

# 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.

2007 FORD Focus Sedan OEM Service and Repair Workshop Manual

Go to manual page

# C8 CHECK THE BCMC (BODY CONTROL MODULE C) RUN/START RELAY COIL CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

- Disconnect BCMC (body control module C) C1035B .
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C1035B-25	$\overline{\mathbf{v}}$	Ground

#### Is the voltage greater than 11 volts?

Yes	GO to C9
No	GO to C10

# C9 ISOLATE THE BCMC (BODY CONTROL MODULE C) RUN/START RELAY COIL CONTROL CIRCUIT SHORT TO VOLTAGE

- Disconnect BCM (body control module) C2280F.
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280F-25	Ÿ	Ground

#### Is the voltage greater than 11 volts?

Yes REPAIR the circuit.

Yes	GO to C12 REPAIR the circuit	•		
Νο	REPAIR the circuit		ONTROL MODUL	
	CK FOR CORRECT		ONTROL MODUL	
C12 CHE		BCM (BODY C		
	onnect and inspe			E) OPERATION
<ul><li>Disc</li><li>Reparation</li></ul>	air:	ct all BCM (bod	ly control module)	connectors.
٠	corrosion (install	new connecto	r or terminals - cle	an module pins)
•	damaged or bent	t pins - install n	new terminals/pins	5
•	pushed-out pins	- install new pi	ns as necessary	
		-		s and all other previously disconnected
	nectors. Make sur	-		ill sussent
	ncern still preser	×	f the concern is st	lli present.
				tion System) for any applicable service articles:
				vice Bulletin) , SSM (special service message) , or
Yes				s for this concern, DISCONTINUE this test and ice articles address this concern, INSTALL a new
	BCM (body contro		uctions. If no serv	The articles address this concern, install a new
	REFER to: Body		e (BCM)	
	(419-10 Multifund	tion Electronic	Modules, Diagno	sis and Testing).
	<b>T</b> I			
Νο	-	0	-	e concern may have been caused by module nector or pin issues.

#### PINPOINT TEST D : NO POWER IN START - CONVENTIONAL IGNITION SWITCH

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.

# D2 CHECK FOR VOLTAGE TO THE PCM (POWERTRAIN CONTROL MODULE) WITH THE IGNITION SWITCH IN THE START POSITION

• Ignition OFF.

No

- Disconnect PCM (powertrain control module) C1232B 2.7L .
- Disconnect PCM (powertrain control module) C1233B 3.0L Diesel .
- Disconnect PCM (powertrain control module) C1551B 3.3L .
- Disconnect PCM (powertrain control module) C175B 3.5L .
- Disconnect PCM (powertrain control module) C1381B 5.0L .
- Place the ignition switch in the START position.
- Measure:
  - 2.7L

Positive Lead	Measurement / Action	Negative Lead
C1232B-43	Ÿ	Ground

# 3.0L Diesel

Positive Lead	Measurement / Actio	n Negative Lead
C1233B-22	Ÿ	Ground

# 3.3L

Positive Lead	Measurement / Action	Negative Lead
C1551B-43	v	Ground

Positive Lead	Measurement / Action	Negative Lead
C1233B-22	Ω	C250-1

# 3.3L

Positive Lead	Measurement / Action	Negative Lead	
C1551B-43	Ω	C250-1	

# 3.5L

Positive Lead	Measurement / Action	Negative Lead
C175B-43	Ω	C250-1

# 5.0L

Positive Lead Measurement / Action	Negative Lead
С1381В-43 О	C250-1

# Is the resistance less than 3 ohms?

 Yes
 GO to D4

 No
 REPAIR the circuit.

 D4 CHECK THE IGNITION START CIRCUIT FOR A SHORT TO GROUND

		-	
	C1381B-43	Ω	Ground
c th	o rocistonco gr	eater than 10,000 ohms	-7
is un	e resistance gr	eater than 10,000 onms	»;
Yes	GO to D5		
No	REPAIR the	circuit.	
5 C	HECK THE IGNI	TION START CIRCUIT FO	R A SHORT TO V
	lgnition ON. Measure:		
	2.7L		
	Positive Lead	Measurement / Action	Negative Lead
	C1232B-43	$\overline{\mathbf{v}}$	Ground
	3.0L Diesel		
	S.UL DIesei		
	Positive Lead	Measurement / Action	Negative Lead
		Σ	
	C1233B-22	V	Ground
	3.3L		
	Positive Lead	Measurement / Action	Negative Lead

Ground

ÿ

C1551B-43

exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,



Guided Routine available in the on-line Workshop Manual.

**No** 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 E : THE IGNITION KEY CANNOT BE RETURNED TO THE OFF POSITION

Refer to Wiring Diagrams Cell 37for schematic and connector information. **Normal Operation and Fault Conditions** REFER to: Steering Wheel and Column Electrical Components -System Operation and Component Description

(211-05 Steering Wheel and Column Electrical Components, Description and Operation).

#### **Possible Sources**

- Wiring, terminals or connectors
- Ignition switch
- Ignition lock cylinder
- Key release interlock actuator

#### NOTICE

Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may damage the connector.

#### E1 CHECK FOR AN ENERGIZED KEY RELEASE INTERLOCK ACTUATOR

- Disconnect BCM (body control module) fuse 20 (5A).
- Attempt to turn the ignition lock cylinder to the ON position and then back to the OFF-LOCK position and remove the key.

#### Can the ignition lock cylinder be turned to the OFF-LOCK position and the key removed?

Yes	GO to	E3	

#### E4 CHECK THE KEY RELEASE INTERLOCK ACTUATOR CONTROL CIRCUIT FOR A SHORT TO GROUND

- Connect BCM (body control module) fuse 20 (5A).
- Select PARK.
- Disconnect Key release interlock actuator C2139 .
- Connect:

Positive Lead	Measurement / Action	Negative Lead
C2139-2	Ω	Ground

#### Is the resistance greater than 10000 ohms?

Yes	GO to	E6	
No	GO to	E5	

# E5 ISOLATE THE KEY RELEASE INTERLOCK ACTUATOR CONTROL CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM (body control module) C2280B .
- Connect:

Positive Lead	ead Measurement / Action Negativ	
C2139-2	Ω	Ground

#### Is the resistance greater than 10000 ohms?

Yes	GO to E6
Νο	REPAIR the circuit.

BCM (body control module) B1472:12	Ignition Key Removal Inhibit: Circuit Short To Battery	Sets when the BCM (body control module) detects a short to voltage from the key removal inhibit solenoid control circuit.	
BCM (body control module) B1472:14	lgnition Key Removal Inhibit: Circuit Short To Ground Or Open	Sets when the BCM (body control module) detects an open from the key removal inhibit solenoid control circuit.	

#### **Possible Sources**

- Wiring, terminals or connectors
- Key Release Interlock Actuator
- BCM (body control module)

#### NOTICE

Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may damage the connector.

F1 CHECK THE KEY RELEASE INTERLOCK ACTUATOR POWER CIRCUIT FOR VOLTAGE

#### F3 CHECK THE KEY RELEASE INTERLOCK ACTUATOR CONTROL CIRCUIT FOR AN OPEN

- Disconnect BCM (body control module) C2280B.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280B-12	Ω	C2139-2

#### Is the resistance less than 3 ohms?



• Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280B-12	Ÿ	Ground

#### Is any voltage present?

Yes	GO to F5
No	REPAIR the
	к тне кеу