


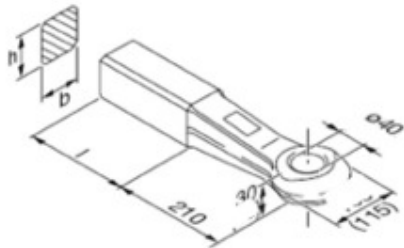
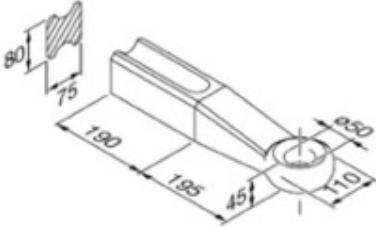


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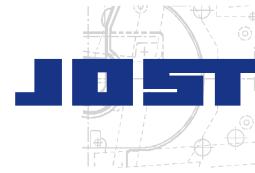
How do you inspect a Rockinger weld in tow eye?

Use the Rockinger tow eye inspection sheet shown below as an inspection guide. The top block information is used to identify the unit and the vehicle it is fitted to. Below that you will find a picture of the 40mm and 50mm tow eye as well as the “new and replace” wear dimensions for both types of eyes. Use the 3rd block as an inspection guide to identify the part inspected and to rate its condition. The comments block is used to note actions to be taken for repair, damage noted or lubrication issues.

INSPECTION SHEET – 40mm and 50mm weld in towing eye.				
Company				
Date				
Trailer registration				
Fleet No.				
Hubodometer reading				
Truck registration				
				
 <p>40mm weld in: RO57229</p>			 <p>50mm weld in: RO57005</p>	
<p>40mm Towing eye height and Front thickness New = 30mm Height and 24mm Front Replace = 28mm Height and 22mm Front Towing eye bush inner diameter New = 40mm Replace = 41.5mm</p>			<p>50mm Towing eye height and Front thickness New = 45mm Height and 25mm Front Replace = 41.5mm Height and 23.5mm Front Towing eye bush inner diameter New = 50mm Replace = 52.5mm</p>	
<p>40mm Weld in towing eye D-Value Weld in Eye = 168 kN</p>			<p>50mm Weld in towing eye D-Value Weld in Eye = 314 kN</p>	
DESCRIPTION	CONDITION			
	Good	Fair	Poor	Size
Main Shaft straightness, visible cracks. Other damage.				
Condition of the eye. Marks, deformation and visible cracks.				
Bush inner diameter. (new = Ø 40mm, replace = Ø 41.5mm) (new = Ø 50mm, replace = Ø 52.5mm)				
Bush fit, any movement visible replace the towing eye.				
Eye flange height. 40mm(new = 30mm, replace = 28mm) 50mm(new = 45mm, replace = 41.5mm)				
Check for cracks on the welding.				
INSPECTED BY				
Name	Signature		Date	
Note: If any welding is present on the bush replace the towing eye immediately.				
Comments:				



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1. Main shaft straightness, visible cracks other damage

Check if the eye is bent in any direction; use a straight edge, in this case the GN-IM-127 skid plate gauge to assist by lining up the centre of the eye with the centre of the block. If the eye is bent in any way, mark it poor, scrap and replace.



2. Condition of the eye, marks deformation and visible cracks

Check if the eye is damaged from the top and from the side. Look for cuts, impact indentations ect. The eye shown here is in a poor condition due to the welding on the eye and the flattened edges showing high impact damage.



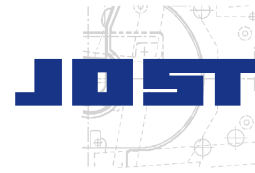
3. Bush Inner diameter

Use the **Jost GN-IM-150** tow eye gauge to see if the bush inside diameter is within specification. 40mm eyes are allowed to wear to a maximum of 41.5mm and 50mm eyes to a maximum of 52,5mm. The gauge calipers have to be inside the outer edge of the gauge for a good result. In this case both calipers line up with the outer edge resulting in a poor rating. This eye will have to be replaced.





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4. Bush fit - any movement visible replace the towing eye

Use a solid steel bar, insert into the eye and apply a side force to the eye and bush as shown here, if the bush moves inside the eye, mark poor, scrap and replace the towing eye. This bush did not move due to the fact that it has been welded. The eye still needs to be replaced as welding on the eye is not allowed.



5. Eye flange height, new 45mm replace 41,5mm

Measure the side thickness of the eye.

If measured less than 41,5mm.

Mark poor, scrap and replace towing eye



6. Check for cracks in the welding

Look for rust lines in the welding

Check for cracks on the tow eye welding.

Also check for cracks on the A Frame



When replacing a towing eye there are choices that can affect your vehicles downtime, profitability and efficiency.

Weld on towing eyes.

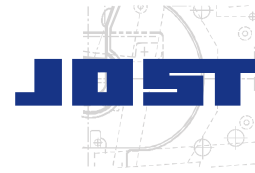
These are the least expensive to purchase but they require the longest downtime to replace.

On the positive side they do have very high D-Values which make them suitable for most applications.





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Replaceable towing eyes.

Slightly more expensive but takes only minutes to replace. Be careful though, these eyes are frequently incorrectly fitted with little to no access to the nut. The torque required on the nut is 1200Nm. If insufficient access is allowed to the nut, the eye will not be able to be replaced to the correct torque setting.

If the nut should work loose the risk of separation of the hitched vehicles will be increased.

The bolt on towing eye, especially the 50mm has a very low D-Value rating which only makes it suitable for the lowest range of 50mm applications.



Flange type bolt on towing eyes

These are by far the most expensive type of eye in the range, but they take mere minutes to replace or inspect with no downtime and they have a very high D-Value, which makes them suitable for most applications.



For more information please contact Christo de Clerk at Jost on 082 774 9818 or christo@jost.co.za