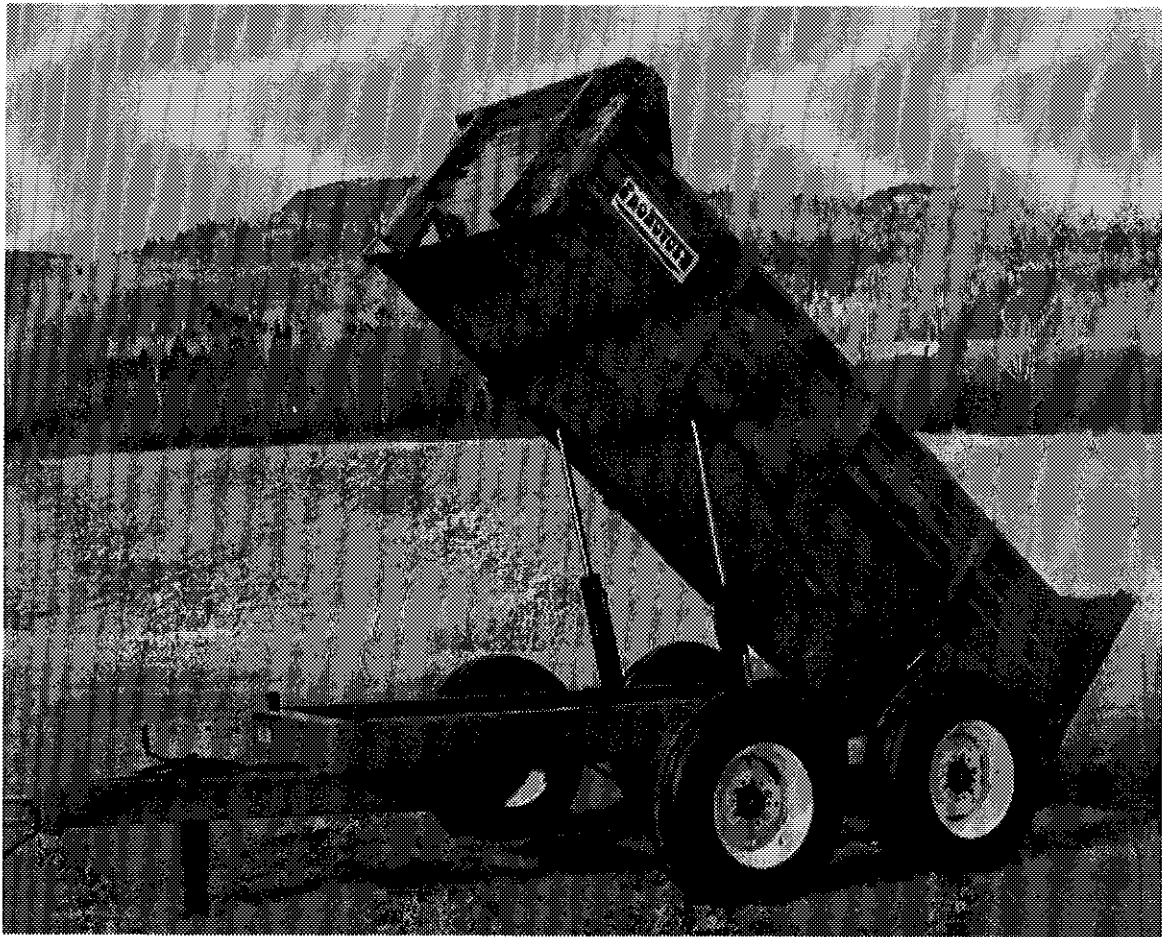


# PRONOVOST

## OWNER'S MANUAL



### *Dump Trailers* Models

**P-516**

**P-516G**

**P-516G36**

Copyright © Les Machineries Pronovost Inc., 1994

All rights reserved.

Printed in Canada.

---

---

# TABLE OF CONTENTS

---

---

| Section | Item  | Page |
|---------|---|------|
| 1       | <b>Introduction</b> .....                   | 5    |
| 2       | <b>Safety</b> .....                         | 6    |
|         | General Safety .....                        | 6    |
|         | Safety in Operation .....                   | 6    |
|         | Safety with Maintenance .....               | 7    |
|         | Safety in Transport .....                   | 7    |
|         | Safety in Storage .....                     | 7    |
| 3       | <b>Decals</b> .....                         | 8    |
|         | Safety Decals .....                         | 8    |
|         | Maintenance Decals .....                    | 8    |
| 4       | <b>Start-up</b> .....                       | 9    |
|         | Basic Start-up Procedures .....             | 9    |
| 5       | <b>Maintenance</b> .....                    | 10   |
| 6       | <b>Storage</b> .....                        | 11   |
| 7       | <b>Specifications</b> .....                 | 12   |
| 8       | <b>Parts List</b> .....                     | 13   |
|         | Dump Trailers P-516, P-516G, P-516G36 ..... | 13   |
|         | Hub H5000 .....                             | 15   |
|         | Cylinder 30B24 .....                        | 16   |
|         | Jack #51459 .....                           | 17   |
| 9       | <b>Torque Chart</b> .....                   | 18   |
| 10      | <b>Warranty</b> .....                       | 19   |



---

---

# 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 Dump Trailer. It contains important information which will help you achieve excellent returns with your PRONOVOST Dump Trailer for years to come.

Please read this manual before operating your Trailer and keep it for future reference.

Before using this equipment, you or any other person who will be using it must familiarize yourself with the safety recommendations, the operating and safety instructions. Please read carefully and be sure to understand and follow all recommendations and procedures.

In this manual, the right and left sides are identified while standing at the rear end of the equipment and facing it.

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

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

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 name plate shown on Fig. 1.

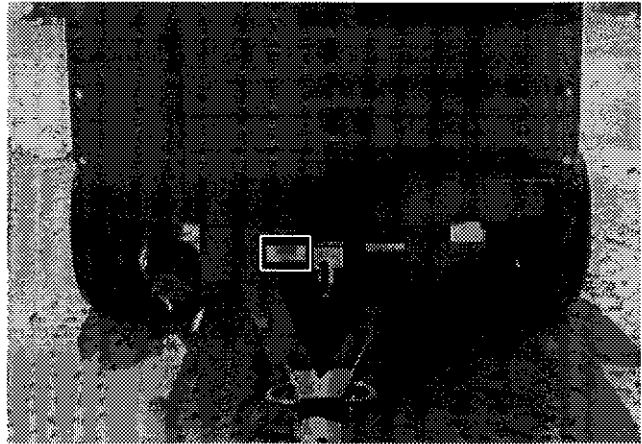


Figure 1

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

- 1) Careful operation is the best assurance against accidents. Carefully read this manual and follow all recommendations before operating this equipment. It is the owner's responsibility to make sure that anyone who will operate the Trailer will read this manual before operating the equipment.
- 2) Do not modify the equipment. Any non authorized modification may affect the efficiency and/or safety of the equipment.
- 3) Never operate the equipment with defective parts or if damaged in any way. Have it repaired before using it.
- 4) Make sure all fasteners are in place and properly secured or tightened. Refer to torque chart on page 18.

- 5) Hydraulic fluids under pressure can damage your skin. Do not use your hands to locate a leak.

## ***SAFETY IN OPERATION***

- 1) **WARNING!** Do not overload your trailer, do not exceed the load capacity indicated in the specifications on page 12.
- 2) Be sure there are no obstructions around the equipment and that no one stands near the equipment when in use.
- 3) Do not operate an engine in a confined or non ventilated area.
- 4) Do not perform any adjustments, cleaning, maintenance or repairs with the engine running on the towing vehicle. Preferably remove the key from the ignition.
- 5) Be careful when backing-up, make sure you have good visibility.
- 6) Do not forget to unlock the proper panel before dumping.
- 7) Always travel at a safe operating speed following regulations and common sense. In the case of agricultural service tires, follow the manufacturer's specified safe speed. The road speed should be such as to maintain full control over steering and braking.

---

---

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

---

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

- 1) Perform maintenance according to recommendations contained in this manual.
- 2) **Before performing any work under the raised platform, always install the safety support provided.**
- 3) If the trailer is hooked up to the tractor while performing maintenance work, make sure the engine is not running and preferably remove the ignition key.

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

- 1) On public roads, use proper safety lights and check local regulations.

- 2) Be alert while driving on the road. Never carry passengers.

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

- 1) If the trailer is to be stored for a certain period of time, install wooden blocks under the axles. **THIS WILL AVOID ANY ACCIDENTAL CRUSHING OF ANIMALS OR ANYONE WHO COULD CRAWL UNDER THE EQUIPMENT.**

**2**

# DECALS

## SAFETY DECALS

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

3

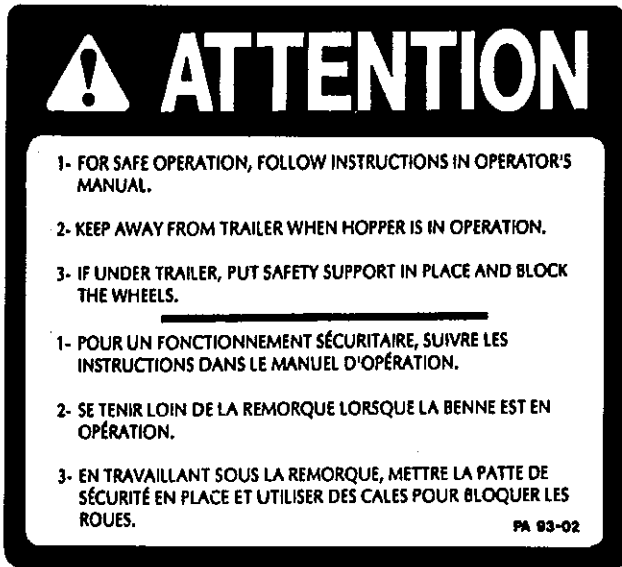


Figure 2  
Decal A

Part no.: A110



Figure 3



Figure 4  
Decal B

Part no.: A103

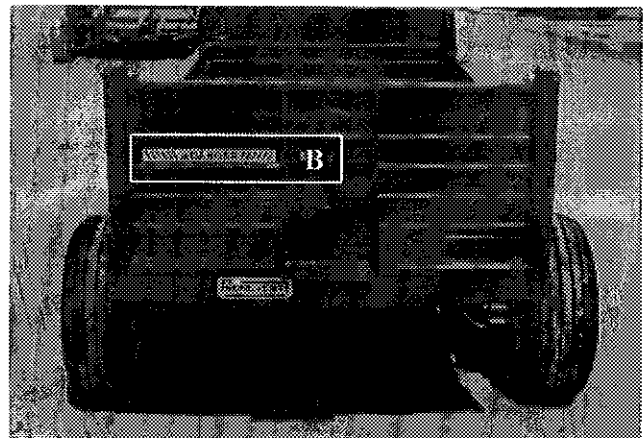


Figure 5

## MAINTENANCE DECALS

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

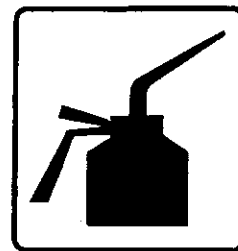


Figure 6

Part no.: A 105



Figure 7

Part no.: A 106



---

---

# ***START-UP***

---

## ***BASIC START-UP PROCEDURES***

- 1) Lubricate all grease fittings with a good quality multiuse grease.
- 2) Lubricate panel release mechanism, front and rear with good quality oil.
- 3) Adjust tire pressure to manufacturer's specifications.
- 4) Install wheels on hubs.
- 5) Install panels.
- 6) Install all hydraulic hoses and fittings compatible with your equipment.
- 7) Verify for adequate tightness of all fastening devices. Refer to torque chart on page 18.
- 8) Operate the hydraulic system a few times, raising and lowering the platform in order to remove any trapped air in the system. Then check the oil level in the tractor's hydraulic oil reservoir.
- 9) Do not forget to unlock the proper panel before dumping.

**4**

---

---

# ***MAINTENANCE***

---

**Before performing any work under the raised platform, always install the safety support provided.**

- 1) Wipe off all grease fittings with a clean cloth before adding grease in order to avoid injecting dirt or sand.
- 2) Repair or replace damaged grease fittings.
- 3) Lubricate all grease fittings every 20 hours of operation.
- 4) Check all bolts on wheels after first 5 hours of operation and then every 50 hours of operation.
- 5) Lubricate panel release mechanism, front and rear, every 20 hours of operation.
- 6) Check tire pressure every 50 hours of operation, adjust according to manufacturer's recommendation indicated on the tires.
- 7) Open, clean and lubricate wheel bearings once a year.
- 8) Check all nuts and bolts once a year. If necessary use torque chart on page 18.

**5**

---

---

## ***STORAGE***

---

- 1) Store in a cool, dry place.
- 2) Install wooden blocks under the axles to keep the tires off the ground and cover them if left exposed to the sun.
- 3) Keep all piston rods in the retracted position. This will assure better protection against the elements.
- 4) Clean your trailer.
- 5) Thoroughly inspect all parts of the trailer. Replace or repair worn or defective parts.
- 6) Touch-up or repaint if necessary.
- 7) Lubricate all points before storage.

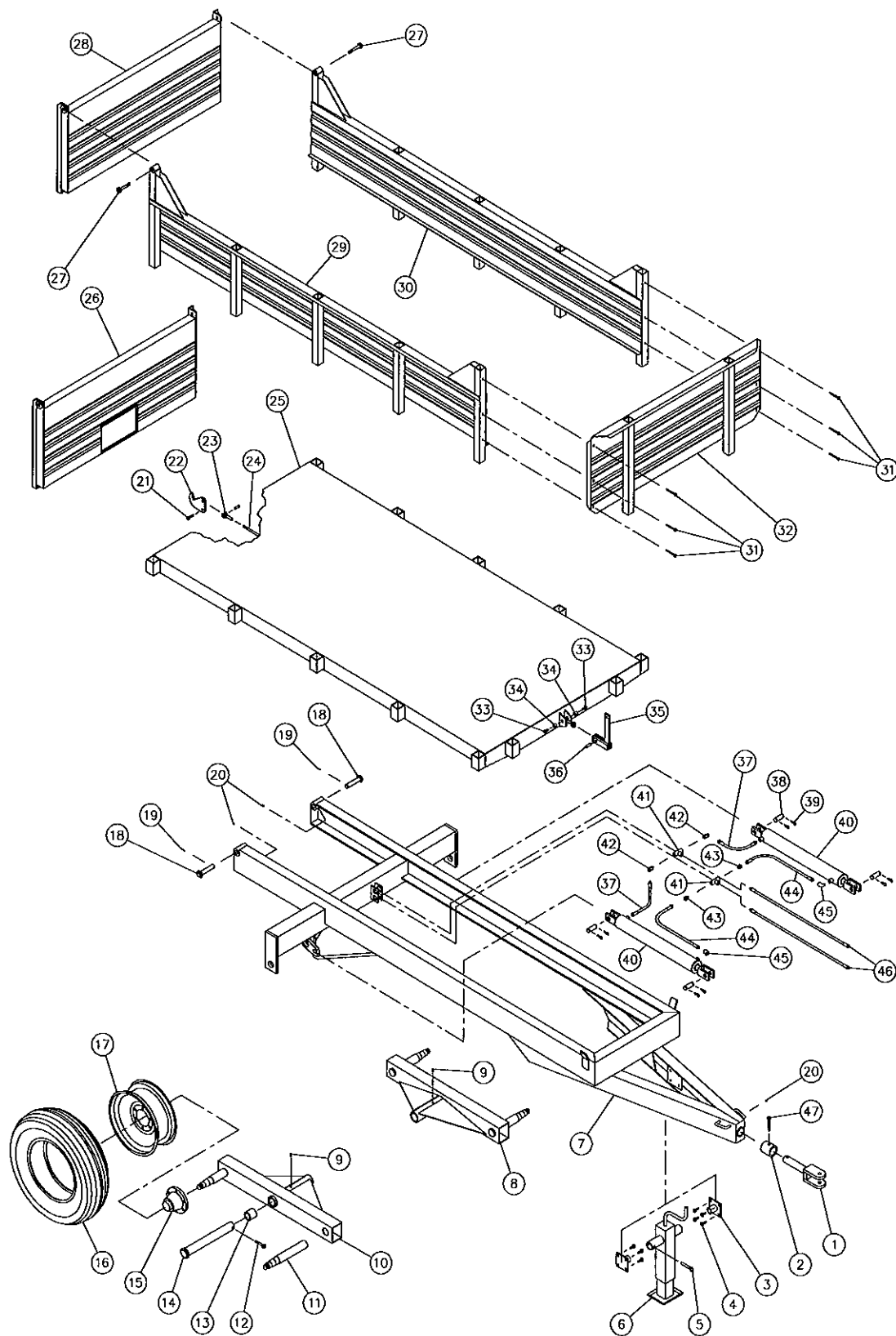
# ***SPECIFICATIONS***

| <b>SERVICE</b>               | <b>AGRICULTURAL</b> | <b>AGRICULTURAL</b> | <b>AGRICULTURAL</b> |
|------------------------------|---------------------|---------------------|---------------------|
| <b>MODEL</b>                 | <b>P-516</b>        | <b>P-516G</b>       | <b>P-516G36</b>     |
| Capacity                     | 8 tons              | 8 tons              | 8 tons              |
| Box (dimensions)             | 5' x 10' x 3/16"    | 5' x 10' x 3/16"    | 5' x 10' x 3/16"    |
| Side panel (removable)       | 16" x 12G           | 16" x 12G           | 36" x 12G           |
| Front/back panel (removable) | 24" x 12G           | 24" x 12G           | 44" x 12G           |
| Platform height              | 32"                 | 32"                 | 32"                 |
| Overall length               | 14'6"               | 14'6"               | 14'6"               |
| Overall width                | 7'5"                | 7'5"                | 7'5"                |
| Overall height               | 3'9"                | 3'9"                | 5'5"                |
| Free height / maximum lift   | 15"                 | 15"                 | 15"                 |
| Thread width                 | 74"                 | 74"                 | 74"                 |
| Dumping angle (back)         | 45°                 | 45°                 | 45°                 |
| Dumping angle (2 sides)      | --                  | --                  | --                  |
| Axle                         | Tandem              | Tandem              | Tandem              |
| Suspension                   | --                  | --                  | --                  |
| Grain door                   | --                  | standard            | standard            |
| Hubs                         | 6 bolts             | 6 bolts             | 6 bolts             |
| Hub capacity                 | 5000 lbs            | 5000 lbs            | 5000 lbs            |
| Spindles                     | 2"                  | 2"                  | 2"                  |
| Wheels                       | 4                   | 4                   | 4                   |
| Wheel dimensions             | 15" x 8"            | 15" x 8"            | 15" x 8"            |
| Tires (standard)             | 11L15 (8 ply)       | 11L15 (8 ply)       | 11L15 (8 ply)       |
| Hitch: clevis/swivel         | standard            | standard            | standard            |
| Hitch: ball coupler          | --                  | --                  | --                  |
| Electric brakes              | --                  | --                  | --                  |
| Hydraulic brakes             | --                  | --                  | --                  |
| Hitch weight (empty)         | 260 lbs             | 260 lbs             | 275 lbs             |
| Total weight                 | 1980 lbs            | 1980 lbs            | 2250 lbs            |
| Light system (12 V)          | --                  | --                  | --                  |
| Oil / volume required        | --                  | --                  | --                  |
| Cylinder                     | 2 double acting     | 2 double acting     | 2 double acting     |

**7**

Design and specifications subject to change without notice.

# DUMP TRAILERS P-516 P-516G P516G36

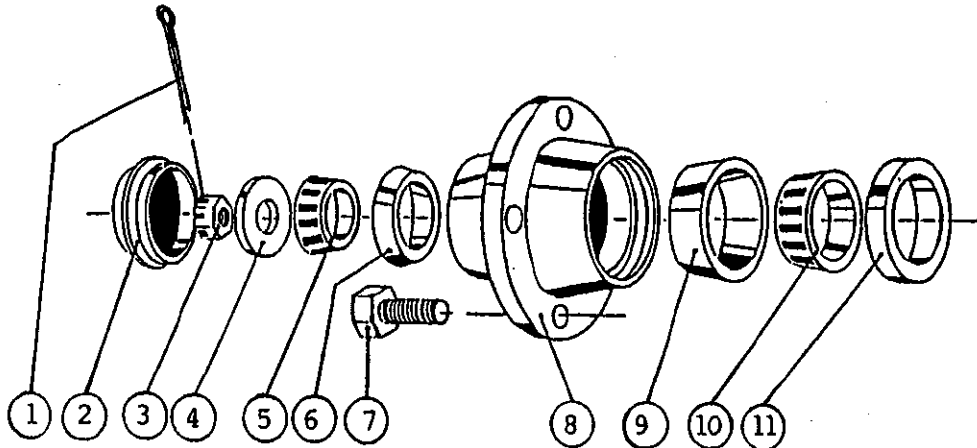


# DUMP TRAILERS P-516 P-516G P-516G36 (cont'd)

| REF. | PART #    | DESCRIPTION  | QTY   |        |          |
|------|-----------|--|-------|--------|----------|
|      |           |  | P-516 | P-516G | P-516G36 |
| 1    | 51409     | Swivel hitch .....   | 1     | 1      | 1        |
| 2    | 51410     | Ring .....   | 1     | 1      | 1        |
| 3    | 51458     | Jack fixation plate .....  | 2     | 2      | 2        |
| 4    | Std.      | Bolt 7/16" NC x 1 1/4" lg + nut & lock washer .....  | 8     | 8      | 8        |
| 5    | 51466     | Pin for jack .....   | 1     | 1      | 1        |
| 6    | 51459     | Jack (see details page 17) .....   | 1     | 1      | 1        |
| 7    | 51446     | Frame .....  | 1     | 1      | 1        |
| 8    | 51403     | Left tandem assembly .....   | 1     | 1      | 1        |
| 9    | Std.      | Grease fitting 1/4"-28 90° .....   | 2     | 2      | 2        |
| 10   | 51438     | Left tandem frame .....  | 1     | 1      | 1        |
| 11   | 51406     | Spindle 2" ø (welded) .....  | 4     | 4      | 4        |
| 12   | Std.      | Bolt 1/2" NC x 3" lg + nut & lock washer .....   | 2     | 2      | 2        |
| 13   | 51405     | Brass bushing 1 3/4" i.d. x 2" o.d. x 2 1/2" lg .....  | 4     | 4      | 4        |
| 14   | 51419     | Tandem clevis pin .....  | 2     | 2      | 2        |
| 15   | 51441     | Hub # H-5000 complete (see details page 15) .....  | 4     | 4      | 4        |
| 16   | PN-11L15  | Tire 11L15 - 8 py with tube .....  | 4     | 4      | 4        |
| 17   | R-1586    | Rim 15" x 8" - 6 holes .....   | 4     | 4      | 4        |
| 18   | 51420     | Clevis pin 1" ø .....  | 2     | 2      | 2        |
| 19   | Std.      | Cotter pin 5/32" x 1 1/2" lg .....   | 2     | 2      | 2        |
| 20   | Std.      | Grease fitting 1/4" NF straight .....  | 2     | 2      | 2        |
| 21   | Std.      | Bolt 1/2" NC x 2" lg + nylon locknut .....   | 1     | 1      | 1        |
| 22   | 51437     | Rear panel lock .....  | 1     | 1      | 1        |
| 23   | 51435     | Clevis yoke 1/2" NF + nut 1/2" NF<br>+ clevis pin 1/2" ø x 1 3/4" lg & cotter pin 1/8" x 3/4" lg ..... | 1     | 1      | 1        |
| 24   | 51433     | Rod 1/2" for rear panel lock .....   | 1     | 1      | 1        |
| 25   | 51467     | Platform .....   | 1     | 1      | 1        |
| 26   | 51471     | Rear panel with grain door (24" height) .....  | -     | 1      | -        |
| 26   | 51457     | Rear panel with grain door (44" height) .....  | -     | -      | 1        |
| 27   | Std.      | Bolt 3/4" NC x 4" lg + nylon locknut .....   | 2     | 2      | 2        |
| 28   | 51470     | Standard rear panel .....  | 1     | -      | -        |
| 29   | 51468     | Right panel (16" height) .....   | 1     | 1      | -        |
| 29   | 51455     | Right panel (36" height) .....   | -     | -      | 1        |
| 30   | 51469     | Left panel (16" height) .....  | 1     | 1      | -        |
| 30   | 51456     | Left panel (36" height) .....  | -     | -      | 1        |
| 31   | Std.      | Bolt 3/8" NC x 3" lg + nut, lock washer & flat washer .....  | 6     | 6      | 1        |
| 32   | 110-12221 | Front panel .....  | 1     | 1      | -        |
| 32   | 51454     | Front panel .....  | -     | -      | 1        |
| 33   | Std.      | Bolt 1/2" NC x 1" lg + lock washer .....   | 2     | 2      | 2        |
| 34   | 51428     | Spacer .....   | 2     | 2      | 2        |
| 35   | 51432     | Lever for rear panel locking mechanism .....   | 1     | 1      | 1        |
| 36   | 51434     | Pin 1/2" x 1 1/4" lg .....   | 1     | 1      | 1        |
| 37   | 51429     | Hose 3/8" x 16 3/4" lg + 2 fittings 6U-108 .....   | 2     | 2      | 2        |
| 38   | 51421     | Clevis pin 1" ø .....  | 4     | 4      | 4        |
| 39   | 51472     | Hitch pin clip (CP132H) .....  | 8     | 8      | 8        |
| 40   | 30B24     | Cylinder 3" ø x 24" run (see details page 16) .....  | 2     | 2      | 2        |
| 41   | 51453     | "T" 1/2" .....   | 2     | 2      | 2        |
| 42   | Std.      | Fitting 9355 8x8 45° .....   | 2     | 2      | 2        |
| 43   | Std.      | Fitting (swivel) 9205 8x8 straight .....   | 2     | 2      | 2        |
| 44   | 51430     | Hose 3/8" x 40" lg + 2 fittings 6U-108 .....   | 2     | 2      | 2        |
| 45   | Std.      | Street elbow 3/8" .....  | 2     | 2      | 2        |
| 46   | 51431     | Hose 3/8" x 165" lg + 2 fittings 6U-108 .....  | 2     | 2      | 2        |
| 47   | Std.      | Bolt 5/8" NC x 3 1/2" lg + nut & lock washer .....   | 1     | 1      | 1        |

8

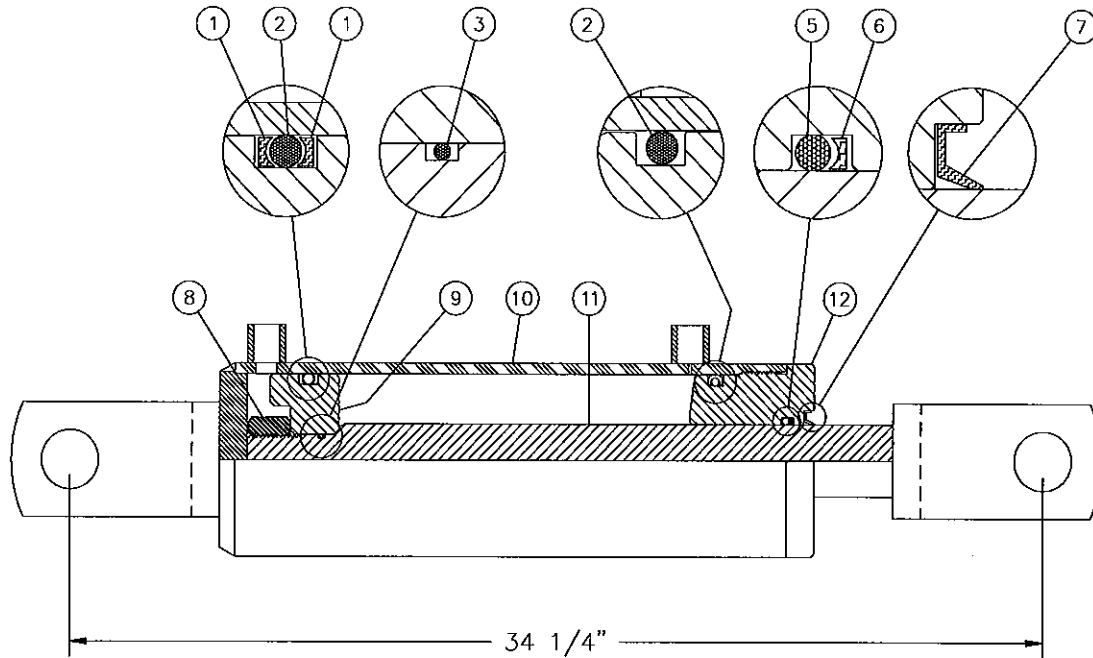
# HUB H5000



| REF. | PART # | DESCRIPTION                                       | QTY |
|------|--------|---|-----|
| 1    | Std.   | Cotter pin 5/32" x 1 1/2" .....                   | 1   |
| 2    | 51417  | Dust cap 2.570" ø .....                           | 1   |
| 3    | 51442  | Castle nut 7/8" NF .....                          | 1   |
| 4    | Std.   | Flat washer 7/8" .....                            | 1   |
| 5    | 51416  | Roller bearing Timken: cone no. 4T-LM48548 .....  | 1   |
| 6    | 51415  | Roller bearing Timken: cup no. 4T-LM48510 .....   | 1   |
| 7    | 51418  | Rim screw 9/16" .....                             | 5   |
| 8    | 51414  | Hub only H5000 .....                              | 1   |
| 9    | 51413  | Roller bearing Timken: cup no. 4T-LM603011 .....  | 1   |
| 10   | 51412  | Roller bearing Timken: cone no. 4T-LM603049 ..... | 1   |
| 11   | 51443  | Oil seal no. CR20044 .....                        | 1   |

**8**

# CYLINDER 30B24

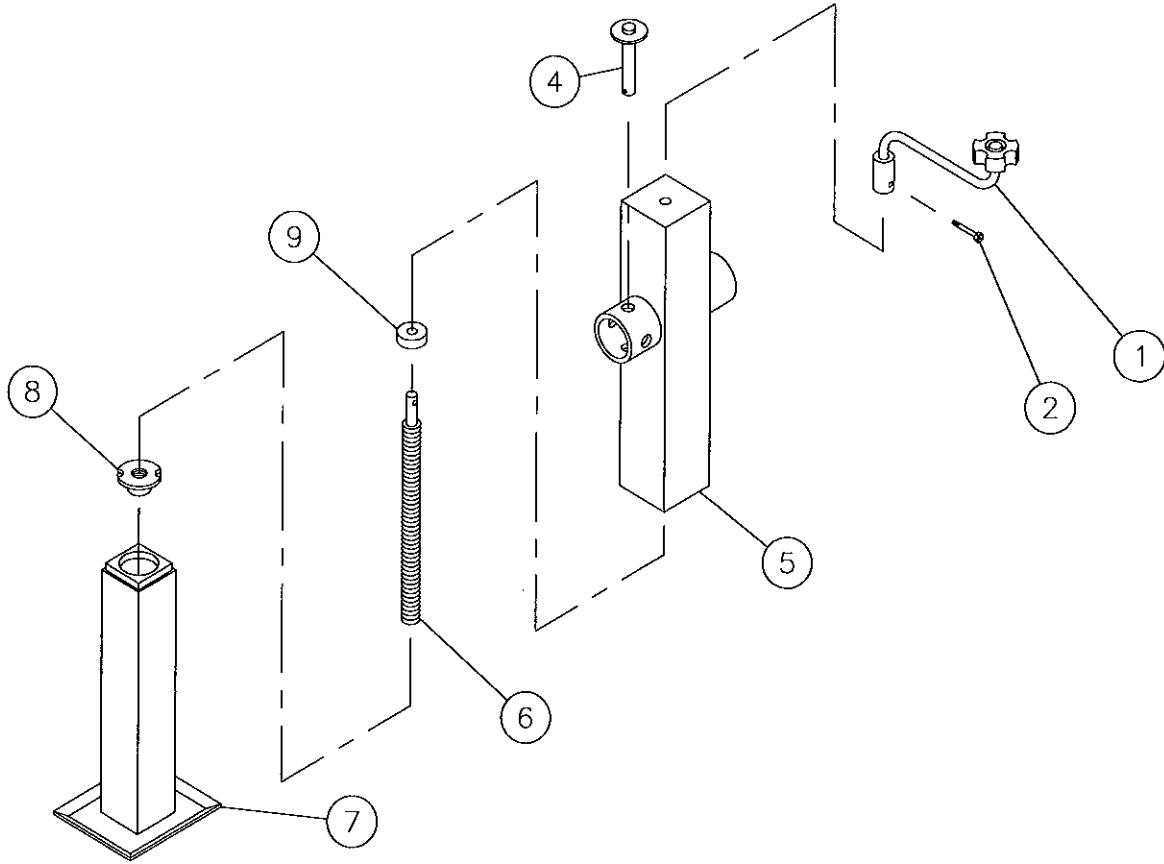


| REF. | PART #  | DESCRIPTION                          | QTY |
|------|---------|--------------------------------------|-----|
| 1    | BU-334  | Back-up 3/16" x 2 5/8" x 3" .....    | 2   |
| 2    | OR-334  | O-ring 3/16" x 2 5/8" x 3" .....     | 2   |
| 3    | OR-018  | O-ring 1/8" x 1 1/4" x 1 1/2" .....  | 1   |
| 5    | OR-218  | O-ring 1/8" x 1 1/4" x 1 1/2" .....  | 1   |
| 6    | BU-218  | Back-up 1/8" x 1 1/4" x 1 1/2" ..... | 1   |
| 7    | CR12330 | Wiper 1/8" x 1 1/4" x 1 1/2" .....   | 1   |
| 8    | Std.    | Nut 7/8" NF .....                    | 1   |
| 9    | D-6000  | Piston 3" dia. ....                  | 1   |
| 10   | D-6156  | Cylinder body 3" for 30B24 .....     | 1   |
| 11   | D-6155  | Piston rod 1 1/4" for 30B24 .....    | 1   |
| 12   | D-6002  | Head 3" dia. ....                    | 1   |

8



# JACK PC-3012 # 51459










| REF. | PART # | DESCRIPTION                                    | QTY |
|------|--------|--|-----|
| 1    | 51462  | Hand crank .....                               | 1   |
| 2    | Std.   | Bolt 1/4" NC x 1 1/4" lg + nylon locknut ..... | 1   |
| 4    | 51466  | Pin 5/8" x 3 1/2" with chain .....             | 1   |
| 5    | 51460  | Jack external part .....                       | 1   |
| 6    | 51465  | Acme screw 7/8"-8 x 13" lg .....               | 1   |
| 7    | 51461  | Jack support .....                             | 1   |
| 8    | 51464  | Acme nut 7/8"-8 (brass) .....                  | 1   |
| 9    | 51463  | Ball bearing .....                             | 1   |






**8**

# TORQUE CHART

## TORQUE SPECIFICATION TABLE

| Thread UNC and UNF |       | Grade 2  |                    |                       |                       | Grade 5    |                    |                       |                       | Grade 8*    |                    |                       |                       |
|--------------------|-------|---|--------------------|-----------------------|-----------------------|--|--------------------|-----------------------|-----------------------|--|--------------------|-----------------------|-----------------------|
| Bolt size          |       | Torque  |                    |                       |                       | Torque   |                    |                       |                       | Torque   |                    |                       |                       |
| Inches             | mm    | Pound feet<br>min.  | Pound feet<br>max. | Newton meters<br>min. | Newton meters<br>max. | Pound feet<br>min.   | Pound feet<br>max. | Newton meters<br>min. | Newton meters<br>max. | Pound feet<br>min.   | Pound feet<br>max. | Newton meters<br>min. | Newton meters<br>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<br>min.   | Pound feet<br>max. | Newton meters<br>min. | Newton meters<br>max. | Pound feet<br>min.   | Pound feet<br>max. | Newton meters<br>min. | Newton meters<br>max. | Pound feet<br>min.   | Pound feet<br>max. | Newton meters<br>min. | Newton meters<br>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.

---

---

## **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.

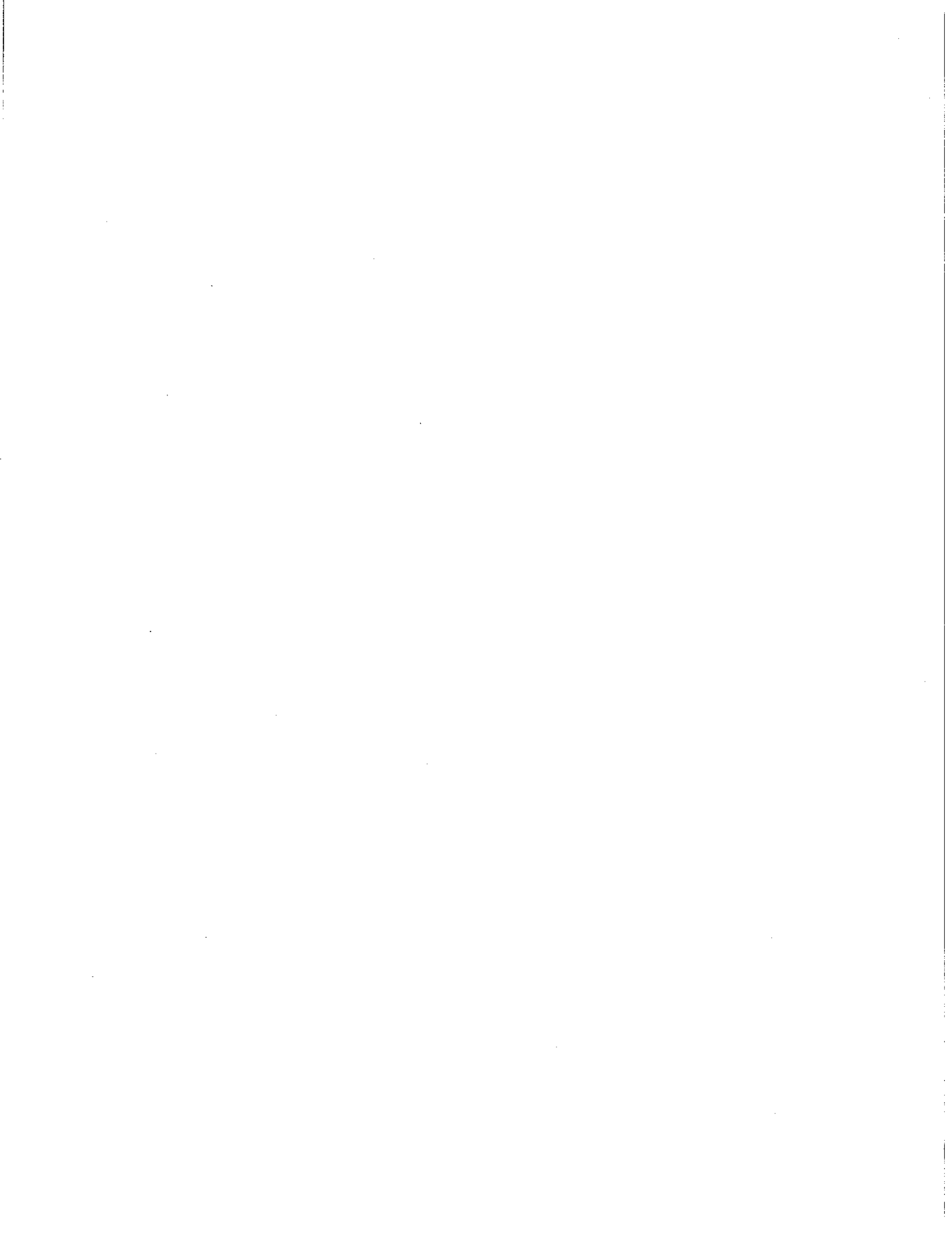
Transportation charges are the responsibility of the customer. This warranty is not transferable.

Hydraulic cylinders are covered by the manufacturer of these items.

All PRONOVOST spare parts purchased are covered by a three (3) month warranty.

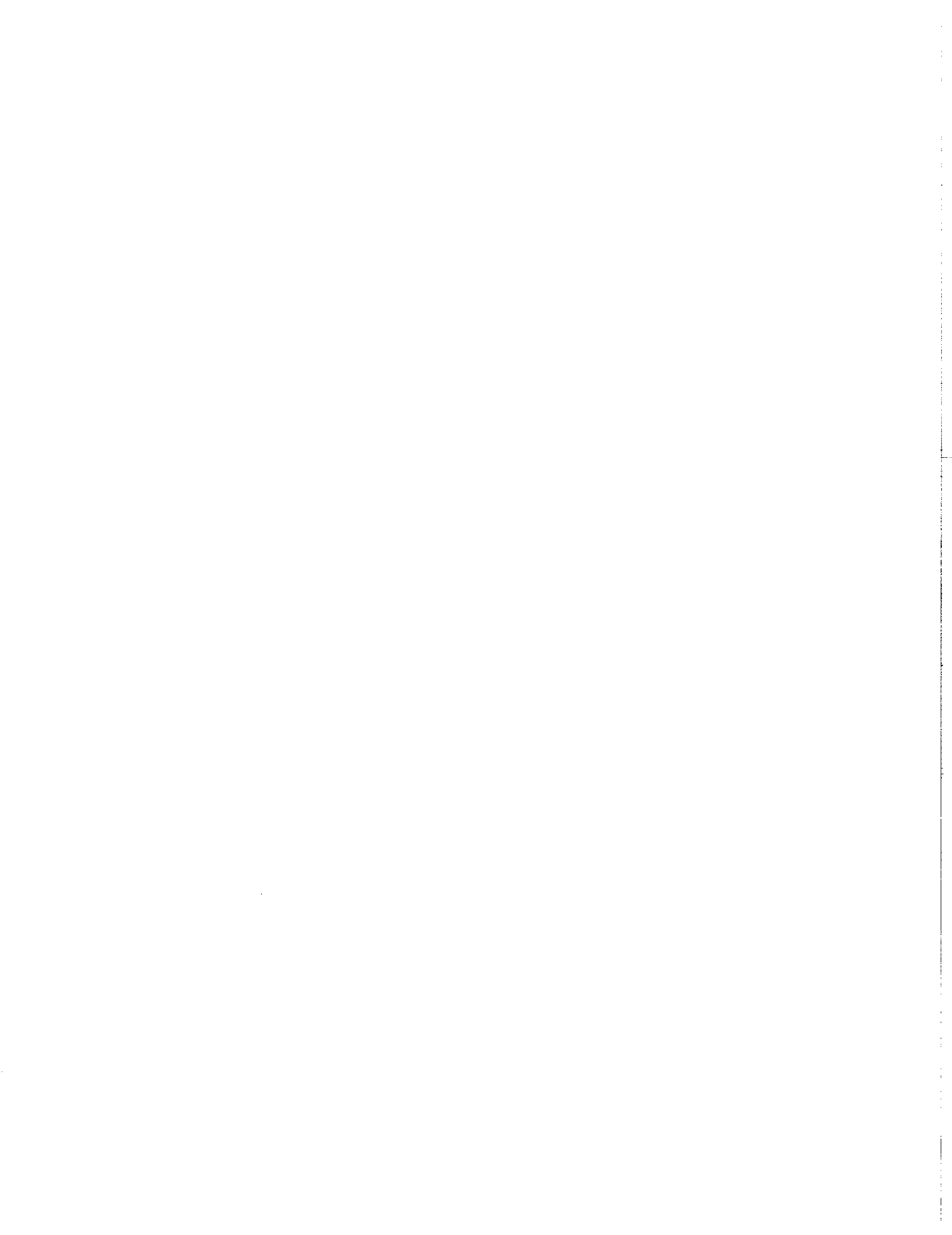
This warranty becomes void and nul if the equipment is modified, breaks down as the result of an accident, is not operated according to manufacturer's recommendations, damaged by negligence or if maintenance has not been carried out as specified.

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.









Ce manuel est aussi disponible en français.  
Veuillez téléphoner.



**LES MACHINERIES PRONOVOST INC.**  
260, route 159,  
Saint-Tite, Quebec, Canada, GOX 3H0  
Tel.: (418) 365-7551, Fax: (418) 365-7954