

ALLIANCE A1 1.2M MACHINE

WIDTH: 123 cm / 48.5 in
HEIGHT: Varies
DEPTH: 46 cm / 18 in
WEIGHT: Varies

ALLIANCE A1 1.7M MACHINE

WIDTH: 171 cm / 67 in
HEIGHT: Varies
DEPTH: 46 cm / 18 in
WEIGHT: Varies

ALLIANCE A1 2.4M MACHINE

WIDTH: 240 cm / 95 in
HEIGHT: Varies
DEPTH: 46 cm / 18 in
WEIGHT: Varies

Alliance motors are or 3/4 hp, single phase, 115 volt, 60 Hz with FLA of 8.7 amps (1050 Watts).

Fixed 92 RPM operational speed.

Motors are explosion-proof, rated for Class 1, Division 1, Group D, hazardous locations.

The motor is controlled by an intrinsically safe electronic timer that operates on 5 volts DC. Both the motor and timer are U.L and CSA approved.

Maintenance and Repairs

Simple steps to correct common issues with the Alliance Machines

- Serial number location
- How to easily access the drive belts without disassembly
- Belt installation
- Common replacement parts
- Lubrication
- Routine maintenance



Alliance A1 2.4M Machine

Dedoes U.S.

Headquarters
1060 W. West Maple Rd.
Walled Lake, MI 48390

Support & Sales

248-624-7710
info@dedoes.com
www.dedoes.com

Installation of the motor to the power supply and other electrical connections must conform to all federal, state, and local regulations and must be performed by a fully qualified electrician.

The motor and timer are both U.L and CSA approved.

Alliance Mixing Machine Motor

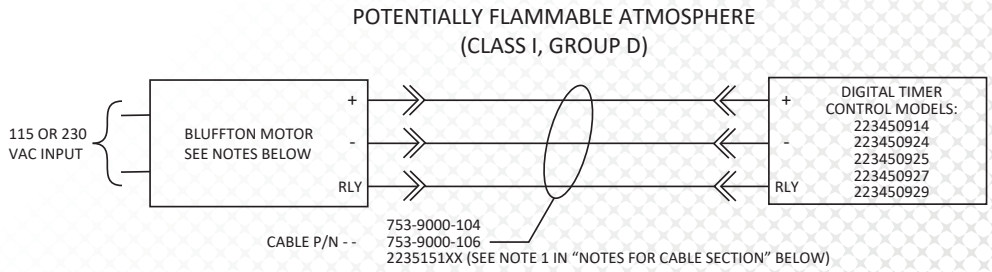
Alliance electric motors are 3/4 hp, single phase, 115 volt, 60 Hz with FLA of 8.7 amps (1050 Watts).

Motors are explosion-proof, rated for Class 1, Div. 1, Group D, hazardous locations.

The motor is controlled by an intrinsically safe electronic timer that operates on 5 volts DC. (See below)

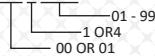
There are two wires coming out of the motor which must be hard wired to the power supply by a certified electrician.

Alliance Intrinsically Safe Timer



SYSTEM MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE OR CANADIAN ELECTRIC CODE AS APPLICABLE

- NOTES FOR MOTOR**
- MOTOR VOLTAGE SWITCH MUST BE SET ACCORDING TO LINE VOLTAGE USED IN THE FINAL APPLICATION.
 - MOTOR HAS BEEN DIELECTRIC TESTED AND GROUND CONTINUITY TESTED PER UL674.
 - EXPLOSION PROOF MODELS:
111 OR 112 X X X X X X



FAN COOLED/NON-VENTILATED; THERMALLY PROTECTED; 56 FRAME; FOR USE IN CLASS I GROUP D HAZARDOUS LOCATIONS; RATED 115/230v: 3/4 HP MAX. WITH 80° C MAXIMUM WINDING RISE BY RESISTANCE AT 40° C AMBIENT; WITH INTRINSICALLY SAFE POWER SUPPLY BOARD ASSY 850-9522-032, (223450928), AS DESCRIBED IN FILE E481969 VOLUME 1, SECTION 2.

Dedoes Safety Instructions.vsd
FM-110 Rev.1

- NOTES FOR CABLE**
- CABLE MUST BE P/N ONE OF THE FOLLOWING:
753-9000-104
753-9000-106
2235151XX
01-99 (CABLE LENGTH IN INCHES)

SUBSTITUTION MAY IMPAIR INTRINSIC SAFETY.

- THIS CABLE CONTAINS INTRINSICALLY SAFE CIRCUITS AND SHALL BE INSTALLED IN ACCORDANCE WITH NEC ANSI/NFPA 70 ARTICLE 504 OR CEC PART 1 APPENDIX F AS APPLICABLE.

- NOTES FOR TIMER**
- DIGITAL TIMER CONTROL MUST ONLY BE USED WITH CABLE AND MOTOR MODELS SHOWN.
 - DIGITAL TIMER BOX MODEL 223450929 CONTAINS THE INTRINSICALLY SAFE TIMER CONTROL BOARD ASSEMBLY 910-9522-033 AS DESCRIBED IN FILE E481969 VOLUME 1, SECTION 1. TIMER MODELS 223450914, 223450924, 223450925 AND 223450927 ALL CONTAIN INTRINSICALLY SAFE TIMER BOARD ASSEMBLY 223440901.

It is recommended to have each Alliance A1 Mix Machine hard wired to its own electric circuit within its location. Please contact your local certified electrician for more information.

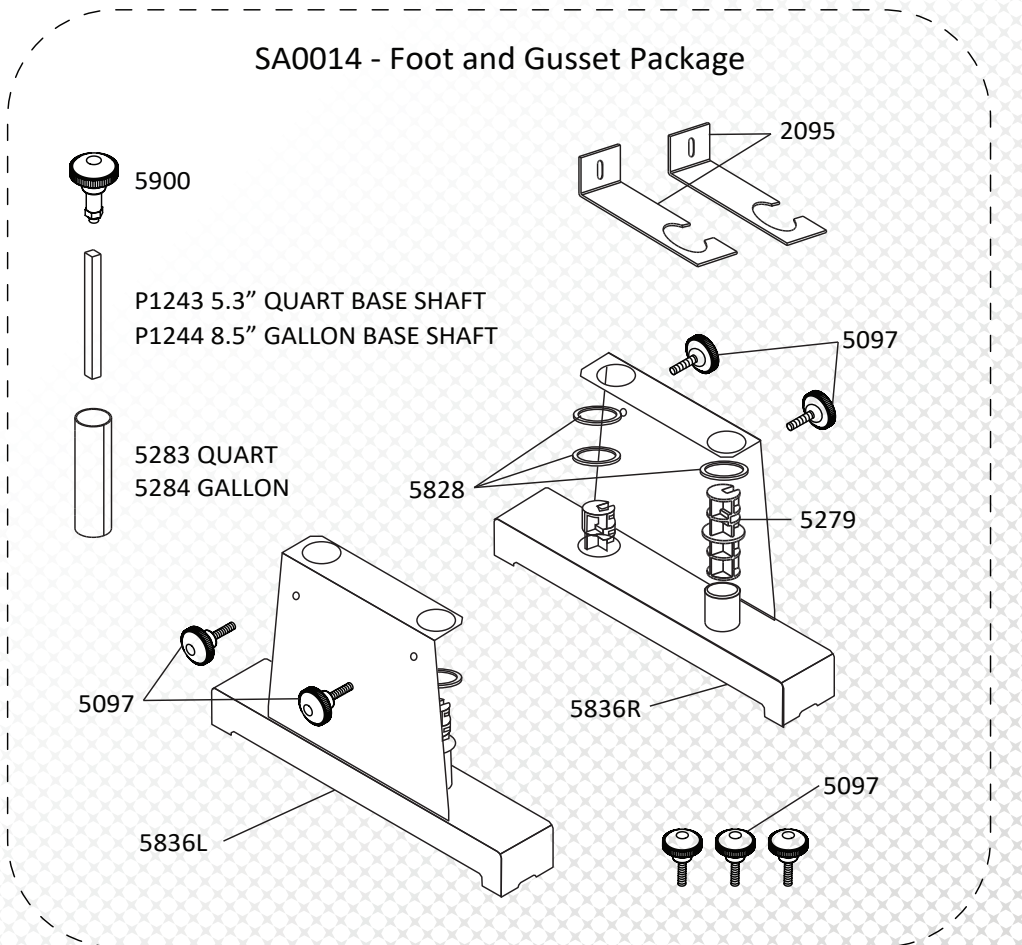
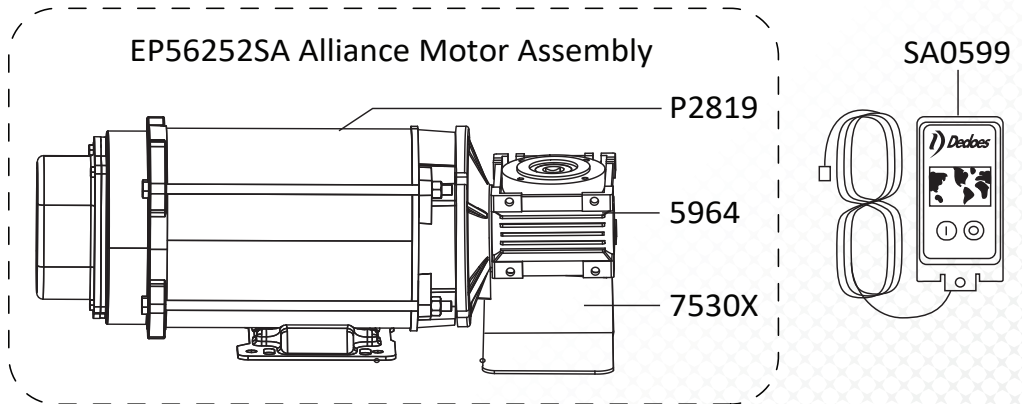
EP56252 MOTOR & TIMER PACKAGE

All items shown are included within the EP56252 Alliance A1 Motor and Timer Package.

The SA0014 Foot and Gusset Package includes all the hardware to assemble a base unit for a new machine.

The EP56252SA is a complete Alliance Motor Assembly for easier install and when needed.

Contact Dedoes to order parts, with questions or anything more you may need.



QUART AND GALLON UNITS

Alliance A1 Machine come in three different sizes; 2.4M, 1.7M and 1.2M.

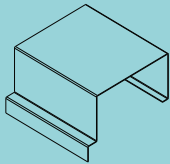
Be sure to get the proper sized belt or shelf cover for your machine.

If you need assistance please feel free to contact us.

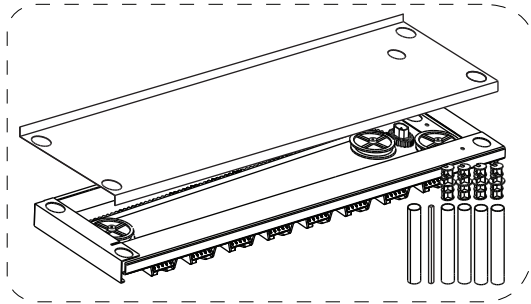
We are here to help.

OPTIONAL QUART PLATFORM

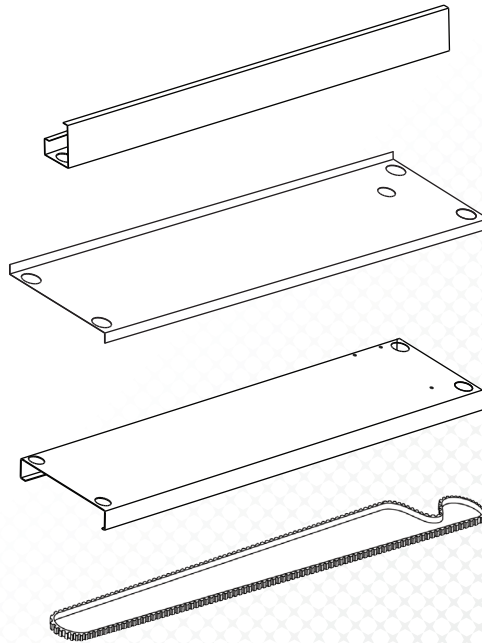
Allows the use of a quart can with lid to fit on a gallon shelf.
PART #: R41



Contact Dedoes to order parts, with questions or anything more you may need.



- 1LL1W - COMPLETE 2.4M QUART MIX UNIT (Adds 18 Quart Locations)
- 4LL1W - COMPLETE 2.4M GALLON MIX UNIT (Adds 12 Gallon Locations)
- 1LM1W - COMPLETE 1.7M QUART MIX UNIT (Adds 12 Quart Locations)
- 4LM1W - COMPLETE 1.7M GALLON MIX UNIT (Adds 8 Gallon Locations)
- 1LS1W - COMPLETE 1.2M QUART MIX UNIT (Adds 8 Quart Locations)
- 4LS1W - COMPLETE 1.2M GALLON MIX UNIT (Adds 5 Gallon Locations)

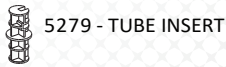


- 2072W - 2.4M TOP HEADER
- 2077W - 1.7M TOP HEADER
- C00457W - TOP 1.2M HEADER

- C00088X - 2.4M QUART SHELF COVER
- 2070 - 2.4M GALLON SHELF COVER
- C00087X - 1.7M QUART SHELF COVER
- 2070 - 1.7M GALLON SHELF COVER
- C00455X - 1.2M QUART SHELF COVER
- C00456X - 1.2M GALLON SHELF COVER

- BL10 - 2.4M BOTTOM BASE SHELF
- BM10 - 1.7M BOTTOM BASE SHELF
- C00458X - 1.2M BOTTOM BASE SHELF

- P1730 - 2.4M 188" BELT (18 Q / 12 G)
- P1729 - 1.7M 132" BELT (12 Q / 8 G)
- P1763 - 1.2M 95" BELT (8 Q / 5 G)



5279 - TUBE INSERT



5993W - QUART TUBE
5994W - GALLON TUBE



5995PLT - 10" QUART SHAFT
5996PLT - 13" GALLON SHAFT



5281D - QUART GUARD
5282D - GALLON GUARD



5364 - SHOULDER BOLT



5930 - DRIVE PULLEY

5804S - WASHER

P0025 - LOCKNUT

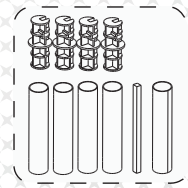


5931 - DRIVE GEAR

P1767 - SCREW



5278E-M - BUSHING



5936W - QUART TUBE KIT
5937W - GALLON TUBE KIT



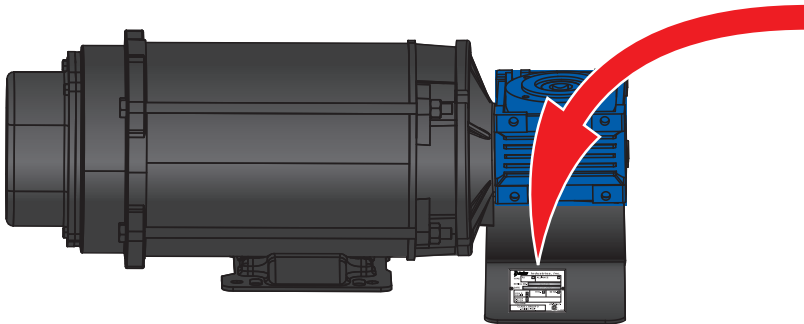
5752B - GREEN INTERFACE

How to locate the serial number of your Alliance machine

When calling the Dedoes Customer Service Department at 1-248-624-7710, we ask that you have your serial number available so that we may research which style machine you have and how old it is. This will help to determine which parts you may need to repair or replace on your machine.

Your serial number is a six digit number that will start with a one or a two. It is located on a small aluminum plate that is bolted to the black metal platform the motor and gear reducer are mounted to.

The serial number and date can tell Dedoes if your machine is still under warranty.



Dedoes Industries, Inc.		
TYPE	RJ <input type="checkbox"/>	ALLIANCE <input checked="" type="checkbox"/>
SERIAL NO.	123456	
DATE	01-01-2012	
1/2 H.P. <input checked="" type="checkbox"/>	115V. <input checked="" type="checkbox"/>	60 HZ. <input checked="" type="checkbox"/>
3/4 H.P. <input type="checkbox"/>		
6.8 FLA <input checked="" type="checkbox"/>		
9.4 FLA <input type="checkbox"/>		
1725 RPM		
CLASS 1 GROUP D THE DIGITAL TIMER IS INTRINSICALLY SAFE.		TEMP. CODE T2A MAX. AMB. 40° C.

How to remove the expanding bolt

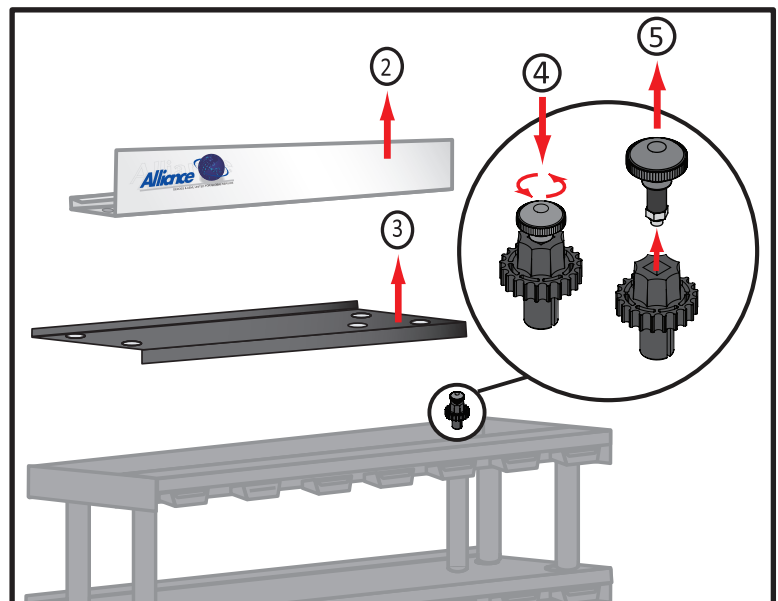
The expanding bolt is installed in the drive gear in the top mixing unit of your fully assembled Alliance machine. It's purpose is to hold all of the shafts from the lower mixing shelves in place so they will not move during operation.

To remove the expanding bolt:

1. Turn off the power to your Alliance mixing machine.
2. Remove the header from the top of your machine.
3. Remove the shelf cover from the top mixing shelf of your machine.
4. Locate the expanding bolt on the right side and turn it counter clockwise to loosen it. Do not loosen the expanding bolt too much or the locknut may fall off.
5. Pull the loosened expanding bolt straight up to remove it from the top drive gear.

This will allow you to remove the shafts from the machine for maintenance and repairs.

Note: If you need to replace the base drive shaft of your machine you will need to replace the expanding bolt as well.



Expanding Bolt
PN# 5900

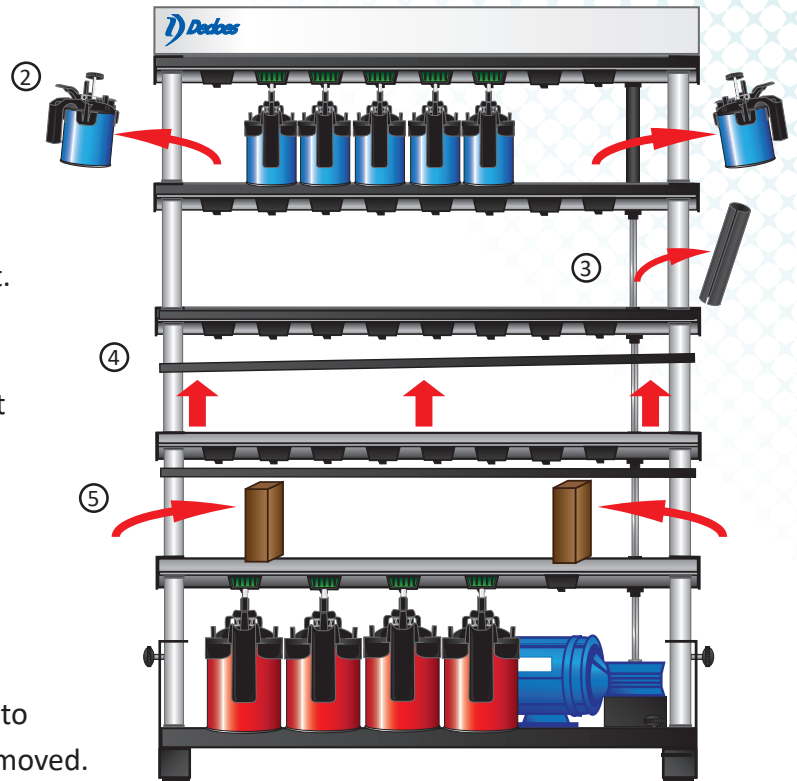
How to repair the Alliance machine without disassembling it

If you need to access the interior of the mixing shelves to replace a belt or repair some components, it is possible to access any of the shelves without disassembling the entire machine.

To do so:

1. Turn off the power to your Alliance mixing machine.
2. Remove the cans from the shelf you wish to access.
3. Remove the shaft guard from around the drive shaft.
4. Lift the shelf cover straight up on both the left and the right side.
5. Support the raised shelf with an object(s) to prevent it from falling back into place.

You should now be able to access any of the internal parts you need.



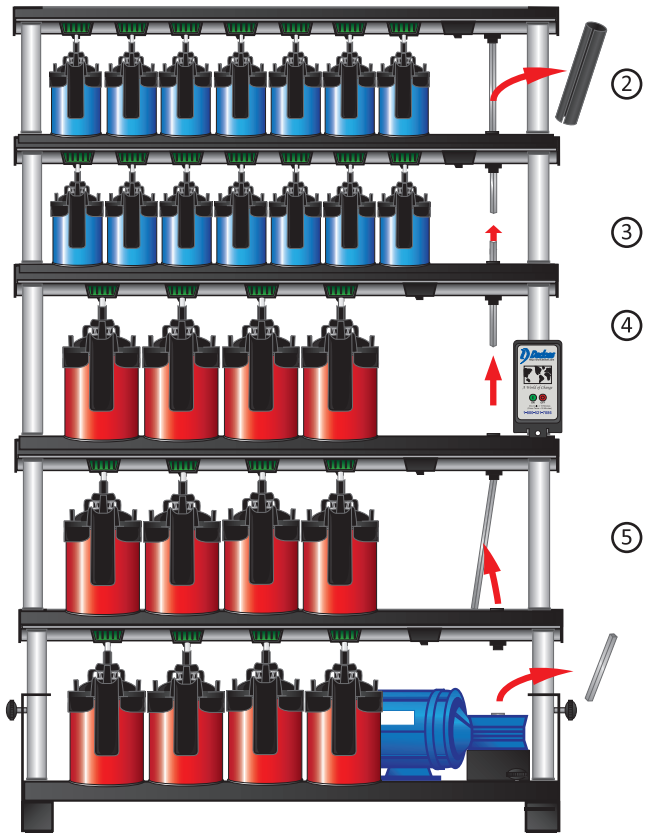
How to remove the drive shafts

Once the expanding bolt has been removed (See “How to remove the expanding bolt”) the drive shafts can be removed.

You do not have to remove the shafts to change a belt.

1. Turn off the power to your Alliance mixing machine.
2. Pull the shaft guards off of each shaft.
3. Lift the shafts straight up and out beginning with the top shaft.
4. To remove a shaft, the one above it must be removed first.
5. It is good practice to lift the shafts that you do not need to repair or replace and let them stand aside on the shelves below without fully removing them. This will prevent loss or misplacement of the shafts during reassembly.

Note: Depending on your choice for the bottom shelf (Quart or Gallon) you may need either the Quart or Gallon motor drive shaft. When replacing either of these two shafts you will also need to replace the expanding bolt.



PN# 5996PLT



Gallon/4 Liter Drive Shaft
(33.35 cm, 13 1/8'')

PN# 5995PLT



Quart/1 Liter Drive Shaft
(25.4 cm, 10'')

PN# P1243



Gallon/4 Liter Motor Drive Shaft
(21.45 cm, 8-1/2'')

PN# P1244



Quart/1 Liter Motor Drive Shaft
(13.5 cm, 5-1/4'')

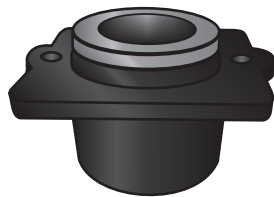
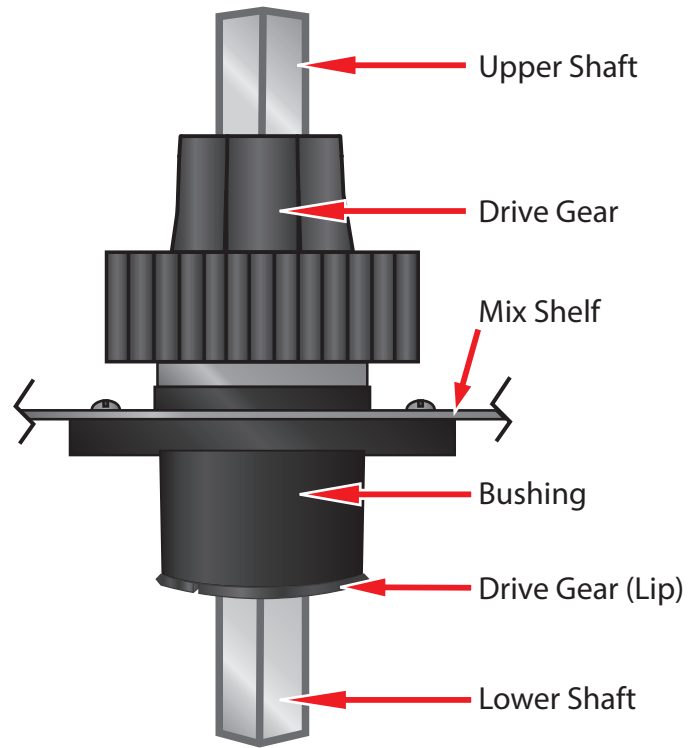
How to replace a bushing or drive gear

During the life of your Alliance machine it may be necessary to replace a bushing or drive gear within the mixing shelf.

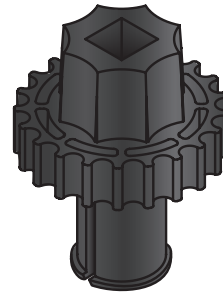
To do so:

1. Turn off the power to your Alliance mixing machine.
2. Remove the expanding bolt and shaft(s) necessary to access the bushing or drive gear that needs to be replaced. It is unnecessary to remove the belt.
(See How to repair the machine without disassembling it.)
3. The drive gear can be removed by squeezing the bottom of the gear together and lifting it straight up out of the bushing.
4. Once the drive gear is removed, the bushing can be removed by loosening the two screws used to secure it.
5. To replace the bushing, install the new bushing from the bottom of the shelf and screw it in from the top.
6. To replace the drive gear, gently press it into the bushing until it snaps into place. The bottom lip of the drive gear should snap and secure it in place against the bottom of the bushing.

Note: It is good practice to check that all of the other drive gears are snapped into place and seated correctly before replacing all of the shafts. The drive gears may become dislodged while moving the shafts.



Bushing
PN# 5278E-M

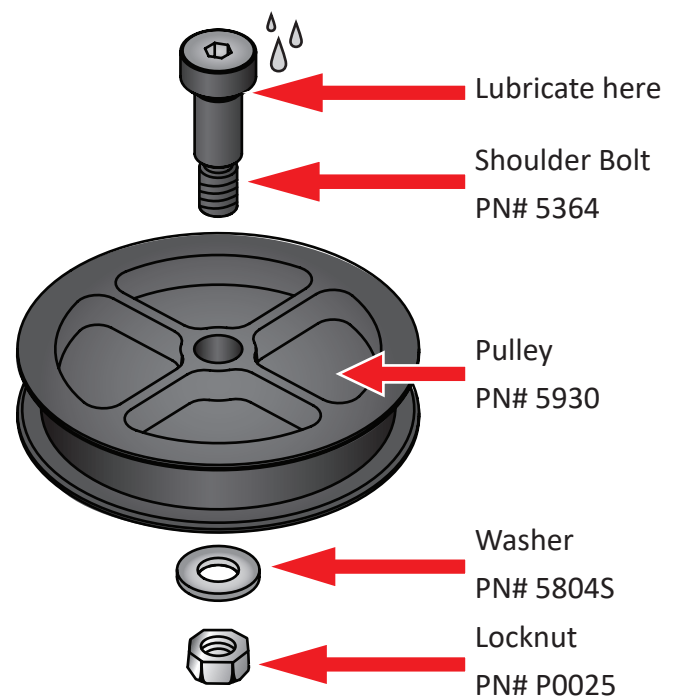


Drive Gear
PN# 5931

How to lubricate your Alliance machine

Periodic lubrication to the three pulley shoulder bolts under each mixing shelf will help maintain quiet operation of the machine. A small drop of lubricant under the head of the shoulder bolt should be all that is required. Make sure the shoulder bolt is free of dirt before lubricating. We suggest using Spray Gun Lube or a lubricant that your paint manufacturer recommends. The lubricant must be Silicone free.

Note: In extremely dirty environments it may be necessary to remove the shoulder bolt from the pulley assembly and clean off the dirt before lubricating.



How to replace a belt

During the life of your Alliance machine it may be necessary to replace the belt in one of your mixing shelves. The Alliance machine utilizes only one belt per shelf and the same size belt for each shelf. The belt supplied with older units is a white cog belt. Any replacement belts will be black and of the same size.

To determine the correct size belt, just count how many cans fit across on the shelf:

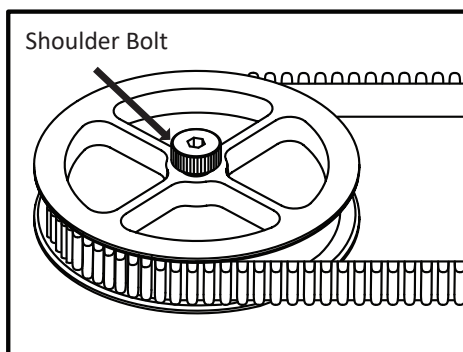
- 8 Quart cans or 5 Gallon cans per shelf = PN# P1763 1.2M Belt 2384mm long
- 12 Quart cans or 8 Gallon cans per shelf = PN# P1729 1.7M Belt 3344mm long
- 18 Quart cans or 12 Gallon cans per shelf = PN# P1730 2.4M Belt 4768mm long

To replace the belt:

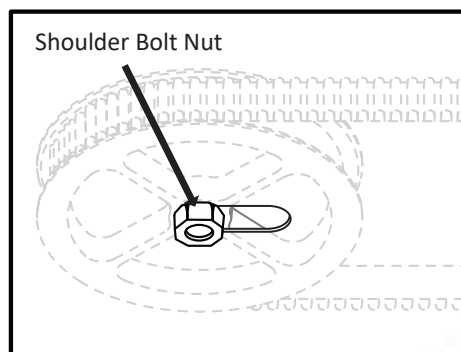
1. Turn off power to your Alliance mixing machine.
2. Remove any cans on the shelf that needs the new belt.
3. Remove the black plastic shaft guard from around the shaft. You will not need to remove the shaft. Then lift the shelf cover of that shelf to access the drive system. It is unnecessary to remove the drive shaft.
(See How to repair the Alliance machine without disassembling it")
4. Loosen the shoulder bolt and locknut of the left end pulley of the drive system to loosen the tension on the belt.
5. Carefully remove the loosened belt from the drive system.
6. Clean the interior of the shelf from dirt and debris.
(This may be a good time to lubricate your mix shelf as well. See How to lubricate your Alliance machine.)
7. Install the new belt with the cogs facing outward while following the belt path illustrated to the right.
8. Slide the bolt and pulley in the slotted hole to the left until the belt tension is adjusted and tighten the locknut and bolt.

The Alliance machine drive belts do NOT require a lot of tension to operate properly. Correct installation of the belt SHOULD have some slack along the back of the shelf.

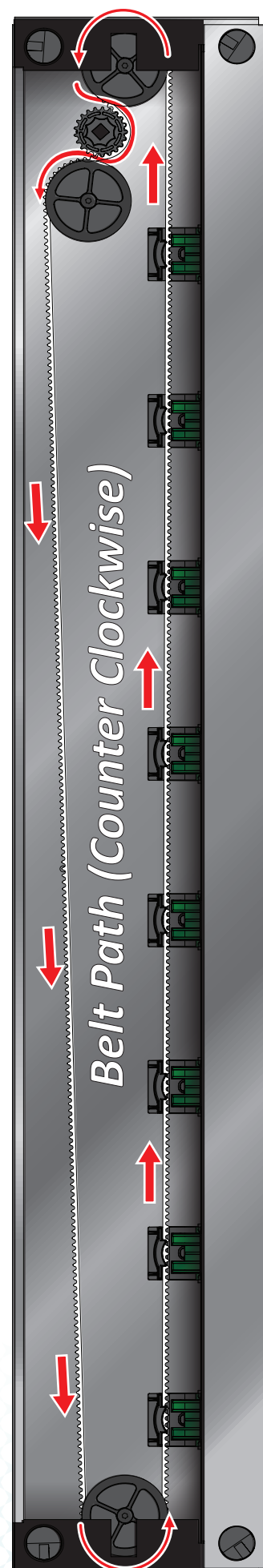
Caution: Do not over tension the belt. Excessive belt tension will cause noise or problems with the operation of the machine.



Shoulder Bolt and
End Pulley



Locknut
(Located on Bottom
of the shelf)



How to run your Alliance machine in bypass

It may be necessary to run your Alliance machine in bypass mode to help determine if you are having a motor or a timer issue. Bypass mode will bypass the timer and allow the motor to operate without the use of the timer.

To operate your machine in bypass:

1. Turn off the power to your Alliance mixing machine.
2. While the timer remains plugged into the motor, remove it from the machine.
3. Disconnect the GREEN wire from the location labeled "GREEN".

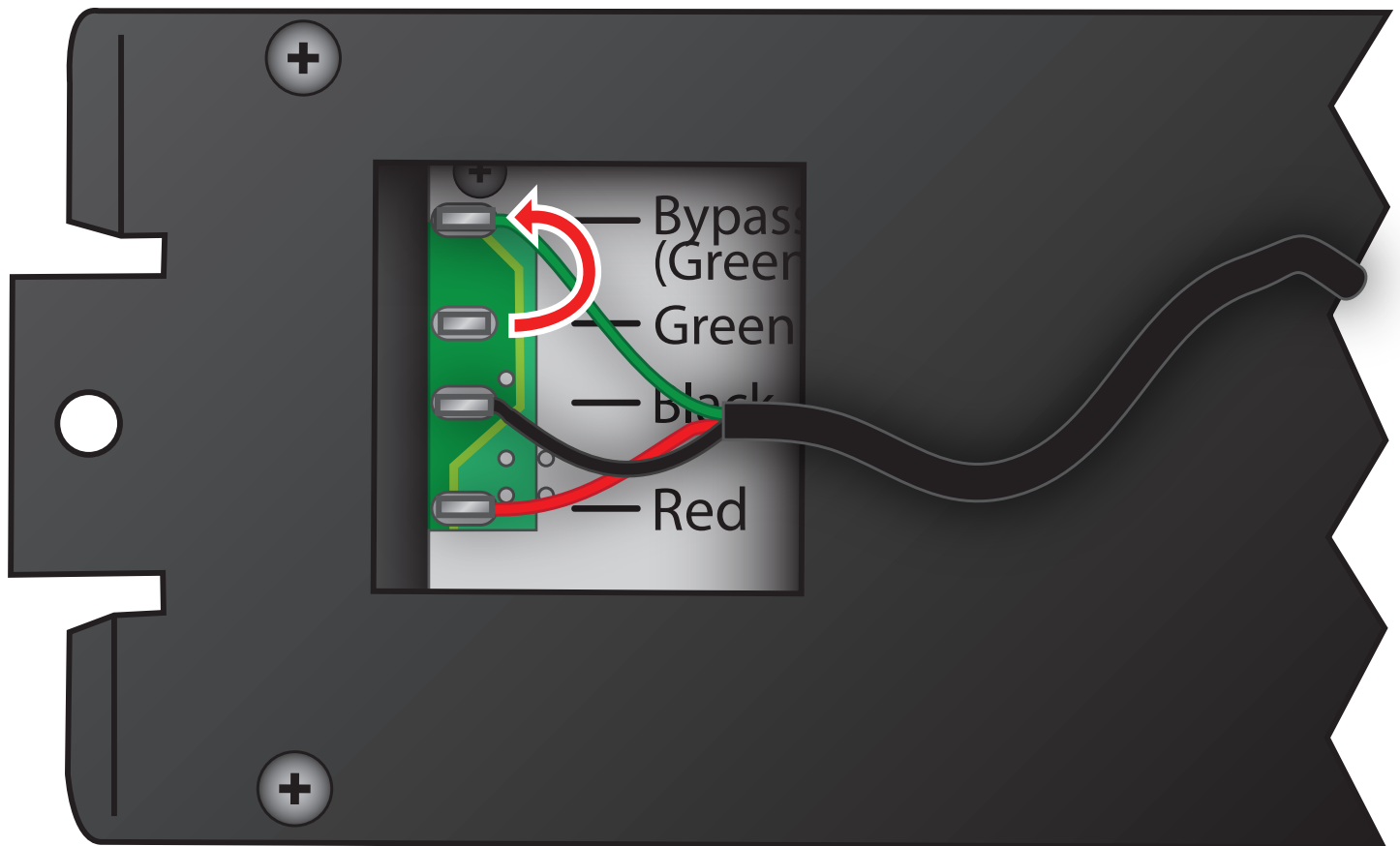
CAUTION: Use care when disconnecting the wires as the connections are very tight and damage to the wires or connectors may result.

4. Connect the GREEN wire into the location labeled "BYPASS (GREEN)".
5. Turn power on to the machine.

Once you restore power to the machine the motor should begin to operate without having to use the timer.

Note: The bypass operation is for diagnosing motor or timer problems. It is not intended to be used for normal operation of the mixing machine. Running the motor in bypass for extended periods will damage the motor.

If you are having trouble with your machine turning ON or OFF please contact the Dedoes Customer Service Department at 1-248-624-7710 and we will be happy to help you resolve your issue.



How to replace an Alliance interface

It may be necessary to replace an interface for your Alliance machine. The interface is the location where your Alliance mixing lid will engage the drive system of your Alliance mixing machine.

To remove an interface:

1. Turn off the power to your Alliance mixing machine.
2. Access the interior of the mixing shelf where the interface is located.
(See How to repair your machine without disassembling it)
3. Using a flat screw driver push into the slots that secure the interface to the mixing shelf on each side. (See Figure 1)
4. Pull the loosened interface down and away from the mixing shelf.

Note: The interface may break or crack during removal.

To install a new interface:

1. Place the back tab of the interface into the opening on the mixing shelf.
2. Push up on the front underside of the interface until the two tabs are snapped into place. (See figure 2)

Figure 1
Alliance Interface
PN# 5752B

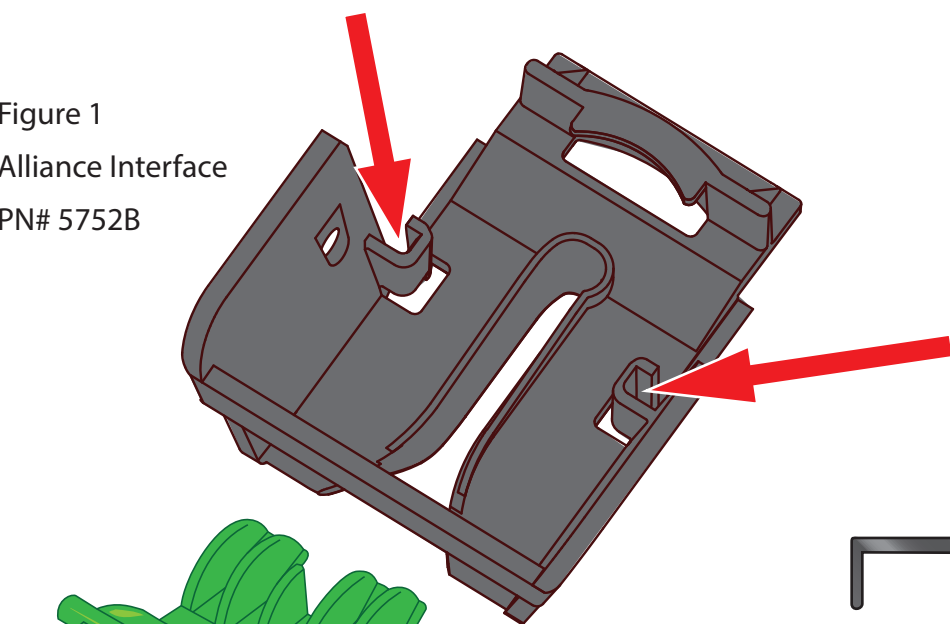
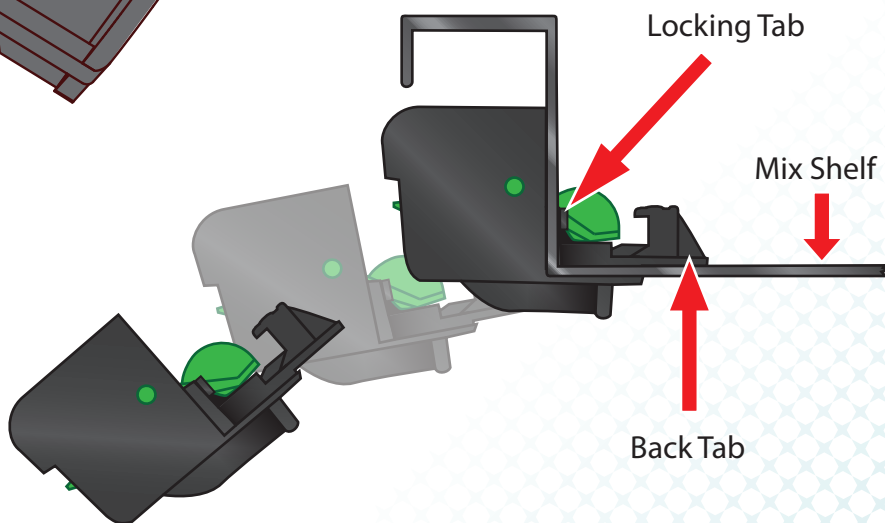


Figure 2



How to make you Alliance Machine square and level

During the initial installation of your Alliance Machine it should have been placed on a level surface. Also, the machine should have been made square and have the wall anchors installed to help retain the position of the machine.

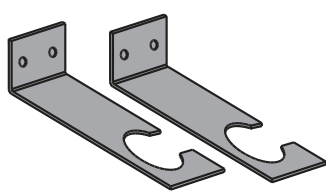
Misalignment in the machine can lead to the shafts not sitting correctly, they will then begin to “wobble”, or grind against the drive gears through out the machine. This leads to friction, friction causes heat, heat causes expansion, and expansion causes damages and breakages. Misalignment in the machine is often reflected in the drive gear, the bushing, and the gear reducer.

We recommend that you check your machine for alignment every six to eight months of operation. We also suggest that after completing and repairs or part replacement on a machine that you check to ensure alignment is correct as well.

The wall anchors that were supplied in the motor box of your machine are very important to help retain alignment over time. They secure the top of the machine to the wall. This helps to prevent movement during operation. Wall anchors also provide a safety against the machine tipping onto a user.

To adjust the alignment to your machine:

- 1 - Loosen the four thumb screws in the left and right feet.
- 2 - You can now push or pull the machine to the left or the right to guide it back to square.
- 3 - Re-tighten the four thumb screws.
- 4 - If need be tighten or reposition the wall anchors for more stability.



Wall Mount Brackets

