

2014 Mazda Mazda6 (Smart Key)



Wiring Information

Item	Wire Color	Polarity	Wire Location
12 Volts	white (50A)	+	driver kick fuse box, rear, white 1 pin plug, pin 1
Second 12 Volts	N/A		
Starter	brown/black	+	Start Stop Unit in steering column, white 24 pin plug, pin 23
Second Starter	lt. green/red (SS1); red/black (SS2)	-	Start Stop Unit, white 32 pin plug, pin 20; white 24 pin plug, pin 17
Ignition	lt. green/red	+	Start Stop Unit in steering column, white 24 pin plug, pin 10
Second Ignition	N/A		
Third Ignition	N/A		
Accessory	yellow/green	+	Start Stop Unit in steering column, white 24 pin plug, pin 2
Second Accessory	brown/red	+	Start Stop Unit in steering column, white 24 pin plug, pin 14
Third Accessory	N/A		
Key Sense	N/A		
Data Bus	(immobilizer antenna is in the push button start)		
Can Bus High	white (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
Can Bus Sw	N/A		
Power Lock	blue	-1000 ohms	driver kick or Rear BCM in trunk left side, white 24 pin plug, pin 15
Power Unlock	(same as power lock)	-	
Lock Motor	pink	5 wire	driver kick or Rear BCM in trunk left side, white 16 pin plug, pin 2
Unlock Motor	blue/red	5 wire	driver kick or Rear BCM in trunk left side, white 16 pin plug, pin 3
Disarm Defeat	blue/orange	5 wire	Rear BCM in trunk left side, white 16 pin plug, pin 4
Parking Lights (+)	green (F); pink/black (R)	+	Front BCM in underhood FB, blue 18 pin plg, pin 14 (F); driver kick(R)
Parking Lights (-)	(switch is plugged into Start Stop Unit; no wires)		
Hazards	white/blue	-	Start Stop Unit in steering column, white 32 pin plug, pin 4
Turn Signal (Left)	white/red (F); blue/red (R)	+	Front BCM in underhood FB, white 28 pin plg, pin 15 (F); driver kick(R)
Turn Signal (Right)	white (F); blue/orange (R)	+	Front BCM in underhood FB, blue 18 pin plug, pin 4 (F); driver kick(R)

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight	green/red	-	Start Stop Unit in steering column, white 32 pin plug, pin 28
AutoLights	(switch is plugged into Start Stop Unit; no wires)		
Reverse Light	white/black	+	Rear BCM in trunk left side, blue 18 pin plug, pin 10
Left Front Door Trigger	brown/black	-	driver kick or Rear BCM in trunk left side, white 24 pin plug, pin 12
Right Front Door Trigger	brown/red	-	Rear BCM in trunk L side, white 24 pin plg, pin 11
Left Rear Door Trigger	brown/white	-	Rear BCM in trunk L side, white 24 pin plg, pin 10
Right Rear Door Trigger	brown/yellow	-	Rear BCM in trunk L side, white 24 pin plg, pin 9
Dome Supervision	purple	-	driver kick or Rear BCM in trunk left side, white 8 pin plug, pin 3
Trunk/Hatch Pin	brown	-	Rear BCM in trunk left side, blue 18 pin plug, pin 6
Rear Glass Pin	N/A		
Hood Pin	blue/white or blue/red	- N.C.	driver kick or Rear BCM in trunk left side, white 24 pin plug, pin 18
Trunk Hatch/Release	green/red	-	release switch or Rear BCM in trnk left side, white 16 pin plug, pin 10
Trunk Release Motor	green	5 wire	Rear BCM in trunk left side, blue 18 pin plug, pin 2
Fuel Door Release	N/A		
Power Sliding Door (Left)	N/A		
Power Sliding Door (Right)	N/A		
Factory Alarm Arm	white/green (driver door key lock)	-1000 ohms	driver kick or Rear BCM in trunk left side, white 24 pin plug, pin 16
Factory Alarm Disarm	(same as factory alarm arm)	double -	
Disarm No Unlock	(smart key and push-button start)		
Trunk Alarm Shunt	N/A		
Tachometer	green	ac	camshaft position sensor, engine driver side, gray 3 pin plug, pin 1
Wait to Start	N/A		
Neutral Safety	purple (M/T)	-	PCM next to underhood fuse box, black 140 pin plug, pin 33
Clutch Pedal	yellow/black (1); white/blue (2)	-	Strt Stp Unit, wh 32P plg, pin19; wh 24P plg, pin3
Fuel Pump	gray	+	driver kick, harness to rear
Rear Defroster	blue/red	+ latched	driver kick, harness to rear
Mirror Defroster	(same as rear defroster)		
Left Front Heated Seat	(LIN bus)		
Right Front Heated Seat	(LIN bus)		

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Speed Sense	purple/red	ac	radio, white 24 pin plug, pin 17
Brake Wire	red/blue	+	Start Stop Unit in steering column, white 32 pin plug, pin 2
Parking Brake	lt. green/red	-	parking brake switch, white 1 pin plug, pin 1
Horn Trigger	blue	-	horn switch, white 14 pin plug, pin 1
Wipers	black/orange	-	Start Stop Unit in steering column, white 32 pin plug, pin 27
Left Front Window (Up/Down)	brown - gray	A	power window main switch, white 12 pin plug, pins 11 - 10 or 9 - 8
Right Front Window (Up/Down)	grn/blk - wht/red (w/o auto); brown - gry (w/auto)	A	driver kick (w/o auto); RF pwr wndw sw, white 12 pin plug, pins 10 - 5
Left Rear Window (Up/Down)	blu/yel - red/blk (w/o auto); brown - gry (w/auto)	A	driver kick (w/o auto); LR pwr wndw sw, white 12 pin plug, pins 10 - 5
Right Rear Window (Up/Down)	blue/black - red (w/o auto); brown - gray (w/auto)	A	driver kick (w/o auto); RR pwr wndw sw, white 12 pin plug, pins 10 - 5
Sun Roof (Open/Close)	blue/red - blue/white (function with ign on only)	+	sunroof switch, white 4 pin plug, pins 1 - 2
Sun Roof (Limit/Close)	N/A		
Memory Seat 1		-	position memory switch, white 4 pin plug, pin 3
Memory Seat 2		-	position memory switch, white 4 pin plug, pin 4
Memory Seat 3	N/A		
Radio 12V	white/blue	+	radio, white 24 pin plug, pin 14
Radio Ground	black	-	radio, white 24 pin plug, pin 24
Radio Ignition	red/black	+	radio, white 24 pin plug, pin 22
Radio Illumination	yellow/green (parking lights); gray/blue (dimmer)	+,-	radio, white 24 pin plug, pins 15, 16
Factory Amp Turn-on	brown/white	+	radio, white 24 pin plug, pin 6
Power Antenna		+	radio, white 2 pin plug, pin 1
Left Front Speaker (+/-)	brown - green or black - white	+,-	radio, white 24 pin plug, pins 1 - 2
Right Front Speaker (+/-)	black/yellow - lt. green or red - green	+,-	radio, white 24 pin plug, pins 3 - 4
Left Rear Speaker (+/-)	red/white - blue/yellow or pink - lt. green	+,-	radio, white 24 pin plug, pins 10 - 11
Right Rear Speaker (+/-)	red - blue or gray - blue	+,-	radio, white 24 pin plug, pins 12 - 13
Center Channel (+/-)	gray - yellow	+,-	amplifier above passenger kick, green 16 pin plug, pins 4 - 5
Subwoofer (+/-)	N/A		
Aux. Audio Input Left (+/-)	red/white - black	+,-	radio, white 24 pin plug (B), pins 22 - 21
Aux. Audio Input Right (+/-)	red/blue - black	+,-	radio, white 24 pin plug (B), pins 7 - 21
RSE Video (+/-)	black - red (rear view camera video)	+,-	radio, white 4 pin plug, pins 4 - 2
RSE Audio Left (+/-)	green - red (satellite audio)	+,-	radio, white 24 pin plug (B), pins 4 - 13
RSE Audio Right (+/-)	black - white (satellite audio)	+,-	radio, white 24 pin plug (B), pins 3 - 12
Satellite Radio 12 Volts	white/blue	+	Sat Radio behind glove box, wht 16 pin plg, pin 16
Satellite Radio Ground	black/yellow	-	Sat Radio behind glove box, wht 16 pin plug, pin 1
Satellite Radio Ignition	red/black	+	Sat Radio behind glove box, wht 16 pin plug, pin 8
Satellite Radio Antenna	(coaxial cable)		
Satellite Audio Left (+/-)	green - white/red	+,-	Satellite Radio, white 16 pin plug, pins 3 - 4
Satellite Audio Right (+/-)	black - white/red	+,-	Satellite Radio, white 16 pin plug, pins 2 - 4

What Fits

Item	Size	Depth	Location
Headunit	double DIN		center of dash
Left Front Speaker	6.5 or 8.86		left front door
Left Front Tweeter	1 (tweeter); 3 (midrange)		left front dash
Right Front Speaker	6.5 or 8.86		right front door
Right Front Tweeter	1 (tweeter); 3 (midrange)		right front dash
Left Rear Speaker	6.5 or 5.25		left rear door
Left Rear Tweeter	2.5 (surround)		left rear deck
Right Rear Speaker	6.5 or 5.25		right rear door
Right Rear Tweeter	2.5 (surround)		right rear deck
Center Channel	3		top center of dash
Subwoofer	N/A		
Left Front Headrest			
Right Front Headrest			
Left Right Headrest			
Right Rear Headrest			
Satellite Radio Tuner			behind glove box

Additional Wiring Notes

Item	Note
Left Front Speaker (+/-)	On models with amplifier, the door speaker wires are brown - green/white at the amplifier above passenger kick, black 8 pin plug, pins 2 - 6. The dash speaker wires are brown - green at the amplifier, green 16 pin plug, pins 3 - 2.
Right Front Speaker (+/-)	On models with amplifier, the door speaker wires are black/yellow - lt. green at the amplifier above passenger kick, black 8 pin plug, pins 3 - 7. The dash speaker wires are black/yellow - white/green at the amplifier, green 16 pin plug, pins 7 - 6.
Left Rear Speaker (+/-)	On models with amplifier, the door speaker wires are red/yellow - blue/white at the amplifier above passenger kick, black 8 pin plug, pins 8 - 4. The deck speaker wires are pink - purple at the amplifier, green 16 pin plug, pins 8 - 16.
Right Rear Speaker (+/-)	On models with amplifier, the door speaker wires are red/white - blue/yellow at the amplifier above passenger kick, green 16 pin plug, pins 1 - 9. The deck speaker wires are pink - purple at the amplifier, green 16 pin plug, pins 8 - 16.