

Parts Manual EHDW-4220-14



WG-EHDW4220-14 5/19

24929+

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Introduction



Thank you for choosing an Ashland disc harrow for your earth tilling needs. Years of research, testing, and successful application have been spent to ensure quality and maximum performance for our customers.

Quality Policy

It is our mission to exceed our customers' expectations in quality, delivery, and cost through continuous improvement and customer interaction.

Please read and understand this manual before attempting to attach or operate this disc harrow. This manual should always remain with the machine. Be sure and fill out and send in the owner's registration form at the beginning of this manual, or you may fill out the form on-line by going to ashlandind.com and click on "Owner Registration" in the Parts section drop-down. If you have questions, please feel free to call or email us. You can visit us on-line at <u>www.ashlandind.com</u>.

Ashland Industries hours of operation are 8:00 a.m. to 5:00 p.m. CST. We can be reached toll free at: 877-634-4622.

ID Number

You can find the serial number plate for **most** machines on the front section of the frame along in the inner tube. The letter and numbers stamped identify the serial number, model number, weight, and date of manufacture. Please record this serial number for use in ordering parts, warranty issues, and to track your equipment if it is ever stolen.





Important

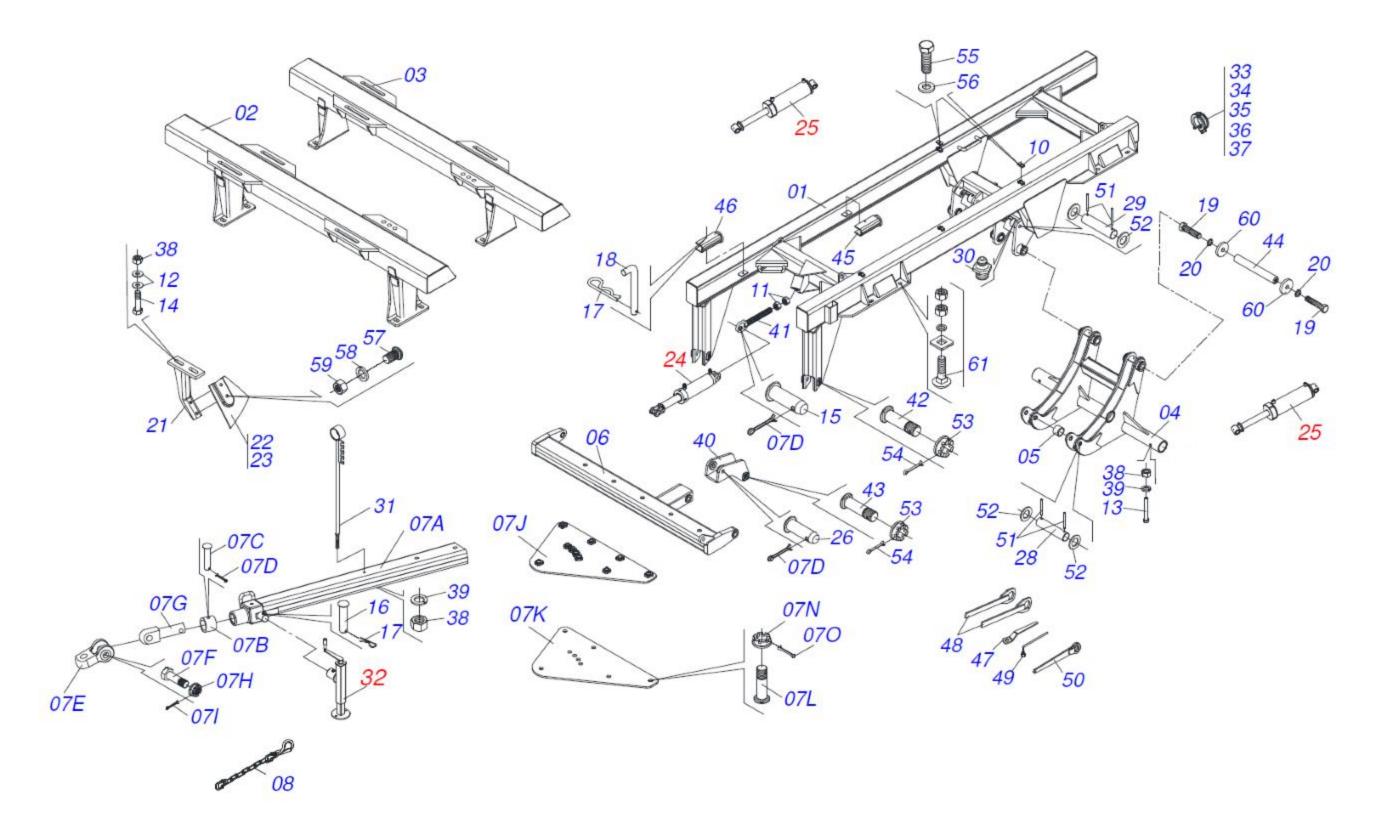
Parts must be ordered through your local authorized ASHLAND dealer. Be sure to state MODEL and SERIAL NUMBER of your machine. Ashland Industries Weldable replacement parts are also available to rebuild, modify, or update your machine to current factory specifications.



	1
Disc Diameter	42 Inches - Notched
Disc Spacing	20 Inches
Number of Discs	7 Front, 7 Rear
Overall Dimensions:	
Length (Frame)	252 Inches
Width	139 Inches
viatii	139 menes
Gang Diameter	2-1/2 Inches
Weight	15,720 Pounds
Width of Cut	132 Inches
Depth of Cut	14 Inches
Gang Angle (Adjustable):	
Front	19°, 21°, 24°
Rear	19°, 21°, 24°
	, ,
Cylinders:	
Leveling	One (4 x 20-1/4 Inches)
Lift	Two (4-1/2 x 19-5/8 Inches)
Horsepower Requirements:	
Tractor (Single)	300 – 620

Frame



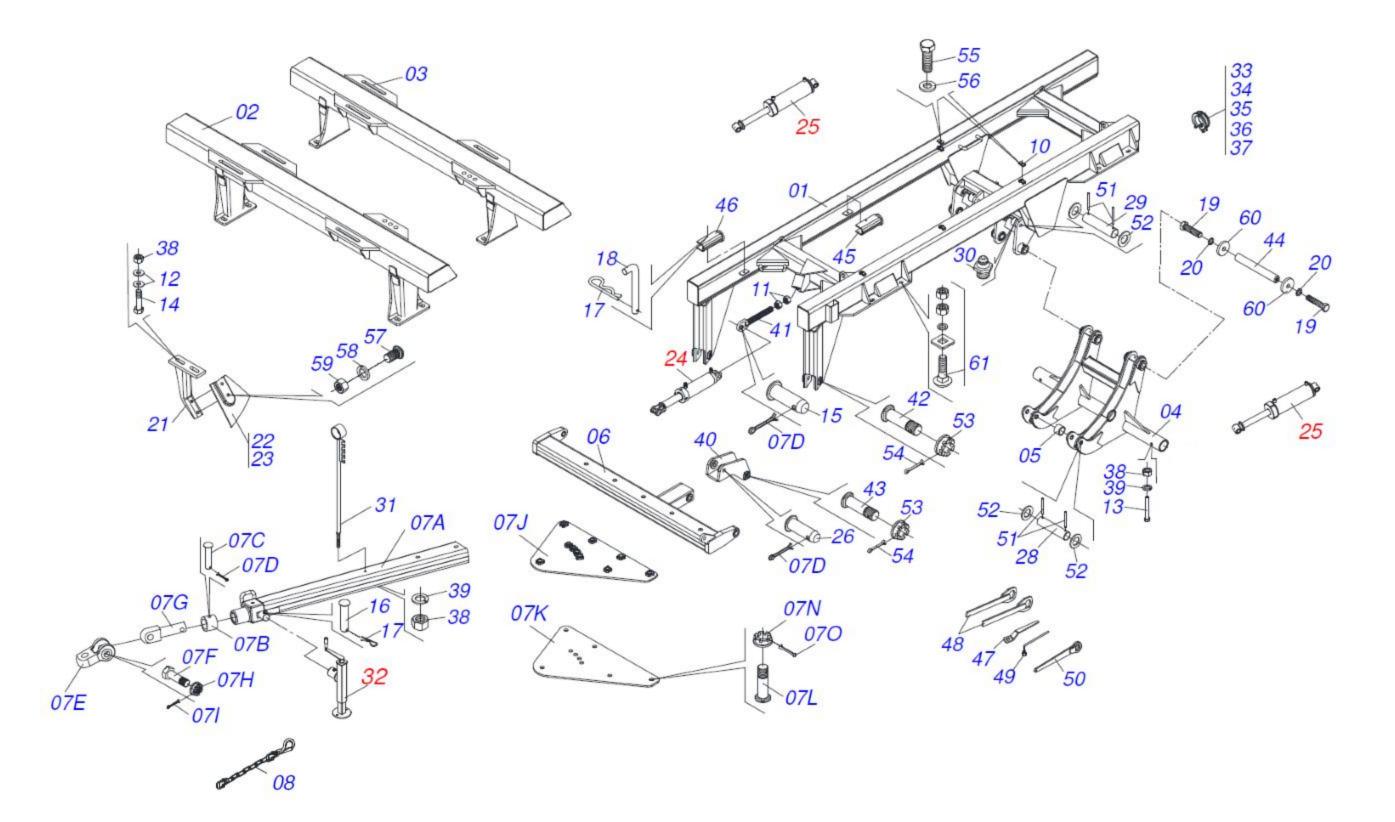


Item	Part Number	Description		
01	400522	Frame: Main Center, EHDW		
02	400523	Frame: Front Gang		
03	400524	Frame: Rear Gang		
04	400525	Frame: Wheel Carriage, EHDW		
05	400483	Bushing: 1-1/2" x 1-1/4" x 1"		
06	400526	Pivot: Offset Pole Bar		
07A	400527	Pole: Main Drawbar, EHDW		
07B	400528	Collar: Coupling Lock Ring		
07C	400529	Pin: Yoke Swivel Shaft		
07D	AFP-00010	Pin: 1/4" x 2" Cotter		
07E	400530	Yoke: Clevis Pivot		
07F	400531	Pin: 2" x 9-1/2" w/ Hex Head		
07G	400535	Yoke: Swivel Shaft		
07H	400536	Flange Nut: 2" Slotted Jam HT		
071	AFP-00019	Pin: 3/8" x 4-1/2" Cotter		
07J	400532	Plate: Adjustable Upper Support		
07K	400533	Plate: Adjustable Lower Support		
07L	400534	Pin: 1-1/2" x 9-1/2"		
07N	400437	Flange Nut: 1-1/2"-6 Slotted Jam HT		
070	AFP-00015	Pin: 1/4" x 2-1/2" Cotter		
08	400537	Chain: Safety Link		
10	400521	Clamp: Hose Body, Double		
11	AFN-00080	Nut: 1-3/4"-5 Hex		
12	AFW-00007	Washer: 3/4" Flat		
13	AFB-00004	HHCS: 3/4"-10 x 6"		
14	AFB-00064	HHCS: 3/4"-10 x 3"		
15	400444	Pin: 1-3/16" x 3-1/2"		
16	400471	Pin: 3/4" x 4"		

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Frame



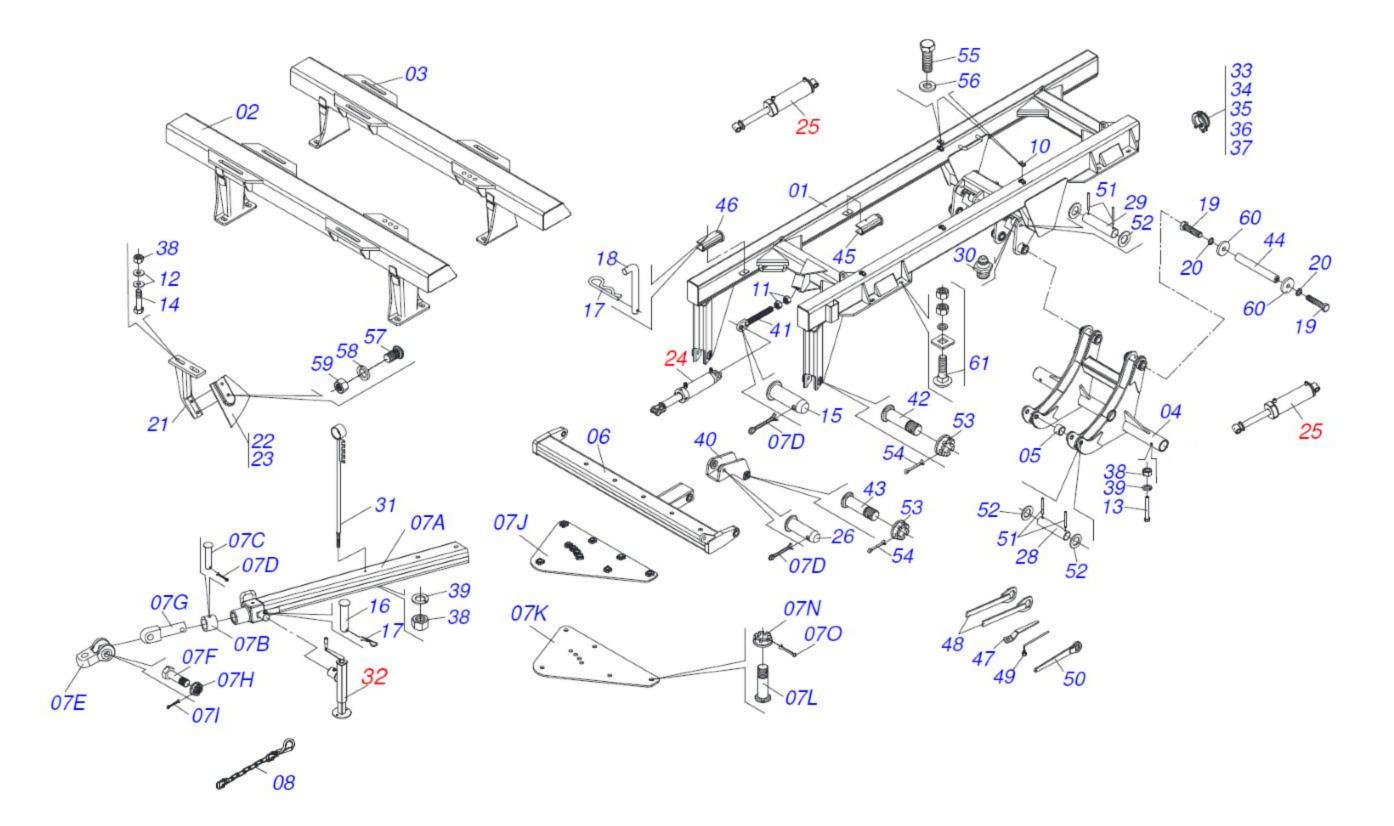


ltem	Part Number	Description	
17	AFP-00018	Pin: 3/16" x 3-1/2" Hairpin	
18	400538	Pin: Transport Lock	
19	AFB-00188	HHCS: 1"-8 x 2"	
20	AFW-00006	Washer: 1" Split Lock	
21	400395	Bracket: Scraper Blade Support, EHDW	
22	400396	Scraper: Front Blade, EHDW	
23	400397	Scraper: Rear Blade, EHDW	
24	400415	Cylinder: 4" x 20-1/4"	
25	400423	Cylinder: 4-1/2" x 25-3/4"	
26	400550	Pin: 1-1/4" x 7"	
28	400539	Pin: 1-3/16" x 7" w/ Cross Holes	
29	400540	Pin: 1-3/16" x 12-1/4" w/ Cross Holes	
30	A125019	Fitting: 1/4"-28 Straight Grease	
31	400541	Holder: Hose	
32	400470	Jack: Top Wind	
33	400405	Rod Stopper: 15/16" Wide	
34	400406	Rod Stopper: 1-3/16" Wide	
35	400407	Rod Stopper: 1-3/8" Wide	
36	400408	Rod Stopper: 1-9/16" Wide	
37	400409	Rod Stopper: 1-3/4" Wide	
38	AFN-00006	Nut: 3/4"-10	
39	AFW-00002	Washer: 3/4" Split Lock	
40	400542	Link: Pole Bar	
41	400543	Regulator: Adjustment Spindle	
42	400544	Pin: 1-1/4" x 8"	
43	400545	Pin: 1-1/2" x 9"	
44	400546	Pin: 1-3/4" x 16" w/ Tapped Ends	
45	400547	Lock: Cylinder Transport 13-1/2" Long	

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Frame

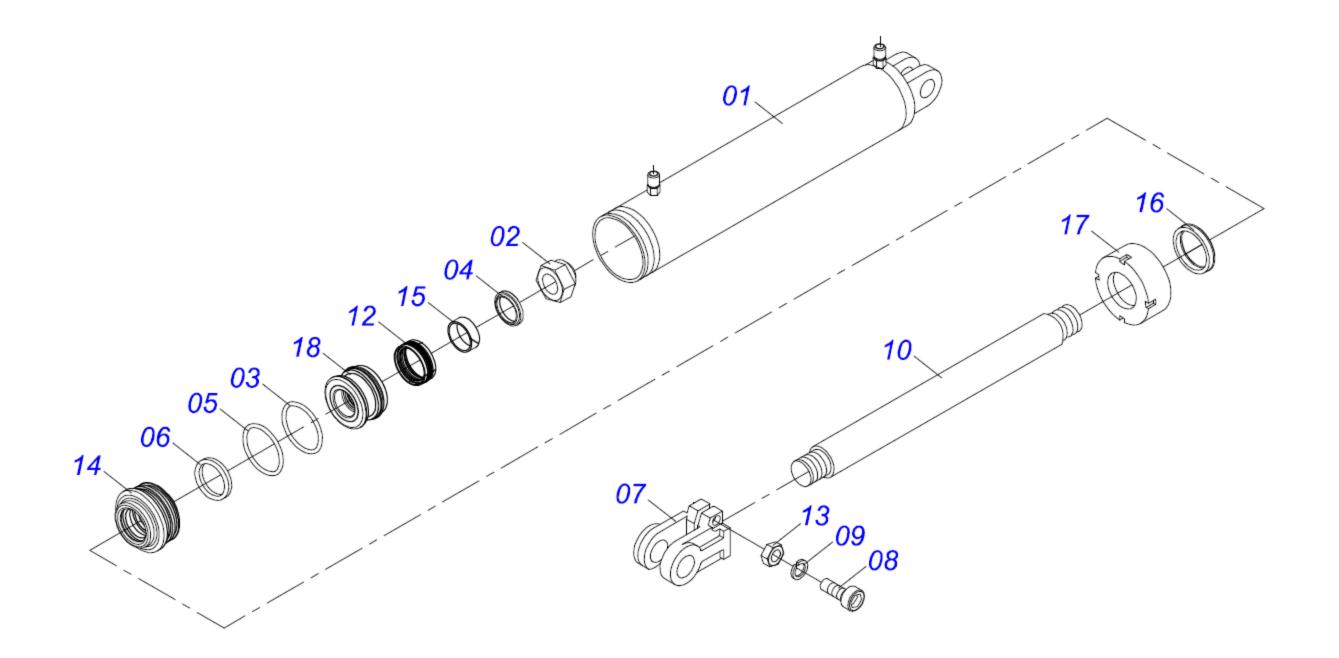




Item	Part Number	Description	
46	400548	Lock: Cylinder Transport 7-3/4" Long	
47	400481	Wrench: 1-1/2" & 1-5/8" Gang Wrench	
48	400479	Wrench: 2-1/8" & 2-1/2" Flat Wrench	
49	400484	Wrench: 1" Cylindrical Wrench	
50	400549	Wrench: 1-1/4" Nut	
51	AFP-00020	Pin: 5/16" x 2-1/2" Roll Pin	
52	AFW-00015	Washer: 1-1/4" Flat	
53	400437	Flange Nut: 1-1/2"-6 Slotted Jam HT	
54	AFP-00015	Pin: 1/4" x 2-1/2" Cotter	
55	AFB-00189	HHCS: 7/16"-14 x 1-1/2"	
56	AFW-00029	Washer: 7/16" Split Lock	
57	AFB-00186	Carriage Bolt: 5/8"-11 x 1-1/4"	
58	AFW-00031	Washer: 5/8" Split Lock	
59	AFN-00003	Nut: 5/8"-11	
60	400551	Washer: 1" HT	
61	400401	Bolt Ass'y.: 1-1/4"-7 x 5-3/4", w/ Spacer, Washer, Nuts	

Leveling Cylinder - 400415



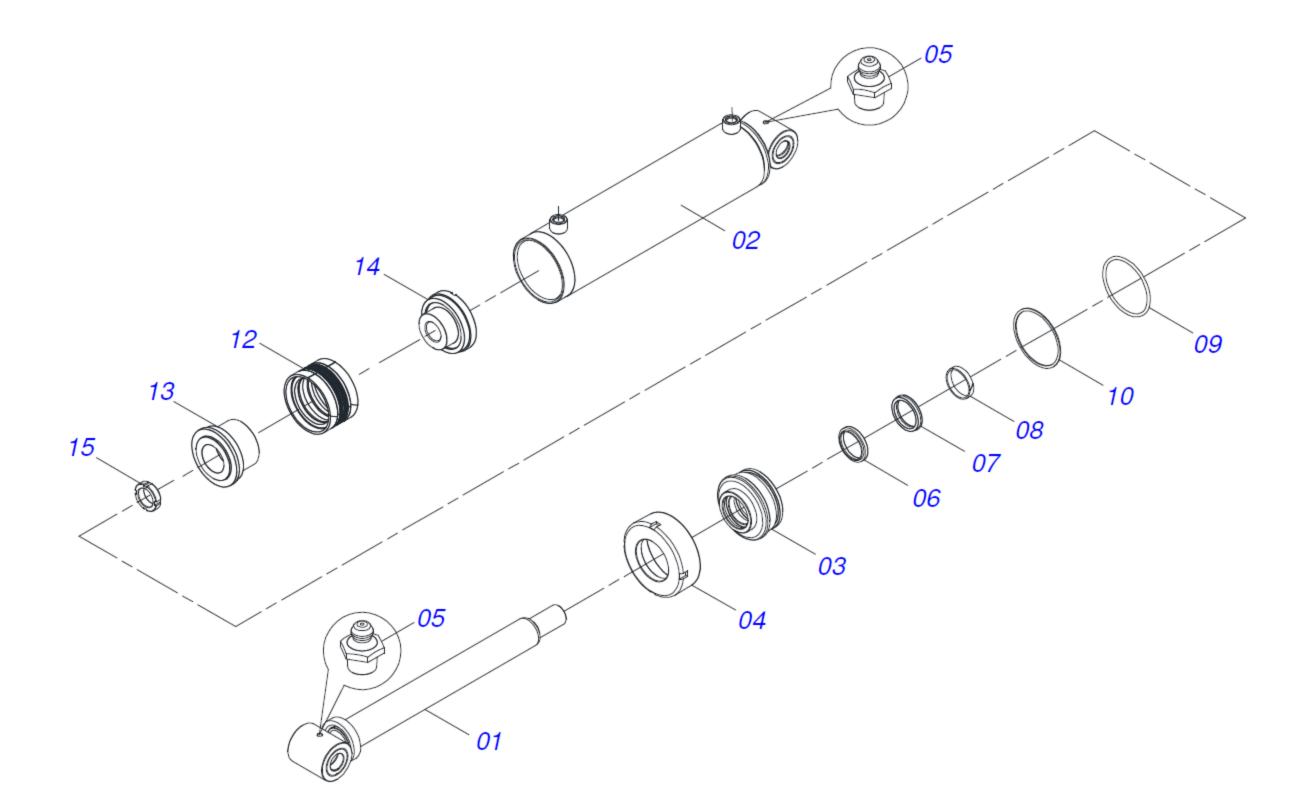


ltem	Part Number	Description
01	400552	Barrel: 4" x 15-5/8"
02	400497	Nut: 1-1/4" Rod End

Seal Kit	400414	Kit: Includes Item 03, 04, 05, 06, 12, 15, 16
03		O-Ring: Piston
04		Wiper: Piston Guide
05		O-Ring: Ring Support
06		Ring: 2" Back-up
07	400553	Clevis: Cylinder Rod End
08	AFB-00184	SHCS: 3/8"-16 x 2"
09	AFW-00028	Washer: 3/8" Split Lock
10	400554	Rod: 2"
12		Seal: Piston Back-up Guide Ring
13	AFN-00048	Nut: 3/8"-16
14	400488	Support: 2" x 4" Ring
15		Ring: 2" Wear Band
16		Seal: 2" Rod Gasket
17	400487	Cap: Gland End
18	400495	Piston: 2" x 4"

Lift Cylinder - 400423

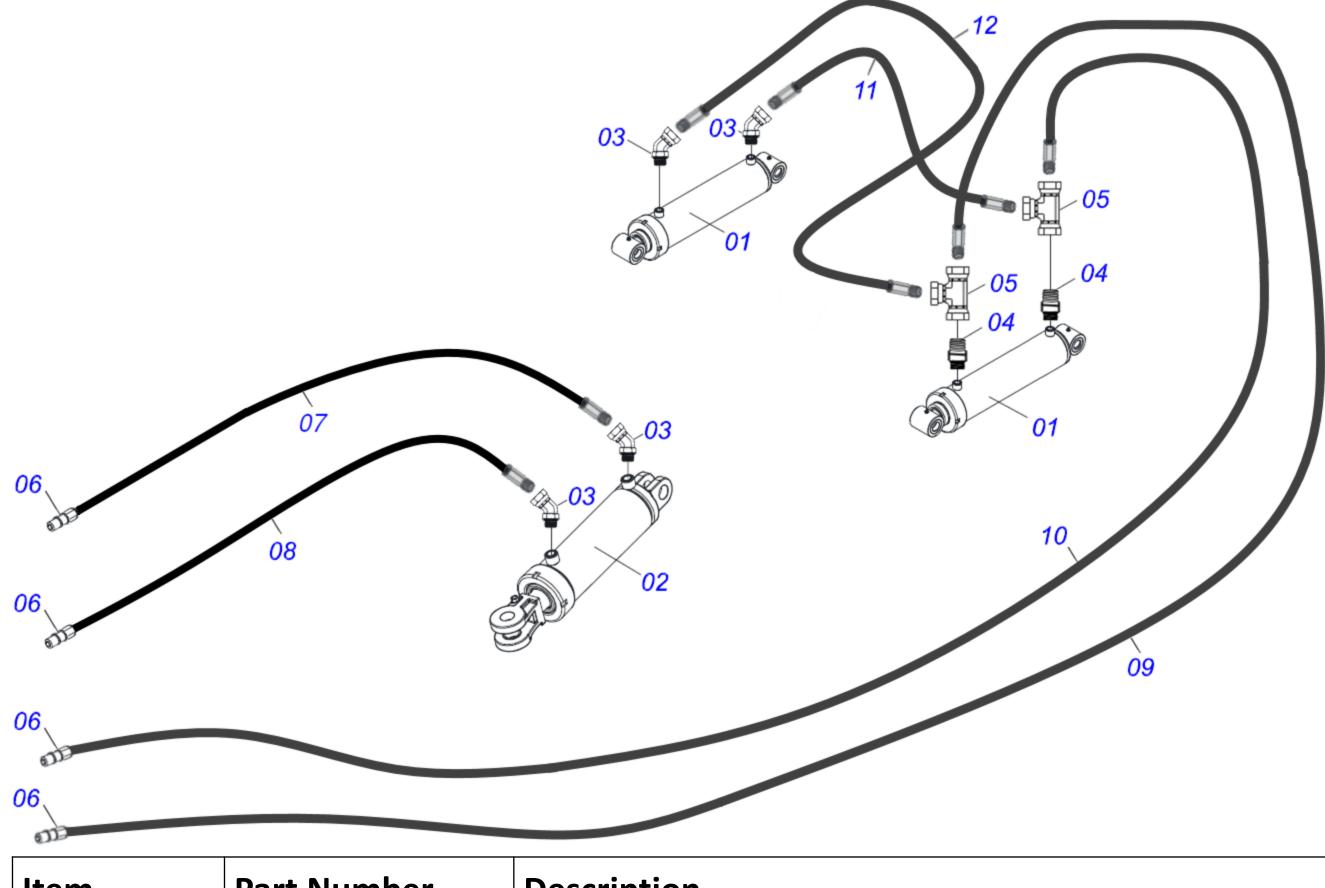




Item	Part Number	Description
01	400555	Rod: 2-1/4"
02	400556	Barrel: 4-1/2" x 19-5/8"
03	400557	Support: 2-1/4" x 4-1/2"
04	400558	Cap: Gland End
05	A125019	Fitting: 1/4"-28 Straight Grease
Seal Kit	400422	Kit: Includes Item 06, 07, 08, 09, 10, 12
06		Seal: 2-1/4" Rod Gasket
07		Seal: 2-1/4" U-Cup
08		Ring: 2-1/4" Wear Band
09		O-Ring: Gland
10		O-Ring: Support
12		Wiper: Piston Guide
13	400565	Piston: Large Body
14	400566	Piston: Small Body
15	400567	Screw: Piston



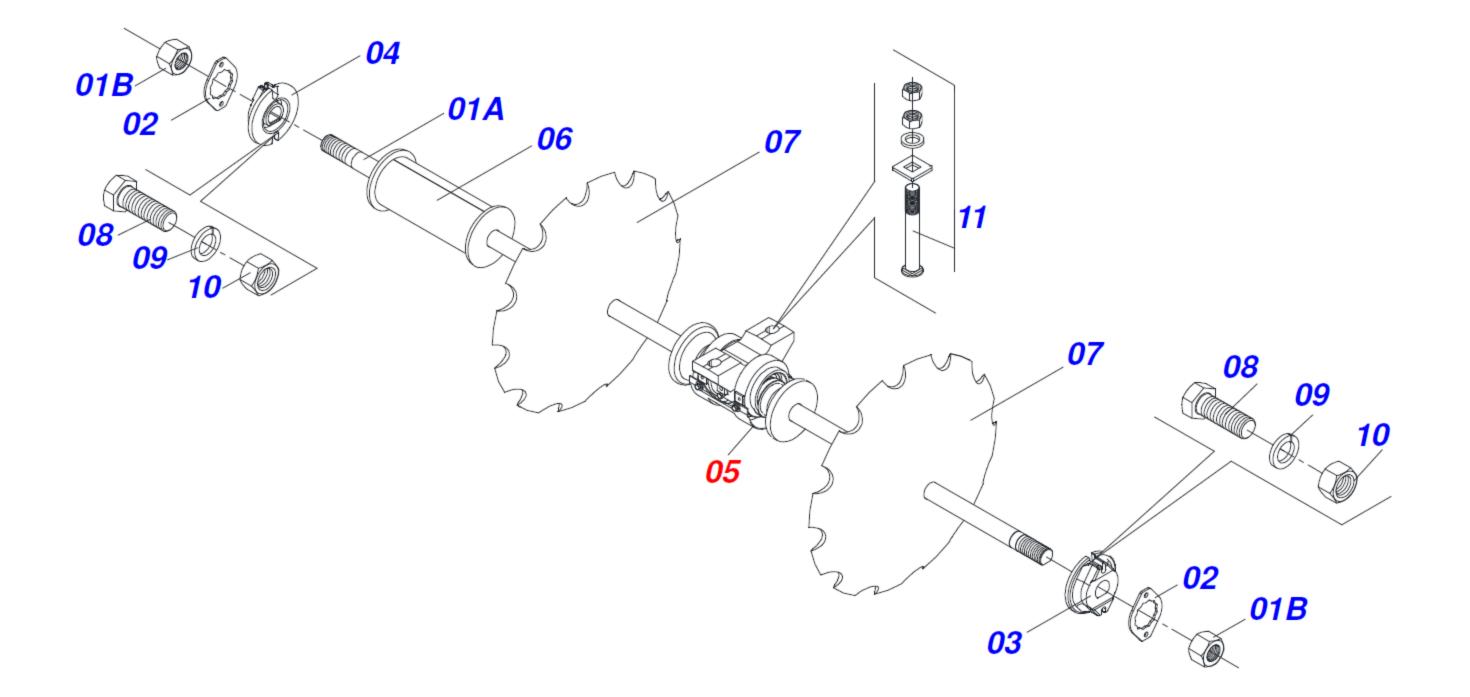




Item	Part Number	Description
01	400423	Cylinder: 4-1/2" x 25-3/4"
02	400415	Cylinder: 4" x 20-1/4"
03	AHA-00126	Adapter: 45° 1/2" Male ORB x 1/2" Female NPT Swivel
04	AHA-00134	Adapter: Straight 1/2" Male ORB x 1/2" Male NPT
05	AHA-00135	Adapter: Tee Swivel 1/2" Female NPT
06	AHF-00020	Coupler: 1/2" Body Male Poppet
07	400643	Hose Ass'y.: 1/2" x 216-1/2" Male NPT
08	400644	Hose Ass'y.: 1/2" x 208-1/2" Male NPT
09	400645	Hose Ass'y.: 1/2" x 389" Male NPT
10	400646	Hose Ass'y.: 1/2" x 374" Male NPT
11	400647	Hose Ass'y.: 1/2" x 19" Male NPT
12	400648	Hose Ass'y.: 1/2" x 45" Male NPT

Disc Gang



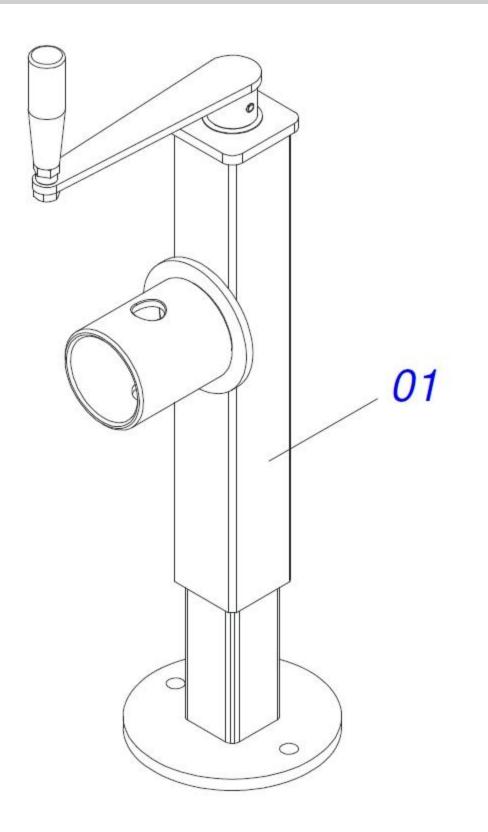


Item	Part Number	Description
01A	400419	Shaft: 2-1/2" x 130-11/16"L, w/o Nut
01B	400413	Nut: 2-1/2" Hex HT

2	400416	Lock: Keeper for 2-1/2" Nut
3	400412	Axle Washer: External, 2-1/2"
4	400411	Axle Washer: Internal, 2-1/2"
5	400417	Bearing: 2-1/2"ID x 19-1/2"L Oil Bath w/ Wear Plate
6	400394	Spacer: 2-1/2" ID x 19-1/2"L Cast Gang
7	400616	Disc: 2-1/2" ID x 42" OD, 12-Notch, Cutting Blade
8	AFB-00190	HHCS: 5/8"-11 x 1-3/4"
9	AFW-00031	Washer: 5/8" Split Lock
10	AFN-00003	Nut: 5/8"-11
11	400401	Bolt Ass'y.: 1-1/4"-7 x 5-3/4", w/ Spacer, Washer, Nuts

Jack

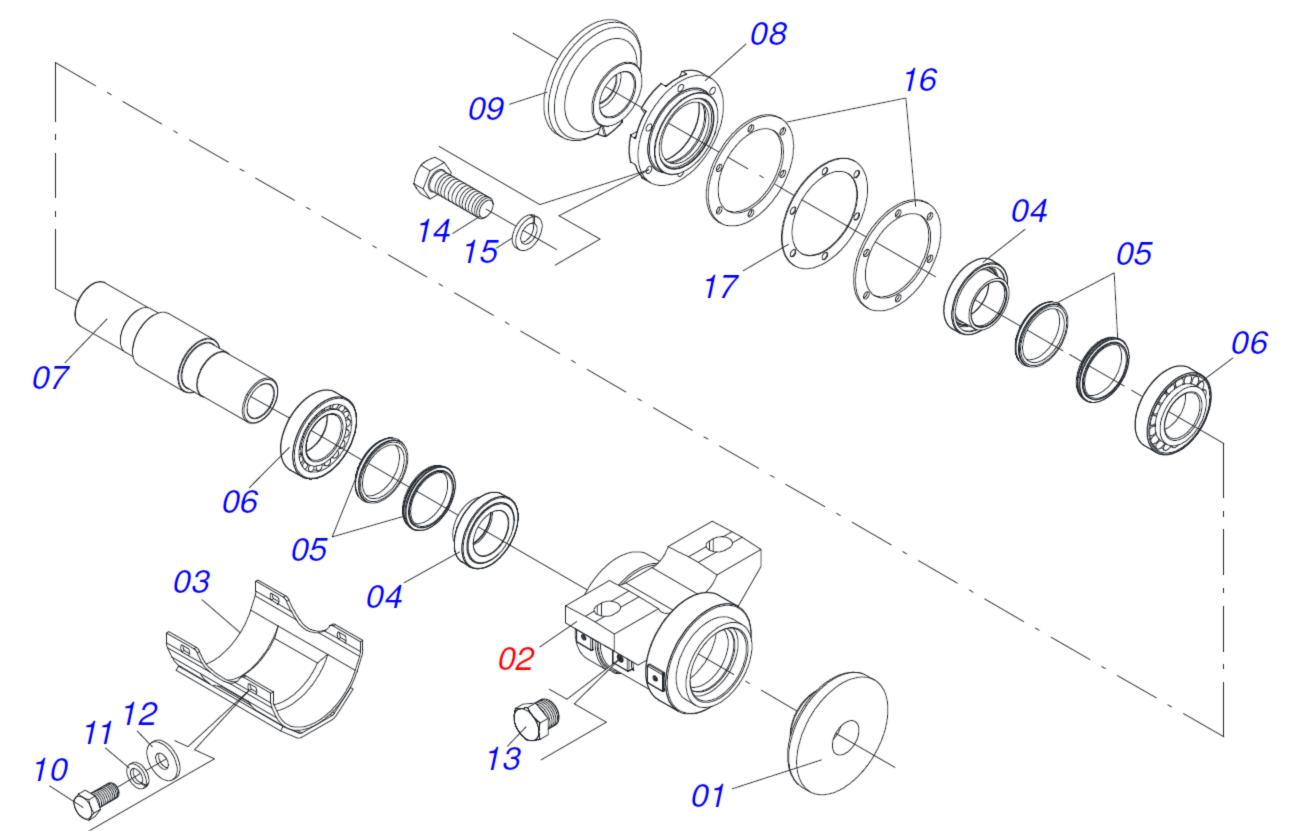




Item	Part Number	Description
01	400470	Jack: Top Wind

Oil Bath Bearing - 400417

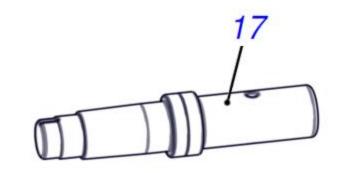


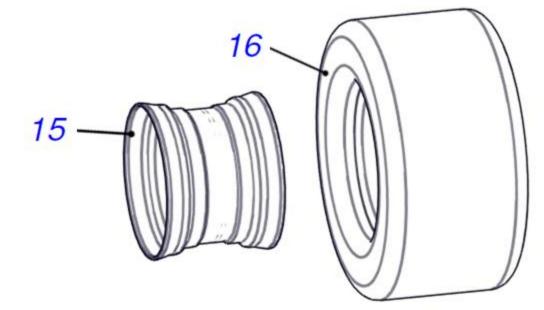


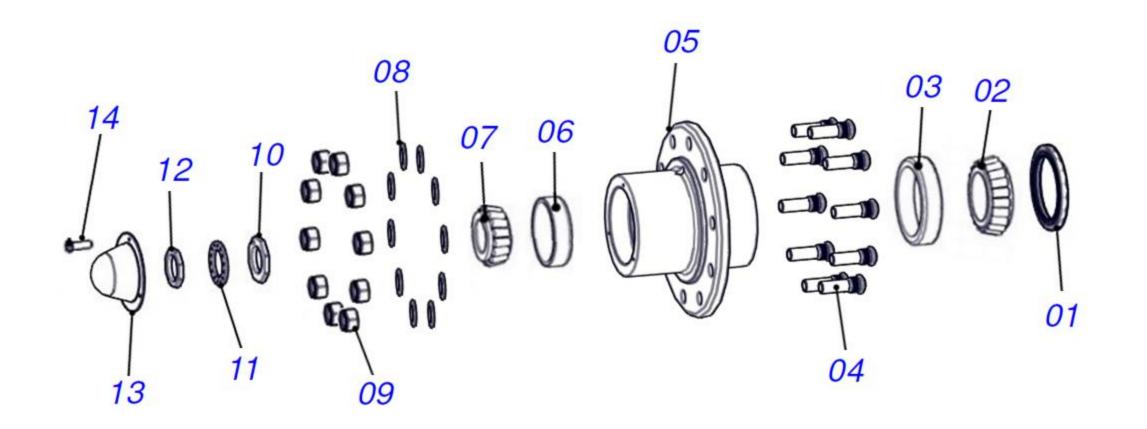
Item	Part Number	Description	
		Oil: SAE 80W-90 Heavy Duty Gear Oil	
01	400573	Flange: Inner Bearing	
02	400499	Housing: Oil Bath Bearing	
03	400424	Guard: Heavy Duty Oil Bath Bearing Wear Plate	
04	400506	Collar: Seal Retainer	
05	400505	Seal: Kit, Oil Bath Bearing	
06	400500	Bearing Ass'y.: Tapered Roller Cup/Cone	
07	400574	Axle: Oil Bearing	
08	400504	Cap: Oil Bath Housing	
09	400575	Flange: Outer Bearing	
10	AFB-00143	HHCS: 1/2"-13 x 1"	
11	AFW-00030	Washer: 1/2" Split Lock	
12	AFW-00009	Washer: 1/2"	
13	400509	Plug: Oil Cap	
14	AFB-00015	HHCS: 1/2"-13 x 1-1/2"	
15	AFW-00030	Washer: 1/2" Split Lock	
16	400502	Gasket: 0.01", 6-hole	
17	400503	Gasket: 0.004", 6-hole	

Hub & Axle









Item	Part Number	Description
01	A14011	Seal: Grease
02	A14012	Bearing: Cone Inner
03	A14013	Bearing: Cup Inner
04	400257	Stud: Wheel 3/4"-16 x 2-3/4"
05	A14010A	Hub: 10-Hole
06	A14014	Bearing: Cup Outer
07	A14015	Bearing: Cone Outer
08	AFW-00036	Washer: 3/4" x 2", Thick Hardened Washer
09	A10046	Nut: Lug 3/4"-16
10	A10172	Nut: Spindle 2-5/8" (Inner)
11	A10049A	Ring: Spindle Lock
12	A10048	Nut: Spindle 2-5/8" (Outer)
13	A14004	Cap: Hub
14	AFB-00080	HHCS: 5/16"-18 x 1/2"
15	400577	Wheel: 22.5" x 13" 10-Hole
16	ATI-00029	Tire: 445/50R-22.5
17	400425	Axle: 3-1/2" x 19-1/4"

Decals



Safety Decals

Model Decals

750464	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	ADS-00061	Decal: 25.75 x 5"
ADS-00011	Decal: Pinch Point Decal: Pinch Point	ADS-00062	Decal: 36 x 7"
ADS-00019	Decal: Grease Daily	ADS-00064	Decal: AI 5.5 x 3.5"
ADS-00030	Decal: Turning Least 50 ft. (15.24m) Away.	ADS-00065	Decal: Al 11.5 x 7"
ADS-00046	Decal: Do Lifting To revent serious injury or death: NOT FOR LIFTING These loops are not rated to support the machine's weight. DO NOT use for lifting. ADD-0006	ADS-00086	Decal: Badge 🔨 EHDW-4220-14





Operation & Maintenance



Your Ashland disc harrow is a durable piece of equipment and with proper care will yield many years of trouble-free operation. However, the life of your machine can be severely shortened by poor maintenance. You must follow consistent maintenance practices and use superior quality grease and hydraulic oil (compatible with the power unit's hydraulic system) to insure the longest, most productive use from your disc harrow.

Your disc harrow should be greased at all points where grease fittings are provided. REMOVE TRANSPORT LOCKS prior to operation. Next, extend and retract all cylinders several times to force out any air from the hydraulic cylinders and lines. Check the oil levels in the tractor hydraulic system and add to maintain the proper level. Care should be used when adding oil or when disconnecting any oil line to keep all dirt out of the oil as dirt is a major factor in the failure of hydraulic components.

When your disc harrow is placed into operation, the operator will have to "feel out" the amount of depth of cut to obtain maximum cutting efficiency. This is usually accomplished by taking a lesser and more uniform cut; however, some soil conditions such as loose sand may require a "pumping action" obtained by taking successive deep cuts and lifting out of cut as the tractor begins to lose power or traction.

After 8 hours of operation, all bolts should be checked and tightened if necessary and all grease fittings lubricated. Check tire pressures daily. Also, check pins and cutting edges for signs of wear.

After 50 hours work, all bolts should be rechecked and tightened if necessary. Check wheel bearings and adjust if necessary.

Check wheel lug nut torque.

- After first 2 hours of operation.
- Recheck daily for the next 2 weeks.
- Tighten wheel lug nuts in a star pattern.
- Torque wheel lug nut (see Torque Specifications).

After 300 hours work, clean and repack wheel bearings and replace, if necessary, cutting edges, worn pins, etc.



Failure to replace worn cutting edges may result in unnecessary wear to the machines sides and floor.

Before starting a job, make sure Diggers Hot Line has been contacted and all underground utilities have been properly located (electric, phone, and pipelines). Have a clear understanding of all local, OSHA, and MSHA rules that apply to the job. Beware of your environment and keep others a safe distance from the machine while familiarizing yourself with the machine's controls. The machine requires a power source with TWO 4-way (double acting) hydraulic control valves.

Safety Guidelines





Safety Signal Words:

Please note the use of signal words such as DANGER, WARNING, and CAUTION paired with the safety messages on your disc harrow. The appropriate signal word for each safety message has been selected using the following guidelines:

- DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or significant injury. This signal word is limited to the most extreme situations – typically for machine components which, for functional purposed, cannot be guarded.
- **WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or significant injury. For example, hazards that are exposed when guards are removed. This signal word may also be used to alert against unsafe practices.
- **CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. This signal word may also be used to alert against unsafe practices.

Operator safety is a main concern in designing and developing equipment. Designers and manufacturers include as many safety features as possible. However, every year many accidents occur on job sites which could have been avoided by extra thought and a more careful approach to handling equipment. The operator can avoid many accidents by observing the precautions in this section. To avoid personal injury, study the following precautions and insist those working with, or for you, follow them.

Replace any CAUTION, WARNING, DANGER, or instruction safety decal that is not readable or missing.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions in the operator's manual with all users annually.

Operators should be responsible adults who are familiar with machinery and trained in the equipment's operations. Do not allow persons to operate or assemble this unit until they have read this manual and the owner's manual and have developed a thorough understanding of the safety precautions and machine operation.

Tire Inflation & Torque Chart



On new machines, wheel nuts must be retorqued after the first 2 hours of operation.

Check tires daily to ensure correct inflation levels with an accurate gauge having 6.9 kPa [(0.07 bar) 1 PSI] gradations.

Also check for:

- Tire Damage
- Loose or missing wheel lugs, nuts, or caps
- Uneven wear
- Damaged Rims

Tire Inflation: PSI @ 6mph			
	Tire Size	Max PSI	
EHDW-4220-14	445/50R22.5	97	

Torque Foot/Pounds	Wheel Bolt/Stud Size	Torque Foot/Pounds	HHCS: Bolt Diameter
80 - 90	1/2"-20	12	1/4"

	_/
85 - 100	5/8"-18
450 – 500	3/4"-16
450 – 500	M22 x 1.5
750 – 800	1-1/8"-16

±/ +
5/16"
3/8"
7/16"
1/2"
9/16"
5/8"
3/4"
7/8"
1″
1-1/8"
1-1/4"
1-3/8"
1-1/2"

Tire Service



The task of servicing tires and wheels can be extremely dangerous and should be performed by trained personnel only, using the correct tools and following best-practice. Do not attempt to mount, demount, or inflate a tire if you do not have the proper equipment and experience to perform the job. Call a qualified repair service to inspect the assembly and make necessary repairs. <u>Failure to heed warnings could lead to serious injury or death.</u>

Visually inspect tires and wheels daily. Carefully inspect any rim and tire assembly that has been run underinflated or flat before reinflating the tire to make sure there is no damage to either the rim or tire.

- ALWAYS wear personal protection equipment such as gloves, footwear, eye protection, hearing protection, and head gear when servicing tire and wheel components.
- DO NOT operate with damaged rims, tire cuts or bubbles, missing lug bolts, or nuts or damaged rims.
- ALWAYS maintain the correct tire pressure. NEVER exceed recommended tire inflation pressure.
- INSPECT any rim and tire assembly that has been run flat or severely underinflated before reinflating the tire. Damage to the rim and tire may have developed.
- NEVER reinflate a tire that has lost air pressure or has been run flat without determining and correcting the problem.
- NEVER try to repair wheel, rim, or tire components parts. Parts that are cracked, worn, pitted with corrosion, or damaged must be discarded and replaced with good parts.
- ALWAYS use approved tire and rim combinations for the model that you have and verify that part numbers of components are correctly matched for the assembly.
- ALWAYS exhaust all air from the tire prior to demounting.
- ALWAYS place wheel and tire assemblies in restraining devices (safety cage) when inflating tires. Use a clip-on chuck and long extension hose to allow you to stand to the side of the tire and not in front of it.
- NEVER weld or cut on an inflated tire assembly. Welding heat can cause increased pressure which could result in tire explosion.
- ALWAYS use proper lifting techniques and mechanized lifting aids to move heavy components and assemblies.
- NEVER leave a tire, wheel, or assembly unsecured in a vertical position.
- ALWAYS take care when moving tires and wheels, making sure that other people in the area are not endangered.

Hub Service





Maintenance Schedule

- Daily visual inspection
- Thorough inspection for leaks or damage every 300 hours of operation
- 5 pumps of grease every 300 hours of operation
- Thorough cleaning, inspection, and repacking every lacksquare1,500 hours of operation

The bearings within the hubs of the scraper are fully greased with an **EP Rated ISO 220 NLGI #2** Lithium Complex blue grease at the factory. Ashland uses a special bearing grease packer to ensure the bearing is effectively and evenly lubricated. Generous amounts of additional grease are added on both sides of the bearing prior to install within the hub.

Lithium Complex Grease

Only high-performance, Lithium Complex grease is used to protect equipment in severe applications. The NLGI #2 ISO 220 EP Rated grease has excellent adhesion, structural stability, and is resistance to wet environments, making it suitable for use in a wide variety of machinery and components. This grease exhibits excellent wear, rust, and corrosion protection to help with mechanical efficiency, enhancing both bearing and equipment life. Overall, reducing maintenance costs, energy consumption, and providing protection at high and low temperatures.

Recommended Products (compatible to mix):

Shell Gadus S3 V220C 2 Chevron Delo Grease EP 2 Mobilgrease XHP 222

Reinstalling Hubs

Before installing or re-installing the hub, follow this procedure to ensure spindle machined surfaces are clean and undamaged.

- Remove old lubricant and thoroughly clean spindle. •
- Inspect machined spindle seal surface for nicks, scratches, burrs or marks. If needed, use crocus ulletcloth or emery cloth to repair damaged areas.
- Clean spindle threads thoroughly with a wire brush to avoid false bearing adjustments and to • avoid introduction of contaminates into the hub.
- Thoroughly clean spindle machined surfaces of rust, dirt, grease, or other contaminants that • could damage the hub seal and cause it to leak.

Caution

Too much grease volume (over-greasing) in a bearing cavity will cause the rotating bearing elements to begin churning the grease, pushing it out of the way, resulting an increase of bearing component temperatures. This leads to rapid oxidation (chemical degradation) of the grease as well as an accelerated rate of oil bleed, which is a separation of the oil from the thickener. The heat that has been generated over time along with the oil bleed eventually will cook the grease thickener into a hard, crusty build-up that can impair proper lubrication and even block new grease from reaching the core of the bearing. This can result in accelerated wear of the rolling elements and then component failure. PH: 715-682-4622



The Purpose of Warranty

Ashland Industries, Inc. warrants each new product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed one year from the date of delivery of the new Ashland Industries product to the original purchaser, or the date the product is first put into service via a rental agreement or other means, whichever occurs first.

Dealers Responsibilities

The following responsibilities are to be performed when the dealer delivers a product to the purchaser or otherwise places it into warranty service:

- Complete the Warranty Registration Form and forward it to Ashland Industries within 30 days of the sale, rental or other use of the product. Warranty reimbursement is contingent upon product registration.
- Review the warranty statement and operator's manual with purchaser to assure understanding of purchaser's responsibilities as related to warranty, service, and the proper and safe operation of the product. Purchasers/Renters should be advised to have failed parts repaired or replaced immediately upon failure, as continued use will result in additional damage, excessive wear, and may result in personal injury.
- Contact Ashland Industries prior to beginning repair or replacement of failed parts to make certain that the cost of repairs are consistent with the value of the product being sold.
- Warranty requests for units in dealer's inventory may be submitted to Ashland Industries when defects are noted in products prior to the retail sale or rental of that unit.
- Provide warranty and service repairs as directed by Ashland Industries' "Service Repairs Bulletins" or other instructions.
- All warranty work must be completed within 30 days of failure. Notify Ashland Industries'
 warranty department if repairs will require more than 30 days after failure for an extension. No
 claim will be accepted for warranties that exceed this 30 day period.
- No warranty will be allowed on units delivered to the retail customer prior to the full payment of that unit to the manufacturer by the dealer.
- If diagnostic time is required, contact Ashland Industries prior to beginning the warranty repair for approval. Ashland Industries must approve travel time reimbursement prior to beginning the warranty repair.

Ashland Industries Responsibilities

- Reimbursement for parts used in warranty repair will be credited only when the parts are purchased from Ashland Industries Inc. Parts will be credited at dealer's net cost. No warranty will be allowed on parts that are past due.
- Dealer should use parts from their parts inventory first. In the event that parts must be shipped from Ashland Industries Inc., freight will be paid by Ashland Industries and will be shipped by the most economical means to arrive in the shortest possible time. Air, Next Day Air, Priority and other special shipment methods requested by the dealer will be at the customer's expense.



Ashland Industries Responsibilities (Cont'd)

- Warranty Labor Reimbursement for labor expense to the dealer is made by payment of the • established hourly shop rate.
- Repair times will be reviewed by Ashland Industries and may be adjusted to average repair time • required by other dealers to make similar repairs. Labor is not paid on the warranty associated with repair parts purchased by the retail customer that are used on a product that is not currently in warranty time frame.
- Reimbursements for repairs made by an outside source (not dealer personnel) will be made for • those services deemed necessary for the resolution of the warranty by Ashland Industries' warranty department. Outside repair invoices must have prior approval from Ashland Industries' service department and must be attached to the warranty claim after approval.

Other Warranty Provisions

The following guidelines are to be followed when performing warranty repairs:

- In all cases, the most economical repair should be performed unless otherwise directed. Credit will not be allowed for assemblies or groups if it is practical to make the repair with individual parts. In some cases, the assembly or group price may be less than the total of the parts and labor required to complete the repair. In those cases, an assembly or group may be used.
- Only those parts provided by Ashland Industries are covered under Warranty. The use of parts from other sources will not be eligible for warranty consideration.
- All parts removed during warranty repair should be held for a period of 90 days after the • warranty claim has been submitted to Ashland Industries. These parts can be discarded if disposition or return request has not been made during this period. Parts that are requested must be returned within 30 days of claim disposition. These parts will be discarded after the 30 day period.
- Ashland Industries reserves the right to deny or reverse any and all warranty claims for parts, labor, or miscellaneous charges when errors are found, warranty provisions are abused, or fraudulent claims are submitted.

Warranty Reimbursement is Not Possible

- When failure falls under the "limitations" as identified in Ashland's Limited Warranty Statement. •
- When Ashland Industries has requested the return of certain parts, assemblies, or information and has not received the material with 30 days of date posted on return request.
- On claims due to damage or shortage that are obviously the responsibility of dealer or the delivering carrier.
- On the entire claim when warranty policy and provisions are not followed.

All dealers will warranty their technician's work to the purchaser and will indemnify Ashland Industries, Inc. from such claims.



Service Bulletins

Service Bulletins will be issued when necessary to alert dealers of special repairs. Each bulletin will give detailed directions and procedures to complete the service.

Procedures For Completion Of Warranty Form

Complete the warranty form available at <u>www.ashlandind.com</u> or in your dealer's yellow Ashland Sales Book. Return this form to Ashland Industries within 30 days of failure.

Use of Photographs

Pictures of the failure are recommended but not required. Photos should be attached to dealer's claim when their inclusion will help identify the condition of the part being repaired or replaced, and thus assisting in approval of the claim. In may cases, the use of photos may eliminate the need to return parts for evaluation. Photos will not be returned unless specifically requested. Digital photos are preferred and can be email to <u>warranty@ashlandind.com</u>.

Delayed Warranty Repairs

Warranty repairs should be scheduled and performed as soon as possible after notifying your dealer and Ashland Industries. There may be circumstances that require the use of the product for a short period of time by the retail customer, or the availability of repair parts may require the work to extend past a 30 day period. In these cases, the dealer must notify Ashland Industries in writing of the extenuating circumstance and advise that the continued use of the product will not enlarge the warranty claim. These claims will then be processed as if the product is still within the warranty period.

Denied Claim

Dealers will be notified of a denied claim and notification will state the reason for denial. A dealer

has the right to appeal this claim and must do so within 30 days of notification of denial. If there has been no appeal within the 30 day period, the claim will be considered closed.

Limited Warranty Statement

Ashland Industries, Inc. warrants each new product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed one year from the date of delivery of the new Ashland Industries, Inc. product to the original purchaser, or the date the product is first put into service via a rental agreement or other means, whichever occurs first.

The major components of swivel hitches used on machines are warranted for three consecutive months from the date of delivery of the new Ashland Industries, Inc. product to the purchaser, or the date the product is first put into service via a rental agreement or other means, whichever occurs first, except those components described below.

Genuine Ashland Industries, Inc. replacement parts and components will be warranted for 30 days from date of purchase, or the remainder of the original equipment warranty period, whichever is longer.

Under no circumstances will it cover any merchandise or components thereof, which in the opinion of the company, has been subjected to misuse, unauthorized modification, alterations, an accident, or if repairs have been made with parts other than those obtained through Ashland Industries, Inc.



Limited Warranty Statement (Cont'd)

Ashland Industries, Inc. in no way warrants tires since their respective manufacturer warrants these items separately. Please call Ashland Industries, Inc. to receive phone numbers of tire suppliers. Ashland Industries, Inc. in no way warrants wearable items such as cutting edges, front dolly wheel balls, sockets, rollers, bushings, yoke hitch pins, hitch bushings, etc.

Our obligation under this warranty shall be limited to repairing or replacing, free of charge to the original purchaser, any part that, in our judgement, shall show evidence of such defect, provided further that such part shall be returned within 30 days from the date of failure to Ashland Industries, Inc. routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. Upon warranty approval, proper credits will be reimbursed for transportation.

This warranty shall not be interpreted to render Ashland Industries, Inc. liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss revenue, extra labor cost associated with downtime, substitute machinery, rental, or for any other reason.

Except as set forth above, Ashland Industries, Inc. shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. Ashland Industries, Inc. makes no other warranty, expressed or implied, and, specifically, Ashland Industries, Inc. disclaims any implied warrant or merchantability or fitness for a particular purpose. Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusion in this warranty may not apply.

This warranty is subject to any existing conditions of supply which may directly affect our ability to obtain materials or manufacture replacement parts.

Ashland Industries, Inc. reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold. No one is authorized to alter, modify, or enlarge this warranty nor the exclusion, limitations, and reservations.

Owner Registration

Be sure to complete the Owner Registration form that you received with your machine and return it to Ashland Industries within 30 days of the sale, rental, or other use of your product. Warranty reimbursement is contingent upon product registration. If your product is not registered, it is NOT covered under warranty.