

E60/61 LCI AND PRE-LCI POST 09/05 M5 MIRRORS ON PRE 09/05 PRE-LCI VEHICLE

MIRROR VERSIONS:

PRE-LCI PRE 09/05 – 3 Wire ends

PRE-LCI POST 09/05 – 1 Wire ends

LCI – 1 Wire ends

Parts / tools needed:

Set of M5 mirrors

18 - rubber o-rings with Inner Diameter -1/8 Outer Diameter-1/4

M5 window switch if you are intending to use the auto-fold feature

3/32 Drill bit

2 wiring pins (BMW Part # 61 13 8 366 260)

Phillips screw driver

Torx sockets or bits

Non-marking prying tool

3 feet white wire (I believe its 20 gauge)

3 feet yellow wire

Disconnect the battery.

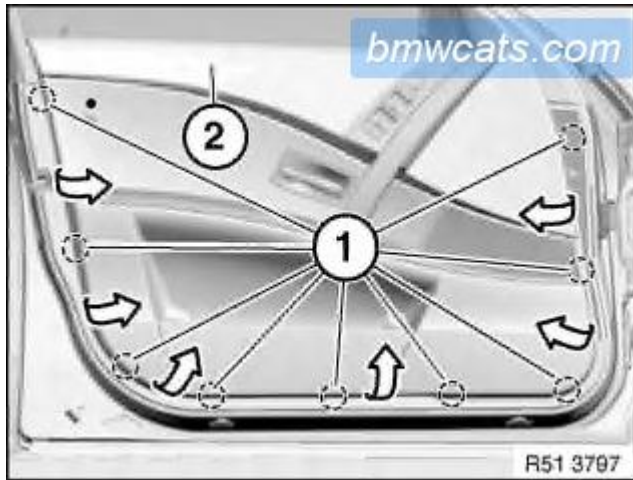
-There is an airbag in the door panel. If the battery isn't disconnected, you will trip the airbag light.

Remove door panel.

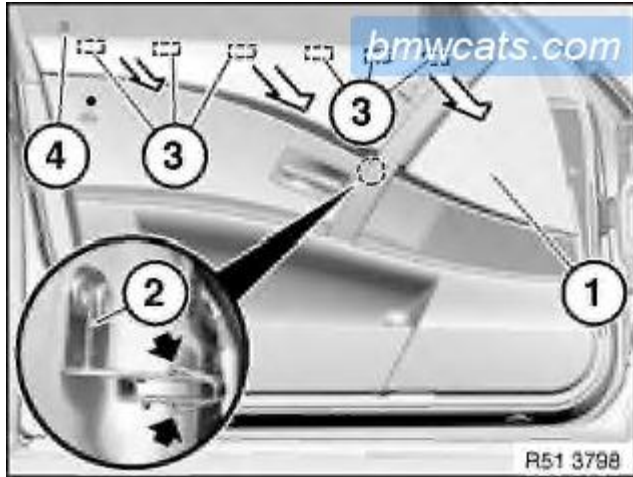
-Remove the airbag covering cap and remove the torx bolt (#1). Remove the cap and remove the Phillips screw (#2).



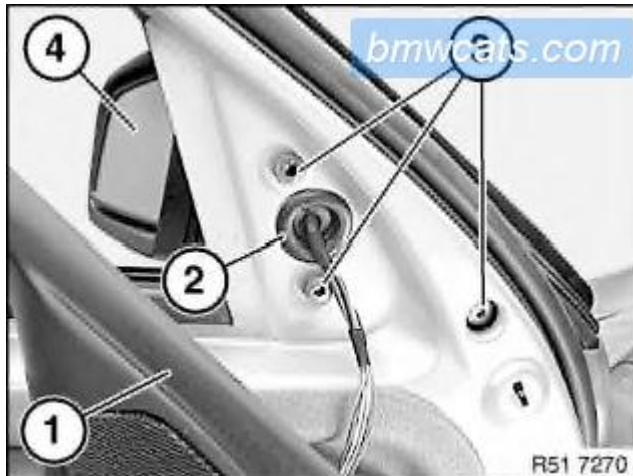
-Using a non marking prying tool to unclip all of the door panel clips.



- Then pull the trim panel back on the top edge to unclip the top fasteners. (#3)
- Once all clips are undone slide the door panel up to remove. There is a plastic retainer that needs to be removed from the center of the door and reinstalled onto the door panel prior to installation of the door panel. (#2)
- Unclip all wiring and handle cable to remove the door panel.



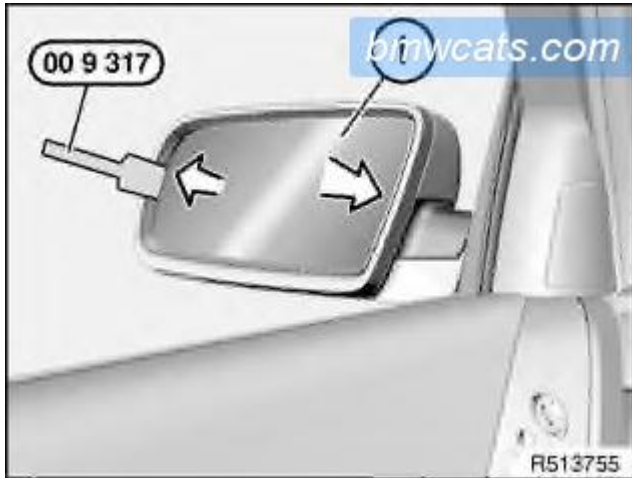
- Remove upper door trim enough to access mirror mounting
- Unplug the 3 wires from the mirror and remove the 3 torx bolts to remove the mirror.



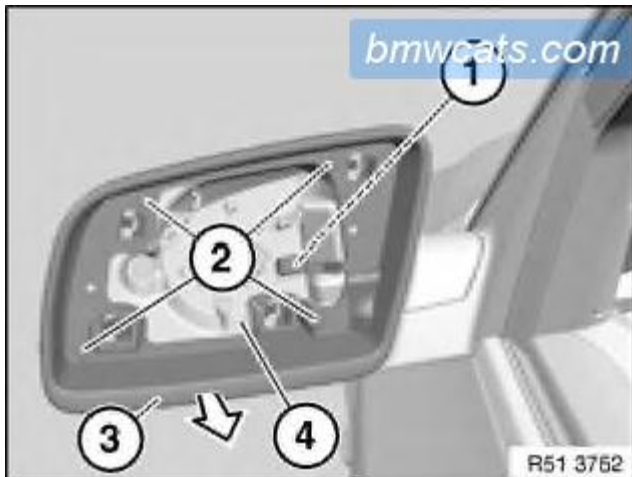
Dissect old mirror keeping only the wiring harness with all clips and motor.

- Start by removing the glass from the old mirror.
- Push the glass inwards. (#1)

- Pull on the opposite end to unclip the glass from the motor. Slow and gently.
- Once the glass is out remove the 2 heated mirror wires and unclip the auto-dim plug.



-After the glass is removed it's pretty straight forward. Separate all pieces of the mirror. 8 screws hold the mirror together and 3 long torx screws hold the motor on.



-Put the motor aside. It will be going on the M5 mirror.

Removing the wiring from the old mirror. Unfortunately the wiring cannot just slide out of the old mirror. The plug ends that connect to the door module need to be removed in order for the wiring to be removed and reinstalled into the M5 mirror.

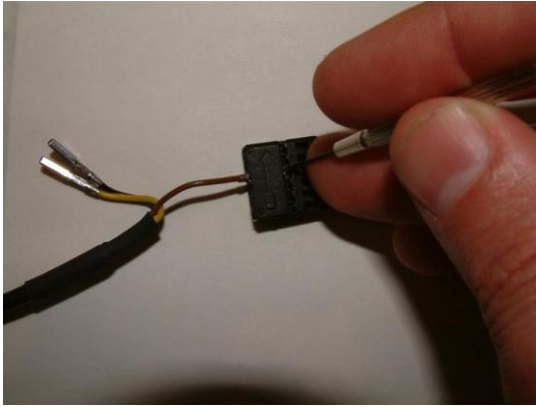
I don't have any pictures but it goes as follows:

Purple plug- Has a little flap that needs to flip up before the pins can be removed.

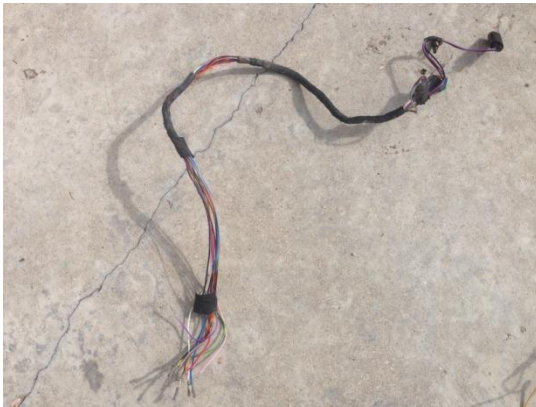
Black plug with 4 wires – Has a case that needs to slide off.

Black plug with 5 wires – Has a case that needs to slide off.

-Use a fine pointed tool (very small flat head screw driver or a pin) to remove the wires from the plug housing. Picture is random off the internet. But it shows how to remove the pins. Push down and slide out.



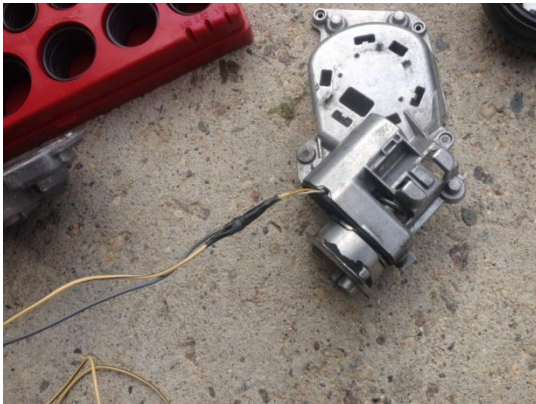
-Once all the plug ends are removed you should be able to slide the wiring harness out of the mirror.



Dismantle new M5 mirror in the same way you did your old mirror.

-Once the M5 mirror is stripped down you will notice that everything can be removed except the little round module that the wires go into because there are 2 wires (yellow and white) that are hardwired to the auto fold motor. Cut those 2 wires close to the round module and remove the module.

-Extend the 2 auto fold wires (yellow and white) roughly 1 ½ feet.



Drilling holes for mounting the old mirror motor in the M5 mirror.

As you have probably noticed when stripping the mirrors down is that the old mirror motor and the M5 motor mount in different ways. The Pre-LCI motor mounts with 3 long torx screws and the M5 motor mounts with a single screw in the middle. In order to get the Pre-LCI motor mounted in the M5 mirror is to drill some holes.

- This is the location for the holes on the right M5 mirror. You will notice that the old mirror and the M5 mirror look very similar in cast marks.
- The little post next to the farthest right hole needs to be ground down in order to clear the motor. The old Pre-LCI mirror has a notch in this area. Also the bottom edge needs to be notched to clear the motor wiring. The Pre-LCI motor plugs in from the side where as the M5 motor plugs in from the bottom.
- When drilling the holes, I find it easier to drill 2 of the holes then mount the motor and drill the last hole. The tolerances are very tight.
- Because the mirror is made of aluminum, a tap isn't necessary. Just thread the torx screws by hand.
- When doing the left side, the motor mounts opposite. You will have 2 holes on top and 1 on the bottom.



Final mounting of the mirror motor.

- The motor doesn't sit flush inside the mirror. If you look where the Pre-LCI motor mounted on the Pre-LCI mirror you will notice its elevated. In order for the motor to sit in the right position, you need to raise the motor slightly. I used rubber o-rings. 3 per torx bolt. 9 per mirror.



Final assembly.

-Now the mirror can be re-assembled and the wire connectors can be put back on once the harness has been fed through the mirror. If you forgot the order:

Purple plug

Slot 1 – Purple

Slot 3 – Black

Black plug w/ 4 wires

Slot 1 – Pink

Slot 2 – Yellow

Slot 3 – Orange

Slot 6 – Blue

Black plug w/ 5 wires

Slot 1 – Red

Slot 2 – Brown

Slot 3 – Gray

Slot 4 – Green

Slot 5 - White

Wiring the auto – fold function.

- Both mirrors wire the same way. Take the black plug with 5 wires. You will see that slot six is empty. Attach the pin (part # 61 13 8 366 260) to the yellow wire you extended from the auto-fold motor and slide it into slot six on that plug. Now take the white wire you extended from the auto-fold motor and tap into the white wire from the same plug. You can either buy a t-shaped wire tap or you can strip a section of wire and attach it that way. I chose the latter.

Coding the auto – fold function.

- I'm not going to tell you how to code. That's a whole other "how to". The coding for activating the auto – fold is:

VO

\$430

TMBT

-Folding

aktiv

TMFT

-Folding

aktiv