

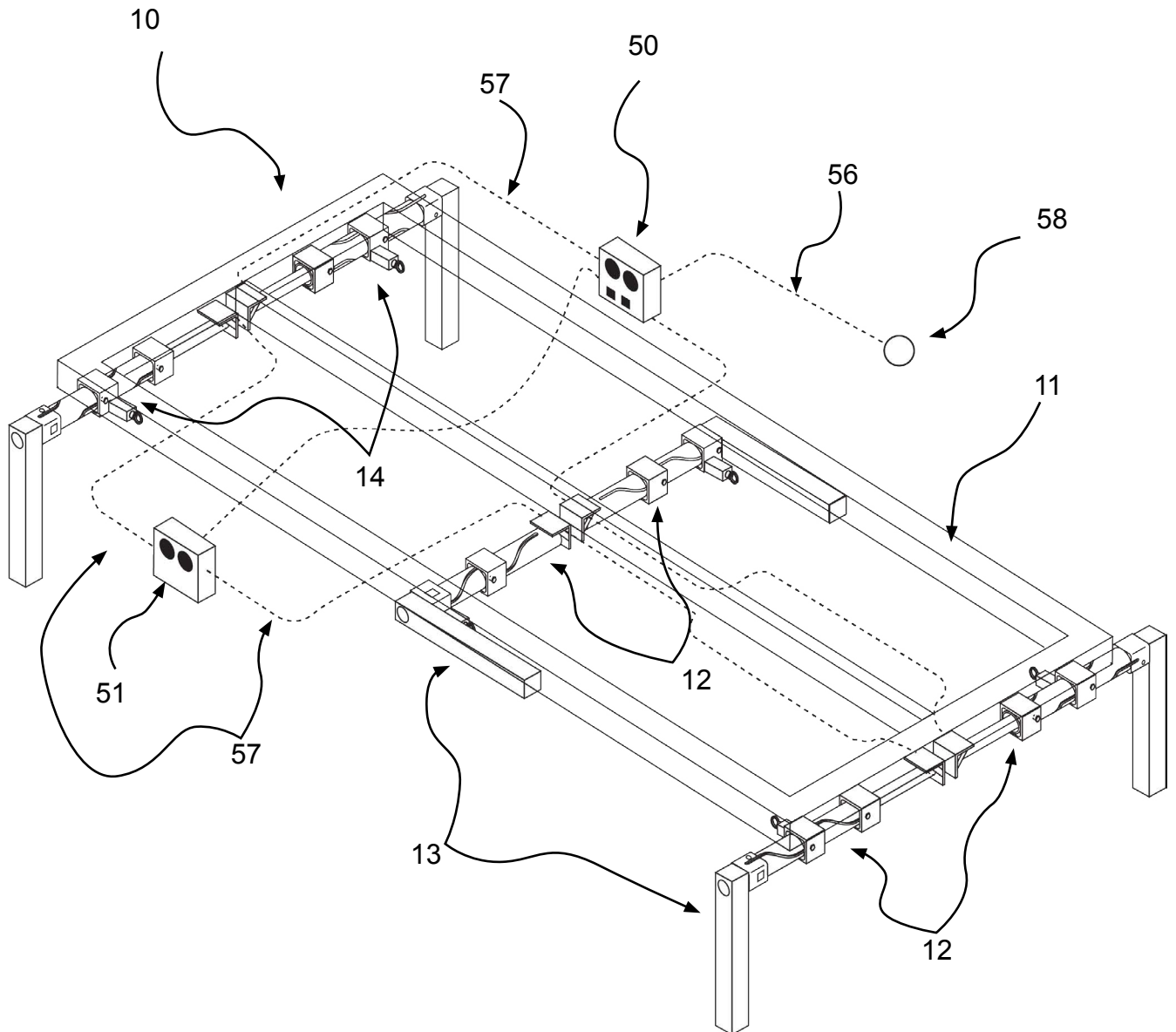


FIG 1

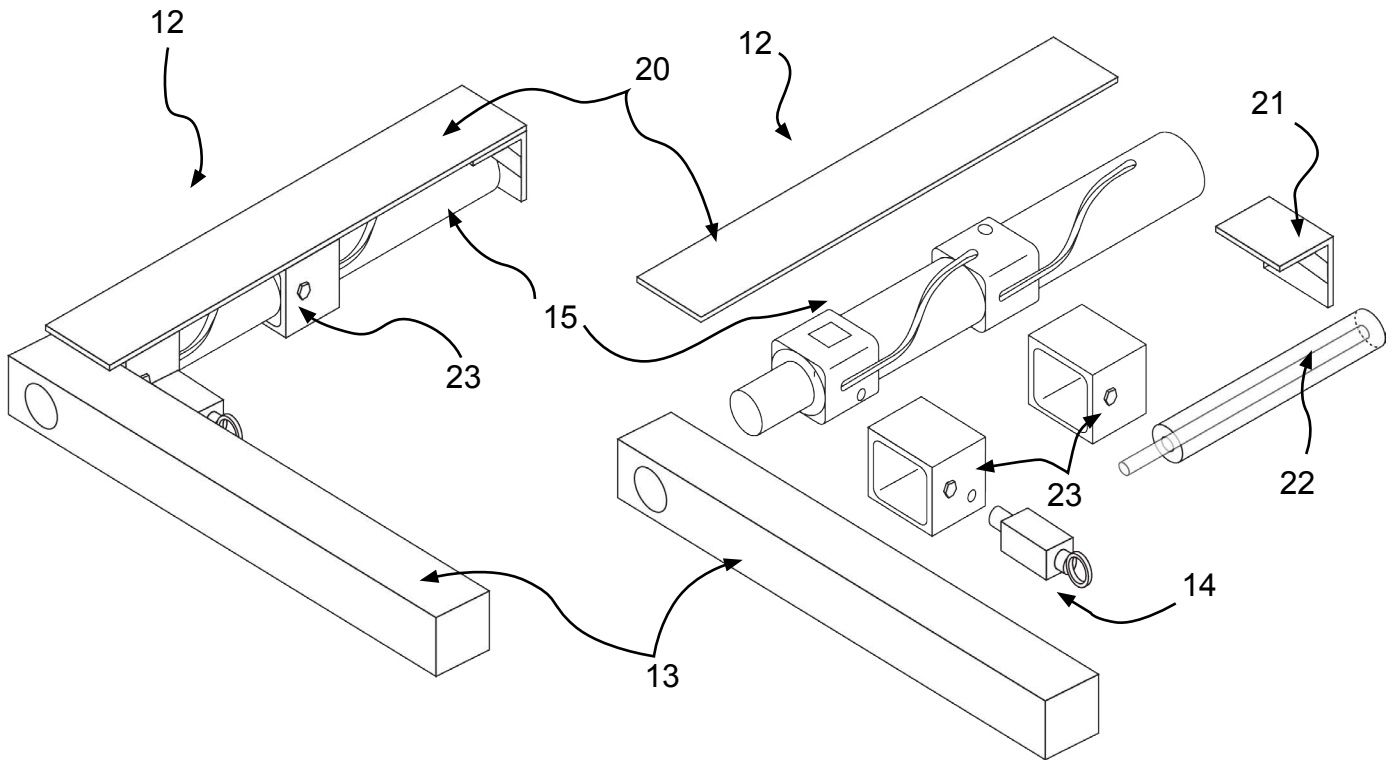


Fig 2.1 Completely retracted and stowed position

Fig 2.2 Completely retracted and stowed position - Major components Exploded View

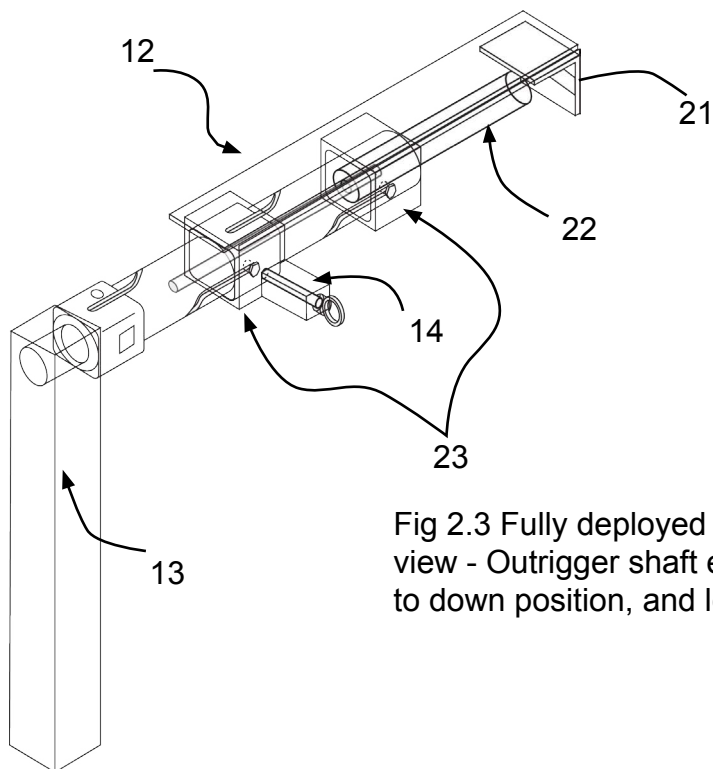


Fig 2.3 Fully deployed and extended Cutaway view - Outrigger shaft extended, and leg rotated to down position, and locked in place

Fig 3.1 - Outrigger shaft Side elevation showing circular and square cross section segments, and milled guide grooves to induce rotation twist for deployment and retraction

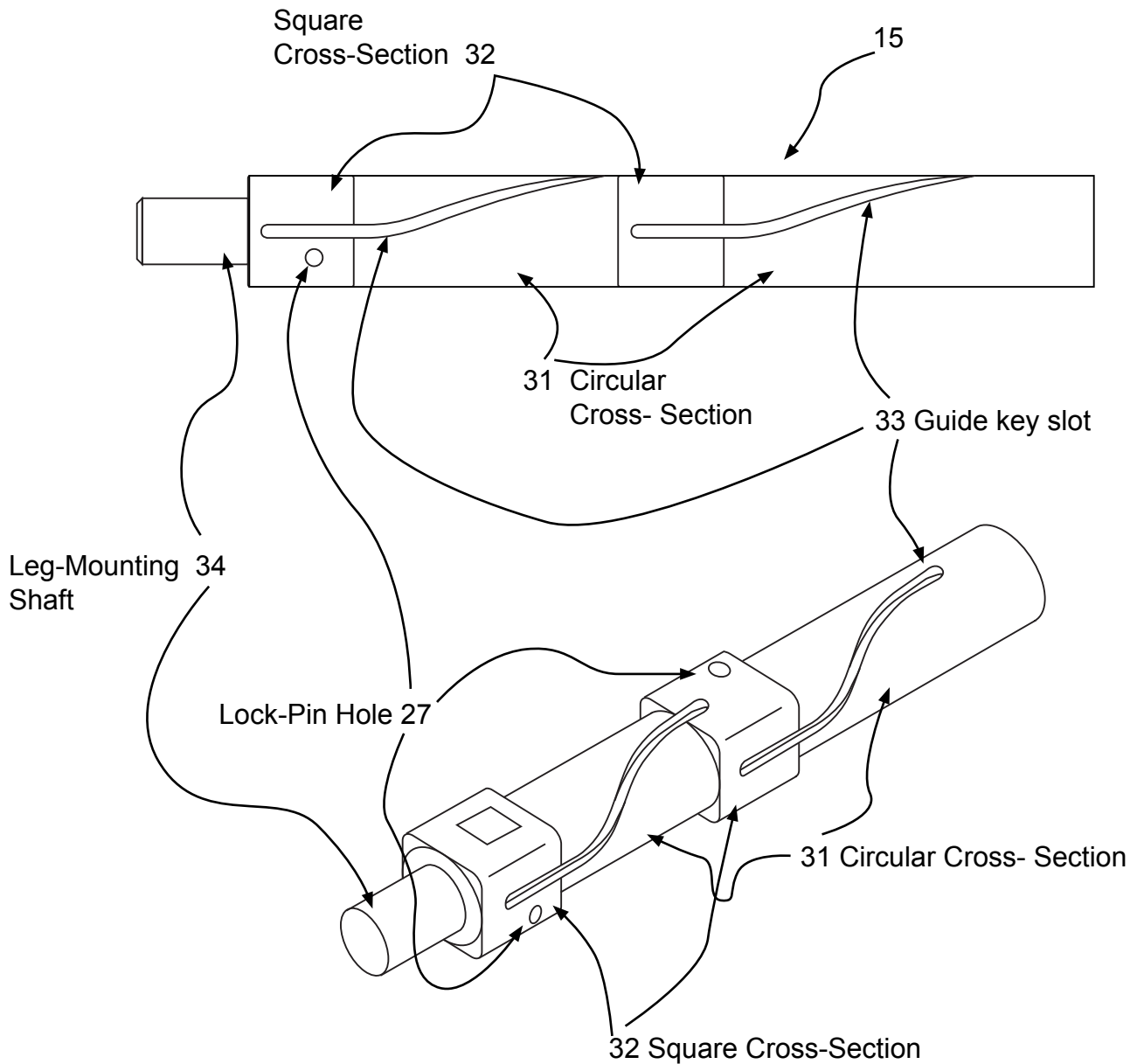
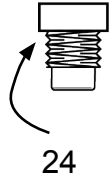


Fig 3.2 Outrigger Shaft Isometric view with square and circular segments, and twist guide grooves

Fig 4.2 Locking Guide Block-
Side ElevationFig 4.3 Locking Guide Block-
End ElevationFig 4.4 Guide
Key Bolt

Guide key
hole for
guide key
bolt

Square cutout
that prevents
rotation of out-
rigger shaft once
square portion is
seated within

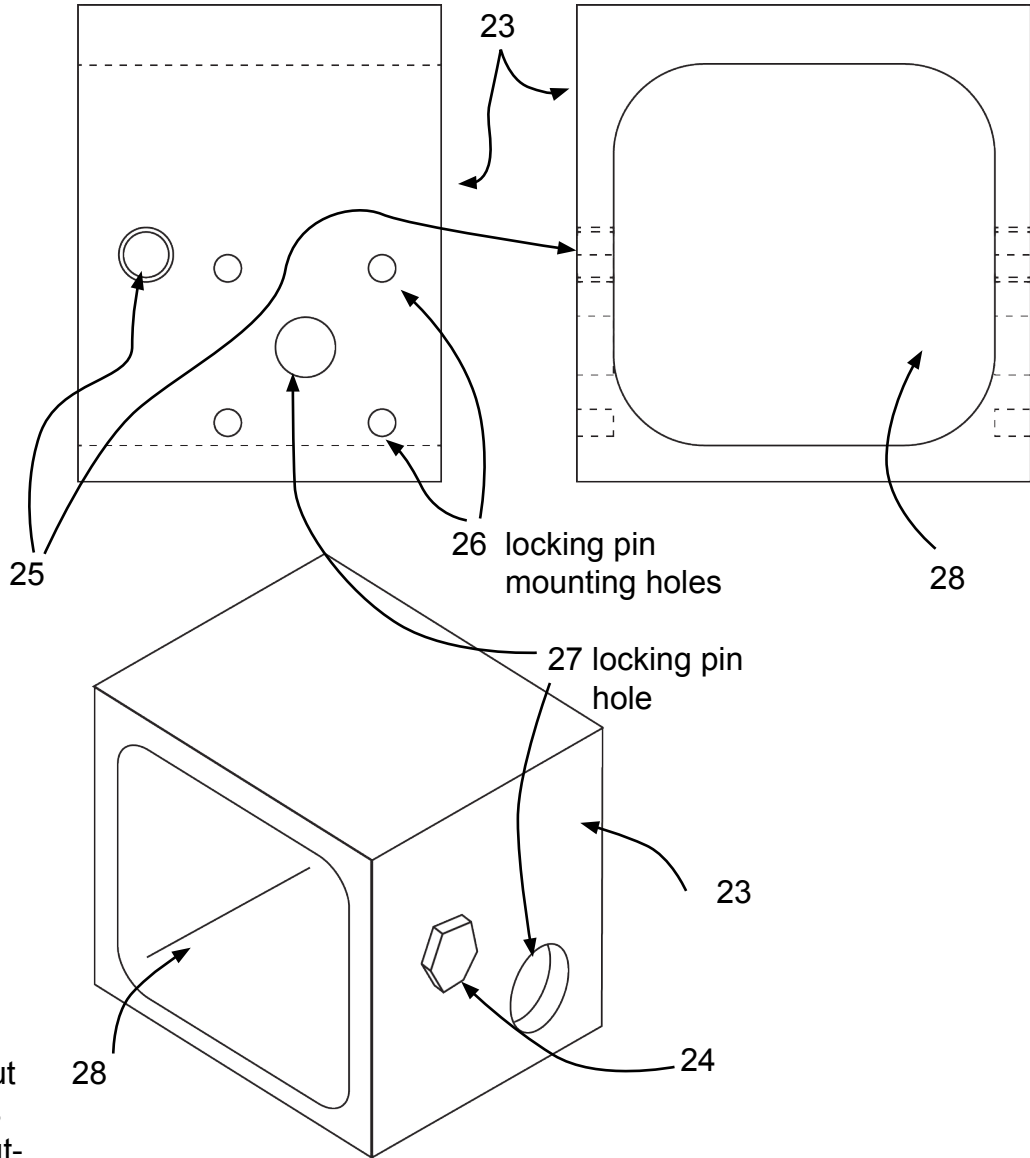
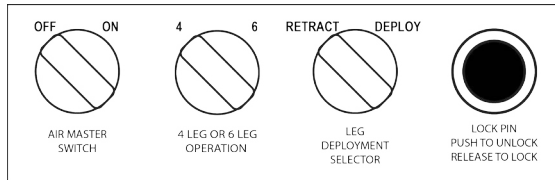
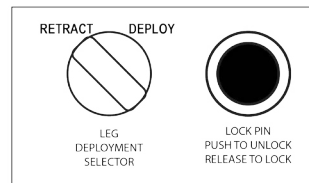
Fig 4.1 Locking Guide Block
Isometric View

FIG 5.1



Master Control Panel



Sub-Control Panel

FIG 5.2

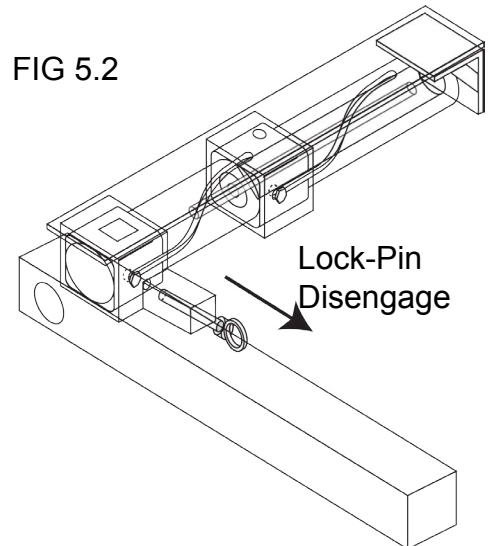


FIG 5.3

Outrigger arm
pneumatically
extends
outward

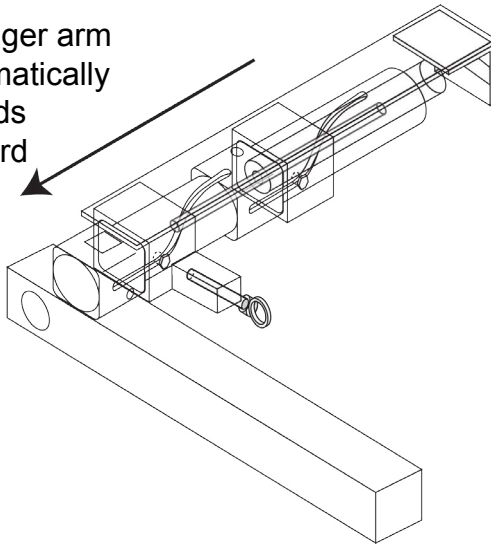


FIG 5.4

Milled key slots force
leg rotation as arm
extends further

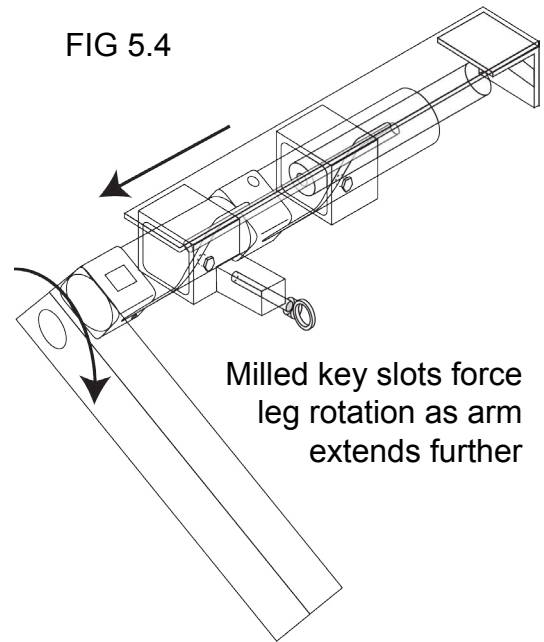


FIG 5.5

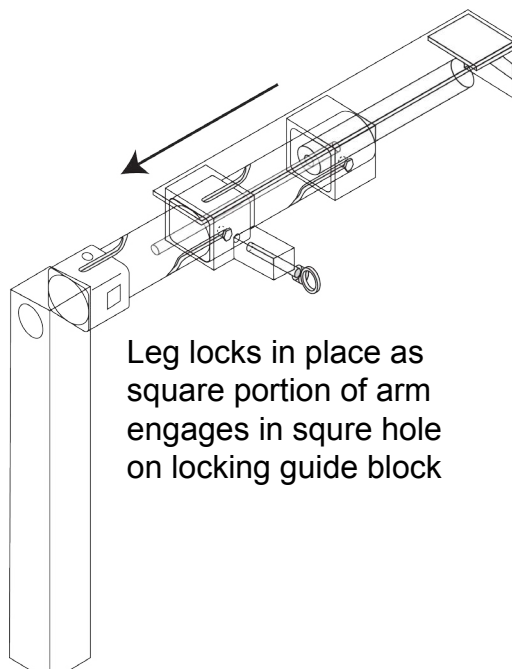
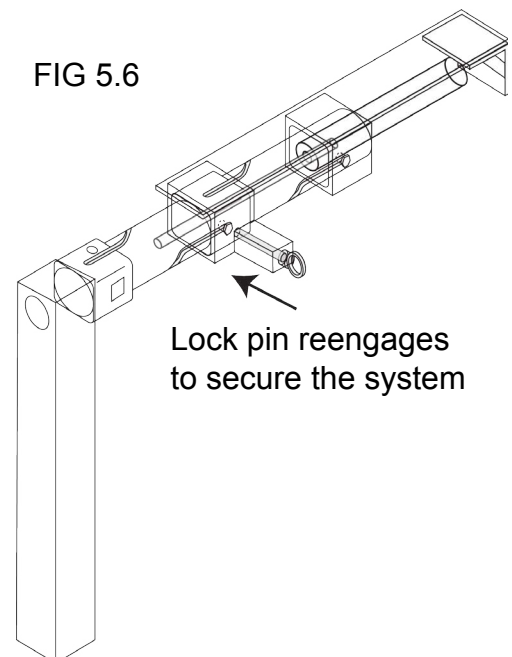
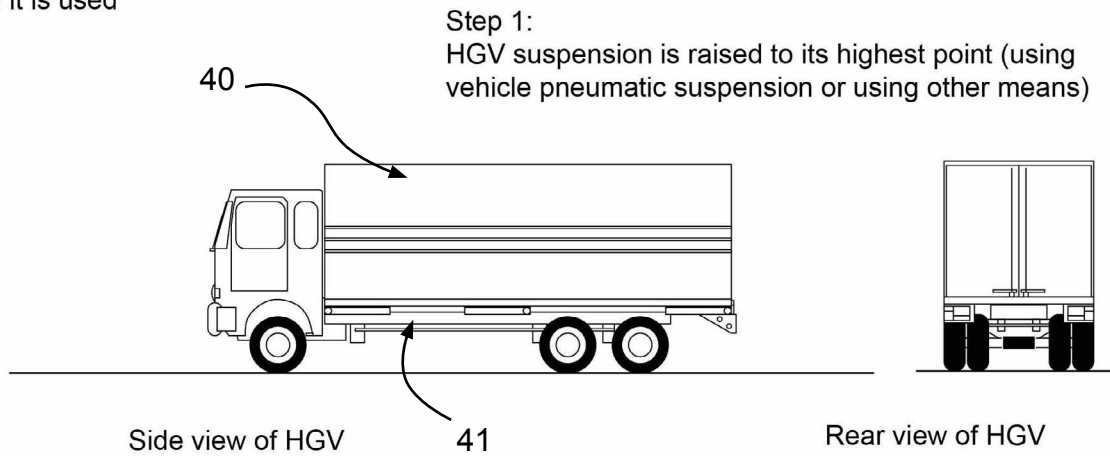


FIG 5.6

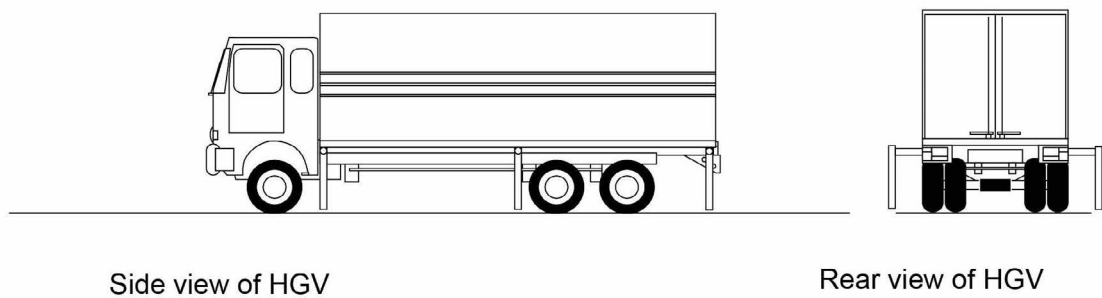


Deployment of Apparatus -
How it is used



Deployment of Apparatus -
How it is used

Step 2:
Apparatus is pneumatically deployed



Deployment of Apparatus -
How it is used

Step 3:
HGV body is disconnected from the HGV chassis and the chassis is lowered to its lowest point

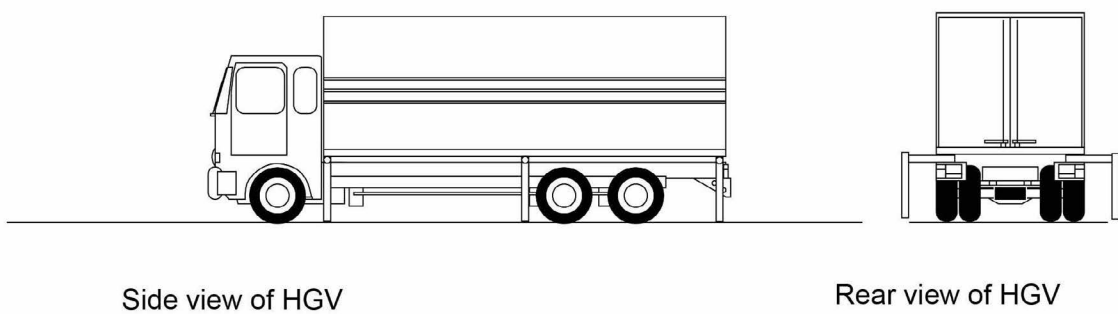
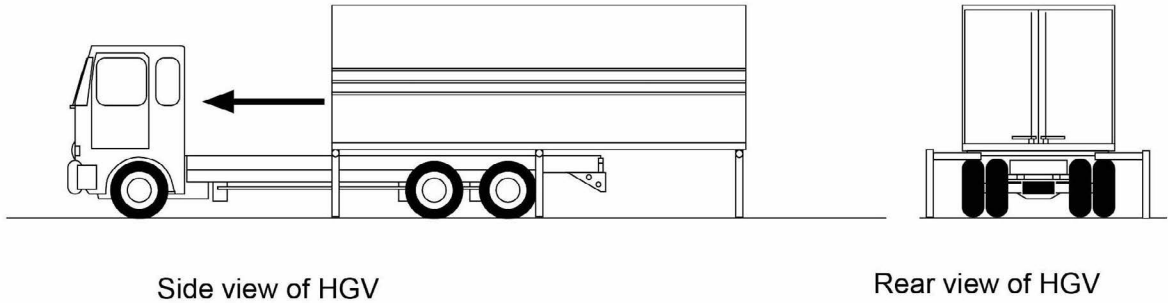


FIG 6

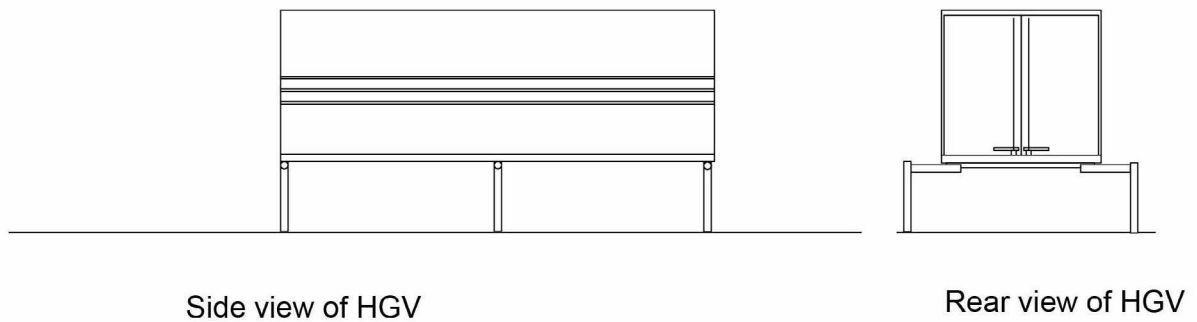
Deployment of Apparatus - How it is used

Step 4:
HGV Chassis can be driven away leaving the HGV
Body free standing on the apparatus



Deployment of Apparatus - How it is used

Step 5:
HGV Body is now free standing on the apparatus



Recovery of Apparatus - How it is used

Step 6:
HGV Chassis is lowered to its minimum height and
backed up under the HGV Body

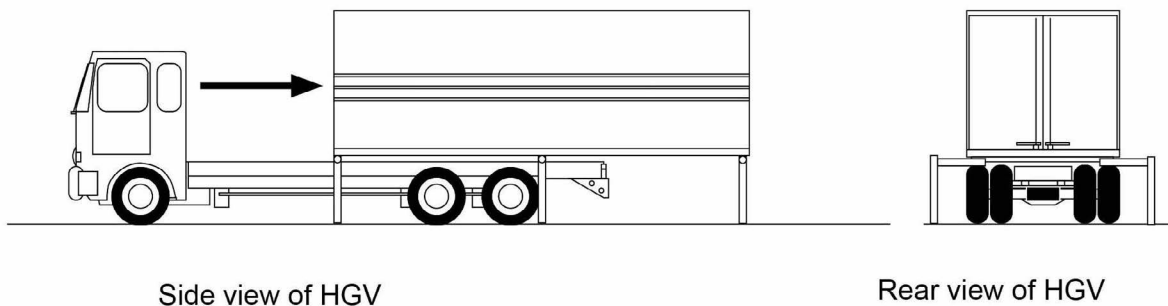
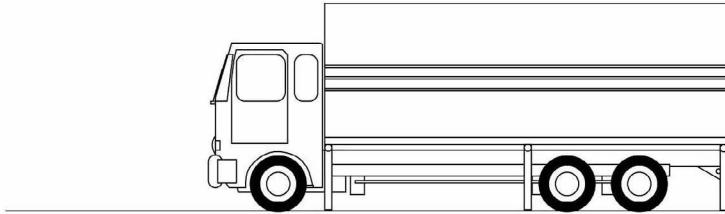


FIG 7

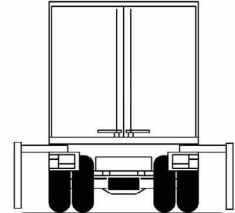
Recovery of Apparatus - How it is used

Step 7:

HGV Chassis is raised to its highest point so that the apparatus legs no longer touch the ground.



Side view of HGV

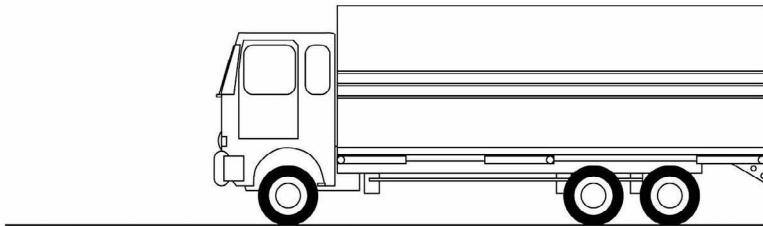


Rear view of HGV

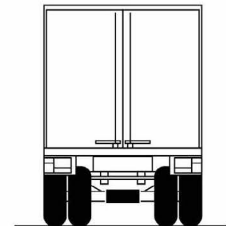
Recovery of Apparatus - How it is used

Step 8:

HGV Body is secured to the HGV Chassis and the apparatus is retracted



Side view of HGV

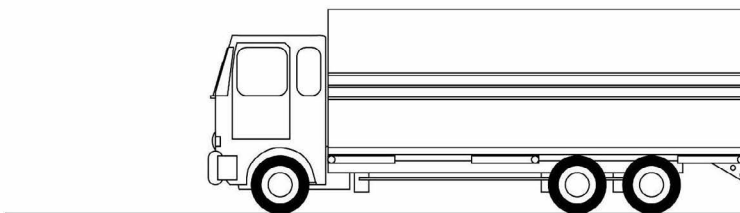


Rear view of HGV

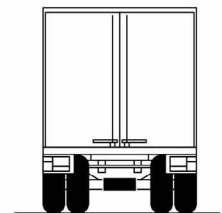
Recovery of Apparatus - How it is used

Step 9:

HGV Chassis is lowered to its normal operating height and the HGV can now be driven off as a single unit.

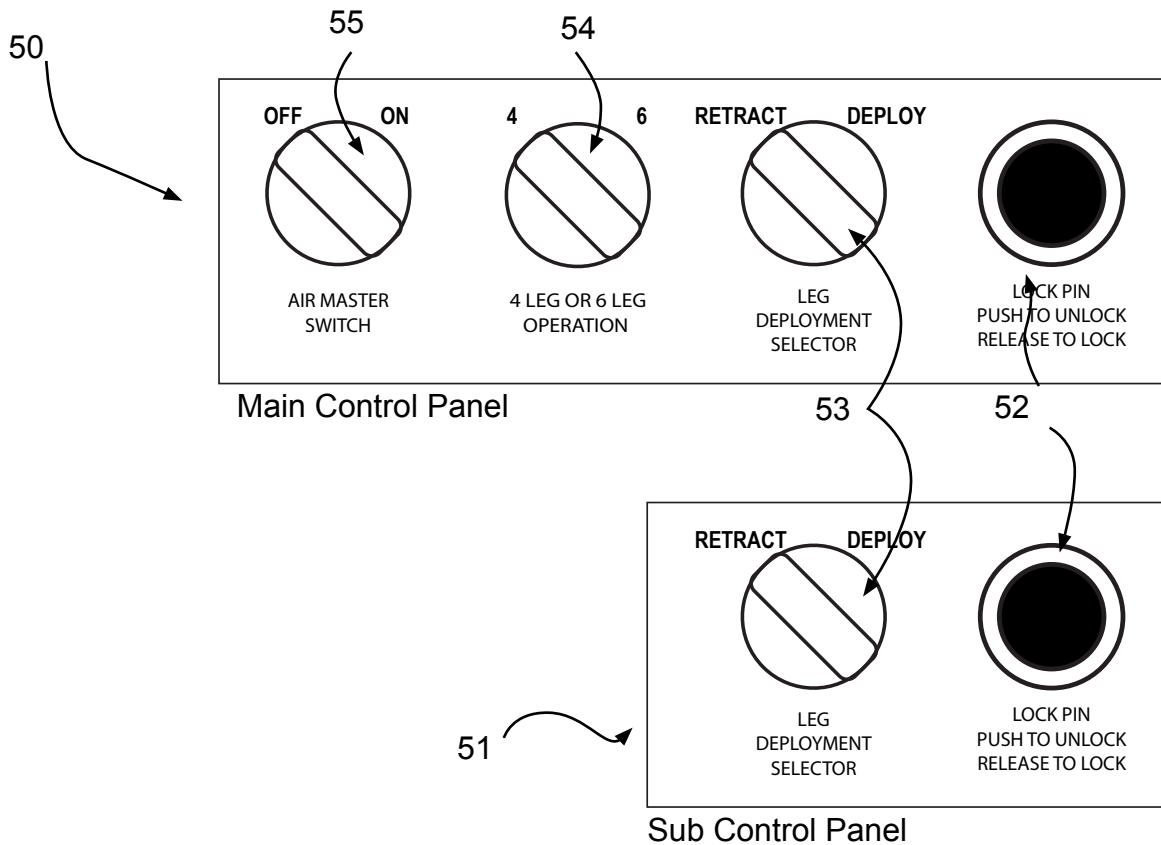


Side view of HGV



Rear view of HGV

1. Air Master Switch - By rotating the switch clockwise to the "On" position, air is fed into the system if connected to the vehicle air source. Rotating anticlockwise to the "Off" position shuts off the air and the system cannot be pneumatically operated
2. 4 Leg or 6 Leg Operations switch. - By rotating to the "6" position, all legs can be operated at the same time. By rotating to the "4" position, the middle 2 legs will not operate, leaving only the 4 corner legs operable. This may be desirable when the HGV load is light.
3. Leg Deployment Selector Switch - By rotating to the "Deploy" position, the legs will extend and rotate to a deployed position. By rotating the switch to the "Retract" position, the legs will retract to a stowed position
4. Lock Pin Release button - By pushing on the button, the lock pin will release. By letting go of the button, the lock pin will engage.



The apparatus has 2 control panels. The Main Control Panel is situated on the driver's side and has additional controls for Air Master and 4 or 6 leg operation. This will ensure that the operator visually confirms that legs are fully deployed or retracted on each side of the HGV as a safety measure.

FIG 9

FIG 10.1

System in fully stowed and retracted position

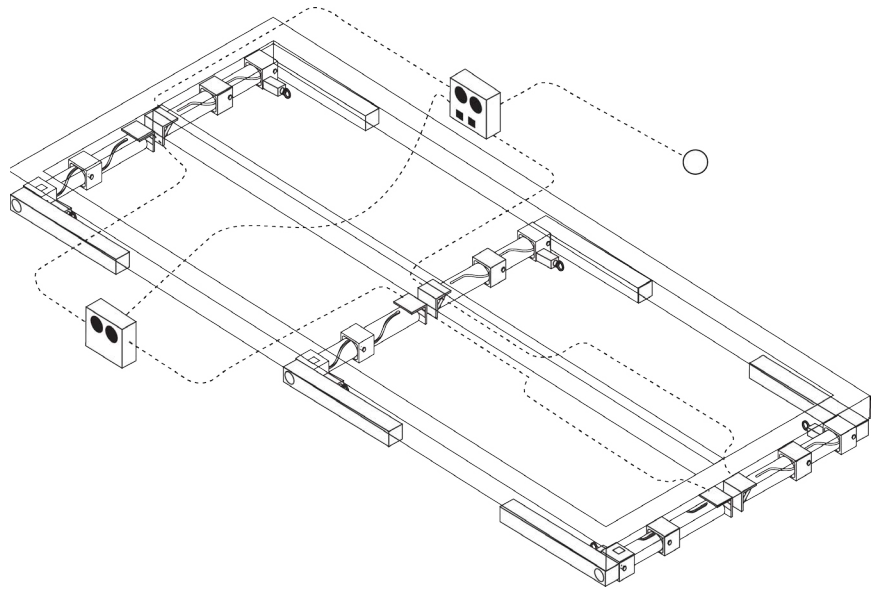


FIG 10.2

System with outriggers fully deployed and legs rotated to full down and locked position

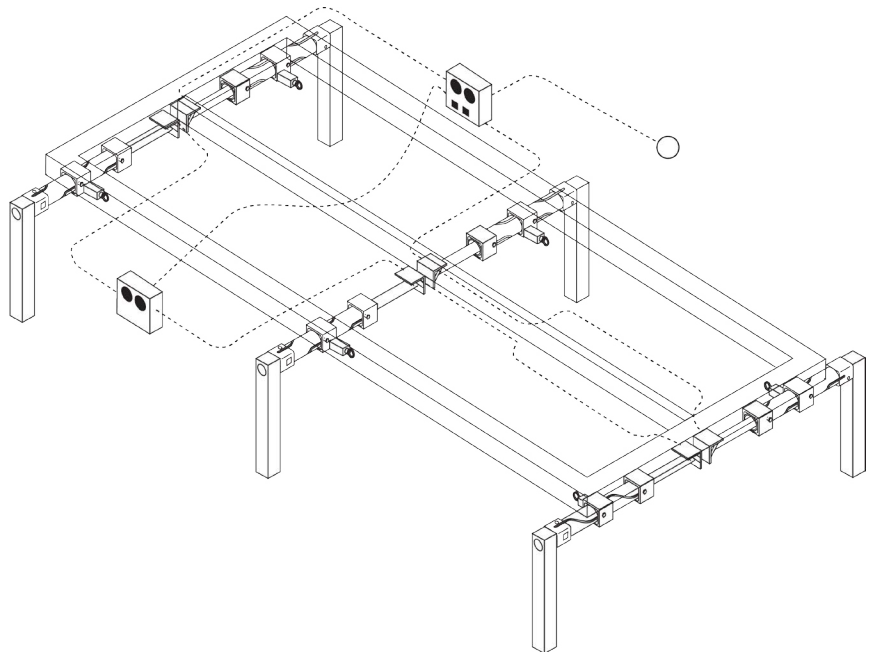
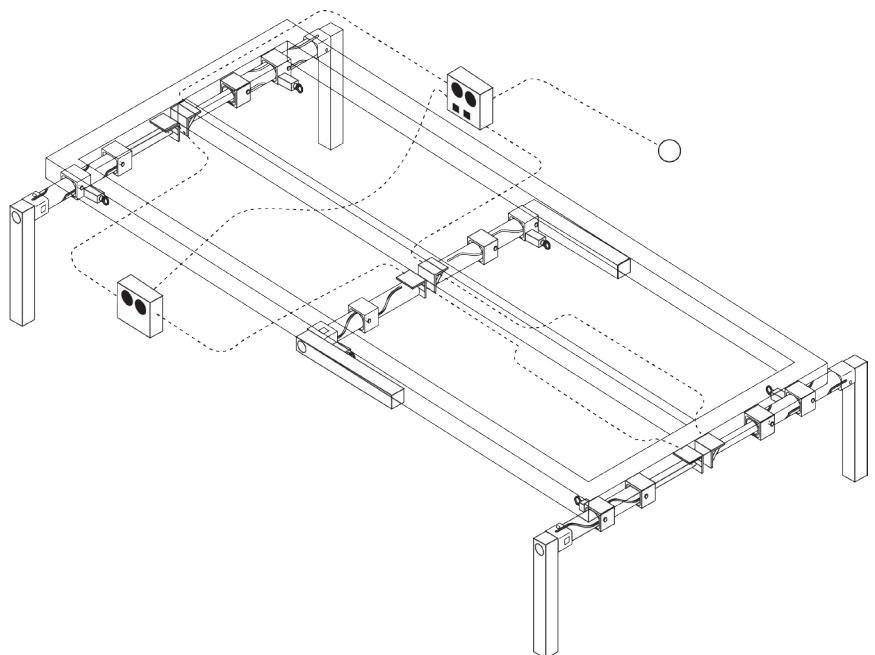


FIG 10.3

System with four outriggers deployed and legs rotated to full down and locked position, two middle legs remain stowed - based on user selection



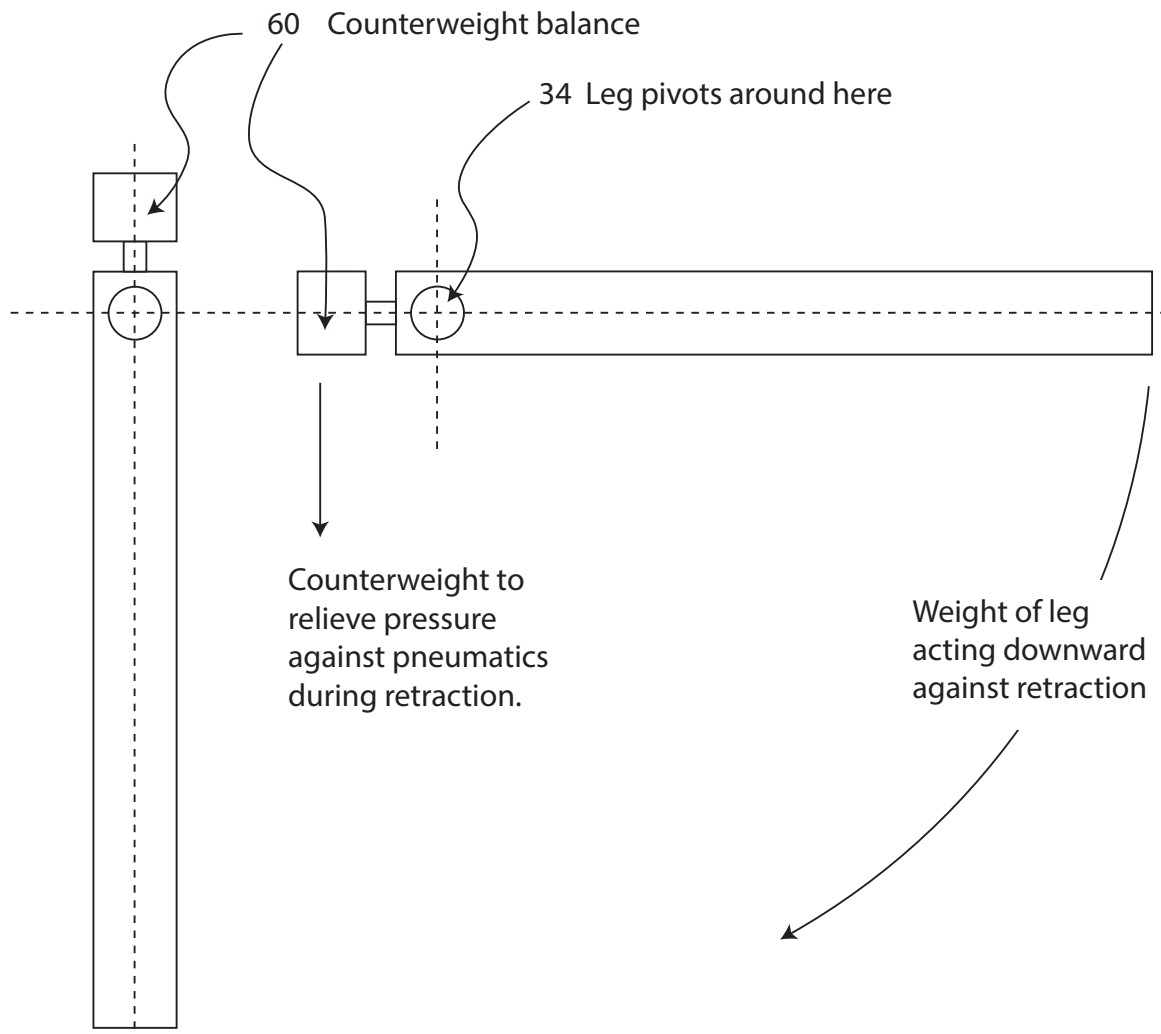


FIG 11