



HONDA TECH INSPECTION WORK SHEET

Class: _____ Honda 120

Division: _____ Jr. _____ Sr. _____ Heavy

Name: _____ Car #: _____ Date: _____

Finish Position: _____

1	Exhaust length 20'-26' no steps or tapers, 1' O.D. Max, unaltered screw in muffler	
2	External visual check- exhaust shrouds, air cleaner, engine seals in tact	
3	Carburetor- # BE 60B Thailand # BE 60 R UT-2 # BE99A	
4	Restrictor plate- between carb. & insulator stock gaskets both sides. Gasket= 0.025 max	
5	Plate thickness= 0.0625max Hole Diameter: Novice= 0.3125 Red Junior= 0.4375 Blue	
6	Carburetor Bore: Intake end= 0.950 Throttle end= 0.632	
7	2 gaskets between carb. And plastic adapter is okay	
8	Venturi Bore: No Go= 0.456	
9	Main Jet: Honda No Go #70 Max #28 pin gauge	
10	Main Air Jet: #60 Drill (0.040) No Go at back of hole 0.0394max	
11	Main Jet access passage: #41(0.096) Drill No Go	
12	Main Nozzle Bore: #50 Drill (0.070) No Go	
13	Main Nozzle: Installed Height 0.429	
14	See tech manual for main nozzle are bleed hole dimensions	
15	Pilot Jet: #79 Drill (0.0145) No Go	
16	Pilot Air Jet: 0.050 min. 1.25 mm (0.0492) Go	
17	Pilot Seat: #61 Drill (0.039) No Go	
18	Pilot Screw tip: 0.019 min.	
19	Float Bowl Vent: #31 Drill (0.120) No Go	
20	Needle Valve Seat: #51 Drill (0.067) No Go	
21	Remove gear box and sun gear- check for any alterations, except to output end of shaft, no polishing	
22	Remove cooling shrouds- check for all pieces installed. No metal added or subtracted	
23	Valve Lift Retainer with zero clearance: Intake= 0.245 max Exhaust= 0.255 max	
24	Push Rod Length 4.803 max	
25	Visually inspect rocker arms, pivots, and studs for alteration. See tech manual	
26	Coil and Timing: Remove head and check coil position @ .65" bt dc- see tech manual	
27	Check timing: if quick check of timing line 27 is in question. 0.665" bt dc or 20 bt dc max	
28	Check Coil Air Gap: 0.016 + .008 (not a tech item but recommended)	
29	Coil Mounting Bolts: Stock 6mm 1-1/16" long. 3/8" max. no thread 0.230 min. threaded dia.	
30	Cylinder Head: Head gasket inner rim thickness = 0.040 min.	
31	Valve depth intake and exhaust= 0.210max / 0.178min	
32	Combustion Chamber: 10cc with stocking plug Reference	
33	Retainers: (thickness) Intake: 0.228 min Exhaust: 0.241 min	
34	Flange thickness: Intake= 0.110 max Exhaust= 0.070 max	
35	Flat of Flange to machined surface: Intake = 0.148 Exhaust= 0.165 min	

Tech Inspector Signature: _____ Engine: _____ Pass _____ Fail

36	Springs: (120) Wire Diameter= 0.071 max Stacked length= 0.394 O.D. 0.790 max, # of coils = 5.3	
37	(120) = Pressure: 11 lbs max @ inches (0.812)	
38	Springs: (140) Wire Diameter= 0.079 max Stacked length= 0.524 O.D. 0.816 max, # of coils = 7	
39	(140) = Pressure: 16 lbs max @ inches (0.812)	
40	Valve: Single angle= 45 degrees unaltered	
41	Weight: Intake= 18 grams min Exhaust= 16 grams min	
42	Head Diameter: Intake= 0.862/0.870 Exhaust= 0.744/0.752	
43	Overall length: Intake= 2.444/2.458 Exhaust= 2.385/2.395 UT-2 2.470	
44	Stem diameter: Intake= 0.216 Exhaust= 0.212/0.216	
45	See tech manual for additional dimensions	
46	Head Surface to Valve Seat: Intake and exhaust= 0.265max/0.250min	
47	-to Valve Guide: Intake= 0.925max Exhaust= 0.925max	
49	- to lowest machined area in port: Intake= 1.064max Exhaust= 1.010max	
50	Head thickness@ Flange Bolts: 2.911min/ 2.917max	
51	Ports- stock "AS CAST"- Single 45 degree angle valve seats	
52	Port Diameter @ valve: Intake: 0.745min/ 0.752max Exhaust= 0.665min/ 0.675max	
53	Block: Bore= 2.366max Stroke= 1.659max/ 1.640min	
54	Top of Piston Deck: 0.000" to 0.015" below deck	
55	Plastic fan- all blades intact	
56	Degree Cam: See tech manual	
57	Max lift: Intake= 0.227 Exhaust= 0.229	
58	Centerline: Intake= 104-107.5 atdc Exhaust= 107.5-110.5 btdc	
59	Check flywheel and crankshaft keyways for alterations	
60	Check key for alteration	
61	Check flywheel magnet and screw for alteration	
62	Check flywheel weight: 1642 grams 57.9oz. min Thailand flywheels 1550 grams	
63	Check flywheel diameter magnet area – 6.285 min	
64	Crankcase cover: Stock "AS CAST"	
65	Gasket: Stock Honda gasket 0.025 max thickness	
66	Cover to be flat + .005	
67	Piston: Stock Honda standard size no alterations. Triangle or Dot towards push rods	
68	Piston Weight: 106 grams min. With rings and retainers 118 grams min	
69	Height: 1.808-1.813	
70	Skirt diameter= 2.357 min 2.363 max (perpendicular to pin) See tech manual for additional dimensions	
71	See tech manual for additional dimensions	
72	Wrist Pin: O.D.= 0.511 ref. I.D.= 0.354 ref length 1.854+-0.010 Weight: 23 grams min.	
73	Rings: Stock Honda- thickness= compression and scraper 0.57, 3 piece Oil Ring= 0.098 N or T or R	
74	Connection Rod: Big end I.D.- 1.021 min 1.0265 max	
75	Small end bore= 0.5111 ref.	
76	Length- near edges of bore= 2.101 min 2.111 max	
77	Weight with bolts: 119 grams min or 4.2oz. min.	
78	Crankshaft: Stock Honda no alterations. Governor drive gear in place	
79	Camshaft: Stock Honda no alterations. Compression release intact	
80	Heel to heel: Intake= 0.864 –0.869 Exhaust= 0.865-0.870	
81	Heel to peek: Intake= 1.079-1.093 Exhaust= 1.081-1.095	

