



DRAG SCRAPERS

**Operation, Service
& Parts Manual
For AP & HC Series**

July 2007 (Rev. March 2012)

TABLE OF CONTENTS

Training & Preparation	1
Operational Safety	2
Servicing Instructions	3
Assembly Instructions	3
Parts Breakdown	4-5
Limited Warranty	6

Date of Purchase: _____

Model Number: _____

Serial Number _____

INTRODUCTION

We welcome you as an owner of a Gearmore drag scraper. Please read the following instructions and refer to them when required:

TRAINING

With normal maintenance you should receive years of use out of the drag scraper.

1. Safety instructions are important! Read this manual, the tractor manual and all safety rules.
2. Know your controls and how to stop tractor engine quickly in an emergency.
3. Operators **must** be instructed in and be capable of the safe operation of the equipment, its attachments and all controls. **Do not** allow anyone to operate this equipment without proper instructions.
4. **Do not** allow children or unqualified persons to operate equipment

PREPARATION

1. **Always** wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hands, hearing and head.
2. Ensure drag scraper is properly mounted, adjusted and in good operating condition.
3. Ensure all safety decals are installed and in good condition.
4. A minimum 20% of tractor and equipment weight **must** be on tractor from wheels with drag scraper in transport position. Without this weight, tractor could tip over causing personal injury or death. The weight may be attained with front wheel weights, ballast in tires or front tractor weights. When attaining the minimum 20% weight on the front wheels, you **must not** exceed the Roll Over Protection Structure (ROPS) weight certification. Weight tractor and equipment. **Do not** guess or estimate.

OPERATIONAL SAFETY

Know your controls and how to stop tractor engine and drag scraper quickly in an emergency. **READ THIS OPERATOR'S MANUAL AND THE MANUAL PROVIDED WITH YOUR TRACTOR.**

- Keep bystanders away from equipment while it is in operation.
- Operate only in daylight or good artificial light.
- Keep hands and feet away from drag scraper while tractor engine is running. Stay clear of all moving parts.
- If your tractor is equipped with a ROPS, you **must** wear your seat belt.
- **Always** comply with all state and local lighting and marking requirements.
- **No riders** are allowed on tractor or drag scraper.
- Start engine from operator's seat after placing transmission in neutral.
- Make sure area behind your tractor is clear before operating in reverse.
- **Do not** operate on steep slopes.
- **Do not** stop, start or change directions suddenly on slopes.
- Use **extreme** care and reduce ground speed on slopes and rough terrain.
- Watch for hidden hazards on the terrain during operation.
- Keep alert and watch ahead as well as behind the tractor when working with the drag scraper.
- Ensure equipment is properly mounted to tractor before making adjustments.
- **Always** be sure the drag scraper is in the fully raised position when in transport.
- When turning close to buildings or passing through narrow areas, be sure to allow sufficient clearance for the drag scraper.
- Make adjustments using hydraulic controls only when seated in operator's position.
- Set parking brake, lower equipment close to ground, turn tractor engine off and remove key before making manual adjustments. Keep yourself behind and out from underneath equipment to make adjustments. Be aware gravity forces can rotate or lower equipment and trap or pinch you.
- Stop tractor immediately upon striking an obstruction. Turn off engine, remove key, inspect and repair any damage before resuming operation.
- Block drag scraper securely before working underneath.
- Lower drag scraper to ground, stop engine, set parking brake and remove key before dismounting tractor.

SERVICING INSTRUCTIONS

MAINTENANCE SAFETY

1. Lower drag scraper to ground, turn tractor engine off and remove key before performing any service or maintenance.
2. Block drag scraper securely before working underneath.
3. Keep all persons away from operator control area while performing adjustments, service or maintenance.
4. Periodically tighten all bolts, nuts and screws to ensure blade is in a safe condition.
5. Ensure all safety decals are installed and in good condition.

SERVICING INSTRUCTIONS

CUTTING EDGE:

For reversing the cutting edge, remove 5/8" plow bolts. Remove the cutting edge from moldboard and reinstall with the sharp edge down. Replace it when both edges are worn.

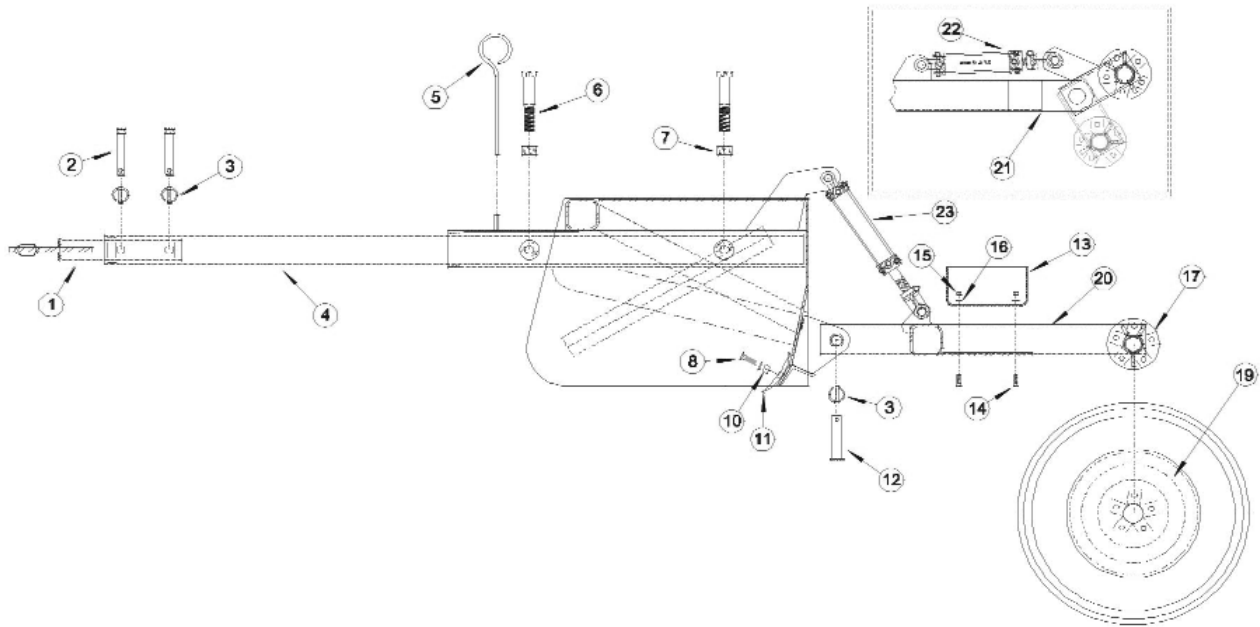
BOLTS:

Keep all the bolts tight at all times by checking them periodically. Replace the bolts only with those having the same marks on the heads as on original bolt. Marks on bolt head indicate high strength.

ASSEMBLY INSTRUCTIONS:

1. Bolt the cam link assembly (Ref. 4) to the wheel lift assembly as shown in the parts illustration. The cam link bolts (Ref. 3 & 5) should have locking nuts. Do not over tighten the bolt assembly, as the cam link assembly needs to move freely.
2. Connect the tongue (Ref. 16) to the scraper, using eight Grade 5 bolts, 5/8" x 2 1/2" (Ref. 15).
3. Now hook up the planing scraper to the tractor drawbar. When properly set, the wings of the bucket will be parallel with the ground.
4. Mount the tires to the hubs with the rim disc offset toward the hub to ensure proper clearance between tire and frame; and bolt to the hubs using 5 nuts.
5. Connect an 8" stroke implement cylinder to your scraper with the shaft end connected to the cam link. A 3 x 8 hydraulic implement cylinder is available as an option.

SCRAPER PARTS DRAWING



<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	HT001*	Swivel Ball Rem Hitch
1a	1	HT002*	Rem Clevis Hitch
1b	1	HT003*	Rem Swivel Hitch
1c	1	HT004*	Rem Swivel Hitch w/Clevis
2	2	AP100500C2TL	Hitch Pin
3	4	P716175LY	Lynch Pin
4	1	T11DS04	Rem Tongue
5	1	R01DS763	Hydraulic Hose Support
6	2	B100700-8	Tongue Bolt
7	2	N100L	Tongue Bolt Nut
8	As Req'd	GR85/8X2	Cutting Edge Plow Bolt
10	As Req'd	GR85/8NC	Hex Nut
11	1	CE96	96" Cutting Edge AP8 & HC8
11a	1	CE120	120" Cutting Edge AP10 & HC10
11b	1	CE144	144" Cutting Edge AP12 & HC12
12	2	R08DS01A	Axle Hinge Pin
13	1	WB60**	Bolt on Weight Box AP8 & HC8
13a	1	WB80**	Bolt on Weight Box AP10/12 & HC10/12
14	4	B050150-5	Weight Box Bolt
15	4	N050H	Weight Box Hex Nut
16	4	W050F	Weight Box Washer

SCRAPER PARTS LIST

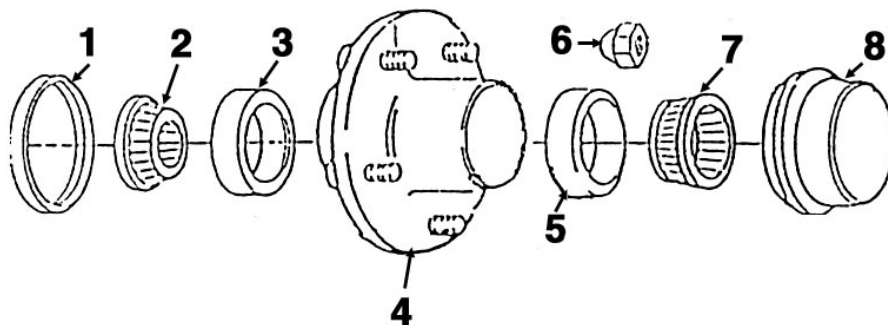
<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
17	2	545	Hub Assembly
19	2	WH54515	Wheel Set (NT20-9.5x15 Wheel/Tire Set)
20	1	AX001***	Non Tilt Axle Assembly AP8 & HC8
20a	1	AX002***	Non Tilt Axle Assembly AP10/12 & HC10/12
21	1	TK-8***	Tilt Axle Assembly AP8 & HC8
21a	1	TK-10-12***	Tilt Axle Assembly AP10/12 & HC10/12
22	1	2X6****	Tilt Axles Hydraulic Cylinder
23	1	3X8	Hydraulic Lift Cylinder

- * Choice of four hitch types
- ** Optional
- *** Choice of non tilt or tilt type axle assembly
- **** Required with tilt type axle

As Required Parts:

<u>REF#</u>	<u>PART#</u>	<u>QUANTITY REQUIRED</u>					
		<u>AP8</u>	<u>AP10</u>	<u>AP12</u>	<u>HC8</u>	<u>HC10</u>	<u>HC12</u>
8	B058200P	8	10	12	8	10	12
9	W058L	8	10	12	8	10	12
10	N058H	8	10	12	8	10	12

HUB ASSEMBLY



<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	CR17146	Grease Seal
2	2	L68149	Inner Bearing
3	2	L68111	Inner Race
4	2	545	Hub - Complete
5	2	L44610	Outer Race
6	10	4756	1/2" Cone Wheel Nut R.H.
7	2	L44649	Outer Bearing
8	2	46749	Dust Cap

LIMITED WARRANTY



GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warrants engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC.
13477 Benson Ave.
Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.