

Name _____

1. Remove engines from create

Install exhaust, air filter housing and add oil

Remove spark plug and check compression with gauge

Set choke to OFF, set throttle to 1/2

Pull the engine over with 4 quick pulls and recorded your reading _____psi.

2. install the test fuel tank and test run engine

| | Pass | Fail | symptoms |
|------------------------------------|-------|-------|----------|
| Be sure it runs with the choke off | _____ | _____ | _____ |
| Check low speed idle | _____ | _____ | _____ |
| Check high speed idle | _____ | _____ | _____ |

Verify that it holds a steady speed with no surging or rough running

3. Remove valve cover and set engine to Top Dead Center (TDC)

check valve lash with Feeler Gauge, have instructor verify your findings

Clearance should be .004-.006 intake and .006-.008 exhaust

| | Clearance (before) | Clearance (after, if adjuster) |
|--------------------|--------------------|--------------------------------|
| Intake valve lash | _____ | _____ |
| Exhaust valve lash | _____ | _____ |

Recheck compression **if** you adjusted the valves

Pull the engine over with 4-5 quick pulls and recorded your reading _____psi.

Drain oil back into the quart of oil you got it from

4. Begin disassembly

Air filter housing

muffler

Remove carburetor and throttle assemble

Remove cylinder head

Remove valves from head

Measure valve stem diameter

Intake valve stem _____

Exhaust valve stem _____

Measure valve guide diameter

Intake guide diameter _____

Exhaust guide diameter _____

Calculate valve stem to guide clearance

Intake guide dia. _____

Exhaust guide dia _____

Minus

Minus

Intake stem dia. _____

Exhaust stem dia _____

Equals clearance _____

Clearance _____

Have the instructor check your work

Re-install the valve cover onto cylinder head

Stop

Disassembly of the lower end

1. Measure the bore and stroke of this engine

Calculate displacement

$\text{Bore}^2 \times \text{stroke} \times .7854 \times \text{number of cylinders}$

To convert, CID/61.02 = liters

Bore _____

Stroke _____

Displacement _____ in cubic inches

2. Remove any small items bolted to the block.
3. Measure crank shaft end play with the dial indicator
record your reading _____ inches
4. Remove flywheel; use an impact gun to get the nut off. Have instructor help with removing flywheel from crankshaft
5. Remove engine cover, **DO NOT DAMAGE THE GASKET!** Have the instructor help if needed.

Remove the low oil sensor

Remove connecting rod cap and remove piston.

Remove crankshaft from block

6. Measure crankshaft

Rod journal _____

Main bearing journal, flywheel side _____

Main bearing journal, output side _____

7. Measure oil clearance of the rod on the crank

Plastigage reading _____

8. Remove wrist pin and measure

Pin hole in piston _____

Pin hole in connecting rod _____

Measure wrist pin dia _____

Calculate clearances

Piston to pin _____

Rod to pin _____

9. Measure camshaft intake exhaust

Heel to Nose _____ Heel to Nose _____

Base circle _____ Base circle _____

Lobe lift _____ Lobe lift _____

10. Measure cylinder bore with T-gauge in 3 places top to bottom on the thrust surface then 3 more at 90 degrees.

Top _____

Top _____

Middle _____

Middle _____

Bottom _____

Bottom _____

11. Measure piston Skirt $\frac{1}{2}$ inch above the bottom of skirt _____

12. Calculate piston to cylinder wall clearance

smallest bore measurement _____

Minus

Piston skirt measurement _____

Clearance _____

13. Reassemble the bottom end. Have your instructor inspect the cam timing before you install the cover.

14. Install the cylinder head and adjust the valves.

15. With the valve cover removed and the engine set to Top Dead Center (TDC)

check valve lash with Feeler Gauge, have instructor verify your findings

Clearance should be .004-.006 intake and .006-.008 exhaust

Clearance

Intake valve lash _____

Exhaust valve lash _____

16. Install the carburetor, muffler and other external components test fuel tank and test run engine.

17. The magneto must be set to .009-.012 clearance. Have your instructor assist and inspect

Pass

Fail

symptoms

Be sure it runs with the choke off _____

Check low speed idle _____

Check high speed idle _____

Verify that it holds a steady speed with no surging or rough running

Write down the Torque specs for the bolts

6mm

8mm

10mm

Honda Multi-Point Vehicle Inspection Checklist

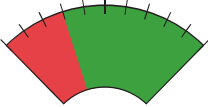


| | |
|-----------------|------------------|
| R/O TAG NUMBER | NEXT SERVICE DUE |
| VIN | MILEAGE |
| SERVICE ADVISOR | TECHNICIAN |






Satisfactory May Require Future Attention Requires Immediate Attention

| Interior/Exterior | | | |
|---|--|--|--|
| Headlights (check high and low beams)/Taillights/Brake lights/Hazard warning lights/Turn signals/Exterior lamps | | | |
| Interior light | | | |
| Windshield washer spray/Wiper operation/Wiper blades/Windshield condition | | | |
| Parking brake | | | |
| Horn operation | | | |
| Clutch operation (<i>if applicable</i>) | | | |
| Cabin air filter | | | |

Battery Performance (see attached ED-18 printout)

Replace  Good



| Tire Condition | | | | |
|--|--|--|--|--|
| Left Front | | | | Right Front |
| Wear pattern  | |  Wear pattern | | |
| Tire tread _____ 32nds | | Tire tread _____ 32nds | | |
| Left Rear | | | | Right Rear |
| Wear pattern  | |  Wear pattern | | |
| Tire tread _____ 32nds | | Tire tread _____ 32nds | | |
| Spare | | | | |
| Wear pattern  | | Front tire inflation set to _____ psi | | |
| Tire tread _____ 32nds | | Rear tire inflation set to _____ psi | | |
| Spare tire not checked at this time <input type="checkbox"/> | | | | |

| Brake Condition | | | | |
|--|--|-----------|--|--|
| Left Front | | | | Right Front |
| _____ mms | | _____ mms | | |
| Left Rear | | | | Right Rear |
| _____ mms | | _____ mms | | |

| Under Vehicle | | | |
|---|--|--|--|
| Brake lines/Hoses/Parking brake cable | | | |
| Shock absorbers/Struts/Suspension/Tie rod ends and boots/Steering gear and dust seals | | | |
| Exhaust system | | | |
| Engine oil and/or fluid leaks | | | |
| Drive shaft boots/Constant velocity boots and bands | | | |

Comments

Comments
