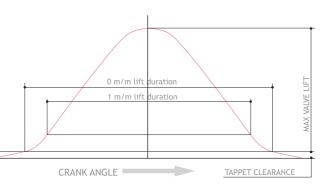
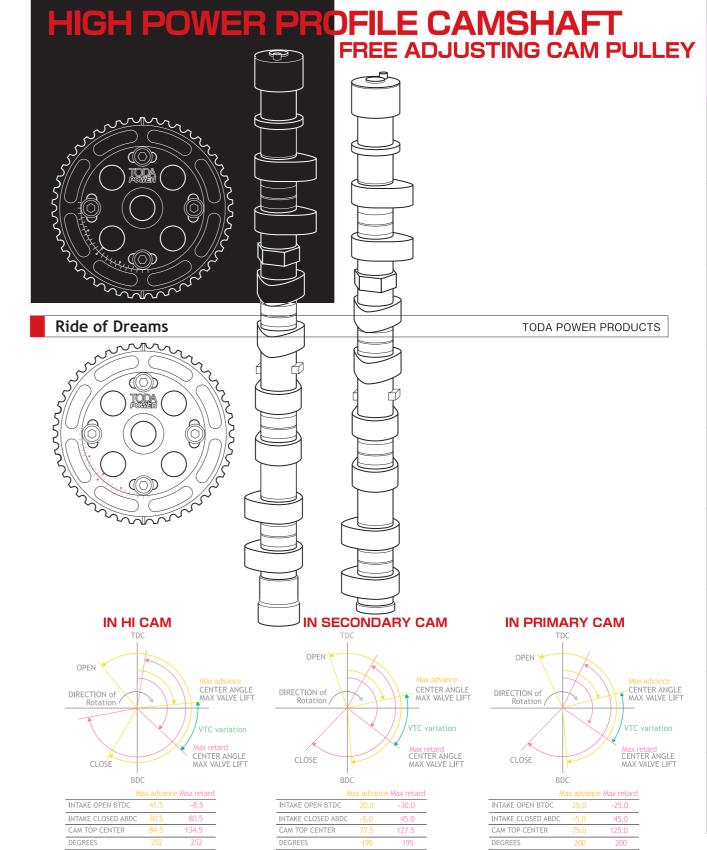
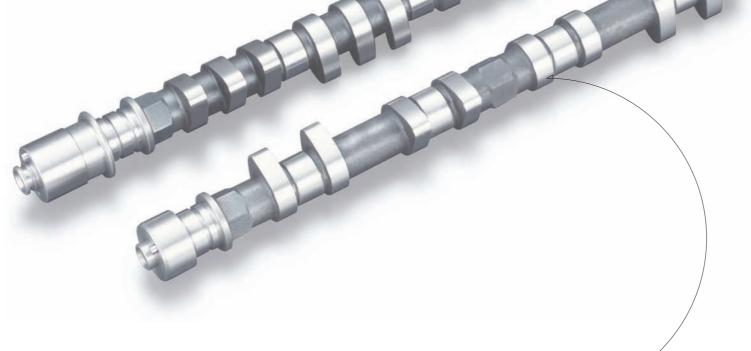




ENGINE TYPE : K20A PARTS NUMBER : 14111-K20-02A DURATION ANGLE IN 297 HIGH CAM VALVE LIFT 12.5 SECONDARY CAM VALVE LIFT 7.1 PRIMARY CAM VALVE LIFT 7.4 TAPPET CLEARANCE (NORMAL TEMPERATURE) 0.23







Compared to conventional camshafts, TODA racing camshafts require smaller cam angles to produce the same power.

All production is done in house, so a high standard of quality is assured.

HIGH POWER PROFILE CAMSHAFT

- Opening Valve Rate Improved By improving the opening valve rate via the smooth acceleration and the smoothing of the transition from closed to open the period of time that the valve is open for is greatly improved. So by using the principals of quick but smooth actions
- Non-symmetrical The cam profile of both the opening and closing phases of the valve lift are not symmetrical, as the closing phase is extended slightly reducing the impact of the valve when it returns to the seat. Making the valve return quietly to the seat, reduces friction, improves reliability and at the same time reduces valve train noise.
- Material quality We do not only pursue improvements in power output (via, mechanical design) but we also pursue material quality, in particular the relationship between the contact face of the cam, rocker arms and cam followers, so helping to reduce friction further. We also conduct research into the thermal process on the surface of the cam.

All this data forms the basis for the production of many prototypes where bench tests are carried out alongside actual racing. With everything done in house there is no room for compromise and so you can only benefit from our constant search for improved performance.



FREE ADJUSTING CAM PULLEY

Duralumin A-7075 + Hard anodize equals Light Weight High Rigidity High Accuracy

- High-strength and light weight anodized Duralumin A-7075 is extensively used in both the pulley and the inner plate. Creating a cam pulley that is highly accurate, super light and highly rigid.
- Accurate valve timing for all situations.
- Can be used with the original camshaft.
- The adjustments can be carried to 1 deg of the crank angle. (0.5 deg of the cam angle)

HIGH ACCURACY

Differing from the standard sintered one piece pulleys. The Toda adjustable cam pulley is made up of two sections (pulley and inner plate) allowing independent movement between the two. This freedom combined with the vernier type graduations (1 deg of crank angle, 0.5 of cam angle) enables the timing to be adjusted accurately giving maximum results.

SUPER LIGHTNESS

Duralumin A-7075 is used extensively for both its lightness and its high rigidity in both the plate and the cam pulley. With both improved design and material changes an average weight saving of 30% is found. Along with weight reductions comes a reduction in inertia so increasing the engines responsiveness.

By using Duralumin A-7075 and good design, Toda pulleys have high rigidity. High rigidity leads to improved timing accuracy for either standard or high performance camshafts. Anodized to prevent wear especially form contact with the belt.

HIGH RIGIDITY



HIGH PERFORMANCE VALVE SPRING

Toda Up Rated Valve Springs help the cam and your engine to operate to the max.

- ■The progressive pitch coil springs are used to prevent valve spring surging and improve
- High strength Si-Cr steel & ultra high strength Si-Cr steels are used.
- Designed for high lifts.
- Depending on engine type egg shaped wire is utilized.





LASH ADJUSTER LOCK

The lock lash adjuster is designed to convert the hydraulic tappet into a solid tappet releasing more performance from the camshafts.



The objective of the standard valve lash adjuster is guiet running and minimum maintenance. The standard lash adjuster can leak, this can lead to problems in maintaining the required clearance, leading to a drop in performance.

To enable the full potential of the cam to be realized oil pressure tappets should be replaced by solid tappets.

%Use with TODA High Power Cam.

INNER SHIM KIT

Inner-shim KIT removing weight from the moving parts of the valve train reduces inertia and friction allowing the engine to rev higher.

Replacing the original outer shim designed tappet with an inner shim design not only helps in reducing friction but improves security.

* Strongly recommended for competition engine.



4AG 4Valve Camshaft (For standard lifter) Part No Angle 14111-4AG-001 ¥34,000 14111-4AG-011 264 7.9 ¥34,000 14111-4AG-021 272 ¥34.000 7.9 14111-4AG-031 288 7.9 ¥34,000 14111-4AG-032 288 ¥34,000 14111-4AG-041 304 7.9 ¥34,000 14111-4AG-042 304 8.5 ¥34,000

*Other cam profiles are available, please contact us.

4AG 4Valve Camshaft (For Inner shim KIT)

Part No	Angle	Lift	Price
14111-4AG-I01	256	9.0	¥34,000
14111-4AG-I11	264	9.0	¥34,000
14111-4AG-I12	264	10.3	¥46,000
14111-4AG-I21	272	9.0	¥34,000
14111-4AG-I22	272	10.3	¥46,000
14111-4AG-I31	280	10.3	¥46,000
14111-4AG-I41	288	9.0	¥34,000
14111-4AG-I42	288	10.0	¥46,000
14111-4AG-I43	288	10.5	¥46,000
14111-4AG-I51	304	9.0	¥34,000
14111-4AG-I52	304	10.5	¥46,000
14111-4AG-I61	310	10.5	¥46,000
14111-4AG-I71	320	10.8	¥46,000

*Other cam profiles are available, please contact us.

4AG(4valve)Intake only High Power Profile Camshaft Intake only ¥28,000 / ¥40,000(Lift10mm~)



4AG 4V Intake Camshaft (For standard lifter) Part No 14111-4A0-001 ¥28,000 14111-4A0-011 264 ¥28,000 7.9 14111-4A0-021 272 7.9 ¥28.000 14111-4A0-031 288 7.9 ¥28,000 14111-4A0-032 288 8.5 ¥28,000 14111-4A0-041 304 7.9 ¥28,000 14111-4A0-042 304 ¥28,000 8.5 *Without distributer drive gears

*Other cam profiles are available, please contact us.

4AG 4V Intake Camshaft (For Inner shim KIT)

Part No	Angle	Lift	Price
14111-4A0-I01	256	9.0	¥28,000
14111-4A0-I11	264	9.0	¥28,000
14111-4A0-I12	264	10.3	¥40,000
14111-4A0-I21	272	9.0	¥28,000
14111-4A0-I22	272	10.3	¥40,000
14111-4A0-I31	280	10.3	¥40,000
14111-4A0-I41	288	9.0	¥28,000
14111-4A0-I42	288	10.0	¥40,000
14111-4A0-I43	288	10.5	¥40,000
14111-4A0-I51	304	9.0	¥28,000
14111-4A0-I52	304	10.5	¥40,000
14111-4A0-I61	310	10.5	¥40,000
14111-4A0-I71	320	10.8	¥40,000

*Without distributer drive gears

4AG(4Valve)

¥88.000

0

0

gap, these are sold separately.

Inner -Shim KIT

*Other cam profiles are available, please contact us.

4AG(4Valve) Free Adjusting Cam Pulley IN·EX common ¥13,000 ×2



IN•EX common ■14211-4AG-001×2

With a vernier degree scale.

4AG(4Valve) Up Rated Valve Springs ¥12,000



■14750-4AG-000

• Remodeled natural frequency and improved valve spring

These progressive pitch coil springs have been redesigned to produce high valve lifts safely.

• Inner-Shim KIT removing weight from the moving parts of the valve train reduces inertia and friction allowing the engine to rev higher.

0

@600 (1.5~3.0mm) *The kit contains standard size shims, but on occasion other size shims will be required to create the required

■14730-4AG-000

TOYOTAI

4AG-5Valve

4AG(5Valve) High Power Profile Camshaft IN ¥46,000 / EX ¥42,000





4AG 20V standard dowel pin

In the case that the STD cam pulley is to be used (Intake with VVT function) the following information is required: TODA's 4AG20V IN camshaft is based on the AE101 engine, so no extra modifications are required. The AE111 engine (Black head cover) can also use this IN camshaft but may require the following modifications. This is due to the cam dowel pin location on the STD camshaft. The position of the STD cam center angle when used with the STD pulley of the AE111 engine is 120deg. TODA's camshaft center angle become 125deg when used with the STD pulley, this may require the camshaft to be advanced by 5deg. Thoughts wanting to re-time the cam to the manufactures STD central cam timing position, we recommend that you use the two stepped dowel pin (TODA Parts Numbers: 14100-111-000 /¥2,000).

This new position of the camshaft advances the timing by the required 5deg (from 125deg up to 120deg as AE111 standard central angle).

4AG(5Valve AE101) Free Adjusting Cam Pulley IN ¥16,000 / EX ¥13,000 for AE101

In all sections duralumin A-7075 is used



IN ■14210-101-001×1 EX ■14211-4AG-001×1

 Designed only for AE101. With a vernier degree scale. **%VVT** system cannot be used.

4AG(5Valve AE101) Up Rated Valve Springs ¥20.000



- Remodeled natural frequency and improved valve spring material. These progressive pitch coil springs have been redesigned to produce high valve lifts safely.
- Can be used with lift of up to 11.0mm.

Designed only for AF101

4AG(5Valve AE111) Free Adjusting Cam Pulley

IN ¥16,000 / EX ¥14,000 for AE111

In all sections duralumin A-7075 is used



IN ■14210-111-001×1 EX ■14211-111-001×1

 Designed only for AE111.
 With a vernier degree scale. **%VVT** system cannot be used.

4AG(5Valve AE111) Up Rated Valve Springs ¥22,000 for AE111



Designed only for AF111

 Remodeled natural frequency and improved valve spring material. These progressive pitch coil springs have been redesigned to give valve lifts of up to the max safely.

• Can be used with lift of up to 11.0mm.

for AE101 / AE111

4AG 5V (20 valve) Intake camshaft (VVT type								
Part No	Angle	Lift	Price					
14111-101-011	264	8.5	¥46,000					
14111-101-012	264	9.0	¥46,000					
14111-101-021	272	8.5	¥46,000					
14111-101-023	272	9.2	¥46,000					
14111-101-031	288	8.5	¥46,000					
14111-101-033	288	9.2	¥46,000					
14111-101-041	304	8.5	¥46,000					
14111-101-043	304	9.2	¥46,000					
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**When installing the cam, check that there is enough piston to valve clearance for the full operating range of the VVT system. **Cam dowel pin phase angle same as STD AE101. Cam center angle be based on AE101. (125 deg as cam center angle in default)

4AG 5V (20 valve) Exhaust camshaft

Part No	Angle	Lift	Price	
14121-101-011	264	8.5	¥42,000	
14121-101-012	264	9.0	¥42,000	
14121-101-021	272	8.5	¥42,000	
14121-101-023	272	9.2	¥42,000	
14121-101-031	288	8.5	¥42,000	
14121-101-033	288	9.2	¥42,000	
14121-101-041	304	8.5	¥42,000	
14121-101-043	304	9.2	¥42,000	

% Other cam profiles are available, please contact us.



Part No	Angle	Lift	Price	Note
★14111-XE1-001 ★14121-XE1-001	268 IN 264 EX	12.0 11.0	¥45,000 ¥43,000	Standard springs can be used. For best effect use TODA Up Rated Vvalve Springs.
14111-XE1-020 14111-XE1-021 14111-XE1-022	295 IN	13.3 13.3 13.3	¥52,000 ¥52,000 ¥52,000	TODA Up Rated Valve Springs & TODA Cam Pullys Required VVT system cannot be used.
14121-XE1-010 14121-XE1-011 14121-XE1-021	280 EX 285 EX 295 EX	13.0	¥50,000 ¥50,000 ¥50,000	* Made to order.

* Standard ECU can be used.

3SG(SXE10) Free Adjusting Cam Pulley IN ¥17,000 / EX ¥17,000

n all sections duralumin A-7075 is used



IN ■14210-XE1-001×1 EX ■14211-XE1-001×1

 With a vernier degree scale. **%VVT** system cannot be used.

> 3SG(SXE10) Up Rated Valve Springs ¥36,000



• Remodeled natural frequency and improved valve spring material. These progressive pitch coil springs have been redesigned to give high valve lifts safely.

• Can be used up to 13.5 mm of lift.

7MG

High Power Profile Camshaft IN ¥75,000 / EX ¥78,000

IN ■14111-7MG-□□□×1 EX ■14121-7MG-□□□×1 MG Camshaft Part No Price Angle 14111-7MG-001 256IN 7.9 ¥75,000 14111-7MG-011 264IN ¥75,000 7.9 14111-7MG-021 272IN 79 ¥75,000 14111-7MG-031 288IN 8.5 ¥75,000 14111-7MG-041 304IN 8.5 ¥75,000 14121-7MG-001 256EX 7.9 ¥78,000 14121-7MG-011 264EX 7.9 ¥78,000 14121-7MG-021 272EX 7.9 ¥78,000 14121-7MG-031 288EX 8.5 ¥78,000 14121-7MG-041 304EX 8.5 ¥78,000

> *Installing the Inner-Shim kit, higher lift camshafts can be used. Other higher lift cam profiles are available

for the 7MG, please contact us.

Inner-Shim KIT



■14730-7MG-000

• Inner-Shim KIT removing weight from the moving parts of the valve train reduces inertia and friction allowing the engine to rev higher.

ns sold separately @600 (1.5~3.0mm)

*The kit contains standard shims,but on occasion other size shims will be required to create the required gap, these are sold separately.

TOYOTAI

3**S**G

High Power Profile Camshaft IN·EX common ¥34,000 / ¥46,000 (Lift10mm~) N•EX common ■14111-3SG-□□□×2

3SG (SW20) Camshaft (Standard lifter)

(Standard base circle diameter $\phi 32.5$ mm)

Part No	Angle	Lift	Price
14111-3SG-001	256	8.5	¥34,000
14111-3SG-002	256	9.0	¥34,000
14111-3SG-011	264	8.5	¥34,000
14111-3SG-012	264	9.0	¥34,000
14111-3SG-013	264	10.3	¥46,000
14111-3SG-021	272	8.5	¥34,000
14111-3SG-022	272	9.0	¥34,000
14111-3SG-023	272	10.3	¥46,000
14111-3SG-031	280	10.3	¥46,000
14111-3SG-041	288	8.5	¥34,000
14111-3SG-042	288	9.0	¥34,000
14111-3SG-043	288	10.0	¥46,000
14111-3SG-044	288	10.5	¥46,000
14111-3SG-051	304	8.5	¥34,000
14111-3SG-052	304	9.0	¥34,000
14111-3SG-053	304	10.5	¥46,000
14111-3SG-061	310	10.5	¥46,000
14111-3SG-071	320	10.8	¥46,000

*A common cam is used for both the IN & EX. *Cannot be installed in a VVT engine.

3SG (ST162) Camshaft (Standard lifter)

(Standard base circle diameter \$\phi 28.0mm)

Part No	Angle	Lift	Price
14111-3S0-001	256	7.9	¥34,000
14111-3S0-011	264	7.9	¥34,000
14111-3S0-021	272	7.9	¥34,000
14111-3S0-031	288	7.9	¥34,000
14111-3S0-032	288	8.5	¥34,000
14111-3S0-041	304	7.9	¥34,000
14111-3S0-042	304	8.5	¥34,000
* A sommon som is us	and for l	oth the I	N & FY

3SG (ST162) Camshaft (Inner-shim kit required) (Standard base circle diameter $\phi 28.0 \text{mm}$)

Part No Angle 14111-3S0-I01 256 8.5 ¥34,000 14111-3S0-I02 9.0 ¥34,000 14111-3S0-I11 264 8.5 ¥34,000 14111-3S0-I12 264 90 ¥34.000 14111-3S0-I13 264 10.3 ¥46.000 14111-3S0-I21 272 8.5 ¥34,000 14111-3S0-I22 272 9.0 ¥34,000 14111-3S0-I23 272 10.3 ¥46,000 14111-3S0-I31 280 ¥46 000 10.3 14111-3S0-I41 288 9.0 ¥34,000 14111-3S0-I42 288 10.0 ¥46,000 14111-3S0-I43 288 10.5 ¥46,000 14111-3S0-I51 304 9.0 ¥34,000 304 14111-3S0-I52 10.5 ¥46.000 14111-3S0-I61 310 10.5 ¥46,000

14111-3S0-I71 320 10.8 **A common cam is used for both the IN & EX. Free Adjusting Cam Pulley IN·EX common ¥14,000 ×2



IN•EX common ■14211-3SG-001×2

• With a vernier degree scale. *Cannot be installed in a VVT engine

3SG(ST162) Inner-Shim KIT ¥88,000



• Inner-Shim KIT removing weight from the moving parts of the valve train reduces inertia and friction allowing the engine to rev higher.

ms sold separately @600 (1.5~3.0mm) **The kit contains standard shims,but on occasion other size shims will be required to create the required gap, these are sold separately.

MITSUBISHI

4G63

Free Adjusting Cam Pulley IN·EX common ¥16,000 ×2

In all sections duralumin A-7075 is used.



IN•EX common ■14211-4G6-301×2

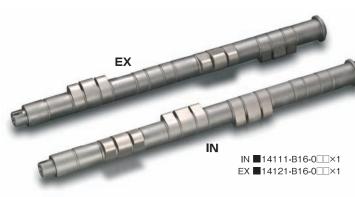


TODA POWER PRODUCTS ■ High Power Profile Camshaft

B16A/B16B/B18C

B16A/B16B/B18C High Power Profile Camshaft IN ¥46,000 / EX ¥46,000

All three-cam profiles have been redesigned to increase power through out.



B16A/B16B/B18C Camshaft Part No Angle (valve lift) Price **★**14111-B16-00A 220(6.0) / 290(11.6) / 240(9.0) ¥46,000 220(5.5) / 280(11.2) / 240(8.5) **★**14121-B16-00A EX ¥46,000 220(6.0) / 295(12.0) / 240(9.0) ¥46 000 ★14111-B16-02A 220(5.5) / 285(12.0) / 240(8.5) **★**14121-B16-02A EX ¥46,000 14111-B16-00B 250(11.0) / 295(12.0) / 250(11.0) 14121-B16-00B 250(11.0) / 285(12.0) / 250(11.0) EX ¥46,000 14111-B16-00C 250(11.0) / 295(12.5) / 250(11.0) IN ¥46,000 14121-B16-00C 250(11.0) / 295(12.5) / 250(11.0) EX ¥46,000 14111-B16-02C 250(11.0) / 300(12.5) / 250(11.0) IN ¥46,000

250(11.0) / 300(12.5) / 250(11.0)

*The cam angles for Primary, Mid, Secondary are indicated.

**TODA Up Rated Valve Springs required.
★ Can idle with standard ECU.

14121-B16-02C

B16A/B16B/B18C Heavy Duty Oil Pump ¥22,000

Made from high spec material and machined by CNC, to give you improved high-speed reliability. Standard Honda oil pumps are made from sintered alloy, this is fine for standard use but, for high performance applications, reliability is questionable. (Size ϕ 80mm or ϕ 84mm)



φ80mm 15131-B16-001 φ84mm■15131-B16-000 B16A/B16B/B18C Free Adjusting Cam Pulley IN·EX Common ¥13,000 ×2

In all sections duralumin A-7075 is used



The adjustment can be carried out to 1 deg of the crank angle. · With a vernier degree scale.

B16A/B16B/B18C Up Rated Valve Springs ¥36,000



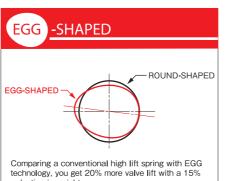
EX ¥46,000



 Remodeled natural frequency and improved valve spring material. These progressive pitch coil springs have been redesigned to give valve lifts of up to 12.5mm safely.

• Egg shaped springs are used to achieve the required high lifts safely.

• Can be used up to 12.5mm of lift.







Our B engine camshaft has been redesigned in response to the requests

Over 5000rpm, VTEC KILLER CAM developed only for Racing.

made by our B type race engine users.

B16A/B16B/B18C VTEC KILLER CAMSHAFT High Power Profile Camshaft IN ¥56,000 / EX ¥56,000



Design

HONDA

- The primary and secondary lobs are designed to be the same size.
- The diameter of the main shaft has been made more uniform in size alonge with a hollowed. out inside. This gives you a camshaft that has increased rigidity and weight savings for improved reliability and more accurate valve timing.
- Optimized surface treatment designed to prevent wear, sticking as well as helping in the early

Characteristics

- The mid rocker cam is removed & both pins are changed, reducing the valve train mass, for better response.
- Disabling the VTEC system removes fluctuations in oil pressure system, securing a reliable oil feed to all the main moving components.

*Lost motion valve should be removed.

 $\ensuremath{\mbox{\%}}$ Should be used inconjunction with quad throttle (TODA) bodies for best effect.



VTEC KILLER CAMSHAFT

Part No	Angle (valve l	ift)	Price
14111-B16-006	285 (12.5)	IN	¥56,000
14111-B16-011	295 (12.5)	IN	¥56,000
14111-B16-016	305 (12.5)	IN	¥56,000
14121-B16-006	285 (12.0)	EX	¥56,000
14121-B16-011	295 (12.0)	EX	¥56,000
14121-B16-016	305 (12.0)	EX	¥56,000

*Standard valve springs cannot be used. *TODA Up Rated Valve Springs required. *Standard ECU cannot be used

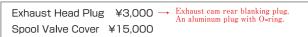
B16A/B16B/B18C Required accessories for VTEC KILLER cams High Power Profile Camshaft Set(with plugs & spacers) VTEC KILLER CAMSHAFT KIT ¥134400

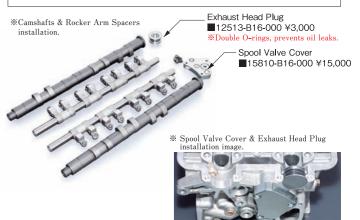


-Rocker Arm Plugs ■14651-B16-000 ¥1,000 ×8

-Rocker Arm Spacers ■14632-B16-000 ¥1,800 ×8

* Rocker arm spacer arrangement







F/IN ■14111-NSX-00□×1 R/IN ■14211-NSX-00□×1

C30A/C32B/T0DA C35B Camshaft

Part No	Angle (valve lift)		Price
14111-NSX-00A	233(9.3) / 285(12.0) / 238(9.7)	F/IN	¥100,000
14121-NSX-00A	238(8.4) / 280(12.0) / 243(8.7)	F/EX	¥100,000
14211-NSX-00A	233(9.3) / 285(12.0) / 238(9.7)	R/IN	¥100,000
14221-NSX-00A	238(8.4) / 280(12.0) / 243(8.7)	R/EX	¥100,000
14111-NSX-00B	250(11.0) / 295(12.0) / 250(11.0)	F/IN	¥100,000 *
14121-NSX-00B	250(11.0) / 285(12.0) / 250(11.0)	F/EX	¥100,000 *
14211-NSX-00B	250(11.0) / 295(12.0) / 250(11.0)	R/IN	¥100,000 *
14221-NSX-00B	250(11.0) / 285(12.0) / 250(11.0)	R/EX	¥100,000 *
14111-NSX-00C	250(11.0) / 295(12.5) / 250(11.0)	F/IN	¥100,000 *
14121-NSX-00C	250(11.0) / 295(12.5) / 250(11.0)	F/EX	¥100,000 *
14211-NSX-00C	250(11.0) / 295(12.5) / 250(11.0)	R/IN	¥100,000 *
14221-NSX-00C	250(11.0) / 295(12.5) / 250(11.0)	R/EX	¥100,000 *
*The sam angles for	or Primary Mid Secondary are indies	tad	

C30A/C32B/TODA C35B

The need for increased performance has lead TODA RACING to design a single progressive coil spring to replace the STD double valve springs. As well a allowing valve lifts of up to 12.5 mm, the material and the coil springs natural

Egg shaped springs are used to achieve the required

We recommend the use of Toda Up Rated Valve Springs to prevent coil binding and or broken springs.

high lifts safely. • Can be used up to 12.5mm of lift.

Up Rated Valve Springs

frequency have all been optimized.

13321-NSX-000 (Black) t=2.5

13322-NSX-000 (Brown) t=2.5

13323-NSX-000 (Green) t=2.5

13324-NSX-000 (Yellow) t=2.5

13325-NSX-000 (Pink) t=2.5 13326-NSX-000 (Pink & Pink) t=2.5

¥80.000

F/EX ■14121-NSX-00□×1 R/EX ■14221-NSX-00□×1 **ToDA Up Rated Valve Spring required.

C30A/C32B/T0DA C35B Free Adjusting Cam Pulleys ¥128,000(1set)

The center plate, duralumin A-7075 is used



The center plate, duralumin A-7075 is used. The adjustment can be carried out to 4 deg of the crank

angle. The product can be used with the original camshaft. With a degree scale.

FR/IN	14260-NSX-000	¥32,000×1
FR/EX RR/IN Con	mmon 14270-NSX-000	¥32,000×2
RR/EX	14290-NSX-000	¥32,000×1

Heavy Duty Oil Pump ¥50,000

machined by CNC, to give yo improved high-speed reliability.

■15131-NSX-000

C30A/C32B/T0DA C35B

Made from high spec material and TODA C35B Main Bearing



> See P044

14750-NSX-001

■ VTEC Killer Camshaft

C30A/C32B/TODA C35B VTEC Killer High Power Profile Camshaft F&R IN ¥110,000×2 / F&R EX ¥110,000×2

GT spec VTEC KILLER → See P045

F/IN **■**14111-NSX-0□□×1

F/EX ■14121-NSX-0□□×1

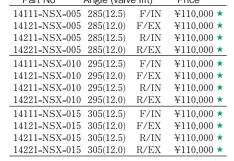
R/IN ■14211-NSX-0□□×1

R/EX ■14221-NSX-0□□×1

Disabling the VTEC system removes fluctuations in oil pressure system, securing a reliable oil feed to all the main moving



EC Killer ca	amshaft	-	_	Rocker Arm Plugs ■14651-B16-000 ¥1,000×1
Part No	Angle (valv	e lift)	Price	Rocker Arm Spacers
111-NSX-005	285(12.5)	F/IN	¥110,000 *	■14632-NSX-000 ¥1,800×
121-NSX-005	285(12.0)	F/EX	¥110,000 *	
211-NSX-005	285(12.5)	R/IN	¥110,000 *	-6-6-6-6-6
221-NSX-005	285(12.0)	R/EX	¥110,000 ★	_0_0_0_0_0



Spool Valve Cover ■15810-NSX-00F ¥20,000





**Standard valve springs cannot be used. **TODA Up Rated Valve Springs required. **Standard ECU cannot be used. ★ Made to order.

HONDA I

F20C/F22C



F20C/F22C Camshaft

	Part No	Angle (valve lift)		Price
	★14111-F20-C2A	235(8.0) / 295(13.0) / 240(8.5)	IN	¥58,000
	★ 14121-F20-C2A	230(8.0) / 290(12.0) / 235(8.5)	EX	¥58,000
	14111-F20-C0B	250(11.0) / 300(13.0) / 250(11.0)	IN	¥58,000
	14121-F20-C0B	250(11.0) / 290(12.5) / 250(11.0)	EX	¥58,000
1	14111-F20-C0C	250(11.0) / 305(13.0) / 250(11.0)	IN	¥58,000
1	14121-F20-C0C	250(11.0) / 295(12.5) / 250(11.0)	EX	¥58,000

*On installing confirming that there is enough, valve to piston clearance, valve to valve clearance, cam lob to follower clearance during mid cam operation.

*The cam angles for Primary, Mid, Secondary are indicated.

*Standard valve spring cannot be used.

*TODA Up Rated Valve Spring required.

F20C/F22C Free Adjusting Cam Gears IN/EX Common ¥36,000 ×2



IN/EX Common ■14210-F20-000×2

Re-designing the F20C cam gears from two to three sections Toda Racing has been able to keep the original scissors mechanism (noise reduction) and incorporate adjustability into the cam gears.

The adjustment can be carried out to 1 deg of the crank

With a vernier degree scale.



■14750-F20-000 • The need for increased performance has lead TODA

RACING to design a single progressive coil spring to replace the STD double valve springs. As well a allowing valve lifts of up to 13.0 mm, the material and the coil springs natural frequency have all been optimized.

Can be used up to 13.0mm of lift.

F20C/F22C/K20A

¥36,000

Up Rated Valve Springs

e recommend the use of Toda Up Rated Valve Springs to vent coil binding and or broken springs.

Valve Spring Easy Changer ¥35,000 Also K20A can be used.



Designed to help replace valve springs without having to moving the engine or cylinder head. Has been made available from the suggestion of a Toda mechanic. (A source of compressed air is required)
Designed for both K20A and F20C engines.

■ Over 5000rpm, VTEC KILLER CAM developed only for Racing.

VTEC Killer High Power Profile Camshaft IN ¥68,000 / EX ¥68,000 Rocker Arm Spacers

■14632-K20-000 ¥1,800×8 Rocker Arm Plugs 14651-K20-000 ¥1,000×8

Disabling the VTEC system removes fluctuations in oil pressure system, securing a reliable oil feed to all the main

VTEC KILLER → See P045

IN ■14111-F20-0□□×1 EX **■**14121-F20-0□×1

F20C VTEC Killer camshaft

Part No	Angle (valve lift)		Price
14111-F20-005	295 (13.0)	IN	¥68,000
14111-F20-010	300 (13.0)	IN	¥68,000
14111-F20-015	305 (13.0)	IN	¥68,000
14121-F20-005	285 (12.5)	EX	¥68,000
14121-F20-010	290 (12.5)	EX	¥68,000
14121-F20-015	295 (12.5)	EX	¥68,000

Spool Valve Cover ■15810-F20-000 ¥20,000





*Always confirm that there is enough, valve to piston clearance, valve to valve cleara *Caution the exhaust finger follower(roller rocker-arm) may need modifying, due to contact with the cam lo **Standard valve springs cannot be used. **TODA Up Rated Valve Spring required. **Standard ECU cannot be used.

High Power Profile Camshaft ■ TODA POWER PRODUCTS 047

K20A

High Power Profile Camshaft IN ¥52,000 / EX ¥48,000 ★ IN ¥62,000 / EX ¥58,000

All three-cam profiles have been redesigned to increase power through out.



VTC Killer Free Adjusting Cam Sprocket (with Cam Dynamic Damper)

Cam sproket

IN set ¥25,000 / EX set ¥25,000

VTC Killer Free Adjusting Cam Sprocket

K20A Camshaft Part No Angle (valve lift) Price ★14111-K20-02A 240(7.4) / 297(12.5) / 235(7.1) IN ¥52,000 ★14121-K20-02A 240(7.0) / 292(12.0) / 235(6.7) EX ¥48 000 ☆14111-K20-03A 245(9.2) / 295(13.0) / 240(8.7) IN ¥52,000 ☆14121-K20-03A 240(8.9) / 290(12.5) / 235(8.4) EX ¥48 000 ☆14111-K20-00C 250(10.5) / 300(13.0) / 250(10.5) IN ¥52,000 ☆14121-K20-02C 250(10.5) / 295(12.5) / 250(10.5) EX ¥48,000 \$\times 14111-K20-00D \ 250(10.5) \ / 305(13.0) \ / 250(10.5) \ IN \ \ \dec{\pma}62,000 \ \pm\$

☆14111-K20-00F 250(10.5) / 315(13.0) / 250(10.5) IN ¥62,000 ★ ☆14121-K20-00F 250(10.5) / 310(12.5) / 250(10.5) EX ¥58,000 ★

*The cam angles for Primary, Mid, Secondary are indicated.

**Standard valve spring cannot be used. **TODA Up Rated Valve Spring required.

**On installing confirming that there is enough, valve to piston clearance, valve to valve clearance, cam lob to follower clearance during mid cam & VTC operation.

☆ Programmable ECU with tunable VTC required.

Customers discretion required on selecting an ECU.

¥25,000

¥25,000

14210-K20-000

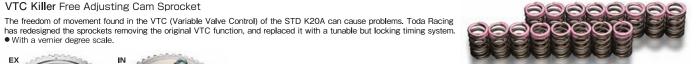
14211-K20-000

Strongly recommend the use of the cam dynamic damper for the VTC killer free adjusting cam sprocket for all applications.

IN set

EX set

K20A/F20C/F22C Up Rated Valve Springs



Cam Dynamic Damper Toda VTC killer cam sprockets are designed to be light • The need for increased performance has lead TODA weight. Fine for sprint races but for longer periods between RACING to design a single progressive coil spring to replace the STD double valve springs. As well a allowing rebuilds the stress put on the chain drive is too great. For mproved durability of the chain tensioner they are a must. valve lifts of up to 13.0 mm, the material and the coil springs

natural frequency have all been optimized. • Can be used up to 13.0mm of lift.



removing the engine or cylinder head. Has been made available from the suggestion of a Toda mechanic. (A source of compressed air is required) Designed for both K20A and F20C engines. FD2 CIVIC exhaust springs replacement

¥36.000



Ve recommend the use of Toda Up Rated Valve Springs to

Valve Spring Easy Changer ¥35,000 For FD2 CIVIC Exhaust Side Handle ¥14,000 &Also F20C can be used





K20A N+ for CL7

■ Over 5000rpm, VTEC KILLER CAM developed only for Racing.

VTEC Killer High Power Profile Camshaft

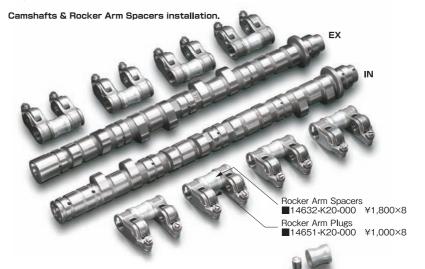
Spool Valve Cover

¥15,000

HONDA

IN ¥62,000 / EX ¥58,000 ★ IN ¥72,000 / EX ¥68,000

Disabling the VTEC system removes fluctuations in oil pressure system, securing a reliable oil feed to all the main moving



■15810-K20-000

VTC Valve Plug ¥5,000

VTC solenoid valve can remove.

■15830-K20-000

Heavy Duty Chain Tensioner ¥15,000

★ Made to order.

A replacement for the STD oil pressure fed chain auto tensioner its weak point being the compensator. Designed to prevent damage to the valve train when an engine brakes in a STD engine. But not designed for high lift cams and or hard run engines' chains can become slack and noise.

VTEC KILLER → See P045

Price

¥62,000

¥62,000

¥62,000

¥72,000 ★

¥72,000 ★

¥58,000

¥58.000

¥58 000

¥68,000 *

¥68,000 ★

¥68,000 *

Angle (valve lift)

285(12.5) EX

**On installing confirming that there is enough, valve to piston clearance, valve to valve clearance, cam lobe to follower

Customers discretion required on selecting an ECU. *Caution the exhaust finger follower (roller rocker-arm) may need modifying, due to contact with the cam lob.

*Programmable ECU with tunable VTC required.

K20A VTEC Killer Camshaft

14111-K20-006 295(13.0) IN

14111-K20-011 300(13.0) IN

14111-K20-016 305(13.0) IN

14111-K20-020 310(13.0) IN

14111-K20-025 315(13.0) IN

14121-K20-011 290(12.5) EX

14121-K20-016 295(12.5) EX

14121-K20-020 300(12.5) EX

14121-K20-025 305(12.5) EX

14121-K20-030 310(12.5) EX

*Standard valve spring cannot be used.

clearance on VTC operation

**TODA Up Rated Valve Spring required.
**TODA Cam Sprockets required.

Part No

14121-K20-006



■14510-K20-000



TODA POWER PRODUCTS ■ High Power Profile Camshaft

B6(NA6CE) Locked Lash Adjuster

(Solid Adjuster Type)

gap, these are sold separately.

Designed only for B6 ■14744-B60-000

% Should only be used with TODA's High Power Profile camshafts

*Shims sold separately ¥@800- (9.6~11.6mm)

**The kit contains standard size shims, but on occasion other size shims will be required to create the required

¥12.800

B6 (NA6CE) Camshaft (Solid Adjuster Type)						
Part No	Angle	Lift	Price			
★ 14111-B60-L01	256 IN	8.5	¥36,000			
★ 14111-B60-L02	256 IN	9.0	¥36,000			
★ 14111-B60-L11	264 IN	8.5	¥36,000			
★ 14111-B60-L12	264 IN	9.0	¥36,000			
○14111-B60-L13	264 IN	10.3	¥36,000			
14111-B60-L21	272 IN	8.5	¥36,000			
14111-B60-L22	272 IN	9.0	¥36,000			
○14111-B60-L23	272 IN	10.3	¥36,000			
○14111-B60-L31	280 IN	10.3	¥36,000			
14111-B60-L41	288 IN	8.5	¥36,000			
14111-B60-L42	288 IN	9.0	¥36,000			
○14111-B60-L43	288 IN	10.0	¥36,000			
○14111-B60-L44	288 IN	10.5	¥36,000			
14111-B60-L51	304 IN	8.5	¥36,000			
14111-B60-L52	304 IN	9.0	¥36,000			
○14111-B60-L53	304 IN	10.5	¥36,000			
★14121-B60-L01	256 EX	8.5	¥36,000			
★ 14121-B60-L02	256 EX	9.0	¥36,000			
14121-B60-L11	264 EX	8.5	¥36,000			
14121-B60-L12	264 EX	9.0	¥36,000			
○14121-B60-L13	264 EX	10.3	¥36,000			
14121-B60-L21	272 EX	8.5	¥36,000			

Standard HLA (Hydraulic Lash Adjuster system) can not be used.

Locked Lash Adjuster KIT or Inner-Shim KIT required.

14121-B60-L22 272 EX 9.0 ¥36,000

○14121-B60-L23 272 EX 10.3 ¥36,000 14121-B60-L31 280 EX 10.3

14121-B60-L41 288 EX 8.5 \(\pm\)36,000

14121-B60-L42 288 EX 9.0 \(\delta 36,000\)

○14121-B60-L43 288 EX 10.0 ¥36,000

○14121-B60-L44 288 EX 10.5 ¥36,000

14121-B60-L51 304 EX 8.5 \(\pm\)36,000

14121-B60-L52 304 EX 9.0 ¥36,000

○14121-B60-L53 304 EX 10.5 ¥36,000

¥36,000

★ Can idling with standard ECII

O Cylinder head modifications required.

B6(NA6CE) Free Adjusting Cam Pulley IN·EX common ¥13,000 ×2

In all sections duralumin A-7075 is used



IN•EX common ■14211-B60-001×2

With a vernier degree scale.

B6/BP Heavy Duty Oil Pump ¥35.000

Made from high spec material and machined by CNC, to give you improved high-speed reliability.



■15131-BP0-000/T=9.45mm (Larger diameter) Φ42.5mm NA6CE-127441~ NB6C-1·····~

■15131-BP0-001/T=9.95mm (Larger side diameter) Φ42.5mm NB6C-2·····~

■14730-B60-000

B6(NA6CE) Inner-Shim KIT ¥85,000



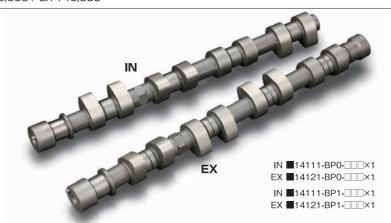
Inner-Shim KIT removing weight from the moving parts of the valve train reduces inertia and friction allowing the engine to rev higher.

Shims sold separately ¥@600(1.5~3.0mm) The kit contains standard size shims, but on occasion other size shims will be required to create the required gap, these are sold separately. BP(NA8C)

MAZDA

BP NA8C/NB8C

BP(NA8C/NB8C [~2000y June]) High Power Profile Camshaft IN ¥46,000 / EX ¥46,000



BP (NA8C/NB8C) Camshaft (Solid Adjuster Type)

ϕ 33mm (Modifie	mm(Standard base circle diameter $\phi 36$ mm)				
Part No	Price	Lift	Angle	Part No	
14111 - BP1	¥46,000	9.0	256 IN	☆14111-BP0-001	
14111 - BP1	¥46,000	9.0	264 IN	☆14111-BP0-011	
14111 - BP1	¥46,000	9.0	272 IN	☆ 14111-BP0-021	
14111 - BP1	¥46,000	9.0	288 IN	14111-BP0-031	
14121-BP1	¥46,000	9.0	304 IN	14111-BP0-041	
14121 - BP1	¥46,000	9.0	256 EX	☆14121-BP0-001	
14121 - BP1	¥46,000	9.0	264 EX	☆14121-BP0-011	
14121 - BP1	¥46,000	9.0	272 EX	14121-BP0-021	
Standard NA80	¥46,000	9.0	288 EX	14121-BP0-031	
can not be used	¥46,000	9.0	304 EX	14121-BP0-041	

 $\overline{\text{Standard NA8C HLA (Hydraulic Lash}} \text{ Adjuster system)}$ can not be used.

* Locked Lash Adjuster KIT or Inner-Shim KIT required.

★ Standard NA8C ECU can be used.

☆ Standard NB8C ECU can be used.

* In some cases the cylinder head may need modifying

due to the high lift cam making contact with the

	A fledesigned base circle for higher in					
ϕ 33mm (Modified base circle diameter ϕ 33mm)						
	Part No	Angle	Lift	Price		
	14111-BP1-011	264 IN	10.0	¥46,000		
	14111-BP1-021	272 IN	10.0	¥46,000		
	14111-BP1-031	288 IN	10.0	¥46,000		
	14111 - BP1 - 041	304 IN	10.0	¥46,000		
	14121-BP1-011	264 EX	10.0	¥46,000		
	14121-BP1-021	272 EX	10.0	¥46,000		
	14121-BP1-031	288 EX	10.0	¥46,000		
	14121-BP1-041	304 EX	10.0	¥46,000		
	Standard NASC HI A	(Hydraulic	Lach	Adjuster syst		

*Inner Shim Conversion KIT required.(14730-BP0-001) *Base circle reduced in size to achieve higher lifts. but still using the same diameter cam follower.

Heavy Duty Oil Pump ¥35,000

Made from high spec material and machined by CNC, to give you improved high-speed reliability.



■15131-BP0-000/T=9.45mm

■15131-BP 0-001/T=9.95mn (Larger side diameter) Φ42.5mm NB8C -200000~

BP(NA8C) Free Adjusting Cam Pulley IN·EX common ¥13,000 ×2

In all sections duralumin A-7075 is used



IN•EX common ■14211-B60-001×2 • With a vernier degree scale.

BP(NB8CI~2000y June]) Free Adjusting Cam Pulley IN ¥15,000 / EX ¥13,000

In all sections duralumin A-7075 is used





IN ■14210-NB0-001×1 EX ■14211-B60-001×1 With a vernier degree scale

BP(NA8C) Locked Lash Adjuster ¥12,800



Designed only for BP ■14744-BP0-000 *Should only be used with TODA's High Power Profile Camshafts

(Solid Adjuster Type) Shims sold separately ¥@800- (9.6~11.6mm).

*The kit contains standard size shims, but on occasion other size shims will be required to create the required gap, these are sold separately

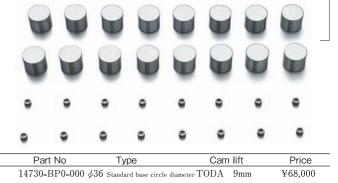
BP(NA8C/NB8C) Inner-Shim Conversion KIT ¥68.000 Shims sold separately ¥@1,000- (1.5~3.0mm)

- The lifter is the only part to be replaced.
- Stock valve spring can be used.
- Common part for both NA8 & NB8 engines.

Since NASC BP NASC uses HLA's as standard. For tuning purposes these heavy hydraulic lash adjusters that have a tendency to leak becoming a big bottle neck in extracting performance from high lift cams.

Replacing them with TODA's Inner-Shim Conversion KIT not only reduces the weight by 17.5g per lifter but removes oil pressure fluctuations, enabling the engine to reach higher engine speeds safely.

Since NB8C BP NB8C uses an outer shim type lifter. Due to the smaller tappet face (shim diameter) the contact area with the cam is reduced making it dangerous to use high lift cams. Replacing them with TODA's Inner-Shim Conversion KIT not only gives you the contact area required but also reduces the weight by 9g per lifter again freeing up the engine giving you more power.



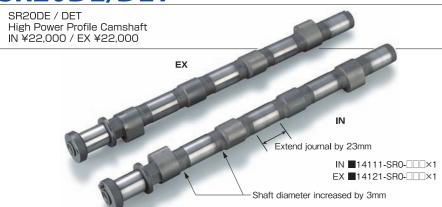
14730-BP0-000 φ36 Standard	l base circle diameter T(ODA 9mm	¥68,000		
$14730\text{-BP0-001}\ \phi 33\ \text{Modified}$	base circle diameter To	ODA 10mm	¥68,000		
For installing high lift camshaft.					
Shims sold	separately	1.5~3.0mm	¥1,000		

Standard HLA lifter (NA) and normal outer shim lifter (NB) should be replaced with TODA's Inner-Shim Conversion KIT. Reductions in mass and friction are found. The standard spring retainer, valve spring and spring seat can be used.

*The kit contains standard size shims, but on occasion other size shims will be required to create the required gap, these are sold separately.

Piston

SR20DE/DET



Normal 4 valve per cylinder engines use 1 cam lob per valve. But the SR engine uses a single rocker to operate 2 valves. This though increases stress on the lob. Stress is further increased when up rated valve springs and higher lift cams are used.

Because of this, TODA Racing has developed a cam with a larger overall diameter. This drastically reduces the stress, leading to improved valve timing and reliability.

Part No

SR20DE/DET Camhaft for Lash adjuster used SR20DE Camshaft for N-2 Racing (Convertible S14)

(Control libio CT+)						
Part No	Angle	Valve Lift	Price			
14111-SR0-002	248IN	11.0	¥22,000			
14111-SR0-001	256IN	10.5	¥22,000			
14111-SR0-011	264IN	10.5	¥22,000			
14111-SR0-021	272IN	10.5	¥22,000			
14121-SR0-002	248EX	11.0	¥22,000			
14121-SR0-001	256EX	10.5	¥22,000			
14121-SR0-011	264EX	10.5	¥22,000			
14121-SR0-021	272EX	10.5	¥22,000			

*Standard lash adjuster used. *Can be used with NVCS.

Angle Valve Lift Price

14111-SR0-R01 296IN 13.0 ¥75,000 14111-SR0-R11 304IN 13.0 ¥75,000

14121-SR0-R11 296EX 12.8 ¥75,000 14121-SR0-R21 304EX 12.8 ¥75,000

14121-SR0-R01 288EX 12.8

*NISMO/N2 head required.

SR20DE / DET (except for RNN14) Up Rated Valve Springs ¥24,000

SR20DE / DET

• With a degree scale.

Free Adjusting Cam Sprocket IN·EX Common ¥14,000×2



IN•EX Common ■14211-SR2-000×2



GT300 ENGINE

RB26DETT

RB26DETT Free adjusting cam pulleys IN·EX Common ¥14,000×2

In all sections duralumin A-7075 is used.





IN•EX Common ■14211-RB2-601×2

• With a vernier degree scale.



F3 2005 Driver: Yasuhiro Takasaki

