

CPi Products

**Manufactured by
Cavallero Plastics**



Universal Roller Skid Product User Manual

Distributed by:



Universal Roller Skid: (URS1)

Thanks for purchasing a Universal Roller Skid (URS) product, it was created to increase the effectiveness and lifespan of your portable video inspection system. Most camera heads will fit into the supplied extension tube. If your camera head is smaller than 1.5" we have adapters available for most smaller diameter cameras if it is larger than 1.5" you can try the following option. If possible, remove the camera head from the push cable or spring and slide the tube over the push cable or spring before mounting the camera head to the URS.

Mounting the Camera Head:

Slide the camera head to the front of the URS so the LED ring rests against the camera stop guides. Secure the camera head to the front of the URS using the front mounting thumb screws. Do not use over tighten with a wrench or pliers, finger tight is enough. Use the rear thumb screws to secure the spring section of the camera to the URS. If the spring section is loosely wound, use tape or a plastic or steel ring to give the thumb screws a solid base to rest against.

Using the Safety / Secondary Retrieval Harness:

Use of the retrieval harness is highly recommended. It is designed to collapse the URS to aid in negotiating pipelines and for emergency removal. The preinstalled harness is attached each arm of the URS and connects to a center pull ring. To use the retrieval harness, attach a nylon rope to the center of the ring. By pulling the rope the URS will collapse to a smaller diameter when under load.

Handy Tips for Using the Safety / Secondary Retrieval Harness:

To collapse the URS1, place a finger or thumb over each center pivot bolt and squeeze towards the main body. You can lock the URS1 to different diameters simply by tightening the 3 center pivot bolts Remember when done to loosen them until they move freely.

The URS1 is assembled with ¼" lock nuts. It can be disassembled for cleaning or adding accessories like the 3" wheel kit which improves its stability in larger diameter pipes.

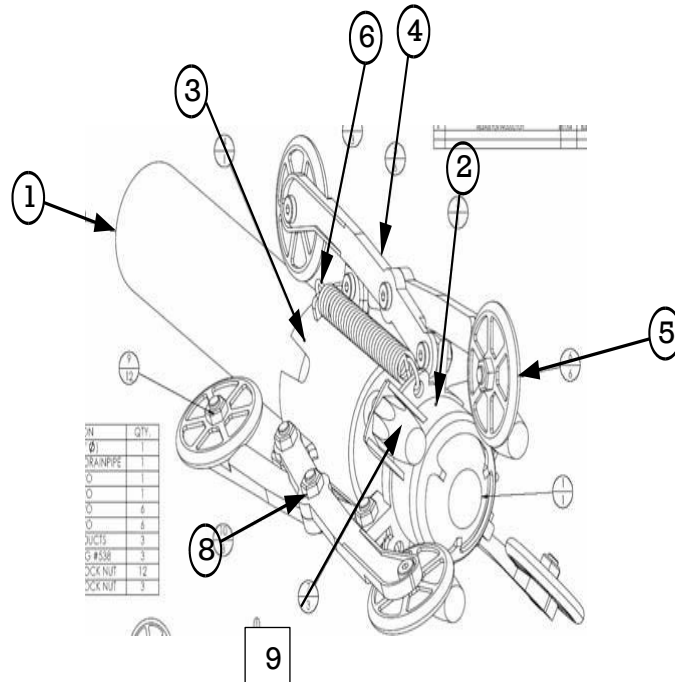
Whenever you loosen or remove the wheel bolts and nuts, tighten them until the wheels barely turn then loosen them until they roll freely.

Auxiliary Flashlight Mounting:

To mount the optional Pelican Scuba lights to the URS1, point the flashlights forward and align with the flashlight mounts located on 3 points along the nose of the URS. Slid the light backwards until the steps on the flashlight seat against the steps on the URS. Pass a zip tie through the clip of the flashlight and under the flashlight mount. Connect the zip tie and tighten. Test by pushing the flashlight front to back, tighten if loose.

URS 1 Drawing

1. Extension Tube
2. Base Housing
3. Slide Housing
4. Arm
5. 2" Wheel (3" Wheel optional)
6. Extension Spring
7. 8 1/4-20 Bolt with Lock Nut 5a
8. ¼ Lock nut
9. Optional lights



Endzo Adapter



Allows use of camera heads larger than 1.930" (49mm) Diameter.

Limited to camera spring diameter of 1.900" (48mm) and Up to 1.580" (40mm)

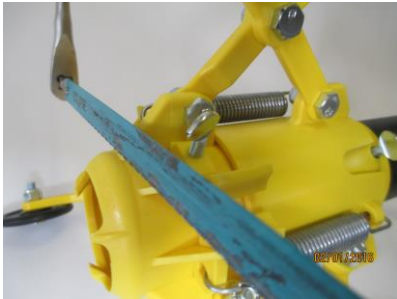
Step 1: Altering your Roller skid to accept your camera.

Measure your camera spring to determine the extent of the required adjustment.



Remove 3 retaining supports as shown.

For 1.580" to 1.700" (43mm) Remove retaining supports & Remove black Tail Pipe



1.700" to 1.900" (48mm) Saw end of Roller skid off & Remove Tail Pipe



Step 2 Loading the camera. Slide Endzo on front of skid. Lead the camera tail thru the front of the skid.

Step 3 tightening camera. Pull camera from the back of the skid so the Camera head is tight against the Endzo.

Mini Roller Skid (URS4):



The Mini Roller Skid is a fast attaching one-piece roller skid to help negotiate bends and corners in 4 to 6" pipelines. The Mini Roller Skid fits camera heads with diameters up to 1.5" (38mm). It will negotiate cast iron, plastic and cement 4" straight pipes and 90 degree turns.

Before inserting the camera, be sure all set screws are clear of the camera path.

Insert the camera until the head contacts the front of the skid. Look at the front of the camera and check to see if any of the tabs block the camera view. If so, clip off the part of the tab obstructing the view. Turn the set screws in until they just make light contact with the camera (do not tighten them) and check to be sure it is centered. Tighten the back-set screws snug into the camera spring. When finished, the camera should be held in position by the back-set screws. Once finished, remove the camera and clean thoroughly. The Mini Roller Skid is designed to easily disassemble if needed.

It can also work without the wheels if necessary, to fit tight pipes. Using without the wheels does wear the plastic body so you want to use the wheels whenever possible. The wheels should spin easily when installed.

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Adapter Sleeves

Universal Roller Skid (URS1):
URS1-AS130 = 1.3" (33mm) adapter
URS1-AS170 = 1.7" (43mm) adapter
Mini and TrapMaster (URS4 & URS-TM):
URS4- AS100 = 1.0" (25mm) adapter
URS4-AS130 = 1.3" (33mm) adapter



These sleeves will adapt most cameras to the URS1, Trapmaster and Mini Roller Skid. They are designed to center small cameras and reduce camera wear.

To install, slide the adapter sleeve into the Roller Skid before you insert the camera. Make sure you align the screw holes, so the nylon tabs grip the camera head and keep it centered inside the skid therefore eliminating screw contact with the camera head. Insert the camera into the roller skid and adapter sleeve and lightly tighten each thumb screw evenly.

Trapmaster Roller Skid (URS-TM):



Head

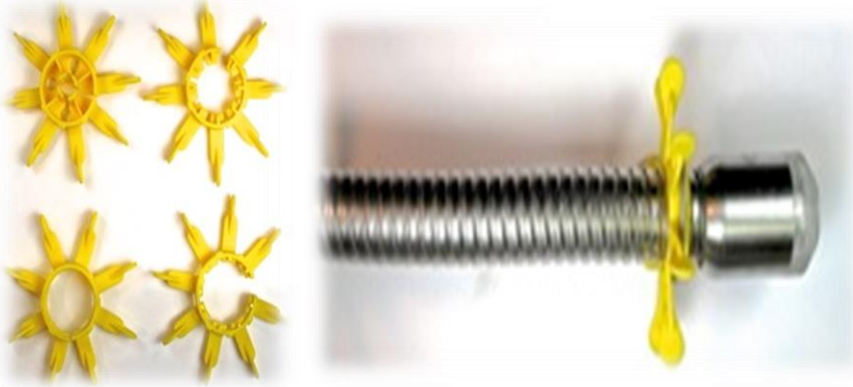


Tail

The Trapmaster is designed as a two-piece skid to help you negotiate bends and traps in 4" to 6" pipelines. The Head section is designed to mount at the camera head. The Tail section can be mounted at the optimal spot along the camera or spring. (approximately 1-1.5") behind the back of the Head Trapmaster section).

Installation Instructions: The Velcro strapped supplied with the Trapmaster allow the Trapmaster to be securely mounted to any camera from 1" to 1.5" in diameter. First apply the Velcro to the rear section of the camera or spring until the outside diameter of the Velcro fits snugly into the rear section of the skid. Allow 1 to 1.5" clearance between front and back Trapmaster components. Adjust as needed. Remove any extra Velcro by cutting the excess. Then tighten the four screws to lock the rear section onto your camera or spring. Next, apply the Velcro strap to the front section of the camera head and repeat the mounting steps.

Pipespyder (URS1-PS-100, 130 & 170,)



The PipeSpyder will center your camera through 4" pipes and keep your camera level as you push or extract your camera and cables.

Camera Mounting Instructions: Some cameras will allow you to open the PipeSpyder over the front and slide into place. For level sliding we recommend at least three PipeSpyder. For cameras that have a larger head than spring

we recommend you stretch the PipeSpyder over the camera cable and onto the back of the camera.

Optional: Place a Pipespyder over the desired area of the camera, use a zip tie to lock it in place.

Cable Mounting Instructions: Cable PipeSpyder (part# URS-PSCBL1S) can be clipped on push cables diameters from 3/8" to 5/8" (9.5mm to 15.5mm) To apply spread the PipeSpyder open, slip over the cable and release when in the desired location. **Optional:** Take the supplied metal ring and align the seam with the seam on the plastic Pipespyder. Push the ring until the Pipespyder is seated.

The Pole Cat (URS-PC):



The Pole Cat will turn your push camera into a pole camera. The body thread size can be combined with most extension poles, roller handles or brooms. The Pole Cat can be adjusted 260 degrees. Mount the Pole Cat to your choice of pole. The Pole can be adjusted after the camera is mounted. Open the Velcro straps and lay your camera along the serrations on the mounting area. Let the head of the camera extend past the serrations.

Hold the camera tight to the Pole Cat as you pull the Velcro tight. Once the Velcro locks to itself the camera will stay in place.

DrainTrain (URS-DT3YW)- Fits cameras up to 1.375" or 35mm dia.



3 Inch Pipe inspection Made Easier!

The DrainTrain Roller Skid is a new addition to the Universal Roller Skid line.

It navigates 3" 90-degree, 45 degree, and of course straight pipe.

The Drain Train keeps your camera on center of the pipe, glides over seams, protects your camera from grinding. The wheels add lubricity, allowing your camera to travel farther down the pipe. As your camera rolls down the pipe, your view will be much clearer than a drag skid.

Step 1. Loosen set screws and remove spacers.

Step 2. Find the spacer that fits best between your camera and the

inside diameter of the Drain Train. You can use both spacers for cameras less than 1 inch.

Step 3. Slide one Drain Train adapter to the tail of your camera spring

Step 4. Slide the next adapter to the center of your camera.

Step 5. Slide the last adapter over the front of your camera.

Step 6. Snug each set screw until camera or spring are tight.

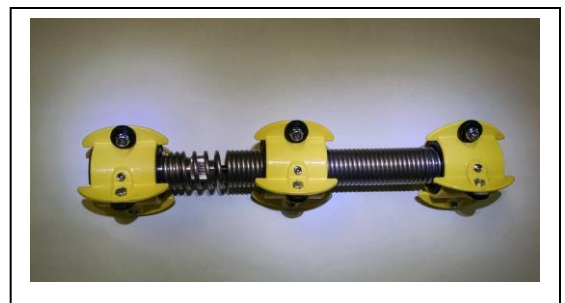
DO NOT OVER TIGHTEN!!!

Each camera has different spring tensions and lengths, you may have to adjust the Drain Train locations that work best for your model.

A New Way to run your push camera,

Our Roller skids offer a new way to lead your camera into and thru pipelines. This method saves your cable from crimping.

Keep constant pressure when going around corners, Do not automatically Ram. Lead your camera in about a foot at a time. Push in with one hand then hold with the other, grip a foot back and repeat until you've gone past the obstacle. Some situations may require a more pervasive head start. ... or, old fashioned "Ramming". But the Drain Train will protect your camera from pi



Limited Lifetime Warranty: Cavallero Plastics, warrants that the parts and equipment manufactured by and delivered hereunder will be free of defects in material and workmanship for its useful life. Should any failure occur, the purchaser will notify the company in writing promptly thereof the company will correct the nonconformity with replacement parts. All replacement parts are F.O.B. the point of manufacture and no freight reimbursement will be provided.

The company is not liable for any repairs, replacement, replacement parts or adjustments or any labor costs of related equipment. The company makes no performance warranty other than what is specially stated in the literature and instructions. The effects of normal wear and tear are specifically excluded from the warranty.

Any abuse, use in applications the product was not designed for, used with improper methods or use in high temperature or high-pressure applications voids the warranty. The customer may be required to provide parts at their expense for evaluation.

The company makes no other warranty whatsoever expressed or implied except of title, and all implied warranties including any warranty of merchantability and fitness for a particular purpose are hereby disclaimed.

Correction by the company of non-conformities whether patent or latent shall constitute fulfillment of all liabilities of the company for nonconformities whether based on contract, warranty, negligence, indemnity, strict liability or otherwise with respect to or arising from equipment and parts.

Dear Values Customer,

Thanks for purchasing a Universal Roller Skid (URS) product, it was created to increase the effectiveness and lifespan of your portable push camera inspection system. All our products have been developed through feedback from users like yourself.

CPI Products is a fully integrated company delivering market changing industrial products. CPI's parent company Cavallero Plastics, Inc. is a 50+ year old American custom injection molding and mold builder located in Pittsfield, MA. We partner with leading industry experts, visionaries and entrepreneurs to assist bringing new ideas and products to market. All CPI Products are made in USA.

Made in America!



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