AG ATTACHMENTS LIMITED

FIELDMASTER®

PREMIUM FARM EQUIPMENT

POST HOLE BORERS



OWNERS/OPERATORS MANUAL &

SPARE PARTS LIST

Issue Date: September 2011

SPECIFICATIONS

Depth of hole	1.2m (48")
Depth of hole with 460mm (18") extension	1.6m (66")
Length of boom	2.2m (90")
Recommended speed of auger – 400rpm at PTO	100rpm
Tractor PTO shaft	36mm (3/8") x 6 spline
Length of drive shaft centre to centre minimum	1.3m (54")
Length of drive shaft centre to centre maximum	2.1m (85")
Maximum lift with boom	400kg (880lbs)
Weight with 300mm (12") auger	107kg (236lbs)
Overall dimensions when folded with 300mm (12") auger	2340mm (92") x 510mm (20") x 330mm (13")

High Speed Digging
The speed of digging depends on the type of soil and the distance between holes. On flat terrain in reasonable ground, 50 holes per hour are possible.

Anti-bog Plate
Prevents winding down and jamming like a cork screw.

Lifting
The pressed steel hook on the frame allows strainer posts to be lifted in and out of holes without removing the gearbox and auger. The chain supplied holds to auger to the frame. If much hoisting work is to be done, the auger and the gearbox can be removed by pulling out one pin.

NOTE: *Do not exceed 400kg (880 lbs) when lifting and do not use the hook to pull objects – use the tractor drawbar.*

Frame
Strong rectangular hollow section steel suitable for vertical lifting.

Heavy Duty Gearbox
Machine cut steel gears and roller bearings for long life.

Drive Shaft Telescopic.

Shear Bolt

A high tensile bolt attaches auger to gearbox shaft reducing possible damage of drive unit, in case clutch fails.

MOUNTING THE POST HOLE DIGGER

The Post Hole Digger is usually stored ready for use, but with the auger detached and the driveshaft chained up to the frame.

The tractor is backed up to the machine and the near end of the boom fitted directly to the top link hole on the tractor.

With the plough arms of the tractor in a low position and with the gearbox supported about a metre off of the ground, the U frame can be connected to the plough arms using the correct category hitch pins provided.

Adjust the U frame to a near vertical position using any one of the three positions provided to suit the tractor.

Connect the end of the driveshaft to the tractor, ensuring that the quick release pin is correctly located in the groove of the PTO spline.

Use the adjustment screw on the right hand side to level the plough arms.

The tractor hydraulics can now be raised enough to fit the auger in a vertical position to the gearbox output shaft. The bolt provided doubles as a shear bolt in the event of striking a rock or tree stump.

CAUTION:

When travelling with the auger fitted, the operator should swing the auger up under the frame and secure it by using the length of chain and wing nuts provided with each machine.

OPERATING INSTRUCTIONS

1) Attach digger to 3 point linkage of tractor.

Release the auger from the folded position before engaging the PTO.

a) Ensure holding chain is fastened clear of drive.
b) Tighten up sway chains to centralize machine.

2) Line the tractor up along the directions of the fence line, working against a guide wire on the ground.

Fit stony country tip in stony ground.

In grassy conditions, the turf should be removed with a spade when marking out post hole sites.

When the boom is lowered, the auger will automatically hang with the tip slightly away from the tractor to allow for the arc of the boom as the auger penetrates.

3) Set the tractor PTO revolutions slightly above idling.

4) Position the tractor so that auger is directly over the intended hole.

Side angle adjustment is by tractor link arm screw.

5) Engage the PTO and let the weight of the digger off the hydraulics – the anti-bog plate will not let the auger dig too fast.

6) As digging commences, adjust the engine revolutions to suit the load.

7) At half meter stages, lift the booms with the auger still turning, not quite clear of the ground surface to clear the soil.

Do not stop the auger from turning without good reason while digging.

8) When the desired depth has been reached, disengage PTO and carefully lift the boom and stationary auger to lift all soil clear.

When travelling from place to place with the digger fitted to the tractor disengage PTO and chain auger to boom with the holding chain supplied.

NEVER START DIGGER WITH PTO IN FOLDED POSITION.

LUBRICATION AND ADJUSTMENTS

Daily:

Check the oil in the gearbox and use the recommended oil to top up if necessary. Oil grade:

80W90 Capacity 40 hp gearbox 1.75 litres

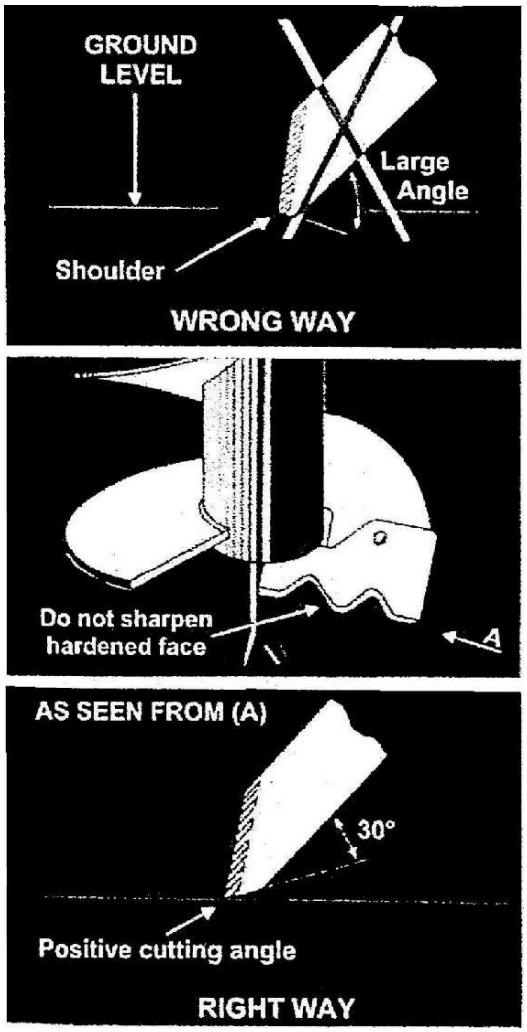
75hp gearbox 4.75 litres

CAUTION: *Do not mix synthetic and mineral oils.*

After First Five Working Hours:

Check driveshaft and gearbox nuts and bolts for tightness.

Check cutting edge on auger tip to make sure that he wear pattern is correct – e.g. the tip should not be riding on its heel.



Sharpening Instructions:

When the tip is held in its vertical position, all hard faced cutting edges should be sharp, with the softer material behind tapering away at a minimum of 30° away from the cutting face.

Careful sharpening with an angle grinder can dramatically improve the digging performance of the tip using a similar principle as that used when sharpening engineering drills. See illustration.

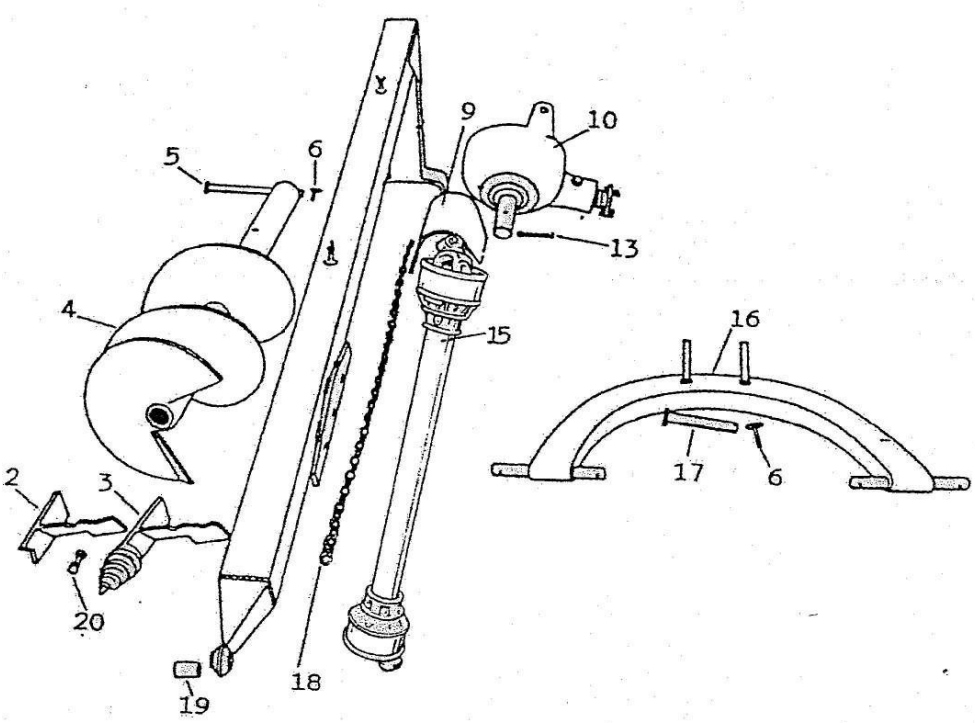
Ensure that the tip retains a wider sweep than the auger diameter to provide a clearance hole.

Maintenance:

Driveshaft: grease cross and bearings and sliding shaft daily while in use.

Shear Bolt: Keep bolt tight, if sheared use spare bolt supplied or 12mm x 90mm (3 ½" x '/1") MS bolt.

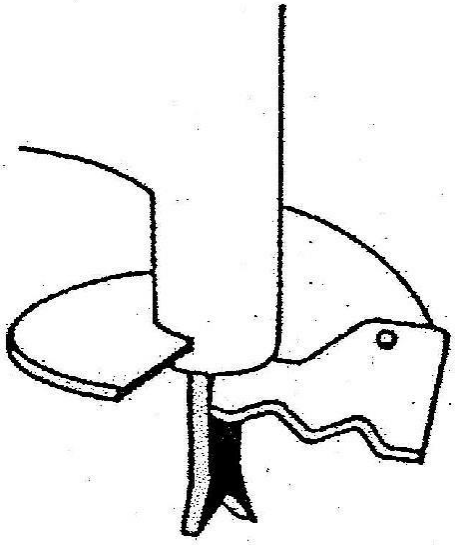
POST HOLE DIGGER PARTS



Ref N°	Part N°	Description
2	See pg 7	Stony country tip
3	See pg 7	Screw tip
4	See pg 7	Auger
5	106047	Pivot pin
6	5603	Lynch pin
9	106058	Safety cover
10	821010.01	Gearbox, complete, 40hp
10a	821010.02	Gearbox, complete, 75hp
15	A4151613	Driveshaft, complete, 40hp
15a	A6151613	Driveshaft, complete, 75hp
16	106046	U frame

17	106047	Pivot pin
19	2250	Hitch bush
20	832419	Auger tip bolt

POST HOLE DIGGER AUGER TIPS



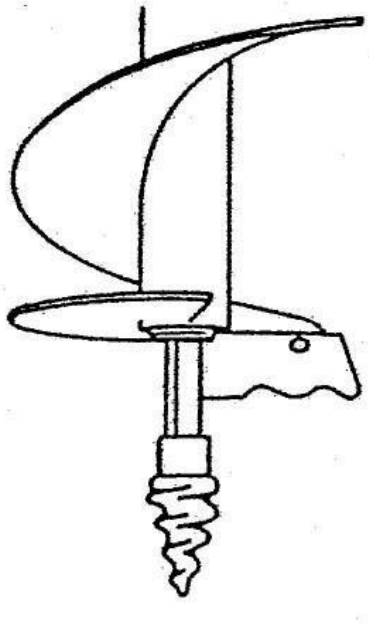
Stony Tip Auger Sizes

Stony Country Auger 150mm (6”) sizes
200mm (8”) available for stony

ground 250mm (10”)

300mm (12”)
350mm (14”)
400mm (16”)
500mm (20”)
600mm (24”)

The stony country two-prong tip is suitable for stony and hard ground. The two-prong tip walks over stones and continues to dig.



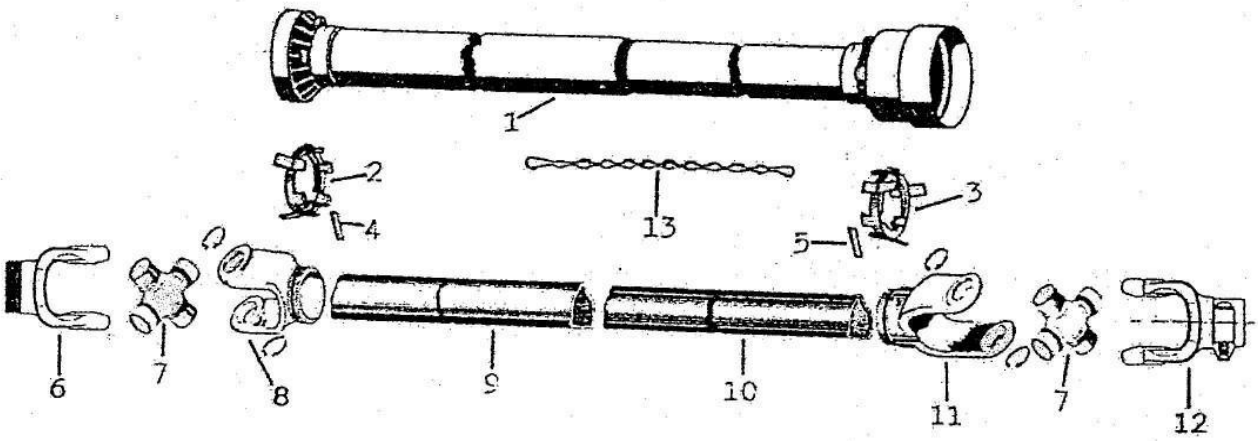
Screw Tip Auger Sizes

150mm (6”)
200mm (8”)
250mm (10”)
300mm (12”)
350mm (14”)
400mm (16”)
500mm (20”)
600mm (24”)

Screw tip for extremely hard ground.
The recommended maximum diameter auger in these conditions is 400 mm (16”)

Part Numbers			
Size	**Auger Only**	**Stony Country Tip**	**Screw Tip**
150mm (6”)	106005	106023	106031
200mm (8”)	106006	106024	106032
250mm (10”)	106007	106025	106033
300mm (12”)	106008	106026	106034
350mm (14”)	106009	106027	106035
400mm (16”)	106010	106028	106036
500mm (20”)	106011	106029	106037
600mm (24”)	106012	106030	106038

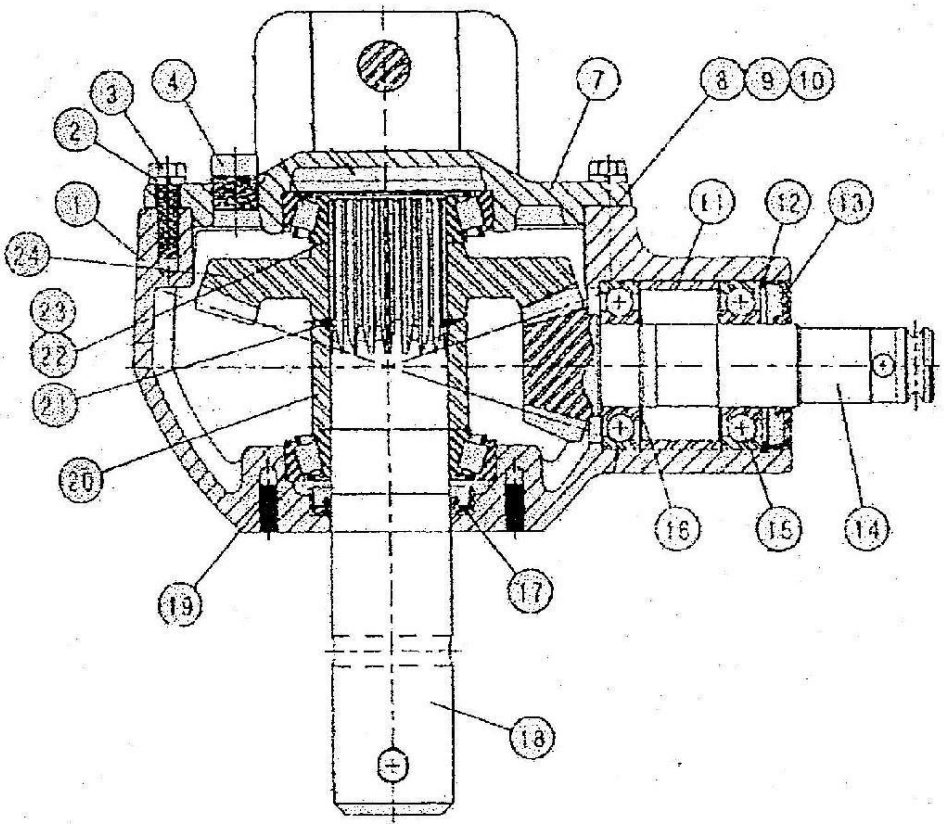
DRIVESHAFT PARTS



Ref N°	Part N°		Description
	40hp	75hp	
1	5F04121 FF	5F06151 FF	Safety guard set
2/3	265040055-6B	265060055-6B	Collar inner/outer safety guard
4	341048000	341043000	Dowel inner tube
5	341038000	341042000	Dowel outer tube

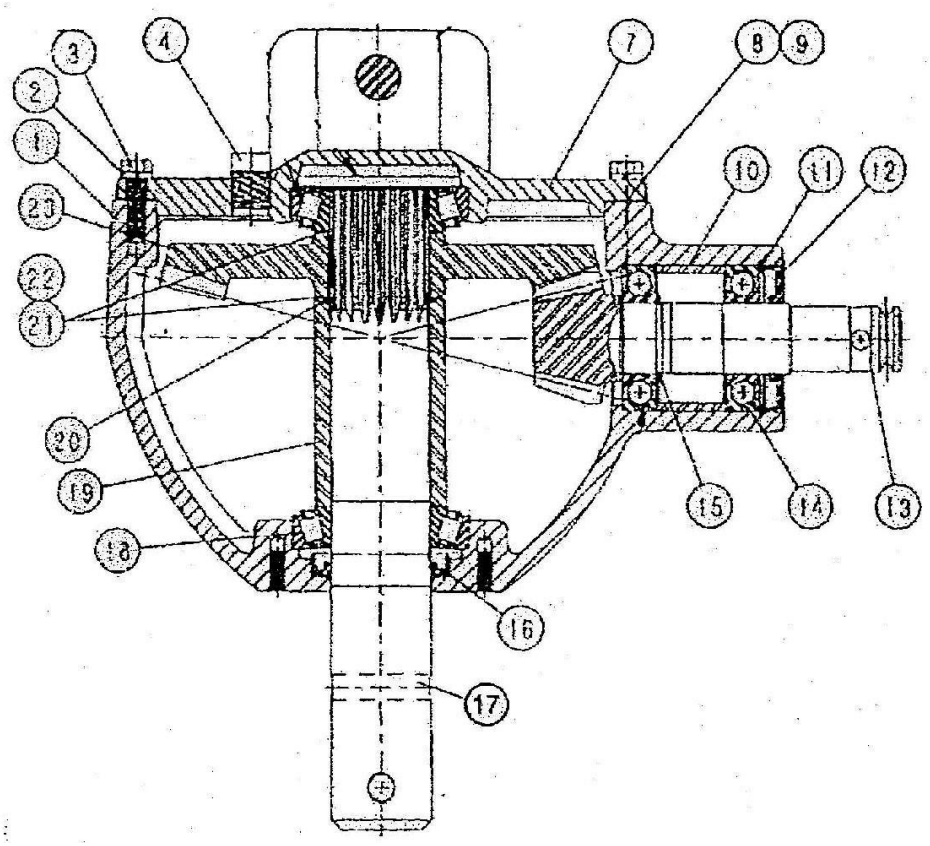
6	507040351	507060351	Flange yoke
7	14204	41206	Cross & bearing
8	204046852	204066852	Yoke internal tube
9	12507	12509	Tube internal
10	12508	12512	Tube external
11	204046851	204066851	Yoke external tube
12	211049151	211069151	Yoke
13	252000001	252000001	Safety chain

40 HP GEARBOX PARTS



Ref N°	Part N°	Description
1	18-013	Housing
2	07-001	Lockwasher
3	06-003	Cap screw
4	09-002	Y2" pipe plug
7	20-014	Hanger cap
8	08-021	Output cap gasket (0.30)
9	08-022	Output cap gasket (0.25)
10	08-023	Output cap gasket (0.40)
11	10-008	Bearing spacer
12	21-004	Retaining ring
13	05-010	Input seal
14	03-033	11-tooth pinion & shaft
15	04-004	Ball bearing
16	21-006	Retaining ring
17	05-008	Output seal
18	02-029	Output shaft
19	04-011	Tapered bearing assembly
20	10-011	Output bearing spacer
21	21-001	Retaining ring
22	17-002	Gear adjusting shim (0.30)
23	17-003	Gear adjusting shim (0.50)
24	03-032	33-tooth output gear

75 HP GEARBOX PARTS



Ref Nº	Part Nº	Description
1	18-012	Housing
2	07-001	Lockwasher
3	06-003	Cap screw
4	09-002	1/2” pipe plug
7	20-013	Hanger cap
8	08-018	Output cap gasket (0.10)
9	08-019	Output cap gasket (0.25)
10	10-008	Bearing spacer
11	21-004	Retaining ring
12	05-010	Input seal
13	03-031	11-tooth pinion & shaft
14	04-004	Ball bearing
15	21-003	Retaining ring
16	05-008	Output seal
17	02-028	Output shaft

18	04-011	Tapered bearing assembly
19	10/013	Output bearing spacer
20	21-001	Retaining ring
21	17-002	Gear adjusting shim (0.30)
22	17-003	Gear adjusting shim (0.50)
23	03-030	44-tooth output gear

TROUBLE SHOOTING

Trouble	Likely Cause	Cure
Machine won't dig	Worn tip	Sharpen or replace
Auger jamming in hole	Outside toe of tip worn, causing auger to wear	Build up toe of tip or replace with a new one
Safety clutch continually releasing	Ground too hard Tip too blunt, or toe worn jamming auger	Use smaller auger and tip if practical Build up toe or replace with a new one
Holes not vertical	Auger not hanging correctly while digging	Study the arc of the boom while digging and move the tractor slightly to compensate
Boom not lifting high enough	Incorrect setting on tractor top link hole U frame not upright	Connect tractor end of boom to bottom setting on tractor Adjust to upright

Machine shaking badly while digging	Bent drive shaft Slack sway chains Sloppy 3 point linkage	Straighten or replace Adjust up a little Change to a tractor in better condition
Boom won't go down while digging	Sway chains or sway blocks on tractor obstructing downward movement	Slacken sway chain Remove one sway block
Boom bent or collapsed	Exceeding 400 kgs	Use for lifting strainers into holes only

WARRANTY

The Fieldmaster Post Hole Digger gearbox and frame is guaranteed to give trouble free service under normal use and maintenance and is also guaranteed to be free from defects in materials used and workmanship, for a period of 12 months.

The driveshaft is also guaranteed against excessive wear during this time, provided that the cross and bearings and tubes are kept adequately greased, but it is not guaranteed against accidental damage such as bending during transportation or when lowering with large augers in the folded position.

The guarantee is to repair or replace any faulty part returned to the Dealer from whom the machine was purchased, or to the manufacturer.

Claims should be made through the Dealer, using the official claim form provided by the manufacturer.

The augers and the tips are not covered by warranty.

LIMITATION as a lifting boom: 400kg (880 lbs)

IMPORTANT: When ordering parts ensure that part is correctly identified from exploded view on pages 6 to 10 and quote part number and model number of machine.

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