

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2006 FORD Focus 5 Doors OEM Service and Repair Workshop Manual

Go to manual page

N5 CHECK THE GWM (GATEWAY MODULE A) DIAGNOSTIC TROUBLE CODES (DTCS)

• Using a diagnostic scan tool, check the GWM (gateway module A) Continuous Memory Diagnostic Trouble Codes (DTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes

REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

If the ABS (anti-lock brake system) warning indicator is never on, the system is operating correctly.

No

If the ABS (anti-lock brake system)
warning indicator is always on, DIAGNOSE the ABS (anti-lock brake system)
module Diagnostic Trouble Codes (DTCs). REFER to the Master DTC (diagnostic trouble code)
Chart.

N6 CHECK FOR CORRECT IPC (INSTRUMENT PANEL CLUSTER) OPERATION

- Ignition OFF.
- Disconnect and inspect the IPC (instrument panel cluster) connector.
- Repair:
 - corrosion (install new connector or terminals clean module pins)
 - damaged or bent pins install new terminals/pins
 - pushed-out pins install new pins as necessary
- Reconnect the IPC (instrument panel cluster) connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new IPC (instrument panel cluster).

REFER to: Instrument Panel Cluster (IPC)

No	GO to Pinpoint Test A

O2 PERFORM THE IPC (INSTRUMENT PANEL CLUSTER) SELF-TEST

• Using a diagnostic scan tool, perform the IPC (instrument panel cluster) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

l	Yes	REFER to DTC (diagnostic trouble code) Chart: IPC (instrument panel cluster) in this section.
н		

No GO to O3

O3 PERFORM THE SASM (STEERING ANGLE SENSOR MODULE) SELF-TEST

• Using a diagnostic scan tool, perform the SASM (steering angle sensor module) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to the Master DTC (diagnostic trouble code)	Chart.	
	, 3		4

No GO to O4

O4 CHECK THE GWM (GATEWAY MODULE A) DIAGNOSTIC TROUBLE CODES (DTCS)

 Using a diagnostic scan tool, check the GWM (gateway module A) Continuous Memory Diagnostic Trouble Codes (CMDTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes

REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

No If the adaptive steering RTT (reconfigurable telltale) indicator is never on, the system is operating normally at this time.

If the adaptive steering RTT (reconfigurable telltale) indicator is always on, DIAGNOSE the adaptive steering system.

- Monitor the door ajar RTT (reconfigurable telltale) warning indicator.
- Open the driver door.
- Clear the message center popup warning.
- Monitor the door ajar RTT (reconfigurable telltale) warning indicator.

Is the door ajar RTT (reconfigurable telltale) warning indicator off with the door closed, and on with the door open?



No GO to Pinpoint Test A

P3 PERFORM THE IPC (INSTRUMENT PANEL CLUSTER) INDICATOR LAMP CONTROL ACTIVE COMMAND

- Using a diagnostic scan tool, view the IPC (instrument panel cluster) Parameter Identifications (PIDs).
- Access the IPC (instrument panel cluster) and control the AIRBAG_LMP (Airbag Warning Indicator) PID (parameter identification)
- Command the airbag warning indicator on then off.

Does the airbag warning indicator turn on when commanded on and turn off when commanded off?

Yes GO to P4

No GO to P6

P4 PERFORM THE IPC (INSTRUMENT PANEL CLUSTER) SELF-TEST

- Ignition ON.
- Using a diagnostic scan tool, perform the IPC (instrument panel cluster) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes REFER to the IPC (instrument panel cluster) DTC (diagnostic trouble code) Chart.

No GO to P5

- Ignition OFF.
- Disconnect and inspect the IPC (instrument panel cluster) connector.
- Repair:
 - corrosion (install new connector or terminals clean module pins)
 - damaged or bent pins install new terminals/pins
 - pushed-out pins install new pins as necessary
- Reconnect the IPC (instrument panel cluster) connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new IPC (instrument panel cluster).

REFER to: Instrument Panel Cluster (IPC)

(413-01 Instrumentation, Message Center and Warning Chimes, Removal and Installation).

No

Yes

The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.

PINPOINT TEST Q : THE AUTO HIGH BEAM RTT (RECONFIGURABLE TELLTALE) INDICATOR IS NEVER OR ALWAYS ON

Normal Operation and Fault Conditions

See Auto High Beam RTT (reconfigurable telltale) Indicator. REFER to: Message Center - System Operation and Component Description(413-01 Instrumentation, Message Center and Warning Chimes, Description and Operation).

If the auto high beam indicator request message is missing for less than 5 seconds, the IPC (instrument panel cluster) defaults the auto high beam RTT (reconfigurable telltale) indicator to its last indication state (on or off), based upon the last message received.

If the auto high beam indicator request message is missing for 5 seconds or longer, the IPC (instrument panel cluster) defaults the auto high beam RTT (reconfigurable telltale) indicator off.

Possible Sources

- Communication concern
- IPMA (image processing module A) concern

Q4 PERFORM THE IPMA (IMAGE PROCESSING MODULE A) SELF-TEST

• Using a diagnostic scan tool, perform the IPMA (image processing module A) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to the Master DTC (diagnostic trouble code) Chart.
	_

No

DIAGNOSE the auto high beams.

REFER to: Headlamps

(417-01 Exterior Lighting, Diagnosis and Testing).

PINPOINT TEST R : THE AUTO HOLD RTT (RECONFIGURABLE TELLTALE) INDICATOR IS NEVER OR ALWAYS ON

Normal Operation and Fault Conditions

See Auto Hold. REFER to: Instrument Panel Cluster (IPC) - System Operation and Component Description(413-01 Instrumentation, Message Center and Warning Chimes, Description and Operation). If the auto hold mode indicator request message is missing for less than 5 seconds, the IPC (instrument panel cluster) defaults the auto hold RTT (reconfigurable telltale) indicator to its last indication state (on or off), based upon the last message received.

If the auto hold mode indicator request message is missing for 5 seconds or longer, the IPC (instrument panel cluster) defaults the auto hold RTT (reconfigurable telltale) indicator off.

Possible Sources

- Communication concern
- Auto hold concern
- GWM (gateway module A)
- ABS (anti-lock brake system) module
- IPC (instrument panel cluster)

R1 CHECK THE MESSAGE CENTER OPERATION

Ignition ON.

R4 CHECK THE GWM (GATEWAY MODULE A) DIAGNOSTIC TROUBLE CODES (DTCS)

• Using a diagnostic scan tool, check the GWM (gateway module A) Continuous Memory Diagnostic Trouble Codes (DTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes

REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

No

DIAGNOSE the auto hold feature.

REFER to: Anti-Lock Brake System (ABS) and Stability Control

(206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).

PINPOINT TEST S : THE AUTO STOP-START RTT (RECONFIGURABLE TELLTALE) INDICATOR IS NEVER OR ALWAYS ON

Normal Operation and Fault Conditions

See Auto Stop-Start. REFER to: Instrument Panel Cluster (IPC) - System Operation and Component Description(413-01 Instrumentation, Message Center and Warning Chimes, Description and Operation). If the stop-start standby indicator message is missing for less than 5 seconds, the IPC (instrument panel cluster) defaults the auto stop-start RTT (reconfigurable telltale) warning indicator to its last indication state (on or off), based upon the last message received.

If the stop-start standby indicator message is missing for 5 seconds or longer, the IPC (instrument panel cluster) defaults the auto stop-start RTT (reconfigurable telltale) warning indicator off.

Possible Sources

- Communication concern
- Message center concern
- PCM (powertrain control module) concern
- GWM (gateway module A) concern
- IPC (instrument panel cluster)

S1 VERIFY THE AUTO STOP-START FEATURE IS ENABLED

- Ignition ON.
- NOTE

- Ignition ON.
- Using a diagnostic scan tool, perform the IPC (instrument panel cluster) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes REFER to DTC (diagnostic trouble code) Chart: IPC (instrument panel cluster) in this section.

No GO to S4

S4 PERFORM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

• Using a diagnostic scan tool, perform the PCM (powertrain control module) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes REFER to the Master DTC (diagnostic trouble code) Chart.

No GO to S5

S5 CHECK THE GWM (GATEWAY MODULE A) DIAGNOSTIC TROUBLE CODES (DTCS)

 Using a diagnostic scan tool, check the GWM (gateway module A) Continuous Memory Diagnostic Trouble Codes (CMDTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes

REFER to: Controller Area Network (CAN) Module Communications Network(418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

No DIAGNOSE the auto stop-start feature. Refer to the appropriate section in Group 303for the procedure.

PINPOINT TEST T: THE BLIS (BLIND SPOT INFORMATION SYSTEM) OFF RTT (RECONFIGURABLE TELLTALE) INDICATOR IS NEVER OR ALWAYS ON

- Ignition ON.
- Using a diagnostic scan tool, perform the IPC (instrument panel cluster) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes REFER to DTC (diagnostic trouble code) Chart: IPC (instrument panel cluster) in this section.

No GO to T3

T3 PERFORM THE IPMA (IMAGE PROCESSING MODULE A) SELF-TEST

Using a diagnostic scan tool, perform the IPMA (image processing module A) self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes REFER to the Master DTC (diagnostic trouble code) Chart.

No GO to T4

T4 CHECK THE GWM (GATEWAY MODULE A) DIAGNOSTIC TROUBLE CODES (DTCS)

 Using a diagnostic scan tool, check the GWM (gateway module A) Continuous Memory Diagnostic Trouble Codes (CMDTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes

REFER to: Controller Area Network (CAN) Module Communications Network(418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

No REFER to: Blind Spot Information System (419-04A Side and Rear Vision, Diagnosis and Testing).

PINPOINT TEST U : THE BRAKE WARNING INDICATOR OR RTT (RECONFIGURABLE TELLTALE) INDICATOR IS NEVER ON

Yes	GO to U4	
No	GO to Pinpoint Test A	

U3 PERFORM THE IPC (INSTRUMENT PANEL CLUSTER) INDICATOR LAMP CONTROL ACTIVE COMMAND

- Ignition ON.
- Using a diagnostic scan tool, view the IPC (instrument panel cluster) Parameter Identifications (PIDs).
- Access the IPC (instrument panel cluster) and control the W_BRAKE (Brake Warning) PID (parameter identification)
- Command the brake warning indicator on then off. Observe the brake warning indicator.

Does the brake warning indicator turn on when commanded on and turn off when commanded off?



U4 CHECK THE BRAKE WARNING INDICATOR OPERATES WITH THE PARKING BRAKE APPLIED

• Apply the parking brake while monitoring the brake warning indicator.

Does the brake warning indicator illuminate?



U5 CHECK THE PARKING BRAKE SYSTEM OPERATION

• Apply the parking brake.

Does the parking brake system apply the rear parking brakes?

Yes	GO to	U6
-----	-------	----