



#### THE NEW 80V FORKLIFT TRUCKS LOAD CAPACITIES FROM 2500 KG TO 5000 KG MR MR MR MR MR MR MR 5.0 2.5 3.0 3.5 4.0 4.5 5.0

# SAFE, COMFORTABLE, MANOEUVRABLE FOR GREAT PERFORMANCE

The new electric 4-wheel forklift trucks, 80V, with load capacities from 2000 kg to 5000 kg in the "MR MONTINI Revolution" series, represent a range of 13 models ideal for indoor and outdoor use in all sectors.

Compact and manoeuvrable, they give the operator maximum reliability, safety and freedom of ergonomic movement in any working situation.

#### **MONTINI SUPER STEERING**

Rear axle steering up to 101 degrees, as standard, to guarantee operational agility in the tightest and most limited manoeuvring spaces.





(80V - 4 wheels - 4999 kg nominal capacity at load centre 500 mm) Length (I2): 2798 mm Width (b1): 1290 mm Turning radius (Wa): 2296 mm

# GREAT AUTONOMY, FOR EXCEPTIONAL WORKING HOURS

Good acceleration and excellent speed make these vehicles the ideal machines for handling large quantities of product. Designed to guarantee a **high level of autonomy**, these forklifts can easily perform two work shifts without needing to recharge the batteries.

The forklifts in the "MR" series with load capacities from 2500 kg to 4500 kg, can be equipped with **high Amp/h capacity batteries**, so as to:

- meet any kind of work requirement (wide range of "MONTINI" brand batteries: batteries for demanding applications; low water consumption; for very heavy, intensive and long-life applications, in particular for forklifts fitted with auxiliary equipment);
- guarantee unbeatable work autonomy, without having to recharge the battery;
- work better, work more, while safeguarding health and the environment.



#### MONTINI batteries offer a wide choice of optional set-ups:

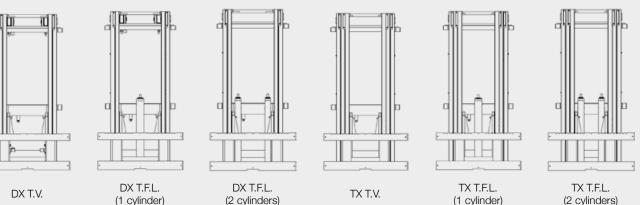
- centralised water top-up system with tank for filling up the battery cells;
- electrolyte level indicator on battery plug or on battery cell;
- electrolyte level indication on the display;
- air circulation system in the cells and specific plug;
- special battery boxes with integrated handles for easy removal.

#### **EXCEPTIONAL LIFTING UNIT** GREAT STRENGTH, OPTIMUM VISIBILITY AND LOAD CAPACITY



The **lifting units**, with 3 and 4 ton "C" profiles, **designed and manufactured by MONTINI, are ground on the sliding guides of the bearings and on the angular guide shoes**, to ensure maximum smoothness, greater stability and safety during high lifts.

• Wide range of masts, available in Duplex (DX) and Triplex (TX) versions, with total visibility (T.V.) and with total free lift (T.F.L.), to meet the most varied working requirements and to offer a safe, strong and quick load capacity.



- Optimum visibility in all working conditions.
- **Sideshift integrated in the fork carriage**, very compact and with excellent visibility.
- Sideshift with grease nipples for easier guide shoes lubrication.
- Hydraulic fork positioner integrated in the forklift truck (optional), to enable a precise and synchronized movement of the forks, without reducing the load capacity.
- Customized lifting unit solutions.



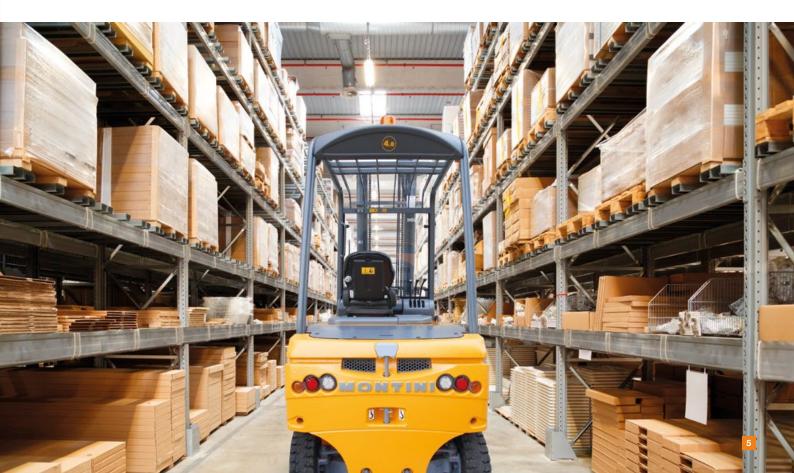
### NEW-CONCEPT DESIGN TECHNOLOGY AND ERGONOMICS FOR SUPER EFFICIENT RESULTS

The new 80V electric trucks in the "MR" range, are the model of choice for the indoor handling of materials and logistics. Designed to improve warehouse efficiency, they are **the perfect vehicles for handling products**, even those that are particularly bulky (crates and pallets), **thanks to their great ability to manoeuvre where space is limited.** 

Usable with lead-acid batteries, **they make it possible to improve work**, performing two shifts without having to recharge or change the battery, **and to achieve long-term cost savings**.

They meet customer's needs; they are quick, nippy, versatile and offer maximum performance with minimum consumption.



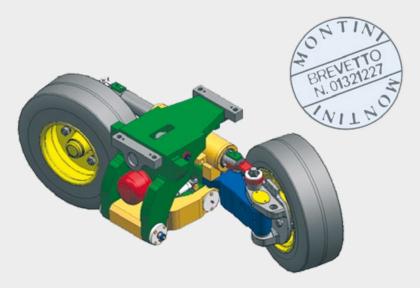


#### **CSM - COMFORT SECURITY MONTINI** THE ONLY FORKLIFT TRUCK IN THE WORLD WITH SHOCK ABSORBERS

**MONTINI**, always attentive to national and international safety regulations, **is the only manufacturer in the world to have designed and patented a suspension system for forklift trucks**: the patented suspension system named **CSM (Comfort Security Montini)** is designed to increase lateral stability and comfort as well as to significantly reduce impact and vibrations transmitted to the operator and the forklift. The 80V "MR" forklift trucks are also available in the CSM version, i.e. fitted with **nitrogen hydropneumatic suspension on the rear steering axle**.

#### SUSPENSION FOR 4-WHEEL FORKLIFT TRUCKS PATENT NO. 01321227

- More safety.
- More stability.
- More comfort.
- No tensions and shocks.
- No vibration.
- No effort.
- Better work.
- Safer driving.
- More stable load.
- Less occupational diseases.

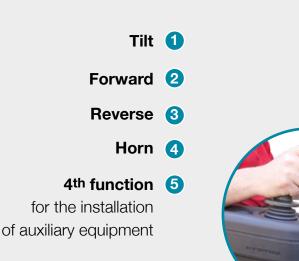


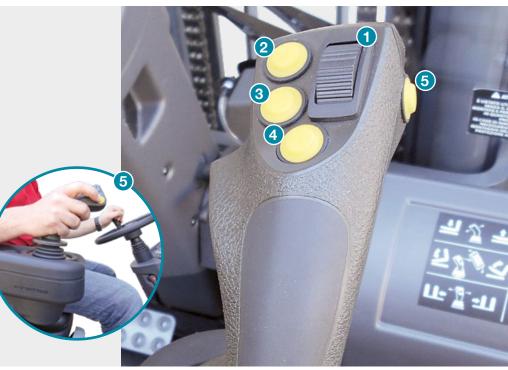


# MORE ERGONOMIC JOYSTICK, MORE PRODUCTIVE WORK

- Intuitive and ergonomic joystick (optional) with proportional control valve with 3 or 4 hydraulic functions.
- As standard, all lifting unit functions are inhibited when the operator is not in the correct driving position.
- Higher lowering speed of the lifting unit, both laden and unladen.
- Maximum productivity thanks to the use of two simultaneous operating functions of the lifting unit.











# PEDAL BOARDS

Standard large and spacious pedal board with forward/backward double pedal and central brake.

Optional pedal board with single pedal and central brake (with forward/backward selection using a lever on the steering wheel or joystick).

# ELECTRONIC TECHNOLOGY

The **innovative electronic technology**, developed in German research laboratories, **with alternating current inverters and Can Bus communication**, guarantees high efficiency and low energy consumption; it comes with a new diagnosis system for keeping everything under control and reducing any machine downtime.

The large colour display, with multifunction buttons, ensure accessibility and control of the forklift's basic functions.



Parking Brake

The functions are defined by icons displayed on the relative bar, for example:



handbrake locked;

seat belt not fastened;

seat switch open;



brake fluid level too low;

maintenance hour meter expired;

activates "tortoise speed";

deactivates "tortoise speed".

Access password personalised for the operator.







# SERVICES AND SAFETY

Possibility to equip the forklifts with **GPRS system** (General Packet Radio System), mobile phone technology, installed on the battery of the forklift, **to check**:

- correct battery use and management (to check regular charge and discharge of the battery, correct operation of the battery charger during charging and the electrolyte level inside the battery cells);
- the registration of possible forklift collisions.



Possibility to equip forklifts with the **innovative "Remote Control" system for rapidly detecting any electric faults** through remote data transmission, **to localize the forklift, activate the anti-theft device and block the forklift functions**.





# **EQUIPMENT VARIATIONS**

#### **OVERHEAD GUARD**

**Overhead guard designed to be equipped easily with cab at any time**, without having to modify or replace the original structure.

It can be cabbed:

- with full panelling, fitted with front and rear windows with wipers and side doors;
- with front and rear windows only (openable), fitted with wipers, and PVC side doors;
- with or without heating system.





#### **HEATED WINDOWS**

As an optional, cabs can be with **innovative heated (or thermal) windows**.

The heated window is made from "coated" glass, with anti-fogging as its main feature.

Coated glass is made by depositing metal oxides with good electric conductivity and optical transparency on the surface.

Electricity is passed through the coating and guarantees total resistance to fogging while at the same time creating the ideal temperature inside the cab for the operator.

#### HEATER

Heating system: fast and direct heating with air vents inside the cab.

The heater ensures a cab temperature which is always comfortable.



#### PRECISION AND PERFORMANCE THANKS TO OPTIONAL HYDRAULIC CONTROLS

The 80V "MR" forklift trucks can also be fitted (as an optional) with hydraulic controls with **Fingertips** (mini levers) or with **Pilot levers** (mini joysticks), easy to access and use since they are installed on an adjustable ergonomic armrest with direction control, for finding the most comfortable driving positions.

Simply operate the **Fingertip controls** gently and this will allow you to combine up to 5 functions, for quick, precise, safe driving and operation.

The **controls with Pilot levers** allow you to have up to 5 functions to manoeuvre the MR forklift safely and reliably.

# <image>

#### **SEATS**

"Grammer Primo M" seat kit complete with armrests and headrest, in fabric (optional).





#### New design concept applied to the seat. "Grammer Primo L" seat (optional).

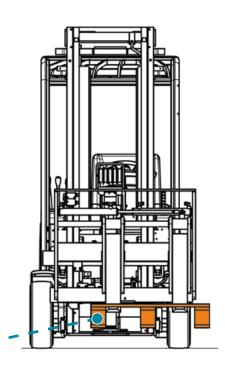
Seat kit with armrests and headrest, in PVC or fabric, also with heating.

- 1 Headrest
- 2 Heating system
- **3** Tilting left armrest
- 4 Tilting right armrest
- 5 Fabric cover
- 6 Pneumatic suspension

#### MONTINI FORK POSITIONER WITH FREE MOVEMENT OF EACH FORK

The MR forklifts can be equipped with the optional **MONTINI** fork positioner with independent forks, also known as a fork positioner with free movement of each fork.

This attachment is very useful and beneficial for the operator in that, when loading and handling Euro-pallets (800 x 1200 mm) with pick-up from the 800-mm side, to load inside a lorry, it allows him to position the pallet close to the edge of the vehicle, without having to manoeuvre the forklift and with no risk of hitting and damaging the side of the lorry.



Pallet 800 x 1200 mm (pick-up side 800 mm)

#### LIGHTING EQUIPMENT AND SIGNALLING DEVICES

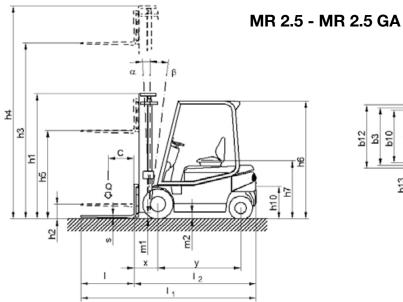
MR forklift trucks can be fitted with a **wide range** of optional lighting accessories, signalling devices and mirrors, to meet the requirements of different applications:

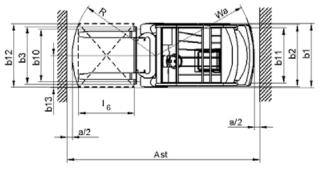
- adjustable LED working lights, installed on the mast or on the overhead guard, also available with suitable protection;
- blue LED device to signal the forklift's presence (blue spotlight);
- strobe or rotating flashing light, also available with suitable protection;
- rearview mirror, also available in panoramic version.

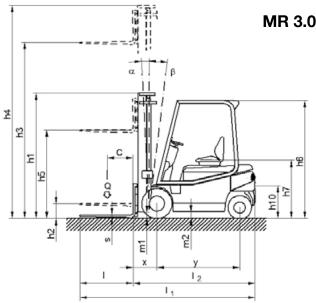




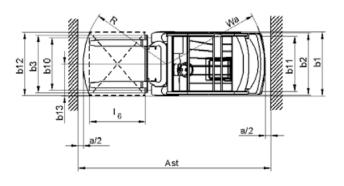
## **TECHNICAL FEATURES**

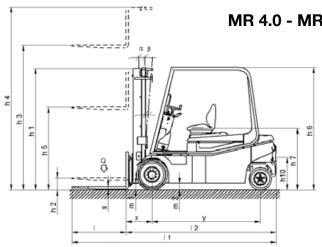




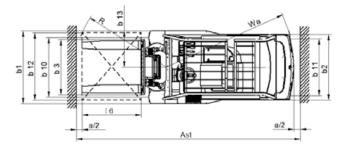


MR 3.0 - MR 3.5





MR 4.0 - MR 4.5 - MR 5.0



	1.1	Mapufaaturar		MONT		MONTIN	.11	
	1.1	Manufacturer Model			MR 2.5 CSM	1		
S						MR 2.5 GA		
Characteristics	1.3	Drive: electric, diesel, petrol, L.P. gas, electric mains		electi	electric seated			
acte	1.4	Operation: manual, pedestrian, stand-on, seated, order picker	<b>O</b> (1)		seated			
hara	1.5	Capacity/Load	Q (t)	2,5		2,5		
ō	1.6	Load centre	c (mm)	500		500		
	1.8		x (mm)	450		450		
	1.9	Wheelbase	y (mm)	156	1705			
ghts	2.1	Weight	Kg	4885	4940	4950		
Weights	2.2	Axle loading, laden, front/rear	Kg	6485/900	6485/955	6290/116		
-	2.3	Axle loading, unladen, front/rear	Kg		2465/2475	2400/255		
	3.1	Tyres: superelastic (SE), cushion (C), pneumatic (PN)		SE/C/		SE/C/PN		
ent	3.2	Tyre size, front		23x9-10 <b>1.</b>		1		
Equipment	3.3	Tyre size, rear		180/60-10 <b>2.</b>		180/60-1	10 <b>2</b> .	
Щ	3.5	Wheels, number front/rear (x=driven wheel)		2x/2		2x/2		
	3.6	Tread width, front	b10 (mm)	985		985 3		
	3.7	Tread width, rear	b11 (mm)	992 <b>4.</b>		992	4.	
	4.1	Max. tilt of mast/fork carriage, forward/backward ( $\alpha$ - $\beta$ )	Degrees	3,5°/6	,	3,5°/6,5 2307	)°	
	4.2	Lowered mast height	h1 (mm)	230	2307			
	4.3	Free lift	h2 (mm)	-		-		
	4.4	Lift height	h3 (mm)	3405		3405		
	4.5	Extended mast height	h4 (mm)	4012		4012 2227		
	4.7	Overhead guard height	h6 (mm)		2227			
	4.8	Seat height	h7 (mm)	111	0	1110		
SU	4.12	Tow coupling height	h10 (mm)	576		576		
Basic dimensions		Total length	ℓ1 (mm)		3302		3446	
mer		Length to face of forks	<i>ℓ</i> 2 (mm)	230		2446	2446	
ic d	4.21	Overall width	b1/b2 (mm)	1180/1	170 <b>5.</b>	1180/1170 <b>5</b> .		
Bas		Forks dimensions	s/e/ℓ (mm)	40/130/	1000	40/130/1000		
	4.23	Fork carriage ISO 2330, class/type A, B		ISO 2	2A	ISO 2A		
	4.24	Min. fork carriage width	b3 (mm)	980	)	980		
	4.31	Ground clearance, under mast, laden	m1 (mm)	95	95		95	
		Ground clearance, centre of wheelbase, laden	m2 (mm)	120		120		
	4.33	Aisle width with pallet 1000x1200 (l6xb12), pick-up side 1200	Ast (mm)	350	2 <b>6.</b>	3646	6.	
	4.34	Aisle width with pallet 800x1200 (b12xl6), pick-up side 800	Ast (mm)	370	2 <b>6.</b>	3846	3846 <b>6.</b>	
	4.35	Turning radius	Wa (mm)	185	2	1996		
	4.36	Distance from turning centre and truck centre axis	b13 (mm)	0		0	0	
	5.1	Travel speed, laden/unladen	Km/h	16		16	16	
	5.2	Lift speed, laden/unladen	m/s	0,39/0	,46	0,39/0,4	0,39/0,46	
Performance data	5.3	Lowering speed, laden/unladen	m/s	0,52/0	,50	0,52/0,50		
	5.5	Drawbar pull, laden/unladen	daN	7210/7	570	6970/753	35	
	5.6	Max. drawbar pull, laden/unladen	daN	10750/1	1620	10580/117	700	
	5.7	Gradeability, laden/unladen	%	10/1	6	9,5/15,5		
Per	5.8	Max. gradeability, laden/unladen	%	15/2	5	14,5/24,5		
	5.9	Acceleration time, laden/unladen	S	5		5		
	5.10	Service brake		hydraulic/	electric	hydraulic/electric		
	6.1	Drive motor, output S2 60 min.	Kw	2x8	}	2x8		
tor	6.2	Lift motor, output at S3 15%	Kw	20		20		
DC	6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 435	36 A	DIN 43536 A		
Electric motor	6.4	Rated voltage/capacity 5h	V/Ah	80/560		80/700-860		
Elec	6.5	Battery weight, min./max.	Kg	1550/1		1853/2047		
	6.6	Energy consumption according to VDI cycle	KWh/h	-		-		
	8.1	Type of electronic control		invert	er	inverter		
	8.2	Working pressure for auxiliary equipment	bar	150		150		
Misc.	8.3	Oil volume for auxiliary equipment	l/min	-	-	-		
Ξ	0.0		711111					
Σ	8.4	Sound pressure level at operator's ear	db (A)	< 75 dł	n (A)	< 75 db (	(A)	

**1.** Optional cushion tyres 559x203-406,4 for MR 2.5-2.5 GA-3.0; 559x229-406,4 for MR 3.5; 559x305-406,4 for MR 4.0-4.5-5.0 **2.** Optional cushion tyres 457x152-308

3. With cushion tyres 977 for MR 2.5-2.5 GA-3.0; 951 for MR 3.5; 985 for MR 4.0-4.5-5.0
4. With cushion tyres 988 for MR 2.5-3.0-3.5; 996 for MR 2.5 GA; 1018 for MR 4.0-4.5-5.0

MONTINI		MON	NTINI	IOM	NTINI		MON	ITINI	MON	NTINI	MONTIN	١I	
MR 2.5 GA C	SM	MR 3.0	MR 3.0 CSM	MR 3.5	MR 3.5 CS	М	MR 4.0	MR 4.0 CSM	MR 4.5	MR 4.5 CSM	MR 5.0	)	
electric		electric		electric			electric		electric		electric		
seated		sea	ated	sea	seated		seat	ted	sea	ated	seated		
2,5		3		3	,5		4		4	,5	4,999		
500		500		500			500		500		500		
450		482		48	487		503		503		503		
1705		17	'05	17	1705		2000		2000		2000		
5005		5130	5185	5560	5615		6555	6610	6555	6610	6915		
6290/121	5	7340/820	7340/875	8135/925	8135/980	)	9206/1349	9206/1404	9957/1098	9957/1153	10833/10	)72	
2400/260	5	2610/2550	2610/2605	2610/2950	2610/300	5	3200/3355	3200/3410	3200/3355	3200/3410	3340/357	75	
SE/C/PN		SE/0	C/PN	SE/0	C/PN		SE/C	/PN	SE/0	C/PN	SE/C/PN	N	
23x9-10 <b>1</b> .		23x	23x9-10 <b>1.</b>		23x10-12 <b>1.</b>		315/45-12 <b>1.</b>				315/45-12		
180/60-10	) <b>2.</b>	180/6	60-10 <b>2</b>	. 180/0	180/60-10 <b>2.</b>		180/60-10 <b>2.</b>		180/0	60-10 <b>2.</b>	180/60-10		
2x/2		2x/2		2x/2			2x/2		2x/2		2x/2		
985	3.	985 <b>3.</b>		965 <b>3.</b>		3.	1005 <b>3.</b>				1005 3		
992	4.	99	92 4	. 99	92	4.	10	10 <b>4.</b>	10	)10 <b>4.</b>	1010	2	
3,5°/6,5°		-	/7°	-	/7°		4°/			/8°	4°/8°		
2307			350		350		230			368	2368		
-			-	-	-		-			-	-		
3405		34	05	34	05		3300		3300		3300		
4012			)25		4025		4010		4010		4010		
2227			27		227		23			310	2310		
1110			10		1110		124	-	1240		1240		
576			76		76		57		576		576		
3446			78		83		379		1	<sup>7</sup> 98	3798		
2446		2478		2483		2798		2798		2798			
1180/1170	05	1180/1170 <b>5.</b>		1205/1170 <b>5.</b>		1290/1170 <b>5.</b>							
40/130/100	-		0/1000		0/1000	J.	50/150			0/1000	50/150/10		
40/130/1000 ISO 2A		ISC		ISO 3A		ISO 3A 1150		ISO 3A 1150		ISO 3A 1150			
980		980		980									
980 95 120		95		95 120		95		95		95			
										120			
3646 <b>6.</b>		3678 <b>6.</b>		3683 <b>6.</b>						3999			
3846	6.		878 <b>6</b>			6.	419			99 <b>6.</b>	4199	6	
1996	0.		96		996	0.	229			296	2296		
0			0		0		0		0		0		
16			6		6		16/		16/17		16/17		
0,39/0,46			/0,42		/0,42		0,35/		0,35/0,45		0,35/0,45		
0,52/0,50			/0,30		/0,30		0,48/				0,48/0,30		
6970/7535			/7720		/7750				-	-			
10580/11700			/12150	-	/12530	$\neg$	1,9000/	19000/19300		19000/19300		19000/19300	
9,5/15,5			15		14	$\neg$	-		-		-		
14,5/24,5		14/24		13/23		15/28		15/28		15/28			
5		4,5		5		4,9/4,5		4,9/4,5		4,9/4,5			
	otrio												
hydraulic/electric			c/electric		ulic/electric		hydraulic/electric		hydraulic/electric		hydraulic/electr		
2x8		2x8		2x8 25			-	۲۸		2,0,0	7		
20 DIN 43536 A			2	-		_	2	1		_ 1	21		
DIN 43536 A			3536 A		DIN 43536 A		DIN 43536 A		DIN 43536 A		-		
80/700-860		80/625-860		80/625-860		-	80/750-1032		80/750-1032		80/840		
1853/2047		1853/2047		1853/2047		_	2180/2410		2180/2410		2180/2300		
			-		-		-		-		-		
-			erter	Inve	erter		inve			erter		inverter	
inverter			50		50						200		
inverter 150			50		50	_	20			00			
inverter			50  db (A)		50 - db (A)		20 - < 75 c			00 - db (A)	< 75 db (		

5. With cushion tyres 1180/1170 for MR 2.5-2.5 GA-3.0-3.5; 1290/1170 for MR 4.0-4.5-5.0
6. Ast = Wa + x + I6 + a (a = 200 mm)
7. With additional ventilation

All MONTINI products comply with Machinery Directive 2006/42/EC and Directives 2006/95/EC and 2004/108/EC.



# Depliant MR 2.5-5.0 (80V) - 10-2018 - Cod. 5014120.EN - Graphic Design: 3pix The data provided herein is purely indicative and is not binding, the manufacturer therefore reserves the right to make changes as and when deemed appropriate.

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