# Clearing the Windscreen

Surely the ability to see just where you are going when you are driving a car is the most important factor on whether you and your passengers are going to arrive safely at your destination. Not only for you and yours of course, every other driver, rider and pedestrian nearby needs you to avoid them. More important even than whether you have had a drink or are smoking or using the phone or simply checking up on the child seat. Yet many drivers are on the move with windscreens that are so clouded with condensation that they distort the view ahead making an accident very possible. As summer days shorten towards autumn the humidity and temperature conspire to create just those conditions which can make clear vision through the screen very tricky. What can you do about it? Firstly before you even start a journey make sure the inside of all the glassware is clean, especially the windscreen. This is particularly important if in the morning you will head eastward at any time, straight into the rising sun which would almost completely blind you if the screen is moist allowing the sun's rays to spread along the moisture and create an almost opaque surface. A good clean cloth and if available some proprietary cleaner would be ideal but if necessary just a clean cloth and a bit of spit works wonders. What next? If your car has a Demist button then turn it on. If there is no button dedicated to demist then turn on the heater with the air directed towards the windscreen but make sure that you turn on the AC button as well. That's right you need the heater and the AC on at the same time. Believe me if the AC is working well any mist on the screen will disappear like magic within seconds and gradually the demisting will extend around the interior of the car until even the rear screen will be entirely clear and dry. This works brilliantly except when the ambient temperature is near or below freezing point when it stops working altogether.

I can well remember driving on the A7 Autoroute in southern France up the Rhone valley a few years ago on a day when the rain was constant and very hard; virtually every other car we could see had "grey-glass" all around so their drivers were driving with just a vague view of the car in front but almost nothing else, no visibility out of the side screen, nothing sensible to see of cars behind or at the rear or of other cars about to overtake. A very dangerous situation indeed. Our car had completely clear glass and so did a few other cars but the vast majority were driving almost blind.

This safety feature is not fully used by all drivers however. Many are scarcely aware of the effectiveness of this facility as were those drivers on the French Autoroute above. In heavy rain or spray conditions also do not forget to use dipped headlamps as heavy lorries do not have an interior rear view mirror and both outside mirrors will have some spray on them and the driver might easily not notice a car without headlights approaching from behind to overtake. This is particularly important in Kent where both the M20 and the A2/M2 highways carry a very high percentage of foreign lorries with the driver sitting on the 'wrong' side of the cab and thus able to see approaching cars only with some difficulty. A car that has not been seen and has been side-swiped and squashed by a lorry is not a pretty sight. So use the Demist or AC button for good vision and also use the headlights to ensure that you can be seen by others. I wrote the bulk of this paragraph a year or more ago but a few months ago in mid-June 2016 I drove down part of the M2 in a exceptionally heavy shower. I could scarcely believe the number of cars being driven without headlights on - but only cars, none of the trucks were driving so dangerously. Are some drivers so convinced of their immortality, is this just stupidity or is this another example of

drivers driving on auto-pilot? Please watch the professional drivers and if you see that most articulated lorries have their headlights switched on, ask yourself if you also need your own cars headlamps on too.

The Demist function is even more effective during fog. What might appear to be thick fog may actually be a combination of a thin fog and a heavily misted windscreen. It is always worth occasionally putting the wipers on as well (use interval wipe) as sometimes the fog accumulates on the exterior of the screen, or take a quick glance out of the side screen to see if it is clearer that way. It is generally better to use dipped beam in foggy conditions rather than the main beam which can leave you with less vision due to the light scatter on the fog particles. If there are road lamps on, keep an eye on those as the fog is frequently only at low level and the lamps above the fog can be seen for some distance and give an indication of road bends before you could see them at road level. In foggy conditions it is usually not the fog which is slowing you down, it is a driver with a misty windscreen up ahead of you who is holding up a long line of traffic.

Why is it necessary to use the air conditioning in conjunction with the heater to obtain good demisting? The damp air entering the car firstly passes through the very cold AC evaporator where the moisture will condense on the extremely cold metal fins of the evaporator. Now the air having been dried can pass through the heater and with hot, dry air can remove any surplus moisture from the glassware.