

增壓器特性：

1. 國內第一座渦輪增壓器性能測試暨數據平台。
2. 測試能量涵蓋世界上所有廠牌產品，壓縮比 0~5；流量範圍 0~2 kg/sec。
3. 網際網路遙控遙測系統。

The Characteristic of Turbocharger :

1. The first Local Turbocharger Performance Tester and Digital Platform.
2. The Test Capacity covers all the brands in the worldwide market with the Compression Rate 0~5; flow capacity range 0~2 kg/sec.
3. Internet Remote Control System.

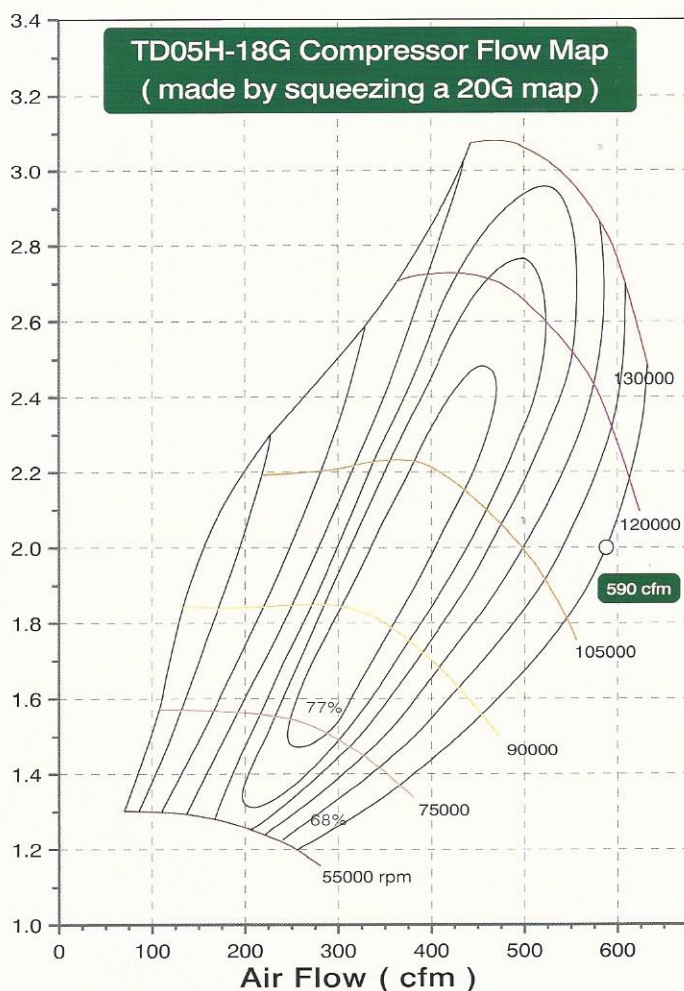
Specifications

Model		TD02	TD025	TD03	TD04	TD05	TD06	TD07	TD08
Max. Speed rpm		270000	250000	230000	200000	170000	145000	132000	114000
Max. Gas Temperature °C		900	900	900	900	900	900	760	760
Max. Pressure Ratio		2.2	2.2	2.3	2.4	2.6	2.7	2.8	3.1
Weight kg	without W/G*	—	—	3.0	3.5	4.0	5.0	9.0	10.5
	with W/G*	2.0	2.3	3.5	4.0	5.0	6.5	—	—

• W/G* : Waste Gate Valve System

• Specifications subject to change without prior notice.

Pressure Ratio



技術特點與技術應用範圍描述

特點：

1. 渦輪機械設計，分析技術（實驗室）。
2. 葉輪鑄造技術。
3. 渦輪機械測試平台設計技術（整廠）。
4. 內燃機引擎渦輪增壓。

The Description of The Technical Features and Technical Application Range

Characteristic :

1. Design and analysis of turbomachinery.
2. Gas turbine blisc casting techniques.
3. Test rig design for turbomachinery.
4. Turbomachinery the internal combustion engine.

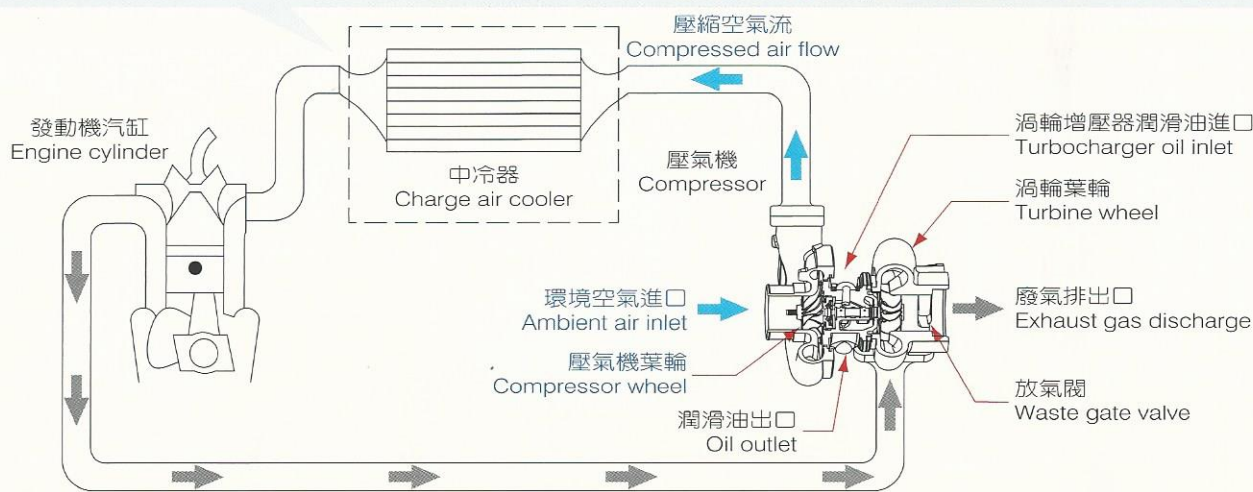
渦輪增壓器的基本知識 - TURBOCHARGER BASIC CONCEPTS

渦輪增壓器是用來提高引擎功率和減少排放黑煙的重要部件。渦輪增壓器本身不是一種動力源，它利用引擎排氣中的剩餘能量來工作，其作用是向引擎提供更多的壓縮空氣。

Turbocharger is an essential part which used to increase the efficiency of engine and reduce the black smoke exhaust discharge. Actually, the Turbocharger itself is not as a power unit source; it mainly utilizes the remaining energy from the engine exhaust to force the engine supply more compressed air.

在增壓中冷型發動機系統中，中冷器位於渦輪增壓器壓氣機的下游，其作用是降低壓縮空氣的溫度，從而進一步增加壓縮空氣的密度。

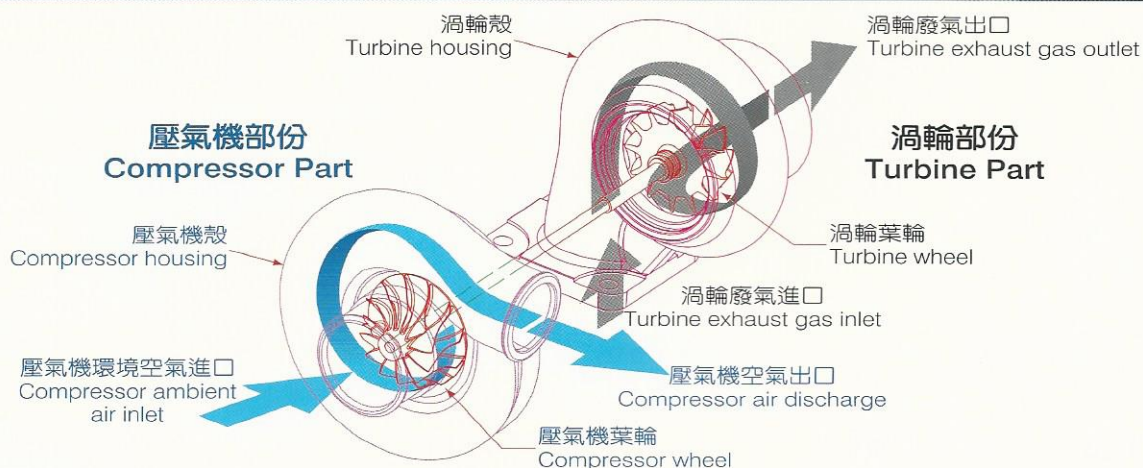
In a boosting cold start engine system, the charge air cooler, placed downstream from the turbocharger compressor, works to lower the temperature of and thereby increase the density of the compressed air.



渦輪增壓器工作原理圖 - Illustration of Turbocharger Operating Principle

渦輪增壓器安裝在引擎排氣管上，引擎汽缸排出的廢氣推動渦輪葉輪轉動，再帶動壓氣機葉輪將經空濾器濾清的空氣加壓後送入氣缸。因為進入氣缸的空氣增多，所以允許噴入更多的燃油，使燃油更充分的燃燒，然而使引擎產生更大的功率或降低排放黑煙。渦輪增壓器還可使引擎在高原上工作時獲得功率補償。

Fundamentally, Turbocharger is installed on the exhaust manifold of the engine. The exhaust from the engine cylinder causes the turbine wheel to spin, which then causes the compressor wheel to compress air, filtered through the air filter, to deliver to the cylinder. Regarding of more air increasingly gets into the cylinder which allows for more fuel injection; the fuel burns more efficiently then leads the engine produce stronger power along with the result of reduction for the amount of black smoke exhaust. Furthermore, the Turbocharger also compensates power when the engine is operating at higher altitudes.



PERFORMANCE TURBOCHARGERS

SUBARU GC 8



Models	Turbine		Compressor		Max HP	Application
	Wheel	Diameter (mm)	Wheel	Diameter (mm)		
S5167	TD05H	49.2 / 56	16 G	48.3 / 68	380	EJ20 IMPREZA WRX STI
S5187			18 G	50.5 / 68	400	
S5207			20 G	52.6 / 68	430	
S6167	TD06SL2	54.08 / 61	16 G	48.3 / 68	380	
S6187			18 G	50.5 / 68	400	
S6207			20 G	52.6 / 68	430	
	NOZZLE AREA 7 CM ²		A / R 49		Actuator 0.9 BAR	

SUBARU GC 8



Models	Turbine		Compressor		Max HP	Application
	Wheel	Diameter (mm)	Wheel	Diameter (mm)		
S5188	TD05H	49.2 / 56	18 G	50.5 / 68	420	EJ20 IMPREZA WRX STI
S5208			20 G	52.6 / 68	450	
S6188	TD06SL2	54.08 / 61	18 G	50.5 / 68	420	
S6208			20 G	52.6 / 68	450	
	NOZZLE AREA 8 CM ²		A / R 57		Actuator 0.9 BAR	

UNIVERSAL



Models	Turbine		Compressor		Max HP	Application
	Wheel	Diameter (mm)	Wheel	Diameter (mm)		
U6208	TD06SL2	54.08 / 61	20 G	52.6 / 68	430	TRIANGLE FLANGE
NOZZLE AREA 8 CM ²			A / R 89		EXTERNAL WASTEGATE	

UNIVERSAL



Models	Turbine		Compressor		Max HP	Application
	Wheel	Diameter (mm)	Wheel	Diameter (mm)		
U4156	TD04H	44 / 52	15 G	43.4 / 56	250	T25 / 28 FLANGE
NOZZLE AREA 6 CM ²			A / R 41		Actuator 0.4 BAR	

MITSUBISHI
EVOLUTION III



Models	Turbine		Compressor		Max HP	Application
	Wheel	Diameter (mm)	Wheel	Diameter (mm)		
M5167	TD05H	49.2 / 56	16 G	48.3 / 68	380	4G63 EVO III ECLIPSE VR4
M5187			18 G	50.5 / 68	400	
M5207			20 G	52.6 / 68	430	
M6167	TD06SL2	54.08 / 61	16 G	48.3 / 68	380	
M6187			18 G	50.5 / 68	400	
M6207			20 G	52.6 / 68	430	
	NOZZLE AREA 7 CM ²		A / R 49		Actuator 0.8 BAR	

PERFORMANCE TURBOCHARGERS

EVOLUTION IV - VIII
MITSUBISHI



Models	Turbine		Compressor		Max HP	Application
	Wheel	Diameter (mm)	Wheel	Diameter (mm)		
M5160	TD05H	49.2 / 56	16 G	48.3 / 68	380	4G63 EVO IV ~ VIII
M5180			18 G	50.5 / 68	400	
M5200			20 G	52.6 / 68	430	
M6160	TD06SL2	54.08 / 61	16 G	48.3 / 68	380	
M6180			18 G	50.5 / 68	400	
M6200			20 G	52.6 / 68	430	
	NOZZLE AREA 10.5 CM ²		A / R 58		Actuator 1 BAR	

NISSAN SLIVA



Models	Turbine		Compressor		Max HP	Application
	Wheel	Diameter (mm)	Wheel	Diameter (mm)		
N5188	TD05H	49.2 / 56	18 G	50.5 / 68	400	T25 FLANGE SILVA S13. 14. 15 SR20DET
N5208			20 G	52.6 / 68	430	
N6188	TD06SL2	54.08 / 61	18 G	50.5 / 68	400	
N6208			20 G	52.6 / 68	430	
	NOZZLE AREA 8 CM ²		A / R 57		Actuator 1 BAR	



GT 2 WASTEGATE

Models	Colors
14005-AK002	

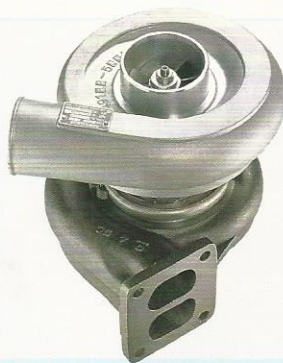
DIESEL TURBOCHARGERS

MITSUBISHI



8DC91T (LH)
ME097476
49174-00592

MITSUBISHI



8DC91T (RH)
ME091427
49174-00593

MITSUBISHI

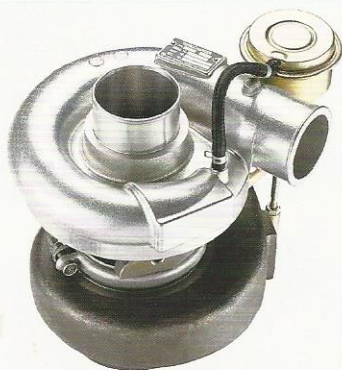


6D22T (90 mm)
ME053934
49174-01140

6D22T (98 mm)
ME053939
49188-01261

DIESEL TURBOCHARGERS

MITSUBISHI



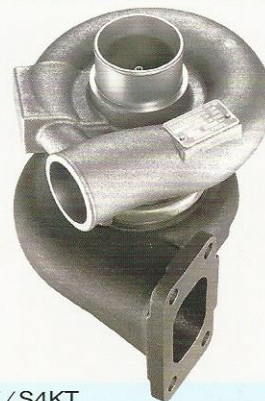
6D16T
ME073573
49187-00270

MITSUBISHI



4D56T
49177-01515

MITSUBISHI



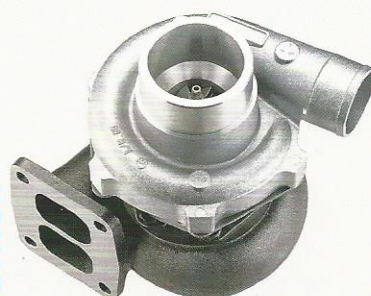
S6KT / S4KT
5I7903
49179-00530

MITSUBISHI



4M40T
49135-03311

KOMATSU



PC200-3
6137-82-8200
465044-0261

KOMATSU



PC200-5
6207-81-8210
465044-0251

KOMATSU



PC300-5
6222-81-8210
466704-0203

KOMATSU



PC300-6
466670-0013

HINO



K13C
24100-2085A
VH250015

HINO



K13C-TEL
24100-2920
3533261

HINO



EP1 (94 mm)
24100-1653A

EP100 (90 mm)
24100-1440C

HINO



EP100 (90 mm)
24100-1397A

DIESEL TURBOCHARGERS

HINO



HO7CT
24100-2850A
466063-0012

HINO



HO6CT
24100-2263A
VI240041

ISUZU



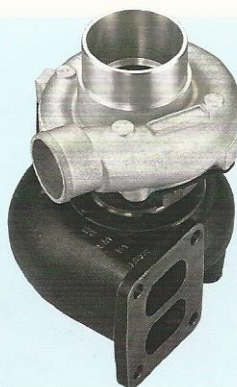
6BD1T - 日立 280 型
1-14400-107-0
VA150021

ISUZU



6BD1T - 日立 EX200-1
1-14400-210-0
NH170048

ISUZU



6BD1TPJ-日立 EX200-2
1-14400-272-0
VA240044

ISUZU



6SD1T
1-14400-339-3
VB730020

ISUZU



6HE1
8-94394-608-0
466515-0003

ISUZU



4JG2T
8-97212842-3

NISSAN



NE6T
14201-95010
466573-0001

NISSAN

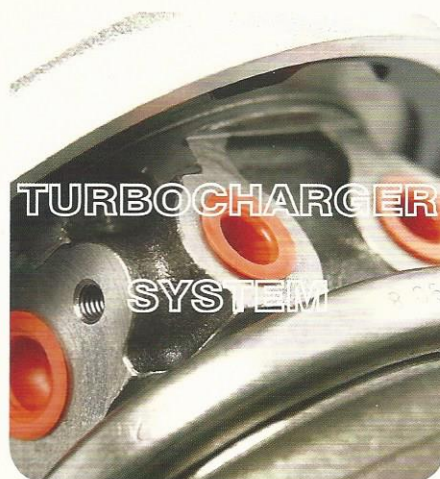


PF6
14201-96607
466242-0016

TOYOTA

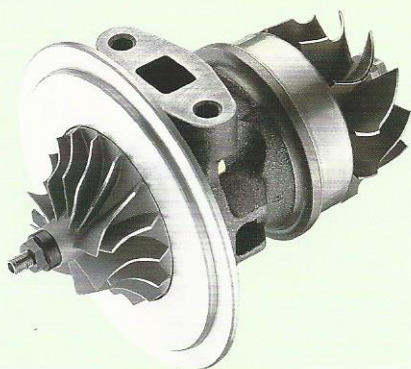


LANDCRUISER 1HD (CT20/CT26)
17201-17040



TURBOCHARGER CARTRIDGE

TURBOCHARGER
CARTRIDGE



車輛廠牌 Brand	正廠號碼 OE-Part-No.	適用車種 Models
MITSUBISHI	49188-08120	8DC91T (LH & RH) 6D22T (90 mm & 98 mm)
MITSUBISHI	49187-08620	6D16T
MITSUBISHI	49177-08020	4D56
MITSUBISHI	—	S6KT / S4KT
MITSUBISHI	49135-08000	4M40T
KOMATSU	447450-0088	PC200-3
KOMATSU	447450-0084	PC200-5
BENZ	310225	BENZ
KOMATSU	447450-0079	PC300-5
KOMATSU	—	PC300-6
HINO	—	K13C
HINO	VA860014	EP100 (90 mm & 94 mm) / EP1
HINO	445074-0019	HO7CT
ISUZU	VA850013	6HE1
HINO	—	HO6CT
HINO	3580579	K13C-TEL
ISUZU	VA830011	6BD1T - 日立 280 型
ISUZU	VA860012	6BD1T - 日立 EX200-1
ISUZU	VA850014	6BD1TPJ - 日立 EX200-2
ISUZU	VAX30011	6SD1T
ISUZU	—	4JG2T
NISSAN	447450-0057	NE6T
NISSAN	—	PF6
TOYOTA	—	LANDCRUISER 1HD (CT20 / CT26)
DAIHASTU	—	VQ29 (RHF3)
SUZUKI	—	VZ28 (RHF3)

Turbocharger Cartridge

Turbocharger Kit

TURBOCHARGER KIT

TURBOCHARGER
KIT



車輛廠牌 Brand	正廠號碼 OE-Part-No.	適用車種 Models
MITSUBISHI	49188-80200	8DC91T (LH & RH) 6D22T (90 mm & 98 mm)
MITSUBISHI	49187-80100	6D16T
MITSUBISHI	49177-80400	4D56
MITSUBISHI	49178-81110	S6KT / S4KT
MITSUBISHI	—	4M40T
KOMATSU	468100-0000	PC200-3 / PC200-5 / PC300-5 / PC300-6
BENZ	—	BENZ
HINO	NH179859	K13C / EP100 (90 mm & 94 mm) / EP1
ISUZU	—	6BD1T - 日立 EX200-1
HINO	NH169836	HO7CT
ISUZU	—	6HE1
HINO	—	HO6CT
HINO	3545653	K13C-TEL
ISUZU	NH179810	6BD1T - 日立 280 型
ISUZU	—	6BD1TPJ - 日立 EX200-2
ISUZU	—	6SD1T
ISUZU	NH459801	4JG2T
NISSAN	467057-0001	NE6T
NISSAN	—	PF6
TOYOTA	—	LANDCRUISER 1HD (CT20 / CT26)
DAIHASTU	—	VQ29 (RHF3)
SUZUKI	—	VZ28 (RHF3)

CHSH TURBO NEW PRODUCTS

2010 & 2011

TURBO CHARGER

No.145060

HINO



JO8C
24100-3251

No.143030

NISSAN



FE6T
14201-Z5715 / 702732-0001

No.142060

MITSUBISHI



4D34(鋁葉小)
49178-02380 / ME014880

No.142061

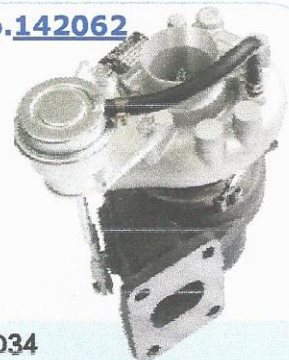
MITSUBISHI



4D34
49178-02340 / ME210143

No.142062

MITSUBISHI



4D34
49178-02345 / ME212182
49178-02320 / ME014878

No.147020

TOYOTA



1HD-FT / CT26
17201-17010

No.147021

TOYOTA



12H-T / CT26
17201-58020

No.147030

TOYOTA



DUTRO
17201-78130

No.147040

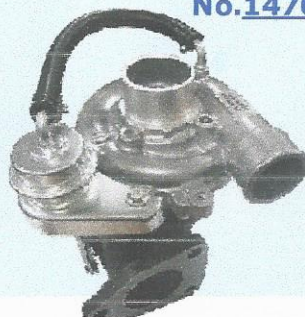
TOYOTA



WO4D/2KD-FTV
17201-0L030

No.147041

TOYOTA



WO4D/2KD-FTV
17201-0L050

No.147031

TOYOTA



DUTRO 2
17201-E0608

CHSH TURBO NEW PRODUCTS

TURBO CHARGER

No. 143021

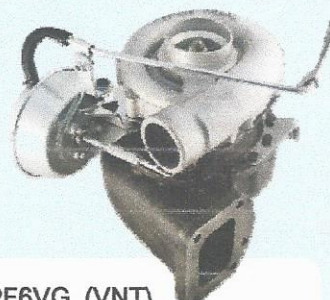
NISSAN



PE6T
14201-96563

No. 143040

NISSAN



PF6VG (VNT)
14201-96764 / 466559-20

No. 148010

SCANIA



DSC12 / HX50
3591167 / 3591985

No. 148020

SCANIA



HX50-2
3537639 / 4033155

No. 148030

SCANIA



HX50-3
DSC1136

No. 143050

NISSAN



FE6TA / GT3576DL / PK260
14201-Z5905 / 702172-12
14201-Z5007 /

HINO



P11C UX881206
S1760-E0220A 24100-2751

ISUZU



6BG1TC
1144003770

VOLVO



K26
5326 970 6497

MITSUBISHI



TD13M-47B
49182-02111