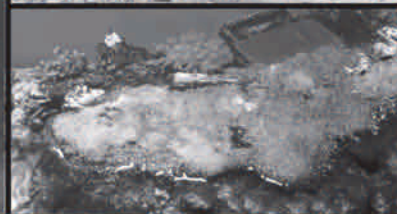
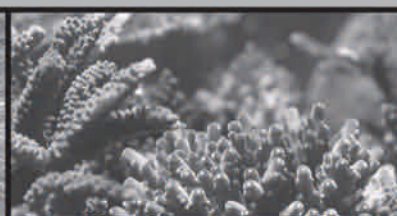


*Spare parts catalogue  
with prices*

€

**TUNZE**

**High-Tech  
Aquarium Ecology**



**2005/2006**

English



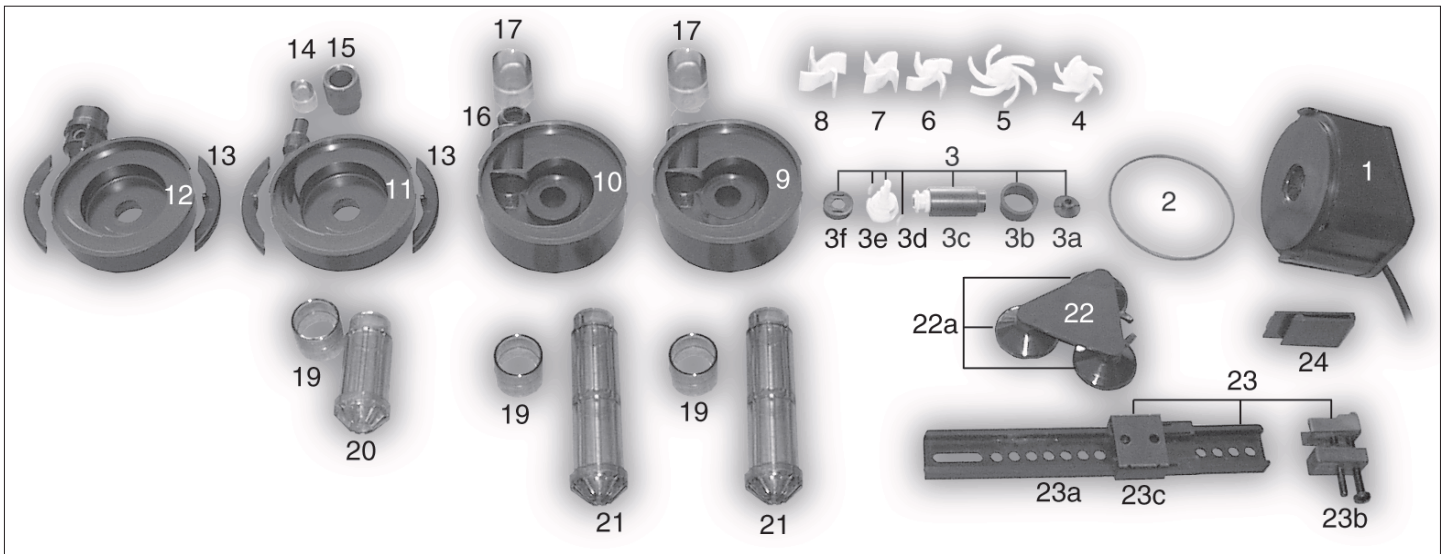
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Nominal charge € 2,00  
**07/2005**

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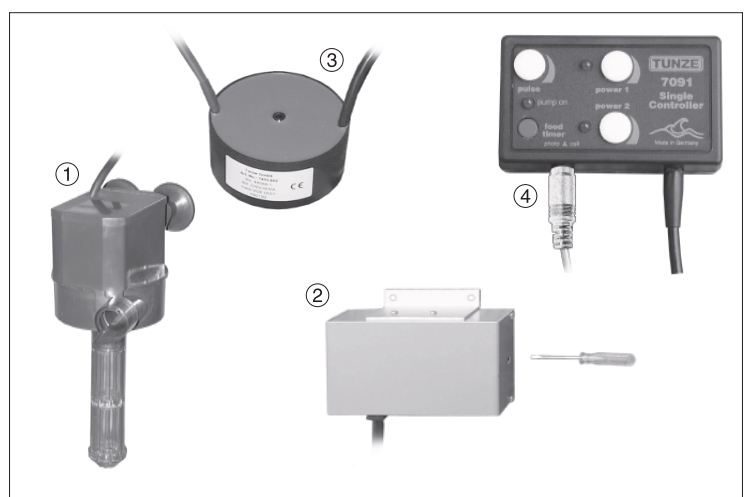
	600/2	800/2	1000/2	1200/2	1600/2	3000/2	7180/2	7240/2	Turbelle®		
	601/2	801/2	1001/2	1201/2	1601/2	3001/2	7181/2	7241/2	Pumpe	Pump	Pompe
14	1001.77								Strömungswinkel	Flow deflector	Défecteur
17			4002.77		4002.77	4002.77		4002.77	Strömungswinkel	Flow deflector	Défecteur
19	3000.78	3000.78	3000.78	3000.78	3000.78	3000.78	3000.78	3000.78	Muffe	Sleeve	Manchon
20	104.79	104.79	104.79						Schlitzkörper	Strainer	Crépine
21				1001.79	1001.79	1001.79	1001.79	1001.79	Schlitzkörper	Strainer	Crépine
22	3060.41	3060.41	3060.41	3060.41	3060.41	3060.41	3060.41	3060.41	Saughalter (mit 22a)	Suction holder (with 22a)	Support à vent. (avec 22a)
22a	3060.42	3060.42	3060.42	3060.42	3060.42	3060.42	3060.42	3060.42	3 Sauger	3 Suction cup	3 Ventouses
23	3000.25	3000.25	3000.25	3000.25	3000.25	3000.25	3000.25	3000.25	Turbelle® Halter (23a-23c)	Turbelle® holder(23a-23c)	Support Turbelle® (23a-23c)
23a	3000.22	3000.22	3000.22	3000.22	3000.22	3000.22	3000.22	3000.22	Schiene	Mounting bar	Barre de montage
23b	3000.24	3000.24	3000.24	3000.24	3000.24	3000.24	3000.24	3000.24	Klemmhalter	Clamp holder	Attache
23c	3000.23	3000.23	3000.23	3000.23	3000.23	3000.23	3000.23	3000.23	Schiebeteil	Sliding piece	Pièce coulissante
24	3060.40	3060.40	3060.40	3060.40	3060.40	3060.40	3060.40	3060.40	Halter	Holding device	Fixation

	601/2	801/2	1001/2	1201/2	1601/2	3001/2	7181/2	7241/2	220.04	230.04	240.04	Turbelle®		
1	600.015	800.015	1000.015	1200.015	1600.015	3000.015	7180.015	7240.015	220.015	230.015	240.015	Motorblock	Engine block	Bloc moteur
2	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	O-Ring	O-ring	Bague torique
3	3000.60	3000.60	3000.60	3000.60	3000.60	3000.60	3000.60	3000.60	3000.60	3000.60	3000.60	Antriebseinheit	Drive unit	Partie mobile
4	602.12	233.12		233.12			235.12		233.12		235.12	Kreisel	Impeller	Rotor
5										235.12		Kreisel	Impeller	Rotor
6			1002.12		1500.12							Kreisel	Impeller	Rotor
7								7410.12				Kreisel	Impeller	Rotor
8						3000.12						Kreisel	Impeller	Rotor
9						3000.13		3000.13				Kreiselgehäuse	Impeller housing	Carter du rotor
10			1500.13		1500.13							Kreiselgehäuse	Impeller housing	Carter du rotor
11	700.13	1201.13		1201.13			1201.13					Kreiselgehäuse	Impeller housing	Carter du rotor
12									233.13	235.13	235.13	Kreiselgehäuse	Impeller housing	Carter du rotor
16			1002.15									Reduzierstück	Reducer	Réduction
15		1200.15		1200.15			1200.15					Muffe	Sleeve	Manchon
13		235.14		235.14			235.14		235.14	235.14	235.14	2 Klammern	2 Clips	2 Clips de verrouill.

	3000.60	Antriebseinheit	Drive unit	Partie mobile
3a	3000.61	Lager oben	Upper bearing	Palier supérieur
3b	3000.62	Lagerbuchse	Bearing bush	Coussinet
3c	3000.63	Magnetrotor	Magnetic rotor	Magnéto-rotor
3d	3000.66	2 Bremsbacken	2 Breakshoes	2 mâchoires
3e	3000.64	Antriebswelle	Drive shaft	Arbre d'entraînement
3f	3000.65	Lagerschale	Breakshell	Coquille

	7100/2	7200/2	7300/2	7400/2	Turbelle® electronic		
1	7180/2	7240/2	7240/2	7240/2	Pumpe	Pump	Pompe
2	7240.26	7240.26	7240.26	7240.26	Treiber	Driver	Driver
3	7410.602	7210.202	7310.302	7410.602	Trafo	Transformer	Transfor.

	7210/2	7310/2	7410/2	Turbelle® electronic Kits
1-3	7200/2	7300/2	7400/2	Turbelle® electronic
4	7091	7091	7091	Singlecontroller



# Wartungsanleitung • Maintenance Instructions • Notice d'entretien

**Turbelle®** powerhead 600/2, 1000/2, 1600/2, 3000/2, 800/2, 1200/2, 220.04, 230.04, 3115.04

**Turbelle®** electronic 7200/2, 7300/2, 7400/2, 7100/2, 240.04

Das Zerlegen wird anhand einer Turbelle® 3000/2 gezeigt. Da alle powerhead den gleichen Aufbau besitzen gilt sie für alle Turbellen

**Zerlegen der Pumpe** (siehe Bild 1 - 3)

**Bild 1** Gehäuseklammern (1), falls vorhanden, mit kräftigem Daumendruck nach außen von Motor- und Kreiselgehäuserand abdrücken.

**Bild 2** Kreiselgehäuse (1) im Uhrzeigersinn bis Haltenase (3) drehen, dann vom Motorblock (2) nach unten abnehmen.

**Bild 3** Antriebseinheit (1) mit Kreisel (2) im Uhrzeigersinn drehend herausziehen.

**Vorsicht Bruchgefahr! Keramik-Magnetrotor ist stoß- und bruchempfindlich und zieht durch seine Magnetwirkung nach innen = Schnapp-Effekt. Deshalb behutsam herausnehmen.**

**Zerlegen der Antriebseinheit** (siehe Bild 4 -7)

**Bild 4** Verriegelungsfeder (1) der Antriebswelle (2) zusammendrücken und gleichzeitig Kreisel (3) anheben und entnehmen. Im Normalfall genügt ein mehrmaliges Durchspülen unter dem Wasserhahn.

Nur im Reparaturfall (sichtbare Verschleißschäden) auseinander nehmen!

**Bild 5** Im Reparaturfall Antriebseinheit zerlegen, dazu Magnetrotor (1) festhalten und Antriebswelle (2) gegen Uhrzeigersinn drehen über den Widerstand des Rastpunktes, dabei schieben sich die Bremsbacken (4) seitlich aus dem Gehäuse und können so von Hand herausgezogen werden. Lagerring (3) bei Bedarf mit dem Fingernagel vom Gehäuse der Antriebswelle (2) abziehen.

**Bild 6** Inneres Rotorlager (1) im Reparaturfall am besten mit einer Holzschraube 4,5x60mm (2) oder einem Drahhaken herausziehen.

**Bild 7** Lagerbuchse (3) im Reparaturfall mit Schraubendreherklinge aushebeln.

Kontrollieren Sie alle Teile auf evtl. Verschleißerscheinungen. Der Austausch eines Teiles für ein paar Mark, kann einen größeren Schaden an Ihrer Turbelle® verhindern. Der Zusammenbau erfolgt, soweit nicht anders vermerkt sinngemäß in umgekehrter Reihenfolge.

---

The disassembly will be demonstrated by means of a Turbelle® 3000.

As all Turbelle® powerhead units have the same construction, these maintenance instructions shall be applicable for all Turbelle®

**Dismantling the pump (cf. Figs 1 – 3)**

**Fig. 1** Press the housing clamps, if fitted, away from motor and housing edge with strong pressure of your thumbs.

**Fig. 2** Turn impeller housing clockwise to retaining nose (3), then remove motor block (2) downwards.

**Fig. 3** Draw out drive unit (1) with impeller (2) clockwise.

**Caution: Danger of breakage ! Ceramic magnetic rotor is sensitive to blows and breakage and through its magnet effect pulls inwards = snap effect. Therefore, remove carefully.**

**Dismantling the drive unit (cf. Figs. 4 – 7)**

**Fig. 4** Press together locking spring (1) of the drive shaft (2) and lift the impeller (3) at the same time. Normally rinsing a few times under the tap is sufficient.

Dismantle only in the case of repair (visible signs of wear).

**Fig. 5** In the case of repair dismantle drive unit: to this end hold magnetic rotor (1) tight and turn drive shaft (2) anticlockwise through the resistance of the latching point, at the same time the brake shoes (4) slide out of the side of the housing and may be removed by hand. As and when necessary draw off bearing ring (3) from the housing of the drive shaft (2) with your finger nail.

**Fig. 6** Using a wood screw 4.5 x 60 mm (2) or a wire hook, draw out inner rotor bearing (1) in the case of a repair.

**Fig. 7** Lift out bearing bush (3) with screwdriver blade in case of repair.

Check all parts for any wear. The replacement of an inexpensive part may prevent a larger damage on your Turbelle®. If nothing to the contrary has been indicated, the assembly is carried out in reverse sequence.

---

Cette opération de démontage est simulée avec une Turbelle 3000. Etant donné que la conception de toutes les pompes Turbelle Powerhead est similaire, ces indications comptent pour toutes les Turbelle®

**Démontage de la pompe** (voir vues 1 à 3)

**Vue 1** S'ils sont utilisés, détachez les clips de verrouillage (1) par une forte pression des doigts sur les ergots et vers l'extérieur de la chambre de turbine.

**Vue 2** Tournez la chambre de turbine (1) dans le sens horaire jusqu'à l'ergot de maintien (3) puis séparez-la du bloc-moteur (2).

**Vue 3** Extrayez l'ensemble mobile (1) et sa turbine (2) en effectuant une légère rotation dans le sens horaire.

**Attention, risques de bris ! Le magnéto-rotor en céramique est sensible aux chocs. Sa puissance magnétique développe une forte attraction vers le bloc-moteur et implique une extraction avec précaution.**

**Démontage de la partie mobile** (voir vues 4 à 7)

**Vue 4** En règle générale, un rinçage minutieux à l'eau courante est suffisant. Ne séparez les pièces qu'en cas de nécessité absolue de réparation (traces d'usure nettement visibles) !

Si nécessaire, appuyez la lame de verrouillage (1) située sur l'arbre d'entraînement (2) tout en saisissant et en détachant la turbine (3).

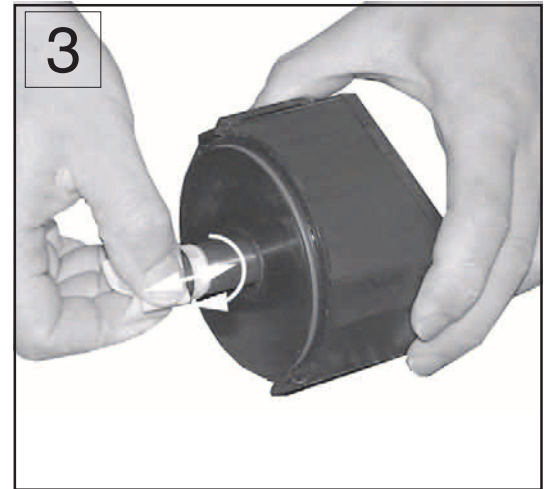
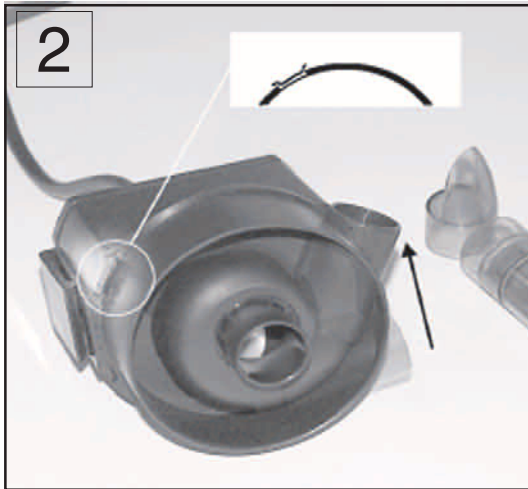
**Vue 5** Si nécessaire, le démontez la partie mobile. Pour cela, maintenez le magnéto-rotor (1) et tournez l'arbre d'entraînement (2) dans le sens anti-horaire au-delà de son point de résistance : les mâchoires de freinage (4) se présentent hors de leur logement et peuvent en être extraites. Si nécessaire, détachez le palier (3) du logement de l'arbre d'entraînement (2) à l'aide de l'ongle.

**Vue 6** Si nécessaire, extrayez le palier de rotor intérieur (1) par une rotation à l'aide d'une vis à bois de 4,5 X 60 mm (2) ou à l'aide d'une vrille.

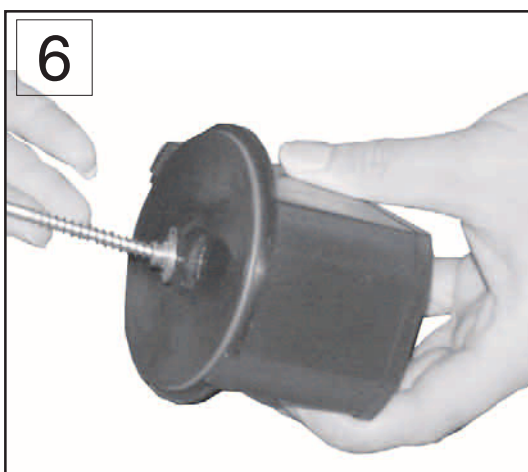
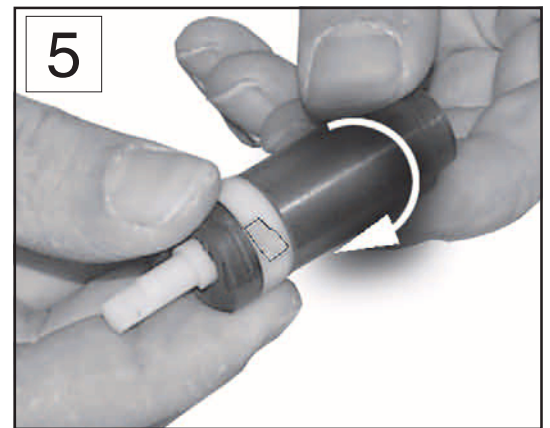
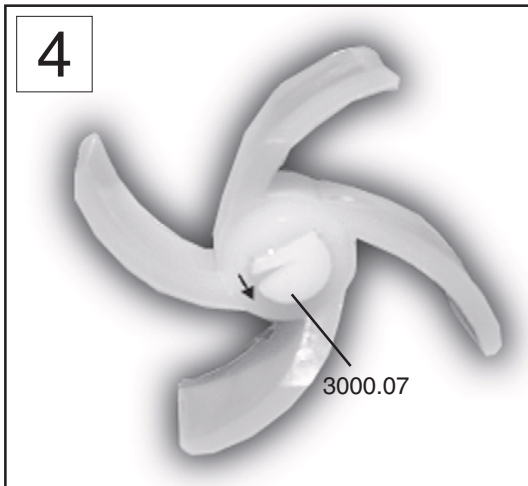
**Vue 7** Si nécessaire, démontez le palier principal (3) à l'aide d'un petit tournevis.

Contrôlez attentivement chaque pièce, son degré d'usure et d'encrassement. Pour une somme modique, l'échange éventuel d'une pièce peut éviter la destruction de votre Turbelle®. Le remontage de la pompe obéit tout simplement à l'ordre inverse au démontage.

Zerlegen der Pumpe • Dismantling the pump • Démontage de la pompe

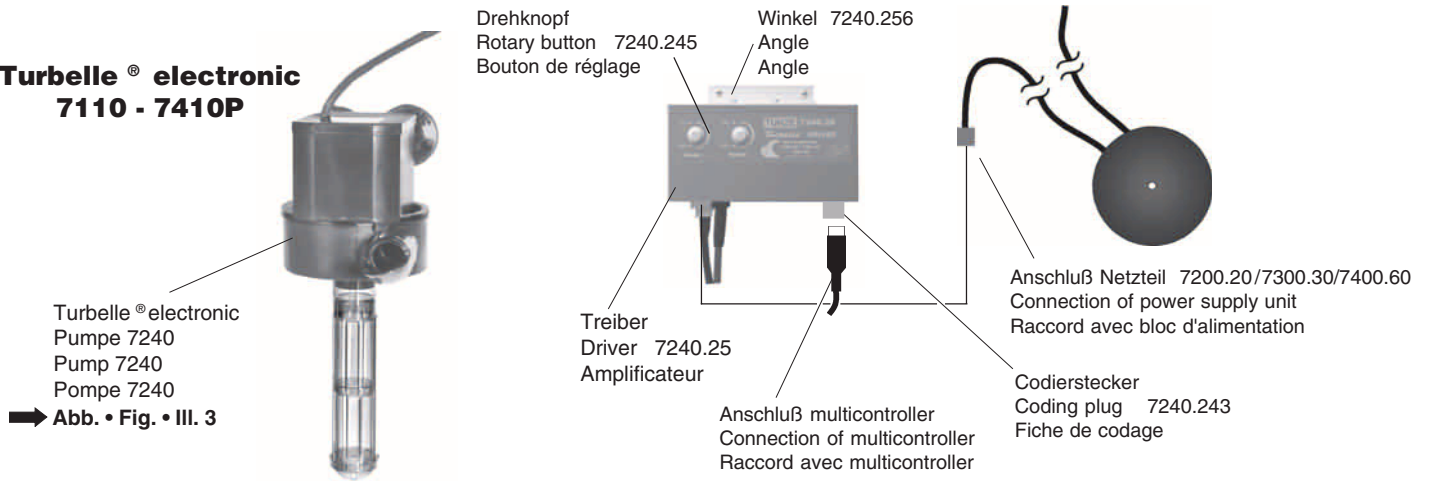


Zerlegen der Antriebseinheit • Dismantling the drive unit • Démontage de la partie mobile



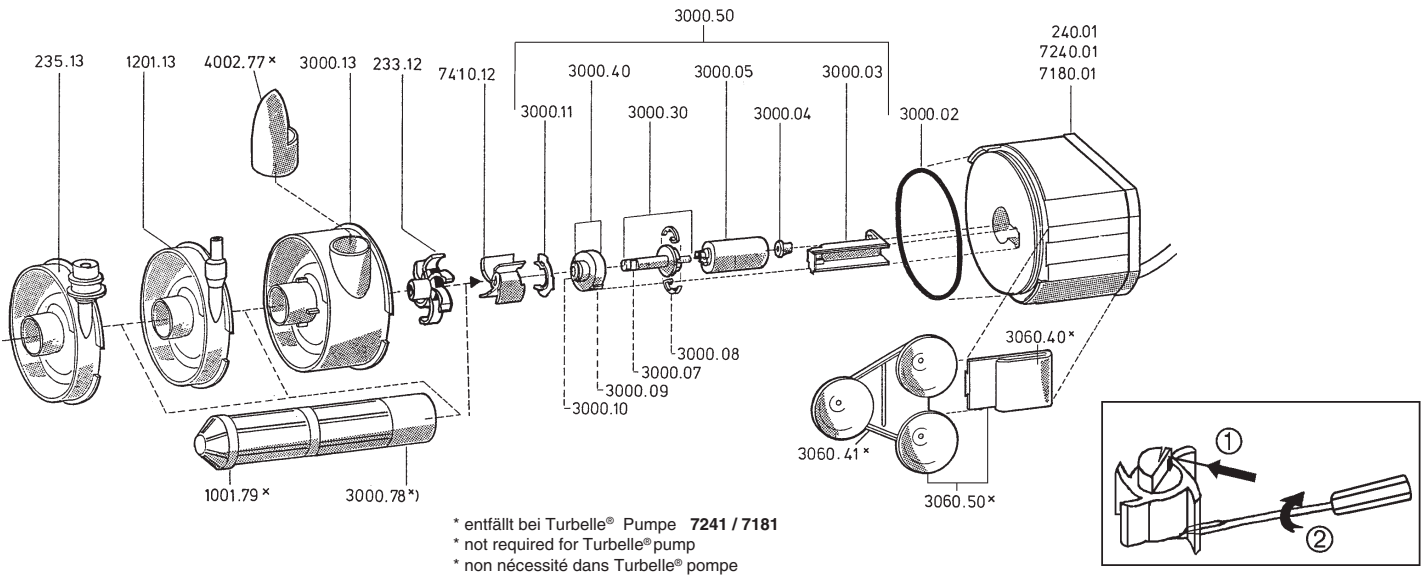
# Turbelle® electronic (Vorgängermodell - previous model)

## Turbelle® electronic 7110 - 7410P



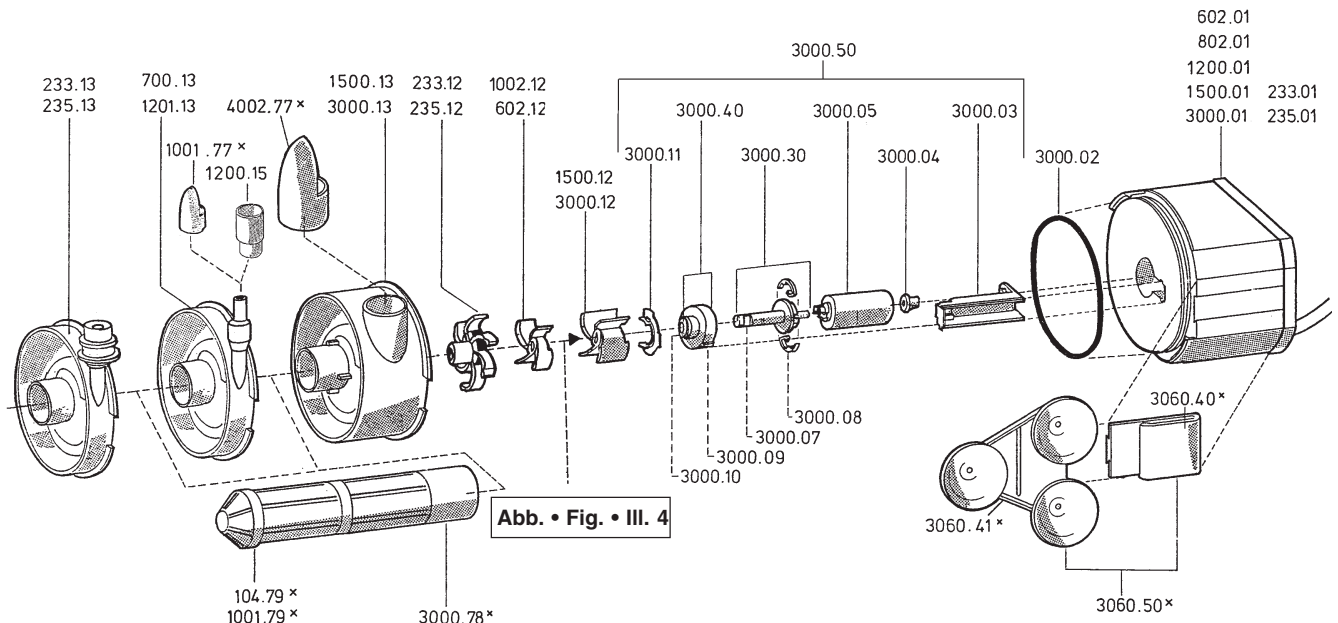
Turbelle® electronic						Teilleiste				List of parts	Liste de pièces
7210P	7211P	7310P	7311P	7410P	7411P	7110	7111	240.05	Turbelle® electronic	Turbelle® electronic	Turbelle® electronic
7240.25	7240.25	7240.25	7240.25	7240.25	7240.25	240.24	240.24	240.24	Treiber (inkl.Codierstecker u.Winkel)	Driver (incl.coding plug a. angle)	Amplificateur (avec fiche et angle)
7240.243	7240.243	7240.243	7240.243	7240.243	7240.243	7240.243	7240.243	7240.243	Codierstecker (nur bis 4/98 erforder.)	Coding plug ( only up to 4/98 nec.)	Fiche de codage ( - 4/98 )
7240.253	7240.256	7240.256	7240.256	7240.256	7240.256	7240.256	7240.256	7240.256	1 Stück Winkel 80 x 40 x 15 mm	1 pcs angle 80 x 40 x 15 mm	1 pièces angle 80 x 40 x 15 mm
7240.245	7240.245	7240.245	7240.245	7240.245	7240.245	7240.245	7240.245	7240.245	Drehknopf	Rotary button	Bouton
7200.20	7200.20	7300.30	7300.30	7400.60	7400.60	7400.60	7400.60	7400.60	Transformator	Transformer	Bloc d'alimentation
7240	7241	7240	7241	7240	7241	7180	7181	240.02	Turbelle® electronic Pumpe	Turbelle® electronic pump	Turbelle® electronic pompe

## Turbelle® electronic (Vorgängermodell - previous model)



7240	7241	7180	7181	240.02	Turbelle® electronic Pumpe	Turbelle® electronic pump	Turbelle® electronic pompe
7240.01	7240.01	7180.01	7180.01	240.01	Motorblock 24V	Motor block 24V	Bloc moteur 24V
3000.02	3000.02	3000.02	3000.02	3000.02	O-Ring	O-ring seal	Bague torique
3000.03	3000.03	3000.03	3000.03	3000.03	Kühlkanal	Cooling duct	Canal de refroidissement
3000.04	3000.04	3000.04	3000.04	3000.04	Lager oben	Upper bearing	Palier supérieur
3000.05	3000.05	3000.05	3000.05	3000.05	Magnetrotor	Magnetic rotor	Induit magnétique
3000.07	3000.07	3000.07	3000.07	3000.07	Antriebswelle	Drive shaft	Arbre d'entraînement
3000.08	3000.08	3000.08	3000.08	3000.08	Bremsbacken 2 Stück	Brake shoes (2 items)	Mâchoires (2 pièces)
3000.30	3000.30	3000.30	3000.30	3000.30	SET (3000.07 + 3000.08)	SET (3000.07 + 3000.08)	SET (3000.07 + 3000.08)
3000.09	3000.09	3000.09	3000.09	3000.09	Lagerschale mit Bremsring	Bearing shell with brake ring	Coquille de coussinet a. bague de r.
3000.092	3000.092	3000.092	3000.092	3000.092	Bremsring	Brake ring	Anneau au freiner
3000.10	3000.10	3000.10	3000.10	3000.10	Lagerbuchse V4A	Bearing bush V4A	Coussinet V4A
3000.40	3000.40	3000.40	3000.40	3000.40	SET (3000.09 + 3000.10)	SET (3000.09 + 3000.10)	SET (3000.09 + 3000.10)
3000.11	3000.11	3000.11	3000.11	3000.11	Klemmring	Clamping ring	Bague de serrage
7410.12	7410.12	233.12	233.12	233.12	Kreisel	Impeller	Rotor
		7410.12	7410.12		Kreisel	Impeller	Rotor
3000.13	3000.13	1201.13	1201.13	235.13	Kreiselgehäuse	Impeller housing	Carter du rotor
		3000.13	3000.13		Kreiselgehäuse	Impeller housing	Carter du rotor
		1200.15	1200.15		Muffe ø 25mm für 1201.13	Sleeve ø25mm 1201.13	Manchon ø25mm pour 1201.13
		1282.15	1282.15		Muffe ø 25mm für 1282.13	Sleeve ø25mm 1282.13	Manchon ø25mm pour 1282.13
3000.78		3000.78			Muffe	Sleeve	Manchon
1001.79		1001.79			Schlitzkörper	Strainer	Tube fendu
3060.40		3060.40			Halter	Holding device	Fixation
3060.41		3060.41			Saughalter	Suction cup unit	Support à ventouses
3060.42		3060.42			Sauger 3 Stück	Suction cup (3 pcs.)	Ventouses (3 pièces)
3060.50		3060.50			SET (3060.40 + 3060.41)	SET (3060.40 + 3060.41)	SET (3060.40 + 3060.41)
3000.14		3000.14			Rahmenhalterung	Frame holding device	Fixation du cadre
4002.77					Stömungswinkel	Flow deflector	Cône d'écoulement

# Turbelle® powerhead (Vorgängermodell - previous model)

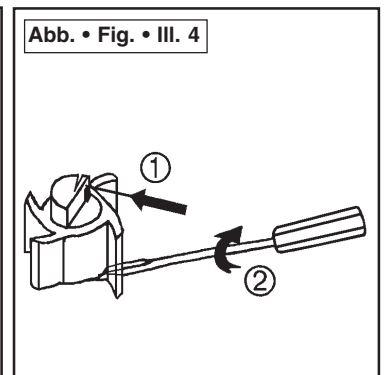


\* entfällt bei Turbelle® Pumpe 603/803/1003/1201/1501/3001  
 \* not required for Turbelle® pump  
 \* non nécessité dans Turbelle® pompe

### Topffilter • Pot-Type Filters Cloches a filtrage

### Patronenfilter • Cartridge filter Filtres à cartouche

	300	800	1600
300.06	800.06	1600.06	
800.07	800.07	800.07	
800.08	800.08	800.08	



Turbelle® powerhead													Teiliste	Partlist	Liste de pièce de rec	
602	603	1002	1003	1500	1501	3000	3001	1200	1201	235.02	802	803	233.02	Turbelle® powerhead	Turbelle® powerhead	Turbelle® powerhead
602.01	602.01	1002.01	1002.01	1500.01	1500.01	3000.01	3000.01	1200.01	1200.01	235.01	802.01	802.01	233.01	Motorblock 230V-50Hz	Engine block 230V-50Hz	Bloc moteur 230V- 50Hz
3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	3000.02	O-ring	bague torique	
3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	3000.03	Kühlkanal	Cooling duct	canal de refroidissement
3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	3000.04	Lager oben	Upper bearing	Pallier Supérieur
3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	3000.05	Magnetrotor	Magnetic rotor	Induit magnétique
3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	3000.07	Antriebswelle	Drive shaft	Arbre menant
3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	3000.08	Bremsbacken 2 Stück	Breakshoes 2 pcs.	Mâchoires 2 piéc.
3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	3000.30	SET (3000.07 + 3000.08)	SET (3000.07 + 3000.08)	SET (3000.07 + 3000.08)
3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	Lagerschale mit Bremsring	Breakshell with break ring	Coquille de coussinet de frein.
3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	3000.09	Bremsring	Break ring	Anneau au freiner
3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	3000.10	Lagerbuchse V4A	Bearingbush V4A	Coussinet V4A
3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	3000.40	SET (3000.09 + 3000.10)	SET (3000.09 + 3000.10)	SET (3000.09 + 3000.10)
3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	3000.11	Klemmring	Clamping	Bague de serrage
602.12	602.12	1002.12	1002.12	1500.12	1500.12	3000.12	3000.12	235.12	235.12	235.12	233.12	233.12	233.12	Kreisel	Impeller	Rotor
700.13	700.13	1500.13	1500.13	1500.13	1500.13	3000.13	3000.13	1201.13	1201.03	235.13	1201.13	1201.13	233.13	Kreiselgehäuse	Impeller housing	Carter du rotor
		1002.15	1002.15											Adapter	Adaptor	Ajutage
3000.78		3000.78		3000.78		3000.78		3000.78						Rohrmuffe	Connecting sleeve	Manchon de tuyau
								1200.15	1200.15		1200.15	1200.15		Muffe für Schlauchanschluß	Sleeve for hose connection	Manchon pour raccord tuyau
104.79		104.79		1001.79		1001.79		1001.79			104.79			Schlitzkörper	Strainer	Tube fendu
3060.40		3060.40		3060.40		3060.40		3060.40			3060.40			Halter	Holder	Fixation
3060.41		3060.41		3060.41		3060.41		3060.41			3060.41			Saughalter mit 3060.42	Suction holder with 3060.42	Support a vent. avec 3060.42
3060.42		3060.42		3060.42		3060.42		3060.42			3060.42			Sauger 3 Stück	Suction 3 pcs.	Support 3 piéc.
3060.50		3060.50		3060.50		3060.50		3060.50			3060.50			SET (3060.40 + 3060.41)	SET (3060.40 + 3060.41)	SET (3060.40 + 3060.41)
3000.14		3000.14		3000.14		3000.14		3000.14			3000.14			Rahmenhalterung.	Frame holding device	Fixation du cadre
1001.77		4002.77		4002.77		4002.77								Störmungswinkel	Folow deflector	Cône d'écoulement
SET 660		SET 1060		SET 1560		SET 3060								Power-Sets	Power Set	Power Set
602		1002		1500		3000								Turbelle® powerhead	Turbelle® powerhead	Turbelle® powerhead
1001.76		1001.76												Rohr	Tube	Tubulure
800.06		800.06		1600.06		1600.06								Schlitzrohr	Stainer	Tube fendu
800.08		800.08												Halteplatte	Bracket	Plaque d'arrêt
800.07		800.07		800.07		800.07								Schraubdeckel	Screw cap	Couvercle fileté
800.01		800.01		1600.01		1600.01								Filterpatronen	Filter cartrdges	Cartouches filtrantes

# Wartungsanleitung • Maintenance Instructions • Notice d'entretien

**Turbelle®** powerhead 602/603, 1002/1003, 1500/1501, 3000/3001, 802/803, 1200/1201, 233.02, 235.02

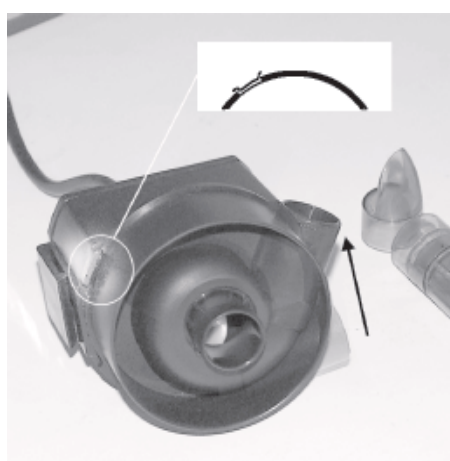
**Turbelle®** electronic 7210P/7211P, 7310P/7311P, 7410P/7411P, 7110U/7111U, 240.02



Das Zerlegen wird anhand einer Turbelle® 3000 gezeigt. Da alle powerhead den gleichen Aufbau besitzen gilt sie für alle Turbelle®

The disassembly will be demonstrated by means of a Turbelle® 3000. As all Turbelle® powerhead units have the same construction, these maintenance instructions shall be applicable for all Turbelle®

Cette opération de démontage est simulée avec une Turbelle 3000. Etant donné que la conception de toutes les pompes Turbelle Powerhead est similaire, ces indications comptent pour toutes les Turbelle®



Drehen Sie das Kieselgehäuse soweit gegen den Uhrzeigersinn, bis es sich nach unten abziehen läßt.

Turn the impeller housing clockwise until it can be pulled off to the bottom.

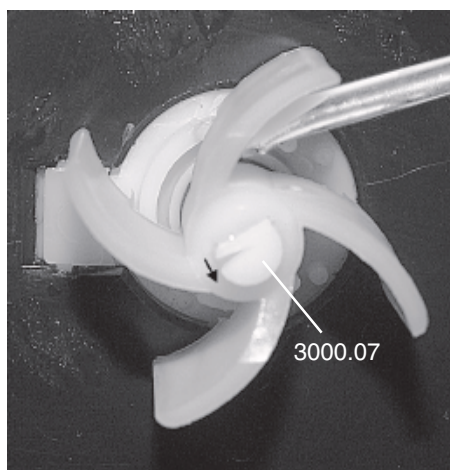
Tournez la chambre de turbine en sens anti-horaire jusqu'à son détachement de la pompe.



Nehmen Sie das Kieselgehäuse vom Pumpenkopf ab.

Remove the impeller housing from the pump head.

Déposez la chambre de turbine.

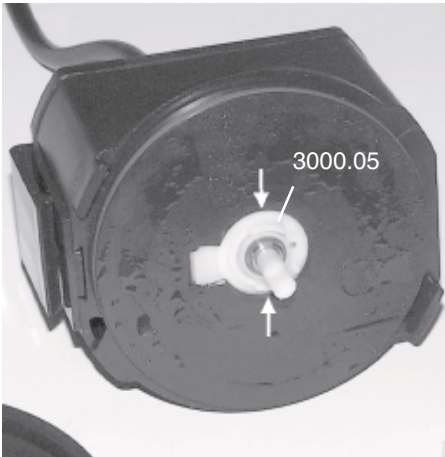


Drücken Sie die Verriegelungsfeder der Antriebswelle (3000.07) zusammen, und hebeln Sie den Kiesel ab (Schraubenzieher).

Press the locking spring of the drive shaft (3000.07) together and lift the impeller off (screw-driver).

Appuyez sur la lame de ressort se situant sur l'arbre d'entraînement (3000.07) et détachez la turbine en faisant levier avec un petit tournevis.

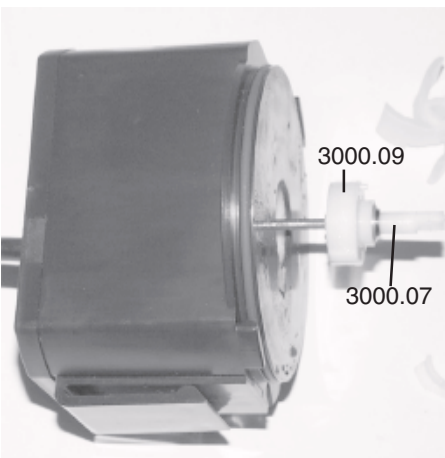




Drücken Sie den Klemmring (3000.11) zusammen, und entnehmen Sie ihn aus seiner Führung.

Press the clamping ring (3000.11) together and remove it from its guideway.

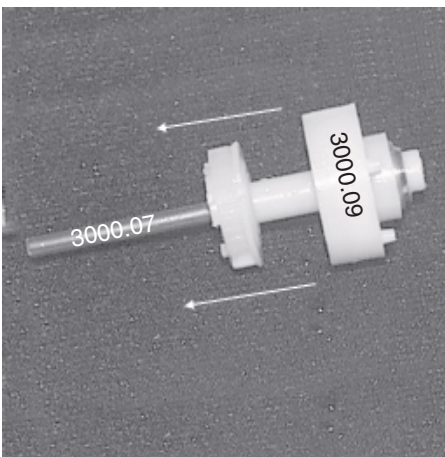
Pincez la bague de serrage (3000.11) de manière à pouvoir l'extraire de son logement.



Ziehen sie die Antriebswelle (3000.07) und Lagerschale (3000.09) aus dem Pumpenkopf. Achten Sie beim Wiedereinsetzen auf die richtige Position der Rastnut.

Pull the drive shaft (3000.07) and the bearing shell (3000.09) out of the pump head. In assembly, please observe the right position of the snap-in groove.

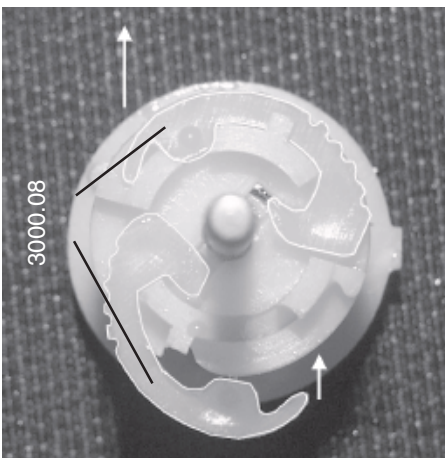
Tirez l'arbre d'entraînement (3000.07) de manière à sortir l'arbre et l'ensemble coquille de freinage (3000.09) de la pompe. Lors de la mise en place, veuillez à bien positionner le téton détromper.



Ziehen Sie die Antriebswelle (3000.07) aus der Lagerschale (3000.09).

Pull the drive shaft (3000.07) out of the bearing shell (3000.09).

Séparez l'arbre d'entraînement (3000.07) de la coquille de freinage (3000.09).



Bremsbacken (3000.08) an der schmalen Seite nach außen ziehen und entnehmen (oben). Zum Einsetzen die Bremsbacken mit der breiten Seite einhängen, und die schmale nach innen einrasten (unten).

Pull the brake shoe (3000.08) to the outside at the narrow part, and remove it (upwards). For assembly, attach the brake shoe on the broad side and permit the narrow part to snap in (bottom).

En les saisissant sur leurs parties les plus fines, sortez les mâchoires de freins (3000.08) (en haut). Pour la remise en place des mâchoires, enclipez tout d'abord la partie large puis introduisez la partie la plus fine (en bas).



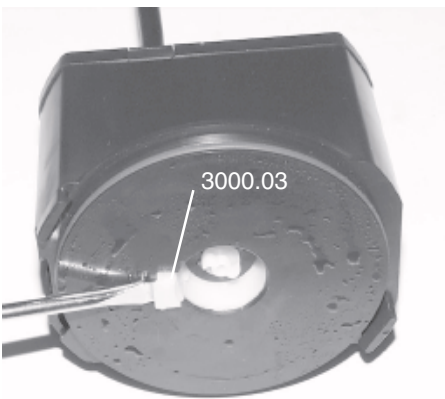
Den Bremsring (3000.092) nur wenn Schäden erkennbar sind, aus der Lager-  
schale (3000.09) herausziehen.

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Pull the brake ring (3000.092) out of the bearing shell (3000.09) only, if damage is  
visible.

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Seulement s'il possible de constater une détérioration, sortez la garniture de  
freinage (3000.092) de la coquille de freinage (3000.09).



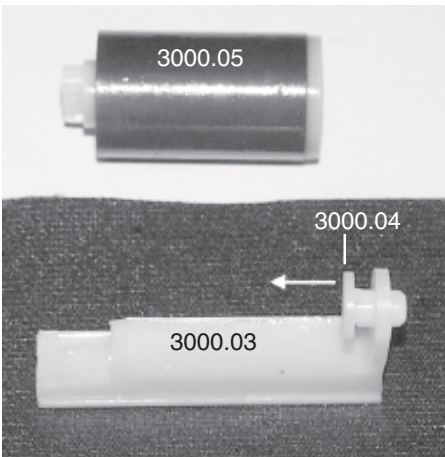
Hebeln Sie den Kühlkanal (3000.03) aus dem Pumpenkopf. Ziehen Sie den  
Magnetrotor mittels des Kühlkanales vollständig aus seiner Führung.

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Prize off the cooling duct (3000.03) from the pump head. Use the cooling duct to  
pull the magnetic rotor out of the guideway completely.

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A l'aide d'un tournevis, extrayez le canal de refroidissement (3000.03) de la pompe.  
Saisissez le rotor poussé par la translation du canal.



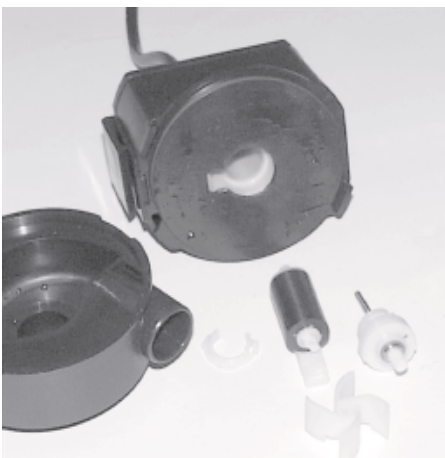
Nehmen Sie den Magnetrotor (3000.05) vom Kühlkanal (3000.03) und ziehen Sie  
das obere Lager (3000.04) aus der Führung.

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Remove the magnetic rotor (3000.05) from the cooling duct (3000.03), and pull the  
upper bearing (3000.04) from the guideway.

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Déposez le rotor (3000.05) de son canal de refroidissement (3000.03) et sortez le  
palier supérieur (3000.04) de son logement.



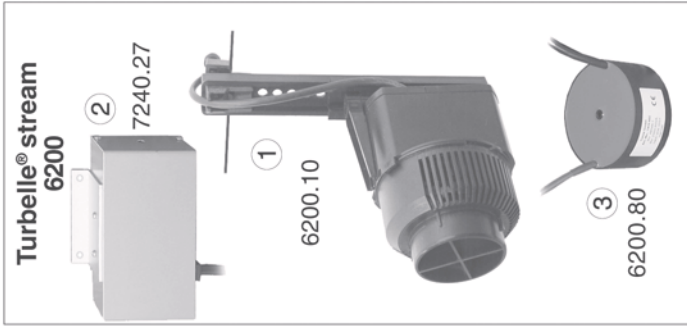
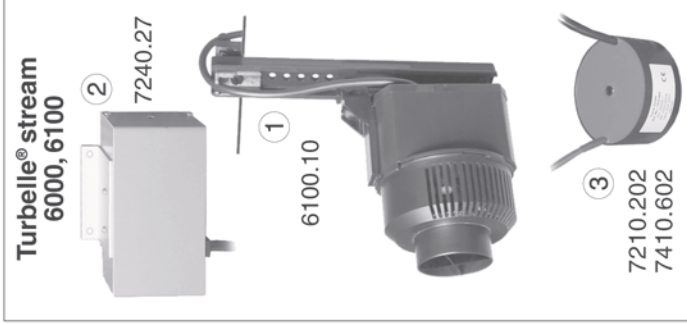
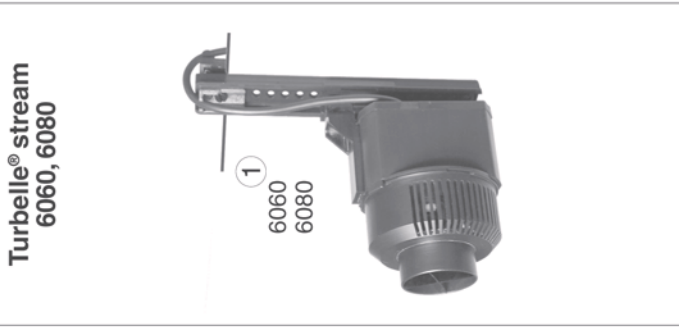
Kontrollieren Sie alle Teile auf evtl. Verschleißerscheinungen. Der Austausch  
eines Teiles für ein paar Mark, kann einen größeren Schaden an Ihrer Turbelle®  
verhindern. Der Zusammenbau erfolgt, soweit nicht anders vermerkt sinngemäß  
in umgekehrter Reihenfolge.

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Check all parts for any wear. The replacement of an inexpensive part may prevent  
a larger damage on your Turbelle®. If nothing to the contrary has been indicated,  
the assembly is carried out in reverse sequence.

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Contrôlez attentivement chaque pièce, son degré d'usure et d'encrassement. Pour  
une somme modique, l'échange éventuel d'une pièce peut éviter la destruction de  
votre Turbelle®. Le remontage de la pompe obéit tout simplement à l'ordre inverse  
au démontage.



Packungsinhalt • Contents of package • Contenu							
	6060	6080	6000	6100	6200	Turbelle® stream	
1	6060	6080	6100.10	6100.10	6200.10	Pumpe	Pump
2			7240.27	7240.27	7240.27	Treiber	Driver
3			7210.202	7410.602	6200.80	Trafo	Transformateur

### Turbelle stream kits

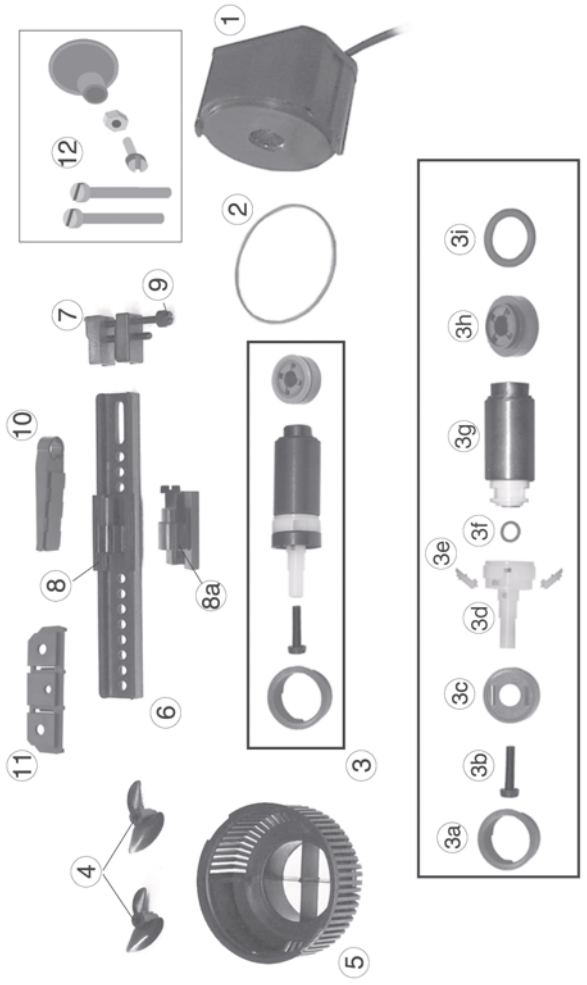
TS 7 = 1 x Turbelle® stream 6000 + Singlecontroller 7091  
 TS 12 = 1 x Turbelle® stream 6100 + Singlecontroller 7091  
 TS 20 = 1 x Turbelle® stream 6200 + Singlecontroller 7091  
 TS 24 = 2 x Turbelle® stream 6100 + Multicontroller 7094  
 TS 48 = 4 x Turbelle® stream 6100 + Multicontroller 7094

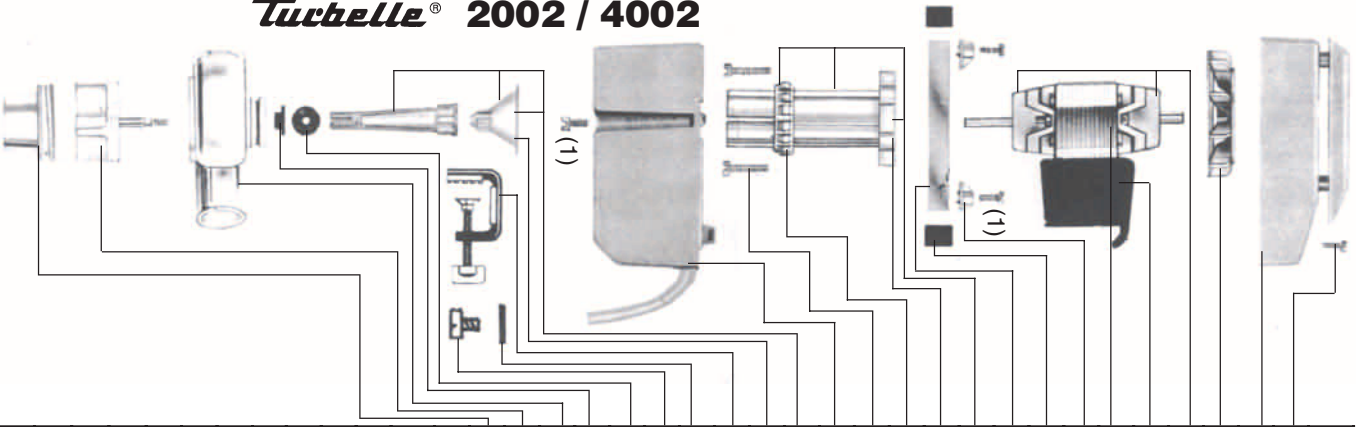
	6200.10	6100.10	6080	6060	Pumpe	Pump	Pompe
1	6200.015	6100.015	6080.015	6060.015	Motorblock	Engine block	Bloc moteur
2	3000.02	3000.02	3000.02	3000.02	O-Ring rot	Red O ring seal	Joint torique
3	6100.60	6100.60	6080.60	6080.60	Antriebsseinheit	Drive unit	Partie mobile
3a	3000.62	3000.62	3000.62	3000.62	Lagerbuchse	Bearing bush	Coussinet
3b	6080.641	6080.641	6080.641	6080.641	Schraube M4 x16	M4x16 screw	Vis M4x16
3c	3000.65	3000.65	3000.65	3000.65	Lagerschale	Bearing shell	Coquille
3d	6080.64	6080.64	6080.64	6080.64	Antriebswelle	Drive shaft	Arbre d'entraînement
3e	3000.66	3000.66	3000.66	3000.66	2 Bremsbacken	2 brake shoes	2 mâchoires
3f	7400.61	7400.61			O-Ring rot, 6x1	Red O ring seal, 6x1	Joint torique rouge, 6x1
3g	3000.63	3000.63	3000.63	3000.63	Magnetrotor	Magnetic rotor	Magnéto-rotor
3h	3000.61	3000.61	3000.61	3000.61	Lager oben	Upper bearing	Pailier supérieur
3i	3000.612	3000.612	3000.612	3000.612	O-Ring rot, 13x2.5	Red O ring seal, 13x2.5	Joint torique rouge, 13x2.5
4	6200.12	6100.12	6080.12	6060.12	Hydropropeller	Hydro propeller	Hydropropulseur
5	6200.13	6080.13	6080.13	6080.13	Ansauggehäuse	Suction housing	Corps d'aspiration
6	3000.22	3000.22	3000.22	3000.22	Lochschiene	Perforated rail	Barre de montage
7	3000.24	3000.24	3000.24	3000.24	Klemmhalter	Clamp holder	Attache (6d)
8	6080.23	6080.23	6080.23	6080.23	Schiebeteil mit Angel	Sliding piece with hinge	Pièce coulissante avec gond
8a	6200.23				6080.23 + Schraube	6080.23 + screw	
9	3000.243	3000.243	3000.243	3000.243	Schraubenset von (7)	Set of screws from (7)	Set visserie de (7)
10	6080.40	6080.40	6080.40	6080.40	Schwenkarm	Swivel arm	Bras pivotant
11	6080.25	6080.25*			Halter-Stabilisator	Holding device-stabiliser	Stabilisateur
12	3000.244	3000.244	3000.244	3000.244	Halter-Erweiterung	Holding device-extension	Extension de supp.

\* nur bei Turbelle® stream 6100 mitgeliefert

\* uniquement livré avec Turbelle® stream 6100

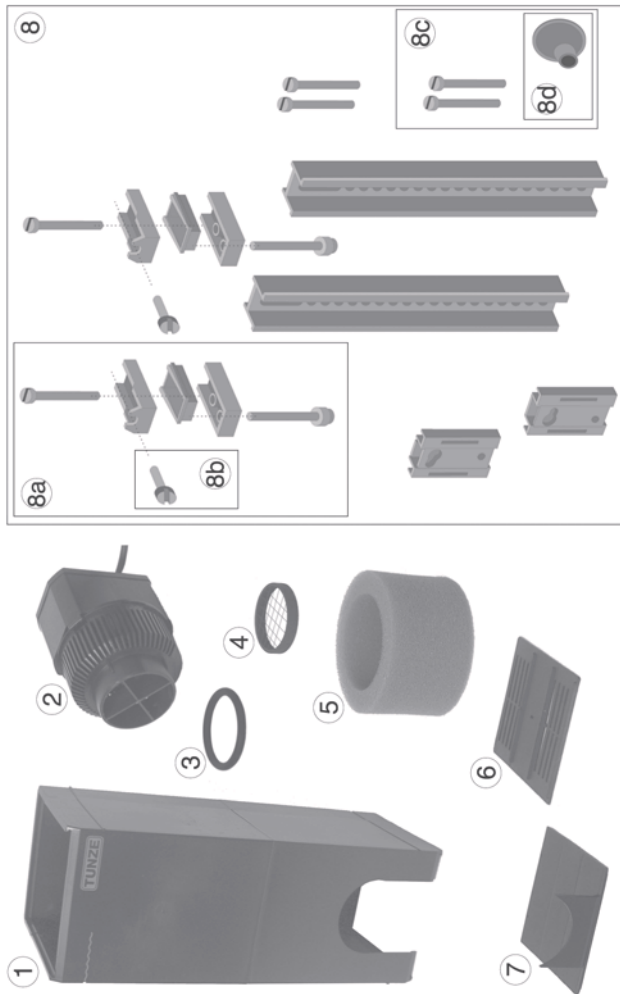
### Einzelteile Turbelle® stream Component parts of Turbelle® stream Pièces détachées Turbelle® stream



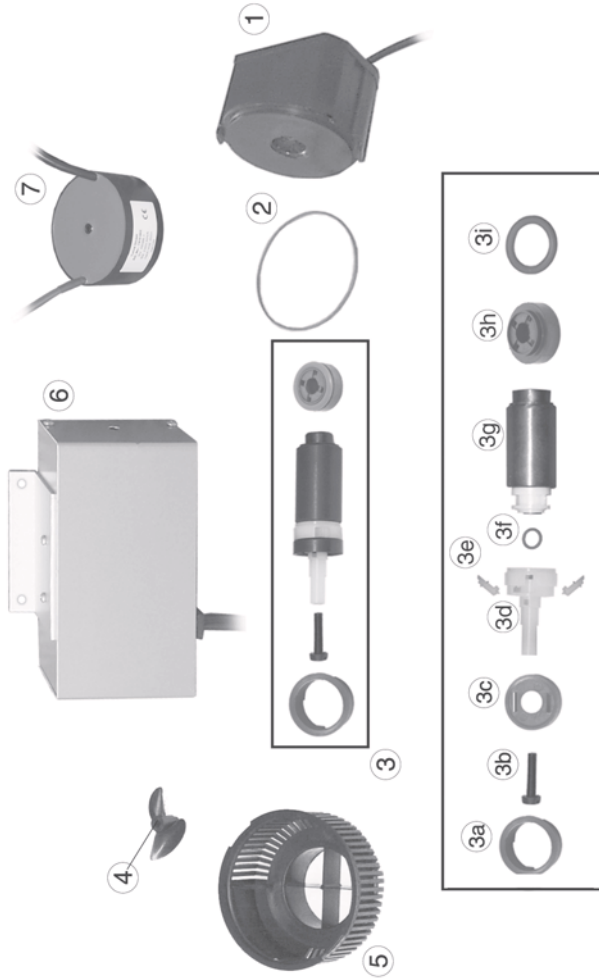


	<b>2002</b>	<b>4002</b>	<b>Teilieliste</b>	<b>List of Parts</b>	<b>Liste de pièces</b>
1	104.19	104.19	Schraube V2A M3x10	Screw V2A M3x10	Vis V2A M3x10
2	2002.02	4002.02	Deckel	Lid	Couvercle
3	4002.09	4002.09	Lüfter	Fan	Ventilateur
4	4002.26	4002.26	Motorlager (2St.)	Motor bearing (2pcs.)	Pallier moteur (2pièces)
5	2002.11	4002.11	Motor 220V mit Kabel vergossen (mit 5a)	Motor 220V sealed with main cable (with 5a)	Moteur 220V coulé avec câble (avec 5a)
5a	2002.22	4002.22	Motoranker	Rotor	Induit
6	4002.08	4002.08	Knebel (10St.)	Retainer (10pcs.)	Bouchon (10pièces)
7	4002.12	4002.12	Gummituß (4St.)	Rubber mount (4pcs.)	Pied caoutchouc (4pièces)
8	4002.07	4002.07	Holm (2St.)	Motor bearer (2pcs.)	Traverse (2pièces)
9	4002.20	4002.20	Wellenrohr (mit 9a / 9b)	Shaft housing (with 9a / 9b)	Collone daxe (avec 9a / 9b)
9a	4002.203	4002.203	Fizstreifen	Felt strip	Langnette de feutre
9b	4002.202	4002.202	Spanning	Clamping ring	Anneau tendeur
10	4002.06	4002.06	Schraube V2A M4x20	Screw V2A M4x20	Vis V2A M4x20
11	2002.10	4002.10	Motorgehäuse	Motor housing	Boîtier moteur
12	4002.13	4002.13	Welle (mit Ritzel 12a)	Shaft set (with 12a)	Axe complet (avec 12a)
12a	4002.131	4002.131	Ritzel mit Feder	Pinion with spring	Roue avec ressort
13	102.40	102.40	Spannhalter V4A	Mounting clamp V4A	Attache V4A
14	851.44	851.44	Scheibe	Disc	Disque
15	102.43	102.43	Schraube V4A M6x12	Screw V4A M6x12	Vis V4A M6x12
16	141.14	141.14	Lagerscheibe	Thrust washer	Rondelle
17	141.15	141.15	Kreisellager	Impeller bearing	Coussinet du rotor
18	121.16	141.16	Kreiselgehäuse	Impeller housing	Carter du rotor
19	121.17	141.17	Kreisel	Impeller	Rotor
20	141.18	141.18	Schraubstutzen	Intake fitting	Reccord fileté
21	4002.25	4002.25	Reparaturbeutel (1, 12, 16, 17)	Repair kit (1, 12, 16, 17)	Set réparation (1, 12, 16, 17)
			<b>Zubehör (extra bestellen)</b>	<b>Accessories (order separately)</b>	<b>Accessoires (commander séparément)</b>
Z1	102.41	102.41	Spannwinkel V4A	Universal bracket V4A	Cornière V4A
Z2	851.41	851.41	Halter für TUNZE SYSTEM	Holder for TUNZE SYSTEM	Support pour TUNZE SYSTEM
Z3	708	708	power timer	power timer	power timer
Z4	7082	7082	power timer mit Ebbe-Flut Steuerung	power timer with high and low tide simulation	power timer av. créer un mouvement de marée
Z5	4002.77	4002.77	Strömungswinkel	Flow deflector	Coue découlem
Z6	2002.71	2002.71	Bio-Anschuß	Bio connection	Raccord bioZ7
Z7	1001.79	1652.79	Schlitzkörper	Strainer	Crépine
Z8	1001.76	1001.76	Rohrstück	Tube	Partie de tuyau
Z9	1001.78	1001.78	Rohrmuffe ø21/25	Connecting sleeve ø21/25	Manchon de tuyau ø21/25
Z10	3000.78	3000.78	Rohrmuffe ø25/28	Connecting sleeve ø25/28	Manchon de tuyau ø25/28
Z11	1001.80	1001.80	T-Stück	T piece	Branchement en T

Teileabbildung der Wavebox • Illustration of parts of the Wavebox  
Illustration des pièces Wavebox



Teileabbildung der Wavebox-Pumpe • Illustration of parts of the Wavebox pump  
Illustration des pièces pompe-Wavebox



Ersatzteilliste • List of spares • Liste des pièces

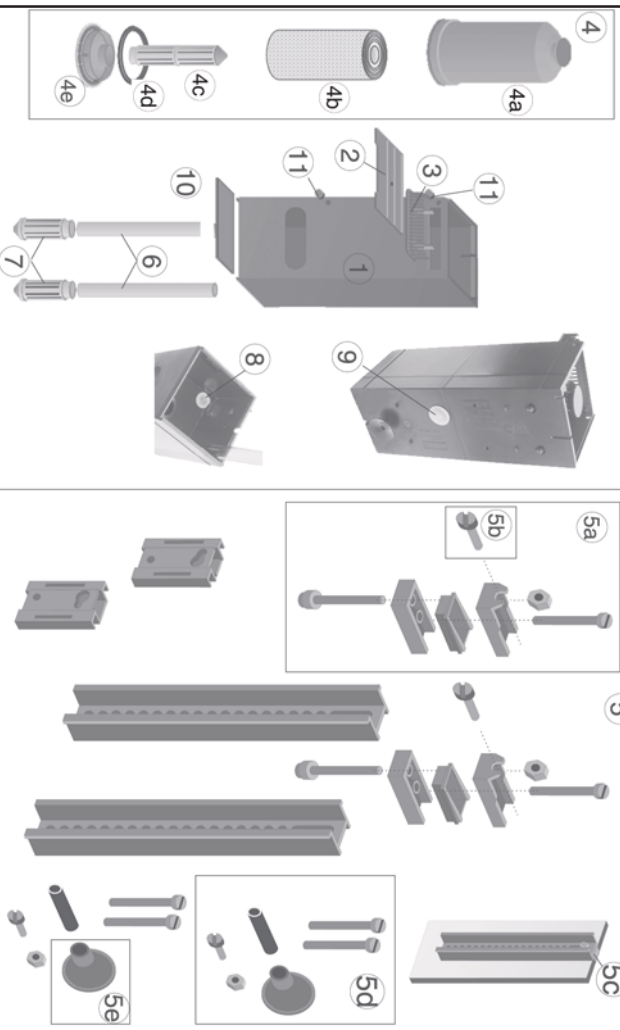
6212	Ersatzteilliste	List of spares	Liste de pièces
1	6212.10	Gehäuse	Corps
2	6260.10	Wavebox-Pumpe	Pompe-Wavebox
3	6250.51	O-Ring Silikon 50x6mm	O-ring seal 50x6mm(.23 in.)
4	6212.20	Schutzgitter	Grille de protection
5	6212.30	Schaumstoffring	Mousse de maintien
6	6212.02	Schiebedeckel	Couvercle
7	6212.07	Sicherungsplatte	Plaque de verrouillage
8	3166.25	Comline Halter	Support Comline
8a	3000.24	Klemmhalter	Attache de support
8b	1281.313	2 Schrauben + 2 Mutter M6	2 viss + 2 écrou noir M6
8c	3000.244	Halterweiterung	Prolongateur de support
8d	3060.44	Sauger (4 Stück)	Ventouses (4p.)

Die hieraufgeführten Ersatzteile können zusätzlich Teile enthalten, die nicht benötigt werden.

6260.100	Wavebox-Pumpe	Wavebox Pump	Pompe Wavebox
1	6260.015	Motorblock	Bloc moteur
2	3000.02	O-Ring rot	Joint torique
3	6100.60	Antriebseinheit	Partie mobile
3a	3000.62	Lagerbuchse	Coussinet
3b	6080.641	Schraube M4 x16mm	Vis M4x16
3c	3000.65	Lagerschale	Coquille
3d	6080.64	Antriebswelle	Arbre d'entraînement
3e	3000.66	2 Bremsbacken	2 mâchoires
3f	7400.61	O-Ring rot, 6x1	Joint torique rouge, 6x1
3g	3000.63	Magnetrotor	Magnéto-rotor
3h	3000.61	Lager oben	Palier supérieur
3i	3000.612	O-Ring rot, 13x2.5	Joint torique rouge, 13x2.5
4	6200.12	Hydropropeller	Hydropulseur
5	6200.13	Ansauggehäuse	Corps d'aspiration
6	7240.27	Treiber	Driver
7	7410.602	Trafo	Transformateur

### ComLine Filter 3166 / 3167

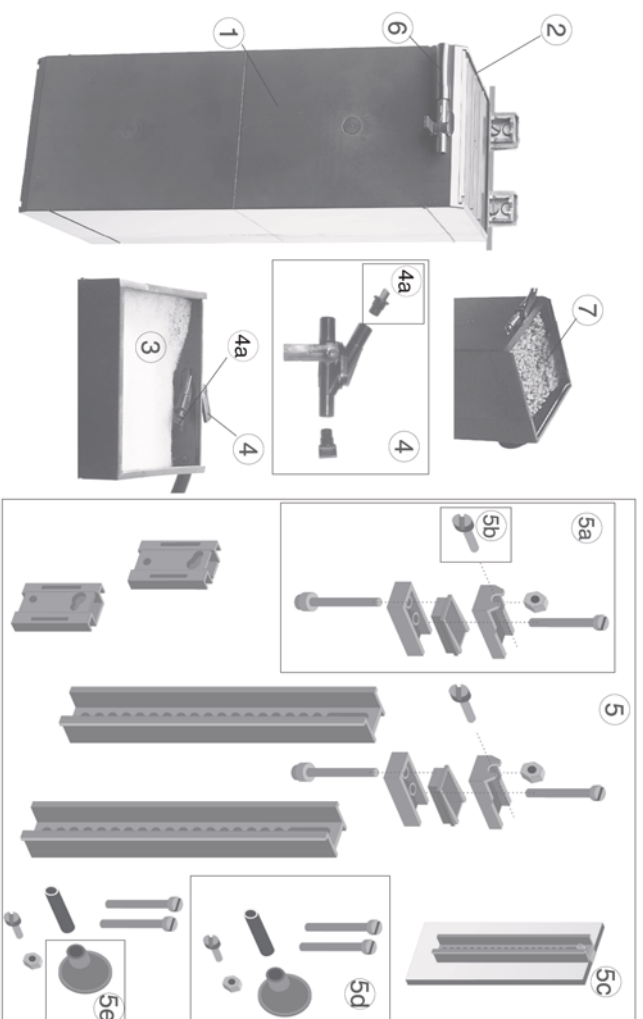
Teileabbildung • Illustration of parts • Illustration des pièces 3166 / 3167



3166	3167	Ersatzteilliste	List of spares	Liste des pièces
1	3166.10	Gehäuse	Housing	Corps de filtre
2	3166.02	Schiebedeckel	Sliding cover	Couvercle
3	5000.15	Ansaugschutz	Protective grid	Grille d'aspiration
4	3166.20	Corniline-Glocke kompl.	Corniline bell complete	Cloche Corniline complete
4a	3166.28	Topf mit Griff	Pot with handle	Cloche avec poignée
4b	800.01	Filterpatronen (5Stück)	Filter cartridges (5ea.)	Cartouches filtrantes (5 p.)
4c	800.06	Schlitzkörper	Strainer	Crépine de cloche
4d	820.29	Rücklaufsperr	Return stop	Anti-retour
4e	820.25	Schraubdeckel	Screw cap	Couvercle à visser
5	3166.25	Corniline Halter	Corniline holder	Support Corniline
5a	3000.24	Klemmhalter	Clamp holder	Attache de support
5b	1281.313	2 Schrauben + 2 Muttern M6	2 screw + 2 nuts M6	2 viss + 2 écrou M6
5c	3000.28	Haltebügel	Holding bracket	Etrier pour support
5d	3000.244	3000.244	Holding device extension	Prolongateur de support
5e	3060.44	3060.44	Sauger (4 Stück)	Ventouses (4 pièces)
6	2x3166.76	4x3166.76	Rohr 19 x 300	Tuyau 19 X 300
7	2x104.79	4x104.79	Schlitzkörper	Strainer
8	3166.05	2x3166.05	Kappe H7A, ø 19mm	Obtuteur H7A, ø 19mm
9	235.481	2x235.481	Kappe H14, ø26mm	Obtuteur H14, ø 26mm
10	3166.07	3166.07	Sicherungsplatte	Plaque de verrouillage
11	2x3166.06	3x3166.06	Kappe schwarz ø9,5 mm	Obtuteur noir ø9,5mm

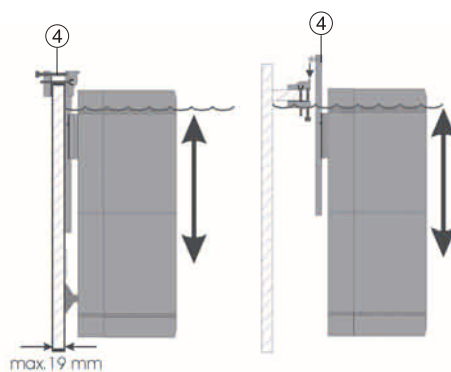
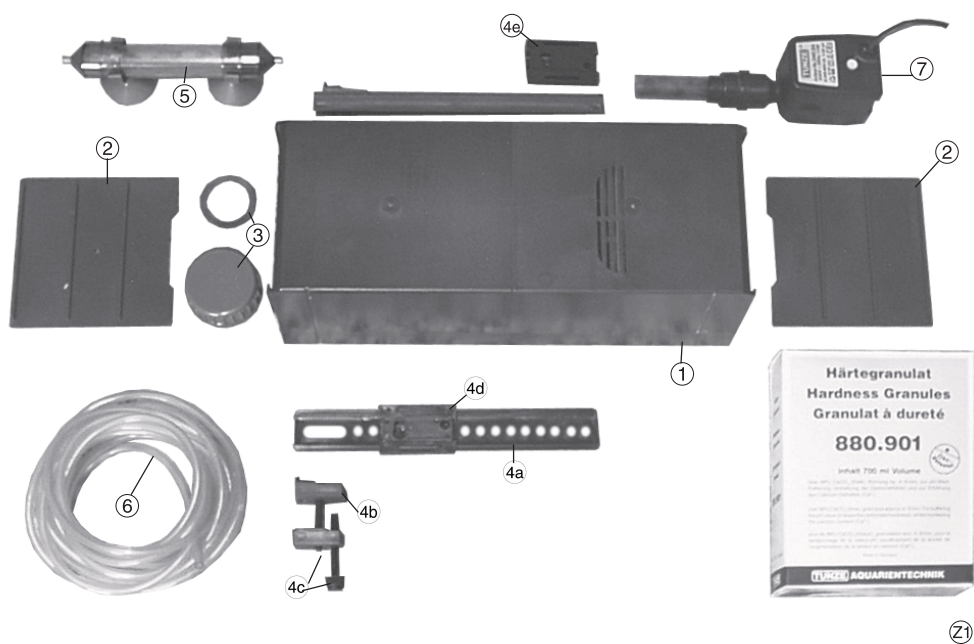
### ComLine Bio-Hydro-Reactor 3179

Teilliste • List of parts • Liste de pièces 3179



3179	Teilliste	List of parts	Liste de pièces
1	3179.10	Gehäuse	Housing
2	3166.02	Schiebedeckel	Sliding cover
3	3197.05	Filtervlies	Filter mat
4	0390.460	Y-Abzweigung	Y-branch
4a	879.711	Biowasser-Verteilerdüse	Distribution nozzle
5	3166.25	Corniline Halter	Corniline holder
5a	3000.24	Klemmhalter	Clamp holder
5b	1281.313	2 Schrauben + 2 Muttern M6	2 screw + 2 nuts M6
5c	3000.28	Haltebügel	Holding bracket
5d	3000.244	Haltenweiterung	Holding device extension
5e	3060.44	Sauger (4 Stück)	Suction cup (4 pcs.)
6	1678.39	Schlauch 6x9mm	Hose 6x9mm (.23x.35 in.)
7	875.95	Granovit 700ml	Granovit 700ml

## Comline Calcium-Automat 3174/3



		<b>Teilleiste</b>	<b>List of parts</b>	<b>Liste des pièces</b>
1	1x 3174.21	Gehäuse	Housing	Boîtier
2	2x 3166.02	Schiebedeckel	Sliding cover	Couvercle coulissant
3	1x 3174.112	Schraubdeckel + Dichtungsring	Screw cap + seal	Bouchon à vis + joint
4	1x 3166.25	Comline-Halter-Paar (4a -4e)	Comline holder couple (4a-4e)	Support (4a - 4e)
4a	2x 3060.42	Lochschiene	Perforated rail	Barre de montage
4b	2x 3000.24	Klemmhalter (incl 5c)	Clamp holder	Attache
4c	2x 3000.242	Schraubenset 40mm	Set of screws (40mm)	Set de vis (40mm)
4d	1x 3166.231	Schiebeteil rechts	Sliding piece right	Pièce couliss. droite
4e	1x 3166.231	Schiebeteil links	Sliding piece left	Pièce couliss. gauche
5	1x 1572.20	Blasenzähler	Bubble counter	Compte-bulles CO2
6	1x 7072.30	CO <sub>2</sub> Schlauch (1m)	CO <sub>2</sub> Hose (40")	Tuyaux CO <sub>2</sub> (1m)
7	1x 210.04	Pumpe (siehe Anleitung)	Pump (see instructions)	Pompe (voir instruc.)
		<b>Zubehör</b>	<b>Accessories</b>	<b>Accessoires</b>
Z1	880.901	Härtegranulat 700 ml	Hardness granules 700 ml	Granulat dur. 700 ml
Z2	880.95	Härtegranulat 5 L	Hardness granules 5 L	Granulat dureté 5 L
Z3	2000.244	Schraubenset 50mm	Set of screws (50mm)	Set de vis (50mm)
74	7074	pH-Controller Set	pH-Controller Set	Set contrôleur de CO <sub>2</sub>
Z5	7077/2	Druckminderer	Pressure regulator	Réducteur de press.
Z6	7079.15	CO <sub>2</sub> - Flasche (1,5Kg)	CO <sub>2</sub> - Bottle (1,5kg)	Bouteille CO <sub>2</sub> 1,5kg
Z7	7079.20	CO <sub>2</sub> - Flasche (2,0 Kg)	CO <sub>2</sub> - Bottle (2,0kg)	Bouteille CO <sub>2</sub> 2,0kg

## Abschäumer • Skimmer • Ecumeur



**233/2\***  
**220/3**

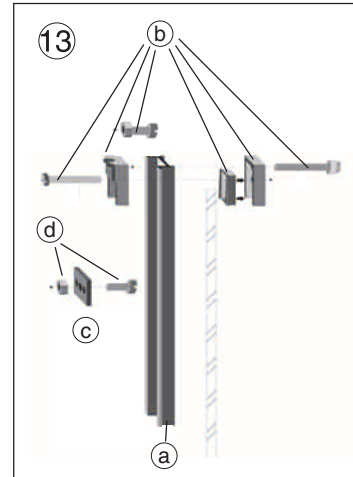


**240/2\***  
**240/3**



\* Artikelnummer vom Vorgängermodell  
\* Order no. for previous model

**230/2\***  
**230/3**



### Teilleiste • List of Parts • Liste de pieces

	220/3	230/3	240/3	Abschäumer	Skimmer	Ecumeur
1	220.04 <sup>1</sup>	230.04 <sup>2</sup>	240.04 <sup>3</sup>	Pumpe mit 9	Pump with 9	Pompe avec 9
2	233.66	230.66	240.67	Abschäumer-Oberteil	Skimmer casing	Boîtier
3	230.05	230.05	230.05	Scheibe	Disk	Disque
4	225.04	225.04	225.04	Unterteil	Skimmer body lower part	Partie inférieure
5	233.14	220.14	245.14	Schaumtopf ohne 6/7	Skimmer cup without 6/7	Godet d'écumage sans 6/7
6			245.13	Schaumzylinder	Cylinder	Cylindre
7	214.15	214.15	214.15	Schaumtopfdeckel	Skimmer lid	Couvercle de godet
8	230.35	230.35	230.35	Düsenrohr	Pressure pipe	Lance
9	233.13	235.13	235.13	Kreiselgeh. mit 9A/9B	Impeller hous.with 9A/9B	Chambre de rotor avec 9A/9B
9a	233.135	235.135	235.135	Düse (weiß)	Nozzle (white)	Buse (blanc)
9b	233.165	230.165	230.165	Vordüse (braun)	Pre-nozzle (brown)	Pré-buse (brun)
10	230.49	230.49	230.49	Schalld. mit Lufts.	Silencer with air hose	Silencieux av. tuy. souple d'air
10a	235.484	235.484	235.484	Kappe	Cup	Bouchon
10b	230.491	230.491	230.491	Kappe	Cup	Bouchon
11	3130.36	3130.36	3130.36	Luftestellschraube	Air regulator screw	Vis réglage d'air
12	230.55	230.55	230.55	Konsole	Pump support	Support de pompe
13	230.25 <sup>4</sup>	230.25 <sup>4</sup>	230.25 <sup>4</sup>	2 Halter	2 Holder	2 Support
13a	2x3000.22	2x3000.22	2x3000.22	Lochschiene	Mounting Bar	Barre de montage
13b	2x3000.24	2x3000.24	2x3000.24	Klemmhalter	Clamp holder	Attache
13c	2x3000.261	2x3000.261	2x3000.261	Verbindungsstück o. Ge.	Plate without thread	Plaque sans filets
13d	230.252	230.252	230.252	2 Schr.+2Mutt.M6x25 sw	2 screw M6x25 +2 nuts black	2 viss M6x25+ 2 écrou noir
13	233.12	235.12	235.12	Kreisel	Impeller	Turbine
14			7240.26 <sup>5</sup>	Treiber	Driver	Driver
15			7410.602 <sup>6</sup>	Transformator	Transformer	Transformateur

Artikelnummer vom Vorgängermodell:  
Order no. for previous model:

<sup>1</sup> 233.02

<sup>2</sup> 235.02

<sup>3</sup> 240.02

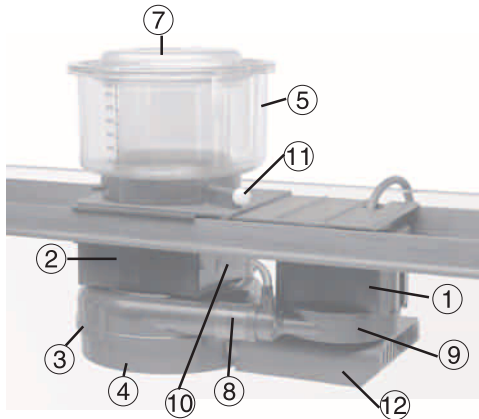
<sup>4</sup> 2x3000.14 + 2x102.45

<sup>5</sup> 240.24

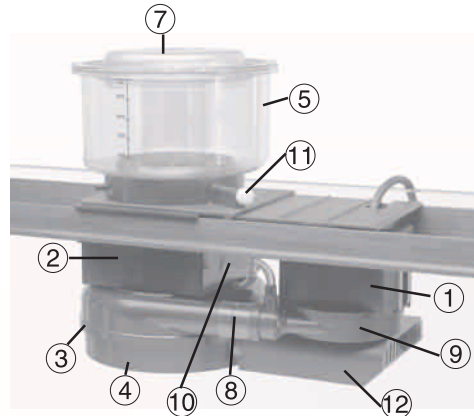
<sup>6</sup> 7400.60



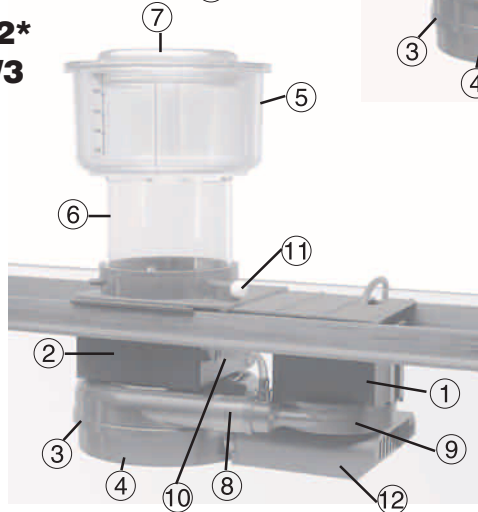
# TUNZE SYSTEM Abschäumer • Skimmer • Ecumeur



**238/2\***  
**225/3**

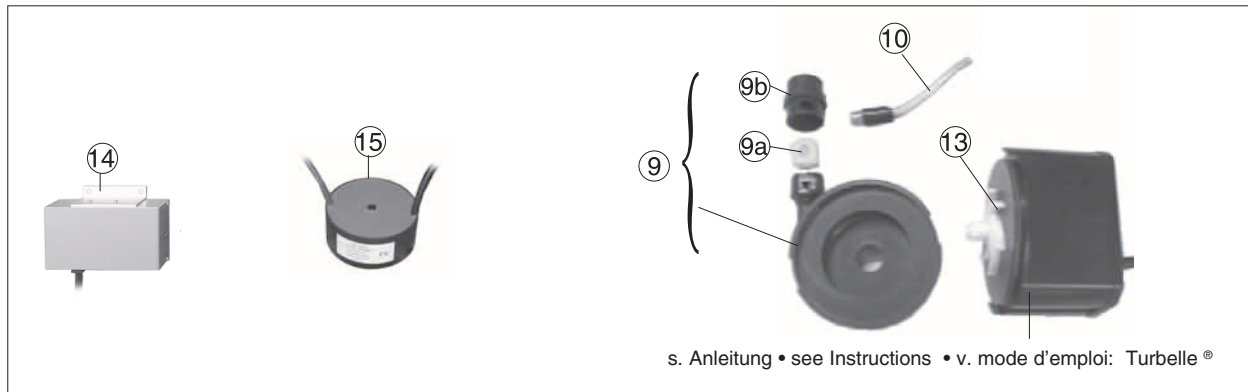


**235/2\***  
**235/3**



**245/2\***  
**245/3**

\* Artikelnummer vom Vorgängermodell  
\* Order no. for previous model



s. Anleitung • see Instructions • v. mode d'emploi: Turbelle®

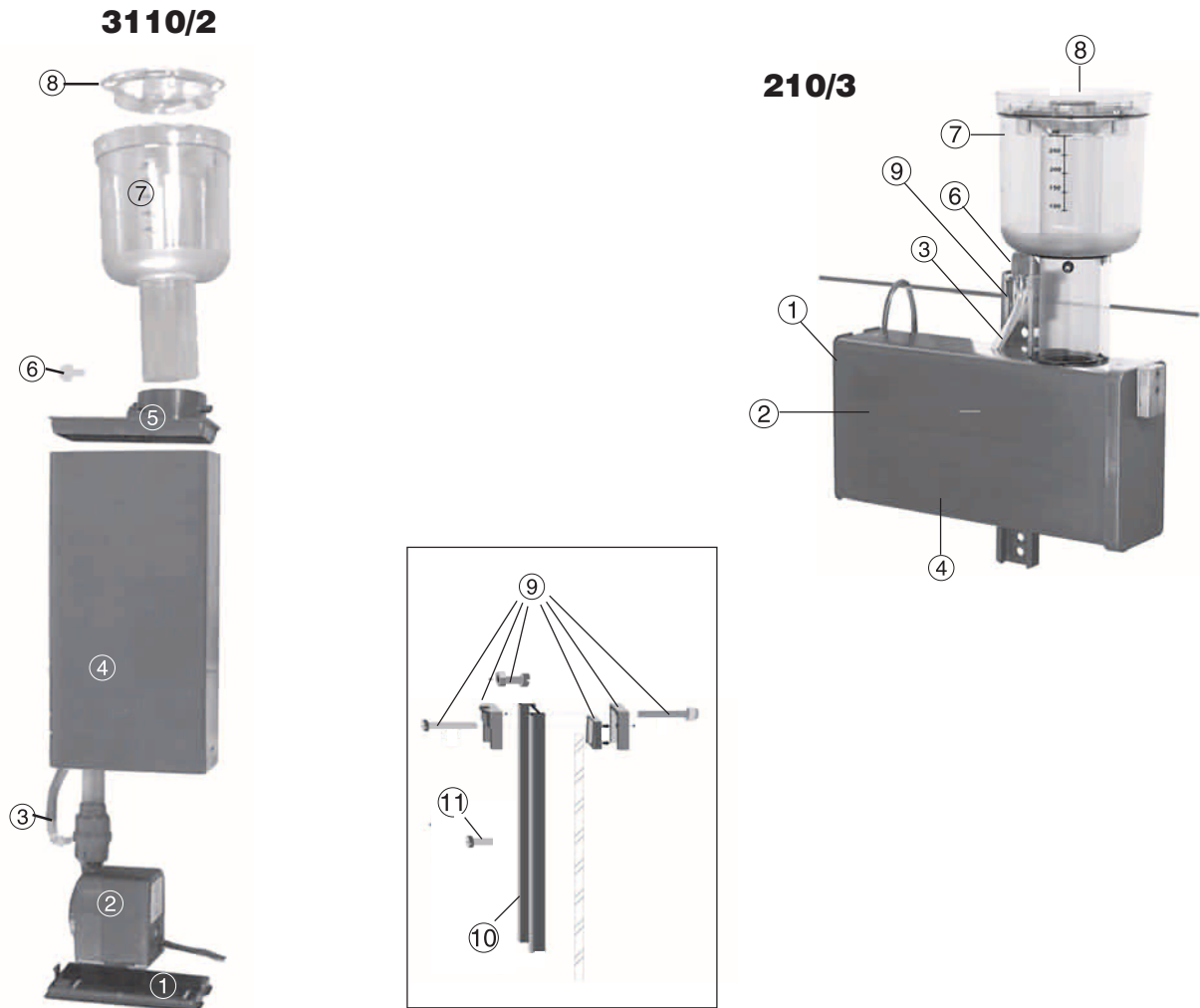
## Teilleiste • List of Parts • Liste de pieces

	225/3	235/3	245/3	Abschäumer	Skimmer	Ecumeur
1	220.04 <sup>1</sup>	230.04 <sup>2</sup>	240.04 <sup>3</sup>	Pumpe mit 9	Pump with 9	Pompe avec 9
2	238.03	235.03	245.67	Abschäumer-Oberteil	Skimmer casing	Boîtier
3	230.05	230.05	230.05	Scheibe	Disk	Disque
4	225.04	225.04	225.04	Unterteil	Skimmer body lower part	Partie inférieure
5	233.14	220.14	245.14	Schaumtopf ohne 6/7	Skimmer cup without 6/7	Godet d'écumage sans 6/7
6			245.13	Schaumzylinder	Cylinder	Cylindre
7	214.15	214.15	214.15	Schaumtopfdeckel	Skimmer lid	Couvercle de godet
8	230.35	230.35	230.35	Düsenrohr	Pressure pipe	Lance
9	233.13	235.13	235.13	Kreiselgeh. mit 9A/9B	Impeller hous.with 9A/9B	Carter du rotor avec 9A/9B
9a	233.135	235.135	235.135	Düse (weiß)	Nozzle (white)	Buse (blanc)
9b	233.165	230.165	230.165	Vordüse (braun)	Pre-nozzle (brown)	Pré-buse (brun)
10	230.49	230.49	230.49	Schalld. mit Lufts.	Silencer with air hose	Silencieux av. tuy. souple d'air
10a	235.484	235.484	235.484	Kappe	Cup	Bouchon
10b	230.491	230.491	230.491	Kappe	Cup	Bouchon
11	3130.36	3130.36	3130.36	Luftinstellschraube	Air regulator screw	Vis réglage d'air
12	230.55	230.55	230.55	Konsole	Pump support	Support de pompe
13	233.12	235.12	235.12	Kreisel	Impeller	Turbine
14			7240.26 <sup>4</sup>	Treiber	Driver	Driver
15			7410.602 <sup>5</sup>	Transformator	Transformer	Transformateur

Artikelnummer vom Vorgängermodell:  
Order no. for previous model:

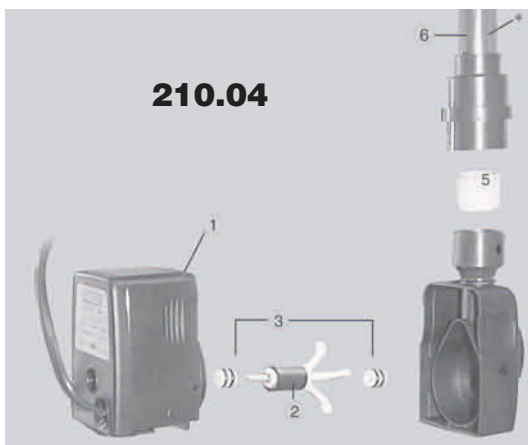
- <sup>1</sup> 233.02
- <sup>2</sup> 235.02
- <sup>3</sup> 240.02
- <sup>4</sup> 240.24
- <sup>5</sup> 7400.60

## Abschäumer • Skimmer • Ecumeur



### Teilleiste • List of Parts • Liste de pièces

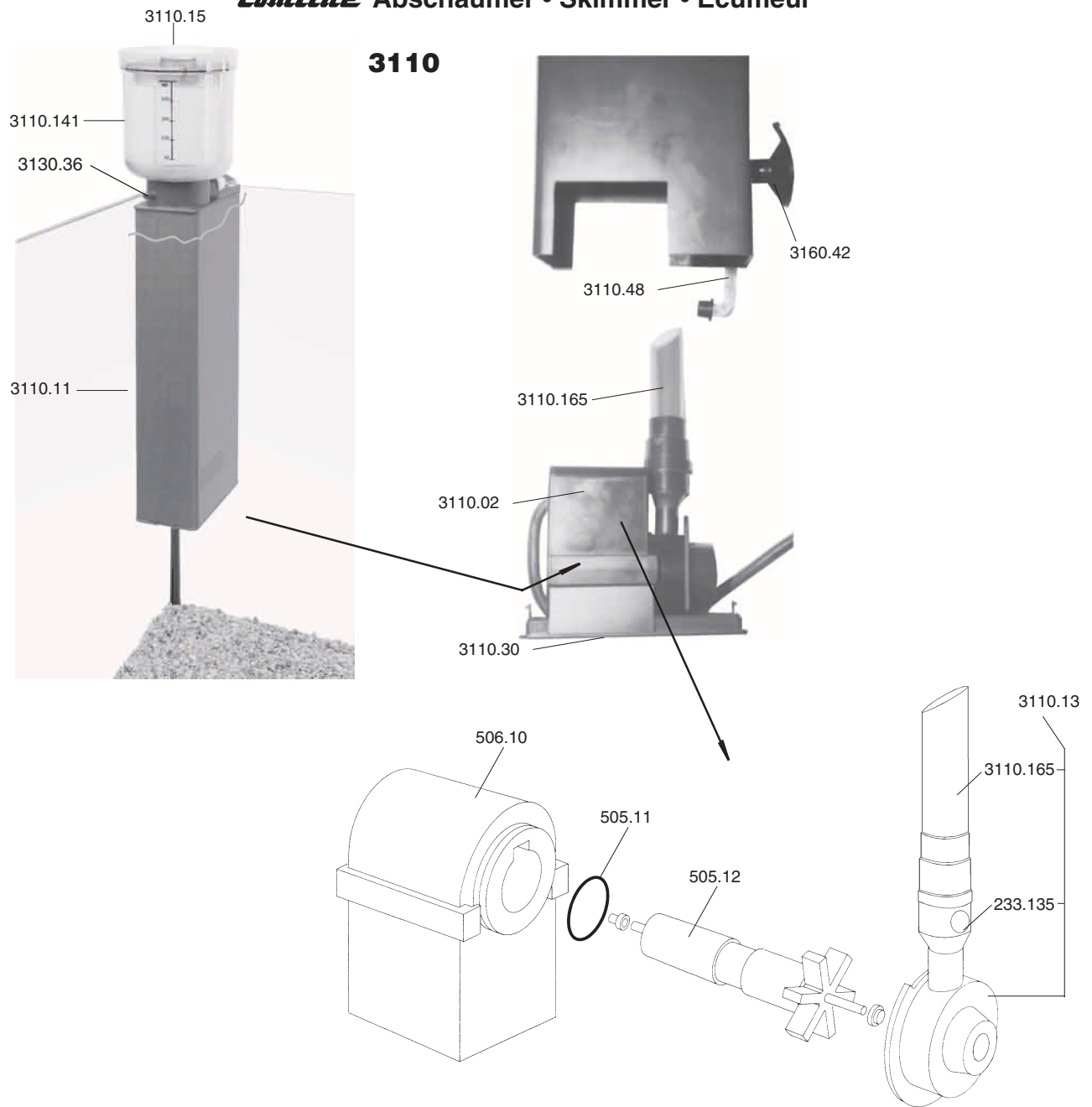
	3110/2	210/3	Abschäumer Automat	Automatic Skimmer	Ecumeur automatique
1	3110.31	3110.31	Deckel für Pumpenhalterung	Cover for pump	Couvercle pour pompe
2	210.04	210.04	Ersatzpumpe	Replacement pump	Pompe de recharge
3	3110.49	3110.49	Schlauch mit Nippel	Hose with nipple	Tuyau avec raccord
4	3110.12	210.103	Gehäuse ab 9/2001	Housing since 9/2001	Boîtier depuis 9/2001
5	3110.03		Abdeckung	Cover	Couvercle
6	3130.36	3130.36	Luftinstellschraube	Air regulation screw	Vis de réglage d'air
7	3110.141	3110.141	Schaumtopf, Rohrlänge 137mm	Skimmer cup, pipe length 137mm	Godet d'écumeur, tuyau 137 mm
8	3110.15	3110.15	Schaumtopfdeckel	Skimmer cup lid	Couvercle du gode
9	3000.24	3000.24	Klemmhalter	Clamp holder	Attache
10	3000.22	3000.22	Lochschiene	Mounting Bar	Barre de montage
11	230.101	230.101	Schraube M5 x 6mm	Screw M5 x 6mm	Vis M5 x 6mm



### Teilleiste • List of Parts • Liste de pièces 210.04

	210.04	Bezeichnung	Designation	Désignations
1	210.041	Motorblock	Motor block	Bloc moteur
2	210.042	Läuferbaugruppe	Rotor, shaft, bearing	Equipage mobile
3	210.044	Lager (2 Stk.)	Bearing (2 pcs.)	Paliers (2 pièces)
4	210.045	Kreiselgehäuse	Impeller housing	Couvercle turbine
5	210.046	Düse (weis)	Nozzle (white)	Gicleur (blanc)
6	210.047	Düsenrohr	Tube for nozzle	Tuyau d'injecteur

# ComLine Abschäumer • Skimmer • Ecumeur

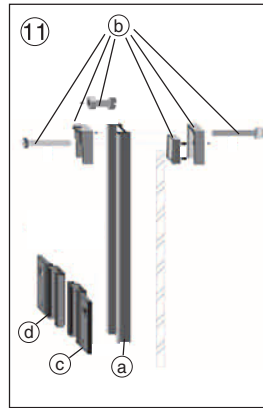


Teilleiste • List of parts • Liste de pièces 3110			
3110	Abschäumer-Automat	Automatic Skimmer	Ecumeur automatique
3110.02	Ersatzpumpe	Replacement pump	Pompe de remplacement
506.10	Motorblock	Motor block	Bloc moteur
3110.13	Kreiselgehäuse	Impeller housing	Carter du rotor
505.12	Läuferbaugruppe	Rotor, shaft, bearing	Block de rotor
505.11	O-Ring	O-ring seal	Bague torique
233.13.5	Düse (weiß)	Nozzle (white)	Gicleur (blanc)
3110.16.5	Vordüse (braun)	Pre-nozzle (brown)	Gicleur primaire
3110.10	Gehäuse, Länge 240mm (-4/97)	Housing, length 240mm (-4/97)	Boîtier, 240mm (-4/97)
3110.11	Gehäuse, Länge 220mm (ab 4/97)	Housing, length 220mm (ab 4/97)	Boîtier, 220mm (ab 4/97)
3110.48	Schlauch mit Nippel	Hose with nipple	Tuyau avec raccord
3130.36	Luftestellschraube	Air regulating screw	Vis de réglage d'air
3110.30	Deckel für Pumpenhalterung	Cover for pump	Couvercle pour pompe
3110.14	Schaumtopf ohne Deckel (-4/97)	Skimmer cup without lid (-4/97)	Cuve d'écumage sans couv. (-4/97)
3110.141	Schaumtopf ohne Deckel (ab 4/97)	Skimmer cup without lid (ab 4/97)	Cuve d'écumage sans couv. (ab 4/97)
3110.15	Schaumtopfdeckel	Skimmer cup lid	Couvercle cuve écumeur
3060.42	Sauger 2 Stück	Suction cups 2 pcs.	Ventouses 2 piéc.

# ComLine Abschäumer • Skimmer • Ecumeur

**3115\***  
**3115/2**  
**3116/2**

**3130\***  
**3130/2**  
**3131/2**



\* Artikelnummer vom Vorgängermodell  
\* Order no. for previous model

## Teilleiste • List of parts • Liste des pièces

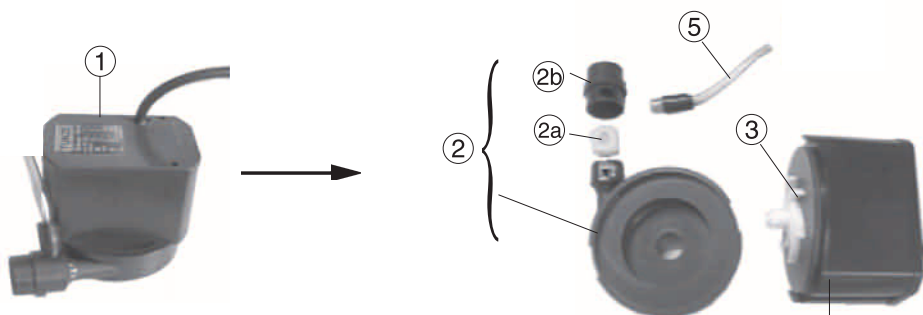
	31152	31162	31302	31312	Abschäumer-Automat	Automatic Skimmer	Ecumeur automat.
1	3115.04 <sup>1</sup>	3115.04	230.04 <sup>2</sup>	230.04	Ersatzpumpe mit 2 + 3	Pump with 2 + 3	Pompe avec 2 + 3
2	235.13	235.13	235.13	235.13	Kreiselgehäuse	Impeller housing	Chambre turbine
2a	235.135	235.135	235.135	235.135	Düse (weiß)	Nozzle (white)	Buse (blanc)
2b	230.165	230.165	230.165	230.165	Vordüse (braun)	Pre-nozzle (brown)	Pré-buse (brun)
3	233.12	233.12	235.12	235.12	Kreisel	Impeller	Turbine
4	3115.10	3116.10	3130.10	3131.10	Gehäuse	Housing	Boîtier
5	3130.482	3130.482	3130.482	3130.482	2 Schläuche + Kappe	2 hoses + cap	2 tuyaux + bouchon
6	3130.36	3130.36	3130.36	3130.36	Luftinstellschraube	Air regulating screw	Vis de réglage d'air
7	3115.20	3115.20	3115.20	3115.20	Deckel für Pumpenhalt.	Cover for pump	Couvercle de pompe
8	3166.07	3166.07	3166.07	3166.07	Sicherungsplatte	Retaining plate	Plaque de maintien
9	233.14	233.14	220.14	220.14	Schaumtopf o. Deckel	Skimmer cup without lid	Godet d'écumage
10	214.15	214.15	214.15	214.15	Schaumtopfdeckel	Skimmer cup lid	Couvercle de godet
11	3130.25 <sup>3</sup>	3130.25	3130.25	3130.25 <sup>3</sup>	Halter	Holder	Support
11a	2x3000.22	2x3000.22	2x3000.22	2x3000.22	Lochschiene	Mounting Bar	Barre de montage
11b	2x3000.24	2x3000.24	2x3000.24	2x3000.24	Klemmhalter	Clamp holder	Support
11c	3130.251	3130.251	3130.251	3130.251	Schiebeteil rechts	Sliding piece l/h	Attache droite
11d	3130.252	3130.252	3130.252	3130.252	Schiebeteil links	Sliding piece l/h	Attache gauche

Artikelnummer vom Vorgängermodell:  
Order no. for previous model:

<sup>1</sup> 3115.03

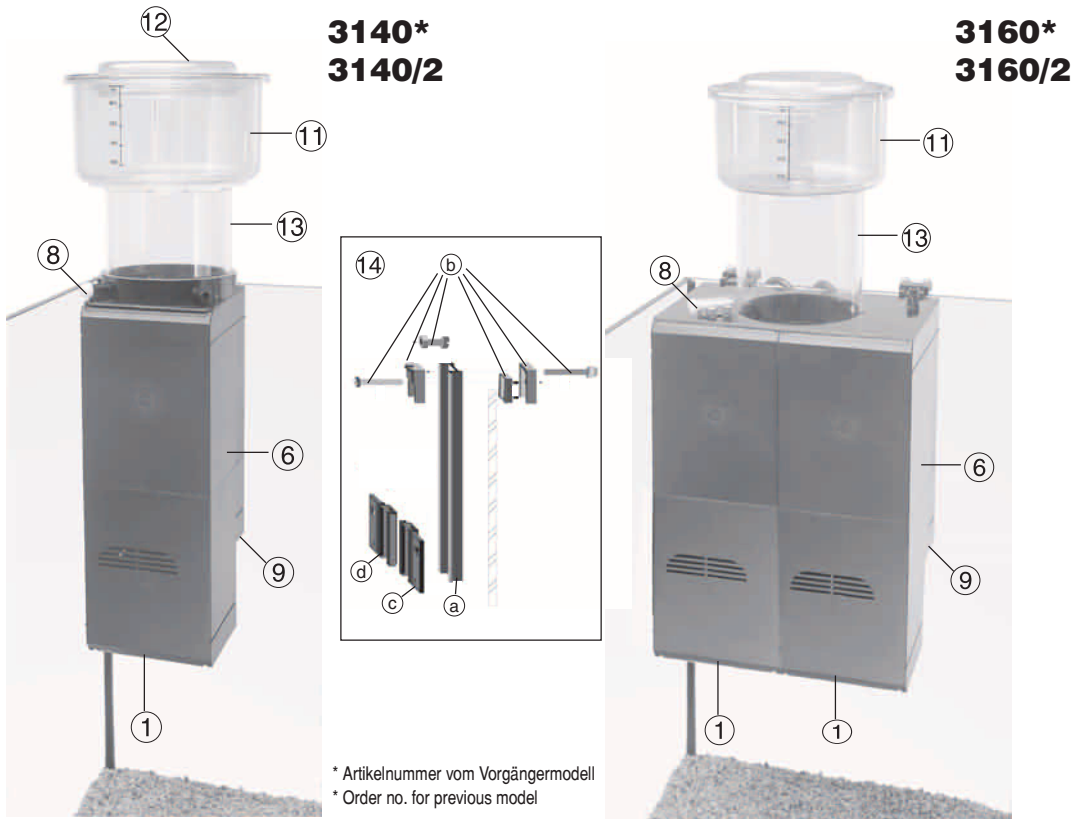
<sup>2</sup> 235.02

<sup>3</sup> 2x3000.14



s. Anleitung • see Instructions • v. mode d'emploi: Turbelle®

## ComLine Abschäumer • Skimmer • Ecumeur

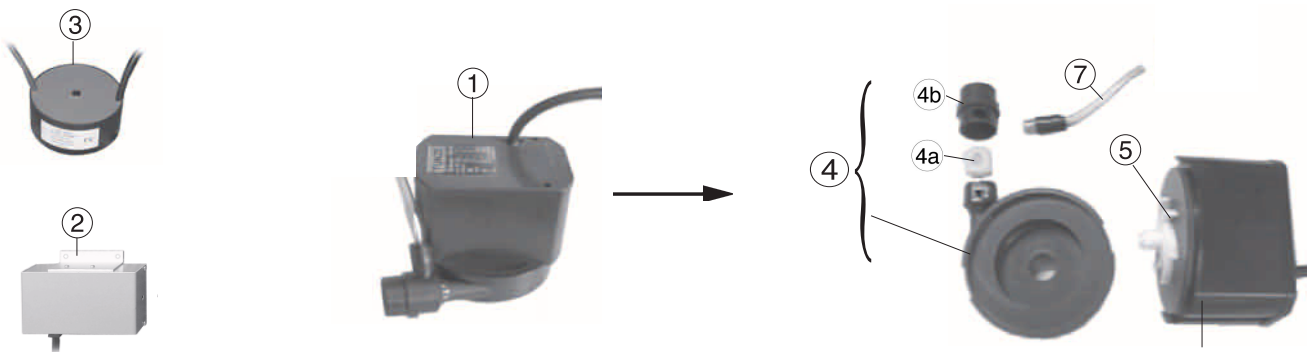


### Teileliste • List of parts • Liste des pièces

	3140/2	3160/2	Abschäumer-Automat	Automatic Skimmer	Ecumeur automatique
1	240.04 <sup>1</sup>	2x230.04 <sup>2</sup>	Ersatzpumpe mit 4 + 5	Pump with 4 + 5	Pompe avec 4 + 5
2	7240.26 <sup>3</sup>		Treiber	Driver	Driver
3	7410.602 <sup>4</sup>		Transformator	Transformer	Transformateur
4	235.13	2x235.13	Kreiselgehäuse	Impeller housing	Chambre turbine
4a	235.135	2x235.135	Düse (weiß)	Nozzle (white)	Buse (blanc)
4b	230.165	2x230.165	Vordüse (braun)	Pre-nozzle (brown)	Pré-buse (brun)
5	235.12	2x235.12	Kreisel	Impeller	Turbine
6	3140.10	3160.10	Gehäuse	Housing	Boîtier
7	3130.482	3160.48	2 Schläuche + Kappe	2 hoses + cap	2 tuyaux + bouchon
8	3130.36	3160.36	Luftinstellschraube	Air regulating screw	Vis de réglage d'air
9	3115.20	2x3115.20	Deckel für Pumpenhalterung	Cover for pump	Couvercle de maintien
10	3166.07	2x3166.07	Sicherungsplatte	Retaining plate	Plaque
11	245.14	245.14	Schaumtopf ohne Deckel	Skimmer cup without lid	Godet d'écumage sans couv.
12	214.15	214.15	Schaumtopfdeckel	Skimmer cup lid	Couvercle de godet
13	245.13	3160.13	Schaumzylinder	Cylinder	Réacteur rehaussé
14	3130.25 <sup>5</sup>	3130.25 <sup>5</sup>	Halter	Holder	Support
14a	2x3000.22	2x3000.22	Lochschiene	Mounting Bar	Barre de montage
14b	2x3000.24	2x3000.24	Klemmhalter	Clamp holder	Support
14c	3130.251	3130.251	Schiebeteil rechts	Sliding piece l/h	Attache droite
14d	3130.252	3130.252	Schiebeteil links	Sliding piece l/h	Attache gauche

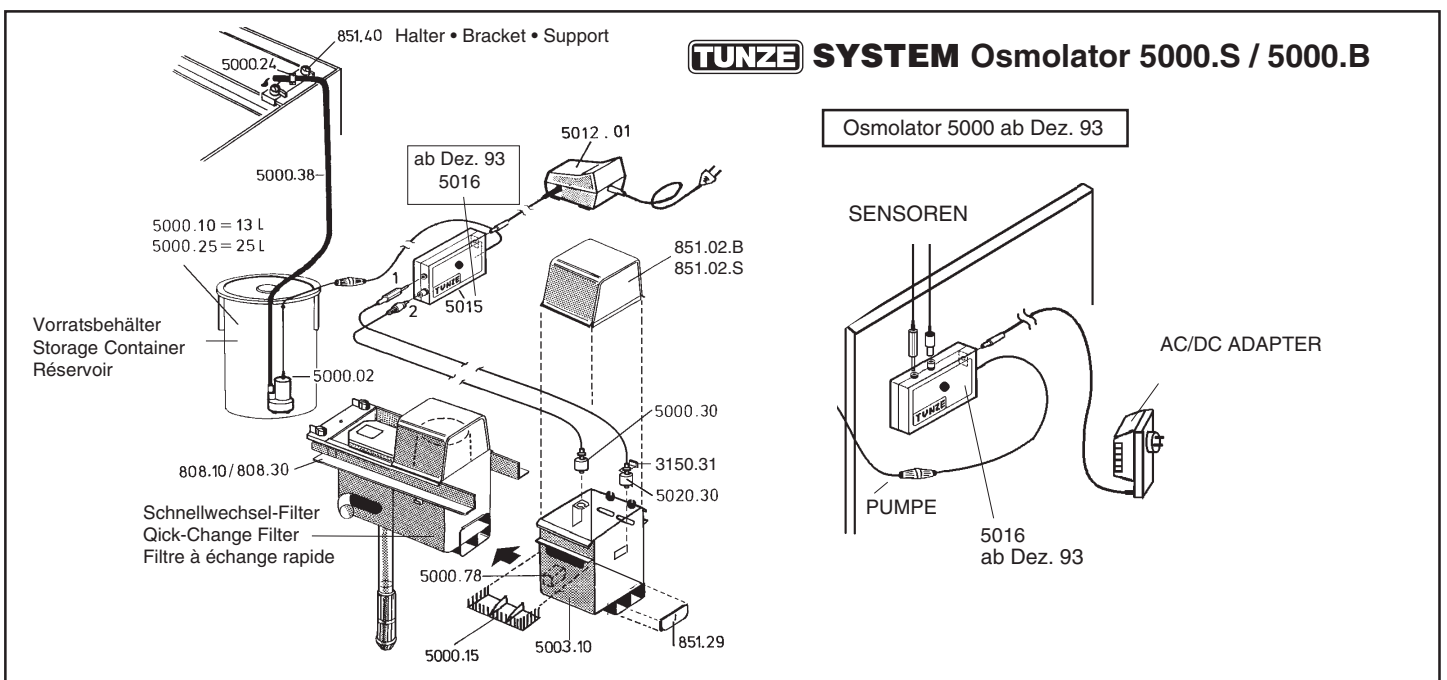
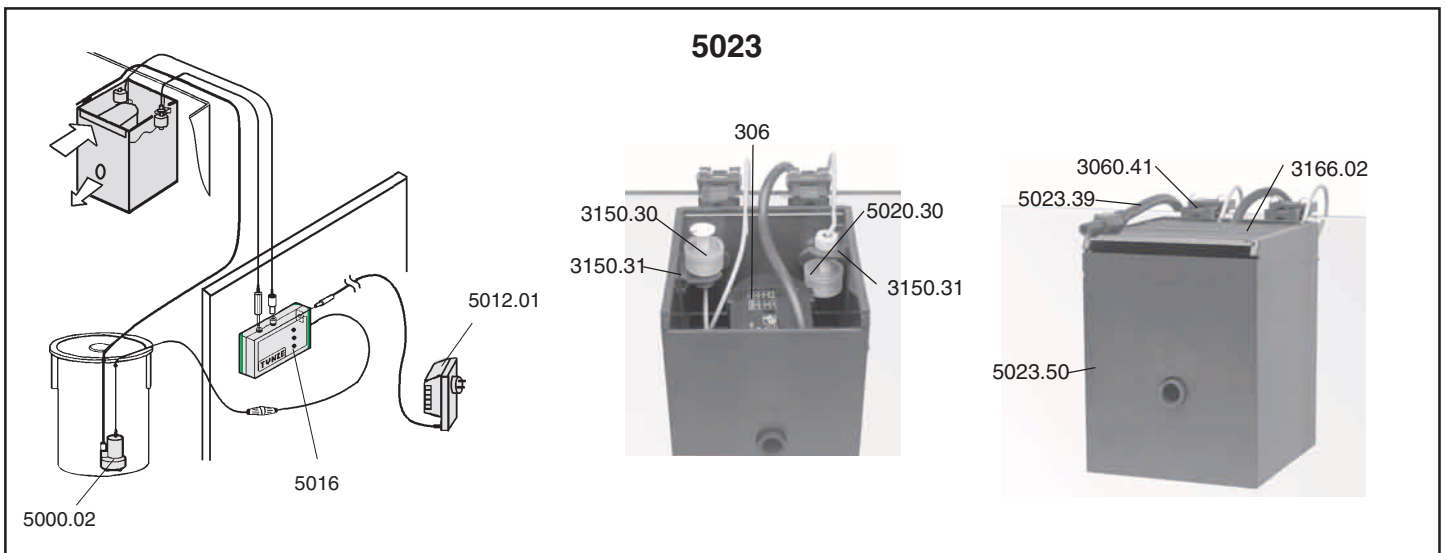
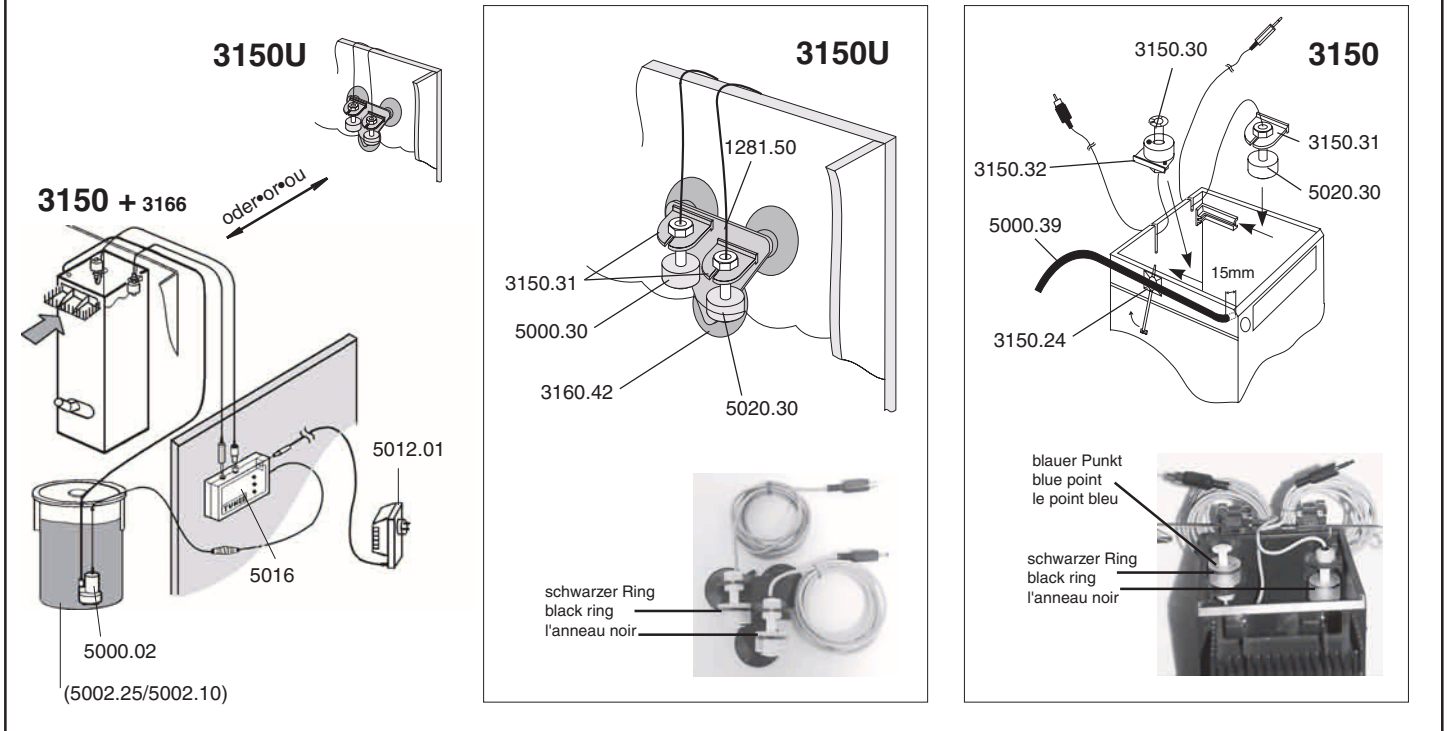
Artikelnummer vom Vorgängermodell:  
Order no. for previous model:

- <sup>1</sup> 240.02
- <sup>2</sup> 235.02
- <sup>3</sup> 7240.25
- <sup>4</sup> 7400.60
- <sup>5</sup> 3000.14

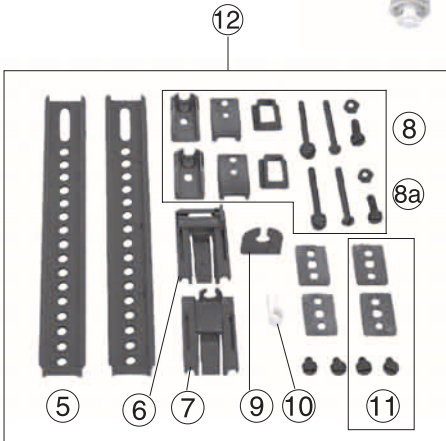
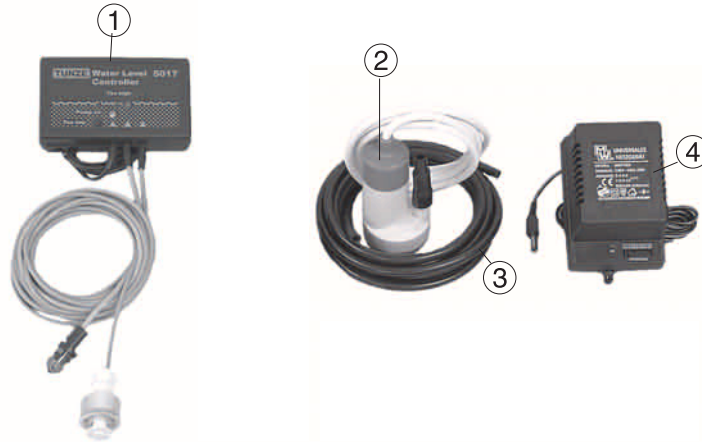


s. Anleitung • see Instructions • v. mode d'emploi: Turbelle®

## ComLine Osmoregulator-Set 3150 / 3150U



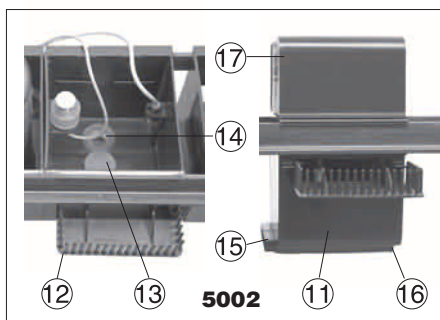
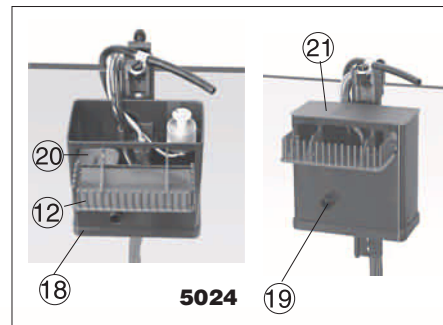
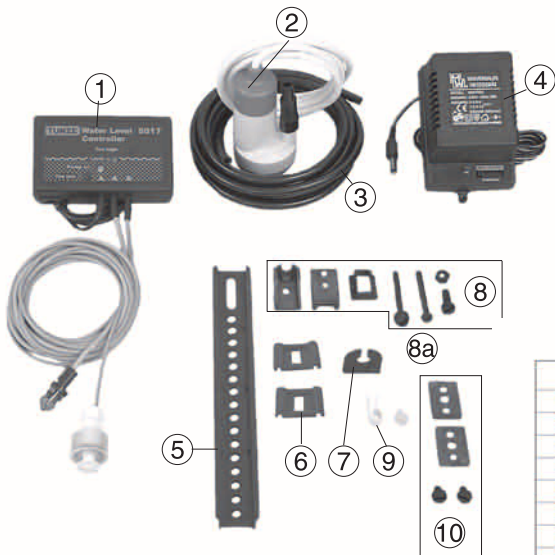
## Osmolator Universal 3155



	3155	Osmolator Universal	Osmolator Universal	Osmolator Universal
1	5017	Controller 5017	Controller 5017	Controller 5017
2	5000.02	Dosierpumpe 9V	Metering pump 9V	Pompe de dosage
3	5000.39	Schlauch 4x7mm/3m schw.	Hose 4x7mm/3m black	Tuyau 4x7mm/3m, noir
4	5012.01	Netzteil 9V	Power supply unit w. 9V DC	Bloc d'alimentation 9V=
5	2x3000.22	Lochschiene	Perforated rail	Barres de montage
6	3155.10	Schiebeteil Sicherheitsens.	Sliding unit - safty sensor	Pièce coulissante Too high
7	3155.20	Schiebeteil Arbeitssensor	Sliding unit - operating sens.	Pièce coulissante Level
8	2x3000.24	Klemmhalter	Clamp holder	Attaches
8a	3000.243	Schraubenset von (8)	Set of screws of (8)	Set visserie (8)
9	3150.31	Halteplatte für Sensor	Retaining plate	Support pour palpeurs
10	5000.24	Schlauchschnelle	Hose clamp	Collier de serrage p.tuyau
11	2x3000.27	Klebefestigung	Fixing for adhesion	Support à coller
12	3155.25	Halter f. 3155 komplett (5-11)	Holder f. 3155 compl. (5-11)	Support p. 3155 (5-11)

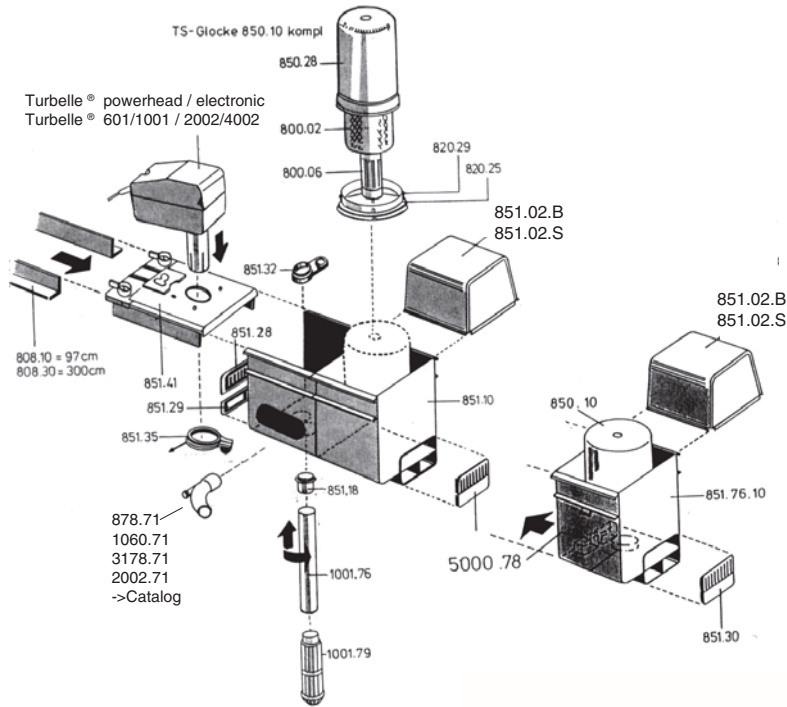
## TUNZE SYSTEM Osmolator 5002

## 5024

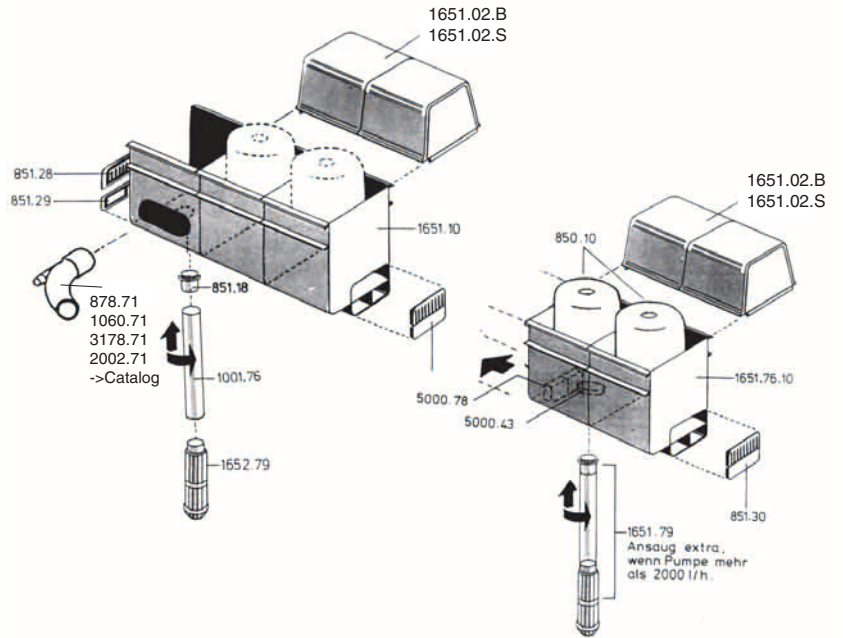


	5024	5002			
1	5017	5017	Controller 5017	Controller 5017	Controller 5017
2	5000.02	5000.02	Dosierpumpe 9V	Metering pump 9V	Pompe de dosage
3	5000.39	5000.39	Schlauch 4x7mm/3m schw.	Hose 4x7mm/3m black	Tuyau 4x7mm/3m, noir
4	5012.01	5012.01	Netzteil 9V	Power supply unit w. 9V DC	Bloc d'alimentation 9V=
5	3000.22		Lochschiene	Perforated rail	Barre de montage
6	2x3000.225		Elastik-Unterlage	Elastic base	Pièces élastiques
7	3150.31	3150.31	Halteplatte für Sensor	Retaining plate	Support pour palpeur
8	3000.24		Klemmhalter	Clamp holder	Attache
8a	3000.243		Schraubenset von (8)	Set of screws of (8)	Set visserie (8)
9	5000.24	5000.24	Schlauchschnelle	Hose clamp	Collier de serrage p.tuyau
10	3000.27		Klebefestigung	Fixing for adhesion	Supports à coller
11		5002.30	Gehäuse	Housing	Boîtier
12	5000.15	5000.15	Ansaugschutz	Protective grid	Protecteur d'aspiration
13		235.481	Kappe	Cap	Capuchon
14		235.484	Kappe lieferbar o. Bohrung	Cap deliver. without hole	Capuchon
15		2x5000.78	Steckmuffe	Plug-in bushing	Manchon pour box
16		851.29	Verschlusskappe	Cap	Couvercle
17		0851.02	TS-Deckel	TS-cover	Couvercle-TS
18	5024.10		Gehäuse	Housing	Boîtier
19	5024.04		Pumpe	Pump	Pompe
-	5024.042		Läuferbaugruppe 5024.04	Rotor assembly of 5024.04	Rotor 5024.04
20	5024.01		Filterschwamm	Filter sponge	Cartouche filtre
21	5024.02		Deckel	Cover	Couvercle
22		230.101	Schraube M5x6mm	Screw M5x6mm	Vis M5x6mm

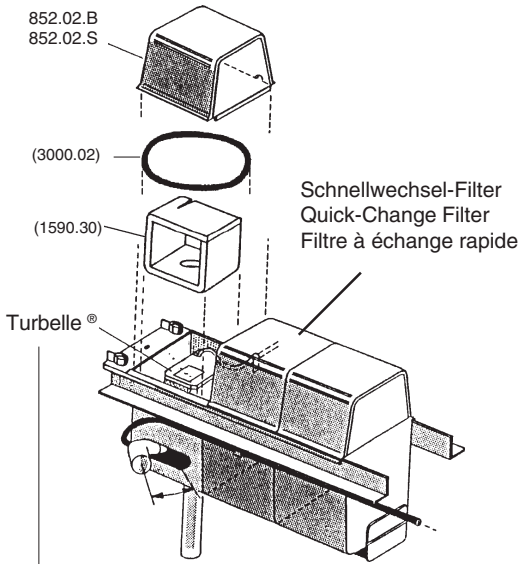
**851 / 852 + 851.76 / 851.76**



**1651 / 1652 + 1651.76**



**853 / 1653**



Turbelle® powerhead / electronic  
Turbelle 2002/4002 + 851.42  
-> Catalog

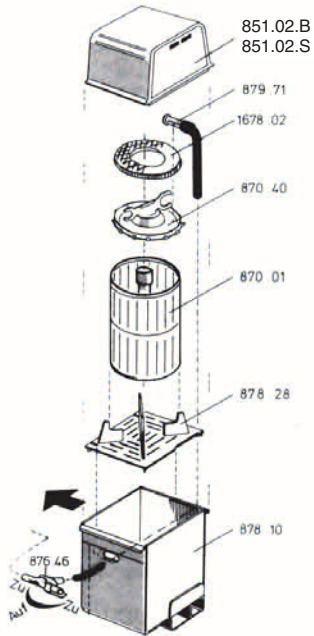
weitere Informationen siehe  
other Informations see  
d'autres informations voir

**852/1652**

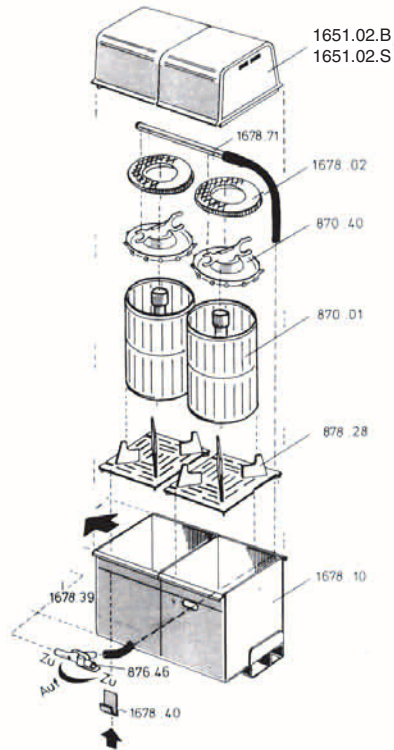


**TUNZE SYSTEM Bio-Reaktor • Bio-Reactor • Réacteur biologique**  
**Hydorkultur-Reaktor • Hydroponic Reactor • Réacteur a hydroculture**

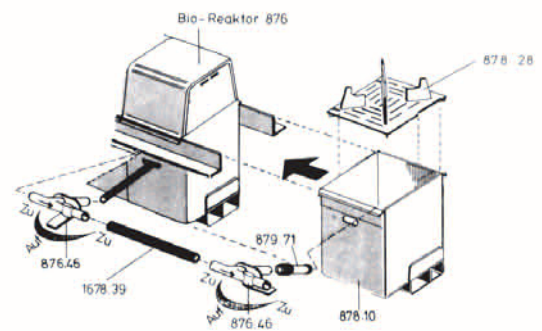
**876**



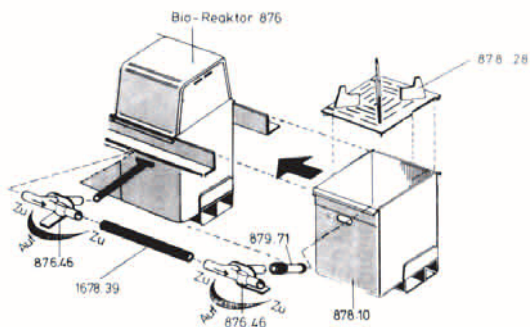
**1676**



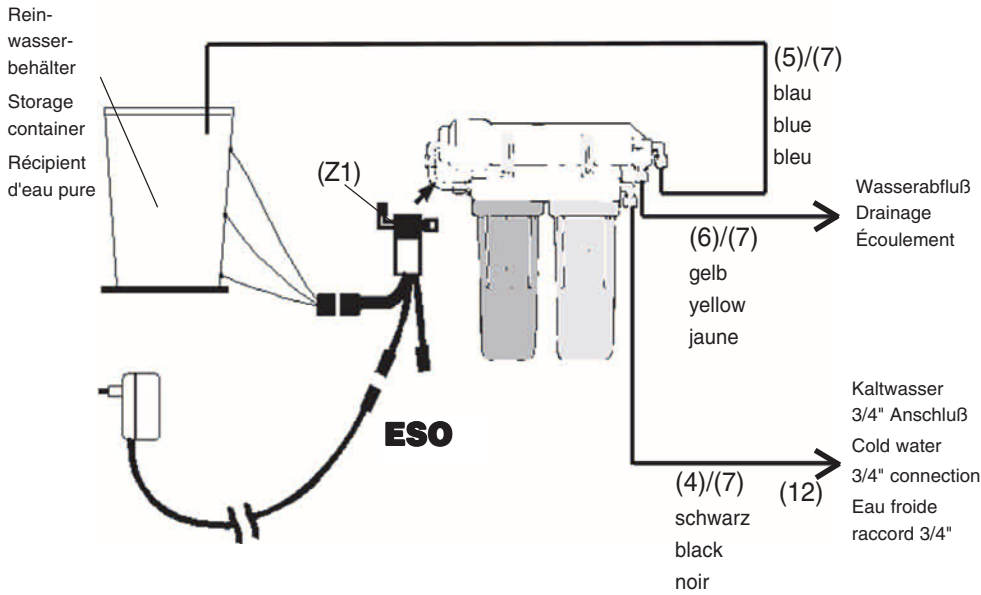
**879**



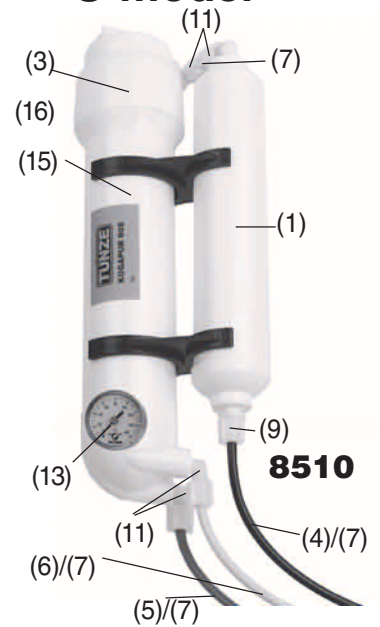
**1679**



## KOGAPUR reverse osmosis



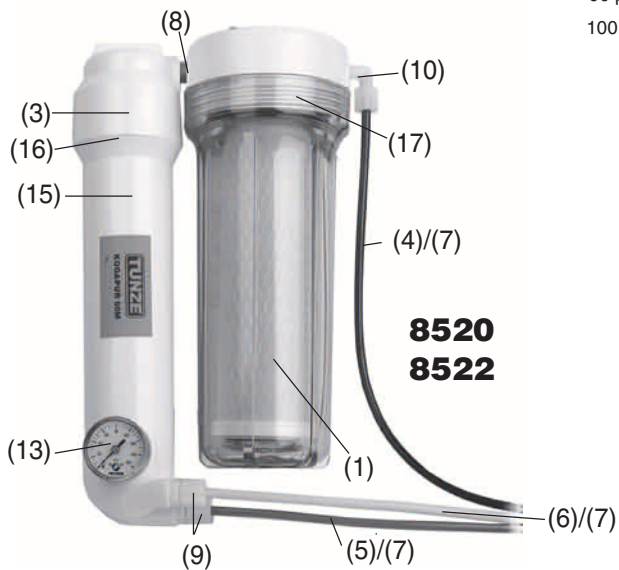
## S-model



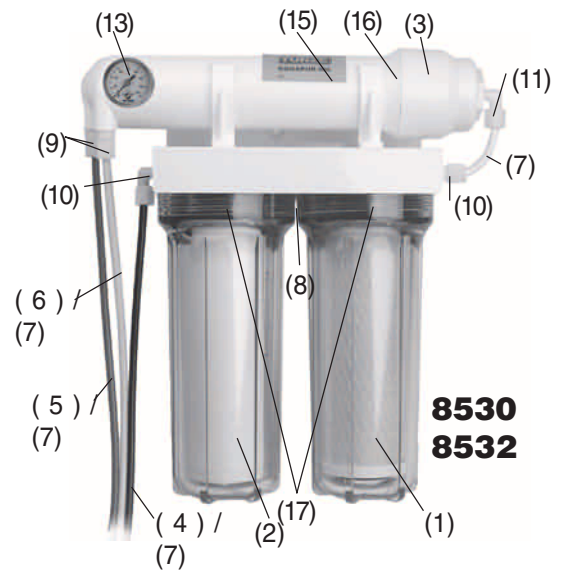
### Umrechnungstabelle psi - bar

50 psi	- 3,3 bar
60 psi	- 4,0 bar
70 psi	- 4,6 bar
80 psi	- 5,3 bar
90 psi	- 6,0 bar
100 psi	- 6,6 bar

## M-model



## L-model



	8510	8512	8520	8522	8530	8532	8534	Teilleiste	List of parts	Liste de pièces
1	8512.100	8512.100	8522.120	8522.120	8522.120	8522.120	8522.120	Kohle/Sedimentfilter	Carbonfilter	Carbonfilter
2					8522.100	8522.100	8522.100	Feinfilter 1µm	Filter 1µm	Filtre 1µm
3	8550.500	8552.500	8550.500	8552.500	8550.500	8552.500	8554.500	Membrane	Membrane	Membrane
4								Speisewasser (schw.)	Feed water (black)	eau purifiée (noir)
5								Reinwasser (blau)	pure water (blue)	eau purifiée (bleu)
6								Solewasser (gelb)	drain water (yellow)	Eau de refus (jaune)
7	8556.000	8556.000	8556.000	8556.000	8556.000	8556.000	8556.000	Druckschlauch (weiß)	pressure hose (white)	Tuyau pour (blanc)
8	8532.010	8532.010	8532.010	8532.010	8532.010	8532.010	8532.010	Übergang 1/4"	1/4" transition	1/4" transition
9	8532.040	8532.040	8532.040	8532.040	8532.040	8532.040	8532.040	Übergang 1/8"	1/8" transition"	1/8" transition
10	8532.020	8532.020	8532.020	8532.020	8532.020	8532.020	8532.020	Winkel 1/4"	1/4" elbow"	1/4" angle
11	8532.030	8532.030	8532.030	8532.030	8532.030	8532.030	8532.030	Winkel 1/8"	1/8" elbow"	1/8" angle
12	8557.000	8557.000	8557.000	8557.000	8557.000	8557.000	8557.000	Verschraubung 3/4"	3/4" nylon nipple	3/4" nylon nipple
13	8532.050	8532.050	8532.050	8532.050	8532.050	8532.050	8532.060	Manometer	press. gauge	Manomètre
14	8532.060	8532.060	8532.060	8532.060	8532.060	8532.060	8532.060	Schrauben 3,2x17	Screw 3,2x17	Vis 3,2x17
15	8550.520	8552.520	8550.520	8552.520	8550.520	8552.520	8554.520	Kapillare 25% Rate	Capillary 25% rate	Capillary 25% rate
16	8532.070	8532.070	8532.070	8532.070	8532.070	8532.070	8532.070	O-Ring	O-ring	O-ring
17			8532.080	8532.080	8532.080	8532.080	8532.080	O-Ring	O-ring	O-ring
								Zubehör (extra best.)	Access. (order sep.)	Access. (com. dep.)
Z1	8540.000	8540.000	8540.000	8540.000	8540.000	8540.000	8540.000	ESO Wasserst. Kontr.	ESO Water level con.	

# **TUNZE® Total price list with spare parts - EURO**

The deliveries are made in compliance with our respectively applicable terms of delivery and payment. Prices in €. Valid as from August 22, 2005. Subject to alterations.

<b>Kit</b>	<b>Designation</b>	<b>Net sales price</b>	<b>Art. No.</b>	<b>Designation</b>	<b>Net sales price</b>
B092	TUNZE Biotope B092	2189,38	0104.150	Impeller bearing	1,81
B095	TUNZE Biotope B095	2037,03	0104.180	Screw connection	2,21
B120	TUNZE Biotope B120	3697,86	0104.190	Screw M3x10 V2A	0,31
B125	TUNZE Biotope B125	2749,52	0104.241	Clip	1,03
TF02	Turbelle® electronic Kit TF02	213,96	0104.250	Repair kit	4,98
TF04	Turbelle® electronic Kit TF04	260,72	0104.710	Tangit, 125g (4.4 oz.) tube	6,38
TF05	Turbelle® electronic Kit TF05	506,00	0104.720	Silicon, 80ml	4,89
TF08	Turbelle® electronic Kit TF08	599,52	0104.730	Instant adhesive, 3g (.1 oz.)	4,58
TF16	Turbelle® electronic Kit TF16	1029,31	0104.740	Coral Fix - 113 g (4 oz.)	8,14
TF24	Turbelle® electronic Kit TF24	1485,17	0104.790	Strainer 7cm	5,16
TF32	Turbelle® electronic Kit TF32	1941,02	0106.170	Impeller	5,75
TS07	Turbelle® stream Kit TS07	247,58	0110.010	Screw M4x6 PA	0,18
TS12	Turbelle® stream Kit TS12	304,23	0110.030	Thermostat	5,71
TS24	Turbelle® stream Kit TS24	686,53	0110.090	Fan	2,02
TS48	Turbelle® stream Kit TS48	1203,35	0110.110	Mains cable	3,21
TSF16	Turbelle® stream Kit TSF16	643,04	0110.114	Wire protect.sleeve	0,91
			0110.130	Shaft with pinion	4,30
0016.000	Compact Kit 16	723,21	0110.140	Thrust washer	1,63
0019.000	SYSTEM Kit 19	1122,00	0110.260	Motor bearing	10,55
0020.000	SYSTEM Kit 20	1428,00	0121.130	Shaft with pinion	8,27
0021.000	Compact Kit 21	504,90	0121.131	Shaft	4,23
0068.000	Calcium Dispenser Kit 68	225,05	0121.160	Impeller housing	20,89
0075.000	Kit 75	695,13	0121.170	Impeller	7,28
0079.000	Kit 79	504,70	0141.140	Thrust washer, 2 pcs.	1,00
			0141.150	Impeller bearing, 2pc	4,73
			0141.160	Impeller housing	20,89
			0141.170	Impeller	8,89
			0141.180	Intake fitting	8,95
			0200.000	Nano Reefpack 200	142,45
			0210.040	Replacement pump	31,46
			0210.042	Drive unit for 210.04	2,71
			0210.044	Upper bearing 2pcs. for 210.04	1,63
			0210.045	Impeller housing	5,97
			0210.046	Nozzle	4,94
			0210.130	Impeller housing	11,66
			0210.165	Pre-nozzle	6,09
			0210.491	Cup with 4,6mm hole	1,52
			0214.150	Skimmer lid	11,27
			0220.015	Motor block for 220.04	44,63
			0220.040	Pump for skimmer	110,11
			0220.140	Skimmer cup	38,59
			0220.400	Aquarium tongs blue, 60 cm (23.6 in.)	27,45
			0220.500	Brush set	6,33
			0220.510	Protective gloves	4,73
			0220.521	Rough surface, 77 x 59 mm	1,90
			0220.522	Magnet. f. 220.55/52	7,32
			0220.526	Pile fabric surface 77x59mm	1,31
			0220.530	Power Magnet 220.53	13,93
			0220.540	Magn.glass cleaner 18mm	18,60
			0220.550	Power Magnet 220.55	92,12
			0220.558	Felt on the outside, 77x59mm	3,03
			0220.560	Power Magnet 220.56	172,06
			0220.568	Fleece for acrylic panes	1,13
			0220.570	Power Magnet 220.57	368,91
			0220.571	Rough surface, 115 x 77 mm	4,61
			0220.572	Felt on the outside, 115x77mm	7,59
			0225.040	Skimmer housing.low	14,09
			0225.390	Air hose	1,21
			0225.460	Air pressure pipe	3,57
			0225.481.S	Cap f. silencer	0,24
			0230.015	Motor block for 230.04	78,88
			0230.030	Skimmer casing	38,25
			0230.040	Pump for skimmer	137,26
			0230.050	Disc	9,22
<b>Art.No.</b>					
0102.400	Universal clamp V4A	11,70			
0102.404	Screw knob	0,88			
0102.407	Disc	0,84			
0102.410	Mounting bracket	6,66			
0102.420	Set of screws	4,25			
0102.430	Screw M6x12 V4A	0,59			
0102.450	Universal mounting clamp	7,05			
0102.780	Connecting sleeve	1,36			



# Total price list with spare parts - EURO

Art. No.	Designation	Net sales price	Art. No.	Designation	Net sales price
0230.101	Screw M5x6mm	1,38	0602.010	Motor block for 602	37,21
0230.140	Holder	5,54	0602.120	Impeller	4,30
0230.165	Pre-nozzle	6,09	0602.400	Air draw nozzle	5,00
0230.252	2 screw+2 nuts black M6x25mm	1,68	0700.120	Impeller f. T700	4,30
0230.350	Pressure pipe	2,00	0700.130	Impeller housing	20,89
0230.490	Silencer w.air hose	7,71	0708.050	Photo cell, no more available	14,27
0230.491	Cup with 6,5mm hole	1,52	0800.000	Cartridge filter 800	13,85
0230.550	Pump support	15,19	0800.010	Filter cartridges,135mm,5pcs.	8,35
0230.660	Skimmer casing	42,09	0800.015	Motor block for 800/2	39,53
0231.020	Return pump	38,03	0800.030	Carbon floss cardrige,135mm	3,43
0231.720	Pipe support	2,14	0800.040	Nano pump	31,46
0233.010	Motor block for 233.02	50,05	0800.041	Drive unit for 800.040	6,73
0233.020	Pump for skimmer ->220.040	110,11	0800.060	Strainer	5,85
0233.120	Impeller	7,00	0800.070	Screw cap for PAF	2,84
0233.130	Impeller housing	28,82	0800.080	Bracket	3,26
0233.135	Nozzle	4,94	0800.140	Cartridge core to 800.22	2,16
0233.140	Skimmer cup w. over	34,73	0800.220	Cartridge mats for 800.14, 2 pcs	1,84
0233.165	Pre-nozzle	5,85	0800/2	Turbelle® powerhead 800/2	69,73
0233.660	Skimmer casing	35,07	0802.010	Motor block for 802	50,05
0235.010	Motor block for 235.02	78,88	0808.100	TS mounting bar - 97 cm (38.1 in.)	13,70
0235.020	Pump for skimmer ->0230.04	137,26	0808.150	TS mounting bars - .97 m (38.1 in.) / pack of 5	59,48
0235.030	Skimmer casing	42,09	0808.200	TS mounting bar - 1.5 m (59.0 in.)	20,64
0235.120	HP-impeller	7,00	0808.250	TS mounting bars - 1.5 m (59 in.) / pack of 5	89,68
0235.130	Impeller housing	30,40	0820.000	Pot-type filter 820	23,50
0235.135	Nozzle	5,15	0820.250	Cover f. F320/820	5,28
0235.140	2 Housing clip Turb.	2,81	0820.260	Strainer	5,85
0235.480	Silencer	7,71	0820.280	Pot for 820	13,42
0235.481	Cup H14, ø 26mm	1,08	0820.290	Return stop	1,64
0235.484	Cup	1,08	0850.100.S	TS bell compl.	20,32
0238.030	Skimmer housin.upper	42,09	0850.250.S	Cover f. TS bell	5,38
0240.010	Motor block for 240.02	63,75	0850.280.S	TS bell	12,46
0240.015	Motor block for 240.04	63,75	0851.020.S	TS lid black	10,42
0240.020	Pump for skimmer ->240.04	190,32	0851.060	Screw M 6x25	0,54
0240.040	Pump for skimmer	190,32	0851.090.S	Clamp set	4,86
0240.150	Skimmer cup	3,77	0851.100.S	TS cover	31,82
0240.220	Driver out of stock	67,26	0851.110	TS-cover with stage	13,56
0240.240	Driver no more available see 7240.27	67,26	0851.120.S	O-ring seal 30x3	1,23
0240.390	Air hose	1,31	0851.180.S	TS screw connector	2,57
0240.480	Silencer with hose	7,71	0851.280.S	Overflow grid	1,41
0240.484	Reducing adaptor for hose	0,85	0851.290.S	Cap	1,05
0240.670	Skimmer casing	49,25	0851.300.S	Grid with cap	1,73
0240.800	Sleeve and hose	6,60	0851.320.S	Adapter + ring	2,12
0245.130	Skimmer cylinder	30,38	0851.350.S	Centering ring	1,23
0245.140	Skimmer cup w. over	41,22	0851.400.S	Holder for TS mounting bar	7,85
0248.300	Aquarium and cabinet 248L	1339,57	0851.420.S	Holder f.TS Turbelle®	12,57
0300.000	Cartridge filter 300	8,99	0851.440	Disc	0,59
0300.020	Filter cartridges, 75mm, 10 pcs.	11,89	0851.450.S	TS heater&electrode holding device	9,23
0300.060	Stainer	3,09	0851.760.S	Quick-change filter extension	40,87
0305.120	Rotor,shaft+bearing	6,42	0851.761.S	TS-Expansion box	24,79
0312.170	HP-impeller	14,89	0852.020.S	TS lid w.cable neck black	9,95
0312.344	Glue-in nipple for hose ø9mm	0,64	0853.000.S	SYSTEM filter	61,85
0320.000	Pot-type filter 320	17,50	0870.000	Refillable cartridge 870	15,22
0320.260	Strainer	2,95	0870.010	Bio cartidge	8,89
0320.280	Pot for 320	9,57	0870.020	Cover for 870/1670	1,37
0370.000	Refillable cartridge 370	11,27	0870.400.S	Cover with clip	5,00
0390.040	Union for hose, diam. 6x9 mm (.23 x .35 in.)	0,71	0870.900	Special filter carbon	38,67
0390.460	Y branch	3,50	0870.901	Special filter carbon	4,20
0396.300	Aquarium and cabinet 396L	1649,24	0870.950	Special filter carbon	24,27
0500.000	Reefpack 500	424,72	0870.960	Special filter carbon	197,70
0505.110	O-ring seal	1,07	0871.000	Wadding refillable cartridge 871	15,18
0505.120	Rotor,shaft+bearing	6,56	0872.000	Micro wadding, 10 x 60g	24,59
0505.130	Impeller housing	1,29	0872.010	Micro wadding, 60g	2,73
0600.000	Riverpack 600	245,32	0872.050	Micro wadding, 5kg sac	79,19
0600.015	Motor block for 600/2	28,40	0873.000	Macro wadding, 10 x 250g	39,97
0600/2	Turbelle® powerhead 600/2	48,14	0873.010	Macro wadding, 250 g	4,45



# Total price list with spare parts - EURO

Art. No.	Designation	Net sales price	Art. No.	Designation	Net sales price
0875.900	GRANOVIT _____	17,92	1282.150	Bushing - outside diam. 25 mm (.98 in.) _____	2,71
0875.901	GRANOVIT _____	1,86	1291.100	Glass housing _____	170,85
0875.950	GRANOVIT _____	11,89	1292.200	Glass housing _____	251,66
0875.960	GRANOVIT _____	64,23	1500.010	Motor block for 1500/1501 _____	50,43
0876.000.S	Bio reactor 876 _____	42,96	1500.120	Impeller for 1501/1500/1600/2 _____	4,30
0876.460.S	Branch connec.f.hose _____	3,12	1500.130	Impeller housing _____	20,89
0878.100.S	Bio reactor box _____	21,55	1560.060	Strainer _____	13,61
0878.280.S	Strainer bottom _____	4,80	1572.200	Bubble counter _____	10,85
0878.710	Bio connection for 600/2 _____	4,34	1590.300.S	Insulation mat _____	4,07
0879.000.S	Hydroponics reactor 879 _____	24,12	1600.000	Cartridge filter 1600 _____	20,93
0879.710.S	Bio tube _____	2,07	1600.010	Spare filter cartridge,225mm,5pcs. _____	11,33
0879.711	Distribution nozzle _____	0,54	1600.015	Motor block for 1600/2 _____	43,29
0880.900	Hardness granules _____	25,23	1600.030	Carbon floss cardrige,225mm _____	6,12
0880.901	Hardness granules _____	2,64	1600.060	Strainer _____	11,94
0880.950	Hardness granules _____	15,22	1600/2	Turbelle® powerhead 1600/2 _____	83,79
0880.960	Hardness granules _____	67,80	1651.020.S	TS-Cover double black _____	17,89
0910.000	Quickphos 750ml _____	15,67	1651.761.S	TS-Box (empty) _____	41,20
0920.000	Silphos 750ml _____	26,68	1651.790	Suction Pipe Set _____	12,22
0930.000	Zeolith 750ml _____	7,14	1652.790	Strainer, 17cm _____	9,05
1000/2	Turbelle® powerhead 1000/2 _____	65,60	1670.000	Refillable cartridge 1670 _____	26,21
1001.060	2 Screw M 3x30 V2A _____	0,82	1674.291	Grid with cap _____	1,90
1001.100	Motor housing _____	21,84	1676.000.S	Bio reactor 1676 (double) _____	82,78
1001.102	Clamping ring _____	3,36	1678.020	Bio filter ring 10p. _____	1,95
1001.150	Impeller bearing _____	3,36	1678.100.S	2 empty boxes _____	37,78
1001.160	Impeller housing _____	15,71	1678.370	PVC hose - diam. 6 x 9 mm x 2 m _____	2,64
1001.240	Cable clamp _____	1,31	1678.380	PVC hose - diam. 6 x 9 mm x 10 m _____	12,32
1001.250	Repair kit _____	6,09	1678.390	PVC hose - diam. 6 x 9 mm x 1 m _____	1,36
1001.400	Air venturi _____	5,43	1678.400.S	Hose clip _____	0,86
1001.740	Overflow tube _____	16,13	1678.710.S	Connection for bio _____	3,95
1001.741	Glueing nipple D=7/11 _____	0,71	1679.000.S	Hydroponics reactor 1679 _____	40,92
1001.760	Pipe for Turbelle® _____	3,83	1679.100.S	Hydro. box (empty) _____	39,82
1001.770	Flow deflector for 600/2 _____	2,31	1691.100	Glass housing Kit 16/21 _____	170,85
1001.780	Bushing, diam. 21/25 mm (.82/.98 in.) _____	1,52	2002.000	Turbelle® classic 2002 _____	181,60
1001.790	Strainer, 12 cm _____	6,66	2002.020	Cover _____	14,50
1001.800	T-piece _____	4,09	2002.100	Motor housing _____	40,68
1002.120	Impeller _____	4,30	2002.110	Motor with cable _____	71,37
1002.150	Reducer for 1000/2 _____	1,31	2002.220	Rotor _____	23,60
1002.400	Air draw nozzle _____	5,43	2002.400	Air draw nozzle _____	10,52
1005.120	Rotor,shaft+bearing _____	6,86	2002.710	Bio connection for 2002, 4002 _____	9,18
1006.000	Centrifugal pump _____	38,29	3000.010	Motor block for 3000 _____	78,88
1060.710	Bio connection for 1000/2 _____	8,14	3000.015	Motor block for 3000/2 _____	71,74
1073.000	Inlet hose and fittings _____	40,09	3000.020	O-ring seal red 78x2,5mm _____	1,36
1073.030	Master Recirculation Pump _____	99,17	3000.030	Cooling duct _____	3,21
1073.042	Drive unit for 1073.03/.04 _____	19,65	3000.040	Upper bearing _____	1,11
1073.090	Master electronic 1073.090 _____	258,79	3000.050	Magnetic rotor _____	11,57
1073.140	Master electronic 1073.140 _____	429,26	3000.070	Drive shaft _____	6,48
1073.160	Master electronic 1073.160 _____	413,80	3000.080	Brake shoes 2 pcs. _____	2,21
1074.100	Housing from 1074 _____	53,15	3000.090	Brake shell + ring _____	6,52
1074.200	Cover _____	3,21	3000.092	Brake ring _____	1,13
1074/2	Outlet for retrofit _____	85,17	3000.100	Bearing bush _____	3,16
1075.050	Outlet hose a. clamp 1m/D.40mm _____	14,39	3000.110	Clampring _____	2,16
1075/2	Outlet hose _____	28,78	3000.120	Impeller _____	4,30
1076.150	Protective grid _____	6,92	3000.130	Impeller housing _____	20,75
1076/2	Wall outlet for glass boreholes _____	81,36	3000.220	Mounting bar with h. _____	2,81
1077.000	Central outlet _____	81,36	3000.225	Elastic ground 1 pcs. _____	0,43
1077.100	Screw connection, pipe and hose _____	43,51	3000.230	Sliding unit _____	2,11
1200.010	Motor block for 1200 _____	78,88	3000.240	Clamp holder _____	4,58
1200.015	Motor block for 1200/2 _____	71,74	3000.243	Screw set f.3000.24 _____	1,64
1200.150	Bushing, outside diam. 25mm _____	1,98	3000.244	Holding device extension _____	2,96
1200/2	Turbelle® Powerhead 1200/2 _____	112,55	3000.245	Cable fastener _____	10,63
1201.130	Impeller housing _____	20,70	3000.250	Turbelle® holder _____	6,78
1278.460	Union for hose, diam. 9x12 mm (.35 x .47 in.) _____	5,57	3000.260	Holding device extension _____	8,42
1281.313	2 screw+2 nuts black M6x16mm _____	1,60	3000.261	Plate without thread _____	1,08
1281.370	Hose black,9x12mm,2m _____	3,06	3000.270	Fixing for adhesion ->3000.26 _____	2,16
1281.390	Hose black,9x12mm,1m _____	1,55	3000.280	Holding bracket _____	2,00



# Total price list with spare parts - EURO

Art. No.	Designation	Net sales price	Art. No.	Designation	Net sales price
3000.300	Set 3000.07+3000.08	7,57	3166.200	Comline bell compl.	21,23
3000.400	Set 3000.09+3000.10	7,87	3166.231	Sliding unit Comline holder right	2,11
3000.500	Internal parts Turbelle®	23,33	3166.232	Sliding unit Comline holder left	2,11
3000.600	Drive unit T. powerhead	19,65	3166.250	Comline support	10,14
3000.610	Upper bearing new	1,11	3166.280	Pot with handle	15,19
3000.612	O-ring seal red 13x2,5mm	1,08	3166.760	Tube 19x300	3,83
3000.620	Bearing bush new	3,16	3167.000	Comline Double Filter	131,02
3000.630	Magnetic rotor new	11,57	3167.200	Comline bell complete for 3167	21,23
3000.640	Drive shaft new	4,58	3170.000	COMLINE Calcium Automat	211,65
3000.650	Bearing shell	3,16	3170.500	Calcium Automat Extension	60,89
3000.660	2 Brake shoes new	1,40	3174.112	Srew cup and seal	5,43
3000.780	Bushing ø25/28mm (.98/1.1 in.)	1,79	3178.710	Bio connection for 3000/2	8,39
3000/2	Turbelle® powerhead 3000/2	125,83	3179.000	Bio-Hydro-Reactor	60,89
3001.400	Air draw nozzle	7,21	3179.050	Filter mat	4,07
3060.400	Bracket	2,43	3200.000	Cartridge filter 3200	37,78
3060.410	Suction cup holder	4,48	3200.520	Connector	12,37
3060.420	Special suction cups, 3 pcs	1,31	4002.000	Turbelle® classic 4002	213,53
3060.440	Suction bell 4 pcs.	1,74	4002.020	Cover	16,66
3060.450	Silencer holder for old Turbelle®	10,81	4002.030	Thermostat	6,09
3060.460	Silencer holding device	10,81	4002.060	Screw M 4x20 V2A	0,52
3060.500	Set 3060.40+3060.41	5,83	4002.070	Motor bearer 2 pcs.	4,17
3110.020	Replacement pump	42,31	4002.080	Retainer 10 pcs.	4,91
3110.030	Cover for 3110(/2)	6,51	4002.090	Fan	5,23
3110.120	Housing,length:220mm	20,70	4002.100	Motor housing	40,64
3110.130	Impeller housing	11,66	4002.110	Motor with cable	91,82
3110.140	Skimmer cup	9,57	4002.120	Rubber mount 4 pcs.	4,07
3110.141	Skimmer cup	9,57	4002.130	Shaft set	8,27
3110.150	Skimmer lid	5,28	4002.131	Pinion with spring	4,07
3110.310	Cover for pump	5,43	4002.200	Shaft housing	12,52
3110.480	Hose with nipple	1,47	4002.202	Clamping ring	3,40
3110.490	Hose with nipple	1,47	4002.203	Felt strip	1,03
3115.010	Motor block	45,17	4002.220	Rotor	22,64
3115.015	Motor block for 3115.04	44,63	4002.250	Repair kit	12,46
3115.030	Pump for skimmer -> 3115.040 new Art.No.	110,11	4002.260	Motor bearings 2pcs.	16,66
3115.040	Turbelle® Powerhead	110,11	4002.330	Thermofuse pluggable	3,57
3115.100	Housing	84,61	4002.770	Flow deflector	3,76
3115.200	Cover f. pump	5,15	5000.020	Metering pump	15,47
3115.480	Silencer with hose	7,71	5000.150.S	Protective grid	6,38
3130.100	Housing for 3130(/2)	84,61	5000.240	Hose clamp + screw	1,23
3130.130	Impeller housing w. nozzel f. Comline	30,40	5000.300	Sensor w. cinch plug	22,55
3130.140	Spacer	5,54	5000.380	PVC hose - diam 4 x 7 mm x 10 m	9,66
3130.160	Nozzle from 08/2003	6,09	5000.390	PVC hose - diam. 4 x 7 mm x 3 m	3,38
3130.340	Pressure pipe	2,00	5000.430.S	Cap	0,86
3130.360	Air regulator screw	1,38	5000.440	Cap	1,05
3130.482	Set: 2 hoses+ cap	7,71	5000.500	Holder for 3 sensors	16,46
3140.100	Housing for 3140(/2)	97,31	5000.780.S	Plug in connector	1,62
3150.110	Switched socket outlet 3150.11	45,28	5001.390.S	Silocon hose (12,5cm)	4,28
3150.240	Hose clamp	0,43	5002.100	Storage container 13 l	7,32
3150.250	Support for sensor	8,44	5002.250	Storage container 27 l	13,94
3150.300	Sensor w. cinch plug	22,55	5002.300	Sensor housing 5002	24,79
3150.310	Holder board	1,63	5012.010	Power supply unit	13,02
3150.320	Holder board	1,63	5016.000	Controller no more available see 5017	103,05
3155.000	Osmolator Universal	135,54	5016.100	Velcro® strips 2x5,5cm (2.1 in.)	0,84
3155.100	Sliding unit for sensor	2,44	5017.000	Controller 5017 for Osmolator	103,05
3155.200	Sliding unit for level sensor	2,10	5020.200	Air lift	5,20
3155.250	Support f. Osmolator	18,98	5020.250	Air adjust (chock)	1,31
3160.480	Silencer with hose	11,66	5020.300	Sensor w. jack plug	22,55
3165.000	Nano filter	40,75	5022.020	Cover for 5022	10,04
3166.000	Comline Filter	68,58	5024.010	Filter sponge for 5024	2,16
3166.020	Sliding cover	3,25	5024.020	Cover for 5024	2,71
3166.050	Cup H7A, ø 19mm	1,08	5024.040	Universal pump Mini 5024.04	10,16
3166.060	Cup black ø 9,5mm	1,08	5024.042	Drive unit for 5024.04	2,44
3166.070	Retaining plate	3,25	5024.100	Housing for 5024	19,52
3166.100	Filter housing	42,31	5074.000	Calcium Dispenser	75,58
3166.140	Holder set	4,23	5074.010	Non-return valve Water/eau	2,27



# Total price list with spare parts - EURO

Art. No.	Designation	Net sales price	Art. No.	Designation	Net sales price
5074.500	Calcium hydroxide - 250 g (.55 lbs.)	7,83	7040.120	Buffer solution for pH 7 and 9	7,47
6000.000	Turbelle® stream 6000	201,77	7040.130	Buffer solution for pH 5 and 7	7,47
6000.250	Stream Rock	59,16	7040.140	Buffer set pH 5/7/9	11,11
6060.000	Turbelle® stream 6060	106,48	7040.200	Cleaning socket outlet	5,23
6060.015	Motor block for 6060	44,63	7040.400	3 m KCl solution 50ml	4,31
6060.120	Hydro propeller for 6100.10	8,09	7055.100	mV Electrode	122,03
6080.000	Turbelle® stream 6080	145,96	7060.040	Electrode for 7061	8,95
6080.015	Motor block for 6080	78,88	7070.010	Non-return valve for CO2	9,25
6080.120	Hydro propeller for 6080	8,09	7070.012	Glue-in nipple for hose ø4x6mm	0,85
6080.130	Suction housing stream ø50mm	35,52	7070.015	Glue-in nipple 30° for hose, diam. 4x6 mm	0,85
6080.230	Sliding piece with hinge	3,96	7070.100	pH-electrode 7070.10	87,07
6080.250	Holder stabilizer	3,06	7070.110	pH-electrode 7070.11	102,30
6080.400	Swivel arm T.stream	3,06	7070.250	Wall holder	4,23
6080.500	Magnet Holder 6080.50	27,94	7070/2	pH-Controller	219,45
6080.600	Drive unit for 6060/6080	22,71	7071/2	mV-Controller	249,60
6080.640	Drive shaft Turbelle® stream	5,60	7072.100	pH-Electrode f.7072	93,04
6080.641	Screw M4x16 black	0,88	7072.200	Silicon hose - diam. 4 x 7 mm x 5 m	12,33
6091.000	Wavecontroller	67,70	7072.300	PVC hose - diam. 4 x 6 mm x 5 m	3,80
6100.000	Turbelle® stream 6100	258,41	7073.100	Platinum electrode	129,41
6100.015	Motor block for 6100.100	63,75	7074.110	Valve set 7074.11	92,21
6100.100	Turbelle® stream rep.	157,74	7074.500	CO2 diffuser	21,22
6100.120	Hydro propeller	12,24	7074/2	pH/CO2 controller set	304,28
6100.600	Drive unit for 6000/6100/6200	23,02	7075.120	Switched socket outlet 7075.12	74,52
6200.000	Turbelle® stream 6200	374,39	7075/2	mV Controller Set	313,02
6200.015	Motor block for 6200	121,38	7077.100	Press. gauche 7077/2 0-250 bar	11,04
6200.100	Turbelle® stream rep.	214,55	7077.150	Seal ring for 7077.100	1,08
6200.120	Hydro propeller for 6100.10,6260.10	14,79	7077.200	Fine adjustment val. 7077/2	11,04
6200.130	Suction housing stream ø63mm	38,76	7077.300	Seal ring for 7077/2	2,71
6200.230	Sliding piece,hingeP Turb.str. 6200	3,96	7077/2	Pressure regulator	64,53
6200.500	Magnet Holder 6200.50	40,09	7079.150	CO2 cylinder - 1.5 kg (3.3 lbs.)	114,68
6200.509	9 elastic pads f.Mag.Holders	2,16	7079.200	CO2 cylinder - 2.0 kg (4.4 lbs.)	131,80
6200.800	Transformer 20V/80VA	83,54	7080.000	Theben-Timer 7080	21,70
6212.000	Wavebox	391,45	7090.100	Remote control butt.	11,70
6212.020	Sliding cover	3,25	7091.000	Singlecontroller	45,82
6212.070	Retaining plate	12,39	7092.300	Cable 1,2m Multicontroller	12,34
6212.100	Wavebox housing	52,75	7092.340	Y-Adapter	26,05
6212.200	Protective grating	7,65	7094.050	Photo-electric cell	11,69
6212.300	Sponge-ring	7,47	7094.400	Pump adapter	64,99
6212.500	Wavebox extension	348,81	7095.000	Multicontroller	187,29
6250.510	O-ring seal 50x6 mm	4,39	7095.051	Cable clamp 3mm	1,23
6260.015	Motor block	113,95	7180.000	Turbelle® electronic	159,89
6260.100	Wavebox pump	198,90	7180.010	Motor block for 7180	62,13
7005.140	Calibration solution - fresh water	5,23	7180.015	Motor block for 7180/2	62,13
7010.000	Quick test for nitrate, 100p.	22,78	7180/2	Turbelle® electronic	148,92
7010.250	Quick test for nitrate, 25p.	13,02	7200.200	Transformer 12V/20VA	29,28
7011/2	Nitrate measuring box	38,34	7200.600	Drive unit T. electronic	20,03
7012/2	Nitrate measuring box	38,34	7200/2	Turbelle® electronic 7200/2	168,14
7013.000	Multistick	31,65	7210.202	Transformer 12V/20VA	29,28
7014/2	Carbonate hardness measuring box	21,80	7240.000	Turbelle® electronic	148,92
7015/2	Calcium measuring box	38,34	7240.010	Motor block	63,75
7016.000	Quick test for phosphate	28,82	7240.015	Motor block ->7240/2	63,75
7016.500	Hight sensitivity test for phosphate	83,07	7240.243	Coding-plug	2,47
7017/2	Ammonia measuring box	38,34	7240.245	Button for driver	0,42
7019/2	Iron measuring box	38,34	7240.250	Driver with 2 butt.	112,20
7020/2	Total hardness measuring box	20,30	7240.253	2 p.angle 15x15x12mm	0,42
7028.200	Substrate heating cable, 20 W, 24 V	78,54	7240.256	angle AL 80x40x15x2	1,87
7028.400	Substrate heating cable, 40 W, 24 V	93,96	7240.260	Driver no more available see 7240.27	76,50
7028.800	Substrate heating cable, 80 W, 24 V	128,95	7240.270	Driver	76,50
7028/3	Temperature Controller Set °Celsius	126,93	7240/2	Turbelle® electronic	148,92
7028/3_A	Temperature Controller Set °F	126,93	7300.300	Transformer 17V/32VA	42,73
7030.140	Calibration solution, salt water	5,23	7310.302	Transformer 17V/32VA	42,73
7032/2	Conductivity meter	216,02	7400.500	Housing waterp. for TF08/TS24	338,64
7040.110	pH-buffer, pH 9	3,74	7400.600	Transformer 22V/60VA	56,13
7040.115	ph-buffer, pH 5	3,74	7400.610	O-ring seal red	1,08
7040.117	pH-buffer, pH 7	3,74	7400/2	Turbelle® electronic 7400/2	214,90



# Total price list with spare parts - EURO

Art. No.	Designation	Net sales price	Art. No.	Designation	Net sales price
7410.120	Impeller _____	4,30	8203.000	Screw connection - diam. 16 mm (.62 in.) _____	3,50
7410.602	Transformer (19)20V/65VA _____	56,13	8204.000	Starter Sti 20W _____	3,07
7606.500	Holder for 1 sensor _____	7,77	8205.000	Socket f.tube ø26mm _____	5,31
7606.600	Holder for 1 sensor _____	7,92	8215.000	T8-Built-in illuminator - ~ 54 cm (21.2 in.), 2x15 W _____	71,02
7607/2	Water level alarm _____	134,29	8218.000	T8-Built-in illuminator - ~ 67.5 cm (26.5 in.), 2x18 W _____	71,48
8001.000	T8 Osram Lumilux 11 - L 44 cm (17.3 in.), 15 W _____	8,93	8230.000	T8-Built-in illuminator - ~ 97.5 cm (38.3 in.), 2x30 W _____	90,68
8002.000	T8 Osram Lumilux 11 - L 59 cm (23.3 in.), 18 W _____	6,51	8236.000	T8-Built-in illuminator - ~ 128 cm (50.3 in.), 2x36 W _____	107,75
8003.000	T8 Osram Lumilux 11 - L 90 cm (35.4 in.), 30 W _____	9,87	8258.000	T8-Built-in illuminator - ~ 158 cm (62.2 in.), 2x58 W _____	105,76
8004.000	T8 Osram Lumilux11 - L 120 cm (47.2 in.), 36 W _____	5,97	8322.000	T5-Built-in illuminator - ~ 80 cm (31.4 in.), 2x24 W _____	126,32
8005.000	T8 Osram Lumilux11 - L 150 cm (59 in.), 58 W _____	9,99	8323.000	T5-Built-in illuminator - ~ 100 cm (39.3 in.), 2x39 W _____	131,77
8006.000	T8 Osram blue 67 - L 59 cm (23.3 in.), 18 W _____	12,70	8325.000	T5-Built-in illuminator - ~ 126 cm (49.6 in.), 2x54 W _____	140,17
8007.000	T8 Osram blue 67 - L 90 cm (35.4 in.), 30 W _____	12,70	8328.000	T5-Built-in illuminator - ~ 156 cm (61.4 in.), 2x80 W _____	211,85
8008.000	T8 Osram blue 67 - L 120 cm (47.2 in.), 36 W _____	12,70	8441.100	Canopy black _____	2,71
8009.000	T8 Osram blue 67 - L 150 cm (59 in.), 58 W _____	12,70	8441.200	Canopy white _____	2,71
8016.000	T12 Philips Aqua Coral - L 120 cm (47.2 in.), 40 W _____	25,96	8441.350	HHolding dev.f. 8460/-65/-70/-80/-90 _____	22,95
8018.000	T12 Philips Aqua Coral - L 59 cm (23.3 in.), 40 W _____	29,81	8441.400	Rope for lamp,2m _____	2,71
8020.000	T12 Philips Aqua Coral - L 150 cm (59 in.), 140 W _____	37,53	8450.000	Lamp - Basic 8450 _____	328,52
8040.000	HQI bulb 70W/D, 5,200 K, RX7s _____	40,41	8460.000	Lamp - Design 8460 _____	408,08
8041.000	HIT bulb 70W, 10,000 K, RX7s _____	75,80	8465.000	Lamp - Design 8465 _____	526,61
8041.100	HIT bulb 70W, blue, >15 K, RX7s _____	75,80	8470.000	Lamp - Design 8470 _____	844,02
8042.000	HQI bulb 150W/D, 5,200 K, RX7s _____	44,06	8480.000	Lamp - Extension 8480 _____	830,71
8043.000	HIT bulb 150W, 10,000 K, RX7s _____	68,33	8490.000	Lamp - Extension 8490 _____	861,31
8043.070	HIT bulb 150W, 14,000 K, RX7s _____	74,79	8512.000	KOGAPUR S 8512 _____	184,03
8043.100	HIT bulb 150W, blue, >15K, RX7s _____	75,80	8512.100	Carbon / sediment filter S _____	20,31
8043.500	HIT bulb 175W, 10,000 K, E40/39 _____	89,22	8522.000	KOGAPUR M 8522 _____	253,05
8044.000	HQI bulb 250W/D, 5,200 K, Fc2/18 _____	86,50	8522.100	Sediment fine filter L _____	11,11
8045.000	HIT bulb 250W, 10,000 K, Fc2/18 _____	87,72	8522.120	Carbon / sediment filter M/L _____	22,10
8045.070	HIT bulb 250W, 14,000 K, Fc2/18 _____	87,37	8532.000	KOGAPUR L 8532 _____	361,72
8046.000	HQI bulb 250W, blue, E40 _____	139,33	8532.010	1/4" nylon nipple Kogapur _____	3,39
8047.000	HQI bulb 250W/D, 5,200 K, E40 _____	86,50	8532.020	1/4" elbow for hose _____	3,39
8048.000	HQI bulb 250W, 10,000 K, E40 _____	99,11	8532.030	1/8" elbow for hose _____	3,39
8049.000	HQI bulb 400W, blue, E40 _____	128,82	8532.040	1/8" transition/hose _____	3,39
8050.000	HQI bulb 400W/D, 5,200 K, E40 _____	120,68	8532.050	pressure gauge 1/8" _____	14,28
8051.000	HQI bulb 400W, 10,000 K, E40 _____	141,03	8532.060	Screw 3,2x17mm Kogapur _____	0,18
8062.000	T5 Osram Daylight - L 54.9 cm (21.6 in.), 24 W _____	7,68	8532.070	O-ring membr.housing _____	5,71
8063.000	T5 Osram Daylight - L 84.9 cm (33.4 in.), 39 W _____	7,68	8532.080	O-ring filter hous. _____	5,71
8065.000	T5 Osram Daylight - L 114.9 cm (45.2 in.), 54 W _____	8,06	8534.000	KOGAPUR L 8534 _____	409,12
8068.000	T5 Osram Daylight - L 144.9 cm (57 in.), 80 W _____	9,15	8540.000	ESO 8540 _____	206,24
8072.000	T5 Narva blue 2 - L 54.9 cm (21.6 in.), 24 W _____	24,51	8542.000	DI-Tester 8542 _____	88,00
8073.000	T5 Narva blue 2 - L 84.9 cm (33.4 in.), 39 W _____	27,26	8550.500	Membrane Kogapur 60S/M/L _____	79,33
8075.000	T5 Narva blue 2 - L 114.9 cm (45.2 in.),54 W _____	28,89	8550.520	Capillary 25% rate 60S/M/L _____	8,46
8078.000	T5 Narva blue 2 - L 144.9 cm (57 in.), 80 W _____	31,64	8552.500	Membrane Kogapur 90S/M/L _____	111,06
8101.000	T8 reflector, tube L 44cm,15W _____	8,22	8552.520	Capillary 25% rate 90S/M/L _____	8,46
8102.000	T8 reflector, tube L 59 cm (23.2 in.),18 W _____	8,90	8554.500	Membrane Kogapur 150L _____	142,78
8103.000	T12 reflector, tube L 59cm,40W _____	10,53	8554.520	Capillary 25% rate 150/M/L _____	8,46
8104.000	T8 reflector, tube L 90cm,30W _____	11,55	8556.000	Press. hose whit/(m) Kogapur _____	1,24
8105.000	T8 reflector, tube L 120cm,36W _____	13,29	8557.000	European hose adapt. Kogapur _____	11,00
8106.000	T12 reflector, tube L 120cm,40W _____	14,92	9002.000	DOC Skimmer 9002 _____	105,34
8107.000	T8 reflector, tube L 150cm,58W _____	15,88	9005.000	DOC Skimmer 9005 _____	197,92
8107.010	2 Tube brackets, ø 26mm _____	3,42	9005.040	Hydrofoamer _____	110,11
8108.000	T12 reflector, tube L 150cm,140W _____	17,50	9005.400	DOC skimmer extension set _____	35,70
8108.010	2 Tube brackets, ø 38mm _____	4,72	9010.000	DOC Skimmer 9010 _____	254,14
8110.000	T5 reflector, tube L 54.9cm, 24W _____	5,17	9010.040	Hydrofoamer _____	137,26
8110.010	2 Tube brackets, ø 16mm _____	3,06	9015.000	DOC Skimmer 9015 _____	331,67
8111.000	T5 reflector, tube L 84,9cm,39W _____	6,85	9020.000	DOC Skimmer 9020 _____	532,86
8112.000	T5 reflector, tube L 114,9cm,54W _____	10,16	9020.140	Foam extraction unit _____	73,95
8114.000	T5 reflector, tube L 144,9cm,80W _____	12,09	9205.000	DOC Skimmer 9205 _____	197,92
8139.000	T12-Built-in illuminator - ~ 67.5 cm (26.5 in.), 40 W _____	84,85	9210.000	DOC Skimmer 9210 _____	279,82
8159.000	T12-Built-in illuminator - ~ 158 cm (62.2 in.), 140 W _____	153,00			
8159.010	Starter and choke, 140 W _____	45,56			
8159.011	Ballast 70W for 140W _____	19,46			
8159.012	Starter for 140 W tubes _____	6,64			
8200.000	Electronic starter 8 - 65 W _____	11,16			
8201.000	Screw connection - diam. 26 mm (1.02 in.) _____	2,89			
8202.000	Screw connection - diam. 38 mm (1.49 in.) _____	3,50			

END