

## 2017 Mazda CX-3 (Smart Key) - North America

**Wiring Information**

Item	Wire Color	Polarity	Wire Location
12 Volts	White (50A)	+	Driver Kick Fuse Box
Ground	(chassis ground)		
Starter	Gray	+	Start Stop Unit in steering column, white 24 pin plug, pin 23
Ignition	Yellow	+	Start Stop Unit in steering column, white 24 pin plug, pin 10
Accessory	Pink	+	Start Stop Unit in steering column, white 24 pin plug, pin 2
PTS 1	Blue	-	Start Stop Unit in steering column, white 32 pin plug, pin 20
PTS 2	Red	-	Start Stop Unit in steering column, white 24 pin plug, pin 17
CAN Bus High	Green (HS CAN)	Data	Start Stop Unit in steering column, white 24 pin plug, pin 7
CAN Bus Low	Red (HS CAN)	Data	Start Stop Unit in steering column, white 24 pin plug, pin 8
IMMO Antenna	(immobilizer antenna is in the push button start)		
Keyless Data	Pink	Data	Start Stop Unit in steering column, white 32 pin plug, pin 9
Power Lock	Pink	- 1000 Ohms	BCM above driver kick, white 32 pin plug, pin 6
Power Unlock	(same as power lock)	-	
Lock Motor	Tan	Reverse	ESU in driver kick, white 8 pin plug, pin 2
Driver Unlock Motor	Gray	Reverse	ESU in driver kick, white 8 pin plug, pin 5
Passenger Unlock Motor	Lt. Blue	Reverse	ESU in driver kick, white 8 pin plug, pin 3
Factory Alarm Arm	Brown (driver door key lock)	- 1000 Ohms	BCM above driver kick, white 32 pin plug, pin 22
Factory Alarm Disarm	(same as factory alarm arm)	Double -	
Disarm No Unlock	(proximity key and push button)		
Parking Lights (+)	White (LF); Gray (RF); Blue (LR); Pink (RR)	+	ESU in driver kick, white 10 pin plug, pins 5, 4; white 8 pin plug, pin 6; white 18 pin plug, pin 1

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Item	Wire Color	Polarity	Wire Location
Parking Lights (-)	Blue	-	Parking Light Switch Assembly inside steering column, white 6 pin plug, pin 1
Parking Lights Interrupt	Black	Cut	Parking Light Switch Assembly inside steering column, white 6 pin plug, pin 2
Hazards	Pink	-	Start Stop Unit in steering column, white 32 pin plug, pin 4
Turn Signal (Left)	Red (F); Red (R)	+	BCM above driver kick, white 24 pin plug, pin 13; white 12 pin plug, pin 4
Turn Signal (Right)	Blue (F); Blue (R)	+	BCM above driver kick, white 24 pin plug, pin 1; white 12 pin plug, pin 3
Headlight	Tan (L); Pink (R)	+	ESU in driver kick, white 10 pin plug, pin 3; white 4 pin plug, pin 3
AutoLights	(switch is plugged into Start Stop Unit; no wires)		
Reverse Light	Gray	+	ESU in driver kick, white 18 pin plug, pin 12
Left Front Door Trigger	Green	-	BCM above driver kick, white 32 pin plug, pin 20
Right Front Door Trigger	Gray	-	BCM above driver kick, white 32 pin plug, pin 4
Left Rear Door Trigger	Violet	-	BCM above driver kick, white 32 pin plug, pin 3
Right Rear Door Trigger	Lt. Green	-	BCM above driver kick, white 32 pin plug, pin 19
Dome Light	Red	-	ESU in driver kick, white 18 pin plug, pin 16
Trunk/Hatch Pin	Brown	-	BCM above driver kick, white 32 pin plug, pin 15
Hood Pin	Brown	- N.C.	BCM above driver kick, white 24 pin plug, pin 12
Trunk/Hatch Release	Red (rear handle switch)	-	BCM above driver kick, white 32 pin plug, pin 10
Trunk Release Motor	White	Reverse	ESU in driver kick, white 8 pin plug, pin 4
Tachometer	Brown or Red	ac	Camshaft Position Sensor, driver side of engine, gray 3 pin plug, pin 1
Fuel Pump	Green	+	Above Driver Kick, white 14 pin plug, pin 4

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Item	Wire Color	Polarity	Wire Location
Rear Defroster	Gray	- Latched	BCM above driver kick, white 24 pin plug, pin 6
Mirror Defroster	(same as rear defroster)		
Left Front Heated Seat	(serial data)		
Right Front Heated Seat	(serial data)		
Speed Sense	Tan	ac	Radio in dash or Tuner above passenger kick, white 24 pin plug, pin 17
Brake Wire	Blue	+	Start Stop Unit in steering column, white 32 pin plug, pin 2
Parking Brake	Blue	-	Parking Brake Switch, white 1 pin plug, pin 1
Horn Trigger	Pink	-	Horn switch-Clock Spring, white 14 pin plug, pin 1 or BCM above driver kick, white 24 pin plug, pin 22
Wipers	Lt. Blue	-	BCM above driver kick, white 24 pin plug, pin 15
Left Front Window (Up/Down)	Brown - Gray	A	Power Window Main Switch, white 12 pin plug, pins 11 - 10
Right Front Window (Up/Down)	Violet - Lt. Blue	A	Driver Kick, door harness
Left Rear Window (Up/Down)	White - Yellow	A	Driver Kick, door harness
Right Rear Window (Up/Down)	Red - Green	A	Driver Kick, door harness
Sun Roof (Open/Close)	Violet - Green (function with ignition on only)	+	Sunroof Switch, white 4 pin plug, pins 1 - 2
Sun Roof (Limit/Close)	White (tilt up) (functions with ignition on only)	+	Sunroof Switch, white 4 pin plug, pin 3
Radio 12V	Blue	+	Radio in dash or Tuner above passenger kick, white 24 pin plug, pin 14
Radio Ground	Black	-	Radio in dash or Tuner above passenger kick, white 24 pin plug, pin 24
Radio Ignition	Gray	+	Radio in dash or Tuner above passenger kick, white 24 pin plug, pin 22
Radio Illumination	Red (parking lights); White (dimmer)	+,-	Radio in dash, white 24 pin plug, pins 15, 16
Factory Amp Turn-on	Violet	+	Tuner above passenger kick, white 24 pin plug, pin 6

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Item	Wire Color	Polarity	Wire Location
Power Antenna	(no wire color listed in service manual)	+	Radio in dash or Tuner above passenger kick, white 2 pin plug, pin 1
Left Front Speaker (+/-)	Lt. Green - Blue or Black - White	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug, pins 1 - 2
Right Front Speaker (+/-)	Blue - Lt. Green or Red - Green	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug, pins 3 - 4
Left Rear Speaker (+/-)	Brown - Lt. Blue or Pink - Lt. Green	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug, pins 10 - 11
Right Rear Speaker (+/-)	Green - Yellow or Gray - Blue	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug, pins 12 - 13
Subwoofer (+/-)	Pink - Red (1); Green - Gray (2)	+,-	Amplifier under passenger seat, black 8 pin plug, pins 3 - 7; 2 - 6
Aux. Audio Input Left (+/-)	Black - White	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug (B), pins 5 - 17
Aux. Audio Input Right (+/-)	Red - White	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug (B), pins 6 - 17
Rearview Camera Video	Black - Red	+,-	Connectivity Master Unit-Display, white 28 pin plug, pins 1 - 15
RSE Video (+/-)	Lt. Green - Violet (iPod video)	+,-	Connectivity Master Unit-Display, white 28 pin plug, pins 6 - 20
RSE Audio Left (+/-)	Black - White (CD player audio)	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug (B), pins 7 - 19
RSE Audio Right (+/-)	Red - Green (CD player audio)	+,-	Radio in dash or Tuner above passenger kick, white 24 pin plug (B), pins 8 - 20
Satellite Radio 12 Volts	(built into tuner above passenger kick)		

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***What Fits***

Item	Size	Depth	Location
Headunit	irregular		center of dash
Left Front Speaker	6.5		left front door
Left Front Tweeter	1		left front dash
Right Front Speaker	6.5		right front door
Right Front Tweeter	1		right front dash
Left Rear Speaker	6.5 or 5.25		left rear door
Right Rear Speaker	6.5 or 5.25		right rear door
Subwoofer	5.25		spare tire well

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***Additional Wiring Notes***

Item	Note
Left Front Speaker (+/-)	On models with amplifier, the speaker wires are lt. green - blue (woofer); green - yellow (tweeter) at the amplifier under passenger seat, green 16 pin plug, pins 8 - 16; black 8 pin plug, pins 4 - 8.
Left Rear Speaker (+/-)	On models with amplifier, the speaker wires are brown - lt. blue at the amplifier under passenger seat, green 16 pin plug, pins 4 - 5.
Right Front Speaker (+/-)	On models with amplifier, the speaker wires are blue - lt. green (woofer); pink - white (tweeter) at the amplifier under passenger seat, green 16 pin plug, pins 7 - 6; 1 - 9.
Right Rear Speaker (+/-)	On models with amplifier, the speaker wires are green - yellow at the amplifier under passenger seat, green 16 pin plug, pins 2 - 3.