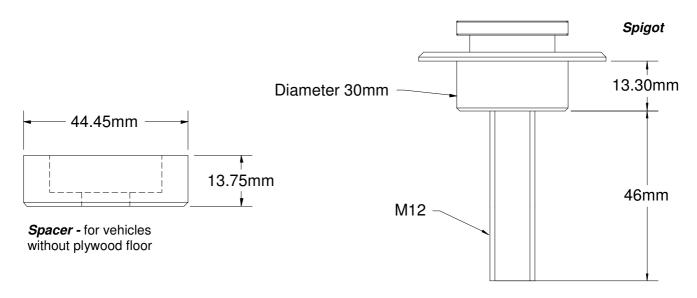


These instructions cover the fitting of Apollo MK2 Spigots. Each restraint contains the following parts that need to be fitted to the vehicle floor:

Spigot x 4, Strengthening Plate x 4, M12 Nyloc Nut x 4, Washer x 4, Spacer x 4 (optional)



## Fitting - general

Before starting, with reference to the dimensions in *fig a*, ensure the proposed position of the Spigots relative to the vehicle leaves enough room to accommodate the wheelchair and occupant. Various organisations stipulate a recommended space to allow for a wheelchair and occupant comfort; typically this is around 1200 - 1300mm long by 700 - 750mm wide. Due to vehicle design, it may not be possible to adhere to this, or particular wheelchairs may require more space. In any event, referring to *fig d* (Important Notes), space should be clear both in front and behind the occupants head.

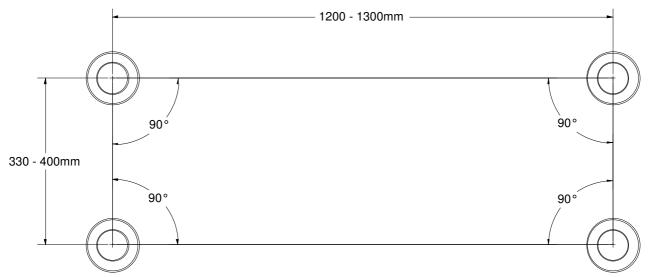
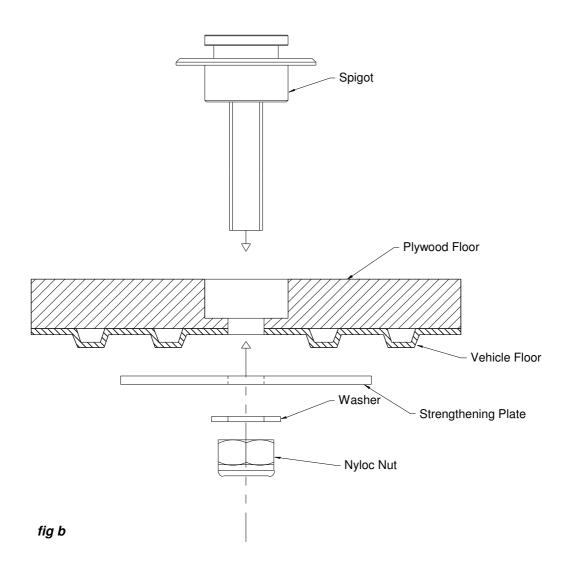


fig a - not to scale



## Fitting - vehicles with plywood flooring - fig b

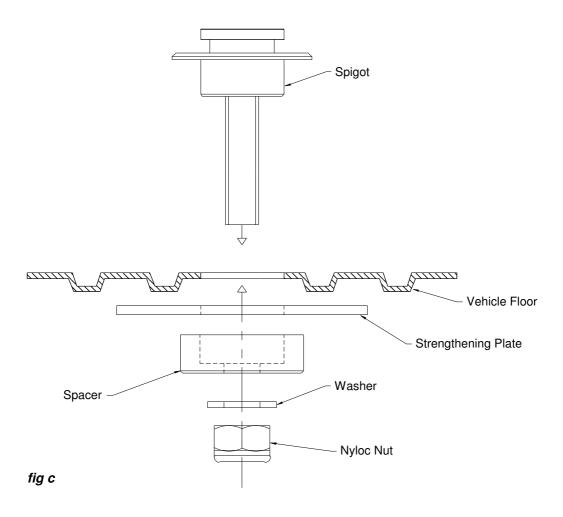
- 1) Drill 13mm diameter holes through the plywood and vehicle floor at the positions indicated in *fig a*, ensuring both lengthways dimensions are identical and both widthways dimensions are identical.
- 2) Drill 31mm diameter x 14mm (approx) holes into the plywood floor, central to the 13mm holes.
- 3) Insert a Spigot into each hole.
- 4) Place Strengthening Plate (use centre hole) and Washer over the M12 thread and lock tightly in place with the M12 Nyloc Nut. Repeat for the other Spigots.





## Fitting - vehicles without plywood flooring - fig c

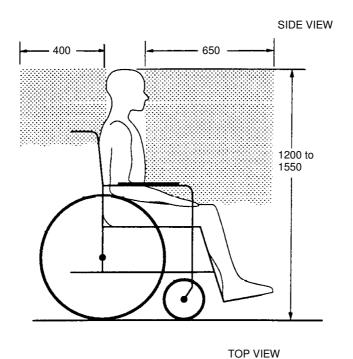
- 1) Drill 31mm diameter holes through the vehicle floor at the positions indicated in *fig a*, ensuring both lengthways dimensions are identical and both widthways dimensions are identical.
- 2) Insert a Spigot into each hole in the vehicle floor.
- 3) Place Strengthening Plate, Spacer (large hole up) and Washer over the M12 thread and lock tightly in place with the M12 Nyloc Nut. Repeat for the other Spigots.





## **Important Notes**

- Keeping to the advised dimensions will ensure suitability for the majority of wheelchairs.
- While installing the Spigots, any floor under-sealing required as recommended by the vehicle manufacturer must be completed.
- Within the longitudinal space, space of at least 650mm should be *clear* from the front of the wheelchair occupant's head forward, and 400mm *clear* from the back of the head rearward (*fig d*). This takes into account movement of the occupant's head in a crash situation, and therefore for safety there should be no rigid vehicle components within the shaded areas as shown. If this is not possible, rigid vehicle components that are within the shaded areas should be covered in padding that conforms with the impact performance requirements of FMVSS 201, EC 74/60 or UN/ECE 21.



The shaded areas in front of and behind the occupant's head should where possible be completely clear of any components (except a headrest).

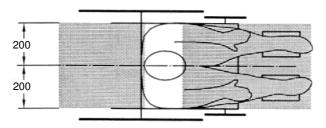


fig d - all dimensions in mm