

FORD'S WAY
EVOLUTION OF THE
A-9020
GAS/COWL TANK FILLER SCREEN ASSEMBLY
AND
A-9032
GAS TANK FILLER FLANGE ASSEMBLY
PART 2
BY
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In Part 1, Model A News January/February 2009, about the Gas Tank Production, I discussed the processes which Ford did in building and assembling the A-9002 Gas Tank Assembly and the A-9300 Gas Gauge Assembly. Before going into the descriptions of the individual 28-31 tanks themselves, which will be in future issues of Model A News, I thought a description of the attached parts "after" the tank was built and painted, excluding the A-9030 Gas Tank Filler Cap Assembly, should be brought forth.

Dates represent the Part Release (PR) date and do not necessarily represent the production date as it took a few days to get the newly drawn part off of the drawing boards, into production and out to the assembly plants which may have taken from 1 week to several depending on just how long it took and just how far the part had to go. Sometimes many parts were put into production long after they were drawn by the engineering department. Then again there were some parts that never made it into production. Always refer to the MARC/MAFCA Restoration Guidelines and Judging Standards for actual production dates and applications when restoring your car or truck.

Contained in the March/April 1994 Issue of Model A News was one of Hans "Doc" Kalinka's "On The Road" articles describing some of the different screens themselves and also in pictures.

As the Model A Ford came into production, one of the items that Ford included in the fuel section of the Part Price List's, and a "must" in every Model A Ford car and truck, was the A-9020 Gas/Cowl Tank Filler Screen Assembly.

The A-9020 Gasoline Tank Filler Screen Assembly (screen assembly) consisted of three (3) parts: A-9021 Gasoline Tank Filler Screen (filler screen); A-9022 Gasoline Tank Filler Screen Bottom (screen bottom); and A-9023 Gasoline Tank Filler Screen Head (screen head).

In relation to this, there was also the A-9032 Gas Tank Filler Flange Assembly which secured the filler screen assembly and gas cap to the tank.

The main function of the screen assembly, or as some called it, a spark arrestor, was not only to keep bits of small particles from getting into the gas tank when filling the tank with gas, but it was also placed in the tank solely as a fire preventative item according to the January 1929 Ford Service Bulletin and the January 15, 1928 issue of Ford News.

There were two (2) types of screen assemblies. The first type was the "screw-on" type which had brass screens to begin with followed by steel screens. The second type had "tabs" which replaced the "screw-on" type. There were also three (3) types of filler flange assemblies which were soldered to the top of the gas tank. Each part had various minor changes within each type.

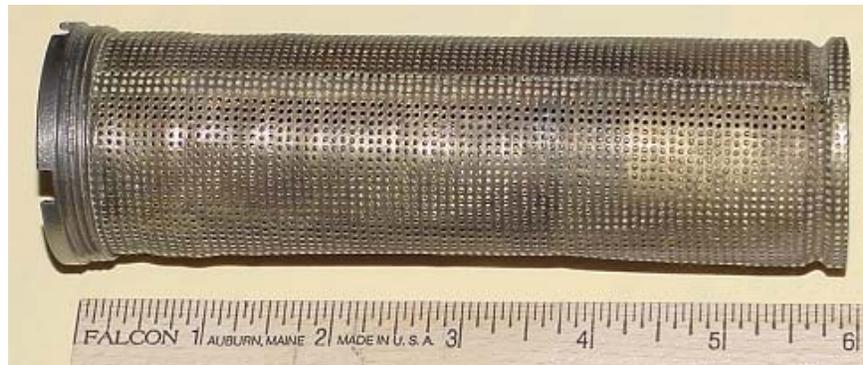
The brass screen type is not as prevalent as the steel screen type. If one were to say, "Well, just how many brass screens were made"? This then, is what it may have looked like. The brass filler screen assembly ceased production a few days after the designated change to steel on May 3-10, 1928 as indicated on the part release sheet. If one brass filler screen assembly was made for each assembled car and truck up to that point in time, say one per each engine number produced, that would mean then that approximately 127,845 brass screen assemblies were made to use in vehicles up to that time and the rest were of the steel screen types after that. If approximately 4,686,814 vehicles were produced, using the total engine number data, then that would mean that there were about 4,558,969 steel screen assemblies made. This computes out to about 3% of the screen assemblies were made of brass.

The first screen assembly, A-9020, started off as having a solid brass "filler screen" and "screen bottom"; there were no long vertical ribs or longitudinal grooves on the "filler screen"; it had a screw-on, non-plated, steel "screen head". The "screen head" started out as either a "seamed" or "seamless" part. The assembly was less than 6 inches (5-3/8 inches) in overall length and was used with A-9002 Cowl (Gas) Tank Assembly and a brass A-9032 Gas Tank Filler Flange Assembly, (Type 1) (**Fig. 1**). By November 30, 1927, PR # 5343 indicated that there was a change in the length of the "filler screen" which therefore changed the overall length of the screen assembly itself to about 6 inches where it remained as such throughout production (**Fig. 2**).

An interesting note about the Gas Tank Filler Flange Assembly. When the part was first designed, the A-9033 Gas Tank Filler Nipple, the threaded part for which the gas cap is screwed on to, was to be "Nickel Plated—No Polish". By April 10, 1928, PR # 8135, the "Nickel Plate" was removed from this part. This also reflected the Radiator Filler Flange, which was also designated to be "Nickel Plated" but was also removed on the same date. If Nickel Plating actually occurred on these parts in production, then they must be few and far between as only one known example exists for both on the same vehicle.



(Fig. 1)



(Fig. 2)

On April 17, 1928, PR # 8275, the “screen head” was to be Cadmium Plated and was changed “to seamless tubing”. No “seamed screen heads” were viewed, not to say they do not exist.

On May 3, 1928, PR # 8570, the “filler screen” was changed from brass to Cadmium Plated steel with the **addition** of seven (7) longitudinal or vertical grooves (ribs), each being about 2-3/4 inches in length and equally spaced around the top 2/3rds of the “filler screen” thus leaving the “screen bottom” as brass. As luck would have it, one was recently found in a box full of screens in Northern California but with 6 ribs. The PR (# 8570) also specified that the “screen head” had “Removed, Cadmium Plate” designation from the “screen head” itself. No reason was given for this. However, and not to confuse the issue, the same PR (# 8570) for the “screen assembly” as a complete unit indicated it was to be “cadmium plate”!

In addition to the May 3, 1928 part release, on May 10, 1928, PR # 8570 (Supplement), indicated that the “screen bottom” was also to be changed from brass to steel.

Why then the change from brass to steel? Since brass is a softer material than steel, one possibility was the corrosion aspect. In all cases viewed, the steel screens, after plating, were to withstand 50-100 hours of 20% salt spray. However, no known specific reason was given for the change.

On November 15, 1928, PR # 11038 specified that the seven (7) vertical ribs on the “filler screen” were to be reduced to six (6) vertical ribs.

On March 28, 1929, PR # 12454, Ford changed its plating specifications and specified that the screen assembly be changed to Zinc Plate instead of Cadmium Plate with no specific reason given. However, again, it may have been done because of the corrosion factor.

As the new 1930 models were being designed, so was the A-9020 Gasoline Tank Filler Screen Assembly. On November 9, 1929, PR # 14489, the old style screen assembly with the steel screw-on “screen head” was to be replaced with one which had 3/8 inch wide steel “lugs” or “tabs” (**Fig. 4 Left**) to hold it in place within the new style (Type 2) A-9032-B (Copper Plated) Gas Tank Filler Flange Assembly (**Fig. 3**). The old style screen assembly (screw-on) thus became A-9020-AR and the new style screen assembly (with tabs) became A-9020-B. The fuel tank part numbers also changed due to the changes within. The original 28-29 tank became A-9002-A1 which signified the screw-on filler flange; the 28-29-early 30 tank, for which was utilized with the 1930 A commercial and AA Trucks, excluding the 1930 150-B Station Wagon, became A-9002-A2. It was the same identical tank as the A-9002-A1 except it utilized the new 1930 “Easy-On” type filler flange which also took the new A-9020-B Gas/Cowl Tank Filler Screen Assembly with the 3/8 inch tabs and new 1930 gas cap. The new 1930 tank, A-9002-B, also utilized the new Zinc Plated screen assembly.



(Fig. 3)



LEFT

RIGHT

(Fig.4)

On February 24, 1930, PR # 15663 specified that the width of the lugs or tabs and slots were widened from $\frac{3}{8}$ inch to $\frac{1}{2}$ inch to lessen any possibility of breakage of the lugs themselves (**Fig. 4 Right**). This feature was also indicated in the March 1930 Ford Service Bulletin thus indicating that a heavier gauge of material was also being used in the manufacture of the new part. The part number, however, remained the same.

When the A-9002-C tanks made their appearance in mid-1930, they too also used the A-9020-B screen assembly with the $\frac{1}{2}$ inch lugs or tabs.

On December 2, 1930, PR # 18323, Ford decided to replace the filler screen assembly (with the $\frac{1}{2}$ inch lugs) and reinstate the filler screen assembly with the screw-on "screen head" which was very similar to, if not exactly like, the 28-29 filler screen assembly. Thus the filler screen assembly with the $\frac{1}{2}$ inch lugs became A-9020-BR and the reinstated filler screen assembly became A-9020-A.

This also required a change in the A-9002-C tank during this time as a new style (Type 3) A-9032-C (Copper Plated) Gas Tank Filler Flange Assembly was also changed to accept the reinstated A-9020-A filler screen assembly with the screw-on "screen head" but retained the "Easy-on" type of gas cap (**Fig. 5**). However, there may be some early 1931 tanks which still possess the Type 2 Gas Tank Filler Flange and the "tabby" type filler screen assembly. This feature remained the same, including its use on the 1931 A-9002-E tanks which were used with the indented firewalls, throughout the production period of the Model A and AA Ford.



(Fig. 5)

**A-9020 GAS/COWL TANK FILLER SCREEN ASSEMBLY
AND CORRESPONDING
A-9032 GAS TANK FILLER FLANGE ASSEMBLY
CHART AND GUIDE**

| PART RELEASE DATE | PART ASSEMBLY NUMBER | FINISH OF SCREENS (TOP AND BOTTOM) | VERTICAL RIBS ON TOP SCREEN | SCREEN HEAD | HEIGHT OF TOTAL ASSEMBLY |
|---|-------------------------------------|---|--|--|---|
| Start of Production October 23, 1927 | A-9020 A-9032 | Brass | None | Non-plated steel Screw-on (Seamed or Seamless steel tubing) | Less than 6 inches |
| November 30, 1927 PR # 5343 | A-9020 A-9032 | Brass | None | Non-plated steel Screw-on (Seamed or Seamless steel tubing) | 6 inches |
| April 17, 1928 PR # 8275 | A-9020 A-9032 | Brass | None | Cadmium Plate steel Screw-on Seamless tubing | 6 inches |
| May 3, 1928 PR # 8570 | A-9020 A-9032 | Top Cadmium Plate Steel; Bottom Cadmium Plate Brass | 6-7 | Cadmium Plate steel Screw-on Seamless tubing | 6 inches |
| May 10, 1928 PR # 8570 (Supplement) | A-9020 A-9032 | Cadmium Plate Steel | 6-7 | Cadmium Plate (Or not) steel Screw-on Seamless tubing | 6 inches |
| November 15, 1928 PR # 11038 | A-9020 A-9032 | Cadmium Plate Steel | 6 | Cadmium Plate (Or not) steel Screw-on Seamless tubing | 6 inches |
| March 28, 1929 PR # 12454 | A-9020 A-9032 | Zinc Plate Steel | 6 | Zinc Plate steel Screw-on Seamless tubing | 6 inches |

| | | | | | |
|---|--|---------------------|---|--|----------|
| November 9, 1929 PR # 14489 (For new style 1930 gas tank) | A-9020-B A-9032-B | Zinc Plate Steel | 6 | Zinc Plate steel 3/8 inch wide tabs Seamless tubing | 6 inches |
| February 24, 1930 PR # 15663 | A-9020-B A-9032-B | Zinc Plate Steel | 6 | Zinc Plate steel ½ inch wide tabs Seamless tubing | 6 inches |
| December 2, 1930 PR # 18323 | A-9020-A (Reinstatement of A-9020 above) A-9032-C | Zinc Plate Steel | 6 | Zinc Plate steel Screw-on Seamless tubing | 6 inches |

NOTE: Dates pertain to the Part Release (PR) and not the actual production date. Refer to the MARC/MAFCA Restoration Guidelines and Judging Standards for those dates.

NOTE: During the judging event, the filter screen may be removed and examined.

Data pertaining to the content of this article came from the MARC/MAFCA Restoration Guidelines and Judging Standards (standards), Ford Part Releases (PR), Ford Part Drawings, Ford Service Bulletins (FSB), Ford Service Letters, Ford News, Model A News, and the viewing of original parts themselves.

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