

## Maintenance Guide for KVT/KDT/DVT



Authorized Dealer  
1.800.229.0009  
sales@updateltd.com  
www.updateltd.com

## TABLE OF CONTENTS

PREVENTATIVE MAINTENANCE SCHEDULE .....	1
PUMP OVERVIEW .....	2
CHANGING FILTERS.....	3
CHANGING FILTERS.....	4
CHANGING FILTERS.....	5
GREASING .....	6
GREASING .....	7
CHECKING AND CHANGING VANES .....	8
CHECKING AND CHANGING VANES .....	9
CHECKING AND CHANGING VANES .....	10
CHECKING AND CHANGING VANES .....	11
CHECKING AND CHANGING VANES .....	12
CHECKING AND CHANGING VANES .....	13
CHANGING DUST SEPARATOR .....	14
CHANGING DUST SEPARATOR .....	15
SPARE PARTS OVERVIEW .....	16
ACCESSORIES.....	17
ACCESSORIES.....	18



**BECKER PUMPS CORP.** • 100 East Ascot Lane • Cuyahoga Falls, Ohio 44223

## Maintenance:

### Preventative Maintenance Schedule:

- Every 40-200 Hours:
  - If installed Check and clean air intake filter
  - Max of 4 blast air filter cleanings
    - A new filter should be installed if clogged
    - A new filter should be installed annually
- Grease Bearings Every 2000 Hours:
  - Grease bearings while unit is running.
- Vane Inspection and Dust Separator – Every 3,000 Hours:
  - Check vanes for minimum height.
    - Replace if at or close to min vane height value.
    - Check for improper wear or chipping of vanes.
  - Replace dust separation element

## Pump Overview

KVT



DVT



KDT



Contact our staff today. We're ready to help. Call 888-633-1083 or email: [info@beckerpumps.com](mailto:info@beckerpumps.com).



**Nationwide Sales and Service: USA, Canada, and Mexico 888-633-1083**

**Becker Pumps Corp.** • 100 East Ascot Lane • Cuyahoga Falls, Ohio 44223  
Tel 330-928-9966 • Fax 330-928-7065 • [info@beckerpumps.com](mailto:info@beckerpumps.com) • [www.beckerpumps.com](http://www.beckerpumps.com)

## Changing filters

- Every 40-200 Hours:
  - If installed Check and clean air intake filter.
  - Max of 4 blast air filter cleanings.
    - A new filter should be installed if clogged.
    - A new filter should be installed annually.

Remove the 4 hand knobs

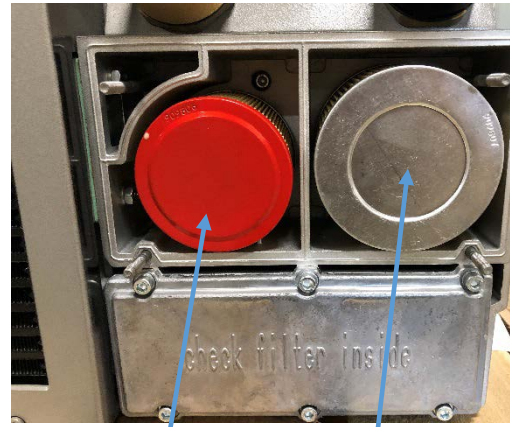


## Changing filters

KVT/Picchio



KDT / DVT



Pressure side

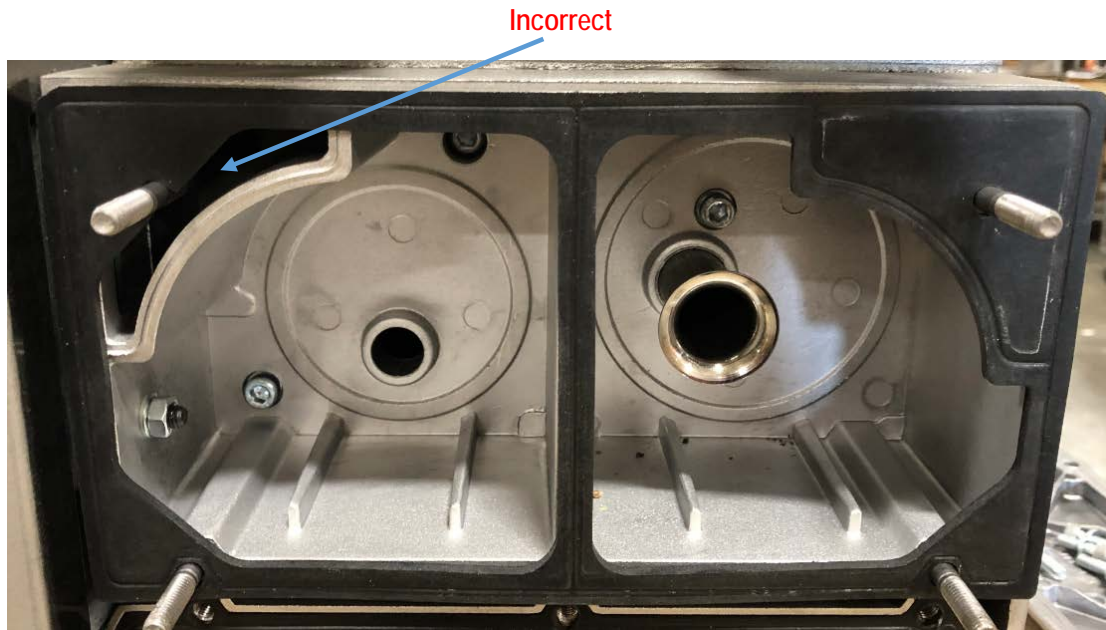
Vacuum side

- Remove all air filters and check for contamination.
- Blowing out the air filter with compressed air is not always enough.
  - You should be able to see light coming through the filter. If not, exchange immediately.



## Changing filters

- When putting the rubber gasket back onto the pump make sure the orientation is correct. Improper installation will result in a vacuum or pressure loss.



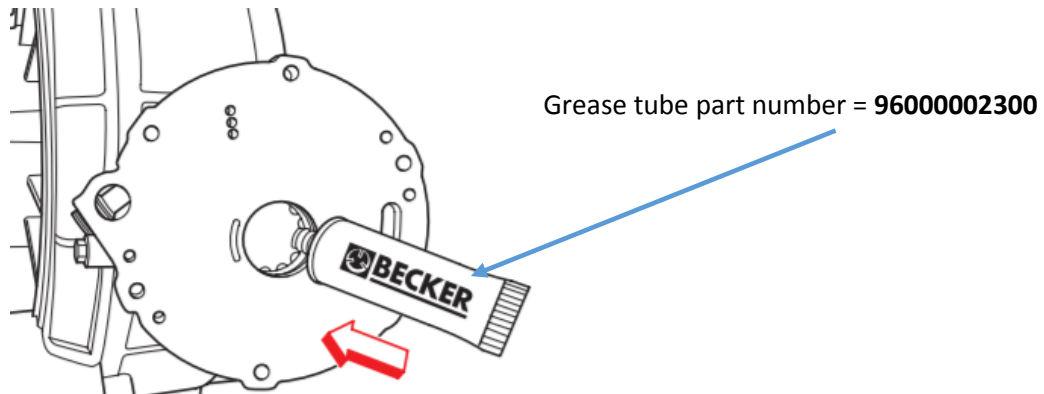


## Greasing

- Grease Bearings Every 2000 Hours:
  - 3.60, 3.80, Picchio – **Shut pump down before greasing!**
  - 3.100-3.140 Grease bearings while unit is running.

### 3.60 – 3.80 + Picchio 2200: (Shut pump down before greasing!)

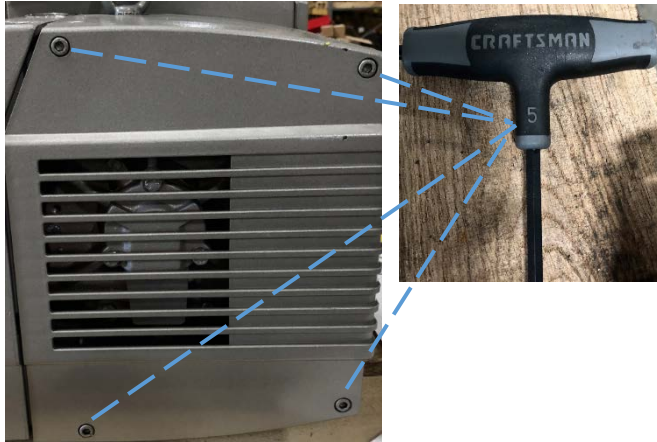
- No grease nipples – Hand pack non-drive side bearing.
  - Drive side bearing is sealed.
- **Exceptions:**
  - 0-56, 0-68 and 0-74 versions will have 2 grease nipples. (See steps for 3.100-3.140.)



## Greasing

### 3.100 – 3.140: (Grease while pump is running.)

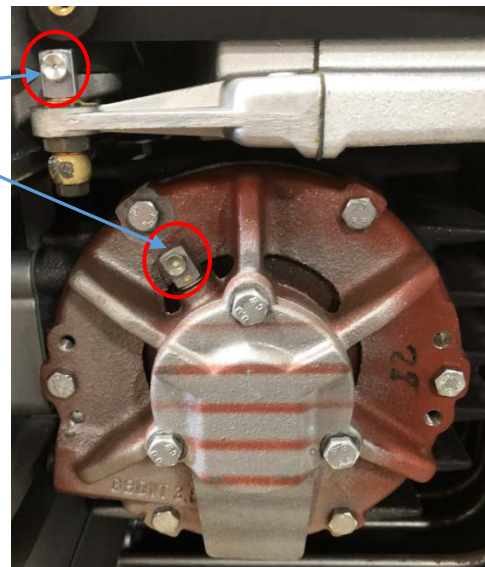
- Grease nipples found behind the air guide cover.



- 3.100 = 10 times in each fitting.
- 3.140 = 15 times in each fitting.

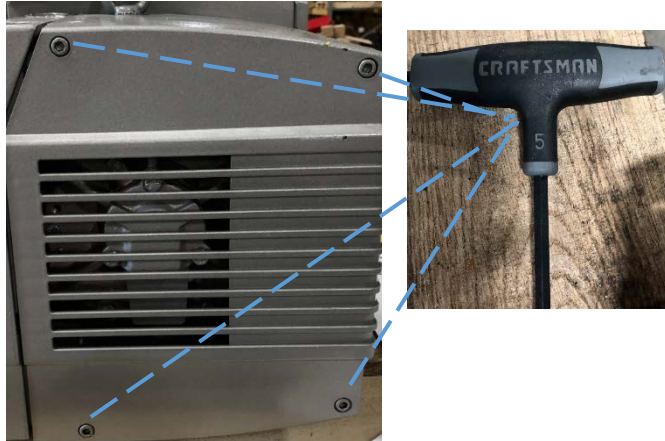


Pre Filled Grease gun part number = **74330500000**



## Checking and Changing Vanes

1. Remove the air guide cover.



2. Remove all of the M10 end-shield bolts.

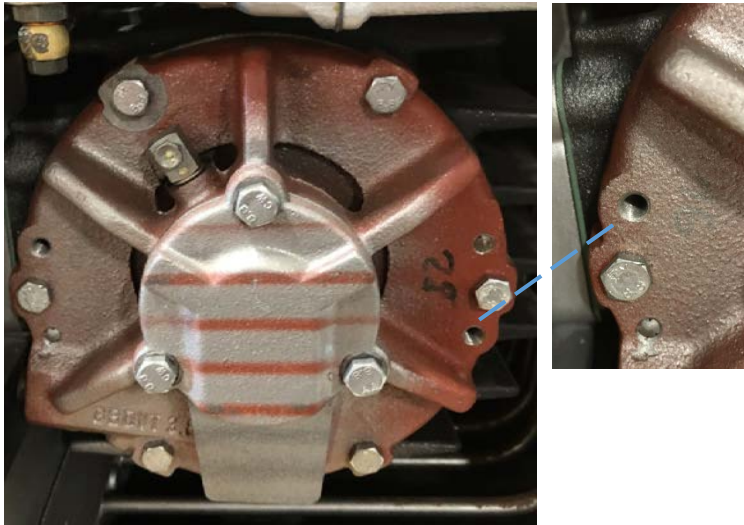


10mm socket

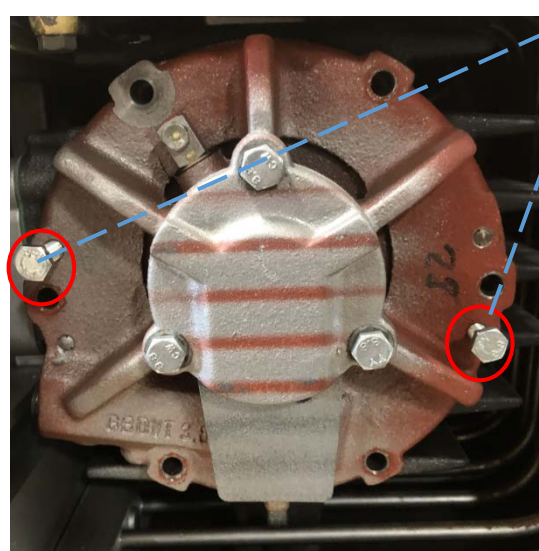


## Checking and Changing Vanes

3. Use 2 of the removed bolts and thread them into the empty threaded jack holes.



4. Tighten bolts to pull off the end-shield.

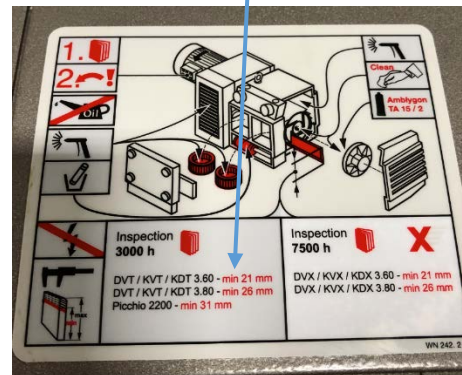


## Checking and Changing Vanes

1. Remove the vanes.



2. Measure the height and compare the value against the min spec listed on the maintenance sticker.



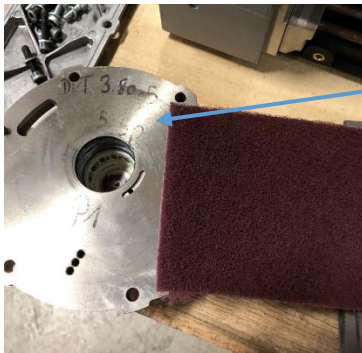
3. If the value is close or at the min spec replace the vanes.
  - a. If there any signs of improper wear is present, (I.E. Chipping, diagonal wear or cupping,) replace the vanes.

## Checking and Changing Vanes

1. Wipe away any grease from the rotor, clean up the end-shield and vane slots.



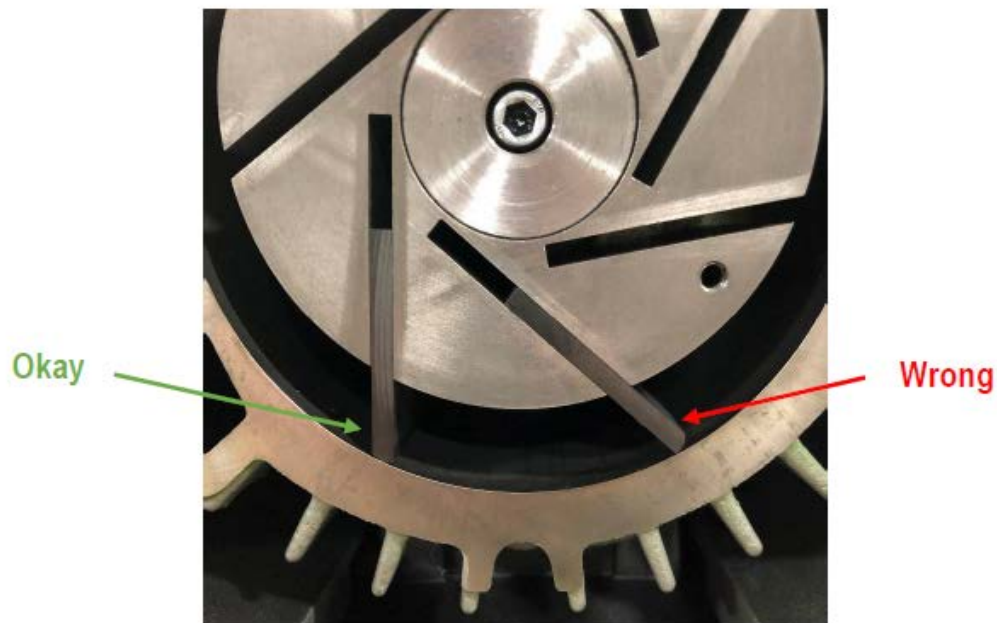
2. Use Scotch Brite™ to clean surfaces. Do not remove large amounts metal. (No machining.)
3. Brake Cleaner can be used to clean with.



3. Light grit sand paper (220) can be used to clean out the vane slots.

## Checking and Changing Vanes

1. Insert the new set of vanes
  - a. Align the beveled edge flush with the cylinder
  - b. Take care of orientation
    - i. If inserted backwards, the vanes can break



## Checking and Changing Vanes

1. Align the guide pins back up and insert them into the tolerance holes.
2. Take care when installing. If the pins are not inserted correctly, the internal components may contact!



3. Insert all of the End-shield bolts back and fasten the end-shield onto the housing.
4. Install the plastic air guide cover back on to the unit.



## Changing the Dust Separator

- Vane Inspection and Dust Separator – Every 3,000 Hours:
  - Replace dust separation cartridge.

1. Remove the metal filter cover.



2. Take out the dust separator by loosening the 13mm nut.



## Changing the Dust Separator

**Attention!**



The filter holder and separator are separate parts. Do not throw away the plastic filter holder!



## Spare Parts Overview

### Maintenance Kits

KVT/KDT 3.60	338030M0000
DVT 3.60	338022M0000
KVT/KDT 3.80/Picchio 2200	338032M0000
DVT 3.80	338024M0000
KVT/KDT 3.100	338034M0000
DVT 3.100	338026M0000
KVT/KDT 3.140	338036M0000
DVT 3.140	338028M0000

#### Included in Kit:

- Carbon Vanes
- Grease
- Filters



Click the Becker Logo for Operation instructions and Spare parts lists

Or

Visit [www.Beckerpumps.com](http://www.Beckerpumps.com)

## Accessory Options

1. Digital Vacuum Gauge:
  - a. Becker Digital 0-30" Vacuum Gauge.
  
2. Liquid Fill Vacuum Gauge:
  - a. Becker Liquid Fill 0-30" Vacuum Gauge.
  
3. External Filter Assembly with Check Valve and Gauge:
  - a. Check Valve Assembly.
  - b. Option 1 = Digital Vacuum Gauge.
  - c. Option 2 = Liquid Vacuum Gauge.
  - d. Option 1 = Metal Canister Filter.
  - e. Option 2 = Clear Cover Filter.



Metal Canister



Clear Cover Canister



## Accessory Options

4. 1-Phase to 3-Phase Converter:
5. Soft Start / VFD / Motor Protector:
  - a. Input = 230V 1-Phase (Phase Converter.)
  - b. Input = 230V, 460V, 575V 3-Phase.



6. Manual Motor Starter:
  - a. Protects the motor from overload.



7. Zerk Fitting Conversation kit W/ Industrial Grease Gun:



Click the Becker Shop Logo below or visit [www.Beckerpumps.com/shop](http://www.Beckerpumps.com/shop)

