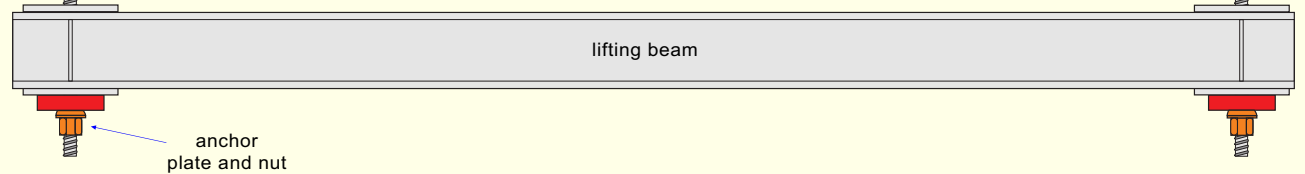
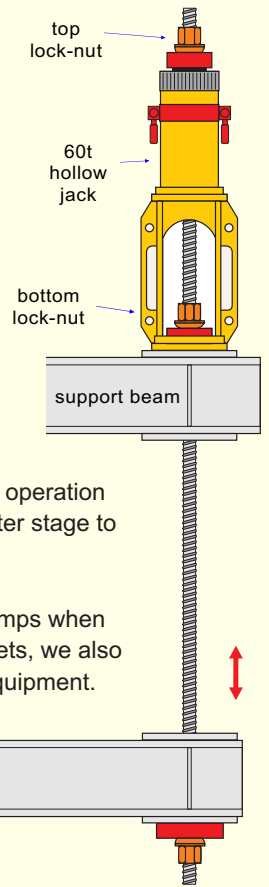
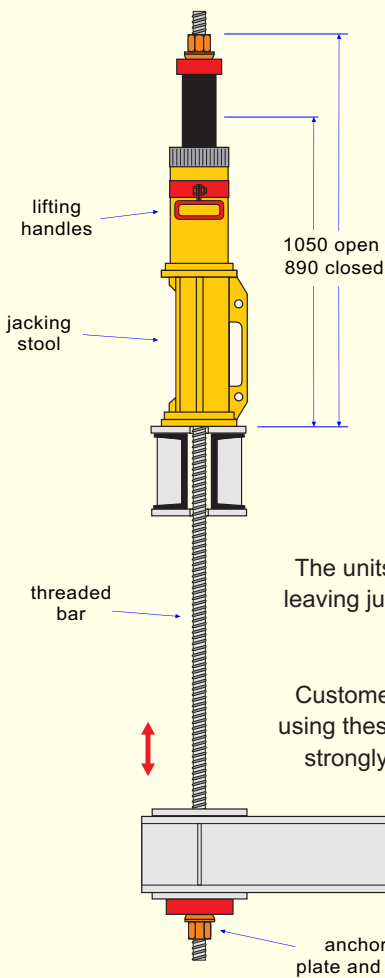


Bar Jacks are 50 tons capacity jacking units capable of lifting, lowering or pulling heavy structures into position using high strength steel threaded bars, the units are normally used for bridge lifting, lowering or pulling (bridge sliding) operations. Each unit comprises of a 60 ton capacity double acting hollow ram jack mounted on a specially fabricated steel stool to enable access to the bottom lock-nut via the access window.

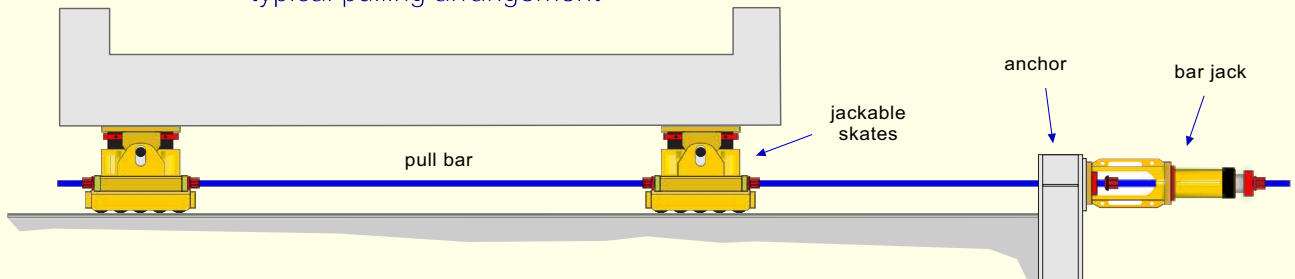
Once set-up, the unit's operation is relatively simple, for lifting operations the ram is firstly fully retracted, both the top and bottom lock-nuts are tightened. The ram is then extended to its full stroke which in turn raises the bar, the bottom lock-nut is then tightened, the ram is retracted and the top lock-nut is re-tightened again ready for the next cycle. The procedure for lowering is similar except that a 10mm thick split pack is used above the jack ram to enable the release of the top lock-nut during the lowering cycle.

The units are designed so that they can be removed upon completion of the jacking operation leaving just the bar, base plate and lock-nut assembly, they can be reinstalled at a later stage to enable lowering of the structure or de-loading of the bars.

Customers should use our specialist diesel or electric driven multi-flow hydraulic pumps when using these units as they provide precise synchronised hydraulic control of multiple sets, we also strongly recommend that you use our specialist teams to install and operate this equipment.



typical pulling arrangement



Bar-Jacks can also be used horizontally in conjunction with our hydra-skates to enable the movement of large heavy structures by pulling them into position, typical examples are, culvert sections, railway bridges or buildings. The hydra-skates are normally connected together using the actual pulling bar and additional lock-nuts, this distributes the pulling forces evenly between the hydra-skates. The vertical hydra-jacks are inter-linked into sets so that any variation in track levels can be compensated for by the hydraulic control system.