

F00VC05001 Injector Steel Ball Technical File

SKU1: G1G7F00VC05001

SKU2: G1Y1F00VC05001



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FO0VC05001 Injector Steel Ball Technical File

1. FO0VC05001 Injector Steel Ball Introduction

1.1. FO0VC05001 Injector Steel Ball Basic Information

Title	FO0VC05001 Injector Steel Ball	Quality
SKU1	G1G7F00VC05001	China Made New
SKU2	G1Y1F00VC05001	China Made New

1.2. FO0VC05001 Injector Steel Ball Common Part Number

(1) Injector Steel Ball Exchange Information

Injector Part Number	OE Number	Engine Model	Pressure
0445110002	0000046472233	AR 32302	/
0445110008	1980 71	RHY	/
0445110009	611 070 04 87	/	/
0445110010	611 070 04 87	/	/
0445110011	611 070 04 87	OM 611.980	1,350
0445110012	611 070 04 87	/	/
0445110014	668 070 02 87	OM 668.941	/
0445110015	668 070 02 87	/	/
0445110019	55189276	188 A2.000	/
0445110020	1980 66	/	/
0445110021	93183595	/	/
0445110022	660 070 01 87	OM 660.940	1,350
0445110023	Q0001587V001	/	1,350
0445110024	611 070 06 87	OM 611.987 D LA	1,350
0445110025	611 070 06 87	/	/

(2) Injector Steel Ball Common Writing

FO0VC05001, FOO VC 05001, F 00V C05 001, F OOV C05 001, F00V C05 001, FOOV C05 001, FO0VC05 001, F 00V C05001, F OOV C05001, F 00VC05001, F OOV C05001, F00V C05001, FO0VC05001

1.3. F00VC05001 Injector Steel Ball Parameter

Adaptation System: **Common Rail System**

Injector Steel Ball Series: **110**

Injector Steel Ball Type: **Electromagnetic**

1.4. F00VC05001 Injector Steel Ball Specifications And Dimensions

Injector Steel Ball Size: **3cm*2cm *1 cm**

Injector Steel Ball Net Weight: **0.02g**

Injector Steel Ball Gross Weight: **2g**

Injector Steel Ball Quality: **China Made New**

Injector Steel Ball Package Size: **7 cm *5 cm *1 cm**

Injector Steel Ball Type: **High Pressure Common Rail Injector Steel Ball**

Injector Steel Ball MOQ: **100 pcs**

1.5. F00VC05001 Injector Steel Ball Quality Control

(1) Injector Steel Ball Testing

All injector steel balls are tested for electrical characteristics, accuracy, high temperature, low temperature, withstand voltage, leakage, durability, and various working conditions.

(2) Injector Steel Ball Assembling

For the quality control of the injector steel ball production and installation process, our company strictly follows the standard product installation data and product installation steps to install.

(3) Injector Steel Ball Inspection

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

1.6. F00VC05001 Injector Steel Ball Customized Service

(1) **Injector Steel Ball Customized Service Coverage:** Meet the customized needs of OEM manufacturers for shell lettering, logo engraving, injector steel ball internal packaging, injector steel ball external packaging and labels customized, etc.



(2) Injector Steel Ball Customized Service Requirements:

The quantity of customized injector steel balls shall not be less than **100 pieces**.

The quantity of customized injector steel ball packages 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 steel ball is sold, it cannot be returned or exchanged if there are no quality problems.

1.7. F00VC05001 Injector Steel Ball Packing List and Package Size

(1) Injector Steel Ball Spare Parts List

No.	1	2	3
Image			
Name	Injector Steel Ball	White Anti-Rust Bag	Injector Steel Ball Size
Description	Injector Steel Ball number: F00VC05001	Prevent Injector Steel Balls From Rusting	1.34mm

▲ Minors are prohibited from using the injector steel ball assembly, VCI anti-rust bags, or bubble bags to avoid personal injury.

▲ The injector steel ball is a disposable accessory and must be replaced for reinstallation.

▲ The VCI anti-rust bags and bubble bags are made of non-degradable materials. Please dispose of them properly after use.

▲ The injector steel ball and the mounting guide must be treated with appropriate sealing oil during installation.

(2) Injector Steel Ball Box Size

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 Steel Ball Warranty Coverage

Within 15 days after customer receives the F00VC05001 injector steel ball, if there is a performance failure and the product has no appearance damage, customer can choose to replace it or repair it;

If the F00VC05001 injector steel ball has performance problems during the warranty period (6-12 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 steel ball 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 Steel Ball Out of Warranty Coverage

- ① The warranty period has expired.
- ② Injector steel ball 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 steel ball personally resulting in damage to the injector steel ball.
- ④ Injector steel ball damage caused by man-made reasons (throwing, strong magnetic field magnetization, set fire).
- ⑤ Injector steel ball failure or injector steel ball damage caused by non-injector steel ball design, technology, manufacturing, quality, and other issues.
- ⑥ Injector steel ball failure due to system pressure exceeding system approved pressure.
- ⑦ Injector steel ball failure caused by system voltage exceeding approved voltage.
- ⑧ Injector steel ball failure caused by impurities (water, lead, aluminum powder, iron powder, sulfide) in the system fuel exceeding the standard requirements.
- ⑨ Injector steel ball 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 steel ball failure caused by not following the installation angle specified in the vehicle engine maintenance manual.
- 11 Injector steel ball failure caused by not following the cleaning requirements specified in the vehicle engine maintenance manual.
- 12 Injector steel ball failure caused by failure to replace consumable parts as specified in the vehicle engine maintenance manual.
- 13 Injector steel ball 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 steel ball connection in accordance with the fuel intake system specified in the vehicle engine maintenance manual.

1.10. F00VC05001 Injector Steel Ball Manufacturer

Injector Steel Ball Manufacturer: Shenzhen Shumatt Technology Co., Ltd

2. F00VC05001 Injector Steel Ball Technical Support

2.1. F00VC05001 Injector Steel Ball Use Location

(1) E.g.: The position of the copper gasket of the injector nozzle is shown below:

No.	Name
A	Injector Steel Ball

2.2. F00VC05001 Injector Steel Ball Installation

(1) F00VC05001 Injector Steel Ball Installation Precautions:

① When replacing injector steel balls, strictly follow the vehicle engine maintenance manual's specifications for the electrical system, low-pressure fuel system approved pressure, high-pressure fuel system approved pressure, and fuel system consumable part replacement requirements (including low-pressure and high-pressure fuel system filters).

② Replacement of consumable fuel system parts, cleaning requirements for the fuel system and injector steel ball connections, injector steel ball connection clearance, injector steel ball installation angle and tightening torque, and intake and exhaust system clearances are essential to ensure engine life and proper function of the injector steel balls.

③ When installing the injector steel ball on the injector, clean the injector body and injector accessories to ensure they are free of dust, carbon deposits, water, rust, etc.

④ Before installation, check that the injector steel ball has been replaced and installed properly.

⑤ Failure to replace the seal ring with a new one can lead to deformation of the injector cap, nozzle, and nozzle orifice, resulting in oil and air leakage, severe damage to the injector steel ball, and even nozzle breakage, which can damage the engine.

⑥ When installing an injector with a replaced ball on the engine, carefully inspect all components related to the injector, such as the injector steel ball retainer, screws, and ejector rod, to ensure they are not deformed. Strictly follow the installation procedures in the engine maintenance manual.

⑦ Do not expose the injector steel ball to dust or corrosive environments for extended periods of time.

⑧ Do not expose the injector steel ball to strong magnetic fields for extended periods of time.

2.3. F00VC05001 Injector Steel Ball Not Working Normally

(1) There is air in the oil circuit of the engine fuel system.

(2) Vehicle oil pump's 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 steel ball of the vehicle.

(5) The long-term placement of the injector steel ball 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 except the injector steel ball are damaged to prevent the injector steel ball from not working properly after being replaced.

2.4. F00VC05001 Injector Steel Ball Causes of Being Damaged

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

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

2.5. F00VC05001 Injector Steel Ball Technical Support Obtaining Methods

- (1) Injector Steel Ball Technical File, visit <http://shumatt.com> to get the technical file.
- (2) Injector Steel Ball Technical Videos

YouTube: https://www.youtube.com/channel/UCByvYBx7VjV_mAfxh_Hu-aw to get the technical videos, constantly follow can get more information.

Shumatt: Visit <http://shumatt.com> to get the technical videos.

- (3) Injector Steel Ball Information Query Software

TruckBook Parts EPC APP, Android/Apple App Store download and install, visit <http://shumatt.com> to get

the download and installation tutorial

(4) Search the injector steel ball test data through TruckBook Parts EPC APP.

3. F00VC05001 Injector Steel Ball Purchase and Delivery

3.1. F00VC05001 Injector Steel Ball Purchase Payment Term

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

⚠ Please contact our salesmen for specific payment information.

3.2. F00VC05001 Injector Steel Ball Main Sales Markets

Injector Steel Ball Main Sales Markets: Asia, Europe, North America, South America, Africa etc.

3.3. F00VC05001 Injector Steel Ball Declaration Requirements

Shumatt 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. F00VC05001 Injector Steel Ball 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. F00VC05001 Injector Steel Ball Lead Time

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

3.6. F00VC05001 Injector Steel Ball 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

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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. F00VC05001 Injector Steel Ball 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. F00VC05001 Injector Steel Ball Storage Standard

(1) Choose a Suitable Storage Place

The warehouse and cargo yard where the injector steel ball 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 steel balls are put into storage, the surface cleaning work should be done well to remove water traces, oil stains, ashes, and other dirt, remove the rust and do anti-rust treatment in time. Packaged injector steel balls must be protected from damage.

(3) Keep The Warehouse Dry And Preventing Moisture

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

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

If the injector steel ball 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 steel ball exposed in the air for a long time.
- ⚠ It is forbidden to store acids, alkalis, salts, and other substances together with the injector steel ball.
- ⚠ The unpacked injector steel ball must be rust-proof during secondary storage.

5. Company Information



5.1. Company Introduction

Chinese Name: 深圳市舒马特科技有限公司

English Name: Shenzhen Shumatt Technology Co., Ltd

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HK Telephone: +852-67653519

Telephone: +86-755-23215133

Email: ruby@shumatt.com

Website: www.shumatt.com

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

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Tel: +8675523215133

Website : www.shumatt.com

📍 **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. F00VC05001 Injector Steel Ball Warranty Instructions](#))

5.2. Salesmen's Contact Information

No.	Name	WeChat/WhatsApp	Email
1	Ruby	+86-13410541523	ruby@shumatt.com
2	Ivy	+86-18025299821	sales@shumatt.com
3	Rebecca	+86-18025349821	sales01@shumatt.com
4	Janny	+86-18028749821	sales02@shumatt.com
5	Sam	+86-13316859821	Sales8@shumatt.com
6	Natalie	+86-18938945856	sales15@shumatt.com
7	Ada	+86-1342286353	sales5@shumatt.com
8	Hison Li	+86-18318811871	web@shumatt.com
9	Mecca	+86-18938948618	sales11@shumatt.com
10	Eric	+86 18319033618	sales3@shumatt.com
11	Wayne (Joaquín en español)	+86-13316959821	wayne@shumatt.com
12	Sylvia	+86 18312499884	sales6@shumatt.com

Visit <http://shumatt.com> to obtain the latest information of salesmen

PS: Shumatt's salesmen's emails are all end with **@shumatt.com**

6. Copyright Statement

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