Replacing Pump Motor (R.H. or L.H.)

Function

Replacement of electric motor - R.H. or L.H.

Tools Needed

- Feeler Gauge for Checking Entrance Gland Permissibility
- Combination Wrenches (SAE and Metric)
- Socket Wrenches (SAE and Metric)
- Pry Bars
- Socket Wrench Drive and Extensions
- Select and Use Before Starting Job

Parts Needed

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electric Motor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Electric Motor Shoulder Eyebolt (1/2-13, 2400 lbs)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Packing/Grommet for Electric Motor Entrance Gland</td>
<td>1</td>
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Machine Setup

1. Locate the machine in a safe work area, under permanent roof support and out by the working face.
2. Position machine to allow lifting apparatus to remove existing motor and install new motor.
3. Remove power to the machine at the power center. Lock out and tag out the electric power to the machine at the power center.
4. Remove cover plates as required to access the electric motor.

DANGER

Power to the machine must be disconnected, locked out and tagged out at the power center.

Removal Procedure

1. Remove the electric motor power entrance enclosure cover.
2. Disconnect the electric motor power leads from the electric motor cable.
3. Remove the electric motor cable from the electric motor entrance enclosure - mark motor leads, if not already marked.
4. Disconnect the electric motor grease lines from the motor fittings.
5. Remove the electric motor grease fittings and install in the replacement motor with the same orientation as they were in the existing electric motor.
6. Remove the blower belt guard.
7. Loosen both belt tension locking screws.
8. Loosen lock nuts on both blower belt tension adjustment bolts.
9. Adjust blower belt tension adjustment screws to position which will allow removal of blower belts from electric motor sheave.
10. Disconnect the coupling halves between electric motor and pump.
11. Remove blower belts from electric motor sheave.
12. Remove the electric motor hold down bar.
13. Install shoulder eyebolt in electric motor.
14. Using shoulder eyebolt, remove electric motor from the machine chassis.
15. Remove the blower belt sheave from the existing motor and install on the replacement motor the same distance from the end of the shaft as was installed on the existing motor.
WARNING

Never operate the machine with the blower belt and pump coupling guard removed. Serious injury or even death can occur from operation without having the blower belt and pump coupling guard installed.

WARNING

All electrical work must only be performed by properly qualified and authorized personnel.

Installation Procedure

1. Install shoulder eyebolt in replacement motor.
2. Lift replacement motor into position in the machine chassis.
3. Remove shoulder eyebolt from replacement electric motor.
4. Connect the two grease hoses to the two electric motor grease fitting assemblies.
5. Install the electric motor hold down bar.
6. Install v-belts [Tip: Install new blower v-belts.]
7. Connect coupling between electric motor and pump.
8. Using the blower belt tension adjusting screws, adjust belt tension.
   (Correct tension: 1/4" or 6mm deflection at mid point between sheaves with moderate pressure applied to the belts.)
9. Tighten down the locking nuts on the adjusting screws.
10. Tighten down both belt tension locking screws.
11. Re-check belt tension, re-adjust if required.
12. Install the blower belt guard.
13. Connect the electric motor cable to the electric motor leads (inside enclosure on electric motor).
14. Pack the electric motor cable.
15. Install the cover on the electric motor connection box.
16. Inspect permissibility of all work performed.
17. Install cover plates.
18. Restore power to the machine.
19. Start machine and check for proper operation.
Component Parts (Fig. 1)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>Electric Motor Connection Box</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Electric Motor Cable</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Electric Motor</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Hold Down Bar</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Blower Belt Guard</td>
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</tr>
<tr>
<td>6</td>
<td>Blower</td>
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</tr>
<tr>
<td>7</td>
<td>Electric Motor Grease Hose</td>
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Component Parts (Fig. 2)

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<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
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<tbody>
<tr>
<td>1</td>
<td>Blower Belt Tension Adjusting Screw</td>
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<tr>
<td>2</td>
<td>Blower Belt Tension Locking Screw</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Electric Motor Grease Hose</td>
<td>-</td>
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