

INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY

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

C A L B 0039

AL-0219

Date: 23rd February 2016

CERTIFICATE

Cert	Brief + Table 11 & 13	Drg	Total
2	10	8	20 Pgs

FOR COMPLIANCE TO THE CENTRAL MOTOR VEHICLES RULES.

1. In order to establish compliance to the provisions of CMVR, 1989, applicable as on date, documental verification/ necessary testing was carried out, on the following base model, submitted by the vehicle manufacturer referred below:

Vehicle Manufacturer	M/s PRAG MOTORS 193, G.T. Road(N) Salkia, Block Municipality Howrah, West Bengal- 711 106			
Net Power	1680W	Battery	Make	M/s Exide Industries
Max Speed	21.39 kmph		Capacity	80 Ah
			Id / Model No.	12ER100L
Motor		Controller		
Identification no.	Manufacturer	Identification no.	Manufacturer	
PM 48V1000W	M/s Changzhou Yufeng Vehicle Co. Ltd.	PM48V50A	M/s. Changzhou Yufeng Vehicle Co. Ltd.	
BASE MODEL	TYPE: E-Rickshaw		Seating Capacity (Incl. Driver)	GVW, kg
PRAG	Special Purpose Battery Operated Three Wheeler		5 Persons	714

Note: Seating Capacity (including driver) to be verified by RTO: At least @ 68 kg/person + 40 kg total luggage allowance.

- 1a. Brief technical specifications (No. PEV-01 dt. 02/11/2015) of the vehicle model as declared by the vehicle manufacturer, are enclosed with this certificate. Detailed specifications (No PEV-01 dt. 02/11/2015), of the vehicle model, are also separately issued to the vehicle manufacturer.
2. This certificate is issued for the above base model, with compliance to additional provisions, including following requirements, (as detailed at ANNEXURE-I, IA & IB):

Standards	Notification	Date	Effective From	Applicable CMVR
E - Rickshaw BoV / VIN / Brakes / Lamps/ Horn / Bulbs / Tyre/ Lighting & light signaling devices / Traction Battery and other safety components	GSR 709 (E)	08.10.2014	08.10.2014	ANNEXURE-I ANNEXURE-IA ANNEXURE- IB
	S.O. 2590 (E)	08.10.2014		
	S.O. 3090 (E)	08.12.2014		
	GSR 784(E)	12.11.2008		

3. This Certificate is issued as per CMV Rule 126, to establish compliance with the Central Motor Vehicles Rules, 1989, and shall not be construed as a certificate of compliance to any rules other than those listed in ANNEXURE-I, IA & IB. Compliance to these rules has been verified based on the use of specific components / parts / assemblies etc. details of which are given in the detailed specifications duly endorsed by ICAT as mentioned at Para. 1a above. It is the vehicle manufacturer's responsibility to ensure fitment of same components / parts / assemblies etc. before submission of the vehicle for registration.

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 Gurgaon shall have the jurisdiction in respect of any dispute, claim or liability arising out of this certificate.

AUTHORISED SIGNATORIES,

			
VIJAYANTA AHUJA Asst. GENERAL MANAGER		DINESH TYAGI DIRECTOR	Page 1 of 2

ANNEXURE-I

To

Date: 23rd February 2016

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Following rules are verified and found to be complying.

Rule No	Sub Rules	Description			Standard
93	(1), (2), (4), (6) & (7)	Overall dimension of motor vehicles			----
94	(1), (2) & (3)	Condition of tyres			----
95	(1), (2), (3), (4), (5) & (6) (i)	Size & Ply rating of tyres (Tube Type)	Fr & Rr : 3.00-12, 63B, 4PR	Make: Raison	IS:15627:2005 & AIS:050:2004
96	(1), (2), (3), (4)(i), (5), (6), (7)(a)	Brakes			IS:14664:1999
99	---	Forward and backward motion			----
102	(1) & (2)	Signalling devices, direction indicators & stop lights			----
103	(1)	Position of the indicator			----
104	(4)	Fitment of reflectors			AIS:057:2005
105	(1)(b), (3), (4) & (7)	Lamps			----
106	(1)	Deflection of lights			----
108	(1)	Use of red or white lights			----
109	---	Parking light			----
110	---	Lamps three-wheelers			----
111	---	Prohibition of spotlights etc.			----
119	(1) & (2)	Horns	Performance		IS:1884-1993
			Installation		IS:15796-2008
122	(1) & (2)	Embossment of the Chassis Number & Motor Number and date of manufacture (Ref: Table 11 of the Brief Technical Specifications)			----
124	Refer ANNEXURE-IA	Safety standards of components as applicable			S.O. 2590 (E) dt. 08.10.2014
125	(1) & (2)	Rear View Mirror	Specifications		AIS:001/2001
			Installation		AIS:002/2001

ANNEXURE-IA

Rule 124 Table B	Particulars	Test Standards	Compliance Verified
1.	Automobile Lamps	AIS:034/2004	✓
2.	Wheel Rims	AIS:073/2007	
3.	(a) Installation requirement for lighting and light signalling devices	AIS:009/2001	
	(b) Performance requirement of lighting, light signalling	AIS:010/2004	
4.	Constructional & Functional Safety of battery operated vehicle	AIS-038/2003	
5.	Measurement of Net Power & max. 30. min. Power & Speed for battery operated vehicles	AIS:041/2003	
6.	Traction batteries used in battery operated vehicles	AIS: 048/2009	
7.	Requirements of Handholds	AIS: 046/2008	

ANNEXURE-IB

CMV Rule	Compliance Verified for	Test Standards	Compliance Verified
95(1)	Size and Ply rating of Tyre	IS-15627-2005	✓
122(1)	Vehicle Identification Number including month and year of manufacture – VIN number	AIS-065-2005	
124(4)	The procedure for Type Approval and establishing Conformity of production for components	Tyres / Horn	
		Bulb / Rear View Mirror	
	Lighting and Light Signaling Devices / Retro - Reflectors	AIS-037-2004**	

**Compliance needs to be established for Type approval / Conformity of Production for components, listed in the notification.

ICAT Case No.	2015 - 580 (IOCS: 41859)
Test Report Nos.	CTOPL 0120 dt. 09.02.2016

AUTHORISED SIGNATORIES,

			Page 2 of 2
VIJAYANTA AHUJA Asst. GENERAL MANAGER		DINESH TYAGI DIRECTOR	

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Innovation • Service • Excellence

C T O P L 0 1 2 0

DATE- 09/02/2016

TYPE APPROVAL TEST REPORT

Manufacturer		Objective of the test		
M/s PRAG MOTORS 193, G. T. Road,(N) Salkia Howrah 7111006		To conduct type approval tests as per the G.S.R 709 (E) Dt: 08-10-2014, S.O. 2590 (E) Dt: 08-10-2014 and AIS 041:2003		
		CMVR Rule no.	Rule 124 Table B (5)	
Test vehicle	E-Rickshaw			
Vehicle Model	PRAG			
Test Request	41859, CSC/K2/0626 Dt: 23-Oct-15	Vehicle Specification	PEV-01 Dt: 02-Nov-15	
Frame No.	M51PPPHP15L000001	Unladen Weight (kg)	334	
Road Load Equation F=N, V=Kmph	Power absorbed @ 1.50 kW.	Equivalent Inertia (kg)	510	
Coast down report No.	As per part XIII of MoRTH/CMVR/TAP-115/116.			
Traction Battery	Make	M/s Exide Industries Ltd	Type	Lead Acid
	Model	12ER100L	Nominal Volts (V)	48V (12 V X 4)
Traction Motor	Make	M/s Changzhou Yufeng Vehicle Co. Ltd		
	ID	PM48V1000W	Max Power(kW)	1.68
Power controller	Make	M/s. Changzhou Yufeng VehicleCo. Ltd.		
	ID	PM48V50A	Rating	44 -54 V, 50A
Test Procedure	AIS - 041: 2003			
Test Equipment	Make	Type		
Chassis Dyno	AVL Zöllner GmbH,GMBH	955 mm Compact Chassis Dyno		
Cooling Fan	AVL Zöllner GmbH,GMBH	Air Stream Fan		
Driver Aid	AVL Zöllner GmbH,GMBH	--		

Prepared By	Checked By		Department Head	
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