

Ford's Way

EVOLUTION OF THE

1930-1931

MODEL A/AA FORD

GAS TANK

BY

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The following article is the 5th of 5 concerning the "Ford's Way" articles about the Model A/AA Ford Gas Tank and related parts. The first, Gas Tank Production, Part 1: MAN/56/1/14-17 (2009), was about the construction of the tank itself; the second was, Evolution of the A-9020 Gas/Cowl Tank Filler Screen Assembly and A-9032 Gas Tank Filler Flange Assembly, Part 2: MAN/56/4/20-21 (2009); the third was about the Evolution of the A-9300 Gas Gauge Assembly, Part 3: MAN/56/6/25-29 (2009); and the fourth was about the Evolution of the 1928-1929 Gas Tank, Part 4: MAN/58/2/14-17 (2011).

The dates listed in this article are those dates which were listed by Ford in their Part Releases (PR), also known as Engineering Information (E.I.), documented Ford Service Letters, and Ford Service Bulletins and do not reflect the true release date of the subject. Please refer to the **MARC/MAFCA Restoration Guidelines and Judging Standards*** for those dates of actual release.

The Model A/AA Ford gas tank had a patent number of 1,629,493 for which Ford filed on August 18, 1926. This number is also on the A-35329 Patent Data Plate which was riveted with four round head, cadmium plated (S7), drive-in style rivets to the upper right side of the firewall (A-35328-B Dash Assembly) inside the engine compartment on the 30-31 vehicles.

The changes mentioned within this article are the more noticeable and significant changes on the tanks and some specific assemblies themselves. There were other minor and smaller changes mentioned within the Part Releases, but are not mentioned here.

The gas tank went through a series of name changes. Those were Gas Tank Assembly, Cowl and Tank Assembly, Cowl Assembly, and Cowl Tank Assembly. It received part number A-9002 for which there were 5 major styles of gas tanks which were produced by the Ford Motor Company for the Model A/AA Ford from late 1927 through 1931. Those were A-9002-A, B, C, D and E, with slight variations in between.

A-9002-B: COWL TANK ASSEMBLY

The new tank, which was “adopted” on October 12, 1929, was for the 1930 production Model A’s which was the A-9002-B: Cowl Tank Assembly which held about 11 gallons of gas but retained the 1928-1929 style A-11805: Instrument Panel Assembly. By November 26, 1929, PR #14703, the tank assembly was brought up to date for production. Other unique features included the new style gas tank top, a “Copper Plated” gas tank filler flange, gasoline tank filler screen assembly with 3/8 inch wide tabs, “Easy On” gas cap, gas tank bottom, steering column support—upper; gas tank speedometer cable support assembly, carburetor adjustment rod bracket on gas tank, and gas tank outlet flange. Unlike the 1928-1929 firewalls, which were of two and sometimes three sections, the firewall of the new 1930 style bodies was all one piece and not connected to the gas tank assembly itself (except for attachment) as the 28-29 tanks were.

The new A-9002-B tank also had two triangular indents or stampings on the bottom of the tank (**Fig. 1**). These stampings were such so as to utilize the placement of the A-3520: Steering Column Support—Upper on the tank for either being set up for the Right Hand Drive (RHD) vehicles (which had a hole for the choke rod control) or the Left Hand Drive (LHD) vehicles. Unlike the 1928-1929 steering column support bracket, which had four (4) rivets to attach itself to the tank, the early 1930 bracket had just three (3) rivets attaching it to the tank (**Fig. 2**) and was 2-3/4 inches in length (**Fig. 3**).



Fig. 1



Fig. 2



Fig. 3

The initial production tank also had no embossing to secure the A-140298 Cowl Moulding Assembly to the tank (**Fig. 4**) (nor did the lower cowl section). Clips such as these (**Fig. 5**) (Ford part number unknown) were used for this purpose, thus making this feature short lived on the first 1930 production vehicles.



Fig. 4



Fig. 5

On December 5, 1929, under E.I. #14815, Ford made a change to the Steering Column and related parts. This change also necessitated a change to the A-3520 Steering Column Support Upper Bracket under E.I. #1-14815 on the same date where a new pattern was necessary to accommodate the new steering column (**Fig. 10**).

By December 16, 1929, the new "shorter" A-3520 Steering Column Support Upper Bracket (**Fig. 6**) was "adopted" for use on the A-9002-B Cowl Tank Assembly along with the new "longer" Steering Column (**Fig. 10**).



Fig. 6

To confirm this I asked around to several owners of early 1930 Model A's and sure enough, measuring from the same point on the gas tank, those with an early tank had a longer bracket than those with later tanks by "approximately" $\frac{3}{8}$ of an inch .

On December 26, 1929, PR #14977, it was decided to add three (3) $\frac{1}{2}$ inch embossing for the assembly of the cowl moulding on the tank itself (**Fig. 7**). These embossings replaced the use of the cowl band clips seen in (**Fig. 5**).



Fig. 7

It is thought, but not yet proven, that the very early production A-9002-B Gas Tanks were those which had no embossing for the cowl band and also had no vertical reinforcing ribs on the back side of the tank (**Fig. 8**). The next "B" tank that evolved was one that had three (3) 1/2 inch cowl band embossings with two (2) vertical reinforcing ribs on the back side of the tank (**Fig. 9**). However, as we all know, Ford used every part. And since the "top" and the "bottom" of the tank were separate stampings, known tanks are known to exist which have NO Cowl Band embossing but do have the two vertical reinforcing ribs in back AND known tanks are known to exist with the three (3) 1/2 inch Cowl Band embossings but without reinforcing ribs in back but only for a very short period of time.

Another interesting feature on tanks with vertical reinforcing ribs was that some "ribs" were stamped as an embossing (raised surface) while some "ribs" were stamped as an indent.



Fig. 8



Fig. 9

On December 31, 1929, the NEW 1930 Model A Ford's were introduced to the American public.

On January 17, 1930, the Chicago branch issued a service letter describing the "Steering Gear" and the change of the A-3520 Steering Column Support Upper Bracket which was adopted on December 16, 1929. The letter went on to say: *"The steering gear assembly A-3503-H for the change in the Model A Car was designed with an overall length from end to end of steering column shaft of 43-1/16" to 43-1/8". This overall length has now been changed to 44-1/16" to 44-1/8", affording more clearance under the wheel. The lighting switch handle and horn switch assembly, A-3616-G, is changed in length to correspond with the shaft length and will be listed under A-3616-H."* **Note: Please review the MARC/MAFCA Restoration Guidelines and Judging Standards for more information on the Steering Gear Assemblies.**

Additional information concerning the lengthening of the steering column was also referred to in the February 1930 Ford Service Bulletin, page 422 (**Fig. 10**). The bulletin went on to say: *"To provide additional clearance between driver's seat and steering wheel, the length of the steering column was recently increased and the angle of the column changed (see Fig. 849). This was accomplished by increasing the length of the steering column 1 inch and **shortening the steering column bracket approximately 3/8"**. The new arrangement provides greater ease in handling the car".* The new bracket was 2-3/8 inches in length (**Fig. 6**). This change was quickly "Adopted" on December 16, 1929 and the new bracket was soon put into production along with the new "longer" steering column.

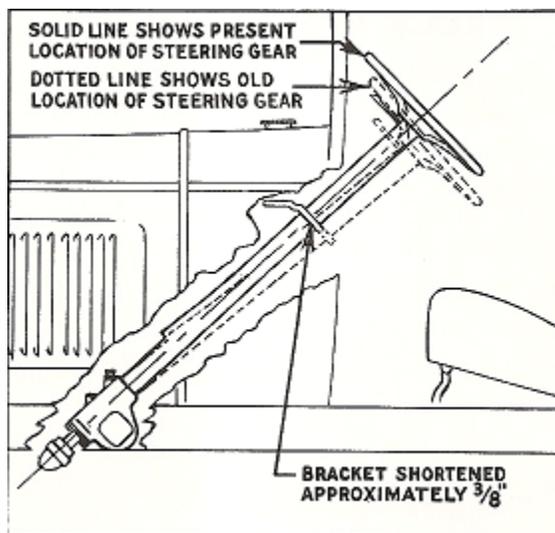


Fig. 10

On January 31, 1930, PR #15414, the three (3) embossings for retaining the Cowl Moulding Assembly went from ½ inch (**Fig. 7**) to 1 inch embossings (**Fig. 11**). This feature continued through the use of the A-9002-B tanks and for a short time with the new A-9002-C tanks.



Fig. 11

Although the new commercial cabs were not released until about June 1930, on February 7, 1930, PR #15347 (Supp. #4), it had indicated that the "B" tank was released for 76-B Open Cab, 79-B "A" Panel Delivery, 82-B Closed Cab, and 85-B "AA" Panel Delivery indicating that maybe some of these first new commercial cabs also had the "B" tank associated with the body. On the other hand, the "B" tank may have been "released" for the latter four body styles early in 1930 but did not show up in production until later in mid 1930.

On February 24, 1930, PR #15663, Ford replaced the 3/8 inch wide filler screen tabs with ½ inch wide filler screen tabs within the "B" tank. See MAN/56/4/20-21 2009 for more information.

THE 1930 A-9002-B GAS TANK

DATE	FILLER FLANGE AND SCREEN	INST. PANEL ASSY.	TRIANG- ULAR INDENTS ON BOTTOM	STEERING COLUMN SUPPORT RIVETS AND SIZE	COWL BAND EMBOSS ON TANK	RIBS ON BACK SIDE (TANK)
November 26, 1929 PR # 14703	"Easy-on" 3/8" wide tabs on screen	28-29 Style	Yes	3 rivets; 2-3/4"	No	No
December 16, 1929 "Adopted"	"	"	"	3 rivets 2-3/8"	"	"
December 26, 1929 PR # 14977	"	"	"	"	Yes (3) 1/2" Emboss.	"
Unknown	"	"	"	"	Yes and No	Yes
January 31, 1930 PR # 15414	"	"	"	"	Yes (3) 1" Emboss.	"
February 24, 1930 PR # 15663	"Easy-on" 1/2" wide tabs on screen	"	"	"	"	"

A-9002-C: COWL TANK ASSEMBLY

The "B" tank continued in production until sometime between May and July 1930 when the A-9002-C Cowl Tank Assembly was released. The March 14, 1930, PR #15551 (Supp. #8) indicated tank A-9002-C was "Adopted" for passenger cars and commercial vehicles. However it is unknown on its exact date of release as the April 14, 1930 PR #16099 (Supp. #4) indicated that the "C" tank was released for production for the 180-A Deluxe Phaeton (introduced in June 1930) and the 130-B Deluxe Delivery in conjunction with all the other 1930 body styles.

The major and maybe the only difference between the "B" tank (**Fig. 12**) and the NEW "C" tank (**Fig. 13**) ***at its introduction*** was the use of the NEW style A-11805-B Instrument Panel Assembly on the "C" tank which replaced the old 28-29-mid-30 style used on the "B" tank. This meant a change in the A-9060 Gas Tank Bottom face as seen in (**Figs. 12 and 13**) which when compared, both have a completely different outline look and shape. ***The indent is also ¼ inch deeper on the "C" tank to clear the pop out ignition switch; the length of the speedometer cable housing was made longer and comes up higher to match the NEW Instrument Panel; plus it made room for the speedometer itself.*** In other words, and according to the July 8, 1930 PR #17052, the Gas Tank to Speedometer Cable Support Assembly was changed and "Released for all chassis" to accommodate the NEW style A-11805-B Instrument Panel Assembly. This then, indicates that the release date for the "C" tank ***may have been*** sometime in July 1930. These "early" production A-9002-C tanks still possessed the three (3) 1 inch embossings on the tank to hold the cowl band in place.



Fig. 12



Fig. 13

Soon after the introduction of the "C" tank with the three (3) 1 inch embossings to secure the cowl band, those embossings were then replaced with a "continuous" embossing across the top of the tank which remained as such through the production period. This occurred on June 5, 1930 with PR # 16704.

On September 9, 1930, PR #17543, Ford once again made a change to the gas tank. Here the two triangular indents on the bottom of the tank, which accommodated the Steering Column Support Bracket Upper, with 3-rivet holes, and the Carburetor Adjusting Rod Bracket, were both eliminated. As the Carburetor Adjusting Rod Bracket remained the same, the Steering Column Support Bracket Upper utilized 4-rivet holes (**Fig. 14**) to hold it to the bottom of the tank (**Fig. 15**).



Fig. 14



Fig. 15

With the introduction of the 180-A Deluxe Phaeton in June of 1930, a special “spacer” was utilized (**Fig. 16**). It was first listed in the October 20, 1930 Parts Price List as A-3514, Steering Column Support Spacer used with the 180-A Deluxe Phaeton (at the time and others to follow).

Besides the spacer (**Fig. 17**), the “assembly” contained the following parts:

- A-3519, Steering Column Support—Lower (1)
- A-20844-S7 5/16—24 x 2-5/16 fillister head bolts (2)
- A-22215, 5/16 (1/16 x 11/32) lock washers (2)
- A-3521 Steering Column Support Anti-rattler (1)

It's use was followed by the 190-A Victoria Coupe introduced October/November 1930; 400-A Convertible Sedan introduced May/July 1931; 295-A Town Car Delivery introduction UNKNOWN; 330-A School Bus Body introduction UNKNOWN and the 330-B Passenger Bus Body introduction UNKNOWN providing these vehicles were introduced before the indented firewall in 1931 which took the new A-3523-F bracket (**Fig. 20**) in place of the spacer (**Fig. 16**).



Fig. 16



Fig. 17

On December 2, 1930, PR #18323, the A-9032 Gas Tank Filler Flange Assembly, which was copper plated, was changed to accept the reinstated A-9020-A Filler Screen Assembly with the screw-on screen head (see MAN/56/4/20-21 2009) for more information.

Sometime in March/April 1931, a lug was added to the gasoline gauge frame and a slot was placed on the flange of the tank (**Fig. 18**). This slot was to hold the gasoline gauge in a vertical position when tightening the A-9330 Gas Gauge to Flange Nut. This application was confirmed on a very late A-9002-C Gas Tank. Therefore for a period of time with the last of the "C" tanks, some had slots and some did not, probably due to supplies on hand. It was also found on some very early A-9002-E tanks that the "slot" for the "lug" was missing also!



Fig. 18

On April 3, 1931, according to PR #19327, Gas Tank A-9002-C was to be removed from "all chassis and specified various models" at once and was being replaced in order to introduce the new gas tank assemblies, A-9002-D and A-9002-E. By April 29, 1931, PR #19500 (Supp. # 8), specified that Gas Tank A-9002-C was "Obsolete" and was replaced by tank A-9002-E.

THE 1930-31 A-9002-C GAS TANK

DATE	FILLER FLANGE AND SCREEN	INST. PANEL ASSY.	TRIANGULAR INDENTS ON BOTTOM	STEERING COLUMN SUPPORT RIVETS AND SIZE	COWL BAND EMBOSS ON TANK	SLOT FOR GAS GAUGE FRAME
April 14, 1930 PR # 16099 (Supp. # 4) However it's "adopted" date may not have been till July 1930	"Easy-on" ½" wide tabs on screen	New style A- 11805-B	Yes	3 rivets 2-3/8"	Yes (3) 1" Emboss	No
June 5, 1930 PR # 16704	"	"	"	"	Continuous Emboss.	"
September 9, 1930 PR # 17543	"	"	No	4 rivets 2-3/8"	"	"
December 2, 1930 PR # 18323	"Easy-on" (for gas cap) "Screw- on" (for screen)	"	"	"	"	"
March/April 1931 PR # ?????	"	"	"	"	"	Yes And No
April 29, 1931 PR # 19500 (Supp. # 8) tank "Obsolete"	"	"	"	"	"	"

A-9002-D: COWL TANK ASSEMBLY

On April 3, 1931, PR #19327, A-9002-D Cowl Tank Assembly (**Fig. 19**) was released for the following models: 180-A Deluxe Phaeton, 190-A Victoria Coupe, 400-A Convertible Sedan and 295-A Town Car Delivery. However, it was short-lived because three weeks later on April 29, 1931 "D" tank became "Obsolete...Effective with new cowl tank (indented firewall tank)", A-9002-E. The "D" tank was intended for the flat firewalls.

According to Vince Falter, he relates the following information about the A-9002-D Cowl Tank Assembly. *"This tank was for the flat firewall, inside gas valve, round speedo, but had no steering column bracket. The release shows it was used with the first dash mounted steering brackets...It was replaced by the "E" indented firewall tank, as soon as that tank became available...Ford was in a state of urgency because of the tank crack problems at the column, and this drove the separate bracket and the relocation of the fuel valve."* In other words the steering column support was not fastened to the bottom of the tank and the same long steering column support, A-3520-F, was used as with the indented firewall.

During this time period, these tanks **should have** the "continuous" embossing for the cowl band but some also have the earlier top with three (3) 1" embossings.

The only mention of the A-9002-D Cowl Tank Assembly in the Ford Service Letters was in the May 18, 1931 Chicago Ford Service Letter. There the letter described "additions" to the Body Parts List, effective May 13, 1931. It was specified that A-9002-D was for use on the 190-A Victoria Coupe. It is not known if the other models were listed in the Body Parts List itself.



Fig. 19

**THE 1931 A-9002-D GAS TANK
(For Flat Firewalls)**

DATE	FILLER FLANGE AND SCREEN	INST. PANEL ASSY.	TRIANG- ULAR INDENTS ON BOTTOM	STEERING COLUMN SUPPORT RIVETS AND SIZE	COWL BAND EMBOSS ON TANK	SLOT FOR GAS GAUGE FRAME
April 3, 1931 PR # 19327	"Easy-on" (for gas cap) "Screw-on" (for screen)	30-31 Style	No	No steering column support riveted to gas tank	Continuous and 3 – 1" Emboss	Yes and No

A-9002-E: COWL TANK ASSEMBLY

April 29, 1931 the A-9002-E Cowl Tank Assembly for the indented firewall bodies was released.

April 1931 Ford Service Bulletins indicated that a lug was added to the gasoline gauge frame and a slot was placed on the flange of the tank (**Fig. 18**). This was also reported in the May 1, 1931 Chicago Ford Service Letter. However some "E" tanks, as pointed out above, have been reported without the "slot" for the "lug" on the gas gauge frame.

One major difference between the A-9002-C and A-9002-E Cowl Tank Assembly was the Gas Tank Bottom section of the tank itself (**Fig. 20**). It possessed an entirely new and revised bottom section without an attached Steering Column Bracket and in addition to this the "inside" gasoline pipe was redesigned as the sediment bulb, the gas shut-off valve and all plumbing connections were removed from the front of the dash or firewall and were relocated on the carburetor in order to minimize the possibility of any fuel leaks happening inside the car or truck.



Fig. 20

The May 1931 Ford Service Bulletin indicated that a new cowl tank, A-9002-E was being used in all "A" cars and "AA" trucks in accordance with the introduction of the indented firewall. It was to replace gas tank A-9002-C after all of the present stock was exhausted. The Service Bulletin also indicated that if something were to happen to a vehicle with an A-9002-C tank, that the new A-9002-E cowl tank was to be supplied and directions were given to assemble the A-9002-E tank into place. With the A-9002-E tank in place (within the gas tank area of the flat firewall vehicle), it was required to drill a 1-3/4 inch diameter hole in the firewall, then assemble rubber grommet A-9072 within the hole, then screw in the A-9074-R Cowl Tank Shut-off Valve Adapter into the outlet flange on the tank, followed by assembling A-9189-B Valve Assembly to A-9074-R (**Fig. 21**).



Fig. 21

In accordance with this bulletin, models 180-A Deluxe Phaeton; 190-A Victoria; 295-A Town Car Delivery and 330-A School Bus were to use Steering Column Bracket A-3523-G (long) assembly (could this have anything to do with the A-9002-D Gas Tank?) and all other models were to use Steering Column Bracket A-3523-F (short) assembly.

The truth about the steering column bracket assemblies A-3523-F (short) (**Fig. 22 Left**) and A-3523-G (long) (**Fig. 22 Right**). The true names for these NEW bracket assemblies according to Ford was Steering Column Support Assembly, LHD. Each “assembly” contained the following parts:

A-3520-E (short) (1) or A-3520-F (long) (1)
 A-3519, Steering column support—lower (1)
 A-20703-S7, 5/16—24 x 1 fillister head screws (2)
 A-22215, 5/16 (1/16 x 11/32) lock washers (2)
 A-3521, Steering column support anti-rattler (1)

The difference was with Steering Column Support--Upper brackets, A-3520-E (short) and A-3520-F (long). The use of the long bracket, A-3520-F, which formed the A-3523-G (long) assembly (**Fig. 22 Right**), was for use on the 180-A Deluxe Phaeton, 190-A Victoria Coupe, 295-A Town Car Delivery and 330-A School Bus Body according to the May 1931 Ford Service Bulletin. However the newly released 400-A Convertible Sedan and 330-B Passenger Bus Body also used this assembly according to the Part Releases.

The use of the short bracket, A-3520-E, which formed the A-3523-F (short) assembly (**Fig. 22 Left**), was for all other body styles according to the Part Releases. They were also to be “paint(ed) with (the) body after assembly (to the body)” as stated on the releases themselves. However this practice wasn’t always followed and some were installed prepainted in black enamel.

According to Hans “Doc” Kalinka’s article about the brackets in the Jan./Feb. 1996 issue of Model A News, some of these brackets were made of brass. However according to the part drawings, they were made of “red bronze”. In reality, both sizes came either in bronze or steel. The RHD vehicles also had their special dash mounted brackets which were symmetrically opposite with the A-3520 brackets which made those “assemblies” different. They also have a hole them to accept the choke rod.



Fig. 22

**THE 1931 A-9002-E GAS TANK
(For Indented Firewalls)**

DATE	FILLER FLANGE AND SCREEN	INST. PANEL ASSY.	TRIANGULAR INDENTS ON BOTTOM	STEERING COLUMN SUPPORT RIVETS AND SIZE	COWL BAND EMBOSS ON TANK	SLOT FOR GAS GAUGE FRAME
April 29, 1931 PR # (For indented firewalls only)	"Easy-on" (for gas cap) "Screw-on" (for screen)	30-31 style	No	No steering column support riveted to gas tank	Continuous Emboss.	Yes and No

The June 19, 1931 Chicago Ford Service Letter discussed the May 1931 Service Bulletin describing the new design cowl tank A-9002-E.

The July 7, 1931 Indianapolis Ford Service Letter discussed the A-9002-C Cowl Tank in that it had been "reinforced" and the steering column support (was) "redesigned" to avoid breakage when used over rough roads. Reports were received that some A-9002-C cowl tanks without the reinforcement were breaking loose. No samples of this "reinforcement" were viewed.

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