

## WHEEL CHANGING ON SLURRY TANKERS (AND OTHER MACHINES?)



Lack of jacking points & unsafe system of work led to fatality.



Potential problem with other trailed agricultural machines



# Unsafe system of work



# Where to place the jack?



# Fatal accident



# Puncture tyre



# Brake bar restricts access for jacking up



# Alternative jack points within danger zone



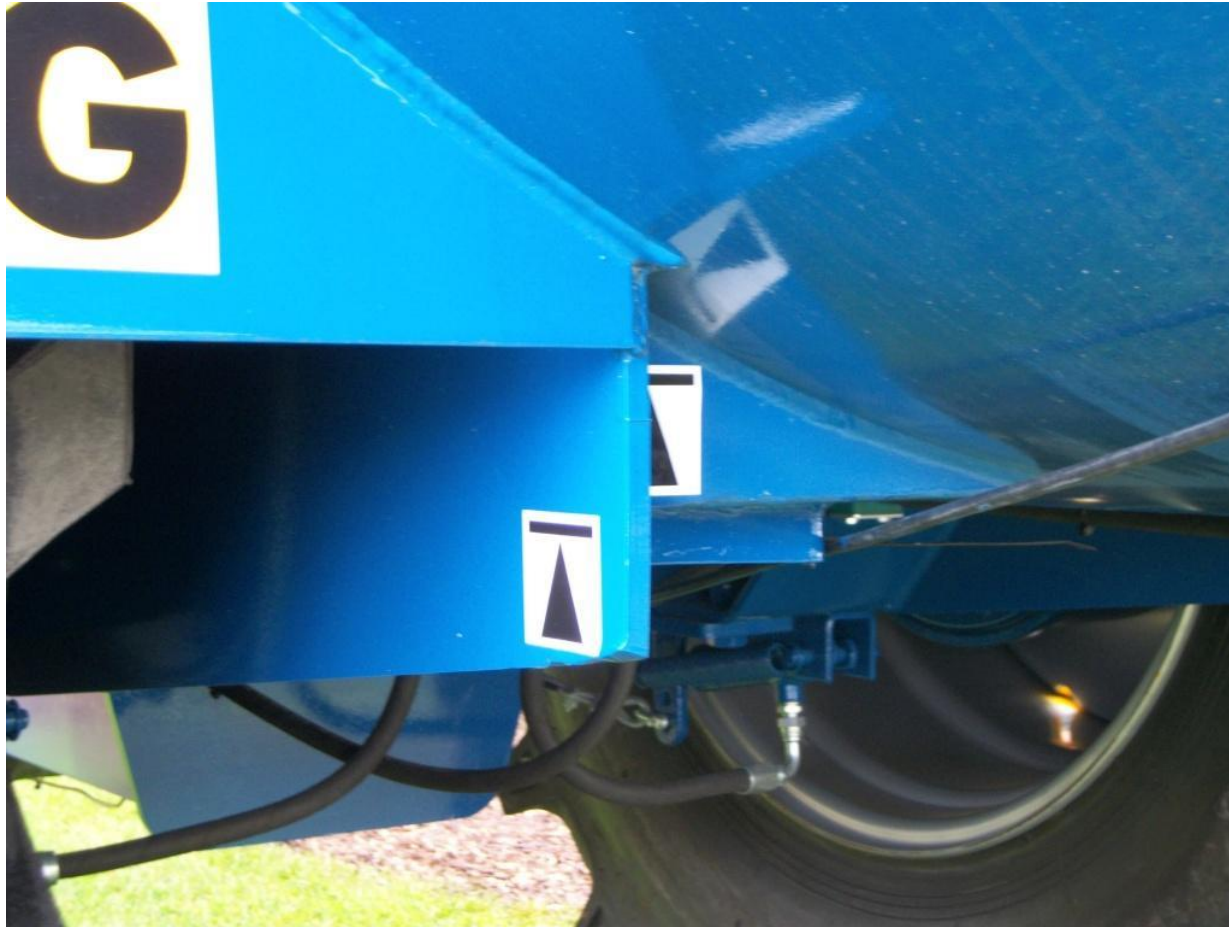




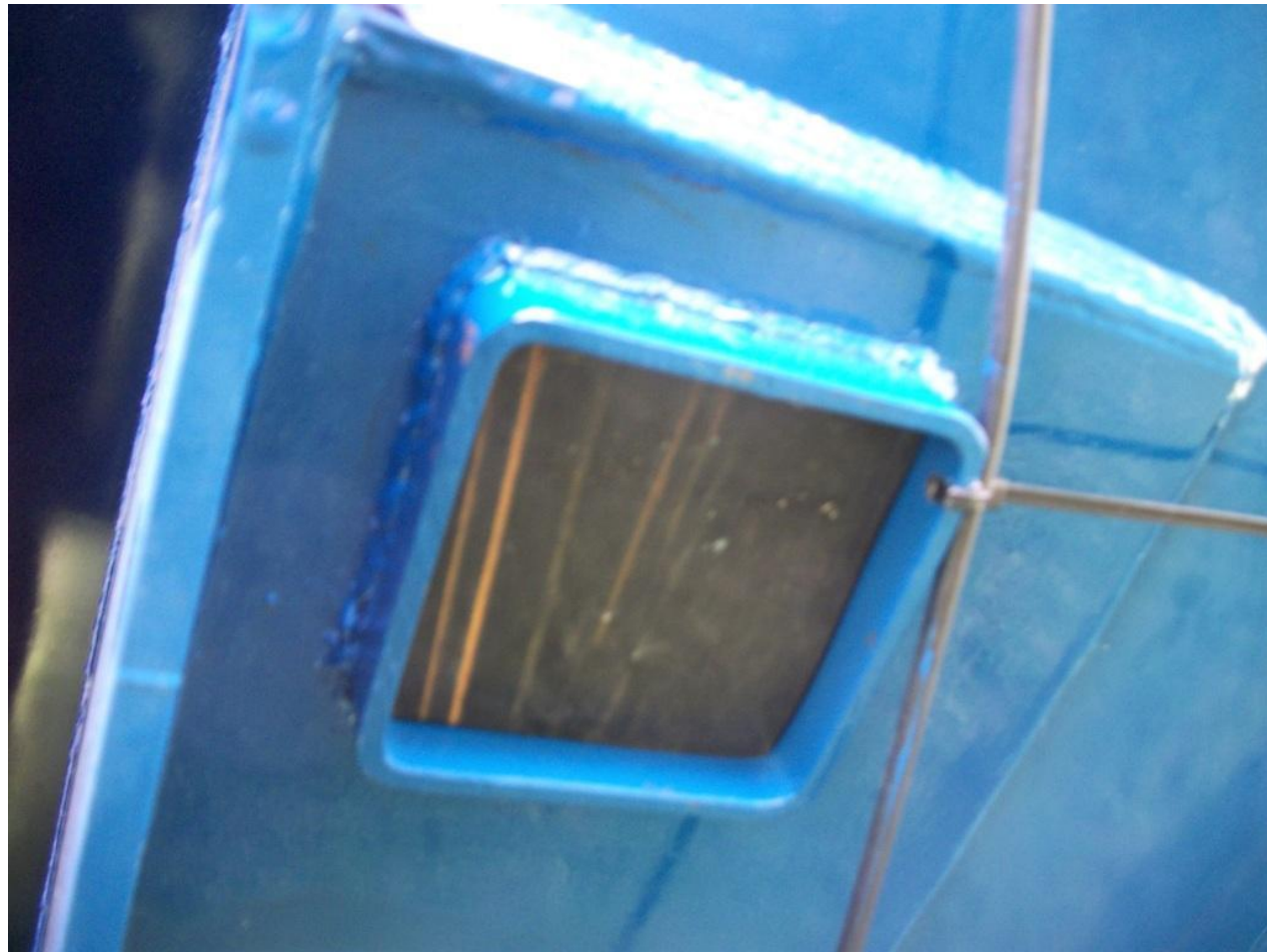
# Rear bolted section



# Welded recessed section



# Rubber base to reduce slippage





# Recessed section



# Warning sign with instructions



# Jacking points

<b>⚠ WARNING ⚠</b>		<b>IMPORTANT</b>	
<p><b>To Prevent Serious Injury or Death</b></p> <ul style="list-style-type: none"> <li>• Avoid unsafe operation.</li> <li>• Follow maintenance schedule.</li> <li>• Do not operate or work on this machine without reading and understanding the operator's manual.</li> <li>• If you use a tool contact your dealer for a new manual.</li> </ul> 	<p><b>Sturdy Gases Can Kill</b></p> <ul style="list-style-type: none"> <li>• Sturdy gases are toxic and can kill.</li> <li>• Keep animals and people out of sealed houses when using stings.</li> <li>• Keep children away when working with stings.</li> <li>• Seals on suction hoses to prevent them falling into the tank.</li> <li>• Step out of building for first hour after agitation.</li> <li>• Never agitate in cold conditions - the gas may freeze.</li> <li>• Do not stand near tank openings when mixing is in progress.</li> <li>• Never enter a tank without appropriate breathing apparatus and a life line held by two men.</li> <li>• Always ensure there is adequate ventilation to provide a draught.</li> <li>• Install safety screen machine covers and never stand over them while agitation is in progress.</li> <li>• Do not allow stings to rise beyond 30cm from the side of tank covers.</li> <li>• Avoid naked lights as sturdy gases can be highly flammable.</li> <li>• Covered lights should have adequate maintenance and a good undervolt which cannot be moved by stingers.</li> <li>• All open tanks must be protected by a substantial Unbreakable safety wall or fence at least 1.8m high with locked gates at the same height.</li> </ul>	<p><b>Operating Instructions:</b></p>  <ul style="list-style-type: none"> <li>• Read operators manual carefully before operating this machine.</li> <li>• To operate pump, move pump lever to R to agitate, to N for Neutral and to F for filling.</li> <li>• Leave pump handle in Neutral when not in use.</li> <li>• 450 RPM is true speed for the pump.</li> <li>• When P.T.D. is running do not turn sharply.</li> <li>• Tight fitting clothes must be worn near the P.T.D. shaft.</li> <li>• Ensure the P.T.D. shaft has a proper guard.</li> <li>• Do not stand between tank and tractor while P.T.D. is in operation.</li> <li>• Do not work at rear outlet before checking that the lock is not protruding.</li> <li>• Rear valve must be open before you wind the tank.</li> <li>• Do not interfere with the top trap or inspection glasses when the tank is pressurised.</li> <li>• Max operating pressure is 0.8 Bar.</li> </ul>	<p><b>Maintenance</b></p> <ul style="list-style-type: none"> <li>• Check tyre pressure and tighten wheel nuts daily.</li> <li>• Check oil level in pump regularly.</li> <li>• Set oil dropper on pump to 45 drops per min for 8000 pump and 55 drops given for 11000 pump.</li> <li>• Oil for pump is SAE20 in summer and SAE20 in winter.</li> <li>• Gearbox oil must be changed after the first 50 hours &amp; every 200 hours thereafter.</li> <li>• Gearbox oil of the pump uses SAE 50 oil.</li> <li>• Lubricate all grease points daily.</li> <li>• Check hub bearings and brake pads regularly and keep greasing points on axle greased.</li> <li>• On a monthly basis (depending on usage) it is beneficial to suck a small amount of diesel mixed with lubricant into the pump while it is running at low revs.</li> <li>• <b>DO NOT</b> power wash with hot water, greater than 200psi or closer than 40cm.</li> </ul>
<p><b>Do Not Go Near Hydraulic Leaks</b></p> <ul style="list-style-type: none"> <li>• High pressure of early machines can cause serious injury, gangrene or death.</li> <li>• If injured seek medical help. Immediate surgery is required to remove oil.</li> <li>• Do not use fingers or skin to check for leaks.</li> <li>• Lower tank or relieve hydraulic pressure before loosening hydraulic fittings.</li> </ul> 	 <p>This symbol designates jacking position. If unsure use a professional tyre fitter</p>		

# Safety in wheel changing





# Jacking point marked



# Other machines – the same problem?



# ADCO agri task force to consider:

- Is there an accident history associated with wheel changing?
- Are EU slurry tankers provided with jacking points?
- Are jacking points marked with signs?
- Is there information in the operator's manual?
- What design solutions are acceptable?
- The same problem with other machines?