

COUNTERBALANCE ROUTINE MAINTENANCE

COUNTERBALANCE REF: Raise & Lower Spring (RLS)

WE STRONGLY RECOMMEND THAT THESE INSTRUCTIONS AND THE HEALTH & SAFETY REQUIREMENTS SHEET SUPPLIED WITH THE UNIT ARE READ CAREFULLY BEFORE ATTEMPTING TO CARRYOUT ANY MAINTENANCE ON THIS EQUIPMENT.

GENERAL

These units consist of a compression spring complete with integral steel linkage and wheels. The springs are individually colour coded, to ensure that the correct unit is selected for the column to be lowered. They are used on Ø168 cam operated columns only.

There are five spring counterbalance units available, the selection of which depends on column height and headload. The units are as follows:-

RLS0	- Colour coded yellow .	Rating 1128Nm	Weight 16kg	(Safe Working Load at 5m = 11kg)
RLS0X	- Colour coded white .	Rating 1500Nm	Weight 16.5kg	(Safe Working Load at 5m = 19kg)
RLS1	- Colour coded red .	Rating 1960Nm	Weight 17.5kg	(Safe Working Load at 5m = 28kg)
RLS2	- Colour coded blue .	Rating 2550Nm	Weight 18kg	(Safe Working Load at 5m = 40kg)
RLS3	- Colour coded green .	Rating 3180Nm	Weight 20kg	(Safe Working Load at 8m = 17kg)

The rating refers to the maximum bending moment about the hinge of the column. For details of the full range of **safe working loads** refer to the manufacturer's column data sheet supplied with the columns. **Note that the safe working load for a counterbalance unit varies with column height.**

PRELIMINARY CHECKS BEFORE USE

Due to its irregular usage it is difficult to specify a periodic maintenance schedule for this equipment. However we do recommend that the following simple checks be carried out at 12 monthly intervals and any items found to be defective must be replaced before the unit can be used.

- 1 Examine the trolley framework for damage. Check that the wheels are operating and retained in position.
- 2 Ensure the locating hooks are secure, undamaged and of the correct profile.
- 3 Check that the spring has not taken a permanent set by measuring the free length of the spring. This is 508mm with a tolerance of +6mm to -3mm. **Springs with a free length less than 500mm must not be used.**
- 4 Check the condition of the top pressure pad.
- 5 Examine the operating lever for damage. The keyway and the bar should both be clean and free from bruises.

ENSURE THE CORRECT MANUAL HANDLING TECHNIQUES ARE USED AT ALL TIMES WHEN LIFTING THE UNIT ONTO OR OFF THE LIGHTING COLUMN.

IF THE UNIT FAILS ANY OF THE ABOVE REQUIREMENTS IT MUST NOT BE USED.

FOR FURTHER ADVICE CONTACT THE ABACUS TECHNICAL DEPARTMENT.



SPRING COUNTERBALANCE UNIT