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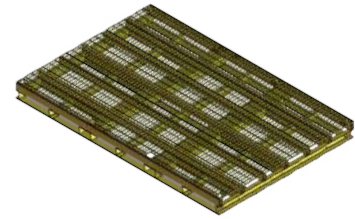
*Assess the condition of each Daywalk bolt before use. Discard bolts with visible signs of damage, including (but not limited to):*

- *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

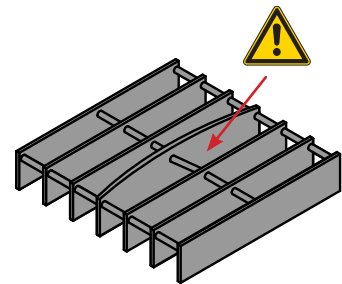
- Covers singular items secured to a Daywalk 8t rated medium duty steel pallet (SKU 13-PMGG3500-2320) by Daywalk securing bolts, transported by road in Australia
- Meets the requirements of the Performance Standard forces specified in Schedule 7 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2018
- Does not cover restraint of the combined pallet and item on the truck



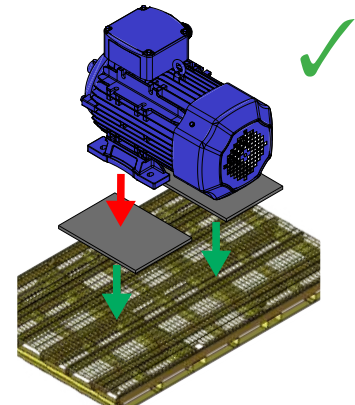
Daywalk 8t  
Rated Medium  
Duty Pallet

## Key Elements

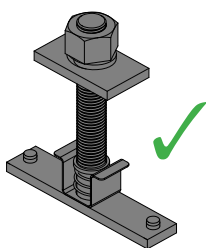
- ✓ Equipment must be in good working order
- ⚠ Damaged pallets should be inspected by a competent person to confirm their structural capacity before use
- ✓ Ensure all pallet bearers are in contact with the deck of the truck
- ✓ Place rubber with minimum coefficient of friction of 0.6 and minimum load capacity of 6.0 N/mm<sup>2</sup> between the item and pallet
- ✓ Rubber must have capacity to withstand load without failing (i.e. crushing, tearing or disintegrating etc.)
- ✗ 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 item to the pallet
- ✓ Bolts must be tightened to the required torque specified in Table 4
- ✓ 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



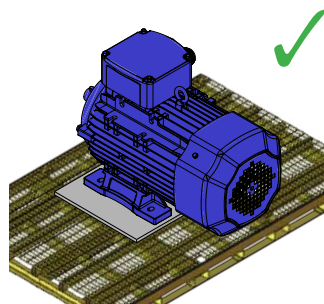
Damaged load bars



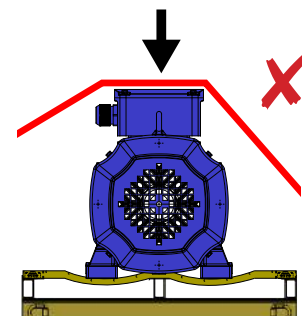
Rubber between  
pallet and item



Daywalk securing bolt



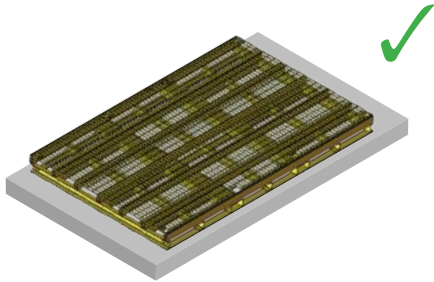
Spreader plate



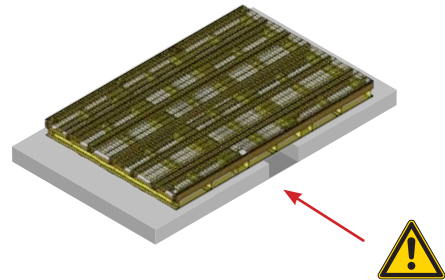
Do not lash over item

## How to Use

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



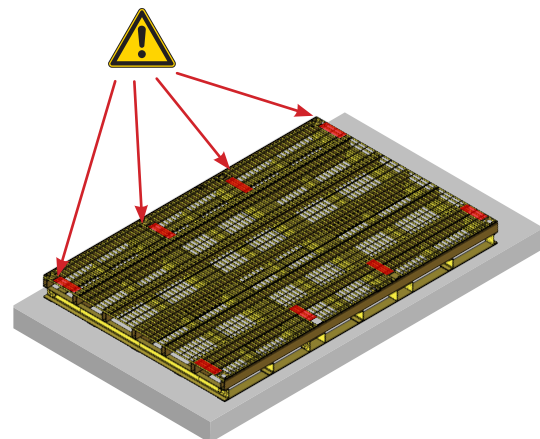
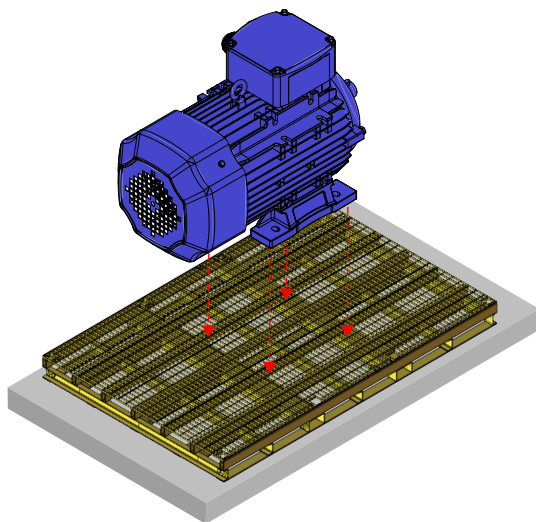
All bearers supported



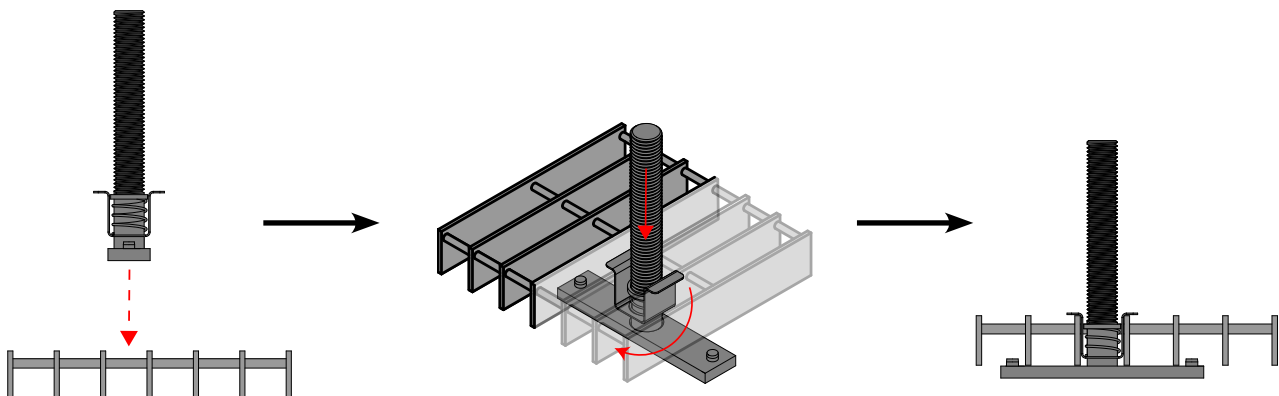
Middle bearers unsupported

- ✓ 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.

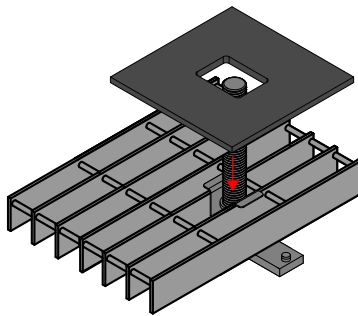
- ⚠ The load capacities identified in this document do not apply to the load bars adjacent to the lashing points - contact Daywalk for more information



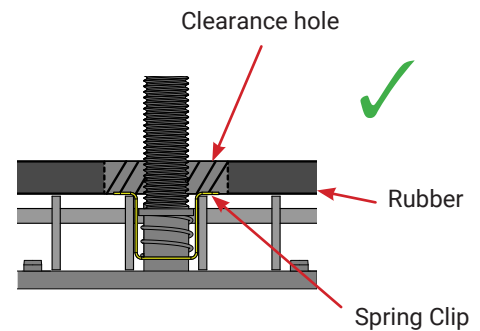
- ✓ Insert bolt between mesh, rotate and hold in place with the spring clip at each location



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

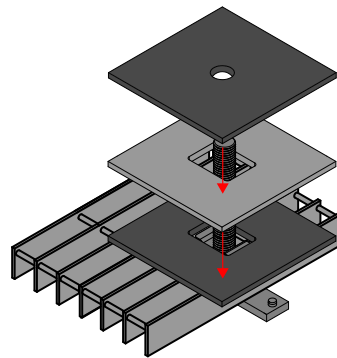


Rubber strip over bolt



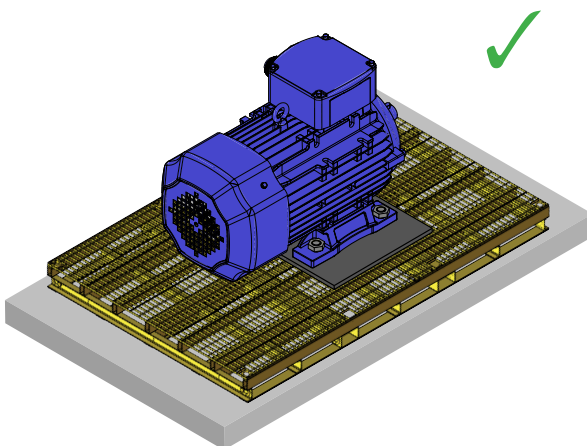
Rubber clearance

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

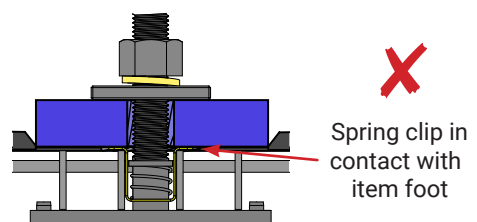
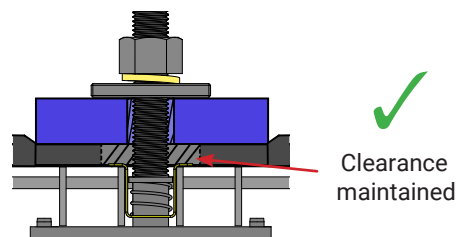


Spreader plate

- ✓ 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



Item secured to pallet



Spring clip clearance

## 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 - Table 1 must be read in combination with Tables 2 and 3
- ✓ The capacity of the pallet is determined by identifying the relevant value from each Table (1, 2 and 3) and taking the lesser of the three
- ✓ Only lift the pallet with forklift tyres in the tyne pockets - do not locate tyres in any other position
- ✗ Medium duty pallets are not suitable for crane lifting

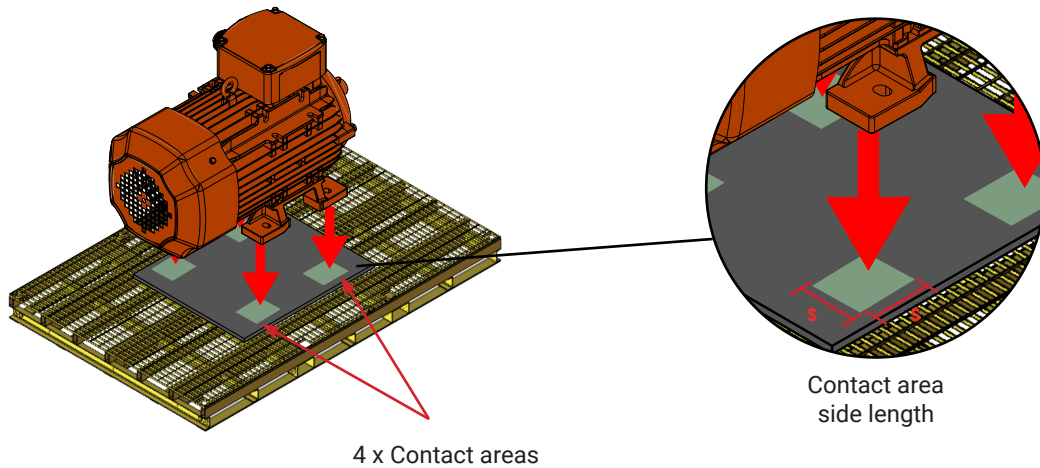


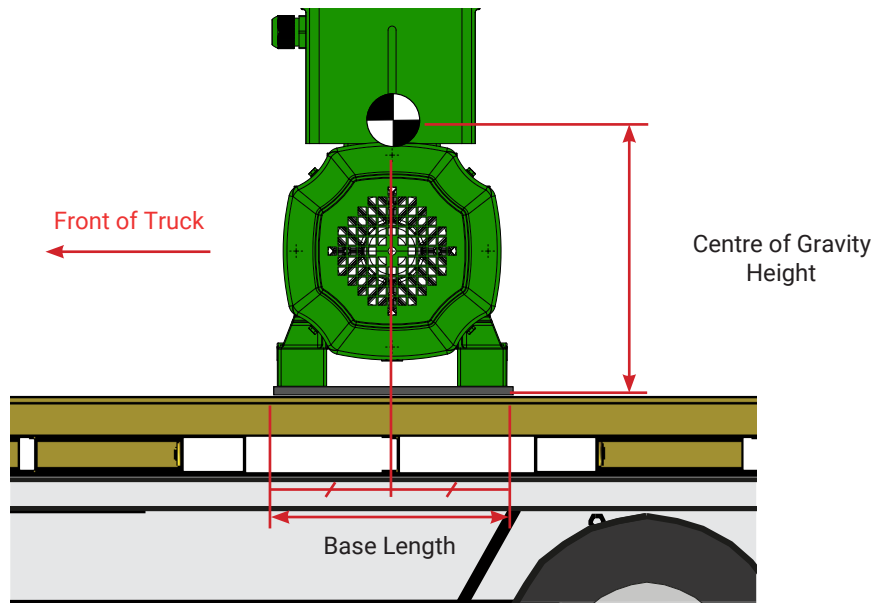
Table 1: Maximum Load Capacity (not for crane lift)

Contact Area Side Length (S)	Number of Contact Areas			
	2	3	4	6
125 - 150mm	1105kg	1655kg	2210kg	3315kg
151 - 175mm	1590kg	2390kg	3185kg	4780kg
176 - 200mm	2165kg	3250kg	4335kg	6505kg
201 - 225mm	2830kg	4245kg	5665kg	8000kg
250 x 250mm spreader plate	4410kg	6615kg	8000kg	8000kg
400 x 150mm spreader plate	4200kg	6300kg	8000kg	8000kg
400 x 400mm spreader plate	8000kg	8000kg	8000kg	8000kg
500 x 350mm spreader plate	6200kg	8000kg	8000kg	8000kg



## 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**

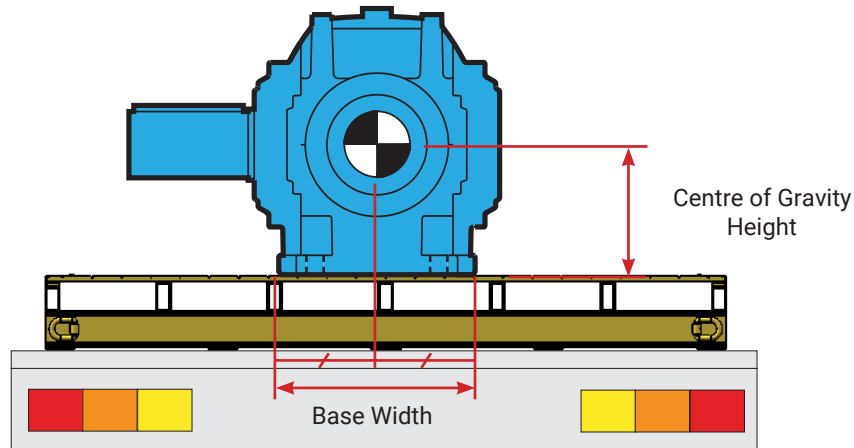


- ✓ The maximum **forwards** toppling load capacity for items with a centre of gravity at the mid point of the base length is shown in Table 2

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	440kg	190kg	120kg	85kg	70kg
501 - 600mm	950kg	285kg	170kg	120kg	90kg
601 - 700mm	3985kg	440kg	230kg	155kg	120kg
701 - 800mm	8000kg	715kg	320kg	205kg	150kg
801 - 900mm	8000kg	1330kg	440kg	265kg	190kg
901 - 1000mm	8000kg	3990kg	630kg	340kg	230kg
1001 - 1100mm	8000kg	8000kg	950kg	440kg	285kg
1101 - 1200mm	8000kg	8000kg	1625kg	585kg	355kg

 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	8000kg	530kg	265kg	175kg	130kg
501 - 600mm	8000kg	1330kg	440kg	265kg	190kg
601 - 700mm	8000kg	8000kg	795kg	395kg	265kg
701 - 800mm	8000kg	8000kg	1860kg	620kg	370kg
801 - 900mm	8000kg	8000kg	8000kg	1060kg	530kg
901 - 1000mm	8000kg	8000kg	8000kg	2390kg	795kg
1001 - 1100mm	8000kg	8000kg	8000kg	8000kg	1330kg
1101 - 1200mm	8000kg	8000kg	8000kg	8000kg	2925kg

## Required Bolt Torque

- ✓ The required bolt torque for Daywalk bolts is shown in Table 4
- ⚠ 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

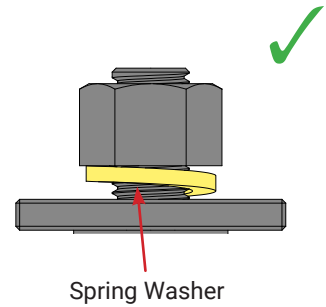
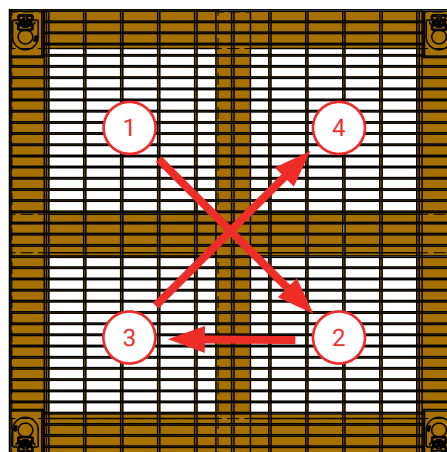


Table 4: Required Bolt Torque

Item Weight	Number of Bolts			
	2	3	4	6
0 - 2000kg	55 Nm	40 Nm	30 Nm	20 Nm
2001 - 4000kg	110 Nm	75 Nm	55 Nm	40 Nm
4001 - 6000kg	min. 3 bolts	110 Nm	85 Nm	55 Nm
6001 - 8000kg	min. 4 bolts required		110 Nm	75 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



(A) Bolt Location

Example Bolt Torque 'Criss-Cross' Sequence