

## E 350 Inspection Sheet (REVISED 4/2020)

Regatta: \_\_\_\_\_ Date: \_\_\_\_\_ Boat # \_\_\_\_\_

- **Length:** (Min: 16', Max: 21') \_\_\_\_\_
- **Width:** (Max: 11') \_\_\_\_\_
- **Weight:** (Min: 1525 lbs.) \_\_\_\_\_
- **Fuel Type** \_\_\_\_\_
  - Specific Gravity \_\_\_\_\_ (0.715-0.765 @60°F)
  - Digatron Reading \_\_\_\_\_ (Must be negative)
- **Compression Ratio** (9.19:1 (+0.1 or 9.29:1 Max)
  - Whistler reading: \_\_\_\_\_

Carburetor	Venturi	Throttle bore	Measured (V)	Measured (TB)
0-4412, HP 0-80583-1	1.375"	1.687"		

Notes:

- Choke plate may be removed but no removal of choke housing.
- No other visible modifications allowed on or inside the carburetor.
- Standard boosters only and must be tightly mounted. No annular boosters. Epoxying or safety wiring of boosters recommended.
- No vacuum leaks. No turtles or other induction performance enhancing devices. No other systems allowed.
- The use of two return springs is mandatory. An over-center throttle stop is recommended.
- Carburetor adapter (Spacer) Bicknell #376 (Max. 1.00") only, no modification allowed to adapter.
  - **Measured:** \_\_\_\_\_
- Maximum size thickness straight bore spacer of 1.00". Maximum of 3 gaskets for a total thickness of 0.266" allowed.
  - **Measured:** \_\_\_\_\_
- **Intake Manifold – Edelbrock 7101 dual plane aluminum**
  - Cooling bleed lines allowed.
  - Any evidence of sanding, polishing, relieving, grinding, porting, chemical treating, abrasive blasting, ceramic work, addition of material or any alteration and modification of the original form is prohibited.
- **Block:**
  - Stock cast iron production GM V-8 style block Identification numbers may not be removed. No grinding or lighting allowed on stock block or optional Dart block.
  - A maximum of three cylinder bores and/or a maximum of seven lifter bores may be sleeved. (No indexing lifter bores)
  - Optional Aftermarket engine block permitted: Dart SHP P/N: 31161111.
  - **Block type:** \_\_\_\_\_
  - Bore: 4.00" +0.040 maximum, **Measurement:** \_\_\_\_\_"
- **Ignition:** Any factory stock HEI type ignition only. No crank triggers. No external super coils. No aftermarket multiple spark discharge control boxes. Firing order must remain stock GM: 1.8.4.3.6.5.7.2.

**Cam Profiles:**

**Procedure: Rotate engine in normal direction until the lifter is on the heel of the camshaft lobe. Set dial indicator on valve spring retainer being sure it is parallel to the valve stem. Adjust valve lash until dial indicator reads .001. Set dial indicator back to zero. Rotate engine in normal direction until indicator reads .050 stop. Set degree wheel to zero degrees or TDC mark on degree wheel. Rotate engine in normal direction and check every .050 thousandths lift. Read degrees on degree wheel and note below.**

	EXHAUST	COMP	ACHA	INTAKE	COMP	ACHA
•	.050	0	0	.050	0	0
•	.100	6	5.5	.100	6	5
•	.150	11	10.5	.150	11	10
•	.200	16	15.5	.200	16	15
•	.250	21	20	.250	20.5	19.5
•	.300	26	25	.300	25.5	24.5
•	.350	31	30.5	.350	30.5	30.5
•	.400	37	37	.400	37	37.5
•	.450	44.5	47	.450	45	49.5
•	.488	51	.471 59.5	.477	51	.458 57.5
•	.450	77	72	.450	73	66
•	.400	85	81	.400	81	77.5
•	.350	91	87.5	.350	87.5	84
•	.300	96	93	.300	92.5	89.5
•	.250	101	98	.250	97	94.5
•	.200	105.5	103	.200	102	99
•	.150	110.5	108	.150	107	104
•	.100	115.5	113	.100	112	109
•	.050	122	119	.050	118.5	114.5

\*Max Intake lift Comp .477” , **Measured:** \_\_\_\_\_

\*Max Exhaust lift Comp .488” , **Measured:** \_\_\_\_\_

\*\*Max Intake Lift ACHA .458” , **Measured** \_\_\_\_\_

\*\*Max Exhaust Lift ACHA .471” **Measured** \_\_\_\_\_

**Lobe Center Measurement Comp 110\***

**Lobe Center Measurement ACHA 112\***

• **Engine**

○ **Pistons**

- No portion of the piston may protrude above the top of the block (measurement excludes head gaskets). **Measurement:**\_\_\_\_\_”

**Head:**

- Only allowable head is Dart Part#:10021070 Dart Iron Eagle S/S 165
- **Gasket/Port Matching** It shall be permissible to perform a minor port match on the intake ports of the heads and intake manifold at the flange mating surface of each if a minimum hull weight of 1,700lbs with driver is met. The heads shall meet rule 45.3.10 in its entirety other than this modification. The intake shall meet rule 45.3.12 in its entirety other than this modification. Dimensions shall be as follows:

Maximum width to the outside wall of both ports shall be 2.70”

Maximum width of each port wall to wall shall be 1.25” each

Minimum width of port dividing wall shall be .200"  
Maximum height of each port shall be 1.975"  
Maximum port intrusion measured from the flange face of heads/intake shall be .625"  
Maximum Intake port volume will be 178cc  
There will be no tolerance to the above max/min measurements

- Check for evidence of illegal modifications to ports/chambers
- Minimum combustion chamber volume, **64cc: Measurement** \_\_\_\_\_
- Intake runner volume **175cc ±2cc Measurement:** \_\_\_\_\_
- Exhaust runner volume **70cc ±2cc Measurement:** \_\_\_\_\_
- **Valves:**
- **Valve Modification - It shall be permissible to back cut valves that meet rule 45.3.11 above in its entirety if a minimum hull weight of 1,700lbs with driver is met. The maximum distance of the required 45\* seat angle and the back cut may not exceed more than .250" as measured from the edge of the valve.**
  - Intake: Max. 1.940" \_\_\_\_\_
    - No back cutting allowed \_\_\_\_\_
    - Valve stem diameter: Min. .340" \_\_\_\_\_
  - Exhaust: Max. 1.500" \_\_\_\_\_
    - No back cutting allowed \_\_\_\_\_
    - Valve stem diameter: Min. 0.340" \_\_\_\_\_
  - Seats/Valve Face: 45°
    - Intake \_\_\_\_\_
    - Exhaust \_\_\_\_\_
  - Valve Springs:
    - O.D. 1.250" ±0.010" \_\_\_\_\_
    - Retainer: Must be steel \_\_\_\_\_
- **Lifters & Misc:**
  - Stock sized push rods only 0.3125": \_\_\_\_\_
  - Rocker arms ratio 1.5 only: \_\_\_\_\_
  - Stroke 3.48" \_\_\_\_\_
  - No shaft rockers, stud girdles allowed
  - Double roller timing chains allowed, no gear drives

NOTES:

- Check all parts for any grinding, polishing and any other alterations from the furnished stock configuration
- The above procedure **DOES NOT** override a complete dismantle of the engine to check weights of rotating/reciprocating parts, and other necessary measurements needed for a record or protest

Chief Inspector/APBA # \_\_\_\_\_

Inspector/APBA # \_\_\_\_\_

Referee/APBA# \_\_\_\_\_

Inboard Commissioner/APBA# \_\_\_\_\_

Boat Owner's signature /APBA# \_\_\_\_\_

