

300C64 CUSTOM FORD 6.4L 2008-2010 PROGRAMMER

Reference Guide and Step-by-Step Installation Manual

IMPORTANT NOTE Some adjustable features listed on the following pages are NOT applicable for all applications. The year, make, and model of the vehicle will determine the feature set. During the installation, only the available adjustable features for that particular application will appear on the programmer screen.

The installation process if very easy and should not take long for programming and installation to be accomplished. To speed and streamline the installation, follow these recommendations.

It is very important in the programming process that the vehicle's battery is fully charged and you do not have a drain on the battery. For this reason these precaution should be taken. Please check and remove the following if they are installed on the vehicle.

DO NOT operate electrical accessories (radio, windows, wipers, etc.). If it's hot, roll the window(s) down BEFORE programming the vehicle.

Make sure nothing is plugged into the cigarette lighter or any other auxiliary power port on the vehicle BEFORE programming.

Once the programming cable has been connected to the vehicle's diagnostic port and to the programmer, DO NOT remove or disturb the cable during the ENTIRE programming process. Only remove the cable from the diagnostic port when the installation is complete.

DO NOT leave the vehicle during programming. The programmer screen will display instructions for you to follow i.e., turning the key to the On position (but NOT starting the engine), and you will be asked to select certain engine tuning and vehicle adjustment features.

During the installation and programming if an error should occur, a help number will be displayed on the programmer screen. Write down the error message and contact the tech support team on the provided telephone number from 9am-6pm, Eastern Time, Monday-Friday.

SECTION 1: PROGRAMMING INSTRUCTIONS

Set the parking brake and turn the key to the RUN position but DO NOT start the engine.

Connect one (1) end of the provided cable to the programmer.

Locate the diagnostic port under the driver's side of the dash. Plug the programmer cable into the diagnostic port. Make sure the cable is plugged in completely to ensure a good connection. DO NOT disturb the cable once it is connected to the diagnostic port.

The programmer will show applications and copyright information and identify the vehicle. This screen will appear:

The programmer is checking the vehicle for any diagnostic trouble codes (DTCs).

If no DTCs are found, the programmer will then go to Engine Tuning.

"X" represents the number of DTCs found in the vehicle.

Press 'Y' to view the DTC(s) found in the vehicle. Press 'N' to clear the DTC(s) without viewing them.

IMPORTANT NOTE

For DTC interpretations, refer to factory manuals, see a local parts dealer, or refer to internet sites that provide this type of information. An example of such a website is www.obdii.com.

Press the 'N' button to view the next DTC (if any). Once all the DTCs have been viewed, Press "N" to continue.

Press 'Y' to view the DTC(s) again. Press 'N' to continue.

Press 'Y' for the programmer to clear the DTC(s).

The programmer has now successfully cleared the DTC(s) found in the vehicle computer. This screen will now appear

TO ENTER PROGRAMMER MODE, PRESS Y TO EXIT PROGRAM, PRESS N

For each option, press the 'Y' button to make a change. Press the 'N' button to make no change and proceed to the next option. For some options, use the up and down arrows to point to a particular selection. Pressing the 'Y' button will then lock in the selection.

ENGINE TUNING

TO INSTALL ENGINE TUNING, PRESS Y TO KEEP FACTORY ENGINE TUNING, PRESS N

Press the 'Y' button to install optimized engine tuning. Then follow the prompts on the screen for each particular application. Press 'N' to keep the stock vehicle tuning.

There is a selection of 5 levels of Power

Level 1---Heavy Tow file, 50hp and 90 ft-lbs Level 2---Light Tow file, 100hp and 125 ft-lbs Level 3---Street file, 150 hp and 235 ft-lbs Level 4---Extreme file, 200hp and 440 ft-lbs** Level 5---Race file, 250hp and 515 ft-lbs** tow full capacity* up to 15k lbs* up to 8k lbs* up to 4k lbs* up to 2k lbs*

*These are recommended towing capacities. While towing, try not to race the truck or take off fast from a stop, use common sense

**Levels 4 and 5 require a cold air intake. At these power levels the factory filter can collapse in the air box.

There are 2 transmission levels to choose from, STREET and EXTREME. STREET should be used with the first the levels and EXTREME should be used with Levels 4 and 5. The EXTREME shifting forces trans into a hot lock mode to get converter to lock earlier which is needed at the higher power levels.

The Extreme Trans level does require the transmission to learn. Go 0-60 mph at 25% throttle, Go 0-60 mph at 50% throttle, Go 0-60 mph at 100% throttle, the transmission may seem to miss a gear or truck will depower on shift. This is normal and will happen a few times before the trans will learn. After it has learned, this will not happen anymore. Every time the truck is flashed, the learned memory is cleared and the trans will have to learn again.

TIRE SIZE

IF TIRE HEIGHT HAS BEEN CHANGED FROM ORIGINAL, PRESS Y IF TIRE HEIGHT HAS NOT BEEN CHANGED, PRESS N

Press 'Y' if the tires installed have an overall height that is different than the original factory tire size. This will allow for correction of speedometer and odometer readings for the new tire height. Pressing 'Y' will display this screen:

USE UP/DOWN ARROWS TO SELECT CORRECT TIRE HEIGHT, THEN PRESS Y TO SELECT OR N TO EXIT.

Use the up and down arrows to adjust the tire height in 1/4" increments. The minimum and maximum tire size will be shown on the programmer screen. Press the 'Y' button to lock in the new tire height.

<u>HOW TO DETERMINE TIRE HEIGHT</u> If the tire height is not known, ask a tire dealer or use these steps:

1. Place a chalk mark on the tire where it contacts the pavement and also mark the pavement. These marks should be at the center of the tire footprint pointing straight down to the pavement.

2. Roll the vehicle in a straight line until the chalk mark makes one revolution and is pointing straight down at the pavement again. Mark the pavement again at this new spot.

3.Measure (in inches) the distance between the two (2) marks on the pavement. Divide the measurement by 3.1416. This will give you the tire height in inches. REAR GEAR RATIO

IF REAR AXLE RATIO HAS BEEN CHANGED FROM ORIGINAL, PRESS Y IF REAR AXLE RATIO HAS NOT BEEN CHANGED, PRESS N

Press 'Y' if the installed rear gear has a ratio that is different than the original factory gear. This feature will recalibrate the speedometer/odometer readings and partthrottle shifting for automatic transmissions for the new gear ratio. This screen will now appear

USE UP/DOWN ARROWS TO SELECT CORRECT REAR AXLE RATIO, THEN PRESS Y TO SELECT OR N TO EXIT. ___-:1

Use the up and down arrows to see all of the gear ratios available for the vehicle. Press 'Y' to lock in the gear ratio that is installed on the vehicle.

REPORT

This screen will now show all the selections that have been made:

YOU HAVE CHOSEN

.

Watch the selections scroll by on the screen. If all the selections are correct, press 'Y' to start programming the vehicle. If changes need to be made to any of the selection(s), press the 'N' button to start over from the beginning.

PROGRAMMING

Follow all of the prompts on the programmer screen during the entire programming process for the vehicle. While the unit is programming, the following is EXTREMELY IMPORTANT:

DO NOT leave the vehicle while programming is in process.

DO NOT unplug or disturb the cable, turn the key off, or start the engine (unless instructed to by the programmer). If the unit stops programming or is interrupted, please make a note of any message(s) that appear on the programmer screen and call the provided tech service line. **IMPORTANT NOTE**

On certain applications, the dash message center may display random code information such as REDUCED ENGINE POWER. This is a NORMAL step during the programming process for certain applications.

After the programmer has successfully programmed the vehicle, wait thirty (30) seconds, then unplug the programmer from the vehicle and start the engine, making sure the "Check Engine" light on the instrument cluster goes out (If it stays on or flashes, call the provided phone number). Warm up the engine and make sure it is running smoothly.

FOR ONSTAR or SATELLITE RADIO EQUIPPED VEHICLES.

Plug any connector(s) back into the original location and reinstall any panels and/or other interior components that were removed prior to programming.

SECTION 2: PROGRAMMING VEHICLE BACK TO STOCK OR CHANGING OPTION SETTINGS

Reconnect the programmer to the vehicle as in Section 1. Turn the key to the RUN position but DO NOT start the engine. The programmer will turn on and this screen will appear:

TO RETURN VEHICLE TO FACTORY SETTINGS, PRESS Y TO ACCESS PROGRAMMER FEATURES, PRESS N

Press 'Y' to return to the original factory settings. Follow the prompts on the screen for the particular application.

Press 'N' to allows viewing of the features in Section 1.

SECTION 3: TROUBLESHOOTING GUIDE

Shifting Issues

If you are using the extreme shifting and you have a light surge at low throttle positions before a shift, change trans level back to street. This is usually caused by a worn torque converter that has trouble locking at low pressures.

IMPORTANT NOTE

Use this as a general reference ONLY. Some screens may vary from those shown. LOSS OF COMMUNICATION

COMMUNICATION LOST: RETRYING

This screen will appear if the programmer is unable to communicate with the vehicle's computer. If the problem is corrected, the programmer will automatically restart the programming process. Take these steps to correct the problem:

1. Make sure that the ignition key is in the RUN position and that the engine is not running.

2. Make sure that both ends of the cable are securely attached.

3. Wait at least five (5) minutes for the programmer to re-establish communication and program the vehicle.

4. If the three (3) steps above do not correct the problem, call the tech service line that appears on the programmer screen.

CABLE REMOVED WHILE PROGRAMMING

The programmer will lose power during programming if the cable is removed for any reason. If this happens, simply reconnect the cable. The programmer will identify the vehicle and then display these screens:

PROGRAMMING WAS

INTERRUPTED...

PROGRAMMING WILL CONTINUE NOW

The programmer will then continue programming from where it was interrupted.

ATTEMPTING TO PROGRAM A DIFFERENT VEHICLE

If attempting to program the computer in another vehicle without first programming the original vehicle back to stock,

the following screen will appear:

CODE 91: PROGRAM YOUR VEHICLE BACK TO STOCK BEFORE PROGRAMMING ANOTHER VEHICLE

BLANK SCREEN

If the programmer does not turn on, make sure that both ends of the cable are fully inserted. If the programmer still does not turn on, check for a blown fuse in the vehicle fuse panel for either the cigarette lighter or the accessory circuit. Replace with the proper amperage fuse.

Contact Us 407-721-2824 or email tech@punchitperformance.com