

PRONOVOST

**OWNER'S
MANUAL**

SILATUBE

**Models
P-6200 & P-6300**

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INTRODUCTION

1

CONGRATULATIONS!

Thank you for choosing PRONOVOST. 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 SilaTube. 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 SilaTube and keep it for future reference.

Before starting the machine, you or any other person who will be operating the SilaTube 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 SilaTube are identified while standing at the discharge end of the machine and facing it.

If you require additional information on your SilaTube, please contact your PRONOVOST Dealer.

NOW take a moment to enter the model, serial number and the date of purchase of your SilaTube in the space provided.

When ordering parts from your Dealer, please refer to these numbers for a fast and efficient service. Use PRONOVOST parts for replacement.

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

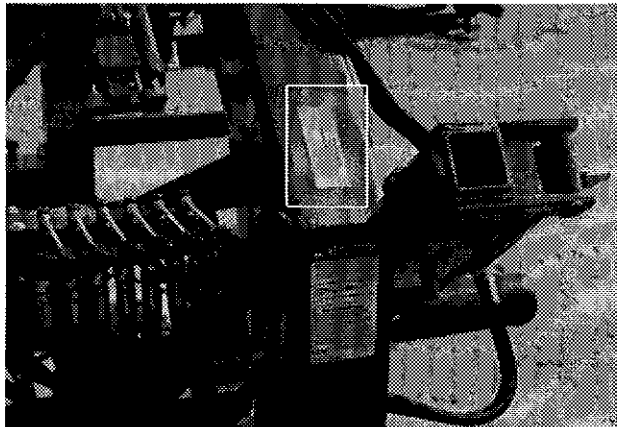


Figure 1

MODEL: _____

SERIAL NO.: _____

DATE OF PURCHASE: _____

SAFETY

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 SilaTube. It warns you of the possibility of danger. Carefully read, understand and follow all safety recommendations before operating the SilaTube.

- 1) Careful operation is the best assurance against accidents. Carefully read this manual and the motor manual and follow all recommendations before operating your SilaTube. It is the owner's responsibility to make sure that anyone who will operate the SilaTube will read these manuals before operating the equipment.
- 2) Never let a child operate the SilaTube.
- 3) Do not modify the SilaTube. Any non authorized modification may affect the efficiency and/or safety of the equipment.
- 4) Never operate the SilaTube 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 43.

- 6) Avoid wearing loose fitting clothing when working with the SilaTube. 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 SilaTube, 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

- 1) Be sure there are no obstructions around the equipment and that no one stands near the SilaTube when in operation.
- 2) Always refuel equipment when outside and away from flames or sparks.
- 3) 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.
- 4) Be careful when adjusting equipment with engine running.

SAFETY (cont'd)

- 5) Keep hands, feet, hair and clothing away from moving parts.
- 6) Should you need to step on the SilaTube for whatever reasons, **ALWAYS** disengage the pusher valve trigger mechanism since there is **RISK OF CRUSHING** if not disengaged.
- 7) 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.
- 8) 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.
- 9) Do not smoke while refueling.
- 10) Do not operate engine with any accumulation of hay, leaves, dirt or any other combustible material near the exhaust muffler.
- 11) Avoid touching the hot muffler and cooling fins since they could cause burns to your skin.

SAFETY WITH MAINTENANCE

- 1) Perform the SilaTube 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).
- 2) Check local regulations for the transport of your SilaTube on the road.
- 3) Be alert when pulling the SilaTube on the road. Do not allow anyone to stand on it while in motion.
- 4) The road speed should be such as to maintain full control over steering and braking.
- 5) Be careful while backing up.

2

SAFETY IN STORAGE

- 1) Let engine cool and drain fuel from tank.
- 2) Do not let children play in the area where the SilaTube is stored.
- 3) Do not leave a ProTube installed on the SilaTube.
- 4) Do not let the SilaTube 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.**

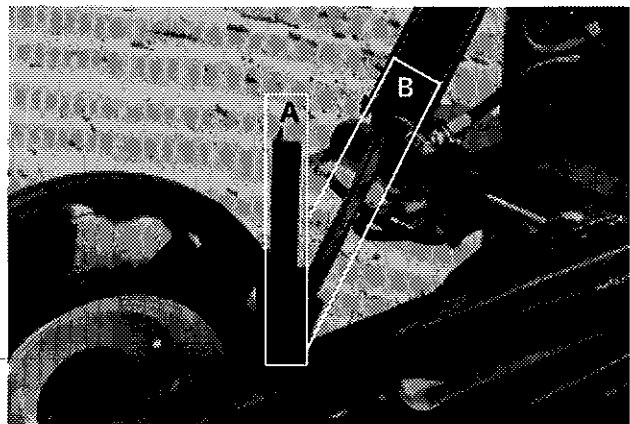


Figure 2

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

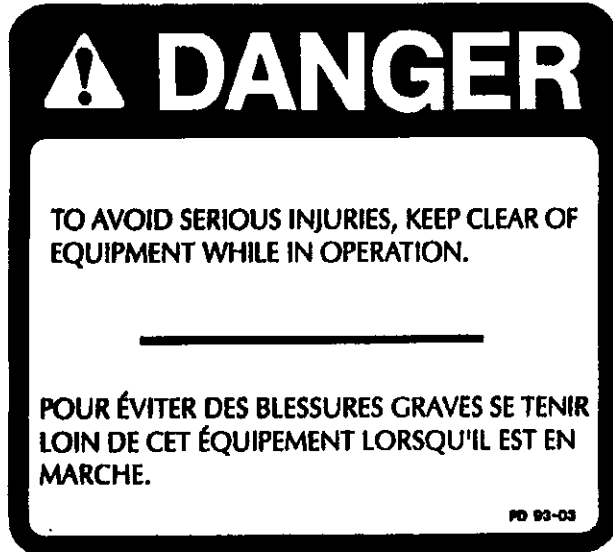


Figure 3
Decal A

Part no.: A101

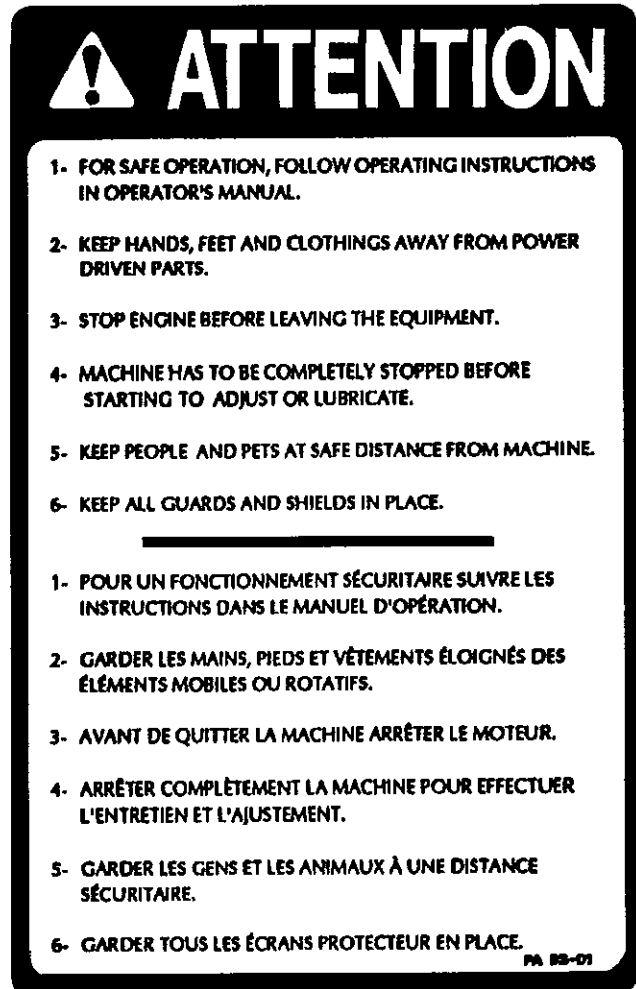


Figure 5
Decal B

Part no.: A102



Figure 4

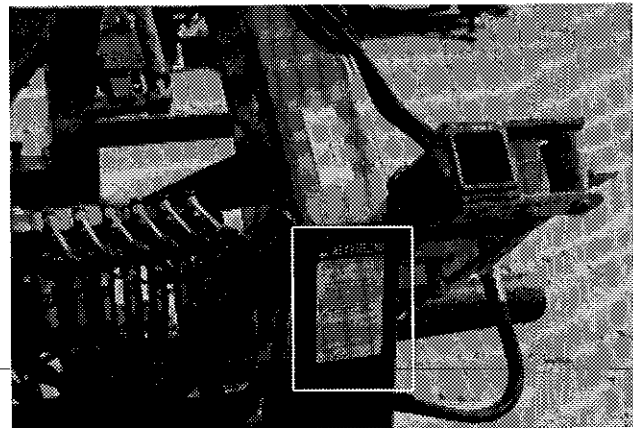


Figure 6

DECALS (cont'd)

///▲DANGER///

Figure 7
Decal C

Part no.: A103

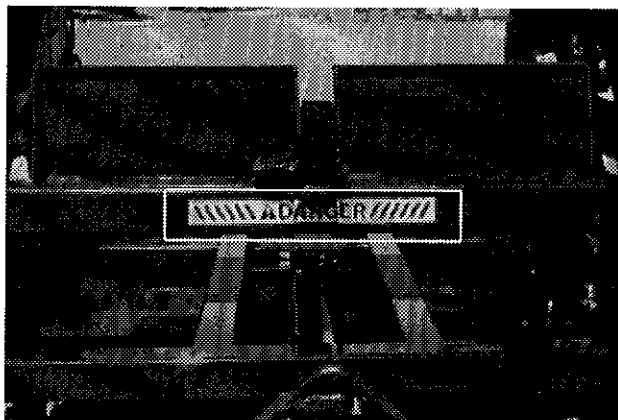


Figure 8

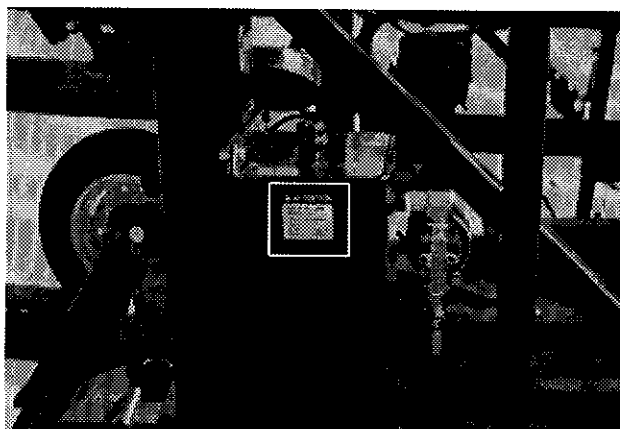


Figure 10

MAINTENANCE DECALS

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



Figure 11

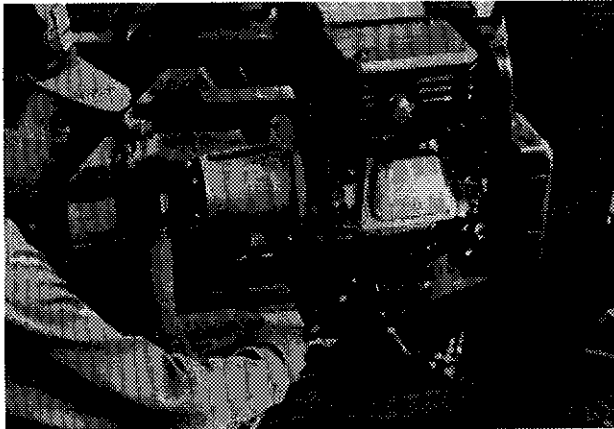
Part no.: A 106



Figure 9

Part no.: A104

STARTING-UP



4 Figure 12

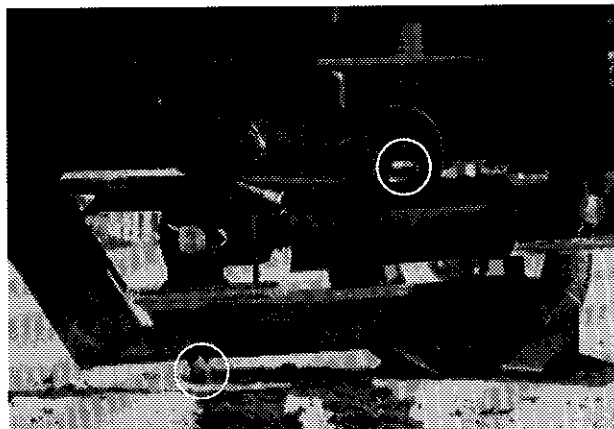


Figure 13

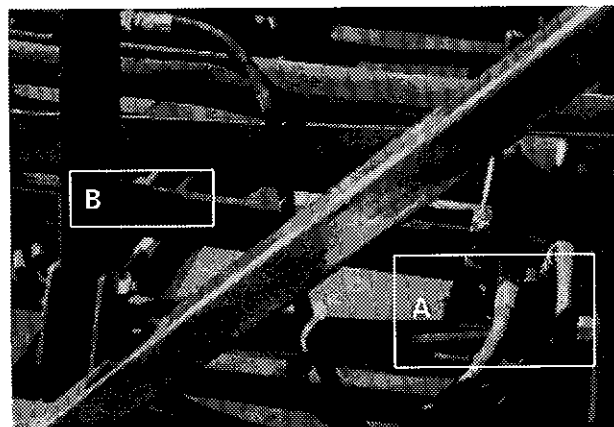


Figure 14

BASIC START-UP PROCEDURES

STEP 1 APPLIES ONLY TO THE P-6300.

- 1) Please note, for shipment, the engine is temporarily mounted in the transport position in order not to exceed the legal width allowed on the road. Consequently, it must be re-positioned properly 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 43.
- 4) Lubricate all points and guide mechanisms requiring grease, with a high quality lithium base grease containing molybdenum disulfide (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).

STARTING-UP (cont'd)

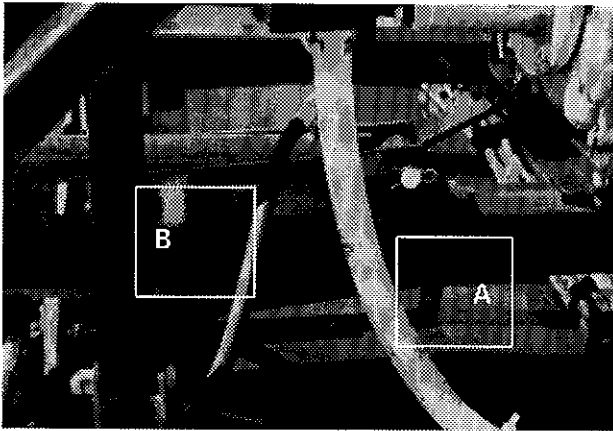


Figure 15



Figure 16

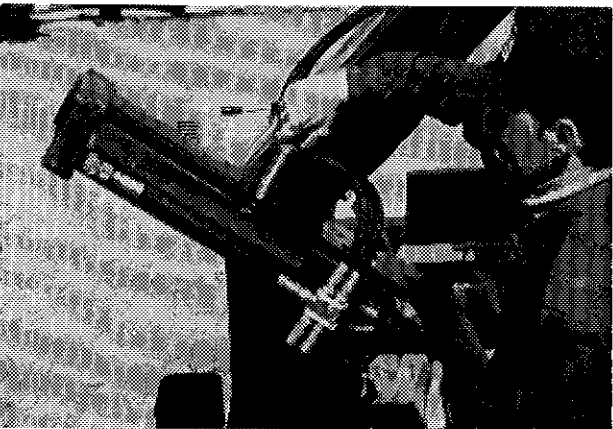


Figure 17

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 ProTube.

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.

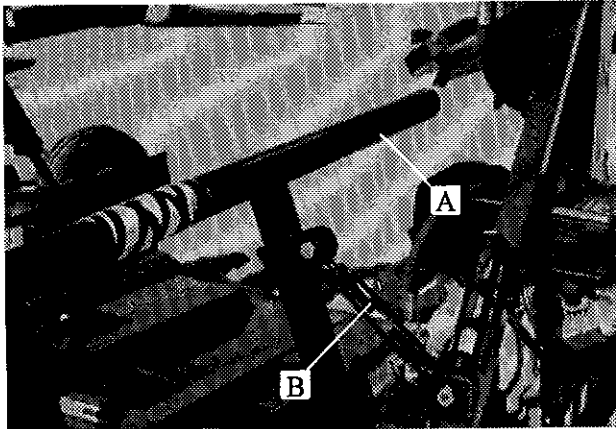
ADJUSTMENT OF SILATUBE

STEP 1 APPLIES ONLY TO THE P-6300

- 1) Position the six (6) stretcher hydraulic cylinder assemblies according to the size of ProTube 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 SilaTube 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 SilaTube forward.

4

STARTING-UP (cont'd)



4

Figure 18

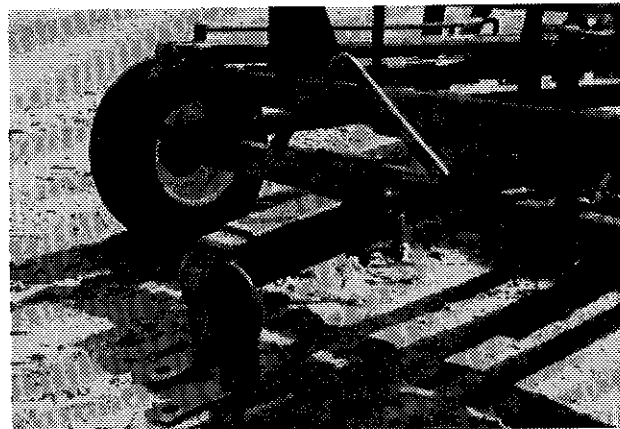


Figure 19

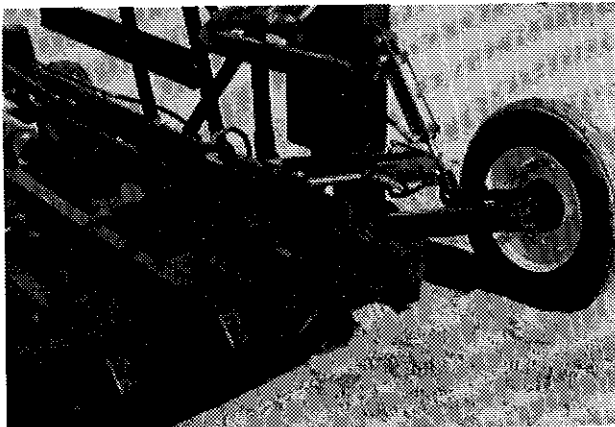


Figure 20

- 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 SilaTube (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.

STARTING-UP (cont'd)

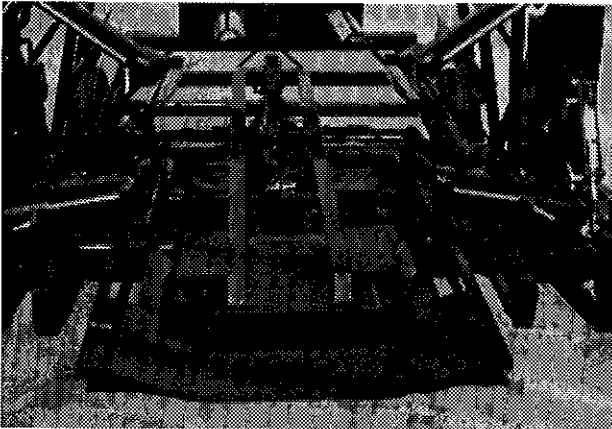


Figure 21

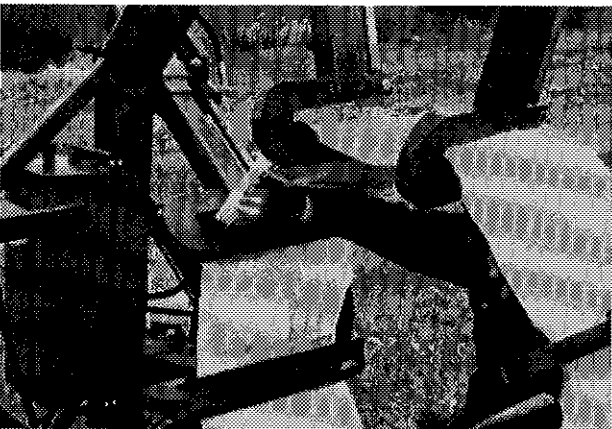


Figure 22

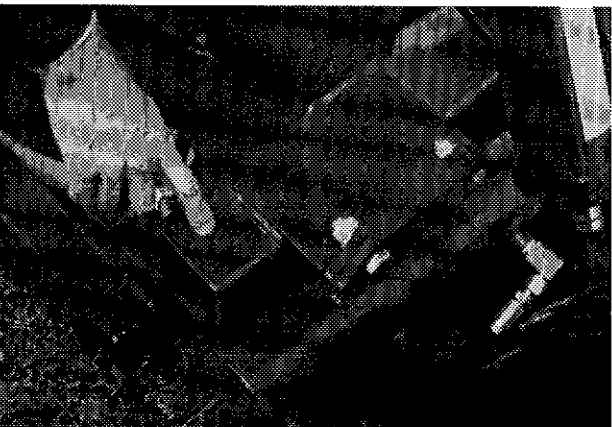


Figure 23

INSTALLATION OF THE PROTUBE

To facilitate this procedure, adhere to the following sequence:

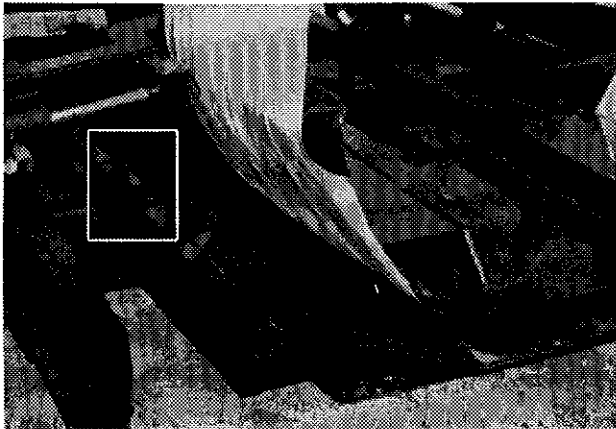
- 1) Start engine.
- 2) Close the stretcher arms to the most inward position and pull out the tube support plate. (Fig. 21)
- 3) Install tube on the stretcher arms. Place it so that the name ProTube is facing outside when it unfolds. Slide it carefully **to the bottom** of the stretcher arms and between 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.
P-6200: Open each pair of stretcher arms until the end of the internal square tubing reaches the pilot hole of the outer tube. (Fig. 23)
P-6300: 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

STARTING-UP (cont'd)



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 too long a period of time. If you must stop loading bales for a while, **BRING THE TUBE DOWN TO A MODERATE TENSION.**



Figure 26



Figure 28

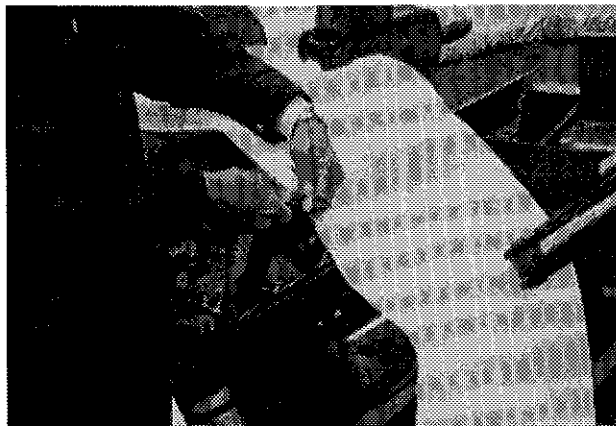


Figure 27



Figure 29

STARTING-UP (cont'd)

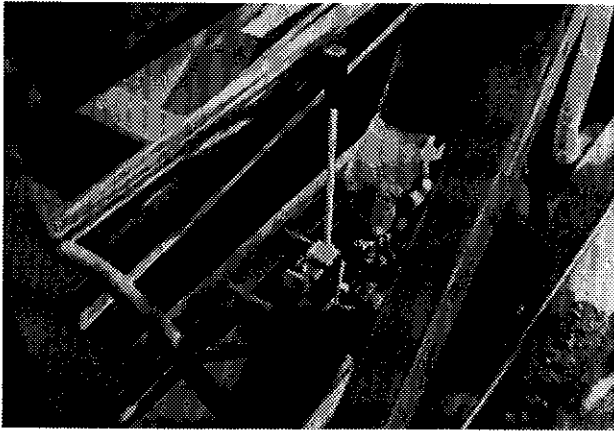


Figure 30

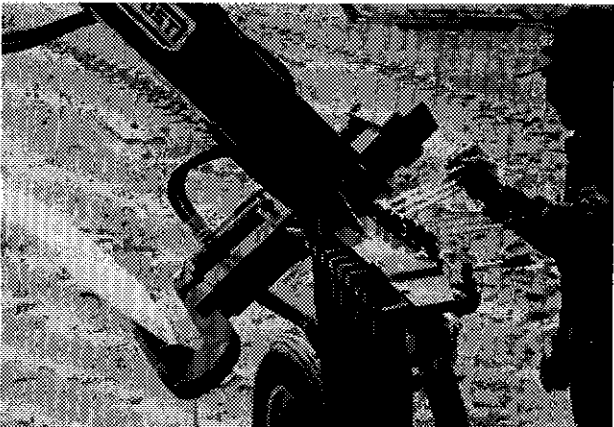


Figure 31

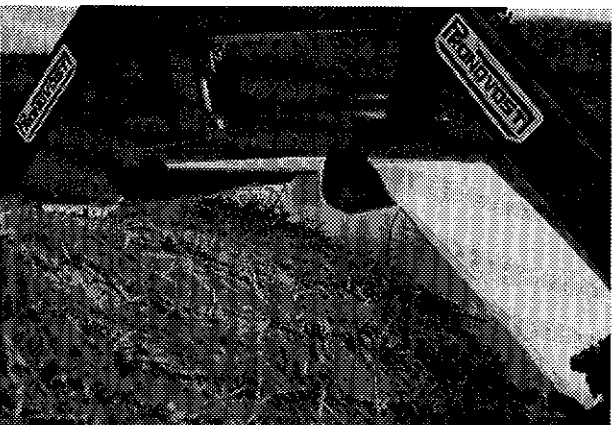


Figure 32

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 SilaTube.
- 6) Once the bale is dropped, back up immediately to make room for the SilaTube's forward movement.
- 7) After the first 3 or 4 bales, lower the rear of the SilaTube to increase ground friction. This will ensure that the bales will be real tight against each other in the Protube.
- 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

STARTING-UP (cont'd)

4

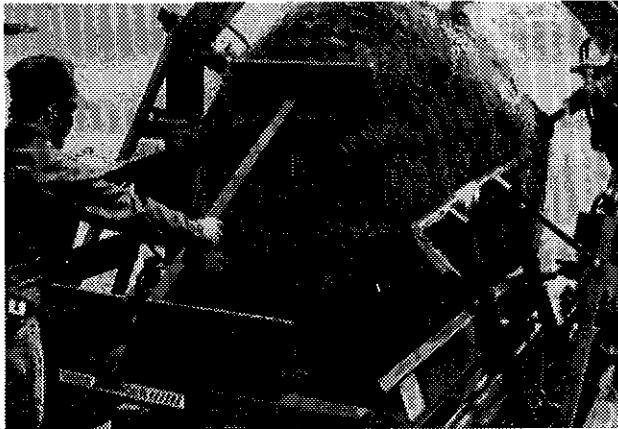


Figure 33

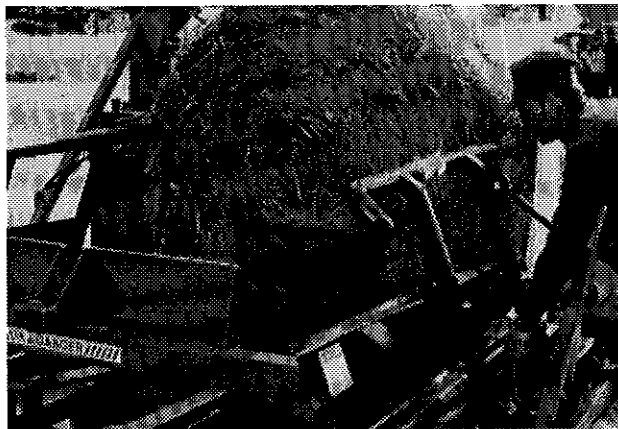


Figure 34



Figure 35

- 9) To push the last bale into the tube, install the pusher extension supplied with the SilaTube. (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 it's receptacle on the right hand side of the SilaTube. (Fig. 35)
- 12) Close up end of ProTube as previously described. (Fig. 28 & Fig. 29)
- 13) Regularly inspect the ProTubes. If torn or punctured, repair openings with proper means.

STARTING-UP (cont'd)

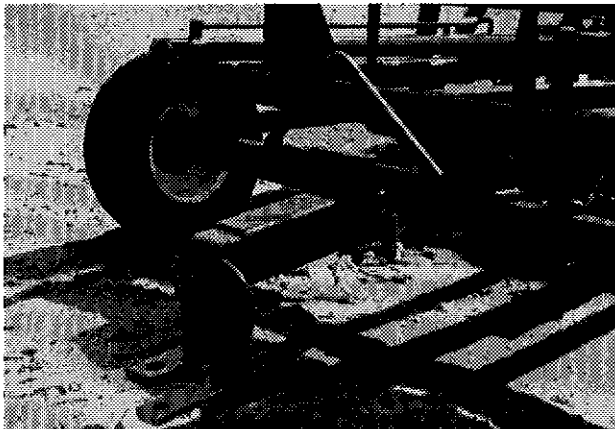


Figure 36

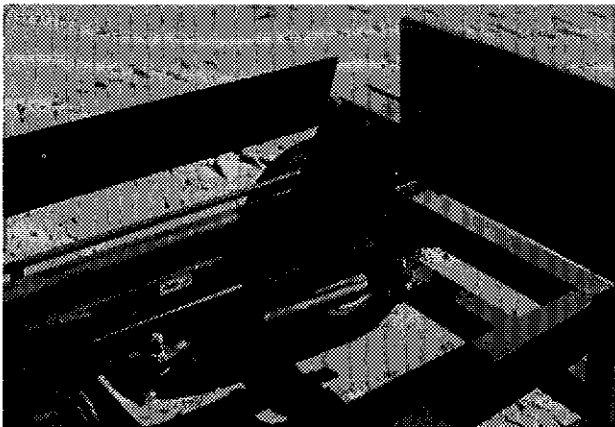


Figure 37

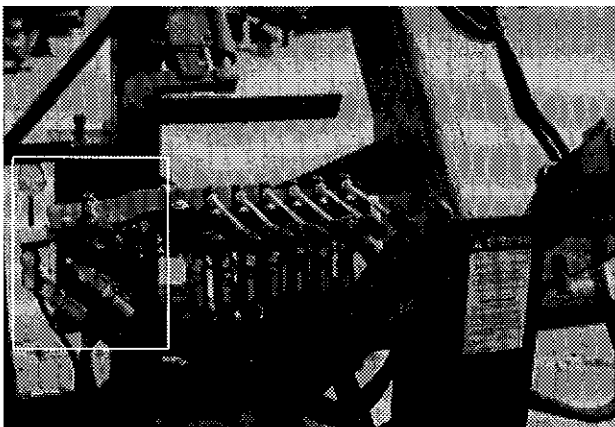


Figure 38

STEERING THE SILATUBE

- 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 SilaTube without leaving the tractor. Simply insert the bale spear in the lower part of the triangle on the side you wish to shift the SilaTube and lift slightly.
- 2) If the SilaTube 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

MAINTENANCE

- 1) Refer to the manufacturer's instructions for the engine.
- 2) Use a high quality lithium base grease containing molybdenum disulfide (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** 6) 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, PRONOVOST part No. 32007.
- 11) Check all nuts and bolts once a year. If necessary use torque chart on page 43.
- 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.

STORAGE

- 1) Store the SilaTube in a cool, dry place.
- 2) Lower the SilaTube 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 SilaTube.
- 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

P-6200

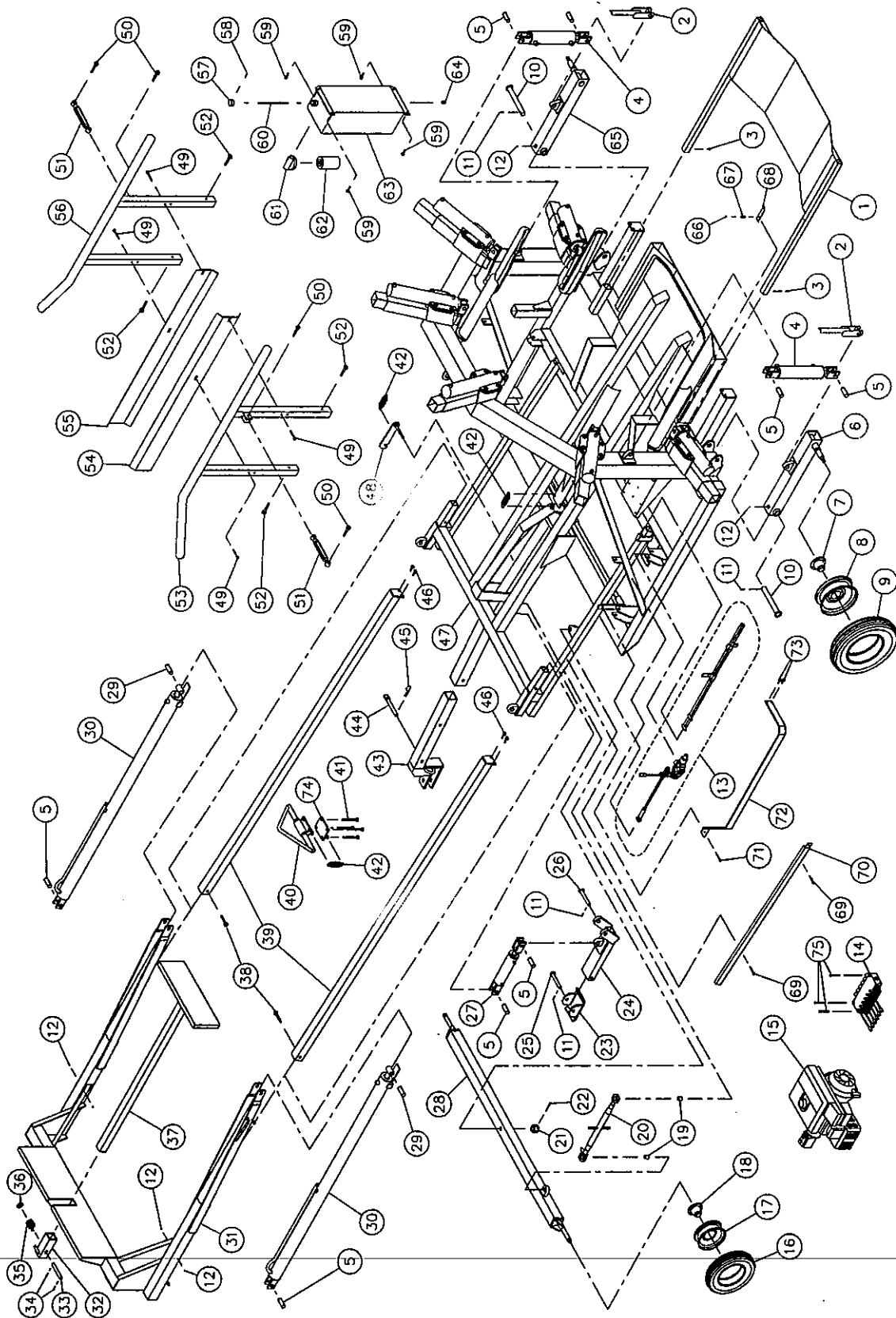
| | |
|---------------------------|--|
| Overall length: | 165" (4.19 m) (without the 8½" (21.6 cm) tongue) |
| Overall width: | 100" (2.54 m) |
| Height: | 92" (2.34 m) (transport position) |
| Bale diameter: | 48" to 56" (1.22 to 1.42 m) diameter |
| Engine: | B/S 9 HP |
| Starting: | Manual |
| Two stage hydraulic pump: | 3 gal at 2500 psi / 11 gal at 1100 psi |
| Front hub: | cap. 1000 pounds (450 kg) 4 bolts |
| Rear hub: | cap. 1800 pounds (810 kg) 5 bolts |
| Front rim: | 10" x 8" - 4 bolts |
| Rear rim: | 15" x 6" - 5 bolts |
| Front tires: | 20.5" x 8" - 4 ply (with tube) |
| Rear tires: | 6.7" x 15" - 4 ply (without tube) |
| Capacity: | 100 bales per hour (Best conditions and experienced operator) |
| Oil tank capacity: | 5.75 gal US (4.75 gal imp.) (21.75 liters) |
| Plastic tubes used: | ProTube 0.004 mil., 150' (47.72 m) length No. P-62204 for bale 48" to 56" (1.22 to 1.42 m) diameter |
| Weight on tongue: | 1360 pounds (612 kg) app. |
| Total weight: | 3900 pounds (1755 kg) app. |

P-6300

| | |
|---------------------------|---|
| Overall length: | 165" (4.19 m) (without the 8½" (21.6 cm) tongue) |
| Overall width: | 112" (2.85 m) |
| Overall width: | 104" (2.64 m) (motor in transport position & without tires) |
| Height: | 93" (2.36 m) (transport position) |
| Bale diameter: | 48" to 66" (1.22 to 1.68 m) diameter |
| Engine: | B/S 9 HP |
| Starting: | Manual |
| Two stage hydraulic pump: | 3 gal at 2500 psi / 11 gal at 1100 psi |
| Front hub: | cap. 1000 pounds (450 kg) 4 bolts |
| Rear hub: | cap. 1800 pounds (810 kg) 5 bolts |
| Front rim: | 10" x 8" - 4 bolts |
| Rear rim: | 15" x 6" - 5 bolts |
| Front tires: | 20.5" x 8" - 4 ply (with tube) |
| Rear tires: | 6.7" x 15" - 4 ply (without tube) |
| Capacity: | 100 bales per hour (Best conditions and experimented operator) |
| Oil tank capacity: | 5.75 gal US (4.75 gal imp) (21.75 liters) |
| Plastic tubes used: | ProTube 0.004 mil., 150' (47.72 m) length No. P-62204 for bales 48" to 56" (1.22 to 1.42 m) diameter No. P-62205 for bales 56" to 66" (1.42 to 1.68 m) diameter |
| Weight on tongue: | 1410 pounds (635 kg) app. |
| Total weight: | 4150 pounds (1868 kg) app. |

Design and specifications subject to change without notice.

SILATUBE P-6200 ASSEMBLY



8

SILATUBE P-6200 ASSEMBLY (cont'd)

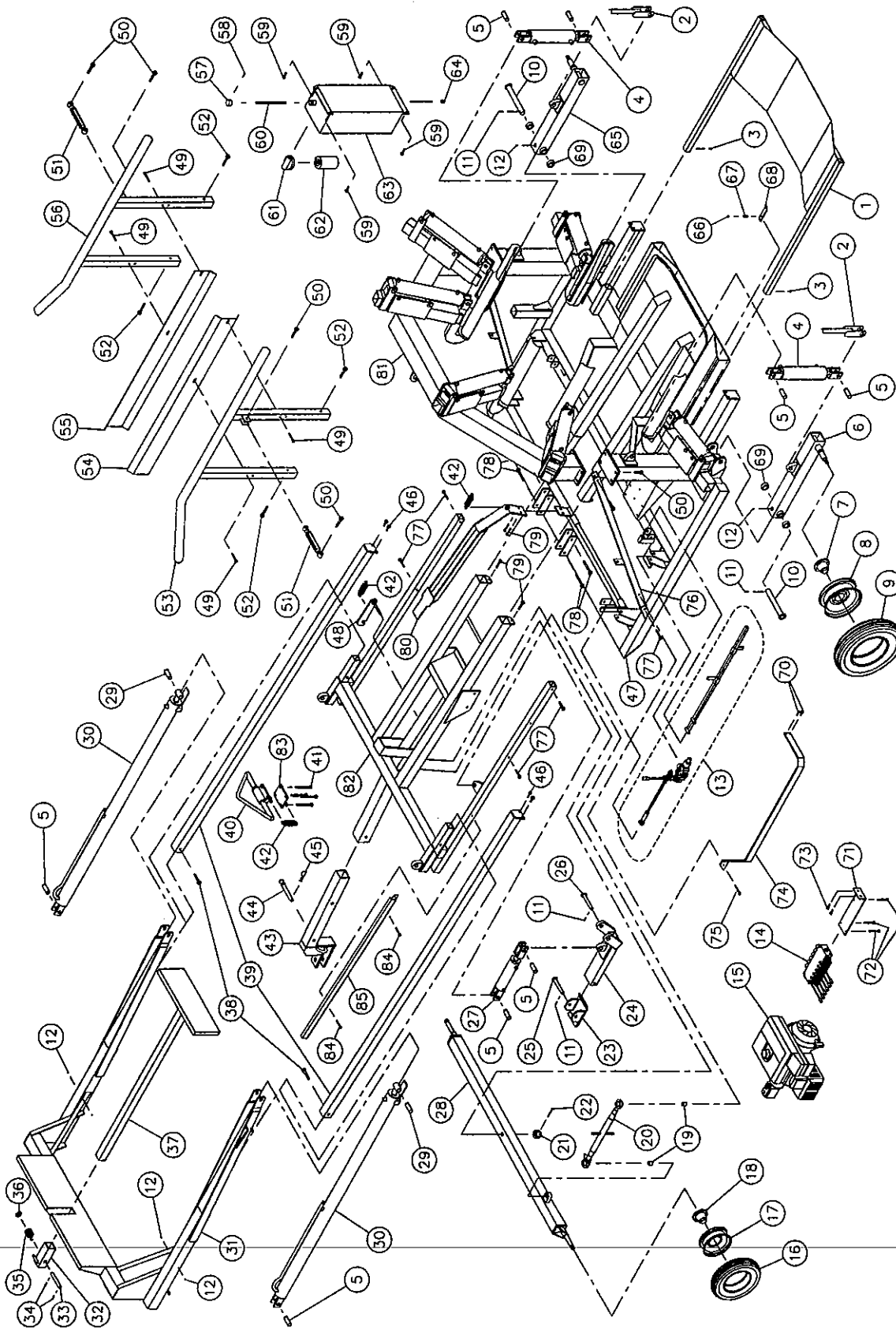
| REF. | PART # | DESCRIPTION | QTY |
|------|-----------|---|-----|
| 1 | 32107 | ProTube support plate | 1 |
| 2 | 32108 | Safety locking mechanism for rear wheels | 2 |
| 3 | Std. | Bolt ¼" NC x ¾" lg + nut & lock washer | 2 |
| 4 | 25TR08 | Cylinder 2.5" x 8" standard | 2 |
| 5 | D-60051 | Pin 1" x 3" lg | 8 |
| 6 | 32109 | Left rear axle | 1 |
| 7 | 32037 | Hub H-511 (see details p. 38) | 2 |
| 8 | R-1555 | Rim 15 x 5 x 5 | 2 |
| 9 | PN-6.7015 | Tire 6.7 x 15 - 6 ply + tube 6.70 x 15 TR-15 | 2 |
| 10 | 32034 | Pin for rear axle (P-6200) | 2 |
| 11 | Std. | Cotter pin 5/32" x 1 ½" lg | 4 |
| 12 | Std. | Grease fitting ¼"-28 straight | 6 |
| 13 | 32110 | 1 spool control valve (SD4 modified) (see details p.35) | 1 |
| 14 | 32111 | 6 spool control valve (see details p. 33) | 1 |
| 15 | --- | B&S 9 HP engine assembled with pump (see details p. 36) | 1 |
| 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 (P-6200) | 1 |
| 29 | 32019 | Pin 1" | 2 |
| 30 | 20172 | Cylinder 2" x 72" lg (see details p. 32) | 2 |
| 31 | 32205 | P-6200 bale ram frame | 1 |
| 32 | 32121 | Ram extension support | 1 |
| 33 | 32122 | Pin | 1 |
| 34 | Std. | Cotter pin 3/16" x 1 ¼" 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 1 ¼" 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 | 32206 | P-6200 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 | 4 |
| 51 | 32014 | Turnbuckle 10" | 2 |
| 52 | Std. | Bolt 5/8" NC x 3½" lg + nylon locknut | 4 |
| 53 | 32025 | Left bale guide (P-6200) | 1 |
| 54 | 32026 | Left protector | 1 |
| 55 | 32027 | Right protector | 1 |
| 56 | 32028 | Right bale guide (P-6200) | 1 |

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SILATUBE P-6200 ASSEMBLY (cont'd)

| REF. | PART # | DESCRIPTION | QTY |
|------|--------|--|-----|
| 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 | 32129 | 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 | Std. | Bolt 3/8" NC x 2 3/4" lg + nylon locknut | 2 |
| 70 | 32207 | Guard | 1 |
| 71 | Std. | Bolt 3/8" NC x 3" lg + nylon locknut | 1 |
| 72 | 32208 | Guard | 1 |
| 73 | Std. | Bolt 3/8" NC x 1 1/4" lg + nylon locknut | 2 |
| 74 | 32209 | Retaining plate for steering triangle | 1 |
| 75 | Std. | Bolt 5/16" NC x 2 3/4" lg + nylon locknut | 3 |

SILATUBE P-6300 ASSEMBLY



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SILATUBE P-6300 ASSEMBLY (cont'd)

| REF. | PART # | DESCRIPTION | QTY |
|------|-----------|---|-----|
| 1 | 32107 | ProTube 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 | 32109 | Left rear axle | 1 |
| 7 | 32037 | Hub H-511 (see details p. 38) | 2 |
| 8 | R-1555 | Rim 15 x 5 x 5 | 2 |
| 9 | PN-6.7015 | Tire 6.7 x 15 - 6 ply + tube 6.70 x 15 TR-15 | 2 |
| 10 | 32093 | Pin for rear axle (P-6300) | 2 |
| 11 | Std. | Cotter pin 5/32" x 1½" lg | 4 |
| 12 | Std. | Grease ¼"-28 fitting | 6 |
| 13 | 32110 | 1 spool control valve SD4 modified (see details p. 35) | 1 |
| 14 | 31111 | 6 spool control valve (see details p. 33) | 1 |
| 15 | --- | B&S 9HP engine assembled with pump (see details p. 36) | 1 |
| 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" 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 | 32162 | Front axle assembly (P-6300) | 1 |
| 29 | 32019 | Pin 1" | 2 |
| 30 | 20172 | Cylinder 2" x 72" lg (see details p. 32) | 2 |
| 31 | 32216 | P-6300 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" | 1 |
| 46 | Std. | Bolt ½" NC x 1½" lg + nut & lock washer | 4 |
| 47 | 32217 | P-6300 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 (P-6300) | 1 |
| 54 | 32026 | Left protector | 1 |
| 55 | 32027 | Right protector | 1 |
| 56 | 32166 | Right bale guide (P-6300) | 1 |

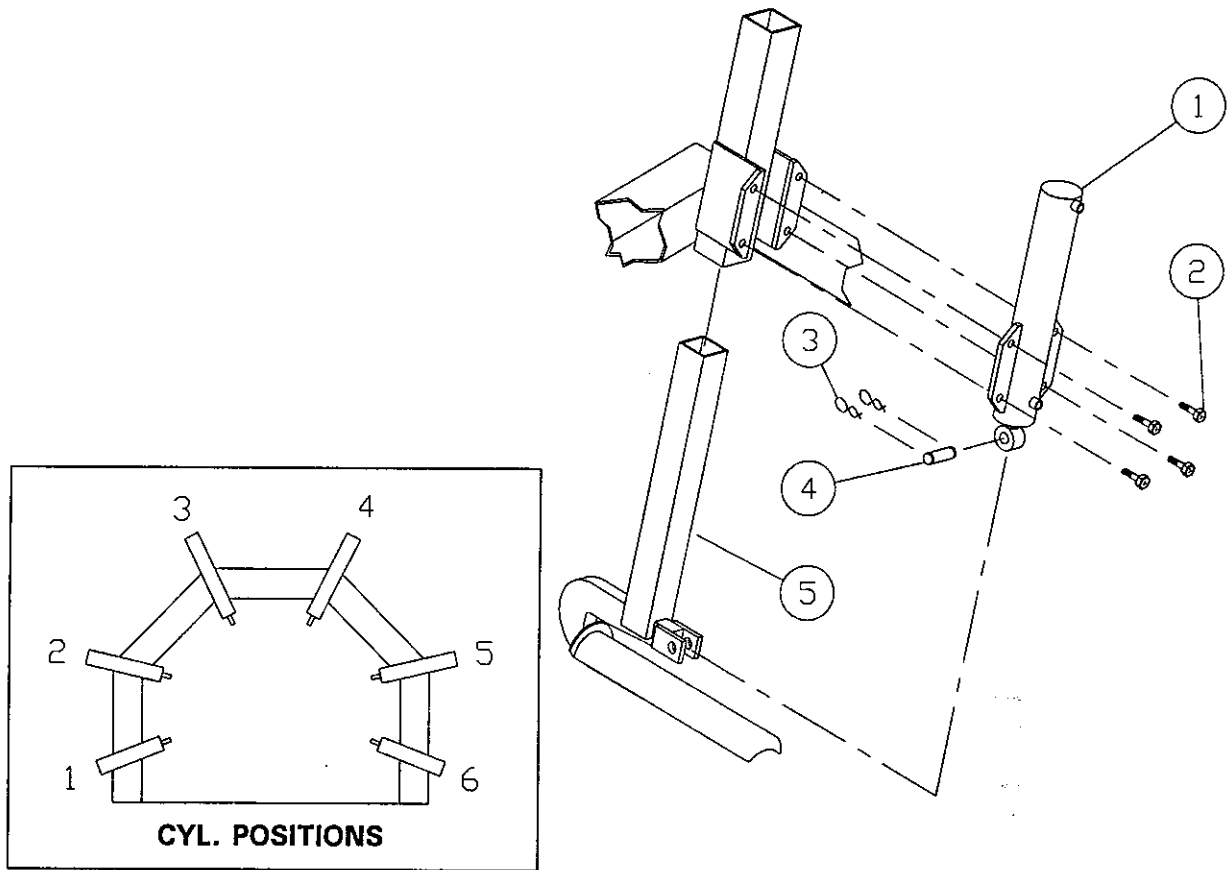
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SILATUBE P-6300 ASSEMBLY (cont'd)

| REF. | PART # | DESCRIPTION | QTY |
|------|--------|--|-----|
| 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 | 32129 | 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 | 1 |
| 70 | Std. | Bolt 3/8" NC x 1 1/4" lg + nylon locknut | 2 |
| 71 | 32210 | Valve support | 1 |
| 72 | Std. | Bolt 5/16" NC x 2 3/4" lg + nylon locknut | 3 |
| 73 | Std. | Bolt 7/16" NC x 3/4" lg + lock washer | 2 |
| 74 | 32211 | Guard | 1 |
| 75 | Std. | Bolt 3/8" NC x 3" lg + nylon locknut | 1 |
| 76 | 32212 | Arch brace | 2 |
| 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 | 2 |
| 85 | 32207 | Guard | 1 |

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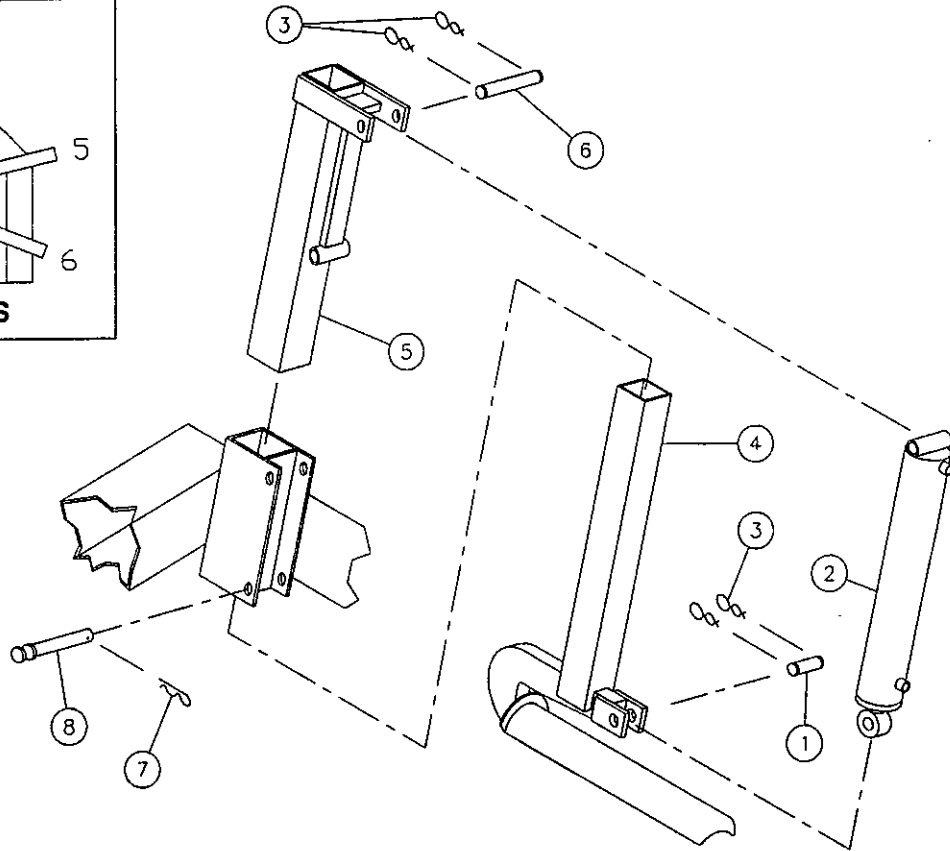
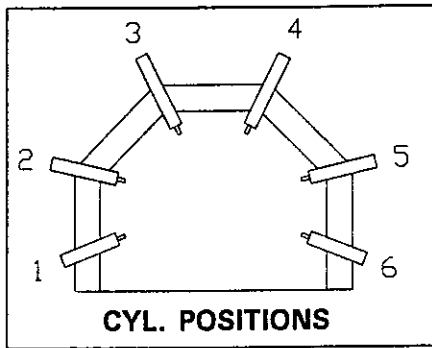
DETAIL OF ARCH MODEL P-6200



| 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 + nut & lock washer | 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 | - |
| 5 | 32040 | Stretcher arm | - | - | 1 | 1 | - | - |

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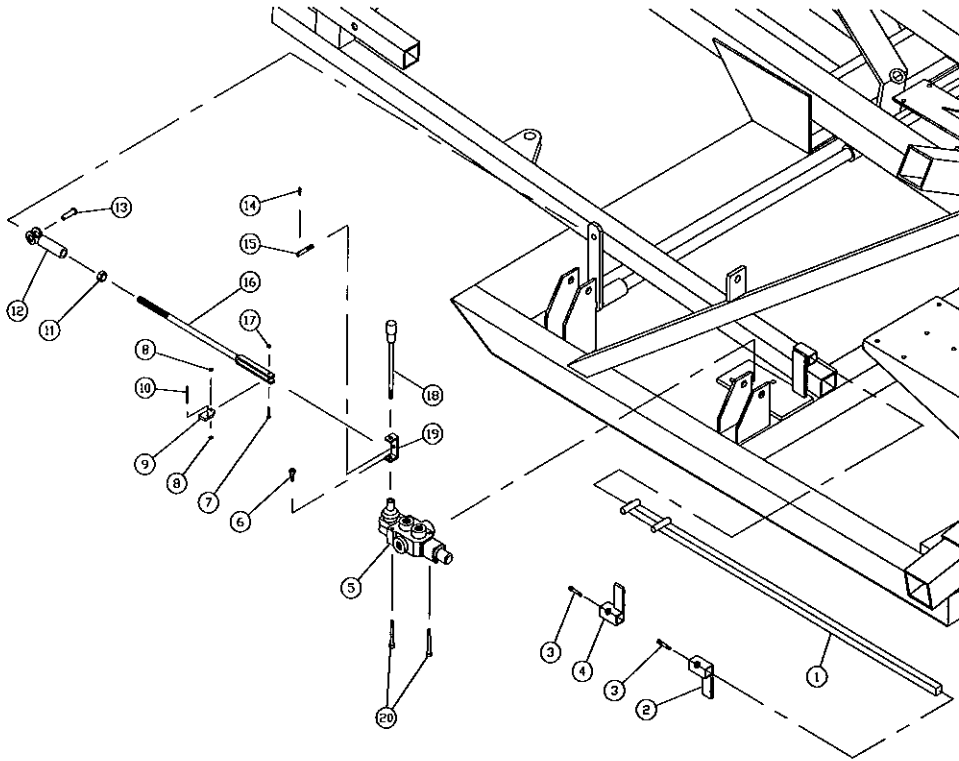
DETAIL OF ARCH MODEL P-6300



| REF. | PART # | DESCRIPTION | QTY CYL POSITION # | | | | | |
|------|--------|----------------------------|--------------------|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Std. | Pin 1" x 3" lg | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 30H10 | Cylinder | 1 | - | - | - | - | 1 |
| 2 | 30H15 | Cylinder | - | 1 | - | - | 1 | - |
| 2 | 30H17 | Cylinder | - | - | 1 | 1 | - | - |
| 3 | Std. | Hair pin 1/8" | 4 | 4 | 4 | 4 | 4 | 4 |
| 4 | 32152 | Stretcher arm | 1 | - | - | - | - | - |
| 4 | 32153 | Stretcher arm | - | 1 | - | - | - | - |
| 4 | 32154 | Stretcher arm | - | - | 1 | - | - | - |
| 4 | 32155 | Stretcher arm | - | - | - | 1 | 1 | - |
| 4 | 32156 | Stretcher arm | - | - | - | - | - | 1 |
| 5 | 32157 | Stretcher arm guide | 1 | - | - | - | - | 1 |
| 5 | 32158 | 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 5/32" | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 32161 | Pin 1" x 5 1/4" lg | 1 | 1 | 1 | 1 | 1 | 1 |

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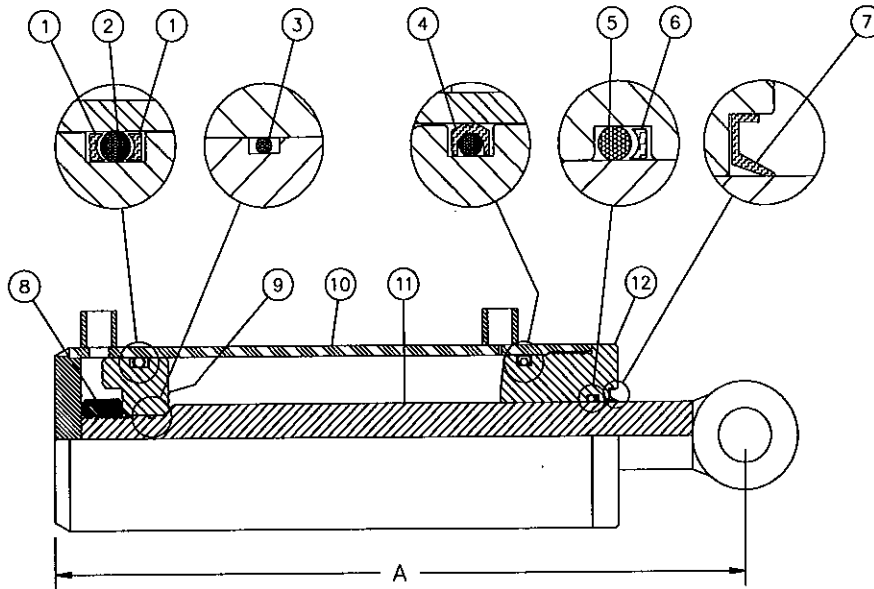
AUTOMATIC SYSTEM DETAIL



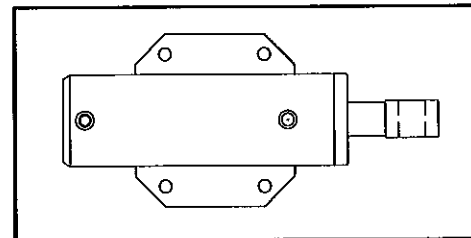
| REF. | PART # | DESCRIPTION | QTY | |
|------|--------|--|--------|--------|
| | | | P-6200 | P-6300 |
| 1 | 32139 | Rod (P-6200) | 1 | - |
| 1 | 32140 | Rod (P-6300) | - | 1 |
| 2 | 32141 | Rear stopper | 1 | 1 |
| 3 | Std. | Square head set screw 5/16" NC x 3/4" lg | 2 | 2 |
| 4 | 32142 | Front stopper | 1 | 1 |
| 5 | 32110 | 1 spool control valve (SD4 modified) (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 3/4" 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 (P-6200) | 1 | - |
| 16 | 32148 | Rod (P-6300) | - | 1 |
| 17 | 32149 | Lock washer 3/16" | 1 | 1 |
| 18 | 32150 | Spool handle + 2 nut M8 x 1.25 | 1 | 1 |
| 19 | 32151 | Spool handle support | 1 | 1 |
| 20 | Std. | Bolt 5/16" NC x 2 1/2" lg + nut & lock washer | 2 | 2 |

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ARCH CYLINDER P-6200

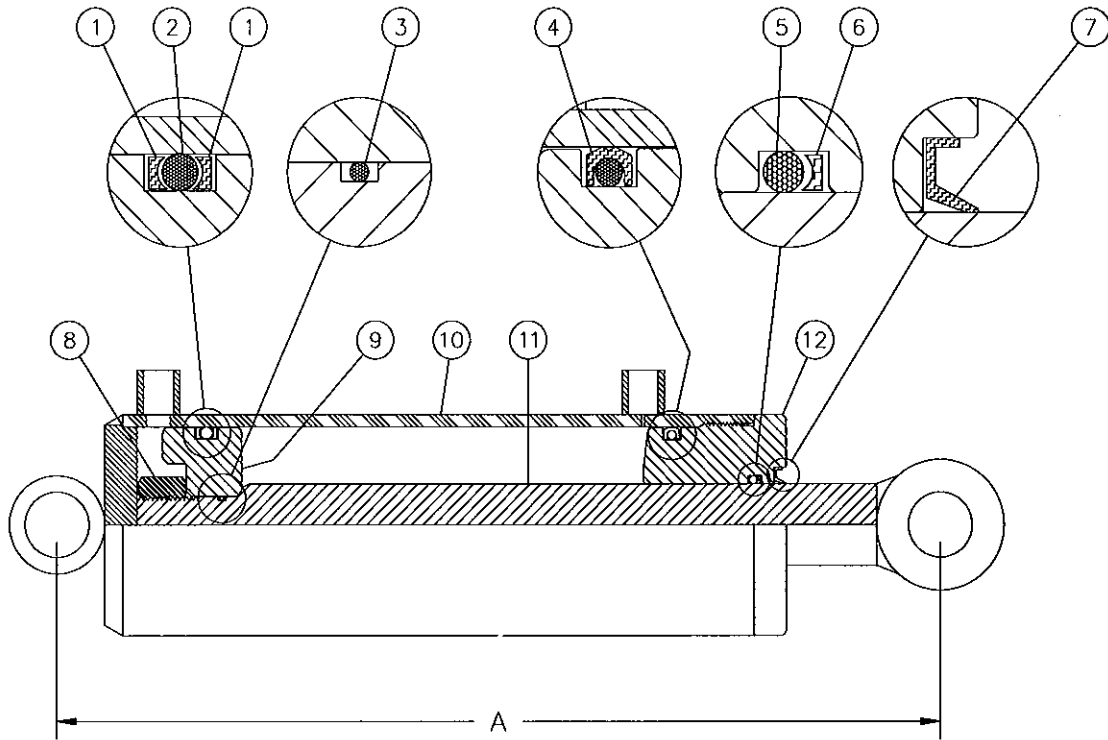


| MODEL | LENGTH A |
|-------|----------|
| 30Z10 | 16" |
| 30Z15 | 21" |
| 30Z17 | 23" |



| REF. | PART # | DESCRIPTION | QTY CYLINDER # | | |
|------|--|---|----------------|-------|-------|
| | | | 30Z10 | 30Z15 | 30Z17 |
| 8 | 1 | BU-334 Back-up ring 3/16" x 2 5/8" x 3" | 3 | 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 | |

ARCH CYLINDER P-6300

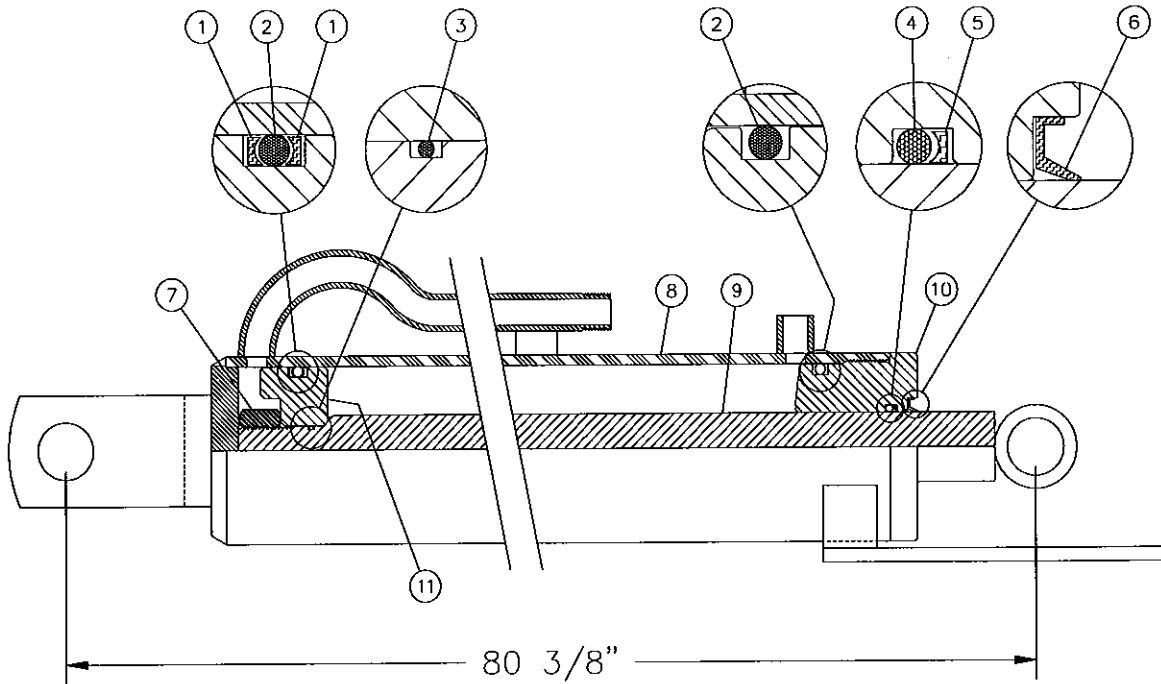


| MODEL | LENGTH A |
|-------|----------|
| 30H10 | 16 3/4" |
| 30H15 | 21 3/4" |
| 30H17 | 23 3/4" |

| REF. | PART # | DESCRIPTION | QTY CYLINDER # | | |
|------|---------|---|----------------|-------|-------|
| | | | 30H10 | 30H15 | 30H17 |
| 1 | BU-334 | Back-up ring 3/16" x 2 5/8" x 3" | 3 | 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-6168 | Cylinder body 3" for 30H10..... | 1 | - | - |
| 10 | D-6169 | Cylinder body 3" for 30H15..... | - | 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-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 |

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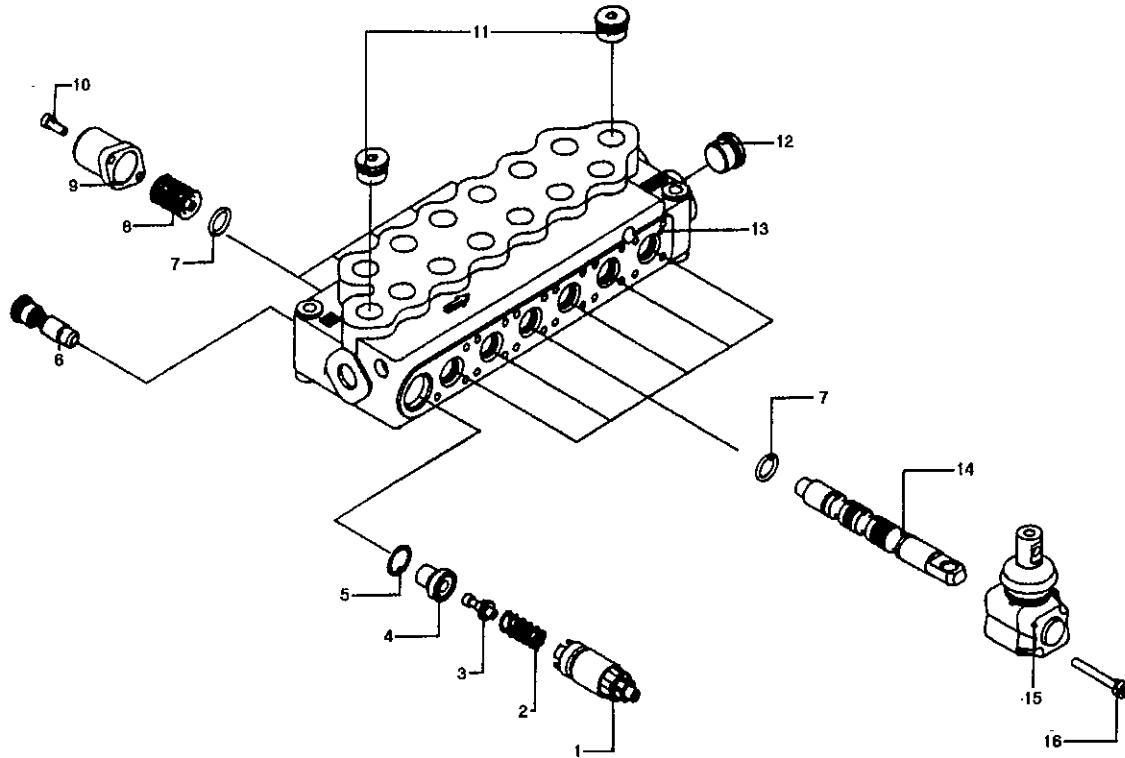
PUSHER CYLINDER # 20G72 & # 20I72



8

| REF. | PART # | DESCRIPTION | QTY | |
|------|---------|---|-------|-------|
| | | | 20G72 | 20I72 |
| 1 | BU-326 | Back-up ring 3/16" x 1 5/8" x 2" | 2 | 2 |
| 2 | OR-326 | O-ring 3/16" x 1 5/8" x 2" | 2 | 2 |
| 3 | OR-016 | O-ring 1/16" x 5/8" x 3/4" | 1 | 1 |
| 4 | OR-218 | O-ring 1/8" x 1 1/4" x 1 1/2" | 1 | 1 |
| 5 | BU-218 | Back-up ring 1/8" x 1 1/4" x 1 1/2" | 1 | 1 |
| 6 | CR12330 | Wiper 1/8" x 1 1/4" x 1 1/2" | 1 | 1 |
| 7 | Std. | Nut 3/4" NF | 1 | 1 |
| 8 | D-6118 | 20G72 cylinder body 2" ø from serial number 1195 to 12304 | 1 | - |
| 8 | D-6179 | 20I72 cylinder body 2" ø from serial number 1305 and over | - | 1 |
| 9 | D-6172 | Piston rod 1 1/4" ø for 20G72 & 20I72 | 1 | 1 |
| 10 | D-6032 | Head 2" ø | 1 | 1 |
| 11 | D-6020 | Piston 2" ø | 1 | 1 |

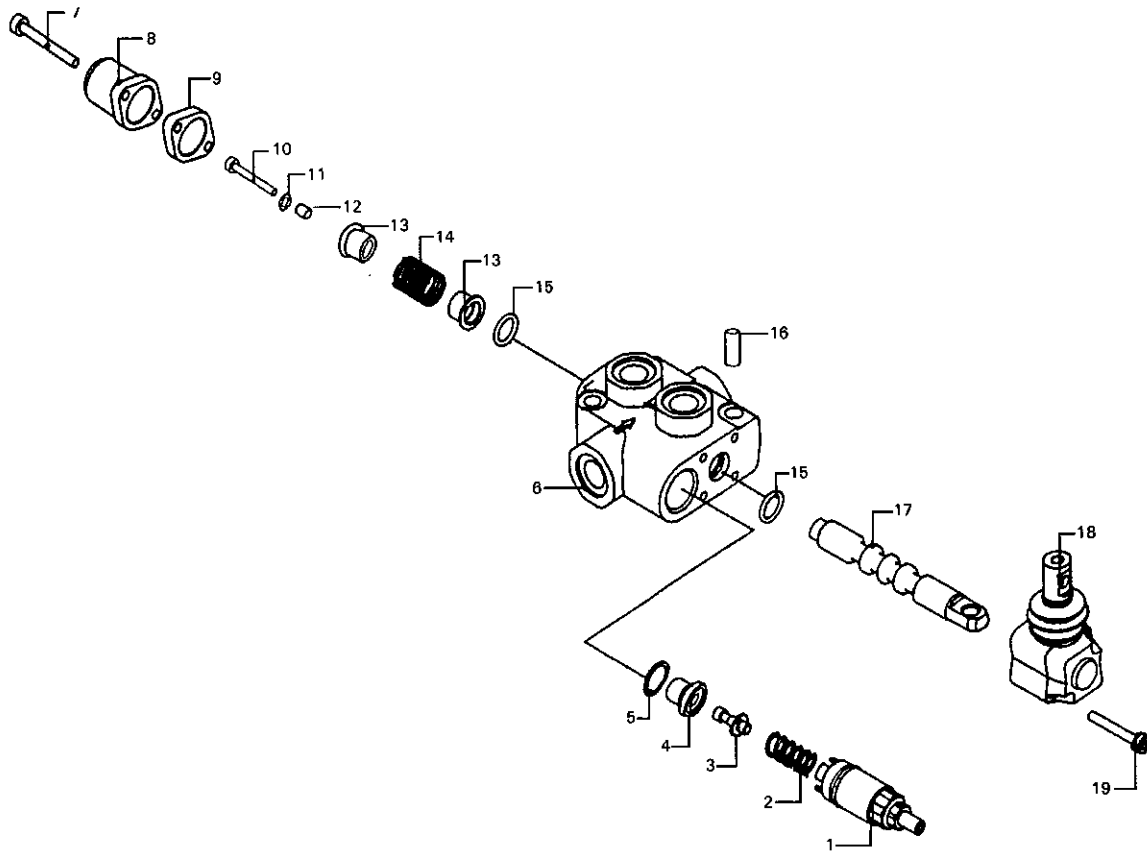
6 SPOOL CONTROL VALVE # 32111



| REF. | PART # | CODE # | DESCRIPTION | QTY |
|------|--------|-------------|--------------------------|-----|
| 1 | 32167 | XKIT105211 | Relief valve | 1 |
| 2 | 32071 | 3MOL315330 | Spring | 1 |
| 3 | 32072 | 3OTT213260 | Spring seat pusher | 1 |
| 4 | 32073 | 3ANE220210 | Ring | 1 |
| 5 | 32074 | 3ANE120010 | Seal | 1 |
| 6 | 32076 | XKIT005000 | Kit VR5 | 1 |
| 7 | 32077 | 4GUA115926 | O-ring | 12 |
| 8 | 32078 | XV08105000 | Spring | 6 |
| 9 | 32079 | 3CAP210370 | Endcap | 6 |
| 10 | 32080 | 4VIT605014 | Screw M5 x14 | 12 |
| 11 | 32081 | 3XTAP822150 | Plug SAE8 | 2 |
| 12 | 32082 | 3XTAP623170 | Plug | 1 |
| 13 | 32168 | 3CO1357000 | Valve housing | 1 |
| 14 | 32085 | 3CU1210130 | Valve spool..... | 6 |
| 15 | 32086 | 3XLEV105000 | Lever | 6 |
| 16 | 32087 | 4VIT605035 | Screw M5 x 35 | 12 |

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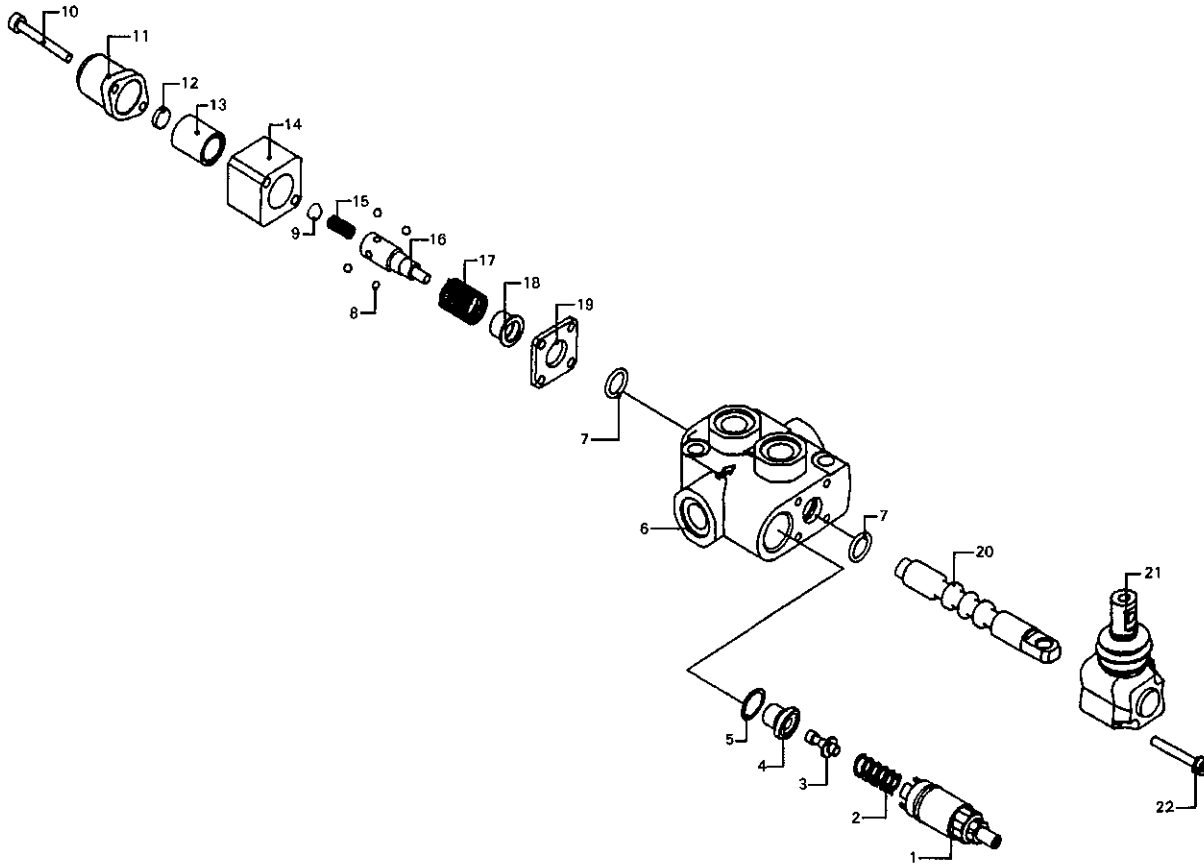
1 SPOOL CONTROL VALVE # 32138 (SD4 standard)



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| REF. | PART # | CODE # | DESCRIPTION | QTY |
|------|--------|-------------|--------------------------|-----|
| 1 | 32167 | XKIT105211 | Relief valve | 1 |
| 2 | 32169 | 3MOL314341 | Spring | 1 |
| 3 | 32072 | 3OTT213260 | Spring seat pusher | 1 |
| 4 | 32073 | 3ANE220210 | Ring | 1 |
| 5 | 32074 | 3ANE120010 | Seal | 1 |
| 6 | 32170 | 3CO1103000 | Valve housing | 1 |
| 7 | 32171 | 4VIT605018 | Bolt M5 x 18 | 2 |
| 8 | 32079 | 3CAP210370 | Endcap | 1 |
| 9 | 32172 | 3DIS12104N | Spacer | 1 |
| 10 | 32173 | 4VIT508035 | Bolt M8 x 35 | 1 |
| 11 | 32174 | 3ANE112010 | Ring | 1 |
| 12 | 32175 | 3ANE109091 | Ring | 1 |
| 13 | 32176 | 3BOC119120 | Spring retainer | 2 |
| 14 | 32177 | 3MOL419430 | Spring | 1 |
| 15 | 32178 | 4GUA115926 | O-ring (121) | 1 |
| 16 | 32179 | 4SPI510022 | Roll pin | 1 |
| 17 | 32180 | 3CU1110100 | Valve spool | 1 |
| 18 | 32086 | 3XLEV105000 | Lever | 1 |

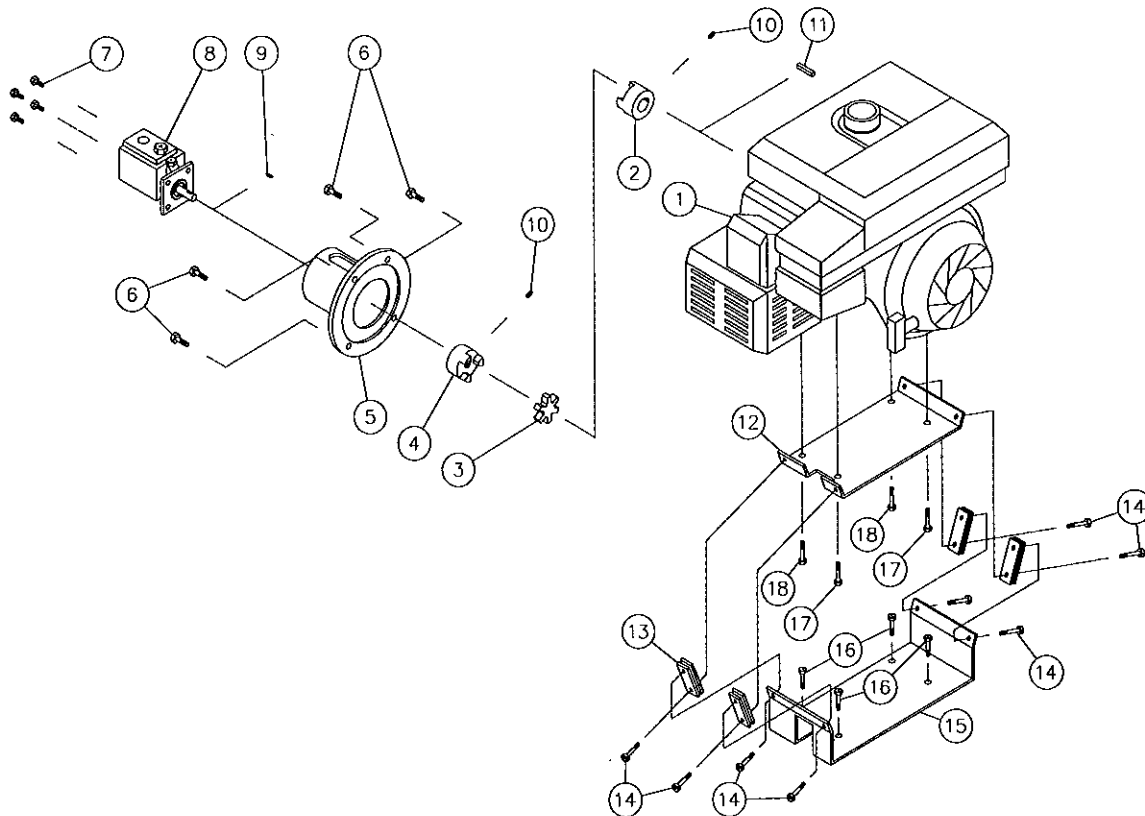
1 SPOOL CONTROL VALVE # 32110 (SD4 modified)



| REF. | PART # | CODE # | DESCRIPTION | QTY |
|------|--------|-------------|--------------------------|-----|
| 1 | 32167 | XKIT105211 | Relief valve | 1 |
| 2 | 32071 | 3MOL315330 | Spring | 1 |
| 3 | 32072 | 3OTT213260 | Spring seat pusher | 1 |
| 4 | 32073 | 3ANE220210 | Ring | 1 |
| 5 | 32074 | 3ANE120010 | Seal | 1 |
| 6 | 32181 | 3CO1116000 | Valve housing | 1 |
| 7 | 32077 | 4GUA115926 | O-ring | 2 |
| 8 | 32182 | 4SFE204762 | Ball 4.762 | 4 |
| 9 | 32183 | 4SFE209525 | Ball 9.525 | 1 |
| 10 | 32184 | 4VIT605050 | Bolt M5 x 50 | 2 |
| 11 | 32079 | 3CAP210370 | Endcap | 1 |
| 12 | 32185 | 3SPE112030 | Spacer | 1 |
| 13 | 32186 | 3BUS221271 | Bushing | 1 |
| 14 | 32187 | 3CAP220331 | Cap | 1 |
| 15 | 32188 | 3MOL208280 | Spring | 1 |
| 16 | 32189 | 3PER115571 | Pin | 1 |
| 17 | 32190 | 3MOL419500 | Spring | 1 |
| 18 | 32191 | 3BOC119130 | Bushing | 1 |
| 19 | 32192 | 3DIS121035 | Nylon spacer | 1 |
| 20 | 32193 | 3CU1110120 | Spool | 1 |
| 21 | 32086 | 3XLEV105000 | Lever | 1 |
| 22 | 32087 | 4VIT605035 | Screw M5 x 35 | 2 |

8

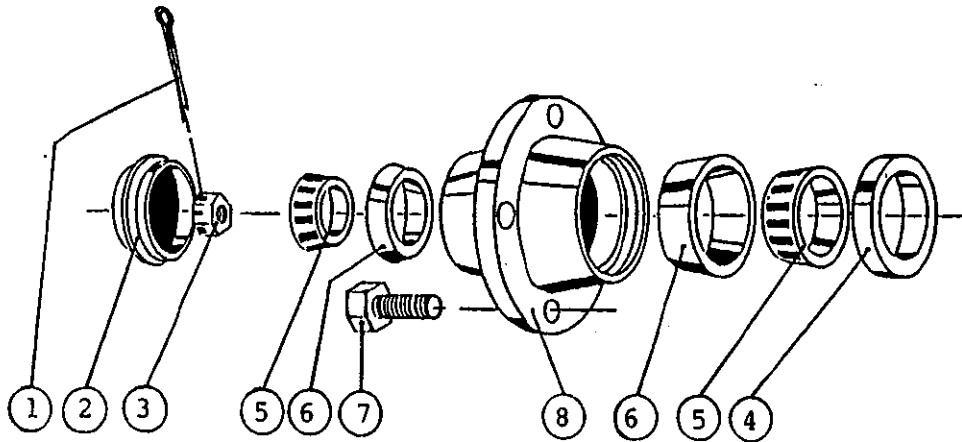
ENGINE ASSEMBLY WITH PUMP



8

| REF. | PART # | DESCRIPTION | QTY SILATUBES' SERIAL # | |
|------|--------|--|-------------------------|----------|
| | | | 1226 & - | 1227 & + |
| 1 | 32011 | Engine B&S 9HP | 1 | - |
| 1 | 32132 | Engine B&S 9HP | - | 1 |
| 2 | 32006 | Flexible coupling 1" ø | 1 | - |
| 2 | 32133 | Flexible coupling 1" ø | - | 1 |
| 3 | 32005 | Flexible coupling | 1 | - |
| 3 | 32134 | Flexible coupling | - | 1 |
| 4 | 32004 | Flexible coupling ½" ø | 1 | - |
| 4 | 32135 | Flexible coupling ½" ø | - | 1 |
| 5 | 32088 | Mounting flange | 1 | - |
| 5 | 32136 | Mounting flange | - | 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 |
| 13 | 32195 | Anti-vibration supports | - | 8 |
| 14 | Std. | Bolt 5/16" NC x 1" lg + nylon locknut & flat washer | - | 8 |
| 15 | 32196 | Lower motor mounting plate | - | 1 |
| 16 | Std. | Bolt 3/8" NC x 1" lg + nut & lock washer | - | 4 |
| 17 | Std. | Bolt 3/8" NC x 1 ½" lg + nut & lock washer | - | 2 |
| 18 | Std. | Bolt 3/8" NC x 1 ½" lg + nut + lock washer & flat washer | - | 2 |

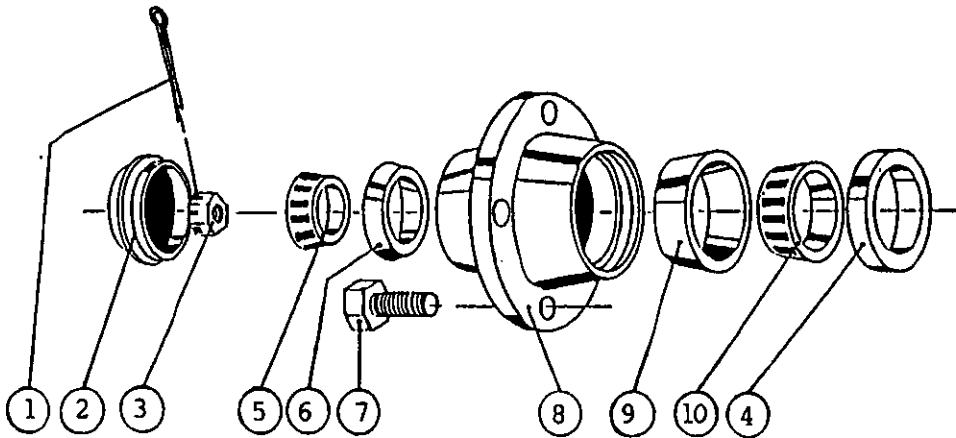
FRONT HUB H1000



| 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

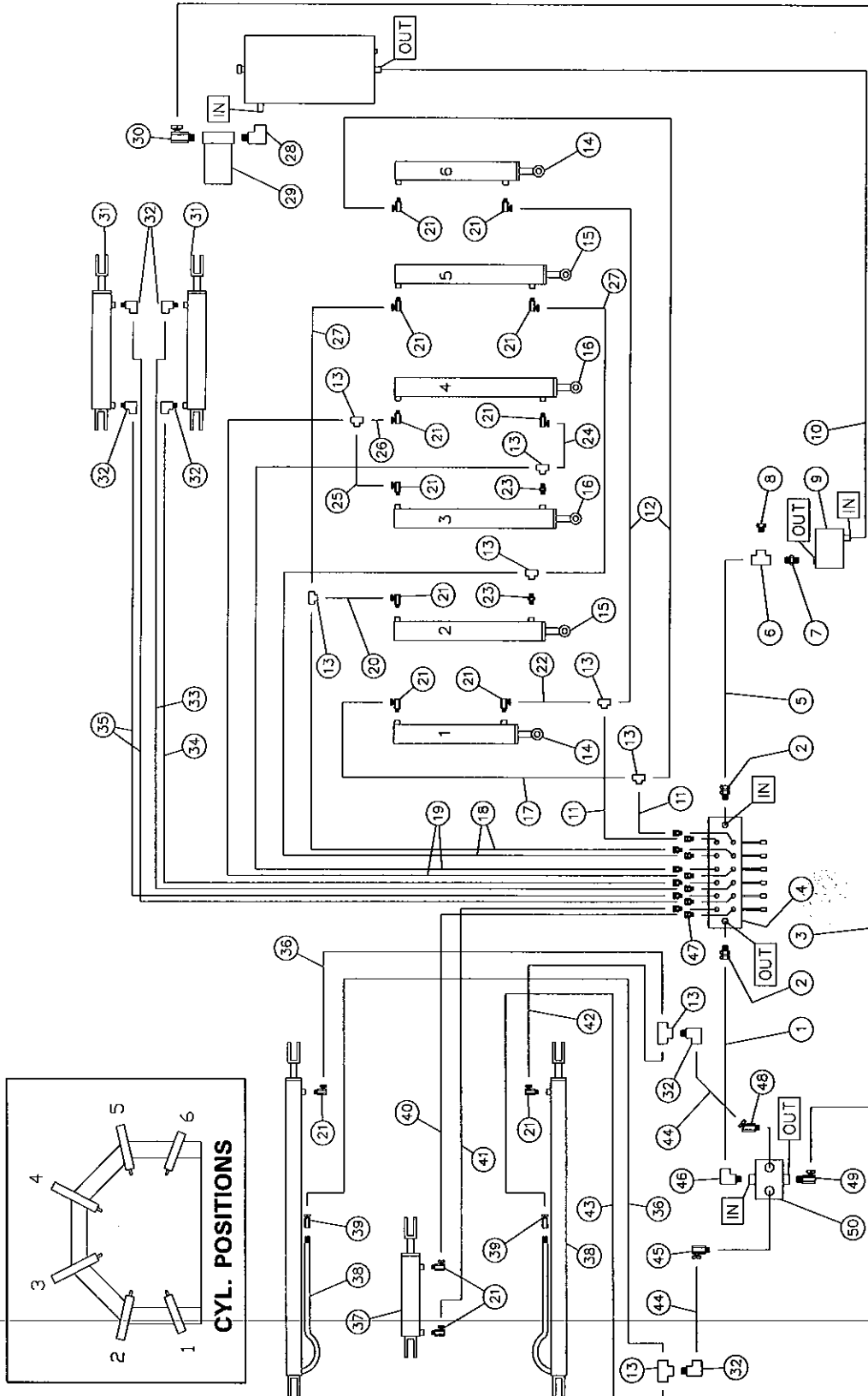
REAR HUB H511



8

| REF. | PART # | DESCRIPTION | QTY |
|------|--------|---|-----|
| 1 | Std. | Cotter pin 3/16" x 1 1/2" | 1 |
| 2 | 32100 | Dust cap (DC12) | 1 |
| 3 | 32101 | Castle nut 3/4" NF | 1 |
| 4 | 32102 | Oil seal SE11 | 1 |
| 5 | 32103 | Roller bearing Timken: cone no. LM11949 | 1 |
| 6 | 32104 | Roller bearing Timken: cup no. LM11910..... | 1 |
| 7 | 32105 | Rim screw WB10 | 5 |
| 8 | 32106 | Hub only H511 | 1 |
| 9 | 51531 | Roller bearing Timken: cup no. LM67010..... | 1 |
| 10 | 51530 | Roller bearing Timken: cone no. LM67048 | 1 |

HYDRAULIC SYSTEM



HYDRAULIC SYSTEM (cont'd)

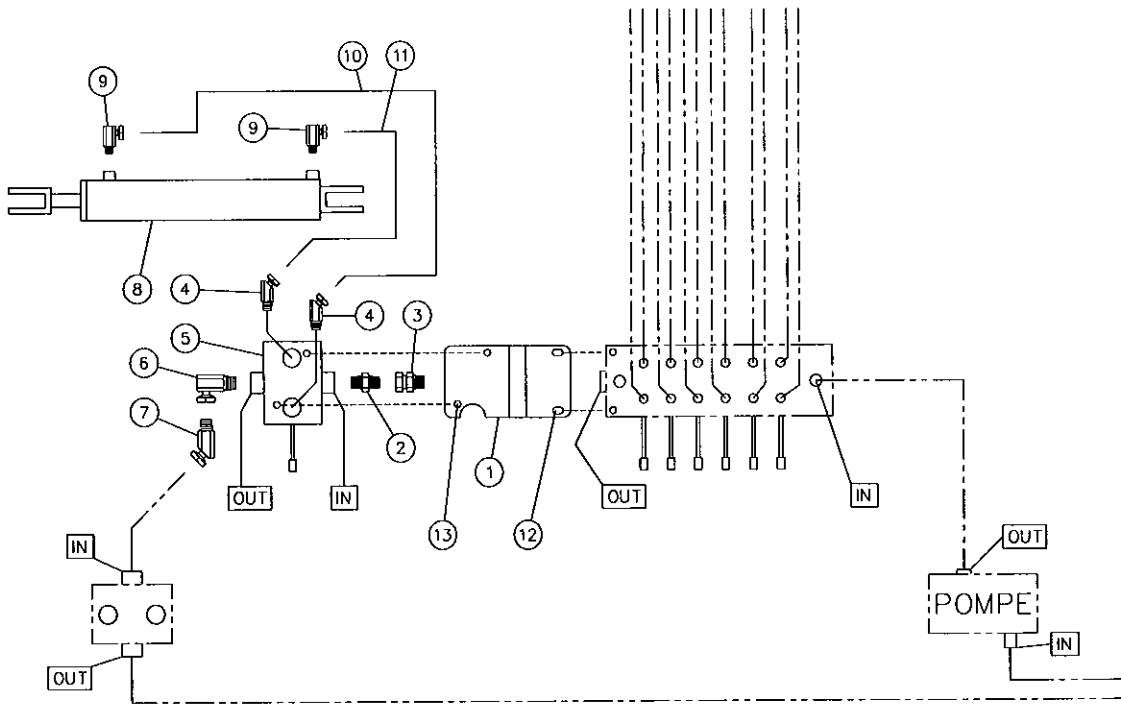
| REF. | PART # | DESCRIPTION | QTY | |
|------|---------|---|--------|--------|
| | | | P-6200 | P-6300 |
| 1 | D-18088 | Hose ½" x 79" lg + 2 fittings 8U108 | 1 | 1 |
| 2 | Std. | Fitting 9315 8 x 8 | 2 | 2 |
| 3 | D-18089 | Hose ½" x 140" lg + 2 fittings 8U108 | 1 | 1 |
| 4 | 32111 | 6 spool control 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 | 3 | 3 |
| 7 | Std. | Straight female pipe to male pipe ½" C3069 x 8 | 3 | 3 |
| 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 117" 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 | 30H15 | Cylinder 3" x 15" 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 | D-18095 | Hose 3/8" x 42" 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 | 1 |
| 21 | Std. | Fitting 9405 6x6 | 14 | 14 |
| 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 | 1 |
| 26 | D-8677 | Hose 3/8" x 50 ½" lg + 2 fittings 6U106 | 1 | - |
| 26 | D-18100 | Hose 3/8" x 52" lg + 2 fittings 6U106 | - | 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 6 | 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 | 6 | 6 |
| 33 | D-8665 | Hose 3/8" x 38" lg + 2 fittings 6U106 | 1 | - |
| 33 | D-18095 | Hose 3/8" x 42" lg + 2 fittings 6U106 | - | 1 |
| 34 | D-18102 | Hose 3/8" x 35 ½" lg + 2 fittings 6U106 | 1 | - |
| 34 | D-18095 | Hose 3/8" x 42" lg + 2 fittings 6U106 | - | 1 |
| 35 | D-8664 | Hose 3/8" x 159" lg + 2 fittings 6U106 | 2 | - |

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HYDRAULIC SYSTEM (cont'd)

| REF. | PART # | DESCRIPTION | QTY | |
|------|---------|---|--------|--------|
| | | | P-6200 | P-6300 |
| 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 | 2 | - |
| 36 | D-18104 | Hose 3/8" x 66" lg + 2 fittings 6U106 | - | 1 |
| 37 | 25TR04 | Cylinder 2 1/2" x 4" | 1 | 1 |
| 38 | 20G72 | Cylinder 2" x 72" stroke from serial number 1195 to 1304 (see details page 32) | 2 | 2 |
| 38 | 20I72 | Cylinder 2" x 72" stroke from serial number 1305 and over (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 9405 x 6 x 8 | 1 | 1 |
| 46 | Std. | Street elbow 1/2" 90° C3409 x 8 | 1 | - |
| 46 | Std. | Fitting 9405 8x8 | - | 1 |
| 47 | Std. | Fitting 9315 6x6 | 12 | 12 |
| 48 | Std. | Fitting 9355 6x8 | 1 | 1 |
| 49 | Std. | Fitting 9405 8x8 | 2 | 2 |
| 50 | 32110 | 1 spool valve SD4 modified (see details page 35) | 1 | 1 |

HYDRAULIC STEERING OPTION










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
| REF. | PART # | DESCRIPTION | QTY | |
|------|---------|--|--------|--------|
| | | | P-6200 | P-6300 |
| 1 | 32137 | Support plate | 1 | 1 |
| 2 | Std. | Fitting C3069 x 8 | 1 | 1 |
| 3 | Std. | Fitting 9315 8x8 (supplied on 6 spool valve) | 1 | 1 |
| 4 | Std. | Fitting 9355 8x8 | 2 | 2 |
| 5 | 32138 | 1 spool valve SD4 standard (see details page 34) | 1 | 1 |
| 6 | Std. | Fitting 9405 8x8 | 1 | 1 |
| 7 | Std. | Fitting 9355 8x8 | 1 | 1 |
| 8 | 25TR08 | Cylinder 2 1/2" x 8" stroke | 1 | 1 |
| 9 | Std. | Fitting 9405 6x6 | 2 | 2 |
| 10 | D-8985 | Hose 3/8" x 138" lg + 2 fittings 6U106 | 1 | - |
| 10 | D-18084 | Hose 3/8" x 133" lg + 2 fittings 6U106 | - | 1 |
| 11 | D-8984 | Hose 3/8" x 120" lg + 2 fittings 6U106 | 1 | - |
| 11 | D-18085 | Hose 3/8" x 122" lg + 2 fittings 6U106 | - | 1 |
| 12 | Std. | Flat washer 5/16" (Use existing screws on 6 spool valve) | 2 | 2 |
| 13 | Std. | Bolt 5/16" NC x 2" lg + nut & lock washer | 2 | 2 |

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 |

9

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.

WARRANTY

PRONOVOST 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 our plant in St-Tite, Quebec, Canada.

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 PRONOVOST 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. PRONOVOST accepts no responsibility for direct or indirect consequential damages of any kind.

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Ce manuel est aussi disponible en français.
Veuillez téléphoner.



LES MACHINERIES PRONOVOST INC.
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