

AA TRUCK TALK

Equipment for the 187-A PLATFORM BODY

By Neil Wilson of Boulder, Colorado — April 2001

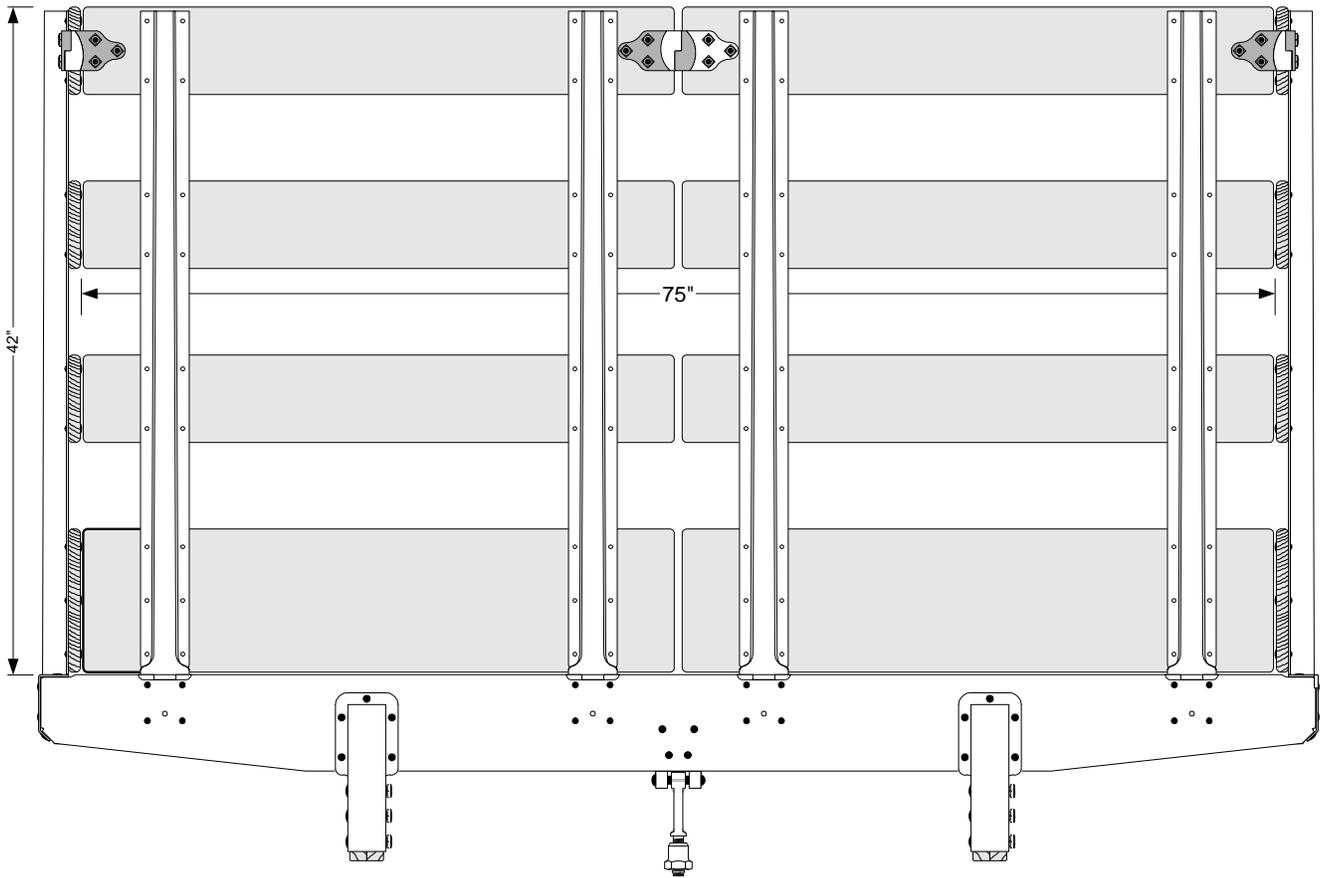


Illustration #1: 189-A Stake Racks - Rear Racks
(scale 1" = 1')

This article covers equipment sold by Ford which were used with the 187-A Platform body in the make up of Stake and Stock bodies.

Stake body research is based on three sources: Ford April 1, 1932 body parts list, a partial set of stake racks provided by Fred Gooding and photographs provided by Jordon Beller and Fred Carlton. Both Jordon Beller and Fred Carlton verified some of the drawings found in this article. If anyone finds errors in this article of either the illustrations or text, or can provide more information regarding the material found here, please let me know.

The photograph found on the last page of this article was taken October 14, 1930 and is from the collections of Henry Ford Museum & Greenfield Village. This photograph is assumed to be a prototype of the 1931 Stock truck. The make-up of this truck includes an 82-B closed cab with a 187-A platform body and 228-A Stock Racks all mounted on a dual wheeled, 131-1/2" 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 Model "A" style which was replaced by the solid single bar style in November of 1930.
- ◇ 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 stock racks tie rods are inserted from the right side of the truck.
- ◇ The front rack includes only three stakes. The production version had four stakes with the center two stakes being the flat strap style.
- ◇ The stock racks include eight cross boards. There is a 1/2" space between the lower three boards and a 3-3/8" space between the remaining boards.
- ◇ The stock racks cross boards are riveted to the stakes.
- ◇ The platform front cross member has internal stake pockets. The production version had external stake pockets.

OVERVIEW

The 187-A platform served as the base for stake and stock bodies on the 131-1/2" WB chassis. These bodies were produced by installing racks in the platform stake pockets. The usable cargo area was 75" wide by 102" long for both bodies.

The stake body consisted of platform 187-A with stake racks 189-A. The racks extended 42" above the platform floor. Production for the 187-A platform body ran from March 1931 through February 1932. BB truck production began March 1932. While the sills for the 187-A platform were modified to fit the new BB chassis, the 189-A stake racks remained unchanged through the 1932 BB production.

The "Midland Steel Products Company" produced the 189-A stake racks as well as all of the other Ford AA platform bodies and equipment. Starting January 1931, 186-A stake racks were produced for use with the 157" WB platform trucks. The 189-A stake racks covered in this article were a clone of the long wheel base 186-A stake racks. The only unique parts for the 189-A stake racks are the boards and sign panel for the side racks.

For 1933, the cargo area was increased to 82" wide x 106"

long for the 131-1/2" WB platform body and was designated as BB-187. The stake racks for these new bodies continued to be 42" high. These new dimensions of the platform remained the same into the late '30's. Based on some original samples and photographs observed, it is likely that connection hardware for these later racks is the same as the prior AA rack connectors. However, original stakes observed for these later racks have a slightly different stamping and include a more substantial reinforcement on the inside of the bottom of the stake.

The stock body consisted of the 187-A platform with 228-A stock racks. The racks extended 60" above the platform floor. Like the stake racks, the stock racks continued through the 1932 BB production. It is likely that similar stock racks were used through the late '30's. Stock racks for the 157" WB chassis were designated as 238-A. These racks used the same parts as the 228-A except for the length of side rack boards.

The remainder of this article is a detailed description of the 189-A stake racks and the 228-A stock racks.

189-A STAKE RACKS DETAIL

Following is a detailed parts list for the 189-A stake racks. Note that most of the parts carry part numbers for the 157" WB racks and start with AA-186. Also, a few of the parts carry part numbers of the prior 188-A stake racks. Also note that those parts listed as AA-186xxx or AA-189xxx have been added for this documentation but were not available through the Ford Service Department in the April 1, 1932 Body Parts List.

	Stakes
18	AA-186280-B Stake assembly
	Board to Stake - attachment
324	1/4 x 1-1/4 (5/32 x 5/8 head) rivet
2	AA-186230-C Stake (front center)
	Board to Stake - attachment
18	1/4 x 1-3/8 (5/32 x 5/8 head) rivet
	Rack Connectors
2	AA-188305 Connection (rack) rear was AA-88305 and was TT-12734-X
4	AA-188308 Connection (rack) RH corners was AA-88308 and was TT-12735-X
4	AA-188309 Connection (rack) LH corners was AA-88309 and was TT-12736-X
8	AA-186304-B Hinge (side rack)
8	AA-186305-B Hinge (side rack)
2	AA-186307 Rod (side rack hinge)
4	AA-186310 Pin (side rack hinge) and chain assembly
	Connection/Hinge to board - attachment
78	5/16-18 x 1-1/4 (5/32 x 1 head) step bolt
78	5/16-18 (1/4 x 9/16) square nut (chamfered one side)
78	5/16-18 (3/32 x 19/32) lock washer
	Front Stake Rack
1	AA-186200-B Rack (front) assembly
1	AA-186xxx Board (rack) front - lower
2	AA-186xxx Board (rack) front - center
1	AA-186xxx Board (rack) front - upper
	Side Stake Racks
1	AA-189202 Rack (side) assembly - front - RH
1	AA-189203 Rack (side) assembly - front - LH
2	AA-189330 Panel (metal advertising) on side front rack assembly
	Panel to Rack - attachment

2	1/4-?? x 3/4 (??/?? x ??/?? head) carriage bolt
2	1/4-?? (??/?? x ??/??) special nut
??	1/4 (??/?? x ??/??) lock washer
1	AA-189204 Rack (side) assembly - rear - RH
1	AA-189205 Rack (side) assembly - rear - LH
2	AA-189207 Rack (side) assembly - intermediate
4	AA-189xxx Board (rack) side - lower
8	AA-189xxx Board (rack) side - center
4	AA-189xxx Board (rack) side - upper
	Rear Stake Racks
1	AA-186220-B Rack (rear) assembly - RH
1	AA-186221-B Rack (rear) assembly - LH
2	AA-186xxx Board (rack) side - lower
4	AA-186xxx Board (rack) side - center
2	AA-186xxx Board (rack) side - upper
	Special Equipment
1	AA-185600 Gate (tail) assembly - complete
?	AA-185626 Support (tail gate hinge rod)
?	AA-186524 Rod (tail gate hinge)
?	AA-185630 Plate (tail gate board scuff)
4	AA-185630 Hinge (tail gate)
?	AA-242600 Bracket (tail gate eye) and ring assembly
?	AA-185608 Strip (tail gate skid)

Stakes

Two stake designs were used for the racks of the stake body as shown in illustrations #2 and #3.

The front rack used the AA-186230-C flat, 1/4" thick, strap-metal stakes for the center two stakes. These stakes measured 45-1/2" and were a longer version of the AA-188230 front stakes used through February 1931. The top corners of this new stake were rounded rather than square like the prior stake.

The remaining 46-1/16" long stakes were a stamped steel design similar to the 29-3/8" long AA-188220 side and rear stakes used through February 1931. This new stake was assigned part number AA-186280-B. The platform's floor side members angled inward along their bottom edge and served as stops for the front face of the stakes which slipped into the pockets with

little play. The platform's outside-front and rear stake pockets did not have stops for the stakes.

The AA-186280-B stake was reinforced by a u-shaped bracket which was spot welded flush with the bottom of the stake on the inside. The stake had a 1/8" tapered profile with its top and bottom measuring 1-1/2" and 1-5/8" respectively. The stake was 3" wide, but the extruded stamping was tapered. The top of the stake formed a blunt "V" shape. At the platform floor side member, the stake's cross section formed a "U" shape.

There was a 19/64" hole in the face of the stake which was centered 2-1/16" from the bottom edge of the stake. The platform's front and rear stake pockets included holes which aligned with those of the stakes, permitting the option of bolting the stakes to the platform.

Rack Connectors

There were two types of connectors for the 189-A stake racks. These were called connections and hinges.

Each connector was attached to rack cross boards with three 5/16-18 large headed step bolts, lock washer, and square nut with a 9/16" wrench size.

Illustrations #4 and #6 show the connection parts for the corner racks and the rear racks respectively. These parts were the same as the prior 188-A stake racks and were actually carryover TT parts.

The side-intermediate racks were designed to be lifted up several inches, swung out and forward to make loading and unloading easier. The connectors for these racks were a hinge type. Illustration #5 and #9 show the hinges used on the left side of the body.

Illustration #2: AA-186230-C Stake
(scale .2" = 1")

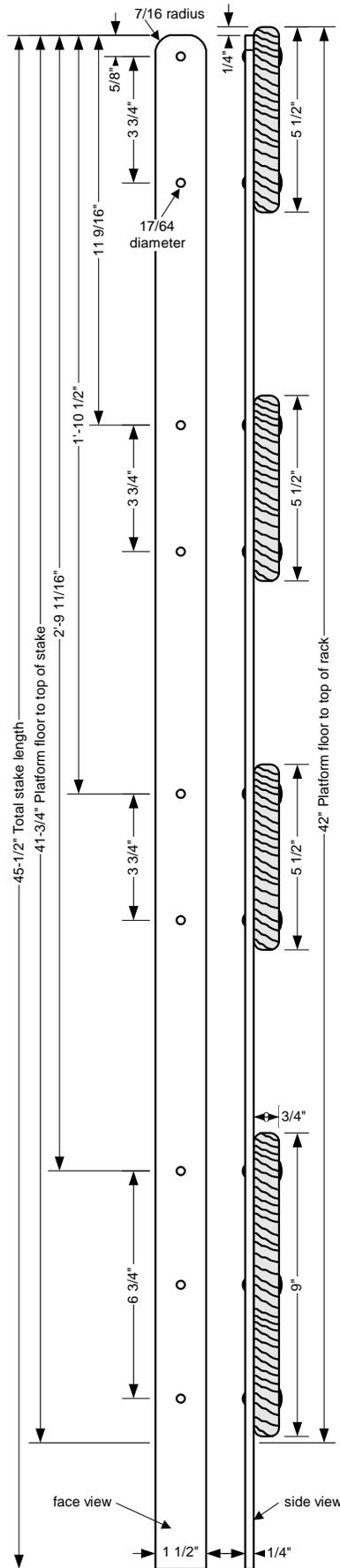
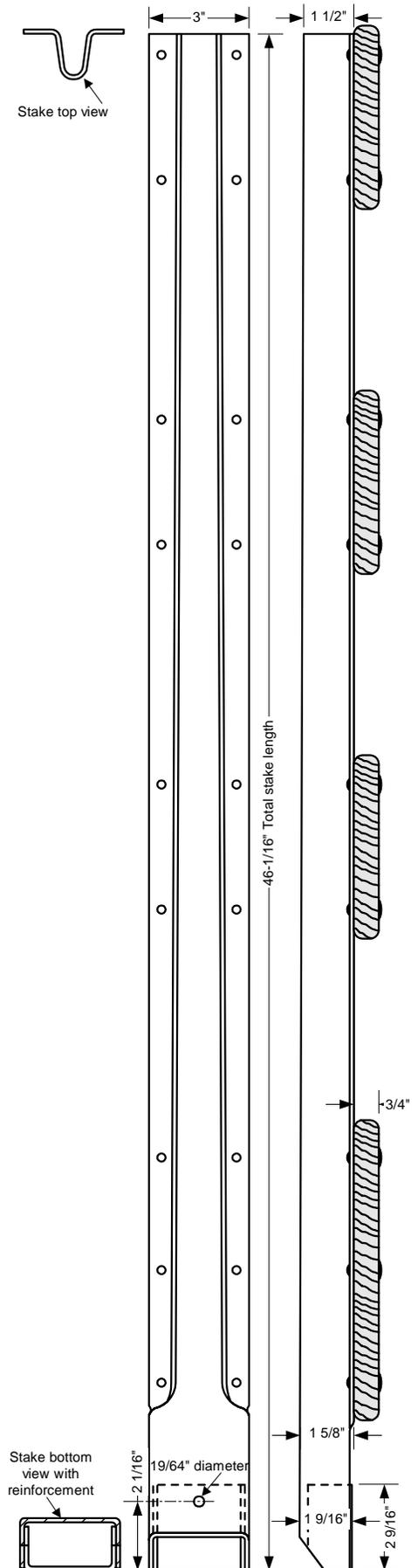


Illustration #3: AA-186280-B Stake
(scale .2" = 1")



For the right side of the body, the hinges were reversed. The AA-186304-B hinges were used to connect the side-intermediate and side-rear racks and the AA-186305-B hinge was used to connect the side-intermediate and side-front racks. The removable AA-168310 hinge pin and chain

assemblies were used at the rear of the side-intermediate rack on both the left and right sides. The hinge pins were forged steel with a 7/16" drilled hole for the connection of the chain assembly. The chain consisted of 23 links and measured 12-5/8" long.

Illustration #4: AA-188308 and AA-188309 Stake Rack Connections
(scale 1/2" = 1")

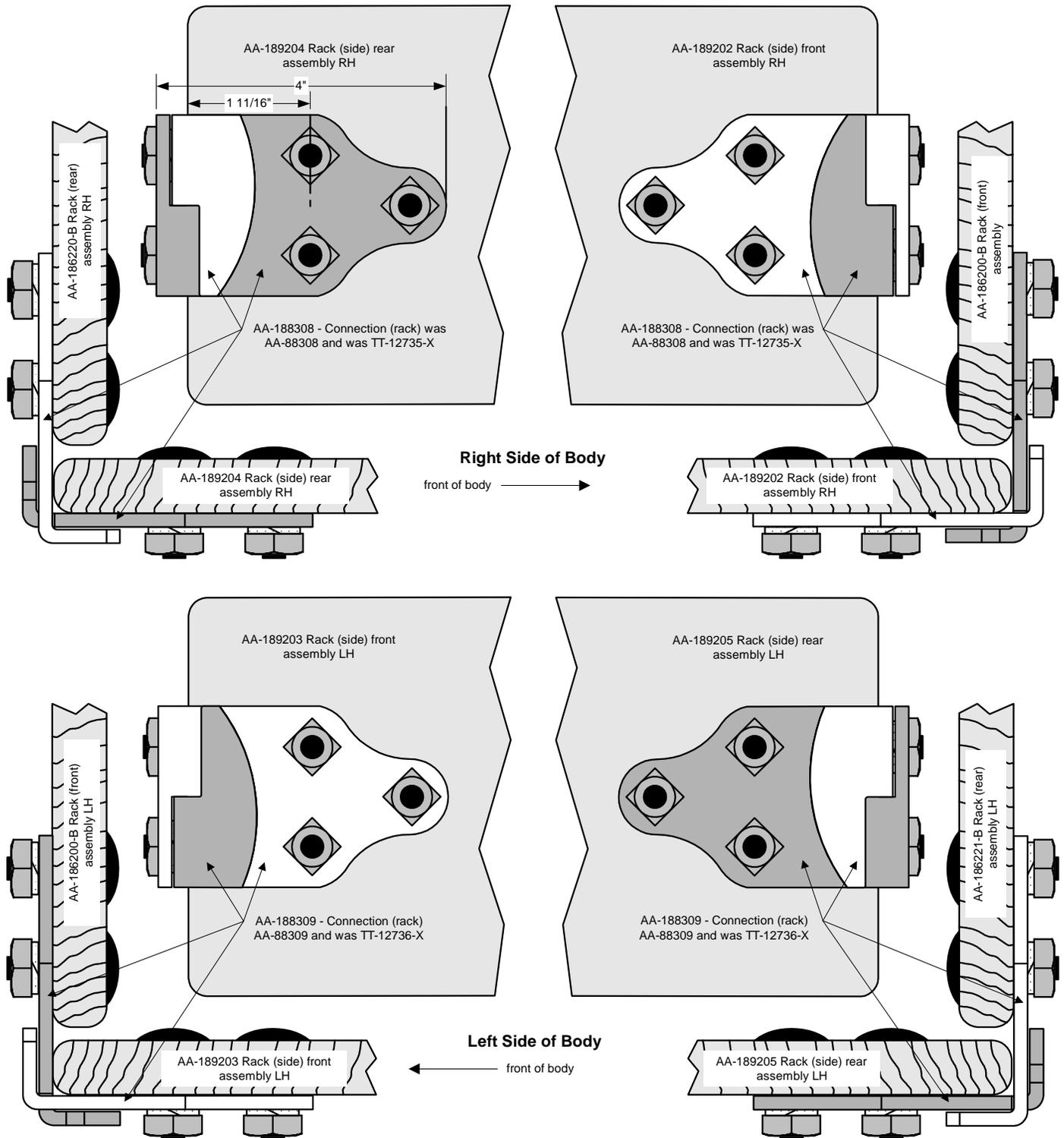


Illustration #5: AA-186304-B and AA-186305-B Side Rack Hinge
 (scale 1/2" = 1")

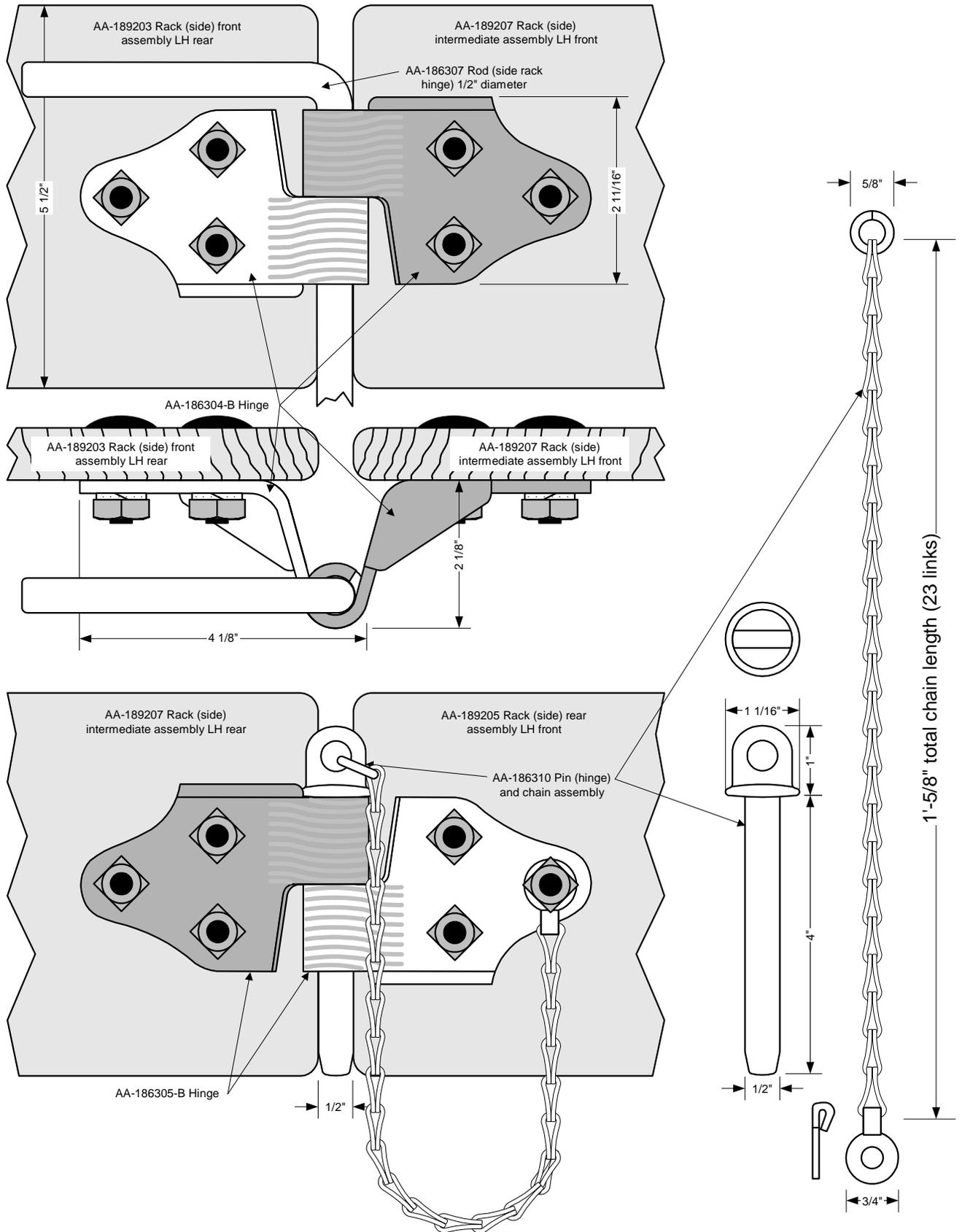
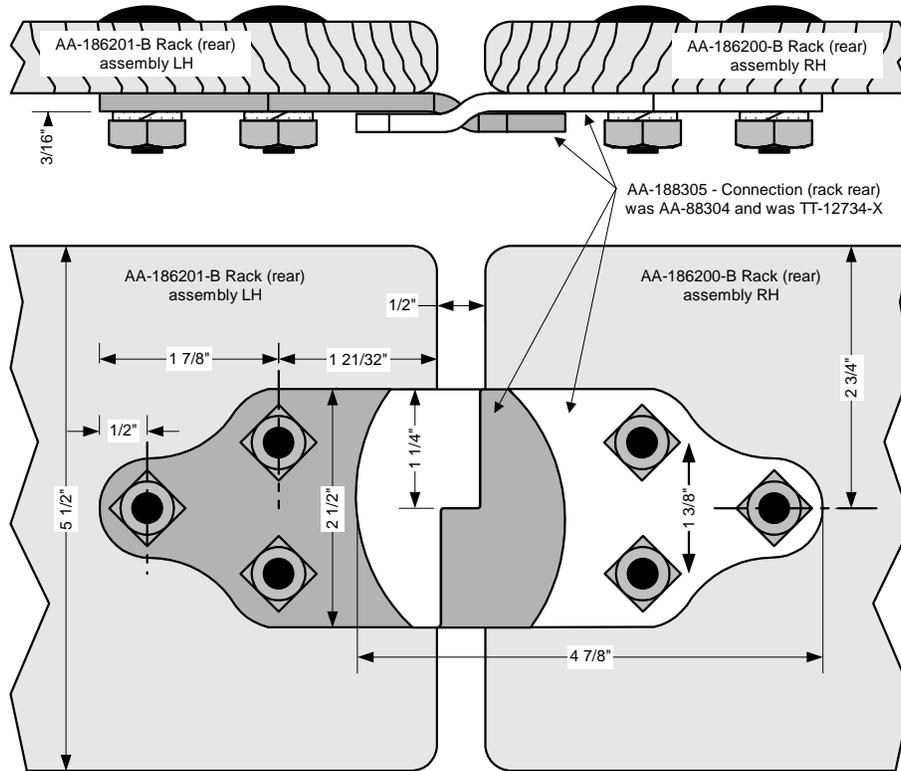


Illustration #6: AA-188305 Stake Rack Connection
(scale 1/2" = 1")



Rack Assemblies

Nine rack assemblies comprised the entire set of 189-A stake racks. They were installed in the following sequence: front, both side-front, both side-rear, both side-intermediate, rear left hand, rear right hand. Each rack assembly consisted of cross boards, stakes, and connectors.

The front rack had a total of four stakes. The two center stakes were the AA-186230-C style. The two outside stakes were the AA-186280-B style.

Illustration #9 shows the left side racks which consisted of three racks of equal size (right side racks were the same format). However, separate part numbers were assigned for the right and left hand side-front and side-rear rack assemblies because the connector hardware was specific for each rack.

Each of the side-front racks included metal sign panel AA-189330 shown in illustration #7, #8, and #9. The panel was located between the rack stakes and rack boards. The sign panel was 41-1/4" high, 23-3/4" wide, and 1/16" thick. These panels had 5/16" pre-punched holes along each side which matched the holes in the stakes and cross boards. The rivets which held the cross boards to the inside of the stakes also held the sign panel. 1/4" x 3/4" carriage bolts and special nuts were used to secure the top and bottom of the sign panel in its center to the rack boards as shown in illustration #8. The slotted nut could be tightened with a split blade screw driver. It was counter sunk flush with the board and would therefore not damage cargo.

The side-intermediate racks were identical. They were connected to the side-front and side-rear racks with hinges as shown in illustrations #5 and #9. These hinges were designed to make loading and unloading easy from either side of the truck.

The hinges at the rear of the racks were held together with removable hinge pins. Once these pins were removed, the side-intermediate rack could be lifted up until the stakes slipped out of the stake pockets. It could then be swung forward serving as a hinged gate.

The two side-rear racks had unique parts numbers because they were not interchangeable. They included the hinge connectors at the front side of the rack with the removable hinge pin chains being attached to a hinge bolt.

Illustration #1 shows the two rear stake racks. These racks were identical except for the connectors. Therefore, the racks were not interchangeable and required separate part numbers.

Rack boards were attached to each stake with 1/4" rivets installed from the board side. The rivet heads, which were like a carriage bolt head, measured 5/32" high by 5/8" in diameter. Unlike the prior 188-A stake racks, all rack boards had rounded edges. The table below provides rack board dimensions.

Rack Board Dimensions

#	Board Description	Dimensions all 3/4" thick
1	Front rack - lower	9" x 74-3/4"
3	Front rack - center and upper	5-1/2" x 74-3/4"
6	Side rack - lower	9" x 34-1/4"
18	Side rack - center and upper	5-1/2" x 34-1/4"
2	Rear rack - lower	9" x 37-1/8"
6	Rear rack - center and upper	5-1/2" x 37-1/8"

Special Equipment

The September 1, 1931 Service Department Letter announced the release of tail gate assembly AA-185600 as special equipment

for both the long and short wheel base platform bodies. This tail gate could be ordered at extra cost either through production or service.

The Service Department Letter described this part as a drop down tail gate which attached to the floor by four hinges. It came with a 151" long chain which permitted lowering the gate to floor level for unloading cargo.

Details such as height and design of this tail gate are not known currently.

Illustration #7: AA-189330 Metal Sign Panel
(scale 1/4" = 1")

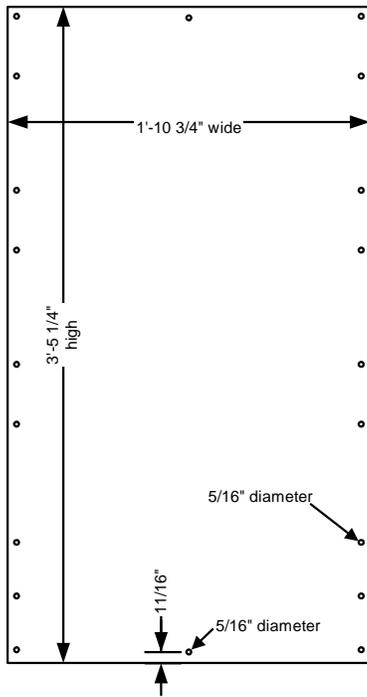


Illustration #8: Sign Panel to board connection

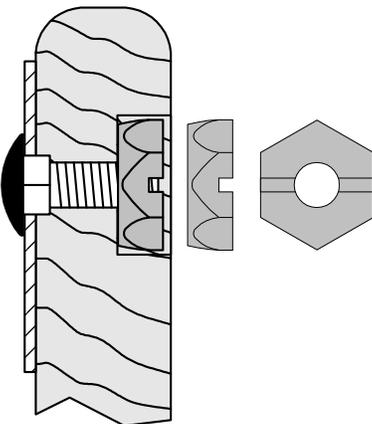
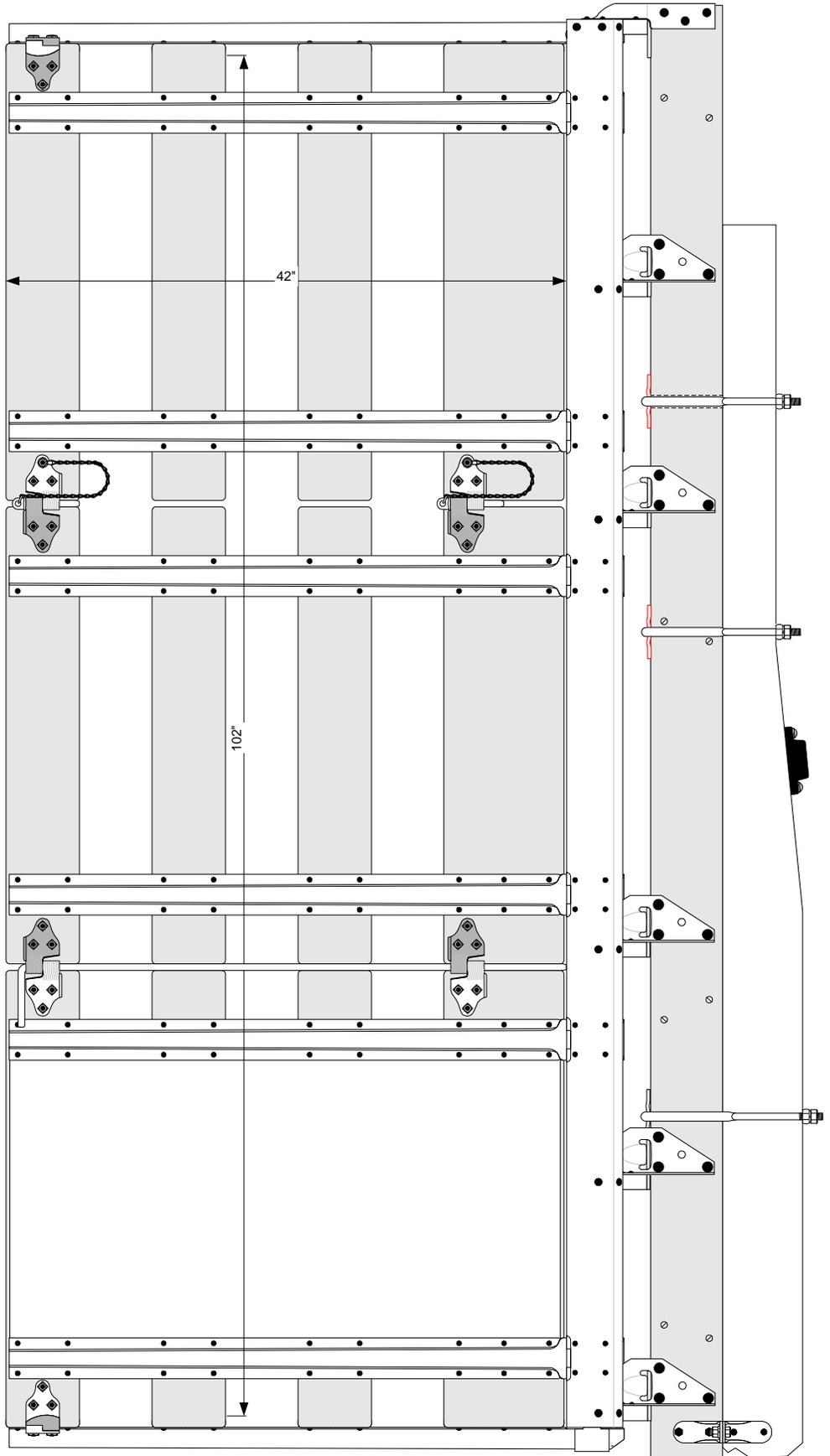


Illustration #9: 189-A Stake Racks - Left Side Racks
(scale 1/4" = 1")



228-A STOCK RACKS DETAIL

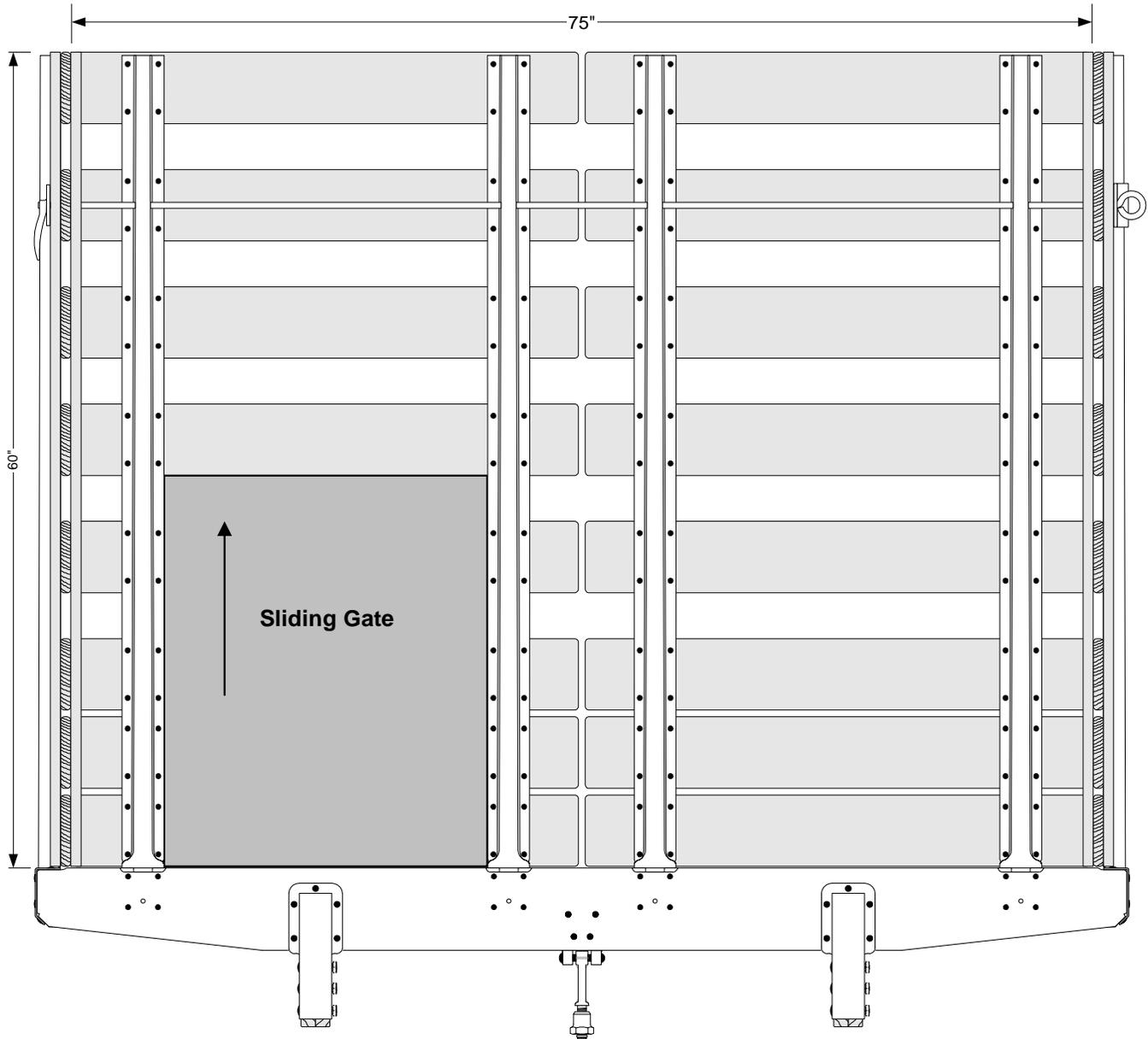


Illustration #10: 228-A Stock Racks - Rear Racks

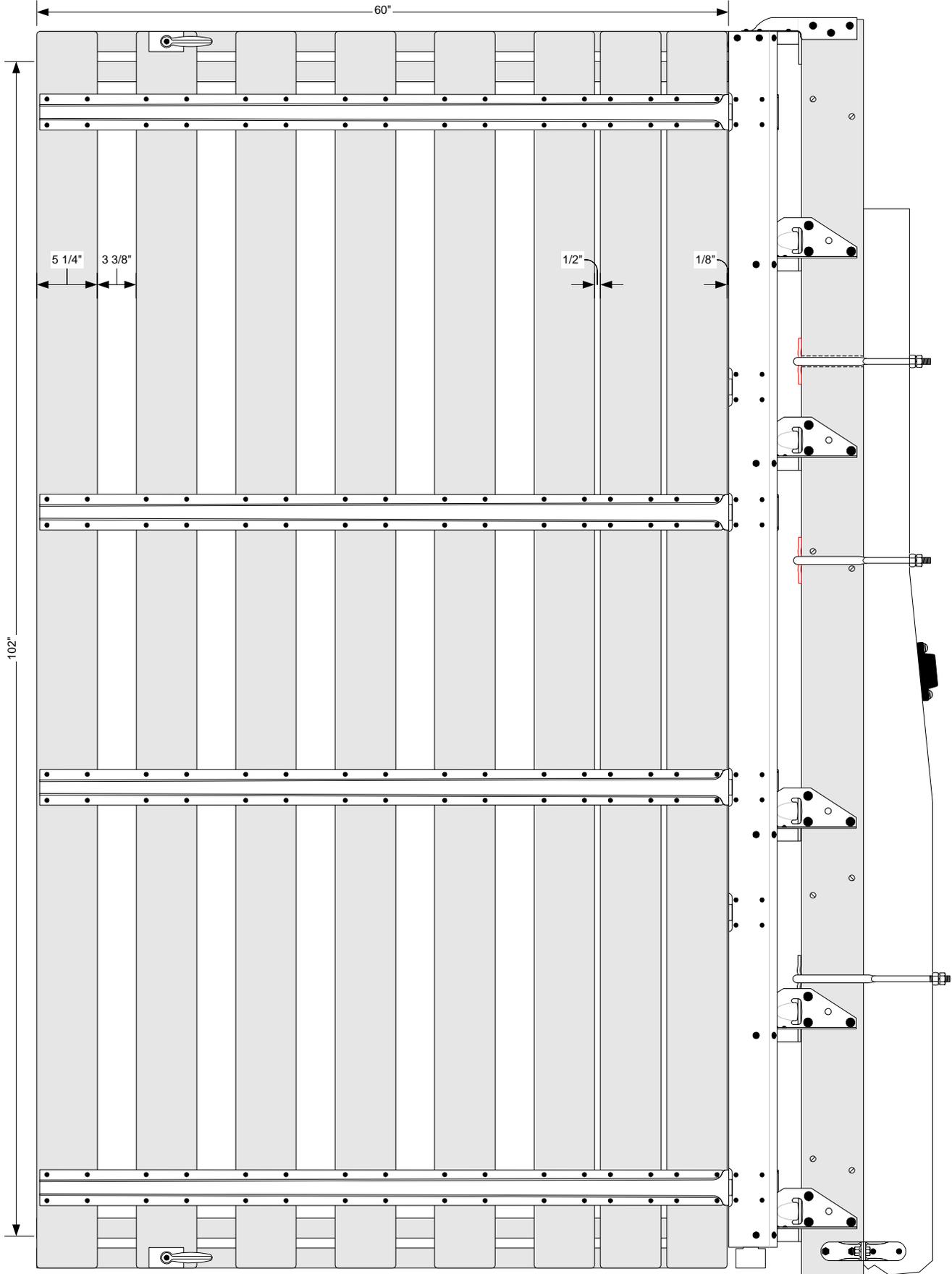
(scale 1/4" = 1")

Stakes		1 AA-228101	Rack (stock) assembly - side LH
6	AA-228050	1 AA-228200	Rack (stock) assembly - rear RH
	Stake (stock rack) assembly - front and rear	1 AA-228201	Rack (stock) assembly - rear LH
	Board to Stake - attachment	? AA-228250	Strip (stock rack rear slide) RH
192	rivet	? AA-228251	Strip (stock rack rear slide) LH
2	AA-228056	1 AA-228300	Gate (stock rack rear) assembly
	Stake (stock rack) - front center	? AA-228315	Strap (stock rack rear gate)
	Board to Stake - attachment	? AA-228318	Strip (stock rack rear gate slide) on gate
32	rivet	? AA-228330	Stop (stock rack rear gate)
8	AA-228150	? AA-228352	Latch (stock rack rear gate) and spring assembly
256	rivet		
Rack Connectors			
2	AA-228040		
	Rod (stock rack tie)		
2	AA-228042		
	Plate (stock rack tie rod) RH		
2	AA-228043		
	Plate (stock rack tie rod) LH		
2	AA-228044		
	Handle (stock rack tie rod)		
Racks			
1	AA-228025		
	Rack (stock) assembly - front		
? AA-228070	Slide (stock rack board) male		
? AA-228074	Slide (stock rack board) female		
1 AA-228100	Rack (stock) assembly - side RH		

The above parts list for the 228-A stock racks is based on the April 1, 1932 Body Parts List. This list includes only those parts offered through Ford service at that time and did not include all parts. Ford did not provide replacement boards for the racks, but rather recommended that these wooden parts be made locally.

Illustration #11: 228-A Stock Racks - Left Side Rack

(scale 1/4" = 1")



Since an original set of stock racks was not available for research, illustrations #10 and #11 showing the 288-A stock racks are based on information gained from parts lists, a photograph and an advertisement as specified below. Consequently, detailed drawings of individual parts can not be produced.

The first information source is the April 1, 1932 Body Parts List which was also used as the base for the parts list on the prior page..

The second information source is the stock rack truck photograph shown at the end of this article. This is presumed to show a prototype version and not the production version. It is the only stock truck photograph found thus far.

The production 187-A platform front cross member has external stake pockets with two center-front stake pockets which accept the AA-228056 1/4" thick flat-strap stake. The photograph however, shows a front cross member with internal stake pockets and only one center-front stamped steel stake like the outside-front stakes. Based on the photograph, the stock rack stakes appear to be a longer version of the 189-A stake rack stakes.

The third information source is an ad page from a Ford sales catalog as found on page 77 of the book "Model A/AA Ford Truck Owner" by A. G. McMillan. The drawings from this page shows the Ford advertised cargo capacity of 75" wide by 102" long by 60" high. Additionally, several dimensions are provided. The boards are shown as 5-1/4" high. There is a 1/2" space between the lower three boards and a 3-3/8" between the remaining boards.

There was a total of five racks: one front rack, one rack per side, and two rear rack. The outside-front and rear stakes were punched with holes for installation of rods used to tie the side racks to the front and rear racks. The AA-228042 and AA-228043 tie rod plates listed in the parts list would have been used on the outside of the side racks. The right hand plate was probably designed to prevent the tie rod from turning while the handle was being tightened from the left side. It is assumed that the two rear racks were designed with a spacer to prevent them from being pulled together when the rear tie rod was tightened. The left-rear rack included a sliding gate for the handling of sheep or hogs. This gate included a stop or stops, latch, and strap. The Ford ad page shows the gate fitting between the two stakes of the left rack and being approximately 28-3/4" high.

