

Vestil Manufacturing Co.

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Web: www.vestilmfg.com

Powered Carousel: POW-CAR-50 Instruction Manual



Receiving instructions:

After delivery, remove the packaging from the product. Inspect the product closely to determine whether it sustained damage during transport. If damage is discovered, record a complete description of it on the bill of lading. If the product is undamaged, discard the packaging.

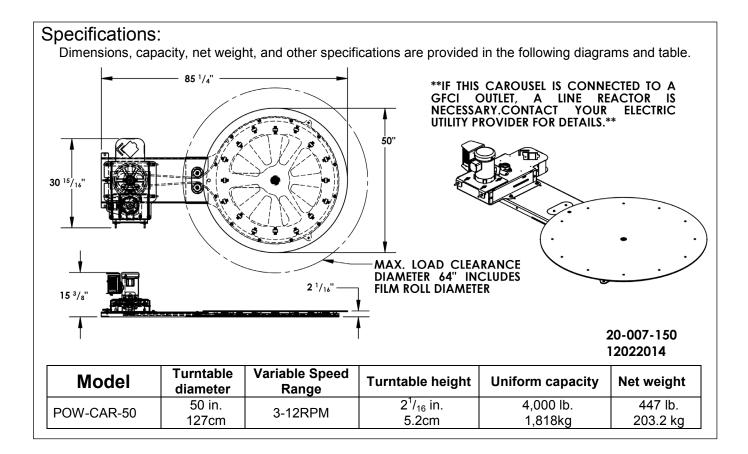
NOTE:

The end-user is solely responsible for confirming that product design, use, and maintenance comply with laws, regulations, codes, and mandatory standards applied where the product is used.

Replacement Parts and Technical Assistance:

For answers to questions not addressed in these instructions and to order replacement parts, labels, and accessories, call our Technical Service and Parts Department at (260) 665-7586. The department can also be contacted online at http://www.vestilmfg.com/parts_info.htm.

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Signal Words:

This manual classifies personal injury risks and situations that could lead to property damage with SIGNAL WORDS. A safety message appears with a signal word that describes an improper/dangerous use of the product. The signal word indicates the seriousness of the injury that could result from the described use.

ADANGER	Identifies a hazardous situation which, if not avoided, WILL result in DEATH or SERIOUS INJURY. Use of this signal word is limited to the most extreme situations.
A WARNING	Identifies a hazardous situation which, if not avoided, COULD result in DEATH or SERIOUS INJURY.
ACAUTION	Indicates a hazardous situation which, if not avoided, COULD result in MINOR or MODERATE injury.
NOTICE	Identifies practices likely to result in product/property damage, such as operation that might damage the product.

Hazards:

Vestil strives to identify all foreseeable hazards associated with the use of its products. However, material handling is dangerous and no manual can address every risk. The most effective way to avoid injury is for the end-user to exercise sound judgment whenever using this product.

AWARNING Failure to read and understand the entire manual before assembling, installing, using and servicing the product is a misuse of the product. If this product is used improperly or carelessly, the operator and/or bystanders might sustain serious personal injuries. To reduce the likelihood of injury:

• DO NOT modify the product in any way UNLESS you first obtain written approval from Vestil. Unauthorized modifications automatically void the Limited Warranty and might make the product unsafe to use.

- Read the manual to refresh your understanding of proper use and maintenance procedures.
- DO NOT exceed the maximum rated load. See Label 287 in Labeling Diagram on p. 12.
- DO NOT stand or sit on the turntable, or load, at any time.
- · Loads must not extend over the shelves of the cart.

• Install the machine ONLY on even, level surfaces where the machine will not be exposed to the outdoor environment.

- Keep hands, clothing, etc. out of contact with all moving parts of the machine.
- BEFORE using the machine, instruct all bystanders to clear the service area.

• DO NOT activate the turntable UNLESS the load is centered on it and stable. Be prepared to stop the turntable, because rotation can cause the load to shift and become unstable. EVERY person involved in the use of the turntable should remain far enough away from the machine to avoid contact with the load if it falls. The load might be ejected from the turntable at high rotation speeds.

• DO NOT continue to use the machine if you observe abnormal motion or noise. Immediately tag the unit "Out of service" and report the problem to maintenance personnel.

• DO NOT attempt to resolve any problems with the product unless you are both authorized to do so and certain that it will be safe to use afterwards.

• Inspect the product as described in *Inspections and Maintenance* on p. 10-11.

DO NOT use this device UNLESS all product labels are easily readable. See Labeling Diagram.

NOTICE

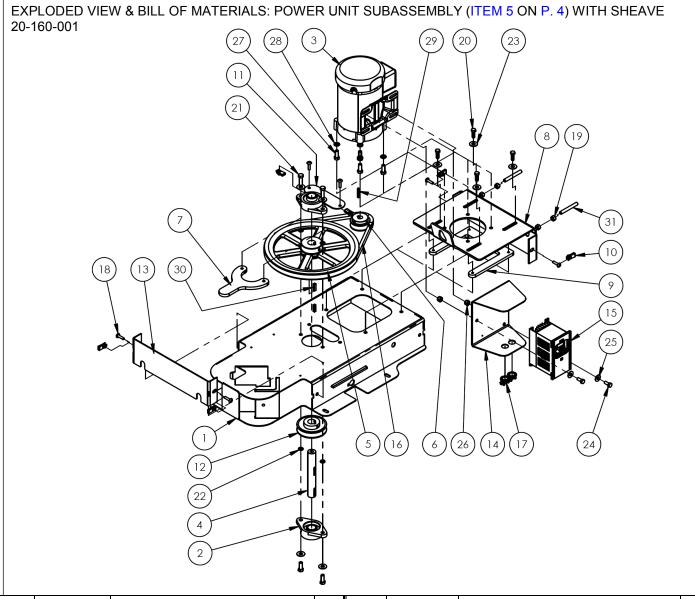
Proper use, maintenance, and storage are essential for this product to function properly.

o Always use this product as instructed in this manual. Periodically lubricate the chain.

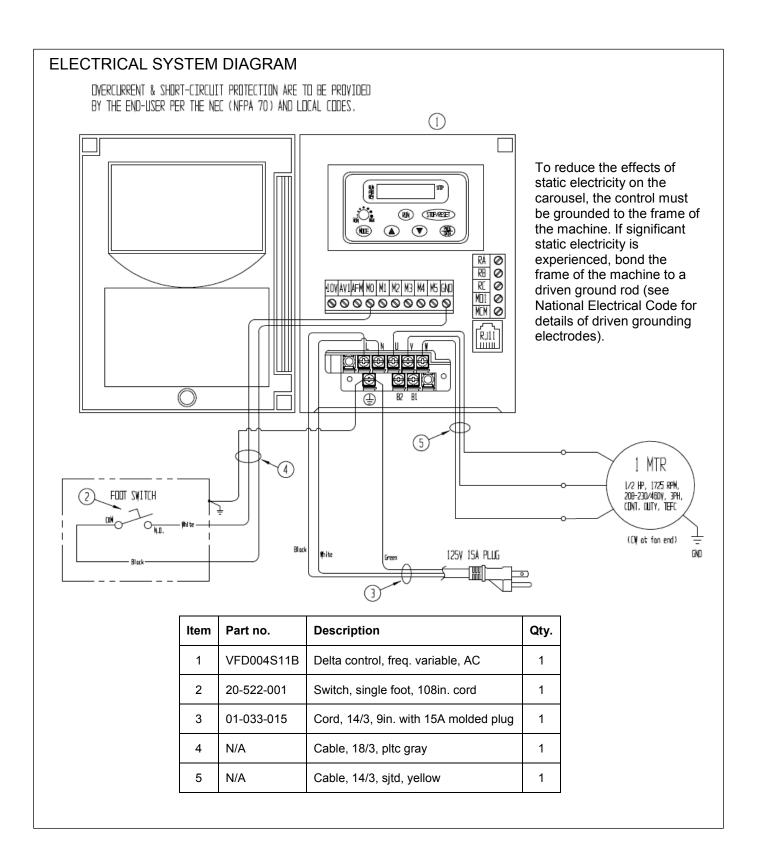
• Keep the product clean & dry.

o Only manufacturer-approved replacement parts should be used to repair this machine. Vestil bears no responsibility for problems that arise from using unapproved replacement parts. To order replacement (or spare) parts for this machine, contact Technical Service.

20-	EXPLODED VIEW AND BILL OF MATERIALS: POW-CAR-50 20-006-150						
(14						
ltem	Part no.	6 Description	Qty.	Item	Part no.	Description	Qty.
1	20-514-078	Weldment, base frame	1	13	21265	Bolt, carriage, zinc plated, ⁵ ₁₆ -18UNCx	1
2	20-027-012	Belt, idler	2	14	37021	3" Nylon insert lock nut, gr. 2, zinc finish,	1
2	20-610-001	Subassembly, thrust bearing	1	14	20-110-001	⁵ / ₁₆ "-18 Single row ball bearing, shielded	1
3 4	20-513-098	Weldment, deck	1	15	20-110-001	Bearing, 6206	1
5	20-160-001	Subassembly, power unit with sheave	1	17	20-117-001	Internal retaining ring, 2"	1
6	20-113-024	Spacer, plate	2	18	20-117-003	External retaining ring, 1" diameter shaft	1
7	20-027-007	Belt, B1 90	1	19	20-117-005	Internal retaining ring, $2^7/_{16}$ "	1
8	11105	Hex bolt, gr. A, zinc plated, ³ / ₈ "-16x1"	4	20	20-024-025	Cover plate, idler access	1
9	33008	Flat washer, low carbon, USS, zinc plated, ${}^{3}/_{8}$ "	4	21	33090	Washer, flat, SAE, ⁵ / ₈ "	2
10	33622	Split lock washer, carbon steel, medium zinc finish, ³ / ₈ "	4	22	11001	Hex bolt, gr. A, zinc plated, $^{1}/_{4}$ "-20x $^{1}/_{2}$ "	2
11	20-016-096	Bracket, tensioning, formed	1	22	68021	External retaining ring, phosphate finish,	1
12	33006	Flat washer, zinc plated, USS, ⁵ / ₁₆ "	1	23	68021	1 ¹ / ₈ "	I



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	20-514-099	Weldment, frame, subassembly	1	16	20-027-008	Belt, B40	1
2	20-110-014	Flange, 2 bolt, 1in. inner diameter	2	17	99-034-037	Accessories, electrical, Romex 0.375in.	2
3	20-135-004	Motor ¹ / ₂ HP, 3 PH, 1725 RPM, 230/460V, 60 Hz	1	18	29185	Screw, machine, truss head	6
4	20-112-015	Shaft pin, 1in. outer diameter	1	19	36106	³ / ₈ in. – 16 zinc-plated hex nut	4
5	20-027-010	Sheave, 12in., 1in. hub	1	20	11055	⁵ / ₁₆ in. – 18 x 1in. HHCS zinc-plated #2 bolt	4
6	20-027-009	Sheave $\frac{5}{8}$ in. inner diameter x 2 in. outer diameter	1	21	11107	³ / ₈ in. – 16 x 1 ¹ / ₄ in. HHCS zinc-plated #2 bolt	4
7	20-110-013	Bearing, mount, upper	1	22	33620	⁵ / ₁₆ in. zinc-plated lock washer	4
8	20-016-085	Bracket, motor, mounting plate	1	23	33008	³ / ₈ in. USS zinc-plated flat washer	8
9	20-016-084	Bracket, motor, mounting plate	1	24	11052	⁵ / ₁₆ in. – 18 UNC x ³ / ₄ in. HHCS screw	2
10	99-145-105	U-Nut, ¹ / ₄ "-20	6	25	33006	⁵ / ₁₆ in. USS zinc-plated flat washer	2
11	20-024-023	Plate cover, bearing	1	26	37021	⁵ / ₁₆ in. – 18 #2 zinc-plated Nylon lock nut	2
12	20-042-019	Sheave, drive	1	27	11105	³ / ₈ in. – 16 x 1in. HHCS #2 zinc-plated bolt	4
13	20-024-022	Guard, end, formed	2	28	33622	³ / ₈ in. zinc-plated lock washer	4
14	20-016-053	Bracket, mounting	1	29	99-130-001	Pin, key stock	1
15	20-029-006	Accessories, electrical, delta controller	1	30	99-130-003	Pin, key stock	2
				31	25550	³ / ₈ in. – 16 x 3in. socket head set screw	2



DELTA MOTOR SPEED CONTROLLER



To change the controller parameters, use the buttons on the keypad to select the desired settings. See *Speed controller parameter settings* table (below).

a. PROG/DATA: press the PROG DATA button to initiate program mode. The following screen will be displayed:

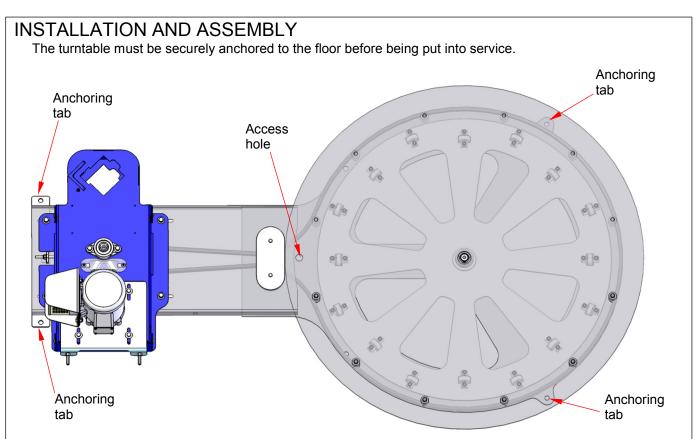
This screen indicates which parameter number is selected, which in this case is parameter 0. Press the up or down arrow button to select the desired parameter number (0; 1; 2; 6; or 7). Press the PROG/DATA button again to reveal the second set of numbers (on the right side of the dash in the "parameter" column of the table below). Use the arrow buttons to select the desired number. After completing the desired combination of numbers, press the MODE button twice to return to the home screen.

- MODE: press the MODE button to display information about the status of the drive. Successively pressing the MODE button displays different information. For instance, pressing the MODE button 3 times displays the current turntable speed in rpm's (12rpm displays as "u 12").
- c. Arrow keys: press the up or down buttons to scroll through different parameters. Press the up or down arrow key quickly to change parameter settings in single unit increments.
- d. The following table indicates the controller settings necessary to achieve a minimum rotation speed of 3rpm and an upper rotation speed of 12rpm:

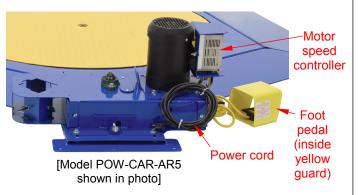
Model	3rj	om	12rpm	
WOder	Parameter	Setting	Parameter	Setting
POW-CAR-50	1-08	d20	1-07	d65

Speed controller parameter settings:

Parameter	Description of parameter	Setting	Description of setting
0-03	Start-up display selection	d2	Display the content of user-defined unit
0-05	User defined coefficient K	d0.3	Scales frequency so display shows approximate turntable rpm
1-02	Maximum output voltage	d255	Sets maximum voltage to motor
1-07	Upper bound of frequency	d65	Sets maximum rotation speed with speed knob turned fully clockwise (~12 rpm)
1-08	Lower bound of frequency	d15	Sets minimum rotation speed with speed knob turned fully counterclockwise (~3 rpm)
1-09	Acceleration time	d10*	Time to accelerate motor to maximum output frequency in seconds
1-15	Auto accelerate/decelerate	d0*	Allows for linear acceleration of motor
1-16	S-curve in acceleration	d 7	Determines how smoothly drive accelerates
2-00	Source of frequency command	d 3	Allows turntable speed to be controlled by knob on keypad
2-01	Source of operation command	d 1	Makes drive turn on external foot switch
2-02	Stop method	d 1	Allows turntable to coast to stop
6-02	Over-current stall prevention limit	d 150	Sets maximum motor current as percentage of rated output
6-03	Over-torque detection mode	d3	Detection enabled during acceleration & continues until Continuous Output Time Limit
6-04	Over-torque detection level	d 200	Sets maximum output torque as percentage of rated output
6-05	Continuous output time limit	d10	Determines how long (in seconds) drive runs after over-torque detected
7-00	Motor rated current	d 120	Establishes maximum output current as percentage of rated output
7-01	Motor no-load current	d 75	Sets motor slip compensation
7-02	Torque compensation	d 10	Sets maximum startup torque



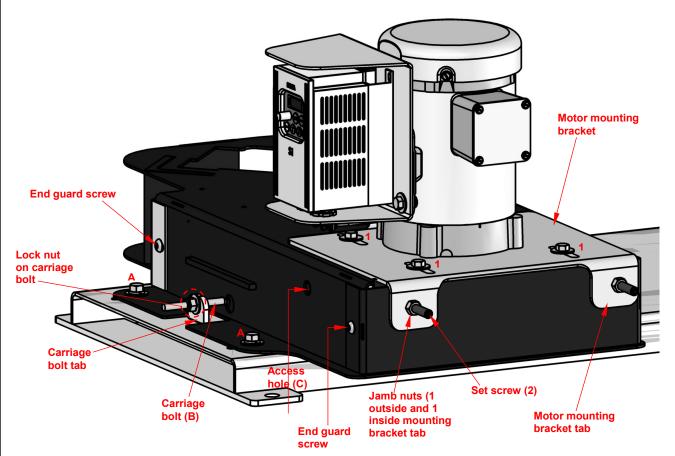
- 1. Move the machine to the installation site. Install the machine only on an even, level surface.
- 2. Fasten the machine to the floor with anchor bolts. There are 2 anchoring tabs located close to the power unit. There are 2 more tabs along the circular frame that are hidden by the tabletop. To access these tabs, rotate the tabletop to align the Access Hole with each tab. All anchoring tabs have holes for anchor bolts. Your building engineer should evaluate the installation site and select ³/₈ in. anchor bolts of appropriate length for the location. Install the anchor bolts.
- 3. Shim and grout under the frame as necessary to level the turntable.
- 4. Plug the power unit into an AC power source that matches the voltage of your motor.
- 5. Test the powered functions:
 - a. Turntable rotation: press the foot pedal to initiate rotation. The turntable will rotate as long as the pedal is pressed.
 - b. Delta speed controller: refer to the Delta operation manual. The dial in the lower left corner of the display panel controls turntable rotation speed. Turn the dial clockwise to increase speed and counterclockwise to reduce speed.



After installing the turntable, increase rotation speed to maximum. The number displayed on the screen of the control is the approximate number of revolutions per minute. Make note of the maximum rotation speed (rpm) in your *Record of Satisfactory Condition*. Reset the speed to minimum when you are finished.

ADJUSTING BELT/CHAIN TENSION

The wrapping machine uses 2 belts to rotate the turntable. The tension of each belt occasionally requires adjustment. For instance, if the turntable vibrates or rattles the tension of the lower belt needs to be adjusted. Similarly, if the turntable drive motor (or the metal box that supports the motor) vibrates, the tension of the upper belt should be increased.



- 1. Adjust the tension of the upper drive belt (inside the power unit housing):
 - a) Loosen all four bolts (1) adequately to allow the motor mounting bracket to slide. NOTE: Only three bolts are visible in the diagram above.
 - b) Loosen the outside jamb nuts on the set screws (2).
 - c) Remove the end guard by removing both end guard screws.
 - d) Assess the belt tension:
 - Locate the access hole C. Insert a metal rod 3/8" (diameter) x ~10" long, into the access hole.
 - Locate the belt with the end of the rod. Lightly contact the belt and do not press the rod into the belt. Mark the rod flush with hole C with a marker or pencil. Make a second mark ¹/₈ in. above the first mark (closer to your hand).
 - Using a pencil-type compression spring scale, measure the force required to push the chain $\frac{1}{8}$ in., i.e. the force necessary to push the rod to make the second mark flush with hole C.
 - If necessary, adjust the tension of the belt. If the belt is new, the force measured by the spring scale should be approximately 16 lb. After the belt is broken in, the force required should be between 8-12 lb. To adjust belt tension, use a ³/₁₆ in. Allen wrench to turn the set screws (2). To increase tension, turn the screws clockwise. To decrease tension, turn the screws the same amount.
 - e) When belt tension is satisfactory, retighten the jamb nuts on both set screws against the bracket tabs.
 - f) Reinstall the end guard and tighten all four of the motor mounting bracket bolts (1).

(Continued on p. 10)

ADJUSTING CHAIN TENSION (continued from p. 9)

- Adjust the tension of the lower drive chain (connects power unit to the turntable): Loosen all 4 power unit subassembly bolts (A). Only 2 bolts are visible in the diagram; the other bolts are on the opposite side of the subassembly.
 - a. To increase tension, use a ⁹/₁₆ in. wrench to turn the lock nut on carriage bolt (B) clockwise. To decrease tension, turn the nut counterclockwise. If the chain is overtightened, the drive train will squeak and/or make grinding noises. If the drive train is noisy after tightening the chain, loosen it sufficiently to eliminate the unusual noises.
 - b. When belt tension is satisfactory, retighten the lock nut firmly against the carriage bolt tab; then tighten all 4 power unit subassembly bolts (A).

USING THE CAROUSEL

Standard carousels must be used indoors. They are designed for moderate duty, intermittent cycling, and accept loads weighing up to 4,000 pounds (1,818.2kg). The net weight applied to the carousel must not exceed 4,000 pounds. Do not drive a forklift onto any of the ramps or the turntable! The load rating appears on Label 287, which is shown in the *Labeling diagram* on p. 12.

NOTICE Improper loading will cause load bearings to fail prematurely or might damage the drive/transmission system. DO NOT shock load the carousel, i.e. do not drop loads onto it. DO NOT exceed the capacity!

To protect the load bearings, be careful when loading the turntable. S**lowly** and carefully apply loads to the turntable. Do not shock-load the carousel by dropping items onto the turntable or by slamming the tines of your fork lift on it.

This machine is equipped with a constant-pressure ("dead man" style) foot pedal controller. The table rotates only if the pedal is pressed. When the pedal is released, the turntable will <u>coast</u> to a stop, i.e. it will spin until friction and resistance bring it to a stop.

Turntable rotation speed is adjustable. To increase or decrease the speed, turn the dial on the Delta motor speed controller clockwise or counterclockwise, respectively.

RECORD OF SATISFACTORY CONDITION

Before using the product for the first time, make a written record of its appearance and operation. Turn on the turntable. Describe its motion and how it sounds while running. For example, the turntable should spin without wobbling. Release the foot pedal. How long does it take for the unit to stop? Use the speed control dial to increase rotation speed to the maximum. Operate the turntable again. Does the turntable still rotate smoothly? Does it produce more noise? How long does it take for the turntable to stop? Thoroughly photograph the unit and each label applied to it. Add the photos to the record. Describe where each label is located. **This record establishes satisfactory condition**. Whenever the unit is inspected, compare those observations to the record to determine if the carousel is in satisfactory condition. Do not use it unless it is in satisfactory condition. However, touchup paint should be applied to all areas where the finish is damaged as soon as damage occurs.

INSPECTIONS & MAINTENANCE: Refer to the diagrams on pages 4 and 5.

NOTICE Proper storage and maintenance are essential to keep this product in normal condition and to maximize the service life of the unit.

Compare all observations made during an inspection to the *Record of Satisfactory Condition*. If problems are discovered during an inspection, restore the machine to normal condition before returning it to service. Contact the *Technical Service Department* if you need assistance with an issue discovered during an inspection.

Before beginning either of the following inspections, make sure that system power is turned off and disconnected.

A. Before each use – Each time the machine is used the following components should be inspected 1. Wiring: examine the wires for fraying and damage.

- 2. Ramps, turntable, and frame: check welds and fasteners. Examine each structure for damage such as bends, warps and cracks.
- 3. Power unit, transmission, and control equipment (particularly the foot pedal): inspect the power unit including the power cord. Examine the foot pedal and its guard and cord for damage. Cycle the turntable (turn it on, let it run for about a minute, and then turn it off). Observe the machine as it operates. Listen for unusual noise. Watch for abnormal movement (e.g. binding and jerking). Confirm normal condition and operation.
- 4. Labels: all labels should be readable and located as shown in the *Labeling Diagram* on p. 12. Replace any label that is damaged, missing, or not easily readable.
 NOTE: Label appearance and content is subject to change. Consequently, replacement

NOTE: Label appearance and content is subject to change. Consequently, replacement labels might differ from labels shown in the manual supplied with the unit.

- B. At least 1 time per month, inspect the following:
 - 1. Electrical wiring: closely inspect wiring for regions of significant wear, cuts, frays, and other damage.
 - 2. Fasteners (hardware): check fasteners for looseness and damage. Tighten all loose fasteners; replace any that are damaged: Bolts, nuts, washers;
 - 3. Turntable drive chain: inspect the chain for significant wear and looseness. Operate the turntable and compare the current maximum rotation speed with the speed recorded when the machine was first installed. If the top rotation speed is slower than the recorded figure, adjust the tightness of the belt. If the turntable lurches or skips during operation or if you hear the chains knocking against the frame, then chain tension needs to be increased. See *Adjusting belt/chain tension* on pages 9-10.
 - 4. Motor speed controller: replace the controller if pushbuttons are not operational, if the speed control dial does not function properly, or if the housing is damaged.
 - 5. Turntable: examine the turntable for significant wear and impact damage. Sharp projections might develop along the edge of the turntable. Sand or grind off all projections, burrs, etc.
 - 6. Ball bearings: operate the turntable and listen for scraping sounds. If the turntable is much nosier while it rotates than it was when it was first put into service, then the bearings should be examined and replaced if significantly worn.
 - 7. Turntable main bearing: the top of the turntable should be parallel to the supporting frame; it should not wobble.
 - 8. Anchoring points: check each of the anchor bolts and the concrete around them. The machine should be solidly fixed to the floor. Tighten bolts, if necessary. Concrete around each bolt should not be cracked, chipped, etc.
 - 9. Labels: confirm that all labels are present, undamaged and readable. See Labeling Diagram, p. 12.
 - 10. Overall condition of machine: the structure should be clean, square and rigid, and free of rust and corrosion. Remove dirt and debris. Do not use the machine if the base is excessively rusted or corroded.

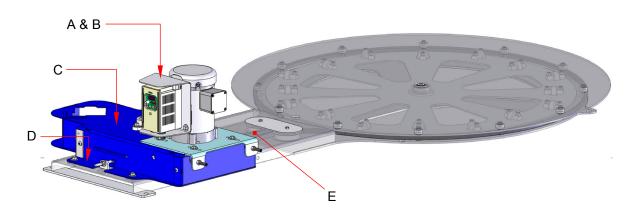
TROUBLESHOOTING

Contact the *Technical Service Department* for assistance with issues identified below or any others.

Issue	Possible Cause	Corrective Action
1) Turntable does not rotate	 a) No power supply voltage 	a) Check outlet for 115V power.
	b) Speed control on lowest setting	 b) Increase turntable speed using the speed dial on the Delta motor speed controller. See p. 7.
	c) No signal from pedal control	 Make sure pedal cable securely connected to power unit.
	d) Motor controller fault or defective motor controller	 Check the display screen on the Delta motor speed controller for a fault code. If a fault code is displayed, contact Technical Service.
	e) Chain is broken or slipping	 e) If fan of drive motor spins but table does not rotate, disconnect power and inspect drive chains.
2) Turntable cannot rotate without assistance, rotates more slowly while loaded, or does not achieve set speed	a) Chain worn or slipping	 a) If motor fan spins but turntable does not rotate, adjust chain tension. If problem persists after adjusting tension, inspect chains.

LABELING DIAGRAM

The unit should be labeled as shown in the diagram. However, label content and location are subject to change so your product might not be labeled exactly as shown. Replace all labels that are damaged, missing, or not easily readable (e.g. faded). To order replacement labels, contact the technical service and parts department online at http://www.vestilmfg.com/parts_info.htm. Alternatively, you may request replacement parts and/or service by calling (260) 665-7586 and asking the operator to connect you to the Parts Department.



A (Label 221)

ELECTRICAL SHOCK Shut power off and consult owners manual before working on this equipment.	
El GOLPE ELECTRICO Corte la corriente consulte el manual de propietario antes de trabajar en este equipo.	
CHOC ELECTRIQUE Couper le courant et consulter le manuel d'utilisation avant de travailler sur cet équipement	

B (Label 325)

NOTICE	NOTA	AVIS	
POWER SUPPLY: 115 V/	1 Phase/60 HZ		
CONTROL VOLTAGE: 11	5V AC		
CORRIENTE: 115 V/1 Fase/60 HZ			
VOLTAJE DE CONTROL: 115V CA			
ALIMENTATION ÉLECTRIQUE: 115 V/1 Monophase/ 60 HZ			
VOLTAGE DE CONTRÔL	E: 115V AC	325	

C (Label 287)

MODEL/MODÉLO/MODÈLE	
STATIC CAPACITY (evenly distributed)	lbs.
LA CAPACIDAD CONSTANTE (distribuida uniformemente)	kgs.
CAPACITÉ STATIQUE (distribuée régulièrement)	kgs.
SERIAL/SERIE/SÉRIE	-
	287 DEV 0812

D (Label 204)

A WARNING	ADVERTENCIA	AVERTISSEMENT
SECURE FRAME	ASEGURE EL	FIXER SOLIDEMENT
TO FLOOR	BASTIDOR AL PISO	LE CADRE AU PLANCHER

E (Label 220)

A WARNING	ADVERTENCIA	AVERTISSEMENT
KEEP CLEAR	MANTENGASE ALEJADO	SE TENIR À DISTANCE
WHEN IN USE	CUANDO SE ESTA OPERANDO	LORS DU FONCTIONNEMENT

LIMITED WARRANTY

Vestil Manufacturing Corporation ("Vestil") warrants this product to be free of defects in material and workmanship during the warranty period. Our warranty obligation is to provide a replacement for a defective, original part covered by the warranty after we receive a proper request from the Warrantee (you) for warranty service.

Who may request service?

Only a warrantee may request service. You are a warrantee if you purchased the product from Vestil or from an authorized distributor AND Vestil has been fully paid.

Definition of "original part"?

An original part is a part used to make the product as shipped to the Warrantee.

What is a "proper request"?

A request for warranty service is proper if Vestil receives: 1) a photocopy of the <u>Customer Invoice</u> that displays the shipping date; AND 2) a <u>written request</u> for warranty service including your name and phone number. Send requests by one of the following methods:

US Mail Vestil Manufacturing Corporation (260 2999 North Wayne Street, PO Box 507 Angola, IN 46703 (260

<u>Fax</u> (260) 665-1339 <u>Phone</u> (260) 665-7586

info@vestil.com Enter "Warranty service request" in subject field.

Email

In the written request, list the parts believed to be defective and include the address where replacements should be delivered. After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil will require you to send the entire product, or just the defective part (or parts), to its facility in Angola, IN.

What is covered under the warranty?

The warranty covers defects in the following original, dynamic parts: motors, hydraulic pumps, motor controllers, and cylinders. It also covers defects in original parts that wear under normal usage conditions ("wearing parts"), such as bearings, hoses, wheels, seals, brushes, and batteries.

How long is the warranty period?

The warranty period for original dynamic components is <u>1 year</u>. For wearing parts, the warranty period is <u>90 days</u>. Both warranty periods begin on the date Vestil ships the product to the Warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend a warranty period for products shipped from authorized distributors by up to 30 days to account for shipping time.

If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

What is <u>not</u> covered by the warranty?

The Warrantee (you) are responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

Events that automatically void this Limited Warranty.

- Misuse;
- Negligent assembly, installation, operation or repair;
- Installation/use in corrosive environments;
- Inadequate or improper maintenance;
- Damage sustained during shipping;
- Collisions or other accidents that damage the product;
- <u>Unauthorized modifications</u>: Do not modify the product IN ANY WAY without first receiving written authorization from Vestil.

Do any other warranties apply to the product?

Vestil Manufacturing Corp. makes no other express warranties. All implied warranties are disclaimed to the extent allowed by law. Any implied warranty not disclaimed is limited in scope to the terms of this Limited Warranty. Vestil makes no warranty or representation that this product complies with any state or local design, performance, or safety code or standard. Noncompliance with any such code or standard is not a defect in material or workmanship.

