

Fig. 7 This spark tester has an adjustable air-gap for measuring spark strength and testing different voltage ignition systems

perform diagnosis of the ignition system using individual component diagnosis procedures.

#### CYLINDER DROP TEST

### See Figures 10, 11 and 12

The cylinder drop test is performed when an engine misfire is evident. This test helps determine which cylinder is not contributing the proper power. The easiest way to perform this test is to remove the plug wires one at a time from the cylinders with the engine running.

1. Place the transmission in P, engage the emergency brake, and start the engine and let it idle.

2. Using a spark plug wire removing tool, preferably, the plier type, carefully remove the boot from one of the cylinders.

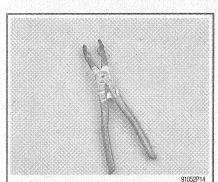
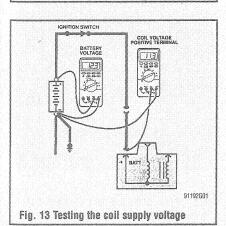


Fig. 10 These pliers are insulated and help protect the user from shock as well as the plug wires from being damaged



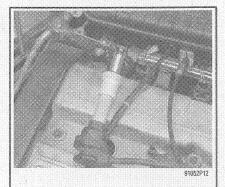


Fig. 8 Attach the clip to ground and crank the engine to check for spark

## CAUTION

Make sure your body is free from touching any part of the car which is metal. The secondary voltage in the ignition system is high and although it cannot kill you, it will shock you and it does hurt.

3. The engine will sputter, run worse, and possibly nearly stall. If this happens reinstall the plug wire and move to the next cylinder. If the engine runs no differently, or the difference is minimal, shut the engine off and inspect the spark plug wire, spark plug, and if necessary, perform component diagnostics as covered in this section. Perform the test on all cylinders to verify which cylinders are suspect.

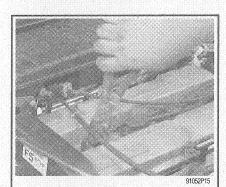
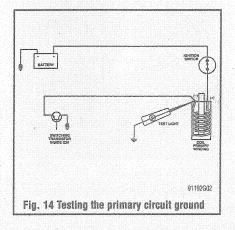


Fig. 11 To perform the cylinder drop test, remove one wire at a time and . . .



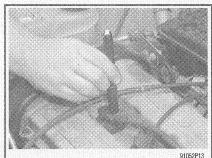


Fig. 9 This spark tester is the easiest to use just place it on a plug wire and the spark voltage is detected and the bulb on the top will flash with each pulse

# Adjustments

The only adjustment available on the TFI-IV system is the timing. Refer to Section 1 for Timing inspection and adjustment.

## THE RESERVE

#### **TESTING**

#### **Primary Coil**

## **b** See Figures 13, 14 and 15

The first check of the primary ignition coil is to verify that there is battery voltage at the BATT ter-

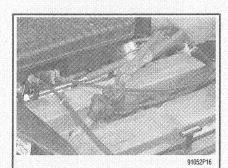


Fig. 12 . . . note the idle speed and idle characteristics of the engine. The cylinder(s) with the least drop is the non-contributing cylinder(s)

