

NAME: _____ PARTNER: _____ PERIOD _____

3B# COURSE: _____
 MTHS AUTO SHOP #1
 Mr. Carlson

DATE: _____

CYLINDER LEAKAGE TEST JOB SHEET

INSTRUCTIONS:

NEED: CYLINDER LEAKAGE TESTER
 REMOTE STARTER SWITCH
 PLUG SOCKET & RATCHET
 ADAPTOR HOSE W.P. VALVE

1. Adjust regulator left (CCW) and hook up air.
2. Adjust regulator right (CW) slowly to 0%.
3. Warm engine, stop engine, and ground ignition coil wire.
4. Hook up remote control starter switch with ignition on.
5. Remove radiator and crankcase filler caps.
6. Remove only ONE PLUG at a time.
7. Hook up adapter and CLT light between ground & distributor side of coil
8. Crank engine until it blows out air and light just comes on.
9. Connect CLT and read. (if fan turns, piston is not at TDC; disconnect CLT and try again)
10. Listen for where air leaks and record below:
 HAVE INSTRUCTOR CHECK CYLINDER # 4



CYLINDER #	% LEAKAGE	EXIT OF LEAKAGE	% DIAGNOSIS	PROBLEM DIAGNOSIS
1				
2				
3				
4				
5				
6				
7				
8				

SAME DAY AS DONE

% DIAGNOSIS
 0-10% = SUPER (RACE)
 11-20% = GOOD
 21-40% = AVERAGE
 41-60% = POOR
 61-100% = BAD

PROBLEM DIAGNOSIS
 (AIR OUT) = (PROBLEM)
 CARB = INTAKE VALVE
 TAIL PIPE = EXHAUST VALVE
 OIL FILLER } = RINGS
 OR
 DIPSTICK }
 RADIATOR = HEAD GASKET

11. Prepare engine to run and put away tools.
12. Do the following:

QUESTIONS: (READ INSTRUCTION SHEET & BOOK FOR ANSWERS)

1. Below what % should CLT read with a good engine? _____

2. What is the condition of the above engine poor ok great

3. Why? _____

4. Why shouldn't you pull all plugs at once? _____

OVER

(184021-WH)

5. Why should you ground the ignition coil wire: _____

6. Air leaking out of the following areas means what?
- A. Air out carburetor _____

- B. Air out exhaust pipe _____

- C. Air out oil filler cap (air passage connected to pan) _____

- D. Air out radiator _____

TEST YOUR KNOWLEDGE

The following are possibilities during a C.L.T. Pick the best answer.

- A. cylinder poor with bad rings
- B. cylinder poor with bad intake valve
- C. cylinder poor with bad exhaust valve
- D. cylinder poor with bad head gasket
- E. cylinder good

- _____ 1. cylinder 10% with air out oil filler
- _____ 2. cylinder 40% with air out radiator filler
- _____ 3. cylinder 60% with air out exhaust pipe
- _____ 4. cylinder 55% with air out carburetor
- _____ 5. cylinder 50% with air out oil filler
- _____ 6. cylinder 20% with air out oil filler
- _____ 7. cylinder 45% with air out radiator filler
- _____ 8. cylinder 85% with air out exhaust pipe
- _____ 9. cylinder 50% with air out carburetor
- _____ 10. cylinder 55% with air out oil filler