

14 July, 2009

## Procedure for Inserting Vent Holes in EWP Ballast Cavities

It has been identified that flammable gas can build up in the ballast cavities of MEWPs. It is Redmond Gary Australia's recommendation that these cavities be vented to stop build-up of pressure and to avoid incidents when personnel are modifying these machines.

1. Before drilling any holes, personnel must be dressed appropriately in protective clothing and use safety equipment as there is a possibility that flammable gases may have built up in these cavities and could be under pressure. The minimum safety equipment is as follows:
  - Long sleeve work shirt and trousers
  - Safety boots
  - Leather Gloves
  - Full face shield

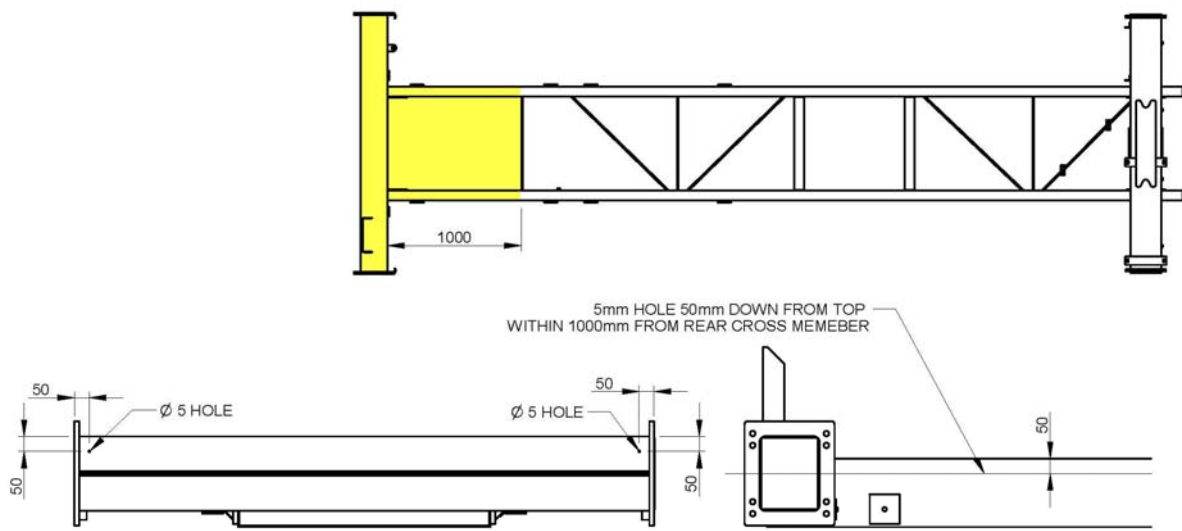
### Tools and Equipment required

- Marking pen or chalk
- Centre punch and Hammer
- Pneumatic or Hydraulic drill with rubber bellows shroud and entry point for CO<sup>2</sup> Gas
- Bottle of CO<sup>2</sup> gas with regulator pressure 1 Bar
- 3mm Drill bit
- 5mm Drill bit
- Fire Extinguisher



**Hole being drilled in rear cross member**

2. Identify the location of ballast. Please refer to drawing below which shows subframe assembly without locker structure for simplification. The ballast is located inside the sections highlighted in yellow on the drawing. The cross member is at the rear of the truck adjacent to the basket rest and runs between the two rear jacklegs. There is a tank built into the subframe directly in front of this cross member. These sections are separate and have been seal-welded when manufactured.
3. Two holes are to be drilled in the cross member between the two jacklegs. The location of these holes should be 50mm down from the top and 50mm in from the side flange that the jacklegs are bolted to. There should be two additional holes drilled in either side of the subframe 50mm down from the top and anywhere within 1000mm of the rear cross member. One hole is to be drilled in each side of the subframe. The location of the holes is indicated on the drawing. In order to access the subframe for drilling purposes, it may be necessary to remove the rear wheels.



LOCATION OF VENT HOLES

#### 4. Drilling procedure:

After marking the position of the hole and centre punching, 3mm drill should be used in conjunction with rubber bellows and CO<sup>2</sup> gas injection at 1 Bar pressure to pierce the first hole in each cavity. Care should be taken when the drill punches through into the cavity behind. There is a possibility that flammable gases may be present which could ignite during the drilling process. After the 3mm hole has been drilled, the hole should be enlarged to 5mm. This process should be repeated for all 4 holes in positions indicated in Step 3. Paintwork is to be touched up after holes have been drilled.