

## TYPES AND FUNCTIONS

**Mobile introduced hollow stem augers to the drilling industry in 1954** as an innovative method of casing advancement for the construction and geotechnical industry. The hollow stem auger is recognized as a versatile, fast and effective tool for advancing the bore hole. Once the drilling depth is achieved, the center stem of the auger is quickly removed which allows working inside the auger using coring tools, soil sampling equipment, the In-Hole Hammer, insertion of tie back rods and cables, or environmental monitor well installations.

The hollow stem auger is widely used in conjunction with ground water monitoring applications and hazardous waste operations. Auger sizes range from 2-1/4" to 12-1/4" (57 to 311mm) I.D., including Mobile's exclusive 6-5/8" (168mm) I.D., the industry's preferred size for 4" (102mm) monitor and remediation well installations.

Mobile's TRI-LOK™, 2-Key and threaded hollow stem augers utilize slightly tapered concave flights designed to throw cuttings toward the shaft and are engineered and manufactured to exceed the rugged demands of today's groundwater monitoring and geotechnical applications, translating into a lower cost per foot for the drilling contractor.

Mobile's threaded, **water-tight**, hollow-stem augers are fully reversible through the use of a locking wedge that prevents unthreading down hole. Threaded hollow stems are available in 2-1/2", 3-3/8", 4" and 6" (64, 86, 102 and 152mm) I.D. sizes.

Mobile's premier TRI-LOK™ series offers tapered heavy-duty couplings with three chamfered, deep set, key ways and twin high-tensile lock bolts with sure grip heads for easy make and break. This exclusive design provides full torque loading throughout the heat treated coupling by dispersing the power equally to the three key ways. This ensures that the lock bolts only function in vertical auger removal.

TRI-LOK™ augers are currently available in 3-1/4", 4-1/4", 6-5/8", 8-1/4", 10-1/4" and 12-1/4" (83, 108, 168, 210, 260 and 311mm) I.D.

Mobile's 2-key augers take advantage of all of our experience with the industry's premiere line — TRI-LOK™. Slightly tapered, heat treated pins, deep set durable keyways, coarse thread bushings will all match up to your existing 2-key hollow stem auger. **Standard duty** styles come in 2-1/4" (57mm) and 3-1/4" (83mm) ID sizes, while **heavy duty** styles come in 3-1/4" (83mm), 4-1/4" (108mm), and 6-1/4" (168mm) ID sizes.

For very light duty drilling using low torque machines such as Mobile's MINUTEMAN®, Mobile manufactures the LITE-FLITE™ auger in the 2-1/4" (57mm) I.D. size in 2'6" lengths only.

LITE-FLITE™ augers are designed as lightweight, low cost hollow stem augers for use with lightweight drilling rigs having a maximum torque output of not more than 350 ft lbs. LITE-FLITE™'s 2-1/4" (57mm) I.D. allows standard penetration testing with 2" (51mm) tools and monitoring equipment to a maximum of 22'.

LITE-FLITE™ augers represent a practical alternative to the use of heavier, more expensive hollow-stem augers designed for greater depths and hole diameters. A 2'6" section of LITE-FLITE™ "weighs in" at a modest 16 lbs.

SAFE-T-DRIVER HOIST  
CABLE CONNECTION, FOR  
SPT SAMPLING  
(SECTION 10)

HEAVY DUTY  
GIMBAL  
COUPLING  
(SECTION 3)

4-1/4" I.D. HSA  
AUGER CONNECTOR,  
FLANGE MOUNTED  
(SECTION 3)

4-1/4" I.D. HSA  
(SECTION 3)

IN-HOLE  
140# HAMMER  
WITH SWIVEL  
(SECTION 6)

TAPERED  
HEAT-TREATED  
PIN

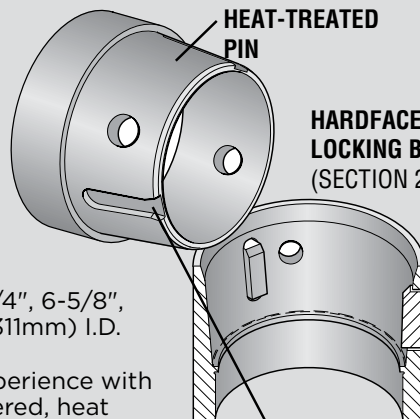
HARDFACED  
LOCKING BOLTS  
(SECTION 2)

TAPERED &  
CHAMFERED  
KEYWAYS

AW PIN TO  
NW PIN-SUB  
(SECTION 6)

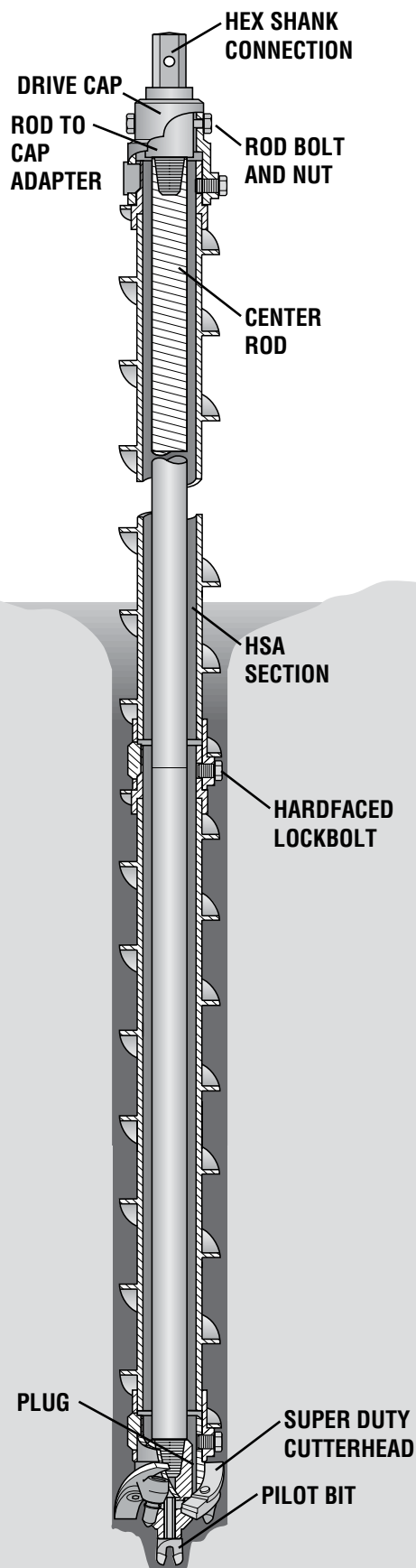
SUPER DUTY  
BLADE BULLET  
CUTTERHEAD  
(SECTION 2)

CHOPPING BIT  
(SECTION 6)



# HOLLOW STEM AUGERS AND CUTTERHEADS

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A wide range of cutterheads for hollow stem augers are available to suit any type of material being drilled. The Blade Type Cutterhead can be used with steel or carbide insert cutter blades designed to perform better in less demanding formations. The BULLDOG™ head available in select sizes, makes use of carbide-tipped bullet teeth for coarse formations. Combining the best features of both, **Mobile's Super Duty (SD) Cutterhead** meets the requirements of the widest range of applications and is more than a match for **glacial till, caliche rock and hardpan.**

Mobile's exclusive Hard Facing process provides highly abrasion resistant wear surfaces on each type of cutter head and lock bolt head. Carbide insert blade and bullet bit life are extended well beyond the normal replacement point. Research indicates that treated surfaces last 50% longer under normal conditions, reducing maintenance and therefore **resulting in a lower cost per foot drilled.**

Since Mobile introduced hollow stems in 1954, their focus has changed to a more environmental concern. Innovative design, state of the art engineering and manufacturing processes make Mobile the recognized industry leader in hollow stem augers and related accessories.

## USING HOLLOW-STEM AUGERS

The hollow-stem auger is used to advance and case the hole simultaneously. It may be used with or without a plug assembly depending on the job requirements. When a plug is used for the purpose of keeping soil from entering the mouth of the lead auger, it is held in place by center (drill) rod and rod to cap adapter, pinned in the drive cap.

Upon reaching the sampling depth, the center rod with plug and pilot bit attached is removed from the mouth of the auger and replaced by a solid/split barrel soil sampler or tube sampler, lowered to the bottom of the hole through the hollow stem of the auger and sampling or coring is initiated.

The use of a hollow-stem auger without the plug has shown that most clay type material will form its own 2"-4" (51-102mm) plug which can be driven or washed through for sampling or core barrel operations. **When flowing sands are encountered, mud may be added inside the hollow stem to serve as a "head" to equalize the hydrostatic pressure in lieu of the plug assembly.**

Hollow-stems are rotated dry and often to depths of 300 feet (91.4m). Many special applications can be carried out in addition to full range soil sampling. Piezometer and well point placement, slope indicator placement, cathodic protection devices, water wells, ground water monitoring wells, diamond drilling, anchor bolt placement as well as grouting and blast hole loading are some of the jobs that hollow-stem augers facilitate.

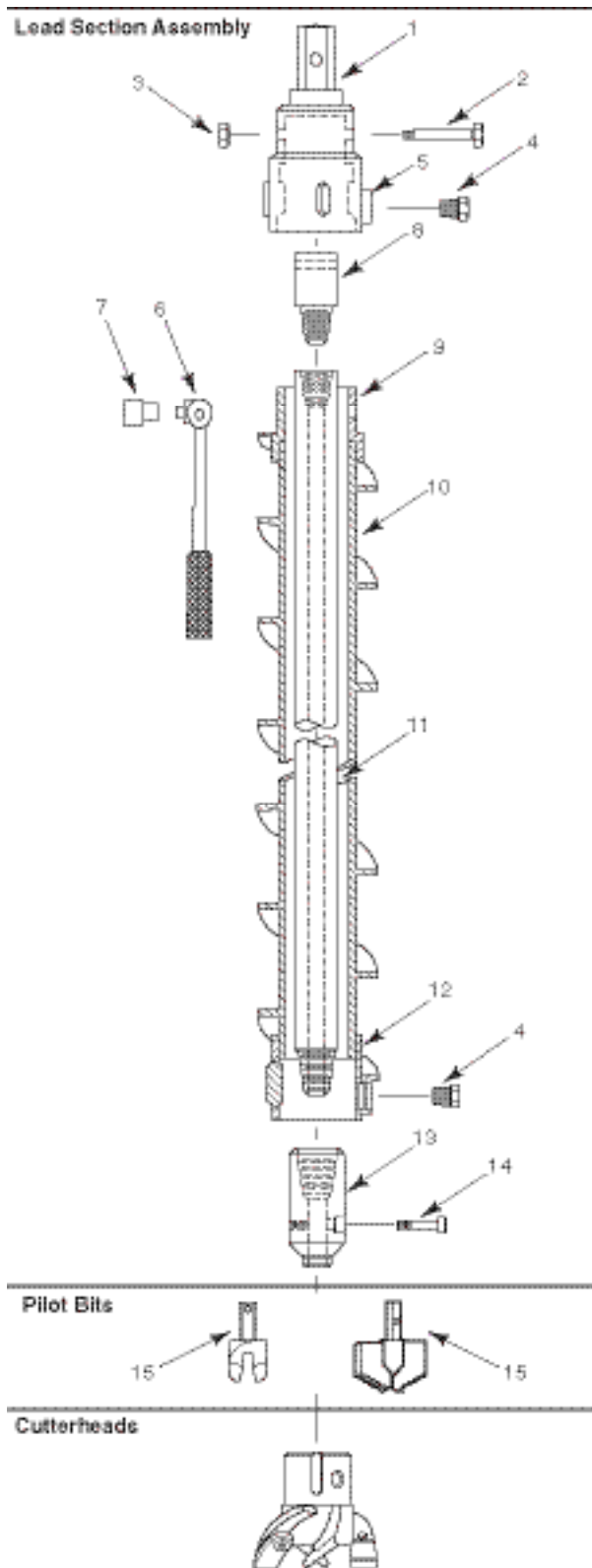
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Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

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## 3-1/4" (83MM) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. Predominately used for geotechnical applications such as split spoon sampling. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods. **Also available in 2-key heavy-duty and standard tapered style.**

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 6-1/2" (165MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	126 (57.2).....	61018-03
1-5/8" (41mm) Hex, AWML Rod.....	126 (57.2).....	61018-04
1-5/8" (41mm) Hex, NW Rod.....	165 (74.8).....	61018-01
1-5/8" (41mm) Hex, NWML Rod.....	165 (74.8).....	61018-02

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	'Drive Cap: 1-1/8" (29mm) Hex.....	†.....	150429
1	Drive Cap: 1-5/8" (41mm) Hex.....	17 (7.7).....	150292
1	Drive Cap: 2" (51mm) Hex.....	22 (10).....	150322
2	Rod Bolt.....	*.....	3100-0184
3	Hex Nut.....	*.....	3122-0012
4	Lockbolt - 1 Req'd.....	*.....	217136
4	Lockbolt - 1 Req'd (Hard Faced).....	*.....	150307
5	Bushing, Field Replaceable.....	*.....	150308
5	Bushing, Replaceable.....	*.....	150300
6	Handle.....	*.....	3781-0009
7	Socket.....	*.....	3782-0016
8	Adapter: AW Rod to Drive Cap.....	5 (2.3).....	150310
8	Adapter: AWML Rod to Drive Cap.....	5 (2.3).....	150311
8	Adapter: NW Rod to Drive Cap.....	11 (5).....	180049-03
8	Adapter: NWML Rod to Drive Cap.....	11 (5).....	180054-04
9	Coupling Pin, Heat-Treated (Repair Only)....	6 (2.7).....	150296
10	Auger Section - 3'0" (.91m).....	38 (17.2).....	150288-02
10	Auger Section - 5'0" (1.5m).....	69 (31.3).....	150288
10	Auger Section - 5'0" (1.5m), Double Flight.....	85 (38.6).....	150288-01
11	Center Rod - 5'0" (1.5m), AW.....	22 (10.0).....	001605
11	Center Rod - 5'0" (1.5m), AWML.....	15 (6.8).....	006276
11	Center Rod - 5'0" (1.5m), NW.....	32 (14.5).....	001608
11	Center Rod - 5'0" (1.5m), NWML.....	35 (15.9).....	006278
12	Box Coupling (Repair Only).....	6 (2.7).....	150295
13	Plug - 1-1/8" (29mm) Hex to AW Box.....	12 (5.4).....	150312
13	Plug - 1-1/8" (29mm) Hex to AWML Box.....	12 (5.4).....	150379
13	Plug - 1-1/8" (29mm) Hex to NW Box.....	11 (5).....	150306
13	Plug - 1-1/8" (29mm) Hex to NWML Box.....	11 (5).....	150377
14	Plug Bolt.....	*.....	3130-0098
15	Pilot Bit, 2-Prong, 1-1/8" (29mm) Hex.....	2 (.9).....	200024
15	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*.....	150574-01
	Coupling, TRI-LOK to CME Pin.....	13 (5.9).....	150290
	Coupling, TRI-LOK to CME Socket.....	13 (5.9).....	150304
	Repair Key.....	*.....	150576
	Clean Out Tap (For Bushing).....	*.....	150562
	O-Ring.....	*.....	3538-0238

† Not recommended for torque over 8,000 ft-lbs (9,556 Nm).

See pages 2-4 and 2-5  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

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# HOLLOW STEM AUGERS AND CUTTERHEADS

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## CUTTERHEADS - 3-1/4" (83MM) TRI-LOK™ AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	†	61001-10

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit	*	150233
3-1/4" (83mm) Body	†	150289

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-3/4" (197mm)	20 (8.6)	61032-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders	†	150599

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-3/4" (197mm)	19 (8.6)	61031-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150593
3-1/4" (83mm) Body w/ Flight Segment	†	150289

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61031-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150593
3-1/4" (83mm) Body w/ Flight Segment	†	150655

Continued on next page

## CUTTERHEADS - 3-1/4" (83MM) TRI-LOK™ AUGER (cont.)

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61032-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Bullet Bit w/Retainer .....	* .....	150194-03
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders .....	† .....	150659

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61037-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Spade Bit w/Retainer .....	* .....	150194-04
Bullet Bit Holder .....	* .....	216044-01
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
Flight Segment .....	† .....	150593-01
3-1/4" (83mm) Body .....	† .....	150652-10

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	13 (5.9) .....	61036-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	* .....	150194-04
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
3-1/4" (83mm) Body .....	† .....	150652

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61038-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150593-01
3-1/4" (83mm) Body .....	† .....	150652-10

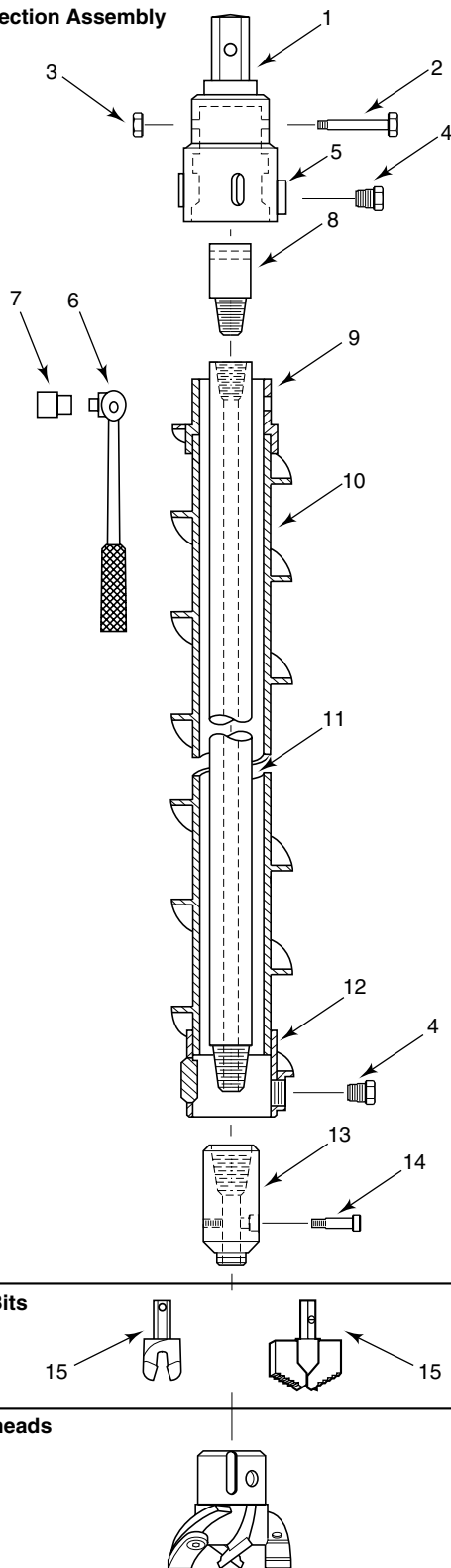
Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

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Lead Section Assembly



Pilot Bits

Cutterheads

## 4-1/4" (108MM) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. Often used for 2" (51mm) monitoring well installation. Sizes are identified by hollow stem auger I.D. Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods. Also available in 2-key heavy duty tapered style.

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 7-5/8" (194MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	175 (79.4).....	61025-05
1-5/8" (41mm) Hex, AWML Rod.....	175 (79.4).....	61025-06
1-5/8" (41mm) Hex, NW Rod.....	185 (83.9).....	61025-01
1-5/8" (41mm) Hex, NWML Rod.....	185 (83.9).....	61025-02
2" (51mm) Hex, AW Rod.....	180 (81.6).....	61025-07
2" (51mm) Hex, AWML Rod.....	180 (81.6).....	61025-08
2" (51mm) Hex, NW Rod.....	190 (86.2).....	61025-04
2" (51mm) Hex, NWML Rod.....	190 (86.2).....	61025-03

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	1" Drive Cap, 1-5/8" (41mm) Hex.....	24 (10.9).....	150482
1	Drive Cap, 2" (51mm) Hex.....	28 (12.7).....	150490
2	Rod Bolt.....	*	3100-0279
3	Hex Nut.....	*	3122-0012
4	Lockbolt - 2 Req'd.....	217136	
4	Lockbolt - 2 Req'd (Hard Faced).....	*	150307
5	Repair Bushing.....	*	150477
6	Handle.....	*	3781-0009
7	Socket.....	*	3782-0016
8	Adapter: AW Rod to Drive Cap.....	5 (2.3).....	150310
8	Adapter: AWML Rod to Drive Cap.....	5 (2.3).....	150311
8	Adapter: NW Rod to Drive Cap.....	11 (5).....	180049-03
8	Adapter: NWML Rod to Drive Cap.....	11 (5).....	180054-04
9	Pin Coupling, Heat-treated (Repair Only).....	9 (4.1).....	150474
10	Auger Section: 3'0" (.91m).....	45 (20.4).....	150473-02
10	Auger Section: 5'0" (1.5m).....	90 (40.8).....	150473
10	Auger Section: 5'0" (1.5m), Double Flight.....	110 (49.9).....	150473-01
11	Center Rod: 5'0" (1.5m), AW.....	22 (10).....	001605
11	Center Rod: 5'0" (1.5m), AWML.....	15 (6.8).....	006276
11	Center Rod: 5'0" (1.5m), NW.....	32 (14.5).....	001608
11	Center Rod: 5'0" (1.5m), NWML.....	35 (15.9).....	006278
12	Box Coupling (Repair Only).....	9 (4.1).....	150475
13	Plug: 1-1/8" (29mm) Hex to AW Box.....	19 (8.6).....	150492
13	Plug: 1-1/8" (29mm) Hex to AWML Box.....	19 (8.6).....	150494
13	Plug: 1-1/8" (29mm) Hex to NW Box.....	18 (8.2).....	150488
13	Plug: 1-1/8" (29mm) Hex to NWML Box.....	18 (8.2).....	150486
14	Plug Bolt.....	*	3130-0118
15	Pilot Bit, 1-1/8" (29mm) Hex, 2-Prong.....	2 (.9).....	004304
15	Pilot Bit, 1-1/8" (29mm) Hex, 3-Wing.....	4 (1.8).....	150574-02
	Repair Key.....	*	150577
	Clean Out Tap (for Lockbolt Hole).....	*	150562
	O-Ring.....	*	3538-0246

<sup>1</sup> Not recommended for torque over 8,000 ft-lbs (9,556 Nm).

See pages 2-7 and 2-8  
for cutterhead information

## CUTTERHEADS - 4-1/4" (108MM) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	9" (229mm) .....	20 (9.1) .....	61031-02

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Flight Segment .....	† .....	150586
4-1/4" (108mm) Body w/ Flight Segment .....	† .....	150596

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61031-06

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Flight Segment .....	† .....	150586
4-1/4" (108mm) Body .....	† .....	150656

## SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

## SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	9" (229mm) .....	21 (9.5) .....	61032-02

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150586
4-1/4" (108mm) Body w/ Flight Segments and Bit Holders .....	† .....	150600

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61032-06

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150586
4-1/4" (108mm) Body w/ Flight Segment and Bit Holders .....	† .....	150660

*Continued on next page*

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

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## CUTTERHEADS - 4-1/4" (108MM) TRI-LOK™ AUGER (cont.)

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	16 (7.3) .....	61036-02

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	* .....	150194-04
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
4-1/4" (108mm) Body .....	† .....	150651

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	19 (8.6) .....	61038-02

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150586-01
4-1/4" (108mm) Body .....	† .....	150651-10

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	19 (8.6) .....	61037-02

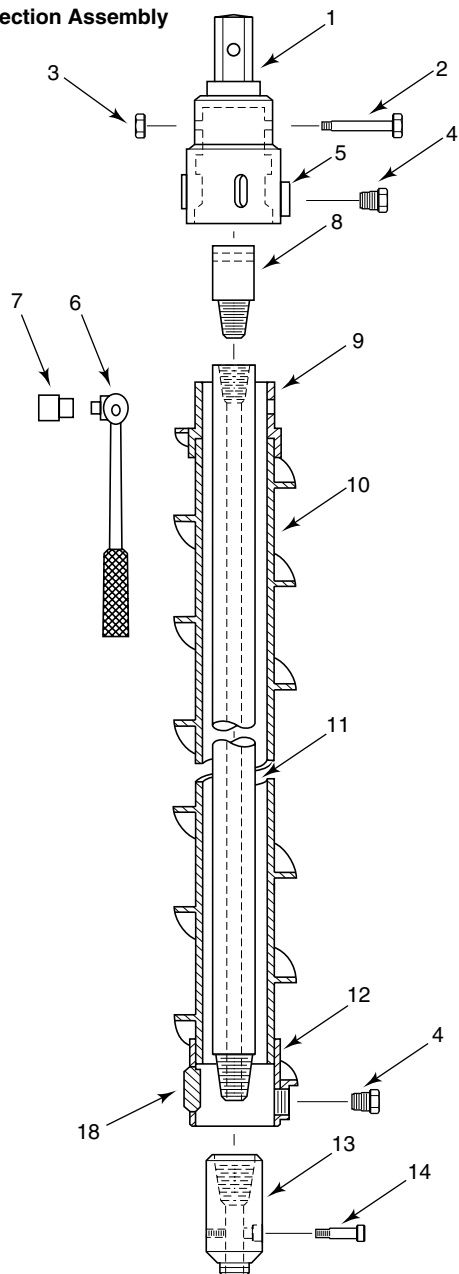
#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Spade Bit w/Retainer .....	* .....	150194-04
Bullet Bit Holder .....	* .....	216044-01
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
Flight Segment .....	† .....	150586-01
4-1/4" (108mm) Body .....	† .....	150651-10

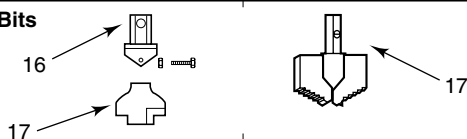
# HOLLOW STEM AUGERS AND CUTTERHEADS

2

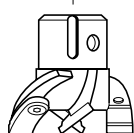
## Lead Section Assembly



## Pilot Bits



## Cutterheads



See pages 2-10 and 2-11  
for cutterhead information

## 6-5/8" (168MM) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. The preferred size for 4" (102mm) monitoring/recovery well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

## 5'0" (1.5M) LEAD SECTION ASSEMBLY: 10" (254MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, NW Rod.....	280 (127).....	61020-01
1-5/8" (41mm) Hex, NWML Rod.....	280 (127).....	61020-02
2" (51mm) Hex, NW Rod .....	285 (129.3) ....	61020-03
2" (51mm) Hex, NWML Rod .....	285 (129.3) ....	61020-04

## COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 1-5/8" (41mm) Hex .....	46 (20.9).....	150394
1	Drive Cap: 2" (51mm) Hex.....	49 (22.2).....	150401
2	Rod Bolt .....	*	3100-0280
3	Hex Nut .....	*	3122-0012
4	Lockbolt - 2 Req'd .....	*	217136
4	Lockbolt - 2 Req'd (Hard Faced) .....	*	150307
5	Repair Bushing .....	*	150477
6	Handle.....	*	3781-0009
7	Socket .....	*	3782-0016
8	Adapter: NW Rod to Drive Cap.....	11 (5).....	180049-03
8	Adapter: NWML Rod to Drive Cap .....	5 (2.3).....	180054-04
9	Pin Coupling, Heat-Treated (Repair Only) .....	15 (6.8).....	150388
10	Auger Section: 5'0" (1.5m),.....	105 (47.6) .....	150392
11	Center Rod: 5'0" (1.5m), NW.....	32 (14.5) .....	001608
11	Center Rod: 5'0" (1.5m), NWML.....	35 (15.9) .....	006278
12	Box Coupling (Repair Only).....	15 (6.8).....	150391
13	Plug: 1-5/8" (41mm) Hex to NW Box.....	50 (22.7).....	180036-15
13	Plug: 1-5/8" (41mm) Hex to NWML Box .....	50 (22.7).....	180036-14
14	Plug Bolt .....	*	3130-0170
16	Pilot Bit Shank: 1-5/8" (41mm) Hex .....	3 (1.4).....	004591
17	Pilot Bit.....	11 (5).....	004950
17	Pilot Bit, 1-5/8" (41mm) Hex, 3-Wing.....	*	150574-03
18	Repair Key .....	*	150578
	Clean Out Tap (For Lockbolt Hole).....	*	150562
	O-Ring .....	*	3538-0262

<sup>1</sup>Not recommended for torque over 8,000 ft-lbs (9,556 Nm).

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

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# HOLLOW STEM AUGERS AND CUTTERHEADS

2

## CUTTERHEADS - 6-5/8" (168MM) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11-1/2" (292mm)	20 (9.1)	61031-03

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150587
6-5/8" (168mm) Body w/ Flight Segment	†	150597

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11" (279mm)	27 (12.2)	61031-07

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150587
6-5/8" (168mm) Body	†	150657

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11-1/2" (292mm)	33 (15.0)	61032-03

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150587
6-5/8" (168mm) Body w/ Flight Segments and Bit Holders	†	150601

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11" (279mm)	31 (14.1)	61032-07

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150587
6-5/8" (168mm) Body w/ Flight Segment and Bit Holders	†	150661

*Continued on next page*

## CUTTERHEADS - 6-5/8" (168MM) TRI-LOK™ AUGER (cont.)

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm) .....	11" (279mm) .....	25 (11.3) .....	61036-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	*	150194-04
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
6-5/8" (168mm) Body .....	†	150653

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm) .....	11" (279mm) .....	30 (13.6) .....	61038-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
Flight Segment .....	†	150587-01
6-5/8" (168mm) Body .....	†	150653-10

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm) .....	11" (279mm) .....	33 (15.0) .....	61037-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Spade Bit w/Retainer .....	*	150194-04
Bullet Bit Holder .....	*	216044-01
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
Flight Segment .....	†	150587-01
6-5/8" (168mm) Body .....	†	150653-10

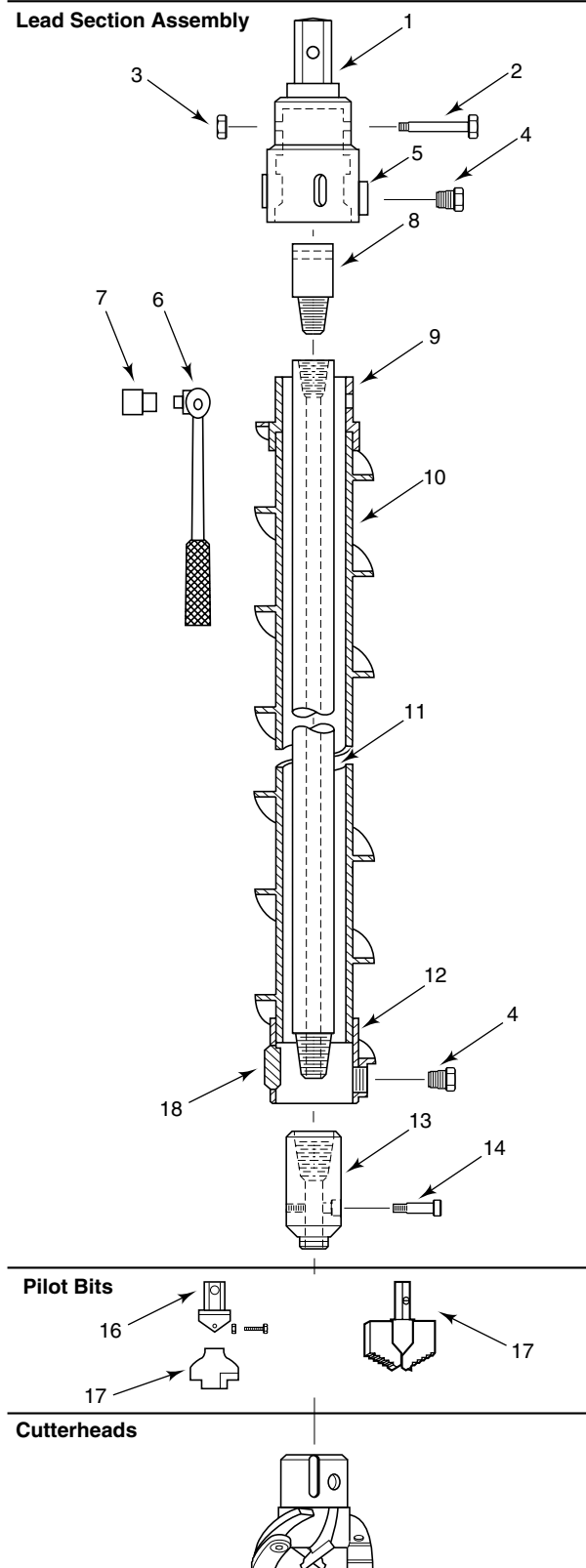
Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

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Lead Section Assembly



See pages 2-13 and 2-14  
for cutterhead information

## 8-1/4" (210MM) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. Used for 6" (152mm) monitoring/recovery well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 12" (305MM) O.D.

Description	Lb/Kg	Part No.
2" (51mm) Hex, NW Rod .....	326 (147.9) .....	61026-03
2" (51mm) Hex, NWML Rod .....	326 (147.9) .....	61026-04

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex .....	57 (25.9) .....	150534
2	Rod Bolt .....	*	3100-0289
3	Hex Nut .....	*	3122-0012
4	Lockbolt - 2 Req'd .....	*	217136
4	Lockbolt - 2 Req'd (Hard Faced) .....	*	150307
5	Repair Bushing .....	*	150477
6	Handle .....	*	3781-0009
7	Socket .....	*	3782-0016
8	Adapter: NW Rod to Drive Cap .....	11 (5) .....	180049-03
8	Adapter: NWML Rod to Drive Cap .....	5 (2.3) .....	180054-04
9	Pin Coupling, Heat-Treated (Repair Only) .....	18 (8.2) .....	150525
10	Auger Section: 5'0" (1.5m) .....	144 (65.3) .....	150531
11	Center Rod: 5'0" (1.5m), NW .....	32 (14.5) .....	001608
11	Center Rod: 5'0" (1.5m), NWML .....	35 (15.9) .....	006278
12	Box Coupling (Repair Only) .....	18 (8.2) .....	150529
13	Plug: 1-5/8" (41mm) Hex to NW Box .....	34 (15.4) .....	180036-19
13	Plug: 1-5/8" (41mm) Hex to NWML Box .....	34 (15.4) .....	180036-20
14	Plug Bolt .....	*	3130-0191
16	Pilot Bit Shank: 1-5/8" (41mm) Hex .....	3 (1.4) .....	004591
17	Pilot Bit .....	8 (3.6) .....	007188
17	Pilot Bit: 1-5/8" (41mm) Hex 3-Wing .....	*	150574-04
18	Repair Key .....	†	150579
	Clean Out Tap (For Lockbolt Hole) .....	*	150562
	O-Ring .....	*	3538-0263

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Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

## CUTTERHEADS - 8-1/4" (210MM) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm) .....	14-1/4" (362mm).....	44 (20) .....	61031-04

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....	* .....	004303
Blade Bolt.....	* .....	001293
Flight Segment .....	† .....	150593
8-1/4" (210mm) Body w/ Flight Segment.....	† .....	150598

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm) .....	13-3/4" (349mm).....	33 (15.0) .....	61031-08

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....	* .....	004303
Blade Bolt.....	* .....	001293
Flight Segment .....	† .....	150588
8-1/4" (168mm) Body.....	† .....	150658

## SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

## SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm) .....	14-1/4" (362mm).....	33 (15.0) .....	61032-03

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....	* .....	004303
Blade Bolt.....	* .....	001293
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150588
8-1/4" (210mm) Body w/ Flight Segments and Bit Holders.....	† .....	150598

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm) .....	13-3/4" (349mm).....	31 (14.1).....	61032-07

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide.....	* .....	004303
Blade Bolt.....	* .....	001293
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150588
8-1/4" (210mm) Body w/ Flight Segment and Bit Holders.....	† .....	150662

*Continued on next page*

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

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## CUTTERHEADS - 8-1/4" (210MM) TRI-LOK™ AUGER (cont.)

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	13-3/4" (349mm)	33 (15.0)	61036-04

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer	*	150194-04
Spade Bit Holder	*	216044-02
Nail	*	150678
8-1/4" (210mm) Body	†	150654

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	11" (279mm)	36 (16.3)	61038-04

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150588-01
8-1/4" (210mm) Body	†	150654-10

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	13-3/4" (349mm)	44 (20)	61037-04

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Spade Bit w/Retainer	*	150194-04
Bullet Bit Holder	*	216044-01
Spade Bit Holder	*	216044-02
Nail	*	150678
Flight Segment	†	150588-01
8-1/2" (210mm) Body	†	150654-10

## 10-1/4" (260MM) TRI-LOK™ AUGER

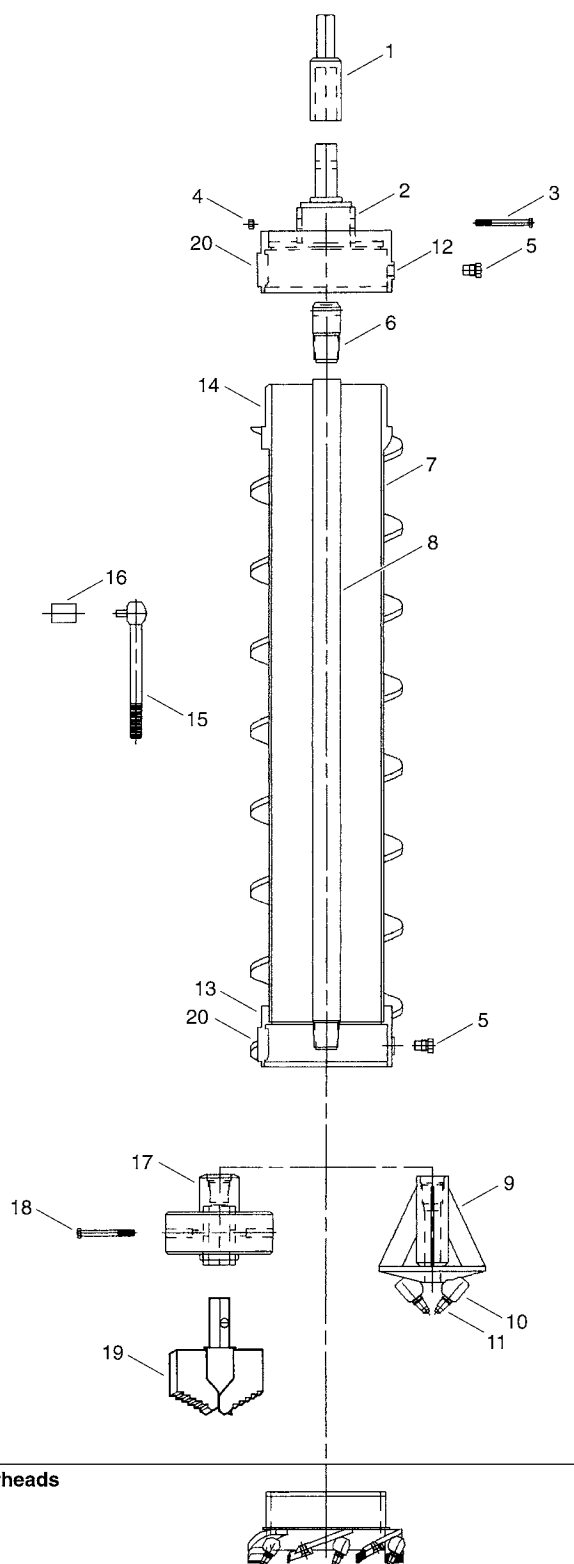
**Now with thicker flight and heat-treated pins for extended life.** Used for 4" (102mm) or larger monitoring/recovery well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 14-1/4" (362MM) O.D.

Description	Lb/Kg	Part No.
2" (51mm) Hex, NW Rod .....	470 (213.2)	61034-02
2" (51mm) Hex, NWML Rod .....	470 (213.2)	61034-01

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Adapter, Auger 1-5/8" (41mm) Hex to 2" (51mm) Hex Socket .....	11 (5.0)	004643
2	Drive Cap: 2" (51mm) Hex .....	70 (31.8)	150618
3	Rod Bolt .....	*	3100-0279
4	Rod Nut .....	*	3122-0012
5	Lockbolt - 2 Req'd .....	*	150666-01
6	Adapter: NW Rod to Drive Cap .....	5 (2.3)	180049-03
6	Adapter: NWML Rod to Drive Cap .....	5 (2.3)	180054-04
7	Auger Section: 5'0" (1.5m) .....	256 (116.1)	150543-02
8	Center Rod: 5'0" (1.5m), NW Rod .....	32 (14.5)	001608
8	Center Rod: 5'0" (1.5m), NWML Rod .....	35 (15.9)	006278
9	Plug-Pilot Bit Combo w/ Ten (10) Bullet Bits and Blocks NW Rod .....	48 (21.8)	150565-04
9	Plug-Pilot Bit Combo w/ Ten (10) Bullet Bits and Blocks NWML Rod .....	25 (11.3)	150565-03
10	Bit Block .....	*	216044-01
11	Bullet Bit .....	*	150194-03
12	Repair Bushing .....	*	150665
13	Repair Box .....	35 (15.9)	150610
14	Repair Pin .....	28 (12.7)	150611
15	Handle .....	*	3781-0010
16	Socket .....	*	3818-0020
17	NW Rod Box Center Plug .....	93 (42.2)	180036-27
17	NWML Rod Box Center Plug .....	92 (41.7)	180036-25
18	Bolt .....	*	3130-0163
19	3 Wing Pilot Bit .....	24 (10.9)	150574-05
20	Repair Key .....	†	150614



Cutterheads

See pages 2-16  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

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## CUTTERHEADS - 10-1/4" (260MM) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
10-1/4" (260mm) .....	15" (381mm) .....	56 (25.4) .....	61031-11

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Flight Segment .....	† .....	150681-01
10-1/4" (260mm) Body w/ Flight Segment .....	† .....	150699

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
10-1/4" (260mm) .....	15" (381mm) .....	56 (25.4) .....	61032-11

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150681-01
10-1/4" (260mm) Body w/ Flight Segments and Bit Holders .....	† .....	150698

2-16

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

## 2

**5'0" (1.5M) LEAD SECTION ASSEMBLY:  
17" (432MM) O.D.**

## COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex.....	70 (31.8) .....	150643
2	Rod Bolt.....	* .....	3100-0242
2	A Rod Nut .....	* .....	3122-0012
3	Lockbolt - 2 Req'd .....	* .....	150666-01
4	Adapter: NWML Rod to Drive Cap.....	5 (2.3) .....	180054-04
5	Auger Section: 5'0" (1.5m).....	256 (116.1) .....	150572-02
6	Center Rod: 5'0" (1.5m), NWML Rod.....	35 (15.9) .....	006278
7	Plug-Pilot Bit Combo w/ Ten (10) Bullet Bits and Blocks NWML Rod .....	.25 (11.3).....	150565-05
8	Bit Block.....	* .....	216044-01
9	Bullet Bit .....	* .....	150194-03
12	Repair Bushing .....	* .....	150665
13	Repair Box.....	35 (15.9) .....	150639
14	Repair Pin .....	28 (12.7).....	150640
15	Handle.....	* .....	3781-0010
16	Socket.....	* .....	3818-0020
17	NWML Rod Box Center Plug .....	92 (41.7) .....	180036-25
18	Bolt .....	* .....	3130-0163
19	3 Wing Pilot Bit .....	24 (10.9) .....	150574-05
20	Repair Key .....	† .....	150642



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# HOLLOW STEM AUGERS AND CUTTERHEADS

2

## CUTTERHEADS - 12-1/4" (311MM) TRI-LOK™ AUGER

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
12-1/4" (311mm) .....	15" (381mm) .....	68 (30.8) .....	61031-12

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	*	004303
Blade Bolt .....	*	001293
Flight Segment .....	†	150681-01
12-1/4" (311mm) Body .....	†	150681

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
12-1/4" (311mm) .....	15" (381mm) .....	68 (30.8) .....	61032-12

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide .....	*	004303
Blade Bolt .....	*	001293
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
Flight Segment .....	†	150681-01
12-1/4" (311mm) Body w/ Flight Segment and Bit Holders .....	†	150688

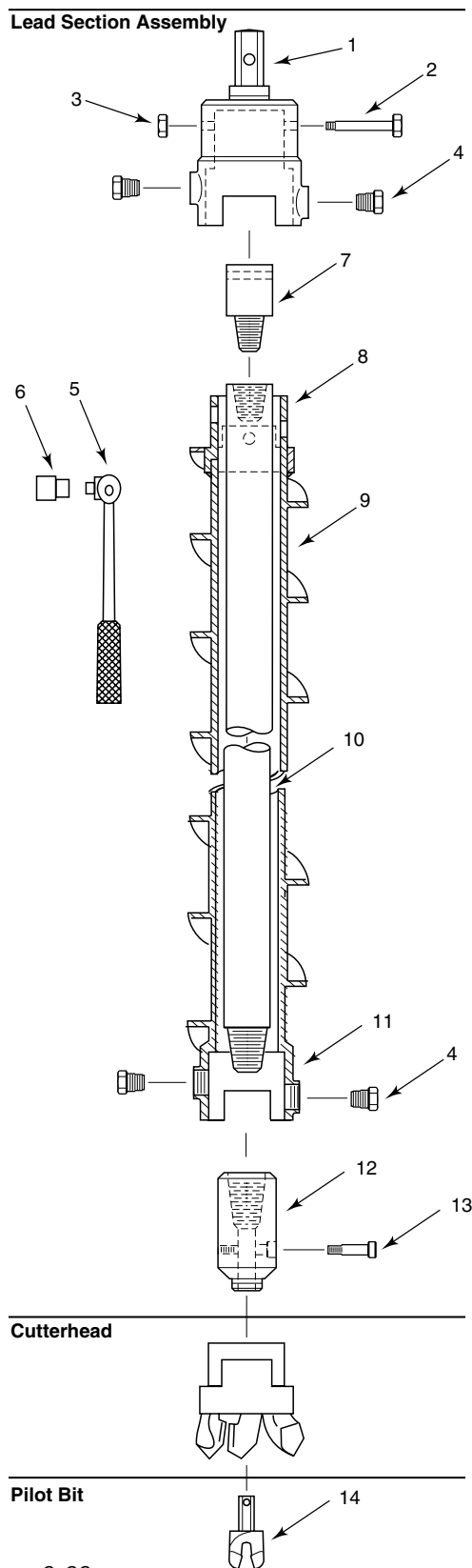
2-18

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

2



## 2-1/4" (57MM) LITE-FLITE™ AUGER

LITE-FLITE augers are designed to fill the need for a lightweight, low cost hollow stem auger for use with lightweight drilling rigs having a maximum torque output of not more than 3750 ft-lbs. For stronger machines, use standard duty 2-1/4" I.D. 2-key HSA. LITE-FLITE's 2-1/4" (57mm) I.D. will allow monitor well placement and standard penetration testing with 2" (51mm) tools and equipment to a maximum of 22.5' (6.8m). **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### LEAD SECTION ASSEMBLY: 4-3/8" (111MM) O.D.

Description	Lb/Kg	Part No.
2'6" (762mm), 13/16" (21mm) Hex, AWML Rod...38 (17.2).....	61023-01	
2'6" (762mm), 13/16" (21mm) Hex, EW Rod.....	35 (15.9).....	61023-04

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap 13/16" (21mm) Hex .....	6 (2.7).....	150404
1	Drive Cap 1-1/8" (29mm) Hex .....	6 (2.7).....	150399
2	Rod Bolt.....	*	3100-0128
3	Hex Nut .....	*	3122-0012
4	Lock Bolt Without Hard Facing.....		217135
4	Lock Bolt With Hard Facing.....	*	150383
5	Handle, 1/2" (13mm) Sq		
	Drive Flex x 1'6" (457mm).....	3 (1.4).....	3781-0009
6	Socket, 15/16" (24mm) Hex.....	*	3782-0013
7	Adapter: EW Rod to Drive Cap.....	1 (.5).....	150402
7	Adapter: AW Rod to Drive Cap .....	2 (.9).....	150310
7	Adapter: AWML Rod to Drive Cap .....	2 (.9).....	150311
8	Pin Coupling (Repair Only) .....	3 (1.4).....	150384
9	Auger Section: 2'6" (762mm).....	17 (7.7).....	150414
10	Center Rod: 2'6" (762mm), AWML.....	7 (3.2).....	150416
10	Center Rod: 2'6" (762mm), EW.....	7 (3.2).....	001753
11	Box Coupling (Repair Only).....	3 (1.4).....	150385
12	Plug: 13/16" (21mm) Hex Socket to		
	EW Box .....	4 (1.8).....	180448-01
12	Plug: 13/16" (21mm) Hex Socket to		
	AW Box .....	4 (1.8).....	180448-02
12	Plug: 13/16" (21mm) Hex Socket to		
	AWML Box.....	4 (1.8).....	180448-03
13	Plug Bolt .....	*	3130-0062
14	Pilot Bit: 13/16" (21mm) Hex.....	1 (.5).....	004981

See pages 2-20  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

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# HOLLOW STEM AUGERS AND CUTTERHEADS

2

## CUTTERHEADS - 2-1/4" (57MM) LITE-FLITE™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

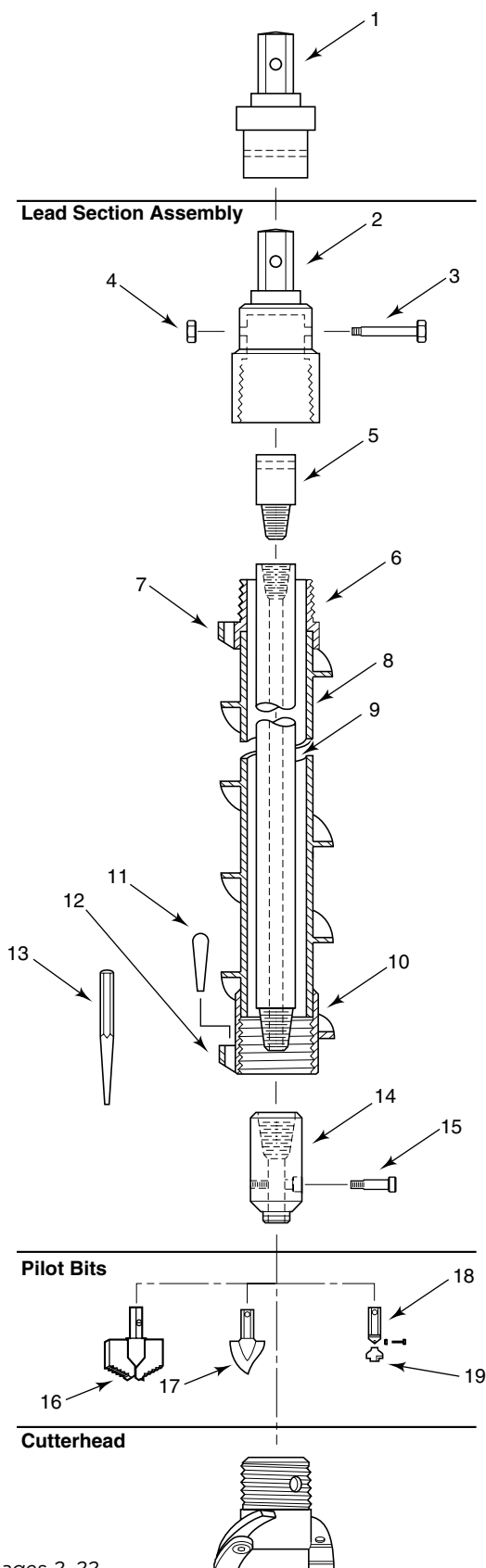
Description	Lb/Kg	Part No.
4-3/8" (111mm) O.D. with Carbide insert bits .....	3 (1.4) .....	150397

### COMPONENT PARTS

Description	Lb/Kg	Part No.
2-1/4" (57mm) Body..... † .....	..... † .....	150387
Carbide Insert..... † .....	..... † .....	180462-02
Carbide Insert..... † .....	..... † .....	180462-03
Carbide Insert..... † .....	..... † .....	180462-04

# HOLLOW STEM AUGERS AND CUTTERHEADS

2



## 2-1/2" (64MM) THREADED AUGER

**The only water-tight auger in the industry.** Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.

## 2-1/2" (64MM) THREADED AUGER

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 6-1/4" (159MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	130 (58.9).....	61000-01
1-5/8" (41mm) Hex, AWML Rod.....	130 (58.9).....	61000-02
2" (51mm) Hex, AW Rod.....	133 (60.3).....	61000-04
2" (51mm) Hex, AWML Rod.....	134 (60.8).....	61000-05

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex.....	14 (6.4).....	005284
1	Auger Break-out Adapter: 2" (51mm) Hex.....	15 (6.8).....	005285
2	Drive Cap: 1-5/8" (41mm) Hex.....	9 (4.1).....	005000
2	Drive Cap: 2" (51mm) Hex.....	11 (5).....	005001
3	Rod Bolt.....	*	3100-0212
4	Hex Nut.....	*	3122-0012
5	Adapter: AW Rod to Drive Cap.....	5 (2.3).....	001030
5	Adapter: AWML Rod to Drive Cap.....	5 (2.3).....	007014
6	Pin Coupling (Repair Only).....	7 (3.2).....	005358
7	Wedge Pocket (Pin Coupling).....	*	006904
8	Auger Section: 5'0" (1.5m).....	80 (36.3).....	004386
9	Center Rod: 5'0" (1.5m), AW.....	22 (10).....	001605
9	Center Rod: 5'0" (1.5m), AWML.....	15 (6.8).....	006276
10	Box Couplings (Repair Only).....	7 (3.2).....	005359
11	Locking Wedge.....	*	004070
12	Wedge Pocket (Box Coupling).....	*	005633
13	Drift Punch.....	2 (.9).....	006038
14	Plug: 1-1/8" (29mm) Hex to AW Box.....	17 (7.7).....	180036-02
14	Plug: 1-1/8" (29mm) Hex to AWML Box.....	17 (7.7).....	007020
15	Plug Bolt.....	*	3130-0072
16	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	†
17			
18	Capscrew (1 per Blade Req'd).....	*	001293
19	Pilot Bit: 1-1/8" (29mm) Hex.....	2 (.9).....	005503

See pages 2-22  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

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# HOLLOW STEM AUGERS AND CUTTERHEADS

## 2

### CUTTERHEADS - 2-1/2" (64MM) THREADED AUGER

#### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

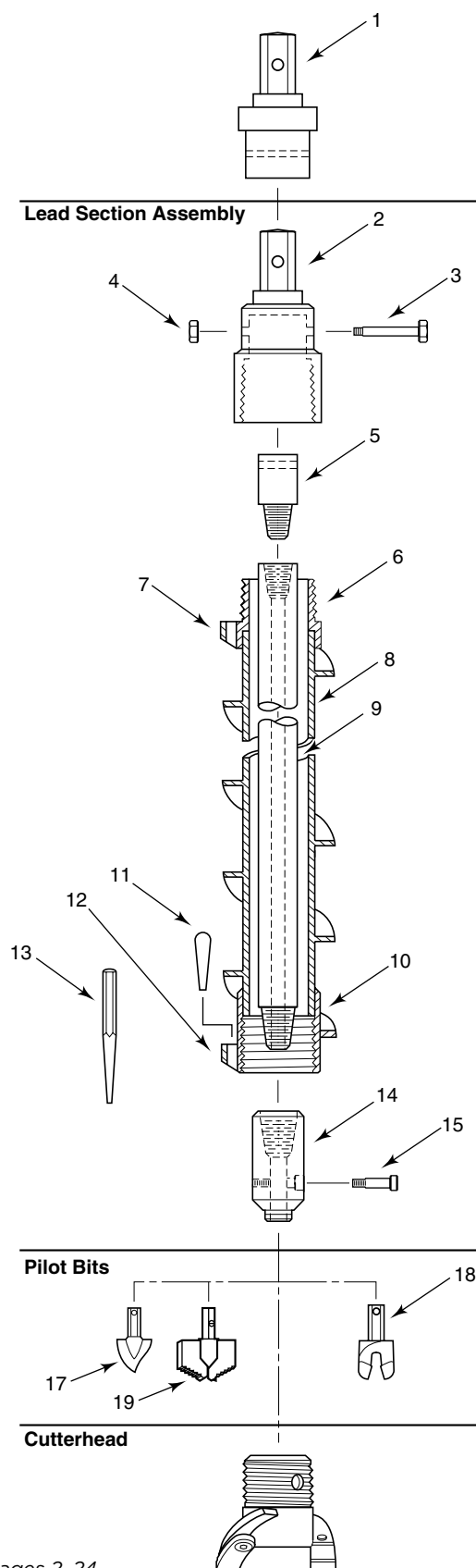
Description	Lb/Kg	Part No.
8" (203mm) O.D., Blade Type .....	21 (9.5).....	004282

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutter Blade w/Carbide..... † .....		004303
Blade Bolt..... † .....		001293
2-1/2" (64mm) Body..... † .....		004831
Locking Wedge..... † .....		004070-10

# HOLLOW STEM AUGERS AND CUTTERHEADS

2



## 3-3/8" (86MM) THREADED AUGER

Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 8-1/4" (210MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	140 (63.5)	61003-01
1-5/8" (41mm) Hex, AWML Rod.....	140 (63.5)	61003-02
1-5/8" (41mm) Hex, NW Rod.....	150 (68)	61003-04
1-5/8" (41mm) Hex, NWML Rod.....	150 (68)	61003-05
2" (51mm) Hex, AW Rod.....	142 (64.4)	61003-06
2" (51mm) Hex, AWML Rod.....	142 (64.4)	61003-07
2" (51mm) Hex, NW Rod.....	153 (69.4)	61003-09
2" (51mm) Hex, NWML Rod.....	153 (69.4)	61003-10

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex.....	25 (11.3)	005286
1	Auger Break-out Adapter: 2" (51mm) Hex.....	27 (12.2)	005287
2	Drive Cap: 1-5/8" (41mm) Hex.....	11 (5)	005002
2	Drive Cap: 2" (51mm) Hex.....	13 (5.9)	005003
3	Rod Bolt.....	*	3100-02222
4	Hex Nut.....	*	3122-0012
5	Adapter: AW Rod to Drive Cap.....	5 (2.3)	001030
5	Adapter: AWML Rod to Drive Cap.....	5 (2.3)	007014
5	Adapter: NW Rod to Drive Cap.....	11 (5)	003511
5	Adapter: NWML Rod to Drive Cap.....	11 (5)	006950
6	Pin Coupling (Repair Only).....	9 (4.1)	005356
7	Wedge Pocket (Pin Coupling).....	*	006904
8	Auger Section: 3'0" (914mm).....	48 (21.8)	150363-03
8	Auger Section: 5'0" (1.5m).....	83 (37.6)	004147
8	Auger Section: 5'0" (1.5m) Double Flight.....	115 (52.2)	150338-01
9	Center Rod: 5'0" (1.5m), AW.....	22 (10)	001605
9	Center Rod: 5'0" (1.5m), AWML.....	15 (6.8)	006276
9	Center Rod: 5'0" (1.5m), NW.....	32 (14.5)	001608
9	Center Rod: 5'0" (1.5m), NWML.....	33 (15)	006278
10	Box Coupling (Repair Only).....	9 (4.1)	005357
11	Locking Wedge.....	*	004070
12	Wedge Pocket (Box Coupling).....	*	005633
13	Drift Punch.....	2 (.9)	006038
14	Plug: 1-1/8" (29mm) Hex to AW.....	17 (7.7)	180036-03
14	Plug: 1-1/8" (29mm) Hex to AWML.....	17 (7.7)	007013
14	Plug: 1-1/8" (29mm) Hex to NW.....	30 (13.6)	180036-06
14	Plug: 1-1/8" (29mm) Hex to NWML.....	30 (13.6)	006963
15	Plug Bolt.....	*	3130-0098
17	Pilot Bit: 1-1/8" (29mm) Hex (Soft Formation).....	2 (.9)	005505
18	Pilot Bit: 2-Prong, 1-1/8" (29mm) Hex (Hard Formation).....	1 (.5)	200024
19	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	†

See pages 2-24  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

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## 2

### CUTTERHEADS - 3-3/8" (86MM) THREADED AUGER

#### BLADE AND BULLET



#### CUTTERHEAD

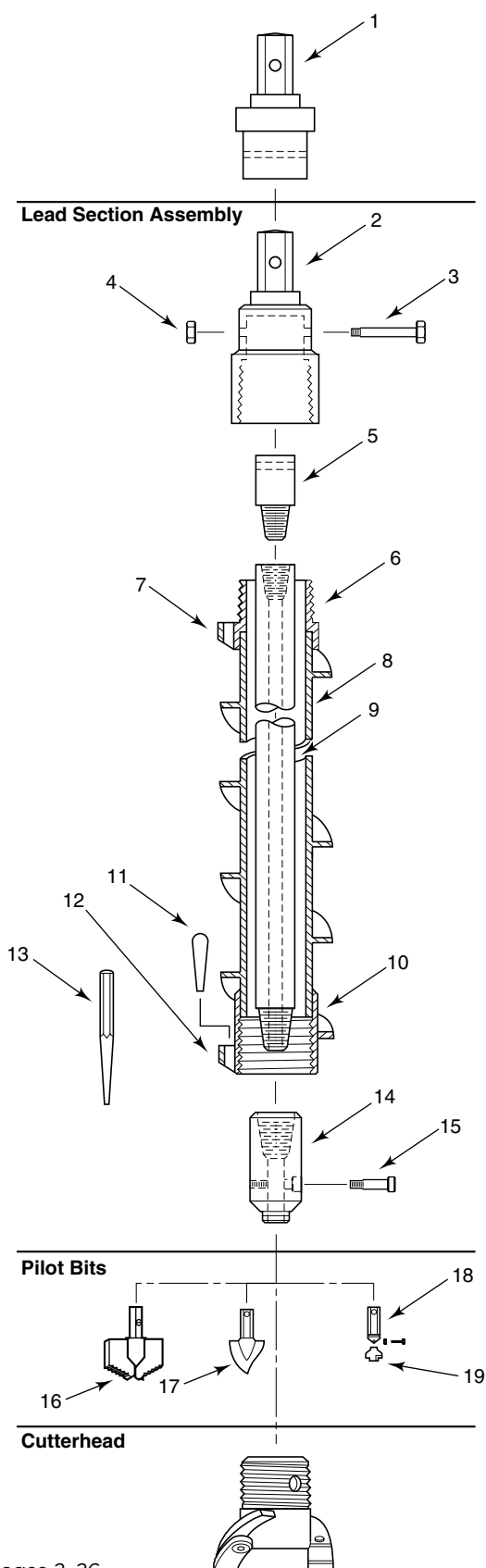
Description	Lb/Kg	Part No.
9" (229mm) O.D. Blade Type.....	17 (7.7)	61031-10
9" (229mm) O.D. Super Duty Type.....	21 (9.5)	61032-10

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutter Blade w/Carbide..... †		004303
Blade Bolt..... †		001293
3-3/8" (86mm) Body..... †		150620
Locking Wedge..... †		004070-10
Bullet Cutter with Retainer..... †		150194-03
Block Holder for Bullet Cutter..... †		216044-01

## 4" (102MM) THREADED AUGER

Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.



### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 8-1/2" (216MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, NW Rod.....	154 (69.9)	61006-02
1-5/8" (41mm) Hex, NWML rod.....	155 (70.3)	61006-03
2" (51mm) Hex, NW Rod .....	157 (71.2)	61006-05
2" (51mm) Hex, NWML Rod .....	157 (71.2)	61006-06

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex.....	29 (13.2)	005290
1	Auger Break-out Adapter: 2" (51mm) Hex.....	30 (13.6)	005291
2	Drive Cap: 1-5/8" (41mm) Hex.....	16 (7.3)	001218
2	Drive Cap: 2" (51mm) Hex.....	16 (7.3)	004617
3	Rod Bolt.....	*	3100-0279
4	Hex Nut.....	*	3122-0012
5	Adapter: NW Rod to Drive Cap.....	11 (5)	003511
5	Adapter: NWML Rod to Drive Cap.....	11 (5)	006950
6	Coupling Pin (Repair Only) .....	10 (4.5)	005689
7	Wedge Pocket (Pin Coupling).....	*	006904
8	Auger Section: 5'0" (1.5m).....	90 (40.8)	001212
8A	Auger Section: 5'0" (1.5m) Double Flight .....	150515-01	
9	Center Rod: 5'0" (1.5m) NW.....	32 (14.5)	001608
9	Center Rod: 5'0" (1.5m) NWML.....	35 (15.9)	006278
10	Box Coupling (Repair Only).....	10 (4.5)	005690
11	Locking Wedge.....	*	004070
12	Wedge Pocket (Box Coupling).....	*	005633
13	Drift Punch.....	2 (.9)	006038
14	Plug: 1-1/8" (29mm) Hex to NW Box.....	32 (14.5)	180036-22
14	Plug: 1-1/8" (29mm) Hex to NWML Box.....	32 (14.5)	007019
15	Plug Bolt .....	*	3130-0118
16	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	†
17	Pilot Bit: 1-1/8" (29mm) Hex.....	2 (.9)	001437
18	Pilot Bit Shank: 1-1/8" (29mm) Hex .....	2 (.9)	004588
19	Pilot Bit, hard formation, carbide.....	5 (2.3)	004948

See pages 2-26  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

## 2

### CUTTERHEADS - 4" (102MM) THREADED AUGER

#### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	Lb/Kg	Part No.
11" (279mm) O.D., Blade Type.....	23 (10.4)	61031-13

#### COMPONENT PARTS

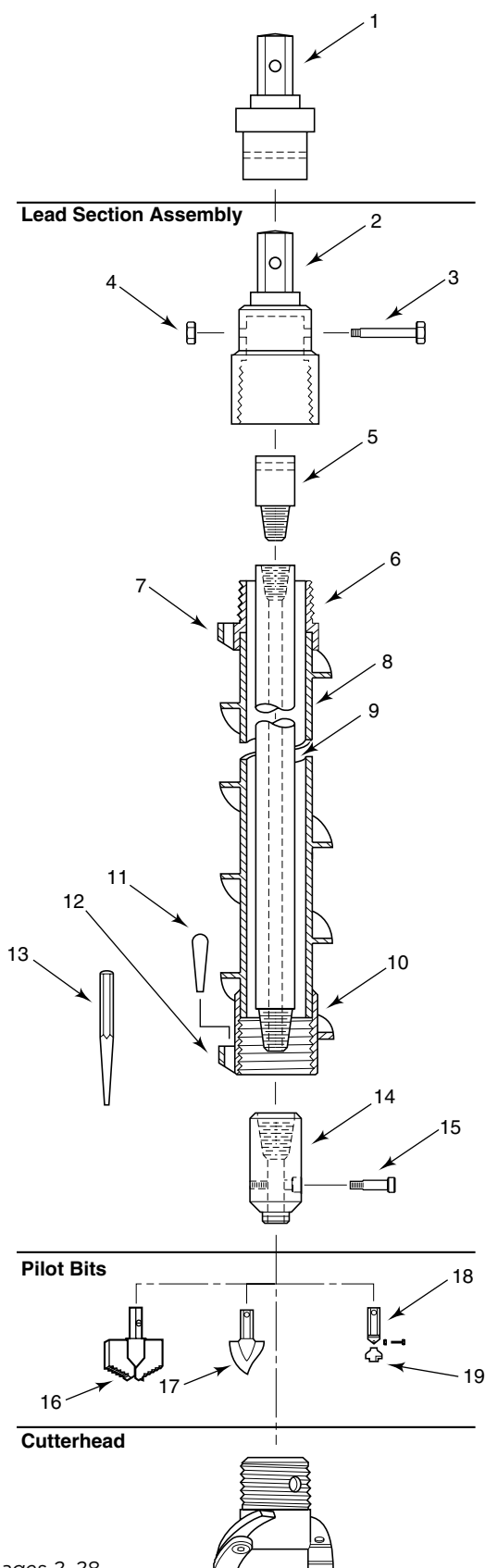
Description	Lb/Kg	Part No.
Cutter Blade w/Carbide..... †		004303
Blade Bolt..... †		001293
4" (102mm) Body..... †		217965
Locking Wedge..... †		004070-10

# HOLLOW STEM AUGERS AND CUTTERHEADS

2

## 6" (152MM) THREADED AUGER

Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.



### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 11" (279MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, NW Rod.....	232 (105.2).....	61009-02
1-5/8" (41mm) Hex, NWML Rod.....	233 (105.7).....	61009-03
2" (51mm) Hex, NW Rod.....	234 (106.1).....	61009-05
2" (51mm) Hex, NWML Rod.....	235 (106.6).....	61009-06

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex.....	48 (21.8).....	005294
1	Auger Break-out Adapter: 2" (51mm) Hex.....	49 (22.2).....	005295
2	Drive Cap: 1-5/8" (41mm) Hex.....	22 (10).....	001220
2	Drive Cap: 2" (51mm) Hex.....	23 (10.4).....	004619
3	Rod Bolt.....	*	3100-0280
4	Hex Nut.....	*	3100-0280
5	Adapter: NW Rod to Drive Cap.....	11 (5).....	003511
5	Adapter: NWML Rod To Drive Cap.....	11 (5).....	006950
6	Pin Coupling (Repair Only).....	17 (7.7).....	005693
7	Wedge Pocket (Pin Coupling).....	*	006904
8	Auger Section: 5'0" (1.5m).....	141 (64).....	001214
9	Center Rod: 5'0" (1.5m), NW.....	32 (14.5).....	001608
9	Center Rod: 5'0" (1.5m), NWML.....	25 (11.3).....	006278
10	Box Coupling (Repair Only).....	15 (6.8).....	005694
11	Locking Wedge.....	*	004070
12	Wedge Pocket (Box Coupling).....	*	005633
13	Drift Punch.....	2 (.9).....	006038
14	Plug: 1-5/8" (41mm) Hex to NW Box.....	35 (15.9).....	180036-24
14	Plug: 1-5/8" (41mm) Hex to NWML Box.....	35 (15.9).....	006949
15	Plug Bolt.....	*	3130-0163
	Cutterhead Body: Blade Type (3 Blades Req'd).....	25 (11.3).....	001280
	Cutter Blade: Carbide Insert.....	1 (.5).....	004303
	Capscrew (1 Req'd per blade).....	*	001293
16	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	†
17	Pilot Bit: 1-5/8" (41mm).....	4 (1.8).....	005509
18	Shank Pilot Bit: 1-5/8" (41mm) Hex.....	2 (.9).....	004591
19	Pilot Bit, hard formation, carbide.....	11 (5).....	004950

See pages 2-28  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

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## 2

### CUTTERHEADS - 6" (152MM) THREADED AUGER

#### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

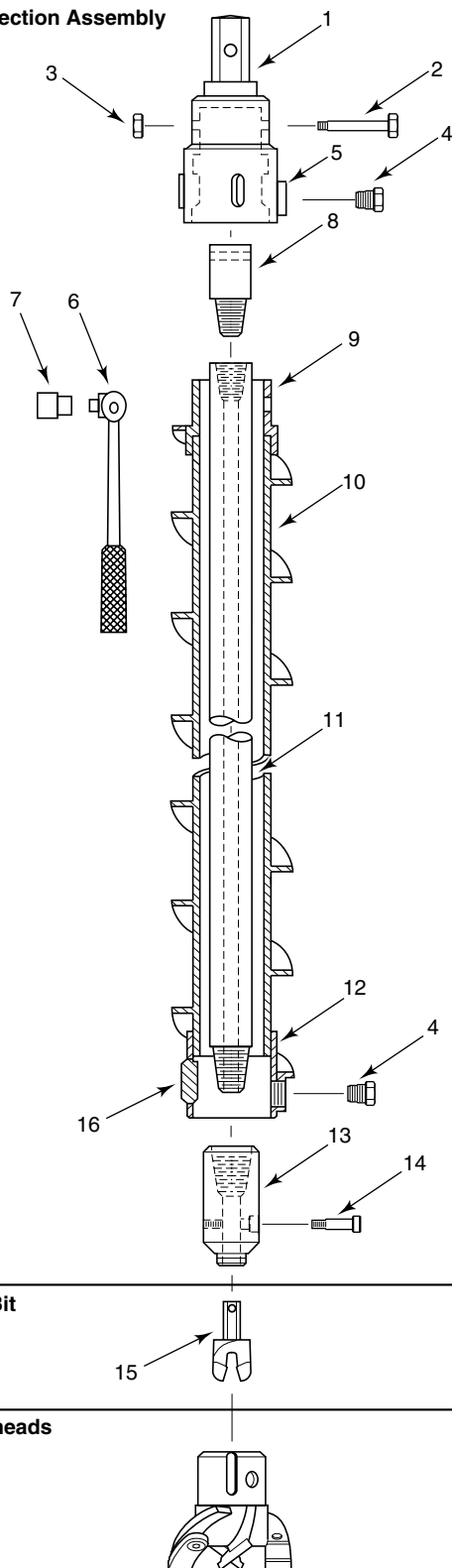
#### CUTTERHEAD

Description	Lb/Kg	Part No.
13-1/4" (337mm), Blade Type.....	44 (20)	61031-14

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterhead w/Carbide .....	†	004303
Blade Bolt.....	†	001293
6" (152mm) Body .....	†	001280
Locking Wedge.....	†	004070-10

**Lead Section Assembly**



## 2-1/4" (57MM) 2-KEY STANDARD DUTY AUGER

Predominately used for geotechnical applications such as split spoon sampling. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 5-5/8" (143MM) O.D.

Description	Lb/Kg	Part No.
1-1/8" (29mm) Hex, AW Rod.....	†	61021-07
1-1/8" (29mm) Hex, AWML Rod.....	†	61021-08
1-5/8" (41mm) Hex, AW Rod.....	†	61021-09
1-5/8" (41mm) Hex, AWML Rod.....	†	61021-10

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 1-1/8" (29mm) Hex.....	†	150717
1	Drive Cap: 1-5/8" (41mm) Hex.....	†	150732
2	Hex Bolt.....	†	3100-0128
3	Hex Nut.....	†	3122-0012
4	Lockbolt.....	†	150712-07
5	Bushing.....	†	218889-04
6	Handle.....	†	3781-0009
7	Socket.....	†	3782-0016
8	Rod to Cap Adapter AW.....	†	001030
8	Rod to Cap Adapter AWML.....	†	007014
9	Pin Coupling, Heat-Treated (Repair Only).....	†	150712-01
10	Auger 5' (1.5m) Lg.....	†	150712
11	Center Rod AW.....	†	001605
11	Center Rod AWML.....	†	006276
12	Box Coupling (Repair Only).....	†	150712-02
13	Center Plug AW Connection.....	†	180448-02
13	Center Plug AWML Connection.....	†	180448-03
14	Plug Bolt.....	†	3130-0062
15	Pilot Bit.....	†	004981
16	Repair Key.....	†	150577
	O-Ring.....	†	3538-0232

**Pilot Bit**

15

**Cutterheads**

See pages 2-30  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

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## HOLLOW STEM AUGERS AND CUTTERHEADS

# 2

### CUTTERHEADS - 2-1/4" (57MM) 2-KEY STANDARD DUTY AUGER

#### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

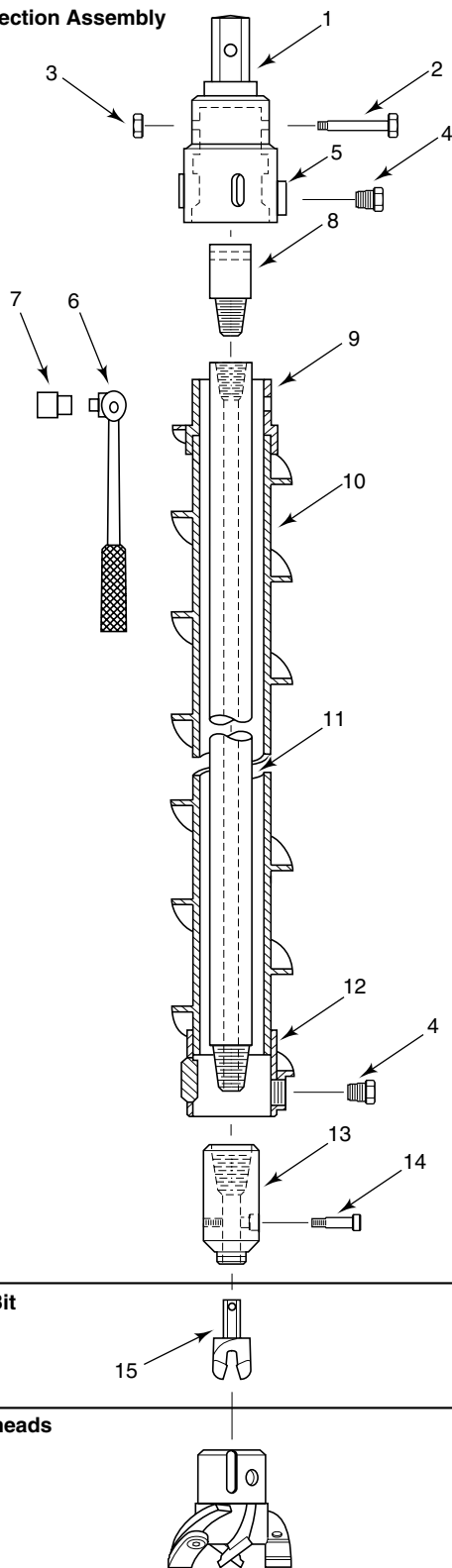
#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
2-1/4" (57mm).....	6-1/2" (165mm).....	†	61036-14

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	*	150194-04
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
2-1/4" (57mm) Body.....	†	150718-01

Lead Section Assembly



## 3-1/4" (83MM) 2-KEY STANDARD DUTY AUGER

Predominately used for geotechnical applications such as split spoon sampling. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods. **Also available in 2-key heavy-duty and TRI-LOK™.**

### 5'0" (1.5M) LEAD SECTION ASSEMBLY: 6-1/2" (165MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	†	61049-01
1-5/8" (41mm) Hex, AWML Rod.....	†	61049-02
1-5/8" (41mm) Hex, NW Rod.....	†	61049-03
1-5/8" (41mm) Hex, NWNL Rod.....	†	67049-04
2" (51mm) Hex, AW Rod.....	†	61049-05
2" (51mm) Hex, AWML Rod.....	†	61049-06
2" (51mm) Hex, NW Rod.....	†	61049-07
2" (51mm) Hex, NWML Rod.....	†	61049-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 1-1/8" (29mm) Hex.....	†	150731
1	Drive Cap: 1-5/8" (41mm) Hex.....	17 (7.7)	150730
1	Drive Cap: 2" (51mm) Hex.....	22 (10)	150732
2	Rod Bolt.....	*	3100-0184
3	Hex Nut.....	*	3122-0012
4	Lockbolt - 1 Req'd.....	*	150712-06
4	Lockbolt - 1 Req'd (Hard Faced).....	*	150712-07
5	Bushing (Repair Only).....	*	218889-04
6	Handle.....	*	3781-0009
7	Socket.....	*	3782-0016
8	Adapter: AW Rod to Drive Cap.....	5 (2.3)	150310
8	Adapter: AWML Rod to Drive Cap.....	5 (2.3)	150311
8	Adapter: NW Rod to Drive Cap.....	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap.....	11 (5)	180054-04
9	Coupling Pin, Heat-Treated (Repair Only) ...	6 (2.7)	150711-01
10	Auger Section - 5'0" (1.5m).....	69 (31.3)	150711
11	Center Rod - 5'0" (1.5m), AW.....	22 (10.0)	001605
11	Center Rod - 5'0" (1.5m), AWML.....	15 (6.8)	006276
11	Center Rod - 5'0" (1.5m), NW.....	32 (14.5)	001608
11	Center Rod - 5'0" (1.5m), NWML.....	35 (15.9)	006278
12	Box Coupling (Repair Only).....	6 (2.7)	150711-02
13	Plug - 1-1/8" (29mm) Hex to AW Box.....	12 (5.4)	150312
13	Plug - 1-1/8" (29mm) Hex to AWML Box.....	12 (5.4)	150379
13	Plug - 1-1/8" (29mm) Hex to NW Box.....	11 (5)	150306
13	Plug - 1-1/8" (29mm) Hex to NWML Box.....	11 (5)	150377
14	Plug Bolt.....	*	3130-0098
15	Pilot Bit, 2-Prong, 1-1/8" (29mm) Hex.....	2 (.9)	200024
15	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	150574-01
	Coupling, TRI-LOK to CME Pin.....	13 (5.9)	150290
	Coupling, TRI-LOK to CME Socket.....	13 (5.9)	150304
	Repair Key.....	*	150577
	Clean Out Tap (For Bushing).....	*	150562

See pages 2-32 and 2-33  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

2

## CUTTERHEADS - 3-1/4" (83MM) 2-KEY STANDARD DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61032-16

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit .....	*	150233
3-1/4" (83mm) Body .....	†	150728

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61032-15

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	*	004303
Blade Bolt .....	*	001293
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders .....	†	150724

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61031-16

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	*	004303
Blade Bolt .....	*	001293
Flight Segment .....	†	150593
3-1/4" (83mm) Body w/ Flight Segment .....	†	150723

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61036-12

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	*	150194-04
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
3-1/4" (83mm) Body .....	†	150653

*Continued on next page*

2-32

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

## CUTTERHEADS - 3-1/4" (83MM) 2-KEY STANDARD DUTY AUGER (cont.)

2

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61037-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Spade Bit w/Retainer .....	* .....	150194-04
Bullet Bit Holder .....	* .....	216044-01
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
Flight Segment .....	† .....	150593-01
3-1/4" (83mm) Body .....	† .....	150726

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61038-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment .....	† .....	150593-01
3-1/4" (83mm) Body .....	† .....	150727

Key: \* Designates weights less than 1 lb (.5kg)

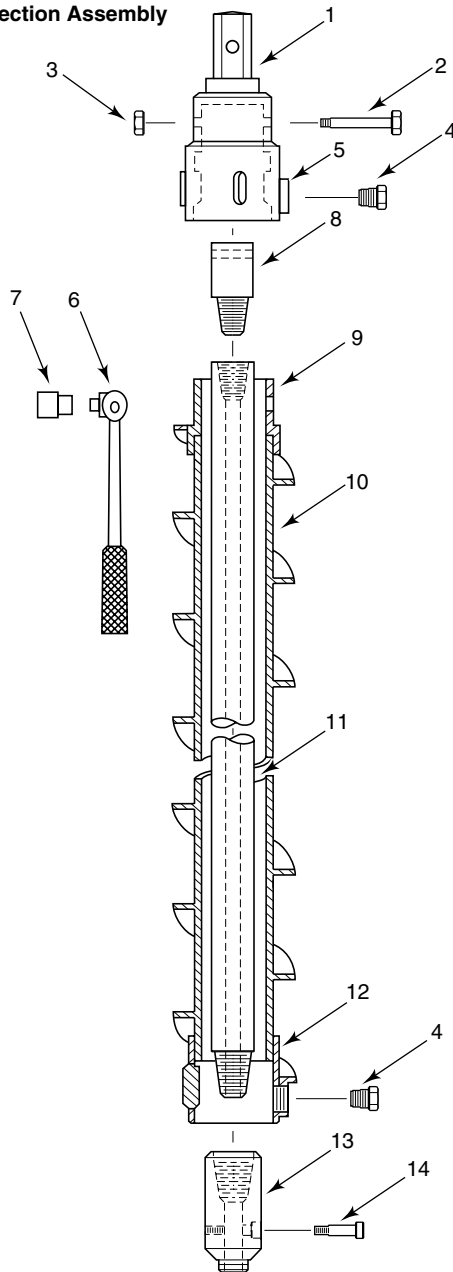
† Consult Factory

2-33

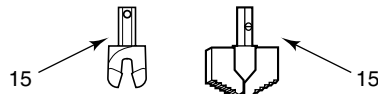
# HOLLOW STEM AUGERS AND CUTTERHEADS

2

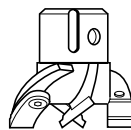
Lead Section Assembly



Pilot Bit



Cutterheads



## 3-1/4"(83MM) 2-KEY HEAVY DUTY AUGER

H.D. key size is 5/8" (16mm) **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5' (1.5MM) LEAD SECTION ASSEMBLY: 6-1/2" (165MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	†	61046-01
1-5/8" (41mm) Hex, AWML Rod.....	†	61046-02
1-5/8" (41mm) Hex, NW Rod.....	†	61046-03
1-5/8" (41mm) Hex, NWML Rod.....	†	61046-04
2" (51mm) Hex, AW Rod.....	†	61046-05
2" (51mm) Hex, AWML Rod.....	†	61046-06
2" (51mm) Hex, NW Rod.....	†	61046-07
2" (51mm) Hex, NWML Rod.....	†	61046-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex.....	22 (10)	150646
2	Rod Bolt.....	*	3100-0184
3	Hex Nut.....	*	3122-0012
4	Lockbolt - 1 Req'd (Repair Only).....	*	150631-06
5	Bushing.....	*	150631-03
6	Handle.....	*	3781-0010
7	Socket.....	*	3782-0017
8	Adapter: AW Rod to Drive Cap.....	5 (2.3)	150310
8	Adapter: AWML Rod to Drive Cap.....	5 (2.3)	150311
8	Adapter: NW Rod to Drive Cap.....	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap.....	11 (5)	180054-04
9	Coupling Pin (Repair Only).....	6 (2.7)	150631-07
10	Auger Section - 5'0" (1.5m).....	69 (31.3)	150631
11	Center Rod - 5'0" (1.5m), AW.....	22 (10.0)	001605
11	Center Rod - 5'0" (1.5m), AWML.....	15 (6.8)	006276
11	Center Rod - 5'0" (1.5m), NW.....	32 (14.5)	001608
11	Center Rod - 5'0" (1.5m), NWML.....	35 (15.9)	006278
12	Box Coupling (Repair Only).....	6 (2.7)	150631-01
13	Plug - 1-1/8" (29mm) Hex to AW Rod Box.....	12 (5.4)	150312
13	Plug - 1-1/8" (29mm) Hex to AWML Rod Box.....	12 (5.4)	150379
13	Plug - 1-1/8" (29mm) Hex to NW Rod Box.....	11 (5)	150306
13	Plug - 1-1/8" (29mm) Hex to NWML Rod Box.....	11 (5)	150377
14	Plug Bolt.....	*	3130-0098
15	Pilot Bit, 2-Prong, 1-1/8" (29mm) Hex.....	2 (.9)	200024
15	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	150574-01
	Repair Key.....	*	150631-04

See pages 2-35 and 2-36  
for cutterhead information

## CUTTERHEADS - 3-1/4" (83MM) 2-KEY HEAVY DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61032-17

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit .....	*	150233
3-1/4" (83mm) Body .....	†	150763

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61033-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	*	004303
Blade Bolt .....	*	001293
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders .....	†	150635-01

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61031-17

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	*	004303
Blade Bolt .....	*	001293
Flight Segment .....	†	150593
3-1/4" (83mm) Body w/ Flight Segment .....	†	150764

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61036-13

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	*	150194-04
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
3-1/4" (83mm) Body .....	†	150766

*Continued on next page*

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

2

## 3-1/4" (83MM) 2-KEY HEAVY DUTY AUGER (cont.)

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61037-06

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Spade Bit w/Retainer .....	*	150194-04
Bullet Bit Holder .....	*	216044-01
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
Flight Segment .....	†	150593-01
3-1/4" (83mm) Body .....	†	150767

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61038-06

### COMPONENT PARTS

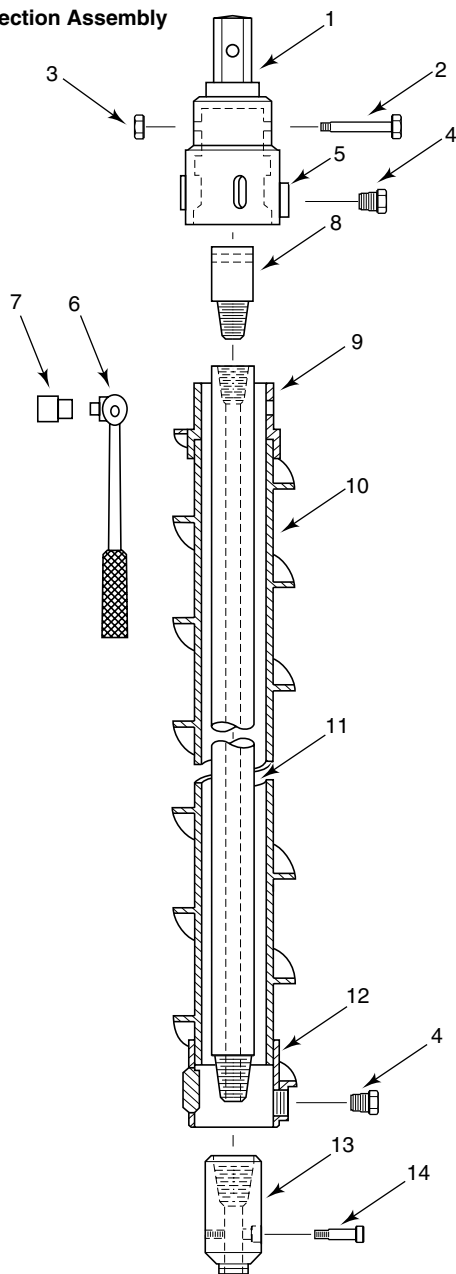
Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
Flight Segment .....	†	150593-01
3-1/4" (83mm) Body .....	†	150768

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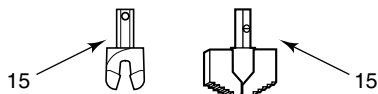
Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

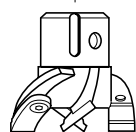
**Lead Section Assembly**



**Pilot Bit**



**Cutterheads**



## 4-1/4" (108MM) 2-KEY HEAVY DUTY AUGER

Often used for 2" (51mm) monitoring well installation. H.D. key size is 5/8" (16mm). **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5' (1.5MM) LEAD SECTION ASSEMBLY: 8-1/4" (165MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod..... †		61047-01
1-5/8" (41mm) Hex, AWML Rod..... †		61047-02
1-5/8" (41mm) Hex, NW Rod..... †		61047-03
1-5/8" (41mm) Hex, NWML Rod..... †		61047-04
2" (51mm) Hex, AW Rod..... †		61047-05
2" (51mm) Hex, AWML Rod..... †		61047-06
2" (51mm) Hex, NW Rod..... †		61047-07
2" (51mm) Hex, NWML Rod..... †		61047-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap, 2" (51mm) Hex Shank.....	28 (12.7)	150649
2	Rod Bolt..... *		3100-0279
3	Hex Nut..... *		3122-0012
4	Lockbolt - 2 Req'd (Repair Only)..... *		150631-06
5	Repair Bushing..... *		150631-03
6	Handle..... *		3781-0009
7	Socket..... *		3782-0016
8	Adapter: AW Rod Pin to Drive Cap.....	5 (2.3)	150310
8	Adapter: AWML Rod Pin to Drive Cap.....	5 (2.3)	150311
8	Adapter: NW Rod Pin to Drive Cap.....	11 (5)	180049-03
8	Adapter: NWML Rod Pin to Drive Cap.....	11 (5)	180054-04
9	Pin Coupling (Repair Only).....	9 (4.1)	150632-04
10	Auger Section: 5'0" (1.5m).....	90 (40.8)	150632
11	Center Rod: 5'0" (1.5m), AW.....	22 (10)	001605
11	Center Rod: 5'0" (1.5m), AWML.....	15 (6.8)	006276
11	Center Rod: 5'0" (1.5m), NW.....	32 (14.5)	001608
11	Center Rod: 5'0" (1.5m), NWML.....	35 (15.9)	006278
12	Box Coupling (Repair Only).....	9 (4.1)	150632-01
13	Plug: 1-1/8" (29mm) Hex Socket to AW Rod Box.....	19 (8.6)	150492
13	Plug: 1-1/8" (29mm) Hex Socket to AWML Rod Box.....	19 (8.6)	150494
13	Plug: 1-1/8" (29mm) Hex Socket to NW Rod Box.....	18 (8.2)	150488
13	Plug: 1-1/8" (29mm) Hex Socket to NWML Rod Box.....	18 (8.2)	150486
14	Plug Bolt..... *		3130-0118
15	Pilot Bit, 1-1/8" (29mm) Hex Shank, 2-Prong.....	2 (.9)	004304
15	Pilot Bit, 1-1/8" (29mm) Hex Shank, 3-Wing.....	4 (1.8)	150574-02
	Repair Key..... *		150632-03

See pages 2-38 and 2-39  
for cutterhead information

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

2

## CUTTERHEADS - 4-1/4" (108MM) 2-KEY HEAVY DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61032-18

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit * .....		150233
4-1/4" (108mm) Body .....	† .....	150769

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61033-04

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
4-1/4" (108mm) Body w/ Flight Segment and Bit Holders .....	† .....	150635-01

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61031-18

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	* .....	004303
Blade Bolt .....	* .....	001293
Flight Segment .....	† .....	150586
4-1/4" (108mm) Body w/ Flight Segment .....	† .....	150771

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61036-15

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	* .....	150194-04
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
4-1/4" (108mm) Body .....	† .....	150772

Continued on next page

## CUTTERHEADS - 4-1/4" (108MM) 2-KEY HEAVY DUTY AUGER (cont.)

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61037-07

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Spade Bit w/Retainer .....	*	150194-04
Bullet Bit Holder .....	*	216044-01
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
Flight Segment .....	†	150586-01
4-1/4" (108mm) Body .....	†	150773

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61038-07

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
Flight Segment .....	†	150586-01
4-1/4" (108mm) Body .....	†	150774

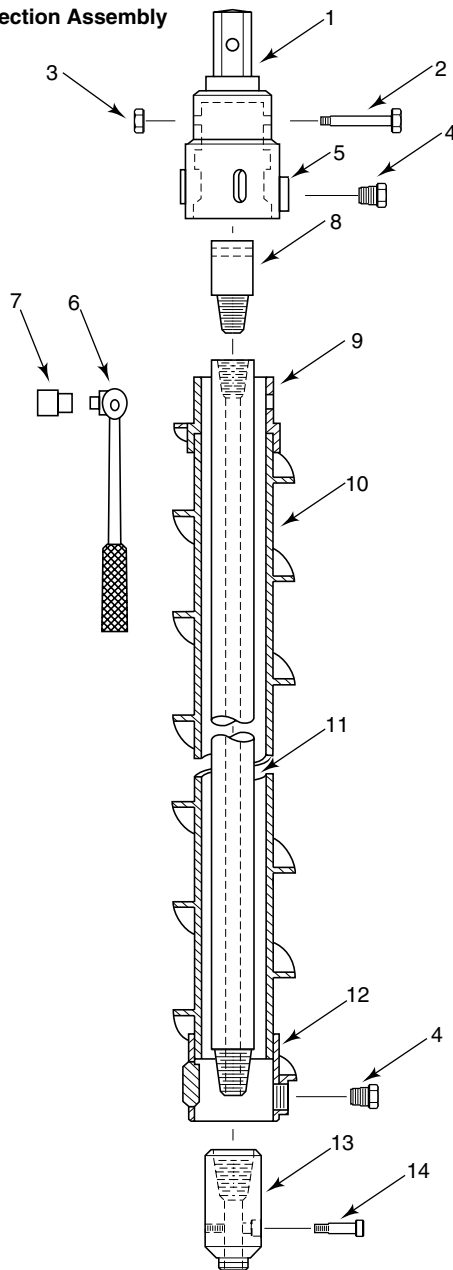
Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

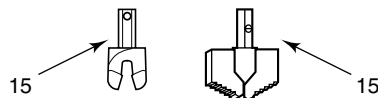
# HOLLOW STEM AUGERS AND CUTTERHEADS

2

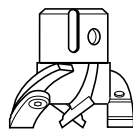
Lead Section Assembly



Pilot Bit



Cutterheads



See pages 2-41 and 2-42  
for cutterhead information

## 6-1/4" (159MM) 2-KEY HEAVY DUTY AUGER

H.D. key size is 5/8" (16mm). **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5' (1.5MM) LEAD SECTION ASSEMBLY: 10-1/4" (165MM) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....†	.....	61048-01
1-5/8" (41mm) Hex, AWML Rod.....†	.....	61048-02
1-5/8" (41mm) Hex, NW Rod.....†	.....	61048-03
1-5/8" (41mm) Hex, NWML Rod.....†	.....	61048-04
2" (51mm) Hex, AW Rod.....†	.....	61048-05
2" (51mm) Hex, AWML Rod.....†	.....	61048-06
2" (51mm) Hex, NW Rod.....†	.....	61048-07
2" (51mm) Hex, NWML Rod.....†	.....	61048-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex.....	22 (10)	150650
2	Rod Bolt.....*	.....	3100-0184
3	Hex Nut.....*	.....	3122-0012
4	Lockbolt - 2 Req'd (Repair Only).....*	.....	150631-06
5	Bushing.....*	.....	150631-03
6	Handle.....*	.....	3781-0009
7	Socket.....*	.....	3782-0016
8	Adapter: AW Rod to Drive Cap.....	5 (2.3)	150310
8	Adapter: AWML Rod to Drive Cap.....	5 (2.3)	150311
8	Adapter: NW Rod to Drive Cap.....	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap.....	11 (5)	180054-04
9	Coupling Pin (Repair Only).....	6 (2.7)	150633-04
10	Auger Section - 5'0" (1.5m).....	69 (31.3)	150633
11	Center Rod - 5'0" (1.5m), AW.....	22 (10.0)	001605
11	Center Rod - 5'0" (1.5m), AWML.....	15 (6.8)	006276
11	Center Rod - 5'0" (1.5m), NW.....	32 (14.5)	001608
11	Center Rod - 5'0" (1.5m), NWML.....	35 (15.9)	006278
12	Box Coupling (Repair Only).....	6 (2.7)	150633-01
13	Plug - 1-1/8" (29mm) Hex to AW Rod Box.....	12 (5.4)	150312
13	Plug - 1-1/8" (29mm) Hex to AWML Rod Box.....	12 (5.4)	150379
13	Plug - 1-1/8" (29mm) Hex to NW Rod Box.....	11 (5)	150306
13	Plug - 1-1/8" (29mm) Hex to NWML Rod Box.....	11 (5)	180036-32
14	Plug Bolt.....*	.....	3130-0170
15	Pilot Bit, 2-Prong, 1-1/8" (29mm) Hex.....	2 (.9)	200024
15	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....*	.....	150574-08
	Repair Key.....*	.....	150633-03

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Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

## CUTTERHEADS - 6-1/4" (159MM) 2-KEY HEAVY DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm).....	11" (279mm).....	27 (12.2).....	61032-19

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit .....	*	150233
6-1/4" (159mm) Body.....	†	150770

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm).....	11" (279mm).....	27 (12.2).....	61033-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	*	004303
Blade Bolt.....	*	001293
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
6-1/4" (159mm) Body w/ Flight Segment and Bit Holders .....	†	150636-01

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm).....	11" (279mm).....	27 (12.2).....	61031-19

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide .....	*	004303
Blade Bolt.....	*	001293
Flight Segment .....	†	150587
6-1/4" (159mm) Body w/ Flight Segment.....	†	150765

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm).....	11" (279mm).....	27 (12.2).....	61036-15

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer .....	*	150194-04
Spade Bit Holder.....	*	216044-02
Nail .....	*	150678
6-1/4" (159mm) Body.....	†	150775

*Continued on next page*

# HOLLOW STEM AUGERS AND CUTTERHEADS

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## 6-1/4" (159MM) 2-KEY HEAVY DUTY AUGER (cont.)

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm).....	11" (279mm) .....	27 (12.2).....	61037-08

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Spade Bit w/Retainer .....	*	150194-04
Bullet Bit Holder .....	*	216044-01
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
Flight Segment .....	†	150587-01
6-1/4" (159mm) Body.....	†	150776

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

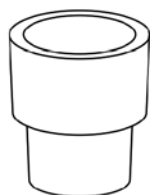
### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm).....	11" (279mm) .....	27 (12.2).....	61038-08

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder .....	*	216044-01
Flight Segment .....	†	150587-01
6-1/4" (159mm) Body.....	†	150777

## ROD HOLDING SLIP & SPIDER BOWL



A rod holding slip is used in conjunction with a spider bowl to speed rod handling by centering the drill rod or casing and holding it securely. The spider bowl centers and holds the slip in the hollow stem auger at the top of the drill string. This technique eliminates the need for pipe wrenches or other holding devices. Order a spider bowl to fit each hollow stem auger size used and a slip assembly for each rod or casing size used. Spider bowls are used with the hollow stem augers noted in parenthesis. **Auger sizes are identified by auger I.D.**

### AUGER SPIDER BOWL: LITE-FLITE AUGER

Description	Lb/Kg	Part No.
2-1/4" (57mm).....	12 (5.4).....	150184-12

### AUGER SPIDER BOWL: THREADED AUGER

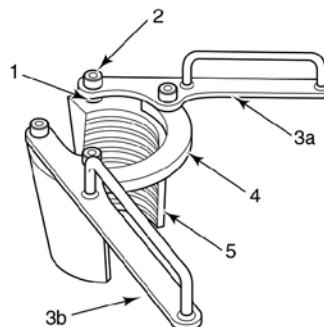
Description	Lb/Kg	Part No.
2-1/2" (64mm).....	14 (6.4).....	150184-01
3-3/8" (86mm).....	15 (6.8).....	150184-02
4" (102mm).....	15 (6.8).....	150184-03
6" (152mm).....	19 (8.6).....	150184-04

### AUGER SPIDER BOWL: TRI-LOK/2-KEY AUGERS

Description	Lb/Kg	Part No.
3-1/4" (83mm).....	14 (6.4).....	150184-08
4-1/4" (108mm).....	16 (7.3).....	150184-09
6-1/4" (159mm).....	†.....	150184-13
6-1/4" (168mm).....	22 (10).....	150184-10
8-1/4" (210mm).....	25 (11.3).....	150184-11
10-1/4" (260mm).....	†.....	150184-14
12-1/4" (311 mm).....	†.....	150184-15

### ROD HOLDING SLIP ASSEMBLY

Description	Lb/Kg	Part No.
A Rod.....	7 (3.2).....	61013-06
AW, AWML & AWL Rod .....	7 (3.2).....	61013-01
BW & BWL Rod .....	6 (2.7).....	61013-02
N Rod.....	6 (2.7).....	61013-08
NW & NWML Rod .....	6 (2.7).....	61013-03
NWL Rod.....	6 (2.7).....	61013-04
NXWL & 2-7/8" (73mm) Rod .....	6 (2.7).....	61013-05



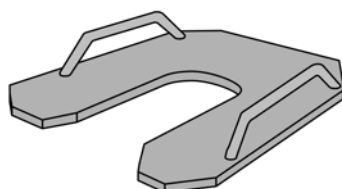
### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Spacer (2 Req'd).....	*.....	210032-03
2	Hex Screw (4 Req'd).....	*.....	3319-0001
3a	Handle(R).....	*.....	150171
3b	Handle (L).....	*.....	150361
4	Link.....	*.....	150172-01
5	Rod Holding Slip, AW, AWML & AW Rod (2 Req'd).....	3 (1.4).....	150173-01
5	Rod Holding Slip, BW & BWL Rod (2 Req'd).....	2 (.9).....	150174-01
5	Rod Holding Slip, NW & NWML Rod (2 Req'd).....	2 (.9).....	150175-01
5	Rod Holding Slip, NWL Rod (2 Req'd).....	2 (.9).....	150176-01
5	Rod Holding Slip, NXWL & 2-7/8" (73mm) Rod (2 Req'd).....	2 (.9).....	150177-01
5	Rod Holding Slip, N Rod (2 Req'd).....	2 (.9).....	150207-01

# HOLLOW STEM AUGERS AND CUTTERHEADS

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## AUGER HOLDER (4-1/4" HSA STYLE SHOWN)



An auger holder is used to temporarily support hollow stem augers during removal of the drill string after soil sampling or monitoring well installation has been completed. Holders are used with the auger noted in parentheses. The above design is only representative. Other designs may vary.

### AUGER HOLDER: LITE-FLITE AUGER

Description	Lb/Kg	Part No.
2-1/4" (57mm).....	10 (4.5) .....	150419-01

### AUGER HOLDER: MOBILOK™ JET AUGER

Description	Lb/Kg	Part No.
AWML .....	9 (4.1) .....	001329
NWML .....	9 (4.1) .....	001330

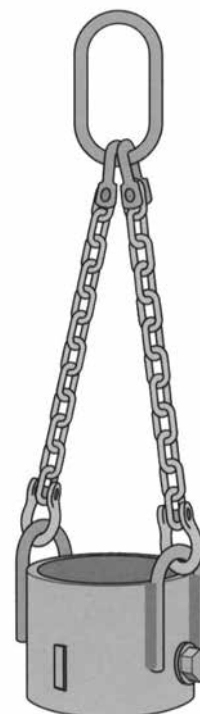
### AUGER HOLDER: THREADED AUGER

Description	Lb/Kg	Part No.
2-1/2" (64mm).....	24 (10.9) .....	001332
3-3/8" (86mm) & 4" (102mm).....	33 (15) .....	001335
6" (152mm) & 6-5/8" (168mm).....	30 (13.6) .....	007076

### AUGER HOLDER: TRI-LOK/2-KEY AUGERS

Description	Lb/Kg	Part No.
3-1/4" (83mm) & 4-1/4" (108mm) .....	33 (15) .....	001335
6-5/8" (168mm) .....	30 (13.6) .....	007076
8-1/4" (210mm) .....	30 (13.6) .....	007166
10-1/4" (260mm) .....	50 (22.7) .....	217694
12-1/4" (311mm) .....	† .....	150419-04

## AUGER HOISTING ASSEMBLY



An auger hoisting assembly is used when it is required to pull hollow stem augers vertically utilizing the main hoist, as a part of the ground water monitoring or remediation well installation process. This technique allows the driller to pull up and back fill more than five feet at a time.

### AUGER HOISTING ASSEMBLY: THREADED AUGERS

Description	Lb/Kg	Part No.
2-1/2" (64mm).....	22 (10) .....	61030-06
3-3/8" (86mm).....	24 (10.9) .....	61030-07
4" (102mm).....	25 (11.3) .....	61030-08
6" (152mm).....	30 (13.6) .....	61030-09

### AUGER HOISTING ASSEMBLY: TRI-LOK AUGERS

Description	Lb/Kg	Part No.
3-1/4" (83mm) .....	21 (9.5) .....	61030-01
4-1/4" (108mm).....	24 (10.9) .....	61030-02
6-5/8" (168mm) .....	30 (13.6) .....	61030-03
8-1/4" (210mm) .....	28 (12.7) .....	61030-04
10-1/4" (260mm) .....	59 (26.8) .....	61030-05
12-1/4" (311mm) .....	78 (35.4) .....	61030-10

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Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

## MOBILKIT

Mobilkits insure that all necessary accessories are included at shipment. They are used with the hollow stem augers noted in parentheses. **Auger sizes are identified by auger I.D.**

### Mobilkits for threaded augers contain:

- 1 retriever
  - 1 holder
  - 1 pointed hammer
  - 1 pinch bar
  - 6 rod bolt & nut sets
  - 2 - 36" (.91 m) pipe wrenches
  - (2 - 48" (1.2 m) for 6" (152 mm) augers),
  - 1 wedge tool
  - 6 WedgLoks (2 for 6" (152 mm) augers).
- Order extensions and auger guides separately.

### Mobilkits for TRI-LOK™ augers contain:

- 1 retriever
  - 1 holder
  - 1 pinch bar
  - 6 rod bolt & nut sets
  - 1 bolt wrench
  - 6 lock bolts
  - 3 clean out taps.
- Order extensions and auger guides separately.

### MOBILKIT: THREADED AUGER

Description	Lb/Kg	Part No.
2-1/2" (64mm).....	230 (104.3)	21014-16
3-3/8" (86mm).....	240 (108.9)	21014-17
4" (102mm).....	270 (122.5)	21014-18
6" (152mm).....	270 (122.5)	21014-19

### MOBILKIT: TRI-LOK/2-KEY AUGERS

Description	Lb/Kg	Part No.
3-1/4" (83mm).....	130 (59)	21014-20
4-1/4" (108mm).....	200 (90.7)	21014-22
6-5/8" (168mm).....	200 (90.7)	21014-23
8-1/4" (210mm).....	†	21014-24
10-1/4" (260mm).....	†	21014-25
12-1/4" (311mm).....	†	21014-26

## AUGER EXTENSION



Essentially a flightless hollow stem auger, extensions are used to compensate for height of drill above ground when mounted on a truck or trailer. Sizes are identified by I.D.

### AUGER EXTENSIONS: THREADED

Description	Lb/Kg	Part No.
2-1/2" (64mm) x 2'0" (610mm).....	29 (13.2)	006327
2-1/2" (64mm) x 2'6" (762mm).....	33 (15)	006328
3-3/8" (86mm) x 1'6" (457mm).....	†	150329-13
3-3/8" (86mm) x 2'0" (610mm).....	32 (14.5)	006330
3-3/8" (86mm) x 2'6" (762mm).....	36 (16.3)	006331
4" (102mm) x 2'0" (610mm).....	35 (15.9)	006867
4" (102mm) x 2'6" (762mm).....	39 (17.7)	006868
6" (152mm) x 2'0" (610mm).....	38 (17.2)	007069
6" (152mm) x 2'6" (762mm).....	42 (19.1)	007070

### AUGER EXTENSIONS: TRI-LOK

Description	Lb/Kg	Part No.
3-1/4" (83mm) x 1'6" (457mm).....	†	150329-13
3-1/4" (83mm) x 2'0" (610mm).....	31 (14.1)	150329-01
3-1/4" (83mm) x 2'6" (762mm).....	35 (15.9)	150329-02
4-1/4" (108mm) x 1'4" (406mm).....	15 (6.8)	150329-08
4-1/4" (108mm) x 2'0" (610mm).....	18 (8.2)	150329-09
4-1/4" (108mm) x 3'0" (914mm).....	20 (9.1)	150329-11
6-5/8" (168mm) x 1'4" (406mm).....	44 (20)	150329-07
6-5/8" (168mm) x 2'0" (610mm).....	52 (23.6)	150329-04
6-5/8" (168mm) x 2'6" (762mm).....	56 (25.4)	150329-05
6-5/8" (168mm) x 3'0" (914mm).....	64 (29)	150329-06
8-1/4" (210mm) x 2'6" (762mm).....	66 (29.9)	150329-15
10-1/4" (260mm) x 2'0" (610mm).....	†	150329-19
12-1/4" (311mm) x 2'0" (610mm).....	†	150329-20

### AUGER EXTENSIONS: 2-KEY STANDARD DUTY

Description	Lb/Kg	Part No.
2-1/4" (57mm) x 24" (610mm).....	†	150329-01
2-1/4" (57mm) x 30" (762mm).....	†	150329-26
3-1/4" (83mm) x 24" (610mm).....	†	150329-22
3-1/4" (83mm) x 30" (762mm).....	†	150329-27

### AUGER EXTENSIONS: 2-KEY HEAVY DUTY

Description	Lb/Kg	Part No.
3-1/4" (83mm) x 24" (610mm).....	†	150329-23
3-1/4" (83mm) x 30" (762mm).....	†	150329-28
4-1/4" (108mm) x 24" (610mm).....	†	150329-24
4-1/4" (108mm) x 30" (762mm).....	†	150329-29
6-1/4" (159mm) x 24" (610mm).....	†	150329-25
6-1/4" (159mm) x 30" (762mm).....	†	150329-30

Key: \* Designates weights less than 1 lb (.5kg)

† Consult Factory

# HOLLOW STEM AUGERS AND CUTTERHEADS

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### EXTENSION ROD ASSEMBLY



Extension rods are essentially flightless augers. They are used to compensate for the drill base height above the ground when the drill is mounted in a truck, trailer, ORV or tracked carrier.

Description	Lb/Kg	Part No.
2'-0" (610mm), 2" (51mm) Hex .....	26 (11.8).....	004604
2'-6" (762mm), 2" (51mm) Hex .....	28 (12.7).....	003570
3'-0" (914mm), 2" (51mm) Hex .....	35 (15.9) .....	003573
5'-0" (1.5m), 2" (51mm) Hex .....	50 (22.7).....	006735
5'-0" (1.5m), 1-5/8" (41mm) Hex .....	50 (22.7).....	006090

### ADJUSTABLE EXTENSION ROD ASSEMBLY



Description	Lb/Kg	Part No.
13/16" (21mm) Hex .....	8 (3.6) .....	005364
1-1/8" (29mm) Hex .....	15 (6.8) .....	005365
1-5/8" (41mm) Hex .....	26 (11.8).....	005363
2" (51mm) Hex.....	35 (15.9) .....	338620

#### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Extension Tube - 13/16" (21mm) Hex Tube.....	5 (2.3).....	006957
1	Extension Tube - 1- 1/8" (29mm) Hex Tube.....	7 (3.2).....	006958
1	Extension Tube - 1- 5/8" (41mm) Hex Tube.....	13 (5.9).....	006956
2	Extension Rod - 13/16" (21mm) Hex.....	5 (2.3).....	006954
2	Extension Rod - 1- 1/8" (29mm) Hex.....	7 (3.2).....	006955
2	Extension Rod - 1- 5/8" (41mm) Hex.....	15 (6.8).....	006953
3	U-Pin 13/16" (21mm) Hex .....	* .....	001305
3	U-Pin 1- 1/8" (29mm) Hex.....	* .....	001306
3	U-Pin 1- 5/8" (41mm) Hex.....	* .....	001307
3	U-Pin 2" (51mm) Hex.....	* .....	001308

### AUGER RETRIEVER



An auger retriever is used to catch hold of hollow stem augers lost down the hole. Outside type retrievers achieve a firm grasp on the flights of the lost auger while inside type can be used where space is restricted. Check auger I.D. before ordering retriever. Retrievers are used with the hollow stem augers noted in parentheses. **Auger sizes are identified by auger I.D.**

#### AUGER RETRIEVER: LITE-FLITE AUGER

Description	Lb/Kg	Part No.
Outside 2-1/4" (57mm) .....	15 (6.8).....	150418-01
Inside 2-1/4" (57mm) .....	10 (4.5) .....	150327-07

#### AUGER RETRIEVER: THREADED AUGER

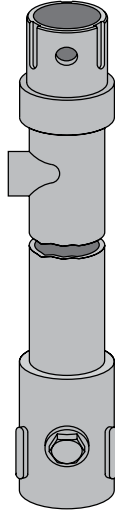
Description	Lb/Kg	Part No.
Outside 2-1/2" (64mm).....	80 (36.3).....	004923
Outside 3-3/8" (86mm).....	100 (45.4).....	004924
Outside 4" (102mm).....	104 (47.2).....	004925
Outside 6" (152mm) .....	140 (63.5).....	004927
Inside Tap, RH Thread, 3-3/8" (86mm).....	35 (15.9) .....	150327-03
Inside Tap, RH Thread, 4" (102mm).....	40 (18.1).....	150327-04
Inside Tap, RH Thread, 6" (152mm) .....	48 (21.8) .....	150327-05

#### AUGER RETRIEVER: TRI-LOK AUGER

Description	Lb/Kg	Part No.
Outside 3-1/4" (83mm) .....	85 (38.6).....	150418-04
Outside 4-1/4" (108mm).....	180 (81.6) .....	150418-03
Inside Tap, LH Thread, 3-1/4" (83mm) .....	33 (15) .....	150327-01
Inside Tap, LH Thread, 6-5/8" (168mm) .....	87 (39.5).....	150327-06
Outside, 10-1/4" (260mm) .....	† .....	150418-07
Inside Tap, LH Thread, 4-1/4" (108mm) .....	† .....	150327-08
Outside 2-1/4"(57mm).....	16 (7.3).....	150418-01

## WASH TEE

2



Used for mud rotary drilling, the hollow stem auger wash tee greatly simplifies the recovery of circulation fluid. It provides a return port so that fluid used while drilling inside the hollow stem is delivered directly to the recirculation tank through the side port of the tee. Overall length is 21-1/2" (546 mm). **Sizes are identified by hollow stem auger I.D.**

### WASH TEE: THREADED NPT SIDE PORT

Description	Lb/Kg	Part No.
2-1/2" (64mm), 2" (51mm).....	19 (8.6).....	150170-02
3-3/8" (86mm), 2" (51mm).....	27 (12.2).....	150170-03
4" (102mm), 2" (51mm).....	30 (13.6).....	150170-04
6" (152mm), 3" (76mm).....	42 (19.1).....	150170-06

### WASH TEE: TRI-LOK NPT SIDE PORT

Description	Lb/Kg	Part No.
3-1/4" (83mm), 2" (51mm).....	26 (11.8).....	150170-07
4-1/4" (108mm), 2" (51mm).....	28 (12.7).....	150170-09
6-5/8" (168mm), 3" (76mm).....	45 (20.4).....	150170-08
8-1/4" (210mm), 3" (76mm).....	50 (22.7).....	150170-10
10-1/4" (260mm), 2" (51mm).....	†.....	150170-11
10-1/4" (260mm), 3" (76mm).....	†.....	150170-13
12-1/4" (311mm), 2" (51mm).....	†.....	150170-12
12-1/4" (311mm), 3" (76mm).....	†.....	150170-14

### WASH TEE: 2-KEY STANDARD DUTY NPT SIDE PORT

Description	Lb/Kg	Part No.
2-1/4" (57mm), 1/2" (38mm).....	†.....	150170-16
3-1/4" (83mm), 2" (51mm).....	†.....	150170-17

### WASH TEE: 2-KEY STANDARD DUTY NPT SIDE PORT

Description	Lb/Kg	Part No.
4-1/4" (108mm), 2" (51mm).....	†.....	150170-18
6-1/4" (159mm), 3" (76mm).....	†.....	150170-19

Key: \* Designates weights less than 1 lb (.5kg)

†Consult Factory

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