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Assess the condition of each Daywalk bolt before use. Discard bolts with visible signs of damage, including (but not limited to):

- Bending, damage or deformation of the threaded rod, washer plate or base plate
- Missing or damaged roll pins or spring washer
- Cracked or damaged welds, base plate or thread body
- Damaged or stripped threads on the bolt or nut
- Galvanisation or coating peeling off or exposed base metal
- Variation in the thread pitch in diameter or width for the nut or thread body
- Sharp or flaky threads on the nut or thread body

Bolts are recommended by the manufacturer to be single use only.

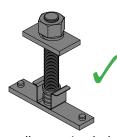


This Guide

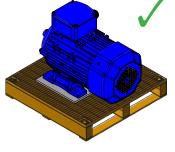
- Covers singular items secured to a Daywalk 2t rated steel pallet (SKU 13-PSGG1160) by Daywalk securing bolts, transported by road in Australia
- Meets the requirements of the Performance Standard forces specified in Schedule 7 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2018
- · Does not cover restraint of the combined pallet and item on the truck

Key Elements

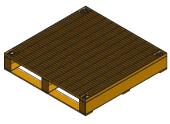
- Equipment must be in good working order
- Damaged pallets should be inspected by a competent person to confirm their structural capacity before use
- \checkmark Ensure all pallet bearers are in contact with the deck of the truck
- Place rubber with minimum coefficient of friction of 0.6 and minimum load capacity of 6.0 N/mm² between the item and pallet.
- Rubber must have capacity to withstand load without failing (i.e. crushing, tearing or disintegrating etc.)
- X No low friction surfaces (i.e. steel on steel)
- Rubber may be required between the pallet and the deck of the truck to permit application of adequate restraint
- Use Daywalk securing bolts to attach the itemto the pallet
- Bolts must be tightened to the required torque specified in Table 5
- Mounting points on the item must be strong enough to withstand the applied forces (Performance Standard + bolt torque)
- Do not apply lashings over the item this will apply additional load to the pallet and may overload it
- Use spreader plates where required to increase the load capacity of the pallet



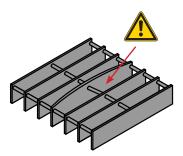
Daywalk securing bolt



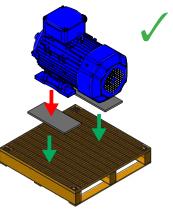
Spreader plate



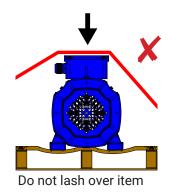
Daywalk 2t Rated Pallet



Damaged load bars



Rubber between pallet and item

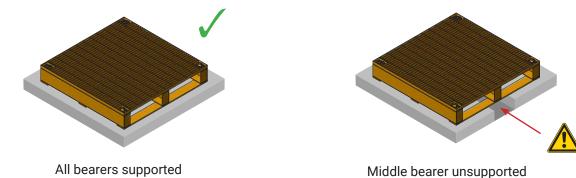


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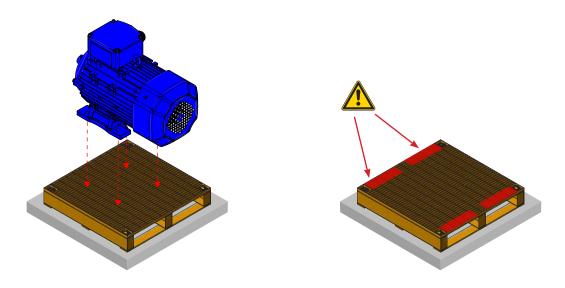
How to Use

Place the pallet on a rigid surface and ensure all bearers of the pallet are supported

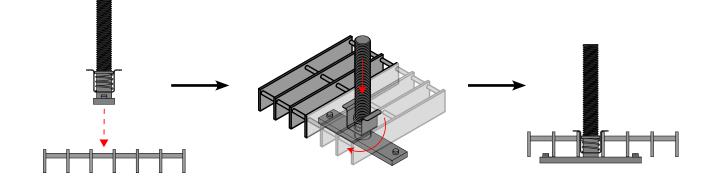


Identify locations where securing bolts can be placed to secure the item to the pallet. The item should be placed such that the centre of gravity is centred on the pallet.

The load capacities identified in this document do not apply to the load bars adjacent to the lashing points - contact Daywalk for more information



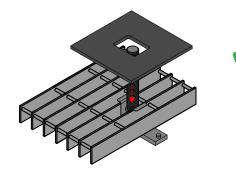
/ Insert bolt between mesh, rotate and hold in place with the spring clip at each location



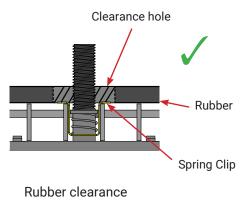
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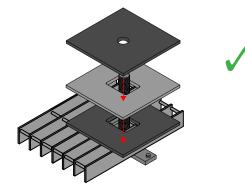
- Place rubber over bolt at each location
- Rubber must have a hole cut in it to clear the spring clip



Rubber strip over bolt

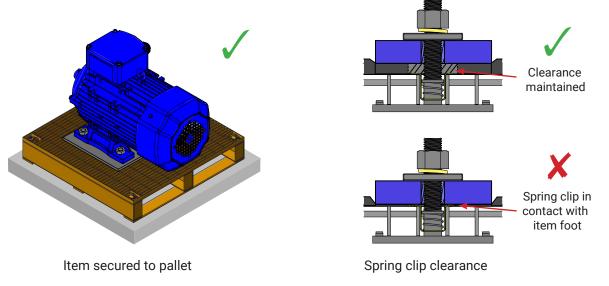


If spreader plates are required, place spreader plate followed by another piece of rubber over bolt at each location





- Load item onto pallet and secure by tightening bolts to the required torque
- Rubber must have capacity to prevent contact between the item (or spreader plate) and the spring clip under the applied load



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Load Capacity - Forklift Lift

- The load capacity of the pallet depends on the total number of contact points and the area of each
- Load capacity is also affected by the stability of the item and how it is secured Table 1 must be read in combination with Tables 2, 3 and 4
- The capacity of the pallet is determined by identifying the relevant value from each Table (1 - 4) and taking the lesser of the four

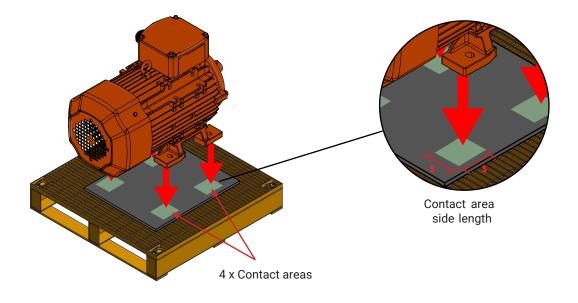


Table 1: Maximum Load Capacity (not for crane lift)

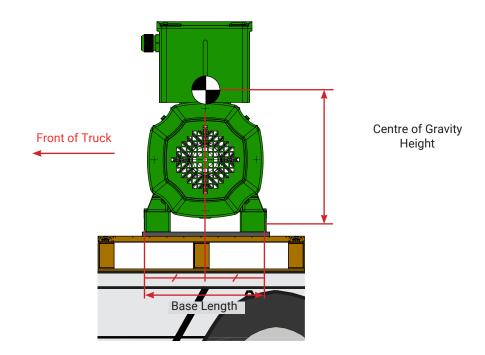
Contact Area Side Length (S)	Number of Contact Areas				
	2	3	4	6	
100 - 125mm	170kg	255kg	340kg	510kg	
126 - 150mm	265kg	395kg	530kg	795kg	
151 - 175mm	380kg	570kg	765kg	1145kg	
250 x 250mm spreader plate	1045kg	1575kg	2000kg	2000kg	
400 x 150mm spreader plate	1010kg	1515kg	2000kg	2000kg	
400 x 400mm spreader plate	2000kg	2000kg	2000kg	2000kg	
500 x 350mm spreader plate	2000kg	2000kg	2000kg	2000kg	



Load Capacity - Load Stability

- The maximum load capacity of the pallet is also dependent on the stability of the item in the forwards and sideways directions (i.e. the base width, base length and centre of gravity height)
- Tables 2 and 3 specify the maximum pallet capacity based on load stability in the forwards and sideways directions respectively

Items may topple **forwards** if they have a narrow **base length**



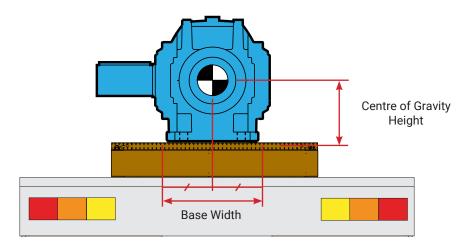
The maximum **forwards** toppling load capacity for items with a centre of gravity at the mid point of the base length is shown in Table 2

Table 2: CoG Limitations - Forwards Toppling

Base Length	Centre of Gravity Height (mm)				
	200 - 400	401 - 600	601 - 800	801 - 1000	1001 - 1200
400 - 500mm	160kg	65kg	40kg	30kg	25kg
501 - 600mm	340kg	100kg	60kg	40kg	30kg
601 - 700mm	1435kg	160kg	80kg	55kg	40kg
701 - 800mm	2000kg	255kg	115kg	70kg	55kg
801 - 900mm	2000kg	480kg	160kg	95kg	65kg
901 - 1000mm	2000kg	1440kg	225kg	120kg	80kg
1001 - 1100mm	2000kg	2000kg	340kg	160kg	100kg
1101 - 1200mm	2000kg	2000kg	585kg	210kg	125kg



Items may topple sideways if they have a narrow base width



The maximum **sideways** toppling load capacity for items with a centre of gravity at the mid point of the base width is shown in Table 3

Table 3: CoG Limitations - Sideways Toppling

Base Width	Centre of Gravity Height (mm)				
	200 - 400	401 - 600	601 - 800	801 - 1000	1001 - 1200
400 - 500mm	2000kg	190kg	95kg	60kg	45kg
501 - 600mm	2000kg	480kg	160kg	95kg	65kg
601 - 700mm	2000kg	2000kg	285kg	140kg	95kg
701 - 800mm	2000kg	2000kg	670kg	220kg	130kg
801 - 900mm	2000kg	2000kg	2000kg	380kg	190kg
901 - 1000mm	2000kg	2000kg	2000kg	860kg	285kg
1001 - 1100mm	2000kg	2000kg	2000kg	2000kg	480kg
1101 - 1200mm	2000kg	2000kg	2000kg	2000kg	1055kg



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13-PSGG1160 Heavy Duty Steel Pallet User Guide

Load Capacity - Strapping

M Strapping the item to the pallet can apply additional load to the pallet and reduce its capacity

Applying strapping through the mesh of the pallet, close to the base of the item, will not affect the capacity of the pallet

Strapping to the lugs or through the mesh at a distance from the item will reduce the capacity of the pallet to the values shown in Table 4

Do not strap around the cross rods - only strap around the load bars

PET strapping is preferred over steel strapping

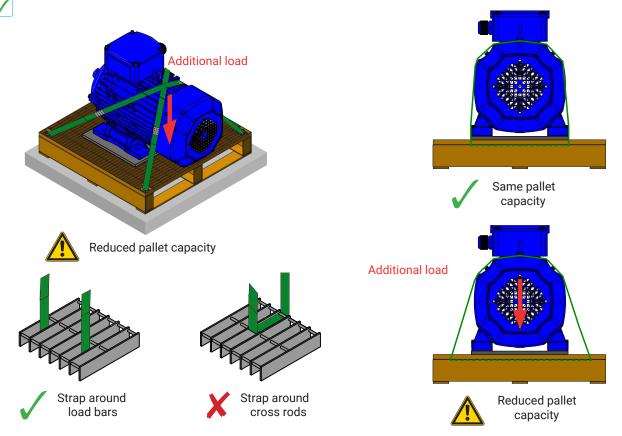


Table 4: Maximum Load Capacity - Reduced by Strapping

Contact Area Side Length (S)	Number of Contact Areas				
	2	3	4	6	
100 - 125mm	85kg	125kg	170kg	255kg	
126 - 150mm	130kg	195kg	265kg	395kg	
151 - 175mm	190kg	285kg	380kg	570kg	
250 x 250mm spreader plate	530kg	795kg	1060kg	1595kg	
400 x 150mm spreader plate	510kg	765kg	1020kg	1530kg	
400 x 400mm spreader plate	1360kg	2000kg	2000kg	2000kg	
500 x 350mm spreader plate	1485kg	2000kg	2000kg	2000kg	

DESIGN > LOGISTICS

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Required Bolt Torque

The required bolt torque for Daywalk bolts is shown in Table 6

Exceeding the bolt torques specified below may damage the rubber between the item and the pallet

A spring washer must always be placed between the nut and washer plate to prevent loosening during transport

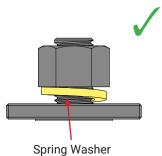
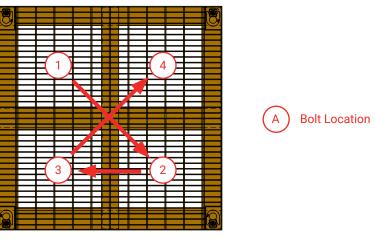


Table 6: Required Bolt Torque

Item Weight	Number of Bolts			
	2	3	4	6
0 - 500kg	20 Nm	20 Nm	20 Nm	20 Nm
501 - 1000kg	30 Nm	20 Nm	20 Nm	20 Nm
1001 - 1500kg	45 Nm	30 Nm	25 Nm	20 Nm
1501 - 2000kg	55 Nm	40 Nm	30 Nm	20 Nm

Bolt Torque Sequence

- Bolts should be torqued in a 'criss-cross' sequence over multiple passes to ensure all bolts achieve the required torque
 - Incrementally increase the applied torque with each pass until the required torque is achieved



Example Bolt Torque 'Criss-Cross' Sequence

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