



User Manual

SLAG



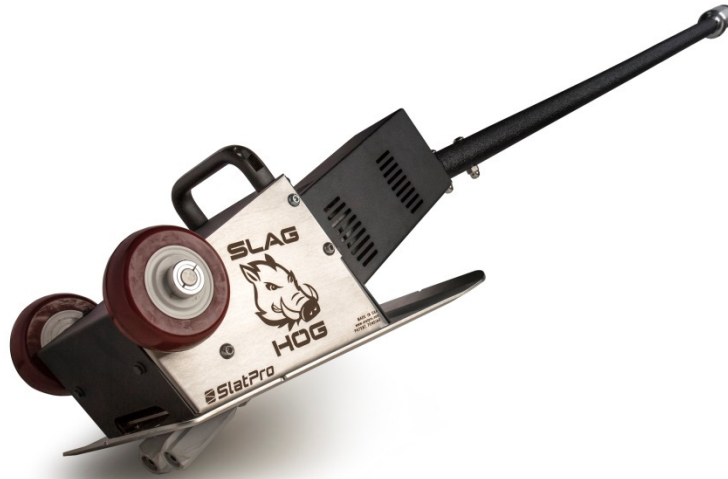
HOG

67069 220V SH2

Slag Removal Tool for use on laser cutting machines with
minimum 1.75" between slats

Slatpro LLC
4757 Mustang Circle
Mounds View, MN USA
Phone: +1 763-452-4550
Fax: +1 763-452-4560
sales@slatpro.com
www.slatpro.com





1. Safety



1.1 General Safety Instructions

ΔWARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
Save all warnings and instructions for future reference.

1.2 Slaghog Specific Safety Warnings and Instructions

- A. Unplug tool from power before performing maintenance on Slaghog
- B. Use protective equipment. Always wear safety glasses when working with the machine. Protective clothing is recommended such as dust mask, gloves, steel toed non-slip footwear and hearing protection.
- C. Do not expose tool to wet conditions or operate in damp environment
- D. Power cord to be kept clear from working range of machine. Always lead cord away from machine.
- E. Switch tool off immediately if it stalls. Lift cutters out of slats before restarting.

2. Supporting Information

2.1 Conditions of use

The tool is only to be use for removing the slag from slats on laser cutting machines where the slats create a horizontal plane and the vertical slat sides are cleaned. The slats may be steel, stainless steel or copper.

2.2 Mains Connection

The tool is only to be use for removing the slag from slats on laser cutting machines where the slats create a horizontal plane and the vertical slat sides are cleaned. The slats may be steel, stainless steel or copper.

2.3 Maintenance

The ventilation slots must be kept clear or over-heating may result.

If the supply cord is damaged it must only be replaced by qualified personnel. Only use Slatpro replacement parts when performing repairs or maintenance.

2.4 Technical Information

Technical Data Slag Removal Tool	Slaghog
Production code	67069
Rated input	825 W
Frequency	50-60hz
Current	4 A
Weight	21.3 kg
Noise Information Measured values determined according to EN 60745. Typically, the A weighted noise levels of the tool are:	
Sound pressure level (Uncertainty K=3db(A))	90 db (A)
Sound power level (Uncertainty K=3db(A))	101 db (A)
Wear ear Protectors!	
Vibration information Vibration total values (triaxial vector sum) determined according to EN 60745 Connect only to a single-phase AC current supply and only to mains voltage specified on the rating plate	
Vibration emission value $a_{h,d}$	4.3 m/s ²
Uncertainty K=	1,5 m/s ²

Warning








The Vibration emission level given in this information sheet has been measured in accordance with a standardized test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However, if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the working period.

An estimation of level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibrations such as: maintain the tool and the accessories, keep the hands warm, organization of work patterns.

2.5 Symbols

	Caution! Warning! Danger!
	Always disconnect the plug from the socket before carrying out any instructions
	Please read the instructions carefully before starting the machine.
	Class II tool. Tool in which protection against electric shock does not rely on basic insulation only, but in which additional safety precautions, such as double insulation or reinforced insulation, are provided. There being no provision for protective earthing or reliance upon installation conditions.
	European Conformity Mark
	UkrSEPRO Conformity Mark
	EurAsian Conformity Mark

3. Description

The tool is moved along the slats on the bed of a laser machine to remove slag that accumulates while cutting. Rotary cutting tools ride on each side of the slat to lift and remove the slag. It may be used on steel, copper or hybrid steel/copper slats. When not in use it may be rolled along the floor and stored in the upright position.

4. Initial Assembly

The Slag Hog ships in two pieces; power unit and the handle assembly. All fasteners for the most part are metric.

- Remove the acorn nuts and button head socket screw from the 1.36" diameter stub on the power unit
- Slide the handle on the stub with the power out cord of the handle on the same side as the plug in on the power unit.
- Plug the power cord from handle tube into the power unit
- Do not plug in to power outlet before verifying the switches on the handle and power unit are off; both rocker switches to 0.

5. Operation

Before plugging into power verify that the two switches are turned off

Wear work gloves and safety glasses when operating

Lift onto the cutting machine bed with care

Use extreme care near the cutters. Do not touch them unless the tool is unplugged

The tool has two on/off switches



Rocker switch on handle end, in off position, acts as circuit breaker reset in case of over-current



Rocker Switch on power unit in off position.

Both switches must be in on or "I" position to run. Turning either switch off stops motor operation.

The upper left picture shows the on/off switch that acts as the circuit breaker when the unit is overworked. If the slats are not straight it is possible for the cutters to grab onto two slats and stall the motor which will trip the breaker. If this occurs wait a minute, reset the breaker switch, and resume operation. When slats have excess slag build up it may cause the circuit breaker to overload. If this happens the operator will need to reduce force used for cleaning slats. If this occurs wait a minute, reset the breaker, and resume operation.

To begin use, place the tool on the slat bed of the laser machine, center the cutters over a slat, and turn on both switches. The slats can be cleaned by moving the tool in either direction along the slat.



With switches off plug tool into a 220Volt outlet with a minimum of 5 Amp capacity



Cutters shown centered on slat

To see the unit in operation, go to Youtube and search for Slaghog. The best video is:
<https://www.youtube.com/watch?v=PDvEFRREdgg>

The cutter geometry is ideal for most slat/pallet bed configurations. If the fit of the cutters on the slats does not seem correct contact the factory to find out options that are available.

When storing in upright position the unit is tippy and care must be taken to ensure that it does not fall over, which may lead to damage of handle end components. Damage due to dropping, improper handling or falling over is not covered by warranty.

6. Maintenance

Disconnect power by unplugging from outlet before performing any work on the tool

6.1 Cutters

The cutters will dull over time and require replacement.

Tools required for replacement

- 6mm L Hex wrench
- 6mm male hex socket wrench
- Adjustable open wrench

Replacement Cutters

- 66106 – 14ga Slats
- 66031 – 11-12ga Slats
- 66105 – 10ga Slats
- 66095 – 7ga Slats
- 66096 – .250" Slats
- 67067 – .11/12ga Deep Slats

Parts required are RH & LH Cutter Set with cap screws. The most common cutters are 66031 SET for 11/12ga slats. Replacement cutters come with two M8 x 22 capscrews, two washers, and Blue Loctite 242.

Place the tool on its back with the cutters up.

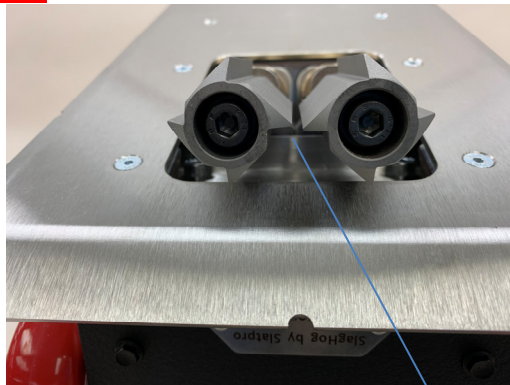
Place the wrenches as shown and remove the right cutter capscrew with counter clock-wise rotation. Remove the right cutter. The cutter may be tight on the shaft and require light tapping with a hammer to remove.



Place adjustable wrench on flats of right shaft and remove left cutter with ccw rotation.



Slide the new right hand and left hand cutters so that the flats between the shaft are facing the base plate as shown. The cutters rotate so that the slag chips are pulled up toward the base plate. The cutters must be installed as shown.



Flat side of cutters towards base plate

Apply Loctite 242 to the capscrew threads. With washers in place thread then tighten cap screws into shaft ends using the male hex socket wrench and L hex wrench approach.



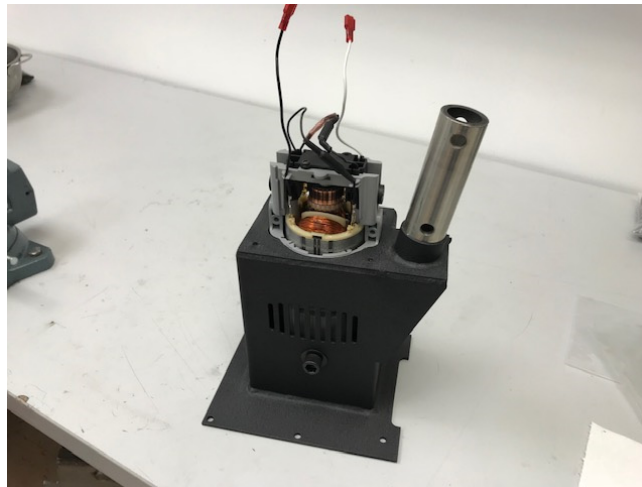
6.2 Motor Brushes

If the motor doesn't rotate under power without load it is likely that the brushes need replacement. The following instructions show replacement of the **66125 Carbon Brush Kit**.

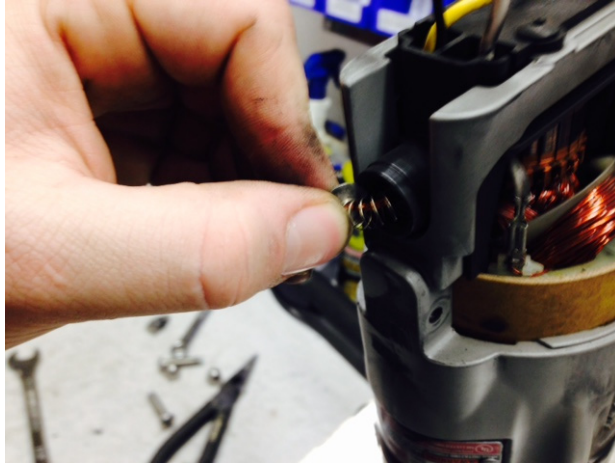
- Remove two 10mm bolts from handle.
- Remove six 5mm hex bolts that attach motor enclosure to cutter mechanism.
- Remove access cover with on/off switch and receptacle as shown below.
- Disconnect black wire from Rocker Switch and white wire from Power Receptacle. Refer to Section A-A of the following assembly drawing for wire connections if necessary.
- Use needle nose pliers to pull on terminal ends. Do not pull on wire.



Remove two each of capscrews, washers and spacers that hold drill motor in enclosure. Remove motor from motor enclosure.



Unscrew plastic cap for the brush. Remove old brush and replace with new brush. Thread in cap and repeat for other side.



Apply light Loctite 242 to fastener threads. Reinstall the drill motor in the enclosure, reconnect three terminals, replace cover plate and mount motor enclosure on cutter mechanism. Replace handle and put back in service.

6.3 Other maintenance

All other repairs require qualified personnel to perform. In this case the factory or distributor should be contacted for further instructions.

SLAGHOG WARRANTY

Subject to the exclusions described below, all Slaghog products ("Products") as manufactured by Slatpro LLC are warranted to be free from defects in materials and workmanship under normal use and service for 12 months after the ship date to the purchaser. Unless otherwise set forth in a quotation or agreed to by Slatpro in writing, Product warranty only applies to the first using purchaser. Warranty is not transferable beyond the first using purchaser and is limited to new Products sold by Slatpro or through authorized representatives and channel partners.

EXCLUSIVE REMEDY. In the event that Slatpro determines that a Product contains a defect in materials or workmanship, then Slatpro, in its sole discretion, will (a) repair the Product, (b) replace the Product with new or rebuilt (c) refund the purchase price of the Product. THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REMEDY OF REPAIR, REPLACEMENT OR REFUND IS BUYER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. IN NO EVENT SHALL SLATPRO'S LIABILITY UNDER THIS WARRANTY EXCEED THE PURCHASE PRICE OF THE PRODUCT GIVING RISE TO THE WARRANTY CLAIM. All Products which are repaired or replaced shall be warranted only for the unexpired portion of the original warranty period.

EXCLUSIONS. This warranty does not cover (a) any failures which are not attributable to defects in materials or workmanship, including without limitation, failures caused by accidents, inadequate maintenance, misuse, unauthorized modifications or repairs, improper storage, and normal wear and tear, (b) any consumable parts or accessories, such as cutter blades, are designed to wear over time or through use of the product, (c) Excessive use which is contributed from overuse, recommended use is for 1 cleaner to service 1-3 machines under normal use conditions. Recommended cleaning interval of once per week if production levels equal 2 shifts.

WARRANTY RETURNS. No Products shall be returned without prior authorization from Slatpro. Buyer shall prepay all shipping charges for the return of Products to Slatpro designated service location.

LIMITATION OF LIABILITY. IN NO EVENT SHALL SLATPRO BE LIABLE FOR ANY INCIDENTAL DAMAGES, CONSEQUENTIAL DAMAGES, SPECIAL DAMAGES, INDIRECT DAMAGES, LOSS OF PROFITS, LOSS OF REVENUES, OR LOSS OF USE, EVEN IF INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. SLAPRO'S LIABILITY FOR DAMAGES ARISING OUT OF OR RELATED TO ANY ORDER IS LIMITED TO THE ORDER PRICE FOR THE SPECIFIC PRODUCT THAT GIVES RISE TO THE CLAIM. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THESE LIMITATIONS AND EXCLUSIONS SHALL APPLY REGARDLESS OF WHETHER LIABILITY ARISES FROM BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE), BY OPERATION OR LAW, OR OTHERWISE.

Effective Date: January 1, 2017

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EXCLUSIVE REMEDY. In the event that Slatpro determines that a Product contains a defect in materials or workmanship, then Slatpro, in its sole discretion, will (a) repair the Product, (b) replace the Product with new or rebuilt (c) refund the purchase price of the Product. THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REMEDY OF REPAIR, REPLACEMENT OR REFUND IS BUYER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. IN NO EVENT SHALL SLATPRO'S LIABILITY UNDER THIS WARRANTY EXCEED THE PURCHASE PRICE OF THE PRODUCT GIVING RISE TO THE WARRANTY CLAIM. All Products which are repaired or replaced shall be warranted only for the unexpired portion of the original warranty period.

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Effective Date: January 1, 2017

EC Declaration of Conformity

Object of the Declaration

Product	Slaghog Tool used for removing slag from laser machine slats
Model/Type	67069 Slaghog 220V Standard 67097 Slaghog 220V NSH
Manufacturer	Slatpro
Address	4757 Mustang Circle, Mounds View, MN 55112, U.S.A.

This Declaration is issued under the sole responsibility of the manufacturer


The object of the declaration described above is in conformity of the relevant union harmonization legislation

2011/65/EU
2006/42/EC
2014/30/EU

Conformity is shown by compliance with the applicable requirements of the following documents:

Reference & Date:

EN 60745-1:2009 + A11:2010
EN 55014-1:2006 + A1:2009 + A2:2011
EN 55014-1:2006+A1:2009+A2:2011
EN 55014-2:2015
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 50581:2012

Signed for on Behalf of	Slatpro LLC
Place of issue:	Mounds View, MN, USA
Date of Issue	3 rd January 2019
Name:	Eric Chalmers
Position:	President of Slatpro LLC
Signature:	





Slag Hog Assembly

P/N: 67069 Model SH2 220V

Item	Qty	Part No.	Description	sheet 1 of 2
The following items are for the drive portion of the assembly				
1	1	67055	Input Shaft	
2	2	66034	Cutter Shaft	
3	2	66135	Idler Shaft	
4	1	67077	Driven Idler Shaft	
5	4	66041	Gear Support Plate	
7	2	66040	Cutter Support Plate	
8	1	66042	Pivot End Plate Cutter Side	
9	1	67052	Pivot End Plate Motor Side	
10	1	66044-RH	Top Gear Support RH	
11	1	66044-LH	Top Gear Support LH	
12	2	66025	Spring Guide Male	
13	2	66051	Spring Guide Female	
15	1	66039	Chip Deflector	
16	8	66081	Idler Shaft Washer	
19	4	66054	Pivot Washer	
20	1	66058	Gear Box	
21	2	66083	Thrust Spacer	
22	2	66053	Spacer, Cutter	
23	4	66048	Spur Gear 14T	
24	2	66049	Spur Gear 16T	
26	16	66115	Needle Bearing .62 ID	
27	4	67007	Needle Bearing .62 ID Closed End	
30	2	66126	Die Spring	
31	6	NI	Thrust Washer .62ID 5906K516	
33	6	NI	Machine Key 98870A140	
34	2	NI	Dowel Pin, Pull-out 97175A390	
35	4	67058	Input Shaft Spacer	
36	2	NI	Clamp Collar 9520T8	

The following items are for the housing portion of the assembly

40	1	66030-RH&LH	Side Plate Set
41	1	66035	Base Plate
42	1	67076	Motor Enclosure
43	1	66037	Top Cover
44	2	67061	Spacer Drill Motor Mount
45	1	67071	Motor Electrical Enclosure
46	2	66117	Wheel
47	2	NI	Clamp Collar 6157K14



Slag Hog Assy
P/N: 67069

Item	Qty	Part No.	Description	sheet 2 of 2
48	1	NI	Shaft .5 dia x 10.25 1255T17	
49	1	66116	Handle	
50	1	67063	On/Off Switch 15A	
51	1	67065	Receptacle	
52	1	67091	Motor	
53	1	67056	Square Drive	
54	1	67070	Switch Cover Plate	

The following items are for the handle portion of the assembly

55	1	66060	Handle Tube
56	1	67088	Handle End Box
57	1	67089	Cover, Handle End
59	2	NI	Cord Grip 7466K36
61	1	NI	Cord Strain Relief Waytek #24617
62	1	67066	Plug End
63	1	67090	On/Off Breaker Switch 5A

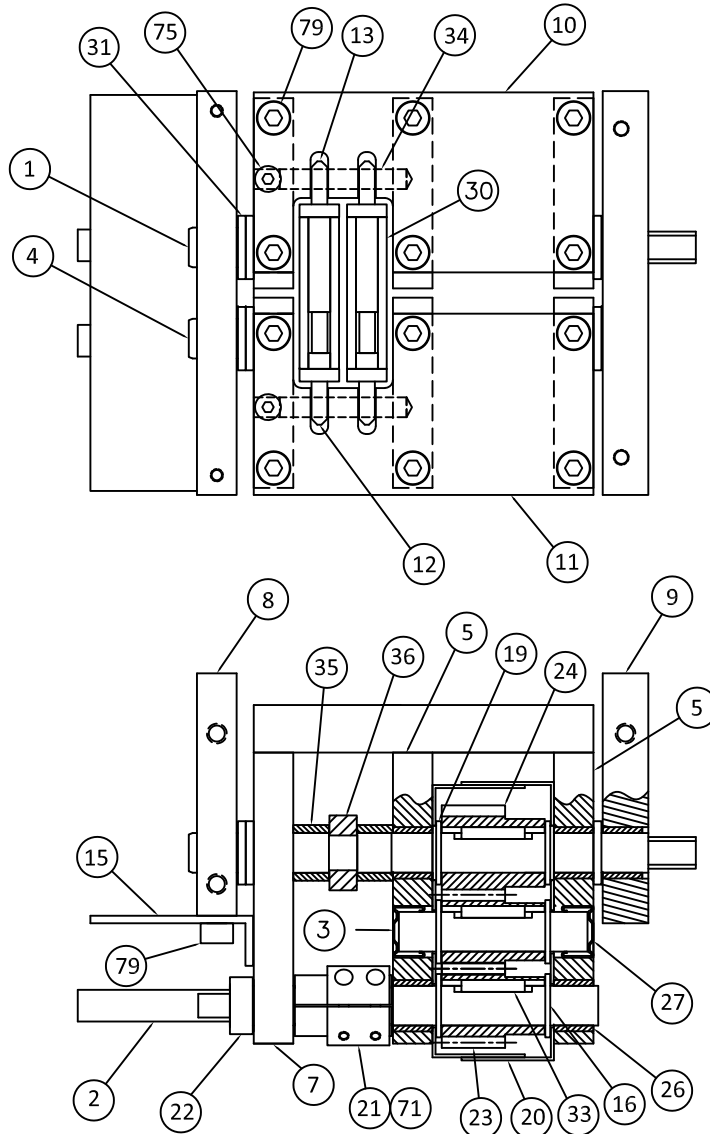
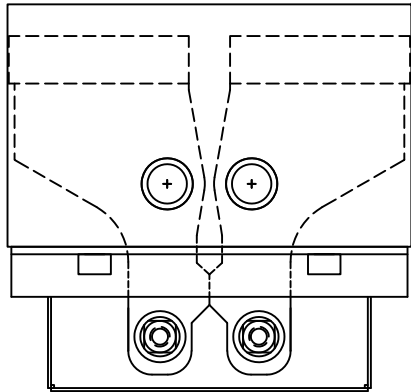
The following items are for the fasteners

70	2	NI	Pan Hd Phillips Mach Scr Nylon M3x10 94387A209
72	10	NI	Button Hd Screw Nylon M5x10 992492A736
73	14	NI	Vib Resist Hex Hd Flange CS M5x12 92820A215
74	6	NI	Flat Head SCS M5x12 91263A833
75	2	NI	Button Hd SCS M6x16 91306A672
76	2	NI	Socket Head Cap Screw M6x25 90128A265
78	8	NI	Button-Head SCS M8x16 91306A677
79	14	NI	SHCS M8x25 90128A275
80	2	NI	Acorn Nut SST M10x1.5 SST
81	2	NI	Button Hd SCS M10x55 SST 92095A426
82	2	NI	SHCS 7/16-14 x .88 91251A668
83	2	NI	Washer 7/16 96765A211

NI means non-inventory item

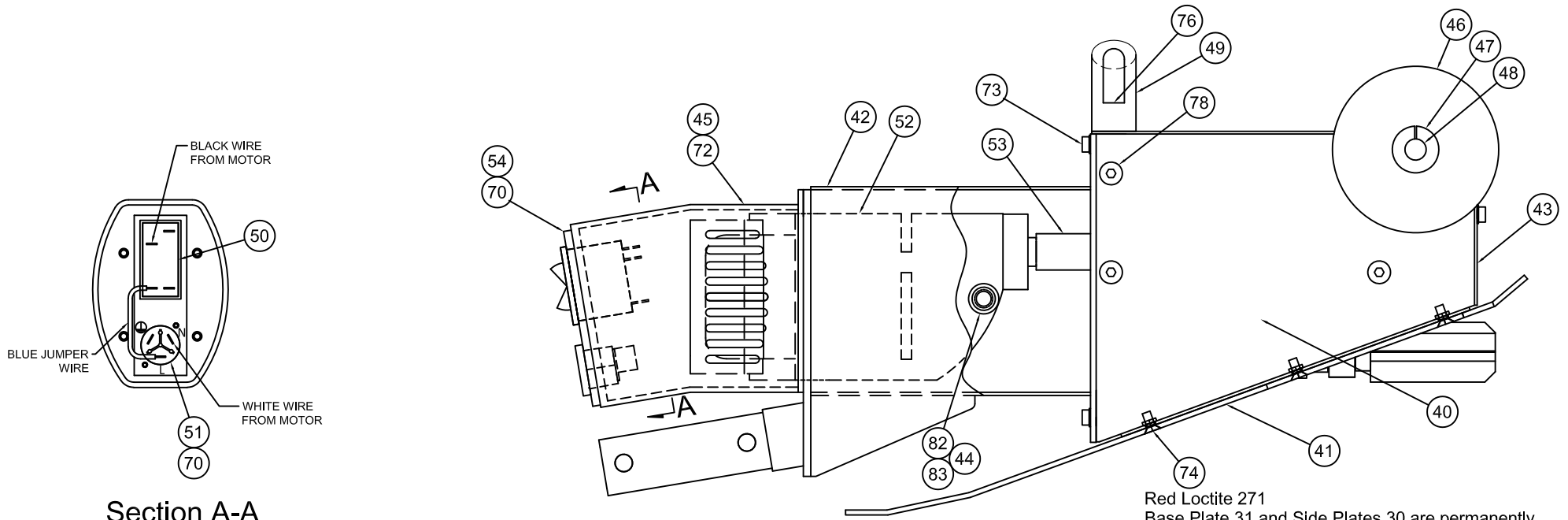
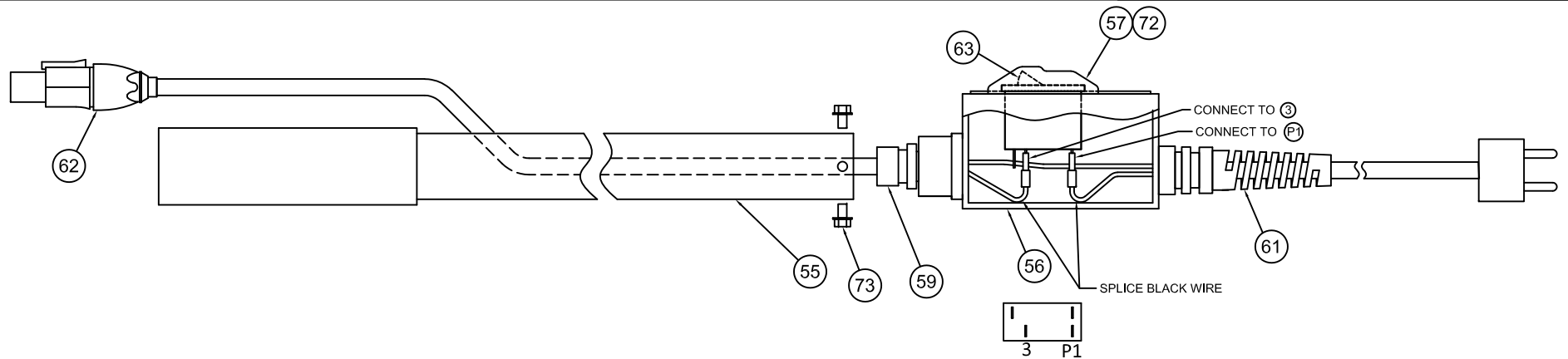
Slag Hog Cutter Sets	Screws x2	Washers x2
66106 SET Cutters for 14ga Slats	M8x22 SHCS	98029A044
66031 SET Cutters for 11 & 12ga Slats	91290A428	
66105 SET Cutters for 10ga Slats		
66095 SET Cutters for 7ga - 3/16" Slats		
66096 SET Cutters for 1/4" Slats		
67067 SET Long Cutter for 11ga Deep Slats	M8x65 SHCS	91290A458

Use Loctite 242 on screw threads



Drive Assembly
Unless noted Blue Loctite 242 on all fasteners

THIRD ANGLE PROJECTION			TITLE
			Slag Hog Assembly SH2 220V
DO NOT SCALE	SHEET 1 OF 2	67069	
<small>ALL DATA AND INFORMATION ON THIS DOCUMENT IS FOR THE SOLE USE OF SLATPRO AND/OR ITS LICENSEES, AND MAY NOT BE USED WITHOUT PERMISSION.</small>			



Drive Installed in Housing Assembly

Red Loctite 271
Base Plate 31 and Side Plates 30 are permanently assembled together and should not be disassembled

THIRD ANGLE PROJECTION			SlatPro	TITLE
DO NOT SCALE	SHEET	2	67069	Slag Hog Assembly SH2 220V
ALL DATA AND INFORMATION ON THIS DOCUMENT IS FOR THE SOLE USE OF SLATPRO AND/OR ITS LICENSEES, AND MAY NOT BE USED WITHOUT PERMISSION.	OF	2		