

# Ford 6.0L Xzillaraider II Instructions

Part Numbers: XZ2004, XZ2005, XZ2005R, XZ2006, XZ2007, and XZ2007R

# Supplied Items:

Xzillaraider II module Xzillaraider II wiring harness Xzillaraider II ControlPOD Bypass plug Care Kit - Velcro, Zip Ties and an Alcohol Wipe

# **Required Tools:**

Side cutters for trimming plastic ties Razor blade or knife if cutting through the firewall grommet (optional) Ratchet ¼" drive 8mm Socket 10mm Socket 13mm Socket

# **Release the Beast**

Thanks for your purchase of a Quadzilla product. We know you'll be more than satisfied with the increased performance our product provides. Be sure to tell your fellow diesel truck owners about Quadzilla.

This is a high performance product and we suggest that you also install Exhaust Gas Temperature (EGT) gauges and boost gauges with all Quadzilla Stealth modules and chips. This product may alter the technician's ability to use diagnostic equipment.

Please remove this Quadzilla product when taking your truck into a service facility.

The installation of this product indicates the BUYER has read and understands this agreement and the 'Disclaimer of Liability' agreement contained at the end of this document and accepts its terms and conditions.

This is a high performance product. Use at your own risk. Be sure to read the disclaimer before beginning any installation of this product.

# **Introduction**

**Important**: Read the disclaimer completely before installing your Quadzilla product. Below is a photo of the Xzillaraider II Ford 6.0L module and some simple things to remember: (Insert photo of module, harness and ControlPOD)

In all positions, the Xzillaraider II module should deliver power smoothly without ill effects. The truck should behave just like it did when it was stock, with the exception of the increase in power. As you run in higher levels, some black smoke from the tailpipe is normal but it should not be excessive and should clear up as turbo boost is achieved. As fuel is added to the vehicle, exhaust gas temperatures will increase and you should use a pyrometer to monitor exhaust gas temperature. In the higher setting you will notice the pitch of the engine to be slightly different. This is due to the timing increase and is normal as long as it is not excessive. The higher settings will have a lighter throttle feel to them and may not be as desirable if driving in inclement weather or around town when only a small amount of extra power is needed. It is highly recommended that the module only be used when the engine is up to operating temperature. If use in the higher level is needed, you may consider a Monster Air Intake or a 4" exhaust system as well.

The Xzillaraider II module adds power throughout the RPM range which makes the truck much more desirable to drive. The added power also helps reduce downshifting when passing or towing.

# **Module Information**

The Xzillaraider II module alters fuel injection quantity, fuel pressure, fuel injection timing and boost. When using the Xzillaraider II module, it is highly recommended that you use a pyrometer to monitor exhaust gas temperature.

<b>XZT Power Level</b> – 65 hp Full-Time	Standard Power Levels:	<b>Race Power Levels:</b>
	Power Level 1 – 25 hp	Power Level $1 - 25$ hp
	Power Level 2 – 45 hp	Power Level 2 – 45 hp
	Power Level 3 – 65 hp	Power Level 3 – 65 hp
	Power Level 4 – 120 hp	Power Level 4 – 120 hp
	-	Power Level 5 – 160 hp

<u>Note:</u> The Race modules were not intended to be used in the high settings for every-day usage. Using the 160hp setting may cause poor shifting, poor fuel mileage, excessive black smoke and other minor undesirable characteristics. The 160hp setting was intended for racing use or dyno use only. The Race module was designed to shift properly at full throttle; shifting at light throttle may produce less than desirable results.

The Xzillaraider II monitors oil temperature as an added safety feature for your engine. The Xzillaraider II module will allow power to be added when the oil temperature reaches 160°F. The Xzillaraider II module will automatically lower the module to the *Off* position if engine oil temperature exceeds 240°F. If the engine coolant temperature exceeds 230°F it will completely disable its self and bypass to stock.

Because some 6.0L engines are known to loose coolant out of the overflow cap under severe duty, we have added even further protection. If the oil temperature and water temperature are separated by more than 40°F, the Xzillaraider II module will automatically turn to the stock position. If your vehicle loses enough coolant, the engine coolant temperature sensor will not read accurately and if the water level is low enough, the sensor will read low. By monitoring oil temperature as well, the Xzillaraider II will not be fooled by false readings.

# **Module Installation**

- 1. Make sure the ignition is in the *Off* position and the keys are removed.
- 2. Pop the hood and locate the Injection Control Pressure (ICP), Manifold Absolute Pressure sensor (MAP), Engine Oil Temperature (EOT), and Engine Coolant Temperature sensors (ECT). The ICP is round, has 3 wires and is located on the passenger side valve cover (2004 2007). The ICP sensor for 2003 and early 2004 trucks is located behind the turbo on the driver's side of the engine. The ICP inspection plate must be removed for installation. The MAP sensor has 3 wires and is located near the firewall, over the top of the passenger side valve cover. The EOT sensor is next to the oil filter housing on the passenger side of the vehicle. The ECT sensor is located on the front of the engine on the driver's side just below the cooling fan sensor.
- 3. (2003 and early 2004) To reach the ICP sensor, you must lay underneath the driver's side of the truck. You will want to look at the backside of the engine towards the turbocharger. You will see a silver inspection plate. There are 3 bolts that you must remove using a ratchet. You must remove two 10mm bolts and one 13mm bolt (some trucks will have 8mm bolts instead of 10mm bolts). Once the plate is removed you will be able to see and reach the ICP sensor.
- 4. (2004 2007) Disconnect the ICP sensor plug by gently lifting the locking tab on the connector and removing the connector. The correct plug for the ICP circuit has green and red wires visible to you. Plug the Xzillaraider II connector into the ICP sensor. Now plug the factory connector into the Xzillaraider II plug. This essentially makes a loop between the factory connector and the sensor. This particular plug is designed to be extremely tight fitting. The connector for the Xzillaraider II harness was designed to fit under the collar of the factory connector. The thin sidewall required to fit this connector requires the connector to be extremely tight so that when it is subject to high temps the connection remains solid. You will want to insert the factory connector completely into the Xzillaraider II harness. Then plug the Xzillaraider II connector back into the factory plug. This essentially makes a loop between the factory connector and the sensor. Make sure the plugs are completely locked together and you notice a light snap when they are fully connected. Failure to connect these plugs properly can cause our check engine light to illuminate and the truck to run poorly.
- 5. Disconnect the MAP sensor by gently sliding the red lock on the connector down, then push the locking tab on the connector and remove the connector from the sensor. The locking tab is located where the red lock was located. The correct plug for the MAP sensor circuit has a blue wire that is visible to you. Plug the Xzillaraider II connector into the MAP sensor. Now plug the factory connector into the Xzillaraider II plug. This essentially makes a loop between the factory connector and the sensor. Make sure the plugs are completely locked together and you can confirm that the locking tab on both connectors have been properly locked down. Failure to connect this properly will cause a check engine light and the truck will run poorly.
- 6. Disconnect the EOT sensor. Using a pair of needle nose may make removing the factory plug easier. The heat this plug is subject to makes it slightly hard to disconnect for the first time. Gently squeeze the locking tab on top of the factory plug and pull up on the plug gently to remove it. The correct plug for the EOT circuit has a yellow wire that is visible to you. Plug the Xzillaraider II connector into the EOT sensor. Now plug the factory connector into the Xzillaraider II plug. This essentially makes a loop between the factory

connector and the sensor. Make sure the plugs are completely locked together and you can confirm that the locking tab on both connectors have been properly locked down. Failure to connect this properly can cause your check engine light to illuminate and the truck to run poorly.

- 7. Disconnect the ECT sensor. Using a pair of needle nose may make removing the factory plug easier. The heat this plug is subject to makes it slightly hard to disconnect for the first time. Gently squeeze the locking tab on top of the factory plug and pull up on the plug gently to remove it. The correct plug for the ECT circuit has an orange wire that is visible to you. Plug the Xzillaraider II connector into the ECT sensor. Now plug the factory connector into the Xzillaraider II plug. This essentially makes a loop between the factory connector and the sensor. Make sure the plugs are completely locked together and you can confirm that the locking tab on both connectors have been properly locked down. Failure to connect this properly can cause your check engine light to illuminate and the truck to run poorly.
- 8. Route the remaining wiring under the turbo inlet tube. It is important to keep the wiring away from any hot or sharp surface that could damage the harness.
- 9. Locate the factory hole in the firewall on the driver's side of the steering shaft. This hole will have either shiny silver tape covering it or there will be a diamond shaped hard plastic plug in it. If the tape is present, a razor blade or even your finger will allow you access in to the truck cab. If the truck has the plastic plug, you will need to reach up under the dash and release the plug so it can come out. There is thick sound cancelling material on the inside of the firewall, but there is already a cut out in it to provide access to this hole. If you have a plastic plug, you can either remove it or drill a hole large enough to route the Xzillaraider II 12-pin plug through the firewall.



10. (Only applies to



Standard and Race modules) Take the red power wire for the ControlPOD and hook it up to fuse #27 for power. Unplug fuse #27 and put the tap over it, then replace the fuse for a power connection. If you plug the ControlPOD in to the 4-pin switch connector and turn the truck to the *On* position, the ControlPOD should light up. If it does not, please check all connections again and then call Quadzilla Tech Support if necessary.

- 11. You now need to run the Xzillaraider II 12-pin connector with 4-pin switch connector through this grommet.
- 12. Check all of your under hood connections to make sure everything is properly connected. It is recommended to pull all excess slack inside the cab at this

time. Using the supplied zip ties, secure the wiring harness to keep it from being damaged. It is recommended that everything is tied tight and kept away from any moving parts or any high temperature areas.

- 13. With the wiring harness inside the cab, plug the Xzillaraider II module into the wiring harness. The plug is keyed so there is only one way to plug the wiring harness into the module. Make certain that the plug is completely connected to the module. If the plug is not fully seated, it can cause the truck not to start or set a check engine light.
- 14. Find a good spot to mount your ControlPOD. There are many locations that provide easy access to your ControlPOD but we recommend the steering column. Once you have a spot located, run the ControlPOD cable to the module. Be careful that the cable is run in a manner that prevents any damage to the ControlPOD wire.
- 15. Connect the 4-pin connector on the ControlPOD cable to the mating 4-pin connector on the Xzillaraider II harness.





before taking the truck in to any dealership) in the future.

19. With the wiring harness inside the cab, plug the Xzillaraider II module into the wiring harnesses 12-pin plug. The plug is keyed so there is only one way to plug the wiring harness into the module. Make certain that the plug is completely connected to the module. If the plug is not fully seated, it can cause the truck not to start or set a check engine light.

- 16. Choose a location to mount the module. The module can be mounted under the dash panel. The module must remain in the cab as the case is not weatherproof. Secure the module using Velcro or Zip Ties. Make sure the module is in a secure location.
- 17. Re-check all connections to ensure proper installation.
- 18. Remove the bypass plug from the 12-pin connector on the Xzillaraider II harness. Store this bypass plug somewhere safe for future use we recommend the glove box. This plug will allow you to remove your Xzillaraider II and return the truck to stock without removing the entire wiring harness (all components should be removed from

the truck, including the wiring harness,



- 20. Start the vehicle and use the ControlPOD to go through all of the power levels. In certain instances a slight change in tone may be heard when the power level is changed, but the idle should remain smooth and quiet just like the vehicle did when it was stock.
- 21. Enjoy your new found power and increased fuel mileage!

#### Troubleshooting

Module resets while driving – Check the ICP sensor. Make sure the plug is tight and can not wiggle. Add tie wrap to the ICP connector and plug to make sure of a tight connection.

Won't shift correctly – Reset transmission (call Quadzilla Technical department for details 1-888-842-6572). Repeat learning process exactly as described in the instructions.

Can't feel power change – At cruising speeds no change should be felt. Use more throttle and then adjust the ControlPOD to feel more power. Peak power is only gained at full throttle.

Feels like less power than before – Check air and both fuel filters. Maintain proper maintenance on these items. These items will be noticeable when dirty after power is added. An oil change at regular intervals is very important – 3000 miles under heavy duty usage and 5000 miles under easy usage is recommended.

Truck surges – Check air and both fuel filters. Maintain proper maintenance on these items. These items will be noticeable when dirty after power is added. An oil change at regular intervals is very important – 3000 miles under heavy duty usage and 5000 miles under easy usage is recommended. Also Race modules in the high setting may not be desirable to use for normal driving.

#### The Learning Curve

The Ford torque shift is a very strong and very advanced transmission. Your transmission has an adaptive learning ability. Because of the added power and torque, your transmission will shift differently and must be retrained to achieve superior shifting again.

It is recommended to start at the stock power level after installation of the Quadzilla Xzillaraider II module. It is important to follow the steps that are outlined in this manual. For your shifting to be the best it can be with this massive amount of added power, it will take some time and some patience on your part. We know that you want to press that button and feel the power, but it is very important to follow the learning procedure.

This process will be used in all power levels, starting with the stock mode. Do not proceed to the next power level until shifting is satisfactory. If your shifting is less than desirable, do not move to the next level: this will make things worse. The more shifts your truck makes, the better the shifting will be. If you drive mainly on the highway, it will take considerably longer to learn. Overall mileage does not affect the adaptive learning process of your transmission.

It is highly recommended to find a location where speeds higher than the speed limits are allowed. Do not speed or break any state laws to follow the learning process.

Starting at approximately 25% throttle, allow your truck to shift through all 5 gears while maintaining a steady throttle position. Once you reach 5rh gear, lightly apply the break while holding your throttle steady for approximately 10 seconds. If the truck has any flares or less than desirable shifts, repeat the same process. If it shifted to your liking, then proceed to the next step.

Using approximately 50% throttle, follow the same guidelines as before. Once shifting is desirable, continue to the next step.

Using approximately 75% throttle, follow the same guidelines as before. Once shifting is acceptable, then continue to the last step.

This is the best part: Use 100% throttle and run through all 5 gears. You do not have to reach top speed to complete this level. Once the transmission has shifted into the last gear, apply the brake gently and hold for 10 seconds. This typically happens around 80mph, but it can vary from truck to truck. Once the truck shifts perfect, go to the next power level and repeat each step at each throttle percentage for each power level. Do not exceed posted speed limits on public highways during 100% throttle. Find an area where higher than normal speeds are legal.

#### **Exception to the Rule:**

When using less than 50% throttle for the first time on power level 3, your transmission may have a funny shift or may be slow to shift into the next gear. It is rare but this can cause the Tow Haul light to blink. We have simply confused the transmission and can be reset with a key start. If you experience this once the truck has been restarted, make a 100% throttle run through the gears. The truck may not shift perfect but it should not have problems. If this works, continue using 100% throttle until the shifting is desirable. After the shifting is acceptable, work backwards using 75% throttle, 50% throttle and so on. If you continue to have trouble, please call Quadzilla Tech Support at 1-888-842-6572.

#### **Explanation:**

The reason for the exception has to do with line pressure. There are many different flashes available from the factory and they can have an affect on the shifting. The Quadzilla Xzillaraider II module makes enough torque on the low end of the power band and at light enough throttle that the clutches are not receiving the needed line pressure for a proper shift. Once we make the transmission understand that there is considerably more power at a lighter throttle it will apply considerably more pressure to the clutches which results in firm, fast shifts. We have been an industry leader in getting power to the ground. You Xzillaraider II module has special tuning to make this learning process as fast and easy as possible. We also offer the best shifting modules. If you can't get through the process, it may be necessary to try a different flash or a slightly reduced horsepower program. This is done free of charge if needed.

#### THIS IS A HIGH PERFORMANCE PRODUCT. USE AT YOUR OWN RISK

Do not use this product until you have carefully read the following agreement.

This sets forth the terms and conditions for the use of this product. The installation of this product indicates that the BUYER has read and understands this agreement and accepts the terms and conditions.

#### **DISCLAIMER OF LIABILITY**

Quadzilla Performance Technologies, Inc. and its distributors, jobbers and dealers (hereafter **SELLER**) shall in no way be responsible for the product's proper use and service. THE **BUYER** HEREBY WAIVES ALL LIABILTY CLAIMS.

The **BUYER** acknowledges that he/she is not relying on the **SELLER's** skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extend beyond the description on the face hereof and the **BUYER** hereby waives all remedies or liabilities, expressed or implied arising by law or otherwise, (including without any obligations of the **SELLER** with respect to fitness, merchantability and consequential damages) or whether or not occasioned by the **SELLER's** negligence.

The **SELLER** disclaims any warranty and expressly disclaims any liability for personal injury or damages. The **BUYER** acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the **BUYER** agrees to indemnify the **SELLER** and to hold the **SELLER** harmless from any claim related to the item of the equipment purchased. Under no circumstances will the **SELLER** be liable for any damages or expenses by reason of use or sales of such equipment.

The **SELLER** assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt, contact the manufacturer.

\*Legal in California only for racing vehicles which may never be used upon a highway.

#### **LIMITATION OF WARRANTY**

Quadzilla Performance Technologies, Inc. (hereafter "SELLER") gives limited warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of SELLER's product herewith. The SELLER shall be in no way responsible for the product's open use and service and the BUYER hereby waives all rights other than those expressly written herein. This warranty shall not be extended or varied in, except by a written instrument signed by SELLER and BUYER. The warranty is limited to one (1) year from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to the **SELLER** and must be accompanied by a dated proof of purchase receipt. All warranty claims are subject to approval by Quadzilla Performance Technologies, Inc.

Under no circumstances shall the **SELLER** be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

Under no circumstances shall the SELLER be liable for any damages or expenses insured by reason of the use of sale of any such equipment.

#### IN THE EVENT THAT THE **BUYER** DOES NOT AGREE WITH THIS AGREEMENT: THE **BUYER** MAY PROMTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION WITH A DATED PROOF OF PURCHASE TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM THE DATE OF PURCHASE FOR A FULL REFUND.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE **BUYER** HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

# WARRANTY:

All QUADZILLA Performance Modules/Tuners Diesel Performance Enhancement Software- as specified below - is warranted against defective materials or workmanship for one million miles or ten years from date of purchase, whichever comes first. The Performance Modules/Tuners hardware units are covered by a one year unlimited mileage warranty.

## WHAT IS WARRANTED:

Any Performance Modules/Tuners Diesel Performance Enhancement Software specified for and Cummins, Powerstroke, and, Duramax diesel engines, except those units sold exclusively for racing and/or off-road use.

## WHO IS COVERED BY WARRANTY:

The original purchaser of a Performance Modules/Tuners who has completed the required warranty registration and provided proper proof of the original retail purchase and all other required information.

## WHAT IS NOT WARRANTED:

Any Performance Modules/Tuners used for any type of racing or competition, any off-road use, custom or modified applications, any non-legal or industrial applications. (These units are covered by a one year unlimited mileage warranty for both Software and Hardware.)

## WHAT VOIDS THE WARRANTY:

Incorrect Installation: The Performance Modules/Tuners must be installed following Quadzilla installation procedure as outlined in the product literature that accompanies the Performance Modules/Tuners. Physical damage to the unit due to improper care in installation or removal will not be covered under this warranty. No Registration: Failure to register your product within 90 days of purchase will void the one year unlimited mileage warranty. No Proof of Purchase: At time of warranty claim, buyer must provide proof of purchase (original receipt or invoice). Incorrect Use: Any damaged, abused or modified Performance Modules/Tuners will not be warranted.

# EXTENT OF WARRANTY:

Any defective Performance Modules/Tuners properly returned to QUADZILLA will be replaced or repaired by QUADZILLA. QUADZILLA will not be responsible for any other expenses incurred by the customer under the terms of this warranty, nor shall it be responsible for any damages consequential, special, contingent, or otherwise; or expenses or injury arising directly or indirectly from the use of the Performance Modules/Tuners unit or software. Any Performance Modules/Tuners returned to QUADZILLA must be sent at the customer's expense along with proof of purchase. QUADZILLA reserves the right to determine whether the terms of the warranty, set out above, have been properly complied with. In the event that the terms are not complied with, QUADZILLA shall be under no obligation to honor this warranty.

### SHORTAGES AND DAMAGED GOODS:

It is the responsibility of the customer to inspect and count products upon receipt. Any shortages or errors must be reported to Quadzilla immediately. Claims for shortages or damaged goods must be received within 3 days of receipt of the product. All merchandise is inspected before packing. Any damaged goods should be reported to the freight carrier immediately. All packaging of damaged goods must be kept for inspection by the freight carrier.

### **RETURNS AND EXCHANGES:**

An RMA (return merchandise authorization) must accompany all returns and exchanges. Returns must include a copy of the original invoice. Returns and exchanges must be shipped pre-paid or they will be refused.

Returned or exchanged products must be undamaged, or in "like new" condition. Damage occurred during freight due to improper packing is the responsibility of the customer. Unauthorized or refused merchandise are subject to a 10% restocking fee.