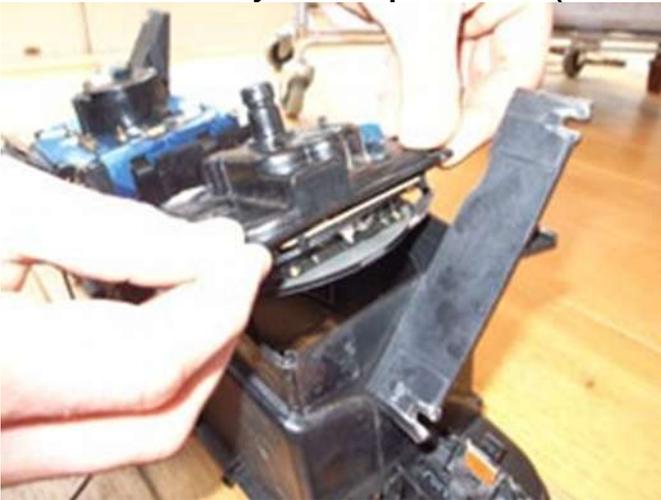


# Section 2 – Gauge Fitting

1. Remove the four screws that hold in the speedometer.



2. Carefully lift the speedometer free. (take note to be careful with the blue flexible circuit ribbon)



3. Flip the speedo on its back and rest it on the center of the cluster housing.



4. Carefully lift the needle over the top of its resting pin.



5a. With two fingers and a thumb, take hold of the black circular part of the speedo needle.



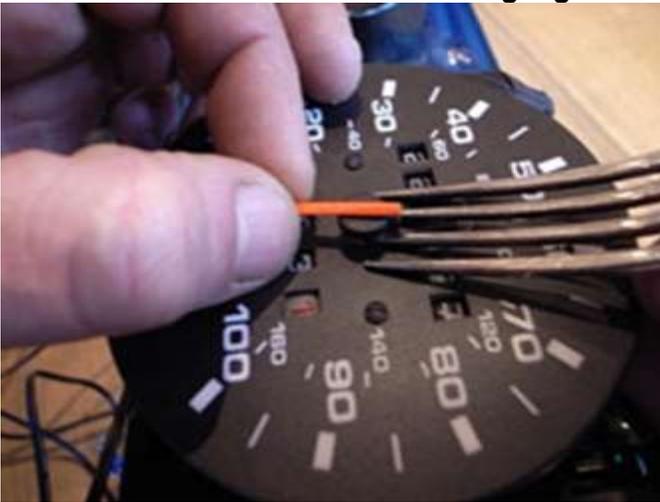
(Note – The needle itself can be very fragile. Hold and exert upward pressure on the black circular portion of the needle only. WEAR SAFETY GLASSES)

5b. Roll your fingers under the black circular part of the needle exerting upward pressure.



(Note – It may take more force that you realize to release the needle from the speed. Try to keep the pressure exerted on the needle as vertical as possible to avoid bending the spindle of the speedo. These needles can be very difficult to remove. If you are having too much difficulty removing the needles, take them to an instrument repair facility for removal.)

5c. If the previous method for removing the needle fails you, try the following. Insert a thin tipped fork between the needle and the gauge face with the fork tines parallel to the needle.



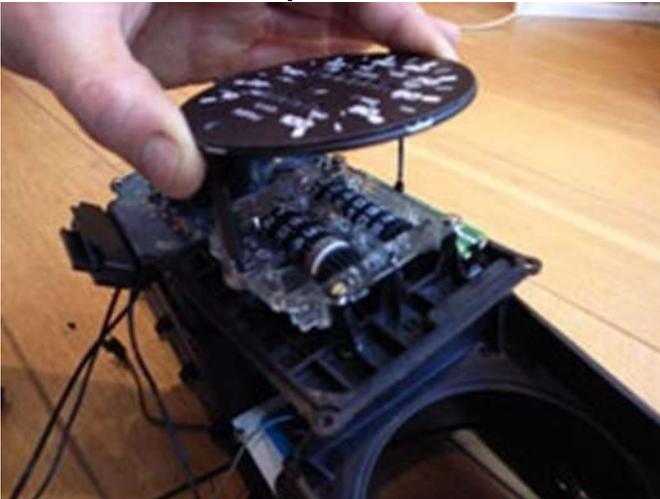
5d. Push the fork forward like a wedge and it should eventually free the needle.



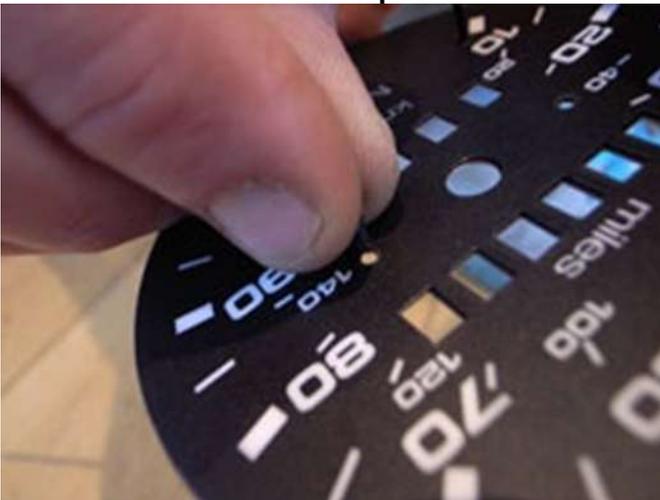
6. Remove the two small black screws from the face of the speedometer.



7. Remove the speedometer face.



8. Place the plasma speedometer gauge face onto your original gauge face, line them up with each other and push the black screws through the screw holes.



9. Place them back onto the speedometer and gently tighten the screws.



(NOTE – Do not tighten the screws too tight as this could cause separation of the foil layers in your new plasma gauge face. This will not affect the operation of the gauge, but can cause circular bulges to form around the screw head)

(NOTE - If the screw heads become scratched from your screwdriver, a quick dab with the black permanent marker can help hide the damage)

10. Paint the needle with the water-based UV-reactive paint supplied in the kit.



(NOTE – Be very careful not to get paint onto the black circular portion of the needle. If this happens, wait for the paint to dry thoroughly and scrape away the dry paint. Masking tape can help prevent accidental contact with the paint brush, but don't rely on it for a clean edge.)

(NOTE - Paint will require at least 2 coats for coverage. 3-4 coats may be necessary. Best results are achieved by waiting for each coat to thoroughly dry before applying the next)

11. Once dry, replace the needle onto the speedometer. Do not push the needle all the way on yet.

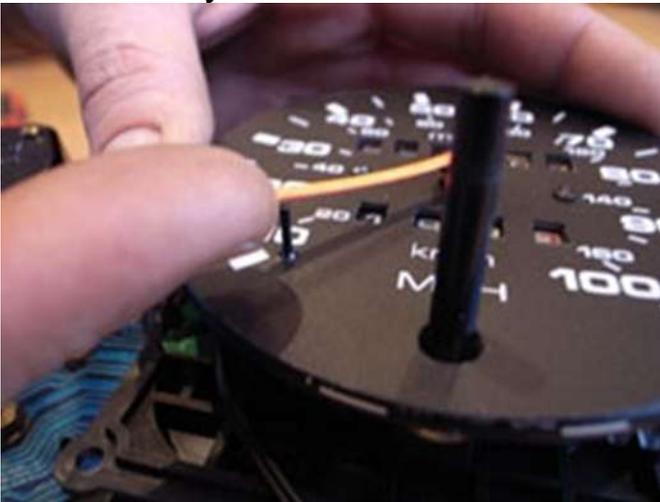


(NOTE – When at rest, the needle should point to the small vertical line at the edge of the gauge face as shown. To test if the needle is “at rest”, move the needle against the stop peg and release. If the needle returns to line up with the vertical line, it is correct. If not, remove and replace the needle until you have achieved the correct position)

12. One the needle line up properly, push down on the center of the needle to secure it onto the spindle.



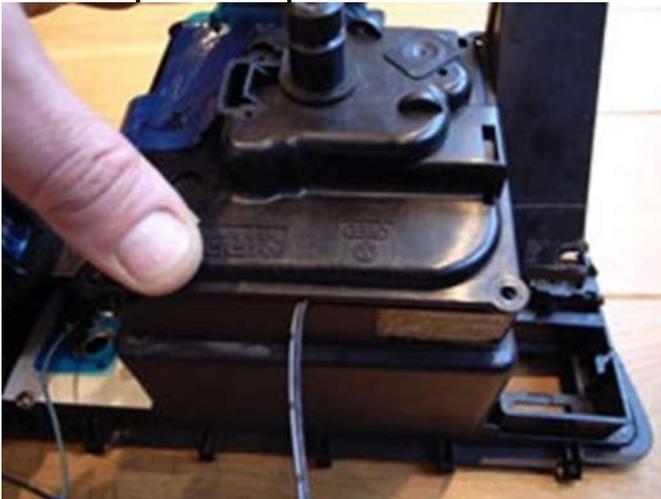
13. Carefully lift the needle back over its resting pin.



14. Slightly bend the electrical connection tab over to enable fitting to the cluster. (DO NOT FOLD)



15. Replace the speedometer back into the cluster housing.



(NOTE – It may be necessary to file a small groove in the housing to ensure the wires are not pinched)

16. Remove the four screws from the tachometer and place it on the cluster as you did for the speedo.



17. Rotate the tachometer needle counterclockwise slightly past its internal stop at “0” while exerting upward pressure.



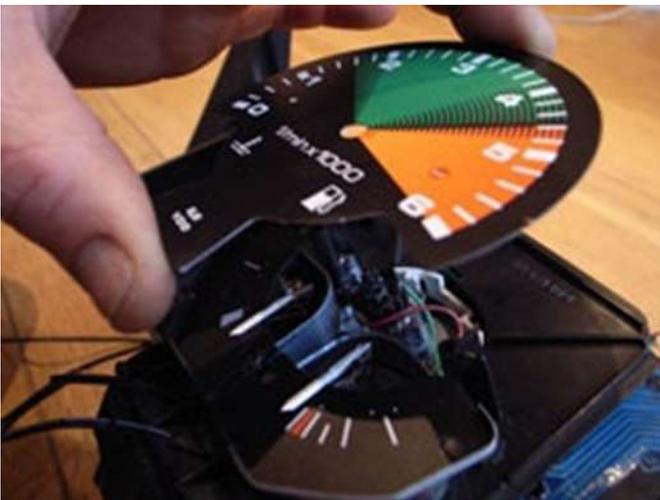
18. Repeat the procedure in the clockwise direction past the internal stop at "6".



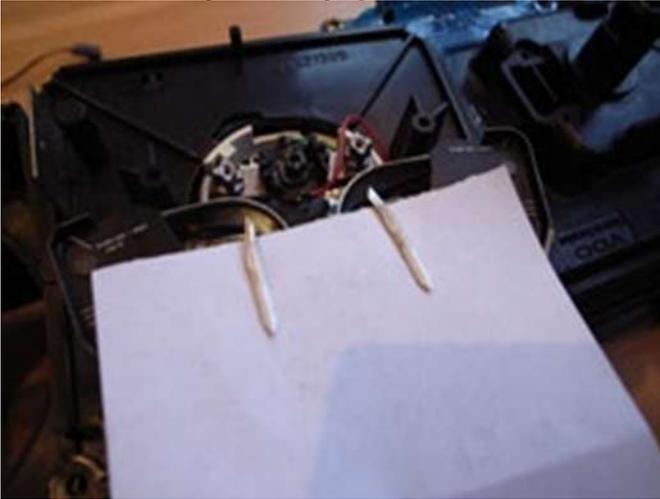
19. Continue this process until the needle comes free.



20. Remove the two small black screws and remove the tachometer face.



21. Place a piece of paper beneath the fuel & temp needles. Paint temp, fuel, tach needles.



22. While you are waiting for the needles to dry, apply the supplied double sided tape to the backside of the fuel and temp plasma gauges.



23. Slightly bend the tabs on your plasma fuel & temp gauges. (DO NOT fold as this will invalidate warranty)



24. Remove the nuts from the back of the fuel and temp gauges and remove the gauges.



25. As shown in the image below, a small piece of the fuel and temp metal housings needs to be removed to allow fitting of the plasma gauges. Use a Dremel with a fine cutting disc, a junior hacksaw or tin snips to remove a piece as illustrated.



26. Once you have made the necessary cuts onto both the fuel and temp gauges, peel the backing from the tape on the reverse of the fuel and temp plasma gauges, place them into position and apply firm pressure. The electrical connection tabs need to be bent down and tucked in as shown. Temp/fuel needles should not rub the gauge face. Adjust if necessary.



27. Place the plasma tachometer gauge face on top of the original tachometer face, insert the black screws and fit back onto the tachometer.



(Note - Do not tighten the screws too tight as this could cause separation of the foil layers in your new plasma gauge face. This will not affect the operation of the gauge, but can cause circular bulges to form around the screw head)

(NOTE - If the screw heads become scratched from your screwdriver, a quick dab with the black permanent marker can help hide the damage)

28. Replace the needle gently back onto the rev counter, ensuring that when at rest the needle just stops on its stop, test this by pushing the needle clockwise and letting it go.



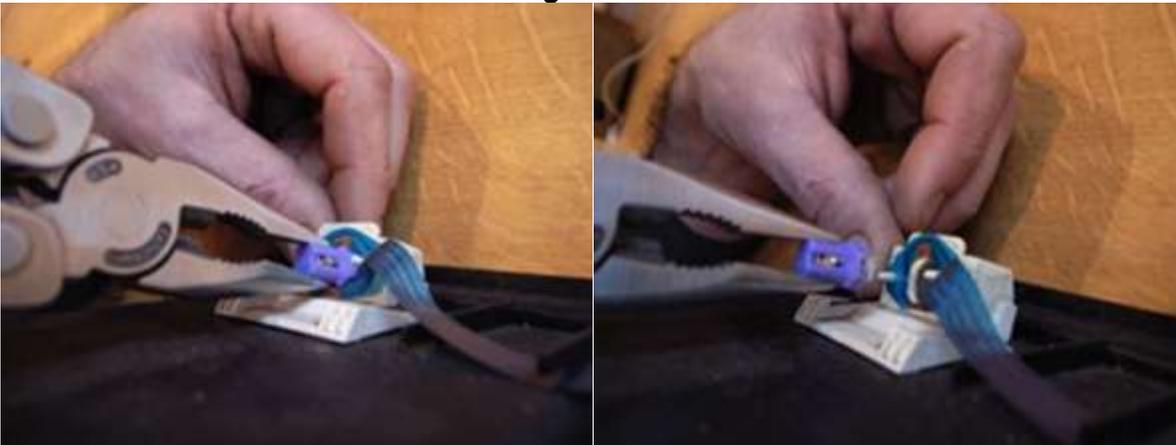
29. Once satisfied, apply pressure to the needle to fully secure it to the spindle and bend the tab over. (DO NOT fold the tab)



**30. Replace the tachometer into the cluster housing and replace the screws.**



**31. Using a pair of pliers, twist and remove all three of your original cluster lights (left, right and center). Use your pliers to install the provided LED lights in the reverse order. Be careful with the circuit foil since it can be fragile.**



**32. Your dash cluster should now be fully reassembled and ready to be installed back into your van.**



**(Tip – The insides of the bulb holders can turn yellow with age. This diminishes the effectiveness of the LED light and can cast a yellow hue on the gauges. If you paint the inside of the bulb holders white, the light from the LED will be crisp and clean. If you need tips on removing, painting or reinstalling the bulb housings, please contact us.)**

**END OF SECTION 2**