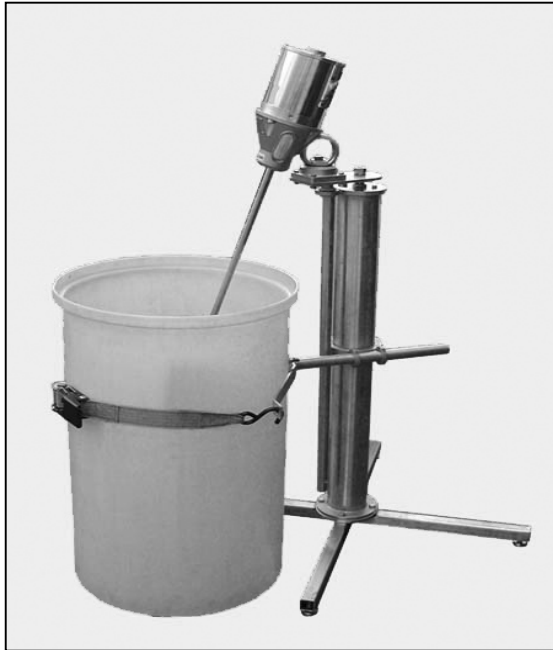


AIR LIFT STAND ASSEMBLY & OPERATION INSTRUCTIONS

Models ALS-24, ALS-36, ALS-48, ALS-24SS, ALS-36SS, ALS-48SS



INITIAL INSPECTION & RECEIVING

1.1 Immediately upon receipt of the equipment check the crating and contents for any damage that may have occurred in transit. Report any damage immediately to the carrier and to Sharpe Mixers. Check against the packing slip to be sure that all parts were received. Report missing items to the carrier and to Sharpe Mixers.

CAUTION

Because neither manufacturer nor seller can control the application or installation of this product, their only obligation shall be to replace this part if defective and shall not be liable for any injury, loss, or damage, direct or consequential, arising from the installation of this product. User assumes all risk in using this product and is therefore cautioned in selecting the product suitable to the intended use. Refer to inside cover of this manual for Terms and Conditions.

1.2 The stand will normally be shipped disassembled. The package should contain:

- Air cylinder body assembly
- Straight Base Leg
- Flanged Base Leg
- Assembly bolts

1.3 There are various optional equipment that may be included with the stand including:

- Tank Clamp & Positioning Bracket
- Tank Positioning Strap
- Leveling casters for stand legs
- Rolling Casters for stand legs
- Base Leg End Caps
- Mixer counter-weight
- Exhaust Restriction Valve
- Extra Counter-Weights

These items may be packaged with the stand or shipped separately. Contact Sharpe Mixers regarding any missing items, or to purchase any of these options for your stand.

ASSEMBLY- BASE LEGS

2.1 Gently set the Cylinder Assembly on its side to access the bottom of the cylinder. Mount the Flanged Base Leg to the bottom of the cylinder, using only the two bolts through the two legs. The Straight base leg



may now be installed at 90-degrees from the Flanged Base Leg. Install the two assembly bolts through the leg, flange and cylinder base. Tighten all four bolts securely.

2.2 At the end of each leg there is a mounting hole for bolting the stand to the floor. Leveling glides or wheeled casters may also be installed here if the stand must be mobile. *Glides and casters may be*

ordered from Sharpe Mixers Parts Department at (800) 237-8815, ext.103.

2.3 Raise the cylinder assembly into a vertical position and place it on the floor resting on the legs.



When bolting the stand to the floor, it is recommended the stand be raised off the floor using nuts below the legs and adjusted until the cylinder is vertical. Tighten the nuts inside the legs to secure the stand in place.

Wheeled Casters should be adjusted on a completely flat surface. Leveling glides should be adjusted for the surface where the stand will be placed. Adjust the Glides until all four rest securely on the floor. Once the glides have been adjusted, tighten the nuts securely inside the legs.



Plastic Base Leg End Caps may be installed on the open ends of the legs for a more finished appearance.

ASSEMBLY- MOUNT & TORQUE ARM

2.4 Depending on packaging requirements, your Air Lift Mixer Stand may have the Mixer Mount / Torque Arm disassembled from the Stand Cylinder. This is the bracket the mixer mounts on, and the arm that prevents the mount from spinning during operation. This mount is comprised of an oblong plate with a shaft extending down from one side. Raise the mount above the stand and insert the shaft into the white plastic guide clamped to the top of the cylinder. Slide the shaft downwards and onto the threaded top of the cylinder ram (see photo).



Tighten the nut securely. Do not tighten the collar that holds the plastic guide in place; this can cause binding.

Note: the alignment of the torque arm and the cylinder ram is important for smooth operation. Hold the Torque Arm so the plastic bushing sits square against the side of the cylinder while tightening the top nut. If binding occurs during the bottom 4" of the stroke, the cylinder ram may not be centered in the hole of the torque arm. Adjust if necessary.

TESTING AIR LIFT

3.1 Prior to completing assembly with the mixer, it is recommended the Air Lift be tested for operation.

CAUTION: Air operated cylinders can be very dangerous. Since air is compressible, it is possible to charge an air cylinder to full pressure before the cylinder moves, creating an "air gun". Once the cylinder begins to move, the compressed air can accelerate the ram for a very fast and violent stroke.

STAY CLEAR OF THE STAND WHEN CHARGING THE AIR CYLINDER.

Before servicing the stand or the mixer, disconnect the airlines and cycle the air valve up-and-down to relieve all air trapped inside the cylinder.

The Air Lift Hand Valve is mounted on the side of the stand cylinder. The inlet of the valve is marked "IN" next to the valve port. The outlet is marked "EXH" for exhaust.

Make sure the valve is in the CLOSED position (horizontal) before attaching air pressure to the valve. Attach an airline to the "IN" port of the valve. A quick-connect fitting is best used here. If this is not supplied, these fittings may be purchased at your local air tool dealer or through Sharpe Mixers.

Although the Air Lift Stand requires minimal volume to operate, air pressure of at least 50psig is recommended. Pressures lower than this may not create enough pressure in the cylinder to raise the weight of the mixer. Pressures greater than 50 psig may be more dangerous by raising the cylinder faster.



An Exhaust Restriction Valve should be used on the exhaust side of the Hand Valve to adjust the speed of the ram.

ASSEMBLY- MIXER COUNTERWEIGHT

4.1 The mixer counter-weight (optional) is used to balance the weight of the mixer for smoother operation when raising and lowering the stand. Since different mixers may be used with these stands, it is recommended that the mixer assembly be weighed to determine the correct counterweight for proper operation. Install the counterweight on the top of the stand head, on the end opposite of the mixer mount.



Pictured is an optional machined stainless-steel counterweight, available for applications where paint-free and plating-free equipment is required. Standard

weight sets are chrome-plated cast iron, available in 10 and 5-lb increments.

Mixer weights vary depending on the type of motor, drive, impeller(s) and shaft size. The chart below may be used to estimate counterweight requirements, but the mixer should be physically weighed for the most accurate number.

Standard Mixers	All-Stainless Mixers
D-025....35 lbs	SSD-025.....44 lbs
D-033....40 lbs	SSD-033.....49 lbs
D-050....47 lbs	SSD-050.....56 lbs
D-075....55 lbs	SSD-075.....64 lbs
D-100....67 lbs	SSD-100.....76 lbs
D-150....75 lbs	SSD-150.....84 lbs
D-200....82 lbs	SSD-200.....91 lbs
G-025....51 lbs	SSG-025.....73 lbs
G-033....55 lbs	SSG-033.....77 lbs
G-050....63 lbs	SSG-050.....85 lbs
G-075....70 lbs	SSG-075.....92 lbs
G-100....83 lbs	SSG-100....105 lbs
G-150....91 lbs	SSG-150....113 lbs
G-200....98 lbs	SSG-200....120 lbs

ASSEMBLY- MIXER MOUNTING

4.3 The standard model Air Lift Stand is designed for Sharpe Portable Mixers using the “Cup Plate” mounting option. Other special mountings are available to meet specific requirements.

Assemble the cup plate onto the mixer nosecone with the rubber vibration pad and the swivel washer. Set the assembled mixer drive on the stand riser and bolt securely in place. Install the mixer shaft and impellers following the instructions in the Portable Service Manual. Position the mixer as required and tighten the swivel bolt securely.

Note: the rubber pad is designed to allow some flexibility in the mounting; do not attempt to tighten the bolt to stop all movement of the mixer drive

ASSEMBLY- TANK POSITION CLAMP (OPTIONAL EQUIPMENT)



4.4 The Tank Positioning Clamp is designed to hold the mixer stand securely to the mixing tank. The inherent vibrations that occur during mixer operation can cause the mixer stand to move out of position. This can cause damage to equipment (impellers hitting the tank wall or other internals) or may even create a dangerous situation (mixer drive toppling over and up-ending the spinning impeller). Securing the stand to the tank is a good way of preventing these possible hazards.

Remove the clamp assembly from the tank “Y-Bar”. Unbolt the larger 2-piece clamp and install the clamp onto the center of the stand cylinder. Reinsert the tank “Y-Bar” into the two smaller collars. The large collar may now be adjusted for height and position, and the “Y-Bar” may be moved in and out to the optimum place to position the tank.

The Tank Positioning Strap may now be wrapped around the tank and hooked to each end of the tank “Y-Bar”. Tighten the ratchet until the tank is held securely.



OPERATION

5.1 The operation of the Air Lift Stand with the mixer may now be tested.

WARNING: STAY CLEAR OF THE STAND WHEN CHARGING THE AIR CYLINDER

Make sure there are no obstructions in the path of the mixer drive, shaft or wiring. All mixer wiring must be held free from the Stand during raising or lowering Air Lift. Allowing the wiring to catch on stand brackets or plumbing could result in the wiring being ripped from the conduit box and creating an electrical hazard.

Move the Hand Valve up to raise the stand, down to lower. The Exhaust Restriction Valve may be adjusted to change the speed of the Air Lift.

The height position of the lift will normally be held in position when the Hand Air Valve is left in the horizontal or "neutral" position. If a "bottom" position is desired that is higher than the stands lowest setting, a clamp collar may be installed on the cylinder ram to limit the downward travel.

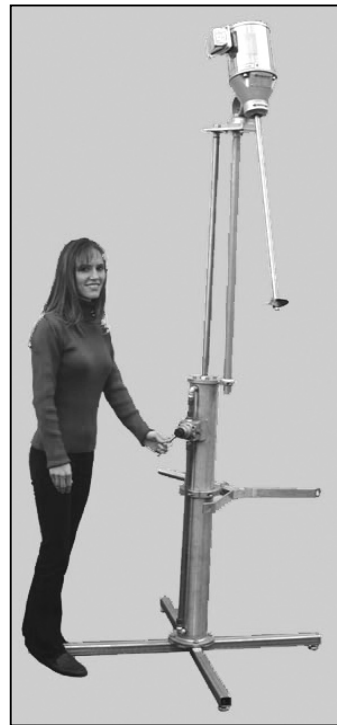
A light lubricant may be applied to the Torque Arm shaft for smoother operation and to prevent binding in the torque arm bushing.

TROUBLE SHOOTING GUIDE

6.1 Your Sharpe Mixers Air Lift Stand may need adjusting after initial operation to provide the best operation. The most common problem that occurs with any air-operated lift is binding or "chatter" during the raising or lowering of the ram. There are many adjustments to resolve this phenomenon:

- ✓ Adjust the Exhaust Restriction Valve
- ✓ Adjust the top nut on the cylinder ram to correct a misalignment between the cylinder ram and the torque arm shaft.
- ✓ Lube the torque arm shaft.
- ✓ Add or remove weight from the counterweight.
- ✓ Tighten or loosen the clamp at the top of the cylinder that holds the plastic torque arm guide. This clamp can be tightened until the stand will not move, so do not over-tighten it, unless you wish the cylinder to be held in place. However, even if the clamp is securely tightened, the cylinder may still be able to overcome the clamp with sufficient air pressure if the torque arm shaft is lubricated.

CAUTION: If the cylinder is pressurized when the guide clamp has locked the air cylinder in place, the movement of the ram can be violent when the clamp is loosened.



Contact Sharpe Mixers if there are any questions regarding operation of this piece of equipment. Optional items may be ordered through our Parts Department at (800) 237-8815, ext. 103, or email at sales@sharpemixers.com

AIR LIFT STAND INSTRUCTIONS #ALS-12205