

# **REVO 1216 LATHE**

## **OWNER'S MANUAL**

**MLAREVO1216EVS**  
**ULTIMATE WOODTURNING EVS MIDI LATHE**  
**7/10/2018**

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REVO 1216 Lathe © 2018 Laguna Tools 7/10/2018

**EN**

**LAGUNA**



# EC DECLARATION OF CONFORMITY

We

Laguna Tools Inc.  
2072 Alton Parkway, Irvine, California 92606, USA

Declare that the product name: Wood Lathe

Model Name : REVO 18 | 36 Lathe, REVO 24 | 36 Lathe, REVO 12|16 Lathe

Conform with the essential safety requirements of the relevant European Directive:

- Machinery Directive 2006/42/EC
- Low voltage Directive 2014/35/EC
- Electromagnetic Compatibility Directive 2014/30/EC

The person who compile technical file established within the EU:

Name: SGS UK  
Address: SGS United Kingdom Rossmore Business Park, Ellesmere Port, Cheshire CH65 3EN

Mounting and connecting instructions defined in catalogues and technical construction files must be respected by the user.

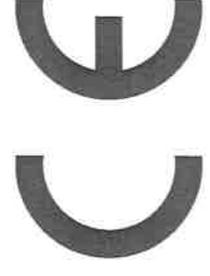
They are based on the following standards :

- EN ISO 12100:2010 Safety of Machinery - General principles for design / Risk Assessment and Risk reduction.
- EN 60204-1:2006+AC:2010 Safety of machinery – Electrical equipment of machines, part 1 : General requirements.
- EN 13849-1:2015 Safety of machinery – Safety – related parts of control systems Part 1: General principles for design
- EN 50370 -1:2005 Electromagnetic compatibility (EMC) – Product family standard for machine tools – Part 1: Emission.
- EN 50370 -2:2003 Electromagnetic compatibility (EMC) – Product family standard for machine tools – Part 2: Immunity.
- EN 61000-4-2: 2009 Electrostatic (ESD)
- EN 61000-4-4: 2012 Electrical fast transient/burst requirements (EFT/Burst)
- EN 61000-4-6: 2014 Immunity to conducted disturbances, induced by radio-frequency fields (CS)

Name : Torben Helshoj

Responsibility : President

Authorized Signature



Date : August 29, 2018

Place : Laguna Tools, USA

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## Safety

**WARNING!** For Your Own Safety Read Instruction Manual before Operating Lathe

- (a) Wear eye protection.
- (b) Do not wear gloves, a necktie, or loose clothing.
- (c) Tighten all locks before operating.
- (d) Rotate work piece by hand before applying power.
- (e) Rough out work piece before installing on faceplate.
- (f) Do not mount split work piece or one containing a knot.
- (g) Use lowest speed when starting new work piece.

### SAFETY RULES

1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. DON'T USE IN A DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AWAY. All visitors should be kept at a safe distance from the work area.
6. MAKE YOUR WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. If in doubt, use the next heavier gauge.
10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
11. ALWAYS USE SAFETY GLASSES. Also use a face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
12. SECURE WORK. Use clamps or a vise to hold the work when practical. It's safer than using your hand and it frees both hands to operate the tool.
13. DON'T OVERREACH. Keep proper footing and balance at all times.
14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. DISCONNECT TOOLS before servicing and when changing accessories, such as blades, bits, cutters, and the like.
16. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure power switch is in the OFF position before plugging the machine in.
17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
20. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

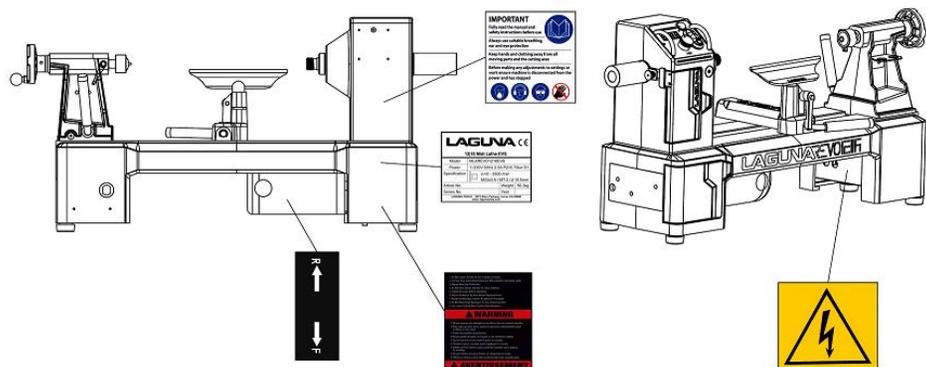
**AVERTISSEMENT!** Pour votre sécurité, lire le manuel d'instruction avant d'utiliser la tour à bois.

- (a) Portez des lunettes de protection.
- (b) Ne pas porter de gants, de cravate, ou de vêtements amples.
- (c) Serrer tous les verrous avant d'opérer la machine.
- (d) Tourner la pièce à la main avant d'appliquer le courant.
- (e) Débiter grossièrement la pièce avant de l'installer sur le plateau de montage.
- (f) Ne pas monter une pièce fendue ou comportant un noeud.
- (g) Utiliser la vitesse la plus lente au démarrage d'une nouvelle pièce.

### Règles de l'opérateur

1. CONSERVEZ TOUS LES DISPOSITIFS DE PROTECTION EN PLACE et en bon état de fonctionnement.
2. ENLEVEZ LES CLÉS ET OUTILS. Prenez l'habitude de vérifier si les clés et autres outils ne sont pas trop près de la machine avant de la démarrer.
3. CONSERVEZ LA SURFACE DE TRAVAIL PROPRE ET LIBRE D'ENTRAVES. Les endroits encombrés augmentent le risque d'accident.
4. NE PAS UTILISER DANS LES ENVIRONNEMENTS DANGEREUX. N'utilisez pas d'outils électriques dans les endroits humides, détrempés, ou sous la pluie. Conservez l'espace de travail bien éclairé.
5. TENEZ LES ENFANTS À L'ÉCART. Tous les visiteurs doivent être tenus à une distance sécuritaire de l'aire de travail.
6. RENDEZ L'ATELIER À L'ÉPREUVE DES ENFANTS avec des verrous, des interrupteurs principaux ou en enlevant les clés de démarrage sur les
7. NE FORCEZ PAS L'OUTIL. L'outil effectuera un meilleur travail et de façon sécuritaire s'il est utilisé au rythme pour lequel il a été conçu.
8. UTILISEZ L'OUTIL APPROPRIÉ. Ne forcez pas un outil ou un accessoire pour effectuer un travail pour lequel il n'a pas été conçu.
9. UTILISEZ UNE RALLONGE ÉLECTRIQUE APPROPRIÉE. Assurez-vous que votre rallonge électrique est en bon état et que le calibre du filage soit adéquat pour transporter le courant que la machine a besoin. Une rallonge de trop faible calibre induira une perte d'intensité du voltage, ce qui provoquera une surchauffe et une perte de puissance. En cas de doute, utilisez la rallonge de calibre plus fort.
10. PORTEZ DES VÊTEMENTS APPROPRIÉS. Ne portez pas de vêtements amples, des gants, des colliers, des bracelets, ou tout autre bijou ou accessoire qui pourrait être entraîné par des pièces mobiles. Des souliers à semelle adhérente sont également recommandés. Rassez les cheveux longs et portez un bonnet pour contenir la chevelure trop abondante.
11. PORTEZ DES LUNETTES DE PROTECTION. Portez également un masque contre la poussière si le travail exécuté dégage de la poussière. Veuillez prendre note que les lunettes de prescription ordinaire ne résistent pas aux impacts et qu'elles ne sont pas homologuées à re de lune de sécurité.
12. IMMOBILISEZ VOTRE TRAVAIL. Utilisez des serres ou un étau pour immobiliser votre travail lorsque c'est possible. C'est plus sécuritaire que d'utiliser votre main, et ça permet de libérer vos deux mains pour opérer confortablement.
13. NE VOUS ÉTIREZ PAS AU-DESSUS DE LA MACHINE. Demeurez solidement en équilibre sur vos pieds en tout temps.
14. ENTRETIENEZ LES OUTILS AVEC SOIN. Gardez les lames de coupe tranchants et propres pour en tirer les meilleures performances. Suivez les instructions du fabricant pour la lubrification et l'entretien des accessoires.
15. DÉBRANCHEZ LES OUTILS avant d'en effectuer l'entretien ou lors du changement d'accessoires tels que lames ou couteaux.
16. RÉDUISEZ LES RISQUES DE DÉMARRAGE NON INTENTIONNEL. Assurez-vous que l'interrupteur est en position fermée avant le branchement d'un outil.
17. UTILISEZ LES ACCESSOIRES RECOMMANDÉS. Consultez le manuel d'instruction pour connaître les accessoires recommandés. L'utilisation d'accessoires inappropriés pose des risques de blessures aux utilisateurs.
18. NE VOUS TENEZ JAMAIS DEBOUT SUR UNE MACHINE. Des blessures graves pourraient survenir si la machine bascule ou si les lames coupantes sont touchées accidentellement.
19. VÉRIFIEZ LES PIÈCES ENDOMMAGÉES. Avant de poursuivre l'utilisation, tout dispositif de protection ou toute pièce endommagée devra être inspecté pour déterminer si elle peut fonctionner correctement et selon l'utilisation prévue. Vérifiez l'alignement des pièces mobiles à savoir s'il y a blocage, un bris, ou toute autre condition qui nuirait à son utilisation. Une pièce ou un protecteur endommagé doit être réparé ou remplacé.
20. SENS D'ALIMENTATION. Alimentez la pièce vers la lame ou le couteau dans le sens contraire de sa rotation seulement.
21. NE LAISSEZ JAMAIS UN OUTIL FONCTIONNER DANS SURVEILLANCE – ÉTEIGNEZ L'OUTIL. Ne laissez pas l'outil sans surveillance jusqu'à ce qu'il s'arrête complètement.

## Location of warning signs

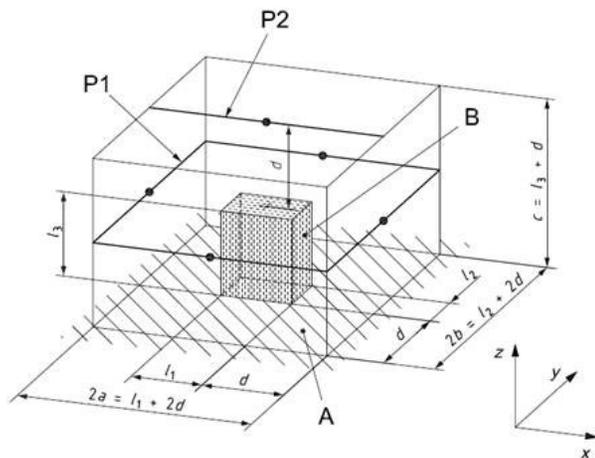


## Noise Emission.

Equivalent A-weighted Sound pressure level according to EN ISO 3746: 75.66 dB(A)

Uncertainty, K in decibels: 4.0 dB (A) according to EN ISO 4871

The figure quoted is emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of the workforce include characteristics of the work room, the other sources of noise, etc. i.e. the number of machines and other adjacent processes. Also the permissible exposure level can vary from country to country, This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.



## Wood lathe

Wood turning lathes are typically used to shape wood into cylindrical profiles. Objects made on a wood lathe include such items as furniture legs, lamp posts, baseball bats, bowls and other ornamental forms. Wood lathe tooling consists of fixturing and securing devices for the work piece, a moveable tool rest, and hand-held cutting tools in the form of long handled gouges, skewers, scrapers, and parting tools. Specialty tooling is also available for internal shaping and surface development.

# LAGUNA CE

## Laguna REVO 12 | 16 Lathe

Model	MLAREVO1216EVS	
Power	1~230V 50Hz 2.5A P2=0.75kw S1	
Specification	 $n_0=0 - 3500 / \text{min}$ $\text{SCCR}=6\text{k A}$ $M33 \times 3.5 / \text{MT-2} / \phi 10.5\text{mm}$	
Article No.	Weight	56.3kg
Series No.	Year	
<b>LAGUNA TOOLS</b> 2072 Alton Parkway, Irvine, CA 92606 <a href="http://www.lagunatools.com">www.lagunatools.com</a>		

## Electrical supply conditions

- Voltage: Steady state voltage: 0,9 to 1,1 of nominal voltage.
- Frequency: 0,99 to 1,01 of nominal frequency continuously; 0,98 to 1,02 short time.
- Harmonics: Harmonic distortion not exceeding 10 % of the total r.m.s. voltage between live conductors for the sum of the 2nd through to the 5th harmonic. An additional 2 % of the total r.m.s. voltage between live conductors for the sum of the 6th through to the 30th harmonic is permissible.
- Voltage unbalance: Neither the voltage of the negative sequence component nor the voltage of the zero sequence component in three-phase supplies exceeding 2 % of the positive sequence component.
- Voltage interruption: Supply interrupted or at zero voltage for not more than 3 ms at any random time in the supply cycle with more than 1 s between successive interruptions.
- Voltage dips: Voltage dips not exceeding 20 % of the peak voltage of the supply for more than one cycle with more than 1 s between successive dips.

## Physical environment and operating conditions

- Ambient air temperature: Between air temperatures of +5 °C and +40 °C.
- Humidity: The relative humidity does not exceed 50 % at a maximum temperature of +40 °C.
- Altitude: Up to 1 000 m above mean sea level
- Transportation and storage: Within a range of -25 °C to +55 °C and for short periods not exceeding 24 h at up to +70 °C.

## Warranty

### Registration

To prevent voiding this warranty, all products sold must be registered within thirty (30) days of receiving the product. All registered purchases will receive notifications about important product changes, receive customer service, and be able to file a warranty claim against defective workmanship, parts, or materials.

**You must register your purchase! Please follow this link or QR code:**



<https://lagunatools.com/policies/warranty/>

### Who is Covered

The applicable warranty covers only the initial purchaser of the product from the date of receiving the product. To file such claims, the original purchaser must present the original receipt as proof of purchase.

### What is Covered

The warranty covers any defects in the workmanship of all parts and materials that make up the machine unless otherwise specified. Any part, determined by Laguna Tools®, to have a defect will be repaired or replaced (and shipped), without charge. The defective item must be returned to Laguna Tools with the complaint and proof of purchase and in the original packaging. In the event the item is determined to be not covered by this warranty, the customer will be responsible for the cost to replace the item/part and all related shipping charges.

### Warranty Limitations

This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, or lack-of inadequate dust collection. The warranty may be voided against proof of misuse/abuse, damage caused where repair or alterations have been made or attempted by others, using the product for purposes outside the intended use (unless with written consent by Laguna Tools®), modification to the product, or use with an accessory that was not designed for the product. It is the responsibility of the user to understand basic machinery settings and procedures and to properly maintain the equipment in accordance with the standards and procedures provided in this manual.

### Length of Warranty

All new machines and optional accessories sold through an authorized dealer carry a two-year warranty effective the date of receiving the product - validated by shipping document or sales receipt. Machines sold for either commercial or industrial use have a one-year warranty. Wearable parts like throat plates, band-saw guides, etc., have a ninety-day warranty.

Aside from being free of defects upon receiving, consumable parts, like cutters and abrasives, are not covered by this warranty unless otherwise stated by Laguna Tools. These parts are designed to be used at the expense of the operator and are available for replacement or inventory purchase. The determination of a consumable part will be made on a case-by-case basis by Laguna Tools.

- 2 Year – New Machines Sold Through an Authorized Dealer
- 2 Year – Accessories Sold as Machine Options (excluding blades)
- 1 Year – Machines Sold for Commercial or Industrial Use
- 1 Year – Blades and Accessories outside of Machine Options
- 90 Days – Wearable Parts

### Shipping Damage

Laguna Tools® is not responsible for damage or loss caused by a freight company or other circumstances not in the direct control of Laguna Tools. All shipping-related claims for loss or damage goods must be made to Laguna Tools within twenty-four hours of delivery.

### How to Receive Support

To file a warranty-claim please contact the warranty department at 1-949-474-1200. To receive customer service or technical support please contact the customer service department at 1-800-332-4094. Warranty parts are shipped at the expense of Laguna Tools either by common carrier, FedEx ground services or similar method. Technical support to install replacement parts is primarily provided by phone, fax, email, or the Laguna Tools Customer Support Website.

## Introduction

Welcome to the Laguna Tools group. We understand that you have a choice of where to purchase your machines and appreciate the confidence you have in the Laguna Tools brand.

Through hands-on experience, Laguna Tools is constantly working hard to make innovative, precision products. Products that inspire you to create works of art, are a joy to operate, and encourage your best work.

This document provides the operator(s) vital safety instructions pertaining to the proper setup, adjustments, maintenance, and service of this product. Please save this document, keep it close to the product, refer to it often, and use it as an education tool to instruct other operators. Failure to read, understand and follow the instructions in this manual may result in personal property damage or serious personal injury—including amputation, electrocution, or death. The owner of this product is solely responsible for safe operation. responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment. The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

**LAGUNA TOOLS**

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# 1. REFERENCE

## 1. Reference



### 1. Reference Contents

- [1.1 REVO 1216 Lathe Specifications](#) 6
- [1.2 Dimensions](#) 8
- [1.3 External Map](#) 9
- [1.4 Internal Map](#) 10
- [1.5 Control & Display Elements](#) 10
- [1.6 Accessories & Options](#) 11

### REVO - Premium Wood-turning

Revo Lathes are premium tools for the most advanced and precise wood turners. With features like outboard turning capabilities, multi-position extensions, and over 15 accessories combined - they are without a doubt a quick way to expand your wood-turning abilities.

### 18|36 & 24|36 EVS

Both Lathes feature full range variable speed in two pulley positions controlled by the Delta S1 variable frequency drive. You set the speed and go to work. The banjo, headstock, and tail stock can be easily located to any position of the bed by the quick action of a cam handle. We tried our best to make everything as adjustable as possible, without losing control. Features include a solid steel bed, 48 position locking indexing system, reversible spindle rotation, quick belt change, and upgraded double sealed bearings (that are removable) to keep you turning longer.

Differences? On the 24|36 we increased the Motor HP, increased the throw capacity, beefed up the cast iron legs, banjo, and tail stock, and upgraded the size of the headstock bearings for those XL outboard turning projects. And finally, we added a patented Remote Control Panel to mount on the tail stock.

### 12|16 EVS MIDI

The 12|16 puts the robust build quality of the Revo name in a MIDI package. By no means is this an introductory lathe! This is the small profile lathe made for professionals who favor the smaller projects. Standard electrical equipment on a lathe this size is typically a Silicon Controlled Rectifier (SCR) inverter. That being said, the standout feature on this midi lathe is the Pulse Width Modulation (PWM) inverter. This allows for consistent and powerful torque through all speeds and no dropping of speed with load. You set the speed and go to work. In addition, many of the features from the 18 and 24 were brought down to the 12|16; the reverse

function, the elegantly designed control panel, full function spindle lock, self ejecting center removal, upgraded bearings, and so much more. We designed this lathe as a compliment to the 18 and 24|36 lathes, and are confident in its performance.

### 1.1 Revo Lathe Specifications



	12-16	18-36	24-36
MACHINE - TYPE - MODEL NO. - CAPACITY - VOLTAGE. EXAMPLE: M-LA-REVO - 2436-220			
Models	MLAREVO 1216EVS	MLAREVO1836220	MLAREVO2436220
<b>1.1.1 Electrical</b>			
Power Requirements	230V-1PH-50HZ	230V-1PH-50HZ	230V-1PH-50HZ
Amperage (FLA)	2.5 AMP	5.8 AMP	9 AMP
Motor Power	1 HP	2 HP	3 HP
Motor Speed	1750 RPM	1450 RPM	
Starter Switch	Magnetic		
Plug Included	YES	YES	YES
Circuit Breaker Requirement	10 AMP	10 AMP	15 AMP
Receptacle Requirement			
	* A Variable frequency drive (VFD) is used to convert the single phase input power to the 3 phase power requirement on the motor plate.		
<b>1.1.2 General</b>			
Certification	CE	CE	CE
Net Weight	118LB (53.5KG)	427LB (193.7KG)	532LB (241.3KG)
Shipping Weight	125LB (56.7KG)	452LB (205.0KG)	560 (254.1KG)
Shipping Dimensions	L35.8" W14.6" H20.5"	L61" W27" H22.5"	
Overall Size	L29.4" W8.9" H17.4"	L60" W26" H52.25	
<b>1.1.3 Machine Type: Lathe</b>			
Speed Range High	650 - 3500 RPM	135 - 3500 RPM	
Speed Range Mid	325 - 1750 RPM	N/A	

	12-16	18-36	24-36
Speed Range Low	50 - 525 RPM	50 - 1300 RPM	
Distance Between Centers	15.5" (394mm)	36" (914mm)	
Swing Over Bed	12-1/2"(318mm)	18" (457mm)	24" (609mm)
Swing Over Banjo	9-1/2"(241mm)	13.5" (343mm)	19.75" (501mm)
Spindle Bore	3/8"(9.5mm)		
Spindle Taper	MT2		
Spindle Thread	M33 X 3.5 mm	M33 X 3.5mm	
Front Bearing	6006LLU	6207LLU	6307LLU
Rear Bearing	6005LLU	6205LLU	
Indexing	24 positions w/ Lock	14 / 36 / 48 positions w/ Lock	
Inverter	PWM inverter	DeltaS1 - Pre-programmed for 1836	DeltaS1 - Pre-programmed for 2436
Drive belt	6 Groove V Belt	8 groove Poly-V	
Tail stock quill travel	2-1/2"(63.5mm)	4.5" (114mm)	
Tail stock taper	MT2		
<b>1.1.4 Dimensions</b>			
Overall Size	L29.4" W8.9" H17.4"(746.8mm, 226mm, 442mm)	L60" W26" H47"(1524mm, 660mm, 1194mm)	L60" W26" H52.25"(1524mm, 660mm, 1327mm)
Floor to bed height	6.7" (170mm) no pads	32.5" (826mm) with pads	
Floor to Spindle Center	13" (328.75mm) no pads	44.5" (1130mm) with pads	
Bed Length	29.4" (746.8mm)	58.5" (1485.9mm)	
Tool Rest Length	6" (152.4mm)	12" (305mm)	
Tool Rest Post Dia.	1" (25.4mm)		
Faceplate Dia.	3" (76.2mm)		
<b>1.1.5 Dust Collection</b>			
Dust Port Outer Diameter	N/A		
CFM Requirement			
<b>1.1.6 Materials</b>			
BED	Cast Iron	Steel	
Head/tail Stock	Cast Iron		
Legs or Base	Sheet Steel	Cast Iron	
Tool Rest	1045 Steel		
Tool Rest Contact Rod	Hardened 1045 Steel		
Banjo	Cast Iron		
<b>1.1.7 Features</b>			

	12-16	18-36	24-36
Spring Loaded Spindle Lock	✓	✓	✓
Outboard Turning	With Accessory - ALAREVO12 Extension	With Accessory - ALAREVO18 20 Extension	
Self Ejecting Tail stock Removal	✓	✓	✓
Tool Storage	✓	✓	✓
Live Center	✓	✓	✓
Drive Center	✓	✓	✓
Faceplate	✓	✓	✓
Remote Control Panel	<b>NO</b>	<b>NO</b>	✓
Reverse Rotation	✓	✓	✓
Operator Height Adjustment	✓	<b>NO</b>	

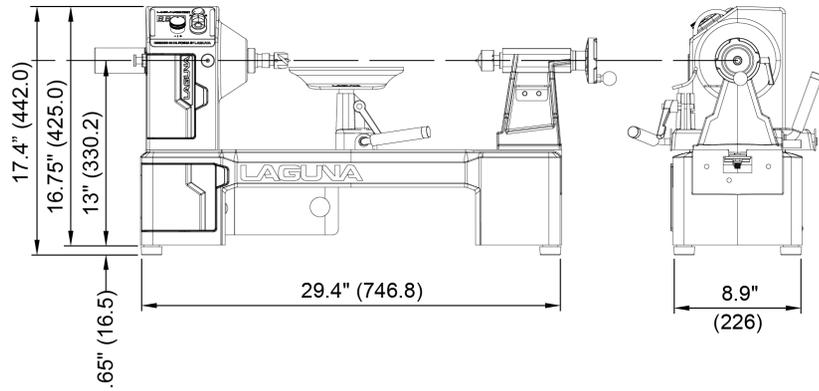
### 1.1.8 Accessories & Options

1216 Stand	ALAREVO12 STAND	<b>X</b>	<b>X</b>
1216 Bed Extension & Outboard Turning	ALAREVO12 EXTENSION	<b>X</b>	<b>X</b>
Industrial Flood Light	ALAREVO18 Light	1836-110: ALAREVO18 Light 1836-220: MBA14BX-LIGHT220-DA	MBA14BX-LIGHT220-DA
20" Steel Extension	<b>X</b>	ALAREVO18 20 Extension	
12" Swing Extension	<b>X</b>	ALAREVO18 12"EXTSA	
Deluxe Wheel System	MBA14/12 WHEEL SYSTEM	ALAREVO18 Wheel System	
3" Riser Kit	<b>X</b>	ALAREVO18 3" Riser Blocks	
Comparator	<b>X</b>	ALAREVO18 Comparator	
Vacuum Regulator	<b>X</b>	ALAREVO18 Vacuum	
Rotary Adapter From Vacuum Regulator	<b>X</b>	PLAREVO1836-802VAA	
Additional 58" bed	<b>X</b>	ALAREVO18 Steel Bed	
Additional Cast Iron Leg	<b>X</b>	ALAREVO18 Cast Leg	
Headstock Guard	<b>X</b>	ALAREVO18 Guard Assembly	ALAREVO24 Guard Assembly

**Key:** V - voltage. PH - phase. HZ - hertz. FLA - full load amperage. HP - horsepower. kW - kilo watt. AMP - amperage. L - length (left to right). W - width (front to back). H - height (bottom to top). M - meter. Ft - foot. MM - millimeter. (") or IN - inch. MPA - mega pascals. PSI - pounds per square inch. LB - Pound. Kg - Kilo gram. CFM - cubic feet per minute.  
**Disclaimer:** The information contained in this publication was correct at the time of print written on the front of this manual. In the interest of continuous innovation, we reserve the right to change specifications, design or included equipment without notice or obligation. No part of this publication may be reproduced, transmitted, or translated into any language in any form by any means without our written permission. Errors and omissions may be current.

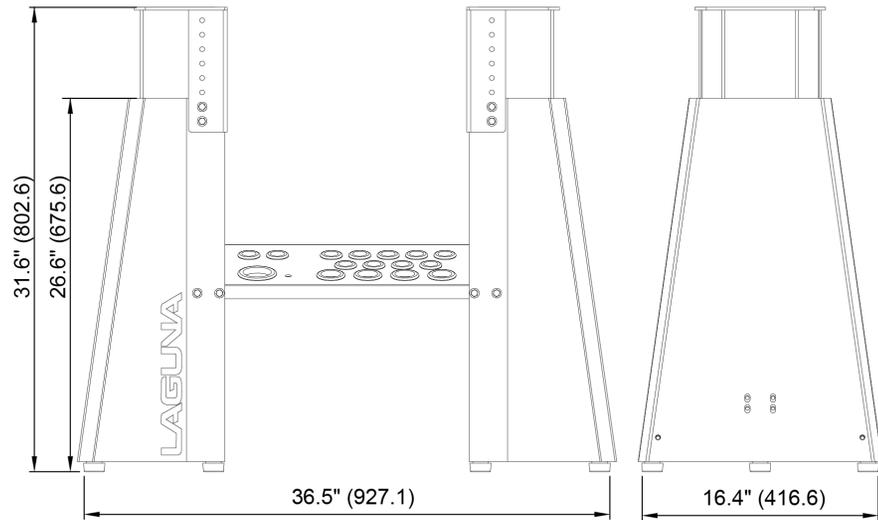
# 1. REFERENCE

## 1.2 Dimensions



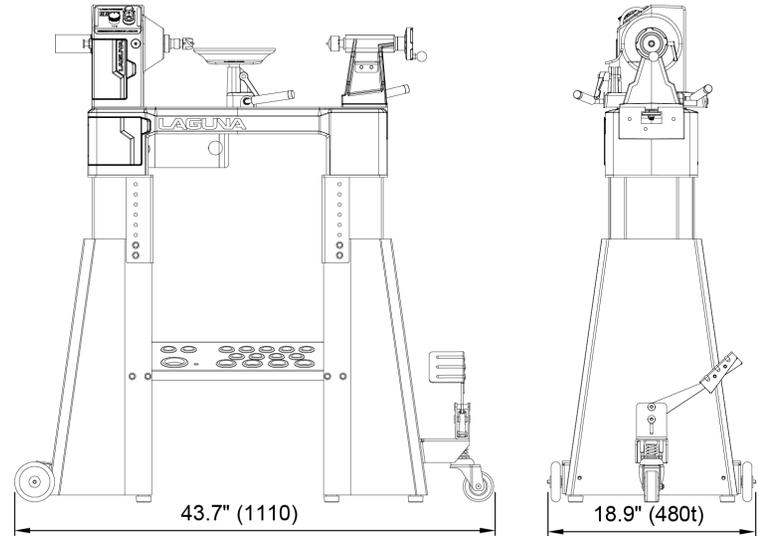
LD01  
LAGUNA

### Stand Floor Space



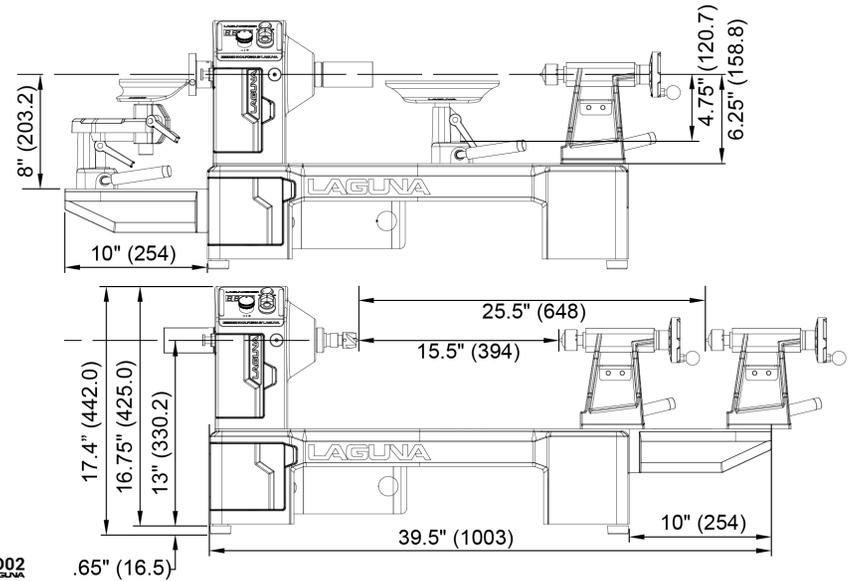
LD03  
LAGUNA

### Stand Floor Space (with mobility kit)



LD04  
LAGUNA

### Capacities (with extension accessory)



LD02  
LAGUNA

EN 1. REFERENCE

## 1.3 External Map

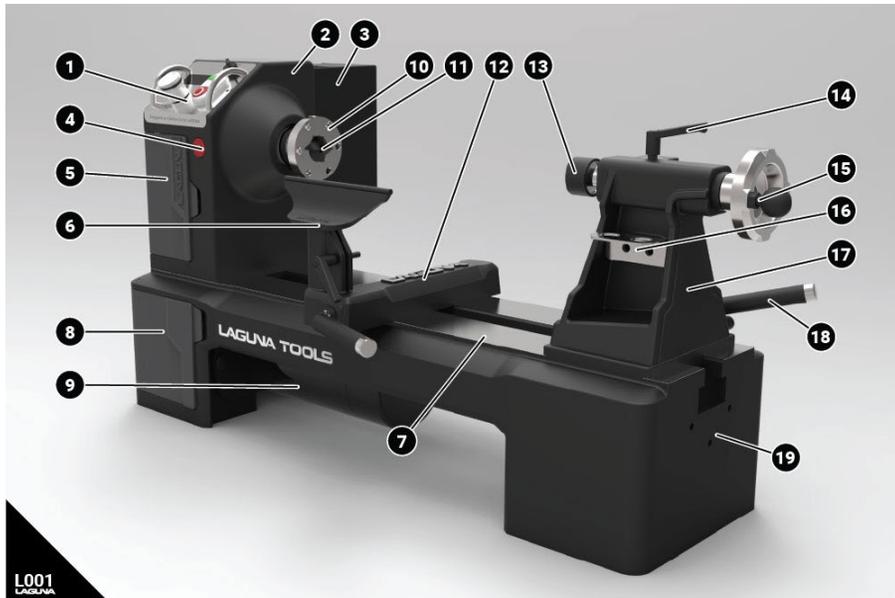


Figure L001: REVO 1216 Lathe external map feature image.

(1) Control Panel. (2) Head-stock. (3) Power Inverter(\*note). (4) Spindle Lock. (5) Upper Belt Door. (6) Tool Rest. (7) Bed. (8) Lower Belt Door. (9) DC Motor. (10) Face Plate. (11) Drive Center. (12) Banjo. (13) Live Center. (14) Center Lock. (15) Tail-stock Plunge Wheel. (16) Center Storage. (17) Tail-stock. (18) Tail-stock Lock. (19) Extension Mounts.

(\*note)Power Inverter was relocated under tail-stock in product testing phase.

Key	Name	Description
1	Control Panel	Houses the ON/OFF switch, FOR/REV switch, variable speed control, and digital read out.
2	Head-stock	Holds the spindle and houses the belt drive system and electrical components. The spindle can rotate forward or reverse. Both ends of the spindle are threaded 1" x 8 TPI. The operator must use the ALAREVO12_Extension accessory with the left spindle configuration.
3	Power Inverter	The Pulse Width Modulation (PWM) inverter does a whole lot of fancy electrical things to make the DC motor spin at different rates with very good torque. The standout benefits from a standard DC Inverter (SCR) is torque control at low speeds, no dropping of rpm when loading spindle, and -of course- clean power that minimizes heat. Under side-by-side comparison, it is obvious which give more precise and consistent control over the tool. *Power Inverter was relocated under tail-stock in product testing phase.
4	Spindle Lock	Spring loaded spindle lock to easily change belts or be used with the indexing system (not shown - see internal map on next page).

Key	Name	Description
5	Upper Belt Door	Access door for quick and easy belt changes. Also, it snaps closed with a magnetic insert.
6	Tool Rest	The tool rest can be moved to any position on the lathe bed and locked to suit the job at hand. The tool rest has a tall profile to allow the bowl turner to turn steep angles. The leading edge is made from 6mm hardened steel.
7	Bed	Serves as the ground plane for the head-stock, banjo, and tail-stock.
8	Lower Belt Door	Access door for quick and easy belt changes. Also, it snaps closed with a magnetic insert.
9	DC Motor	Direct Current Motor. Used in conjunction with the (3) Power Inverter and belt system to spin the spindle at user-controlled rates.
10	Face Plate	Used to mount things.
11	Drive Center	Used only in the head-stock spindle to mount a piece of stock material on the lathe.
12	Banjo	Mounts the tool rest. Can be located anywhere on the bed. Easily locks and unlocks with the lock lever (same as 18 tail-stock lock).
13	Live Center	Used only in the tail-stock spindle to mount a piece of stock material on the lathe. The live center rotates freely and features a removable thimble.
14	Center Lock	Once the workpiece is secured with (15) Tail-stock plunge wheel, use this to make sure it does not come loose! <b>NOTICE! Make sure to unlock the center-lock prior to cranking the Tail-stock plunge wheel.</b>
15	Tail-stock Plunge Wheel (Quill)	Clockwise to go in, counterclockwise to come out. Come all the way out to pop out the (self ejecting) live center.
16	Center Storage	Stores your stuff.
17	Tail-stock	Holds the workpiece in line with the spindle. The spindle quill has a plunge distance of 2 1/2 in. It can accommodate centers and other tools which have a number 2 Morse Taper. The tail stock can be moved to any position on the lathe bed and locked to suit the job at hand.
18	Tail-stock Lock	Clockwise to lock down, Counter Clockwise to unlock. Couldn't be simpler.
19	Extension Mounts	Mounts the ALAREVO12 Extension accessory to extend the capacity. There is also an identical bolt pattern on the headstock side (but lower) for outboard turning capabilities with a maximum throw of 16".

# 1. REFERENCE

## 1.4 Internal Map

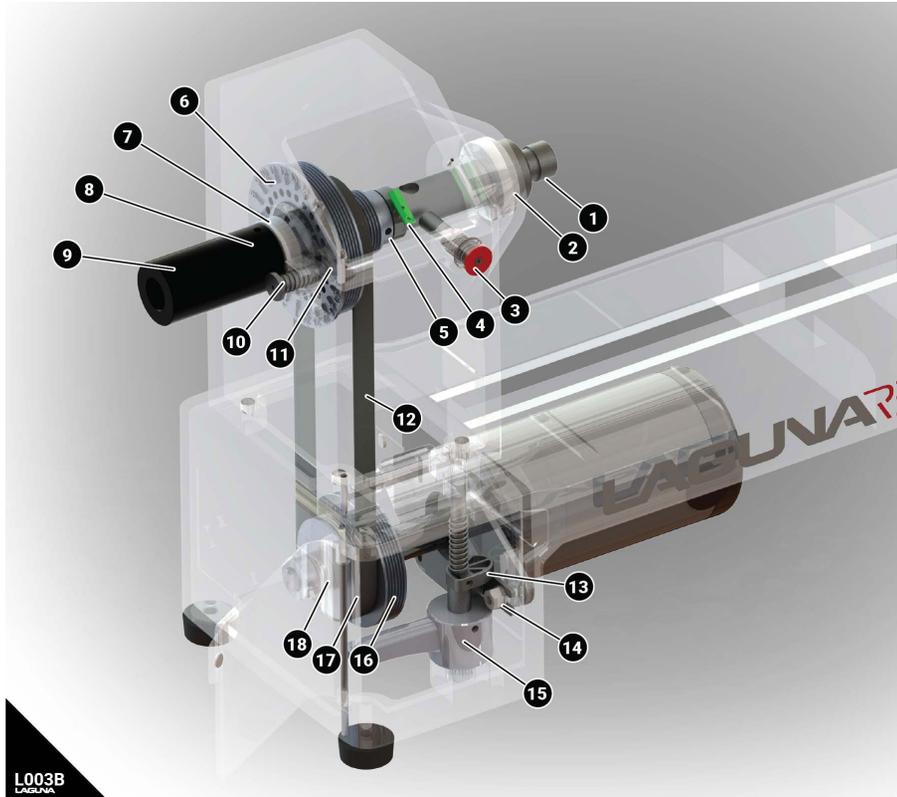


Figure L003B: REVO 1216 Lathe internal map feature image.

(1) Front Spindle Threading - 1" x 8 TPI. (2) Head-stock Front Bearing - 6006LLU. (3) Spring Loaded Spindle Lock. (4) RPM Sensor. (5) Ride Pulley Cat Screw. (6) Indexing Positions. (7) Rear Bearing - 6005LLU (8) Below Hand Wheel, Rear Spindle Threading - 1" x 8 TPI. (9) Hand Wheel (10) Indexing Plunge. (11) Viewing Window of Index Position. (12) Drive Belt. (13) Cam Stop. (14) Cam Adjustment Bolt. (15) Belt Release Cam Handle (16) High RPM Pulley 650 - 3500 RPM. (17) MED RPM Pulley 325 - 1750 RPM. (18) Low RPM Pulley 50 - 525 RPM.

Key	Name	Description
1	Front Spindle Threading	This can be used to fasten a faceplate or chuck with M33 x 3.5 mm threading.
2	Front Bearing	6006LLU double sealed premium bearing. This bearing should last a very long time, but can be replaced if needed.
3	Spindle Lock	Press to lock, stop pressing to unlock. <b>CAUTION! Do not start the lathe with the lock engaged.</b>

Key	Name	Description
4	RPM Sensor	Works very similar to a Laser Tachometer to relay the ACTUAL rpm of the spindle.
5	Ride Pulley	Used to transfer power from motor to pulley to spindle to workpiece.
6	Indexing Positions	24 Positions on a 15 degree step.
7	Rear Bearing	6005LLU double sealed premium bearing. This bearing should last a very long time, but can be replaced if needed.
8	Rear Spindle Threading	1" x 8 TPI. For Outboard turning, the "Bed Extension & Outboard Turning Kit" must be purchased. Mount the extension in outboard turning position, remove the (9) Hand Wheel and install on the (1) front spindle threading. Finally, flip the lathe in reverse and fasten your outboard raw stock with the 3" faceplate.
9	Hand Wheel	Used to turn the spindle by hand.
10	Indexing Plunge	Rotate clockwise to engage, Counter clockwise to release. Locks the spindle on the index position.
11	Viewing Window	To view the current indexing position.
12	Drive Belt	Used to transfer power from motor to pulley to spindle to workpiece.
13	Cam Stop	Allows for the cam handle to lift the Drive Pulley assembly and loosen the belt for adjusting between speed groups.
14	Cam Adjustment Bolt	This bolt is to be used to adjust the cam lever mechanism if found faulty. <b>NOTICE! Do not adjust unless necessary!</b>
15	Cam Handle	Engage to change the belt between the speed groups.
16	High RPM Pulley	650 - 3500 RPM
17	MED RPM Pulley	325 - 1750 RPM
18	Low RPM Pulley	50 - 525 RPM

## 1.5 Control & Display Elements

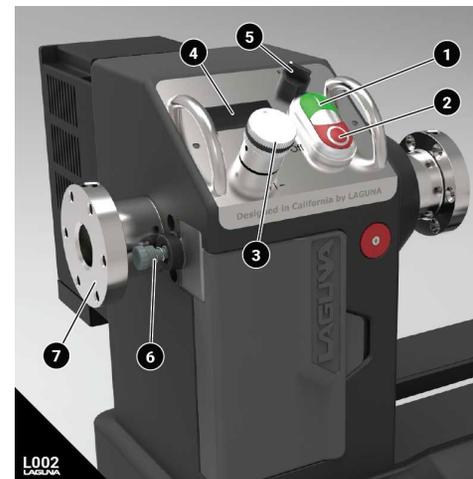


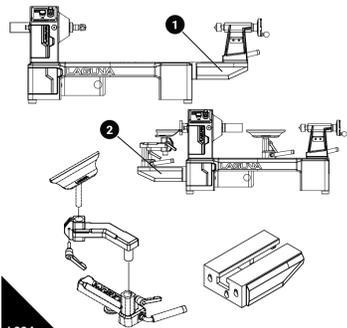
Fig L002 - REVO 1216 Control Panel.

(1) On button (Power).  
 (2) Off button.  
 (3) Speed adjustment knob - CW to increase, CCW to decrease.  
 (4) DRO RPM Panel.  
 (5) Forward / Reverse Control.  
 (6) Indexing Adjustment.  
 (7) 3" Faceplate shown on reverse spindle mount.

## 1.6 Accessories & Options

The following accessories are designed for the REVO 1216 Lathe. These instructions should be followed exactly to properly set up the equipment. Some of these accessories are designed to fit multiple machines offered by Laguna Tools, check the [specification](#) <sup>[6]</sup> sheet for a fit guide of all REVO accessories.

### 1216 Bed Extension & Outboard Turning



**Fig L004: 10" Outboard Extension for REVO 1216 10".** Includes 10" Extension, Outboard turning tool rest knuckle, and Tool Rest clamp. (1) As bed lengthening function - increased center to center from 15" to 25". (2) As outboard turning function - allows for 16" throwing capacity.

### 1216 Stand

**SKU:** ALAREVO12 STAND  
**Fits:** MLAREVO 1216-110

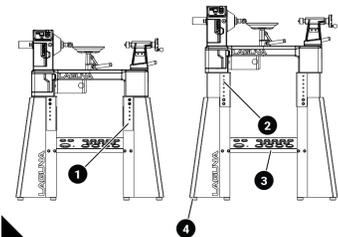
#### FAQ

**Q: What is the range of motion with this stand?**

A: The REVO 1216 Stand allows the spindle center line to be positioned in 7 different positions from 39.6" to 44.6".

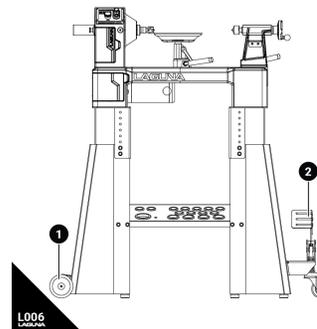
**Q: Does this come with the mobility kit?**

A: No, it comes standard with leveling casters.



**Fig L005: Stand for REVO 1216 10".** Includes adjustable lathe stand and tool rack. (1) In lowest 29.6" (floor to spindle center-line) position. (2) In Highest 29.6" position. (3) Tool Rack - holds faceplate, both centers, knock out rod, 9 chisel tools with 1" holes, and 4 large tools with 1.5" holes.

### Deluxe Wheel System



**Fig L006: Premium Mobility kit for REVO 1216 10".** (1) Base Wheels & mounting (2) Foot Lever and wheel.mount assembly.

**SKU:** MBA14/12 WHEEL SYSTEM

**Fits:** ALAREVO12 STAND (1216 Stand), MBAND1412-175, MBAND14BX110-175

#### FAQ

**Q: Does the wheel system affect the height of the lathe?**

A: No. The two left wheels will always be in contact with the floor but only at the same level as the caster. When the lever (2) is engaged the lathe will prop up on the 3 wheels and is mobile. Releasing the lever (2) and the machine is back on the floor as if there was not a mobility kit installed.

### Machine Light

**SKU:** ALAREVO18 Light

**Fits:** ALAREVO12STAND (1216 Stand), MLAREVO1836-110-150, MBAND1412-175, MBAND14BX110-175



**Fig: L011: Machine Light for Laguna Tools Machines, shown on the 14BX Bandsaw.**

#### FAQ

**Q: What bulb?**

A: The bulb installed is a 50 Watt Halogen Flood Light bulb.

**Q: Is drilling required to install?**

A: No, there are pre-tapped holes or mounting brackets available for each model listed above.

**NOTE:** There are two different models depending on voltage: see MBA14BX-LIGHT220-DA for 220V version.

**NOTE:** This accessory will not fit the 1216 lathe without the stand accessory.

## Apparel



Fig L010: Laguna Tools Apparel.

Fig L010: Laguna Tools Apparel.  
Fits: Humans

### FAQ

**Q: Shut up and take my money, how do i buy?**

A: Go to this link:

<https://lagunatools.com/accessories/apparel/>  
select items, add to cart, then proceed to checkout.

**Q: Does this fit other Laguna Tools?**

A: Yes, you can proudly dress up your Laguna Tools with Laguna Tools Apparel.

## 2. Setup

### WARNING!

**WARNING!** Never perform any setup, maintenance or adjustments with the machine connected to the power source!

**WARNING!** If you have any doubt about the described procedure, seek professional assistance. Do not attempt any procedure that you feel is unsafe, or that you do not have the physical capability of achieving.

**WARNING!** When removing packaging banding, extreme caution must be used as the banding will spring when cut.

**CAUTION!** The machine is heavy. Ensure that you have enough people to do the job safely.

**NOTE:** There may be sawdust in or around your new machine as a result of thorough testing.

**NOTE:** The indexing numbers used to describe images are not the same as those indexing numbers used to describe the individual parts in the Parts Section exploded views. This is done solely to help with assembly and give better instructions to those receiving the machine new. When ordering replacement parts, please only consult the part numbers and reference images in the [Parts Section](#) <sup>[23]</sup>.

The machine comes as assembled as possible without impacting shipping costs. With this, there will always be some setup procedures and adjustments that the craftsman must perform prior to using the machine. Those setup sections that must be done to complete the assembly of the machine are in the General Set-Up sub-section. Those help topics for making operational changes to the machine in order to set up for a different function are in the Functional Setup Section. All help topic pertaining to the proper set-Up of Accessories are in the Accessories & Options Setup sub-section.

If you are looking for adjustments, like how to align centers, please navigate to the [Maintenance Sections](#) <sup>[20]</sup>.

## 2. Setup Contents

[2.1 Preparing For Set-Up](#) <sup>[13]</sup>

[2.2 Inventory](#) <sup>[13]</sup>

[2.3 General Set-Up](#) <sup>[14]</sup>

Installing the Leveling Casters

[2.4 Functional Set-Up](#) <sup>[14]</sup>

Installing/Removing Face Plate & Hand Wheel

Installing/Removing Drive Center and Live Center

Changing Between Speed Groups (Pulley Steps)

[2.5 Accessories & Options Setup](#) <sup>[17]</sup>

[Outboard Extension](#) <sup>[17]</sup>

[Stand](#) <sup>[18]</sup>

[Wheel System](#) <sup>[19]</sup>

[Machine Light](#) <sup>[20]</sup>

## 2.1 Preparing For Set-Up

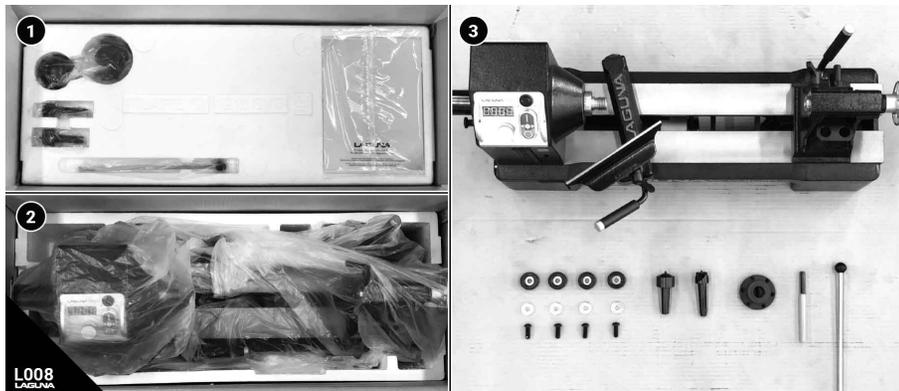


Fig L008: Receiving and un-boxing the REVO 1216 Lathe. (1) Un-boxing Contents. (2) Lathe in box. (3) Components un-boxed.

### Receiving

It is likely that your machine will be delivered by a third party. Before un-boxing, be sure to inspect the packaging and shipping documents supplied by the driver. Ensure that there is no visible damage to the shipment. If any damage has occurred because of shipment, note the damage on the bill of lading or refuse the shipment. Immediately call the dealer store where the machine was purchased.

1. Never accept a shipment that is damaged or partial without notifying the shipping company and the purchasing store.

### Placement

Prior to removing the machine from the packaging, decide the operating location of the machine. The dimensions and floor space can be found here: [Dimensions](#)<sup>[8]</sup>.

1. There should be sufficient area at the front of the machine to allow you to work on it comfortably.
2. There should be sufficient area at the back of the machine to allow access for adjustments and maintenance to be conducted.
3. The better the lighting the more accurately and safely you will be able to work.
4. You should select a solid flat floor, preferably one made of concrete or something similar.
5. Locate it close to a power source and dust collection (If Applicable).

### Un-boxing

Once in place, carefully un-box and remove all components. Un-boxing guidelines:

1. Do not cut deep into a box with a blade as it could scratch the paint, only cut deep enough to cut the tape or use a dull edge.
2. Organize the hardware and setup tools needed (at beginning of each set-up section) prior to proceeding with setup.

## 2.2 Inventory

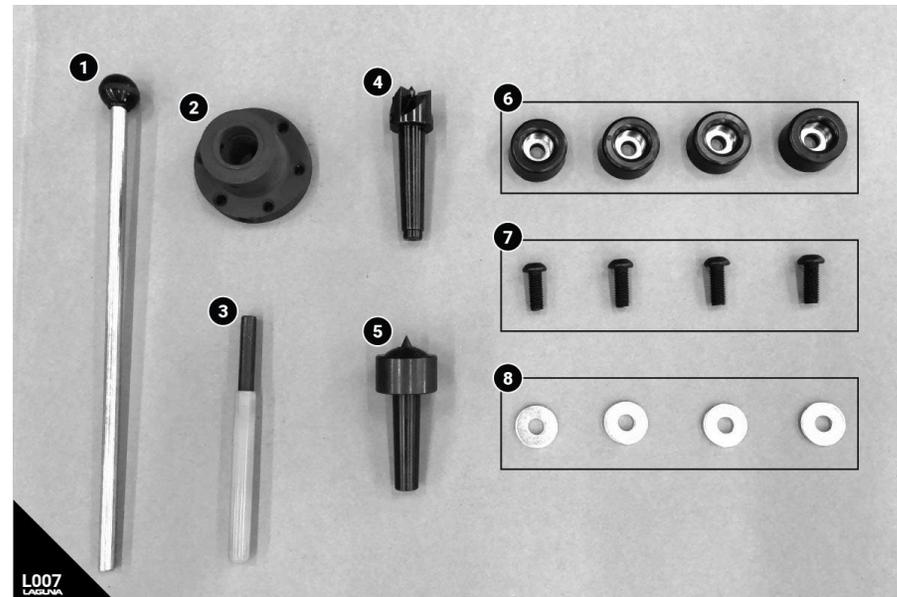


Fig L007: REVO 1216 Lathe Inventory.

Key	Name	Description
0	<b>REVO 1216 Lathe</b>	
1	Center Knock-Out Rod PLAREVO1216-1103	Used to release the headstock centers. <b>NOTICE:</b> Do not attempt to use the knock out rod on tail-stock, release (unscrew hand wheel) the quill completely to remove the center.
2	Face Plate PLAREVO1216-104	3" faceplate used to fasten workpiece.
3	Face Plate Wrench PLAREVO1836-1136	To release the Face Plate from spindle threading.
4	Drive Center PLAREVO1836-124	Used in the headstock to turn a work piece. Does not have a bearing.
5	Live Center PLAREVO1216-168	Used in the tail-stock to keep workpiece rotating. Has a bearing.
6	4x Rubber Foot PLAREVO1216-199	Rubber feet to limit vibrations - Remove if using stand.
7	4x Caster Screw PLAREVO1216-1100	
8	4 x Flat Washer PLAREVO1216-198	

## 2. SETUP

### 2.3 General Set-Up

The following setup sections will complete the assembly of the machine.

#### Installing the Leveling Casters

You may want to install the included caster on the lathe to reduce vibrations, and protect the base from the floor. You should not install the casters if you are planning to use the 1216 Lathe Stand.

**Tools Needed:** Alan Wrench

1. Make sure Lathe is unplugged and cannot be powered on.
2. Remove the Tail Stock and Banjo (tool rest) from the lathe by releasing the cam lock and sliding off the end. **NOTICE:** You do not need to unbolt anything to remove banjo or tail stock.
3. CAREFULLY tilt the lathe on its side - use a moving blanket or other soft thing to cushion the side of the lathe in contact with floor.
4. Remove the rubber "table saver" inserts from the screw holes on the bottom of the lathe by screwing them out.
5. Install a washer, caster, and screw on each corner.

### 2.4 Functional Set-up

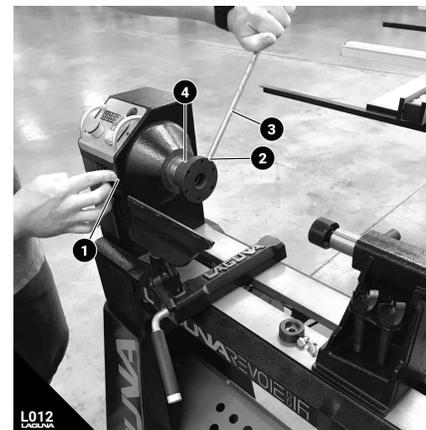
The following setup sections are to change between different functions that the machine offers.

#### Installing/Removing Face Plate & Hand Wheel

**WARNING!** Unplug machine from power prior to proceeding!

**NOTICE!** Do not over torque the threading, firm pressure is all that is required.

**NOTICE!** Do not attempt to remove faceplate without removing set screws. The set screws set on a flat part of the spindle. Forcing the faceplate off while set screws are set or not completely removed away from threading can damage the lathe spindle.



**Fig L012 - Face plate installation. (1) Spindle Lock. (2) Faceplate wrenching hole. (3) Faceplate Wrench. (4) Set Screws.**

The Face Plate simply screws into the spindle threading on either end of the spindle. Both sides of the spindle are 1" x 8TPI right hand threads. Both 3" faceplate and the hand wheel have the same set screw in the exact same position. There is a cutting groove on each side of the spindle for the set screws.

**Tools Needed:** Face Plate Wrench (PLAREVO1836-1136) **OR** Center Knock-Out Rod (PLAREVO1216-1103) **AND** Allen Wrenches

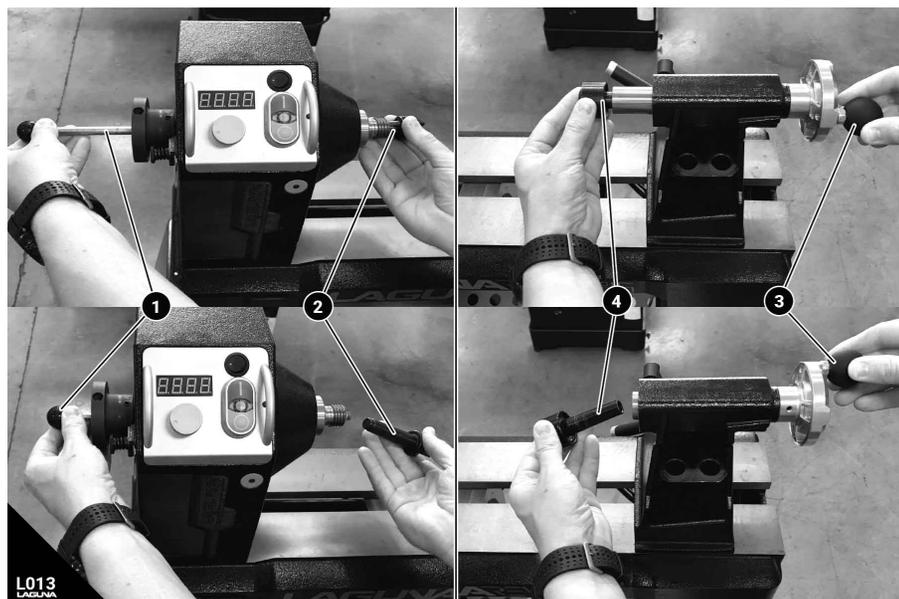
1. Make sure Lathe is unplugged and cannot be powered on.
2. Position the Banjo out of the way to prevent damage.
3. **CHECK** that the (4) set screws are not engaged, **REMOVE** all set screws that are tighten down with Allen wrench.
4. Press the (1) spindle lock inward to lock the spindle. You may need to rotate the spindle a bit to line up the pin hole.
5. With (1) spindle lock engaged (and set screws removed), fit the (2) faceplate wrench into the (3) faceplate wrenching hole.
6. Turn counter clock-wise (CCW) to remove, turn clock-wise (CW) to install for both sides of the spindle.
7. When installing, reverse steps 6-1. **NOTICE!** The face plate wrench is not needed to install, if you over-tighten, the set screw flats (on spindle) may not line up and you could damage the threading. Hand tightening is usually sufficient.

## Installing/Removing Drive Center and Live Center

**WARNING!** Unplug machine from power prior to proceeding!

**NOTICE!** Do not attempt to remove the tail stock center with tools, simply reverse the quill until it pops out.

**NOTICE!** The centers come out quickly, prevent from dropping.



**Fig L013 - Center Installation. (1) Knock-out Rod. (2) Quill Hand Wheel. (3) Drive Center. (4) Live Center.**

To install the centers, simply press them into the boring. When the workpiece is loaded both centers will be pressed into a sturdy position. To remove the centers, the method depends on whether they are installed in headstock or tail stock spindle.

### Removing (Drive Center) From Head-stock

**Tools Needed:** Center Knock-Out Rod (PLAREVO1216-1103)

1. Make sure Lathe is unplugged and cannot be powered on.
2. Lightly grasp the center tool with free hand prior to step 3 - it will pop out unexpectedly.
3. Use the Center (1) Knock-out Rod and lightly tap the center loose.

### Removing (Live Center) From Tail-stock

**Tools Needed:** N/A

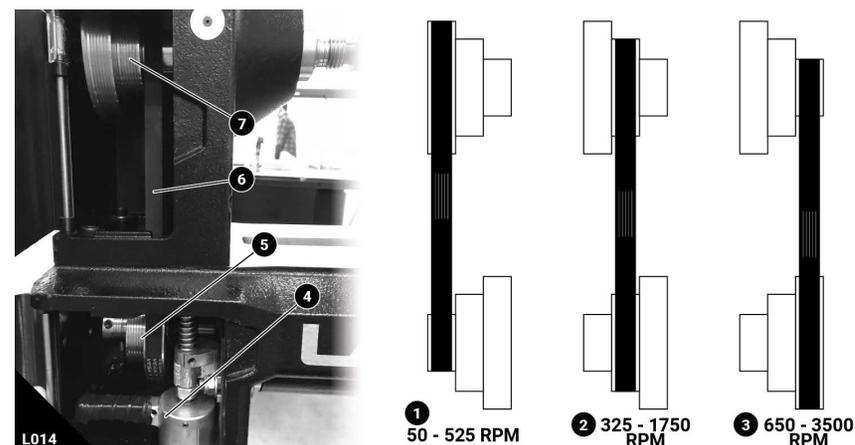
1. Lightly grasp the center tool with free hand prior to step 2 - it will pop out unexpectedly.
2. Completely loosen the (2) quill (plunge) by turning the handle counter clockwise.

## Changing Between Speed Groups (Pulley Steps)

**DANGER!** Unplug machine from power prior to proceeding!

**CAUTION!** Pinching hazard. Do not rotate spindle with hands in the belt cabinet.

**NOTICE!** Do not attempt any other pulley configurations than those described below.



**Fig L014 - Changing between speed groups. (1) Low Speed Configuration: 50-525 RPM. (2) Mid Speed Configuration: 325 - 1750 RPM. (3) High Speed Configuration: 650-3500 RPM. (4) Belt Tension Cam Handle. (5) Drive (Lower) Pulley. (6) 6 Rib Drive Belt. (7) Ride (Upper) Pulley.**

The lathe has three sets of pulleys for high, medium, and low as described above. The belt should be tensioned so that there is approximately 1/8 to 1/4 " deflection when the belt is pressed with moderate thumb pressure. To adjust the amount of tension, see the Adjustments section. To adjust between the speed ranges, follow these steps:

### Tools Needed: N/A

1. Disconnect the electric supply to the lathe.
2. Open both pulley covers to access (7) upper and (5) lower pulleys.
3. To loosen the belt tension, turn the (4) belt tension cam handle towards you.
4. Move the (6) drive belt to the required set of pulleys 1, 2, or 3.
5. Give Tension back to the Belt by returning the (4) belt tension cam handle to the taught position.
6. Test that the belt is set correctly by inspection and manually turning the spindle prior to returning power to the lathe.

## 2. SETUP

### 2.5 First Use

**WARNING!** Read the entire owners manual prior to using this machine.

**WARNING!** Never load or adjust the loading of a workpiece with the machine powered on.

**CAUTION!** The workpiece must be balanced to limit vibrations!

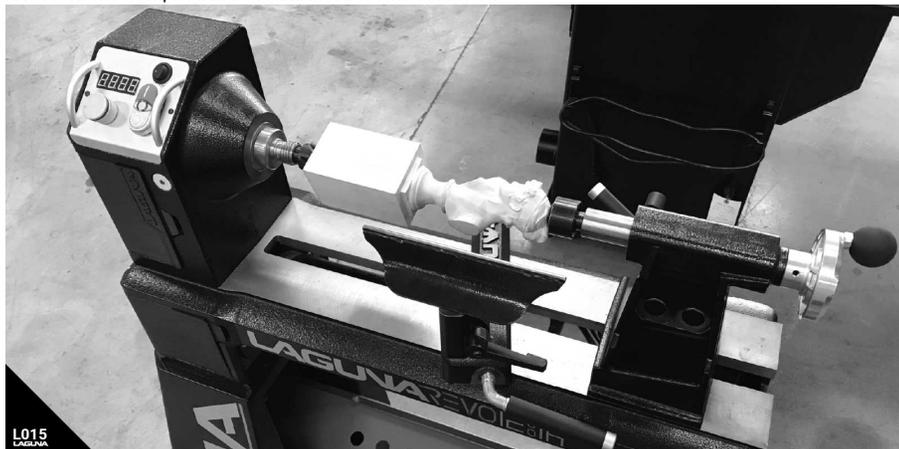


Fig L015 - 1216 lathe first use.

#### Loading a workpiece

1. With the Lathe still turned off, prepare to load a workpiece by [installing the live center](#) <sup>15</sup> into the tail stock spindle.
2. Find the center of the workpiece to be mounted with either the faceplate or the drive center. **NOTE:** A wood lathe chuck can also be used to load a workpiece. The chuck must fit the spindle threading to be compatible.
3. Fasten the workpiece to the faceplate **or** drive the drive center into the center mark of workpiece with a rubber mallet (**NOTICE:** do not use a metal hammer) **or** clamp the workpiece in the jaws of the chuck (skip step 4).
4. Thread or insert the faceplate or drive center into the spindle. **NOTE:** You may need to remove the tail stock to fit.
5. Replace the tail stock if removed.
6. Fully release the quill (plunge) of the tail-stock by reversing the hand-wheel counter-clockwise.
7. Move the tail-stock to the workpiece such that the live center is 1/2" away from the workpiece.
8. Lock the tail-stock in place with the large cam lever.
9. Slowly engage the quill (plunge) to the center of the workpiece and tighten down. **NOTE:** About 1/2 turn beyond contact is sufficient, but it depends on the hardness of the workpiece.
10. Lock the quill.
11. Check that the workpiece rotates freely without any obstructions with hand-wheel prior to turning on the machine.

**CAUTION!** The workpiece must be balanced. If unbalance, the lathe may vibrate too heavily and cause problems. Especially with "live edge" pieces, remove any large

abnormalities prior to loading stock workpieces. A balanced workpiece will not assume any rotation orientation.

#### Personal Protection Equipment & Safety

Make sure to completely read and understand the [Safety Sections](#) <sup>3</sup> of this manual prior to proceeding. It is vital to follow these instructions to limit the danger evolved when using this machine.

#### Turning on the machine

1. Confirm that the belt is in the correct speed range. See [Changing between speed groups](#) <sup>15</sup>.
2. Confirm that the appropriate personal protective equipment is being used.
3. Confirm that all chisels and wok tools are within close range and **DO NOT** require any reaching over the workpiece.
4. Plug in the machine to the appropriate receptacle as denoted on the machine information plate.
5. Double check the workpiece balancing and rotation.
6. Turn on the machine. The machine will always start at 0 RPM when turned on.
7. Set the speed and get to work!

## 2.6 Accessories & Options Setup

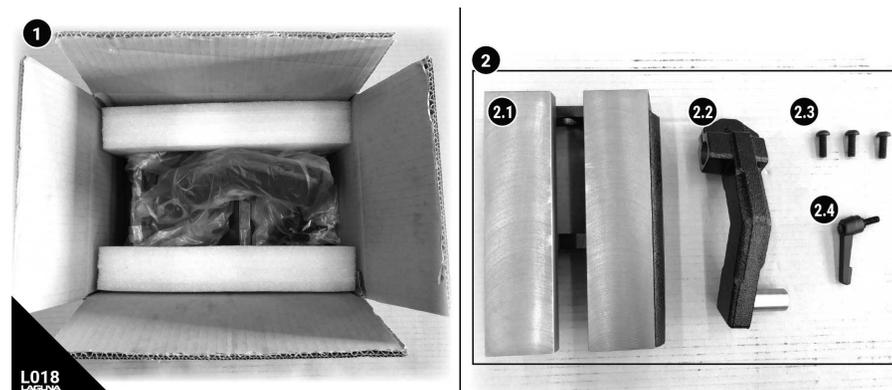
The following accessories are designed for the REVO 1216 Lathe. These instructions should be followed exactly to properly set up the equipment. Some of these accessories are designed to fit multiple machines offered by Laguna Tools, check the [specification](#) sheet for a fit guide of all REVO accessories.

### Outboard Extension ALREVO12 EXTENSION

**WARNING!** Unplug machine from power prior to proceeding!

**NOTICE!** Do not over torque the threading, firm pressure is all that is required.

**NOTE:** The (2.2) Tool rest extension, and (2.4) Lock Handle, are only used when outboard turning.



**Fig L018: Receiving and un-boxing the ALREVO12 Extension.** (1) Un-boxing Contents. (2) Components un-boxed. (2.1) 12" Extension Bed. (2.2) Tool Rest Extension. (2.3) Extension Bed Bolts. (2.4) Lock Handle.

#### Receiving

It is likely that your machine will be delivered by a third party. Before un-boxing, be sure to inspect the packaging and shipping documents supplied by the driver. Ensure that there is no visible damage to the shipment. If any damage has occurred because of shipment, note the damage on the bill of lading or refuse the shipment. Immediately call the dealer store where the machine was purchased.

1. Never accept a shipment that is damaged or partial without notifying the shipping company and the purchasing store.

#### Un-boxing

Once in place, carefully un-box and remove all components. Un-boxing guidelines:

1. Do not cut deep into a box with a blade as it could scratch the paint, only cut deep enough to cut the tape or use a dull edge.
2. Organize the hardware and setup tools needed (at beginning of each set-up section) prior to proceeding with setup.

#### Inventory

Key	Name	Description
0	<b>ALREVO12 EXTENSION</b>	
2.1	Extension Bed PLAREVO1216-301	Extends the bed length of the lathe or can be installed to the left side of spindle for outboard turning ability.
2.2	Tool rest Extension PLAREVO1216-302	Only to be used when outboard turning (left side spindle) to raise the tool rest to the appropriate position.
2.3	Allen Head Screw	Attaches extension to end of the bed (right side extension) or the lower outboard turning position (left side extension).
2.4	Lock Handle	Locks the Tool Rest extension (2.2) in place.

#### Set-Up Procedure

**Tools Needed:** Allan Wrench.

1. Make sure Lathe is unplugged and cannot be powered on.
2. Remove the tail stock, banjo (tool rest) from the lathe bed by releasing the cam locks and carefully sliding out the right side of the lathe bed.

##### As Bed Extension:

3. The bolt holes on the REVO 1216 bed are pre-tapped to accept the extension. Using the three (2.3) Allen screws, fasten the extension to the right side (of the bed) extension mounts.
4. Reverse step 2.

##### As Outboard Turning Bed:

5. Replace the tail-stock on the main bed for safe keeping, it will not be used for outboard turning.
6. The bolt holes on the REVO 1216 bed are pre-tapped to accept the extension. Using the three (2.3) Allen screws, fasten the extension to the left of spindle extension mounts.
7. Install the banjo on the extension by carefully sliding it into the left side of the (just mounted) extension.
8. Install the (2.2) tool-rest extension into the neck of the banjo.
9. Install the (2.4) lock handle into the (2.2) tool-rest extension.
10. Install the tool-rest into the (2.2) tool-rest extension.

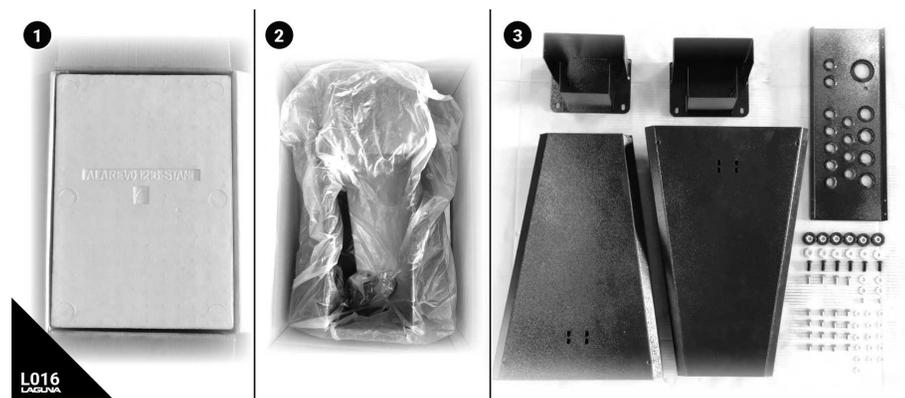
# 2. SETUP

## Stand ALREVO12 STAND

**WARNING!** Unplug machine from power prior to proceeding!

**CAUTION!** Two persons is required in this set-up.

**NOTICE!** Do not over torque the threading, firm pressure is all that is required.



**Fig L016: Receiving and un-boxing the ALREVO12 Stand.** (1) Un-boxing Contents. (2) Stand in box. (3) Components un-boxed.

### Receiving

It is likely that your machine will be delivered by a third party. Before un-boxing, be sure to inspect the packaging and shipping documents supplied by the driver. Ensure that there is no visible damage to the shipment. If any damage has occurred because of shipment, note the damage on the bill of lading or refuse the shipment. Immediately call the dealer store where the machine was purchased.

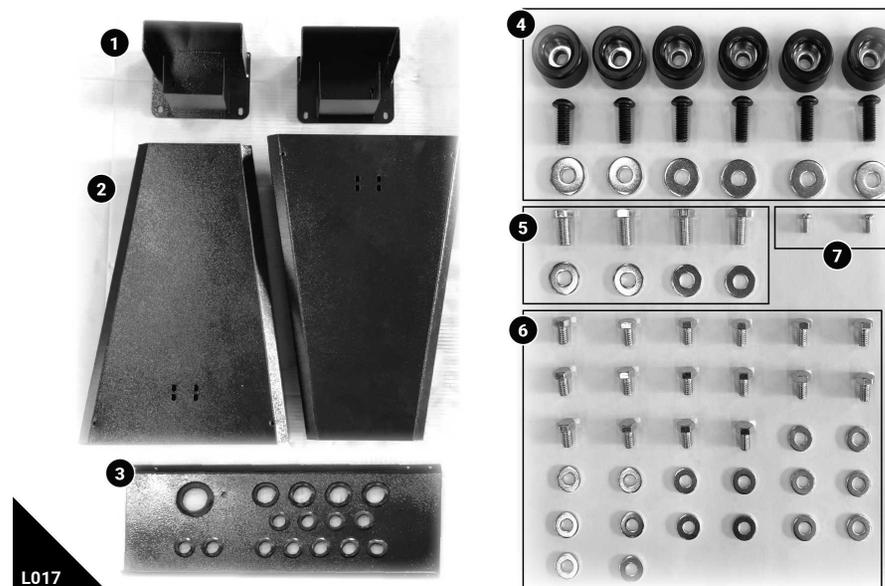
1. Never accept a shipment that is damaged or partial without notifying the shipping company and the purchasing store.

### Un-boxing

Once in place, carefully un-box and remove all components. Un-boxing guidelines:

1. Do not cut deep into a box with a blade as it could scratch the paint, only cut deep enough to cut the tape or use a dull edge.
2. Organize the hardware and setup tools needed (at beginning of each set-up section) prior to proceeding with setup.

## Inventory



**Fig L017: ALREVO12 Stand inventory check.** (1) Adjustable height pillars. (2) Stand Leg. (3) Tool Organization shelf. (4) Rubber pads, screws, and washers. (5) Lathe attachment bolts and washers. (6) Bolt/Washers for assembly. (7) Height constraint screws.

Key	Name	Description
0	<b>ALREVO12 STAND</b>	
1	Height Pillar PLAREVO1216-204	Main contact point from lath to stand. Allows for adjustable height.
2	Stand Leg PLAREVO1216-201 PLAREVO1216-202	Sheet Steel constructed stand leg. Has pre-tapped holes to mount (2) machine lights and the wheel system. <b>NOTICE: These legs are not the same. You will notice that the bolt holes that connect the organization shelf are not at the same height. The lower positioned bolts holes must be front.</b>
3	Organization Shelf PLAREVO1216-203	Adds structural stability to stand. Also holds 13 turning chisels/tools and all functional set-up tools.
4	Casters/Bolts/Washer	Used on the bottom of the stand legs to minimize vibration.
5	Lathe Bolts/Washer	Lathe to stand Fasteners.
6	Assembly Hardware	Height Adjustment fasteners, Shelf to leg fasteners,
7	Height Constraint Screw	Positions maximum height of lathe stand.

## Set-Up Procedure

**Tools Needed:** Additional person, Allan Wrench, Phillips head screwdriver, and open ended wrench.

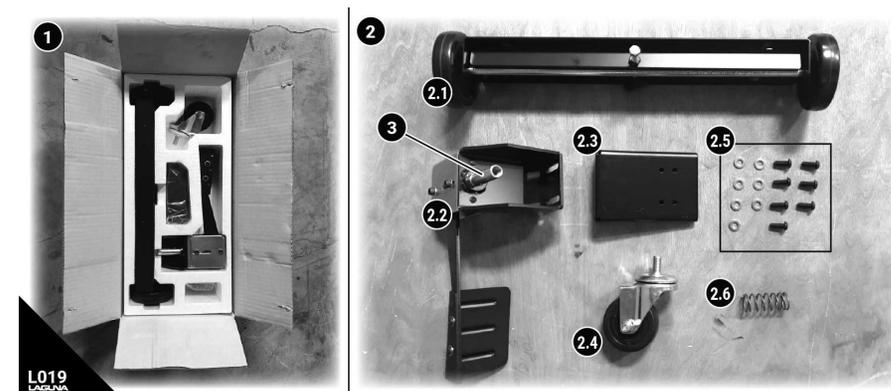
1. Make sure Lathe is unplugged and cannot be powered on.
2. Install the (4) casters to the (2) stand legs with the (4) caster (Allan head) screws and washers. The order is stand leg, washer, caster, screw.
3. Identify the left and right legs. On each leg there are four bolt holes for the (3) shelf to attach. The upper two bolt holes must face the rear of the machine, the lower two bolt holes must face the front of the work space. The shelf is then installed so that it is angled towards the operator.
4. Identify the correct orientation of the (3) organization shelf. The shelf should be positioned such that the lip is not visible - **in Fig L017 the shelf is upside down**. The intended orientation is such that the largest hole (faceplate storage) is furthest left and towards the operator. Please see the exploded parts view for the correct orientation.
5. Fasten the (2) stand legs to the (3) organization shelf. Eight bolts/washers from the (6) assembly hardware are used. It is always best practice to wait until the end of the set-up to tighten all screws. **NOTE:** The stand will not be rigid until it is fastened to the Lath - this is NORMAL. Once the Lathe is attached and the height is adjusted properly, the lathe will be very rigid.
6. Install the (1) height pillars to the stand legs with the remaining eight bolts/washers from the (6) assembly hardware. It is always best practice to wait until the end of the set-up to tighten all screws. **NOTE:** Although it can be positioned later, this is when the operator should assume the final height of the lathe. It is much easier to set the height now. Check the dimensions section to see the spindle height and height range of the stand.
7. Carefully reach into the stand leg and install the (7) height constraint screw on each height pillar. These screws will prevent the operator from pulling the lathe out of the stand when adjusting height later on.
8. Using an additional person, place the REVO 1216 Lathe onto the assemble stand. **CAUTION!** Do not leave the lathe unattended without the bolts in place. Once person must focus on holding the position of the lathe while the other positions the four (5) lathe attachment bolts and washers.
9. Fasten the four (5) lathe attachment bolts and washers.
10. Confirm the height of the lathe, adjust if needed by repositioning one side at a time and one notch at a time.
11. Tighten down all bolts to firm pressure, about a half turn passed finger tight. **NOTICE!** Avoid over tightening.

## Wheel System MBA14/12 WHEEL SYSTEM

**WARNING!** Unplug machine from power prior to proceeding!

**NOTICE!** Do not over torque the threading, firm pressure is all that is required.

**NOTE:** The Stand Accessory must be purchased to use the wheel system.



**Fig L019: Receiving and un-boxing the Wheel System.** (1) Un-boxing Contents. (2) Components un-boxed. (2.1) Stationary Wheels. (2.2) Foot Pedal Assembly. (2.3) Support Plate. (2.4) Foot Pedal Caster. (2.5) Hardware. (2.6) Foot Pedal Spring. (3) Swivel Axle (see step 3).

### Receiving

It is likely that your machine will be delivered by a third party. Before un-boxing, be sure to inspect the packaging and shipping documents supplied by the driver. Ensure that there is no visible damage to the shipment. If any damage has occurred because of shipment, note the damage on the bill of lading or refuse the shipment. Immediately call the dealer store where the machine was purchased.

1. Never accept a shipment that is damaged or partial without notifying the shipping company and the purchasing store.

### Un-boxing

Once in place, carefully un-box and remove all components. Un-boxing guidelines:

1. Do not cut deep into a box with a blade as it could scratch the paint, only cut deep enough to cut the tape or use a dull edge.
2. Organize the hardware and setup tools needed (at beginning of each set-up section) prior to proceeding with setup.

### Inventory

Key	Name	Description
0	<b>Wheel System</b>	
2.1	Stationary Wheels	Can be mounted on left or right stand leg. Must be positioned after installation such that machine is off floor when foot pedal engaged.
2.2	Foot Pedal Assembly	Can be mounted on left or right stand leg. Must be positioned after installation such that machine is off floor when foot pedal engaged.
2.3	Support Plate	Mounts to the (inside) stand leg with (2.2) foot pedal assembly.

## 2. SETUP

Key	Name	Description
2.4	Foot Pedal Caster	Mounts to (2.2) foot pedal assembly.
2.5	Hardware	Used to fasten the wheels to the machine base.
2.6	Foot Pedal Spring	Installs in between (2.4) foot pedal caster, and (2.2) floor pedal assembly, to apply force when deactivating.
3	Swivel Axle	Axle that (2.6) spring and (2.4) caster are installed to.

### Set-Up Procedure

**Tools Needed:** Allan Wrench, open ended wrench.

#### Installing the stationary wheels.

1. Make sure Lathe is unplugged and cannot be powered on.
2. Install the (2.1) stationary wheels to either the left or right stand leg with two of the seven (2.5) bolts and washers from hardware. **NOTE:** Decide whether the foot pedal assembly will be best fit on the left or right side of the lathe. If on the left side, the operator must be behind the lath to engage, because of this - it is often best to have the foot pedal caste on the right side, and the stationary wheels on the left side.
3. Make sure the wheels are in contact with the floor and fasten down (2.1) stationary wheels. **NOTE:** Do no remove the pre-installed rubber feet on the bottom of the lathe stand. When the wheel system is not engaged, the lathe will rest on these casters.

**Installing the foot pedal assembly and wheel.** The order (from inside) is support plate, stand leg, foot pedal assembly, washer, bolt. The bolts thread into the (2.3) support plate. The (2.3) support plate installs to the inside of the **opposite** stand leg that the stationary wheels were installed to in step 1-3.

4. Place the (2.6) foot pedal spring on the (3) swivel axle of the (2.2) foot pedal assembly, and screw the (2.4) foot pedal caster onto the swivel axle.
5. Tighten down the (2.4) foot pedal caster with open ended wrench.
6. Elevate the side of the stand leg that the foot pedal assembly wheel will be installed on by resting the inside edge (of stand leg) on a piece of wood. A 2x4 will work well.
7. Raise the foot pedal to the high (non-engaged) position.
8. Place one bolts and washer in one of the (2.2) foot pedal assembly bolt slots and hold in place.
9. Sandwich the (metal from the) stand leg between the (2.3) support plate, and (2.2) foot pedal caster assembly. Finger tighten the bolt.
10. Finger tighten the remaining three bolts and washers from (2.5) hardware. **NOTE:** We supply an extra bolt, discard if not needed.
11. When the foot pedal is in the raised position, the (2.4) foot pedal wheel should be approximately 1/2" to 1" above the rubber casters on the bottom of the stand leg. With this criteria met, fasten down all four bolts.

### Light ALREVO18 LIGHT

The light simply bolts onto the Stand Accessories with the supplied bolts and mounting plates or brackets.

## 3. Maintenance

### WARNING!

**WARNING!** Never perform and setup, maintenance or adjustments with the machine connected to the power source!

**WARNING!** If you have any doubt about the described procedure, seek professional assistance. Do not attempt any procedure that you feel is unsafe, or that you do not have the physical capability of achieving.

**WARNING!** When removing banding, extreme caution must be used as the banding will spring when cut.

**CAUTION!** The machine is heavy. Ensure that you have enough people to do the job safely.

**NOTE:** There may be sawdust in or around your new machine as a result of thorough testing.

### General

Keep your machine clean. At the end of each day, clean the machine. Wood contains moisture, and if sawdust or wood chips are not removed they will cause rust. In general, we recommend that you only use a Teflon-based lubricant on the lathe. Regular oil attracts dust and dirt. Teflon lubricant tends to dry and has less of a tendency to accumulate dirt and saw dust. Periodically check that all nuts and bolts are tight.

### Drive belt

The drive belt should last for many years (depending on the usage) but needs to be inspected regularly for cracks, cuts and general wear. If damage is found, replace the belt.

### Bearings

All bearings are sealed for life and do not require any maintenance. If a bearing becomes faulty, replace it.

### Rust

The lathe is made from steel and cast iron. All none-painted surfaces will rust if not protected. It is recommended that they be protected by applying wax or a Teflon-based lubricant to them.

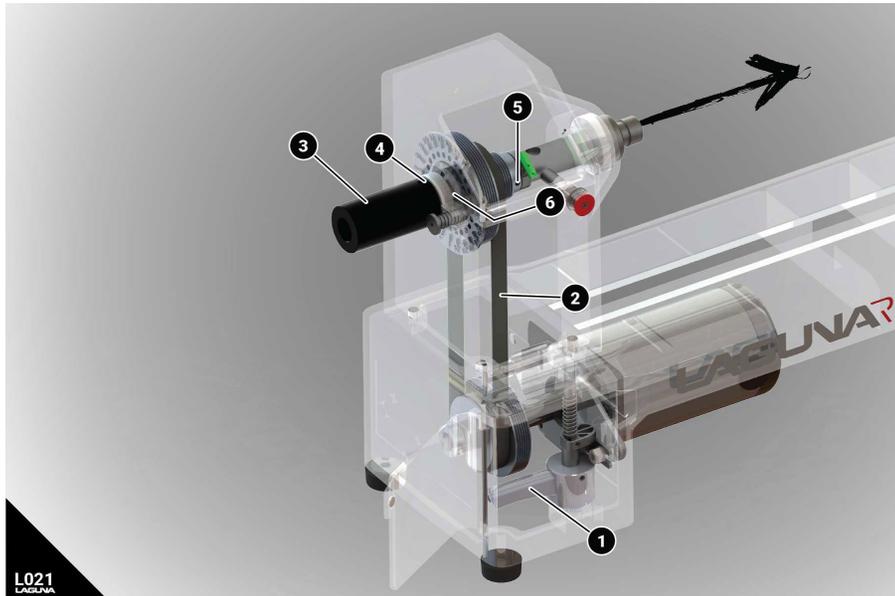
## 3.1 Maintenance Work

### Changing the Belt and Bearings

**WARNING!** Unplug machine from power prior to proceeding!

**NOTICE!** Do not over torque the threading, firm pressure is all that is required.

**NOTICE!** Do not attempt to remove pulleys without removing set screws.



**Fig L021: REVO Belt Change. (1) Belt Tension Handle. (2) Belt. (3) Hand Wheel. (4) Clamping Nut. (5) Pulley Set Screws. (6) Collar Set Screws.**

Changing belt and bearings can be a difficult task, and should be performed by an authorized repair station. Remove headstock and take into a repair station for servicing.

1. Disconnect the machine from the power source!
2. Loosen the (1) tension handle to remove tension from the poly v-belt.
3. Open door and remove the (2) belt from the lower pulley.
4. Loosen two set screws in the (3) hand-wheel and remove.
5. Loosen socket head cap screw enough to un-thread the (4) clamping nut.
6. Loosen two (5) set screws in the right hand pulley.
7. Loosen (6) set screw in the collar.
8. Use a wood dowel, or aluminum stock to knock spindle towards the tail-stock. Use a material that is softer than the spindle so you do not mushroom end of spindle. Go only far enough to remove belt from spindle, see Figure L021.
9. Now you can replace the belt or bearings.
10. To reassemble reverse the procedure. **NOTE:** When reinstalling clamping nut thread it on to the spindle until its snug. Then back off slightly and tighten the socket head cap screw.

## 3.2 Troubleshooting

### Lathe will not start.

1. Check that the start switch is in the correct position.
2. Check that the electrical power cord is plugged into the power outlet.
3. Check that the electrical supply is on (reset the breaker).
4. With the power disconnected from the machine, check that the wiring to the plug is correct.
5. Check that the rubber insulation is stripped enough and is not causing a bad connection. Check that all the screws are tight.
6. Emergency stop button engaged. Reset emergency stop button. Twist and it will pop out.

### The machine will not stop.

This is a very rare occurrence as the machine is designed to be fail-safe. If it should occur and you cannot fix the fault, seek professional assistance. The machine must be disconnected from the power and never run until the fault has been rectified.

1. The stop switch is faulty. Replace the stop switch.

### Motor tries to start but will not turn.

1. With the power disconnected from the machine, try to turn the spindle by hand. If the spindle will not turn, check the reason for jamming.
2. Capacitor faulty. Replace the capacitor. (N/A for MLAREVO1216EVS)
3. Motor faulty. Replace the motor.
4. Power line overloaded. Correct overloaded condition.
5. Low voltage. Correct low voltage condition.

### Motor overheats.

The motor is designed to run hot, but should it overheat it has an internal thermal overload protector that will shut it down until the motor has cooled, and then it will reset automatically. If the motor overheats, wait until it has cooled and restart. If the motor shuts down consistently check for the reason. Typical reasons are dull cutting tools, the motor cooling fan being clogged or faulty, the motor cooling fins are clogged, overfeeding the job, and excessive ambient temperature.

### Squeaking noise.

1. Check that the motor cooling fan is not contacting the fan cover.
2. Check the bearings
3. Check the drive belt is tensioned correctly.

### Spindle slows down during a cut.

1. Dull cutting tools. Replace the tool or have it re-sharpened.
2. Feeding the wood too fast. Slow down the feed rate.
3. Oil or dirt on the drive belt. Clean or replace the drive belt.
4. Drive belt loose. Re-tension drive belt.

### Machine vibrates.

1. Machine not level on the floor. Re-level the machine ensuring that it has no movement.
2. Damaged drive belt. Replace the belt.

# 3. MAINTENANCE

3. Job is not balanced. Change to slower speed and/ or balance the job.
4. Damaged pulley. Replace the pulley.
5. Worn spindle bearing. Replace the bearing.

## Digital Read Out (DRO) is displaying an error.

### 1. Err1:Over-current mode

If the operating current of the motor exceeds 10 Amps for 30 seconds, the control board goes into Over-current protection mode.

Over-current mode is to stop the motor immediately and the display shows Err1.

Release the Over-current mode steps:

- a) Press the stop button to release the Over-current mode.
- b) Press the Start button again and the control board restarts the motor.

### 2. Err2:Motor work fail mod

After pressing the start button, if the motor is not running after 25seconds, the control board enters the Motor work fail mode

In the motor work fail mode, the control board immediately stops the motor operation and the display shows Err2.

Release the Motor work fail mode steps:

- a) Press the stop button to release the Motor work fail mode.
- b) Press the Start button again and the control board restarts the motor.

### 3. Err3:Spindle work fail mode

After pressing the start button, if the control board detects that the spindle is not running for 30 seconds after the motor runs normally, it will enter the Spindle work fail mode.

In the Spindle work fail mode, the control board immediately stops the motor operation and the display shows Err3.

Release the Spindle work fail mode steps:

- a) Press the stop button to release the Spindle work fail mode.
- b) Press the Start button again and the control board restarts the motor.

## A1. Wiring

### WARNING!

**VOLTAGE.** Before connecting this tool to a power supply (receptacle, outlet, etc.) make sure that the voltage supplied is the same that is specified on the nameplate of the tool. **IF IN DOUBT, DO NOT PLUG IN THE MACHINE.** Using this tool with a voltage different than that stated on the nameplate can damage the electrical components of this machine and any such damage will not be covered by a warranty.

**CIRCUIT BREAKER.** Also make sure that the power supply is equipped with the appropriate breaker and plug according to your local electrical code. To do this, first check the motor plate to get the FLA amperage of the machine, if worn out or not present refer to the specifications sheet. If there is any doubt in choosing the appropriate circuit breaker, please consult an electrician or an electrical supply source.

**ELECTRICAL SHOCK.** It is extremely dangerous to work on live wires and/or electrical systems that are connected to a power source. **ALWAYS** disconnect the power from the machine prior to performing any maintenance or adjustments work.

**MOTOR WIRING:** The information in this manual was current at the time of printing but may be different than the diagram on your machine. **ALWAYS** use the supplied wiring diagram with the machine or motor (under the electrical covering) if present.

See Electrical Specifications here: [1.1 Specifications](#)  
 Customer Support: (949)-474-1200 or [customerservice@lagunatools.com](mailto:customerservice@lagunatools.com)

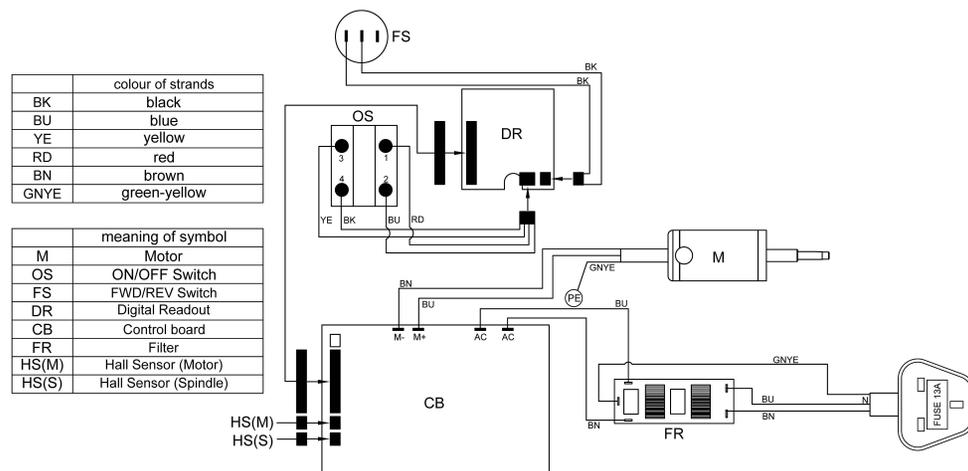


Figure LW01 - REVO 1216 (MLAREVO1216EVS) Wiring Diagram.

## A2. Parts

### WARNING!

**WARNING!** Never perform and setup, maintenance or adjustments with the machine connected to the power source!

**NOTICE!** Only use authentic Laguna Tools parts for replacements.

See Specifications here: [1.1 Specifications](#) <sup>6</sup>

Customer Support: (949)-474-1200 or [customerservice@lagunatools.com](mailto:customerservice@lagunatools.com)

## A2. Parts Contents

[Revo 1216 Banjo, Tool Rest, Tail Stock, Centers](#) <sup>23</sup>

[Revo 1216 Headstock Assembly](#) <sup>24</sup>

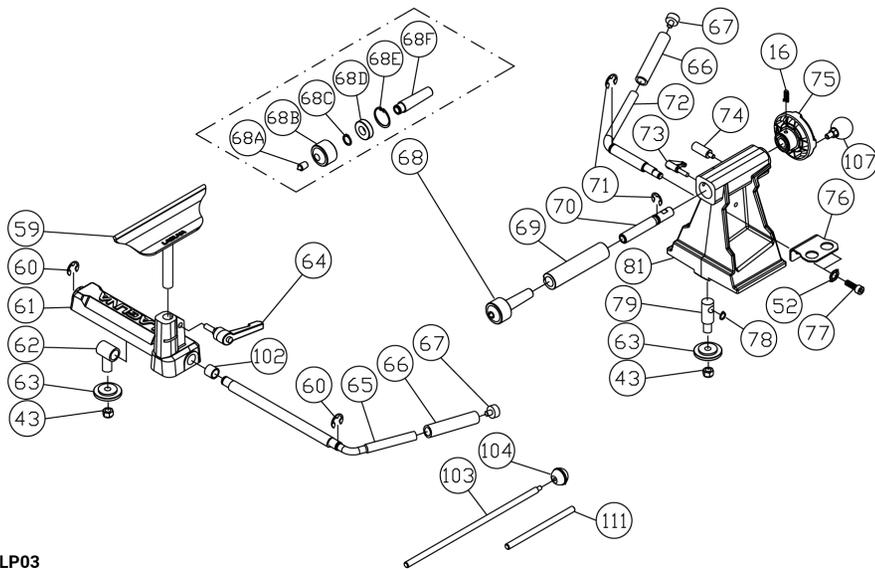
[Revo 1216 Bed, Internals, Motor](#) <sup>25</sup>

[Option: Stand \(ALAREVO12 STAND\)](#) <sup>26</sup>

[Option: Mobility \(MBA14/12 WHEEL SYSTEM\)](#) <sup>27</sup>

[Option: Extension \(ALAREVO12 EXTENSION\)](#) <sup>28</sup>

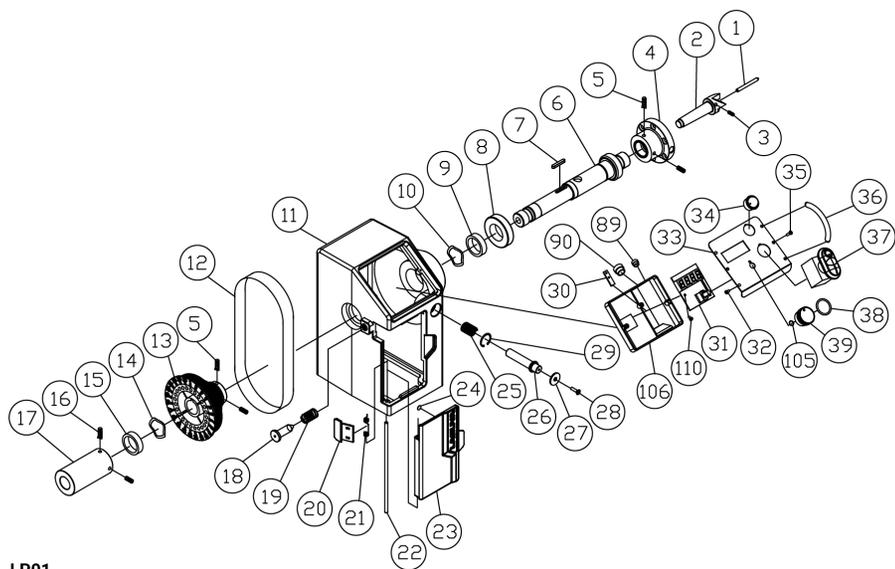
## Revo 1216 Banjo, Tool Rest, Tail Stock, Centers



LP03  
LAGUNA

Key	Part Number	Description	Specification	Qty
16	PLAREVO1836-1119	Set Screw	1/4-20UNCx3/8	5
43	PLAREVO1216-143	Nylon Insert Lock Nut	3/8-16UNC	3
52	PLAREVO1836-1113	Flat Washer	D8xD18x2t	3
59	PLAREVO1216-159	8" Tool Rest		1
60	PLAREVO1216-160	E-RING	E-10	2
61	PLAREVO1216-161	Tool Rest Support Base		1
62	PLAREVO1216-162	Clamp Bolt		1
63	PLAREVO1216-163	Clamp		2
64	PLAREVO1216-164	Lock Handle		1
65	PLAREVO1216-165	Tool Rest Locking Handle		1
66	PLAREVO1216-166	Rubber Sleeve		2
67	PLAREVO1216-167	Cap		2
68	PLAREVO1216-168	Live Center Assembly		1
69	PLAREVO1216-169	Quill		1
70	PLAREVO1216-170	Lead Screw		1
71	PLAREVO1216-171	E-RING	E-12	2
72	PLAREVO1216-172	Tailstock Locking Handle		1
73	PLAREVO1216-173	Lock Handle		1
74	PLAREVO1216-174	Stop Bolt		1
75	PLAREVO1216-175	Handwheel		1
76	PLAREVO1216-176	Tailstock Tool Caddy		1
77	PLAREVO1836-1122	Socket Head Cap Screw	5/16-18UNCx1/2"	2
78	PLAREVO1216-178	C-RING	S10	1
79	PLAREVO1216-179	Clamp Bolt		1
81	PLAREVO1216-181	Tailstock		1
102	PLAREVO1216-1102	bushing		1
103	PLAREVO1216-1103	Knockout Rod		1
104	PLAREVO1216-1104	Knob		1
107	PLAREVO1836-181	Knob		1
111	PLAREVO1836-1136	Handle, Faceplate		1

## Revo 1216 Headstock Assembly

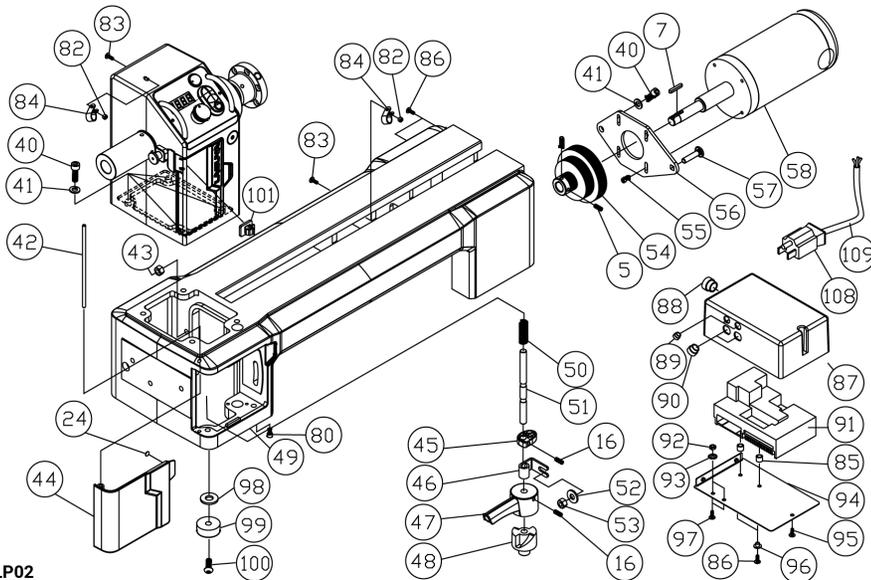


LP01  
LAGUNA

Key	Part Number	Description	Specification	Qty
1	PLAREVO1836-1140	Thimble		1
2	PLAREVO1836-124	Spur Center		1
3	PLAREVO1836-1124	Set Screw	M6x6	1
4	PLAREVO1216-104	3" Faceplate		1
5	PLAREVO1836-1101	Set Screw	1/4-20UNCx1/4	6
6	PLAREVO1216-106	Spindle		1
7	PLAREVO1216-107	Key	5x5x25	2
8	PLAREVO1216-108	Ball Bearing	6006LLU	1
9	PLAREVO1216-109	Magnetic ring		1
10	PLAREVO1216-110	Wave Washer	6202	1
11	PLAREVO1216-111	Headstock		1
12	PLAREVO1216-112	Poly-V Belt	PJ6-290	1
13	PLAREVO1216-113	Spindle Pulley		1
14	PLAREVO1836-184	Wave Washer	6205	1
15	PLAREVO1216-115	Ball Bearing	6005LLU	1
16	PLAREVO1836-1119	Set Screw	1/4-20UNCx3/8	5
17	PLAREVO1216-117	Handwheel		1
18	PLAREVO1216-118	INDEX-PIN		1

Key	Part Number	Description	Specification	Qty
19	PLAREVO1216-119	Spring		1
20	PLAREVO1216-120	Window		1
21	PLAREVO1216-121	Spring		1
22	PLAREVO1216-122	Upper Door Shaft		1
23	PLAREVO1216-123	Upper Door		1
24	PLAREVO1836-1151	Magnet		2
25	PLAREVO1836-103	Spring		1
26	PLAREVO1216-126	Spindle Lock Plunger		1
27	PLAREVO1836-132	Disc, Spindle Lock		1
28	PLAREVO1836-1141	Socket Flat Head Screw	M3x8	1
29	PLAREVO1836-191	C-Ring	R22	1
30	PLAREVO1216-130	Digital Readout Sensor		1
31	PLAREVO1216-131	Digital Readout		1
32	PLAREVO1216-132	Phillips Flat Head Screw	M3x6	4
33	PLAREVO1216-133	Control Panel		1
34	PLAREVO1216-134	Fwd/Rev Switch		1
35	PLAREVO1216-135	Socket Head Button Screw	M3x20	2
36	PLAREVO1216-136	Handle		2
37	PLAREVO1836-170	ON/ OFF Switch		1
38	PLAREVO1216-138	O-Ring	P22	1
39	PLAREVO1216-139	Speed Knob		1
89	PLAREVO1216-189	Strain Relief	4K-4	3
90	PLAREVO1216-190	Strain Relief	6P-4	3
105	PLAREVO1216-1105	O-Ring		1
106	PLAREVO1216-1106	Control Box	P12	1
110	PLAREVO1216-1110	Pan Head Self-Tapping Screw	M3x8	2

## Revo 1216 Bed, Internals, Motor

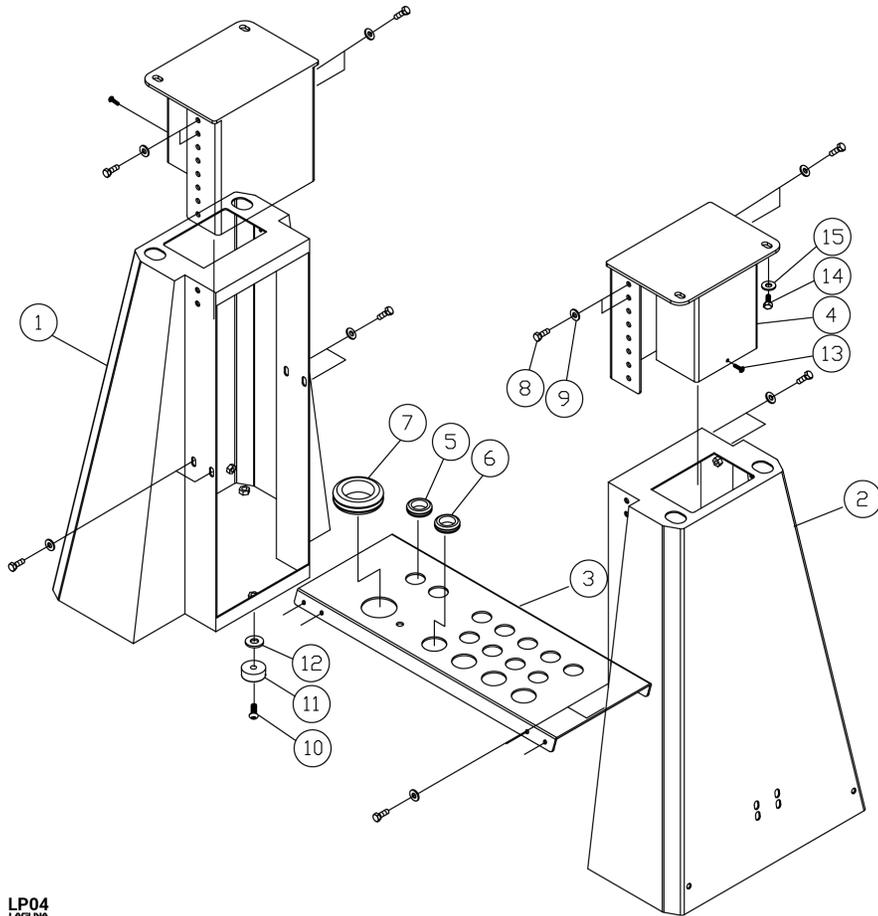


LP02  
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Key	Part Number	Description	Specification	Qty
5	PLAREVO1836-1101	Set Screw	1/4-20UNCx1/4	6
7	PLAREVO1216-107	Key	5x5x25	2
16	PLAREVO1836-1119	Set Screw	1/4-20UNCx3/8	5
24	PLAREVO1836-1151	Magnet		2
40	PLAREVO1216-140	Socket Head Cap Screw	3/8-16UNCx1"	5
41	PLAREVO1836-1115	Lock Washer	3/8"	5
42	PLAREVO1216-142	Lower Door Shaft		1
43	PLAREVO1216-143	Nylon Insert Lock Nut	3/8-16UNC	3
44	PLAREVO1216-144	Lower Door		1
45	PLAREVO1216-145	CAM		1
46	PLAREVO1216-146	Link block		1
47	PLAREVO1216-147	Belt Tension Handle		1
48	PLAREVO1216-148	Belt Tension Base		1
49	PLAREVO1216-149	Bed		1
50	PLAREVO1216-150	Spring		1
51	PLAREVO1216-151	Belt Tension Shaft		1
52	PLAREVO1836-1113	Flat Washer	D8xD18x2t	3
53	PLAREVO1216-153	Nylon Insert Lock Nut	M8	1

Key	Part Number	Description	Specification	Qty
54	PLAREVO1216-154	Motor Pulley		1
55	PLAREVO1216-155	Socket Head Cap Screw	M5x15	4
56	PLAREVO1216-156	Motor Plate		1
57	PLAREVO1216-157	Carriage Bolt	M8x30	1
58	PLAREVO1216-158	DC Motor		1
58A	PLAREVO1216-158A	Magnetic ring		1
58B	PLAREVO1216-158B	Carbon brush		2
58C	PLAREVO1216-158C	Motor Sensor		1
80	PLAREVO1216-180	Screw	M4x15	2
82	PLAREVO1836-1153	Hex Nut	M4x0.7	2
83	PLAREVO1216-183	Screw	M4x20	2
84	PLAREVO1216-184	Cord Holder		2
85	PLAREVO1216-185	Spacer		2
86	PLAREVO1216-186	Screw	M5x15	4
87	PLAREVO1216-187	Control Box		1
88	PLAREVO1216-188	Strain Relief	7P-2	1
89	PLAREVO1216-189	Strain Relief	4K-4	3
90	PLAREVO1216-190	Strain Relief	6P-4	3
91	PLAREVO1216-191	Control board		1
92	PLAREVO1216-192	Hex Nut	#10-32UNF	2
93	PLAREVO1216-193	Washer, Lock-Int. Tooth	#10	2
94	PLAREVO1216-194	Cover, Base-Control Box		1
95	PLAREVO1216-195	Pan Head Self-Tapping Screw	#8x1/2"	1
96	PLAREVO1216-196	bushing		2
97	PLAREVO1216-197	Screw	#10-32UNFx1/2"	2
98	PLAREVO1216-198	Flat Washer	3/8"x27x3t	4
99	PLAREVO1216-199	Rubber Pad		4
100	PLAREVO1216-1100	Socket Head Button Screw	3/8"-16UNCx1"	4
101	PLAREVO1216-1101	Cord Holder		1
108	PLAREVO1216-1108	Power Cord		1
109	PLAREVO1216-1109	Control Cord		1

## Option: Stand (ALAREVO12 STAND)

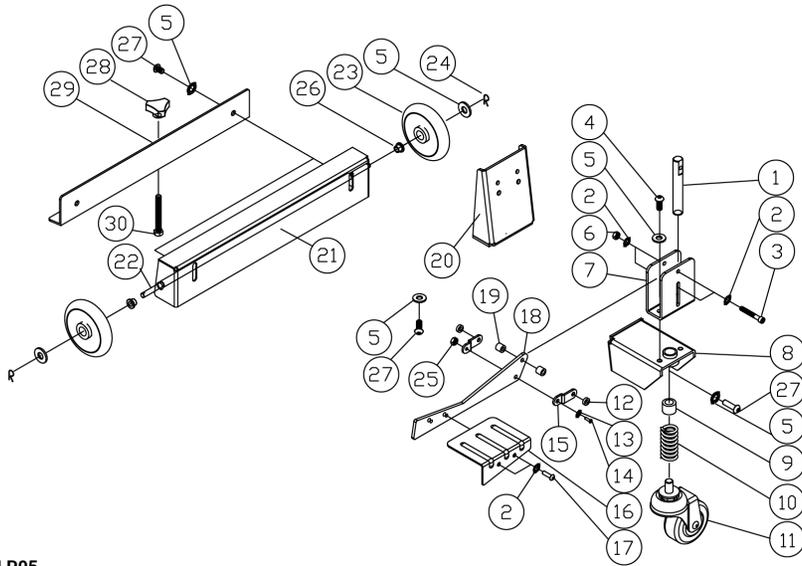


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Key	Part Number	Description	Specification	Qty
1	PLAREVO1216-201	Stand		1
2	PLAREVO1216-202	Stand		1
3	PLAREVO1216-203	Connect Plate		1
4	PLAREVO1216-204	Adjust Set		2
5	PLAREVO1216-205	Rubber Bushing	D25	11
6	PLAREVO1216-206	Rubber Bushing	D35	4
7	PLAREVO1216-207	Rubber Bushing	D50	1
8	PLAREVO1216-208	Hex Cap Screw	5/16-18UNCx1/2"	16

Key	Part Number	Description	Specification	Qty
9	PLAREVO1836-1113	Flat Washer	D8xD18x2t	16
10	PLAREVO1216-1100	Socket Head Button Screw	3/8"-16UNCx1"	6
11	PLAREVO1216-199	Rubber Pad		6
12	PLAREVO1216-198	Flat Washer	3/8"x27x3t	6
13	PLAREVO1216-213	Screw	M5x10	2
14	PLAREVO1216-214	Hex Cap Screw	3/8-16UNCx3/4"	4
15	PLAREVO1216-215	Flat Washer	3/8"x23x2t	4

## Option: Mobility (MBA14/12 WHEEL SYSTEM)

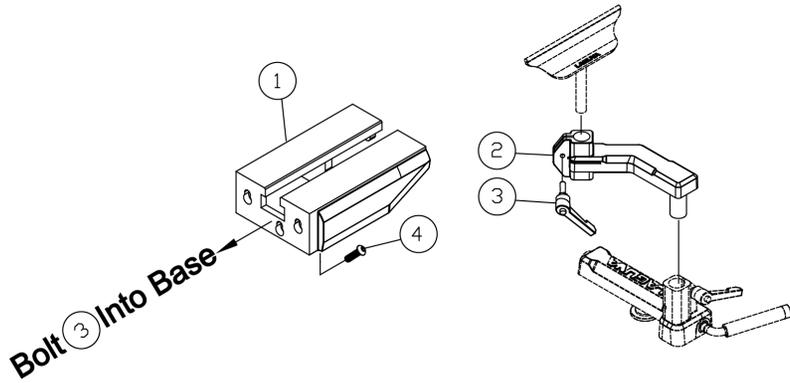


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Key	Part Number	Description	Specification	Qty
1	PBAND1412-175-6-1	Rod		1
2	PBAND1412-175-6-2	Flat Washer	1/4"	6
3	PBAND1412-175-6-3	Socket Head Cap Screw	1/4"-20x1-3/4"	2
4	PBAND1412-175-6-4	Socket Head Button Screw	5/16"-18x1/2"	2
5	PBAND1412-175-6-5	Flat Washer	5/16"	11
6	PBAND1412-175-6-6	Nylon Inserted Lock Nut	1/4"-20	2
7	PBAND1412-175-6-7	Fixed Plate		1
8	PBAND1412-175-6-8	Wheel Bracket		1
9	PBAND1412-175-6-9	DU Bearing	MB1620DU	1
10	PBAND1412-175-6-10	Spring		1
11	PBAND1412-175-6-11	Caster		1
12	PBAND1412-175-6-12	Spacer		2
13	PBAND1412-175-6-13	Flat Washer	M5	1
14	PBAND1412-175-6-14	Screw	M5x0.8x20	1
15	PBAND1412-175-6-15	Connecting Plate		2
16	PBAND1412-175-6-16	Foot Pedal		1
17	PBAND1412-175-6-17	Socket Head Button Screw	1/4"-20x3/8"	2
18	PBAND1412-175-6-18	Plate		1

Key	Part Number	Description	Specification	Qty
19	PBAND1412-175-6-19	Spacer		2
20	PBAND1412-175-6-20	Support Plate		1
21	PBAND1412-175-6-21	Support Plate		1
22	PBAND1412-175-6-22	Rod		1
23	PBAND1412-175-6-23	Wheel		2
24	PBAND1412-175-6-24	Retaining Pin	R8	2
25	PBAND1412-175-6-25	Nylon Inserted Lock Nut	M5x0.8	1
26	PBAND1412-175-6-26	Bushing		2
27	PBAND1412-175-6-27	Socket Head Button Screw	5/16"-18x3/4"	7
28	PBAND1412-175-6-28	Knob		1
29	PBAND1412-175-6-29	Support Plate		1
30	PBAND1412-175-6-30	Hex Cap Screw	M8x1.25x70	1

## Option: Extension (ALAREVO12 EXTENSION)



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Key	Part Number	Description	Specification	Qty
1	PLAREVO1216-301	Extension Bed		1
2	PLAREVO1216-302	Toolrest Extension		1
3	PLAREVO1216-164	Lock Handle		1
4	PLAREVO1836-303	Socket Head Button Screw	3/8-16UNCx1"	3

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