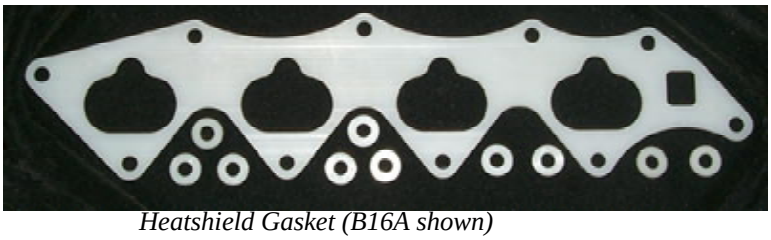
Hondata have developed a special high temperature insulating gasket which replaces the stock intake gasket. This and bypassing several heat sources significantly reduces the transfer of heat from the head to the intake and incoming air giving you up to 4% more power.

B16A, B18C, H22A



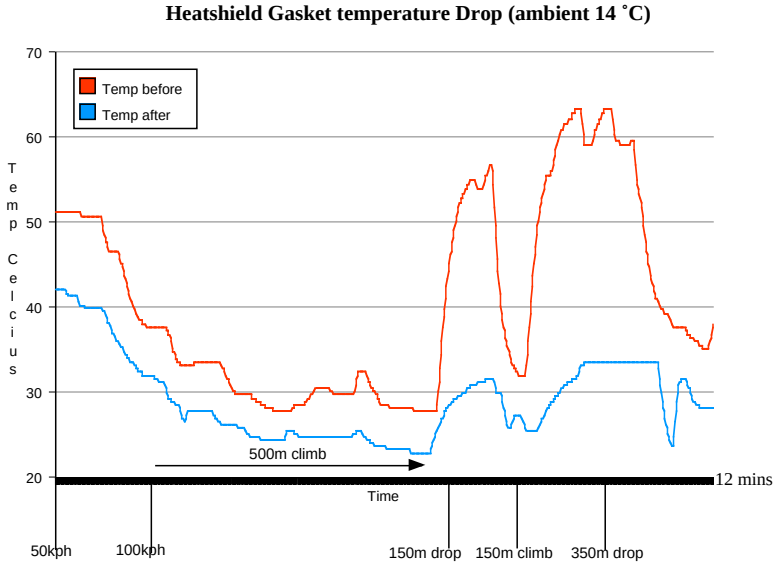
Heatshield Gasket (B16A shown)

Turbocharged cars often use an aluminum intercooler to cool the air compressed by the turbo. The intake manifold is also made of aluminum but because it is heated by the engine and coolant, works in reverse by heating the incoming air by as much as 50˚ C (90˚F)

Fact: For every 3.3 ˚C rise in intake temperature, air density drops 1%. The hotter the air, the less fuel the computer injects to compensate for reduced oxygen. Hondalogger datalogging software has enabled us to measure intake air temperature under varied driving conditions.

Around town, testing has shown an average drop of around 15 degrees C which is good for around 3-4 percent power increase. Remember though that 3-4 percent power increase is difficult to feel. You'd feel a greater change in performance getting rid of that passenger.

The graph to the right shows the results of installing the Heatshield gasket and bypassing the throttle body heating and idle control valve heating. If you examine a Type R intake manifold you will find that most sources of water heating are removed. Further temperature drops are possible when in addition the coolant bypass is blocked.



What the graph shows, is that as you open the throttle, the intake temperature drops slowly as it cools the intake. When you descend a hill with the throttle closed or drive around town on a light throttle the temperature climbs quickly. It takes a good 15-20 seconds for the temperature to drop again when you open the throttle. So if you start your 1/4 mile drag with a hot intake manifold - you are only starting to develop maximum power near the end of the run when the intake has been cooled. The heatshield gasket gives you 3-4% more power immediately by lowering the intake temperature.

The B16A manifold for example is heated in 5 places. From the head, the interior heating takeoff hose, the cold idle valve, the idle control valve and the throttle body heater. The Heatshield gasket kit contains an intake insulating gasket, 10 insulating washers and instructions to bypass these heat sources.

Hondata also make a heatshield gasket wihout the hole for the coolant bypass next to intake runner # 4, for additional cooling.

Extensive information and updates at **www.hondata.com**
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