

## PROTECTIVE FILM TAPE WITH RAISED PULL-TAB

### CUSTOMER

North American manufacturer of automotive instrument cluster and head-up display assemblies.

### PART

Surface protection film tape

### MATERIAL

Nitto R100 E-Mask, Blue Splice Tape

### APPLICATION

Temporary protection of glass surface on head-up display module during manufacturing and transportation



*This image is a representation, this is not the actual HUD module.*



### CHALLENGE

Marian's customer required a die-cut removable film tape to be placed onto the glass surface of their HUD modules before they shipped to their end-user for installation into the dashboard of the automobile. The purpose of the die-cut film tape was to protect the sensitive glass surface from scratching or marring during transportation and installation. The end-user, who installs the HUD modules, requested that the surface protection film tape be provided with a pull-tab so that removal of the piece was easier for their employees after installation. A typical pull-tab or extended liner is created by extending the liner off the side of the part. Due to the way the HUD module was installed into the dashboard, an extended pull-tab would not work. For a short period of time, Marian's customer was hand-applying blue splice tape to each part, which was extremely labor intensive and time consuming. The customer knew this was not a cost effective or high quality solution, therefore they decided to call Marian.

### SOLUTION

Marian proposed a die-cut surface protection film tape with a raised pull tab. The individual die-cut parts are provided to the customer wound on a roll for ease of handling. The raised pull-tab stands up straight off the top of the part (vs. extended to the side). When it is time for the employee at the end-user to remove the film, they can easily grab hold of the raised pull-tab to remove the part. See photo below. The ability to create a raised pull-tab within the high-speed rotary die cutting process is an example of Marian's innovative and industry leading manufacturing capabilities.

### CUSTOMER BENEFITS

- Marian's customer eliminated the time and labor that was associated with hand-applying the blue splice tape tab.
- The requirement at end-customer was met, providing ease of part removal. This decreased labor and created a more ergonomic process for the assembly team at the end-user