

Ashland

EARTHMOVERS



I-110XL2

PARTS MANUAL

ver 1108-22103



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MEMBER



CONSTRUCTION INDUSTRY
MANUFACTURERS ASSOCIATION



I-110 XL2

How to Order Parts



HOW TO ORDER PARTS:

IMPORTANT

Parts must be ordered through your local authorized ASHLAND dealer.

Be sure to state MODEL and SERIAL NUMBER of your machine, PART NUMBER, DESCRIPTION and QUANTITY needed.



Unless this is done, we cannot provide prompt service or assure shipment of the correct parts.

Ashland Industries weldable replacement parts are available to rebuild, modify or update your scraper to current factory specifications.

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SAFETY SIGNAL WORDS



SAFETY SIGNAL WORDS

Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:



DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.



WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It 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. It may also be used to alert against unsafe practices.



GENERAL SAFETY GUIDELINES

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

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

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. **Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.**

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**

I-110 XL2

Operators & Maintenance Instructions

OPERATORS AND MAINTENANCE INSTRUCTIONS

This scraper is a durable piece of equipment and with proper care will yield many years of trouble free operation. The scraper requires a power source with TWO 4 way (double acting) hydraulic control valves.

The scraper should be greased at all points where grease fittings are provided. Connect hydraulic hoses to the tractor and retract lift cylinders to **REMOVE TRANSPORT LOCK PINS** (point A), then 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 the scraper is placed into operation, the operator will have to "feel out" the amount of depth of cut to obtain maximum loading 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.

1. After 10 hours work, all bolts should be checked and tightened if necessary.
2. Every 10 hours all grease fittings should be lubricated.
3. After 50 hours work, all bolts should be rechecked and tightened if necessary. Check wheel bearings and adjust if necessary.
4. After 300 hours work, clean and repack wheel bearings and replace, if necessary, cutting edges, worn pins, etc.
5. Tighten all wheel bolts after first two hours use. Check daily for two weeks. Keep torqued to 450 ft. lbs.

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Safety-Tire Warning

WARNING



Check Tires and Wheels

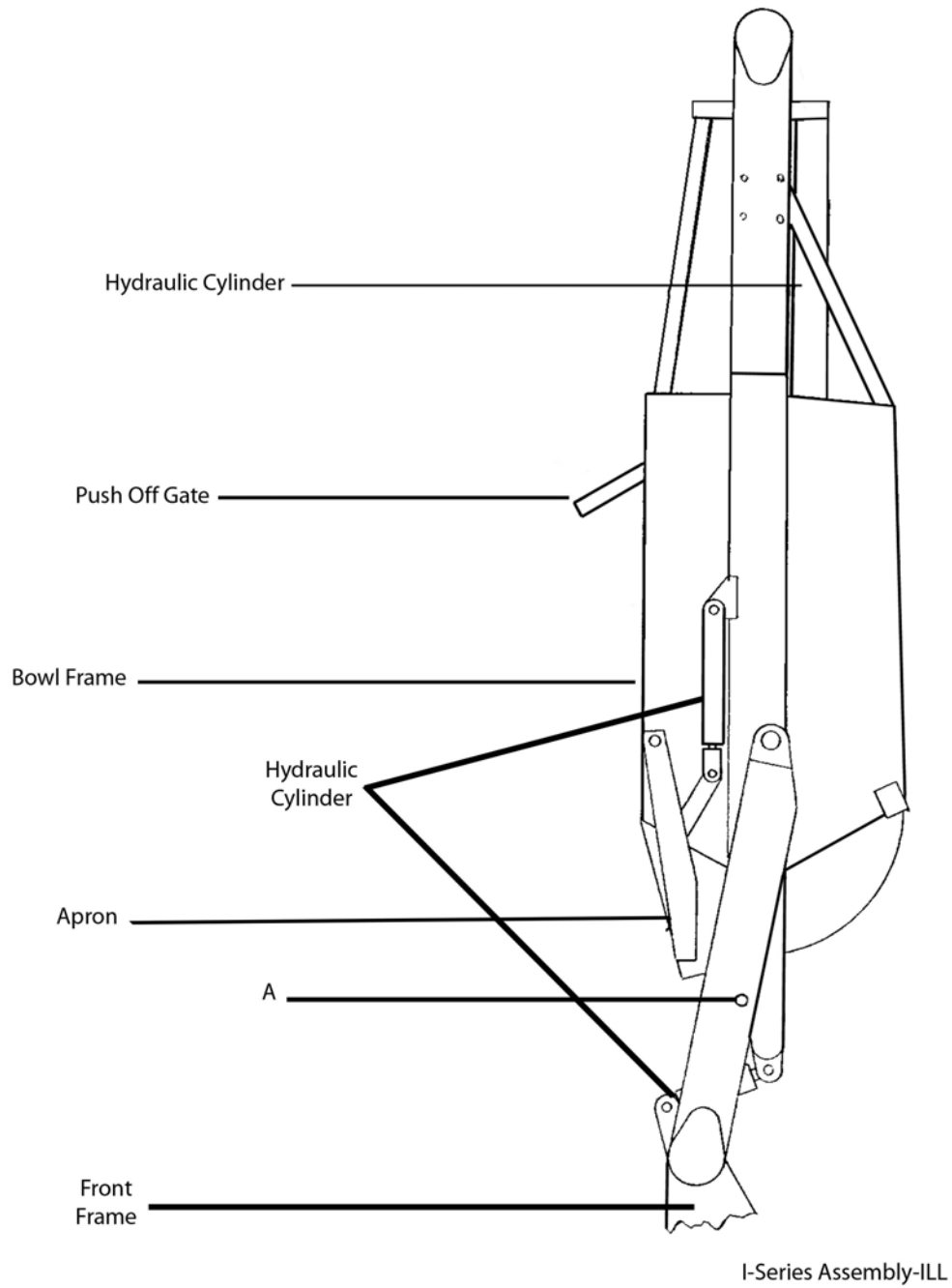
The task of servicing tires and wheels can be extremely dangerous and should be performed by trained personnel only, using the correct tools and following specific procedures. Do not attempt to mount, demount or inflate a tire if you do not have the proper equipment and experience to perform the job.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

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 inflate 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 scraper 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 that other people in the area are not endangered.

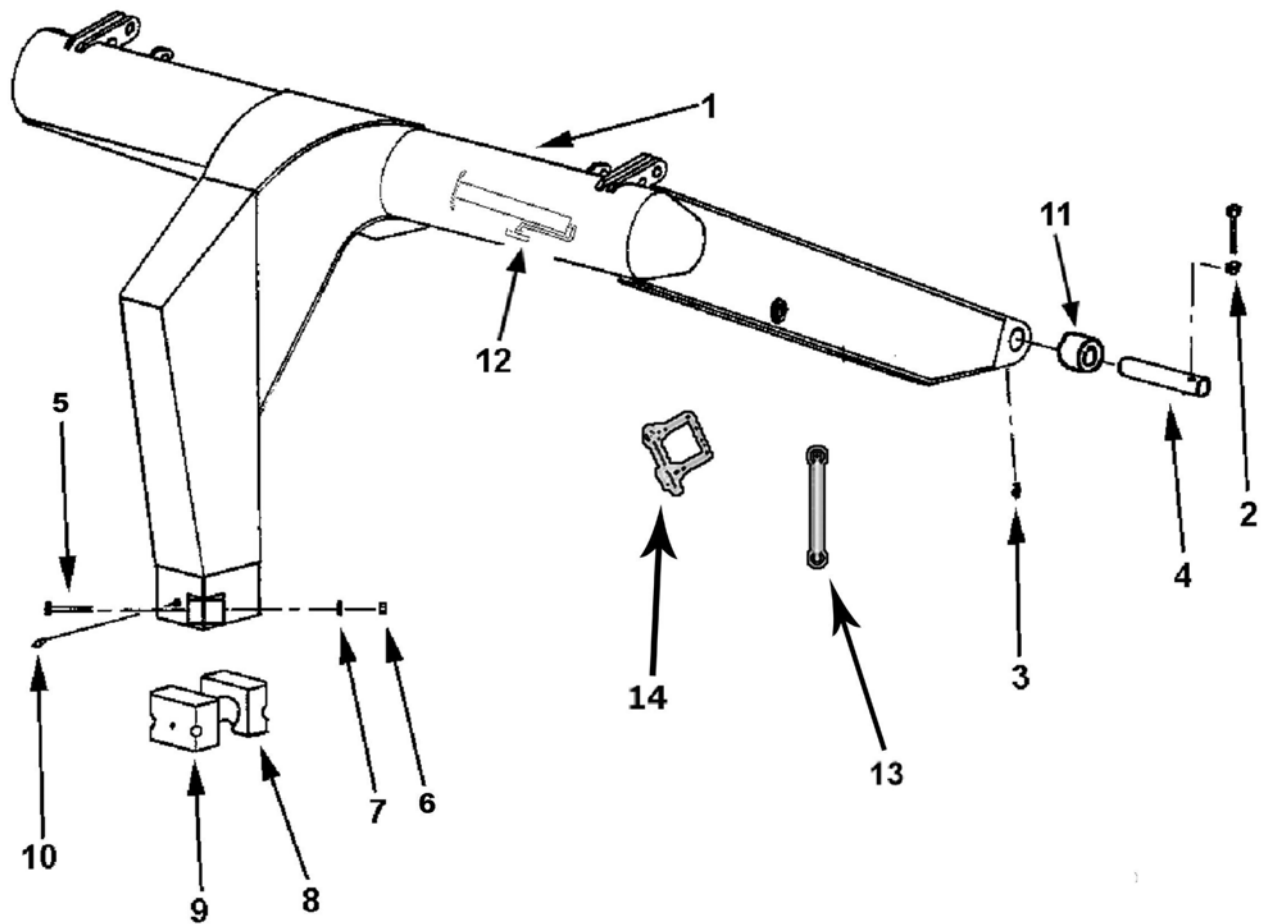
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Illustration Assembly



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Gooseneck Frame Assembly



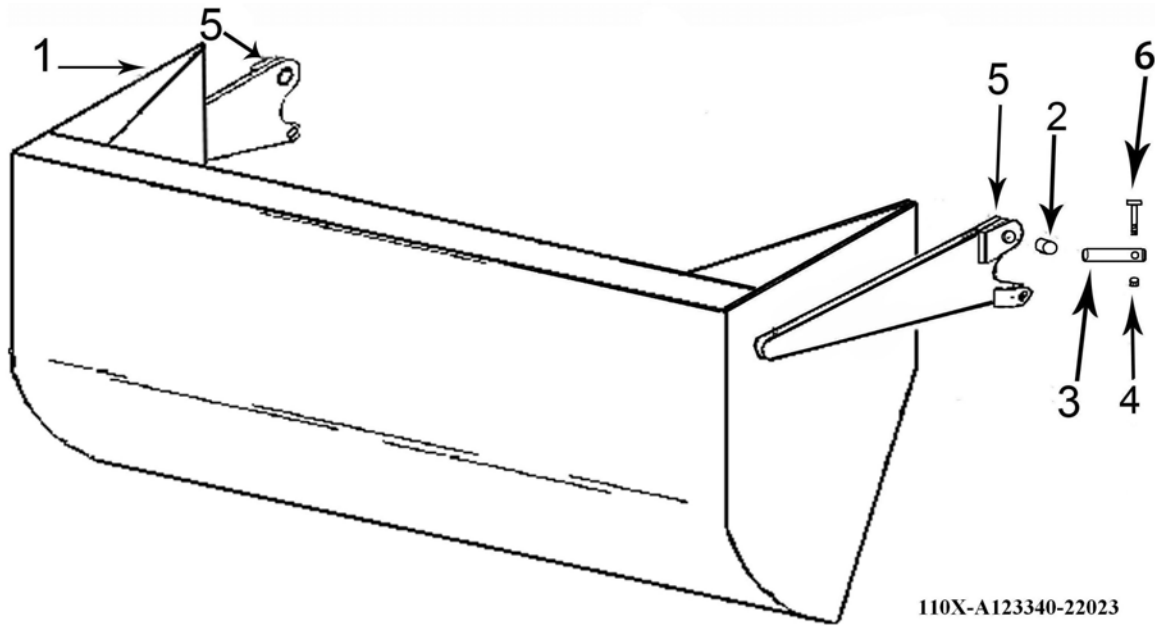
A-10151A-III

| Key Number | Part Number | Description |
|------------|-------------|---|
| 1 | A10151A | Gooseneck frame, s/n 17816 & up |
| 2 | AFB-00054 | Bolt, 1/2" NC x 3-1/2" w/ 7500 Nut |
| 3 | AHF-00028 | Fitting, Grease 90° 1/8 NPT |
| 4 | A10152A | Pin, Frame attachment, 2" OD x 8-1/16" Long |
| 5 | AFB-00069 | Bolt, 3/4" x 4-1/2" gr. 8 NF |
| 6 | AFN-00030 | Nut, 3/4" NF |
| 7 | AFW-00002 | Lockwasher, 3/4" |
| 8 | A10004A | Cast socket half, rear |
| 9 | A10005A | Cast socket half, front w/ zerk hole |
| 10 | A2206 | Grease zerk, long shank |
| 11 | A14039 | Bushing, 2.375 OD x 2.00 ID x 2" Long, Grease Passage |
| 12 | OPT-00001 | Hitch jack |
| 13 | A030672-33 | Dog Bone |
| 14 | A125006 | Safety Snap Pin |

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Apron Assembly

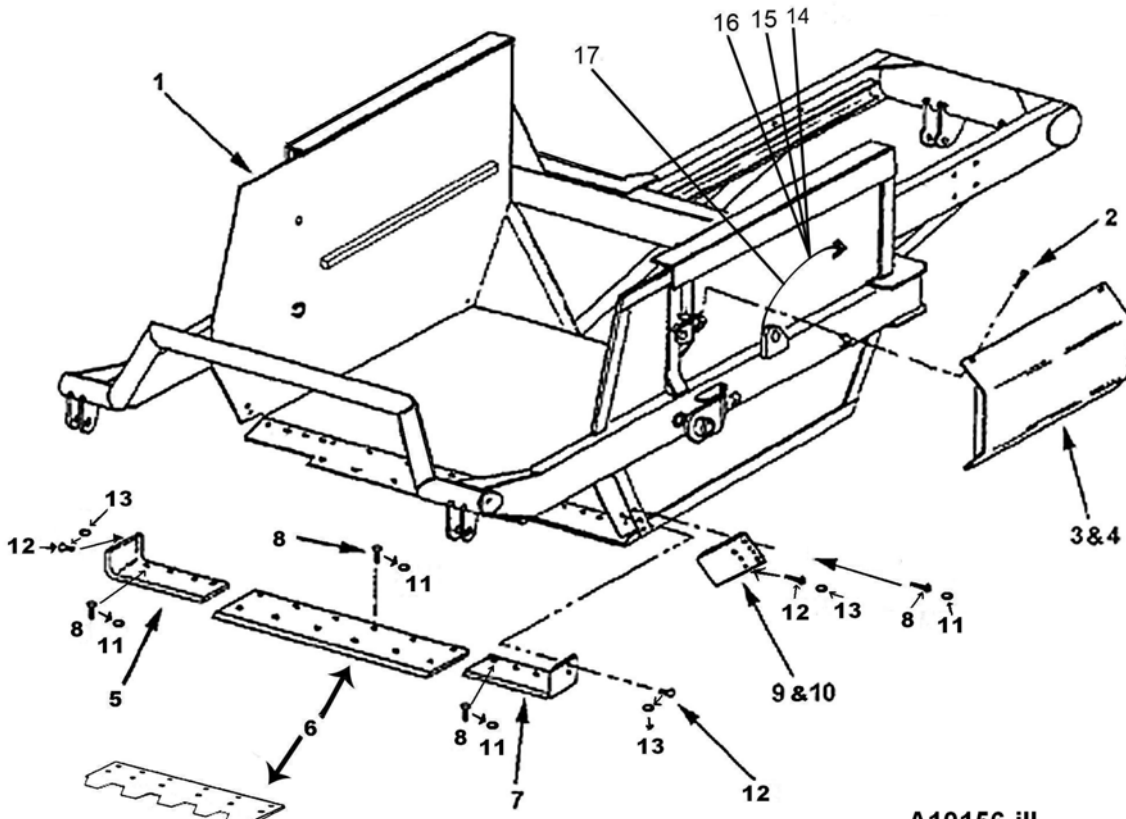
Part # A123340



| Key Number | Part Number | Description |
|------------|-------------|----------------------------------|
| 1 | A123340 | Apron |
| 2 | A16027 | Bushing, 2" OD X 1 1/2 ID X 2" L |
| 3 | A123337 | Pin, 1 1/2" X 5 3/8 L |
| 5 | 14505 | Grease Fitting |
| 6 | AFB-00049 | Bolt, 3/8" NC X 3" |

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Bowl & Frame Assembly



A10156-III

Blade Bolts Required:

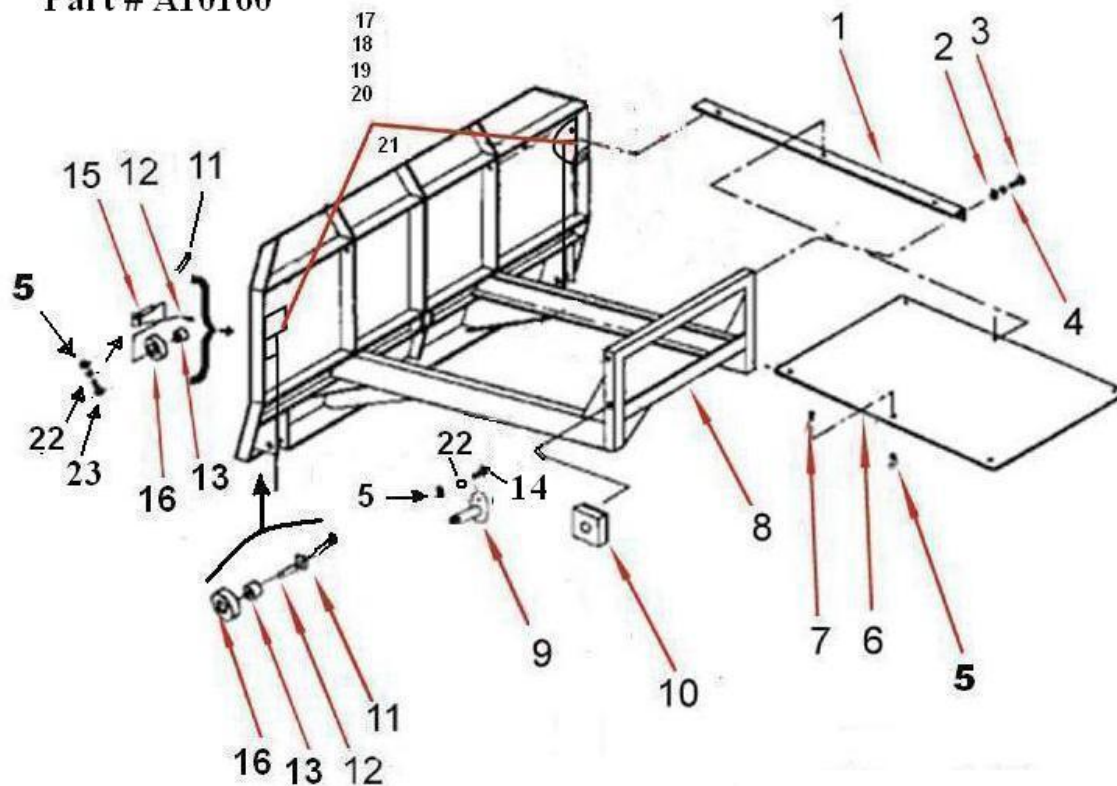
| | | <u>Qty</u> |
|-----------------|------------------|------------|
| A123331 (& Ser) | PB9P-NC-088-0275 | (12) |
| A123332L & R | PB9P-NC-088-0275 | (4) |
| | PB9P-NC-088-0225 | (2) |
| A123338L & R | PB9P-NC-088-0275 | (4) |
| | PB9P-NC-088-0225 | (3) |

| Key Number | Part Number | Description |
|-------------------|--------------------|--|
| 1 | A10156 | Bowl and Frame I-110XL2 |
| 2 | AFB-00094 | Flange Bolt, 3/8" NC x 1" |
| 3 | A123309-62L | Apron Cylinder Guard Left |
| 4 | A123309-62R | Apron Cylinder Guard Right |
| 5 | A123332R | Right cutting edge, 8" |
| 6 | A123331 | Center cutting edge, 13" x 54" |
| | A123331SER | Optional Serrated cutting edge 13" X 54" |
| 7 | A123332L | Left cutting edge, 8" |
| 8 | PB9P-NC-088-0275 | Plow bolt, 7/8" NC x 2-3/4" |
| 9 | AFN-00019 | Nut: 7/8" NC (12 req'd./ center blade) |
| 10 | PB9P-NC-088-0225 | Plow bolt, 7/8" NC x 2-1/4" |
| 11 | AFN-00026 | Nut: 7/8" NC Jam |
| 12 | A123338L | (Optional) Left Bank Shaver Side Blade |
| 13 | A123338R | (Optional) Right Bank Shaver Side Blade |
| 14 | A125019 | Grease Fitting |
| 15 | A125026 | Bulkhead Nut |
| 16 | A123309-89 | Single Hole Tab |
| 17 | A125022 | 18" Grease Line |

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Push Off Gate 22103

Part # A10160

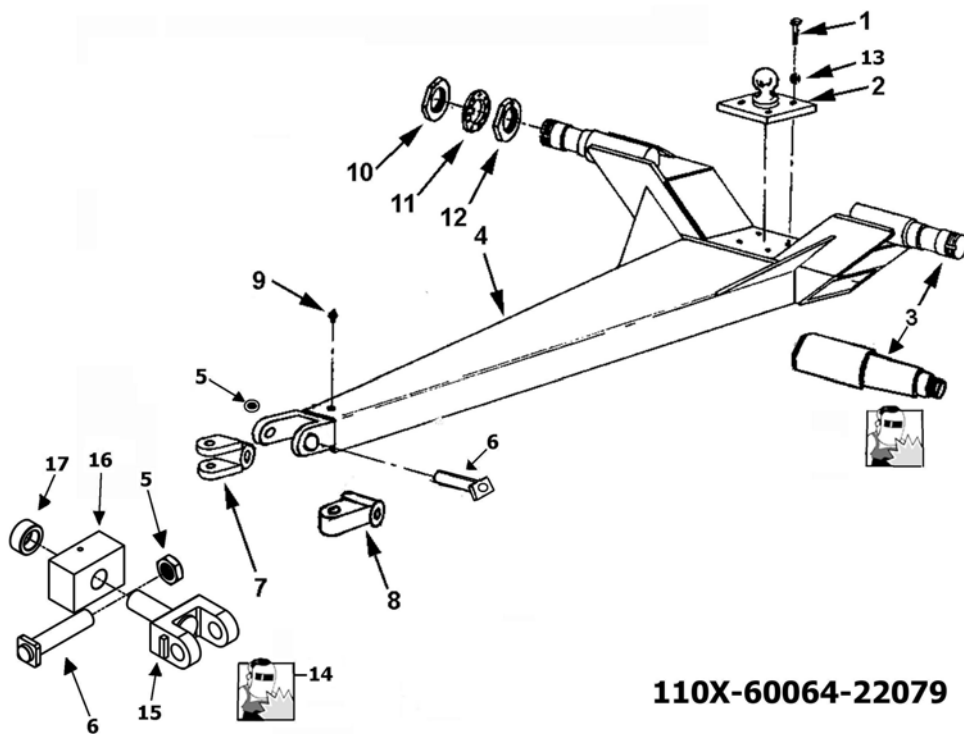


110X-A10160-22103

| Key Number | Part Number | Description |
|------------|-------------|---------------------------------|
| 1 | A10159 | Brace (L.H. & R.H. same) |
| 2 | AFN-00006 | Nut: 3/4" NC |
| 3 | AFB-00037 | Bolt: 3/4" NC X 2" Lg. |
| 4 | AFW-00002 | Lockwasher: 3/4" |
| 5 | 7500 | Nut: 1/2" NC |
| 6 | A10171 | Dirt Shield |
| 7 | AFB-00019 | Bolt: 1/2" X 1/2" NC |
| 8 | A10160 | Push Off Gate: Model I110 |
| 9 | A123305A | Pin: 1 1/4" X 2 3/4" |
| 10 | A123353 | Wear Pad |
| 11 | AFP-00001 | Cotter Pin: 1/4 X 3 |
| 12 | 500465 | Pin: 1 1/4" X 7" |
| 13 | A10163 | Bushing: 1 3/4" OD X 1 1/4" ID |
| 14 | AFB-00033 | Bolt: 1/2 NC X 2 1/2" |
| 15 | A123323-21 | Pin: 1 1/4 X 4 5/8 lg. Tab Head |
| 16 | A10164 | Roller: 4 1/4 OD X 1 3/4" ID |
| 17 | A125020 | 32" Grease Line |
| 18 | A123323-40 | Double Hole Tab |
| 19 | A125026 | Bulkhead Nut |
| 20 | A125021 | 54" Greaseline |
| 21 | A125019 | Greasefitting 1/4-28 54 Lg. |
| 22 | 8100 | Lockwasher |
| 23 | 7036 | Bolt: 1/2 NC X 2" Gr. 8 |

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Pole & Axle Assembly

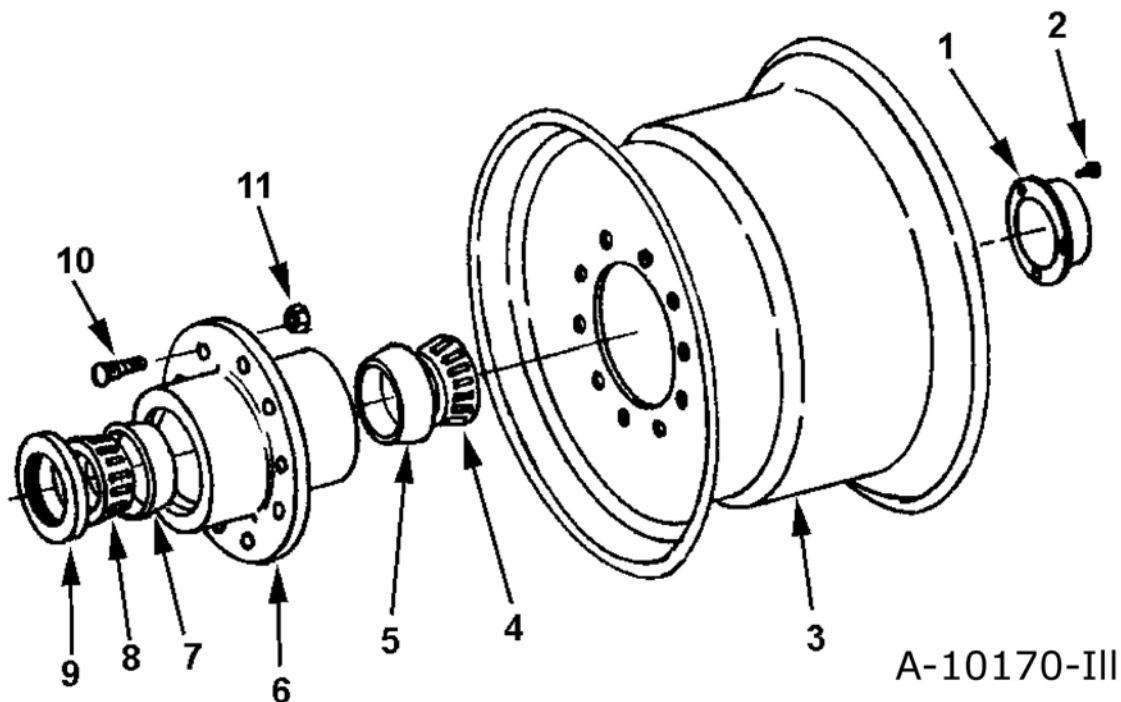


110X-60064-22079

| Key Number | Part Number | Description |
|------------|-------------|--|
| 1 | AFB-00005 | Bolt, 3/4" NC X 2 1/2" |
| 2 | A10035 | Ball Swivel |
| 3 | A14021 | Spindle Only (Weldable) |
| 4 | A10181 | Pole |
| 5 | 500433 | Nut: Lock |
| 6 | 600053 | Pin: Swivel Hitch |
| 7 | A10033 | Double Lip Clevis |
| 8 | A10033A | Single Lip Hitch |
| 9 | 14505 | Grease Fitting |
| 10 | A10048 | Spindle Nut |
| 11 | A10049A | Lock Collar |
| 12 | A10172 | Nut w/lock pin |
| 13 | AFW-00002 | Lockwasher, 3/4" |
| 14 | 600064 | Yoke Hitch Rebuild Kit (Contains items 5,6,15,16,17) |
| 15 | A030168-3A | Swivel Yoke Assembly |
| 16 | A030172-11 | Swivel Block |
| 17 | A030568-01 | Hitch Collar |

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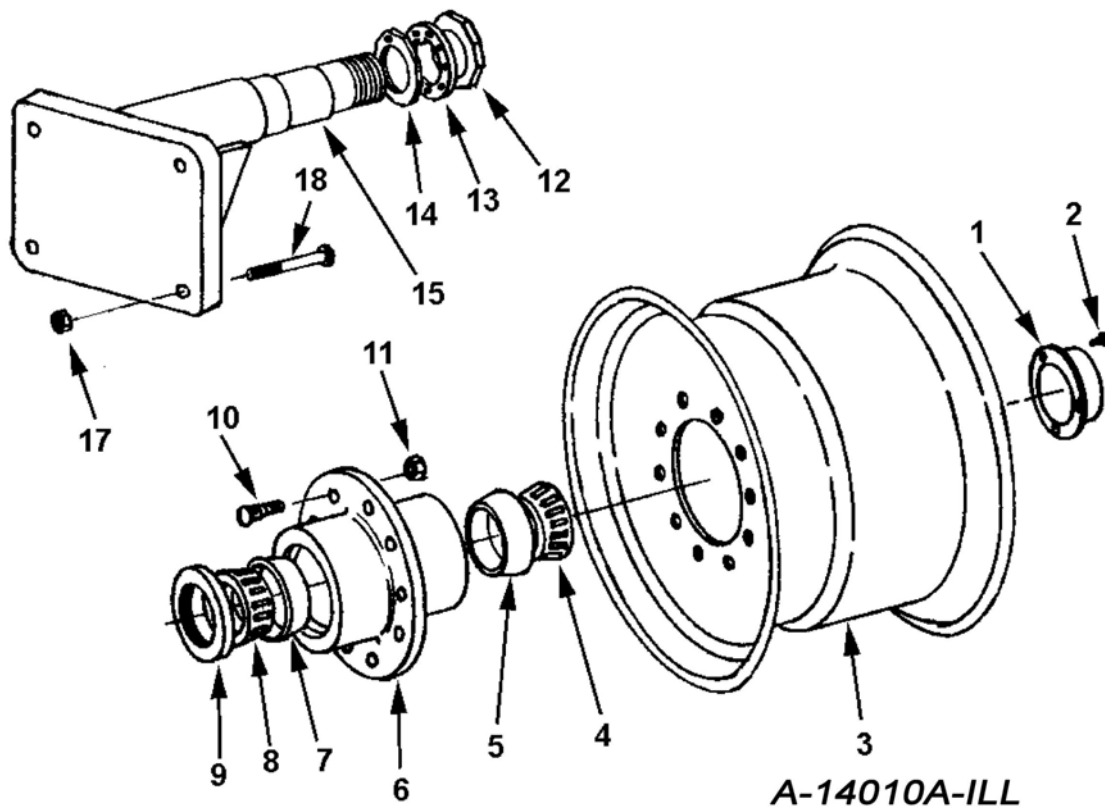
Front Wheel & Hub Assembly



| Key Number | Part Number | Description |
|------------|-------------|-----------------------------|
| 1 | A14004 | Hub cap |
| 2 | AFB-00080 | Bolt, 5/16 NC x 1/2 lg. |
| 3 | A10170 | Wheel, 14 x 16.1 |
| 4 | A14015 | Bearing cone (Timken 644) |
| 5 | A14014 | Bearing cup (Timken 632) |
| 6 | A14010A | Hub |
| 7 | A14013 | Bearing cup (Timken 742) |
| 8 | A14012 | Bearing cone (Timken 749) |
| 9 | A14011 | Grease seal (CR 42624) |
| 10 | A10176 | Stud |
| 11 | A10046 | Lug nut |

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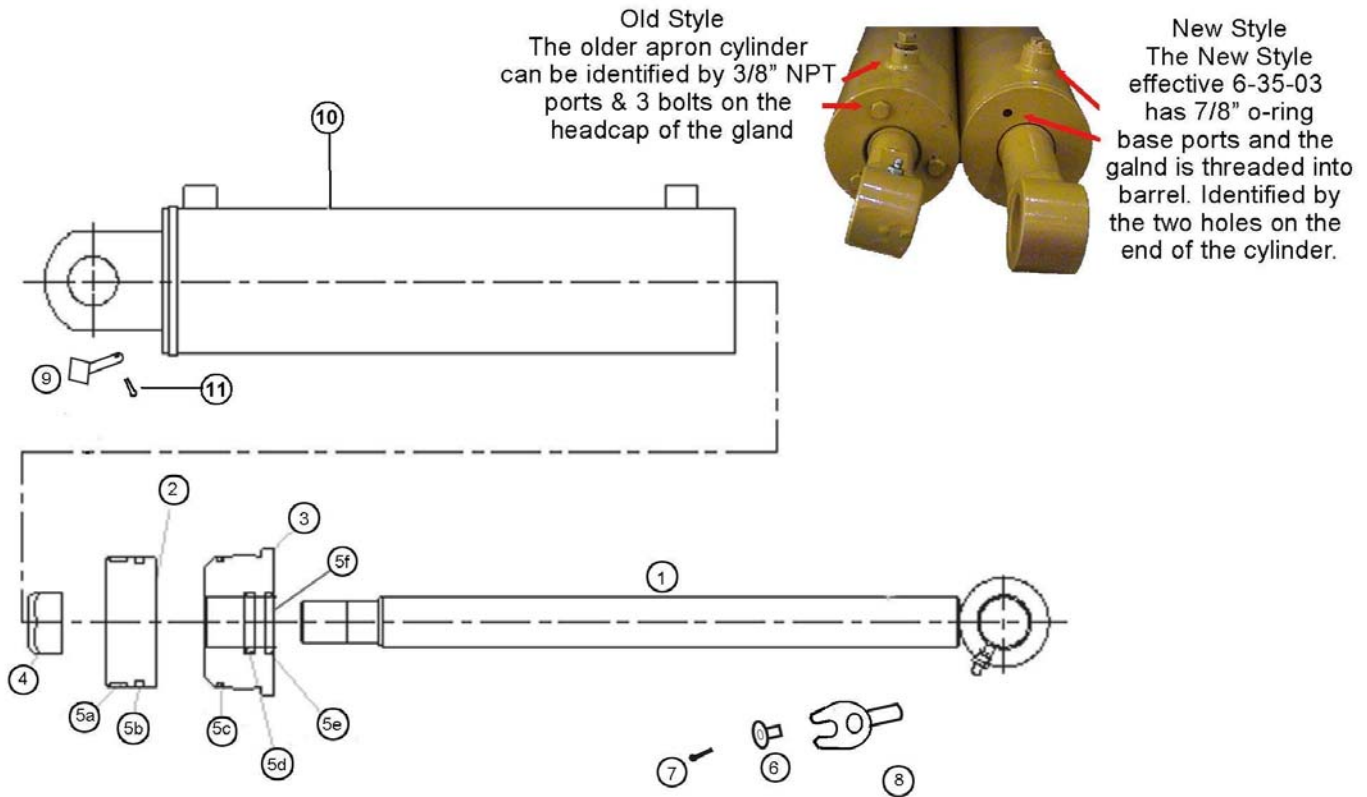
Rear Wheel Spindle & Hub Assembly



| Key Number | Part Number | Description |
|------------|-------------|-------------------------------|
| 1 | A14004 | Hub cap |
| 2 | AFB-00080 | Bolt, 5/16 NC x 1/2 lg. |
| 3 | A10039 | Wheel, 16 x 26 Drop Center |
| 4 | A14015 | Bearing cone (Timken 644) |
| 5 | A14014 | Bearing cup (Timken 632) |
| 6 | A14010A | Hub, Blank, less cups + studs |
| 7 | A14013 | Bearing cup (Timken 742) |
| 8 | A14012 | Bearing cone (Timken 749) |
| 9 | A14011 | Grease seal (CR 42624) |
| 10 | A10176 | Stud |
| 11 | A10046 | Lug nut |
| 12 | A10048 | Spindle nut |
| 13 | A10049A | Lock collar |
| 14 | A10172 | Nut w/ lock pin |
| 15 | A14037 | Spindle |
| 17 | AFN-00001 | Nut: 1" NF Top Lock |
| 18 | AFB-00017 | Bolt, 1" NF x 6-1/2" lg. |

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Apron Cylinder 4" x 13"

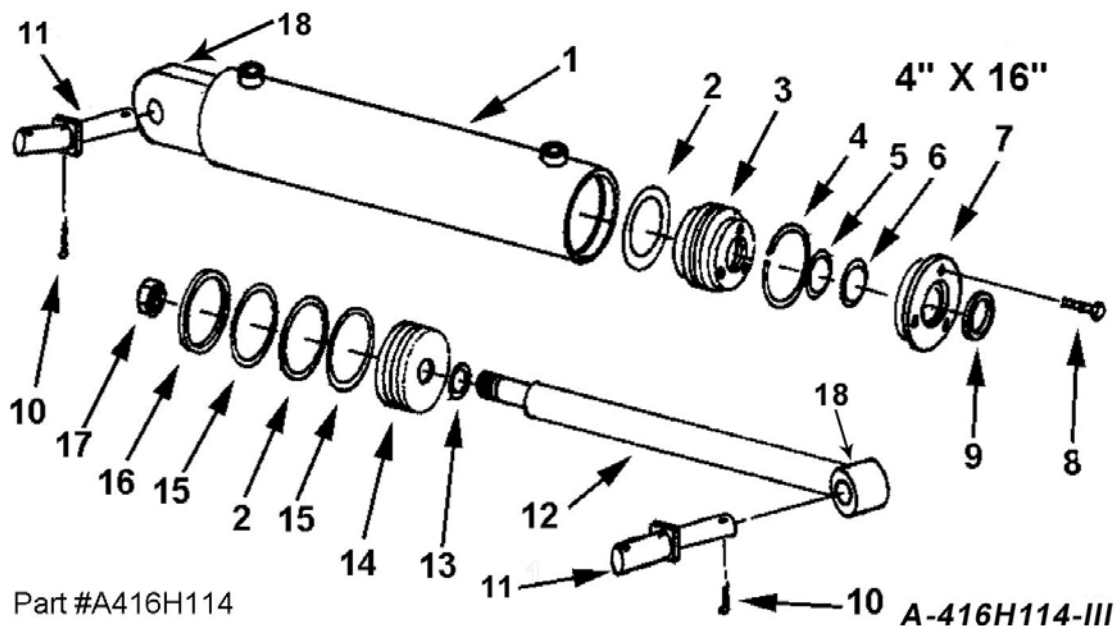


A-125050-III

| Key Number | Part Number | Description |
|------------|-------------|--------------------------------------|
| 1 | A125050-01 | Rod 1-3/4" with welded eye |
| 2 | A125050-02 | Piston |
| 3 | A125050-03 | Gland, Threaded |
| 4 | A125050-04 | Lock Nut, 1-1/8" NF |
| 5 | A125050-05 | Seal Kit, a-f |
| 5a | A125050-05a | Nylon Wear Ring |
| 5b | A125050-05b | FSP Seal |
| 5c | A125050-05c | O-Ring |
| 5d | A125050-05d | Backup Washer |
| 5e | A125050-05e | Hallite Rod Seal |
| 5f | A125050-05f | Snap-in Rod Wiper |
| 6 | A123351 | Pin Keeper Bushing |
| 7 | AFB-00015 | 1/2" X 1 1/2" Gr 8 Bolt |
| 8 | A123362 | Rod End Pin 1 1/2 X 4 1/2 |
| 9 | A123363 | Barrel End Pin 1 1/2 X 4 18 Sq. Head |
| 10 | A125050-06 | Cylinder Barrel |
| 11 | 8602 | Cotter Pin |

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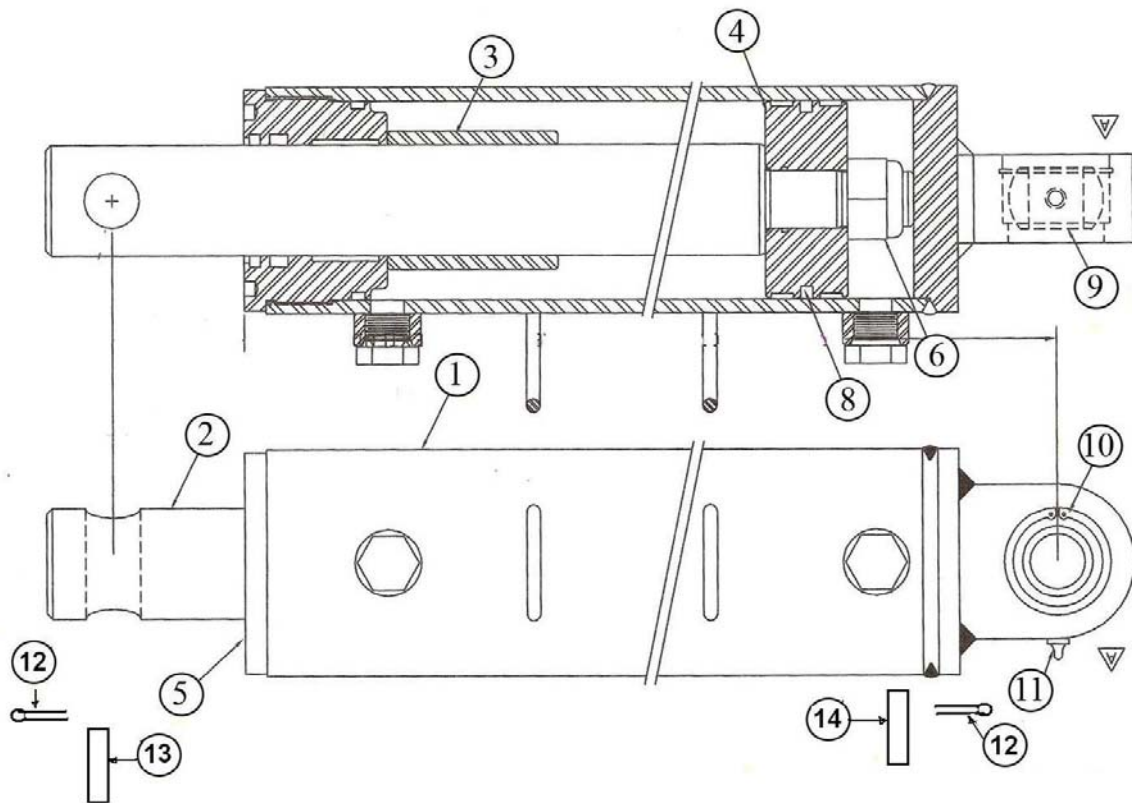
Hydraulic Cylinder Dig & Lift Circuit



| Key Number | Part Number | Description |
|------------|-------------|---|
| 1 | A45H04A | Barrel Assembly -2" ear 1 1/4" hole |
| 2 | A300H06 | O-ring, 4" OD x 3/16" |
| 3 | A300H11 | Head gland |
| 4 | A300H12 | Retainer ring |
| 5 | A22H15 | O-ring, 1-1/2" ID x 1/8" |
| 6 | A22H15A | Backup washer |
| 7 | A300H13 | Head cap |
| 8 | A22H18 | Capscrew, 1/4" x 1" |
| 9 | A22H17 | Wiper seal, 1-1/2" ID |
| 10 | 8602 | Cotter pin, 1/4" x 2" |
| 11 | A123383 | Pin, 1-1/4" x 7" w/ square head (for units w/Dog Bone, 06/04) |
| 12 | A45H03-114 | Shaft, 1-1/2" diameter |
| 13 | A45H05 | Piston gasket, 1" ID |
| 14 | A300H07 | Piston, 4" |
| 15 | A300H05 | Backup washer, 4" OD |
| 16 | A300H04 | Cast iron ring, 4" OD |
| 17 | A300H03 | Piston nut |
| 18 | 14505 | Grease fitting |
| | A300H14B | Packing kit containing: *See Note* |
| | | 1- A300H04 2- A-22H15 2 - A300H05 1-A22H15A |
| | | 2-A300H06 1-A22H17 1-A45H05 |

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Pushgate Cylinder



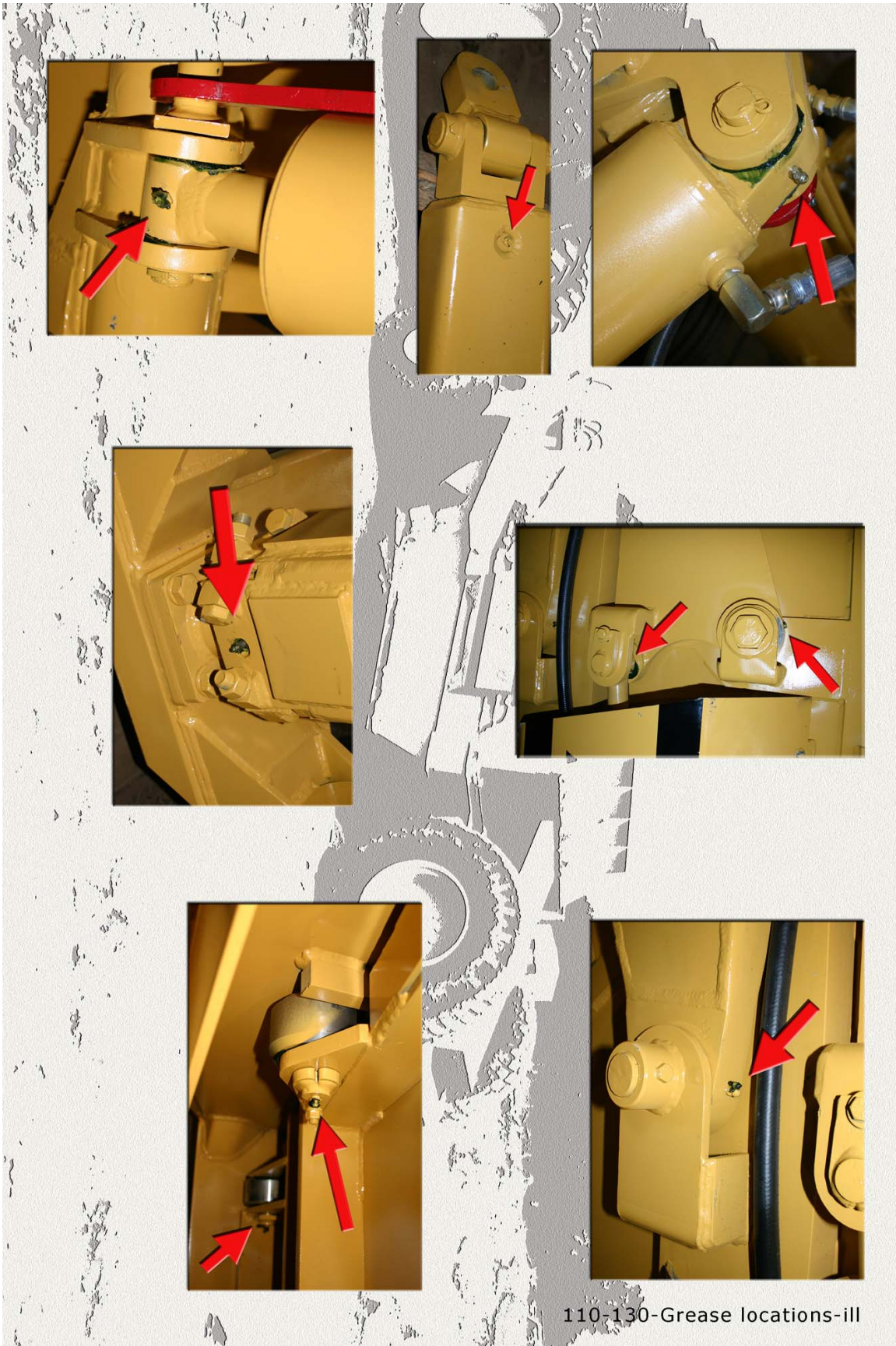
Part # A125176

110X-A125176-22037

| Key Number | Part Number | Description |
|------------|-------------|----------------------|
| | A125176 | Pushgate Cylinder |
| 1 | A125176-10 | Barrel Weldment |
| 2 | A125176-20 | Shaft |
| 3 | A125176-32 | Spacer |
| 4 | A125176-30 | Piston |
| 5 | A125176-31 | Head |
| 6 | A125175-33 | 1 1/4" Nylock Nut |
| 7 | A125176-40 | Seal Kit |
| 8 | A125175-35 | Bearing |
| 9 | A125175-36 | Snap Ring |
| 10 | A125175-37 | Grease Zerk |
| 11 | 8602 | 1/4" X 2" Cotter Pin |
| 12 | A14033 | Pin: Rod End |
| 13 | A9024 | Pin: Barrel End |

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Grease Locations (Grease Twice a Day)



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Hydraulic Manifold Assembly



IMPORTANT: This Hyd. Manifold was integrated into production April, 2006 It replaces A125070 valve.

For older machines see master parts book on Ashlandind.com.

HYDRAULIC MANIFOLD ASSEMBLY

A125174

SETTING THE APRON AND PUSHOFF VALVE

The manifold block containing the pushoff sequence valve cartridge and apron sequence valve cartridge is used to control two hydraulic circuits with one hydraulic remote. when the tractor hydraulic remote is activated, oil flows first to the apron cylinders until they are fully extended. Once the cylinders are fully extended, the apron circuits' hydraulic pressure begins to increase. Once the pressure threshold is surpassed (which is adjustable. See adjustment section), the sequence valve diverts the oil flow to the pushoff's hydraulic circuit. Once the push off is completely extended the operator then reverses the tractors hydraulic remote. The counterbalance valve will hold the apron open until the push off is fully retracted. The Apron sequence valve then opens and allows the apron to close.

Setting the valves:

STEP 1 PUSHOFF SEQUENCE VALVE

Loosen the lock nut (9/16") on the sequence valve cartridge. Turn the setscrew (4mm) clockwise until the front apron rises before the push-off begins to advance. (Earthmover should be empty) Turn the adjustment screw an additional 1/4 turn clockwise and tighten jam nut.

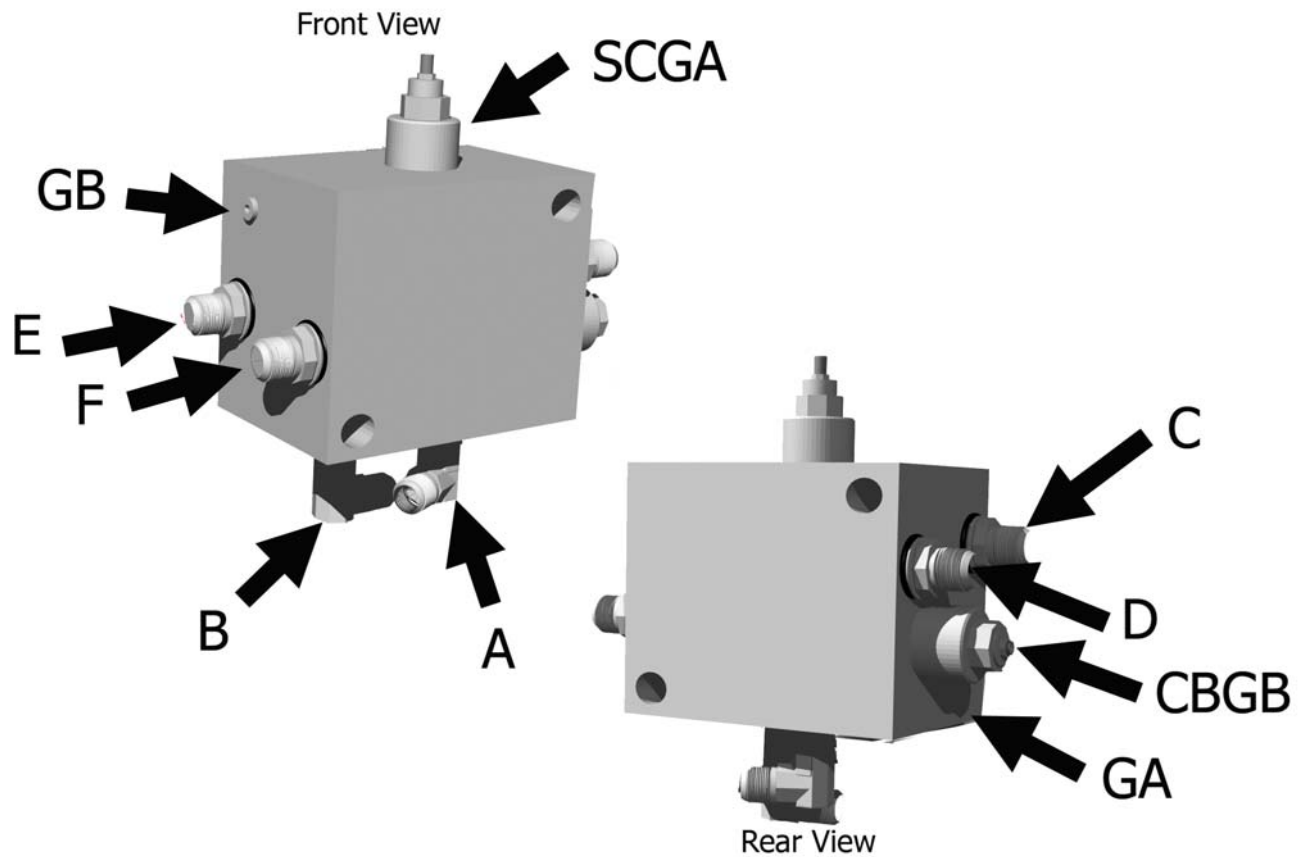
STEP 2 Counter Balance VALVE

Loosen the lock nut (9/16") on the counterbalance valve cartridge. Turn the setscrew (4mm) counter-clockwise until the apron holds in a raised position while rear gate is being retracted. Turn adjustment screw an additional 1/4 turn, tighten jam nut. DO NOT tighten adjusting screw more than necessary.

| Key Number | Part Number | Description |
|-------------------|--------------------|---------------------------|
| 1 | A125162-01 | COUNTER BALANCE CARTRIDGE |
| 2 | A125162-02 | SEQUENCE CARTRIDGE |

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Hydraulic Valve Assembly Ports

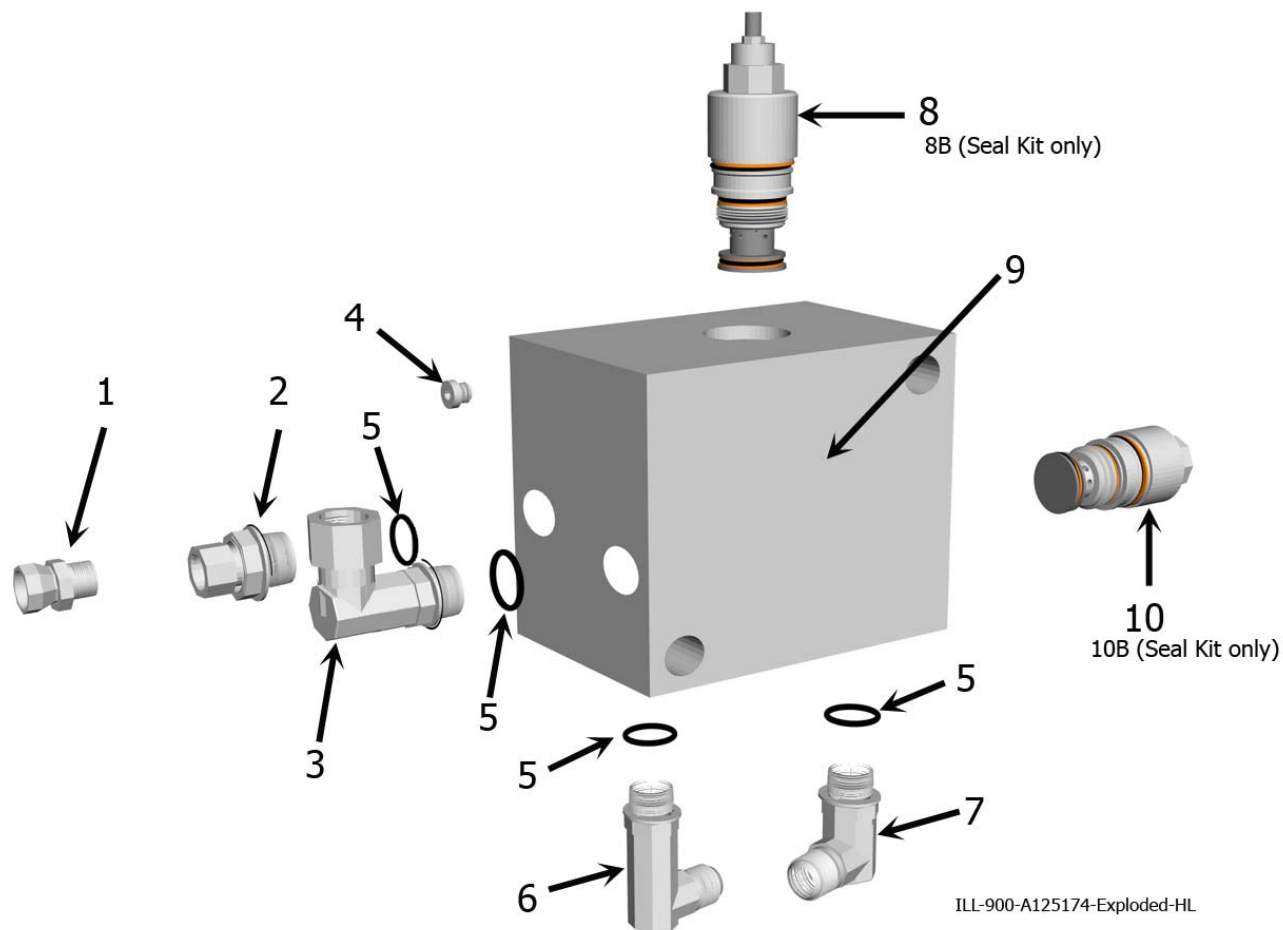


ILL. A125174 Port Location

| Key Number | Description |
|------------|---|
| A | Supply Line |
| B | Pushoff Cyl. (Rod End) - Apron Cyl., Right Side (Rod End) - Supply Line |
| C | Pushoff Cylinder (Base End) |
| D | Apron Cylinder, Right Side, (Base End) |
| E | Apron Cylinder, Left Side, (Rod End) |
| F | Apron Cylinder, Left Side, (Base End) |
| CBGB | Counterbalance Valve, adjustable |
| SCGA | Sequence Valve, adjustable |
| GA | Pressure test port |
| GB | Pressure test port |

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Hydraulic Valve Seal Kit



| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|-------------|-----------------|---|
| 1 | AHA-00076 | Adapter: Str. Swiv ½ MP X ½ FP. 109 Rest |
| 2 | AHA-00043 | Adapter: Str. Sw. 1 1/16 M ORB X ½ FP |
| 3 | AHA-00048 | Adapter: 90 Deg. Swiv. 1 1/16 M ORB X ½ FP |
| 4 | AHA-00046 | 6 ORB Plug |
| 5 | AHS-00153 | O-ring for 12 M ORB Fitting |
| 6 | AHA-00047 | Adapter: 90 Deg. XL ¾ MJ X 1 1/16 M ORB |
| 7 | AHA-00044 | Adapter: 90 Deg. ¾ MJ X 1 1/6 M ORB |
| 8 | A125162-02 | Valve: Sequence Cartridge for Ver. III & IV |
| 9 | A125174 | Valve: Manifold Block IV Body |
| 10 | A125162-01 | Valve: Counterbalance Cartridge for Ver. III & IV |
| Seal Kits: | A125162-01KIT | Seal Kit for A125162-01 Valve Cartridge |
| | A125162-02KIT | Seal Kit for A125162-02 Valve Cartridge |

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Maintenance check list

MAINTENANCE CHECKLIST

1. Grease all zerks.
 - a) Every 8 hours of operation.
 - b) See Lubrication Points section on next page.

2. Greasing the hubs.
 - a) Re-pack wheel bearings after 600 hrs of operation.
 - b) Completely clean grease out of hub and bearings every 1200 hours of operation.

3. Check tire pressure.
 - a) 20.5 - 25, 12-ply tire requires a tire pressure of 35-40 psi on a rear machine, 40-50 on a front machine.

4. Check all pins for signs of wear.
 - a) Daily

5. Check wheel lug nut torque.
 - a) After first 2 hours of operation.
 - b) Recheck daily for next 2 weeks.
 - c) Tighten wheel lug nuts in a star pattern.
 - d) Torque wheel lug nuts to 450 ft-lbs.

6. Check and retighten all bolts.
 - a) After initial 10 hours of use.
 - b) Again after 50 hours of use.
 - c) See Torque Specifications on next page.

7. Inspect cutting edges.
 - a) Daily
 - b) Replace cutting edges when center blade has been worn to approximately 6" and side edges worn to approximately 4".



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

Note: Please specify left or right "L" shaped cutting edges when ordering replacements.

I-110 XL2

Torque Specifications

TORQUE SPECIFICATIONS

| <i>Bolt Diameter</i> | <i>Torque Ft-lbs</i> |
|--------------------------|--------------------------|
| <i>1/4</i> | <i>12</i> |
| <i>5/16"</i> | <i>25</i> |
| <i>3/8"</i> | <i>45</i> |
| <i>7/16"</i> | <i>70</i> |
| <i>1/2"</i> | <i>110</i> |
| <i>9/16"</i> | <i>150</i> |
| <i>5/8"</i> | <i>220</i> |
| <i>3/4"</i> | <i>380</i> |
| <i>7/8"</i> | <i>600</i> |
| <i>1"</i> | <i>900</i> |
| <i>1-1/8"</i> | <i>1280</i> |
| <i>Lug Nuts</i> | <i>750</i> |

LUBRICATION

1. Grease all zerks every 8 hrs of operation with high quality, general-purpose grease.
 - a) Grease until grease flows from around pin.

Lubrication Points (see III.)

1. Hitch – Horizontal and vertical pins.
2. Lift Cylinders – Rod end & Trunion; Both left & right sides.
3. Front Arm Pivot Joint – Both left & right sides.
4. Apron Cylinders – Rod clevis pin; Both left & right sides.
5. Apron Pivot Pin – Both left & right sides.
6. Hold-down Rollers – Both left & right sides.
7. Floor Rollers – Both left & right sides.
8. Tapered Rollers – Both left & right sides.

I-110 XL2

Troubleshooting1

TROUBLESHOOTING

Introduction

With proper care and maintenance, the I-110XL will give many years of reliable service. When a situation arises where the earthmover performance is not satisfactory, this section will give some pointers on finding and correcting the problem.

Grease zerk will not take grease.

1. Grease zerk plugged.
 - a) Remove and replace grease zerk.
 2. Pin is frozen.
 - a) Remove, clean, and inspect pin.
 - b) Replace pin if necessary.
 3. Bushing grease passage is not aligned with grease zerk.
 - a) Remove, clean, inspect, and realign bushing.
 - b) Replace bushing if necessary and realign.
-

Push-off rollers do not roll.

1. The rollers need lubrication.
 - a) Check zerk hole and grease.
 - b) Remove pin, clean, inspect, and replace if necessary.
 2. The roller bushing is worn out.
 - a) Remove roller assembly and replace bushing.
 - b) See parts manual.
-

Cylinders will not hold in preset position, i.e. the cylinder creeps.

1. Seals leaking internally.
 - a) Remove and replace seal kit.
-

Machine cuts unevenly.

1. Cutting edges worn unevenly.
 - a) Replace cutting edges.
 2. Improperly inflated tires.
 - a) Check air pressure in tires.
-

I-110 XL2

Pushing the Earthmover



PUSHING THE EARTHMOVER

The I-110XL was designed to be pushed when equipped with the optional push-bar. However, Ashland Industries, Inc. **STRONGLY** recommends using extreme caution when pushing the I-110XL earthmover to prevent any unnecessary damage.

CAUTION! The I-110XL earthmover must be pushed in a straight line with a maximum of a 100 hp dozer. Do not ram or jar the earthmover while pushing and push at a constant speed.

I-110 XL2

Warranty Statement

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 **six consecutive months** from the date of delivery of the new Ashland Industries product to the 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 Industrial series scrapers are warranted for three consecutive months from the date of delivery of the new Ashland Industries 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.

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, socket halves, 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. make 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 direct 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.

Ashland Industries Inc.
Warranty Department