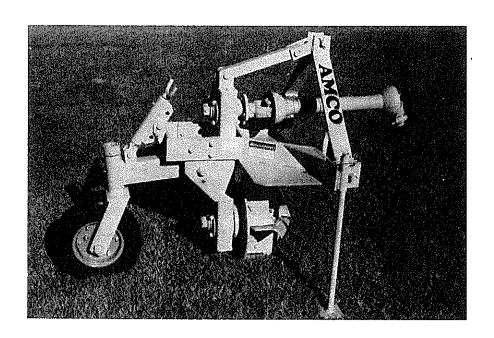


# PARTS CATALOG OPERATION — MAINTENANCE — SET-UP INSTRUCTIONS FOR MODEL PD2-18 POWER DITCHER





Portable Elevator Division, Dynamics Corporation of America No. 1 AMCO Drive, Yazoo City, Mississippi 39194 / 601/746-4464



#### To the Purchaser:

The care you give your new AMCO PD2-18 Power Ditcher will greatly determine the satisfaction and service life you will obtain from it. By observing the instructions and suggestions in this manual, your AMCO PD2-18 Power Ditcher will serve you well for many years.

As an Authorized AMCO Dealer, we stock Genuine AMCO Parts, which are manufactured with the same precision and skill as the original equipment. Our factory-trained staff is kept fully informed of the most efficient methods of servicing AMCO equipment and is ready and able to assist you.

If you should require additional aid or information, contact us.

#### YOUR AUTHORIZED AMCO DEALER



Look for this symbol to point out important safety precautions. It means ATTENTION! Become alert! Your safety is involved.

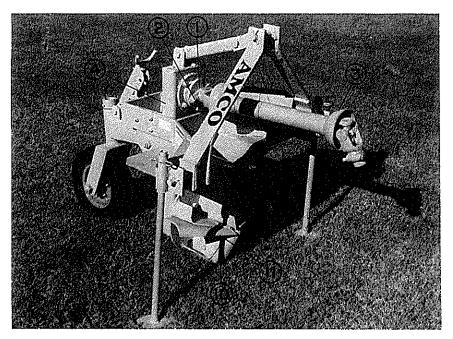
To insure efficient and prompt service, please provide the model number and serial number of your AMCO Power Ditcher in all correspondence or contacts.

#### Take a moment to meet your new AMCO PD2-18 Power Ditcher.

You will find a machine designed by engineers with imagination as well as intimate knowledge of today's field requirements and working conditions. You will find a machine built by conscientious craftsmen who know what you expect to get out of your equipment and, hence, put the various parts and components together to earn your approval and assure you of satisfaction when you use the machine.

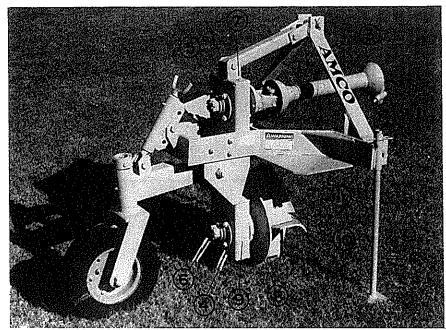
You will find features in this AMCO Power Ditcher not available in any other equipment of a similar nature. AMCO means QUALITY!

Please examine the features of this AMCO PD2-18 Power Ditcher that will give you performance in the field.

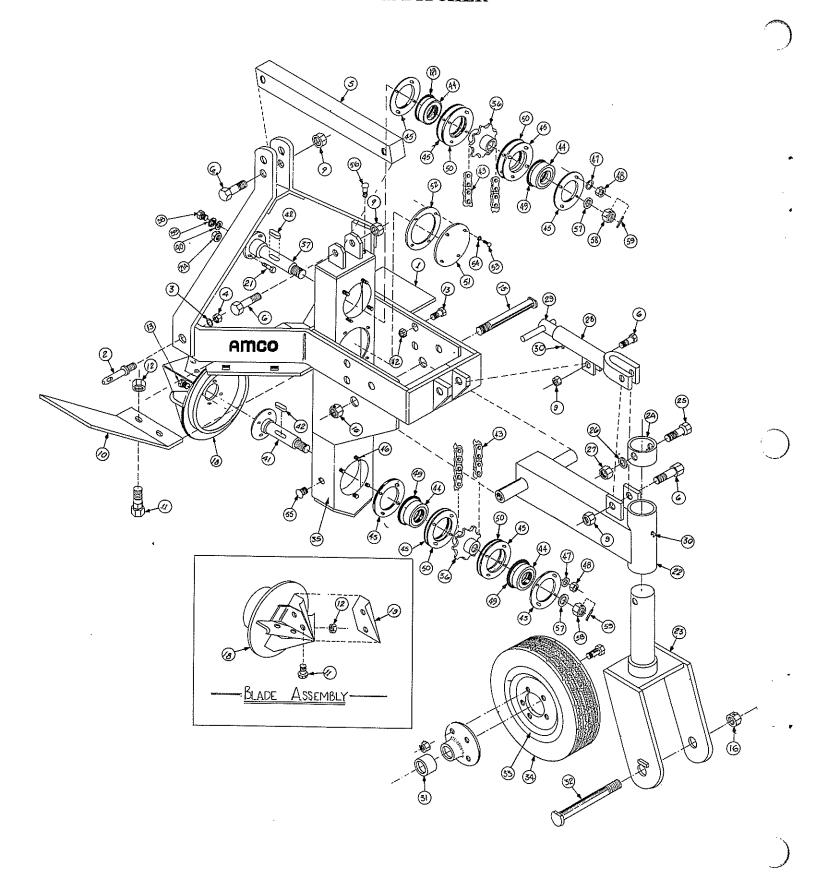


1 Shear Flanges
2 Hardened Steel Bolts
3 Shielded Universal Drive Shaft
4Drive Case
5Bearings and Tri-Ply Seals
6 Alloy Steel Shafts

Drive Case Breather	7
3 Anti-Wrap Ring	8
ODrive Sprockets	9
)	10
1Hard Surfaced Cutting Edges	11



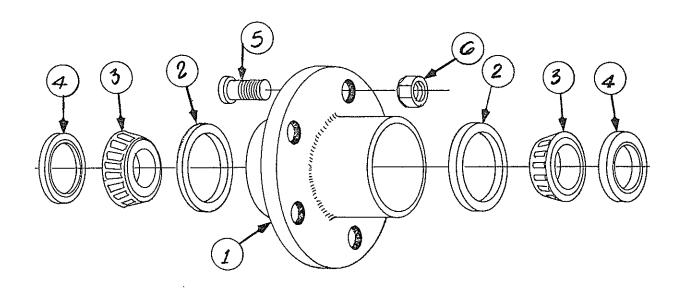
## POWER DITCHER



#### AMCO MODEL PD2-18 POWER DITCHER

		I O WER DITCHER	No. Required		
Ref. No.	Part No.	Description	PD-18	PD2-18	
1	022	Frame — Three Point Hitch	1	_	
1	0143	Frame — Three Point Hitch		1	
2 3	10339	Pin — Link 7/8 NF	2		
3 4	10391 10406	Washer — Lock 7/8	2 2		
2	8142	Pin — Hitch (lower)	<u>~</u>	2	
22	6021	Bushing — not shown	_	2 2	
5	023	Post — Back	1		
5	8424	Post — Back	_	1	
6	10851	Bolt — Hex 5/8 x 3-1/2 NC, PL	4	4	
9 10	10299 8079	Nut — Lock 5/8 NC, PL	4	4 1	
11	10708	Shield — Dirt	2	2	
12	10395	Nut — Lock 1/2 NC, PL	8	8	
13	10785	Bolt — Hex 1/2 x 1-1/2 NC, PL	6	6	
15	024	Bolt — Pivot	1	1	
16	10868	Nut — Lock 1" NC, PL	1	1	
18	025	Hub — Blade	1	1	
19 21	8080 10711	Blade	2	4 2	
21 21 A	10775	Nut — Lock 5/16 NF, PL		2	
22	026	Swivel — Depth Gauge		1	
23	027	Swivel — Wheel		1	
24	8081	Retainer Collar		1	
25	10773	Bolt — Hex 3/8 x 3-1/2 NC		1	
27	10509	Nut — Lock 3/8 NC, PL	1	Ţ	
28 29	0385 1584	Leg — Adjusting		<u>.</u>	
29	0387	Sleeve — Guide		1	
30	11081	Fitting — Grease 5/16 Drive in		ī	
31	8109	Spacer		2	
32	028	Spindle		1	
33	10448	Wheel (Pair)		L 1	
34 35	10476 1928	Tire (laminated)	1 1	1	
36	1929	Sprocket — Upper & Lower	2	$\frac{1}{2}$	
37	029	Shaft — Input	$\overline{1}$	ī	
38	10602	Bolt — Hex 7/16 x 1 NF	. 1	1	
39	10619	Washer — Lock 7/16		1	
40	10657	Washer — 7/16 Special	. 1	1	
41 42	030 AI642	Shaft — Out Put	. 1	2	
43	10746	Key — 1/2 sq. x 1-1/4 Lg	. 1	1	
44	10771	Bearing	4	4	
45	10707	Flangette	. 8	8	
46	10747	Bolt — Carriage 1/2 x 1-1/4 NC Rib	. 16	16	
47 48	10098	Washer — Lock 1/2		16	
48 49	10178 7864	Nut — Hex 1/2 NC		16 4	
50	7862	Ring — O		4	
51	7861	Plate — Inspection	-	i	
52	7865	Gasket — Inspection Plate	. 1	1	
53	10944	Bolt — Hex 3/8 x 3/4 NF, PL, GR5	. 4	4	
54	11070	Washer — Lock 3/8		4	
55 56	AI115 AI165	Plug — Pipe 3/8 Socket HD	. 2	3 2 4	
50 57	10077	Breather	. 2	<u> </u>	
58	10179	Nut — Hex 1-3/8 NF Slotted		$\dot{\tilde{\mathbf{z}}}$	
59	10772	<b>Pin</b> — Roll 1/4 x 2	. 2	2 2 1	
	8145	Pin — Hitch (upper) not shown	. 1		
	8193	Bushing — (upper) not shown	. 1	1	
	10317	Pin — Klik 1/4 — not shown		3	
	0145	Stand — Parking — not shown	. 2	2	

# AMCO MODEL PD2-18 POWER DITCHER HUB ASSEMBLY

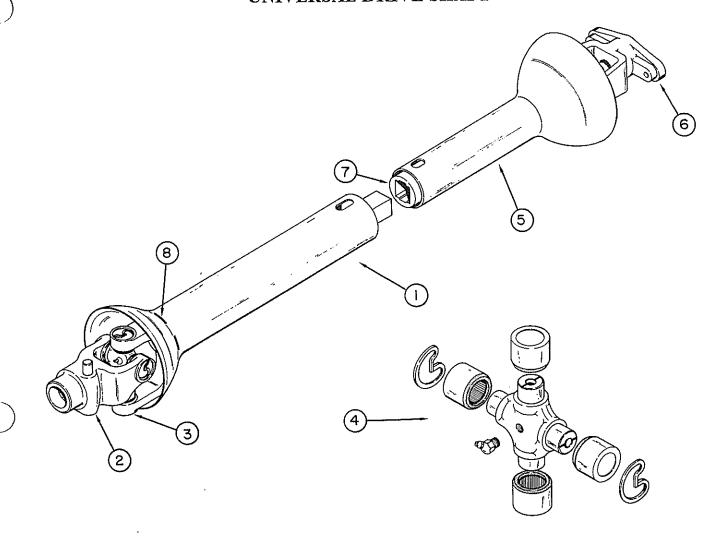


#### **HUB ASSEMBLY**

Ref. No.	Part No.	No. Description			
1	10408	Hub — w/2 Cups and 5 Hub Bolts	1		
2	10409	Cup — Inner and Outer	2		
3	10410	Cone — Bearing Inner and Outer	2		
4	10411	Seal — Grease	2		
5	10412	<b>Bolt</b> — Hub 7/16 x 1-1/4 NF	5		
6	10413	Nut — Hub 7/16 NF	5		

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# AMCO MODEL PD2-18 POWER DITCHER UNIVERSAL DRIVE SHAFT



#### UNIVERSAL DRIVE SHAFT

Ref. No. Part No.		Description	No.	Reqd.
1	AI-368M	Shaft — Drive — Male End Complete		. 1
2	AI-58	Yoke — Quick Disconnect 1-3/8"		. 1
3	AI-364	Yoke & Square Shaft		. 1
4	AI-56	Kit — Cross Repair		. 2
5	AI-368F	Shaft — Drive — Female End Complete		. 1
6	AI-89	Yoke and Flange		. 1
7	AI-363	Yoke and Tube		. 1
8	AI-365	Kit — Shield Bearings and Snap Rings		. 1
	AI-368	Complete Drive Shaft		. 1

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# AMCO PD2-18 POWER DITCHER DECALS

(1)

# AMCO

(2)

(3)



LOWER OR BLOCK HYDRAULICALLY OR MECHANICALLY ELEVATED COMPONENTS.

BEFORE SERVICING OR WHEN LEAVING THE EQUIPMENT

#### CAUTION

This Power Ditcher and the Universal Drive Shaft are designed for a maximum of 60 PTO Horse Power at 540 RPM. Excessive horse power will cause excessive maintenance cost.



- 1. ALLOW NO RIDERS ON IMPLEMENT OR TRACTOR.
- 2. OPERATE AT SAFE DISTANCE FROM BY-STANDERS.
- 3. KEEP ALL SHIELDS IN PLACE.
- 4. BE SURE POWER TAKE OFF IS DISENGAGED AND HAS STOPPED ROTATING BEFORE DISMOUNTING FROM TRACTOR.

#### **DECALS**

Ref. No.	Part No.	Description	No. Read.
1	10948	Decal — AMCO	1
2	10941	Decal — Warning	
3	10998	Decal — Caution	
4	10949	Decal — Warning — PTO	

# **Operating Instructions**

IT'S A GOOD IDEA to run in first gear, about 11/2 MPH with a PTO speed of 540 RPM.

ENGAGE PTO BEFORE lowering the machine into the ground. The PD2-18 will throw dirt from 10 to 50 feet under favorable conditions — for building fire lanes, for unobstructed middles for cotton, beans or other row crops or for cross ditching of bedded crops. By-standers should stand clear of discharge.

LOWER HYDRAULIC LIFT to its float position and make your trial ditch. Stop the tractor and disengage the PTO so that you can adjust the gauge wheel for the ditch depth you want. Deep ditches can be made with small tractors by using two or more passes.



YOUR PD2-18 WILL SERVE YOU many ways. You may use it for draining excess standing water...for improving run-off in row crops...for making shallow trenches for laying irrigation pipe...or for building fire lanes. Folks have used PD2-18's like yours for a great many purposes. However you plan to use your AMCO POWER DITCHER, it will serve you EASILY, QUICKLY, DURABLY, INEXPENSIVELY....PROFITABLY!

# **Safety Suggestions**



Never ride or permit others to ride on the tractor or on the POWER DITCHER.

Only one person—the operator—should be permitted on the tractor platform while tractor and POWER DITCHER are in operation.

Never clean, adjust, or lubricate a POWER DITCHER that is in motion.

All hydraulically elevated components must be blocked or lowered to prevent accidents when adjusting or lubricating the POWER DITCHER. Always lower the POWER DITCHER when it is to stand idle.

By-standers should stand clear of discharge when POWER DITCHER is in operation.

When working on POWER DITCHERS, care should be exercised in handling or tightening bolts near blades to avoid injury.

Always place the POWER DITCHER on a level area when disconnecting the POWER DITCHER from the tractor. Always use the two parking stands.

Never stand between a tractor and machine when hitching unless all the controls are in neutral and the brakes are locked.

Remember, a careful operator is always the best insurance against an accident.

## **Set-Up Instructions**

SHEAR FLANGES — The heavy duty 35-R Universal Drive Shaft is connected to the #80 precision roller chain drive housed inside the steel tubing case. All four (4) bearings in the chain drive housing are the same size—1-15/16" diameter—and are guarded by Tri-Ply seals. Both the drive line and the cutter head are mounted on alloy steel shafts. Bearings and shafts within the drive housing are lubricated by continuous oil bath while the equipment is operating. In addition, an anti-wrap ring protects the bearing behind the cutter head. Both sprockets are heat treated for long life. The cutter head blades are made of high carbon steel with hard surfaced cutting edges.

You will find the AMCO PD2-18 POWER DITCHER is a fine tool for the purposes for which it was built. It will serve you well in many ways if you treat it properly.

The Model PD2-18 POWER DITCHER is completely assembled at the factory — except for the Universal Drive Shaft which is wired to the "A" frame. Also, a small bag contains a breather cap for the drive case, and two (2) heat treated shear bolts 5/16" x 1-3/4".

The PD2-18 POWER DITCHER is built to work with tractors of 35 to 60 HP, and is designed for a PTO drive running at 540 RPM.

Use on tractors with over 60 HP will cause excessive maintenance cost!!

# **Assembly Instructions**

TO ASSEMBLE UNIVERSAL DRIVE SHAFT: Remove male portion of drive shaft from "A" frame and attach to female portion.

Install breather cap in oil filler hole located on top of chain case.

CHECK OIL LEVEL at the check plug when machine is in upright operating position. Oil should be level with plug hole. The drive housing was filled to the proper level at the factory with approximately one (1) quart of Kendall SCL-SAE 80-90 or equivalent. A similar grade should be used for replacement.

LUBRICATE cross and bearings at each end of Universal Drive Shaft.

LUBRICATE shear flange fitting.

REMOVE MALE END of Universal Drive Shaft and pack tube end with generous amount of grease.

NOTE: This Power Ditcher is set up for a category I or II hitch.

Attach POWER DITCHER in customary manner to tractor's 3-point hitch. Level with tractor lift arm adjusting screw. Set vertical position with tractor top link. Imput shaft must be parallel with tractor's PTO shaft.

THE DEFLECTOR WING on the left side of your POWER DITCHER was mounted for maximum spreading when it was shipped. The deflector is tilted up for this purpose. However, you can reverse the deflector to pile the material in a neat windrow, close to the ditch, ready for easy backfilling over irrigation pipe and similar uses.

# **Maintenance Instructions**

#### I. Daily or Every Ten [10] Hours of Operation:

- 1. Visually check chain case for oil leaks.
- 2. Visually inspect for loose or missing bolts.
- 3. Inspect for loose or damaged blades.
- 4. Visually inspect entire POWER DITCHER for worn, loose, damaged or missing parts.

#### II. Weekly or Every Fifty [50] Hours of Operation:

- 1. Check chain case oil level. Use a good grade of clean 90 weight oil when adding oil.
- 2. Grease universal drive shaft and depth gauge adjusting screw. Use a good grade of clean No. 2 lithium soap base grease.

#### III. Every Season or Every 250 Hours of Operation:

- 1. Clean and repack bearings in depth gauge wheel. Use a good grade of clean wheel bearing grease. Inspect for worn or damaged parts. Replace all worn or damaged parts.
- 2. Remove oil from chain case and flush case with kerosene or diesel fuel to remove contamination. Replace oil with a good grade of clean 90 weight oil.
- 3. Inspect chain, sprockets and bearings for wear. Replace worn or damaged parts.
- 4. Inspect universal drive shaft for worn or damaged parts. Replace worn or damaged parts.
- 5. Inspect blades for wear. Repair or replace blades if worn or damaged.
- 6. Thoroughly inspect entire POWER DITCHER for missing, worn or damaged parts. Repair or replace these parts during the "off-season" to assure dependable, trouble-free performance during the rush season.

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