



Climbing jack Operating sequences



Lifting sequence

Square steel climbing bar

Load applied to top of jack

Wedges Closed

Load taken by top anchor

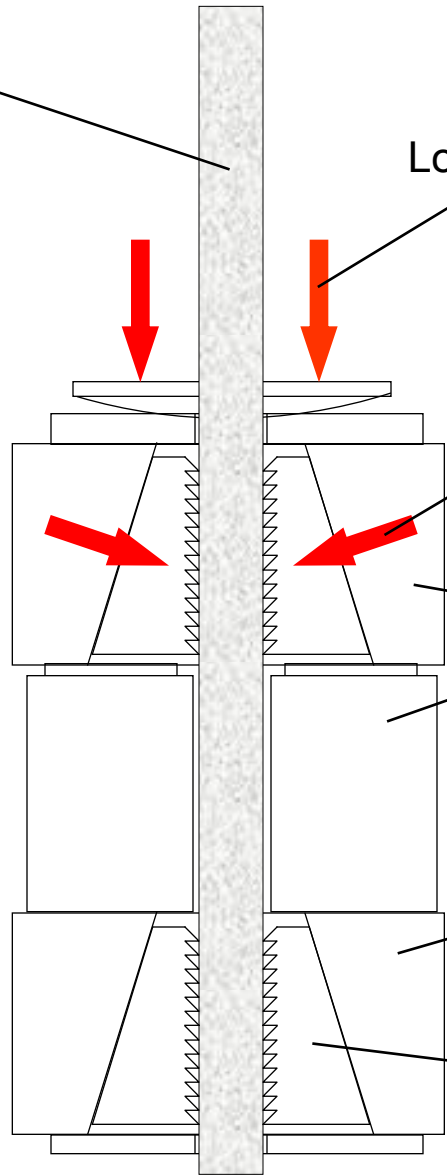
Top anchor

Hydraulic rams, double acting

Bottom anchor

Wedges Closed

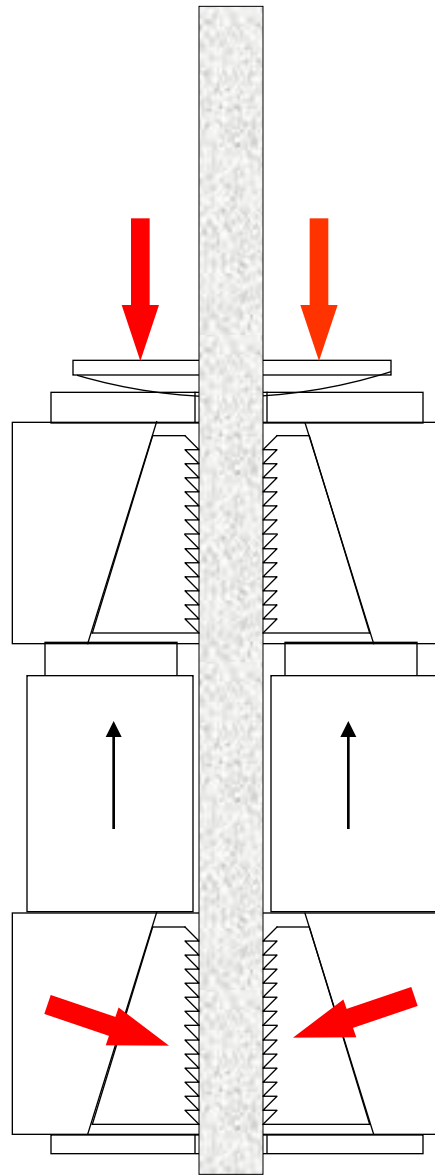
Steel wedges with teeth to grip the climbing bar (typical).
Can be opened and closed hydraulically when not loaded



Starting position

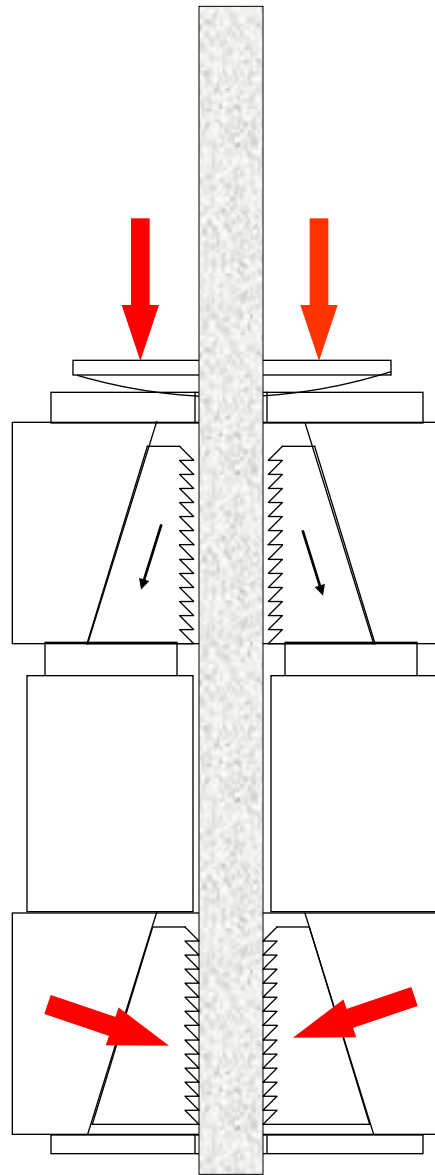
Wedges Closed

Wedges Closed



Action:
Extend rams approx 25mm to transfer the load to the bottom anchor

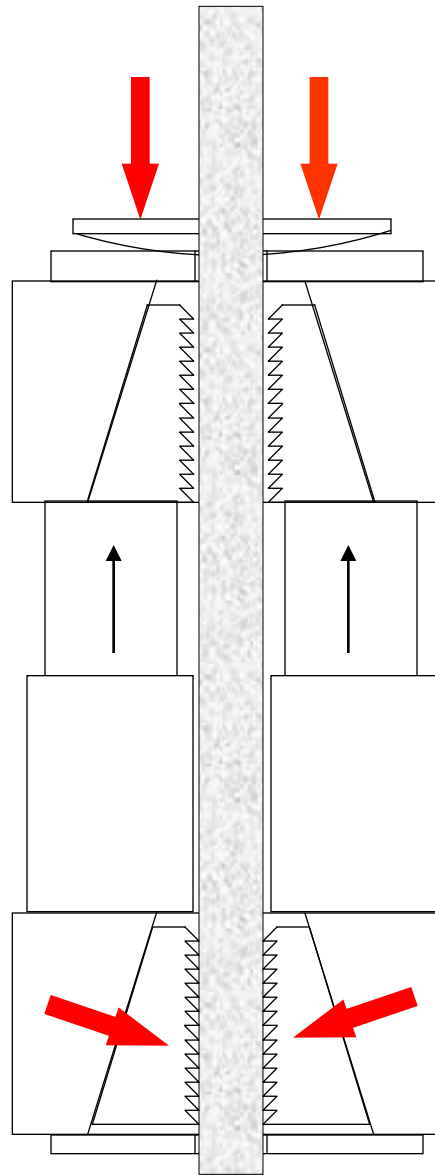
Wedges Open



Action:
Open the top anchor wedges

Wedges Closed

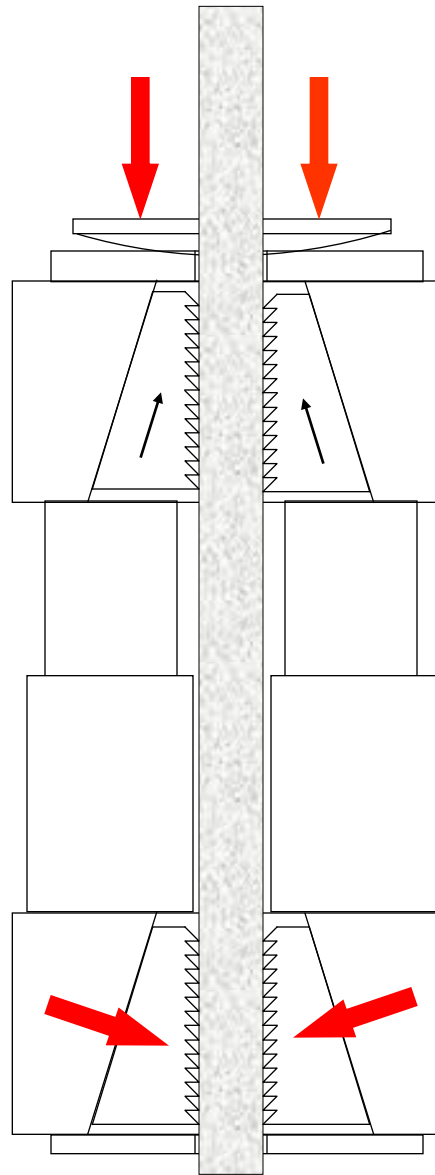
Wedges Open



Action:
Load lifting stroke.
Fully extend the rams

Wedges Closed

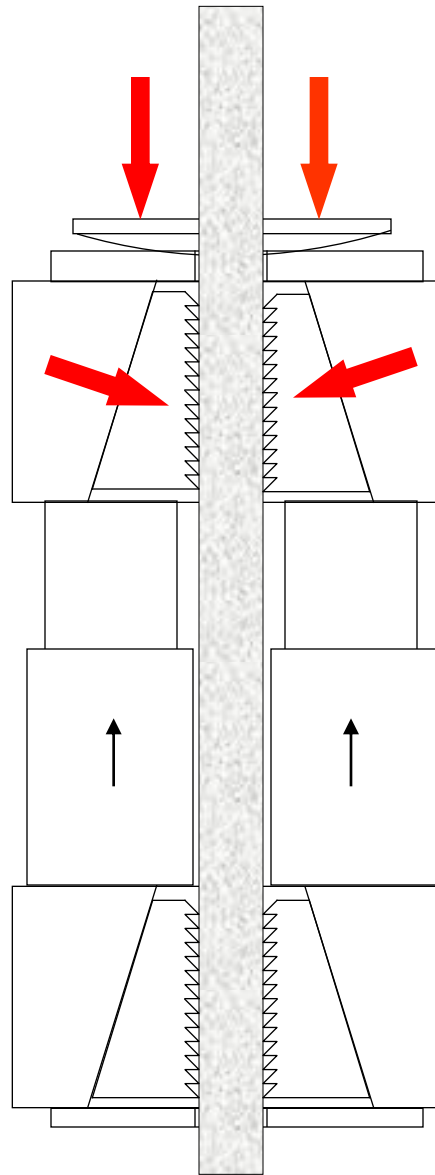
Wedges Closed



Action:
Close top anchor wedges

Wedges Closed

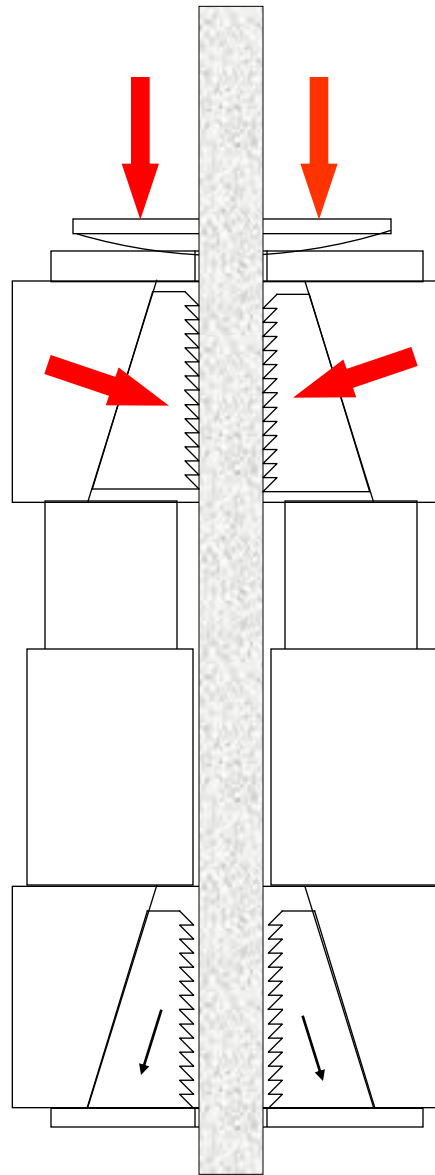
Wedges Closed



Action:
Retract rams approx 25mm to
transfer load to the top anchor

Wedges Closed

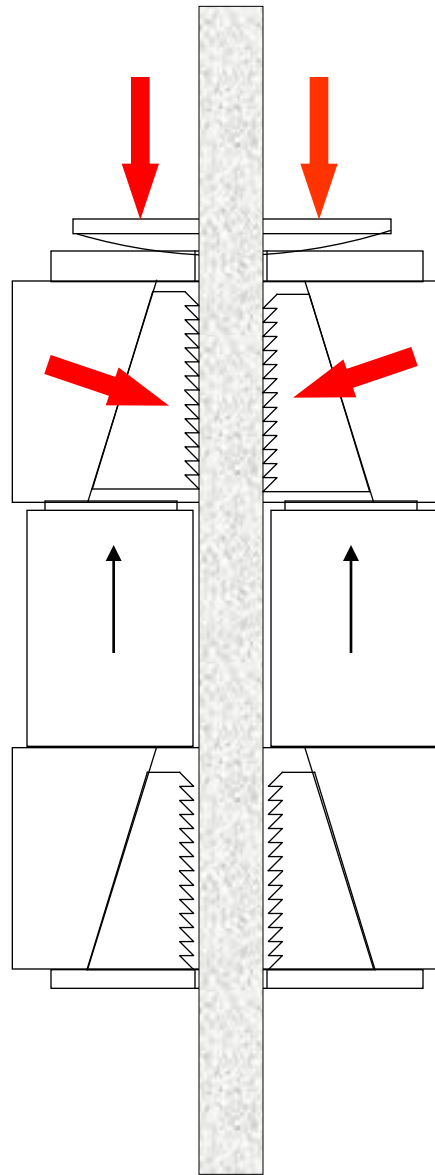
Wedges Closed



Action:
Open bottom anchor wedges

Wedges Open

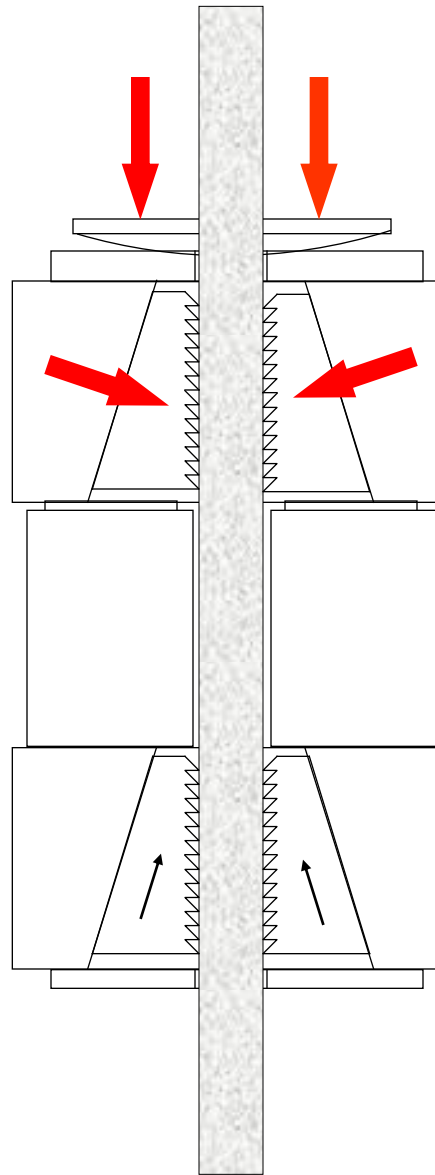
Wedges Closed



Action:
Fully retract rams

Wedges Open

Wedges Closed



Wedges Closed

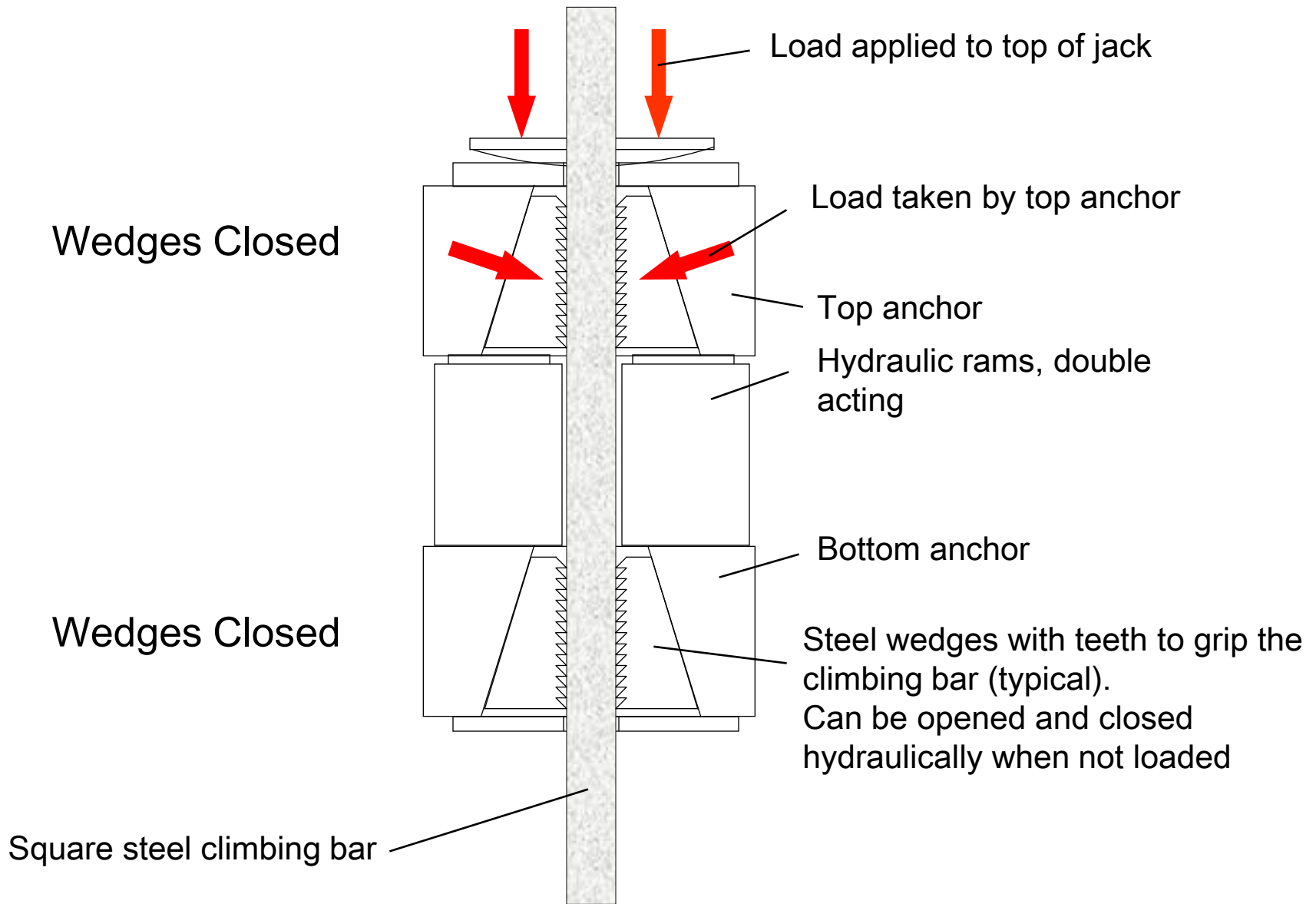
Action:

Close wedges in bottom anchor.

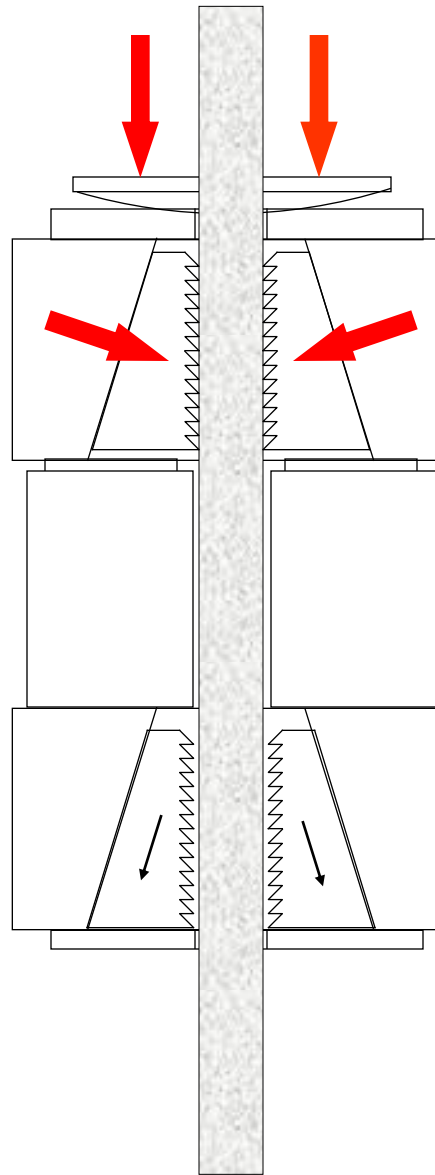
Lifting sequence complete



Lowering sequence



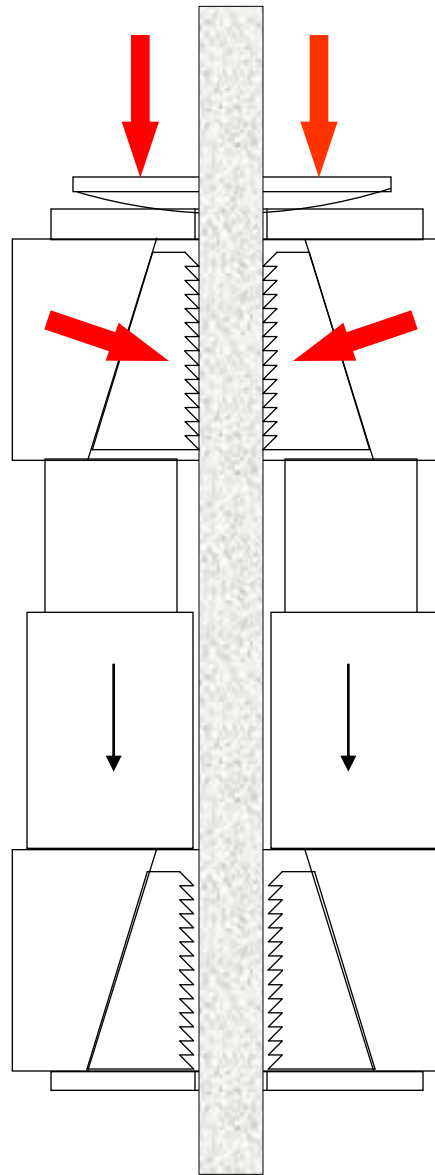
Wedges Closed



Wedges Open

Action:
Open bottom anchor wedges

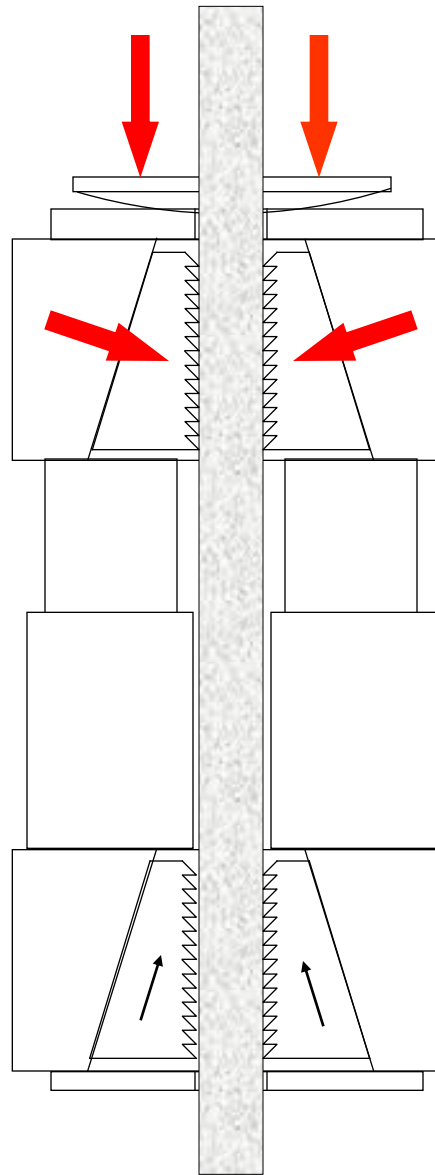
Wedges Closed



Wedges Open

Action:
Extend rams to 25mm short of
fully extended

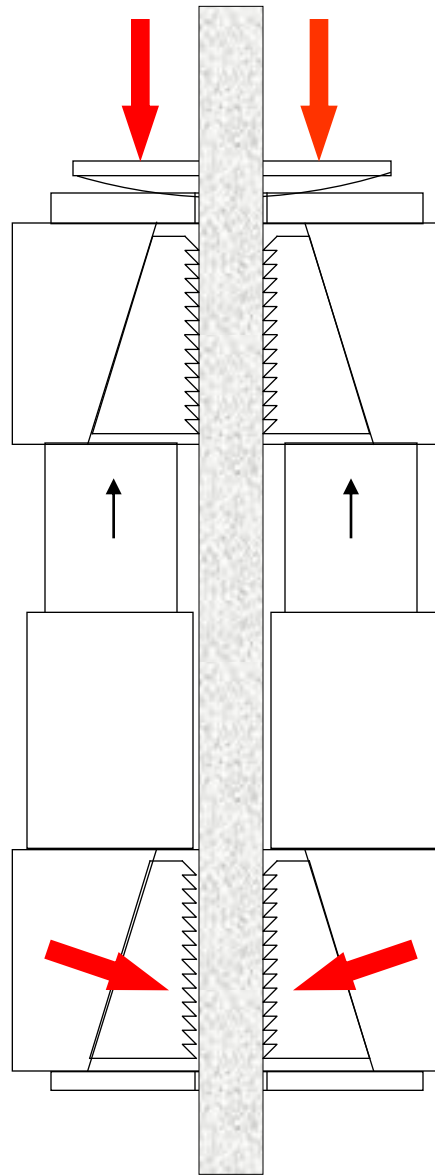
Wedges Closed



Action:
Close wedges in bottom
anchor

Wedges Closed

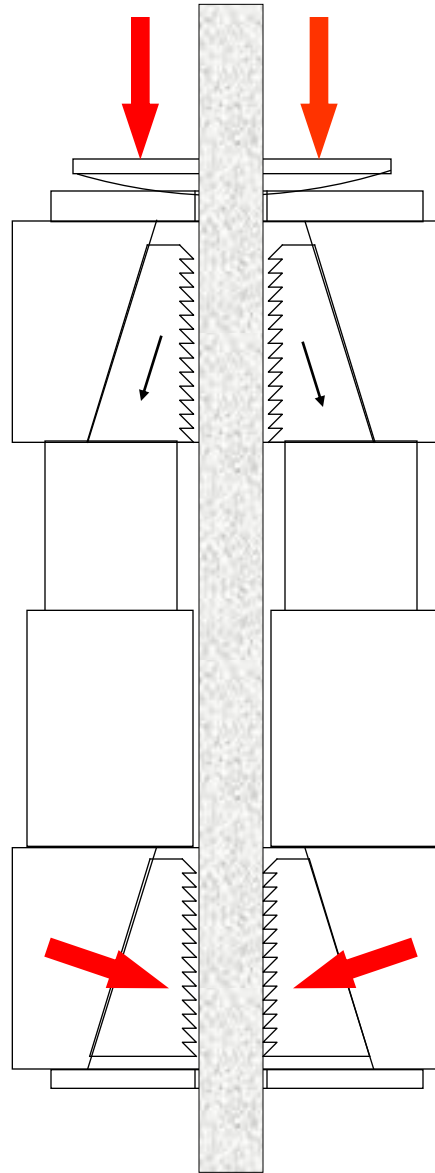
Wedges Closed



Wedges Closed

Action:
Fully extend rams to transfer
load to the bottom anchor

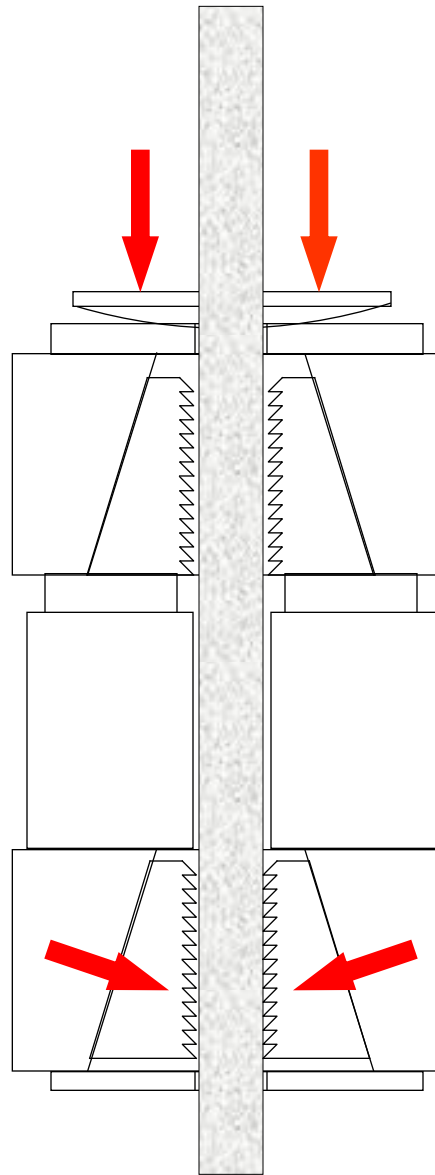
Wedges Open



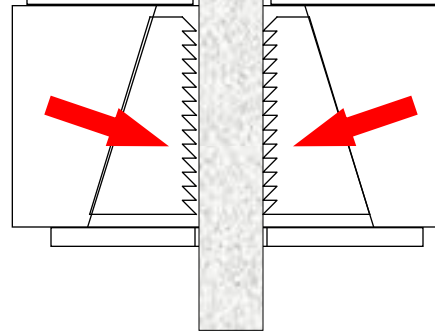
Wedges Closed

Action:
Open wedges in top anchor

Wedges Open

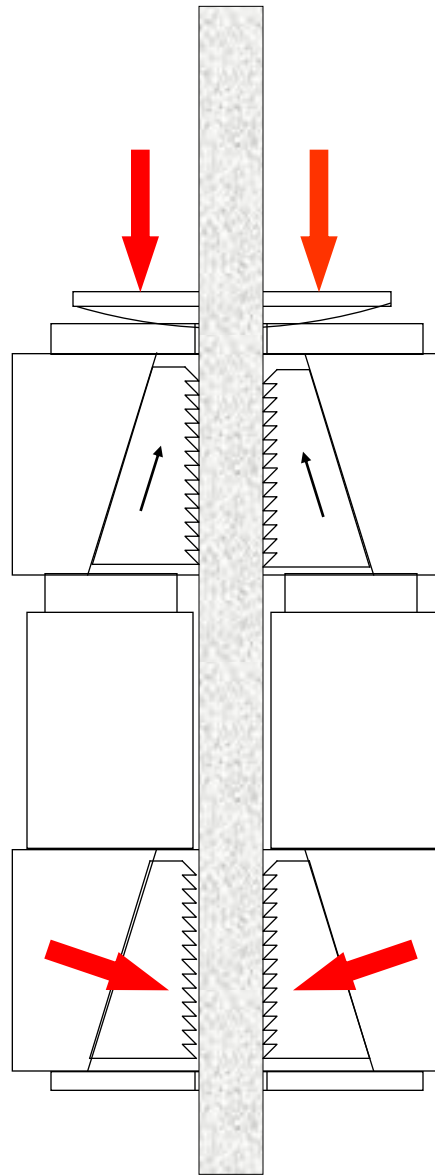


Wedges Closed

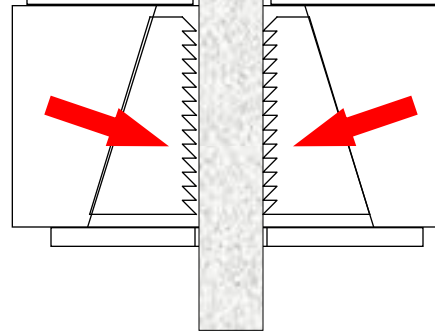


Action:
Load Lowering stroke.
Retract rams to 25mm from
fully retracted

Wedges Open

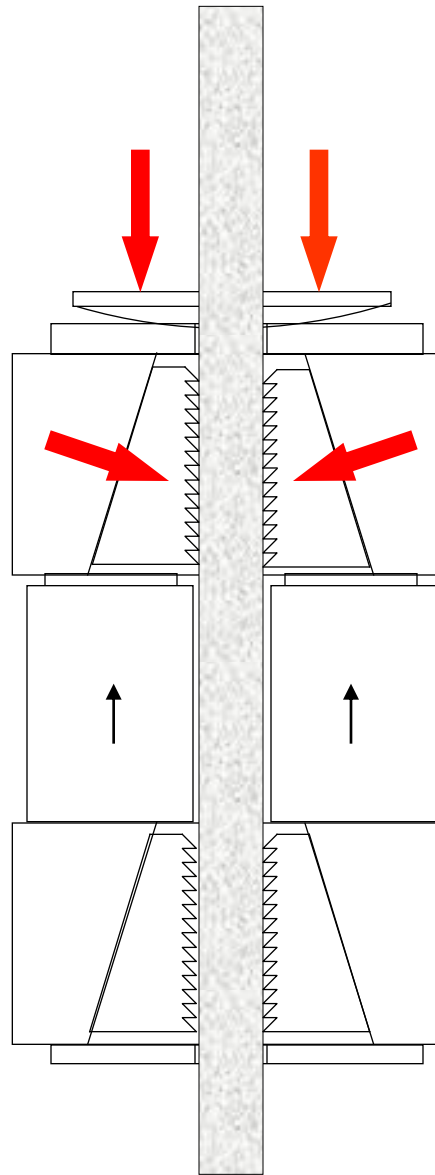


Wedges Closed



Action:
Close wedges in top anchor

Wedges Open



Wedges Closed

Action:
Fully retract rams to transfer
load to the top wedges
Lowering sequence complete