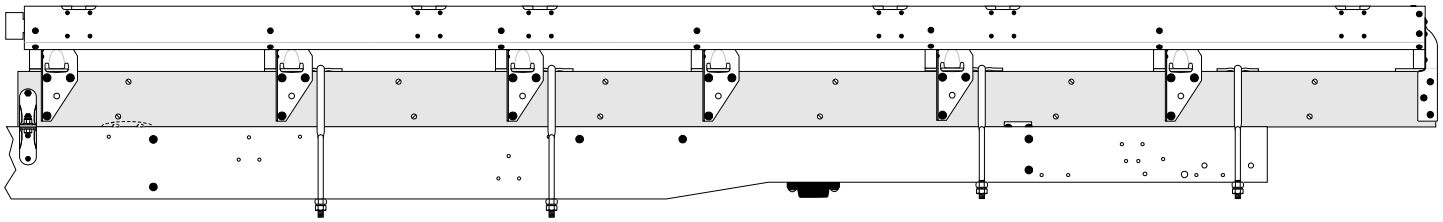
AA TRUCK TALK - THE 185-B PLATFORM BODY



By Neil Wilson of Boulder, Colorado — April 2002

This article covers the 185-B Platform body. My research is based on a platform body from a 1931 truck from Kansas plus various Ford Archives photographs found in several books. If anyone has a platform which is different from the information in this article, please let me know.

The photograph found on the next page of this article was taken January 26, 1932 and is from the collections of Henry Ford Museum & Greenfield Village. The make-up of this truck includes an 82-B closed cab with a 185-B platform body and 186-B stake racks all mounted on a dual wheeled, 157" WB AA chassis. Some detail is lost in reproducing the original found here; however, several specific observations may be made:

- ◊ The front bumper is the solid single bar style and both the bumper and attachment carriage bolts are painted black.
- ◊ The wheel nuts (lug nuts), removable wheel rim flange, and hub caps are cadmium plated.
- ◊ The removable wheel rim flange has a notch which is less than 90 degrees. This feature started in May 1930. The prior notch was 90 degrees.
- ◊ The wheels are the later 1931 style with reinforcement ridge stamped around the wheel bolt holes.
- ◊ The radiator shell, head light buckets, and cowl band are painted black (a standard commercial vehicle feature).
- ◊ The standard pin stripping starts at the front of the hood and follows the belt moulding around the cab.
- ◊ The 42" high stake racks include the optional sign board mounted on the side-front rack.
- ◊ Unlike the 188-A stake racks, the stake rack boards have rounded corners.
- ◊ The side-center stake rack is designed to be lifted up and hinge forward for loading and unloading.

OVERVIEW

Platform body 185-B production began in January 1931 and ended February 1932. The single and optional-dual 157" WB chassis and both the closed and open cabs were used in combinations to form platform trucks. This body was the base for stake and stock bodies which were produced by installing sides in the platform stake pockets. The 185-B platform had a 1-5/16" lower profile and a cargo area which was 7" wider and 34-1/2" longer than the 131-1/2" WB platform. The "Midland Steel Products Company" produced this body as well as all of the other Ford AA platform bodies.

Two months later in March 1931 a new short wheel base platform body was released. It was a short version of the 185-B platform and was assigned body model number 187-A

In March 1932, BB truck production began. The sills for both the 185-B and 187-A platforms were modified to fit the new BB chassis but otherwise the bodies were unchanged.

According to the book "Ford Trucks Since 1905", the 1933 platforms had a larger 82" wide cargo area. The cargo area lengths were 106" and 142" for the types BB-187 and BB-186 respectively. These platforms had physical lengths of 9 feet and 12 feet. The 1933 sized platforms continued as the production standard through 1937.

The 1931 185-B platform consisted of a wooden cargo floor attached to a stamped steel support structure. This structure was attached to wooden floor side sill assemblies which rested on the frame. Excluding front external stake pockets, the overall body dimensions were 80-3/8" wide by 135-1/2" long. It was 11-9/16" from the bottom of the floor side sills to the top of the cargo floor boards. With stake racks or stock racks installed, the usable cargo floor was 75" wide by 132" long.

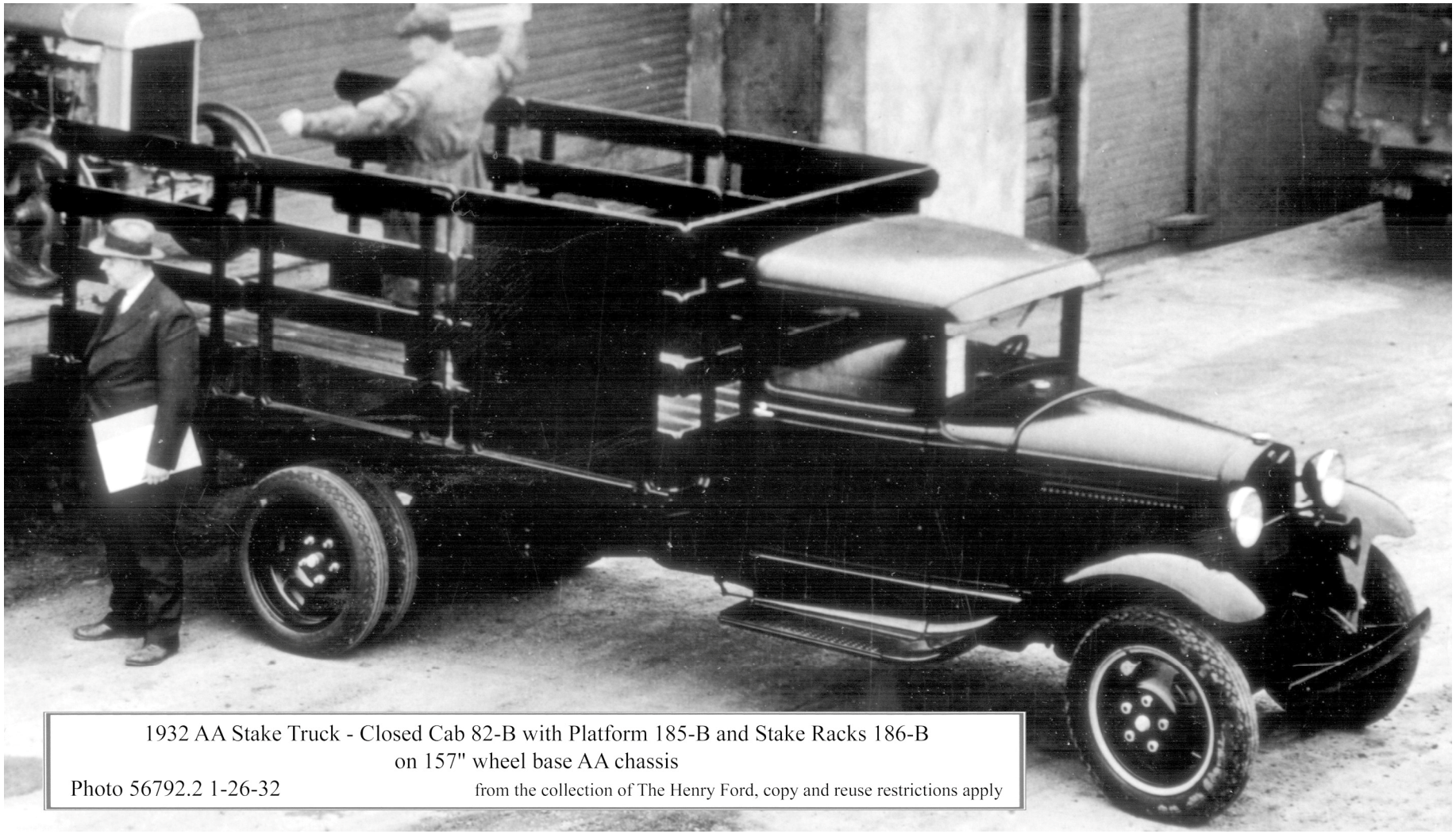
The cargo floor had ten 5/4" thick floor boards connected by corrugated steel batten-strips bolted to the support structure.

The body was completely assembled before painting. The body and cab were painted the same color.

The 185-B platform body was designed to fit a new 157" WB chassis. The new chassis had parallel side members starting from the back of the cab to the rear of the. This frame assembly was assigned part number AA-5008. The side members of the new AA-5008 frame were the same size as the prior design (7" high x 210-5/8" long). However, unlike the prior side members, the new sides were reduced down to a height of 5-3/8" at a point just in front of the rear axle bumper. This redesigned frame required different u-bolt mounting hardware than the hardware used with the prior frame for the 185-A platform body.

Using the 185-B platform body as a base, Ford offered both a stake and stock body for the 1931 157" WB chassis. The stake body used stake racks 186-B. The stock body included stock racks 238-A.

The remainder of this article is a detailed description of the 185-B platform body.



1932 AA Stake Truck - Closed Cab 82-B with Platform 185-B and Stake Racks 186-B
on 157" wheel base AA chassis

Photo 56792.2 1-26-32

DETAILS

Following is a detailed parts list for the 185-B platform body. Note that a few of the parts carry part numbers of the 88-A platform body.

		Floor Sill Assembly
1	AA-185030-B	Sill (floor side) assembly (2-1/8 x 5-3/8 x 137-1/8)
		Sill board to sill board - attachment
24		#12 x 2 flat head slotted wood screw (12 per side sill)
2	AA-185060-B	Plate (floor side sill to u-bolt) (1/4 x 2 x 4)
6	AA-185064	Plate (floor side sill to cross sill & u-bolt) (1/4 x 2 x 7-1/2)
6	AA-88066-B	Plate (floor side sill to cross sill) (1/4 x 2 x 4)
		Plate to sill - attachment
x		#12 x 1-1/4 flat head slotted wood screw (2 per plate)
		Floor Support Structure
1	AA-185078	Member (floor side) assembly RH (includes stake pockets)
1	AA-185079	Member (floor side) assembly LH (includes stake pockets)
2	AA- 88235	Pocket (stake) front-center
2	AA-185292	Pocket (stake) front-end
12	AA-185294-B	Pocket (stake) side (same as rear)
		Side pockets - attachment
48		9/32 x ?/? round head rivet (15/32" head) 4 per pocket
1	AA-185091-C	Sill (floor cross) #1 assembly (includes front stake pockets & angles)
1	AA-185092-C	Sill (floor cross) #2, #3, #4, #5, and #6 assembly (includes angles)
		Floor cross sill #1-6 to side member - attachment
30		1/4 x ?/? wagon head rivet (9/16" head) 6 per cross sill
1	AA-185097-C	Sill (floor cross) rear (#7) assembly (includes pockets & reinforcements)
		Floor cross sill rear (#7) to side member - attachment
8		1/4 x ?/? wagon head rivet (9/16" head)
4	AA-88074	Reinforcement (floor corner)
		Reinforcements to cross and side sills - attachment
12		1/4 x ?/? wagon head rivet (9/16" head) on side sill
12		9/32 x ?/? round head rivet (15/32" head) on cross sill
6	AA-185054-B	Angle (side sill to cross sill) RH
6	AA-185055-B	Angle (side sill to cross sill) LH
		Angles to cross sills - attachment
36		9/32 x ?/? round head rivet (15/32" head)
		Angles to side sills - attachment
36	*S1	5/16-18 x 2-3/4 carriage bolt
36		5/16-18 (1/4 x 9/16) square nut (chamfered one side)
36		5/16 (3/32 x 7/8) flat washer
36		5/16 (3/32 x 23/32) lock washer
2	AA-185???	Reinforcement (cross sill #7 to side sill)
		Reinforcements to #7 cross sill - attachment
10		9/32 x ?/? round head rivet (15/32" head)
		Reinforcements to side sill - attachment
6	*S2	5/16-18 x 2-3/4carriage bolt
6		5/16-18 (1/4 x 9/16) square nut (chamfered one side)
6		5/16 (3/32 x 23/32) lock washer
2	AA-88235	Pocket (stake) front - center (on cross sill #1) - was TT-12727-X
2	AA-185292	Pocket (stake) front - end (on cross sill #1)
		Pockets to cross sill #1 - attachment
16		9/32 x ?/? round head rivet (15/32" head) 4 per pocket
4	AA-185294-B	Pocket (stake) rear (on cross sill #7) - same as side pockets
		Rear pockets - attachment
16		9/32 x ?/? round head rivet (15/32" head) 4 per pocket
	*S1-S2	see illustration 185-A #3, 5, and 6
		Cargo Floor
8	AA-185152-B	Board (floor) center (5/4 x 7-1/4 x 133-1/4)
1	AA-185150-B	Board (floor) side RH (5/4 x 7-7/16 x 133-1/4)
1	AA-185151-B	Board (floor) side LH (5/4 x 7-7/16 x 133-1/4)
9	AA-185145-B	Strip (floor skid)
		Floor to support structure assembly - attachment
139	*F1	5/16-18 x 1-3/4 (7/64 x 25/32 head) carriage bolt
139		5/16-18 (1/4 x 9/16) square nut (chamfered 1 side)
139		5/16 (3/32 x 37/64) lock washer
54		5/16 (3/32 x 1-1/2) washer
	*F1	see illustration 185-A #7a and 7c
		Mounting Hardware
2	AA-88084-A	Bracket (body sill) to frame bracket
		Bracket to sill - attachment
4		3/8-24 x 3 (9/32 x 9/16) hex head bolt
4		3/8-24 (5/16 x 9/16) hex nut (chamfered 1 side)
4		3/8 (5/64 x 7/8) flat washer
4		3/8 (3/32 x 21/32) lock washer
1	AA- 5077	Bracket (frame) to body sill bracket
		Bracket to bracket - attachment
2	A-21237	1/2-20 x 1-1/2 (3/8 x 3/4) hex head bolt
2	A-21845	1/2-20 (7/16 x 3/4) hex nut
2	A-22330	1/2 (1/8 x 7/8) lock washer
4	AA-185048	Bolt (floor to chassis frame "U") long
4	AA-185050-B	Bolt (floor to chassis frame "U") short
8	AA-88052	Bar (u-bolt) long (1/2 x 1-1/8 x 4-1/4)
		Bar to u-bolt & frame - attachment
16		1/2-13 (1/2 x 7/8) hex nut (chamfered 1 side) (2 per u-bolt)
16		1/2 (1/8 x 7/8) lock washer (2 per u-bolt)
4	AA- 51??-?	Frame Spacer (sleeve) use with AA-185048 (6-9/16")
4	AA- 5120	Frame Spacer (sleeve) use with AA-185050-B (4-15/16")

Floor Sill Assembly

Two floor side sill assemblies rested on the parallel AA chassis frame and supported the remainder of the platform body. These identical wooden sills were 2-1/8" thick, 5-3/8" high and 137-1/8" long. For the one original body observed, the sills were made of fir or yellow pine.

Each sill was made of two 1-1/16" thick boards with chamfered outside corners as shown in illustration #2a.

Based on the sample 185-A platform used for this article, the side sill boards were held together with twelve screws. These screws only served to hold the two boards together until the angles of the floor support structure were bolted in place. The screw heads faced the outside of the body on the left side and the inside of the body on the right side. The pattern and location of the screws is shown in illustration #2b and #4.

A hidden grove was cut in the bottom of the sill to clear frame #4 cross member rivets. It was located between body cross sill #1 and #2. A notch was cut across the bottom of the sill to clear the frame #5 cross member rivets. The notch started 41-3/4" from the rear of the sill. It extended back form this point for 2-3/4" and was 1/2" high. The grove and notch can be seen in illustration #4.

Illustration #2c shows details of the 1/4" thick steel saddle plates which were attached by two wood screws to the tops of the floor side sill assemblies. The floor cross sill assemblies rested on these saddle plates as shown in illustration #3 and #4. Illustration #4 also shows the addition of a saddle plate to support the rear u-bolt located between floor cross sill #6 and #7.

Plates AA-88066-B and AA-185060-B were 4" long and plate AA-185064 was 7-1/2" long. The AA-185060-B and AA-185064 plates were designed with a trough to hold the u-bolt in place.

Illustration #2a - Floor Side Sill
sectional view detail
(scale 1/2" = 1")

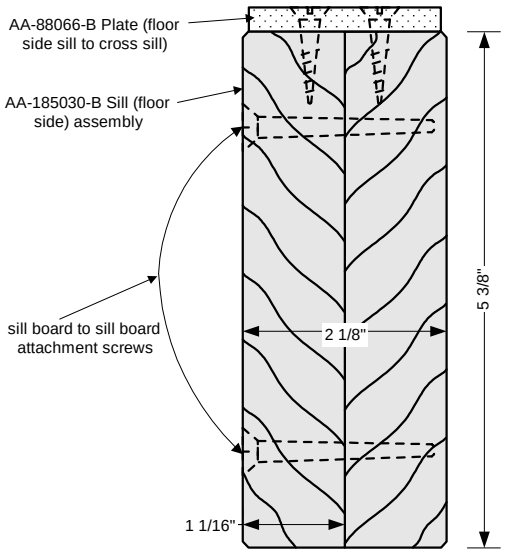


Illustration #2b - Floor Side Sill
Board to Board
screw attachment locations
(six sets of screws)

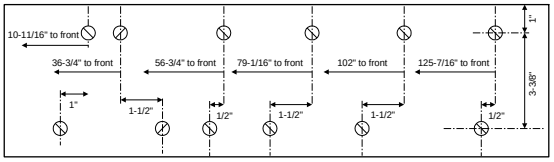
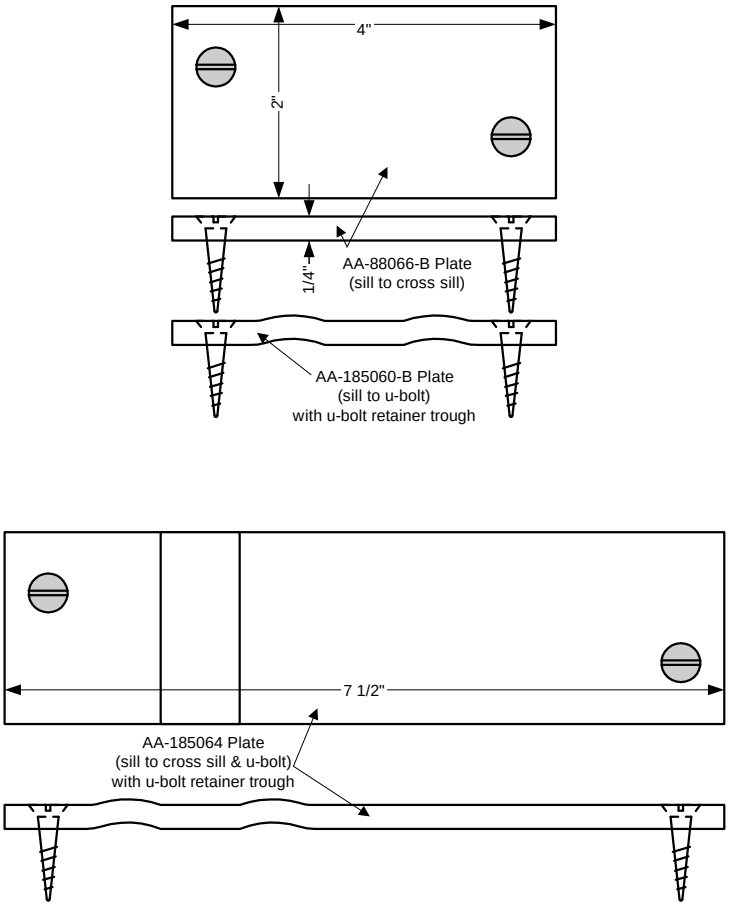


Illustration #2c - Saddle Plates
(scale 1/2" = 1")



Floor Support Structure

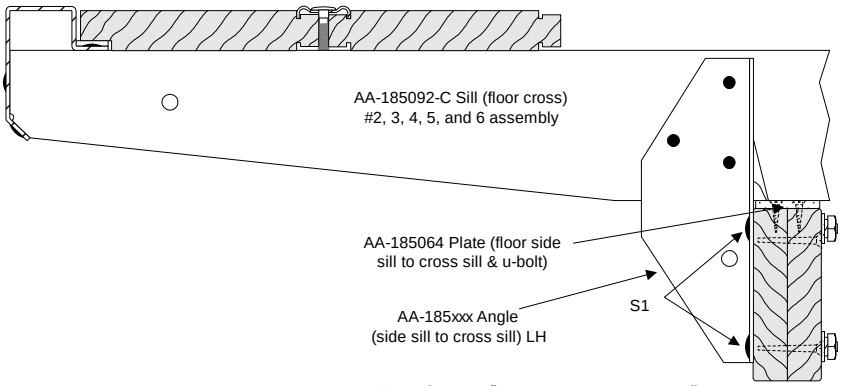
Illustration #7b shows a top view of the floor support structure which consisted of seven floor cross sill assemblies and two side member assemblies with internal stake pockets.

Each corner had a triangular shaped reinforcement. The entire stamped steel structure was assembled with rivets. Carriage bolts were used to connect this structure to the floor side sills.

Floor cross sill #1 included four external stake pockets. The two center pockets were carry-over parts from the 88-A platform, designed for 1/4" thick by 1-17/32" wide strap iron stakes. The two end pockets were designed to accept the same stakes used on the side and rear of the platform. Illustration #3 and #4 shows the set-up used for floor cross sills #1-6. Each cross sill assembly included angles attached on the right and left sides above the side sills. Since the side sills rested on the parallel chassis frame, the distance between angles on each floor cross sill was the same.

Floor cross sill #7 is shown in illustration #5. This assembly included two reinforcements which capped the rear end of the side sills with details shown in illustration #7.

Illustration #3 - Floor Cross Sill and Angle Set-up
(scale 1" =1/2')



Note: S1 - see floor support sturcture parts list.

Illustrations #4 - 185-B Platform side view

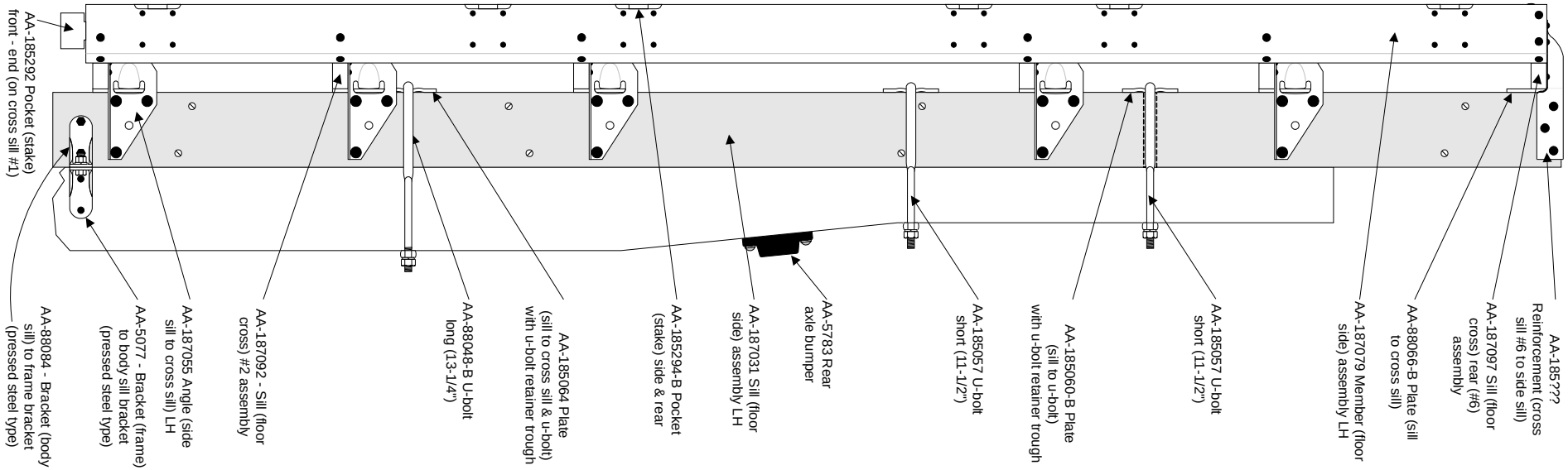


Illustration #5 - AA-185097-C Rear Cross Sill (#7) Assembly

With AA-1451 Spare Wheel Carrier

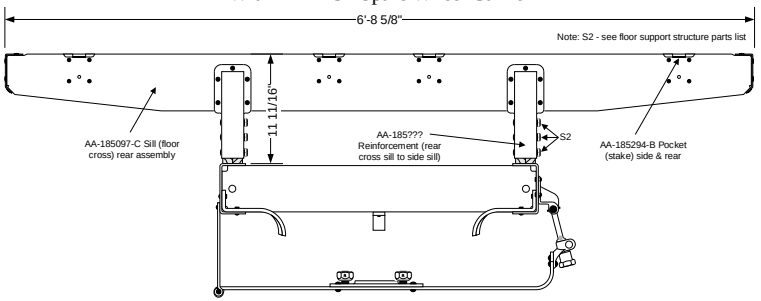


Illustration #6 Floor, Sill, and Cross Sill #7 Details

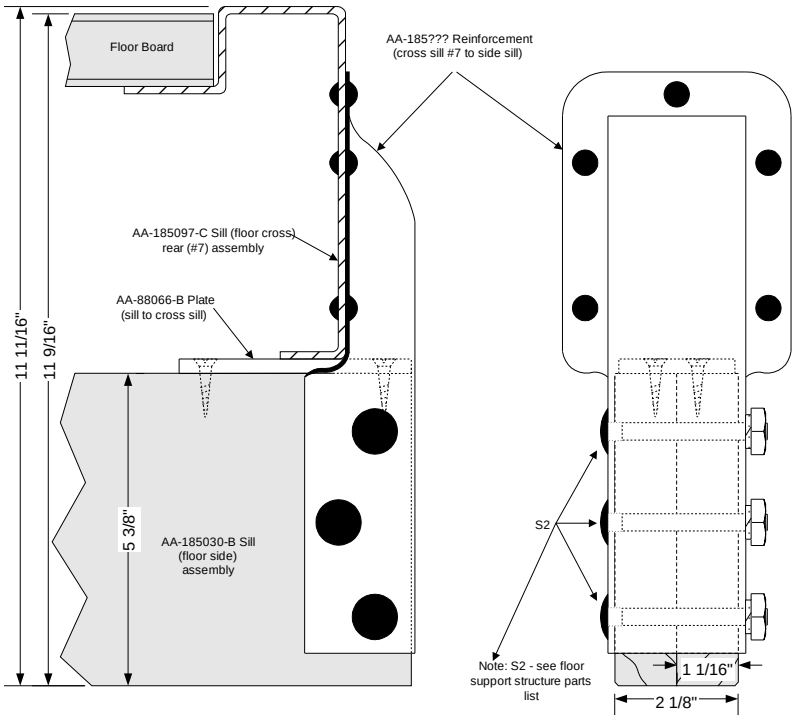
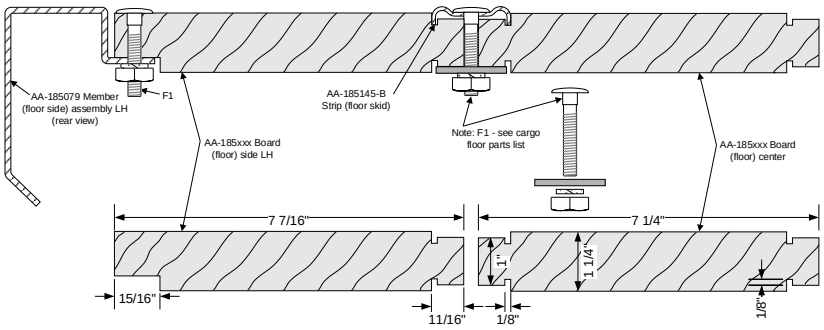


Illustration #7a Cargo Floor Details (between cross sills)



Cargo Floor

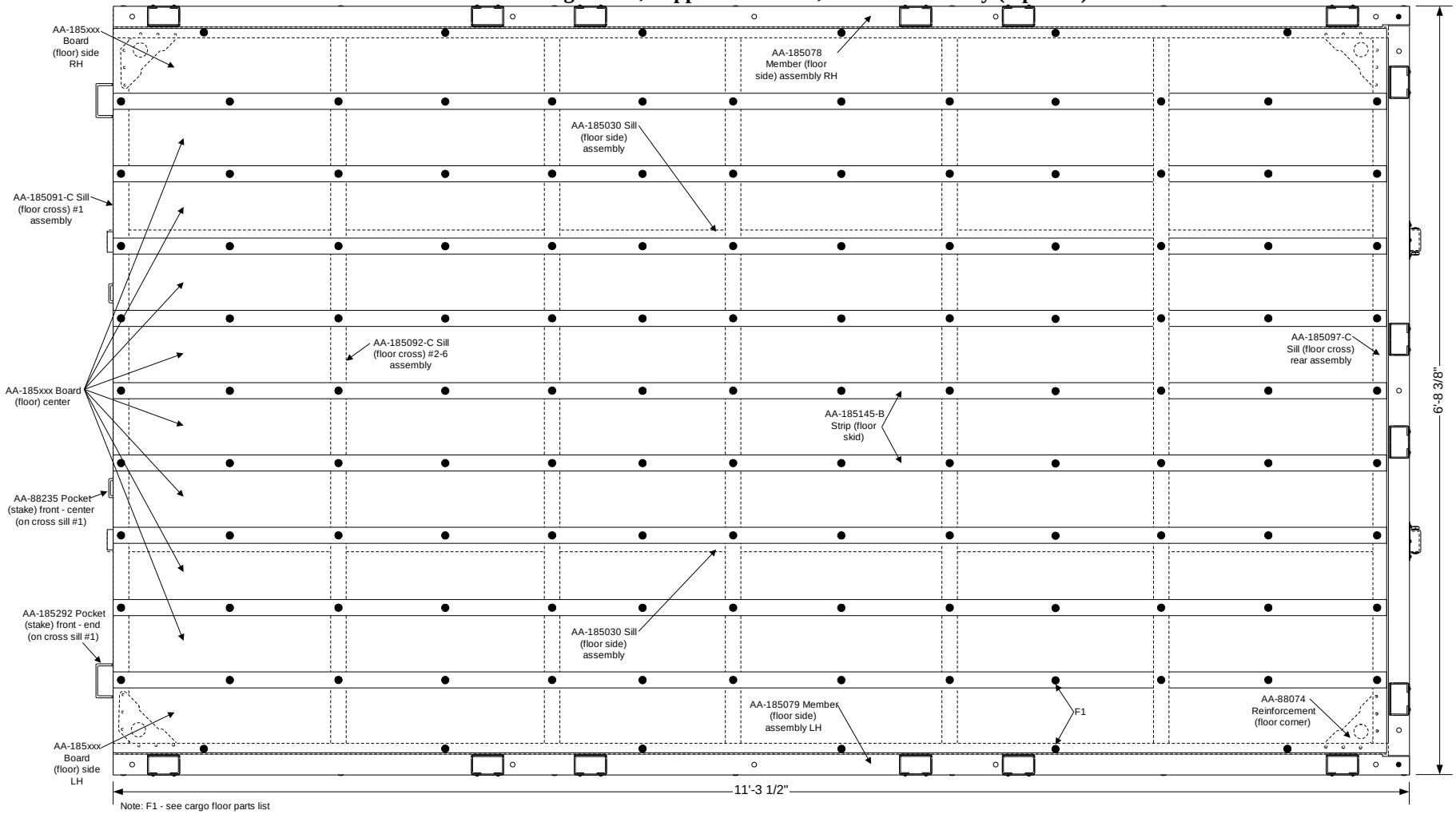
Illustration #7b shows a top view of the cargo floor which consisted of 10 floor boards running the length of the body. Each board was 5/4" thick by 133-1/4" long. The eight center boards were 7-1/4" wide. Each of the two outside boards were 7-7/16" wide. Original bodies observed have fir or yellow pine floor boards. Illustration #7a shows cargo floor details.

Metal skid strips straddled each pair of boards and were secured with carriage bolts which ran between the floor boards. The strips were bolted to each floor cross sill. Each skid strip had one additional carriage bolt between the floor cross sills. These additional bolts used thick round washers to span the gap between boards. The skid strips used with the 185-B platform are 1-11/16" wide versus the earlier design for the 88-A platform which are 1-9/16" wide.

The outer edges of the floor boards were thinner and contained grooves, allowing the skid strips to be countersunk and somewhat level with the floor boards. Illustration #7a shows a floor board cross section.

The outside edges of the two side floor boards were attached with carriage bolts which ran through the boards between each floor cross sills. To allow these outside boards to lay flat, their undersides had recesses to provide clearance for the side members and corner reinforcements.

Illustration #7b - Cargo Floor, Support Structure, and Sill Assembly (top view)



MOUNTING HARDWARE

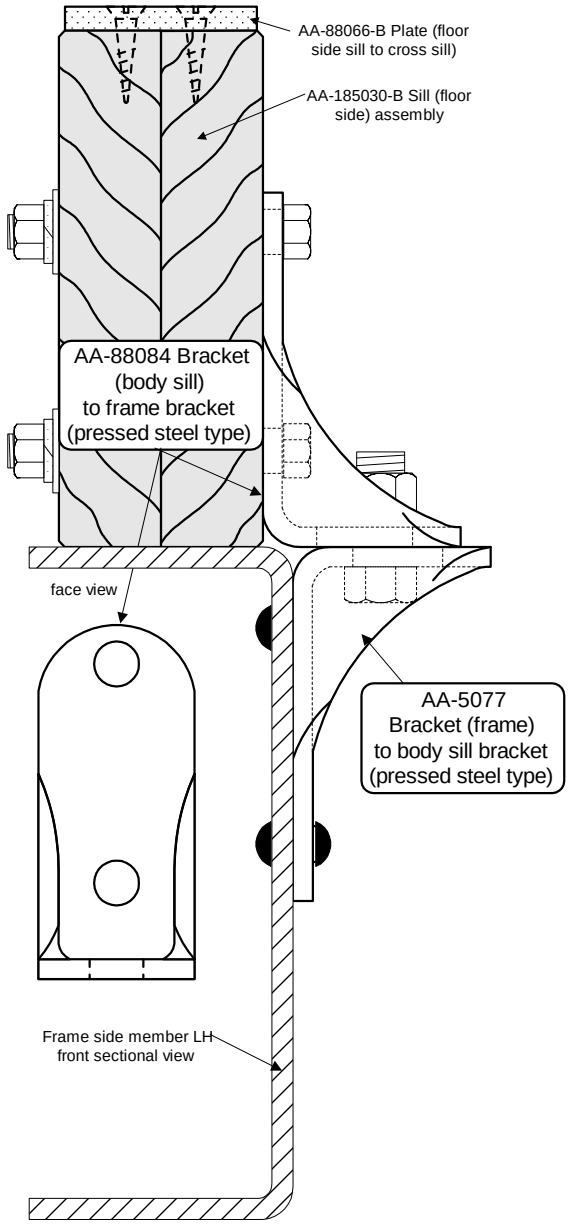
The table below shows the hardware of the five mounting locations for the 185-B platform.

Location	#	Part No.	Description
Front	2	AA-88084	Bracket (sill to frame)
	2	AA- 5077	Bracket (frame to sill)
Center-Forward	2	AA-185048	U-Bolt long - 14-3/8”
	2	AA- 51??-?	Frame Spacer - 6-9/16”
Center	2	AA-185048	U-Bolt long - 14-3/8”
	2	AA- 51??-?	Frame Spacer - 6-9/16”
Center-Back	2	AA-185050-B	U-Bolt short - 12-1/2”
	2	AA- 5120	Frame Spacer - 4-15/16”
Rear	2	AA-185050-B	U-Bolt short - 12-1/2”
	2	AA- 5120	Frame Spacer - 4-15/16”

Body Sill & Frame Brackets

Illustration #8a shows detailed installation of the brackets used for the front body mounting location. Frame brackets AA-5077 were riveted to the outside face of the frame side member. Body sill brackets AA-88084 were bolted to the outside face of the side sills. When the body was mounted on the frame, the brackets were bolted together. These same brackets were used starting August 1928 for both the express and platform bodies. In late 1930, the production method of these brackets changed from forged steel to stampings. The brackets were the same dimensionally. Illustration #4 shows the installation location.

Illustration #8a - Body Sill & Frame Brackets
(scale 1/2” = 1”)



U-Bolts & Frame Spacers

Illustration #8b shows the u-bolts and frame spacers used for mounting hardware. The u-bolts were forged steel and had a semi-circle or half round cross section at the top and down each leg. The lower ends of the legs became normal 1/2” round-bolts with 1/2-13 threads on the last 1-1/2” to 1-3/4”.

The u-bolts used for the 185-B platform were the same “C” style which were used with the earlier 88-A platform from 1929 through February 1931. These u-bolts contained no manufacturing identifications or Ford script. “A” and “B” style u-bolts were used from December 1927 through early 1929. To fit the 2-1/8” wide floor side sills used with the 185-B platform, the throats of these u-bolts were 2-1/2” wide. Prior u-bolts for the 88-A platform will not fit the wider 185-B side sills.

There were two 7/8” wrench size hex nuts and lock washers used to secure the bar to each u-bolt.

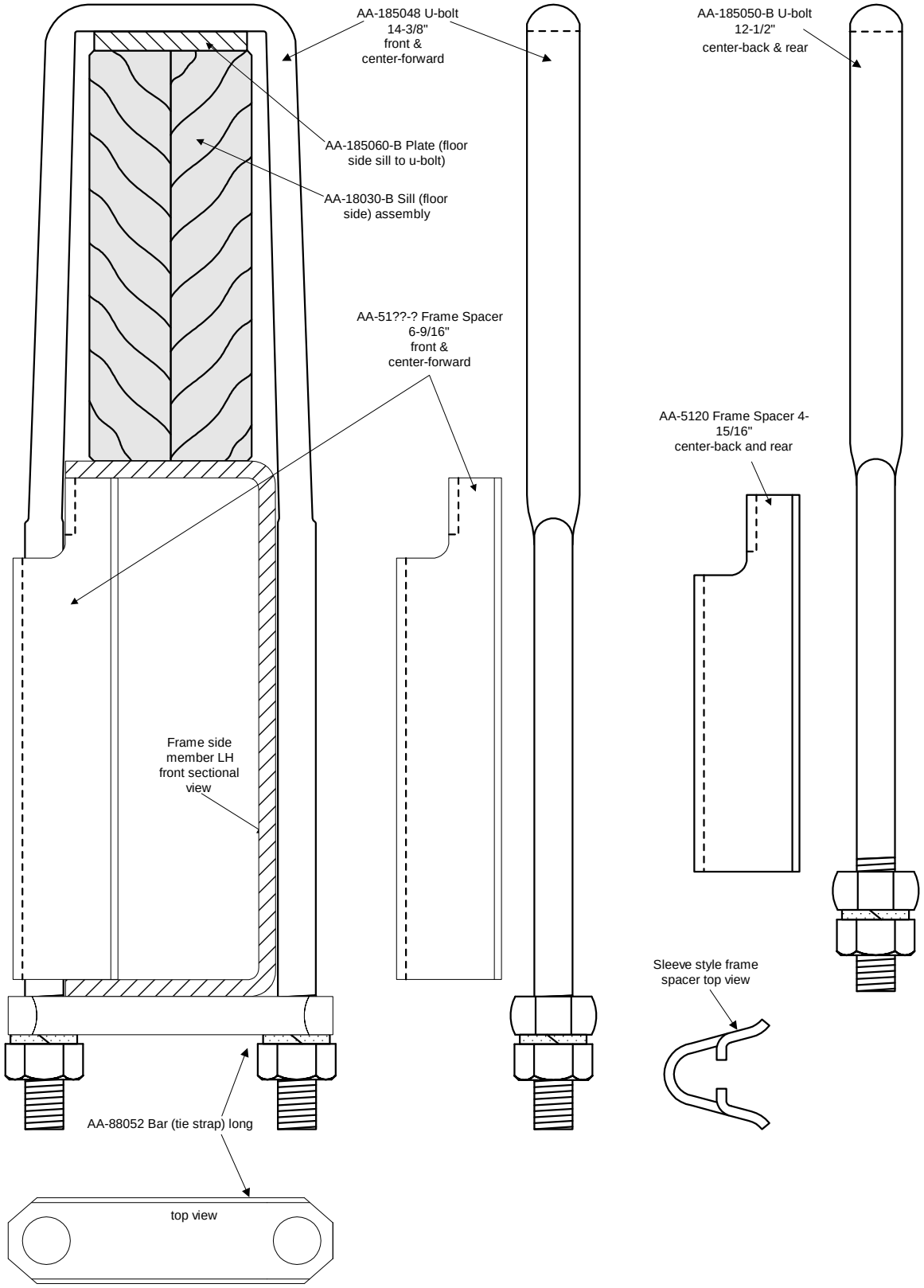
Illustration #4 shows the u-bolt installation locations.

Frame spacers were mounted on the inside of the frame side members to prevent the compression of the frame when u-bolt nuts were tightened. They had a stamped steel sleeve style and were held in place by the insertion of the inside leg of the u-bolt through the spacer as shown in Illustration #8b.

U-bolt Identification Table

U-Bolt Part No.	Style	Total Length	Throat Width	Semi Circle (half round) Width
AA-185048	C	14-3/8”	2-1/2”	11/16”
AA-185050-B	C	12-1/2”	2-1/2”	11/16”

Illustration #8b - U-Bolts & Frame Spaces
(scale 1/2” = 1”)



SPARE WHEEL CARRIER

The spare wheel carrier used for the 185-B platform body was mounted crosswise under the AA chassis frame as shown in illustration #5. The two carrier front hinges were attached to the frame left side member. Access to the spare wheel was from the right side.

This carrier was standard for all '31 157" WB trucks except the 210-A Panel Delivery. Since this carrier was mounted completely to the chassis, it was provided with Cab and Chassis or Chassis only units.

The complete spare wheel carrier assembly was assigned part number AA-1451 and is shown in illustration #9h. It was the same basic design as the AA-1453-C carrier used from January 1930 through February 1931 for the 88-A platform body on the 131-1/2" WB.

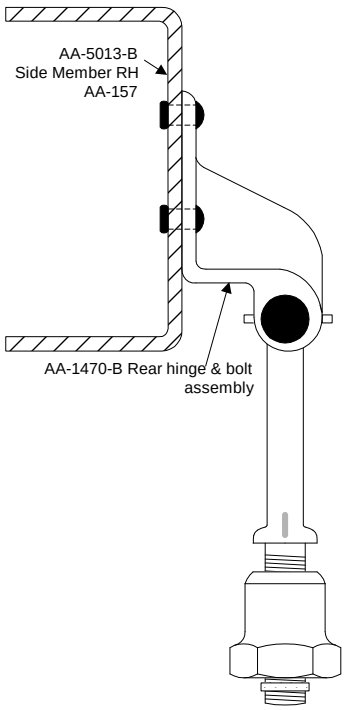
Parts were as follows for the AA-1451 spare wheel carrier:

1	AA- 1451	Carrier assembly
1	AA- 1443	Carrier strap assembly
2	AA- 1458-B	Stud (3/4-13 threads)
1	AA- 1469	Strap end (style B)
		Strap end to carrier strap - attachment
4	A-23437	3/8 x 1-1/8 button head rivet
2	AA- 1493	Front hinge
		Front hinge to frame left side - attachment
4	A-23372	5/16 x 7/8 round head rivet
		Front hinge to carrier strap - attachment
2	A-23455	7/16 x 3-3/4 round head rivet
1	AA- 1470-B	Rear hinge bolt & nut assembly
		Rear hinge bolt & nut to frame right side - attachment
4	A-23372	5/16 x 7/8 round head rivet
1	AA- 1496	Spare wheel stop - center
		Wheel stop to rear cross member - attachment
2	A-23371	5/16 x 1-1/16 round head rivet
1	AA- 1498	Spare wheel stop - side right hand
1	AA- 1499	Spare wheel stop - side left hand
		Wheel stop to side member - attachment
4	A-23389	5/16 x 1-1/4 round head rivet
		Spare wheel to carrier - attachment (lug nuts)
2	AA- 1120-B	3/4-16 (7/8 x 1-1/2) wheel nut RH thread (cadmium)

This carrier placed the spare wheel under the rear of the frame as shown in illustration #9h. On the right side of the frame, the rear of the carrier strap assembly could be disconnected from a swiveling bolt by loosening its jam-nut with the wheel wrench and swinging the bolt outwards to clear the end of the strap assembly. The strap assembly could then be lowered to the ground, exposing the attached spare wheel for removal. With the carrier in the closed position, the spare wheel's rear flange made contact with three wheel stops which were attached to the frame. The strap assembly could be locked to the swiveling bolt with a pad lock. Ford did not supply a lock.

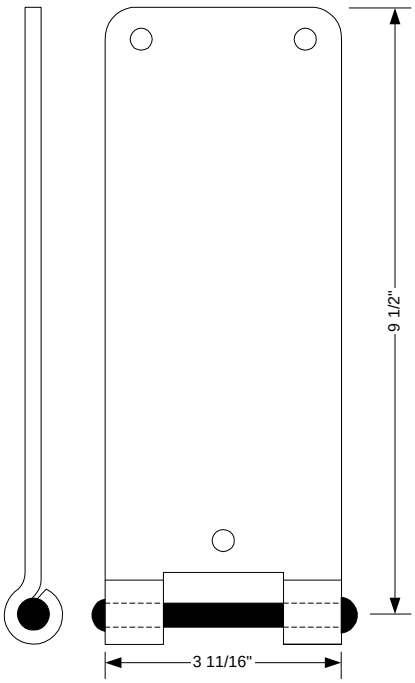
Illustration #9a is of the rear hinge bolt and nut assembly. This assembly included a jam nut with a 1-1/2" wrench size to match the wheel lug nuts. This part was used for the wheel carriers of the 88-A platform starting in early 1930, the 187-A platform body, which started production in March 1931, and the BB trucks under the part number BB-1470.

Illustration #9a - Spare Wheel Carrier
AA-1470-B Rear Hinge Bolt & Nut Assembly
(scale 1/2" = 1-1/2")



Each of the 9-1/2" long front hinges, as shown in illustration #9b, were attached to the frame left side in a vertical position with two rivets. This hinge was used in the AA-1495 two piece front hinge assembly for the 1931 131-1/2" WB 187-A platform body.

Illustration #9b - Spare Wheel Carrier
AA-1493 Front Hinge
(scale 1" = 1-1/2")



Three wheel stops were attached to the chassis frame. With the wheel carrier in the closed position, the wheel stops made contact with the spare wheel's rear flange. The side wheel stops were attached to the inside of the frame side members. The center wheel stop was attached to the bottom of the #5 cross member. Illustrations #9c, #9d, and #9e show these 3/8" thick stamped steel parts as attached to the frame.

Illustration #9c - Spare Wheel Carrier
AA-1498 Wheel Stop - Side RH
frame rear sectional view (scale 1/2" = 1-1/2")
????????????? fix ???????????????

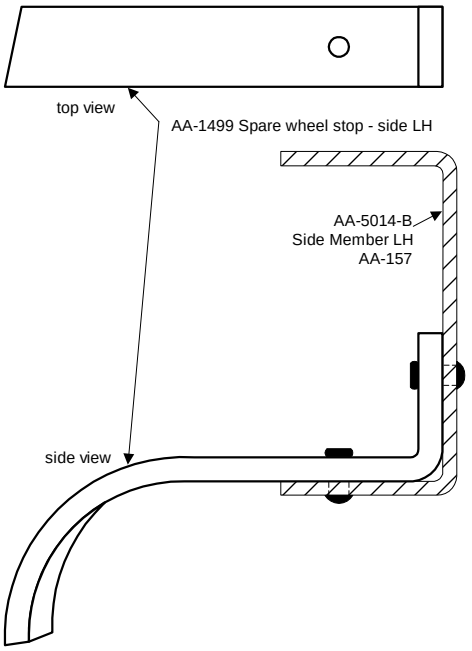


Illustration #9d - Spare Wheel Carrier
AA-1499 Wheel Stop - Side LH
frame rear sectional view (scale 1/2" = 1-1/2")

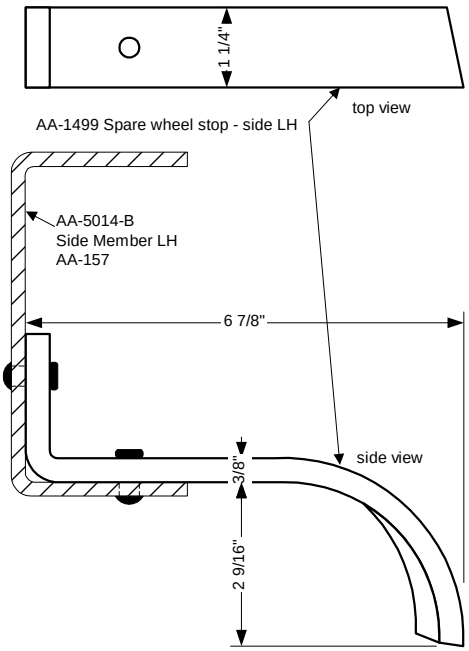
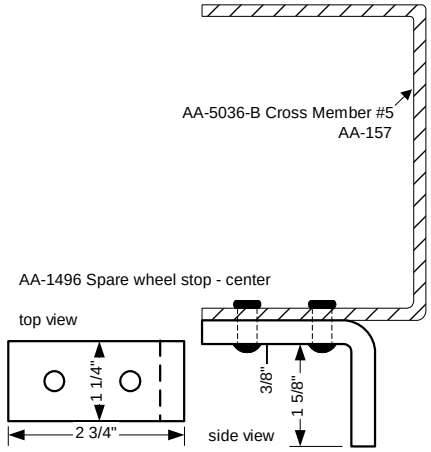


Illustration #9e - Spare Wheel Carrier
AA-1496 Wheel Stop - center
cross member left section view (scale 1/2" = 1-1/2")



Illustrations #9f and #9g show close-up views of the strap end and a stud used in the makeup of the strap assembly.

Illustration #9f - Spare Wheel Carrier
AA-1458-B Stud (scale 1/2" = 1-1/2")

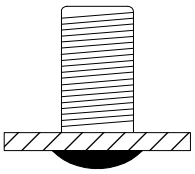
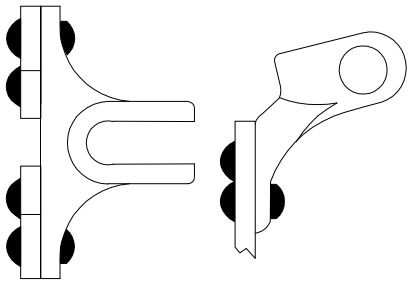


Illustration #9g
Spare Wheel Carrier AA-1469 Strap End
(scale 1/2" = 1-1/2")



The AA-1443 carrier strap assembly, shown in illustration #9h, consisted of a plate assembly, a strap end, and two straps. It the was 2" longer than the prior AA-1461-B and AA-1461-C assemblies used starting July 1928 on the 131-1/2" WB platforms. This longer assembly was used on the BB trucks under part number BB-1443. This assembly was flat except for the upward curve at the back where the strap end attached. The spare wheel was mounted face down on the strap. The 4" hole centered in the strap assembly plate was stamped with a flange which curled up. This flange aligned the spare wheel since it fit inside of the spare wheel center opening.

Illustration #9h - Wheel Carrier AA-1451
1/31-2/32
(scale 1" = 1/2')