

# MITSUBISHI TRITON MR / PAJERO SPORT 2019-CURRENT

TOWING MIRRORS INSTALLATION INSTRUCTIONS

## Our Range

**Towing Mirrors** 



**Rock Tamers** 



Easy Slides



Expanda Slides



Pantry



Clip on Trays



Power Boards



Tyre Spider



Power Slides



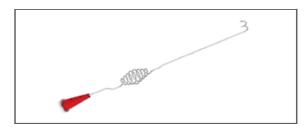
Fridge Cage



Cutlery Set



Cable Saver



Our Range Introduction **Getting Started** Before You Start Maintaining Your Mirrors Mirror Dimensions Fitting Instructions FAQS Troubleshooting

### **Getting Started**

Clearview mirrors are direct replacement mirrors that mount securely in the same position as your original mirrors.

#### What's in the box





- 1x Left hand side mirror & base
- 1x Right hand side mirror & base
- 1 x Installation instructions

#### If you have purchased a camera model mirror:

Within the shipping box with the mirror head, you will find a camera bracket kit for your make of vehicle. This kit will contain:

1 x LH and 1 x RH camera lower access panels (parts marked/inscribed LH or RH) 1 x LH and 1 x RH camera brackets (parts marked/inscribed LH or RH) 4 x camera bracket attaching screws

#### Tools Required:

- 1x 1/4 drive ratchet with a 10mm socket or 10mm spanner
- 1x Philips head screwdriver
- 1x Flat screwdriver
- 1x Panel removal tools
- 1x S-Hook



Whilst our mirrors can be installed by one person, the process is quicker and easier when an additional person is available to hold the mirror into position.

#### **CAUTIONS | WARNINGS**



#### **CAUTION**



#### **WARNING**

- Read through the fitting instructions before installation of Clearview Accessories.
- Always install the accessory following the fitting instructions. Failure to do so may cause damage to the vehicle or the accessory.
- Ensure all recyclable discarded vehicle accessory components and packaging are recycled following local recycling regulations.
- It is always recommended that this accessory is fitted by a qualified technician.
- Safely store and protect any removed vehicle components.
- Ensure all bare metal surfaces are protected using Automotive Bare Metal Primer and touch-up paint.
- Remove all metal swarf and dust from all vehicle surfaces if surface is used for accessory installation.
- Your vehicle maybe fitted with the Active Park Assist feature. You should only use this feature with your Towing Mirrors in the fully retracted, driving position.



## WARNING DO NOT UNFOLD MANUALLY

#### **POWER FOLD**

If your mirror is equipped with Power Fold. In some cases, the mirror head my be loose before installation as the mirror head needs to be electrically folded and unfolded for a minimum of cycles on its first use to synchronize.

Please refrain from folding the mirror MANUALLY as it can reduce the life span of the product.

Important: This mirror is designed to be manually folded upon impact as a safety feature.

#### COURTESY/PUDDLE LIGHT

Please understand that every car and every model are different, and that some vehicles have different wiring options to other vehicles. We do not know the exact wiring configuration of your vehicle.

If you require the use of the courtesy / puddle light function you will require the assistance of an Auto Electrician.

Clearview Accessories does NOT provide this service unless it's a standard function on the vehicle.

NOTE IF HARD WIRING: Orange Wire: Negative (-) | Grey Wire: Positive (+)

ATTENTION If your RHS puddle light fails illuminate after install, please join the additional connector (provided in the box) between the orange and grey wire

## Maintaining your mirrors

#### Maintaining Powder Coated Surfaces

Whilst powder coating is a lot more durable, and longer lasting than paint, it can still be affected by dust, dirt, salt water and constant exposure to the weather. For this reason, no protective powder coating is completely maintenance-free.

With the right maintenance, you can increase the life of the finish of your powder coated surfaces:

- Harsh chemicals and solvents can damage powder coating. Once damaged, the surface is a lot more vulnerable to fading and failure.
- We recommend regularly inspecting your powder coat and wiping any dust off with a soft cloth. Clean, good quality micro-fiber cloths are recommended.
- We recommend regular washing with highly diluted mild soap and water. Use a soft towel to gently clean. Rinse and dry with another soft towel.
- If your powder coat is losing its shine, you can apply a thin layer of high-grade non abrasive car wax after it's been cleaned. Wipe all the wax off once its dried and the powder coat should look like new again! Use a car wax brand that contains a UV blocker or UV inhibitors. Do not use compound-type waxes as they contain abrasives that can harm the powder coating.

It's important in coastal areas to regularly clean any powder coated surfaces as salt will stick to the coating, dulling its appearance. This can leave your powder coated surface looking chalky. We don't recommend paint touch ups to cover imperfections as paint won't adhere to powder coated surfaces. A local professional can quote to repair the powder coating.

#### How do I maintain my Powerfold mirrors?

Under normal Powerfold operation, there shouldn't be any maintenance required. However, if it is regularly used off-road, then the mirrors may need to be maintained every 12 months. This maintenance involves pulling the mirror into the fully extended position and applying dry lubricant on the arms.

#### Maintaining your Chrome Mirrors

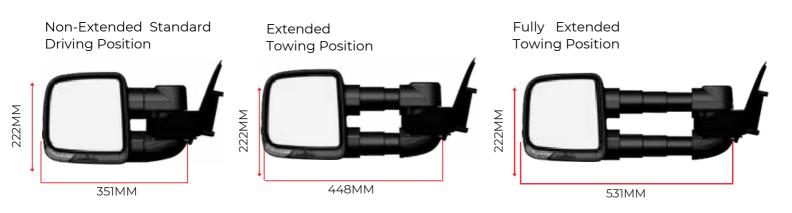
The chrome finish used on our mirror heads is a chrome plated plastic, which provides the appearance and feel of real chrome, in a more lightweight and cost-effective material. Weather conditions, how often they are washed and how close to the ocean you live, all play a role in the longevity of the chrome finish.

- Automatic car washes that use bristle brushes or acidic preparations can damage your chrome
- Salt and de-icers will surface pit chrome and extra care will be required with more frequent washes to remove residue.
- We recommend washing them weekly with mild soap and water, steering clear of ammonia-based or acid solutions.
- Clean, good quality micro-fiber cloths are recommended to wipe down the chrome surface and prevent water stains from forming
- An occasional polish with a non-abrasive chrome polish will help bring your chrome back to its original shine!

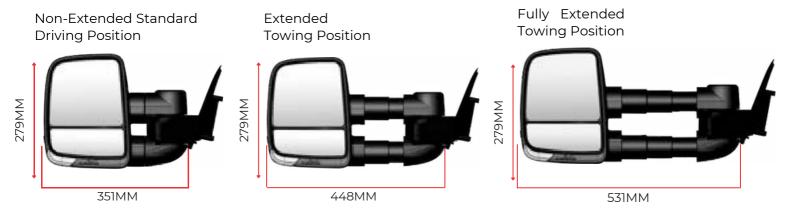
If chrome isn't properly maintained, it can develop pitting from corrosion or lose its attractive shine. We recommend Autosol Metal Polish and Autosol Metal Life Saver

## Mirror Dimensions

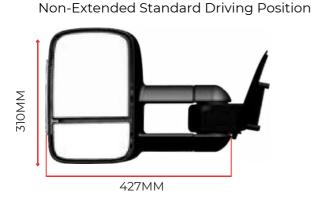
## **Clearview Compact**

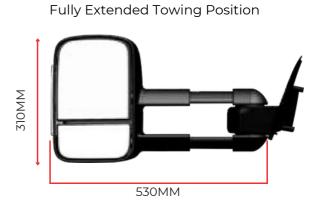


#### Clearview Next Gen



## Clearview Original





## Fitting Instruction

#### Step 1

Prepare vehicle

Place transmission into park position with handbrake on.

Turn ignition on and lower front door glass/windows.

Turn ignition off.

Ensure that your two front windows are down.



#### Step 2

Remove Door Trim

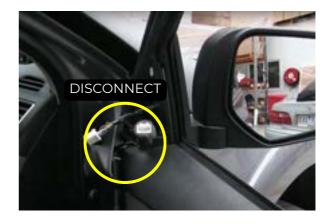
Using your panel removing tool, remove the quarter panel. There are wires behind this quarter panel that will allow the panel to gently hang while you follow the next step.



#### Step 3

Disconnect the Wiring

Find the wiring loom behind the quarter panel, and gently remove the plug.



Step 4

#### Remove the Standard Mirror





Ensure that you are holding your vehicle's standard mirrors securely and remove the 3 x 10mm nuts that are securing the mirror with a 10mm socket.

Once all 3 nuts have been removed, pull your mirror gently away from the car and store them away safely.



HANDY TIP: Keep your original OEM mirrors as back up should something happen to one of your Clearview Mirrors, necessitating the need to return it to us for repairs.

NOTE: IF YOUR OE MIRROR CONTAINS THE 360° CAMERA FEATURE, PLEASE FOLLOW THE NEXT STEP. IF YOUR MIRROR DOES NOT CONTAIN THE 360° CAMERA, PLEASE SKIP AND PROCEED TO STEP 5

#### Remove 'OEM' cameras from your original vehicle mirrors







- After removing both of your OEM Mirrors, place them on a sturdy bench top.
- Locate the bottom of the OEM Mirror, where you can find the lens of your 360 Camera.
- With a white pencil, gently create a line, from the glass side of the mirror, to the middle of the camera (Image 1)
- Once you have created your line, with a screwdriver, gently remove the OEM mirror glass from the top. Being mindful of any clips or wiring beneath it (Image 2)
- Once the glass has been removed, you can disconnect the mirror wiring for easy access. (You may need to use a screwdriver to de-pin them) Image 3

## Remove 'OEM' cameras from your original vehicle mirrors

 Begin by removing the two screws as pictured (image 4)

#### **IMPORTANT NOTICE:**

Right / Left cameras are different and they need to return into the same side they came out of.









- Using a flat head screwdriver, remove the Mirror cover. Being gentle and mindful of any clips and wiring beneath it (image 5)
- Locate the green 360 camera, using a flat screwdriver, de-pin the wiring (image 6)
- Now you will need to remove the lower half of the mirror cover, you can do this with a screwdriver (image 7)







- Then, remove the right bottom half of the mirror, which contains the Camera (image 8)
- Locate the Camera Bracket, and remove the two screws keeping it in place (image 9)
- Then, remove your Camera from your bracket, by removing the two smaller screws. Ensure the wiring is still attached (Image 10)







- Locate your Clearview 360 Camera Mounting Bracket, and your 360 Camera, place the 360 camera, with the white mark facing from the two clip points (refer image 1)
- Secure the 360 Camera and mounting bracket, with the smaller supplied bracket.
- With the two screws secure the smaller bracket into place. followed by the other two screws from the previous OEM Mirror. (refer images 2 & 3) you have right and left bracket
- Once everything is secure, connect your wiring, and clip the mounting bracket into place

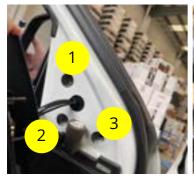
Tip: Ensure that your left side 360 °, is kept and installed with your left side Clearview Towing Mirror, and the right side is kept and installed in the right side.

Step 5

#### Install the Clearview Towing Mirrors

Unbolt the bolts from the Clearview Towing mirrors, then feed the cables through the quarter panel hole, aligning it flush to the quarter panel and ensuring that you aren't trapping any wires.









Using a 1/4 drive ratchet with a 10mm socket or 10mm spanner, use the bolts that were removed from the Clearview Towing Mirror to secure the new mirror into position, starting from the top and working your way to the bottom.

Step 6

#### Connect the Wiring

Once you have ensured that your mirrors are secure, plug your cables back into the switch, and tuck them behind the door panel.



NOTE: IF YOU DO NOT HAVE THE 360° CAMERA FEATURE, YOU CAN SKIP FORWARD TO STEP 7. IF YOUR MIRROR CONTAINS THE 360° FEATURE, PLEASE FOLLOW THE NEXT STEPS.

## Camera Fitting Instruction

#### Fitment of 360 camera & lower access panel

#### Prepare mirror head for fitment of camera & lower access panel

Opening in mirror housing should be clear for fitment of camera lower access panel and to provide access to camera wiring plug.



#### Remove parts from camera bracket kit

Within the shipping box with the mirror head, you will find a camera bracket kit for your make of vehicle. This kit will contain:

1 x LH and 1 x RH camera lower access panels (parts marked/inscribed LH or RH)
1 x LH and 1 x RH camera brackets (parts marked/inscribed LH or RH)
4 x camera bracket attaching screws

#### Assemble 'OEM' cameras to new lower access panels

1. Assemble the 'OEM' cameras to the camera lower access panel and align the camera in position using the camera brackets and screws provided, as shown. Do not securely tighten the screws yet.



Attaching screws

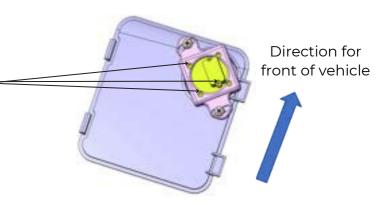
Camera brackets

Camera lower access panel

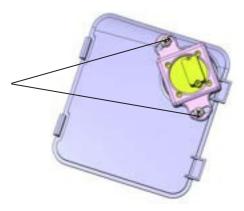
#### RH side only shown

2. Align 'OEM' camera so that the coloured dot or line previously marked on camera lens, is orientated towards the front of the vehicle and the camera bracket wings are positioned over the mounting lugs, as shown.

3. Secure the 'OEM' camera to the new camera bracket with the small screws previously removed from 'OEM' = camera and original vehicle camera brackets. Secure into these holes.

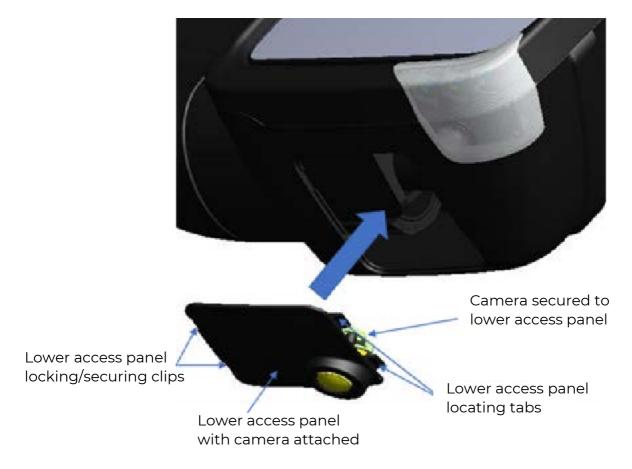


4. Position the camera brackets, as shown, with the attaching screws located approximately in the mid-point of the slots. The attaching screws can now be tightened.



## Camera Fitting Instruction

#### Fit new lower access panels with camera to towing mirror head



#### RH side only shown

With 'OEM' camera secured to the lower access panel – begin with right hand side mirror head.

- 1.Locate the camera wiring plug immediately inside the mirror head.
- 2.Connect this wiring plug to the mating plug on the camera wiring lead.
- 3.Ensure the 2 mating plugs are completely connected.
- 4.As you position the lower access panel to the mirror head, allow the wiring to fit into the mirror head opening.
- 5.Ensure that the wiring is not trapped or interfering with the fitment of the lower access panel.
- 6.Position the lower access panel 2 locating tabs into the slots in the mirror head opening. These slots are on the outside of the mirror head.
- 7. Now pivot the inner side of the lower access panel up until the locking clips are in contact with the mirror head opening.
- 8.Apply localised pressure to this edge of the lower access panel until the locking clips snap into position.
- 9.The lower access panel and camera assembly is now in position.
- 10. You are now ready to test alignment of RHs camera.

#### Check and adjust camera alignment on vehicle in preparation for testing:

- 1.Position vehicle on flat clear surface.
- 2.Ensure clear space of a minimum 1 meter each side of vehicle.
- 3.Place 2 parallel lines on the floor surface 500-600mm away from vehicle wheels.
- 4. These parallel lines should run approximately the full length of the vehicle.
- 5.These parallel lines should be thick enough to be visible on vehicle 360 camera screen approx. 50mm. The use of masking tape is suggested.
- 6.Refer to the vehicle owner's manual for instructions as to how to access the vehicle 360 camera screen.
- 1.Turn on vehicle 360 camera screen.
- 2. With Clearview towing mirrors firmly attached and electrically connected to vehicle and lower access panel & camera assembly securely in position, close the driver's door (RHS) fully.
- 3. Whilst seated in the vehicle, inspect the alignment of the RH parallel line on the floor surface.
- 4. You want to see this line being parallel to the longitudinal centerline of the vehicle, as shown below.
- 5.If the line is not parallel, you may want to adjust the angle of the camera on the lower access panel until this line is parallel. Refer below for instructions for adjustment.
- 6.The alignment does not need to be perfect; this is at your preference.
- 7. Repeat above steps for the LH camera.

Longitudinal centerline of the vehicle – as a reference.



50mm line marked on floor surface 500- 600mm from vehicle wheels. Want to be parallel to centreline of vehicle.

RH side only shown

## Camera Fitting Instruction

#### Adjust camera alignment on vehicles

1.Switch off the vehicle ignition.

2.Remove lower access panel, with camera attached, from mirror head as instructed earlier.

3.If required to gain access to the camera bracket screws, disconnect the wiring plug from the camera wiring lead.

4.Unscrew the 2 attaching screws just enough to enable movement of the camera bracket & camera assembly.

5. Maintain downward pressure on the camera bracket so that it does not move prior to your adjustment.

6.Adjust the camera alignment by rotating the camera bracket & camera assembly a small amount, either clockwise or anti-clockwise.

7.Re-secure the 2 attaching screws to hold the camera in the adjusted position.

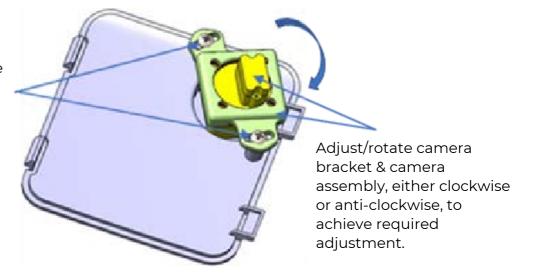
8.Re-connect the camera wiring plug.

9.Re-fit the lower access panel, with camera secured in adjusted position, into the mirror head as instructed earlier.

10. Repeat 'view camera alignment' steps instructed previously.

11.Repeat 'adjust' & 'view camera alignment' steps until you are satisfied with the alignment of the parallel lines on both the RH and LH side of the vehicle.

2 attaching screws to be unscrewed for camera alignment adjustment.



## Fitting Instruction

#### Step 7

#### **Test the Mirrors**

It is now time to begin testing that your Clearview Mirrors are operating correctly. Test your mirror functionality to ensure they run the correct way; Indicate left, Indicate right, electrically adjust your mirror view etc.

If your mirror functions correctly, it is now time to re-affix your door panel into position. If your mirror is not functioning properly, see our troubleshooting on page 20 or follow the instructions again just in case a step has been missed.



#### Step 8

#### Reassemble the Door Trim

Finish by fitting your quarter panel cover back on, ensuring that no cables have been trapped.

Double check that all mirror functions are working. If your mirror is not functioning properly, a cable has likely been trapped behind the door trim in the previous step.



Congratulations! You have now fully installed your new Clearview Towing Mirrors and are ready for your next adventure!

#### Can I install Clearview mirrors myself?

Yes! Depending on the complexity of the installation, Clearview mirrors are extremely easy to install and mount to the vehicle's original OEM mirror mounts. Depending on the vehicle's current mirror options, Clearview mirrors include plug and play wiring looms. Instructional videos are also available on our website

(clearviewaccessories.com.au) in the "HOW TO" section. Clearview recommends that any installation requiring hard wiring be done by a licensed auto electrician.

#### What is the fitting time?

Depending on the complexity of the installation, a dealer should be able to install the mirrors in approximately 15 minutes per side of the vehicle. Installation requiring special fitting and/or hard wiring will require longer fitting times (eg: Camera and electric wiring kits). Note: The 70 Series mirrors with electrics are more complex and will take more time than a 'normal' vehicle fitting. Please contact Clearview mirrors if you have any questions about fitting or wiring.

#### Are the telescopic arms electric?

No. The telescopic arms are extended manually. Clearview Mirrors will only fold against the vehicle electronically provided we make that model in Power Fold.

## Can I retrofit the original mirror base to the Next Gen or Compact mirrors?

No. The cost of converting the mirrors to suit the new models is not worth it. We recommend either selling your Original mirrors privately or through the "Pre-Loved" section (Within the "Shop" menu category) of our website and purchasing the new Next Gen or Compact mirrors brand new.

## Can I add an indicator later if I didn't order the mirrors with an indicator?

Yes, you can. But it comes at a greater expense than if you were to order the mirrors with indicators. Installation to the mirror head will require longer time and more parts to dismantle.

#### Are spare parts available?

Yes. We have a list of spare parts for all our mirrors on our website. Our dealers also have a list of all our spare parts.. If you cannot find the parts that you require, please contact us or any of our dealers to assist you with your inquiry

How do I maintain my mirrors?

We recommend using WD-40 Dry Lubricate.

#### How do I maintain my Powerfold mirrors?

Under normal Powerfold operation, there shouldn't be any maintenance required. However, if it is regularly used off-road, then the mirrors may need to be maintained every 12 months. This maintenance involves pulling the mirror into the fully extended position and applying dry lubricant on the arms.

I have just installed my new Powerfold mirrors and the mirror heads appear to be loose/floppy?

After the mirrors are installed, they need to be cycled a few times. This will allow all the internal mechanisms to set and find the proper positions. If the mirror head is still loose/floppy after they're cycled, please contact Clearview Technical Support.

I have installed my Powerfold Mirrors and have noticed that the Passenger's side mirror is closer to the vehicle compared to the Driver's side; Is this normal?

This is completely normal. In most vehicles, the mirror housings are angled differently between the driver and passenger side. This is because when you sit in the car, you are off centre, so generally the passenger side mirrors are closer to the vehicle body to allow you to have the same field of vision in the mirror.

## Troubleshooting

One of my Powerfold Mirrors folds/opens quicker than the other one; Is this normal? Generally, the passenger mirror will fold/open quicker, as it is closer to the vehicle body and therefore travels a shorter distance compared to the driver's side mirror. See previous question in regards to why the mirrors are angled differently.

#### My mirrors have been knocked out of Driving Position; how do I fix it?

Press the powerfold switch once. This should initiate the powerfolding motors and the mirrors should start folding inwards. Wait until the mirrors are fully folded in and have stopped moving, then press the powerfold switch again. This should now bring your mirrors back out to normal driving position. Check and see if the mirrors are locked into position firmly. If the mirror is not returning to the normal position, please contact Clearview Technical Support.

Note: The Powerfold mirrors can fold manually, however the manual fold mechanism is only designed as a safety feature. Through the lifespan of the product, manual folding will occur, such as people walking into them or accidentally bumping them. The internal mechanisms are designed to withstand this accidental manual folding during normal usage. It is not recommended for the mirrors to be manually folded constantly, as it will prematurely wear out the internal folding mechanisms and reduce the lifespan of the product.

## My mirror was knocked out of driving position. When I cycled them, there is a clicking sound and the mirror appears to have "jumped"; Are my mirrors damaged?

When the Powerfold mirror is being cycled to find its original driving position, it will "jump" back into position and make an audible click sound when mechanisms realign. Once the mirrors have found the original position and have been cycled, check for looseness and mirror movement. If they feel firm, then the mirrors have not been damaged. If they still feel loose, please contact Clearview Technical Support.

#### Why don't my mirrors fold all the way in/out when I press the switch?

The circuit breaker inside the mirror activates when the electrical current increases due to resistance. If the mirror stops before it reaches the folded in/out position, that means something is adding resistance while the mirrors are folding, hence activating the circuit breaker before it has reached the desired position. Please contact Clearview Technical Support.