

LUCAS INDUSTRIES INC.

ELECTRONIC IGNITION

CONSTANT ENERGY



RECOMMENDED TEST EQUIPMENT

DC Moving Coil Voltmeter. Scale 0-20V
DC Moving Coil Ohmmeter
HT Jumper Cable

NOTES

1. The ignition must be switched on for all Tests.
2. Key to symbols used in the charts for Tests 2 & 5



Correct Reading



High Reading

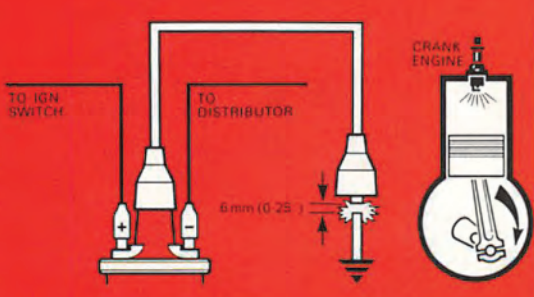


Low Reading

3. Constant Energy Pick-Up Air Gap Settings:
45 DM Distributors 0.008"-0.014" (0.20mm-0.35mm)

Settings must not be adjusted unless factory setting has been tampered with or the pick-up replaced.

TEST 1 CHECK H.T. SPARKING



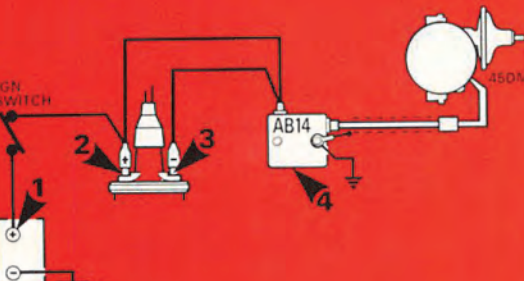
RESULT

Should be:

Regular Sparking ▶ Test 6

No Sparking ▶ Test 2

TEST 2 AMPLIFIER STATIC CHECKS



Measure voltages at 1-4 inclusive.

Should be:

1. More than 11.5V
2. 1V max below V at 1 above.
3. 1V max below V at 1 above.
4. 0V-0.1V

All Correct ▶ Test 3

Incorrect Reading(s) ▶ See Chart

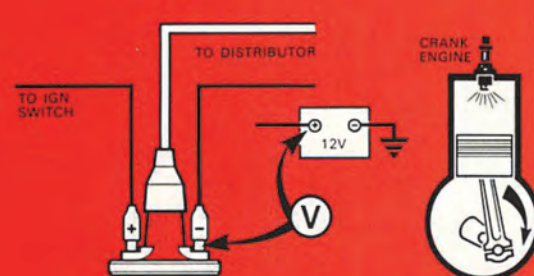
CHART

1	2	3	4
L	✓	✓	✓
✓	L	L	✓
✓	✓	L	✓
✓	✓	✓	H

SUSPECT

- Battery Discharged
- Ignition Switch and/or Wiring
- Coil or Amplifier
- Amplifier Grounded

TEST 3 CHECK AMPLIFIER SWITCHING



Voltage increases

while cranking ▶ Test 5

Voltage does not increase

while cranking ▶ Test 4

TEST 4 PICK-UP COIL RESISTANCE



Ohmmeter should show 2.5 KΩ

Correct:

Change Amplifier.

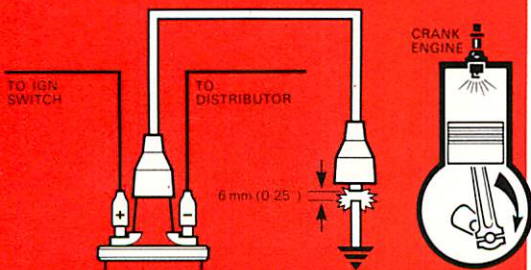
If engine will not start ▶ Test 5

Incorrect:

Change Pick-Up.

If engine will not start ▶ Test 5


TEST 5 CHECK H.T. SPARKING




Should be good H.T. Sparking .

Repeat with original H.T. Lead.

Good Sparking .


If engine will not start  Test 6

No sparking, replace H.T. Lead

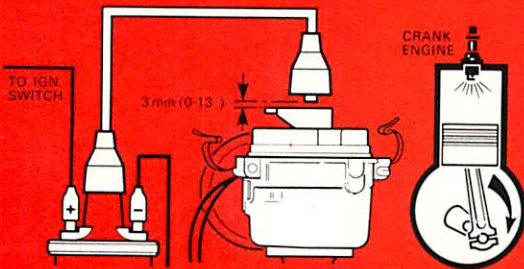
If engine will not start  Test 6

No Sparking

Replace Coil

If engine will not start  Test 6

TEST 6 CHECK ROTOR ARM




Should be:

No Sparking  Test 7

If H.T. Sparking:

Replace Rotor Arm

If engine will not start  Test 7

TEST 7 VISUAL AND H.T. CABLE CHECKS

EXAMINE

1. DISTRIBUTOR COVER
2. COIL TOP
3. H.T. CABLE INSULATION
4. H.T. CABLE CONTINUITY
5. SPARK PLUGS

Should be:

1. Clean, dry, no tracking marks
2. Clean, dry, no tracking marks
3. Must not be cracked, chafed or perished.
4. Must not be open circuit
5. Clean, dry, and set to correct gap.