

AUSSIE ECO-CLEAN ELECTRIC DRIVE COLD WATER PRESSURE CLEANER RISK ASSESSMENT

8 May 2014

MODELS:

In line with the National Occupation Health & Safety Commission's requirements the data below applies to the Aussie Eco-Clean electric drive pressure cleaner models:-

- Monsoon Series
- BB100 Electric Series
- Hurricane & Raptor Electric Drive

DESCRIPTION:

Electric drive pressure cleaners designed for professional cleaning applications.

MATERIAL CONSTRUCTION:

Electric drive cold water pressure washers are mounted on heavy duty trolley mounted frames. They consist of a quality 4 pole, IP56 rated electric motors driving a triplex style three piston high pressure pump. The machines are supplied with wheels for ease of portability and manoeuvrability. The machines can be supplied with hose reels and up to 45 metres of high pressure hose to increase operator convenience.

Machines can all be supplied with longer length hoses for increased operator convenience.

POTENTIAL HAZARDS:

1. Electrocution from motor and switch gear
2. Entrapment from high pressure hose assembly
3. Entrapment from power cable
4. Injury through being sprayed with high pressure water

RISK RANKING:

1. Eight
2. Fifteen
3. Fifteen
4. Thirteen

CONTROL METHODS:

1. Provide adequate insulation around cable terminals and switches. Provide adequate warning decals
2. Provide warning decals. Advise operators of availability of hose reels.
3. Provide operator warning decals
4. Place warning decals on the machine, train operators and provide adequate instructions in Operating Instructions.

CONCLUSION:

All of the machines mentioned above provide satisfactory insulation, safety warnings and protection devices for use in normal cleaning applications.

The machine is fitted with a Total Stop device that protects the operator in the event of an emergency situation. This functions as an automatic cut-out that turns the machine off when the operator releases the trigger on the gun.

Although we regard the machines as being suitable for the use by semi-skilled people, there is a clear and real need for the operators to be made aware of the safety precautions and practises to be adopted whilst using the machine.

The machine is engineered and manufactured professionally and is suitable for the function it is designed for.

RISK RANKING METHOD:

Risk is the combination of the likelihood of a specific unwanted event and the potential consequences if it should occur.

PROBABILITIES:

- A. Common or repeating occurrence.
- B. Known to occur or "it has happened".
- C. Could occur, or "I've heard of it happening".
- D. Not likely to occur.

E. Practically impossible.

CONSEQUENCES FOR PEOPLE:

1. Fatality or permanent disability.
2. Serious lost time, injury or illness.
3. Moderate lost time, injury or illness.
4. Minor lost time, injury or illness.
5. No lost time.

RISK RANKING METHOD:

For each event, the appropriate probability (a letter A to E) and consequences (a number 1 to 5) is selected.

RISK RANKING TABLE:

The consequences (loss outcomes) are combined with the probability (of those outcomes) in the risk ranking table to identify the risk rank of each loss event (e.g. a consequence of 3 with a probability of B yields a risk rank of 9).

The table yields a risk rank from 1 to 25 for each set of probabilities and consequences. A rank of 1 is the highest magnitude or risk, that is a highly likely, very serious event.

A rank of 25 represents the lowest magnitude of risk, an almost impossible very low consequence event.

C O N S E Q U E N C E		PROBABILITY				
		A	B	C	D	E
	1	1	2	4	7	11
	2	3	5	8	12	16
	3	6	9	13	17	20
	4	10	14	18	21	23
	5	15	19	22	24	25

SIGNED

QUALITY CONTROL MANAGER

POTENTIAL HAZARD:

Hazard	Yes/No	Risk	Risk Rating	Controls
Entanglement with hose (tripping, falling)	Yes	Personal injury of the operator or bystanders	13	◆ Warning stickers ◆ hose reel option
Injury from high pressure water	Yes	Personal injury of the operator or bystanders	13	◆ Warning notice on blaster ◆ Warning in Operator's Manual, ◆ Use of safety protection clothing (Aussie Pro-operator) ◆ Use of barriers to keep bystanders away from work area
Suffocation	Yes	Fatality is the risk	7	◆ Machine decal warning about operation in confined spaces ◆ Operator training in working in confined spaces

Ergonomic lifting or movement on site,	Yes	Personal injury	8	<ul style="list-style-type: none"> ◆ Machine decal warning about correct lifting procedures ◆ Operator's Manual ◆ Staff training
High temperature (from engine muffler and other components)	Yes	Burns from muffler	15	<ul style="list-style-type: none"> ◆ Warning sticker on machine
Battery exploding if not charged correctly	Yes	Acid burns	12	<ul style="list-style-type: none"> ◆ Warning sticker on battery ◆ Wear eye & face protection when working near battery
Fire or explosion caused by refuelling engine while running	Yes	Serious injury, burns	8	<ul style="list-style-type: none"> ◆ Warning sticker on machine
Unsecured machine, moves unattended	Yes	Cause of accidents and/or injury	18	<ul style="list-style-type: none"> ◆ Warning sticker "Secure Machine during Operation" ◆ Operator's Manual
Noise	Yes	Hearing damage	15	<ul style="list-style-type: none"> ◆ Warning sticker regarding ear muffs to be used during operation
Dislodged particles in atmosphere	Yes	Sight damage	6	<ul style="list-style-type: none"> ◆ Warning regarding wearing safety glasses.
Slipping on wet surface	Yes	Personal injury	9	<ul style="list-style-type: none"> ◆ Use of proper footwear
Contact with chemical cleaners used to clean surfaces	Yes	Skin contact could result in burns, skin irritation etc. Fumes from some chemicals may lead to respiratory problems	4	<ul style="list-style-type: none"> ◆ Chemical cleaners to only be used as a last resort when other methods have failed. ◆ Areas to be kept well ventilated. ◆ Staff to follow manufacturers' instructions at all times for use, storage & disposal. ◆ Staff to wear the appropriate PPE ◆ Respiratory protection when required
Electrocution – electric shock and burns	Yes	Personal injury	13	<ul style="list-style-type: none"> ◆ Authorised personnel to carry out maintenance ◆ Daily checks on condition of power cable ◆ Suitable circuit breaker installed ◆ Cover on electric motor in tact ◆ Machine checked regularly for earth leakage ◆ Motor located outside wash bay / spray area

AUSTRALIAN PUMP

AUSTRALIAN PUMP INDUSTRIES PTY LTD

P: +61 2 9894 4144 F: +61 2 9894 4240

wlorenz@aussiepumps.com.au

www.aussiepumps.com.au