



Installation Instructions 129-190 Cooling Fan Replacement Kit

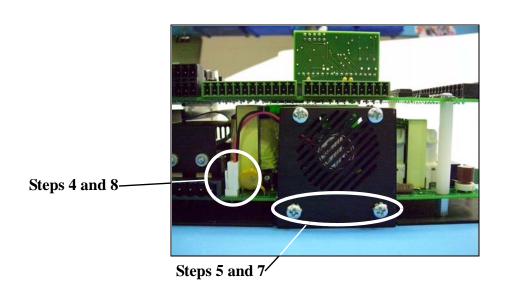
To replace fan on PPC4000 Parallel Positioning Control & NXCESO2 Oxygen Probe

Tools Required:

Philips screwdriver Small pliers (for NXCESO2 oxygen probe only)

Replacement Instructions for PPC4000 Parallel Positioning Control:

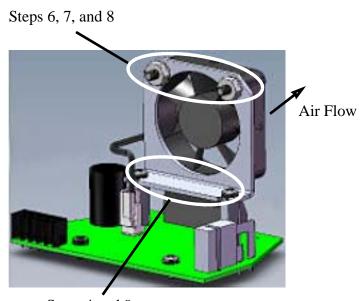
- 1. Remove power from the PPC4000 control.
- 2. Unplug the deplugable connectors (P1 thru P15) from the PPC4000
- **3**. Remove and retain the three large slotted thumb screws (2 located on top, 1 located on bottom center) and remove the red plastic cover from the PPC4000
- 4. Pull back slightly the retaining tab on the white receptacle and remove white wire connector to cooling fan (red and black wires)
- 5. Remove and retain the two (2) 6-32 x 1/4 Phillips screws located on the bottom of the fan grill.
- **6**. Remove fan and grill from PPC4000.
- 7. Install new fan and grill to base using the two (2) 6-32 x 1/4 Phillip screws supplied with replacement kit or removed on step 5 above. Red and black wires should exit fan from upper left. Direction of airflow exits the PPC4000.
- 8. Snap white wire connector into receptacle on PPC4000.
- **9.** Slide the red plastic PPC4000 cover over printed circuit board assemblies and secure with three (3) large slotted thumb screws removed in step 3 above.
- **10**. Install the deplugable connectors removed in step 2 above.
- **11.** Apply power to the PPC4000 control.





Replacement Instructions for NXCESO2 Oxygen Probe

- 1. Remove power from the NXCESO2 oxygen probe.
- **2.** Loosen the three thumb screws near the mounting flange of the probe and remove and retain the black metal cover.
- **3.** Pull back slightly the retaining tab on the white receptacle and remove white wire connector to cooling fan (red and black wires).
- 4. Loosen the two (2) Phillip head screws that hold the metal "L" bracket and cooling fan to the standoffs.
- 5. Remove metal "L" bracket and fan.
- **6.** Remove and retain the two (2) 4-40 x 5/8" screws and nuts that secure the fan to the "L" bracket.
- 7. Remove the two (2) 6-32 x 5/8" screws and nuts that mount the fan to the metal grill supplied with the 129-190 replacement kit. The metal grill, screws and nuts are not needed for the NXCESO2 probe.
- 8. Mount the replacement fan onto the metal "L" bracket using the screws and nuts retained in step 6. The label on the fan mounts away from the "L" bracket facing the rear of the oxygen probe.
- **9.** Install the "L" bracket and fan onto the two standoffs and tighten the Phillip head screws. Direction of airflow exits the NXCESO2 probe.
- **10.** Snap the white wire connector onto the white receptacle on the NXCESO2 probe.
- **11.** Slide the black metal cover over the probe assembly and tighten the three (3) thumb screws.
- **12.** Apply power to the NXCESO2 oxygen probe.



Steps 4 and 9

