

BOX DUMPER

Operations & Maintenance

*Reliant / Extended
Pivot / Bale*

Smart Solutions To Keep You Moving!

Installation: First, anchor the dumper to the floor. We recommend 1/2" x 4" anchor bolts (minimum) for cement floors.

WARNING: This equipment should be installed by qualified personnel. Follow all local codes and safety requirements. Do not operate equipment until it is anchored to the floor.

Connect the power source to the terminal block located inside the control box. When initially powering the dumper, check the motor rotation per the arrow on the motor shroud. If the motor is not turning in the correct direction, you are probably out of phase and will need to check wiring (if unit is 240V or 480V three phase).

Verify operation by running the unit empty a few cycles. Even though the dumper is thoroughly tested at Ensign, you will want to check the anchor bolts and condition of all moving components before lifting material.

Operation: The standard controls are momentary push buttons. To start the unit, press and hold the "UP" button. To stop the unit at any point during the cycle, simply release the "UP" button. A limit switch will automatically stop the tilt at the end of the up cycle. To return the unit to the rest position, depress and hold the "DOWN" button.

To adjust the down speed, there is a flow control valve located near the hydraulic pump. If needed, turn the knob clockwise to slow the descent



and counter clockwise to speed it up. It is preset at the factory and should not need adjustment.

The adjustable hold down bar should be positioned no more than 4" above your container. Excessive space between the bar and the container could result in a safety hazard or damage to your dumper.

WARNING: All lock-out / tag-out and other safety precautions should be taken prior to performing any maintenance. Ensure there is zero pressure in the hydraulic system before servicing.

Maintenance: Follow the service intervals listed below to ensure a long and maintenance free life.

Hydraulic Box Dumper - Reliant

Daily:

- Inspect dumper integrity, safety items and hydraulics for proper operation.
- Wipe down cylinder rods to promote long life.

Every three months:

- Check hydraulic reservoir fluid level. Remove vent on top of the reservoir. With the bucket in the down position, the fluid should be no more than 2" from the top of the reservoir.
- Inspect cylinders, upper cylinder pivot bushings & pins, fittings, motor, pump and hoses.
- Grease roller type main pivot bearings. Grease fittings are located on each bearing which can be accessed from the back of the dumper.

Annually:

- Participation in an oil analysis program is the best method for determining oil change frequency. If you choose not to participate in an oil analysis program, the recommended oil change frequency is at 500hrs after initial start-up then every 2000hrs thereafter.

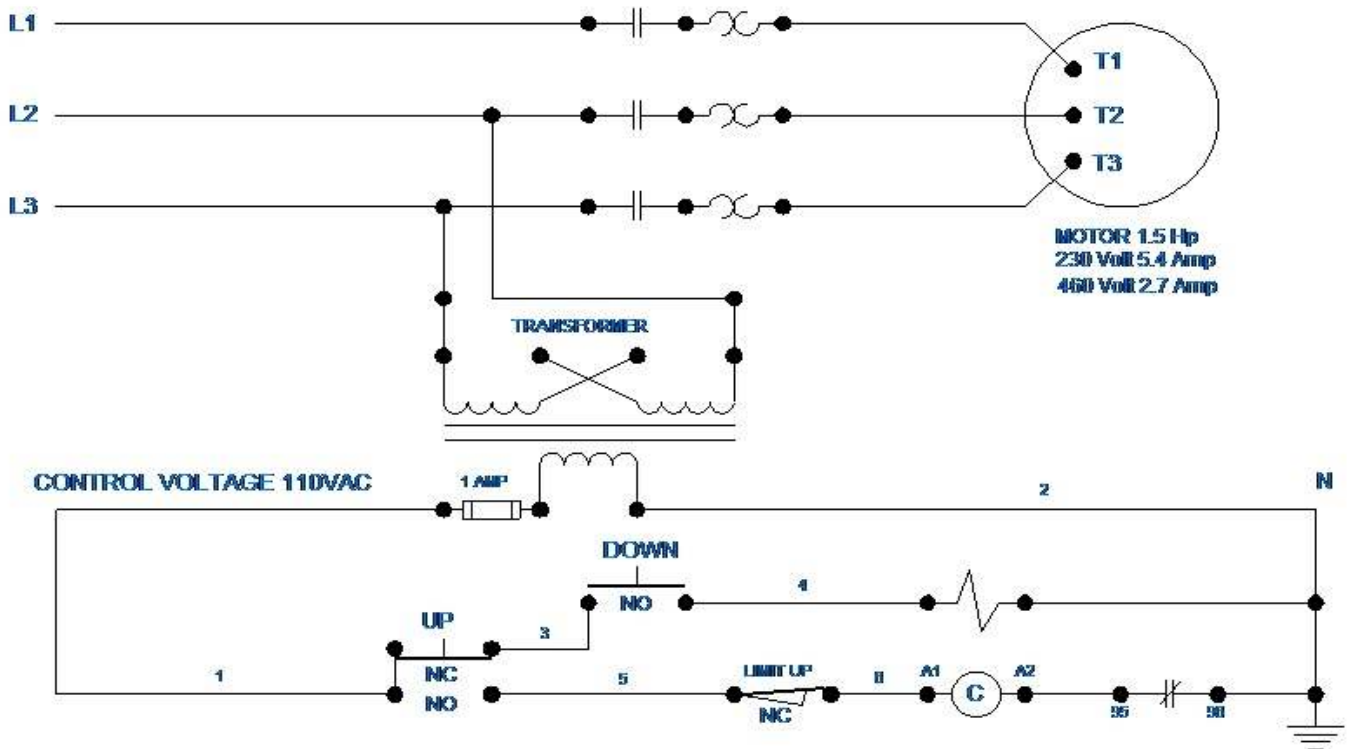
Repair parts & fluids:

| | |
|--|---------|
| 1. Cylinder, tilt, SA, 2" x 24" | 83-4521 |
| 2. Seal kit, cylinder, tilt, 2" x 24" SA | 83-4531 |
| 3. Cylinder, tilt, SA 2.5" x 24" | 83-4023 |
| 4. Pin, cylinder, lower | 31-0001 |
| 5. Pin, cylinder, upper (non-locking) | 31-0002 |
| 6. Bushing, bronze, top (2ea per pin) | 86-3001 |
| 7. Bushing, Rulon CJ, top | 86-2512 |
| 8. Pin, cylinder, upper (locking) | 30-0401 |
| 9. Locking tab, pin | 30-0402 |
| 10. Motor, 1.5HP, 3PH, 56C | 84-1436 |
| 11. Motor, 2HP, 3PH, 56C | 84-1446 |
| 12. Coupler, motor, 1/2" bore | 83-3353 |
| 13. Coupler, pump | 83-3354 |
| 14. Coupler, insert ("spider") | 83-3352 |
| 15. Pump, 1GPM, Parker | 83-3391 |
| 16. Pump, 2GPM, Parker | 83-3392 |
| 17. Flow control, 0-5000psi, Parker | 83-2002 |
| 18. Tilt limit switch, spring arm, AB | 84-3121 |
| 19. Bearing, pivot, 2" , 4-bolt flanged | 86-2019 |

Grease - use a high performance NLGI grade 2 Moly based synthetic grease or food grade equivalent

Hydraulic oil - use a high quality ISO grade 32 or 46 hydraulic fluid based on start-up and ambient operating temperatures. Dumper is shipped with ISO 46 hyd fluid.

Contact **Ensign Customer Service** if you have any questions - 616.928.2365



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