

OS SuperLock LSD

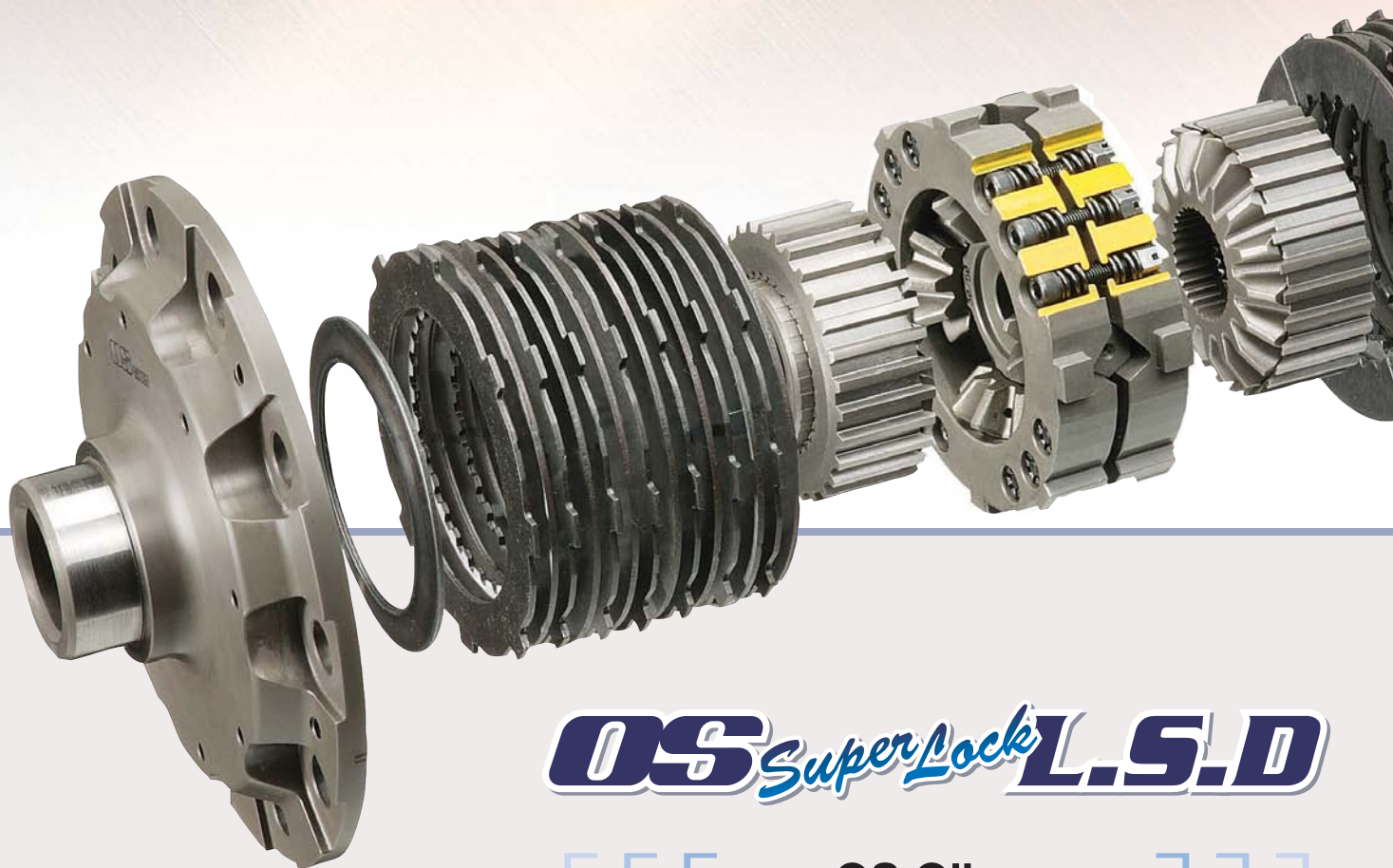


*Experience the Difference
with our Differentials!*



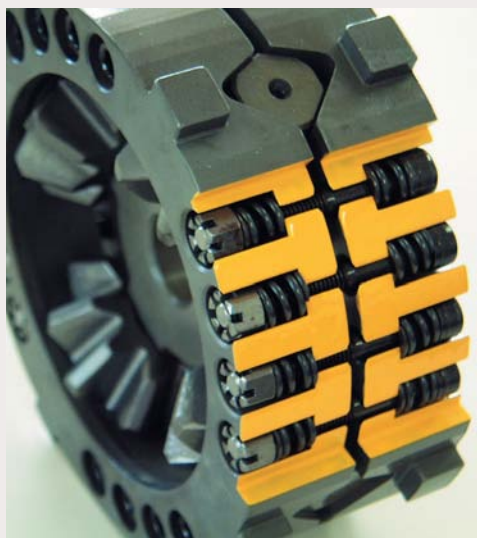
OS Super Lock L.S.D

The OS Super Lock LSD instantly reacts and transitions smoothly from both free and locked positions, thus combining advantages of a normal differential's drivability and a race limited slip differential's performance and stability.



OS Super Lock L.S.D

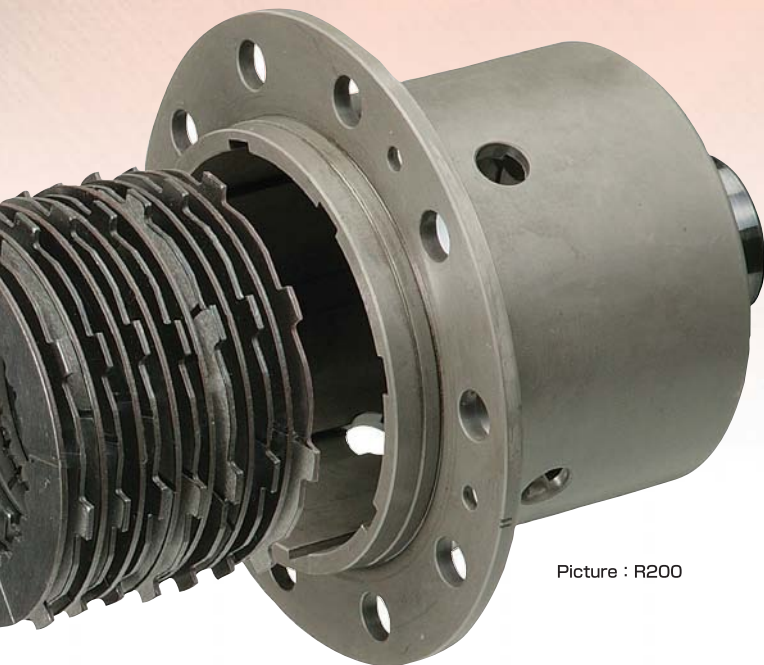
OS Giken Secrets



1. OS Giken's Revolutionary and Patented Lock Timing Technology

Under normal driving conditions, our OS Super Lock LSD operates with the smoothness of a normal differential. Once full power is applied, it transforms into a 100% locking LSD. Thanks to our patented design, our Super Lock LSDs are able to perform this transformation with such unparalleled smoothness, the transition occurs virtually unnoticed. In addition, our design also enables the Super Lock LSDs to be extremely responsive to throttle input and smoothly lock or loosen accordingly.

(Patent earned in USA, Japan, Taiwan, and Korea)



Picture : R200

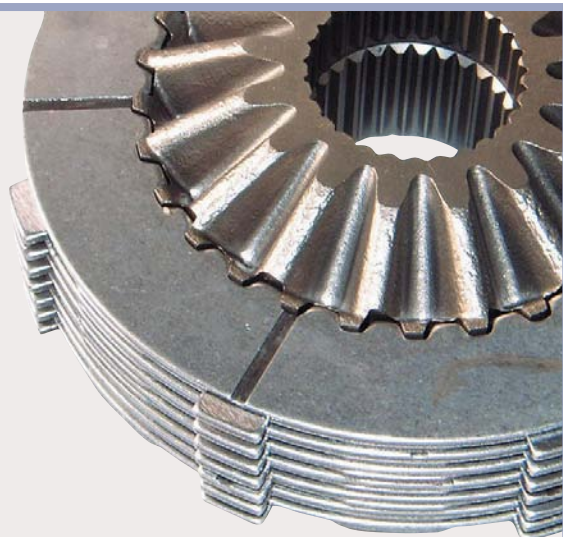
Known for its renowned racing engine design and engineering expertise in parts development since the 1970's, OS Giken utilized its accumulated knowledge and engineering experience to develop its own limited slip differential. Four years of extensive research and development lead to a new and revolutionary LSD design. Whether it be a day of shopping or a day out on the race circuit, the OS Super Lock LSDs easily adapts to any style of driving, thus contradicting the conventional perception that a mechanical limited slip differential is for professional race use only.



2. Truly 100% Lock Capable.

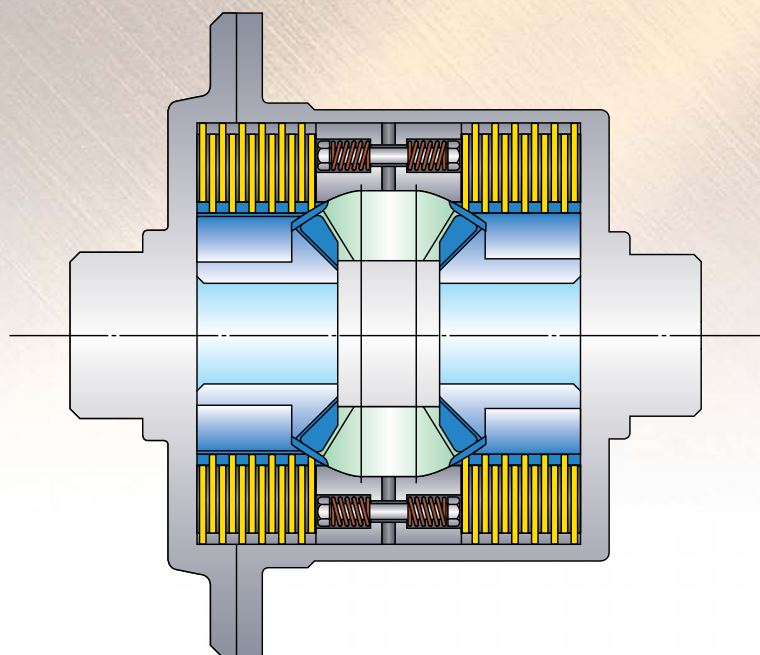
Some of the determining factors of an LSD's quality and capability are the number of friction plates and their diameter (total surface area). Our OS Super Lock LSD design minimized the bevel gears and pinion gears to create more space inside the differential case to maximize disc space and diameter. As a result, our design enables 1.5 to 2 times more friction plates compared to other more conventional mechanical limited slip differential designs. Utilizing our own forging technology, our internal gears have incredible durability and strength. Our innovative designs and original technologies have enabled us to create a true 100% locking LSD.

(Patent earned in USA, Japan. Patent Pending in China, Taiwan, and Korea)



3. #1 & #2 High performance and durability results in a new dimension = OS Giken advantage.

OS Giken has designed a differential to be smooth at low speeds, yet able to 100% lock completely during high loads. In addition, our exact engineering and precision machining assures our LSD's internal components precisely fit and function as one complete unit, thus reducing temperature and most incurred wear during operation. OS Giken Super Lock LSDs have unparalleled durability and longevity.



Unlocked initial torque condition



Advantages of an OS G

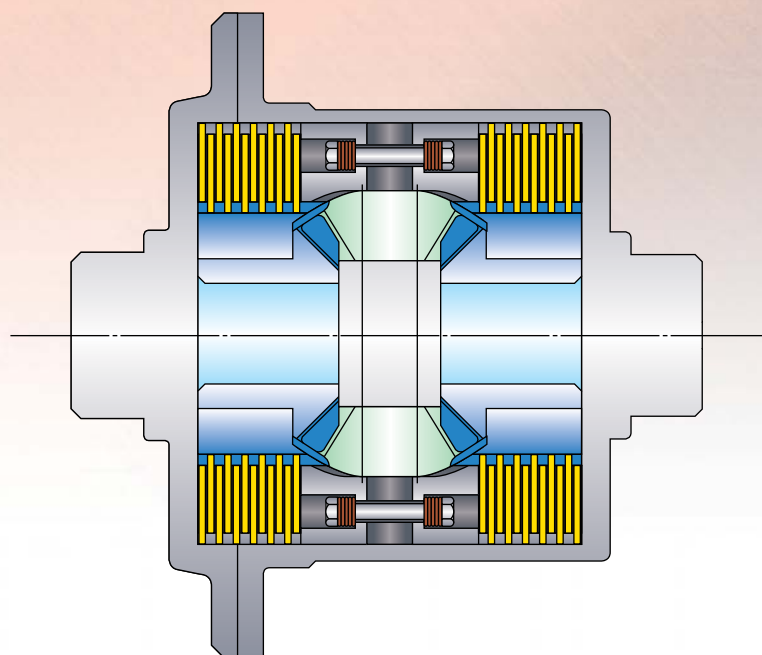
- **A true 100% locking LSD:** No movement of internal parts means less heat is generated while in operation and less wear of the friction disks. Less initial torque loss and incredible longevity and durability can be realized.
* We have tested our LSD for 35,000km and there was no wear or loss of performance.
- **Proven Durability and Reliability:** No drop in performance or loss of initial torque, even during long and stressful endurance races.
* During the Altezza (IS300) Single Make Race in Japan, an OS Giken equipped Altezza ran a total of 3 seasons totaling 23 races and never had to change or rebuild its LSD. Even now, this unit only requires regular inspection service only.
- **Straight line stability:** During a drag race, our LSD will lock 100% and provide torque equally to each powered wheel. Stable and straight runs will result thus eliminating torque steer in FF applications and lower the chance of drive-shaft breakage.
- **Customizable:** Lock timing can be customized by adjusting the spring inside the pressure ring. Tune the LSD to custom fit any specification and set-up of your desired vehicle and driving style/skill level for optimum performance. **(SPEC-X Only)**
- **By using a pressure control ring,** the LSD responds smoothly to the application of initial torque. Lock engagement is smooth and the impact vibration is significantly reduced. This increases the stability of the vehicle and allows more freedom for the driver to trace the desired racing line.
- **On snow tracks and regions with unstable road conditions,** our OS Super Lock LSD easily adapts and adjusts tire rotation to increase vehicle stability. Bad weather and harsh road conditions are not a problem when the vehicle is equipped with an OS Super Lock LSD.

Super Lock LSD

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100% locked condition

Giken Super Lock LSD

- Less under-steer during cornering: When entering into a corner with the throttle closed, the spring inside the pressure control ring will react accordingly and immediately return the differential's internal components to the original initial torque settings and thus creating less under-steer. However, with a conventional differential, there will be a lapse of time before returning to the initial torque settings, as it takes time for the cone springs to react and make contact with the friction disk in order to close the pressure ring.
- When exiting from a corner, our LSD's transition to the full 100% lock position is smooth and predictable. This gives the vehicle better traction and stability, resulting in better lap times while racing.
- OS Giken Super Lock LSDs do not require any break-in process. OS Super Lock LSDs are composed of parts that have been precisely machine to exact specifications and are ready for use upon installation.



Picture : Integra (Honda DC5) One Make Race
2002 West Japan Series Champion
Driver : T.Kogame



Picture : Integra

PRODUCTS LIST

NISSAN

| Model | Model No. | Engine | M/T | Year Notes | SPEC-S | Extended |
|----------|-----------|----------|-----|----------------|-----------------|--|
| Skyline | HCR32 | RB20DET | ● | '89/5thru'93/7 | D-NA202061405-S | *1 |
| | ECR33 | RB25DET | ● | '93/8thru'98/5 | D-NA202061405-S | Not for ABS & Active LSD |
| | ER34 | RB25DET | ● | '98/5on | D-NA402061405-S | *1 Not for Active LSD |
| | BNR32 | RB26DETT | ● | '89/8to'93/1 | D-NA302061405-S | For Rear *2 |
| | | | ● | '93/1to'94/12 | D-NA302061405-S | No Additional OS Giken Parts Required for Installation |
| | BCNR33 | RB26DETT | ● | '95/1to'98/12 | D-NA302061405-S | Not for rear active LSD |
| | BNR34 | RB26DETT | ● | '99/1on | D-NA302061405-S | Not for rear active LSD |
| 180SX | RPS13 | SR20DET | ● | '91/1to'96/11 | D-NA202061405-S | *1 |
| | | | ● | '96/12to'98/12 | D-NA202061405-S | *1 |
| Silvia | PS13 | SR20DET | ● | '91/1to'93/10 | D-NA102061405-S | *1 |
| | S14 | SR20DET | ● | '93/11to'96/11 | D-NA202061405-S | *1 |
| | | | ● | '96/12to'98/12 | D-NA202061405-S | *1 |
| | S15 | SR20DET | ● | '99/1on | D-NA402061405-S | No Additional OS Giken Parts Required for Installation |
| Fairlady | Z33 | VQ35DE | ● | '02/8on | D-NB102061405-S | *1 |
| Cedric | Y34 | VQ30DET | - | - | D-NA402051605-S | No Additional OS Giken Parts Required for Installation |

TOYOTA

| Model | Model No. | Engine | M/T | Year Notes | SPEC-S | Extended |
|-----------------|-------------------|--------|-----|---------------|-----------------|--|
| MarkII & Chaser | JZX90 | 1JZGTE | ● | '92/10to'96/8 | D-TC102061405-S | *3 |
| | | | - | '92/10to'96/8 | D-TC102061405-S | *3 |
| | JZX100 | 1JZGTE | ● | '96/9on | D-TC102061405-S | *3 |
| | | | - | '96/9on | D-TC102061405-S | *3 |
| | JZX110 | 1JZGTE | ● | '00/10on | D-TC102061405-S | *3 |
| Supra | JZA70 | 1JZGTE | ● | '90/8to'93/5 | D-TC102061405-S | *3 |
| | JZA80 | 2JZGE | - | '93/5to'96/5 | D-TD102061405-S | '93/5 to '96/6 except '93/5 to '96/5 6spd; *4 |
| | | 2JZGTE | - | '93/5to'96/5 | D-TD102061405-S | |
| Soarer | JZZ30,31 | 1JZGTE | - | '91/6to'96/8 | D-TD102061405-S | *4 |
| | | 2JZGE | - | '91/6to'96/8 | D-TD102061405-S | *4 |
| | UZZ30 | 1UZFE | - | '91/6to'96/8 | D-TD102061405-S | *4 |
| Aristo | UZZ143 | 1UZFE | - | '91/10to | D-TD102051605-S | *4 |
| | JZS147 | 2JZGE | - | '92/10to | D-TD102051605-S | *4 |
| | | 2JZGTE | - | '92/10to | D-TD102051605-S | *4 |
| | JZS160,161 | 2JZGE | - | '97/8to | D-TD102051605-S | *4 |
| | | 2JZGTE | - | '97/8to | D-TD102051605-S | *4 |
| Levin, Trueno | AE86 (1st style) | 4AG | ● | '83/5to'85/9 | D-TA202081604-S | No Additional OS Giken Parts Required for Installation |
| | AE86 (2st style) | 4AG | ● | '85/10to'87/4 | D-TA102081604-S | No Additional OS Giken Parts Required for Installation |
| Altezza | SXE10 | 3SG | ● | '98/10on | D-TB102081404-S | No Additional OS Giken Parts Required for Installation |

OS Giken Super Lock L.S.D **SPEC-S** 1.5WAY (FF is Limited 1.1WAY)

While our LSDs are ideal for use in sports driving, racing, auto-cross, and quarter mile applications, we also are proud to say that they are considered to be some of the most quiet and easy to drive LSDs available. Our OS Super Lock LSDs are more than suitable for use in your daily driver.

OS Giken Super Lock L.S.D **SPEC-X** FULL ORDER TYPE

The Type X version is available in 1.1way, 1.5way, and 2way types with customizable cam angles, lock timing, initial torque settings. For a Type X LSD tuned to best suit your driving style and vehicle, please contact the nearest Authorized OS Giken Distributor.

MAZDA

| Model | Model No. | Engine | M/T | Year Notes | SPEC-S | Extended |
|-----------|-----------|---------|-----|---------------|-----------------|--|
| RX-7 | FC3S | 13B | ● | '85/9to'91/10 | D-MA102061405-S | *5 |
| | FD3S | 13B | ● | '91/11to | D-MA102061405-S | No Additional OS Giken Parts Required for Installation |
| RX-8 | SE3P | 13B-MSP | ● | — | D-MA102061405-S | No Additional OS Giken Parts Required for Installation |
| Unos 1800 | NA8 | BP | ● | — | D-MA202061404-S | No Additional OS Giken Parts Required for Installation *13 |

HONDA

| Model | Model No. | Engine | M/T | Year Notes | SPEC-S | Extended |
|---------|-----------|--------|-----|----------------|-----------------------|---|
| Civic | EK9 | B16B | ● | '97/8to'00/9 | D-HB101091401-S | optional final gear *6 |
| Integra | DC2 | B18C | ● | '93/5thru'01/7 | D-HB101091401-S | Type R *7 |
| | DC5 | K20A | ● | '01/7on | D-HC101091401-S | No Additional OS Giken Parts Required for Installation *8 |
| S2000 | AP1 | F20C | ● | '99/4on | D-HA102081604-S | No Additional OS Giken Parts Required for Installation |
| NSX | NA1 | C30A | ● | — | D-HD102062004-SF | *9 |
| | | | | | D-HD102062004-SF4,4-5 | *10 |
| | NA2 | C32A | ● | — | D-HD102062004-SF | *9 |
| | | | | | D-HD102062004-SF4,4-6 | *10 |

MITSUBISHI

| Model | Model No. | Engine | M/T | Year Notes | SPEC-S | Extended |
|------------------|-----------|--------|-----|---------------|------------------|------------------------------|
| Lancer Evolution | CP9A | 4G63 | ● | '98/1to'00/12 | D-MIA101081402-S | front LSD kit *14 |
| Lancer Evolution | CP9A | 4G63 | ● | '98/1to'00/12 | D-MIB102081404-S | rear LSD (for RS w/o AYC) |
| Lancer Evolution | CP9A | 4G63 | ● | '98/1to'00/1 | D-MIC102081404-S | rear LSD (for GSR w/AYC) *15 |

SUBARU

| Model | Model No. | Engine | M/T | Year Notes | SPEC-S | Extended |
|---------|-----------|--------|-----|------------|--------|-------------------|
| Impreza | | | | | | Under Development |

OS Giken Note Key:

- *1... Refer to Side Flange Adaptation List #1.
- *2... Exchange with Genuine Nissan side flange pn:38220-12U00×1 and pn:38220-12U01×1.
- *3... Refer to Side Flange Adaptation List #2.
- *4... Refer to Side Flange Adaptation List #3.
- *5... For Viscous LSD equipped vehicles, exchange with Genuine Mazda side flange pn:P019-27-270B×2 and snap ring pn:P016-27-421×2. Open differential vehicles need no additional modification.
- *6... Transmission case must be machined to provide clearance. Remove speedometer gear and replace with OS Giken speedometer gear.
- *7... Remove speedometer gear and replace with OS Giken speedometer gear.
- *8... Remove and replace speedometer gear.

- *9... Includes ring gear for normal final gear.
- *10... Includes 4.4 Final Gear Set.
- *11... Not for use for diesel turbo models. Upon order, please specify whether vehicle is ABS equipped or not.
- *12... Upon order, please specify whether vehicle's side bearing's diameter is 50mm or 45.3mm.
- *13... Not for use with turbo equipped vehicles or 1600cc models.
- *14... Upon order, please send in transfer case for OS Giken qualified technical center for machining. Please consult an authorized OS Giken Distributor for further details. (does not apply to Lancer Evolution IV)
- *15... Upon order, please send in AYC case assembly to an OS Giken qualified technical center for machining. Please consult an authorized OS Giken Distributor for further details. (does not apply to Lancer Evo IV)

Please Contact Your Authorized OS Giken Distributor for Further Details.

SIDE FLANGE ADAPTATION LIST

| No.1 NISSAN | Model | Model No. | Engine | M/T | Year | OE Flange | Flange Replacement |
|------------------------------|----------|-----------|----------|-----|--|---|---|
| | Skyline | HCR32 | RB20DET | ● | '89/5thru'93/7 | For 5 bolt OE Flanges | Genuine Nissan pn:38220-73L01×2 |
| | | ECR33 | RB25DET | ● | '93/8thru'98/5 | | |
| | 180SX | RPS13 | SR20DET | ● | '91/1to'96/11 | | |
| | | | | ● | '96/12to'98/12 | | |
| | Silvia | PS13 | SR20DET | ● | '91/1to'93/10 | For 6 bolt OE Flanges | Genuine Nissan pn:38220-41F01×2 |
| | | S14 | SR20DET | ● | '93/11to'96/11 | | |
| | | | | ● | '96/12to'98/12 | | |
| | Skyline | ER34 | RB25DET | ● | '98/5on | For Viscous LSD | 38220-0V770 (right side) ×1 38220-0V771 (left side) ×1 |
| | Fairlady | Z33 | VQ35DE | ● | '02/8on | For Viscous LSD equipped vehicles w/long flange | 38220-AR011×1 |
| | Skyline | BNR32 | RB26DETT | ● | '89/8to'93/1 (models before minor change) | If vehicle's spline has 30 ridge | 38220-12U00 (right side) ×1 38220-12U01 (left side) ×1 |

| No.2 TOYOTA | For vehicles equipped with an open differential, no additional OS Giken parts are required for installation. For vehicles equipped with a Toyota Torsen type LSD, please refer to the chart below. | | | | | | |
|------------------------------|---|-----------|--------|-----|---------------|---------------------------------|--------------------|
| | Model | Model No. | Engine | M/T | Year | OE Flange | Flange Replacement |
| | MarkII Chaser | JZX90 | 1JZGTE | ● | '92/10to'96/8 | For vehicles with Torsen LSD | 41309-22050×2 |
| | | | | — | '92/10to'96/8 | | |
| | | JZX100 | 1JZGTE | ● | '96/9on | | |
| | | | | — | '96/9on | | |
| | | JZX110 | 1JZGTE | — | '00/10on | | |
| | Supra | JZA70 | 1JZGTE | ● | '90/8to'93/5 | | 41309-14060×2 |

| No.3 TOYOTA | For vehicles equipped with an open differential, no additional OS Giken parts are required for installation. For vehicles equipped with a Toyota Torsen type LSD, please refer to the chart below. | | | | | | |
|------------------------------|---|------------|--------|-----|--------------|---------------------------------|--------------------|
| | Model | Model No. | Engine | M/T | Year | OE Flange | Flange Replacement |
| | Supra | JZX80 | 2JZGE | — | '93/5to'96/5 | For vehicles with Torsen LSD | 41309-24020×2 |
| | | | 2JZGTE | — | '93/5to'96/5 | | |
| | Soarer | JZZ30,31 | 1JZGTE | — | '91/6to'96/8 | | |
| | | | 2JZGE | — | '91/6to'96/8 | | |
| | | UZZ30 | 1UZFE | — | '91/6to'96/8 | | |
| | Aristo | UZS143 | 1UZFE | — | '91/10to | | |
| | | JZS147 | 2JZGE | — | '92/10to | | |
| | | | 2JZGTE | — | '92/10to | | |
| | | JZS160,161 | 2JZGE | — | '97/8to | | |
| | | | 2JZGTE | — | '97/8to | | |



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Picture: Altezza