GOINGINCIRCLEZ GUIDE No. 4

SNAFU TUBES: Tyco #357 62' Triple Dome Tank Cars

In 1972, Tyco introduced what must be considered among their most (in)famous freight car offerings: the 62-Foot Triple-Dome Tank Car. The prefix *in* - as most who have ever tried to operate these may tell you – is surely warranted!

Barring the possible but still unconfirmed existence of some odd, one-off real-life prototype built for evaluation purposes, the 62' triple dome tank appears to be a pure flight of fancy by Tyco's tool and die makers. But some practical consideration of tank cars is necessary in order to understand this. Indeed, there most certainly **are** 62-foot (and larger) tank cars out there. And while they were never by any means common, tri-dome tanks do exist. But have you ever seen the two styles combined? No!

The reason is: multi-dome tank cars were made to carry **different** commodities within separate compartments (one per each dome). So they are uncommon, save for smaller shippers and owners who deal with multiple types of commodities (liquids, syrups, slurries, etc); or modified suspensions or different concentrations in smallish quantities. In those rare cases, a small, multi-compartment tank could sometimes be sensible. Indeed, smaller multi-domes are the kind that actually exist.

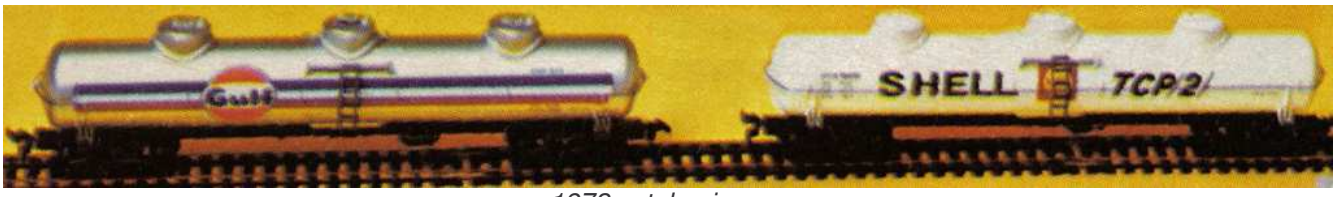
Now then, consider a 60-foot, triple-dome tank car. Such a car would be basically equivalent to three 20-foot tank cars, but of course, a tank's capacity in GALLONS is more important! Given the tri-dome's unabashed wide-body fat-boy appearance, one could argue it as more comparable to three typically narrow 30 or 40-footers in terms of sheer volume capacity. But, before you think "yeah, well one car would be cheaper" consider this: If a fluid would fill a smaller tank car to its maximum weight capacity… how does making a bigger, heavier car have any benefit? Not to mention: WHY would you have three domes on 60-feet worth of tanker? Because you'd need three compartments for three different commodities; that's the only reason a 3-dome car makes sense. Now, if you have different liquids, they are unlikely to be the same density, viscosity, or weight. In a smaller car this can be managed – the total volume is not so great, and contained within a small wheelbase (like a 40-foot 3-dome tank), the car will remain stable. But separating out different densities and/or viscosities of liquid in a car of such voluminous capacity and length as a 60' tanker, would be an impending disaster. Imagine a high-cube

boxcar filled with bowling balls sloshing around in one end, and ping-pong balls in the other. It would not balance well, and simply just ask for trouble.

Which – perhaps not ironically - is exactly how these "models" tend to perform in real life!

The 62' tri-domer is a victim of many varied and questionable design decisions made by Tyco's tooling dept. First cataloged in 1972 alongside the 62' High Cube boxcars, there's no doubt Tyco's goal was simply to capitalize on the new, longer, brown-box-filling car lengths and create a unique, imposing beast of a freight car! They certainly succeeded, as a few 62' tri-domes end-to-end will certainly stand out in any train. But the compromises made to its design resulted in a car that not only makes no sense from a plausibility standpoint, but also operates as poorly as it looks.

But yet – once again! – Tyco was so close to doing much better, as the catalog prototype photos themselves reveal!

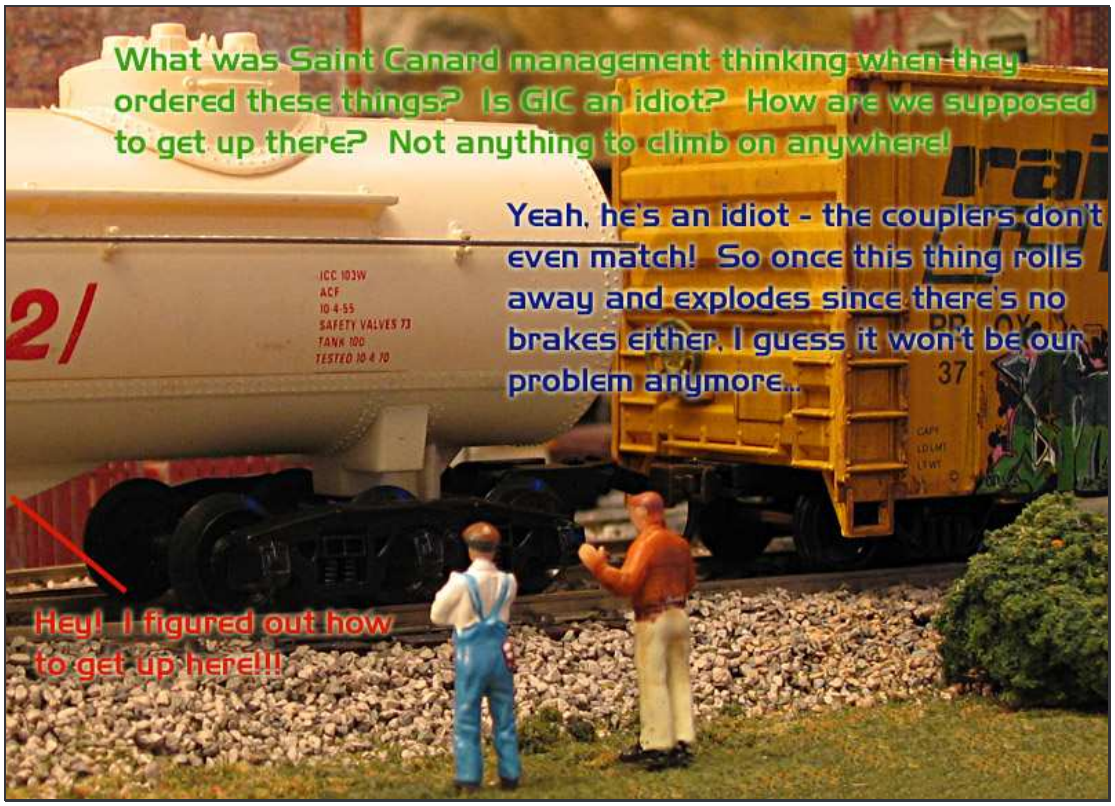


1972 catalog image

Ignore the odd paint scheme variants for a moment, and look very carefully at the tooling itself. You can see a semblance of actual brake system hardware under the tank – and if you see that, you realize there should have been a full frame as well, complete with end stirrups, side walkway and access ladder* (hold that thought for later). The center dome is the only one with an access platform (a silly oversight), but even with that shortcoming, this catalog prototype car as shown is leagues better, practically speaking, than the one that was actually released!

When the production 62-footers hit the market, we see that Tyco has extended the dome access platform outward to all three domes. Which would be good – if there was a way to get up there! But there isn't a way, since the ladder is gone. A wire grab has been added around the perimeter of the tank, which looks nice but again poses the question: what purpose does it serve, because how would someone actually grab it? There is nothing to stand or walk on: no sill frame, no bolster platform, walkway, or stirrups. Maybe these cars were so big and round, they created their own gravitational field and enabled crews and workmen to float? Of course not – because there is a strange set of grabs on the ENDS of the tank, very low. What purpose they would serve or provide access to is a mystery.

With the loss of the catalog sample's frame, there is no brake gear either – in fact, this car is the ONLY Tyco freight car that does NOT have the famous tiny brake wheel to lose! Unfortunately, no brakes means that no railroad worth its charter would touch one of these…



Tyco does seem to address the loss of the frame against the need for supporting the tank span, by adding a long, boat-keel-like rib down the length of the car between the bolsters. Such a structural member could indeed

keep a tank from buckling; yet it looks rather disquieting, and one might note that no prototype tank car so equipped is known to exist. Such a tall and narrow strengthening rib would also force a car's bulk to ride high over the tucks – which it does.

This high ride height, plus the round cross-section of the car, means that the weight sits high over the rail: netting this car a high center of gravity. Remember this isn't some small, lightweight 40' car. Combine that with the lack of a frame (or any other meaningful mass) below the tank, and this car is destined to be unstable.

Tyco does attempt to address this with the use of six-wheel trucks, but again this is not without compromise and frustration. The trucks themselves are the same as found on the Boom Crane. But with an offset kingpin, and applied to a car without a center sill, stirrups, or side sills to keep them relatively centered, they have a tendency to spin around freely while handling the car and can break off easily as a result. Adding further insult: for some reason, the bolster holes on the tank are small compared to say, the 50-foot boxcar; you cannot remove these scarce trucks easily without the serious risk of breaking the kingpin tabs that secure them. And without the tabs, the unstable tank car is potentially prone to simply rock off the now loose-fitting trucks while running. Joy!

So then, why would you want to remove the trucks? To inspect and replace the wheelsets. With everything else working against this car, the trucks absolutely need to be straight, true, and free-rolling. But with three axles to deal with per truck, even one that is slightly defective will have a markedly adverse effect on performance. Most of my examples – which were even MIB - actually came with horrible-running trucks, especially compared to Tyco's 4-wheel trucks which are generally reliable.

The net effect of all this tomfoolery is finding countless examples with broken or missing trucks. In fact, I would say damaged examples easily outnumber intact ones when dealing with loose cars. Unfortunately, using 4-wheel trucks as replacements makes these cars look (and run) even more ridiculous than they do already!

The build date says "1967", but tank cars hadn't been riveted for over a decade!

Finally, the implied construction of this car would have been obsolete by the time it could have been conceived. By the time bulky 60-foot cars were becoming possible, welding ruled the roost. Certainly tank cars were among the first to reap the benefits of welding. Yet the 62' Triple Dome features old-school riveted construction complete with riveted dome collars. But that strengthening fin would have been welded on! So we have a car that looks like it should have been built in the 1930's but wouldn't have been for another 30 years… a true anachronism, to say the least.

In conclusion, I've tried to remain objective but the facts can't be denied. From the perspective of a modeler; or a "simple pleasures" operator; or even a budget-minded scavenger/collector dealing with bad trucks and inconsistent paint quality: on all accounts, these are among the absolute worst cars that Tyco ever made. Period.

Yet one final bit of irony remains: for all their problems, they were rather popular! So much so in fact, that while Tyco could often be accused of cribbing the tooling of other vendors like Athearn… it was the 62' triple-dome that finally presented Tyco a case of turnabout, as it was cloned and copied by Bachmann (*who actually added the missing brake gear and frame), Pemco, and a number of fly-by-night Hong Kong vendors.

So why were they so popular despite themselves? Well, for one, "millions" of them were included in *Chattanooga Choo-Choo* sets in the 1970's, so they enjoyed a widespread introduction to a captive audience of sorts. For another, they certainly do have an imposing look to them: Nothing says "this train could wipe out a large city" like the bloated, rocking 62-Foot Triple-Dome can. For another, many of the paint schemes were simple yet attractive, and shared a common theme.

And for the collector who manages to get the whole set, there is a unique visual reward in this series of cars that is not repeated anywhere else in the Tyco line!

So now, with editorializing complete and without further ado, I present to you the roll call of these bloated monstrosities:

Catalog Number Roll-Call

357-A: Shell (cat. 1972-1974) UTLX 99939

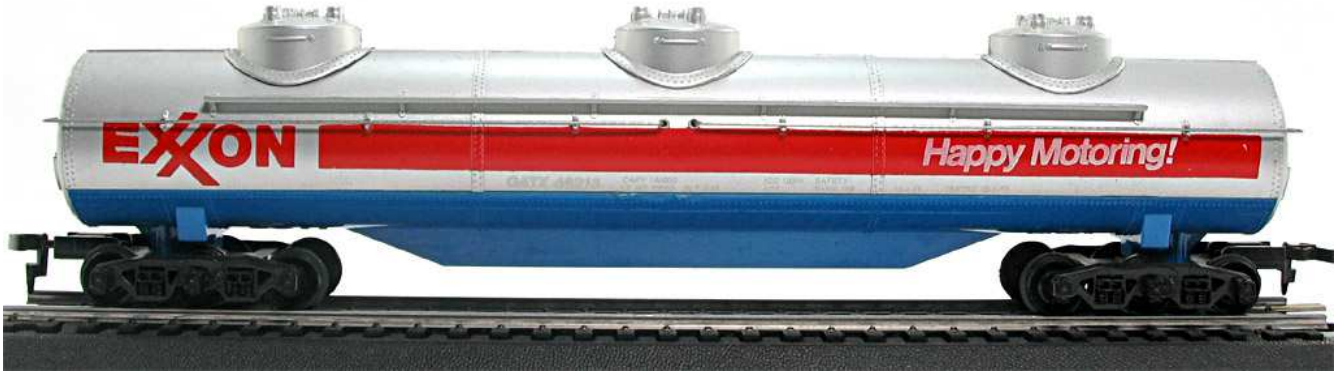
With sparse graphics on a simple flat white base, the first car in the series is easily the plainest. The bold lettering on the side looks good, but on all the examples I have inspected, the Shell logo in the center leaves much to be desired; often it is illegible.

TCP was an additive used in leaded gasoline in the 1950's and 60's. It was developed for aircraft engines by the US military during WWII; Shell purchased the rights to it as it was found to keep spark plugs from fouling. With the phase-out of leaded gasoline, TCP is no longer prevalent today.

357-B: Gulf (cat. 1972-1979) OSKX 829

While not the most cataloged of the group, the Gulf tri-dome was included in thousands of Chatanooga and a few other train sets, and, like the Old Dutch among centerflows, it outnumbers all the others by a wide, wide margin. As such, I have come across several examples of these and have noticed subtle variations in the shades of paint, mostly on the stripes. This is not unexpected on a car produced in such massive quantities, and is only evident when comparing examples side-by-side.

The biggest difference in graphics from catalog to production, is the thickness of the stripes, and the relocation of the logo to the left end of the car. Taken in sum, the stripe pattern forms a large band that is a recurring design theme on almost all of the other cars in this series.



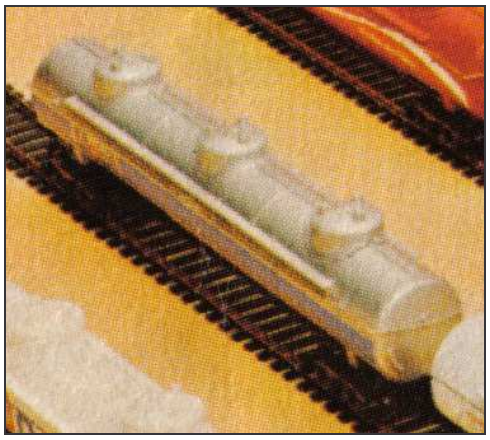
357-C: Exxon (cat. 1974-1979) GATX 46213

Sharing the same silver base paint as the Gulf version, the Exxon tri-dome trades in the thin stripes for a solid red band more in keeping with corporate stylings. The overall layout is the same as the Gulf version though, with the EXXON logo on the left and the band extending from it. One gripe with this car is that the data and reporting marks are very difficult to read! White on Silver is not a wise combination.

The blue portion of the car is the chassis/base, which is a separately molded piece. This is the only tanker to get a contrasting paint scheme in such fashion. The base does snap very securely into the main shell and of all Tyco cars, the 62' triple dome is perhaps the toughest one to disassemble.

357-D: Mobil (cat. 1974-1975) GATX 46210

The third silver tanker in a row is technically as plain as the Shell car, but more visually striking and appealing. Only cataloged for two years, the Mobil tri-dome is also one of the harder ones to find! Like most of the others it has the logo on the left, but there is no large band on this one as the famous Pegasus mark takes its place…



1974 catalog image; zoomed

…However, close inspection of the 1974 catalog picture DOES reveal a blue band in place of the Pegasus sign. In fact, that catalog sample is quite difficult to make out in the photo, but the Mobil logo can be seen within a thematic band of the same blue color as the letters. This car is not known to exist in production and the photo was corrected for its second and last catalog appearance in 1975.

357-E: Union 76 (cat. 1974-1975) GATX 46211

Also among the more difficult to find examples, the “76” tanker is strikingly handsome... but commonly suffers from paint defects. Finding a nice example of this car can be a challenge. They are not too common, and many examples suffer from either a faded orange band, or a misaligned “76” numeral in the “Union” logo, or both! Thus, a "pristine" version of this car is a true find.

It also shares its overall appearance with a smaller cousin: the 40' single dome tank car #315-H. The layout is the same; the only major difference is the unbroken orange band on the 62' car. Once again, the design fits the theme seen on most of the petroco tankers.

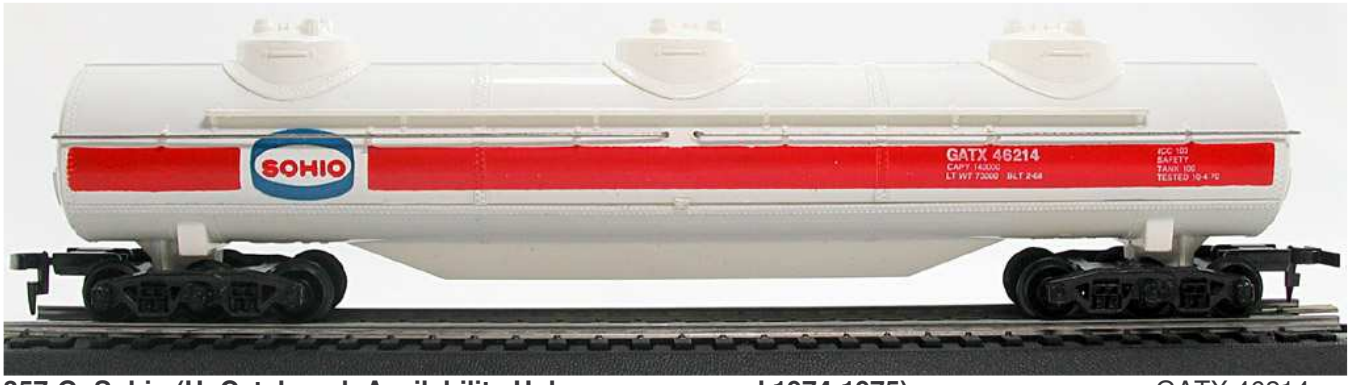
357-F: Coca-Cola (cat. 1974-1982) GATX 46212

The only 62TD not "owned" (leased) by a petroleum company, the Coca-Cola tanker also stands out on its own graphical merit and presents a bold contrast to the others in this series. As such, it is among the more popular and sought-after, even though it was cataloged for the longest time, including its notoriety as the *only* tri-dome offered in the 1980's.

Like its Union 76 bretheren, the Coca-Cola Tri-Dome shares its graphics and general appearance with a smaller cousin, the #315-L 40' Tank Car. The swirling band is longer of course, but the overall appearance and theme is very much the same.

1975 catalog image

1974 and 1975 catalogs actually show a sample of this car that is not known to exist in production: instead of the script "Coca-Cola" logo, the car shown has the modern typeset "Coke" logo. As usual, this is assumed to be a pre-production test sample that made the catalog shoot but no further. The pictures are corrected after 1975.



357-G: Sohio (UnCataloged; Availability Unknown; assumed 1974-1975) GATX 46214

The Sohio car was never cataloged and is generally regarded as among the scarcest of "non-promotional" Tyco items. While the blue ring and lettering might cause one to think of the old "Esso" logo, Sohio was a real company based in Ohio. Indeed, the similarities to "Esso" stylings are in fact deliberate – with "Esso" of course being the pronounced initials and nickname for Standard Oil, Sohio was the abbreviated name for Standard Oil… of Ohio.

The white paint is not at all like the flat white seen on the Shell and Union tankers; it is a full gloss white typical of most Tyco production in the timeframe when this car was likely released. The graphics do of course follow the typical convention followed by every petroco car since the first: logo on the left, color band across the car.

The Saving Grace?

If you are wondering why I bothered to list the reporting marks for each car, let me suggest you look at them again. The first two cars in this series predate the others by a full two years and thus are outliers, but the batch that was introduced in 1974 all share a very cool, unique trait:

No other series of cars made by Tyco ever had sequentially assigned reporting marks!

This is a feature straight out of Lionel-land, and while it's corny on one hand, it's undeniably appealing on the other. The numbers don't appear to have any meaning behind them, but GATX is the real-life mark for General American (the "T" could stand for "Tank" while "X" denotes their private ownership). The sequential effect is somewhat muddied by the catalog sequence, as the Exxon car gets shuffled out of sync.

Take note of the number for the Sohio car – the last in the sequence. This could suggest that it was introduced in 1974 along with the others (indeed, the style of print on my example's box flap would confirm this). Of course if someone at Tyco had been paying attention, they could have easily added it into the series at a later date – but I'm not inclined to give them that much credit…

Variation Alert!

In comparing several of the more plentiful examples, I have yet to discover any obvious variations, save for some minor variances in shades of paint and trim, and imperfect Union 76 cars. The tooling never changed, there is very little data applied to these cars, and most of them were only available for a couple of years. That would seem to conspire against major variations. The Coca-Cola tri-dome does potentially merit some investigation to rule out the "Coke" version seen in the catalog.
Certainly it should be noted that almost every example has a catalog specimen that does not match production, but like all catalog oddities, these have yet to be seen in the wild.

GIC Scarcity Rank™

As always, assigning firm values to any one car is an exercise in futility – Specific prices are volatile: subject to local supply, local demand, seller particulars, buyer whimsy, auction hits, and phases of the moon. That said, it's helpful to know where some cars generally align with each other, as some are definitely scarcer than others.

My listings are in general order and neighbors may "trade places" from time to time, but you can bet the bottom is rarer than the top… be the trend linear or parabolic.

Does that mean one particular car may be worth the price of two or three (or more) others? Possibly; it depends on your budget and level of patience – and good ol' supply and demand. But when budgeting, it helps to know what's out there – and how long you might wait to see another.

GIC Scarcity Rank™ for 357-Series 62-foot Triple-Dome Tank Cars

Easy Pickings-> • Gulf
• Shell
• Coca-Cola
• Exxon
• Mobil
• Union 76
• Sohio <- "Happy Hunting"!

Catalog-angle Photo Gallery


Mobil
GATX 46210


UNION 76
GATX 46211


GATX 46212
Coca-Cola
It's the real thing.

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Comments, corrections, submissions and other communication is welcome: goingincirclez@gmail.com