FORD'S WAY

The A-20606: 1/4"-20 x 9/16 "Special Head" Carriage Bolt

By

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This article pertains to the A-20606: 1/4"-20 x 9/16 Special Head Carriage Bolt and its assembly usage on Model A Ford's.

The *"Special Head"* designation of this bolt was not used in the PPL's until the June 15, 1930 PPL was published along with its new finish of Raven Finish and Black Enamel, Head Only (S3). Until that date, it was signified as just a *"Carriage Bolt"* and *"Cadmium Plate"*.

These are the four (4) bolts, two on each side of the car in a vertical assembly, which are attached to the Rear Fender and the Running Board Splash Apron...NOT the Running Board itself, which are in a horizontal position. The bolt also applied to the Running Board Splash Apron to Frame; Rear Lamp Bracket; Luggage Carrier Hook; and the Front Seat Adjusting Arm Bracket to Front Seat Back Center Panel for the 1931 Standard Fordor Sedan, Town Sedan, and Fordor 2-Window Sedan.

When I first got my 1929 Standard Coupe, it was pretty much a complete car. I was told by my farmer friend who sold me the car back in 1966 to pay attention to detail as I went ahead with the restoration. So, as it was, I paid close attention to detail and noted what nuts and bolts went where as I removed each item and eventually replaced them during the restoration. My friend also gave me a December 1, 1929 Parts Price List (PPL) to go along with the car and the restoration.

It was during this time that I noticed the rear fender to running board shield bolts were that of the large head carriage bolt type.

As each new Restoration Guidelines and Judging Standards came out, I would always double check things in accordance to what I had on the car to make it as original as possible.

When the 1989 Standards were released, there was nothing specifically said about the nuts, bolts and washers which attached the rear fender to the body and or the Running Board "Splash" Shields in Area 13 (Sheet Metal).

By 1994, Area 13 (Sheet Metal) was revised and the MARC/MAFCA Restoration Guidelines and Judging Standards told us that these bolts used in this application (Rear fender to running board shield) for 1928 through 1929 were the **"Same as front fender to running board shield"** which would of been the A-20557: 1/4"-20 x 5/8" with a 3/8" hex, thick head bolt. However, my 1929 Standard Coupe had large carriage head bolts within this specific area although nothing was said of it in the standards.

The January 1, 1928 PPL confirmed the fact that only one type of bolt was used to attach the *front and rear fenders to the running board shield*. This was A-20557: 1/4"-20 x 5/8" hex head (3/8") bolt, which was indicated to be Cadmium Plate within the "Standard Parts" section of the PPL. It tells us that 16 were used (8 per side {6 for the front fender, 2 for the rear fender}). No mention of any "Carriage bolt" was used in this application.

The October 1, 1928 PPL deleted the "use" statements as was stated in the January 1, 1928 PPL. Now the October 1928 PPL only listed headings as "Front Fender Bolts"; "Rear Fender Bolts"; and "Running Board Bolts"; along with their respective "Nuts" and "Washers", used in each assembly application. The PPL also dropped the "how many" of each item were used. Essentially, the same bolts, nuts, and washers were utilized, as with the January 1, 1928 PPL with no new additions.

(Fig. 1) shows these bolts and their assembly orientation for this time period from start of production thru about November 1928.



(Fig. 1)

So the question is this, just <u>when</u>, during the Model A Ford production period, did the A-20606: 1/4" -20 x 9/16 Special Head Carriage Bolt start being used on the Model A Ford and for <u>what</u> applications?

According to the Part Releases (PR), it was on September 11, 1928, PR # 10211, when the 1/4 – 20 NC-2 x 9/16 Special Head Carriage Bolt became a "New Number, adopted". The PR went on to say "Specified as Rear Fender to Running Board Shield Bolt, 4 req." and was to be used on the "Phaeton, Roadster, Coupe, Special Coupe, Sport Coupe, Business Coupe, Tudor, Fordor, A and AA Bus, Pickup, A and AA Panel Delivery, Platform Body, Express Body, Deluxe Delivery, Taxi and Town Car".

On October 8, 1928, PR # 10487 indicated that the bolt was to be "Cadmium Plate to prevent rust". So did a batch get out in the production lines that were not "Cadmium Plate"? Maybe...Maybe not.

By November 22, 1928, PR # 11109 indicated that the bolt "Changed finish from Cadmium Plate to Raven Finish and Black Enamel" for the assembly of the new style A-13471-B Rear Lamp Bracket (3 required). Although the PPL's, up to and including the March 1, 1930 PPL, indicate that the bolt was Cadmium Plate, the true finish may have been Raven Finish and Black Enamel for its use as the Rear Fender to Running Board Shield Bolt.

On January 21, 1929 the Town Sedan, Cabriolet, and Station Wagon were added to the application.

On May 9, 1929, PR # 12901, the Running Board Shield To Frame Bolt, A-20557: 1/4—20 USS x 5/8 Hex. Head Bolt (Cad. Plate) and (2 required), was replaced by the use of this "Special Head" carriage bolt.

The next known PPL was the June 1, 1929 PPL. Listed in the "Rear Fender Bolts" section was A-20557 (along with others) and A-20606: 1/4"-20 x 9/16 Carriage Bolt which was indicated to be Cadmium Plate within the "Standard Parts" section of the PPL.

This is the bolt in question as to its use on the Model A Ford and its assembly in the area of the "Rear Fender to Running Board Shield". The designation remained as such through the March 1, 1930 PPL and when the June 15, 1930 PPL was published, the finish designation changed to A-20606-S3 (Raven Finish and Black Paint, Head Only)...1/4"-20 x 9/16 Special Head Carriage Bolt.

Newer models were added to the usage of the bolt in 1930 which included the Open Cab, Closed Cab, Deluxe Delivery, 2-Window Fordor, etc.

On June 1, 1930, PR # 16775, the "Special Head" Carriage Bolt was "Removed" from use concerning the assembly of the "Rear Fenders to Running Board Shield...Effective A. O. (At Once)" from all of the 1930 vehicles. However they were still being used on the Frame (2 required) and Rear Lamp Bracket (3 required) assemblies.

Contained in the October 20, 1930 PPL, A-20606 was shown to have two finish designations in the Standard Parts section: A-20606-S3 and A-20606-S7 (Cadmium Plate). Interestingly, the bolt does not show up in this or the remaining PPL's for use on the Rear Lamp Bracket A-13471-B but does show up in the Front Fender and Running Board bolt sections.

The (S7) designation only showed up within the Accessories section as listed to be the "Rack to Hook Bolt" for the A-18589 Luggage Carrier Hook used on the 180-A (Deluxe Phaeton) and the 40-B (Deluxe Roadster).

On November 10, 1930, PR # 18136, two (2) more "Special Head" Carriage Bolts were added to the assembly of the Running Board Shield to Frame which meant that there were now four (4) total per assembly of each vehicle, two (2) per side.

On November 11, 1930, PR # 16905 #139, the bolt was also "Released (2 required) for Model 160-A (Standard Fordor Sedan) and 160-B (Town Sedan) for the Front Seat Adjusting Arm Bracket to Front Seat Back Center Panel".

On December 12, 1930, PR #18231 #9, the bolt (2 required) was added to the 160-C (Fordor 2-Window) for the "Front Seat Adjusting Arm Bracket to Front Seat Back Center Panel".

On April 20, 1931, PR #19508, the "Special Head" Carriage Bolt was removed from the "Front Seat Adjusting Arm Bracket to Front Seat Back Center Panel" assembly in the 160-A, B and C and was replaced with A-20535-S2: 1/4" –20 x 1/2 Round Head Bolt.

So the PPL's (which we know have mistakes within) thru March 1, 1930 has this bolt as Cadmium Plate which, then, was changed to (S3) for the rest of the production period. However the PR of November 22, 1928 has this bolt being changed to Raven Finish and Black Enamel (Head only). In this instance, please rely on the MARC/MAFCA Restoration Guidelines and Judging Standards for the correct finish of this bolt.

Just what made the A-20606: 1/4"-20 X 9/16 "Special Head" Carriage Bolt "Special"? As it indicates within its description, it is in the "head" of the bolt itself as compared to other Carriage Bolts of the 1/4"-20 size (**Fig. 2**).



(Fig.2)

Where the "special" 1/4 inch carriage head size was about 0.750 inch in width, the regular 1/4 inch carriage head size was about 0.545 inch in width. A difference of 0.205 inch.

This change in assembly (and construction) saved Ford the use of one less flat washer per "Special Head" Carriage Bolt used.

All of the Carriage Bolts for which I have seen in this area of assembly on original, unmolested Model A Fords, have the bolt head inward and the nuts, flat and lock washers pointing outward. This was so the assembly person on the assembly line did not have to use a wrench on the back side of the bolt in order to tighten it.

These "Special Head" Carriage Bolts have been seen on the following original and unrestored Model A Fords:

MONTH/YEAR	BODY STYLE	REAR TAIL LIGHT ATTACHMENT	REAR FENDER TO RUNNING BOARD SHIELD MOUNTING BOLTS	RUNNING BOARD SHIELD TO FRAME (REAR) BOLT
Aug. 1928 (RN)	Roadster	Body	Hex Head Bolts	
Sept. 1928 (RWh)	Fordor Sedan	Body	Hex Head Bolts	
October 1928 (SC)	Fordor Sedan	Body	Hex Head Bolts	Hex Head Bolts
October 1928 (TW)	Phaeton	Body	Hex Head Bolts	
Oct./Nov. 1928 (RWi)	Fordor Sedan	Body	Hex Head Bolts	Hex Head Bolts
Nov. 1928 (HP)	Roadster	Body	Carriage Bolts	
Dec. 1928 (RG)	Special Coupe	Body	Carriage Bolts	
Jan./Feb. 1929 (ML)	Tudor Sedan	Body	Carriage Bolts	Hex Head Bolts
Feb./Mar. 1929 (SP)	Special Coupe	Body	Carriage Bolts	Hex Head Bolts
Feb./Mar. 1929 (BM)	Tudor Sedan	Body	Carriage Bolts	Hex Head Bolts
April 1929 (JR)	Special Coupe	Fender	Carriage Bolts	
April 1929 (BH)	Tudor Sedan	Fender	Carriage Bolts	Hex Head Bolts
August 1929 (TS)	Standard Coupe	Fender	Carriage Bolts	
Sept. 1929 (SP)	Standard Coupe	Fender	Carriage Bolts	Carriage Bolts

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