

# Freight Cars Journal

N° 81



**Pullman's Tank Cars  
Box Cars 1983-1999**

**January 2000**

# Freight Cars Journal

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#### *Front cover*

PTLX 82014 is a 20,754 gallon tank car that was built in April 1974 by Richmond Tank Car Houston (Sheldon), Texas. Builder's reference # 1074. DOT 111A100W5. AAR T055. External length 50'7".

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# PULLMAN's TANK CARS

## Part 1

Reviewing the tank cars of  
Transport Leasing, Pullman Transport, and Pullman Leasing.  
Photos courtesy **James Kinkaid**. Captions **David G Casdorff**.

Pullman's Tank Car Reporting Marks	
<i>Initials</i>	<i>Company Name</i>
PLCX	Pullman Leasing Company, A Subsidiary of Pullman Incorporated
PLWX	Pullman Leasing Company
PTLX	Pullman Transport Leasing Company, A Subsidiary of Pullman Incorporated
TLDX	Transport Leasing, A Division of Pullman Incorporated

**PLCX 92544.** This is a 23,531 gallon insulated and coiled tank car that was built by Gulf Railcar (formerly Richmond Tank Car) in Houston (Sheldon) Texas. Lot number 3002. Built January 1990. DOT class 111A100W3. AAR car type code T106. External length 55'6".





**PLCX 129025** is a non-insulated tank without coils. This is the type of tank that usually carries alcohol, methanol and related products. This has a 29,815 gallon capacity. It was built in October 1987 by Trinity Industries (File # 8725). DOT class 111A100W1. AAR car type code T108. External length 67'11”.

**PLCX 129187** is another alcohol/methanol type tank (non-insulated, un-coiled, circa 30,000 gallons). DOT class 111A100W1. This one was built by Union Tank Car in East Chicago, Indiana during January 1989. Builder's reference # 6589. Actual capacity 29,983 gallons. AAR car type code T108. External length 69'0”.







**PLCX 129187** is another non-insulated un-coiled tank car built under builder's reference # 6589 by Union Tank Car. This one was built in May 1989. Capacity is 30,010 gallons. DOT class 111A100W1. Non-insulated un-coiled. AAR car type code T108. External length 69'0".

**PLCX 180007** is a rare tank on any fleet. This is an aluminum tank (with steel frame) used for transporting hydrogen peroxide. Most hydrogen peroxide tankers are closer to 20,000 gallons. This has a capacity of 8,218 gallons. Built by Trinity Industries, Tulsa, Oklahoma in December 1987. It was originally leased to FMC Corporation. DOT class 111A60ALW2. AAR car type code T012. External length 40'4".





**PLCX 220373** is a 20,507 gallon insulated coiled tank car. Built by Trinity Industries, Longview, Texas in November 1987. Trinity File # 8724. AAR car type code T105. External length 48'11".

**PLCX 220540** is nearly identical to 220373 above. This 20,532 gallon insulated coiled tank car was built in February 1988 by Trinity Industries, Longview, Texas (File # 8751). Originally leased to the Mobay Corporation. DOT 111A100W3. AAR car type code T105. External length 48'11".







**PLCX 224313** is a 23,711 gallon insulated coiled tank car. Built by Trinity Industries in December 1987 (File # 8723). AAR car type code T106. External length 55'5".

**PLCX 224706** was built by Union Tank Car's East Chicago, Indiana plant in January 1989 (Builder's reference # 6591). AAR car type code T106. External length 55'5".



# Box Cars 1983-1999: A Type Analysis

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Evolution of the box car types that have emerged since 1983.

**David G Casdorff**

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## *Background*

1983, or as I refer to it as the Great American Freight Car Depression. This is the year that according to the ARCI had the fewest deliveries of new-built freight cars (5,570 cars delivered). During the previous five years over a quarter-million cars were delivered new. The Seventies were the era of 50-foot Plate B and Plate C box cars. Builders of box cars during the Seventies seemed rise from everywhere. Trailer Train saw such a lucrative market that they compiled Railbox, a huge pool fleet of box cars for the Class 1 railroads. Box cars were being built everywhere...until 1983.

The last box cars that came out of the assembly line were in some ways a sign of the future. While 50-foot Plate B and Plate C boxes dominated the years before, Burlington Northern's 376500-series were 52-foot Plate F double-plug-door cars. The high-cube box's time had come - just not yet.

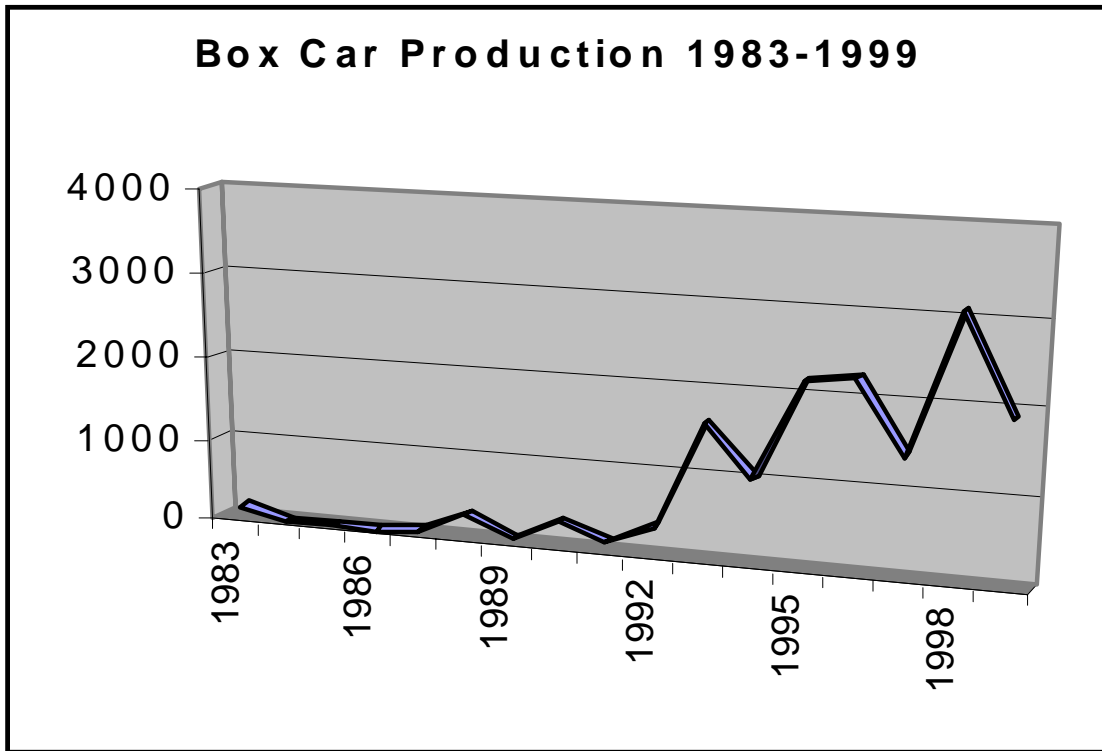
There were no box cars built for three years. In 1987, The Chessie System expanded their GM auto parts service and received fifty unusual 52-foot Plate E double-sliding-door box cars that were built (ironically) at the former Pullman-Standard plant in Bessemer, Alabama (the birth site of so many box cars).

The following year, 1988, saw new box car deliveries for Burlington Northern and Montana Rail Link (traffic and routes spun off from BN) . A whopping 310 cars were built (210 for BN and 100 for MRL). Both groups were high-cube Plate F plug-door boxes. Both cars were built by a newly re-emerged Gunderson (previously FMC, previously Gunderson Inc, previously Gunderson Brothers Engineering) that would be the dominating force during the Nineties. A small (40) follow-up order of boxes identical to the BN cars were delivered to the WCRC in January 1989.

1990 saw 320 more newly delivered box cars. Again all were Plate F plug-door designs built by Gunderson. Burlington Northern again acquired double plug cars (the BN 375880-series); while A&G (A Greenbrier...read Gunderson company) acquired two series of identical single-plug door cars (the AG 1000- and 2000-series).

From the "Seventies flashback" year of 1991 came a series of 50-foot Plate C single-plug-door box cars (CRLE 6200-series). This series of 125 cars were even stencilled as 5277 cubic-foot...a very common size during the Seventies. The flashback continued into 1992 with the deliveries of three-hundred 50-foot Plate C single-plug-door cars for





Wisconsin Central (WC 21000-series) again all from Gunderson.

In 1993, Burlington Northern, Montana Rail Link and Kansas City Southern all acquired new box cars. However, there were a few surprises this year. First, the Burlington Northern cars (BN 287000-series) were built by Trinity Industries at their Greenville, PA plant (yes, the old Greenville Steel Car location). These were the first true new boxes from Trinity Industries. The design incorporated Pullman-Standard features as well as new features. The Montana Rail Link (MRL 11000-series) cars were nearly the same as the boxes delivered by Gunderson before (MRL 10001-series of 1988) but, with some new features incorporated (new door manufacturer, wide post design etc). Kansas City Southern ordered three series of boxes; a 60-foot Plate F (that

is really a Plate E size), a loader-equipped 50-foot Plate E, and a plain 50-foot Plate E.

This brings us to 1994-95...the Rebirth of the Box Car. Trenton Works (who had built a few small series for BC Rail began some bigger production starting with Canadian National's order of five-hundred 60-foot Plate E combination door cars (actually started production on this series in December 1993). This was followed by a new 50-foot Plate F design. National Steel Car even built a small series (150) of 50-foot Plate F cars for Burlington Northern. Gunderson introduced their 6269 cube 50-foot Plate F design. And, Trinity Industries built some single-sliding door 50-foot Plate F cars for the GERSCO (OAR)...sliding doors on Plate F cars are rare. At this time it seemed the whole world of box car were again alive!

<b>Table 1: Quantity by Length Type</b>	
50-foot	8352
52-foot	1375
60-foot	4967

<b>Table 2: Standard vs High-Cube</b>	
Standard: Plates C & E	4082
High-Cube: Plates F & G	10612

<b>Table 3: Door Types</b>			
Sliding	Single	400	2174
	Double	1774	
Plug	Single	9188	11495
	Double	2307	
Combination			1025

<b>Table 4: Box Car Production by Builders</b>	
Gunderson (Includes Trenton after 3/96)	9581
National Steel Car	150
Trenton (Prior to Greenbrier/Gunderson acquisition)	2636
Trinity (Includes PSM)	2157
United American	150
Unknown	20

In mid-1996, Greenbrier (the parent company of Gunderson) acquired Trenton Works (the last cars built by Trenton Works before the Greenbrier takeover were the CN/NOKL 558000-series). Trenton-built boxes soon acquired some of the Gunderson features...most notably the wide post. However, Trenton boxes still at the present time continue to use former Trenton side sill, door frame and end features.

While most of the box cars built since 1983 have been employed in some sort of paper service - we are beginning to see the beginnings of new-built auto-parts boxes. America's auto parts box fleet is getting quite old. Most of the special design Plate G (back then called Plate F+) 60-foot and 86-foot cars haven't been built since the late Seventies. However, both Gunderson and Trinity have built 60-foot Plate G double-plug-door designs for Norfolk Southern, TFM, and Union Pacific. With the break-

up of Conrail this really only leaves the CSX, NS and UP as traditional auto parts box operators. There's been talk of building 86-footer again...but so far no action.

#### *The Nineties Box Car*

So, what is the Nineties box car? If the 50-foot Plate C sliding-door box car dominated new deliveries during the late Seventies...then certainly the 50-foot Plate F plug-door box car was its equivalent during the Nineties. The Gunderson 6269 cube design emerges as the most numerous single type (in both Gunderson and Trenton versions).

Nearly 57% of all boxes built during the period 1983-1999 were 50-foot types (Table 1). A whopping 72% of the boxes built were considered "high-cubes" (Table 2). And, 78% of the boxes built had plug-doors (Table 3). Finally, Gunderson emerged as the largest producer of box cars during this period (Table 4).

**Table 5: Gunderson Box Car Types 1983-1999**

<i>Length Type</i>	<i>Cube Type</i>	<i>Door(s)</i>	<i>Qty</i>	<i>Users</i>
50-foot Plate C	5277	10' Single Plug	125	CRLE
	5327		300	WC
50-foot Plate E	5037	12' Single Plug (with loaders)	100	KCS
	5327	12' Single Plug (without loaders)	300	KCS
50-foot Plate F	5757	12' Single Plug	100	AG
	5997	Double Sliding (16' opening)	149	SP
	6156	Double Plug (16' opening)	200	MRL
	6236	Double Plug (16' opening)	120	BN
	6269	Single Plug (10' or 12' opening)	1975	BAR, BN, CP, CSXT, HS, IBT, IC, MR, NS, TR, UMP, WC
52-foot Plate F	6504	12' Single Plug	250	BN, WCRC
	6538	Double Sliding (Offset 16'4" opening)	150	CLC
60-foot Plate C	6354	Double Plug (16' opening)	212	NS
60-foot Plate E	6607	12' Single Plug	450	KCS, MDW
60-foot Plate F	6646	12' Single Plug	225	KCS
	7541	Double Sliding (16'0" opening)	80	UP
60-foot Plate G	7285	Double Plug (16'0" opening)	465	NS



**Table 6: Trenton Box Car Types 1996-1999**

<i>Length Type</i>	<i>Cube Type</i>	<i>Door(s)</i>	<i>Qty</i>	<i>Users</i>
50-foot Plate C	5237	10' Single Sliding	200	CP
50-foot Plate F	6269	Single Plug (10' or 12' opening)	2040	CDAC, CHTT, CRLE, IATR, IBT, LW, MR, NOKL, WC, YKR
60-foot Plate C	6288	12' Single Plug	200	AMTK
60-foot Plate E	6645	Single Plug	100	CRLE
	6648	Double Sliding	300	HS
	6652	Combination	275	BCOL
60-foot Plate F	7541	12' Single Plug	160	NS
		12' Single Sliding	100	NS
		Double Plug	300	CHTT, SLGG
	???	Double Sliding	250	IBT
60-foot Plate G	7286	Double Plug	250	KCS
	7352		205	UP

**Table 7: Trenton Box Car Types to March 1996**

<i>Length Type</i>	<i>Cube Type</i>	<i>Door(s)</i>	<i>Qty</i>	<i>Users</i>
50-foot Plate C	5277	10' Single Plug	500	CN
		Combination	100	BCOL
50-foot Plate F	6237	12' Single Plug	150	CN
	6257	Single Plug (10' or 12' opening)	461	CNW, CRLE, CSXT, HS, MR, SLR, SRY
52-foot Plate C	5503	Double Sliding	50	BCOL
52-foot Plate F	6538	Double Sliding	725	CN, GNRR, NOKL
60-foot Plate C	6348	Combination	500	CN
60-foot Plate E	6637	Combination	150	BCOL

**KCS 129000-129574: Plate E and F?**

The first 225 cars are 60-foot Plate F while the last 350 cars are 60-foot Plate E. Can you tell the difference? Apparently UMLER can't either...both show as 6646 cube. However, the Plate E cars are actually stencilled as 6607. So, what throws these outwardly identical cars from a Plate E into a Plate F? Well, apparently one inch! The Plate F cars are IL: 60'10"; IW 9'6", IH 11'6". The Plate E cars have identical dimensions except for an IH of 11'5". This also throws the outside dimension (determines Plate size) of the car off one inch from a 15'9" of the Plate E cars to a 15'10" of the Plate F cars. All other outside dimensions are identical. Now the question remains...why were the first cars Plate F...and the next ones Plate E?

**Table 8: Trinity Box Car Types**

<i>Length Type</i>	<i>Cube Type</i>	<i>Door(s)</i>	<i>Qty</i>	<i>Users</i>
50-foot Plate F	6190	10' Single Plug	157	BN
	6200	Single Sliding (10' or 12') or Double Plug	545	CNA, LHRR, LW, OAR
	6235	10' Single Plug	300	SLGG, SRY
	6236	12' Single Plug	160	CP
	6241	12' Single Plug	220	CNA
60-foot Plate E	6637	10' Single Plug	170	ATW
60-foot Plate F	7500	10' Single Plug	200	NOKL
	7541	Double Plug	45	CHTT
60-foot Plate G	7332	Double Plug	310	NS, TFM

This article summarizes 14,694 box cars known to be new-built from 1983 to June 1999.

**Table 9: Miscellaneous Builders Box Car Types**

<i>Length Type</i>	<i>Cube Type</i>	<i>Door(s)</i>	<i>Qty</i>	<i>Users</i>
PSM 52-foot Plate E	5457	Double Sliding	50	CO
NSC 50-foot Plate F	6219	10' Single Plug	150	BN
UAC 52-foot Plate F	6504	Double Plug	150	BN

**The Wide Rib Box Cars**

The wide rib box car has become a Gunderson (and more recently Trenton) quick identification character. But, when did Gunderson start using the wide ribs on their box bodies? It appears that the WC 21000-series (production beginning in December 1992) was the first series to have the wide rib character. The CRLE 6200-series built in December 1991 did not have the wide ribs. All known boxes built since December 1992 (the WC 21000-series) have had the wide rib characteristic.

Beginning in mid-1996, the wide rib character was applied to Trenton Works built box cars now under the shared Greenbrier parent company with Gunderson.

**Additional References:**

<http://www.rpi.org/arcistat.htm> This is the website where one can find statistics for freight car orders, deliveries, and back orders for each year from 1956-present.

*Box Cars Since 1983* by David G. Casdorff. 1994. Published by the Society of Freight Car Historians. Monrovia CA. This book has 54 B&W photos plus rosters up through 1994. Includes rebuilt box cars during this period, too. Softcover, saddle-stitched, glossy paper. 44 pp. Still available from D.G. Casdorff PO Box 2480 Monrovia CA 91017 @ \$25.00 ppd.