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SWP006/14

*Re-controlled Dorman Non-Proved LED Ground
Position Light Signals*

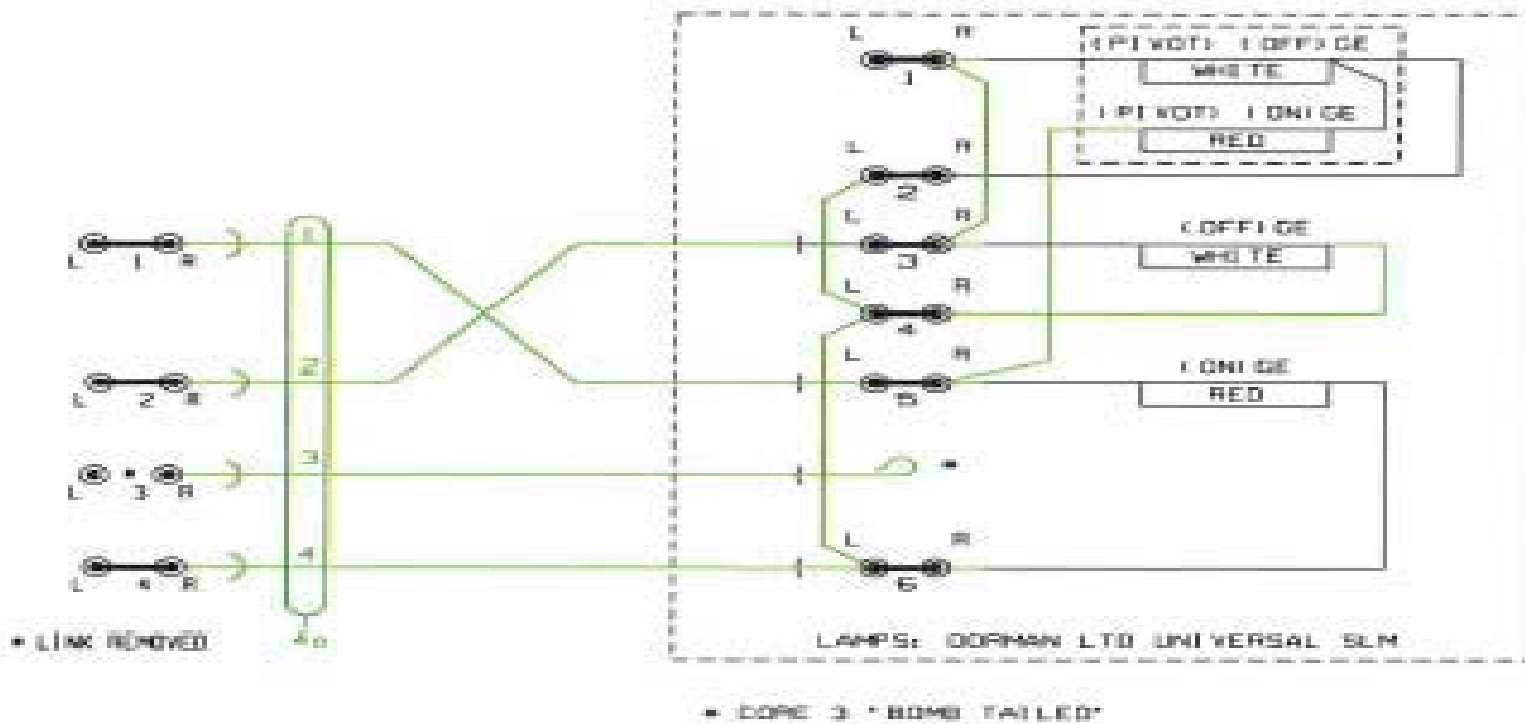
Background and issues encountered

During commissioning it was found that existing GPL LED Signals manufactured by Dorman (c2001) when re-controlled from RRI to SmartLock (SSI based) were causing the signal TFMs to enter 'output interface disable' mode and shut down

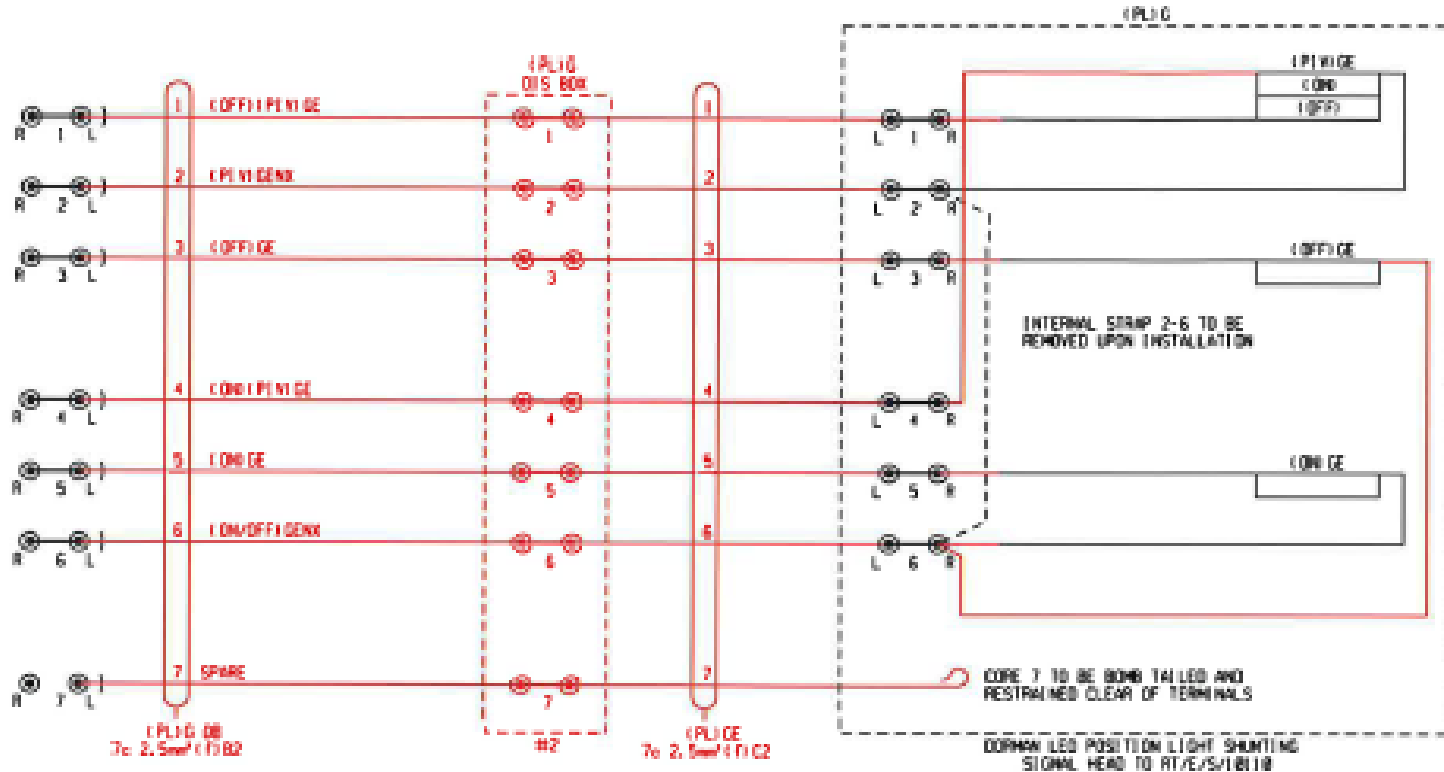
The circuits at the loc end were wired to T28354 and worked with new Dorman heads provided by the scheme but not with the existing heads

During testing it was found that there was a back feed presented at L1 and that was causing the TFM shutdown

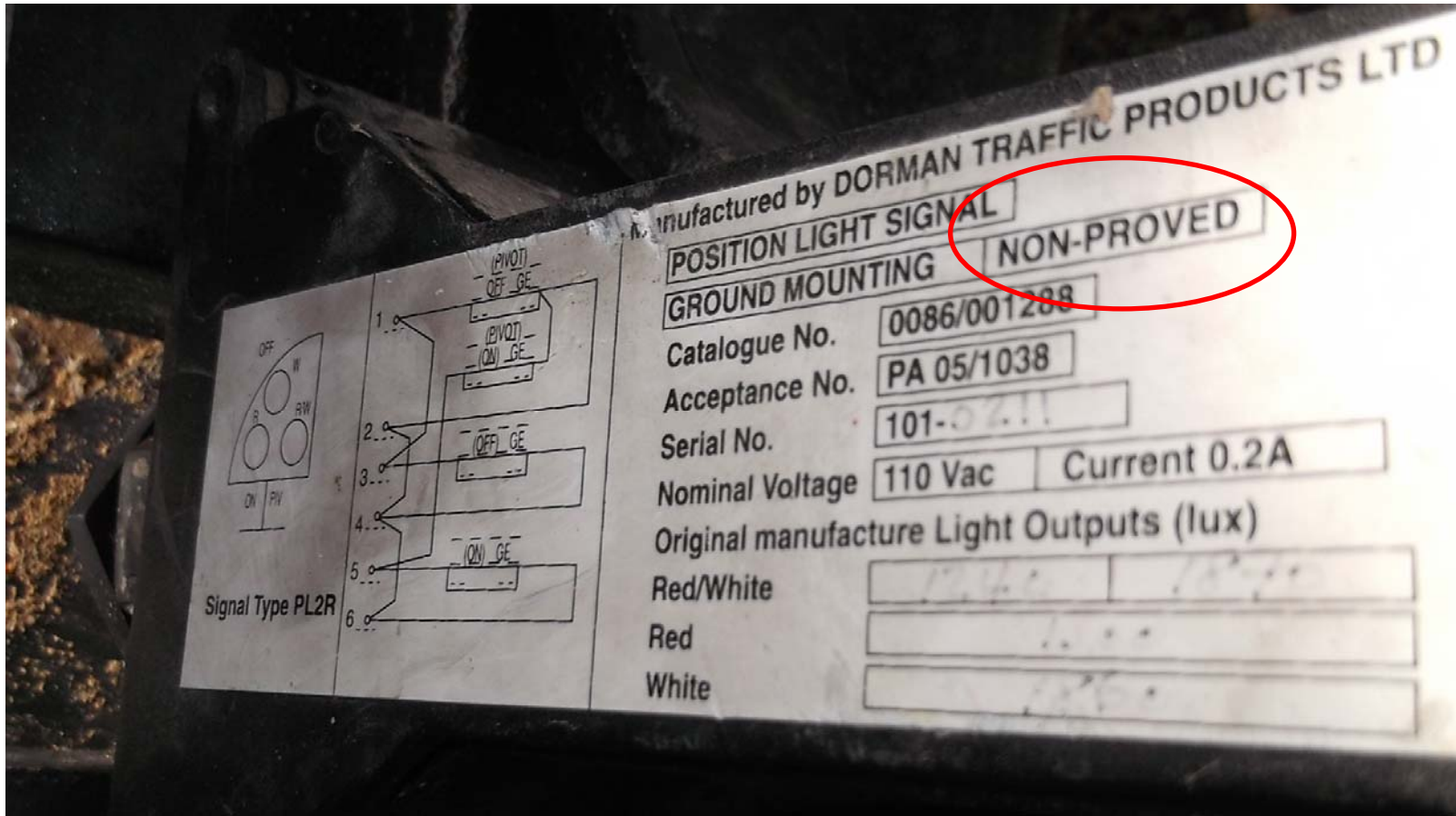
Relay controlled circuitry



TFM controlled circuitry



Identification of Non Proved version



Identification of Non Proved Version (2)

The non lamp proved versions have the terminal enclosure in the fixed half of the casing with an umbilical to the rear where the modules are mounted and the serial number identification plate states **NON PROVED**

The GPLs of the early non lamp proved type draw current of between 150 and 200mA per light source so the overall current is about half of the latter current proved units which have the (lamp out) current proving detection in each module

The non lamp proved units were manufactured circa 2001/2002 and sold via NRS. They had a production run of **approx 587** and the last units were despatched from Dorman on 27/6/2002. The lamp proved version came into production just before this date and the first units were despatched from Dorman on 16/4/2002

PADS and Serial Numbers

Obsolete 'Non-Proved' Version			Equivalent 'Proved' Version		Description
Former PADS No.	Dorman Part No.	Serial No. Range	PADS No.	Dorman Part No.	
86/1288	GPL2/RWRW/1/N/G	101-0001 to 101-0580	86/1306	GPL2/RWRW/1/P/G	R/W R/W GPLS - Ground Mounted
86/1289	GPL2/RWRW/1/N/O	102-0001 to 102-0007	86/1307	GPL2/RWRW/1/P/O	R/W R/W GPLS - Elevated
86/1290	GPL2/WOOW/1/N/G	103-0001 to 103-0007	86/1308	GPL2/WOOW/1/P/G	W/W Subsidiary Signal - Ground Mounted
86/1291	GPL2/WOOW/1/N/O	104-0001 to 104-0135	86/1309	GPL2/WOOW/1/P/O	W/W Subsidiary Signal - Elevated
86/1292	GPL2/RORO/1/N/G	None produced	86/1310	GPL2/RORO/1/P/G	R/R Limit of Shunt - Ground Mounted
86/1293	GPL2/RORO/1/N/O	None produced	86/1311	GPL2/RORO/1/P/O	R/R Limit of Shunt - Elevated
-	GPL2/YWYW/1/N/G	None produced	86/1312	GPL2/YWYW/1/P/G	Y/W Y/W GPLS - Ground Mounted
-	GPL2/YWYW/1/N/O	None produced	86/1313	GPL2/YWYW/1/P/O	Y/W Y/W GPLS - Elevated

Action Taken / Lessons Learnt

As a temporary arrangement L1 was disconnected for 3 signals and the other 4 signals were replaced with new proved Dorman heads

Post commissioning it is found that the PADS number shown on the head is obsolete and no longer listed

It is believed that the majority of the non lamp proved GPLs were supplied to the South East

Projects that are to re-control from Relay driven Dorman LED GPLs to TFM driven GPLs are advised to confirm the TYPE of re-controlled Dorman LED GPL devices as part of correlation / survey and where NON PROVED exist are to advise the asset owner of the need for renewal to the PROVED version

Further information...

For any further details or information please contact:

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