



#1 in Dodge Cummins Performance

Smarty JR Power on Demand Instructions

Foreword:

The Power on Demand (**PoD**) allows you to change the hp output of the engine "on the fly". That means that you can load the highest horsepower **CaTCHER** software you wish to use (with all the usual **REVO** parameters) and then the **PoD** reduce the power from there. With the **PoD** this can be done with the engine off (key on), at idle or while driving the truck. You simply need to plug the **Smarty** into OBD port, select the **PoD** menu and type in a # comprised between 00 and 99. Where "99" is the full power potential of the performance software loaded into the ECM and "00" is the lowest power setting.

How does it work?

Once you have updated your ECM with any of the performances softwares, **Smarty** becomes VIN # locked. The next time **Smarty** is plugged in the **PoD** menu will be displayed.

1=Power OnDemand 2=Main menu

Press up arrow key (▲) to enter the **PoD** menu section. The power selection page will appear.

Power=99 =

You only need to select any value from 99 down to 00 with the up (▲) or down (▼) keys. 99 is the full power of the **CaTCHER** software you have previously downloaded into the ECM, 00 is the lowest possible power setting. The upper line of the display will flash the value you have entered, pressing the right (▶) key will confirm your selection and transmit it to the truck. Now the upper display line will stop flashing. This confirms that the power level you have selected has been sent correctly to the truck. Now you can unplug **Smarty** or with the left (◀) key return to the power selection menu and change the power value again.

When will the selected power become active?

This depends upon the operation of the engine! In order to make the power change process as safe as possible, different ways to activate the newly selected power level have been built in. There are three different ways to program the **PoD**:

1. The Engine is off, the key is in the run position.
Program the **PoD** level you want.
The next time the engine is started it will start with your power selection.
2. The truck is coasting and no throttle is applied during the power level change.
Program the **PoD** level you want.
Press and release the throttle, the second time you press the throttle the power will be changed.
3. The truck is driven with throttle applied.
Program the **PoD** level you want.
Press and release the throttle twice, the third time you press the throttle the power will be changed.



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A few hints about the How to?

Since the power reduction depends upon how much hp the engine makes from the beginning (injectors, turbo(s), just to mention a few). There's no such thing like a "magic number" that works for all. Each truck needs to be adjusted for it's own modifications! After all that was our goal" Deliver the right power for EACH truck!

The easiest way to find the right power level for your particular truck is to drive on a free road around 55/60 mph in the highest gear (OD for the automatic transmission). Now select any power level you wish and do a short WOT run in order to find the right power level you need in that moment. The help of a Boost or EGT gauge will make it easier to determine how much less power the truck makes with the new setting.

Hint. The **PoD** is **NOT** designed to be "linear". That means, then higher the load on the engine (read higher gear) the more power is delivered. Even when the power is severely reduced. This is done in order to allow you to find the lowest possible power level in the lower gears (thus good mileage gains for in city driving) and at the same time still to be able to drive on the highway without the need to change the power levels continuously. You'll find your own magic number quickly.

An example Our STOCK '06 test truck runs best with the **PoD** set to "60" with the Performance **CaTCHER** loaded into the ECM. Would we have loaded the Fuel Economy **CaTCHER** then we'd likely needed to set the **PoD** to "75" in order to get the same power. Would we have hugh injectors, twin turbos and what not then we likely would need to set the **PoD** to "40" or maybe even "30" or less.

Automatic transmission:

Depending upon how much the power has been reduced, the automatic transmission will shift at higher RPM (You're pushing the throttle farther than with the stock power). That can come to the point where you need to release the throttle shortly in order to make the AT shift. This is perfectly normal! At first it may seem annoying, after a short while we actually LIKED it! The fuel savings that come with such reduced power may have contributed to liking it.

Mileage gains:

We have found that the fuel savings are much more noticeable for in city driving rather than on the highway. This does not mean that you're not going to safe fuel with the **PoD** on the highway. It means that if the truck needs 80 hp to run 60 mph, that's 80 hp with or without **PoD**. The **PoD** saves fuel on the AVERAGE daily driving! Not just on highway! Most trucks see many more miles driven in the slow city traffic rather then HIGHWAY only. AVERAGE is the key word!