

IMI Company - Cannon Equipment

Case Study

Customer: Toyota North American Parts Operation – Baltimore, MD

Toyota is the seventh largest company in the world and the second largest manufacturer of automobiles, with production facilities in 28 countries around the world.

Requirement:

Toyota North American Parts Operation, Baltimore, MD, needed to upgrade their parts distribution operation to increase efficiencies and provide better service to their network of dealers. Their old method used a combination of floor loading and pallets to ship auto parts to the dealerships during business hours, requiring store personnel to help with the labor intensive unloading process.

Toyota Goals:

- Make unattended nighttime (off hours) deliveries
- Shorten unloading times to allow drivers to make multiple stops
- Provide nightly deliveries instead of once or twice a week in their current operation
- Provide additional product protection to minimize shipping damage.

Solution:

Cannon Equipment used its 40 plus years of industry experience and know-how to develop a solution that satisfied the stringent needs of this project. Cannon worked with Toyota to develop a custom security cart to best fit their array of products, from bumpers to transmissions. We added a tie-down feature in the design of our cart to secure large and heavy components. Additionally, for added security and convenience we added safety features to allow multiple carts to be connected and secured in the trucks during transit.

Objectives:

- Develop a cart design to maximize the amount of products, including varying size body parts, that can be loaded onto carts
- Prepare prototypes for review and approval
- Value engineer the most cost-effective design to meet/exceed Toyota's functional and price requirements.

The new system allows shipping 90% of their parts by carts (which allows Toyota to maximize the cube in the trucks with a large mix of components). The cart also allows for reducing loading/unloading times by up to 75% while minimizing damage in transit. Using a 4 sided security cart also provides better accuracy and accountability of shipments. And in response to the TOYOTA GREEN INITIATIVE program, the new system eliminates use of shipping consumables - stretch wrap and wooden pallets.

