

कार्यालय परिवहन आयुक्त, उत्तराखण्ड,
कुल्हान, सहस्रधारा रोड़, देहरादून।

संख्या-342/TR/23-1/सी0एन0जी0किट/2020

दिनांक 31 जनवरी 2020

आदेश

केन्द्रीय मोटरयान नियमावली, 1989 के नियम 115 बी में in use वाहनों में सी0एन0जी0 किट लगाये जाने की व्यवस्था की गयी है। इस सम्बन्ध में कार्यालय ज्ञाप संख्या-3460/टी0आर0/5/CNGKIT/2019-2020 दिनांक 04-11-2019 के द्वारा सी0एन0जी0 किट के रिट्रोफिटमेंट हेतु अनुमोदन की प्रक्रिया निर्धारित की गयी है, जिसके अन्तर्गत M/s Mijo Auto Gas Pvt. Ltd. द्वारा केन्द्रीय मोटरयान नियमावली 1989 के नियम 126 में वर्णित टेस्टिंग एजेंसी ICAT, Manesar द्वारा नार्म्स के अनुरूप होने के प्रमाण संख्या- CAIA-0060 Dated 27th Nov, 2013, Extension 1 -CAIA-0060E01 Dated 11th January 2017, Extension 2-CAIA-0060 E02 Dated 08th December, 2017 तथा वैद्यता के सम्बन्ध में प्रमाण पत्र का Extension of Validity Certificate No-CAIA-0060 R02 Dated 18th June 2019 प्राप्त कर लिये गये है। उक्त प्रमाण पत्र के आधार पर M/s Mijo Auto Gas Pvt. Ltd. द्वारा निर्मित सी0एन0जी0 किट मॉडल-MSEQUENT SGI को in use पेट्रोल चालित वाहन मॉडल SKODA FABIA, BSIV (Engine Capacity-1198 cm³) में रिट्रोफिटमेंट कर प्रस्तुत की गयी। जिसका निरीक्षण सम्भागीय निरीक्षण प्राविधिक द्वारा किया गया है। सी0एन0जी किट एवं सिलेण्डर/वाल्व का संक्षिप्त विवरण निम्नानुसार है:-

1-Detail of Kit Manufacturer/ Supplier/ Installer- M/s Mijo Auto Gas Pvt. Ltd.
(ISO 9001:2008 Company)

S-110, Badli Industrial Area,
Phase-I Delhi

2-CNG Kit Identification no- MSEQUENT SGI

3- CNG Cylinder (DOE Approved/Endorsed):

Description detail	OPT-I	OPT-II	OPT-III	OPT-IV	OPT-V	OPT-VI
Name of Manufacturer	M/s Sahuwala High Pressure Cylinder pvt. Ltd.	M/s Rama Cylinder Pvt. Ltd.	M/s Everest kanto cylinder ltd.	M/s Jay Fe cylinder Ltd.	M/s Lizer Cylinder Ltd	M/s Euro India Cylinder Ltd.
Identification No/Cylinder no	SHPCL	RCPL	EKC	JCL	LIZER	EURO
Type	Seamless	Seamless	Seamless	Seamless	Seamless	Seamless
Max test Pressure (kg/cm ² /MPa)	340 kg/cm ²	340 kg/cm ²	340 kg/cm ²	340 kg/cm ²	340 kg/cm ²	340 kg/cm ²
Working Pressure (KG/cm ²)/MP A	204 kg/cm ²	204 kg/cm ²	204 kg/cm ²	204 kg/cm ²	204 kg/cm ²	204 kg/cm ²
Cylinder Capacity (water Equivalent) and Dia in mm	316 mm 50,55,60,65,70,75,80,85, 90 ltrs 325 mm 50,55,60,65,70,75,80,85, 90 ltrs 356 mm 50,55,60,65,70,75,80,8 5,90.	317 mm 50,55,60,65, 70,75,80,85, 90 ltrs 356 mm 50,52,53,55, 57,58,60,62, 63,65,70,75, 78,80,82,85, 90 ltrs	267 mm 50, 55, 60, 65, 70 lts 316 mm 50,54,55,58,6,64,65,68, 70,75,80,85,90 ltrs 323.8 mm 50,53,55,58,60,63,65,70,75, 80,85,90 ltrs 356 mm 55,58,60,63,64,65,66,67,68, 70,73,75,78,80,85,90 lts	317 mm 50,55,60,65,7 0,75,80,85,90 lts 356 mm 50,,55,58,60, 63,65,70,75,7 8,80,85,90 lts	317 mm 50,55,57,58,60 ,62,63,65,70,7 5,80,85,90 lts 356 mm 50,55,57,58,60 ,62,63,65,68,7 0,73,75,77,78, 80,82,85,90 lts	267 mm 50,60 lts 316 mm 50,55,60,65,70, 75,80,90 lts 356 mm 57,60,63,65,70, 75,80,82,85,90 lts
Approval Reference from DOE	G3 (42) 544/I dt 17-07-2008	G.3(42)515/II Dt-11-09-2011	G3(42) 523. Dt-06/02/2006	G.3(42) 557/I Dt-2/12/2009	G.3(42)536/II Dt-13-8-2008	G.3(42) 572/I Dt-14/10/2011

4. Cylinder Valve (DOE approved/endorsed):

Name of manufacturer	M/s EMER s.r.l Italy	M/s Batra Valves	M/s H.M Plastic	M/s Minda Emer Technologies Ltd.
Model name/ Identification no	Valve 119/CNG EM04-Z	Batra Valve	HMP	MINDA EMER
Type	With fusible plug, burst disc & built in vent	With fusible plug burst disc & built in vent	With fusible plug burst disc & built in vent	With fusible plug burst disc & built in vent
Working pressure (KG/Cm ²)Mpa	204.4/20(200 bar)	204Kgf/cm ²	204 kgf/cm ²	204 kgf/cm ²
Max Test pressure (kg/cm ²) (Mpa)	309.9/30(375 bar)	350 kgf/cm ²	350 kgf/cm ²	350 kgf/cm ²
Approval reference form DOE	G.3(4)140 DT -04-04-2001	G3(40)87 DT 16-10-2010	G-3(40)225 DT 22/5/2015	G.3(40) 230 Dt 05-07-2016

5. ICAT, Manesar द्वारा प्रदत्त Layout plan Approval certificate no-CAIA-0060 L01, CAIA-0060 L02, CAIA-0060 L03 में उक्त सी0एन0जी0 किट एवं सलेन्डर/वाल्व को निम्न मॉडल वाहन पर लगाये जाने के उल्लेख किया गया है:-

Sl. No.	Layout Plan Approved Vehicle Model	Engine Cm ³	Mass Emission	ICAT Certificate No.	Validity for the conversion in use vehicles Manufactured & Registered from
1	Chevrolet Spark PS BS IV	995	Bharat stage-IV	CAIA0060 L01 Date : 05 th Dec. 2013	1 st April 2010 to 31 st March 2013
2	MARUTI ALTO 800	796			
3	MARUTI ALTO (K10)	998			
4	MARUTI OMNI (5 SEATER)	796			
5	MARUTI OMNI (8 SEATER)	796			
6	MARUTI OMNI (CARGO)	796			
7	MARUTI ZEN ESTILO	998			
8	MARUTI WAGONR	998			
9	MARUTI ASTAR	998			
10	MARUTI EECO (CARGO)	1196			
11	TATA INDICA VISTA	1172			
12	CHEVROLET AVEO U-VA	1150			
13	FIAT GRANDE PUNTO	1172			
14	HYUNDAI I10 (ERA)	1086			
15	HYUNDAI SANTRO	1086			
16	PREMIER RIO	1173			
17	HYUNDAI EON	814			
18	MARUTI SWIFT DZIRE	1197	Bharat stage-IV	CAIA0060 L02 Date : 08 th June 2015	1 st April 2010 till 31 st March 2013
19	MARUTI RITZ	1197			
20	MARUTI SWIFT	1197			
21	MARUTI EECO - 5 SEATER	1196			
22	MARUTI EECO - 7 SEATER	1196			
23	CHEVROLET BEAT	1199			
24	HYUNDAI I10 1.2L	1197			
25	HYUNDAI I20 1.2L	1197			
26	CHEVROLET SAIL	1199	Bharat stage-IV	CAIA0060 L03 Date : 11 th Dec. 2017	1 st April 2010 till 31 st March 2013
27	CHEVROLET SAIL U-VA	1199			
28	FIAT PALIO STILE	1108			
29	FORD FIGO	1196			
30	HONDA AMAZE	1198			
31	HONDA BRIO	1198			
32	HONDA JAZZ	1198			
33	HYUNDAI EON	998			

TR / TR / 23-1/CNG KIT/2019-20

M/s Mijo Auto Gas Pvt. Ltd.

CNG Kit Identification no- MSEQUENT SGI

Page- 2 of 3

34	HYUNDAI GETZ	1086			
35	MARUTI ALTO LXI	796			
36	MARUTI CELERIO	998			
37	NISSAN MICRA	1198			
38	RENAULT PULSE	1198			
39	SKODA FABIA	1198			
40	TATA INDICA V2 XETA	1193			
41	TATA INDIGO eCS	1193			
42	TOYOTA ETIOS LIVA	1197			
43	VOLKSWAGEN POLO	1198			
44	VOLKSWAGEN VENTO	1197			

अतः उक्त सी0एन0जी0 किट/सिलेंडर/वाल्व को प्रोटोटाइप एजेन्सी द्वारा अनुमोदित विशिष्टताओं के अनुसार उक्त मॉडल वाहनों में रिट्रोफिटमेंट निम्नलिखित प्रतिबन्धों एवं शर्तों के अधीन किये जाने की अनुमति प्रदान की जाती है:-

1. किट रिट्रोफिटमेंट के साथ वाहन में लगाये जाने वाले ऑटो सीएनजी टैंक एवं मल्टीफंक्शन वाल्व के सुरक्षित होने के सम्बन्ध में सीसीओई के प्रमाण-पत्र की प्रति विक्रय के समय क्रेता को उपलब्ध करायी जाएगी, जिसे क्रेता द्वारा पंजीयन अधिकारी के समक्ष प्रस्तुत किया जाएगा।
2. वाहन में किट रिट्रोफिटमेंट किट निर्माता की अधिकृत कार्यशाला अथवा वाहन विनिर्माता द्वारा ही लगायी जायगी। इस प्रकार की कार्यशालाओं को जी0एस0टी0 प्रमाण-पत्र उपलब्ध कराना अनिवार्य होगा।
3. किट के स्पेसिफिकेशन अथवा ले आउट में किसी प्रकार का परिवर्तन हाने पर इसकी सूचना सम्बन्धित प्रोटोटाइप एजेन्सी को तत्काल देनी होगी और पुनः टाइप एप्रूवल प्राप्त कर प्रस्तुत करना होगा।
4. किट के सम्बन्ध में सुरक्षा प्राविधान केन्द्रीय मोटरयान नियमावली, 1989 के नियम 115ख के बिन्दु (ड) के एनेक्जर IX एआईएस024 और एआईएस028 (आरईवी-1) में समय-समय पर यथा संशोधित -विनिर्धारित सुरक्षा सम्बन्धी अपेक्षाओं का अनुपालन किया जायेगा।
5. प्रत्येक किट स्थापित करने वाला (kit installer) यह सुनिश्चित करेगा कि लगायी जाने वाली किट सुरक्षित है तथा लगाये गये फ्यूल टैंक एवं मल्टीफंक्शन वाल्व के सम्बन्ध में सीसीओई प्रमाण-पत्र प्राप्त कर लिया गया है।
6. ऑटो सीएनजी टैंक वाहन में स्थायी रूप से स्थापित किया जायेगा।
7. ऑटो सीएनजी टैंक निर्माता के स्पेसिफिकेशन के अनुरूप ही लगाया जायेगा।
8. प्रोटोटाइप एजेन्सी से अनुमोदित किट का वाहन में रिट्रोफिटमेंट के पश्चात् विनिर्माता द्वारा वाहन स्वामी को सर्विस मैनुअल आर्वतक निरीक्षण और अनुरक्षण की निर्देशिका, सर्विस, मरम्मत अनुरक्षण हेतु पर्याप्त बुनियादी संरचना प्रदान की जायेगी।

9. किट निर्माता द्वारा किट उपयोगकर्ताओं का समुचित प्रशिक्षण देने की व्यवस्था की जायेगी।
10. किट निर्माता द्वारा केन्द्रीय मोटरयान नियमावली, 1989 के नियम 115ख के बिन्दु (च) के एनेक्जर X के उपबन्धों का अनुपालन सुनिश्चित किया जायेगा।
11. किट निर्माता द्वारा सीएनजी किट के रिट्रोफिटमेंट के समय मोटरयान अधिनियम, 1988 केन्द्रीय मोटरयान नियमावली, 1989 एवं उत्तराखण्ड मोटरयान नियमावली, 2011 की व्यवस्थाओं का अनुपालन करना होगा।
12. किट निर्माता द्वारा मोटर वाहन में विधिमान्य तरीके से किट रिट्रोफिटमेंट न किये जाने और या विधि की व्यवस्थाओं का अनुपालन सुनिश्चित न करने की दशा में अनुमोदन रद्द कर दिया जायेगा।
13. मोटर वाहनों में किट रिट्रोफिटमेंट के सम्बन्ध में किट निर्माता द्वारा परिवहन विभाग के सक्षम अधिकारी द्वारा अपेक्षित सूचनाओं को निर्धारित समय के भीतर उपलब्ध कराना होगा। साथ ही इस विषय में परिवहन आयुक्त द्वारा समय-समय पर जारी आदेशों का अनुपालन सुनिश्चित किया जाएगा।
14. किट निर्माताओं द्वारा अनुमोदन प्राप्त किट ही वाहनों में फिट की जाएगी और ऐसी किट का विवरण ही सम्बन्धित पंजीयन अधिकारी द्वारा पंजीयन प्रमाण पत्र में प्रविष्ट किया जाएगा।

संलग्न:- प्रोटोटाईप प्रमाण पत्र की प्रति।

(सुनीता सिंह)
अपर परिवहन आयुक्त,
उत्तराखण्ड।

संख्या- 342/TR/VLT/2019 तददिनांकित।

प्रतिलिपि:- निम्नलिखित को अनुपालनार्थ हेतु प्रेषित।

- 1-समस्त सम्भागीय/सहायक संभागीय परिवहन अधिकारी, उत्तराखण्ड।
- 2-समस्त संभागीय निरीक्षक (प्राविधिक) उत्तराखण्ड।
- 3-सम्बन्धित पत्रावली।
- 4- M/s Mijo Auto Gas Pvt. Ltd. (ISO 9001:2008 Company) S-110,
Badli Industrial Area, Phase-I Delhi-110042

(सुनीता सिंह)
अपर परिवहन आयुक्त,
उत्तराखण्ड।

(3/10/20)

INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY

[A Division of NATRiP Implementation Society (NATIS), Govt. of India]

C	A	I	A	0060	R02
---	---	---	---	------	-----

AN-1179

Date: 18th June 2018

EXTENSION OF VALIDITY

Cert	Brief	Drg	Total
01	09	02	12 pgs

1. This is in continuation to the certificate referred below, issued to M/s. Mijo Auto Gas Pvt. Ltd. (ISO 9001:2008 Company), S-110, Badli Industrial Area Phase - I, Delhi - 110042 (India), in respect of retrofitment on the model specified therein.

Sr. No.	Reference of Type Approval	Validity of Certificate					
		Earlier		Revalidated			
		From	To	From	To	From	To
1	ICAT/CMVR/197B-759(R1)/M-0059 dt. 12.01.2017 (Revalidation Certificate) C A I A 0060 Dt. 27.11.2013(Base Certificate) Issued for CNG In-Use base model "Chevrolet Spark PS BS 4" 995 cc - August 2010 make - Bharat Stage - IV	27.11.2013	26.11.2016	27.11.2016	18.06.2018	19.06.2018	18.06.2021
Reference of layout / Extension Certificates		From	To	From	To	From	To
1	C A I A 0060 L01	05.12.2013	26.11.2016	27.11.2016	18.06.2018	19.06.2018	18.06.2021
2	C A I A 0060 L02	08.06.2015	26.11.2016				
3	C A I A 0060 E01	11.01.2017	-				
4	C A I A 0060 E02	08.12.2017	-				
5	C A I A 0060 L03	11.12.2017	-				

Compliance of Mass Emission Standards & Validity: (Ref. 115B A.(II) Clause (iv), as per GSR 84(E) dt. 09.02.2009

2. The CNG converted "In-Use" base model "Chevrolet Spark PS BS 4" 995 cc (August 2010 make) fitted with O.E. Catalytic Converter", meets the Bharat Stage-IV norms. Same kit can therefore be fitted on the MPFI vehicles fitted with O.E. Catalytic Converter, between stipulated Engine cc range (746.25 to 1243.75 cm³) manufactured / registered from 01st April 2010 till 31st March 2013, subject to specific approval, for layout plan by ICAT, for retrofitment of CNG kit in each vehicle model.





3. All conditions and compliance requirements, in respect retrofitment of CNG kit, given in the certificates referred above, remain unchanged. Brief technical & CNG Kit Specification (No. MAGPL TA MW R03 dt. 02.05.2018) of the In-Use vehicle model, as declared by the CNG Kit Installer, are enclosed with this certificate.

DISCLAIMER

- ICAT issues "Type Approval Certificates" (TAC) for vehicles/ engines/gensets/ parts/ assemblies etc. based on the documents produced and/or prototype / vehicle(s) submitted by the applicant and testing thereof.
- ICAT issues TAC in compliance to Motor Vehicle Act/ Central Motor Vehicle Rules/ Central Pollution Control Board rules and their provisions as amended from time to time or any other statutory orders under which ICAT is authorized. Other Rules/Acts are outside the purview/scope of the TAC.
- Test(s) on prototype is/are carried out on the basis of standard procedures as notified under specific rules. Results of such tests are property of bearer of TAC. These results cannot be disclosed unless specifically ordered by Government, Court, etc.
- The bearer of the TAC is under the obligation to ensure production strictly as per the provisions of the specific TAC.
- ICAT is not responsible for testing each vehicle/ engines/gensets/ component/part/assemblies etc. for which TAC is issued. Further, ICAT is not responsible for ensuring manufacturing quality of the type approved vehicles/ engines/gensets/ components/ parts/ assemblies etc.
- ICAT is no way responsible for any misuse or copying of any design/type/system in connection with entire vehicle/ engines/gensets/ components/parts and assemblies covered under the TAC.
- Breach of any statutory provision of Indian laws or laws of other countries, will be sole responsibility of the bearer of the TAC and ICAT shall not be liable for any claims or damages. The bearer shall alone be liable for the same, and shall undertake to indemnify ICAT in this regard.
- ICAT has the right, but not under obligation to initiate cancellation / withdrawal of the certificate issued, in case of any fraud, misrepresentation, when it surfaces and comes in the knowledge of ICAT. The appropriate local court at Gurugram shall have the jurisdiction in respect of any dispute, claim or liability arising out of this certificate/report.

ICAT Case ref:	2018 - 140 (IOCS Ref. : 59859)
Emission test report:	Wagon R VXi (April 2010 make) , CT0PN 0404 Dt. 13.06.2018 (Lizer Cylinder; 67L-C01 Cat Con ; NGK R Spark Plug ;Regulator: SR09 ; Interfacing Unit: ME-10 ; Gas Injector: MIR01)

AUTHORISED SIGNATORIES,

 VIJAYANTA AHUJA ASST. GENERAL MANAGER	 INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY Innovation • Service • Excellence MANESAR	 DINESH TYAGI DIRECTOR	 AN-1179
--	--	--	--



TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATIONS OF CNG CONVERSION KIT

1. Details of Kit Manufacturer / Supplier / Installer					
a. Name of Manufacturer	M/s. MIJO AUTO GAS PVT. LTD. (ISO 9001:2008 COMPANY) S-110, BADLI INDUSTRIAL AREA PHASE-I DELHI-110042. (INDIA) E-mail: info@mijoautogas.co.in Website: www.mijoautogas.co.in				
b. Telephone No.	PHONE – (011) 27294386 , 32588722				
c. Contact Person	TELE FAX – (011) 47550538 Mr. Dipesh Mittal (Mobile) - 09999689995				
2. CNG Kit Identification					
a. Identification No.	MSEQUENT SGI				
b. Variants, if any					
3. CNG Cylinder (DOE Approved / Endorsed)					
Description detail		Option I	Option II	Option III	
A	Name of the Manufacturer	M/s. Sahiwala High Pressure Cylinder Pvt. Ltd.	M/s. Rama Cylinder Pvt. Ltd.	M/s. Everest Kanto Cylinder Ltd.	
B	Identification No./ Cylinder No	SHPCL	RCPL	EKC	
C	Type	Seamless	Seamless	Seamless	
D	Max. Test Pressure (kg/cm ²)/(MPa)	340 kg/cm ²	340 kg/cm ²	340 kg/cm ²	
E	Working Pressure (Kg/cm ²) / (MPa)	204 kg/cm ²	204 kg/cm ²	204 kg/cm ²	
F	Cylinder Capacity (Water Equivalent) and Dia. in mm.	316 mm 50,55,60,65,70,75,80,85,90 ltrs 325 mm 50,55,60,65,70,75,80,85,90 ltrs 356 mm 50,55,60,65,70,75,80,85,90 ltrs	317 mm 50,55,60,65,70,75,80,85,90 ltrs 356 mm 50,52,53,55,57,58,60,62,63,65,70,75,78,80,82,85,90 ltrs	267 mm 50,55,60,65,70 ltrs 316 mm 50,54,55,58,60,64,65,68,70,75,80,85,90 ltrs 323,8 mm 50,53,55,58,60,63,65,70,75,80,85,90 ltrs 356 mm 55,58,60,63,64,65,66,67,68,70,73,75,78,80,85,90 ltrs	
G	Approval Reference from DOE	G.3(42)544/III dt.-06.05.2011, G.3(42)544/I dt.-17.07.2008, G.3(42)544/I dt.-24.12.2008	G.3(42)553/I dt.-11.11.2010 & G.3(42)515/VI dt.-20.05.2011	G.3(42)523,dt.-06.02.2006	

Test Agency ICAT- Gurgaon	Manufacturer: M/s. MIJO AUTO GAS PVT. LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature:	 MAGPL TA MW R03
Name:	Name: Dipesh Mittal	
Designation:	Designation: Director	
Date:	Date: 02/05/2018	
Page 1 of 6		



Descriptiondetail	OptionIV	Fitted	OptionV
Name of the Manufacturer	M/s. Jay Fe cylinderLtd. ✓	M/s. LizerCylinder Ltd. ✓	M/s. EuroIndia CylindersLtd.
Identification No./ CylinderNo	JCL	LIZER/A-III-55-915T ✓	EURO ✓
Type	Seamless	Seamless	Seamless
Max. Test Pressure (kg/cm ²)/(MPa)	340kg/cm ²	340kg/cm ²	340kg/cm ²
WorkingPressure (Kg/cm ²)	204kg/cm ²	204kg/cm ²	204kg/cm ²
CylinderCapacity (WaterEquivalent) and Dia. In mm.	317 mm 50,55,58,60,65,70,75,80,85,90 ltrs 356 mm 50,55,58,60,63,65,70,75,78,80,85,90 ltrs	317 mm 50,55,57,58,60,62,63,65,70,75,80,85,90 ltrs 356 mm 50,55,57,58,60,62,63,65,68,70,73,75,77,78,80,82,85,90 ltrs	267 mm 50,60 ltrs 316 mm 50,55,60,65,70,75,80,90 ltrs 356 mm 57,60,63,65,70,75,80,82,85,90 ltrs
Approval ReferencefromDOE:	G.3(42)557/I dt.-22.12.2009	G.3(42)536 dt.-18/03/2008& G.3(42)536/I dt.-10/12/2008 Batch Certificate No.- G.3(42)536/P/2018/11/3 dt.-09.04.2018	G.3(42)572 dt.-18/08/2011& G.3(42)572/I dt.-14/10/2011

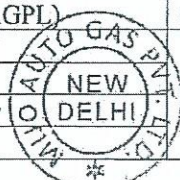
4.Cylinder Valve (DOE approved / endorsed)	Option-1	Option-2	Fitted	Option-3
a. Name of manufacture	M/s. EMER s.r.l, Italy	M/s. Batra Valves	M/s. H.M. Plastic	M/s. Minda Emer Technologies Ltd.
b. Model name/ Identification No.	Vale 119 / CNG - EM04 -Z	Batra Valve	HMP	MINDA EMER/ME-CVM-001
c. Type	With fusible plug, burst disc & built in vent	With fusible plug burst disc & built in vent	With fusible plug burst disc & built in vent	With fusible plug burst disc & built in vent
d. Working pressure (Kg/cm ²)/(MPa)	204.4 / 20 (200 bar)	204kgf/cm ²	204kgf/cm ²	204kgf/cm ²
e. Max. Test pressure (kg/cm ²)/(MPa)	309.9 /30 (375 bar)	350 kgf/cm ²	350 kgf/cm ²	350 kgf/cm ²
f. Approval reference from DOE	G.3(4) 140, Dt-04-04-2001	G-3(40)87, Dt-06/10/2010	G-3(40)225	G.3(40) 230, Dt-05/07/2016

5.CNGSolenoid Valve a. Name of manufacturer	M/s. MijoAuto Gas Pvt.Ltd.(MAGPL)
b. Model name / Identification no. c. Type	Integral part of the pressure Regulator.
d. Working pressure	

6.Petrol Solenoid Valve	NA
-------------------------	----

7.Refilling Valve		
a. Name of Manufacturer	M/s. MijoAuto Gas Pvt.Ltd.(MAGPL)	M/s. MijoAuto Gas Pvt.Ltd.(MAGPL)
b. Model Name / Identification No	MRV (TradeMarks- Mijo, Msequent, GoldAFS)	MRV 02 (TradeMarks- Mijo, Msequent, GoldAFS)
c. Type	NZS type	NZS type
d. Working Pressure (kg/cm ²)	26.0 mpa	26.0 mpa

Test Agency ICAT-	Manufacturer: M/s. MIJO AUTO GAS PVT.LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature: <i>[Signature]</i>	
Name:	Name: Dipesh Mittal	MAGPLTAMW R03
Designation:	Designation: Director	
Date:	Date: 02/05/2018	Page 2 of 6



**8. Pressure Regulator**

a. Name of Manufacturer	M/s. Mijo Auto Gas Pvt. Ltd. (MAGPL)
b. Model Name / Identification No./TAC NO	SR09 (Trade Marks- Mijo, Msequent, Gold AFS)
c. Type / Sr. No.	Sequential
d. Inlet Pressure (kg/cm ²) / (MPa)	200 bar
e. Outlet Pressure (kg/cm ²) / (MPa)	0.8 to 3.5 bar
f. Test Report No.	ISR336684, DT-16/09/2015
g. TAC Report No.	CF2941, DT-18/09/2015
h. COP Certificate No.	CC0BM 5077, DT-21/03/2017

9. CNG Filter

Integral part of the pressure Regulator

10. Oil Pump or Lubrication system, if any

NA

11. High Pressure Tubing

a. Name of Manufacturer	M/s. Rispar Fueltek Inc.	M/s. Shiv Shakti Impex	M/s. Highrise International Pvt. Ltd.
b. Model Name / Identification No.	RFI-6	SSI-P-999-5D-05	HIGHRISE KIA-HP-01
c. Type	PVC STEEL TUBES	PVC STEEL TUBES	PVC STEEL TUBES
d. Working Pressure (Mpa)	28.17 Mpa	28.17 Mpa	28.17 Mpa
e. Max. Test Pressure (Mpa)	70 Mpa	70 Mpa	70 Mpa
f. Outer Diameter / Inner Dia.	6mm / 4mm	6mm / 4mm	6mm / 4mm
g. Protection Quality (material used)	PVC Steel	PVC Steel	PVC Steel
h. Approval reference no.	Report No.- CT0BM5170, Dt- 12.6.2017	Rep. No.-SHL/16/ 2017-18/1697/1941 Dt- 08.06.2017	Report No.-CT0BM5009, Dt:-18.1.2017

12. Low Pressure Tubing

a. Name of Manufacturer	M/S. GATES INDIA LTD.	M/S. GATES INDIA LTD.
b. Model Name / Identification No.	Gates 3/8 Inch (9.5mm) CNG Hose, J30R6 21 BAR WP 48 BAR	Gates 1/4 Inch (6.3mm) CNG Hose, J30R6 21 BAR WP 48 BAR
c. Type	Low pressure CNG hose	Low pressure CNG hose
d. Working Pressure (kg/cm ²)	21bar	21bar
e. Max. Test Pressure (kg/cm ²)	48bar	48bar
f. Outer Diameter / Inner Diameter	15.8mm/9.5mm	12.7mm/6.3mm
g. Protection Used / Test Report No.	SHL/239/2016-2017/10620/1343, Dt-11/04/2017	SHL/239/2016-2017/10620/1343, Dt-11/04/2017

13. Gas Injector Rail

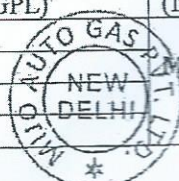
a. Name of Manufacturer	M/s. Mijo Auto Gas Pvt. Ltd. (MAGPL)
b. Model Name / Identification No.	MIR01 (Trade Marks- Mijo, Msequent, Gold AFS)
c. Type	Gas Injector type
d. Working Pressure (kg/cm ²)	-40 to+ 120°C

Test Agency	Manufacturer: M/s. MIO AUTO GAS PVT. LTD. (MAGPL)	Document No.
ICAT- Gurgaon		(including also revision status)
Signature:	Signature:	
Name:	Name: Dipesh Mittal	
Designation:	Designation: Director	
Date:	Date: 02/05/2018	Page 3 of 6



14. ON / OFF Switch a. Name Of Manufacturer b. Model name / Identification No. c. Type	PART OF ECU MIJO ELECTRONIC SWITCH
15. Ignition System a. Name of manufacturer b. Type of Ignition system c. Spark plug gap	OE Fitted Standard Ignition System 0.8 to 0.9 mm
15A. Wiring Harness (for CNG System) (Ref. Clause A11 of Table 2 of AIS 007) a. Name Of Manufacturer b. Model name / Identification No. c. Type d. Electrical circuit diagram	M/s. Jiaying Lineng Autogas Equipment Co., Ltd. ME-10 PVC Insulated Copper Separately enclosed
16. ECM / Interfacing Unit a. Name of manufacturer b. Model Name / Identification No. c. Type	M/s. Jiaying Lineng Autogas Equipment Co., Ltd. ME-10 (Trade Marks- Mijo, Mscquent, Gold AFS) Sequential Type
17. Brief Description of System Including Dimensional Layout for Cylinder and Other kit component installations, Ventilation details etc.	CNG comes out from the cylinder through the cylinder valve & goes to the engine compartment through a high-pressure pipe, which is also connected to the refueling system. The engine compartment contains the regulator where the pressure of CNG is reduced from 200 bars to (1-3) bars. From the regulator the CNG goes to the injector rail which is located on the intake manifold. It releases the flow of gas according to the requirement of the engine. The regulator allows gas to flow through the engine only when engine is running and the switch is in the gas position and the supply of fuel is control by ECM.
18. Refilling Valve interlocking switch a. Name of manufacturer b. Identification No. c. Type	Part of Refilling valve Interlocking

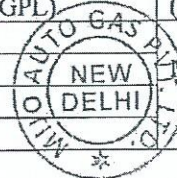
Test Agency ICAT- Gurgaon	Manufacturer: M/s. MIJO AUTO GAS PVT. LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature:	MAGPL TA MW R03 Page 4 of 6
Name:	Name: Dipesh Mittal	
Designation:	Designation: Director	
Date:	Date: 02/05/2018	





19. Catalytic Converter a. Make b. Model	OE fitted 67L-C01 SUZUKI FM1	
20. Current limiting Device (Fuse) a. Name of manufacturer b. Identification No. c. Voltage / current rating d. Type	M/s. Protectron Electromech Pvt. Ltd. PTF 200 15A 15A Moulded	M/s. Mijo Auto Gas Pvt. Ltd. (MAGPL) (Customer) IMP 7.5 7.5A Moulded
21. Conduit a. Name of manufacturer b. Identification No. c. Inner & outer diameter d. Type e. Report No.	M/s. Tubicor VDH/2939 29mm / 39mm PVC with spring cored Rep.No-SHL/239/2016-2017/8274/285 Dt - 25/01/2017	
22. Details of Seat / Upholstery / roof and side Lining a. Name of manufacturer b. Identification No. c. Type	O.E Fitted.	
23. Details of non-moisture retaining hard Rubber / equivalent material padding / Lining provided for inner side of the cylinder mounting band(s). a. Name of manufacturer b. Identification No. c. Type d. Report No.	M/s. Mijo Auto Gas Pvt. Ltd. (MAGPL) MJO EPDM Rep No-AML/2005-01/NK/CM/3775/710, Dt-31.01.05	
24. Timing Advancer a. Name of manufacturer b. Type c. Timing on CNG mode d. Timing on baseline fuel.	N.A.	

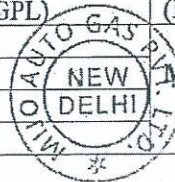
Test Agency ICAT- Gurgaon	Manufacturer: M/s. MJO AUTO GAS PVT. LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature:	MAGPL TA MW R03 Page 5 of 6
Name:	Name: Dipesh Mittal	
Designation:	Designation: Director	
Date:	Date: 02/05/2018	





25. Battery cut off switch (if applicable) a. Name of manufacturer b. Identification No. c. Type	Not a part of Kit (O.E. fitted)		
26. Compartment / subcompartment /Gas tight housing a. Name of manufacturer b. Identification No. c. Type	In built with in the cylinder valve		
27. Pressure Indicator a. Name of Manufacturer b. Identification no. c. Type	M/s. Mijo Auto Gas Pvt, Ltd. (MAGPL) CNG- bottom mounting Mano meter type	Fitted M/s. Ramesh Corporation CNG- bottom mounting Mano meter type	M/s. Green Globe CNG CNG- bottom mounting Mano meter type
28. Service Shutt off Valve a. Name of Manufacturer b. ID No. c. Type	INBUILT IN REFILLING VALVE		
29. Any Other information (Not covered) a. Idle rpm b. Spark Plug (Make/ID No.) c. Petrol ECU (Make) d. Petrol ECU (ID No.)	700±100 NGKR-KR6A 10 DENSO (OE, Fitted) HA112400-3601		

Test Agency ICAT- Gurgaon	Manufacturer: M/s. MIJO AUTO GAS PVT. LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature: <i>[Signature]</i>	MAGPL TA MW R03
Name:	Name: Dipesh Mittal	
Designation:	Designation: Director	
Date:	Date: 02/05/2018	Page 6 of 6



[Handwritten mark]



TECHNICAL SPECIFICATION OF VEHICLE

Manufacturer's Name and Address	MARUTI SUZUKI INDIA LTD. (Haryana), India
Vehicle data Model Type Year and Month of Manufacture Engine No. Chassis No.	Wagon R VXi, BS-IV Passenger Car April 2010 4054017 MA3EWDE1S00111294
Engine Type Bore x Stroke, mm No. of cylinders Displacement Compression Ratio Max. Engine Output (As per IS Std. 14599) Max. Torque (As per IS Std. 14599) Air Cleaner Oil Filter Fuel Filter Capacity of Cooling System Oil Sump Capacity Weight of Engine (Complete) Radiator Frontal Area (Core Area)	SOHC 4 Cylinder 16 Valve 73mm X79.5mm. 3 Cylinder 998 cc 10:1 50KW @ 6200 rpm 90Nm @ 3500 rpm Dry Type Woven fabric Type Paper Type MPFI 4 Ltrs. 3.7 Ltrs. 110 As per O.E. Specification
Clutch Type Outside Diameter	Dry Single Disc N/A

Test Agency ICAT- Gurgaon	Manufacturer: M/s. MIJO AUTO GAS PVT. LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature: <i>Dipesh Mittal</i>	
Name:	Name: Dipesh Mittal	MAGPL TA MW R03
Designation:	Designation: Director	
Date:	Date: 02/05/2018	Page 1 of 3





Gear Box Model Type No. Of Gears Gear Ratio 1 st 2 nd 3 rd 4 th 5 th 6 th Reverse Front Axle Rear Axle Ratio	5 SPEED MANUAL TRANSMISSION 5 FORWARD + 1 REVERSE 3.545 1.904 1.280 0.966 0.783 NA 3.272 4.6 N/A 4.388
Steering Steering Wheel Diameter Ratio	400 mm 33mm/REV
Frame Long member size, mm Number of Cross Member	INTEGRATED CHASIS WITH BODY
Suspension Spring Anti-Roll Bar	MCPHERSON STRUT REAR : TORSION BEAM
Shock absorber	
Brake Service Brake Front Rear Total Brake Area Parking Brake Wheel and Tyres	Hydraulic Brake Ventilated Brake Drum Brake Front - 32X4 ; Rear -43X4 Front Brake Mechanical Action On Rear Wheel Front - MRF -155/65 R14 ; Rear - Apollo 155/65 R14

Test Agency ICAT- Gurgaon	Manufacturer: M/s. MIJO AUTO GAS PVT. LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature:	MAGPL TA MW R03
Name:	Name: Dipesh Mittal	
Designation:	Designation: Director	
Date:	Date: 02/05/2018	Page 2 of 3





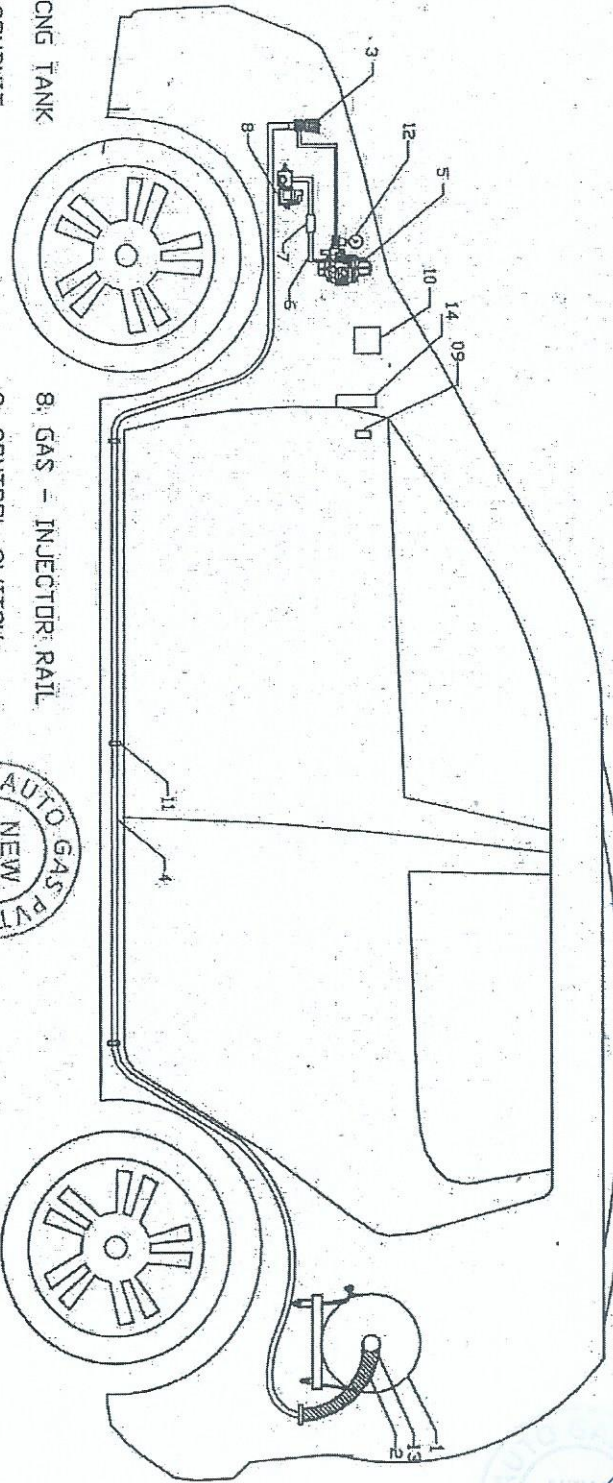
Electrical System System voltage Battery Alternator (Max. output) Type Wiper Motor	12V DC Lead Acid 12V DC 12V – 60 AMP Built in Regulator 2 Speed 12V/DC
Fuel Tank	35 Ltrs.
Dimensions Wheel Base, mm Overall width, mm Overall length, mm Front Track, mm Rear Track, mm Min. Ground Clearance, mm Cargo Box Dimensions (capacity) Load Body Platform Area	2400 mm 1475 mm 3599 mm 1295 mm 1290 mm 165mm N.A N.A
Weights Maximum GVW Maximum Permissible FAW Maximum Permissible RAW KERB weight with 90% fuel (with spare Wheel, tools, etc.) Maximum Grade ability in 1 st Gear	1350 Kgs 700 Kgs 720 Kgs 960 Kgs 10 DEGREE
Seating Capacity	5 Person

Test Agency ICAT- Gurgaon	Manufacturer: M/s. MIJO AUTO GAS PVT. LTD. (MAGPL)	Document No. (Including also revision status)
Signature:	Signature:	
Name:	Name: Dipesh Mittal	MAGPL TA MW R03
Designation:	Designation: Director	
Date:	Date: 02/05/2018	



Page 3 of 3

VEHICLE DRAWING



- 1. CNG TANK
- 2. CONDUIT
- 3. REFILLING VALVE
- 4. HIGH PRESSURE TUBE
- 5. CNG REDUCER
- 6. LOW PRESSURE TUBE
- 7. MAP SENSOR
- 8. GAS - INJECTOR RAIL
- 9. CONTROL SWITCH
- 10. M. SEQUENT ECM
- 11. CLIP
- 12. PRESSURE INDICATOR
- 13. CYLINDER VALVE
- 14. COMPLIANCE PLATE

ALL DIMENSIONS ARE IN mm

Item No	Description	Bot./ Size	Tightening Torque
1.	Cylinder mounting	M10xL5	25-30Nm
2.	Vaporiser mounting	M8xL	20-25Nm
3.	High Pressure Line Cap Fitting	Hexnut	7Nm



Signature

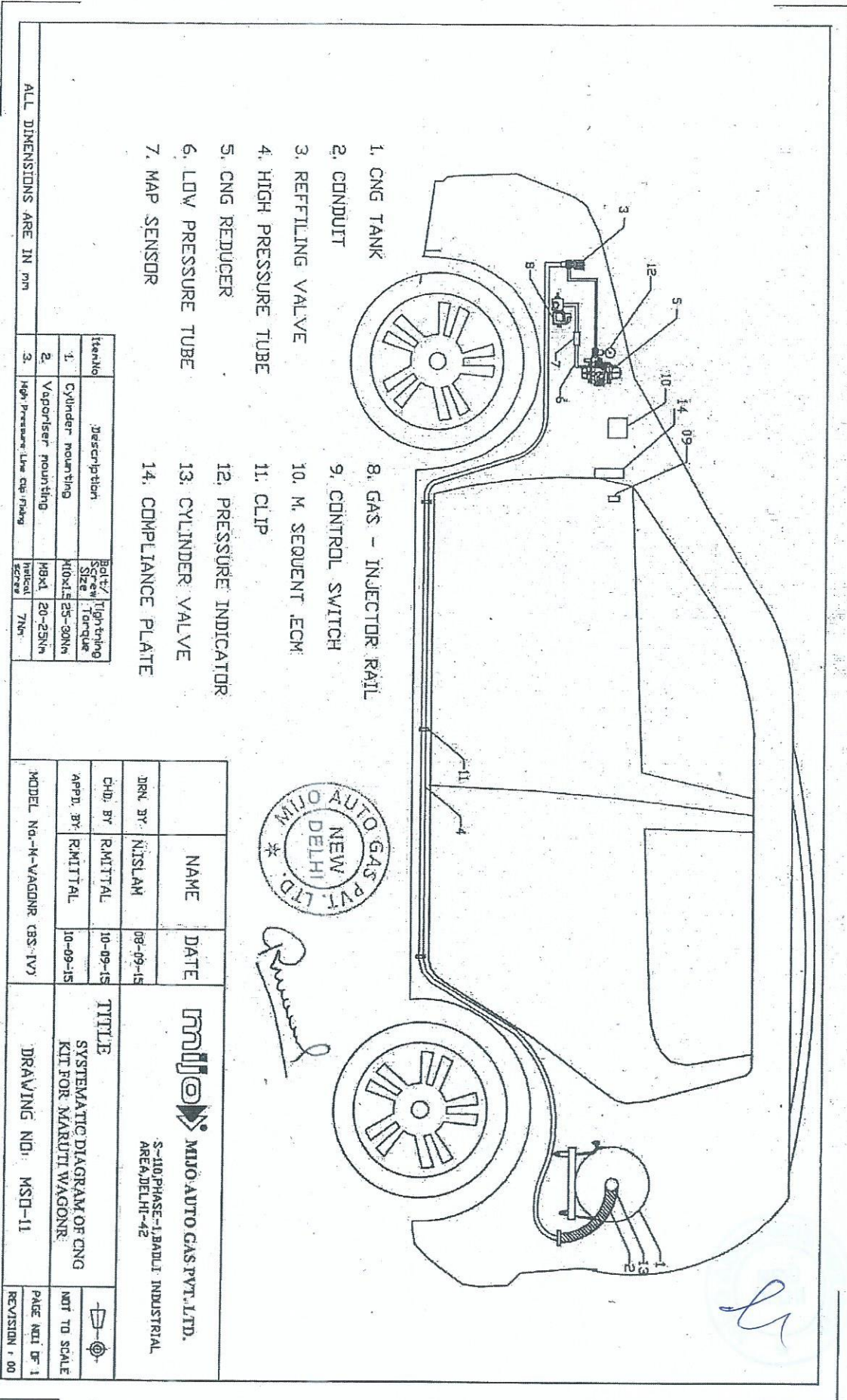
NAME	DATE
DRN. BY NISLAM	08-09-15
CHK. BY R.MITTAL	10-09-15
APPD. BY R.MITTAL	10-09-15

MISO MISO AUTO GAS PVT. LTD.
S-110 PHASE-1, BADELI INDUSTRIAL AREA, DELHI-42

TITLE:
SYSTEMATIC DIAGRAM OF CNG KIT FOR MARUTI WAGONR

DRAWING NO: MSD-11

NOT TO SCALE	PAGE NO. 1 OF 1
REVISION : 00	



- 1. CNG TANK
- 2. CONDUIT
- 3. REFILLING VALVE
- 4. HIGH PRESSURE TUBE
- 5. CNG REDUCER
- 6. LOW PRESSURE TUBE
- 7. MAP SENSOR
- 8. GAS - INJECTOR RAIL
- 9. CONTROL SWITCH
- 10. M. SEQUENT .ECM
- 11. CLIP
- 12. PRESSURE INDICATOR
- 13. CYLINDER VALVE
- 14. COMPLIANCE PLATE

ALL DIMENSIONS ARE IN MM

Item No	Description	Ref./ Screen Size	Tightening Torque
1.	Cylinder mounting	H10x1.5	25-30Nm
2.	Vapouriser mounting	H8x1	20-25Nm
3.	High Pressure Line clip fixing	Helical screw	7Nm

NAME	DATE	TITLE
DRN. BY: NISLAM	08-09-15	MID AUTO GAS PVT. LTD. S-110 PHASE-1, BADLI INDUSTRIAL AREA, DELHI-42
CHD. BY: RMITTAL	10-09-15	
APPD. BY: RMITTAL	10-09-15	
MODEL No.-M-VAGNR (GS-1V)		DRAWING NO: MSD-11

NOT TO SCALE	PAGE NO. OF 1
REVISION : 00	