

The following paragraph 4 is from a word document referenced in [www.chevelles.com/forums](http://www.chevelles.com/forums) I don't know the author. My comments in [red square brackets]... Larry Gorden

#### **4. THE “FISHER BODY PROBLEM” AND G.M.A.D. (GM Assembly Division)**

Since the beginnings of the Corporation, the GM assembly system relied on Fisher Body Division to engineer the body from the firewall rearward, manufacture all the body parts, weld the body shell together, paint it, completely trim it inside and out, and supply the finished body to each of the car divisions (Chevrolet, Pontiac, Buick, Oldsmobile, and Cadillac). The car divisions paid Fisher Body Division for each body based on Fisher's transfer price schedule, and added the instrument panel, front end sheet metal (hoods, fenders, grilles, etc.), bumpers, and the complete frame, chassis, powertrain and running gear at their final assembly plants to create the finished cars.

The “Home Plants” for Pontiac, Buick, Oldsmobile and Cadillac were located at their Division headquarters (in Pontiac, Flint, Lansing, and Detroit, respectively), but [some] were physically remote from their supplying Fisher Body plants; one Fisher Body assembly plant in Euclid, Ohio, was hundreds of miles away from the Buick, Oldsmobile, and Cadillac plants it supplied with Riviera, Toronado, and Eldorado bodies. In all cases, bodies destined for the “home plants” were transported (on their wheeled Fisher Body conveyor pallets) to the Car Division assembly plants via huge enclosed two-level Fisher Body semi-trucks; Fisher had hundreds of these tractor-trailer rigs as a captive fleet that delivered about 5,000 bodies per day to the “home” assembly plants. [I suspect some of these were sent by rail, especially those station wagons that were shipped to Pontiac and Chevy assembly plants all over the nation from the CL (Cleveland) plant and the EP (Euclid) plant. Station wagon bodies were made in Cleveland and shipped to assembly plants as far as South Gate, CA, 2300 miles away] When the trucks arrived at the final assembly plants, the bodies were unloaded and placed on the plant's conveyor pallets, and the empty Fisher body pallets were then returned to the supplying Fisher Body assembly plant on the same trucks that had brought them.

The Chevrolet arrangement was a little different [not really, some B-O-P plants were like this too]; at Chevrolet assembly plants [and some B-O-P plants], the Fisher Body assembly plant was adjacent to the Chevrolet [or B-O-P] facility, on the same piece of property, and finished bodies were conveyed directly from Fisher Body into the Chevrolet plant for final assembly. However, even at these adjacent locations, which were generally only separated by a wall, they had totally separate managements, offices, staffs and support systems, operated as separate companies, and could only deal with each other between the two Divisions at the highest level of local management. In most cases they even had separate union locals. Even the horrendously costly Paint Shops were separate; Fisher Body had one to clean, prime, and paint the body, and Chevrolet had

another one to clean, prime, and paint the front end sheet metal. In all cases (home plants and Chevrolet plants), paint color and gloss match between the firewall-back Fisher-painted body and the firewall-forward Car Division-painted hood and fenders was a never-ending problem, with DuPont (the corporate paint supplier to both sides) caught in the middle.

Why such a costly, burdensome, illogical, redundant, and inefficient way to build cars? Call it tradition, corporate politics, history, “turf” protection, and inward-focused Divisional profit goal competition, with no thought to the redundant costs and inefficiencies of production, administration and investment. This was borne out of huge corporate size, 54% market share and decades of zero domestic competition, which allowed GM to operate inefficiently and just pass the on the increasing operational costs to its customers through annual price increases.

Fisher Body marked-up everything they did as “body content” when they figured the price the Car Divisions had to pay for the finished body, so Fisher would NEVER give up assembling a part, even if it made sense to do it in the Car Division final assembly plant instead. If a Car Division wanted to transfer a part to Fisher to install because it made sense to install it earlier in the process, Fisher would “mark it up” and sell it back to the Car Division at a higher price as part of the “body as shipped”, and the Car Division Finance types were having none of that. It was enormously parochial and political, and Fisher Body protected priceable “body content” with incredible tenacity.

A similar situation existed in the Engineering community. Fisher Body had “their” parts which they designed, developed and manufactured, and each of the Car Divisions had “their” parts which they designed, developed, and manufactured. If a Car Division engineer was responsible for a part that would be attached to the body at final assembly, he had to provide Fisher Body with documentation on how he planned to attach it, any structural considerations such as loads it might impart to the body, dimensional tolerances for the part’s location and function, etc., so Fisher could design the body to accommodate it. There was a “wall” between Fisher Body and the Car Division engineers in many areas, and frequently the Car Division engineers found it difficult to talk directly to their counterpart at Fisher that was responsible for the mating part of the body without scheduling formal meetings at Fisher that would involve ten or twenty people; Fisher even had a “Customer Relations” group that handled the flow of paper communication (“E.R.” – Engineering Release to Fisher Body) from the Car Divisions and the official Fisher response documents back to the Car Divisions, even though Chevrolet Engineering was literally right next door.

GMAD engineers, however, weren’t allied with either side, and worked on a daily basis with both Fisher Body and Car Division engineers to optimize both product and tooling designs for assembly productivity; we were frequently an informal conduit that facilitated communication between the Car Divisions and Fisher Body at a one-on-one level, bypassing the bureaucratic morass at Fisher Body

that appeared to be in place solely to frustrate engineers who wanted to get the job done.

Meanwhile, way out in the hinterlands, far away from Car Division-Fisher Body politics in Detroit, another little-known Division was also building GM cars for Buick, Olds, and Pontiac (and later, for Chevrolet). The B-O-P Assembly Division grew out of wartime GM defense operations which were converted to assembly plants in the late 40's, and had assembly plants in Linden, New Jersey, Wilmington, Delaware, Leeds, Missouri, Doraville, Georgia, Arlington, Texas, and South Gate, California.

[I believe this paragraph is not true for years prior to early 60s -- Fisher Body plants and B-O-P assembly plants were separate. This paragraph is probably true only after the formation of GMAD in late 60s] These assembly plants were a LOT different; they built multiple Division's car lines mixed together on the same line on a contract basis for each Division except Cadillac (that came later), and there was no "Fisher Body" in their plants. Those plants were designed with ONE Body Shop, ONE Paint Shop, ONE Trim/Chassis/Final assembly system, and ONE management structure; their plants were integrated operations, with assembly processes sequenced and integrated based on logic and efficiency. Fisher Body and the Car Divisions supplied them with parts and assembly tooling, and B-O-P (later re-named GMAD, for GM Assembly Division) combined the parts and tooling so it made sense, put the parts on the car in the most efficient sequence on one continuous line regardless of which Division supplied the parts, painted the body and front end sheet metal together in a single Paint Shop, and built the cars at about half the variable cost of the traditional Fisher/Car Division plants.

GMAD efficiency finally caught the attention of the GM Finance types, and between 1968 and 1974, GMAD absorbed all the previous Fisher Body/Chevrolet assembly plants and set about integrating their personnel and operations under a single management structure and process sequence. GMAD became GM's largest single Division, with 26 assembly plants and over 125,000 employees; Fisher Body and Chevrolet logos disappeared from those plants, and they all became GM Assembly Division operations.

The "home plants", however, for Cadillac in Detroit, Oldsmobile in Lansing, Buick in Flint, Pontiac in Pontiac, and their five supplying Fisher Body assembly plants, were exempted from this efficiency consolidation ("tradition and Divisional pride" again), and all eventually died of their own weight due to competitive cost pressures and were closed down as industrial dinosaurs, replaced by new, fully-integrated and more efficient GMAD assembly plants in other locations which built multiple car lines for all Car Divisions.

It's difficult these days to comprehend the old "traditional" Fisher Body/Car Division way of doing business, which was extremely inefficient, but that's the

way GM operated for nearly fifty years. Nobody else in the entire worldwide automotive industry had design, engineering, manufacturing, and car assembly set up as independent competing companies, and it took GM until 1984 to figure it out. That was the year Fisher Body Division disappeared entirely as a result of the infamous Roger Smith re-organization, and it was also the beginning of the phase-out of individual Divisional design, engineering, development, manufacturing, and assembly at Chevrolet, Pontiac, Buick, Oldsmobile, and Cadillac, which are now small Marketing operations (except Cadillac, which was allowed to continue on a semi-independent basis, although their current plants were built and are operated on the GM Assembly Division model).

Chevrolet and GMC truck plants and the Corvette plant weren't operated like the Fisher/Car Division plants; Fisher had no part whatsoever in trucks or Corvettes, which were designed, developed, manufactured and assembled entirely within Chevrolet, and those products were built in integrated Chevrolet-only plants (which is why you never saw "Body by Fisher" on their door sill plates).

The "traditional Fisher Body/Car Division" operating model was one of the many reasons that GM North American Operations (design, development, manufacturing and sales of cars and trucks) didn't make a dime from 1980-1994; virtually all of GM's profits during that period came from GMAC, Hughes Electronics, EDS, MIC, and numerous other non-automotive subsidiaries, not from their core car and truck business, and a similar earnings pattern continues today.