

**Document ID:**     **AAA-II-H122KTl2**                      **Issue:**   **A**

**Description:**     **Focus Coupling Installation for Nikon TsR2**

**Prepared:**     J.H.                                      **Date**   06.04.18

**Approved:**                                              **Date**

Revision History			
Iss.	Date	Changed By	Changes
A	06.04.18	J.H.	Initial Release

**Please refer to this document during build/test of this Works Order.**

**If you find any omissions or inaccuracies, then please note them on the Comments/Amendments sheet and return the document(s) to the R&D Department, otherwise please pass to your supervisor to sign and return to R&D**

<b>Document ID</b>	<b>AAA-II-H122KT12</b>		
<b>Assembly Number</b>	<b>Part No. H112KT12H122KT12</b>	<b>Issue</b>	<b>A □</b>
	<b>Description: Focus Coupling Installation for Nikon TsR2Focus Coupling Installment for Nikon Ts2R</b>		
<b>Document Type</b>	<b>Installation InstructionInstallation Instruction</b>	<b>Prepared by</b>	<b>A.D.M.J.H.</b>
		<b>Date</b>	<b>25.02.14</b>

## 1. Scope

- 1.1. The purpose of this document is to assist in the mechanical build of the H122KT12 focus coupling for Nikon Ts2R. It is a guide only, to be used in conjunction with training by an experienced operator.
- 1.2. We assume proficiency in the use of tools required for the operations described below. A sound knowledge of screw tightening torques is needed so as not to damage the small fasteners used in aluminium parts.
- 1.3. We also assume the parts to comply with the quality needed to achieve the company objectives. This document is not intended to replace a quality assurance system.

## 2. General

- 2.1. The assembly area, and the parts to be assembled, must be kept clean. Take care when carrying out an operation that may produce dust or swarf that it does not contaminate the work surface, tools or parts.
- 2.2. Always observe safe working practices. Use extraction when soldering.
- 2.3. Take proper precautions against static discharge when handling static-sensitive components or assemblies, as specified in Prior Quality Assurance Procedures Manual - Appendix 2.

## 3. Tools/consumables

- Allen Wrench
- Phillips Screwdriver

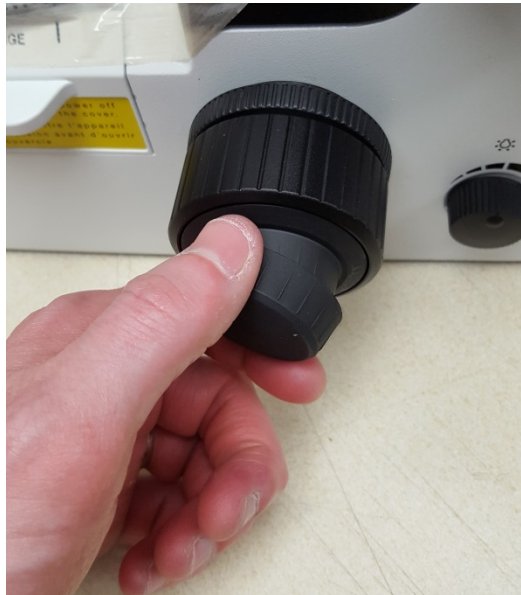
## 4. Preparation

- 4.1. Check that the kit of parts is complete. If there are any shortages, check that they agree with those noted on the kitting list. Inform Stores of any discrepancies.

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## 5. Remove outer cover

- 5.1. Remove the top cover from the fine focus knob to gain access to the screw holes underneath.



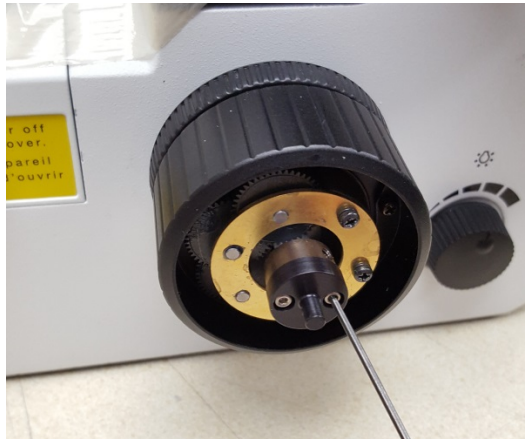
- 5.2. Remove the two screws that hold the inner cover in place using a Phillips screw driver.
- 5.2.1. Note: The screws can be easily stripped if care is not taken.
- 5.2.2. Place the two screws aside for future use.



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## 6. Attach 4mm adapter hub

6.1. Screw 4mm adapter hub to the threaded holes in the fine focus boss.



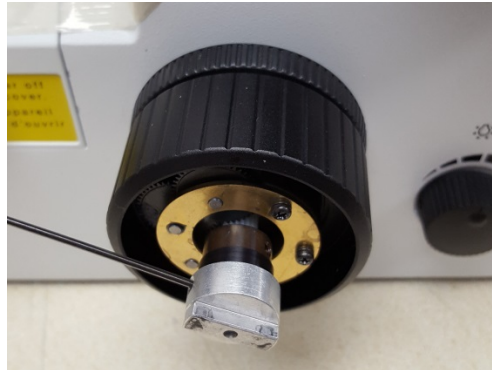
6.2. Fine focus shown without 4mm adapter hub.



## 7. Attach W2018 to coarse knob

7.1. Attach the W2018 to the adapter hub using the set screws so that it is securely in place.

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## 8. Attach the focus sleeve

8.1. Slide the focus sleeve, (H2975) over the coarse knob, as shown below.



## 9. Add Focus Motor Bell Housing

9.1. Attach the focus motor's bell housing by tightening the 3 set screws around the large diameter using the allen wrench provided ensuring that the housing is tightly mounted over the coarse knob.



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## 10. Attach Focus Motor

- 10.1. Slide the focus motor with parts W2018 and W249 already attached into the focus motor's bell housing. It is important to line up the ridge in the W2018 (the one on the microscope) with the slot in the W249 so that they mate together and form a solid connection. If the W2018 and W249 are not attached remove the ridged rubber friction pad from the motor shaft and replace it with the W2018 and W249 shown below.



## 11. Post Assembly

- 11.1. Ensure that the fine focus rotates proportionally to the rotation of the digipot on the joystick

## 12. Testing

- 12.1. Testing is via customer software or Prior controller demo program

## 13. References

- W2018 Solid Model
- W249 Solid Model
- W347 Solid Model

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