

CENTAUR



HOT WALKER SERVICE MANUAL

For Models 200, 201, 400 & 401

**5761 RIDGEVIEW AVENUE
MIRA LOMA, CALIFORNIA 91752
(951) 685-7337 FAX (951) 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

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Unloading the Hot Walker:

Lift Hot Walker from the head only. 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 & drop pin through steel tabs & arm itself. 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

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Installing the Variable Speed Control Handle (For Variable Speed Models ONLY)

If the factory has not already installed the handle, then start first by removing screws that hold the front cover pane (the one with the small door on it) to the cover. There is a steel shaft mounted to the left and to the rear of the electric motor. Put the handle (you will find the handle, taped to the left front steel supports) through the hole in the cover and slide it over the metal shaft. Align the hole in the handle with the hole in the metal shaft, and put the cotter key through the holes, be sure to bend the cotter key so it will not fall out. At this time, you can complete hooking up your electrical supply. When complete replace the front cover panel, and screw it in place.

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

(951) 685-7337 • (951) 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

(951) 685-7337 • (951) 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

(951) 685-7337 • (951) 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

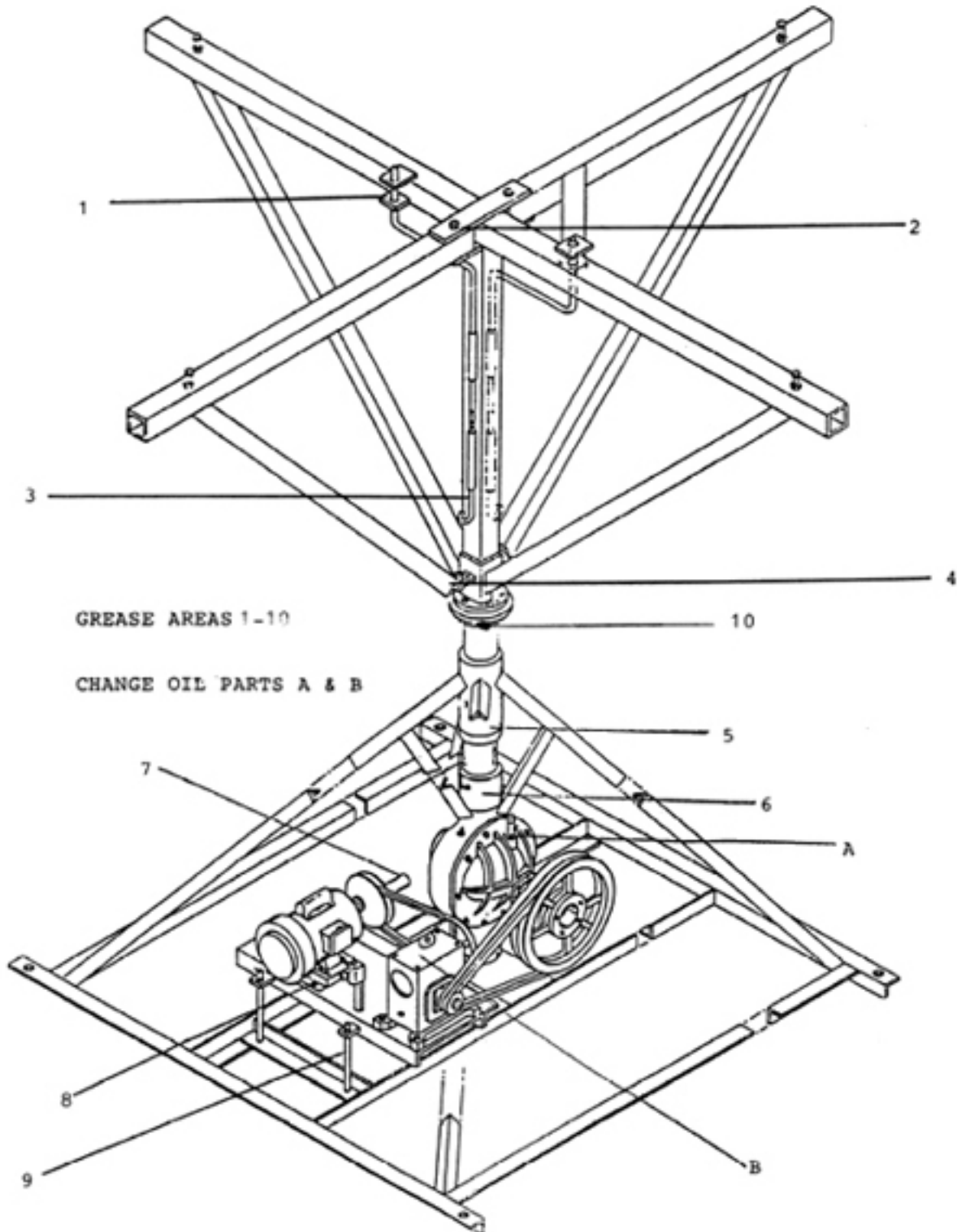
Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Lubrication Points For a Variable Speed Hot Walker with a Folding Head





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

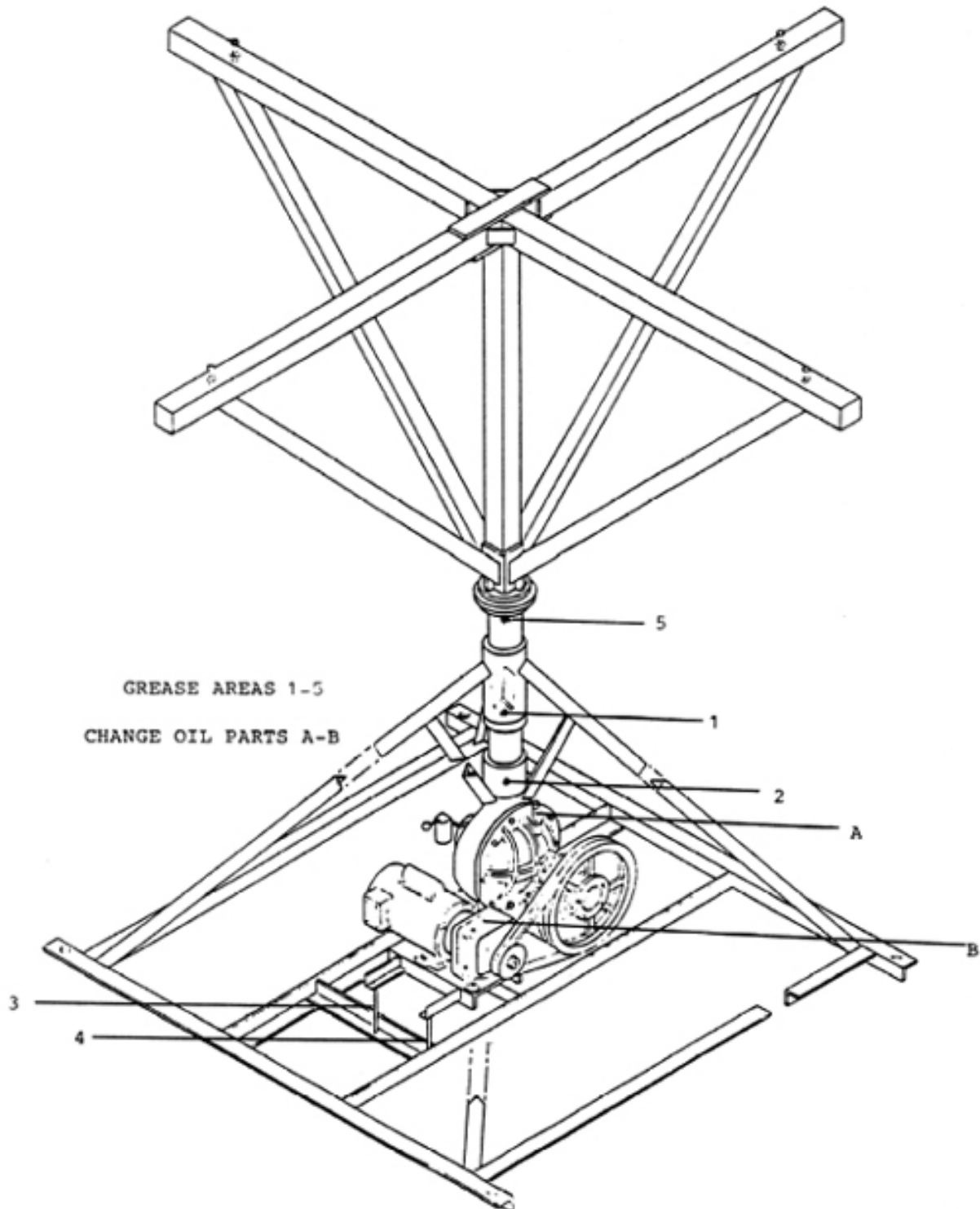
Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Lubrication Points For a Single Speed Hot Walker with a Solid Head





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

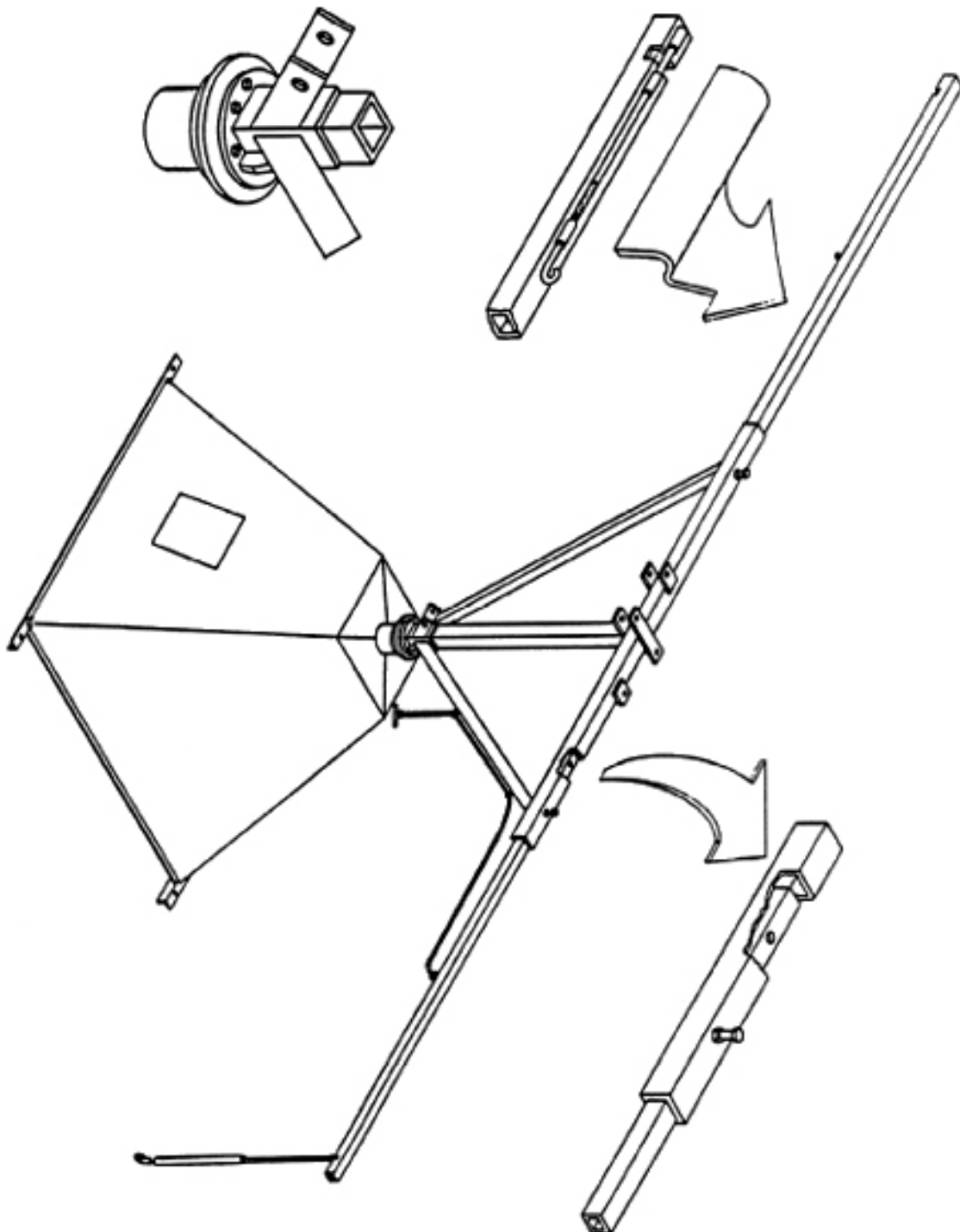
Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Hot Walker Diagram Showing Arm and Safety Rope Assembly





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

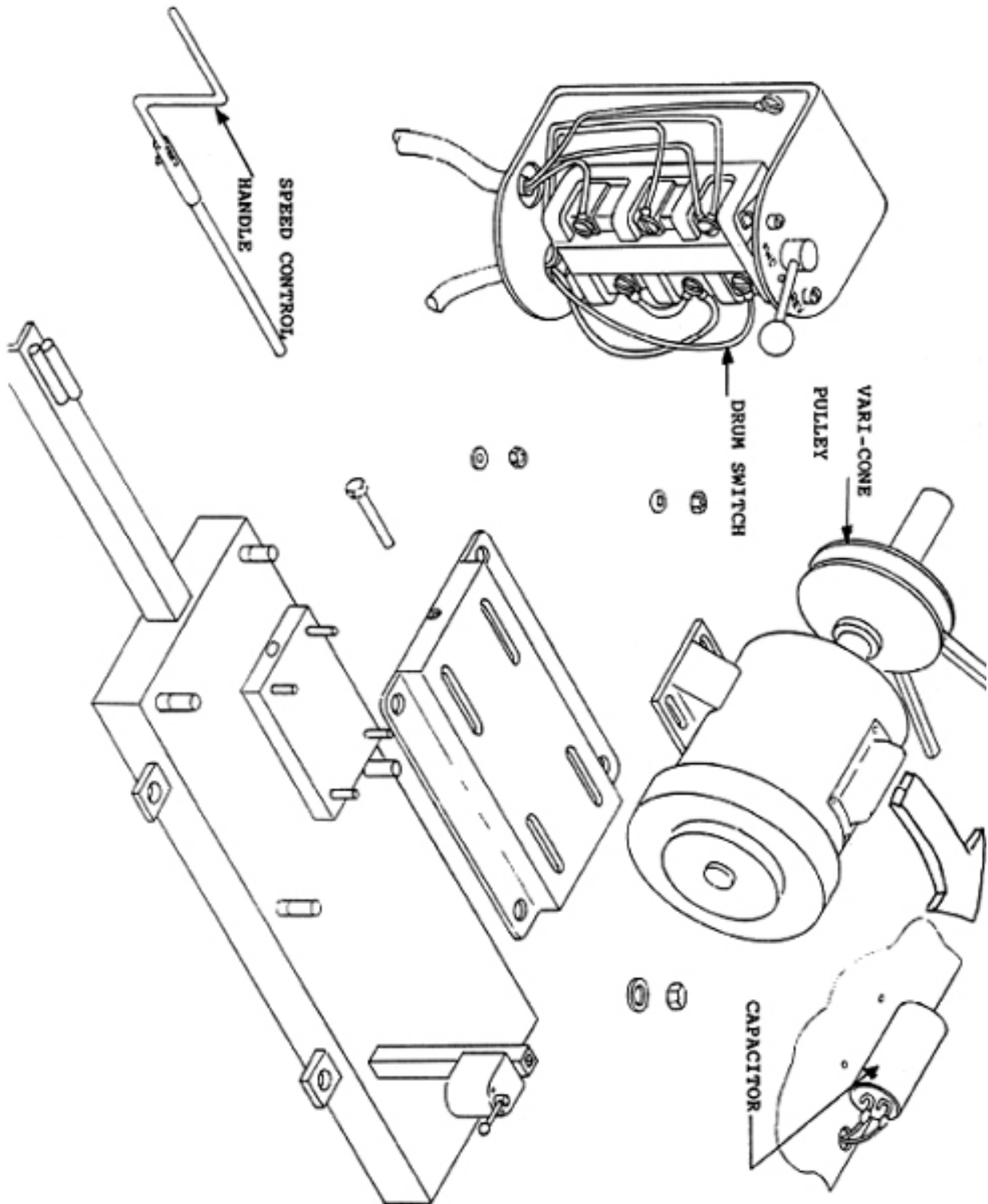
Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

**View of Drum Switch & Electric Motor showing capacitor and
vari-cone sheeve on electric motor output shaft.**





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

**This Motor Information Applies only to the following models of
Centaur Hot Walkers: 200, 201, 400, and 401**



**MOTOR
INSTALLATION**

and

**MAINTENANCE
INFORMATION**

Fractional HP Motors



5S706



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
Mira Loma, Ca 91752
(951) 685-7337 • (951) 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

(951) 685-7337 • (951) 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

(951) 685-7337 • (951) 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

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com



WARNING

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
(951) 685-7337 • (951) 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

(951) 685-7337 • (951) 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.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue
Mira Loma, Ca 91752
(951) 685-7337 • (951) 685-0341 Fax
1-800-962-8050
www.hotwalkers.com

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 and EP Oil are NOT recommended.
4. For ambient temperatures -40° F to 15° use Mobil SHC634.
5. Units running at slow speeds (less than 100 RPM input) should carry high oil level and in ambient temperatures of 15° to 125° F use an AGMA #8C lubricant.
6. See Table 3 for list of recommended lubrication manufacturers.

Lubrication Manufacturers

The companies and oil shown are typical. Any other make of oil meeting American Gear Manufacturers Association (AGMA) standards #7C and #8C will be satisfactory.

Table 3

Ambient Temperature	15 to 60° F	50 to 125° F
Viscosity Range MM/S at 40° C	414 – 506	612 – 748
ISO Grade	460	680
SAE Gear Lubricant (approx.)	#140	#250
Oil Company Name	AGMA #7C	AGMA #8C
Amoco Oil Co.	Amoco Worm Gear Oil	Amoco Cyl. Oil 680
Atlantic Richfield (ARCO)		Modoc 175
Chevron Oil Co.	Cylinder Oil 460X	Cylinder Oil 680X
Conoco Oil Co.	Inca Oil	
Exxon Oil Co.	Cyclesstic TK460	Cyclesstic TK680
Fiske Brothers	SPO 277	SPO 288
Gulf Oil Co.	Senate 460	Senate 680
Gulf-Canada	Senate 460	Senate 680
Keystone-Penwalt	Keygear K-600	
Mobile Oil Corp.	Mobil 600W. Cyl. Oil	Mobil 600W Super Cyl. Oil
Pennzoil	Cyl. Oil #8	Cyl. Oil No. 6
Phillips Petroleum Co.	Hector 460S	Hector 630S
Shell Oil Co.	Valvata Oil J460	Valvata Oil J680
Shohio	Energol DC-600C	Energol DC-600C
Texaco Inc.	Vanguard 460	Honor 680
Union Oil Co. of Ca.	Steaval B110	Steaval V165



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Table 4

OIL CAPACITY (OZ.)				
CENTER DISTANCE	WORM TOP	WORM BOTTOM	WORM VERTICAL	OUTPUT VERTICAL
1.33	4	8	8	4
1.54	6	18	18	14
1.75	8	20	20	12
2.06	12	22	28	18
2.37	16	30	36	26
2.62	26	46	60	40
3.00	46	78	82	72
3.25	56	65	101	66



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

Lovejoy's Variable Speed Pulley-Belt Drive Trouble-Shooting Guide

<p>B</p> <p>Offset Bent Angle Bent Pigeon Toe</p> <p>MISALIGNED SHEAVES</p>	<p>C</p> <p>Vibrating Noise Eccentricity</p> <p>SHEAVE WOBBLE</p>	<p>A</p> <p>Oversized Sheave Dished Out Worn Damaged</p> <p>SHEAVE PROBLEMS</p>
<p>A</p> <p>Lack of Belt Contact Undersized Pitch Dia.</p> <p>IMPROPER SHEAVE SIZE</p>	<p>A</p> <p>Undersized Belt</p> <p>BELT BOTTOMING</p>	<p>B, C</p> <p>Tick Tick Tick</p> <p>MECHANICAL INTERFERENCE</p>
<p>A</p> <p>Normal Dip</p> <p>OVERLOADED DRIVE</p>	<p>B, C</p> <p>Belt Cord Back Bend</p> <p>EXCESSIVE BELT TENSION</p>	<p>A, B, C</p> <p>Heat Water, Dust Oil, or Grease</p> <p>BELT HOP AND SLIP</p>



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

PROBLEM	PROBABLE CAUSE	SUGGESTED CORRECTION
A Belt Slippage Rule of thumb very audible belt squeal = 5% or more belt slippage	1. Overloaded Drive 2. Worn Sheaves 3. Excessive dust, oil, or grease 4. Lack of flange support (weak VSP spring tension or broken spring) 5. Improper companion sheave size 6. Undersized P.D. (Belt Riding on bottom of sheave)	<ul style="list-style-type: none"> • Check motor ampere load to max. speed range of pulley drive to insure proper size drive package selected. • Replace worn sheaves • Provide better shielding • Replace weak or broken spring; Consult factory; consult catalog for pulley rating • Consult catalog specifications and factory • 1/32" min. belt clearance when belt at pulley's specified minimum pitch diameter
B Rapid Belt Wear Heavy rubber dust deposit Belt side "wear" pattern irregular Heat build-up beyond 160° F max. limit	1. Misaligned sheaves 2. Loose motorbase supports 3. Damaged or worn sheaves 4. Excessive temperatures 5. Mechanical interference 6. Overloaded drive 7. Broken belt cords (excessive spring tension) 8. Dirt and grit entering drive	<ul style="list-style-type: none"> • Realign sheaves – remove "bends" • Replace undersize screws or broken base • Replace sheaves • Ventilate belt guard – determine cause • Remove interference – move pulley over • Increase pitch diameter • Reduce pulley HP rating – reduce spring tension • Air ventilate belt guard
C Vibration Pulley sheave lacks dynamic smoothness common to belt drive arrangement	1. Sheave wobble 2. Pulleys or sheaves out of balance 3. Mechanical interference 4. Pulsating loads belt hop and skip 5. Undersized motorshaft 6. Bent shaft 7. Worn – undersize motorbase – improper installation 8. Excessive pulley spring tension	<ul style="list-style-type: none"> • Replace distorted sheave rim; replace worn "QD" bushing • Determine cause, return to factory for correction • Enlarge belt guard, and avoid pulley housing contact • Belt's side surfaces glazed – replace; remove oil from pulley's flange surfaces • Correct or resize shaft diameter per NEMA specifications • Replace shaft • Replace, consult catalog for HP rating • Install lighter HP rated pulley, consult factory.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

NOTE: The information on Dayton Speed Reducers is only for Centaur Single Speed Hot Walkers, models, 201 & 401.

Operating Instructions & Parts Manual

22932F thru 22935F

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Speed Reducers

Description

These Dayton Speed Reducers are in-line drive type units suitable for general purpose applications involving shop equipment, conveyors, etc. Each unit is equipped with heavy duty steel helical gears, tapered roller bearing, lip-type seals and cast iron housing.

NOTE: The speed reducer is built for direct drive with a 1/4, 1/3, or 1/2 HP NEMA 56C face, 1725 RPM (maximum) motor, purchased separately. For additional information pertaining to a specific model in this series refer to Specifications.

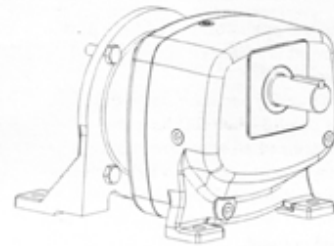


Figure 1

Dimensions

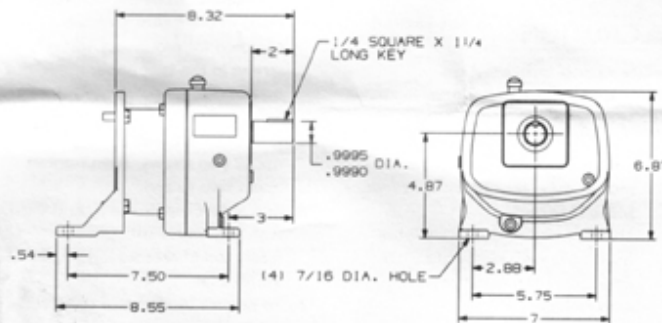


Figure 2

General Safety Information

1. Follow all local electrical and safety codes, the United States National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).
2. Motor (not included with this unit) must be securely and adequately grounded. This can be accomplished by wiring with a grounded, metal-clad raceway system, by using a separate ground wire connected to the bare metal of the motor frame, or other suitable means. Refer to United States NEC Article 250 (Grounding) for additional information.
3. Always disconnect power source before working on or near a motor or its connected load. If the power disconnect point is out of sight, lock

Specifications

Model	Nominal Output RPM*	Nominal Ratio	1/4 HP Torque In-Lbs*	1/3 HP Torque In-Lbs*	1/2 HP Torque In-Lbs	Finish
22932F	30	57.5:1	470	638	955	Gray
22933F	44	39:1	320	435	651	Gray
22934F	60	29:1	235	318	478	Gray
22935F	91	19:1	160	217	326	Gray

(*) At 1725 RPM (maximum) motor input speed.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Dayton Operating Instructions and Parts Manual

Dayton® Speed Reducers

it in the open position and tag it to prevent unexpected application of power.

4. All moving parts should be guarded.
5. Be careful when touching the exterior of an operating motor; it may be hot enough to be painful or cause injury. Modern-design motors run hot when operated at rated load and voltage.
6. Protect the power cable from coming in contact with sharp objects.
7. Do not kink the power cable and never allow the cable to come in contact with oil, grease, hot surfaces, or chemicals.
8. Make certain that the power source conforms to the requirements of your equipment.
9. Before energizing the motor which drives the speed reducer, be sure that the reducer output shaft key is either fully captive, or is removed.
10. Clean electrical or electronic equipment with approved cleaning agent such as dry cleaning solvent.

Installation

⚠ WARNING When an installation involves a holding or overhauling application (such as a hoist or conveyor), a separate magnetic brake or other locking device should be used. Do not depend on gear friction to hold the load.

1. Locate the speed reducer in a clean and dry area with access to adequate motor cooling air supply. If installation is outdoors, make certain that the unit is protected from the weather.
2. Mount unit to a rigid surface, preferably metallic using largest bolts that will fit through the base holes.

NOTE: The speed reducer is intended for horizontal floor, wall, or ceiling mounting only. (The output shaft must be horizontal).

3. For shipment, 4 pipe plugs are packed separately. After mounting unit in position as instructed in step 2, remove pipe plug located in highest position, and install vent plug in its place. (Correct oil level for mounted unit is just below pipe plug in side position).
4. Attach motor to speed reducer. (See Figure 3).

⚠ CAUTION Do not exceed motor HP and torque rating indicated on nameplate in Specifications.

- a. Speed reducer is to be used with any NEMA Frame 56C face mounted, 1725 RPM electric motor (max. 1/3 HP) without feet. Make sure motor shaft is clean and free of dirt. Lubricate input shaft bore with heavy grease or anti-seize compound provided with reducer.

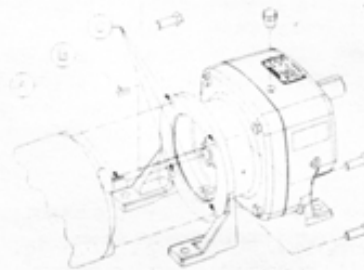


Figure 2 - Attaching the Motor

⚠ CAUTION Do not use key supplied with motor. Use short key supplied with reducer. (Failure to use short key makes assembly impossible).

- b. Insert short key (B in Figure 3) into

reducer shaft sleeve. Line up keyway in 5/8" diameter motor shaft (A in Figure 3) with keyway in reducer shaft sleeve. Carefully insert motor shaft until C face of motor fits into place against reducer, with four mounting holes in reducer (C in Figure 3) lined up with tapped holes in motor C face.

⚠ CAUTION Do not force shaft into coupling.

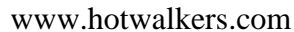
- c. Four screws to fit the tapped holes in the motor face are supplied for mounting. Insert two screws in the two upper holes, but do not tighten completely. Insert lower two screws finger-tight and then back off 3/4 turn. Tighten upper two screws. Then tighten lower two screws.
- d. Run motor momentarily and then turn off. Motor should coast freely to indicate no binding in motor shaft.
- e. To reverse direction of reducer rotation, reverse motor leads.

5. Attaching (coupling) the load:

NOTE: To determine output torque capacity for operating conditions other than a normal 8 hour day and shock free operation, multiply the rated output torque (see Specifications) by the applicable load factor listed below. Shock loads should be avoided.

Load Factor Chart

Type of Load	Load Factor
8 to 10 hour Day Service	
With Moderate Shock Loads	0.85
24 Hour Day Service	
With No Shock Load Involved	0.93
24 Hour Service	
With Moderate Shock Loads	0.81





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

2Z932F, 2Z933F, 2Z934F and 2Z935F

Dayton Operating Instructions and Parts Manual

For Repair Parts, call 1-800-323-0620

24 hours a day - 365 days a year

Please provide the following information:

-Model number

-Serial number (if any)

-Part description and number as shown in parts list

Address parts correspondence to:

Granger Parts

P. O. Box 3074

1657 Shermer Road

Northbrook, IL 60065-3074 U.S.A.

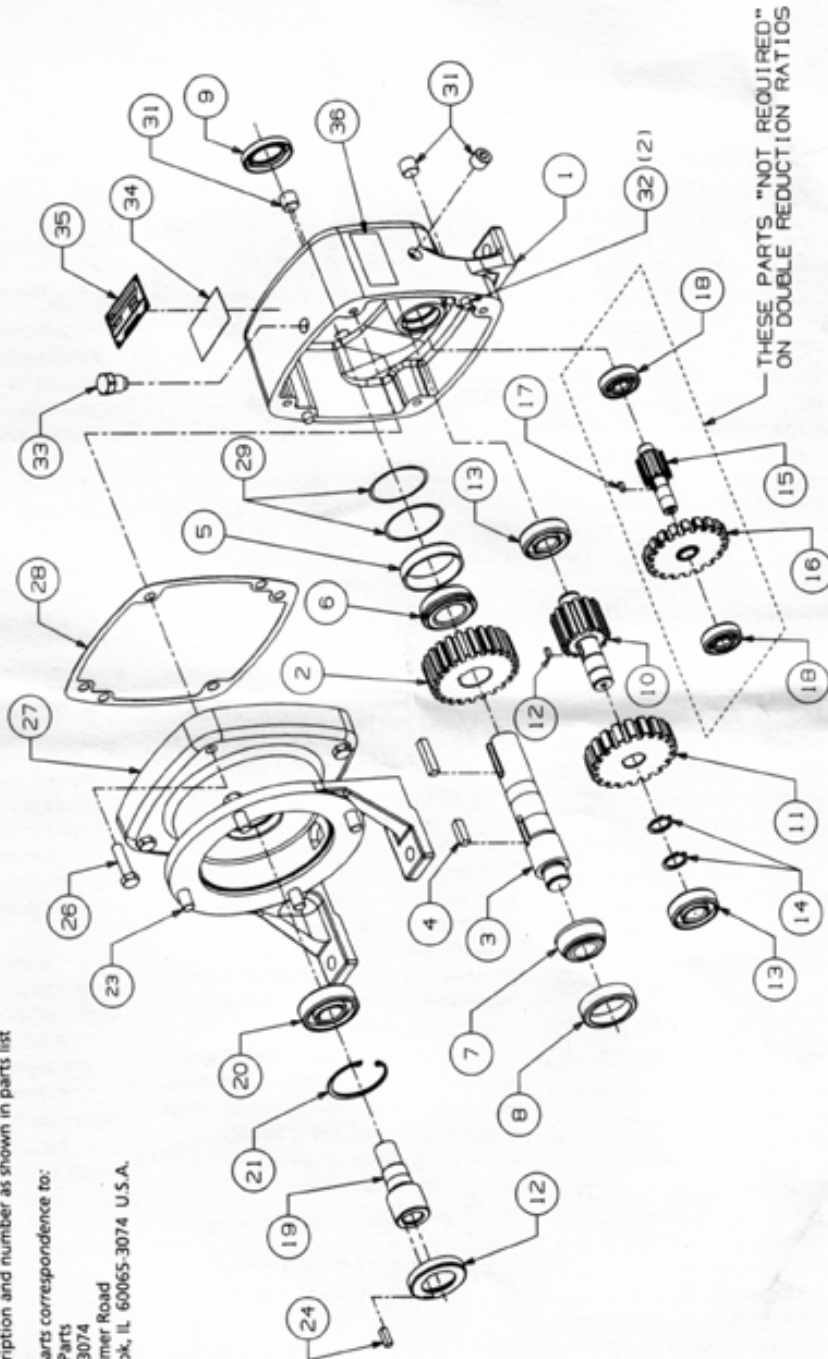


Figure 3 - Repair Parts Illustration



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Dayton Operating Instructions and Parts Manual

2Z932F thru 2Z935F

Repair Parts List

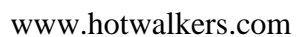
Ref No	Description	Model 2Z932F Part No.	Qty	Model 2Z933F Part No.	Qty	Model 2Z934F Part No.	Qty	Model 2Z935F Part No.	Qty
1	Gear housing	XZ2-1	1	XZ2-1	1	XZ2-1	1	XZ2-1	1
2	Output gear	46T (Kit 84396)	1	46T (Kit 84396)	1	41T (Kit 84399)	1	48T (Kit 84395)	1
3	Output shaft	XG2Z-3A	1	XG2Z-3A	1	XG2Z-3A	1	XG2Z-3A	1
4	Key - output gear	XK4-4-13-101	1	XK4-4-13-101	1	XK4-4-13-101	1	XK4-4-13-101	1
5	Output shaft bearing cup front	L44610	1	L44610	1	L44610	1	L44610	1
6	Output shaft bearing cone front	L44643	1	L44643	1	L44643	1	L44643	1
7	Output shaft bearing cone back	LM11949	1	LM11949	1	LM11949	1	LM11949	1
8	Output shaft bearing cup back	LM11910	1	LM11910	1	LM11910	1	LM11910	1
9	Oil seal-output	XOS-16-26-4	1	XOS-16-26-4	1	XOS-16-26-4	1	XOS-16-26-4	1
10	Third reduction pinion	19T (Kit 84396)	1	19T (Kit 84396)	1	21T (Kit 84399)	1	17T (Kit 84395)	1
11	Second reduction gear	54T (Kit 84394)	1	54T (Kit 84394)	1	64T (Kit 84397)	1	-----	-----
12	Key-second reduction gear	XKF3-3-8	1	XKF3-3-8	1	XKF3-3-8	1	XKF3-3-8	1
13	Ball bearing-second reduction	XBB-17-40-12M	2	XBB-17-40-12M	2	XBB-17-40-12M	2	XBB-17-40-12M	2
14	Snap ring	XTRS100-66	2	XTRS100-66	2	XTRS100-66	2	XTRS100-66	2
15	Second reduction pinion	15T (Kit 84394)	1	15T (Kit 84394)	1	19T (Kit 84397)	1	-----	-----
16	First reduction gear	85T (Kit 84393)	1	58T (Kit 84391)	1	58T (Kit 84391)	1	85T (Kit 84392)	1
17	Key - first reduction gear	XKF2-2-5	1	XKF2-2-5	1	XKF2-2-5	1	-----	-----
18	Ball bearing-first reduction	XBB-12-32-10M	2	XBB-12-32-10M	2	XBB-12-32-10M	2	-----	-----
19	First reduction pinion	13T (Kit 84393)	1	13T (Kit 84391)	1	13T (Kit 84391)	1	13T (Kit 84392)	1
20	Ball bearing-input	XBB-20-47-14M	1	XBB-20-47-14M	1	XBB-20-47-14M	1	XBB-20-47-14M	1
21	Snap ring	XTRN5000-185	1	XTRN5000-185	1	XTRN5000-185	1	XTRN5000-185	1
22	Oil seal-input	XOS-18-29-6-5	1	XOS-18-29-6-5	1	XOS-18-29-6-5	1	XOS-18-29-6-5	1
23	Hex cap screws (3/8-16 X 1" LG)	84383	1	84383	1	84383	1	84383	1
24	Key (3/16 SQ. X 5/8 LG)	84383	1	84383	1	84383	1	84383	1
25	Label-caution	84383	1	84383	1	84383	1	84383	1
26	Hex head cap screws (Hsg/Cover)	XL518-24	4	XL518-24	4	XL518-24	4	XL518-24	4
27	Gear cover	XZ2-31	1	XZ2-31	1	XZ2-31	1	XZ2-31	1
28	Gasket	XG2Z-40	1	XG2Z-40	1	XG2Z-40	1	XG2Z-40	1
29	Output bearing cup shim	XG20-39	3	XG20-39	3	XG20-39	3	XG20-39	3
30	Key 1/4 SQ. X 1-1/4 LG	50074	1	50074	1	50074	1	50074	1
31	Pipe plugs	XSHPP-4	4	XSHPP-4	4	XSHPP-4	4	XSHPP-4	4
32	Dowel pins	XDP516-12	2	XDP516-12	2	XDP516-12	2	XDP516-12	2
33	Vent plug	XVP-4-18M	1	XVP-4-18M	1	XVP-4-18M	1	XVP-4-18M	1
34	Nameplate	XNP-335	1	XNP-335	1	XNP-335	1	XNP-335	1
35	Nameplate tape	XNP-TAPE-2	1	XNP-TAPE-2	1	XNP-TAPE-2	1	XNP-TAPE-2	1
36	Label-oil	XLAB-49	1	XLAB-49	1	XLAB-49	1	XLAB-49	1
▲	Anti-seize compound	XL T-1	1	XL T-1	1	XL T-1	1	XL T-1	1
▲	Cover-clear 2D Label	XLAB-2D-Cover	1	XLAB-2D-Cover	1	XLAB-2D-Cover	1	XLAB-2D-Cover	1
▲	2D Label-Blank	XLAB-2D-Blank	1	XLAB-2D-Blank	1	XLAB-2D-Blank	1	XLAB-2D-Blank	1

(▲) Not shown

Items 2 & 10 sold as kit only

Items 11 & 15 sold as kit only

Items 16 & 19 sold as kit only



2Z932F thru 2Z935F

Dayton® Speed Reducers

6



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Dayton Operating Instructions and Parts Manual

Models 2Z932F thru 2Z935F

Troubleshooting Chart

Symptom	Possible Causes(s)	Corrective Action
Unit fails to operate	1. Blown fuse or open circuit breaker 2. No power 3. Defective motor 4. Excessive load	1. Replace fuse or reset circuit breaker 2. Contact power company 3. Repair or replace 4. Reduce load
Motor runs but no output	1. No input key 2. Defective gear(s)	1. Install key (see installation) 2. Check and replace if necessary
Intermittent rotation of output shaft	1. Poor electrical connection 2. Damaged gear assembly possibly caused by shock load	1. Check connection 2. Replace gear and if possible, avoid shock load
Excessive noise	1. Bearings worn 2. Belt too tight 3. Overhung Load - exceeds rating and causes bearing wear 4. Insufficient lubrication	1. Replace 2. Adjust tension 3. Correct load and/or replace bearing 4. Check oil level
Oil leak	1. Vent plug not installed 2. Gasket broken or not seated 3. Damaged or worn seal 4. Too much oil	1. Install vent plug 2. Replace or reseal gasket 3. Replace seal 4. Check oil level



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Dayton Operating Instructions and Parts Manual

2Z932F thru 2Z935F

Dayton® Speed Reducers

LIMITED WARRANTY

DAYTON ONE-YEAR LIMITED WARRANTY. Dayton Speed Reducers, Models covered in this manual are warranted by Dayton Electric Mfg. Co. (Dayton) to the original user against defects in workmanship or materials under normal use for one year after date of purchase. Any part which is determined by Dayton to be defective in material or workmanship and returned to an authorized service location, as Dayton designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced at Dayton's option. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

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

WARRANTY DISCLAIMER. Dayton has made a diligent effort to provide product information and illustrate the products in this literature accurately, however, such information and illustrations 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. Except as provided below, no warranty or affirmation of fact expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Dayton.

PRODUCT SUITABILITY. Many jurisdictions 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 Dayton 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 a product review the product applications, and all applicable national and 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 jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you, (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequently the above limitation may not apply to you, and (c) by law, during the period of this Limited Warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

PROMPT DISPOSITION. Dayton will make a 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 the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Dayton at address 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 to you, file claim with carrier.

Manufactured for Dayton Electric Mfg. Co., 5959 W. Howard St., Niles, Illinois 60714 U.S.A.

Manufactured for Dayton Electric Mfg. Co.
Niles, Illinois 60714 U.S.A.

Dayton®



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

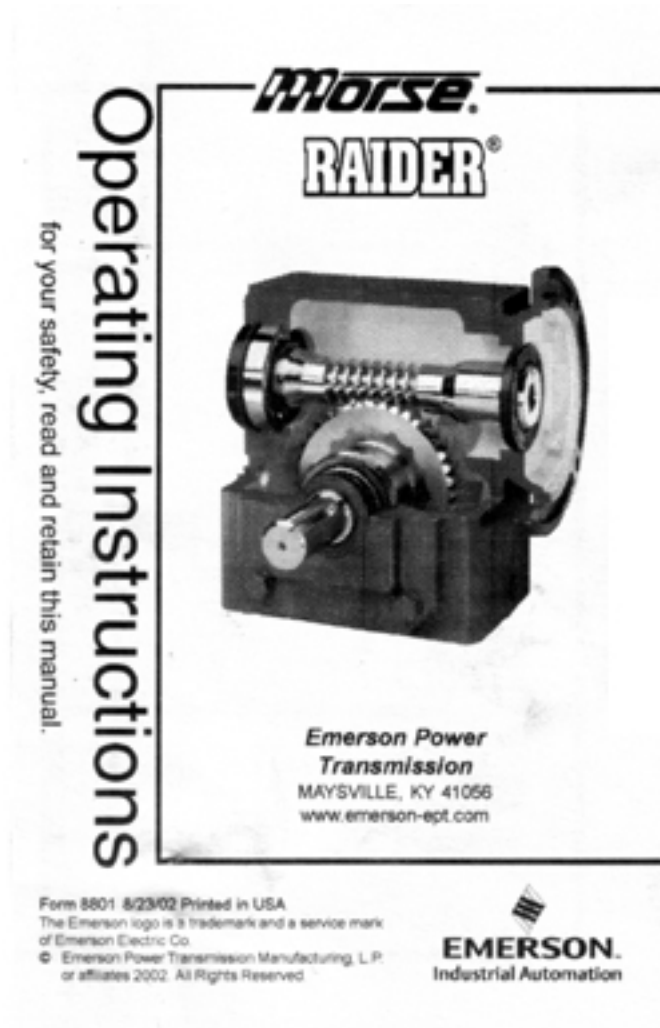
Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

NOTE: The information on Morse Worm Gear Drives is only for Centaur Variable Speed Hot Walkers, models, 200 & 400.





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Installation, Operation & Maintenance Instructions

SAFETY FIRST

High voltage and rotating parts can cause serious or fatal injury. Safe installation, operation and maintenance must be performed by qualified personnel. Familiarization with and adherence to NEMA MG2, The National Electrical Code and local codes is recommended. It is important to observe safety precautions to protect personnel from possible injury. Personnel should be instructed to:

1. Avoid contact with energized circuits or rotating parts.
2. Disconnect all power sources before initiating any maintenance or repair.
3. Act with care in accordance with prescribed procedures in handling and lifting this equipment.
4. Be sure unit is electrically grounded in accordance with code requirements.
5. Be sure equipment is properly enclosed to prevent access by children or other unauthorized personnel in order to prevent possible accidents.
6. Be sure shaft key is fully captive before unit is energized.
7. Provide proper safeguards for personnel against rotating parts and applications involving high inertia loads which can cause overspeed.
8. Avoid extended exposure to equipment with high noise levels.
9. Be familiar with the equipment and read all instructions thoroughly before installing or working on equipment.

▲WARNING

Disconnect all power while adjusting units

INSPECTION

Inspect unit to make sure no damage has occurred during shipment.

STORAGE

Units should be stored in a clean, dry location. If units are to be stored for over six months, refer to Emerson Power Transmission.

MOUNTING

Mount units on a firm, flat surface which is sufficiently rigid to prevent vibration. Drive belts and chains should be within recommended limits of tightness. Couplings should be properly aligned and balanced. For drive recommendations refer to drive or equipment manufacturers or to Emerson Power Transmission.

▲WARNING

Guards should be provided for all exposed rotating parts to prevent possible personal injury. Keep fingers and foreign objects away from ventilation and other openings. Applications involving HIGH INERTIA LOADS may damage this equipment due to motor overspeed during shut down. Such applications should be referred to Emerson Power Transmission.

▲CAUTION

Do not force drive coupling or other equipment onto shaft, as bearing damage may result.

LUBRICATION

The normal operating temperature of a worm gear reducer may be as high as 200°F. During initial break-in higher temperatures may occur. If the temperature exceeds 200°F for longer than 100 hours contact Emerson Power Transmission.

1. Install the breather (vent plug) supplied, in correct location - see diagrams on the back of this card. Adjust the oil level if mounting other than in "Worm Top" position. Unit is shipped from EPT with AGMA #7C oil.
2. Change initial oil fill after 500 hours or 5 weeks.
3. Change oil every 2500 hours service or 6 months. If severe operating conditions exist, change oil every 1 to 3 months.
4. EP oil is not recommended.
5. For ambient temperatures -40°F to 15°F use Mobil SHC634. (This synthetic oil is acceptable for ambient temperatures up to 125°F). When changing oil type, the unit should be carefully drained and flushed prior to refilling.
6. For units running at slow speeds or under other unusual conditions, contact Emerson Power Transmission. The Company names and the names of the lubricants mentioned above are the trademarks, trademarks and logos of the respective companies, and are not owned by EPT.



▲WARNING

High voltage and rotating parts may cause serious or fatal injury. Turn off power to install or service. Operate with guards in place. Read and follow all instructions.





Centaur Horse Walkers, Inc.

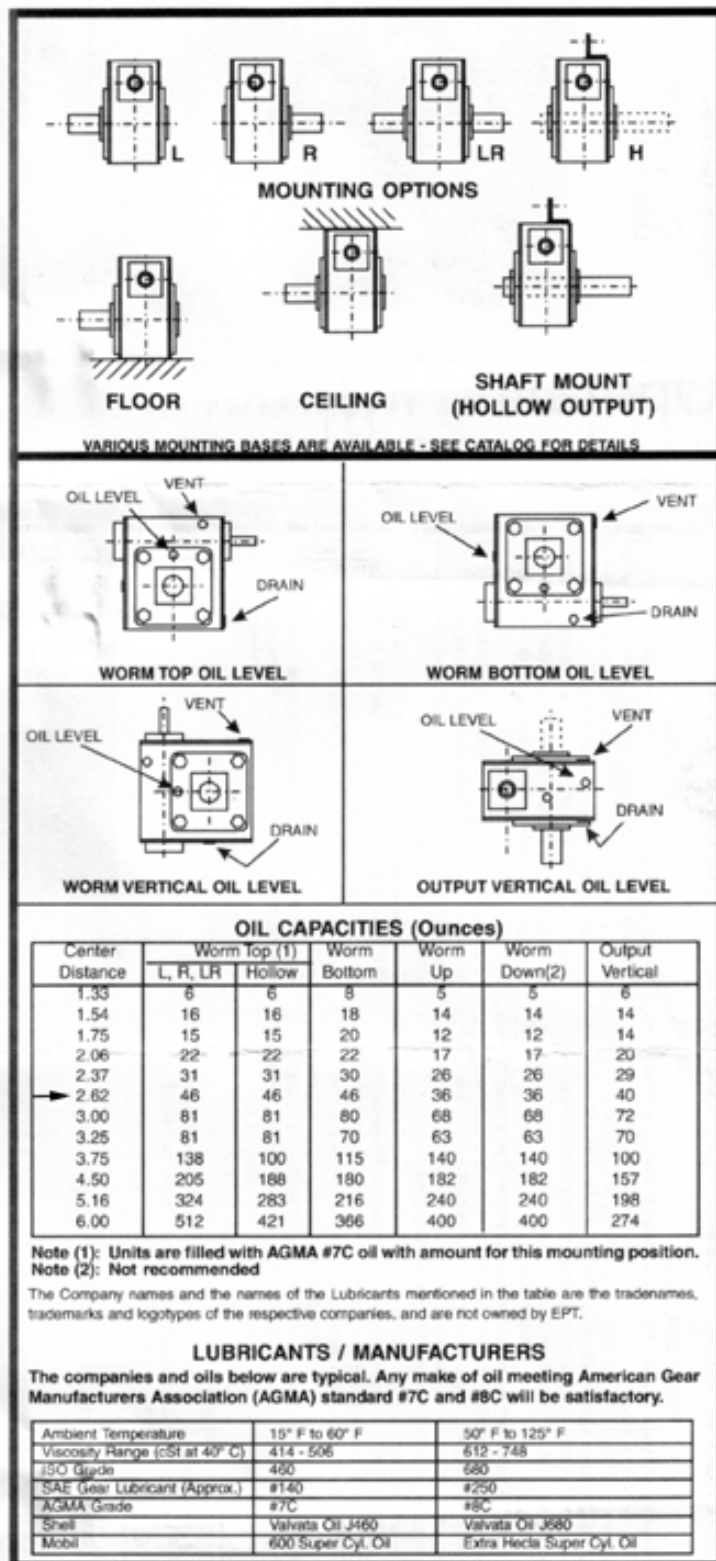
5761 Ridgeview Avenue

Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

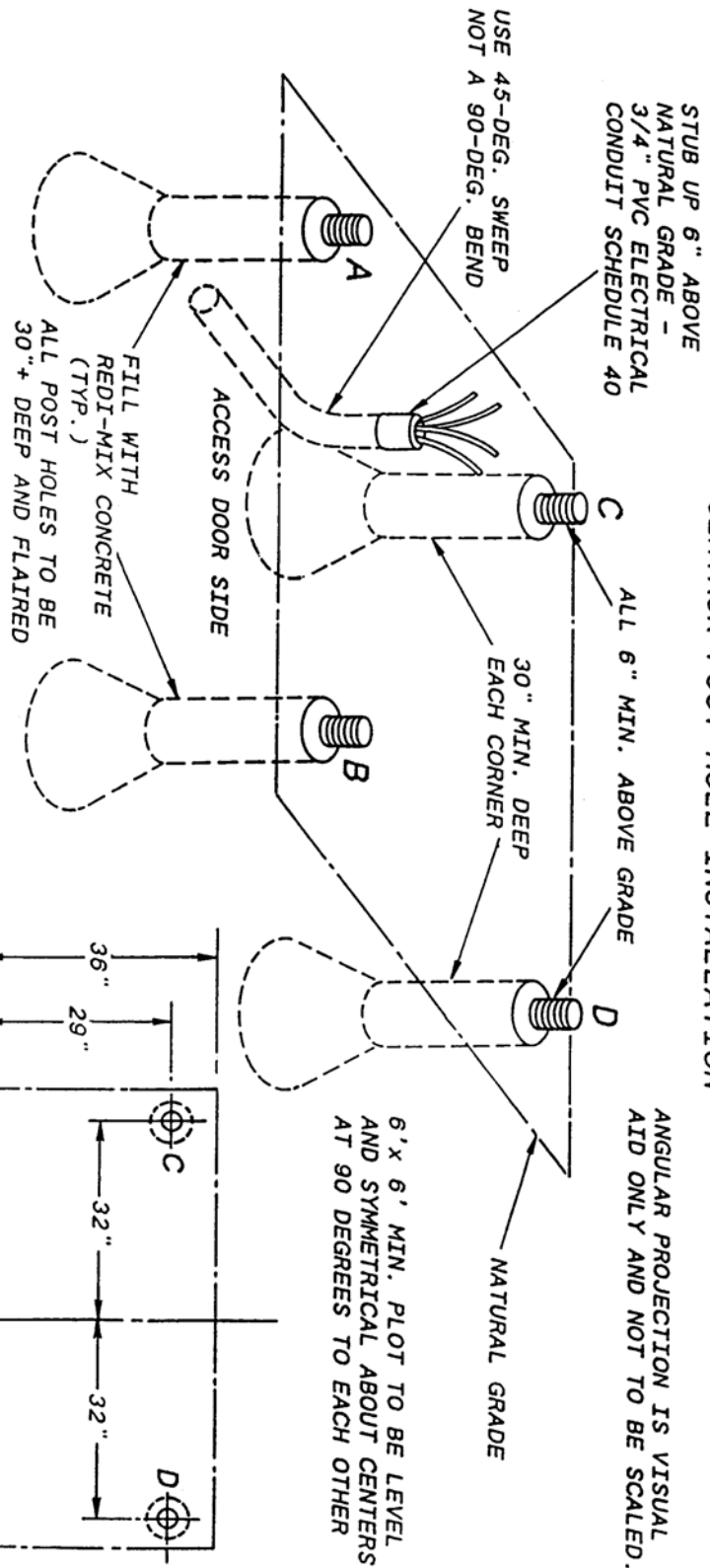
Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

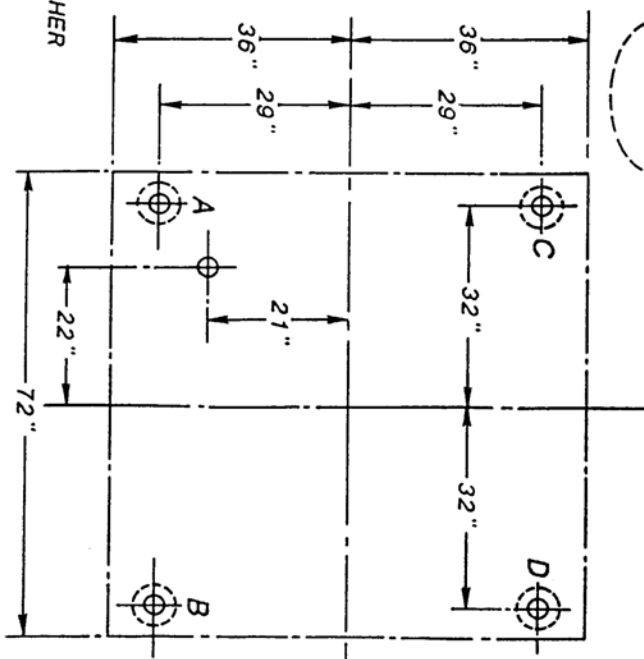
CENTAUR POST HOLE INSTALLATION



SEE ACCOMPANYING OPTION A AND/OR
OPTION B ELECTRICAL INSTALLATION
DIAGRAM FOR DETAILS.

NOTE:

ALL ANCHOR BOLTS:- 3/4" DIA BY 24" LONG WITH NUT AND WASHER
ALL POST HOLES SHOULD BE AT LEAST 30" DEEP AND FLAIRE
CENTER TO CENTER OF BOLTS: A TO B = 64" / A TO C = 58"
CENTER TO CENTER OF BOLTS: C TO D = 64" / B TO D = 58"
CENTER TO CENTER DIAGONALLY OF BOLTS A TO D AND B TO C = 86 3/4"
ACCESS DOOR SIDE - A TO B





Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

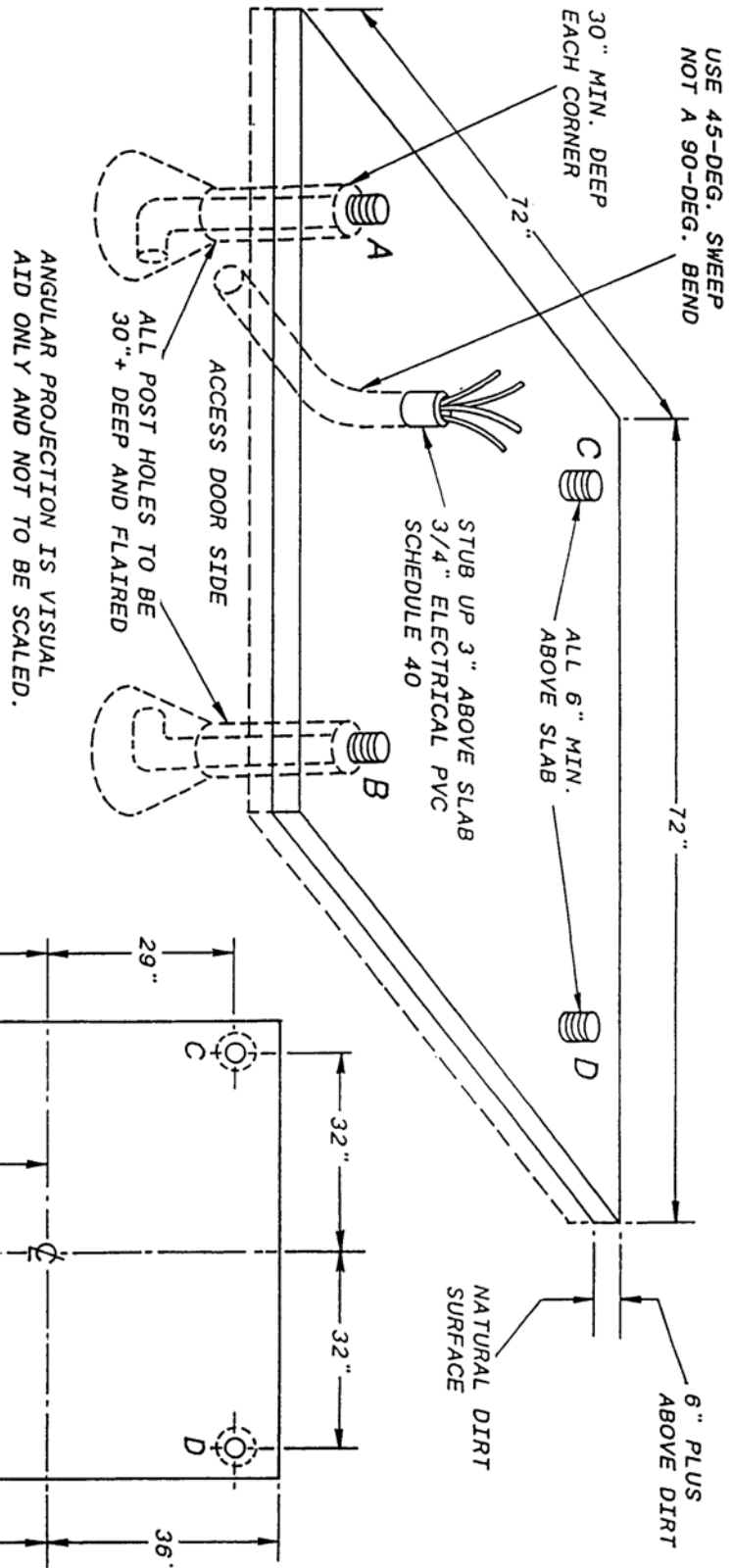
Mira Loma, Ca 91752

(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

CENTAUR CONCRETE PAD INSTALLATION



SEE ACCOMPANYING OPTION A AND/OR
OPTION B ELECTRICAL INSTALLATION
DIAGRAM FOR DETAILS.

NOTE:

ALL ANCHOR BOLTS: - 3/4" DIA BY 24" LONG WITH NUT AND WASHER
ALL POST HOLES SHOULD BE AT LEAST 30" DEEP AND FLAIED
CENTER TO CENTER OF BOLTS: A TO B = 64" / A TO C = 58"
CENTER TO CENTER OF BOLTS: C TO D = 64" / B TO D = 58"
CENTER TO CENTER DIAGONALLY OF BOLTS A TO D AND B TO C = 86 3/4"
ACCESS DOOR SIDE - A TO B

6' x 6' MIN. PLOT TO BE LEVEL
AND SYMMETRICAL ABOUT CENTERS
AT 90 DEGREES TO EACH OTHER



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

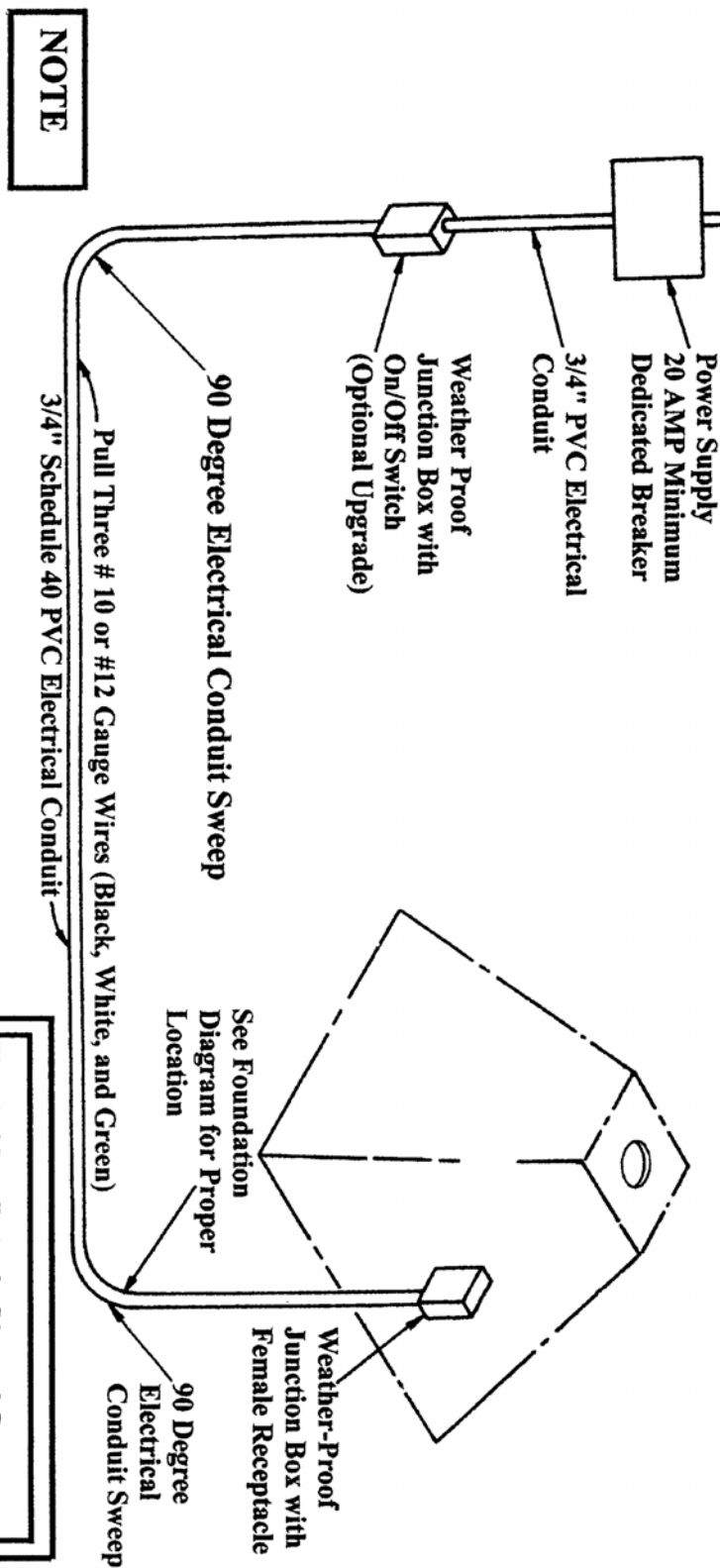
(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Two Wires Plus
Ground Wire

CENTAUR 4 HORSE HOT WALKER ELECTRICAL INSTALLATION OPTION A 110/120V CONTROLLER MOUNTED INSIDE WALKER For Models 201, 401, 400



Use #8 Wire for Runs Exceeding 150 Feet (46 M).
Maximum Run of Electrical Wire to be 250 Feet (76.2 M).
Maximum Run to be 250 Feet from 20 AMP Dedicated Breaker.
Minimum Depth of 3/4" PVC Schedule 40 Electrical Conduit to be
TWO FEET DEEP WHERE HORSES WALK.

Electrical Installation by Licensed Contractor
In Compliance with State and Local Building
Code is Standard Procedure Recommended by
Centaur Horse Walkers, Inc.



Centaur Horse Walkers, Inc.

5761 Ridgeview Avenue

Mira Loma, Ca 91752

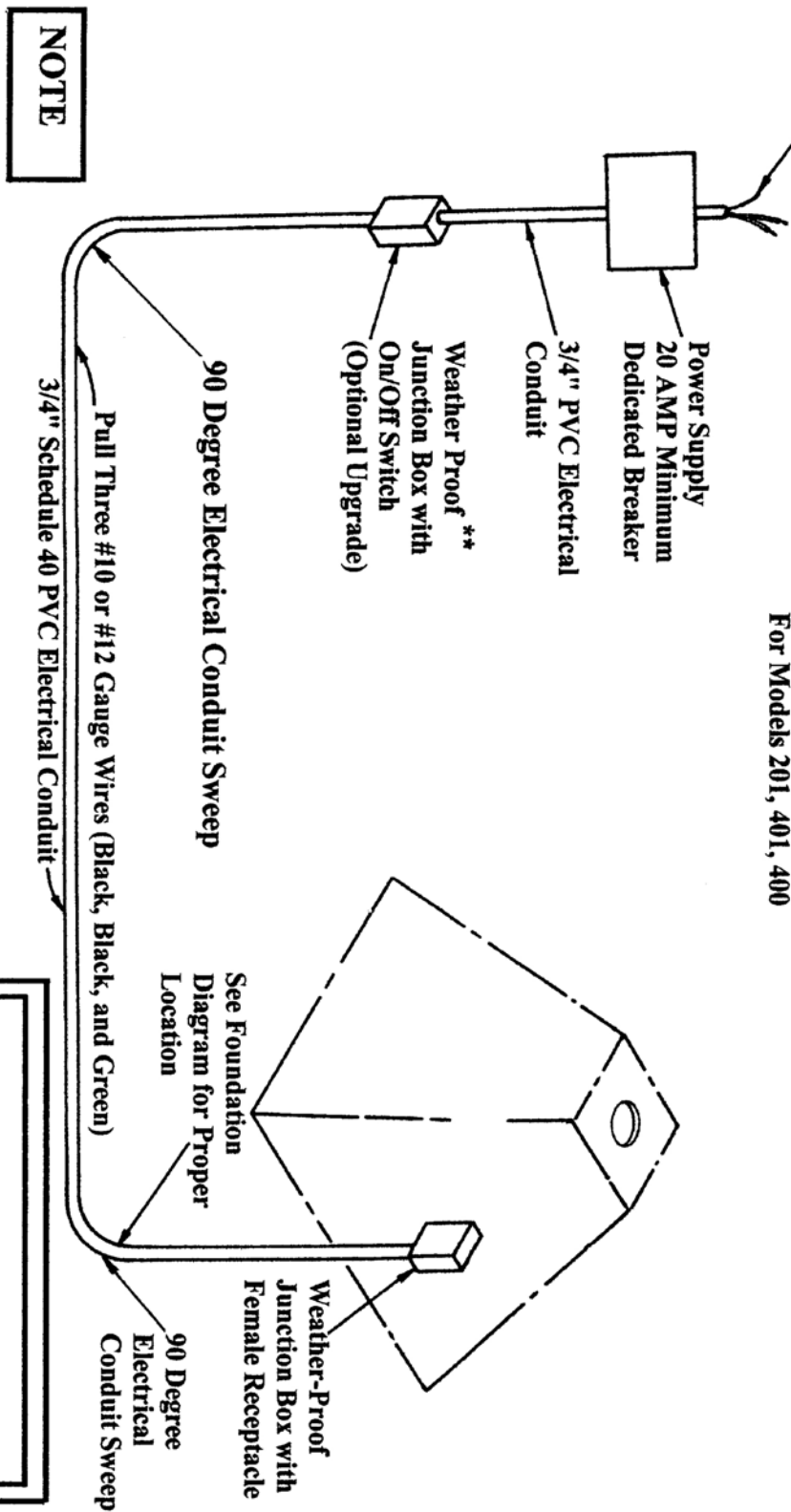
(951) 685-7337 • (951) 685-0341 Fax

1-800-962-8050

www.hotwalkers.com

Two Wires Plus
Ground Wire

CENTAUR 4 HORSE HOT WALKER ELECTRICAL INSTALLATION OPTION B 220V CONTROLLER MOUNTED INSIDE WALKER For Models 201, 401, 400



All 220/240 Volt Installations Pull Three #10 or #12 Wires (2 Black, 1 Green)
Maximum Run of Electrical Wire to be 250 Feet (76.2 M).
Use #8 Wire for Runs Exceeding 150 Feet (46 M).
Maximum Run to be 250 Feet From 250 AMP Dedicated Breaker.
Minimum Depth of 3/4" PVC Schedule 40 Electrical Conduit to be
TWO FEET DEEP WHERE HORSES WALK.

Electrical Installation by Licensed Contractor
In Compliance with State and Local Building
Code is Standard Procedure Recommended by
Centaur Horse Walkers, Inc.

** 20 AMP DOUBLE PULL SWITCH FOR
ON/OFF REMOTE SWITCH