



AERATOR

OPERATOR'S MANUAL & PARTS LIST

8 and 12 Foot Models



Kesmac Inc.

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STATEMENT OF LIMITED WARRANTY

Brouwer Kesmac warrants its full line of equipment to be free from defects in material and factory workmanship for a period of 12 months. This warranty begins on the date of sale or use of the equipment to the original purchaser. This statement does not extend or limit engine, tractor or component warranties in which the engine, tractor or component manufacturers may carry extended time periods up to 24 months. Engine, tractor or component warranty claims will be subject to the engine, tractor or components manufacturer's approval.

Replacement Parts carry a 90 day replacement warranty and are reimbursed to the dealer. All electrical and hydraulic parts are limited by this policy and will only be covered upon approval by the service department after inspection of the part. The installation and removal of a part will automatically place that part under the replacement parts warranty.

This warranty is limited exclusively to equipment or accessories manufactured or supplied by **Brouwer Kesmac** and are subject to the inspection and analysis by the company to conclusively identify the nature and cause of failure.

PRODUCT REGISTRATION FORM must be completely filled out, signed by the customer at the original date of installation, and returned to **Brouwer Kesmac** before any claims will be considered.

Brouwer Kesmac reserves the right to incorporate improvements in material and design of its products without notice and is not obligated to make the same improvements to equipment previously manufactured.

Brouwer Kesmac is not obliged under any warranty policy different from the Kesmac Brouwer Turf warranty policy as published above.

BROUWER KESMAC RESPONSIBILITIES

Brouwer Kesmac's obligation under the terms of this warranty is limited to the repair, replacement or credit, at its option, of the equipment, parts or supply items that conform to its warranty.

DEALER'S RESPONSIBILITIES

1. Only factory-trained service or approved personnel will be permitted to perform warranty service on **Brouwer Kesmac** equipment.
2. All major warranty claims exceeding \$650.00 (in total including parts and labour) must be authorized by **Brouwer Kesmac** before work is performed.
3. All replacement parts used in warranty situations must be furnished by **Brouwer Kesmac** or approved by **Brouwer Kesmac** personnel. The use of non-recommended oil could nullify warranty.

OWNERS RESPONSIBILITIES

The owner is obligated to operate and maintain the equipment in accordance with the recommendations published by **Brouwer Kesmac** in the owners/operators manual for the unit. The owner is responsible for the costs associated with such maintenance and operating adjustments that may be required on a regularly scheduled basis. Where applicable the owner is responsible for transportation to and from the dealership or service calls made by the dealer.

CONDITIONS THAT VOID WARRANTY

This warranty shall not apply to equipment which:

- 1. Has had repairs or modifications not authorized by **Brouwer Kesmac**
- 2. Has been subject to abuse, improper maintenance, or improper application.
- 3. Has been modified from original equipment specifications.

WARRANTY EXCEPTIONS

This warranty does not apply to the following items:

- 1. Wear items including blades, cutting edges, cutting arms, spark plugs, belts, filters, bearings, sprockets, chains, tires, light bulbs, lubricants and fluids etc. Cost of normal maintenance including replacement of service items.
- 2. Damages to engine/drive systems caused by lack of or improper lubricants and/or fluids.
- 3. Damages arising from accident, misuse or neglect.
- 4. Damages to engine/drive systems caused by improper operation and/or maintenance.
- 5. **Brouwer Kesmac** will not be liable for any incidental or consequential damage or injuries, including but not limited to loss of profits, loss of crops, rental of substitute equipment, or other commercial loss or for damage to the equipment in which the Company Product is installed.

FREIGHT CARRIER DAMAGE

Claims for equipment damaged in transit should be referred to the freight carrier. Visible damage should be reported immediately and concealed damage as soon as possible, in accordance with freight carrier regulations.

Section 1

Operator's Manual

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FOREWORD

IMPORTANT

The Owner and Operator, must assume responsibility for the safe operation of the machine, their own safety, and the safety of others, by reading, understanding, and following, all of the safety instructions and operating procedures as outlined in the machines Operator's Manual.

Failure of the Owner or Operator to adhere to the recommended safety instructions and operating procedures, indemnifies KESMAC Inc. against any claims that may arise, due to accidents resulting in personal injury or property damage.

It is not possible to list all situations that may affect the safety of the machine or the operator, and therefore Kesmac Inc. Inc. cannot list all precautions, and identify all potential hazards, that may prevent accidents.

IF YOU DO NOT UNDERSTAND....ASK

BE A QUALIFIED OPERATOR BY ;

- Reading and obeying the instructions in this manual, the tractor manufacturers operator's manual, and the safety decals on the machine.
- Receiving operational training on the operation of the machine.
- Asking your supervisor or equipment dealer to explain anything you do not understand.
- Explaining the written instructions in the operator's manual and safety decals to user/operators who cannot read or understand them.



WARNING

The Kesmac **Aerators** are designed for safe efficient operation, and must not be used for any purpose other than that for which they are designed.

Prior to being shipped from the manufacturer the machines are inspected to insure that all safety guards, shields and warning/safety/operating decals are correctly positioned and secure

Before operating the machine the operator must check that all of the above items are correctly located.

The machine must not be used if any guards, shields or warning/operating decals are damaged or missing.

Your new **Aerator** has been designed and built to give many years of outstanding performance. The service and reliability you receive from this product will be affected by the proper maintenance and operation of the machine.

Use only genuine Kesmac replacement parts. Parts not supplied by Kesmac may not meet Kesmac specifications or standards of manufacture and may void warranty. The use of non-approved parts may result in component failure and possibly cause in an accident to the operator or others.

IMPORTANT

MODEL NUMBER

The Model Number appears on sales literature, Technical manuals and price lists.

SERIAL NUMBER

The serial number applies only to the machine to which it is allocated.

The serial number **MUST** be quoted when ordering parts or calling for service or warranty

 EQUIPMENT BUILT FROM EXPERIENCE	KESMAC INC. KESWICK, ONT. CANADA	
	PHONE: (905) 476-6222	FAX: (905) 476-6744
SERIAL NO. _____		
WEIGHT _____ kg.		
_____ lbs.		
	BS EN 292-1, BS EN 292-2, BS EN 294, BS EN 349, BS EN 418, BS EN 953, BS 5378-1, BS 5378-3 & EMC Stds.	made in CANADA fabrique au CANADA 

Aerator SPECIFICATIONS

	8ft.RPC.	12ft.RPC.
Weight - lbs/Kg.	2970/1350	4023/1825
Height. - in/mm.	72.5/1842	72.5/1842
Width. - in/mm.	109/2769	156.5/3975
Length. - in/mm.	153/3886	153/3886
Tires.	31.0x13.50	31.0x13.50
Tractor Req. - hp/kw.	30/22.4	40/30.0
Working Depth. - in/mm.	0 to 2.5/64	0 to 2.5/64
Space between Spike Sets. - in/mm.	6/150	6/150
Distance between Spike Holes. - in/mm.	6/150	6/150
Hole Width. - in/mm.	0.5/13 – 1.0/25	0.5/13 – 1.0/25
Depth Gauge Roller Dia. - in/mm.	8/203	8/203

Specifications subject to change without notice or obligation.



WARNING

Unauthorized modifications may result in **extreme safety hazards** to operators and bystanders, and could result in damage to the machine.

Kesmac Inc. warns against, and strongly rejects and disclaims, against any modifications, add-on accessories or product modifications that are not designed, developed, tested and approved by Kesmac Engineering Department.

Any Kesmac product that is altered or modified in anyway that is not authorized, after original manufacture, including after market accessories or component parts, that are not approved by Kesmac Inc. will result in the machines warranty being voided.

All liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Kesmac Inc. will be considered the responsibility of the individual(s) or Company designing and/or making such changes.

Kesmac Inc. will vigorously pursue full indemnification and costs, from any party responsible for unauthorized post manufacture modifications and/or accessories, should personal injury and/or property damage result from any of the above.

IMPORTANT

Kesmac Inc. cannot stress too strongly the importance of Owners/Operators adhering strictly to the safety recommendations as stated in this manual.



This Symbol means :

- **ATTENTION !**
- **BECOME ALERT !**

Your safety and that of others is involved.

Signal word definitions.

The signal words below are used to identify levels of 'hazard' seriousness. These words appear in this manual and on the warning decals that are placed on the machine.

For your safety and that of others, read and follow the information and instructions given with these signal words and/or the symbol shown above.



DANGER:

Indicates an imminently hazardous situation which if not avoided **WILL** result in death or serious injury.



WARNING:

Indicates a potentially hazardous situation which if not avoided **COULD** result in death or serious injury.



CAUTION:

Indicates a potentially hazardous situation which if not avoided **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

NOTE

Used without the safety alert symbol, '**CAUTION**' indicates a potentially hazardous situation which if not avoided **MAY** result in property damage.

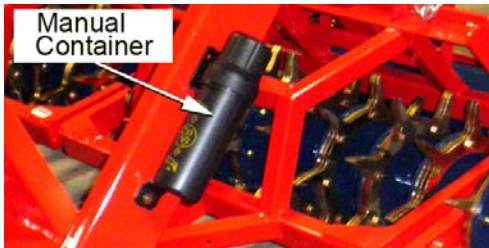
AERATOR

SAFETY

Safe Operation Operator Preparation and Training

Before operating the machine:

Read the **Aerator** Operator's Manual supplied with the machine. It must be kept on the machines at all times. Also read the Tractor Owner/Operator's Manual.



- If an operator or mechanic cannot read and understand English, it is the owners responsibility to explain the material contents to them.
- If any of the information or instructions in this manual are not clear, contact your dealer or the factory representative for clarification.
- Become familiar with the safe operation of the machine, the operating controls and the safety decals. If there are any questions concerning safety, do not operate the machine until they are clarified.
All safety guards and shields must be kept in place and in good condition.
- It is the owners responsibility to ensure that all operators and service personnel are trained in the proper operation and service procedures of the machine.
- Wear appropriate work clothing, safety equipment and work boots. Do not operate the machine with loose clothing, long hair, or any jewelry, that may get tangled in moving parts.



CAUTION

Wear suitable hearing protection such as ear-muffs or ear plugs, to protect against hearing impairment or hearing loss.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating the machine.

- Never allow children or untrained persons to operate this equipment. Local regulations may restrict the age of the operator.

- Only the operator must be on the machine, never allow riders on the machine. Riders can be injured by foreign objects or can be thrown off the machine. Also they may obstruct the ability of the operator or the operators view resulting in unsafe operation of the machine.
- The warning/safety decals must be kept clean, legible, and undamaged. Do not operate the machine if any decals are missing or damaged. Obtain new decals from the factory.
- Do not operate the machine if drugs, alcohol or medication are being used that can affect the alertness or co-ordination of the operator. Seek professional advice, before operating the machine, if there is any doubt about the side affects of any medication being taken that may put your safety and that of others at risk.
- Keep animals and all bystanders clear of the machine, at a safe distance, when operating the machine.
- The owner/operator is responsible for accidents and/or injuries that may occur to themselves, bystanders, or property that may happen as a result of the operation of this machine.

Machine Preparation

- Check that the tractor 'operator presence' interlock switch is operating. Check tractor brake operation. Repair or adjust any problem before operating the machine.
- Do not tamper with, or defeat, safety devices. Keep guards, shields and interlock safety devices in place and in proper working condition. They are for your protection.
- Check regularly that all fasteners, such as nuts, bolts, and retainer pins are secure.
- Check daily that the machine is in good working condition. Check tires for damage or excessive wear.
- Use only accessories, attachments and replacement parts that are approved by the manufacturer.

If you do not understand....Ask

General Operating Safety

- Ensure all persons are clear of the machine before starting the tractor engine. Keep hands and feet clear of all moving parts.
- Do not make sharp turns. Exercise care when reversing and maneuvering. Look behind the machine and downward when reversing.
- Keep all persons clear of the machine and operating areas.
- Use counterweights, wheel weights or ballast, only as recommended by the manufacturer.
- Exercise caution when approaching or crossing roadways.
- Put the transmission in **NEUTRAL** and apply the **Parking Brake** before dismounting. Leaving the transmission in gear with the engine stopped will not prevent the tractor from moving.



WARNING

Never attempt to get on or off the machine when it is moving.

Before leaving the operating position, place the transmission in NEUTRAL, set the 'park brake'.

Stop the engine and remove the ignition key.

Starting the Tractor



WARNING

To avoid possible injury or death from a runaway machine, **DO NOT** start the engine by shorting across the battery terminals. The machine can start when in gear if the normal safety circuitry is bypassed.

- Start only in accordance with the instructions in this manual and also the tractor operators manual.
- **DO NOT** use starting-aid fluid.
- Never start the engine from the ground. Start only from the operator's seat, with the transmission in **NEUTRAL** and park brake '**ON**'.

Transporting

- Exercise caution when loading or unloading the machine on or off a truck or trailer.
- Ensure that the machine is properly 'blocked' and secured during transport.

Operating

- Do not change the engine governor setting, or over-speed the engine.



WARNING

Work in a ventilated area. Never operate the machine without adequate engine exhaust ventilation.

Never run the engine in an enclosed area. Exhaust fumes contain carbon monoxide and can be fatal if inhaled.

- Inspect the area to be treated and remove any objects that may be hazardous or may cause an injury.
- Operate with adequate light and avoid any holes and other hazards.

Highway Operation

- To prevent collisions with other vehicles, slow moving tractors with attachments, towed equipment or self-propelled machines, frequently check for traffic from the rear, particularly when making turns, always use turn signal lights.
- Slow down and exercise caution when making turns and crossing roads and railway tracks.
- Use headlights, flashing warning lights and turn signals day and night. Follow local regulations for equipment lighting and marking. Ensure that all lighting, signals and markings are visible, clean and in good working order. Repair or replace any lights, signals or marking that is damaged or is missing.
- Couple brake pedals together for road travel. If applicable

To prevent Tipping

- Avoid holes, ditches, slopes, and obstacles that may result in instability and cause the machine to tip

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! WARNING




**HIGH PRESSURE
FLUID HAZARD**

To prevent serious injury or death from escaping hydraulic fluid.
Visually check all hydraulic lines and hoses **BEFORE** applying pressure. Relieve pressure on system before repairing, adjusting or disconnecting. Use of paper or cardboard, **NOT BODY PARTS**, to check for suspected leaks.

D001-012

BROUWER

D001-162

! WARNING

CRUSHING HAZARD
Stay clear of moving parts

D001-054

WARNING

**LOW SPEED TIRES
INSTALLED**

DO NOT EXCEED 25 MPH (40 KM H)
CONNECT HITCH SAFETY CHAINS
FOR TRANSPORT

502205



! WARNING

**HIGH
PRESSURE
FLUID.**

D001-234

PATENT PENDING

D001-056

! WARNING



CRUSHING HAZARD

To prevent serious injury, stay clear of moving parts.

D001-032

kesmac
EQUIPMENT BUILT FROM EXPERIENCE

KESMAC INC.
KESWICK, ONT. CANADA
PHONE: (905) 476-6222
FAX: (905) 476-6744

SERIAL NO. _____

WEIGHT _____ kg.
_____ lbs.

! WARNING

**PINCH POINT OR
CRUSHING HAZARD**

To prevent serious injury or death from pinching or crushing:
Stand clear from implement while

- Folding
- Unfolding
- Raising
- Lowering

D001-007

! WARNING

When the machine is not in operation the Cylinder Stop Lock must be in place.

D001-226

KEEP FRAME LEVEL

701134



! WARNING

To Prevent Serious Injury or Death

- Avoid unsafe operation or maintenance
- Do not operate or work on this machine without reading and understanding the operator's manual.
- If manual is lost, contact your nearest dealer for a new manual.

D001-033



! WARNING

NO RIDERS

Vehicle is to be ridden in operators seat only. Failure to do so could result in death or serious injury.

D001-024



AERATOR MAINTENANCE



WARNING

To prevent serious personal injury:

When performing any service/maintenance or repair work on the machine, the **Aerator Reel Lift Cylinder Safety Lock must be securely in place.**

With Aerator Reel Lift Cylinder extended the Cylinder Safety Lock pivots down to lock on the **Cylinder Rod.**

Lubrication

NOTE: The Pivot Bushings 'A' are IGUS plastic bushings and must not have **any** lubrication applied.

To ensure a long service life and trouble free operation, it is important to follow a regular maintenance schedule. Also keeping the machine clean prevents the build-up of dirt and dust that causes premature wear in moving parts.

Every 50 hours of operation Grease the:

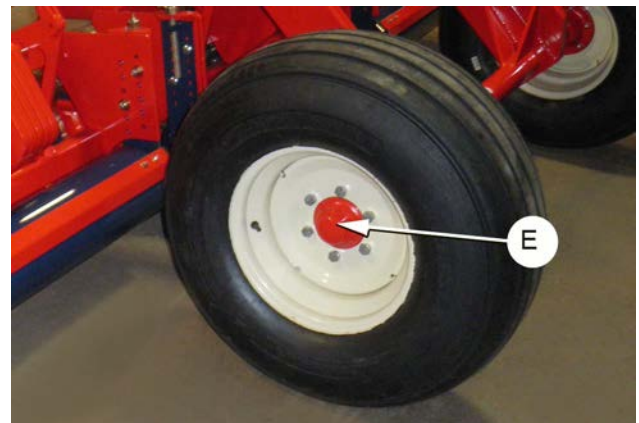
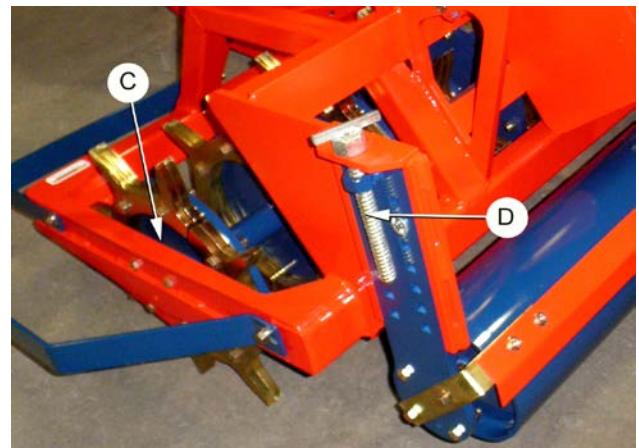
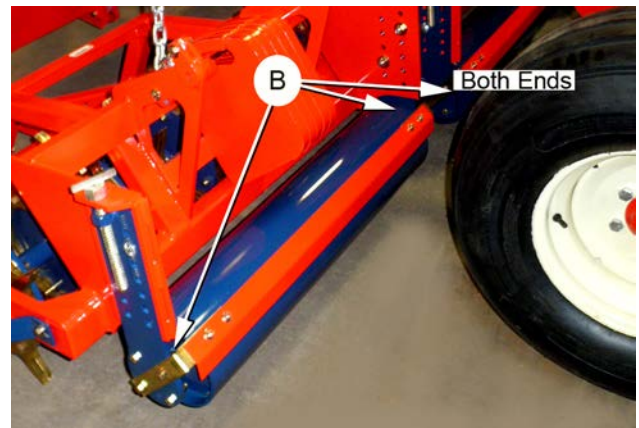
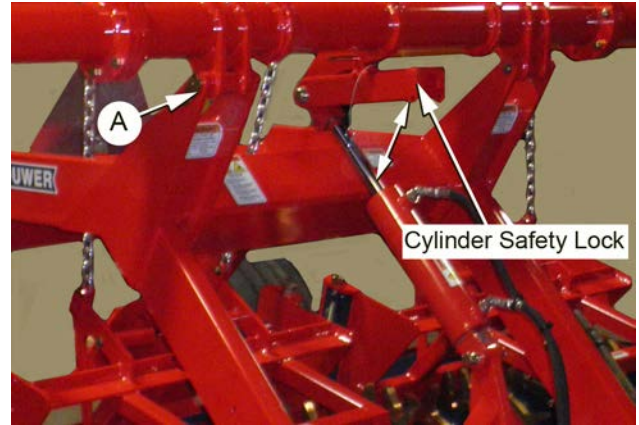
- Roller Bearings 'B'.
- 'Spike' Shafts Bearings 'C'.
- Adjuster Screws 'D'.

NOTE

When the machine is to be stored for a long period of time, the Lift Cylinder Rod should be coated with grease to prevent corrosion forming on the surface

Every 12 Months:

The Wheels Bearings 'E', should be removed and checked for wear or damage, replaced if necessary, repacked with grease and reassembled to the correct preload. See page 1-11 for this procedure.



Wheel Bearings

It is recommended that the wheel bearings are serviced every twelve months.

To service/replace the wheel bearings:

With the wheels removed.

- Remove the Dust Cap, Split Pin, Flat Washer and Slotted Nut. Pull the Hub and Bearings off the Spindle.
- Remove the Grease Seal and Inner Cones.
- Clean and inspect the bearings for signs of damage or excessive wear.

If the Bearings are in good condition:

- Pack the bearings and hub cavity with grease.
- Fit the rear Inner Cone and a new Grease Seal.
- Fit the front Inner Cone and slide the Hub and Bearings onto the spindle. Fit the Flat Washer and Slotted Nut.

To set bearing preload:

- Tighten the Slotted Nut, while turning the hub, until there is firm resistance, then 'back-off' the Slotted Nut two flats. Fit the Split Pin.
- Pack the Dust Cap with grease and tap it into place.

If the bearings are worn or damaged and require replacing, the Cups and Cones must be replaced, as assemblies.

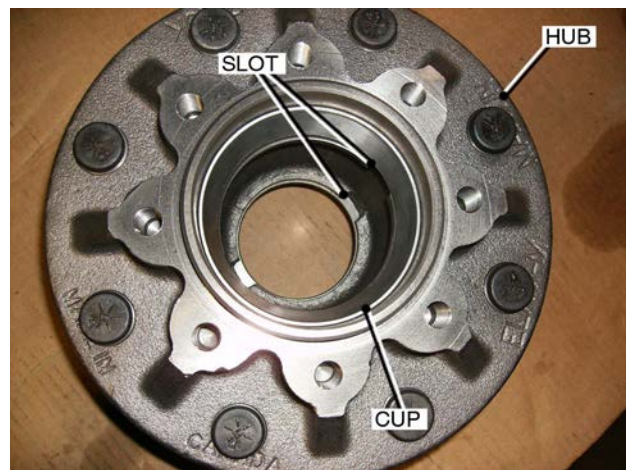
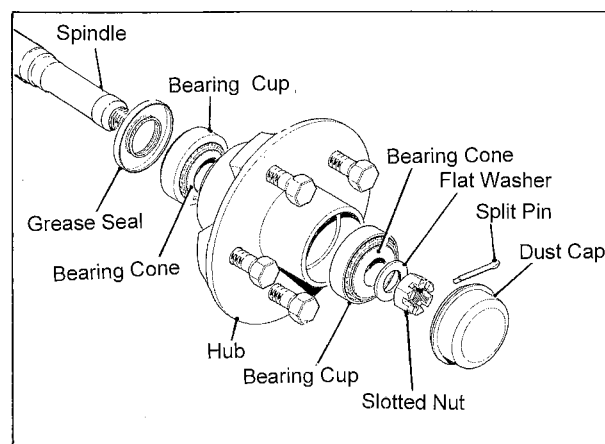
To remove the Bearing Cups from the Hub:

- Use a Bearing 'puller' to remove the Cups from the Hub. If a 'puller' is not available use a soft metal rod to 'knock' the Cups out.

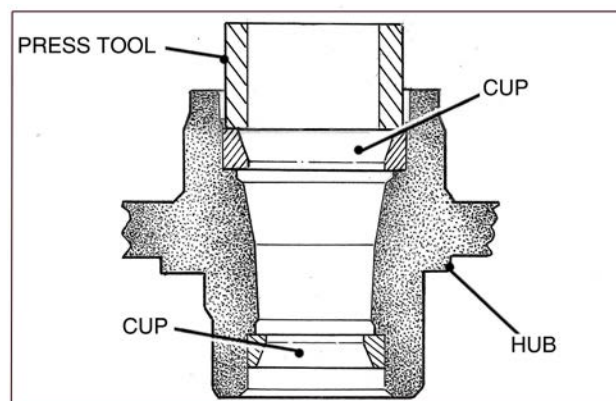
To install new Bearing Cups:

Using a press and a correctly sized tube or bar:

- Set the Bearing Cups 'square' to the Hub bore and carefully press them in, ensure that they are pressed completely to the bottom of the bore.
- Install a new Grease Seal in the same manner.
- If not using a press, the Cups and Seal can be carefully 'tapped' into place.
- Pack the hub cavity and bearings with grease, fit the assembly onto the Spindle. Set the preload as above. Do not apply excessive preload.
- Pack the Dust Cap with grease and tap it into place.



Typical Wheel Hub



AERATOR Maintenance

Aerator Reel Lift Cylinder.

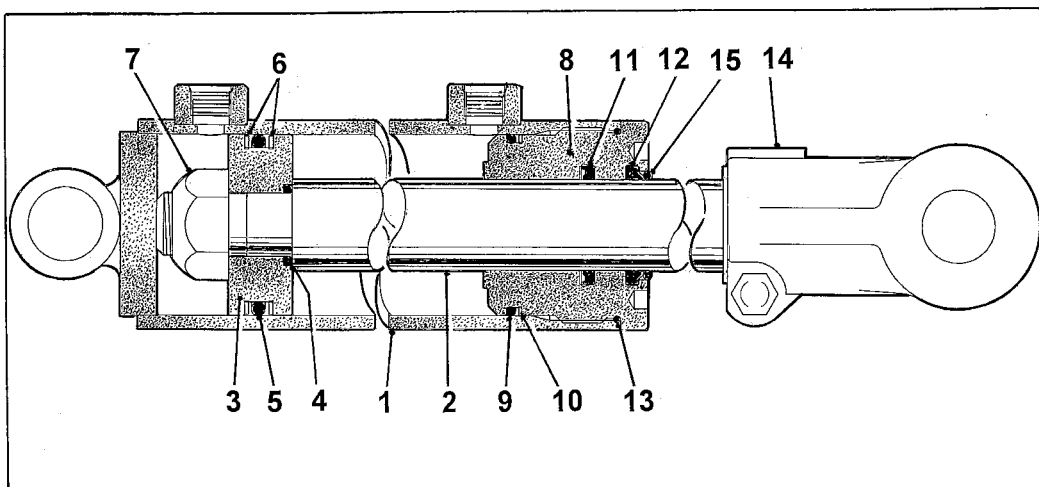
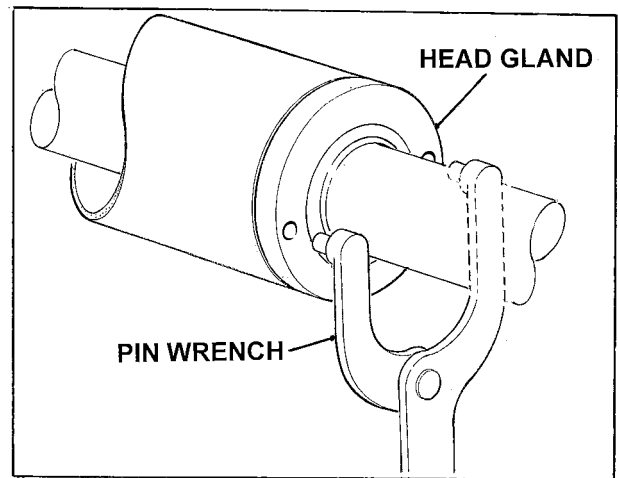
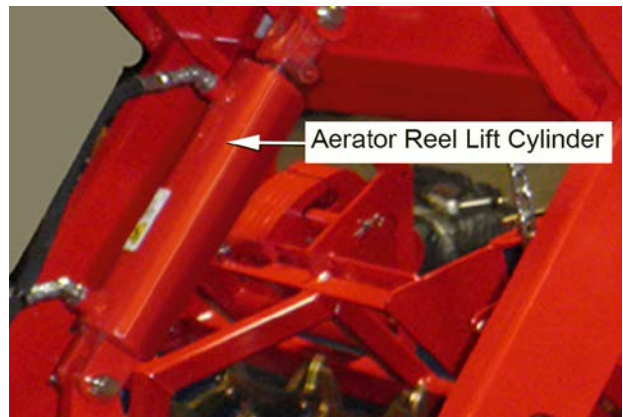
To install a Service Seal Kit, (Part No. KH70075) :

- Raise the Aerator Reel and fit the Cylinder Safety Lock. See P1-08.
Ensure that the Lock Pin is secure.
- Remove the Hydraulic Fittings Plug and Cap the hydraulic fittings.
- Remove the cylinder from the frame.
Drain the oil from the cylinder.
- Place the Cylinder in a bench vise, and use a Pin Wrench to remove the Head Gland.
- Pull the Rod (2) with Piston (3) and Gland (8) out of the Cylinder Tube (1).
- Place the Clevis Rod End (14) in a bench vise and remove the Retainer Nut (7).
- Remove the Piston (3) from the Rod (2).
- Remove the Gland (8) from the Rod (2).

IMPORTANT

To ensure correct reassembly note the location and orientation of the O-Rings, Seals and Washers.

- Coat the new Seals, O-Rings and Washers with oil and carefully install them into place on the Piston (3) and the Gland (8).
- Fit the O-Ring (15) onto the Rod (2) and carefully slide the Gland (8) onto the Rod (2).
- Fit the Piston (3) onto the Rod (2).
- Fit the Retainer Nut (7).
- Remove the Rod Assembly from the vise.
- Place the Cylinder Tube (1) in the vise and carefully insert the Piston, Rod and Gland assembly into place.
- Tighten the Gland (8) with the Pin Wrench.
- Fill the Cylinder with clean oil and re-install in the Frame.



Aerator Reel Lift Cylinder



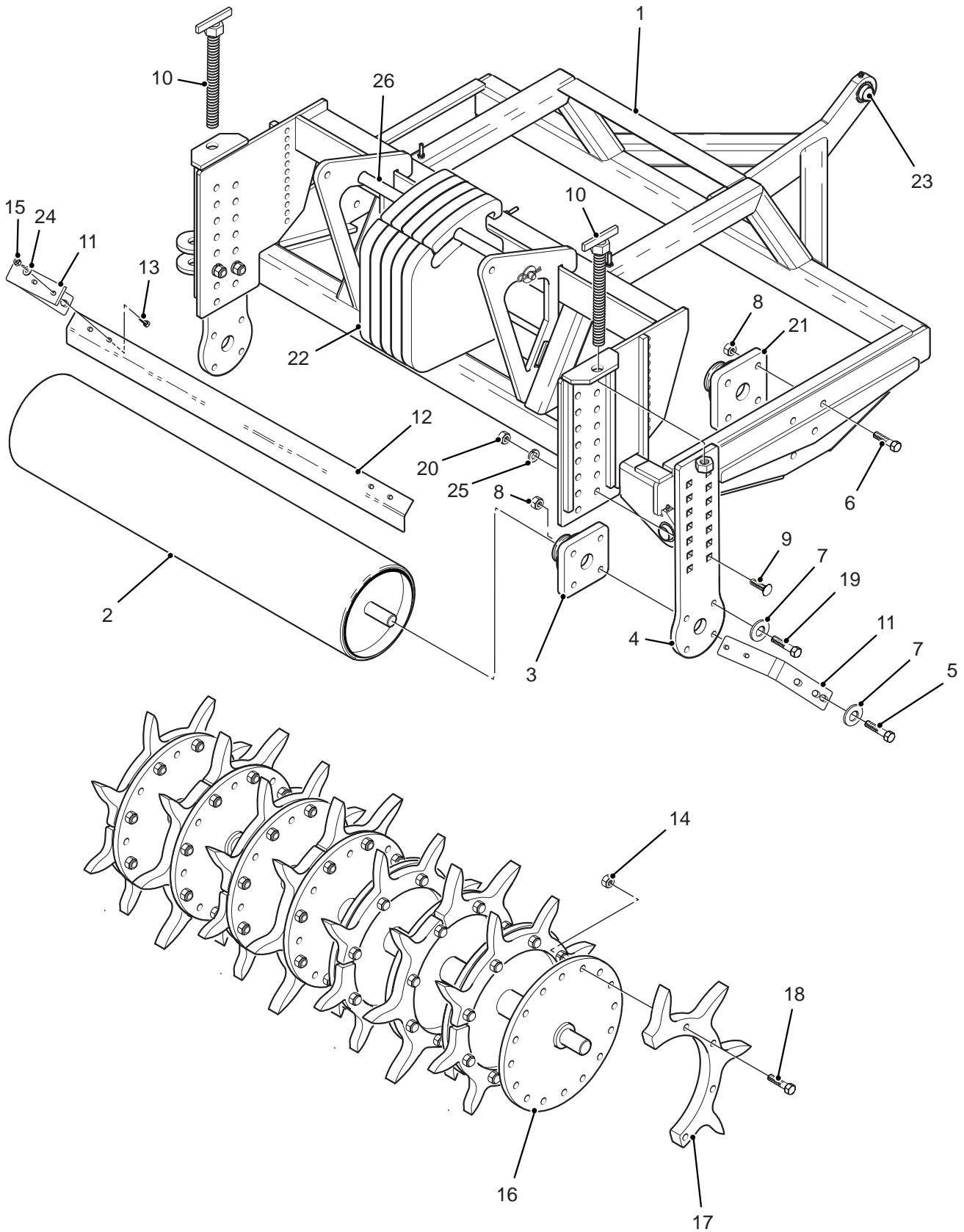
AERATOR

Parts List



Section 2**Illustrated Parts List – 8 & 12 Foot Models**

Roller Carrier Assembly	2-01
Main Frame Assembly	2-03
Decals	2-05



ITEM NO.	PART NO.	DESCRIPTION	QTY
AERATOR - 8 & 12 Foot Model Roller Carrier Assembly			
1	GR80815	Roller Carrier Frame - L.H.	1
	GR80816	Roller Carrier Frame - Center	1
	GR80817	Roller Carrier Frame - R.H.	1
2	GR30521	Ground Roller	1
3	55-FB22016	Bearing - 4 Bolt. 1 in. Dia.	2
4	GR30525	Ground Roller Bearing Plate	2
5	F040720	Bolt 7/16 unc x 2 Gr.8	4
6	F040716	Bolt 7/16 unc x 1 3/4 Gr.8	8
7	F320708	Flatwasher 7/16	8
8	F210708	Locknut 7/16 unc	24
9	F020814	Carriage Bolt 1/2 unc x 1 1/2	4
10	GR30568	Lift Screw	2
11	GR10475	Scraper Bracket	2
12	GR10566	Scraper	1
13	F040410	Bolt 1/4 unc x 1 Gr.8	4
14	F210808	Locknut 1/2 unc	64
15	F210408	Locknut 1/4 unc	4
16	GR30813	Roller Shaft	1
17	GR10653	4 Tooth Std. - 1/2 in.	*
18	F040816	Bolt 1/2 unc x 1 3/4 Lg. - 1/2 in. Tooth Width	64
	F040722	Bolt 1/2 unc x 2 1/4 Lg. - 1 in. Tooth Width	64
19	F040716	Bolt 7/16 unc x 1 3/4 Gr.8	12
20	F230800	Nut 1/2 unc	4
21	KB32018	Flange Bearing - 4 Bolt. 1 1/4 in. Dia.	2
22	GR50675	Weight Kit - Option	1
	H110097	Counter Balance Weight	A/R
23	KB11117	Spherical Bearing - 1 in.	1
24	F320408	Washer 1/4 Gr.8	4
25	F310808	Lockwasher 1/2	4
26	GR10855	Spacer	2

NOTE

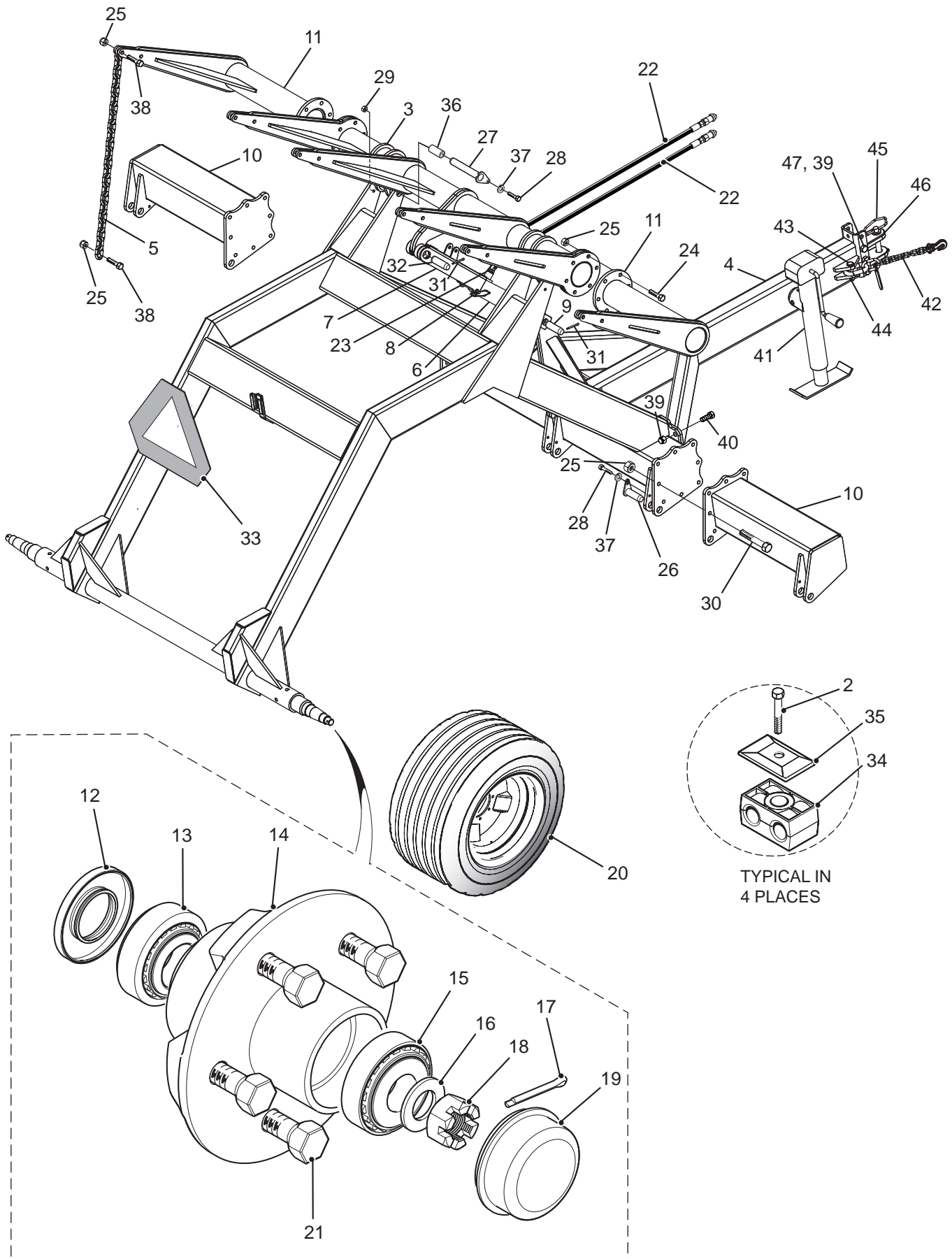
Item 23 - Weight Kit.
includes:
H110097 - Weight (5)
GR30674 - Retaining Rod
F320800 - Flatwasher 1/2
F940224 - Hitch Pin Clip
GR10855 - Spacer (2)

NOTE

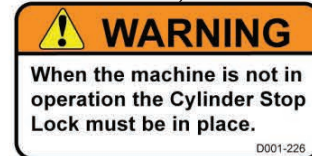
Ground Roller Assembly
includes Items: 2-13, 15, 20,
24 & 25

NOTE

* For 1/2 in. Tooth Width - Qty: 16x
For 1 in. Tooth Width - Qty: 32x



ITEM NO.	PART NO.	DESCRIPTION	QTY
BROUWER AERATOR - 8 & 12 Foot Model			
Main Frame Assembly			
1	GR30829	Main Frame	1
2	F040414	Bolt 1/4 unc x 1 1/2 Gr.8	4
3	GR30842	Aerator Lift Frame	1
4	GR30838	Aerator Tow Bar	1
5	GR10849	Lift Chain (23 Links)	6
6	M500011	Lift Cylinder	1
7	H310285	Cylinder Lock	1
8	KX06100	Hitch Pin c/w Lanyard	1
9	H100503	Lower Pin. Lift Cylinder	1
10	GR30604	Main Frame Extension (12 foot model only)	2
11	GR30848	Lift Arm Extension (12 foot model only)	2
12	E1034	Seal	1
13	B4514	Bearing Cone. Small	1
	B4017	Bearing Cup. Small	1
14	R1054	Hub	1
15	B4515	Bearing Cone. Large	1
	B4018	Bearing Cup. Large	1
16	F8051	Flatwasher 1 in.	1
17	02-CP0612	Cotter Pin 3/16 x 1 1/2	1
18	92-16	Slotted Nut 1 in.	1
19	R1053	Dust Cap	1
20	R1060	Rim	1
	R1063	Tire - 31.0 x 13.5	1
21	F9050	Wheel Bolt 9/16 x 1	6
22	GR50857	Hose Assembly - Cylinder Head End	1
	GR50858	Hose Assembly - Cylinder Rod End	1
	MH10004	Quick Connect	2
23	6-8-070320	Fitting - No.6 to No.8 'O' ring 45 deg. Elbow	2
24	F040824	Bolt 1/2 unc x 2 1/2 Gr.8	12
25	F210808	Locknut 1/2 unc Gr.8	28
26	GR30457	Pivot Pin (12 foot model Qty: 3x)	2
27	M300010	Pivot Pin	2
28	F040514	Bolt 5/16-18 unc x 1 1/4 Gr.8	2
29	F320508	Locknut 5/16 Gr.8	2
30	F040816	Bolt 1/2 unc x 1 3/4 Gr.8 (12 foot model only)	16
31	F910514	Cotter Pin	4
32	P100061	Ramp Hinge Pin	1
33	KM99060	SMV Sign c/w Mounting Bracket	1
34	KH65005	Double Hose Clamp	4
35	KH63005	Hose Clamp Cover	4
36	KB11612	Bushing	2
37	F320508	Flatwasher 5/16 Gr.8	4
38	F040822	Bolt 1/2 unc x 2 1/4 Gr.8	12
39	F211008	Nyloc Nut 5/8 unc Gr.8	14
40	F041016	Bolt 5/8 unc x 1 3/4 Gr.8	15
41	MW50003	Tongue Jack	1
42	M500070	Transport Safety Chain	1
43	KX01022	Pin 5/8 Clevis x 2.25 LG.	1
44	F910208	Cotter Pin 1/8 dia x 1 in. Long	1
45	G2040	Hitch Pin 3/4 dia x 4 grip LG.	1
46	KW50012	Clevis Hitch	1
47	F041044	Bolt 5/8 unc x 4 1/2 Gr.8	2



ITEM NO.	PART NO.	DESCRIPTION	QTY
		BROUWER AERATOR - 8 & 12 Foot Model	
		Decals	
1	D001-012	Decal - "Warnig - High Pressure Fluid Hazzard..."	1
2	D001-162	Decal - Brouwer Logo - 16 in.	2
3	502205	Decal - "Warnig - Low Speed Tires Installed..."	1
4	D001-054	Decal - "Warnig - Crushing Hazard..." Small (8 Foot Model)	6
		Decal - "Warnig - Crushing Hazard..." Small (12 Foot Model)	9
5	D001-050	Decal - Patent Pending	1
6	D001-032	Decal - "Warnig - Crushing Hazard..."	3
7	D001-234	Decal - "Warnig - High Pressure Fluid."	1
8	D001-246	Decal - Brouwer - Since 1972	2
9	D001-007	Decal - "Warnig - Pinch Point or Crushing Hazard..."	2
10	D001-226	Decal - "Warnig - Cylinder Stop Lock...."	1
11	701134	Decal - "Keep Frame Level...."	2
12	D001-033	Decal - "Warnig - Read Manual...."	1
13	D001-024	Decal - "Warnig - No Riders...."	1
14	D001-035	Decal - Made in Canada	1



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