

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.

2009 FORD Mondeo Hatchback OEM Service and Repair Workshop Manual

[Go to manual page](#)

- Inspect the BECM (battery energy control module) module sense circuit connectors and make sure they are fully seated.



- DISCONNECT all BECM (battery energy control module) connectors in sequence.
REFER to: [Battery Energy Control Module \(BECM\) - Electric](#)(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).
- Inspect the module sense circuit connectors and the BECM (battery energy control module) pins for:
- For:
 - corrosion
 - damaged or bent pins
 - pushed-out pins

Are any concerns present?

Yes	<p>If the connectors were NOT fully seated reseal the connector(s). GO to AD4</p> <p>If wiring harness module sense circuit connector or pin concerns are present install new high voltage battery wiring harness and/or BECM (battery energy control module) .</p> <p>REFER to: High Voltage Battery Wiring Harness - Electric (414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).</p> <p>REFER to: Battery Energy Control Module (BECM) - Electric (414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).</p>
-----	--

No	GO to AD4
----	---------------------------

AD4 INSPECT THE HIGH VOLTAGE BATTERY MODULES

No

INSTALL a new module.

REFER to: [First Row High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [First Row High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Second Row High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Second Row High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Third Row High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Third Row High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fourth Row High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fourth Row High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fourth Row Upper High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fourth Row Upper High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fifth Row High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fifth Row High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fifth Row Upper High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

REFER to: [Fifth Row Upper High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery](#)
(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

4P Battery Packs

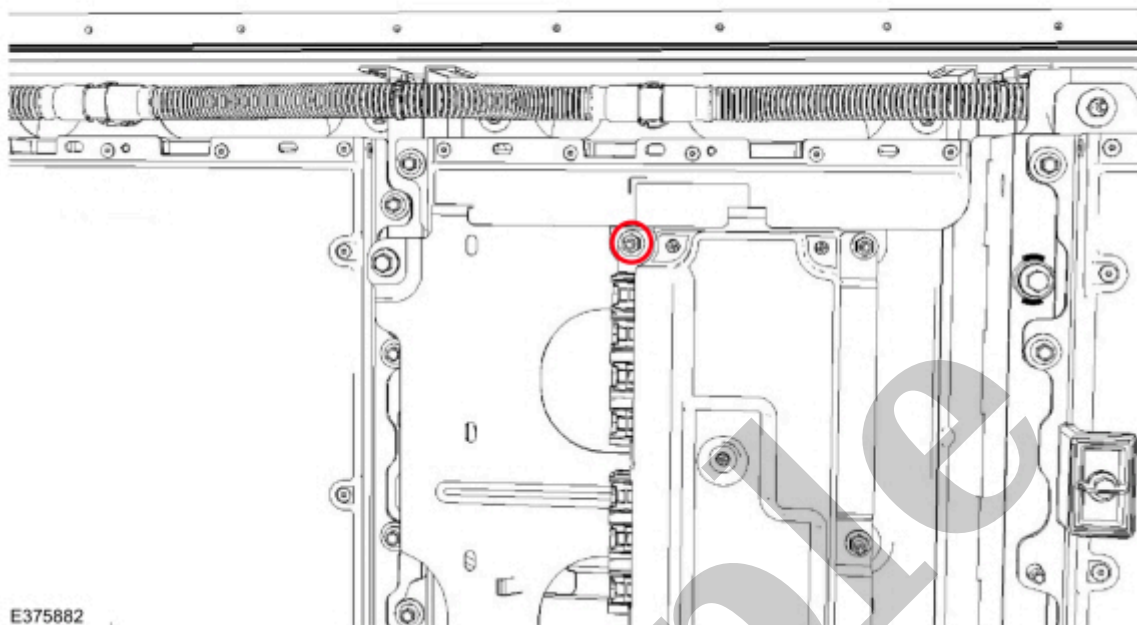
- Cell 0 - (cell 1 negative) C4816J-17
- Cell 1 - C4816J-7
- Cell 2 - C4816J-16
- Cell 3 - C4816J-6
- Cell 4 - C4816J-15
- Cell 5 - C4816J-5
- Cell 6 - C4816J-14
- Cell 7 - C4816J-4
- Cell 8 - C4816J-13
- Cell 9 - C4816J-3
- Cell 10 - C4816J-12
- Cell 11 - C4816J-2
- Cell 12 - C4816J-11
- Cell 13 - C4816J-1
- Cell 14 - C4816I-20
- Cell 15 - C4816I-10
- Cell 16 - C4816I-19
- Cell 17 - C4816I-9
- Cell 18 - C4816I-18
- Cell 19 - C4816I-8
- Cell 20 - C4816I-17
- Cell 21 - C4816I-7
- Cell 22 - C4816I-16
- Cell 23 - C4816I-6
- Cell 24 - C4816I-15
- Cell 25 - C4816I-5
- Cell 26 - C4816I-14
- Cell 27 - C4816I-4
- Cell 28 - C4816I-13
- Cell 29 - C4816I-3
- Cell 30 - C4816I-12
- Cell 31 - C4816I-2
- Cell 32 - C4816I-11

- Cell 62 - C4816G-14
- Cell 63 - C4816G-4
- Cell 64 - C4816G-13
- Cell 65 - C4816G-3
- Cell 66 - C4816G-12
- Cell 67 - C4816G-2
- Cell 68 - C4816G-11
- Cell 69 - C4816G-1
- Cell 70 - C4816F-16
- Cell 71 - C4816F-8
- Cell 72 - C4816F-15
- Cell 73 - C4816F-7
- Cell 74 - C4816F-14
- Cell 75 - C4816F-6
- Cell 76 - C4816F-13
- Cell 77 - C4816F-5
- Cell 78 - C4816F-12
- Cell 79 - C4816F-4
- Cell 80 - C4816F-11
- Cell 81 - C4816F-3
- Cell 82 - C4816F-10
- Cell 83 - C4816F-2
- Cell 84 - C4816F-9
- Cell 85 - C4816F-1
- Cell 86 - C4816E-12
- Cell 87 - C4816E-6
- Cell 88 - C4816E-11
- Cell 89 - C4816E-5
- Cell 90 - C4816E-10
- Cell 90 - C4816E-4
- Cell 90 - C4816E-9

5P Battery Packs

- Cell 0 (cell 1 negative) - C4816J-17
- Cell 1 - C4816J-7

- Cell 35 - C4816H-10
- Cell 36 - C4816H-19
- Cell 37 - C4816H-9
- Cell 38 - C4816H-18
- Cell 39 - C4816H-8
- Cell 40 - C4816H-17
- Cell 41 - C4816H-7
- Cell 42 - C4816H-16
- Cell 43 - C4816H-6
- Cell 44 - C4816H-15
- Cell 45 - C4816H-5
- Cell 46 - C4816H-14
- Cell 47 - C4816H-4
- Cell 48 - C4816H-13
- Cell 49 - C4816H-3
- Cell 50 - C4816H-12
- Cell 51 - C4816H-2
- Cell 52 - C4816H-11
- Cell 53 - C4816H-1
- Cell 54 - C4816G-20
- Cell 55 - C4816G-10
- Cell 56 - C4816G-19
- Cell 57 - C4816G-9
- Cell 58 - C4816G-18
- Cell 59 - C4816G-8
- Cell 60 - C4816G-17
- Cell 61 - C4816G-7
- Cell 62 - C4816G-16
- Cell 63 - C4816G-6
- Cell 64 - C4816G-15
- Cell 65 - C4816G-5
- Cell 66 - C4816G-14
- Cell 67 - C4816G-4



Are the resistances greater than 10,000 ohms?

Yes	GO to AD7
-----	---------------------------

No	<p>INSTALL a new wiring harness.</p> <p>REFER to: High Voltage Battery Wiring Harness - Electric (414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).</p> <p>Re-install the high voltage battery cover and the high voltage battery. Repower the high voltage system. REFER to: High Voltage System De-energizing - Electric (414-03A High Voltage Battery, Mounting and Cables, General Procedures).</p> <p>Clear the BECM (battery energy control module) DTC's. Repeat the self-test.</p>
----	--

AD7 CHECK THE FAULTED CELL SENSE CIRCUITS FOR AN OPEN

NOTE

Use the correct measurement table for the 4P or 5P battery pack.

Cell 8 C4816j-13	Ω	C4801-10
Cell 9 C4816j-3	Ω	C4801-16
Cell 10 C4816j-12	Ω	C4801-11
Cell 11 C4816j-2	Ω	C4802-4
Cell 12 C4816j-11	Ω	C4802-2
Cell 13 C4816j-1	Ω	C4802-13
Cell 14 C4816l-20	Ω	C4802-1
Cell 15 C4816l-10	Ω	C4802-14
Cell 16 C4816l-19	Ω	C4802-9
Cell 17 C4816l-9	Ω	C4802-15
Cell 18 C4816l-18	Ω	C4802-10

Cell 30 C4816I-12	Ω	C4803-11
Cell 31 C4816I-2	Ω	C4804-4
Cell 32 C4816I-11	Ω	C4804-2
Cell 33 C4816I-1	Ω	C4804-13
Cell 34 C4816H-20	Ω	C4804-1
Cell 35 C4816H-10	Ω	C4804-14
Cell 36 C4816H-19	Ω	C4804-9
Cell 37 C4816H-9	Ω	C4804-15
Cell 38 C4816H-18	Ω	C4804-10
Cell 39 C4816H-8	Ω	C4804-16
Cell 40 C4816H-17	Ω	C4804-11

Cell 50 C4816H-11	Ω	C4805-11
Cell 51 C4816H-1	Ω	C4806-4
Cell 52 C4816G-20	Ω	C4806-2
Cell 53 C4816G-10	Ω	C4806-13
Cell 54 C4816G-19	Ω	C4806-1
Cell 55 C4816G-9	Ω	C4806-14
Cell 56 C4816G-17	Ω	C4806-9
Cell 56 C4816G-8	Ω	C4806-9
Cell 56 C4816G-18	Ω	C4806-9
Cell 57 C4816G-7	Ω	C4806-15
Cell 58 C4816G-16	Ω	C4806-10