

# Cylinder-Head Cover Modules



**VICTOR REINZ®**

Sealing Products



## **One Module. One Source. One Partner.**

Victor Reinz® cylinder-head cover modules provide more than just dust protection, noise shielding, and air/oil separation. With other features such as sealing and isolating elements, the part is optimized for improved efficiency and faster speed-to-market.



# Cylinder-Head Cover Modules

## Testing Exceeds

**Standards.** Leakage tests, dynamic shaker tests, heat-aging tests in thermal cycle chambers, and NVH tests ensure that Victor Reinz® cylinder-head cover modules deliver a long service life under all conceivable operating and environmental conditions.

## Development Partner

Already a sealing system leader, Dana combines this experience with its design, analysis, and molding capabilities of cylinder-head covers to provide its customers a fully integrated module. One part number. One partner responsible.

Depending on the need, Dana engineers can design anything from a simple cylinder-head cover to an integrated system. Cover, gasket and grommets, fastener assemblies, spark plug seals, baffle, brass inserts, oil fill cap, air/oil separation system – you name it, Dana will deliver.

## Product Features

- Global experience in thermoset and thermoplastic materials
- Coupled or decoupled modules to support noise, vibration, and harshness (NVH) targets
- Integrated air/oil separation systems
- Inherent structural stiffness to reduce noise transmissibility
- Unique material formulations to improve durability

## Product Benefits

- Component reduction
- Simplified assembly
- Improved NVH
- Reduction of oil consumption
- Recyclable thermoplastic materials



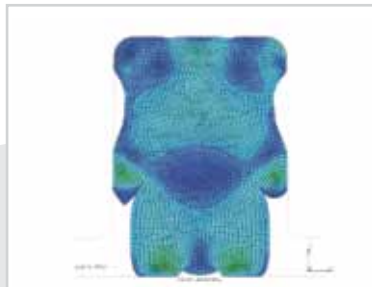
## Systematic Manufacturing

Highly automated production lines minimize time and cost.



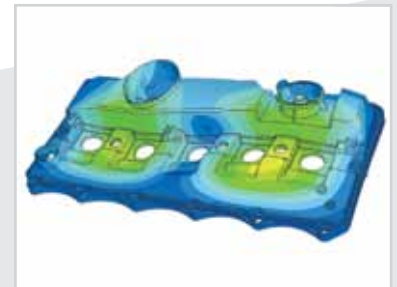
## 100% Leak Tested

Every cylinder-head cover is tested for sealing integrity.



## Finite Element Analysis (FEA)

Optimal alignment of cylinder-head cover gasket and gasket groove is achieved via 2-D analysis.



## NVH Testing

Modal analysis combats noise.

As important as the design itself, the material and manufacturing process utilized impact the final product. Dana is experienced in using the utmost precision with injection and injection/compression molding of thermoset and thermoplastic materials. Single and dual cavity approaches can be performed.

## Plastic Advantages Over Metal

Plastic cover modules reduce weight. Molding flexibility permits designs that deliver outstanding sound-absorption properties. Plastics enable cover modules to be manufactured simply, cost-effectively, and quickly. Time-consuming machining steps, such as turning, milling, and drilling, are eliminated because molded plastic cover modules come out of the machine in their final shape and finish. These are just a few of the many reasons to choose plastics.

## Dana Power Technologies Group

Global Research and Development Locations

Lisle, Illinois, USA  
Gravatai, Brazil

Paris, Tennessee, USA  
Wuxi, China

Oakville, Ontario, Canada  
Neu-Ulm, Germany

Pune, India



For more information, please call 1-888-670-DANA (3262) or visit [www.dana.com](http://www.dana.com)

## Application Policy

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.