



SAFETY PRECAUTIONS

Observe the following precautions when working near the machine during operation.

- As with all machinery, it is important for the operator to be alert at all times.
- OSHA approved eye protection must be worn when operating the machine.
- Pay close attention to gloves, hair, and any loose clothing when operating the machine.
- Keep hands and loose clothing away from any drive chain components and connection points.
- Do not stand under the machine during operation.
- Turn off the machine and ensure it has stopped completely before changing a drum.
- Use care when moving or changing the drums.
- Be sure the shear pins are installed prior to each operation.
- Keep the floor and the area surrounding the machine clean to avoid hazardous conditions.
- Do not perform any maintenance on the machine during operation.
- Always stop the machine and lock out power before removing any of the top or side guards.
- Never operate the machine without each guard in place.

Proper operation, correct adjustments, care and maintenance of the machine are essential for safe and efficient operation.

Basic Information:

- Each machine is supplied with an installed explosion proof motor, a dolly and an appropriate number of live skid platforms, flexible drive shafts, shear pins, and grounding clips. Three or six of each. 85 Gallon machine does not include live skid platforms, or a dolly. 85 Drums would rest on the ground to engage the machine.
- The machine was supplied with one of two motor options.
 - One Horsepower Single Phase 110/220V 60Hz Explosion Proof Motor
 - One Horsepower Three Phase 220/440V 60Hz Explosion Proof Motor
- Drum Covers and Mix Paddle Assemblies are sold separately.
 - 55 Gallon Drum Cover and Paddle Assembly: Dedoes Part# 910074SS
 - 85 Gallon Paddle Assembly: Dedoes Part# 910285SS (85 Gallon Drum cover not available)
- Other paddle assemblies can fit onto a Dedoes 55 Gallon mix machine using the supplied flexible Drive Shafts.
- Viscosity of any material intended to be mixed must not exceed 2600 centipoise.
- The mixing speed of the 55/85 Gallon Machine is approximately 43 RPM.



MACHINE INSTALLATION

It is important that the machine is properly installed prior to operation.

- Using proper equipment, place the machine where it will be permanently installed and used.
- Include sufficient room on all sides of the machine for drum handling and maintenance.
- Referring to the wiring diagram on the motor nameplate, have a qualified electrician connect the motor to the starter switch and to an electrical supply applicable with the motor option purchased.
- Follow all local codes for explosion-proof environments, when applicable.
- The machine must be square and level to allow for installation and removal of the drums.
- The legs of the machine must be in a square upright position for proper stability and use.
- Secure the machine to the floor using $\frac{3}{8}$ " x $2 \frac{1}{2}$ " lag bolts and lead anchors through the holes in each of the two legs. *(Floor hardware is not supplied with the machine)*

Mix Paddle and Drum Cover Installation *(Sold separately)*

- Using proper equipment, lift a drum onto one of the included live skid platforms. *(85 Gallon machine do not use the live skid platforms)*
- Remove the lid from the drum.
- Measure the height of the interior of the drum in which the mixing paddle is to be installed. The distance from the bottom of the paddle to the underside of the drum should be one to two inches less than that of the full height of the drum.
- Insert the paddle and cover into the drum.
- Measure and lock the paddle shaft at the proper height using the set screw in the bearing on top of the drum cover.
- The bottom of the paddle should be secured one to two inches from the bottom of the drum.
- Ensure the foam gasket seal is properly in place on the underside of the cover.
- Lock the cover onto the drum with the included locking ring.
- Manually rotate the paddle shaft to ensure that the assembly moves freely and is not binding on the bottom of the drum, the bung, or elsewhere.
- The included dolly can be connected to the live skid platform to safely move the drum into position beneath the mix machine.
- Position the drums so the flexible drive shaft is vertically in-line with the connection points of the paddle shaft and the machine shaft. This will allow the flexible drive shafts to operate freely without putting stress on any drive mechanisms. *(See Shear Pin Protection)*
- Install an included flexible drive shaft onto the mixing paddle shaft and the machine drive shaft for each location.
- Install one $\frac{3}{16}$ " x $1 \frac{1}{4}$ " brass shear pins into the top of the flexible drive shafts.
- Install an included grounding clamp onto the machine and each drum.



Shear Pin Protection

The flexible drive shafts are secured by a $\frac{3}{16}$ " x $1\frac{1}{4}$ " brass shear pin, Dedoes Part# 910040C. Abnormal amounts of stress from the mixing mechanisms will snap the shear pin preventing strain or damage to the machine. When it is necessary to replace a shear pin, a $\frac{3}{16}$ " X $1\frac{1}{4}$ " brass pin must be used. A few additional shear pins are included with each machine. Replacing these shear pins with any other fastener may cause damage to the machine and will void the warranty. Viscosity of any material intended to be mixed must not exceed 2600 centipoise.

Daily Inspection

Every operator should make a daily inspection of the machine and components to be certain everything is operating correctly and in place.

Routine Inspection

- Inspect the drive shafts for horizontal alignment. All shafts must be at the same height. Adjust as necessary.
- All sprockets, bushings, and shafts should be inspected to prevent unusual wear patterns from developing. Adjust as necessary.
- Check all sprockets for horizontal alignment. All sprockets must be at the same height and must be horizontal. Adjust as necessary.
- All attaching hardware should be checked for tightness after the first month of operation and every three months thereafter, or as necessary.

If at any time you notice unusual noise, wear, or poor operation of any kind, please notify your maintenance department. Early detection of problems can save down time and money.

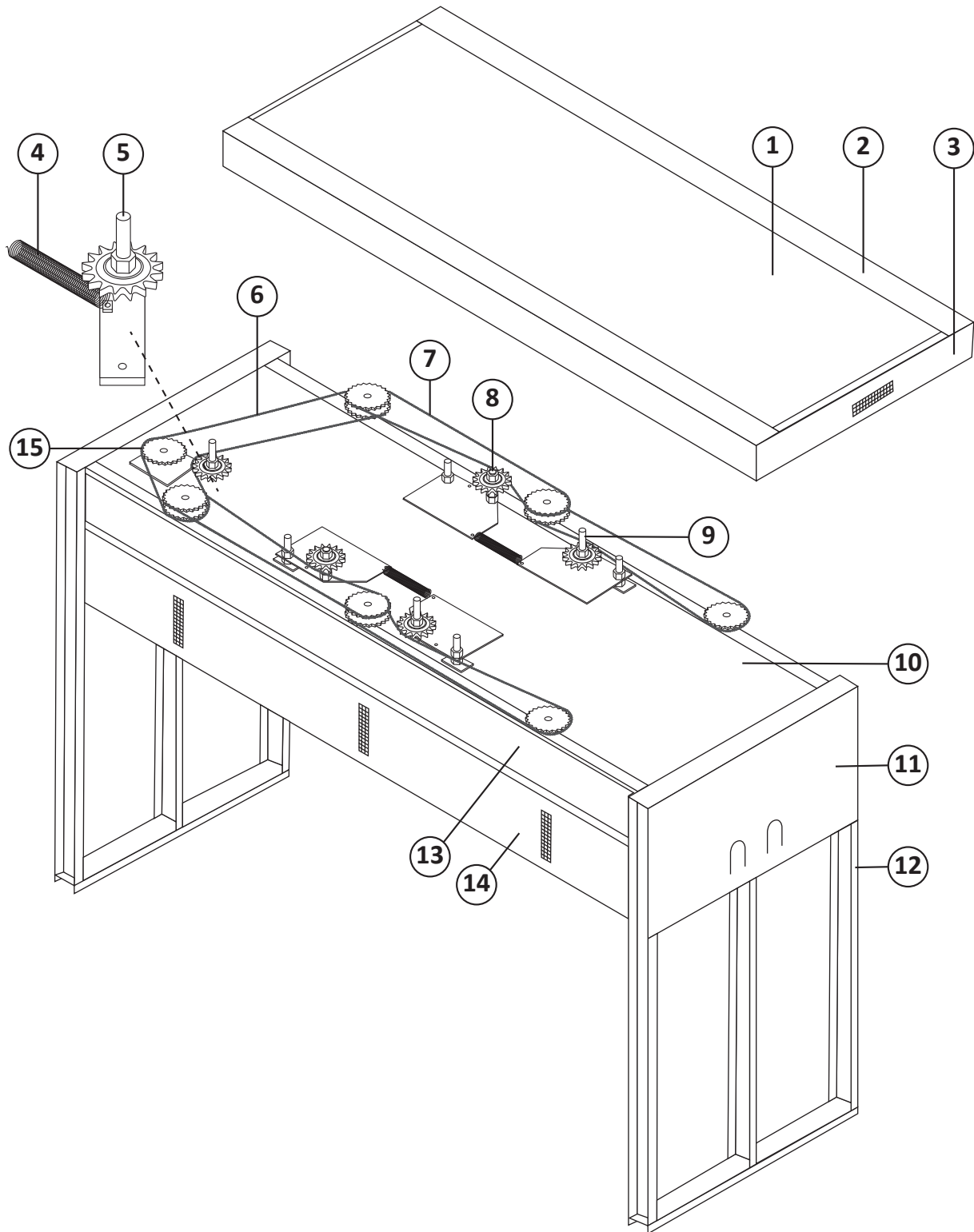
Lubrication and Preventative Maintenance

- The gearbox is filled and sealed with synthetic oil and does not require maintenance.
- The pillow block bearings are factory lubricated. A grease fitting is provided on each bearing for re-lubrication every 250 hours of use using a good grade multi-purpose grease.
- The drive chain and sprockets require light grease after every month of operation with a quality non-liquefying lithium grease.



55 Gallon or 85 Gallon Drum Mixing Machine Instructions

Part No: 55/3, 55/6, 55/6I, 85/3



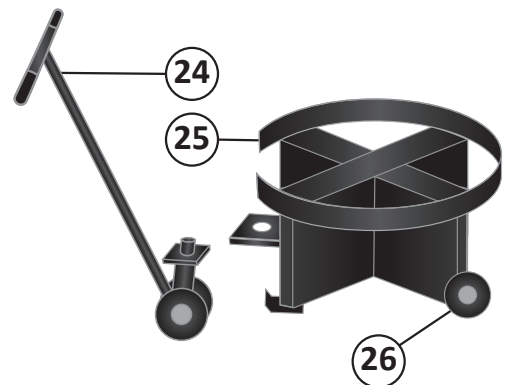
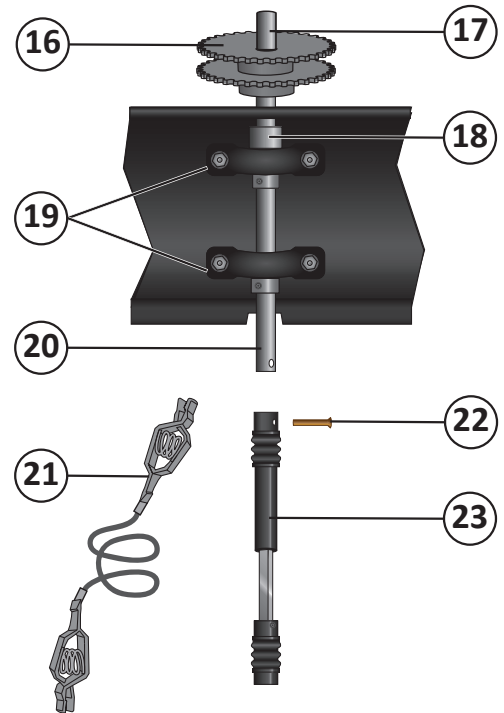
Six Place Back to Back 55 Gallon Mix Machine used for example.



55 Gallon or 85 Gallon Drum Mixing Machine Instructions

Part No: 55/3, 55/6, 55/6I, 85/3

| Item # | Description | Dedoes # |
|---|--|----------|
| 1 | Six Place Guard Cover | 910402W |
| | Three Place Rear Guard (Not Shown) | 910300W |
| 2 | Front Guard | 910302W |
| 3 | Six Place End Guard | 910401W |
| | Three Place End Guard (Not Shown) | 910111W |
| 4 | Six Inch Tensioner Spring | 910118 |
| 5 | Primary Tensioner Sprocket | 910114 |
| 6 | Six Place Primary Drive Chain, No. 50 | 910050-G |
| | Three Place Primary Drive Chain, No. 50 (Not Shown) | 910050-F |
| 7 | Secondary Chain | 910050-E |
| 8 | Idler Sprocket | 910015 |
| 9 | Idler Bolt | 5361 |
| 10 | Six Place Bottom Guard | 910400W |
| | Three Place Bottom Guard (Not Shown) | 910106W |
| 11 | Side Guard | 910054W |
| 12 | Leg | 910128 |
| 13 | Main Frame | 910304X |
| 14 | Safety Guard | 910307W |
| 15 | Motor Sprocket | 910025 |
| 16 | Drive Shaft Sprocket | 910016 |
| 17 | Drive Shaft Key | 910000 |
| 18 | Drive Shaft Bearing | 910002 |
| 19 | Drive Shaft Lock Collar | 910001 |
| 20 | 3/4 Inch Drive Shaft | 910003-C |
| 21 | Grounding Clamp | 910073 |
| 22 | 3/16 Inch Brass Shear Pin | 910040C |
| 23 | Flexible Driver Shaft | 910069 |
| 24 | Complete Dolly Assembly | 910045 |
| 25 | Complete Live Skid Platform | 910022 |
| 26 | Wheel | 910050 |
| N/A | Chain Master Link, No. 50 (Not Shown) | 910049 |
| Explosion Proof Electric Motor Options (Not Shown) | | |
| N/A | 1 HP Explosion Proof Single Phase 115/230 Volt Motor | 910077 |
| N/A | 1 HP Explosion Proof Three Phase 230/460 Volt Motor | 910078 |
| N/A | 40:1 Gear Reducer | P2619 |
| N/A | 40:1 Gear Reducer Shaft Kit | P2620 |

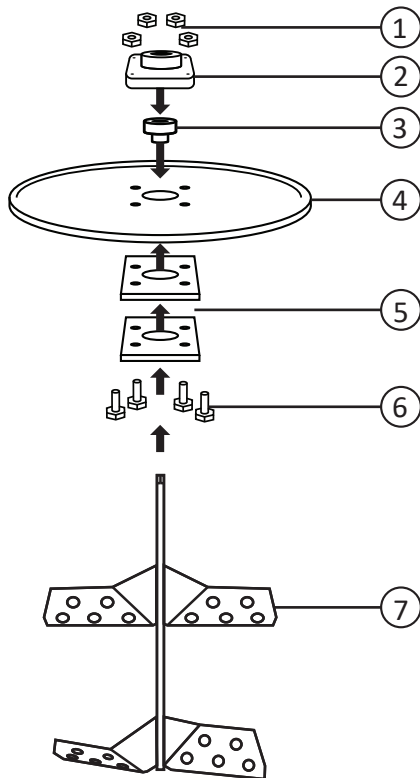


For technical support on our products or additional accessories, please call us at 248-624-7710 or visit : www.dedoes.com



55 Gallon or 85 Gallon Drum Mixing Machine Instructions

Part No: 55/3, 55/6, 55/6I, 85/3

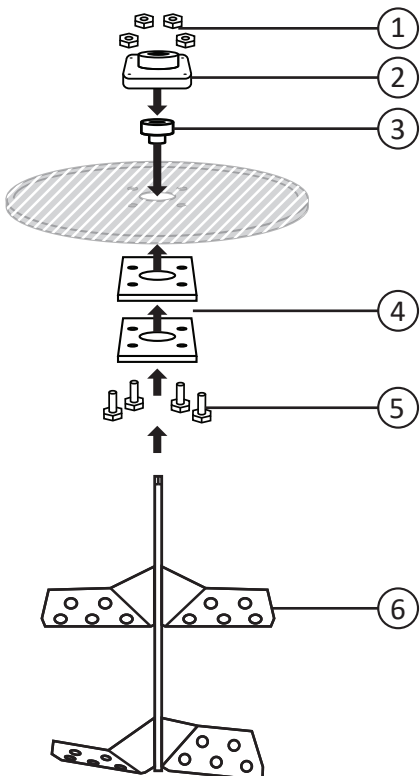


55 Gallon Drum Cover and Stainless Steel Paddle Assembly

Dedoes Part# 910074SS

| REF # | DESCRIPTION | PART # |
|-------|--|----------|
| 1 | 3/8" - 16 KEP Nut (4) | 5805 |
| 2 | 3/4" Flange Bearing (1) | 910211 |
| 3 | 3/8" I.D. - 1" O.D. Oilite Bushing (1) | 910012 |
| 4 | 55 Gallon Lid, Lid Ring, Bolt, & Nut Assembly (1) | 910206 |
| 5 | Stainless Steel Bushing Plate (2) | 7045SSP |
| 6 | Stainless Steel Screw 3/8" -16 x 1 1/4" HXHD Grade 5 (4) | P0014 |
| 7 | 55 Gallon Stainless Steel Paddle (1) | 910085SS |

NOTE: Drum Covers and Mix Paddle Assemblies are not included with the mix machine. These are sold separately. Other drum paddle assemblies can be fitted onto a Dedoes mix machine using the supplied flexible Drive Shafts.



85 Gallon Stainless Steel Paddle Assembly

Dedoes Part# 910285SS

| REF # | DESCRIPTION | PART # |
|-------|--|-----------|
| 1 | 3/8" - 16 KEP Nut (4) | 5805 |
| 2 | 3/4" Flange Bearing (1) | 910211 |
| 3 | 3/4" I.D. - 1" O.D. Oilite Bushing (1) | 910012 |
| 4 | Stainless Steel Bushing Plate (2) | 7045SSP |
| 5 | Stainless Steel Screw 3/8" -16 x 1 1/4" HXHD Grade 5 (4) | P0014 |
| 6 | 85 Gallon Stainless Steel Paddle (1) | 910285SSA |

NOTE: 85 Gallon Drum Covers are not available. If you wish to use a Dedoes Stainless Steel Paddle and shaft we would request that you send the 85 Gallon Drum covers to us and we will retro fit them with the hardware for the paddle and shaft.

Please contact Dedoes for more information.
info@dedoes.com / 248-624-7710