The Scenicruiser and Previous Exclusive Coaches
plus Related Pieces of the Historical Puzzle

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Introduction

Scenicruiser is the name and the registered trademark which The Greyhound Corporation applied to a specific type of highway coaches used in intercity service throughout the USA. The
The first Scenicruiser entered the Greyhound fleet in 1954, and the last one retired from active service at Greyhound about 1975. The Scenicruiser was a product of the GMC Truck and Coach (T&C) Division of the General Motors (GM) Corporation. [GM held the patent for the general design of the Scenicruiser.] The builder designated it as the model PD-4501. [The P means "parlor" (a term, borrowed from the railway industry, which implies "intercity"), the D means "diesel", the 45 indicates the nominal seating capacity (although the standard washroom reduced the actual seating capacity to 43), and the numeral 1 represents the first model in the new PD-4500 series (which never grew beyond 4501).] The Scenicruiser was an exclusive design for Greyhound alone, although several other builders unsuccessfully imitated or emulated it for other customers. It quickly became the most popular and most recognizable coach in the US, and it still remains as a significant cultural icon.

After Greyhound replaced and sold the Scenicruisers, many of them continued in service, for a host of schools, churches, individuals, tour and charter companies, and scheduled carriers. Most have since become scrapped or otherwise destroyed, but about 230 have survived, some have kept on running, and a few have become beautifully and effectively restored, both cosmetically and mechanically. About 50-100 appear to be in reasonably roadworthy condition.

The first Scenicruiser from the production line, serial 001, originally numbered as P-5446, assigned to the Pennsylvania Greyhound Lines (GL), has become fully restored. Now bearing the side number of 1954 (the year of its manufacture), it's in the historical fleet of the present (second) Greyhound Lines, Inc., the (second) GLI.

**Background**

In 1930 the Yellow Truck and Coach (T&C) Manufacturing Company, based in Pontiac, Michigan, a subsidiary (not a division) of the GM Corporation, began to supply coaches to Greyhound – that is, to the regional operating subsidiaries of the parent firm, which was then a holding company (rather than an operating company), named as The Greyhound Corporation (with an uppercase T, because the word the was an integral part of the official name of the corporate entity).

The first Yellow Coach (YC) delivered to Greyhound was the model Z-250-376 (type Z, using a 250-inch wheelbase, sequential model 376). It included some of the better features of the Will coaches, which were products of the C.H. Will Motors Corporation, of Minneapolis, Minnesota, especially after an extensive examination of a Will coach in Pontiac, possibly one of the model GN, in connection with the sale of the Will firm to Greyhound.

[Likewise the Will coaches included a number of the better features of the Fageol (pronounced as "fad-jull", rhyming with "fragile" or "satchel") Safety Coaches. [During the 1920s the two Fageol brothers, Frank and William, were the principal innovators and pacesetters for the entire coach-building industry in the US.]

The T&C Company then designed and built a large number of Yellow Coaches of various models for Greyhound and a large number of other carriers as well. While doing so it incorporated many features and design elements in response to requests and suggestions from Greyhound.

[Carl Will, an employee, officer, and part owner of the Wilcox Trux, Inc., the successor to the H.E. Wilcox Motor Car Company, both also of Minneapolis, acquired the entire ownership of the Wilcox Trux in 1926. Next he renamed it as the C.H. Will Motors Corporation, then he started producing WMC and, later, Will chassis for coaches, mostly with Eckland bodies (also built in Minneapolis), mostly for the Motor Transit Corporation (the MTC), which in 1929 became renamed as The Greyhound Corporation, and for a few other
carriers. The MTC in 1927 bought the Will firm, then in 1929 sold it to the Yellow T&C Manufacturing Company. Yellow in 1930 closed the Will operation but turned over the facilities in Minneapolis to Carl – as one result of a complex deal which had led to the development of the Yellow Coach organization as a long-term nearly exclusive supplier of coaches to Greyhound. Carl Will then founded another company, which continued to build automotive heaters and related hardware under the trade name of Tropicaire. Those heaters had already become the first automotive heaters anywhere in the US to use hot water and electric blowers, which were first, in October 1926, installed aboard the coaches of the MTC.

In the early years – through the era of the long-nose “conventional” coaches (with their engines in the front below prominent outside hoods) – none of those designs was exclusive for any one buyer, not even for Greyhound.

In 1931 T&C introduced its model 700, its first flat-front "integral" Yellow Coach, a full-size 33-foot 40-seat city-transit bus of the "streetcar type", with a gasoline engine mounted straight-in longitudinally (lengthwise) in the tail. Other similar models, including trolley coaches, followed.

Then in 1933 T&C introduced its model 709, its first small (18-seat) flat-front Yellow, using the forward-control or cab-over-engine (CoE) concept, with the driver’s seat in a cramped spot beside the engine, under a hood inside the shell of the coach. Several other similar models followed.

Until that point the YC flat-front products had been almost entirely city-transit cars rather than intercity parlor cars. [The only exceptions were 137 small (21-seat) CoE parlor buses and four medium (30-seat) CoE parlor buses.]

In 1934, in an important step forward, the Yellow T&C Company hired Dwight Austin, an engineer, formerly the manager of the bus-manufacturing plant of the Pickwick Corporation, in El Segundo, California, after Pickwick in 1932 failed in business. Austin assigned to T&C the rights to the use of his patent for his angle drive, a major engineering development, which allowed the transverse (crosswise) installation of the engine and transmission across the tail of a coach, with a short diagonal driveline to the differential in the drive axle, thus allowing relatively easy access for maintenance work from the outside of the coach, rather than from the inside or the underside.

Afterward most Yellow and GM Coaches – parlor, suburban, and city-transit – used the Austin angle drive – until the Scenicruiser – and then again afterward. [The Cruiserettes (1939-49) and the Camelback Victory liners (1939-45) used longitudinally mounted engines and transmissions.]

In 1934 Yellow introduced the model 718, a transit car, its first bus using the Austin angle drive; a large number of other models followed until 1987, when GM ceased to build city-transit and suburban coaches. [GM had already, in 1980, ceased to build parlor coaches.]

Super Coach

In 1934 and -35, as a result of a joint project involving Greyhound and Yellow Coach, three hand-built prototype samples emerged from the Engineering Department in Pontiac. The first, known simply as model 719, serial 001, rolled out in August -34. The second, known as X-1, serial 002, followed in February -35; the third, X-2, serial 003, in September -35. Each of them had 37 seats for passengers. They had transversely mounted engines and transmissions, using Austin angle drives. For the first time they provided enclosed luggage compartments below a raised floor, rather than an open baggage bin at the rear of the roof. Only minor superficial differences distinguished the three variations from one another. Serial 001 survived as the selected version, and the X-1
and X-2 later became disassembled. YC built also a fourth prototype, which was a second 719, serial 004, which used a larger gasoline engine.

On 11 June 1935 Greyhound placed two of the prototypes, serials 001 and 002, into trial revenue service between Detroit, Michigan, and Chicago, Illinois, in the operating company which was then known as the Central GL of Michigan (the CGL of Michigan). [Previously (1930-35) the CGL of Michigan had been known as the Eastern GL of Michigan (the EGL of Michigan); in 1936 the CGL of Michigan became merged into the undenominated main Central GL; in 1948 the Michigan routes of the Central GL became transferred to the Great Lakes GL (which had begun in 1941) as a major part of it.]

Then Greyhound placed an order for a production run of 325 more of the model 719, built in 1936, which became known as the Super Coach, as did the 743, the next model.

After gaining operational experience with the 719, Greyhound requested a number of refinements, which resulted in a slightly changed, but nearly identical, version of the Super Coach, the model 743. The three recognition features of the 743 were two windows (rather than three, as on the 719) on the tail, a slightly revised grille design for the tail, and horizontal fins at each end of the destination sign on the nose of the coach (rather than vertical ones, as on the 719). A fourth feature was the inclusion of turn signals as a standard item, which became backfitted onto most or all of the 719s. The production of the 743 began in 1937.

Thus Greyhound acquired from Yellow Coach not only its first King of the Road but also its first exclusive or nearly exclusive coach – the Super Coach, models 719 and 743. [Only a few other carriers bought the 743, in small numbers and with the consent of the Dog, for use in connecting service or pooled interline operations (through-coaches on through-routes).]

The production of the 743 ended about the end of 1939, after 1,256 copies, and after the production of the Silversides had already begun. The last few 743s got GM 6-71 diesel engines, rather than GMC gasoline engines, all for Greyhound and the Burlington Transportation Company (the Burlington Trailways). [Greyhound first introduced diesel power, then Burlington also did so.] A few of the diesel-powered ones also got factory-installed Carrier air conditioners.

In June 1937, with the end of the production of the Z-250-843 long-nose streamliners, the last of the Z-250 coaches, the Yellow T&C Manufacturing Company quit building "conventional" buses with separate bodies mounted on chassis. [By that time Greyhound had bought 990 of the 1,838 of the Type Z, 53.8 percent of them, in five models (376, 649, 670, 834, and 843).]

Then T&C started building "integral" buses, with model numbers in the 700 series, as described above in the section entitled "Background". Those consisted of bodies and chassis built together, but they still included the use of both transverse sill members and heavy longitudinal frame rails, which bore the weight of the body and its contents. The Super Coaches, models 719 and 743, were integral buses.

Silversides

However, Yellow Coach engineers in 1938 started working on the next concept, which had begun in the aircraft-building industry – monocoque (literally, "single-shell" or "one-skin") construction, in which the body shell itself becomes a load-bearing structural member, without longitudinal frame rails. YC extended that technique to new models, both transit and parlor, numbered in the 1200 series.

Also in 1938 T&C started working on the next coach for Greyhound, an exclusive design, in cooperation with the Hound, using the monocoque system. In September -38 workers there either
finished the hand-built prototype of that next model, labeled as the model 1206, or maybe stopped working on it while it was still incomplete on the inside. That design, with coachwork built entirely from aluminum, later, in 1939, became known officially as the PGG- and PDG-3701, using a new scheme of nomenclature, and it became known also, unofficially but widely and popularly, as the Silversides, due to the outward appearance. Greyhound placed the 1206 on public display in 1939 at the World’s Fair in Chicago.

Yellow in 1938 introduced also the model 1210, which was mechanically and dimensionally similar to the 1206, the Silversides prototype, but without the brightwork siding and the other distinctive styling features. The 1210 had a standard gasoline engine or, later, an optional GM 6-71 diesel engine. The 1210 soon became redesignated as the PG- and PD-3701 (different from the PGG- and PDG-3701). [The Tennessee Coach Company late in 1939 became the third intercity highway carrier in the US to run diesel-powered equipment, using six copies of the 1210 (the only diesel-powered 1210s), and the Tri-state Transit Company (the Tri-state Trailways) about the end of 1939 became the fourth to do so, using the PD-3701, after Greyhound and the Burlington Transportation Company (the Burlington Trailways) had been the first and second, respectively, using the 743.]

Early in 1940 the Yellow Coach PGG-3701 (the first production version of the Silversides) made its début and quickly began to attract much positive attention; the PGG-4101 soon followed, after an increase in the legal length limit from 33 feet to 35. [The designations PGG-3701 and -4101 mean parlor-gasoline-Greyhound, an exclusive design for the Dog, with a seating capacity of either 37 or 41 as indicated, the first in each of two new series.]

The Silversides had a stunning new design – with distinctive Art Deco styling, which included fluted aluminum brightwork siding – to suggest or imitate the fluted stainless-steel siding on the contemporary streamlined railway passenger cars – along with a lighted round drumhead sign on the tail (similar to those which typically appeared on the tails of railway observation cars).

The fluted aluminum brightwork siding, introduced in 1939 on the 1206, quickly became the nearly universal standard for intercity coaches in the US until 1987, when the C series of the models from the Motor Coach Industries, the MCI, returned to the concept of smooth painted sides.

Even now, however, many carriers still (or again or anew) specify fluted brightwork siding, in either aluminum or stainless steel – all because the Silversides in 1939 began to imitate or emulate the appearance of the streamlined Art Deco railway passenger cars.

The Silversides quickly became a big hit among drivers, passengers, fans, and Greyhound executives and accountants. It soon became and long remained as the new King of the Road – until the GM Highway Traveler PD-4104 arrived in 1953, and until the GM Scenicruiser PD-4501 arrived in -54.

The Silversides featured standard Carrier air-conditioning, although a few of the Greyhound companies ordered several of them without cooling for use on routes in the far North.

Almost immediately the PGG-3701 and -4101 morphed into the PDG-3701 and -4101 (parlor-diesel-Greyhound), due to the availability and installation of the new GM 6-71 diesel engine – largely as a result of the work and influence of Charles Franklin “Boss” Kettering – the new product from the new GM Diesel Engine Division (later, in 1958, renamed as the Detroit Diesel Engine Division) of the GM Corporation. [The number 6-71 means six cylinders in line with a displacement of 71 cubic inches in each cylinder (426 cubes altogether).]

[Kettering was a co-founder of the Dayton (Ohio) Engineering Laboratories Company, known later as Delco, and a
long-time (1920-47) vice president for research of the GM Corporation, after GM in 1918 bought Delco and merged it into itself as a division – as well as the brilliant and legendary inventor who created self-starters, generators, and automotive electric systems and other components, along with a dazzling variety of other developments in many fields, including Freon refrigerant and Duco paints.]

For a short while, about the end of 1939 or the first of 1940, in an unusual situation at the Yellow Coach plant in Pontiac, two different designs for Greyhound were in production concurrently – the Super Coach and the Silversides – before the last of the Super Coaches came off the line, and after the first of the Silversides had already come off the line – when the 6-71 diesel engine became available.

For that reason the first few Silversides coaches (127 of them) had gotten GMC gasoline engines, and the last few Super Coaches (82 of them) got GM diesel engines – although all the previous Super Coaches (1,664 of them) had gotten gasoline engines, and all the following Silversides coaches (2,459 of them) got diesel engines.

Eventually the surviving gasoline-powered Silversides PGG-3701 (92 of them) and -4101 (35 of them) became refit with GM 6-71 diesel engines.

The intervention of World War II (WW2) caused motor-coach construction to drop sharply (along with the manufacture of most other civilian products), due to the scarcity of the required materials, which became diverted to war-related goods. The manufacture and the allocation of new coaches came under the control and supervision of two agencies of the federal government – the War Production Board (WPB) and the Office of Defense Transportation (ODT). The building of the Silversides models temporarily stopped in 1942, although several other types (basic and unadorned models), trickled into service in strictly controlled numbers. [For example, during 1944 and -45 the Pontiac Motor Division (of the GM Corporation) built 1,200 copies of the Camelback Victory liners (PDA- and PGA-3702) in one of its own car plants in Pontiac, while the T&C plant was engaged in the production of DUKW amphibious vehicles for the war.]

After WW2 800 of the gasoline-powered Super Coaches (the better remaining ones, in four groups of 200 apiece) became repowered with GM 6-71 diesel engines under a contract with the General American Aerocoach Company at its plant in East Chicago, Indiana, near Hammond. Those refit coaches also became spruced up by the renovation of the interiors and by the addition of partial brightwork (fluted aluminum siding), just below the belt line.

The General Motors (GM) Corporation in 1943 merged its Yellow Coach (YC) subsidiary, named as the Yellow Truck and Coach (T&C) Manufacturing Company, with the GMC truck operation and then named the combined unit as the GMC Truck and Coach (T&C) Division. Thus Yellow Coach, as a bus brand, became GM Coach. [In 1968 the GM Corporation slightly changed the brand name from GM Coach to GMC Coach.]

In 1946, when the GM and Greyhound engineers finally reached an agreement for the specifications for the postwar Silversides, the managers at T&C had tentatively intended to designate the new models as the PDG-3702 and -4102; however, before production began, those models became known instead as the PD-3751 and -4151.

The 2,000 postwar Silversides coaches, PD-3751 and -4151, became built and delivered between March 1947 and December -48.

[The PGG- and PDG-3701 (pre-WW2 models) were 33 feet long; the PGG- and PDG-4101 (also pre-WW2) and the PD-3751 and
-4151 (post-WW2) were all 35 feet long, due to an increase in the legal length limit, about the same time as the introduction of the -3701. There was no structural or dimensional difference in the coachwork among a -4101, a -3751, and a -4151. The -4101 and the -4151 used slightly slimmer seats spaced on shorter intervals than on the -3701 and the -3751, thus seating 41 passengers rather than 37.

According to the best evidence now available, it appears that Greyhound first assigned the PGG- and PDG-4101, the 41-seat versions of the pre-WW2 Silversides, to only seven operating companies – the Atlantic GL, Central GL, Great Lakes GL, Pacific GL, Pennsylvania GL, Richmond GL, and Teche GL – although in later years some of the -4101s became redistributed to other divisions. Of those seven companies only the Great Lakes GL did not receive also any copy of the PGG- or PDG-3701, the two 37-seat prewar versions.

Greyhound first assigned the PD-4151, the 41-seat version of the post-WW2 Silversides, to only three divisions – the Teche GL, Great Lakes GL, and Pacific GL – although in later years some of the -4151s likewise became redistributed to other divisions. Each of those three operating companies received also a number of the PD-3751, the 37-seat postwar version.

**GX-1**

During 1946 and -47, in a shop in or near Chicago, Greyhound workers, under the supervision of Carl Will or at least with his advice or other help, built an experimental prototype sample, named as the GX-1, in the direction of developing the next signature Greyhound coach. Visibly and obviously, the GX-1 included many parts and components obtained from the GMC T&C Division, which in 1943 had replaced the Yellow T&C subsidiary.

[Will in 1927 had sold his C.H. Will Motors Corporation to the Motor Transit Corporation, which in -29 became renamed as The Greyhound Corporation, and which in -29 sold the Will firm to the Yellow T&C Manufacturing Company.]

The GX-1 followed a design which Raymond Loewy and Associates had created for the Hound. It was a true double-decker, with one deck stacked on top of the other. Although it was only 35 feet long, with a single drive axle, it seated 50 passengers, 37 on the upper deck and 13 on the lower deck. The driver's seat was on the upper deck, high above the pavement.

The features of the GX-1 included power steering, a washroom, and a primitive (and complex) form of air suspension (rather than conventional steel springs). Despite the typical advertising fluff, the luggage space was nearly nonexistent. It used two air-cooled V-6 gasoline engines (from the Aircooled Motors Company, of Syracuse, New York, the successor of the Franklin Engine Company, which had begun in 1902 as the builder of the engines for the famous Franklin air-cooled automobiles).

[In 1947 the Tucker Corporation bought the Aircooled Motors Company, to provide the source of the engines for Preston Tucker's controversial Tucker Torpedo cars; after the failure of the Tucker empire, the Tucker family continued to hold the Aircooled firm until 1961, when the Aero Industries bought it and renamed it as the Franklin Engine Company; in 1975 the national government of Poland bought it and moved it to the city of Rzeszów.]

[The former site of the Tucker Corporation, at 7401 South Cicero Avenue, Chicago, Illinois, 60629, is now the headquarters of the Tootsie Roll Industries.]

Greyhound named the GX-1 as the Highway Traveler, which was also the title of its corporate promotional magazine, distributed to passengers and the public.

Not surprisingly, the GX-1 encountered many mechanical problems, due to the unproved and undeveloped nature of so many of its concepts, systems, and components. It demonstrated not so much the practical as the impractical, not so much the realistic as the
unrealistic, not so much the successful as the unsuccessful, not so much a right way as a combination of wrong ways. It appeared never to run in regular revenue service.

Shortly after the GX-1 made its introductory splash, Greyhound parked it at the main shop in Chicago, then for the most part left it under a tarpaulin until disassembling it about 1956 or -57.

Sometime, however, Greyhound added a second rear axle, a non-powered idle one, behind the single drive axle, to experiment with a pair of tandem rear axles, in preparation for the Scenicruiser.

**GX-2**

Shortly after the completion and the subsequent long-term parking of the GX-1, Greyhound workers in Chicago began to build another experimental prototype sample, the GX-2, using a number of good and desirable features from the GX-1. That process started with an unfinished PD-4151, obtained from the GMC T&C Division, and it continued with a large number of parts and components likewise obtained from T&C.

Again the overall design came from Raymond Loewy and Associates.

GM stylists and engineers took a significant part in providing the details involved in the execution of the design, both cosmetically and mechanically.

Greyhound named the GX-2 as the Scenicruiser, which name it soon attached also to the PD-4501, the production model.

The GX-2 established the general layout of the PD-4501. It was 40 feet long, and it used a pair of tandem rear axles. [The rearmost axle of the GX-2 was the driving one, and the intermediate axle was an idle non-powered one with single wheels rather than dual ones.] It was not a true double-deck coach but rather a split-level or deck-and-a-half coach. That is, it did not consist of two full stacked decks, as on the GX-1; instead it consisted of two adjacent decks, the upper of which was raised about 27 inches above the lower. The upper deck, the rear one, seated 33 passengers, and the lower deck, the forward one, seated 10, along with the driver. The washroom was in the rear corner of the street side of the lower deck. The upper deck provided two huge luggage compartments underneath.

Because Greyhound used the GX-2 as a promotional sample, traveling to many state capitals, in a successful attempt to persuade legislators to increase their legal length limits from 35 feet to 40, the GX-2 used reliable time-tested conventional mechanical systems and components, to avoid breakdowns and other problems. It used steel springs, rather than air suspension, and a single GM 6-71 diesel engine with a standard manual four-speed gearbox.

Greyhound completed the GX-2 in June 1949.

After the promotional legislative tours, the GX-2, based in Chicago, went into part-time revenue service along mainline routes extending from Chicago. Numbered as G-7483, it became assigned to the Great Lakes GL. It also served as a part-time testbed for experimentation by GM with various combinations and modifications in the drivetrain (engine, transmission, and drive axle).

**PDX-41 and EXP-304**

During the wait for the legislative action in many state capitals (to increase their length limits), two major sequences of events took place:

First, Greyhound bought 35 of the PDA-4101 in 1949 and 756 of the PD-4103 in -51 and -52. The PDA-4101 was the first 35-foot parlor car which GM offered to buyers other than Greyhound (or the friends of Greyhound whom the Dog allowed to buy the Silversides, for use in pooled interline operations with the Hound); it used a 6-71 diesel engine and a manual four-speed gearbox, and it combined the nose of a Camelback Victory liner with the tail of a city-transit car. The PDA-4101 went to only two...
Greyhound companies (10 copies to the Dixie GL and 25 to the Southwestern GL). [Other carriers bought a total of 300.] GM then, in 1950 and -51, built another model, the PD-4102, which continued the mechanical arrangement of the PDA-4101 but used a new nose cap and a new tail cap, each freshly designed. GM built only 115 copies of the -4102 before incorporating a number of internal improvements, in response to recommendations from Greyhound, which resulted in a new model number, the PD-4103. [Other carriers also bought a total of 745 of the latter.] The nose of the -4102 and -03 closely resembled and imitated the nose of an ACF-Brill IC-41. An intermediate model, the PD-3704, a 33-foot car (100 copies, all built and delivered in 1950), used the tail and the drivetrain of a Camelback Victory liner, with a 4-71 engine and a manual four-speed gearbox, along with the nose of a PD-4102 or -03; Greyhound did not buy any of the -3704.

Second, the GMC T&C Division built two more experimental prototype samples – the PDX-41 and the EXP-304. Each of them was a 35-foot car with 41 chairs. The first, completed in 1949, appeared to have begun with the body shell of a standard city-transit car, with, of course, only a front passenger door, without a rear exit door. Each side had only six elongated rectangular windows with rounded corners, although the required emergency door interrupted one of the long windows on the street side. The PDX-41 evolved into the EXP-304. The latter, completed in 1952, established the styling concept or styling theme for both the PD-4104 and the -4501, along with the ill-fated -4901. One obvious recognition feature was the large picture windows in the sides (four in each side of the -304 and the -4104, five in each side of the -4501 and -4901). The EXP-304 led directly to the -4104 and, with modifications, to the -4501 and the -4901.

**PD-4104**

In 1953, after the end of the Korean War and after the end of the resultant scarcity of aluminum (which had caused many of the PD-4103s to emerge from the plant without fluted brightwork siding but with painted sides and a bare minimum of other bright trim), the GMC T&C Division introduced another stunning model, an innovative one, the PD-4104.

Greyhound named and trademarked it as the Highway Traveler (the name previously given to the GX-1, the first experimental prototype used in the development of the concept of the Scenicruiser) – the GM Highway Traveler PD-4104, the new King of the Road, the pre-Scenicruiser.

The PD-4104 had full-height fluted aluminum brightwork siding, along with a number of major and significant improvements, including air suspension, power steering, and picture windows (in the shape of an elongated forward-leaning parallelogram with gracefully rounded corners) – introducing the styling theme which the GM Scenicruiser PD-4501, after only one more year, continued and made even more famous and recognizable. It used a GM 6-71 engine and a manual four-speed gearbox.

It was a model which no other builder matched in its numbers – until, some years later, The Greyhound Corporation itself did so (through two subsidiaries, the Motor Coach Industries, the MCI, and the Transportation Manufacturing Corporation, the TMC) – by building its own coaches again – as it first had done during 1927-29 (through a short-time subsidiary, the C.H. Will Motors Corporation, based in Minneapolis) – before the Dog turned to Yellow Coach and its products.

The Greyhound companies procured a total of 753 of the first version of the PD-4104, all delivered in 1953 and the first half of -54.

Greyhound received preferential treatment on its deliveries of the PD-4104. Serial 001 went to Mexico as a demonstrator, and serial 002 went to Cuba as a demonstrator, then all the next 381...
copies went only to Greyhound companies, before any other carrier received any of its coaches. Afterward the distribution to the various buyers continued in a normal pattern. Late in 1953 the Dog received 143 more, then, early in -54, got 229 more, before the building of the Scenicruiser.

As soon as the -4104 arrived in any fleet, suddenly everything else looked old and outdated.

However, one unfortunate feature of the new cars was the unattractive interior color scheme – brown upholstery with brown on the floor and beige and brown on the inside of the shell. That brown color scheme was the standard one for all the coaches of the first version of the PD-4104 for the entire fleet throughout The Greyhound Corporation.

[The T&C Division had persisted and succeeded in developing air suspension to an acceptable level of reliability. In 1952 it installed that feature on five city-transit cars, then in -53 made it standard on all future coaches – parlor, suburban, and transit – except on the small TGH-3102, which continued to use conventional steel leaf springs.]

Seating Capacities of PD-4103 and -04

Whereas 41 was the nominal seating capacity of the PD-4103 and the -04, some of those coaches were delivered to the Greyhound companies with 41 chairs apiece, but many, and probably most, of the cars of those two models were delivered to the Dog with fewer seats, spaced on slightly longer intervals. Many or most of the PD-4103 and the first version of the -04 (without washrooms) arrived with either 37 or 39 chairs. Most or all of the second version of the -4104 (with washrooms) arrived with either 38 or 39 chairs. For example, the Southeastern GL bought the -4103 and the first version of the -04 only with 37 seats, and the second version of the -04 only with 38 seats. [Likewise, the Southeastern GL had bought the Silversides and the ACF-Brill IC-41 only with 37 seats.]

EXP-331

In 1952 and -53, while preparing to start building the PD-4104, the GMC T&C Division also created another hand-built prototype sample, known as the EXP-331, which led directly to the PD-4501, the production Scenicruiser, which began to emerge from the assembly line in 1954. T&C later, in 1956, rebuilt the EXP-331 somewhat, redesignated it as a PD-4501, serial 1001, and sold it too to Greyhound, which assigned it to the Atlantic GL, with the side number of A-2267. That coach is now the property of Tom McNally, of Peoria, Illinois, who has announced an intent to renovate it. [McNally owns also a preserved PD-4104 and another Scenicruiser, serial 771, which he has thoroughly and faithfully restored to the gold-stripe Super Scenicruiser livery.]

PD-4501

On 14 July 1954 The Greyhound Corporation and the GMC Truck and Coach (T&C) Division of the GM Corporation presented the result of their latest and final joint project, another new King of the Road, the fantabulous new GM Scenicruiser PD-4501, a result of years of planning, styling, designing, and engineering through collaboration between GM and Greyhound.

During a ceremony at the T&C facilities in Pontiac, Michigan, Orville Snow “Sven” Caesar (one of the original busmen from northern Wisconsin and Minnesota, who was then the president of Greyhound), along with various senior officials of both GM and Greyhound and other dignitaries, including the Honoroble G. Mennen Williams, the Governor of Michigan, took part in the festivities accompanying the formal delivery of the first group of the new coaches. A parade of the new cars emerged from building 34. The first one burst through a huge paper poster, appropriately decorated, which completely covered the doorway. The first coach in the line, the one which burst through the paper, was C-675 (serial 006) –
which GM later used (with \textbf{NEW YORK EXPRESS} on the
destination sign) for a large number of factory photographs shot in
several locations around Pontiac and elsewhere near Detroit. Mrs.
America (Wanda Jennings, of Saint Louis, Missouri) broke a
traditional bottle of champagne on the front bumper of F-701 (serial
002). During the excitement of that busy day, P-5446 (serial 001)
somehow became ignored and lost in the shuffle despite its special
status as the first Scenicruiser to have rolled off the end of the
production line, although it eventually became restored (with the side
number of 1954, the year of its manufacture) in the Greyhound
historic fleet. [Fred Dunikoski, as the president and the CEO of the
(second) Greyhound Lines, Inc, the (second) GLI, while it was still a
subsidiary of The Greyhound Corporation, before it became sold to
the GLI Holding Company, based in Dallas, Texas, caused the
formation of the Greyhound corporate historic fleet.]

The appearance of the Scenicruiser was impressive and
distinctive. The styling was stunning and superb, continuing the
styling theme introduced in the previous year, 1953, on the GM
Highway Traveler PD-4104. It included full fluted aluminum
brightwork siding below the belt line and between adjacent side
windows. It too featured large picture windows (in the shape of an
elongated forward-leaning parallelogram with gracefully rounded
corners, as on the -4104). The split-level or deck-and-a-half design
gave it the characteristic stepped silhouette.

The outside paint scheme was consistent with that on the
Highway Traveler PD-4104 – except that the name \textit{Greyhound}
alone (no longer Greyhound Lines, just plain Greyhound) appeared in
the characteristic style of italic lettering on the sides near the tail and
across the tail. One unusual touch was a blue (or sometimes red) ®
(circle-R) symbol in the upper-forward corner of each side of the
upper deck, to denote the design as a registered one (registered in
the US Patent Office).

The Cruiser was 40 feet long, and it had a standard
washroom (on the street side at the foot of the steps to the upper
deck), two huge baggage bins below the upper deck, a pair of
tandem rear axles (although the rearmost axle was an idle non-
powered one), with dual wheels on each rear axle, and a pair of GM
4-71 diesel engines (mounted longitudinally straight-in side-by-side in
the tail), acting through a fluid coupling, a conventional clutch, and a
Spicer three-speed manual mechanical gearbox with a two-stage
splitter section (providing six forward speeds altogether).

Air-conditioning was, of course, a standard feature, with
the Freon compressor driven by one of the two main engines (the
only engines). [Previous models of GM and Yellow Coaches with air-
conditioning had used a small Continental four-cylinder gasoline
engine, mounted amidships on the street side, to drive the Freon
compressor and a second 12-volt DC generator.]

Incidentally, the Scenicruiser PD-4501 was the first model,
from any builder for any carrier, to have both air-conditioning and a
washroom as standard features aboard every coach without
exception.

Fortunately, the interior décor of the Cruiser greatly
improved on the depressing and unimaginative brown and beige
(earth tones) of the Highway Traveler. The inside of the shell, on
each deck, was yellow (in an attractive soft shade) with white on the
ceiling. The upholstery on the driver's seat was the same shade of
yellow.

The Scenicruiser became widely known also by the
nickname \textit{Cruiser}. [Although Greyhound for a while used the name
Cruiser for the Super Coach (YC models 719 and 743), in the context
of a discussion of the Scenicruiser, the nickname \textit{Cruiser} clearly
refers to the Scenicruiser.]

\textbf{Problems with the Scenicruiser}
Regrettably, the build quality of the new coaches was deficient – characteristic of that era throughout not only GM but also the other automotive manufacturers in the US – due in part to the difficulties with the relations between the employer builder and the unionized employees (that is, due to sloppy or careless workmanship on the part of displeased, disgruntled, or malcontent factory workers) – to the extent that Greyhound found it necessary to run each new Scenicruiser directly from the T&C plant in Pontiac to the regular Greyhound shop in Toledo, Ohio, about 80 miles to the south, for final adjustments and corrections of the discrepancies – final assembly, the wags suggested – before sending it onward to its destination division and its first assignment.

Although the Cruiser was a beautiful machine, and although it gave an extremely comfortable ride (a distinctive and recognizable ride due to the full tandem rear axles), it presented a new set of mechanical problems.

When the Scenicruisers ran well, they did so incredibly well, and most of the time they did; however, sometimes (too often, more often than did less unusual coaches) they broke down, largely due to the two-engine drivetrain.

Unfortunately, from the engineering viewpoint, the Scenicruiser was ahead of its time. Many of the concepts used in the engineering design – and many of the tricks required of the vehicle – were ahead of the state of the art of the components available at the time (mechanical, electric, and electromechanical). [That era was about one eon before the days of computers, chips, semiconductor devices, and other fancy electronic gadgets, all of which we now accept and expect as routine.]

To say it another way, the design of the Cruiser demanded a level of technology which in 1954 was not yet available, or not yet developed well enough, or not yet at an acceptable level of reliability.

The largest and most basic problem was that no single appropriate engine (either diesel or gasoline) was then feasible – not rated for enough horsepower or torque, to provide adequate acceleration, speed, and hill-climbing capability. [Although several hotter engines were available, they were not suitable or readily adaptable to an application in highway coaches, or the dimensions were too large, or the fuel-consumption rates (an extremely important factor) were too high.]

That's why the Cruiser first used a pair of four-cylinder engines rather than a single eight-cylinder engine.

That problem became solved in 1960, when the Detroit Diesel Engine Division (of the GM Corporation) introduced its long-awaited 8V-71 (V-8) machine (based on the original 6-71), shortly after the introduction of the smaller 6V-71 (V-6), first used in 1959 in the GM Fishbowl suburban and city-transit coaches).

Maintenance on the Scenicruiser was a constant headache – partly because of the complicated nature of some of the new systems (in the manner of Rube Goldberg, some of the critics suggested), partly because some of the components were too new and unimproved (using new, unproved, and unimproved technology), partly because the diagnostic tools and techniques were inadequate, partly because the training and availability of mechanics (and maintenance supervisors and managers) for the new model were less than optimum, partly because the technical support and repair-parts support were less than optimum, and largely because of a combination of several of those factors – along with a few other explanations – including, sadly, occasional incidents of careless or intentional abuse of the new coaches by disgusted drivers or mechanics.

PD-4901

About the time of the construction of the EXP-331, the T&C Division built also a second experimental prototype, known as the
EXP-321, 10 numbers lower than the -331, named as the Golden Chariot, later redesignated as the model PD-4901. The Chariot was a 40-foot coach with 47 seats on a single high deck, with the same height as the upper deck of the PD-4501, the Scenicruiser. It was in effect a high-level elongated PD-4104, the Highway Traveler, with tandem rear axles and an additional short (or less long) window on each side. It had a drivetrain identical to that aboard the Scenicruiser. Its distinctive feature was a gold-tone anodized finish on all the aluminum brightwork (rather than a natural untinted finish, anodized but untinted, as on the Cruiser and other GM models) – thus called the “Golden” Chariot. Due to the single full-length high deck, it had a third forward large luggage compartment underneath, although not as huge as either of the two rear ones, as aboard a Cruiser. It was an attractive coach, despite the pretentious gold tint, which, presumably, could eventually become deselected by the use of a delete option. It appeared to hold much potential for many mainline carriers along high-density routes – provided that one major disadvantage could be corrected.

Unfortunately, the PD-4901 never went into production, so the sample continued to stand alone. Several carriers, including the Continental Trailways, had shown interest, but nobody ever placed a firm definite order. The prospects felt wary of the questionable two-engine propulsion arrangement, and the bad experience of Greyhound with the Scenicruiser, from the beginning, finished frightening away everyone else.

The Pennsylvania GL leased the Chariot for several months and ran it, numbered as P-5599, between New York City and Philadelphia, Pennsylvania, without markings other than the side number and the required legal lettering.

Afterward several small carriers owned and used it in the Northeast.

The Golden Chariot still exists, parked in East Templeton, Massachusetts, as a property of the Wilson Bus Lines, which has announced the intent to restore it.

Midstream Revision

Late in the fall of 1955 the GMC T&C Division introduced a midstream revision, which consisted mainly of a new clutch arrangement, along with a few miscellaneous minor improvements (including pantograph wiper arms, which allow the blades to remain in a vertical position throughout the entire arc of the sweep). After that point all new Scenicruisers left the plant with the new features, and all the older (that is, less new) Cruisers became retrofitted with the new items.

The clutch was not changed or replaced, but the manner of controlling it was changed. [The clutch was a conventional one connected to the engines by a fluid coupling (a "slush box" but not a torque converter).]

In the original design the clutch was engaged and disengaged by an electric solenoid controlled by a switch connected to a treadle-type pedal (similar to the brake and accelerator pedals) mounted in the usual spot at the driver's left foot. That concept allowed the driver to select between only two positions of the clutch – on or off, out or in, 1 or 0, engaged or disengaged – without a capability to engage or disengage the clutch smoothly or gradually. Thus it was physically or mechanically impossible for the driver to avoid a lurch while engaging the clutch at a standstill with the transmission in gear, and it was extremely difficult to avoid another lurch while engaging the clutch again after shifting gears while in motion.

The revised arrangement, introduced late in 1955, continued to use the same clutch, fluid coupling, and transmission; it changed only the manner of actuating the clutch. It returned to the old notion of engaging and disengaging the clutch by using a direct
mechanical linkage connected to a standard relief-type pedal – similar to the familiar clutch pedals on the PD-4103 and -04 and other GM models with manual gearboxes. Thus the driver could engage or disengage the clutch smoothly and gradually, while either at a standstill or in motion, and thereby could achieve a high degree of comfort and expertise (without jerking or lurching, in contrast with the original design).

**Shifting the Gearbox**

Because of the fluid coupling, when the driver prepared to set into motion from a standstill, he applied the service (foot) brakes, released the parking brake, depressed the clutch pedal, made sure that the splitter switch was in the L position (L for low rather than H for high), briefly nudged the gearstick toward (or partly into) the 2 position – to use the synchronizer feature (as though starting to shift into 2), because the second and third gears used synchronizer cones, although 1 and R did not – then shifted into 1 (or R as needed), released the clutch pedal, released the brake pedal, and accelerated in the usual manner. That technique, thus far, was much the same as used while setting into motion a 1940s or -50s Chrysler product equipped with Fluid Drive (an early semiautomatic transmission), because the mechanical arrangement was similar. [Although Fluid Drive did not use a splitter section on the gearbox, it did use an automatic overdrive.]

The driver then manually shifted through the three forward gears, arranged in the customary H pattern, by using a stick mounted in the floor and by using the clutch in the usual way – but not using the double-clutch technique (because of the synchronizer feature on the second and third gears).

The two-stage splitter section of the gearbox (which gave six forward speeds with only three gearstick positions) was controlled by an oversize electric switch with two positions (L and H, for low and high), which also served as the knob at the top of the gearstick in the first version (with the original clutch arrangement), but which later became attached to the stick just below a standard knob in the second version (with the improved clutch arrangement). [The two-stage splitter was truly a separate rear section of the gearbox, not a two-speed drive axle and not a “two-speed clutch” (whatever that may mean), as some have labeled it.]

On a Scenicruiser with the original clutch arrangement, the prescribed protocol required the driver to shift through the gears in only five steps: 1L, 2L, 2H, 3L, and 3H, thus skipping directly from 1L to 2L without using 1H.

However, on a Cruiser with the improved clutch arrangement, the new protocol required the driver to shift in all six steps: 1L, 1H, 2L, 2H, 3L, and 3H.

With the new clutch arrangement, the driver operated the clutch pedal in the normal manner, engaging and disengaging gradually and smoothly, except that he fully engaged the clutch before setting into motion, and except that some drivers while in motion used a form of “float” shifting without using the clutch or by using it only minimally (just enough to time the shift and to soften it).

After the 8V-71 engines became available, the engineers at GM and Greyhound began making plans to improve the entire fleet of Scenicruisers, by replacing the original dual-engine power plants with single V-8 machines.

This part of the Cruiser story continues in the section entitled "Repowering the Scenicruiser".

**How Many of Them?**

How many Scenicruisers ever existed? That depends; that depends on how one counts. There are three different answers to that question, and each one is correct, at least in part, in its own sense.
First, the regular production run of the PD-4501 consisted of exactly 1,000 coaches, bearing serial numbers from 001 through 1000.

Second, in 1956, when that run ended, the GMC T&C Division pulled out the EXP-331, its hand-built prototype of the PD-4501, rebuilt it somewhat, completed it in the standard seating configuration, revised the exterior trim to conform with that on the production coaches (including the removal of the drumhead sign from the tail), then gave it the serial number of PD-4501-1001, then sold it too to Greyhound as A-2267 (in the fleet of the Atlantic GL), which later became renumbered as A-6464 and soon as 6464 (in the fleet of the Southern GL), and eventually as 5399 (in the fleet of the Greyhound Lines East). [That was the only Scenicruiser which left the plant with a spotlight, a drumhead sign, or an emergency door (which became sealed during the rebuilding).]

[During the production of the first version of the Highway Traveler PD-4104 – and after the beginning of the construction of the hand-built prototype of the Scenicruiser PD-4501 – but before the production run of the -4501 – the federal regulations became changed in such a way that an emergency door became no longer required on a coach with large picture windows equipped with hinges and simple latches (operable by passengers as well as drivers) along with adequate instruction plates. Thus no PD-4501 in the production run had an emergency door – although every -4104, even in the second version of it (beginning in 1956) – did have an emergency door.]

[The Atlantic GL received also the last 12 copies of the Cruiser from the production run, serials 989-1000, numbered as A-2255 through -2266. One of those, serial 992, originally A-2258, has become restored and is now on display at the Greyhound Bus Museum, in Hibbing, Minnesota.]

[Shortly before the beginning of the production run of the Scenicruiser, the managers at the T&C Division (with the consent of their counterparts at Greyhound) took the hand-built prototype to a Tootsietoy plant, then allowed the officials and workers at Tootsietoy to examine their new coach, photograph it, and measure it, in preparation for Tootsietoy to begin producing die-cast metal models of the Scenicruiser, about 9.6 inches long, in the 1:50 scale, almost the same as the O scale (1:48) in model trains. The prototype at that time bore a round drumhead sign on the tail, as aboard a Silversides (and a number of other previous models) – that is, as though on the tail of a railway passenger observation car. Thus the Tootsietoy models of the Scenicruiser have evermore bore drumhead signs on their tails, although no other Scenicruiser ever left the plant with a drumhead sign, and although the prototype lost its drumhead sign before it went into regular revenue service.]

Third, the GX-2 – the second hand-built experimental prototype while developing the Scenicruiser concept – became assigned to the Great Lakes GL (with the side number of G-7483) – and, according to one source, at some point got the bogus serial number of PD-4501-1002.

How many Scenicruisers? If one regards or defines a Scenicruiser as a GM PD-4501 – not some other model with the name Scenicruiser attached to its sides, as in the cases of several other models during several years – then there were exactly 1,001. The GX-2 was a special coach, but it never was a PD-4501, although it bore the name Scenicruiser in script on each side, and it never was a GM product at all, except that Greyhound workers had built it (in a Greyhound shop in or near Chicago) from parts and components obtained from the GMC T&C Division – despite the contrived serial number.

[PD-4501-1001, the one which went into revenue service as A-2267, was a hand-built product of the GM Corporation, built in the T&C facilities in Pontiac (and finished in 1953) – whereas the GX-2 (named as a Scenicruiser, the only "Scenicruiser" at that time) was a...
hand-built product of The Greyhound Corporation, built in Greyhound facilities in or near Chicago (and finished in 1949), largely using parts and components obtained from GM (starting with an unfinished PD-4151) – and whereas the GX-1 (named as a Highway Traveler, the only "Highway Traveler" at that time) was a hand-built coach, nominally (at least) also a Greyhound product (and finished in 1947), also largely using parts and components obtained from GM.

[Ironically, due to the involvement of Carl Will in the construction of the GX-1, it appears that the very last "Will" coach was also, in a special and limited sense, the first "Scenicruiser" – or at least the first tangible step in the development of the Scenicruiser concept – on the way toward the first post-WW2 split-level Greyhound coach.]

Because of the severe problems with the drivetrain in the Scenicruiser, which remained unresolved until 1961, Greyhound did not place an order for any more of the Cruiser.

**More of the PD-4104**

In the spring of 1957 the second version of the PD-4104 began to appear throughout Greyhound, with toilets (although the first version did not include that option except on a few coaches for premium extra-fare limited-stop service on several routes) and with several other improvements, including pantograph wiper arms (as in the second version of the Scenicruiser), arms which allow the blades to remain vertical at any point during the arc of the sweep, along with left-side rear-view mirrors mounted at the belt line (as on the Scenicruiser) rather than near the top of the side window (as in the first version of the -04). They were no longer named as Highway Travelers, as were the cars of the first version of the -04, starting in 1953. Instead they bore the legend "Scenicruiser Service". Otherwise the livery continued as on the first version. The inside décor used a medium shade of metallic green, which greatly improved on the brown (as on the first version).

In the fall of 1957 another group of the second version of the -4104, also with toilets, began to appear. They too bore lettering for Scenicruiser Service (rather than Highway Traveler). [That last group of the new cars introduced a clever twist on the destination sign – the silhouette of the Greyhound dog trademark (as an alternate to a blank reading) for use when the correct destination was not available on the curtain for a particular trip.]

Of the 5,065 copies of both versions of the PD-4104, the Greyhound companies altogether bought a total of 1,985, about 39.2 percent of them, delivered in the years 1953-54 and -57-58. [The number 5,065 made the -4104 the most numerous coach in North America – until the MC-9, from the Motor Coach Industries (the MCI), exceeded it and, in 1994, reached a total of about 9,513 when production ended.

**Mack MV-620-D**

In 1957 the Mack Truck Company built a prototype sample of a 40-foot intercity parlor coach, in response to an invitation, a request for proposals, from The Greyhound Corporation. One prompting reason was the displeasure of the Greyhound executives about the initial mechanical problems with the GM Scenicruiser PD-4501.

That demonstrator, which Mack designated first as the model MV-39, later as the MV-620-D, was and still is a high-level single-deck coach with 39 seats, a washroom, three axles, and, originally, a Mack six-cylinder diesel engine and a Mack five-speed manual gearbox with a two-speed auxiliary gearbox (thus providing 10 forward gears with only five holes or positions of the one gearstick).

The 620, as it is often called, somewhat resembles the GM PD-4901, and it clearly represents an attempt to compete against the Scenicruiser. The styling of the nose and the sides is generally
similar to that of the contemporary GM models (the PD-4104, -4501, -4901, and, later, the -4106).

However, the styling of the tail is a product of the space age of the mid-1950s. Containing small but distinct tail fins, it resembles that of a DeSoto or other Chrysler product of the same era. It almost invites an addition of a Continental kit (for a spare tire).

The tail of the 620 apparently inspired the tail of the MC-1 and MC-2, and the nose of it influenced the noses of the MC-1 through the MC-7, all from the Motor Coach Industries (the MCI).

Partly because of the lost or wasted space inside at the tail, the 620 accommodates only 39 passengers, whereas in the same length, 40 feet, a Scenicruiser seats 43, and the Golden Chariot seats 47, as do 40-foot MCI coaches, and whereas the second version of the PD-4104 seats 38 or 39, even with a washroom, within a length of only 35 feet.

Greyhound leased and evaluated the 620 during many months in regular revenue service between Chicago and San Francisco, California, and between Chicago and Los Angeles, California. Greyhound assigned it to the new (fifth) Central GL and gave it the whimsical side number of C-620.

For several reasons neither Greyhound nor any other carrier placed an order for 620s.

In 1990 Charles Wotring, a motor-coach hobbyist and enthusiast, of the Royal Coach Company, of Mechanicsburg, Pennsylvania, bought the lone sample and restored it.

The 620 still exists, now as the property of a private individual, in a personal collection (consisting mostly of antique trucks, mostly Mack, rather than coaches) in a small town near Youngstown, Ohio.

**PD-4106**

In March 1961 the GMC T&C Division introduced the PD-4106, a 35-foot parlor car which took the next logical step beyond the -4104 (skipping the number -4105, which was never used for a production model), and which featured the new Detroit Diesel 8V-71 (V-8) engine [after the début of the 6V-71 (V-6) in 1959 in the GM Fishbowl suburban and city-transit models].

As the numbers suggest, both the 6V-71 and the 8V-71 were based on the durable and dependable, although leaky, in-line 6-71.

[Engines of the 71 series were and are often called "green screamers" (because of the color of the factory paint and because of their characteristic and distinctive whining sound, due to the presence of a gear-driven Roots blower in the air-intake system – because they use the two-stroke concept, and because natural (unblown) aspiration cannot provide enough air to the combustion cylinders in a two-stroke high-compression diesel engine).]

The styling of the -4106 was quite similar to that of the -4104 but somewhat more creased or angular, or less soft or rounded, than on the -04. [For example, the rounded corners of the picture windows on the sides used shorter radii – that's the plural of radius – shorter than on the -4104 (Highway Traveler), -4501 (Scenicruiser), and Fishbowls.] It included the first quad headlamps (round ones) on a GM parlor car. [The Fishbowls in 1959 had introduced quad headlamps on suburban and city-transit cars.]

The mechanical layout was similar to that of the PD-4103 and -04. It used a manual unsynchronized four-speed gearbox. The main engine, the only engine, drove the air-conditioning compressor (through a pair of hydraulic lines running between a hydraulic pump on the engine and a hydraulic motor on the compressor, inside the ventilation compartment amidships on the street side). [That is, again there was no auxiliary engine, just as there was none aboard
The new car introduced slightly revised markings, with the name of GREYHOUND (again, not Greyhound Lines, just plain Greyhound) in slightly larger and bolder vertical uppercase letters (rather than the old italic upper-and-lowercase letters) on each side, and, for the first time, across the nose. They too bore lettering for Scenicruiser Service (as on the -4104s with washrooms).

Of the 3,226 copies of the -4106 built, Greyhound bought 1,105 of them, 34.3 percent of them, delivered in the years 1961-64.

After the PD-4106s began to arrive, in 1961, with their new markings, as the Scenicruisers became repainted in due course, their livery became changed slightly. The name Scenicruiser, on the sides near the nose, became Scenicruiser Service, in line with the -4104s with washrooms and the -4106s (all of which at Greyhound had washrooms, although not all other carriers specified them). Further, the name of GREYHOUND appeared in even larger and bolder vertical uppercase letters (replacing the old italic upper-and-lowercase letters), on each side near the tail and across the tail (as before), and, for the first time on the Scenicruiser, across the nose (as on the -4106 as they came from Pontiac). [Relatively few Scenicruisers ever acquired those markings, because a new livery late in 1961 began to appear on the renovated Scenicruisers.]

By that time a decreasing number of PD-4103s and other coaches of older models still remained on the equipment roster at Greyhound; a few of them got the name of GREYHOUND on the sides in vertical uppercase letters in a style slightly bolder than before.

Trouble between Greyhound and GM

Sadly, although the Scenicruiser program marked the high point, the crown jewel, of the long relationship between Greyhound and the GM Corporation, the Scenicruiser program also marked the beginning of the end of that liaison. The mechanical problems with the Cruiser led to major disagreements between those two parties, then to a lawsuit by Greyhound against GM, then to a settlement, all of which resulted in a thoroughly ruptured and intolerably unhappy relationship. [More about that appears below in the section entitled "A Different Source".]

Governmental Intervention

In 1956 the US Department of Justice filed a civil suit against the GM Corporation, under the Sherman Antitrust Act of 1890, in a successful attempt to depose the GMC T&c Division from its clear position of leadership and dominance in the coach-building industry in the US (for both city-transit and intercity cars). [That legal action did not apply to GMC chassis for school buses, in which segment GM held only a minority market share.]

Correctly seeing that GM had a share of 84 percent of the domestic market for parlor and transit cars, the lawyers on the payroll of the Antitrust Division, long on vigilance but short on common sense, long on aggressiveness but short on analytic skills, long on zeal but short on knowledge and understanding of the business in question, incorrectly assumed that GM’s dominant position must necessarily be bad and wrong, merely because GM had become large and successful.

The complaint alleged, among other points, that GM had acquired the exclusive rights (that is, patents and registered designs) to various technologies, that GM had refused to give or sell the fruits of its efforts to its competitors (mainly, that is, the diesel engines, the automatic transmissions, and the angle drives), that GM (through its financing subsidiary, the GMAC, the GM Acceptance Corporation) had made it easy for its customers to finance their purchases, and that Boss Kettering, a vice president of the GM Corporation, had sat on the board of directors of The Flxible Company, a nominal
Flxible is pronounced as “flexible.”

Apparently it never occurred to the watchdogs in the Antitrust Division that T&CC had reached its preeminent position because of the superior quality of its products, its service, and its financing. GM Coaches with GM diesel engines accounted for the majority of the sales in the US because they were the most desirable, most durable, most serviceable, most productive, most efficient, and most reliable (except, of course, for the initial mechanical problems with the drivetrain of the Scenicruiser). If those myopic hall monitors from Washington had taken the trouble to try to get themselves straight on the facts before they pulled on their jackboots and started marching in lockstep against GM, they might somehow have stumbled across the hugely significant fact that the presence of Kettering on the Flxible board had worked not to the detriment or disadvantage of Flxible but rather to its enhancement or advantage. Kettering, a native of Loudonville, Ohio, also the home of The Flxible Company, was on the board because Hugo Young, the founder of Flxible, had placed the Boss on the board—partly to show honor to him, partly to take advantage of his brilliance as an inventor and original thinker, and partly to enable Flxible to get special terms and deals from GM (including, from the early days of Flxible, those related to both chassis and engines from both Buick and Chevrolet). It is undeniably documented that the Boss rarely took part in the decisionmaking processes of Flxible, and he seldom even attended the meetings of the board, although he occasionally served in an advisory capacity. Flxible and T&CC were nominal rivals, but they were only partial rivals, only in small part. Flxible was then a niche builder, concentrating on the market segment for small medium-duty 21-29-seat coaches, whereas T&CC concentrated on the one for larger heavy-duty 37-43-seat coaches. T&CC never directly competed against Flxible, except that for a short time, 1939-49, T&CC offered a small line of 25-29-seat Cruiserette coaches for its own customers who wanted GM products in the manner of a Flxible Clipper (without GM’s ever seeking to invade the customer base of Flxible).

The suit by the federal government dragged on but never went to trial, while the lawyers prolonged their arguments, motions, counter-motions, and other sparring and tap dancing with one another. In 1965 the parties, the USA and the GM Corporation, eventually reached a distinctly one-sided agreement, which, with the approval of the court (that is, the judge), emerged as a document known in the law business as a consent decree (a decree of the court by the consent of the parties through their ostensibly mutual agreement).

The remedy (the consent decree) imposed four main requirements on GM; it required two behaviors, and it enjoined (forbade) two other behaviors:

It required GM:

- to sell any coach to any operator (thus ruling out any possibility of another exclusive design for Greyhound or any other carrier) and to sell engines, transmissions, angle drives, and other parts or components to any other coach manufacturer (that is, to any competitor);
- to grant licenses to any rival coach builder (without the payment of royalties or other fees or charges) for the use of the present intellectual property (on the date of the decree) covered by GM patents and registered designs and to grant such licenses for reasonable fees or royalties for the use of any future such right acquired or developed during the following 10 years.

It also forbade GM:

- to enter into exclusive-supply contracts with any operator or any other coach manufacturer for coaches or parts or components for them (thus ruling out any possibility of not only another exclusive design for Greyhound or any other carrier but also...
an exclusive-supply relationship with any carrier even for non-exclusive designs, and thus depriving Greyhound or any other carrier of any contractually assured benefit resulting from the economies of scale associated with multi-year commitments for future coaches in future years);

or to allow any person to serve as an officer or director of the GM Corporation if that one serves also as an officer or director of any coach-operating company or any other coach-building company, or if that one owns a "material share" of any such firm.

The "consent" decree also required the GMAC to provide the financing of a certain number of purchases from the rivals of the T&C Division.

According to one authority, Dr. Thomas DiLorenzo, a scholar and a professor of economics at the Loyola University in Maryland, the history of antitrust enforcement in the US has consisted of a history of politically inspired witch hunts launched against some of this nation's most innovative and most entrepreneurial business firms, including the GM Corporation.

Many other authorities, such as both Robert Bork and Alan Greenspan, also have expressed much similar criticism of the disturbing record of the US Department of Justice in that area.

In this instance the persecution of the GM Corporation by the US appears to illustrate the validity and credibility of those views.

What's bad or wrong about GM's having gained dominance in its markets through its inventiveness and innovativeness or through its own excellence or the superiority of its products and the availability of them?

Where is it written that GM did not have a lawful right to protect its intellectual property by obtaining patents and registrations for its inventions and developments? Or to exercise its lawfully exclusive rights to them without sharing its own assets with its less successful competitors? What in law, logic, or ethics previously required GM to hand over a large and significant portion of its own proprietary technology to its less inventive rivals?

In the view of many observers, a large part of antitrust enforcement in general and this case in particular illustrates an overwhelmingly socialistic tendency – to require and force the redistribution of the rewards of free enterprise from the achievers to the nonachievers (or those who have achieved less).

Such behavior on the part of the federal government of the USA causes many of us to express the thoughts that we love our country, but we fear and distrust our government and those who run it.

Because of the practical consequences of the consent decree, Greyhound found it all the more easy to turn away from the GM Corporation and its T&C Division and to continue developing its own subsidiary coach builder. In 1958 The Greyhound Corporation bought a controlling (majority) interest in the Motor Coach Industries (MCI), Limited, and in -61 it acquired the entire ownership of it.

[The MCI, then based in Canada, was less subject to the meddling and interference by the federal government of the US.]

**Repowering the Scenicruiser**

After the 8V-71 engines became available, the engineers at GM and Greyhound began making plans to improve the entire fleet of Scenicruisers, by replacing the original dual-engine power plants with single V-8 machines.

Before the final decision to use the Detroit 8V-71 engines, Greyhound had given serious consideration also to several other makes (at least Mack, Cummins, and two German brands, MAN and Mercedes-Benz), even to the extent of temporarily installing some or all of those alternatives aboard Cruisers for evaluation. [Incidentally, MAN is the abbreviation for Maschinenfabrik Augsburg-Nürnberg]
Although the managers of the GMC T&C Division provided the engineering support to design the replacement installation, they declined to carry out the conversion project.

Therefore Greyhound hired the Marmon-Herrington (MH) Corporation, of Indianapolis, Indiana, to repower all the remaining Scenicruisers (979 of them, because 22 had become destroyed in fires and wrecks) for a price of about 10 million dollars. [MH is the company best known perhaps for its trackless trolley coaches (which have long run in San Francisco, California, and several other cities), along with its Marmon heavy-duty tractor trucks and its short-lived (1950-55) line of small gasoline-powered city-transit buses (after MH bought the right to use the design of the defunct Ford Transit buses, after the Checker Motors Corporation, of Kalamazoo, Michigan, the famous taxicab manufacturer, gave up in its attempt in the bus-building industry). MH still continues in business in 2010 as a constructor and converter of all-wheel-drive (AWD) vehicles for a variety of commercial and military applications.]

Between October 1961 and September -62, Marmon-Herrington replaced the pairs of GM 4-71 engines, the fluid couplings, the clutches, and the three-speed gearboxes with new drivetrains, consisting of single Detroit 8V-71 (V-8) engines, standard clutches (without fluid couplings), and Spicer manual four-speed unsynchronized gearboxes – mounted longitudinally (straight-in) – that is, without using the Austin angle-drive arrangement [as did most other flat-nose GM coaches, which used engines mounted transversely (crosswise) in the tail].

Aboard a repowered Scenicruiser the new V-8 main engine, the only engine, drove the Freon compressor, as had one of the four-cylinder main engines previously.

As each Scenicruiser left the MH plant in Indianapolis, Greyhound then refurbished the inside and made several changes on the outside, at a total cost of about three more million dollars.

Regrettably, the inside work included an inartful repainting of the previous yellow metalwork on the dash and other surfaces into a medium shade of metallic green (only on the lower deck), which matched the inside décor of the PD-4106, which had begun to arrive early in 1961, and that of the second version of the -04, which had begun to arrive in the spring of -57. Sadly, the new green paint completely covered the handsome builder’s plate, attached to the dash near the door, and obliterated the lettering on it.

The outside work included the replacement of a pair of doors on the tail (hinged at the sides) with a single overhead door hinged at the top, a pair of horizontal gold Scotchlite stripes, and new lettering, announcing the new name of Super Scenicruiser (on each side near the nose, as before) – no longer just Scenicruiser or even Scenicruiser Service – but rather Super Scenicruiser – along with the name of GREYHOUND in larger yet and bolder yet vertical uppercase letters, on each side near the tail, across the tail, and across the nose (as on the PD-4106 as they came from Pontiac).

Every remaining Scenicruiser, 979 of them, became repainted and changed into the Super Scenicruiser livery, with the gold Scotchlite stripes, during the process of repowering and renovating.

A Different Source
Late in 1963 a few of the new MC-5 coaches began to appear in service at Greyhound in the US, then in -64 Greyhound received 200 copies of the MC-5, the first model which Greyhound ordered (for service in the US) from the Motor Coach Industries (MCI), Limited, which then was a Canadian coach builder. [The New England GL had previously, in 1953, acquired five new MCI Courier 95-D coaches when it took over the International Coach Lines.]
In 1948 the Western Canadian Greyhound Lines, Limited, had bought the MCI as the supplier of its coaches for its operations in Canada; in 1958 The Greyhound Corporation (the parent firm in the US) bought a controlling (majority) interest in the MCI (thus taking an important step toward again developing its own source for its future equipment); in 1961 The Greyhound Corporation acquired the entire ownership of the MCI; in 1963 the MC-5 (equipped with power steering, air suspension, air-conditioning, a Detroit 8V-71 engine, a manual four-speed gearbox, and a toilet) compared well with the GM PD-4106.

The early successes with the MC-5 paved the way for Greyhound to continue developing the MCI as the exclusive source of its coaches (for the US as well as for Canada) and to continue to turn away from the GM Corporation and its T&C Division. [More about the MCI appears in a later section.]

PD-4107

However, the MCI could not yet reach the level of production necessary to fully satisfy the needs of Greyhound in the US, so the executives of the Dog, in a stopgap measure, bought a modest number of the next model from GM, the PD-4107, which quickly became nicknamed as the Buffalo (due to the distinctive hump in the rooftop near the nose) – 162 of them in 1966 and 200 more in 1967. Those were the last GM coaches to enter the fleet of Greyhound.

The Buffalo introduced another minimally changed livery, using a slightly darker shade of blue and a narrow red stripe at the belt line.

More Paint Schemes

After that, as Scenicruisers became due for repainting in due course, some of them got the same livery as the one on the Buffaloes. The name of Super Scenicruiser continued, but the lettering for the name of GREYHOUND became even larger and bolder. At the same time the company began removing the fluted aluminum trim flanking the side picture windows, because of increasing oxidation behind the trim. Unfortunately, that removal harmed the overall appearance of the coaches. [That livery became applied also to some of the -4104s and -06s during repainting in due course.]

When the MCI in 1969 introduced the MC-7, which Greyhound named as the Super 7 Scenicruiser, it arrived in the Buffalo-style livery, then, about 1970 or -71, it began to appear instead in a new livery, using white, as before, and a much lighter shade of blue, similar to Olympic blue or Pepsi blue, plus a wider red stripe, reaching all the way across the roof, in a lighter shade of red, similar to tomato red or Pepsi red. Because of the resemblance of the new livery to the contemporary Pepsi-Cola color scheme, the coaches wearing it became known as the Pepsi buses.

The Pepsi livery, with minor changes, remained in use through the era of the MC-12 era. It became applied to many older coaches, including a few of the real Scenicruisers. Unfortunately, the new livery was not well suited to the Cruisers. They did not look good in it.

On the other hand, however, a number of the Cruisers never lost their gold-stripe Super Scenicruiser livery.

Final Years

About 1970 some 500 of the Scenicruisers, in better condition, became renovated again, with no further change in the mechanical arrangement.

That time about 130 of them became converted into the combination (“combo”) configuration, which provided a cavernous cargo compartment in the rear of the upper deck plus an access door
on the curb side near the tail. The remaining seats, in several patterns, numbered from 10 (those on the lower deck) to about 26 (including up to about 16 on the upper deck). [The toilet aboard a Scenicruiser is on the lower deck (on the street side), so it remained accessible to all the passengers even in the combo floor plan.] The side number of a combo included a 0 (zero) as the first digit in the fleet-wide four-digit numbering scheme.

Some of the Scenicruisers continued operating, in decreasing numbers, no longer scheduled as first sections on mainline or long-distance routes, until, about 1975, the MC-8 finished replacing them and sending them out to pasture. Several of the Cruisers served in their last years in commuter service based in San Francisco.

Motor Coach Industries

Meanwhile, Greyhound continued buying from the MCI (a subsidiary of its own) – more of the MC-5 and -5A, 100 copies of the MC-6 (15 for Canada and 85 for the US), then large numbers of the MC-7, -8, -9, and -12, the 96A3, 102A3, -D3, and -DL, and the G45.

The Motor Coach Industries (MCI), Limited, had begun in 1932 as an automotive body shop, named first as the Fort Garry Motor Body and Paint Works, Limited, in a suburb of Winnipeg, Manitoba, Canada, in one of the "prairie provinces" (Alberta, Saskatchewan, and Manitoba) of western Canada, north of North Dakota and Minnesota. It soon diversified into bus construction. In 1933 it built its first bus, a stretched Packard sedan, and in -37 it built its first bus from scratch on its own chassis. In -38 it filled its first order for new coaches for Greyhound in Canada.

In 1941 the firm became renamed as the Motor Coach Industries, Limited.

At first the MCI used under-floor Hall-Scott gasoline engines (as did ACF and ACF-Brill in the US and CCF-Brill in Canada).

However, the MCI later began to use rear-mounted gasoline engines (Continental in 1950, then International in -51), then rear-mounted Cummins diesel engines in 1952, then rear-mounted GM (renamed in 1958 as Detroit) diesel engines – the 4-71 in 1953, the 6V-71 in -61, the 8V-71 in -63, the 12V-71 (V-12) in -69 (in the short run of the MC-6), the 6V-92 in -79, the series 60 in -92, and the series 50 in -94.

Conclusion

The GM Scenicruiser PD-4501 is the most popular, distinguished, remarkable, and recognizable highway coach of all time in the US. While it served, "Scenicruiser" meant "Greyhound". Despite the early mechanical and other maintenance problems, the Cruiser remains as a significant cultural icon.

Related Articles

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Redhound for dogs. 5.4K likes. British dog attire inspired by Bruno our shivering whippet. Our mission is to help your hound stay warm & dry in Style.... Redhound for Dogs is the place for stylish attire for hound and human. Originally inspired by Bruno. See more. CommunitySee all. 5,426 people like this. 5,402 people follow this. AboutSee All.