

294000-1021 Fuel Pump HP3 Series Technical File

SKU: L30000D5D001021



294000-1021 Fuel Pump HP3 Series Technical File**Content**

1. 294000-1021 Fuel Pump Introduction.....	2
1.1. 294000-1021 Fuel Pump Basic Information	2
1.2. 294000-1021 Fuel Pump Common Part Number	2
1.3. 294000-1021 Fuel Pump Parameter	2
1.4. 294000-1021 Fuel Pump Specifications And Dimensions	2
1.5. 294000-1021 Fuel Pump Quality Control	2
1.6. 294000-1021 Fuel Pump Customized Service	3
1.7. 294000-1021 Fuel Pump Packing List and Package Size	3
1.8. 294000-1021 Fuel Pump Testing Standard and Certificate	4
1.9. 294000-1021 Fuel Pump Warranty Instructions.....	5
1.10. 294000-1021 Fuel Pump Manufacturer	6
2. 294000-1021 Fuel Pump Technical Support	6
2.1. 294000-1021 Fuel Pump Use Location.....	6
2.2. 294000-1021 Fuel Pump Installation	7
2.3. 294000-1021 Fuel Pump Not Working Normally	8
2.4. 294000-1021 Fuel Pump Causes of Being Damaged	8
2.5. 294000-1021 Fuel Pump Technical Support Obtaining Methods.....	9
3. 294000-1021 Fuel Pump Purchase and Delivery	9
3.1. 294000-1021 Fuel Pump Purchase Payment Term	9
3.2. 294000-1021 Fuel Pump Main Sales Markets	9
3.3. 294000-1021 Fuel Pump Declaration Requirements.....	9
3.4. 294000-1021 Fuel Pump Shipping Ways	9
3.5. 294000-1021 Fuel Pump Lead Time	9
3.6. 294000-1021 Fuel Pump Logistics Time for Destination Out of China's Areas	9
3.7. 294000-1021 Fuel Pump Packing	10
4. 294000-1021 Fuel Pump Storage Standard	11
5. Company Information.....	12
5.1. Company Introduction.....	12
5.2. Salesmen's Contact Information.....	13
6. Copyright Statement.....	13

294000-1021 Fuel Pump HP3 Series Technical File

1. 294000-1021 Fuel Pump Introduction

1.1. 294000-1021 Fuel Pump Basic Information

Title	294000-1021 HP3 Series Fuel Pump	Quality
SKU	L30000D5D001021	Original New

1.2. 294000-1021 Fuel Pump Common Part Number

(1) Fuel Pump Exchange Information

Fuel Pump Part Number	OE Number
294000-1021	22100-0R050

(2) Fuel Pump Application Information

Vehicle Brand	Car Model	Engine Model	Production date
For TOYOTA	RAV4	2AD-FHV	0810

(3) Fuel Pump Common Writing

294000-1020, 2940001020, 294000-1021, 2940001021, 294000-1022, 2940001022, 294000-1023, 2940001023, 294000-1024, 2940001024, 294000-1025, 2940001025, 294000-1026, 2940001026, 294000-1027, 2940001027, 294000-1028, 2940001028, 294000-1029, 2940001029, 294000-102#, 294000102#, 22100-0R050, 221000R050

1.3. 294000-1021 Fuel Pump Parameter

Adaptation System: Common Rail System

Fuel Pump Series: HP3 Series

Fuel Pump Type: Common Rail Electromagnetic Fuel Pump

1.4. 294000-1021 Fuel Pump Specifications And Dimensions

Fuel Pump Size: 26cm* 22cm *22cm

Fuel Pump Net Weight: 5980g

Fuel Pump Gross Weight: 6000g

Fuel Pump Quality: Re-manufactured/Original New

Fuel Pump Package Size: 28cm* 24cm *24cm

Fuel Pump Type: High Pressure Common Rail Fuel Pump

Fuel Pump MOQ: 1 Pieces

1.5. 294000-1021 Fuel Pump Quality Control

(1) Fuel Pump Testing

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

(2) Fuel Pump Assembling

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

(3) Fuel Pump Inspection

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

1.6. 294000-1021 Fuel Pump Customized Service

(1) Fuel Pump Customized Service Coverage: Meet the customized needs of OEM manufacturers for shell lettering, logo engraving, fuel pump internal packaging, fuel pump external packaging and labels customized, etc.

		
Pump Housing Label	Packaging Box	White Label

(2) Fuel Pump Customized Service Requirements:

The quantity of customized fuel pump shall not be less than **10 pieces**.

The quantity of customized fuel pump 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 fuel pump is sold, it cannot be returned or exchanged if there are no quality problems.

1.7. 294000-1021 Fuel Pump Packing List and Package Size

(1) Fuel Pump Spare Parts List

No.	1	2	3
Image			
Name	Fuel Pump Assy	Fuel Pump Protective Cover	White Anti-Rust Bag
Description	Fuel Pump Part Number :294000-1021	Height 41.5mm	Outer diameter size 19.1mm
No.	4	5	6

Image			
Name	Lining	Packaging Box	White Label
Description	Prevent the pump from being damaged by external forces	Place the pump and its accessories	Product Number

⚠ Minors are prohibited from using the fuel pump assembly, O-rings, fuel pump housing covers, oil return covers, VCI anti-rust bags, and bubble bags to avoid personal injury.

⚠ The fuel pump housing cover and oil return cover are recyclable accessories and can be recycled.

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

⚠ The fuel pump and the installation parts guide tube should be treated with appropriate sealing oil during installation.

(2) Fuel Pump Box Size



No.	Name	Fuel Pump Packing Size (cm)
1	Fuel Pump Box	42*25*42

1.8. 294000-1021 Fuel Pump Testing Standard and Certificate

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Tel: +8675523215133

Website : www.shumatt.com

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Shumatt can provide the factory quality inspection test report of each fuel pump to ensure that each fuel pump delivered meets the engine performance indicators.

BOTEN		测试报告		4.05.2019 10:42:09	
承单企业: _____					
电话:		地址: _____			
传真:		检测人: _____			
客户地址: _____					
电话:		送检单位: _____			
传真:		客户姓名: _____			
检测用途: _____					
检测名称: <u>酸值</u>					
型号/零件号: _____					
检测商: _____					
检测结果					
检测器型号: C06002-0511					
	标准范围	检测结果	单位/标准	标准范围	
IGAK TEST:	32	4	°C	20.0 ± 1.0	✓
Endo:	32	4	75.0	20.0 ± 1.0	✓
WARM:	32	127.9 ± 16.5	°C	-----	✗
Max:	201.5	218.9 ± 14.4	°C	-----	✓
TL:	28.4	25.0 ± 8.5	°C	-----	✓
IL:	14.1	15.0 ± 4.8	°C	-----	✓
VE:	5.2	4.5 ± 1.6	°C	-----	✓

☐ 打印前
 ☐ 重分析

☐ 打印后

1.9. 294000-1021 Fuel Pump Warranty Instructions

(1) Product Warranty Conditions and Instructions

It is necessary to provide pictures, videos, or test reports detected by the fuel pump inspection equipment when the fuel pump 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) Fuel Pump Warranty Coverage

Within 15 days after customer receives the 294000-1021 fuel pump, if there is a performance failure and the product has no appearance damage, customer can choose to replace it or repair it;

If the 294000-1021 fuel pump 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 fuel pump 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) Fuel Pump Out of Warranty Coverage

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

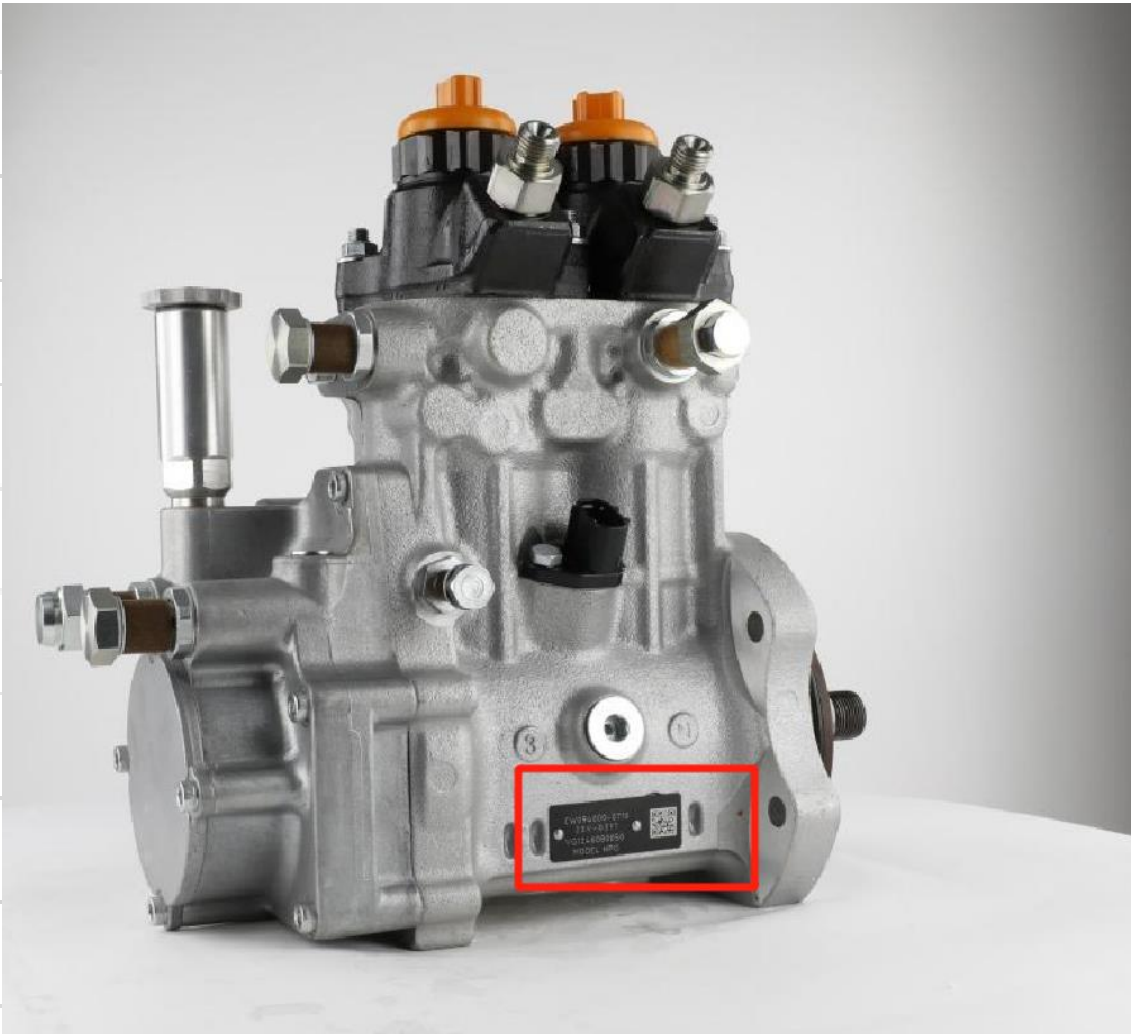
1.10. 294000-1021 Fuel Pump Manufacturer

Fuel Pump Manufacturer: Shenzhen Shumatt Technology Co., Ltd

2. 294000-1021 Fuel Pump Technical Support

2.1. 294000-1021 Fuel Pump Use location

NO.	Name
A	Nameplate, Logo, Part Number



2.2. 294000-1021 Fuel Pump Installation

(1) 294000-1021 Fuel Pump Installation Precautions:

- ⚠ The replacement of the fuel pump 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.
- ⚠ Replacement of wearing parts of the fuel system, cleaning requirements for the connection between the fuel system and the fuel pump, the fitting clearance of the fuel pump connection, the installation angle and tightening torque of the fuel pump, 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 fuel pump.
- ⚠ When installing the fuel pump on the engine, it is necessary to clean the engine block, cylinder head and other parts connected to the fuel pump, and ensure that there is no dust, carbon deposits, water, rust spots, etc.

⚠ When installing the fuel pump on the engine, please carefully check the components related to the installation of the fuel pump, such as the fuel pump pressure plate, screw, fuel pump rod and other accessories are not deformed, and install it in strict accordance with the operation steps of the engine maintenance manual.

⚠ It is forbidden to operate the bare fuel pump for a long time in an environment with serious dust pollution and corrosion to iron products.

⚠ It is forbidden to operate the bare fuel pump for a long time in a strong magnetic field environment.

2.3. 294000-1021 Fuel Pump 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 fuel pump of the vehicle.
- (5) The long-term placement of the fuel pump 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 fuel pump are damaged to prevent the fuel pump from not working properly after being replaced.

2.4. 294000-1021 Fuel Pump Causes of Being Damaged

- (1) Didn't operate properly according to engine maintenance manual during disassembly or installation, resulting in damage to the fuel pump.
- (2) The fuel oil used for the vehicle does not meet the standard cause damage to the fuel pump, 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 fuel pump.
- (4) The abrasion of the fuel pump produces iron powder and aluminum powder enter the fuel pump and cause damage to the fuel pump.
- (5) The deformation and abrasion of fuel tank result in iron powder or aluminum powder entering the fuel pump and causing damage to the fuel pump.
- (6) The fuel pump is damaged due to replacement or adjustment of the relevant parts of the fuel pump. 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 fuel pump fails to meet the original standard.

- (7) The engine is overheated and overloaded for a long-time working result in damage to the fuel pump.
- (8) The fuel pump will be damaged naturally at the end of its working life.
- (9) The fuel pump is magnetized (fuel pump parts' magnetic exceeded) causing the fuel pump to not work properly.

⚠ Before replacing the fuel pump, please check the engine parts carefully according to the engine maintenance manual to avoid the Fuel Pump being damaged again after replacement.

2.5. 294000-1021 Fuel Pump Technical Support Obtaining Methods

- (1) Fuel pump technical file, visit <http://shumatt.com> to get the technical file.
- (2) Fuel pump 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) Fuel pump 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 fuel pump test data through TruckBook Parts EPC APP.

3. 294000-1021 Fuel Pump Purchase and Delivery

3.1. 294000-1021 Fuel Pump Purchase Payment Term

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

⚠ Please contact our salesmen for specific payment information.

3.2. 294000-1021 Fuel Pump Main Sales Markets

Fuel Pump Main Sales Markets: Asia, Europe, North America, South America, Africa etc.

3.3. 294000-1021 Fuel Pump 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. 294000-1021 Fuel Pump 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. 294000-1021 Fuel Pump Lead Time

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

3.6. 294000-1021 Fuel Pump 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. 294000-1021 Fuel Pump 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. 294000-1021 Fuel Pump Storage Standard

(1) Choose a Suitable Storage Place

The warehouse and cargo yard where the fuel pump 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 fuel pumps 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 fuel pumps must be protected from damage.

(3) Keep The Warehouse Dry And Preventing Moisture

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

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

If the fuel pump 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 fuel pump exposed in the air for a long time.



It is forbidden to store acids, alkalis, salts, and other substances together with the fuel pump.



The unpacked fuel pump must be rust-proof during secondary storage.

5. Company Information



Office Locations



Global Exhibitions

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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 **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

 **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. 294000-1021 Fuel Pump 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			

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