



Hydraulic

## EARTH AUGER ATTACHMENTS



Do Not Use This Equipment  
Until This Manual and  
Assembly Instructions  
Have Been Read  
And Understood.



OPERATOR'S  
MANUAL

Part #70853  
Revision: 12/25



18903 High Point Road  
Viola, WI 54664

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1-608-538-4000

# WARRANTY

**LOWE®** Manufacturing Company, LLC, (**LOWE®**) is proud of its reputation for producing products with high standards of quality and workmanship. When **LOWE®** products are used and maintained in the prescribed manner, you can be assured they will provide reliable, productive service.

Period of Warranty: **LOWE®** auger drive units purchased and registered with **LOWE®** will be warranted against defects in materials and workmanship for a period of two years from the date of purchase, subject to the exclusions noted herein. Other **LOWE®** auger items are warranted for a period of one year. There is a FIVE (5) YEAR limited REPAIR or REPLACE WARRANTY on the BP gearbox. Should anything go wrong with your new **LOWE®** BP gearbox that is covered by warranty within that period, simply send it back to **LOWE®** and it will be repaired or replaced by trained factory personnel. Replacement parts used in warranty repairs will be warranted for the balance of the applicable warranty period.

Warranty Registration: To be eligible for warranty coverage, **LOWE®** product(s) must first be registered with **LOWE®**. A warranty registration form is provided in the Operator's Manual. This form must be completed, signed, and mailed to **LOWE®** by either the authorized selling dealer or the purchaser.

Customer's Responsibility: Under the terms of this warranty, the customer will be responsible for ensuring the product is properly operated and maintained as specified in the Operator's Manual. The owner of the product shall give notice to an authorized dealer of any and all apparent defects within ten (10) days of discovery and make the product available for inspection and repairs at the dealer's place of business. Dealers must contact **LOWE®** for authorization of any warranty work.

The customer's responsibilities include all costs of normal maintenance, replacement wear parts, non-warranty repairs, accidents, collision damage, and other repairs resulting from abnormal strain, neglect, or abuse. Specific examples include, but are not limited to, bending or prying with the product, failure to monitor wear, use of contaminated hydraulic fluid, excessive oil flow or pressure, and operation with a broken or damaged part which causes another part to fail. The customer is also responsible for incidental costs such as transportation due to failure. If you have any specific questions on operation or maintenance, please contact your dealer or **LOWE®** for advice.

General Exclusions From Warranty: This warranty is not transferable and applies only to the original owner of the equipment. It does not apply to products sold or used previously, products subject to misuse, service other than normal, damage in transit or handling, normal wear, or products which in the opinion of **LOWE®** have had unauthorized alterations or repair.

**LOWE®** will replace any warrantable parts with original **LOWE®** parts. **LOWE®** will not pay for unauthorized parts, nor will it pay for the freight, excessive labor, travel time, or mileage connected with the replacement of warranty parts. **LOWE®** will also not pay third party repair or replacement charges.

All defective parts against which warranty claims are made must be returned to **LOWE®**, freight prepaid, in accordance with the **LOWE®** Official Return Policy current at the time of the warranty claim. The hydraulic motor(s) used in **LOWE®** products are warranted by the motor manufacturer and, in case of possible warranty failure, must be returned to **LOWE®** or the nearest authorized hydraulic motor distributor for service. Any attempt by you, your dealer, or another company to repair the motor will result in denial of warranty credit.

This warranty is in lieu of all other warranties, expressed or implied. Any claims for incidental or consequential damages are hereby disclaimed by **LOWE®** and excluded from this warranty. **LOWE®** neither assumes nor authorizes any person or company to assume for it any other obligations or liabilities in connection with its products.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Model Number \_\_\_\_\_ Serial Number \_\_\_\_\_ Date Purchased \_\_\_\_\_

Owner's Name \_\_\_\_\_ E-mail \_\_\_\_\_

Owner's Address \_\_\_\_\_

Dealer's Name \_\_\_\_\_

Dealer's Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Dealer's Phone Number \_\_\_\_\_

## II SAFETY INFORMATION



The Safety Alert Symbol is used in this manual to highlight messages where your safety is involved. When you see it, pay attention.

To emphasize special information, the words listed below carry specific meanings and should be carefully reviewed.

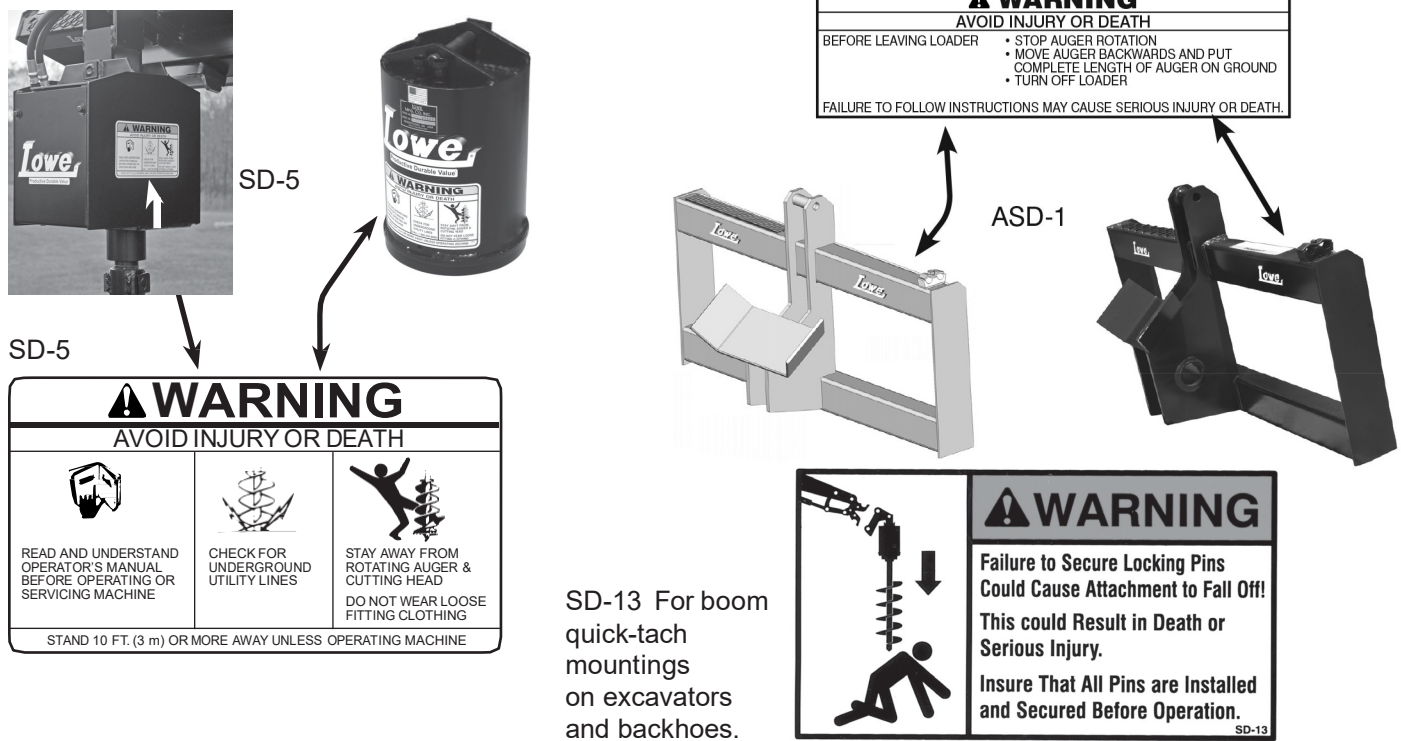
**Danger:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**Warning:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**Caution:** Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**Notice:** This is special information which may make operation of maintenance easier or explain best practices.

### LOCATION OF SAFETY WARNINGS:



### Replacement Safety Decals

**Worn, damaged, or illegible labels should be replaced.** New labels may be obtained from the manufacturer. Labels are listed under specific part numbers and are included in the safety decal illustration.

### Replacement Safety Shields

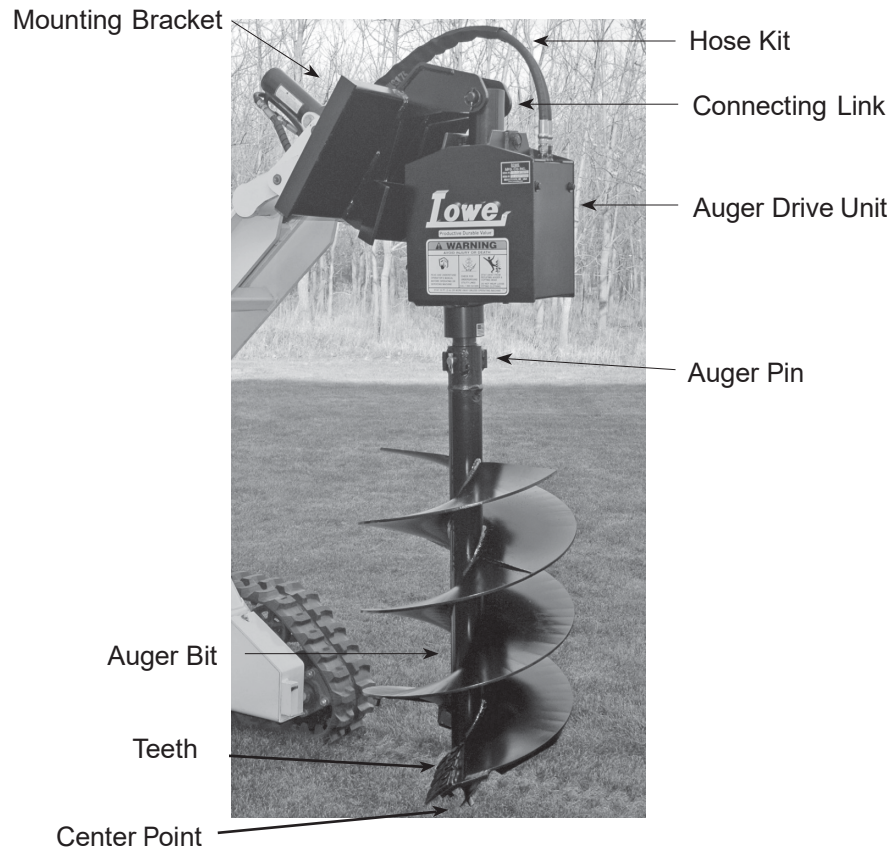
All worn, damaged, unusable, or missing safety shields should be replaced. New shields may be obtained from the manufacturer. They are listed with a specific part number and are included in the exploded parts diagram.

#### Obligations and Usage:

This product is intended to be used only under the guidelines of this manual and relevant literature published by **LOWE**® Manufacturing Company, Inc. It is the owner's and/or operator's obligation to ensure this product is operated only for its intended uses. Operation, contrary to guidelines set forth, may cause premature breakage of the equipment and create serious safety problems.



### III MACHINE NOMENCLATURE



### IV MACHINE SETUP

Your new auger drive unit comes completely assembled from the factory. However, some items may have loosened or become lost during shipping or use. Because of the elements in which an auger operates, the following checklist should be thoroughly completed each time before the machine is used.



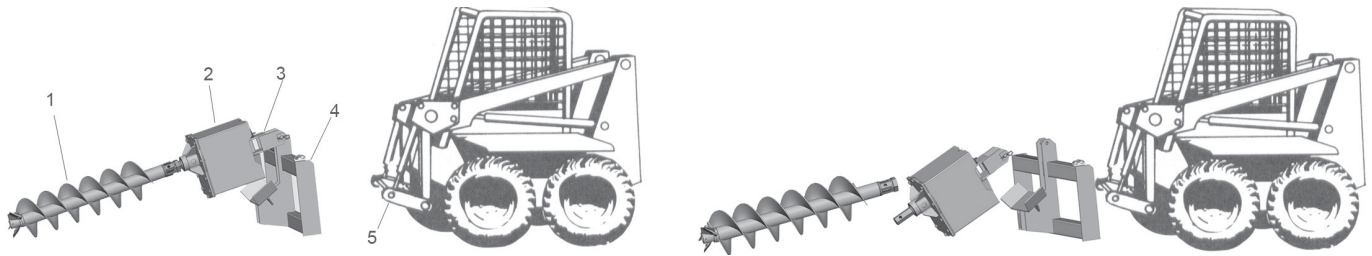
**Make certain that all power sources are disconnected before servicing!**

- 1) \_\_\_\_\_ All nuts, bolts, and other hardware are tightened securely.
- 2) \_\_\_\_\_ All safety covers are secured in their proper positions.
- 3) \_\_\_\_\_ The two attachment hoses that run from the loader to the auger are secure and are long enough to perform the full range of the auger's capability. Such hoses are usually not supplied with the drive unit.
- 4) \_\_\_\_\_ The auger mounting bracket is properly secured to the loader's boom and all levers and/or pins are properly locked in place.
- 5) \_\_\_\_\_ All hoses and fittings are properly tightened to avoid leaks.
- 6) \_\_\_\_\_ All controls operate freely and in the correct manner.
- 7) \_\_\_\_\_ The operator has been briefed on proper operation of the auger.



**Warning:** Do Not use a "Hole Top" cleaning device that extends past the normal working diameter of the auger. Use of such a device greatly increases the chance of accidentally striking another person or object, causing possible serious injury or equipment damage.

## V MOUNTING INSTRUCTIONS



### SKID LOADERS

- 1) Connect auger drive (item 2), connecting link (item 3), and mounting bracket (item 4).
- 2) Attach your choice of auger (item 1) to the shaft of the drive unit. Be sure auger pin is secured.
- 3) Connect mounting bracket to loader's boom plate (item 5).
- 4) Secure all locking levers or pins in their proper fully locked position.
- 5) Connect two hydraulic hoses to the drive unit and then to the loader's auxiliary hydraulic system via proper quick couplers. (Is your hose routing correct to avoid binding?)
- 6) You are now ready for operation.

**CARRY POSITION:** Roll back and lower lift arms until the lowest edge of the auger is 18 to 24 inches above the ground. Transport the auger unit at a slow speed and without rapid side to side movement.

#### REMOVING THE AUGER SETUP:

- 1) Roll the loader arms back and lower lift arms until the end of the auger just touches the ground.
- 2) Stop the engine, disconnect the hydraulic hoses, and release locking levers or pins.
- 3) Start the engine and move the loader backward while lowering lift arms all the way down.
- 4) Angle the loader boom plate forward.

**NOTE:** As the operator faces the mounted assembly the hoses should exit the top front of the drive unit. If mounted improperly, damage to the hoses could occur.

Make sure the correct size pins are used to attach the various components, including the auger.



**WARNING:** Avoid Tipping, Do Not Operate on Side Hills or Sloping Ground Where the Prime Mover Does Not Have a Stable Base.

Do Not Connect Hoses Until Assembly is Properly Mounted and Secured.

Never use a Bucket Clamping Device to Mount the Assembly to Prime Mover..

Make Certain all Connecting Levers and/or Pins are Properly Locked in Place.

Carry the Assembly in Lowered Position at all Times. Avoid Excessive Swing.

Tether Auger with Locking Chain When Transporting on a Swinging Boom (such as a Backhoe).

Do Not Modify Equipment as Damage or Injury Could Occur.

Failure to Follow Directions May Result in Unstable Operation and/or Serious Injury.

### BACKHOES (AND CRANES)

- 1) Following backhoe manufacturer's instructions, remove the backhoe bucket (then disconnect bucket tilt cylinder hydraulic hoses if on a backhoe).
- 2) Assemble drive unit, auger bit, and TBH mounting and then install TBH connecting link in the end of the backhoe dipper arm.
- 3) Typically, you can "tap" into the bucket tilt cylinder hydraulic hoses for your hydraulic power. However, your backhoe dealer is in the best position to advise you as to the best location to attach the auger's hydraulic hoses.
- 4) It is important to follow the operating tips and safety instructions outlined in the previous section on Mounting for Skid Loaders. **Never** allow the auger to swing excessively either during transport or drilling operations.
- 5) Carry auger as low as practical and curled as close to the loader as possible during transport on the job site. Completely disconnect and store in a safe, secured position when loader is being transported from jobsite to jobsite.

## FRONT END LOADERS

- 1) There are a number of methods for mounting, ranging from removal of the bucket and using a special mounting bracket, to side mounting in a boom joint, to using a bucket clamping device. No matter what method is used, it is important to securely mount the auger and make certain that all pins, levers, bolts, and other locking devices are properly installed and maintained.
- 2) Your loader dealer is in the best position to advise you where to “tap” the system for your hydraulic power.
- 3) Follow the operating and safety steps outlined in the previous section on Mounting for Skid Loaders. Never allow the auger to swing excessively during transport or drilling operations.
- 4) Carry auger as low as practical during transport on the jobsite. Completely disconnect and store in a safe, secured position when the loader is being transported from jobsite to jobsite.

## VI OPERATION

*LOWE*® Auger Drive Units are designed to be mounted on a machine with suitable hydraulic capacity. By means of two hydraulic hoses attached to your machine’s hydraulic system, you are able to dig holes in a variety of soil conditions.

The flow and pressure should be measured at the point where the unit is to be mounted. Most important in a drilling operation is the amount of output torque your drive unit develops. As a general rule of thumb, gallonage determines turning speed while hydraulic pressure determines torque. *LOWE*® augers are designed with torque being the primary function for typical drilling applications.

### DIGGING WITH THE AUGER

**Caution:** Do **Not** engage auger rotation unless the point of the auger cutting head is touching the ground. The auger should turn in a clockwise direction for digging.

Operating an attachment auger can be made simpler by following a few simple guidelines:

- 1) Carry the auger low to the ground when traveling between drilling positions.
- 2) Position yourself and the loader as much as possible on the uphill side of the hole. Your machine balance and down force will be greatly improved.
- 3) Do not try to run the loader arms, auger rotation, and other functions all at once. Instead, isolate each function. On a skid loader, a typical method would be to:
  - a) Lift boom and then tilt loader bucket cylinder to full extension.
  - b) Position tip of auger at the center of the intended hole and touch the point to the ground.
  - c) Run loader at about 65 to 75 percent power and engage auger rotation.
  - d) Use loader boom pedal to gently push rotating auger into ground. Ease up on down force if rotation stops.
  - e) As the hole is being dug, periodically adjust loader’s position to assure a vertical hole. You may have to monitor the position of the tilt arms if your loader has a self-leveling bucket feature.
  - f) Once the hole is dug, gently pull auger out of the ground with no rotation and shake the spoil dirt off. If the auger is stuck, reverse rotation until it is free, then pull it out of the ground with no rotation.
  - g) Dip the auger back into the hole to pick up spoil dirt that may have fallen into the hole, then repeat step F.
  - h) Raise the auger out of the hole and roll tilt arms into low carry position. Watch for people and obstructions, then go to the next hole site.
- 4) In hard or frozen ground it may be wise to slow the rotation speed to allow the teeth time to penetrate the soil.
- 5) Remember that torque and down force are the two most important items in digging hard-to-penetrate conditions. Hard rock is best left to the premium high pressure truck drill rigs or to other methods of rock excavation.

## VII TROUBLESHOOTING

Symptom	Possible Cause	Action
Jerky	Cold oil or air in lines Loader hydraulic pump or system	Give time to warm up. See loader's manual.
Slow	Restriction in lines, couplers, or in loader's hydraulic system  Worn, damaged, or insufficient loader hydraulic pump  Loader oil filter	Check with pressure and flow gauge.  See loader dealer. Request flow (GPM) and pressure (PSI) check.  Check for dirt and grime. See if filter is installed correctly.
Insufficient digging capacity	Hydraulic pump in loader or motor in auger  Excessive load	See your dealer. Request pressure check.  Reduce digging load because load exceeds capacity of system.
Wrong direction	Hoses not properly connected	Re-install properly.
Oil leaks	Hydraulic motor seals are worn or damaged  Loose fittings on hoses or motor  Hoses are loose or damaged	See dealer for replacement of seals.  Tighten or replace as required.  Tighten or replace as required.

## VIII MAINTENANCE

(also see Checklist in Machine Setup Section)



**WARNING:** Diesel fuel or hydraulic fluid under pressure can penetrate the skin or damage eyes. Fluid leaks under pressure may not be visible. Never use a bare hand to find leaks and always wear safety goggles for eye protection. Such fluid, if injected into the skin, must be removed within a few hours by a doctor familiar with this type of injury. Make certain power source is disconnected before servicing.

**Shut off power, relieve pressure, and disconnect power source before performing maintenance.**

Maintenance Required	Length of Operation	Type of Maintenance
Gear Box Lubricant	50 hours initially, then once each year	Drain and replace gear oil. Use EP 80-90 wt. gear oil. Use 21 oz. for BP-150, BP-210, BP-230 Use 16 oz. for TJ-101 Use 27 oz. for A-275.      Use 54 oz. in the A-400.
Motor Drive Chain	50 hours or as needed	Lubricate. Chain should have about 1 inch (25.4 mm) of free play.
Auger Teeth	As needed for wear	Replace. Pay particular attention to outside teeth
Auger Center Point	As needed for wear	Replace.
Auger Attaching Pin	As needed	Check for bends, cracks, breaks, and visible wear. Replace if any of these conditions are present.
Auger Driveshaft	Before each use	Check for bends, cracks, breaks, and visible wear. Replace if any of these conditions are present.
Unit Mounting Pins (2)	Before each use	Check for bends, cracks, breaks, and visible wear. Replace if any of these conditions are present.

**NOTE:** Use of a gear puller is highly recommended when removing a sprocket from a shaft.

**Chain Lubricant** can be any premium grade grease or commercial chain lube (motorcycle chain lubricant works very well). The lubricant will work best when applied to a warm chain. Give the lubricant time to soak into the working parts of the chain before resuming operation.



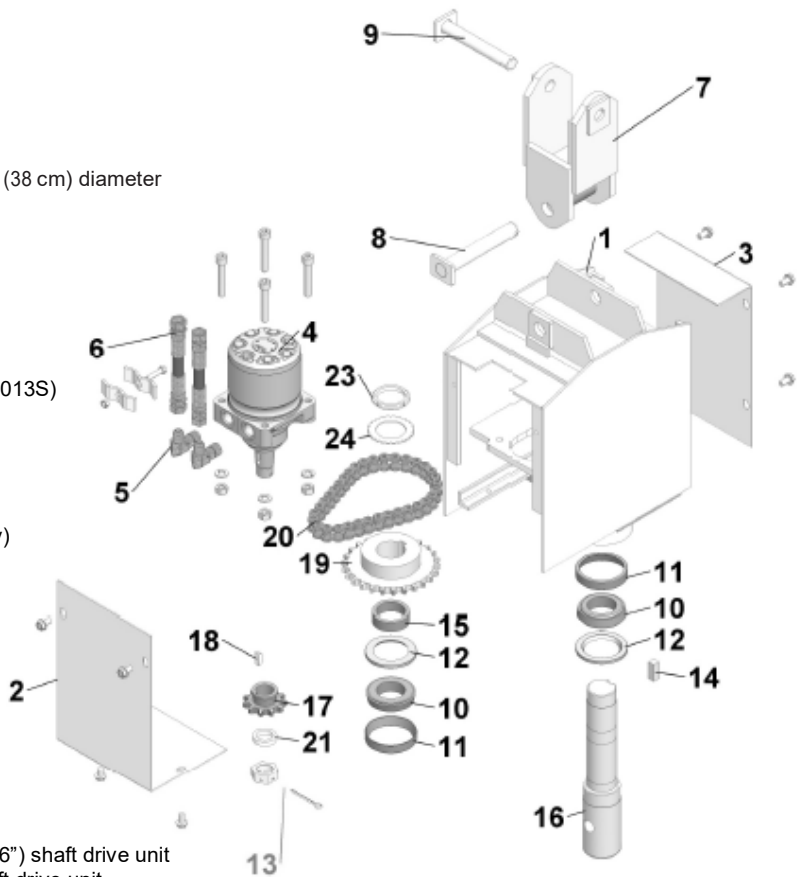
# IX UNIT PARTS DIAGRAMS

## MODEL 500 CL

### Operational Range:

Oil Flow 5 to 15 GPM (19 to 57 Lpm)  
 Pressure 1,700 to 3,300 PSI (11,720 to 22,737 Kpa)  
 Digging Conditions Light  
 Typical Auger Sizes 4" (10 cm), 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm) diameter

Ref. #	Part #	Description
1	75-001CL	Housing
2	75-002A	Front cover
3	75-004	Rear cover
4	MEL-12K	Hydraulic motor
5	10-008E	90°elbow (2 Required)
6	10-009	Hose nipple and clamp assembly
7	10-112	Universal connecting link (Includes 10-013S)
8	10-013CL	Clevis BOLT
9	10-013S	Clevis BOLT
10	10-368A	Bearing cone (2 Required)
11	10-362A	Bearing cup (2 Required)
12	10-25028	Seal (2 Required)
13	N-12	Nut for motor shaft (Includes cotter key)
14	10-15	Key for output shaft
15	TR-507	Spacer for output shaft
16	CR255-13	Round output shaft
	HE255-13	Hex output shaft
17	11-60T	Motor sprocket (Includes 10-17W)
18	10-17W	Key for motor shaft
19	26-60	Driven sprocket (Includes 10-15)
20	34-60H	Drive chain
21	10-14CL	Motor shaft spacer
23	N-10	Nut for output shaft
24	W-10	Lock washer for output shaft
	C-60H	Chain connecting link
	L-78	7/8" pin to attach auger to round (2 9/16") shaft drive unit
	L-50	1/2" pin to attach auger to hex (2") shaft drive unit
	SK-92	Seal kit for moto

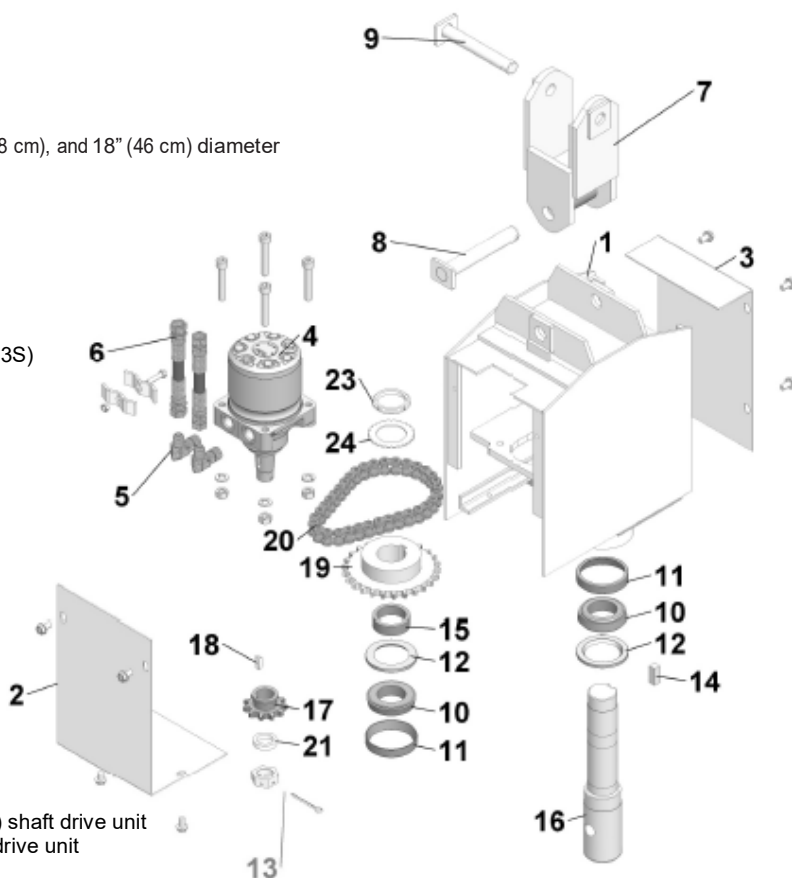


## MODEL 750 Classic

### Operational Range:

Oil Flow 6 to 20 GPM (23 to 76 Lpm)  
 Pressure 2,000 to 3,300 PSI (13,790 to 22,737 Kpa)  
 Digging Conditions Light  
 Typical Auger Sizes 4" (10 cm), 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), and 18" (46 cm) diameter

Ref. #	Part #	Description
1	75-001CL	Housing
2	75-002A	Front cover
3	75-004	Rear cover
4	MEL-12K	Hydraulic motor
5	10-008E	90°elbow (2 Required)
6	10-009	Hose nipple and clamp assembly
7	10-112	Universal connecting link (Includes 10-013S)
8	10-013CL	Clevis BOLT
9	10-013S	Clevis BOLT
10	10-368A	Bearing cone (2 Required)
11	10-362A	Bearing cup (2 Required)
12	10-25028	Seal (2 Required)
13	N-12	Nut for motor shaft (Includes cotter key)
14	10-15	Key for output shaft
15	TR-507	Spacer for output shaft
16	CR255-13	Round output shaft
	HE255-13	Hex output shaft
17	11-60T	Motor sprocket (Includes 10-17W)
18	10-17W	Key for motor shaft
19	26-60	Driven sprocket (Includes 10-15)
20	34-60H	Drive chain
21	10-14CL	Motor shaft spacer
23	N-10	Nut for output shaft
24	W-10	Lock washer for output shaft
	C-60H	Chain connecting link
	L-78	7/8" pin to attach auger to round (2 9/16") shaft drive unit
	L-50	1/2" pin to attach auger to hex (2") shaft drive unit
	SK-92	Seal kit for moto

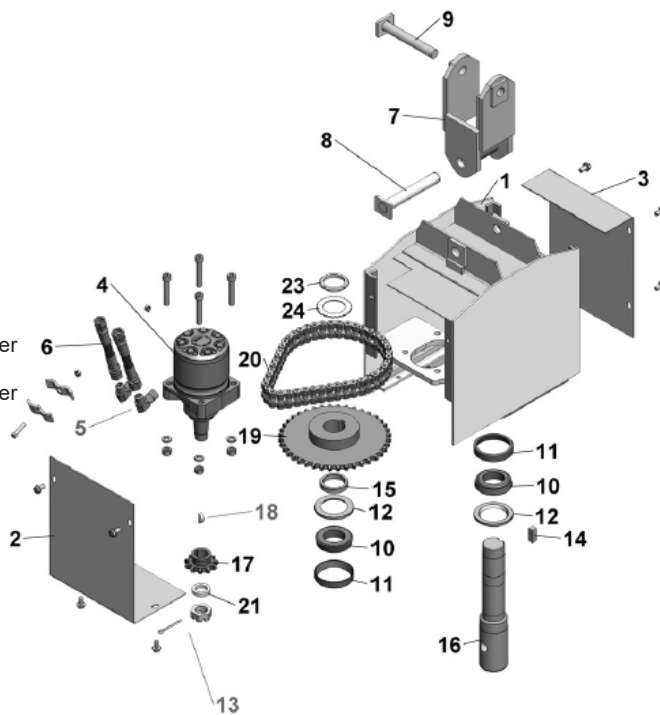


**Operational Range:**

1200 Classic	10-20 GPM (38 to 76 LPM)
1650 Classic	14-25 GPM (53 to 95 LPM)
2175 Classic	17-25 GPM (64 to 95 LPM)
Pressure	2,000 to 3,300 PSI (13,790 to 22,737 Kpa)
Digging Conditions	Moderate to moderately heavy
Typical Auger Sizes	
1200 Classic	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), and 30" (76 cm) diameter
1650 Classic	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91 cm) diameter
2175 Classic	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91 cm) diameter

Ref. #	Part #	Description
1	10-001CL	Housing
2	10-002CL	Front cover
3	10-004CL	Rear cover
4	MEL-12K	Hydraulic motor 1200 Classic
	MEL-18K	Hydraulic motor 1650 Classic
	MEL-21K	Hydraulic motor 2175 Classic
5	10-008E	90° elbow (2 required)
6	10-009	Hose Assy and clamp
7	10-112	Universal connecting link (includes 10-103S)
8	10-013CL	Hex Bolt, 1-8x7.5 (includes Nut)
9	10-013S	Hex Bolt, 7/8-9x6.5 (includes Nut)
10	10-368A	Bearing cone (2 required)
11	10-362A	Bearing cup (2 required)
12	10-25028	Seal (2 required)
13	N-12	Nut for output shaft- includes cotter key
14	W-10	Key for output shaft
15	TR-507B	Spacer for output shaft
16	CR255-13	Round output shaft
16	HE255-13	Hex output shaft

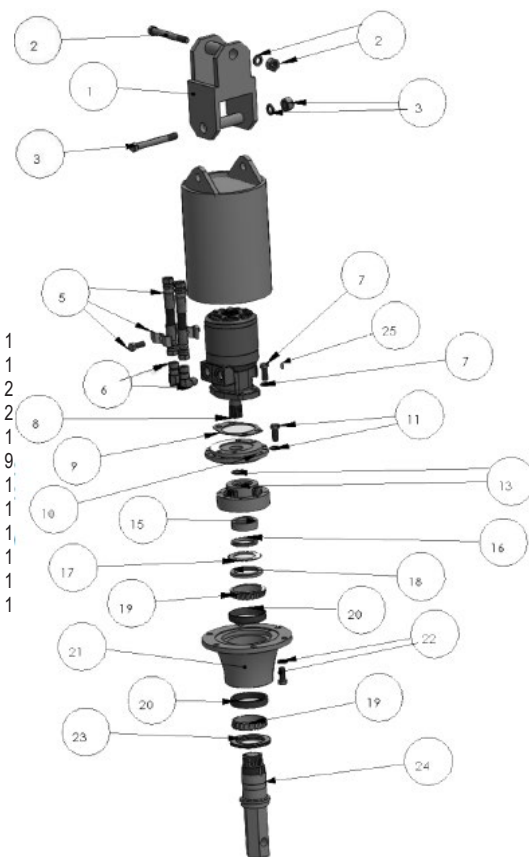
17	11-60T	Motor sprocket (includes 10-17W key)
18	10-17W	Key for motor shaft
19	40-60	Driven sprocket (includes key)
20	46-60DBC	Drive chain
21	10-14CL	Motor shaft spacer
23	N-10	Nut for output shaft
24	W-10	Lock washer for output shaft
	C-60DBC	Chain connecting link
	L-78	$\frac{7}{8}$ " pin to attach auger to round ( $2\frac{9}{16}$ ") shaft drive unit
	L-50	$\frac{3}{4}$ " pin to attach auger to hex (2") shaft drive unit
	SK-92	Seal kit for motor



**Operational Range:**

BP-150	10 to 20 GPM (38 to 76 Lpm)
BP-210	15 to 30 GPM (57 to 114 Lpm)
BP-230	18 to 30 GPM (68 to 114 Lpm)
Pressure Range:	2,000 to 3,300 PSI (13,790 to 22,737 Kpa)
Digging Conditions:	Moderate to moderately heavy
Typical Auger Sizes:	
BP-150	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), and 30" (76 cm) diameter
BP-210	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91 cm) diameter
BP-230	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), 36" (91 cm), 42" (107 cm), and 48" (122 cm) diameter

Ref. #	Part #	Description	Ref. #	Part #	Description
1	BP-112	Connecting Link	16	BPG-007	B.P. Shaft Nut
2	BP-113	Connecting Link Pin Assembly	17	BPG-008	B.P. Shaft Lock Washer
3	BP-114	B.P. Unit Clevis Pin Assembly	18	BPG-014	B.P. Bearing Washer
4	BP-115	B.P. Unit Housing	19	BPG-009	B.P. Bearing Cone
5	10-009	Unit Motor Hose Assembly	20	BPG-010	B.P. Bearing Cup
6	10-008E	Unit Motor Fitting	21	BPG-011	B.P. Unit Hub
7	BP-118	B.P. Motor Bolt Assembly	22	BPG-012	B.P. Housing Bolt Assembly
8	MEL-12S	Unit Motor Model BP-150	23	BPG-013	B.P. Shaft Seal
8	MEL-18S	Unit Motor Model BP-210	24	BPG-013H	B.P. Hex Output Shaft
8	MEL-21S	Unit Motor Model BP-230	24	BPG-013R	B.P. Round Output Shaft
9	K-005	Motor Gasket	25	BPG-016	B.P. Drain Plug
10	BPG-001	B.P. Top Cover	26	BPG-015	B.P. Seal Protection Plate
11	BPG-002	B.P. Top Cover bolt Assembly		L-78	7/8" pin to attach auger to round (29/16") shaft drive unit
12	BPG-003	B.P. Thrust Washer			
13	BPG-004	B.P. Gear Set		L-50	3/4" pin to attach auger to hex (2") shaft drive unit
14	BPG-005	B.P. Ring Gear			
15	BPG-006	B.P. Spacer		SK-92	Seal kit for motor
COMPLETE GEAR BOX					
			10-26	BPG-006H	B.P. GEAR BOX, HEX
			10-26	BPG-006R	B.P. GEAR BOX, SHAFT

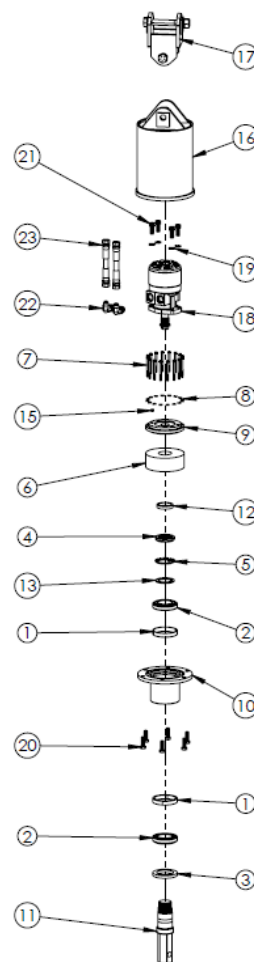


## MODEL TJ-101

### Operational Range:

Oil Flow: 5 to 15 GPM (19 to 59 Lpm)  
 Pressure Range: 2,000 to 3,000 PSI (13,790 to 20,684 kPa)  
 Digging Conditions: Moderate to Light  
 Typical Auger Size: 4" (10 cm), 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm) diameter

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	71028	BEARING CUP 382A BP	2
2	71029	BEARING CONE, 387 BP	2
3	71030	SEAL, OIL 26310	1
4	71032	LOCKNUT, N-11	1
5	71033	LOCKWASHER, W-11	1
6	71067	GEARSET, MODEL 3	1
7	71076	SCREW, SOC, 1/4-20X3.00, BO	16
8	71077	WASH, LOCK, 1/4, PL	16
9	100100A	TJ100 GEAR BOX COVER	1
10	100102A	TJ, HUB, WELDMENT	1
11	250048	BP HEX SHAFT	1
12	251118	SPACER	1
13	253118	BEARING SPACER	1
14	70131A	GEAR OIL, 80W90	1
15	71079	PLUG-1/8" NPTF STEEL PIPE	1
16	150-0036	TJ100 CAN WELDMENT	1
17	170-0100	TJ-101 LINK, ASM	1
18	71066	MOTOR, MEL-9S SPLINE	1
19	70008	WASH, LOCK, 1/2, ZC	4
20	70050	SCREW, HEX, .50-13X1.50, G5, ZP	6
21	71213	SCREW, SOC, 1/2-13X1.25, BO	4
22	70032	FTG, 90DEG, -10MORB, -8MJIC, ST, ZC	2
23	71225	HOSE, ASSEMBLY -7.5 UNIT, 4,000 PSI	2

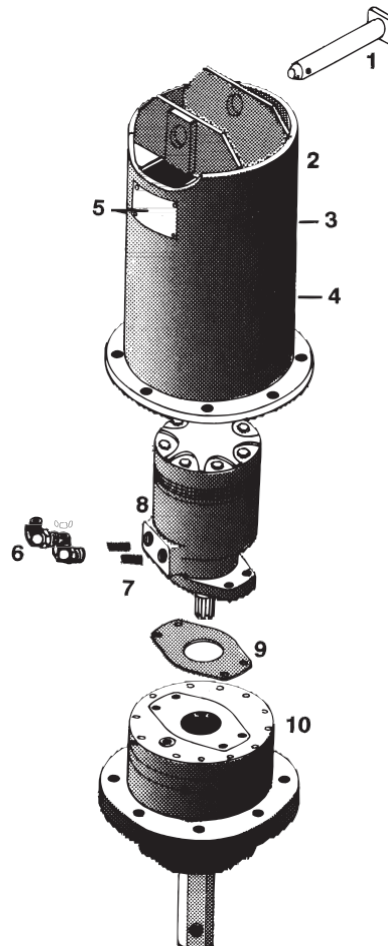


## Model A-400H

### Operational Range:

Oil Flow: 22 to 42 GPM (83 to 159 Lpm)  
 Pressure Range: 2,000 to 4,200 PSI (13,790 to 28,958 kPa)  
 Digging Conditions: Moderate to moderately heavy  
 Typical Auger Size: 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), 36" (91 cm), 42" (107 cm), and 48" (122 cm) diameter

Ref. #	Part #	Description
1	SK-009	Clevis pin to attach auger drive unit to
2	A-008	Drive unit housing with logo and safety labels
3	L-large	LOWE <sup>®</sup> logo
4	SD-5	Warning decal
5	SNT	Serial number tag
7	10-008HP	90° elbow (2 required)
7	10-008TK	Motor fitting (2 required)
8	TKL-30	Hydraulic motor
9	TK-005	Gasket
10	A-006-2.5H	Gearbox 2 1/2" hex shaft



## MODELS 1650HPCL, 2175HPCL

### Operational Range:

#### Oil Flow

1650HPCL 14-25 GPM (53 to 95 LPM)

2175HPCL 17-25 GPM (64 to 95 LPM)

Pressure 2,000 to 3,500 PSI (13,790 to 24,131 Kpa)

Digging Conditions Moderate to moderately heavy

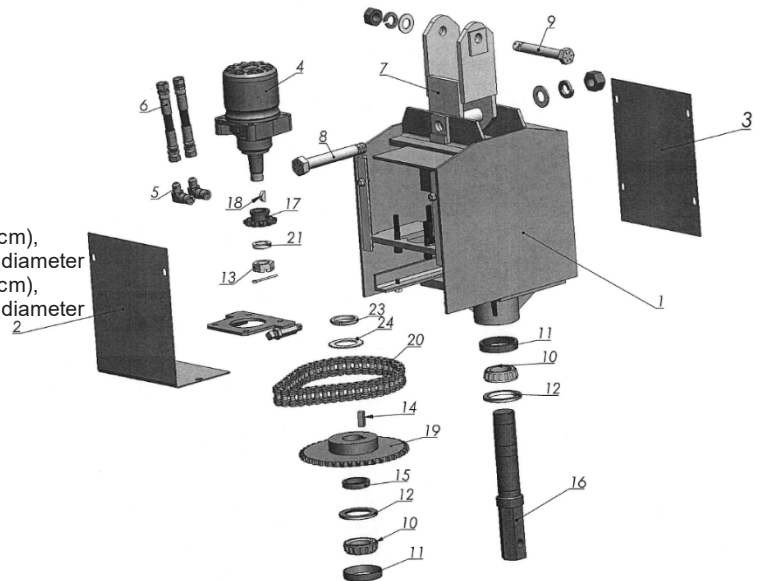
#### Typical Auger Sizes

1650HPCL 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91 cm) diameter

2175HPCL 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91 cm) diameter

Ref. #	Part #	Description
1	10-001CL	Housing
2	10-002CL	Front cover
3	10-004CL	Rear cover
4	TKG-18K	Hydraulic motor 1650HPCL
	TKG-21K	Hydraulic motor 2175HPCL
5	10-008E	90° elbow (2 required)
6	10-009	Hose Assy and clamp
7	10-112	Universal connecting link (includes 10-103S)
8	10-013CL	Hex Bolt, 1-8x7.5 (includes Nut)
9	10-013S	Hex Bolt, 7/8-9x6.5 (includes Nut)
10	10-368A	Bearing cone (2 required)
11	10-362A	Bearing cup (2 required)
12	10-25028	Seal (2 required)
13	N-12	Nut for output shaft- includes cotter key
14	W-10	Key for output shaft
15	TR-507B	Spacer for output shaft
16	CR255-13	Round output shaft
16	HE255-13	Hex output shaft

17	11-60T	Motor sprocket (includes 10-17W key)
18	10-17W	Key for motor shaft
19	40-60	Driven sprocket (includes key)
20	46-60DBC	Drive chain
21	10-14CL	Motor shaft spacer
23	N-10	Nut for output shaft
24	W-10	Lock washer for output shaft
	C-60DBC	Chain connecting link
	L-78	7/8" pin to attach auger to round (29/16") shaft drive unit
	L-50	3/4" pin to attach auger to hex (2") shaft drive unit
	SK-92	Seal kit for motor



## MODELS BPHP-210; BPHP-230

### Operational Range:

#### Oil Flow:

BPHP-210: 15 to 30 GPM (57 to 114 Lpm)

BPHP-230: 18 to 30 GPM (68 to 114 Lpm)

Pressure Range: 2,000 to 3,300 PSI (13,790 to 24,131 Kpa)

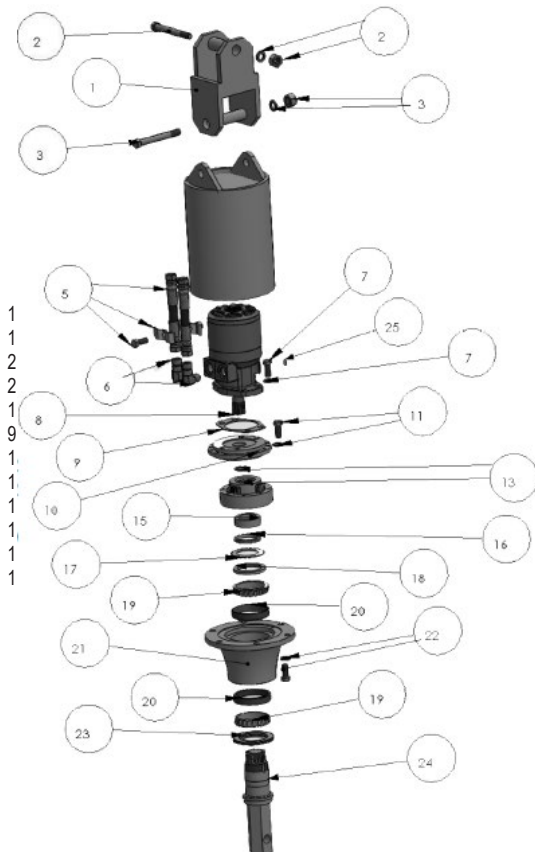
Digging Conditions: Moderate to moderately heavy

#### Typical Auger Sizes:

BPHP-210 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91 cm) diameter

BPHP-230 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18" (46 cm), 20" (51 cm), 24" (61 cm), 30" (76 cm), 36" (91 cm), 42" (107 cm), and 48" (122 cm) diameter

Ref. #	Part #	Description	Ref. #	Part #	Description
1	BP-112	Connecting Link	1	16	B.P. Shaft Nut
2	BP-113	Connecting Link Pin Assembly	1	17	B.P. Shaft Lock Washer
3	BP-114	B.P. Unit Clevis Pin Assembly	1	18	B.P. Bearing Washer
4	BP-115	B.P. Unit Housing	1	19	B.P. Bearing Cone
5	10-009	Unit Motor Hose Assembly	1	20	B.P. Bearing Cup
6	10-008E	Unit Motor Fitting	2	21	B.P. Unit Hub
7	BPG-118	B.P. Motor Bolt Assembly	4	22	B.P. Housing Bolt Assembly
8	TKG-18S	Unit Motor Model BP-210	1	23	B.P. Shaft Seal
8	TKG-21S	Unit Motor Model BP-230	1	24	B.P. Hex Output Shaft
9	K-005	Motor Gasket	1	24	B.P. Round Output Shaft
10	BPG-001	B.P. Top Cover	1	25	B.P. Drain Plug
11	BPG-002	B.P. Top Cover bolt Assembly	12	26	B.P. Seal Protection Plate
13	BPG-004	B.P. Gear Set	1	L-78	7/8" pin to attach auger to round (29/16") shaft drive unit
15	BPG-006	B.P. Spacer	1	L-50	3/4" pin to attach auger to hex (2") shaft drive unit
				SK-92	Seal kit for motor
				COMPLETE GEAR BOX	
				10-26 BPG-006H	B.P. GEAR BOX, HEX
				10-26 BPG-006R	B.P. GEAR BOX, SHAFT





# X

## WEIGHTS OF AUGER INSTALLATION

**NOTE:** Make certain auger assembly is used only on equipment that can safely handle the weight of all installed items. Weights shown are estimated and do not include the weight of soil that may be on the auger bit.

Drive Unit	Estimated Weight (lbs/Kg)
500CL	85 / 39
750 Classic	170 / 77
1200 Classic	196 / 89
1650 Classic / 1650HPCL	198 / 90
2175 Classic / 2175HPCL	200 / 91
TJ-101	124 / 56
BP-150	164 / 74
BP-210 / BPHP-210	165 / 75
BP-230 / BPHP-230	166 / 75
A-400	390 / 177

Auger Bits (Standard Length)*	Estimated Weight (lbs/Kg)
SQ-4	48 / 21
SQ-6	56 / 25
SQ-9	83 / 38
SQ-12	110 / 50
SQ-15	145 / 66
SQ-18	163 / 74
SQ-20	186 / 84
SQ-24	203 / 92
SQ-30	260 / 118
SQ-36	340 / 154
SQ-42	439 / 199
SQ-48	480 / 218

Auger Bits cont. (Standard Length)*	Estimated Weight (lbs/Kg)
TSQ-18	117 / 53
TSQ-24	160 / 73
TSQ-30	270 / 122
TSQ-36	348 / 158
TSQ-42	430 / 948
TSQ-48	475 / 216
LP-6	50 / 23
LP-9	77 / 35
LP12	108 / 49
LP-14/15	136 / 62
LP-18	119 / 54
LP-20	133 / 60
LP-24	178 / 81
LP-30	255 / 116
LP-36	286 / 130
*Hex Hub - add 5 lbs (2 Kg) to the weight of the auger bit.	

Auger Mounting Brackets	Estimated Weight (lbs/Kg)
Typical Skid Steer Loader	145 / 66
Typical Backhoe Loader (TBH Link)	55 / 25
Tractor Front Loader (39LC Link)	51 / 23
Quick Connect Mount for Front Loaders	185 / 84

# XI

## PERFORMANCE SPECIFICATIONS

FLOW	SPEED IN RPM														
GPM / LPM	500CL	750CL	1200CL	1650CL	1650HPCL	2175CL	2175HPCL	TJ-101	BP-150	BP-210	BPHP-210	BP-230	BPHP-230	A-400	
6 / 22.7	56							44							
8 / 30.3	75	64						59							
10 / 37.9	94	80	52					73	51						
12 / 45.4	113	97	63					88	61						
14 / 53.0	132	113	74	51	51			103	71						
16 / 60.6		129	84	58	58				82	55	55				
18 / 68.1		145	95	65	65	54	54		93	62	62	50	50		
20 / 75.7		161	106	73	73	60	60		103	68	68	54	54		
22 / 83.3				80	80	67	67			76	76	60	60	42	
24 / 90.8				88	88	73	73			82	82	64	64	45	
26 / 98.4										89	89	70	70	49	
28 / 106.0										97	97	75	75	53	
30 / 113.6										104	104	81	81	57	
32 / 121.1										109	109	91	91	60	
34 / 128.7														6	
36 / 136.3														68	
38 / 143.8														71	
40 / 151.4														76	
42 / 159.0														79	

DRIVE MODEL	TORQUE - lbs/ft per PSI					DRIVE MODEL	TORQUE - Newton meters per Kpa				
	(Theoretical / Near Actual)						(Theoretical / Near Actual)				
	2,000	2,500	3,000	3,500	4,000		13,790	17,237	20,684	24,131	27,589
500CL	653 / 588	817 / 735	980 / 882			500CL	885 / 797	1,108 / 997	1,329 / 1,196		
750CL	745 / 671	932 / 839	1,118 / 1,006			750CL	1,010 / 909	1,264 / 1,137	1,516 / 1,364		
1200CL	1,150 / 1,035	1,437 / 1,293	1,724 / 1,552			1200CL	1,559 / 1,403	1,948 / 1,753	2,337 / 2,104		
1650CL	1,652 / 1,487	2,062 / 1,856	2,478 / 2,230			1650CL	2,240 / 2,016	2,796 / 2,516	3,360 / 3,024		
1650HPCL	1,652 / 1,487	2,062 / 1,856	2,478 / 2,230	2,887 / 2,507	3,300 / 2,873	1650HPCL	2,240 / 2,016	2,796 / 2,516	3,360 / 3,024	3,910 / 3,390	
2175CL	1,992 / 1,793	2,490 / 2,241	2,989 / 2,690			2175CL	2,701 / 2,431	3,376 / 3,038	4,053 / 3,647		
2175HPCL	1,992 / 1,793	2,490 / 2,241	2,989 / 2,690	3,479 / 3,031	3,976 / 3,472	2175HPCL	2,701 / 2,431	3,376 / 3,038	4,053 / 3,647	4,747 / 4,109	
TJ-101	716 / 644	899 / 809	1,080 / 972			TJ-101	971 / 873	1,219 / 1,099	1,464 / 1,318		
BP-150	1,190 / 1,071	1,486 / 1,337	1,783 / 1,604			BP-150	1,613 / 1,452	2,014 / 1,813	2,417 / 2,175		
BP-210	1,708 / 1,537	2,135 / 1,921	2,562 / 2,306			BP-210	2,315 / 2,084	2,894 / 2,605	3,473 / 3,126		
BPHP-210	1,708 / 1,537	2,135 / 1,921	2,562 / 2,306	2,930 / 2,544	3,349 / 2,920	BPHP-210	2,315 / 2,084	2,894 / 2,605	3,473 / 3,126	3,972 / 3,449	
BP-230	1,999 / 1,799	2,497 / 2,247	2,998 / 2,698			BP-230	2,710 / 2,439	3,385 / 3,047	4,065 / 3,658		
BPHP-230	1,999 / 1,799	2,497 / 2,247	2,998 / 2,698	3,530 / 3,082	4,034 / 3,529	BPHP-230	2,710 / 2,439	3,385 / 3,047	4,065 / 3,658	4,786 / 4,179	
A-400	2,970 / 2,673	3,712 / 3,340	4,454 / 4,009	5,196 / 4,676	5,939 / 5,345	A-400	4,027 / 3,624	5,032 / 4,529	6,039 / 5,435	7,044 / 6,340	8,052 / 7,247