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# It doesn't cost the earth to move it!











# **Owner, Operation & Parts Manual**



Model PB 4WD MKII (ARTICULATED BATTERY POWERED WHEELBARROW)



# **CONGRATULATIONS!!**

And thank you for purchasing a new PB 4WD II.

We have done our utmost to ensure your *PB 4WD II* will be the most trouble free and productive machine you will ever use. Please read the operators manual carefully before using your *PB 4WD II*.

If you have any questions, please have the following relevant information before you call us:

#### Date of purchase:

Serial Number:

Dealer/Distributor's name:

## **CERTIFICATE OF CONFORMITY**

THE UNDERSIGNED MUCK-TRUCK UK LTD. WE DECLARE THAT THE BATTERY OPERATED PEDESTRIAN DUMPER TRUCK

CATEGORY .....BATTERY POWERED—PEDESTRIAN DUMPER MODEL......PB 4WD II

CONFORMS WITH THE ESSENTIAL HEALTH & SAFETY REQUIREMENTS OF THE EEC DIRECTIVE 2006/42/EC; ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 2004/108/EC; LOW VOLTAGE DIRECTIVE 2006/95/EC; SAFETY OF MACHINERY EN ISO 12100:2010; MECHANICAL VIBRATION ISO 5349 AND ASSOCIATED HARMONISED STANDARDS, WHERE APPLICABLE. NOISE EMISSIONS CONFORM TO DIRECTIVE 2005/88/EC AMENDED BY 2000/14/EC FOR MACHINES UNDER ARTICLE 12. THE NOTIFIED BODY IS AV TECHNOLOGY LIMITED, AVTECH HOUSE, BIRDHALL LANE, CHEADLE HEATH, STOCKPORT, SK3, 0XX, ENGLAND

#### H.A.V.s

Left hand—2.0 m/s<sup>2</sup> Right hand—2.5 m/s<sup>2</sup> Daily Exposure Time 8 hrs.

YEAR OF MANUFACTURE-2024

NAME & SIGNATURE OF TECHNICAL MANAGER OF MUCK-TRUCK UK LTD.

**TERRY ROWLANDS** 

# **MACHINE SPECIFICATIONS**

MOTOR:	2 x 900 Watts Electric
MOTOR.	Transmission
SPEED:	0-3.5 mph/5.6 kph FWD
SPEED.	0-1.75 mph/2.8 kph REV
STEERING/MOVEMENT:	ARTICULATED
POWER (W):	1800W
SKIP SIZE:	8cu ft./ 226.53 liters.
MACHINE	L75 x W30 x H42 inches
DIMENSION:	L190 x W76 x H107 cm
WHEELS:	Front: 2 x 16 x 6.50-8
	Rear: 2 x 16 x 6.50-8
TRACTION:	4 wheel drive
CARRYING CAPACITY:	804.68lbs / 365kg
WEIGHT UNLADEN:	556lbs / 252kg
NOISE RATING:	Up to 5db
RUNNING TIME:	4 hrs. continuously
CHARGING TIME:	80% (4 hrs.), 100% (6 hrs.)
CHARGER (120 or 140 Volt):	Onboard Smart Charger (Victron)
BATTERY OPTION:	AGM+GEL or Lithium (Upgrade)
MAX. SLOPE:	30 degrees
TURNING RADIUS (DIA.)	Inside: 80" / Outside: 140"

## HINTS FOR SAFE OPERATION

- DO Study this manual before operating your PB 4WD II.
- **DO** Check all nuts, bolts and wheel studs monthly.
- **DO** Be safety conscious and dress appropriately when operating your **PB 4WD II**. Always wear substantial footwear and a hard hat in relevant areas.
- **DO** Exercise extreme caution with the controls when working on steep or slippery surfaces. Especially, when people are near to the working area.
- DO Ensure that all safety guards are in place when operating the PB 4WD II.

## ATTENTION

- **DO** Keep the **PB 4WD II** free of any accumulation of dirt, grease, oil or other flammable material.
- DO After use, connect the truck to the supplied battery charger. The battery charger should be left powered up and connected to the PB 4WD II until the PB 4WD II is next used. This will ensure that the batteries are fully charged when the PB 4WD II is next to be used.

Note that there is no inhibit on the drive motor whilst the battery charger is plugged into the **PB 4WD II** socket.

# **BE SAFE: FOLLOW INSTRUCTIONS AT ALL TIMES.**

**DO NOT** Allow anyone lacking in experience to operate your **PB 4WD II**.

- DO NOT Carry "passengers" on your PB 4WD II.
- **DO NOT** Start work without completing the daily maintenance checks.
- **DO NOT** Operate the **PB 4WD II** without exercising appropriate safety precautions.
- **DO NOT** Use other types of battery charger or batteries.
- **DO NOT** Put Hands or Limbs near Moving Parts.

## ATTENTION

## **DO NOT** Pressure wash directly into the truck's electronics.

## BE SAFE: EXERCISE COMMON SENSE AT ALL TIMES.

# **OPERATING INSTRUCTIONS:**

<ol> <li>Turn On the Key Switch and Release the Emergency Stop Button.</li> </ol>	OFF ON ON
2. Press the ON/OFF switch to turn ON the machine.	
3. On the Controls, there is a Fast/Slow rocker switch, select the desired mode.	SLOW FAST
4. To move forward, press the forward rocker switch, then pull the lever located on the left handlebar. The speed of the machine is based on how hard you will pull the lever.	FORWARD
5. To reverse, press the reverse rocker switch, then pull the lever located on the left handlebar.	FORWARD
<ol> <li>To Empty the Skip, press and hold the Empty/Return Rocker Switch located on the Top Control Plate.</li> <li>To Return the Skip, press and hold the Return Rocker Switch.</li> </ol>	EMPTY E RETURN

### MAINTENANCE

PB 4WD II Serial No-

12 Months on Electric Transmission, 6 months on all other parts excluding wear parts or Operator damage (misuse), unless deemed defective from Manufacture. Under the following conditions

- Routine maintenance undertaken in accordance with Owner's Manual.
- Returned defective parts are approved by Muck-truck UK Ltd.
- Machine is not abused or operated with known faults or lack of maintenance.
- Repairs are in accordance with Muck-truck UK Ltd.

# AT AN AGREED JOB RATE

Only defective parts are covered and not wearable components that necessitate replacements through normal wear and tear, i.e. puncture, chipped paint, dented skip/bucket etc. Muck-truck UK Ltd will not be liable for any consequential losses.

## PERSONAL CUSTOMER WARRANTY STATEMENT

If there is any component, or components, manufactured by Muck-truck UK Ltd that are found to be defective within 12 months from the date of purchase (or 90 days in the case of a machine used for hire/commercial purposes), Muck-truck UK Ltd undertake to replace the faulty component/s free of charge, (provided that they are notified immediately upon date of failure) fill in the Warranty Form and attach photographic evidence.

# THE FOLLOWING ARE NOT COVERED BY THIS WARRANTY

- A machine which has been subject to operation in excess of recommended capacities, misuse, negligence or accident, or has been altered or modified in a manner which has not been authorized by Muck-truck UK Ltd.
- 2. Wear parts, e.g. tyres, cables, batteries etc.
- 3. Transportation Charge— to and from the warranty repair site.

Muck-truck UK Ltd operates a policy of continual development and reserves the right to alter product specification without giving prior notice.

## **SPARE PARTS LIST**

DESCRIPTION	PART NO.	QTY	IMAGE
PB 4WDII SKIP	PB4WDII - 001	1	POWER BARROW II
PB 4WDII FRONT CHASSIS	PB4WDII - 002	1	
PB 4WDII TOP PLATE	PB4WDII - 003	1	
PB 4WDII REAR DOOR	PB4WDII - 004	1	
PB 4WDII COWLING (L/R)	PB4WDII - 005	2	
PB 4WDII CHARGER HOLDER	PB4WDII - 006	1	
PB 4WDII CHARGER/ DOCUMENT HOLDER	PB4WDII - 007	1	
PB 4WDII KETTLE SOCKET BLANKING PLATE (BOELS)	PB4WDII - 008	1	•

DESCRIPTION	PART NO.	QTY	IMAGE
PB 4WDII DOOR STAY (SHORT)	PB4WDII - 009	2	
PB 4WDII DOOR STAY (LONG)	PB4WDII - 010	2	
PB4 4WDII HANDLEBARS (L/R)	PB4WDII - 011	2	
PB 4WDII BATTERY COVER	PB4WDII - 012	1	
PB 4WDII COWLING BASE PLATE COVER	PB4WDII - 013	1	
PB 4WDII DOOR STAY PLATE	PB4WDII - 014	1	·
PB 4WDII IDRIVE HOLDER PLATE	PB4WDII - 015	1	
PB 4WDII REAR CHASSIS SADDLE	PB4WDII - 016	1	

DESCRIPTION	PART NO.	QTY	IMAGE
PB 4WDII REAR DOOR BRACKETS	PB4WDII - 017	4	NA NA
PB 4WDII TRANSMISSION BRACKETS	PB4WDII - 019	4	
PB 4WDII SOCKET BLANKING PLATE	PB4WDII - 020	4	• •
PB 4WDII THROTTLE CABLE PLATE	PB4WDII - 021	1	
PB 4WDII IDRIVE	PB4WDII - 022	1	
PB 4WDII BATTERY (24V SYSTEM)	PB4WDII - 023	2	CCC ALPHA HOUSE
PB 4WDII TRANSMISSION	PB4WDII - 024	2	

DESCRIPTION	PART NO.	QTY	IMAGE	DESCRIPTION	PART NO.	QTY	IMAGE
PB 4WDII ACTUATOR	PB4WDII - 025	1		PB 4WDII BATTERY LINK CABLE	PB4WDII - 033	1	
PB 4WDII CHARGER	PB4WDII - 026	1		PB 4WDII BATTERY TO EMERGENCY STOP CABLE	PB4WDII - 034	1	$\bigcirc$
PB 4WDII CHARGER CABLE	PB4WDII - 027	1		PB 4WDII MOTOR TO IDRIVE CABLE	PB4WDII - 035	1	$\bigcirc$
PB 4WDII MOTORS TO IDRIVE WIRE	PB4WDII - 028	1		PB 4WDII SWITCHES WIRE LOOM	PB4WDII - 036	1	
PB 4WDII BATTERY TO EMPTY/RETURN SWITCH WIRE	PB4WDII - 029	1		PB 4WDII POTBOX	PB4WDII - 037	1	
PB 4WDII EMPTY/ RETURN SWITCH TO RAM WIRE	PB4WDII - 030	1	NO.	PB 4WDII KEY SWITCH	PB4WDII - 038	1	
PB 4WDII MOTORS TO IDRIVE BRAKE WIRE	PB4WDII - 031	1		PB 4WDII ON/OFF SWITCH	PB4WDII - 039	1	
PB 4WDII IDRIVE TO EMERGENCY STOP BUTTON CABLE	PB4WDII - 032	1		PB 4WDII FAST/SLOW SWITCH	PB4WDII - 040	1	O I

DESCRIPTION	PART NO.	QTY	IMAGE	DESCRIPTION	PART NO.	QTY	IMAGE
PB 4WDII FORWARD/ REVERSE SWITCH	PB4WDII - 041	1		PB 4WDII LEVER	PB4WDII - 049	1	
PB 4WDII EMPTY/ RETURN ROCKER SWITCH	PB4WDII - 042	1		PB 4WDII PIVOT BEARING	PB4WDII - 050	4	
PB 4WDII BATTERY GAUGE	PB4WDII - 043	1		PB 4WDII TIE DOWN HOOKS	PB4WDII - 051	2	
PB 4WDII CHARGER SOCKET	PB4WDII - 044	1		PB 4WDII LATCH	PB4WDII - 052	1	
PB 4WDII EMERGENCY STOP BUTTON	PB4WDII - 045	1		PB 4WDII HUBS	PB4WDII - 053	4	
PB 4WDII FOAM	PB4WDII - 046	5		PB 4WDII WHEELS	PB4WDII - 054	4	
PB 4WDII BOLT KITS	PB4WDII - 047	1	10	PB 4WDII LOGO	PB4WDII - 055	2	POWER BARROW II
PB 4WDII HANDLEBAR GRIPS	PB4WDII - 048	2		PB 4WDII WEIGHT STICKER	PB4WDII - 056	2	365 Kilos 800 Lbs

DESCRIPTION	PART NO.	QTY	IMAGE	DESCRIPTION	PART NO.	QTY	IMAGE
PB 4WDII ON/OFF STICKER	PB4WDII - 057	1	ON/OFF	PB 4WDII CHARGING WARNING STICKER	PB4WDII - 065	1	PLEASE KET ANNY FROM WET AREAS WHILE CHARGING. DO NOT OPERATE WHILE CHARGING.
PB 4WDII BATTERY GAUGE STICKER	PB4WDII - 058	1	BATTERY GAUGE	PB 4WDII HAND SAFETY STICKER	PB4WDII - 066	1	DANGER! KEEP AWAY FROM MOVING PARKTS WHEN BUCKETSKIPI STURE FORWARD!
PB 4WDII FAST/SLOW STICKER	PB4WDII - 059	1	FAST/ SLOW	PB 4WDII TIE DOWN HOOKS STICKERS	PB4WDII - 067	2	
PB 4WDII FORWARD/ REVERSE STICKER	PB4WDII - 060	1	FORWARD/ REVERSE	PB 4WDII MADE IN UK STICKER	PB4WDII - 068	1	MADE IN THE UK
PB 4WDII KEY SWITCH STICKER	PB4WDII - 061	1	OFF 1 ON 1	PB 4WDII MUCK- TRUCK LOGO STICKER	PB4WDII - 069	2	muck-truck
PB 4WDII EMPTY/ RETURN SWITCH STICKER	PB4WDII - 062	1	EMPTY/ RETURN	PB 4WDII OPERATING HINTS STICKER	PB4WDII - 070	1	
PB 4WDII VOLTAGE STICKER	PB4WDII - 063	1		NEW POWER BARROW 4WD II	PB4WDII - 071	1	
PB 4WDII CRUSHING STICKER	PB4WDII - 064	1	Warning Danger of crushing				9-9

## DIAGNOSTICS FLASH CODE LIST...

### **DIAGNOSTICS FLASH CODE LIST**

If your Battery indicator is showing flashing lights, that means your machine is showing a fault, to identify the fault, please see below diagnostics:

# I-DRIVE



#### Low Battery Voltage

The battery needs charging or there is a bad connection to the battery. Check the connections to the battery. If the connections are good, try charging the battery.



#### Motor Disconnected

The motor has a bad connection. Check all the connections and leads between the motor and the i-drive . Check the position of the freewheel switch.



#### Motor Wiring Trip

The motor has a short circuit to a battery. Check all the connections and leads between the motor and the battery.



#### Not Used



Not Used



6 Bar

#### Inhibit Active The i-drive is being inhibited from driving



#### Throttle Trip

A throttle trip is indicated. Make sure that the throttle is in the rest position before switching on the vehicle.



Possible Control System Trip A control system trip is indicated. Make sure that all connections are secure.



#### Solenoid Brake Trip The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the control system connections are secure.



#### High Battery Voltage

An excessive voltage has been applied to the i-drive. This is usually caused by a poor battery connection. Check the battery connections.

Commonly Seen Informational Flash Codes



Control System in Sleep Mode

The control system has entered sleep mode. Switch the vehicle off and then on again.



#### Throttle Displaced

The throttle has been displaced while the vehicle is being switched on. Place the throttle in the neutral position and switch the vehicle off and on again.

If the problems persist after you have made the checks described above please contact your service agent.

## MAINTENANCE

Routine checks of your PB 4WD II will ensure trouble free operation with less "down" time.



# **BATTERY CHARGE LEVEL:**

Please **DO NOT** discharge the Batteries below 25% level.

If you do, then the smart charger might not recognize the Batteries are attached and therefore, you would need to disconnect and individually charge one of the Batteries with an external 12V charger.

Remember - A daily check takes only minutes but could save you hours.

Be Proud - look after your PB 4WD II!

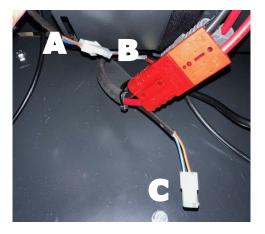
## **ELECTRIC DIAGRAM**

Available upon request.

Please provide the Serial Number of your machine when requesting the Electric Diagram.

# HOW TO FREE WHEEL YOUR 4WD MACHINE

Figure 1:



#### Important!

Please <u>DO NOT</u> forget to re-connect wires A & B after moving your machine to the desired location, or else your Parking Brake will not engaged.

- 1. Unlock the Electric Box Latch, tilt the box backward.
- 2. Inside you will see Figure 1 set up.
- 3. Disconnect A & B, then connect B & C, and you will hear a click, as the brakes get disconnected.
- 4. You can now start pushing your machine to the desired location.
- 5. Once the machine is in the desired place, please do not forget to connect back A and B.