The idea behind daytime running lights is obvious: people can see you better when you're on the road. In an ordinary car you simply turn on your dipped beam, but in the Volvo 480 this means you have to raise the popup headlights. As you can see on the photo above the popup lights remain closed and you can be seen better by others. If you want to install daytime running lights on your Volvo 480 and it doesn't have them you can use this manual. We think that this manual covers all Volvo 480. **Xander Tielrooy** was so kind to provide us the following installation procedure.

Installation procedure:

First check the bulbsocket of your parking lights (between the direction indicator and the long range light). Does it have two or three connections? If it has only two, you need to get two sockets with three connections (probably partnumber 3414335-4, please check with your dealer). The plug that goes in, already has three connections, so this will fit. Make sure you install 21/4 Watt lightbulbs in these sockets, because installing the wrong bulbs might cause serious troubles. Using rear/brake lightbulbs (21/5 Watt) will drive you mad as they don't fit very well and will stop functioning every now and then because the don't make contact in the sockets.

Second, open your relaybox and pull the cylinder shaped light-control unit out, located most right in the box as seen by the driver. (Cars with a chassis number above 530098 have a cube-shaped unit) You have in your hands: 3.11 in *figure 1*.



Figure 1. (scheme with relay)

Check whether there are metal points on the spots marked with S, SL and SR. If this is not the case, you need another light-control unit: 3416797-3 (up to chassisnr. -530098) or 3448130-9 (chassisnumber 530099- and onwards). According to the parts-manual there is for chassisnumbers 530099- and onwards only such a unit available which **does** support day running lights, so you'll probably have the right one if your car has a chassisnumber above 530098. In case you need a new light-control unit, but you don't mind that your new day running lights are not checked by the bulb failure system, you can also do the following: Connect the spots in the relaybox where S, SL and SR are located; find this location by comparing your light-control unit with the metal points in the box. The best way to make these connections is to do this under the box. The colours of the wires are respectively white, green and white/green.

Third you have to pull your lightknob out of the dashboard. Remove the black/clear "light transporter". Insert carefully a screwdriver in the hole indicated in *figure 2*. (both sides) and pull the part with the copper connections from the rest of the knob. **Be prepared!** While doing this a couple of springs and other tiny things will be released, so don't do this outdoors or on a deep-pile carpet, because you can't prevent them from jumping out. You now have 3 dumb-bell shaped metal contacts and six small springs (see *figure 3*., a pushpin is on it for comparison). Further you have 2 small metal balls and 2 larger (but still small) springs (*figure 4*.).

All you have to do now is getting a fourth dumb-bell and two small springs. Put all the springs verically in the knob and place the dumb-bells horizontally, see *figure 5*. (Ask your little sister for help, because it is far from easy with grown-up shaped hands.) In the hole indicated in *figure 6*., one of the balls followed by a larger spring has to be placed. The same holds for the other side. Now close the knob while pressing both larger springs with a propelling pencil for example. Refit the "light transporter" and put the knob back into the car.



Figure 2. (prise open with screwdriver here)



Figure 3. (size of spring and contact)



Figure 4. (size of ball and spring)



Figure 5. (contacts on the inside)



Figure 6. (inside of the button)

Some background information:

The dumb-bells connect and disconnect the copper contacts inside the knob (see *figure 7*.). In *figure 8*. the 4 spots can be seen where the dumb-bells should be located. In this picture the knob is held on position O, with the O pointing upwards. In the following table is indicated which connection is made by each dumb-bell with reference to *figure 1*. or the outside of the knob (*figure 9*.).



Figure 7. (how the inside works) Figure 8. (location of dumb bells in pos **0**)

Figure 9. (outside of the knob)

| | 1 | 2 | 3 | 4 |
|-------------------------|-------|-------|------|-------|
| Position O | 15-A | 15-58 | - | - |
| Position 1 (parklights) | - | - | 30-M | 30-58 |
| Position 2 (popups up) | 15-56 | - | - | 30-58 |

Contact 15 refers to switched 12 V (by the key), contact 30 refers to constant 12 V, 56 is the connection to the bulbs in the pop-ups, 58 is the connection to the parking lights. A is the connection to the day running lights and M is in some countries connected to the same wire as A. If only 3 dumb-bells are present, then position 2 is empty. Filling this one with a dumb-bell and not replacing the bulbsocket and bulbs, results in dim day running lights. Mind that there can be differences between different countries.