

# PERFORMANCE SPECIFICATIONS

Section 2.4  
Page 61

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T 444E/175 HP @ 2300 RPM  
[50 State 1997 Model Year]

## PERFORMANCE SPECIFICATIONS

Engine/Model ..... T 444E/B175

Engine rating ..... 175 BHP @ 2300 RPM

Engine Family Rating Code (EFRC) ..... 2111

Injector Part Number  
Original Equipment ..... 1 822 803 C1

Turbocharger Part Number (With Exhaust Back Pressure Device) ..... 1 823 554 C91  
A/R Ratio ..... 1.0

Turbocharger Part Number (Without Exhaust Back Pressure Device) ..... 1 823 553 C91  
A/R Ratio ..... 1.0

Injection Timing ..... Not-Adjustable

High Idle Speed – RPM with manual transmission ..... 2500 + 50

High Idle Speed – RPM with automatic transmission ..... 2500 + 200

Low Idle Speed – RPM ..... 700 ± 50

Injection Control Pressure/Voltage  
@ Low Idle No Load ..... 440 ± 40 psi (3.00 ± 0.3 MPa) (0.76 ± 0.1 Volts)

Injection Control Pressure/Voltage  
@ High Idle No Load ..... 1020 ± 100 psi (7.00 ± 0.7 MPa) (1.44 ± 0.1 Volts)

Injection Control Pressure/Voltage  
@ Rated Speed and Full Load ..... 2180 ± 150 psi (15.0 ± 1.0 MPa) (2.81 ± 0.2 Volts)

Intake and Exhaust Valve Clearance (Engine Off – Hot or Cold)  
Intake ..... Not-Adjustable  
Exhaust ..... Not-Adjustable

## PERFORMANCE SPECIFICATIONS

T 444E/175 HP @ 2300 RPM  
[50 State 1997 Model Year]

### PERFORMANCE SPECIFICATIONS CONTINUED

The following data to be taken at high idle with [no load].

Air Cleaner Restriction* [Measured @ Air Cleaner Outlet]	
(Check at High Idle [No Load]) – Max	12.5 in. H <sub>2</sub> O (3.13 kPa)
(Check at Full Load, Rated Speed) – Max	25 in. H <sub>2</sub> O (6.25 kPa)
Fuel Pressure [Minimum]*	20 psi (138 kPa)
Fuel Inlet Restriction Maximum*	6 in. Hg. Vacuum (20.261 kPa)
(Requires Stabilized	
Crankcase Pressure [Maximum]*	6.0 in. H <sub>2</sub> O** ( 2.0 kPa)
Operating Temperature)	

The following data to be taken at full load, full throttle rated engine speed on chassis dynamometer or on highway.

15.1 psi ± 1.5 psi (104 kPa ± 10 kPa) @ 2300	
Intake Manifold Pressure*	4.7 psi ± 1.5 psi ( 32 kPa ± 10 kPa) @ 1500
Exhaust Back Pressure (After Turbocharger [Maximum])*	0–27 in.H <sub>2</sub> O (6.7 kPa)
Smoke Level Max* – Bosch Number	0.4 @ 2300 RPM
	0.6 @ 1500 RPM

Measure water temperature differential across the radiator with engine on a chassis dynamometer, at full load and ambient temperature of 80°F or above.

Water Temperature Differential Across Radiator	6–12°F (3.3–6.6°C)
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The following data to be taken after engine reaches stabilized operating temperature.

Lube Oil Temperature (Oil Gallery)	230°F (110°C) Max.
Lube Oil Pressure at Operating Temperature	
Low Idle (Min.)	10–30 psi (137–344 kPa)
Rated Speed (Min./Max.)	40–70 psi (276–483 kPa)

\*Engine must be at normal operating temperature.

\*\*Crankcase pressure [ maximum ] as measured with Orificed Restrictor Tool ZTSE4146.

# PERFORMANCE SPECIFICATIONS

Section 2.4  
Page 63

**T 444E/190 HP @ 2300 RPM**  
**[50 State 1997 Model Year]**

## PERFORMANCE SPECIFICATIONS

Engine/Model ..... T 444E/B190

Engine rating ..... 190 BHP @ 2300 RPM

Engine Family Rating Code (EFRC) ..... 2121

Injector Part Number

Original Equipment ..... 1 822 803 C1

Turbocharger Part Number (With Exhaust Back Pressure Device) ..... 1 823 554 C91

A/R Ratio ..... 1.0

Turbocharger Part Number (Without Exhaust Back Pressure Device) ..... 1 823 553 C91

A/R Ratio ..... 1.0

Injection Timing ..... Not-Adjustable

High Idle Speed – RPM with manual transmission ..... 2500 + 50

High Idle Speed – RPM with automatic transmission ..... 2500 + 200

Low Idle Speed – RPM ..... 700 ± 50

Injection Control Pressure/Voltage

@ Low Idle No Load ..... 440 ± 40 psi (3.00 ± 0.3 MPa) (0.76 ± 0.1 Volts)

Injection Control Pressure/Voltage

@ High Idle No Load ..... 1020 ± 100 psi (7.00 ± 0.7 MPa) (1.44 ± 0.1 Volts)

Injection Control Pressure/Voltage

@ Rated Speed and Full Load ..... 2320 ± 150 psi (16.0 ± 1.0 MPa) (2.98 ± 0.2 Volts)

Intake and Exhaust Valve Clearance (Engine Off – Hot or Cold)

Intake ..... Not-Adjustable

Exhaust ..... Not-Adjustable

## PERFORMANCE SPECIFICATIONS

**T 444E/190 HP @ 2300 RPM**  
**[50 State 1997 Model Year]**

### PERFORMANCE SPECIFICATIONS CONTINUED

**The following data to be taken at high idle with [no load].**

Air Cleaner Restriction* [Measured @ Air Cleaner Outlet]	
(Check at High Idle [No Load]) – Max	12.5 in. H <sub>2</sub> O (3.13 kPa)
(Check at Full Load, Rated Speed) – Max	25 in. H <sub>2</sub> O (6.25 kPa)
Fuel Pressure [Minimum]*	20 psi (138 kPa)
Fuel Inlet Restriction Maximum*	6 in. Hg. Vacuum (20.261 kPa)
(Requires Stabilized	
Crankcase Pressure [Maximum]*	6.0 in. H <sub>2</sub> O** ( 2.0 kPa)
Operating Temperature)	

**The following data to be taken at full load, full throttle rated engine speed on chassis dynamometer or on highway.**

15.5 psi ± 1.5 psi (107 kPa ± 10 kPa) @ 2300	
Intake Manifold Pressure*	7.0 psi ± 1.5 psi ( 48 kPa ± 10 kPa) @ 1500
Exhaust Back Pressure (After Turbocharger [Maximum])*	0–27 in.H <sub>2</sub> O (6.7 kPa)
Smoke Level Max* – Bosch Number	0.6 @ 2300 RPM
	1.3 @ 1500 RPM

**Measure water temperature differential across the radiator with engine on a chassis dynamometer, at full load and ambient temperature of 80°F or above.**

Water Temperature Differential Across Radiator	6–12°F (3.3–6.6°C)
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**The following data to be taken after engine reaches stabilized operating temperature.**

Lube Oil Temperature (Oil Gallery)	230°F (110°C) Max.
Lube Oil Pressure at Operating Temperature	
Low Idle (Min.)	10–30 psi (137–344 kPa)
Rated Speed (Min./Max.)	40–70 psi (276–483 kPa)

\*Engine must be at normal operating temperature.

\*\*Crankcase pressure [ maximum ] as measured with Orificed Restrictor Tool ZTSE4146.

# PERFORMANCE SPECIFICATIONS

Section 2.4  
Page 65

T 444E/210 HP @ 2400 RPM  
[50 State 1997 Model Year]

## PERFORMANCE SPECIFICATIONS

Engine/Model .....	T 444E/B210
Engine rating .....	210 BHP @ 2400 RPM
Engine Family Rating Code (EFRC) .....	2231
Injector Part Number Original Equipment .....	1 822 803 C1
Turbocharger Part Number (With Exhaust Back Pressure Device) .....	1 823 554 C91
A/R Ratio .....	1.0
Turbocharger Part Number (Without Exhaust Back Pressure Device) .....	1 823 553 C91
A/R Ratio .....	1.0
Injection Timing .....	Not-Adjustable
High Idle Speed – RPM with manual transmission .....	2500 + 50
High Idle Speed – RPM with automatic transmission .....	2500 + 200
Low Idle Speed – RPM .....	700 ± 50
Injection Control Pressure/Voltage @ Low Idle No Load .....	440 ± 40 psi (3.00 ± 0.3 MPa) (0.76 ± 0.1 Volts)
Injection Control Pressure/Voltage @ High Idle No Load .....	1020 ± 100 psi (7.00 ± 0.7 MPa) (1.44 ± 0.1 Volts)
Injection Control Pressure/Voltage @ Rated Speed and Full Load .....	2470 ± 150 psi (17.0 ± 1.0 MPa) (3.15 ± 0.2 Volts)
Intake and Exhaust Valve Clearance (Engine Off – Hot or Cold) Intake .....	Not-Adjustable
Exhaust .....	Not-Adjustable

## PERFORMANCE SPECIFICATIONS

**T 444E/210 HP @ 2400 RPM**  
**[50 State 1997 Model Year]**

### PERFORMANCE SPECIFICATIONS CONTINUED

**The following data to be taken at high idle with [no load].**

Air Cleaner Restriction* [Measured @ Air Cleaner Outlet]	
(Check at High Idle [No Load]) – Max	12.5 in. H <sub>2</sub> O (3.13 kPa)
(Check at Full Load, Rated Speed) – Max	25 in. H <sub>2</sub> O (6.25 kPa)
Fuel Pressure [Minimum]*	20 psi (138 kPa)
Fuel Inlet Restriction Maximum*	6 in. Hg. Vacuum (20.261 kPa)
(Requires Stabilized	
Crankcase Pressure [Maximum]*	6.0 in. H <sub>2</sub> O** ( 2.0 kPa)
Operating Temperature)	

**The following data to be taken at full load, full throttle rated engine speed on chassis dynamometer or on highway.**

17.25 psi ± 1.5 psi (119 kPa ± 10 kPa) @ 2400	
Intake Manifold Pressure*	7.00 psi ± 1.5 psi ( 48 kPa ± 10 kPa) @ 1500
Exhaust Back Pressure (After Turbocharger [Maximum])*	0–27 in.H <sub>2</sub> O (6.7 kPa)
Smoke Level Max* – Bosch Number	0.6 @ 2400 RPM
	1.9 @ 1500 RPM

**Measure water temperature differential across the radiator with engine on a chassis dynamometer, at full load and ambient temperature of 80°F or above.**

Water Temperature Differential Across Radiator	6–12°F (3.3–6.6°C)
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**The following data to be taken after engine reaches stabilized operating temperature.**

Lube Oil Temperature (Oil Gallery)	230°F (110°C) Max.
Lube Oil Pressure at Operating Temperature	
Low Idle (Min.)	10–30 psi (137–344 kPa)
Rated Speed (Min./Max.)	40–70 psi (276–483 kPa)

\*Engine must be at normal operating temperature.

\*\*Crankcase pressure [ maximum ] as measured with Orificed Restrictor Tool ZTSE4146.

# PERFORMANCE SPECIFICATIONS

Section 2.4  
Page 67

T 444E/210 HP @ 2300 RPM  
[50 State 1997 Model Year]

## PERFORMANCE SPECIFICATIONS

Engine/Model ..... T 444E/BH210

Engine rating ..... 210 BHP @ 2300 RPM

Engine Family Rating Code (EFRC) ..... 2141

Injector Part Number  
Original Equipment ..... 1 822 803 C1

Turbocharger Part Number ..... 1 823 560 C92  
A/R Ratio ..... 1.11

Injection Timing ..... Not-Adjustable

High Idle Speed – RPM with manual transmission ..... 2500 + 50

High Idle Speed – RPM with automatic transmission ..... 2500 + 200

Low Idle Speed – RPM ..... 700 ± 50

Injection Control Pressure/Voltage  
@ Low Idle No Load ..... 440 ± 40 psi (3.00 ± 0.3 MPa) (0.76 ± 0.1 Volts)

Injection Control Pressure/Voltage  
@ High Idle No Load ..... 1020 ± 100 psi (7.10 ± 0.7 MPa) (1.44 ± 0.1 Volts)

Injection Control Pressure/Voltage  
@ Rated Speed and Full Load ..... 2470 ± 150 psi (17.0 ± 1.0 MPa) (3.15 ± 0.2 Volts)

Intake and Exhaust Valve Clearance (Engine Off – Hot or Cold)  
Intake ..... Not-Adjustable  
Exhaust ..... Not-Adjustable

## PERFORMANCE SPECIFICATIONS

T 444E/210 HP @ 2300 RPM  
[50 State 1997 Model Year]

### PERFORMANCE SPECIFICATIONS CONTINUED

The following data to be taken at high idle with [no load].

Air Cleaner Restriction* [Measured @ Air Cleaner Outlet]	
(Check at High Idle [No Load]) – Max	12.5 in. H <sub>2</sub> O (3.13 kPa)
(Check at Full Load, Rated Speed) – Max	25 in. H <sub>2</sub> O (6.25 kPa)
Fuel Pressure [Minimum]*	20 psi (138 kPa)
Fuel Inlet Restriction Maximum*	6 in. Hg. Vacuum (20.261 kPa)
	(Requires Stabilized
Crankcase Pressure [Maximum]*	6.0 in. H <sub>2</sub> O** ( 2.0 kPa)
	Operating Temperature)

The following data to be taken at full load, full throttle rated engine speed on chassis dynamometer or on highway.

	14.5 psi ± 1.5 psi (100 kPa ± 10 kPa) @ 2300
Intake Manifold Pressure*	8.0 psi ± 1.5 psi ( 55 kPa ± 10 kPa) @ 1500
Exhaust Back Pressure (After Turbocharger [Maximum])*	0–27 in.H <sub>2</sub> O (6.7 kPa)
Smoke Level Max* – Bosch Number	0.8 @ 2300 RPM 1.9 @ 1500 RPM

Measure water temperature differential across the radiator with engine on a chassis dynamometer, at full load and ambient temperature of 80°F or above.

Water Temperature Differential Across Radiator	6–12°F (3.3–6.6°C)
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The following data to be taken after engine reaches stabilized operating temperature.

Lube Oil Temperature (Oil Gallery)	230°F (110°C) Max.
Lube Oil Pressure at Operating Temperature	
Low Idle (Min.)	10–30 psi (137–344 kPa)
Rated Speed (Min./Max.)	40–70 psi (276–483 kPa)

\*Engine must be at normal operating temperature.

\*\*Crankcase pressure [ maximum ] as measured with Orificed Restrictor Tool ZTSE4146.



# PERFORMANCE SPECIFICATIONS

Section 2.4  
Page 69

T 444E/230 HP @ 2300 RPM  
[50 State 1997 Model Year]

## PERFORMANCE SPECIFICATIONS

Engine/Model ..... T 444E/B230

Engine rating ..... 230 BHP @ 2300 RPM

Engine Family Rating Code (EFRC) ..... 2151

Injector Part Number  
Original Equipment ..... 1 822 803 C1

Turbocharger Part Number (With Wastegate) ..... 1 823 560 C92  
A/R Ratio ..... 1.11

Injection Timing ..... Not-Adjustable

High Idle Speed – RPM with manual transmission ..... 2500 + 50

High Idle Speed – RPM with automatic transmission ..... 2500 + 200

Low Idle Speed – RPM ..... 700 ± 50

Injection Control Pressure/Voltage  
@ Low Idle No Load ..... 440 ± 40 psi (3.00 ± 0.3 MPa) (0.76 ± 0.1 Volts)

Injection Control Pressure/Voltage  
@ High Idle No Load ..... 1020 ± 100 psi (7.00 ± 0.7 MPa) (1.44 ± 0.1 Volts)

Injection Control Pressure/Voltage  
@ Rated Speed and Full Load ..... 2470 ± 150 psi (17.0 ± 1.0 MPa) (3.15 ± 0.2 Volts)

Intake and Exhaust Valve Clearance (Engine Off – Hot or Cold)  
Intake ..... Not-Adjustable  
Exhaust ..... Not-Adjustable

## PERFORMANCE SPECIFICATIONS

T 444E/230 HP @ 2300 RPM  
[50 State 1997 Model Year]

### PERFORMANCE SPECIFICATIONS CONTINUED

The following data to be taken at high idle with [no load].

Air Cleaner Restriction\* [Measured @ Air Cleaner Outlet]  
(Check at High Idle [No Load]) – Max ..... 12.5 in. H<sub>2</sub>O (3.13 kPa)  
(Check at Full Load, Rated Speed) – Max ..... 25 in. H<sub>2</sub>O (6.25 kPa)

Fuel Pressure [Minimum]\* ..... 20 psi (138 kPa)

Fuel Inlet Restriction Maximum\* ..... 6 in. Hg. Vacuum (20.261 kPa)

(Requires Stabilized  
Crankcase Pressure [Maximum]\* ..... 6.0 in. H<sub>2</sub>O\*\* ( 2.0 kPa)  
Operating Temperature)

The following data to be taken at full load, full throttle rated engine speed on chassis dynamometer or on highway.

Intake Manifold Pressure\* ..... 14.8 psi ± 1.5 psi (102 kPa ± 10 kPa) @ 2300  
..... 10.0 psi ± 1.5 psi ( 69 kPa ± 10 kPa) @ 1500

Exhaust Back Pressure (After Turbocharger [Maximum])\* ..... 0–27 in.H<sub>2</sub>O (6.7 kPa)

Smoke Level Max\* – Bosch Number ..... 0.8 @ 2300 RPM  
..... 3.6 @ 1500 RPM

Measure water temperature differential across the radiator with engine on a chassis dynamometer, at full load and ambient temperature of 80°F or above.

Water Temperature Differential Across Radiator ..... 6–12°F (3.3–6.6°C)

The following data to be taken after engine reaches stabilized operating temperature.

Lube Oil Temperature (Oil Gallery) ..... 230°F (110°C) Max.

Lube Oil Pressure at Operating Temperature  
Low Idle (Min.) ..... 10–30 psi (137–344 kPa)  
Rated Speed (Min./Max.) ..... 40–70 psi (276–483 kPa)

\*Engine must be at normal operating temperature.

\*\*Crankcase pressure [ maximum ] as measured with Orificed Restrictor Tool ZTSE4146.

# PERFORMANCE SPECIFICATIONS

Section 2.4  
Page 71

T 444E/250 HP @ 2300 RPM  
[50 State 1997 Model Year]

## PERFORMANCE SPECIFICATIONS

Engine/Model .....	T 444E/B250
Engine rating .....	250 BHP @ 2300 RPM
Engine Family Rating Code (EFRC) .....	2161
Injector Part Number Original Equipment .....	1 822 803 C1
Turbocharger Part Number (With Wastegate) .....	1 823 560 C92
A/R Ratio .....	1.11
Injection Timing .....	Not-Adjustable
High Idle Speed – RPM with manual transmission .....	2500 + 50
High Idle Speed – RPM with automatic transmission .....	2500 + 200
Low Idle Speed – RPM .....	700 ± 50
Injection Control Pressure/Voltage @ Low Idle No Load .....	440 ± 40 psi (3.00 ± 0.3 MPa) (0.76 ± 0.1 Volts)
Injection Control Pressure/Voltage @ High Idle No Load .....	1020 ± 100 psi (7.00 ± 0.7 MPa) (1.44 ± 0.1 Volts)
Injection Control Pressure/Voltage @ Rated Speed and Full Load .....	2480 ± 150 psi (17.1 ± 1.0 MPa) (3.16 ± 0.2 Volts)
Intake and Exhaust Valve Clearance (Engine Off – Hot or Cold)	
Intake .....	Not-Adjustable
Exhaust .....	Not-Adjustable

## PERFORMANCE SPECIFICATIONS

T 444E/250 HP @ 2300 RPM  
[50 State 1997 Model Year]

### PERFORMANCE SPECIFICATIONS CONTINUED

The following data to be taken at high idle with [no load].

Air Cleaner Restriction* [Measured @ Air Cleaner Outlet]	
(Check at High Idle [No Load]) – Max	12.5 in. H <sub>2</sub> O (3.13 kPa)
(Check at Full Load, Rated Speed) – Max	25 in. H <sub>2</sub> O (6.25 kPa)
Fuel Pressure [Minimum]*	20 psi (138 kPa)
Fuel Inlet Restriction Maximum*	6 in. Hg. Vacuum (20.261 kPa)
	(Requires Stabilized
Crankcase Pressure [Maximum]*	6.0 in. H <sub>2</sub> O** ( 2.0 kPa)
	Operating Temperature)

The following data to be taken at full load, full throttle rated engine speed on chassis dynamometer or on highway.

	15.0 psi ± 1.5 psi (103 kPa ± 10 kPa) @ 2300
Intake Manifold Pressure*	11.0 psi ± 1.5 psi ( 76 kPa ± 10 kPa) @ 1500
Exhaust Back Pressure (After Turbocharger [Maximum])*	0–27 in.H <sub>2</sub> O (6.7 kPa)
Smoke Level Max* – Bosch Number	1.3 @ 2300 RPM 4.6 @ 1500 RPM

Measure water temperature differential across the radiator with engine on a chassis dynamometer, at full load and ambient temperature of 80°F or above.

Water Temperature Differential Across Radiator	6–12°F (3.3–6.6°C)
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The following data to be taken after engine reaches stabilized operating temperature.

Lube Oil Temperature (Oil Gallery)	230°F (110°C) Max.
Lube Oil Pressure at Operating Temperature	
Low Idle (Min.)	10–30 psi (137–344 kPa)
Rated Speed (Min./Max.)	40–70 psi (276–483 kPa)

\*Engine must be at normal operating temperature.

\*\*Crankcase pressure [ maximum ] as measured with Orificed Restrictor Tool ZTSE4146.