



## **68RFE Signature Series Transmission Installation Instructions 2007.5-2009**

### **Oil Specifications**

Use only ATF+4 oil in your transmission. You will need approximately 22-23 qts of oil. It will take 10-15 minutes for the oil to stop clinging to the dipstick after adding oil. Reading the oil level too soon will result in a false high reading due to the dipstick pickup of the clinging oil.

*Be sure to completely flush the contaminants out of your cooler and lines.*

### **Step 1 TCM Tuning Options**

On 3<sup>rd</sup> gen trucks the TCM is a separate module and because of this you have several options on how to get the proper tuning onto your truck. You must have one of these two options installed on your truck or your warranty will be void. Our transmissions must have one of these two options installed in order to work properly!

1. H&S Overdrive Software: This is a great choice but please know that H&S has been defunct for over 5 years and there is absolutely no support for this product. If you run into issues, we will not be able to assist.
2. Revmax Custom TCM: The easiest way, we simply will sell you a pre-programmed TCM and you will return your old TCM back for a core charge.

Option 1, H&S: Install your tuner and enter in the overdrive unlock code. *This code would have been purchased when you bought your tuner. If you no longer have this code you will be unable to install the software.* Install the OD software and select default 5<sup>th</sup> and 6<sup>th</sup> gear shift points. Select the 225psi line pressure option.

### **Step 2 Initial Quick Learn Process**

Using a Snap On, Matco or equivalent scanner perform a transmission quick learn procedure. After this procedure has been completed you may now start the drive learn process!

### **Step 3 Drive Learn Process**

You will now take the vehicle out for the initial test drive, do not exceed 30% throttle or 2000RPM. Allow transmission to shift all the way up to sixth gear AND back down to first at least 10 times. If full power is given, immediate transmission failure will occur and you will be responsible for repair charges.

You must keep throttle below 50% at all times during this cycle. Drive the vehicle for a MINIMUM of 3 days. The truck must be allowed to rest overnight and go from HOT to COLD engine and transmission temperatures. During this time period it is best to have a MINIMUM of 200 miles STOP AND GO driving. Highway driving does not count and will not drive learn the transmission.

During the the first 500 or so miles you will notice that the transmission may shift firm. It will take quite some time for the TCM to adapt to the new transmission. During this adaptation time some odd or firm shifts may occur. These should disapate over time. If they remain after this time, please contact your tuner for revisions.

#### **Step 4 Line Pressure Verification**

After Quick Learn has been completed you will need to hook up your scan tool to monitor line pressure. Your line pressures should be +/- 15psi of these values. If your pressures differ from these, stop driving the vehicle and report the issue via our tech service @ <https://revmaxconverters.com/support/>

| Range          | Desired Pressure | Actual Pressure |
|----------------|------------------|-----------------|
| D @ idle       | 100psi           | 100psi          |
| D Power Braked | 225psi           | 225psi          |
| P @ idle       | 60psi            | 60psi           |

#### **Step 5 Operational Notes**

Due to the increase in line pressure and clutch surface area you may notice your new transmission could run warmer than previously. In stop and go situations where you are not towing it is normal to see temps up to 200 degrees. If towing, the temps may be even higher. We recommend manual shifting the transmission when towing in stop and go traffic. By doing this, you can lock the converter in 2<sup>nd</sup> gear and keep the truck running cooler. Once in manual 2<sup>nd</sup> allow the RPM to reach 2500 or more and then completely let out of the throttle. The converter will now lock and stay locked thru 6<sup>th</sup> gear. If you will be in crawling low speed traffic while towing heavy, placing the truck in 4WD LOW will help greatly to reduce converter slippage and lower transmission temps.

You may notice that your truck may have set DTC codes P2701, 2702, 2703 or 2704 stored. This is nothing to worry about. They refer to inadequate CVI volumes. In a stock transmission this would be an issue but with a modified performance 68RFE these codes are generated for other reasons. The reason these codes are appearing is due to the fact that you are now applying the clutches 29% faster due to the 225psi of line pressure. In a performance transmission with additional clutches you will apply even faster and this may cause one or more CVI values to get down to 0. Once at 0 these codes will appear. When the apply is quicker than the factory was looking for it to be, these codes set. These codes do no effect performance in anyway and can be disregarded!

RevMax has strict requirements for larger than stock tire sizes and axle ratios. Please consult this data to assist in getting the correct gear swap if needed. Any tires larger than 36" require a re-gear in order for us to warranty the transmission.

Up to 35" = 3.42 - 3.73

35" to 37" = 3.73 - 4.10

37" to 39" = 4.10 - 4.56

39" to 42" = 4.56 - 4.88

#### **Warranty**

2 YR UNLIMITED MILEAGE WARRANTY FOR NON COMMERCIAL APPLICATIONS. COMMERCIAL APPLIATIONS HAVE A 2 YR 50K MILE WARRANTY. WARRANTY IS VOID IF CORE TRANSMISSION IS NOT RETURNED. WARRANTY COVERS LABOR FOR THE INITIAL 12 MONTHS AT \$400.00 FOR 2WD AND \$500.00 FOR 4WD VEHICLES. LABOR IS NOT COVERED AFTER 1 YR.

SHIPPING CHARGES FROM A BUSINESS ADDRESS ARE COVERED FOR 2YRS. WARRANTY LABOR REIMBURSEMENT IS GIVEN ONCE ITEM IS RETURNED FOR INSPECTION AND CLARIFICATION AS TO IF THE FAILURE WAS A RESULT OF REVMAX WORKMANSHIP OR PART FAILURE. SHAFT BREAKAGE OR SPRAG FLIPPING OF ANY KIND IS NOT WARRANTIED.



## **68RFE Signature Series Transmission Installation Instructions 2010-2019**

*Even though we require approved tuning to be ran with our products, we cannot guarantee that the tuning you receive from your tuner will have great drivability. Your tuner must be approved by RevMax but please note that we have not evaluated each tuner's files for shift quality, lockup firmness and overall driveability has not been tested by RevMax and we are not responsible for tuning issues or complaints about hard shifting or harsh converter apply as all of these complaints are directly related to tuning. Should you have issues with any of this, please contact your tuner for revised software tuning that still meets our minimum criteria.*

*We **HIGHLY** advise that the factory torque converter lockup programming be retained. Programming for early lockup apply (before 4<sup>th</sup> gear) will likely result in **VERY** harsh lockup apply and hard shifting. This can result in broken shafts which are not covered under warranty under any circumstances!*

### **Oil Specifications**

Use only ATF+4 oil in your transmission. You will need approximately 22-23 qts of oil. It will take 10-15 minutes for the oil to stop clinging to the dipstick after adding oil. Reading the oil level too soon will result in a false high reading due to the dipstick pickup of the clinging oil.

*Be sure to completely flush the contaminants out of your cooler and lines.*

### **Step 1 TCM Tuning**

On 4<sup>th</sup> gen trucks there are a plethora of ways to tune your truck with RevMax approved transmission tuning. This can be done with EZ Lynk, EFI Live, RaceMe and H&S.

1. H&S Overdrive Software: This is a great choice but please know that H&S has been defunct for over 5 years and there is absolutely no support for this product. If you run into issues, we will not be able to assist.
2. EZ Lynk
3. EFI Live
4. Race Me

Option 1, H&S: Install your tuner and enter in the overdrive unlock code. *This code would have been purchased when you bought your tuner. If you no longer have this code you will be unable to install the software.* Make sure your OD software is installed and then you will copy the RevMax provided H&S file onto your SD card. If done correctly you will get a message asking if you wish to overwrite or keep the current copy. Be sure to select overwrite and replace the existing file.

### **Step 2 Initial Quick Learn Process**

After installing the approved transmission tuning you can proceed to the quick learn procedure. Using a Snap On, Matco or equivalent scanner perform a transmission quick learn procedure. After this procedure has been completed you may now start the drive learn process!

### **Step 3 Drive Learn Process**

You will now take the vehicle out for the initial test drive, do not exceed 30% throttle or 2000RPM. Allow transmission to shift all the way up to sixth gear AND back down to first at least 10 times. If full power is given, immediate transmission failure will occur and you will be responsible for repair charges.

You must keep throttle below 50% at all times during this cycle. Drive the vehicle for a MINIMUM of 3 days. The truck must be allowed to rest overnight and go from HOT to COLD engine and transmission temperatures. During this time period it is best to have a MINIMUM of 200 miles STOP AND GO driving. Highway driving does not count and will not drive learn the transmission.

### **Step 4 Line Pressure Verification**

After the 200 mile drive cycle has been completed you will need to hook up your scan tool to monitor line pressure. Your line pressures should be +/- 15psi of these values. If your pressure differ from these stop driving the vehicle and report the issue via our tech service @ <https://revmaxconverters.com/support/>

| Range          | Desired Pressure | Actual Pressure |
|----------------|------------------|-----------------|
| D @ idle       | 105-115psi       | 105-115psi      |
| D Power Braked | 225psi           | 225psi          |

**Anytime you install or reflash your truck to modify the engine tuning you will also be inadvertently reflashing the transmission tuning as well. Due to this, the above drive learn procedure must be completed again anytime you upgrade, reinstall or switch tunes. Failure to do this will cause immediate transmission damage!** Simply changing power levels via CSP 5 switch is not reflashing and you do not have to perform the drive learn portion again.

### **Step 5 Operational Notes**

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towing in stop and go traffic. By doing this, you can lock the converter in 2<sup>nd</sup> gear and keep the truck running cooler. Once in manual 2<sup>nd</sup> allow the RPM to reach 2500 or more and then completely let out of the throttle. The converter will now lock and stay locked thru 6<sup>th</sup> gear. If you will be in crawling low speed traffic while towing heavy, placing the truck in 4WD LOW will help greatly to reduce converter slippage and lower transmission temps.

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