

10. AIR CLEANER ASSEMBLY

10.1. Three Carburetor Engines

YEAR	CLEANER	NOTES
1953-54	3796476	until about E54S002902
1954-55	1551968	after about E54S002911

3796476: Each carburetor had a bullet shaped air inlet extension PN 3796476 with the name Boettger stamped between the dome and center panel of the three screen panels. Replacement units did not have this mark.

The intake unit was secured with zinc or cadmium plated, slotted round or pan-head screws.

Sometime after the beginning of 1954, scribe marks appear on the end which mounts to the carburetor. A Chevrolet service bulletin says "Align scribe with boss on carburetor body and secure with set screw." This positioned the three screened openings down and slightly rearward.

1551968: a sheet metal manifold was attached to all three carburetors. At the center bottom of the manifold was a small opening with a filter, apparently to drain excess fuel. Part numbers for the manifold were:

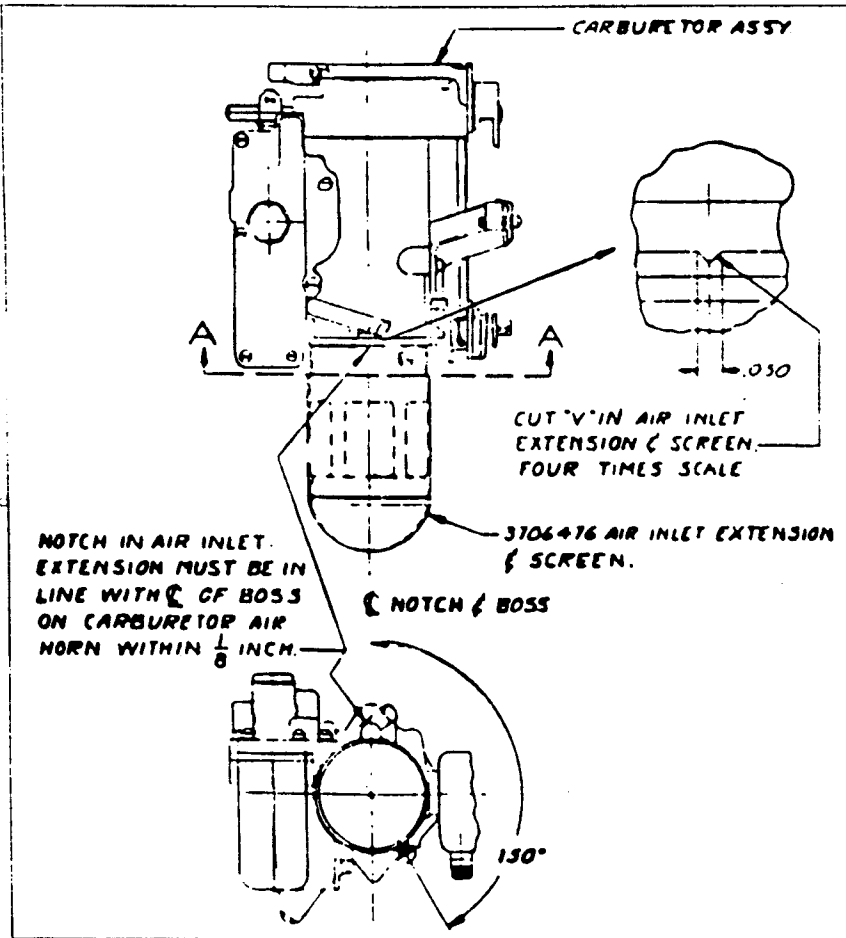
3710012 center duct	3710007 rear elbow
1151974 center breather	3710008 front elbow

Air was fed to the manifold through two air inlet assemblies (air cleaners) sitting on top of it. Each inlet had a chromed domed top held in place with a wing nut (stamped, not solid type). Inside was an element resembling heavy steel wool and held in place by a perforated retainer. The ductwork was painted semi-gloss black.



AIR CLEANER - SIX CYLINDER

(no examples have been found of the notation "cut V")



10.2. Two Carburetor Engines

YEAR	CLEANER	NOTES
1956-57	1552558	
1958-60	1553619	until AIM 10-21-59
1960-61	5645690	after AIM 10-21-59

1552558: Each carb had its own air cleaner. It was 6-7 inches diameter, 2 inches high, and made of machine polished aluminum. There were twelve columns of louvers around the side with four louvers in each column. The pieces were crimped together, so the element is not replaceable.

Air cleaners are held in place with low-profile, plated, stamped steel wing nuts.

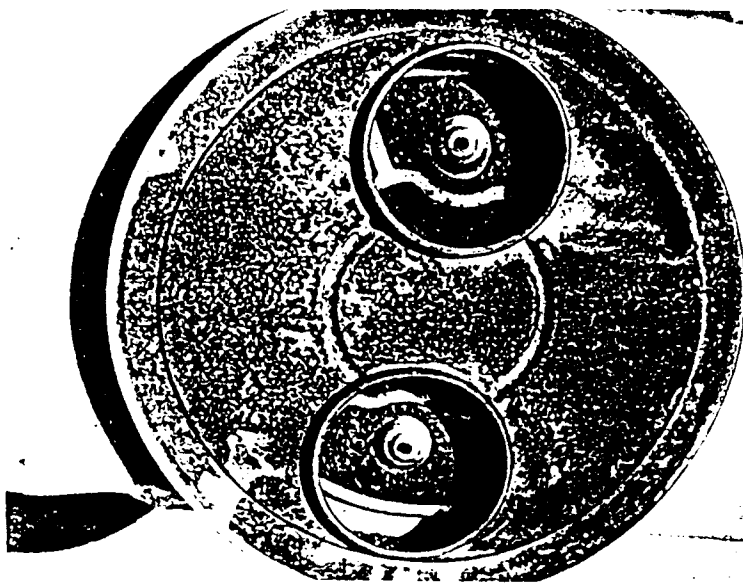
1553619: One 14-15 inch sealed air cleaner covered both carbs. Two of the three depressions in the top held the wing nuts for mounting to the carbs. The middle depression was not used.

5645690: The significant change was the removable polyurethane foam element (PN 5646306, AC type A98C) retained against the louvers by a long "S" shaped spring.

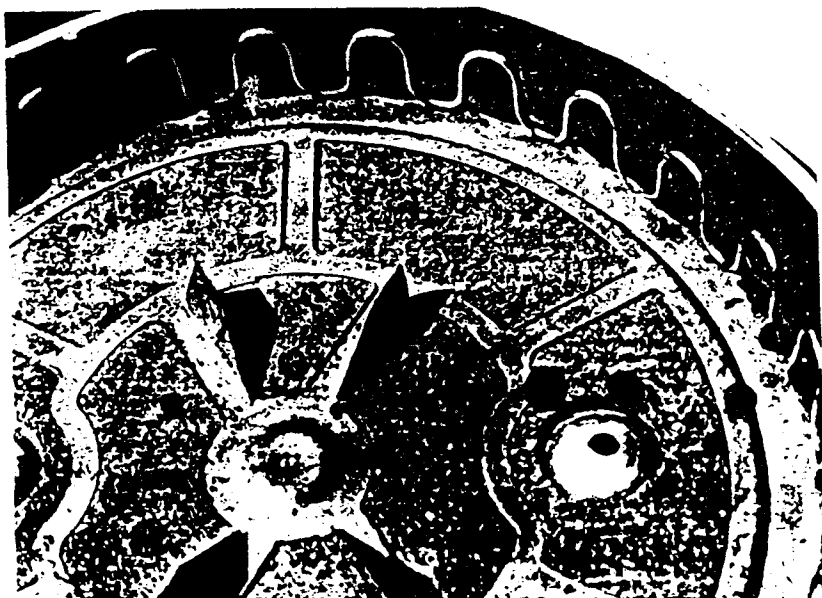
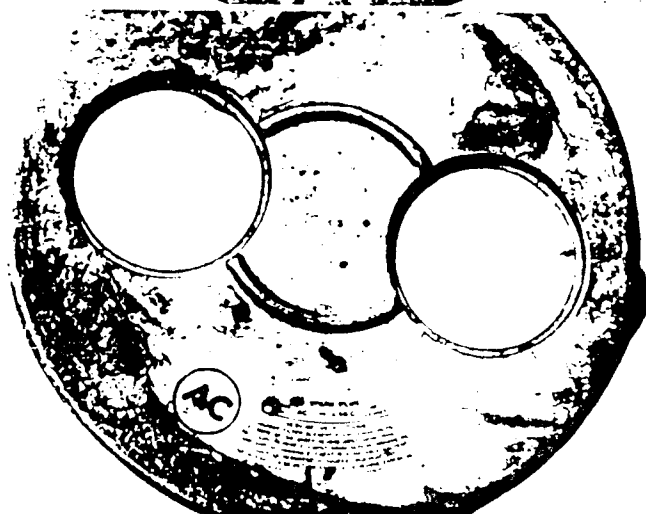


AIR CLEANER
DUAL CARBURETORS

1958-60
PN 1553619
SEALED
FILTER



1960-61
PN 5645690
REMOVABLE
FILTER



10.3. One Carburetor Engines

YEAR	CLEANER	NOTES
1955-57	1552185	1955 flat bottom; 1956-7 indented bottom
1956-57	1552558	sporadic usage
1958-60	1553495	until AIM 10-19-59
1960-61	5645689	after AIM 10-19-89
1962	5648423	none found to date, used prior year cleaner

1956-57 NOTE: 14 inch diameter aluminum cleaners from later Corvettes will work (PN 1553495 sealed or PN 5645689 unsealed) but are not considered original.

1958-62 NOTE: The 1963 or 64 Pontiac cleaner will function properly and looks similar but is chrome, not aluminum, and had a removable paper element (AC A350C).

1552185: It was about 12 inches diameter and 2 inches high. There were twelve columns of louvers around the side with four louvers in each column. The pieces were crimped together, so the element is not replaceable.

The chrome plated air cleaner was held in place with a wing nut. The wing nut was stamped, not solid, type and chrome plated. The underside of the element is flat, without any depressions to clear the carburetor's choke housing.

1956 and 57 air cleaners on one-carb engines were identical to the 1955 cleaner (same PN), except an indentation was made in the bottom to clear the automatic choke housing.

1552558: Short supply of the 12 inch cleaner resulted in some engines receiving this 6 inch diameter air cleaner, normally used on two-carb engines.

1553495: A 1.5 inch high by 14-15 inch diameter cleaner. It had 12 columns of louvers with 3 louvers in each column and was made of polished aluminum. The aluminum wire element was sealed inside. This unit was attached with a wing nut and washer. The bottom had several depressions to allow clearance for carburetor parts: one large square shaped, and three smaller oval shaped.



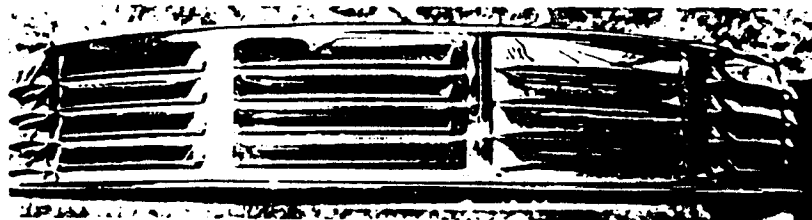
5645689: Is nearly identical to 1553495. The main difference was the removable polyurethane element (PN 5646306, AC type A98C) held against the louvers by a long "S" shaped spring.

5648423: None of these cleaners has appeared on 1962 cars. They look the same as 5645689, but have two internal changes. First the composition mat liner on the top was removed. Second, the polyurethane element and S spring were replaced with a folded paper element.

1955-62 TOP VIEW

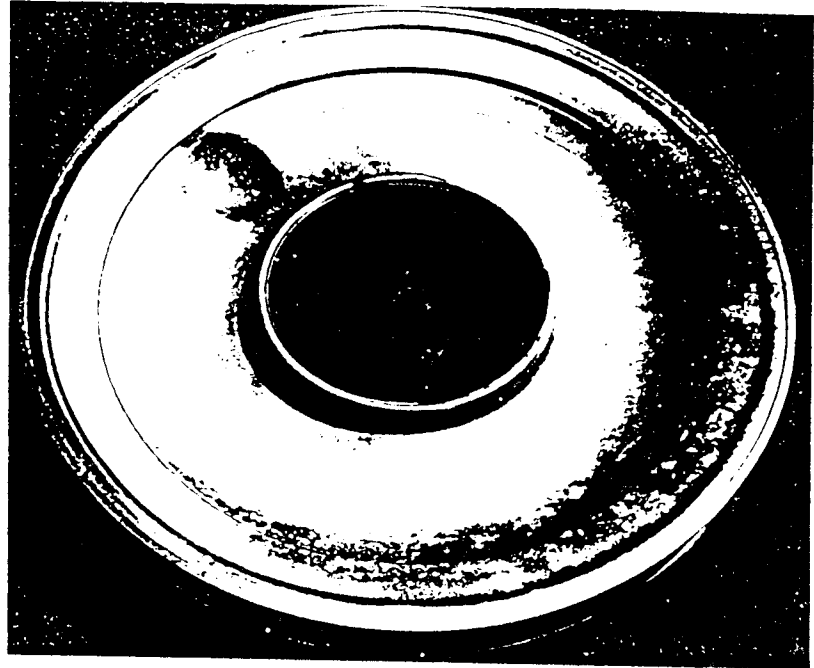


1955-62 SIDE VIEW

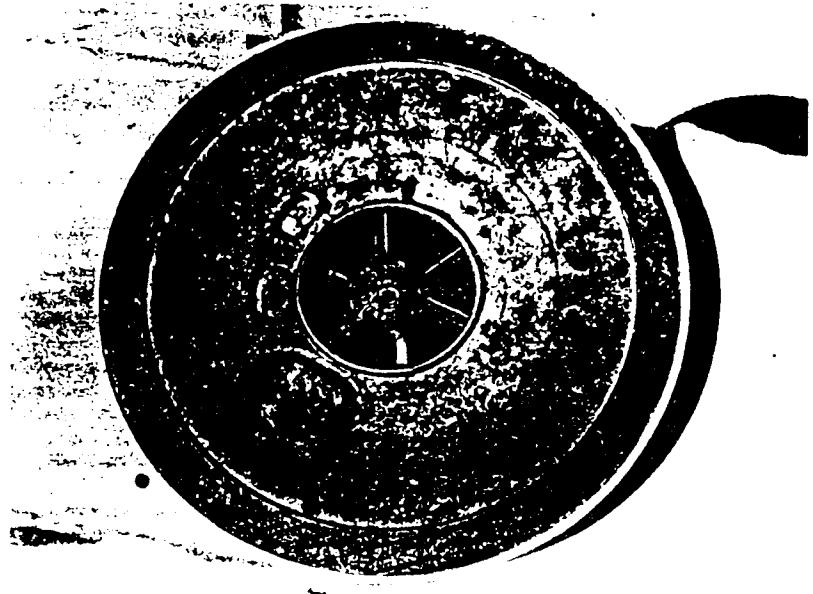


1955 BOTTOM VIEW (SAME AS 56-57 BUT NO INDENTATION)

1956-57 BOTTOM VIEW

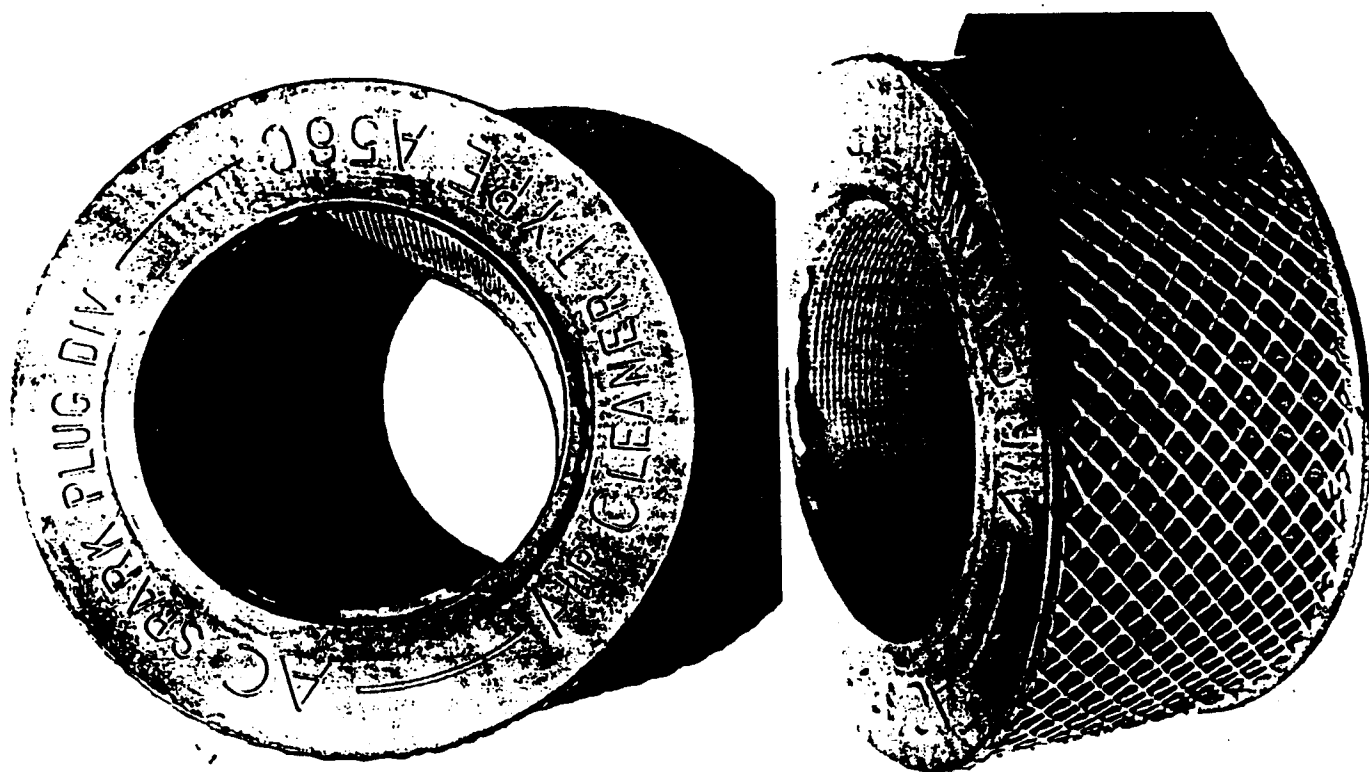


1958-62 BOTTOM VIEW



10.4. Fuel Injection Engines

YEAR	FUEL INJ	CLEANER	NOTES
1957	7014360	1553077	until AIM 4-30-57
		1553181	after AIM 4-30-57
	7014520	1553181	until AIM 7-25-57
		1553556	after AIM 7-25-57
7014800	1553556		
	7014960	3744832	after AIM 7-25-57 (hi-lift cam only)
1958-61	all	1553780	large X
1962	all	5648705	small X
		1553780	sporadic until about VIN -103361



1957 FI FILTER ELEMENT FOR AIR CLEANERS 1553181 & 1553556

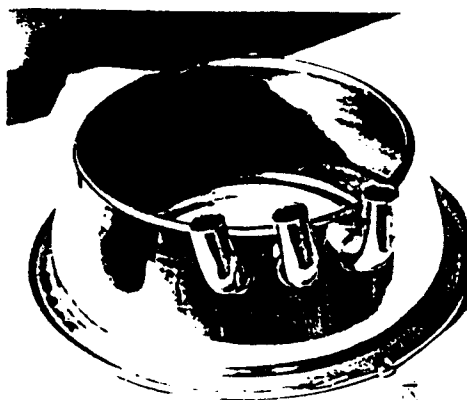
1553077: A large sealed unit. It's adapter was built into the assembly and had three tubes. One tube is connected to the fuel meter, the others connect the nozzle blocks.

1553181: The removable paper element (AC A56C) is visible since there is no outer cover on the cleaner. The element was held in place by a chromed disk (PN 1553196) and wing nut (stamped type).

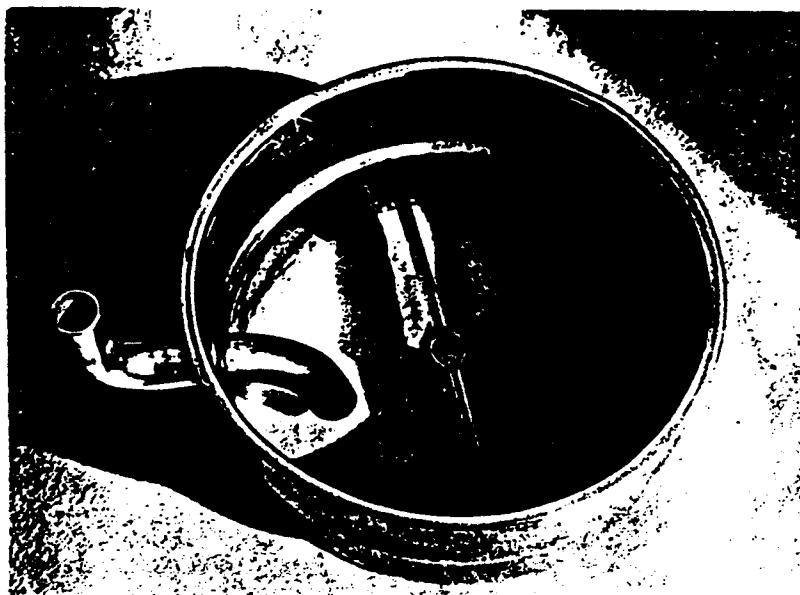
The air cleaner adaptor (PN 1553100) looks the same but is a separate piece from the air cleaner assembly. The nozzle blocks now connect directly to the bottom of the air meter instead of the air cleaner adaptor. Two of the three tubes are plugged with plastic caps.

1553556: Had a single tube adaptor PN 1553781.

1957 FI
TRIPLE TUBE ADAPTER



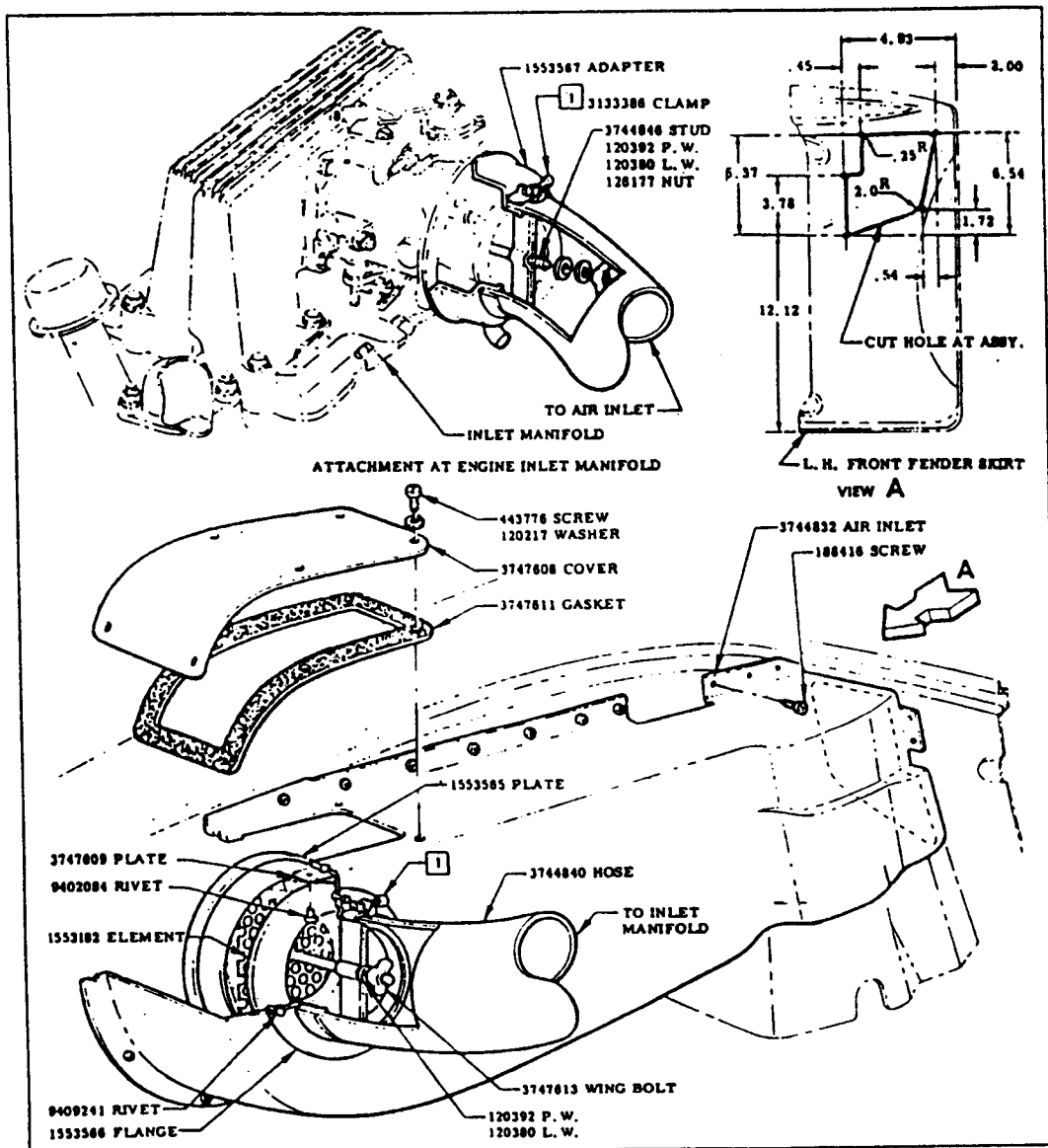
1957-62 FI
SINGLE TUBE ADAPTER



3744832: Only 43 of these fiber glass fresh air intake boxes were produced. They were screwed on the driver's inner fender panel running forward toward the radiator. The intake box cover was fiberglass attached with clutch-head screws.

Element PN 1553182 mounted inside the box. A 4 inch diameter rubberized duct connected the box to the FI adaptor PN 1553567 which had a single tube and did not extend into the air passage like later adaptors.

1957 HI-LIFT CAM AIR BOX AFTER AIM 7-25-57



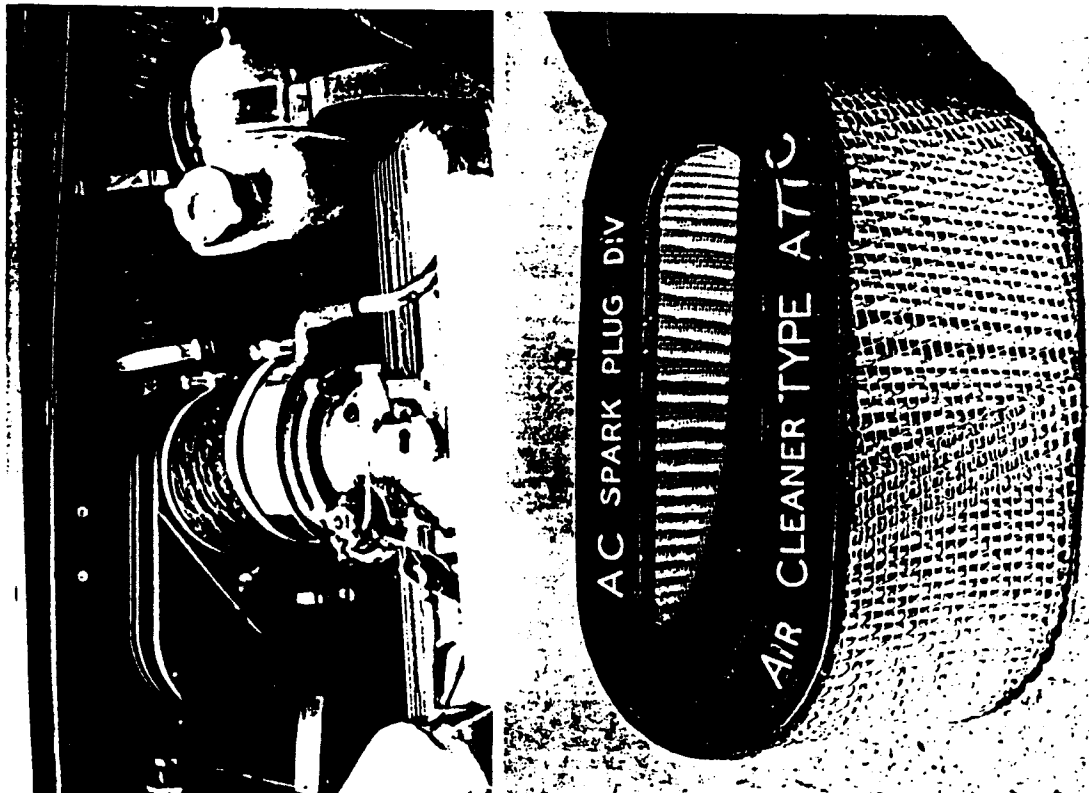
1553780: A metal assembly mounted on the driver fender panel. It can be identified by a large X on the entire width of the cover. It used an oval shaped, folded paper element (PN 1553911, AC type AC-A77-C).

The cover had a red-lettered instruction decal. The fresh air hose appeared only on the hi-lift cam engines. It is 4-3/4 inch diameter formed with 3/8 inch spiral wire. The filter-to-adapter hose is slightly larger diameter. The clamps for both hoses have pan head screws.

The fresh air hose ran from the air cleaner along the fender panel to the radiator support. The hole in support was covered with a screen. Those without a hose used a block-off plate to cover the hole in the radiator support. The hose clamp changed on AIM 1-30-60.

The fresh air hose was held against the inner fender panel in three ways. The first version consisted of one retainer screwed to the fender panel. The second version began about January 1960 and deleted the retainer and added a protector bracket near the hood support. There was a nut plate riveted to the inner fender panel near the sway bar which was visible from inside the driver's wheel well. The third version began about May 1960 and added two retainers on the fender panel.

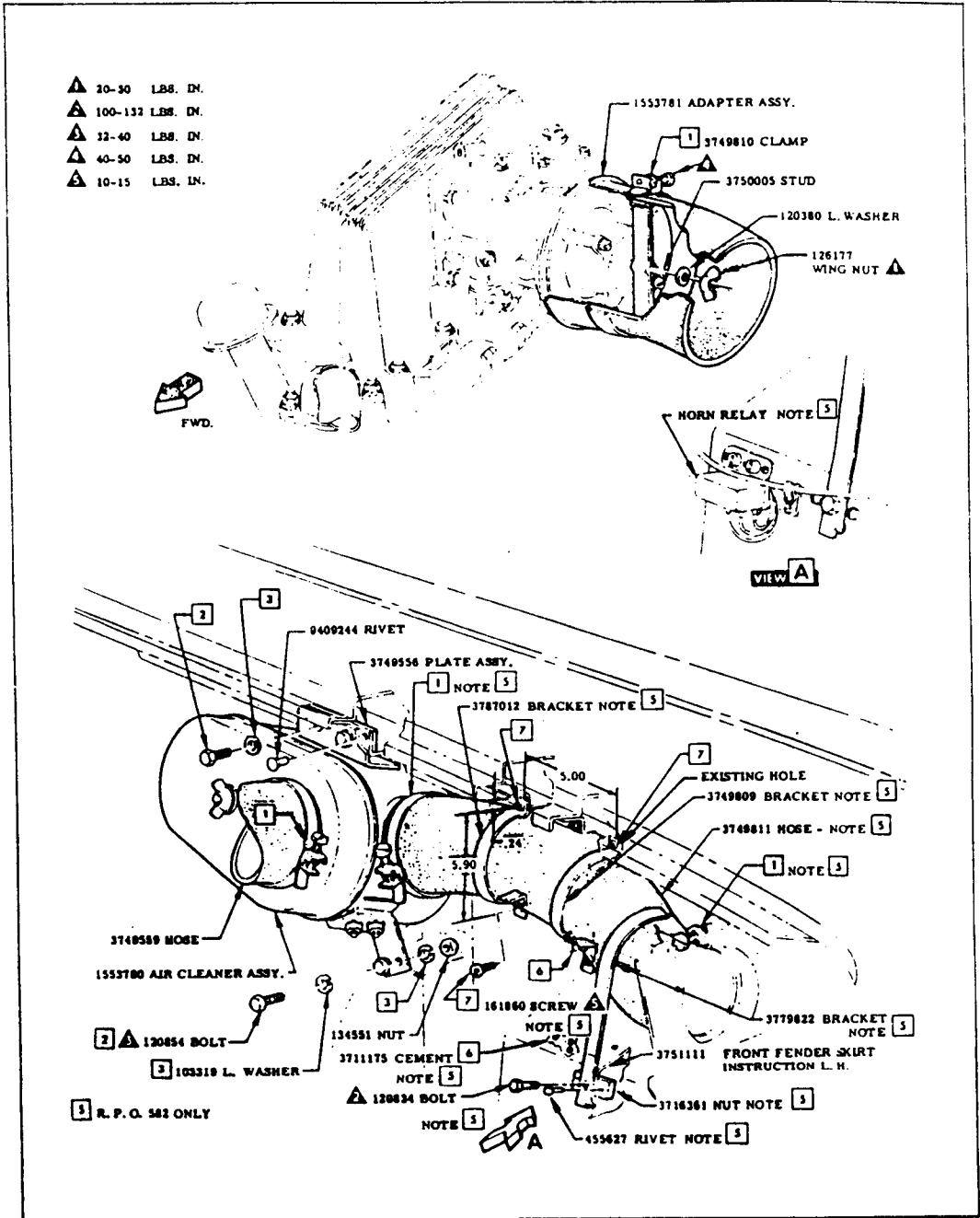
1958
THRU
1961
FI



FUEL INJ

1958-62
AIR
CLEANER
----->

1958-61
DECAL
↓



REPLACE FILTER ELEMENT EVERY 15,000 MILES,
OFTENER UNDER SEVERE DUST CONDITIONS.
DO NOT WASH - OR OIL
DO NOT CLEAN WITH AIR HOSE
REPLACE ELEMENT WITH
AC TYPE A 77 C

AC SPARK PLUG

MADE IN U.S.A.

FLINT, MICH

5648705: identified by a smaller X on the cover (stops short of the cover edge by at least an inch). Its element (PN 5648987) was flat, shaped in a tapered oval cone and supported by wire mesh screen (PN 5648713).

Uses small X with foam filter element.

Used 4.75 inch diameter fresh air hose on the driver's inside fender panel from air cleaner to a hole in the radiator support. Three brackets held it in place using fillister head screws. The hole in the radiator support had a wire screen. Clamps are side screw type with solid band.

NOTE: 1958-62 FI had plate assy 3749556 riveted to fender panel.

1962 FI
AIR CLEANER



10.5. REFERENCES:

Adams: 1953-55 pages 53-6, 61
1956-57 pages 128, 166, 174-8, 180, 185-7
1958-60 pages 230-2, 271-1, 288
1961-62 pages 330-1, 364, 371, 379-80

GM Assy Manual 1956-57 Sect 6 Sheet 3.00
Sect 469 Sheet 1.00
RPO 579 Sheet 1.00 and 1.01
1958-60 Sect 6 Sheet 3.00
Sect 469 Sheet 1.00
RPO 579 Sheet 2.00
1961 Sect 6 Sheet 3.00
Sect 468 Sheet 1.00
RPO 579/582 Sheet 2.00
1962 Sect 6 Sheet 2.00
RPO 582 Sheet 3.00

NCRS Judging Manual 1953-55, page 33
1956-57, page 35
1958-60, page 20
1961-62, page 15

