



**New in the range**

## **Intake manifold modules for passenger cars**

**OE quality that professionals rely on –  
for reliable performance**



**purifying our planet**

[hengst.com](https://hengst.com)

**Hengst**  
FILTRATION

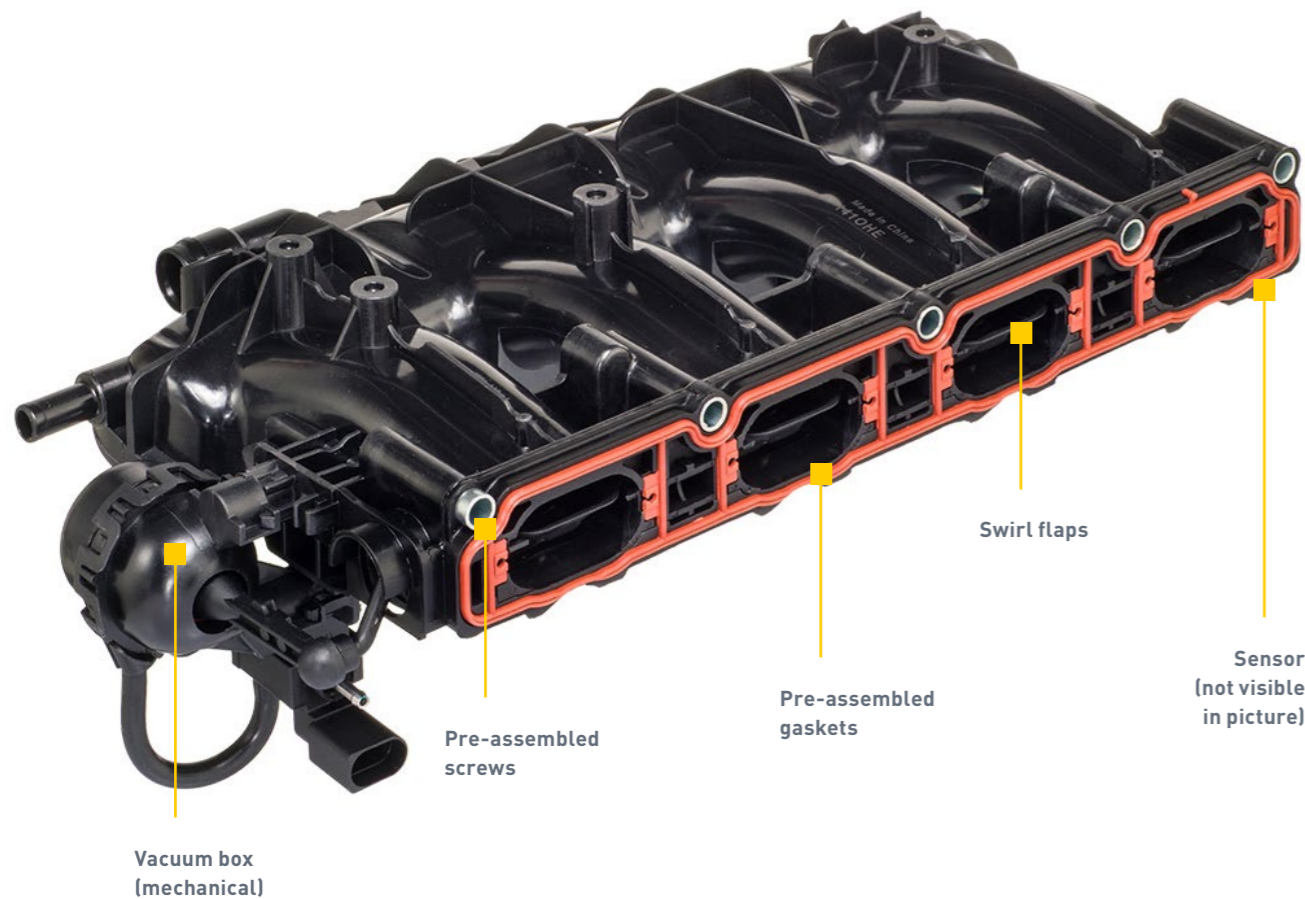
# What are intake manifold modules?

The intake manifold module, also known as the intake manifold or manifold, is a central component in the engine's air supply system. It feeds the combustion air cleaned by the air filter evenly into the individual cylinders, ensuring a stable, controlled air supply. This precise air distribution is crucial for clean and efficient combustion, which in turn has a significant impact on performance, fuel consumption, and emissions.

To ensure that this process functions reliably, the intake manifold module consists of a complex system of tubular lines and integrated functional components. Modern designs use swirl flaps to adapt the air flow to different load and speed ranges and ensure optimum turbulence of the intake air. In addition, sensors, actuators for throttle valve

control, or cooling water channels can be integrated to ensure constant temperature control and precise measurement data for engine management.”

Another important component in conjunction with the intake manifold is exhaust gas recirculation (EGR). It returns a portion of the oxygen-poor exhaust gases back to the combustion chamber to control combustion and reduce the formation of nitrogen oxides. The intake manifold module thus forms an essential hub between the intake air, throttle valve, and EGR system – and makes a decisive contribution to low-emission, fuel-optimized, and long-lasting engine function.



# Replacing the intake manifold module – understanding the causes, avoiding damage

## Typical symptoms

- **Visibly uneven engine running and loss of power:** False air causes uneven combustion, which manifests itself in jerking or reduced power.
- **Increased fuel consumption:** If the air-fuel mixture is no longer correct, more gas must be applied to achieve the desired performance.
- **Engine warning light illuminates:** Sensor errors, defective flaps, air leaks, or leaks are detected by the control unit and displayed as an error code in the instrument cluster.
- **Hissing or whistling noises:** Leaks in the intake manifold produce audible vacuum noises, which are particularly noticeable when accelerating.

## Common causes

- **Defective or coked swirl flaps:** Deposits block the flap mechanism so that it can no longer control correctly.
- **Return of exhaust particles (soot) through the EGR line:** Soot particles enter the intake manifold via the EGR system and settle there, which can lead to coking or clogging.
- **Faulty servomotors or sensors:** Electrical defects impair the air flow in the intake manifold because the flaps are no longer operated correctly.
- **Porous or damaged gaskets:** Porous or damaged intake manifold gaskets allow false air to enter, leading to irregular combustion and temperature fluctuations.

- **Cracks or material weaknesses in the plastic housing:** Tension, high temperatures, thermal stress, or mechanical stress (e.g., vibrations) can cause the module to crack, leading to leaks or loss of vacuum pressure.

## A defect rarely has no consequences

- **Overloading of servomotors and sensors:** Blocked flaps increase mechanical stress and cause consequential damage to electrical components.
- **Unregulated combustion due to incorrect air-fuel mixture:** Incorrect mixture formation leads to incomplete combustion, which puts a permanent strain on the engine and increases both wear and tear and pollutant emissions. In the worst case, poorer exhaust emissions can lead to a failed TÜV inspection.
- **Increased risk of serious engine damage:** If a defective intake manifold module is ignored, thermal and mechanical damage can occur, leading to total failure.
- **Damage to valves and pistons due to misfiring:** If the mixture preparation is not correct, misfiring can occur, which puts a heavy strain on components in the combustion chamber.

## Your added value from Hengst

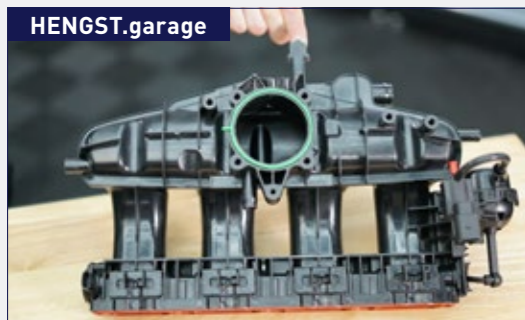
- Everything from a single source
- Time and cost savings
- Wide range
- Durable products
- Repair solutions from the original equipment manufacturer

# Your advantage with Hengst in your product range

- Complete and ready to install:** Includes installation materials and pre-assembled gaskets – reduces complaints and saves workshop time.
- Technology leader in injection molding:** In-house global production with plastic injection molding systems and winner of the ENGEL Award for plastics technology.
- Tried and tested technology from Germany:** We test our products for leak tightness, temperature resistance, material durability, and accuracy of fit on our own 45 test benches.
- Quality that counts:** The intake manifold module usually only needs to be replaced once or twice during the life of a vehicle – and when it is replaced, it should only be with our OEM quality.
- Avoid consequential damage:** Complete replacement instead of just changing the gasket prevents leaks, material breakage, and further visits to the repair shop.
- Wide vehicle coverage:** Our range covers more than 1,000 European vehicle models.
- High availability:** Our 98 percent delivery reliability ensures smooth day-to-day business.
- Efficiency in the parts business:** Our complete solution with only one item number ensures fast and uncomplicated ordering and order processes.



Quality control is carried out on specially equipped test benches.



Check out the YouTube video in the HENGST.garage, where our team presents the new intake manifold modules.



# Product range overview of Hengst intake manifold modules

## Excerpt from the product range

Hengst Type	GTIN Code	Vehicle application	OE number
H100L D1044	4030776097191	AUDI A4 B7 (8EC) AUDI A6 C6 (4F2) AUDI A8 D3 (4E2, 4E8) AUDI Q7 (4LB)	059129711CK
H101L D1045	4030776097207	AUDI A4 B7 (8ED) AUDI A4 B7 (8HE) AUDI A6 (4FH) VW TOUAREG (7LA, 7L6, 7L79)	059129712BQ
H102L D1046	4030776097214	AUDI A3 (8P1) AUDI A5 (8F7) SEAT LEON (1P1) SKODA OCTAVIA II (1Z3) VW PASSAT B6 (3C2)	03L129711AG
H103L D1047	4030776097221	AUDI A1 (8X1, 8XK) SEAT ALTEA (5P1) SKODA FABIA II (542) VOLKSWAGEN JETTA IV (162, 163, AV3, AV2)	03L129711AL

H100L D1044



H101L D1045



H102L D1046



## Excerpt from the product range

Hengst Type	GTIN Code	Vehicle application	OE number
H104L D1048	4030776097238	AUDI A3 (8P7) AUDI Q3 (8UB, 8UG9) SEAT ALHAMBRA (710, 711) SKODA YETI (5L) VW GOLF VI (5K1)	06J133201BH
H105L D1049	4030776097245	AUDI A4 B8 (8K2) AUDI Q5 (8RB) SEAT ALTEA (5P1) SKODA SUPERB II (3T4) VW TIGUAN (5N_)	03L129711E
H106L D1050	4030776097252	AUDI A3 (8PA) SEAT ALTEA (5P1) SKODA OCTAVIA II (1Z5) VW PASSAT B7 (365)	06J198211D
H107L D1051	4030776097269	AUDI A5 (8T3) SEAT LEON (5F1) SKODA OCTAVIA III (5E3, NL3, NR3) VW GOLF VII (5G1, BQ1, BE1, BE2)	06L133201GA
H108L D1052	4030776097276	MERCEDES-BENZ C-CLASS (W203) MERCEDES-BENZ CLK (C209) MERCEDES-BENZ E-CLASS (W210)	A 611 090 13 37
H109L D1053	4030776097283	BMW 1 (E81) BMW 3 (E90) BMW X1 (E84)	11618507240
H110L D1054	4030776097290	MERCEDES-BENZ C-CLASS (S203) MERCEDES-BENZ E-CLASS (W211) MERCEDES-BENZ M-CLASS (W163)	A 612 090 03 37 A 612 090 10 37 A 612 090 19 37
H111L D1055	4030776097306	BMW 1 (F20) BMW 2 (F22, F87) BMW 3 (F34)	11617807991

H104L D1048

H105L D1049

H108L D1052

H111L D1055

## Excerpt from the product range

Hengst Type	GTIN Code	Vehicle application	OE number
H112L D1056	4030776097375	BMW 3 (E90) BMW 5 (E60) BMW X3 (E83)	11617800585
H113L D1057	4030776097313	AUDI A3 (8P1) SEAT LEON (1P1) VW PASSAT B6 (3C2)	03G129711AS
H114L D1058	4030776097320	MERCEDES-BENZ SPRINTER (B906) MERCEDES-BENZ V-CLASS (W447) MERCEDES-BENZ VITO (W447)	6510905737
H115L D1059	4030776097900	BMW 1 (E87) BMW 3 (E90) BMW 5 (E60) BMW X1 (E84)	11618507239
H116L D1060	4030776097337	CITRÖEN C3 (FC_, FN_) CITRÖEN C4 I (LC_) PEUGEOT 307 SW (3H) PEUGEOT 308 I (4A_, 4C_)	0361.N3
H117L D1061	4030776097344	OPEL AGILA A (H08) OPEL CORSA D (S07) MERIVA A (X03)	55207034
H118L D1062	4030776097351	OPEL ASTRA J (P10) OPEL INSIGNIA A (G09) OPEL ZAFIRA C (P10)	16 84 882 480 55 566 258 55 571 993

H114L D1058

H115L D1059

H116L D1060



purifying our planet

All information is provided without guarantee.  
The table shown is an excerpt from our constantly growing product range. For more detailed information on the above vehicle assignments and other vehicle applications, please visit our online catalog: [catalog.hengst.com](http://catalog.hengst.com)

# OE INSIDE



**Hengst**  
AUTOMOTIVE



## **Built on OE. Made for the Aftermarket.**

Since 1958, Hengst has stood for OEM quality, technical precision and partnership. With OE inside, we bring these strengths to the aftermarket – with proven standards, high product availability on four continents and a broad portfolio for all important applications. For wholesalers: this means reliable product ranges, fast digital processes with parts always available. For garages: parts that work, quality that impresses and services that you can rely on.



SCAN ME

### **Hengst SE**

Nienkamp 55-85 | 48147 Münster | Germany

+49 251 20202-0 | [aftermarket@hengst.com](mailto:aftermarket@hengst.com)

[hengst.com](http://hengst.com)    

**Hengst**  
FILTRATION