## GAUGE THE RESULTS FOR YOURSELF

by Dave "Hogfiddles" Fox

What we'll be doing here is illustrating the steps I've gone through to get into the gauges on the XJ700 models (air and liquid cooled) and XV Virago models. It doesn't always work, but it's worth making the effort to possibly save something that would have been scrapped otherwise. Available part numbers (from XJ4Ever) are listed on the last page.

Although the gauges we are working on are from an XJ700 model, the basic procedures and methods will also work for sealed instruments like those found on the XJ650RJ Seca and XJ650 Euro bikes, virtually all of the XV Viragos from 1984 up, YX Radians, and the VMax models.

For the sake of expediency, we'll begin with the gauge already removed from the bike.



The red arrow here points out the retaining screw for the outer cover.

Once the cover's off, you can remove the nuts and washers for the mounting bracket, then the bracket itself.



We're doing good. Lights and reed switch come out next.



Lights come out easily – they are a press fit, so just wiggle them out. The reed switch, which handles the turn signal autocancel, is another matter. It's a thin glass tube, and rather delicate. There are two barbs, one on either side, that hold the piece in place. CAREFULLY press in on one end and lift to free it from the body, followed by the other side.



Wiring is out of the way.



Two more pieces to remove before we begin work in earnest. One is the knob for the trip meter. Like most XJ gauges (the 750J being a notable exception), this one screws in. One important thing to note:

## THIS KNOB IS <u>REVERSE THREADED</u>.

To remove, turn it to the **<u>RIGHT</u>**.



Finally, we remove the sealing gasket. The red arrow points out a little slot on the gauge body; there's a little tab on the gasket that fits into that slot. The hole in the gasket for the trip meter knob also helps to line the gasket up properly.



We've got the rest of it apart, now let's deal with the reason that we're here.



Grab a precision/jewelers' flat blade screwdriver and get under the edge of the bezel. Carefully pry it up a hair.



Keep working your way around the edge of the bezel until you have loosened it up enough to slide out the gauge body. Set the body aside.



Carefully press the glass/rubber/metal ring out from inside by pushing from the front of the glass.



We'll be using the guts from a second gauge to better illustrate the procedure.

First, lift off the metal backing ring. Make a note of which way the rubber faces (there's a lip the glass fits into), then fold the rubber piece back over the edge of the glass. The rubber may or may not stick to the glass; if it does, use a blade of some sort (razor blade, hobby knife, etc) to separate them. Go slow.



Keep going...



...almost there...



...and we're done.

Here are the three separate parts – the metal backing ring, the rubber, and the glass. Clean everything up, make sure there's no residue anywhere, and polish the glass.

Next, we'll be putting the glass back into the rubber ring.



In our example, we've borrowed an intact glass piece from a junked gauge; this is notable because the original glass pieces are slightly convex (bulging outward). Unless you can source these (new or used), your replacement glass piece will likely be flat.

If using convex glass, make sure that side faces away from the lip when you reinstall it into the rubber – otherwise it'll look odd when you reassemble everything. For flat glass pieces, make sure the thickness and diameter match.

If you're replacing convex glass with flat, you might consider doing all the gauges so that they all look the same.



Clean the metal bezel, inside and out.



Place the rubber/glass assembly back into the bezel.



Grab yourself a bit of silicone grease or silicone sealant and put two small dabs on the metal ring (just to hold it in place) and then insert the ring.



Place the gauge body back into the bezel. Take a large blade screwdriver, or a wide punch, and start folding the bent-up portion of the bezel back down over the edge of the body. Work in a star pattern to ensure that the body doesn't sit off-kilter in the bezel.

Bending the metal back and forth might result in the bezel showing something akin to stretch marks or some other deformities. It may not look perfect when you're done, but it beats buying a new gauge to fix some broken glass, right?



To reassemble, reverse the steps we used to take it apart. You should see this when you're done.



This looks even better – compare with the picture on page 5.

All finished. Wasn't that fun?

## **PARTS LIST**

- HCP8435 Replacement flat glass lens for Speedometer or Tachometer (the original was concave). Fits all XJ700/700X, 750X, and some Virago models.
- HCP8436 Replacement flat glass lens for the temp gauge (the original was concave). Fits XJ700X/750X.
- HCP6128 OEM gauge mounting rubber damper. This square rubber damper goes inside the gauge cover. Use 2 per gauge (speedometer or tachometer) on all XJ700/700X and XJ750X models.
- HCP6040 OEM gauge mounting rubber damper. This round rubber ring insulator cushions the mounting of the temperature gauge within its housing. For all XJ700X and XJ750X models.
- HCP6027 OEM gauge mounting <u>bracket</u> rubber damper. This round rubber insulator cushions the mounting of the speedometer and tachometer bodies to their mounting brackets. For all XJ700 aircooled models (use one) and XJ700X/XJ750X models (use three).
- HCP6096 OEM gauge mounting bracket rubber damper. This round rubber insulator cushions the gauge mounting brackets to the handlebars. Each bike takes two per mounting stud (four per bike). Fits the following models:

XJ550, all models XJ650, all models except Turbo XJ700, all models XJ750, all models XJ1100, all models

- HCP3618 OEM meter illumination and warning bulb for all XJ700 and XJ750X models. Use a total of 4 bulbs per cluster for the aircooled (non-X models), and 5 for the 700/750X. Add the HCP10235 filter to each bulb to give your gauges their signature green tint.
- HCP3618B Aftermarket meter illumination and warning bulb for all XJ700 and XJ750X models. Use a total of 4 bulbs per cluster for the aircooled (non-X models) and 5 for the 700X/750X. Rated for an average of 500 hours of use. These are slightly larger than OEM bulbs; while they will fit into the gauge body, their larger size means one cannot use the HCP10235 green filter with these bulbs.
- HCP10235 OEM meter illumination bulb green filter. Fits over the end of the meter bulbs and gives the gauge light and face its greenish tint. These soft rubber filters are very fragile and generally need to be replaced whenever the light bulb is changed. Use a total of 4 bulbs per cluster for the aircooled (non-X models), and 5 for the 700/750X. Not to be used with the aftermarket HCP3618B bulbs.
- HCP6021 OEM speedometer rear bullet style chrome housing. A bright polished chrome plastic gauge bottom cover really brightens up a typically damaged or dull area on your bike. Fits all XJ700/700X and XJ750X.
- HCP6022 OEM tachometer rear bullet style chrome housing. A bright polished chrome plastic gauge bottom cover really brightens up a typically damaged or dull area on your bike. Fits all XJ700/700X and XJ750X.
- HCP6029 OEM temperature gauge rear bullet style chrome housing. A bright polished chrome plastic gauge bottom cover really brightens up a typically damaged or dull area on your bike. Fits all XJ700X/XJ750X.
- HCP6024 OEM instrument cluster lower chrome housing. A bright polished chrome plastic cluster bottom/rear cover really brightens up a typically damaged or dull area on your bike. Fits all XJ700 non-X models.

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