

### SAFETY FIRST

Isolate the mains electrical supply before commencing installation. All electrical work must be carried out in accordance with the latest IET wiring regulations (BS7671) by suitably qualified engineers. Ensure the voltage of the INVINCA is compatible with the mains supply input.

### TOOLS REQUIRED

M8 Tri-head key  
5mm Allen key  
2 No.13 mm ring/open ended spanners  
Wire trimmers  
Phillips screwdriver (small)  
3mm Spade end screwdriver.  
15mm Drill.

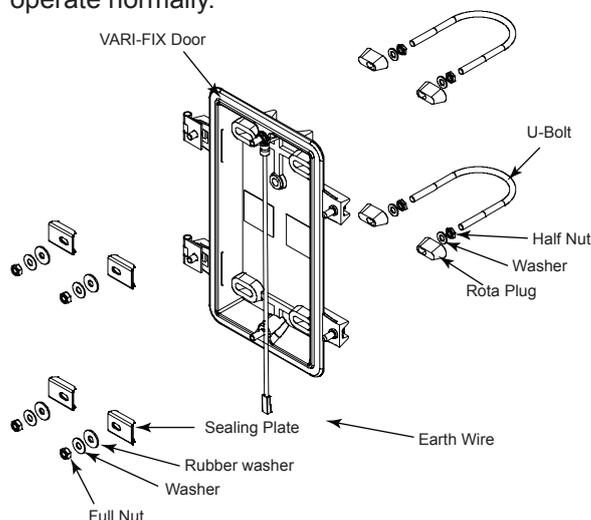
*Please see the separate user manual for details on how to configure the INVINCA VAS detection settings .*

### INSTALLATION

- To ease installation, it is recommended that the sign body of an INVINCA is removed from the back-door assembly prior to installing the unit. To do this open the unit by undoing the M8 Tri-head screws and then, when hinged open, simply de-mount the body from the hinges by undoing the 2 x M8 button head screws using a 5mm Allen key.
- It is recommended to mount the INVINCA VAS so that the base of the INVINCA VAS is a minimum of 2300mm above ground. To do this drill a cable entry hole in the post at a point 2700mm above ground facing the oncoming traffic (see overleaf). De-burr and surface protect the hole then feed the supply cable through the post and into the back of the VARI-FIX back door through the cable entry grommet. Pull around 500mm cable through to allow for the sign to hinge open.
- Select the appropriate U-Bolt fixing set for the mounting post diameter. U-Bolt kits are available for 76, 89 and 114mm posts. Where the post size does not suit the U-Bolt system a banding cleat kit is available.
- Offer the VARI-FIX back door to the post so that the cable entry grommet aligns with the post cable hole.
- Take one of the U-Bolts and pass it around the mounting post and penetrate the two projecting ROTA-PLUGS into the slotted rebates in the VARI-FIX back door.
- Assemble the sealing plate and rubber washer onto the U-Bolt ends and secure with the 2 no. M8 washers and full nuts.
- To achieve the correct assembly of the VARI-FIX U-Bolt system, slacken the 2 no. half nuts and evenly tighten the 2 no. M8 full nuts until the 4 raised lugs on the VARI-FIX door firmly engage with the post diameter.
- When secure, retighten the 2 no. M8 half nuts, which will automatically push the ROTA-PLUGS into the slotted VARI-FIX holes to form a weather-proof seal.
- Repeat procedure for the other U-Bolt assembly.
- Remove the plug socket from the display cartridge and wire to the supply cable remembering to fit the cable restraint and terminal cover.  
L – Line ,E – Earth, N – Neutral

Note: The spade terminal from the earth cable of the back door should be connected to the spare spade terminal on the back of the display cartridge

- Replace body onto the hinges and after securely tightening the 2 No. M8 button head screws. Re-connect the plug socket then close the body onto the VARI-FIX door and securely tighten M8 Tri-head fixings.
- Re-connect the power and after a short delay, the INVINCA VAS will display a test sequence until activated by an approaching vehicle. It will then operate normally.



*Simmons signs Limited reserves the right to alter or improve this guide without prior notice.*