



OPERATOR'S MANUEL



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INTRODUCTION

It is the responsibility of the owner and operators of this equipment to read and understand the information contained in this manual. Improper use due to failure to follow safety guidelines and become familiar with the pipepuller could result in serious injury or death. The information in this manual will cover important safety tips, recommended maintenance, and other general information. Following these recommendations will provide the operator with safe, efficient use of this equipment. Keep this manual in a safe place for future reference. *In the event your JB Pipepuller changes ownership, this manual MUST accompany the machine.* Additional manuals are available by contacting Basinger Manufacturing.

To ensure your JB Pipepuller remains in top working condition, it requires general maintenance. General cleaning as well as routine maintenance is necessary and will be highlighted in this manual. Safety messages and decals are located on the pipepuller as well as in this manual. It is the operator's responsibility to read and follow these safety messages.

In the event replacement parts are needed, contact Basinger Manufacturing. Using unapproved replacement parts will void the warranty and could compromise the safe operation of your equipment.

Upon receiving your pipepuller, use the space below to record information for future reference.

Contact Information

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Date of Purchase: _	
Model:	
Serial Number:	

JB PIPEPULLER SPECIFICATIONS

MODEL 1600

Weight	690 lbs.
Height	43 inches
Length	71 inches
Width	24 inches
PSI	3000 pounds
Hydraulic Oil Capacity	9 quart
Pulling Force	15.5 tons
Battery	12 Volt Deep Cycle (1450 Cold Cranking Amps)

FEATURES

- Self- releasing Strut Hydraulic Release System (Patented)
- Extendable Strut Up to 14 Feet 24" Stackable Extensions
- Solid Pull J-Link system Eliminate Chains and Cables
- Cordless Remote Reception Good for 150'
- Voltage Meter Keep Track of the Voltage in the Battery
- Shut Off Switch
- Steel Pallet Used to Store All Parts on and Shipping
- Three Sizes of J-Hooks Used to Hook onto Boxes
- Laser Friendly Pipe Puller Design Allows Laser to Shoot thru Lower Shoe
- Adjustable Wheels Allows for Perfect Fit in Round Pipe

GENERAL CONSIDERATIONS

- In order to show detailed parts of the pipepuller, some photographs may be shown without proper safety equipment in place. NEVER operate the machine without proper safety equipment in place. NEVER alter or modify the safety equipment.
- It is the responsibility of the owner and operators to thoroughly read and understand this manual.
- The instructions in this manual are meant to provide guidance as you become familiar with your pipepuller. As the operators gain familiarity with this machine, he/she can develop operations specific to their operating environment.
- Basinger Manufacturing may make periodic updates to the design or construction of the JB Pipepuller. These updates may cause a slight variation in design and/or construction.
- Directional identifiers including left, right, front, rear, top, bottom, etc. are made assuming the operator is positioned facing the hydraulic valve selector.
- Proper shoring and safety precautions must be in place when working below grade.

SAFETY

This manual contains safety messages designed to alert the user to exercise caution in certain situations. Take a moment to review the safety symbols and their meanings below.



This safety alert symbol is used to alert the operator of physical injury hazards. Read the warnings to avoid risking injury or death.

NOTICE

This symbol marks a recommended practice to directly or indirectly avoid personal injury or property damage.



If not avoided, the scenario **could** result in minor or moderate personal injury. This is also used to alert the user of unsafe practices.



If not avoided, the scenario **could** result in death or serious injury. This warning presents a lesser degree of injury than those labeled with DANGER.



If not avoided, the scenario **will** result in death or serious injury. This indicates the most extreme circumstances.

SAFETY Continued

Safety Warning Decals

The following safety warning decals located on the JB Pipepuller indicate a potential for personal injury if appropriate precautions are not taken. It is the operator's responsibility to review all safety and operational information prior to operating the JB Pipepuller.

A WARRING SAFETY PRECAUTION Read Carefully Before Operating this Machine! Operator must have read and understood the Operation and Maintenance Manual BEFORE operating this machine! Unqualified persons are to stay out of work area! Always set machine on level and stable ground! When transporting this machine, always lower the inner post! Use proper slings rated for listed capacities on the Pulling Chart! Always step out of the culvert when applying pressure! Always relieve pressure before re-entering the culvert to inspect joint!

A WARNING

Never exceed work load limit of slings or chains!
Always step out of the culvert when applying pressure.

Pulling Capacity Chart

Pressure Applied	Pound of Pull	Tons of Pull
3000	30,480	15.24
2900	29,464	14.73
2800	28,448	14.22
2700	27,432	13.72
2600	26,416	13.21
2500	25,400	12.70
2400	24,384	12.19
2300	23,368	11.68
2200	22,352	11.18
2100	21,336	10.67
2000	20,320	10.16
1900	19,304	9.65
1800	18,288	9.14
1700	17,272	8.64
1600	16,256	8.13
1500	15,240	7.62
1400	14,224	7.11
1300	13,208	6.60
1200	12,192	6.10
1100	11,176	5.59
1000	10,160	5.08
900	9,144	4.57
800	8,128	4.06
700	7,112	3.56
600	6,096	3.05
500	5,080	2.54

Note: These pressures apply only to the factory installed cylinder!

Training

- Failure to follow the safety instructions in this manual could result in severe personal injury or death as well as damage to personal property. Keep in mind the safety instructions found in this manual are not all inclusive. The operator must exercise common sense and practice safe operations while using this equipment.
- Should questions regarding this manual arise, contact Basinger Manufacturing.
- All operators of this equipment should actively practice the following:
 - Be familiar with operating the controls while running the machine.
 - Be familiar with emergency shutdown procedures.
 - Always provide new operators with appropriate training.
 NEVER allow an inexperienced person to operate the machine without proper training.
 - ALWAYS take necessary precautions to protect yourself from pressurized hydraulic fluid. Use a rag, cardboard, etc. to check a connection for leaks—NEVER use your hand or other body part. Always wear appropriate eye protection, clothing, and footwear.
 - Unqualified individuals are to never operate this equipment.

NOTICE

Basinger Manufacturing has designed and manufactured this equipment with safety and efficiency in mind. It is important to remember that <u>safety ultimately lies in the hands of a proficient and safety-minded equipment operator!</u>

A CAUTION

Use extreme caution while operating in open trenches. Proper shoring is required prior to beginning work.

A WARNING

In the event hydraulic fluid contacts your eyes or punctures your skin, <u>you</u> <u>must immediately seek medical treatment by a physician</u>. Even the smallest wound is considered a serious injury and <u>will result in serious injury or death if not treated immediately.</u>

SAFETY Continued

Pre-Work Safety Review

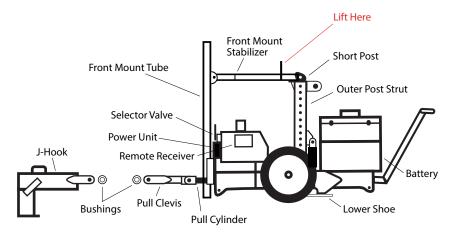
Use this safety review as a checklist to refresh yourself with safe operating guidelines. This checklist is not all-inclusive and should include additional condition-specific considerations based on the operator's experience.

- The operator must read and understand this operator's manual before operating the JB Pipepuller.
- Unqualified persons are to remain clear of the work area.
- Always place the pipepuller on level and stable ground.
- When transporting this machine, always lower the inner post and lock the wheels in place.
- Use proper slings rated for the listed capacities on the pulling chart.
- Always step out of the culvert when applying pressure.
- Always relieve pressure before re-entering the culvert to inspect the joint.
- Wear appropriate personal safety equipment including, but not limited to, hardhat, safety-toe footwear, hearing protection, safety glasses and gloves. Cover exposed skin while working on/operating the equipment. Avoid loose clothing, jewelry, hair, or anything that could become tangled in moving equipment.
- Purge the air from the hydraulic system by actuating hydraulic controls until all air is removed from the system. This procedure must be performed any time a hydraulic hose is disconnected and prior to initial service. Take extra caution to prevent dirt and debris from contaminating the hydraulic fluid reservoir as this may cause failure of the hydraulic system.
- Function check all controls to ensure they match the appropriate operation of the machine as indicated in this manual.
- Replace hoses or sleeves if damaged or if protective sleeve cannot be properly positioned or secured.
- All hydraulic hoses, fittings, and valves must be in proper working condition. Inspect for abrasions, cuts, kinks, excessive wear, and sharp angles in hydraulic hoses.
- Inspect safety warning decals. If they are missing or not legible, replace them.
- Ensure all safety guards are in place and in good repair. If needed, replace them.
- Other condition-specific safety procedures as deemed necessary by an experienced operator.
- Be aware of overhead obstructions including power lines and dead branches.
- NEVER operate ANY kind of equipment while under the influence of drugs or alcohol.
- Always use equipment during the day or with sufficient supplemental lighting.
- ALWAYS know what's below. Dial 811 if working near public utilities and pipelines.

PARTS DESCRIPTION

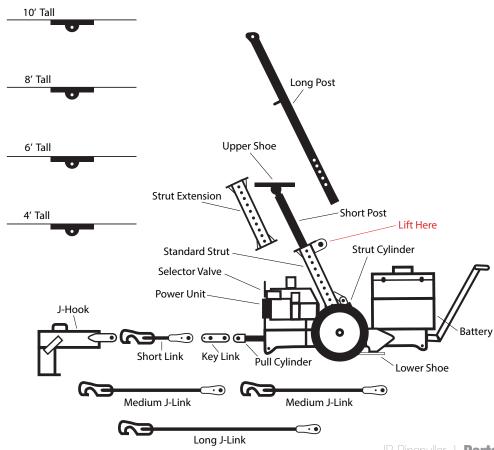
JB Pipepuller with Front Mount Tube

(Used on Culverts 4' Tall and Shorter)



JB Pipepuller Base Unit

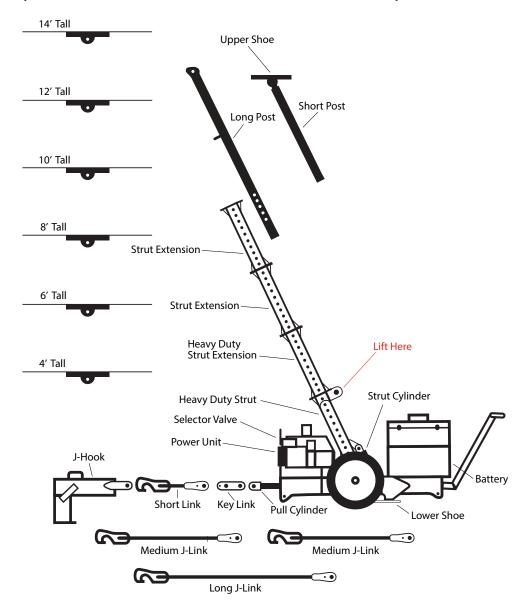
(Used on Reinforced Concrete Culverts 4'-10' Tall)



PARTS DESCRIPTION Continued

JB Pipepuller Base Unit with Heavy Duty Strut

(Used on Reinforced Concrete Culverts 4'-14' Tall)



NOTICE

This parts diagram shows the optional heavy duty strut and strut extension. If you are pulling pipe 10 feet or more in inside height, the heavy duty strut and strut extension are required.

OPERATION

Setting up the JB Pipepuller

The following steps will outline the steps necessary to set up the JB Pipepuller to pull reinforced concrete pipe. For additional instruction, a detailed training video is also available at www.jbpipepuller.com.

Important!

The wheel adjustment procedure should be followed depending on the type of pipe you will be working with.

Wheel Adjustment Procedure

While the pipe puller is mounted on the pallet or supported by other means, with the weight off of the wheels—

Remove the two half inch bolts and loosen the center bottom bolt. Raise or lower the wheel to the proper setting then re-insert the two bolts to the new setting and tighten all three bolts.

This procedure is required for both wheels.

Setting	Inside Height of Culvert	Pipe Type
Α	48"	Round
В	54"-66"	Round
С	72"-84"	Round
D	96"	Flat Bottom Box

Shown here is an example of the wheel adjustment settings with the wheel removed.



OPERATION Continued

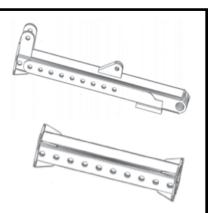
STEP 1: Setting the Post Height

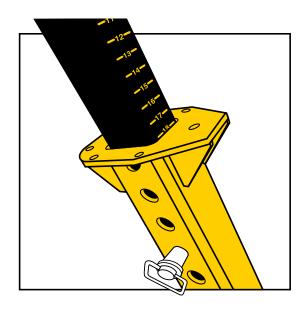
- Measure the inside height of the culvert and record the measurement.
- Use the post adjustment chart located on the side of the power unit cover to determine the appropriate post setting.
- Slide either the long or short post into the outer post strut with the numbers facing the tool box end of the pipepuller.
- Set the post to the proper setting and insert the 1" pin into the matching hole.

Several examples using the post adjustment chart are located on the next page.

NOTICE

If you are going to be pulling pipe with an inside height greater than 10 feet, you are required to use the reinforced strut and reinforced extensions. This specialized strut and extensions provide greater stability for the increased height of boxes over 10 feet. Contact JB Manufacturing about the use of these struts if you have questions.





Post Adjustment Chart Examples

Example #1: Culvert height of 60", select the short post and set to number 14.5.

Example #2: Culvert height of 84", there are two options: select the long post and set to number 15 or add the outer tube extension, insert short post and set to number 15.

Example #3: Culvert height of 120", install outer tube extension then insert long post and set to 27.5.

Post Adjustment Chart Short Post WITH **Long Post WITH Outer Tube Extension** Long Post **Outer Tube Extension** MM MM Setting Setting MM MM Inches Inches Inches Setting Inches Setting 4 1/2 4 1/2 5 1/2 5 1/2 5 1/2 6 1/2 6 1/2 6 1/2 7 1/2 7 1/2 7 1/2 8 1/2 8 1/2 8 1/2 9 1/2 9 1/2 9 1/2 9 1/2 10 1/2 10 1/2 10 1/2 10 1/2 11 1/2 12 1/2 13 1/2 14 1/2 15 1/2 16 1/2 20 1/2 21 1/2 21 1/2 21 1/2 22 1/2 22 1/2 22 1/2 23 1/2 23 1/2 23 1/2 24 1/2 24 1/2 24 1/2 25 1/2 25 1/2 25 1/2 26 1/2 26 1/2 26 1/2 26 1/2 27 1/2 27 1/2 27 1/2 27 1/2 Refer to the Pre-measured Guide on the Inner Post for easy preset. The numbers are on the BACKSIDE of the Inner Post and are to be lined up on the TOP REAR EDGE of the Outer Post.

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Decreasing the post length could cause damage

OPERATION Continued

STEP 2: J-Link & J-Hook Selection

Next you need to select the proper length J-Link. Refer to the J-Link page for proper selection. There is also a J-Hook reference sheet in this manual. The idea behind this step is to only take the necessary J-Link and J-Hook components with you into the culvert. Also, it is easier to ensure the key link is installed on the end of the pulling cylinder before placing the puller into the culvert.



Shown above is the key link which attaches to the pulling cylinder on the right and a J-Link section on the left.

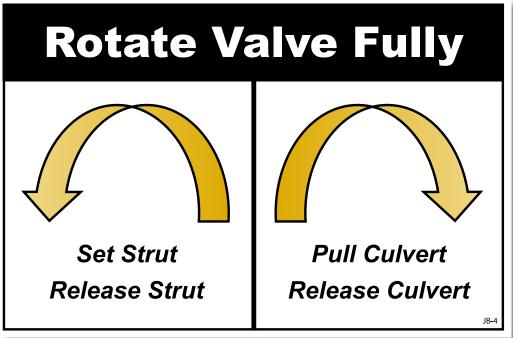


The blue arrow points to a properly placed J-Hook. Note the yellow shim under the back of the hook to maintain parallel pulling force.

The red arrow indicates the key link. The yellow arrow shows the short J-Link positioned with the hook opening facing up.

Step 3: Cylinder Selector Valve Operation





After setting the valve to the left or the right, activate the remote.

OPERATION Continued

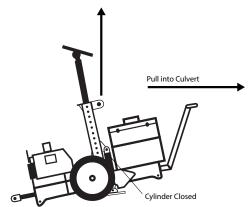
STEP 4: Lower Puller into Culvert

The lower shoe must be in the up position before placing the pipepuller into the culvert. With the pipepuller in transport position, connect a properly sized sling to the lifting ears and gently lower the pipepuller into the culvert facing the direction the culverts are to be pulled. Use the handlebars to guide the pipepuller into the culvert as it is being lowered.



A CAUTION

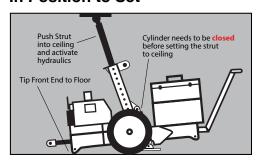
NEVER for ANY reason place yourself or any body part under any object being lifted overhead. Doing so risks serious injury or death! Crane controls and hydraulic systems can fail even when the equipment is not running!



Transport Position

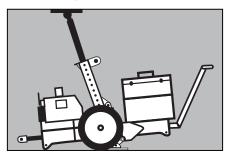


In Position to Set



Set and Ready to Pull

Fully extend the strut cylinder when setting the Strut.



Step 5: Set up J-Links and Lock Puller in Position

- Position the JB Pipepuller in the direct line of pull and lay out the J-link and J-hook so they are in line with the direction of pull.
- Position the J-hook on the culvert. Note that the J-Hook may require shims to keep the pulling force parallel to the culvert. See the J-Hook section of the manual for more important details.
- Attach the proper length J-Link to the key link on the pulling cylinder.
- With the selector valve rotated to the left, tip the front of the puller to the floor, shove the strut to the ceiling, then activate the remote.
- This will rotate the shoe to the floor and lock the puller into position, ready to pull. Remember, the cylinder needs to be fully extended when setting the Strut.
- Now extend the pulling cylinder and hook the J-Link onto the J-Hook and position the selector valve to the right and activate the remote to pull the first culvert into place.
- At full pull, the cylinder has 15.5 tons of pulling power.
- Remember, stand off to one side at the edge of the culvert for safety purposes.



This picture shows the procedure for locking the puller into place prior to pulling.

OPERATION Continued

STEP 6: Attach 2nd J-Link

- After pulling the first culvert, you may need to attach the 2nd J-Link to keep one culvert between the puller and the culvert being pulled, as shown in the picture below.
- After the first culvert is seated, release it by activating the remote.
- Switch the Valve Selector to the left, and support the strut with your hand. Activate the remote- this will un-wedge the strut.
- Reposition the puller and extend the pulling cylinder so after you add the 2nd J-Link, it drops over the J-Hook as you retract the pulling cylinder.



STEP 7: Release Pipepuller and Reposition

- After the culvert is seated, release the culvert by activating the remote.
- Switch the Valve Selector to the left, and support the strut with your hand. Activate the remote- this will un-wedge the strut.
- With the strut cylinder completely retracted, the JB Pipepuller is ready to move forward. Repeat steps 5 & 6 until all culverts are set.

MAINTENANCE

Battery

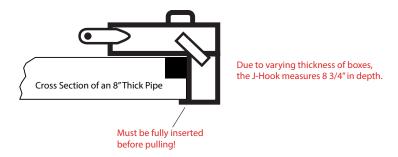
The JB Pipepuller is powered by an Interstate SRM-4D deep cycle battery. It has 1645 cranking amps and 1314 cold cranking amps. It is recommended that the battery be fully charged at the end of its daily use. It is recommended that the battery be charged at a slow rate, preferably in deep cycle mode. An automatic charger is highly recommended. The water level in the battery should be checked periodically. If taken care of properly, this battery will give you many years of service.

Hydraulics

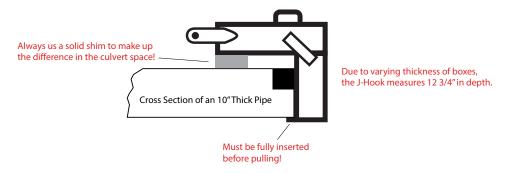
The JB Pipepuller is powered by a Monarch DC power unit capable of putting out 3000 psi. The recommended oil for this unit is Dextron IV. Before adding any oil, always have the cylinder in the closed position. It is critical to ensure no dirt or debris is introduced into the system while adding oil. Contaminated hydraulic oil can cause failure of the hydraulic system.

J-HOOK DIAGRAMS

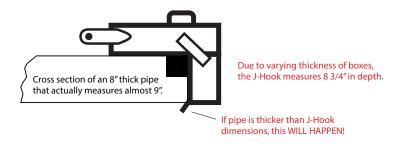
Example of using a J-Hook on an 8" culvert



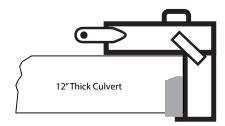
Example of using a larger J-Hook on a smaller culvert thickness Shim must be used to prevent rotation of J-Hook!



Example of what will Happen if pipe are thicker than the design of the J-Hook!



Example of using a J-Hook installing pipe backward using a precut oak block no less than 18" long!



Post Adjustment Chart

Short Post

Adjust Post to this Height
Adjust Post to this Height
In Inches
In Millimeters
In Millimeters
Inside Height of Culvert
Inside Height of Culvert
Inches

ММ	
IVIIVI	Setting
1219	2
1245	3
1270	4
1295	5
1321	6
1346	7
1372	8
1397	9 1/2
1422	10 1/2
1448	11 1/2
1473	12 1/2
1500	13 1/2
1524	14 1/2
1549	15 1/2
1575	16 1/2
1600	18
1626	19
1651	20
1676	21
1702	22
1727	23
1753	24
1778	25
1800	26 1/2
1829	27 1/2
	1219 1245 1270 1295 1321 1346 1372 1397 1422 1448 1473 1500 1524 1549 1575 1600 1626 1651 1676 1702 1727 1753 1778

Short Post WITH
Outer Tube Extension

Adjust Post to this Height In Inches In Inches In Millimeters In Millimeters In Inches In Inches

	Inches	MM	Setting
6'	72	1829	2
	73	1854	3
	74	1880	4 1/2
	75	1905	5 1/2
	76	1930	6 1/2
	77	1956	7 1/2
	78	1981	8 1/2
	79	2007	9 1/2
	80	2032	10 1/2
	81	2057	12
	82	2083	13
	83	2100	14
7'	84	2134	15
	85	2159	16
	86	2184	17
	87	2210	18
	88	2235	19
	89	2261	20
	90	2286	21 1/2
	91	2311	22 1/2
	92	2337	23 1/2
	93	2362	24 1/2
	94	2388	25 1/2
	95	2400	26 1/2
8'	96	2438	27 1/2

Long Post

Adjust Post to this Height In Inches in Millimeters In Millimeters In Inches

	Inches	ММ	Setting
6'	72	1829	2
	73	1854	3
	74	1880	4 1/2
	75	1905	5 1/2
	76	1930	6 1/2
	77	1956	7 1/2
	78	1981	8 1/2
	79	2007	9 1/2
	80	2032	10 1/2
	81	2057	12
	82	2083	13
	83	2100	14
7'	84	2134	15
	85	2159	16
	86	2184	17
	87	2210	18
	88	2235	19
	89	2261	20
	90	2286	21 1/2
	91	2311	22 1/2
	92	2337	23 1/2
	93	2362	24 1/2
	94	2388	25 1/2
	95	2400	26 1/2
8'	96	2438	27 1/2
		1	

Long Post WITH
Outer Tube Extension

Adjust Post to this Height In Inches In Inches In Millimeters In Millimeters In Millimeters In Millimeters In Inches

	Inches	MM	Setting
8'	96	2438	3
	97	2464	4
	98	2489	4 1/2
	99	2515	5 1/2
	100	2540	6 1/2
	101	2565	7 1/2
	102	2591	8 1/2
	103	2616	9 1/2
	104	2642	10 1/2
	105	2667	12
	106	2692	13
	107	2700	14
9'	108	2743	15
	109	2769	16
	110	2794	17
	111	2819	18
	112	2845	19
	113	2870	20 1/2
	114	2896	21 1/2
	115	2921	22 1/2
	116	2946	23 1/2
	117	2972	24 1/2
	118	3000	25 1/2
	119	3023	26 1/2
0'	120	3048	27 1/2



Refer to the Pre-measured Guide on the Inner Post for easy preset.

The numbers are on the BACKSIDE of the Inner Post and are to be lined up
on the TOP REAR EDGE of the Outer Post.



- Always follow the chart recommendations.
- Decreasing the post length could cause damage to the culvert.

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Post Adjustment Chart

Using Strut Extensions (10'-12')

For any culvert over 120" tall, use Heavy Duty Strut Extention bolted first to the Lower Strut.

On top of Heavy Duty Strut bolt the Regular Strut Extension



Refer to the Pre-measured Guide on the Inner Post for easy preset.

The numbers are on the BACKSIDE of the Inner Post and are to be lined up on the TOP REAR EDGE of the Outer Post.

A CAUTION

- Always follow the chart recommendations.
- Decreasing the post length could cause damage to the culvert.

Long Post WITH Strut Extensions

Inside Height of Culvert in Inches	Inside Height of Culvert	Adjust Post to this Setting
------------------------------------	--------------------------	--------------------------------

	Inches	MM	Setting
10'	120	3048	1
	121	3073	2
	122	3099	3
	123	3124	4
	124	3150	5
	125	3175	6
	126	3200	7
	127	3226	8
	128	3251	9
	129	3277	10
	130	3302	11
	131	3327	12
11'	132	3353	13
	133	3378	14
	134	3404	15
	135	3429	16
	136	3454	17
	137	3480	18
	138	3505	19
	139	3531	20
	140	3556	21
	141	3581	22
	142	3607	23
	143	3632	24
2'	144	3658	25
			_

Post Adjustment Chart

Using Strut Extensions (12-14')

For any culvert over 144" tall, the Heavy Duty Strut MUST be used.

Heavy Duty Strut Extention bolted first to the Lower Heavy Duty Strut.

On top of Heavy Duty Strut Extension bolt two Regular Strut Extensions.



Refer to the Pre-measured Guide on the Inner Post for easy preset. The numbers are on the BACKSIDE of the Inner Post and are to be lined up on the TOP REAR EDGE of the Outer Post.

A CAUTION

- Always follow the chart recommendations.
- Decreasing the post length could cause damage to the culvert.

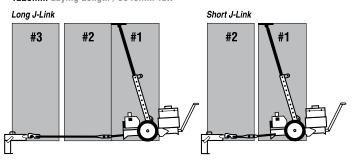
Long Post WITH Strut Extensions

Adjust Post to this Setting to this Setting Inside Height of Culvert Inside Height of Culvert Inside Height of Culvert In Inches	
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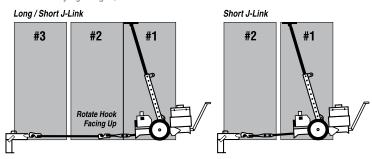
	Inches	MM	Setting
12'	144	3658	1
	145	3683	2
	146	3708	3
	147	3734	4
	148	3759	5
	149	3785	6
	150	3810	7
	151	3835	8
	152	3861	9
	153	3886	10
	154	3912	11
	155	3937	12
13'	156	3962	13
	157	3988	14
	158	4013	15
	159	4039	16
	160	4064	17
	161	4089	18
	162	4115	19
	163	4140	20
	164	4166	21
	165	4191	22
	166	4216	23
	167	4242	24
14'	168	4267	25

J-LINK DIAGRAMS

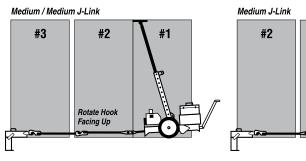
48" Laying Length / 10' Tall 1220mm Laying Length / 3048mm Tall



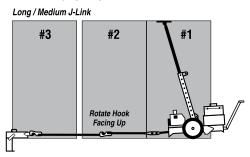
54" Laying Length / 10' Tall 1372mm Laying Length / 3048mm Tall

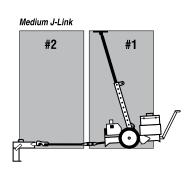


60" Laying Length / 10' Tall 1524mm Laying Length / 3048mm Tall



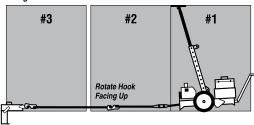
66" Laying Length / 10' Tall 1376mm Laying Length / 3048mm Tall





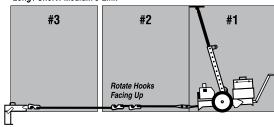
72" Laying Length / 8' Tall **1830mm** Laying Length / 2438mm Tall

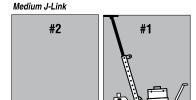
Long / Medium J-Link



78" Laying Length / 8' Tall 1981mm Laying Length / 2438mm Tall

Long / Short / Medium J-Link

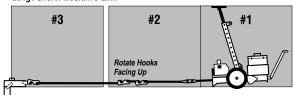


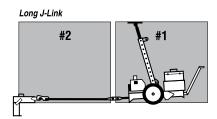


84" Laying Length / 6' Tall

2134mm Laying Length / 1830mm Tall

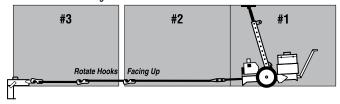
Long / Short / Medium J-Link

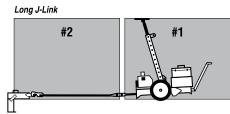




96" Laying Length / 6' Tall 2438mm Laying Length / 1830mm Tall

Medium / Medium / Long J-Link





Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Power unit will not run	12 volt Battery Low on charge	Charge battery or replace
	Remote battery is low on charge	Replace battery or use extension cord remote
	10 amp fuse is blown	Change fuse
	Insufficient battery connection	Clean and tighten battery connections
	Improper Ground connection to frame	Clean and tighten all connection points
	Loose or broken wire	Check all connections and inspect wire for breaks

Cylinders will not operate	12 volt Battery Low on charge	Charge battery or replace
	Remote battery is low on charge	Replace battery or use extension cord remote
	10 amp fuse is blown	Change fuse
	Insufficient battery connection	Clean and tighten battery connections
	Improper Ground connection to frame	Clean and tighten all connection points
	Hydraulic oil low	Add oil
	Hydraulic hose pinched or obstructed	Change hose or clear obstruction

Strut does not set	Improper post setting	Refer to Post setting chart for proper setting
	Strut Cylinder is not fully extended	Extend the cylinder to its full extension
	Strut cylinder not closed before engagment of ceiling	Retract cylinder before you shove the strut to the cylinder
	Improper wheel setting	Read manual for proper setting

Limited Warranty



Basinger Manufacturing hereby warrants the original purchaser named below that this JB Pipepuller is free from defects in materials and workmanship for a period of two years from the date of purchase. Damage to this JB Pipepuller caused directly or indirectly by misuse, abuse, negligence, accidents, unapproved repairs or alterations, and/or lack of maintenance voids all warranty terms. Basinger Manufacturing will not be held liable for death, personal injury, property damage, or for incidental, contingent, special or consequential damages resulting in the use of this product. For warranty questions or inquiries, reference the contact information found in the introduction section of this manual.

Purchaser:	Model:	
Date of Purchase:	Serial Number:	