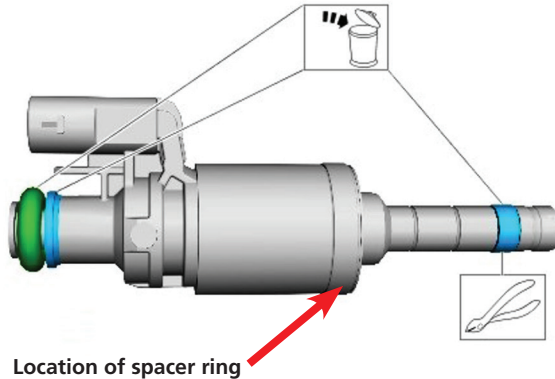


Small but significant - Rough when cold Ford Fiesta Ecoboost 1.0 M1DA

This Fiesta had been in the workshop many times over a few months, for a rough running issue when the engine was cold. After a warmup period, the engine returned to perfect running and no codes were present. While all the usual suspects had been checked or replaced during annual service work, still the problem persisted.



Engine compression was checked and passed with no issues. The spark plugs had been changed.

Tests on fuel pressure low supply was within specifications. A donor car was tested to confirm the readings. The fuel pressure high side showed a slightly lower reading than the donor vehicle, but only during cold starts.

The high pressure fuel pump was removed and found to be leaking fuel, very slightly from the seal. This leak had contaminated the engine oil. The high pressure fuel pump was replaced, and the oil service performed to remove any fuel contamination.

The issue still persisted, so it was decided to swap the injectors from the donor vehicle as a last resort. This is when the



An extra ring was found installed on one of the injectors

cause of the rough running while cold was discovered. A second ring was present in the cylinder head, possibly from a previous repair. This was positioning the injector within the cylinder incorrectly. Removing this extra ring and refitting the original injector was the solution to the cold smooth-running issue.