

COMMON RAIL

INJECTOR PART



319 Injector Valve Cap Technical Instruction

Content

1. 319 Injector Valve Cap Introduction	2
1.1. 319 Injector Valve Cap Basic Information	2
1.2. 319 Injector Valve Cap Common Part Number	2
1.3. 319 Injector Valve Cap Specifications and Dimensions Parameter	2
1.4. 319 Injector Valve Cap Quality Control	2
1.5. 319 Injector Valve Cap Customized Service	3
1.6. 319 Injector Valve Cap Spare Parts List & Packing Size	3
1.7. 319 Injector Valve Cap Testing Standard and Certificate	4
1.8. 319 Injector Valve Cap Warranty Instructions	5
2. 319 Injector Valve Cap Technical Support	6
2.1. 319 Injector Valve Cap Utilized Location	6
2.2. 319 Injector Valve Cap Installation Precautions	7
2.3. Reasons of 319 Injector Valve Cap Not Working Normally	7
2.4. Causes of 319 Injector Valve Cap Being Damaged	7
2.5. 319 Injector Valve Cap Measurement Tool	8
2.6. 319 Injector Valve Cap Storage Standard	9
2.7. 319 Injector Valve Cap Technical Support Obtaining Methods	9
3. 319 Injector Valve Cap Purchase and Delivery	9
3.1. 319 Injector Valve Cap Purchase Payment Term	9
3.2. 319 Injector Valve Cap Main Sales Markets	10
3.3. 319 Injector Valve Cap Declaration Requirements	10
3.4. 319 Injector Valve Cap Shipping Ways	10
3.5. 319 Injector Valve Cap Lead time	10
3.6. 319 Injector Valve Cap Logistics Time for Destination Out of China's Areas	10
3.7. 319 Injector Valve Cap Injection Packing	10
4. Company Information	11
4.1. Company Introduction	12
4.2. Contact Information	12
5. Copyright Statement	12

319 Injector Valve Cap Technical Instruction

1. 319 Injector Valve Cap Introduction

1.1. 319 Injector Valve Cap Basic Information

Title	Common Rail 319 Injector Valve Cap China Made New
SKU	G1L10ZC01319FM

1.2. 319 Injector Valve Cap Common Part Number

1) Injector Valve Cap Applicable Model

Valve Assembly Part Number	Injector Part Number	Injector Part Number	Injector Part Number
F00ZC01319	0445110444	0445110496	0445110557
/	0445110580	0445110698	/

2) Injector Valve Cap Application Information

Brand	Car Model	Engine Model	OE Part Number
MAHINDRA	TUV300 1.5 D T8	mHawk100	0305BAU00381N
MAHINDRA	Bolero 2.5 Diesel	NEF CRDe	0305BAB02221N
MAHINDRA	Genio 2.5D	mDI CRDe	0305BAB02451N

3) Injector Valve Cap Part Number Common Writing

F00ZC01319, F 00Z C01 319, 0 445 110 444, 0 445 110 496, 0 445 110 557, 0 445 110 580, 0 445 110 698, 0445110444, 0445110496, 0445110557, 0445110580, 0445110698, 0305BAU00381N, 0305BAB02221N, 0305BAB02451N

1.3. 319 Injector Valve Cap Specifications and Dimensions Parameter

Injector Valve Cap Applicable System: [Common Rail System](#)

Injector Valve Cap Series: [120 Series](#)

Injector Valve Cap Size: [2*2*3 cm](#)

Single Injector Valve Cap Weight: [10g](#)

Injector Valve Cap Weight Per Box: [20g](#)

Injector Valve Cap Quality: [China Made New](#)

Injector Valve Cap Package Size: [3cm* 3cm *4cm](#)

Injector Valve Cap Type: [High Pressure Common Rail Injector Valve Cap](#)

Injector Valve Cap MOQ: [1pcs](#)

1.4. 319 Injector Valve Cap Quality Control

1) Injector Valve Cap Testing

All parts of the injector valve cap have undergone electrical characteristics testing, precision testing, high temperature testing, low temperature testing, withstand pressure testing, leakage testing, durability testing, and various working conditions testing.

2) Injector Valve Cap Installation



In addition, the injector valve cap production and installation process is quality controlled. Our company strictly follows the standard product installation data and product installation steps for installation, such as injector valve cap stroke test, injector valve cap solenoid valve tightening torque, injector valve cap nozzle tightening torque.

3) Injector Valve Cap Inspection

The factory inspection of the injector valve cap has undergone three inspections: full inspection, random inspection, and batch inspection. Different brands of test benches are used to test the same injector valve cap for more than three times for factory inspection, and the fuel injector installation testing environment are progressed in dust-free workshop.

1.5. 319 Injector Valve Cap Customized Service

(1) Injector Valve Cap Customized Service Coverage: Meet OEM manufacturers' customization needs for shell engraving, logo engraving, injector valve cap internal packaging, injector valve cap external packaging and labels, etc.

No.	1	2
Image		
Name	Injector Valve Cap Packing	Injector Valve Cap Engraving Customization

(2) Injector Valve Cap Customized Service Requirements:

The purchase quantity of customized **injector valve cap** is no less than **10 pieces**.




The purchase quantity of **injector valve cap boxes** is no 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 valve cap is sold, it can't be returned or exchanged if there is no quality problems.

1.6. 319 Injector Valve Cap Spare Parts List & Packing Size

1) Injector Valve Cap Spare Parts List

No.	1	2	3
Image			
Name	Injector Valve Cap Side	Injector Valve Cap Front	Injector Valve Cap Engraved Number

⚠ Minors are prohibited from using the injector valve cap assembly, O-ring, nozzle protective cover,

injector valve cap shell protective cover, oil return protective cover, VCI anti-rust bag, and bubble bag to avoid personal injury.

⚠ O-rings and nozzle washer shim are one-time installation accessories and need to be replaced when installed again.

⚠ The nozzle protective cover, injector valve cap shell protective cover, and oil return protective cover are recyclable accessories and can be reused.

⚠ VCI anti-rust bags and bubble bags are non-degradable materials, please dispose of them properly after using.

⚠ The injector valve cap and the installation part duct must be treated with appropriate sealing oil during installation.

2) Injector Valve Cap Packing Size



Pic No.1

No.	Name	Injector Valve Cap Packing Size (cm)
1	Injector Valve Cap Box	3*3*4

1.7. 319 Injector Valve Cap Testing Standard and Certificate

We can provide the factory quality inspection test report of each injector valve cap to ensure that each injector valve cap 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: _____		检测日期: _____			
检测项目: _____					
检测名称: _____					
型号-零件号: _____					
检测地点: _____					
检测结果					
检测标准: GB1002-9511					
检测项目	检测结果	检测标准	检测结果	检测结果	检测结果
LSAR TEST:	38	4	4.5	20.8 ± 1.5	✓
Pa (k):	38	4	75.7	48.8 ± 2.5	✗
WPRM:	38	125.3 ± 14.3	0.9	10.8 ± 1.5	✓
Mass:	201.5	218.3 ± 14.4	0.9	10.8 ± 1.5	✓
TL:	28.4	24.0 ± 2.5	0.9	10.8 ± 1.5	✓
EL:	14.1	11.3 ± 4.8	0.9	10.8 ± 1.5	✓
VE:	6.7	4.5 ± 1.6	0.9	10.8 ± 1.5	✓
检测日期: 4.05.2019					
检测地点: _____					
检测人: _____					
检测日期: _____					

Pic No.2

1.8. 319 Injector Valve Cap Warranty Instructions

1) Product Warranty Conditions and Instructions

It is necessary to provide pictures, videos, or test reports tested by the injector valve cap inspection equipment when the injector valve cap 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. Oil leakage etc.

2) Injector Valve Cap Warranty Coverage

- ① After customer receives the 319 injector valve cap within 15 days , if there is a performance failure and the product has no damage on surface, customer can choose to replace it or repair it;
- ② If the 319 injector valve cap has performance problems during the warranty period (6-12 months), and it is confirmed to be product's problems after being tested, you can contact our salesmen to replace the same model or a reworked product with the same performance for free;
- ③ If the injector valve cap shell 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 Valve Cap Is Not Covered By Warranty

- ① The warranty period has expired.
- ② Injector valve cap failure caused by high temperature, high pressure, humidity, rain and snow,

saline-alkali land, earthquake, and used in abnormal environment.

- ③ Customer disassembles or repairs the injector valve cap personally resulting in damage to the injector valve cap.
- ④ Injector valve cap damage caused by man-made reasons (throwing, strong magnetic field magnetization, set fire).
- ⑤ Injector valve cap failure or injector valve cap damage caused by non-injector valve cap design, technology, manufacturing, quality and other issues.
- ⑥ Injector valve cap failure due to system pressure exceeding system approved pressure.
- ⑦ Injector valve cap failure caused by system voltage exceeding approved voltage.
- ⑧ Injector valve cap failure caused by impurities (water, lead, aluminum powder, iron powder, sulfide) in the system fuel exceeding the standard requirements.
- ⑨ Injector valve cap failure caused by not installing according to the tightening torque specified in the vehicle engine maintenance manual (the tightening torque is too large or too small).
- ⑩ Injector valve cap failure caused by not following the installation angle specified in the vehicle engine maintenance manual.
- 11 Injector valve cap failure caused by not following the cleaning requirements specified in the vehicle engine maintenance manual.
- 12 Injector valve cap failure caused by failure to replace consumable parts as specified in the vehicle engine maintenance manual.
- 13 Injector valve cap failure caused by not complying with the intake system fit clearance and exhaust system fit clearance requirements specified in the vehicle engine maintenance manual.
- 14 Failure to replace the consumable parts and the fitting clearance of the oil inlet system pipeline and the injector valve cap connection in accordance with the fuel intake system specified in the vehicle engine maintenance manual.

2. 319 Injector Valve Cap Technical Support

2.1. 319 Injector Valve Cap Utilized Location

(1) E.g.: See the injector valve cap utilized location as follows

No.	Name
A	Injector Valve Cap




2.2. 319 Injector Valve Cap Installation Precautions

- 1) The replacement of the injector valve cap 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 valve cap, the fitting clearance of the injector valve cap connection, the installation angle and tightening torque of the injector valve cap, 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 valve cap.
- 3) When installing the injector valve cap on the engine, it is necessary to clean the engine block, cylinder head and other parts connected to the injector valve cap, and ensure that there is no dust, carbon deposits, water, rust spots, etc.
- 4) Before installing, check whether the injector valve cap washer shim has been replaced and installed on the injector valve cap.
- 5) When installing the injector valve cap, apply lubricant between the injector valve cap, fuel nozzle sealing washer shim and O-ring.
- 6) Without replacing new washer shim can lead to: deformation of the tight cap of nozzle, deformation of nozzle, deformation of nozzle orifice, oil leakage and air leakage, which will cause serious damage to the injector valve cap and nozzle to break and cause damage to the engine.
- 7) When installing the injector valve cap on the engine, please carefully check the components related to the installation of the injector valve cap, such as the injector valve cap pressure plate, screw, injector valve cap rod and other accessories are not deformed, and install it in strict accordance with the operation steps of the engine maintenance manual.
- 8) It is forbidden to operate the bare injector valve cap for a long time in an environment with serious dust pollution and corrosion to iron products.
- 9) It is forbidden to operate the bare injector valve cap for a long time in a strong magnetic field environment.

2.3. Reasons of 319 Injector Valve Cap Not Working Normally

- (1) There is air in the oil circuit of the engine fuel system.
- (2) Vehicle injector valve cap oil supply system is not normal.
- (3) Engine common rail system oil leakage or pressure limiting valve damage.
- (4) There is a short circuit, cutting out and poor contact in the wiring harness connected to the injector valve cap of the vehicle.
- (5) The long-term placement of the injector valve cap causes the anti-rust oil to solidify, and the internal components are stuck or the oil holes are blocked.

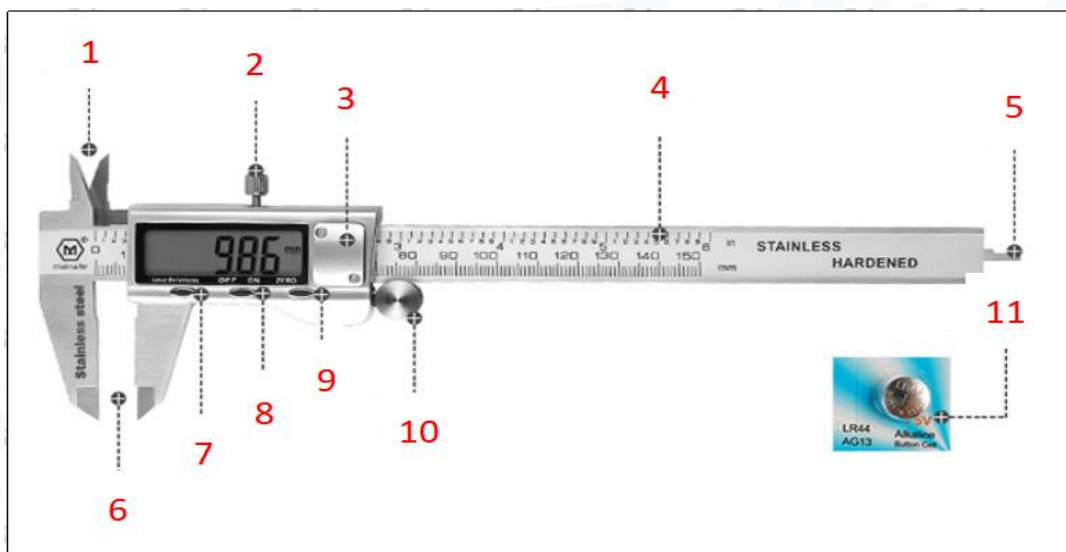
 **Before installing, carefully check whether other components in the common rail system are damaged so as to prevent the injector valve cap from not working properly after being replaced.**

2.4. Causes of 319 Injector Valve Cap Being Damaged

- (1) Didn't operate properly according to engine maintenance manual during disassembly or installation, resulting in damage to the injector valve cap .
- (2) The fuel oil used for the vehicle does not meet the standard cause damage to the injector valve cap, such as: the water content in the fuel oil 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 oil 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 valve cap.
- (4) The abrasion of the oil pump produces iron powder and aluminum powder enter the injector valve cap and cause damage to the injector valve cap.
- (5) The deformation and abrasion of fuel tank result in iron powder or aluminum powder entering the injector valve cap and causing damage to it.
- (6) The injector valve cap is damaged due to replacement or adjustment of the relevant parts of the injector valve cap. 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 valve cap fails to meet the original standard.
- (7) The engine is overheated and overloaded for a long time working results in damage to the injector valve cap.
- (8) The injector valve cap will be damaged naturally at the end of its working life.
- (9) The injector valve cap is magnetized (injector valve cap parts' magnetic exceeded) causing the injector valve cap to not work properly.

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

2.5. 319 Injector Valve Cap Measurement Tool



Pic No.4

1. Inner diameter measuring claw	7. inch/mm metric and inch conversion button
2. Limit screw	8. OFF/ON power button

3. Battery installation place	9. ZERO button
4. Ruler body	10. Push roller
5. depth measurement	11. Button battery
6. depth measurement	/

2.6. 319 Injector Valve Cap Storage Standard

(1) Choose a Suitable Storage Place

The warehouse and cargo yard where the injector valve caps are stored should be kept clean and dry, and away from the factory buildings that generate harmful gases and dust; do not mix with acid, 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 valve caps are put into storage, the surface cleaning work should be done well to remove water traces, oil stains, ash and other dirt, remove the rust and do anti-rust treatment in time. Packaged injector valve caps must be protected from damage.

(3) Keep The Warehouse Dry And Preventing Moisture

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

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

If the injector valve cap 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 oil applied at the factory is found to be damaged or dried up, it should be cleaned and re-applied oil in time.

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

⚠ It is forbidden to store acid, alkali, salt and other substances together with the injector valve cap.

⚠ The unpacked injector valve cap must be rust-proof during secondary storage.

2.7. 319 Injector Valve Cap Technical Support Obtaining Methods

- 1) Injector Valve Cap Technical Data: <https://www.injectorpart.com/download/>
- 2) Injector Valve Cap Technical Videos: <https://www.injectorpart.com/videos/>
- 3) Injector Valve Cap Encyclopedia: <https://www.injectorpart.com/category/news/encyclopedia/>

3. 319 Injector Valve Cap Purchase and Delivery

3.1. 319 Injector Valve Cap Purchase Payment Term

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

⚠ Please contact our salesmen for specific payment information.

3.2. 319 Injector Valve Cap Main Sales Markets

Injector valve cap main sales markets: Asia, Europe, North America, South America, Africa etc.

3.3. 319 Injector Valve Cap 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. 319 Injector Valve Cap 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. 319 Injector Valve Cap Lead time

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

3.6. 319 Injector Valve Cap 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	5-7 Days	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 , subjects are according to the actual arrival.

3.7. 319 Injector Valve Cap Injection Packing

Domestic Express Packaging: Usually wrapped in waterproof scotch tape, such as picture No.5.

International Express Packaging: Wrapped with waterproof yellow tape After wrapping the black protective film, such as picture No. 6.

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. 7, 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.

No.	1	2	3
Image			
Name	Domestic Express Packaging	International Express Packaging	Pallet Shipping
Description	Wrapped by transparent tape	Wrapped with yellow tape after wrapping black protective film	Use pallet that meet export requirements, and use white wrapping protective film to wrap and bind with cable ties

4. Company Information




Pic No.5

4.1. 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 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: [1.8. 319 Injector Valve Cap Warranty Instructions](#))

4.2. Contact Information

Name	WeChat/ WhatsApp
Ruby	+86-13410541523

5. Copyright Statement

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