaler or installer in your area, please contact us or use the dealer locator on our website.

### TERMS OF SALE

JMS product orders are subject to our wholesale trade terms and conditions, which are located in the applicable price guide.

#### SHIPPING AND HANDLING

JMS products are shipped F.O.B. Lucedale, MS via UPS or common freight carrier, and are subject to applicable shipping terms and charges. JMS does maintain a freight policy for warehouse distribution based on a minimum order qualification. Overseas order shipping via a common freight forwarding company or broker are the responsibility of the customer.

#### Pricing

JMS maintains a *minimum advertised pricing policy* to protect product value, and maintain consistent and fair distribution or retail pricing points. JMS places high value on its brand and product integrity.

### **NON-JMS BRAND PARTS**

Aftermarket parts purchased from JMS are covered under the manufacturer's warranty, and are not covered under the JMS manufactured products warranty.

### **OFF-ROAD NOTICE AND TERMS & CONDITIONS**

JMS products are designed for Off-Road or Racing use only. JMS terms and conditions including: Pricing, specifications, warranty, and availability are subject to change without notice. Compliance with all federal, government, provincial, state or local laws are the responsibility of the customer or end-user. All claims of product performance are based on controlled testing conditions and real-time data, and results may vary based on your application or use. JMS shall not be liable for any fines or violations resulting from product use or installation.

#### **SERVICE OR REPAIR:**

Please contact JMS @ 601-766-9424 for a Return Authorization. All service returns should be sent freight pre-paid to: JMS SERVICE, 3247 HWY 63 S, Lucedale, MS 39452. The Return Authorization Number should be clearly written on the outside of the box, and in a letter that is included in the box. The letter should also list your contact phone number and a clear explanation of the exact problem.



### **JMS WARRANTY & CONTACT INFORMATION**

#### JMS WARRANTS TO THE ORIGINAL PURCHASER THE FOLLOWING:

Your JMS Product will be free from defects in materials and workmanship for a period of twelve months from the original purchase date. The warranty only covers the product itself and not the cost of removal and re-installation of the product. JMS may extend the limited warranty on a case by case basis, based on the circumstances of the warranty claim. JMS 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 JMS @ 601-766-9424 FOR A RETURN AUTHORIZATION NUMBER:

All warranty returns should be returned freight pre-paid and should include inside of the box: Proof of Purchase and 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.

#### **SEND ALL RETURNS TO:**

JMS Returns, 3247 HWY 63 S, Lucedale, MS 39452

JMS Chip & Performance LLC 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 3247 Hwy 63 S, Lucedale, MS 39452

601-766-9424

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

CONFIGURATION AND INSTALLATION VIDEOS ARE AVAILABLE ONLINE: <u>WWW.YOUTUBE.COM/JMSCHIP</u>

If you have any questions, please contact JMS technical support via email: jms@jmschip.com

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