A2B EURO PARTS

KNOTT

Installation & Operating Instructions

Operation of Knott Coupling Head & Eyes

Precautions

The correct assembly and adjustment of all equipment is critical to the safe operation of the trailer. Therefore the procedures must only be carried out by competent persons. If you have any doubts about your ability to complete the procedure, we recommend this task is performed by your local service centre. You are advised to wear suitable protective equipment such as safety glasses, gloves and face mask. In addition be aware of hazards associated with handling workshop materials such as chemicals, oils and greases which may be flammable and can prove to be irritants.

It is recommended that the opportunity is taken to inspect associated items for wear or damage and replace if necessary; they can be obtained through your local stockist.

All procedures should be carried out with the trailer on level ground with either the parking brake applied or wheel chocks front and rear. In addition, the drawbar should be supported with the trailer horizontal. Where required consult your Trailer Handbook for the recommended jacking points and positions for stands.

The components are used in a wide variety of trailers and reference to the trailer manufacturer's manual must always be made for procedures and data relevant to the particular unit.

The text includes guidance to assist in the safe execution of the procedures:

WARNING!	Risk of Injury.
CAUTION!	Risk of damage to equipment.
NOTE.	Safety requirement.

We have used "Plain English" descriptions throughout this text. If you are unsure of the meaning, if the procedure is unclear or you require any further information, please use the following contact details:-

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Burton Upon Trent, Staffs, DE14 2WF
☎ +44 (0) 1283 531541
✉ sales@knottuk.com

Spelter Site, Caerau, Maesteg,
Mid Glamorgan, CF34 0AQ
☎ +44 (0) 1656 739111
✉ maestegsales@knottuk.com

IMPORTANT! Record the key serial number below and store it in a safe place. This will be required to order spare or replacement keys.

KF097E

www.knottuk.com

PRIOR TO CARRYING OUT THESE TASKS PLEASE REFER TO PRECAUTIONS

Knott Towing Eyes

UK 40mm Towing Eye

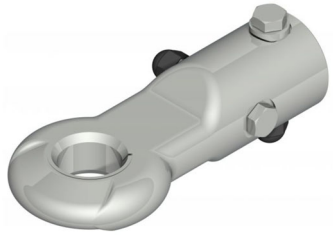
Installation
Dia. 45, 50 & 60mm Tube
S = 350kg
M12 & M14 Gr.10.9 Bolts
Suitable Locking Nut
M12 - 100Nm
M14 - 125Nm

UK 50mm Towing Eye

Installation
Dia. 45, 50 & 60mm Tube
S = 350kg
M12 & M14 Gr.10.9 Bolts
Suitable Locking Nut
M12 - 100Nm
M14 - 125Nm

DIN 40mm Towing Eye

Installation
Dia. 45, 50 & 60mm Tube
S = 350kg
M12 & M14 Gr.10.9 Bolts
Suitable Locking Nut
M12 - Horiz.90Nm Vert.75Nm
2700kg M12 - 110Nm
M14 - 120Nm



NATO 76mm Towing Eye

Installation
Dia. 45, 50 & 60mm Tube
S = 350kg
M12 & M14 Gr.10.9 Bolts
Suitable Locking Nut
45mm Tube - Horiz.90Nm Vert.75Nm
2700kg M12 - 110Nm
M14 - 120Nm

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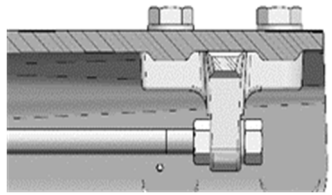
02 8960 7770
info@a2beuroparts.com.au

Replacing Coupling Heads / Towing Eyes

Prior to proceeding, it is essential to confirm the condition of the new damper. Carry out a damper reaction test. Pull the handbrake lever on as far as possible. Push the ball coupling as far back into the overrunning hitch as it will go. This requires force to compress and should extend smoothly when released. If the drawtube will not compress, or compresses with just spring force and no damping resistance, or the extension is very rapid the damper must be replaced Carefully follow the instructions on Knott form KF088. If completely satisfied that the damper is in good condition proceed as follows:

1. Follow the procedure on KF088 up to and including point (4).
2. If you have been able to remove the coupling head / eye as instructed go straight to point (5) below, otherwise continue.
3. The damper will now be retained by the safety pin. It is now necessary to remove the damper and place to one side. **WARNING!** Proceed with extreme caution. The most efficient method is to remove the rear damper mounting bracket but, depending on the coupling, there may still be tension in the damper.
4. Place a lever against the rear damper in such a manner that once the mounting bracket bolts are removed the tension can be released slowly. Take the tension and remove the mounting bracket bolts, release the tension in the damper.
5. Inspect the shaft for damage, dress burrs and clean any dirt as the new coupling will be a close fit on the shaft.
6. If a new bellows is to be fitted cut the tie-wrap and discard of the old one. Fit the new and secure with a tie-wrap.
7. Trial fit the new coupling, it should slide into place without any undue force. **DO NOT** hammer the coupling into place, this can damage the coupling itself or the over-run mechanism. If it proves to be tight, remove it and thoroughly clean the shaft, inspecting for burrs.
8. Fit the bolts, washers and secure with NEW locking nuts. **DO NOT** re-use the old nuts as this is safety critical. Fit the plastic nut covers. Where the damper has been removed ensure that the coupling head rear bolt passes through the hole in the damper body. **NOTE.** If you have any doubts about the condition of the damper a new one must be fitted.
9. If the damper has been released the rear mounting bracket will need to be re-fitted. This means that the damper needs to be compressed such that the bolts can be located.

   WARNING! Proceed with extreme caution. Compress the damper with a lever and secure the mounting bracket bolts, as shown below.



10. Re-fit the bellows with the coupling / eye horizontal taking care not to tear or damage the material.

Where the replacement coupling / eye is a different part to the original:

1. Always ensure that the corresponding length bolts are used.
2. Always ensure that the compatible bellows is used.
3. Always ensure that the hole sizes in the coupling and draw-bar tube match and that the correct sized bolts are employed.

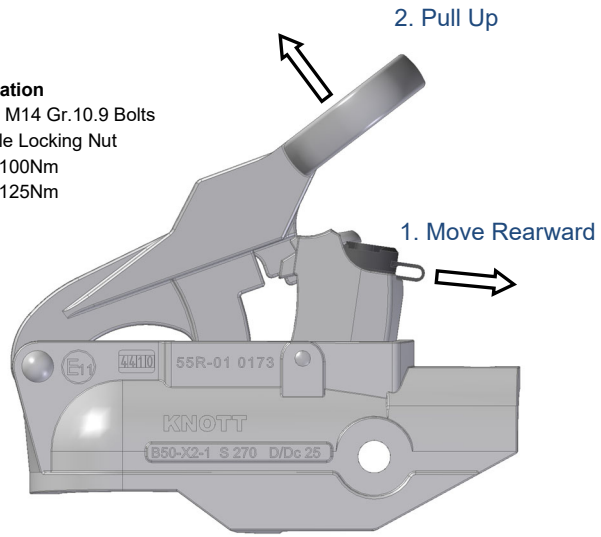
Adjustment

It is not necessary to make any adjustments. Rotate the head / eye to its limits to ensure that the natural position of the bellows is with the head horizontal.

IF IN DOUBT ASK - ONLY USE KNOTT ORIGINAL REPLACEMENT PARTS!

Knott-Avonride Cast Coupling Head

1. Ensure the key (if fitted) is in the unlock position.
2. Move the thumb catch (arrow 1) rearward and hold in place.
3. Pull the handle upward (arrow 2).
4. Lower or raise the coupling head.
5. Release the handle and thumb catch.

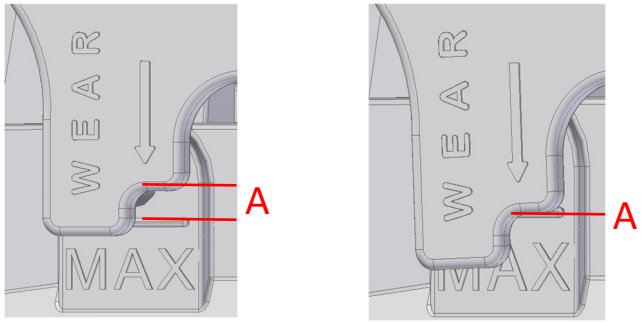


Installation
M12 & M14 Gr.10.9 Bolts
Suitable Locking Nut
M12 - 100Nm
M14 - 125Nm

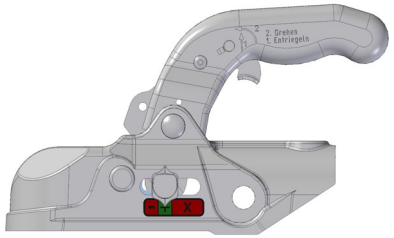
WARNING! If the coupling is not closed or faulty the trailer must not be driven. Always ensure the coupling head and towball are engaged before driving.

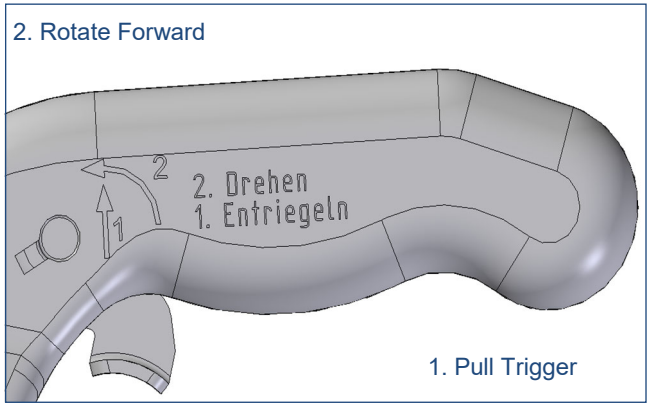
Knott-Avonride Cast Coupling Head Wear Indicator

1. When the coupling head is fitted to the towball note dimension “A” as indicated in the view below. The position should always be higher than when fitted to the towball.
2. Re-check dimension “A” at regular intervals. If the dimension is identical when not fitted and fitted to the towball then either the ball or head is worn or a combination of both. Action must be taken to replace either ball and/or head.



Knott Type 3 Handle





WARNING! If the coupling is not closed or faulty the trailer must not be driven. Always ensure the coupling head and towball are engaged before driving.

Marking	Coupling Position
X	Coupling is open
+	Coupling is closed
-	Faulty condition

Installation
M12 & M14 Gr.10.9 Bolts
Suitable Locking Nut
M12 Pressed Steel - 57Nm - Dia.45 Tube
M12 Pressed Steel - 75Nm - Dia.50 Tube
M12 Cast - 110Nm
M14 Cast - 120Nm

Knott Type 2 Handle

WARNING! If the coupling is not closed or faulty the trailer must not be driven. Always ensure the coupling head and towball are engaged before driving.

Marking	Coupling Position
X	Coupling is open
+	Coupling is closed
-	Faulty condition

Installation
M12 & M14 Gr.10.9 Bolts
Suitable Locking Nut
M12 Pressed Steel - 57Nm - Dia.45 Tube
M12 Pressed Steel - 75Nm - Dia.50 Tube
M12 Cast - 110Nm
M14 Cast - 120Nm