

# **HI-PERFORMANCE PARTS CATALOGUE**

**2012 EXPORT VERSION Vol.2** 





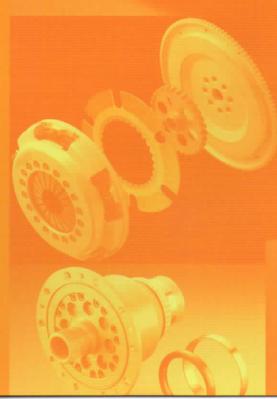






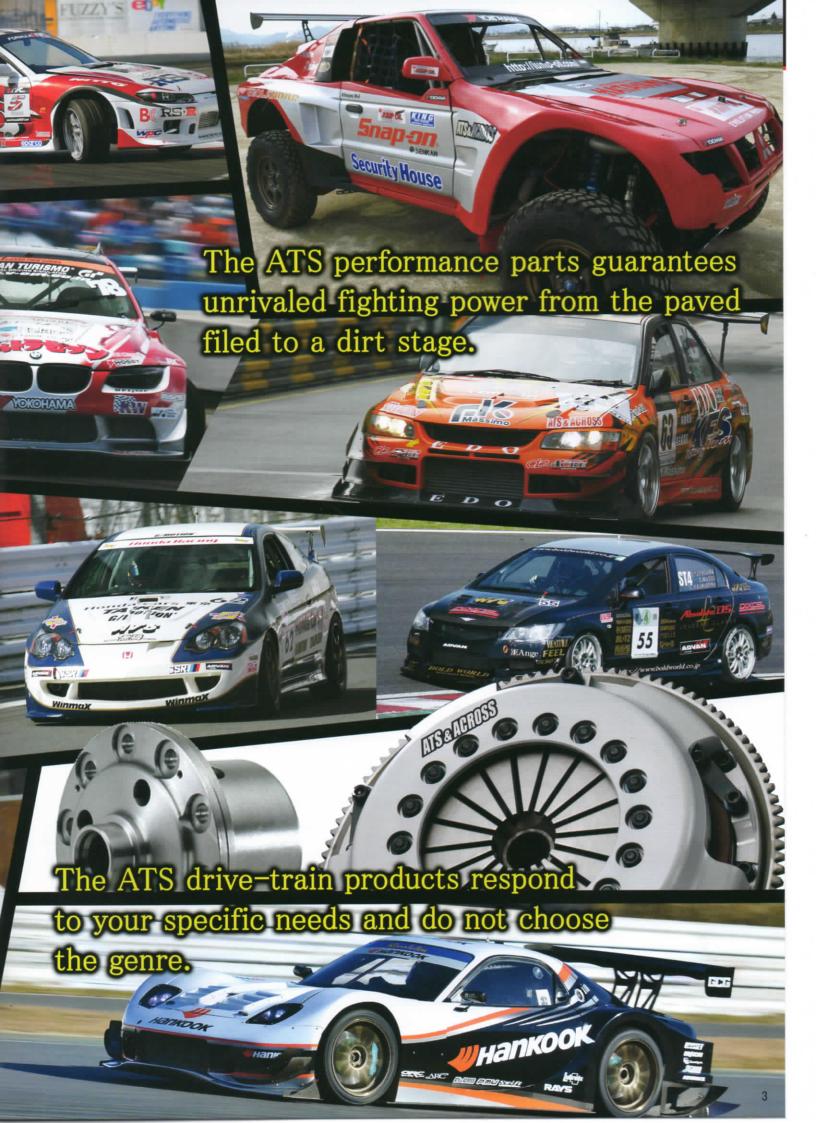
Ginch Magnum et al single clutch

TOISVESSUET











## ATS LSD - Limited Slip Differential -

## LSD Basics ] How does an LSD work?

LSD is an acronym for Limited Slip Differential. It is a mechanism which limits the rotational difference of the out-put shafts.

An "Open Differential" (as compared with LSD) allows the transfers of power to the wheel/s which are experiencing the least amount of resistance. This enables the car's wheels with the least resistance to run at different speeds in a turn. As an example, when cornering, the inner wheel travels a shorter distance than the outer wheel.

With an "Open Differential" you will experience easier handling during a turn. However, an "Open Differential" may not necessarily produce the best results for Racing, Drifting, and other Performance Driving.





## ▶ Why does LSD improve your driving performance?

When cornering in competition or a racing situation, you will frequently experience body roll where one wheel of the car is lifted from the ground.

This will cause the "Open Differential" to transfer all the torque to the wheel lifted rather than to the wheel that is on the ground. The results are a useless "wheel spin" which causes the car to lose its forward momentum. In order to eliminate the "spin", your LSD will transfer the torque to both wheels which consequently improve your lapping time.

The benefit of a performance LSD is quite obvious in the autocross or in a road race with many tight corners, but the benefit is not limited to those situations.

In Drifting, an "Open Differential" makes it very difficult to control vehicle's slide with throttle actuation. LSD will allow the driver to steer the car with the throttle, allowing larger, more dramatic slide with plenty of forward movement.

In Drag Racing, the impact of an LSD is less dramatic. However, during sudden high-power starts and while up-shifting during acceleration, it is possible that either the left or the right tire frequently slips. A performance LSD will quickly detect that condition and lock the differential so that you do not lose any time. Not even a few tenths of a second is wasted!

















### LSD - Limited Slip Differential -

There are several types of LSDs. Viscous type, Helical type, and Torque Sensitive type. Those LSDs are frequently chosen by many car manufacturers due to the advantage on easy maintenance and very little noise levels. However, when it comes down to the high-performance driving, professional drivers will always choose a Clutch Type (also called as a mechanical type).

#### Clutch type (All ATS LSDs are clutch type)

A Clutch Type LSD has several (4 to 24) internal clutch plates. The LSD is activated by pressuring the clutch plates which will produce a very strong locking performance. The LSD acts like as a standard differential when a car is moving straight or the rotational difference between left and right wheels are similar. Once there is a rotational difference among wheels, the cross axis which is set in the middle will press the pressure rings, then the pressure rings will transfer the movement to the clutch plates. When all the clutch plates are engaged, both wheels are locked and the torque is transferred equally to both wheels.



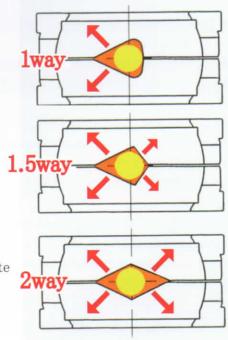
### LSD Activation mechanism 1way, 1.5way, & 2way

1 way. An LSD is activated only when the throttle is on. The internal cam rings has an angle on only one side.

**1.5way.** The angle of the cam rings for the off-side is very close to 5-25 degrees which will make the LSD ineffective or weak when the throttle is off (during deceleration). The ATS 1.5-Way LSD will work similar to 1-Way LSD during deceleration

2way. The 2-Way cam rings angle are cut in the same degree on both sides (throttle on and throttle off sides). A 2-Way LSD will activate during both acceleration and deceleration.

2 way is a popular choice for drifting.



## Why is an clutch type superior to the gear type (helical or Torque sensitive type)?

\*Both gear type and clutch type produces the locking from the friction. The friction area of the clutch type is far larger than the gear type, which generates much larger torque capacity and stronger locking performance.

\*The clutch type gives you a much faster response to your throttle movement.

\*If one wheel loses all the traction with gear type LSD, the LSD simply becomes open diff and you lose the traction.

\*A gear type is 2 way. As such, if it is used for a FF vehicle, the LSD cannot use a strong performance setting because it will cause a under steer.

You can find an easy proof of clutch type LSD's superiority from the fact almost all the LSDs used for the Rally, Time attack, Drifting, and Circuit Racing are clutch type.

## Is a clutch type LSD noisy?

The concept that a clutch type LSD chatters and very noisy is out of date. ATS carbon LSD surprised many people with that quietness and effectiveness. In 2009, ATS introduced super silent LSD which is a metal LSD but it does not chatter.



## ATS LSD - Limited Slip Differential -

## ATS Carbon LSD

### Unrivaled controllability and smoothness

By utilizing the CC composite discs, the ATS carbon LSD possesses the superior transitional characteristics from free to the differential lock, enabling the neutral and comfortable cornering.

- Gentle transitional characteristics that yield ease of handling from free to lock
- · Quiet operation without any chattering noise
- Very high adaptability to many LSD oils from different manufacturers

ATS released the first carbon LSD in 2001 with smooth and soft differential lock as the primary advantage. This year (2012), with tremendous input from the professional driver, Mr. Kinoshita, ATS dramatically improved the carbon LSD with much higher initial torque.

Based on the initial torque (break away torque) and the number of the internal discs, ATS carbon LSDs are available in several specs.

Spec 2 - Usually 8 internal discs with about 10 to 12kg.m initial torque.

Spec 3 - 12 internal discs with 15kg.m initial torque

Spec 4 - 12 internal discs with 20kg.m initial torque

Spec 5 - More than 12 internal discs with 20kg.m initial torque

## Advantages of high initial torque carbon LSD

The amazing performance of the high initial torque carbon LSD can be summarized

- 1) Super sharp throttle response,
- 2) LSD accepts steering input during the cornering,
- 3) significantly reduced under steer,
- 4) the traction is strong and very solid, and
- 5) vehicle is superbly stable at braking
- \*ATS carbon LSD causes drastically less understeer.

Several FF drivers use our 2 way LSD for the superb stability at braking. A 2 way LSD for FF vehicle – unthinkable for metal LSD.

















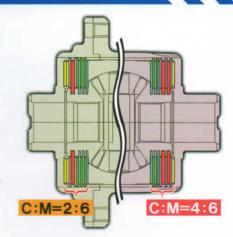




## ATS Carbon LSD Hybrid

Several carbon LSD are available in hybrid type. By exchanging the 2 or 4 carbon discs with the metal discs, a hybrid type can be created. The hybrid type has a superb durability without scarifying much of the excellent carbon LSD advantage. It is also less expensive than the standard spec carbon LSD. The typical example would be the hybrid type for Honda FF vehicle.

The hybrid type is available for Honda B16B, B18C, K20 engines with 2:6 (2 carbon discs & 6 metal discs) or 4:6 (4 carbon discs & 6 metal discs).



## Metal LSD New Type-R (our standerd metal LSD)

Born to win the races!!

By taking advantage of the newly designed silent type disc and several choices of cam angles and initial torques, we significantly improved the metal LSD.

- New disc has the ideal oil circulation with reduced noise
- ☆ Locking performance is not affected by the temperature
- Razor sharp response from the open to the lock
- ☆ Superb throttle controllability and smooth handling
- ☆ For FF vehicle, 1 way cam provides the winning combination

ATS metal LSD with 1 way 70 degree cam D20 (20 discs) dominated the Civic FD2 Inter Series for 3 years.

Mr. Matsui won the championship twice with our D20 LSD.

D24 is the successor of the D20 metal LSD with the improved durability and torque capacity.





## Metal LSD Silent Type

An inevitable drawback of a metal clutch type LSD was the undesirable chattering noise. You do not have to make the trade off with our silent LSD. The ATS Silent LSD offers both the performance of clutch type LSD and the quietness of a gear type LSD.

ATS Silent LSD comes with the cam angles of 45 and 60 degree (in the case of 87mm discs, the angles are 45 and 55 degree.). The cam angle is set at 45 degrees at the factory. By changing the cam angle to 60 (or 55) degree, the Silent LSD becomes very close to the standard metal LSD with increased performance.





Toyota	Lexus	Nissan	Honda	Mazda	BMW	Lotus
FT86/Levin	SC/GS/IS/IS-F	GTR/Skyline	Civic B16A	Miata NA/NB/NCEC	E30/E36/E46	Elise/Exige
FRS(Scion)	Suzuki	G35/G37	Civic EK9/FD2	RX7/RX8	5 series E28	Porsche
Vitz/Celica	Swift ZC31S	350Z/370Z	Integra DC2/DC5	Subaru	5 series E34	911/930/964
MR2/MR-S	Swift ZC32S	Silvia/180SX	Accord CL1/CL7	BRZ/Imprezza	Z3	993
Celica/Supra	Alfa Romeo	240SX	Prelude H22A	GC8/GDA	Z4 E85	996 GT2
Chaser/Soarra	156/145/Spider	Mitubishi	S2000/NSX	GDB/GRB	E87/E90	996 GT3
Celsior/Celsior	147/147GTA	Mirage/Gallant	FIT CR-Z	CHRYSLER	E92 M3	997 GT3
Altezza	159/GTV/155	Lancer Evol-10	Insight	Viper RT/10	Mini	



## ATS carbon clutch & metal clutch (Triple, Twin, and Single)

ATS clutches offered to various vehicles provide an unparalleled torque delivery, quality, and durability, which are the requirement for the top-rated performance clutches.

The clutch discs (carbon & metal) are interchangeable. However, each clutch has its unique performance characteristics.

New for 2013. Most of the carbon clutch applications will be available in metal clutch. As of August 2012, the application coverage of the metal clutch is significantly smaller than the carbon clutch. That difference will almost disappear when we release the newly designed metal disc at the end of 2012. (\* A few Spec 2 models are not offered in metal.)



The performance market evolves and always demands more. It looks for a clutch which is lighter in weight, easier to use, ultra high performance, and as reliable as the stock clutch.

The answer from ATS is our carbon clutch.

Through technological collaboration with ACROSS Co, ATS introduced a line of carbon clutches to the market in 2001. Immediately the products underwent the vigorous testing by well-known automotive experts and won their enthusiastic approval in all areas. In 2012, ATS carbon clutches evolved further with the introduction of Spec 2.

The carbon clutch is our signature clutch.



Metal Single Clutch.

Metal Triple Clutch.

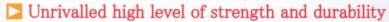




## ATS carbon clutch features

### Unmatched torque delivery

Even the single carbon clutch is rated over 500 horse power and the triple can handle over 1,200 horse power.



ATS & ACROSS uses non-mesh random-weaving method to make the extremely strong carbon friction disc.



The 230mm disc is used from the single to triple for the excellent transmission characteristics.

### Large reduction of inertia weight

The carbon disc weighs only 160g. The dramatic weight reduction decreases the rotation inertial weight. All the engine output is smoothly converted into power without waste. With enhanced synchronization, gear shifting is extra nimble and sharp.

Outstanding controllability even in traffic jams

The high level of controllability at half clutch makes the driving pleasant even in annoying traffic jams and on sloping streets in urban areas.

Damage reduction to the transmission and the engine

Despite the lack of a damper spring, the carbon disc provides the ultra soft engagement which reduces the impact to the mission and the engine significantly.

The carbon clutch does not slip even at a cold temperature.

There is no need for warming up the clutch in a cold temperature.

#### Spec 2

The carbon clutch Spec 2 was released in 2011. The Spec 2 uses a higher leverage ratio on the pressure plate and successfully has reduced the pedal effort significantly or increased the torque delivery without changing the pedal effort. The single carbon Spec 2 with 2,400kg clamping force is rated at 600 hp and boasts stock-like pedal effort.

ATS carbon clutch is available in single, twin, and triple discs.

Depending on your driving stage and your vehicle specs,, ATS presents variety of choices with the number of discs and clamping forces.

The single carbon clutch can handle 350 hp to 600 hp and the triple carbon is good for amazing 1,400 hp The performance and the quality of our carbon clutches have been proved by the countless winning records on All Japan Gymkhana & Dirt Trial, D1 Drifting competition, Time attacks and road races, and by the popularity from the well known tuning shops.

























## ATS carbon clutch & metal clutch (Triple, Twin, and Single)

## ► ATS Metal Clutch

Perfected through the numerous racing participations, ATS metal clutch with its 230mm diameter disc is the excellent choice for all the performance and racing drivers.

## ≥ Sizable 230mm diameter friction disc

The friction disc of this size (230mm / 9 inch ) is very rare even in the performance industry .

This large disc dramatically increases the torque delivery capacity.

## Superb shift response and clutch engagement

The reduction of the weight of the friction disc to the minimum and various ingenious design ideas generate excellent shift response and disengagement / engagement.



## Precision production and unparalleled durability

All the components of the clutch are made for precision and strength. From the selection of the material, heat treatment, and to the final finish, the product is made by the one chucking process using dedicated machine. In the development process, ATS went through many experimental designs to finalize the best one and the product is assembled by the very high manufacturing technique under the strict quality control. The metal clutch with above mentioned production process boasts the very high quality, performance and durability. The triple metal clutch with 1,350kg clamping force can handle 1,200 horse power at the crank.

## Easy operation on the street

The 230mm disc facilitates the slipping process, which makes the street driving very easy and comfortable.

## ► Spec 2

The metal clutch Spec 2 was released in 2011. The Spec 2 uses a higher leverage ratio on the pressure plate and successfully has reduced the pedal effort significantly or increased the torque delivery without changing the pedal effort.















## Single metal clutch (9inch Magnum)

With the introduction of Spec 2, our single metal clutch with 1,600kg clamping force can handle 300 to 350 horse power with a stock like or lighter than stock pedal effort. If it is used with the 2,200kg clamping force, the clutch is rated 450 horse power.

In 2009, the Bold Motor Sports won the championship in Super Taikyu series ST4 class by its Civic FD2 equipped with ATS 9 inch Magnum. The car never had a trouble for 2 years under the harsh driving condition of endurance race. This proved the superior durability of

ATS metal clutch. The single clutch also has accomplished many prizes in Gymkhana, Dirt Trial, and Sprint race.





Metal Single Clutch.

Metal Triple Clutch.

## Twin & Triple metal clutch

The competition forces the production of a vehicle with more horse power every year. In these days, the vehicles with over 1,000 horse power are not uncommon. ATS went into the horse power battle in 1999 with the multi disc metal clutch. Since then, our twin and triple metal clutches

triple metal clutches contributed numerous victories in drag racing, drift competition, and road racing.



# ➤ ATS metal clutch earned its reputation in the Super Taikyu (Endurance) Race Series.

Besides the above mentioned Bold Motor Sport FD2, our clutches are the favorite choice for 350Z, 370Z, NSX, Civic, S2000, Integra, and Porsche in Super Taikyu Series. We have earned the drivers trust by winning the races.

The battle stage of ATS metal clutch is not limited to the Supre Taikyu. Our clutch is widely used and praised by the drivers all over the world in Gymkhana, Rally, Dirt Trial, Drift competition, Drag racing, and Speed Race in Bonneville.





Clutch Spec	Clamping rate (kg)	Model	Pedal Effort	Carbon Rated HP (at the wheel)	Metal Rated HP (at the wheel)
	1,300	Spec 1	0 % to + 20% of stock	300	250
	1,600	Spec 1	+30 % to + 50 % of stock	400	330
Single	1,600	Spec 2	-10 % to 0 % of stock	400	330
	2,200	Spec 2	0 % to + 20% of stock	540	440
	2,400	Spec 2	-10 % to 0 % of stock	600	480
	1,100	Spec 1	0 % to + 20% of stock	600	480
	1,100	Spec 2	-10 % to 0 % of stock	600	480
Twin	1,350	Spec 1	+30 % to + 50 % of stock	750	600
17.50 16557	1,500	Spec 2	0 % to + 20% of stock	800	640
	1,900	Spec 2	0 % to + 20% of stock	1,000	NA
	1,100	Spec 1	0 % to + 20% of stock	900	730
Triple	1,100	Spec 2	-10 % to 0 % of stock	900	NA
Triple	1,350	Spec 1	+30 % to + 50 % of stock	1,100	900
	1,500	Spec 2	0 % to + 20% of stock	1.200	NA

# ATS LSD / GEAR OIL



ATS LSD OIL Lin-up

ATS LSD OIL R5W-140 GL-5/ATS&ACROSS Carbon High conformity mineral system for Carbon LSD / FF & FR



ATS LSD OIL 75W-140

GL-6/Ester System synthesis 100% for Metal & Carbon LSD / FF & FR

ACTIVE TRACTION SERVICE

ATS LSD 01L 80W-250 GL-5/Ester System synthesis 100% for Carbon LSD / FF & FR

AIS ATTEMENT







#### ATS recommends the dedicated LSD Oil.

The performance of the LSD is greatly influenced by the choice of LSD oil. Unsuitable oil could cause an unwanted noise or performance deterioration. Please avoid a use of LSD oil whose compatibility with ATS LSD is not confirmed.

- ■LSD Oil change interval
- ■The first oil change after the 300km
- ■Every 3,000km after the first oil change on street driving
- Oil change is strongly recommended after each track event or race

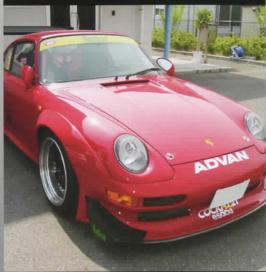
The timely oil change can prevent the early wear of the final gear and bearings and consequent howling / whining noise.

# ATS CLOSE- RATIO GEAR / FINAL GEAR

## HONDA Fit Final gear



## PORSCHE Final gear





## HONDA Close-ratio gear



HONDA CIVIC/INTEGRA







## Line-up

#### Close-ratio gear



#### **HONDA**

INTEGRA	DC2/DB8
CIVIC	EG2/EG6/EG9/EK4/EK9

#### Transmission Final

#### HONDA

S2000 AP1/AP2



#### Final gear

INTEGRA

INTEGRA	DC2
CIVIC	EG6/EK4/EK9
Fit	GD3/GE8
PRELUDE	BB1/BB4/CL1/CF4
NSX	NA1/NA2

#### NISSAN

FAIRLADY Z Z33/Z34

#### PORSCHE

PORSCHE911 930/964/993/996







Machine parts treated with Temper Shot will prove to you that this process is phenomenally effective

#### What is Temper shot?

It is a type of shot-peening process in which the surface of processe parts is bombarded by minute par-ticles at a high velocity in order to modify and strengthen the material composition near the surface.

#### Advantages of Temper Shot

- Compared to the conventional surface-modifying treatment (micro-shot-peening), this process can create a hardened layer of a depth up to 10 times greater (400 Φ). This delivers a superior improvement in strength that was unthinkable with the conventional techniques. Temper Shot is considered to be an indispensable technology by automotive manufactureers as well as F1 teams.
- This process creates a hardened layer so deep that it can hardly be damaged by external pressure and depressinos. The superior strength will be stably maintained even under severe conditions of
- 3. This process will improve the lubricity by creating dimples (semi-spherical indentations) on the surface. These imples will also increase the surface area and improve the cooling ability.
- 4. This strengthening process can target only the low-strength spots, thereby preventing stress concentration.

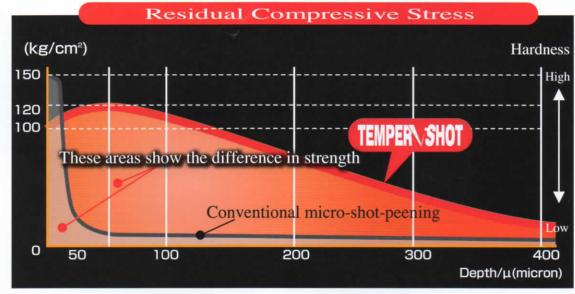










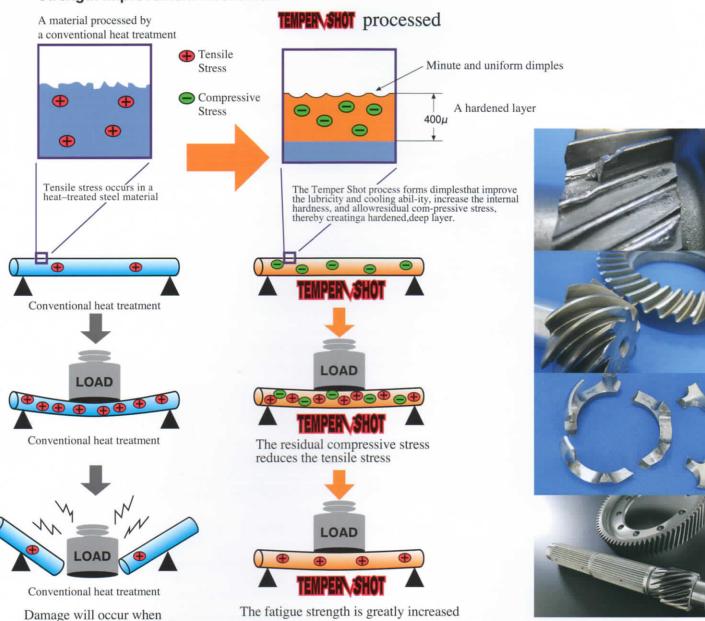


Graph showing the relationship between the depth and the residual compressive stress (hardness) of machine parts after shot-peening

Roadrace, drugrace, drift competition, autocross, dirttrailandrally-inanyracing condition, TemperShotisveryeffective.

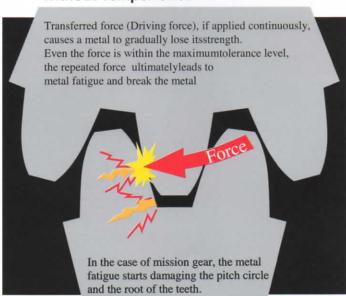
- A synchro treated by Temper Shot prevents the shifting trouble in any endurance race. There are several race teams finished two consecutive endurance races without shifting trouble with Temper Shot.
- ●FD3s race team with full Temper Shot treatment on the transmission finished the whole season without any problem.

#### Strength Improvement Mechanism



#### Without Temper Shot

a load is repeatedly applied



#### With Temper Shot





									CI	utch		
				SD				Metal			Carbon	
TO	YOTA		Metal		Carbo	on	Single	Twin	Triple	Single	Twin	Triple
			Spec1	Spec1		Spec4/5		Spec1/2			Spec1/2	
Aristo			- Cpot	орос.		0,0000					орос	
UZS143	1UZ-FE	R		5								
JZS147	2JZ-GE		123,000 ~ 130,000	166.000	~	215,000			-			
JZS160/161	2JZ-GTE		,	,								
		_			П							
Altezza	10.55	-										
GXE10	1G-FE	R	141,000	166,000	~	215,000	-	-		400,000	-	-
SXE10	3S-GE						*	-	-	160,000	-	-
Altezza Zeta												
JCE15W	2JZ-GE	R	141,000	166,000	~	215,000	-	-	-	-		-
GXE10W	1G-FE		- COMMINISTRACE			10000000						
JCE10W	2JZ-GE	R	107,000 ~ 114,000	166,000	~	215,000	-	-	-		-	-
Vitz												
NCP13	1NZ-FE	F	117,000	146,000	~	164,000						
NCP91			,	,000		,500						
Celsior												
UCF30	3UZ-FE	R	102 000 100 000	100 000		245.000						
UCF31			123,000 ~ 130,000	166,000	~	215,000			-			-
MR2												
SW20 NA	3S-GE	М	117,000 ~ 132,000	152,000	~	167,000	-		-			
SW20	3S-GTE	202	141,000	166,000	~	215,000	*	*	-	156,000	239,000	-
MR - S			TO THE OWNER OF THE OWNER									
Miles S	1ZZ-FE		117,000 ~ 132,000	152,000	_	167 000	*	*	-	162.000	261,000	-
ZZW30	122-FE	IVI	117,000 ~ 132,000	152,000		167,000	*	*	-	102,000	201,000	-
Supra												
GA70	1G-FE		107,000 ~ 141,000	166,000	~	215,000	-	-	-	-	-	-
JZA70	1G-GE	R										
MA70	1G-GTE		107,000 ~ 114,000	166,000	~	215,000	*	*	*	177,000	268,000	350,0
	1JZ-GTE											
	7M-GTEU											
JZA80	2JZ-GTE	R	123,000	166,000	~	220,000	-	*	*		268,000	350,0
	2JZ-GE											
Celica												
ST202/203	3S-FE	F	117,000 ~ 132,000	152,000	~	167,000	-	-	-	.=	-	
ZZT230/231	1ZZ-FE	F	117,000 ~ 132,000	152,000	~	167,000	*	*	-	163,000	261,000	
	2ZZ-GE		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				00				33,737 0.33.	
Soarra												
JZZ30/31	1JZ-GTE	R										
UZZ30	2JZ-GE		123,000 ~ 130,000	166,000	~	215,000	*	*	*	177,000	268,000	350,0
	1UZ-FE											
UZZ40	3UZ-FE	R	123,000 ~ 130,000	166,000	~	215,000	-	2	~	-	-	12
Levin												
AE86	4A-GE	R	117,000 ~ 138,000	157,000	~	221,000	*	-	-	165,000	-	12
AE92	4A-GE	F										
AE101			117,000	146,000	~	215,000	*	-		165,000		
AE111												
86 / Scion FRS												
ZN6	FA20	R	114,000	166,000	~	175,000	*	*	*	160,000	243,000	325,0
Hi Ace												



A	В	С	D E F	G			J	K		M	- 11	0
			L	SD					Cli	utch		
LEXUS	3							Metal			Carbon	
			Metal Spec1	Spec1	arbo ~	Spec4/5	Single	Twin Spec1/2	Triple	Single	Twin Spec1/2	Triple
SC												
UZZ40	3UZ-FE	R	130,000	166,000	~	215,000		-	120	-	-	11-
GS							- 1					
UZS190	3UZ-FE	R										
URS191/196	2GR-FSE		130,000	166,000	~	215,000	-	-			-	-
GWS191												
IS250/350												
GSE20	4GR-FSE	R	107,000 ~ 114,000	166,000	~	215,000	-	-	-	-	-	-
GSE21	2GR-FSE	R	130,000	166,000	~	215,000	-	-	-	-		
IS-F												
USE20	2UR-GSE	R	157,000	195,000	~	222,000	-			-		-
A	В.	C	D E F	G	Н		J	K	L	M	N	0
			LS	SD					Cli	ıtch		
HONDA	4							Metal			Carbon	
			III OLD I		arbo		Single	Twin	Triple	Single	Twin	Triple
Accord			Spec1	Spec1	~	Spec4/5		Spec1/2			Spec1/2	
CD6	H22A	F	137,000 ~ 152,000	171.000	~	186,000		-	-		-	
CF4	F20B	F	MANAGE AND DEE	ALL THE PARTY OF T			-	-	-	-	2	-
CL1	H22A		137,000 ~ 152,000	171,000	~	186,000	*	-	-	164,000		-
CL7	K20A	F	144,000 ~ 159,000	176,000	~	193,500	*	*	-	153,000	263,000	
Integra												
DC2/DB8	B18C	F	137,000 ~ 164,000	166,000	~	198,500	*	*	-	153,000	263,000	-
DC5	K20A	100	149,000 ~ 164,000	100000000000000000000000000000000000000	~	198,500	*	*	-	153,000	263,000	-
NSX												
NA1 Final gear ratio:4.235	C30A	М			_							
NA2 Final gear ratio:4.235			181,000	214,000			*	*	*	189,000	266,000	348,000
NA1 Final gear ratio:4.429	C30A	М										147015
NA2 Final gear ratio:4.429			241,000	274,000			*	*	*	189,000	266,000	348,000
S2000												
AP1	F20C	R										
AP2	F22C		141,000	166,000	~	215,000	*	*	*	176,000	263,000	345,000
CR-X												
EG2	B16A	F	137,000 ~ 158,000	166,000	~	230,000	*	*	-	153,000	263,000	-
CR-Z												
ZF1	LEA-MF6	F	125,000 ~ 140,000	139.000	~	161,500		-	41	-	-	-
Civic			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
		_										
EG6/9	B16A	F										

F 137,000

F 149,000

144,000

99,000

99,000

F

164,000

164,000

159,000

114,000

152,000

166,000

181,000

176,000

134,000

171,000

114,000 134,000 ~

198,500

198,500

193,500

149,000

149,000

186,000

\*

\*

EK9

EP3

GD1

GD3

GE6

GE8

46 BB6

Prelude BB1/4

41 FD2

B16B

K20A

K20A

L13A

L15A

L13A

L15A

H22A

153,000

153,000

153,000

153,000

164,000

263,000

263,000

263,000

 $<sup>\</sup>star$  - Release date is January 2013. The price is not determined at the time of this printing. Prices in this page are in Japanese Yen.



												CI	utch		
						LS	SD				Metal			Carbon	
	NI	SSAN			Meta		C	Carbo	ОП	Single	Twin	Triple	Single	Twin	Triple
				8	Spec	1	Spec1	~	Spec4/5		Spec1/2			Spec1/2	
	Silvia														
	PS13	SR20DE	R												
7		SR20DET		107,000	~	141,000	166,000	~	206,000	*	*	*	157,000	228,000	310,00
	S14	SR20DE	R												
3		SR20DET		107,000	~	141,000	157,000	~	206,000	*	*	*	157,000	228,000	310,00
	S15	SR20DE	R		_					705			100000	202022	22.2
3		SR20DET		107,000	~	114,000	157,000	~	206,000	*	*	*	169,000	242,000	324,0
	GT-R				Т										
	R35	VR38DETT	F	129,000			178,000	~	227,000			-	-	-	-
		***************************************	_	38,000	~	238,000	258,000			-	-	-		-	-
	Oledies		3.0												
	Skyline	DROOF	-	407.000		111 000	457,000	190	245 000	-4-	4	-	157 000	220 000	240.0
	HR32	RB20E		107,000	~	141,000	157,000	~	215,000	*	*	*	157,000	228,000	310,0
	HNR32	RB20DET		107,000	~	114,000	157,000	~	206,000	*	*	*	157,000	228,000	310,0
	BNR32	RB26DETT		129,000		444.000	178,000	~	227,000	*	*	*	157,000	228,000	310,0
				107,000	~	114,000	157,000	~	206,000				457.000	000 000	040.0
	ENR33	RB25DE		107,000	~	114,000	157,000	~	206,000	*	*	*	157,000	228,000	310,0
	ECR33	RB25DE RB25DET	R	107,000	~	114,000	157,000	~	215,000	*	*	*	157,000	228,000	310,0
7	HR33	RB25DET RB25DE	R	107,000	~	114,000	157,000	~	206,000	*	*	*	157,000	228,000	310,0
	HR34	RB20DE	R												
	ER34	RB25DE RB25DET		107,000	~	114,000	157,000	~	206,000	*	*	*	157,000	228,000	310,0
	BCNR33	RB26DETT	F	129,000			178,000	~	227,000						
	DOTATOS	110200211		107,000	~	114,000	157,000	~	206,000	*	*	*	157,000	228,000	310,0
	BNR34	RB26DETT		129,000		,	178,000	~	227,000						
	DIVITO+	110200211		107,000	~	114.000	157,000	~	206,000	*	*	*	183,000	258,000	340,0
	HV35	VQ30DD	R	101,000		111,000	101,000		200,000						
	NV35	VQ25DD		114,000			167,000	~	216,000						
	V35	VQZSDD		114,000			101,000		210,000						
	PV35	VQ35DE	R	114,000			167,000	~	216,000	*			186,000	258,000	340.0
-	CPV35	VQ35DD VQ25DD	R	114,000			107,000		210,000	^			100,000	200,000	040,0
	NV35	VQ35DE	1	114,000			167,000	~	216,000	*	-	-	186,000	258,000	340,0
	V36	VQ35HR	R												
	V30	VQ25HR	1	114,000			167,000	~	216,000			-	-	-	-
7	CV36	VQ37VHR	R	114,000			167,000	~	216,000	*	*	*	231,000	311,000	393,0
	Infinity G35	VQ37VIIIC		114,000			167,000		216,000	*	*	*	186,000	258,000	340,0
)	Infinity G37	VQ37VHR	_	114,000			167,000		216,000	*	*	*		311,000	393,0
		r dor vint		111,000			1011000		2.0,000						000
	Fairlady	VCCOET	D												
	HZ31	VG20ET	R		-	114 000	166,000		215,000						
	Z31	VG30ET		117,000		114,000	100,000		210,000						
	PZ31	RB20DET	-	107.000	y <sub>E</sub>	114 000	157.000		206 000		4	4		227.000	240.0
	Z32	VG30DE		107,000	~	114,000	157,000	~	206,000	-	*	*	212.000	237,000	319,0
	Z33 / 350Z	VQ35DE	R	114,000			167,000	~	216,000	*	*	*	213,000	311,000	393,0
	704 / 0707	VQ35HR	-	111.000	_		167.000	LQEL.	216 000	*	*	*	231,000	311,000	393,0
	Z34 / 370Z	VQ37VHR	K	114,000			167,000	~	216,000	*	*	*	231,000	311,000	393,0
	180SX												2000		
	RPS13	SR20DET	R	107,000	~	114,000	157,000	~	206,000	*	*	*	157,000	228,000	310,0
	US 240SX														
	S13/S14	KA24	R	107 000	~	114,000	157 000	-	206,000			-	-	-	-



	A	В	С	D.	Е	1111		H		J	K	CI	utch	N	0
	MITCLID	10111				LS	SD				Metal			Carbon	
	MITSUB	ІЗПІ			Meta	al	C	arbo	n	Single	Twin	Triple	Single	Twin	Triple
				S	Spec	:1	Spec1	~	Spec4/5		Spec1/2			Spec1/2	
	Lancer Evolution I~III														
	CD9A	4G63T	F	117,000	~	123,000	157,000	~	184,000	*	*			239,000	321,000
	CE9A		R	117,000	~	123,000	157,000	~	184,000	^	^		-	239,000	321,000
	Lancer Evolution IV~VI	T.M.E(MR)													
	CN9A	4G63T	F	163,000	~	178,000	216,000	~	231,000	4			100 000	220,000	204 000
	CP9A		R	117,000	~	159,000	157,000	~	207,000	*	*	*	160,000	239,000	321,000
	Lancer Evolution VII ~ IX	MR													
1	CT9A	4G63T	F	163,000	~	192,000	216,000	~	247,000	- 4			100,000	220 000	204 000
			R	117,000	~	159,000	157,000	~	207,000	*	*	*	160,000	239,000	321,000
	Lancer Evolution X														
	CZ4A	4B11T	F	129,000			163,000			4	*	*	160,000	220 000	224 000
			R	117,000	~	123,000	157,000	~	184,000	*	.*	*	160,000	239,000	321,000
	Mirage														
4	CA4A	4G92 MIVEC	F	117,000	~	123,000	157,000	~	184,000						
	CJ4A			117,000	~	123,000	157,000	-	104,000	-		-		-	

						20					CI	utch		0
		CUDAE	N. I		L	SD				Metal			Carbon	
		SUBAF	KU		Metal	C	Carb	on	Single	Twin	Triple	Single	Twin	Triple
					Spec1	Spec1	~	Spec4/5		Spec1/2			Spec1/2	
Ou	utba	ck												
BF	RF		EZ36	R	117,000	157,000	~	197,000						
Im	prez	a												
G	C8	[Applied A,B,C]	EJ20T (240PS)	F	141,000	176,000								
G	C8	[Applied C]	EJ20T (260PS)	R	117,000	457,000		107.000	*	*	*	160,000	243,000	325,000
			EJ20T (275PS)		117,000	157,000	~	197,000						
G	C8	[Applied D]	EJ20T (280PS)	F	141,000	176,000			_	*	_	160,000	242 000	335,000
				R	117,000 ~ 141,000	157,000	~	215,000	*	*	*	160,000	243,000	325,000
G	C8	[Applied E]	EJ20T (280PS)	F	141,000	176,000			_	4	4	160,000	242 000	225 000
				R	117,000 ~ 141,000	157,000	~	215,000	*	*	*	160,000	243,000	325,000
G	C8	[Applied F,G]	EJ20T (280PS)	F	141,000	176,000			*	*	4	160,000	243,000	325,000
3				R	117,000 ~ 141,000	157,000	~	215,000	*	*	*	160,000	243,000	325,000
GI	DA	[Applied A ~ F]	EJ20T	F	141,000	176,000			*	*	*	160,000	243,000	325,000
L				R	117,000	157,000	~	197,000	^	^	^	100,000	243,000	323,000
GI	DB	[Applied A ~ E]	EJ20T (280PS)	F	141,000	176,000			*	*	*	160 000	243,000	325,000
L				R	141,000	166,000	~	215,000	^	^		100,000	243,000	323,000
GL	DB	[Applied F,G]	EJ20T	F	141,000	176,000			*	*	*	160,000	243,000	325,000
L				R	141,000	166,000	~	215,000				100,000	240,000	525,000
GI	H8		EJ20T	F	141,000	176,000			*	*	*	160,000	243,000	325,000
1				R	117,000	157,000	~	197,000				100,000	240,000	020,000
GI	RB		EJ20T	F	141,000	176,000			*	*	*	160,000	243,000	325,000
3 GI	VB			R	141,000	166,000	~	215,000		n n		100,000	210,000	020,000
BF	RZ													
4 ZC	C6		FA20	R	107,000	166,000	~	175,000	*	*	*	160,000	243,000	325,000
Fo	rest	er												
SF	-5		EJ20/20T	F	117,000 ~ 141,000	117,000	~	197,000				400.000	040.000	005.000
6				R	117,000	157,000	~	197,000	*	*	*	160,000	243,000	325,000
SF	-9		EJ25	R	117,000	157,000	~	197,000		-	-			
8 50	35/S	G9	EJ20/20T	R	117,000 ~ 141,000	157,000	~	215,000	*	*	*	160,000	243,000	325,000

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	A	В	C	D	Ε	F	G	H		J	K	L	M	N.	0
						LS	en.					CI	utch		
		MAZDA					,U				Metal			Carbon	
		MAZDA			Meta	al	C	arbo	n	Single	Twin	Triple	Single	Twin	Triple
				5	Spec	:1	Spec1	~	Spec4/5		Spec1/2			Spec1/2	
	RX-7														
	FC3S	13B	R	117,000	~	124,000	159,000	~	208,000	*	*	*	158,000	229,000	311,000
10	FD3S	13B	R	117,000	~	124,000	159,000	~	208,000	*	*	*	187,000	258,000	340,00
	RX-8														
11	SE3P	13B	R	117,000	~	124,000	159,000	~	208,000	*	*	*	158,000	229,000	311,000
	Roadstar / Miata														
12	NA6C	B6	R	117,000			157,000			*	-	-	168,000	-	16
13	NA8C	BP-ZE	R	141,000			166,000	~	215,000	*	-	-	168,000	-	-
	NB6C	B6	R												
14	NB8C	BP-ZE		141,000			166,000	~	215,000	*	-		168,000	-	-
		BP-ZET													
	NCEC	VE	R	141,000			166,000			*	-	*	171,000	-	-

	A				E	F	G	H		J	K	L	M	N.	0
							en.					CI	utch		
	CUZUK					L	SD							Carbon	
	SUZUKI				Metal		(	Carb	on	Single	Twin	Triple	Single	Twin	Triple
				Spec1		Spec1	~	Spec4/5		Spec1/2			Spec1/2		
Swift Spor	t														
ZC31S	V	116A	F	99,000			134,000	~	164,500	*	-	-	161,000	-	ii-
ZC32S	V	116A	F	129,000	~	144,000	161,000	~	178,500	-	-		-	-	12

	A.	В	C	D	E	F	G	H	1	J	K	L	M	N	0.
												CI	utch		
	LOTUS					Li	SD				Metal			Carbon	
	LOTUS				Meta	1	C	arb	on	Single	Twin	Triple	Single	Twin	Triple
			S	Spec	1	Spec1	~	Spec4/5		Spec1/2			Spec1/2		
Elise / Exige															
	K1	8	М	163,000	~	178,000	196,000	~	211,000	*		-	184,000	-	14
	2Z	Z-GE	M	117,000	~	132,000	152,000	~	167,000	*	*	-	163,000	281,000	-

	A	В	C	D E F	G	H I	J	K	L	M	N	0	
					Clutch								
	Δ	LFA ROMEO		LSD				Metal			Carbon		
	· ·			Metal	Ca	rbon	Single	Twin	Triple	Single	Twin	Triple	
				Spec1	Spec1	~ Spec4/5		Spec1/2			Spec1/2		
	145												
20	930A5 930A534	2.0L	F	157,000	196,000		*		-	184,000	-	-	
	147												
121	937AB	twin spark 2.0L	F	157,000	196,000		*	-	-	206,000	-	-	
22	GTA	V6 3.2L	F	157,000	196,000		-		-	-	-	-	
	155												
	167A1E	V6 2.5L	F	157,000	196,000	~ 236,000	*	-		184,000	-	-	
124	167A2G	twin spark 2.0L	F	157,000	196,000		-	-	-	-	-	-	
	156												
25	932A1	V6 2.5L	F	157,000	196,000	~ 236,000	-	-	-	-	-	-	
	932A2	twin spark 2.0L	F	157,000	196,000		-	-	-	-	-		
	GTV												
27	916C1	V6 3.0L	F	157,000	196,000	~ 236,000		-	-	-	-	-	
	916CXB	V6 3.2L		157,000	190,000	230,000	_						
	91620	twin spark 2.0L	F	157,000	196,000		-	-	-	-	-	-	
	Spider												
		twin spark 2.0L	F	157,000	196,000		-	-	: =:	-	-	-	
		V6 3.0L V6 3.2L	F	157,000	196,000	~ 236,000	-	-	-	-	-	-	

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	A	В	C	D.	Е			Н		J	K	CI	utch M	N	0
	DAMA					L	SD						aton	Carbon	
	BMW				Meta	el	Carbon			Single	Twin	Triple	Single	Twin	Triple
					Spec	:1	Spec1	~	Spec4/5		Spec1/2			Spec1/2	
1 se	ories														
E87	116i/118i/120i		R	157,000	~	163,000	196,000	~	223,000	-	-		-	-	12
E87	130i M-sport		R	157,000	~	163,000	196,000	~	223,000	-	-	-	-	-	
3 se	ries														
E30	318i	4-DOHC	R	157,000	~	178,000	196,000	~	238,000	-	T-	-		- 2	
E30	320i	6-SOHC		167,000			196,000	~	223,000	-	-	-			
E30	323i	6-SOHC		167,000			196,000	~	223,000	-	-	-	-	-	-
E30	325i/M3	6-SOHC	R												
		4-DOHC		167,000			196,000	~	223,000			-	-	-	
E36	318i/318ti	1795	R	157,000	~	178,000	196,000	~	238,000		-	-			
E36	318is	4-DOHC	R	157,000	~	178,000	196,000	~	238,000	*	*	*	184,000	275,000	366,00
E36	320i	6-DOHC	R	167,000			196,000	~	223,000	-	-	-	-	-	-
E36	323i/325i/328i	6-DOHC	R	167,000			196,000	~	223,000	-		-	-		-
E36	<i>M3B</i>	6-DOHC	R	167,000			196,000	~	223,000	*	*	*	184,000	275,000	366,00
E36	M3C	6-DOHC	R	167,000			196,000	~	223,000	*	*	*	184,000	275,000	366,00
E46	318i/318Ci/318ti		R	157,000	~	163,000	196,000	~	223,000	-	-	-		-	
E46	323i/325i/328i/330i		R	157,000	~	163,000	196,000	~	223,000	-	-	-	-	-	-
E46	316t/320i		R	157,000	~	163,000	196,000	~	223,000	-	-	-	-		-
E46	M3	6-DOHC	R	167,000			196,000	~	223,000	*	*	*	184,000	275,000	366,00
E90	/E91/E92 320i	1995	R	157,000	~	163,000	196,000	~	223,000	-	-	-	-	-	-
E90	323i	2495	R	157,000	~	163,000	196,000	~	223,000	-	-	-	-	-	-
E90,	VE91 325i/330i	2493	R	157,000	~	163,000	196,000	~	223,000	-		-		-	-
E90,	VE92 M3	3999	R	167,000			196,000	~	223,000	-	-	-	-	-	-
5 se	ries														
E28	525i/535i		R	167,000			196,000	~	223,000	-	1.5	-	-	(*	
E34	525i/530i/535i	6-DOHC	R	167,000			196,000	~	223,000	-	-	-	-	-	-
E39	525i/528i/530i		R	157,000	~	163,000	196,000	~	223,000	-	-	-	-		-
E60	525i/530i		R	157,000	~	163,000	196,000	1	223,000	-	-	-	-	-	-
6 se	ries														
E63	630i	2996	R	157,000	~	163,000	196,000	~	223,000	-	-	-	-		-
7 se															
	735i	3497	D	157 000		163,000	106 000		222 000	-	-	-	-		
	7551	0431	11	137,000		103,000	130,000		223,000		-	-	-	-	-
Z3															
E36/	77,E36/8	1.8i	R												
		1.9i													
		2.0i		157,000	~	178,000	196,000	~	238,000	-		-		-	
		2.2i													
		2.8i													
70		3.0i		457.000	_	470 000	400 000		200 000						
Z3		4-DOHC	R	157,000	~	178,000	196,000	~	238,000	-	•	-	-	-	-
M ro	adster														
E36/	/7	M roadster	R	167,000			196,000	~	223,000		-	-	-	-	-
М со	oupe														
E36/	/8	M coupe	R	167,000			196,000	~	223,000	-	-		-	-	-
Z4															
	/E86	2.2i	R												
2007		2.5i	.,	157,000	~	163,000	196,000	~	223,000	-					_
		3.0i					,000								

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A	В	С	D E F	G H I	U	K			N	0	
		- 1		.SD		Model	CI	utch			
N	INI		A Control		Oissels	Metal	T 1-1-	011	Carbon		
			Metal	Carbon	Single	Twin	Triple	Single	Twin	Triple	
			Spec1	Spec1 ~ Spec4/5		Spec1/2			Spec1/2		
Cooper S		121									
3 RE16		F	132,000	161,000	-	-	-	-	•	-	
4 MF16S					*	-	-	184,000	-	-	
Α.		0	D E F	0 0 1		P		1.1		_	
A	В	C	D E F	G H I	J	K	CI	utch	N	0	
				.SD		Metal		Carbon			
PORSCH	HE (9 1 1)	ш.	Metal	Carbon	Single	Twin	Triple	Single	Twin	Triple	
			Spec1	Spec1 ~ Spec4/5	Olligio	Spec1/2	Tipio	Olligio	Spec1/2	Tipic	
911,930		_	ороот	орест оресто		Opoc 172			Op001/2		
Carrera	NA	R									
5 Carrera 3.0	2.36.3		157,000	196,000 ~ 245,000	*	*	*	208,000	288,000	384,0	
SC SC				2101000			-	200,000	200,000	551,0	
Turbo	Turbo	R									
Turbo 3.3	raibo	1	157,000	196,000 ~ 245,000	-	-	-		-	-	
B Carrera	NA	R 1	163,000	196,000 ~ 223,000	*	*	*	208,000	288,000	384,0	
9 Carrera 3.3	Turbo		163,000	196,000 ~ 223,000	-	-	-	-	_	-	
	, 4,55		,00,000	100,000							
964		-	100.000	400.000 000.000				200 000			
Carrera 2	NA		163,000	196,000 ~ 223,000	*	*	*	208,000	288,000	384,00	
Carrera 3.3	Turbo	R 1	163,000	196,000 ~ 223,000							
Carrera RS						-			1	-	
Carrera 3.6											
993											
2 Carrera	NA	R 1	163,000	196,000 ~ 223,000	*	*	*	208,000	288,000	384,00	
GT2	Turbo	R 1	163,000	196,000 ~ 223,000							
3 Carrera RS					-		-	-	-	-	
Twin Turbo 3.6/3.6S											
996											
4 <i>GT3</i>	NA	R 1	163,000	196,000 ~ 223,000	*	*	*	208,000	288,000	384,0	
5 GT2	Turbo	R 1	163,000	196,000 ~ 223,000				-		-	
997											
6 GT3	NA	D 1	163,000	196,000 ~ 223,000	*	*	*	208,000	288,000	384,00	
073	IVA	K	103,000	190,000 = 223,000	^	*	^	200,000	200,000	304,00	
A	В	C	D E F	G H I	J	K	1	M	N	0	
								utch			
OUD	VOLED.			.SD		Metal			Carbon		
CHR	YSLER		Metal	Carbon	Single	Twin	Triple	Single	Twin	Triple	
			Spec1	Spec1 ~ Spec4/5		Spec1/2			Spec1/2		
Dodge Viper											
7 RT/10	GTS	R 2	200,000	230,000 ~ 257,000	-	· ·		-	-	-	
A	В	C	D E F	G H I	J	К	L	M	N	0	
				.SD			CI	utch			
F	IAT					Metal	1000		Carbon		
			Metal	Carbon	Single	Twin	Triple	Single	Twin	Triple	
			Spec1	Spec1 ~ Spec4/5		Spec1/2			Spec1/2		

196,000

236,000

R 157,000

Abarth 500





## Corporate overview

ATS manufactures and sells automobile drive train parts like carbon LSD and carbon clutch which utilize the CC composites material. The sales of those carbon products exceeds tens of thousands in the last 10 years. The performance level and the durability of the products are highly praised by both racing drivers and street users.

## About our products and technology:

The purpose of LSD (limited slip differential) to replace the stock open differential is to make the vehicle run faster. When properly used, LSD reduces the wheel spin, increases the straight-line stability, and controls the roll during a turn, consequently making the car run safer and faster.

Furthermore, with LSD, a driver can control the vehicle position by throttle operation much easier. ATS released the first carbon LSD in 2001, and has sold more than tens of thousands so far. The ATS LSD is the one and only CC composite ultra high performance LSD in the world.

Another benefit of the ATS carbon LSD is its easiness to everyone. Even a driver who uses the LSD for the first time will not be stressed at all. Unlike the metal LSD, the carbon LSD is noiseless and the steering operation remains as natural as ever.

At last, the carbon LSD also dramatically enhances the vehicle stability on a wet surface.

ATS also sells high performance clutch for the vehicle with big horse power/torque which way exceeds the capacity of the stock clutch. ATS released its first carbon clutch in 2001 and the clutch has been sold more than tens of thousands sets. The ATS carbon clutch is very unique in a sense that even though it is designed for the street use, it can handle any racing and competition with its ultra high performance. Compared to the conventional metal clutches from other companies, the ATS carbon clutch lasts 3 to 10 times longer.





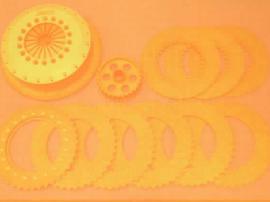


Company Name(Japanese)
エイティーエス株式会社
Company Name / ATS,INC.
Address / 3201Tomiyosi
kita- ku Okayama city Okayama
prefecture
President Name / Hitoshi Akagi
Type Of Business /
High-performance car's parts
production and sales
Established Year / 1995
Capital / 45million yen
http://www.a-t-s.co.jp/















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