

New Apparatus Factory Inspection Proposal

For

Fire Departments, Fire Districts, Municipalities, and Private Industry

Big Red Trucks Fire Apparatus Consultants Inc.

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New Apparatus Inspections Services

Big Red Trucks Fire Apparatus Consultants, Inc. (*BRTFAC*), welcomes the opportunity to offer our new apparatus inspection services to Fire Departments, Fire Districts, Municipalities, and Private Industry.

Changing demographics in the fire service and the complexity of today's apparatus have had a large impact on the quality of inspections members of the Apparatus Committee can do. Many sales personnel I have spoken with tell me it's difficult to even get Fire Department members to attend inspections and those that do rarely, if ever, get under the vehicle. Dealership and factory personnel have their time being consumed by other obligations and don't have the time to spend two or three days going over all the details in the build documents and change orders along with performing a bumper-to-bumper inspection.

During the pandemic when many fire department members could not or would not travel. Once the factories allowed non-employees into their facilities, I and my associates conducted over 36 apparatus inspections. These included rescues, pumpers, aerials, and quints at six manufacturing facilities. Inspections ranged from a single vehicle to six apparatus at a single inspection. Customers having the inspections done ranged from small volunteer departments to major cities spread across two countries. Often times video conference calls were conducted with the apparatus salesmen and/or the fire departments as part of the process to make placement decisions or necessary adjustments so that those decisions were made with the input and approval of the end user.

BRTFAC inspections are performed by firefighters who are also trained mechanics and are certified Emergency Vehicle Technicians. Our inspections are based on the build documents generated after the pre-construction conference and the change orders that were approved during the build process. A function test of all components along with physical inspection of the apparatus. A written list of items that need to be addressed is given to and reviewed with factory and dealership personnel at the conclusion of the inspection. A comprehensive written report including pictures is provided to the entity that contracted **BRTFAC** to perform the inspection. Having an independent third-party inspector perform inspections and supply a written report that can then be forwarded to the customers relieves the dealer and manufacturer from any perceived conflict of being the position of supplying the vehicle and the certifying that it meets specification. It also allows personnel from dealership and manufacturer to devote their time to other responsibilities related to the process.

With each detailed inspection the **BRTFAC** customer receives a written report that includes a list of items that need to be addressed complete with pictures of the vehicle(s) inspected.

Cab and Chassis Inspection

Performed at the manufacturer's chassis plant, the complete cab and chassis assembly is inspected to make sure it was built and assembled to specification compliance. The assembly is inspected to ensure the apparatus is being manufactured as intended, that the correct components have been used and changes orders have been followed.

A chassis inspection is typically an overnight trip but in certain circumstances it may be able to be scheduled as a single day trip.

Inspection Type
Cab & Chassis Inspection – single axle
Cab & Chassis Inspection – tandem axle

Contact BRTFAC For Pricing

Mid-Process Inspection

This is sometimes referred to as the "pre-paint" inspection. A detailed "in process" inspection at the manufacturer's facility will be completed at the mid-point of the build process. This should take place before the body is mounted on the chassis assembly. All apparatus sections, components and modules are inspected. Fixtures and components that have been received by the manufacturer and are waiting for installation on the vehicle are checked for compliance with specifications and change orders.

- ✓ Inspect the chassis, frame, body, and other components for specification compliance and to ensure the apparatus is being manufactured as intended.
- ✓ Since the body is not mounted, this is an excellent time to perform a chassis inspection, if one was not done previously.
- ✓ The apparatus is not completely assembled, any potential problems are more easily discovered.
- ✓ This inspection typically takes a day and one half (1½) to two (2) days to complete.

Inspection Type
Mid-Process Inspection – single axle vehicle
Mid-Process Inspection – tandem axle vehicle
Mid-Process Inspection – aerial apparatus
Mid-Process Inspection – quint apparatus

Contact BRTFAC For Pricing

Final Inspection

Perform a "final inspection" at the manufacturer's facility to ensure the apparatus is manufactured according to the written specifications and any change orders.

- ✓ Should be scheduled when apparatus is a minimum of 95% complete.
- ✓ Inspections is extraordinarily thorough. All of the apparatus systems are checked, bumper to bumper, lights, pumps, aerial devices, heat, air conditioning, generators, mirrors, paint, and so on.
- ✓ If possible, the UL acceptance test(s) should be scheduled during the final inspection so that they can be observed by the purchaser.
 - If test(s) could not be scheduled during the final, they should be repeated in abbreviated versions during final, providing the factory can make those arrangements.
- ✓ Any deficiencies are documented and a written plan is formulated with the manufacturer and dealer to resolve all issues on the final inspection list. The plan includes the party responsible for correction, the factory or the dealer.

This inspection typically takes two (2) to two and a half ($2\frac{1}{2}$) days and can on a complex vehicle take longer. A minimum of two (2) complete days should be scheduled for a final inspection.

A detailed list of items that need to be addressed is compiled and copies are given the customer, the dealer and the apparatus manufacturer so that all interested parties remain informed with the same information. Customer receives a written report.

Inspection Type
Final Inspection – single axle vehicle
Final Inspection – tandem axle vehicle
Final Inspection – aerial apparatus
Final Inspection – quint apparatus

Contact BRTFAC For Pricing

<u>Pricing for Mid-Process and Final Inspections – Same Vehicle</u>

If the factory or dealership opts to contract for a mid-process and final on the same vehicle. The pricing structure would be as follows.

Inspection Type
Mid-Process & Final Inspection – single axle vehicle
Mid-Process & Final Inspection – tandem axle vehicle
Mid-Process & Final Inspection – aerial apparatus
Mid-Process & Final Inspection – quint apparatus

Contact BRTFAC For Pricing

In order to qualify for this pricing structure, the mid-process and final must be contracted for at the same time. The billing would be 50% of the inspection fee plus incurred travel expenses billed at the conclusion of each inspection.

Travel Services and Accommodations

BRTFAC does not bill travel time on a portal-to-portal basis. We bill for travel related expenses and transportation costs associated with travel expenses for visits to the manufacturer's facilities:

- Airfare, round trip
- Mileage
- Parking, if applicable
- Tolls, if applicable
- Ground Transportation
- Hotel Accommodations
- Meals Per Diem

Travel expenses are billed at actual cost and any discounts received are passed along to the customer. The appropriate party is billed for travel expenses at the conclusion of each trip.

Summary

In addition to new apparatus inspections, we also offer in-service apparatus inspections. These may be of particular interest to Fire Departments, Fire Districts, Municipalities, and Private Industry. Being an independent party that is not affiliated with any dealer or manufacturer, our written reports can help justify a Fire Department's request for funding new purchases.

Because of travel restrictions during the pandemic, *BRTFAC* associates performed numerous factory final inspections for dealers and their customers. Because of these inspections, BRTFAC has developed a thorough, efficient and complete inspection procedure that has been appreciated by the customer. *BRTFAC* welcomes the opportunity to discuss our inspection services with you.

<u>Bio</u>

I am a retired Captain from the Scarsdale, NY Fire Department, starting as a Volunteer Firefighter in 1975 and hired as a Professional Firefighter in 1980. Since the start of my career, I was involved in all apparatus acquisitions for the fire department. These duties encompassed all aspects of the apparatus purchase process from needs assessment, through specification writing, and putting the finished apparatus in service.

Coming from a smaller fire department has given me unique insight into the needs and design requirements of departments that operate with limited manpower. Have been involved in several apparatus refurbishment projects over the years and this has given me excellent firsthand knowledge of the pros and cons of this approach.

I am also a fire apparatus mechanic and hold certifications from Detroit Diesel, Allison Transmission, Hale Pump, Sutphen Fire Apparatus, Spartan Chassis, Smart Power, and is certified by the Emergency Vehicle Technician Certification Commission in six areas. Maintenance, Inspection, and Testing of Fire Apparatus (F-1), Design and Performance Standards of Fire Apparatus (F-2), Fire Pumps and Accessories (F-3), Aerial Fire Apparatus (F-5), Allison Automatic Transmissions (F-6) and Hydraulic Systems (F-8).

