



# Kwik-Trench Mini-Trencher **KT100**

**OPERATORS MANUAL**  
WITH MAINTENANCE AND PARTS INFORMATION

**1.800.227.7515**  
LITTLEBEAVER.COM



**LITTLE BEAVER®**  
EARTH DRILLS & AUGERS

MFG BY: Little Beaver, Inc. 0418

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sales@littlebeaver.com

## **CUSTOMER SERVICE**

**Ph: 936/327-3121 or Fax 936/327-4025**

### **ORDERS...**

Place your orders by telephone, fax, or mail. When calling, please have your parts manual handy for reference. Our hours are 8:00 am - 4:30 pm central time, Monday thru Friday. When ordering by mail or fax, include a description and KWIK TRENCH part number for the items you are ordering, your return address, and payment or your authorization for COD shipment. All orders are shipped UPS where possible. Freight charges will be added to your invoice. Some items are oversize, resulting in a higher shipping cost. Earth Saws are shipped via motor freight due to their weight.

### **PAYMENT TERMS...**

COD, Cash in Advance, Visa, Mastercard, Discover, American Express or NET 30 with approved credit. COD limit for new accounts is \$500.00. Personal or company checks on new accounts will be held until they clear the bank. To eliminate this delay, you may pay by wire transfer or send a certified or cashiers check. For a NET 30 open account, please call or write for a credit application.

### **SERVICE AND REPAIR...**

Your KWIK TRENCH Earth Saw has been designed for user repair with ordinary hand tools. No special tools are required. Consult the appropriate section of the parts manual for instructions.

Service or technical consultation is available, free of charge, from the factory in Livingston, Texas. We will be pleased to help you with any problems or questions. Just write, fax, or call. Our hours are 8:00am - 4:30pm central time, Monday thru Friday.

Factory repair is available. If you return a part to the factory, please include the following information: Your name and return address, a description of the problem and payment or authorization to return the repaired item COD for the repair and shipping charges.

### **RETURNS...**

Please call the factory for a return authorization. This will help to ensure that your parts are handled properly. Include your name and address, customer account #, invoice # under which the returned parts were ordered, and a brief description of the problem with the parts or the reason for returning them. Parts to be considered for warranty must be returned to the factory for inspection within 10 days after receipt of replacement parts. Be sure to prepay the shipping charges, we will not accept collect or COD packages.

### **Our mailing address...**

**LITTLE BEAVER, Inc.**  
2009 South Houston  
P. O. Box 840  
Livingston, Texas 77351



**SAFETY ALERT SYMBOL**



The symbol shown above is used to call your attention to instructions concerning your personal safety.

**WATCH THIS SYMBOL** — It points out important safety precautions.

It means — **ATTENTION! BECOME ALERT! YOUR PERSONAL SAFETY IS INVOLVED!**

Read the message that follows and be alert to the possibility of *Personal Injury or Death!*



**WARNING:** *The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.*

**1 YEAR LIMITED WARRANTY**

For 1 year from purchase, LB EQUIPMENT, INC. will replace for the original purchaser, free of charge, any part or parts, found upon examination by any factory authorized service center, or by the factory at Livingston, Texas, to be defective in material or workmanship or both. If your equipment cannot be repaired, it will be replaced. All transportation charges on parts submitted for replacement under this warranty must be borne by purchaser.

There is no other express warranty.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to 1 year from purchase and to the extent permitted by law. Any and all implied warranties are excluded. This is the exclusive remedy and liability for consequential damages under any and all warranties are excluded to the extent exclusion is permitted by law.

\*Notice: Engines are warranted by the manufacturer of the engine. See separate engine warranty enclosed.

**MACHINE SERIAL NUMBER**

The machine serial number for your Kwik Trench Earth Saw is located on the rear shroud. For your convenience, when requiring service of parts information, refer to this number and your model number. Record the model number, engine make, machine serial number and date of purchase in the space provided below:

MODEL NUMBER \_\_\_\_\_ ENGINE MAKE \_\_\_\_\_

MACHINE SERIAL NUMBER \_\_\_\_\_ DATE OF PURCHASE \_\_\_\_\_



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## PARTS MANUAL

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# SAFETY INSTRUCTIONS



**DANGER:** Failure to observe safety instructions and reasonable safety practices can cause Property Damage, Serious Bodily Injury and/or Death. **BE CAREFUL!! WATCH OUT FOR BYSTANDERS!!**



**DANGER:** NEVER dig trenches where there is a possibility of underground power cables or other hazards. The exact location of underground services must be determined prior to drilling. Inadvertent severing of telephone, fiber optic or CATV transmission cable, or damage to sewer pipe is costly; RUPTURING OF GAS OR WATER LINES CAN CAUSE SERIOUS BODILY INJURY AND/OR DEATH. COMING INTO CONTACT WITH BURIED POWER LINES CAN CAUSE SERIOUS BODILY INJURY, SEVERE BURNS, AND/OR ELECTROCUTION. Call local utility companies or your local "One-Call" number at least 48 hours before digging and have underground utilities marked.



**DANGER:** NEVER run engine inside building or enclosed area. Exhaust gases contain carbon monoxide, an odorless and deadly poison.



**DANGER:** KEEP hands and feet away from rotating blades. Serious bodily injury will result.



**CAUTION:**

1. READ and understand this operator's manual and the operator's manual for the engine. If one is not available, please call or write for a free replacement.
2. NEVER Transport with engine running.
3. NEVER Trench on steep slopes. Trencher may overturn causing bodily injury.
4. NEVER Trench in solid rock or concrete.
5. NEVER Operate with broken teeth, belts or other damaged or missing parts.
6. KEEP Hands, Feet and Clothing away from moving parts while engine is running.
7. KEEP All safety shields and devices in place.
8. MAKE Certain everyone is clear before operating the machine.
9. DO NOT Drop trencher off the back of a vehicle. Trencher's weight can exceed 350 lbs.
10. WEAR SAFETY GLASSES.
11. KEEP Bystanders at least 10 feet away from work area.
12. SHUT OFF Engine and disconnect spark plug wire to adjust, service, refuel or clean the machine. Accidental engine starting is possible by rotating the cutter wheel.
13. AVOID The possibility of spilled fuel causing fire.
14. MAKE Sure when transporting trencher in a vehicle or trailer, it is safely secured with straps or ropes.

## NOTICE

It is the responsibility of the contractor, owner and user to maintain and operate the Earth Saw in compliance with operating instructions provided. Observe all listed safety instructions and other reasonable safety practices. LB EQUIPMENT, INC. accepts no responsibility for damages to this machine, and other property damage and/or bodily injury due to careless or improper operations.

LB EQUIPMENT, INC. does not recommend or condone use of replacement engines greater than eight (8) horsepower.

LB EQUIPMENT, INC. does not recommend or condone any unauthorized modifications to the earth saw.

LB EQUIPMENT, INC. reserves the right to make changes in design and changes for improvements upon its product without imposing any obligation upon itself to install the same upon its products theretofore manufactured.

*Your operators manual offers recommendations for prolonged and satisfactory service.*

*Precaution is the best insurance against an accident.*



## MAINTENANCE and LUBRICATION



**DANGER:** NEVER run engine inside building or enclosed area. Exhaust gases contain carbon monoxide, an odorless and deadly poison.

**Engines are shipped without oil or gasoline.** Refer to MANUFACTURER'S INSTRUCTIONS for proper procedures and recommended fluids.

**IMPORTANT** DO NOT drop the machine off the back of a vehicle, this may cause damage to the body and frame. Machines should always be lifted, ramped or by a trailer.

### LUBRICATING INSTRUCTIONS:

CHECK crankcase and gearbox oil level before each use.

CHANGE crankcase and gearbox oil as recommended by the manufacturer's instructions.

ADD grease to the pillow block bearings after every 100 hours of use.

CLEAN vertical frame posts and sleeves frequently to prevent binding. Do not use oil base lubricants or grease. Silicone is recommended.



**SHUT OFF ENGINE** and disconnect spark plug wire to adjust, service, refuel or clean the machine. Accidental engine starting is possible by rotating the cutter wheel.

ALL nuts, fasteners and fittings must be kept properly torqued. After every 25 hours of use the engine nuts and bolts should be checked and tightened, if necessary. Add lock-tight to bolt threads.

### FILTERS:

The air filter needs to be cleaned every 10 hours. More often in dusty dry conditions: Check engine owners manual for further instructions.

Attach a remote air filter with pre-cleaner in serious dusty conditions, this will add to the engine life considerably.

### CLUTCH:

The slip clutch facings should be changed if the thickness is worn to 1/16" or less, this will maintain the fast digging speed this type of unit can perform. Check every 20-25 hours of use.

**ADJUSTMENT:** Shoulder bolts must be kept tight. If the clutch wears to the point where stopping the blades will not stall the engine within a few revolutions, tension should be increased by adding a washer under each should bolt, or by replacing the clutch facings.

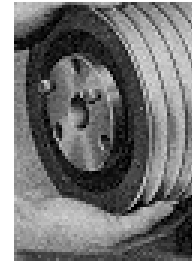
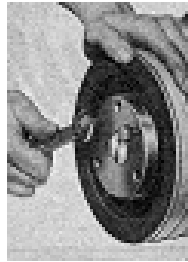


## **MAINTENANCE and LUBRICATION Cont...**

### **CUTTER HUB:**

#### **REMOVING THE CUTTER HUB:**

Should it ever be necessary to remove the cutter hub, remove the three (3) cap screws and insert two (2) 1/4" - 20 cap screws into the threaded holes in the bushing flange. Tighten the cap screws alternately and evenly so the press against the shoulder of the cutter hub, "jacking" the bushing from the hub.



#### **INSTALLING THE CUTTER HUB:**

To install the cutter hub, assemble the bushing into the cutter hub so that the three (3) counter-bored holes in the bushing line up with the three (3) threaded holes in the cutter hub. Insert the three (3) cap screws through the counter-bored holes into the threaded holes and screw them in finger tight. Slide the cutter hub and bushing on the shaft over the key. Locate the assembly so the blades will clear the base and the guard. Tighten the cap screws in sequence around the circle. Repeat until no further movement can be obtained (approx. 12 ft. lbs.).

### **BEARINGS:**

The nylon bearing (clear collar) must be inserted in the blade with a slight bulge. After locating the bearing in the collar of the blade, press the bulge to conform to the contour of the cutter hub.



## **TRENCHER ASSEMBLY INSTRUCTIONS:**

Install three (3) tires with valve stem facing out. Insert bolt through tire wheel and frame axle. Attach nut to bolt. Tire pressure should be 40 lbs. PSI.

Remove two (2) bolts from open neck of frame. Insert the push handle, re-install bolts.

Attach lift hand lever.

Shroud and engine will now raise and lower for digging depth.

Following engine start up instructions. Fill crankcase with oil. Add 10W30 wt. oil to the 6:1 gear reduction unit at a 1/3 level full.

Follow diagram on page P-1 on wear part assembly to install the "Spring Tynes Blades".

Double check all bolts and fasteners. Add gasoline, open throttle, may need to pull choke to start.

## **BLADE/TEETH ASSEMBLY:**



**CAUTION:** When changing blades or making adjustments on the trencher, the spark plug must be disconnected to prevent accidental starting of the engine.

The blades must be installed in the sequence listed below (Clockwise looking at the slots in the blade holder) to insure proper operation of the trencher. The blade identification number is stamped on each blade near the retaining notch.

## **SELECTION AND INSTALLATION OF SPRING TYNE BLADES**

1/2" wide ditch	- Use Blades #1, 2, 1, 2
1" wide ditch	- Use Blades #1, 2, 3 & 4
2" wide ditch	- Use Blades #3, 4, 5 & 6
3" wide ditch	- Use Blades #2, 5, 6 & 7

**DO NOT** use disc blade trenchers with missing teeth. If you do, this will increase the possibility of engine vibration.

**INSTRUCT** operator to back off immovable objects to eliminate early teeth breakage.

To install new blades, remove the two clutch bolts, friction plate, clutch facing, disc and bladeholder. Remove the old blades, insert the new blades in the proper order, and remount the blade holder on the hub.





## **TRENCHING INSTRUCTIONS:**

**NOTE:** If in hard ground, roots and other problem areas. **DO NOT** try and force machine. Let the cutting blade do the cutting. Over pushing may cause the blade to bog-down.

Put trencher in position.

Set the steel chain for digging depth. If the chain is left unhooked, the full depth of eight inches will be obtained.

Turn fuel on. Use choke when starting engine if necessary.

Bring engine speed up with the throttle.

Lower the machine slowly into the ground with the lifting lever. Brace your body against the handle, keeping forward pressure on the handle. Allowing the machine to move backwards during lowering can cause the blades to catch and stall the engine.

Push trencher forward to end of your trench. Steady, even movement of the machine is necessary for best results. Bracing your body against the handle will help in obtaining a steady feed in rough ground.

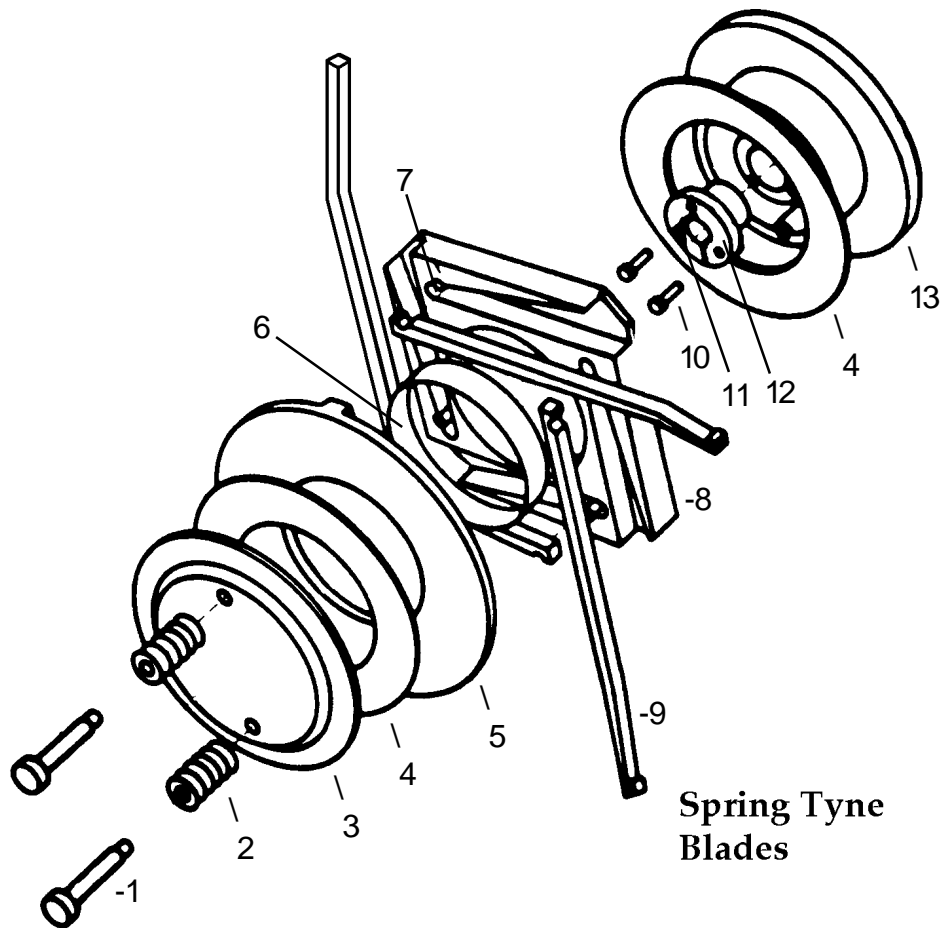
Stop the engine and turn the fuel off before moving the machine.



# PARTS INFORMATION

**NOTES:**

# CLUTCH/CUTTER HUB ASSEMBLY



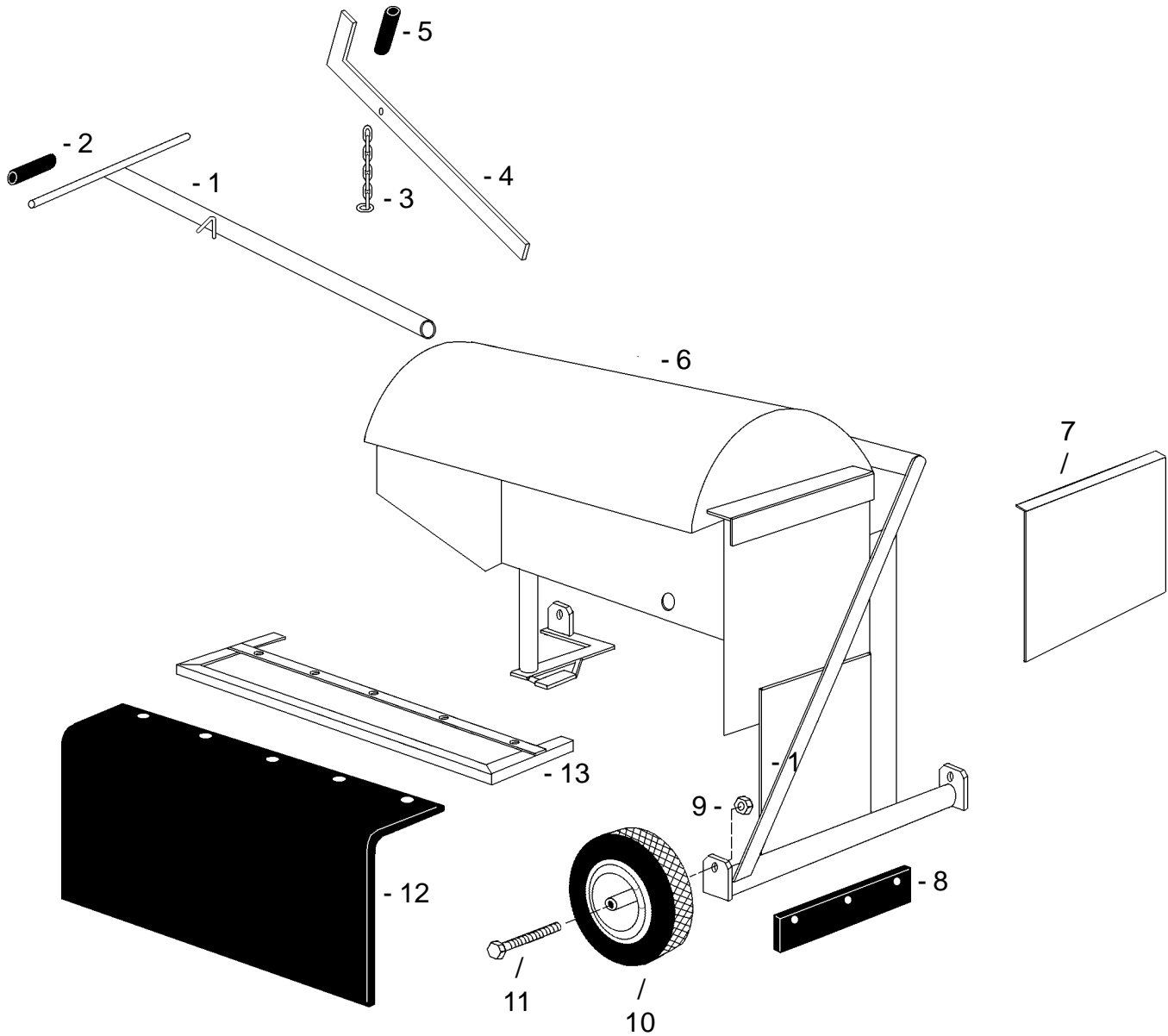
<u>ITEM #</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	KT4-1032	Shoulder Bolt, Socket Hd., 1/2 x 1 3/4	2
2	KT4-1031	Spring, Die	2
3	KT4-1017	Friction Plate	1
4	KT4-1029	Clutch Facing	2
5	KT4-1014	Disc	1
6	KT4-1026	Nylon Bearing	1
7	KT4-1071	Dowel Pin, 1/4" x 5/8"	4
8	KT4-1013	Blade Holder	1
9	KT4-1015A	Blade (Specify 1,2,3,4,5,6 or 7) 12"	4
10	KT4-1040	Cap Screw	3
11	KT4-1035	Motor Key	1
12	KT4-1030	Bushing, 3/4" Bore	1
13	KT4-1016	Cutter Hub	1

See Page O-8 for digging widths



# FRAME ASSEMBLY

## KT100



# FRAME ASSEMBLY

## KT100

<u>ITEM #</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	KT-011	Push Handle Assy. (w/ handle grips)	1
2	KT-010	Handle Grips	2
3	KT-032	Chain, 5/16, 8 links	1
4	KT-106	Height Adjustment Handle (w/ handle grip)	1
5	30194	Handle Grip	1
6	KT-108	Frame Assembly	1
7	KT-206	Kick Plate	1
8	KT-234	Front Skirt	1
9	36412	Nut, Tire	3
10	KT-008	Tire	3
11	KT-025	Bolt, Tire	3
12	KT-232	Side Skirt	1
13	KT-212	Skirt Guard Frame	1



**THINK  
SAFETY  
FIRST**



***LITTLE BEAVER, INC.***

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