Diagnosis – Engine Adjustment

Single/dual ignition systems



Static high-voltage distribution only possible with HHT.

The test is comprised of the following:

- a) Dwell
- b) Ignition timing
- c) On-off ratio control

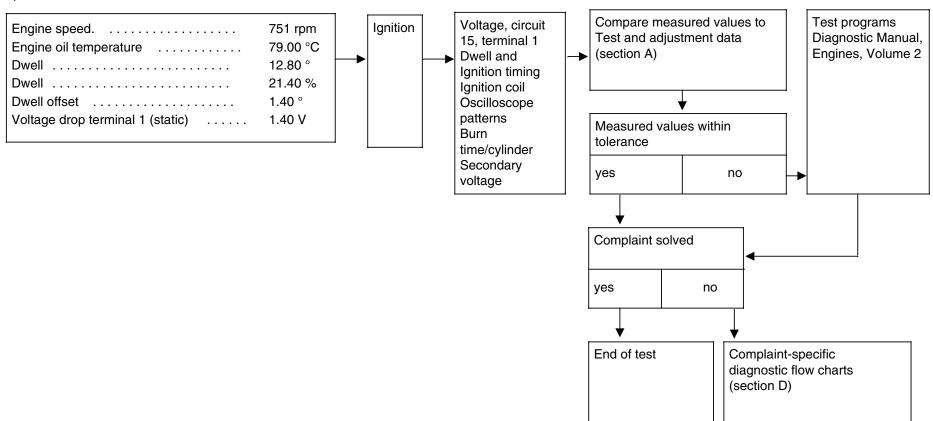
Note:

The following should be noted on engines with dual ignition systems (engine 119 CFI, engine 119 LH-SFI and 120 LH-SFI):

- Engine analyzer should be set to 4 cylinder position (engine 119) or to 6 cylinder position (engine 120).
- Connect dual ignition adaptor and set to T1/1 position.
- Engine at idle.
- Compare dwell value of T1/1 with test data.
- Set dual ignition adaptor to T1/2.
- Engine at idle.
- Compare dwell **T1/2** with test values.

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a) Dwell



Note:

The specifications shown are examples for a 4 cylinder engine and can not be compared directly.

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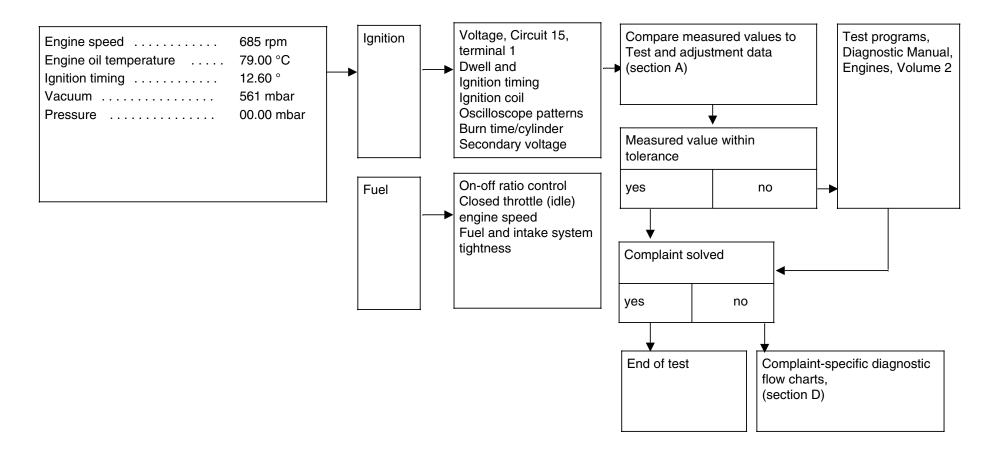
- The idle speed control can be checked with the dwell test program on engines 102 and 103. In this case, the dwell % measurement is used as an on-off ratio measurement. For the measurement use test cable 102 589 14 63 00 or 103 589 00 63 00.
- Test and adjustment data see section A.

b) Ignition timing

By switching the trigger clamp from cylinder 1 to cylinder 2 on Engine 119, an ignition timing comparison measurement can be made. Subtract 90° from the indicated measurement value to determine the correct specification. This will show any defects in the segments on the starter ring gear.

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Note:

The specifications shown are for a 4 cylinder engine and cannot be compared directly.

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c) On-off ratio

