

FSB Number:	FSB-016
Title:	Replacement of SMPS switching transistor BUP 101 – BU2525A
System Description:	SMPS fitted with BUP101
Module/Component Description:	All Switch Mode Power supply's fitted with BUP101 transistors.
Priority:	4
Reference:	BARCO info t 350

<p>1 - Essential SEOS Will Supply the Parts free of charge to implement modification</p> <p>3 - General Improves the general working conditions</p>	<p>2 - Reliability Recommended to improve reliability of the system</p> <p>4 - For Information Only General product and company information</p>
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Description

[Replacing BP101 Transistors with BU2525A \(Due to unavailability of the BUP 101 device\)](#)

Reason to apply the modification

We have been informed by the manufactures of their decision to discontinue the production of the BUP101.
In the event of a failure of this device an equivalent replacement power transistor will need to be fitted.

A **BU2525A** transistor can be used to replace the discontinued BUP101.
Under certain conditions the base current of the new BU2525A must be adapted in order to avoid over dissipation of the device.

As detailed in Field Service Bulletin (FSB-015) in certain applications a Mosfet originally replaced the BUP101.
This Mosfet device was later replaced by 2SC3998 power transistor.

Please refer to Field Service Bulletin (FSB-015) in case of trouble with the SMPS module from the 1200 series projectors.

The table listed on page 2 gives an overview of the modules in which you may find a BUP101 fitted (unless it has already been replaced by another power device).
All units that are mentioned in the first column may be equipped with the BUP101

(R132913) and in case of a failure, must be replaced by a BU2525A (V1325993),

The second column mentions its position on the board.

How to check if this modification should be applied-

In certain cases the series base resistor (which determines the base current for Saturation) must be changed into a **0.22 E** (V1011984)

**** Attention should be paid to the special case where Q100 in the 1200 series must be replaced by a 2SC3998 as described in Field Service Bulletin FSB -015**

Solution

MODULE	TRANSISTOR	RESISTOR	SERIES
761442 761399* 761499 761520*	Q1	R1 unchanged	400 / 600 SERIES
762200* 762446*	Q10	R37 unchanged	700 SERIES
761736*	Q101	R119 becomes 0.22E	700 SERIES
761770 761829 762170* 762293*	Q100 Q101	R104 becomes 0.22E R119 becomes 0.22E	800 / 801 SERIES
762120 762506*	Q141	R169 unchanged	1200 SERIES
762106*	Q101 Q100 **	R119 becomes 0,22E SEE FSB- 015	1200 SERIES
762147	Q100 Q101	R104 becomes 0.22E R119 becomes 0.22E	1200 SERIES VISION

- = including all units with extension 5, 6 etc. (ex. 762170* = 762170 ;7621705 &7621706
** = Attention: BUP101 is replaced by a 2SC3998 (see FSB-015).