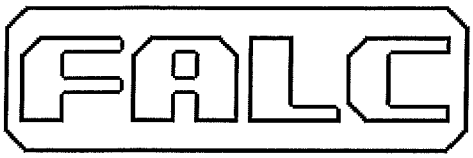
http: www.falc1960.com
e-mail: info@falc1960.com



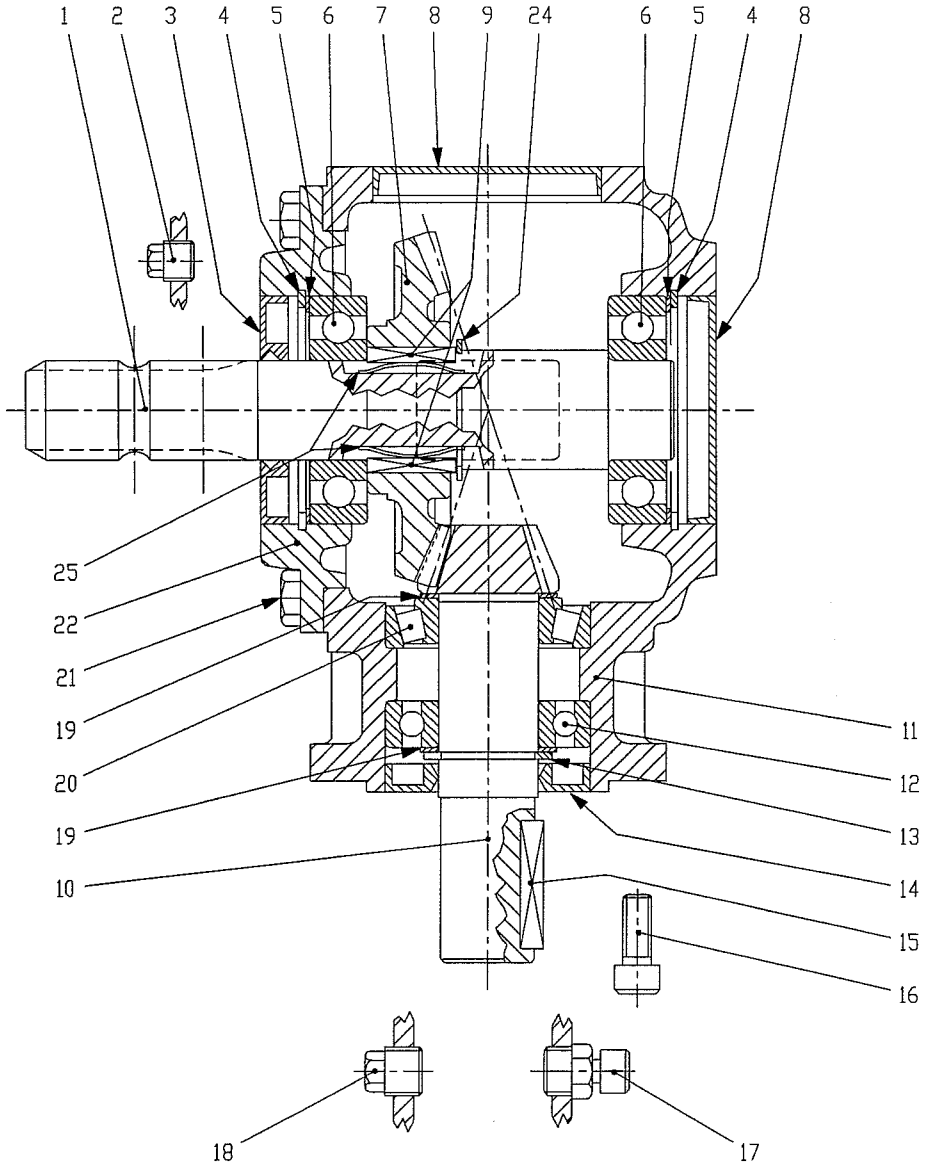
via Proventa n.41 - Faenza (Ra) - ITALY -
☎ ++39 0546 29050
fax ++39 0546 663986

CATALOGO RICAMBI

Modello:

Trincia Cat / Spostabile

Rivenditore / Dealer / Händler / Concessionnaire

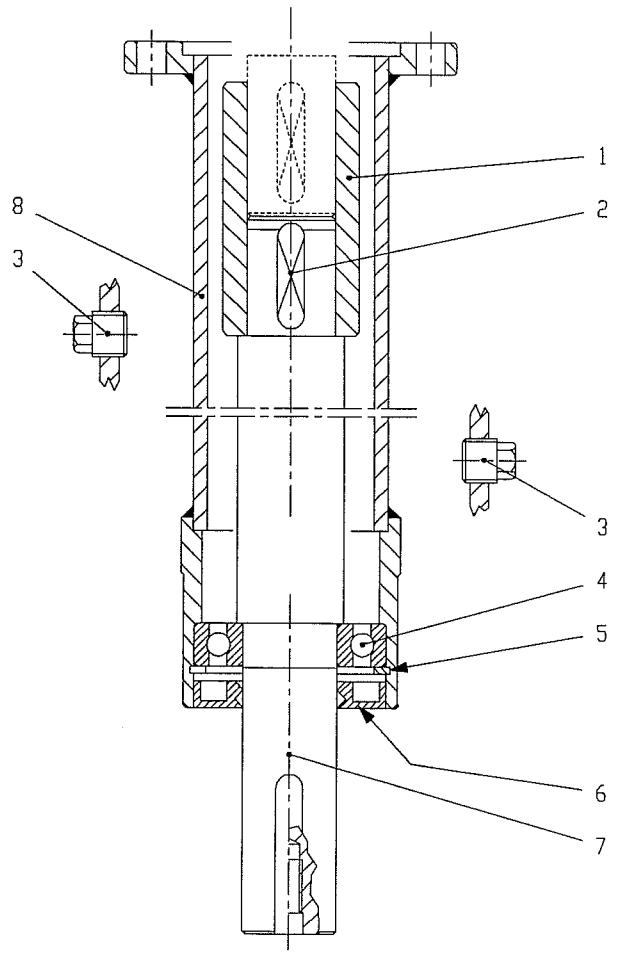


CAT 1000–1200–1350–1500

SCATOLA TL 310 CON R.L. INTERNA

TAV. 590

FALC



CAT 1000–1200–1350–1500

PROLUNGA MOLTIPLICATORE L=615 T–310 B

TAV. 591

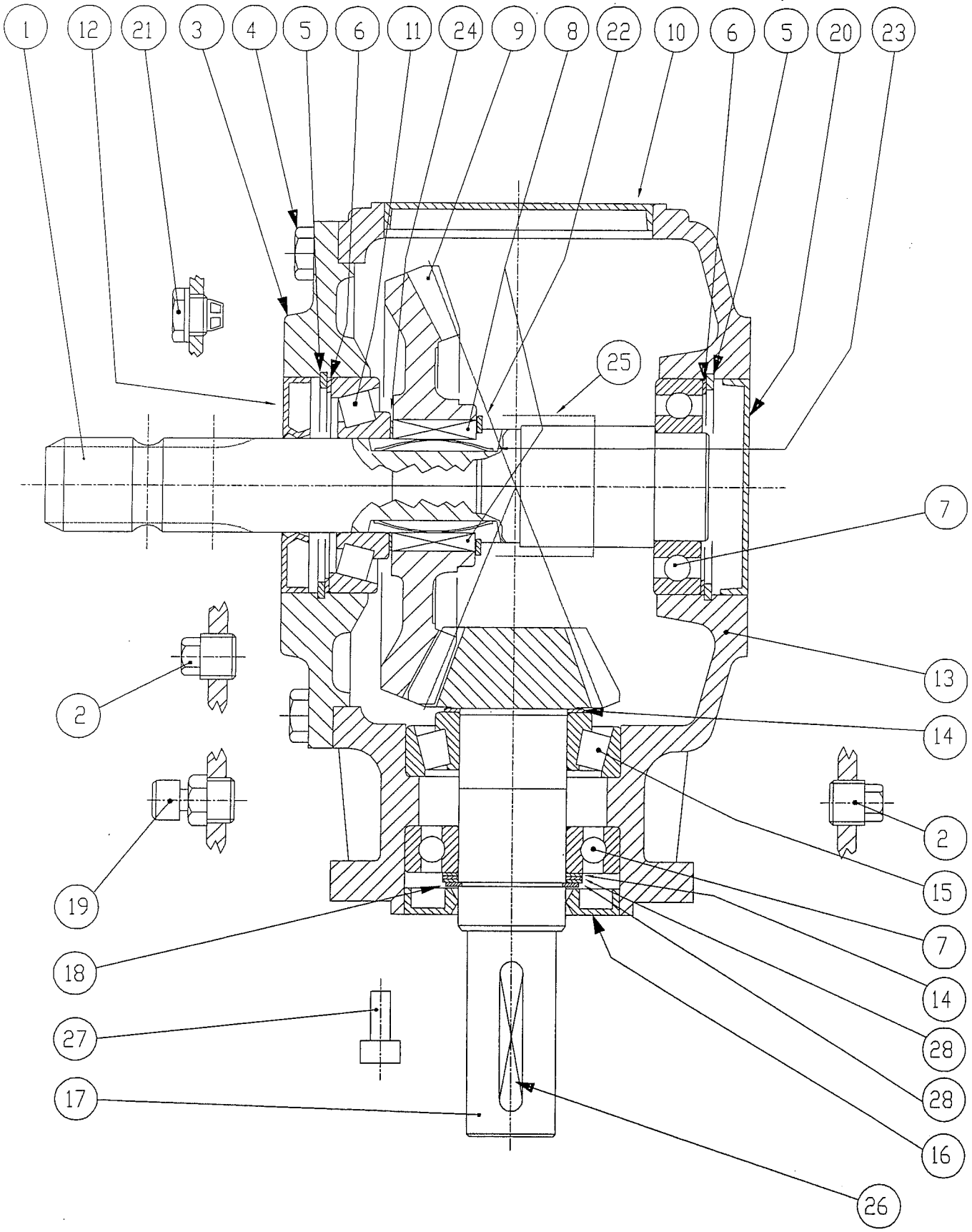
FALC

Falc	Tavola Ricambi	CAT 1000–1200–1350–1500
pag.1	n. 590 02/2002	Moltiplicatore T 310 J

Pos.	Codice	Descrizione
	9.310.844.00	**MOLTIPLICATORE T 310 J CON R.L. INTERNA**
1	0.311.3201.00	Albero calettato Ruota Libera 1 3/8" z=6
2	8.6.5.00339	Tappo conico esagono esterno 1/4"
3	07.0.135	Paraolio 35x80x10
4	8.5.2.00030	Seeger per interni d 80 – UNI 7437
5	0.267.7500.00	Spessore di registro 69.0x79.9
6	06.0.033	Cuscinetto a sfera 6307
7	0.310.6010.00	Corona z=36 m 3.45
8	8.7.0.00790	Cappellotto di chiusura 80x10
9	0.267.7109.00	Linguetta per Ruota Libera
10	0.310.5002.00	Albero pignone z=12 m 3.45
11	0.310.0300.00	Scatola
12	06.0.014	Cuscinetto a sfera 6207
13	05.0.041	Seeger per esterni d 35 s=2.5 serie pesante – UNI 7436
14	07.0.029	Paraolio 35x72x10
15	8.4.1.00314	Linguetta A 10x8x45 – UNI 6604
16	8.1.2.00198	Vite TCEI M10 L=25 classe 8.8 – UNI 5931
17	8.6.7.00161	Tappo sfiato anticondensa 3/8"
18	8.6.5.00006	Tappo conico esagono esterno 3/8"
19	0.259.7500.00	Spessore di registro 35.3x48.0
20	06.1.037	Cuscinetto a rulli 30207
21	8.1.1.00501	Vite TE M10 L=22 classe 8.8 – UNI 5739
22	0.310.1300.00	Coperchio
24	05.0.026	Seeger per esterni d 42 s=1.75 – UNI 7435
25	0.267.7110.00	Molla a lamina Ruota Libera

Falc	Tavola Ricambi	CAT 1000–1200–1350–1500
pag.1	n. 591 02/2002	Prolunga L=615 SENZA Ruota Libera Interna

Pos.	Codice	Descrizione
	9.310.501.00	**PROLUNGA L=615 SENZA RUOTA LIBERA INTERNA**
1	0.310.7100.00	Boccola
2	8.4.1.00022	Linguetta A 10x8x40 – UNI 6604
3	8.6.5.00006	Tappo conico esagono esterno 3/8"
8	2.310.1701.00	Prolunga L=615
4	06.0.014	Cuscinetto a sfere 6207
5	8.5.2.00131	Seeger per interni d 72 – UNI 7437
6	07.0.029	Paraolio 35x72x10
7	0.310.3701.00	Albero liscio L=615



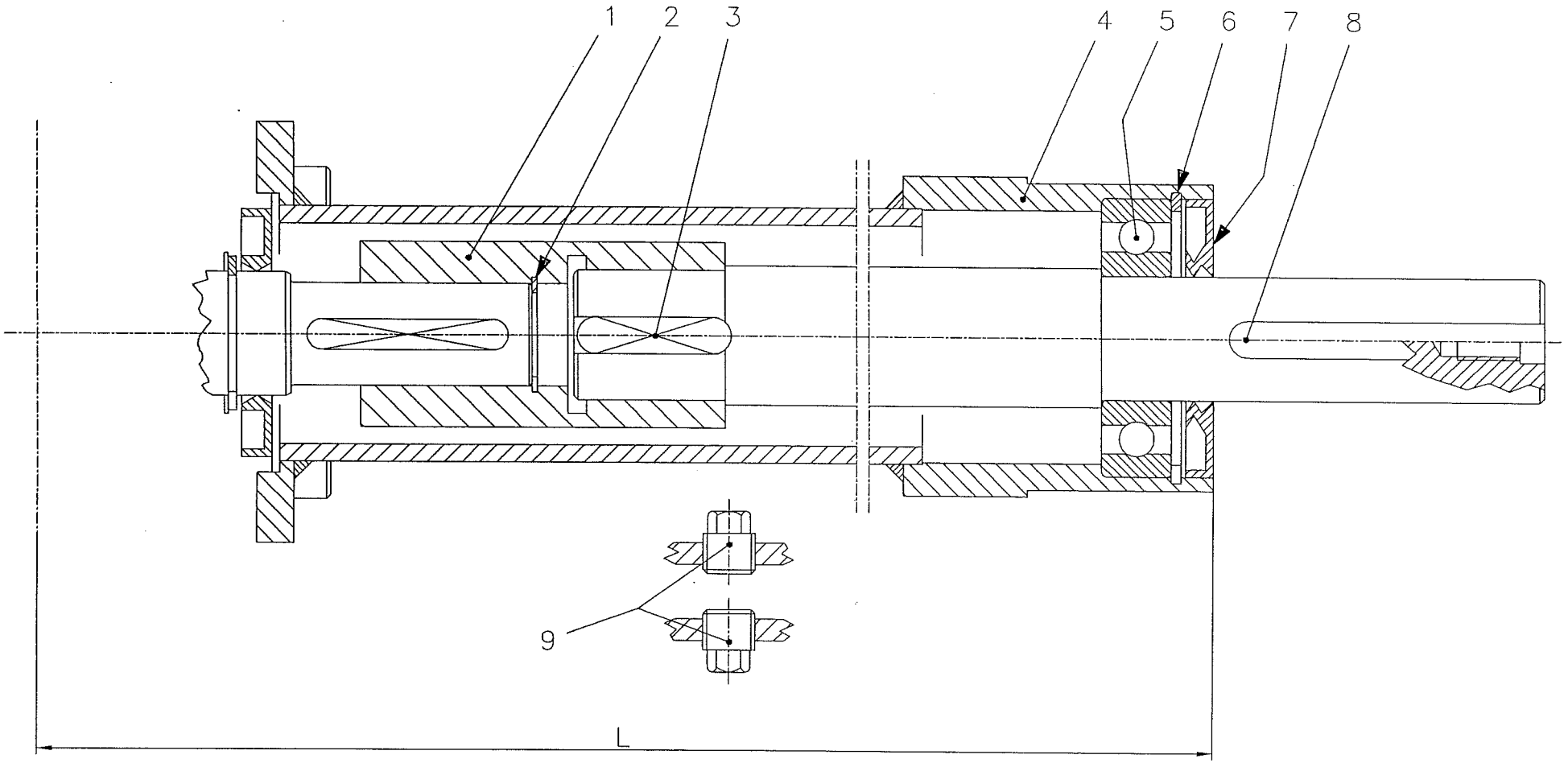
TAV.605

T 313J CON RUOTA LIBERA

FALC

Falc	Tavola Ricambi	Moltiplicatore T 313J con Ruota Libera
pag. 1	n. – 605/2002	

Pos.	Codice	Descrizione	q.
	90.2.101	Moltiplicatore T 313J **R=1:2,5 per PTO 540** con Ruota Libera Interna - cod. 9.313.871.00 **Di serie per Alce 1600-1950-2300-2500**	
	90.2.102	Moltiplicatore T 313J **R=1:3 per PTO 540** - con Ruota Libera Interna cod. 9.313.875.00 (9.313.856.00) - **Di serie per Cat 1800-2100-2500 - Velox 1650-1800-2100 – Beta – Condor – Zenit – Cargo – Vortex – Solex – Jolly 1800**	
	90.2.103	Moltiplicatore T 313J **R=1:1,6 per PTO 1000** con Ruota Libera Interna - cod. 9.313.873.00 **Di serie per Alce 2700-Super Alce 2500**	
1	0.312.3005.00	Albero entrata 1 3/8" z6	1
2	8.6.5.00006	Tappo conico con esagono esterno 3/8"	2
3	0.312.1300.00	Coperchio	1
4	01.0.153	Vite TE M10 L=25 cl.8.8 UNI 5739	8
5	05.1.012	Seeger per interni d 80 s=2,5 UNI 7437	2
6	0.267.7500.00	Kit distanziali 69x79,9	2
7	06.0.032	Cuscinetto 6208 (40x80x18)	2
8	0.267.7109.00	Chiavetta	2
9	0.312.6009.00 0.312.6005.00 0.312.6006.00	Corona z30 (per R=1:2,5 – PTO 540) Corona z36 (per R=1:3 – PTO 540) Corona z24 (per R=1:1,6 – PTO 1000)	1 1 1
10	8.7.0.00975	Cappellotto di chiusura 100x10	1
11	06.1.029	Cuscinetto a rulli conici 30307 (35x80x22,75)	1
12	07.0.135	Paraolio 35x80x10 con parapolvere	1
13	0.312.0300.00	Scatola	1
14	0.244.7500.00	Kit distanziali 40,3x51,5	2
15	06.1.010	Cuscinetto a rulli conici 32208 (40x80x24,75)	1
16	07.0.034	Paraolio 40x80x10	1
17	0.312.5001.00 0.312.5002.00 0.312.5004.00	Albero pignone z12 (per R=1:2,54 – PTO 540) Albero pignone z12 (per R=1:3 – PTO 540) Albero pignone z15 (per R=1:1,6 – PTO 1000)	1 1 1
18	05.0.018	Seeger per esterni d 40 s=2,5 UNI 7436 serie pesante	1
19	8.6.7.00161	Tappo sfiato anticondensa 3/8"	1
20	8.7.0.00790	Cappellotto di chiusura 80x10	1
21	8.6.4.00673	Tappo 3/8" indicatore livello olio	1
22	05.0.026	Seeger per esterni d 42 s=1,75 UNI 7435	1
23	0.267.7110.00	Molla a lamina per Ruota Libera	2
24	0.259.7510.00	Distanziale 48x35,3x1	1
26	8.4.1.01689	Chiavetta A10x8x65	1
27	01.2.204	Vite TCEI M12 L=30 cl.8.8 UNI 5931	4
28	0.244.7510.00	Distanziale 40,3x51,5x1	2



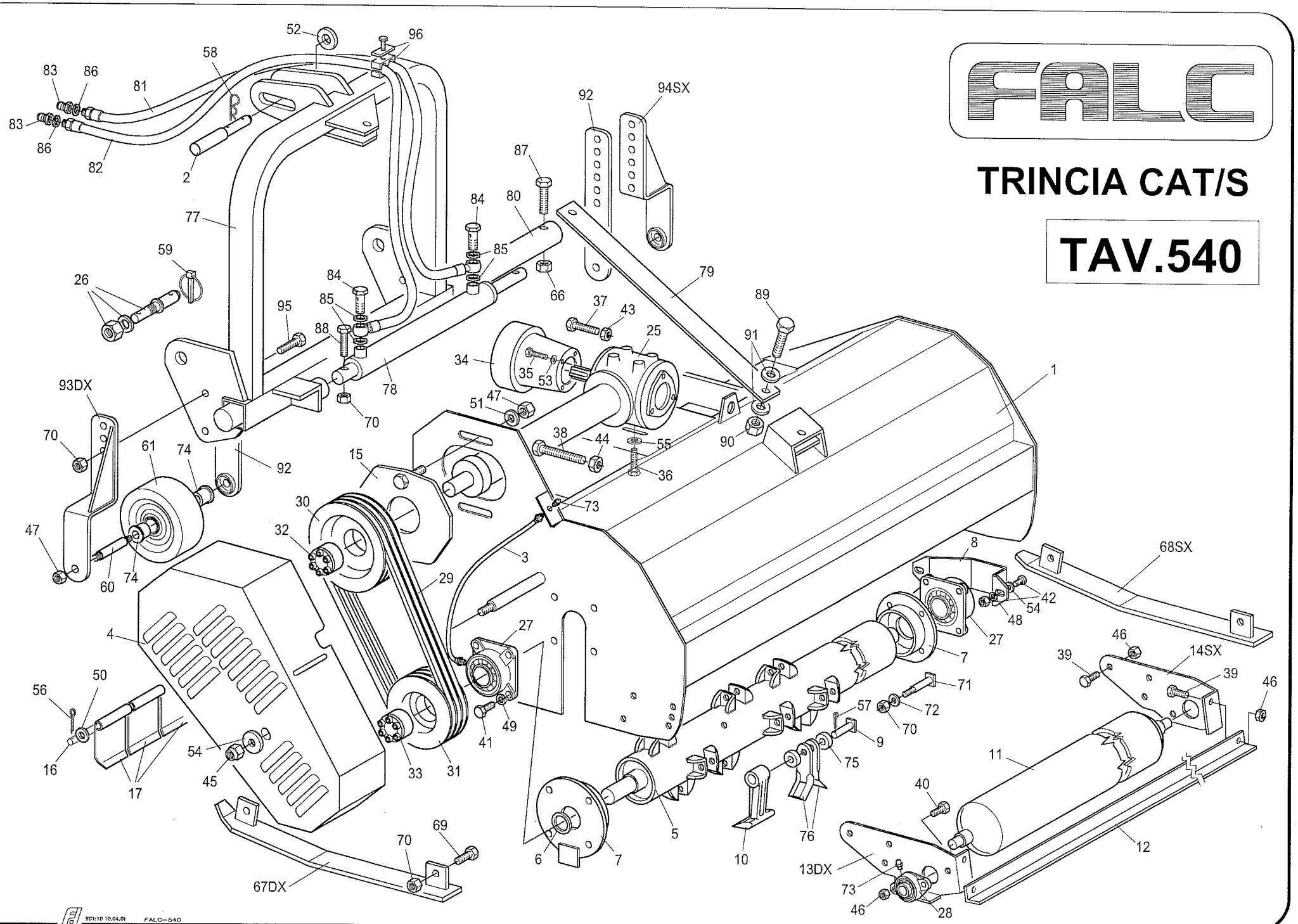
TAV.607

PROLUNGA SENZA RUOTA LIBERA PER SCATOLE 311–312–313

FALC

Falc	Tavola Ricambi	Prolunga SENZA Ruota Libera
pag.1	n. – 607/2002	per 311 – 312 – 313

Pos.	Codice	Descrizione	n.
	90.3.016	Prolunga SENZA Ruota Libera L=500 – 9.312.505.00	
	90.3.017	Prolunga SENZA Ruota Libera L=615 – 9.312.500.00	
	90.3.010	Prolunga SENZA Ruota Libera L=780 – 9.312.503.00	
	90.3.015	Prolunga SENZA Ruota Libera L=810 – 9.312.524.00	
	90.3.018	Prolunga SENZA Ruota Libera L=950 – 9.312.515.00	
	90.3.019	Prolunga SENZA Ruota Libera L=1060 – 9.312.502.00	
	90.3.020	Prolunga SENZA Ruota Libera L=1140 – 9.312.519.00	
	90.3.021	Prolunga SENZA Ruota Libera L=1200 – 9.312.508.00	
	90.3.022	Prolunga SENZA Ruota Libera L=1350 – 9.312.507.00	
	90.3.023	Prolunga SENZA Ruota Libera L=1500 – 9.312.523.00	
1	0.312.7000.00	Boccola	1
2	05.1.014	Seeger per interni d 33 s=1,2 UNI 7437	1
3	8.4.1.01630	Linguetta temprata A12x8x50	1
4	2.312.1301.00	Prolunga L=500	1
	2.312.1302.00	Prolunga L=615	1
	2.312.1303.00	Prolunga L=780	1
	2.312.1313.00	Prolunga L=810	1
	2.312.1310.00	Prolunga L=950	1
	2.312.1304.00	Prolunga L=1060	1
	2.312.1312.00	Prolunga L=1140	1
	2.312.1306.00	Prolunga L=1200	1
	2.312.1305.00	Prolunga L=1350	1
	2.312.1314.00	Prolunga L=1500	1
5	06.0.020	Cuscinetto a sfera 6308	1
6	05.1.003	Seeger per interni d 90 s=3 UNI 7437	1
7	07.0.068	Paraolio 40x90x8(7) con labbro parapolvere	1
8	0.312.3741.00	Albero L=500	1
	0.312.3742.00	Albero L=615	1
	0.312.3744.00	Albero L=780	1
	0.312.3745.00	Albero L=810	1
	0.312.3746.00	Albero L=950	1
	0.312.3747.00	Albero L=1060	1
	0.312.3748.00	Albero L=1140	1
	0.312.3749.00	Albero L=1200	1
	0.312.3750.00	Albero L=1350	1
	0.312.3766.00	Albero L=1500	1
9	8.6.5.00006	Tappo con esagono esterno 3/8"	2


FALC
TRINCIA CAT/S
TAV.540
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SD1:10.10.04.01
FALC-540

Falc	Tavola Ricambi	Trincia CAT/S
pag.1	n.540 – 04/2001	Attacco Spostabile

Pos.	Codice	Descrizione
1	45.10.88 45.10.89 45.10.77 45.10.78	Telaio con tubo 1350 Telaio con tubo 1500 Telaio con tubo 1800 Telaio con tubo 2100
2	31.00.52	Spina superiore I-II categoria
3	49.03.52	Prolunga ingrassatore
4	45.10.48	Carter copricinghie
5	45.04.36 45.04.14 45.04.12 45.04.37	Rotore 1350 Rotore 1500 Rotore 1800 Rotore 2100
6	45.04.30 45.04.31 45.04.32	Rasamento regolazione rotore 40,1x50x1 Rasamento regolazione rotore 40,1x50x1,5 Rasamento regolazione rotore 40,1x50x2
7	45.04.47	Flangia supporto UCF 208 con protezione
8	45.04.19	Protezione cuscinetto rotore
9	45.04.40	Perno portacoltello
10	45.04.33	Martello stampato
11	45.10.33 45.10.34 45.10.35 45.10.36	Rullo posteriore 1350 Rullo posteriore 1500 Rullo posteriore 1800 Rullo posteriore 2100
12	45.10.44 45.10.45 45.10.46 45.10.47	Raschiatore rullo 1350 Raschiatore rullo 1500 Raschiatore rullo 1800 Raschiatore rullo 2100
13	45.10.90	Flangia dx rullo posteriore
14	45.10.91	Flangia sx rullo posteriore
15	45.10.92 45.10.93	Flangia prolunga TL 310 – Cat 1350-1500 Flangia prolunga TL 311 – Cat 1800-2100
16	45.10.97 45.10.98 45.10.99 45.11.00	Perno protezioni anteriori 1350 Perno protezioni anteriori 1500 Perno protezioni anteriori 1800 Perno protezioni anteriori 2100
17	45.06.20 45.06.22 45.06.41	Protezione anteriore L=138 Protezione anteriore L=122 Protezione anteriore L=102
25		Moltiplicatore TL 310 L=615-Pto 540 g/min-R=1:3-Ruota Libera Cat 1350-1500 Moltiplicatore TL 311 L=615-Pto 540 g/min-R=1:3-Ruota Libera Cat 1800-2100
26	05.3.602	Perno doppio per attacco attrezzi d 22-art.39
27	06.4.002	Supporto flangiato con cuscinetto UCF 208
28	06.4.006	Supporto flangiato con cuscinetto UCFL 205
29	08.1.007	Cinghia SPB 1320

Pos.	Codice	Descrizione
30	08.2.038 08.2.039 08.2.019	Puleggia superiore SPB 200/2 foro d 80 – Cat 1350 Puleggia superiore SPB 200/3 foro d 80 – Cat 1500-1800 Puleggia superiore SPB 200/4 foro d 80 – Cat 2100
31	08.2.040 08.2.041 08.2.042	Puleggia inferiore SPB 160/2 foro d 80 – Cat 1350 Puleggia inferiore SPB 160/3 foro d 80 – Cat 1500-1800 Puleggia inferiore SPB 160/4 foro d 80 – Cat 2100
32	08.3.010	Calettatore superiore 35x80 (7 viti)
33	08.3.004	Calettatore inferiore 40x80 (7 viti)
34	10.0.501	Protezione Pto in plastica
35	01.0.126	Vite TE M8 L=14 tf UNI 5739 zincata
36	01.0.204	Vite TE M12 L=30 tf UNI 5739
37	01.0.261	Vite TE M14 L=90 tf UNI 5739
38	01.0.310	Vite TE M16 L=110 tf UNI 5739
39	01.1.101	Vite TE M12x1.25 L=25 tf UNI 5740
40	01.1.104	Vite TE M12x1.25 L=35 tf UNI 5740
41	01.1.153	Vite TE M14x1.5 L=40 tf UNI 5740
42	01.4.002	Vite TTQST M12 L=30 tf UNI 5732 con dado esagonale
43	02.0.004	Dado esagonale alto M14 h=14 UNI 5587
44	02.0.005	Dado esagonale alto M16 h=16 UNI 5587
45	02.2.005	Dado autobloccante M16 h=18 UNI 7473
46	02.5.002	Dado metalbloc M12x1.25 h=11
47	02.5.004	Dado metalbloc M16x1.5 h=14
48	04.0.004	Grower serie pesante d 12
49	04.0.005	Grower serie pesante d 14
50	04.1.004	Rosetta d 14 –15x31x3- comune cat.C
51	04.1.238	Rosetta d 16 –17x35x3- UNI 6593 cat.C
52	04.1.215	Rosetta d 20 –21x37x3- UNI 6592 cat.A zincata
53	04.1.226	Rosetta d 8 –9x24x2- UNI 6593 cat.C zincata
54	04.1.227	Rosetta d 16 –18x48x4- UNI 6593 cat.C
55	45.10.81	Rosetta d 12 –13x40x4- zincata
56	05.3.004	Copiglia d 4 L=30 UNI 1336
57	05.3.010	Copiglia d 5 L=30 UNI 1336
58	05.3.203	Copiglia a molla d 5 L=100 art.116
59	05.3.402	Spina a scatto d 10 L=58 art.104
60	45.06.02	Perno ruota anteriore
61	10.1.202	Ruota d 190x100
66	02.4.005	Dado metalbloc M14 h=12
67	45.10.62	Slitta dx
68	45.10.63	Slitta sx
69	01.1.151	Vite TE M14x1.5 L=30 tf UNI 5740
70	02.5.003	Dado metalbloc M14x1.5 h=12
71	45.04.41	Perno filettato per martello stampato
72	04.1.211	Rosetta d 14 –15x28x2.5- UNI 6592 cat.A
73	09.2.501	Ingrassatore dritto a spillo M6

Pos.	Codice	Descrizione
74	10.1.226	Boccola per ruota d 190x100
75	45.04.20	Distanziale coltello 01
76	45.04.00	Coltello 01
77	45.10.67	Attacco a 3 punti spostabile
78	66.03.58	Martinetto idraulico
79	45.10.69	Tirante attacco a 3 punti spostabile
80	45.10.19	Asta attacco a 3 punti spostabile
81	42.02.04	Tubo SAE 100R1AT 3/8" Occhio 3/8"-MaschioDritto 1/2" L=2300
82	45.10.57	Tubo SAE 100R1AT 3/8" Occhio 3/8"-MaschioDritto 1/2" L=1870
83	09.1.506	Attacco rapido parte maschio 1/2"(piooner a sfere)
84	09.1.051	Vite forata 3/8"
85	09.1.002	Rondella in rame 3/8"
86	09.1.004	Rondella in rame 1/2"
87	01.0.308	Vite TE M16 L=90 tf UNI 5739
88	01.1.157	Vite TE M14x1.5 L=60 pf UNI 5738
89	01.1.270	Vite TE M18x1.5 L=60 tf UNI 5740
90	02.5.006	Dado metalbloc M18x1.5 h=17
91	04.1.209	Rosetta d 18 –19x34x3- UNI 6592
92	45.11.38	Braccio ruota dritto
93	45.10.73	Braccio ruota piegato dx
94	45.10.74	Braccio ruota piegato sx
95	01.1.154	Vite TE M14x1.5 L=45 tf UNI 5740
96	09.1.659	Collare stringitubo AD2 18/18

USE AND MAINTENANCE MANUAL

1.1. Manufacturer: **FALC S.r.l.**
via Proventa n.41 - Faenza (Ravenna) - ITALIA -
Tel. ++39 0546 29050
Fax ++39 0546 663986
e-mail: info@falc1960.com
http: www.falc1960.com

1.2. Series: **ZENIT - CONDOR - CAT**
BETA - SUPER SAX - VELOX

1.3. Model:

1.4. Series number:

CAREFULLY NOTE:

- THIS MANUAL MUST ACCOMPANY EACH EXAMPLE OF THE ABOVE MENTIONED SERIES.
- IN ORDER TO ENSURE A COMPLETE UNDERSTANDING OF THE MACHINE'S CORRECT FUNCTIONING THE USER MUST FULLY READ EACH SECTION OF THE MANUAL.
- **PARTICULARLY IMPORTANT NOTES REGARDING SAFETY ARE WRITTEN IN BOLD PRINT.**
- **ANY USERS WHO MUST CARRY OUT PARTICULAR OPERATIONS ON THE MACHINE FOR WHICH NO SPECIFIC INSTRUCTIONS HAVE BEEN SUPPLIED MUST DIRECTLY ASK OUR SALES OR TECHNICAL OFFICE.**

INDEX

2. CONDITIONS OF USE

FALC shredders are built to be coupled to an ideal tractor provided with a 3-point hitch and a Cardan shaft transmission.
The shredders are used to shred the remains after maize, wheat, soya bean, cotton, sunflower, artichokes, tobacco harvests, etc., to allow a better formation of the humus necessary for the soil fertility, for the elimination of parasites and to achieve the optimal condition that restores the land for further cultivation. They are also used to shred grasses and pruning remains in fruit orchards and vineyards.

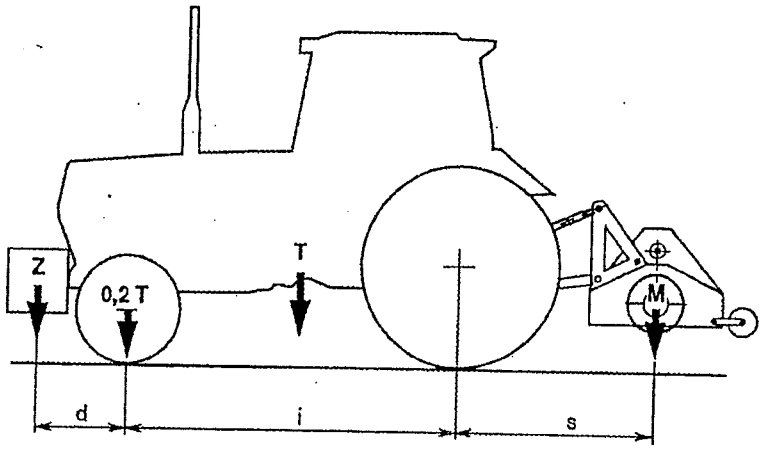
ANY OTHER USE OF THE SHREDDERS IS TO BE CONSIDERED ILLEGAL AND PROHIBITED BY THE MANUFACTURER.

Model	Weight	Hp Tractor	Kw Tractor	Model	Weight
Zenit 1400 Fisso	kg 510	50 - 90	37 - 66		
Zenit 1600 Fisso	kg 595	50 - 90	37 - 66	Zenit 1600 Spostabile	kg 660
Zenit 1800 Fisso	kg 630	50 - 90	37 - 66	Zenit 1800 Spostabile	kg 720
Zenit 2100 Fisso	kg 720	50 - 90	37 - 66	Zenit 2100 Spostabile	kg 800
Zenit 2300 Fisso	kg 800	50 - 90	37 - 66	Zenit 2300 Spostabile	kg 850
Zenit 2500 Fisso	kg 870	50 - 90	37 - 66	Zenit 2500 Spostabile	kg 910
Zenit 2700 Fisso	kg 950	50 - 90	37 - 66	Zenit 2700 Spostabile	kg 990
Zenit 3000 Fisso	kg 1020	50 - 90	37 - 66	Zenit 3000 Spostabile	kg 1090
		50 - 90	37 - 66	Zenit Avant 2300	kg 860
		50 - 90	37 - 66	Zenit Avant 2500	kg 910
		50 - 90	37 - 66	Zenit Avant 2700	kg 960
		50 - 90	37 - 66	Zenit Avant 3000	kg 1030
Condor 1400 Fisso	kg 440	50 - 70	37 - 52	Condor 1400 Spost.	kg 495
Condor 1600 Fisso	kg 460	50 - 70	37 - 52	Condor 1600 Spost.	kg 515
Condor 1800 Fisso	kg 490	50 - 70	37 - 52	Condor 1800 Spost.	kg 545
Condor 2100 Fisso	kg 543	50 - 70	37 - 52	Condor 2100 Spost.	kg 600
Condor 2300 Fisso	kg 580	50 - 70	37 - 52	Condor 2300 Spost.	kg 635
Cat 1000 Fisso	kg 260	20 - 60	15 - 44		
Cat 1200 Fisso	kg 290	20 - 60	15 - 44		
Cat 1350 Fisso	kg 313	20 - 60	15 - 44	Cat 1350 Spostabile	kg 353
Cat 1500 Fisso	kg 336	20 - 60	15 - 44	Cat 1500 Spostabile	kg 374
Cat 1800 Fisso	kg 382	20 - 60	15 - 44	Cat 1800 Spostabile	kg 417
Cat 2100 Fisso	kg 428	20 - 60	15 - 44	Cat 2100 Spostabile	kg 468
		20 - 60	15 - 44	Cat Avant 1500	kg 415
		20 - 60	15 - 44	Cat Avant 1800	kg 458
		20 - 60	15 - 44	Cat Avant 2100	kg 509
		50 - 90	37 - 66	Beta 1200 Spostabile	kg 540
		50 - 90	37 - 66	Beta 1400 Spostabile	kg 610
		50 - 100	37 - 74	Super Sax 1600	kg 760
		50 - 100	37 - 74	Super Sax 1800	kg 810
		50 - 100	37 - 74	Super Sax 2100	kg 860
		40 - 70	30 - 52	Velox 1200 Spostabile	kg 358
Velox 1350 Fisso	kg 336	40 - 70	30 - 52	Velox 1350 Spostabile	kg 379
Velox 1500 Fisso	kg 359	40 - 70	30 - 52	Velox 1500 Spostabile	kg 400
Velox 1650 Fisso	kg 382	40 - 80	30 - 59	Velox 1650 Spostabile	kg 425
Velox 1800 Fisso	kg 405	40 - 80	30 - 59	Velox 1800 Spostabile	kg 446

To achieve the lifting capacity and tractor stability it is necessary to respect the following conditions:

$$M \times s \leq 0{,}2\ T \times i + Z\ (d + i) \qquad M \leq 0{,}3\ T$$

i = tractor wheels wheelbase	T = Tractor mass
d = distance of front axis from ballast	Z = ballast mass
s = protrusion of shredder rear axis	M = shredder mass



IT IS ABSOLUTELY FORBIDDEN TO ALLOW PERSONS, ANIMALS OR THINGS TO CLIMB OR BE TRANSPORTED ON THE ZENIT, CONDOR, CAT, BETA, SUPER SAX, VELOX SERIES SHREDDERS

3. CONDITIONS FOR THE OPERATOR

a) During the use of the shredder, the operator must remain on the tractor in the driver's position. **The operator cannot leave the driver's position on the tractor if he has not disengaged the power take-off from the tractor itself and has not waited until the moving parts of the shredder (rotor, etc.) are completely stationary. The stop time of the moving parts of the shredder is roughly 3 minutes.**

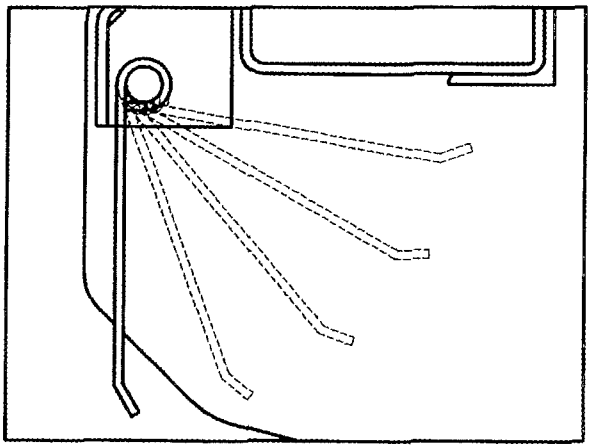
b) **Under normal conditions, that is, with the rear lid closed, the operator must ensure that when starting up the shredder and during its operation, there are no persons within a radius of 20 m around the machine. The operator must immediately stop both the tractor as well as the shredder if one or more persons enter within a 20 m radius around the machine.**

c) The operator must not activate the hydraulic lift of the tractor without having first disengaged the tractor's power take-off. **Before lifting the shredding machine from the ground using the tractor's hydraulic lift, the operator must ensure that the power take-off is disengaged.**

d) **It is strictly prohibited to go in reverse while continuing to chop; i.e. with the tractor PTO engaged. Before starting the reverse manoeuvre, always wait till the rotor has completely stopped.**

e) **The front part of the machine is equipped with oscillating protective devices designed to prevent any material from being thrown out while working. You need to check these devices constantly to make sure that they are free to oscillate and that they are not deformed (crooked or bent). This check is very important particularly on stony ground where these protective devices are subject to numerous impacts during normal work. If the**

protective devices are deformed, they must be replaced immediately.



f) **To protect your eyes from any objects thrown out from the shredder while working, always wear suitable work goggles.**

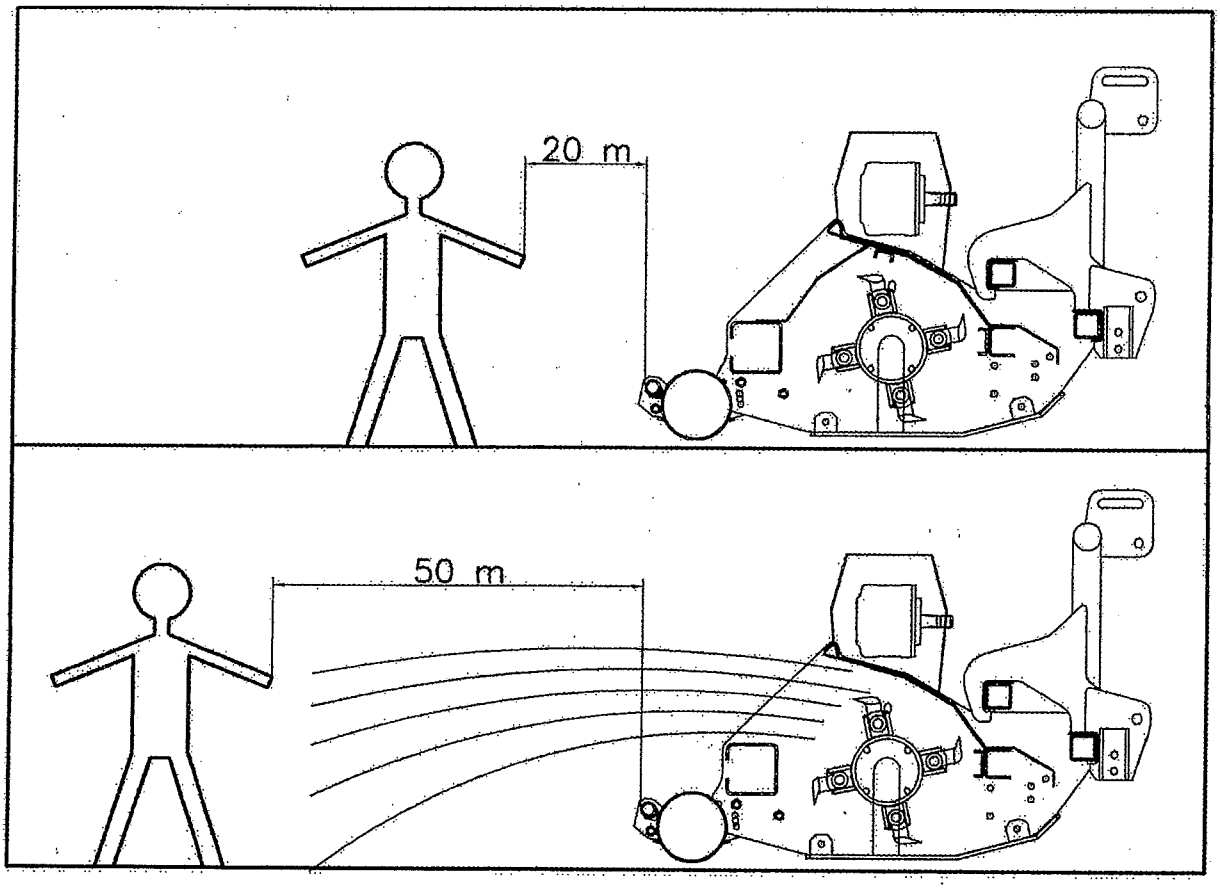
4.1. CONNECTION OF THE SHREDDER TO THE TRACTOR

a) All Falc shredders can be mounted onto any type of tractor provided it is supplied with a 3-point universal hitch
b) The shredder must be positioned on level ground, in a good stable position.
c) The tractor must approach the shredder in reverse until its arms are in correspondence with those of the shredders 3 point. Any operator on the ground must maintain a distance of at least 5 m from the machine.
d) Position the lower 3 point pin and block with the split pins provided.
e) Connect the upper arm of the tractor to the upper dowel of the 3 point, adjusting so that the machine assumes a horizontal position with respect to the ground.
f) Position the cardan shaft and ensure that its ends are well connected to the power take-off of the tractor and the multiplier. Fix the anti-rotation chains (catenelle) on the cardan to both the tractor and shredder side. **The tractor engine must be off during this phase so that the power take-off is not activated by any wrong manouveure.**
g) After the completion of this operation the tractor's hydraulic lift may be activated just enough to free the support legs (if present) which must then be completely raised and blocked with the pins provided.
h) For standard machines: Tractor power take-off (PTO) = 540 revolutions/minute
On request: Tractor power take-off (PTO) = 1000 revolutions/minute

4.2. USING THE SHREDDER

After having correctly connected the shredder to the tractor, the operator can start to work, always respecting the conditions mentioned in point 3 (point 4.3 if working with the lid open).
The tractor's advancement speed is independent of the shredder; it is up to the operator to judge and determine the best machine output depending on some factors, namely the tractor's power, height of the remains to be shredded, adjustment of the working height, etc..

4.3. USE WITH THE REAR LID OPEN



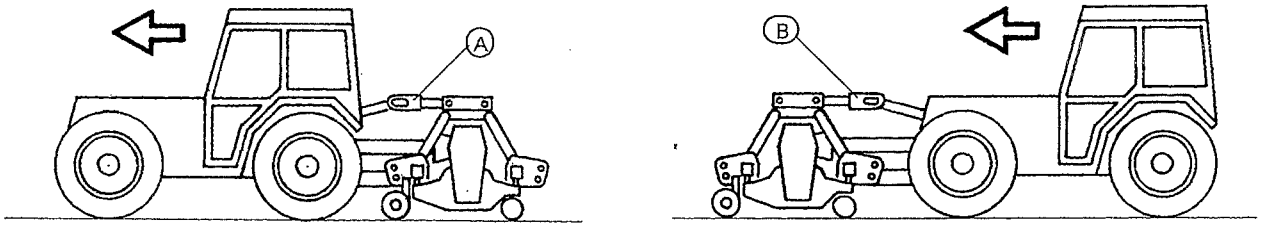
The Zenit and Condor shredders, for particular needs of the user, provides for the removal of the rear lid thus obtaining a distribution of the shredded material up to about 20 m from the shredder itself.
The work in this special situation requires some precautions also during the preparation of the shredder.
To remove the rear lid the operator must act as follows:

a) (If the machine is on) Completely stop the shredder and switch the tractor off.
   Wait for approximately 3 minutes, until the rotor is completely still.
b) Unscrew the relative rear lid fixing bolts with the appropriate keys.
c) Remove the lid or bolt it in open position.
d) Carefully check against the possibility that propelling material might be cast towards persons, animals or objects where this could cause damage (e.g. trees of a nearby farm, agricultural sheds, various parked vehicles, etc.). The minimum distance required between the shredder in operation and the nearest persons, animals or things, must be at least 50m.
e) After the operator has carried out all these procedures, he can again climb onto the tractor and switch it on.

f) **During operation with the rear lid open, the operator must ensure that the conditions mentioned in point (d) are constantly adhered to. The operator must further ensure that the minimum distance between the shredder and any place of passage, namely a street, a trail, etc., is at least 50 m.**
g) **Even if only one of the above mentioned conditions is not adhered to, the operator is obliged to stop the shredder and switch the tractor off.**
h) **It is further prohibited for the operator to leave the tractor's driver's position without having previously stopped the shredder and waited until the rotating parts of the same have come to a complete standstill (about 3 minutes).**

4.4. FRONT USE

Shredders model Zenit Avant, Cat Avant and Super Sax have facilities to be mounted on the front of the tractor or also to be mounted on reversible tractors.



The gearboxes (overdrives) of such shredder are standard equipped with a through Power Take-Off.I
Rotation of the gearbox (overdrive) becomes necessary if , when working with the shredder in front of the tractor, the rotation direction of the Power Take-Off is inverted with respect to the usual.
To decide whether it is necessary to carry out the rotation of the gearbox (overdrive), it is recommended to always verify the rotation direction of the Power Take-Off

For any doubts, it is recommended either to get in touch to the area distributor or directly to the manufacturer offices.

4.5. DISCONNECTION OF THE SHREDDER FROM THE TRACTOR

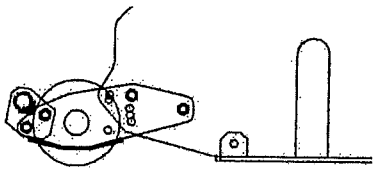
The following are necessary precautions for a correct disconnection of the shredders from the tractor:
a) Stop the tractor on level ground, activate the handbrake, turn the engine off and disconnect the power take-off.
b) Place the shredder on the ground ensuring that its position is both stable and horizontal
c) Stop the tractor motor and wait for about 3 minutes until all the moving parts of the shredder stop.
d) Disconnect the cardan joint from the tractor's power take-off and place it in the appropriate shredder support.
e) Disconnect the shredder from the 3-point hitch of the tractor first by sliding out the split pins that block the dowels and then by removing the pins themselves.
f) Climb onto the tractor again and move it forward to completely free the tractor's arms from the 3rd point of the shredder.

4.6. TRANSPORT

During operation, the shredders rest on the wheels at the rear, on the roller as well as on the lateral slits. In the front they are kept lifted by the tractor's hydraulic hitches' arms .
During transport the shredders are completely supported by the tractor (see point 2).
Due to the handling which is necessary during the loading, unloading and storage ensure that only the appropriate equipment which can support the weight of the machine itself is used and use the pegs which are purposely positioned on the machine.

4.7. ADJUSTING THE WORKING HEIGHT

Before using the shredder it is necessary to take particular care in adjusting the working height.



a) The working height adjustment is carried out by moving the connection flanges of the roller by one or more holes.
b) The working height adjustment is correct when the cutters or the hammers skim the ground without actually touching it. If the rotating movements touch the ground due to an incorrect adjustment, the result will be a greater power consumption by the tractor and a faster wear rate of the same rotating movements.
c) The machine must always be in a horizontal position with respect to the ground.

4.8. MAINTENANCE AND REPAIRS

Before approaching the machine to carry out any maintenance or repairs, it is compulsory to take some precautions:
a) **Stop the tractor on level ground**
b) **Place the shredder on the ground**
c) **Activate the handbrake**
d) **Disengage the p.t.o**
e) **Turn the engine off**
f) **Wait for about 3 minutes until all moving parts of the shredder have stopped.**
In case of specific maintenance or repair work where it is necessary that the machine is lifted from the ground or turned around, it is indispensable to use the suitable equipment built for such purposes. It is always recommended that the area sales assistance or ideally equipped mechanical workshops are consulted. The machine weight is in point 2 of this manual.
For intervention on parts of the machine which may reach elevated temperatures such as the multiplier, the bearings, the belts etc., wait until they have cooled. The cooling time for these parts may vary depending on the work carried out before stoppage as well as external atmospheric conditions.

4.8.1. Maintenance

Even though all the shredders are delivered well greased and lubricated, hereafter is a list of rules which must strictly be adhered to, so as to obtain better results.

a) **After the first hour of operation**
- Check that all bolts and screws are correctly tightened.

b) **Daily**
- Check the oil level in the transmission box.
- Lubricate the Cardan joint (see the specific Instruction manual relative to the Cardan joint)
WARNING : the Cardan joint is in general supplied by FALC and is suitable for the effective power required for the tractor-shredder link-up. In case of replacement always use a Cardan joint with characteristics not inferior to those of the original Cardan shaft.

c) **Every 8 hours of work**
Grease the rotor supports using the appropriate grease nipples indicated on the machine. Grease in moderation applying a little grease at a time
Grease all of the points indicated on the machine.

d) **Every 8 working hours**
- Check the belts' tension so as to prevent premature wear of the belts themselves and the pulleys. The correct tension of the belts is achieved when, by pushing on the central point between the pulleys, the belt yields a maximum of 10 mm.

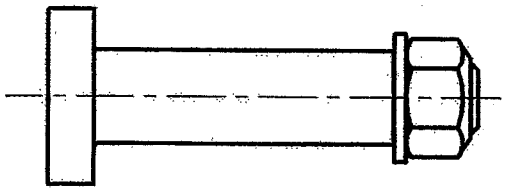
e) **Every 300 working hours**
- Change the oil in the transmission box.
- Check that the breather plug of the multiplier is free of dust and earth internally. If in doubt replace the breather plug.
On delivery the transmission box is lubricated with Mobil Gear 634 SAE 140 oil.
WARNING: Do not disperse the used oil but use the appropriate means provided for its disposal.

f) If vibrations should be noted during work IMMEDIATELY STOP THE SHREDDER AND DISCONNECT THE P.T.O. Check for breakage or excessive wear of the cutters or of the hammers. If necessary immediately provide for a partial or total replacement of these, taking the utmost care to maintain the balance of the rotor, that is, by replacing the broken cutters (hammers) and those diametrically opposite the broken ones.

g) Further check if there is residue or encrustation on the knives, hammers or on the rotor. If this is so clean immediately.

h) Prior to a period of inactivity, it is recommended that the machine is accurately cleaned machine of remains accumulated during operation. During the period of inactivity, it is recommended that the machine is protected from atmospheric agents.

i) **FOR SHREDDER "STONE LINE" VERSION, ONLY: every 8 hours check the locking of the nut of the hammer-pin.**



4.8.2. Possible causes of inconveniences and relative interventions.

If the shredder vibrates in an evident manner

CAUSE :	INTERVENTION :
Breakage of one or more cutters (hammers) which causes the rotor to lose its balance.	Replacement of the broken cutters (hammers) and of those diametrically opposite the broken ones.
The bearings of the rotor's supports are worn.	Replacement of the supports.
Remains and encrustations are visible on the cutters (hammers) and/or the rotor.	Cleaning of the cutters (hammers), cleaning of the rotor

If the rotor rotates at a speed lower than specified

CAUSE :	INTERVENTION :
The belts have become loose.	Reset the correct tension of the belts.
Excessive wear of the belts and pulleys.	Replace any worn parts.

An excessive wear of the cutters (hammers) is noted.

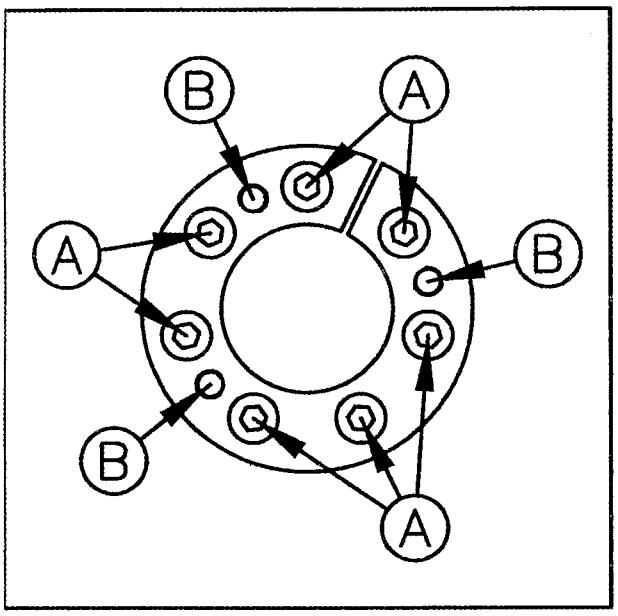
CAUSE :	INTERVENTION :
The cutters (hammers) touch the ground during operation.	Reset the machine's correct height from the ground.

4.8.3. Replacement of the belts

Carry out the following operations to replace the belts:

a) Remove the belts' safety guard
b) Unscrew the locking bolts of the gearbox (overdrive) and jackshaft
c) Reduce belts tension unscrewing the bolts that you find on the gearbox (overdrive) and on the top of the jackshaft.
d) Slide the belts from their respective pulley's races and replace them with new ones. Carefully check that the new belts are the same as the old ones, both as regards the length as well as the type. FALC s.r.l, installs toothed belts type SPB on standard series machines.
e) To place the belts in tension again, reset the adjustment bolts previously loosened. **The bolts must be adjusted in such a way that the upper pulley remains parallel and on the same plane as the lower pulley. If the upper pulley is in an incorrect position with respect to the lower one, the belts do not transmit the right power and will hence have a shorter life.**
f) Check the tension of the belts
g) Tighten the fixing bolts previously loosened
h) Remount the belts' safety guard.

4.8.4. Assembling and dismantling the pulleys



The pulleys are fixed on the relative shafts by means of a coupling similar to that shown in the diagram above.

a) To dismantle the pulleys adhere to the following steps::
   Loosen the bolts (A) with the relative key
   Remove "x" no. of bolts (A) and insert them into the threaded holes (B) tightening in a uniform manner
   After a few turns of the bolts the pulley can easily be slipped out from the shaft
b) To assemble the pulleys adhere to the following steps:
   Insert the coupling in the pulley's hole
   Connect it all to the shaft ensuring that the pulley is in the right position
   Tighten in a uniform manner the bolts (A) with the relative key
   ATTENTION : Tightening moment = 40 N/m (4,1 kg/m)

5. GUARANTEE

a) The guarantee is valid 1 year from the date of the delivery. The company is committed to replacing parts which present material or manufacturing defects in as short a time as possible. The manpower necessary for replacing parts is excluded from the guarantee. Any transport or forwarding expenses are excluded from the guarantee.
b) The guarantee ceases if breakage is the result of forza maggiore, incorrect use of the machine or any erroneous action carried out by the purchaser, employees or third parties. Repairs, replacements, modifications carried out by the purchaser or for the purchaser without the authorisation of the manufacturer are included in these actions. Incorrect use of the machine is understood to mean actions which are not listed in the user norms listed in this instruction manual.
c) Parts which due to their very nature or use are subject to inevitable deterioration or wear are excluded from this guarantee.
d) The bearings and oil retainers are not under guarantee.
e) The cardan shaft is not under guarantee.
f) The following standards are valid for the parts for which a warranty is requested:
- the piece to be replaced must be returned to the manufacturer the moment in which a request is made for a new piece.
- the spare parts are always invoiced when forwarded.
- only examination by the manufacturer's technicians can result in the guarantee being upheld and, therefore, accredited.

6. NORMS TO BE FOLLOWED FOR CORRECTLY ORDERING SPARE PARTS

In order to quickly deal with the orders relative to spare parts it is necessary to specify :
a) Type of machine, Model, Series number.
(Eg. Zenit 3000 series' number. XXXXX)
b) Number of the spare parts table in which the piece in question is to be located, identification number, piece code.
(E.g. Table no. YY ; Item no. JJ ; Code KKKKKK)
c) Exact denomination of the item.
d) Quantity of pieces requested.
e) Instructions for the forwarding.
(rail, postal package, courier, etc.)
f) The minimum delivery time for the parts requested is 3 days from the date of receiving the order.

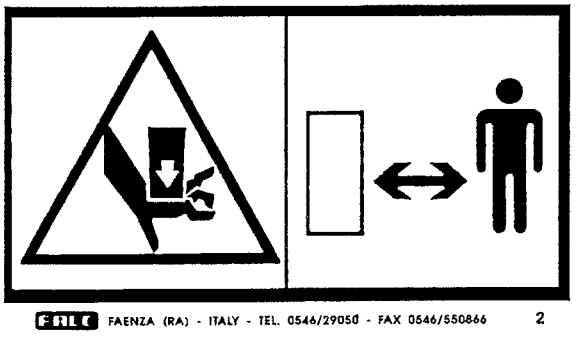
If any part of this instruction manual should result insufficiently clear, we ask you to kindly contact your closest authorised dealer or contact us directly at our technical and commercial departments.

7) SAFETY PICTOGRAMS

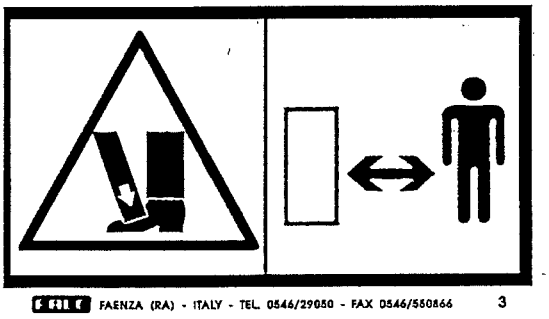
All the safety pictograms applied to Falc's machines, are based on norms ISO 11/684.
The adhesive labels adopted are 168 x 88 mm and are divided in two equal parts.
The left part contains within the triangular danger symbol the graphic description of the symbol itself.
e.g. Attention - Danger of flying objects.
The right part shows how to avoid the risk.
e.g. Maintain a safety distance.
Together, these 2 graphics synthesise the full message which is intended to be transmitted to all those which for various reasons are in direct contact or nearby a Falc-produced machine.
(see enclosure C of the norm)
The graphical message is hence directed to the machine operators as well as all those that enter within the working radius of the machine.
The operator is obliged to carefully read the machine's instruction manual in order to understand its correct operation and to have a comprehensive explanation of the safety pictograms
The complete list of all the pictograms which are applied to Falc-produced machines is reported hereafter with the relative explanation on the side.

Label no.1
ATTENTION: Read the instruction manual before using the machine.

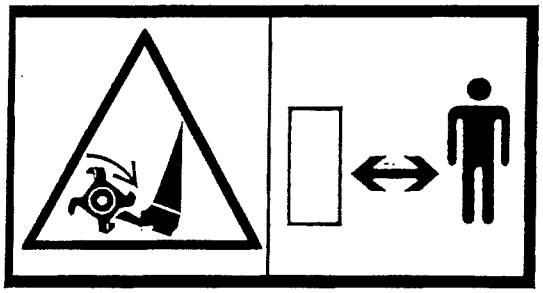
Label no.2
ATTENTION: Danger of hand and fingers collision with movements in alternate rotation.
Keep the safety distance.



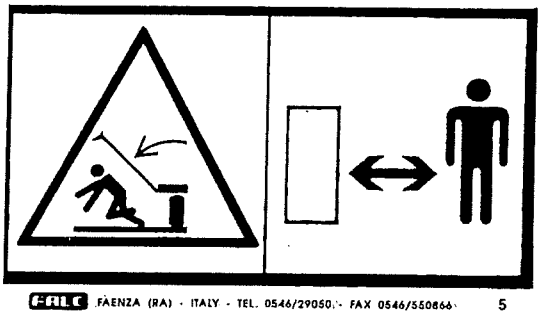
Label no3
ATTENTION: Danger of foot collision with movements in alternate rotation.
Keep the safety distance.



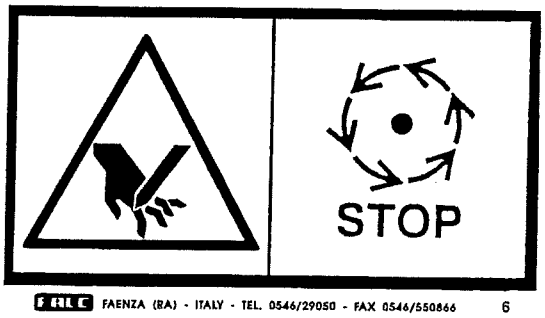
Label no.4
ATTENTION: Danger for feet due to rotating cutters with horizontal rotating axis.
Keep the safety distance.



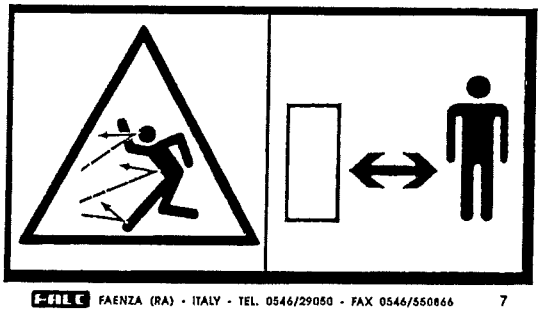
Label no.5
ATTENTION: Danger due to machine component that can be lifted from the ground.
Keep the safety distance.



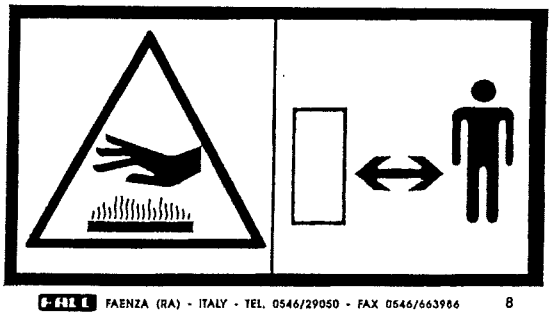
Label no.6
ATTENTION: Danger of cutting due to moving parts.
Wait until all moving components are completely still before approaching the machine.



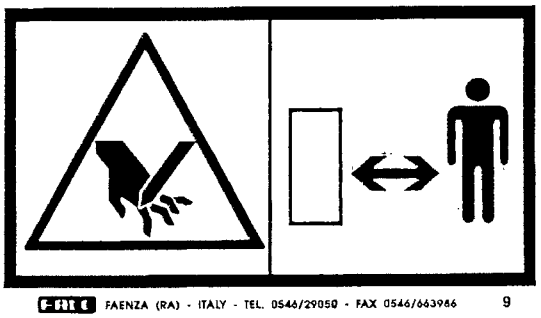
Label no.7
ATTENTION: Danger due to flying objects.
Keep the safety distance.



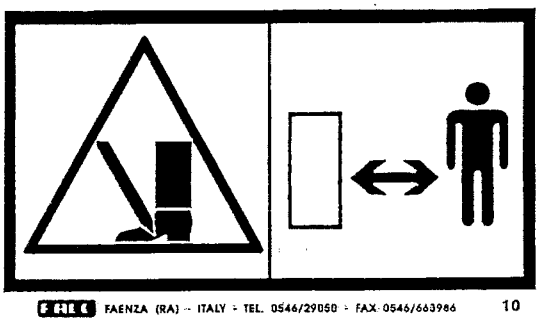
Label no.8
ATTENTION: Danger due to hot surfaces.
Keep the safety distance.



Label no.9
ATTENTION: Danger of hand and finger cutting.
Keep the safety distance.

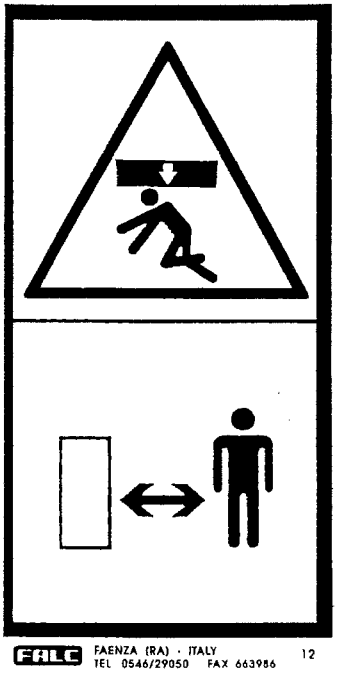


Label no.10
ATTENTION: Danger of feet cutting.
Maintain the safety distance.



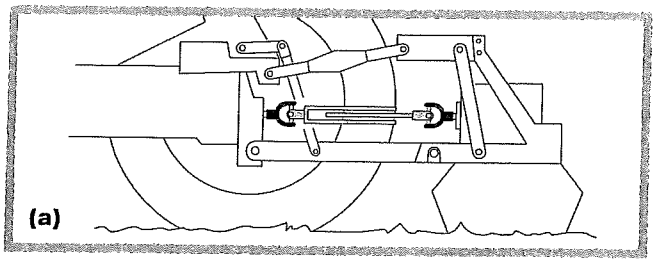
Label no.11
ATTENTION: Danger of rotating movements.
Do not open or remove the safety guards of the rotating shafts while the machine is in operation.

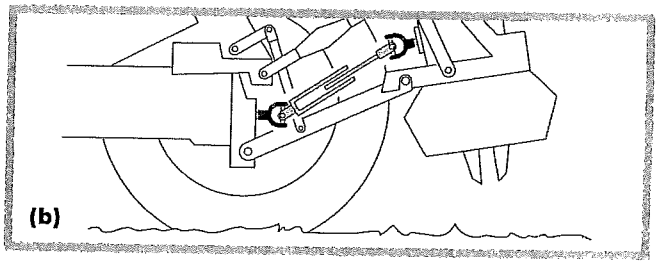
Label no.12
ATTENTION: Danger due to loads lifted from the ground.
Keep the safety distance.



Italiano: Istruzione per il montaggio del cardano

Prima di montare il cardano, leggere attentamente il Libretto fornito dal costruttore del cardano stesso. La Ditta Falc Srl declina ogni responsabilità per operazioni effettuate sul cardano senza seguire le Istruzioni specifiche fornite dal costruttore del cardano stesso.	Prima di iniziare a lavorare, si raccomanda di verificare la lunghezza del cardano: se è LUNGO, alzando o abbassando la macchina, le 2 parti telescopiche si accoppieranno completamente creando pressione sulle crociere e sulle forcelle; se è CORTO, alzando o abbassando la macchina, le 2 parti telescopiche si sfileranno troppo.	Le macchine agricole portate sono collegate direttamente al trattore e posizionate mediante attacco a tre punti. Generalmente con attrezzo in lavoro (a) si ha la configurazione di minore lunghezza dell'albero ed angoli di snodo sensibilmente uguali. Ad attrezzo sollevato (b) si ha la massima estensione dell'albero, l'aumento e la diversificazione degli angoli di snodo. Durante il sollevamento è INDISPENSABILE interrompere la rotazione del cardano.





Français: Instructions pour le montage de l'arbre à cardan

Avant de monter le cardan, lire attentivement le Livret fourni par le fabricant du cardan lui-même. L'entreprise Falc Srl décline toute responsabilité pour toute opération effectuée sur le cardan sans avoir suivi les instructions spécifiques fournies par le fabricant de ce cardan.	Avant de commencer à travailler, nous recommandons de vérifier la longueur du cardan : s'il est LONG, en relevant ou en baissant la machine, les deux parties télescopiques vont s'accoupler complètement en exerçant une pression sur les tourillons et les fourchettes ; s'il est COURT, en relevant ou en baissant la machine, les 2 parties télescopiques risquent de se désenfiler trop.	Les machines agricoles portées sont connectées directement au tracteur et mises en place par l'attelage à trois points.. Avec l'outil en fonction (a) la configuration du cardan est de longueur minimum et les angles d'articulation sont similaires. Lorsque l'outil est soulevé (b), l'extension du cardan est au maximum et on a l'augmentation et la diversification des angles d'articulation. Pendant le soulèvement il est INDISPENSABLE d'interrompre la rotation du cardan.

English: Instructions for the assembling of the cardan shaft

Before mounting the cardan shaft, carefully read the booklet supplied by the Manufacturer. Falc Srl declines all responsibility for operations carried out on the cardan shaft if the specific instructions supplied by the Manufacturer are not followed.	Before starting work, it is advised to check the length of the cardan shaft: if it is LONG, by raising or lowering the machine, the 2 telescopic parts will couple completely, creating pressure on the cross and on the forks; if it is SHORT, by raising or lowering the machine, the 2 telescopic parts will slide apart too much.	The agricultural machinery carried is connected directly to the tractor and positioned using a three-point attachment. Generally, when the equipment is functioning (a) the shorter length of the shaft with equal articulation angles is present. With the equipment raised (b) there is maximum extension of the shaft, increase and diversification of the articulation angles. During lifting it is INDISPENSABLE to interrupt rotation of the cardan shaft.

Deutsch: Bedingungen für die Gelenkwellenanbau

Bevor Sie die Kardanwelle montieren, ist das vom Hersteller der Kardanwelle gelieferte Handbuch aufmerksam durchzulesen. Falc Srl haftet nicht für an der Kardanwelle durchgeführte Arbeiten, bei denen die spezifischen Anweisungen des Herstellers der Kardanwelle nicht eingehalten wurden.	Vor dem Beginn der Arbeiten ist die Länge der Kardanwelle zu überprüfen. Falls die Kardanwelle LANG ist, kuppeln die beiden Teleskopteile bei Heben oder Senken vollständig ein und drücken auf das Gelenkkreuz und das Gabelgelenk. Falls die Kardanwelle KURZ ist, fahren die beiden Teleskopteile bei Heben oder Senken zu sehr aus.	Die Anbau-Landmaschinen werden direkt an den Traktor angeschlossen und mit einem Dreipunktanschluss positioniert. Im Allgemeinen sind im Fahrzustand der Maschine (a) die Welle kürzer und die Gelenkswinkel annähernd gleich. Bei gehobener Maschine (b) ist die Welle maximal ausgefahren; die Gelenkswinkel sind größer und unterscheiden sich voneinander. Während des Hubs MUSS die Rotation der Welle unterbrochen werden.

Español: Instrucciones para el montaje de la cardan

Antes de montar el cardan, leer detenidamente el Manual suministrado por el fabricante de éste. La empresa Falc Srl se exime de cualquier responsabilidad frente a operaciones que puedan efectuarse en el cardan sin cumplimiento de las instrucciones específicas dictadas por el fabricante del mismo.	Antes de iniciar a trabajar, se recomienda comprobar que la longitud del cardan sea la adecuada: Si es demasiado LARGO, al alzar o descender la máquina sus 2 partes telescópicas se acoplarán completamente, creando presión en las crucetas y en las horquillas. Si es demasiado CORTO, al alzar o descender la máquina sus 2 partes telescópicas se desenhebrarán excesivamente.	Las máquinas agrícolas traídas están directamente unidas al tractor por medio de un enganche de tres puntos. Generalmente, cuando el equipo está en posición de trabajo (a) se obtiene una configuración con una menor longitud del árbol y con ángulos de articulación muy parecidos. Con el equipo en posición alzada (b) se obtiene la extensión máxima del árbol, con un aumento de los ángulos de articulación, que ahora serán distintos entre si. Durante la elevación es INDISPENSABLE interrumpir la rotación del cardan.

Nederlands: Instructies voor montage van de aftakas

Lees de door de fabrikant geleverde handleiding aandachtig door alvorens de aftakas te monteren. Falc Srl wijst elke aansprakelijkheid af als de betreffende specifieke montageaanwijzingen niet worden opgevolgd.	Controleer eerst de lengte van de aftakas alvorens met de montage-werkzaamheden te beginnen. Als de aftakas TE LANG is, schuiven de beide telescopische delen volledig in tijdens het heffen en dalen van het werktuig en wordt druk uitgeoefend op de kruiskoppeling en de vorken; Als de aftakas TE KORT is, schuiven de beide telescopische delen tijdens het heffen en dalen van het werktuig te veel uit elkaar.	Aanbouwmachines worden bevestigd aan de driepuntskoppeling van de tractor. In het algemeen geldt dat als het werktuig in bedrijf is (a) de korter is en de knikhoek gelijk. Met het werktuig in geheven positie (b) is de as maximaal uitgeschoven, en is de knikhoek groter en variabel. Als het werktuig wordt geheven MOET de aftakas worden uitgeschakeld.

Dansk: Montage af kardanaksel

Før montagen af kardanakslen påbegyndes, gennemlæses producentens brugervejledning grundigt. Falc Srl er fritaget for ethvert ansvar i forbindelse med arbejder foretaget på kardanakslen, hvis de givne retningslinier, som er specificeret af producenten, ikke er fulgt nøje.	Før arbejdet påbegyndes, anbefales det at kontrollere kardanakslens længde ved at hæve eller sænke redskabet. Hvis den er for LANG, resulterer det i, at de to kardan dele støder sammen, når redskabet er i sin yderposition, hvilket bevirker et ødelæggende tryk på kardankryds og transmissioner. Hvis den er for KORT, resulterer det i, at de to kardan dele kan glide fra hinanden, hvilket bevirker, at de ikke er i indgreb med hinanden.	Redskabet monteres direkte på traktorens 3-punktsophæng. Generelt gælder, at når redskabet er sænket (a), er kardanakslen i sin korteste position, og når redskabet er hævet (b), er kardanakslen i sin længste position. Når redskabet hæves, SKAL kardanakslens rotation afbrydes.