

Guidelines for fitting MPH dials into an imported Toyota Rav 4.

(Part No. C343 & C412 & C1533)

Before starting, compare these dials with the your originals to make sure they are correct for your vehicle (taking particular note of the calibration positions)

Firstly, with the engine cold but ticking over, make a drawing or take a photo of the dials showing the position of each of the needles (this image will enable you to confirm that the needles are back to their original positions at the end of the job).

To fit the new dials you need to gain complete access to your original dial faces. To do this you need to remove the instrument cluster pod from the dashboard. You will need to disconnect any electrical connections from the back of the instrument pod and take it to a clean workbench.

Now remove the front lens from the pod by carefully releasing the **BLACK** plastic clips around the sides. The dial faces are now completely exposed.

If you gently move the speedo and rev counter needles in a clockwise direction you will find it moves easily, now move it back in an anti-clockwise direction and you will feel a resistance as it comes to a natural stop. ***Important: Mark the natural stop positions of all the needles with a pencil because you need to refer to these markings when replacing the needles.***

Grip the centre hub of the needle between your finger and thumb and twist it clockwise whilst pulling upwards. Keep twisting and pulling until the needle comes off its spindle (even if it rotates several revolutions).

Gently pull & remove the black plastic collar rings from around the centre spindle holes. Now you can lift off the dial fascia.

Mark the Speedometer dial: Around the Speedo face is a raised bezel ring (usually in grey / silver). If you hold the fascia in front of a light you will see that calibration lines are visible on the ring. Using a soft pencil, lightly (so you can rub it out later) mark the positions of the '0 Kmh' calibration line the '80 Kmh' calibration line. This is so you can position the MPH dial correctly.

Using a very sharp craft knife: cut around the outer edge of the dial faces as indicated by the white dotted line in the diagram. It is important to leave a shoulder of about 1mm for the new dial to rest on, ***don't leave any more than 1mm as it would interfere with the illumination of the calibration lines on the new dial.*** When cutting around the digital display window area at the bottom of the speedo, ***don't cut into the recessed level, just cut on the upper level of the dial*** as indicated by the white dotted line in the diagram.

With the center cut out turn the fascia over. The calibration lines at the back of the raised grey / silver bezel need to be blacked out to stop light from getting through (as do the remaining tips of the calibration lines on the lower black area of the speedo face). Use a black permanent marker felt pen with a broad tip to do this. Hold the fascia in front of a light to check that no light is getting through these calibration lines.

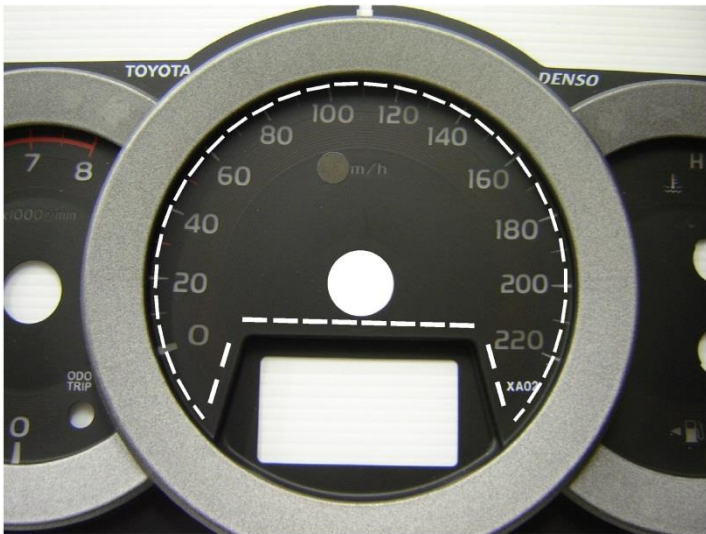
Sit the new dial onto the 1mm shoulder on the original fascia and hold in front of a light. Check that all the numbers and calibrations on the new dial are lighting up ok. If not you may have to trim the original dial fascia further.

Return the original fascia (with its center cut out) back to the instrument cluster. Now take the new MPH dial and remove the paper liners from the top of the two adhesive shapes on either side of the center hole to reveal the adhesive. Sit the new MPH speedo dial into the recessed area of the original fascia so that it rests on the ‘1mm shoulder’. To position the dial accurately: line up the 50 MPH calibration line with the 80 kmh pencil line that you marked earlier, (double check that the two ‘0’ points are lining up too). When it is correctly positioned, press down on the dial so that the adhesive sticks the dial down and clip the black plastic collar ring back around the centre spindle hole. When you are sure it is in the correct position you can rub out your pencil lines.

For the tachometer & temperature & fuel; replace the black plastic collar rings to hold them in place.

Refer to your pencil marks (of the original needle natural stop positions) and replace the needle pointers ensuring they return to their original natural stop positions. You can turn them anti-clockwise a full revolution to get back to the original stop position.

Before replacing the clear lens on the pod we recommend reconnecting the electrical connections and taking the vehicle on a short run to be sure that the needles are working correctly. If the stop point is wrong when the engine is idling (compared to your very first drawing or image), then make a note of how far out it is, turn off the ignition and gently push the needle the required distance against the resistance and try it again. Once you are satisfied that everything is OK, then disconnect the electrical connections, refit the lens and replace the complete instrument cluster back into the dashboard being sure to connect the electrics.



CUT ALONG DOTTED LINE

		These dials will be a perfect fit in the majority of vehicles referred to on the label, but sometimes, minor variations occur between models during manufacture at the car plant. If this has been the case with your car, it may be necessary for you to make very slight adjustments to the new dials, using a pair of scissors or a craft knife. If more than minor adjustments are necessary, please contact us immediately. Lockwood International make replacement dials for hundreds of different models and it would be impossible to give detailed instructions for every one. The above suggestions from Lockwood customers who have fitted our dials, coupled with a little common sense should be sufficient. But no responsibility will be accepted by the vendor for any damage caused whilst fitting these dials.
--	--	--