

# Installation and Operating Instructions

**V1051 Big Brute Bulkmaster 1000 - 110v**

**V1080 Big Brute Bulkmaster 1000 - 230v**

Big Brute accessories and spares are available from:

Michael Williams Engineering Ltd  
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## Industrial Vacuum Cleaner

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## 1.0 Introduction

The purpose of this manual is instruction on the proper use of the Big Brute Bulkmaster 1000 Vacuum Cleaner.

### Warning!

**This manual must be read and thoroughly understood before using the Big Brute Bulkmaster 1000. Failure to do so could result in personal injury and/or damage to the product.**

### Caution

**This machine must only be used to suck up dry waste. It must never be used to suck up liquids.**



Picture 1

## 2.0 Standard Dimensions and Weights

|                                 |                           |
|---------------------------------|---------------------------|
| Model                           | Big Brute Bulkmaster 1000 |
| Machine length                  | 1560 mm                   |
| Machine width:                  | 1260 mm                   |
| Machine height:                 | 1950 mm                   |
| Machine weight (Unloaded)       | 310Kg                     |
| Machine Weight (Maximum Loaded) | 1310kg                    |

### Warning!

**Please ensure that your forklift is capable of lifting the above weight at 24" (600mm) centres plus 1.3m<sup>3</sup> (46 cu. ft.) of the material you anticipate collecting.**

**Maximum permitted gross weight for the Big Brute Bulkmaster 1000 is 1310kg**

## 14.0 Declaration of conformity for Big Brute Vacuum Cleaners

### E. C. Declaration of Conformity

Michael Williams Engineering Ltd hereby declares that the Product described in this operators' manual and defined by the serial number on the front of this document and attached to the product, conforms with the following directives and regulations and has been certified accordingly.

- Section 6 of the Health and Safety at Work Act 1974.
- E.C. Machinery Directive 89/392/EEC, as amended by 91/3688/EEC, 93/44/EEC and 93/688/EEC.
- The Supply of Machinery (Safety) Regulations 1992 (S.I. 1992/3073) as amended (S.I. 1994/2063)
- The Provision and Use of Work Equipment Regulations 1998.
- The Electrical Equipment (Safety Regulations) 1994 (S.I. 1994/3260) Implementing the Low Voltage Electrical Equipment Directive (as amended).
- The Electromagnetic Compatibility Regulations 1992 (S.I. 1998/2722)
- The Electromagnetic Compatibility (amended) regulations 1994 (S.I. 1994 /3080)
- I.E.E. Regulations 16th Edition B.S.E.N. 60335-2-2

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Certified on behalf of Michael Williams Engineering Ltd:

D.M. Williams



9th April 2001

### 13.0 Ordering spare parts

Each machine has a serial number printed on the power unit (Picture 27). This is also written on the front of this instruction manual. To give you the best service possible, please supply this serial number when ordering spare parts.



Picture 27



Picture 28

In the case of ordering replacement motor brushes, please also supply the serial number of the motors. This is written on the motor housing. (Picture 28)

### 3.0 Power consumption

The Big Brute Bulkmaster 1000 Industrial Vacuum Cleaner needs a power supply as detailed below.

Current consumption can vary depending on the load being placed on the motors which can constantly change during use.

| Voltage    | 230V                            | 110V                              |
|------------|---------------------------------|-----------------------------------|
| Plug       | 16A 2P+E<br>Blue<br>(Picture 2) | 32A 2P+E<br>Yellow<br>(Picture 3) |
| Watts      | 3600                            | 3600                              |
| Amps Range | 8.8 to 14.9                     | 19.5 to 29.0                      |

Please ensure that you have a suitable power supply. If in any doubt, please consult a qualified electrician.

Please note that to power the 110V Big Brute Bulkmaster 1000, we recommend a transformer with a minimum constant output of 5kVA.

The wires in the mains lead are coloured in accordance with the following code:

- Green & Yellow Earth
- Blue Neutral
- Brown Live



Picture 2



Picture 3

## 4.0 Foreseen Use of the Machine

The Big Brute Bulkmaster 1000 Industrial Vacuum Cleaner is for the collection dry free flowing material only. The machine is powered by a Big Brute vacuum cleaner power unit and acts as a collection interceptor for dry material to be sucked into it. It can then be easily transported by forklift truck to an emptying point and the contents discharged.

The machine works best with free flowing grains or pellets. If large quantities of dust, straw or wood chips are collected, the unit may need a little agitation to discharge the full contents.

### Warning!

**DO NOT use to recover liquids. DO NOT use in a zoned area or use for the recovery of explosive vapours.**

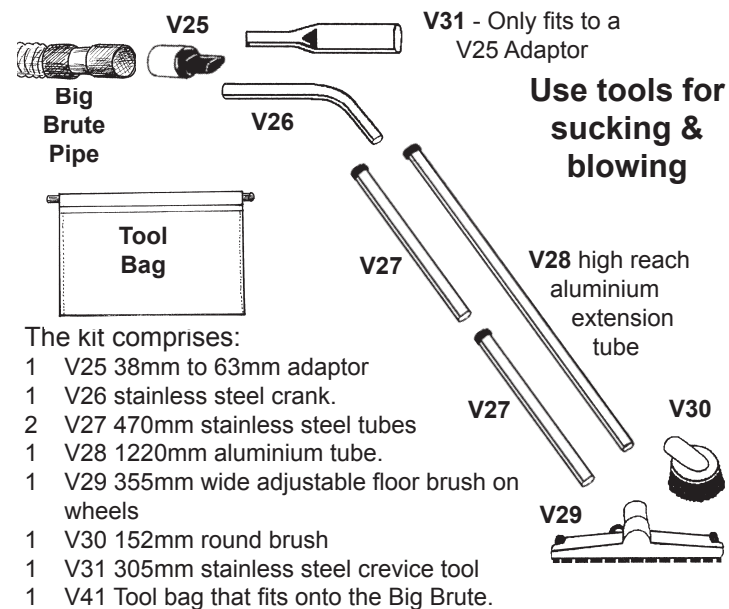
## 5.0 Ways in which the Machine Must Not Be Used

The Big Brute Bulkmaster 1000 vacuum cleaner must not be used in the following ways. Failure to adhere to these precautions could result in personal injury and/or damage to the machine.

- Do not use the machine in Zoned Areas
- Do not use the machine to suck up liquids
- Do not overload the container - its safe working load (SWL) is 1310 kg.
- Do not drop or damage the machine
- Do not place any part of your body over the end of the suction hose
- Do not attempt any modifications to the machine
- Do not operate the machine on slopes
- Do not use with an unsuitable forklift.
- Do not move the machine without engaging the fork lift tine locking pins.

## 12.0 The Floor Wall & Ceiling Hand Tool Kit

This is a selection of long reach stainless steel and aluminium tools that enable you to cover large areas, attack walls, reach into roofs and to poke into small confined places. For general, restricted-access floor cleaning, use the floor brush on the end of the hose. Refer to Pictures 24 and 25 on how to connect this brush and its tubes. For taller operators, extend the suction hose further by attaching the floor brush to the 38 mm diameter aluminium extension tube.



The kit comprises:

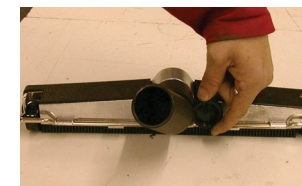
- 1 V25 38mm to 63mm adaptor
- 1 V26 stainless steel crank.
- 2 V27 470mm stainless steel tubes
- 1 V28 1220mm aluminium tube.
- 1 V29 355mm wide adjustable floor brush on wheels
- 1 V30 152mm round brush
- 1 V31 305mm stainless steel crevice tool
- 1 V41 Tool bag that fits onto the Big Brute.

Picture 24

Ensure that you adjust the bristle height on the floor brush to its optimum position for effective cleaning. Adjust the height of the bristles by turning the knob on the rear of the floor brush, as shown in Picture 26. The bristles are in the correct position when they lightly sweep over the floor.



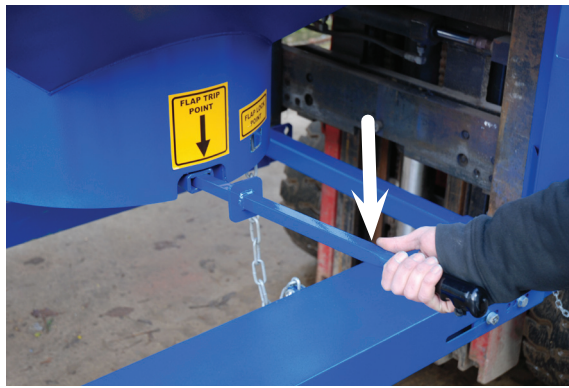
Picture 25



Picture 26

Remove the Emptying Handle [item 10, Picture 4] from its holder and insert it into the Flap trip point socket [item 9, Picture 4].

Picture 22. Pressing down on the handle will now open the flap in the bottom of the machine and allow the contents to empty.



Picture 22

If large quantities of dust, straw or wood chips have been collected, the machine may need a little agitation to discharge the full contents.

To close the flap, sharply pull on the chain connected to the flap. The flap will now be partly latched.



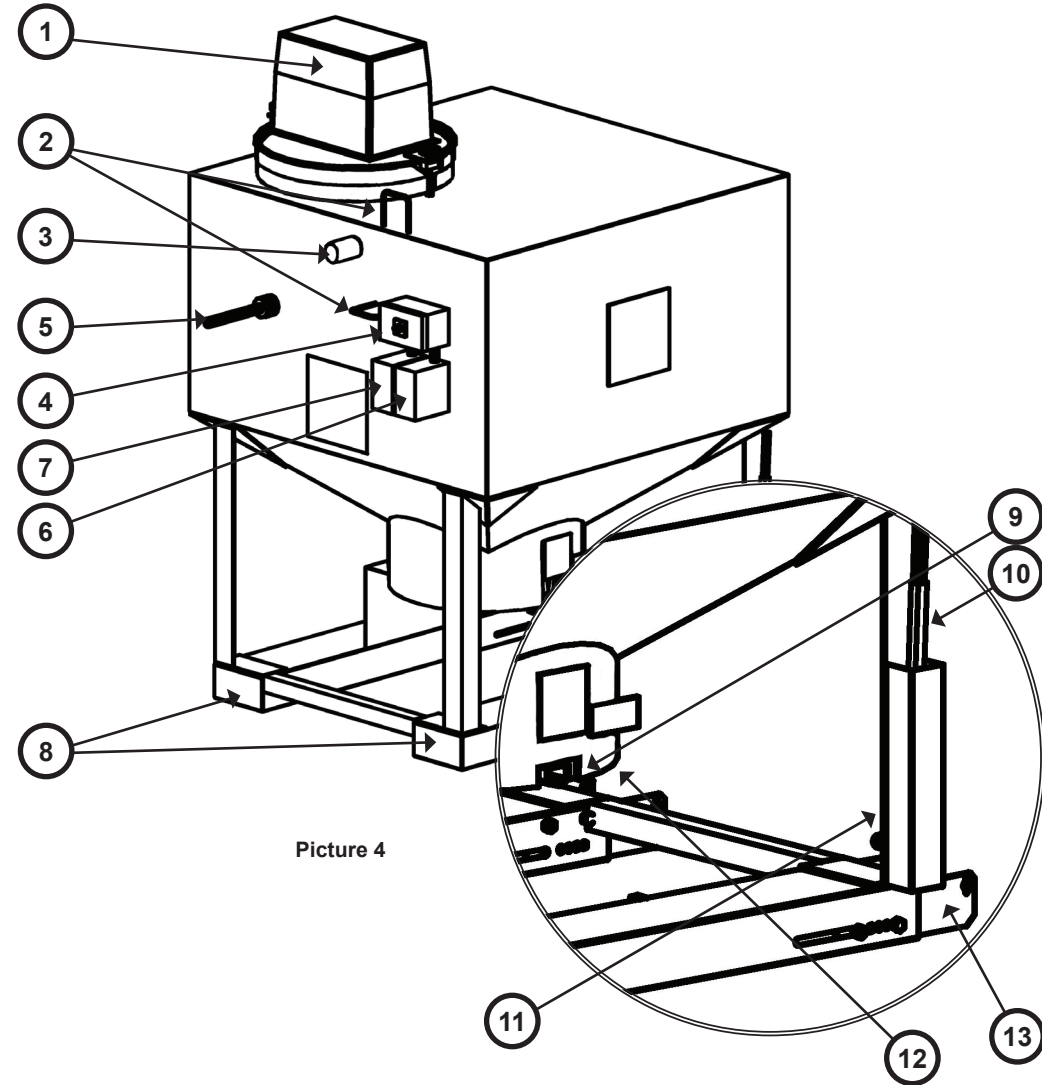
Picture 23

To lock the flap into its working position, insert the emptying handle in the Flap Lock Point socket [item 12, Picture 4] and press down until the discharge flap fully locks onto place with a loud click. Picture 23

### Warning

**Do not go under the raised Big Brute Bulkmaster 1000 to close the discharge flap.**

## 6.0 Identification of parts



Picture 4

|   |                             |
|---|-----------------------------|
| 1 | Power Unit                  |
| 2 | Cable securing loops        |
| 3 | Inlet (Suction waste entry) |
| 4 | On / Off Switch             |
| 5 | Filter Shaker Handle        |
| 6 | Power Output Socket         |
| 7 | Power Input Socket          |
| 8 | Fork Lift Tine Slots        |

|    |                                    |
|----|------------------------------------|
| 9  | Flap Trip Point                    |
| 10 | Emptying Handle                    |
| 11 | Fork Lift Heel Locking pin storage |
| 12 | Flap Locking Point                 |
| 13 | Forklift Heel Locks                |
|    |                                    |
|    |                                    |
|    |                                    |

## 7.0 Installing

The Big Brute Bulkmaster 1000 is fully assembled upon delivery. The fork lift tine heel retaining plates will need to be adjusted to fit your forklift truck before the unit is made operational.

This is carried out as follows

Insert the forklift tines into the forklift tine slots and lift the Big Brute Bulkmaster 1000 about 600mm (2 feet) off the ground.

### Warning

**Take precaution to ensure that the Big Brute Bulkmaster 1000 is adequately supported before working beneath it.**

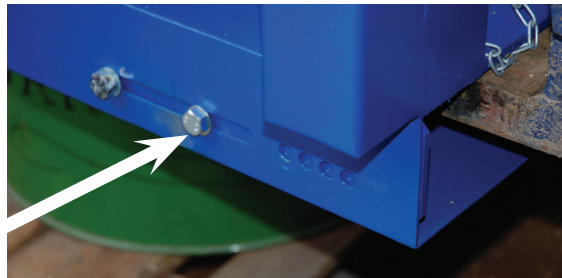
Remove the M12 Bolt (19mm Spanner) as indicated in Picture 5.

The retaining plate can be withdrawn from the fork lift tine slot [item 8 in Picture 4]. Extend the retaining plate so that the hole to the end of the plate will allow the retaining pin to fit behind the heel of the forklift tine. (Picture 6)

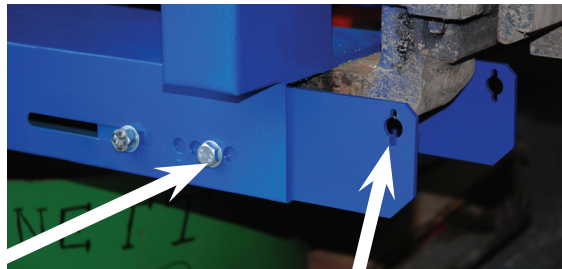
Chose the hole for the bolt to be refitted which gives the smallest clearance between the retaining pin, the forklift tine and the Big Brute Bulkmaster 1000.

Ensure that all four retaining plates are fitted using the same hole and tighten the bolts.

The Big Brute Bulkmaster 1000 is now ready for service.(Picture 7)



Picture 5



Picture 6



Picture 7

## 11.0 Operating

### 11.1 Attaching to forklift

#### Warning

**Before moving the Big Brute Bulkmaster 1000, ensure that the forklift truck has adequate lifting capacity for when the Bulkmaster 1000 is full..**

When you need to move the Big Brute Bulkmaster 1000 for relocation or emptying, slide the forks into the fork lift tine slots [item 8, Picture 4] remove the locking pins from the holders [item 11, Picture 4] and fit through the holes in the retaining plates as per Picture 4

### 11.2 Removal from Forklift

Withdraw the two locking pins from the retaining plates and place them back in their storage locations [item 11, Picture 4]. The forklift tines can now be withdrawn from the fork lift tine tubes [item 8, Picture 4]

### 11.3 Emptying

#### Warning

**Before moving the Big Brute Bulkmaster 1000, ensure that the forklift truck has adequate lifting capacity.**

When you need to move the Big Brute Bulkmaster 1000 for relocation or emptying, slide the forks into the fork lift tine slots [item 8, Picture 4] remove the locking pins from the holders [item 11, Picture 4] and fit through the holes in the retaining plates as per Picture 7

The Big Brute Bulkmaster 1000 can now safely be moved to the emptying location. Picture 21



Picture 21

The Switch Box [item 4 in picture 4] has a 3-position switch (Picture 18) which provides power to the three motors. Each motor is protected by a thermal cut-out unit. In the event of motor overheating, this unit will automatically cut-out and stop the motor before damage can occur. In the event of thermal cut-out, disconnect the machine from the electricity supply and allow to cool before restarting. The cooled motor will automatically re-connect.



Picture 18

Check the motor brushes for wear at least once every year. If the brushes need replacing, please order using the part number printed on the side of the motor.

### Caution

**Never operate the machine with worn motor brushes as this will damage the motors.**

## 10.0 Hose Connections

The Big Brute Bulkmaster 1000 is fitted with a 63mm inlet port [item 3, Picture 4]

A wide range of hoses and adaptors can be fitted to these ports to give the optimum performance.

The hose is connected by pushing it on to the inlet port as shown in picture 19.

The machine is ready to go. Picture 20.



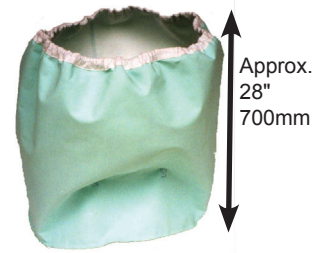
Picture 19



Picture 20

## 8.0 Filters

The Big Brute Bulkmaster 1000 Industrial Vacuum Cleaner has two filters: the Primary Filter and the Secondary Filter. The Primary Filter is the V39A Extra Large Primary Filter (Picture 8) which contains an integral, black, box filter spreader which locates in the filter shaker inside the machine.



Picture 8  
V39A Extra Large Filter

### 8.1 Fitting the Primary Filter

The V39A Primary Filter is a loose-type bag filter. This filter fits inside the Big Brute Bulkmaster 1000 as shown in picture 9 with the filter box spreader inside the filter.



Picture 9

Fold the top of the filter over the top of the ring in the top of the Bulkmaster 1000 as shown in Picture 10



Picture 10

### Caution

**Never operate the Big Brute Bulkmaster 1000 without a Primary Filter in place.**

## 8.2 Cleaning the Primary Filter

Clean the primary filter regularly and before emptying the machine. Clean the primary filter by moving the filter shaker handle from side to side as shown in picture 11

Leave the suction hose in place while you do this to prevent dust escaping from the machine into the air.



Picture 11

## 8.3 The Secondary Filter

The square Secondary Filter is permanently attached to the underside of the Big Brute Power Unit, as shown in Picture 12, and requires no attention other than periodic inspection for damage and holes.

### Caution

**Never operate the Big Brute Bulkmaster 1000 with damaged filters. If in doubt, replace the filter.**

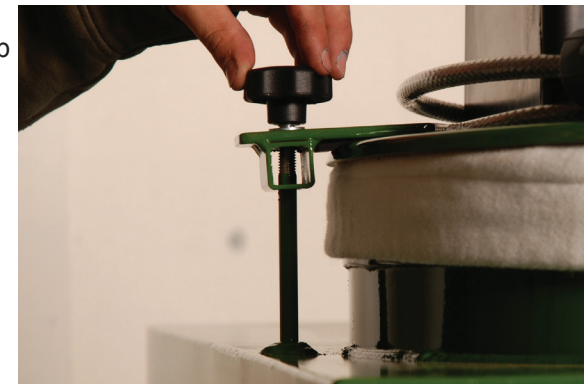
As long as the filters are kept dry and free from holes they should last years without further attention.

If the filters get wet, allow them to air-dry completely before using the machine again.



Picture 12

The power unit is secured to the top of the bulkmaster 1000 with two clamp plates and knobs. Picture 13



Picture 13

## 9.0 Electrics

The Big Brute Bulkmaster 1000 is fitted with a detachable power unit and removable power supply lead.

The power unit is plugged in to the Power Output Socket [item 6 in picture 4] The plug is first passed through the cable securing loops on the top and side of the Bulkmaster 1000 (pictures 14 and 15) and then plugged into the power output socket [item 6 in picture 4] Picture 16

The supply lead is plugged into the power input socket [item 7 in picture 4]. It is not possible to get these mixed up. Picture 17



Picture 14



Picture 15



Picture 16



Picture 17