



P35 from 32Kg to 38Kg
P40 from 36Kg to 43Kg
P45 from 42Kg to 49Kg
P50 from 47Kg to 54Kg
P55 from 55Kg to 58Kg
P60 from 56Kg to 65Kg



P70 from 64 to 76Kg
P80 from 72 to 86Kg
P90 from 82 to 96Kg
P110 from 94 to 108Kg
P110 from 104 to 116Kg
P120 from 112 to 132Kg

INSTRUCTION MANUAL

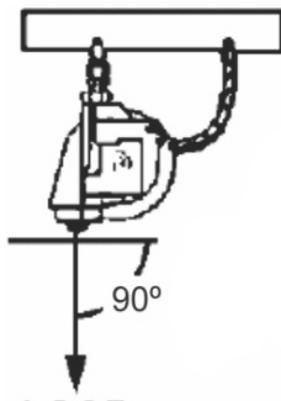
READ CAREFULLY THIS MANUAL BEFORE THE INSTALLATION

1- SAFETY TECNOLOGY

One of the main objectives of the companies is the reduction of production costs and at the same time to increase productivity. In this context, the ergonomics in the workstation is of importance maximum. The Draw™ Retractors Balancers provide safety and convenience in the production and assembly systems. Your constructive manner make them safe and durable as well as an indispensable item in the workbenches and assembly lines.

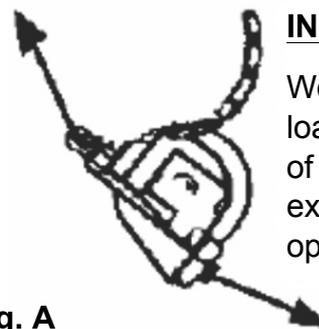
2- INSTALLATION MODE

Hang the balancer by swivel hook assembled on its top. The balancer should be placed directly over the work area. Your assembly must be done in such a way that minimizes the contact of the cable in the cable guide, in other words, perpendicularly. To prevent the fall/dropping of the balancer, install and secure, as indicated in the figure, a safety chain. The length of the safety chain should be the lowest possible, preventing that in case of rupture of the hook of sustaining the balancer does not fall more than 150 to 300 mm.



CORRECT

Keep the load hanging perpendicularly.



INCORRECT

Working with the inclined load causes premature wear of the cable and the reel and excessive effort from the operator.

Fig. A

The fitting with trolley allows a better operation of the balancer and allows a greater area of coverage.

A- The Draw™ Balancers models P35 to P120 leave factory with steel cable of the 2,2m useful and 0,5m additional cable that is outside the body of the balancer which may be increased, if the user want, rising the cable gland (never down the cable gland because the cable will be loose and may overlap, locking the balancer).

B- All Draw™ Balancers is factory preset to the specified mid-range load. Ex: a balancer model P-35 has specified, on the label, the capacity from 32 to 38 kg and leaves factory preset to load of 35 kg.

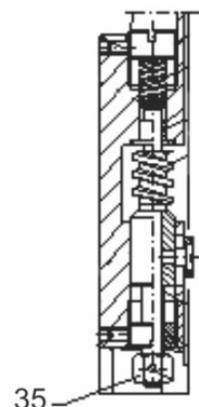
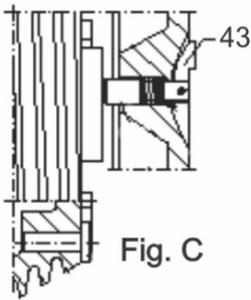


Fig. B



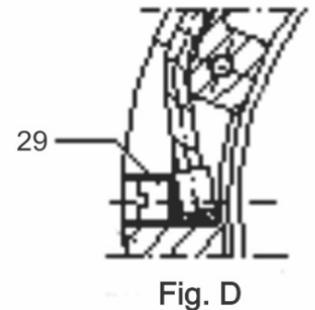
C- To reload the balancer and adapt it to the workload, turn clockwise the hex nut (item 35) using a 5/8 (16 mm) wrench. To download, turn counter-clockwise the same nut (see figure B). Attention: Never download the balancer with the load hang down on the cable.

D- The balancer has on the back a handle (item 43) that locks the reel in 6 (six) positions at each turn. In this way, it is possible to handle the load without any effort from the operator (see figure C).

3 - MAINTENANCE

A- Prior the maintenance, download completely the spring tension as indicated in item 2 C until the cable is completely free of tension. Remove the frontal cover then remove the reel spring set, afterwards inspect springs, bearings, cap and pinion, observing all components.

B- It is important to examine the terminal of the cable by removing the plug (item 29) to detect any premature wear (see figure D).



CABLE REPLACEMENT

When the cable indicates any sign of damage, this should be replaced immediately. Better to change the cable than run the risk of falling, losing the load or injuring the operator.

To replace the cable, it is not necessary to disassemble the balancer, remove the spring tension or remove it from its working position.

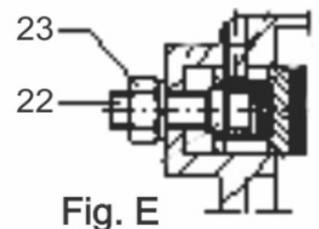
Simply move the cable to its lower end exposing the plug (item 29 - Fig. D) of the reel, as shown in Fig. D. Engage the lock (item 43 - Fig. C) and remove the load. Remove the plug and the old cable.

Place the new cable and replace the plug. Replace the load and then release the lock (item 43 - Fig. W)

ATTENTION: NEVER DISENGAGE THE LOCK BEFORE PLACING THE LOAD AT THE HOOK

BRAKE

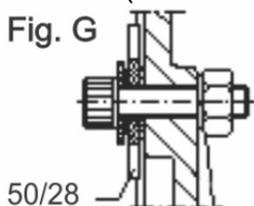
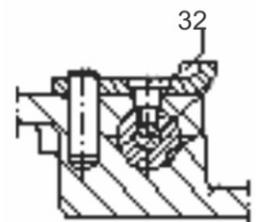
The Draw™ Balancers P35 to P120 models have a fine adjusting brake system on the front cover. This system is not factory preset. The brake is activated by the allen screw (item 22 – Fig. E), which presses the brake against the spring case. This allows a softer load return. When the desired adjusting is reached, tighten the nut (item 23 - Fig. E) to hold it.



SAFETY

These balancers have double security system:

A - Reel Lock - In case of sudden spring rupture this system is activated. In the absence of spring traction, the spindle-pinion system immediately retracts and the latch (item 32 - fig F) locks on the shoes of the reel bottom.



B- Malt Cross (star) is activated in case of cable rupture, preventing the central spring pulled by the load and suddenly without traction, return at high speed avoiding other damages. (Item 50/28 - Fig G)

4 - WARRANTY

Always use original Draw™ parts in replacing.

The Draw™ Balancers have 6 months warranty against manufacturing defects except for the cable, whose durability depends on the handling of the moved load, so inspect the cable every 15 days by checking if there was no disruption of some of the wires that composes the weft. Remember that the Draw™ Balancers are manufactured with first-class materials, so you will have a long-life balancer. Thank you for purchasing our products.

5 – CERTIFICATE

Serial Number: _____

Model: _____

Date of Purchase: ____ / ____ / ____ Invoice N°: _____

Owner: _____