

Connection diagrams – Electronic Ignition (EI) system (distributor-less)

Note:

- **The following section applies to Hermann engine analyzers, tests and connections for Bear DACE engine analyzers are similar, please refer to instruction manual supplied with the EI (distributor-less) test adapters.**
- When diagnosing starting or warm up complaints, do not check engine at operating temperature, instead proceed according to specific complaint.

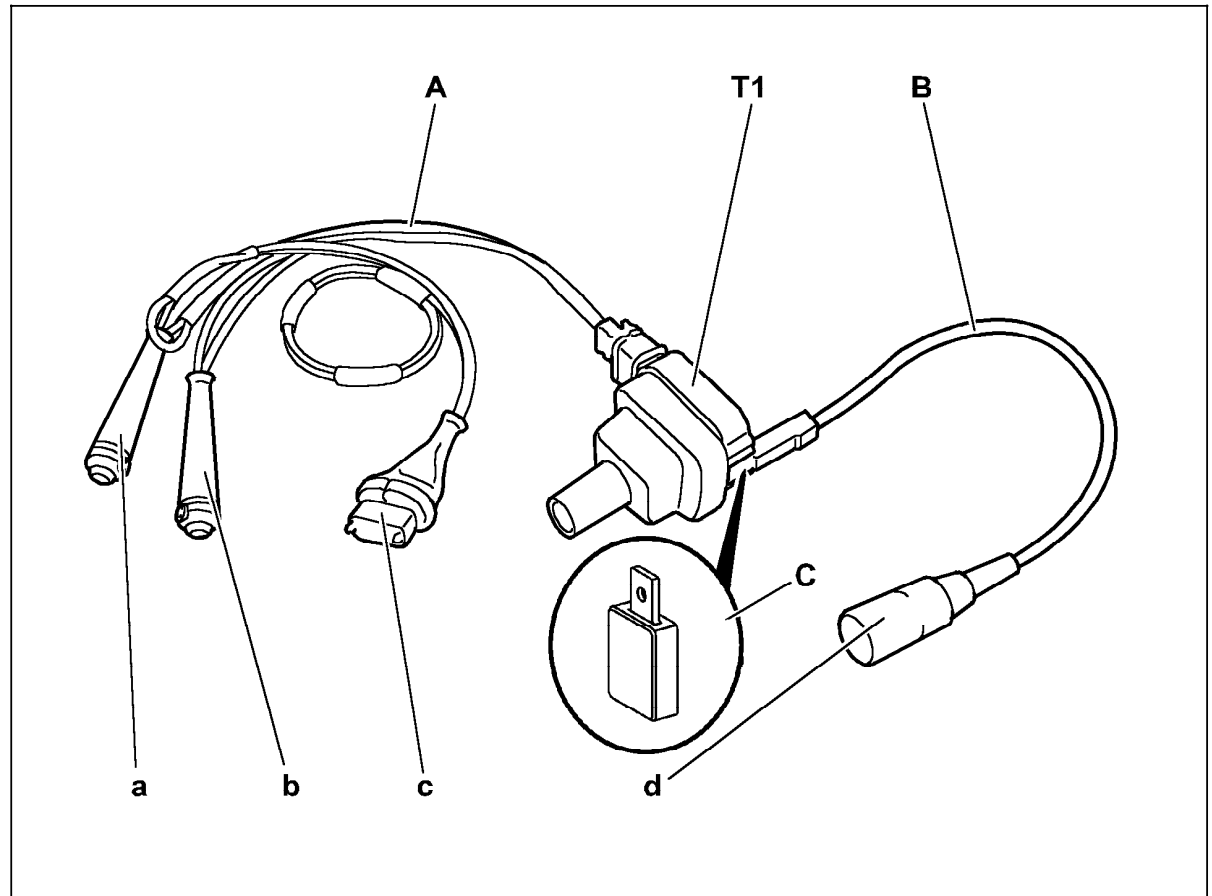
Connection method:

Set engine analyzer to cylinder 1, select primary or secondary and test each ignition circuit

The primary and secondary ignition systems can be tested. The ignition coils are equipped with a mounting slot (Figure 2) for the kV (pickup) sensor. The primary pattern can be picked up using the primary adapter lead (Figure 3), or through a connection from the socket box to the ME-SFI engine control module.

Air filter	Remove, install
Ignition coil covers on top of valve covers	Remove, install
Primary side connections:	
Disconnect engine harness from selected ignition coil (T1/1 - T1/8 or T1/1 - T1/12) and install primary adapter cable (A) in between selected ignition coil (T1) and engine harness	Connect, disconnect
Primary leads with yellow (a) and green (b) connectors (from primary adapter cable) to primary leads on engine analyzer	Connect, disconnect
Secondary side connections:	
Kilovolt (pickup) sensor (C) to selected ignition coil (T1) mounting slot	Connect, disconnect
Kilovolt clamp connector from engine analyzer (Note: kV clamp must first be removed) to secondary adapter cable connector (d [3 pole]) ..	Connect, disconnect
Secondary adapter cable connector (1- pole) to kV (pickup) sensor connector	Connect, disconnect

Figure 1
Connection diagram for Electronic Ignition System



- A Primary adapter cable
- B Secondary adapter cable
- C kV (pickup) sensor
- T1 Ignition coil
- a Yellow (female) lead = terminal 15
- b Green (female) lead = terminal 1
- c to ignition harness
- d to kV clamp connector (kV clamp must first be removed)

U07.60-0269-57

Equipment

Hermann Electronics ¹⁾	Datascope D950 or D960 S
Automotive Diagnostic ¹⁾	Bear DACE 40-960A
Electronic ignition (EI) System (distributor-less) adapter ¹⁾ Includes: Kilovolt clamp and kilovolt pickup harness with trigger clamp for no. 1 cylinder, TN-adapter harness, primary ignition adapter harness and operating instructions.	Hermann CD 1222 ²⁾ Bear 43-324 (ref: DACE CD 1222 BA) ²⁾
Adapter set ME-SFI 1.0 Includes: Primary adapter cable for one cylinder, primary adapter cable (for DACE) secondary adapter cable, kilovolt (coil) pickup	Hermann CD 1230 ²⁾ Bear 43-324 ²⁾

¹⁾ Refer to the MBUSA Standard Equipment Program.

²⁾ Equipment supplied with EI (distributor-less) adapter may vary from equipment listed above, refer to MBNA Standard Equipment Catalog for complete listing.