

## **ScanGauge II Settings Ford PowerStroke**

### **Throttle Position 1 (Volts)**

TXD: 07E0220917

RXF: 046245090617

RXD: 3010

MTH: 0064040000000

NAM: **TP1**

Note: Voltage of the ETC Throttle Position Sensor number 1

### **Throttle Position 2 (Volts)**

TXD: 07E0220918

RXF: 046245090618

RXD: 3010

MTH: 0064040000000

NAM: **TP2**

Note: Voltage of the ETC Throttle Position Sensor number 2

### **Throttle Position Desired (Degrees)**

TXD: 07E022091A

RXF: 04624509061A

RXD: 3010

MTH: 0064020000000

NAM: **TPD**

Note: ETC Commanded Throttle Angle, in degrees.

### **Throttle Position Actual (Degrees)**

TXD: 07E022093C

RXF: 04624509063C

RXD: 3010

MTH: 0064020000000

NAM: **TPA**

Note: The measured throttle angle from the throttle sensor inputs

**Throttle Position Commanded (Degrees)**

(Have not seen this one verified)

TXD: 07E022091A

RXF: 04620509061A

RXD: 3010

MTH: 020000010000

NAM: **TPC**

**FICM Vehicle Power (Volts) (Should be 12 Volts)**

TXD: 07E02209CE

RXF: 0462450906CE

RXD: 3010

MTH: 0064010000000

NAM: **FVP**

**FICM Logic Power (Volts) (Should be 12 volts)\***

TXD: 07E02209CF

RXF: 0462450906CF

RXD: 3010

MTH: 0064010000000

NAM: **FLP**

**FICM Main Power (Volts) (Should be 47-48) \***

TXD: 07E02209D0

RXF: 0462450906D0

RXD: 3010

MTH: 0064010000000

NAM: **FMP**

**Sync (1 = in sync, 0 = not in sync) FICM SYNC\***

TXD: 07E02209CD

RXF: 0462050906CD

RXD: 3701

MTH: 000100010000

NAM: **SYC**

**Engine Oil Temp. \***

TXD: 07E0221310

RXF: 046245130610

RXD: 3010

MTH: 00090005F05F ( Use this if the **EOT** is not reading right:  
00090005FFD8 or 00090005F060)

NAM: **EOT**

**Trans. Fluid Temp., \*F \***

TXD: 07E1221674

RXF: 046205160674

RXD: 3010

MTH:000100080000

NAM: **TFT**

**Inj. Control Press., psig \***

TXD: 07E0221446

RXF: 046205140646

RXD: 3010

MTH: 003900640000

NAM: **ICP**

**ICP Voltage (Volts)**

TXD: 07E02216AD

RXF: 0462451606AD

RXD: 3010

MTH: 004827100000

NAM: **ICV**

**Exhaust Back Pressure**

TXD: 07E0221445  
RXF: 046285140645  
RXD: 3010  
MTH: 001D00500000  
NAM: **EBP**

**Exhaust Back Pressure (-0.5 PSI bias)**

TXD: 07E0221445  
RXF: 046285140645  
RXD: 3010  
MTH: 001D0050FFFB  
NAM: **EBP**

**Fuel Level**

TXD: 07E02216C1  
RXF: 0462451606C1  
RXD: 3010  
MTH: 000101480000  
NAM: **FL**

**Engine Run Time**

TXD: 07DF011F  
RXF: 0441051F  
RXD: 2810  
MTH: 0001003C0000  
NAM: **ERT** (Minutes)

**IAT1 Degrees F**

TXD: 07E0221123  
RXF: 046205110623  
RXD: 3010  
MTH: 000100010000  
NAM: **IAT 1 Degrees F**

## **Manifold Absolute Pressure**

TXD: 07E0221440

RXF: 046285140640

RXD: 3010

MTH: 012203200000

NAM: **PSI**

With a little tweaking you can adjust this to read boost as you said.

To do this, just plug in the **MAP** code - get a reading from it with the key in the on position but the engine off, then based on the reading changed the last 4 digits of the MTH to whatever corresponds to your reading on this table

14.0 -- FF74,

14.1 -- FF73

14.2 -- FF72

14.3 -- FF71

14.4 -- FF70

14.5 -- FF6F

14.6 -- FF6E

14.7 -- FF6D

14.8 -- FF6C

14.9 -- FF6B

15.0 -- FF6A

Elevation 6200 ft!

12.7 FF81, 12.8 FF80, 12.9 FF7F, 13.0 FF7E, 13.1 FF7D, 13.2 FF7C, 13.3 FF7B, 13.4 FF7A, 13.5 FF79  
13.6 FF78, 13.7 FF77, 13.8 FF76, 13.9 FF75

So, for example if you got a reading of **14.5 PSI** with key on engine off you'd change the **MTH** to **01220320FF6F** and the reading should read **0.0** with key on engine off and would then show how many lbs of boost you were at when the vehicle is running.

## **Injector Timing Before Top Dead Center (Degrees)**

TXD: 07E02209CC

RXF: 0462850906CC

RXD: 3010

MTH: 000A00400000

NAM: **ITM**

**Fuel Injector Pulse Width (microseconds)**

TXD: 07E0221410  
RXF: 046205140610  
RXD: 3010  
MTH: 000800010000  
NAM: **FPW**

**Fuel Injector #1 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3001  
MTH: 000100010000  
NAM: **FI1**

**Fuel Injector #2 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3101  
MTH: 000100010000  
NAM: **FI2**

**Fuel Injector #3 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3201  
MTH: 000100010000  
NAM: **FI3**

**Fuel Injector #4 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3301  
MTH: 000100010000  
NAM: **FI4**

**Fuel Injector #5 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3401  
MTH: 000100010000  
NAM: **FI5**

**Fuel Injector #6 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3501  
MTH: 000100010000  
NAM: **FI6**

**Fuel Injector #7 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3601  
MTH: 000100010000  
NAM: **FI7**

**Fuel Injector #8 Commanded on (On/Off)**

TXD: 07E02209EF  
RXF: 0462250906EF  
RXD: 3701  
MTH: 000100010000  
NAM: **FI8**

**Cylinder #1 cumulative misfires**

TXD: 07E022160E  
RXF: 04620516060E  
RXD: 3010  
MTH: 000100010000  
NAM: **1CM**

**Cylinder #2 cumulative misfires**

TXD: 07E022160F  
RXF: 04620516060F  
RXD: 3010  
MTH: 000100010000  
NAM: **2CM**

**Cylinder #3 cumulative misfires**

TXD: 07E0221610  
RXF: 046205160610  
RXD: 3010  
MTH: 000100010000  
NAM: **3CM**

**Cylinder #4 cumulative misfires**

TXD: 07E0221611  
RXF: 046205160611  
RXD: 3010  
MTH: 000100010000  
NAM: **4CM**

**Cylinder #5 cumulative misfires**

TXD: 07E0221612  
RXF: 046205160612  
RXD: 3010  
MTH: 000100010000  
NAM: **5CM**

**Cylinder #6 cumulative misfires**

TXD: 07E0221613  
RXF: 046205160613  
RXD: 3010  
MTH: 000100010000  
NAM: **6CM**

**Cylinder #7 cumulative misfires**

TXD: 07E0221614  
RXF: 046205160614  
RXD: 3010  
MTH: 000100010000  
NAM: **7CM**

**Cylinder #8 cumulative misfires**

TXD: 07E0221615  
RXF: 046205160615  
RXD: 3010  
MTH: 000100010000  
NAM: **8CM**

**Vehicle Speed Sensor (MPH)**

TXD: 07E02211C1  
RXF: 0462051106C1  
RXD: 3010  
MTH: 000102000000  
NAM: **VSS**

**Accelerator Pedal Position (%)**

TXD: 07E02209D4  
RXF: 0462050906D4  
RXD: 3008  
MTH: 000100020000  
NAM: **AP%**

**DTC Count**

TXD: 07E0220200  
RXF: 046205020600  
RXD: 3008  
MTH: 000100010000  
NAM: **DTC**

**Mass Fuel Desired (in milligrams per stroke)**

TXD: 07E0221412  
RXF: 046205140612  
RXD: 3010  
MTH: 000100100000  
NAM: **MFD**

**Volume Fuel Desired, Cubic mm**

TXD: 07E0221411  
RXF: 046245140611  
RXD: 3010  
MTH: 006400100000  
NAM: **VFD**

**VREF**

TXD: 07E0221155  
RXF: 046245110655  
RXD: 3010  
MTH: 006433330000  
NAM: **CVI**

**Battery Voltage (Volts)**

TXD: 07E0221172  
RXF: 046205110672  
RXD: 3008  
MTH: 000100100000  
NAM: **BAT**

**GEAR**

TXD: 07E12211B3  
RXF: 0462051106B3  
RXD: 3008  
MTH: 000100020000  
NAM: **GER**

**Fan Speed Sensor Duty Cycle (%)** THIS DOESN'T WORK FOR ME!!

TXD: 07E022091F  
RXF: 04624509061F  
RXD: 3010  
MTH: 013103E80000  
NAM: **FDC**

**Fan Speed Sensor (RPM)**

TXD: 07E022099F  
RXF: 04620509069F  
RXD: 3010  
MTH: 000100040000  
NAM: **FSS**  
FSS 07E022099F 04620509069F 3010 000100010000 FAN  
SPEED SENSOR, rpm (I believe this 1 is wrong)

**Barometric Pressure (PSI)**

TXD: 07E0221442  
RXF: 046285140642  
RXD: 3010  
MTH: 001D00500000  
NAM: **BAR**

**Transmission Range**

TXD: 07E12211B6  
RXF: 0462051106B6  
RXD: 3008  
MTH: 000100010000  
NAM: **TR**

"TR - PRNDL Position. 0=fault. 1=manual 1st gear. 2=second to last position. 3=drive. 4=overdrive. 5=neutral. 6=reverse. 7=park"

"TR - PRNDL Position. 0=fault. 1=manual 1st gear. 2=second to last position. 3=drive. 4=overdrive. 5=neutral. 6=reverse. 7=park"

**Manifold Air Temperature (Degrees F)** NOTE: THIS SHOULD READ THE SAME AS IAT2

TXD: 07E02216E0  
RXF: 0462051606E0  
RXD: 3010  
MTH: 001200050020  
NAM: **MAT**

So say you wanted to step through the response for the Sync XGauge you'd set it up as follows  
TXD: 07E02209CD RXF: 0462150906CD (Notice the '1' in the 5th digit = display raw hex value)

RXD: 0010 (This effectively states "start from bit 0 in the response, and capture 16 bits (or two bytes) to display) MTH: 000100010000 (This MTH is needed as it just multiplies by 1 and divides by 1 to leave the data unconverted NAM: WD1

(Short for Word 1 so I know this is the 1st Word (word is another way of saying '2 bytes') in the response.

You can step through the whole response by using RXD's 0010, 1010, 2010, 3010, 4010.

**Horse Power**

TXD: 0  
RSF: 400080000000  
RXD: 0  
MTH: 000A00240000  
NAM: **HPR**

ITM 07E02209CC - 0426850906CC - 3010 000A00400000 INJECTOR TIMING BTDC (DEGREES)

**Injector Timing Before Top Dead Center (Degrees)**

TXD: 07E02209CC  
RXF: 0462850906CC  
RXD: 3010  
MTH: 000A00400000  
NAM: **ITM**

**Fuel Injector Pulse Width (microseconds)**

TXD: 07E0221410  
RXF: 046205140610  
RXD: 3010  
MTH: 000800010000  
NAM: **FPW**

**Intake Air Temperature 2**

TXD: 07E02216A8  
RXF: 0462051606A8  
RXD: 3010  
MTH: 000100010000  
NAM: **IA2**

**Manifold Air Temperature Degrees Fahrenheit**

TXD: 07E02216E0  
RXF: 0462051606E0  
RXD: 3008  
MTH: 00090005FFD8  
NAM: **MAT**

**Fan Speed Sensor RPM**

TXD: 07E022099F  
RXF: 04620509069F  
RXD: 3010  
MTH: 000100040000  
NAM: **FSS**

**BOOST XXXX = See Table**

TXD: 07E0221440  
RXF: 046285140640  
RXD: 3010  
MTH: 001D0050XXXX  
NAM: **BST**

PSI Reading XXXX Entry 12.7 FF81, 12.8 FF80, 12.9 FF7F, 13.0 FF7E, 13.1 FF7D, 13.2 FF7C, 13.3 FF7B, 13.4 FF7A, 13.5 FF79, 13.6 FF78, 13.7 FF77, 13.8 FF76, 13.9 FF75, 14.0 FF74, 14.1 FF73, 14.2 FF72, 14.3 FF71, 14.4 FF70, 14.5 FF6F, 14.6 FF6E, 14.7 FF6D, 14.8 FF6C, 14.9 FF6B, 15.0 FF6A.

## Summary of Parameters

NAME	DESCRIPTION
FVP	<b>FICM</b> Vehicle Power (Volts) (Should be 12 Volts)
FLP	<b>FICM</b> Logic Power (Volts) (Should be 12 volts)
FMP	<b>FICM</b> Main Power (Volts) (Should be 47-48) (this does work!)
IA2	Intake Air Temperature 2 (Fahrenheit) - should read the same as MAT
SYC	Camshaft and Crankshaft in sync (1 equals in-sync)
EGR	EGR Duty Cycle (Percent)
ETP	EGR Throttle Position Control Signal
EVP	EGR Valve Position (mm)
EVD	EGR Valve Position Desired (%)
EVM	EGR Valve Position Measured (%)
EGV	EGR Valve Position (Volts 0-5)
TP1	Throttle Position 1 (Volts)
TP2	Throttle Position 2 (Volts)
TPD	Throttle Position Desired (Degrees)
TPA	Throttle Position Actual (Degrees)
TPC	Throttle Position Commanded (Degrees) (Have not seen this one verified)
VGT	VGT Duty Cycle (%)
ECT	Engine Coolant temp, *F
EOT	Engine Oil Temp.
TFT	Trans. Fluid Temp., *F
ICP	Inj. Control Press., psig
ICV	ICP Voltage (Volts)
IPR %	IPR Duty Cycle
EBP	Exhaust Back Pressure
EBP	Exhaust Back Pressure (-0.5 PSI bias)
FL	Fuel Level
ERT (Minutes)	Engine Run Time
PSI	Manifold Absolute Pressure
ITM	Injector Timing Before Top Dead Center (Degrees)
FPW	Fuel Injector Pulse Width (microseconds)
FI1	Fuel Injector #1 Commanded on (On/Off)
FI2	Fuel Injector #2 Commanded on (On/Off)
FI3	Fuel Injector #3 Commanded on (On/Off)
FI4	Fuel Injector #4 Commanded on (On/Off)
FI5	Fuel Injector #5 Commanded on (On/Off)
FI6	Fuel Injector #6 Commanded on (On/Off)
FI7	Fuel Injector #7 Commanded on (On/Off)
FI8	Fuel Injector #8 Commanded on (On/Off)

<b>1CM</b>	Cylinder #1 cumulative misfires
<b>2CM</b>	Cylinder #2 cumulative misfires
<b>3CM</b>	Cylinder #3 cumulative misfires
<b>4CM</b>	Cylinder #4 cumulative misfires
<b>5CM</b>	Cylinder #5 cumulative misfires
<b>6CM</b>	Cylinder #6 cumulative misfires
<b>7CM</b>	Cylinder #7 cumulative misfires
<b>8CM</b>	Cylinder #8 cumulative misfires
<b>VSS</b>	Vehicle Speed Sensor (MPH)
<b>AP%</b>	Accelerator Pedal Position (%)
<b>DTC</b>	DTC Count
<b>SYC</b>	Sync (1 = in sync, 0 = not in sync) FICM SYNC
<b>MFD</b>	Mass Fuel Desired (in milligrams per stroke)
<b>VFD</b>	Volume Fuel Desired, Cubic mm
<b>CVI</b>	VREF
<b>BAT</b>	Battery Voltage (Volts)
<b>GER</b>	Gear
<b>FDC</b>	Fan Speed Sensor Duty Cycle (%) THIS DOESN'T WORK FOR ME!!
<b>FSS</b>	<i>Fan Speed Sensor (RPM)</i>
<b>BAR</b>	Barometric Pressure (PSI)
<b>TR</b>	Transmission Range
<b>WD1</b>	Short for Word 1 so I know this is the 1st Word (word is another way of saying '2 bytes') in the response.
<b>HPR</b>	Horse Power
<b>ITM</b>	Injector Timing Before Top Dead Center (Degrees)
<b>FPW</b>	Fuel Injector Pulse Width (microseconds)
<b>MAT</b>	Manifold Air Temperature Degrees Fahrenheit
<b>FSS</b>	Fan Speed Sensor RPM
<b>BST</b>	Boost XXXX = See Table