



Quarter Midgets of America, Inc.

HONDA TECH INSPECTION WORK SHEET

Class: _____ Honda 120

Division: _____ Jr. _____ Sr. _____ Hvy

Driver Name: _____ Car #: _____ Date: _____

Finish Position: _____

Check OK

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	
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 #65 max #71 Drill (0.026) No Go	
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: #63 Drill (0.038) 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 4.775min 4.799max	
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 effective 1998- 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	
36	Springs: Wire Diameter= 0.071 max Stacked length= 0.394	
37	O.D. 0.790 max, # of coils = 5.3	
38	Pressure: 11 lbs max @ inches (0.812)	
39	Valve: Single angle= 45 degrees unaltered	
40	Weight: Intake= 18 grams min Exhaust= 16 grams min	

Tech Official Signature: _____ Engine: ___ Pass ___ Fail

Honda 120

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41	Head Diameter: Intake= 0.862/0.870 Exhaust= 0.744/0.752	
42	Overall length: Intake= 2.444/2.458 Exhaust= 2.385/2.395	
43	Stem diameter: Intake= 0.216 Exhaust= 0.212/0.216	
44	See tech manual for additional dimensions	
45	Head Surface to Valve Seat: Intake and exhaust= 0.265max/0.250min	
46	-to Valve Guide: Intake= 0.925max Exhaust= 0.925max	
47	- to lowest machined area in port: Intake= 1.064max Exhaust= 1.010max	
48	Head thickness@ Flange Bolts: 2.911min/ 2.917max	
49	Ports- stock "AS CAST"- Single 45 degree angle valve seats	
50	Port Diameter @ valve: Intake: 0.745min/ 0.752max Exhaust= 0.665min/ 0.675max	
51	Block: Bore= 2.365max Stroke= 1.659max/ 1.640min	
52	Top of Piston Deck: 0.000" to 0.015" below deck	
53	Plastic fan- all blades intact	
54	Degree Cam: See tech manual	
55	Max lift: Intake= 0.227 Exhaust= 0.229	
56	Centerline: Intake= 104-107.5 atdc Exhaust= 107.5-110.5 btdc	
57	Check flywheel and crankshaft keyways for alterations	
58	Check key for alteration	
59	Check flywheel magnet and screw for alteration	
60	Check flywheel weight: 1642 grams 57.9oz. min Thailand flywheels 1570 grams	
61	Check flywheel diameter magnet area – 6.285 min	
62	Crankcase cover: Stock "AS CAST"	
63	Gasket: Stock Honda gasket 0.025 max thickness	
64	Cover to be flat + .005	
65	Piston: Stock Honda standard size no alterations. Triangle or Dot towards push rods	
66	Piston Weight: 106 grams min. With rings and retainers 118 grams min	
67	Height: 1.808-1.813	
68	Skirt diameter= 2.357 min 2.363 max (perpendicular to pin)	
69	See tech manual for additional dimensions	
70	Wrist Pin: O.D.= .5116 ref. I.D.= 0.354 ref length 1.854+-0.010 Weight: 23 grams min.	
71	Rings: Stock Honda- thickness= compression and scraper 0.57, 3 piece Oil Ring= 0.098 N or T or R	
72	Connection Rod: Big end I.D.- 1.021 min 1.0265 max	
73	Small end bore= 0.5111 ref.	
74	Length- near edges of bore= 2.101 min 2.111 max	
75	Weight with bolts: 119 grams min or 4.2oz. min.	
76	Crankshaft: Stock Honda no alterations. Governor drive gear in place	
77	Camshaft: Stock Honda no alterations. Compression release intact.	
78	Heel to heel: Intake= 0.864 -0.869 Exhaust= 0.865-0.870	
79	Heel to peek: Intake= 1.079-1.093 Exhaust= 1.081-1.095	
80	Length flange to flange: 3.137 min 3.142 max	
81	Cam bearings: 0.547 min- 0.551 max	
82	Tappets: Stock Honda no alterations. Base Diameter= 0.910 min	
83	Stem Diameter= 0.312 min Base thickness= 0.076 min – 0.090 max	
84	Length= 1.181 min- 1.220 max Weight= 16 grams min	
85	Block Stock Honda "AS CAST". Oil level sensor intact	
86	Bore= 2.365 max	
87	Deck Height= 4.527min 4.532 max	
88	Machined side cover surface- to cam thrust face= 3.228/3.240max	
89	Machined side cover surface- to bearing face= 3.429 min/3.442max	

