ATTENTION: Read carefully before attempting to install, operate, or service your motor. 
Retain for future reference.

SAFETY FIRST, PROTECT YOURSELF AND YOUR EQUIPMENT

1. Be familiar with the equipment and read your manual thoroughly before you work on the equipment.
2. Always disconnect electrical power at the motor starter, fuse box, or circuit breaker before handling electrical connections. Double check to be sure power is off and that it cannot be turned on while you are working on the equipment.
4. Refer to motor nameplate for proper power supply requirements. Be sure connections are tight and adequately taped to prevent shorts and to assure maximum protection against moisture.
5. Be sure unit is electrically grounded and mounting bolts are secure.
6. Keep tools, clothing and hands away from rotating or moving parts while equipment is running.
7. Use safety glasses to protect your eyes when inspecting equipment while it is running.
8. Observe good safety habits at all times and use care to avoid injury to yourself or damage to your equipment.

The above should not be considered as limiting in safety precautions to be followed. Local conditions, environments and prudent judgement in safety should be considered at all times.

NEMA “C” FACE IS STANDARD FOR 56-140T FRAME, ALL TYPES EXCEPT UT MULTISPEED, UTE AND UTN.

NEMA “C” FACE KIT INSTALLATION PROCEDURE—180T-280T FRAME & NEMA “D” FLANGE KIT INSTALLATION PROCEDURE—180T FRAME

DISASSEMBLY

1. Unscrew screws (item A-Qty. 4) and remove fan cover (item B).
2. Loosen bolt(s) (item C) and remove fan (item D).
3. Remove nuts and overbolts (items G & E-Qty. 4 each) and lifting lugs (item F-Qty. 2) and note position for later reassembly.
4. Remove pulley end bracket, (item R1). Item R1 not required for reassembly.
5. Move rotor assembly, (item H) forward until front bearing is clearly visible as shown.
6. After disassembly (step 5) check to see if motor has snap ring out board of bearing. If not, install snap ring provided in this kit.

REASSEMBLY
7. Fill "C" ("D") bracket grease cavity ½ full of grease (See operating instructions).
8. Insert new bearing clamp (item 1) behind bearing as indicated.
9. Position new "C" ("D") bracket (item 2) and align bearing clamp holes with corresponding "C" ("D") bracket holes.
10. Insert new bearing clamp screws (item 3-Qty. 2), and alternately tighten.
11. Position "C" ("D") bracket and rotor assembly (items 2 & H) with motor frame. Align bolt holes with those on short end bracket.
12. Reinstall lifting lugs (item F-Qty. 2) overbolts and nuts (items G & E-Qty. 4 each), and alternately tighten to torque value shown.

<table>
<thead>
<tr>
<th>FRAME SIZE</th>
<th>TORQUE VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>6 lb. ft.</td>
</tr>
<tr>
<td>210 thru 280</td>
<td>12 lb. ft.</td>
</tr>
</tbody>
</table>

NOTE: 180 "C" bracket with 8-½ inch AK does not require reinstallation of nuts (item G) or lifting lug (item F) on pulley end.

13. Replace fan (item D) and tighten bolt(s) (item C).
14. Replace fan cover (item B) and secure with screws (item A-Qty. 4).
15. Place water deflector (item 4-Qty. 1) over shaft and press against bracket face.
16. Rotate shaft by hand several times to ensure free movement and proper reassembly.

If NEMA mounting dimensions are required, mounting base (item J) must be repositioned . . . . refer to mounting feet removal/reposition procedure on pages 2 & 3.

MOUNTING BASE ON 56-140T FRAMES ARE WELDED AND CANNOT BE REMOVED.

MOUNTING FOOT REMOVAL/REPOSITION PROCEDURE (NEMA "C" FACE & "D" FLANGE) — 180T FRAME

DISASSEMBLY/REMOVAL
1. Remove all screws, (item A-Qty. 4). Notice location of holes used in mounting feet, standard position.

NOTE: For footless installation, screws & mounting feet are not required.

REASSEMBLY
2. Move mounting feet toward rear of motor until the second set of holes in motor feet are aligned with holes in frame.
3. Replace and tighten all screws (item A-Qty. 4) securely to the torque value shown on mounting feet.
MOUNTING FOOT REMOVAL/REPOSITION PROCEDURE  
(NEMA "C" FACE) — 210T-280T FRAME

NOTE: 280 FRAME UNITS ALREADY MEET NEMA "C" FACE MOUNTING. BASE CANNOT BE REPOSITIONED.

DISASSEMBLY
1. Remove all screws (item A-Qtys. 6). Notice marking on bottom of feet, indicating position of feet with use of standard bracket.
   NOTE: For footless installation, screws & mounting feet are not required.

REASSEMBLY
2. Interchange mounting feet so that marking P.E. ♦ C is closest to shaft. 250T Frame only.
3. Replace and tighten all screws (item A-Qtys. 6) securely to the torque values indicated on mounting feet.

CANOPY CAP KIT INSTALLATION PROCEDURE — 56-140T FRAME

DISASSEMBLY
1. Unscrew screws (item A-Qtys. 3) and remove fan cover (item B).

REASSEMBLY
2. Place square nut (item 1) into recess inside fan cover.
3. Position spacer, canopy cap, lock washer and bolt (items 2, 3, 4, and 5) on fan cover (item B) as shown and tighten.
4. Reposition fan cover (item B) and secure with screws (item A-Qtys. 3).

Mounting base is welded and cannot be removed.
CANOPY CAP KIT INSTALLATION PROCEDURE — 180T-280T FRAME

DISASSEMBLY
1. Unscrew screws (item A-Qty. 4) and remove fan cover (item B).
2. Remove old lifting lugs (item R1-Qty. 2) by unscrewing overbolts and nuts (items C and D-Qty. 2 each). Item R1 not required for reassembly. NOTE: Loosen remaining overbolts to assure proper seating of bracket during reassembly.

180T FRAME

REASSEMBLY
3. Replace overbolts and nuts (items C and D-Qty. 2 each) and alternately tighten all 4 overbolts to a torque of 6 lb. ft.
4. Place square nut (item 1-Qty. 1) into recess inside fan cover.
5. Position spacer, canopy cap, lock washer and screw (items 2, 3, 4, and 5-Qty. 1 each) on fan cover as shown and tighten.
6. Replace fan cover (item B).
7. Place new lifting lugs (item 6-Qty. 2) across from each other, outside fan cover, and tighten screws (item A-Qty. 4) to 6 lb. ft.

If feet (item R2) are not required for footless installation, refer to mounting foot removal/reposition procedure on page 2.

210T-280T FRAME

REASSEMBLY
3. Replace overbolts and nuts (items C and D-Qty. 2 each) and alternately tighten all 4 overbolts to a torque of 12 lb. ft.
4. Place square nuts (item 1-Qty. 3) into recesses inside fan cover.
5. Position spacers, canopy cap, lock washers and screws (items 2, 4, and 5-Qty. 3; item 3-Qty. 1) on fan cover as shown and tighten.
6. Replace fan cover (item B).
7. Place new lifting lugs (item 6-Qty. 2) across from each other, outside fan cover, and tighten screws (item A-Qty. 4) to 12 lb. ft.

If feet (item R2) are not required for footless installation, refer to mounting foot removal/reposition procedure on page 3.
ELECTRIC BRAKE KIT

Brake Kit modules are available for 56, 140T, 180T and 210T frames. (4, 6 & 8 Pole).

Each kit is provided with its own specific installation instructions due to its detailed installation and electrical requirements.

Refer to your NIDEC MOTOR CORPORATION Sales Office or local distributor for kit number, price and availability.