

# MG4 SE Reversing Camera Installation - summary / lessons

andyMG4

16 June 2024

**Links:**

Aliexpress: <https://www.aliexpress.com/item/1005006012928137.html>

Installation: Pt 1 <https://www.youtube.com/watch?v=uSfQA15bm9A> [Electronics]  
Pt 2 <https://www.youtube.com/watch?v=abpxb-V9grk> [Camera]  
Pt 3 <https://www.youtube.com/watch?v=dpVixK0qums> [Cable routing]

Discussion starts: <https://www.mgevs.com/threads/reverse-camera-se-lr.9579/page-3>

**Note:** AHD will not work in this installation, only CVBS

**Cameras:** AliExpress one is adequate, but not adjustable, and maybe not best CVBS resolution. The thread for the nut is easily stripped. P-31D seems best CVBS resolution and adjustable. More substantial thread / nut. AliExpress for £10? P-31E same best CVBS resolution, cannot use better AHD resolution, also adjustable. Numerous similar cameras are out there e.g. **P690** which, if CVBS, may well work subject to wiring as below.

**Cabling:** The P-31D/E cabling seems better quality (thicker, shielded) than AliExpress. Each camera type seems to have different pins in the 4-pin connector - suggest use same source Camera/Male/Female/Buck Converter so wires / volts match. If you want/need to cut cable, suggest do so between phono plug/REV POW (glovebox) and prior 'Buck Converter' - both sides will invariably be 3 core:

Red	<b>+12V</b>	
Black or shield	<b>Ground</b>	(see below - omitting the Buck Converter will likely kill the camera!)
Yellow	<b>Video signal</b>	

**Installation Sequence:** Will be by personal preference, experience and time. I did the glovebox first to check it all worked, then worked back routing the cable all on the (UK) driver's side to the tailgate. If you do not cut the cable, this means you are threading the smaller 4-pin male plug rather than the wider Phono Plug. I still removed the rear seat but you do not route across the car under it, just on 1 side.

**Glovebox:** the video is slightly confusing since to film some assemblies, others had to be removed first. To summarise:

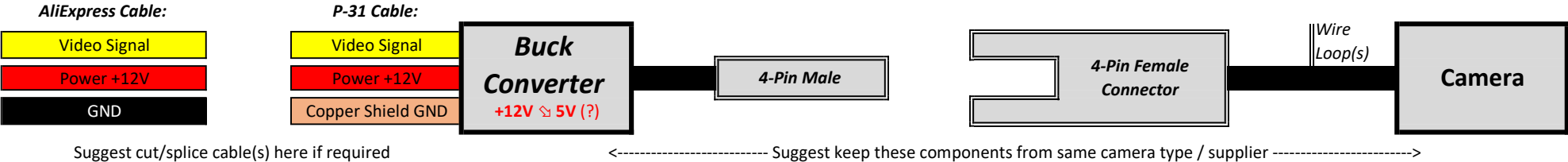
- 1 Remove Glovebox (Video 1 @ 3:30)
- 2 Remove Glovebox housing (Video 1 3:00) NB there is a cable fastener to remove from the hole you can see in Video 1 @ 3:16
- 3 Remove top of footwell (Video 1 @ 7:10)

**Cables:** the clip discussed at Video 1 @ 00:38 are on top of the cables, suggest use a jeweller's type screwdriver from above them

**Striker Plate Cover removal:** Video 2 @ 1:00 - a taped screwdriver slid in RHS top and it came off easily.

**Handhold insert removal:** Video 2 @ 1:20 - a taped screwdriver on the long top edge unclipped it easily I found rather than the short edge.

**Lessons / differences to videos:** The infamous 'white clips' holding the spoiler on are difficult. However, the 'square' holes in the video I think are not quite square, and if you can turn the clips through 90° they will pop out much more easily. Turn them back prior refitting the spoiler. MY2023 SE have a rear wiper, and the centre 8mm nut will require a socket set universal joint adapter. The spoiler is connected by 2 wires - 1 to the tailgate release latch - the whole latch can be popped out of the spoiler and then go back through the hole. The two number plate light connectors can be disconnected. Once done the spoiler can be taken away from the car to fit the camera. The P-31D/E cameras need a 13mm spanner.



### Video 1:

00:20 AliExpress camera reversing unit  
00:38 Cable to disconnect for video cables  
*The 'clip' to remove is on top of it - suggest jewellers type screwdriver from top*  
00:50 The cables can only go in one way (male-female)  
*Where he says 'green' more like turquoise*  
01:28 You are only removing RH plu as you see - the clips ('tabs') come out, but still stiff!  
01:35 Removed plug goes into AliExpress socket  
02:15 **Backacar VIDEO IN** is where camera will go  
02:25 Pink **REV POW** will go to red cable with camera lead (needs to be 12V when in Reverse)  
03:00 **[2]** Glovebox housing removal  
03:05 (7) Screws to remove glovebox housing  
03:16 *There is also a cable fastener to remove - can see hole 3:16 in video bottom left*

### Video 2:

00:10 remove tailgate trim to remove spoiler [1st 0:38 / 0:42]  
00:25 blue clip  
00:38 take handhold out [1 screw with cover plate]  
00:42 striker plate cover out  
00:53 Striker plate tab holding cover  
01:00 Striker Plate cover clip  
*Taped screwdriver in RHS at top came off easily*  
01:20 Handhold cover - plate over screw  
*Remove by screwdriver v long edge, not short edge inset*  
02:08 5 clips to remove trim  
02:30 plus 2 blue plastic clips  
02:40 Remove 9x 8mm nuts  
03:45 white clips a problem [see 3:06]  
*I think these need to be turned thru 90° then will pop out?*

### Video 3: (cable threading) *Must be easier to route wire all on Pax side to tailgate? Is what I did...*

01:30 avoid fouling on (rear) seat belt inertia reel  
01:35 (rear) seat bottom removal  
01:45 lever / yank raise seat bottom [see 2:50]  
01:50 allows seat base to come up - some wires  
02:00 seat belt buckles back into 'hole'  
02:05 push seat base backwards to release seat back... [see 3:00/3:05]  
02:10 Seat electrics to disconnect e.g. seat belt sensing  
02:25 UK Driver side green multipin  
02:50 *2 white clips that needed removing*  
03:00 *can see mount bracket that requires seat to go back for removal*  
03:05 *rails on rear seat that engage with bracket*

03:30 **[1]** Glove box removal  
03:43 Tabs to pull in  
04:10 Removing glovebox requires string loop removed (see 5:20)  
04:25 Glovebox light remove  
05:57 Glovebox light switch disconnect  
07:05 Pull housing out v clips  
07:10 **[3]** Remove top of footwell  
07:35 1 screw to remove  
*NB also some clips to push in to remove it*

04:10 spoiler popped off  
05:00 use RHS rubber cable guide [empty cf LH one]  
05:45 6mm hole for camera  
05:55 Camera drilled and fitted  
06:05 Youtube video has green & white wire loops  
*I have only white loop [AliExpress camera]*  
*He says 2nd loop 'reverses image'*  
07:20 Refitting spoiler v rubber using credit cards  
07:56 Grommets he used for cable  
08:10 Camera wire connector v loom [DC and video to camera]  
08:55 Power leads NB does not need earth (black)  
09:25 Add foam in tailgate to avoid rattle  
09:34 Removing rubber cable conduit tailgate ⇒ car  
09:50 Not easy threading cable / plugs through

05:10 Sidewall around rear seat tilt loop  
05:25 Comes out at bottom of seat  
05:30 Cable clip across car to Pax side  
05:35 Put seat back in  
05:55 Rear Seat ⇒ Pax side  
06:05 simply 'tuck under this bit of (side) trim' to the front  
06:20 *'all the way and look has come out here'* [glovebox]  
**End threading, have video male & red wire in glovebox**