



**OPERATOR'S / PARTS
MANUAL**



Dump Trailers
Models

P-505

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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 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 20.

- 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 13.
- 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.

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

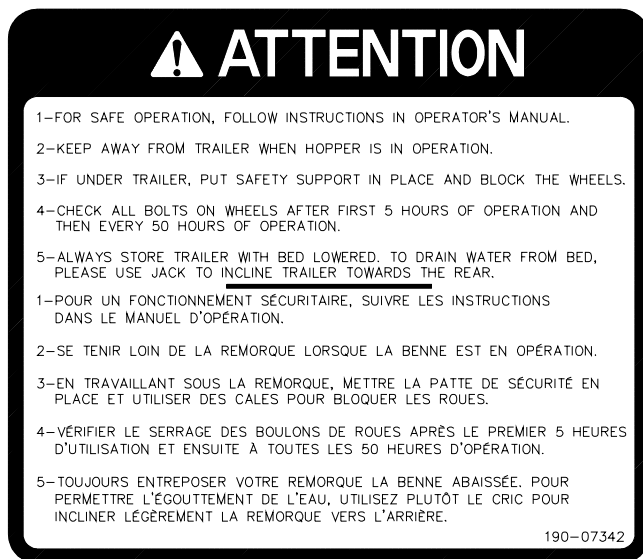


Figure 2
Decal A

Part no.: 190-07342



Figure 3

MAINTENANCE DECALS

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



Figure 4

Part no.: A 105



Figure 5

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.

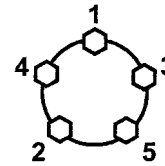
! WARNING: Wheel lug nuts must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible separation of the wheel(s) from your trailer. The lug nuts on the wheels of your trailer must be maintained according to the torque values listed in the chart contained in this section. Over torquing and under torquing wheels are both dangerous.

! WARNING: Towing, especially during the break-in period, can cause wheel lug nuts to loosen. Failure to maintain proper torque of the wheel lug nuts could lead to separation of the tire and wheel while driving, possibly resulting in property damage or personal injury.

Be sure to use only lug nuts matched to the cone angle of your wheel, usually 60° or 90°.

The proper procedure and sequence for attaching the wheels and torquing lug nuts is as follows.

- a-** Start all nuts by hand to avoid cross threading.
- b-** Tighten the nuts slightly.
- c-** Using the proper sequence shown in figure 6, tighten the lug nuts to the 1st stage torque as



5 lug

Figure 6

indicated in the chart. Using the proper sequence for the second time, tighten the lug nuts to the 2nd stage torque as indicated in the chart. Using the proper sequence for the third time, tighten the lug nuts to the 3rd stage torque as indicated in the chart.

4

| Wheel Torque Requirements | | | |
|---------------------------|----------------|-----------------|------------------|
| Nut Ø | 1 st Stage | 2 nd Stage | 3 rd Stage |
| 1/2" | 20 - 25 ft-lbs | 35 - 40 ft-lbs | 50 - 75 ft-lbs |
| 9/16" | 20 - 25 ft-lbs | 50 - 60 ft-lbs | 90 - 120 ft-lbs |
| 5/8" | 20 - 25 ft-lbs | 90 - 100 ft-lbs | 140 - 170 ft-lbs |

d- Torque the wheel lug nuts before the first road use and after each wheel removal. Check and re-torque after the first 16, 40 and 80 kilometers (10, 25 and 50 miles) and adjust if required. Check periodically thereafter without exceeding 50 hours of use between the verifications.

Check the wheel lugs after winter storage, before starting a trip or following extensive braking. Perform maintenance periodically as indicated above.

- 5) Install panels.
- 6) Install all hydraulic hoses and fittings compatible with your equipment.

START-UP

- 7) Verify for adequate tightness of all fastening devices. Refer to torque chart on page 20.
- 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 as indicated in the start-up section.
- 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.

Adjust the bearings as follows:

- a-**Lubricate spindle threads.
- b-**Screw the adjusting nut on the spindle thread.
- c-**Set a bearing preloading by torquing the adjusting nut to 200 ft-lbs to make up for any play between parts. **N.B.: This step must be carried out while rotating the wheel.**
- d-**Loosen the adjusting nut one complete turn.
- e-**Now tighten it again to a 50 ft-lbs torque.
- f-**Loosen the nut 1/4 turn; while doing so, determine the right position for the locking device.
- g-**Install the locking device.

- 8) Check all nuts and bolts once a year. If necessary use torque chart on page 20.

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

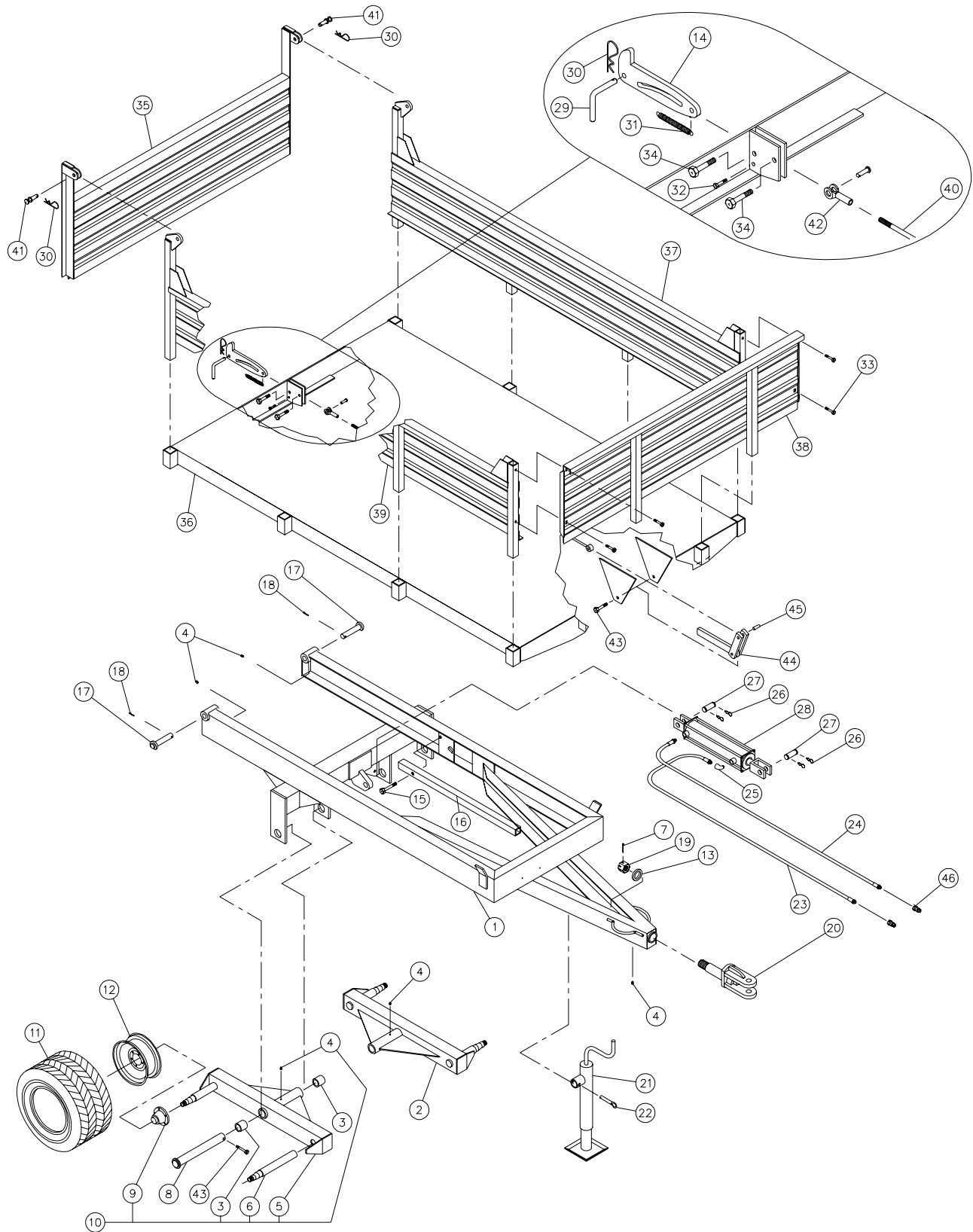
| SERVICE | OFF-ROAD |
|--------------------------------------|--------------------------------------|
| MODEL | P-505 |
| Gross weight | 5000 lbs / 2270 kg |
| Width x length interior of box in/mm | 60 x 94 / 1524 x 2388 |
| Thickness of floor | 3/16" / 4.78 mm |
| Side panel height 12G* | 14" / 356 mm |
| Front/back panel height 12G* | 19" / 483 mm |
| Platform height | 34" / 864 mm |
| Overall length | 144" / 3658 mm |
| Overall width | 64" / 1626 mm |
| Overall height | 55.5" / 1409 mm |
| Free height / maximum lift | 15" / 381 mm |
| Thread width | 44.5" / 1130 mm |
| Dumping angle (back) | 47° |
| Dumping angle (2 sides) | -- |
| Central unloading hatch | -- |
| Axle | tandem |
| Suspension | -- |
| Hubs | 5 bolts |
| Hub capacity | 2500 lbs / 1135 kg |
| Spindles | 1.75" / 44 mm |
| Wheels | 4 |
| Wheels dimensions | 12 x 8.5 x 5 |
| Tires (standards) | 23 x 10,5 x 12 4-plys Turf Saver |
| Hitch: clevis/swivel | standard |
| Hitch: ball coupler 2 5/16" / 59 mm | option |
| Electric brakes | -- |
| Security chain | option |
| Electric power pack | option |
| Battery 12V | option |
| Light system (12 V) | -- |
| Oil / volume required | -- |
| Cylinder | 1 double acting ⇒ 2½" ø x 20" stroke |
| Hitch weight (empty) | 110 lbs / 50 kg |
| Total weight | 1550 lbs / 704 kg |

Design and specifications subject to change without notice.

* Removables.

DUMP TRAILER P-505

170-01525



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DUMP TRAILER P-505 (cont'd)

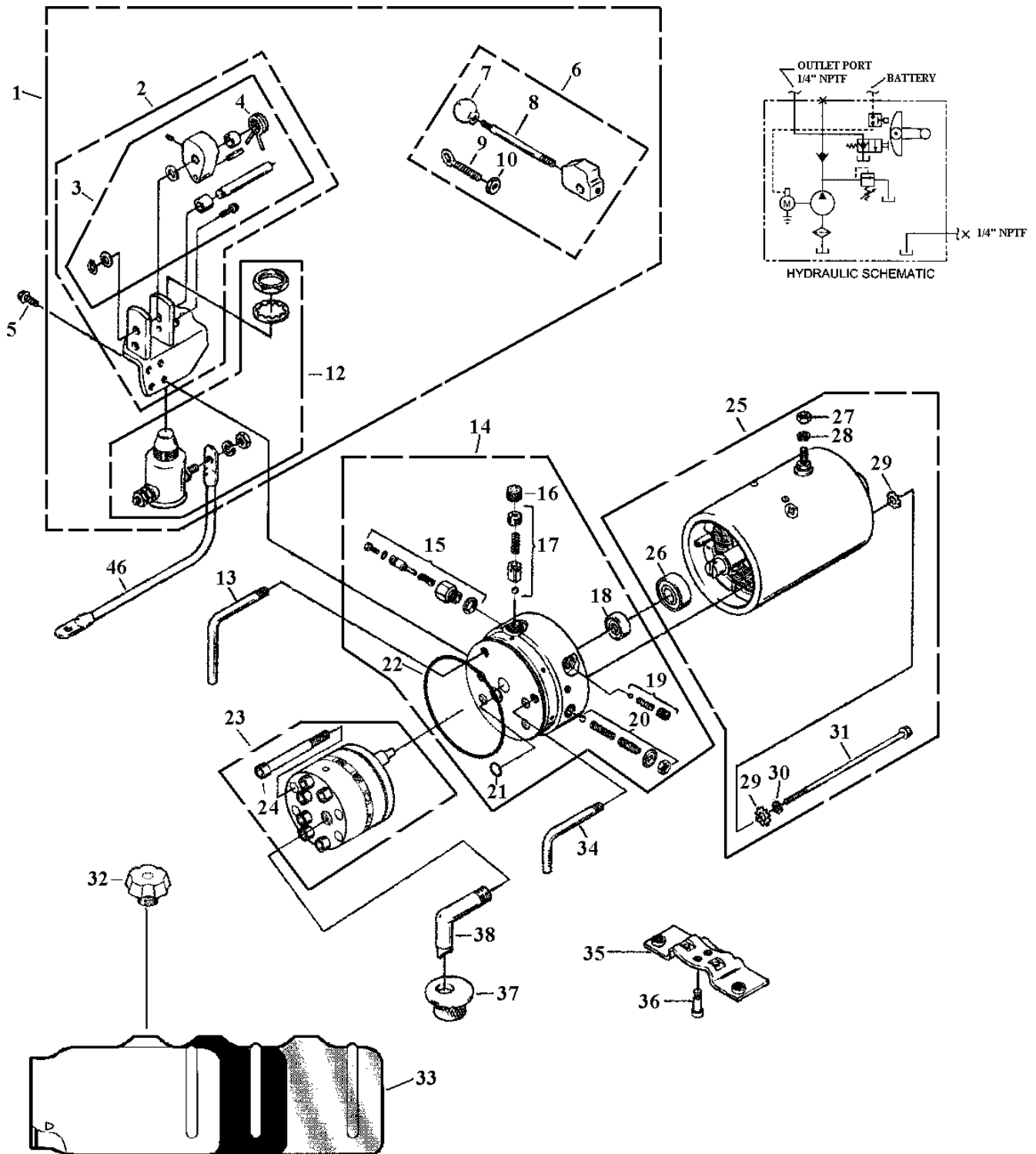
| REF. | PART # | DESCRIPTION | QTY |
|------|-----------|-------------------------------------------------------------------------------------------------|------|
| 1 | 120-02013 | Main frame | 1 |
| 2 | 110-10026 | Left tandem frame | 1 |
| 3 | 160-01091 | Brass bushing 1 3/4" i.d. x 2" o.d. x 2" lg | 4 |
| 4 | Std. | Grease fitting 1/4" - 28 straight | 5 |
| 5 | 110-10025 | Right tandem frame | 1 |
| 6 | 150-01982 | Axle 2" ø x 12 13/16" lg (welded) | 4 |
| 7 | Std. | Cotter pin 1/4" x 3" | 1 |
| 8 | 110-00011 | Pin for tandem 1 3/4" ø x 15 1/4" lg | 2 |
| 9 | 32218 | Complete hub assembly H-2500 | 4 |
| 10 | 110-10027 | Right tandem assembly | 1 |
| N.I. | 110-10028 | Left tandem assembly | 1 |
| 11 | PN2310512 | Turf Saver tire 23" x 10.5" x 12" 4-plys | 4 |
| 12 | R12855HD | Rim 12" x 8.5" - 5 holes | 4 |
| 13 | 130-20331 | Flat washer 1 5/8" i.d. x 2 1/4" o.d. | 1 |
| 14 | 130-16212 | Rear panel lock | 1 |
| 15 | 300-44370 | Bolt 5/8" x 2 1/2" lg + nylon locknut | 1 |
| 16 | 160-04721 | Safety prop | 1 |
| 17 | 110-08971 | Clevis 1" ø x 5 1/4" lg | 2 |
| 18 | Std. | Cotter pin 1/4" x 2" lg | 2 |
| 19 | 357-57000 | Castle nut 1 1/2" NC | 1 |
| 20 | 110-08991 | Swivel hitch | 1 |
| 21 | 51407 | Jack 2000 lbs | 1 |
| 22 | 51408 | Pin for jack | 1 |
| 23 | 190-02561 | Hose 3/8" x 162" lg + 1 fitting 6U-106 & 1 fitting 6U-108 | 1 |
| 24 | 190-02551 | Hose 3/8" x 150" lg + 1 fitting 6U-106 & 1 fitting 6U-108 | 1 |
| 25 | C3409x6 | Elbow 90° x 3/8" NPT - MF | 1 |
| 26 | Std. | Hairpin cotter 7/8" x 2 1/4" lg | 4 |
| 27 | 150-01841 | Clevis pin 1" ø x 3 1/8" lg | 2 |
| 28 | 25TR20 | Cylinder 25TR20 | 1 |
| 29 | 150-02861 | Pin for rear locking mechanism | 1 |
| 30 | Std. | Hitch pin clip 1/8" x 2 9/16" | 3 |
| 31 | 190-08211 | Spring 7/8" o.d. x 6 5/32" lg | 1 |
| 32 | 300-34340 | Bolt 5/16" NC x 2" lg + nylon locknut + flat washer | 1 |
| 33 | 300-36370 | Bolt 3/8" NC x 2 1/2" lg + nylon locknut | 4 |
| 34 | 300-40340 | Bolt 1/2" NC x 2" lg + nylon locknut | 2 |
| 35 | 110-17631 | Standard rear panel | 1 |
| 36 | 120-02022 | Platform | 1 |
| 37 | 110-12344 | Left side panel | 1 |
| 38 | 110-12311 | Front panel | 1 |
| 39 | 110-12343 | Right side panel | 1 |
| 40 | 110-17581 | Rod 1/2" for rear panel lock | 1 |
| 41 | 150-02851 | Hinge pin for rear panel | 2 |
| 42 | 51435 | Yoke 1/2" NF + nut 1/2" NF + clevis pin 1/2" ø x 1 3/4" lg & cotter pin 1/8" x 3/4" lg | 1 |
| 43 | 300-40400 | Bolt 1/2" NC x 3" lg + nylon locknut | 3 |
| 44 | 110-14271 | Lever for automatic locking mechanism | 1 |
| 45 | 150-02761 | Pin 1/2" dia. x 1 1/2" lg | 1 |
| 46 | Std | Quick coupler 1/2" male | 2 |
| *NI | 51625 | Electric hydraulic pump M-301-016-04M* *E | opt. |

NI = Not illustrated



ELECTRIC HYDRAULIC PUMP M301 # 51625

170-04261.TIF



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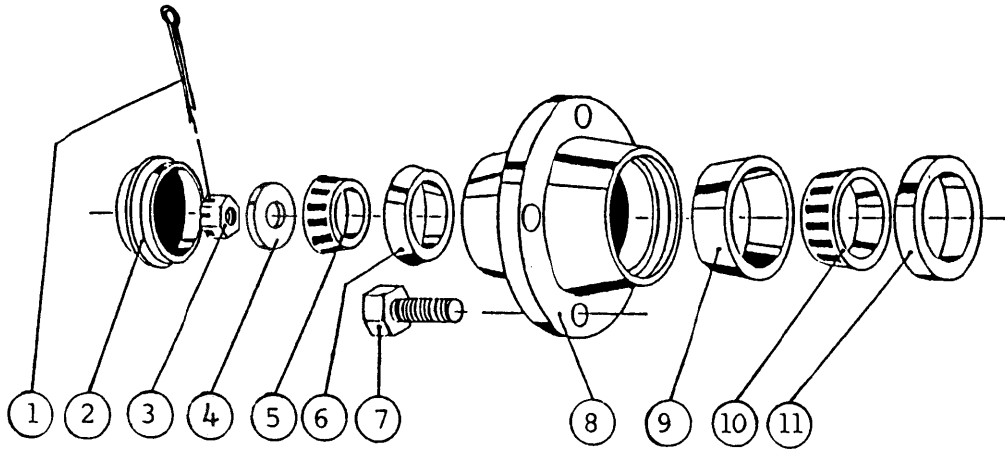
ELECTRIC HYDRAULIC PUMP M301 # 51625 (cont'd)

| REF. | PART # | DESCRIPTION | QTY | | |
|------|------------|-------------------------------------------------------|-------|-------|-------|
| | | | 51624 | 51625 | 51627 |
| 1 | 03412 | Bracket assembly (incdingt #6 & 12) | 1 | 1 | 1 |
| 2 | 03440 | Bracket assembly including #6 | 1 | 1 | 1 |
| 3 | 03660 | Parts Kit, Bracket assembly | 1 | 1 | 1 |
| 4 | 00018 | Spring torsion..... | 1 | 1 | 1 |
| 5 | 07815 | Screw, hex washer head, tap tite 1/4" NC x 5/8" | 4 | 4 | 4 |
| 6 | 00175 | Parts kit, Handle assembly | 1 | 1 | 1 |
| 7 | 01157 | Ball, plastic | 1 | 1 | 1 |
| 8 | 01326 | Rod, Handle 4" | 1 | 1 | 1 |
| 9 | 01327 | Eye bolt 5/16" NC x 1 7/8" | 1 | 1 | 1 |
| 10 | 07790 | Nut 5/16" NC..... | 1 | 1 | 1 |
| 11 | 01373 | Cable, insulated, with lugs 9" 6 GA | 1 | 1 | 1 |
| 12 | 03322 | Switch on/off (canister type) | 1 | 1 | 1 |
| 13 | 13058 | Tube return 1/8" NPT | 1 | 1 | 1 |
| 14 | 12421 | Base assembly | 1 | 1 | 1 |
| 15 | 00235 | Parts kit, Plunger | 1 | 1 | 1 |
| 16 | 02349 | Plug 3/8" NPT | 1 | 1 | 1 |
| 17 | 07526 | Parts kit, Check valve..... | 1 | 1 | 1 |
| 18 | 02159 | Seal | 1 | 1 | 1 |
| 19 | 00078 | Parts kit, Check valve..... | 1 | 1 | 1 |
| 20 | 03766 | Parts kit, Relief valve..... | 1 | 1 | 1 |
| 21 | 00120 | O-ring 1/2" i.d. x 5/8" o.d. x 1/16" | 1 | 1 | 1 |
| 22 | 02352 | O-ring 3 5/8" i.d. x 3 7/8" o.d. x 1/8" | 1 | 1 | 1 |
| 23 | K12171-250 | Pump assembly | 1 | 1 | 1 |
| 24 | 07818 | Socket head cap screw 1/4"NC x 3" | 4 | 4 | 4 |
| 25 | 08111 | Electric motor 12V DC | 1 | 1 | 1 |
| 26 | 02318 | Bearing base motor | 1 | 1 | 1 |
| 27 | 07625 | Nut 5/16" NF | 1 | 1 | 1 |
| 28 | 07781 | Lock washer 5/16" | 1 | 1 | 1 |
| 29 | 07737 | Star washer 1/4" | 4 | 4 | 4 |
| 30 | 07795 | Lock washer 1/4" | 2 | 2 | 2 |
| 31 | 07738 | Socket head cap screw 1/4"NC x 6 1/2" | 2 | 2 | 2 |
| 32 | 01143 | Plug | 1 | 1 | 1 |
| 33 | 14157 | Reservoir 6" x 6 1/2" x 10" (199 po3) | - | 1 | - |
| 33 | 14159 | Reservoir 6" x 6 1/2" x 19" (432 po3) | 1 | - | - |
| 33 | 14170 | Reservoir 6 1/2" x 7 1/4" x 26" (715 po3) | - | - | 1 |
| 34 | 13059 | Tube return 1/8" NPT..... | 1 | 1 | 1 |
| 35 | 04560 | Bracket, Plate mount 3 1/4" c/c | 1 | 1 | 1 |
| 36 | 07592 | Socket head cap screw 3/8"NC x 1" | 2 | 2 | 2 |
| 37 | 01134 | Screen filter | 1 | 1 | 1 |
| 38 | 01209 | Tube, Filter suction 3/8" NPT 90 deg | 1 | 1 | 1 |

* Some parts might not be available apart.



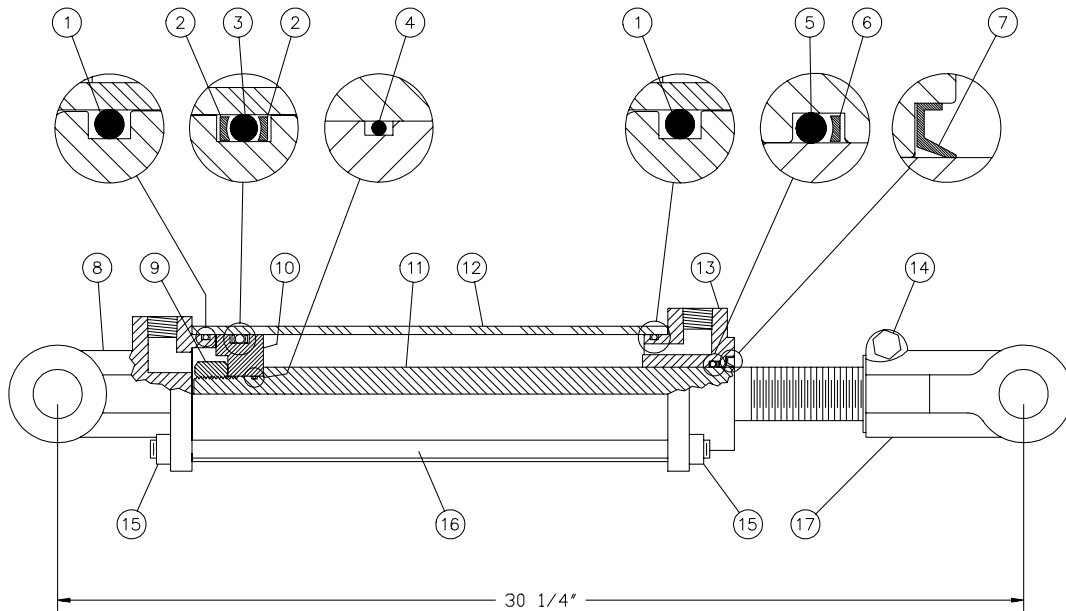
HUB H2500 #32218



| REF. | PART # | DESCRIPTION | QTY |
|------|-----------|-----------------------------------------------|-----|
| 1 | Std. | Cotter pin 5/32" x 1 3/4" | 1 |
| 2 | 53019 | Dust cap D-1000 1.980" ø | 1 |
| 3 | 51529 | Castle nut 1" NF x 9/16" thick | 1 |
| 4 | 378-50000 | Flat washer 1" | 1 |
| 5 | 53058 | Roller bearing Timken: cone no. L44649 | 1 |
| 6 | 53023 | Roller bearing Timken: cup no. L44610 | 1 |
| 7 | 53024 | Rim screw 1/2" | 5 |
| 8 | 53059 | Hub only H2500 | 1 |
| 9 | 51415 | Roller bearing Timken: cup no. LM48510 | 1 |
| 10 | 51416 | Roller bearing Timken: cone no. LM48548 | 1 |
| 11 | 51535 | Oil seal no. CR17415 | 1 |

8

CYLINDER 25TR20










| REF. | PART # | DESCRIPTION | QTY |
|------|-------------|-------------------------------------------------------------------------|-----|
| 1 | See #RK25TR | O-ring 1/8" x 2 1/4" x 2 1/2" | 2 |
| 2 | See #RK25TR | Back-up 2 1/2" o.d. x 3/16 ø | 2 |
| 3 | See #RK25TR | O-ring 3/16" x 2 1/8" x 2 1/2" | 1 |
| 4 | See #RK25TR | O-ring 1/16" x 5/8" x 3/4" | 1 |
| 5 | See #RK25TR | O-ring 1/8" x 1 1/8" x 1 3/8" | 1 |
| 6 | See #RK25TR | Back-up 1 3/8" o.d. x 1/8" ø | 1 |
| 7 | See #RK25TR | Wiper 1 1/8" i.d. x 1 5/8" o.d. | 1 |
| 8 | 492401 | Yoke (for 2 1/2" tube) | 1 |
| 9 | Std. | Nut 3/4" NF | 1 |
| 10 | 492431 | Piston 2 1/2" ø | 1 |
| 11 | 492643-L | Piston rod 1 1/8" | 1 |
| 12 | 491680-L | Cylinder body 2 1/2" ø | 1 |
| 13 | 492421 | Head (for 2 1/2" tube) | 1 |
| 14 | Std. | Bolt 3/8" NC x 2 1/4" lg + nut | 1 |
| 15 | Std. | Nut 3/8" NC | 8 |
| 16 | Std. | Threaded rod 3/8" NC x 12" lg | 4 |
| 17 | 458599 | Yoke (for 1 1/8" rod) | 1 |
| NI* | 8183 | Pin 1" ø + cotter pin | 2 |
| NI* | RK25TR | Repair kit for cylinder 2 1/2" (includes # 1, 2, 3, 4, 5, 6, & 7) | 1 |






*NI = NOT ILLUSTRATED

TORQUE CHART

TORQUE SPECIFICATION TABLE

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

* Thick nuts must be used with grade 8 bolts.

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

Use the above torques when special torque is not given.

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

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.



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