# Manufacture's Limited Warranty for Precision Pull Accessories

The limited warranty set forth below is given by Precision Products Inc. with respect to new merchandise purchased and used in the United States, its possessions and territories.

Precision Products Inc. warranties the product(s) listed against defects in material and workmanship, and will at our option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been assembled, operated, and maintained in accordance with the owner's manual furnished with the product, and has not been subject to misuse, abuse, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear parts or component failures will be covered on the product for a period of one year. Parts found to be defective within the warranty period will be replaced at our expense. Our obligation under this warranty is expressly limited to the replacement or repair, at our option, of parts found to be defective in material and workmanship.

#### **Contacting Service**

Warranty parts replacements are available, ONLY WITH PROOF OF PURCHASE, through our Customer Service Department.

#### Call **1 (800) 225-5891**

This limited warranty does not provide coverage in the following cases:

- Routine maintenance items such as lubricants and filters
- 2. Normal deterioration of the exterior finish due to use or exposure.
- 3. Transportation and/or labor charges.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of expressed written warranty above as to the part as identified below. No other expressed warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Precision Products Inc. during the period of the warranty, the exclusive remedy is repair or replacement

of the product as set forth above. The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the purchase.

Precision Products Inc. will not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services, or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion of limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

During the warranty period, the exclusive remedy is replacement of the part. In no event shall recovery of any kind be greater that the amount of the purchase price of the product sold. Alteration of safety features of the product shall void this warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use this product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a qift.

#### **Local Law to this Warranty**

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### **Warranty Period**

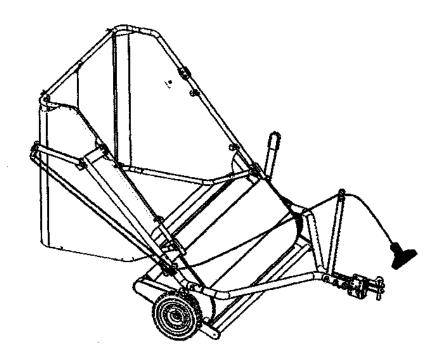
The warranty period stated below begins with the **Proof of Purchase**. Without the proof of purchase, the warranty period begins from the date of manufacture.

#### **Product Warranty Period**

The warranty period for this product is as follows: All parts are covered for 1 year.



## Owner's Manual | ES100 | Electric Sweeper



#### **Manual Contents**

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### **Your New Electric Sweeper**

**Congratulations** on your purchase of a new Precision Products Inc. Electric Sweeper. Your spreader has been engineered and built to give you the most dependable and best performing product possible.

If you experience any problem you can not easily resolve, please feel free to contact our knowledgeable and helpful customer service department toll-free at **1 (800) 225-5891.** 

**Caution:** Carefully read all rules and instructions for safe operation. Retain this manual for reference.

5/2017

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**DO NOT RETURN TO STORE** For Missing Parts or Assembly Questions

Call 1 (800) 225-5891 Attachment Hotline

## **SAFETY**

Remember, any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times when using power equipment.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS—ATTENTION! BECOME ALERT!



CAUTION: VEHICLE BRAKING AND STABILITY MAY BE AFFECTED WITH THE ADDITION OF AND ACCESSORY OR AN ATTACHMENT. BE AWARE OF CHANGING CONDITIONS ON SLOPES

Exercise caution at all times when using power equipment.

- 1. Read this owners manual before attempting to assemble or operate the sweeper.
- 2. Read the vehicle owners manual and know how to operate your tractor before using the sweeper attachment.
- 3. Never allow children to operate the tractor or the cart attachment.
- 4. Do not allow adults to operate the tractor or cart attachment without proper instructions.
- 5. Use caution and be aware of your surroundings while turning with the sweeper attachment.
- 6. Maximum towing speed is 3-4 M.P.H.
- 7. Tow the sweeper at reduced speed over rough terrain and hillsides or near creeks and ditches to prevent tipping over and loss of control. Do not drive too close to a creek or ditch.
- 8. Before operating vehicle on any grade (hill) refer to the safety rules in the vehicle owner's manual concerning safe operation on slopes. Stay off steep slopes!
- 9. Do not run sweeper with belt cover removed.
- 10. Do not leave sweeper running while unattended.
- 11. Make sure all electrical connections are tight.
- 12. Keep wiring harness off ground and out of sweeper brush area.
- 13. When making battery connections be careful not to cause spark as explosive gas may be present.
- 14. When dumping bag make sure brush is not running.
- 15. Keep hands clear of moving parts when dumping bag.
- 16. Wear eye protection when working with sweeper as dirt can fly through the air and be driven by wind.
- 17. Do not spray water on unit to clean as electrical components may be damaged.
- 18. Always disconnect power when working on unit.
- 19. Follow maintenance and lubrication instructions as outlined in this manual.

# **TROUBLESHOOTING**

If motor doesn't run follow these steps.

- 1. Check motor connections, make sure they are secure.
- 2. Check wire harnes connection, make sure they are secure.
- 3. Check inline fuse located near battery clamps.
- 4. Make sure power switch is on.
- 5. Make sure connections to battery is secure.
- 6. Make sure battery is at a full charge.
- 7. Make sure belt is secure on motor.

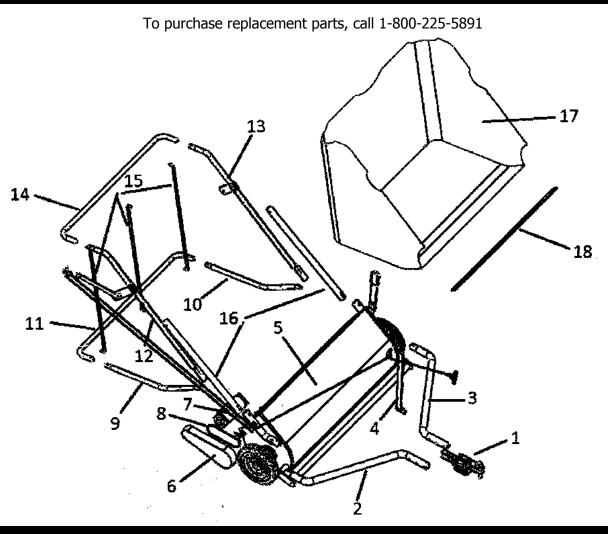
# **Missing Parts and Phone Support**

If parts are missing upon opening the shipping carton, or you need phone assistance to assemble this product, call the following number:

1 (800) 225-5891

# **NOTES**

# PARTS ILLUSTRATION



# **PARTS LIST**

Ref No.		Qty.	Description
1		1	Clevis
2		1	RH Hitch Tube
3		1	LH Hitch Tube
4		1	Pulley Bar
5		1	Chassis Assembly
6		1	Belt Cover
7		1	Electric Motor
8		1	Belt
9		1	RH Hitch Tube
10		1	LH Hitch Tube
11		1	Lower Rear Hopper Tube
12		1	RH Upper Hopper Tube
13		1	LH Upper Hopper Tube
14		1	Upper Rear Hopper Tube
15		3	Support Rods
16		2	Bag Arm Tubes
17		1	Hopper Bag
18		1	Bag Frame Strap
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 9 1 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

## **ASSEMBLY**

#### **Assembly Instructions**

## **Tools Required for Assembly**

Minimum
(2) Adjustable Wrenches

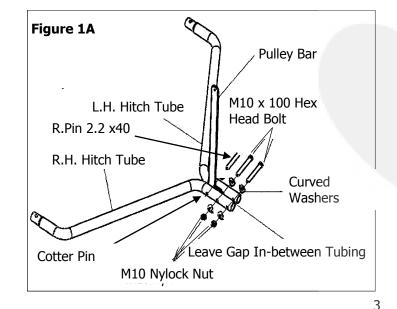
#### **Remove from Carton**

Remove all parts and hardware packages from the carton. Lay out all parts and hardware.

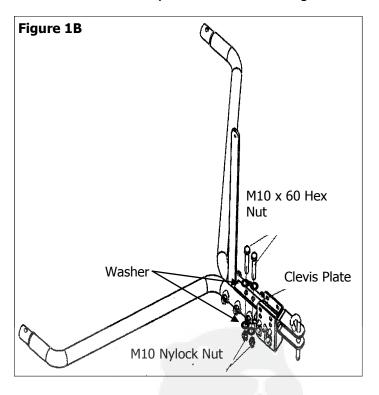
**NOTE:** All reference to Right (RH) and Left (LH) directions are from a position behind hopper.

# STEP 1:

1A. Attach the Right Hitch Tube, Pulley bar and Left Hitch Tube using two M10 x 100 Hex head Bolts , four curved washers and securing with two M10 Nylon Lock Nuts When attaching Pulley Bar add washer on both sides between Pulley Bar and Hitch Sides . Loosely attach and leave gap between tubing. See Figure 1A.

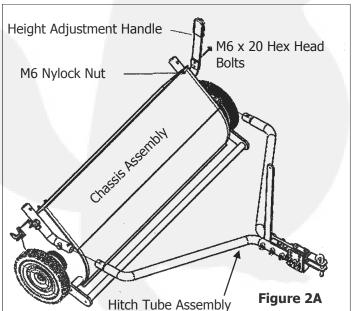


1B. Loosely attach the Clevis Plate to the Hitch Tube Assembly using two M10 x 60 Hex Head Bolts, two Washers and M10 Nylon Lock Nuts. See Figure 1B.



## STEP 2:

2A. Attach the Height Adjustment Handle to the Chassis Assembly using two M6 x 20 Hex Head Bolts, four washers and two Hex Nuts. Attach Hitch Tube Assembly to the Chassis Assembly. **Tighten all bolts after this step**. See Figure 2A.

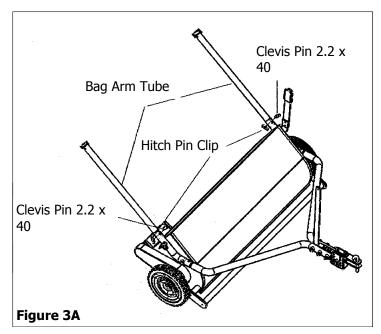


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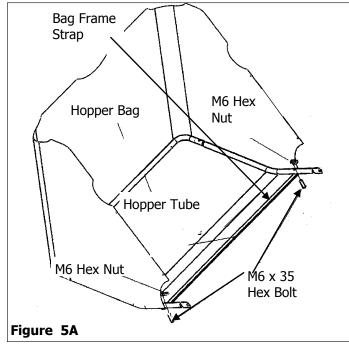
## STEP 3:

# STEP 5: Hopper Assembly

3A. Attach Bag Arm Tubes to the Chassis Assembly using two 2.2 x 40 Clevis Pins and Hitch Pin Clips. See Figure 3A.

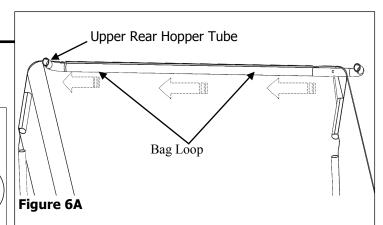


5A. Attach Hopper Bag To Lower Hopper Tube Assembly and secure with Bag Frame Strap and two 6x35 Hex Bolts and two M6 Nuts. See Figure



# **STEP 6: Hopper Assembly**

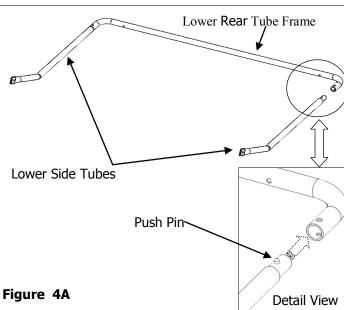
6A. Feed the Upper Rear Hopper Tube into position in the Hopper Bag. See Figure 6A.



6B. Attach the Right Upper Hopper Side Tube to Hopper bag and push in to Upper Rear Hopper Tube until push pin secure. Repeat for left side. Attach Hopper Bag to side tubes using four 2.2 x 40 Clevis Pins and securing Velcro. Secure Lower Side Tubes using two M8 x 20 Hex Head Bolt Sets. **Do Not Tighten At This Time**. See Figure 6B.

# **STEP 4: Hopper Assembly**

4A. Attach The two Lower Hopper Side Tubes to the Lower Rear Hopper Tube by pressing in the push pins. See Figure 4A



# **Attaching Lead to Power Source:**

Battery connection options.

To connect to battery under the hood use clamps; Red to positive—Black to negative.

To connect to battery under seat use eyelets. Red to positive—Black to negative.

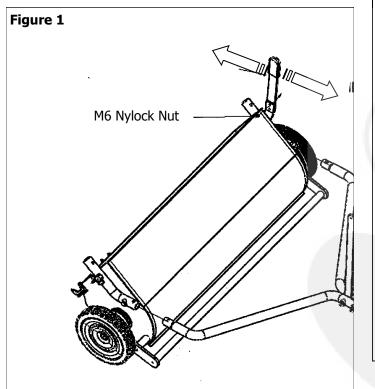
# **Operation and Maintenance:**

#### **Storing Your Lawn Sweeper**

For long term storage, you can remove the Tube Frame Assembly (both RH and LH Side Frame and Top Frame Tube) and the Support Rods on the Hamper Assembly to reduce total storage area.

#### Operation

**Brush Adjustment:** To raise the brushes further away from the ground, push the Height Adjustment Tube back and pull down until desired sweeping height is attained. To lower, push the Height Adjustment Tube back and pull up to desired sweeping height. See Figure 1.



**Sweeping Speed:** For best results, rider/tractor should travel between 3 to 4 miles per hour range. **Dumping:** Simply pull the Hopper Dump Rope forward to empty debris. Slowly ease the Hopper Dump Rope back, keeping even pressure, until the Hopper returns back down.

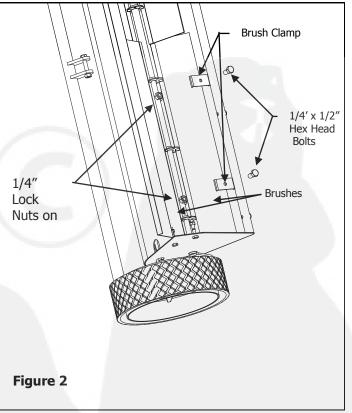
#### **Maintaining your Lawn Sweeper**

Lubrication: Apply a light multipurpose grease to wheel bearing. Lubricate at the beginning of each season or more often as conditions dictate.

# \*\*\*NOTICE\*\*\*

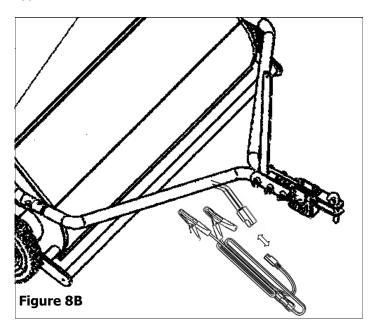
For best operation set brush height 3/4" off floor. Set to low will drag on motor and set to high will cause inadequate pickup.

**Brush Replacement:** Remove Hex Head Bolts holding on the Brush Clamps. Place Brush Strips in slots of Brush Disc so shorter supporting bristles are away from brush sweeping rotation. Place the Brush Clamp against the brushes and tightly secure with the 1/4" x 1/2" Hex Head Bolts into the nut on the Brush Axle. See Figure 2.



8B. Attach Lead to connectors coming out of arm as shown in Figure 8B

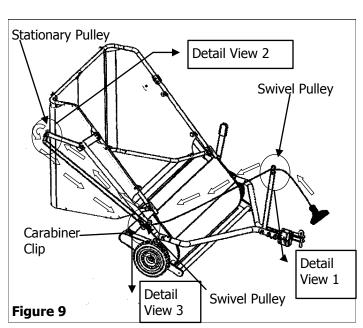
(Hang excess wire slack on notch located on pulley bar



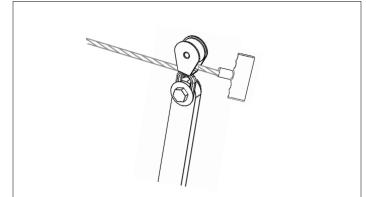
Operating power is obtained from a 12 volt Battery. Be sure to connect the red to the positive (+) source and attach the black to the negative(-) source.

# **STEP 9: Dump Rope Setup**

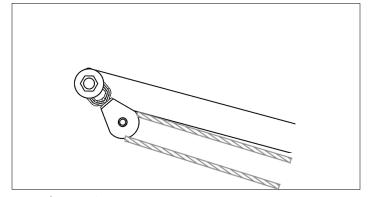
Feed dump rope through swivel pulley on pulley bar, through swivel pulley on chassis assembly, through stationary swivel on upper hopper bag. Tie end of rope to Carabiner Clip. Chassis Pulley may need adjusted after assembly. See Figure 9



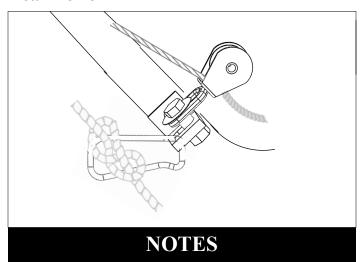
#### Detail View 1:

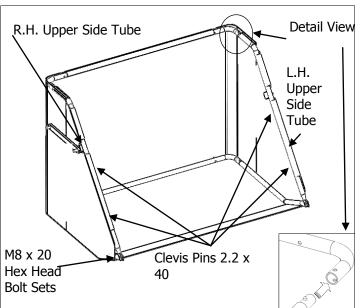


Detail View 2:



Detail View 3:

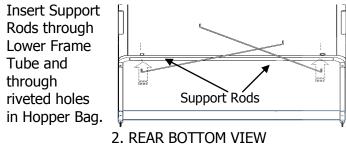


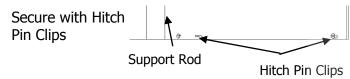


6c. Attach Support Rods to Hopper. See Following Steps 1, 2, 3 & 4.

#### 1. INSIDE VIEW

Figure 6B

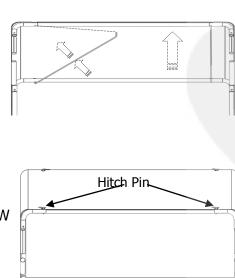




#### 3. INSIDE VIEW

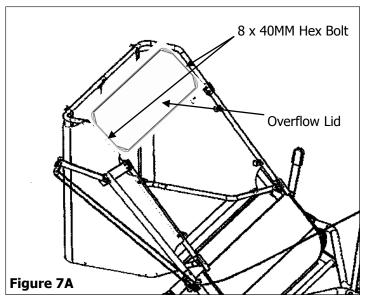
Raise Rear Hopper Tube up and extend Support Rods up and place into riveted holes and **Upper Rear** Frame Tube

**4.REAR TOP VIEW** Secure with two Hitch Pin Clips



# **STEP 7: Hopper Assembly**

7A. Secure Hopper Overflow Lid to Hopper using two 8 x 40mm hex head bolts and two M8 nuts. See Figure 7A.



# **STEP 8: Connect Sweeper Motor**

8A. Attach sweeper motor to connectors (black to black, red to red) coming out of arm as shown in Figure 8A.

