## Installation Instructions • 2011-2016 Mustang 6R80 DIY Wire-In

## Thank you for your purchase.

Please read and understand the complete installation instructions before attempting to install this simple wire-in product.

If not installed properly, LaunchMAX will not function and may be damaged. Improper installation will void the product warranty. LauchMAX is for Off-Road Racing Use ONLY! This version of LaunchMAX is a "DO-IT-YOURSELF" wire-in product. The LaunchMAX black module has been designed to be mounted with plastic zip ties behind the dash inside the vehicle cabin. The "DO-IT-YOURSELF" LaunchMAX wiring harness must be spliced into the ECU and wired into +12v KEY-ON Power. To activate you must also wire up a momenatary push-button switch.



| Reasons to choose LaunchMAX!          | 2011-14<br>Mustang<br>6r80 | 2015+<br>Mustang<br>6r80 | Can be<br>wired into<br>any 6r80 | Digital<br>Technology | No Parts to<br>Fail (Digital) | Heavy-Duty<br>Sealed Unit | Universal<br>Wire-In<br>Harness |  |
|---------------------------------------|----------------------------|--------------------------|----------------------------------|-----------------------|-------------------------------|---------------------------|---------------------------------|--|
| JMS Digital Technology                | X                          | x                        | X                                | X                     | X                             | X                         | x                               |  |
| No Parts To Fail (Digital Product)    | x                          | x                        | x                                | x                     | x                             | x                         | X                               |  |
| Heavy-Duty Sealed Unit                | X                          | X                        | X                                | X                     | X                             | X                         | X                               |  |
| Universal 7 Foot Long Wire-In Harness | x                          | x                        | x                                | x                     | x                             | x                         | X                               |  |
| Can be wired into any 6r80 Trans      | X                          | X                        | X                                | x                     | X                             | x                         | X                               |  |
| Reliable Digital Trans-Brake Module   | x                          | x                        | X                                | x                     | X                             | x                         | x                               |  |
| Fastest Trans-Brake Release Time      | x                          | x                        | X                                | x                     | X                             | x                         | x                               |  |

## The concept behind LaunchMAX:

We designed the most reliable and robust Trans-Brake product and then wrapped it in a waterproof, vibration resistant case. LaunchMAX is the worlds first **digital** trans-brake product available for the 6r80 Ford Transmission.

DIY Installation is simple: cut two factory wires, connect the factory wires to LaunchMAX, connect +12v Key-On Power and ground. Finally, connect a momentary push-button switch to ground. The push-button activates the trans-brake.

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STEP 1 - LOCATE VEHICLE ECU, DISCONNECT BATTERY

- Ignition key off, remove key from ignition.
- Open the vehicle's hood. Disconnect the Battery.

• Locate the vehicle ECU (under the hood, near the front passenger side of the vehicle).

• Disconnect the TOP ECU Connector.

Note: Move the grey lever to release the connector from the ECU. 2015 Mustang connector has 95 pins 2011-2014 Mustang connector has 50 pins

• Unwrap six inches of black tape that protects the wires entering the TOP ECU Connector.

#### STEP 2 - LOCATE AND CUT TWO ECU WIRES

• Locate the two Transmission Wires to CUT. Unwrap the tape 6 inches back from the connector. Verify and Cut each wire 3 inches from connector.

 2015+ Mustang 6R80 Auto 5.0L & 3.7L
 (95 Pin Top Connector) \*2.3L is different see step 3 Locate and cut two wires 3" from the top connector
 Wire 1 PC3 - Grey with Orange Tracer -> Pin 73
 Wire 2 PC2 - Green with Brown Tracer -> Pin 74

 2011 - 2014 Mustang 6R80 (50 Pin Top Connector) Locate and cut two wires 3" from the top connector Wire 1 PC3 - Grey with Orange Tracer -> Pin 45 Wire 2 PC2 - Green with Brown Tracer -> Pin 44

> 2015+ Mustang Wire 1 PC3 - Grey with Orange Tracer -> Pin 73 Wire 2 PC2 - Green with Brown Tracer -> Pin 74





2011 - 2014 Mustang Wire 1 PC3 - Grey with Orange Tracer -> Pin 45



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#### **STEP 3 - SOLDER ECU WIRES TO LAUNCHMAX HARNESS**

#### 2015 - 2016 Mustang - 5.0L and 3.7L • 2015 - 2016 F150 - 5.0L

White Wire (grey cable) -> solder to the wire from ECU Connector: Pin 73 PC3 Grey with Orange Tracer Brown Wire (grey cable) -> solder to the wire from ECU Connector: Pin 74 PC2 Green with Brown Tracer Green Wire (grey cable) -> solder to the wire harness: Green with Brown Tracer Yellow Wire (grey cable) -> solder to the wire harness: Grey with Orange Tracer

#### 2015-2016 Mustang - 2.3L EcoBoost Engine

White Wire (grey cable) -> solder to the wire from ECU Connector: Pin 73 PC3 Grey with Orange Tracer Brown Wire (grey cable) -> solder to the wire from ECU Connector: Pin 45 PC2 Green Green Wire (grey cable) -> solder to the wire harness: Green Yellow Wire (grey cable) -> solder to the wire harness: Grey with Orange Tracer

#### 2011 - 2014 Mustang - 5.0L and 3.7L • 2011 - 2014 F150 - 5.0L

White Wire (grey cable) -> solder to the wire from ECU Connector: Pin 45 PC3 Grey with Orange Tracer Brown Wire (grey cable) -> solder to the wire from ECU Connector: Pin 44 PC2 Green with Brown Tracer Green Wire (grey cable) -> solder to the wire harness: Green with Brown Tracer Yellow Wire (grey cable) -> solder to the wire harness: Grey with Orange Tracer

#### 2011 - 2016 F150 - 3.5L EcoBoost Engine

White Wire (grey cable) -> solder to the wire from ECU Connector: Pin 75 PC3 Grey with Orange Tracer Brown Wire (grey cable) -> solder to the wire from ECU Connector: Pin 45 PC2 Green with Brown Tracer Green Wire (grey cable) -> solder to the wire harness: Green with Brown Tracer Yellow Wire (grey cable) -> solder to the wire harness: Grey with Orange Tracer

#### STEP 4 - CONNECT LAUNCHMAX TO +12v Key-ON Power and TO GROUND

- Connect Grey and Red Wires (grey cable) to +12v Key-ON Power. Both of these wires must be connected to +12V when the key is ON and in the Start position. Solder connections if possible.
- Connect the Pink Wire (grey cable) to Vehicle Ground. Choose a good ground and bond to gound with a solid connection (screw or bolt). Solder connections if possible.

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## STEP 5 - CONNECT LAUNCHMAX TO ONE SIDE OF A MOMENTARY SWITCH AND THE OTHER SIDE TO GROUND

- Connect the Blue Wire (grey cable) to one side of a momentary switch. Solder connections if possible.
- Connect the other side of a momentary switch to GROUND. Choose a good ground and bond to gound with a solid connection (screw or bolt). Solder connections if possible.
- The momentary switch should be Normally Open. When the switch is pressed the two connections should make contact and activate LaunchMAX.

#### STEP 6 - (OPTIONAL) CONNECT LAUNCHMAX TO MOMENTARY SWITCH & MSD 2-STEP ACTIVATION

- Connect the Blue Wire (grey cable LaunchMAX) to the 3 wire connector on the MSD (Blue Wire)
- When the momentary switch is pressed (closed) ground will be applied to LaunchMAX and the MSD.

#### STEP 7 - USE ELECTRICAL TAPE TO INSULATE ALL CONNECTIONS, RECONNECT ECU PLUG, RECONNECT BATTERY

- Insulate all connections using electrical tape.
- Reconnect the WireHarness plug to the ECU. Be sure to replace the tape that was removed in step 1.
- Reconnect the Battery

#### STEP 8 - TEST LAUNCHMAX

• Do NOT ENABLE LaunchMAX when the vehicle is moving. Catastrophic Transmission Damage may occur if the LaunchMAX is enabled when the vehicle is moving.

- Turn the KEY-ON and verify that the GREEN LED is ON.
- When the momentary switch is pressed (closed) the RED LED on LaunchMAX will turn ON. If the RED LED is on the TRANS-BRAKE is enabled.

#### LAUNCHMAX INSTALLATION IS COMPLETE.

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LAUNCHMAX - OPTIONAL +12v ACTIVATE WIRING (THREE STEPS) How to Wire LaunchMAX so it can be enabled via a momentary switch and +12V You Must Use The Optional Steps for 4, 5 and 6 to enable LaunchMAX with +12v.

## OPTIONAL LAUNCHMAX ACTIVATE +12v DC (STEP 1)

### STEP 4 - CONNECT LAUNCHMAX TO +12v Key-ON Power and TO GROUND

- Connect Grey Wire (grey cable) to +12v Key-ON Power. This wire must be connected to +12V when the key is ON and in the Start position. Solder the connection if possible.
- Connect the Pink Wire and Blue Wire (grey cable) to Vehicle Ground. Choose a good ground and bond to gound with a solid connection (screw or bolt). Solder the connections if possible.

#### **OPTIONAL LAUNCHMAX ACTIVATE +12v DC (STEP 2)**

### STEP 5 - CONNECT LAUNCHMAX TO ONE SIDE OF A MOMENTARY SWITCH AND THE OTHER SIDE TO +12V DC

- Connect the Red Wire (grey cable) to one side of a momentary switch. Solder connections if possible.
- Connect the other side of a momentary switch to +12v Key-On Power. Solder connections if possible.
- The momentary switch should be Normally Open.
  When the switch is pressed the two connections should make contact and activate LaunchMAX.

#### OPTIONAL LAUNCHMAX ACTIVATE +12v DC (STEP 3)

#### STEP 6 - (OPTIONAL) CONNECT LAUNCHMAX TO MOMENTARY SWITCH & MSD 2-STEP ACTIVATION / NOS

- Connect the Red Wire (grey cable LaunchMAX) to the 3 wire connector on the MSD (White/Blue Wire).
- Connect the Red Wire (grey cable LaunchMAX) to the +12v Activate wire on your NOS Controller.
- When the momentary switch is pressed (closed) +12v will be applied to LaunchMAX,MSD & NOS.

• Note: You will typically only use the optional +12v wiring in the event of a NOS controller that requires a +12v signal to Activate.

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#### **DB9** WIRING REFERENCE - LAUNCHMAX (GROUND ACTIVATION WIRING)

DB9 Pin 1 -> white wire -> input 1 -> ECU Connector: PC3 Grey with Orange Tracer (73 - 2015) (45 - 2011-2014)

DB9 Pin 2 -> brown wire -> input 2 -> ECU Connector: PC2 Green with Brown Tracer (74 - 2015) (44 - 2011-2014)

DB9 Pin 3 -> green wire -> output 2 -> Connect to OE Wire Harness Green with Brown Tracer

DB9 Pin 4 -> yellow wire -> output 1 -> Connect to OE Wire Harness Grey with Orange Tracer

DB9 Pin 5 -> grey wire -> connect to Pin 8 Red -> connect Grey and Red wires to +12v Key ON Power

DB9 Pin 6 -> pink wire -> connect to GROUND

DB9 Pin 7 -> blue wire -> connect to ONE side of a momentary switch, connect the other side to GROUND Optional - MSD 2-step connect 3 pin msd blue wire to the LaunchMAX DB9 pin 7 blue wire.

DB9 Pin 8 -> red wire -> connect to Pin 5 Grey -> connect Grey and Red wires to +12v Key ON Power

#### **DB9** WIRING REFERENCE - LAUNCHMAX (+12 ACTIVATION WIRING)

DB9 Pin 1 -> white wire -> input 1 -> ECU Connector: PC3 Grey with Orange Tracer (73 - 2015) (45 - 2011-2014)

DB9 Pin 2 -> brown wire -> input 2 -> ECU Connector: PC2 Green with Brown Tracer (74 - 2015) (44 - 2011-2014)

DB9 Pin 3 -> green wire -> output 2 -> Connect to OE Wire Harness Green with Brown Tracer

DB9 Pin 4 -> yellow wire -> output 1 -> Connect to OE Wire Harness Grey with Orange Tracer

DB9 Pin 5 -> grey wire -> connect Grey wire to +12v Key ON Power

DB9 Pin 6 -> pink wire -> connect to Blue Wire Pin 7 -> connect Pink and Blue wires to GROUND

DB9 Pin 7 -> blue wire -> connect to Pink Wire Pin 6 -> connect Blue and Pink wires to Ground

DB9 Pin 8 -> red wire -> connect to ONE side of a momentary switch, connect the other side to +12v Key on Power

Optional - MSD 2-step connect 3 pin msd white/blue wire to the LaunchMAX DB9 pin 8 red wire. Optional - Connect NOS or Turbo Controller to the LaunchMAX DB9 pin 8 red wire.

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#### **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.