

FORD

DPF-R 4.0 INSTALLATIONS

INSTRUCTIONS



Plug the module into the diagnostic port. The diagnostic port is under the dash, below and to the left of the steering column.

The device will power up automatically.

Follow the voice prompts. Navigate the menu with the "YES" and "NO" buttons.

Power/function (green) light will flash when it is communicating.

Warning (red) light will be on while writing to the ECU. DO NOT UNPLUG WHILE THE RED LIGHT IS ON

If you are using with a chip/programmer it is recommended that you install the DPF-R first.

EXHAUST NOTES: Exhaust sensors need to be connected to the truck wiring harness. Exhaust sensors do not need to go back into the pipe.

DPF-R 4.0 DISCLAIMER

THIS IS A HIGH PERFORMANCE PRODUCT. USE AT YOUR OWN RISK. Do not use this Product until you (the "Buyer") have carefully read this Disclaimer. The installation of this Product indicates that you have read and understand, and accept all of the terms of, this Disclaimer.

•Gear Box Z Inc., their affiliates, distributors, dealers, et al. (hereafter referred to as the "Seller") shall not be responsible for the Product's proper installation, use

and service. Rather, the Buyer shall look solely to the installer who installs the Product for any service and support needed by the Buyer with respect thereto, as well as any damage that may be done to vehicle components as a result of modifications made by the installer.

- The Buyer is responsible to fully understand the capability and limitations of his/her vehicle according to manufacturer specifications, warnings and instructions and agrees to hold the Seller harmless from any damage resulting from failure to adhere to such specifications, warnings and/or instructions. The Buyer is also responsible to obey all applicable federal, state, and local laws, statutes, and ordinances when operating his/her vehicle, and the Buyer agrees to hold Seller harmless from any violation thereof.

- The Seller's Limited Warranty for this Product is the Buyer's exclusive warranty and is in lieu of all other warranties, express or implied, except as may be required by applicable law. Without limiting the generality of the foregoing, the Seller shall not be liable for any breach of any other written or oral warranties given to the Buyer by any third party(ies) such as those (if any) given to the Buyer by dealers or distributors of the Product.

- Consult your vehicle warranty before using this Product. Under no circumstances will the Seller be liable for the voidance of the Buyer's vehicle warranty. Rather, the Buyer assumes all risk and responsibility if an automotive manufacturer and/or dealer void the Buyer's vehicle warranty due to use of this Product.

- This product modifies the programming on the truck's computer. **WARNING:** If the download fails for any reason the truck may be rendered unusable until a recovery can be done on the ECU. BY USING THIS PRODUCT YOU AGREE THAT YOU UNDERSTAND AND TAKE RESPONSIBILITY FOR THIS RISK.

- Operate your vehicle at all times in a safe manner. Regardless of any capability, feature or function of the Seller's Products, the Buyer understands and acknowledges that it is the Buyer's sole responsibility to ensure that (A) the motor vehicle is operated in a safe and legal manner, (B) the motor vehicle is not driven faster than the lower of the speed limit or the speed rating of the tires on the vehicle in which the Seller's product is installed, and (C) the maximum RPM or speed rating of the engine is not exceeded while operating the motor vehicle. In no case will the Seller be held liable, and the Buyer assumes all risk and responsibility, for any property damage, personal injury and/or death that may occur in the event the Buyer operates the vehicle in an unsafe manner, violates the law or exceeds the above mentioned limits. Please check your local, state and federal laws to determine if you are within your rights to modify your vehicle's exhaust. The Seller makes no representation or warranty, express or implied that the use of its Products will comply with local, state, or Federal emission levels, noise levels or safety standards. The Buyer assumes all responsibility for such use and compliance.

SELLER IS NOT LIABLE FOR AND HEREBY EXCLUDES ANY AND ALL INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES RELATING TO THE PRODUCTS COVERED BY THIS DISCLAIMER. The Seller's Limited Warranty for this Product gives you specific legal rights, and you may also have other rights which may vary from state to state. Pertinent state law shall control for what Period of time following the sale a consumer may seek a remedy under the implied warranty of merchantability or fitness for a particular purpose. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitations or exclusions may not apply to you.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS DISCLAIMER, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN FOURTEEN (14) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.

EMERGENCY RECOVERY DISCLAIMER

The Special Recovery function of this product is intended only as an emergency use in case something goes wrong during programming of the ECU (ie power failure, accidental unplugging of the programmer, etc.) This function should only be used as a last resort. This function should not be used to recover or troubleshoot another truck. This function is not guaranteed to work, and may not apply the same firm ware as was originally on the truck. The Special Recovery function of this product is not intended to be used to troubleshoot or diagnose problems. Under no circumstances will the Seller be liable for any damages or expenses incurred by reason of the use of this product. USE OF THE SPECIAL RECOVERY FUNCTION OF THIS PRODUCT INDICATES THE USER UNDERSTANDS AND AGREES WITH THIS EMERGENCY RECOVERY DISCLAIMER AND THE DPF-R 4.0 DISCLAIMER.



DPF-R 4.0 DIAGNOSTICS INSTRUCTIONS

THIS FUNCTION IS FOR THE CONVENIENCE OF THE OWNER AND IS NOT INTENDED TO TAKE THE PLACE OF A QUALIFIED TECHNICIAN.

Plug the module into the diagnostic port. The diagnostic port is under the dash, below and to the left of the steering column.

The device will power up automatically.

Follow the voice prompts. Navigate the menu with the "YES" and "NO" buttons.

Navigate to "Diagnostics and emergency recovery" menu.

Press "YES" when asked if you would like to read diagnostic codes. When the product is finished reading codes it will ask if you want to read them again. Press "NO" to move on to the code clearing menu.

Press "YES" or "NO" to clear or leave trouble codes.

Press "NO" to skip the emergency recovery and you will be prompted to unplug the device.

DIAGNOSTIC TROUBLE CODES

P0001 Fuel Volume Regulator Control Circuit
P0003 Fuel Volume Regulator Control Circuit Low
P0004 Fuel Volume Regulator Control Circuit High
P000E Fuel Volume Regulator Control Exceeded 0 Learning Limit
P0069 MAP - Barometric Pressure Correlation
P006B MAP/Exhaust Pressure Correlation
P0087 Fuel Rail/System Pressure - Too Low
P0088 Fuel Rail/System Pressure - Too High
P008C Fuel Cooler Pump Control Circuit/Open
P008D Fuel Cooler Pump Control Circuit Low
P008E Fuel Cooler Pump Control Circuit High
P008F Engine Coolant Temperature/Fuel Temperature Correlation
P0090 Fuel Pressure Regulator Control Circuit
P0091 Fuel Pressure Regulator Control Circuit Low
P0092 Fuel Pressure Regulator Control Circuit High
P0096 Intake Air Temperature Sensor 2 Circuit Range/Performance
P0097 Intake Air Temperature Sensor 2 Circuit Low
P0098 Intake Air Temperature Sensor 2 Circuit High
P0101 Mass or Volume Air Flow A Circuit Range/Performance
P0102 Mass or Volume Air Flow A Circuit Low
P0103 Mass or Volume Air Flow A Circuit High
P0104 Mass or Volume Air Flow A Circuit Intermittent/Erratic
P0106 Manifold Absolute Pressure (MAP/BARO) Sensor Range/Performance
P0107 Manifold Absolute Pressure (MAP)/Barometric Pressure (BARO) Sensor Low
P0108 Manifold Absolute Pressure (MAP)/Barometric Pressure (BARO) Sensor High
P0112 Intake Air Temperature (IAT) Sensor 1 Circuit Low
P0113 Intake Air Temperature (IAT) Sensor 1 Circuit High
P0114 Intake Air Temperature (IAT) Sensor 1 Intermittent/Erratic
P0117 Engine Coolant Temperature Sensor 1 Circuit Low
P0118 Engine Coolant Temperature Sensor 1 Circuit High
P0128 Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)
P0148 Fuel Delivery Error
P0149 Fuel Timing Error
P0168 Engine Fuel Temperature Too High
P0181 Fuel Temperature Sensor A Circuit Range/Performance
P0182 Fuel Temperature Sensor A Circuit Low
P0183 Fuel Temperature Sensor A Circuit High
P0191 Fuel Rail Pressure Sensor A Circuit Range/Performance
P0192 Fuel Rail Pressure Sensor A Circuit Low
P0193 Fuel Rail Pressure Sensor A Circuit High
P0194 Fuel Rail Pressure Sensor A Circuit Intermittent/Erratic
P0196 Engine Oil Temperature Sensor Circuit Range/Performance
P0197 Engine Oil Temperature Sensor Circuit Low
P0198 Engine Oil Temperature Sensor Circuit High
P0201 Injector Circuit/Open - Cylinder 1
P0202 Injector Circuit/Open - Cylinder 2
P0203 Injector Circuit/Open - Cylinder 3
P0204 Injector Circuit/Open - Cylinder 4
P0205 Injector Circuit/Open - Cylinder 5
P0206 Injector Circuit/Open - Cylinder 6
P0207 Injector Circuit/Open - Cylinder 7
P0208 Injector Circuit/Open - Cylinder 8
P0216 Injector/Injection Timing Control Circuit
P0219 Engine Overspeed Condition
P0231 Fuel Pump Secondary Circuit Low
P0232 Fuel Pump Secondary Circuit High
P0234 Turbocharger/Supercharger A Overboost Condition
P0263 Cylinder 1 Contribution/Balance
P0266 Cylinder 2 Contribution/Balance
P0269 Cylinder 3 Contribution/Balance
P0272 Cylinder 4 Contribution/Balance
P0275 Cylinder 5 Contribution/Balance
P0278 Cylinder 6 Contribution/Balance
P0281 Cylinder 7 Contribution/Balance
P0284 Cylinder 8 Contribution/Balance
P0297 Vehicle Overspeed Condition
P0298 Engine Oil Overtemperature Condition
P02CC Cylinder 1 Fuel Injector Offset Learning at Minimum Limit
P02CD Cylinder 1 Fuel Injector Offset Learning at Maximum Limit
P02CE Cylinder 2 Fuel Injector Offset Learning at Minimum Limit
P02CF Cylinder 2 Fuel Injector Offset Learning at Maximum Limit
P02D0 Cylinder 3 Fuel Injector Offset Learning at Minimum Limit
P02D1 Cylinder 3 Fuel Injector Offset Learning at Maximum Limit
P02D2 Cylinder 4 Fuel Injector Offset Learning at Minimum Limit
P02D3 Cylinder 4 Fuel Injector Offset Learning at Maximum Limit
P02D4 Cylinder 5 Fuel Injector Offset Learning at Minimum Limit
P02D5 Cylinder 5 Fuel Injector Offset Learning at Maximum Limit
P02D6 Cylinder 6 Fuel Injector Offset Learning at Minimum Limit
P02D7 Cylinder 6 Fuel Injector Offset Learning at Maximum Limit
P02D8 Cylinder 7 Fuel Injector Offset Learning at Minimum Limit
P02D9 Cylinder 7 Fuel Injector Offset Learning at Maximum Limit
P02DA Cylinder 8 Fuel Injector Offset Learning at Minimum Limit
P02DB Cylinder 8 Fuel Injector Offset Learning at Maximum Limit
P0300 Random Misfire Detected
P0301 Cylinder 1 Misfire Detected
P0302 Cylinder 2 Misfire Detected
P0303 Cylinder 3 Misfire Detected
P0304 Cylinder 4 Misfire Detected
P0305 Cylinder 5 Misfire Detected
P0306 Cylinder 6 Misfire Detected

P0307 Cylinder 7 Misfire Detected
 P0308 Cylinder 8 Misfire Detected
 P0336 Crankshaft Position Sensor A Circuit Range/Performance
 P0337 Crankshaft Position Sensor A Circuit Low
 P0341 Camshaft Position Sensor A Circuit Range/Performance (Bank 1 or Single Sensor)
 P0342 Camshaft Position Sensor A Circuit Low (Bank 1 or Single Sensor)
 P0381 Glow Plug/Heater Indicator Circuit
 P0401 Exhaust Gas Recirculation (EGR) Flow Insufficient Detected
 P0402 Exhaust Gas Recirculation (EGR) Flow Excessive Detected
 P0403 Exhaust Gas Recirculation (EGR) Control Circuit
 P0404 Exhaust Gas Recirculation (EGR) Control Circuit Range/Performance
 P0405 Exhaust Gas Recirculation (EGR) Sensor A Circuit Low
 P0406 Exhaust Gas Recirculation (EGR) Sensor A Circuit High
 P040B Exhaust Gas Recirculation Temperature (EGRT) Sensor A Circuit Range/Performance
 P040C Exhaust Gas Recirculation Temperature (EGRT) Sensor A Circuit Low
 P040D Exhaust Gas Recirculation Temperature (EGRT) Sensor A Circuit High
 P041B Exhaust Gas Recirculation Temperature (EGRT) Sensor B Circuit Range/Performance
 P041C Exhaust Gas Recirculation Temperature (EGRT) Sensor B Circuit Low
 P041D Exhaust Gas Recirculation Temperature (EGRT) Sensor B Circuit High
 P0420 Catalyst System Efficiency Below Threshold (Bank 1)
 P042E Exhaust Gas Recirculation (EGR) Control Stuck Open
 P042F Exhaust Gas Recirculation (EGR) Control Stuck Closed
 P0472 Exhaust Pressure Sensor A Circuit Low
 P0473 Exhaust Pressure Sensor A Circuit High
 P0480 Fan 1 Control Circuit
 P0488 Exhaust Gas Recirculation (EGR) Throttle Control Circuit A Range/Performance
 P0494 Fan Speed Low
 P0495 Fan Speed High
 P0500 Vehicle Speed Sensor A
 P0503 Vehicle Speed Sensor (VSS) A Intermittent/Erratic/High
 P0512 Starter Request Circuit
 P0528 Fan Speed Sensor Circuit No Signal
 P0529 Fan Speed Sensor Circuit Intermittent
 P0544 Exhaust Gas Temperature Sensor Circuit - Bank 1 Sensor 1
 P0545 Exhaust Gas Temperature Sensor Circuit Low - Bank 1 Sensor 1
 P0546 Exhaust Gas Temperature Sensor Circuit High - Bank 1 Sensor 1
 P0560 System Voltage
 P0563 System Voltage High
 P0565 Cruise Control ON Signal
 P0566 Cruise Control OFF Signal
 P0567 Cruise Control RESUME Signal
 P0568 Cruise Control SET Signal
 P0569 Cruise Control COAST Signal
 P0571 Brake Switch A Circuit
 P0600 Serial Communication Link
 P0602 Powertrain Control Module (PCM) Programming Error
 P0603 Internal Control Module Keep Alive Memory (KAM) Error
 P0604 Internal Control Module Random Access Memory (RAM) Error
 P0605 Internal Control Module Read Only Memory (ROM) Error
 P060B Internal Control Module A/D Processing Performance
 P060C Internal Control Module Main Processor Performance
 P060D Internal Control Module Accelerator Pedal Position Performance
 P0610 Control Module Vehicle Options Error
 P061B Internal Control Module Torque Calculation Performance
 P061C Internal Control Module Engine RPM Performance
 P0620 Generator Control Circuit
 P0625 Generator Field Terminal Circuit Low
 P0626 Generator Field Terminal Circuit High
 P0627 Fuel Pump A Control Circuit/Open
 P0628 Fuel Pump A Control Circuit Low
 P0629 Fuel Pump A Control Circuit High
 P062D Fuel Injector Driver Circuit Performance Bank 1
 P062E Fuel Injector Driver Circuit Performance Bank 2
 P0642 Sensor Reference Voltage A Circuit Low
 P0643 Sensor Reference Voltage A Circuit High
 P0652 Sensor Reference Voltage B Circuit Low
 P0653 Sensor Reference Voltage B Circuit High
 P0670 Glow Plug Control Module (GPCM) Control Circuit/Open
 P0671 Cylinder 1 Glow Plug Circuit/Open
 P0672 Cylinder 2 Glow Plug Circuit/Open
 P0673 Cylinder 3 Glow Plug Circuit/Open
 P0674 Cylinder 4 Glow Plug Circuit/Open
 P0675 Cylinder 5 Glow Plug Circuit/Open
 P0676 Cylinder 6 Glow Plug Circuit/Open
 P0677 Cylinder 7 Glow Plug Circuit/Open
 P0678 Cylinder 8 Glow Plug Circuit/Open
 P0684 Glow Plug Control Module (GPCM) to Powertrain Control Module (PCM) Communication Circuit Range/Performance
 P0691 Fan 1 Control Circuit Low
 P0692 Fan 1 Control Circuit High
 P0703 Brake Switch B Input Circuit
 P0704 Clutch Switch Input Circuit
 P0A09 DC/DC Converter Status Circuit Low
 P0A10 DC/DC Converter Status Circuit High
 P1000 On-Board Diagnostic (OBD) Systems Readiness Test Not Complete
 P1102 Mass Air Flow Sensor In Range But Lower Than Expected
 P1103 Mass Air Flow Sensor In Range But Higher Than Expected
 P1111 System Pass
 P115A Low Fuel Level - Forced Limited Power
 P117B Exhaust Gas Temperature Sensor Correlation - Bank 1
 P117F Fuel Pressure Regulator Control Exceeded Learning Limits
 P1184 Engine Oil Temperature Sensor Out Of Self-Test Range
 P120F Fuel Pressure Regulator Excessive Variation
 P123C Cold Start Turbo Protection - Forced Limited Power
 P1260 Theft Detected, Vehicle Immobilized
 P127A Aborted KOER - Fuel Pressure Failure
 P132A Turbocharger/Supercharger Boost Control A Electrical
 P132B Turbocharger/Supercharger Boost Control A Performance
 P132C Turbocharger/Supercharger Boost Control A Voltage
 P1335 Exhaust Gas Recirculation (EGR) Position Sensor Minimum/Maximum Stop Performance
 P1336 Crankshaft/Camshaft Sensor Range/Performance
 P138D Turbocharger Boost Control A Temperature Too High
 P1397 System Voltage Out Of Self-Test Range
 P1408 Exhaust Gas Recirculation (EGR) Flow Out Of Self-Test Range
 P1464 A/C Demand Out Of Self-Test Range
 P1501 Vehicle Speed Sensor Out Of Self-Test Range
 P1531 Invalid Test - Accelerator Pedal Movement
 P1536 Parking Brake Switch Circuit
 P1551 Cylinder 1 Injector Circuit Range/Performance
 P1552 Cylinder 2 Injector Circuit Range/Performance
 P1553 Cylinder 3 Injector Circuit Range/Performance
 P1554 Cylinder 4 Injector Circuit Range/Performance
 P1555 Cylinder 5 Injector Circuit Range/Performance
 P1556 Cylinder 6 Injector Circuit Range/Performance
 P1557 Cylinder 7 Injector Circuit Range/Performance
 P1558 Cylinder 8 Injector Circuit Range/Performance
 P1586 Electronic Throttle to PCM Communication Error
 P162E Internal Control Module PTO Performance
 P1635 Tire/Axle Out Of Acceptable Range
 P1639 Vehicle ID Block Corrupted, Not Programmed
 P1703 Brake Switch Out Of Self-Test Range
 P1705 Transmission Range Circuit Not Indicating Park/Neutral During Self-Test
 P1725 Insufficient Engine Speed Increase During Self-Test
 P1726 Insufficient Engine Speed Decrease During Self-Test
 P174E Output Shaft Speed / ABS Wheel Speed Correlation
 P179A Controller Area Network (CAN) Engine Control Module (ECM)/Turbocharger Boost Control A Actuator Circuit Malfunction
 P2002 Diesel Particulate Filter Efficiency Below Threshold (Bank 1)
 P200E Catalyst System Over Temperature (Bank 1)
 P2031 Exhaust Gas Temperature Sensor Circuit Bank 1 Sensor 2
 P2032 Exhaust Gas Temperature Sensor Circuit Low Bank 1 Sensor 2
 P2033 Exhaust Gas Temperature Sensor Circuit High Bank 1 Sensor 2
 P2080 Exhaust Gas Temperature Sensor Circuit Range/Performance Bank 1 Sensor 1
 P2081 Exhaust Gas Temperature Sensor Circuit Intermittent Bank 1 Sensor 1
 P2084 Exhaust Gas Temperature Sensor Circuit Range/Performance Bank 1 Sensor 2
 P2085 Exhaust Gas Temperature Sensor Circuit Intermittent Bank 1 Sensor 2
 P20E2 Exhaust Gas Temperature Sensor 1/2 Correlation Bank 1
 P20E3 Exhaust Gas Temperature Sensor 1/3 Correlation Bank 1
 P20E4 Exhaust Gas Temperature Sensor 2/3 Correlation Bank 1
 P2122 Throttle/Pedal Position Sensor/Switch D Circuit Low
 P2123 Throttle/Pedal Position Sensor/Switch D Circuit High
 P2127 Throttle/Pedal Position Sensor/Switch E Circuit Low
 P2128 Throttle/Pedal Position Sensor/Switch E Circuit High
 P2138 Throttle/Pedal Position Sensor/Switch D/E Voltage Correlation
 P215A Vehicle Speed / Wheel Speed Correlation
 P215B Vehicle Speed / Output Shaft Speed Correlation
 P2199 Intake Air Temperature (IAT) 1/2 Correlation
 P2228 Barometric Pressure Circuit Low
 P2229 Barometric Pressure Circuit High
 P2230 Barometric Pressure Circuit Intermittent
 P2262 Turbo/Super Charger Boost Pressure Not Detected — Mechanical
 P2263 Turbo/Super Charger Boost System Performance
 P2269 Water in Fuel Condition
 P2289 Injector Control Pressure Too High - Engine Off
 P2291 Injector Control Pressure Too Low - Engine Cranking
 P242A Exhaust Gas Temperature Sensor Circuit Bank 1 Sensor 3
 P242B Exhaust Gas Temperature Sensor Circuit Range/Performance Bank 1 Sensor 3
 P242C Exhaust Gas Temperature Sensor Circuit Low Bank 1 Sensor 3
 P242D Exhaust Gas Temperature Sensor Circuit High Bank 1 Sensor 3
 P242E Exhaust Gas Temperature Sensor Circuit Intermittent/Erratic Bank 1 Sensor 3
 P242F Diesel Particulate Filter Restriction - Ash Accumulation
 P244A Diesel Particulate Filter Differential Pressure Too Low
 P244C Exhaust Temperature Too Low For Particulate Filter Regeneration, Bank 1
 P244D Exhaust Temperature Too High For Particulate Filter Regeneration, Bank 1
 P2452 Diesel Particulate Filter Pressure Sensor A Circuit
 P2453 Diesel Particulate Filter Pressure Sensor A Circuit Range/Performance
 P2454 Diesel Particulate Filter Pressure Sensor A Circuit Low
 P2455 Diesel Particulate Filter Pressure Sensor A Circuit High
 P2456 Diesel Particulate Filter Pressure Sensor A Circuit Intermittent/Erratic
 P2457 Exhaust Gas Recirculation (EGR) Cooler System Performance
 P2458 Diesel Particulate Filter Regeneration Duration
 P2459 Diesel Particulate Filter Regeneration Frequency
 P2463 Diesel Particulate Filter - Soot Accumulation
 P246C Diesel Particulate Filter Restriction - Forced Limited Power
 P2545 Torque Management Request Input Signal A Range / Performance
 P2563 Turbocharger Boost Control Position Sensor A Circuit Range Performance
 P2610 Electronic Control Module (ECM)/Powertrain Control Module (PCM) Internal Engine Off Timer Performance
 U0073 Control Module Communication Bus A Off
 U0101 Lost Communication With Transmission Control Module (TCM)
 U0121 Lost Communication With The Anti-lock Brake System (ABS) Control Module
 U0137 Lost Communication With Trailer Brake Control (TBC) Module
 U0151 Lost Communication With Restraints Control Module (RCM)
 U0155 Lost Communication With Instrument Panel Cluster (IC) Control Module

VOICE PROMPT

MENU FLOW CHART

