



OPERATOR'S / PARTS MANUAL



**Snowblowers
Model**

PGS-740

&

PGS-800



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INTRODUCTION

CONGRATULATIONS!

1

Thank you for choosing PRONOVEST. 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 Snowblower. It contains important information which will help you achieve excellent returns with your Snowblower for years to come.

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

Before starting the machine, you or any other person who will be operating the Snowblower 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 are identified as shown on Figure 1.

If you require additional information on your Snowblower, please contact your PRONOVEST Dealer.

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

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

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

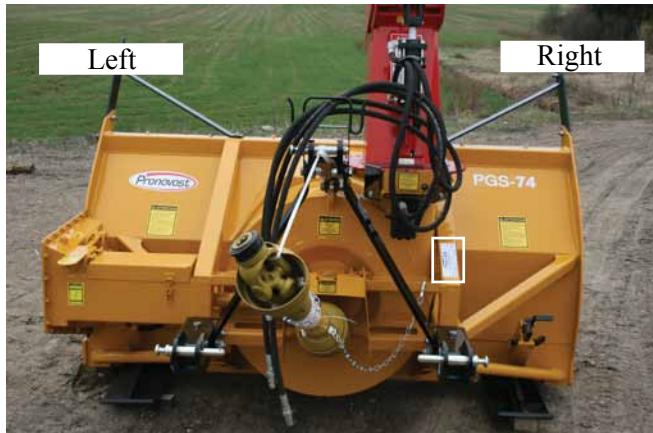


Figure 1

MODEL: _____

SERIAL NO: _____

DATE OF PURCHASE: _____

SAFETY

GENERAL SAFETY

WHEN YOU SEE THIS SYMBOL

2



ATTENTION!

**BE ALERT
YOUR SAFETY IS INVOLVED**

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

- 1) Careful operation is the best assurance against accidents. Carefully read this manual and follow all recommendations before operating your Snowblower. It is the owner's responsibility to make sure that anyone who will operate the Snowblower will read this manual before operating the equipment.
- 2) Familiarize yourself with all controls and always be ready to stop the Snowblower quickly in case of emergency.
- 3) Never let a child operate the Snowblower.
- 4) Do not modify the Snowblower. Any non authorized modification may affect the efficiency and/or safety of the equipment and will automatically void the warranty.
- 5) Never operate the Snowblower with defective parts or if damaged in any way. Have it repaired before operating.
- 6) Make sure all fasteners are in place and properly secured or tightened. Refer to torque chart on page 31.
- 7) Avoid wearing loose fitting clothing when working with the Snowblower. These could get entangled in moving parts of the equipment and cause accidents.
- 8) Prolonged exposure to noise may hamper hearing. Protect yourself by wearing adequate protection devices.
- 9) Hydraulic fluids under pressure can damage your skin. Do not use your hands to locate a leak.
- 10) Before the beginning of the snow season, inspect all areas where the Snowblower will be used and remove any object which may cause an accident and/or damage the equipment.
- 11) Never operate your Snowblower in poor visibility or without proper lighting conditions.

SAFETY IN OPERATION

- 1) Be sure there are no obstructions around the equipment and that no one stands near the equipment when in operation.
- 2) Do not operate an engine in a confined or non ventilated area.
- 3) Do not perform any adjustments, cleaning, maintenance or repairs with the engine running. The engine must be stopped and the P.T.O. disengaged. Preferably remove the key from the ignition.
- 4) Wear adequate clothing when working in cold or windy conditions.
- 5) Adjust skid shoes for proper ground clearance of scraper blade, especially in rough terrain or soft ground conditions.
- 6) Before operating, make sure the P.T.O. is properly installed and secured.
- 7) Before starting-up the Snowblower, make sure the auger and drum areas are free of ice.
- 8) Put P.T.O. control in neutral position before starting engine.
- 9) Keep hands, feet and clothing away from moving parts of the Snowblower. Stay away from the discharge chute.

SAFETY (cont'd)

2

- 10) Before unplugging the chute, always disengage the P.T.O., stop the engine and relieve all hydraulic pressure.
- 11) Do not operate in excessive inclined conditions. Be careful when turning on slopes.
- 12) Never operate your Snowblower with missing guards or without protective devices in place.
- 13) Do not operate your Snowblower near buildings, windows or other vehicles without prior and proper adjustment of the chute deflector.
- 14) Never aim discharge chute towards people or animals. This may cause serious injuries.
- 15) Always reduce operating speed in slippery conditions.
- 16) Be careful when backing-up, make sure you have good visibility.
- 17) Always be on the lookout for objects which may enter the snowblower.
- 18) If undue vibrations are felt, disengage the P.T.O., stop the motor and look for the cause of the vibration. Vibration is usually the indication of a problem.
- 19) At the end of the operation, disengage the P.T.O., lower the Snowblower, put transmission in neutral, apply parking brake, stop engine and remove the key from the ignition.
- 3) Never perform any work under the Snowblower while it is supported only by the tractor's hydraulic system. It must be completely supported on blocks with sufficient capacity.

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.
- 3) Always disengage P.T.O. while moving from one area of work to another.
- 4) It is recommended to use both brake pedals simultaneously for better control.
- 5) The recommended road speed should be such as to maintain full control over steering and braking.
- 6) Be careful while backing up, make sure you have good visibility.

SAFETY IN STORAGE

- 1) Provide adequate supports to prevent any accidental overturning of the Snowblower.
- 2) Do not let children play in the area where the Snowblower is stored.

SAFETY WITH MAINTENANCE

- 1) Perform the Snowblower maintenance according to recommendations contained in this manual.
- 2) Stop engine and relieve all hydraulic pressures before doing inspection, maintenance or repairs.

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. The following photos indicate where each one must be installed.

3



Figure 2
Decal A

Part no.: 190-11671



Figure 3



Figure 4
Decal B

Part no.: 190-07722



Figure 5

DECALS (cont'd)

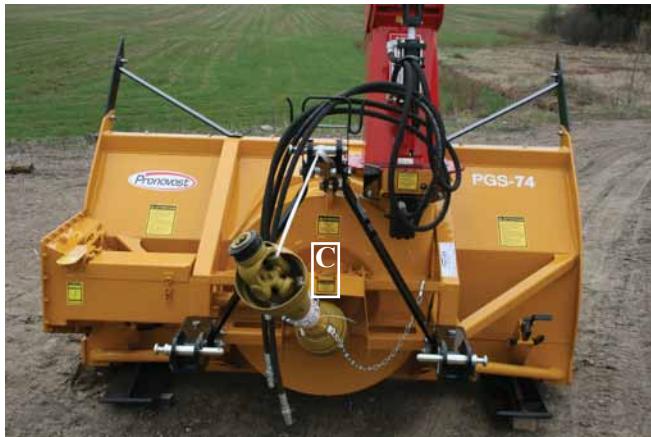


Figure 6



Figure 7
Decal C

Part no.: 190-11641

Decal E in Fig. 8 is located directly on the P.T.O. shaft. It is not visible when the safety shield is in place. It must never be visible when you operate the equipment.



Figure 8
Decal E

Part no.: A108

DECALS (cont'd)

3

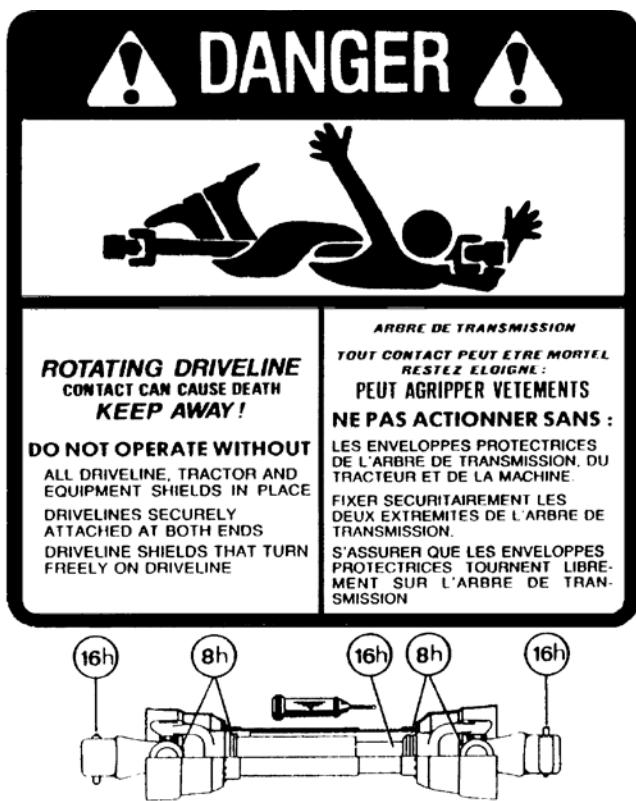


Figure 9

Decal F

Part no.: A 109



Figure 12



Figure 13

Decal G

Part no.: 190-10991



Figure 10



Figure 11

Decal D

Part no.: A103



Figure 14

DECALS (cont'd)

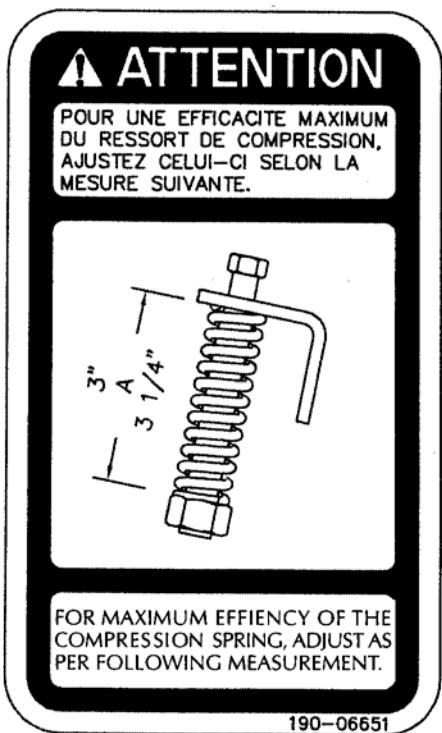


Figure 15
Decal H

Part no.: 190-06651

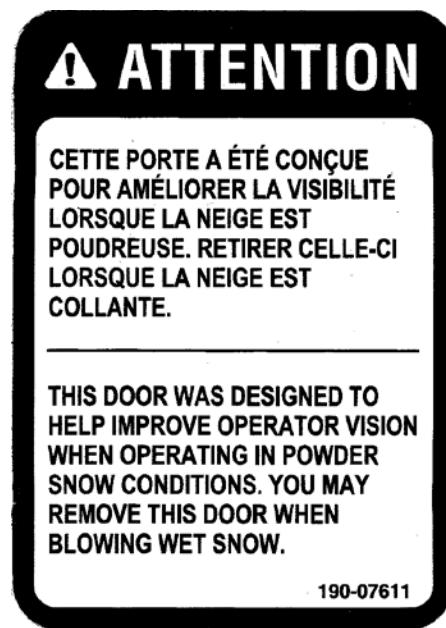


Figure 17
Decal J

Part no.: 190-07611

3



Figure 16



Figure 18

DECALS (cont'd)

MAINTENANCE DECALS

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

3



A 105



A 106

Figure 19



Figure 20

Decal L

Part no.: 190-11581



Figure 21



Figure 22

ASSEMBLY



Figure 23

4

ASSEMBLY

- 1) The Snowblower is shipped partly assembled.
- 2) Install 3-point system according to the model of your Snowblower. (See section 10 for part numbers). Use the holes most convenient to the type of tractor used (Fig. 23).
- 3) Install P.T.O. shaft with the shear pin end onto the Snowblower gear box. Then attach both safety shield support chains to tractor and snowblower (Fig. 24). **WARNING:** The telescoping tubes of the drive shaft must never be allowed to bottom out while maintaining a minimum overlap of 6 inches.
- 4) For the installation of the chute rotation mechanism, please refer to page 14.



Figure 24

ASSEMBLY (cont'd)

4



Figure 25

HYDRAULIC CHUTE ROTATION Motor

- 1) Install U-shaped UHMW piece , place chute on Snowblower and secure with retaining bracket and bolts provided.
- 2) Install the mounting plate; put the required spacers between mounting plate and base of chute (see p. 24 & 25). Do not tighten the bolts immediately, they will be tightened at final adjustment (Fig. 25).
- 3) Install motor and 9 tooth gear. The thickness of the 9 tooth gear is slightly more than the ring-gear. Make sure it exceeds on both sides of the ring gear (Fig. 26).
- 4) Using the take-up screws, adjust gear to mesh without bottoming. Tighten mounting plate bolts.
- 5) Install guard. It is important that the cushion valve furnished with your chute rotation kit be installed. Cushion valve has been pre set in plant at 1200 psi. (Fig. 27).



Figure 326



Figure 27

STARTING-UP



Figure 28



Figure 29



Figure 30

START-UP PROCEDURES

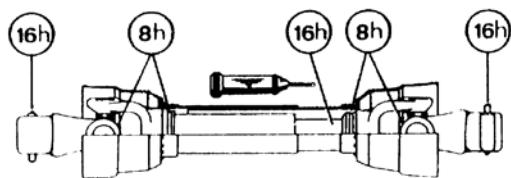
- 1) Check oil level in **gearbox** and in speed reducer if so equipped. Use SAE 80W90 gear box oil.
- 2) Check oil level in **auger drive chain box**. Fill to level plug. Use SAE 80W90 oil (Fig. 28).
- 3) Lubricate all points with a good quality multipurpose grease. For the PTO tubes, use a grade 0 synthetic grease like "Petro-Canada Arctic Synthetic NLGI Grade 0" or equivalent.
- 4) Check chain take-up adjustment. The spring maintaining the tension must be compressed to a length between 3" and 3 1/4".
- 5) Verify for adequate tightness of all fastening devices. Refer to torque chart on page 31.
- 6) Adjust skid shoes according to ground conditions (Fig. 29).
- 7) Make sure of a 540 RPM input to your snowblower.
- 8) Check impeller adjustment. The tip of the blades should be approximately 1/8" to 3/16" from the discharge wall of the drum. If necessary, adjust with the take-up screws provided (Fig. 30).

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MAINTENANCE

GENERAL MAINTENANCE

- 1) Wipe off all grease fittings with a clean cloth before adding grease in order to avoid injecting dirt and sand.
- 2) Repair or replace damaged grease fittings.
- 3) Lubricate all grease fittings every 8 hours of operation.
- 4) Lubricate P.T.O. shaft as indicated below:



Pull out the P.T.O. And lubricate between the two tubes with low temperature grease. Use a grade 0 synthetic grease like "Petro-Canada Arctic Synthetic NLGI Grade 0" or equivalent. Drive line tubes must slide easily even in cold weather. Clean off old hardened grease and apply fresh grease as needed.

- 5) **Check oil level in gear box** once a month. Adjust to required oil level as per drawing in "Parts List section". Use **SAE 80W90** oil.
- 6) **Check oil level in auger drive chain box** once a month. Fill to level plug, figure 28 page 15. Use **SAE 80W90** oil.
- 7) Check tension of drive chain every 24 hours of operation and adjust if necessary.
- 8) Check for tightness of bearing collars every 48 hours of operation.
- 9) **Change gearbox** oil once a year. Adjust to required oil level as per drawing in "Parts List section". Use **SAE 80W90** oil.
- 10) **Change the auger drive chain box** oil once a year. Fill to level plug, figure 28 page 15. Use **SAE 80W90** oil.
- 11) Check all nuts and bolts once a year. If necessary use torque chart on page 31.
- 12) For the auger drive shaft, always use a grade 5 shear bolt.
- 13) For the PTO shaft:
AT 540 RPM on a PTO size 60, the shear bolt is 10 mm, grade 8.8, part number **8218**.
- 14) Anti-friction slides do not require lubrication except at the end of the season in order to prevent corrosion of steel components that are in contact with the anti-friction material.

STORAGE

- 1) Store the Snowblower in a cool, dry place.
- 2) Support the Snowblower with wooden blocks.
- 3) Keep all piston rods in the retracted position. This will assure better protection against the elements.
- 4) Clean your Snowblower.
- 5) Thoroughly inspect all parts of the Snowblower. Replace or repair worn or defective parts.
- 6) Touch-up or repaint if necessary.
- 7) Lubricate all points before storage.

TROUBLESHOOTING

P.T.O. SHAFT

| PROBLEM | POSSIBLE CAUSE | CORRECTION |
|---|---|---|
| - Premature wear of U-joints and/or bluish color of cross journals. | - Insufficient lubrication. - Excessive working angle. - Poor quality lubricant. | - Follow lubrication recommendations. - Replace defective U-joints. - Make sure the Snowblower inlet face is perpendicular to the ground and if possible readjust 3-point hitch in order to position the Snowblower further away from tractor. - Use high quality lubricant. |
| - Gripping or premature wear of telescoping members. | - Too much sliding under load. - Tube overlap too-short: minimum recommended is 6". - Insufficient lubrication. - Contaminants (sand, etc.). | - Avoid raising Snowblower while in operation. - Readjust 3-point hitch in order to position the Snowblower closer to the tractor. - Follow lubrication recommendations. - Replace defective telescopic members. |
| - Damaged or jammed locking pin or bolt. | - Pin or orifice contaminated by sand, ice, etc. - Telescoping members too long, exerting pressure on locking device. | - Clean and grease. - Readjust 3-point hitch in order to position the Snowblower further away from tractor or shorten tubes. |
| - Premature wear of guard tube bearing ring. | - Lack of lubrication. - Wrong installation of guard chain. - Part of the guard in contact with the equipment. | - Follow lubrication instructions. - Adjust chain to prevent interference between guard & equipment. - Replace worn or damaged bearing rings. |
| - Cut or deformed safety guard tubes. | - Tubes in contact with the equipment. | - Eliminate any interference between tubes and equipment or tractor. - Replace damaged tubes. |

TROUBLESHOOTING (cont'd)

SNOWBLOWER

| PROBLEM | POSSIBLE CAUSE | CORRECTION |
|---|--|---|
| - The snow is not being thrown as far as usual. | - Tractor RPM too low. - Gap too wide between impeller blade tip and drum outlet wall. - Insufficient tractor HP. | - Raise P.T.O. speed to a minimum of 540 RPM. - Adjust impeller blades closer to drum outlet (1/8" to 3/16"). - Reduce travel speed. |
| - Frequent plugging of discharge chute. | - Tractor RPM too low. - Tractor RPM reduced too early with snow still in the Snowblower. - Slippage of PTO clutch mechanism. - Wet snow condition. | - Raise P.T.O. speed to a minimum of 540 RPM. - Make sure the Snowblower is completely empty before reducing RPM, especially on tractors with foot controlled RPM. - Repare clutch. - Reduce travel speed. - Remove the chute access panel. |
| - The impeller will not turn. | - Shear bolt broken on drive shaft. | - Replace shear bolt. |
| - The auger will not turn. | - Shear bolt broken on drive shaft. - Shear bolt broken on auger drive shaft. - Broken drive chain. - Broken key on motor. | - Replace shear bolt. - Replace shear bolt. - Fix or replace chain. - Replace the key. |
| - The chute will not turn. | - Ice accumulation. - Wrong hydraulic connections. - Broken key on motor. | - Remove ice. - Check hydraulic connections. - Replace the key. |

SPECIFICATIONS

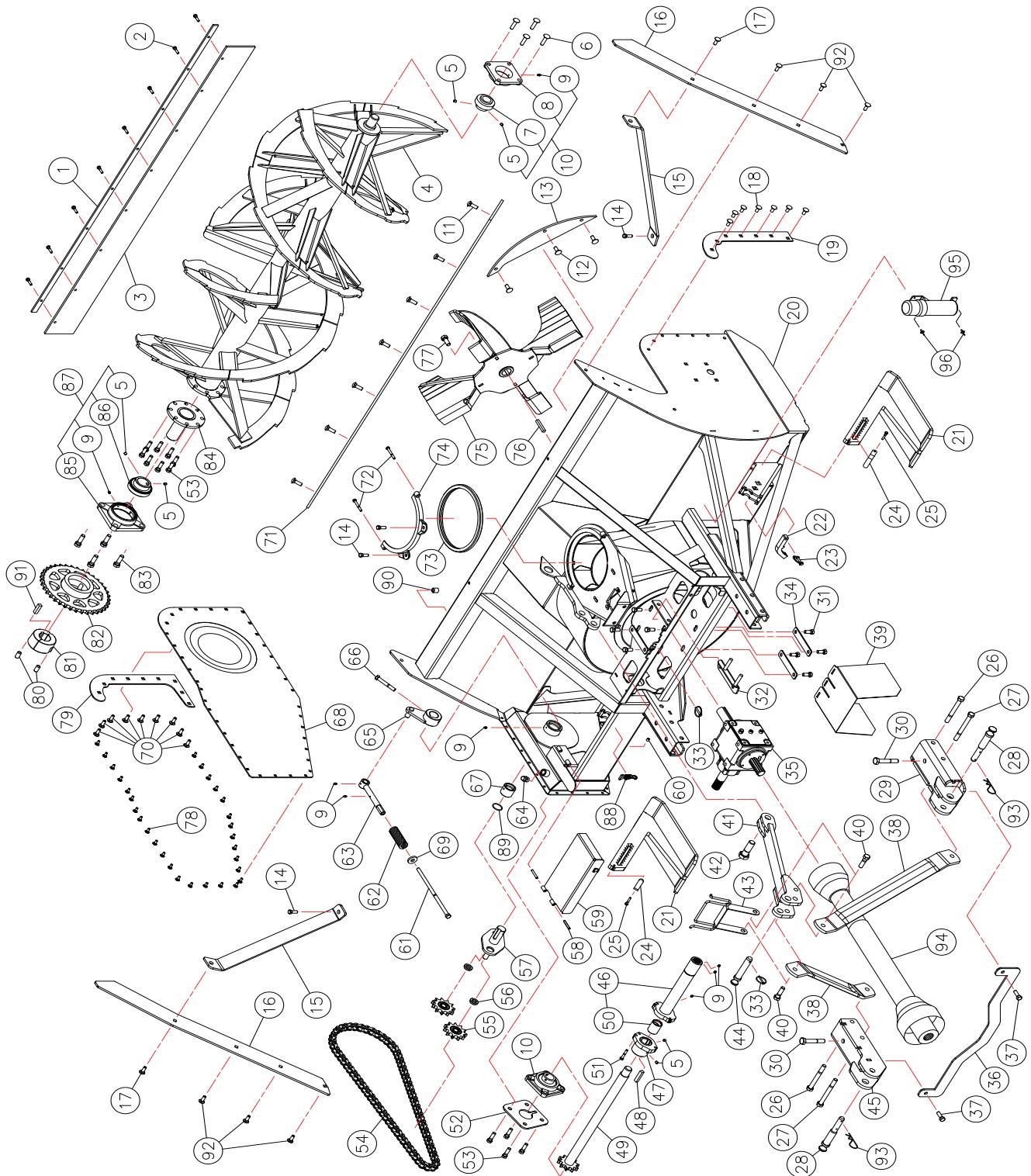
| Model | PGS-740 | PGS-800 |
|---|--|---------------------|
| Horse power required | 35 to 65 HP | |
| Approximate performance | 500 tons imp./hour (tractor 60 HP) | |
| Height - chute base | 35" | |
| Chute rotation | On anti-friction ring, for hydraulic motor | |
| Frame height | 36 3/4" | |
| Lateral cutting height | 58 1/2" | |
| Working width | 74" | 80" |
| Drum diameter | 28" | |
| Depth of drum | 10 1/2" | |
| Drum position | Centered | |
| Drum liner | 3/16" carbon steel 450 | |
| Impeller blades | 4 blades x 3/8" thickness - welded | |
| Size and height of impeller shaft | Diameter 1.575" (40 mm) - Height 18" | |
| Impeller speed | 540 RPM (CW) | |
| Standard P.T.O. shaft | T60 | |
| Auger | Dual band, toothed, welded, 28" diameter | |
| Drive chain | RENOLD No. 80HV in oil bath | |
| Shear bolt | 1 for the impeller + 1 for the auger drive | |
| Scraper blade | Carbon steel | Standard |
| | Stainless steel | Optional |
| Skid shoes | Carbon steel (quick adjust) | Standard (2 patins) |
| | Stainless steel (quick adjust) | Optional (2 patins) |
| | Rocktec (quick adjust) | Optional (2 patins) |
| Bearing / ductile iron casing | Standard | |
| 3-point hitch | Category 2 | |
| Center of gravity from 3-pt hitch at its shortest | 30 1/2" | |
| Rotational force (reference) | 42 468 lbs-po | 44 580 lbs-po |
| Weight* | 1 475 lbs | 1 526 lbs |

Design and specifications subject to change without notice.

* Weight including chute, cylinder for chute deflector and hydraulic motor for chute rotation.

SNOWBLOWER PGS-740 PGS-800

170-05873R1



SNOWBLOWER PGS-740 PGS-800 (cont'd)

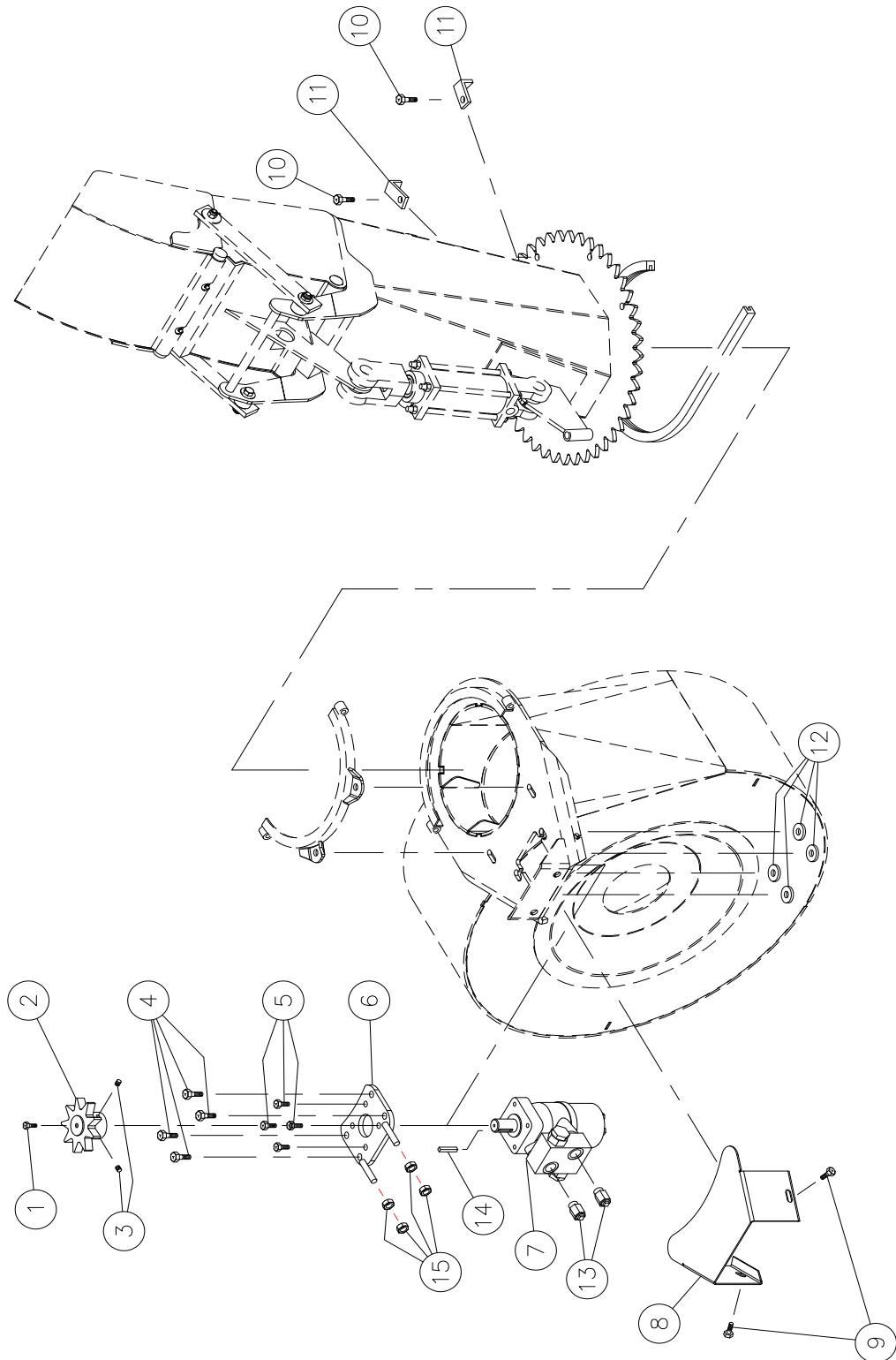
| REF. | PART # | DESCRIPTION | QTY |
|------|------------|---|-------|
| 1 | 140-26831 | Back plate for the shroud | 1 - |
| 1 | 140-26971 | Back plate for the shroud | - 1 |
| 2 | 300-34280 | Bolt 5/16" NC x 1 1/4" lg + nylon locknut..... | 8 9 |
| 3 | 190-13861 | Shroud..... | 1 - |
| 3 | 190-13891 | Shroud..... | - 1 |
| 4 | 110-46982 | Auger for PGS-740..... | 1 - |
| 4 | 110-49041 | Auger for PGS-800..... | - 1 |
| 5 | 323-36160 | Hexagonal socket set screw 3/8" NC X 3/8" lg..... | 8 8 |
| 6 | 321-40340 | Carriage bolt 1/2" NC x 2" lg + spring washer + nut..... | 4 4 |
| 7 | UC-208-24 | Bearing 1 1/2" | 2 2 |
| 8 | FD208 | Flange 4 holes | 2 2 |
| 9 | Std. | Grease fitting 1/4"-28 straight | 12 12 |
| 10 | UCFD208-24 | Bearing 1 1/2" + flange & 2 grease fitting straight | 2 2 |
| 11 | 321-40310 | Carriage bolt 1/2" NC x 1 1/2" lg + nylon locknut | 7 8 |
| 12 | 321-40280 | Carriage bolt 1/2" NC x 1 1/4" lg + nylon locknut | 3 3 |
| 13 | 130-92231 | Deflector..... | 1 1 |
| 14 | 300-38280 | Bolt 7/16" NC x 1 1/4" lg + rondelle + nylon locknut..... | 4 4 |
| 15 | 130-90673 | Lateral blade strengthener | 2 2 |
| 16 | 130-94521 | Lateral blade..... | 2 2 |
| 17 | 321-38280 | Carriage bolt 7/16" NC x 1 1/4" lg + 2 flat washer + 2 nylon locknut..... | 2 2 |
| 18 | 321-38250 | Carriage bolt 7/16" NC x 1" lg + spring washer + nut..... | 7 7 |
| 19 | 130-90511 | Right lateral brace | 1 1 |
| 20 | 120-08102 | Frame PGS-740 | 1 - |
| 20 | 120-08332 | Frame PGS-800 | - 1 |
| 21 | 110-47951 | Skid shoe | 2 2 |
| 22 | 130-90531 | Skid shoes lock..... | 2 2 |
| 23 | 8112 | Lock pin 1/4"..... | 2 2 |
| 24 | 140-26661 | Handle for skid shoe | 2 2 |
| 25 | 300-32310 | Bolt 1/4" NC x 1 1/2" lg + nylon locknut | 2 2 |
| 26 | 300-44550 | Bolt 5/8" NC x 5 1/2" lg + nylon locknut | 2 2 |
| 27 | 300-44580 | Bolt 5/8" NC x 6" lg + nylon locknut | 2 2 |
| 28 | 8004 | Pin category 1 & 2 | 2 2 |
| 29 | 110-47651 | Right lower hitch..... | 1 1 |
| 30 | 300-44460 | Bolt 5/8" NC x 4" lg + nylon locknut | 2 2 |
| 31 | 300-40280 | Bolt 1/2" NC x 1 1/4" lg + lock washer + nut..... | 8 8 |
| 32 | 110-47061 | Adjustment plate for gear box + 4 nut 1/2" - NC | 1 1 |
| 33 | Std. | Lynch pin 1/4" | 2 2 |
| 34 | 130-90591 | Back plate | 3 3 |
| 35 | 8251 | Gear box T-27D | 1 1 |
| 36 | 130-97051 | Brace | 1 1 |
| 37 | 300-40310 | Bolt 1/2" NC x 1 1/2" lg + nylon locknut | 2 2 |
| 38 | 140-26651 | 3-points side bar | 2 2 |
| 39 | 130-90941 | P.T.O. shroud | 1 1 |
| 40 | 300-44355 | Bolt 5/8" NC x 2 1/4" lg + nylon locknut | 2 2 |
| 41 | 110-47931 | Top link | 1 1 |
| 42 | 300-50400 | Bolt 1" NC x 3" lg + nylon locknut | 1 1 |
| 43 | 110-15291 | Hoses support | 1 1 |
| 44 | 150-05961 | Pin category 2 for top link | 1 1 |
| 45 | 110-47641 | Left lower hitch | 1 1 |
| 46 | 110-47123 | Side shaft & shearplate (long side) + splined adaptor (20 splines) | 1 1 |
| 47 | 110-47103 | Side shaft & shearplate (short side) | 1 1 |
| 48 | 140-26321 | Key 1/2" x 1/2" x 2 3/8" | 1 1 |

SNOWBLOWER PGS-740 PGS-800 (cont'd)

| REF. | PART # | DESCRIPTION | QTY |
|------|------------|--|----------------------|
| | | | PGS-740 PGS-800 |
| 49 | 110-47111 | Auger drive shaft for PGS-740..... | 1 - |
| 49 | 110-49091 | Auger drive shaft for PGS-800..... | - 1 |
| 50 | 160-27622 | Aluminium-bronze bushing 1 1/2" i.d. x 1 3/4" o.d. x 2" lg | 1 1 |
| 51 | 300-34340 | Bolt 5/16" NC x 2" lg + nylon locknut | 1 1 |
| 52 | 130-88491 | Adjustment plate for auger drive shaft..... | 1 1 |
| 53 | 300-40250 | Bolt 1/2" NC x 1 3/4" lg + nylon locknut | 4 4 |
| 54 | 190-13441 | Drive chain RENOLD HV # 80..... | 1 1 |
| 55 | 9287 | Idler sprocket #80..... | 2 2 |
| 56 | 160-27771 | Spacer..... | 2 2 |
| 57 | 110-47231 | Idler + nylon locknut 3/4" (thin) | 1 1 |
| 58 | Std. | Spring pin 5/16" x 2" lg | 2 2 |
| 59 | 110-47921 | Auger drive shaft guard PGS-740..... | 1 - |
| 59 | 110-49071 | Auger drive shaft guard PGS-800..... | - 1 |
| 60 | 3169-02 | Oil level plug 1/8" NPTF | 1 1 |
| 61 | 110-47961 | Threaded rod for idler adjustment..... | 1 1 |
| 62 | 9688 | Compression spring..... | 1 1 |
| 63 | 110-47941 | Threaded tube for idler adjustment..... | 1 1 |
| 64 | Std. | Breather 1/2" | 1 1 |
| 65 | 110-47261 | Idler | 1 1 |
| 66 | 300-40430 | Bolt 1/2" NC x 3 1/2" lg + nylon locknut | 1 1 |
| 67 | 160-27711 | Idler bushing | 1 1 |
| 68 | 130-90502 | Oil bath cover..... | 1 1 |
| 69 | 376-40000 | Flat washer 1/2" | 1 1 |
| 70 | 321-38281 | Carriage bolt 7/16" NC x 1 1/4" lg + spring washer + nut..... | 9 9 |
| 71 | 140-26272 | Scraper blade PGS-740..... | 1 - |
| 71 | 140-26911 | Scraper blade PGS-800..... | - 1 |
| 72 | 300-34370 | Bolt 5/16" NC x 2 1/2" lg + nylon locknut | 2 2 |
| 73 | 190-02132 | Anti-friction ring | 1 1 |
| 74 | 110-02001 | Retaining bracket | 1 1 |
| 75 | 110-47972 | Impeller 28" x 9" | 1 1 |
| 76 | 8030 | Key 3/8" x 3/8" x 3 1/2" lg | 1 1 |
| 77 | 300-44310 | Bolt 5/8" NC x 1 1/2" lg + lock washer | 1 1 |
| 78 | 321-34220 | Carriage bolt 5/16" NC x 3/4" lg + lock washer + nut | 29 29 |
| 79 | 130-96261 | Left lateral brace..... | 1 1 |
| 80 | 323-44280 | Hexagonal socket set screw 5/8" NC x 1 1/4" lg | 2 2 |
| 81 | 3030X2 | Male adaptor «taper-lock» | 1 1 |
| 82 | 110-47031 | Sprocket for auger 80A37 + female adaptor «taper-lock» | 1 1 |
| 83 | 300-44340 | Bolt 5/8" NC x 2" lg + nylon locknut | 4 4 |
| 84 | 110-47011 | Auger hub (auger drive end) | 1 1 |
| 85 | FD211 | Cast iron flange 4 holes | 1 1 |
| 86 | UC211-32 | Bearing 1" | 1 1 |
| 87 | UCFD211-32 | Bearing 1" + cast iron flange & grease fitting | 1 1 |
| 88 | 8374 | Adjustable clamp fastener (welded) | 1 1 |
| 89 | O-222 | O-ring 1/8" x 1 1/2" d.i. x 1 3/4" d.e. | 1 1 |
| 90 | 2653 | Magnetic plug 1/2 NPT | 1 1 |
| 91 | 140-27411 | Key 1/2" x 1/2" x 1 3/4" lg | 1 1 |
| 92 | 321-38280 | Cariage bolt 7/16" NC x 1 1/4" lg + nylon locknut | 6 6 |
| 93 | Std. | Hitch pin clip 5/32" | 2 2 |
| 94 | 8202 | P.T.O. shaft | 1 1 |
| 95 | 8393 | Storage tube for operator's manual..... | 1 1 |
| 96 | 8394 | Large head pop rivet 3/16" dia. X 0,565" lg..... | 2 2 |

HYDRAULIC CHUTE ROTATION KIT SP-7480-PGS

170-06271

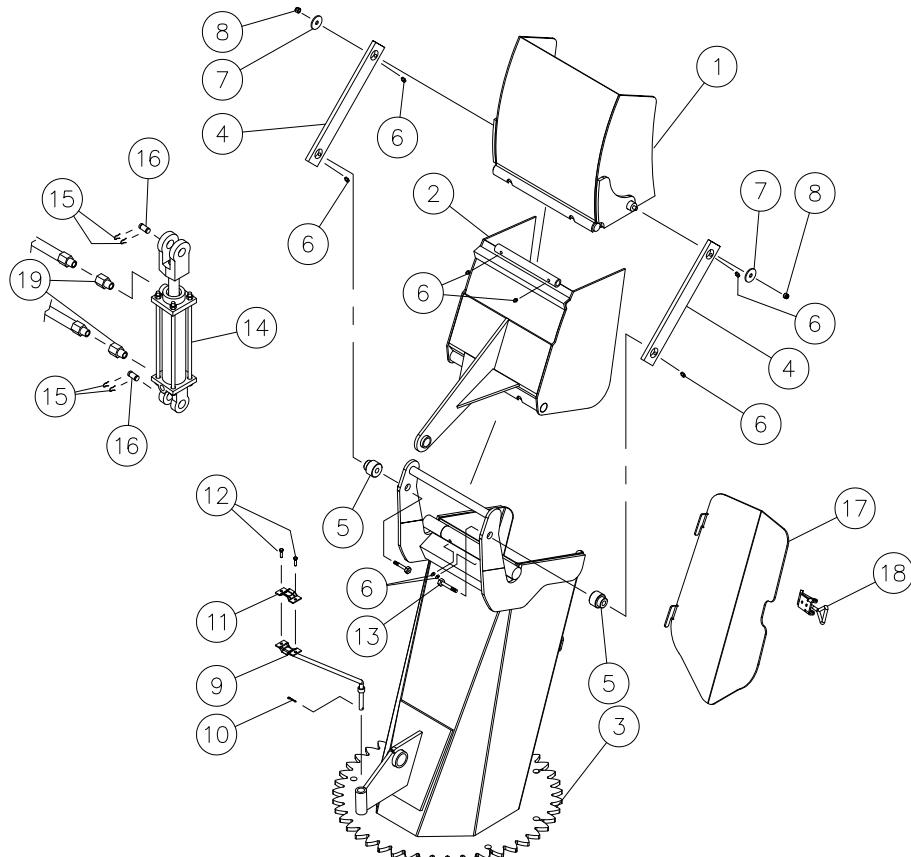


HYDRAULIC CHUTE ROTATION KIT SP-7480-PGS (cont'd)

| REF. | PART # | DESCRIPTION | QTY |
|------|----------------|---|------|
| 1 | 300-32220 | Bolt 1/4" NC x 3/4" lg + lock washer | 1 |
| 2 | 110-44331 | Sprocket 9 teeth..... | 1 |
| 3 | 323-36160 | Hexagonal socket setscrew 3/8" NC x 3/8" lg | 2 |
| 4 | 300-38280 | Bolt 7/16" NC x 1 1/4" lg + nylon locknut | 4 |
| 5 | 300-36250 | Bolt 3/8" NC x 1" lg + lock washer | 4 |
| 6 | 110-20811 | Hydraulic motor support | 1 |
| 7 | MLH-250 | Hydraulic motor with cushion valve..... | 1 |
| 8 | 130-08162 | Hydraulic motor guard | 1 |
| 9 | 300-34250 | Bolt 5/16" NC x 1" lg + lock washer | 2 |
| 10 | 300-38280 | Bolt 7/16" NC x 1 1/4" lg + nylon locknut | 2 |
| 11 | 140-05661 | Stopper | 2 |
| 12 | 150-12741 | Flat washer 7/16" heavy duty | 4 |
| 13 | RSP-1/16x100RB | Kit of two unidirectional restrictors..... | opt. |
| 14 | 8369 | Key | 1 |
| 15 | 336-38000 | Nut 7/16" NC..... | 4 |

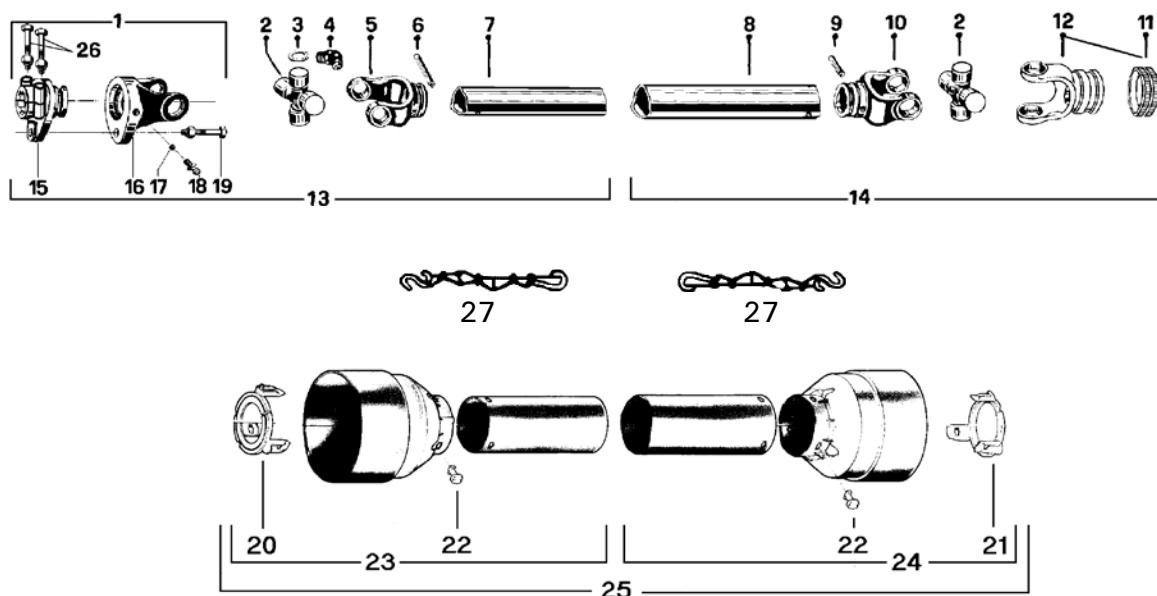
SEMI-INDUSTRIAL CHUTE PSIG-5472

170-03513



| REF. | PART # | DESCRIPTION | QTY |
|------|-----------------|--|------|
| 1 | 110-22861 | Upper chute deflector | 1 |
| 2 | 110-22871 | Lower chute deflector | 1 |
| 3 | 110-36763 | Chute base | 1 |
| 4 | 140-14171 | Connecting rod | 2 |
| 5 | 150-05391 | Spacer for connecting rod | 2 |
| 6 | Std. | Grease fitting 1/4" - 28 droit | 8 |
| 7 | 378-36500 | washer | 2 |
| 8 | 346-36000 | Nylon locknut 3/8" NC | 2 |
| 9 | 110-01122 | Mounting support plate (1) | opt. |
| 10 | Std. | Cotter pin 1/8" x 1" lg | opt. |
| 11 | 140-13071 | Hoses mounting plate (1) | opt. |
| 12 | 300-32250 | Bolt 1/4" NC x 1" lg + nylon locknut (1) | opt. |
| 13 | 300-38340 | Bolt 7/16" NC x 2" lg + nylon locknut | 2 |
| 14 | 25TR04 | Cylinder | opt. |
| 15 | Std. | Hairpin cotter 7/8" (4) | opt. |
| 16 | 6004 | Clevis pin 1" x 3 1/8" lg (2) | opt. |
| 17 | 110-32762 | Access panel | 1 |
| 18 | 8374 | Adjustable clamp fastener (welded) | 1 |
| 19 | RSP-1/16x06 NPT | Kit of two unidirectional restrictors 3/8" NPT | opt. |
| 19 | RSP-1/16x08 NPT | Kit of two unidirectional restrictors 1/2" NPT | opt. |

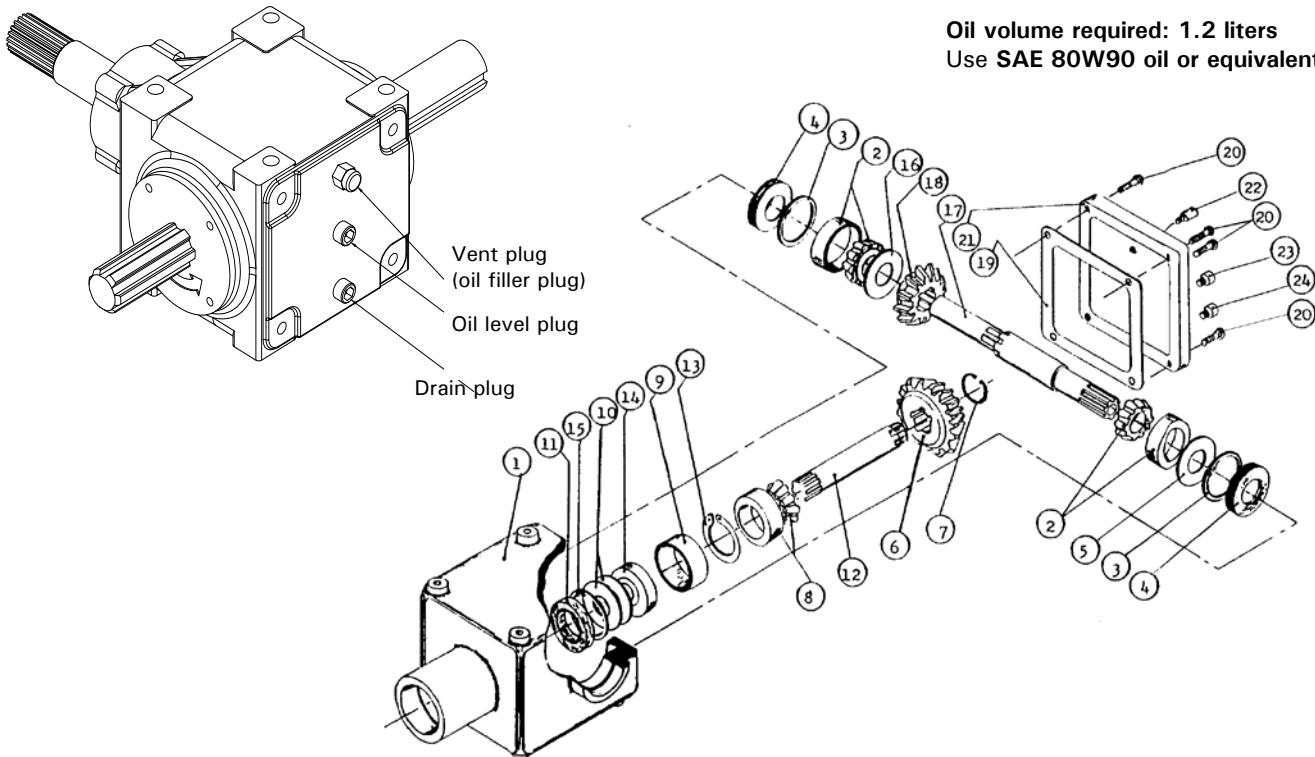
P.T.O. SHAFT # 8202 (T60)



| REF. | PART # | DESCRIPTION | QTY |
|------|--------|--|-----|
| 1 | 8237 | Safety shear yoke (2 bolts)..... | 1 |
| 2 | 8238 | U joint + 4 retaining rings + 1 grease fitting..... | 2 |
| 3 | 8061 | Retaining ring | 8 |
| 4 | 8110 | Grease fitting..... | 2 |
| 5 | 8239 | Yoke for inner tube..... | 1 |
| 6 | 8075 | Stopper for inner tube..... | 1 |
| 7 | 8077 | Inner tube | 1 |
| 8 | 9212 | Outer tube..... | 1 |
| 9 | 9210-E | Stopper for outer tube | 1 |
| 10 | 8240 | Yoke for outer tube | 1 |
| 11 | 8363 | Collar kit | 1 |
| 12 | 8250 | Yoke with hole 1 3/8"-6 splines + yoke stopper (#11 included)..... | 1 |
| 13 | 8241 | P.T.O. section, SBI 1 3/8"-6, inner part, with protector | 1 |
| 14 | 8242 | P.T.O. section, QD 1 3/8"-6, outer part, with protector..... | 1 |
| 15 | 8243 | Adaptor (2 bolts)..... | 1 |
| 16 | 8244 | Yoke and shearplate | 1 |
| 17 | 9205 | Ball..... | 17 |
| 18 | 8071 | Grease fitting..... | 1 |
| 19 | 8218 | Safety shear bolt M10 x 60mm..... | 1 |
| 20 | 8245 | Bearing ring for inner guard tube | 1 |
| 21 | 8246 | Bearing ring for outer guard tube | 1 |
| 22 | 8109 | Stopper..... | 6 |
| 23 | 8247 | Inner shield..... | 1 |
| 24 | 8248 | Outer shield..... | 1 |
| 25 | 8249 | Complete shield | 1 |
| 26 | 8222 | Bolt M12 x 70mm + lock nut..... | 2 |
| 27 | 8308 | Safety chain | 2 |

GEAR BOX # 8251 (T27D)

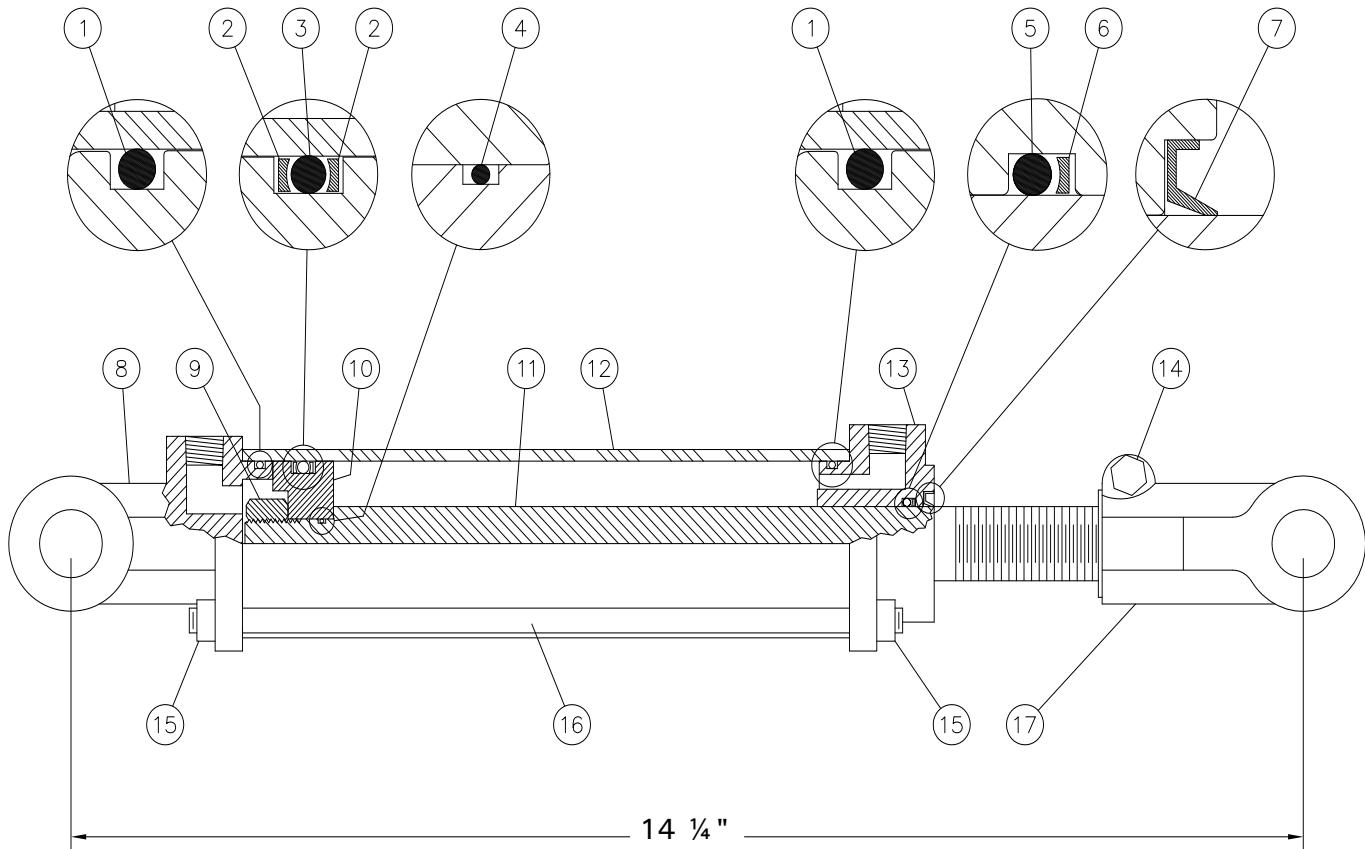
170-05581



| REF. | PART # | DESCRIPTION | QTY |
|------|----------|--|-----|
| 1 | 8043 | Casing | 1 |
| 2 | 30208-A | Roller bearing..... | 2 |
| 3 | 8045 | Inside circlip 80mm | 2 |
| 4 | 8046 | Oil seal 40 x 80 x 12mm..... | 2 |
| 5 | 8047 | Adjusting washer | 1 |
| 6 | 8048 | Gear Z18 | 1 |
| 7 | 8049 | Outside circlip 40mm | 1 |
| 8 | 30207-A | Roller bearing..... | 1 |
| 9 | 8051 | Spacer ring..... | 1 |
| 10 | 8052 | Adjusting washer | 2 |
| 11 | 8053 | Oil seal 35 x 72 x 12mm..... | 1 |
| 12 | 8054 | Side shaft (1 1/4" - 19 splines) | 1 |
| 13 | 8055 | Inside circlip 72mm | 1 |
| 14 | 6207-2RS | Ball bearing | 1 |
| 15 | 8057 | Outside circlip 35mm | 1 |
| 16 | 8058 | Adjusting washer | 1 |
| 17 | 8252 | Impeller shaft (1.575" & 1 3/8" - 6 splines) | 1 |
| 18 | 8060 | Gear Z-18 | 1 |
| 19 | - - - | Use silicone caulking..... | - |
| 20 | 8062 | Bolt M10 x 14mm | 4 |
| 21 | 8063 | Cover | 1 |
| 22 | 8065 | Vent plug (oil filler plug) | 1 |
| 23 | 8064 | Plug (oil level) | 1 |
| 24 | 8064 | Plug (oil drain)..... | 1 |

CYLINDER 25TR04

170-02141

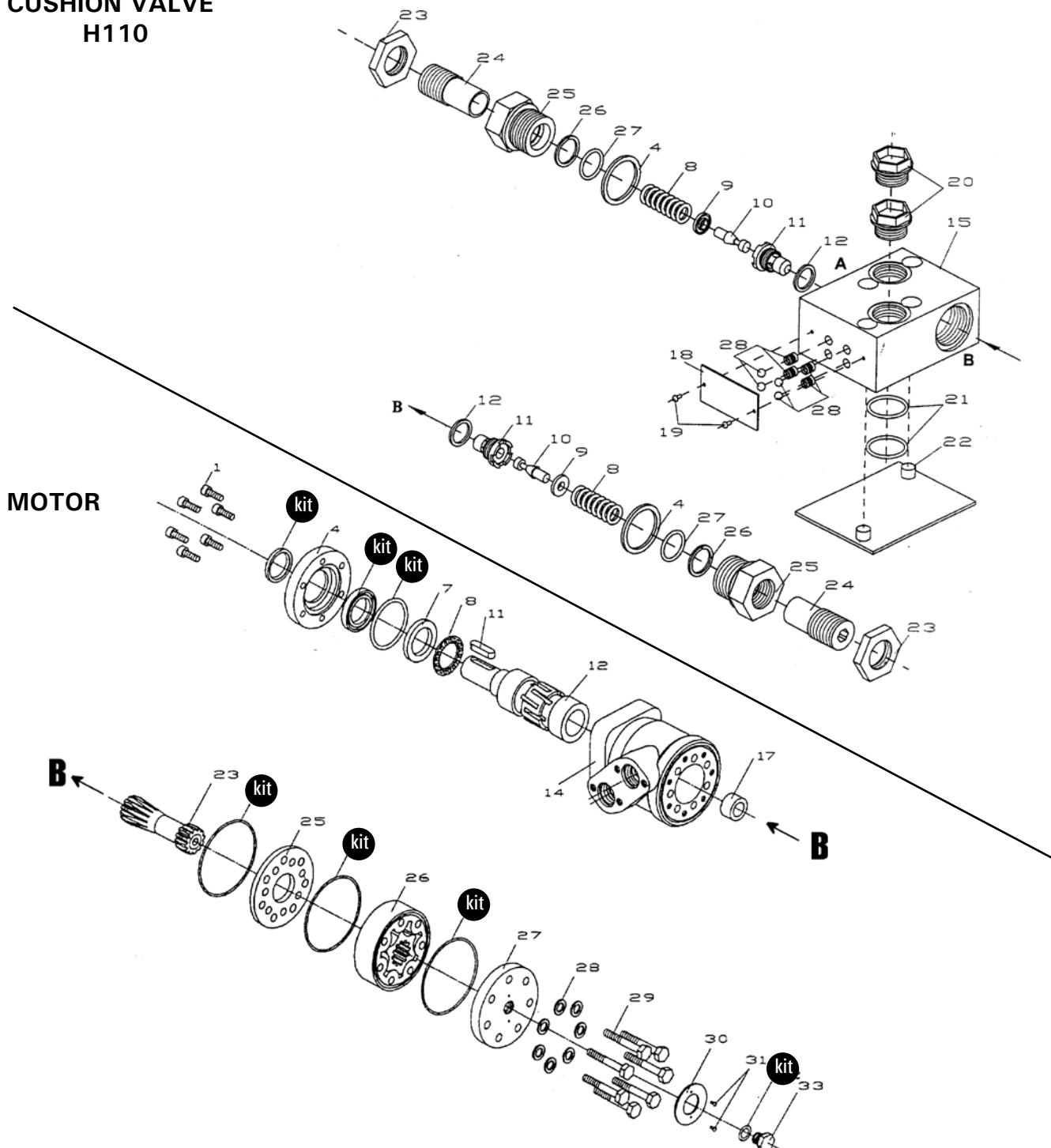


| REF. | PART # | DESCRIPTION | QTY |
|------|-------------|---|-----|
| 1 | See #RK25TR | O-ring 1/8" x 2 1/4" x 2 1/2" | 2 |
| 2 | See #RK25TR | Back-up 2 1/2" o.d. x 3/16 ø | 2 |
| 3 | See #RK25TR | O-ring 3/16" x 2 1/8" x 2 1/2" | 1 |
| 4 | See #RK25TR | O-ring 1/16" x 5/8" x 3/4" | 1 |
| 5 | See #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 | 338-46000 | Nut 3/4" NF | 1 |
| 10 | 4924-31 | Piston 2 1/2" ø | 1 |
| 11 | 491980-04 | Piston rod 1 1/8" | 1 |
| 12 | 491668-04 | Cylinder body 2 1/2" ø | 1 |
| 13 | 492421 | Head (for 2 1/2" tube) | 1 |
| 14 | 300-36355 | Bolt 3/8" NC x 2 1/4" + nut | 1 |
| 15 | 336-36000 | Nut 3/8" NC | 8 |
| 16 | Std. | Threaded rod 3/8" NC x 8" 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

HYDRAULIC MOTOR MLH250

CUSHION VALVE H110



10

REF.

PART # DESCRIPTION

QTY

| | | | |
|-----------|------|----------------------------|---|
| kit 11 | 8368 | Set of seals..... | 1 |
| | 8369 | Key for "Orbit" motor..... | 1 |

TORQUE CHART

TORQUE SPECIFICATION TABLE

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

12

PRONOVEST 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 and motors are covered by the manufacturer of these items.

The PTO shafts are warrantied by the manufacturer and cover **only** defects in material and workmanship, and is conditional to recommended use and installation only.

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

This warranty becomes void and null 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. PRONOVEST 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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