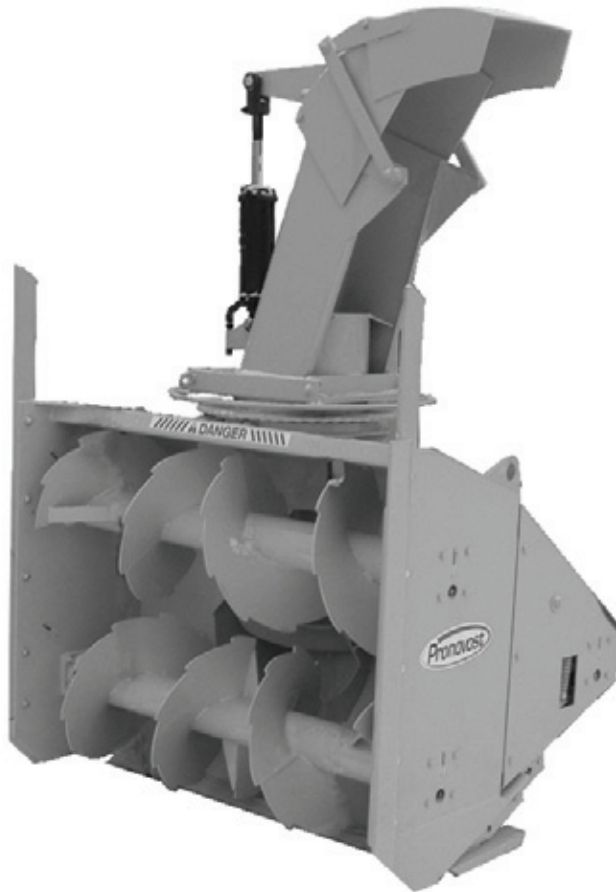




**OPERATOR'S / PARTS
MANUAL**



Industrial Snowblower for sidewalk

Models

P-254-T

P-260-T



Copyright © Les Machineries Pronovost Inc., 2012

All rights reserved.
Printed in Canada.

TABLE OF CONTENTS

Section	Item	Page
1	Introduction	5
2	Safety	6
	General Safety	6
	Safety in Operation	6
	Safety with Maintenance	7
	Safety in Transport	7
	Safety in Storage	7
3	Decals	8
	Safety Decals	8
	Maintenance Decals	12
4	Maintenance	12
5	Storage	13
6	Trouble Shooting	14
7	Specifications	16
8	Parts List	17
	Snowblowers P-254-T & P-260-T	17
	Industrial Chute PCG-7486	20
	Semi-Industrial Chute PSIG-7486	22
	Hydraulic telescopic chute PCT-7486-HDB	24
	P.T.O. Shaft T60	26
	P.T.O. Shaft T80	27
	Gear box 8251	28
	Cylinder 25TR08	29
	Cylinder 15PC32	30
	Hydraulic Motor MLH 315	31
9	Torque Chart	32
10	Warranty	33

INTRODUCTION

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 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 accompanying photo.

If you require additional information on your Snowblower, please contact your PRONOVOST 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 PRONOVOST parts for replacement.

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



LES MACHINERIES PRONOVOST INC. ST-TITE	
MODÈLE	SÉRIE
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
FAIT AU CANADA	MADE IN CANADA

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 32.
- 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)

- 10) Before unplugging the chute, always disengage the P.T.O., stop the engine and relieve all hydraulic pressures.
- 11) Do not operate in excessive inclined conditions. Be careful when turning in 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.

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.
- 3) Never perform any work under the Snowblower while it is supported only by the tractor's hydraulic system. It must be completely supported by wooden blocks or other safe means.

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.

2

DECALS

SAFETY DECALS

The safety decals are affixed wherever special safety precautions are indicated. Locate them on the machine and read them carefully. If a decal is damaged, lost or illegible, install a new one.

3



Figure 2

Part no.: 190-11671

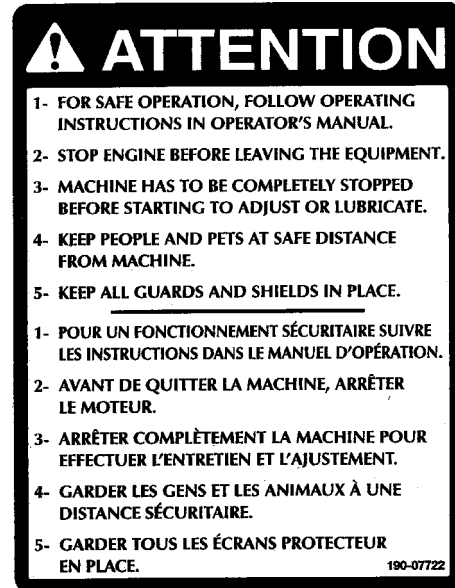


Figure 3

Part no.: 190-07722



Figure 4

Part no.: 190-11641



Figure 5

Part no.: A103

DECALS (cont'd)



Figure 6
Part no.: A108



Figure 7
Part no.: A 109

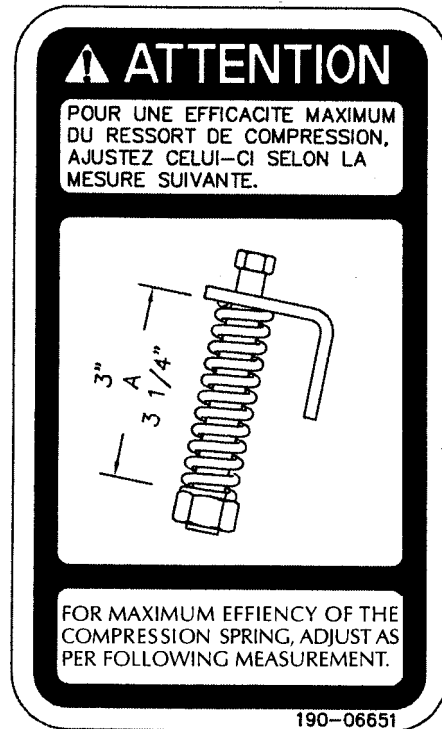


Figure 8
Decal A

Part no.: 190-06651

DECALS (cont'd)

3



Figure 9

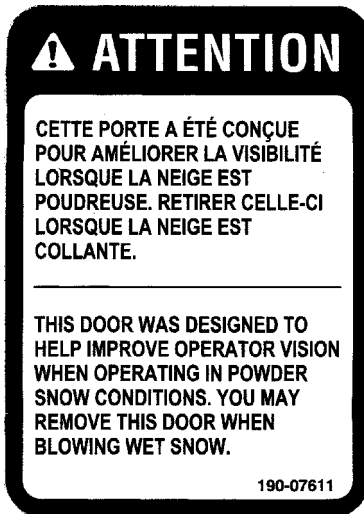


Figure 10
Decal B

Part no.: 190-07611

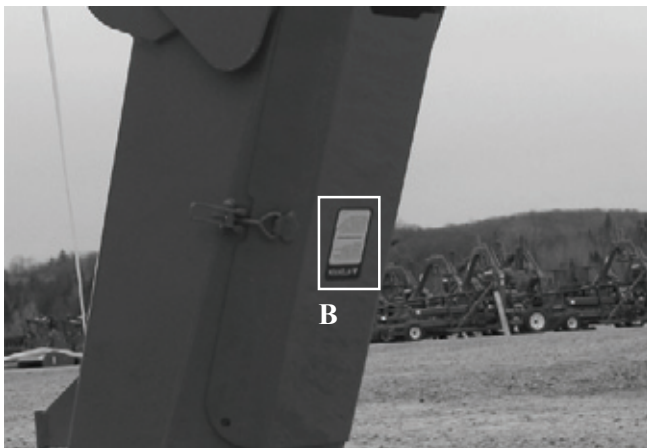


Figure 11

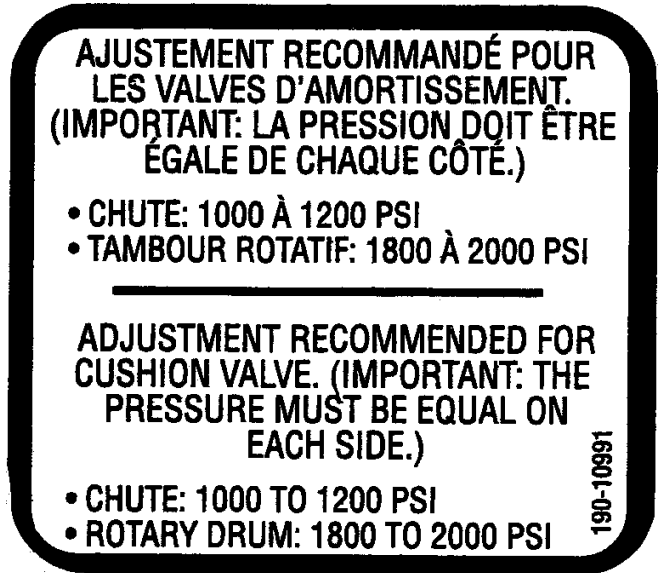


Figure 12
Decal C

Part no.: 190-10991

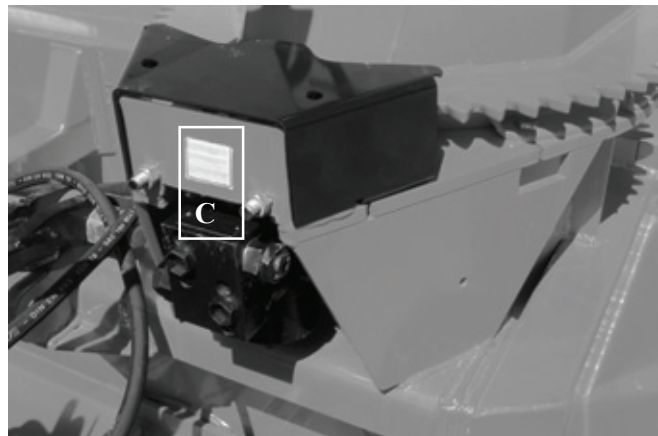


Figure 13

DECALS (cont'd)

MAINTENANCE DECALS

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



Figure 14

Part no.: 190-11581

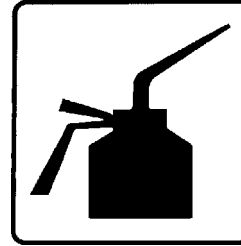


Figure 15

Pièce no.: A 105

3



Figure 16

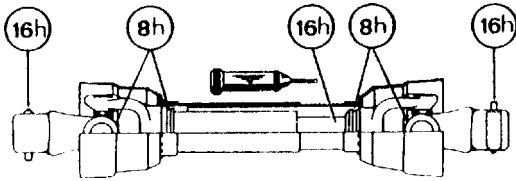
Pièce no.: A 106

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) Oil drive chain every 8 hours of operation.
- 5) Lubricate P.T.O. shaft as indicated below:
 - 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) Check all nuts and bolts once a year. If necessary use torque chart on page 32.
 - 11) Standard scraper blades are reversible. Reverse when one edge is worn out.
 - 12) For the auger drive shaft, always use a grade 5 shear bolt.
 - 13) For the P.T.O. shaft, use a grade 8.8 at 540 RPM.
 - 14) UHMW 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 UHMW material.
- 6) 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.

4



Pull out the P.T.O. and lubricate between the two tubes with low temperature grease. Drive line tubes must slide easily even in cold weather. Clean off old hardened grease and apply fresh grease as needed.

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.	- 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.
- 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.
- 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.

6

TROUBLESHOOTING (cont'd)

SNOWBLOWER

PROBLEM	POSSIBLE CAUSE	CORRECTION
- The snow is not being thrown as far as usual.	<ul style="list-style-type: none"> - Tractor RPM too low. - Gap too wide between impeller blade tip and drum outlet wall. - Insufficient tractor HP. 	<ul style="list-style-type: none"> - 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.	<ul style="list-style-type: none"> - Tractor RPM too low. - Tractor RPM reduced too early with snow still in the Snowblower. - Slippage of PTO clutch mechanism. - Wet snow condition. 	<ul style="list-style-type: none"> - 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. - Repair clutch. - Reduce travel speed. - Remove access panel.
- The impeller will not turn.	<ul style="list-style-type: none"> - Shear bolt broken on drive shaft. 	<ul style="list-style-type: none"> - Replace shear bolt.
- The auger will not turn.	<ul style="list-style-type: none"> - Shear bolt broken on drive shaft. - Shear bolt broken on auger drive shaft. - Broken drive chain. 	<ul style="list-style-type: none"> - Replace shear bolt. - Replace shear bolt. - Fix or replace chain.
- The chute will not turn.	<ul style="list-style-type: none"> - Ice accumulation. - Wrong hydraulic connections. 	<ul style="list-style-type: none"> - Remove ice. - Check hydraulic connections.

SPECIFICATIONS

SNOWBLOWERS

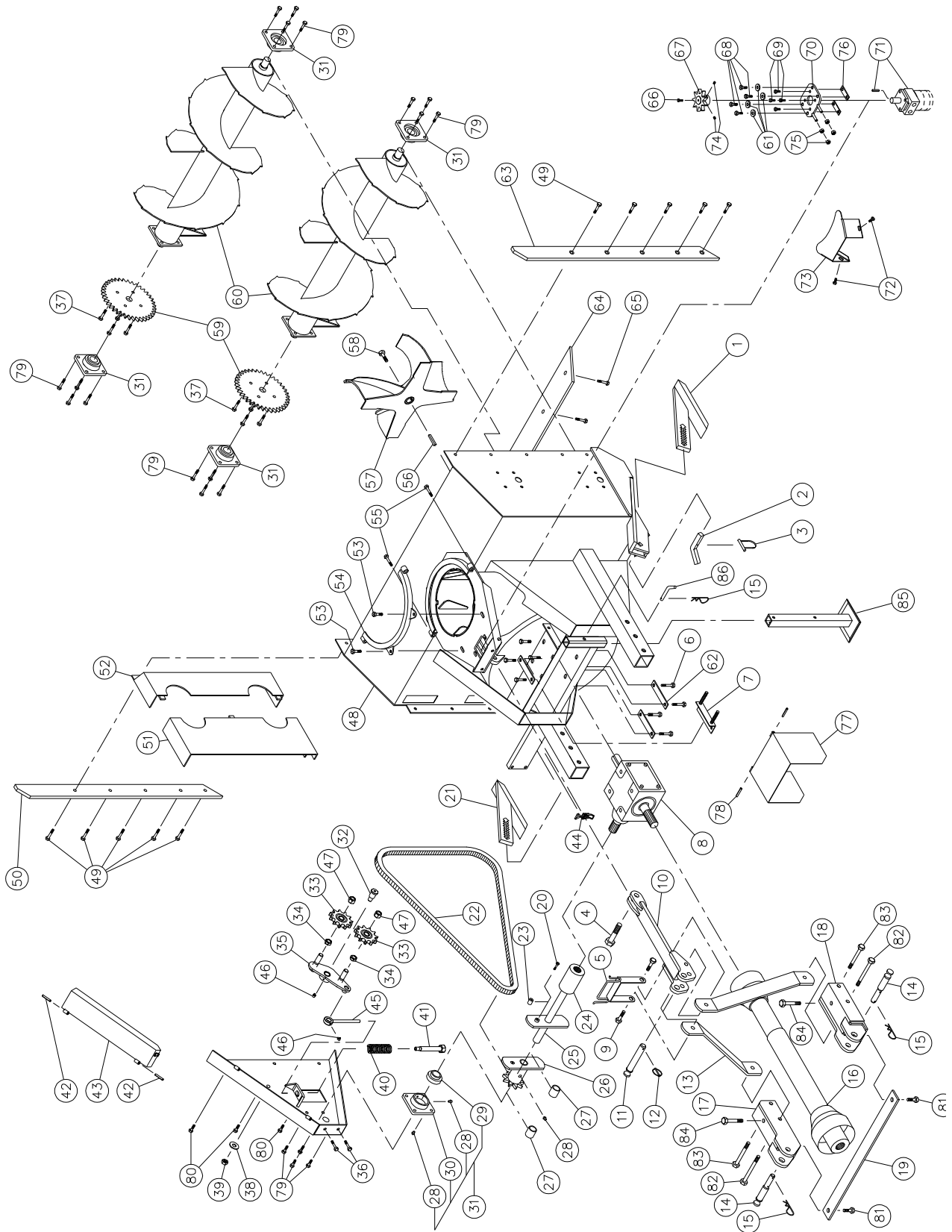
Model	P-254-T	P-260-T
Horse power recommended	50 to 75 HP	
Working width	54"	60"
Frame height	39 1/2"	
Lateral blades cutting height	51"	
Frame height	39"	
Impeller diameter	26"	
Depth of drum	12"	
Impeller blades	4 curved blades	
Number of shear bolts	2 (impeller and auger)	
Size of impeller shaft	1.575" (40 mm)	
Impeller RPM	540 RPM	
Number of augers	2 full flight spiked auger (16" diameter)	
Drive chain	No. 80	
Replaceable scraper blade	Standard steel, reversible (4" x 1/2")	
Adjustable skid shoes	Standard steel	
P.T.O. shaft	Category T60	
Auger bearings	1 1/4"	
Hitch category	Category 1 & 2	
Chute rotation kit	Hydraulic with motor and cushion valve MLH-315 (UHMW slide)	
Approximative performance	400 tons imp./hour	
Color	Industrial yellow	
Gravity center	From the 3-points hitch 27 3/4"	
Weight	1,400 lbs.	1,450 lbs.

OPTIONS

Replaceable scraper blade	Carbon steel 450 (1/2" x 4", not reversible, not sharpened)
	Carbon steel 450 (1/2" x 6", not reversible, sharpened)
Adjustable skid shoes	Carbon steel 450
Extension for chute PCG-7486	4' (48")
	2' (24")
P.T.O. Shaft	Category T80

INDUSTRIAL SNOWBLOWER P-254-T P-260-T

170-04833



INDUSTRIAL SNOWBLOWER P-254-T P-260-T (cont'd)

REF.	PART #	DESCRIPTION	QTY	
			P-254-T	P-260-T
1	110-05491	Skid shoe (right side)	1	1
1	110-05501	Industrial skid shoe, carbon 450 steel (right side)	opt.	opt.
2	140-01861	Skid shoes lock	2	2
3	8112	Lock pin 1/4"	2	2
4	300-50400	Bolt 1" NC x 3" lg + nylon locknut	1	1
5	110-15291	Hoses support	1	1
6	300-40250	Bolt 1/2" NC x 1" lg + lock washer	8	8
7	110-05311	Adjustment plate for gear box + 4 nuts 1/2"	1	1
8	8251	Gear box T27D	1	1
9	300-44355	Bolt 5/8" NC x 2 1/4" lg + nylon locknut	2	2
10	110-37741	Upper hitch	1	1
11	150-05961	Pin category 2 (top link)	1	1
12	Std.	Lynch pin	1	1
13	140-10881	3-points side bar	2	2
14	8004	Pin Category 1 & 2	2	2
15	Std.	Hitch pin clip 5/32"	3	3
16	8202	P.T.O. shaft T60	1	1
16	9225-1	P.T.O. shaft T80	opt.	opt.
17	110-15051	Left lower hitch	1	1
18	110-15052	Right lower hitch	1	1
19	140-22021	Brace	1	1
20	300-34340	Bolt 5/16" NC x 2" lg + nylon locknut	1	1
21	110-03151	Skid shoe (left side)	1	1
21	110-04681	Industrial skid shoe, carbon 450 steel (left side)	opt.	opt.
22	190-02961	Chain no. 80 x 91 1/2" lg	1	1
23	150-01531	Bushing 5/16" d.i. x 7/8" d.e. x 3/4" lg (welded)	2	2
24	6466	Splined adaptor 1 1/4"-19 splines (welded)	1	1
25	110-10791	Auger drive shaft 17" lg overall	1	-
25	110-37731	Auger drive shaft 20 1/8" lg overall	-	1
26	110-07481	Sprocket #80 + shearplate	1	1
27	8009	Brass bushing 1 1/4" i.d. x 1 1/2" o.d. x 1 3/16" lg	2	2
28	Std.	Grease fitting 1/4" - 28 straight	9	9
29	UC207-20	Bearing 1 1/4"	5	5
30	FD207	Flange for 2 grease fitting	5	5
31	UCFD207-20	Bearing 1 1/4" + flange + 2 straight grease fitting	5	5
32	150-00381	Idler clevis pin	1	1
33	9287	Idler sprocket #80A11	2	2
34	336-48000	Nut 7/8" NC	2	2
35	110-01211	Idler	1	1
36	300-38250	Bolt 7/16" NC x 1" lg + nylon locknut	2	2
37	300-38325	Bolt 7/16" NC x 1 3/4" lg + nylon locknut	8	8
38	376-44000	Flat washer 5/8"	1	1
39	346-44500	Nylon locknut 5/8" NC thin	1	1
40	9473	Compression spring	1	1
41	110-01221	Threaded tube for idler adjustment	1	1
42	Std.	Roll pin 5/16" x 2" lg	2	2
43	110-10752	Chain guard	1	1
44	8374	Adjustable clamp fastener	1	1
45	110-01232	Threaded rod for idler adjustment + nut 7/16" NC	1	1

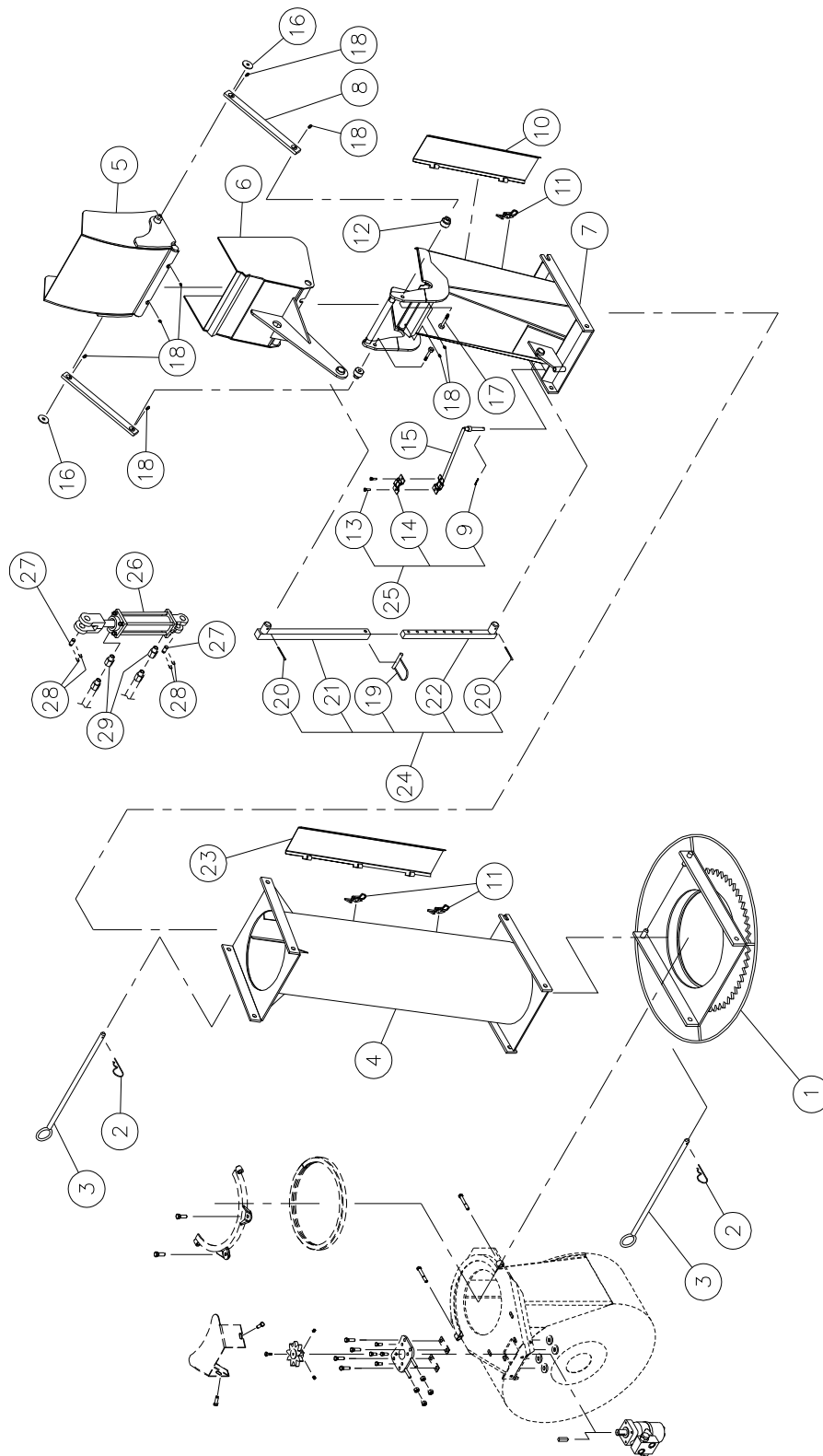
INDUSTRIAL SNOWBLOWER P-254-T P-260-T (cont'd)

REF.	PART #	DESCRIPTION	QTY	
			P-254-T	P-260-T
46	Std.	Grease fitting 1/4"-28 45 deg.	2	2
47	300-46385	Bolt 3/4" NC x 2 3/4" lg (welded) + nylon locknut	2	2
48	120-06742	Frame P-254-C	1	-
48	120-06712	Frame P-260-T	-	1
49	319-38280	Plow bolt 7/16" NC x 1 1/4" lg + nut & lock washer	10	10
50	2579	Lateral blade (left side)	1	1
51	130-11981	Inside guard (welded)	1	1
52	110-21371	Inside guard (bolted)	1	1
53	300-40310	Bolt 1/2"NC x 1 1/2" lg + nylon locknut & flat washer	2	2
54	110-01341	Retaining bracket	1	1
55	300-38400	Bolt 7/16"NC x 3" lg + nylon locknut.....	2	2
56	8030	Key 3/8" x 3/8" x 3 1/2" lg	1	1
57	110-01872	Impeller 26" dia. 4 blades	1	1
58	300-44310	Impeller cap screw 5/8" NC x 1 1/2" lg (ass. with «lock-tite 242) + lock washer	1	1
59	2583	Sprocket 80A26 x 1 1/4"	2	2
60	2544	Full flight spiked auger 16" dia. - 52 1/2" lg	2	-
60	110-37751	Full flight spiked auger 16" dia. - 58 3/4" lg	-	2
61	150-12741	Flat washer	4	4
62	140-10571	Back plate	3	3
63	2585	Lateral blade (right side)	1	1
64	140-08241	Reversible scraper blade 1/2" x 4" x 47 1/4" lg	1	-
64	140-08521	Carbon steel scraper blade 1/2" x 4" x 47 1/4" lg (not sharpened, reversible) . opt.	-	-
64	130-66951	Carbon steel scraper blade 1/2" x 6" x 47 1/4" lg (sharpened, not reversible) . opt.	-	-
64	140-21981	Reversible scraper blade 1/2" x 4" x 53 1/2" lg	-	1
64	140-22051	Carbon steel scraper blade 1/2" x 4" x 53 1/2" lg (not sharpened, reversible) .	-opt.	-
64	130-66961	Carbon steel scraper blade 1/2" x 6" x 53 1/2" lg (sharpened, not reversible) .	-opt.	-
65	319-38310	Plow bolt 7/16" NC x 1 1/2" lg + nut & rondelle de blocage	5	5
66	300-32220	Bolt 1/4" NC x 3/4" lg + lock washer	1	1
67	110-44331	Sprocket 9 tooth	1	1
68	300-38310	Bolt 7/16" NC x 1 1/2" lg + nylon locknut & flat washer	4	4
69	300-36250	Bolt 3/8" NC x 1" lg + lock washer	4	4
70	110-20811	Hydraulic motor support	1	1
71	MLH-315	Hydraulic motor	1	1
72	300-38280	Bolt 7/16" NC x 1 1/4" lg + nylon locknut & flat washer	2	2
73	130-08162	Guard	1	1
74	323-36160	Hexagonal socket set screw 3/8" NC X 3/8" lg	2	2
75	336-38000	Nut 7/16" NC	4	4
76	140-09571	Spacer 1/8" x 1" x 3 1/4" lg	2	2
77	110-12421	Hinger P.T.O. shroud	1	1
78	Std.	Roll pin 5/16" x 2"	2	2
79	300-38310	Bolt 7/16" NC x 1 1/2"lg + nylon locknut + flat washer 3/8"	20	20
80	300-38250	Bolt 7/16" NC x 1" lg + nylon locknut + flat washer 3/8"	3	3
81	300-40310	Bolt 1/2" NC x 1 1/2" lg + nylon locknut	2	2
82	300-44550	Bolt 5/8" NC x 5 1/2" lg + nylon locknut	2	2
83	300-44520	Bolt 5/8" NC x 5" lg + nylon locknut	2	2
84	300-44490	Bolt 5/8" NC x 4 1/2" lg + nylon locknut	2	2
85	A-5517	Storage support	1	1
86	8220	Storage support pin	1	1



INDUSTRIAL CHUTE PCG-7486

170-03413R2

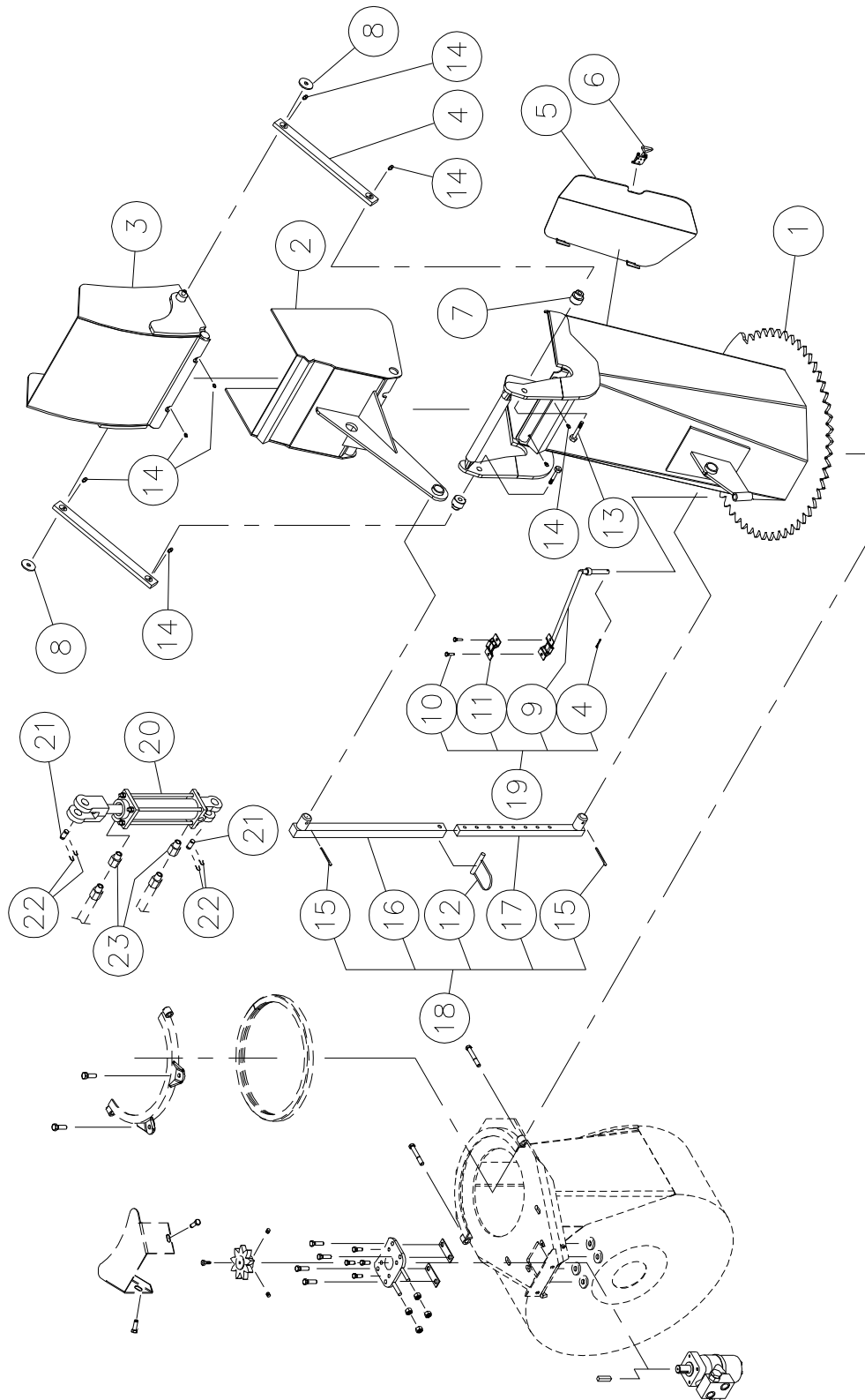


INDUSTRIAL CHUTE PCG-7486

REF.	PART #	DESCRIPTION	QTY
1	110-04441	Chute adaptor with quick attach	1
2	Std.	Hitch pin clip 5/32"	2
3	8200	Pin for quick attach (adaptor & extension)	2
4	110-22961	Extension 48" PRP-7486	opt.
4	110-23051	Extension 24" PRP-7486-2	opt.
5	110-22511	Upper deflector	1
6	110-22521	Lower deflector	1
7	110-22563	Chute base	1
8	140-14041	Connecting rod	2
9	Std.	Cotter pin 1/8" x 1" lg.	1
10	110-22893	Access panel.....	1
11	8376	Adjustable clamp fastener (welded)	1
12	150-05311	Spacer for connectiong rod	2
13	300-32250	Bolt 1/4" NC x 1" lg. + nylon locknut	2
14	140-13071	Hoses mounting plate	1
15	110-01112	Mounting support plate.....	1
16	378-36500	Washer	2
17	300-40380	Bolt 1/2" NC x 2 3/4" lg + nulon locknut & washer	2
18	Std.	Grease fitting 1/4"-28 straight	8
19	8112	Lock pin 1/4" (1)	opt.
20	Std.	Cotter pin 5/32" X 2" lg (2)	opt.
21	8146	Chute adjusting tube (1)	opt.
22	8145	Chute adjusting rod (1)	opt.
23	110-23022	Access panel for extension PRP-7486	opt.
23	110-23062	Access panel for extension PRP-7486-2	opt.
24	T-74104	Manual telescopic tube	opt.
25	TSB-74104	Hose support for deflector cylinder	opt.
26	25TR08	Cylinder.....	opt.
27	6004	Clevis pin 1" x 3 1/8" lg (2)	opt.
28	Std.	Hairpin cotter 7/8" (4)	opt.
29	RSP-1/16-08 NPT	Kit of 2 unidirectional restrictors 1/2" NPT	opt.
29	RSP-1/16-06 NPT	Kit of 2 unidirectional restrictors 3/8" NPT	opt.

SEMI-INDUSTRIAL CHUTE PSIG-7486

170-03395

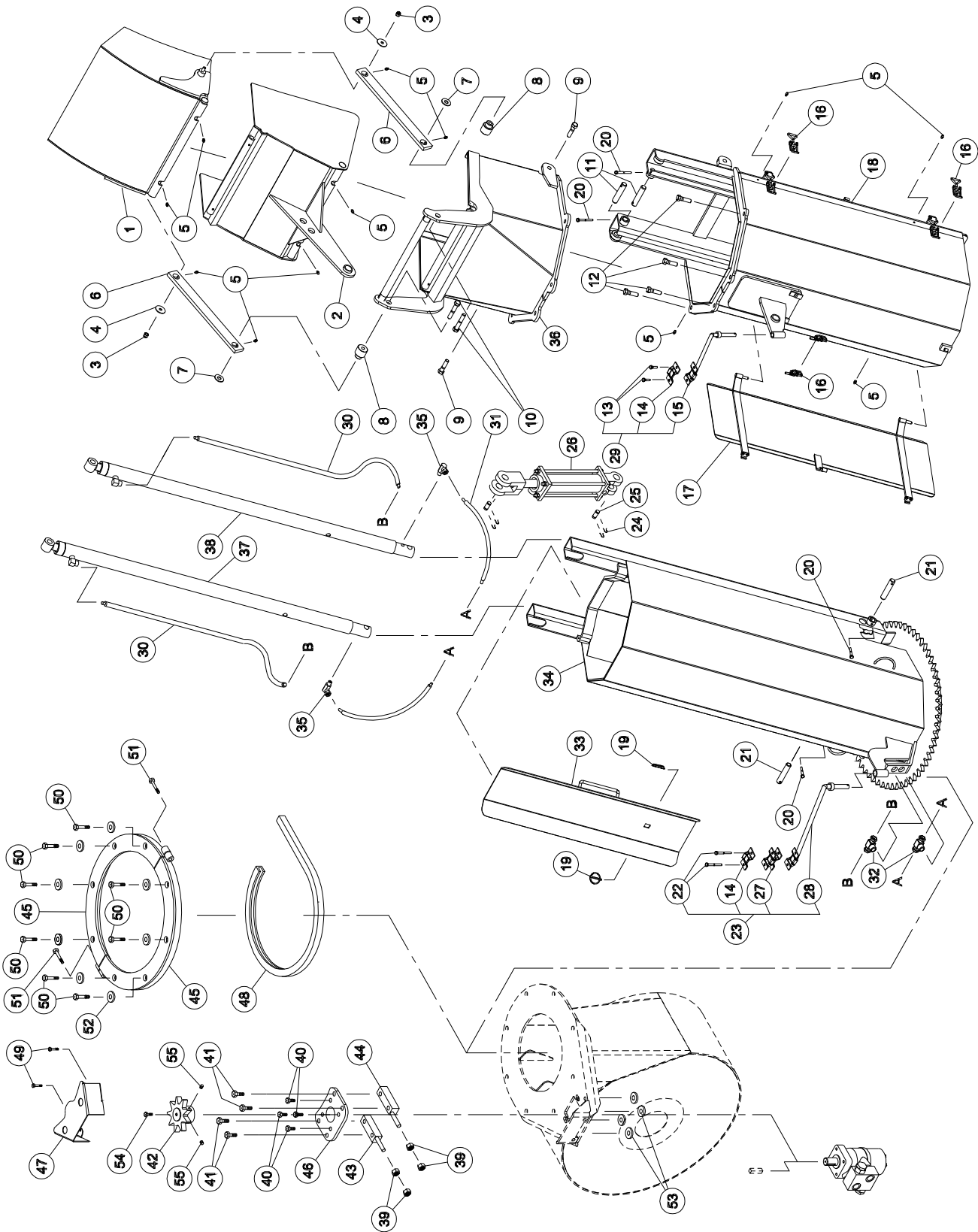


SEMI-INDUSTRIAL CHUTE PSIG-7486

REF.	PART #	DESCRIPTION	QTY
1	110-45361	Chute base	1
2	110-22521	Lower chute deflector	1
3	110-22511	Upper chute deflector	1
4	140-14041	Connecting rod	2
5	110-45611	Access panel.....	1
6	8376	Adjustable clamp fastener (welded)	1
7	130-05311	Spacer for connecting rod	2
8	378-36500	Washer	2
9	110-01112	Hoses support	1
10	300-32250	Bolt 1/4" NC x 1" lg + nylon locknut	2
11	140-13071	Hose hold down	1
12	8112	Lock pin 1/4" (1)	opt.
13	300-40380	Bolt 1/2" NC x 2 3/4" lg + nylon lock nut & washer	2
14	Std.	Grease firtting 1/4"-28 straight	8
15	Std.	Cotter pin 5/32" x 2" lg (2)	opt.
16	8146	Chute adjusting tube (1)	opt.
17	8145	Chute adjusting rod (1)	opt.
18	T-74104	Manual telescopic tube	opt.
19	TSB-74104	Hose support for deflector cylinder	opt.
20	25TR08	Cylinder.....	opt.
21	6004	Clevis pin 1" x 3 1/8" lg (2)	opt.
22	Std.	Hairpin cotter 7/8" (4)	opt.
23	RSP-1/16-08 NPT	Kit of 2 unidirectional restrictors 1/2" NPT	opt.
23	RSP-1/16-06 NPT	Kit of 2 unidirectional restrictors 3/8" NPT	opt.

INDUSTRIAL CHUTE PCT-7486-HDB

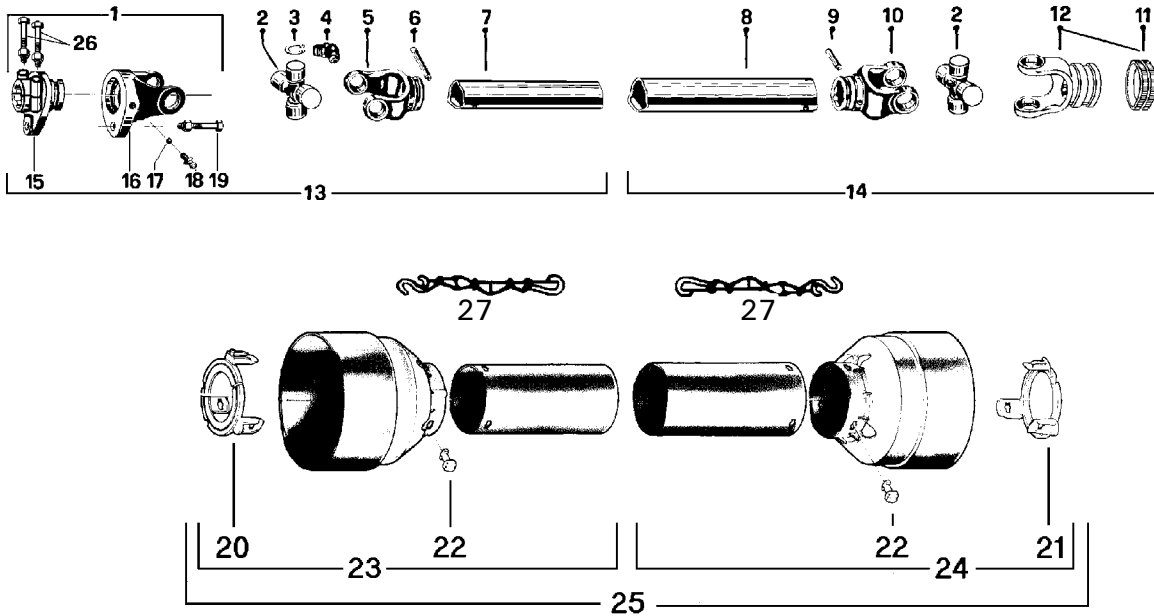
170-05213



INDUSTRIAL CHUTE PCT-7486-HDB

REF.	PART #	DESCRIPTION	QTY
1	110-41801	Upper chute deflector	1
2	110-41781	Lower chute deflector	1
3	346-36000	Nylon locknut 3/8"	2
4	378-36500	RWasher 3/8" i.d. x 1 1/2" o.d.	2
5	Std.	Grease fitting 1/4"-28 straight	12
6	140-13931	Connecting rod	2
7	378-37500	Washer 1/2" i.d. x 1 3/8" o.d.	2
8	150-05311	Spacer for connecting rod	2
9	300-40340	Bolt 1/2" NC x 2" lg + nylon locknut	2
10	300-40400	Bolt 1/2" NC x 3" lg + nylon locknut	2
11	150-13181	Pin for cylinder	2
12	300-40325	Bolt 1/2" NC x 1 3/4" lg + nylon locknut	4
13	300-32250	Bolt 1/4" NC x 1" lg + nylon locknut	2
14	140-13071	Hoses mounting plate	2
15	110-01122	Mounting support plate for upper extension	1
16	8376	Clamp fastener	3
17	110-41731	Access door for upper extension	1
18	110-41721	Upper extension	1
19	Std.	Lynch pin 3/16" x 1 1/4"	2
20	300-32325	Bolt 1/4" NC x 1 3/4" lg + nylon locknut	4
21	150-12701	Pin for cylinder	2
22	300-32370	Bolt 1/4" NC x 2 1/2" lg + nylon locknut	2
23	TSB-74104-IND	Hoss support on chute base	1
24	Std.	Hairpin cotter 7/8" (4)	1
25	6004	Clevis pin 1" x 3 1/8" lg (2)	opt.
26	25TR08	Cylinder	1
27	110-20611	Hoses mounting plate	1
28	110-04982	Mounting support plate for lower extension	1
29	TSB-74104	Hoses support for deflector cylinder	1
30	190-08231	Hose 1/4" SAE 100R2AT - 500 PSI x 63 1/2" lg	2
31	190-08241	Hose 1/4" SAE 100R2AT - 500 PSI x 20 1/2" lg	2
32	9456-06-06	"T" female 3/8" NPT swivel, female 3/8" NPT	2
33	110-41701	Access door for lower extension	1
34	110-41712	Lower extension	1
35	9406-04-04	Elbow 90 degrees 1/4" NPT swivel	2
36	110-41771	Hexagonal extension	1
37	15 PC 32G	Cylinder 1 1/2" x 32" stroke	1
38	15 PC 32D	Cylinder 1 1/2" x 32" stroke	1
39	336-38000	Nut 7/16" NC	4
40	300-36250	Bolt 3/8" NC x 1" lg + lock washer	4
41	300-38385	Bolt 7/16" NC x 2 3/4" lg + lock washer	4
42	110-36731	Sprocket 9 tooth	1
43	110-38322	Left spacer	1
44	110-38321	Right spacer	1
45	110-48041	Retaining bracket	2
46	130-08152	"Orbit" motor support	1
47	130-14282	Guard	1
48	190-13631	Antifriction ring for chute	1
49	300-36280	Bolt 3/8" NC x 1 1/4" + nylon locknut	2
50	300-40415	Bolt 1/2" NC x 3 1/4" + nylon locknut	8
51	300-38400	Bolt 7/16" NC x 3" + nylon locknut	2
52	150-12731	Flat washer 1/2" heavy-duty	16
53	150-12741	Flat washer 7/16" heavy-duty	4
54	300-32220	Bolt 1/4" NC x 3/4" lg + lock asher	1
55	323-36160	Hexagonal socket set screw 3/8" NC x 3/8" lg	2

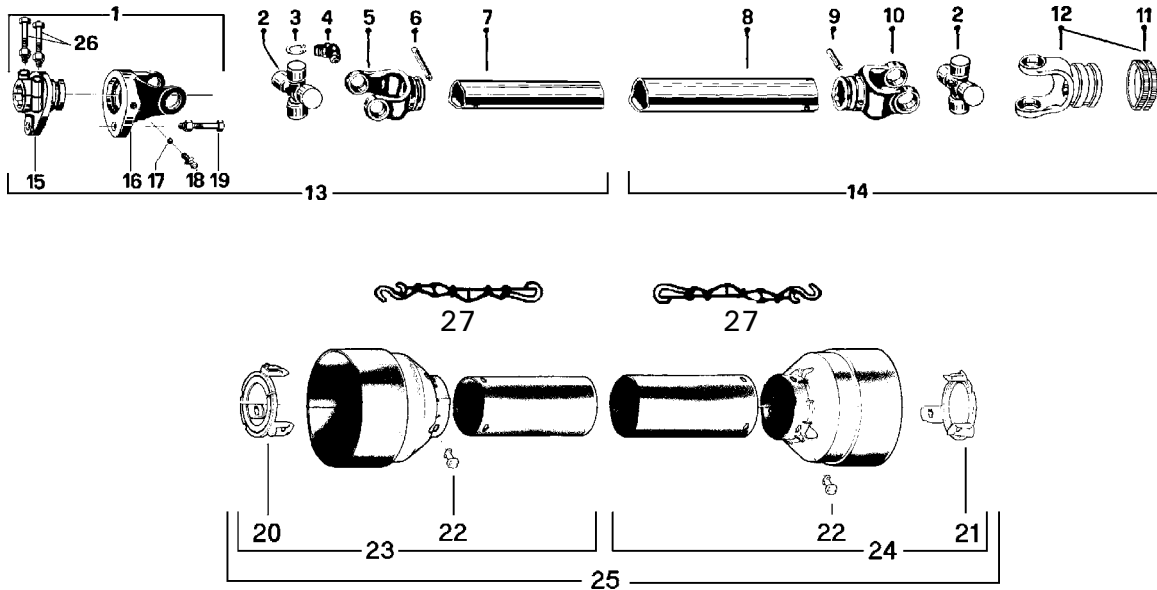
P.T.O. SHAFT # 8202 & 8202-1 (T60)



REF.	PART #	DESCRIPTION	QTY	
			8202	8202-1
1	8237	Safety shear yoke (2 bolts)	1	1
2	8238	U joint + 4 retaining rings + 1 grease fitting	2	2
3	8061	Retaining ring	8	8
4	8110	Grease fitting	2	2
5	8239	Yoke for inner tube	1	1
6	8075	Stopper for inner tube	1	1
7	8077	Inner tube	1	1
8	9212	Outer tube	1	1
9	9210-E	Stopper for outer tube	1	1
10	8240	Yoke for outer tube	1	1
11	8363	Collar kit	1	1
12	8250	Yoke with hole 1 3/8"-6 splines + yoke stopper (#11 included)	1	-
12	8250-1	Yoke with hole 1 3/8"-21 splines + yoke stopper (#11 included)	-	1
13	8241	P.T.O. section, SBI 1 3/8"-6, inner part, with protector	1	1
14	8242	P.T.O. section, QD 1 3/8"-6, outer part, with protector	1	-
14	8242-1	P.T.O. section, QD 1 3/8"-21, outer part, with protector	-	1
15	8243	Adaptor (2 bolts)	1	1
16	8244	Yoke and shearplate	1	1
17	9205	Ball	17	17
18	8071	Grease fitting	1	1
19	8218	Safety shear bolt M10 x 60mm	1	1
20	8245	Bearing ring for inner guard tube	1	1
21	8246	Bearing ring for outer guard tube	1	1
22	8109	Stopper	6	6
23	8247	Inner shield	1	1
24	8248	Outer shield	1	1
25	8249	Complete shield	1	1
26	8222	Bolt M12 x 70mm + lock nut	2	2
27	8308	Safety chain	2	2

8

P.T.O. SHAFT # 9225-1 (T80)

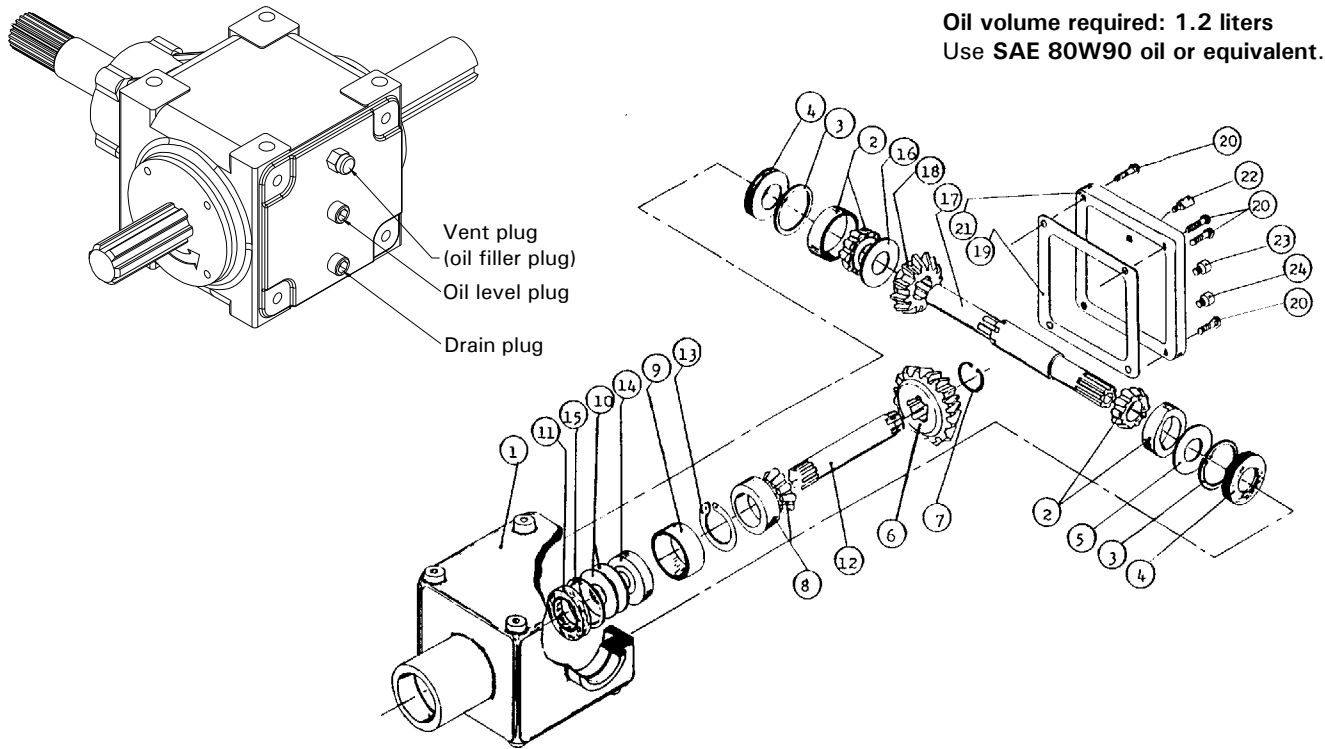


REF.	PART #	DESCRIPTION	QTY
1	9464-2	Safety shear yoke M10 (2 bolts) 1 3/8" - 6 splines	1
2	9208	U-joint + 4 retaining rings + 1 grease fitting	2
3	9454	Retaining ring	8
4	8110	Grease fitting	2
5	9214	Yoke for inner tube	1
6	8075	Stopper for inner tube	1
7	9212	Inner tube	1
8	9211	Outer tube	1
9	9210-E	Stopper for outer tube	1
10	9209	Yoke for outer tube	1
11	8363	Collar kit	2
12	9455	Yoke with hole 1 3/8"-6 splines + yoke stopper (#11 included)	1
13	9456-1	P.T.O. section, SBI 1 3/8"-6, inner part, with protector	1
14	9457	P.T.O. section, QD 1 3/8"-6, outer part, with protector	1
15	9458-2	Adaptor 1 3/8"-6 splines (2 bolts) (hole 10 mm)	1
16	9572	Yoke and shearplate (hole 10 mm)	1
17	9205	Ball	17
18	8071	Grease fitting	1
19	8218	Safety shear bolt M10 x 60 mm	1
20	9459	Bearing ring for inner guard tube	1
21	9460	Bearing ring for outer guard tube	1
22	8109	Stopper	6
23	9221	Inner shield	1
24	9220	Outer shield	1
25	9222	Complete shield	1
26	8222	Bolt M12 x 70 mm + lock nut	2
27	8308	Safety chain	2

8

GEAR BOX # 8251 (T27D)

170-05581

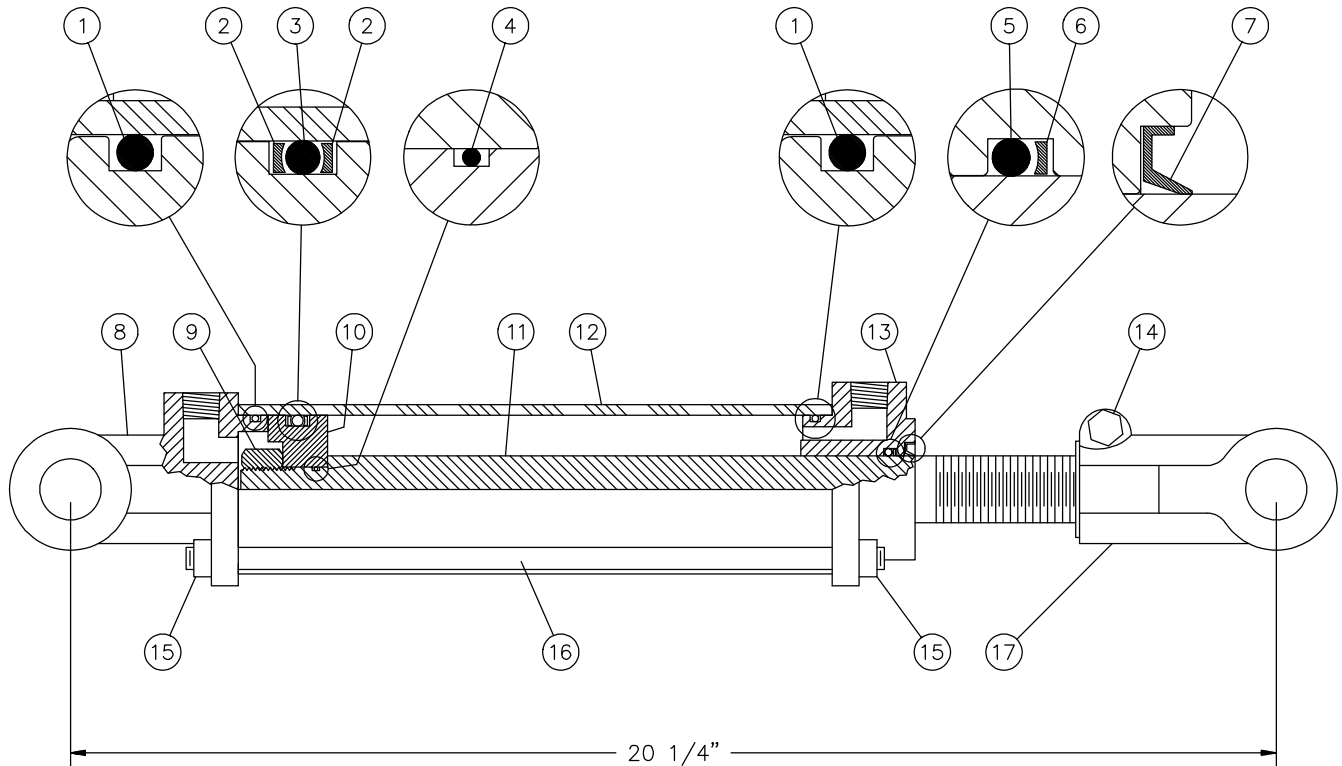


REF.	PART #	DESCRIPTION	QTY
1	8043	Casing	1
2	30208-A	Roller bearing	2
3	8045	Inside circlip 80mm	2
4	8046	Oil seal 40 x 80 x 12mm	2
5	8047	Adjusting washer	1
6	8048	Gear Z18	1
7	8049	Outside circlip 40mm	1
8	30207-A	Roller bearing	1
9	8051	Spacer ring	1
10	8052	Adjusting washer	2
11	8053	Oil seal 35 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

8

CYLINDER 25TR08

15050

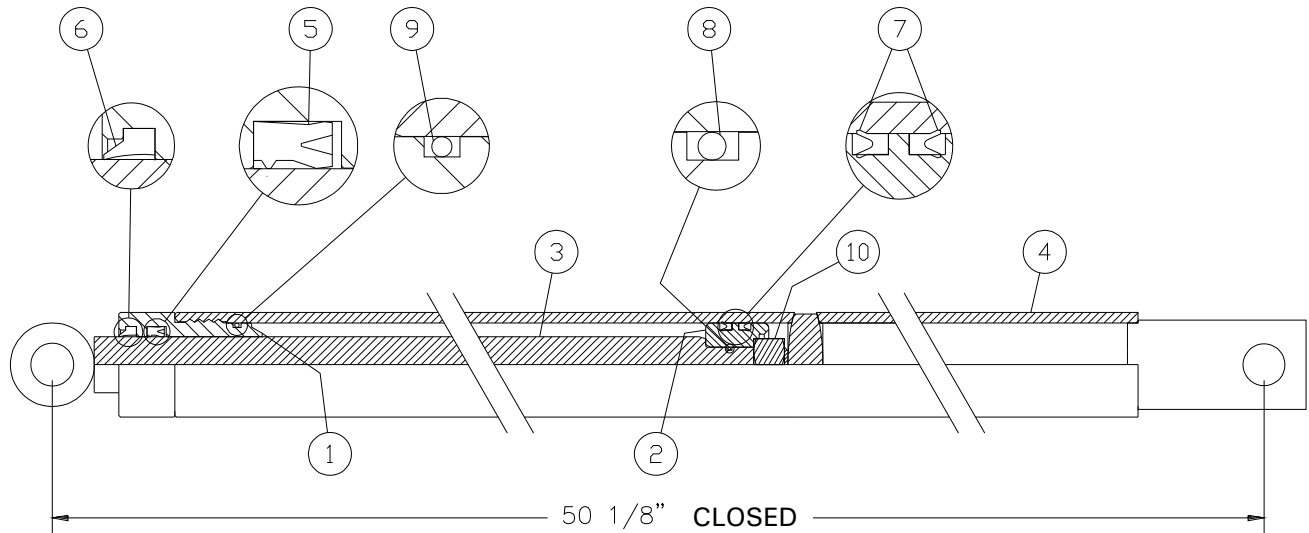


REF.	PART #	DESCRIPTION	QTY
1	See #RK25TR	O-ring 1/8" x 2 1/4" x 2 1/2"	2
2	See #RK25TR	Back-up 2 1/2" o.d. x 3/16 ø	2
3	See #RK25TR	O-ring 3/16" x 2 1/8" x 2 1/2"	1
4	See #RK25TR	O-ring 1/16" x 5/8" x 3/4"	1
5	See #RK25TR	O-ring 1/8" x 1 1/8" x 1 3/8"	1
6	See #RK25TR	Back-up 1 3/8" o.d. x 1/8" ø	1
7	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	492028	Piston rod 1 1/8"	1
12	491668	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 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

EXTENSION CYLINDER 15PC32

170-04361



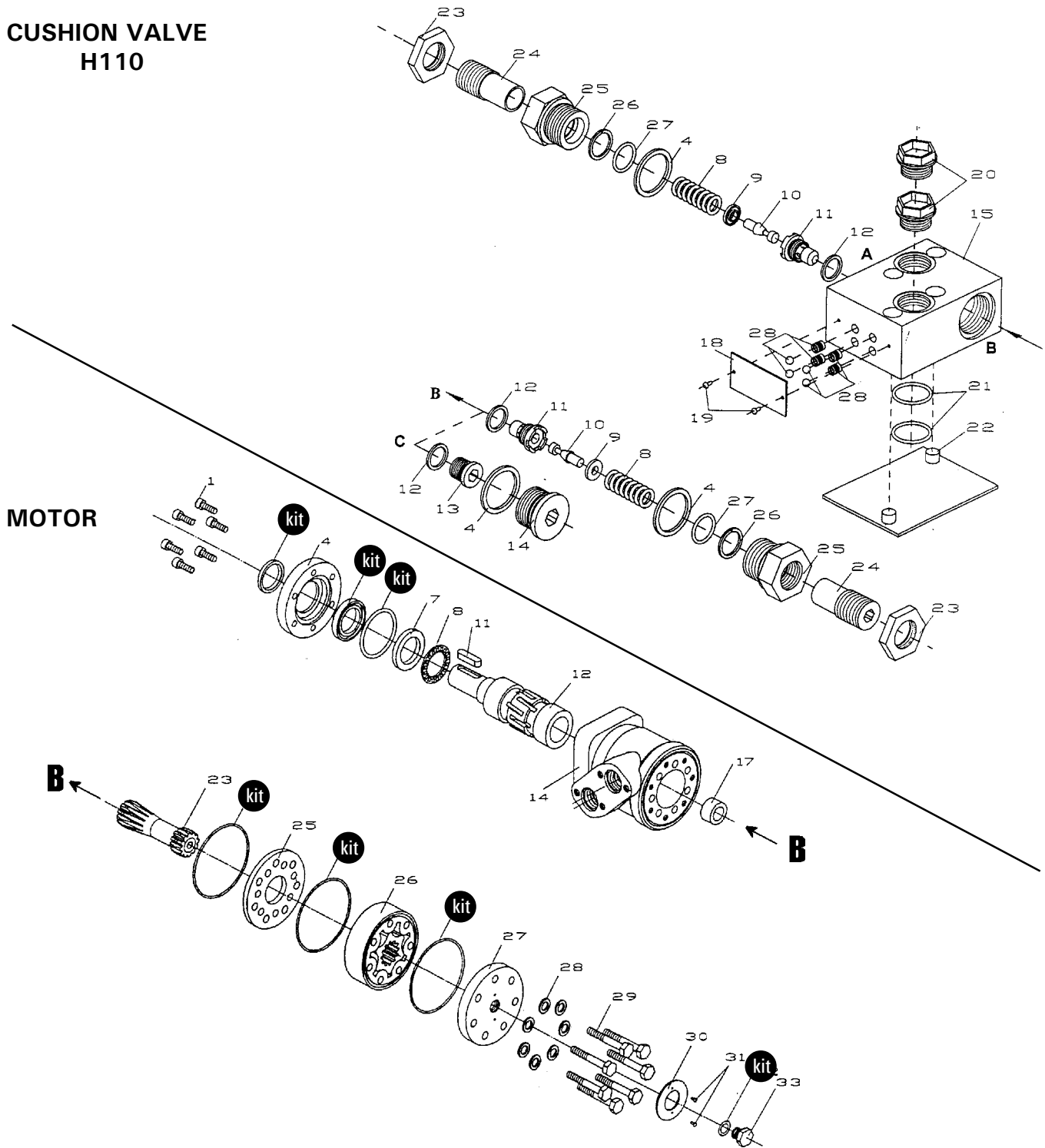
REF.	PART #	DESCRIPTION	QTY	
			15PC32D	15PC32G
1	150-06561	Head 1 1/2" dia.	1	1
2	150-06571	Piston 1 1/2" dia.	1	1
3	110-26561	Piston rod 1" dia.	1	1
4	110-29631	Cylinder body 1 1/2" dia. (15PC32D)	1	-
4	110-29632	Cylinder body 1 1/2" dia. (15PC32G)	-	1
5	DRTU-18-1.00-31	«U» seal 3/16" x 1" x 1 3/8"	1	1
6	ST-100	Wiper 3/16" x 1" x 1 3/8"	1	1
7	DSU12-1.25-18	«U» seal 3/16" x 1 1/4" x 1 1/2"	2	2
8	OR-014	O-ring 1/16" x 1/2" x 5/8"	1	1
9	OR-125	O-ring 3/32" x 1 5/16" x 1 1/2"	1	1
10	336-44000	Nut 5/8" NC	1	1
NI*	9689	Repair kit (includes # 5, 6, 7, 8 & 9)	1	1

*NI = NOT ILLUSTRATED

8

HYDRAULIC MOTOR # MLH-315

CUSHION VALVE H110










8






REF.	PART #	DESCRIPTION	QTY
kit	8368	Set of seals.....	1
11	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.	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 and motors are covered by the manufacturer of these items.

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

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, Haut du Lac Sud (route 159),
Saint-Tite, Quebec, Canada, G0X 3H0
Tel.: (418) 365-7551, Fax: (418) 365-7954
www.pronovost.qc.ca