

## CERTAIN 2017 MODEL YEAR F-250 TO F-750 F-SUPER DUTY VEHICLES EQUIPPED WITH A 6.7L DIESEL ENGINE — ENGINE OIL PRESSURE INSPECTION

### **NEW !** OVERVIEW

In some of the affected vehicles, the engine may lack oil pressure at start up after a cold soak due to concerns with the oil pump. This condition may lead to engine failure at very low mileage. Before demonstrating or delivering any new in-stock vehicles involved in this program, dealers are to inspect for a lack of engine oil pressure *and if necessary contact the SSSC for further repair direction following these technical instructions.*

The minimum 30 minute engine RPM increase is needed to achieve 90C (194F) engine oil temperature to complete the engine oil pressure inspection.

*A review of service part requests and IDS recordings indicate that some dealers are incorrectly identifying vehicles as having a lack of engine oil pressure (fail condition). Dealers are requested to repeat Phase Two of the technical instructions on new unsold vehicles currently being held for parts. Vehicles that pass inspection may be demonstrated and delivered immediately.*

**NOTE:** *It is not necessary to repeat Phase One on vehicles that have already been tested in order to repeat Phase Two.*

**NOTE:** Less than 1% of the affected vehicles are expected to require engine front cover replacement based on this inspection.

**NOTE:** To ensure a positive customer delivery experience, dealers are requested to immediately conduct this procedure on all affected *new* in-stock vehicles in your inventory. The inspection procedure is a two-phase operation with an 8 hour wait between phases. Please ensure that adequate time is allotted to perform this procedure prior to the demonstration or delivery of vehicles affected.

### **NEW !** SERVICE PROCEDURE

#### **Phase One**

**NOTE:** If the vehicle has been stored in ambient temperatures -18C (0F) or below, allow the vehicle to warm inside the shop before starting this procedure. Otherwise in extremely cold temperatures, the Integrated Diagnostic Software (IDS) Desired Idle Speed RPM (RPMDS) control function will not increase the RPM to the level required in step 2. For in-shop repair efficiency, consider beginning the pre-soak procedure just prior to shop close.

**NOTE:** This procedure has two phases and both can be conducted outside the shop/service bay if the ambient temperature is above -18C (0F) at the start of the initial phase.



1. Connect IDS and navigate to the RPMDSD Parameter Identification (PID). See Figures 1 and 2.
  - A. Select Tool Box > Data Logger > Powertrain > Engine.
  - B. Clear all pre-selected Parameter Identification (PID) boxes by pressing the clear button in the lower right corner of the screen. See Figure 1.
  - C. Select the RPMDSD PID. Click the check mark. See Figure 2.

AAT (TEMP)	AAT_UR (FAULT)	AAT_V (VOLT)	ACC_CMD # (MODE)	ACP_PRESS (PRESS)	AC_DISABLE_TRQ (MODE)	AC_LOWSW (MODE)	AC_MED (MODE)	AC_MSG_F (FAULT)	AC_REQ # (MODE)
AEIS_ACTION (NUM)	AEIS_POSS (NUM)	APP (PER)	APP1 (VOLT)	APP1 [APP_D] (PER)	APP2 (VOLT)	APP2 [APP_E] (PER)	AXLECC_STAT (MODE)	B+ (VOLT)	BARO (FREQ)
BARO (PRESS)	BARO (VACU)	BARO_UR (FAULT)	BARO_V (VOLT)	BCM_LOSTCOMM (FAULT)	BOO1 (MODE)	BOO2 (MODE)	BOOSTP_EVAL (MODE)	BRKOVRO_POSS (NUM)	BRKOVRO_ACTION (NUM)
CACT_V (VOLT)	CAC_T (TEMP)	CAC_UR (FAULT)	CC_VENTHOSE_ST (FAULT)	CLR_DIST (DIST)	CLRVRMUP (NUM)	CMP_F (FAULT)	CYL_BAL_1 (MASS)	CYL_BAL_2 (MASS)	CYL_BAL_3 (MASS)
CYL_BAL_4 (MASS)	CYL_BAL_5 (MASS)	CYL_BAL_6 (MASS)	CYL_BAL_7 (MASS)	CYL_BAL_8 (MASS)	DEF_CONC (PER)	DEF_LEVEL (PER)	DEF_TEMP (TEMP)	DEF_TYPE (FAULT)	DIST_AEIS (DIST)
DIST_BRKOVRO (DIST)	DIST_LAST_DP (METER)	DIST_TOT_VEH (DIST)	DIST_TRVL_EXFUL (DIST)	DIST_TRVL_EXOL (DIST)	DPF_INP (PRESS)	DPF_INP_V (VOLT)	DPF_REGN_AVG (DIST)	DPF_REGN_AVGT (TIME)	DPF_REGN_STAT (MODE)
DPF_SOOT_INF (NUM)	DPF_SOOT_OL (NUM)	DPF_SOOT_PCT_CL (PER)	DPF_SOOT_PCT_OL (PER)	DTCCHT (NUM)	EBP (PRESS)	ECT (TEMP)	ECT1 (TEMP)	ECT1_V (VOLT)	ECT2 (TEMP)
ECT2_V (VOLT)	ECU_WAKEUP (MODE)	EGRBV # (MODE)	EGRCOT_V (VOLT)	EGRTP (TEMP)	EGRTP_CMD # (PER)	EGRTP_MES (PER)	EGRTP_V (VOLT)	EGRVP (VOLT)	EGRVPDES # (PER)
EGR_A_ACT (PER)	EGR_A_CMD (PER)	EGR_EVAL (MODE)	EGT11 (TEMP)	EGT11_V (VOLT)	EGT12 (TEMP)	EGT12_V (VOLT)	EGT13 (TEMP)	EGT13_V (VOLT)	EGT14 (TEMP)
EGT14_V (VOLT)	ENGIDL_TIME_TOT (TIME)	ENGOFF_TIMER (TIME)	ENG_CRANK (MODE)	ENG_FUEL_RATE (MODE)	ENG_IDLE_SD (MODE)	ENG_ST_PCM (MODE)	ENG_TIME_TOT (TIME)	EOT (TEMP)	EOT_V (VOLT)
EXHGAS_EVAL (MODE)	EXH_SYS_REQ (MODE)	FANDC # (PER)	FANSS (RPM)	FAN_F (FAULT)	FLI (PER)	FLP (PRESS)	FLP_DSD (PRESS)	FLP_V (VOLT)	FP # (MODE)
FP # (PER)	FPM_STAT (FAULT)	FP_RELAY (MODE)	FRP (PRESS)	FRP (VOLT)	FRPC_STAT (FAULT)	FRP_DSD # (PRESS)	FRT (TEMP)	FRT_V (VOLT)	FUELMON_RDY (MODE)
FUEL_RATE (FLOW)	FUEL_TIMING (MODE)	F_PCV # (PER)	F_PCV_CUR (CUR)	F_VCV # (CUR)	F_VCV_CUR (CUR)	F_VCV_F (FAULT)	F_VCV_FLT (FAULT)	GEAR (MODE)	GENCMD # (PER)
GENCMD2 (PER)	GENCMD_LF (FAULT)	GENCMD_LF2 (FAULT)	GENFIL (MODE)	GENMON (PER)	GENMON2 (PER)	GENMON_FS (FAULT)	GENMON_FS2 (FAULT)	GENMON_HZ (FREQ)	GENMON_HZ2 (FREQ)
GENMON_LS	GENMON_LS2	GENVDSO #	GENVDSO2 #	GLOWPLUG_RLY	GP_LMP	GP_RELAY_CMD #	HSCAN_1st	HSCAN_2nd	HSCAN_3rd

Ambient Air Temperature 1602B

FIGURE 1

INJ3_OFF # (MODE)	INJ4_OFF # (MODE)	INJ5_OFF # (MODE)	INJ6_OFF # (MODE)	INJ7_OFF # (MODE)	INJ8_OFF # (MODE)	INJ_F (FAULT)	INJ_Q_1_TOT (MASS)	INJ_Q_2_TOT (MASS)	INJ_Q_3_TOT (MASS)
INJ_Q_4_TOT (MASS)	INJ_Q_5_TOT (MASS)	INJ_Q_6_TOT (MASS)	INJ_Q_7_TOT (MASS)	INJ_Q_8_TOT (MASS)	KEYST (MODE)	LOAD (PER)	LOW_FUEL (MODE)	MAF (FLOW)	MAFLRN_AIDLE (NUM)
MAFLRN_IDLE (NUM)	MAF_A (FLOW)	MAF_HZ (FREQ)	MAINPCM_V (VOLT)	MAP (PRESS)	MAP (PRESS)	MAP_DMD (PRESS)	MAP_V (VOLT)	MIL (MODE)	MIL_DIS (DIST)
MISF_EVAL (MODE)	MP_LRN (MODE)	NMHC_CAT_EVAL (MODE)	NOx11 (NUM)	NOx11_CORR (NUM)	NOx12 (NUM)	NOx12_CORR (NUM)	NOxLMP_TIME (TIME)	NOxNTE_IN (MODE)	NOxNTE_OUT (MODE)
NOx_AFT_EVAL (MODE)	NOx_HTR (MODE)	O2S11_PCT (PER)	O2S12_PCT (PER)	OILCHNG_DAYS (NUM)	OIL_FUEL_INF (PER)	OIL_FUEL_INF (PER)	OIL_LAST_DIST (DIST)	OIL_LOW_SW (MODE)	OIL_REMAINING (MODE)
OIL_SOOT_CALC (MASS)	OSS (RPM)	OUTDR_TMP (TEMP)	PATSENABL (MODE)	PCM_TEMP (TEMP)	PM11 (PER)	PM11_ACTIVE (MODE)	PM11_REGEN (MODE)	PMNTE_IN (MODE)	PMNTE_OUT (MODE)
PM_CURRENT (CUR)	PM_FILT_EVAL (MODE)	PM_HTR_DC (PER)	PM_SUPPLY_V (VOLT)	PM_TEMP (TEMP)	PTOIR_V (VOLT)	PTOTIME_TOT (TIME)	PTO_ACTV_MODE (MODE)	PTO_OP_STATE (MODE)	PTO_RPM_DSD (RPM)
PVT (PRESS)	PVT (VACU)	PWRTRN_DRVMODE (MODE)	PWR_MODE_KEY (MODE)	PWR_MODE_QF (MODE)	REALTIME (TIME)	REDUCT_LINEST (PER)	REDUCT_LITERS (CAP)	REGEN_ATT_EXFUL (NUM)	REGEN_ATT_EXOL (NUM)
RPM (RPM)	RPMDSD # (RPM)	RPM_VSS_RATIO (RATIO)	RUNTM (TIME)	SPDCTRLCC_STAT (MODE)	STARTENB_HI (MODE)	STARTENB_LOW (MODE)	STARTER_PROT (MODE)	STRRT_RLY (MODE)	SUMP_OIL_T (TEMP)
SYNC (MODE)	TCBP (PRESS)	TCBP_DSD (PRESS)	TCBP_V (VOLT)	TIRECC_STAT (MODE)	TOT_RGNM_EXFUL (TIME)	TOT_RGNM_EXOL (TIME)	TOT_RUNTM_EXFUL (TIME)	TOT_RUNTM_EXOL (TIME)	TQ_ACT (PER)
TQ_DD (PER)	TQ_ENGREF (TORQUE)	TQ_FRICTION (MODE)	VEHMODE (MODE)	VEH_FUEL_RATE (FLOW)	VFDES (VOLT)	VGDC # (PER)	VINCC_STAT (MODE)	VPWR (VOLT)	VSS (SPD)
VS_LIMIT (SPD)	WFS_V (VOLT)	WIF_1_DIST_TRVL (METER)	WIF_1_ODOMETER (METER)	WIF_2_DIST_TRVL (METER)	WIF_2_ODOMETER (METER)	WIF_3_DIST_TRVL (METER)	WIF_3_ODOMETER (METER)	WIF_4_DIST_TRVL (METER)	WIF_4_ODOMETER (METER)
WIF_ACTIVE (MODE)	WIF_EV1_DIST (METER)	WIF_EV2_DIST (METER)	WIF_EV3_DIST (METER)	WIF_EV4_DIST (METER)	WIF_EVTS_12 (NUM)	WIF_EVTS_AFT2 (NUM)	WIF_OCCURANCES (NUM)	WIF_ODO_12 (METER)	WIF_ODO_AFT2 (METER)
WIF_ODO_RCHT (METER)									

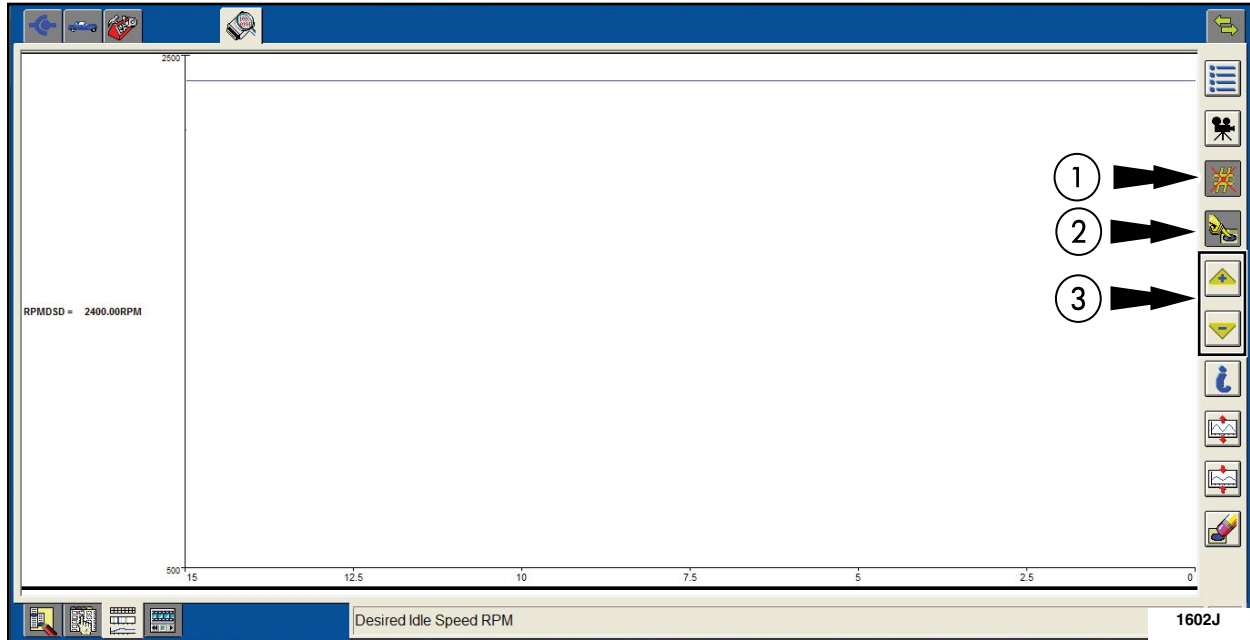
Desired Idle Speed RPM 1602I

FIGURE 2



**NOTE:** It is not necessary to run the vehicle inside the shop once it has been allowed to warm.

2. Start the engine and then select the control function. Use the control function buttons to increase engine RPM between 2,400 to 2,500 RPM for a minimum of 30 minutes. See Figure 3.



**FIGURE 3**

3. Shut off engine at the desired soak location. Allow vehicle to soak for a minimum of 8 hours.

**NOTE:** Regardless of outside ambient temperatures, the balance of this test procedure may be completed without bringing the vehicle into the shop. The vehicle must NOT be started until the 8 hour soak is completed.

### **Phase Two**

**NOTE:** *If you are repeating Phase Two on a previously tested vehicle, it is not necessary to run the engine at 2,400 to 2,500 RPM for a minimum of 30 minutes again (Phase One).*

1. After 8 hour soak, connect IDS and select Tool Box > Data Logger > Powertrain > Engine.
2. Clear all pre-selected PID boxes by pressing the clear button in the lower right corner of the screen. See Figure 1.



**NOTE:** Do not start the engine until the **DIST\_TOT\_VEH (DIST) PID**, **OIL\_LOW\_SW (MODE) PID** and the **RPM (RPM) PID** are displayed in graph form as shown in Figure 10.

3. Select the **DIST\_TOT\_VEH (DIST) PID**, **OIL\_LOW\_SW (MODE) PID** and the **RPM (RPM) PID**. Click the check mark. See Figures 4a and 4b.

AAT (TEMP)	AAT_UR (FAULT)	AAT_V (VOLT)	ACC_CMD # (MODE)	ACP_PRESS (PRESS)	AC_DISBLE_TRQ (MODE)	AC_LOWSW (MODE)	AC_MED (MODE)	AC_MSG_F (FAULT)	AC_REQ # (MODE)
AEIS_ACTION (NUM)	AEIS_POSS (NUM)	APP (PER)	APP1 (VOLT)	APP1 [APP_DJ] (PER)	APP2 (VOLT)	APP2 [APP_E] (PER)	AXLECC_STAT (MODE)	B+ (VOLT)	BARO (FREQ)
BARO (PRESS)	BARO (VACU)	BARO_UR (FAULT)	BARO_V (VOLT)	BCM_LOSTCOMM (FAULT)	BOO1 (MODE)	BOO2 (MODE)	BOOSTP_EVAL (MODE)	BRKOVDR_POSS (NUM)	BRKOVDR_ACTION (NUM)
CAC_T (TEMP)	CAC_T (TEMP)	CAC_UR (FAULT)	CC_VENTHOSE_ST (FAULT)	CLRDIST (DIST)	CLRWRMUP (NUM)	CMP_F (FAULT)	CYL_BAL_1 (MASS)	CYL_BAL_2 (MASS)	CYL_BAL_3 (MASS)
CYL_BAL_4 (MASS)	CYL_BAL_5 (MASS)	CYL_BAL_6 (MASS)	CYL_BAL_7 (MASS)	CYL_BAL_8 (MASS)	DEF_CONC (PER)	DEF_LEVEL (PER)	DEF_TEMP (TEMP)	DEF_TYPE (FAULT)	DIST_AEIS (DIST)
DIST_BRKOVDR (DIST)	DIST_LAST_DPF (METER)	<b>DIST_TOT_VEH (DIST)</b>	DIST_TRVL_EXFUL (DIST)	DIST_TRVL_EXOL (DIST)	DPF_INP (PRESS)	DPF_INP_V (VOLT)	DPF_REGN_AVGD (DIST)	DPF_REGN_AVGT (TIME)	DPF_REGN_STAT (MODE)
DPF_SOOT_INF (NUM)	DPF_SOOT_OL (NUM)	DPF_SOOT_PCT_CL (PER)	DPF_SOOT_PCT_OL (PER)	DTCCNT (NUM)	EBP (PRESS)	ECT (TEMP)	ECT1 (TEMP)	ECT1_V (VOLT)	ECT2 (TEMP)
ECT2_V (VOLT)	ECU_WAKEUP (MODE)	EGRCBV # (MODE)	EGRCOT_V (VOLT)	EGRTC (TEMP)	EGRTP_CMD # (MODE)	EGRTP_MES (MODE)	EGRTP_V (VOLT)	EGRVP (VOLT)	EGRVPDES # (PER)
EGR_A_ACT (PER)	EGR_A_CMD (PER)	EGR_EVAL (MODE)	EGT1 (TEMP)	EGT1_V (VOLT)	EGT12 (TEMP)	EGT12_V (VOLT)	EGT13 (TEMP)	EGT13_V (VOLT)	EGT14 (TEMP)
EGT14_V (VOLT)	ENGIDL_TIME_TOT (TIME)	ENGOFF_TIMER (TIME)	ENG_CRANK (MODE)	ENG_FUEL_RATE (FLOW)	ENG_IDLE_SD (MODE)	ENG_ST_PCM (MODE)	ENG_TIME_TOT (TIME)	EOT (TEMP)	EOT_V (VOLT)
EXHGA5_EVAL (MODE)	EXH_SYS_REQ (MODE)	FAINDC # (PER)	FANSS (RPM)	FAN_F (FAULT)	FLI (PER)	FLP (PRESS)	FLP_DSD (PRESS)	FLP_V (VOLT)	FP # (MODE)
FP # (PER)	FPM_STAT (FAULT)	FP_RELAY (MODE)	FRP (PRESS)	FRP (VOLT)	FRPC_STAT (FAULT)	FRP_DSD # (FAULT)	FRT (TEMP)	FRT_V (VOLT)	FUELMON_RDY (MODE)
FUEL_RATE (FLOW)	FUEL_TIMING (ANGL)	F_PCV # (PER)	F_PCV_CUR (CUR)	F_VCV # (CUR)	F_VCV_CUR (CUR)	F_VCV_F (FAULT)	F_VCV_FLT (FAULT)	GEAR (MODE)	GENCMD # (PER)
GENCMD2 (PER)	GENCMD_LF (FAULT)	GENCMD_LF2 (FAULT)	GENFIL (MODE)	GENMON (PER)	GENMON2 (PER)	GENMON1_F5 (FAULT)	GENMON_F52 (FAULT)	GENMON_HZ (FREQ)	GENMON_HZ2 (FREQ)
GENMON_LS	GENMON_LS2	GENVSD #	GENVSD2 #	GLOWPLUG_RLY	GP_LMP	GP_RELAY_CMD #	HSCAN_1st	HSCAN_2nd	HSCAN_3rd
Total Vehicle Distance									1602K

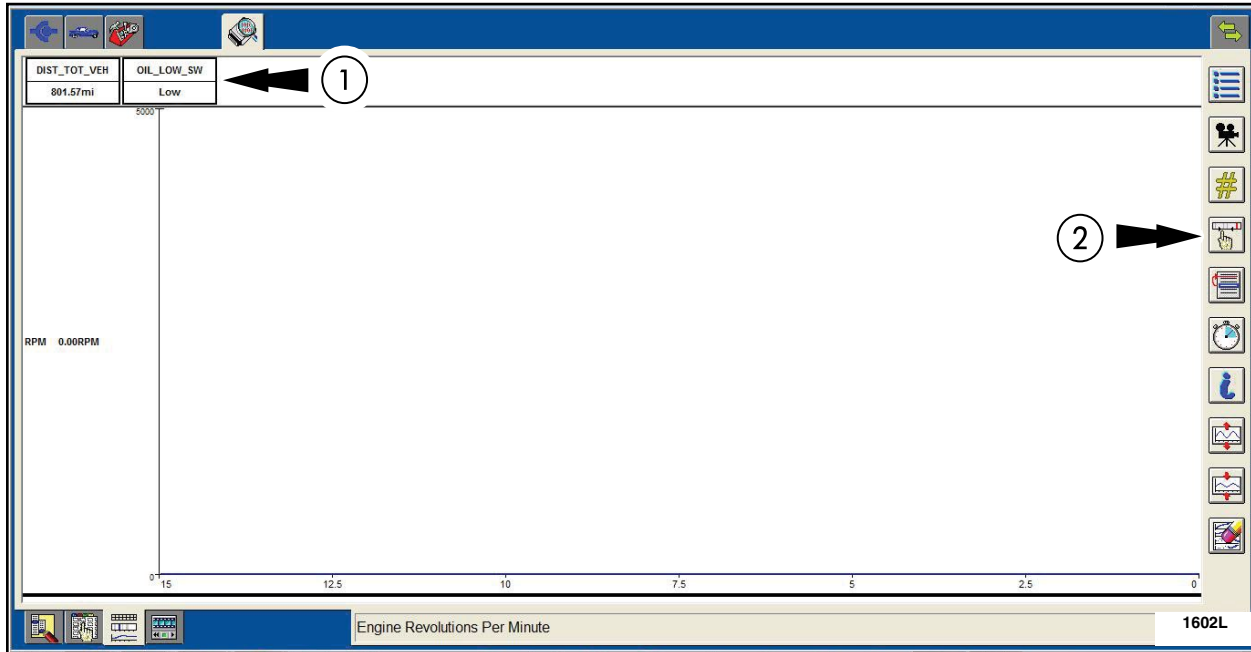
FIGURE 4a

GENCMD2 (PER)	GENCMD_LF (FAULT)	GENCMD_LF2 (FAULT)	GENFIL (MODE)	GENMON (PER)	GENMON2 (PER)	GENMON1_FS (FAULT)	GENMON_F52 (FAULT)	GENMON_HZ (FREQ)	GENMON_HZ2 (FREQ)
GENMON_LS	GENMON_LS2	GENVSD # (VOLT)	GENVSD2 # (VOLT)	GLOWPLUG_RLY (MODE)	GP_LMP (MODE)	GP_RELAY_CMD # (MODE)	HSCAN_1st (MODE)	HSCAN_2nd (MODE)	HSCAN_3rd (MODE)
HSCAN_4th (MODE)	HSCAN_5th (MODE)	IAT1 (TEMP)	IAT1_V (TEMP)	IAT1_UR (FAULT)	IGNCYL_EXFUL (NUM)	IGNCYL_EXOL (NUM)	INERTIA_SW (MODE)	INJ_OFF # (MODE)	INJ_OFF # (MODE)
INJ5_OFF # (MODE)	INJ4_OFF # (MODE)	INJ5_OFF # (MODE)	INJ6_OFF # (MODE)	INJ7_OFF # (MODE)	INJ8_OFF # (MODE)	INJ_F (FAULT)	INJ_Q_1_TOT (MASS)	INJ_Q_2_TOT (MASS)	INJ_Q_3_TOT (MASS)
INJ_Q_4_TOT (MASS)	INJ_Q_5_TOT (MASS)	INJ_Q_6_TOT (MASS)	INJ_Q_7_TOT (MASS)	INJ_Q_8_TOT (MASS)	KEYST (MODE)	LOAD (MODE)	LOW_FUEL (MODE)	MAF (FLOW)	MAFLRN_AIDLE (NUM)
MAFLRN_IDLE (NUM)	MAF_A (FLOW)	MAF_HZ (FREQ)	MAINPCM_V (VOLT)	MAP (PRESS)	MAP (PRESS)	MAP_DMD (PRESS)	MAP_V (VOLT)	MIL (MODE)	MIL_DIS (DIST)
MISF_EVAL (MODE)	MP_LRN (MODE)	NMHC_CAT_EVAL (MODE)	NOx11 (NUM)	NOX11_CORR (NUM)	NOx12 (NUM)	NOX12_CORR (NUM)	NOxLMP_TIME (TIME)	NOxITE_IN (MODE)	NOxITE_OUT (MODE)
NOx_AFT_EVAL (MODE)	NOx_HTR (MODE)	O2S11_PCT (PER)	O2S12_PCT (PER)	OILCHNG_DAYS (NUM)	OIL_Q_FUEL_INF (PER)	OIL_FUEL_INF (PER)	OIL_LAST_DIST (DIST)	<b>OIL_LOW_SW (MODE)</b>	OIL_REMAINING (PER)
OIL_SOOT_CALC (MASS)	OSS (RPM)	OUTDR_TMP (TEMP)	PATSENABL (MODE)	PCM_TEMP (TEMP)	PM11 (PER)	PM11_ACTIVE (MODE)	PM11_REGEN (MODE)	PM11TE_IN (MODE)	PM11TE_OUT (MODE)
PM_CURRENT (CUR)	PM_FILT_EVAL (MODE)	PM_HTR_DC (PER)	PM_SUPPLY_V (VOLT)	PM_TEMP (TEMP)	PTOIR_V (VOLT)	PTOTIME_TOT (TIME)	PTO_ACTV_MODE (MODE)	PTO_OP_STATE (MODE)	PTO_RPM_DSD (RPM)
PVT (PRESS)	PVT (VACU)	PWRTRN_DRVMODE (MODE)	PWR_MODE_KEY (MODE)	PWR_MODE_OF (MODE)	REALTIME (TIME)	REDUCT_LINEST (PER)	REDUCT_LITERS (CAP)	REGEN_ATT_EXFUL (NUM)	REGEN_ATT_EXOL (NUM)
<b>RPM (RPM)</b>	RPM_DSD # (RPM)	RPM_VSS_RATIO (RATIO)	RUNTM (TIME)	SPDCTRLCC_STAT (MODE)	STARTENB_HI (MODE)	STARTENB_LOW (MODE)	STARTER_PROT (MODE)	STR_RLY (MODE)	SUMP_OIL_T (TEMP)
SYNC (MODE)	TCBP (PRESS)	TCBP_DSD (PRESS)	TCBP_V (VOLT)	TIRECC_STAT (MODE)	TOT_RNHTM_EXFUL (TIME)	TOT_RNHTM_EXOL (TIME)	TOT_RNHTM_EXFUL (TIME)	TOT_RNHTM_EXOL (TIME)	TQ_ACT (PER)
TQ_DD (PER)	TQ_ENGREF (TORQUE)	TQ_FRICTION (MODE)	VEHMODE (MODE)	VEH_FUEL_RATE (FLOW)	VDES (VOLT)	VGTDCC # (PER)	VINCC_STAT (MODE)	VPWR (VOLT)	VSS (SPD)
V_S_LIMIT (SPD)	WF_S_V (VOLT)	WF_1_DIST_TRVL (METER)	WF_1_ODOMETER (METER)	WF_2_DIST_TRVL (METER)	WF_2_ODOMETER (METER)	WF_3_DIST_TRVL (METER)	WF_3_ODOMETER (METER)	WF_4_DIST_TRVL (METER)	WF_4_ODOMETER (METER)
Engine Revolutions Per Minute									1602D

FIGURE 4b

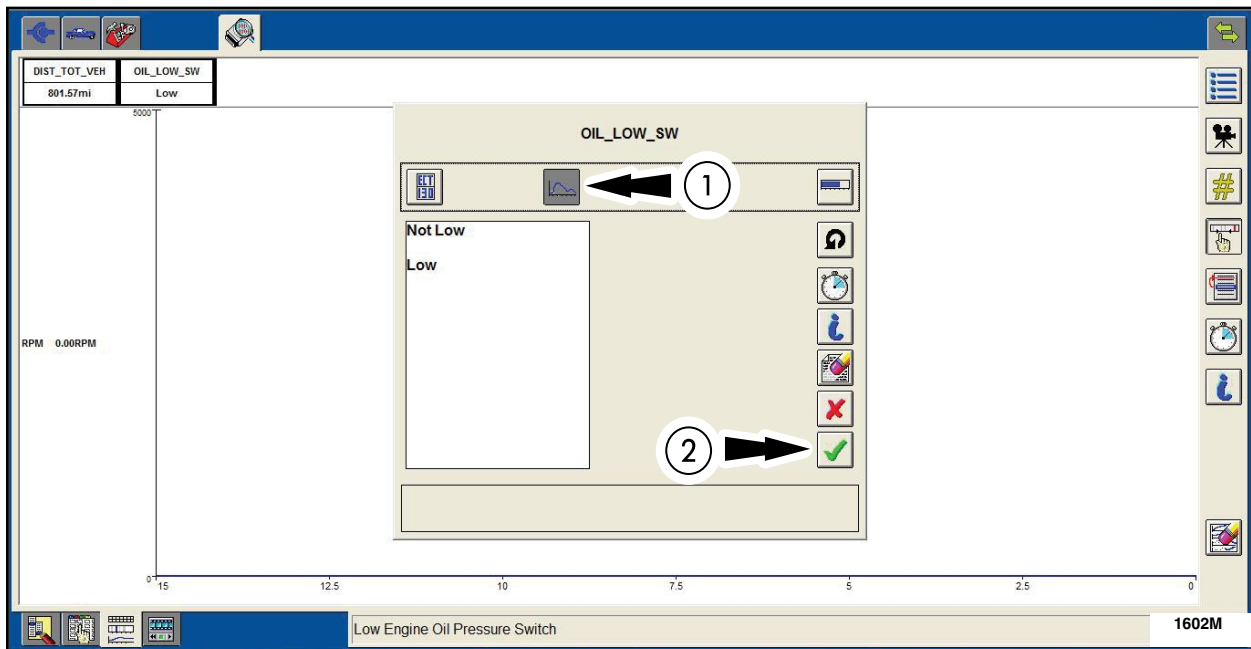


4. On the graph screen, select the OIL\_LOW\_SW PID in the upper LH corner of the screen and then click the plot format button. See Figure 5.



**FIGURE 5**

5. In the OIL\_LOW\_SW PID dialog box, select the graph button and then click the check mark. See Figure 6.



**FIGURE 6**



6. On the graph screen, select the RPM PID and then click the plot format button. See Figure 7.

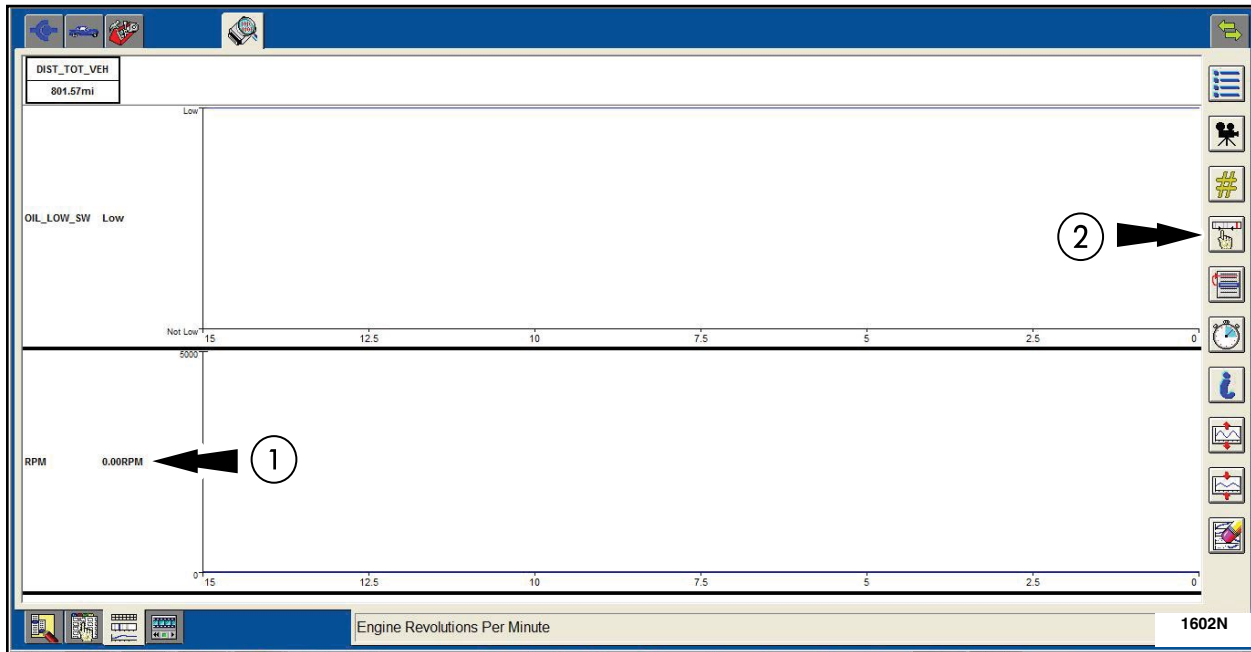


FIGURE 7

7. In the RPM PID dialog box, select upper limit button. See Figure 8.

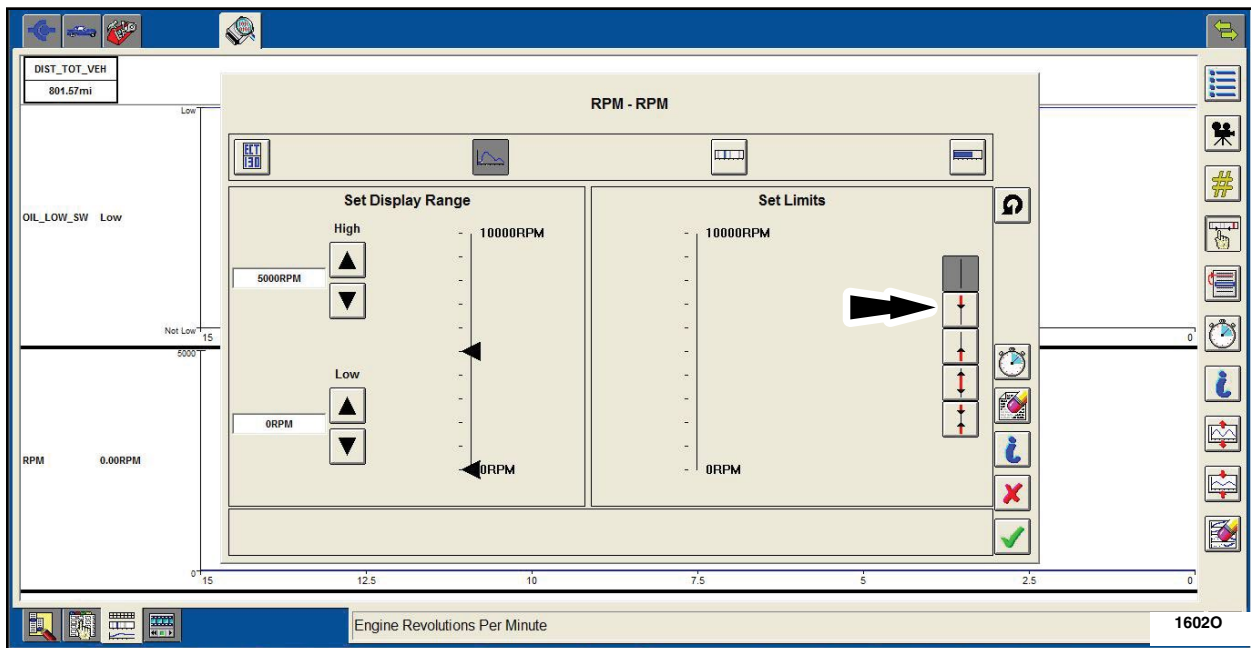
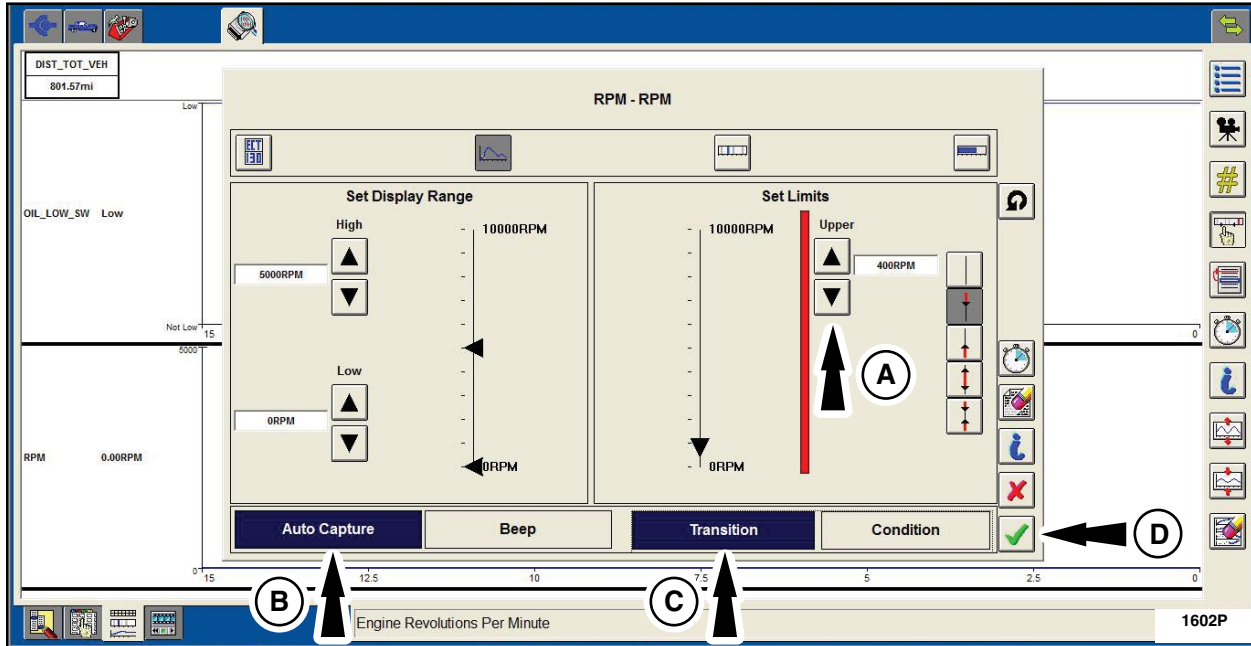


FIGURE 8



8. Set the Auto Capture limits for the RPM PID. See Figure 9.

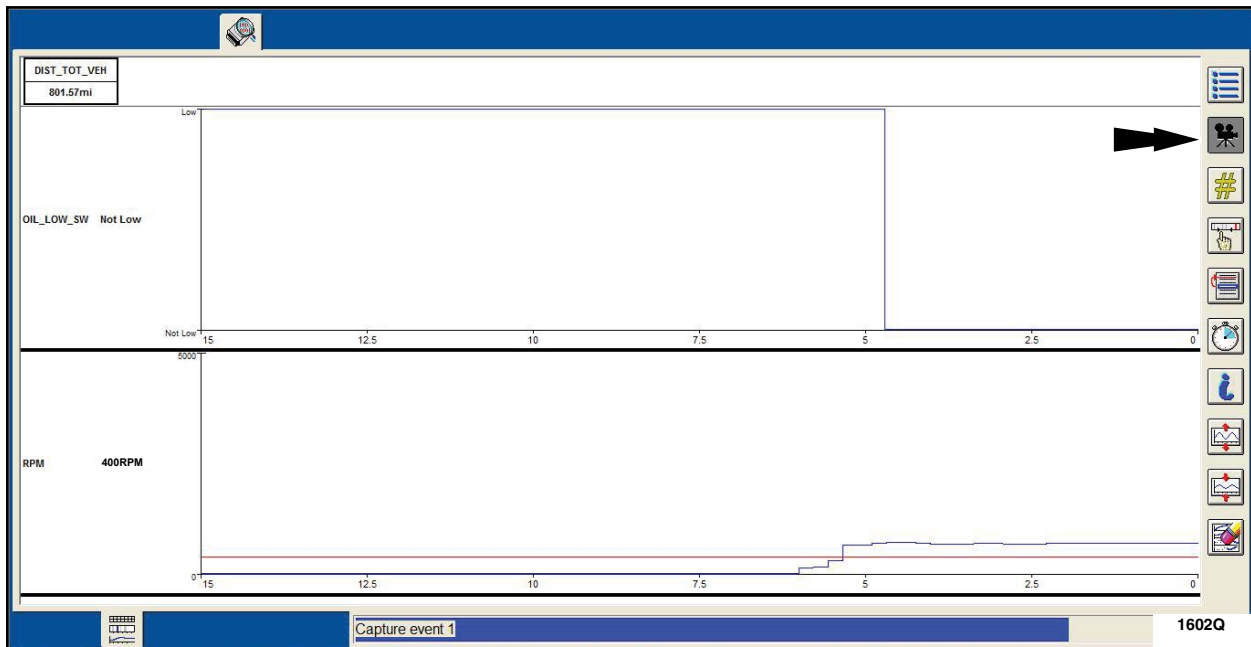
- A. Under the Set Limits section, press the down arrow until the upper limit is set to 400 RPM.
- B. Select the Auto Capture button.
- C. Select the Transition button.
- D. Click the check mark.



**FIGURE 9**

9. Once the OIL\_LOW\_SW (MODE) PID and the RPM (RPM) PID are displayed in graph form, start the engine and the recording will automatically begin when the engine RPM reaches 400. See Figure 10.

**NOTE:** The data capture button will be automatically selected for you.



**FIGURE 10**



10. Evaluate the recording data. See Figures 11 and 12.

A. Select the Playback Display button to view the IDS recording.

B. The recording automatically started when the RPM PID crossed the 400 RPM limit. This represents 0 (zero) seconds on the graph.

C. Observe when the OIL\_LOW\_SW PID switched from "Low" to "Not Low".

- If the time is less than **3.25 seconds** the inspection is a PASS, no additional service is required.
- If the time is greater than **3.25 seconds** the inspection is a FAIL, and the engine front cover must be replaced following the procedures in Workshop Manual (WSM) Section 303-01C.
  - To place an order for the engine front cover, submit a VIN-specific Part Order contact via the SSSC Web Contact Site. The Part Order must include a file attachment containing a screen shot of the IDS recording demonstrating the fail condition. Attachments must be 1MB or smaller.
  - Send the IDS session file to Ford. See GSB G000070 - How To Send An IDS Session File Containing Recordings.

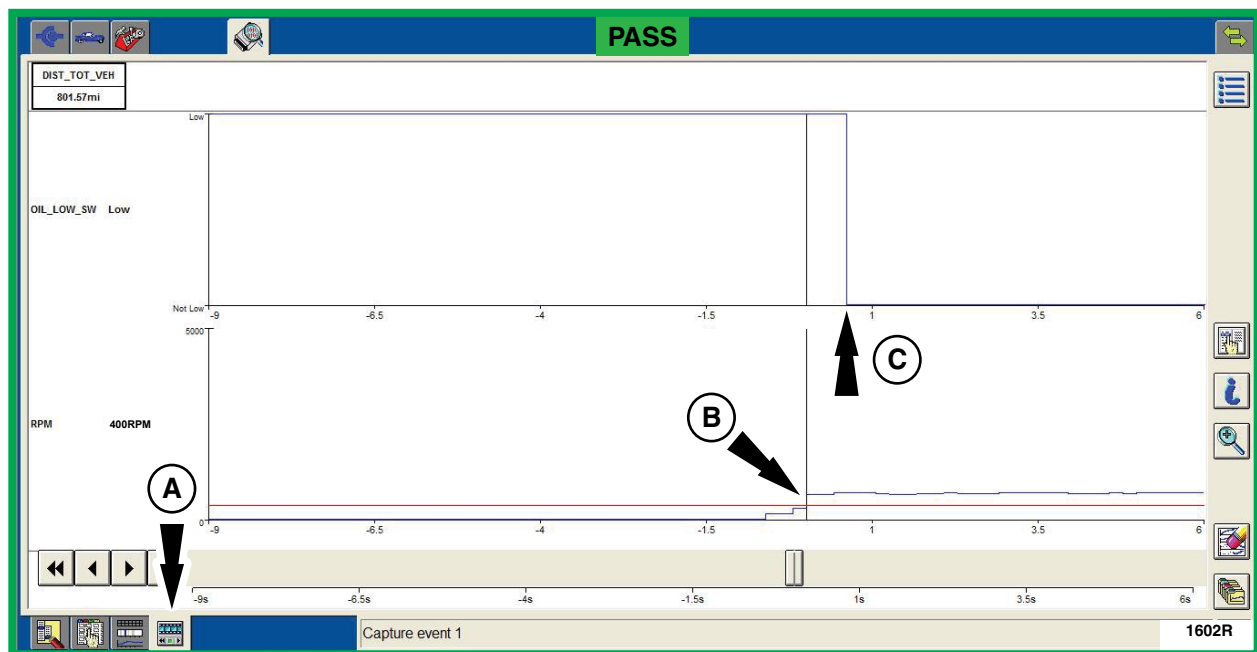
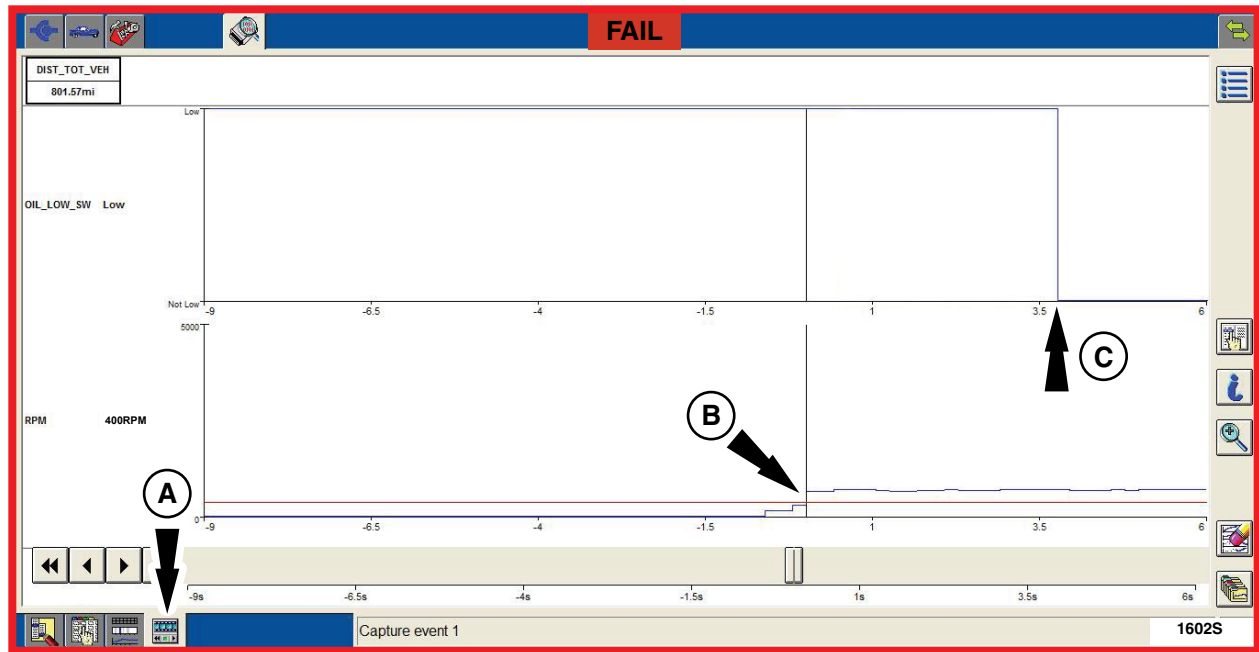


FIGURE 11







**FIGURE 12**

