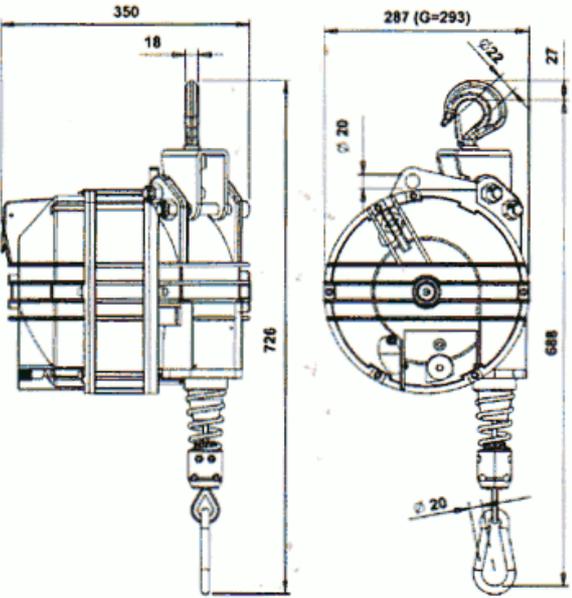
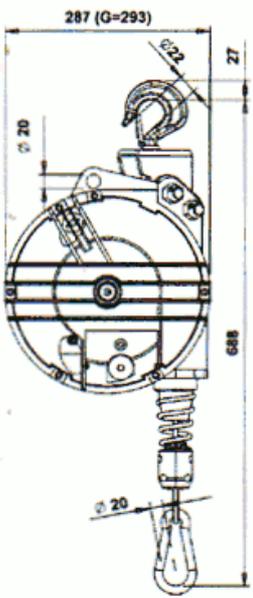


TOTAL AIRTOOL SERVICES (UK) Ltd
BALANCER OPERATING MANUAL



Reproduced from Tecna manual

ART. ITEM					350	287 (G=293)
	kg.	mm	kg.	kg.		
9422-9422G	100 + 120	2500	36.61	37.83		
9423-9423G	120 + 140	2500	38.51	39.74		
9424-9424G	130 + 150	2500	38.83	40.06		
9425-9425G	140 + 160	2500	40.90	42.13		
9426-9426G	160 + 180	2500	43.20	44.43		
9451-9451G	100 + 115	3000	36.61	37.83		
9452-9452G	115 + 130	3000	36.77	37.99		
9453-9453G	130 + 140	3000	38.51	39.74		
9454-9454G	140 + 150	3000	38.83	40.06		
9455-9455G	150 + 160	3000	40.90	42.13		
9456-9456G	160 + 180	3000	43.20	44.43		

< 70 d b (A) **T = +5°C... +60°C**

Conservare queste istruzioni per tutta la vita del bilanciatore
 Save these instructions for all the balancer life
 Conserver ces instructions pendant toute la vie de l'équilibreur
 Conservar estas instrucciones durante toda la vida del equilibrador
 Diese Bedienungsanleitung muss für die Lebensdauer des Federzuges aufbewahrt werden
 Bewaar deze instructies gedurende de gehele levensduur van de balancer
 Oppbevar denne bruksanvisning for hele bruksperioden
 Spara denna bruksanvisning så länge balansblocket är i bruk

Collegamenti di sicurezza N.220331N.121183
 Safety connections N.220331N.121183
 Liaisons de sûreté N.220331N.121183
 Conexiones de seguridad N.220331N.121183
 Sicherheitsaufhängungen N.220331N.121183
 Veilighedsforbindinger N.220331N.121183
 Sikkerhetsoppheng N.220331N.121183
 Säkerhetsupphängningar N.220331N.121183

GB Translation of the Original Instructions

 Install the balancer before using it. This operation is to be carried out by skilled personnel who must comply with the directions outlined in this manual: a wrong installation could cause injury/damage to people/property.

This manual contains important information that the user must adhere to in order to use the balancer safely. Be sure to have clearly understood all the instructions before using the balancer. Failure to do so could cause injury.

The balancer was built in conformity with European Community Directives that were pertinent and applicable when the balancer was put on the market and that entail the CE marking of the product.

Intended conditions of use

The balancers are designed to balance the weight of tools and utensils in general and are to be used by one operator at a time. The balancer may be used in an assembly line, in single workplaces, in professional or private environments, as a hobby, etc.

 Always operate, inspect and maintain this balancer in perfect working order in accordance with all regulations pertinent to balancers, tools and workplaces.

Use contraindications

Do not use the balancer in environments with potentially explosive atmospheres.

Do not permit children or people under age to use the balancer.

Do not work, transit or linger underneath the balancer.

When using balancers, always fully and duly comply with the standards and laws in force in the country in which they are used.

TECNA S.p.A. will not be held liable for any damage or problems caused by customers using these balancers for any other application.

Choosing the balancer

Assess the total load to be balanced: tool, accessories and sections of hoses or cables to be lifted by the balancer. The overall load to be balanced must fall within the balancer's minimum and maximum load-bearing capacity.

Starting up the balancer

Assess the range of the work area and, if need be, hang the balancer on a carriage to be able to use it properly in an area wide enough to carry out the required activities.

If screw-fixing devices are used to install the balancer, use self-locking nuts, split-pins or other safety systems.

 Always connect the safety suspension S, using exclusively the supplied standard fittings (Fig.1), to a suitably sized support. The safety support MUST NOT BE the same one used for the main suspension 23 (Fig.1). If the main suspension breaks, the max falling distance must not be more than 100 mm. Tighten the nuts of the clamps 20331 (Fig.1) at a torque of 4 Nm.

To avoid anomalous wear, the load must be applied vertically and in any case the cable must be free to line up with the direction of the load.

Using the balancer

Grip the tool hanging from the balancer and carry out the required operations. Then accompany the tool until it balances, on the vertical line of the balancer, and release it.

The load to be balanced must be hung on snap-hook 33 (Fig.5). Ensure that the snap-hook is properly closed after having hung the load. The cable must never be unwound all the way: its work travel must end at least 100 mm before it reaches the lower limit (balancers 9422÷9426 9451÷9456 are fitted with an automatic limit stop system).

If need be, move and lock the clamp M (Fig.5) to stop the upward stroke.

 Do not unhook the load if the clamp M (Fig. 5) does not lean onto the rope's swaging (POSITION SHOWN IN FIGURE 5).

When using the balancer, always don individual protective gear and closely adhere to the prevailing accident prevention regulations. ***It is strictly prohibited to:***

- Abandon the load if it is not in a vertical position
- Swing/throw the hanging load to another operator
- Move the load by pulling the balancer's cable
- Hang loads that are not within the upper and lower ranges of the admissible load-bearing capacity
- Hang more than one tool on the balancer

 *The sole risk linked to the use of the balancer consists in any uncontrolled rewinding of the cable. This very dangerous event will be avoided by adhering to the following instructions:*

- if you have any doubts concerning the working efficiency of the balancer, BEFORE performing any kind of inspection be sure to hold up the hanging tool to prevent it from falling and DISCHARGE THE SPRING COMPLETELY

 *Should one wish to fully discharge the spring, stop the discharging operation as soon as the spring is effectively and completely discharged (proceeding beyond this position would damage the spring which would require to be replaced).*

- never release the load if the cable has not been fully wound in the drum
- if the balancer's cable is unwound and no load applied to it, DO NOT do anything on your own initiative but contact customer service at once

Adjusting the balancer

To enable the balancer to balance heavier loads, use the specific key to turn screw 44 (Fig. 5) in the direction indicated by symbol "+". For lighter loads, turn screw 44 (Fig. 5) in the direction indicated by symbol "-".

After having adjusted the load, check that the cable slides freely for its entire length: the movement must not be restricted when the spring has wound all the way. Check the stroke often and at different speeds.

NOTE: should the balancer's capacity of supporting a hanging load decrease, this could mean that the spring of the drum is about to break. DO NOT MODIFY BALANCER ADJUSTMENT TO MAKE IT HOLD UP THE LOAD IN ALL CASES BUT CONTACT SKILLED PERSONNEL IN CHARGE OF MAINTENANCE AT ONCE.

Safety devices

Drum spring breakage

The balancer is fitted with a safety device that trips when the drum spring breaks and stops the balancer to prevent the hanging load from falling.

If the hanging tool cannot be lifted or lowered through ordinary strain, **DO NOT INSIST but contact customer service.**

NOTE: the balancer stops even if the drum spring is fully discharged: in this condition the head of the charge screw 44 (Fig.5) protrudes approximately 4 mm outside the cap. To restore operating conditions, use the lever 5 (Fig.6) and try to charge the spring as outlined in paragraph "Balancer adjustment" (release lever 5 when the head of the charge screw has re-entered the cap). If the balancer does not release, DO NOT do anything and contact customer service. Centrifugal speed limiter

The balancer is fitted with a centrifugal safety system that locks the drum if the speed exceeds the danger limit (accidental unhooking of the load, cable breakage, etc.).

If the centrifugal safety system trips, discharge the drum spring IMMEDIATELY and completely, and have the balancer inspected by an authorized service center. **Manual lock**

The balancer is fitted with a manual-locking system (Fig.4): turn the knob 1 to position H to stop drum rotation. Turn the knob 1 to position G for routine work conditions.

NOTE: for safety reasons, the shape of the shutter that stops the drum does not allow the shutter to be removed unless it is perfectly coaxial with the matching hole in the drum: to release the drum,

move the load slightly at the top and at the bottom until you find the correct position in which to release it.

OPTION 'B': control from below (Fig.2)

Lower the side of the handle with the **RED** tape to lock the drum; lower the side of the handle with the **GREEN** tape to release it.

 *WARNING: do not leave the balancer with the drum locked and no hanging loads.*

WARNING: if the balancer's cable is not fully wound, and no load is applied to it, DO NOT do anything but contact the customer service at once.

OPTION "RI", insulated rotary suspension (Fig.3)

Permits to insulate the load hung on the balancer and/or turn the hanging tool freely without twisting the cable.

 *WARNING: always comply with the safety regulations when using electrical appliances.*

Installation: insert the snap-hook (33) into the pin E of the rotary suspension. Insert the cable's thimble (15) into the pin F; insert the split-pin (D) and deform it.

INSPECTIONS AND MAINTENANCE

Maintenance may be carried out only by skilled and authorized personnel.

- Visually inspect the balancer on a regular basis (for instance once at each work shift). Specifically, check the state of the suspensions (23) and S (Fig.1), the fixing screws & self-locking systems (if used), and the condition of the hooks and cable.

 *If the cable has the defects shown in (Fig.7), replace it immediately.*

Do not make any modification to the cable unit and, specifically, **DO NOT SHORTEN the cable:** if need, please get in touch with TECNA S.p.A.

- check that the cable's movement is smooth and that it does not make any strange noises
- do not lubricate the balancer with flammable or volatile fluids
- do not remove any labels. Replace any damaged labels
- **the balancer must be inspected at least once a year by skilled, authorized personnel.**

 *Never disassemble the balancer. Maintenance is to be carried out only by*

skilled, authorized personnel. The balancer must be disposed of complying with

prevailing rules and regulations at the end of its work life.

Warranty

The use of non-original TECNA spare parts will negatively affect safety and performance and will, in any case, void the warranty.

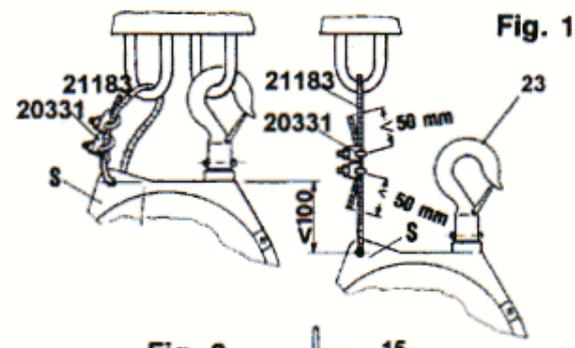


Fig. 2

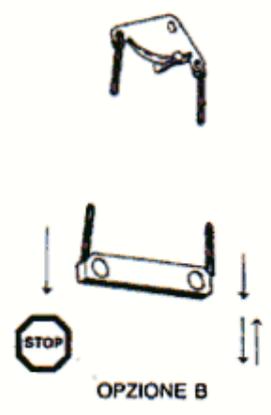


Fig. 3

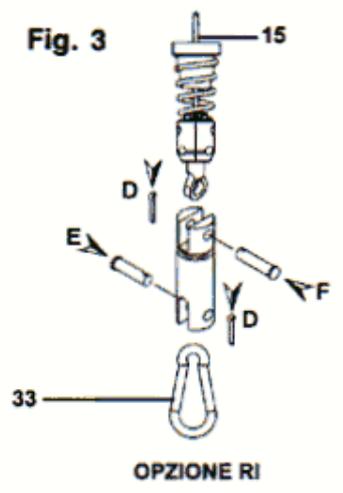


Fig. 4



Fig. 5

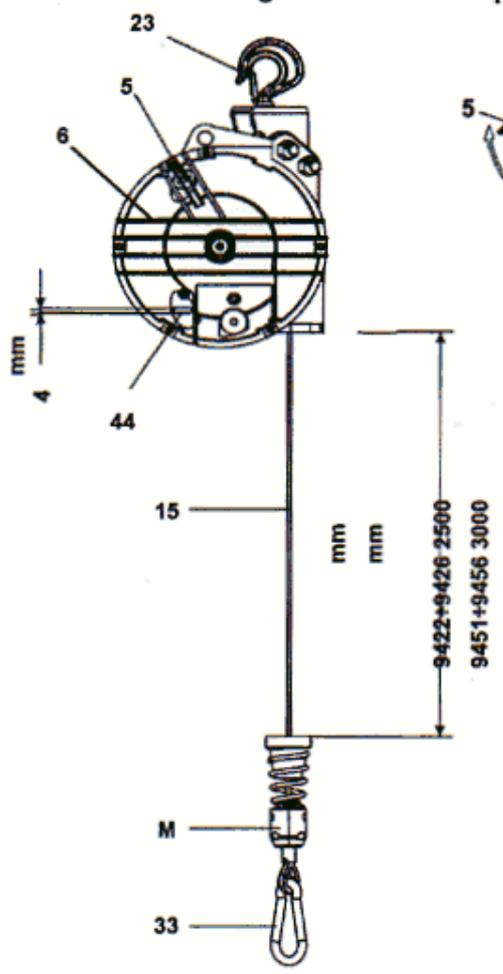
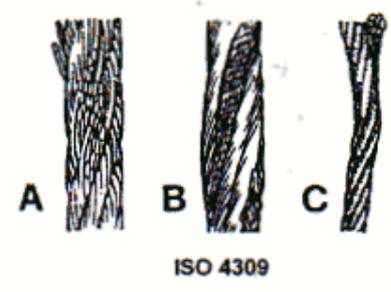
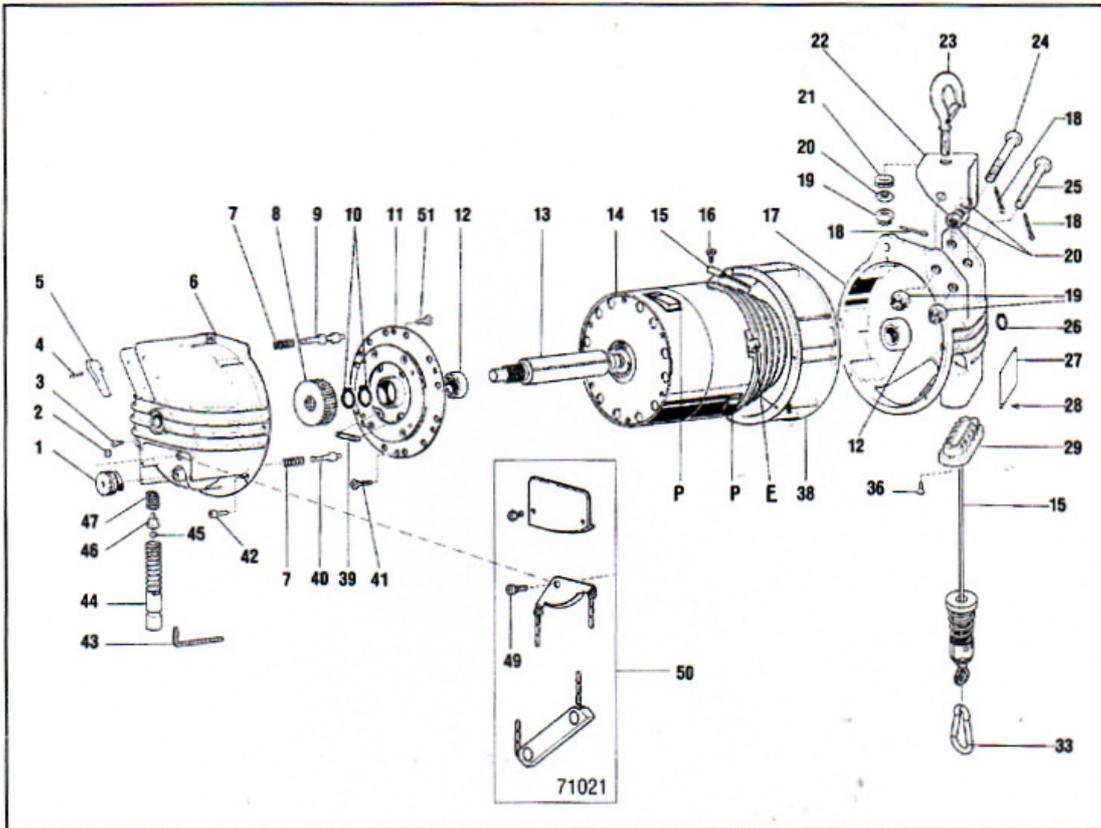


Fig. 6



Fig. 7





Pos.	Qt.	Codice
1	1	31296
2	1	10401
3	1	10189
4	1	10572
5	1	31169
6	1	9422-9456 49078
6	1	9422G-9456G 49078N
7	2	30348
8	1	38570
9	1	31162
10	2	10465
11	1	70232
12	2	20535
13	1	38606
14	1	9422-9451 70408

Pos.	Qt.	Codice
1	1	9423-9453 70409
1	1	9424-9454 70410
1	1	9425-9455 70411
1	1	9426-9456 70412
1	1	9452 70413
15	1	9422-9426 72543
1	1	9451-9456 72544
16	1	10511
17	1	9422-9456 49076
17	1	9422G-9456G 49076N
18	3	10183
19	3	10476
20	3	10468
21	1	10478
22	1	38603

Pos.	Qt.	Codice
23	1	31080
24	1	10469
25	1	10475
26	1	10180
27	1	-
28	2	10411
29	1	38582
33	1	20589
36	2	10514
38	1	49130
39	2	30352
40	1	32155
41	5	10479
42	6	10013
43	1	10270

Pos.	Qt.	Codice
44	1	31053
45	1	10480
46	1	31012
47	1	31161
49	1	30623
50	1	71021
51	1	10031

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**DICHIARAZIONE DI CONFORMITÀ • DECLARATION OF CONFORMITY
CERTIFICAT DE CONFORMITE • CERTIFICADO DE CONFORMIDAD
KONFORMITÄTSEKRLARUNG • CONFORMITETS VERKLARING**

Nome e indirizzo del costruttore Name and address of manufacturer Nom et adresse du constructeur Nombre y dirección del constructor Name und Adresse des Herstellers Naam en adres van de fabrikant	TECNA S.P.A. VIA MEUCCI, 27 40024 CASTEL S. PIETRO TERME (BO) ITALY
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Dichiaro sotto la nostra unica responsabilità che il prodotto We declare under our sole responsibility for manufacture of the product Nous déclarons sous notre seule responsabilité que le produit Certificamos bajo nuestra sola responsabilidad que el producto Wir erklären unter einziger Verantwortung, dass das Produkt Wij verklaren onder onze uitsluitende aansprakelijkheid, dat het produkt	BILANCIATORE BALANCER EQUILIBREUR EQUILIBRADOR FEDERZÜG BALANCER
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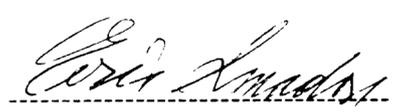
Modello - Model - Type - Modelos - Typen - Modellen	9422 - 9423 - 9424 - 9425 - 9426 9451 - 9452 - 9453 - 9454 - 9455 - 9456 9422G - 9423G - 9424G - 9425G - 9426G 9451G - 9452G - 9453G - 9454G - 9455G - 9456G
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Numero di serie - Serial number - Numéro de série Número de fabricación - Serie-Nummer - Serienummer	da/from/de/de/von/van a/to/a/a/bis/tot	000001 004999
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A cui si riferisce la presente dichiarazione e conforme al seguente standard: To which this declaration relates is in conformity with the following standard: Objet de certificat, est conforme à la norme suivante: Objeto de este certificado, es conforme a la norma siguiente: Auf die sich die gegenwärtige Erklärung bezieht, mit folgender Norm konform ist: Waarnaar deze verklaring verwijst is conform norm:	DIN 15112
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Ai sensi delle direttive CEE: Following the provisions of EEC Directives: Conforme aux prescriptions des Directives CEE: Conforme a las prescripciones y directivas de la CEE: Gemäss EG-Richtlinien Volgens de E.E.G.-Richtlijnen	2006/42/EC
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Nome e indirizzo della persona autorizzata a costituire il fascicolo tecnico: Name and address of the person authorized to draw up the technical file: Nom et adresse de la personne autorisée à constituer le dossier technique: Nombre y dirección de la persona autorizada a constituir el expediente técnico: Name und Adresse der zur Erstellung des Technikheftes autorisierten Person: Naam en adres van de geautoriseerde persoon voor het samenstellen van het technische dossier:	TECNA S.p.A. VIA MEUCCI, 27 40024 CASTEL S. PIETRO TERME (BO) ITALY
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Nome e firma della persona autorizzata alla redazione della dichiarazione di conformità: Name and signature of the person authorized to write the declaration of conformity: Nom et signature de la personne autorisée à rédiger la déclaration de conformité: Nombre y firma de la persona autorizada a redactar la declaración de conformidad: Name und Unterschrift der zur Abfassung der Konformitätserklärung autorisierten Person: Naam en handtekening van de geautoriseerde persoon voor het opstellen van de conformiteitsverklaring:	 -----
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Ezio Amadori

Presidente del C.d.A.

Caste San Pietro Terme 30/05/2012

Chairman of the BOD • Président du Conseil d'Administration • Vorsitzender des Verwaltungsrates • Presidente del C.d.A.