



Hydraulic

# EARTH AUGER ATTACHMENTS



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



OPERATOR'S MANUAL Part #RAL 0116







**Equipment Attachments** 

18903 High Point Road Viola, WI 54664

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

Period of Warranty: **LOWE**<sup>®</sup> auger drive units purchased and registered with **LOWE**<sup>®</sup> 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**<sup>®</sup> 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**<sup>®</sup> BP and TJ gearbox that is covered by warranty within that period, simply send it back to **LOWE**<sup>®</sup> 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**<sup>®</sup> product(s) must first be registered with **LOWE**<sup>®</sup>. A warranty registration form is provided in the Operator's Manual. This form must be completed, signed, and mailed to **LOWE**<sup>®</sup> 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**<sup>®</sup> 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 low 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**<sup>®</sup> 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**<sup>®</sup> have had unauthorized alterations or repair.

**LOWE**<sup>®</sup> will replace any warrantable parts with original **LOWE**<sup>®</sup> parts. **LOWE**<sup>®</sup> 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**<sup>®</sup> will also not pay third party repair or replacement charges.

All defective parts against which warranty claims are made must be returned to **LOWE**<sup>®</sup>, freight prepaid, in accordance with the **LOWE**<sup>®</sup> Official Return Policy current at the time of the warranty claim. The hydraulic motor(s) used in **LOWE**<sup>®</sup> products are warranted by the motor manufacturer and, in case of possible warranty failure, must be returned to **LOWE**<sup>®</sup> 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**<sup>®</sup> and excluded from this warranty. **LOWE**<sup>®</sup> 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	Denotes the most serious potential hazard(s).
Warning	The personal safety of the operating personnel or other persons may be
	involved. Disregarding this information could result in injury.
Caution	General reminders of good safety practices or to direct attention to
	unsafe practices.
Note	This is special information which may make operation of maintenance
	easier or make instructions more clear

ASD-1

#### 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**

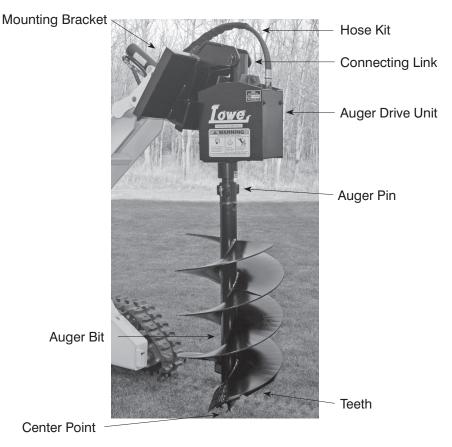
All worn, damaged, unusable, or missing safety shields should be replaced. New shields may be obtained from the manufacturer. They are listed with a specific part number and are included in the exploded parts diagram.

#### **Obligations and Usage:**

This product is intended to be used only under the guidelines of this manual and relevant literature published by  $LOWE^{\text{®}}$  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.







# 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!

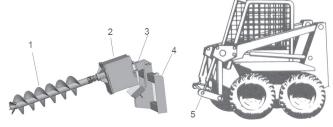
- 1) \_\_\_\_\_ All nuts, bolts, and other hardware are tightened securely.
- 2) \_\_\_\_\_ All safety covers are secured in their proper positions.
- 3) \_\_\_\_\_ The two attachment hoses that run from the loader to the auger are secure and are long enough to perform the full range of the auger's capability. 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.

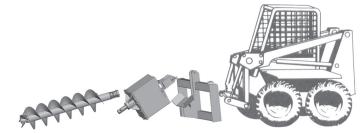


**Warning:** Do Not use a "Hole Top" cleaning device that extends past the normal working diameter of the auger. Use of such a device greatly increases the chance of accidentally striking another person or object, causing possible serious injury or equipment damage.



# 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 length correct?)
- 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) Tilt 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, especially the auger.



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

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

Never use a Bucket Clamping Device to Mount the Assembly to a Skid Loader.

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.
- 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*<sup>®</sup> 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*<sup>®</sup> 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	Give time to warm up.
	Loader hydraulic pump or system	See loader's manual.
Slow	Restriction in lines, couplers, or in loader's hydraulic system	Check with pressure and flow gauge.
	Worn, damaged, or insufficient loader hydraulic pump	See loader dealer. Request flow (GPM) and pressure (PSI) check.
	Loader oil filter	Check for dirt and grime. See if filter is installed correctly.
Insufficient digging	Hydraulic pump in loader or motor in auger	See your dealer. Request pressure check.
capacity	Excessive load	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	See dealer for replacement of seals.
	Loose fittings on hoses or motor	Tighten or replace as required.
	Hoses are loose or damaged	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. in the BP-150, BP-210, BP-230. Use 16 oz. in the TJ-100. Use 27 oz. in the 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 do its best job 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 with SPEED & POWER RATINGS

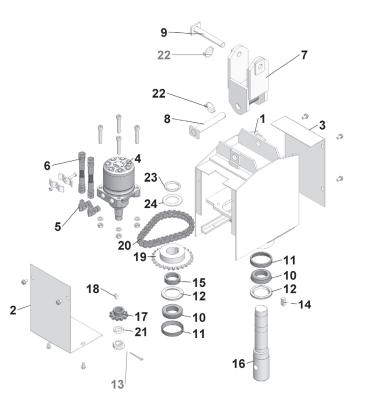
#### MODEL 500 Classic

Digging Conditions Lig	l (19 to 57 Lpm) 300 PSI (11,720 to 22,737 Kpa)	9 22 7
Ref. #     Part #       1     75-001C       2     75-002A       3     75-004       4     MEL-12t       5     10-008E       6     10-009       7     10-112       8     10-013C       9     10-013S       10     10-368A       11     10-362A       12     10-2502f       13     N-12       14     10-15       15     TR-507       16     CR255-1       17     11-60T       18     10-17W       19     20-60       20     30-60H       21     10-14       22     HANG-4       23     N-10       24     W-10       C-60H     L-78       L-50     SK-92	Description     CL   Housing     A   Front cover     Rear cover     K   Hydraulic motor     E   90°elbow (2 Required)     Hose nipple and clamp assembly     Universal connecting link (Includes 10-013S)     CL   Clevis pin (Includes HANG-4)     S   Clevis pin (Includes HANG-4)     A   Bearing cone (2 Required)     A   Bearing coup (2 Required)     Nut for motor shaft (Includes cotter key)     Key for output shaft     Spacer for output shaft     13   Round output shaft     13   Hex output shaft     14   Diriven sprocket (Includes 10-17W)     Key for motor shaft   Dirive chain     Motor shaft spacer   Dirive chain	

#### 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 6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), and 18" (46 cm) diameter

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 pin (Includes HANG-4)     9   10-013S   Clevis pin (Includes HANG-4)     10   10-362A   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     17   11-60T   Motor sprocket (Includes 10-17W)     18   10-17W   Key for motor shaft     19   26-60   Drive nsprocket (Includes 10-15)     20   34-60H   Drive chain     21   10-14   Motor shaft spacer     22   HANG-4   Lynch pin     23   N-10   Nut for output shaft     24   W-10   Lock	2 75- 3 75- 4 ME 5 10- 6 10- 7 10- 8 10- 9 10- 10 10- 11 10- 12 10- 13 N-1 14 10- 15 TR- 16 CR: HE: 17 11- 18 10- 20 34- 21 10- 22 HAI 23 N-1 24 W- <sup>1</sup> 24 W- <sup>1</sup> 24 W- <sup>1</sup> 25 C- <sup>2</sup> C- <sup>2</sup> L- <sup>5</sup>	001CL Housing   001CL Housing   002A Front cover   004 Rear cover   L-12K Hydraulic motor   008E 90° elbow (2 Requ   009 Hose nipple and c   112 Universal connect   013CL Clevis pin (Include   368A Bearing cone (2 R   362A Bearing cup (2 Required)   2 Nut for motor shaf   15 Key for output shai   507 Spacer for output shai   255-13 Round output shaf   601 Drive chain   14 Motor sprocket (In   10 Lockwasher for ou   0 Nut for output shaf   10 Lockwasher for ou   00 Nut for output shaf   10 Lockwasher for ou   00 Kei for in to attach at a   01 Vier pin to attach at a	Hamp assembly ser HANG-4) as HANG-4) as HANG-4) equired) equired) ft (Includes cotter key) aft shaft ft icludes 10-17W) ft includes 10-15) ir ft utput shaft link auger to round (2 9/16") shaft drive uni
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### MODELS 1200 Classic, 1650 Classic, 2175 Classic

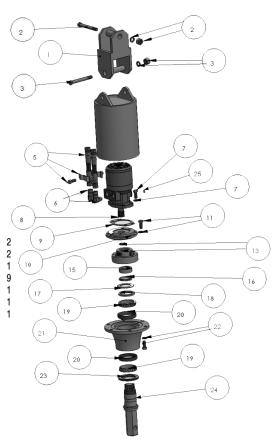
<b>Operati</b> Oil Flow	onal Rang	e:			9
1200 ( 1650 (		10-20 GPM (38 to 76 LPM) 14-25 GPM (53 to 95 LPM)			22 7 0
2175 (		17-25 GPM (64 to 95 LPM)			8
Pressure		2,000 to 3,300 PSI (13,790 to 22,737 Kpa)			
	conditions	Moderate to moderately heavy			
1200 (1200	uger Sizes	$C_{1}^{*}$ (15 cm) $O_{1}^{*}$ (00 cm) $10_{1}^{*}$ (00 cm) $15_{1}^{*}$ (00 cm) $10_{1}^{*}$	(16 am)		
1200 (	JIASSIC	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18' 20" (51 cm), 24" (61 cm), and 30" (76 cm) diamete		4	23-0
1650 (	Classic	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18'		6	24-0
		20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91	cm) diameter	6	20 20
2175 (	Classic	6" (15 cm), 9" (23 cm), 12" (30 cm), 15" (38 cm), 18'		No.	
		20" (51 cm), 24" (61 cm), 30" (76 cm), and 36" (91	cm) diameter	5	
Ref. #	Part #	Description			· <sup>19</sup> O 11
1	10-001CL	Housing		e	<b>Q</b> -15 <b>Q</b> -10
2	10-002CL	Front cover			
3	10-004CL	Rear cover		2—	
4	MEL-12K MEL-18K	Hydraulic motor for 1200 Classic Hydraulic motor for 1650 Classic			
	MEL-21K	Hydraulic motor for 2175 Classic		1	21
5	10-008E	90°elbow (2 Required)			16
6	10-009	Hose nipple and clamp assembly			
7 8	10-112 10-013CL	Universal connecting link (Includes 10-013S) Clevis pin (Includes HANG-4)			<sup>\</sup> 13
o 9	10-013CL 10-013S	Clevis pin (Includes HANG-4)			
10	10-368A	Bearing cone (2 Required)			
11	10-362A	Bearing cup (2 Required)	19	40-60 46-60DBC	Driven sprocket (Includes 10-15)
12 13	10-25028 N-12	Seal (2 Required)	20 21	46-60DBC 10-14	Drive chain Motor shaft spacer
13	10-15	Nut for motor shaft (Includes cotter key) Key for output shaft	22	HANG-4	Lynch pin
15	TR-507B	Spacer for output shaft	23	N-10	Nut for output shaft
16	CR255-13	Round output shaft	24	W-10	Lockwasher for output shaft
17	HE255-13 11-60T	Hex output shaft		C-60DBC L-78	Chain connecting link 7/8" pin to attach auger to round (2 9/16") shaft drive unit
17	10-17W	Motor sprocket (Includes 10-17W) Key for motor shaft		L-70 L-50	1/2" pin to attach auger to hex (2") shaft drive unit
				SK-92	Seal kit for motor

#### MODELS BP-150, BP-210, and BP-230

#### **Operational Range:**

Oil Flow:	
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. # 1 2 3 4 5 6 7 8 8 8 8 9 10 11 13	Part # BP-112 BP-113 BP-114 BP-115 10-009 10-008E BP-118 MEL-12S MEL-12S MEL-18S MEL-21S K-005 BPG-001 BPG-002 BPG-004	Description Connecting Link Connecting Link Pin Assembly B.P. Unit Clevis Pin Assembly Unit Motor Hose Assembly Unit Motor Fitting B.P. Motor Bolt Assembly Unit Motor Model BP-150 Unit Motor Model BP-210 Unit Motor Model BP-230 Motor Gasket B.P. Top Cover B.P. Top Cover B.P. Top Cover bolt Assembly B.P. Gear Set	1 1 1 1 2 4 1 1 1 1 1 1 2 1		Part # BPG-009 BPG-010 BPG-011 BPG-012 BPG-013 BPG-013H BPG-013R L-78 L-50 SK-92 Complete	Description B.P. Bearing Cone B.P. Bearing Cup B.P. Unit Hub B.P. Housing Bolt Assembly B.P. Shaft Seal B.P. Hex Output Shaft B.P. Round Output Shaft 7/8" pin to attach auger to round (29/16") shaft drive unit 3/4" pin to attach auger to hex (2") shaft drive unit Seal kit for motor	2 2 2 1 9 1 1 1
11	BPG-002	B.P. Top Cover bolt Assembly	12 1 1 1 1	Gearbox 10-24 10-24		Round Shaft Hex Shaft	





#### Model TJ-100 **Operational Range:** Oil Flow

TJ-100

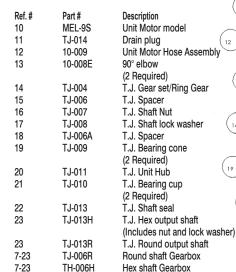
. TJ-100

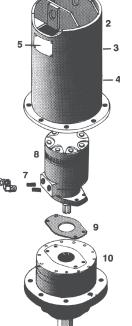
Pressure

5-15 (19-59 LPM) 2,000 to 3,300 PSI (13,790 to 22.737 Kpa) **Digging Conditions** Light to moderate Typical Auger Sizes

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	TJ-113	Connecting link pin assembly
		(Unit Clevis Pin)
2	TJ-112	Connecting link
		(includes TJ-113)
3	TJ-114	Unit Pin Assembly
4	TJ-115	T.J. Unit housing
5	TJB-009	T.J. Cover Bolt Assembly
		(2 Required)
6	TJB-010	T.J. Motor Bolt Assembly
		(4 Required)
7	TJB-011	T.J. Top cover bolt Assembly
		(16 Required)
8	TJB-012	T.J. Housing bolt Assembly
		(6 Required)
9	TJ-002	T.J. Side Cover





#### MODEL A-275H **Operational Range:**

Oil Flow: Pressure Range: Digging Conditions: Typical Auger Size:

Part # DM-013 A-011 L-large SD-5 SNT 10-008HP 10-008TK TKL-15 TK-005 A-010H
A-010H

15 to 42 GPM (57 to 159 Lpm) 2,000 to 4,200 PSI (13,790 to 28,958 kPa) Moderate to moderately heavy 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

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#### Description

Clevis pin to attach auger drive unit to connecting link Drive unit housing with logo and safety labels LOWE<sup>®</sup> logo Warning decal Serial number tag 90° elbow (2 required) Motor fitting (2 required) Hydraulic motor Gasket Gearbox 2" hex shaft

#### Model A-400H

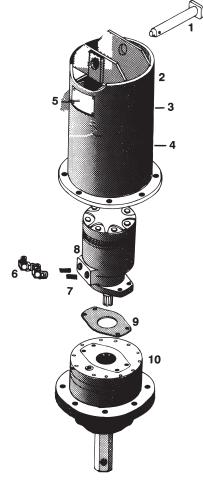
#### **Operational Range:**

Oil Flow:	
Pressure Range:	
<b>Digging Conditions:</b>	
Typical Auger Size:	

Ref. #

22 to 42 GPM (83 to 159 Lpm) 2,000 to 4,200 PSI (13,790 to 28,958 kPa) Moderate to moderately heavy 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

¥	Part #	Description
	SK-009	Clevis pin to attach auger drive unit to connecting link
	A-008	Drive unit housing with logo and safety labels
	L-large	LOWE <sup>®</sup> logo
	SD-5	Warning decal
	SNT	Serial number tag
	10-008HP	90° elbow (2 required)
	10-008TK	Motor fitting (2 required)
	TKL-30	Hydraulic motor
	TK-005	Gasket
	A-006-2.5H	Gearbox 21/2" hex shaft



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# 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 (lb/Kg)					
500CL	85 / 39					
750 Classic	170 / 77					
1200 Classic	196 / 89					
1650 Classic	198 / 90					
2175 Classic	200 / 91					
TJ-100	102 / 46					
BP-150	164 / 74					
BP-210	165 / 75					
BP-230	166 / 75					
A-275	270 / 122					
A-400	390 / 177					

Auger Bits (Standard Length)*	Estimated Weight (lb/Kg)
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 (Ib/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						
LP-12	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 lb (2 Kg) to the weight of the auger bit.							

Auger Mounting Brackets	Estimated Weight (lb/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	2175CL	TJ-100	BP-150	BP-210	BP-230	A-275	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		103	71					
16/60.6		129	84	58			82	55		57		
18/68.1		145	95	65	54		93	62	50	65		
20/75.7		161	106	73	60		103	68	54	73		
22 / 83.3				80	67			76	60	79	42	
24 / 90.8				88	73			82	64	86	45	
26 / 98.4								89	70	94	49	
28 / 106.0								97	75	101	53	
30/113.6								104	81	108	57	
32 / 121.1										116	60	
34 / 128.7										123	64	
36 / 136.3										130	68	
38 / 143.8										137	71	
40/151.4										145	76	
42 / 159.0											79	
			TORQUE - I				TORQUE - Newton meters per Kpa					
DRIVE		· ·	[heoretical /		, ,		DRIVE	(Theoretical / Near Actual)				
MODEL	2,000	2,500	3,000	3,500	4,000		MODEL	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		
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		
TJ-100	716/644	899 / 809	1,080/972				TJ-100	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					BP-210	2,315 / 2,084	2,894/2,605	3,473 / 3,126		
BP-230	1,999 / 1,799	2,497 / 2,247	2,998 / 2,696				BP-230	2,710/2,439	3,385 / 3,047	4,065 / 3,658		
A-275	1,504/1,354	1,891/1,702		2,632/2,369			A-275	2,039 / 1,835	2,564/2,308	3,059 / 2,753		4,079/3,671
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





