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2001 FORD Puma OEM Service and Repair Workshop Manual

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C4498-1	Ω	Ground
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Are the resistances greater than 10,000 ohms?

Yes	GO to J6
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No	REPAIR the circuit in question.
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J6 CHECK THE SUSPECT DOOR LOCK ACTUATOR LOCK CIRCUIT FOR AN OPEN

- Measure:

Front Door Lock Actuator LH (left-hand)

Positive Lead	Measurement / Action	Negative Lead
C525A-1	Ω	C2280C-35


Front Door Lock Actuator RH (right-hand)

Positive Lead	Measurement / Action	Negative Lead
C603-5	Ω	C2280C-35


Rear Door Lock Actuator LH (left-hand)

Positive Lead	Measurement / Action	Negative Lead
C704-2	Ω	C2280C-35


Rear Door Lock Actuator RH (right-hand)

Positive Lead	Measurement / Action	Negative Lead
C525A-2		Ground


Front Door Lock Actuator RH (right-hand)

Positive Lead	Measurement / Action	Negative Lead
C603-6		Ground


Rear Door Lock Actuator LH (left-hand)

Positive Lead	Measurement / Action	Negative Lead
C704-1		Ground

Rear Door Lock Actuator RH (right-hand)

Positive Lead	Measurement / Action	Negative Lead
C804-5		C804-2

Tailgate Lock Actuator

Positive Lead	Measurement / Action	Negative Lead
C4498-2		C804-2

Is any voltage present?

C804-5	Ω	Ground
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Tailgate Lock Actuator

Positive Lead	Measurement / Action	Negative Lead
C4498-2	Ω	Ground

Are the resistances greater than 10,000 ohms?

Yes	GO to J9
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No	REPAIR the circuit in question.
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J9 CHECK THE SUSPECT DOOR LOCK ACTUATOR UNLOCK CIRCUIT FOR AN OPEN

- Measure:

Front Door Lock Actuator LH (left-hand)

Positive Lead	Measurement / Action	Negative Lead
C525A-2	Ω	C2280C-27

Front Door Lock Actuator RH (right-hand)

Positive Lead	Measurement / Action	Negative Lead
C603-6	Ω	C2280C-32

Rear Door Lock Actuator LH (left-hand)

J10 CHECK THE BCM (BODY CONTROL MODULE) GROUND CIRCUIT FOR AN OPEN

- Disconnect BCM (body control module) C2280C .
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280C-10	Ω	Ground

Are the resistances less than 3 ohms?

Yes	GO to J11
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No	REPAIR the circuit in question.
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J11 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect the BCM (body control module) connector C2280C.
- Repair:
 - corrosion (install new connectors or terminals, clean module pins)
 - damaged or bent pins - install new terminals/pins
 - pushed-out pins - install new pins as necessary
- Reconnect all the BCM (body control module) connectors and make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	<p>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 BCM (body control module) .</p> <p>REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).</p>
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No	GO to K4
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K2 ISOLATE THE DOOR LOCK CONTROL SWITCH

- Ignition OFF.
- Disconnect Driver Door Lock Control Switch C505 (without memory seats) or C541 (with memory seats) (DTC (diagnostic trouble code) set in DDM (driver door module)).
- Disconnect Passenger Door Lock Control Switch C605 (DTC (diagnostic trouble code) set in PDM (passenger door module)).
- Ignition ON.
- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Using a diagnostic scan tool, carry out the DDM (driver door module) or the PDM (passenger door module) self-test.

Is DTC (diagnostic trouble code) B108F:23 still present?


Yes	GO to K3
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No	INSTALL a new door lock control switch. REFER to: Front Door Lock Control Switch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
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K3 CHECK THE DOOR LOCK CONTROL SWITCH INPUT CIRCUITS FOR A SHORT TO GROUND

- Ignition OFF.
- Disconnect DDM (driver door module) C501A (DTC (diagnostic trouble code) set in DDM (driver door module)).
- Disconnect PDM (passenger door module) C652A (DTC (diagnostic trouble code) set in PDM (passenger door module)).
- If the DTC (diagnostic trouble code) set in the DDM (driver door module) , measure:

Positive Lead	Measurement / Action	Negative Lead
C501A-10	Ω	Ground

C505-4, (without memory seats)		C505-3
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- For the passenger door lock control switch, connect:

Positive Lead	Measurement / Action	Negative Lead
C605-1		C605-2

- Remove the fused jumper wire.

Do the doors lock?

Yes	GO to K6
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No	GO to K5
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K5 CHECK THE LOCK REQUEST INPUT CIRCUIT FOR AN OPEN

- Disconnect DDM (driver door module) C501A (driver door lock control switch).
- Disconnect PDM (passenger door module) C652A (passenger door lock control switch).
- For the driver door lock control switch, measure:

Positive Lead	Measurement / Action	Negative Lead
C541-2, (with memory seats)	Ω	C501A-20

Positive Lead	Measurement / Action	Negative Lead
C505-4, (without memory seats)	Ω	C501A-20

C605-3		C605-2
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- Remove the fused jumper wire.

Do the doors unlock?

Yes	<p>INSTALL a new door lock control switch.</p> <p>REFER to: Front Door Lock Control Switch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).</p>
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No	GO to K7
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K7 CHECK THE UNLOCK REQUEST INPUT CIRCUIT FOR AN OPEN

- Disconnect DDM (driver door module) C501A (driver door lock control switch).
- Disconnect PDM (passenger door module) C652A (passenger door lock control switch).
- For the driver door lock control switch, measure:

Positive Lead	Measurement / Action	Negative Lead
C541-1, (with memory seats)	Ω	C501A-10

Positive Lead	Measurement / Action	Negative Lead
C505-2, (without memory seats)	Ω	C501A-10

- For the passenger door lock control switch, measure:

Positive Lead	Measurement / Action	Negative Lead
C605-3	Ω	C652A-10

- damaged or bent pins - install new terminals pins
- pushed-out pins - install new pins as necessary
- Reconnect the DDM (driver door module) connectors and make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	<p>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 DDM (driver door module) .</p> <p>REFER to: Driver Door Module (DDM) (419-10 Multifunction Electronic Modules, Removal and Installation).</p>
No	<p>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.</p>

PINPOINT TEST L : ALL DOOR LOCKS ARE INOPERATIVE FROM ONE DOOR LOCK CONTROL SWITCH

Refer to Wiring Diagrams Cell 117for schematic and connector information.

Normal Operation and Fault Conditions REFER to: [Handles, Locks, Latches and Entry Systems - System Operation and Component Description](#) (501-14 Handles, Locks, Latches and Entry Systems, Description and Operation).

Possible Sources

- Wiring, terminals or connectors
- Door lock control switch
- PDM (passenger door module)
- DDM (driver door module)


Visual Inspection and Pre-checks


- Check the door lock control switch for damage.

L1 CHECK FOR COMMUNICATION TO THE DDM (DRIVER DOOR MODULE) AND PDM (PASSENGER DOOR MODULE)


- Ignition ON.
- Using a diagnostic scan tool, carry out the network test.

Does the DDM (driver door module) and the PDM (passenger door module) pass the network test?

C541-1, (with memory seats)		C541-3
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Positive Lead	Measurement / Action	Negative Lead
C505-2, (without memory seats)		C505-3

- For the passenger door lock control switch, connect:

Positive Lead	Measurement / Action	Negative Lead
C605-3		C605-2

- Remove the fused jumper wire.

Do the doors lock and unlock?

Yes	<p>INSTALL a new door lock control switch.</p> <p>REFER to: Front Door Lock Control Switch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).</p>
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No	GO to L3
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L3 CHECK THE DOOR LOCK CONTROL SWITCH GROUND CIRCUIT FOR AN OPEN

- Disconnect DDM (driver door module) C501B (driver door lock control switch).
- Disconnect PDM (passenger door module) C652B (passenger door lock control switch).
- For the driver door lock control switch, measure:

Positive Lead	Measurement / Action	Negative Lead
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