

USE OF LIGHTING COLUMN JACKS

No – 22.24

During a recent site inspection it was observed that medium duty 8m columns had been lowered and raised using a counterbalance spring jack that was incorrectly rated for the task. The 8m column had been lowered \ raised using a Red spring when it should have been lowered \ raised using a Blue or Green spring (depending on the head load).

Counterbalance Product Code	Column Height	Safe Working Load (kg)	Counterbalance Weights (kg)*
RLS168 - Yellow	4m	18kg	22
	5m	10kg	
RLS168 - White	4m	28kg	23
	5m	19kg	
	6m	11kg	
RLS168 - Red	4m	38kg	23.5
	5m	28kg	
	6m	19kg	
RLS168 - Blue	4m	53kg	25
	5m	40kg	
	6m	29kg	
	8m	11kg	
RLS168 - Green	8m	17kg	26.5
RLH168 Hydraulic (Small)	4m	53kg	40
	5m	40kg	
	6m	29kg	
	8m	17kg	
RLH1M Hydraulic (Large)	6m	62kg	49*
	8m	62kg	
	10m	32kg	
	12m	11kg†	

All personnel are reminded...

Only ever raise or lower columns if you have been **trained** to use the raise and lower counterbalance units.

Spring counterbalance units are colour coded and each unit has a designated Safe Working Load.

The Safe working load refers to the head weight and not the column itself the head weight is made up of the lighting bracket and lighting unit and any other furniture that is attached to the column.

For example...

An 8m column with a head load of up to 11kg would require a **Blue** spring unit.

An 8m column with a head load of up to 17kg would require a **Green** spring unit.

An overloaded spring will damage the unit and result in the operative having to assist with raising / lowering the column manually causing an increased risk of injury due to manual handling.

When using Spring counterbalance jacks ensure you have the correct spring for the SWL as per the above table.

Personnel must never attempt to raise or lower a column by hand under any circumstances

When planning works that involve the raising and lowering of lighting columns, preference should be given to the use of RLH168 hydraulic column raising and lowering equipment as it covers all spring capabilities and eliminates the chance of selecting an incorrect spring jack for the loads imposed by the various columns.

When installing new columns, it is not possible to attach standard raise/lower units in the lowered position, therefore Abacus strongly advise hinged columns are installed in the same manner as a conventional column i.e. Use a crane to lift the column into place. KH Engineering have some specialist column raising equipment that can be mounted to columns in the lowered position, this can be used when installing a new column and allows the column to be raised without the need for a crane.

Please note...

An 8m column with a 17kg head unit will create a maximum moment about the hinge of **>324Kg**

An 8m column with a 11kg head unit will create a maximum moment about the hinge of **>260Kg**

These loads mean it is not safe to lower or raise columns by hand and specialist jacks or equipment must therefore be used at all times.