

CENTAUR



MINIATURE HORSE HOT WALKER SERVICE MANUAL

**5761 Ridgeview Avenue
P.O. BOX 446
MIRA LOMA, CALIFORNIA 91752
(909) 685-7337 FAX (909) 685-0341
1-800-962-8050
www.hotwalkers.com
E-Mail: centaur@hotwalkers.com**



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(909) 685-7337 * (909) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Unloading the Hot Walker:

Lift Hot Walker from the head or base. If you must lift the Hot Walker from the base, make sure that your forks on your lift clear all drive assemblies inside the Walker. You can inspect this prior to lifting by opening up your small inspection door, which is mounted on one side of your Hot Walker.

Prior to installing your Hot Walker on your pad or postholes, refer to the enclosed diagrams for the proper layout of the bolts and your electrical source. Make sure that the walker is mounted on a fairly level surface.

Installing the Arms:

Unscrew the bolts from the top of each head arm assembly. Slide your arms into each head assembly with the holes in the arms pointing upward. Align the holes in the arms with the nut holes in each arms assembly. You can use a center punch or an old screwdriver to align the holes more easily. Grease the threads on each one of the bolts prior to rethreading, and thread the bolt down until it is snug against the welded nut.

Installing Your Safety Release Ropes and Animal Leads:

On the bottom side of each arms there is a steel rod with a curled end. Take the supplied rope and tie a non-slipping knot through its steel loop. Now take the free end of the rope and feed it through the two welded rings on the head assembly. At the free end of the rope attach it to the lowest ring on the support arm with a good knot.

Now take the ring end of your lead and have someone pull the safety rope which will pull the rod back and allow you to put the ring in the arm opening, now release the rope and the lead will stay attached to the Hot Walker Arm.

To release the animal all you need to do now is simply jerk the pull rope and the animal is released with the lead attached to its halter.

Be sure to grease each spring on each arm. This allows the quick release to work properly. You can use any WHITE GREASE. You should grease the springs at least every **60 days** to insure your animal's safety.

Folding Models Only:

Open Machine fully and drop pins through steel tabs and arms themselves. All of the folding parts on the head assembly should be kept greased on a regular basis so that it will function safely and properly for you and your horse. (The solid head model walkers need no head assembly greasing).



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
Mira Loma, Ca 91752
(909) 685-7337 * (909) 685-0341 Fax
1-800-962-8050
www.hotwalkers.com

Hot Walker Lubrication Schedule:

Inside the Hot Walker above the cover, the vertical shaft has 1 grease fitting it should be greased every **60 days**.

The truck rear end should have the oil drained from it every **6 months**. You can use any reclaimed oil 30, 40, or 50 weight. **Do not use gear oil in it**, since it turns at a low R.P.M. and it is not needed. Fill the oil through the vertical fill tube located on the topside of the rear end. When oil starts to come out of the breather cap (Located on the vertical rear end housing) then the Walker is filled. The Walker takes about 2 ¼ gallons to fill it completely.

The gear box should be checked every **90 to 120 days** and it should be drained and refilled with the proper “gear oil”.

Adjusting the Proper Pulling Power of your Hot Walker:

To give your Hot Walker more pulling power you will notice 2 vertical all thread rods mounted in the front of the electric motor and the gear box. Loosen the lower jamb nuts under the slotted motor plates on each of the thread rods. Now tighten the upper nuts on the thread rods and this will cause the motor and gearbox plate assembly to tilt downward creating more tension on the double V-Belts. The 2 V-Belts should have about 1 1/16th inch give between the big pulley and the little pulley. Try to tighten each nut the same to keep the motor assembly plate parallel. The 2 vertical thread rods should be kept greased to stop rusting and allow the nuts to work smoothly.

NOTE: The Hot Walker Must be Turning While Tightening the V-Belts. Tighten the V-Belts after the first 5 days of usage. This is most important, to prevent the belts from slipping.

Replacement Parts:

Any parts that become worn or broken can be replaced by calling our Corporate Office at 1-800-962-8050 or (909) 685-7337. Most of the parts can be shipped the same day.

For belt replacement the sizes are listed on the backside of the belts themselves.

For motor, switch, controllers, and gearboxes all the model number are located on their I.D. plates, for ordering.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(909) 685-7337 * (909) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Operating Instructions:

1. The Walker is designed to walk horses for conditioning and cooling. The variable speed control is provided to allow the option of adjustment speed for different horse needs.
2. Horses “DO” require training to walk and behave properly on a Hot Walker. It is not intended to be used to break wild horses or force them to walk.
3. Leads are furnished with the walker. They should be inspected once a month; they should be replaced immediately, if they show signs of weakness, or if they begin to fray.
4. A monthly check and tightening of all bolted parts is needed. A Walker that is in constant use requires this as a normal maintenance procedure.
5. If the V-Belts become loose, they can be tightened by adjusting the nuts on the 2 vertical thread rods mounted in front of the motor.
6. **Grease** – Grease zerk is located on the vertical shaft, above the cover. These will grease the moving parts of the drive tower. Greasing each month is recommended. **Note: Do Not** oil or grease the V-Belt assembly.
Important: When greasing use Lithium grease only.
7. The Walker will not reverse without stopping completely first.
8. Any electrical service should be done by a licensed electrician. 110 Volt or 220 Volt wiring is required. **NEVER** adjust Walker speed or put hands near the V-Belt assembly unless the electrical switch is turned off.
9. Walkers are warranted for one year from the date of purchase as per attached warranty statement.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
Mira Loma, Ca 91752
(909) 685-7337 * (909) 685-0341 Fax
1-800-962-8050
www.hotwalkers.com

“DO’S AND DON’TS”

<p>DO NOT attempt to use Walker prior to being properly secured to the foundation pad.</p> <p>DO NOT operate Walker with the cabinet off.</p> <p>DO NOT leave the Walker unattended while in operation.</p> <p>DO NOT put hands near the V-Belts while Walker is in operation.</p> <p>DO NOT use a metal chain as a lead. Use rope or nylon rope with a snap at the bottom end.</p> <p>DO NOT ride or allow a child to ride a horse that is being walked.</p> <p>DO NOT oil the V-Belts.</p> <p>DO NOT allow the horse to rear or buck on the Walker.</p> <p>DO NOT allow wiring or motor to get wet.</p> <p>DO NOT open the cabinet to adjust speed or to turn the power. Turn the power off at the remote switch before opening the cabinet.</p> <p>DO NOT use your Walker as a merry-go-round for children or adults.</p>	<p>DO grease your Walker at the grease fittings once a month, or more often if the unit is in constant use.</p> <p>DO have all electrical hook-ups done by a licensed electrician.</p> <p>DO allow the Walker to stop completely before reversing direction.</p> <p>DO make sure when less than 4 horses are being walked, that they are opposite each other on the Walker.</p>
---	---

As with all electrical driven equipment, the utmost caution must be taken with regard to exposure to electrical shock caused through a rupture of any electrical connections or wire. DO NOT allow water or moisture to accumulate around any wiring, switches, or the motor.

All moving parts of this equipment are of heavy gauge steel. DO NOT expose any portion of your body to this equipment while it is in motion.

Moving parts can be hazardous to a person wearing loosely fitting clothing or with long hair.

Use the utmost caution in operating this equipment.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
Mira Loma, Ca 91752
(909) 685-7337 * (909) 685-0341 Fax
1-800-962-8050
www.hotwalkers.com

Centaur Hot Walker Limited Warranty

Centaur One-Year Limited Warranty

Horse Walker Models 200, 201, 400, 401, 600, Mini-Horse Walker Models 400, 401 and 600 and Hound Walker Models 400, 401 and 600 are warranted by **Centaur Horse Walkers, Inc.** to the original user against defects in workmanship or materials under normal use for one year after the date of purchase. Any part, which is determined by **Centaur** to be defective in material or workmanship and returned to our authorized service location, as **Centaur** designates, shipping costs prepaid by client, will be, as the exclusive remedy, repaired or replaced at **Centaur's** option. Shipping to be supplied by client on all returning items. For limited warranty claim procedures see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights, which vary, from state to state.

Limitation of Liability

To the extent allowable under applicable law, **Centaur's** liability for consequential and incidental damages is expressly disclaimed. **Centaur's** liability in all events is limited to, and shall not exceed, the purchase price paid.

Warranty Disclaimer

Centaur has made a diligent effort to illustrate and describe the products in this literature accurately; however such illustrations and description are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose, or that the products will necessarily conform to the illustrations or descriptions.

Product Suitability

Many states and localities have codes and regulations governing sales, construction installation and/or use of products for certain purposes, which may vary from those in neighboring areas. While **Centaur** attempts to assure that its products comply with such codes it cannot guarantee compliance and cannot be responsible for how the product is installed or used. Before purchase and use of our products, please review the product application, and national & local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (A) some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or warranty lasts, consequently the limitations may not apply to you; (B) Also, some states do not allow limitations on how long an implied warranty lasts, consequently the above limitations may not apply to you; and (C) by law, during the period of the limited warranty any implied warranties of merchantability or fitness for a particular purpose applicable to consumer products purchased by consumer, may not be excluded or otherwise disclaimed.

Prompt Disposition

Centaur will in good faith effort for prompt correction or other adjustment with respect to any product, which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom product was purchased. Dealer will be given additional directions. If unable to resolve satisfactorily write to **Centaur Horse Walkers, Inc.** below, giving dealer's name, address, date and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit you, file claim with freight carrier.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

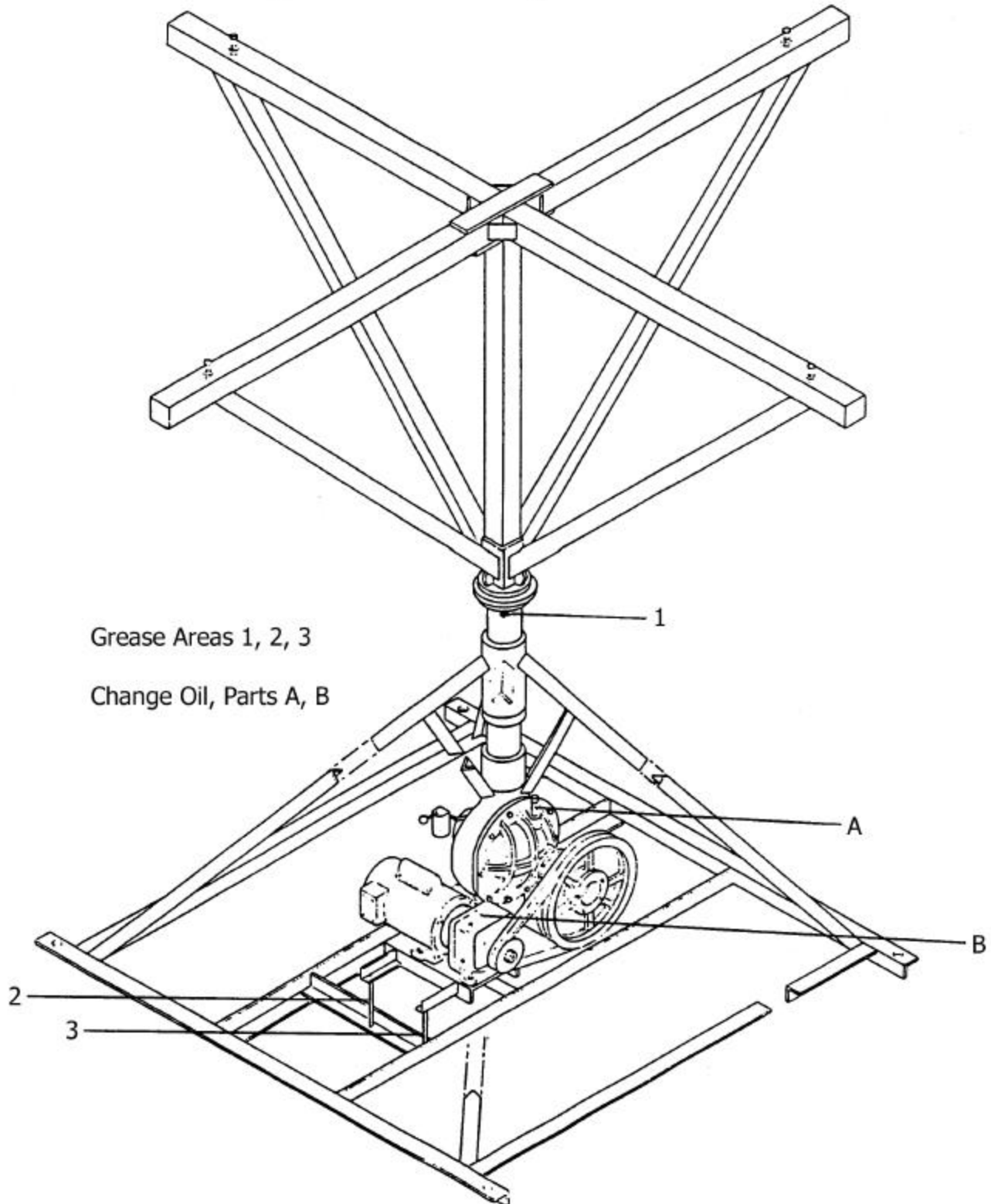
Mira Loma, Ca 91752

(909) 685-7337 * (909) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Lubricating Chart for Variable Speed Miniature Hot Walker





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

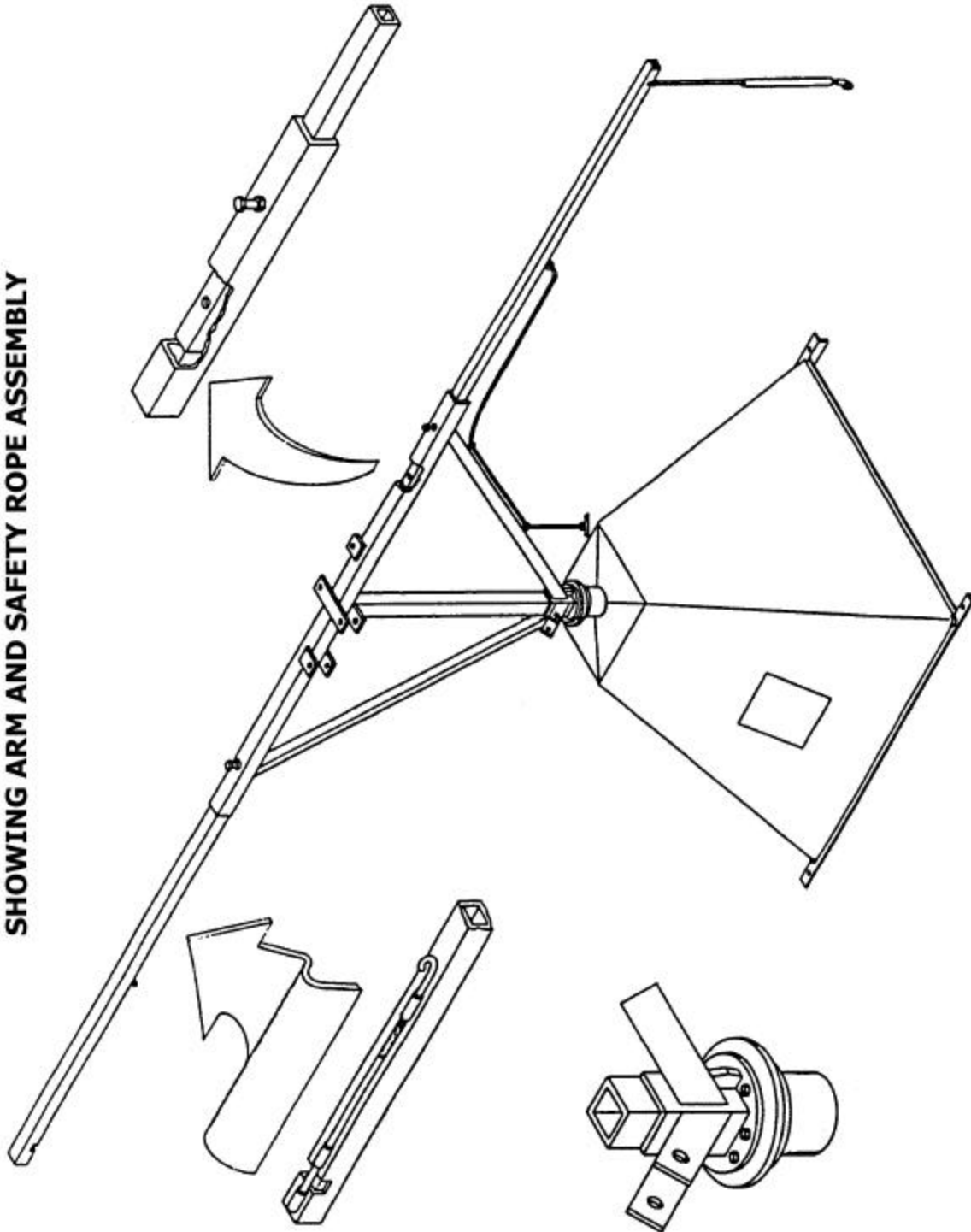
Mira Loma, Ca 91752

(909) 685-7337 * (909) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

**MINIATURE HOT WALKER DIAGRAM
SHOWING ARM AND SAFETY ROPE ASSEMBLY**





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(909) 685-7337 * (909) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

This motor information applies ONLY to the following Centaur Hot Walker Models:

Standard Horse 200, 201, 400, & 401

Miniature Horse 400, & 600

Hound 400, & 600



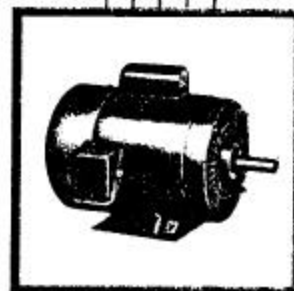
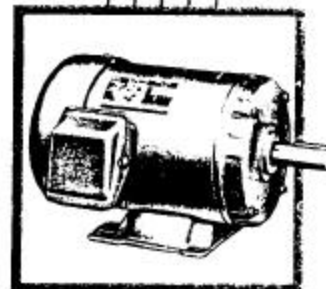
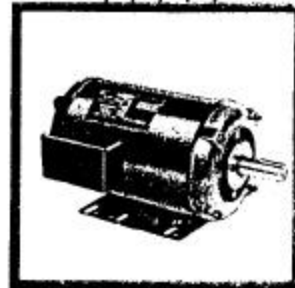
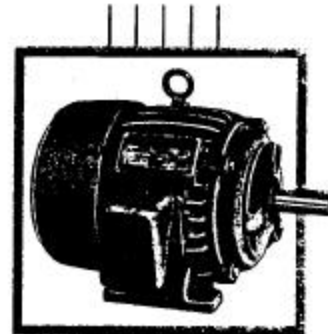
**MOTOR
INSTALLATION**

and

**MAINTENANCE
INFORMATION**

Fractional HP Motors

5S706





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
Mira Loma, Ca 91752
(909) 685-7337 * (909) 685-0341 Fax
1-800-962-8050
www.hotwalkers.com

Power Source

- Voltage, frequency and phase of the power supply must correspond to that shown on the motor nameplate. Low voltage can reduce performance and cause overheating.
- On three – phase power, voltages on all three lines should be balanced within 1%. Unbalanced voltages cause motor overheating and poor performance.

Motor Control Devices

- Use a suitable motor starting device is advisable and usually required by local electrical codes.
- Power supply must have fuses or circuit breakers to provide short circuit protection for the motor and controller.
- Where a motor starter is used, follow the control manufacturer’s recommendations on heater selection or setting. If an existing controller is to be used with a replacement motor, new heaters may be required.
- Any switching device used to control a motor must have a horsepower rating equal to or greater than the motor.
- An electronic adjustable speed control **must not be used** unless the motor has been specifically designed for such applications.

Motor Mounting:

- Motor must be securely fastened to prevent vibration and minimize noise. For secure mounting use high quality bolts of the largest possible diameter.
- Where possible, sleeve-bearing motors should be mounted with oil ports up and accessible.
- Belt-drive sheaves must be in-line. Use a straight edge to check. Do not over tighten belts.
- Direct-coupled installations require a careful check of shaft and coupling alignment. Shim motor base as necessary. Do not depend on a flexible coupling to compensate for misalignment.

Connecting Power to Motor:

- To connect motor for proper voltage and rotation, refer to the connection diagram on the nameplate or inside the terminal/conduit box.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
 Mira Loma, Ca 91752
 (909) 685-7337 * (909) 685-0341 Fax
 1-800-962-8050
 www.hotwalkers.com

Table A: - Minimum Wire Sizes For Three-Phase Motors

Motor HP	25 to 50 ft.			100 Ft.			150 to 200 Ft.		
	200V	230V	460V	200V	230V	460V	200V	230V	460V
1/8	14(18)*	14(18)*	14(18)*	14(18)*	14(18)*	14(18)*	14(16)*	14(16)*	14(18)*
1/6	14(18)*	14(18)*	14(18)*	14(18)*	14(18)*	14(18)*	14	14(16)*	14(18)*
1/4	14(18)*	14(18)*	14(18)*	14(16)*	14(18)*	14(18)*	14	14	14(18)*
1/3	14(18)*	14(18)*	14(18)*	14(16)*	14(16)*	14(18)*	12	14	14(18)*
1/2	14(16)*	14(18)*	14(18)*	12	14(16)*	14(18)*	10	12	14(18)*
3/4	14(16)*	14(16)*	14(18)*	12	14	14(18)*	10	10	14(16)*
1	14	14(16)*	14(18)*	12	12	14(18)*	8	10	14(16)*
1 1/2	12	14	14(18)*	10	10	14(16)*	6	8	14
2	12	12	14(18)*	8	10	14(16)*	6	6	12
3	10	12	14(18)*	6	8	14	4	6	12

NOTE: NEC 310-5 Minimum Conductor Size for General Wiring at 115-440 VAC is No. 14AWG.

Initial Inspection and Handling:

- After opening carton, look for concealed damage. If concealed damage is found, immediately file claim with carrier.
- Check the nameplate to verify that data conforms to specifications of motor ordered.



High voltage and moving parts around motors and motor driven equipment can cause serious or fatal injuries. Always disconnect power source before working on a motor or its connected load. Installation must conform to all OSHA requirements, the National Electric Code (NEC) and all local codes.

Electrical – Motor must be securely and adequately grounded by wiring with a grounded metallic conduit, or other grounding method approved by the NEC and local codes.

Insulate all connections carefully to prevent grounding or short circuits. Reinstall all conduit and terminal box covers. Do not force connections into the conduit box.

Thermal Protection – Use thermally protected motors or a motor starter incorporating thermal overload protection wherever required by safety regulations, (including NEC) or Underwriters Laboratories (UL) Standards; or where overloading, jamming or other abnormal operating conditions may occur. Under low temperature conditions, manual reset protectors may reset automatically, causing motor to start unexpectedly. **Always disconnect power before working on equipment.**



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
 Mira Loma, Ca 91752
 (909) 685-7337 * (909) 685-0341 Fax
 1-800-962-8050
 www.hotwalkers.com

Mechanical – Guard all moving parts. Remove the shaft key before running the motor without a connected load. Be careful when touching the exterior of an operating motor! Motor may be hot enough to be painful or cause injury. This condition is normal for most motors when operated at rated load and voltage.

Do not use the motor in a hazardous location as defined by Article 500 of the National Electric Code (NEC).

Location:

- **Open, Dripproof Motor** – Clean, dry locations with access to an adequate supply of cooling air.
- **Totally Enclosed Motor** – Harsher environments where damp and dirty conditions may exist. Totally enclosed motors are not water-proof.
- Use only UL listed **Hazardous Location** motors for service in **Hazardous Locations** as defined in Article 500 of the NEC.
- Temperature around the motor should not exceed 104° F (40° C). Minimum temperature is -20° F (-29° C).
- If the motor nameplate indicates “Air-Over, Cont. A.O.,” etc, the motor must be mounted in the air stream of an air moving device.

Table B: - Minimum Wire Sizes For Single -Phase Motors

Motor HP	25 Feet		50 Feet		100 Feet		150 Feet		200 Feet	
	115 V	230 V	115 V	230 V	115 V	230 V	115 V	230 V	115 V	230 V
1/8	14(18)*	14(18)*	14	14(18)*	12	14(18)*	10	14(16)*	8	14
1/6	14(16)*	14(18)*	12	14(18)*	10	14(16)*	6	14	6	12
1/4	14	14(18)*	10	14(16)*	8	14	6	12	4	10
1/3	14	14(18)*	10	14(16)*	8	14	6	12	4	10
1/2	12	14(18)*	8	14	6	12	4	10	3	8
3/4	10	14(16)*	6	12	4	10	2	8	1	6
1	10	14(16)*	6	12	4	10	2	8	1	6
1 1/2	8	14	6	12	3	8	1	6	1/0	6
2	8	12	4	10	2	8	1/0	6	2/0	4
3	6	12	3	8	1/0	6	2/0	4	4/0	3

NOTE:

- NEC Article 310-5 – Minimum conductor size for general wiring at 115-440VAC is No. 14AWG
- Above wire sizes based on approximate 5% voltage drop during starting; copper conductors; and 75°C type THHW, THW, THWN, RH, RHW, etc. insulation. For aluminum wire, increase two wire size steps minimum. See NEC Article 310 for ampacities of aluminum conductors.
- Type S, SO, SJ, SJO, etc. flexible cable wire sizes. See NEC Article 400 for ampacity.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(909) 685-7337 * (909) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com



All aspects of the installation must conform to the requirements of the NEC, including Article 430 (Motor Circuits and Controllers), and all local codes. Wherever possible, each motor should be powered from a separate circuit of adequate capacity to keep voltage drop to a minimum during starting and running. Increase wire size where motor is located a distance from the power source. Wire size must be adequate to minimize voltage drop during starting and running. Refer to Tables A and B for suggested wire sizes. Distances shown are one-way between source and motor. Portable cords, if used, should be as short as possible to minimize voltage drop. Long or inadequately sized cords, especially on hard starting loads, can cause motor failure. All electrical connections in system must be secure to prevent voltage drop and localized heating.

- Determine direction of rotation before connecting driven equipment to prevent damage.
- To prevent bearing damage, do not strike shaft with hammer or other tool.
- If the motor has been damp or wet, then have motor serviced by a qualified motor repair shop before operating.

Starting Motor

Be Sure motor is properly grounded.

Connect motor to load and run briefly. Check for unusual noises and vibration (see troubleshooting). Check motor current; it should be close to nameplate.

Visually re-inspect the installation. Make sure that the guards and other protective devices are securely in place. All covers and gaskets must be re-installed to minimize the entry of dirt and moisture.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
 Mira Loma, Ca 91752
 (909) 685-7337 * (909) 685-0341 Fax
 1-800-962-8050
 www.hotwalkers.com

Troubleshooting

This chart suggests common answers to electric motor problems. The information is not all-inclusive and does not necessarily apply in all cases. When unusual operating conditions, repetitive failures, or other problems occur, consult an electric motor service firm for assistance.

Trouble	Cause	What To Do
Motor Fails To Start	Blown Fuses	Replace with time-delay fuses. Check for grounded winding.
	Tight Shaft	Occasionally during shipment a sleeve bearing motor may be received with a shaft, which does not rotate freely. It may be necessary to strike the motor, at the shell/endshield rabbet, with a rawhide or plastic mallet to align the bearings.
	Voltage too low at motor terminals due to line drop.	Consult local power company. Increase wire size (refer to Tables A & B). Check for poor connections.
	Overload in motor starter tripped.	Check and reset overload relay in starter. Check heater rating against motor nameplate current rating.
	Overload (internal thermal protector) tripped.	Check motor load. If motor has an automatic or manual reset thermal protector, check if tripped.
	Improper line connections.	Check connections against diagram supplied with motor.
	Motor May be overloaded.	Check motor load. If motor has an automatic or manual reset thermal protector, check if tripped.
	Defective motor or starter.	Repair or replace.
Motor Does Not Come up To speed Or Takes too Long to Accelerate.	Not applied properly.	Consult motor service firm for proper type. Use larger motor.
	Voltage too low at motor terminals.	Increase wire size (refer to Tables A & B). Check for poor connections. Check for voltage unbalance (3-phase).
	Starting load too high.	Check load motor is carrying at start.
	Excess loading; tight belts.	Reduce load; increase motor size. Adjust belts.
	Defective motor.	Repair or replace.
	Inadequate starting torque. High inertia load.	Replace with larger motor.
Motor Stalls During Operation.	Overloaded motor.	Reduce load or increase motor size.
	Low motor voltage.	Verify that nameplate voltage is maintained.
Motor Vibrates or is Excessively Noisy.	Motor shaft misaligned.	Realign.
	Three-phase motor running single phase.	Check for open circuit, blown fuses or unbalanced voltages.
	High or unbalanced voltages.	Check wiring connections. Consult local power company.
	Worn, damaged, dirty or overloaded bearings.	Repair or replace motor; check loading and alignment.
	Defective winding. Bent or bowed shaft.	Repair or replace.
	Loose sheave or misaligned coupling.	Tighten setscrew(s); realign coupling.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
Mira Loma, Ca 91752
(909) 685-7337 * (909) 685-0341 Fax
1-800-962-8050
www.hotwalkers.com

Motor Overheats While Running Under Load	Overloaded	Reduce load; increase motor size; belts may be too tight.
	Dirt blocking ventilation openings.	Clean motor.
	If three-phase, one phase may be open.	Check lines for open phase. Check voltage with motor disconnected, one fuse may be blown.
	Unbalanced supply voltage.	Check for faulty connections. Voltage on all three lines should be balanced within 1%. Excessive single phase loads.
	Faulty connection.	Clean, tighten or replace.
	High or low voltage.	Check voltage at motor, should not be more than 10% above or below rated.
	Defective motor.	Repair or replace.

Lubrication (Variable Speed Hot Walkers **ONLY**).

Normal operating temperature of a worm gear reducer is less than 200°F but during initial break-in the temperature may exceed 200°F. After break-in is completed the temperature will fall below 200°F. If temperature exceeds 200°F for greater than 100 hours consult the factory.

1. Change initial oil fill after 500 hours of service or 5 weeks.
2. Change oil every 2500 hours service or 6 months. If severe operating conditions exist, change the oil every 1 to 3 months.
3. 90 Weight oil is recommended.