

# GOING IN CIRCLEZ GUIDE No. 2

## Bittersweet Behemoths: TYCO #358 Center-Flow Hoppers



In 1972, Tyco introduces its largest and most complex freight car: the 55-foot American Car & Foundry “Center Flow” Hopper. The name Center Flow was derived from the car’s lack of a center sill and its curved sides, which enabled lading to flow downward and discharge smoothly from the center of the bays without collecting in corners and eaves. The design was a refinement of earlier cylindrical hoppers – the ovoid cross-section was actually found to be stronger than a circular one (in much the same manner an egg is stronger than a hollow sphere).

In the real world, the Center Flow hopper was a true breakthrough in railcar design, finding instant favor among railroads and shippers alike, and quickly offered by many hobby manufacturers including Athearn, AHM and Bachmann (sharing the same tooling), and Tyco. Interestingly however, while these manufacturers were quick to jump on the CenterFlow bandwagon, they all chose the single most uncommon version in the 4-bay, 5250 cubic-foot behemoth. If you do much train watching you’ll discover these prototypes are (and were) rather rare indeed – their sheer extreme size and whopping capacity made them too heavy when filled with all but the lightest of commodities.

### Model Details

Athearn’s famous model was the first in HO scale and it seems the other manufacturers rushed to follow suit. Tyco’s design most strongly favors Athearn’s over the others, but not without some key differences. And it’s really not as close to any of them as you might think!

Construction basics do mimic the Athearn design, with separately-applied end plates that fit inside end cages molded as part of the body, secured by inserting the two small nubs on the plates into the matching notches in top of the hopper body ends. Just like Athearn, the Tyco’s base is one piece with hopper bays and minimal-relief brake apparatus directly cast, and a set of small lugs to align the bottoms of the end plates for a proper fit (AHM & Bachmann take a slightly different approach to brake gear and end plates). But that’s where the similarities end.

Here's a surprising fact – the cars aren't even the same length! Tyco's are longer by one-and-half scale feet, to a full 56.5'!



*Comparison of car length and roof details; Tyco (brown) vs. Athearn (gray)*

Tyco adds a beveled snap lug on each end of the hopper base, which snaps very securely into the end cage. Coupled with several additional lugs molded inside the sill, Tyco's assembled car stays solidly put together, unlike Athearn's design which can fall apart easily. Considering Tyco's market, this is a nice touch born of necessity. Brakewheel rigging is also different on the Tyco molds, and properly mounted low (AHM / Bachmann's design put the brakewheel up high, which was outlawed in the late 1960's very soon after the prototype cars were introduced). Finally, Tyco's stirrups are an attractive design – wide and angular with reinforcing braces on the ends that make them surprisingly sturdy – especially when compared to Athearn's small square stirrups, or AHM/Bachmann's comically narrow versions, both of which snap off the moment you touch them.



*Comparison of end details. Athearn & Tyco have the same ladder rung and brake gear arrangements; AHM/Bachmann differ greatly and also omit the access hole in the end panel.*



*Comparison of undersides. Tyco sports additional bracing between the bays.*

The roof is where the biggest differences live. The most frustratingly obvious one is Tyco's mixture of both hatch styles – oval and round – one the same car. Tyco's roof sports additional, nicely-rendered welding seams, and Tyco's hatches actually have better detail right down to the hinges and rivets - but as anyone who has ever built an Athearn kit knows: "[The hatches] are never mixed"! (Indeed, they could not possibly be, even in the name of an emergency repair). So with this singular glaring fault, Tyco loses the points it earned on what could have otherwise been a standout model amongst all contemporaries.

Incidentally, the bays are equipped with pneumatic discharge tubes, which typically called for round hatches on cars so optioned; oval hatches usually went with sliding-gate bays. Interestingly, the model manufacturers used pneumatic bays, but varied on hatches. AHM/Bachmann (correctly) used round while Athearn offered a choice; it seems that Tyco apparently tried to split the difference so maybe they get a half credit?



*Hatch details. Note the more-defined hinges and strap rivets on Tyco's (right) Even the roof walks are slightly different.*

The most significant difference in manufacturing is the roof panels themselves, hatches aside. Athearn's roof is integrated with body, while Tyco's roof is actually a separate piece. It's interesting that Tyco would go through the trouble to do this, but one notes that this did enable them to design interesting, contrasting paint schemes by painting and molding the roofs in separate colors without masking. Or it may have been cheaper to cast the roof as a separate piece with directly-molded hatches, as opposed to an integrated piece requiring a complex body mold with details on five sides, and/or separately-cast-and-applied hatches, a la Athearn & Bachmann.



*Removable roof plate on Tyco's center flow. Though not illustrated, the roofwalk is also removable.*

But this was still the most complex car in Tyco's lineup – by sheer number of parts and complexity of assembly. Consider the tally:

- Body
- Roof
- Roofwalk
- Base
- (2) End plates
- (4) Pneumatic discharge tubes
- (5) metal weights

...For a total of **15 separate pieces** to be painted and assembled (not counting the brakewheel and trucks)! Compare to other more typical Tyco standbys such as the 50' boxcar and 40' gondola, which use a one-piece body snapped onto a one-piece frame with one-piece weight, and it's easy to see why this was not only an expensive car to produce and sell, but also limited to 6 cataloged roadnames during its entire 11-year lifespan. It was also one of the first to dwindle in total offerings, and also among the group of cars that ultimately disappeared forever following Tyco's last serious effort in 1982.

Assembly cost aside, Tyco did pull out all the stops on decoration, by making this the most intricately-decorated series of cars they ever offered! Most Tyco freight cars were lucky to get a roadnumber and some basic copy data, and even luckier if the paint was evenly stamped and registered. But for the center flows they did all that and more, by applying a full battery of accurate and appropriate prototype warnings, logos, and informational stencils across the entire carbody. The only other cars to receive similar treatment were the 3-bay ribside covered hoppers, which I hope to cover at a later date (once and if I ever get them all).

Unfortunately ("of course!"), Tyco still couldn't be trusted to take things seriously. While the ACF Centerflow became a darling of shippers and railroads of all sizes and functions, with hundreds of different prototype paint schemes in almost any imaginable style, Tyco reduced theirs to a series of fantasy billboards only a housewife could love. And further muddying their décor, the road and copy data on most of these cars is on the righthand end – an unorthodox practice for any railcar, let alone one never seen applied to an ACF hopper.

Today IHC owns the Tyco center flow tooling and has released a few models, which are not seen too frequently. Athearn and Bachmann still sell their versions with upgraded tooling, running gear, and paint schemes. And numerous other manufacturers have since offered the more common 2- and 3-bay versions of the ACF Centerflow in HO scale.

## The Catalog

Tyco's centerflow was first seen hidden in the 1972 catalog – a group of two cars sharing photo space with others, with nary as much as a “new!” to introduce them. If you weren't paying attention, you'd have missed them altogether. The very same two roadnames that introduced the group, were the final and only two cataloged from 1980-1982. One uncataloged version is also known.



**358A – Kellogg's (Cat. 1972-1982)**

The first car in the series is rather plain yet still somewhat attractive, and easily found. The Kellogg's car sports a bicentennial-themed logo, applied to the standard “Centerflow Gray” common on tens of thousands of “undercover” centerflows around the country. If Tyco had only put the reporting marks on the left, you could have stripped the Kellogg's graphics and had an easy, cheap, realistic privately-owned center flow fleet.



**358B – Morton (Cat. 1972-1982)**

The second car in the series is also not terribly hard to find. And it's truthfully a very faithful interpretation of the famous cardboard canisters that were (and still are) found in virtually every cupboard in America. It's also one of only three cars in the series where the reporting marks are properly located.



**358C - Domino (Cat. 1975)**

The only car not sporting ACF reporting marks, this one is stenciled for ASRX. One might note the trademark blurb signifying that Domino is an AmStaR company (the X in a reporting mark denotes a car owned by a private entity and not a common carrier or railroad).

The Morton and Domino cars make for an interesting pair. Cataloged sequentially, you get Salty versus Sweet, on inverted color schemes, right next to each other!

The Domino car was cataloged for only one year, perhaps because it seems to suffer from an apparent defect in the paint. Numerous examples have been found or reported with peeling paint in the white area.



**358D - Sanka (Cat. 1974-1979)**

Looking closely at this car makes one thankful that Tyco never entered the educational toy business. Can you find the mistake? To date I have not seen a "corrected" version.

The orange and gold are a very striking contrast to the trademark Sanka brown. Judging from some slight imperfections on my example, it appears that the orange is actually applied over a white base. Other examples have been found where the orange is correctly registered.



358E – Maxwell House (cat. 1974)

Arguably the most striking car in the series, there is positively no missing this car on a layout. The bright orange roofwalk lends a classy homage to the orange mug band. But one might note the trademark bug, “Used under license from General Foods Corp.” and wonder why “Consolidated Foods (Tyco)” would seek a license to promote them?

The two coffee ~~cars~~ cars make another interesting pair: you can stage both Regular and Decaf in your Percolation Yard! Your plastic denizens will thank you. Both are the most uncommon examples of the Center Flow series – with the Maxwell House being much more so.



358F – Old Dutch (1974-1977)

She may be last in the catalog, but most certainly not the *least!* Easily the most readily found in the series, the Old Dutch centerflow was included in countless thousands, upon *thousands* of *Chattanooga Choo-Choo* sets throughout the 1970's.

In 1978, Tyco evicted the maid from the centerflow line and sent her to clean the 50' boxcar instead.



358G – Alcan (U/C, A/U)

As an uncataloged release, the Alcan car was only recently discovered and is obviously a true rarity among Tyco offerings, likely produced for a promotional set of some sort. Its authenticity is verified by thorough inspection of the paint and graphics. It also shares a roadnumber and data tampo with the Sanka car, although it does not have the same caliber of additional data and color that the rest of the series enjoys.

The catalog # is not proven but assumed within reason – it most certainly can be no lower than “G”, and no other Tyco center flows are known at this point in time.

**Variation Alert!**

As with all Tyco releases, if you suffer what I affectionately will call COCD (“Collector’s OCD”), the hunt never ends just because you got one of each catalog number.

Consider the following two Old Dutch examples:



358C – Old Dutch - v1.0 (1974-?)



358C – Old Dutch - v2.0 (?-1977)

The top version has a much larger red area, while the bottom has a bolder herald. The top also has an Amazon Battle-Axe of a maid, while the bottom’s is a little more petite.

But look again ‘cuz that’s not all – do you see anything about the data?

The top version has much more data, condensed on the side sill. The bottom loses the “ACF Chicago Plant” logo, and none of the sill data goes beyond two lines. This was obviously easier and cheaper to produce, as the three-line version took up the entire sill and would have required exacting alignment to get it applied properly. On the revised version, part of the sill data is moved to the carbody (under the “Super Chlorine” graphic).

Now, the 358F Old Dutch probably outnumbers any of the others by at least 3:1, but this simplification of data is seen on other examples as well:



358D - Sanka - v1.0



358D - Sanka - v1.5

Compare the top to the bottom and note the same omission of the ACF Chicago logo, and the reduction of sill data from three lines to two. As well as a few other differences (the bottom, intact car has a more subdued, satiny finish, while the scrapper has a near mirror-shine factory gloss). There are at least two other differences here which the author will leave for your discovery.

After further research, I've determined that this pattern of variations exists for EACH standard car in the series (with the possible exception of the rare Maxwell House) – there's one with the "ACF Chicago Plant" logo and three lines of sill data; and one without the "ACF Chicago Plant" logo and only two lines of sill data (the Old Dutch seems to be the only one with a coinciding, major revision in graphics).

Oh wait, did I say that there was no variation in Kelloggs? NOPE!



358A - Kellogg's - v1.0a



358A - Kellogg's - v1.0b

You could say the discovery of the differences in the two cars above was marked as a Red Letter day, but there is also some data change as well. Nonetheless, out of dozens of Kellogg's I've looked at, the Red Letter version is very uncommon...



358A - Kellogg's - v1.5

... although, surprisingly, the RedLetter version isn't as rare as the now-confirmed, simplified data version pictured above!

**GIC Scarcity Rank™**

As usual, 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.

Does that mean one certain 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 358-Series Center Flow Hoppers

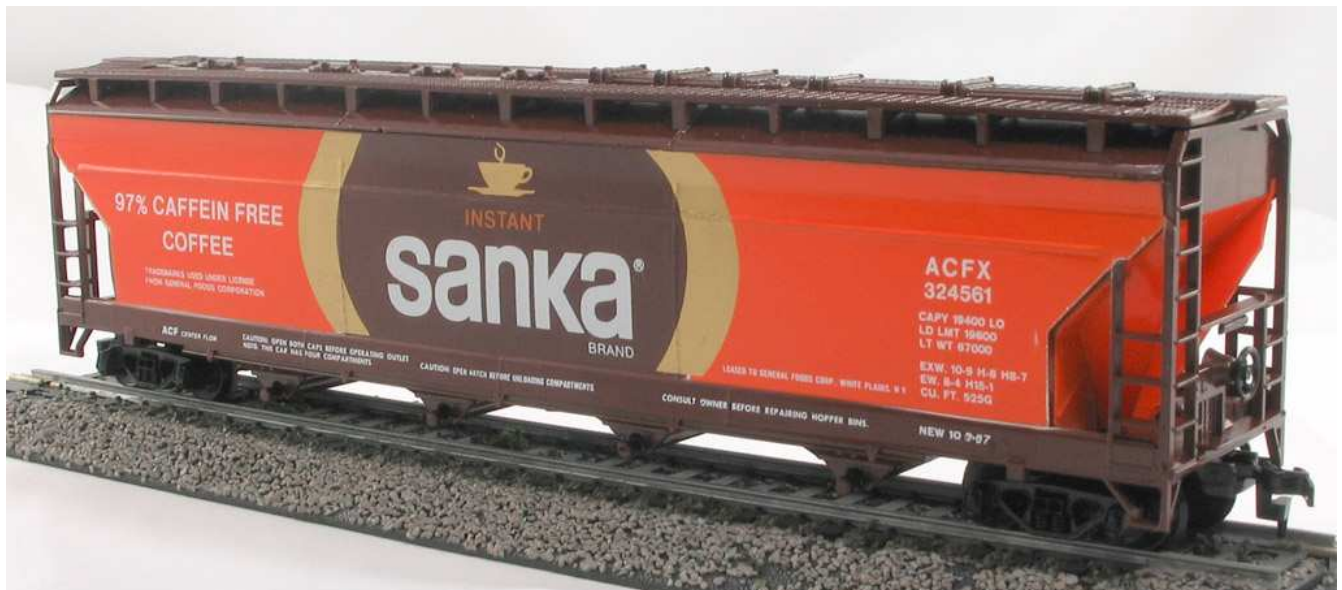
### Easy Pickings->

- Old Dutch (large)
- Old Dutch (small)
- Kellogg's (blue)
- Morton Salt
- Sanka
- Domino Sugar
- Kellogg's (red)
- Kellogg's Simplified
- Maxwell House
- Alcan Chemicals

<- "Happy Hunting"!

### Catalog-angle Photo Gallery







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