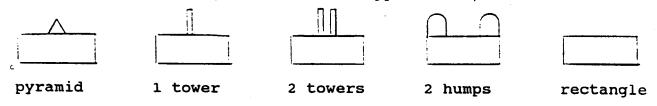
#### 5. CYLINDER HEADS

- 5.1. Cylinder heads were made of cast iron. One possible exception is the 1960 fuel injected heads thru mid March. These were supposed to be aluminum, although none have surfaced.
- 5.2. The raised casting number is on the top driver side.

The six cylinder casting number is visible with the valve cover in place. The driver side has a tapped hole for the temperature sender (no adapter). The passenger side contains mounting holes for the radiator surge tank.

The eight cylinder casting number is not visible with the valve cover in place. A raised casting symbol appears on the ends and sometimes elsewhere (see tables for application).



5.3. The casting date (format like engine block date) is located toward the front and is not visible with the valve cover in place.

The casting date begins with an alpha for the month ("I" is used starting 1956), followed by the numeric day (1 thru 31) followed by a one digit numeric year. Examples: J15 is September 1, 1955

I16 is September 1, 1956

5.4. Four bolt holes were used to mount the valve cover. Two patterns were used: first a staggered pattern, then a rectangular pattern. The pattern changed on AIM 3-9-59 (VIN -5595 to -6671).



## 5.5. References

Adams, pages 50, 52, 61, 130, 233-4, 236, 274-5, 292-5, 332-3, 365, 373, 383

NCRS Specifications 1953-72, page 62 NCRS Judging Manual 1953-55, page 27 1956-57, pages 28-9 1958-60, page 18 1961-62, page 14

# STRAIGHT-AXLE CORVETTE TECHNICAL GUIDE - MECHANICAL Page 5-2

YR	SYMBOL	CAST NO.	ASSY NO.	PART NO.	NOTES
110	SIMBOL	CASI NO.	ADDI NO.	TAKE NO.	NOTES
53	none	3836066	3836064	?	six cylinder
54-5	none	3836241	3836258	?	six cylinder
		3836241	3836265	?	six cylinder
5 <b>5</b>	rectangle	3703523	3711346	?	eight cylinder
		3703523	3736523	?	eight cylinder
	•	3703523	3836838	3836839	eight cylinder (1)
		3703523	3836840	3836839	eight cylinder (1)
56	pyramid	3725306	3729785	?	all 1-carb all 2-carb before VIN -1658 to -1663 some 2-carb afterward
	2 towers	3731762	3734029	?	most 2-carb after VIN -1658 to -1663
57	1 tower	3740997	3741459	?	all carb FI with regular cam
	pyramid	3731359? 3731539?	3739270	?Adams ?NCRS	FI with hi-lift cam

<sup>(1)</sup> The heads are identical but the springs, studs, or other assembly components may vary.



YR	SYMBOL	CAST NO.	ASSY NO.	PART NO.	NOTES
58	pyramid	3748770	3742680	?	all carb or reg cam
		3748770	3748779	3748771	all hi-lift cam (2)
		3748770	3752037	?	replacement for base
		3748770	3748770	3745141	replacement for FI with hi-lift (2) (3)
		3748770	3752843	3752845	replacement for FI with hi-lift (2) (3)
5 <b>9</b>	pyramid	3755550	3755591	3755550	all regular cam (5)
		3755550	3758124	3755550	replacement for all regular cam
0		3755550	3755592	3758584	all hi-lift (5) (2)
		3755550	3758124	3760116	replacement for all hi-lift cam (2) (3)
	?	?	3755593	3755595	all regular cam (4)
	?	?	3755597	3755595	all hi-lift cam (4)
	pyramid	3767465	3767457	3767465	all regular cam (6)
	′ ?	?	3767752	?	all hi-lift cam (6)
	?	3760116	3758124	3760116	replacement for all hi-lift cam (2) (3)
	pyramid	3774692	3776894	3774694	replacement for all hi-lift cam (2)

- (2) The casting water jacket was modified to improve cooling; two 3/16" diameter holes at an angle next to each spark plug
- (3) The casting exterior received three threaded holes (3/8-16) for accessory mounting. These appeared in the built-up boss on the driver's side at the front.
- (4) Before AIM 2-17-59
- (5) Between AIM 2-17-59 and 3-9-59
- (6) After AIM 3-9-59 (between VIN -5595 & -6671) Valve covers changed hole pattern.

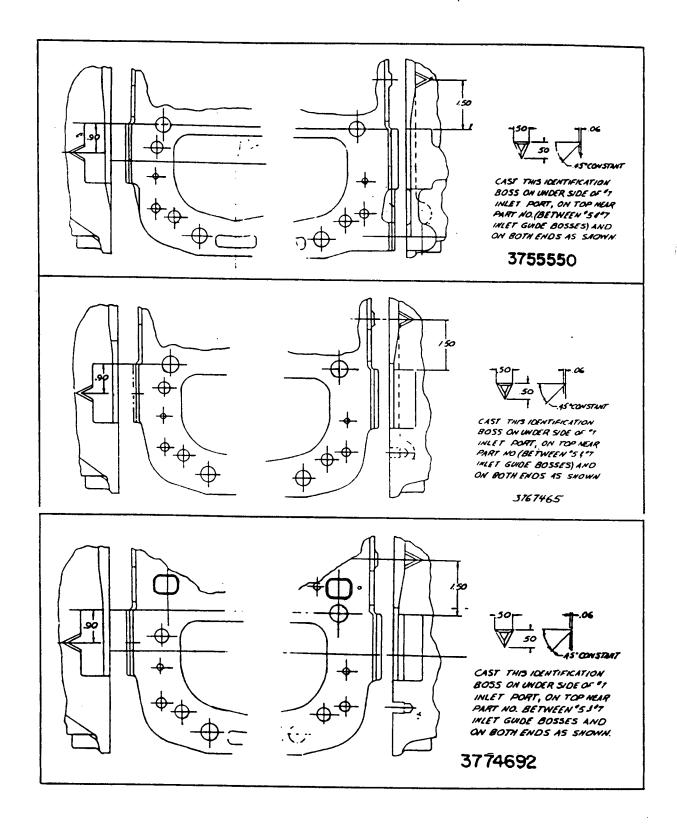


YR	SYMBOL	CAST NO.	ASSY NO.	PART NO.	NOTES
60	pyramid	3774692	3774691	3774692	regular cam
		3774692	3776894	3776894	all engines (2)
		3774692	3774691	?	all FI regular cam after AIM 3-17-60
	pyramid	3767465	3767465	3772665	all carb
		3767465	3767465	3767754	all carb
	pyramid	3767754	3767465	3767754	all carb
	?	?	3767752	?	2-carb hi-lift cam
	?	?	3774693	?	all FI hi-lift cam after AIM 3-17-60
د	rectangle	3767466	3767466	?	all FI (7)
		3767466	3767468	?	alum heads on all FI before AIM 3-17-60
		3767466	3772894	?	alum heads on all FI before AIM 3-17-60
61	pyramid	3774692	3776894	3774694	all carb (2)
		3774692	?	3774692	all carb
		3774892	3772894	?	2-carb spec cam
		3774892	3767752	?	2-carb spec cam
	2 hump	3782461	3788796	?	FI
62	pyramid	3795896	3817680	3795896	small carb
	2 hump	3782461	3817681	?	large carb
		3782461	3817681	?	FI

- The casting water jacket was modified to improve cooling; two 3/16" diameter holes at an angle next to each spark plug (2)
- It is suspected athat rectangular marked heads were never used in 1960.



CYLINDER HEADS: typical of heads with pyramid casting symbol.





#### 6. VALVE COVERS

The bolt pattern changed from staggered to rectangle on AIM 3-9-59 (between J59S105595 and -6671).



Staggered before 3-9-59

Rectangle after 3-9-59

6.1. Steel: All one-carburetor engines used stamped steel valve covers (except the 1962 large carburetor used cast aluminum). All steel covers used washers (or insulators); they used slotted screws on six-cylinder and Phillips screws on eight-cylinder.

1953-61: had the word "Chevrolet" raised in the center.

1962: the center became recessed and formed a flat rectangle.

	PART NO	BOLT PATTERN	NOTES
1953	3836135	staggered	(1)
1954-55	3836242	staggered	(2)
1955	3712575	staggered	V-8 engine only; (3)
1956-59	unknown	staggered	until AIM 3-9-59
1959-61	3772668	rectangle	after AIM 3-9-59
1962	3813915	rectangle	small carb only

- (1) The steel valve covers were unique in several ways: lower at front end to clear the hood; the oil filler cap positioned more to the rear; a lip and two studded tabs on passenger side for the ignition shielding; two studs which fit through holes in the cover with two gaskets (insulators) filling the holes to prevent oil leaks and provide a surface for the retaining acorn cap nuts.
- (2) The steel valve covers are identical to passenger covers except for two studs on the passenger side for mounting the upper ignition shielding. Special football shaped washers were used.
- (3) The steel valve covers were physically the same as passenger cars.



6.2. Aluminum: All two-carburetor, fuel-injected and 1962 large one-carburetor engines used cast aluminum valve covers. Aluminum covers used zinc-plated Phillips screws without washers.

	PART NO	BOLT PATTERN	NOTES
1956-59	3726086	staggered	until AIM 3-9-59; (1)
1959-62	3767493	rectangle	after AIM 3-9-59

(1) There were several modifications to this part number:

In mid 1956 two notches appeared in the gasket lip due to a clearance problem with the intake manifold. Started between VIN -1658 and -1663 and continued thru 1957.

1957 ribs changed from 9 to 7 when the supply ran out. Carbs switched about VIN -5100; FI switched about VIN -2900.

Some 1957 covers on FI engines had a notch in the center of the top rib (for air meter clearance). First appeared about VIN -1900; ended about VIN -2900 Mysteriously, some 7-rib covers were notched through 1958.

AIM 1-25-58 changed the height of the word "Corvette". From low profile (.03 inch) to high profile (.12 inch)

NOTE: replacement aluminum covers have a casting flaw.

## 6.3. Finish

Steel valve covers, screws and washers were painted to match the engine color. Two exceptions exist: first, some 1954 covers (about 18% of engines between -1636 and -4381) have chrome covers; and second, all the 1955 eight cylinder covers were chrome plated with bright screws and washers.

Aluminum covers had unpainted screws (no washers).



### 6.4. Markings

1953: two decals, one running lengthwise on each upper edge. The decal on the passenger side had an arrow pointing to the words "Blue Flame" in white with red speed streaks. On the driver side, the decal said "Special" followed by a thunderbolt, both in white.

1954-55 six cylinder: the same 1953 decal was used on the passenger side but was reduced in size. A second decal appeared on the passenger side toward the front with the numbers "150" inside an arrow outline pointing forward, also white.

1955 eight cylinder: no markings.

1956: steel covers had the raised "Chevrolet" painted in silver-white; others had no markings.

1957-61: passenger side had a decal showing the horsepower rating expressed as three numbers inside a rectangle outline. The color varied depending on the finish of the valve cover: painted covers had gold decals, aluminum covers had orange-red decals. The decal was located on the top between the bolt holes and 3/8 inch from the aluminum rib or steel ridge.

1962: steel covers had a 5-1/4 by 1-11/16 inch recess containing a metal plate saying "Chevrolet 327 Turbo-Fire" in gold and black. Both steel and aluminum covers had a decal on the passenger side cover located on the top slope between the bolt holes and 3/8 inch from the aluminum rib or steel ridge. This decal was gold and black showing the hp number above the word "HORSEPOWER".

#### 6.5. References:

Adams pages 50, 52-3, 61, 132, 166, 183, 236, 275, 295, 334, 404-7

NCRS Judging Manual 1953-55, pages 27-8

1956-57, page 29

1958-60, page 23

1961-62, page 18

VALVE COVER DECALS (sizes reduced)



Above: 1953 Below: 1954-55



Right Top: 1957-61 (hp numbers varied)

Right Center: 1962 (hp numbers varied)

Right Bottom: 1962 (steel covers only)



