

GUIDE ROD INSTALLATION

The Guide Rod is attached to the Mini P&T Camera to steer the camera in the pipeline during inspections involving wyes and to help navigate around blockages. Each camera includes an Accessory Kit, P/N LL901, to assist with the Guide Rod installation process.

- 1 Using an Allen Wrench, remove the screw and cover from the camera head as shown.
- 2 Install the Guide Rod Housing as shown.
- 3 Re-install the screw (used in Step #1) using an Allen Wrench.
- 4 Select the desired rod length from the Accessory Kit.
- 5 Prior to assembly, apply Blue Loctite to the Rod threads. Install by screwing the Rod and Ball into the housing as shown. Secure with a Cresent Wrench utilizing flats on the Rod.



NOTE: For Screen Operations, refer to the K2 User Manual, P/N MD910, Mini Pan & Tilt Functions section.

**ATTACHING THE CAMERA TO THE LATERAL
PUSH CABLE**

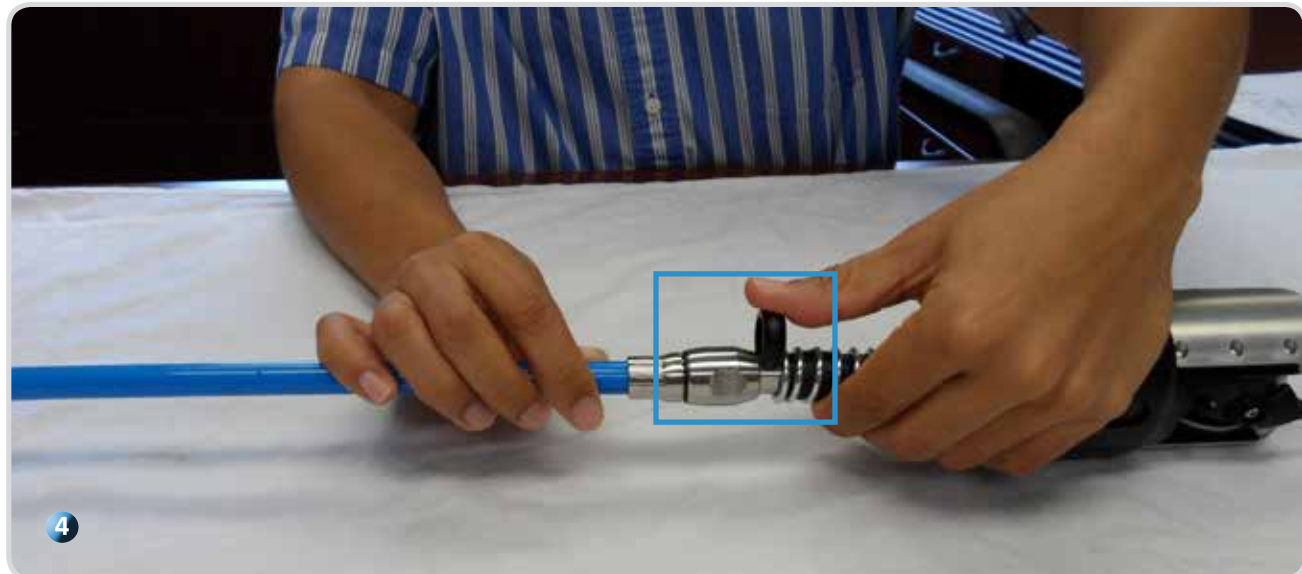
The following procedure is for use with the LAMP II only. To attach the camera to the push cable:

NOTE: Prior to re-assembly, it is recommended to apply Deoxit (CUES P/N CS569) to the pins / connections. Deoxit is included in the camera kit.

- 1 Align the visual markers and guide pins and mate the cable ends together.
- 2 Thread the cable nut completely, ensuring the o-ring is covered and no physical play can be felt between the ends. Ensure the notches on the push cable and spring assembly end are aligned.
- 3 Tighten with a wrench (not shown).
- 4 Snap the C-Clip over the flats between the nut and spring where shown.

NOTE: The C-Clip must be removed in order to disassemble the spring adapter from the push cable.

NOTE: For Screen Operations, refer to the K2 User Manual, P/N MD910, Mini Pan & Tilt Functions section.



INSTALLING OR REPLACING THE SHROUD

The following procedure is for use with the LAMP II and MPlus+ only. To install or replace the shroud, perform the following:

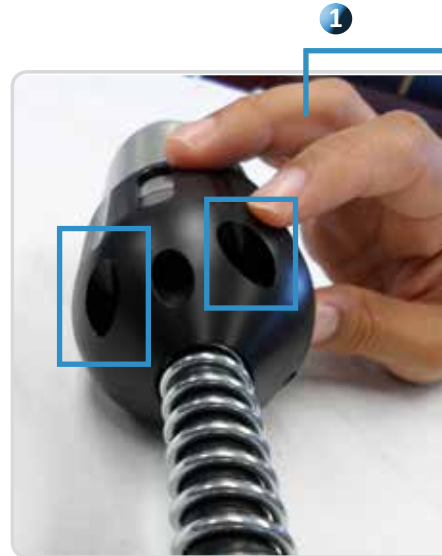
- 1 Using a Phillips screwdriver, remove the (2) screws from the shroud, P/N LL082 or LL082-1, as shown.

NOTE: There are (2) different shrouds available. Most inspections will require shroud P/N LL082. For pipes with severe corrosion and/or smaller pipe diameters, use shroud P/N LL082-1. Follow the same steps for either shroud.

- 2 Place the camera in the desired shroud and turn until the one of the screw heads is seated/locked in the slot that's located on the inside of the shroud.

- 3 Using a Phillips screwdriver, re-install the (2) screws from Step #1 and secure until tight.

NOTE: For Screen Operations, refer to the K2 User Manual, P/N MD910, Mini Pan & Tilt Functions section.



SHROUDS: P/N's LL082-1 and LL082



INSTALLING OR REPLACING THE SPRING

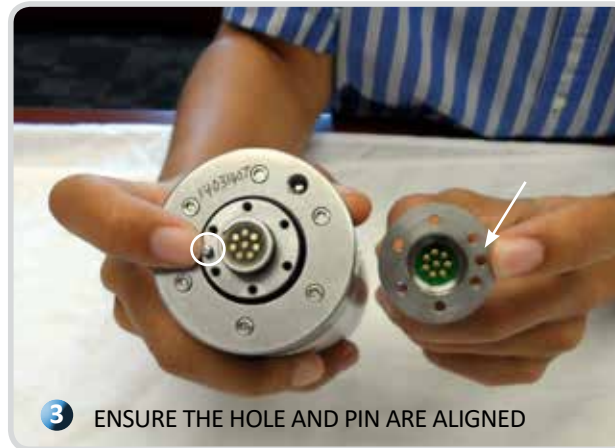
The following procedure is for use with the LAMP II and MPlus+ only. Ensure that the Shroud is removed per the previous instructions prior to performing this procedure. To install/replace the spring, perform the following:

- 1 Using an Allen Wrench, remove the (6) screws located around the rear of the camera as shown.
- 2 Remove the spring.
- 3 Before re-installing the spring, ensure that the hole and the pin are aligned as shown.

NOTE: Prior to re-assembly, apply Blue Loctite to the screw threads.

NOTE: Prior to re-assembly, it is recommended to apply Deoxit (CUES P/N CS569) to the pins / connections. Deoxit is included in the camera kit.

- 4 Using an Allen Wrench, re-install the (6) screws from Step #1 until secure.



3 ENSURE THE HOLE AND PIN ARE ALIGNED



NOTE: For Screen Operations, refer to the K2 User Manual, P/N MD910, Mini Pan & Tilt Functions section.

PRESSURIZING THE CAMERA

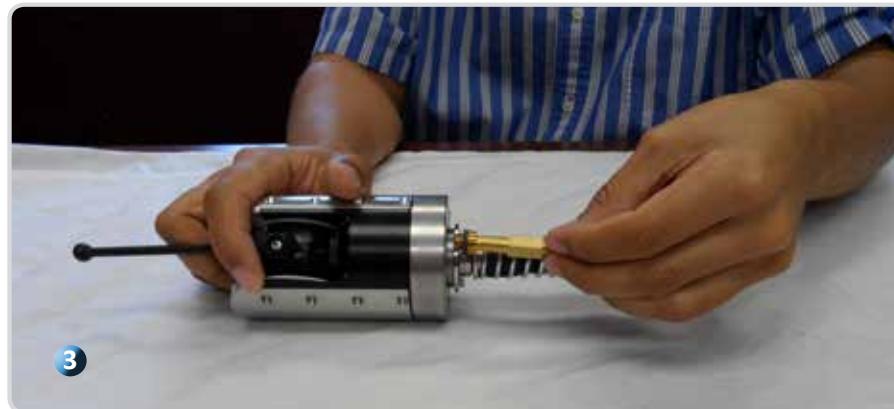
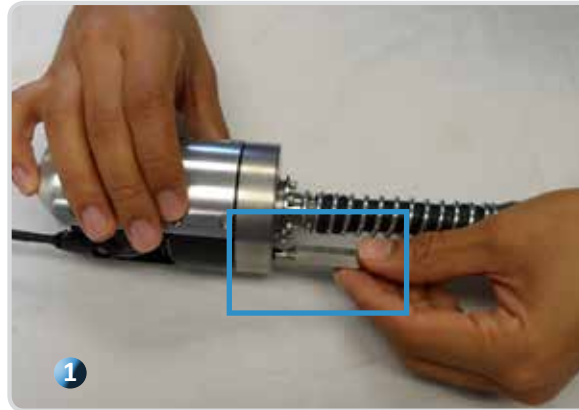
The following procedure is for use with the LAMP II and MPlus+ only at this time. Ensure that the Shroud is removed per the previous instructions prior to performing this procedure. Perform the following steps to pressurize the camera:

- 1 With the Shroud removed, remove the valve cover using the valve remover tool.
- 2 NOTE: Only remove the cover when pressurizing the camera! Do not remove the valve located behind the valve cover!
- 3 Install the valve adapter until secure.
- 4 Pressurize with dry nitrogen using a standard (Schrader) fill tool.

NOTE:

Re-pressurization should be done on an as-needed basis. The charge station is typically set to ~7-10 psi (relative). The camera will settle to ~7psi and CUES recommends re-pressurization at 1psi (relative).

NOTE: For Screen Operations, refer to the K2 User Manual, P/N MD910, Mini Pan & Tilt Functions section.



Attach standard (Schrader) fill tool here.