



# HIGHRISE INTERNATIONAL PVT LTD

CNG SEQUENTIAL & CONVENTIONAL KITS







APPROVED BY



Vice Excellence 110R-0400000200C @ 67R-0201000200C @ 10R-0501011700C





### **Highrise International Pvt. Ltd**



Deals in CNG Sequential and Conventional Kits in India. We are located in Center of Delhi and have a dealer network all over India and still expanding. We are with the highly skilled (R.D) and professional team to developed best and perfect suitable Sequential System for the Indian Market. Our R&D team keeps ourselves update and upgrade with International CNG Market.

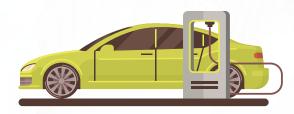
We Highrise's are the importer of CNG Sequential reducer (HIGHRISE), VCA & ICAT approved, CNG Injector Rail (HR-04) approved by ICAT, CNG High Pressure Pipe approved by ICAT, CNG Electronic Control Unit and CNG Pressure Gauge is approved by Luxembourg Europe

The Highrise brand is popular among its customers for its design and structure featured on the reliability and ease of installation. Company aims to reach to all its customers and its endeavor.

Choose Us

Few of the factors that make us the first choice ahead of our competitors are: Exceptional Staff | Premimum Staff Affordable Pricing High Industry Standards.









## SOME STATISTICS ABOUT US



### CNG KITS INSTALLATION TECHNICAL STATISTICS YOU MUST KNOW









## HIGHRISE

**CNG KIT IS APPROVED FOR RETRO FITMENT** 

IN THE FOLLOWING VEHICLES





# HIGHRISE CNG SEQUENTIAL REDUCER HR 12

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**ICAT** 

SO 15500-

HR-12 CNG Sequential Reducer: CNG Sequential Reducer is an important part of CNG Kit. HIGHRISE CNG reducer is a two-stage pressure reducer for sequential injection which provides a constant outlet flow in all Environment conditions. The outlet pressure of HighRise reducer is adjustable to obtain the best performance and is provided with an adjustable fitting that has also the connection for pressure manometer.

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### HIGHRISE 6/8 CYL ELECTRONIC CONTROL UNIT (ECU)

Advantages of 6/8 CYL ECU:

1. 32bit DSP singlechip control, control accuracy up to 0.01ms

2. A variety of gas injectors and sensors (level sensor, temperature of pressure reducer tempera ture) to choose

3.Suitable for multi-point sequential injection and grouped injection vehicles, compatible with EU4 EU5 EU6 vehicles

4. There are two gas correction modes, MAP and K Main A, more gas injection strategies, and easier gas calibration.

5. With fuel and gas injector detection and gas system self-diagnosis function, more convenient detection of gas system.



### Ex-HIGHRISE OBD-2 8 INJECTOR ECU



The 5.0OBD 4 cylinder with 8pcs injectors dual-fuel ECU is suitable for 4 cylinder with 4pcs injectors and 8pcs injectors dual-fuel vehicles. A 32Bit microcontroller and advanced engine control design to ensure air, fuel, leak diagnosis, OBD and emission control (Euro VI). The innovative integration of all 8pcs injectors sim - ulations and controls into the ECU reduces the installation difficulty of external simulators and effectively increases reliability. ECU collects the fuel injection signals from 8pcs injectors at the same time and uses Ex-HIGHRISE patented algorithm to optimize the performance of the dual-fuel system, further improving the acceleration performance and idling stability of the vehicle.





## ECU EX HIGHRISE OBD 2

EX-HIGHRISE OBD-2 gas injection system – applicated for 3cyl /4cyl. engine. Hardware is develop and manufacture on high quality standard TS16949 with ECE 67R-010311 and 110R-000166 certification. Function EX-HIGHRISE Professional design for OEM "0km" automotive. Can with OBD II function. and real-time calibration keeps gas vehicle in perfect condition in different drive surrounding and mileage, at the same time satisfied with EURO IV displacement standard. Very professional PC interface saves much time for user.



# ECU EX HIGHRISE -OBD 1



OBD 1 Smart System is a gas sequential injection gas supply system. When the system works, the gas ECU takes the fuel injection signal from original vehicle as the basic signal, and collects the parameters of the engine coiling water temperature, gas pressure and other parts at the same time to decide the final gas injection time and gas rail injector supply gas to the corresponding engine cylinder. Within the permitted scope of engine cylinder volume, the system will provide gas which is equal to the energy of the gasoline when the switch is in the gas position, the gas ECU will automatically defect the conversion conditions which are already stored in the ECU. When the condition is met, system will switch to the gas. At this time, the gasoline injection nozzle is cut off, and the gas system ECU drives the gas rail injector to start working.





# **HIGHRISE ADVANCED TOUCH SWITCH**

The Advance Touch Switch is the part of the CNG / LPG Electronic Circuit Unit and is installed in the vehicle dashboard near to the driving seat.

How Switch Works The car starts (ignition), the orange light is ON indicating the car is on petrol, As we press accelerator (rpm increases), it automatically switches to CNG as it reaches the set rpm(programmed i.e. 1200 rpm) Greenlights become visible as the car is now running on CNG. The number of lights indicates the quantity of CNG available in the gas cylinder. Even if CNG is still available in a gas cylinder and you want to switch into petrol, then just Touch the switch once. It will be switched to petrol. You will not feel any knocking during fuel conversions. End of CNG Indication When the red light becomes visible, it means that CNG is in its last phase. It will still run a few Km's.





## **HIGHRISE INJECTOR RAIL HR04**

The HR04 injector Rail is to inject the controlled quantity of CNG Fuel at specific interval of time (as programmed in ECU). it can be supplied with 3 Ohm coil and is compatible with the majority of the ECUs distributed in the markets.

it is homologated in accordance with ISO 15500 standards and approved by ICAT . HR04 injector RAIL has been designed to allow easy installation and manteinance: it does not require the setting of the solenoid core, assuring the performance of the injector rail also after the maintenance, without difficult processes and dedicated setting machinery.





## HIGHRISE 360 LPG CNG FILTER 12MM IN/OUT

HIGHRISE Ultra 360° is a brand new improved filter with oil separation; effective filtration combined with ergonomy.

The original construction of the filter ensures very effective filtration. Gas entering the filter is set in rotary motion and directed towards the bottom. Thanks to the rotary motion, centrifugal force and inertial force, particular and liquid matters are centrifuged and kept

on the bottom. Additionally, the filter cartridge cleans the of gas heading upwards from the remaining tiny impuri - ties.

HIGHRISE 360° was designed especially for the conve nience of the installers. The inlet and outlet are placed on sepa elements of filter cover, which results in easy angle regulation tween them. Because of such solution the installer can easily freely place the filter in the underbonnet area.

#### **TECHNICAL SPECIFICATION**

- Cover material: polyamide and glass composite
- Filtrating material: polyester
- Inlet and outlet diameter: 12mm
- Classification: CLASS#2
- Classifying pressure: 4,5 bar
- Working temperature: -20÷120°C

### DIMENSIONS

60 x 60 (110 when the inlet and outlet are set on 180°) x 106m



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### HIGHRISE CNG PRESSURE GAUGE

Description The CNG Gauge or CNG pressure sensor provides a linear electronic signal proportional to gas pressure. The device uses an analogical indication for directly reading the pressure of the gas in the tank.

3000

BAR 100 x kP

BS6

### HIGHRISE REFILLING VALVE

Dt. 08/2023

Sr. No E

BS6

BS6

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Filling Valve is the valve through which the CNG is refilled in the gas cylinder. Highrise International uses filling valves that matches with international standard and matches the world's class best quality.



### HIGHRISE CNG STEEL TUBE HP 01

CNG Steel Tube is the pipe through which gas from the cylinder comes to the reducer. The CNG Steel Tube is approx 5.9 mtr in length and comes from the cylinder compartment to the Engine compartment. Highrise International provides the best quality steel Tubes which are extensively tested in different environments and meets international standard ISO 15500.

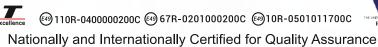






SIZE :  $\Phi$  5.5 MM SIZE :  $\Phi$  8.0 MM SIZE :  $\Phi$  10 .5 MM SIZE :  $\Phi$  19 MM





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## **CNG CYLINDER**











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### **CHOOSE HIGHRISE** CNG GAS KIT IN YOUR VEHICLE TO RESTORE NATURAL ECOSYSTEM

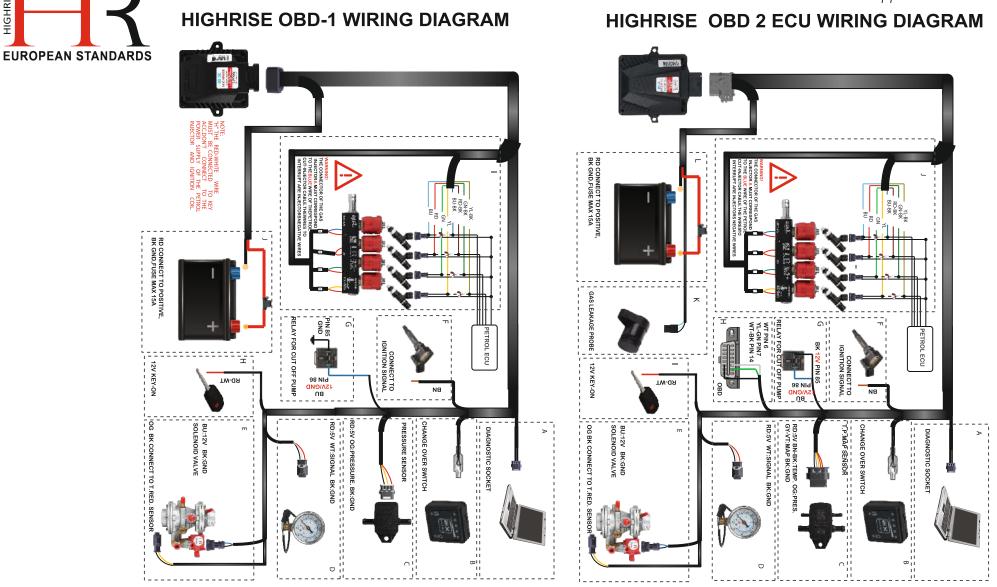
Electronic Components Approved by Luxembourg Europe.. Highrise CNG Sequential Reducer Approved by VCA United Kingdom

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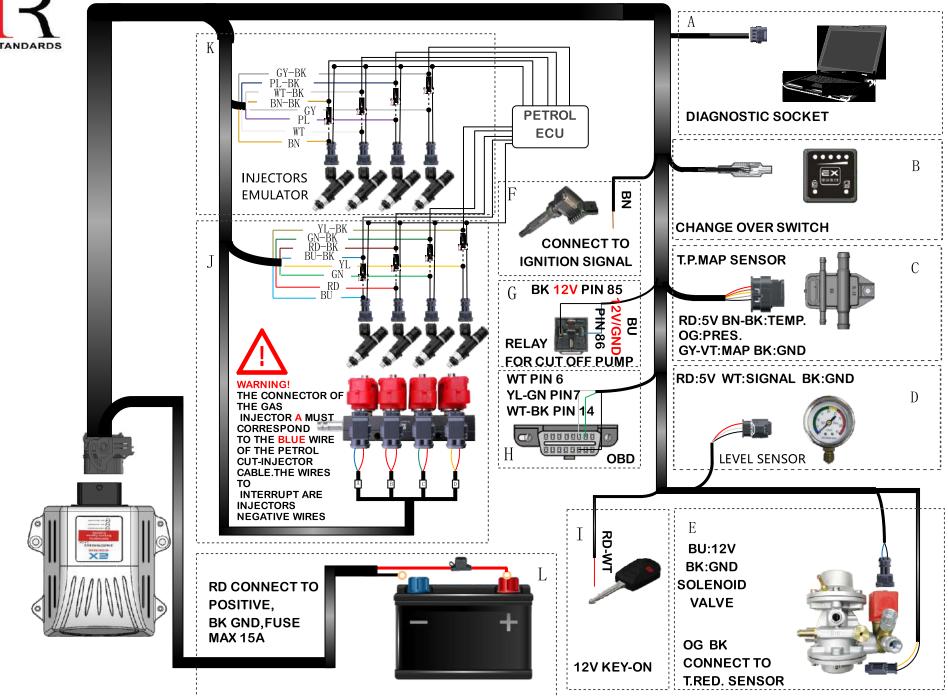


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**EX HIGHRISE OBD2 8 INJECTOR CONNECTION DIAGRAM** 



#### **DO'S WHILE USING CNG**

- 1. The vehicles operating on CNG must comply with the required conditions as contained in the central motor vehicles ruels
- 2. Before installing the CNG kit, it is required to ensure that the workshop is authorized
- 3. You should have the approved Kit and cylinder that goes well with the make of vehicle.
- 4. You should have through leak of the gas system. In case of Leakage, close cylinder Value; fitted on CNG cylinder. Don't drive the vehicle on CNG till you get the leakage test from authorized fitment center. it is worth pointing out that CNG is lighter than air and in the unlikely event of a leak from piping or container the gas will dissipate upwards quite quickly. In case of petrol and LPG, the vapour given off is heavier than air and will tend to pool near the ground.
- 5. You should collect the installer certificate from the workshop and ensure to endorse the CNG or bi-fuel mode in Registration Certificate issued by RTO.
- 6. Get the CNG cylinder checked every Three (3) years from the date of last testing / retesting of cylinder by government authorized CNG cylinder testing agency
- 7. Switch "OFF" engine while fuel filling
- 8. The CNG kit installed in the vehicle should be insured along with vehicle accessories. The Motorist should notify the insurance company to provied insurance on the CNG system, for which additional premium may be charged by the insurance company. Motorists should take the insurance cover for the additional CNG kit system.
- 9. As per present government regulation the pollution checks and pollution certificate is mandatory even after converting the vehicle on CNG.

#### **DONT'S WHILE USING CNG**

- 1. You should not purchase Components from various sources and do not install the kit yourself.
- 2. You should not modify or improvise the kit and unauthorized workshops.
- 3. You should not install on LPG, Propane in place of CNG cylinder.
- 4. You should not do Filling of LPG, Propane or other fuel in a CNG Cylinder.
- 5. You should ensure that there are no passengers on board at a time of filling of CNG.
- 6. You should not ignore any signs of gas leakage if observed by you.
- 7. Avoid carrying inflammable material near the CNG cylinder.



EUROPEAN STAND



### WARRANTY CARD

Invoice No	Date of ( Fitment)	
	Phone No.	
Vehicle No. on which kit fitted		
	tment	
Kit Box No	ECU No	

HIGHRISE Authorised Dealer Copy

Stamp & Sign.

Invoice No	Date of (Fitment)	
Customer Name	Phone No	
Address		
Vehicle No. on which kit fitted		
Kilometer Reading at the time of fitment		
<u> </u>	ECU No	

Customer Copy

Stamp & Sign





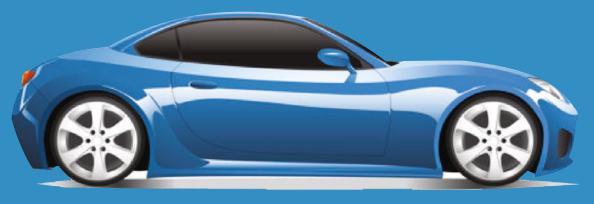
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Thanks for Choosing



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