



# FITTING INSTRUCTIONS

## TOYOTA LANDCRUISER LC70 SERIES

1984-CURRENT **MODELS** TM402 - TM403

**TOWING  
MIRRORS**  
*BUILT FOR WORK & PLAY!*





**CONGRATULATIONS ON  
YOUR PURCHASE OF A  
QUALITY MSA 4X4 TOWING MIRROR!**

**MSA 4X4  
TOWING  
MIRRORS**  
MSA 4X4



**MSA 4X4 Towing Mirrors are simple to fit as they mount onto your vehicle door in the same position as your existing mirrors.**

**Getting Started:**

*Here's what comes inside the box:*

- 1 x** Left hand side mirror
- 1 x** Right hand side mirror
- 1 x** Complete fitting kit
- 1 x** Electrical fitting kit
- 1 x** Installation instructions

*If anything is missing, please contact us via: [warranties@msa4x4.com.au](mailto:warranties@msa4x4.com.au)*

**Standard fitment to vehicles with the Toyota fitted extended side mirrors and 76 & 78 Series with OE mirrors.**

***MODELS* TM402 - TM403**



## IMPORTANT INFORMATION

MSA 4X4  
**TOWING MIRRORS**  
MSA 4X4



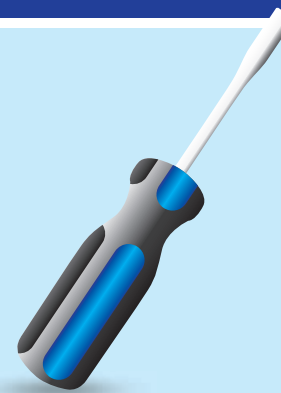
### The 70 series mirrors offer different fitting requirements.

Please fully read these instructions before proceeding with any fitting of your MSA Towing mirrors.

Fitting of the MSA Towing Mirror requires drilling of your vehicle, if you are not confident in doing this please contact one of our recommended dealers.

**Everything you need to fit the MSA Towing Mirrors is included in your fitting kit.**

#### Recommended Tools for installation:



- > **Phillips head screwdriver**
- > **Flat head screwdriver**
- > **Small ratchet with 10mm socket**
- > **Trim panel removal tools**
- > **Drill**
- > **3-4mm pilot drill bit**
- > **7mm drill bit**



# 1

## Prepare the Vehicle

First start with removing the door panels as per recommended manufacturer's instructions. Once this is done you can remove the OE mirror, you will also need to move your Toyota badge to allow installation. This is easily done by carefully using a heat gun to heat up the badge to soften the glue, or you can use a small piece of fishing line behind the badge and pull through to cut the tape away. **(FIG 1)**

### Removing the Badge on 76 & 78 Series

*Removing this badge will leave small holes showing in your door after the final mirror fitment as they are held in place with locator pins. To leave your badge in place you will need to follow the steps as outlined below.*



Figure 1



Figure 2

### **NOTE.**

You can opt to leave your badge in place and cover it with your mirror. You will not need the small secondary rubber insert provided, although this is not widely done there is the option to do so. **(FIG 2)**



Image for illustration purposes only.



## 2

### Preparing Mirror Bases

#### Marking and Drilling Out Base Holes

If fitting the MSA Towing Mirrors to a vehicle with the extended OE mirror with four fixing points you may find that the bottom two holes are fitted with rivet nuts. If this is the case we recommend removing these rivet nuts and using the backing plate supplied in the fitting kit. **(AS SHOWN IN STEP 3)**

The LC76 wagon and 78 Troopcarrier will require you to drill two base fitting holes through your door skin. If you are not comfortable or do not wish to do this we recommend using one of our recommended dealers to do this for you.

#### Supplied Rubber Backing

You will need to fit the supplied rubber backing to your mirror prior to installing the mirror to your vehicle. You will find two parts to your backing rubber, if you have removed the Toyota badge you will need to place the small infill rubber as shown, if you have left your badge in place you will not require the small rubber. **(FIG 3)**

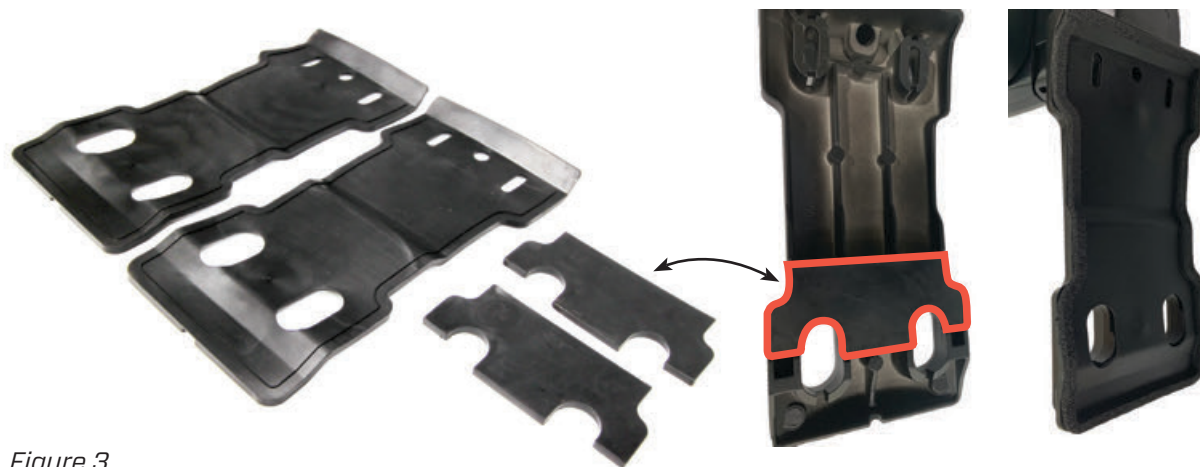


Figure 3





**76 & 78 SERIES**



**79 SERIES**

### 3

## Securing Bolts & Backing Plate

### Top Mounting Holes

The top mounting holes in the door are already fitted with securing nuts so for this you will just need the securing bolt with washer and the fixing cup.

The 76 & 78 Series OE mirror only uses two mounting holes. The MSA Towing Mirror will require you to drill two base securing holes. The easiest way to do this is to place your mirror and align it to your door. Tighten your top two bolts so you are happy with the fit and then mark the two base holes. Mark the centre location of your holes and remove your mirror.

Place the securing plate over your marks to ensure the holes you are about to drill will line up. These holes should be 70mm apart center to center. Drill a small pilot hole followed by a 7mm hole to allow a slight amount of play for your M6 fixing bolts.



Image for illustration purposes only.

### 3

## Securing Bolts & Backing Plate



Figure 4

Figure 5

Figure 6

To ascertain where you need to drill the access hole for the wires, place masking tape around the area where the mirror will sit. Then place the mirror on and align the pre drilled holes in the door to the centre line of the mirror base. Draw around the rubber base (**FIG 4**) and remove the mirror from the door. Place the rubber back on the door inside your lines. You can now see where you need to drill. You will need to drill a 8.5mm hole (**FIG 5**) to allow the wiring to pass through and also to be able to fit the rubber gromet in place.

Once you are happy that all will align, drill your required holes. Please use rust protector over the bare metal from your new drill holes. (**FIG 6**).

**\*Rust protector not supplied.\***

**Be sure to clean any drill swarf that dropped inside your door.**



Figure 7

### Secure the Base Holes

To secure the base holes you will need to place the supplied base securing plate (**FIG 7**) on the inside of the door skin. This plate has already been fitted with fixing tape. Clean the area inside the door with wax and grease remover prior to placing the plate over the pre drilled holes.



# 4

## Fitting the Mirror



Assemble your mirror fixing M6 bolts, washers and adjusting washers. **(FIG 8) (FIG 9) (FIG 10)** These washers are designed to allow for any discrepancy in the alignment of the holes previously drilled to fit your original mirrors. Hold your mirror in place feed the wiring through the hole you earlier drilled and fit the rubber grommet into place. Position your mirror and hand tighten all the bolts with a Phillips head screwdriver.



Figure 8



Figure 9



Figure 10





Figure 11



Figure 12



Figure 13



Figure 14

### Tighten the Four Securing Bolts

Once you are happy that your mirror is aligned and in place, you can fully tighten the four securing bolts with a 10mm socket. **(FIG 11) (FIG 12)**

### Push in Covers

In your fitting kit you will find four push in covers per mirror **(FIG 13)** to cover your securing bolts. These only go in one position and one way. Carefully place them in and make sure they are secure. **(FIG 14)**

**5**

*Installing the electrical switch and wiring*

This model also requires the placement of the switch in the dash, wiring up of the indicators and powering up of your mirrors.



**STEP 1**

Remove M6 Bolt holding speaker cover panel and retain for later.



**STEP 2**

Pull speaker cover panel directly straight out from the dash taking care not to damage the clips.

Pull switch mounting panel directly straight out from the dash taking care not to damage the clips.



**STEP 3**

From the back of the panel push the mirror blank out.



## 5

### Installing electrical switch and wiring



#### STEP 4

Feed main wiring loom through mirror control surround.



#### STEP 5

Feed wiring through blank hole and down towards the pedals.



#### STEP 6

**Please note the LHS wires are the longest ones.**

Make sure that all wiring is clear of moving parts.



#### STEP 7

Once done, insert mirror control and surround into blank.

## 6

### Connecting to a power source



**Please pull your fuse from its holder prior to connecting to a power source.**

You will need to connect your red fused power wire to a switched auxiliary power source and earth your black wire.

You will find we have left off all the connecting plugs from the wiring for ease of running through the body and the door rubbers. You will need to insert them to the connecting plugs once all the wires are in place.

With the door open you will find the wiring for your electric windows passing from the body to the door. You will be able to feed these wires through by making a small slit in these rubbers and taping your wiring to the OE loom. Once you are finished, feed your wiring tight up inside the door and away from your window mechanism.

Connect the small barbed terminals into your three-pin male connector and match them into the female plug. Now also do the same for your two-pin Blue and Black wires.

You will need to run your indicator wires out through the guard and splice them into the wires from the back of your indicator in your guard, this will power up the indicators on your MSA 4x4 Towing mirrors.

Once you have all your wiring complete you can now replace the fuse and check the functions of your mirrors.



**7**

**Re-fix Badge**



You can now re-fix your badge, this is best done with double sided 3M tape.

**IMPORTANT**

All that is left to do is check your mirror is functioning correctly and adjusts to suit your driving position.

***Your MSA Towing mirror installation is now complete.***



### PLEASE NOTE

All dimensions are taken from the widest part of the mirror body on that position.





## MSA 4X4 TOWING MIRROR WARRANTY

MSA 4X4  
**TOWING  
MIRRORS**  
MSA 4X4



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All MSA 4X4 Accessories products are designed and manufactured to the highest quality standards to perform as they should. We stand behind our Driving Mirrors with a 5-year Manufacturer's Warranty.

All claims under this warranty should be made by returning the product at your cost to MSA 4X4 Accessories Pty Ltd, 43 Harrington Street, Arundel, QLD 4214, with the detail of the fault, proof of purchase, proof of identification and vehicle fitment details where relevant. 5-year manufacturer's warranty applies to the original purchaser only.

If we determine that an MSA 4X4 Towing Mirror is defective in materials or workmanship during the 5-year Warranty, we will either repair or replace the product. Repair or replacement is solely at the discretion of MSA 4X4 Accessories Pty Ltd.

This warranty does not apply to failure or damage caused by incorrect or faulty fitment, accidental or intentional damage, misuse or abuse, failure of other products, operation of the product outside of its environmental or technical specifications, or repair or modification carried out by anyone other than MSA 4X4 Accessories Pty Ltd. No charges will be accepted for external labour or materials. MSA 4X4 Accessories 5-year warranty does not cover any scratches, cracks or chips.

MSA 4x4 Accessories products are designed for lifestyle applications. Due to the harshness of the mining environment, MSA 4X4 Accessories products used in mining applications that may be operating outside of their environmental and technical specifications, are therefore excluded from the 5-Year Warranty. MSA 4X4 Accessories products used in mining applications are warranted for up to 1 year.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.





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