



YMMS: 2006 Ford Pickup F250 Super Duty  
 Engine: 6.0L Eng  
 VIN:

Apr 4, 2021  
 License:  
 Odometer:

Fig 1: Hard Start/No Start Diagnostic Guide Sheet (E-Series or F-Super Duty)

**F-Super Duty/Econoline 2006  
 6.0L Power Stroke Diesel Engine  
 Hard Start/No Start Diagnostic Guide**

-NOTE-  
 IF CONCERN IS FOUND, SERVICE AS  
 REQUIRED. IF THIS CORRECTS THE  
 CONDITION, IT IS NOT NECESSARY TO  
 COMPLETE THE REMAINDER OF THE  
 DIAGNOSTIC PROCEDURE.

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CUSTOMER NAME \_\_\_\_\_ DEALER NAME \_\_\_\_\_ P.I.R. CODE \_\_\_\_\_ ODOMETER \_\_\_\_\_

MODEL YEAR \_\_\_\_\_ VEHICLE SERIAL NO. (VIN) \_\_\_\_\_ ENGINE SERIAL NUMBER \_\_\_\_\_ TRANSMISSION \_\_\_\_\_

CHASSIS STYLE \_\_\_\_\_ VEHICLE GVW \_\_\_\_\_ 1803 CLAIM NUMBER \_\_\_\_\_ AMBIENT TEMP. \_\_\_\_\_ DATE \_\_\_\_\_

CUSTOMER CONCERNS (Please list in this box) \_\_\_\_\_

TYPE OF SERVICE    PERSONAL     COMMERCIAL

**NOTE: A hard start/no start concern with EOT Temp. below 60°F perform step 11 first.**

**1. Visual Engine/Chassis Inspection** 6008E

Fuel Oil Coolant Electrical Hoses Leaks	Check
Method	Visual

**8. Retrieve Continuous Trouble Codes** 9005E3

Use the scan tool. DTC's retrieved during this test are historical faults.

Diagnostic Trouble Codes	
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**11. Glow Plug System Operation** 900

GPCM Operation

Glow Plug ON time is dependent on oil temperature and altitude. The Glow Plug Control Module (GPCM) comes on between 1 and 120 sec., and does not come on at all if oil temp is above 131°F. Using a scan tool, check Continuous and KOEO DTC's. If codes are present go to Pinpoint Test AF. Verify B+ voltage is being supplied to GPCM. Using the scan tool GPCTM and EOT prds, verify glow plug "on" time. Turn key to run position, measure voltage ("on" time) (Dependent on oil temperature and altitude)

Relay on time	Spec.	Measurement
1 to 120 seconds	B +	

Wait to Start Lamp "on" time is independent from gip "on" time

Glow Plug Resistance

Disconnect the 4-pin connector at front of valve cover. Measure each Glow Plug resistance to Bat. ground. Measure engine harness resistance to GPCM.

Glow Plug Number	Glow Plug to Ground	Harness to GPCM connector
#1	.1 to 2 ohms	0 to 1 ohms
#3		
#5		
#7		
#2		
#4		
#6		
#8		

Add 5 seconds to glow plug on time when above 7000 feet in altitude, but not to exceed 120 seconds.

See PC/ED manual, Section 4 for more detail on all of the above test steps.

When troubleshooting a Hard Start/No Start or Performance concern, this form must be filled out to the point of repair and returned, to receive warranty credit for diagnostic time for the parts listed below.

Fuel Injectors (9E527), regulator-injection control pressure (9C968), pump assembly-high pressure oil (9A543), turbo charger assembly (9K882), fuel control module (9G282), FICM (12B599), PCM (12A850), EGR valve (9P45), CKP sensor (8C315), CMP sensor (12K073), GPCM (12B533), and Glow Plugs (12A342).

Some labor operations are listed in more than one test step. Those operations include time for all occurrences and can be claimed only once.

What problems were found and what repairs were performed?

List Part Name, Number and Serial Number of parts replaced.

**N002R065**

Courtesy of FORD MOTOR CO.

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