VM-3377

Installation, Operation and Maintenance Instructions

VIBRATORY FEEDER

MODELS 76C, HS-76, & HD-76C

ERIEZ MAGNETICS HEADQUARTERS: 2200 ASBURY ROAD, ERIE, PA 16506–1402 U.S.A.
WORLD AUTHORITY IN SEPARATION TECHNOLOGIES

Introduction

This manual details the proper steps for installing, operating and maintaining the Eriez Vibratory Feeder.

Careful attention to these requirements will assure the most efficient and dependable performance of this equipment.

If there are any questions or comments about the manual, please call Eriez at 814-835-6000 for Vibratory Feeder assistance.

CAUTION

Safety labels must be affixed to this product. Should the safety label(s) be damaged, dislodged or removed, contact Eriez for replacement.

Table of Contents

ERIEZ VIBRATORY FEEDER - MODELS 76C, HS-76, & HD-76C

Installation

Mounting

This Hi-Vi model should be mounted on a flat surface, fastened with bolts of proper size. Use lock washers under the bolt heads. See feeder outline drawing for mounting details.

Figure 1

Electrical Connections

NOTE: The Eriez Vibratory Feeder is designed to be operated from an AC source. It cannot be operated DC source.

All wiring should conform to all applicable electrical codes.

1. Check the specifications of the power line to be certain that they are the same as those shown on the feeder nameplate.
2. Connect the black and white wires in the feeder power cord to the proper terminals in the control box.
3. Connect the green wire to the ground or to the lug provided in the control box.
4. If using a control box, make all connections as indicated on the supplied control wiring diagram.
5. Connect the ground lug in the control box to a good earth ground (a cold water line is excellent).
6. On multiple drive feeders (two or more drives on one tray) all drives should be wired electrically in phase and in parallel.

The black wires from each power cord should be connected together and the white wires connected together. The black wires should be connected to the line side of the input voltage and the white wires should be connected to the neutral side.

Operation & Maintenance

Do not operate the unit with associated equipment touching any part of the unit. All inlet and outlet connections should be flexible and free from restricting the feeder.

To start the feeder after all connections have been made, apply power to the line connected to the feeder. If a controller is used, operate the switch on the controller and adjust the output voltage to maximum. Ordinarily (at ordinary room temperatures) the unit will take about two minutes to reach full steady-state displacement.

After full steady-state displacement has been attained, use the controller to adjust the unit to the desired feed rate.

No routine maintenance or lubrication is required except that any accumulation of foreign matter should be periodically removed from between the tray assembly and the body, and from between the body and the mounting surface, to prevent restriction of movement of the vibratory elements. Also any buildup on the feeder tray itself should be removed as this will affect the tray deflection.

IMPORTANT NOTE:

Special Trays and Attachments

Eriez engineering service should always be consulted before undertaking the design or construction of special trays. Neither standard nor special trays as furnished by Eriez should be modified or attachments made without first contacting us. Not doing so will void warranty and affect the performance of the feeder.
(See Standard Tray Specifications.)

Operation & Maintenance (cont.)

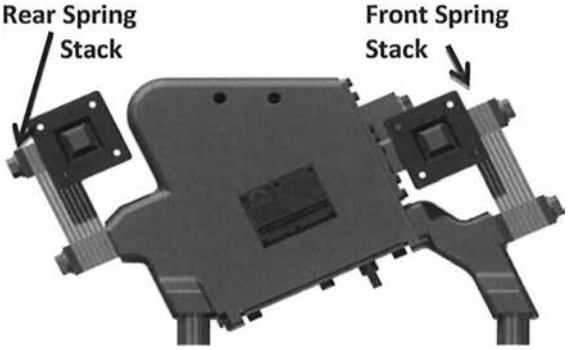


Figure 2

Tuning Guide

General Information

The tuning means is provided solely for the purpose of mechanically tuning the unit, with its tray, to the desired vibratory displacement at full voltage. When a complete unit (drive & tray) is purchased from Eriez it will be properly tuned at the factory to meet the standard model deflection or detuned to meet the customer's desired feed rate.

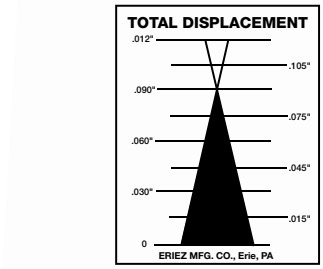
Tuning is accomplished by changing the stiffness of the tuning spring stack of the feeder (see Figure 2). Variations in stiffness are obtained by changing the number of springs in the stack and/or by changing the thickness of fiberglass springs.

In normal operation at full voltage,the total maximum displacement for standard size trays is measured at the back of the tray. See Table 1 for tray deflection per feeder model. For trays substantially larger than standard this normal displacement range should be reduced. Refer to the serial number on the nameplate on your feeder for the amplitude that your unit was tuned for.

FEEDER MODEL	DEFLECTION
76C	.055" - .060" (1.4mm - 1.5mm)
HS76	.70" - .080" (1.8mm - 2.1mm)
HD76C	9/64" - 3/16" (3.5mm - 4.7mm)

Table 1
Feeder Model Tray Deflections

Figure 3



Stroke gauge under vibration
(shown at .090" displacement)

Figure 4

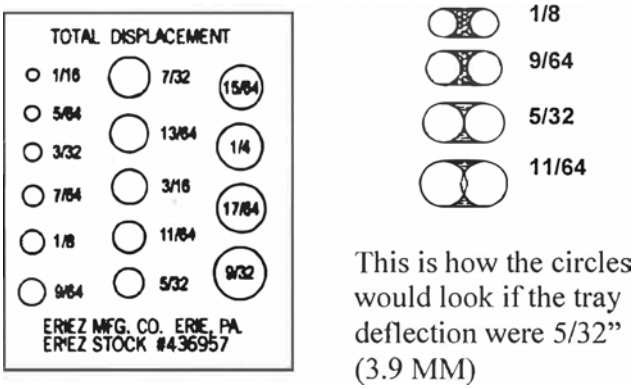


Figure 5

How to Measure Displacement

Position an Eriez displacement sticker on the outer side of the tray, near the rear of the tray and at an angle of 25° from vertical (see Figure 3). Orientation of the sticker should be parallel to the feeder springs. Also note the Feeder tray should be unloaded during the tuning process.

Remember to allow for feeder to run for two minutes to reach full deflection before making adjustments.

CAUTION

Never Exceed displacement amount displayed in Table 1.

76 & HS76 Models

With unit operating observe where the fine gray lines on the displacement sticker meet. This point will be higher or lower as the displacement changes. Opposite the point where they meet, read amount of displacement (see Figure 4). See Table 1 or feeder nameplate for displacement rating.

HD76C

With unit operating observe at the optical illusion in which the printed circles appear as double. The deflection is read where the pair of circles just touch together (see Figure 5). See Table 2 or feeder nameplate for displacement rating.

For more information on reading Eriez tray displacement stickers. Visit our YouTube channel.

The following general rules, which apply only to the **HD76C & 76C** feeder, should be borne in mind when making tuning adjustments to increase or decrease the displacement:

1. To DECREASE the tray displacement, INCREASE the stiffness of the tuning springs.
2. To INCREASE the tray displacement, DECREASE the stiffness of the tuning springs.

If decreasing or increasing the tuning spring stiffness has an opposite effect, it means that the spring stiffness is not great enough, and that the unit is operating on the "opposite" side of its tuning curve. The spring stiffness should be increased until the behavior is in accordance with rules 1 and 2. The unit can then be properly tuned to the desired displacement.

The following general rules, which apply only to the **HS76** feeder, should be borne in mind when making tuning adjustments to increase or decrease the displacement:

3. To DECREASE the tray displacement, DECREASE the stiffness of the tuning springs.
4. To INCREASE the tray displacement, INCREASE the stiffness of the tuning springs.

If decreasing or increasing the tuning spring stiffness has an opposite effect, it means that the spring stiffness is too great, and that the unit is operating on the "opposite" side of its tuning curve. The spring stiffness should be reduced until the behavior is in accordance with rules 1 and 2. The unit can then be properly tuned to the desired displacement.

As a guide to the stiffness of individual tuning springs, each spring is marked with a code number example, 5-27. The first number (5) is the number of fiberglass plies in the spring. The following number (27) indicates the relative stiffness of the spring; the relative stiffness of the spring; the higher this number the stiffer the spring. The total stiffness of the tuning spring stack is the sum of the relative stiffness numbers. By various combinations of different ply springs having different relative stiffness's, practically any desired total stiffness can be obtained.

Tuning For Non-Standard Trays

If it is necessary to tune the unit to an off-size or nonstandard tray, follow this procedure:

1. Attach the tray, making sure that all bolts are in place and torqued to table 3 recommendations
2. Energize the unit at the nameplate voltage and frequency.
3. During tuning if a hammering or striking noise occurs when the unit is turned off and on quickly, the displacement is well in excess of normal. Whether striking or not, if the displacement exceeds the normal range for the particular size of tray (see Table 1 Feeder Model Tray Deflection), it must be reduced by substituting a tuning spring of less stiffness, or by subtracting one or more springs, until approximately normal full voltage displacement is attained. Then use the controller for fine or variable control of displacement and feed rate.

Tuning For Different Conditions of Tray Loading

Units with Eriez-built trays are factory tuned for maximum displacement (see Table 1) with light loading (light head load, light materials, limited depth of flow of heavier materials). Ordinarily this tuning will not need to be changed. In no case should the unit be permitted to deflect more than the max deflection listed in Table 1 without load.

CAUTION

A small amount of striking during tuning is permissible, but must not be allowed during regular operation since damage to the feeder can result.

Repairs

CAUTION

For the HD76C model the armature assembly should only be removed by an Eriez on site technician or sent back to Eriez for repair due to the strong magnetic force produced from the RE Magnets. Failure to follow this procedure can result in serious bodily injury or armature assembly failure.

CAUTION - STRONG MAGNET

This equipment includes one or more extremely powerful magnetic circuits. The magnetic field may be much stronger than the Earth's background field at a distance several times the largest dimension of the equipment.

- **If you use a heart pacemaker or similar device you must never approach the equipment because your device may malfunction in the magnetic field, with consequences up to and including death.**
- **To avoid serious pinch-type injuries caused by objects attracted to the magnet, keep all steel and iron objects well away from the equipment. Do not allow hands, fingers, and other body parts to be caught between the equipment and nearby steel or iron objects.**
- **Keep credit cards, computer disks, and other magnetic storage devices away from the equipment because magnetically stored information may be corrupted by the magnetic field.**
- **Keep electronic devices, such as computers or monitors, away from the equipment because exposure to the magnetic field may result in malfunction or permanent damage to such devices.**

Contact Eriez if you have a question regarding these precautions.

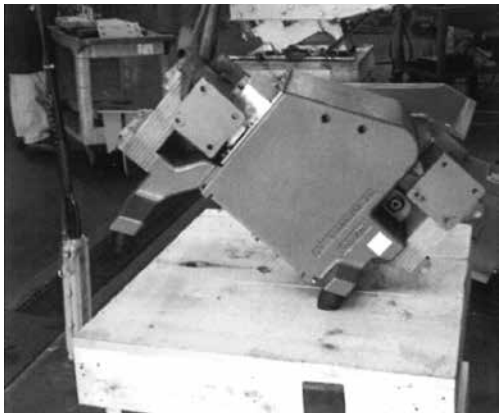


Figure 6

Figure 7: Gapping 76 Feeder

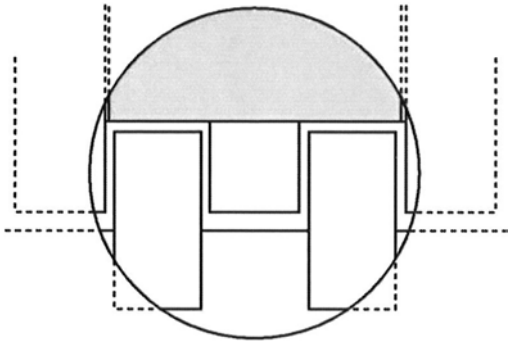


Figure 8: Air Gap

76C & HS76 = 0.105 HD76C = 0.250

Coil Replacement

Refer to the Parts List Drawings and Figures 6-10.

The following procedure should be followed in removing and replacing the electrical assembly, which includes the coil:

1. Remove both nameplates and insert the two gap gauges (furnished with the unit) between the E-frame center leg and the two armature pole pieces (see Figure 7 & 8).
2. The electrical assembly can be removed without removing the tray but, if the armature assembly is also being removed the tray will then need to be removed from the feeder. To remove tray unbolt the eight bolts on each side of the tray. Then lift tray upward to remove.
3. To help assisting in the removal of the coil it is recommended to either angle the feeder upwards on its back legs (figure 6) or flip the feeder upside down to gain access to the coil.

For 76C & HS76 Feeders use 0.100 - 0.095" thk gauge to measure gap. HD76C feeders use 0.248 - 0.243" thk gauge.

4. Remove the six bolts securing the electrical assembly to the feeder body. Take four of the removed bolts and insert them into the threaded holes shown in Figure 9 to back off the electrical assembly from the body.

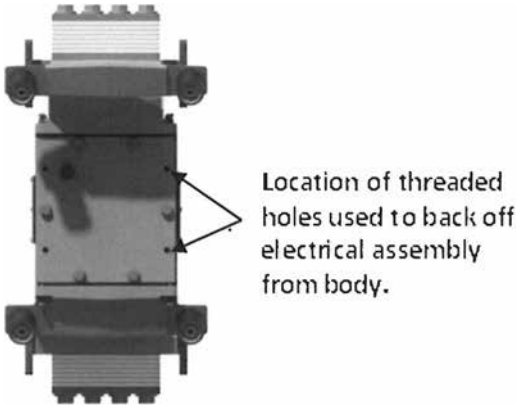


Figure 9: Bottom View of Feeder

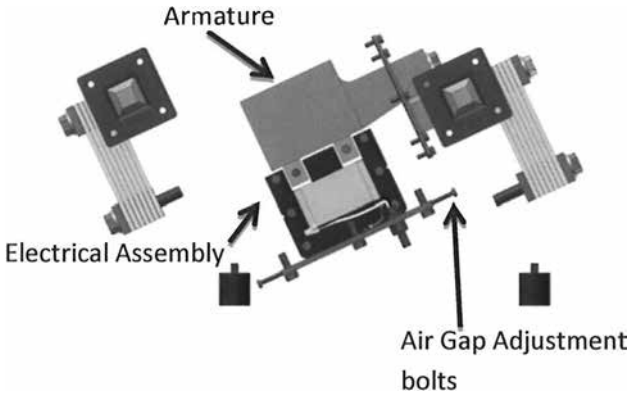


Figure 10: Side View With Feeder Body Removed

5. Use a pry bar to pry the electrical assembly from feeder body using the gap created in Step 4.
6. Inspect the removed electrical assembly. If the coil is defective, the entire E-frame assembly including the coil must be replaced (order from Eriez parts list).
7. In reassembling the unit, first center the Electrical assembly at the bottom of the body cavity; then insert the E-frame into the body cavity, making sure that the center leg enters the space between the armature pole pieces see Figures 7 & 8. Inset the bolts securing the electrical assembly and fasten only finger tight.
8. Insert the gap gauge into the air gap seen in Figure 7 & 8. The gap gauge should be able to move freely between both gaps. Use air gap adjustment bolts (Figure 10) to move the electrical assembly forward & backward until both gaps allow gauge to move freely.
9. After gap gauge can move freely between right and left air gaps tighten electrical assembly bolts. See Table 2 for bolt torque.
10. When installing tray, loosen spring bolts to allow front & rear spring bars to align to tray mounting holes.
11. After tray has been installed check air gap again on both sides of feeder and readjust if necessary.

Spring Change or Replacement

Refer to parts list & figures

Although the non-metallic springs used in the Feeder have outstanding life characteristics, failure may eventually occur, especially if the displacement is greater than normal. The symptoms of such failure will be:

1. Erratic behavior of unit.
2. 2. Greatly reduced displacement
3. 3. Striking sound
4. 4. High amperage reading @ 100% voltage

Carefully examine each tuning spring for signs of delamination or breakage, especially in the area next to the spring shims. A failed spring can be recognized by the appearance of the spring surface. If this surface is discolored or has a patchy whitish appearance, perhaps accompanied by surface indentation or other irregularity, the spring is defective and should be replaced with a new spring ordered from the parts list.

If spring failure is suspected, the rear tuning spring stack (Figure 2) should be removed afer first inserting the two gap gauges between the center leg of the E-frame and the two pole pieces. The purpose of this is to keep the armature poles and the E-frame from sticking together due to the magnets while the tuning springs are removed. Once removed check if springs resemble the above paragraphs description.

Failed springs should be replaced with the same thickness of spring and be certain to have the brown phenolic spring space between every spring. See parts list for spring thickness and spring stack components.

If changing out the front spring stack (figure 2) the tray will need to be removed and use the same step as removing the rear spring stack.

If tuning the tray only changes to the rear spring stack should be needed.

FEEDER	FRONT SPRING QTY	REAR SPRING QTY
76C	7 x 31 ply	7 x 31 ply
HS76	5 x 31 ply	3 x 31, 1 x 25, 1 x 29 ply
HD76C	13 x 16 ply	13 x 16 ply

Table 2: Starting Spring Combination for a 200lbs. Tray

When adding more springs to a 76 feeder it is important that the thread engagement is 1-1/2" min to 1-3/4" max for the spring bolts.

CAUTION

Remember to torque all bolts to the torque valve indicated in Table 3 & to follow the two step torque process below Table 3. Failure to torque bolts will affect feeder performance and may lead to failure.

Elastomeric Damper Replacement (HS76 Model Only)

If the feeder still exhibits signs of spring malfunction after the tuning springs have been checked and replaced, check the four cylindrical elastomer dampers at the rear of the feeder. See procedures below for removal.

1. First insert the two gap spacers, and then remove the spring lever arms & bolts Figure 11.
2. Remove the four spring bolts that secure the damper housings to the feeder.
3. Use a small hammer and a punch or dowel to tap the elastomer damper out of each body housing.
4. Carefully examine both springs for signs of failure and replace if such signs are found. A failed elastomer dampener will exhibit one of the following characteristics:

   A. Looseness of the damper combined with signs of rubbing or abrasion at the outer surface of the cylinder. Looseness of the metal sleeve.

   B. Small crack in the elastomer around the end of the metal sleeve, possibly with small abraded particles of the elastomer present.

   C. Tackiness of the elastomer around the metal sleeve and at the outer surface of the cylinder, possibly with some outward bulging of the elastomer.

5. In replacing the elastomer damper, lay the housing on its side so that the chamfered ends of the spring holes are up. After making sure that the holes and their chamfered ends are clean and free from obstructions, lubricate the elastomer spring with a solution of water and 10% of liquid dishwasher soap (NEVER use a petroleum lubricant) and press them partly into place by pressing on the center metal insert. Then tap the springs 1/16" - 1/8" past center, then back into place. Make sure that all dampers go in straight and protrude equally on both sides. Reinstall the damper housings to the rear of the feeder and torque the spring bolts to rating in Table 3.
6. Lastly reinstall the spring lever arms & bolts, torque to rating in Table 3.

Figure 11: Elastomeric Damer Components

Annature Replacement

Prolonged striking may damage the armature to an extent that it will have to be replaced. If this should become necessary, order a new armature from the parts list and begin by following the same instructions as for coil replacement. Before removing the armature the tray should be removed as well as the electrical assembly as disrussed in the electrical assembly removal.

CAUTION

Take caution while moving the annature around inside the feeder body. The magnets inside the annature will cause it to stick to the body. It is recommend to slide 3/8 non-magnetic spacer between the sides of the body and annature to ease the removal & install of the armature.

1. Remove Tray and Electrical Assembly.
2. First begin by removing the diaphragm damp bolts and damp shown in Figure 13.
3. Remove lower spring bolts on front spring assembly Figure 2.
4. Using an overhead crane lift the armature assembly & spring assembly up and out of the feeder body cavity (Figure 14).
5. Make certain to add a piece of wood over the poles on the armature while storing as a safety precaution.
6. Then move assembly to table & separate the armature from the armature adapter in Figure 15.
7. To reassemble the unit reverse the above procedures and be sure to torque bolts to the specs in Table 2.
8. When installing tray, loosen spring bolts to allow front and rear spring bars to align to tray mounting holes.
9. Be sure to check air gap onc.e armature and electrical assembly have been installed and then once more after the tray is installed (Figures 7 & 8).

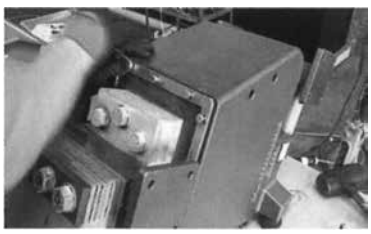


Figure 12: Diaphragm Removal

Figure 13: Armature Removal

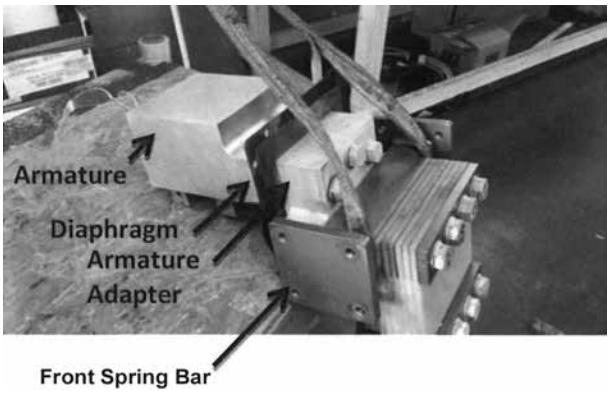


Figure 14: Armature Removal

CAUTION

Make sure that all of the fasteners in the assembly are tight at all times. Periodic checks for tightness should be made to insure against possible malfunction or damage due to loose parts. (See Torque Chart)

PART	BOLT SIZE	TORQUE	
		N-M	ft-lbs
Front Spring Bolts	M20	319	235
Rear Spring Bolts	M20	319	235
Armature Bolts	M20	319	235
Electrical Assembly Bolts	M14	102	78
Tray Mounting Bolts	M14	102	78
HS76 Damper Bolts	M12	68	50

Table 2: Bolt Torque Chart 76 Series

Bolt Torque Procedure:

1. Torque bolt to 80% rating in Table 2.
2. Then adjust wrench to 100% of rating in Table 2 and re-torque.

The Hi-Vi Magnetic Drive Circuit

Old-style electromagnetic equipment has an inefficient attract-release type operation, where a mass mounted on springs is attracted by a DC electromagnet and returned to its original position solely by the springs. The new Hi-Vi method incorporates a lifetime permanent ceramic magnet and is operated directly from an alternating current line. In the Hi-Vi method, the springmounted mass is alternately both attracted and repelled by an AC electromagnet assisted by the springs.

Intermeshing a fixed polarity permanent magnet with an alternating polarity AC electromagnet eliminates the rectifier since you would have an alternating attracting and repelling force as the polarity of the electromagnet alternated.

It will be noted that the pole pieces of the permanent magnet are intermeshed in the air gaps of an electromagnet. The polarity of the permanent magnet is fixed; the polarity of the electromagnet alternates at the line frequency. We have shown the polarity of the electromagnet as it would exist on one side of the sine wave. Note that both poles of the permanent magnet are being attracted toward the unlike electromagnet poles. They are also being repelled in the same direction by the like electromagnet poles.

This results in four forces accumulating to drive the armature in the same direction. It also results in closing the magnetic circuit through the electromagnet providing a magnetizing effect on the permanent magnet on each side of the sine wave. The demagnetizing force is very minor for the attracting force, and the magnetic lines of flux would much prefer to be attracted than repelled.

This always tends to place the permanent magnet in a magnetizing circuit regardless of where the AC current is on the sine wave. As the polarity of the electromagnet changes, all of the forces are reversed and the permanent magnet armature is driven in the opposite direction.

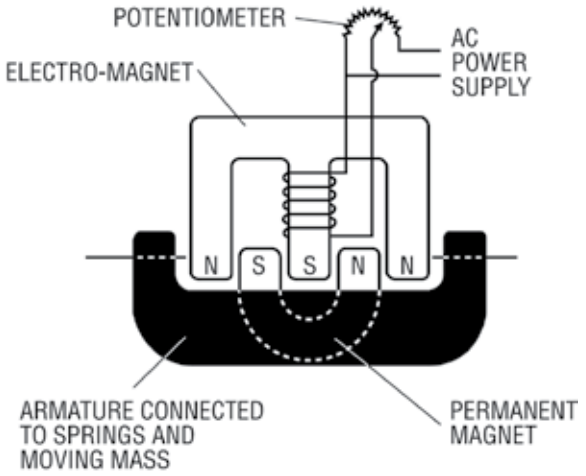


Figure 15: Drive Circuit

CAUTION

Operation from portable engine driven power plants.

Varying and unstable line frequency has a diverse effect on vibratory feeders because they are tuned mechanical devices, designed around either 50 or 60 cycle operating frequency. Shifts in the operating point due to changes in frequency (+ or -1 cycle) cause higher than normal spring stress, striking and high line currents which can cause drive and tray failure. When operating from portable engine-driven power plants, be certain that the engine is up to speed and all other loads are started and at running speed before starting the electromagnet feeder. The feeder should always be stopped first when the engine-driven power plant is shut down.

Troubleshooting

Refer To Table 3. Service Chart

1. **Misapplication**
   Feeder too small. Product difficult or impossible to handle. Impossible temperatures or atmospheres. Impossible dimesnsional requirements. Feeding requirements too precise or excessive. Consult Eriez.

2. **Tampering or Changing of Base or Tray**
   Improper disassembly, extensions, covers, weights, screens, or other modifications or attatchments may have affected performance. Reassemble in accordance with printed instructions or consult Eriez.

3. **Loose Spring Clamp or Tray Mounting Bolts**
   Tighten all bolts.

4. **Coil Failure**
   Replace coil or coil and E-frame assembly. Order from Eriez parts lists. Follow maintenance instructions carefully.

5. **Control Failure**
   Check for burned out powerstat or rheostat, defective capacitor, defective switch, loose wiring, defective transformer (if used). Order new parts from Eriez. Possibility special control needed. Consult Engineering.

6. **Incorrect Voltage**
   Check nameplate specifications and line voltage.

7. **Spring Failure**
   See maintenance instructions. Disassemble for examination. Tuning spring failure will show up as white areas. Order new parts from factory and replace per instructions.

8. **Foreing Material**
   Examine and remove foreign material.

9. **Incorrect Tuning**
   See maintenance instructions. To decrease displacement and output and eliminate striking, use fewer or thinner tuning springs. To increase displacement use more or thicker tuning springs.

10. **Poor or Broken Weld on Tray**
    Check and correct.

11. **Incorrect Factory Adjustment**
    See maintenance instructions (Gap Adjustments)

12. **Sympathetic Vibration in Other Equipment**
    Check and correct.

13. **Contact with Other Equipment**
    Check and correct.

14. **Line Voltage or Hz Variation**
    Check and install voltage regulator if necessary. Check and install Hz regulator.

15. **Blown Fuse or Circuit Breaker**
    Check for short circuits and correct.

16. **Other Electrical Connections**
    Check all connections and correct.

17. **Shockmount Deterioration**
    Check and correct.

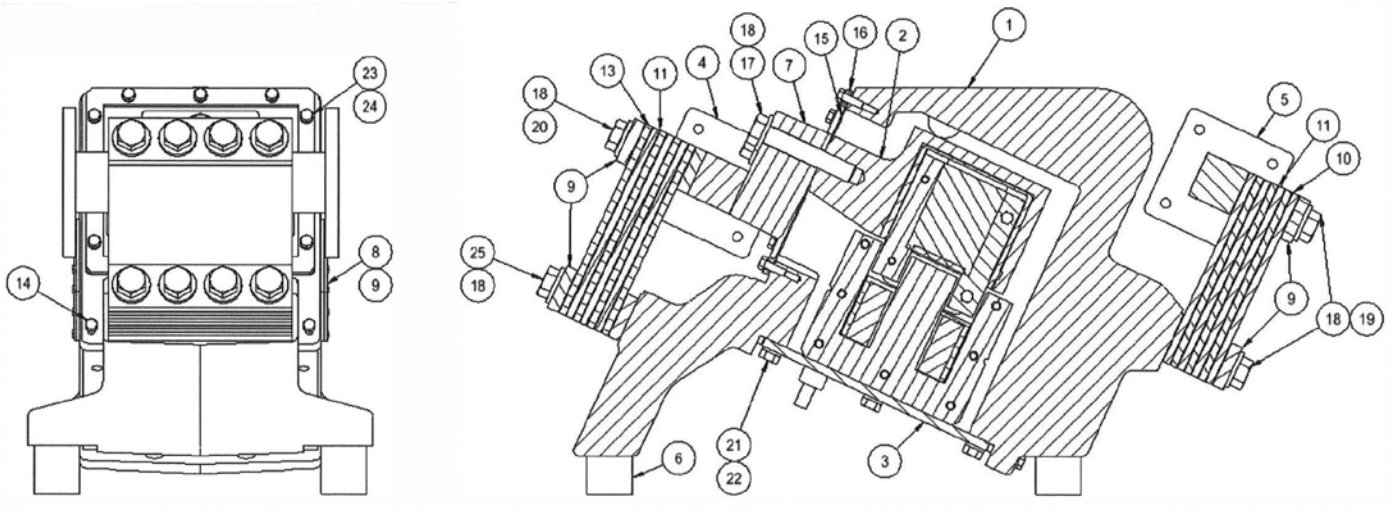
18. **Corrosive or Abrasive Material**
    May require special tray. Consult Eriez.

19. **Product Variation**
    If product density, moisture content or other characteristics vary, customer should take own corrective measures.

Table 3: Service Chart

NATURE OF PROBLEM		Misapplication	Tampering or Changing of Base or Tray	Loose Spring Clamp or Tray Mounting Bolts	Coil Failure	Control Failure	Incorrect Voltage	Spring Failure	Foreign Material Between Tray & Reaction Mass	Incorrect Tuning	Poor or Broken Weld on Tray	Incorrect Factory Adjustment	Sympathetic Vibration in Other Equipment	In Contact with Other Equipment	Line Voltage or Hz Variation	Blown Fuse or Circuit Breaker	Other Electrical Connections	Shockmount Deterioration	Corrosive or Abrasive Material	Product Variation
Initial Installation	Reduced or Low Output	1	2			5	6	7	8	9				13	14		16			19
	Noisy but Output Okay		2	3					8	9	10	11	12	13	14					
	Noisy Certain Periods Only													13	14					
Develop After Satisfactory Initial Operation	Completely Inoperative		2		4	5		7						13		15	16			
	Operating But Reduced Output		2	3		5	6	7	8	9	10		12	13	14		16	17		19
	Output Okay Too Much Noise		2					7	8	9	10		12	13	14					
	Gradual Fading					5		7	8	9	10			13						19
	Excessive Tray Wear																		18	
	Turbulent Flow										10							17		
	Inconsistent Output		2	3		5	6	7		9	10		12	13	14		16	17		19

Parts List - Model 76C



Item Number	Name	Part Number	Quantity
1	Body Casting	466470	1
2	Armature	201411300G1	1
3*	Coil and E-Frame Assembly	See Note	1
4	Front Spring Bar	201409036G1	1
5	Rear Spring Bar	201409036G2	1
6	Shockmount	464635	4
7	Armature Adapter	201408716G1	1
8	Name Plate	190067	2
9	Name Plate Gasket	196011	2
10	Rear Spring	(Specify ply #)	As Required
11	Spring Spacer	468831	As Required
12	Spring Clamp Bar	201200970G1	4
13	Frong Spring	(Specify ply #)	As Required
14	Hex Hd Bolt Full Thread M8-1.25 x 40mm	42891	4

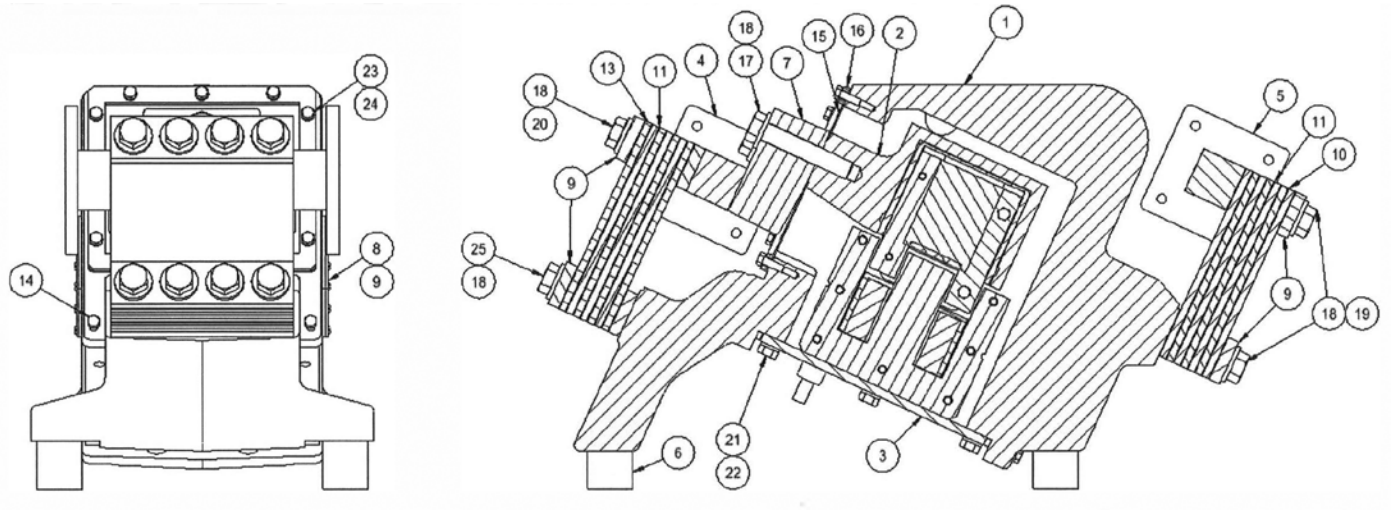
Item Number	Name	Part Number	Quantity
15	Diaphragm	201411367G1	1
16	Diaphragm Clamp	101200979G1	1
17**	Hex Hd Bolt M20-2.5 x 110mm	468939	3
18	Washer Flat M20	435579	19
19**	Hex Hd Bolt M20-2.5 x 120mm	468940	8
20**	Hex Hd Bolt M20-2.5 x 190mm	231066	4
21	Washer Lock M14	226142	6
22	Hex Hd Bolt M14-2 x 40mm	226125	6
23	Washer Lock M8	233363	12
24	Hex Hd Bolt M8-1.25 x 25mm	430232	12
25**	Hex Hd Bolt M20-2.5 x 140mm	468951	4

* Specify Name Plate Voltage when Ordering

** Use Grade 8.8 Bolts, must maintain min 1.5" thread engagement when + or - springs

Note: Parts not listed above (bolts, nuts & washers) are standard items obtainable at any industrial supply house. When ordering parts be sure to specify Feeder Model and Style, Part No. and Quantity.

Parts List - Model HD76C



Item Number	Name	Part Number	Quantity
1	Body Casting	466470	1
2	Armature	201411300G1	1
3*	Coil and E-Frame Assembly	See Note	1
4	Front Spring Bar	201409036G1	1
5	Rear Spring Bar	201409036G2	1
6	Shockmount	464635	4
7	Armature Adapter	201408716G1	1
8	Name Plate	190067	2
9	Name Plate Gasket	196011	2
10	Rear Spring	(Specify ply #)	As Required
11	Spring Spacer	468831	As Required
12	Spring Clamp Bar	201200970G1	4
13	Frong Spring	(Specify ply #)	As Required
14	Hex Hd Bolt Full Thread M8-1.25 x 40mm	428914	4

Item Number	Name	Part Number	Quantity
15	Diaphragm	201411367G1	1
16	Diaphragm Clamp	101200979G1	1
17**	Hex Hd Bolt M20-2.5 x 110mm	468939	3
18	Washer Flat M20	435579	19
19**	Hex Hd Bolt M20-2.5 x 130mm	231064	8
20**	Hex Hd Bolt M20-2.5 x 190mm	231066	4
21	Washer Lock M14	226142	6
22	Hex Hd Bolt M14-2 x 40mm	226125	6
23	Washer Lock M8	233363	12
24	Hex Hd Bolt M8-1.25 x 25mm	430232	12
25**	Hex Hd Bolt M20-2.5 x 140mm	468951	4

* Specify Name Plate Voltage when Ordering

** Use Grade 8.8 Bolts, must maintain min 1.5" thread engagement when + or - springs

Note: Parts not listed above (bolts, nuts & washers) are standard items obtainable at any industrial supply house. When ordering parts be sure to specify Feeder Model and Style, Part No. and Quantity.

Storage of Equipment

Prior to storage, equipment should be carefully inspected for shipping damage. Should damage have occurred immediately contact freight carrier and Eriez. Equipment should remain in its original shipping crate or packaging and be placed in a clean, dry area.

For electronic controllers, in addition to the above, a rust inhibitor should be placed inside the control enclosure. Desiccant must be removed from control enclosure prior to wiring control. Controls should not be stored in temperatures above 110°F (43°C).

World Authority in Separation Technologies
Headquarters: 2200 Asbury Road, Erie, PA 16506-1402 U.S.A.
Telephone: 814-835-6000 • 800-345-4946 • Fax: 814-838-4960 • International Fax: 814-833-3348
Web Site: http://www.eriez.com e-mail: eriez@eriez.com
Manufacturing Facilities: AUSTRALIA • BRAZIL • CANADA • CHINA • INDIA • JAPAN • MEXICO • SOUTH AFRICA • UNITED KINGDOM • UNITED STATES

1015-250-AHA-GOD ERIEZ MANUFACTURING CO ©2015 PRINTED IN USA