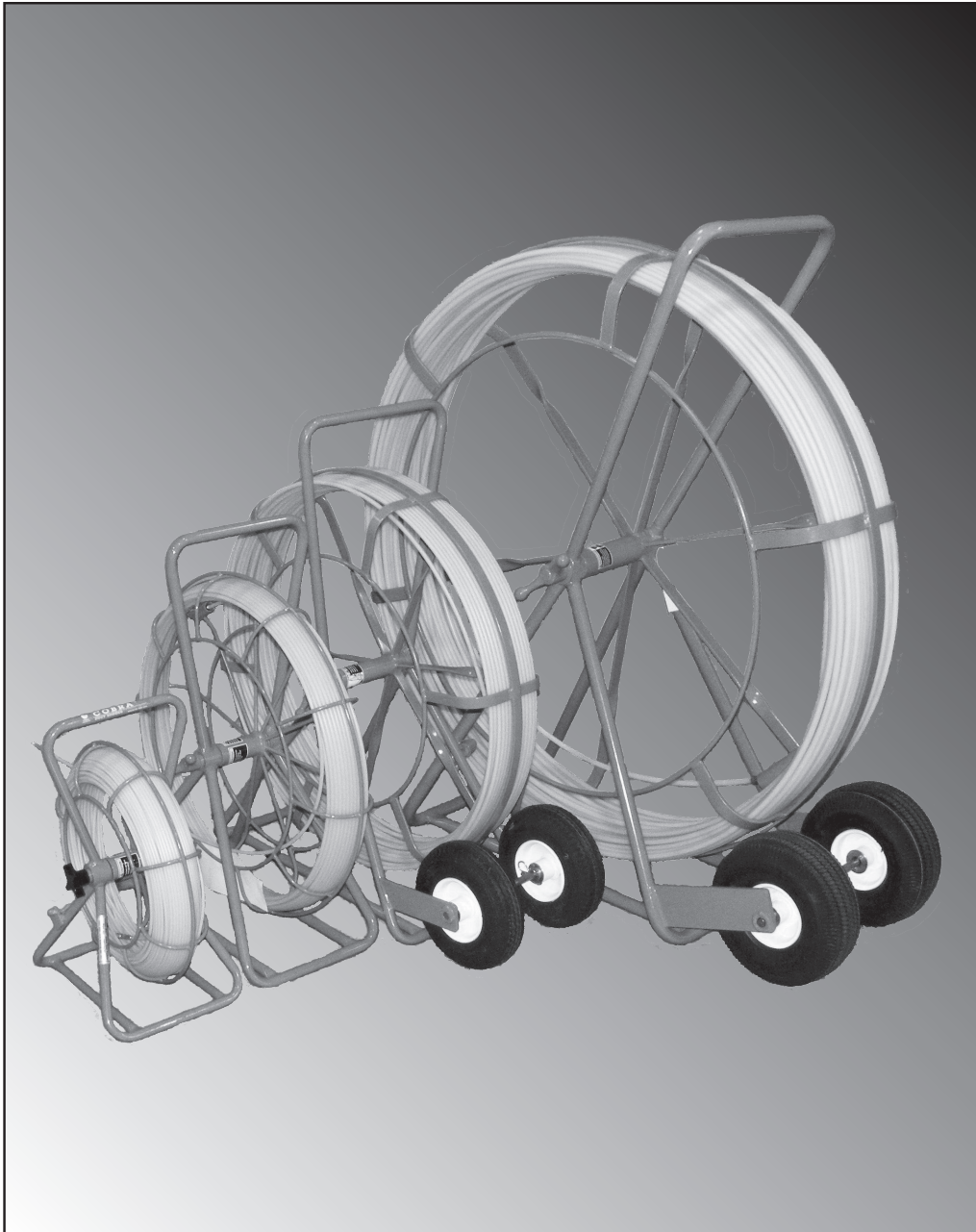


Duct Rodder



CONDUX

ISO 9001:2008
CERTIFIED

Table of Contents

1.	Safety Notice	3
2.	Operator's Instructions	4
3.	Duct Rod Sizes	5
4.	Duct Rodder Assembly	6
5.	Duct Rod Accessories	7

Important Safety Notice

Read and understand these usage and safety instructions in this manual before using a Condux Duct Rodder. Practice the safety information on this page and note the specific safety cautions called out in this manual. Failure to follow these instructions could result in serious personal injury or death. Save this user's guide for future reference.



Favor de leer y comprender todas las instrucciones de operación y seguridad antes de usar la máquina. Si Ud. no comprende las instrucciones favor de consultarle a su jefe.


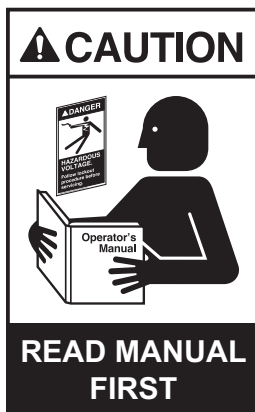
Safe Operating Practices

All tools, materials and equipment manufactured and supplied by Condux International are designed to be used only by trained craft personnel. Information in this manual is essential for the safe use of Condux duct rodders.

Operating instructions must be read and understood by all personnel prior to using any tools, materials, or equipment from Condux International.


Condux will not be held liable for any injury or damage to either persons or property resulting from the misuse of Condux equipment.

This manual should be available to all operating personnel.



DANGER

Contact with electrical lines may result in death or injury. The user should be properly trained in correct procedures for work on or around electric lines.



CONDEX

If you have questions on:
SAFETY • OPERATIONS • APPLICATIONS
CALL 1-800-533-2077 or 1-507-387-6576

Operator's Instructions

2.

1. Place the duct rodder outside of the manhole. For the best stability, lay the rodder on its side.
2. Loosen the hand brake on the center of the cage (See Figure 1).



Figure 1

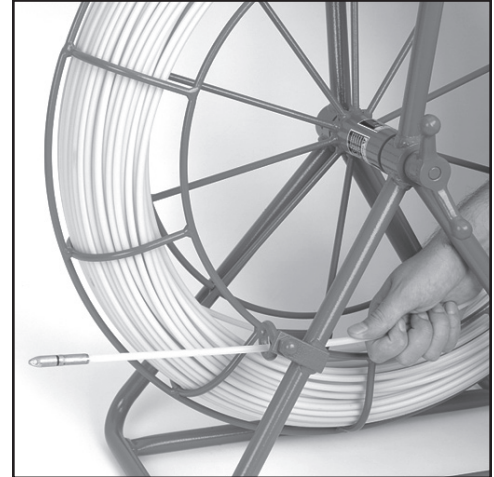


Figure 2

3. Pull the tapered head and male end fitting out of the cage and feed them through the eye on the duct rodder frame (See Figure 2).
4. Remove the tapered head and replace with one of the optional end fittings, if required (see "Accessories", page 7).
5. Slowly feed the duct rod into the manhole and into the conduit.
6. Push the duct rod through the conduit by hand. Some force may be required for the duct rod to negotiate bends. Use no mechanical means to push the duct rod.

Note: Use only the recommended duct rods for the size conduit you are working in (see chart of rod sizes, page 5). A larger rod will not negotiate the bends, and a smaller rod will buckle.

7. If you run out of duct rod before reaching the end of the conduit, attach a second length of duct rod to the first using a swivel coupling.
8. When the duct rod reaches the other end of the conduit, remove any optional accessories and install the tapered head and a shackle fitting (if required). Attach the rope or pull line to the tapered head and shackle fitting (See Figure 3).

Note: To stop the cage from turning or slow the speed of the cage while feeding the duct rod, tighten the hand brake on the center of the cage.

9. From the entrance end of the conduit, pull the duct rod out of the conduit and feed it back into the cage. This will often require two or more people, one to properly feed the rod back into the cage and one or more to pull the rod out of the conduit. Use no mechanical means to pull the duct rod out of the conduit (See Figure 4).

!CAUTION: DO NOT spin the cage to get the rod back into it. You must push the rod through the eye and into the cage.



10. Remove the rope or pull line from the end of the duct rod, remove the shackle fitting from the tapered head, and feed the end of the duct rod through the eye and back into the cage.

!CAUTION: Always store the duct rod with the rod fully inside the cage. Do not store the duct rod with the end fitting protruding through the eye.



Figure 3



Figure 4

Conduit Sizes*	Recommended Duct Rod Size
1/2"	3/16"
3/4"	3/16"
1"	3/16", 1/4"
1 1/4"	3/16", 1/4"
1 1/2"	1/4", 5/16"
2"	1/4", 5/16"
2 1/2"	1/4", 5/16"
3"	5/16", 7/16", 9/16"
3 1/2"	5/16", 7/16", 9/16"
4"	5/16", 7/16", 9/16"
5"	7/16", 9/16"
6"	7/16", 9/16"
8"	9/16"

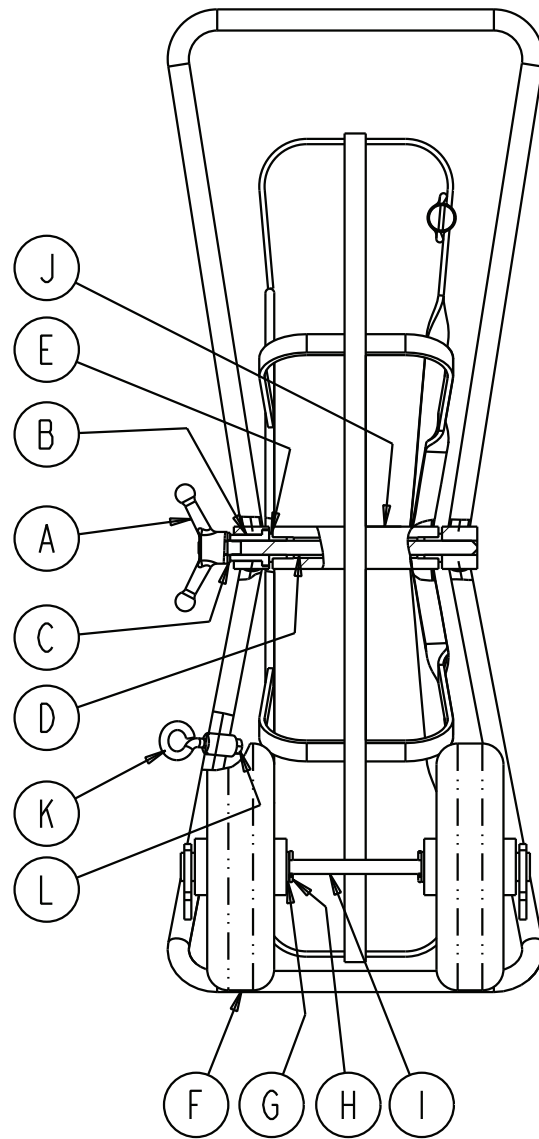
Duct Rod Sizes

*Conduit sizes are based on standard radius bends and should be considered minimums. A larger diameter rod than what is listed is not recommended because it will not negotiate the bend. A smaller diameter rod than what is listed is not recommended since it will have a tendency to buckle within the conduit.

3.

Assembly

4.



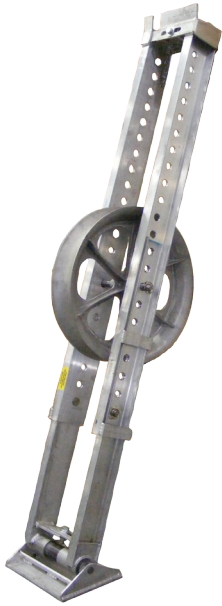
ITEM	DESCRIPTION	CAGE ASSEMBLY			
		16" Cage	24" Cage	30" Cage	45" Cage
		08081516	08081524	08081530	08081550
A	Hand Brake	02218300	08081547	08081547	08081567
B	Shaft Sleeve	08081507	08081543	08081543	08081564
C	Flatwasher	12000901	12008301	12008301	02288457
D	Shaft	08081514	08081505	08081544	08081565
E	Flange Bushing	02290015	02218000	02218000	02187001
F	Wheel	N/A	N/A	02290046	08610695
G	Flatwasher	N/A	N/A	12008301	02047002
H	Cotter Pin	N/A	N/A	02206100	02196400
I	Axle	N/A	N/A	08081596	08081566
J	Caution Label	02269632	02269632	02269632	02269632
K	Eye Bolt	02277404	02288436	02288436	08081518
L	Nut	02125401	02168801	02168801	02010100

Accessories

5.

- Tapered head – attaches to the end fitting on the duct rod. Guides duct rod through the conduit and allows a pull line to be attached to the duct rod. Comes standard with the duct rodders.
- Shackle fitting – fits onto tapered head to provide a larger pulling loop for attaching the rope or pull line.
- Roller guide – helps guide the duct rod around bends, sweeps, and duct misalignments. Also used when the conduit is already occupied by other cables.
- Flexible leader – helps guide the duct rod around bends, sweeps, and duct misalignments.
- Swivel coupling – used to connect two duct rods pushed into the conduit from the same end. Used only when one length of duct rod is not long enough for the full conduit run.
- Basket combination – used to connect two duct rods pushed into the conduit from opposite ends of the conduit run. Both rods can then be pulled out in one direction. Used instead of a swivel coupling when the full length of the rod is difficult to push from one end. Works in four inch or larger conduit only. Does not negotiate tight bends.
- Threaded end fittings – used as a replacement to the factory installed end fittings if the end fitting breaks off or if the duct rod breaks close to the end of the rod. Installation instructions are included with the end fittings. Epoxy is required for installation and is ordered separately (Part Number 08035851).
- Splice kit – used to repair the duct rod if it breaks. Includes epoxy and installation instructions.

**Contact Condux Customer Service for ordering information.
1-800-533-2077**



A Word About This Guide and Condux Products

It is our intent to constantly improve the performance of our products; therefore, designs and specifications contained within this guide may be changed without notice.

Limited Warranty

Condux International, Incorporated extends the following warranty to the original purchaser of these goods for use, subject to the qualifications indicated:

Condux International, Incorporated warrants to the original purchaser for use that the goods or any component thereof manufactured by Condux International will be free from defects in workmanship for a period of one year from the date of purchase, provided such goods are installed, maintained, and used in accordance with Condux's written instructions.

Components not manufactured by Condux International but used within the assembly provided by Condux International are subject to the warranty period as specified by the individual manufacturer of said component, provided such goods are installed, maintained, and used in accordance with Condux's and the original manufacturer's written instructions.

Condux's sole liability and the purchaser's sole remedy for a failure of goods under this limited warranty, and for any and all claims arising out of the purchase and use of the goods, shall be limited to the repair or replacement of the goods that do not conform to this warranty.

To obtain repair or replacement service under the limited warranty, the purchaser must contact the factory for a Return Material Authorization (RMA). Once obtained, send the RMA along with the defective part or goods, transportation prepaid, to: Condux International, Inc.
145 Kingswood Drive
Mankato, MN 56002

THERE ARE NO EXPRESS WARRANTIES COVERING THESE GOODS OTHER THAN AS SET FORTH ABOVE. THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF PURCHASE.

CONDUX ASSUMES NO LIABILITY IN CONNECTION WITH THE INSTALLATION OR USE OF THIS PRODUCT, EXCEPT AS STATED IN THIS LIMITED WARRANTY. CONDUX WILL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.



Condux International, Inc.

P.O. Box 247 • 145 Kingswood Drive, Mankato, MN 56002-0247 USA

1-507-387-6576 • 1-800-533-2077 • FAX 1-507-387-1442

Internet: <http://www.condux.com> • E-mail: cndxinfo@condux.com