

# Maxi Sky 600 - Infrared (IR) System

## Summary

The Maxi Sky infrared system has been described by some customers as difficult to operate due to a poor sensitivity of the control signals also in some instances the system has operated un-commanded.

It has been noted that the infrared system has been susceptible to electrical interference from outside frequencies that have affected the operating characteristics of the unit. To overcome the above problems BHM have made available a modification kit that includes a shielded cable and detector circuit board to protect the control system from unwanted outside electrical interference and improve the sensitivity of the IR.

### Action

- The completion date for implementation of the upgrade to the applicable infrared units is 10<sup>th</sup> November 2008 and will be performed by ARJO UK service engineers.
- This is for information only, use as and when necessary.
- Inform all relative personnel of this Technical Advice Notice (TAN).

# **Serial Numbers Affected**

Maxi Sky 600 Infrared Systems (LD 10115).

# Parts Required

Infrared Upgrade Kit No. 700.14564.

### **Tools Required**

Standard Tool Kit. ST300 Electrostatic Discharge (ESD) Equipment.

### Procedure

# WARNING: OBEY ALL RELEVANT SAFETY PRECAUTIONS.

Disassemble the unit sufficiently to gain access to the PCB. Refer to the detailed instructions on pages 2 to 6 of this TAN for the removal and installation process of the PCB and the test and verification requirements.

# Close Up

Record the work carried out also the condition and any recommendations on the Service Paperwork and obtain the customer signature.

We strongly advise and warn that only Company Designated Parts, which are designed for the purpose, should be used on equipment and other appliances supplied by the Company, to avoid injuries attributed to the use of inadequate parts. The Company's Conditions of sale make specific provision, confirming liability in such circumstances. Our policy is one of continuous development, and we therefore reserve the right to change specifications without notice.



DATE:	May 5 <sup>th</sup> , 2008
SUBJECT:	Maxi Sky 600, V4 or V4i equipped with infrared (IR) system
PRODUCT FAMILY:	CEILING LIFTS (FIXED)
DOCUMENT NUMBER:	SAN 04/2008/CA - rev.2
PAGES:	7

#### SCOPE

This notice pertains only to the following ceiling lifts that are equipped with the BHM Medical infrared (IR) hand control system:

9100021	V4 4FB KWIKTRAK + IR REMOTE (UL)
9100021.13	V4 4FB KWIKTRAK +IR (UL)
9100022	V4 4FB KWIKTRAK + IR REMOTE (JP)
9100023	V4 4FB KWIKTRAK + IR REMOTE (CE)
9100024	V4 4FB KWIKTRAK + IR REMOTE (AU)
9100025	V4 4FB KWIKTRAK + IR REMOTE (UK)
9100025.13	V4 4FB KWIKTRAK +IR (UK)
9100043.24	V4 KWIK 4FB IR - CE
9101021	V4 4FB RAIL BHM + IR REMOTE (UL)
9101023	V4 4FB RAIL BHM + IR REMOTE (CE)
9110021	V4-I 4FB 600LBS KWIK + IR (UL)
9110024	V4-I 4FB 600 LB KWIK + IR - AU
LD 10111	MAXISKY 600 4F 2H IR-UL
LD 10113	MAXISKY 600 4F 2H IR-CE
LD 10115	MAXISKY 600 4F 2H IR-UK

This notice also applies if the IR function was added to the original manufacturer's ceiling lift using the following parts:

Part number	
-700.13640 (V4 or V4i)	
-700.13640.33 (Maxi Sky 600)	

IR detector Part number 492.00038 circuit board





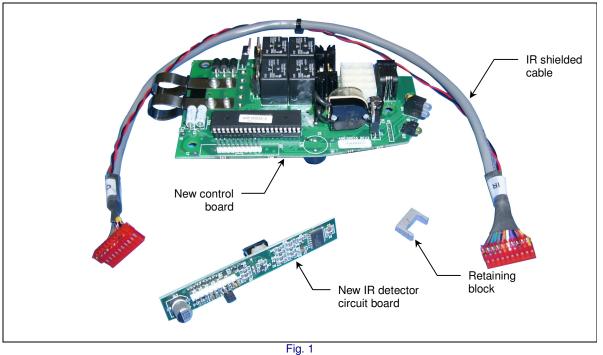
### BACKGROUND

We have received some complaints outlining an issue regarding the Maxi Sky 600, V4 and V4i ceiling lift's optional IR hand control system.

- The IR system has been described as being difficult to operate due to a poor sensitivity to control signals.
- In one case, uncontrolled movement of the ceiling lift was halted by pulling the emergency stop cord.

#### **CORRECTIVE ACTIONS**

BHM has developed a kit that solves the issues previously mentioned. The components of that kit are depicted in Figure 1. The instructions to make the modification of the IR system are given at the end of this document.



#### **NEXT STEP**

BHM will contact dealers / distributors within 2 weeks to make arrangement for all repairs.

If you have any further questions, please contact our service department at:

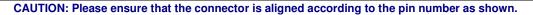
2001 Tanguay, Magog, QC, Canada J1X 5Y5 Telephone: (819) 868-0441 Toll free: 1-800-868-0441 Fax: (819) 868-2249 E-mail: service@ bhm-medical.com

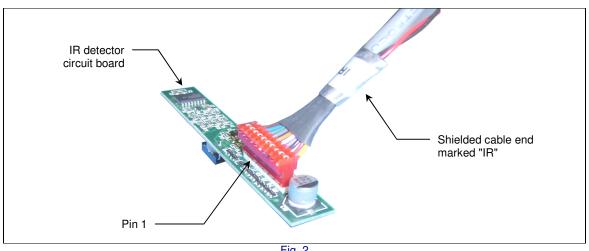


### **INSTRUCTIONS**

CAUTION: Use proper ESD protection prior when opening the IR kit and during the installation. (Refer to the ESD handling of PCB assemblies attached to this document.)

1) The shielded cable has labels identifying both ends. The end marked "IR" must be connected to the IR detector circuit detector board as shown in figure 2.







- 2) Remove the old main control board and replace it with the new one supplied in the IR kit.
- 3) Connect the shielded cable end marked "CONTR" to the new control board, as shown in figure 3.

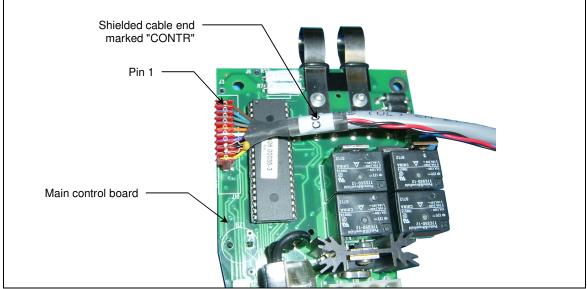


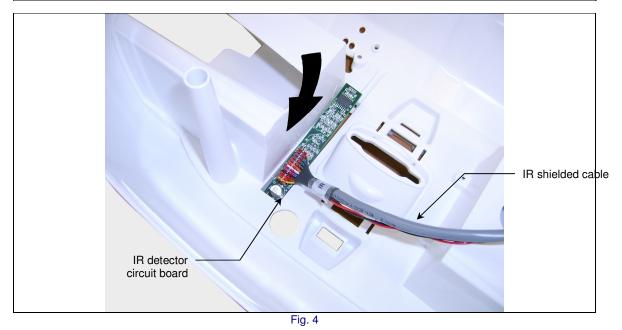
Fig. 3



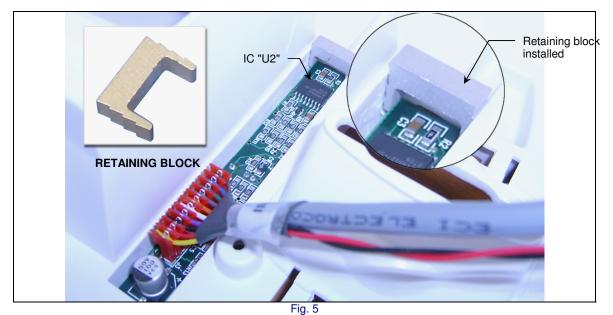
CAUTION: If the shielded cable connectors are not connected with respect to the cable's end labels and to the pin numbers, the unit will fail to function and/or damage can occur to one or both circuit boards.

4) Place the IR detector circuit board in its main shell cavity as shown in figure 4.

CAUTION: DO NOT BEND THE CIRCUIT BOARD. Manipulate the IR detector circuit board with extreme care as it is fragile and bending it may cause damage to surface mount components.



5) Place the retaining block over the end of the IR detector circuit board where IC "U2" is located, as shown in figure 5. Be careful not to allow the retaining block to touch any of the components on the board, since it is made of aluminum, and would cause a short-circuit to occur.





## PARTS TO BE USED

The IR kit required in order to modify your ceiling lift must be selected according to the ceiling lift model. Please refer to the table below for more information.

Ceiling Lift Model	Kit Number	
V4 • 200 kg (440 lb)	9100021 9100021.13 9100022 9100023 9100024 9100025 9100025.13 9100043.24 9101021 9101023	700.14563
V4i • 272 kg (600 lb)	9110021 9110024	700.14564
MaxiSky 600 • 272 kg (600 lb)	LD 10111 LD 10113 LD 10115	700.14564

Tools:

- Torx-20 screwdriver
- Ratchet
- 8 mm socket

#### **TESTS/VERIFICATIONS**

Have a Maxi Sky 600, V4 or V4i IR hand control readily available. Turn on the ceiling lift, and check if the unit responds to commands from the IR hand control. Repeat the test 10 times.

#### HANDLING OF RECORDS

Please ensure to maintain detailed records of the serial numbers involved with each ceiling lift modification. That information needs to be forwarded to BHM for record handling.