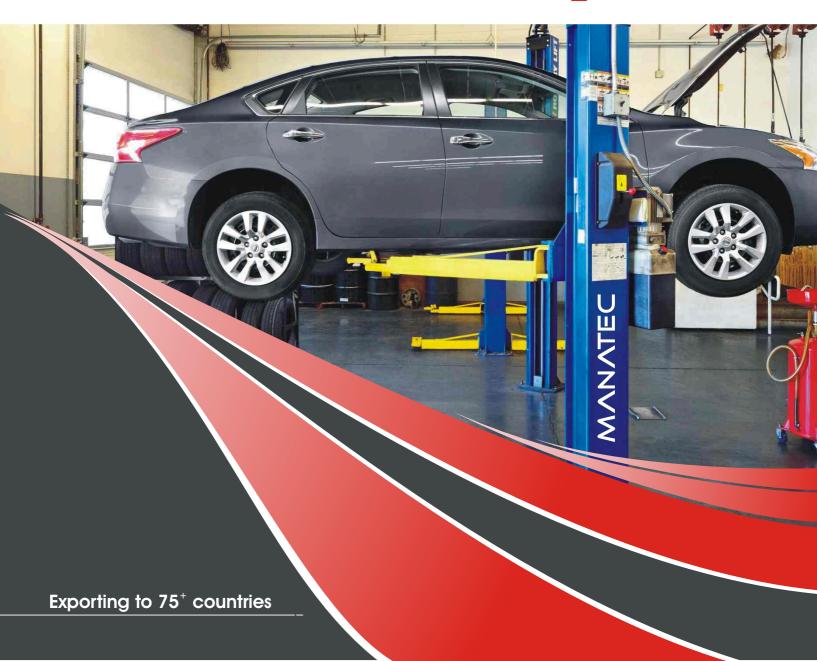


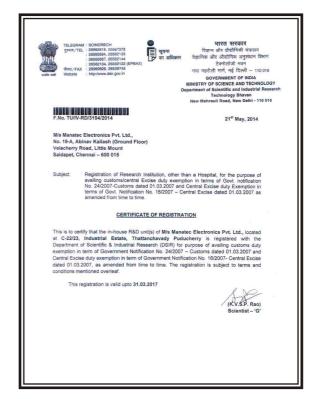
AUTOMOTIVE AFTER MARKET EQUIPMENT

for Cars & LCV Workshop

■ Total Solution







ISO 9001: 2015 Certificate

In-house R&D Recognition by Govt. of India



D&B Certificate



C € 3D Wheel Aligner



[fi 3D Wheel Aligner









(€ Wheel Balancer





COMPANY PROFILE

Manatec is an ISO 9001: 2015 certified organisation, located in Puducherry, on the East Coast of South India. Manatec, established in 1987, started with designing and manufacturing of Industrial Shaft Alignment systems and diversified to the Automotive Garage Equipment design and manufacturing, since 1991.

The global automotive industry is ever growing, with constant innovations in technology resulting in a surge of new automobile models launched everyday. It poses equal challenge in after market maintenance and servicing needs. Manatec's Garage Equipment Division works with the objective of meeting the above challenge by designing high



quality service station equipment in-line with the emerging trends in the industry. All garage equipment are designed & developed indigenously, and Manatec's in-house R&D division is recognised by the Government of India.

The manufacturing facility incorporates Electronics Hardware and Software processing departments, Tool Room, Machine shop, Quality Assurance & separate Production bays for every product with world class infrastructure.

For the workforce in Manatec, Quality and Technology is not just a requirement, but it is a state of mind!

AWARDS



Innovation Award in Automechanika Germany - 2018



MSME Award for Quality Products - 2015



CII Industrial Innovation Award - 2015



Winner of EEPC Award for 14 Consecutive years Since 2005



Best R&D Efforts Award from Prof. Murali Manohar Joshi - 1998-99



Award for Excellence in R&D (Electronics) - 1996



National Award for Best Entrepreneur and Quality Products in SSI Sector - 1993



Best Productivity Performance Award - 1990-91

OUR PRESTIGIOUS CORPORATE CUSTOMERS





















































Products Range

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04.	Nitrogen Filling Station & Wall Mounted NFS	12-12
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POLLUTI	ON CHECKING EQUIPMENT	
06.	Petrol Gas Analyser	14-14
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04 www.manatec.in

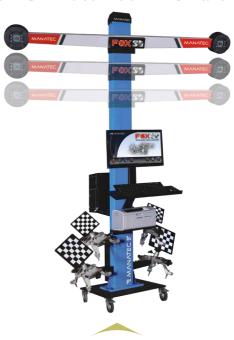


Unique "ALIGN+" Software >>>

Model: FOX 3D Auto BoomX



Model: FOX 3D Auto BoomX Smart Mobile



Automatic camera beam movement synchronized with movement of the vehicle on the lift by using compensation program. All measurements can be done at floor level and adjustments at any convenient height. Provision for manual height adjustment also available.

Automatic camera beam movement synchronized with movement of the vehicle on the lift. Can be moved between bays to use in different alignment lifts.

Model: FOX 3D MBX



Model: FOX 3D VHX



This model is designed to suit lift based (Two Post Lift, Four Post Lift & Scissor Lift) wheel alignment. The camera beam can be raised/lowered manually to the required height using handle provided in the beam saddle.

Designed to perform alignment on Scissor lift, Four Post Lift and Pit. Horizontal beam with camera can be fixed at desired height.



Model: FOX 3D - DTX



Dual Tower model consists 2 vertical columns fitted with cameras. Ideal for space constraint workshops giving access for free movement in shop floor without any obstruction. No horizontal beam.

Unique "ALIGN+" Software

Model: FOX 3D PTX

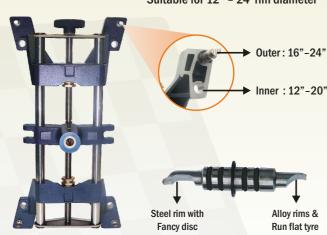


Designed to perform Alignment on pit.



Universal Wheel Bracket

Suitable for 12" - 24"rim diameter



SMART CONTROL - Optional

Tablet

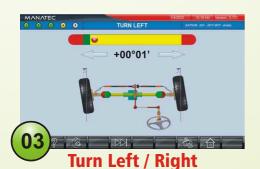


Highly user-friendly Wi-Fi enabled tablet device to display alignment results and to operate the PC from the Alignment bay (Max 10 meters).

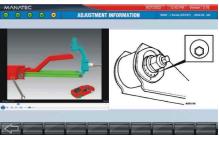
SIMPLE 4 STEP ALIGNMENT : SAVES TIME











Animation guidance (optional features availabale in Autodata)



Live readings to adjust

Quick Align Program



Unique OEM wizard program helps in saving technician time and increases alignment center productivity through customization of the screens himself by selecting and skipping routine inspection screens, attention screens, Caster swing etc.,

Features Menu



Useful features like vehicle information modification, multi users function, vehicle data updates, unit conversion etc. are available.

Data Manager



Data Manager software to retrieve alignment history by month, year and registration number. Useful tool for workshop managers.

Lift level compensation



This feature will overcome the error in readings due to level unevenness during elevation in a scissor or 4-post wheel alignment lift thus ensures caster, Camber angles are not affected.

C € EHI

Salient Features

- Vision based 3D Imaging technology using 2 High Performance SI (Scientific Image) Cameras
- Simultaneous Front and Rear wheel alignment (4x4)
- Push Pull Runout / Setback / Thrust angle compensation
- Lift level compensation at adjustment level
- Unlimited memory for vehicle specifications
- Option for selection of vehicle specification during alignment
- Power failure data protection
- Multi-lingual program & Voice prompt in English
- Automatic tracking of Left & Right turns for Caster/Kingpin measurements
- Adjustment of Camber in wheel Jacked-up position & Toe curve measurement
- Rear Setback & Track width difference,
- Toe adjustment in single Tie rod vehicle, Vehicle geometry measurements
- Effortless Toe (Easy Toe) adjustment program / Drag link adjustment
- Camber measurement at Zero Toe
- Toe out on Turns & Lock angle measurements
- Animated pictorial display of angles during alignment
- Zoom in option for live parameters like Camber, Caster & Toe
- Two color bar display for adjustment of all angles
- Option for Quick Wheel Alignment program
- Data Manager Software for storing & retrieving alignment results
- Customer Address in printout & customer data edit option
- Two wheel Alignment program by fixing only front two target plates

Technical Specifications

Measurement parameters	Range	Accuracy
Camber (Front / Rear)	± 15° 00'	± 00° 02'
Caster	± 28° 00'	± 00° 05'
Kingpin Inclination	± 25° 00'	± 00° 05'
Toe (Front / Rear)	± 20° 00'	± 00° 02'
Total Toe	± 40° 00'	± 00° 04'
Toe Out on Turns	± 20° 00'	± 00° 02'
Setback (Front / Rear)	± 25 mm	± 2 mm
Thrust angle	± 05° 00'	± 00° 02'
Runout	± 10° 00'	± 00° 02'
Included angle	± 40° 00'	± 00° 05'
Track width difference	± 300 mm	± 5 mm
Power supply	230V AC, 50Hz /	110V AC, 60Hz
Power consumption	200W (without Pr	inter)
Power consumption for Autoboom	400W (without Pr	inter)
Operating temperature	0° - 50°C	

Standard Accessories





Target Plates – 4 Nos.

Brake Pedal Lock -



Wheel brackets (12" - 24") - 4 Nos.



Wheel stoppers – 2 Nos.



Rotary Plates - (2 ton) – 2 Nos.



PC with LED Monitor, Keyboard & Mouse



Steering Lock
– 1 No.



Align+
& Data Manager
Software

Optional Accessories



Printer (Inkjet or Laser)-1 No.

- 1 No.



Long Rear wheel sliders – 2 Nos.

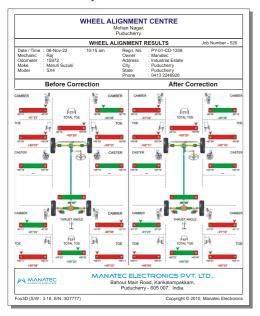


Wheel Bracket adapters (10"-26") – 16 Nos.



Rim locking pin – 16 Nos.

Graphical Printout



Text Printout

WHEEL A	Mohan Nag Puducher	ar,	TRE		
WHEEL	ALIGNMEN	T RESULT	s	Job Nu	mber - 526
Date / Time : 06-Nov-22 10:15 am Mechanic : Raj 10:00 am Odometer : 15972 1592 Make : Maruti Suzuki 10:00 am Model : SX4 10:00 am	Regn. N Owner Address City State Phone	: Manat	rial Estate herry herry		
DB : India (2014-1)	Before		Specification		After
Within limits	correction	Min	Target	Max	correction
Out of limits	FR	ONT WHEE	L ALIGNME	NT RESUL	TS
CAMBER Left Right Max.diff. Left/Right	+01°50' -00°30' +02°20'	+00°02' +00°02'	+00°32' +00°32' +00°30'	+01°02' +01°02'	+00°04' +00°05' -00°01'
KINGPIN Left Right Max.diff. Left/Right	+12°30' +11°00' +01°30'	+12°15' +12°15'	+12°45' +12°45' +00°30'	+13°15' +13°15'	+12°45' +13°00' +00°15'
INCLUDED ANGLE Left Right Max.diff. Left/Right	+00,00, +00,00, +00,00,	-	+13°17' +13°17' 		+10°44' +10°35' +00°09'
CASTER Left Right Max.diff, Left/Right	+03°30′ +01°20′ +02°10′	+01°59' +01°59'	+02°29' +02°30'	+02°59' +02°59'	+02°30' +02°00' +00°30'
SETBACK	0mm				0mm
TOE Left Right Max.diff. Left/Right	+00°30' +00°30'	-00°20'	+00°42' +00°42' +01°02'	+01°44' +01°44'	+00°01' +00°08' +00°07'
TOTAL TOE	+00°30'	-00°40'	+01°24'	+03°28'	+00°09'
			L ALIGNME		
CAMBER Left Right Max.diff. Left/Right	+00,00, +00,00, +00,00,	-00°30'	+00,00, +00,00, +00,00,	+00°30.	+00°20' +00°20' +00°00'
THRUSTANGLE	-00°30'				+00°06
TOE Left Right Max.diff. Left/Right	-00°30' -00°30'	-01°02' -01°02'	+00 ₀ 00, +00 ₀ 00, +00 ₀ 00,	+01°02' +01°02'	+00°01' +00°06' +00°06'
TOTAL TOE	+01°00'	-02°04'	+00°00'	+02°04'	+00°08'
SETBACK	0mm				0mm
	ATEC ELI Bahour Main Puduch		kalampakkai		

Pre-Alignment Inspection Report

WHEEL ALIGNMENT CENTRE Mohan Nagar, Puducherry.										
WHEEL ALIGNMENT RESULTS Job Number - 526										
r-22 10:15 am Regn. No. : PY-01-CD-1258 Owner : Manatec Manatec Suzuki City : Puducherry State : Puducherry Phone : 0-13 2249826										
Pre - Alignment Inspection										
Comments Check Service Replace										
Yes No No										
Yes No No										
Yes No No										
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MANATEC ELECTRONICS PVT. LTD., Bahour Main Road, Karikalampakkam, Puducherry - 605 007. India.										
MANATEC ELECTRONICS PVT. LTD., Bahour Main Road, Karikalampakkam,										

Computerised Wheel Balancer

Models: VL-65 LX VL-65 LX Premium VL-65 LX Premium+



>> Videographic display <<

Models : DL-65 Premium +



>> Elegant Digital display <<

Models: DL-65 C DL-65 C+



- Suitable for Car and LCV wheels
- Two modes of measurement Normal & Fine
- Seven modes of Alloy wheel functions
- Graphical user interface for live balancing
- Option for "grams" / "ounces" unit conversion
- Automatic distance input (Not available in DL-65 C)
- Rim parameter value entry through wheel rotation
- Over voltage & over load protection circuit
- Universal AC input socket
- Self calibration (when calibration error is displayed)
- Self checking on-line error display
- Adjustable unbalance threshold (weight cut off)
- Mid-centering device with Quick change lock nut to ensure fast mounting & removal of wheels
- Mechanical brake for weight addition and wheel mounting (Not available in DL-65 C)
- Automatically starts when wheel guard is closed
- High resolution (HDMI input) & LED Monitor / LED digital display
- Wheel seating cones for LCV are supplied as optional

Additional features for Premium models

- Automatic Rim diameter and Rim width input
- Split weight program (spokes program)
- Optimization program
- Automatic Rim type detection

Additional features for Premium+ models

- Laser line indication to indicate weight fixing position (for Sticker weights)
- Torch light for illumination of the Inner plane during weight fixing





Laser line



Torch light indication

Automatic distance & diameter measurement



Automatic distance & rim diameter input through distance measuring rod.

Automatic width measurement



Automatic rim width measurement.

Alloy Wheel Functions



7 Alloy wheel (ALU) functions.

Auto Start



Automatically starts when wheel guard is closed

Optimization Program



Optimization program helps in reducing wheel weight consumption.

Split Weight Program



Split weight program (spokes program) helps to split the weight to be hidden behind the spokes of the alloy wheels.



Mid Centering Device



Mid centering device for positioning of wheels accurately at center of the rotor assembly. Quick Change Lock Nut (QCLN) to ensure fast mounting and removal of wheel.

Technical Specifications

Maximum wheel weight	65 kg
Maximum wheel diameter	39" (990 mm)
Maximum wheel width	21" (533 mm)
Rim diameter	10" to 24" (254 mm to 610 mm)
Rim width	1.5" to 20" (38 mm to 508 mm)
Rim distance By distance measuring rod (for C & C+ models) By distance measuring rod (for other models) By keypad entry	4 mm to 250 mm 4 mm to 300 mm 4 mm to 550 mm
Resolution Fine mode Normal mode	1 gm 5 gm
Maximum unbalance measurement	300 gm
Accuracy	1 gm
Position accuracy	± 1°
Balancing speed	175 RPM
Power supply	230V AC ±10%, Single Phase, 50 Hz
Power	0.35 HP

Standard Accessories



* Not Applicable for DL 65 C & DL 65 C+

Model: Tyremate 200 TL - RFT



>> Fully Automatic << **Run Flat Tyre**

- Suitable for Car and LCV tyres
- Capable of handling stiff, wide and low-profile tyres using RFT helper arm
- Pneumatically operated tilting type vertical column
- Pneumatically operated twin cylinders for firm clamping
- Individual pedal for vertical column tilting
- Alloy wheel plastic protector for jaws

Model:



>> Fully Automatic << **Tubeless**

- Suitable for Car and LCV tyres
- Pneumatically operated tilting type vertical column
- Pneumatically operated twin cylinders for firm clamping
- Individual pedal for vertical column tilting
- Four Jaw self centering chuck
- Alloy wheel plastic protector for jaws

Model:

TC - XL - 40



>> Semi Automatic <<

- Suitable for Car and LCV tyres
- Pneumatically operated twin cylinders for firm clamping
- Four Jaw self centering chuck
- Horizontal moving arm
- Alloy wheel plastic protector for jaws

Technical Specification

Technical Specification	Tyremate 200 TL - RFT Tyremate 200 TL	TC - XL - 40
Rim clamping from inside	12" – 24" (305 – 610 mm)	12" – 21" (305 – 533 mm)
Rim clamping from outside	10" – 21" (254 – 533 mm)	10" – 18" (254 – 457 mm)
Max. wheel diameter	38" (960 mm)	37" (930 mm)
Max. wheel width	3" – 12" (76 – 305 mm)	3" - 12" (76 - 305 mm)
Operating pressure	8 – 10 bar	6 – 8 bar
Bead breaker force	2500 kg	2500 kg
Power supply	220V AC, Single Phase, 50 Hz	220V AC, Single Phase, 50 Hz
Power	1.5 HP	1.0 HP

Standard Accessories









Optional Accessories







Nitrogen Filling Station

Model: NFS 308 A/MO-E



Salient Features

- Suitable for 2 Wheelers, Cars & LCVs
- Compact design with 50L NFS tank inside
- Provided with heavy caster wheels for portability
- Automatic Nitrogen generator shut-off after Nitrogen generation
- Two sets of large capacity CMS filter
- Automatic alarm for any error and work finish
- Record of last time set-data
- Audio and visual indication during nitrogen generation
- Accumulated working hours display for the filter replacement
- Large backlight LED for indicating pressure & time

Technical Specification

Nitrogen generated	PSA technology
Nitrogen purity	95 - 99%
Air Inlet pressure	8 -10 Kg/cm², 115 -145 PSI
Air compressor required	5.5-7.5 kW, 10 Kg/cm ² , Exhaust volume, 0.6-1.5 M ³ /min
Nitrogen outlet pressure	1 - 6 Kg/cm ²
N ₂ output capacity	30 - 50 LPM 2.1 - 2.5 CFM
N ₂ Tank capacity	50 ltrs. In-built
Measure unit	Bar & PSI
Operating temperature	0 - 50°C, 0 - 122°F
Power supply	220V AC, Single Phase, 50 Hz
Power	60 W

Wall Mounted NFS

Model: WM NFS



Salient Features

- Suitable for 2W, Cars & Van
- Wall mount type, compact in size
- Live N₂ generation to inflate tyres
- $\,\blacksquare\,\,$ In-built with manual Tyre pressure gauge in inflator hose saves time
- Ergonomic design to reduce space and cost
- Ideal for puncture shops, fuel station and garages

Technical Specification

Nitrogen generation	PSA technology
Nitrogen purity	95 - 99%
Air Inlet pressure	8 -10 Kg/cm ²
Nitrogen outlet pressure	6-7 Kg/cm ²
Power supply	220V AC, Single Phase, 50 Hz
Power	25 W

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Automatic Tyre Inflator

Model: Air D150



Salient Features

- Solid state high precision pressure sensor
- A specially developed software to carry out all functions -filling /releasing, measuring and controlling
- An advanced closed loop control & monitoring circuit
- No possibility of over inflation ensures safety to the operator and to the tyres

Technical Specification

Pressure setting range	3 - 150 PSI
Resolution	1 PSI
Accuracy	± 1 PSI
Display	1" Dual LCD display
Maximum Input Pressure	150 PSI
Inlet Air Pressure	7 - 10 Kg/cm ²
Temperature Range	-20° C to 70° C
Power supply	230V AC ±10%, Single Phase, 50 Hz
Power consumption	60 W

Air Compressor

Model: AC



<< Reciprocating type air cooled Compressor >>

Salient Features

Key product features

- Cast iron block
- Industrial duty rating
- Slow running speed
- Pressure switch with unloader
- Totally enclosed belt guard
- Inter stage pressure relief valve
- Air receiver
- Testing as per IS 5456 standards
- Leak proof fittings

Benefits

- Outperforms and outlasts aluminum block compressor
- No stand-by compressor required
- Low wear & tear
- Easy starting and increased motor life
- Full protection against accidents
- Provides extra safety
- Totally safe, as per international standards
- Guaranteed output
- No compressed air leakage

Motor Power	(HP)	3	5	7.5	10	15
Compressor	(RPM)	1050	925	1050	750	1150
Maximum pressure	(Bar)	12	12	12	12	12
Piston displacement	(LPM/CFM)	397 / 14	501 / 17.7	700 / 24.8	997 / 35.4	1535 / 54.3
Free air delivery	(LPM/CFM)	167 / 5.9	410 / 14.5	580 / 20.7	850 / 30.1	1250 / 44.1
Air receiver	(LTR)	250	250	300	500	500
No of cylinders		2	2	2	3	3
Power supply	415V AC,	3 Phase, 50 I	Hz			

Model: Eco Gas 200 I Eco Gas 200 IBA



- O DC Operation
- O PC Interface
- Check
 Leak Check
- @ Petrol / CNG / LPG Selection

PC Interface (Optional)

Test Report (PC Printout)



TRANSPORT DEPARTMENT SEAL					[Bade 10-6: 10 (CC)] High Tech Wheel Care 1919 Feet Read, Modellarget, Pacifichery - 905-904. P) : *91.431 224926.						
Registering Authority / License No 3630											
EMISSION TEST CERTIFICATE											
lob Id	: 25	836		Vehicle	Make :	Hoo	\$a		Fuel		Petrol
Serial No.	: 603	06525		Vehicle	Model	Hors	la Civix		Catalyst		NO
Oust. Nam	e.: Ra	sikuma		Vehick	Type :	Four	Wheeler		Test Date		08/07/2014
Vehicle N	x : TN	i-07-M-	4665	Engine	Type :	4.80	oke		Test Time		11:42:08 AN
Kms Run	: 35	00		Engine	No. :	3454	5821		Chassis No		3341544
Rogn. Dus	: 16	06/2010	,	Tened		NO.			Bharat Stan	att :	Yes
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Certifie Rule II:					ission l	nd ee	afirms t	o the s	tandards	presi	ribed under

Technical Specification

Measurement Parameters	Range	Resolution			
CO (Carbon Monoxide)	0 - 15%	0.01%			
CO ₂ (Carbon Dioxide)	0 - 19.9%	0.1%			
HC (Hydro Carbon)	0 - 20000 PPM	1 PPM			
O ₂ (Oxygen)	0 - 25%	0.01%			
NOx (Oxides of Nitrogen)	0 - 5000 PPM	1 PPM			
AFR	0 - 30%	0.01%			
Lambda	0.20 - 2.00	0.001			
Engine RPM (Battery based)	400 - 9990 RPM	10 RPM			
Engine oil temperature	0 - 150°C	1°C			
Operating temperature	+ 5°C to + 45° C				
Measuring gas intake	3 litres / minute				
Response time	< 15 Sec. (for samp	le probe length of 3m)			
Warm-up time @ 25°C & above	< 3 minutes				
Power supply	12V DC ± 2V battery				
	100-265V AC, Single	phase, 50-60 Hz			
Power	25W				

Salient Features

- Petrol / CNG / LPG selection
- 7 Segment LED display
- Non dispersive Infrared (NDIR) technology
- Automatic condensate discharge
- Automatic zero calibration
- Digital span calibration
- Easy update of software in the field through USB port
- DC operation facility available for "mobile road tests" using vehicle battery
- Display of Lambda / AFR / PEF
- Separate Indication for battery Low / High voltage
- Electronic leak check facility
- Gas scrubber for cleaning of impure particles
- Conforms to ISO 3930
- NOx measurement (Optional)

Eco Gas 200 I	Eco Gas 200 IBA
Inductive pickup based RPM measurement	Inductive pickup, Battery & Accelerometer based RPM measurements

Standard Accessories



Optional Accessories



* To be ordered along with machine. Field implementation not possible.

ENGINE RPM METER (Optional) for Eco Gas 200 I



Salient Features:

- Accelerometer based RPM measurement
- Compatible for Diesel & Petrol vehicles
- The Engine RPM meter allows easy measurement of RPM
- Use of multiple acquisition systems

Technical Specification:

■ RPM measurement range : 400 - 9990 RPM
■ Resolution : 10 RPM

■ Display : Four digit LED display

Model: Eco Smoke 100 A
Eco Smoke 100 B
Eco Smoke 100 BA



- O DC Operation
- O PC Interface
- Free Acceleration Test

PC Interface (Optional)

Test Report (PC Printout)



SI No. : TRANSPORT DEPARTMENT SEAL	High Te	DER CONTROL TESTING STATIONS 116-81 10 (CS) ct Wheel Care Road, Methilsepet, therry - 665 004, 91 413 2248934
		ority / License No 3630
	EMISSION TEST CERTIF	
Job Id : 28653	Make : Mahindra	Fuel : Diesel
Serial No. : 4806	Model : Legan	Yr of Roga. : 2008
Cust Name .: Anilkumar	Vehicle Type : Four Wheeler	Test Date : 06/08/2014
Vehicle No.: TN-01-M-2561	Kms Run : 85753	Test Time : 03:25:25 AM
Vehicle Target Data ldle RPM : 700	Max. RPM : 4000	Oil Temperature: :75°C
Test Data		Photo of Vehicle
3. 35.4 L01 760 4. 35.5 L01 760	2900 2.4 073	iii: 05/02/2015
RESULT PASS	Thank you for k Environment Go	
Rule 115(2) of CMV Rule	s 1989. ue is 2.45 I/m (Opacity : 65%)	
Permissible limit of k-Val		

Technical Specification

Measurement Parameters	Range	Resolution
Opacity	0 - 99.9 %	0.10 %
K-value	0 – 9.99 m ⁻¹	0.01 m ⁻¹
Linearity	± 0.1 m ⁻¹	
Repeatability	± 0.1 m ⁻¹	
Zero & Span drift	± 0.1 m ⁻¹	
Response time – Physical	< 0.4 seconds	
Response time – Electrical	< 1 millisecond	
Warm up time @ 25°C and above	< 7 minutes	
Engine RPM (Battery based)	400 - 9990 RPM	10 RPM
Oil Temperature	0 - 150° C	1° C
Operating Temperature	+ 5°C to + 50°C	
Smoke measuring cell length	215 mm (430 mm folded length)	
Power supply	12V DC ± 2V battery 100-265V AC, Single phase, 50-60 Hz	
Power	300W AC / 100W	DC (without heater)



Salient Features

- Measures smoke opacity of diesel vehicles in % opacity and K value
- Measurement principle: Partial flow, optics based on folded geometry
- Suitable for free acceleration test
- Engine oil temperature measurement
- Operates on 230V AC (or) 12V DC power supply
- Portable, Compact & light weight design, suitable for "Road tests" using vehicle battery
- Low & High voltage indication for battery operation
- Automatic Zero and Span calibration
- Automatic Pressure regulation and moisture separation
- Handheld, Menu driven LCD remote control unit
- Compatible with VAHAN Online API software
- RS232C serial port for PC interface
- Conforms to IS: 14553 derived from ISO 11614: 1999

Ecosmoke 100 A	Ecosmoke 100 B	Ecosmoke 100 BA
Accelerometer based RPM measurement	Battery based RPM measurement	Battery & Accelerometer based RPM measurements

Standard Accessories



Optional Accessories



Smoke sampling probe - ID 22.5 mm Smoke sampling probe - ID 10 mm Vertical exhaust extension pipe



* To be ordered along with machine. Field implementation not possible.

ENGINE RPM METER (Optional) for Ecosmoke 100 B



Salient Features:

- Accelerometer based RPM measurement
- Compatible for Diesel & Petrol vehicles
- The Engine RPM meter allows easy measurement of RPM
- Use of multiple acquisition systems

Technical Specification:

■ RPM measurement range : 400 - 9990 RPM

■ Resolution : 10 RPM

■ Display : Four digit LED display

Model: Rhino 4 HF 4 Ton **Floor Plate**







Salient Features

>> Electro Hydraulic <<

- Lifting of Cars, MUVs & SUVs by Electro-Hydraulic power
- Suitable for Lifting / Lowering of Vehicles upto 4 ton weight
- Dual Hydraulic cylinder to ensure steady Lifting & Lowering
- Symmetric Vertical posts for wider opening of Vehicle door
- Universal Telescopic Asymmetric Lifting arms with 2 deck to accommodate different kinds of vehicles
- Limit switch for automatic stopping at extreme upper positions
- Safety mechanism using Steel rope to provide synchronous movement of both lifting arms

- Automatic Locking / Releasing device for Lifting arms while Raising
- Mechanical safety locking system to lock vehicle at different heights while lifting
- Rubber pad in vertical columns for safe door opening
- Power pack on front side of the post for easy operation and installation at lesser bay width

Technical Specification

Specification	Rhino 4 HF	Rhino 4 HC
Lifting capacity	4 Ton	4 Ton
Overall height	2800 mm	3660 mm
Bay width	3420 mm	3420 mm
Inside column	2755 mm	2800 mm
Load distribution (Front : Rear)	2:3	2:3
Lifting time	50 seconds	< 45 seconds
Drive through clearance	2576 mm	2576 mm
Maximum lifting height	1700 mm	1800 mm
Minimum height	100 mm	110 mm
Lifting arm adjustments Minimum length Maximum length	Front Rear 675 mm 735 mm 1000 mm 1120 mm	Front Rear 700 mm 830 mm 1060 mm 1330 mm
Power supply	380V AC, 3 Phase, 50 Hz	380V AC, 3 Phase, 50 Hz
Power	3.0 HP	3.0 HP

Standard Accessories



Height adapters 90mm length - 4 Nos. 40mm length - 4 Nos

Model: FSL E35 3.5 Ton





Salient Features

- Flush-Mount Scissors lift
- Easy for tyre and chassis maintenance
- Occupies smaller area
- Electro hydraulic operation
- Pneumatically controlled mechanical lock for safe operation
- Lifting power is higher due to double cylinder structure

Technical Specification

3.5 Ton
2030 mm
330 mm
1440 - 1740 mm
550 mm
<55 seconds
<55 seconds
6-8 Kg/cm ³
380V AC, 3 Phase, 50 Hz
2.2 KW

Wheel Alignment Scissor Lift

>> Electro Hydraulic << Model: WASL D40 4.0 Ton



Salient Features

- Longer platform to perform Push Pull Runout
- Double-level platform scissor lift
- Double safety device: Hydraulic lock & Mechanical dual-gear safety-claw lock
- Oil-free nylon blocks for smooth scissor movement
- Pneumatic double-teeth self-locking system & anti-explosive PU hose
- Integrated base for easy '0' level adjustment for better accuracy of wheel alignment
- Limit switch for top safety height
- Safety Alarm during the final one feet down-movement
- Platform level sensor for monitoring uneven movement
- Ramps for on-ground Installations (Optional)

Technical Specification		
Main machine Lifting capacity	4.0 Ton	
Submachine Lifting capacity	2.0 Ton	
Main machine max. Lifting height	1850 mm	
Submachine Lifting height	450 mm	
Main machine platform length	4500 mm	
Submachine length	1400mm	
Main machine platform width	620 mm	
Overall length	5000 mm	
Overall width	2040 mm	
Lifting speed	<55 seconds	
Dropping speed	<55 seconds	
Power supply	380V AC, 3 Phase, 50 Hz	
Power	2.2 KW	

Model: FPL FS40 4.0 Ton



>> Electro Hydraulic <<

Salient Features

- Driven by hydraulic cylinder and wire-ropes for stable lifting & lowering
- Adjustable lock position at any level
- Wheel free jack 2 Ton capacity
- Imported electric components
- Adjustable platform for wider wheel track vehicles
- Ramps inbuilt with platform

Technical Specification

Lifting capacity	4.0 Ton
Max lifting height	1750 mm
Min lifting height	250 mm
Platform length	4250 mm
Platform width	530 mm
Lifting speed	<45 seconds
Dropping speed	<30 seconds
Input air pressure	6-8 Kg/cm ³
Power supply	380V AC, 3 Phase, 50 Hz
Power	2.2 KW

Hydraulic Washing Lift

Model: WL 4T



Salient Features

- Hydro pneumatic
- Standard model at 4 ton capacity
- Separate model with Spider Arm design for 4 ton capacity
- Plunger finish Hard chrome plated to 20 microns
- Heavy duty rigid ramps accommodate a wide range of vehicles of varying size and type

Model: WL 4T SA



Spider Arm

Technical Specification

Specification	ME - WL 4T	ME - WL 4T SA
Capacity	4 Ton	4 Ton
No. of posts	1 No.	1 No.
Plunger diameter	270 mm	270 mm
Operating pressure	9 to 12 Kg/cm ²	9 to 12 Kg/cm ²
Lifting height	1500 mm	1500 mm
Ramp length	4500 mm	_
Spider arm	_	Inclusive
Tyre rest platform	Optional	_
Oil fill capacity	150 ltrs.	150 ltrs.

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Model: PB 700 Eco

PB 700 Eco (WB)



Salient Features

- EPS (Expanded Polystyrene) sandwich panels, no Thermo transfers between inside and outside of the booth
- 8 ceiling light boxes (each with 3x16 Watts) LED bulbs
- Pre-filter class EU3 in Thermic group
- Fine filter in ceiling class Eu5
- Paint stop floor filter EU2 with filter frame
- Metal base (300 mm height)
- Two row K700 capacity galvanized grids floor
- Three rows of reinforced GI plates
- Standard Paint Booth includes the blower with damper unit and thermic unit
- Single turbo fan 5.5 kw (intake)
- Riello G10 Diesel oil burner
- Full function control panel with CE approved electric components

Control Box with:

- a) Thermostat 0-80°C
- b) Electric wiring cable
- c) Fan motor start / stop
- d) Burner start / stop
- e) Emergency stop
- f) Digital temperature setting
- g) Timer adjustment
- h) Operating hour counter

Specifications	ME-PB 700 Eco	ME-PB 700 Eco (WB)
Outside dimensions	7000 x 5350 x 3400 mm	7000 x 5350 x 3400 mm
Inside dimensions	6900 x 3900 x 2650 mm	6900 x 3900 x 2650 mm
Main door dimensions	3000 x 2600 mm	3000 x 2600 mm
Service door dimensions	650 x 1800 mm	650 x 1800 mm
Flow Rate	18000 m³/h	18000 m³/h
Air velocity	0.2 - 0.3 m/s	>=0.21 m/s
Working temperature	60 - 80 °C	80 °C
Fuel consumption	Depends on usage, filter & ambient condition	
Lighting intensity	650 - 700 Lux	<800 Lux
Sound level	<80 dBA	<80 dBA
Applicable vehicle	Passenger car	Passenger car
Power supply	380V AC, 3 Phase, 50 Hz	380V AC, 3 Phase, 50 Hz
Power	6.5 KW	8 KW

Model: Mig / Mag 250 XL



Salient Features

- The inductor system ensures excellent welding characteristics on very thin materials
- Equipment can weld MS sheets
- Compatible with all welders
- Suitable for automobile and manufacturing sector
- High quality and robust design
- Automatic wire speed selection
- Time selection for spot welding
- High quality german made torch
- User-friendly control panel

Technical Specification

Fuse	1 amp for pcb
Open circuit voltage	15 - 35 V
Voltage positions	7
Duty cycle 100%	90 A
Duty cycle 60%	110 A
Duty cycle 30%	135 A
Current range	40 - 250 A
Wire reel weight	5 - 15 kg
Wire speed	2 - 15 m/min
Power supply	400V AC, 3 Phase, 50 Hz

Plasma Cutter

Model: PC 40



- Inverter technology for compact design and better efficiency
- Adjustable Cutting current for different sheet thickness
- Able to cut Mild steel, Stainless steel, Aluminum, Copper etc.

Rated input current	9.4 A (Max. 13 A)
No load voltage	230 V
Output current regulation	20 - 40 A
Duty cycle	60 %
Efficiency	85 %
Power factor	0.8
Protection class	IP23
Cutting thickness	1 - 10 mm
Power supply	230V AC±10%, Single Phase, 50-60 Hz
Power	4.9 k VA

Model: **DP 3500**



Salient Features

- Designed for metal panels
- A truly amazing design
- Special tip for Shrinking
- High output transformer
- A whole package for all tinkering needs

Technical Specification

Number of modes	2 (Dent and Shrink)
Triggering	Automatic
Triggering Input	230V AC - 50 Hz
Output	3500A I max
Output kVA nominal	11.5 kVA
Output voltage	7 V
Input cable	2.5 mm ² 3 core x 6 mtr
Output cable +	70 mm² x 2 mtr
Output cable -	50 mm² x 2 mtr
Protection	IP21

Inverter Spot Welder

Model: ISWI3KA



Standard Accessories

- Pair of water-cooled cables
- Adjustable height trolley with tray and arms holder
- Pair of water-cooled arms
- Water cooling electric group 2LP
- Compressed air filter-regulator
- Suspension arm
- Spring balancer

Salient Features

- The inverter technology that allows constant and high welding current not influenced by the variation of the supply voltages and by the secondary circuit conditions, the quality of the spot is improved also on galvanized sheets.
- The high current value allows to reduce welding time resulting in a longer electrodes life.
- The reduced absorption balanced on the three phases reduces the connecting and consumption costs.
- Allow simultaneous connection of two tools with automatic recall of the relevant memorized welding program, enabling to save time, avoid errors so to have a simple and safe working process.

•	
Mains protection (delayed)	50 A - delayed
Clamping force	550 daN
Nominal Power 50% ED	25 kVA
Maximum welding power	190 kVA
Maximum secondary current	13000 A
Thermal current 100%	1.25 kA
No load secondary voltage	16 V
Weld time	0.01 ÷ 2s
Supply supply	400V AC, 3 phase, 50 Hz

Automatic Car Washer

Model: Touchless Automatic Car Washer



Technical Specification

Construction material	Stainless Steel (SS-304)
Required space (LxWxH)	7000 mm x 4250 mm x 3700 mm
Overall dimension(LxWxH)	5500 mm x 3950 mm x 3080 mm
Maximum washable dimension of car (LxWxH)	4750 mm x 1900 mm x 1900 mm
Water consumption	125 ltr / Car (depends on car length)
Shampoo consumption	20 ml / Car
Electrical consumption	0.5 unit / Car
Water pressure	22 - 24 Bar
Number of nozzle	16 + 14 Nos.
Cycle time	3 min /car
Total connected load	7 kW
Power consumption	0.6 units /car (depends on car length)
Pump type & capacity	Centrifugal multistage pump (7.5 HP)
Length detecting sensors	Available
Site requirements	 3 Phase, 415V Electricity supply Overhead water tank 6 Bar compressed Air connection up-to control panel

Optional Accessories

- Auto dryer unitUltra sonic sensor

Model: Touchless Automatic Under Chassis Car Washer



Technical Specification

Construction material	Stainless Steel (SS-304)
Required space (LxWxH)	7000 mm x 4250 mm x 3700 mm
Pit dimension (LxWxH)	5500 mm x 850 mm x 325 mm
Number of cycles to clean	1 (2 pass)
Operating pressure (water)	24 Bar
Water consumption	40 ltr/car (depends on car length)
Time consuming for one cycle	40 sec /car (depends on car length)
Number of nozzle	18 Nos.
Input Power supply	415V AC, 3 Phase, 50 Hz
Power consumption	0.07 units /car
Total connected load	6 kW

Optional Accessories

■ Ultra sonic sensor

High Pressure Car Washer

Model: HPCW 120



Salient Features

- Triplex plunger pump HAWAK Made in Italy
- VRT 3 unloader valve
- Starter with cable
- MV 925 QRC gun with 400mm Lance and V jet Nozzle SS
- Foam Gun with male coupler
- High Pressure heavy duty hose 3/8"-10m
- Suction hose -3m
- Pressure gauge
- Electric motor (Crompton / Rotomotive / BBL)

Technical Specification

Туре	Coupled
Plunger	3 No.
Speed(RPM)	1450
Crankcase oil capacity	1250 ml
Hose and Gun	1 No. each
Working pressure	120 Kg/cm ²
Output (LPM)	11
Hose length	10 mtrs.
Power supply	230V AC, Single phase, 50 Hz 380V AC, 3 Phase, 50 Hz
Power	3 HP

Vacuum Cleaner

Model: VC 70



Technical Specification

Application	Wet & Dry
Motor	2 Nos.
Water lift	2300 mm H ₂ O
Air flow	270 m³/ h
Tank capacity	70 Ltrs.
Motor power supply	1500 W (each)
Power supply	230V AC, Single phase, 50 Hz

Standard Accessories

- Suction hose
- Short connector
- Long connector
- Telescopic Pipe
- Floor Nozzle
- Crevice tool
- Dust brush
- Handle

Models: i COOL 100

i COOL Pro 100 D i COOL Pro 100



Recharge your Car Air Conditioning with Innovative & Fully Automatic icool

- LCD Monochrome display
- Suitable for Cars & LCV cabins
- Fully Automatic machine (Recovery, Recycling, Vacuum, Leak test & Recharging, Oil drain & integration)
- Option to perform above functions individually
- Dedicated gauge for Inlet pressure
- Filter in recovery line to eliminate humidity & acidity
- Manual air purge from refrigerant tank (for i Cool 100 models)
- Electronically controlled Automatic air purge system from refrigerant tank (for i Cool Pro 100 models)
- Tank pressure digital display (for i Cool Pro 100 models)
- Spark free Compressor and Vacuum pump (for i Cool Pro 100 models)
- Automatic Oil injection PAG oil with separate electronic scales
- Automatic High pressure protection for Compressor
- Audible indication / alarm
- Caution & error message / prompt
- Display of Pressure in "psi" / "bar" / "kPa" & Weight in "kg" / "lbs"
- Self diagnosis for checking the fitness of the machine
- Vehicle data base (up to 500 vehicles)
- Vehicle database with User entry provision
- Software update through USB interface
- Vehicle data update through USB interface
- Shock proof protection for load cells

Additional features for i Cool Pro 100 D / i Cool Pro 100 models

- Automatic Oil injection POE oils with separate electronic scales
- Electric / Hybrid vehicles compatibility
- Hose purge system with separate flush input connectors

LCD Display



Printout







HP Gauge

LP Gauge

Technical Specification

Specification	i Cool 100 i Cool Pro 100 D	i Cool Pro 100
Type of refrigerant	R134a	R1234yf (or) R134a (Pre defined)
Service procedure	Automatic / Manual	
Display	LCD Monochrome 20x4	
Vacuum Pump	4.5 CFM, ½ hp, 128 Lit/ 5.0 CFM, ¾ hp, 141 Lit/	,
Compressor	9.1 cc (for 230V AC) 11.4 cc (for 110V AC)	12 cc (for 230V AC) 11.4 cc (for 110V AC)
Refrigerant bottle capacity	12 kgs	
Power Supply	110 / 230V AC, ±10%,	Iφ, 60/50Hz, +N +PE
Power consumption	900 W	

Standard Accessories



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Engine De-Carbonisation Machine

Model: GN006R



Technical Specification

Max. working pressure	4140 LPH
Service capacity	Upto 20000 CC
Power supply	12V - 14V DC

Benefits

- De-carbonisation is a Zero carbon system, it reduces the carbon footprint of each vehicle
- It can be implemented on all Vehicle that use petrol, diesel, LPG & CNG fuels
- Easy, simple 30 minutes service
- Increase combustion efficiency which reduce engine noise, vibration and black smoke
- Restores fuel consumption and engine performance
- Increase your vehicle mileage
- Low weight and easily portable

Technical Specification

Max. working pressure	4140 LPH
Service capacity	Upto 20000 CC
Power supply	210V - 240V AC / 12V - 14V DC

Model: GN008R



Digital touch advanced Hybrid technology titanium plated

Waste Oil Collection Trolley

Model: WOCT - 80



Salient Features

- Self-contained wheeled unit
- Height adjustable swinging arm
- Airline connection to discharge unit
- Easy to use and position
- Minimise mess and spillages
- Avoid costly accidents
- Heavy Duty Castor Wheels for free movement of trolley within the workshop

Technical Specification

Tank capacity

80 Ltrs

Pneumatic Jack with Trolley



Salient Features

- Lifting capacity 4 Ton
- Pneumatic pit jack to lift the Cars & LCV
- Trolley with wheels give access to move the jack from front to end of the pit

Impact Wrench



Salient Features

- 1/2" Impact Wrench to remove wheel nut in PCVs & SUVs
- Capacity bolt size 19 mm
- Working torque : 525 Nm
- Free speed 7400 RPM

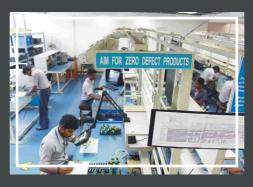
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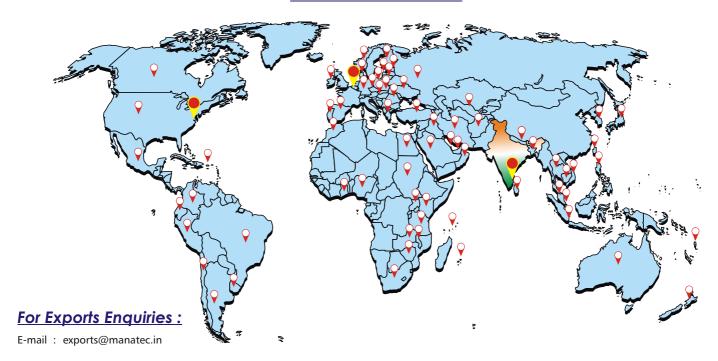








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CORPORATE OFFICE

C-22 & 23, Industrial Estate, Thattanchavady, Puducherry - 605 009. Phone: +91 413 3502000 E-mail: sales@manatec.in

USA OFFICE

Unit D16, 10795 Hammerly Blvd, Houston, TX 77043, USA Phone: +1 734 629 2672 +1 248 653 1245 E-mail: sales@manatecusa.com

EUROPE OFFICE:

Warandestraat 1A, 9240.

Zele, Belgium.

Email: sales@manateceurope.eu

For Sales Enquiries:



sales@manatec.in

For Service Enquiries:



customersupport@manatec.in







FACTORY

Bahour Main Road,

Karikalampakkam,

Puducherry - 605 007.

REGISTERED OFFICE

19A, Abhinav kailash

(Ground Floor),

Phone: +91 413 3502000

E-mail: sales@manatec.in

Velachery Road, Little Mount,

Saidapet, Chennai - 600 015.

E-mail: ro_chn@manatec.in

Phone: 044 - 42036407



C-22 & 23, Industrial Estate, Thattanchavady,

Puducherry - 605 009. INDIA. : +91 413 3502000 Email: sales@manatec.in

exports@manatec.in



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