





Ride of Dreams





Exhaust Manifold & Muffler System

*\$*50

The specification decided by engine bench testing & actual racing.

Engine bench testing & actual racing Exhaust manifolds manufactured by TODA Racing are used in competition. Ideal lengths, diameters, and shapes are determined using the feedback data from racing and continual bench testing.

Ideal4–2–1 design For ultimate power the 4-1 type exhaust manifold design is the one to use.

The problem is that power is only made from 4,500 rpm in the process removing drivability. TODA racing have designed a 4-2-1 system which restores drivability 15% more torque*with only 1.5% loss of power*.

*TODA 4-1 bench testing manifold used for comparison

As used on all the latest 4-cylinder racing engines the 4-2-1 gives best results.



¥108.000

- A bench test (Equal length 4-2-1+ Taper) Design ϕ 45mm $\rightarrow \phi$ 50mm $\rightarrow \phi$ 55mm \rightarrow Taper $\rightarrow \phi$ 60mm *Taper design is adopted from feedback from both racing and the bench testing.
- Racing high flow junctions design

Each section of the manifold has optimized pipe lengths, diameters, and angles as well as high flow junctions.

- Racing look spring joint design
- No exhaust gas leakage as all joints are welded.
- Made of light weight stainless steel for both durability and looks.
- Flange manufactured by high precision machining center.
- Standard catalyst can be used. (Automatic transmission can not be used)

TOYOTA **4AG** AE86







122 TODA POWER PRODUCTS Exhaust Manifold

COROLLA LEVIN SPRINTER TRUENO

Original 2000 version of the 4-2-1 design.

For ultimate power the 4-1 type exhaust manifold design is the one to use basically. The problem is that power is only made from 4,500 rpm in the process removing drivability.TODA racing have designed a 4-2-1 system which restores drivability 15% more torque^{*} with only 1.5% loss of power^{*}

TODA 4 -1 bench testing manifold used for comparison.

As used in the 1999-2000 TI circuit 4AG(AE86) for N1 AE86 Championship winning ca EX Down Pipe & Muffler SET(SUS) ¥180,000 (Made to order)



Made of light weight stainless steel for both durability and looks.

Center muffler is eliminated, improved power output.

To cope with exhaust noise regulations, a larger volume rear muffler is used.

Standard cast iron exhaust manifold & standard gasket used.

HONDAI

Injecti

Flywheel

Gear Box

Ex Manifold



Should be used in conjunction with Toda Racing performance items in producing the best power. A study of design and without compromise TODA High Power Muffler is a genuine TODA Racing performance item.

Dolphin tail style titanium end pipe

Dolphin tail style titanium end pipe has been designed to reduce over hanging weigh and to give improved looks. Blue heat treatment giving a hard worked racing image. With the end receiving special treatment to prevent cracking.

Stainless steel & straight diameter system

The internal design is based around a constant ϕ 60 pipe, with no bends or restrictions the engine is able to breath more freely so releasing more power. 3 piece design

Handling easier due to compact 3 piece design. (Stainless) Center pipe ϕ 60 mm + (Titanium) Tail pipe ϕ 90 mm/ Dolphin tail.

K20A DC5

K20A(DC5) High Power Muffler System (Dolphin tail) ¥110,000 Weight :12kg



К2ОА ЕРЗ

TYPER

K20A(EP3) High Power Muffler System (Dolphin tail) ¥110,000 Weight :11.7kg





Straight tail style titanium end pipe

Straight tail style titanium end pipe has been designed to reduce over hanging weigh and to give improved looks. Blue heat treatment giving a hard worked racing image. With the end receiving special treatment to prevent cracking.

Stainless steel & straight diameter system

The internal design is based around a constant ϕ 60 pipe, with no bends or restrictions the engine is able to breath more freely so releasing more power.

3 piece design

Handling easier due to compact 3 piece design. (Stainless) Center pipe ϕ 60 mm + (Titanium) Tail pipe ϕ 100 mm/ Straight tail.

K20A DC5

K2OA(DC5) High Power Muffler System (Straight tail) ¥98,000

weight :12kg









One

Fiming Belt

Gasket

Injection



HONDAI

K20A FD2



racing image. With the end receiving special treatment to prevent cracking. Stainless steel & straight diameter system

The internal design is based around a constant ϕ 60 pipe, with no bends or restrictions the engine is able to breath more freely so releasing more power.

3 piece design

Handling easier due to compact 3 piece design. (Stainless) Center pipe ϕ 60 mm + (Titanium) Tail pipe ϕ 100 mm/ Straight tail

Decibel level test results (Japan Vehicle Inspection Association) A copy of this document (right) is attached to this product.

• ALLER AND A COMPANY	CONTRACTOR - 101 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 -	騷音試験成績表
	HAAA	The FD2/TODA muffler was measured
	HARD TARE STOLEN AND MADE	to produce 94dB by JVIA.
		*A standard FD2/Civic-R with a TODA
		muffler was used for the test.
		This result can not guarantee the passing
		or failing of any other car.
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K20A(FD2)

18160-FD2-000

K20A FD2





Installed image with stock protector



CIVIC TYPE

K20Z(FN2) Exhaust Manifold(4-2-1 SUS) ¥120,000

K20Z FN2



*φ*60

In order to get the best performance, engine power, efficiency, this exclusive exhaust manifold design takes into consideration not only the special characteristics of the K20A engine but also the results of an extensive bench testing program.

- Racing purpose only(the catalyst can not be installed) A bench test (Equal length 4 - 2 - 1 + Taper) Design
- ϕ 45mm $\rightarrow \phi$ 50mm $\rightarrow \phi$ 55mm \rightarrow Taper $\rightarrow \phi$ 60mm

%Taper design is adopted from feedback from both racing and the bench testing.

- Racing high flow junctions design Each section of the manifold has optimized pipe lengths, diameters, and angles as well as high flow junctions.
- With the service adapter for A/F sensor
- Made of light weight stainless steel for both durability and looks.

115

Flange manufactured by high precision machining center.

K20Z FN2

K20Z(FN2) High Power Muffler System (Straight Tail ϕ 50mm both sides) Weight : 18.5kg ¥108,000

for A/F se





A study of design and without compromise TODA High Power Muffler is a genuine TODA Racing performance item.

Right & Left rear tail pipes with performance chambers Equipped with resonator in each tail pipe to give more sporty sounds.

Stainless steel & straight diameter system

The internal design is based around a constant ϕ 60 pipe, with no bends or restrictions the engine is able to breath more freely so releasing more power.

5 piece design Handling easier due to compact 5 piece design. Center pipe ϕ 60 mm + Rear muffler + pipe ϕ 50 mm / Both sides + small chambers /Both sides

HONDA

K24A CL9/CM2 Type**S**(Accord/Accord wagon)

K24A TypeS/200HP spec (CL9/CM2) Exhaust Manifold(4-2-1 SUS) ¥130.000



K24A RB1 Absolute(Odyssey)

K24A Absolute /200HP Spec (RB1) Exhaust Manifold(4-2-1 SUS) ¥130,000



The catalyst installed

Box

Gear

Щ

Dar

Tuning

Piston

In order to get the best performance, engine power, efficiency, this exclusive exhaust manifold design takes into consideration not only the special characteristics of the K24A engine but also the results of an extensive bench testing program. A bench test (Equal length 4-2-1+ Taper) Design ϕ 45mm $\rightarrow \phi$ 50mm $\rightarrow \phi$ 55mm \rightarrow Taper $\rightarrow \phi$ 60mm *Taper design is adopted from feedback from both racing and the bench testing. Racing high flow junctions design Each section of the manifold has optimized pipe lengths, diameters, and angles as well as high flow junctions. Close-up internal port of header With the service adapter for A/F sensor Made of light weight stainless steel for both durability and looks. Flange manufactured by high precision machining center The standard catalyst can be installed. Remove the rear pipe and replace with the catalyst.

Two way style





In order to get the best performance, engine power, efficiency, this exclusive exhaust

For competition use

Exhaust Manifold TODA POWER PRODUCTS 129



Dolphin tail style titanium end pipe has been designed to reduce over hanging weigh and to give improved looks. Blue heat treatment giving a hard worked racing image. With the end receiving special treatment to prevent cracking.

Stainless steel & straight diameter system

The internal design is based around a constant ϕ 60 pipe, with no bends or restrictions the engine is able to breath more freely so releasing more power. (Stainless) Center pipe ϕ 60 mm + (Titanium) Tail pipe ϕ 90mm on both sides/ Dolphin tails.

HONDA



Stainless steel & straight diameter system The internal design is based around a constant ϕ 60 pipe, with no bends or restrictions the engine is able to breath more freely so releasing more power. (Stainless) Center pipe ϕ 60 mm + (Titanium) Tail pipe ϕ 100 mm





18160-AP1-000

- *Taper design is adopted from feedback from both racing and the bench testing. Each section of the manifold has optimized pipe lengths, diameters, and angles

S2000 Testing TODA exhaust manifold



Can

Piston

Gasket

Gear

B18C DC2/DB8

В16В ЕК9

Exhaust Manifold Ver 2 (4-2-1 SUS)

φ45

B16B(EK9)

¥108,000

18100-EK9-001

B18C-R(DC2/DB8) 98spec Exhaust Manifold Ver 2 (4-2-1 SUS) ¥108,000



In order to get the best performance, engine power, efficiency, this exclusive exhaust manifold design takes into consideration not only the special characteristics of VTEC B18C-R engine but also the results of an extensive bench testing program.

- Our 4-2-1 type now available as Ver.2 strengthened The part of a racing look is removed by the strong request from the competition customers.
- It became simple structure
- The reinforcement plate is added The reinforcement plates are added to each racing junction and a head plate to each pipe exit.
- A bench test (Equal length 4-2-1+ Taper) Design ϕ 45mm $\rightarrow \phi$ 50mm $\rightarrow \phi$ 55mm \rightarrow Taper $\rightarrow \phi$ 60mm
- *Taper design is adopted from feedback from both racing and the bench testing.
- Racing high flow junctions design Each section of the manifold has optimized pipe lengths, diameters, and angles as well as high flow junctions.
- Made of light weight stainless steel for both durability and looks
- Flange manufactured by high precision machining center
- The standard catalyst can be installed

18100-DC2-981 ¥108,000 \$\phi45 - \$\phi50 - \$\phi55 - taper - \$\phi60mm Integra-R (DC2/DB8) 98spec

* The only difference between this and the DC2 96 spec Exhaust manifold is the 2cm offset of the rear flange, (Basic specification is the same as 96's)

TYPER

In order to get the best performance, engine power, efficiency, this exclusive exhaust manifold design takes into consideration not only the special characteristics of the B16B-R with 1600cc engine but also the results of an extensive bench testing program, When building a B16B (1600cc) to 1800cc specifications we recommend the TODA B18C-R 96 spec header.

- Our 4-2-1 type now available as Ver.2 strengthened
- The part of a racing look is removed by the strong request from the competition customers. It became simple structure.
- The reinforcement plate is added The reinforcement plates are added to each racing junction and a head plate to each pipe exit.
- A bench test (Equal length 4 2 1 + Taper) Design ϕ 45mm $\rightarrow \phi$ 48mm $\rightarrow \phi$ 55mm \rightarrow Taper $\rightarrow \phi$ 60mm *Taper design is adopted from feedback from both racing and the bench testing.
- Racing high flow junctions design
- Each section of the manifold has optimized pipe lengths, diameters, and angles as well as high flow junctions.
- Made of light weight stainless steel for both durability and looks
- Flange manufactured by high precision machining center
- The standard catalyst can be installed

Taper design

18100-EK9-001 ¥108,000 \$\phi45 - \phi48 - \phi55 - taper - \phi60mm CIVIC-R(EK9) * TODA DC2 (B18C-R) 96spec Exhaust manifold and TODA EK9 (B16B-R) Exhaust manifold flange, rear flange and bolt positions are the same.

HONDA



B18C DC2/DB8

B18C-R(DC2/DB8) 96spec Exhaust Manifold Ver.2 (4-2-1 SUS) ¥108,000

FIGHTEX

Motor Dream







TYPER

In order to get the best performance, engine power, efficiency, this exclusive exhaust manifold design takes into consideration not only the special characteristics of VTEC B18C-R engine but also the results of an extensive bench testing program.

- Our 4-2-1 type now available as Ver.2 strengthened The part of a racing look is removed by the strong request from the competition customers. It became simple structure.
- The reinforcement plate is added
- The reinforcement plates are added to each racing junction and a head plate to each pipe exit. A bench test (Equal length 4 – 2 – 1 + Taper) Design
- ϕ 45mm $\rightarrow \phi$ 50mm $\rightarrow \phi$ 55mm \rightarrow Taper $\rightarrow \phi$ 60mm
- *Taper design is adopted from feedback from both racing and the bench testing. Racing high flow junctions design
- Each section of the manifold has optimized pipe lengths, diameters, and angles as well as high flow junctions.
- Made of light weight stainless steel for both durability and looks
- Flange manufactured by high precision machining center The standard catalyst can be installed

18100-DC2-961 ¥108,000 *\phi*45 - *\phi*50 - *\phi*55 - taper - *\phi*60mm Integra-R (DC2/DB8) 96spec * The only difference between this and the DC2 98 spec Exhaust manifold is the 2cm offset of the rear flange (Basic specification is the same as 98's)