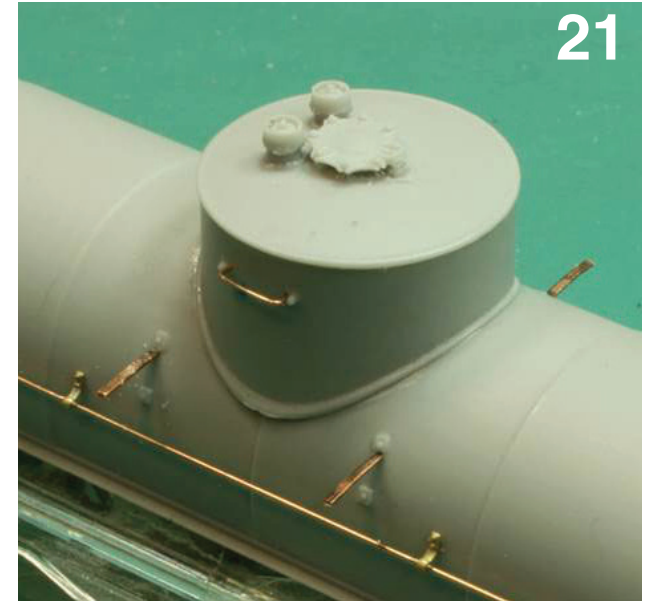


gested [Photo 20, inset]. Place the remaining three on each side. Form the handrail by bending 0.015" wire using the jig provided, or by eye. There will be two pieces, with each running down one side of the tank to the wide stanchion and including one curved end. Trim the ends of the pieces so that the ends of each meet within the wide stanchions. When satisfied, slide the two remaining stanchions around each end and attach them in the ends of tank holes. Fix the wire ends inside the wide stanchion castings with glue. Soldering with a low wattage iron also works. Straighten the handrails as necessary by adjusting the angle of the stanchions.

g. The dome platforms are composed of the cast wood plank and brackets made from A-line stirrups attached to the tank sides. There are four square "gussets" with rivets on them on each side of the dome and on both sides of the tank. These are the attachments for the platform brackets. Drill #76 holes just under the two top "gussets" as shown [Photo 19]. Now there are two ways of forming the platform support. One is to straighten and cut the "A-line" stirrups in half. Install them into the tank side in the drilled #76 holes. After the platform boards are installed, trim the "A-line" stirrups flush with the side of the platform. Use scrap 0.010"x0.030" styrene to finish the platform support from the bottom gusset to the "A-line" stirrups. The other method is to bend the "A-line" stirrup into the shape of the bracket and attach to the tank side [Photo 21].



21

### 3. Complete the Detailing.

Before proceeding we recommend that you use a cradle of foam to hold the model in order to ease installation of the final components.

- a. Install the etched placards using the photos as guides [Photos 17, 19, 20].
- b. Attach the tank top to the bottom by running some CA on the inside of the top section of the tank and pressing together.
- c. Install the etched stirrups centered under the frame grabs. These



are bent out slightly from the sideframe.

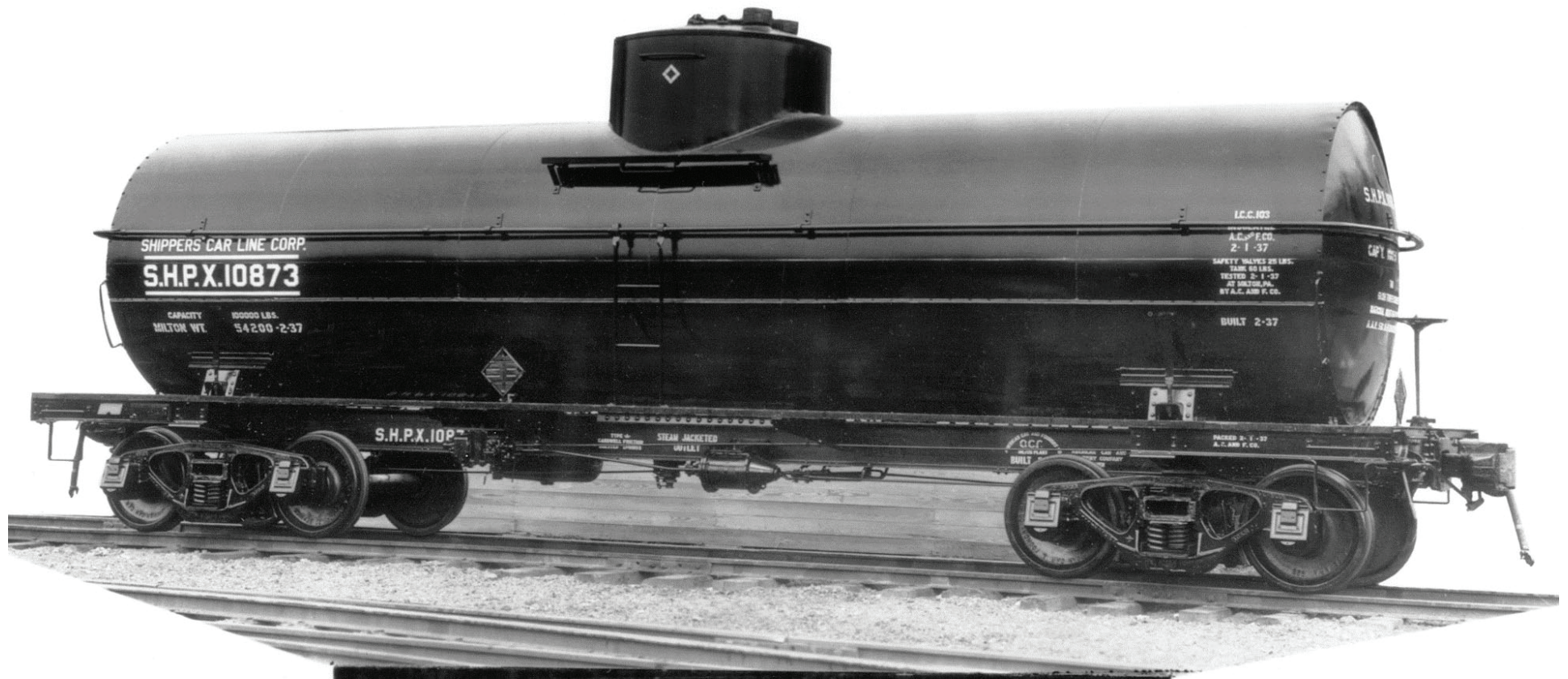
d. The cars had two styles of cut levers, top and bottom. Form with 0.0125" wire and install as per the appropriate arrangement for the car being modeled. Parts are provided for either installation with the etched eyebolts being used to attach the cut levers to the frame.

e. Install the vertical brake staff and brake wheel. The top of the wheel is 2'-5" above the running board.

f. Make four tank bands with scrap 0.010" x 0.030" styrene (about 1' long)

and 0.015" wire using the photos and drawings as a guide. Insert the 0.015" wire through the previously drilled holes. Attach the styrene to the tank side.

g. Before cleaning the ladders, drill #76 holes at right angles to the ladder where the ladder attaches to the handrail. Clean out the back side of the hole to create a slot to fit the ladder over the handrail. Clean out the ladder from the parts fret. Center the ladder on the car to locate holes in the running board for the ladder attachment points. Drill #74 holes through the running boards. Slip the ladder through the drilled holes and over the handrail. Cement in place and, when dry, remove any protruding parts of



American Car And Foundry Co. Feb. 4, 1937  
A. C. And F. Co. Lot-1596 Neg. #171515-A-1



the ladder from below the running board.

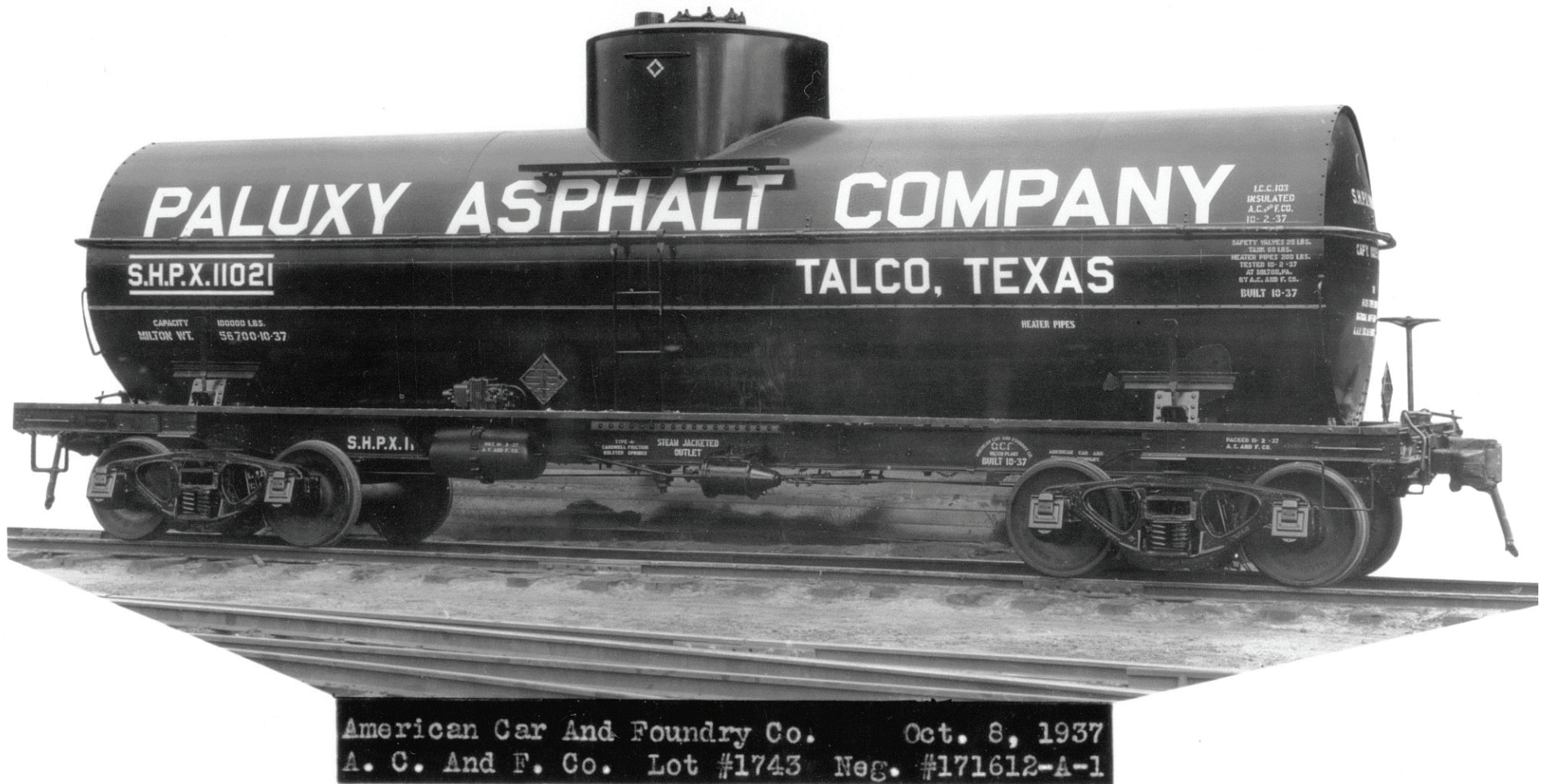
h. Install the Precision Scale air brake hose hangers at the ends of the underframe after first flattening them a bit with pliers and drilling out the hanger loop to accept the cast brake hose. The installation pin should rest against the inside of the end sill and the hanger should be 15" off the center of the car. This will pretty much put it up against the draft gear. Attach the brake pipe to the hanger. Trim the wire so that the ends come to rest on the flat underside of the hose hangers where these ends will come together with

the hose castings. Install the air hoses into the hangers, trimming to fit.

i. Install couplers of your choice and draft gear covers.

### Painting and Lettering

Wash the model again with Dawn and allow to thoroughly dry before painting. The entire model, including the trucks, is black. I like Scalecoat 1 No. 10 black as it provides a glossy surface for decals. Once decals are applied and all the air bubbles have been removed, spray with flat glaze.







American Car And Foundry Co. Oct. 8, 1937  
 A. C. And F. Co. Lot #1743 Neg. #171612-A-1



Resin Car Works And Co. May 2017  
 R. C. W. Kit #6.03 ACF Type 27 10K Insulated







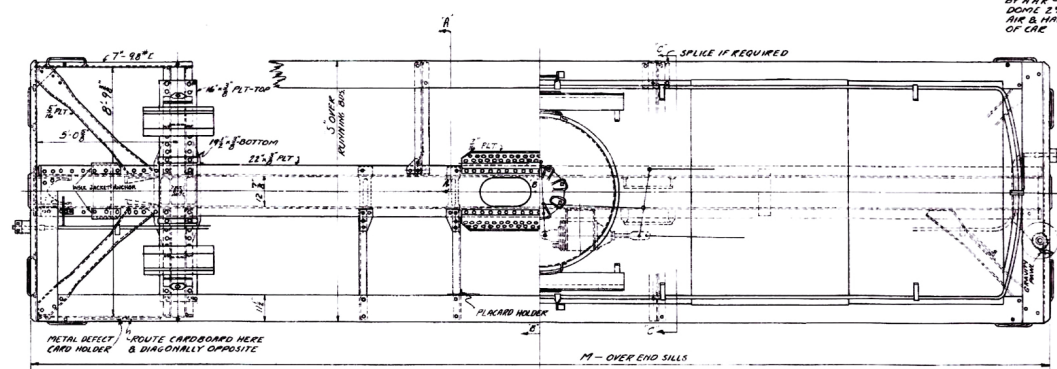
the Tahoe truck with the wide spring spacing include the Western Pacific, Northern Pacific (Yarmouth's NP steel box car needs this Tahoe truck), SP (notably square cornered box and auto cars), UP, the Missouri Pacific family of roads, the Van Swerigan roads (NKP, Erie, C&O and PM) and WM. Both Proto 2000 and Tichy attempted to model this truck with the close spring grouping. An alternative to the Tahoe truck for the Cities Service car would be Tangent's 50-ton ASF truck. The Tangent truck has the side frame, bolster end and spring grouping that we want, but it also has spring plank details that we don't want. So there's no perfect match of a modeled truck for the Cities Service cars. We've provided the best and closest truck that is available in our kit.



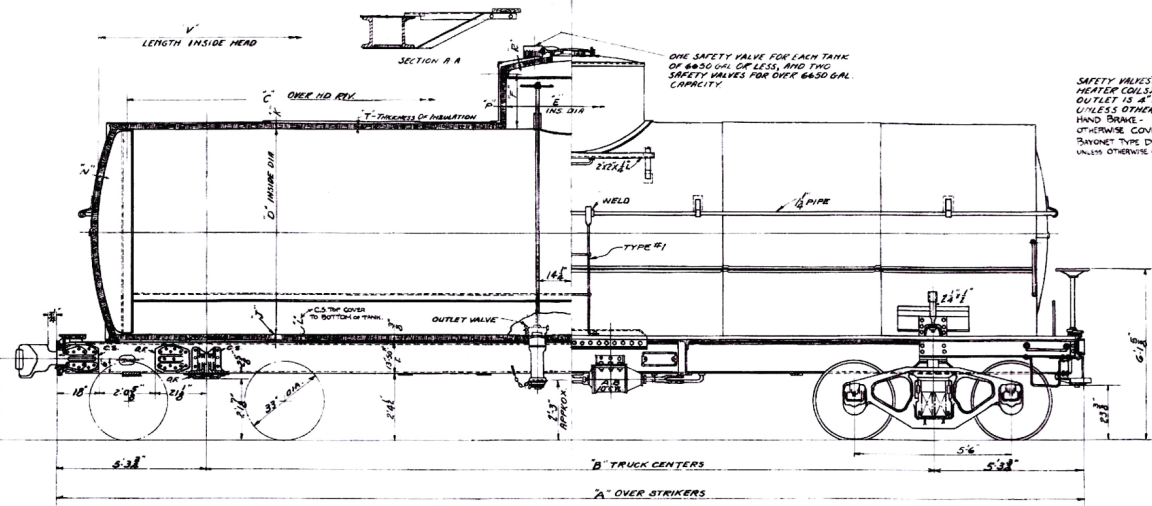
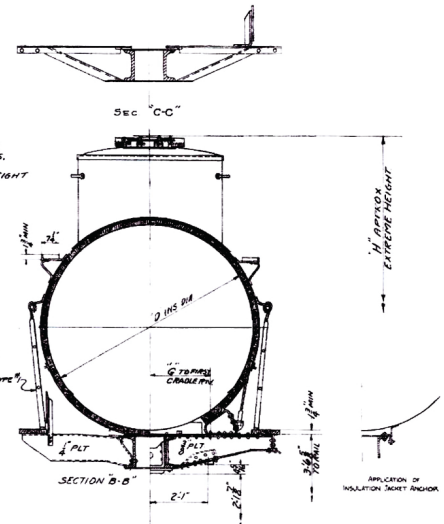


LINE NO.	CAPACITY	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	REMARKS	TYPE OF STRUCTURE	LADDER/STAIRS
1	10,000	36-0 1/2	25-11 1/2	31'-0	27 1/2	67	23	2 1/2	18'-4	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 1743 - INSULATION LAYER - 4" DOGIE & STEEL JACKETS - & POSITIVE SELF LOCKING DOGIE	#1	NO
2	8,000	36-0 1/2	24'-2	31'-0	27 1/2	67	23	2 1/2	17'-6	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 1744 - INSULATION LAYER - 4" DOGIE & STEEL JACKETS - & POSITIVE SELF LOCKING DOGIE	#1	NO
3	8,000	36-3 3/4	25-8 1/2	31'-0	27 1/2	67	23	2 1/2	13'-2 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 1744 - INSULATION LAYER - 4" DOGIE & STEEL JACKETS - & POSITIVE SELF LOCKING DOGIE	#2	NO
4	10,000	36-3 3/4	25-8 1/2	31'-0	27 1/2	67	23	2 1/2	14'-0 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 1744 - INSULATION LAYER - 4" DOGIE & STEEL JACKETS - & POSITIVE SELF LOCKING DOGIE	#2	NO
5	10,000	36-0 1/2	25-11 1/2	31'-0	27 1/2	67	23	2 1/2	14'-0 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 1743 - INSULATION LAYER - 4" DOGIE & STEEL JACKETS - & POSITIVE SELF LOCKING DOGIE	#1	NO
6	8,000	36-0 1/2	25-11 1/2	31'-0	27 1/2	67	23	2 1/2	13'-2 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 1743 - INSULATION LAYER - 4" DOGIE & STEEL JACKETS - & POSITIVE SELF LOCKING DOGIE	#1	NO
7	10,000	36-4 1/4	27-1 1/4	31'-4	27 1/2	67	23	2 1/2	14'-4 1/4	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 1804-A - INSULATION LAYER - 4" DOGIE & STEEL JACKETS - & POSITIVE SELF LOCKING DOGIE	#1	NO
8	8,000	34'-2	23'-0 1/2	27'-0	27 1/2	67	23	2 1/2	12'-2 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 2118 - INSULATION LAYER - 2" FIBERGLASS 4" DOGIE OUTLET DOGIE ARRGT. 3157843 - INSULATION LAYER - 4" DOGIE	#2	YES
9	6,000	32'-7	21'-11 1/2	27'-0	27 1/2	67	23	2 1/2	12'-2 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE LOT 2237 - INSULATION LAYER - 2" FIBERGLASS 4" DOGIE OUTLET DOGIE ARRGT. 3157843 - INSULATION LAYER - 4" DOGIE	#2	YES
10	6,000	32'-3	21'-7 1/2	27'-0	27 1/2	67	23	2 1/2	12'-2 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	SHIPPED CAR LINE - LAYER 2" FIBERGLASS 4" DOGIE OUTLET	#2	YES

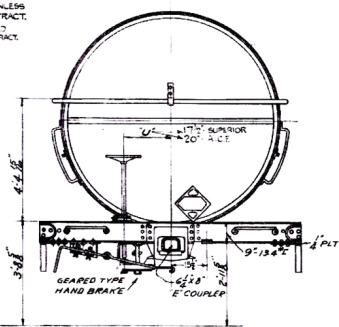
(Not to Scale)



CARS CONFORM TO ALL REQUIREMENTS BY A.R.R. - I.C.C. - BUREAU OF EXPLOSIVES. DOGIE MINIMUM DIA. & HAND SPACE BOX OF LIGHT WEIGHT OF CAR



SAFETY VALVES (USED IF COVERED BY CONTRACT HEATER COALS) OUTLET IS A POSITIVE SELF LOCKING UNLESS OTHERWISE SPECIFIED BY CONTRACT HAND BRAKE - A.C.F. TYPE UNLESS OTHERWISE COVERED BY CONTRACT. BURNING TYPE DOGIE COVER UNLESS OTHERWISE COVERED BY CONTRACT.



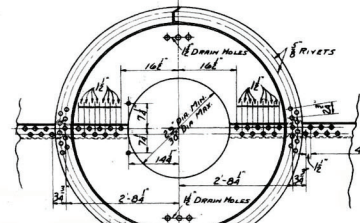
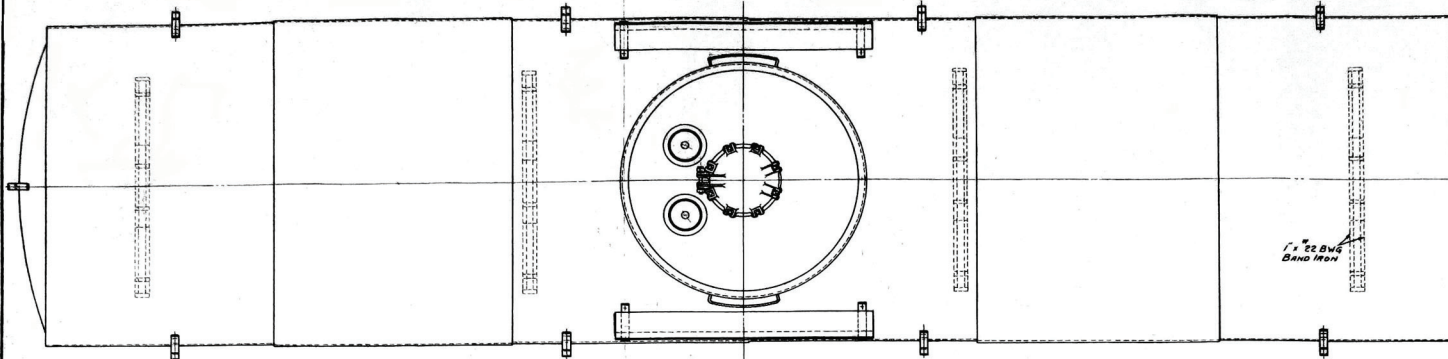
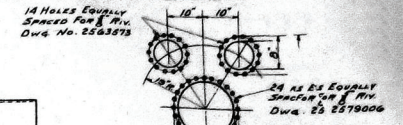
- 1. LINE NO. ADDED
- 2. LINE NO. ADDED
- 3. TYPE #E LADDER ADDED
- 4. LINE NO. ADDED & SINGLE DOGIE CHANGED FROM TOP INLOCK
- 5. RUNNING DIAPHRAGM SUPPORT CHANGED
- 6. ANCHOR FOR INSULATION SHOWN
- 7. (Lot 1804A) CHANGED FROM LINE 5 TO LINE 7. CONSTITUTIONAL JOINT OF JACKET REVERSED.
- 8. CHECKER SHOWN ON FRONT END SUPPORT

AMERICAN CAR AND FOUNDRY CO.

41 48 f36

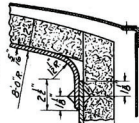
GENERAL ARRANGEMENT  
I.C.C. 103115 TANK CAR  
JUNE 10, 1937

(Not to Scale)

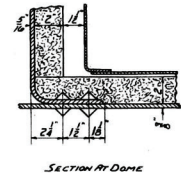


DETAIL OF TANK SHELL AT DOME.

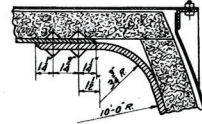
- SAFETY VALVE CAGE-----2581177
- SAFETY VALVE FLANGE-----2583573
- SAFETY VALVE STEM-----1141181
- SAFETY VALVE FOLLOWER-----2563551
- SAFETY VALVE SPRING-----1563561
- SAFETY VALVE-----2147083
- GASKET RETAINER-----2583565
- GASKET RETAINER LIFTING EYE-----2578999



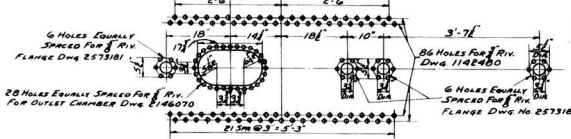
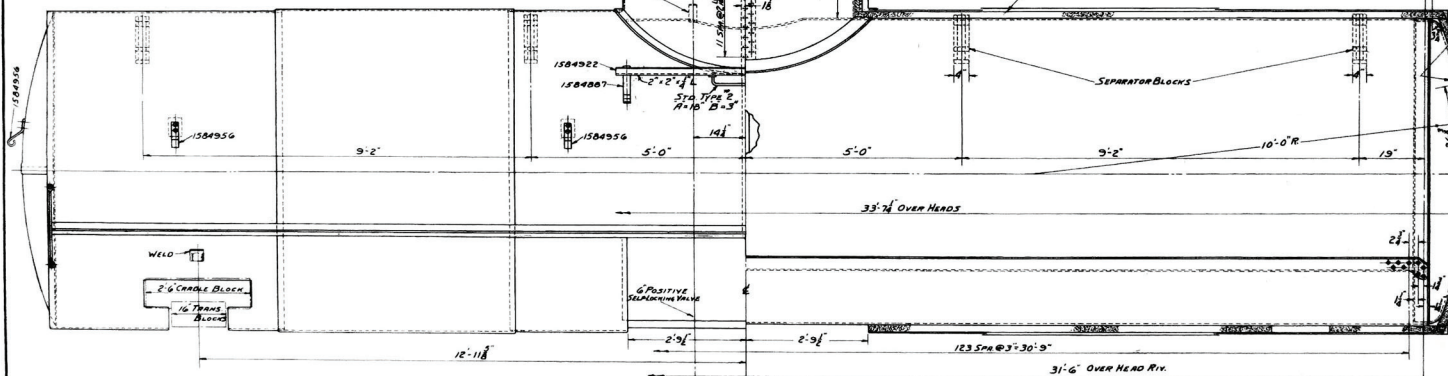
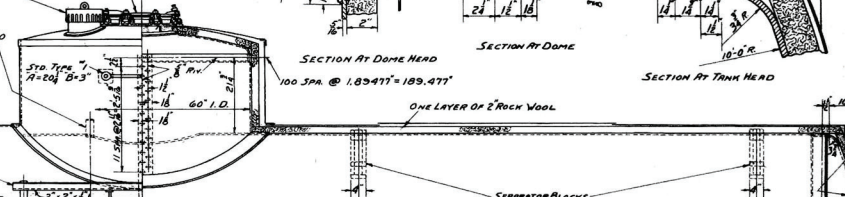
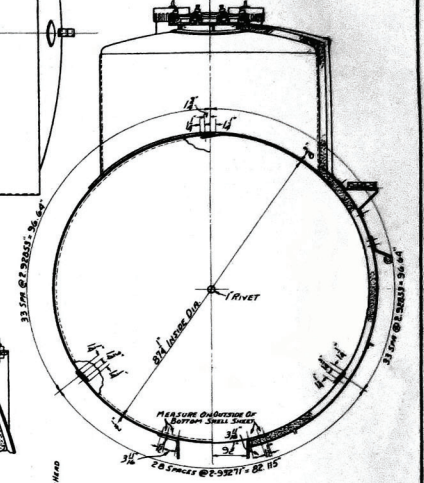
SECTION AT DOME HEAD



SECTION AT DOME



SECTION AT TANK HEAD



DETAIL OF ANCHOR, OUTLET FLANGE AND STEAM PIPE FLANGE HOLES.

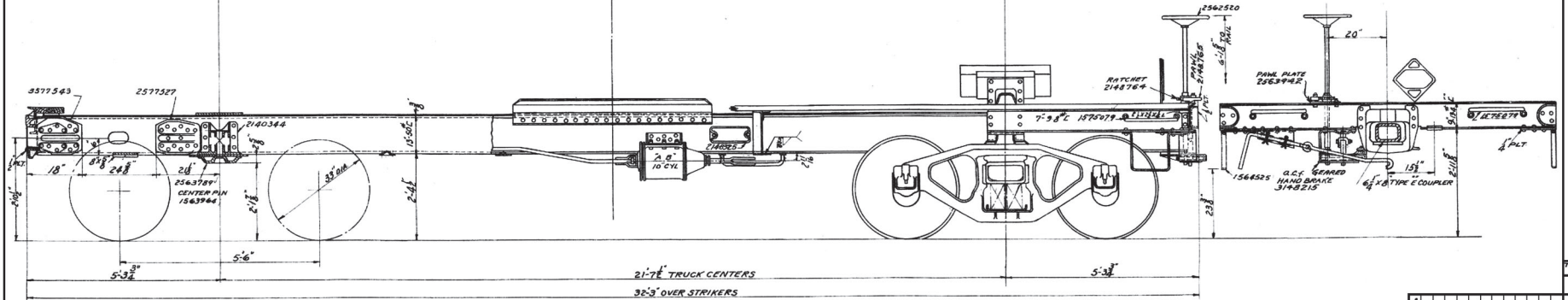
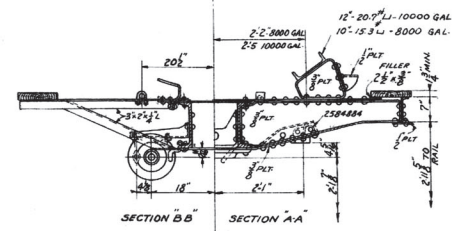
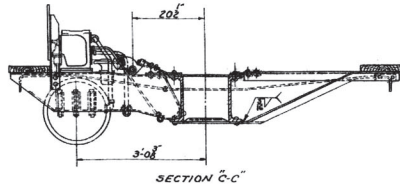
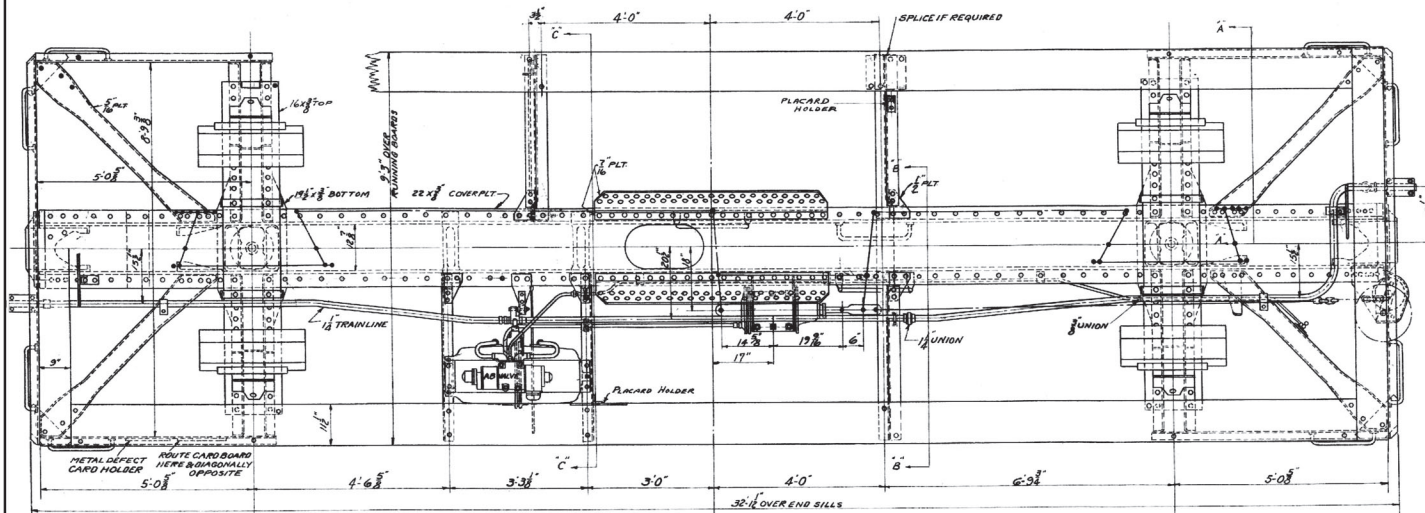
TANK NOTES:  
 ALL HOLES FOR 1/2\"/>

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AMERICAN CAR AND FOUNDRY CO.  
 41 49 504  
 ARR'GT. OF TANK & INSULATION  
 10,000 GAL. - 1.C.C.-103140  
 MAR 16 1928



**AB1**  
**(Not to Scale)**



NOTE—  
BRAKES SHOWN APPLIED AT 6" PISTON TRAVEL.  
WITH NEW SHOES & WHEELS  
CYLINDER & FLOATING LEVERS TO BE DRILLED  
TO SUIT LIGHTWEIGHT OF CAR PER DWG 1108/70  
BRAKE ARRANGEMENT DWG 4154 42 9

AMERICAN CAR AND FOUNDRY CO.

STANDARD UNDERFRAME  
TYPE 27 TANK CAR  
6/27/29

