Ford IDS – 2008 Ford Crown Victoria P71 Police Interceptor
**Archived from:**

The model year 2005 and later ford crown victoria police interceptors are appearing at auction and being purchased by their new owners. Often, these car are put into civilian use where cruise control and having the domelights illuminate when the doors are opened is desired.

Previously, enabling the interior domelights involved physically seperating a connector under the dashboard. And installing speed control involved physically installing a cruise control servo under the hood. But on 2006+ crown victorias enabling the domelights requires use of an ids laptop/vcm at a ford dealership to electronically change the module preferences in the lighting control module flash memory. And on the 2005+ drive-by-wire crown victorias, retrofitting speed control also requires use of an ids laptop/vcm to reprogram the vehicles pcm with it's speed control enabled counterpart.

Some people with wrecked spare parts cars avaliable might wonder about swapping a speed control enabled pcm into their crown vic instead of using an ids laptop. This can work, but pcms are year specific and your particular pcm calibration must be compatible with the remainder vehicles hardware (i.e. maf sensor, transmission model, fuel injectors, etc). Also, many states now read the vin data from the pcm during the annual smog emissions/safety check. If the vin stored in the pcm doesn't match the one on the vehicle's registration, the car will fail it's smog check and can no longer legally be driven on public roads.
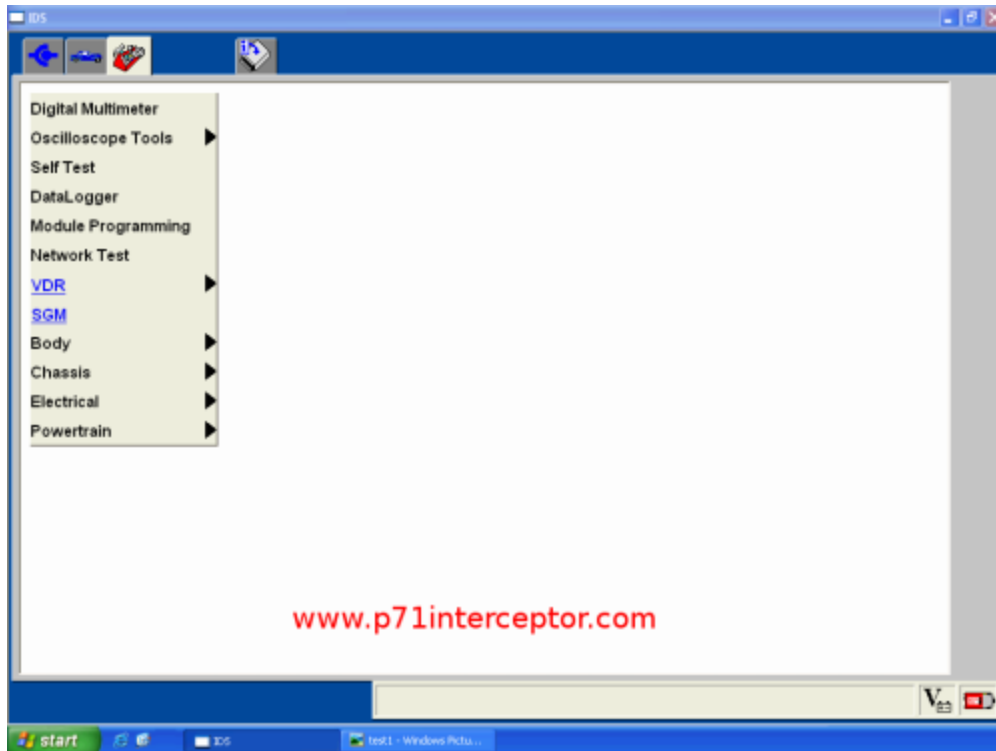
For this demonstration of the ids, a 2008 crown victoria police interceptor with the IDS R58 software is being used.

This is the startup screen. Some shops enter data in the Repair Order (RO) and Odometer fields, others just leave it blank.
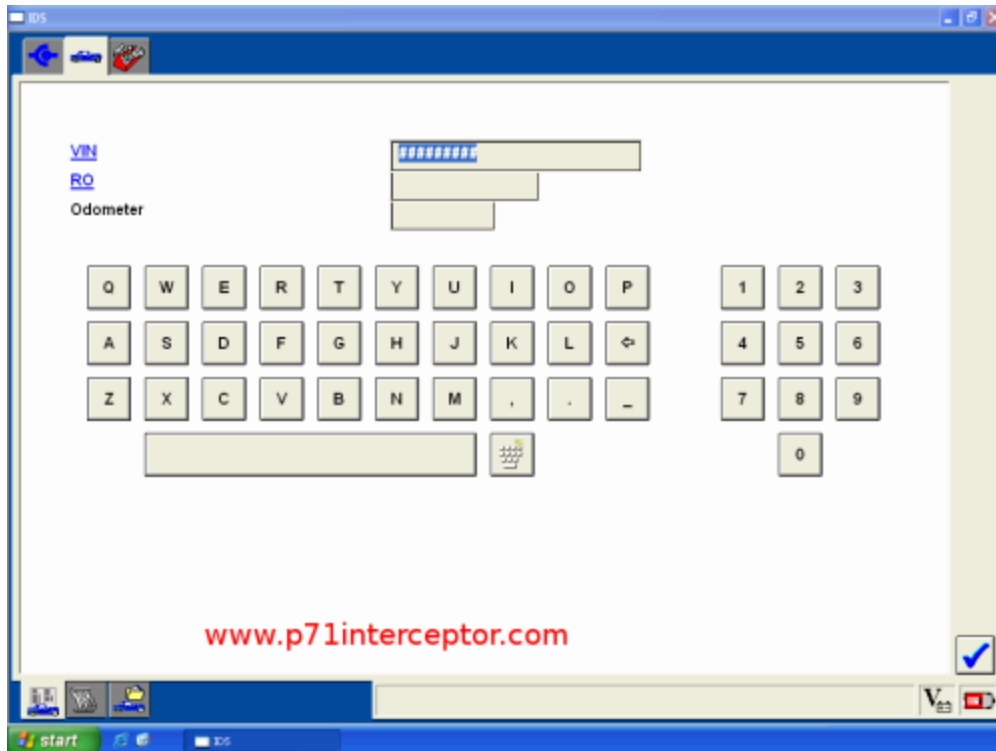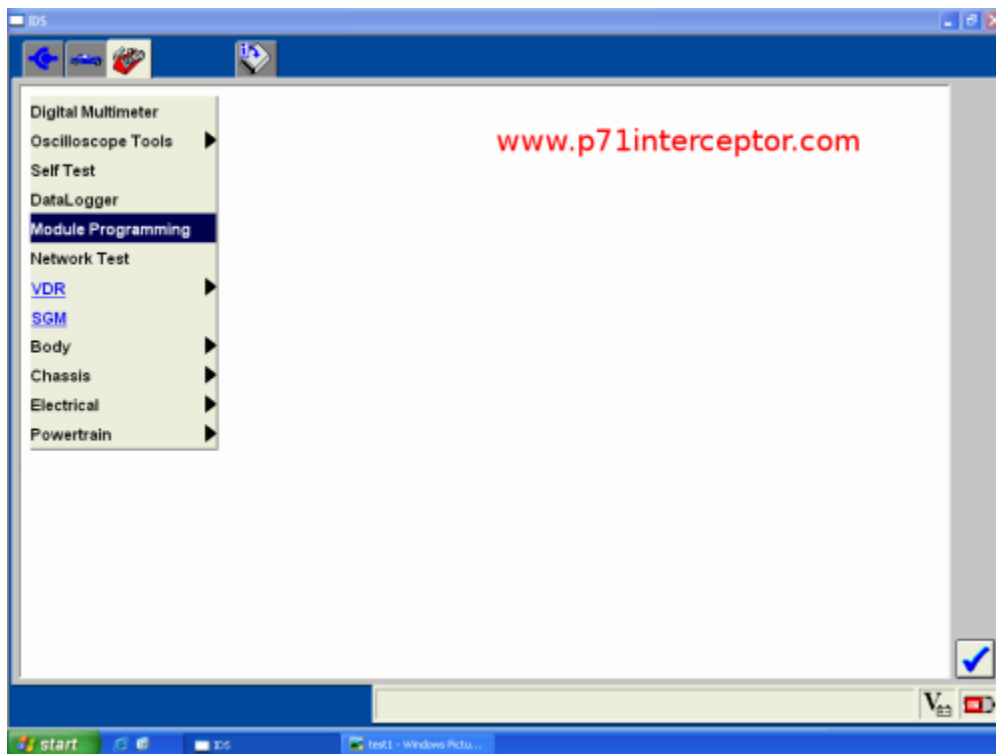
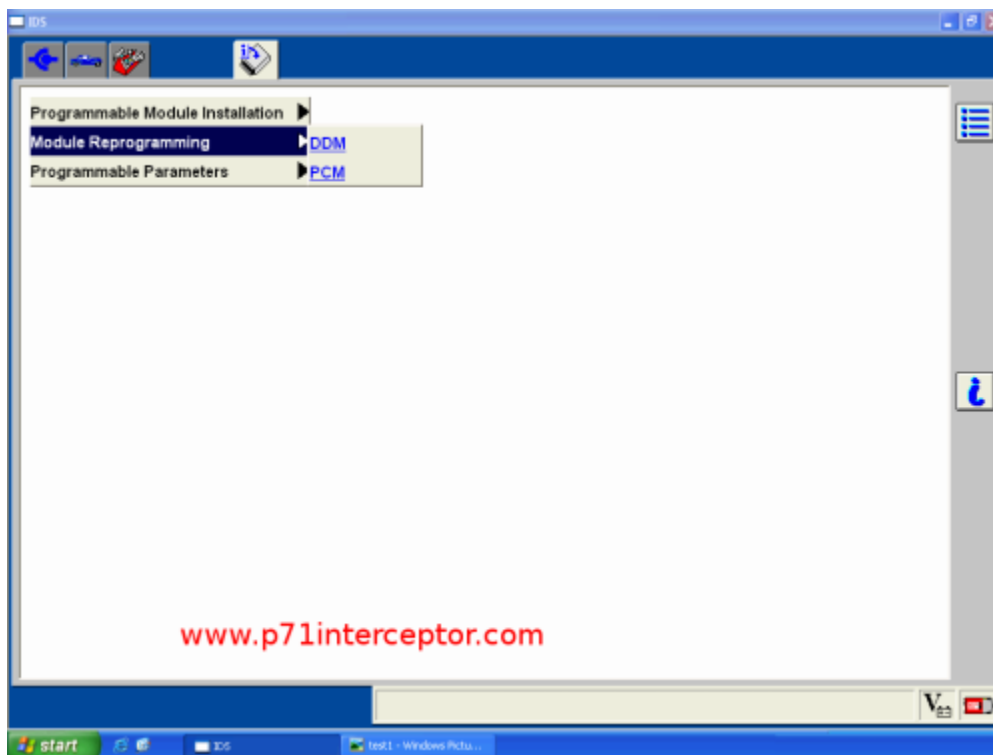After clicking on the ok button, this screen appears.
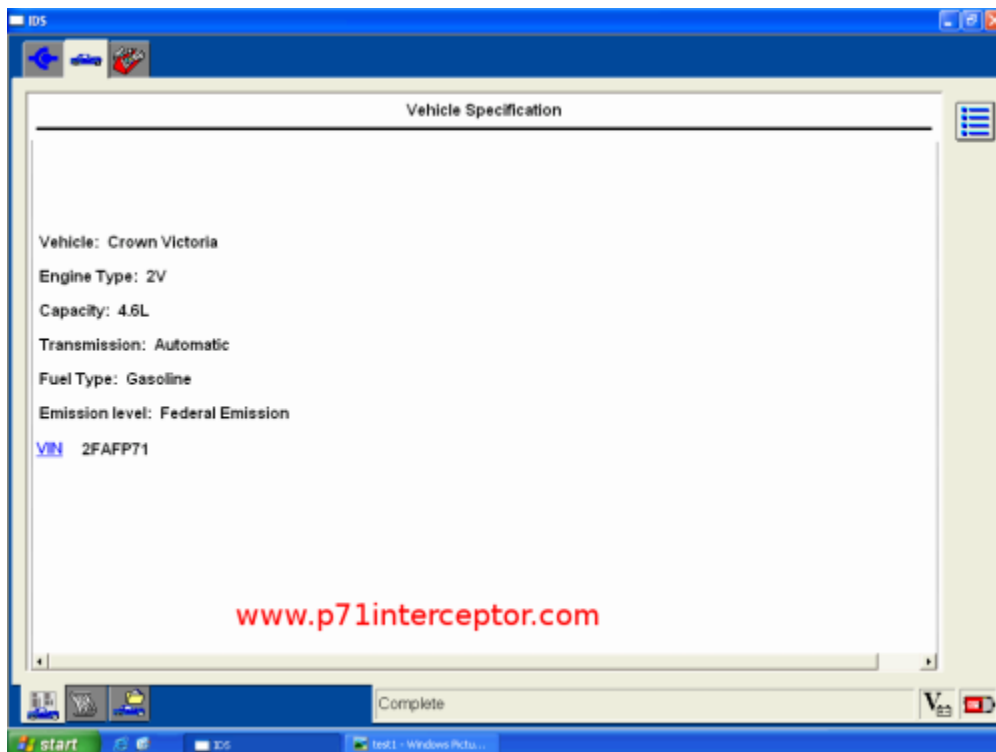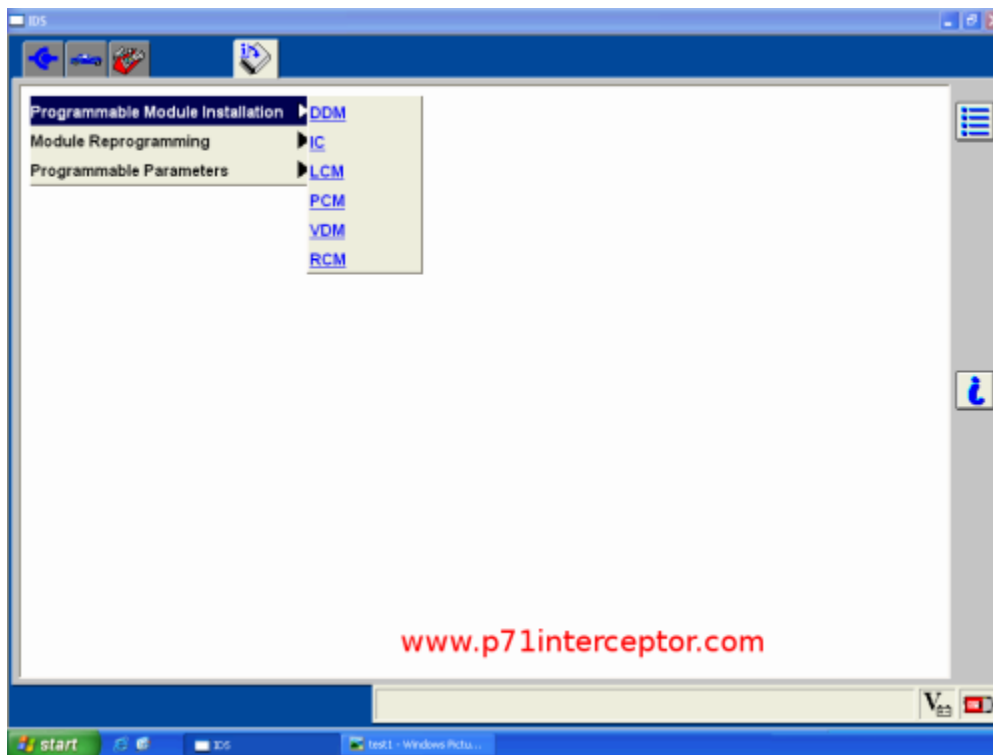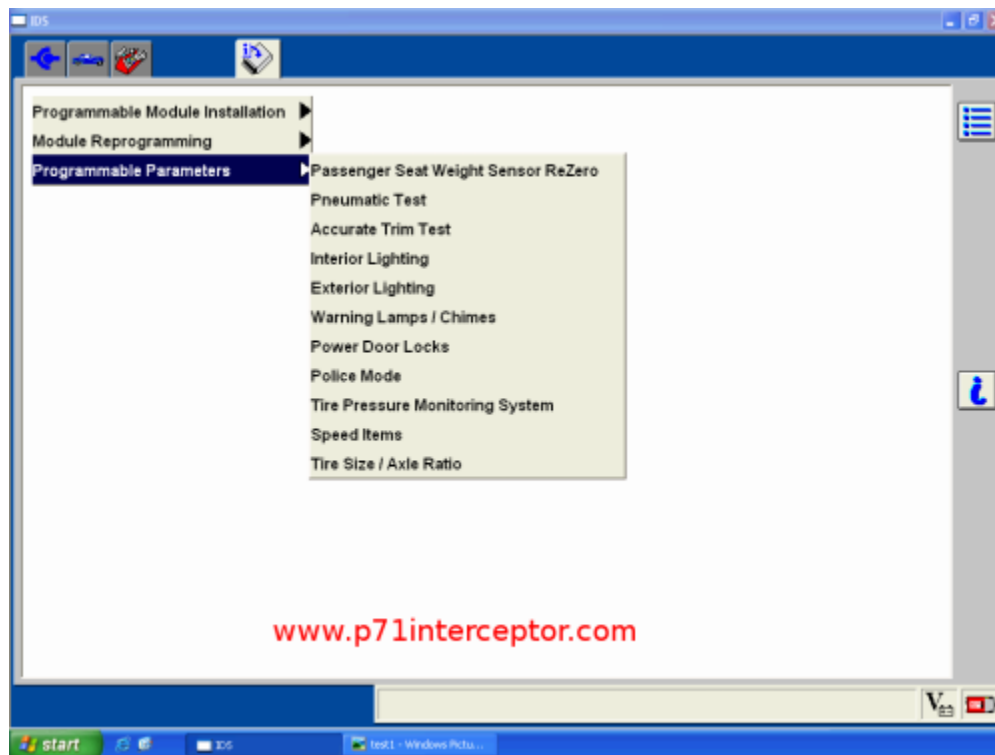
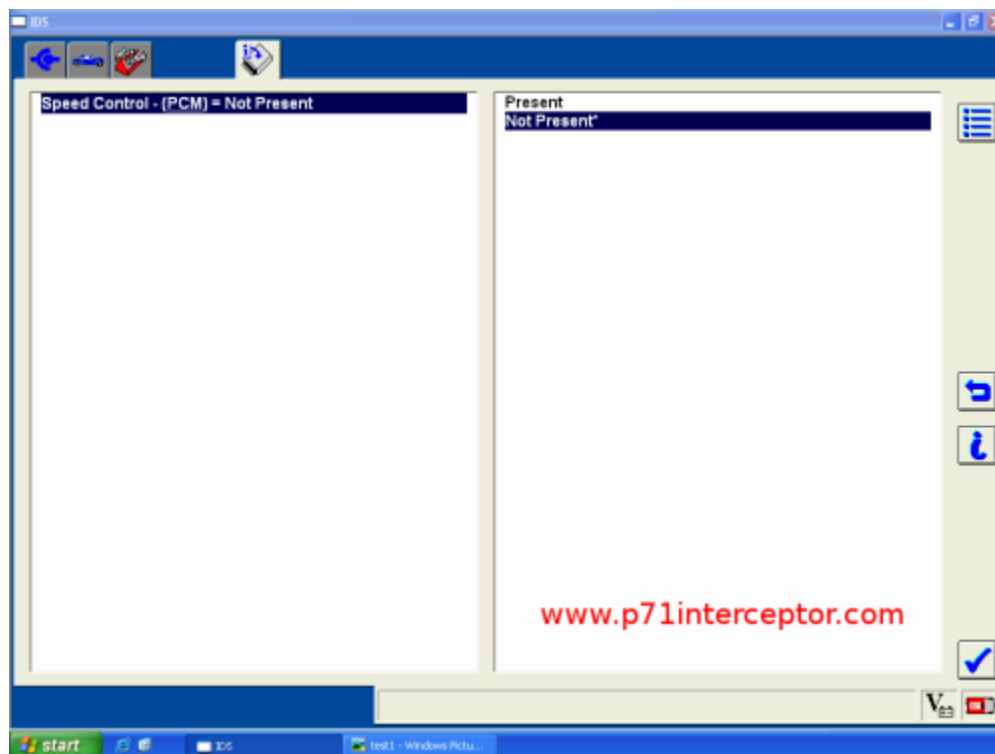For our project, we want to select "Module Programming" from the main menu

Which brings us to a screen with multiple sub-menus

And finally, the "Programmable Parameters" menus that we're after for our domelight and speed control project
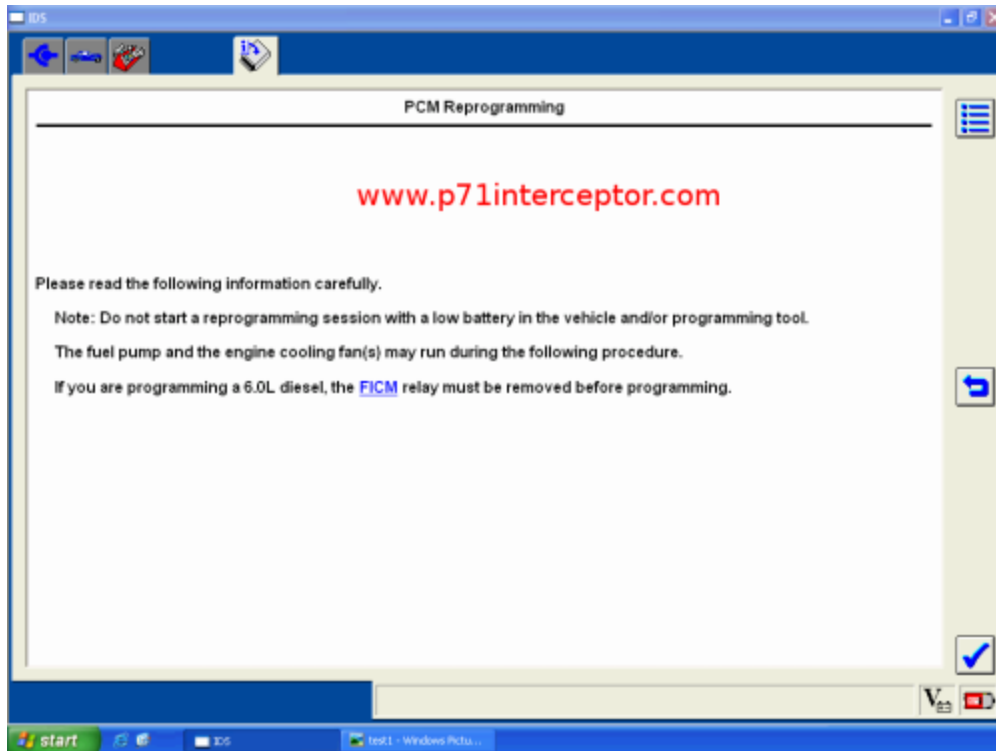
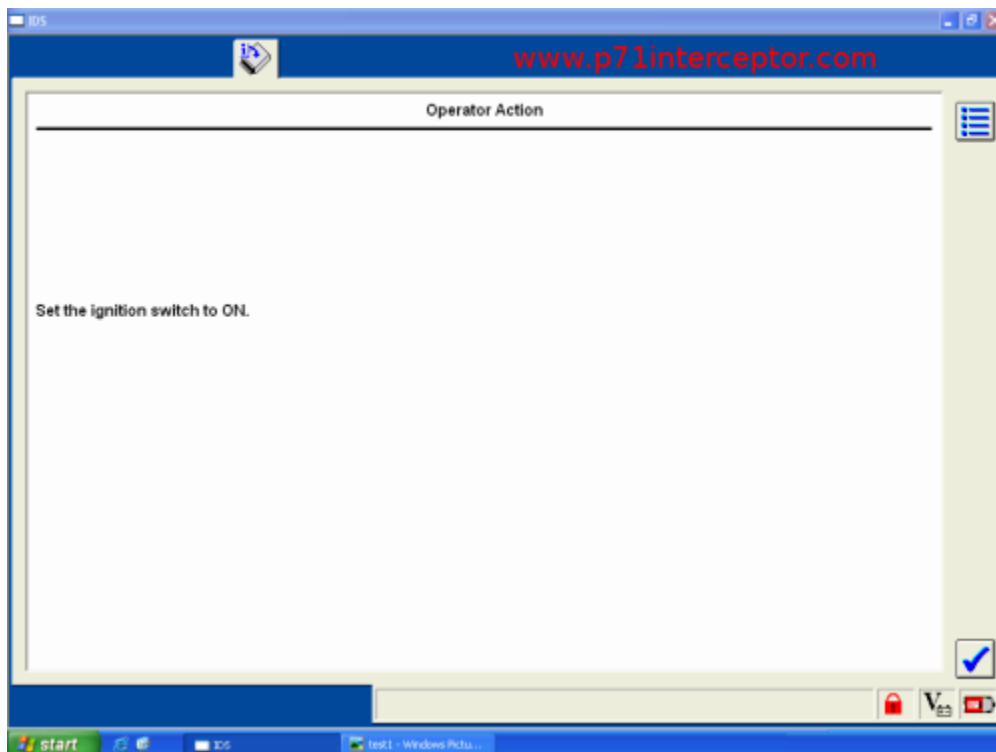After clicking on "Speed Items" from the menu, this screen appears.

This particular police cruiser didn't have factory installed cruise control. So we're going to enable it by clicking on "Present"

Operator Action

Set ignition switch to OFF (Position 0).

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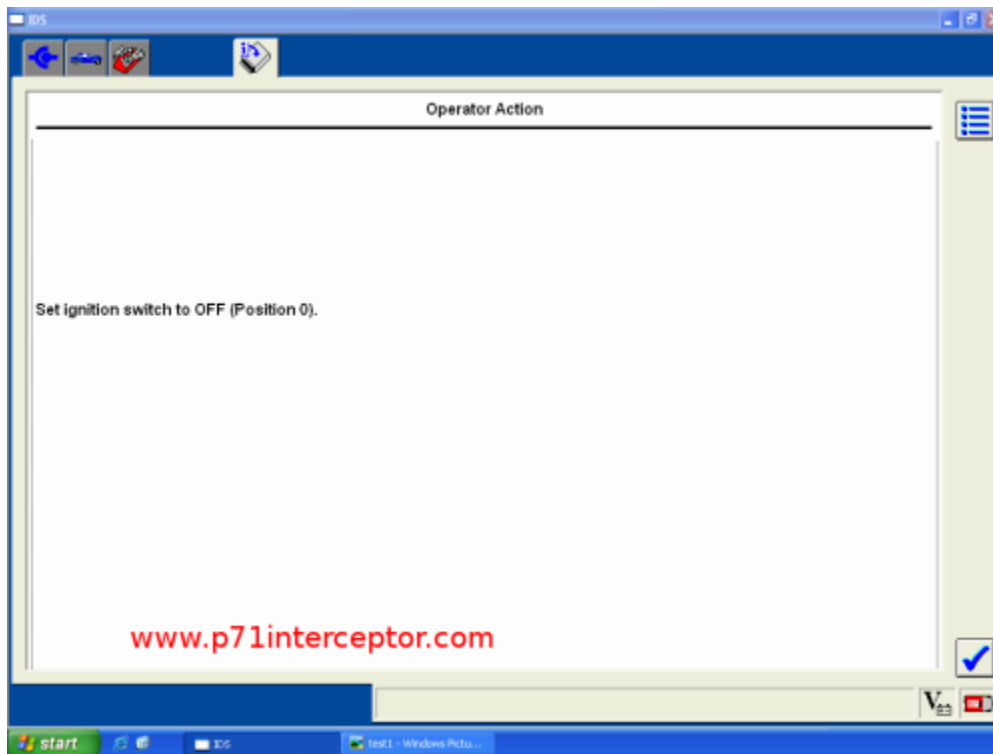
Make sure that your vehicle has a fully charged battery because bad things will happen if the battery runs out in the middle of reprogramming the pcm. To fully charge the battery, you could take a couple hour road trip on the highway. You could also leave an external battery charger installed connected to the battery for a few hours. Note that in some situations like slow city driving with the headlights on, radiator fan spinning, interior climate control fan spinning, and the rear window defroster on that you could actually be discharging the battery as you drive because the alternator couldn't keep up with all of the electrical demand.

PCM Reprogramming

Please read the following information carefully.

Note: Do not start a reprogramming session with a low battery in the vehicle and/or programming tool.

The fuel pump and the engine cooling fan(s) may run during the following procedure.

If you are programming a 6.0L diesel, the FICM relay must be removed before programming.

Turn the ignition key to the run position, but do not start the engine

Operator Action

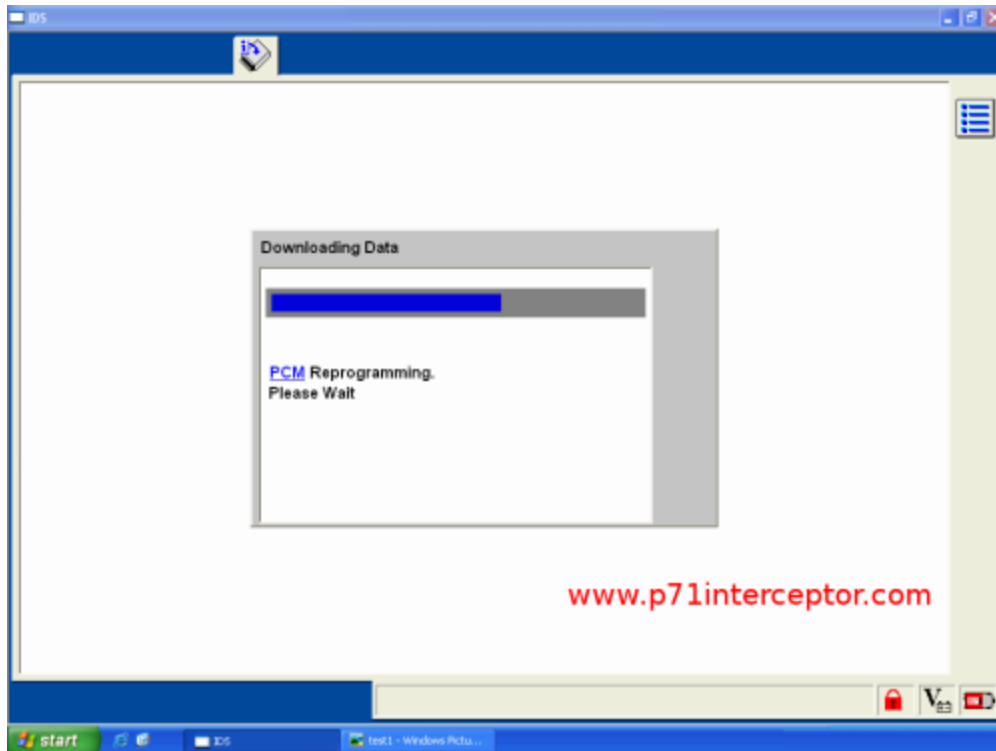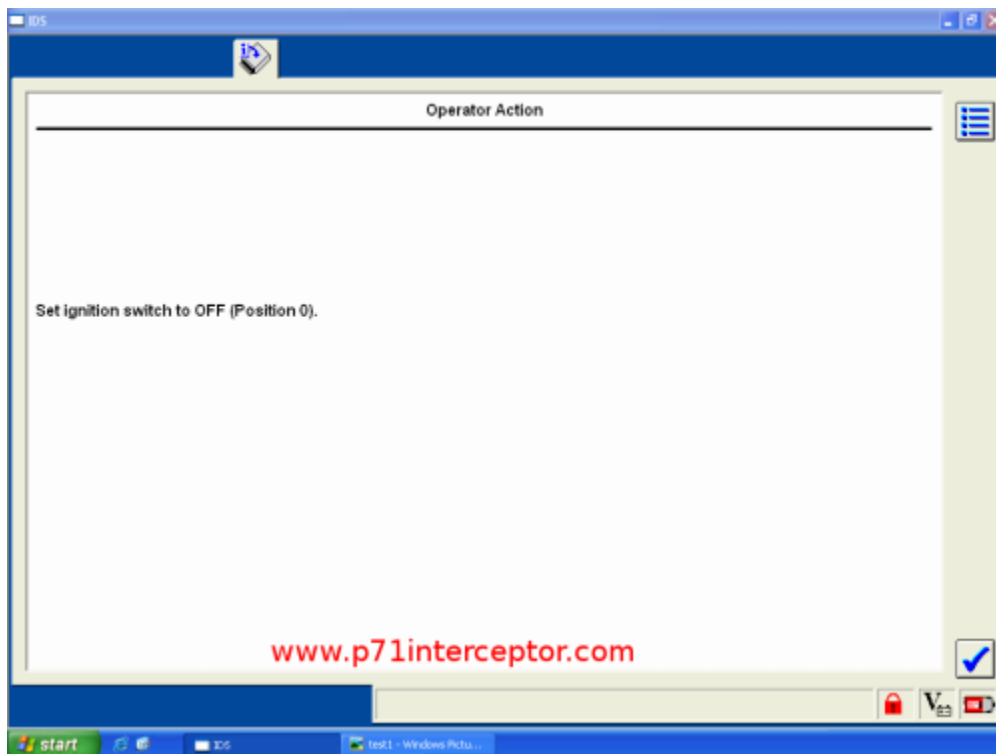Set the ignition switch to ON.

The powertrain control module programming is now being erased
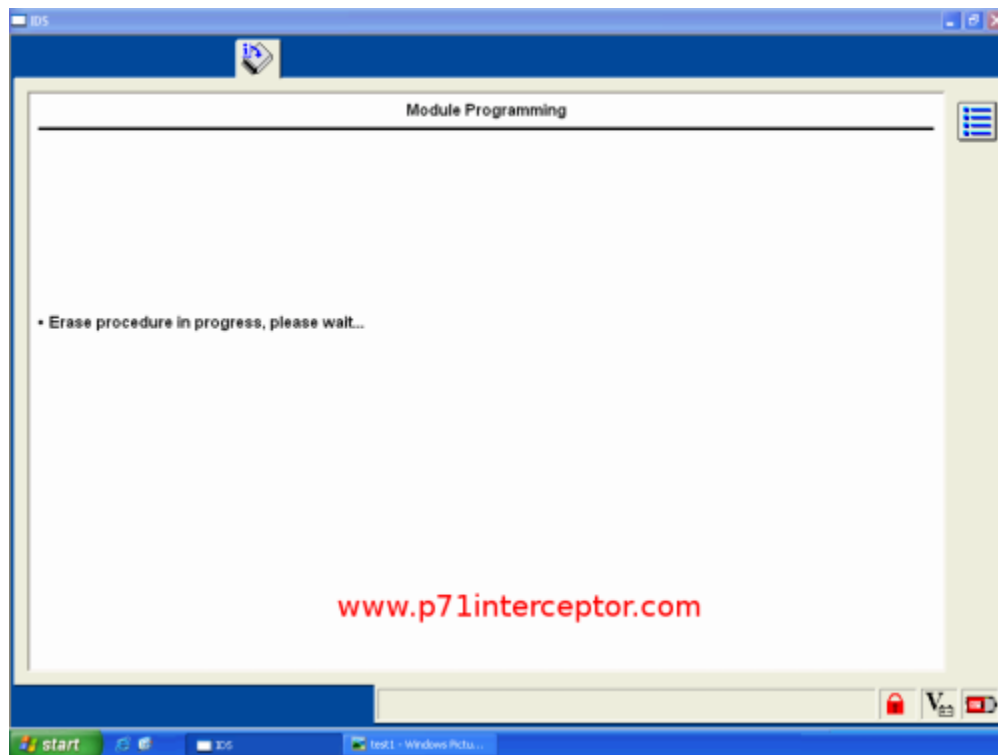
The process takes a few minutes
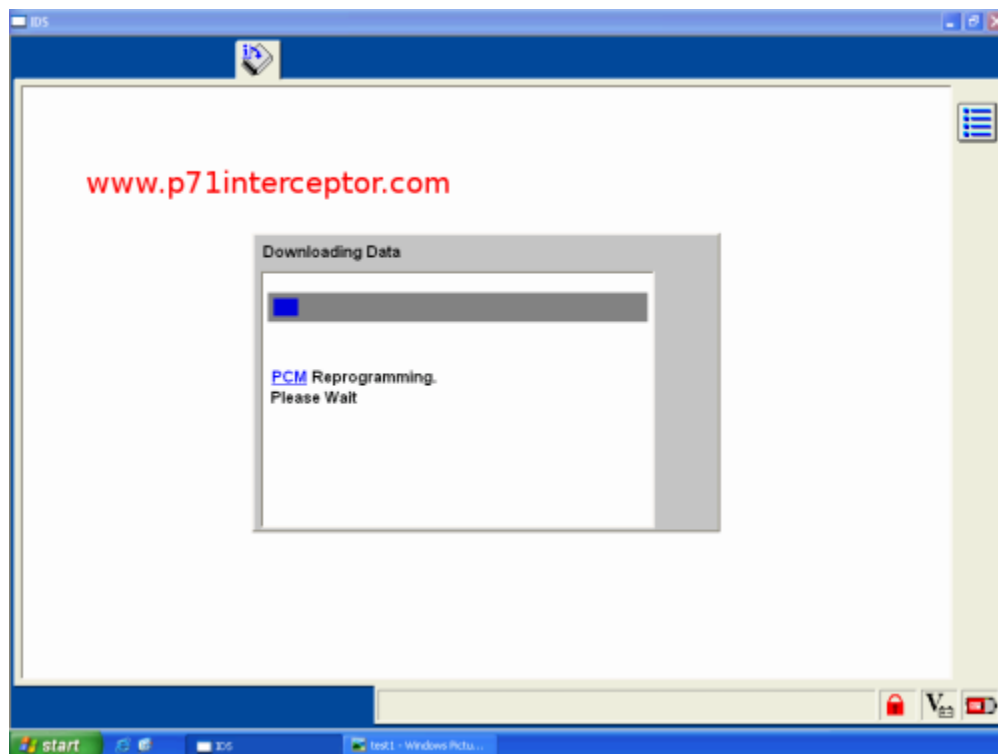
Now it's time to turn the ignition key again

And yet again

Operator Action

Set the ignition switch to ON.

PCM Reprogramming

Calibration has been loaded and checked.
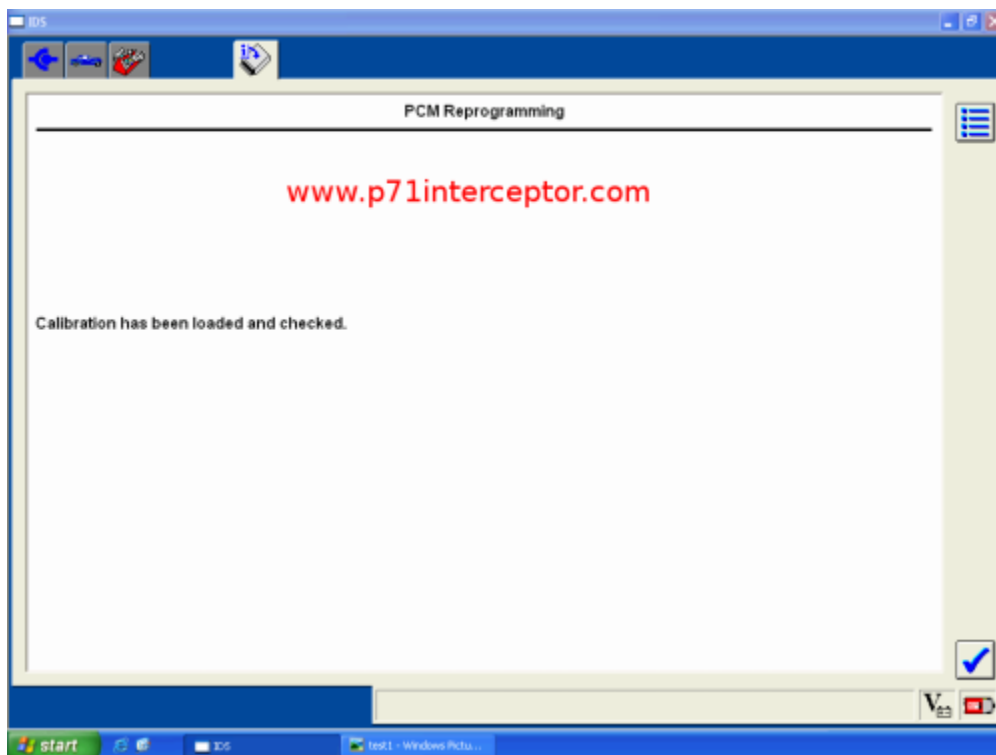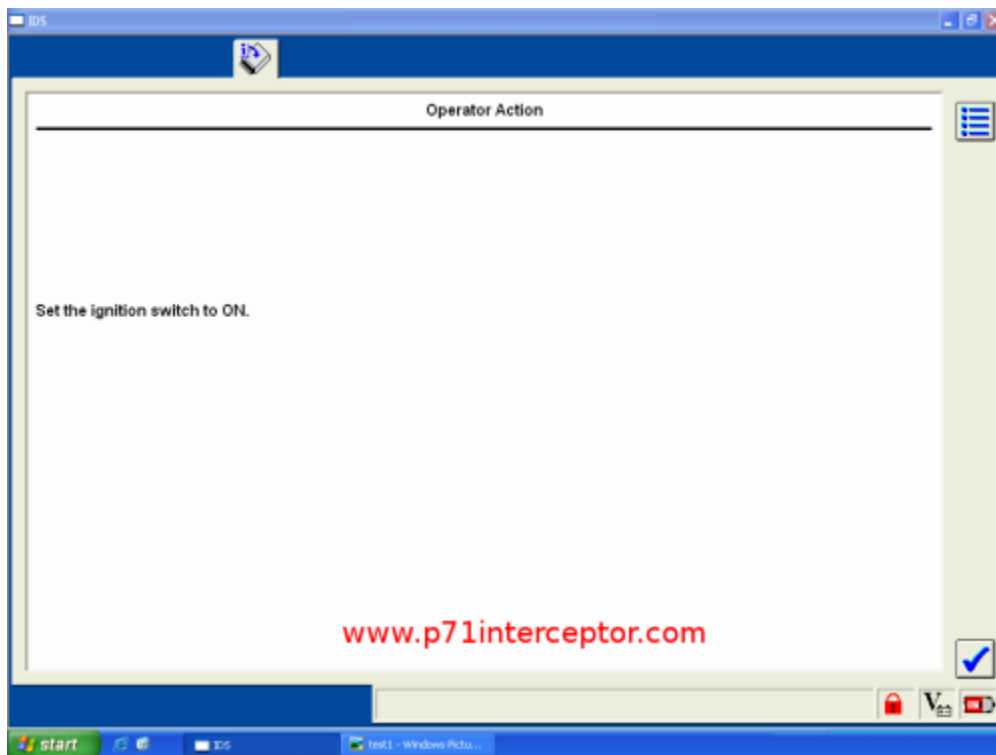
There was never a diesel crown vic, so do not worry about the ficm relay

PCM Reprogramming

If you programmed a 6.0L diesel please reinstall the FICM relay.

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PCM Reprogramming

If required, obtain a PCM reprogramming label and complete with the following data:

Note: A reprogramming label is not required on vehicles serviced in North America.

• Date:
• PART: 8W7A - 12A650 - RB

Place the completed label in the appropriate position.

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Now, cross your fingers and hope that the engine actually starts

Operator Action

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Start Engine

NOTE : Do not depress the throttle pedal.

Time to turn the ignition key again

Operator Action

Set ignition switch to OFF (Position 0).

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Operator Action

Set the ignition switch to ON.

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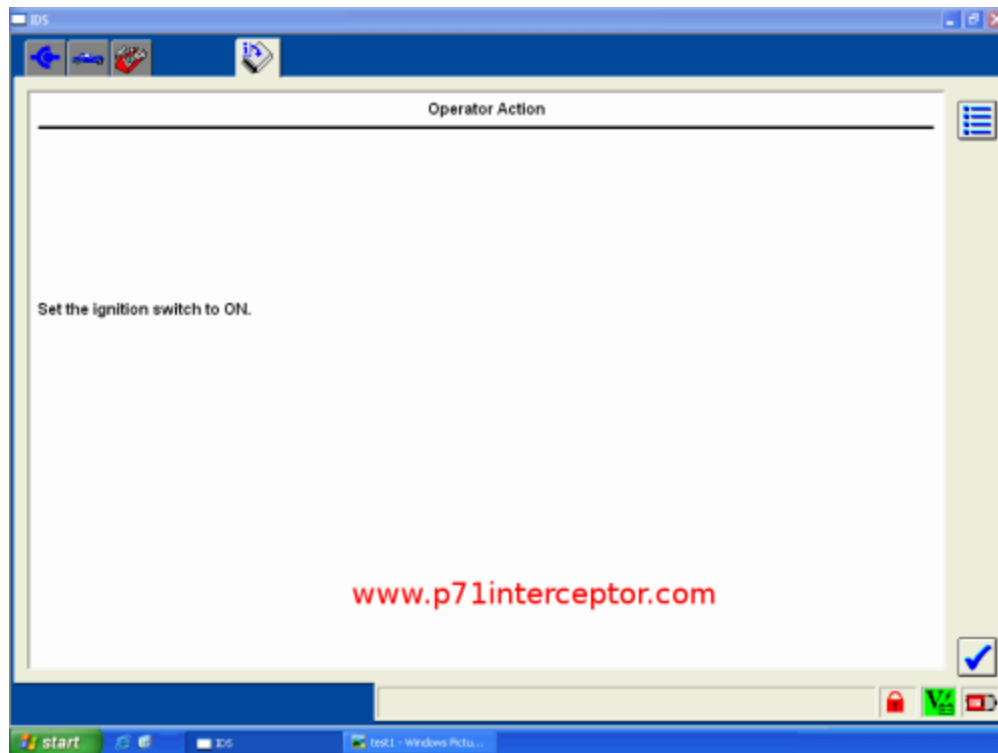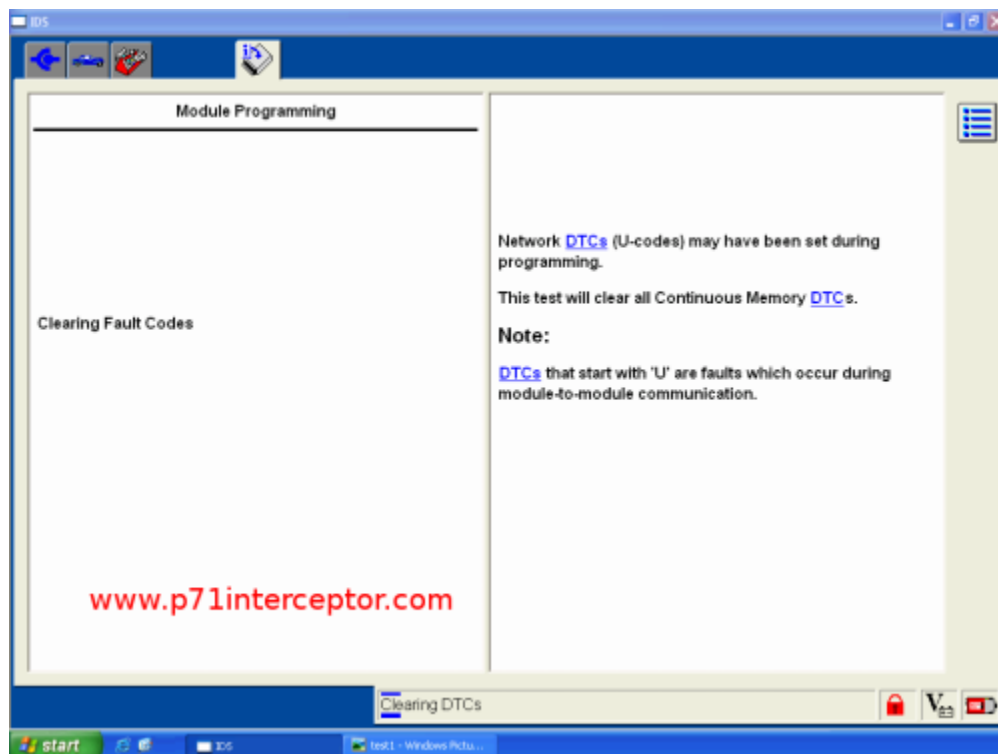
And now it's time to clear any fault codes that we might have generated during the pcm reprogramming

Module Programming

Clearing Fault Codes

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Network DTCs (U-codes) may have been set during programming.

This test will clear all Continuous Memory DTCs.

Note:

DTCs that start with 'U' are faults which occur during module-to-module communication.

Clearing DTCs

And turn the ignition key yet again
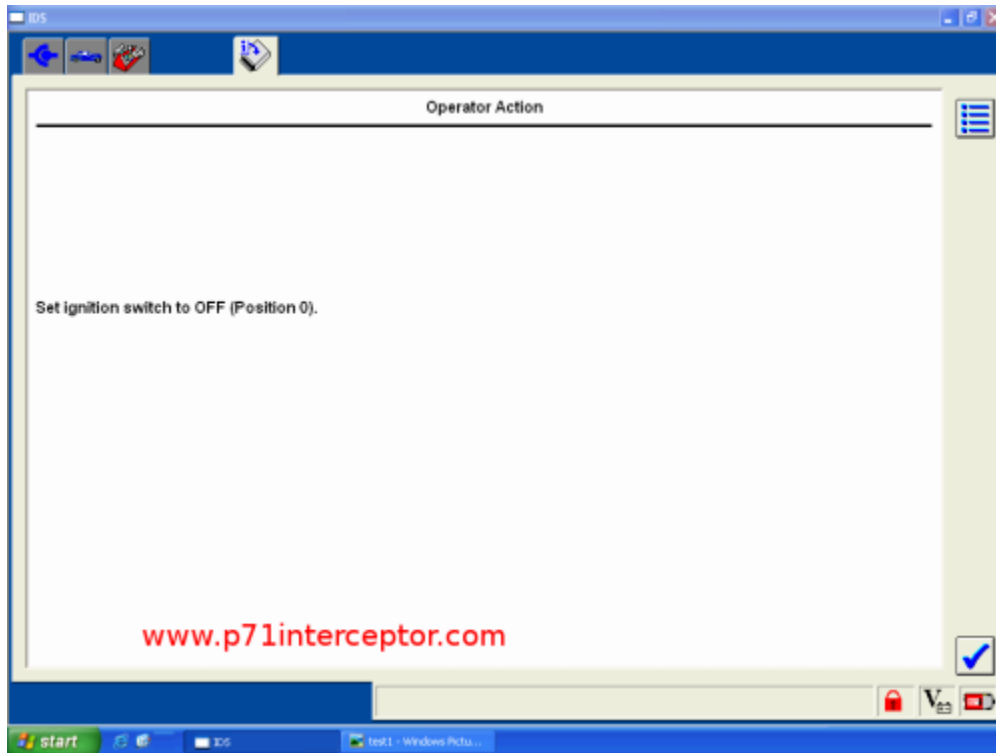
Now that the pcm reprogramming is complete, let's double check the status of the speed control
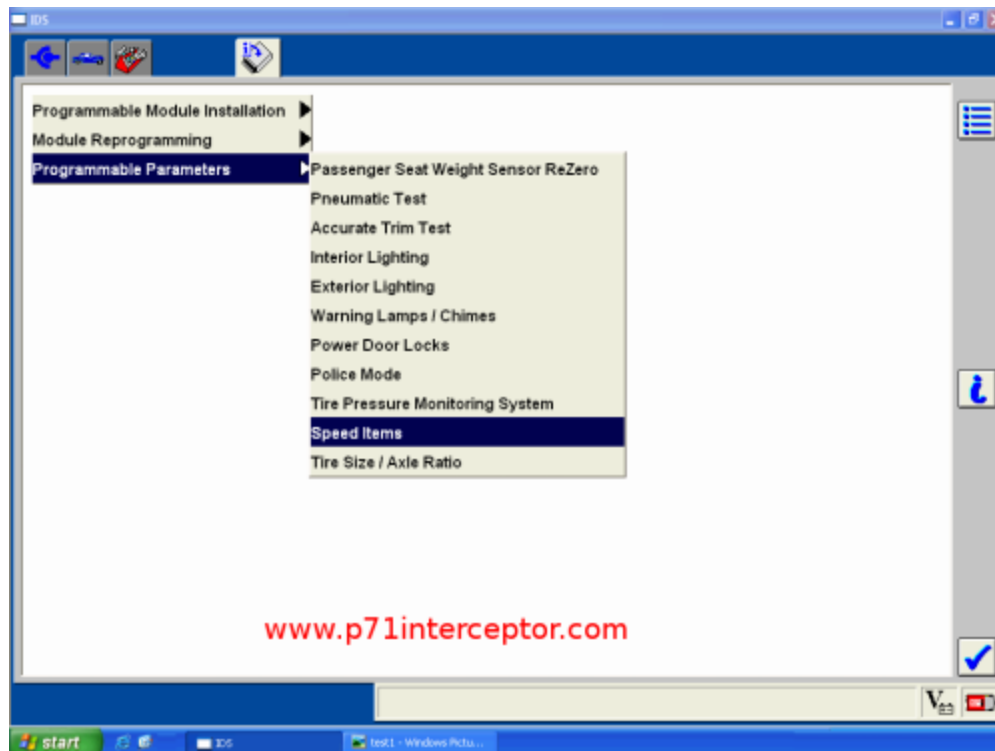
And now speed control is present. If we have a new steering wheel with the cruise switches already installed, we should be able to utilize cruise control now.
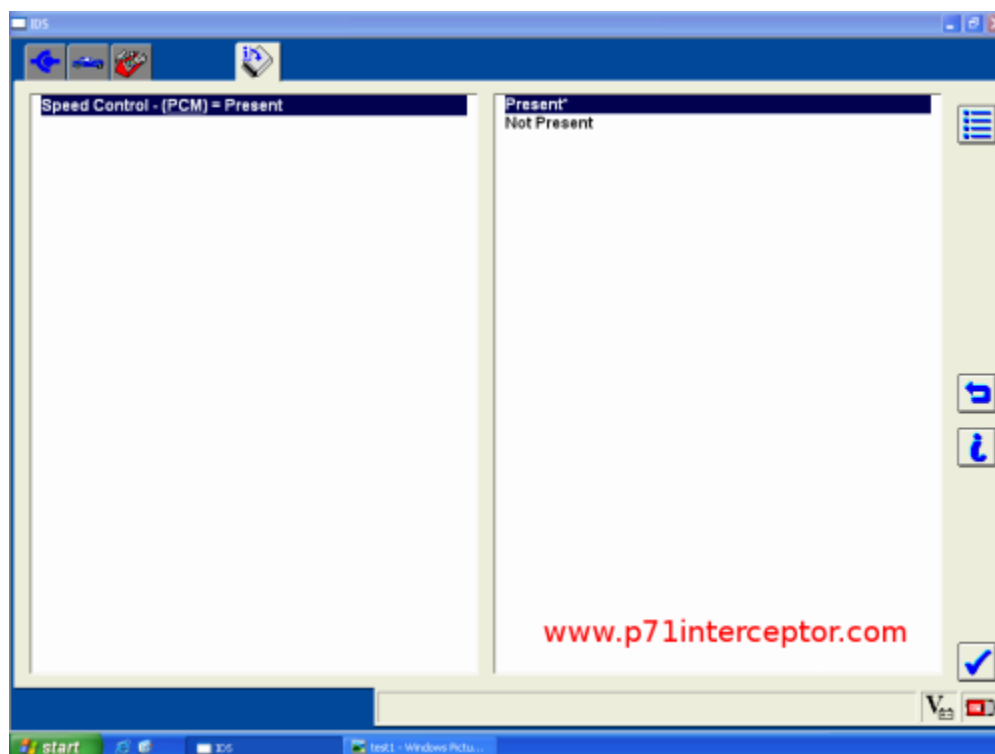
While we've got the car, lets disable police dark mode so that the dome lights will illuminate when the doors are opened.

From the menu select "Interior Lighting"
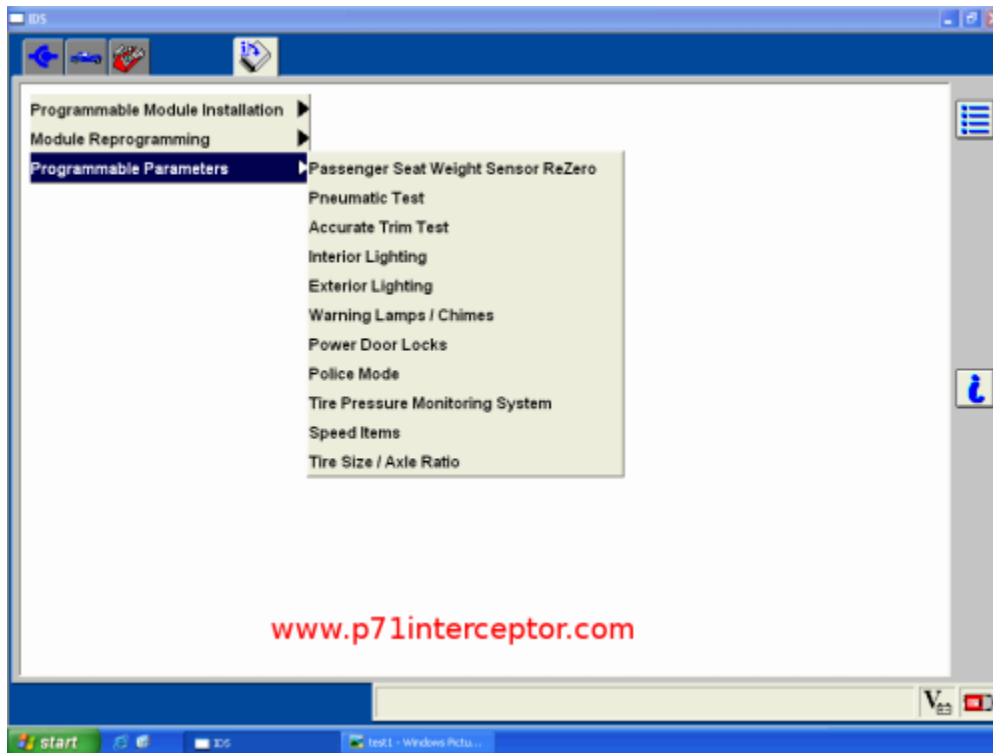
Which will bring up this screen

Note: 2005 and earlier crown vics will not have this option
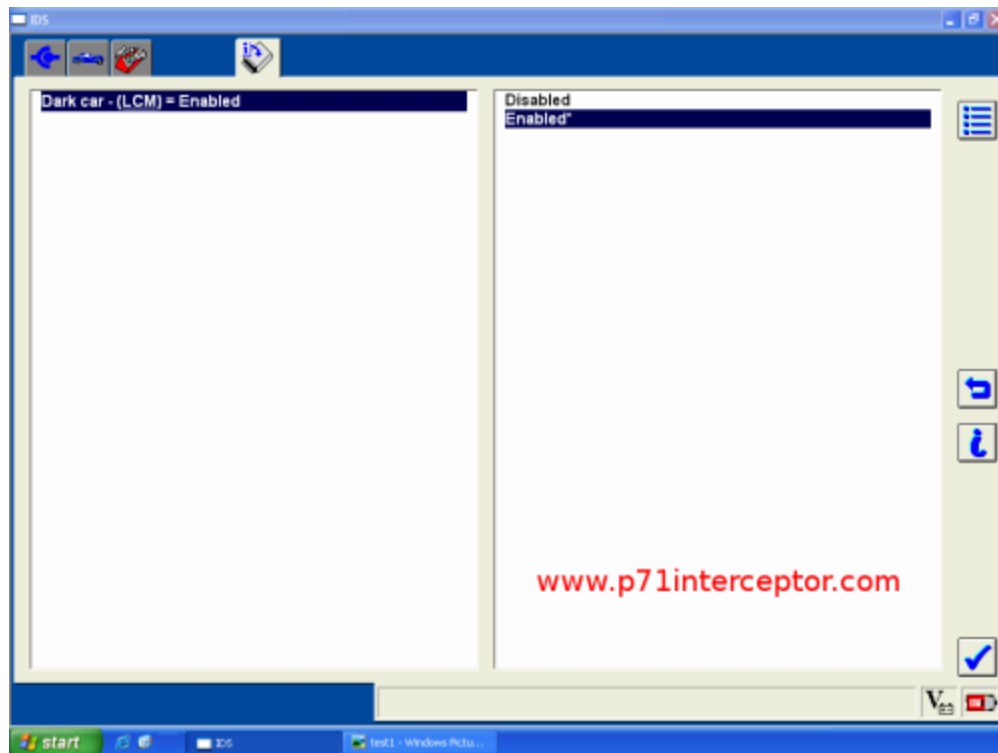
Now click on disabled
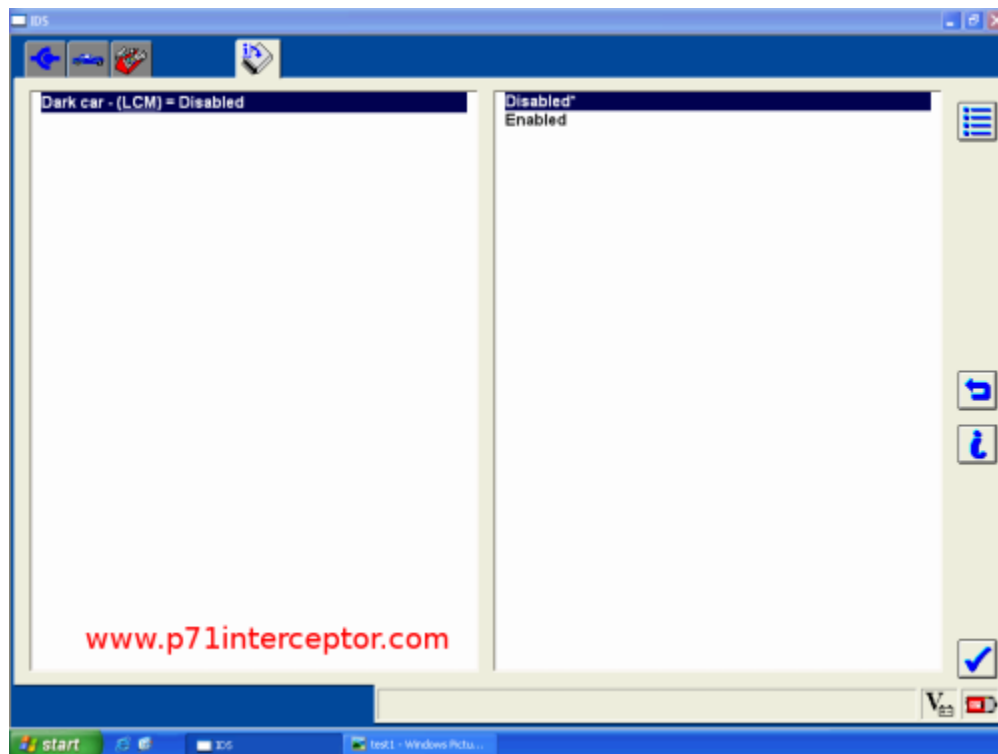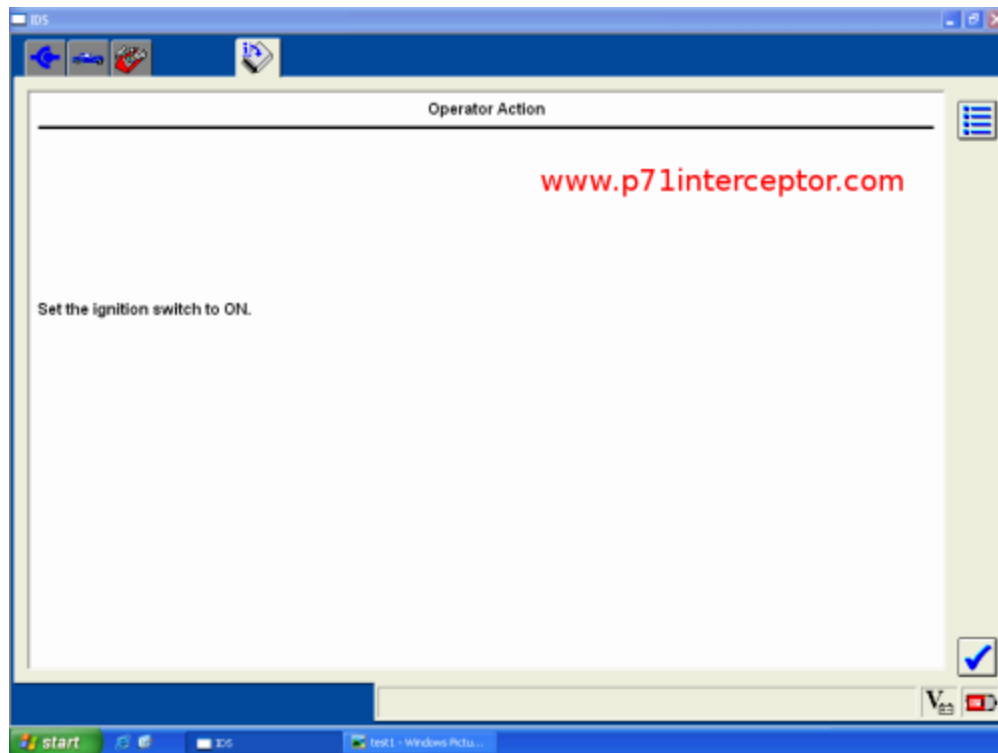
LCM = Lighting Control Module
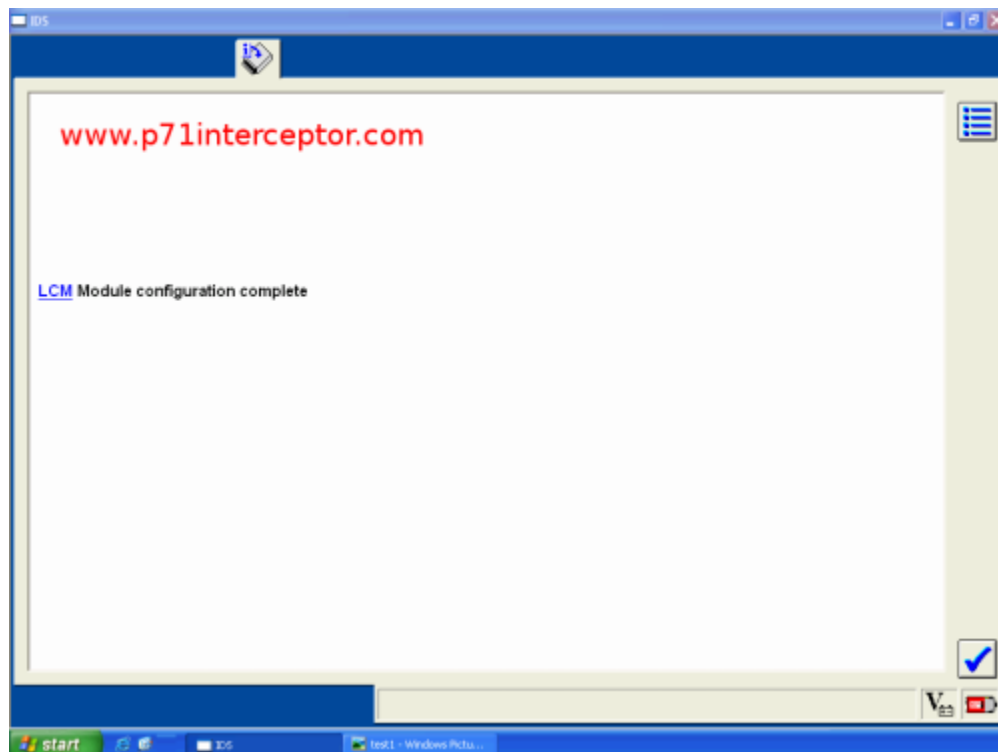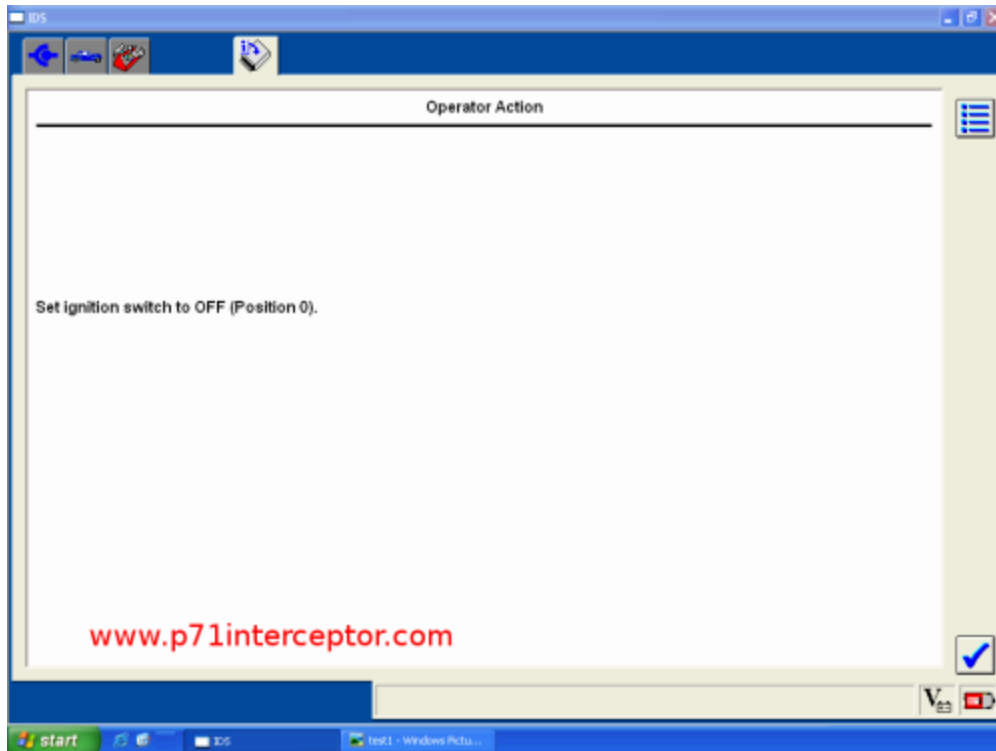
Let's take a look at the Warning Lamps / Chimes screen
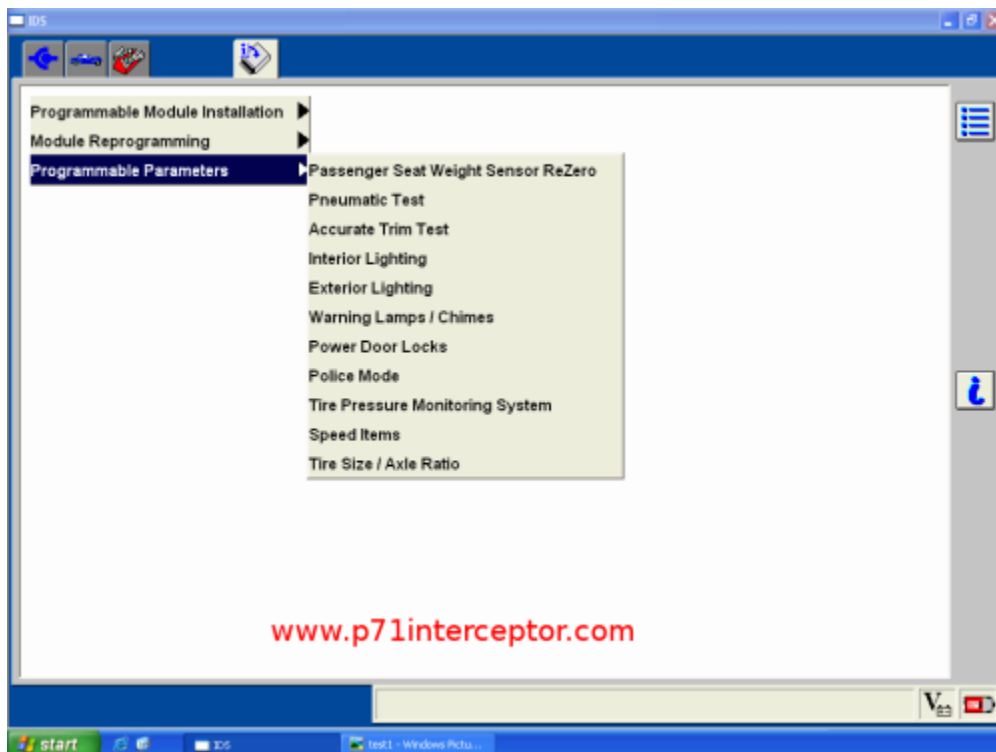
For police use, you will probably want this feature disabled. For civilian use, you can

enable it if you'd like.

Turn Signal Warning Chime
The turn signal warning chime sounds when the vehicle is driven in excess of 1/2 mile with the right or left turn signal active continuously.
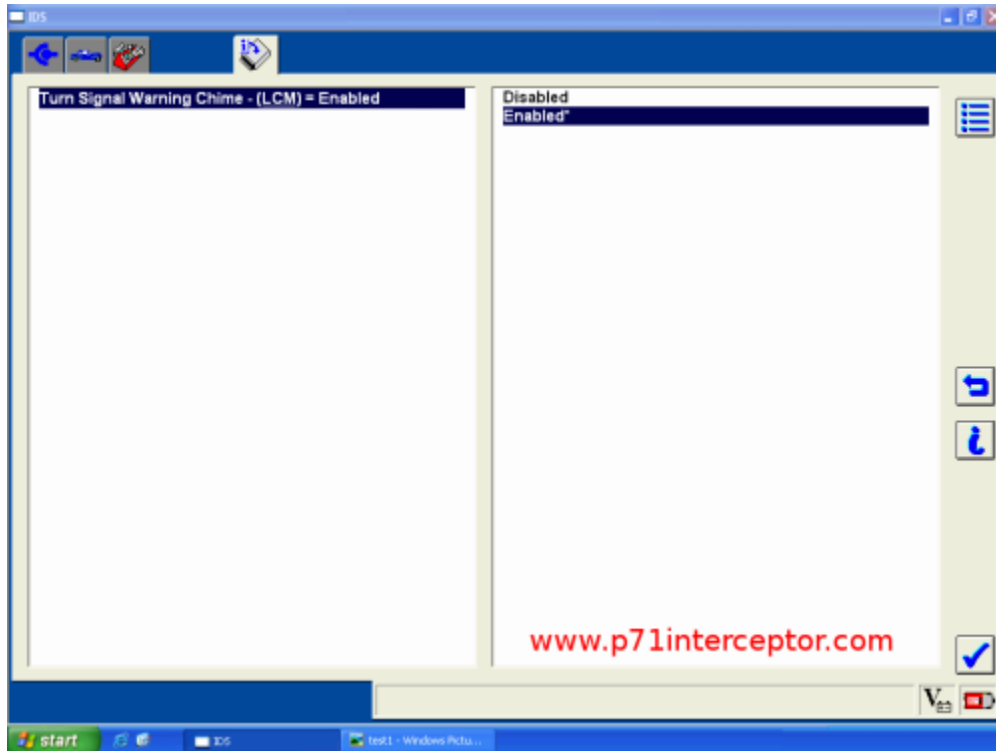
Let's take a look at the "Police Mode" screen
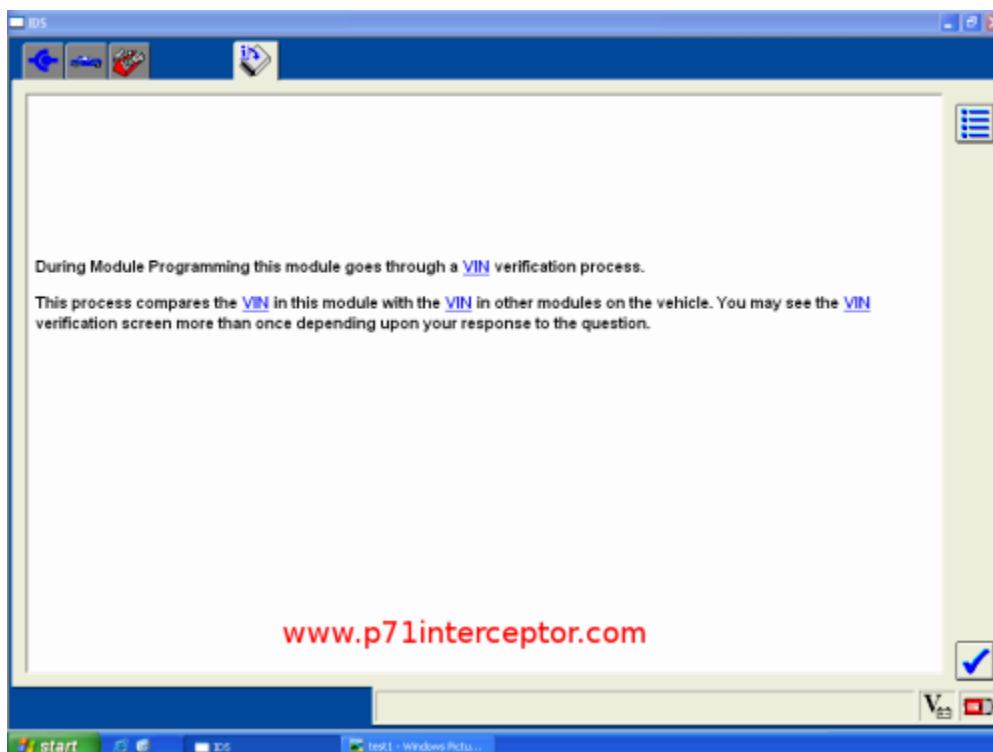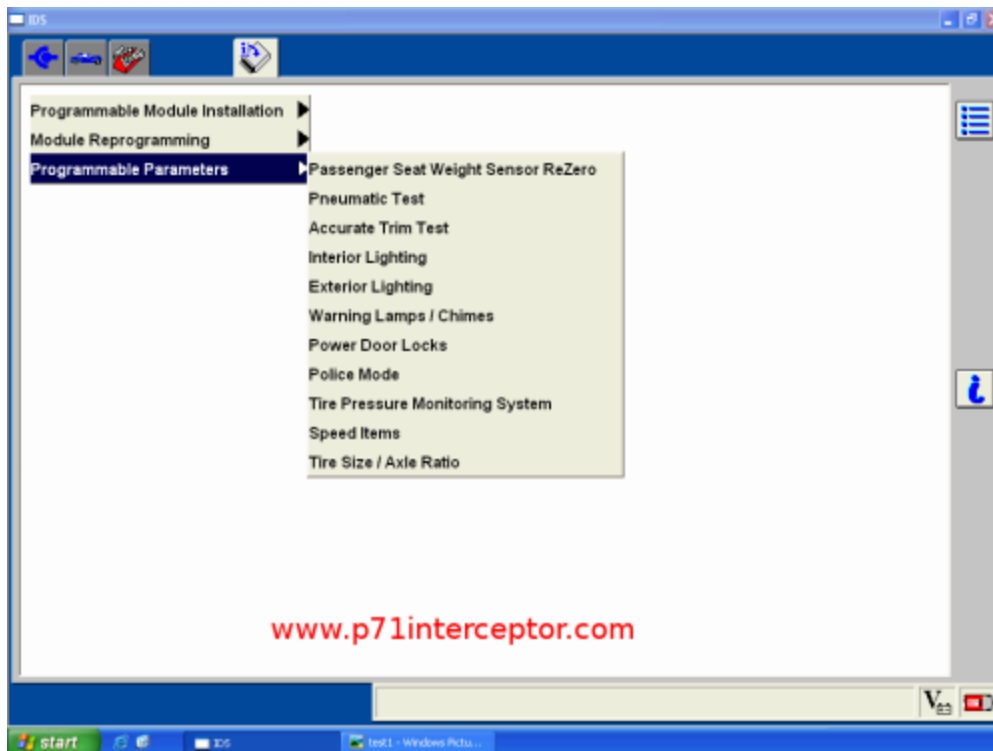
Do not enable the wig-wag option unless you have the wig-wag module present under the hood. Otherwise, you may have trouble activating the headlight highbeams from the steering column switch.
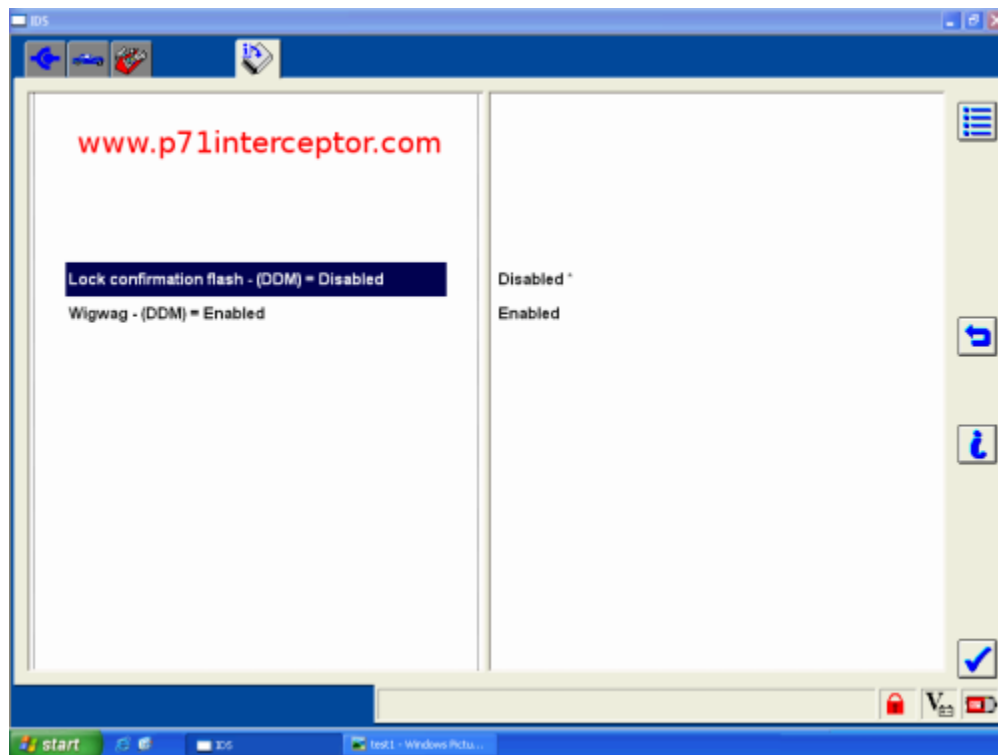
And the Exterior Lighting screen
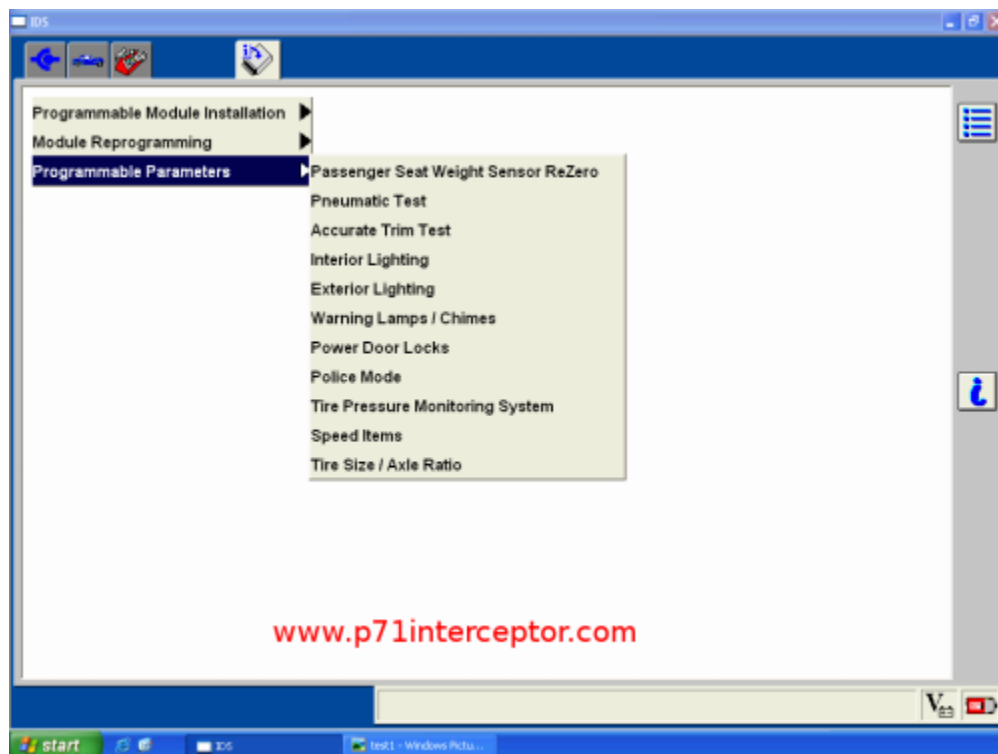
Do not enable the Daytime Running Lamps feature unless you have the drl module present under the hood. Canadian vehicles usually have this module factory installed. Vehicles for the United States market usually don't.
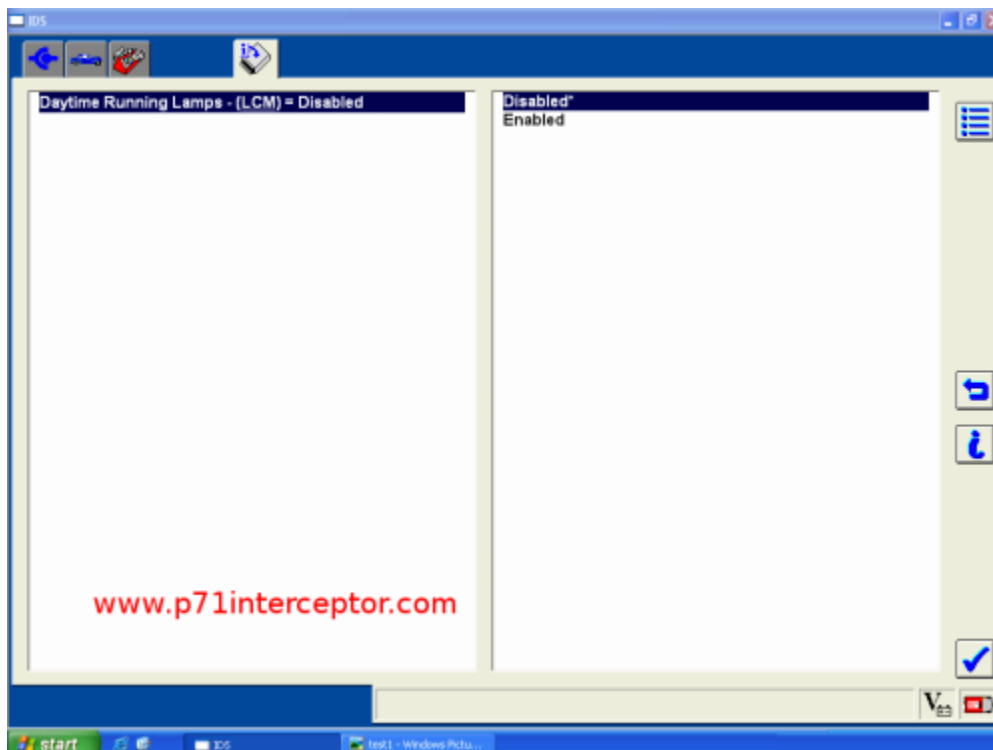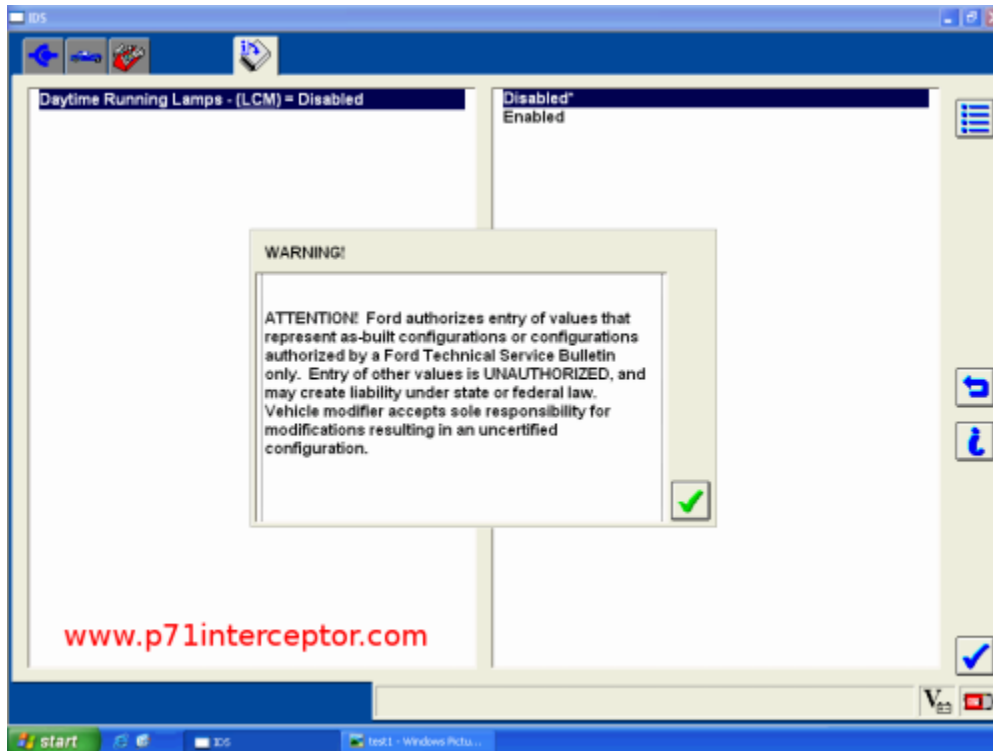
Let's take a look at the "Power Door Locks" screen
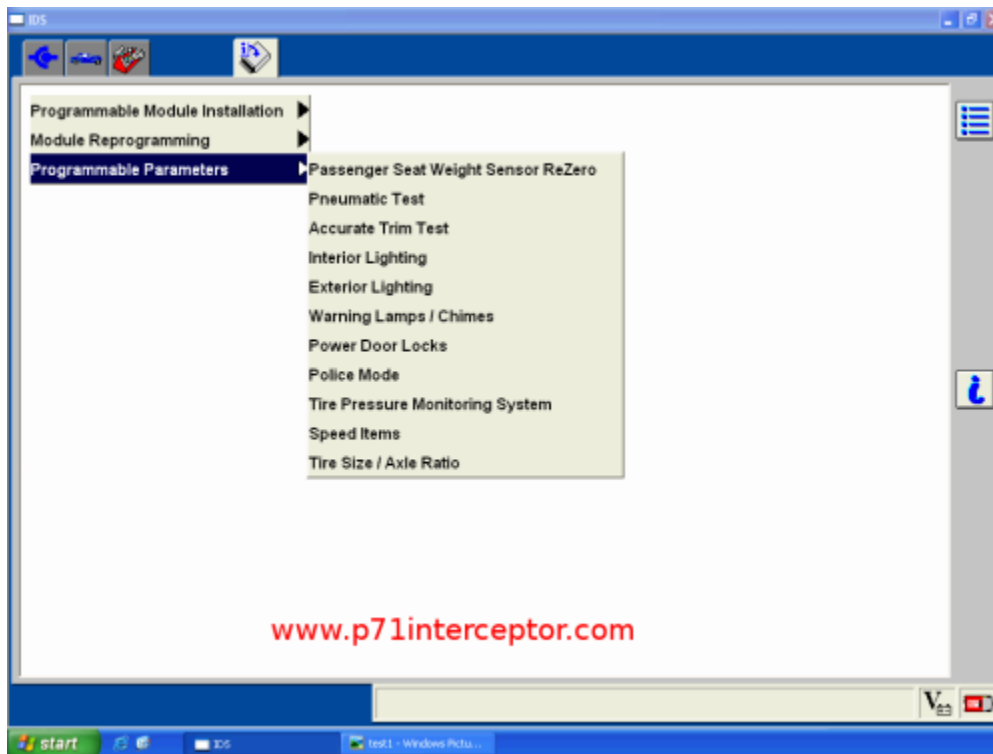
If the vehicle is in active police use, you'll probably want to leave these features disabled. If you're using the car for civilian use, you can enable them if you want.

Smart Unlock
The smart unlock feature prevents the driver door from locking with the key in the ignition lock cylinder. When the vehicle security module receives a LOCK command from a door lock control switch, and the key is in the ignition lock cylinder with the driver door open, the vehicle security module commands the driver door to UNLOCK.

With the key in any ignition position, and either the driver's or passenger's door open, the doors cannot be locked using the power door lock switches.

The vehicle may still be locked with the key in the ignition, and performing one of the following actions:

- Pressing the manual lock button on the door.
- Operating the remote entry transmitter (if equipped).
- Operating the keyless entry keypad (if equipped).

- Operating the driver's door with a key.

Autolock

The autolock feature locks all the doors when all the doors, including the liftgate, are closed, the brake pedal is pressed with the key in ON position, and vehicle speed then exceeds 8 kph (5 mph) or higher. This feature relocks the doors (if any doors were open) after the brake pedal is pressed, once all the doors are read as closed and vehicle speed then exceeds 8 kph (5 mph). Door ajar switches are wired directly to the vehicle security module. The autolock feature can be enabled/disabled through module configuration, the key, and the keyless entry keypad. The auto-lock feature also uses inputs from the key position, the brake pedal position (BPP) switch and vehicle speed.

Auto-unlock

The auto-unlock feature will unlock all doors when:

- the ignition has been in the on position, all doors are closed, and the vehicle has been in motion at a speed greater than 12 mph (20 km/h),
- the vehicle has then come to a stop and the ignition is turned to the accessory or off position, and
- the driver door is opened {within ten minutes after the ignition was transitioned to the accessory or off position}

Note: The vehicle doors will not auto-unlock if the vehicle has been electronically locked prior to the driver door being opened.

The Drivers Door Module (DDM) was first installed into police interceptors starting in the 2006 model year. If you have a 2005 or earlier police cruiser, you will not have the smart unlock, autolock or auto-unlock options to change.
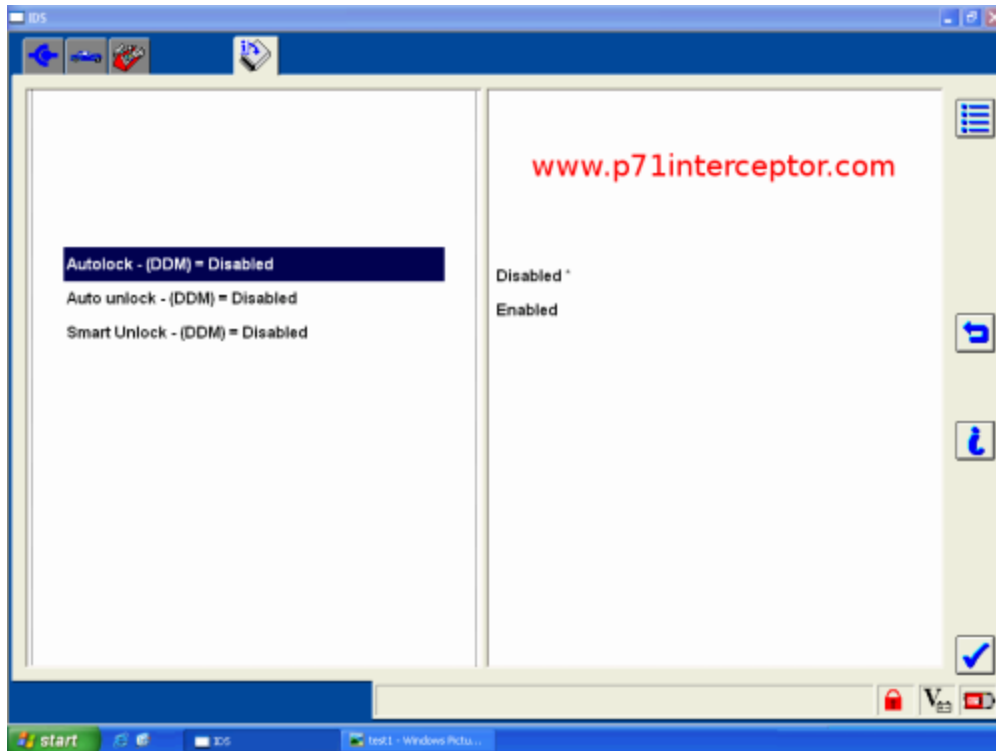
And let's take a look at the Tire Size / Axle Ratio Menu
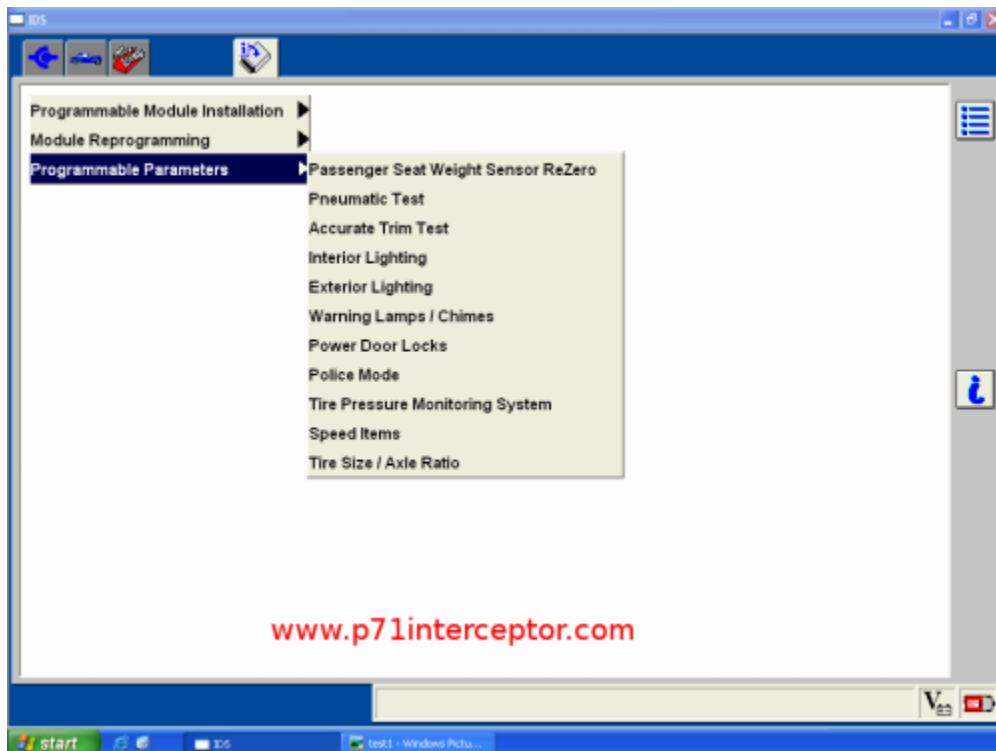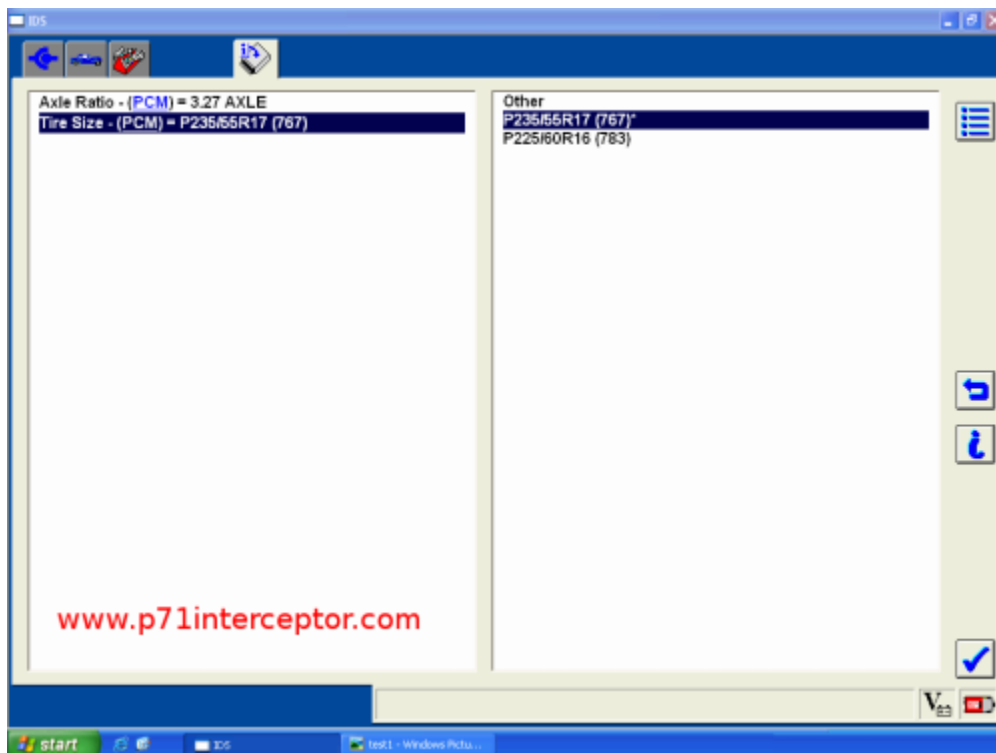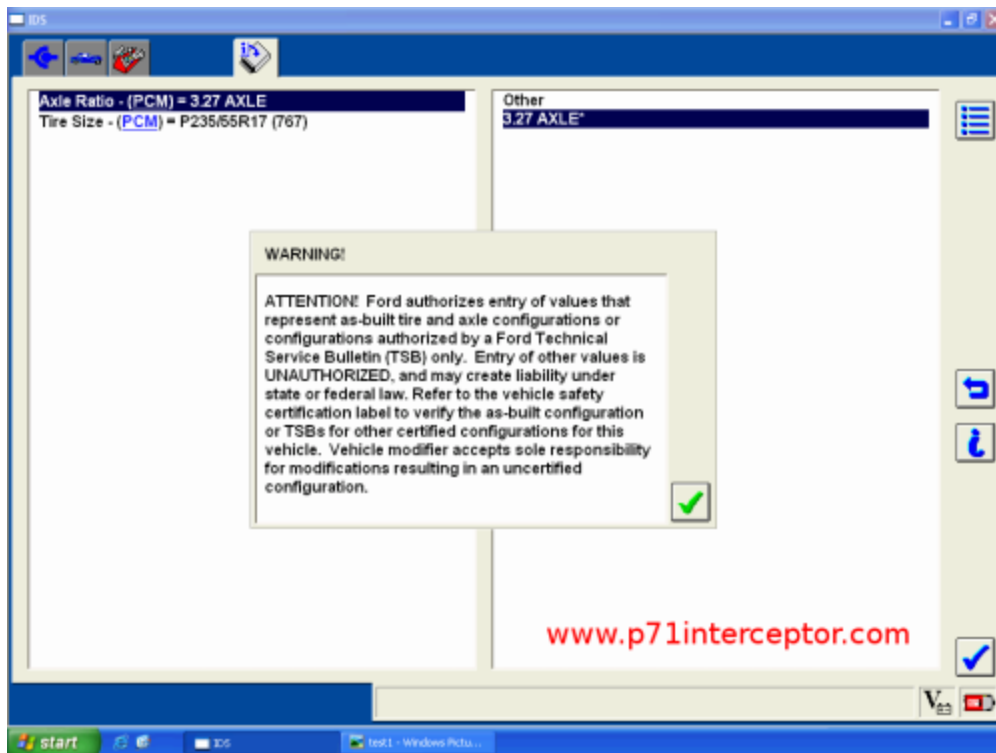
And the Tire Pressure Monitoring System screen. The TPMS system is a new feature for the 2008 model year.

Programmable Module Installation
Module Reprogramming
Programmable Parameters ▶ Passenger Seat Weight Sensor ReZero
Pneumatic Test
Accurate Trim Test
Interior Lighting
Exterior Lighting
Warning Lamps / Chimes
Power Door Locks
Police Mode
Tire Pressure Monitoring System
Speed Items
Tire Size / Axle Ratio

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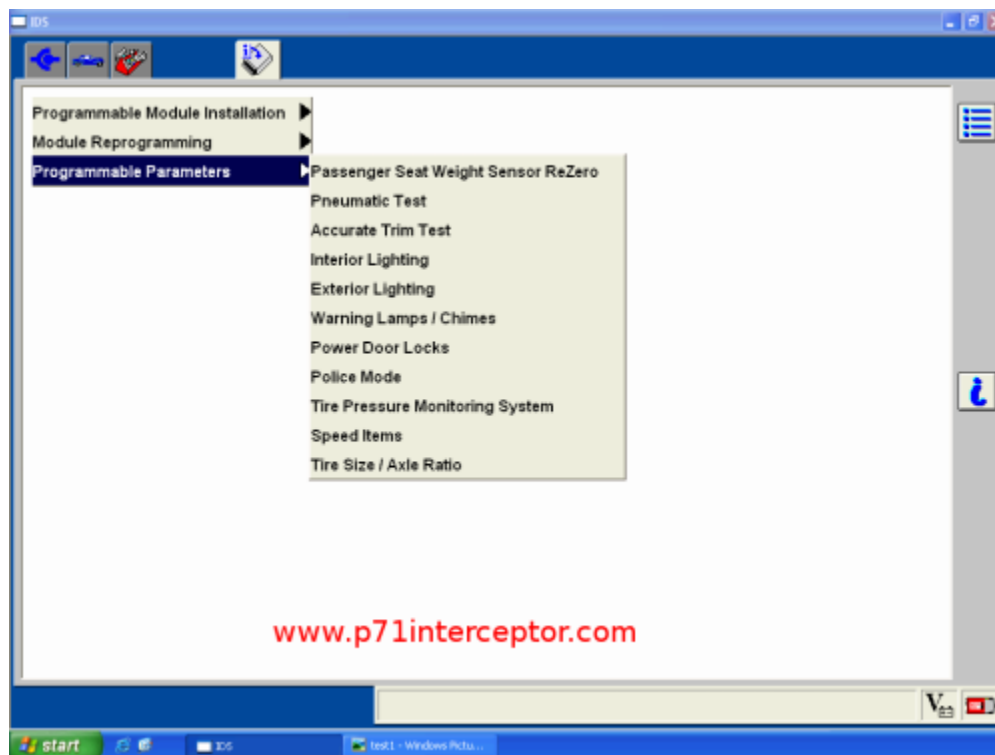
We can set the minimum tire pressure higher, but we can't lower it

35 psi ˙
36 psi
37 psi
38 psi

NOTE:

ATTENTION!
Only use this parameter to raise the tire placard pressure setting to a value higher than the CURRENT setting. The currently programmed pressure setting will be the lowest available value.
Use the factory as-built data to return the placard pressure to its original setting if the placard pressure was previously raised to a setting higher than the factory. The vehicle modifier accepts sole responsibility for modifications resulting in an uncertified configuration.

Front Tire Placard Pressu
Rear Tire Placard Pressu

47 psi
48 psi
49 psi
50 psi

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Let's take a look at the "Passenger Seat Weight Sensor ReZero" screen
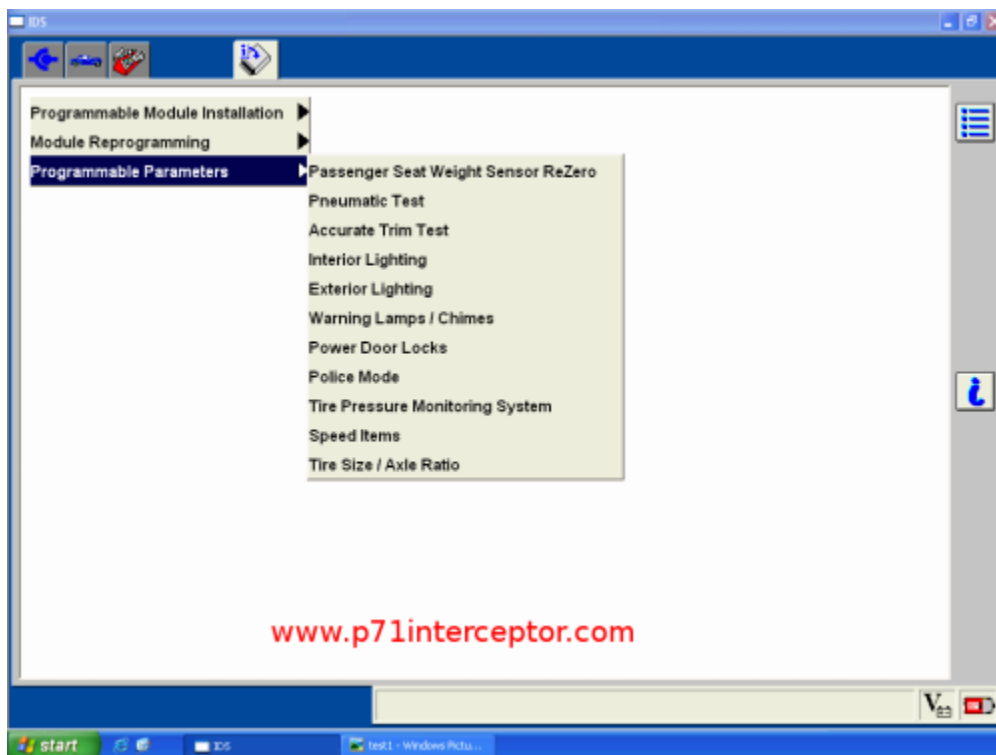
This section of the ids program is used after installing new passenger seat weight sensor components or after installing a different passenger seat assembly. If this procedure is not completed after those tasks, the airbag system might not work properly and the airbag warning light on the instrument cluster might be illuminated.

Passenger System Reset

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The ambient temperature of the vehicle must be between 42 degrees F (6 degrees C) and 97 degrees F (36 degrees C) before the rezero procedure can be performed. If the vehicle is outside these limits then the vehicle must soak for no less than 4 hours to stabilize for successful rezero.

Do you want to ReZero the Seat Weight Sensor?

NO   YES

Passenger System Reset

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The seat must be EMPTY during the rezero procedure to make sure proper function of the seat weight sensor. Make sure nothing is under the seat and remove any items from the seat that were not factory installed.

Is The Seat Empty?

NO	YES

Passenger System Reset

Zeroing the Seat Weight Sensor.

The ReZero Procedure will take 60 seconds.

Press the tick when ready to start.

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Passenger System Reset

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Operation in progress

0s 60s

Passenger System Reset

Running Selftest to confirm successful ReZero Procedure

Cycle key OFF then ON. Touch Tick to continue.

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IDS

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Performing tests - please wait

Self Test

IDS

| Select Option | Restraint Control Module |

Airbag ODDTCs ▶

Pass - RCM ▶

EXIT

No DTCs present

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Passenger System Reset

ReZero Procedure Successful

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Operator Action

Set ignition switch to OFF (Position 0).

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The accurate trim test isn't applicable to this vehicle, since the rear suspension uses conventional metal coil springs rather than air springs
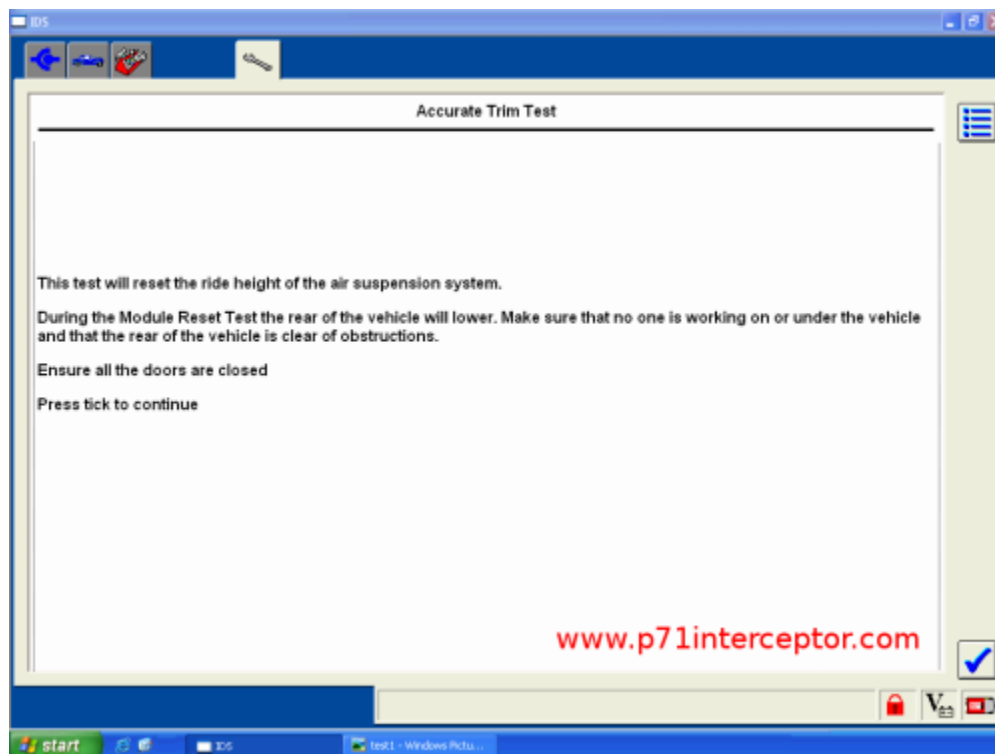
For some reason, the ids scantool has trouble connecting with a non-existant module

Accurate Trim Test

Communication failure returning to diagnostic menu.

Check the DLC for damage or corrosion which may cause intermittent communication problems. Ensure the connections between the diagnostic tester and the vehicle are secure and not loose.

Communications failure can occur on vehicles with poor condition / low batteries.

Rerun the diagnostic.

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Pneumatic Test

This test verifys the airlines are connected and not blocked

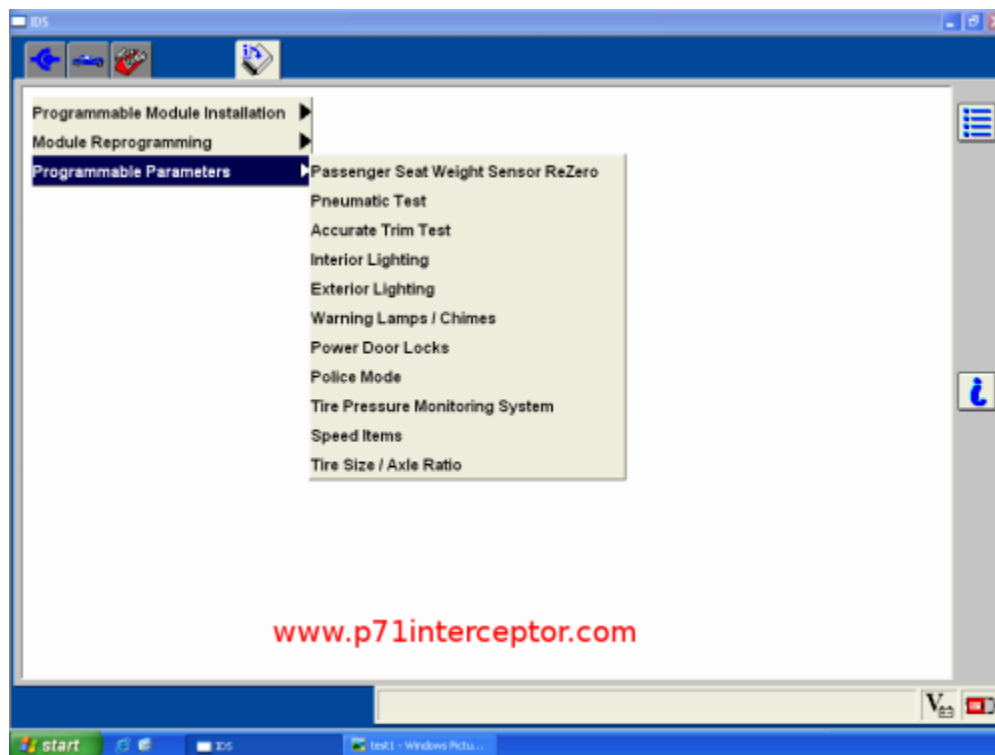Ensure all the doors are closed

Press tick to continue

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Again, the scantool has trouble communicating with a non-existant module

Do be warned that enabling speed control in the pcm changes the vid block. So if you're using a superchips custom programmer, your vin locked programmer may no longer work with your vehicle.

Question & Answer

Can I purchase a VCM to use on my own car?

Yes. But the VCM unit costs around $3,000 upfront to purchase. And after 2 years, you need to pay $500/year to obtain an activation code for continued VCM functionality.

I found a VCM module on ebay for only $999 shipped to me from HongKong, will this work with my car?

What you've likely found is a counterfeit vcm module clone. Ford is aware of these conterfeit units and has taken steps to make sure that the current IDS program will not function properly with them.

What hardware is required to run the IDS program?

Most laptop computers with windows xp professional installed should be able to run the IDS program. However, ford encourages the use of the Panasonic Toughbook CF-18 and the Panasonic Toughbook CF-19 for durability reasons. Do note that the IDS program is not compatible with Windows Vista or Windows 7.

Can I disable police darkmode without using the ford IDS scantool?

The commands to disable police darkmode are suspected to be CAN bus messages. If you have the proper hardware, you might be able to sniff the IDS data packets to disable police darkmode on one car, and then replay the police darkmode disable CAN bus messages on another car. However, this method won't work to enable cruise control because this requires a complete reprogram of the pcm strategy.

Why is my local franchised ford dealership telling me that it is impossible to retrofit cruise control into my crown victoria?

Because ford motor company never released an official cruise control retrofit kit for these cars.

Is my local ford dealer obligated to use their IDS tool to enable cruise control in my car's pcm if I show them this webpage?

No. However, if you find a cooperative dealer, they likely will. Do note that you might have to call around to a few different ford dealers before you find one willing to tackle this project.

How much money will my local ford dealer charge to enable cruise control in my car's pcm?

Many ford dealership service deparments have a 1 hour minimum for customer pay repairs. So with prevailing labor rates, figure around $100 for this task.

I had the local ford dealer disable police darkmode and my domelights still don't turn on when I open the drivers door. Why is this?

This is likely because the police deparment that owned your car cut the wiring in

between the driver's door ajar switch and the lighting control module. To get functional domelights, you will need to locate the cuts in the wiring and splice the hacked wires back together.