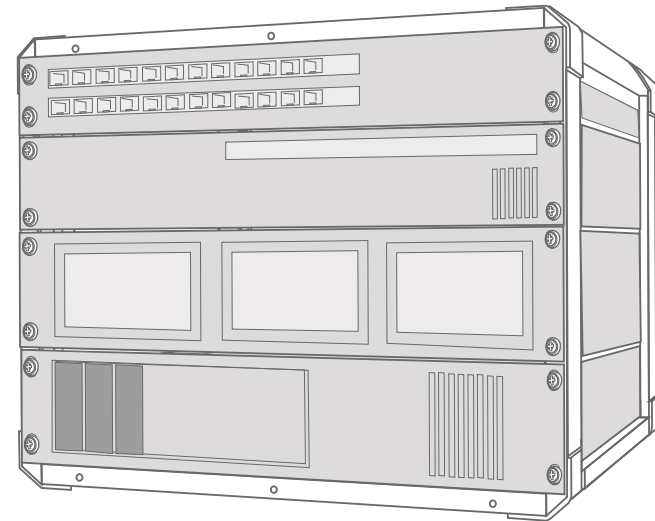
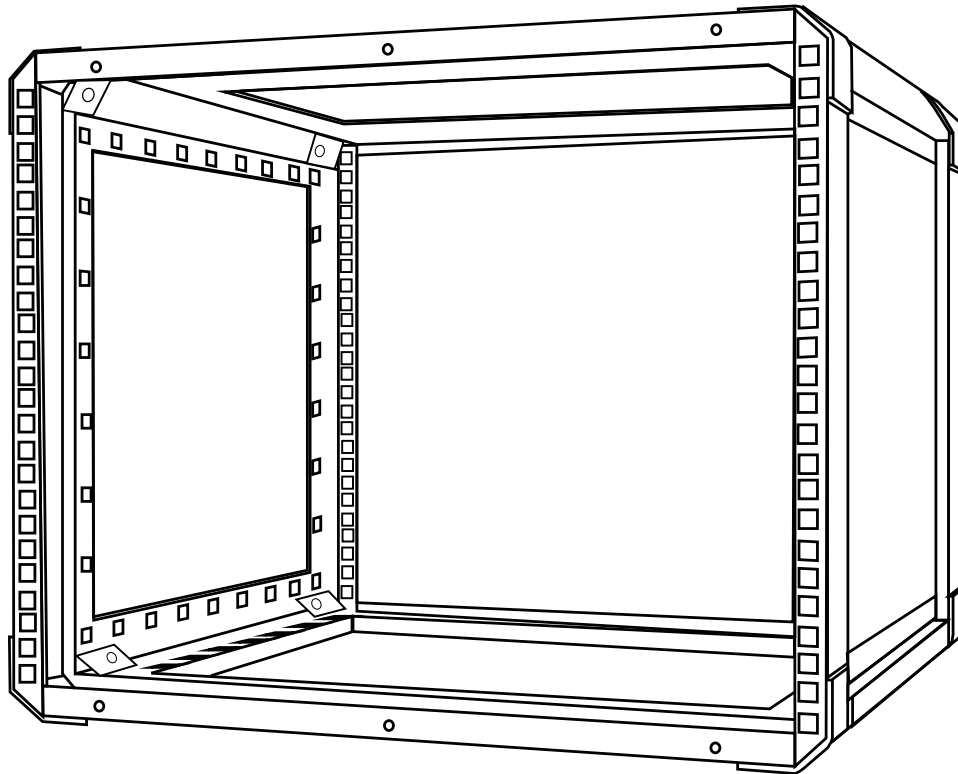
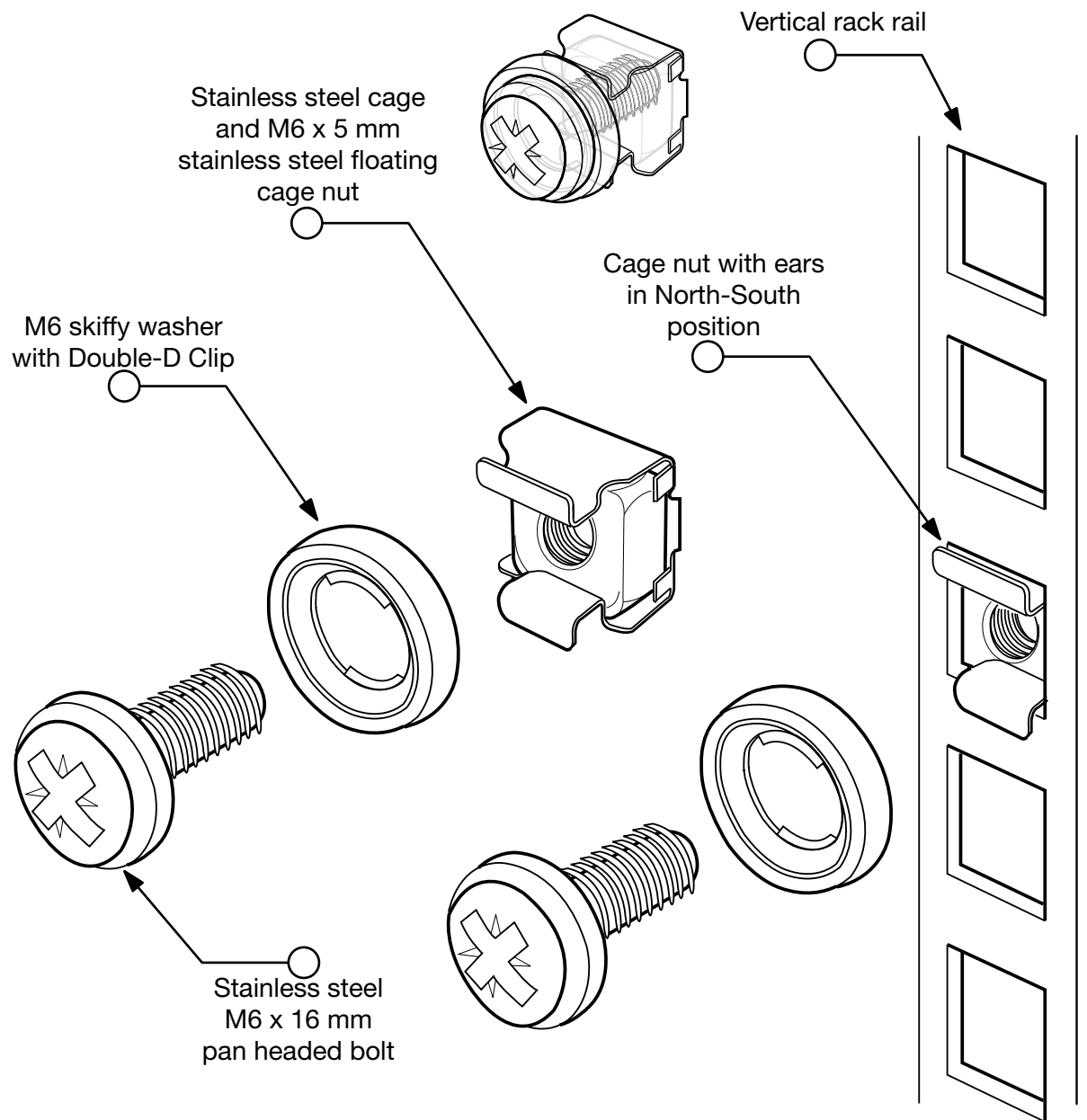


19" RACK CHASSIS ASSEMBLY GUIDE

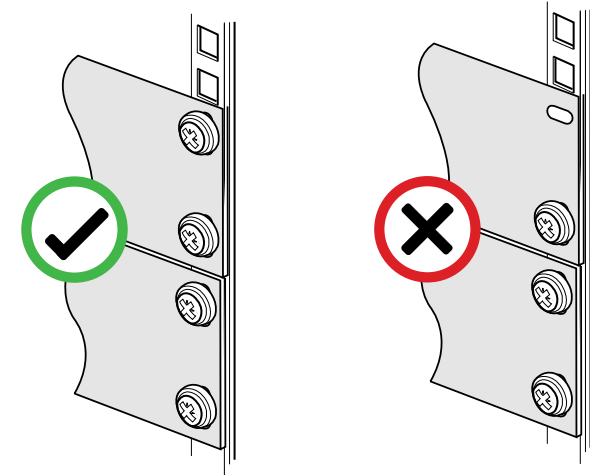


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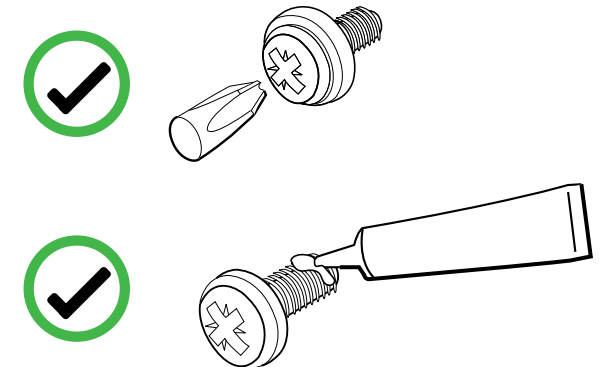
SELECTING APPROPRIATE FIXINGS



- Ensure that the correct CP Cases' authorised cage nuts are installed into the vertical rack rails
- CP Cases recommend that sufficient cage nuts are fitted to correspond with any fixing holes on the front of equipment

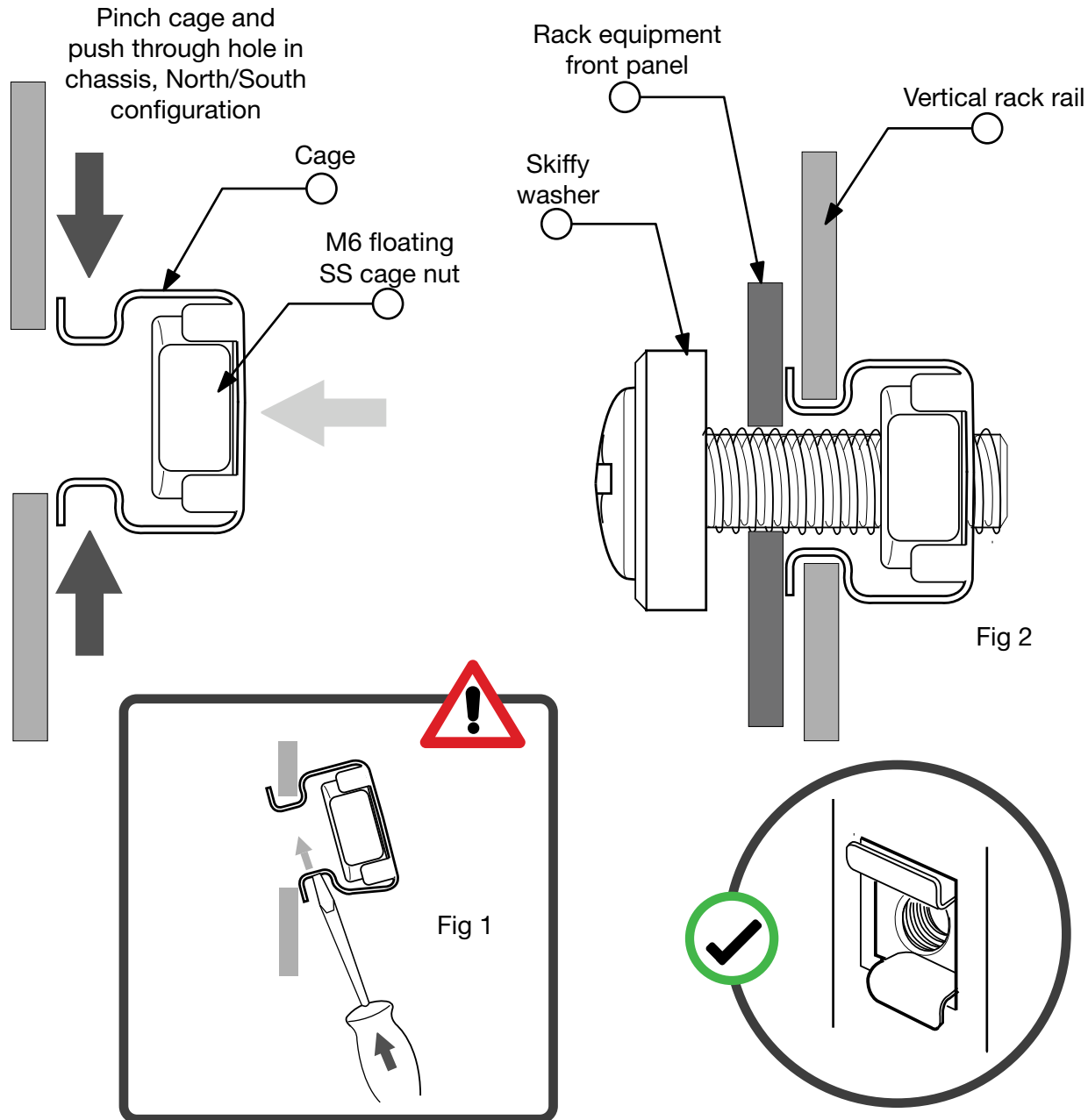


- CP Cases recommend that equipment is fixed with one bolt/ cage nut for every available fixing hole
- Do not leave any front panel holes without fixings
- Ensure skiffy washers are fitted properly to capture the head of the screw
- Use an appropriate crosshead screwdriver for fixing



- Ensure bolts M6 Pan head bolts are tightened securely and use threadlock if severe shock or vibration is likely to be encountered

FITTING THE CAGE NUTS CORRECTLY



- Ensure that the correct CP Cases' authorised cage nuts are installed into the vertical rack rails
- CP Cases recommend that cage nuts are fitted with the ears pointing North to South
- If a cage nut insertion/extraction tool is not available, a screwdriver blade may assist in inserting the cage nut into the vertical rack rail (Fig 1)
- Ensure that the threaded part of the M6 x 16 mm pan headed bolt passes completely through the M6 stainless steel floating nut (Fig 2)



CARE MUST BE TAKEN TO PREVENT ACCIDENTAL SLIPPAGE

LOADING EQUIPMENT INTO RACK - I

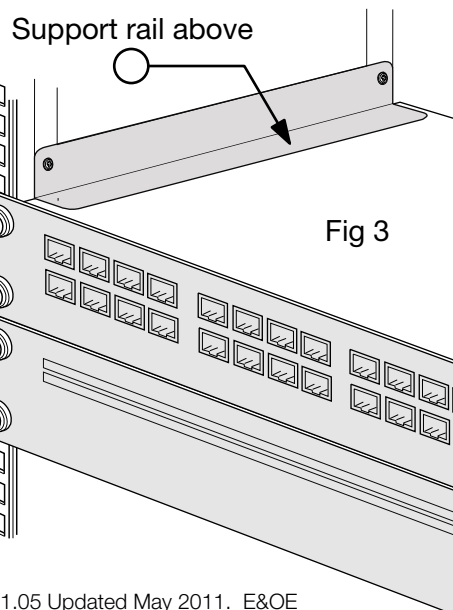
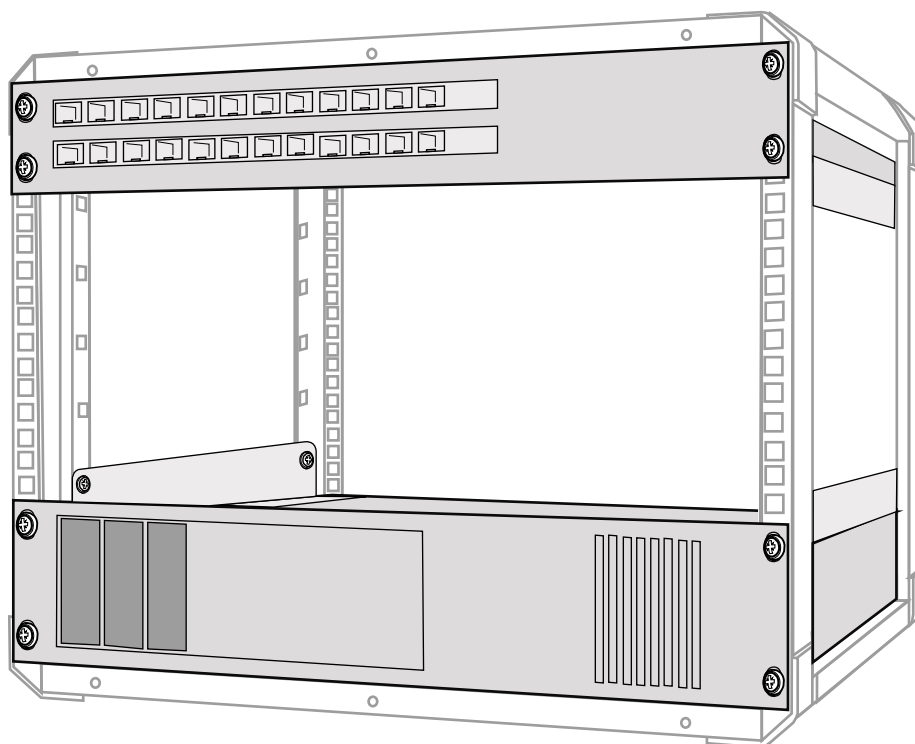
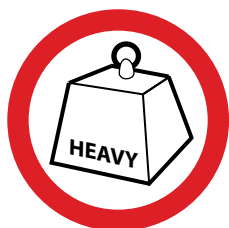


Fig 3

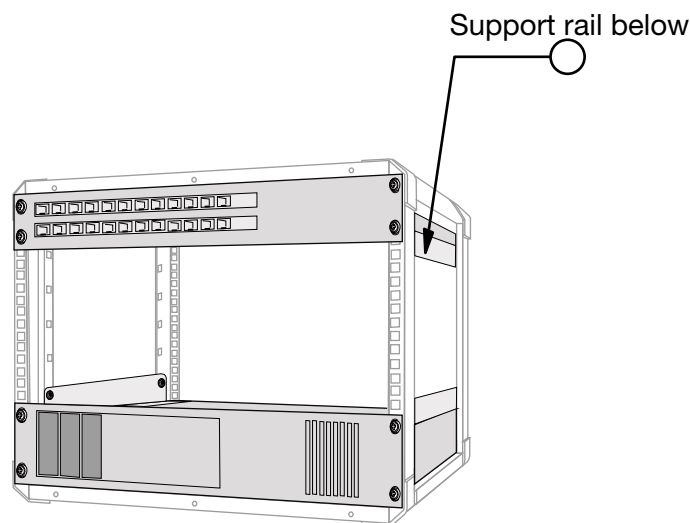
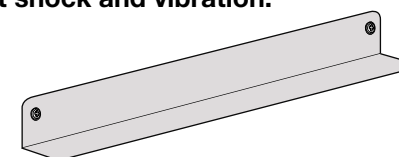


Fig 4

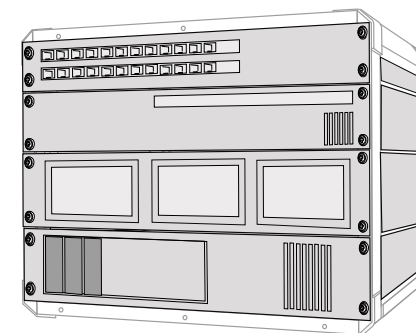
- When loading equipment into the chassis, every endeavour should be made to position the heavier items at the bottom of the chassis and lighter items towards the top
- CP Cases recommend the use of support rails attached to the chassis in order to restrain equipment. Support rails ensure that the rack-mounted equipment is securely clamped, cannot move or vibrate in any direction and will withstand shock or drop hazard

This Best Practice is imperative in ensuring your equipment is protected against shock and vibration.



Sliding rail kits should be compatible with the rack chassis and must be robust enough to withstand shock, drops and vibration

- Use of support rails above and below the equipment (Figs 3 & 4) will ensure equipment is restrained from moving vertically in the chassis when it is not fully populated



- For heavy equipment and/or deep items of equipment (over 400 mm deep), it is strongly recommended that customised bracketry be designed and manufactured to completely secure the items in the chassis
- Ensure there are no projections (wiring/looms/fans) that protrude outside the envelope of the chassis, which may inhibit the sway space and impede the free travel between the chassis and the outer rack body when the rack is dropped and the chassis reaches full excursion (Figs 6 & 7 below)

* Support rail shown above is Part Number # AASR48, one of pair for 480 mm deep rack. Similar rails are available for chassis 610 mm, 740 mm and 870 mm deep.

LOADING EQUIPMENT INTO RACK - 2

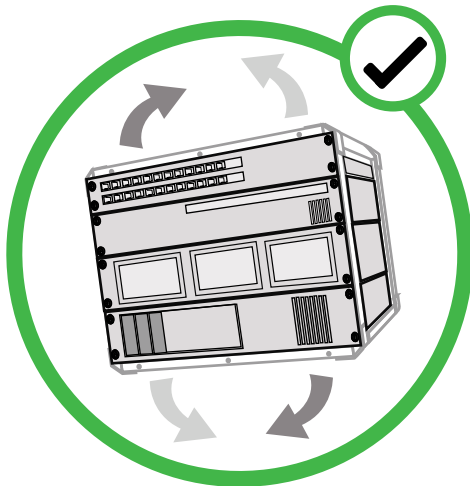
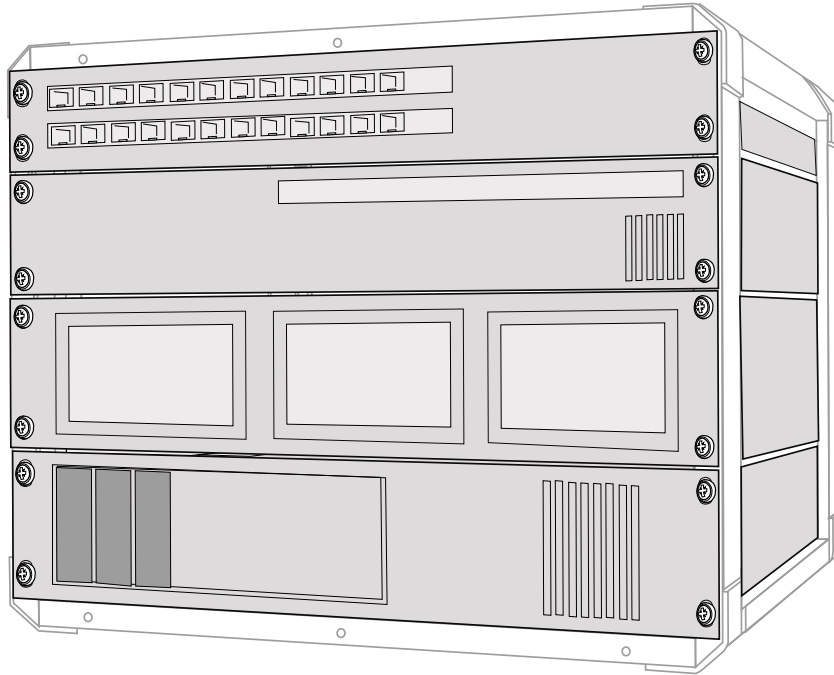


Fig 5

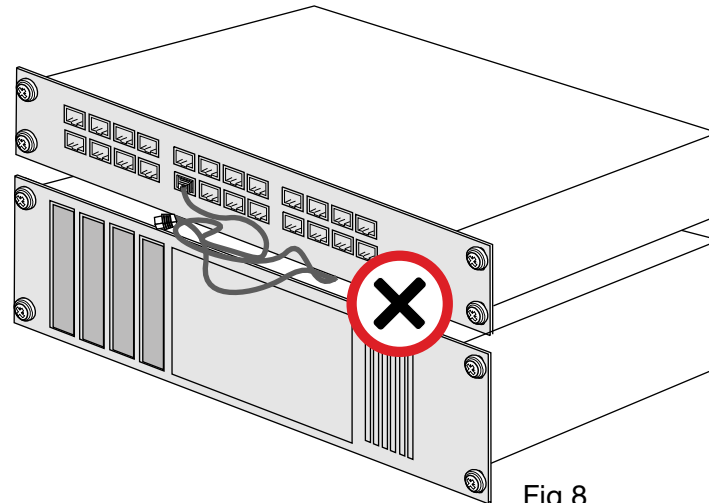


Fig 8

- Ensure that any wiring/looms/cable management systems etc do not get caught or trapped between adjacent pieces of racking equipment when being installed or following installation (Fig 8)
- Ensure that sway space/chassis excursion space is not compromised by any cabling or any other items. It is essential that the chassis is able to move without restriction in any direction within the rack body (Fig 5)

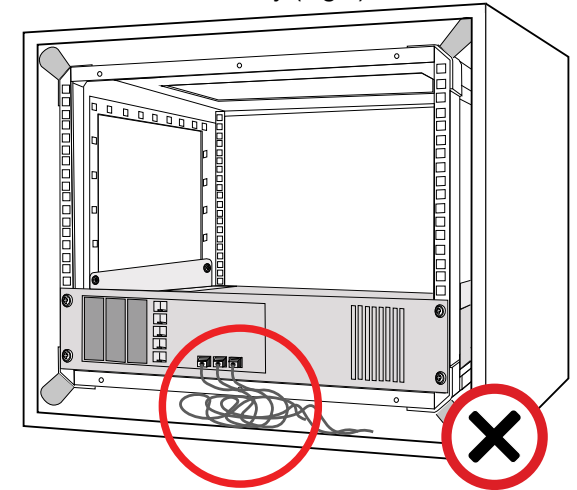


Fig 6

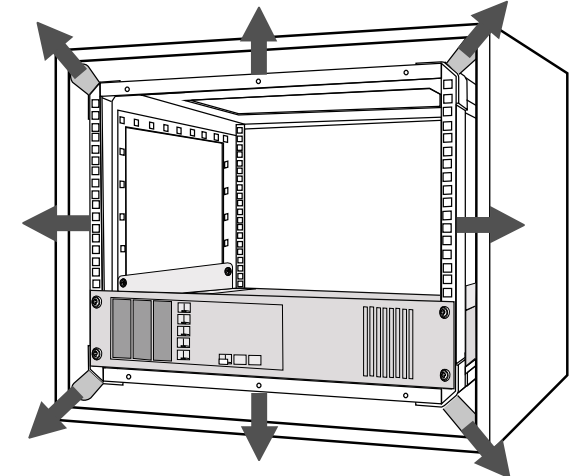


Fig 7

- When all the pieces of equipment have been securely fitted into the chassis, do a systematic “Shake, Rattle and Roll” test to ensure items are secured in every axis (Fig 5)

FINE TUNING THE RACK

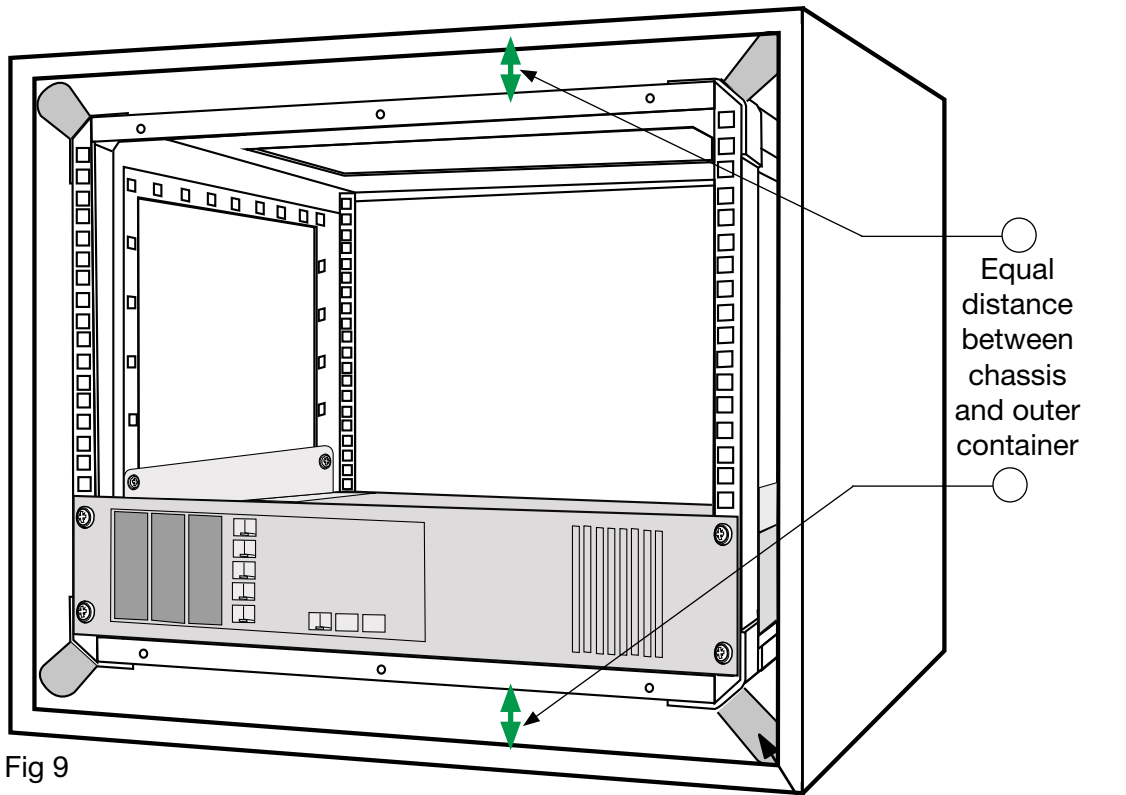
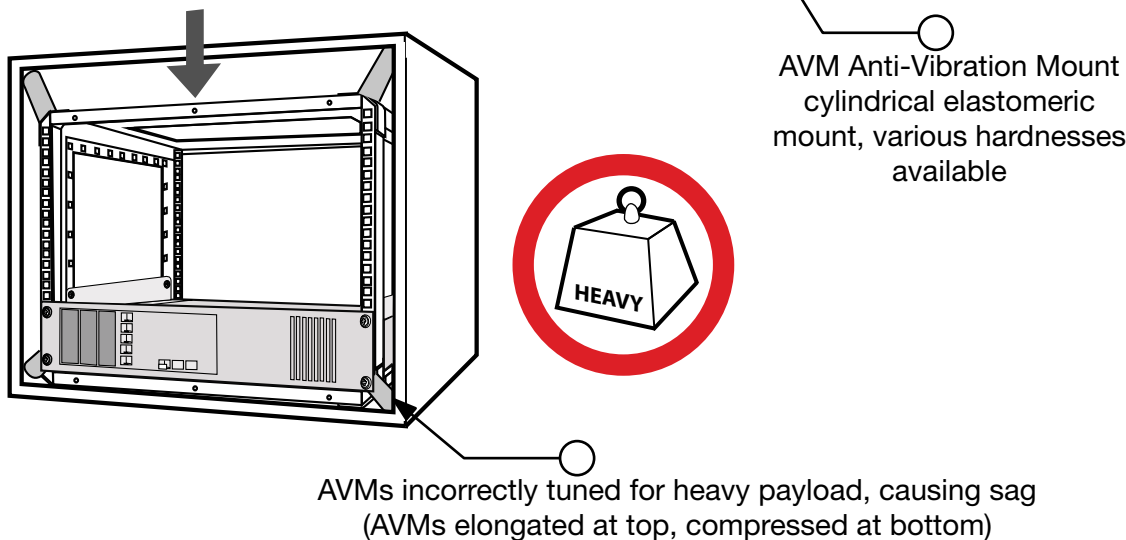


Fig 9



- AVM (Anti-Vibration Mounts) should be selected to match the payload weight: the loaded chassis should be able to move by hand but feel very stiff
- There should be no sag (elongation/compression) seen in the AVMs when the rack is sitting passively (Fig 9)
- Depending on the combined weight of the equipment and the chassis, CP Cases Engineers may recommend alternative AVM configurations, such as:
 1. Additional AVM - doubling from 8 AVMs to 16 AVMs
 2. Swapping out the 8x standard AVM (45 shore hardness) for 8x 60 shore hardness, giving a significantly stiffer ride
 3. Alternative anti-vibration support systems such as calibrated wire rope mounts

19-inch Rack-Mounted Storage Drawers



- Black powder coated
- Steel construction
- Slam latch drawer

A selection of storage drawers, showing 2U, 3U and 4U sizes. Also available: 6U size, key-lockable option all sizes.

Part Number #	Description
426/D2R	Road drawer for 2U chassis
426/D3R	Road drawer for 3U chassis
426/D4R	Road drawer for 4U chassis
426/D6R	Road drawer for 6U chassis

RACK ACCESSORIES SELECTION

Part Number #	Description
426/D2R	Road drawer for 2U chassis
426/D3R	Road drawer for 3U chassis
426/D4R	Road drawer for 4U chassis
426/D6R	Road drawer for 6U chassis
426/LOK	Road drawer lock
431/BSU	19-inch panel, 1U blank steel U section
431/VSU	19-inch panel, 1U vented steel U section
432/BSU	19-inch panel, 2U blank steel U section
432/VSU	19-inch panel, 2U vented steel U section
433/BSU	19-inch panel, 3U blank steel U section
433/VSU	19-inch panel, 3U vented steel U section
434/BSU	19-inch panel, 4U blank steel U section
434/VSU	19-inch panel, 4U vented steel U section
AAAVM608	Anti-vibration mount, 60 shore hardness, supply & fit an additional 8 mounts
AAAVM4508	Anti-vibration mount, 45 shore hardness, supply & fit an additional 8 mounts
AAAVM60	Anti-vibration mounts, 60 shore hardness, fitted as alternative to std 45 shore AVMs
AASR48	Stainless steel support rails for 480 mm deep chassis (pair - inc fixings)
AASR61	Stainless steel support rails for 610 mm deep chassis (pair - inc fixings)
AASR74	Stainless steel support rails for 740 mm deep chassis (pair - inc fixings)
AASR87	Stainless steel support rails for 870 mm deep chassis (pair - inc fixings)
AASSFW48	Support shelf, full width, stainless steel for 480 chassis, self colour
AASSFW61	Support shelf, full width, stainless steel for 610 chassis, self colour
AASSFW74	Support shelf, full width, stainless steel for 740 chassis, self colour
AASSFW87	Support shelf, full width, stainless steel for 870 chassis, self colour
AAAET	Earth terminal for rack
AA423	Spare M8 panel fixings (pack of 12)
AAAA423	Spare M6 panel fixings (pack of 12)
AAEGS48	Easy-glide removable internal frame system for 480 chassis (check suitability before order)
AAEGS61	Easy-glide removable internal frame system for 610 chassis (check suitability before order)
AAEGS74	Easy-glide removable internal frame system for 740 chassis (check suitability before order)
AAEGS87	Easy-glide removable internal frame system for 870 chassis (check suitability before order)

For the full range of Accessories, please contact CP Cases Sales

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PRODUCT INFORMATION



Tough, lightweight rotomoulded 19-inch racks for extreme operating environments in desert, field, sea and air.

Accredited to MIL-STD-810F and rated IP65.

Climate control options available.



Lightweight, shock-mounted transit racks in ruggedised aluminium, available in full and half-rack sizes. Ideal where weight, strength and portability are critical issues.

Climate control and EMI/EMC compliance options available, lids on/off.



Unique, super-lightweight transit rack solution for portable satellite equipment. Full and half-rack sizes available.

Conforms to IATA guidelines for checked-in baggage.

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