

## COMPACT POST HOLE DIGGER



# AgKNX MODEL 400 OWNER'S MANUAL ASSEMBLY & OPERATING INSTRUCTIONS



<u>WARNING:</u> All operators must read this manual before operating this post hole digger. Follow the safety instructions in the manual and in decals attached to the product. Failure to do so could result in serious injury or death.

## **Table of Contents**

Page(	(s)
Important Safety Information	-4
Intended Use1	
Personal Protective Equipment	
Safety Decals1-	-3
General Safety and Preparation3	}
Operating Safety	3-4
Repair and Maintenance Safety 4	1
Assembly Instructions	5
Operating Instructions	3
General Maintenance	ô
Parts List	7
Parts Breakdown Illustration	8
Cutting Edges and Point Parts List	9
Notes	10
Specifications	11
Ordering Information	11



## IMPORTANT SAFETY INFORMATION



<u>WARNING:</u> Read and thoroughly understand all instructions and safety information before assembling or operating this post hole digger. Failure to do so may cause serious injury or death. Do not allow anyone to operate this post hole digger who has not read this manual. As with all power equipment a post hole digger can be dangerous if assembled or used improperly. Do not operate this post hole digger if you have doubts or questions concerning safe operation. Contact us at info@tooltuffdirect.com to address these concerns.

Si no entiende ingles, se prefiere que busque alguien que interprete las instrucciones para usted.

## **INTENDED USE**

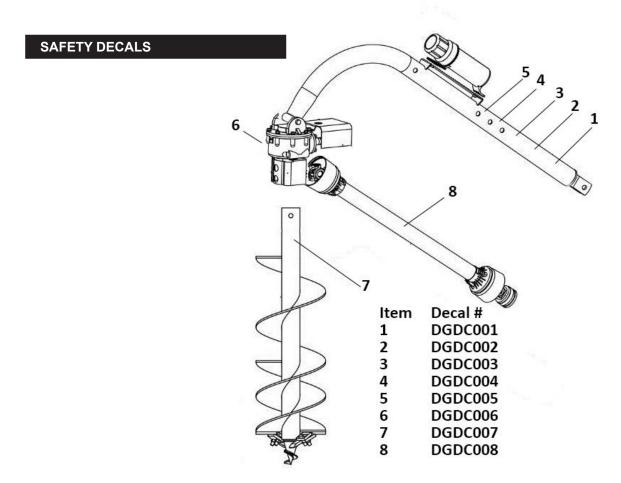
This product is designed to dig holes in the soil when attached to the 3-point linkage system and power-take-off of a tractor. It is **not** intended for any other use. Using the product for anything other than digging holes could result in serious injury or death.

## PERSONAL PROTECTIVE EQUIPMENT



**ALWAYS** use appropriate personal protective equipment such as protective eyewear and safety shoes when operating this post hole digger.

**NEVER** wear loose clothing or jewelry that could become entangled in the auger or driveline.



Find the decals shown on the next pages and ensure your digger has them. Read and understand the warnings on the decals.

ALWAYS replace missing or defaced decals. Reorder from AgKNX, 15000 W. 44th Ave., Ste B, Golden, CO 80403 or call 1-720-437-7640.

## **A DANGER**

DO NOT ATTACH THIS IMPLEMENT OR ATTEMPT TO OPERATE UNTIL YOU HAVE READ AND UNDERSTOOD ALL INSTRUCTIONS IN THE OWNER'S MANUAL. DGDC002

> DGDC002 4.5 w x 1.5 h

## NOTICE

**540 RPM MAXIMUM PTO** OPERATING SPEED

> DGDC001 2.7 w x 1.25 H

## **A DANGER**

#### TO PREVENT SERIOUS INJURY OR DEATH:

- Warning: this digger may not be compatible with all tractors.
- Inspect system, be sure your machine has all current safety guards and shields in place.
- Contact dealer if safety guards or decals are missing.
- Do not operate without all guards and shields in place.
- Raise and lower 3-point lift arms full range to ensure there is no interference before attaching drive components.

DGDC003

## **A DANGER**

#### TO PREVENT SERIOUS INJURY OR DEATH:

- Stop auger rotation before maneuvering, relocating or transporting.
- Operate only from the tractor seat
- Stay away from rotating parts. Keep others away.
- Do not operate when auger is higher than 12 inches above ground level. Doing so may cause driveline to bind.
- Do not dig near underground utilities without contacting authorities

DGDC004 2.75 w x 3.5 h

## NOTICE

**FILL GEARBOX WITH** 80W-90 LUBRICANT

> DGDC006 2.7 w x 1.25 H

6 piece safety decal sheet AgKNX Post Hole Diggers ToolTuff Direct LLC 15000 W 44th Ave. Ste B Golden CO 80403 720-437-7640

#### Stay away from rotating parts. Keep others away Do not dig around underground utility lines without checking with authorilies.

DANGER

TO PREVENT SERIOUS INJURY OR DEATH:

Read and understand owner's

Operate only from the tractor

manual before operating.



#### Rotating Driveline CONTACT CAN CAUSE DEATH KEEP AWAY! DO NOT OPERATE WITHOUT-

- All driveline guards, tractor and equipment shields in place Drivelines securely attached at both ends
- Driveline guards that turn freely on driveline



#### TO PREVENT SERIOUS INJURY OR DEATH:

- Contact dealer, make sure you machine has all current safety
- guards and shields in place. Do not operate without all
- guards and shields in place.
  Do not operate when auger is higher than 12 inches above ground level. Doing so may cause driveline to bind, cause driveline to bind, resulting in equipment damage or operator injury. Stop auger rotation before maneuvering, relocating or
- maneuvering transporting.

## NOTICE

540 RPM Maximum PTO Operating Speed

DGDC003 2.75 w x 3.5 h





## ROTATING DRIVELINE **KEEP AWAY**

To prevent injury or death from rotating driveline:

- Operate only at 540 RPM.
- · Securely attach both ends of driveline.
- Keep hands, feet, clothing and hair away from moving parts.
- Keep all guards in place when operating. DGDC005

DGDC005 2.75 w x 3.75 h

> LOCATION: PTO DRIVE SHAFT PART NUMBER: DGDC008



## IMPORTANT SAFETY INFORMATION



PART NUMBER: DGDC007

LOCATION: TOP END OF AUGER TUBE

NOTE: IF THE OUTPUT SHAFT GUARD MENTIONED IN THE ABOVE DECAL IS MISSING, ORDER A REPLACEMENT BY CONTACT US AT 720-437-7640 OR INFO @TOOLTUFFDIRECT.COM

#### **GENERAL SAFETY AND PREPARATION**

**ALWAYS** make sure that anyone else who operates this post hole digger has read and understood the contents of the owner's manual and all safety decals on the product.

**ALWAYS** be certain that all members of the work party are familiar with the operation of the digger and the hazards associated with it.

**ALWAYS** check with authorities for underground utilities before digging a hole. Serious injury or death could result from contact with gas or electric lines.

**ALWAYS** check the tractor owner's manual for instructions on operation, attachment of 3-point equipment and safety.

**ALWAYS** make sure that all safety shields are in place and tightened down. Do not operate this post hole digger if any shields are missing. Contact AgKNX at 1-720-437-7640 for replacement part(s).

**ALWAYS** make sure that the auger point and cutting edges are intact and in good working order before using this digger. These parts are replaceable if damaged.

#### **OPERATING SAFETY**

**ALWAYS** operate this post hole digger from the tractor seat. Only one person should operate the digger.

**NEVER** attach the post hole digger with the tractor engine running.

**NEVER** operate the post hole digger with anyone near or in contact with any part of the implement, PTO driveline or auger.

Serious injury or death could result from entanglement with moving parts.



## **IMPORTANT SAFETY INFORMATION**

ALWAYS make sure that the tractor brake is set before digging a hole.

**ALWAYS** keep hands, feet and clothing away from power-driven parts during operation.

**NEVER** manually position the auger or manually force the auger into the ground.

ALWAYS make sure that the tractor engine is shut off and the PTO drive is disengaged before leaving the tractor seat.

**NEVER** move the tractor with the power-take-off in the ON position.

**NEVER** exceed 540 RPM PTO operating speed.

**NEVER** operate the post hole digger when the auger point is more than 6 in. above ground level. Operating the digger in elevated positions may cause the PTO driveline "U" joints to bind resulting in equipment damage and operator injury.

**ALWAYS** turn off the digger immediately if an immovable object is encountered to prevent damage to the gear box or driveshaft and possible injury. A shear bolt is provided but may become welded to the input shaft if the driveshaft is left running after being sheared.

## **REPAIR AND MAINTENANCE SAFETY**

**ALWAYS** perform maintenance operations such as lubrication, adjustments or repairs on the post hole digger with the tractor engine off, the PTO drive disengaged and the auger point resting on the ground.

**ALWAYS** use the correct shear bolt (Grade 2). **NEVER** use or replace the shear bolt with one that is longer than the one specified in the manual (5/16" x 2-1/2").

## ASSEMBLY INSTRUCTIONS

**IMPORTANT:** The gear box is shipped without lubricant. Fill the top hole with 80W-90 lubricant or the

equivalent. The gear box holds 25 oz. (0.7 liter). Fill to the bottom of the plug hole on the side.

Do not fill to overflow point as this may damage the seals.

**STEP 1:** Be certain that the gear box has adequate lubrication. Check the oil level after every fifty hours

of use.

**STEP 2:** Attach the boom (1) to the top link mounting bracket on the tractor using a top link pin and a

lynch pin (not provided) through the hole at the bottom of the boom.

STEP 3: Connect the "A" frame (5) to the tractor's 3-point lift arms using the 7/8 in. pull pins with nut and

lockwasher (5A) as shown in the drawing. Attach the "A" frame (5) to the boom (1) after

selecting the desired hole (for angle adjustment) using the "A" frame pin (6) and lynch pin (4).

**STEP 4:** Attach the gear box (10) to the boom (1) using the boom pin provided with the gear box. When

in place secure with cotter pins provided. NOTE: Input shaft shield (9) and output shaft shield

(12) are already attached to the gear box.

**STEP 5:** Attach the auger (20, 21 or 22) to the output shaft on the bottom of the gear box (10) using the

1/2 in. hex cap screws (17), 1/2 in. lockwashers (18) and 1/2 in. hex nuts (19). Tighten the nuts.

**STEP 6:** Attach the driveline (13) to the gear box input shaft using the 5/16 in. grade 2 hex cap screw

(14), the 5/16 in. lockwasher (15) and the 5/16 in. NC hex nut (16). Tighten the hex nut. Insert the 1/4 in. x 3/8 in. set screw from the hardware kit in the hole on the yoke that aligns with the 3/16 in. groove on the gear box input shaft. Tighten. This set screw is a safety feature that

keeps the driveline from coming off if the shear bolt fails.

**ATTENTION:** THE 5/16 IN. HEX CAP SCREW PROVIDES SHEAR PROTECTION. USE A GRADE 2

2-1/2" BOLT ONLY TO AVOID DAMAGE TO THE GEAR BOX OR AUGER.

**IMPORTANT:** The universal joint should be greased with a good grade chassis lube every week. At the

beginning of each season grease the sliding driveshaft members with a moly grease. All diggers are equipped with quick-detach universal joints on the power-take-off end for a

1-3/8 in. splined shaft.

**STEP 7:** Attach the tractor end of the driveline (13) to the tractor PTO shaft. Push in the spring-loaded

pin in the splined yoke (13D) and slip it on the splined PTO shaft of the tractor. Release the pin and push until it locks securely in place. It will be necessary to obtain a 1-1/8 in. to 1-3/8 in.

sleeve spline adapter if your tractor PTO shaft has a 1-1/8 in. spline.

STEP 8: Check all nuts and bolts for tightness. Stabilizers should be kept tight to avoid side sway of the

digger.

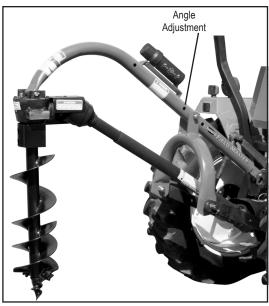
**NOTE:** See ILLUSTRATION A for reference in assembling the digger and mounting it to the tractor.

Note that the boom angle can be adjusted on your tractor for proper digging and ground

clearance by moving the "A" frame to a different mounting hole as shown in ILLUSTRATION A.

**NOTE:** When the 7/8 in. diameter pull pins in the "A" frame are too small for the holes in the lift

arms, bushings should be used to obtain a proper fit.



**ILLUSTRATION A** 

## **OPERATING INSTRUCTIONS**



<u>WARNING:</u> Read and thoroughly understand all instructions and safety information before operating this post hole digger Failure to do so may cause serious injury or death. Do not allow anyone to operate this post hole digger who has not read this manual.

- **STEP 1:** After mounting the digger to the tractor, lower the auger point slowly to the ground at the desired digging angle before engaging power.
- STEP 2: Engage the power-take-off and start digging at a slow speed, lowering the auger slowly as it begins to dig.
- **STEP 3:** Increase speed as the auger goes deeper. The type of soil will determine the proper auger speed. If the soil is extremely hard, it will generally improve operation to vary the speed of the auger at times. If an object is encountered which is too large for the auger to move, the digger will begin to vibrate. Withdraw the auger and remove the obstacle.
- **STEP 4:** When the auger has reached the desired depth, spin it momentarily at a high speed to clear the hole of dirt. Reduce speed before withdrawing the auger from the hole.
- STEP 5: Disengage the power-take-off after withdrawing from the hole and move the tractor to the next hole location.

#### GENERAL MAINTENANCE

REFER TO ILLUSTRATION B



<u>WARNING:</u> Always perform maintenance operations with the tractor engine off, the PTO drive disengaged and the auger point resting on the ground.

- 1. To remove the auger from the gear box output shaft, take out the two 1/2 in. x 3 in. hex cap screws (17).
- 2. To remove the driveshaft from the gear box input shaft, take out the shear pin bolt (14) and 1/4 in. set screw (13J).
- 3. Check the oil level after every fifty hours of use. Use 80W-90 lubricant and fill to oil level plug. All replacement lubricant should be of this type.
- 4. The universal joints should be greased with a good grade chassis lube every week. At the beginning of each season, grease the sliding driveshaft members with a moly grease.

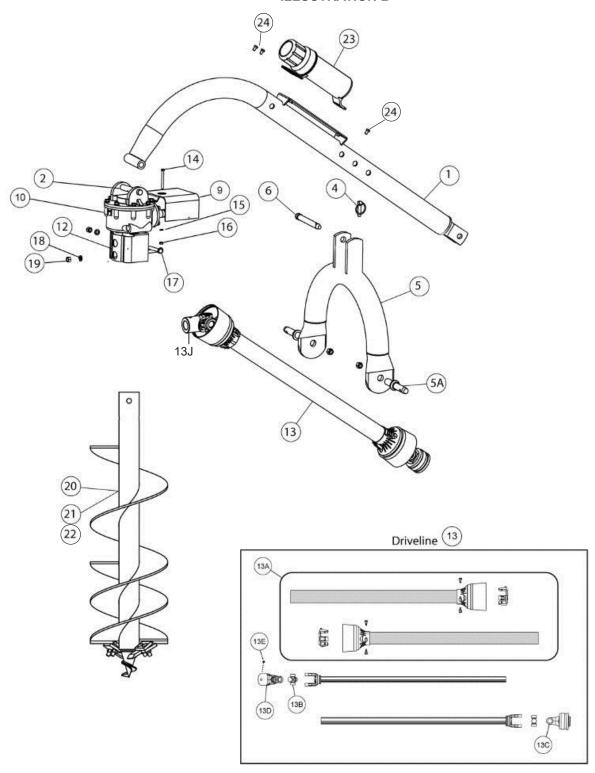
# COMPACT POST HOLE DIGGER PARTS BREAKDOWN

REFERENCE NUMBER	SKU NUMBER	DESCRIPTION	NUMBER REQUIRED
	DIGT400	Compact Post Hole Digger less Auger	1
1	DIGT002C	Boom	1
2	DIT002P	Boom Pin	1
4	LKLP044	7/16 in. Lynch Pin	1
5	DIGT003C	"A" Frame	1
5A	LKDP101	7/8 in. Pull Pin with Nut and Lockwasher	2
6	LKTP102	"A" Frame Pin	1
9	DIGT204	Gear Box Input Shield	1
10	DIGT201	Gear Box with Shields	1
12	DIGT203	Gear Box Output Shield	1
13	PTOLD650	Driveline with Plastic Shield	1
13A	PTOLD650G	Guard Assembly	1
13B	PTOLD650B	Cross and Bearing Kit	2
13C	PTOLD650Y	Push Pin Yoke	1
13D	PTOLD650I	Slide Collar Yoke Assembly	1
13E	O/L	1/4 in. x 3/8 in. Pointed Set Screw	1
14	O/L	5/16 in. x 2-1/2 in. Hex Cap Screw (Grade 2 Shear Bolt)	1
15	O/L	5/16 in. Lockwasher	1
16	O/L	5/16 in. NC Hex Nut	1
17	O/L	1/2 in. NC x 3-1/2 in. Hex Cap Screw	2
18	O/L	1/2 in. Lockwasher	2
19	O/L	1/2 in. NC Hex Nut	2
20	AUGT006C	6 in. Auger with Screw Point and Cutting Edges	as required
21	AUGT009C	9 in. Auger with Screw Point and Cutting Edges	as required
22	AUGT012C	12 in. Auger with Screw Point and Cutting Edges	as required
23	DIGT110	Manual Canister	1
24	O/L	5/16 in. x 1 in. Bolt	3
	(includes above)	Hardware Kit (not shown)	1

O/L - Obtain Locally. Common fasteners available through hardware and farm stores.

# COMPACT POST HOLE DIGGER

**ILLUSTRATION B** 



See ILLUSTRATION C for Cutting Edges

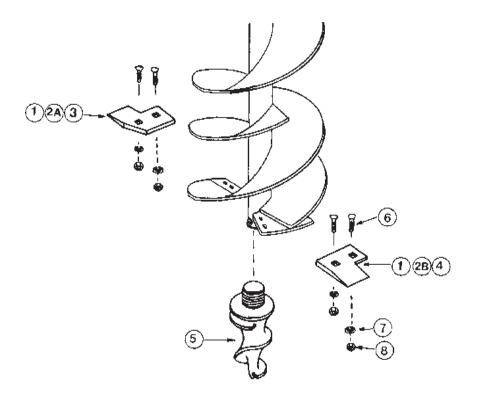


NOTE: Safety shields are shaded on this diagram. NEVER operate the digger with any shield missing.

## **CUTTING EDGES AND POINT PARTS BREAKDOWN**

REFERENCE NUMBER	SKU	DESCRIPTION	NUMBER REQUIRED
1	AUGT206	6 in. cutting edge	2
2A	AUGT309	9 in. outer cutting edge	1
2B	AUGT209	9 in. inner cutting edge	1
3	AUGT312	12 in outer cutting edge	1
4	AUGT212	12 in. inner cutting edge	1
5	AUGT101	Screw point with 1-1/4 in. NC threads	1
6	O/L	3/8 in. NC x 1-1/4 carriage bolt	4
7	O/L	3/8 in. lockwasher	4
8	O/L	3/8 in. NC hex nut	4

O/L - Obtain locally. Common fasteners available through hardware and farm stores.



**ILLUSTRATION C** 

**NOTE:** It is important to replace the self-sharpening point on the auger when it shows signs of excessive wear. Generally, the digging life of the point will be greater than that of the inner cutting edge. The digging life of the inner cutting edge will be greater than that of the outer cutting edge since it covers fewer inches of digging circumference.

## - NOTES -

Model No. AgKNX DIGT400	
Date of Purchase	Place of Purchase
AgKNX 15000 W 44 <sup>th</sup> Ave Ste B Golden, CO 80403 720-437-7640	

info@tooltuffdirect.com

## **SPECIFICATIONS**

Tractor Category Subcompact, Category 0 and 1

Gear Box 3:1 Ratio, 2 in. output shaft to accept to common augers

Driveline Equipped with quick-tach yoke to fit standard 6-spline PTO (completely shielded)

Augers 6 in., 9 in. and 12 in. sizes available (sold separately)

Boom 2-7/8 in. O.D. high strength tubing

A-frame 2-7/8 in. high strength tubing

Safety Shields On driveline, gear box "U" joint and gear box output shaft

Shear Bolt On input shaft to protect driveline, auger and gears. Replaceable.

## **ORDERING INFORMATION**

SKU NUMBER	DESCRIPTION
DIGT400	Compact post hole digger less auger
AUGT006C	6 in. compact auger with screw point and replaceable cutting edges
AUGT009C	9 in. compact auger with screw point and replaceable cutting edges
AUGT012C	12 in. compact auger with screw piont and replaceable cutting edges
AUGT 101	Screw point
AUGT206	6 in. cutting edge set
AUGT209/309	9 in. cutting edge set
AUGT212/312	12 in. cutting edge set



## WARRANTY VOID IF REGISTRATION IS NOT MAILED WITHIN 15 DAYS OF RECEIVING ITEM.

Fill out this page and mail to the address below.
Also found at www.tooltuffdirect.com

Digger Model #
Purchase Date//
Purchased From: Purchaser:
Owner's Address:
City:ST:Zip Code:
Phone: Email: Em
Acceptance of responsibility:  I (Purchaser) have read operators manual and Limited Warranty or someone has read/and explained all instructions to me. I understand this warranty does not cover any labor and that all disputes will be settled by binding arbitration. Warranty void if any attempt to repair or replace defective parts has been made by unauthorized personnel. I have received my Owner's Manual and fully understand the stipulations. The mark next to each item below confirms my acceptance of responsibility for the use and maintenance of this Post Hole Digger. I understand that I alone am responsible for proper maintenance, care and safe operation of this Post Hole Digger.  Received and read or will read prior to use the Operators Manual, specifically the safety warnings  Specifications accepted  Controls understood  Maintenance Requirements understood  Storage of Log Splitter
I (purchaser) also understand that persons not familiar with the operation of this equipment should not be allowed to use it. Children especially should not operate or be near equipment. ANYONE OPERATING EQUIPMENT SHOULD HAVE READ ALL EQUIPMENT OPERATIONS MANUALS AND SAFETY MANUALS.
Is this Post Hole Digger used in a business NO YES If yes, business type:
Owners Signature: xDate://
It is recommended that a copy of the registration be given to the seller. You must sign this warranty and mail copy to <b>AgKNX</b> , <b>15000 W 44th Avenue Suite B. Golden</b> , <b>CO</b> , <b>80403.</b> This warranty

You must sign this warranty and mail copy to **AgKNX**, **15000 W 44th Avenue Suite B. Golden**, **CO**, **80403**. This warranty is not effective unless the Purchaser mails this Registration and Warranty Form **within 15 days of receipt**. NOTE: The Manufacturer may refuse warranty of any kind unless AgKNX receives a completed, legible and signed warranty registration. It is the responsibility of the purchaser to assure that this registration document is received by AgKNX.