

# Trendsetter NEWS Power Box Cooling Upgrade Procedure (TSM) FCO CA03937

**Document Number**
**719-00288A-A**

2004-05-26

Creo Inc.
3700 Gilmore Way
Burnaby, BC
Canada V5G 4M1
(604) 451-2700

Copyright 2004 Creo Inc. All rights reserved.

# Revision History

| Revision | Date | Author | Comments |
|---|---|---|---|
| A-A | 26 May 2004 | Carl Rueck | New document |
| | | | |
| | | | |
| | | | |

## CONTENTS

Revision History ..... i

1. Scope.....1

2. Parts Required.....1

3. Procedure .....1

4. Testing.....2

# 1. SCOPE

This procedure is for upgrading the power box cooling on NEWS 200 output devices (FCO CA03937).

# 2. PARTS REQUIRED

**FCO Kit 512-00136A**

| Creo Part Number | Qty | Item Description |
|---|---|---|
| 719-00288A-B | 1 | DOC,PROC,UPGRADE,HYDRA PB,FAN,TSM |
| 220-00739A | 1 | ASSY,ELEC,FAN,24VDC,137CFM,NWP,TSM |
| 220-00740A | 1 | CAB,ASSY,SLAVE-FAN,ADPTR,NWP,TSM |
| 252-06268A | 1 | FAB,FAN,ELEC,SOCK BRACKET,HYDRA |
| 252-06419A | 1 | FAB,PB COOLING ACCESS COVER,TSM |
| 52-3013 | 8 | WASH,M4,FLT,SS |
| 52-4265 | 4 | SCRW,M4*60,SOCK-CAP,SS |
| 52-4042 | 4 | NUT,M4,NYLOCK |
| 52-3175 | 2 | SCRW,M5*12,SOCK-CAP,SS |
| 52-3177 | 2 | NUT,M5,NYLOCK,S-PLATED |
| 376-00020 | 2 | FINGER GUARD FOR FAN 120*120 |

# 3. PROCEDURE

1. Turn off the system power.
2. Remove the existing power box access cover.
3. Insert one M4 washer into each M4 screw.
4. Take one of the finger guards and place it over the fan hole in the new access box cover.
5. Insert the four M4 screws through the finger guard and each of the four holes in surrounding the fan hole.
6. Place the fan over the hole on the inside of the fan box access cover keeping the wire exiting from the fan at the top right corner. Install the inside finger guard over the fan.
7. Install three M4 washers and three Nylock nuts on all screws except the top right.
8. Install the remaining M4 washer on the top right screw.
9. Take the blue ring connector on the green tether wire and place it onto the last screw at the top right side of the connector. Tighten the last M4 Nylock nut on top of the blue ring connector, making sure that the connector is at a 45 degree angle from the side of the fan.

   **Note:** The green wire is shorter than the other wires on the fan. This allows it to tether the power box cover and protect the cable when the cover falls back during removal (this is done before the cable is disconnected from the Molex 6-pin receptacle).

10. Set aside the cover for now.

11. From the left side, remove the two M5 screws that hold the main power switch bracket.
12. Replace them with the M5 × 12 screws supplied.
13. Install the 90 degree cable socket bracket on the inside of the power box, so that the angled part is at the bottom. (It will only fit one way.)
14. Install and tighten the top M5 Nylock nuts.
15. Install the blue ring connector on cable 220-00740A onto the top or bottom screw of the bracket, and then add the M5 Nylock nut and tighten it.
16. Insert the Molex 6-pin female socket end of cable 220-00740A into the bracket from the top, so the fan cable on 220-00739A can be inserted from the bottom of the bracket.
17. Route cable 220-00740A to the slave MCE Board and plug it into J21. Use a cable tie to secure the cable to the already installed cable in the power box.

## 4. TESTING

1. Place the access cover onto the power box at the bottom with its feet resting on the inside of the box.
2. Plug the Molex male end of the fan cable into the Molex female socket on the bracket installed in step 14 above.
3. Allow the cover to swing out. The green tether wire will support the cover and prevent it from falling and damaging the yellow, black and red fan wires while you are performing the test.
4. Turn on the system power.
5. After the fan starts blowing, check for 0 Volts DC between pins 3 and 6 on the Molex 6-pin connector. See Figure 1, below:
6. Turn off the power. Disconnect the fan from the plug and turn the power back on.
7. Check for +5VDC between Pins 3 and 6 on the connector attached to the bracket.



Figure 1: Molex 6-pin plug—view from wire entry

8. If both of these tests pass the system is functional.
9. Turn the power off and plug the fan cable back in and fasten the power box access cover to the power box.
10. Replace the outer skins and put the machine back into service.