





MANUAL

O P E R A T O R ' S

TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Frontier dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Owner's/Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the Warranty Registration located on the Frontier website.

TO THE OWNER:

Read this manual before operating your Frontier equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all the adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your Frontier dealer.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Frontier dealer has trained mechanics, genuine Frontier service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Frontier service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model:

Date of Purchase:_____

Serial Number: (see Safety Decal section for location)

Provide this information to your dealer to obtain correct repair parts.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING** and **DANGER** are used in conjunction with the Safety-Alert Symbol, (a triangle with an exclamation mark), to indicate the degree of hazard for items of personal safety.



This Safety-Alert Symbol indicates a hazard and means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

IMPORTANT NOTE

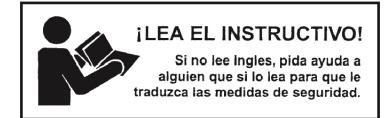
Indicates that failure to observe can cause damage to equipment.

Indicates helpful information.

Introduction ii

TABLE OF CONTENTS

INTRODUCTION / GENERAL INFORMATIONii
SPECIFICATIONS
SAFETY DECALS
SAFETY RULES
DEALER INSTRUCTIONS
OPERATION
OWNER SERVICE
PARTS CATALOG
BOLT SIZE AND BOLT TORQUE CHART
NOTES



GENERAL INFORMATION

The purpose of this manual is to assist you in operating and maintaining your Land Plane. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance.

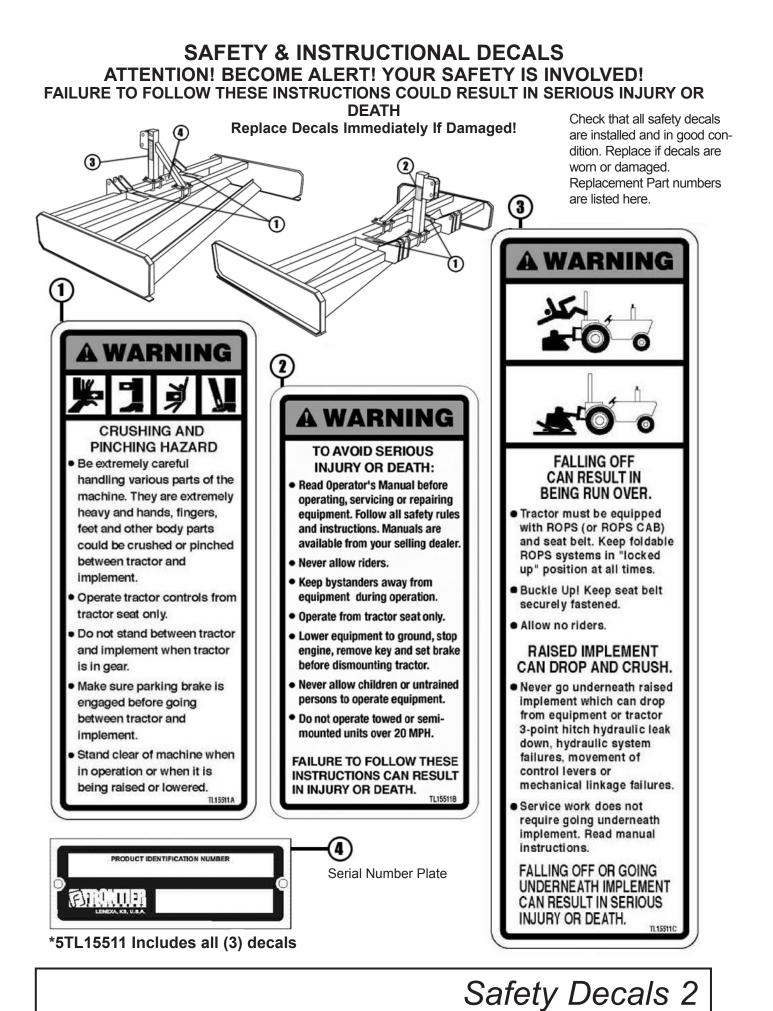
These instructions have been compiled from field experience and engineering data. Some information may be general in nature, due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing. However, due to possible inline production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.

Throughout this manual, references are made to right and left direction. These are determined by standing behind the tractor facing the direction of forward travel.

SPECIFICATIONS

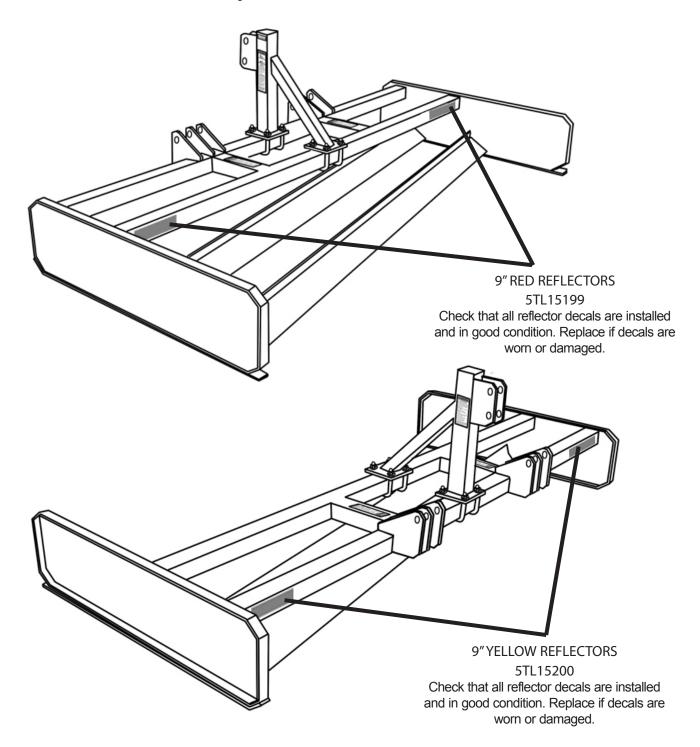
	LP1207	LP1208	LP1210
Dimensions			
Working width in.	84	96	120
Weight			
Operating lbs	998	1,110	1,254
Shipping lbs	1,048	1,160	1,304
Implement Code	57.6	64.1	72.4
Tractor compatibility			
PTO Horsepower hp	35-75	50-95	50-105
Hitch			
3 pt.Compatibility	Cat. 1 & 2	Cat. 1 & 2	Cat. 2
iMatch Compatible (Cat. 1)	Yes	Yes	NA
Quick Coupler (Cat. 2)	Yes	Yes	Yes
Cutting Edge			
Quantity	2	2	2
Size in.	.5 x 6	.5 x 6	.5 x 6
Reversible	Yes	Yes	Yes
Replaceable	Yes	Yes	Yes
Skid Shoes			
Configuration	Steel - Adjustable	Steel - Adjustable	Steel - Adjustable
Height Adjustment Range in.	1.5	1.5	1.5
Thickness in.	0.375	0.375	0.375
Scarifier Shanks			
Available	Yes	Yes	Yes
Qty	4	6	8
Adjustable	Yes - Notched 3 Position	Yes - Notched 3 Position	Yes - Notched 3 Position
Points	Replaceable	Replaceable	Replaceable
Tubular scarifier beam size			
in.	4 x 4 (.375)	4 x 4 (.375)	4 x 4 (.375)
Shipping			
Configuration	1 unit	1 unit	1 unit
Set-up time			
Labor hours	0.25	0.25	0.25
Warranty			
Time Period (Machine)	1 Year	1 Year	1 Year



SAFETY REFLECTOR DECALS ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR

DEATH Replace Decals Immediately If Damaged!

Only on LP1208 and LP1210



3 Safety Decals



SAFETY RULES ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator."We ask you to be that kind of operator.

TRAINING

• Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals are available from selling dealer.) Failure to follow instructions or safety rules can result in serious injury or death.

• If you do not understand any part of this manual and need assistance, see your dealer.

• Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.

• Never allow children or untrained persons to operate equipment.

• Train all new personnel and review instruction's frequently with existing workers. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.

PREPARATION

• Always wear relatively tight and belted clothing to avoid getting caught in moving parts.

Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

• Make sure attachment is properly secured, adjusted, and in good operating condition.

• Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in "locked up" position at all times.

• A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader, front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

TRANSPORTATION

• Always comply with all state and local laws governing highway safety and lighting and marking requirements.

- Never allow riders on power unit or attachment.
- Do not operate or transport on steep slopes.
- Use extreme care and reduce ground speed on slopes and rough terrain.

• Do not operate or transport equipment while under the influence of alcohol or drugs. Consult your doctor about operating this machine while taking prescription medications.

OPERATION

• Never go underneath equipment (lowered to the ground or raised) unless it is properly

SAFETY RULES



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

OPERATION (cont'd)

blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause

equipment to drop or rotate unexpectedly and cause severe injury or death.

• Always comply with all state and local laws governing highway safety and lighting and marking requirements.

- Operate only in daylight or good artificial light.
- Keep bystanders away from equipment.

• Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.

• Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in "locked up" position at all times.

• Never allow riders on power unit or attachment.

• Always sit in power unit seat when operating controls or starting engine. Securely fasten seat belt, place transmission in neutral, engage brake, and ensure all other controls are disengaged before starting power unit engine.

• Look down and to the rear and make sure area is clear before operating in reverse.

• Use extreme care when working close to fences, ditches, other obstructions, or on hillsides.

- Do not operate or transport on steep slopes.
- Do not stop, start, or change directions suddenly on slopes.

Always operate down slopes; never across the face.

• Use extreme care and reduce ground speed on slopes and rough terrain.

• Keep alert and watch the front as well as the rear when operating.

• When making gang adjustments, be careful to keep hands and feet clear of sliding parts and possible pinch points.

• Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.

• Before leaving operator's seat, lower lift arms and put attachment on the ground. Engage brake, stop engine, remove key, and remove seat belt.

MAINTENANCE

• Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

• Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.

• When performing maintenance or repairs make sure the equipment is in the lowered position and properly blacked and secured to prevent rolling.





MAINTENANCE(cont'd)

Failure to do so can cause serious injury or death.

• Make sure attachment is properly secured, adjusted, and in good operating condition.

• Before leaving operator's seat, lower lift arms and put attachment on the ground. Engage brake, stop engine, remove key, and remove seat belt.

• Never perform service or maintenance with engine running.

• Keep all persons away from operator control area while performing adjustments, service, or maintenance.

• Tighten all bolts, nuts, and screws to torque

chart specifications. Check that the equipment is properly attached to the power source and that the equipment is in a safe condition before putting unit into service.

STORAGE

• Block equipment securely for storage.

• Keep children and bystanders away from storage area.



DEALER INSTRUCTIONS

Pre-Assembly

Top Link Mast Assembly

Reference Figure 6 (Pg. 13).

The top link mast should be centered evenly between the two inside hitch ears. Once centered, insert the four 5TL11971 u-bolts and fasten with the eight 5TLT31 lock washers and 5TLT27 lock nuts.

Installing Scarifier Shanks in the Land Plane

Remove scarifier shanks and shank keys from carton inside land plane.

Block up machine by placing two 4" x 4" blocks under each side frame of the land plane.

Insert the scarifier shank in the shank hole from the bottom up.

Note: The scarifier shank has four notches for adjustments. The bottom notch is for transport. The top three notches are for ground penetration to be determined by the user.

After inserting scarifier shank, place shank key on the rear side of shank. This will prevent the shank from working loose.

Dealer Checklist

(Dealer's Responsibility)

Inspect the equipment thoroughly after assembly to be certain it is set up properly before delivering it to the customer. The following check list is a reminder of points to inspect.

Check off each item if it is found satisfactory or after proper adjustment is made.

_____ Check that all safety decals are installed and in good condition. Replace if damaged.

Check all bolts to be sure they are tight.

____ Check that all cotter pins and safety pins are properly installed.

_____It is important for the dealer to visually check and make sure all parts are in tact prior to delivery to customer.

_____ Show customer the safe, proper procedures to be used when mounting, dismounting, and storing equipment.

For mounted units, add wheel weights, ballast in front tires, and/or front tractor weight to enhance front end stability. A minimum 20% of tractor and equipment gross weight must be on front tractor wheels. When adding weight to attain 20% of tractor and equipment weight on front tractor wheels, you must not exceed the ROPS weight certification. Weigh the tractor and equipment. Do not estimate!

_____ Show customer how to make adjust-ments.

Present Owner's/Operator's Manual and request that customer and all operators read it before operating equipment. Point out the manual safety rules, explain their meanings and emphasize the increased safety hazards that exist when safety rules are not followed.

Point out the safety decals. Explain their meaning and the need to keep them in place and in good condition. Emphasize the increased safety hazards when instructions are not followed.

Explain to customer the potential crushing hazards of going underneath raised equipment. Instruct customer that service work does not require going underneath unit and never to do so.

7 Dealer Instructions

Operation

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prvention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

The operator is responsible for the safe operation of this equipment. The operator must be properly trained.Operators should be familiar with the equipment, the tractor, and all safety practices before starting operation. Read the safety rules and safety decals on pages 2-6.

Owner should check and tighten all hardware after the first hour of operation. The break in stage of your new land plane can cause minimal loosening of hardware. Please see Bolt Torque Chart (page 15) for proper torque information.

• Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS systems in "locked up" position at all times.

• Never allow children or untrained persons to operate equipment.

• Keep bystanders away from equipment.

• NEVER GO UNDERNEATH EQUIPMENT. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.

- Service work does not require going underneath.
- Read Manual for service instructions or have service performed by a qualified dealer.

• Stop tractor and implement immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.

• Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.

Owner/Operator Pre-Operation Checklist (Owner's/Operator's Responsibility)

_____ Review and follow all safety rules and safety decal instructions on page 2 through page 6.

____ Check that equipment is properly and securely attached to tractor.

_____ Check that all safety decals are installed and in good condition. Replace if damaged.

_____ Check that all hardware is properly installed and secured.

___ Do not allow riders.

_____ Make sure tractor ROPS or ROPS CAB and seat belt are in good condition. Keep seat belt securely fastened during operation.



Connecting Land Plane to the Tractor

The LP1207 & LP1208 are compatible with tractors equipped with Category 1 or Category 2, 3-point hitch systems that use side-swing type lower lift arms. These Land Planes will fit Category 1, and Category 2 Quick Hitch systems.

The LP1210 is compatible with Category 2 only. This Land Plane will also fit tractors equipped with Category 2 Quick Hitch systems.

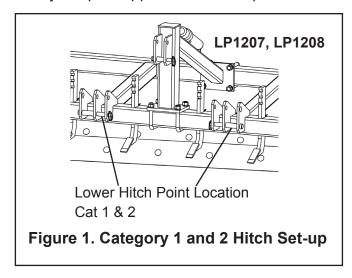
When attaching Land Plane using a Category 1 or 2 Quick Hitch, lower hitch bushings (part # 5TL15638) must be purchased separately. Top link bushings are standard on all units.

Category 1 Standard (Figure 1) LP1207, LP1208

1. Attach the tractor's lower lift arms to the Land Plane through the lower, inner set of holes.

2. Use the hitch pin supplied with your Land Plane and re-install the lynch pins.

3. Attach the tractor's top link to the Land Plane's mast using the heavy-duty top link pin and lynch pin supplied with the top link.

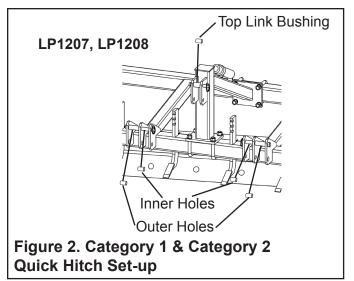


Category 2 Standard (Figure 1) LP1207, LP1208

Operation

9

1. Use Category 1 Standard instructions except use lower, outter set of holes.

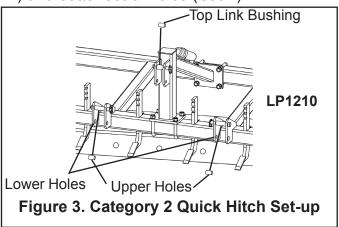


Category 1 & Category 2 Quick Hitch (Figure 2) LP1207, LP1208

1. Slide lower sleeve (sold separately part #5TL15638) over the mounting pin supplied with Land Plane. Re-install lynch pins.

2. Slide upper sleeve over the heavy-duty top link pin supplied with top link. Reinstall lynch pin.

3. Connect the tractor's Quick Hitch to the Land Plane through the upper, inner set of holes (Cat 1) and outter set of holes (Cat 2).



Category 2 Quick Hitch (Figure 3) LP1210

1. Slide lower sleeve (sold seperatly part #5TL15638) over the mounting pin supplied with Land Plane. Re-install lynch pins.

2. Slide upper sleeve over the heavy-duty top link pin supplied with top link. Reinstall lynch pin.

3. Connect the tractor's Quick Hitch to the Land Plane through the upper set of holes.

Connecting Land Plane to the Tractor (cont'd.)

Category 2 Standard (Page 9, Figure 3) LP1210

1. Use Category 2 Standard instructions except use lower set of holes.

Removing Scarifier Shanks

Scarifier shanks have three operating positions in the land plane. They may be removed if scarifying action is not needed.

1. Block up machine by placing two 4" x 4" (10 x 10 cm) blocks under each side-frame of the land plane.

2. Lower the land plane to rest securely on the blocks.

NOTE: Do not block the machine any higher than necessary to remove the shanks or cutting edge.

3. Remove shank key for disengagement of shank(see Figure 4).

4. Remove shank from bottom of tube (see Figure 4).

Replacing Cutting Edge

To service the land plane when attached to the tractor, it must be blocked up off the ground.

1. Place two 4" x 4" (10 x 10 cm) blocks under each side-frame of the land plane.

2. Lower the land plane to rest securely on the blocks.

NOTE: Do not block the machine any higher than necessary to remove the shanks or cutting edge.

3. Refer to parts drawing, page 13. Remove the hex nuts (12) and plow bolts (14) from land plane. Turn cutting edge over and use new edge, or replace it if both edges have been used.

4. Attach cutting edge to land plane and secure with plow bolts and hex nuts previously removed.

5. Torque plow bolts to 170 lbs-ft. See specifications given in Bolt Torque Chart, page 15.

Operation 10

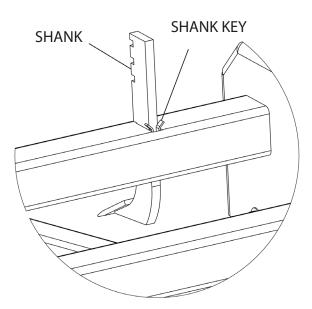


Figure 4. Scarifier Shanks Adjustment

Operation (cont'd.)

Adjusting Skid Shoe Weldment

The adjustable skid shoe weldments (part #5TL15786, page 13, Figure 6, Ref. 3) can be adjusted up or down for maximum or no cutting edge penetration. To adjust skid shoe weldments, block up machine by placing two 4" x 4" blocks under each end of the cutting edges on the Land Plane. Loosen the six bolts holding the skid shoes in place (see picture below). Set to desired depth and retighten bolts according to torque chart on page 15.

**The skid shoe weldments (part #5TL15786) on the Land Plane are reversible. This allows the user to change sides when the skid shoe (part #5TL15729) becomes worn. Under normal usage the front side of the skid shoe will wear more than the rear. By reversing the skid plate weldments, this allows for longer life of the skid shoe before having to replace it.



INCORRECT To much pressure on the rear of the skid shoes. Adjust top link in.

CORRECT

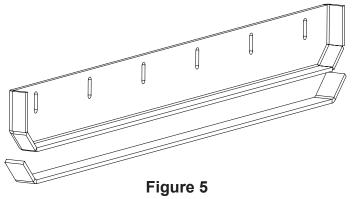
Pressure is evenly distributed on the front and rear of skid shoes.

INCORRECT

To much pressure on the front of the skid shoes. Adjust top link out.

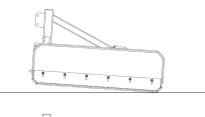
Replacing the Skid Shoes Figure 5

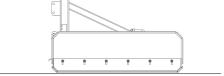
The skid shoes (part #5TL15729) on the Land Plane should be replaced once they are worn down to the skid shoe weldment (part #5TL15786). They can be removed by grinding the welds holding it to the skid shoe weldment. The replacement shoes should then be positioned on the bottom of the skid shoe weldment and welded.

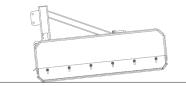


Adjusting Top Link

Adjust the three point top link so that both blades touch the ground at the same time. In most cases this will give the desired results. To adjust the front blade to cut more than the rear, shorten the three point top link. Lengthen the top link to make the rear blade cut more.







11 Operation

Owner Service

A WARNING

• NEVER GO UNDERNEATH EQUIPMENT. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.

• Service work does not require going underneath.

• Read Manual for service instructions or have service performed by a qualified dealer.

The information in this section is written for operators who possess basic mechanical skills. If you need help, your dealer has trained service technicians available. For your protection, read and follow the safety information in this manual.

A WARNING

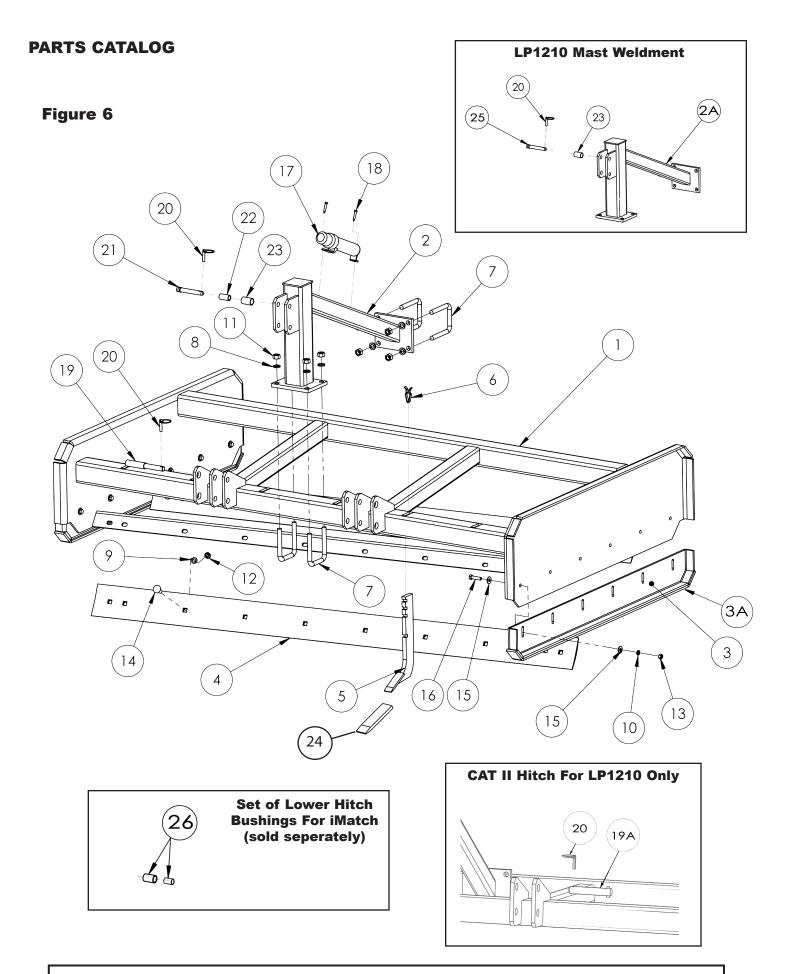
• Keep all persons away from operator control area while performing adjustments, service, or maintenance.

• Before dismounting power unit or performing any service or maintenance, follow these steps: disengage power to equipment, lower the 3 point hitch and all raised components to the ground, operate valve levers to release any hydraulic pressure, set parking brake, stop engine, remove key, and unfasten seat belt.

• Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.

Storage

When storing your land plane make sure the unit is placed on level ground and clear of any obstuctions. Use caution when disconnecting theland plane from the tractor.



13 Parts Catalog

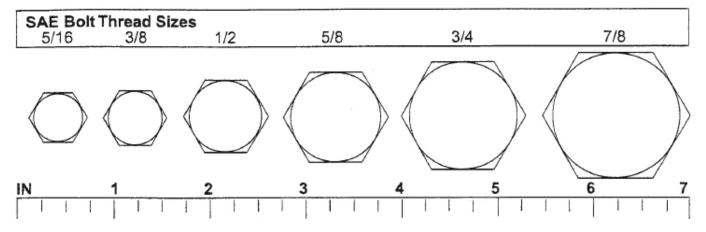
Parts Catalog(cont'd.)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	5TL15793	LP1207 MAIN FRAME WELDMENT	1
	5TL15780	LP1208 MAIN FRAME WELDMENT	1
	5TL15794	LP1210 MAIN FRAME WELDMENT	1
2	5TL15784	CAT I, MAST WELDMENT, LP1207, LP1208	1
2A	5TL15795	CAT II, MAST WELDMENT, LP1210	1
3	5TL15786	ADJ. SKID SHOE WELDMENT	2
3A	5TL15729	WELD ON REPLACEABLE SKID SHOE	2
4	5TL10705	CUTTING EDGE 84"	2
	5TL10706	CUTTING EDGE 96"	2
	5TL13456	CUTTING EDGE 120"	2
5	5TL14835F	SCARIFIER SHANK WITH WELD ON POINT	*MS
6	5TL15413	SHANK KEY	*MS
7	5TL11971	U-BOLT	4
8	5TLT31	LOCK WASHER, 3/4"	8
9	5TLT24	LOCK WASHER, 5/8"	*MS
10	5TLT25	LOCK WASHER, 1/2"	12
11	5TLT27	HEX NUT, 3/4"	8
12	5TLT22	HEX NUT, 5/8"	*MS
13	5TLT26	HEX NUT, 1/2"	12
14	5TL10699	PLOW BOLT 5/8" X 1 3/4" GR. 5	*MS
15	5TL9225	FLAT WASHER, 1/2"	24
16	5TL15782	HEX BOLT	12
17	5TL15189	MANUAL TUBE	1
18	5TL15348	SCREW	2
19	5TL13257	CAT I & II HITCH PIN LP1207, LP1208	2
19A	5TL11167	CAT II HITCH PIN LP1210	2
20	5TLVP252	LYNCH PIN	3
21	5TL15206	CAT I TOP LINK PIN	1
22	5TL15209	CAT I TOP LINK BUSHING, FOR iMatch HITCH	1
23	5TL15210	CAT II TOP LINK BUSHING, FOR iMatch HITCH	1
24	5TL10697	WELD ON POINT	*MS
25	5TL15208	CAT II TOP LINK PIN	1
26	5TL15638	SET OF LOWER HITCH iMatch BUSHING	1
27	5TL15285	FRONTIER LOGO DECAL NOT SHOWN	2
28	5TL15796	LP1207 MODEL DECAL NOT SHOWN	2
	5TL15797	LP1208 MODEL DECAL NOT SHOWN	2
	5TL15798	LP1210 MODEL DECAL NOT SHOWN	2
29	5TL15511	WARNING DECAL (4 DECALS) NOT SHOWN	1
30	5TL15199	9" RED REFLECTOR NOT SHOWN	2
31	5TL15200	9" YELLOW REFLECTOR NOT SHOWN	2
32	5TL15788	LP12 OPERATORS MANUAL NOT SHOWN	1

Parts Catalog 14

Bolt Size Chart

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



SAE Torque Chart

1	CHART	SAE G		SAE G (3 Radia)		SAE Grad (6 Radial Da	
(A)			0	MARKING	a stategy a		
Diameter	meter Wrench	SAE 2		SAE 5		SAE 8	
(Inches)		lbs-ft	N-m	lbs-ft	N-m	ibs-ft	N-m
1/4"	7/16"	6	8	10	13	14	18
5/16*	1/2-	12	17	19	26	27	37
3/8"	9/16"	23	31	35	47	49	67
7/16*	5/8"	36	48	55	75	78	106
1/2"	3/4"	55	75	85	115	120	163
9/16"	13/16"	78	106	121	164	171	232
5/8*	15/16"	110	149	170	230	240	325
3/4"	1-1/8"	192	261	297	403	420	569
7/8"	1-5/16"	306	416	474	642	669	907
1"	1-1/2"	467	634	722	979	1020	1383

15 Bolt Size and Bolt Torque Chart

NOTES:

Notes 16

PART NO. 5TL15788



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