Calibration Guide

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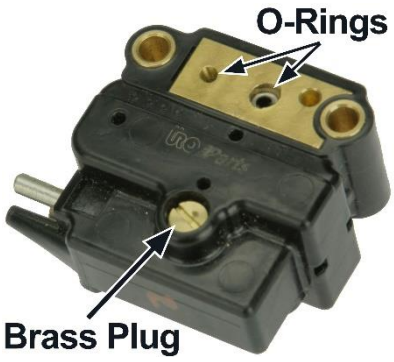
Electro-Hydraulic Actuator 000 070 3962



STEP 1 - If the engine is hard to start (especially when warm), stumbles when accelerating, or doesn't seem to have proper power at higher speeds, the air/fuel mixture may be incorrect. Check fuel pump, fuel filter, and O2 sensor for proper operation. Verify that there are no engine vacuum leaks. If you have confirmed that there are no vacuum leaks and all other components are functioning correctly, proceed with Electro-Hydraulic Actuator (EHA) replacement per the Mercedes factory repair manual.

STEP 2 - Using new o-rings at the two fuel ports, install the new EHV valve on the fuel distributor. (Be sure to remove the old o-rings from the fuel distributor.)

STEP 3 - After verifying there are no fuel leaks, warm engine to normal operating temperature.

STEP 4 - Check the fuel pressures in the lower chamber of the fuel distributor (at bottom of assembly) and the upper chamber (at cold start injector supply port) using gauges per the Mercedes factory repair manual. Engine must be **warm** and **idling** with **EHA wire unplugged** when checking pressures. If the pressure differential between upper and lower chambers is not **0.4 Bar** (0.45 Bar maximum), the EHA must be calibrated for your engine.

STEP 5 - Remove the EHA from the fuel distributor. Using a wide flat-tip screwdriver, remove the large threaded brass plug that covers the mixture adjustment screw. The brass plug retains 80psi fuel pressure and must be very tight, so the screwdriver blade must be full-width and fit the slot snugly, or you may accidentally damage the slot (preventing adjustment) and have to buy a new EHA unit. Do not lose the aluminum sealing washer located beneath the brass plug.

STEP 6 - Using a 2mm hex key, turn the adjustment screw in quarter-turn increments (which is roughly 0.1 Bar of pressure differential change). *Turning the adjustment screw counter-clockwise lowers the pressure differential* and will lean the mixture, while turning clockwise enriches mixture.

STEP 7 - Reinstall sealing washer and brass plug, and reinstall EHA. Re-check for fuel leaks and re-check fuel pressure differential. **Repeat steps 3 - 6** as necessary to reach **0.4 Bar**.

STEP 8 - Perform road test, checking for hard starting, stumbling, idle exhaust smoke, and (after time) fouled spark plugs and poor fuel economy. Readjust EHA as necessary to correct issues.

STEP 9 - Now that the EHA is calibrated, re-adjust the idle mixture using 3mm hex key.

Installation by a professional technician is recommended. Refer to the factory repair manual for vehicle-specific service procedures for this part. Tighten all hardware to factory torque specifications and observe all repair manual cautions and warnings. Use safety stands whenever beneath a vehicle and always wear protective eyewear.