

Ringmaster Compact Ringswitch Mechanism Drive Bolt Inspection Medium Voltage Division Leeds

#### **Introduction**

The inspection procedure applies only to **Ringmaster type RN2c**, **RN6c and RE2c** that were manufactured from 17 November 2006 to 31 October 2009 with serial numbers between 100204905 and 100811684.

This procedure does not apply to Ringmaster type RN2c, RN6c and RE2c outside these dates of manufacture or serial number range.

This procedure applies only to the inspection of the ring switches. We recommend this procedure is carried out BEFORE AND AFTER each operation of one or both of the ring switches.

The date of manufacture and serial number can be found on the product data plate on the front of all the Ringmaster ring main units. Refer the photo below.

IMPORTANT: If a Motorpack has been fitted it must be switched OFF in the RTU before this inspection is carried out.

We recommend that the Motorpack is left switched OFF to prevent the Motorpack from being remotely operated until the Ringmaster has been repaired.

It is recommended to check both RSW1 (left hand) and RSW2 (right hand) ring switch at the same time even if it is only required to operate one of the ring switches after the inspection.



Data plate on the LV cabinet of the Ringmaster



Check revision against IBMS before use

#### Title

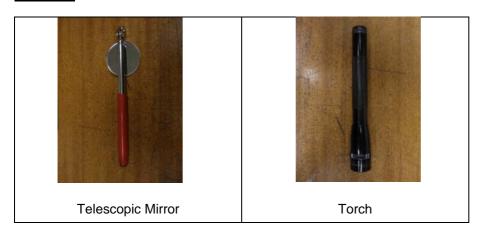
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#### 1. Health, Safety & Environment

This inspection can be carried out whilst the equipment is still energized. None of the external covers are being removed and NO MANUAL OPERATION shall be carried out during the inspection.

We recommend that only one person carries out the inspection at any one time and wears the appropriate Personal Protective Equipment required to enter an electrical substation.

#### 2. Tools



#### 3. Parts to be Inspected

Ref	Part Number	Description	Qty
1	4807713**	M8X60 CAP HD Bolt	2
2	2C83144**	SPECIAL NUT M8X12 Long	2
3	2C83128**	Drive Spacer (26.5mm Long)	2



M8 x 60mm cap head bolt



Drive spacer



Special nut



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### 4. Inspection of Ringmaster as described below

4.1 Ringmaster ring main Unit



4.2 Ringswitch I and 2

Do not operate the either of Ringswitch mechanisms from their current service position



4.3 Open the LV cabinet and search for loose pieces of hardware in all accessible locations





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- 4.4 Check the parts to be inspected are still correctly located in Ring switch 1 drive shaft using a mirror and torch
- 4.5 Repeat the check for the correct location of hardware on Ring switch 2

If any of the parts to be inspected described below cannot be seen or is not in the positions shown in the photos STOP and DO NOT operate the Ringmaster.





#### Check revision against

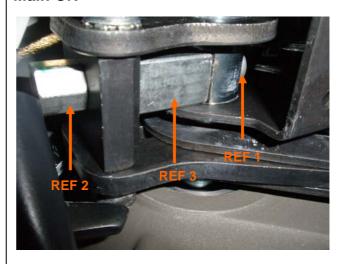
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## 4.6 **RSW1** Service position **Main selected Main ON**



## 4.7 Correct view of hardware **Main selected Main ON**

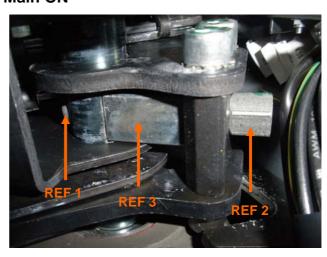


Main ON

## 4.8 **RSW2** Service position **Main selected Main ON**



## 4.9 Correct view of hardware Main selected Main ON



**Main ON** 

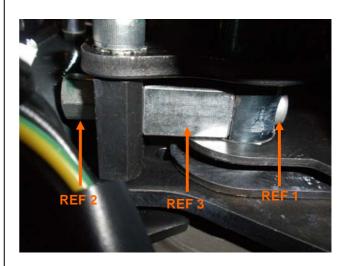


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## 4.10 **RSW1** Service position **Main selected OFF**



### 4.11 Correct view of hardware **Main selected OFF**

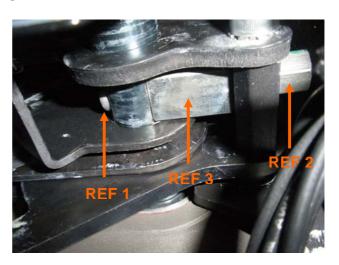


OFF

4.12 **RSW2** Service position **Main selected OFF** 



## 4.13 Correct view of hardware **Main selected OFF**

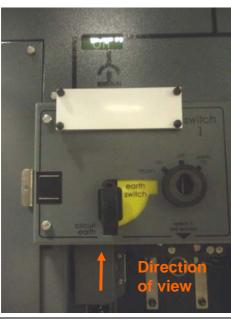


OFF

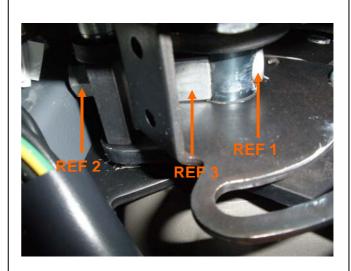


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## 4.14 **RSW1** Service position **Earth selected OFF**



## 4.15 Correct view of hardware **Earth selected OFF**

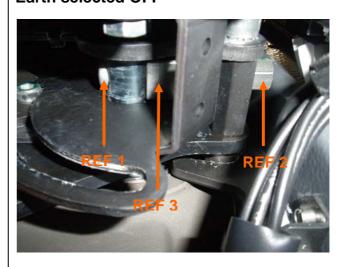


OFF

4.16 **RSW2** Service position **Earth selected OFF** 



4.17 Correct view of hardware **Earth selected OFF** 



OFF

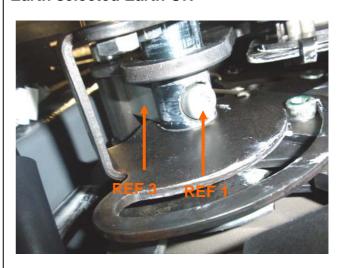


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## 4.18 **RSW1** Service position **Earth selected Earth ON**



## 4.19 Correct view of hardware **Earth selected Earth ON**

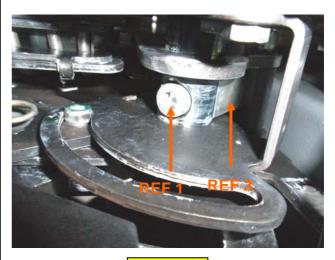


Earth ON

4.20 **RSW1** Service position **Earth selected Earth ON** 



## 4.21 Correct view of hardware **Earth selected Earth ON**



Earth ON



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5.0 After the inspection has been carried out the LV cabinet door should be closed.

WARNING - IF THE PARTS TO BE INSPECTED ARE NOT FOUND IN THE CORRECT LOCATION THE RINGMASTER MUST NOT BE OPERATED.

Please follow the instructions in the Ringmaster Product Safety Notice for further action to be taken.