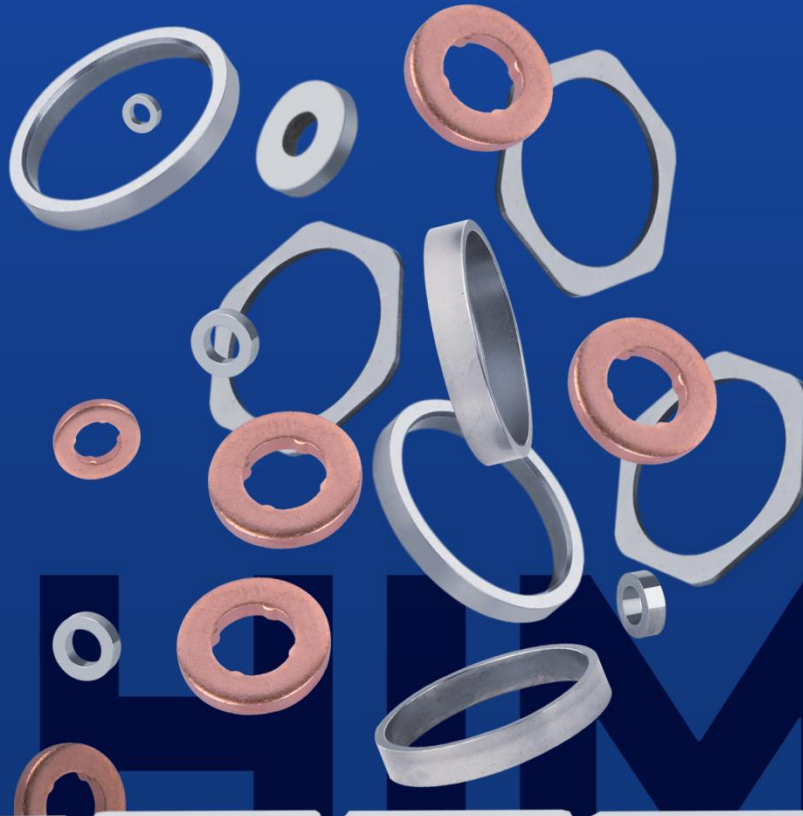


INJ

813 Injector Adjust Shim Technical File

SKU: G1N20B13100B2B



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B13 Injector Adjust Shim Technical File

1. B13 Injector Adjust Shim Introduction

1.1. B13 Injector Adjust Shim Basic Information

Title	B13 Injector Adjust Shim	Quality
SKU	G1N20B13100B2B	China Made New

1.2. B13 Injector Adjust Shim Common Part Number

(1) Injector Adjust Shim Exchange Information

Injector Part Number	Injector Part Number	Injector Part Number	Injector Part Number
0445110218	0445110646	0445110418	0445110454

(2) Injector Adjust Shim Application Information

Brand	Model	Engine	OE Number
JEEP	Cherokee 2.8 CRD 4x4	ENR	5142811AA
AUDI	A1 2.0 TDI	CFHB	03L 130 277 Q
SEAT	Alhambra 2.0 TDI	CFFE	03L 130 277 J
SKODA	Octavia 2.0 TDI	CLCA	03L 130 277 Q
FIAT	Ducato 110 MultiJet	F1AE3481G	504389548
JMC	/	/	11112100ABA

(3) Injector Adjust Shim Common Writing

B13

1.3. B13 Injector Adjust Shim Parameter

Adaptation System: Common Rail System

Injector Adjust Shim Series: CR12

Injector Adjust Shim Type: Electromagnetic

1.4. B13 Injector Adjust Shim Specifications And Dimensions

Injector Adjust Shim Thickness: 1.0-1.96

Injector Adjust Shim Net Weight: 3.1g

Injector Adjust Shim Gross Weight: 310g

Injector Adjust Shim Quality: China Made New

Injector Adjust Shim Package Size: 9*cm*2cm *4cm

Injector Adjust Shim Type: High Pressure Common Rail Injector Adjust Shim

Injector Adjust Shim MOQ: 100pcs

1.5. B13 Injector Adjust Shim Quality Control

(1) Injector Adjust Shim Testing

All injector adjust shim parts are tested for electrical characteristics, accuracy, high temperature, low temperature, pressure resistance, leakage, durability, and various working conditions.

(2) Injector Adjust Shim Assembling

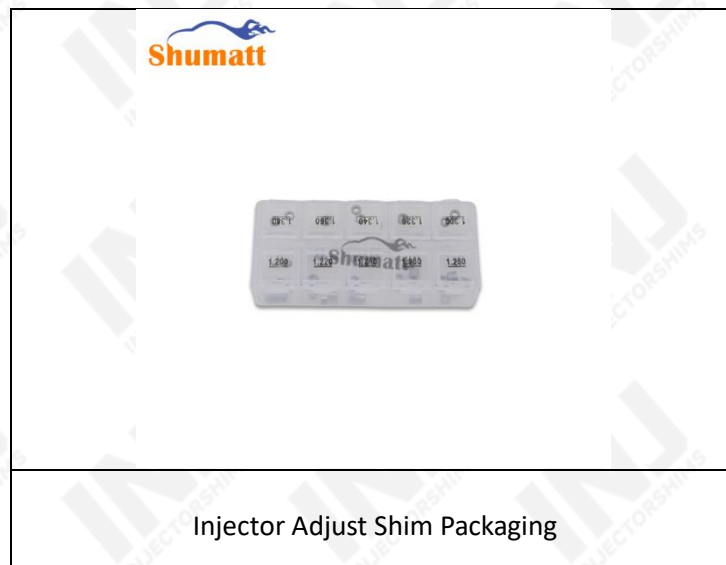
In addition, injector adjust shim production and installation process quality control, our company strictly follows the standard product installation data and product installation steps for installation, such as injector adjust shim stroke test, injector adjust shim solenoid valve tightening torque.

(3) Injector Adjust Shim Inspection

The injector adjust shim factory inspection is tested three times: full inspection, random inspection, and batch inspection. The injector adjust shim factory inspection will use different brands of test benches to test the same injector adjust shim for a total of no less than three times. The injector adjust shim installation and testing environment is completed in a dust-free workshop.

1.6. B13 Injector Adjust Shim Customized Service

(1) Injector Adjust Shim Customized Service Coverage: Meet the customized needs of OEM manufacturers for shell lettering, logo engraving, injector adjust shim internal packaging, injector adjust shim external packaging and labels customized, etc.



(2) Injector Adjust Shim Customized Service Requirements:

The sales of customized injector adjust shim products shall not be less than **10 units**.

The packaging of customized injector adjust shims shall not be less than **1000 pieces**.

Customized products involve the need of specify logo, the OEM manufacturer needs to provide trademark authorization and the sample of logo image file.

⚠ **Once the customized injector adjust shim is sold, it cannot be returned or exchanged if there are no quality problems.**

1.7. B13 Injector Adjust Shim Packing List and Package Size

(1) Injector Adjust Shim Spare Parts List

No.	1	2	3
Image			
Name	Injector Adjust Shim Size	Injector Adjust Shim Thickness	Injector Adjust Shim Accuracy
Description	Size: $\Phi 2.3 * \Phi 4.2$	1.00-1.96	0.02/ gear

- ⚠ Minors are prohibited from using the injector adjust shim, plastic film to avoid personal injury.
- ⚠ The injector adjust shim is disposable installation accessory and need to be replaced for reinstallation.
- ⚠ Plastic film is non-degradable materials. Please dispose of it properly after use.
- ⚠ The injector adjust shim and installation parts guide tube should be treated with appropriate sealing fuel during installation.

(2) Injector Adjust Shim Packing Size



No.	Name	Injector Adjust Shim Packing Size (cm)
1	Injector Adjust Shim Box	9*2*4

1.8. B13 Injector Adjust Shim Testing Standard and Certificate

We can provide the factory quality inspection test report of each injector adjust shim to ensure that each injector adjust shim delivered meets the engine performance indicators.

BOTEN		测试报告		4.05.2019 10:42:09	
企业名称: _____					
电话:		_____		地址: _____	
传真:		_____		检测人: _____	
客户地址:		_____		送检单位: _____	
电话:		_____		客户姓名: _____	
传真:		_____		_____	
检测描述: _____					
检测名称: 检测器					
型号-零件号: _____					
检测日期: _____					
检测结果					
检测器型号: CDE000-IGS11					
	喷射测试值	喷射测试值	喷射测试值	喷射测试值	
LEAK TEST:	0.8	0.8	0.8	0.8	✓
Back:	0.8	+	0.8	0.8	✓
WAFER:	0.8	147.3±10.5	0.8	0.8	✗
Max:	231.5	218.3±14.4	0.8	0.8	✓
TL:	28.4	25.6±8.5	0.8	0.8	✓
EL:	14.1	11.7±4.8	0.8	0.8	✓
VE:	0.7	4.5±1.8	0.8	0.8	✓
ch1 ch2 ch3 ch4 ch5 ch6 ch7 ch8 检测器型号: _____					
☐ 维修前 ☐ 维修后					

1.9. B13 Injector Adjust Shim Warranty Instructions

(1) Product Warranty Conditions and Instructions

It is necessary to provide pictures, videos, or test reports detected by the injector adjust shim inspection equipment when the injector adjust shim is abnormal during use as evidence to feed back to the salesman.

Abnormal conditions are properly explained such as: 1.Smoke, 2. Engine shake, 3. Difficulty starting the engine, 4. Engine noise, 5. Fuel leakage etc.

(2) Injector Adjust Shim Warranty Coverage

Within 15 days after customer receives the B13 injector adjust shim, if there is a performance failure and the product has no appearance damage, customer can choose to replace it or repair it;

If the B13 injector adjust shim has performance problems during the warranty period (3 months), and it is confirmed that it is product's problems after testing, you can contact our salesmen to replace the same model or a reworked product with the same performance for free;

If the injector adjust shim house has obvious scratches, it can only be repaired and it will be returned as it is if the product is confirmed to be fault-free.

⚠ Tips: For products not covered by warranty, our company can provide paid maintenance services. For products after paid repaired, the same performance problem will have a free warranty period within 3 months from the date of repairing.

(3) Injector Adjust Shim Out of Warranty Coverage

- ① The warranty period has expired and is not covered by the warranty.
- ② Injector adjust shim failure caused by high temperature, high pressure, humidity, rain and snow, saline-alkali land, earthquake, and abnormal environment.
- ③ The customer privately disassembles or repairs the injector adjust shim, causing the injector adjust shim to be damaged.
- ④ Injector adjust shim damage caused by human factors (throwing, strong magnetic field magnetization, arson).
- ⑤ Injector adjust shim failure or injector adjust shim damage caused by non-injector adjust shim design, technology, manufacturing, quality and other issues.
- ⑥ Injector adjust shim failure caused by system pressure exceeding the approved system pressure.
- ⑦ Injector adjust shim failure caused by system voltage exceeding the approved voltage.
- ⑧ Impurities (water, lead, aluminum powder, iron powder, sulfide) in the system fuel exceed the standard requirements and cause injector adjust shim failure.
- ⑨ Injector adjust shim failure caused by not installing according to the tightening torque specified in the vehicle engine maintenance manual (tightening torque is too large or too small).
- ⑩ Injector adjust shim failure caused by failure to follow the installation angle specified in the vehicle engine maintenance manual.
- 11 Injector adjust shim failure caused by failure to comply with the cleaning requirements specified in the vehicle engine maintenance manual.
- 12 Injector adjust shim failure caused by failure to replace wearing parts in accordance with the requirements specified in the vehicle engine maintenance manual.
- 13 Injector adjust shim failure is caused by not following the intake system clearance and exhaust system clearance requirements specified in the vehicle engine maintenance manual.
- 14 Injector adjust shim failure is caused by not replacing the wearing parts of the fuel intake system and the clearance between the fuel intake system pipeline and the injector adjust shim connection specified in the vehicle engine maintenance manual.

1.10. B13 Injector Adjust Shim Manufacturer

2. B13 Injector Adjust Shim Technical Support

2.1. B13 Injector Adjust Shim Installation

(1) B13 Injector Adjust Shim Installation Precautions:

- ① The replacement of the injector adjust shim must strictly follow the electrical system, the approved pressure of the low-pressure fuel intake system, the approved pressure of the high-pressure fuel circuit system, and fuel system replacement consumables requirements (including the low-pressure fuel circuit system filter and the high-pressure fuel circuit) specified in the vehicle engine maintenance manual.
- ② Replacement of wearing parts of the fuel system, cleaning requirements for the connection between the fuel system and the injector adjust shim, the fitting clearance of the injector adjust shim connection, the installation angle and tightening torque of the injector adjust shim, the fitting clearance of the intake system, and the fitting clearance of the exhaust system to ensure the service life of the engine and the normal operation of the injector adjust shim.
- ③ When installing the injector adjust shim on the engine, it is necessary to clean the engine cylinder block, cylinder head and other parts connected to the injector adjust shim and ensure that they are clean and free of dust, carbon deposits, water, rust spots, etc.
- ④ Before installation, check whether the injector adjust shim and the nozzle sealing washer shim have been replaced and installed on the injector adjust shim.
- ⑤ When installing the injector adjust shim, apply lubricant between the injector adjust shim, nozzle sealing washer shim, and O-ring.
- ⑥ Failure to replace the new sealing ring gasket may lead to: injector adjust shim deformation, fuel leakage, air leakage, serious damage to the injector adjust shim, causing the injector adjust shim to break and cause engine damage.
- ⑦ When installing the injector adjust shim on the engine, please carefully check that the parts related to the installation of the injector adjust shim, such as the injector adjust shim pressure plate, screws, push rods and other accessories are not deformed, and strictly follow the operating procedures in the engine maintenance manual for installation.
- ⑧ It is forbidden to expose the injector adjust shim for a long time in an environment with severe dust pollution and corrosion to iron products.
- ⑨ It is forbidden to expose the injector adjust shim for a long time in a strong magnetic field environment.

2.2. B13 Injector Adjust Shim Not Working Normally

- (1) There is air in the fuel circuit of the engine fuel system.
- (2) The vehicle injector adjust shim supply system is abnormal.
- (3) The engine common rail system is leaking or the pressure limiting valve is damaged.
- (4) The wiring harness connecting the vehicle to the injector adjust shim is short-circuited, disconnected, or has poor contact.
- (5) The anti-rust fuel of the injector adjust shim solidifies after being left for a long time, causing the internal components to become stuck or the fuel holes to become clogged.



Before installing, carefully check whether other components in the common rail system except the

injector adjust shim are damaged to prevent the injector adjust shim from not working properly after being replaced.

2.3. B13 Injector Adjust Shim Causes of Being Damaged

- (1) Didn't operate properly according to engine maintenance manual during disassembly or installation, resulting in damage to the injector adjust shim.
- (2) The fuel used for the vehicle does not meet the standard cause damage to the injector adjust shim, such as: the water content in the fuel exceeds the standard, iron powder, aluminum powder, sulfide impurities exceed the standard, etc.
- (3) The engine is not regularly maintained according to the engine maintenance manual (please refer to the vehicle maintenance manual for the maintenance mileage). For example, failure to replace the lubricating fuel of the engine system for a long time will cause abnormal wear of the engine, excessive exhaust gas volume or a large amount of carbon deposits inside the engine. The filter is not replaced during maintenance or the replaced filter cannot reach the original filter standard. all above reasons can cause damage to the injector adjust shim.
- (4) The abrasion of the injector adjust shim produces iron powder and aluminum powder enter the injector adjust shim and cause damage to the injector adjust shim.
- (5) The deformation and abrasion of fuel tank result in iron powder or aluminum powder entering the injector adjust shim and causing damage to the injector adjust shim.
- (6) The injector adjust shim is damaged due to replacement or adjustment of the relevant parts of the injector adjust shim. For example, the valve clearance does not meet the standard after the engine is repaired, the replacement or modification of the wiring harness connected to the injector adjust shim fails to meet the original standard.
- (7) The engine is overheated and overloaded for a long-time working result in damage to the injector adjust shim.
- (8) The injector adjust shim will be damaged naturally at the end of its working life.
- (9) The injector adjust shim is magnetized (injector adjust shim parts' magnetic exceeded) causing the injector adjust shim to not work properly.

⚠ Before replacing the injector adjust shim, please check the engine parts carefully according to the engine maintenance manual to avoid the injector adjust shim being damaged again after replacement.

2.4. B13 Injector Adjust Shim Technical Support Obtaining Methods

- (1) Injector Adjust Shim Technical File: <https://www.injectorshims.com/download/>
- (2) Injector Adjust Shim Videos: <https://www.injectorshims.com/videos/>
- (3) Injector Adjust Shim Encyclopedia: <https://www.injectorshims.com/category/news/encyclopedia/>

3. B13 Injector Adjust Shim Purchase and Delivery

3.1. B13 Injector Adjust Shim Purchase Payment Term

Payment Terms: T/T, PayPal, Alipay, WeChat

⚠ Please contact our salesmen for specific payment information.

3.2. B13 Injector Adjust Shim Main Sales Markets

Injector Adjust Shim Main Sales Markets: Asia, Europe, North America, South America, Africa etc.

3.3. B13 Injector Adjust Shim Declaration Requirements

We can assist customers to provide the following documents for import customs clearance: contract, invoice, packing list, bill of lading, insurance policy, certificate of origin, etc.

3.4. B13 Injector Adjust Shim Shipping Ways

Destination in China Areas: SF Express, Debon Express, the corresponding logistics company can be provided according to customer requirements in special cases.

Destinations Out of China's Areas: DHL, UPS, FedEx, TNT air, ocean or other shipping methods required by customers.

3.5. B13 Injector Adjust Shim Lead Time

Lead Time: Send out within 3 – 7 working days after receiving payment (Except for special products and special cases) .

3.6. B13 Injector Adjust Shim Logistics Time for Destination Out of China's Areas

DHL Logistics Time:

Country or Region of Departure	Hong Kong, China	Other Countries or Regions of Asia	Australia and New Zealand	Europe	America	Other Countries
China's Mainland	7 Days	7 Days	8 Days	8 Days	8-12 Days	7-10 Days

UPS Logistics Time: Country or Region of Departure: China's Mainland

Country of Destination	Estimated Arrival Time	Country of Destination	Estimated Arrival Time	Country of Destination	Estimated Arrival Time
Japan	3 Days	UK	5-7Days	Egypt	5-7 Days
Turkey	5-7 Days	Singapore	3 Days	Switzerland	5-7 Days
Bahrain	5-7 Days	Latvia	7-10 Days	New Zealand	7-10 Days
Sri Lanka	5-7 Days	Thailand	3 Days	Austria	5-7 Days
Romania	5-7 Days	Vietnam	3-5 Days	Estonia	5-7 Days
Malaysia	3-5 Days	Israel	5-7 Days	Mexico	7-10 Days
France	5-7 Days	America	5-7 Days	United Arab Emirates	5-7 Days
Italy	5-7 Days	Netherlands	5-7 Days	Bengal	7-10 Days
Lebanon	5-7 Days	Philippine	3-5 Days	Greece	7-10 Days
South Korea	3 Days	Spain	5-7 Days	Myanmar	5-7 Days
Canada	5-7 Days	Germany	5-7 Days	Saudi Arabia	7-10 Days
Portugal	5-7 Days	Australia	5-7 Days	South Africa	7-10 Days
Denmark	5-7 Days	Belgium	5-7 Days	Ukraine	7-10 Days
India	7-10 Days	Qatar	7-10 Days	Poland	5-7 Days
Indonesia	3-5 Days	Morocco	7-10 Days	Pakistan	7-10 Days
Kuwait	7-10 Days	/	/	/	/

⚠ The logistics time is for reference only and is subject to the actual arrival.

3.7. B13 Injector Adjust Shim Packing

Domestic Express Packaging: Usually wrapped in waterproof scotch tape, such as picture No. 1.

International Express Packaging: Wrapped with waterproof yellow tape After wrapping the black protective film, such as picture No. 2.

Pallet Shipping: Use fumigation free and recycling trays that meet export requirements, and use white wrapping protective film to wrap and bind with cable ties for the outside, such as picture No. 3, also, the products can be packaged according to customers' requirements.

⚠ The packing tray is made of plastic and can be recycled.

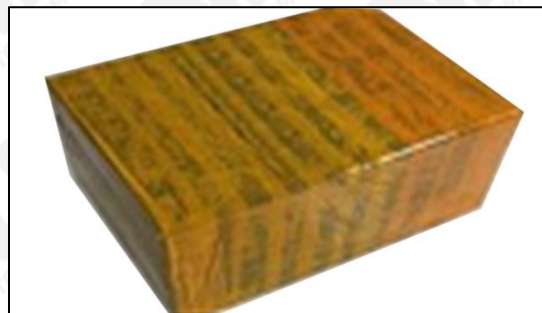
⚠ Transparent tape, yellow tape, black wrapping protective film, white wrapping protective film are non-degradable materials, please dispose of them properly.

⚠ Minors are prohibited from using transparent tape, yellow tape, black wrapping protective film, and white wrapping protective film to avoid personal injury.



Pic No. 1

Domestic express packaging:
Wrapped with Transparent tape



Pic No. 2

International express packaging:
Wrapped with yellow tape after wrapping black protective film



Pic No. 3

Pallet shipment: Use pallets that meet export requirements and wrap with white plastic wrap and tie.

4. B13 Injector Adjust Shim Storage Standard

(1) Choose a Suitable Storage Place

The warehouse and cargo yard where the injector adjust shim is stored should be kept clean and dry, and away from the factory buildings that generate harmful gases and dust; do not mix with acids, alkali, salt, and other substances; the storage place should have a good drainage system; the cargo yard should be flattened with gravel or furnace ash etc. to enhance the water permeability of the surface layer to keep the reservoir area dry.

(2) Strict Requirements of Warehousing

Strict inspections should be carried out when the injector adjust shim are put into storage, the surface cleaning work should be done well to remove water traces, fuel stains, ashes, and other dirt, remove the rust and do anti-rust treatment in time. Packaged injector adjust shim must be protected from damage.

(3) Keep The Warehouse Dry And Preventing Moisture

The relative humidity is usually below 70% for the injector adjust shim placed in the room, and the corrosion of the injector adjust shim is significantly reduced.

Injector adjust shim must be stored in the warehouse, and they are forbidden to store in the same warehouse with commodities with high water content.

(4) Stack Properly

After the injector adjust shim is exposed to rain, the corrosion rate will increase significantly. The purpose of sealing is to isolate the injector adjust shim from rainwater and humid air, so the warehouse window should be checked in time to avoid rainwater entering the warehouse.

If the injector adjust shim package is damaged, it should be repaired or replaced; when the package is damp, the packaging material should be dried; if the original anti-corrosion and fuel applied at the factory is found to be damaged or dried up, it should be cleaned and re-applied fuel in time.

⚠ It is forbidden to leave the injector adjust shim exposed in the air for a long time.

⚠ It is forbidden to store acids, alkalis, salts, and other substances together with the injector adjust

shim.



The unpacked injector adjust shim must be rust-proof during secondary storage.

5. Company Information



5.1. Company Introduction



Mob Phone/WeChat: +86-13410541523



HK Telephone: +852-67653519



Telephone: +86-755-23215133



Shenzhen Office: 11-12, Floor 14, Building 13, Qinchengda Building, Exit A, Honglang North Subway Station, Bao'an District, Shenzhen, China's Mainland



Shenzhen Office: Exit C, Qiao Touxu Metro Station, NO. 66 Chongqing Road, Fuhai Avenue, Bao'an District, Shenzhen, China Mainland



Hong Kong Office: Jianfa Street Industrial Zone, Tuen Mun, New Territories, Hong Kong, China



After-sales Service Address: Please contact our salesmen to obtain and provide the corresponding product maintenance reasons (Reference: [1.9. B13 Injector Adjust Shim Warranty Instructions](#))

5.2. Contact Information

Name	WeChat/ WhatsApp
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Ruby	+86-13410541523
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6. Copyright Statement

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