



NEW PRODUCT INFORMATION

【Products on display】

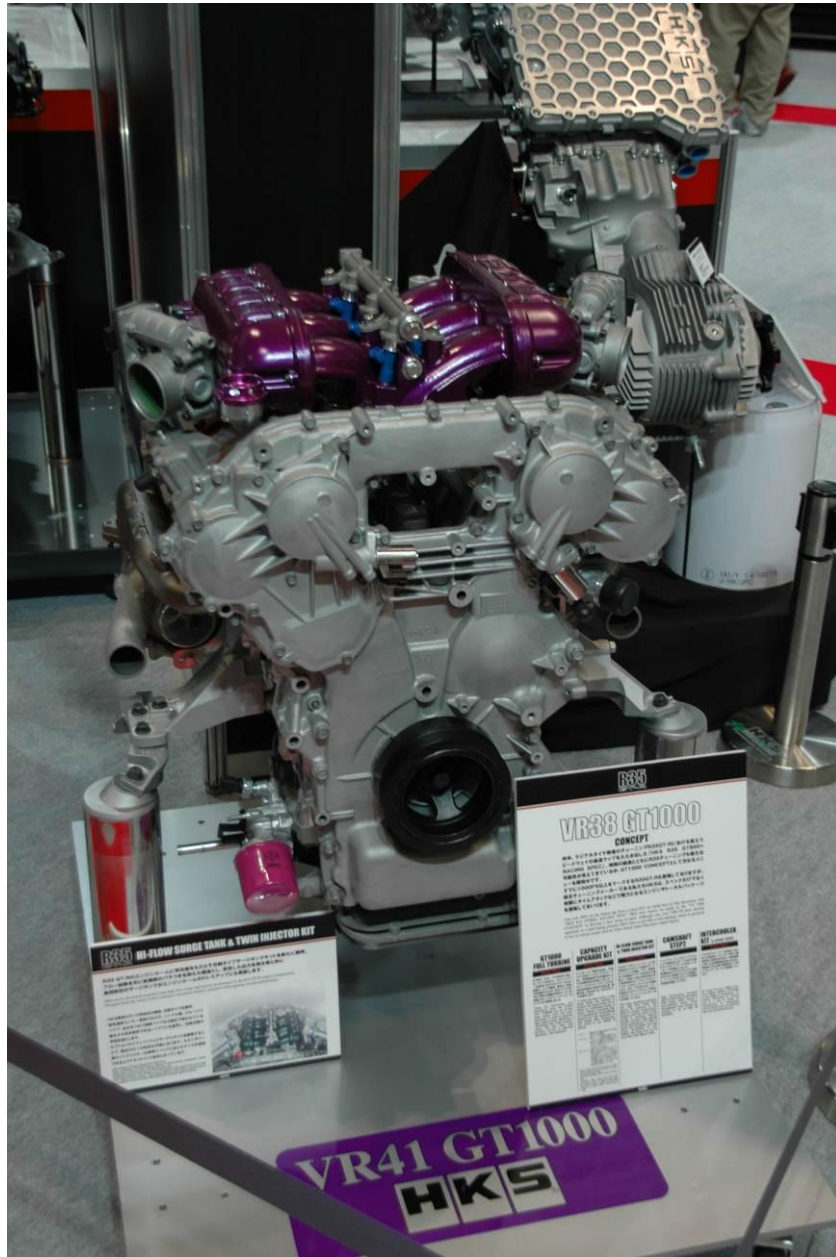
HKS Co., Ltd.

www.hks-power.co.jp

■ HKS R35 GT-R Section

■ HKS R35 GT1000 CONCEPT

- GT1000 FULL TURBINE KIT (To be released in April, 2012)



GT800 Full Turbine Kit was developed to provide "total balance" and has been received good feedback. Strengthening the transmission and engine by further analysis, "total balance" can be reached higher level.

With the improved engine and transmission, GTII 7460, which was utilized in GT800, was fully redesigned so 600ps over engine power is achievable. By taking full advantage of in-house development and manufacturing abilities, redesigning was done with a great attention to details. Not only just increasing the capacity of a turbine but also number of

wheels, height, diffuser's length, nozzle width, etc. were reviewed to create ultimate "Symmetry Twin Turbo Layout" turbine kit perfectly complying with the turning turbine kits' prerequisite, high quality and high resistance.

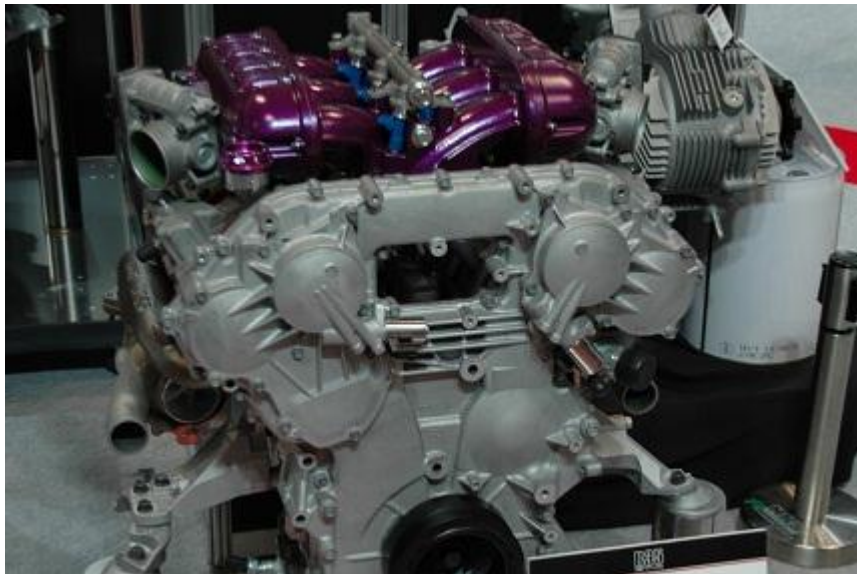
• **CAPACITY UPGRADE KIT (To be released in April, 2012)**



To match the larger turbines, a long stroke design was selected to increase low speed torque and to deliver an outstanding feeling of torque. Pistons, connecting rods, and crankshaft are all specifically designed for this application in high quality billet construction and proud to say **MADE IN JAPAN**.

- Piston: Forged from high specification material. Ultra-short height design reduces friction and weight for performance optimization.
- Connecting Rod: Highly reputed STEP2 Connecting Rods.
- Crankshaft: Billet design built from high specification material. Its engine specific design was created from HKS' expertise in racing field. Designed for optimal balance without excess weight.

• **HI-FLOW SURGE TANK (To be released in March, 2012)**



HKS newly developed separated type high flow surge tank asserts its presence in the R35GT-R engine compartment. Design was created from the result of flow testing to maximize balance between cylinders while gaining overall performance. In order to obtain both drivability and high output capabilities of over 1000PS, this surge tank can be used with a twin injector setup.

• **INTERCOOLER KIT (LARGE SIZE) for R35 GT-R [prototype]**



To bring out over 1000ps from the engine, efficient air-intake to the engine is necessary. To reduce increment in volume due to a rise in intake air temperature, an intercooler core is larger and more efficient than the conventional core.

■ **HKS S2000 Section**

■ **HKS AP350SC-II CONCEPT**

- **GT SUPERCHARGER COMPLETE KIT** [prototype]



HKS GT Supercharger increases torque as the engine RPM increases, and compliments VTEC engine characteristics which has 2 profiles without losing stock natural feeling.

This feeling of acceleration after switching to the high speed camshaft can only be experienced with GT Supercharger.

GTS7040 was chosen for the main unit to reach approximately 350ps.



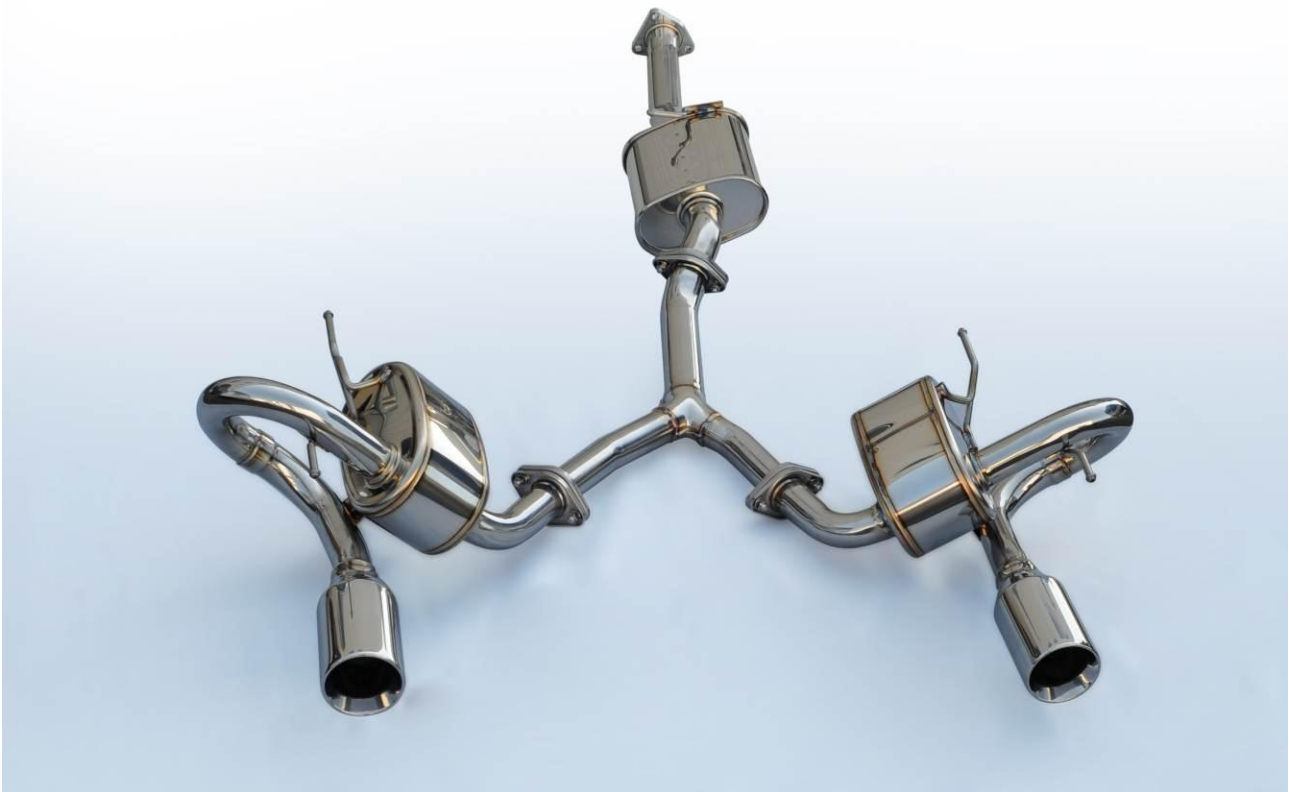
• **EXHAUST MANIFOLD ¥123,900 (To be released in January, 2012)**

This exhaust manifold does not sacrifice the torque characteristics at low to mid speed range. The layout is the same 4-2-1 type as the factory manifold. HKS' exhaust manifold is twisted at "2" to extend the pipe length allowing the torque improvement at mid speed range. Knocking can be reduced so setting range of the ignition timing and air-fuel ratio can be wider.

• **METAL CATALYZER ¥93,450 (To be released in January, 2012)**

HKS Metal Catalyzer utilizes 150cpsi cell design compared to the factory 400casi design. Pressure loss reduction and high emissions standard are implemented together. Pressure loss reduction particularly affects at high engine RPM range providing sharp engine feeling and response.

• **SUPER SOUND MASTER ¥197,400**



HKS created a muffler which maximizes the distinct high rpm VTEC sound for an aural sensation like no other. However practicality was not neglected and daily driving at lower rpm is comfortable with minimal drone which could be mistaken for stock. SSM is 30% lighter

than stock which contributes towards the handling characteristics of the lightweight sports car.

- **V CAM SYSTEM [prototype]**



An engine that prioritizes high rpm response and power output tends to suffer a lack of torque at lower rpm ranges. The HKS VCAM SYSTEM is designed to overcome these problems.

Camshaft profiles were reviewed on both high and low cam. Also adding continuous variable valve timing to the intake side can massive improve the potential of the engine from low rpm all the way to the redline. Optimized valve timing also improves combustion conditions leading to improved fuel economy and cleaner exhaust gas emissions.

■ HKS VELLFIRE Section

■ HKS S-Style VELLFIRE



- **HIPERMAX S-style X [for EXTREME LOW FORM] ¥207,900**

HKS S-style X was designed for remodeling car experts to stand out and to make vehicles more stylish. This suspension kit is not only to lower the vehicle height, but also to provide traditional HKS Hipermax series' steady driving experience.

- **HIPERMAX S-style L [for LUXURY & ALMIGHTY] ¥186,900**

HKS S-style L was designed to be highly reliable in various uses under any conditions. This new damper is recommended to preserve or improve the ride quality after upgrading tires and/or lowering the vehicle height. The driver can change the ride characteristics at will.

- **HIPERMAX S-style C [for CASUAL & COMFORT] ¥152,250**

HKS S-style C was designed for those who want to enjoy the driving with family or friends with customizing cars.

HKS S-style C can provide comfortable long distance driving even with a customized car.

• **SUPER SOUND MASTER ¥283,500**



HKS SSM includes a front pipe, CAT, center pipe, and main muffler. HKS' expertise in exhaust tuning achieved 12ps engine output increase even with an NA engine. A noise test certification and emissions test certification for CAT are provided. HKS' equal length front pipe and full dual layout from the mid pipe to main muffler improves the exhaust sound quality. An unprecedented exhilarating sporty sound begins the moment the accelerator is pressed.

■ 2012 HKS NEW PARTS Section

- FLASH EDITOR (To be released in March, 2012)



HKS' Flash Editor allows "re-flash" of the factory ECU simply by selecting from the factory mode, 1st mode, and 2nd mode after connecting to the OBDII. A factory preset map has data prepared based on lightly tuned engines. When tuning level becomes higher, HKS PowerWriter shops take care of setting using Flash Editor.

【To be available for the following applications】

	Vehicle	Model	Engine
SUBARU	IMPREZA STi	GRB/GVB	EJ207
	IMPREZA STi	GRF/GVF	EJ257
	LEGACY	BR9/BM9	EJ255
	LEGACY	BP5/BL5	EJ208/EJ206
MITSUBISHI	LANCER Evolution IX	CT9A	4G63
	LANCER Evolution X	CZ4A	4B11

* More application will be released

• **F-CON V Pro** (To be released in April, 2012)



HKS F-CON V Pro is a full computer for high-level professional car tuners. Addition of new functions will render the unit compatible with latest vehicles.

Fuel Injector control for up to 8 injectors, and 8 independent ignition settings will be possible. To enhance its compatibility with latest vehicles, "Drive by wire control," "Variable valve timing control," and "Boost control" will be added as new functions.

To increase in the level of convenience in settings, logging capability will be improved to 8MB, and the A/F Knock functions will be built-in.

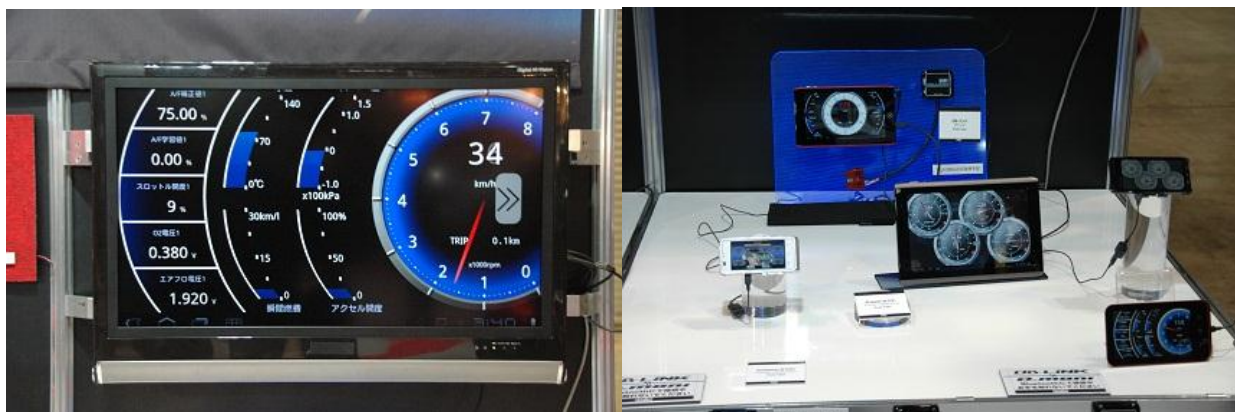
• **EVC6 ¥68,250**

HKS EVC has become synonymous with boost controller. The EVC has been redesigned utilizing a TFT full color liquid crystal panel. In addition to the highly-reputed boost pressure control capability using stepping motor, visibility and operability have been dramatically improved.

3 different boost pressure settings are available to improve its usability.

EasyWriter software is under development to fully utilize the functions of EVC6.

• **OB-LINK (To be released in March, 2012)**



With HKS OB-Ling, vehicle's information, fuel efficiency information, circuit lap time, etc. can be monitored on your Smartphone or tablet PC (Android compatible) after installing applications (available separately) and connecting a small Bluetooth transmitter to the OBD connector.

【D-moni】 D-moni shows vehicle data on various design meters.

Car Chart: Maintenance record of each part

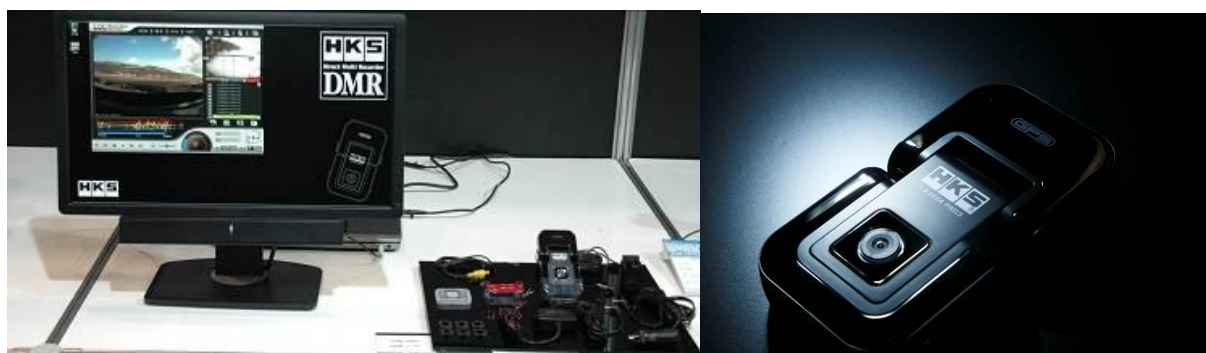
Smart Meter: Vehicle data such as speed, RPM, etc is shown on stock-like meters.

Tuning Meter: Vehicle data are shown on aftermarket-like meters.

Data Monitor: Vehicle's data is shown in figures and on a bar graph.

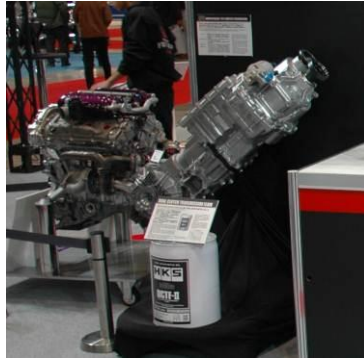
Fuel Consumption Calculation: Fuel consumption record, average consumption, and/or momentary fuel consumption is shown.

• **DMR-150D (To be released in March, 2012)**



HKS DMR-150D which minimizes radio emission with radio shielding, will be released soon. HKS DMR can record driving and allow digital terrestrial broadcast viewing at the same time.

- **DCTF-II (To be released in April, 2012)**



Extreme-pressure performance was improved based on DCTF-1, and gears' antiwear performance was enhanced. Flow properties are improved over stock fluid at low temperatures providing smoother driving even under normal driving conditions. High temperature properties have also been improved for better performance during high load driving. HKS DCTF-II will be affordable making it ideal to use during regular maintenance or overhauls even the base oil is 100% synthetic.

- **SUPER OIL HR ¥9,975 (4L)**

The target engine for HKS Super Oil HR series are the most-advanced NA engines. Friction reduction can be experienced under various driving stages from daily driving to circuit driving. Oil viscosity change is reduced while maintaining the oil film to run the engine without stress.

- **SUPER RACING DIESEL ¥3,360 (4L)**

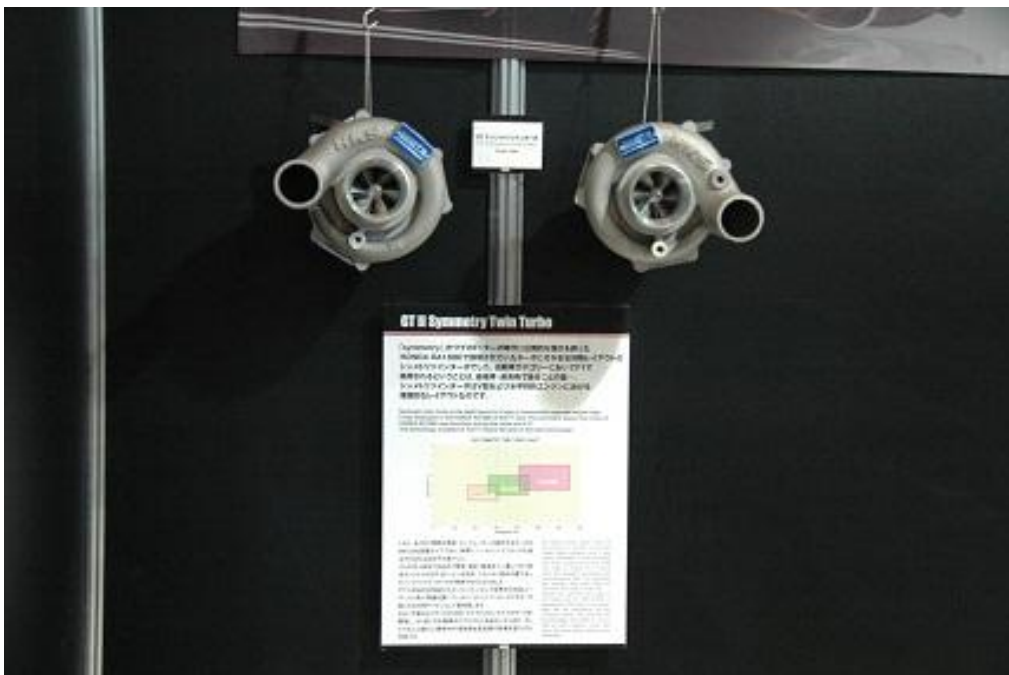
100% synthetic blend oil can maintain the stable property of heat resistance and abrasion resistance not only for stock diesel engines but also for tuned diesel engines. In-house tests of this Super Racing Diesel Oil were conducted both in Japan and overseas where is the major market of diesel engine vehicles.

• GTII TURBINE



New turbine size will be available for HKS GTII Turbine. GTII Turbines are originally designed and manufactured by HKS. Full Turbine Kit for S14/S15 and JZX100 utilizing GTII Turbine are now under development, and R35 GT1000 Full Turbine Kit with a "Symmetry Twin Turbo Layout", where left and right side turbines revolve in opposite directions.

• GTII SYMMETRY TWIN TURBO [prototype]



"symmetry"~ It was utilized to HONDA RA168E, which drew overwhelming strength in F1 turbo era. "Symmetry Twin Turbo Layout" has left and right side turbines revolve in opposite directions. Being employed by F1 machine is a proof of its quality and function. Symmetry twin turbo layout is an ideal for v-shaped and horizontal opposed engines. However, there always is a difference between what's ideal and what people can do; 99% of turbines manufactured are clockwise rotation type. It was almost impossible to utilize a symmetry twin turbo layout.

Since HKS has developed, designed, and manufactured original GTII turbines on its own,

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utilizing a symmetry twin turbo layout to HKS GTII turbines is now possible.

HKS has already utilized a symmetry twin turbo layout to GT800 Full Turbine Kit for R35, which has received great feedback from R35 owners. HKS will release a universal symmetry twin turbine kit.

To meet more customers' request, HKS keeps developing GTII turbine of larger and smaller sizes using new technology to provide high quality and high performance.

• GT SUPERCHARGER



HKS has developed and manufactured GT Supercharger as next generation supercharger. HKS GT Superchargers are available from GTS4015HP for 1500cc engines to GTS8555 for 5000cc class large displacement engines. HKS will develop more GT Supercharger to be compatible with a wider range of vehicles including S2000 currently in development.

GTS8555 Assy ¥289,800 (To be released in January, 2012)

■ HKS EXHAUST Section **【JASMA Booth】**

- LEGAMAX Premium for CR-Z (To be released in February, 2012)
※Installed to HKS CR-Z (ZF200SC+h) displayed at TAS



Impressive rear view has been designed for advanced design and environmentally-oriented compact sports car CR-Z. Exhaust system and finisher has been developed together. Original center pipe layout was changed not only to enhance appearance but also to improve performance. This exhaust system was also designed to optimize performance of Supercharger.

Finisher was made of "Dry Carbon" to make it more sporty and beautiful.

• **SUPER SOUND MASTER for ALPHARD & VELLFIRE/GGH20W** **¥283,500**



Amazing 12ps increase from an NA engine!

HKS SSM includes a front pipe, CAT, center pipe, and main muffler. HKS' expertise in exhaust tuning achieved 12ps engine output increase even with an NA engine. Power and torque increase at all speed ranges. Upgraded ride quality can be experienced at startup and during street and highway driving.

A noise test certification and emissions test certification for CAT are provided.

Equal Length & Full Dual Layout Creates Exhilarating Sporty Sound.

Factory unequal length front pipe causes exhaust interference at the join preventing exhaust sound improvement.

HKS' equal length front pipe and full dual layout from the mid pipe to main muffler improves the exhaust sound quality. An unprecedented exhilarating sporty sound begins the moment the accelerator is pressed.

• Super Turbo Muffler for Legacy Touring Wagon (TA/CBA-BP5) ¥159,600



Reduction of Cold Engine Idling Sound & Exhaust Noise was the target concept. Unwanted sound such as idling noise in the morning, low exhaust resonance, etc was reduced! Remarkable silence can be experienced with vehicles equipped with upgraded metal catalyzer. Performance improvement and noise reduction are implemented together!

Low Exhaust Pressure - 90% less than the stock's pressure.

Optimized pipes' diameter & bent positions and straight through construction reduced the exhaust pressure 90% less than the stock's pressure. Installing this exhaust system is highly effective on high performance vehicles with upgraded turbines and over 400ps engine power. Noticeable performance improvement by significant exhaust pressure reduction!

• **Super Turbo Muffler for Lancer Evolution X (CBA-CZ4A)**
(To be released in February, 2012)



To deal with hard tuned engine up to 500ps, the exhaust system utilizes two $\phi 75-\phi 60$ pipes and straight design. Exhaust friction was reduced by approximately 80% less than the stock friction. Quiet, but powerful exhaust system which also provide drive comfort for daily driving.

• **Metal Catalyzer for CR-Z (DAA-ZF1) (To be released in February, 2012)**



Original CR-Z's exhaust manifold is the 4-1 type layout in the cylinder head, and it connects to 1st catalyzer. HKS Metal Catalyzer replaces this layout with the 4-2-1 layout to remove the primary catalyzer. Instead of the primary catalyzer, a divider is inserted so HKS Metal Catalyzer works as an exhaust manifold.

Even without the primary catalyzer, HKS Metal Catalyzer can provide high purification

performance to clear the latest emission regulation. Pressure loss was further reduced compared to the stock system leading engine output increase.

Dividing the primary catalyzer prevents exhaust back-flow at high temperature, decrease temperature inside the pipe to improve antiknock function, and improve engine output.

• **SUPER SOUND MASTER for S2000 (ZH/LA/ABA-AP1) ¥197,400**



Enjoy NA Engine's Unique Characteristics !

HKS created a muffler which maximizes the distinct high rpm VTEC sound for an aural sensation like no other. However practicality was not neglected and daily driving at lower rpm is comfortable with minimal drone which could be mistaken for stock. SSM is 30% lighter than stock which contributes towards the handling characteristics of the lightweight sports car.

Not only the sound was researched, but also the weight was engaged in intensive research. The system weight was trimmed to 30% less than the factory system even with twin exit exhaust layout. Sound level is only 94dB when combined with HKS Exhaust Manifold and Metal Catalyzer.

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• **EXHAUST MANIFOLD for S2000 (GH/LA/ABA-AP1) ¥123,900**

(To be released in January, 2012)

This exhaust manifold does not sacrifice the torque characteristics at low to mid speed range. The layout is the same 4-2-1 type as the factory manifold. HKS' exhaust manifold is twisted at "2" to extend the pipe length allowing the torque improvement at mid speed range. Knocking is also reduced, increasing ignition timing and air-fuel ratio for further performance and stability.

• **METAL CATALYZER for S2000 (GH/LA/ABA-AP1) ¥93,450**

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