## 828 Dwners Alulh

## TWELVE-HOUR MODE FOR DIGITAL CLOCK <br> Michael Schmidt - 928 Owners Club

Yes, there is a way to convert that 24 hour format digital clock in your 928 to 12 hour format. It is more involved than simply pressing button "A" for five seconds, but it's really not too bad. First you need to remove the clock from the car.

The clock is held in place by the trim piece that goes around the clock and gear shift opening. This piece is removed by carefully pulling it up and back. You may need to pull one or both sides of the console apart slightly to get the trim piece started out. The clock assembly is sandwiched between this trim piece and the console. Once the trim piece is removed the clock assembly simply lifts out. Disconnect the wires at the back of the clock assembly as you remove it and make sure that they don't short out against anything or each other.

Remove the black plastic face piece from the clock assembly by pushing in the four retaining hooks on the back and pulling it forwards. Be careful not to loose the two small buttons that are used to set the time. The buttons just lay in the two holes in the black face piece and will fall out if the piece is turned. See Figure 1..

Top Face Retaining Hooks


FIGURE 1
Face Piece Retaining Hooks

Bottom Face Retaining Hooks

Remove the solder from the two connections on the back of the white plastic clock housing with a soldering iron and a desoldering tool. A desoldering tool is simply a tool that sucks up the solder when it's melted with the soldering iron. They're available from Radio Shack or any other electronics retailer for only a few dollars. Remove as much of the solder as you can, otherwise you won't be able to get the clock out of the housing in the next step. See Figure 2.

Soldered Connections


FIGURE 2
Soldered Connectors

Remove the clock circuit board/digital display assembly from the white plastic clock housing by releasing the two retaining hooks on the front of the housing and pulling it forwards. See Figure 3. Use caution so as not to break the hooks off when pulling them back. If the assembly doesn't come out easily after the retaining hooks have been released, you probably still have some solder on those connections on the back holding the assembly in place.


FIGURE 3

Circuit Board Retaining Hooks

Lay the circuit board/digital display assembly face down and remove the two small screws on the back of the circuit board. These screws hold the circuit board and the digital display together. See Figure 4. Do not
turn the small adjusting screw in the center of that round plastic piece that's on the back of the circuit board. After the two screws are removed, lift the circuit board up away from the digital display housing.


FIGURE 4
Circuit Board Detail

On the side of the circuit board that was towards the digital display, you will see the letters VDO printed on the circuit board. Directly beneath the letter V there are two small copper areas. They look like a copper circle that's been split in half. These two copper areas are connected on the circuit board. Holding the circuit board up to a light will reveal the darker line connecting the two areas in the small area between them. Take a pin, or similar small pointed tool, and scratch through the connection attaching the two copper areas. Make sure the connection between the two copper areas is completely broken. Use care not to scratch through any other connections on the circuit board when you're doing this. Holding the circuit board up to a light will make it easier to see if you have successfully removed the connection completely. See Figure 5.


Directly underneath the letter D of the printed VDO, you will see another two copper areas that look like the first pair. Using a soldering iron and a small amount of solder, connect these two copper areas across the gap. Use only enough solder to cross the gap between the two areas and ensure a good connection between them.

Screw the circuit board back to the digital display assembly with the two small screws, making sure the alignment pins match up to their holes properly. Be careful not to strip the screws when tightening them in
the plastic. Press the circuit board/digital display assembly back into the white plastic clock housing until the two retaining hooks snap over it to hold it in place. As you are doing this, make sure the two long pins on the back of the circuit board go through their holes and out the back of the clock housing. Solder the two long pins back to the copper connections on the back of the clock housing, the way they were initially.

When I got my car the clear plastic lens in the clock's face piece had a foggy or hazy appearance to it. As long as the face piece is off, it might make it a little easier to take care of this problem if you have it too. A little polishing of the clear plastic lens with a small amount of Meguiar's Step 1 Paint Cleaner returned mine to crystal clarity.

Before you reinstall the black plastic face piece to the clock assembly, make sure the two small plastic time setting buttons are in their holes. There are two different sized retaining hooks on the face piece so that it can only be put on one way. Press the face piece back into place until the retaining hooks for it snap into position. Make sure the two small clock adjusting buttons are still in their proper locations.

Reinstall the clock into the car in the reverse order of removal and that's it. No more people asking you what $21: 47$ is!

