

Ashland **INDUSTRIES, INC.™**

*Quality
Equipment
Since
1953*

I-140 **PARTS MANUAL**

Version 4-04

Ashland Industries Inc.
1115 Rail Drive
P.O. Box 717
Ashland, WI. 54806
Ph: 877-634-4622 *Toll Free*
Ph: 715-682-4622
Fx: 715-682-9717
www.ashlandind.com

MEMBER
CIMA
CONSTRUCTION INDUSTRY
MANUFACTURERS ASSOCIATION



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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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.



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.

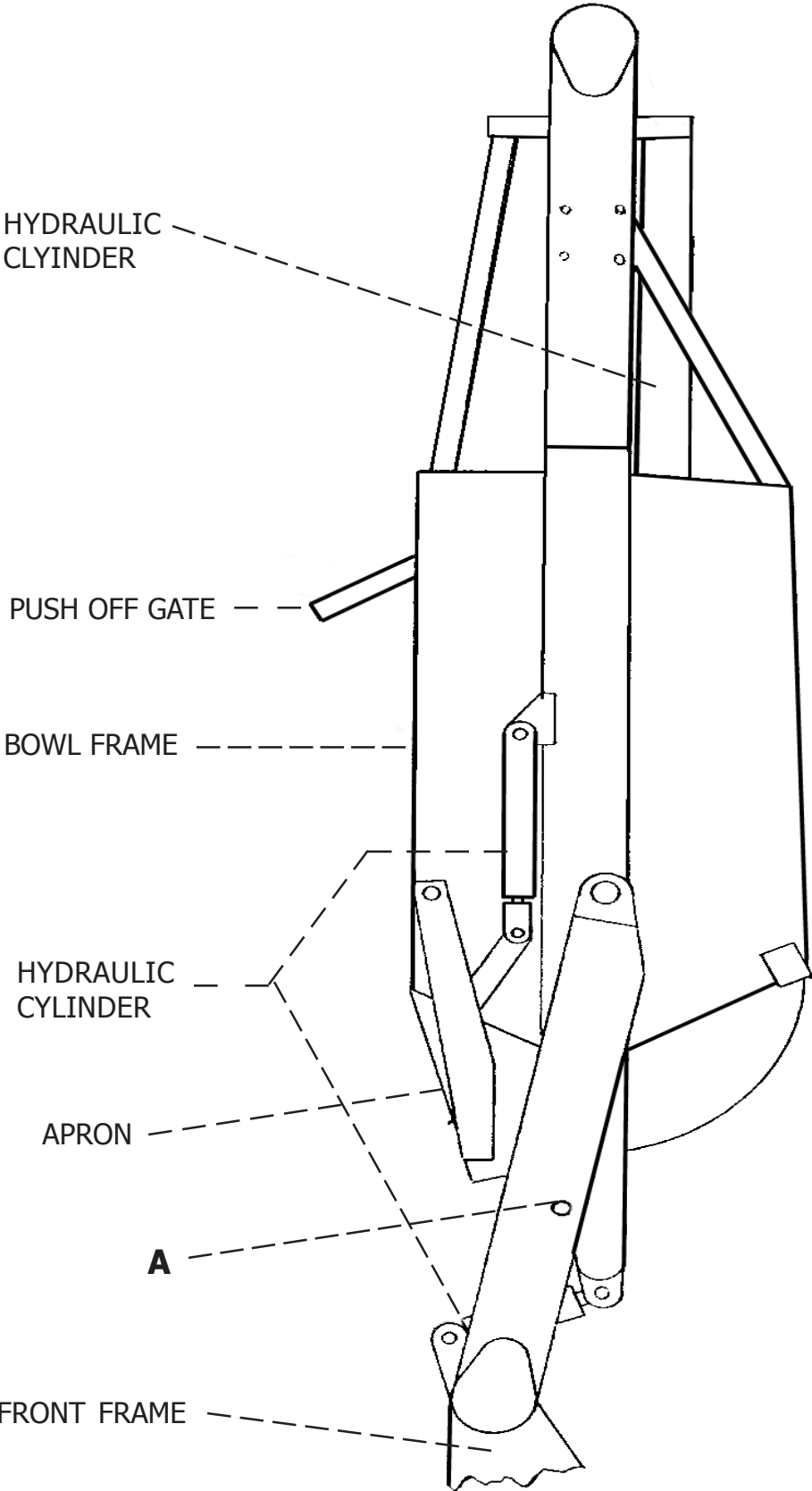
Review the safety instructions with all users annually.

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.**

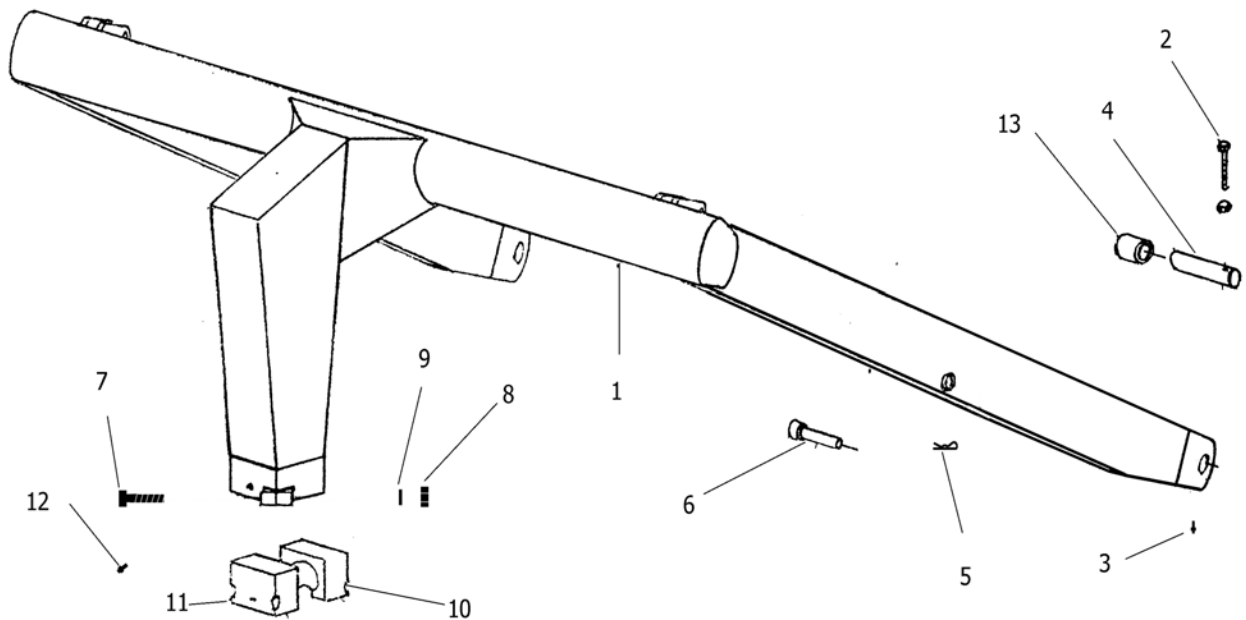
To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

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.**

ILLUSTRATION - ASSEMBLY



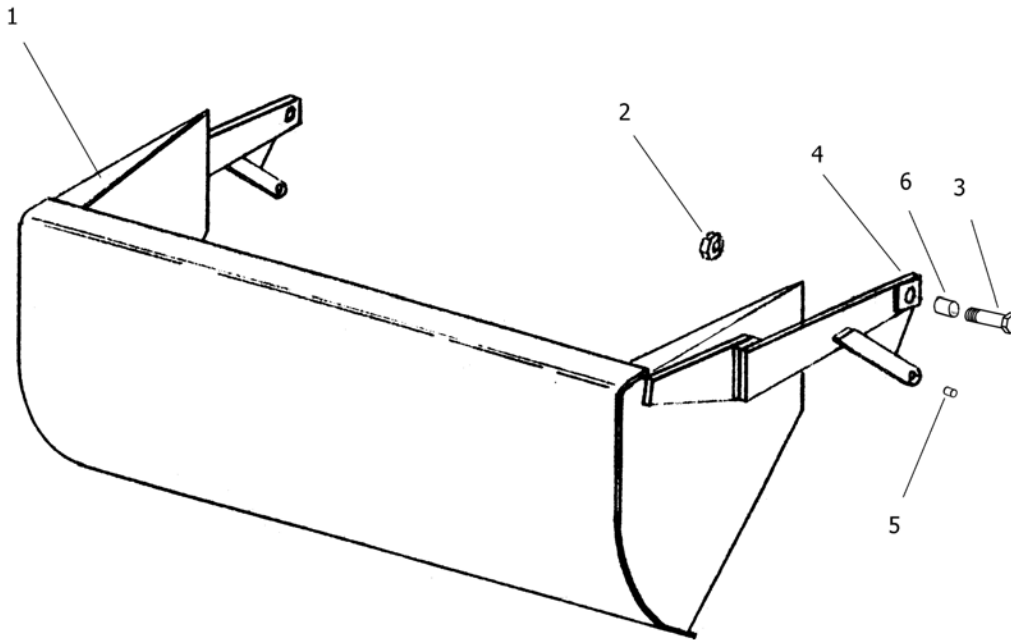
I-140 GOOSENECK FRAME ASSEMBLY



PARTS LIST GOOSENECK FRAME ASSEMBLY MODEL I-140

KEY NO.	PART NO.	DESCRIPTION
1.	A14001B	Gooseneck Frame for serial number 17815 and up
2.	AFB-00054	Bolt, 1/2" NC x 3-1/2" Lg.
3.	14505	Grease Zerk - Straight
4.	A10152A	Pin, Frame Attachment, 2" OD x 8-1/16" Long
5.	-----	Hair Pin
6.	A10153	Pin, Transport Lock
7.	-----	Bolt, 7/8"NF x 5" Lg. Grade 8
8.	7597	Nut, 7/8"NF
9.	8125	Lockwasher 3/4"
10.	A14002	Cast Socket Half - Rear
11.	A14003	Cast Socket Half - Front w/Zerk Hole
12.	A2206	Grease Zerk - Long Shank
13.	A14039	Bushing, 2-3/8" OD x 2" Long

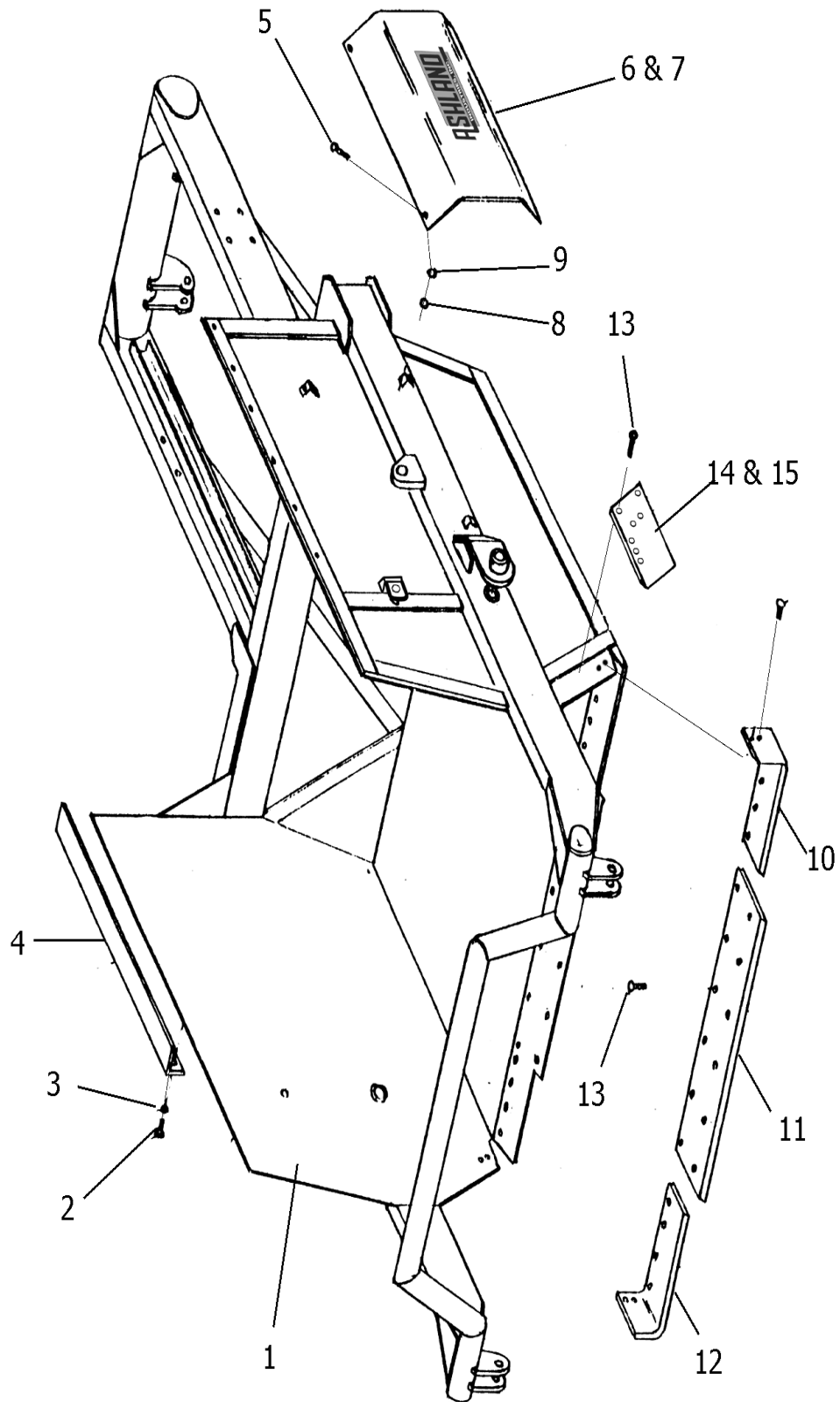
I-140 APRON ASSEMBLY



PARTS LIST APRON ASSEMBLY MODEL I-140

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A14025A	Apron Model I-140
	A16025A	Apron Model I-160, s/n 17332 to 17581
	A16025B	Apron Model I-160, s/n 17642 to 17697
	A16025C	Apron Model I-160, s/n 17698 and up
2.	AFN-00024	Self Lock Nut, 1-1/4"NF
	AFN-00018	Self Lock Nut, 1-1/2" NF
3.	A6010	Shoulder Pin, 1-5/8" x 1-1/4", up to s/n. 17130
	A17506	Shoulder Pin, 2-1/4" x 1-1/4", s/n 17332 to 17581
	A17506A	Shoulder Pin, 2-1/4" x 1-1/2", s/n 17642 to 17697
	-----	Bolt, 1-1/2"NF x 6" Lg., for s/n 17698 and above
4.	14505	Grease Fitting, 1/8" NPT
5.	A10155	Bushing, 1-1/2" OD x 1" ID x 1" Lg.
6.	A16027	Bushing, 2" OD x 1-1/2" ID x 2" Lg. for s/n 17698 and above

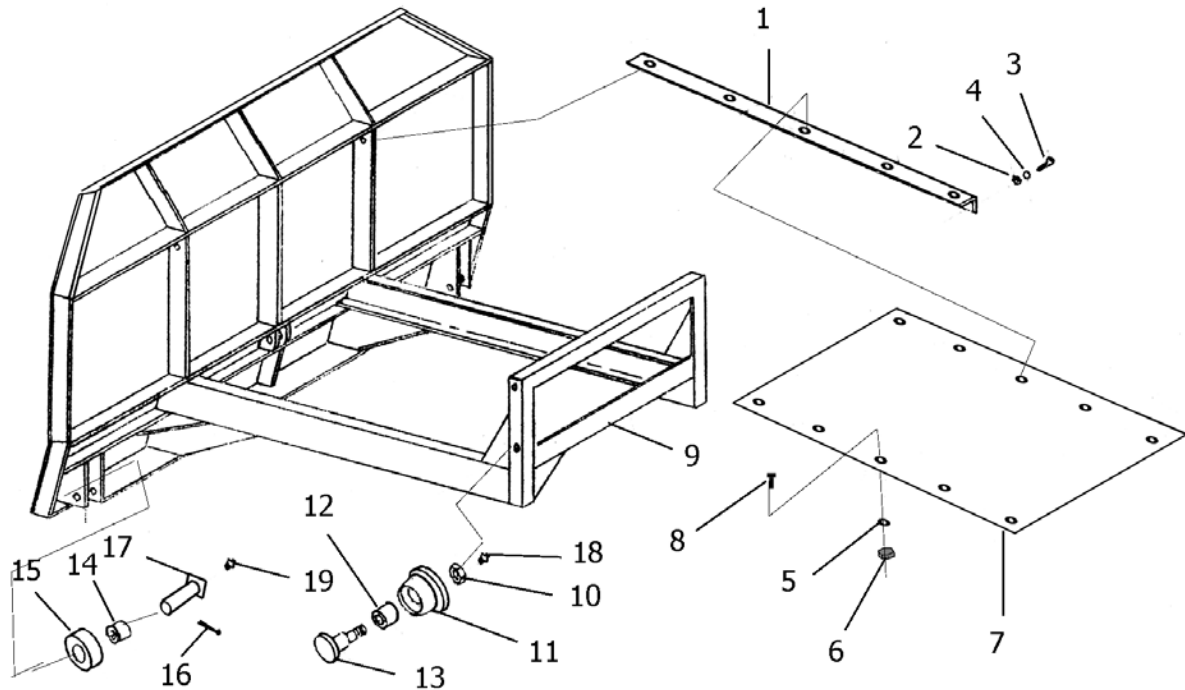
I-140 BOWL AND FRAME ASSEMBLY



**PARTS LIST
BOWL AND FRAME ASSEMBLY
MODEL I-140 SCRAPER**

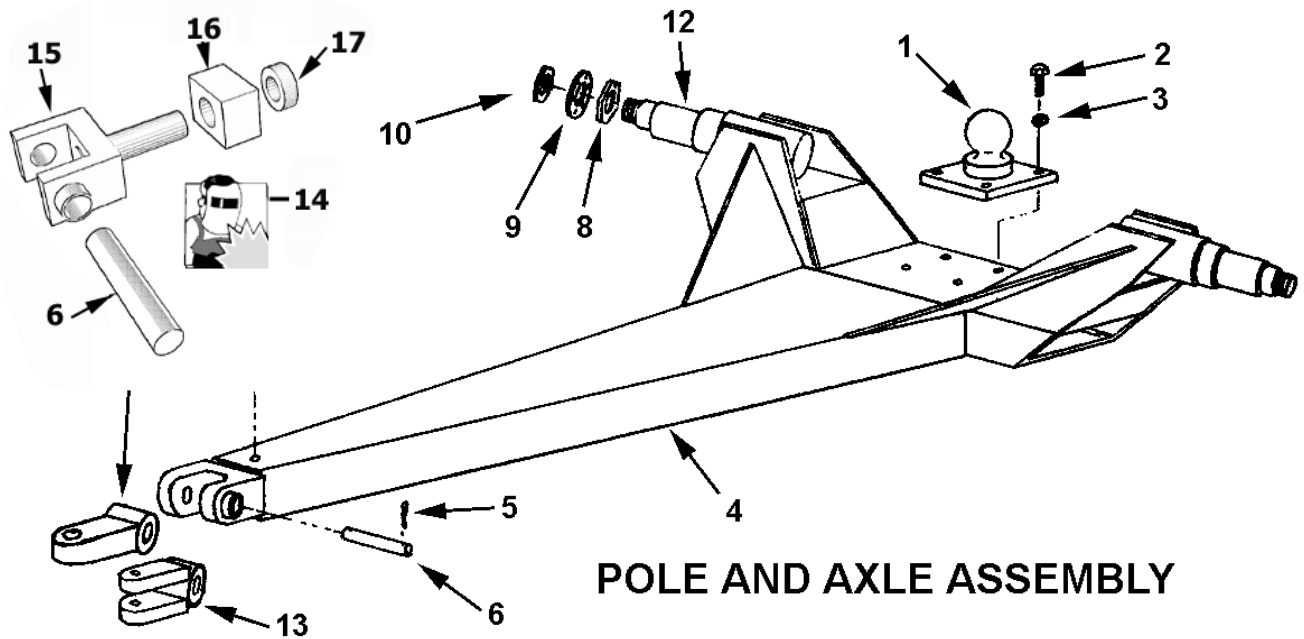
<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A14026	Bowl and Frame, Model I-140
17581	A16026A	Bowl and Frame, Model I-160 - serial number 17332 to
17697	A16026B	Bowl and Frame, Model I-160 - serial number 17642 to
up	A16026C	Bowl and Frame, Model I-160 - serial number 17698 and
2.	7115	Capscrew 5/8"NC x 1-1/4" Lg.
3.	8100	Lockwasher 1/2"
4.	A17504	Gate Containment Angle
5.	6835	Bolt 3/8"NC x 1" Lg.
6.	A10157	Cylinder Guard - Left Hand
7.	A10158	Cylinder Guard - Right Hand
8.	7450	Nut 3/8" NC
9.	8078	Lockwasher 3/8"
10.	A10011A	Left Cutting Edge
11.	A14029	Center Cutting Edge
12.	A10010A	Right Cutting Edge
13.	PB8P-NC-063-0250	Plow Bolt 5/8"NC x 2-1/2" Lg.
14.	A14031	Left Shaver Bit - serial number up to 17581
	A14031A	Left Shaver Bit - serial number 17642 and up
15.	A14032	Right Shaver Bit - serial number up to 17581
	A14032A	Right Shaver Bit - serial number 17642 and up

I-140 PUSH OFF GATE ASSEMBLY



PARTS LIST PUSH OFF ASSEMBLY MODEL I-140

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A14022	Brace
2.	AFN-00006	Nut 3/4" NC
3.	----	Bolt 3/4" NC x 1-1/2" Lg.
4.	AFW-00002	Lockwasher 3/4"
5.	8078	Lockwasher 3/8"
6.	7450	Nut 3/8" NC
7.	A14023	Dirt Shield
8.	6835	Bolt 3/8 NC x 1" Lg.
9.	A14024	Pushoff Gate, Model I-140
10.	AFN-00024	Jam Nut 1-1/4" NF
11.	A10161	Roller - Rear Gate
12.	A10162	Bushing 2" OD x 1-5/8" ID
13.	A10008	Shoulder Pin 1-5/8" to 1-1/4" Zerk in Thread
14.	A10163	Bushing 1-3/4" OD x 1-1/4" ID
15.	A10164	Roller - Front Gate
16.	----	Cotter Pin 1/4" x 2" Lg.
17.	A6007A	Pin 1-1/4" x 4-1/8" Lg.
18.	14505	Grease Fitting 1/8" NPT
19.	AHF-00028	Grease Fitting 1/8" NPT -90 degree

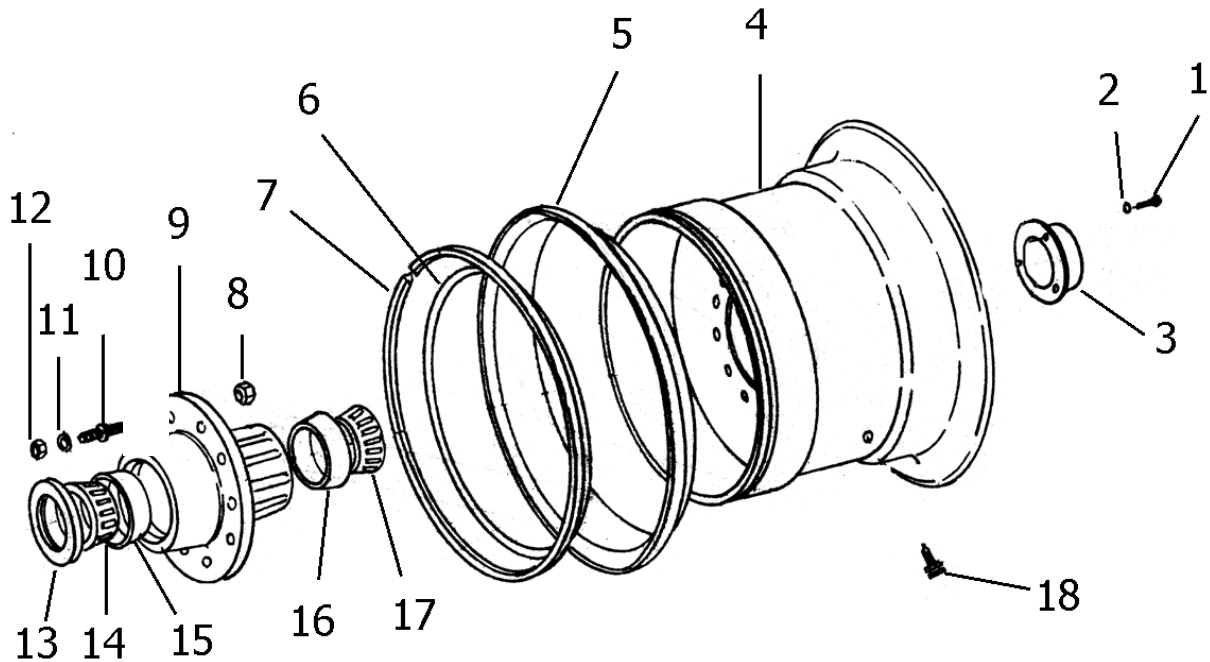


POLE AND AXLE ASSEMBLY

PARTS LIST POLE and AXLE ASSEMBLY MODEL I-140

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A14017	Ball Swivel
2.	AFB-00018	Bolt 1" NC x 3" Long
3.	AFW-00006	Lockwasher 1"
4.	A14018	Pole
5.	-----	Cotter Pin 5/16" x 3" Long
6.	A14019	Pin 1-3/4" x 7-3/8" Long
7.	A14020A	Swivel Hitch Single Lip
8.	A10172	Nut with Lock Pin
9.	A10049A	Lock Collar
10.	A10048	Spindle Nut
11.	14505	Grease Fitting
12.	A14021	Spindle (weld on)
13.	A14020	Swivel Hitch, Double Lip (optional)
14.	A082875W	Swivel Hitch Rebuild Kit, includes thrust block, thrust collar, yoke, cross shaft.
15.	A082875	Hitch: Swivel Yoke
16.	A123166	Hitch: Swivel Block
17.	A083075	Hitch: Retaining Collar

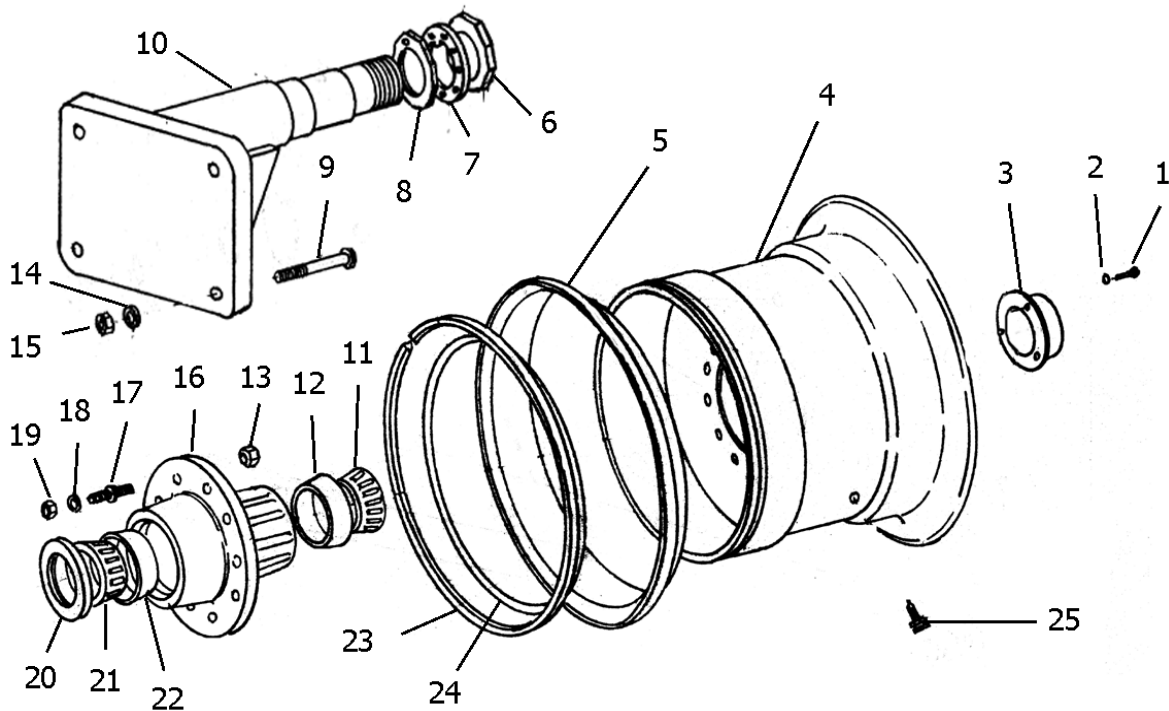
FRONT WHEEL AND HUB ASSEMBLY



PARTS LIST FRONT WHEEL and HUB ASSEMBLY MODEL I-140

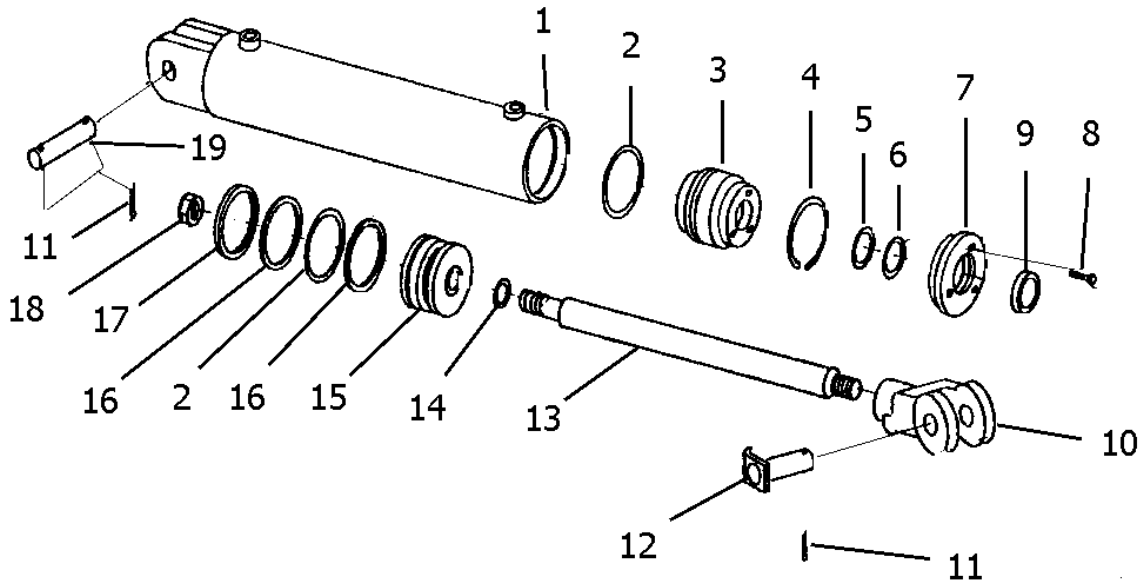
<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	AFB-00026	Bolt 5/16" NC x 3/4" Lg.
2.	8070	Lockwasher 5/16"
3.	A14004	Hub Cap
4.	A14006A	Wheel 14" x 25"
5.	A14007A	Side Ring for 14" x 25" Wheel
6.	A14008	"O" Ring
7.	A14009	Lock Ring
8.	A10046	Lug Nut
9.	A14010	Hub
10.	A10044	Lug
11.	AFW-00002	Lockwasher 3/4"
12.	-----	Nut 3/4" NF
13.	A14011	Grease Seal
14.	A14012	Bearing Cone
15.	A14013	Bearing Cup
16.	A14014	Bearing Cup
17.	A14015	Bearing Cone
18.	A14016	Valve Stem

REAR WHEEL AND HUB ASSEMBLY



<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	AFB-00026	Bolt 5/16" NC x 3/4" Lg.
2.	8070	Lockwasher 5/16"
3.	A14004	Hub Cap
4.	A14035	Wheel 17" x 25"
5.	A14036	Side Ring
6.	A10048	Spindle Nut
7.	A10049A	Lock Collar
8.	A10172	Nut with Lock Pin
9.	AFB-00024	Bolt 1" NF x 7" Lg.
10.	A14037	Spindle
11.	A14015	Bearing Cone
12.	A14014	Bearing Cup
13.	A10046	Lug Nut
14.	AFW-00006	Lockwasher 1"
15.	AFN-00017	Nut 1" NF
16.	A14010	Hub
17.	A10044	Lug
18.	AFW-00002	Lockwasher 3/4"
19.	----	Nut 3/4" NF
20.	A14011	Grease Seal
21.	A14012	Bearing Cone
22.	A14013	Bearing Cup
23.	A14038	Lock Ring
24.	A14008	"O" Ring
25.	A14016	Valve Stem

HYDRAULIC CYLINDER - A413H1, 4" X 13" APRON CIRCUIT, RIGHT SIDE

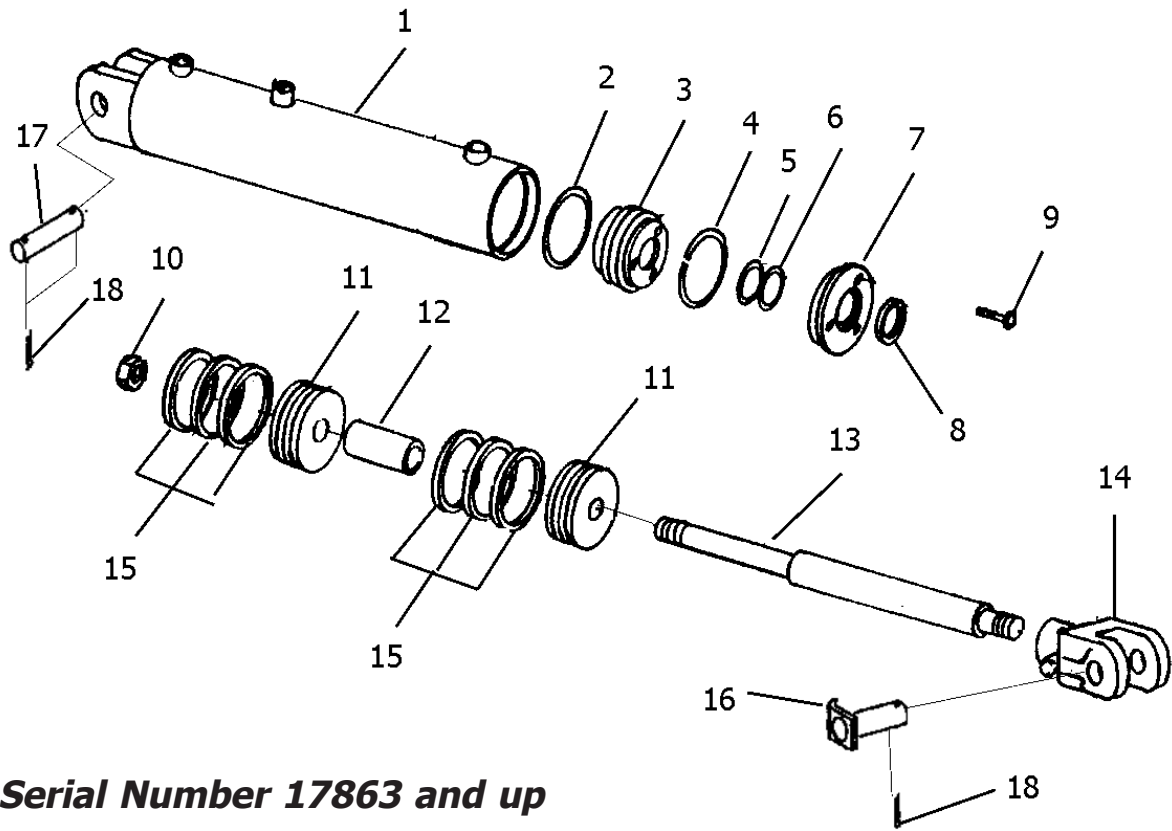


PARTS LIST RIGHT SIDE APRON CYLINDER

For Serial Number 17863 and up

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A175H013	Cylinder Barrel
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, 1-1/2"
7.	A300H13	Gland Cap
8.	A22H18	Capscrew, 1/4" NC x 1"
9.	A22H17	Wiper Seal, 1-1/2" ID
10.	A12H03	Clevis End
11.	-----	Cotter Pin, 3/16" x 1-1/2"
12.	A10167	Pin, 1" x 3-1/16"
13.	A175H02	Shaft, 1-1/2" Dia.
14.	A45H05	Piston Gasket, 1"
15.	A300H07	Piston, 4" Dia.
16.	A300H05	Backup Washer, 4" OD
17.	A300H04	Cast Iron Ring, 4" OD
18.	A300H03	Piston Nut, 1" NF
19.	A1217	Pin, 1" x 3-1/2"
	A300H14B	Packing Kit, Containing:
	(1) A300H04	(2) A22H15
	(2) A300H06	(1) A22H17
	(1) A45H05	

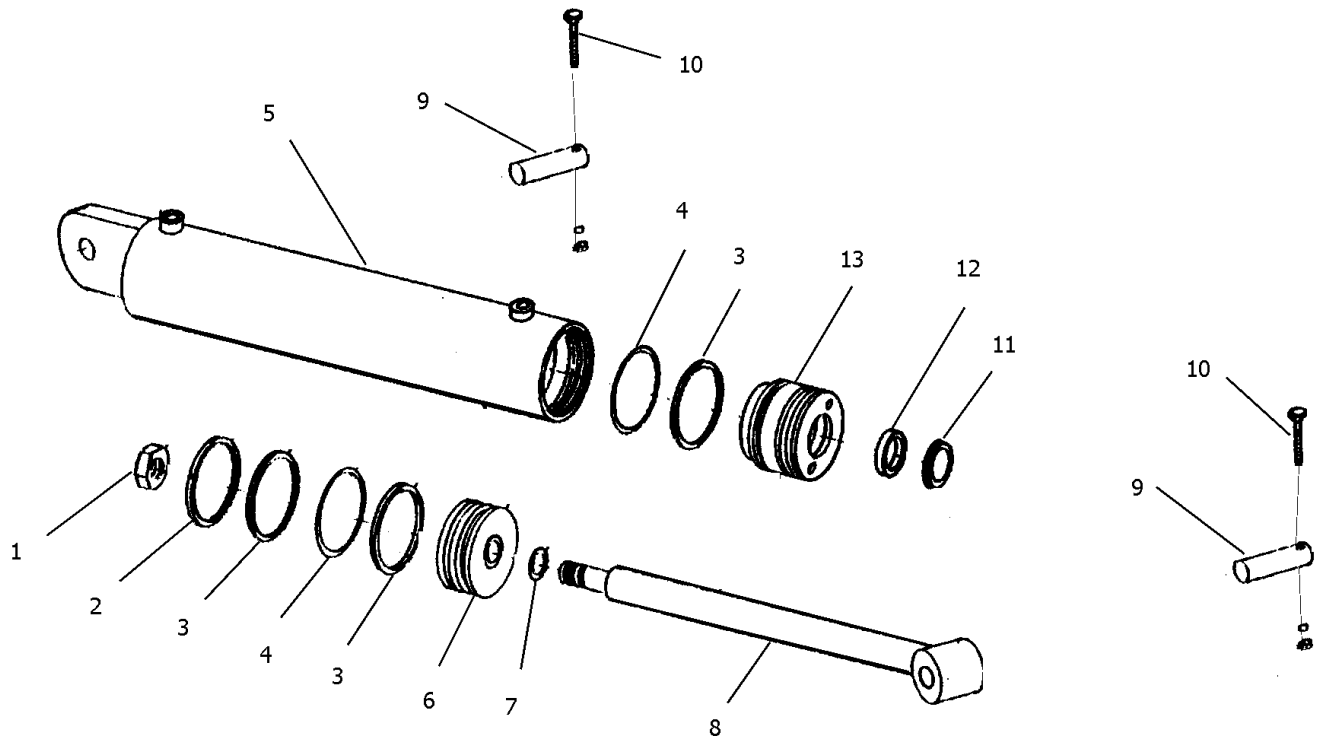
**3 PORT HYDRAULIC CYLINDER - AS413H1, 4" X 13"
APRON CIRCUIT, LEFT SIDE**



For Serial Number 17863 and up

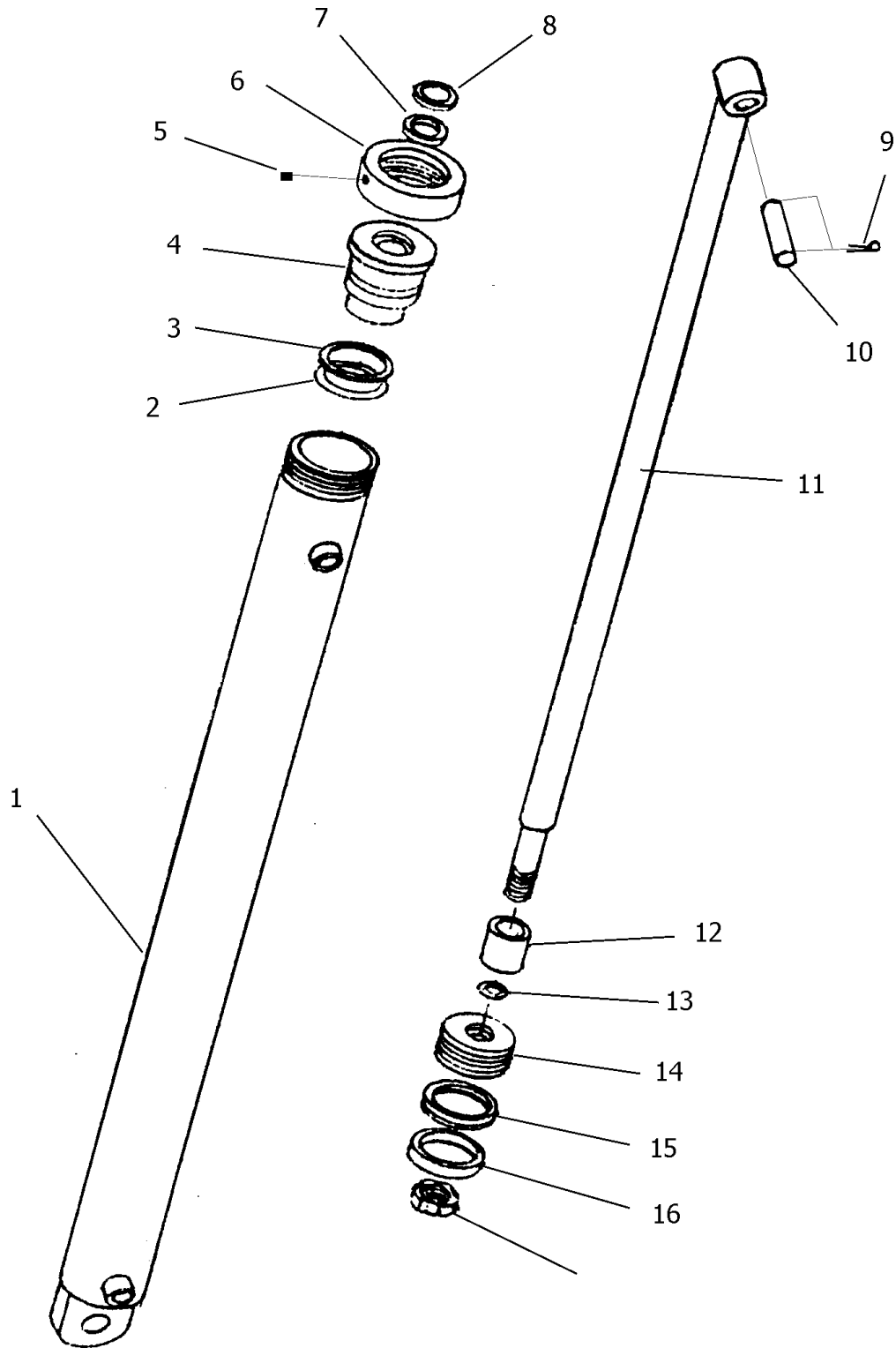
KEY NO.	PART NO.	DESCRIPTION
1.	A175H013	Cylinder Barrel
2.	A300H06	"O" Ring, 4" OD x 3/16"
3.	A300H11	Head Gland
4.	A300H12	Retainer Ring
5.	A22H15	"O" Ring, 1-1/2"ID x 1/8"
6.	A22H15A	Backup Washer, 1-1/2"
7.	A300H13	Gland Cap
8.	A22H17	Wiper Seal, 1-1/2" ID
9.	A22H18	Capscrew, 1/4" NC x 1"
10.	A300H03	Piston Nut
11.	A450H15	Piston, 4"
12.	A130H12	Piston Spacer
13.	A175H14	Shaft, 1-1/2"
14.	A12H03	Clevis End
15.	A300H04	Cast Iron Rings, 4" OD
16.	A10167	Pin, 1" x 3-1/16"
17.	A1217	Pin, 1" x 3-1/2"
18.	-----	Cotter Pin, 3/16" x 1-1/2"
	A130H23	Packing Kit, Containing:
		(6) A300H04 (1) A22H17
		(1) A22H15(1) A22H15A
		(1) A300H06

HYDRAULIC CYLINDER - A520H114 5" X 20" LIFT CYLINDER



<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A400H17	Nut 1-1/4" NF, Lock Type
2.	A400H04	Cast Ring, 5" OD
3.	A400H05	Back-up Washer, 5" OD x 1/4"
4.	A400H06	"O" Ring, 5" OD x 1/4"
5.	A80H02A	Barrel Assembly with 1-1/4" holes
6.	A80H01	Piston, 5" OD
7.	A60H52	"O" Ring, 1-1/4" OD x 1/16"
8.	A80H08A	Shaft 2" Dia.
9.	A6007A	Pin, 1-1/4" x 4-1/8 with Square Head & Grease Hole
10.	-----	Bolt 1/4" NC x 2" Lg. with Nut & Lockwasher
11.	A80H06	Wiper Seal 2" ID
12.	A80H04	Seal 2" ID
13.	A80H05A	Head Gland
	A80H07	Packing Kit, Containing:
	(1) A400H04	(1) A60H52
	(3) A400H05	(1) A80H04
	(2) A400H06	(1) A80H06

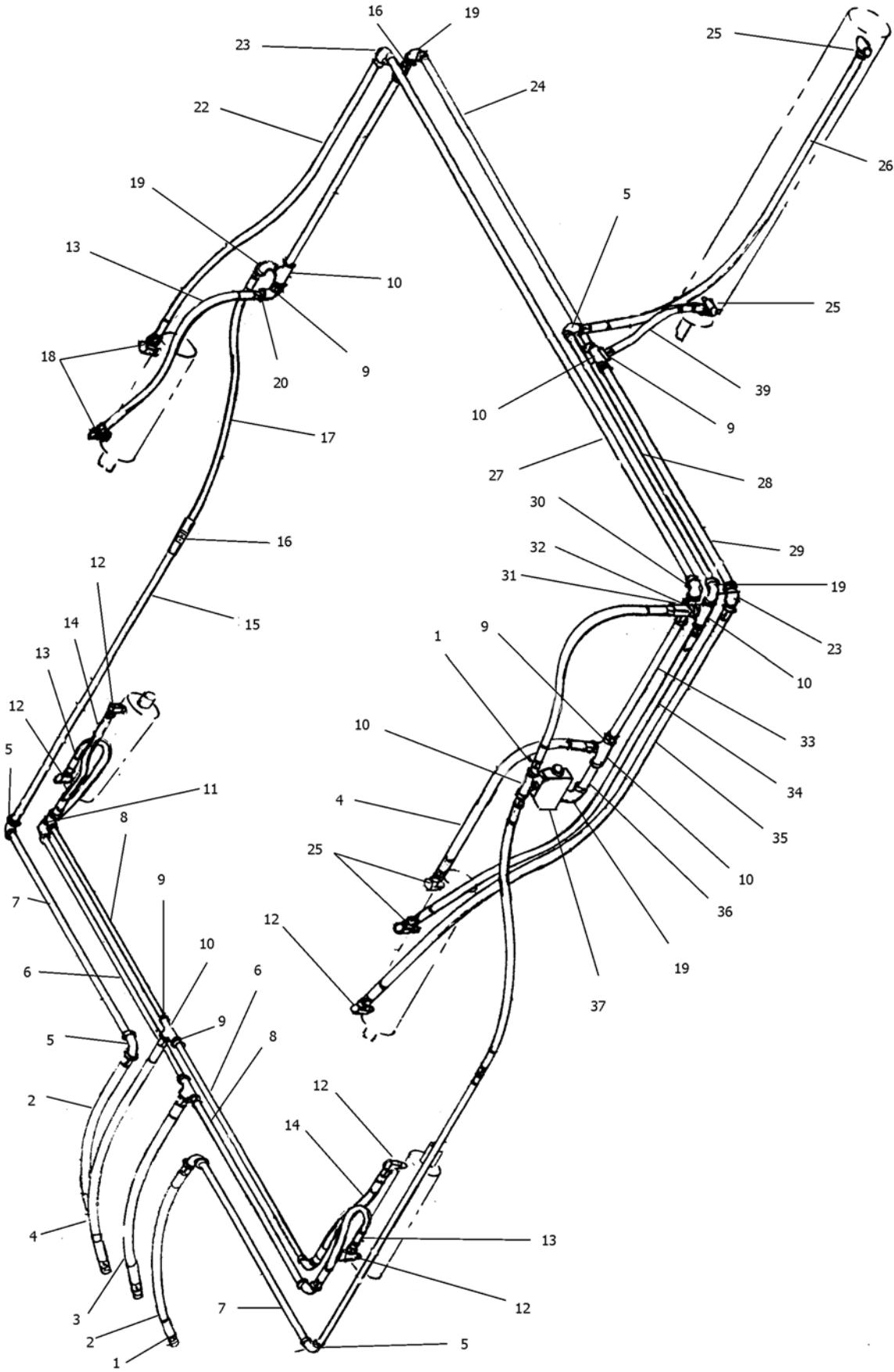
**HYDRAULIC CYLINDER - A4560H114, 4-1/2" X 60"
PUSH OFF CYLINDER**



PARTS LIST
PUSH OFF CYLINDER, A4560H114, 4-1/2" x 60"
 For Serial Number 17488 and up
MODEL I-140

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A175H08	Barrel Assembly, 4-1/2" Bore
2.	A175H03	"O" Ring, 4-1/2" OD x 4-1/8" ID
3.	A175H04	Back Up Washer, 4-1/2" OD x 4-1/8" ID
4.	A175H09	Head Gland
5.	-----	Set Screw, 3/8" NC
6.	A175H10	Collar
7.	A140H07	Shaft Seal, 2-1/2" ID, OU-Cup
8.	A140H08	Wiper Seal
9.	-----	Cotter Pin, 3/16" x 2"
10.	A10038	Pin, 1-1/4" Dia. x 4-1/4" Lg.
11.	A175H11	Shaft, 2-1/2" Dia.
12.	A175H06	Spacer
13.	A22H15	"O" Ring, 1-1/2" x 1-3/4" OD
14.	A175H12	Piston
15.	A175H05	Piston Seal, 4-1/2" OD
16.	A175H07	Wear Ring, 4-1/2" OD
17.	AFN-00018	Nut, Lock Type, 1-1/2" NF
	A175H15	Packing Kit, Containing:
		(1) A175H03 (1) A175H04
		(1) A140H07 (1) A140H08
		(1) A22H15(1) A175H05
		(1) A175H07

HYDRAULIC CIRCUIT



HYDRAULIC CIRCUIT PARTS LIST

MODEL I-140

<u>KEY NO.</u>	<u>NO. REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	5	A101H72	Swivel Adapter, Str. 3/4" Male x Female
2.	2	A101H32	Hose, 3/4" x 21" Long
3.	2	A101H46	Hose, 3/4" x 24-1/2" Long
4.	2	A101H31A	Hose, 3/4" x 27" Long
5.	5	-----	Elbow, 90 degree x 3/4" NPT, Steel
6.	2	-----	Pipe, 1/2" x 43" Long
7.	2	-----	Pipe, 3/4" x 53-1/2" Long
8.	2	-----	Pipe, 1/2" x 40-3/4" Long
9.	7	-----	Pipe Bushing, 1/2" NPT x 3/4" NPT
10.	7	-----	Pipe Tee
11.	4	-----	Elbow, 90 degree, 1/2" NPT, Cast
12.	5	A400H02	Swivel adapter, 90 degree, 1/2" NPT x 1/2" NPT
13.	3	A60H01A	Hose, 1/2" x 18" Long
14.	2	A45H06	Hose, 1/2" x 24" Long
15.	2	-----	Pipe, 3/4" x 80" Long
16.	3	A101H35	Swivel Adapter, Str. Female to Female, 3/4" NPT
17.	1	A101H36	Hose, 3/4" x 33" Long
18.	2	A45H07	Swivel Adapter, 90 degree, 3/8" NPT x 1/2" NPT
19.	4	-----	Street Elbow, 3/4" NPT
20.	1	-----	Street Elbow, 45 degree, 1/2" NPT
21.	1	-----	Pipe, 3/4" x 36-1/2" Long
22.	1	A80H29	Hose, 1/2" x 46" Long
23.	2	-----	Elbow, 90 degree, 1/2" NPT, Steel
24.	1	-----	Pipe, 3/4" x 61" Long
25.	4	A101H77	Swivel Adapter, 90 degree, 3/4" NPT
26.	1	A140H17A	Hose, 3/4" x 77" Long
27.	1	-----	Pipe, 1/2" x 107-1/2" Long
28.	1	-----	Pipe, 3/4" x 50-1/2" Long
29.	1	-----	Pipe, 1/2" x 46" Long
30.	1	A101H73	Street Elbow, 90 degree, 1/2" NPT, Steel
31.	1	A101H74	Swivel Adapter, Str. 1/2" NPT Female to Female
32.	1	A101H75	Check Valve
33.	1	-----	Pipe, 1/2" x 12" Long
34.	1	A130H22	Hose, 3/4" x 48" Long
35.	1	A140H19	Hose, 1/2" x 60" Long
36.	1	-----	Pipe, 3/4" x 5-3/4" Long
37.	1	A101H48	Counterbalance Valve
38.	1	A101H42	Hose, 3/4" x 42" Long
39.	1	A101H37	Hose, 3/4" x 18" Long

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.

TORQUE SPECIFICATIONS

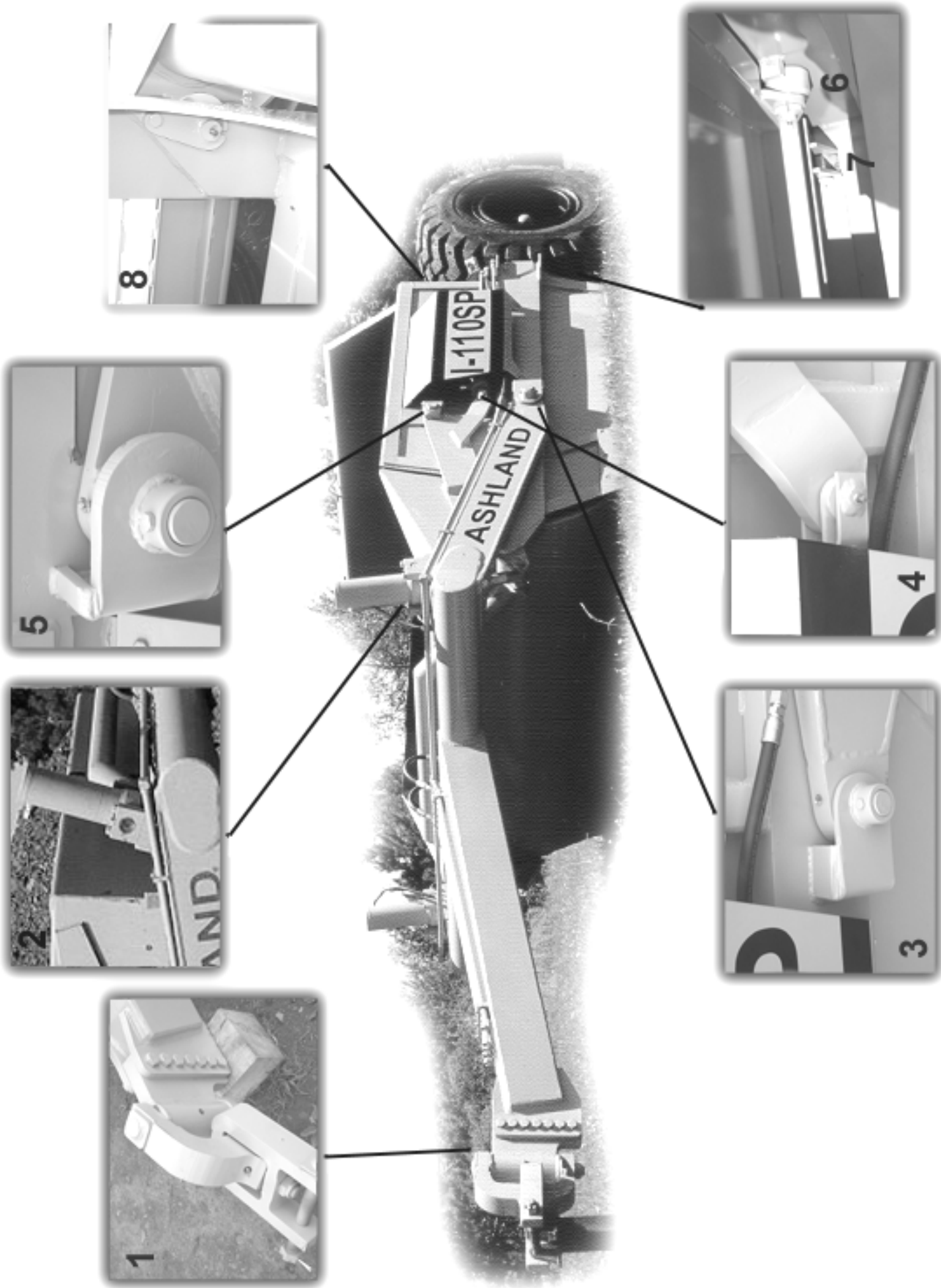
<i>Grade 8</i>	
<i>Bolt</i>	<i>Torque</i>
<i>Diameter</i>	<i>ft-lbs</i>
1/4"	12
5/16"	25
3/8"	45
7/16"	70
1/2"	110
9/16"	150
5/8"	220
3/4"	380
7/8"	600
1"	900
1-1/8"	1280
Lug Nuts	750

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 *Ill. on next page*)

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.



HYDRAULIC SYSTEM

Standard Two-Circuit Hydraulic Plumbing

The apron cylinders and the push-off cylinder are controlled on the same circuit with the sequence of the operation controlled by a sequence valve. The other hydraulic circuit controls the lift cylinders on the earthmover.

***To adjust the sequence valve, see Troubleshooting section.**

Optional Three-Circuit Hydraulic Plumbing

The apron cylinders, push-off cylinder, and lift cylinders are all on separate hydraulic circuits.

PUSHING THE EARTHMOVER

The I-140 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-140 earthmover to prevent any unnecessary damage.



CAUTION! The I-140 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.



TROUBLESHOOTING

Introduction

With proper care and maintenance, the I-140 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.

Apron closes slowly

or

Apron and push-off are not working well together.

1. Sequence valve needs adjusting.
 - a) Remove acorn nut from end of sequence valve with a ½" wrench. Turn adjustment screw, using a 4mm hex wrench, clockwise until front apron rises before the push-off advances while the earthmover is empty. Turn the adjustment screw an additional ¼ turn clockwise, then replace the acorn nut and tighten.
 - b) Torque check valve assembly and int. pilot plug to **25 ft-lbs maximum**.

CAUTION! Overtightening check valve assembly and int. pilot plug will cause internal damage to the sequence valve.



Note: Check valve assembly may leak slightly when torqued to 25 ft-lbs.



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 original purchaser, or the date the product is first put into service via a rental agreement or other means, whichever occurs first.

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 these items are warranted separately by their respective manufacturer. 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.

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