



PART# 2 (002)

2017 Ford Super Duty Structural Front End Module

COMPETITION WINNER OF: Automotive Division Innovation Awards Gala – Body Exterior Category Winner

SUBMITTED BY: Ford Motor Co.

PROCESSOR: Shape Corp.

DESIGNER: Ford Motor Co.

MOLDMAKER: Shape Corp.

OVERVIEW:

This all-composite design without metallic reinforcement is the first active grille shutter-capable, injection-molded long glass polypropylene (Celanese Celstran® PP-GF40-20) front end module bolster used on a heavy-duty pickup platform. The composite design replaces steel and a plastic/metal hybrids design for a 3 lb./1.4 kg and \$3 USD savings/vehicle. The design offers parts consolidation with locating features that aid fit and finish and improved airflow, while meeting structural requirements for part deflections of <1mm on this 8,500 lb./3,856 kg class vehicle.