lliance Bus Group introduced their two new CAIO models, the CAIO S3645 and the CAIO 3436, at the ABA Show in St. Louis and the UMA Motorcoach Expo in New Orleans in January of 2015. In addition to stainless steel construction, this new model offers several major improvements over previous models and may well be the highest quality sled integral intercity coach ever offered on the American market. Here is the background behind the coach and a list covering many of the improvements.

The story starts with the Alliance Bus Group, a well respected and major bus dealer with offices in Atlanta, New York, Dallas, Orlando, New Orleans, Jackson, Mississippi and New England. Alliance offers an extensive product line of several makes and models of buses. They are well known for their service, support and parts availability that is in keeping with their company motto, "Along for the Whole Ride."

While Alliance offers an extensive product line of mid-size buses, more and more of their customers were expressing an interest in moving up into full-size, heavy-duty coaches. As a result, the Alliance staff looked at alternatives and decided to work with CAIO of Brazil to produce the desired coaches. CAIO is the largest bus builder in the Western Hemisphere and builds as many as 9,000 buses annually. CAIO is also involved in bus operations including the huge municipal transit operation in Sao Paulo, Brazil. For more information on CAIO see the article in the September 2013 NATIONAL BUS TRADER.

In developing a coach for the American market, Alliance's primary goal was to combine the CAIO quality and experience with components that were suitable and easily sourced on the American market. The result was the 45-foot CAIO G3600 and the 36.7foot G3400 for smaller groups.

Keeping with American components, Freightliner supplied a power module for both the G3600 and the G3400 consisting of engine, transmission and running gear. This was combined with the body at the CAIO factory in Botucatu, Brazil in sled integral construction.

Both models were well received. Their high American content made them easy to service and source parts. The G3600 handled well and turned heads with its huge 517 cubic feel of underfloor luggage space. Once the Alliance customers got a taste of an integral coach with big coach features, they wanted more. An initial step came a year ago when Alliance worked with Freightliner to provide the Detroit Diesel DD13 engine as standard on the G3600. Since Freightliner and Detroit Diesel were both part of the Daimler family, this was not only a logical move but also provided several benefits for

The New Stainless Steel CAIO S-Series

A Major Step Forward in Quality

by Larry Plachno Photos courtesy of Alliance Bus Group

Alliance Bus Group recently introduced the new CAIO S3645 and S3436 models. Both feature stainless steel construction as well as several improvements over the previous models. Alliance is a major bus dealer with offices in Atlanta, New York, Dallas, Orlando, New Orleans, Jackson, Mississippi and New England. CAIO is the largest bus builder in the Western Hemisphere and is based in Brazil.

CAIO owners. For our test drive of the G3600 go to the May, 2014 issue of NATIONAL BUS TRADER.

Since then, Alliance has been working with CAIO on a higher quality addition to their American product line. In addition to providing increased quality and longevity by using stainless steel, several major improvements were incorporated in the new 45-foot model S3645 and the shorter S3436. The resulting S-Series may well be the highest quality sled integral coach ever offered on the American market. Here is a list of some of the CAIO S-Series improvements and features, the majority of which also apply to the shorter S3436.

CAIO S-Series - Features

The CAIO S-Series offers stainless steel integral construction for greater longevity and durability. It also reportedly offers the highest number of domestic components of any import to improve service and enhance parts availability. As you approach the CAIO S-Series, the first thing you will notice is its modern design and attractive European appearance. It will fit in well with your fleet and please your customers.

Noteworthy is the full exterior light package. In addition to using less electricity, the LED lights provide more safety and a longer duty cycle. Hella and Grote lights are used to offer both good value as well as making replacement easy. The American-made passenger windows are not glued in but are quick change and available as either single or double pane. They are easily replaced by your garage staff and offer 80 percent tinted panels. The windows are available from an American supplier to provide both an affordable replacement cost and greater availability.

Walking up to the luggage compartment door, you will find that the luggage handles have been moved to the center of the door. This new location makes it easier to open the door because it splits the load and it also reduces the possibility of damage to the handles. Open the door of the S3645 and you are looking at 517 cubic feet of underfloor luggage space, the largest in the industry. All of this space comes in handy on longer charters and tours as well being helpful on college team charters with their extra equipment. An 80 percent reduction in fasteners gives the luggage compartment a smoother look, makes it easier to clean and reduces the potential for luggage damage. There are lockable compartments for spare parts and other items.

If you walk around to the rear and open the engine compartment you will find one of the best features of the S3645, the Detroit Diesel DD13 engine. Originally introduced in buses in the late 1930s, the Detroit engine has been the bus power of choice for decades. Requests from customers as well as numerous other advantages prompted Alliance to select Detroit.

The Detroit engine offers a fiveyear/500,000-mile warranty, which amounts to 2.5 times the maximum mileage offered previously. This, combined with the fact that Detroit has a superior distribution network and better access to parts, is in keeping with the Alliance "Along for the Whole Ride" philosophy. Another major advantage of the Detroit engine is that it offers an upgrade of the GPS-based Virtual Technician that is limited to Detroit engines and only available on full-size CAIO coaches. It works in real time to help drivers and fleet managers watch engine operations and offers tablet-based fleet management solutions. Also provided is the standard electronic engine shut down protection with an override control.

A Jacobs brake retarder is included as standard equipment and serves as an additional safety feature while reducing brake wear. The coach is equipped with a 13-gallon DEF tank and a Webasto heater. An Allison transmission is included on all CAIO S-Series coaches. It has Allison's Fuel Sense system that maximizes fuel economy by selecting the ideal transmission shift points.

Improvements also apply to the axles, steering and suspension. The S3645 features new and improved ZF independent front suspension that provides increased stability and a better ride. It also has the ZF ITag steering



The new stainless steel CAIO models offer several improvements over the previous models. Noteworthy is the full exterior light package that uses longer-lasting LED lights. The American-made passenger windows are not glued in but are quick-change.



A major feature of the new CAIO S3645 is its huge underfloor luggage compartment. This 517 cubic feet of underfloor luggage space comes in very handy on longer charters and tours. A reduction in fasteners in the luggage compartment makes it easier to clean and reduces the potential for luggage damage.

tag axle that delivers a five percent improvement in turning radius and reduces tire scrubbing. Those who have driven the coach are complimentary of its performance and turning radius. The coach is also equipped with Sachs shocks that are tuned to provide the best ride quality and performance. ABS brakes and traction control are standard equipment.

If you walk up to the front door you can see the new door mechanism with a parabolic lift and seal that eliminates wind and road noise. A window at the bottom of the door provides additional safety in monitoring boarding or leaving passengers while giving the driver an advantage on locating the curb while parking. Moving up you will see the redesigned stepwell that provides a maximum step surface for passenger safety.

The driver's cockpit area includes a wraparound side console that includes a cell phone tray, dual USB ports and a driver storage tray. A redesigned dash improves driver convenience and puts important items within reach. There is a single door open / close button with



Walking in the door, you will find a redesigned stepwell that increases passenger safety. The driver's cockpit area features a redesigned dash with dual USB ports and a driver storage tray.



Passengers will notice the Amaya seats with three-point seat belts, the LED strip lighting that makes the interior brighter, the redesigned overhead console and the upgraded restroom.

a door-locking option. Dual (driver/tour guide) microphones are standard equipment as is a driver/passenger speaker selection while a GPS is optional.

Boarding passengers will note the LED strip lighting and redesigned overhead console with service-friendly doors and increased lighting for passenger visibility. Amaya seating is standard and all new coaches have three-point seat belts. Torino G or A2Ten Amaya seats are available and 110-volt outlets, airline-style tray tables, curtains, Satellite TV and foot rests are optional.

An upgraded restroom uses a fresh water flush. To eliminate odors, the waste tank is sealed off from the restroom compartment and is three times larger than previously to provide extra capacity on longer charters. A warning light on the dash warns the driver when it is time to dump.

Passenger comfort is provided by a Mobile Climate Control roof top system with a 655cc compressor. Optionally available is a TransAir Konvecta SL800 roof top system that includes a back 655cc compressor with V-groove belt drive. The coach comes with an REI Elite audio and video system that includes a DVD/CD player and a 2-DIN multi-media stereo receiver with an integrated backup camera monitor. An optional rear window "opens up" the rear of the coach and improves passenger visibility. With all of these improvements, the new CAIOS-Series is easily a leader in its class and will be a good addition to many fleets.

The new CAIO stainless steel coaches are built with Freightliner components to substantially improve the availability of parts and service. Provided as standard equipment on the S3465 is the improved ZF independent front suspension for a better ride and the ZF ITag tag axle that improves turning radius. Noteworthy is the Detroit Diesel DD13 engine with its five-year/500,000-mile warranty.





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