

**Alberta  
Ag-Industries Ltd.**

**OWNER'S  
MANUAL**

**Agripac<sup>®</sup>  
Lastic Tuber<sup>™</sup>**

**Models  
9000 & 9100**

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# INTRODUCTION

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## CONGRATULATIONS!

Thank you for choosing ALBERTA AG-INDUSTRIES LTD. We are confident this equipment will meet your requirements in terms of quality, performance and reliability.

This manual was prepared to assist you in the safe operation of your new AgriPac® Lastic Tuber™. It contains important information which will help you achieve excellent returns with your tubing-machine for years to come.

Please read this manual completely before operating your AgriPac® Lastic Tuber™ and keep it for future reference.

Before starting the machine, you or any other person who will be operating the AgriPac® Lastic Tuber™ must familiarize yourself with the safety recommendations and the operating instructions. Please read carefully and be sure to understand and follow all recommendations and procedures.

In this manual, the right and left sides of the AgriPac® Lastic Tuber™ are identified while standing at the discharge end of the machine and facing it.

If you require additional information on your AgriPac® Lastic Tuber™, please contact your ALBERTA AG-INDUSTRIES LTD. Dealer.

**NOW** take a moment to enter the model, serial number and the date of purchase of your AgriPac® Lastic Tuber™ in the space provided.

When ordering parts from your Dealer, please refer to these numbers for a fast and efficient service. Use ALBERTA AG-INDUSTRIES LTD. parts for replacement.

The model and serial numbers are on the nameplate shown on Fig. 1.



Figure 1

MODEL: \_\_\_\_\_ ✍

SERIAL NO.: \_\_\_\_\_ ✍

DATE OF PURCHASE: \_\_\_\_\_ ✍

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# SAFETY

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## GENERAL SAFETY

2

### WHEN YOU SEE THIS SYMBOL



**ATTENTION!**

**BE ALERT  
YOUR SAFETY IS INVOLVED**

This symbol «**SAFETY ALERT**» is used in this manual and on the safety decals on the AgriPac® Lastic Tuber™. It warns you of the possibility of danger. Carefully read, understand and follow all safety recommendations before operating the AgriPac® Lastic Tuber™.

- 1) Careful operation is the best assurance against accidents. Carefully read this manual and the motor manual and follow all recommendations before operating your AgriPac® Lastic Tuber™. It is the owner's responsibility to make sure that anyone who will operate the AgriPac® Lastic Tuber™ will read these manuals before operating the equipment.
- 2) Never let a child operate the AgriPac® Lastic Tuber™.
- 3) Do not modify the AgriPac® Lastic Tuber™. Any non authorized modification may affect the efficiency and/or safety of the equipment and will automatically void the warranty.
- 4) Never operate the AgriPac® Lastic Tuber™ with defective parts or if damaged in any way. Have it repaired before operating.
- 5) Make sure all fasteners are in place and properly secured or tightened. Refer to torque chart on page 44.

- 6) Avoid wearing loose fitting clothing when working with the AgriPac® Lastic Tuber™. These could get entangled in moving parts of the equipment and cause accidents.
- 7) Keep motor clean and exempt of dust and debris.
- 8) Before using the AgriPac® Lastic Tuber™, inspect the area where it is to be used and remove any object which could hamper normal operation or damage the plastic tube.
- 9) Hydraulic fluids under pressure can damage your skin. Do not use your hands to locate a leak.
- 10) Plastic bags are impervious to air. Keep them away from children to avoid suffocation.
- 11) When using a tractor equipped with a spear, be extremely careful. Always lower the spear to the ground before leaving your tractor.
- 12) Do not store, spill or use fuel near a flame, a hot engine or stove.

## SAFETY IN OPERATION

### STEP 1 APPLIES ONLY TO THE 9100

- 1) Position the engine outward before you start working with the AgriPac® Lastic Tuber™.
- 2) Be sure there are no obstructions around the equipment and that no one stands near the AgriPac® Lastic Tuber™ when in operation.
- 3) Always refuel equipment when outside and away from flames or sparks.
- 4) Never run the engine inside. Do not operate the engine in a confined or non ventilated area. Carbon monoxide is a colorless, odorless and deadly gas.
- 5) Be careful when adjusting equipment with engine running.

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## ***SAFETY (cont'd)***

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- 6) Keep hands, feet, hair and clothing away from moving parts.
- 7) Should you need to step onto the AgriPac® Lastic Tuber™ for whatever reasons, **ALWAYS** stop the motor since there is **RISK OF SERIOUS INJURY** if not stopped.
- 8) Do not refill fuel tank with engine running. Always let the engine cool off for a couple of minutes before refilling. Always use approved fuel containers.
- 9) Do not operate the engine if fuel is spilled. Move equipment away from the spill and avoid any spark until the complete evaporation of the fuel.
- 10) Do not smoke while refueling.
- 11) Do not operate engine with any accumulation of hay, leaves, dirt or any other combustible material near the exhaust muffler.
- 12) Avoid touching the hot muffler and cooling fins since they could cause burns to your skin.

### ***SAFETY WITH MAINTENANCE***

- 1) Perform the AgriPac® Lastic Tuber™ maintenance according to the recommendations contained in this manual.
- 2) Stop engine and relieve all hydraulic pressures before doing inspection, maintenance or repairs.
- 3) Do not check spark with spark plug or wire removed. Use the appropriate testing equipment.
- 4) Regularly check fuel lines and fittings for leaks. Replace if necessary.

### ***SAFETY IN TRANSPORT***

- 1) Be sure to engage the two safety locks (A Figure 2) provided for the rear wheels hydraulic cylinders (B Figure 2).

### **STEP 2 APPLIES ONLY TO THE 9100**

- 2) Slide the engine to the inward position (transport position) in order not to exceed the legal width on the road.
- 3) Check local regulations for the transport of your AgriPac® Lastic Tuber™ on the road.
- 4) Be alert when pulling the AgriPac® Lastic Tuber™ on the road. Do not allow anyone to stand on it while in motion.
- 5) The road speed should be such as to maintain full control over steering and braking.
- 6) Be careful while backing up.

### ***SAFETY IN STORAGE***

- 1) Let engine cool and drain fuel from tank.
- 2) Do not let children play in the area where the AgriPac® Lastic Tuber™ is stored.
- 3) Do not leave a Tube installed on the AgriPac® Lastic Tuber™.
- 4) Do not let the AgriPac® Lastic Tuber™ stand on the tires. Lower it to the ground or on wooden blocks. **THIS WILL AVOID ANY ACCIDENTAL CRUSHING OF ANIMALS OR ANYONE WHO COULD CRAWL UNDER THE EQUIPMENT.**

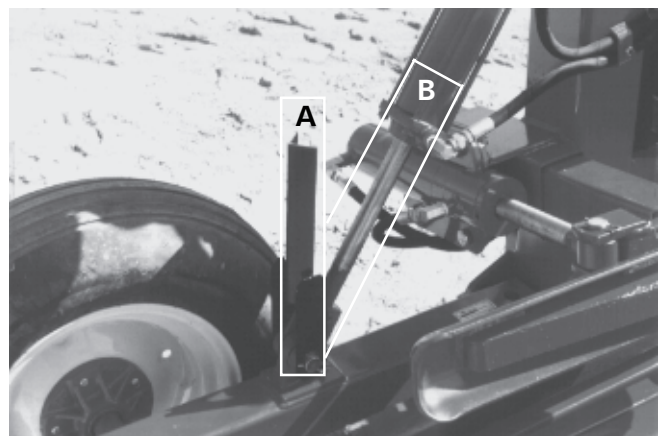


Figure 2

# DECALS

## SAFETY DECALS

The safety decals are affixed wherever special safety precautions are indicated. Locate them on the machine and read them carefully. If a decal is damaged, lost or illegible, install a new one. Each decal is identified with a letter and part number. The following photos indicate where each one must be installed.

3



Figure 3  
Decal A

Part no.: A101

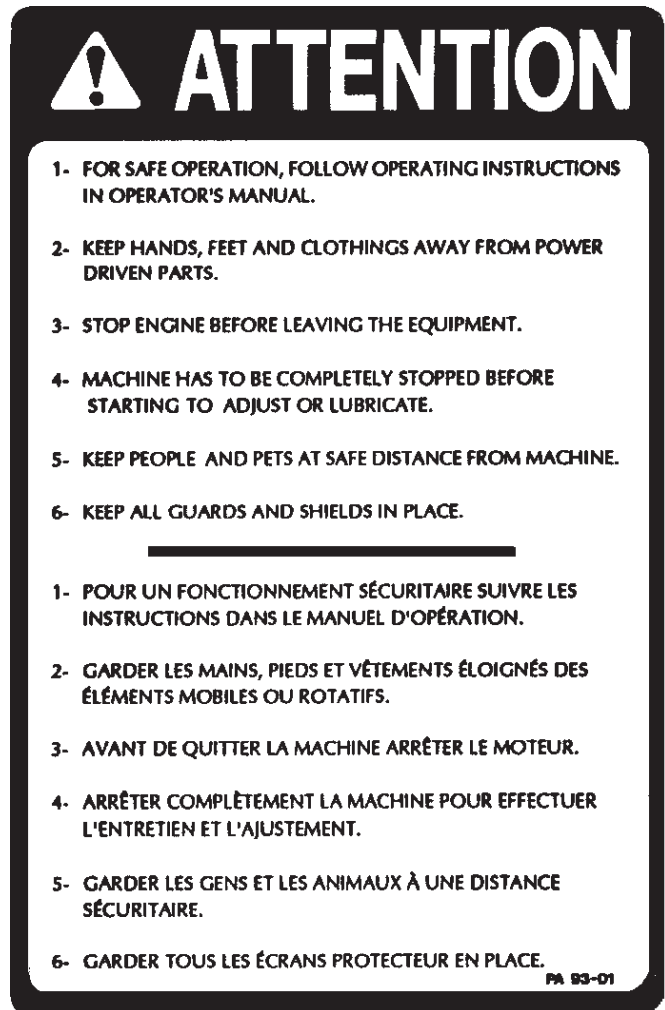


Figure 5  
Decal B

Part no.: A102



Figure 4



Figure 6



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## DECALS (cont'd)

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Figure 7  
Decal C

Part no.: A103



Figure 8

### MAINTENANCE DECALS

The maintenance decals indicate the points requiring lubrication. Refer to the maintenance section for more details.



Figure 9

Part no.: A104

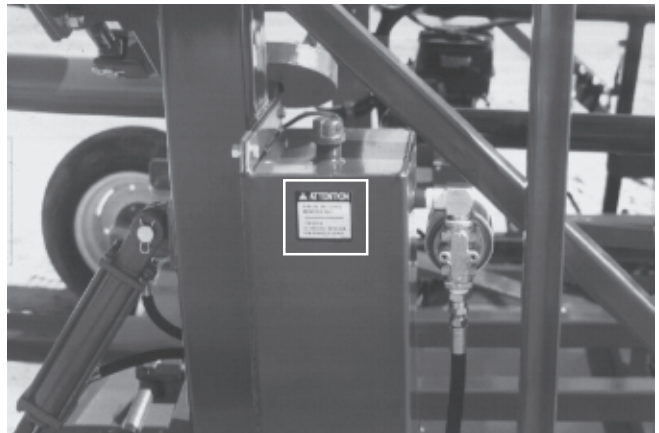


Figure 10

3



Figure 11

Part no.: A 106

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# STARTING-UP

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**4** Figure 12

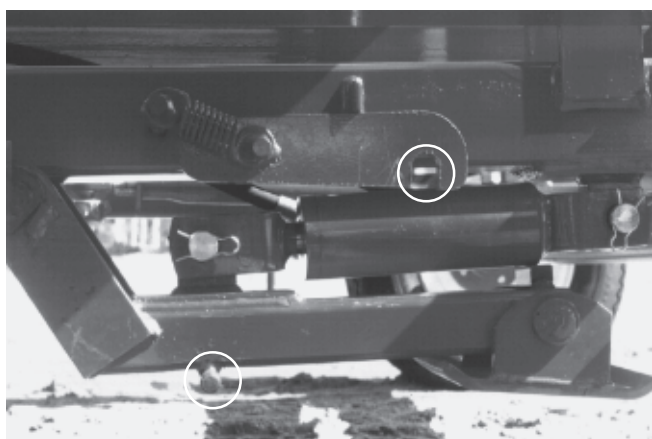


Figure 13

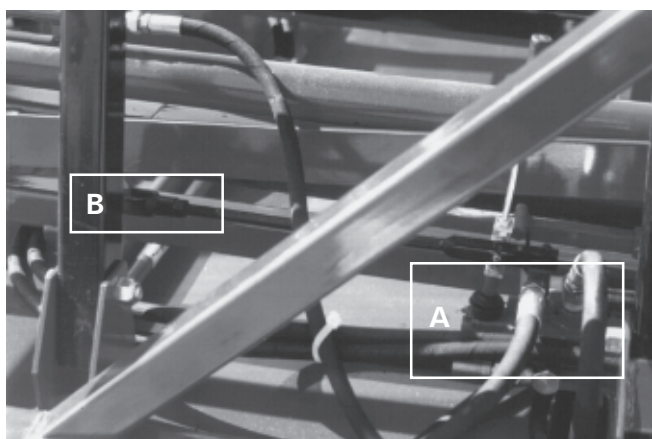


Figure 14

## **BASIC START-UP PROCEDURES**

### **STEP 1 APPLIES ONLY TO THE 9100.**

- 1) The AgriPac® Lastic Tuber™ engine is mounted on a sliding base so it can be easily placed in transport position in order not to exceed the legal width on the road. Do not forget to re-position the engine outward before starting. (Fig. 12)
- 2) Do not forget to unlock the hydraulic jack before lowering and always lock it when in the retracted position. (Fig. 13)
- 3) Verify for adequate tightness of all fastening devices. Refer to torque chart on page 44.
- 4) Lubricate all points and guide mechanisms requiring grease, with a high quality lithium base grease containing molybdenum disulfide ( $\text{MoS}_2$ ) such as «Esso Unirex EP1 Moly», «DARINA XL-Multi Season Moly, Grade #1» from Shell or equivalent.
- 5) Check oil level in hydraulic reservoir. Use good quality tractor transmission and hydraulic system oil such as «Trans Hydraulic Duratran» from Petro Canada, «DONAX TD» from Shell or equivalent.
- 6) Check tire pressure and adjust according to recommendation indicated on the tires.
- 7) Check engine oil level.
- 8) Check the operation of all hydraulic cylinders.
- 9) Check the operation of the bale pusher mechanism. It must operate freely and return to its starting position automatically. Should the valve (A Fig. 14) not engage positively, adjust the rod end clevis (B Fig. 14).

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## ***STARTING-UP (cont'd)***

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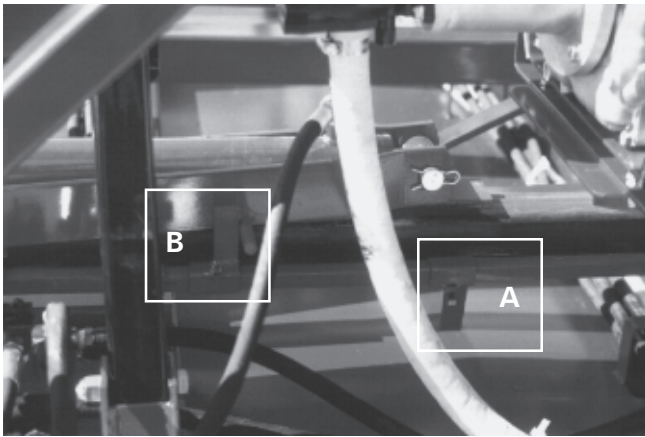


Figure 15



Figure 16



Figure 17

- 10) Check and if necessary, adjust the length of travel of the pusher by changing the position of lug "A" figure 15. To prevent bottoming of the piston, always keep  $\frac{1}{2}$ " to  $\frac{3}{4}$ " of travel at either end of the cylinders. The retracted position is adjusted in the same manner with lug "B" figure 15.
- 11) Check the surface of the stretcher arms for smoothness. Any mark or protrusion could cause tears to the tube.

### ***GROUND PREPARATION***

- 1) Choose a dry and well drained area.
- 2) Level and clean up site where the tubes will be used.
- 3) If possible, provide a sand bed of 2" to 3" (5-8 cm.) thick. This will help reduce damage from rodents.

### ***ADJUSTMENT OF THE AGRIPAC® LASTIC TUBER™***

#### **STEP 1 APPLIES ONLY TO THE 9100**

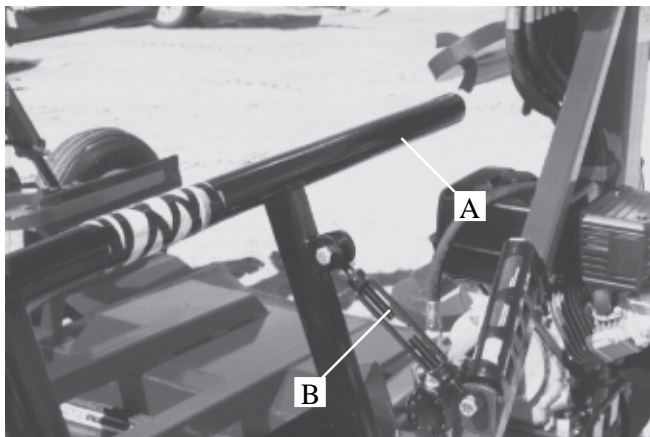
- 1) Position the six (6) stretcher hydraulic cylinder assemblies according to the size of tube used. Use the inside holes for 4 ft. tubes, 48" to 56" (1.22 to 1.42 m) (Fig.16). Use the outside holes for 5 ft. tubes, 56" to 66" (1.42 to 1.68 m) (Fig.17).
- 2) Locate the rear end of the AgriPac® Lastic Tuber™ approximately 5' (1.5m) away from the point where you want to position the end of the tube. This will compensate if there is some slippage of the first couple of bales until there is enough ground friction to push the AgriPac® Lastic Tuber™ forward.

**4**

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## STARTING-UP (cont'd)

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**4** Figure 18



Figure 19

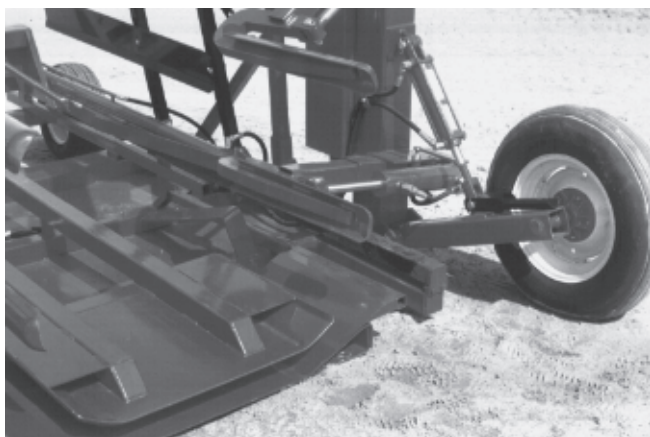


Figure 20

- 3) Adjust guides (A Fig.18) according to the width of the bales. Use turnbuckles provided (B Fig.18).
- 4) Adjust tongue to its most inward position. If there is a risk of interference with the front of the tractor or with uneven ground, it is recommended to remove it. (Fig. 19)
- 5) Adjust rear wheels in order to have a minimum amount of ground friction with the rear end of the AgriPac® Lastic Tuber™ (Fig. 20) while keeping it in contact with the ground.
- 6) For maximum operating speed, you may set the engine to full throttle, although it is preferable to run it a speed closer to your rate of bale supply to machine. This will result in a more economical operation.

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## STARTING-UP (cont'd)

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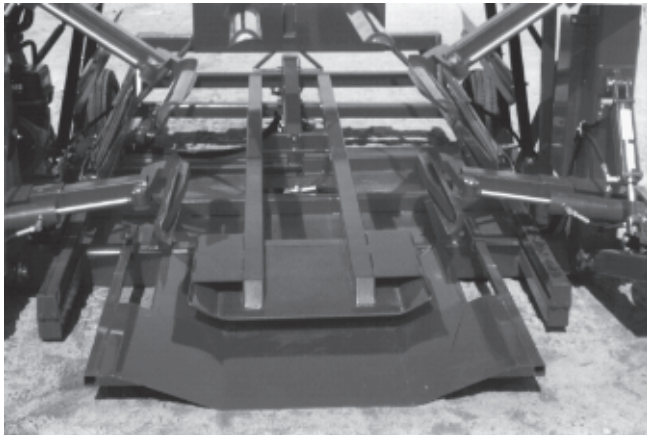


Figure 21



Figure 22



Figure 23

### INSTALLATION OF THE TUBE

To facilitate this procedure, adhere to the following sequence:

- 1) Start engine.
- 2) Close the stretcher arms to the most inward position and pull out the tube support plate. (Fig. 21)
- 3) Install tube on the stretcher arms. Place it so that the tube name is facing outside when it unfolds. Slide it carefully **to the bottom** of the stretcher arms and between the two bottom plates, being careful to remove all wrinkles, since they could cause some tearing of the tube. (Fig. 22)
- 4) At this stage, apply a **SLIGHT AMOUNT OF TENSION** to the tube.  
**9000:** Open each pair of stretcher arms until the end of the internal square tubing reaches the pilot hole of the outer tube. (Fig. 23)  
**9100:** Open each pair of stretcher arms until the pilot hole in the square tubing reaches the lower end of the guide tube. (Fig. 24)
- 5) Do not forget to fully retract the tube support plate until it is locked in place. (Fig. 25)

4

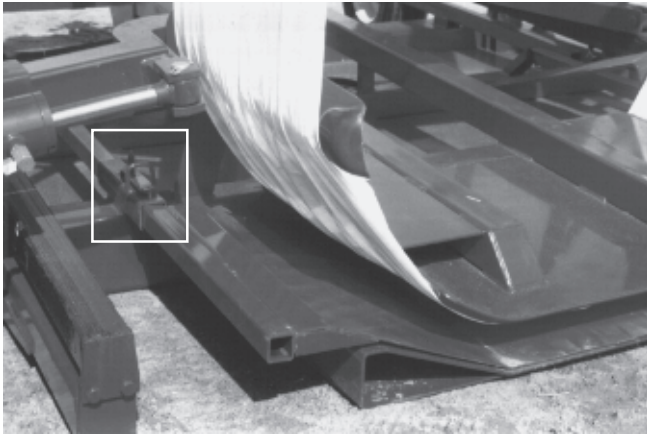


Figure 24

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## STARTING-UP (cont'd)

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**4** Figure 25

- 6) Again check the tube position (Fig. 26) and eliminate any wrinkles. Next, cut off all ties (Fig. 27).
- 7) Now it's time to close the end of the tube. Pull out the outer ply for approximately 36" (91 cm) and tie properly. (Fig. 28 and Fig. 29)
- 8) **STRETCH THE TUBE ONLY WHEN READY TO OPERATE.** It may lose some of its memory if kept stretched for a too long period of time. If you must stop loading bales for a while, **BRING THE TUBE DOWN TO A MODERATE TENSION.**



Figure 26



Figure 28



Figure 27



Figure 29

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## STARTING-UP (cont'd)

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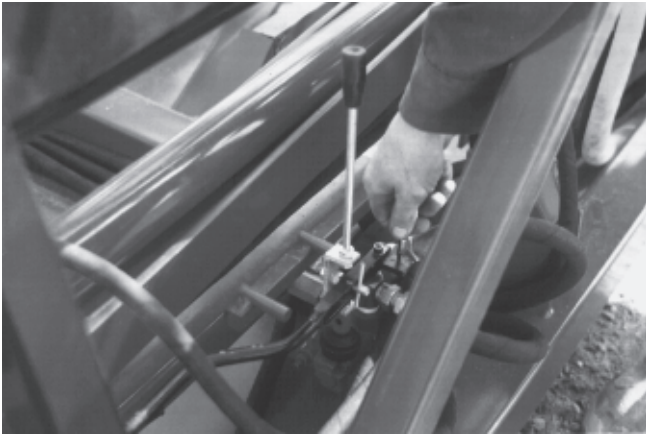


Figure 30



Figure 31



Figure 32

### OPERATION

- 1) Before loading the first bale, disengage the pusher control valve by flipping the safety lock outward. (Fig. 30) Load the first bale on the machine, operate the control valve manually until the bale approaches the arms and stop it there.
- 2) Stretch the tube by operating the three valves **SIMULTANEOUSLY** (Fig. 31) to obtain a **CLEARANCE OF APPROXIMATELY 2" to 3"** between the bale and the tube (Fig. 32). Readjust stretcher arms individually if necessary.
- 3) At this point, check again the rear wheels adjustment for **minimum** ground friction (step 5, page 12) before engaging the bale pusher valve.
- 4) Reset the safety lock by pushing it fully inward. Engage the valve manually to complete the cycle automatically.
- 5) It is recommended to use a spear (single or double) on your loader to drop the bales onto the AgriPac® Lastic Tuber™.
- 6) Once the bale is dropped, back up immediately to make room for the AgriPac® Lastic Tuber™'s forward movement.
- 7) After the first 3 or 4 bales, lower the rear of the AgriPac® Lastic Tuber™ to increase ground friction. This will ensure that the bales will be real tight against each other in the tube.
- 8) Towards the end of the tube, keep at least 36" (91 cm) of plastic, in order to allow for proper closure of the tube.

4

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## STARTING-UP (cont'd)

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4 Figure 33



Figure 34



Figure 35

- 9) To push the last bale into the tube, install the pusher extension supplied with the AgriPac® Lastic Tuber™. (Fig. 33)
- 10) Manually engage the pusher valve to initiate the last bale cycle. (Fig. 34)
- 11) Remove the pusher extension and store it in its receptacle on the right hand side of the AgriPac® Lastic Tuber™. (Fig. 35)
- 12) Close up end of tube as previously described. (Fig. 28 & Fig. 29)
- 13) Regularly inspect the tubes. If torn or punctured, repair openings with proper means.



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## STARTING-UP (cont'd)

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Figure 36

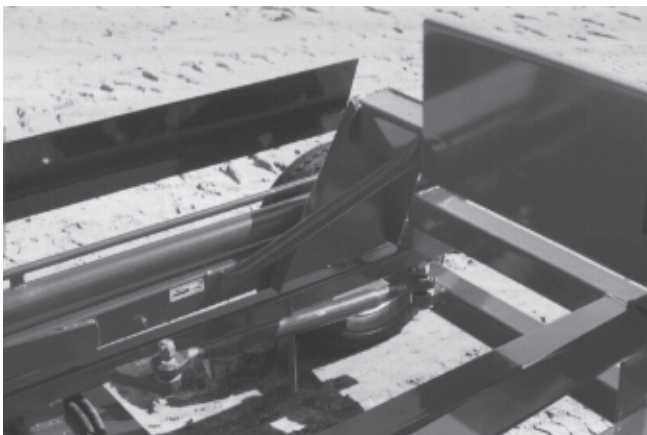


Figure 37

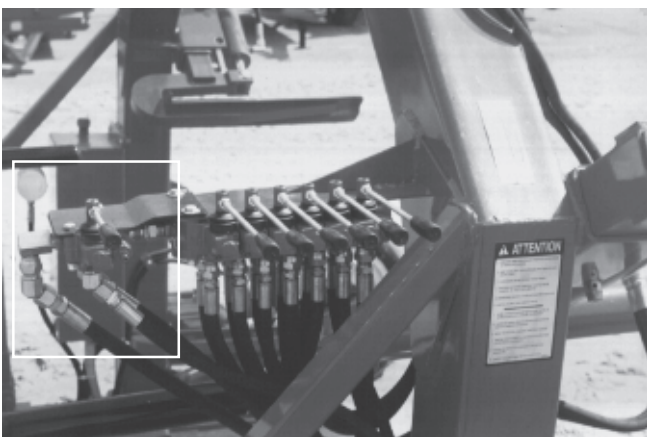


Figure 38

### STEERING THE AGRIPAC® LASTIC TUBER™

- 1) A triangular shape hoop has been installed on the fixed section of the tongue (Fig. 36). This provides a quick and efficient method to influence or change the direction of travel of the AgriPac® Lastic Tuber™ without leaving the tractor. Simply insert the bale spear in the lower part of the triangle on the side you wish to shift the AgriPac® Lastic Tuber™ and lift slightly.
- 2) If the AgriPac® Lastic Tuber™ has a tendency to always turn on the same side, you may adjust the direction of the wheels with the help of turnbuckles. (Fig. 37)
- 3) A hydraulic steering control mechanism is also available as an option, in this case, an additional control valve (Fig. 38) and an additional cylinder (2.5" x 8" stroke) are required (Fig. 39).

4



Figure 39

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## ***MAINTENANCE***

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- 1) Refer to the manufacturer's instructions for the engine.
- 2) Use a high quality lithium base grease containing molybdenum disulfide ( $\text{MoS}_2$ ) such as «Esso Unirex EP1 Moly», «DARINA XL-Multi Season Moly, Grade #1» from Shell or equivalent.
- 3) Wipe off all grease fittings with a clean cloth before adding grease in order to avoid injecting dirt or sand.
- 4) Repair or replace damaged grease fittings.
- 5) Lubricate long pusher guides every 8 hours of operation.
- 5) Lubricate stretcher arms guides every 20 hours of operation.
- 7) Lubricate all grease fittings every 20 hours of operation.
- 8) Open, clean and lubricate wheel bearings once a year.
- 9) Check oil level in hydraulic reservoir every 20 hours of operation. If necessary add good quality trans hydraulic oil such as «Trans Hydraulic Duratran» from Petro-Canada, «DONAX TD» from Shell or equivalent.
- 10) Change oil filter after the first 50 hours of operation and then every 250 hours. Use replacement filter no. K-22001, Alberta Ag-Industries Ltd. part No. 32007.
- 11) Check all nuts and bolts once a year. If necessary use torque chart on page 44.
- 12) Check all bolts on wheels after first 5 hours of operation and then every 50 hours.
- 13) Check tire pressure every 50 hours. Adjust according to manufacturer's recommendation indicated on the tires.

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## ***STORAGE***

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- 1) Store the AgriPac® Lastic Tuber™ in a cool, dry place.
- 2) Lower the AgriPac® Lastic Tuber™ frame on wooden blocks.
- 3) Keep tires off the ground and cover them if left exposed to the sun.
- 4) Keep all piston rods in the retracted position. This will assure better protection against the elements.
- 5) Clean your AgriPac® Lastic Tuber™.
- 6) Touch-up or repaint if necessary.
- 7) Lubricate all points before storage.
- 8) Drain all fuel from tank and follow engine manufacturer's storage recommendations.

# SPECIFICATIONS

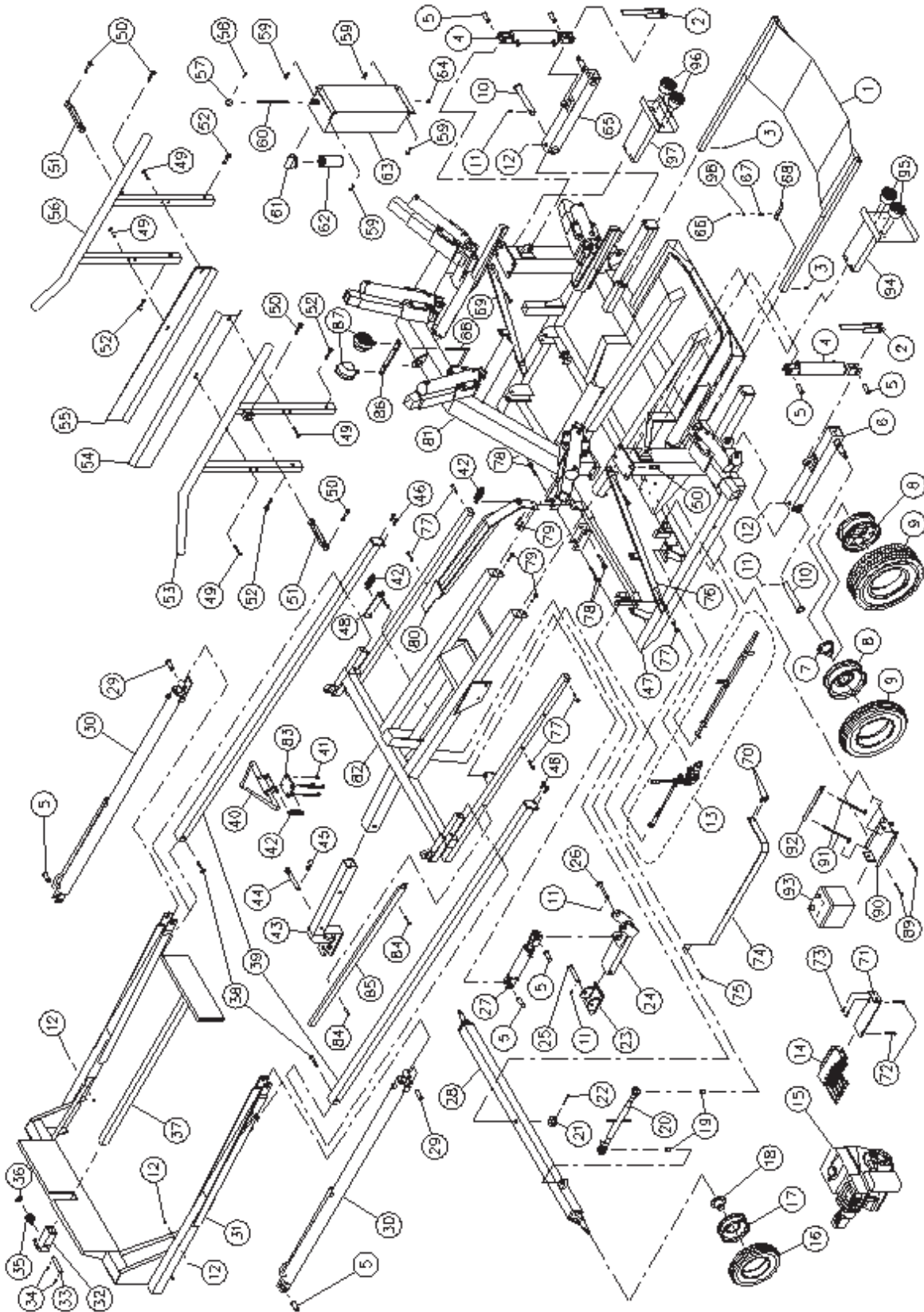
AgriPac® Lastic Tuber™	9000	9100
Overall length	165" (4.19 m) (without the 8½" (21.6 cm) tongue)	165" (4.19 m) (without the 8½" (21.6 cm) tongue)
Overall width	100" (2.54 m) - - -	112" (2.85 m) 104" (2.64 m) (without tires & motor in transport position)
Height	92" (2.34 m) (transport position)	93" (2.36 m) (transport position)
Bale diameter	48" to 56" (1.22 à 1.42 m) diameter	48" to 66" (1.22 à 1.68 m) diameter
Adaptor for stretcher arm for smaller bales	bales 44" to 52" (1.12 à 1.32 m) diameter Option (P-6210)	bales 44" to 52" (1.12 à 1.32 m) diameter Option (P-6310)
Engine	HONDA 9 HP	HONDA 9 HP
Manual starting	Standard	Standard
Electric starting	Option	Option
Two stages hyd. pump	3 gal at 2500 psi / 11 gal at 1100 psi	3 gal at 2500 psi / 11 gal at 1100 psi
Front hub	cap. 1000 lbs (450 kg) 4 bolts	cap. 2500 lbs (1136 kg) 5 bolts
Rear hub	cap. 2500 lbs (1136 kg) 5 bolts	cap. 2500 lbs (1136 kg) 5 bolts
Front rim	10" x 6" - 4 bolts	10" x 6" - 5 bolts
Rear rim	15" x 5" - 5 bolts	15" x 6" - 5 bolts
Front tires	20.5" x 8" x 10" - 4 plys (with tube)	20.5" x 8" x 10" - 4 plys (with tube)
Rear tires	6.7" x 15" - 6 plys (with tube)	7.6" x 15" - 6 plys (with tube)
Performance	70 to 100 bales per hour	70 to 100 bales per hour
Oil tank capacity	5.75 gal US (4.75 gal imp.) (21.75 liters)	5.75 gal US (4.75 gal imp.) (21.75 liters)
Hyd. steering adjustment	Option (P-6235)	Option (P-6235)
Working lights	Option	Option
Road lights	Option	Option
Hitch weight	1360 lbs (612 kg) app.	1410 lbs (635 kg) app.
Total weight	3900 lbs (1755 kg) app.	4150 lbs (1868 kg) app.

Design and specifications subject to change without notice.

## PLASTIC TUBES TO USE ACCORDING TO BALES DIAMETER

9000 & 9100	For bales 44" to 52" (1.12 à 1.32m) diameter	Lay flat 69" (1.75 m) (Use with adaptor for stretcher arms)
9000 & 9100	For bales 48" to 56" (1.22 à 1.42 m) diameter	Lay flat 73½" (1.87 m)
9100 ONLY	For bales 56" to 66" (1.42 à 1.68 m) diameter	Lay flat 86" (2.18 m)

# AGRIPAC® LASTIC TUBER™ 9000 ASSEMBLY



# AGRIPAC® LASTIC TUBER™ 9000 ASSEMBLY (cont'd)

REF.	PART #	DESCRIPTION	QTY
1	32107	Tube support plate .....	1
2	32108	Safety locking mechanism for rear wheels .....	2
3	Std.	Bolt ¼" NC x ¾" lg + nut & lock washer .....	2
4	25TR08	Cylinder 2.5" x 8" standard .....	2
5	D-60051	Pin 1" x 3" lg .....	8
6	110-03441	Left rear axle .....	1
7	32218	Hub H-2500 (see details p. 38) .....	2
8	R-1555	Rim 15 x 5 x 5 .....	2
8	R-1575RT	Rim 15 x 7 x 5 (2) .....	opt.
9	PN-6.7015	Tire 6.7 x 15 - 6 ply + tube 6.70 x 15 TR-15 .....	2
9	PN-7.0015RT	Tire 7.00 x 15 (2) .....	opt.
10	32034	Pin for rear axle (9000) .....	2
11	Std.	Cotter pin 5/32" x 1½" lg .....	4
12	Std.	Grease fitting ¼"-28 straight .....	6
13	640-10002	1 spool control valve (see details p.35) .....	1
14	640-60001	6 spool control valve (see details p. 33) .....	1
15	---	HONDA 9 HP engine assembled with pump (see details p. 36) .....	1
15	---	HONDA 9 HP engine with electric starter assembled with pump (see details p. 36) .....	opt.
16	PN-20.58	Tire 20.5 x 8 x 10 - 4 ply .....	2
17	R-1064	Rim 10 x 6 x 4 .....	2
18	53015	Hub H-1000 (see details p. 37) .....	2
19	32112	Spacer ¾" i.d. x 1" o.d. x 1" lg .....	2
20	32113	Turnbuckles 20½" à 30½" .....	1
21	32114	Castle nut 1" - 8 .....	1
22	Std.	Cotter pin 5/32" x 2" .....	1
23	32115	Base, hydraulic jack .....	1
24	32116	Body, hydraulic jack .....	1
25	32117	Pin for hydraulic jack base .....	1
26	32118	Pin for hydraulic jack body .....	1
27	25TR04	Cylinder 2.5 x 4" standard .....	1
28	32119	Front axle assembly (9000) .....	1
29	32019	Pin 1" .....	2
30	20172	Cylinder 2" x 72" lg (see details p. 32) .....	2
31	32205	9000 bale ram frame .....	1
32	32121	Ram extension support .....	1
33	32122	Pin .....	1
34	Std.	Cotter pin 3/16" x 1¾" lg .....	2
35	32123	Ram extension support spring .....	1
36	Std.	Washer 1" .....	1
37	32124	Ram extension .....	1
38	Std.	Bolt 5/8" NC x 3½" lg + nut & lock washer .....	2
39	32022	Ram guide .....	2
40	32198	Steering triangle .....	1
41	Std.	Bolt ½" x 5" lg + nylon locknut .....	4
42	32008	Tension spring 1¼" x 3½" lg .....	3
43	32199	Drawbar .....	1
44	32024	Drawbar pin .....	1
45	DA3070-56	Hitch pin clip .....	1
46	Std.	Bolt ½" NC x 1½" lg + nut & lock washer .....	4
47	120-00641	9000 main frame .....	1
48	32128	Locking mechanism for jack .....	1
49	Std.	Bolt 7/16" NC x 3" lg + nut + lock washer + flat washer .....	4
50	Std.	Bolt 5/8" NC x 2½" lg + nylon locknut .....	12
51	32014	Turnbuckle 10" .....	2
52	Std.	Bolt 5/8" NC x 3½" lg + nylon locknut .....	4
53	32025	Left bale guide (9000) .....	1

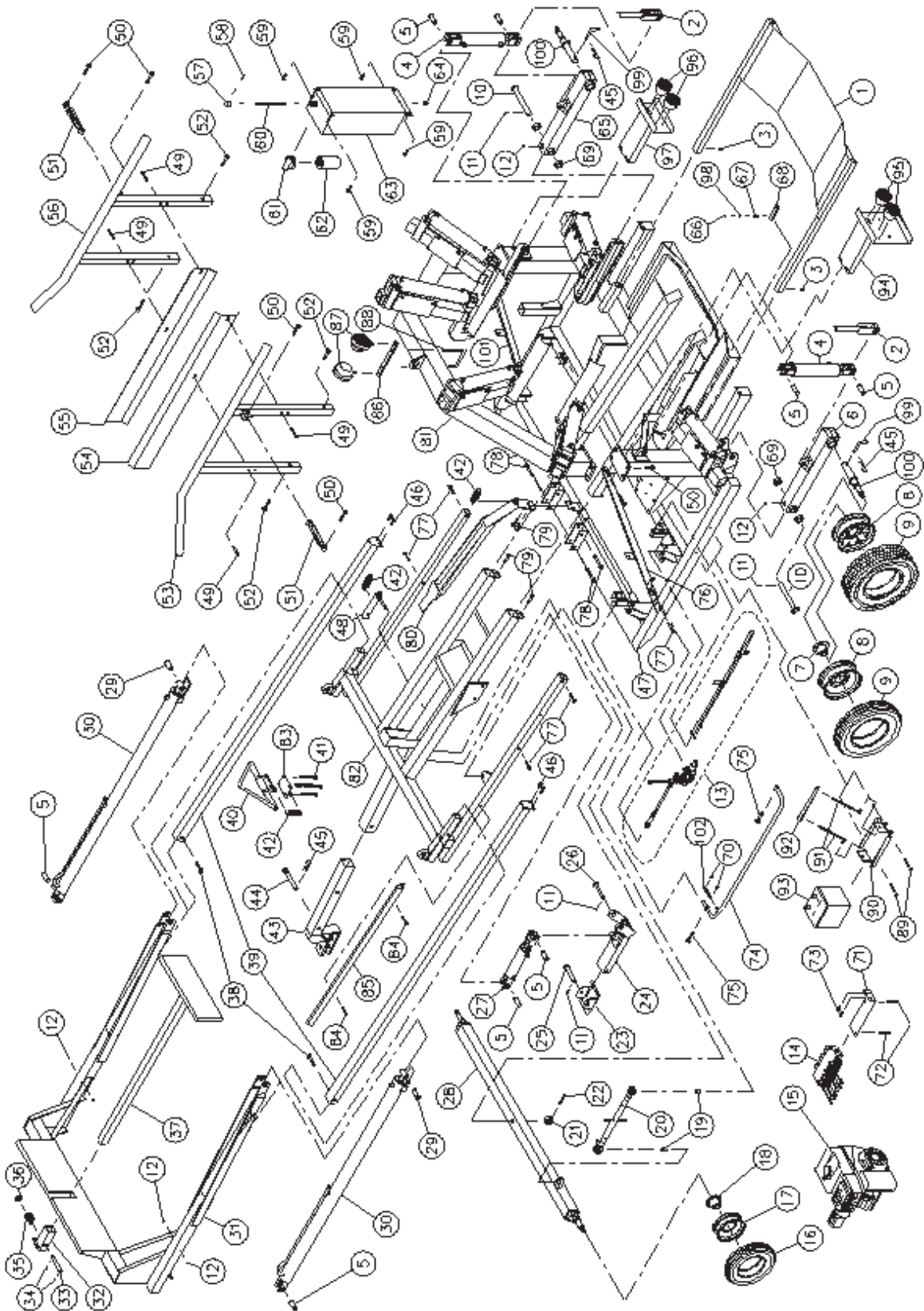


# AGRIPAC® LASTIC TUBER™ 9000 ASSEMBLY (cont'd)

REF.	PART #	DESCRIPTION	QTY
54	130-04281	Left protector .....	1
55	130-04271	Right protector .....	1
56	32028	Right bale guide (9000) .....	1
57	32029	Oil reservoir cap .....	1
58	Std.	Roll pin 5/32" x 1 3/4" .....	1
59	Std.	Bolt 7/16" NC x 1" + nut & lock washer .....	4
60	32030	Dip stick .....	1
61	32031	Hydraulic oil filter adaptor FSP107-1E DNN .....	1
62	32007	Paper filter K-22001 .....	1
63	32033	Oil reservoir .....	1
64	32032	Drain plug 1/2" .....	1
65	110-03451	Right rear axle .....	1
66	Std.	Nylon locknut 1/4" NC .....	1
67	32130	Compression spring 13/32" x 1 1/2" lg .....	1
68	32131	Locking device for support plate .....	1
69	160-02081	Arch brace (right side) .....	1
70	Std.	Bolt 3/8" NC x 1 1/4" lg + nylon locknut .....	2
71	110-06191	Valve support .....	1
72	Std.	Bolt 5/16" NC x 2 1/2" lg + nylon locknut .....	2
73	Std.	Bolt 7/16" NC x 3/4" lg + lockwasher & flat washer .....	2
74	32208	Guard .....	1
75	Std.	Bolt 3/8" NC x 3" lg + nylon locknut .....	1
76	160-02221	Arch brace (left side) .....	1
77	Std.	Bolt 1/2" NC x 3 1/2" lg + nylon locknut .....	8
78	Std.	Bolt 5/8" NC x 4 1/2" lg + nylon locknut .....	4
79	Std.	Bolt 1/2" NC x 1 1/2" lg + nylon locknut .....	4
80	110-03311	Trigger .....	1
81	120-00621	Arch frame .....	1
82	120-00631	Support structure for ram guide .....	1
83	32209	Retaining plate for steering triangle .....	1
84	Std.	Bolt 3/8" NC x 2 3/4" lg + nylon locknut & flat washer .....	2
85	32207	Guard .....	1
86	140-02901	Working lights retaining plate .....	opt.
87	110-04771	2 Working lights .....	opt.
88	150-00971	"U" bolt 3/8" NC + 2 nylon locknut .....	opt.
89	Std.	2 Bolts 5/16" NC x 4" lg + nylon locknut .....	opt.
90	110-04831	Battery support .....	opt.
91	110-04841	2 Threaded rods for battery hold down + nylon locknut 3/8" NC and 7/16" NC .....	opt.
92	130-05751	Battery hold down .....	opt.
93	Std.	Battery 12V-540A .....	opt.
94	110-03511	Left support for flasher .....	opt.
95	32228	2 Left flashers with license light .....	opt.
96	32229	2 Right flashers .....	opt.
97	110-03501	Right support for flasher .....	opt.
98	376-32200	Flat washer 3/16" .....	1

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# AGRIPAC® LASTIC TUBER™ 9100 ASSEMBLY





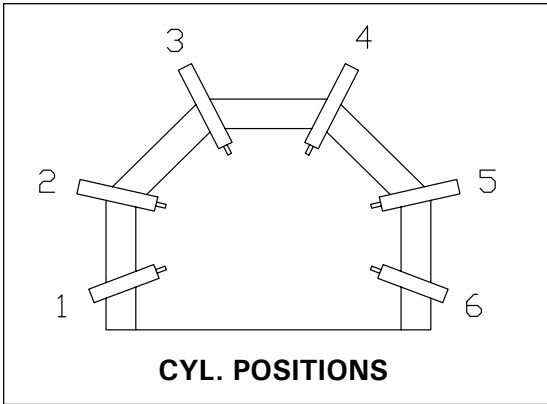
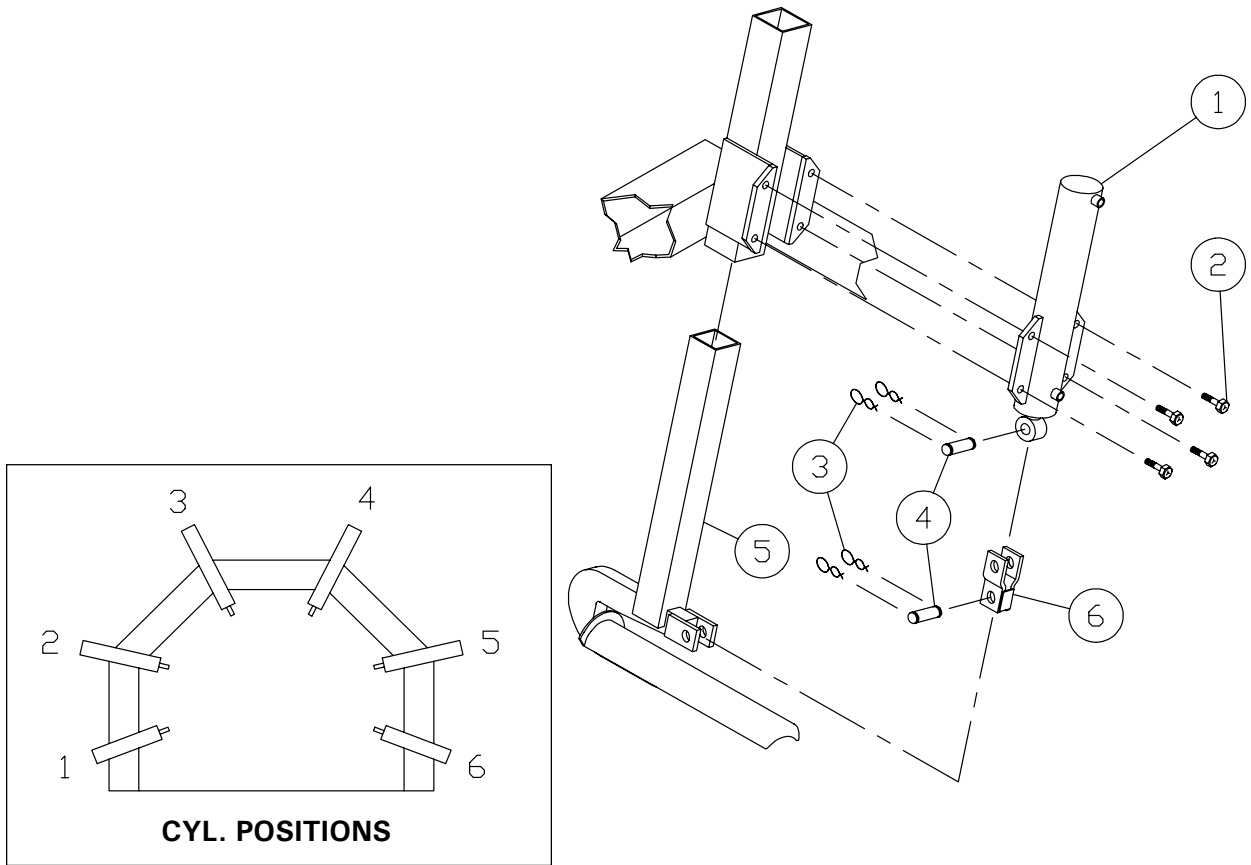
# AGRIPAC® LASTIC TUBER™ 9100 ASSEMBLY (cont'd)

REF.	PART #	DESCRIPTION	QTY
1	32107	Tube support plate .....	1
2	32108	Safety locking mechanism for rear wheels .....	2
3	Std.	Bolt ¼" NC x ¾" lg + nut & lock washer .....	2
4	25TR08	Cylinder 2.5" x 8" standard .....	2
5	D-60051	Pin 1" x 3" lg .....	8
6	110-03442	Left rear axle .....	1
7	32218	Hub H-2500 (see details p. 38) .....	2
8	R-1565	Rim 15 x 6 x 5 .....	2
8	R-1575RT	Rim 15 x 7 x 5 (2) .....	opt.
9	PN-7.6015	Tire 6.7 x 15 - 6 ply + tube 7.6 x 15 TR-15 .....	2
9	PN-7.0015RT	Tire 7.00 x 15 (2) .....	opt.
10	32093	Pin for rear axle (9100) .....	2
11	Std.	Cotter pin 5/32" x 1½" lg .....	4
12	Std.	Grease ¼"-28 fitting .....	6
13	640-10002	1 spool control valve (see details p. 35) .....	1
14	640-60001	6 spool control valve (see details p. 33) .....	1
15	---	HONDA 9HP engine assembled with pump (see details p. 36) .....	1
15	---	HONDA 9 HP engine with electric starter assembled with pump (see details p. 36) .....	opt.
16	PN-20.58	Tire 20.5 x 8 x 10 - 4 ply .....	2
17	R-1065	Rim 10 x 6 x 5 .....	2
18	32218	Hub H-2500 (see details p. 38) .....	2
19	32112	Spacer ¾" i.d. x 1" o.d. x 1" lg .....	2
20	32113	Turnbuckles 20½" to 30½" .....	1
21	32114	Castle nut 1" - 8 .....	1
22	Std.	Cotter pin 5/32" x 2" .....	1
23	32115	Base, hydraulic jack .....	1
24	32116	Body, hydraulic jack .....	1
25	32117	Pin for hydraulic jack base .....	1
26	32118	Pin for hydraulic jack body .....	1
27	25TR04	Cylinder 2.5 x 4" standard .....	1
28	110-03461	Front axle assembly (9100) .....	1
29	32019	Pin 1" .....	2
30	20172	Cylinder 2" x 72" lg (see details p. 32) .....	2
31	32216	9100 bale ram frame .....	1
32	32121	Ram extension support .....	1
33	32122	Pin .....	1
34	Std.	Cotter pin 3/16" x 1¾" lg .....	2
35	32123	Ram extension support spring .....	1
36	Std.	Washer 1" .....	1
37	32124	Ram extension .....	1
38	Std.	Bolt 5/8" NC x 3½" lg + nut & lock washer .....	2
39	32022	Ram guide .....	2
40	32198	Steering triangle .....	1
41	Std.	Bolt ½" x 5" lg + nylon locknut .....	4
42	32008	Tension spring 1¼" x 3½" lg .....	3
43	32199	Drawbar .....	1
44	32024	Drawbar pin .....	1
45	DA3070-56	Hitch pin clip 5/32" .....	3
46	Std.	Bolt ½" NC x 1½" lg + nut & lock washer .....	4
47	32217	9100 main frame .....	1
48	32128	Locking mechanism for jack .....	1
49	Std.	Bolt 7/16" NC x 3" lg + nut + lock washer + flat washer .....	4
50	Std.	Bolt 5/8" NC x 2½" lg + nylon locknut .....	12
51	32014	Turnbuckle 10" .....	2
52	Std.	Bolt 5/8" NC x 3½" lg + nylon locknut .....	4
53	32165	Left bale guide (9100) .....	1

# AGRIPAC® LASTIC TUBER™ 9100 ASSEMBLY (cont'd)

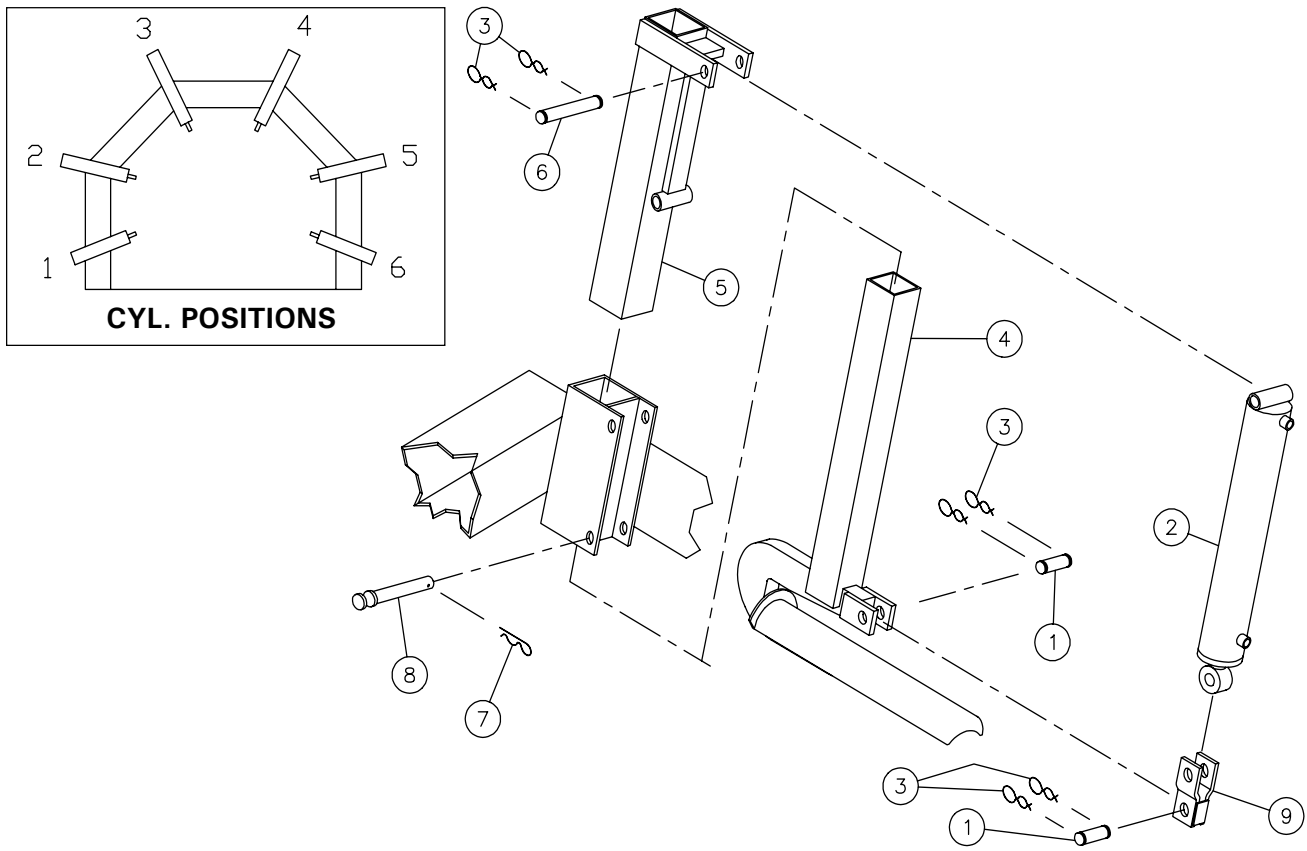
REF.	PART #	DESCRIPTION	QTY
54	130-04281	Left protector .....	1
55	130-04271	Right protector .....	1
56	32166	Right bale guide (9100) .....	1
57	32029	Oil reservoir cap .....	1
58	Std.	Roll pin 5/32" x 1 3/4" .....	1
59	Std.	Bolt 7/16" NC x 1" + nut & lock washer .....	4
60	32030	Dip stick .....	1
61	32031	Hydraulic oil filter adaptor FSP107-1E DNN .....	1
62	32007	Paper filter K-22001 .....	1
63	110-06241	Oil reservoir .....	1
64	32032	Drain plug 1/2" .....	1
65	110-03452	Right rear axle .....	1
66	Std.	Nylon locknut 1/4" NC .....	1
67	32130	Compression spring 13/32" x 1 1/2" lg .....	1
68	32131	Locking device for support plate .....	1
69	32094	Spacer 1 1/4" x 1/2" lg .....	4
70	Std.	Nylon locknut 5/16" NC .....	2
71	110-06191	Valve support .....	1
72	Std.	Bolt 5/16" NC x 2 1/2" lg + nylon locknut .....	2
73	Std.	Bolt 7/16" NC x 3/4" lg + lock washer & flat washer .....	2
74	110-06301	Guard .....	1
75	Std.	Bolt 5/8" NC x 3" lg + nylon locknut .....	2
76	160-00271	Arch brace (left side) .....	1
77	Std.	Bolt 1/2" NC x 3 1/2" lg + nylon locknut .....	8
78	Std.	Bolt 5/8" NC x 4 1/2" lg + nylon locknut .....	4
79	Std.	Bolt 1/2" NC x 1 1/2" lg + nylon locknut .....	4
80	32213	Trigger .....	1
81	32214	Arch frame .....	1
82	32215	Support structure for ram guide .....	1
83	32209	Retaining plate for steering triangle .....	1
84	Std.	Bolt 3/8" NC x 2 3/4" lg + nylon locknut & flat washer .....	2
85	32207	Guard .....	1
86	140-02901	Working lights retaining plate .....	opt.
87	110-04771	2 Working lights .....	opt.
88	150-00971	"U" bolt 3/8" NC + 2 nylon locknut .....	opt.
89	Std.	2 Bolts 5/16" NC x 4" lg + nylon locknut .....	opt.
90	110-04831	Battery support .....	opt.
91	110-04841	2 Threaded rods for battery hold down + nylon locknut 3/8" NC and 7/16" NC .....	opt.
92	130-05751	Battery hold down .....	opt.
93	Std.	Battery 12V-540A .....	opt.
94	110-03511	Left support for flasher .....	opt.
95	32228	2 Left flashers with license light .....	opt.
96	32229	2 Right flashers .....	opt.
97	110-03501	Right support for flasher .....	opt.
98	376-32200	Flat washer 3/16 .....	1
99	150-01281	Pin 5/8" .....	2
100	110-06161	Spindle for rear axle .....	2
101	160-02081	Arch brace (right side) .....	1
102	16107	Extension spring .....	1

# DETAIL OF FARCH MODEL 9000



REF.	PART #	DESCRIPTION	QTY CYL. POSITION #					
			1	2	3	4	5	6
1	30Z10	Cylinder .....	1	-	-	-	-	1
1	30Z15	Cylinder .....	-	1	-	-	1	-
1	30Z17	Cylinder .....	-	-	1	1	-	-
2	Std.	Bolt 5/8" NC x 2" lg + nylon locknut .....	4	4	4	4	4	4
3	Std.	Hair pin 1/8" .....	2	2	2	2	2	2
4	Std.	Pin 1" .....	1	1	1	1	1	1
5	32038	Stretcher arm .....	1	-	-	-	-	1
5	32039	Stretcher arm .....	-	1	1	1	1	-
6	110-06171	Adaptor for 44" to 50" bales (optional) .....	-	-	1	1	-	-

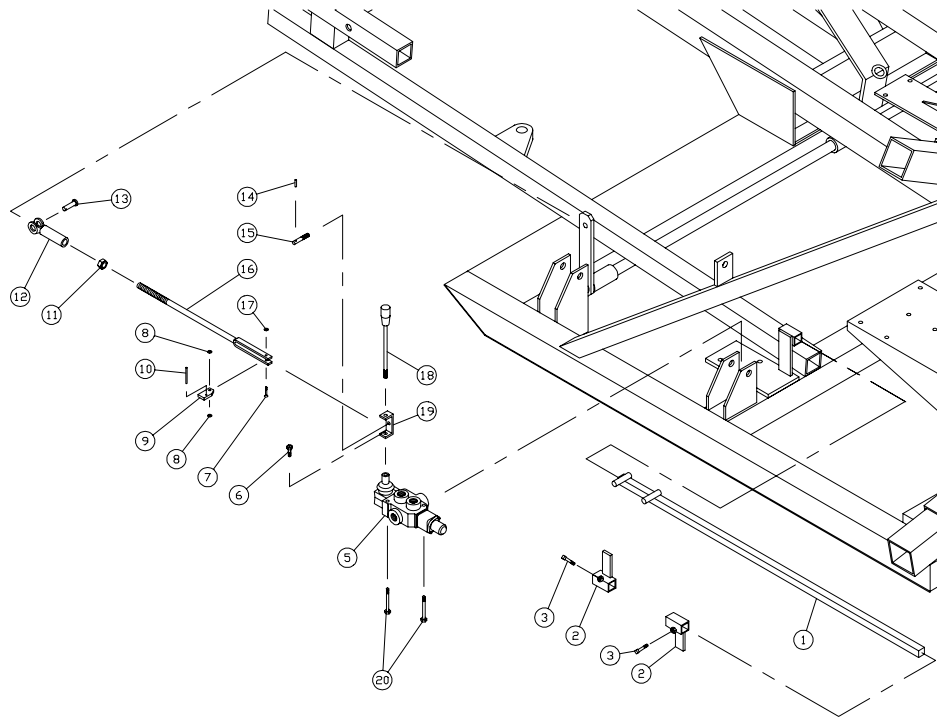
# DETAIL OF ARCH MODEL 9100



REF.	PART #	DESCRIPTION	QTY CYL POSITION #					
			1	2	3	4	5	6
1	Std.	Pin 1" x 3" lg .....	1	1	2	2	1	1
2	30H10	Cylinder .....	1	-	-	-	-	1
2	30H17	Cylinder .....	-	1	1	1	1	-
3	Std.	Hair pin 1/8" .....	4	4	6	6	4	4
4	32152	Stretcher arm .....	1	-	-	-	-	1
4	32153	Stretcher arm .....	-	1	-	-	1	-
4	32154	Stretcher arm .....	-	-	1	1	-	-
5	110-06131	Stretcher arm guide .....	1	-	-	-	-	1
5	110-06141	Stretcher arm guide .....	-	1	-	-	1	-
5	32159	Stretcher arm guide .....	-	-	1	1	-	-
6	32160	Pin 1" x 5" lg .....	1	1	1	1	1	1
7	Std.	Hitch pin clip 3/16" .....	1	1	1	1	1	1
8	32161	Pin 1" x 5/4" lg .....	1	1	1	1	1	1
9	110-06181	Adaptor for 44" to 50" bales (optional) .....	-	-	1	1	-	-

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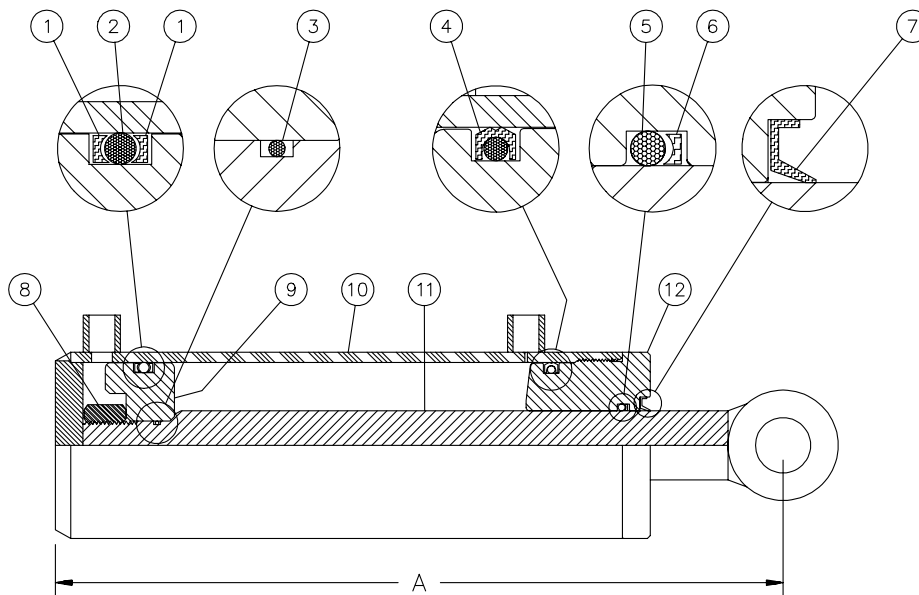
# AUTOMATIC SYSTEM DETAIL



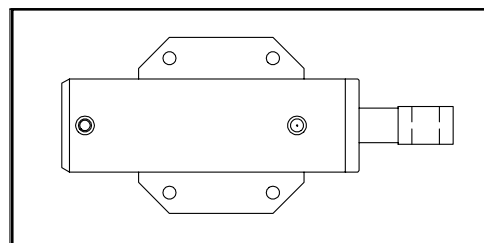
REF.	PART #	DESCRIPTION	QTY	
			9000	9100
1	110-06321	Rod (9000) .....	1	-
1	110-06311	Rod (9100) .....	-	1
2	32141	Stopper .....	2	2
3	Std.	Square head set screw 5/16" NC x 3/4" lg .....	2	2
5	640-10002	1 spool control valve (see details p. 35) .....	1	1
6	Std.	Bolt M8 x 1.25 x 16mm lg + lock washer .....	1	1
7	Std.	Flat head screw 10-24 UNC x 1" lg + nylon locknut .....	1	1
8	32144	Flat washer 3/16 (brass) .....	2	2
9	32145	Lever .....	1	1
10	Std.	Roll pin 5/32" X 1 1/4" lg .....	1	1
11	Std.	Nut 1/2" NF .....	1	1
12	51435	Clevis 1/2" NF .....	1	1
13	51436	Pin 1/2" ø x 1 3/4" lg + cotter pin 1/8" x 3/4" lg .....	1	1
14	Std.	Roll pin 5/32" x 3/4" lg .....	1	1
15	32146	Valve actuator pin + 2 nut 5/16" NC + lock washer .....	1	1
16	32147	Rod (9000) .....	1	-
16	32148	Rod (9100) .....	-	1
17	32149	Lock washer 3/16" .....	1	1
18	649-00009	Spool handle + 2 nut M8 x 1.25 .....	1	1
19	190-01651	Spool handle support .....	1	1
20	Std.	Bolt 5/16" NC x 2 1/2" lg + nylon locknut & flat washer .....	2	2

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# ARCH CYLINDER 9000



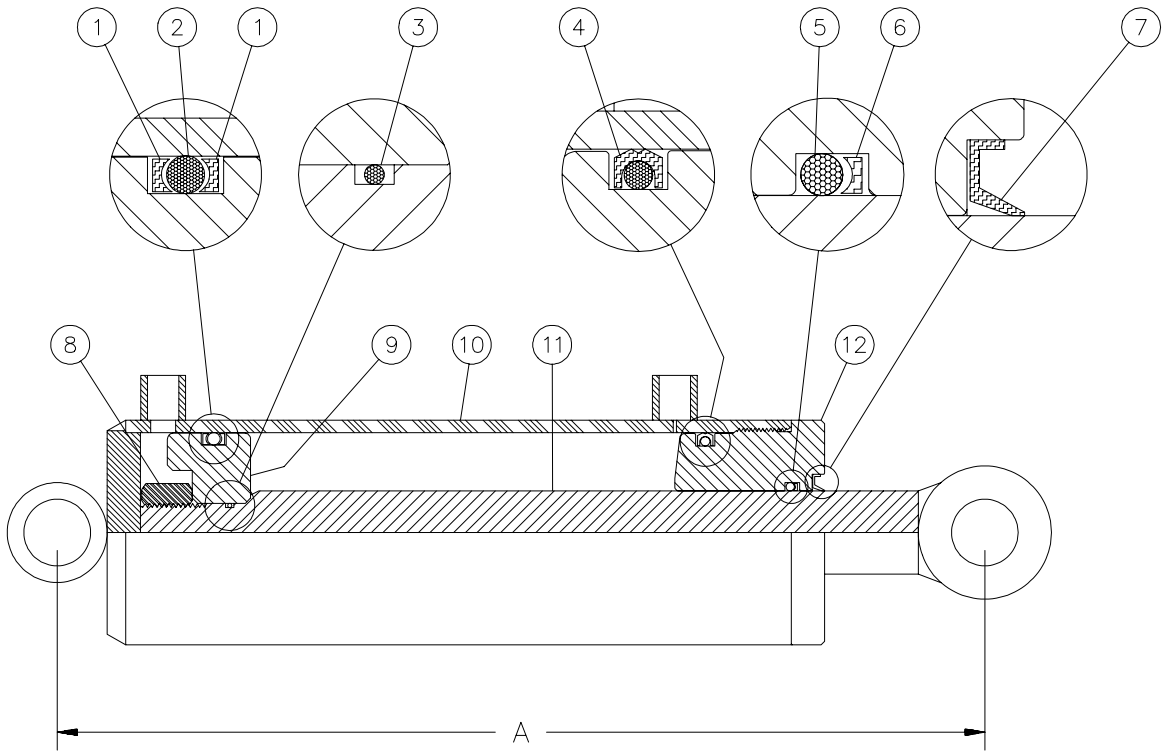
<u>MODEL</u>	<u>LENGTH A</u>
30Z10	16"
30Z15	21"
30Z17	23"



REF.	PART #	DESCRIPTION	QTY CYLINDER #		
			30Z10	30Z15	30Z17
1	BU-334	Back-up ring 3/16" x 2 5/8" x 3" .....	2	2	2
2	OR-334	O-ring 3/16" x 2 5/8" x 3" .....	2	2	2
3	OR-018	O-ring 1/16" x 3/4" x 7/8" .....	1	1	1
4	PSP-334	O-ring "heavy duty" 3/16" x 2 5/8" x 3" .....	1	1	1
5	OR-218	O-ring 1/8" x 1 1/4" x 1 1/2" .....	1	1	1
6	BU-218	Back-up ring 1/8" x 1 1/4" x 1 1/2" .....	1	1	1
7	CR12330	Wiper 1/8" x 1 1/4" x 1 1/2" .....	1	1	1
8	Std.	Nut 7/8" NF .....	1	1	1
9	D-6000	Piston 3" dia. ....	1	1	1
10	D-6096	Cylinder body 3" for 30Z10 .....	1	-	-
10	D-6097	Cylinder body 3" for 30Z15 .....	-	1	-
10	D-6098	Cylinder body 3" for 30Z17 .....	-	-	1
11	D-6099	Piston rod 1 1/4" for 30Z10 and 30H10 .....	1	-	-
11	D-6100	Piston rod 1 1/4" for 30Z15 and 30H15 .....	-	1	-
11	D-6101	Piston rod 1 1/4" for 30Z17 and 30H17 .....	-	-	1
12	D-6093	Head 3" dia. ....	1	1	1
NI*	32204	Repair kit for cylinder 3" (includes # 1, 2, 3, 4, 5, 6, & 7) ...	1	1	1

NI = Not illustrated

# ARCH CYLINDER 9100

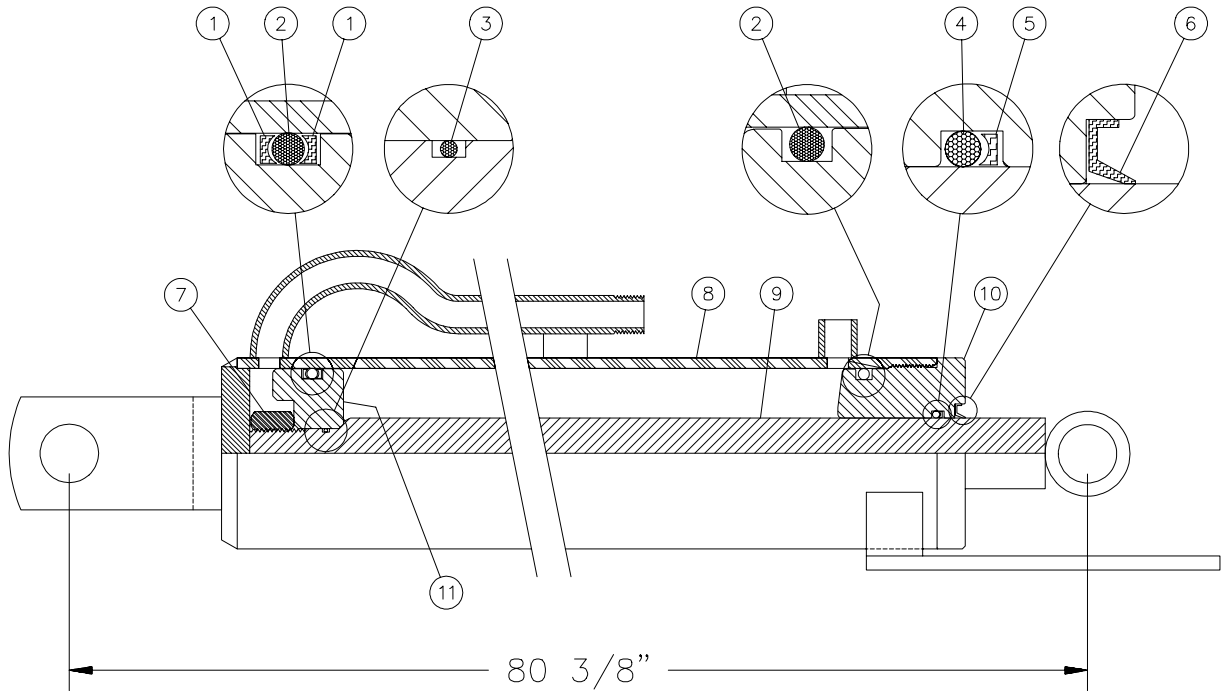


<u>MODEL</u>	<u>LENGTH A</u>
30H10	16 <sup>3</sup> / <sub>4</sub> "
30H17	23 <sup>3</sup> / <sub>4</sub> "

REF.	PART #	DESCRIPTION	QTY CYLINDER #	
			30H10	30H17
1	BU-334	Back-up ring 3/16" x 2 5/8" x 3" .....	2	2
2	OR-334	O-ring 3/16" x 2 5/8" x 3" .....	2	2
3	OR-018	O-ring 1/16" x 3/4" x 7/8" .....	1	1
4	PSP-334	O-ring "heavy duty" 3/16" x 2 5/8" x 3" .....	1	1
5	OR-218	O-ring 1/8" x 1 1/4" x 1 1/2" .....	1	1
6	BU-218	Back-up ring 1/8" x 1 1/4" x 1 1/2" .....	1	1
7	CR12330	Wiper 1/8" x 1 1/4" x 1 1/2" .....	1	1
8	Std.	Nut 7/8" NF .....	1	1
9	D-6000	Piston 3" dia. ....	1	1
10	D-6168	Cylinder body 3" for 30H10 .....	1	-
10	D-6170	Cylinder body 3" for 30H17 .....	-	1
11	D-6099	Piston rod 1 1/4" for 30Z10 and 30H10 .....	1	-
11	D-6101	Piston rod 1 1/4" for 30Z17 and 30H17 .....	-	1
12	D-6093	Head 3" dia. ....	1	1
NI*	32204	Repair kit for cylinder 3" (includes # 1, 2, 3, 4, 5, 6, & 7) .....	1	1

NI = Not illustrated

# PUSHER CYLINDER # 20I72



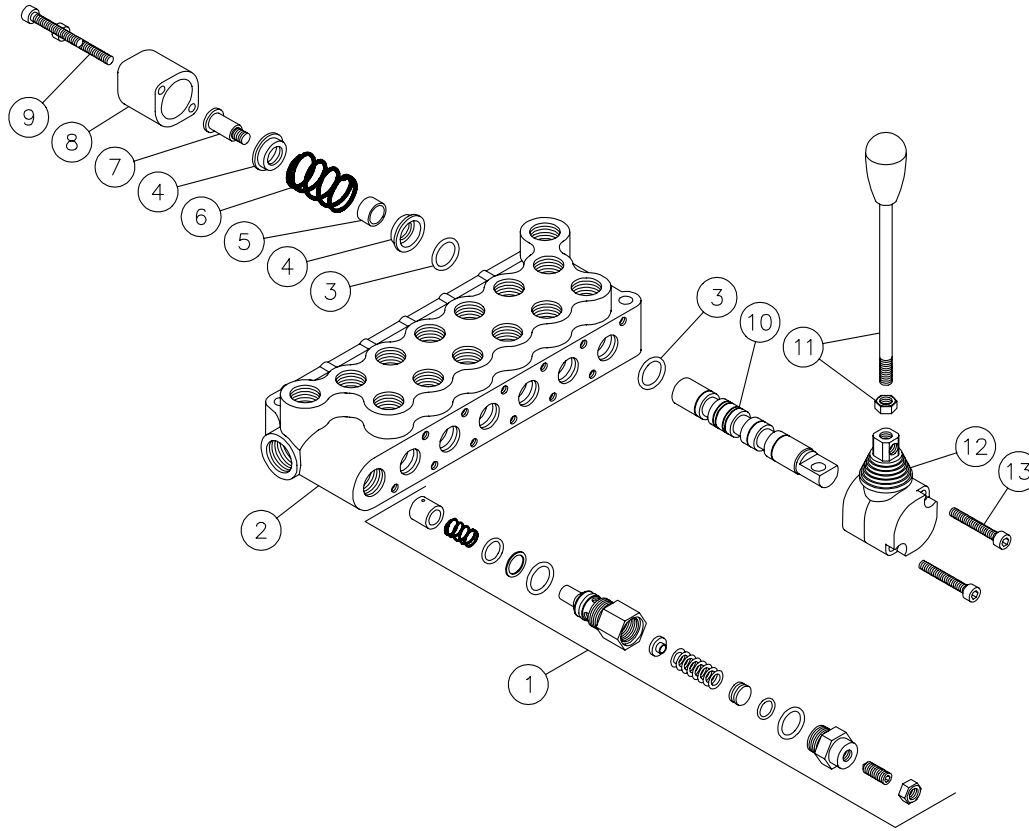
REF.	PART #	DESCRIPTION	QTY
			20172
1	BU-326	Back-up ring 3/16" x 1 5/8" x 2" .....	2
2	OR-326	O-ring 3/16" x 1 5/8" x 2" .....	2
3	OR-016	O-ring 1/16" x 5/8" x 3/4" .....	1
4	OR-218	O-ring 1/8" x 1 1/4" x 1 1/2" .....	1
5	BU-218	Back-up ring 1/8" x 1 1/4" x 1 1/2" .....	1
6	CR12330	Wiper 1/8" x 1 1/4" x 1 1/2" .....	1
7	Std.	Nut 3/4" NF .....	1
8	D-6179	Cylinder body 2" ø .....	1
9	D-6172	Piston rod 1 1/4" ø for 20G72 & 20I72 .....	1
10	D-6032	Head 2" ø .....	1
11	D-6020	Piston 2" ø .....	1
NI*	32203	Repair kit for cylinder 2" (includes # 1, 2, 3, 4, 5, & 6) .....	1

NI = Not illustrated

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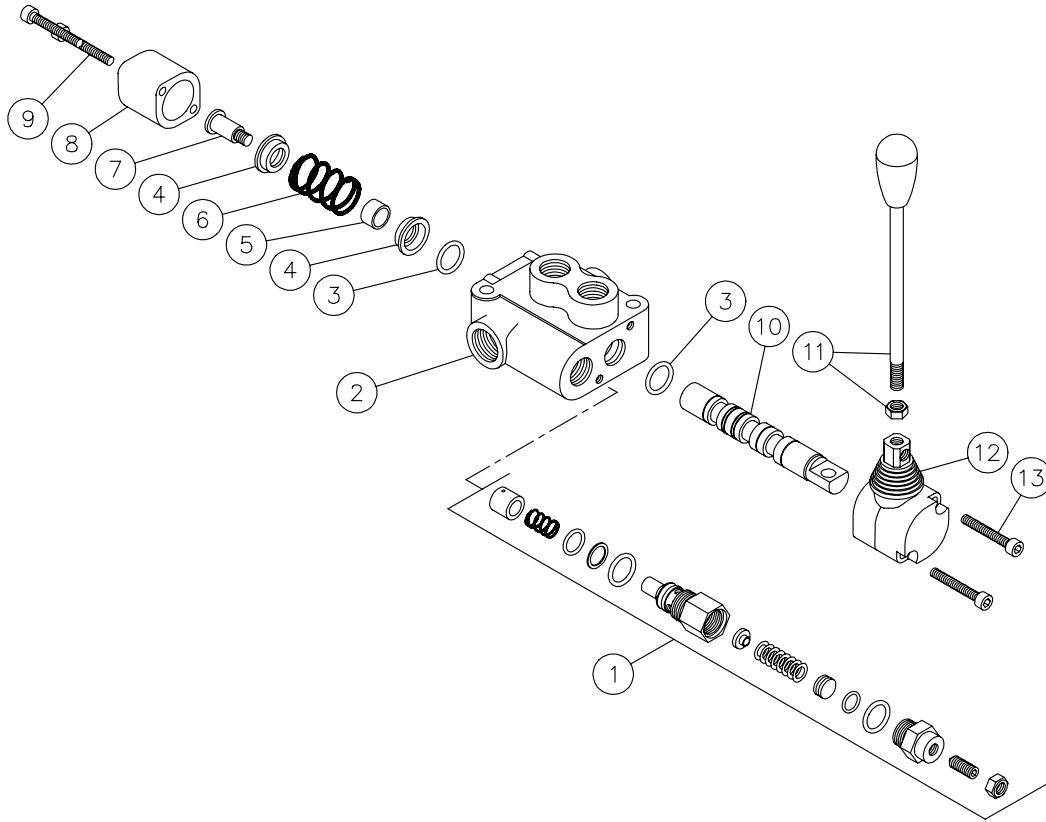
# 6 SPOOL CONTROL VALVE # 640-60001



REF.	PART #	DESCRIPTION	QTY
1	649-00000	Relief valve .....	1
2	649-00011	Valve housing .....	1
3	649-00002	O-ring .....	12
4	649-00003	Ring .....	12
5	649-00004	Spacer .....	6
6	649-00005	Spring .....	6
7	649-00006	Bolt .....	6
8	649-00007	Endcap .....	6
9	331-12840	Bolt M6 - 1.0 x 40 mm lg .....	12
10	649-00008	Valve spool .....	6
11	649-00009	Lever .....	6
12	649-00010	Lever endcap .....	6
13	331-12845	Bolt M6 - 1.0 x 45 mm lg .....	12

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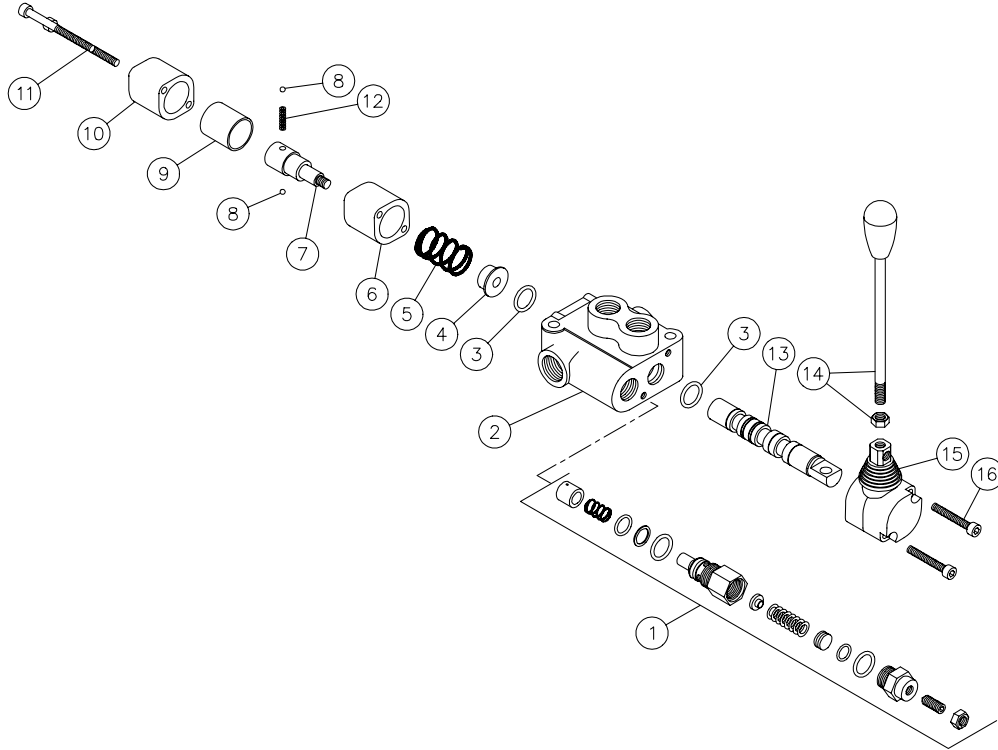
# 1 SPOOL CONTROL VALVE # 640-10001



REF.	PART #	DESCRIPTION	QTY
1	649-00000	Relief valve .....	1
2	649-00001	Valve housing .....	1
3	649-00002	O-ring .....	2
4	649-00003	Ring .....	2
5	649-00004	Spacer .....	1
6	649-00005	Spring .....	1
7	649-00006	Bolt .....	1
8	649-00007	Endcap .....	1
9	331-12840	Bolt M6 - 1.0 x 40 mm lg .....	2
10	649-00008	Valve spool .....	1
11	649-00009	Lever .....	1
12	649-00010	Lever endcap .....	1
13	331-12845	Bolt M6 - 1.0 x 45 mm lg .....	2

8

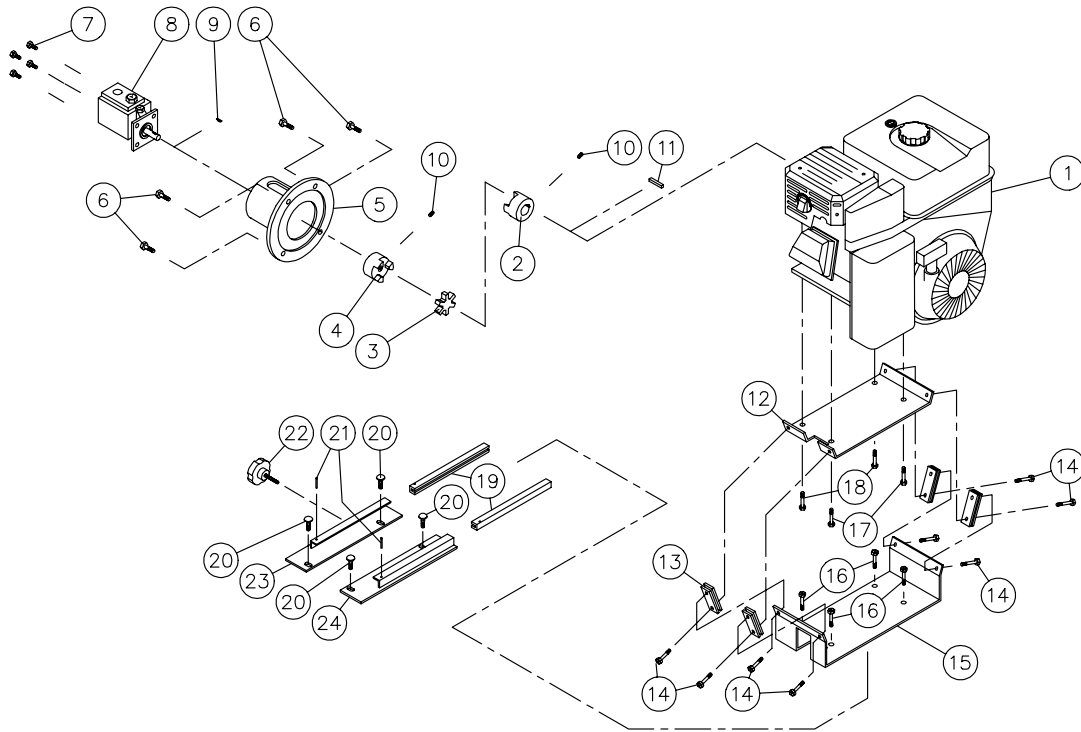
# 1 SPOOL CONTROL VALVE # 640-10002 (modified)



REF.	PART #	DESCRIPTION	QTY
1	649-00000	Relief valve .....	1
2	649-00001	Valve housing .....	1
3	649-00002	O-ring .....	2
4	649-00012	Ring .....	1
5	649-00005	Spring .....	1
6	649-00013	Spacer .....	1
7	649-00014	Bolt .....	1
8	649-00015	Ball .....	2
9	649-00016	Ring .....	1
10	649-00007	Endcap .....	1
11	331-12875	Bolt M6 - 1.0 x 75 mm lg .....	2
12	649-00017	Spring .....	1
13	649-00008	Valve spool .....	1
14	649-00009	Lever .....	1
15	649-00010	Lever endcap .....	1
16	331-12845	Bolt M6 - 1.0 x 45 mm lg .....	2

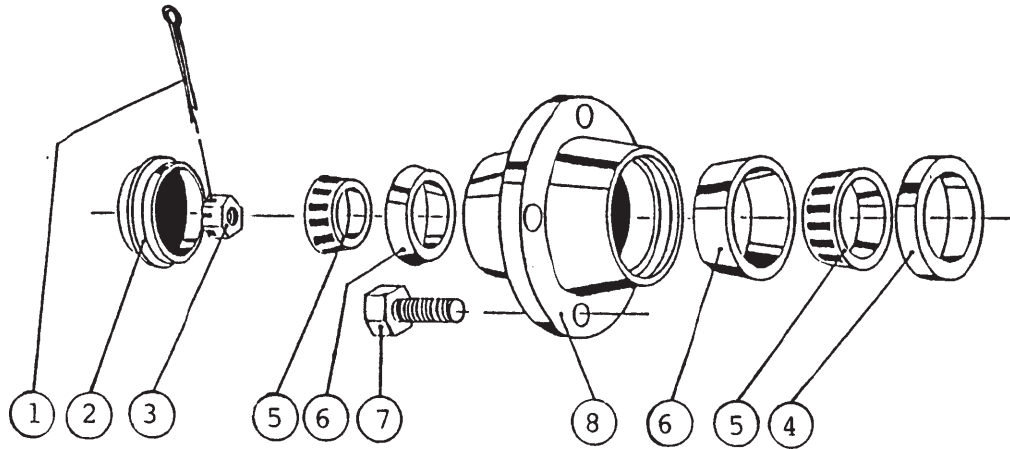
8

# ENGINE ASSEMBLY WITH PUMP



REF.	PART #	DESCRIPTION	QTY AGRIPAC® LASTIC TUBER™	
			9000	9100
1	32230	Engine HONDA 9HP .....	1	1
1	32257	Engine HONDA 9HP with electric starter .....	opt.	opt.
2	32133	Flexible coupling 1" ø .....	1	1
3	32134	Flexible coupling .....	1	1
4	32135	Flexible coupling ½" ø .....	1	1
5	32136	Mounting flange .....	1	1
6	Std.	Bolt 3/8" NC x 1" lg + lock washer .....	4	4
7	Std.	Bolt 5/16" NC x 3/4" lg + lock washer .....	4	4
8	32002	Pump .....	1	1
9	Std.	Woodruff key 1/8" .....	1	1
10	Std.	Socket set screw 5/16" NC x 1/2" .....	2	2
11	Std.	Square key 1/4" x 1 1/2" lg .....	1	1
12	32194	Upper motor mounting plate .....	1	1
13	32195	Anti-vibration supports .....	8	8
14	Std.	Bolt 5/16" NC x 1" lg + nylon locknut & flat washer .....	8	8
15	32196	Lower motor mounting plate .....	1	1
16	Std.	Bolt 3/8" NC x 1" lg + nylon locknut .....	4	0
17	Std.	Bolt 3/8" NC x 1 ¾" lg + nylon locknut .....	2	2
18	Std.	Bolt 3/8" NC x 1 ¾" lg + nylon locknut & flat washer .....	2	2
19	190-00202	Sliding engine mount .....	0	2
20	Std.	Carriage bolt 3/8" NC x 1" lg + nylon locknut .....	0	4
21	Std.	Roll pin 1/8" x 1" lg .....	0	2
22	110-00591	Slide handle .....	0	1
23	110-00582	Left fixation for slide .....	0	1
24	110-00572	Right fixation for slide .....	0	1

# HUB H1000

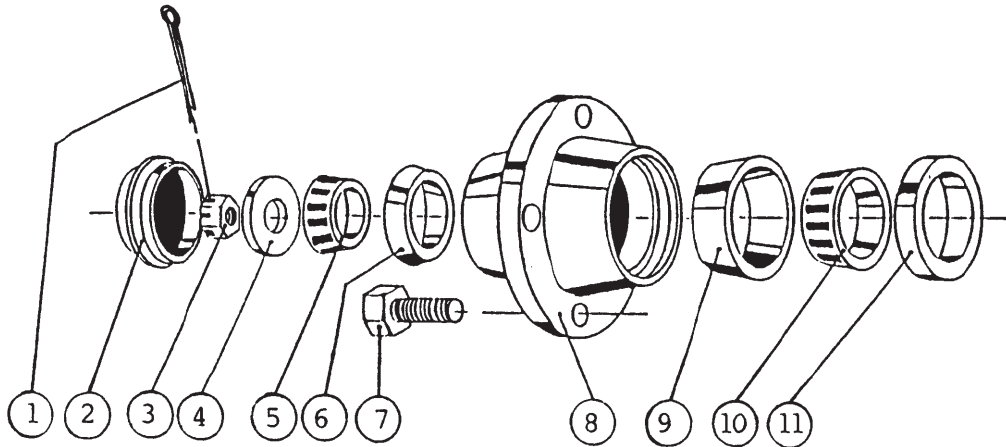


## FRONT HUB FOR 9000

REF.	PART #	DESCRIPTION	QTY
1	Std.	Cotter pin 3/16" x 1 1/2" .....	1
2	53019	Dust cap 1.973 ø. ....	1
3	53020	Castle nut 1" NF.....	1
4	53021	Oil seal no. CR523696 .....	1
5	53022	Roller bearing Timken: cone no. L44643 .....	2
6	53023	Roller bearing Timken: cup no. L44610.....	2
7	53024	Rim screw 1/2" .....	4
8	53025	Hub only H1000 .....	1

**8**

# HUB H2500

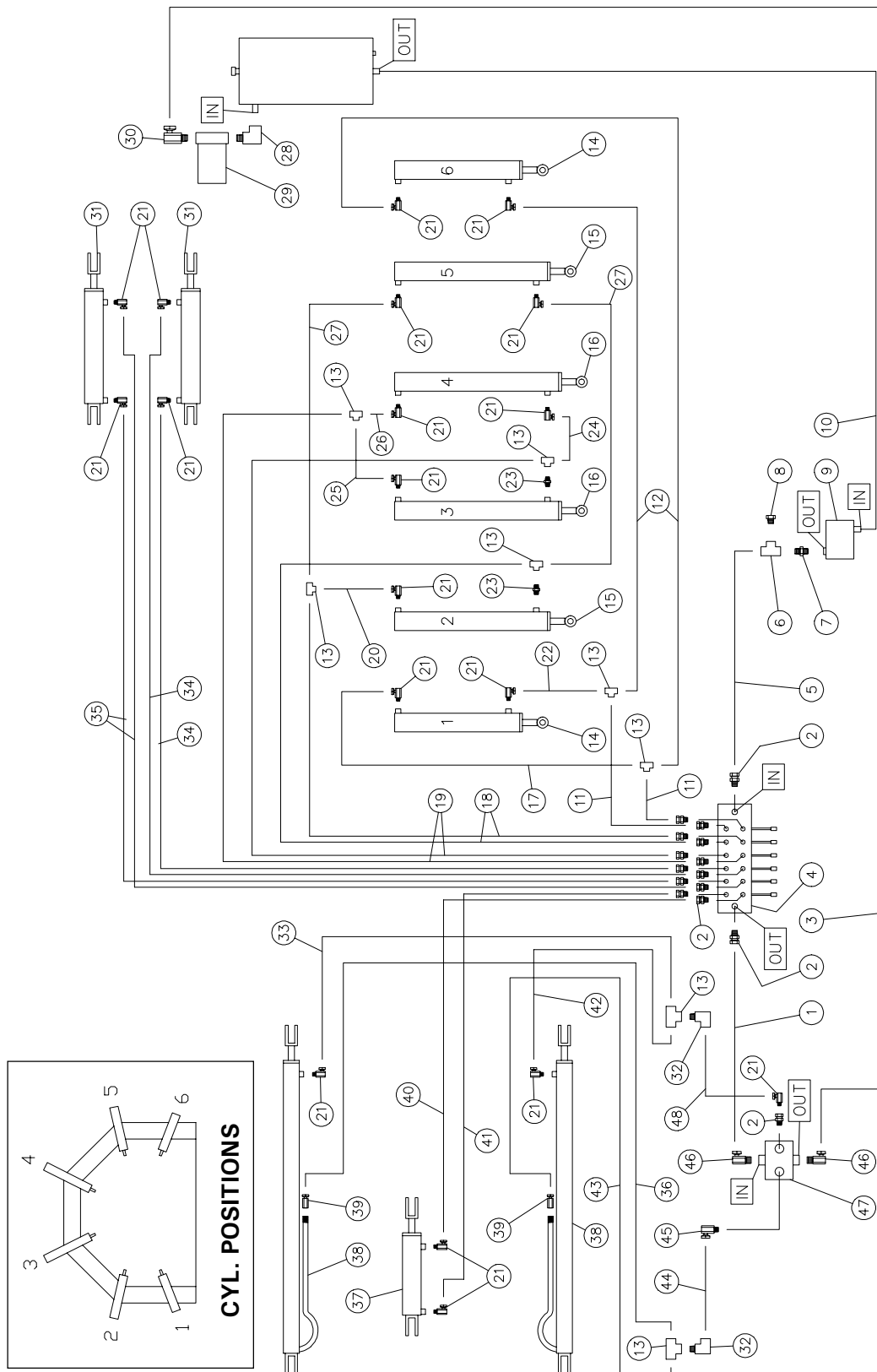


## REAR HUB FOR 9000 & FRONT AND REAR HUB FOR 9100

REF.	PART #	DESCRIPTION	QTY
1	Std.	Cotter pin 5/32" x 1 1/2" .....	1
2	53019	Dust cap D-1000 1.973" ø .....	1
3	51529	Castle nut 1" NF x 9/16" thick .....	1
4	Std.	Flat washer 1" .....	1
5	53058	Roller bearing Timken: cone no. L44649 .....	1
6	53023	Roller bearing Timken: cup no. L44610 .....	1
7	53024	Rim screw 1/2" .....	5
8	53059	Hub only H2500 .....	1
9	51415	Roller bearing Timken: cup no. LM48510 .....	1
10	51416	Roller bearing Timken: cone no. LM48548 .....	1
11	51535	Oil seal no. CR17415 .....	1

**8**

# HYDRAULIC SYSTEM



# HYDRAULIC SYSTEM (cont'd)

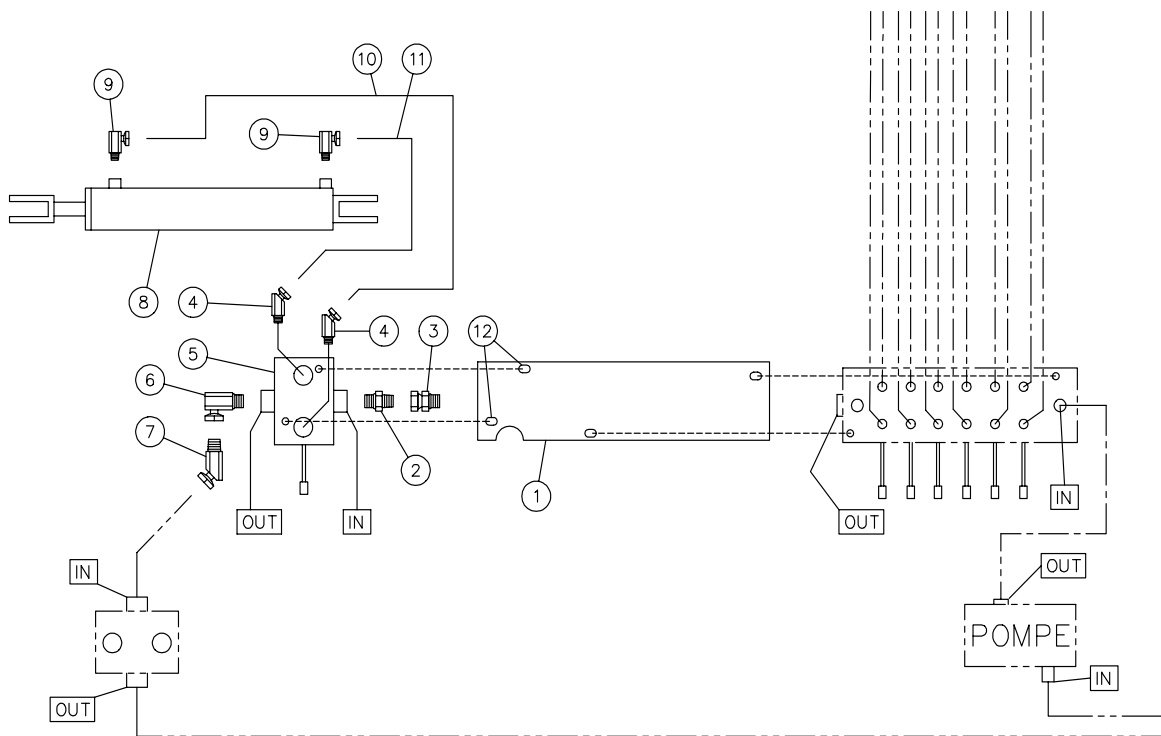
REF.	PART #	DESCRIPTION	QTY	
			9000	9100
1	190-01621	Hose ½" x 90" lg + 2 fittings 8U108 .....	1	1
2	Std.	Fitting 9315 8 x 6 .....	15	15
3	D-18089	Hose ½" x 140" lg + 2 fittings 8U108 .....	1	1
4	640-60001	6 spool control valve (see details page 33) .....	1	1
5	D-8668	Hose ½" x 38" lg + 2 fittings 8U108 .....	1	1
6	Std.	"T" ½" C3709 x 8 .....	1	1
7	Std.	Straight female pipe to male pipe ½" C3069 x 8 .....	1	1
8	Std.	Plug ½" C3159 x 8 .....	1	1
9	32002	Two stages 4/11 hydraulic pump .....	1	1
10	D-8727	Low pressure hose 1" x 116½" lg .....	1	-
10	D-18090	Low pressure hose 1" x 123" lg .....	-	1
11	D-18091	Hose 3/8" x 37" lg + 2 fittings 6U106 .....	2	-
11	D-18092	Hose 3/8" x 45" lg + 2 fittings 6U106 .....	-	2
12	D-8678	Hose 3/8" x 110" lg + 2 fittings 6U106 .....	2	-
12	D-18093	Hose 3/8" x 125" lg + 2 fittings 6U106 .....	-	2
13	Std.	"T" 3/8" C3709 x 6 .....	8	8
14	30Z10	Cylinder 3" x 10" stroke (see details page 30) .....	2	-
14	30H10	Cylinder 3" x 10" stroke (see details page 31) .....	-	2
15	30Z15	Cylinder 3" x 15" stroke (see details page 30) .....	2	-
15	30H17	Cylinder 3" x 17" stroke (see details page 31) .....	-	2
16	30Z17	Cylinder 3" x 17" stroke (see details page 30) .....	2	-
16	30H17	Cylinder 3" x 17" stroke (see details page 31) .....	-	2
17	D-8723	Hose 3/8" x 19 ½" lg + 2 fittings 6U106 .....	1	-
17	D-18094	Hose 3/8" x 26" lg + 2 fittings 6U106 .....	-	1
18	D-8675	Hose 3/8" x 31" lg + 2 fittings 6U106 .....	2	-
18	190-00001	Hose 3/8" x 48" lg + 2 fittings 6U106 .....	-	2
19	D-8676	Hose 3/8" x 58" lg + 2 fittings 6U106 .....	2	-
19	D-8760	Hose 3/8" x 64" lg + 2 fittings 6U106 .....	-	2
20	D-18096	Hose 3/8" x 11" lg + 2 fittings 6U106 .....	1	-
21	Std.	Fitting 9405 6x6 .....	19	19
22	D-8724	Hose 3/8" x 22" lg + 2 fittings 6U106 .....	1	-
22	D-18097	Hose 3/8" x 29" lg + 2 fittings 6U106 .....	-	1
23	Std.	Close nipple 3/8" C3069 x 6 .....	2	2
24	D-8673	Hose 3/8" x 43 ½" lg + 2 fittings 6U106 .....	1	-
24	D-18098	Hose 3/8" x 49" lg + 2 fittings 6U106 .....	-	1
25	D-18099	Hose 3/8" x 12 ¾" lg + 2 fittings 6U106 .....	1	2
26	D-18100	Hose 3/8" x 52" lg + 2 fittings 6U106 .....	1	1
27	D-8674	Hose 3/8" x 123" lg + 2 fittings 6U106 .....	2	-
27	D-18101	Hose 3/8" x 144" lg + 2 fittings 6U106 .....	-	2
28	Std.	Street elbow 3/4" 90° C3409 x 12 .....	1	1
29		Paper filter 32007 + hydraulic oil filter adaptor 32031 .....	1	1
30	Std.	Fitting 9205 8x12 .....	1	1
31	25TR08	Cylinder 2 ½" x 8" .....	2	2
32	Std.	Street elbow 3/8" 90° C3409 x 6 .....	2	2
33	190-00611	Hose 3/8" x 52" lg + 2 fittings 6U106 .....	1	1
34	D-18102	Hose 3/8" x 35 ½" lg + 2 fittings 6U106 .....	2	-
34	D-18095	Hose 3/8" x 42" lg + 2 fittings 6U106 .....	-	2
35	D-8664	Hose 3/8" x 154" lg + 2 fittings 6U106 .....	2	-
35	D-8751	Hose 3/8" x 166" lg + 2 fittings 6U106 .....	-	2
36	D-18103	Hose 3/8" x 60" lg + 2 fittings 6U106 .....	1	-



## HYDRAULIC SYSTEM (cont'd)

REF.	PART #	DESCRIPTION	QTY	
			9000	9100
36	D-18104	Hose 3/8" x 66" lg + 2 fittings 6U106 .....	-	1
37	25TR04	Cylinder 2 1/2" x 4" .....	1	1
38	20I72	Cylinder 2" x 72" stroke (see details page 32) .....	2	2
39	Std.	Fitting 9255 6x6 .....	2	2
40	D-8964	Hose 3/8" x 158" lg + 2 fittings 6U106 .....	1	-
40	D-18105	Hose 3/8" x 168" lg + 2 fittings 6U106 .....	-	1
41	D-8965	Hose 3/8" x 164" lg + 2 fittings 6U106 .....	1	-
41	D-18106	Hose 3/8" x 170" lg + 2 fittings 6U106 .....	-	1
42	D-18107	Hose 3/8" x 63" lg + 2 fittings 6U106 .....	1	1
43	D-18108	Hose 3/8" x 68" lg + 2 fittings 6U106 .....	1	1
44	D-8986	Hose 1/2" x 53" lg + 2 fittings 8U106 .....	1	1
45	Std.	Fitting 9515 8x6 .....	1	1
46	Std.	Fitting 9515 8x8 .....	2	2
47	640-10002	1 spool valve (see details page 35) .....	1	1
48	D-8986	Hose 1/2" x 53" lg + 2 fittings 8U106 .....	1	-
48	D-8757	Hose 1/2" x 57" lg + 2 fittings 8U106 .....	-	1

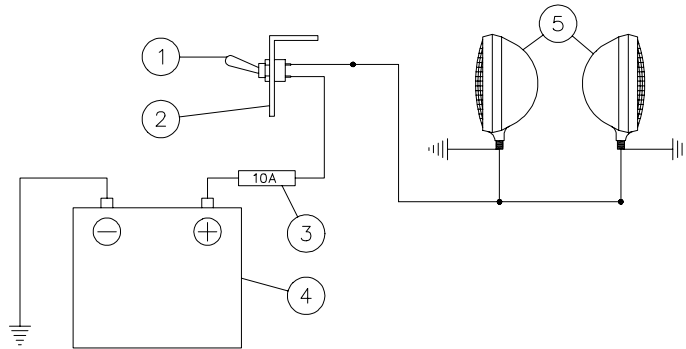
# HYDRAULIC STEERING OPTION



REF.	PART #	DESCRIPTION	QTY
1	130-06871	Support plate .....	1
2	Std.	Fitting 6401 8x8 .....	1
3	Std.	Fitting 9315 10x8.....	1
4	Std.	Fitting 9365 8x6 .....	2
5	640-10001	1 spool valve (see details page 34).....	1
6	Std.	Fitting 9515 8x8 .....	1
7	Std.	Fitting 9355 8x8 .....	1
8	25TR08	Cylinder 2½" x 8" stroke .....	1
9	Std.	Fitting 9405 6x6 .....	2
10	D-8985	Hose 3/8" x 138" lg + 2 fittings 6U106.....	1
11	D-18085	Hose 3/8" x 122" lg + 2 fittings 6U106.....	1
12	Std.	Bolt 5/16" NC x 2 1/2" lg + nylon locknut .....	2

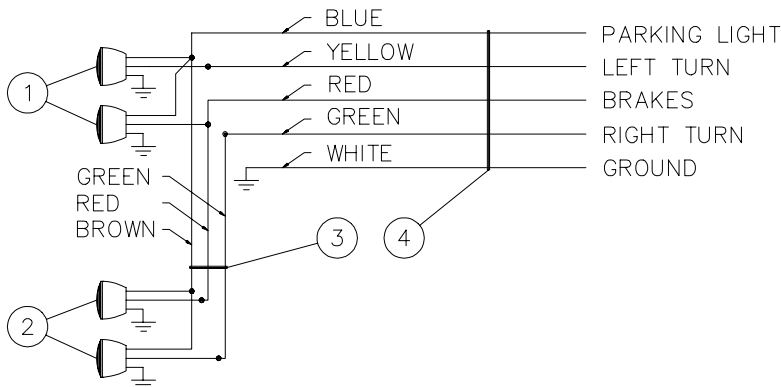
# ELECTRIC CIRCUIT

## WORKING LIGHTS



REF.	PART #	DESCRIPTION	QTY
1	32237	Switch ON-OFF .....	1
2	130-04481	Switch support .....	1
3	Std.	Fuse 10A .....	1
4	Std.	Battery 12V-540A .....	1
5	110-04771	Working lights .....	2








## ROAD LIGHTS








REF.	PART #	DESCRIPTION	QTY
1	32228	Left red flashers with license light .....	2
2	32229	Right red flashers .....	2
3	110-03761	3 conductors cable with terminal 173" lg .....	1
3	110-03601	3 conductors cable with terminal 204" lg .....	-
4	110-03591	5 conductors cable with terminal 288" lg .....	1

# TORQUE CHART

## TORQUE SPECIFICATION TABLE

Thread UNC and UNF		Grade 2 				Grade 5   				Grade 8*   			
Bolt size		Torque				Torque				Torque			
Inches	mm	Pound feet min.	max.	Newton meters min.	max.	Pound feet min.	max.	Newton meters min.	max.	Pound feet min.	max.	Newton meters min.	max.
1/4	6.35	5	6	6.8	8.13	9	11	12.2	14.9	12	15	16.3	30.3
5/16	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8	9.53	20	23	27.1	31.2	35	42	47.5	57.0	45	54	61.0	73.2
7/16	11.11	30	35	40.7	47.4	54	64	73.2	86.8	70	84	94.9	113.9
1/2	12.70	45	52	61.0	70.5	80	96	108.5	130.2	110	132	149.2	179.0
9/16	14.29	65	75	88.1	101.6	110	132	149.2	179.0	160	192	217.0	260.4
5/8	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358.0
3/4	19.05	150	185	203.3	250.7	270	324	366.1	439.3	380	456	515.3	618.3
7/8	22.23	160	200	216.8	271.0	400	480	542.4	650.9	600	720	813.6	976.3
1	25.40	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5
1 1/8	25.58	-	-	-	-	800	880	1084.8	1193.3	1280	1440	1735.7	1952.6
1 1/4	31.75	-	-	-	-	1120	1240	1518.7	1681.4	1820	2000	2467.9	2712.0
1 3/8	34.93	-	-	-	-	1460	1680	1979.8	2278.1	2380	2720	3227.3	3688.3
1 1/2	38.10	-	-	-	-	1940	2200	2630.6	2983.2	3160	3560	4285.0	4827.4

\* Thick nuts must be used with grade 8 bolts.

Size of screw	Thread	Pitch (mm)	Grade 4T  				Grade 7T 				Grade 8T  			
			Torque				Torque				Torque			
			Pound feet min.	max.	Newton meters min.	max.	Pound feet min.	max.	Newton meters min.	max.	Pound feet min.	max.	Newton meters min.	max.
M6	UNC	1.00	3.6	5.8	4.9	7.9	5.8	9.4	7.9	12.7	7.2	10	9.8	13.6
M8	UNC	1.25	7.2	14	9.8	19	17	22	23	29.8	20	26	27.1	35.2
M10	UNC	1.5	20	25	27.1	33.9	34	40	46.1	54.2	38	46	51.5	62.3
M12	UNC	1.75	28	34	37.9	46.1	51	59	69.1	79.9	57	66	77.2	89.4
M14	UNC	2.0	49	56	66.4	75.9	81	93	109.8	126	96	109	130.1	147.7
M16	UNC	2.0	67	77	90.8	104.3	116	130	157.2	176.2	129	145	174.8	196.5
M18	UNC	2.0	88	100	119.2	136	150	168	203.3	227.6	175	194	237.1	262.9
M20	UNC	2.5	108	130	146.3	176.2	186	205	252	277.8	213	249	288.6	337.4
M8	UNF	1.0	12	17	16.3	23	19	27	25.7	36.6	22	31	29.8	42
M10	UNF	1.25	20	29	27.1	39.3	35	47	47.4	63.7	40	52	54.2	70.5
M12	UNF	1.25	31	41	42	55.6	56	68	75.9	92.1	62	75	84	101.6
M14	UNF	1.5	52	64	70.5	86.7	90	106	122	143.6	107	124	145	168
M16	UNF	1.5	69	83	93.5	112.5	120	138	162.6	187	140	158	189.7	214.1
M18	UNF	1.5	100	117	136	158.5	177	199	239.8	269.6	202	231	273.7	313
M20	UNF	1.5	132	150	178.9	203.3	206	242	279.1	327.9	246	289	333.3	391.6

Use the above torques when special torque is not given.

NOTE: These values apply to fasteners as received from supplier, dry, or when lubricated with normal engine oil. They do not apply if extreme pressure lubricants are used.



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## **WARRANTY**

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ALBERTA AG-INDUSTRIES LTD. warrants this product to the initial purchaser for the period of one year from the date of purchase against defects in materials and workmanship.

We will replace or repair defective parts free of charge if they are returned to ALBERTA AG-INDUSTRIES LTD. 10012 - 93 rd Avenue, Westlock, AB, T7P 2P2 unless instructed otherwise.

Transportation charges are the responsibility of the customer. This warranty is not transferable.

Tires and gasoline engine are covered by the manufacturers of these items.

All ALBERTA AG-INDUSTRIES LTD. spare parts purchased are covered by a three (3) month warranty.

This warranty becomes void and nul if the equipment is modified, breaks down as result of an accident, if not operated according to manufacturer's recommendations, damaged by negligence or if maintenance has not been carried out as specified.

Our obligation is limited to the replacement or repair of the defective part. ALBERTA AG-INDUSTRIES LTD. accepts no responsibility for direct or indirect consequential damages of any kind.





**Alberta  
Ag-Industries Ltd.**

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