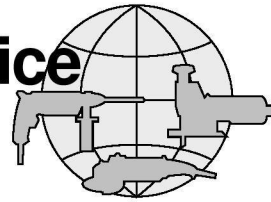


# BOSCH



# Service



**INSTANDSETZUNGSHINWEISE  
REPAIR INSTRUCTIONS  
INSTRUCTIONS DE REPARATION  
INSTRUCCIONES DE REPARACION**

EW / WJW 0 611 243 7.. (99 - 07) X

**Bohrhammer  
Rotary Hammer  
Marteau perforateur  
Martillo perforador**

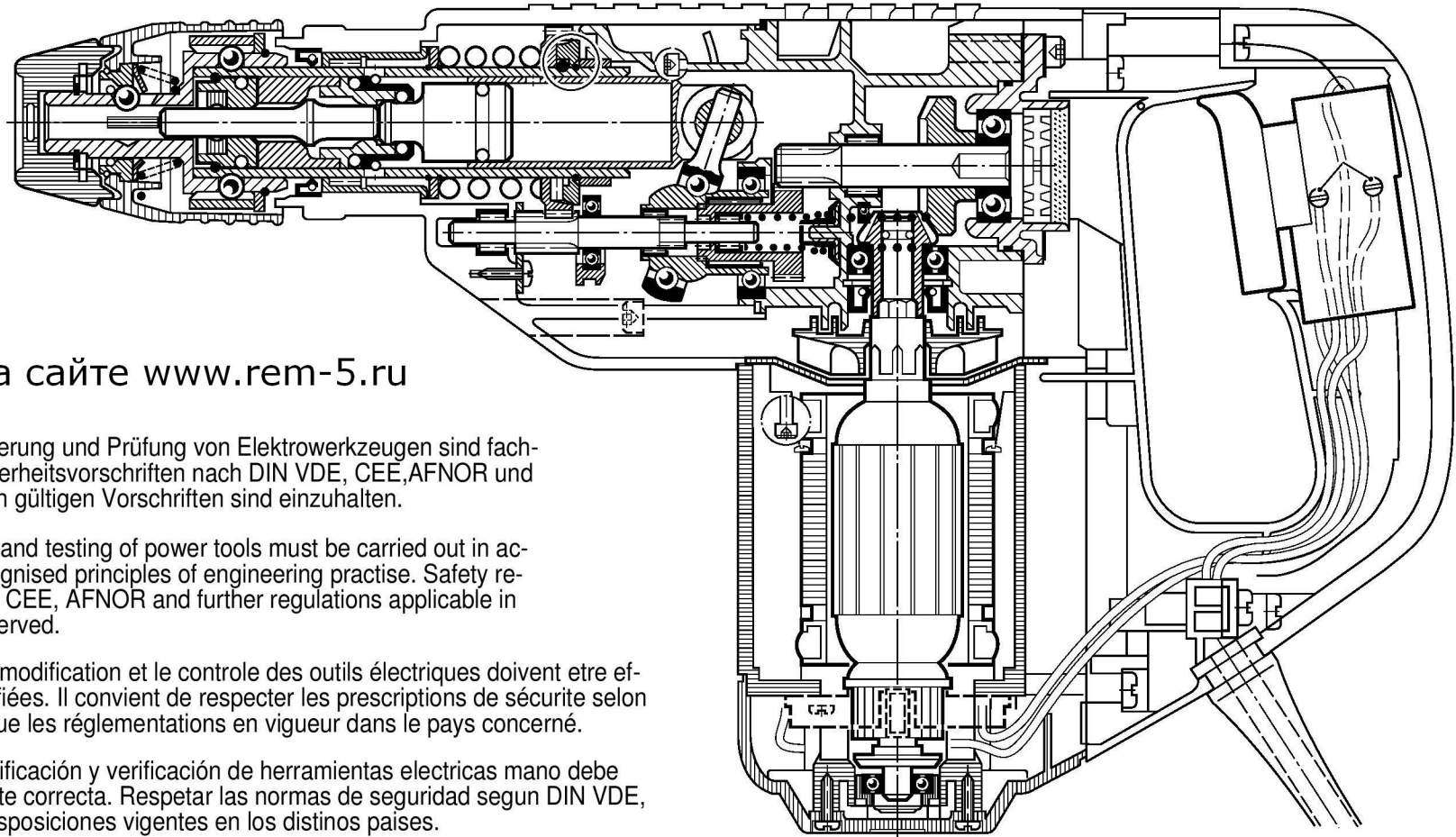
**Typ 0 611 243 7.. = GBH 4 DFE-top**

**Änderungen vorbehalten.** Unsere Erzeugnisse werden stets dem neuesten technischen Stand angepaßt. Deshalb behalten wir uns Änderungen vor.

**Modifications.** Our products are constantly modified to meet new technical standards. We therefore reserve the right to alter data and specifications without prior notice.

**Modifications.** Nos produits sont continuellement adaptés aux dernières nouveautés techniques et les dates sont données sous réserve de changement.

**Modificaciones.** Nuestros fabricados van siendo adaptos constantemente a las últimas conquistas técnicas. Por ello, tenemos que reservarnos el derecho de introducir modificaciones en los datos técnicos.



Опубликовано на сайте [www.rem-5.ru](http://www.rem-5.ru)

**Beachten:** Instandsetzung, Änderung und Prüfung von Elektrowerkzeugen sind fachgerecht durchzuführen. Die Sicherheitsvorschriften nach DIN VDE, CEE, AFNOR und weitere in den einzelnen Ländern gültigen Vorschriften sind einzuhalten.

**Attention:** Repair, modification, and testing of power tools must be carried out in accordance with the generally recognised principles of engineering practise. Safety regulations according to DIN VDE, CEE, AFNOR and further regulations applicable in individual countries must be observed.

**Attention:** La remise en état, la modification et le controle des outils électriques doivent être effectués par des personnes qualifiées. Il convient de respecter les prescriptions de sécurité selon DIN VDE, CEE, AFNOR, ainsi que les réglementations en vigueur dans le pays concerné.

**Obsérvese:** La reparación, modificación y verificación de herramientas electricas mano debe efectuarse en forma técnicamente correcta. Respetar las normas de seguridad segun DIN VDE, CEE, AFNOR, asi como otras disposiciones vigentes en los distintos países.

**ROBERT BOSCH GMBH    GESCHÄFTSBEREICH ELEKTROWERKZEUGE    D 70745 LEINFELDEN-ECHTERDINGEN**



## Zerlegen

Für die Demontage werden handelsübliche Werkzeuge benötigt.

1. Eingangsprüfung durchführen.  
**Beachten:**  
Die Sicherheitsvorschriften nach DIN, VDE, CEE, AFNOR und weitere in den einzelnen Ländern gültigen Vorschriften sind einzuhalten.

## Disassembly

Use normal trade tools by disassembly.

1. Carry out power supply check.  
**Attention:**  
Safety regulations according to DIN, VDE, CEE, AFNOR and further regulations applicable in individual countries must be observed.

## Démontage

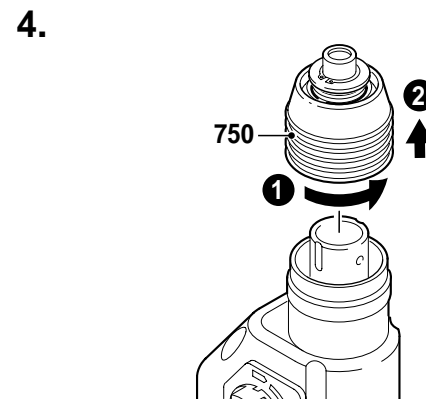
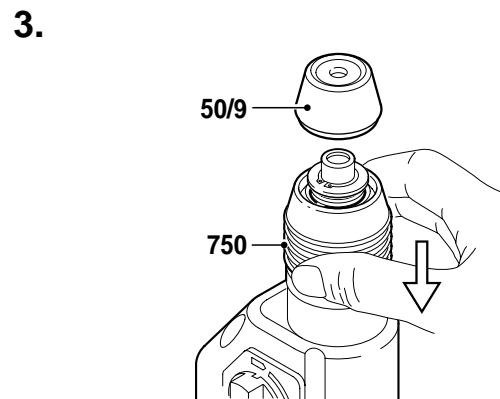
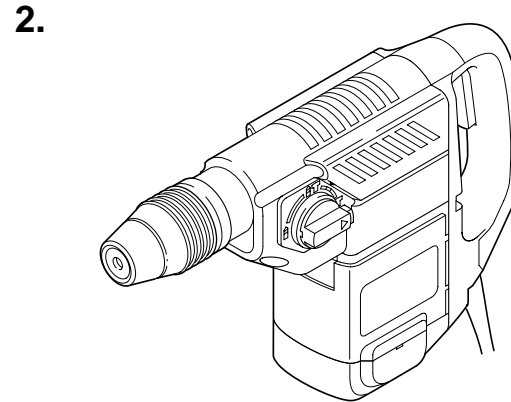
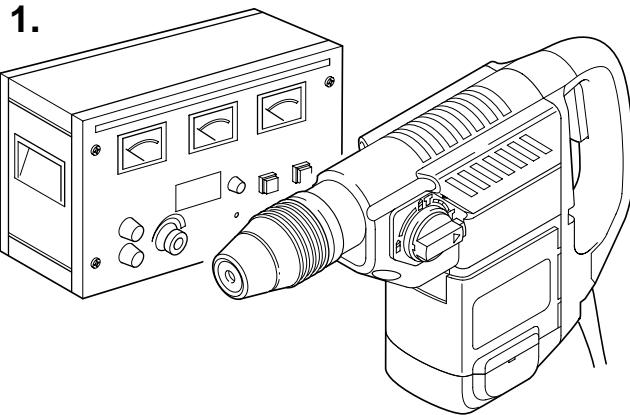
Pour le démontage, des outils en usage dans le commerce sont nécessaires.

1. Effectuer un contrôle préliminaire.  
**Attention:**  
Respecter les instructions de sécurité selon DIN, VDE, CEE, AFNOR et les autres instructions valables dans les pays respectifs.

## Desmontaje

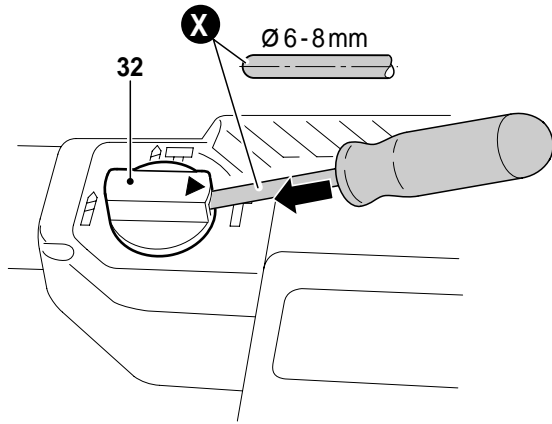
Para el desmontaje no se precisan herramientas especiales.

1. Realizar control de recepción.  
**Atención:**  
Atenerse a las prescripciones de seguridad según DIN, VDE, CEE, AFNOR y a las prescripciones adicionales específicas que pudieran existir en los respectivos países.

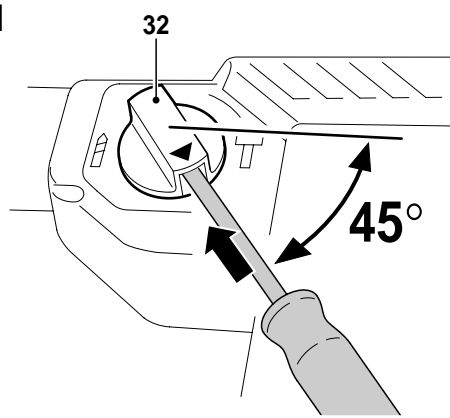


2. Zerlegen nach Explosions-, Schnittzeichnung und diesem Instandsetzungshinweis.
2. Disassembly using explosion, cut-away drawings and these repair instructions!
2. Démontez l'appareil suivant la vue éclatée, le plan en coupe et ces instructions de réparation.
2. Realizar el desmontaje conforme a los dibujos en perspectiva y en sección, y a estas instrucciones de reparación.

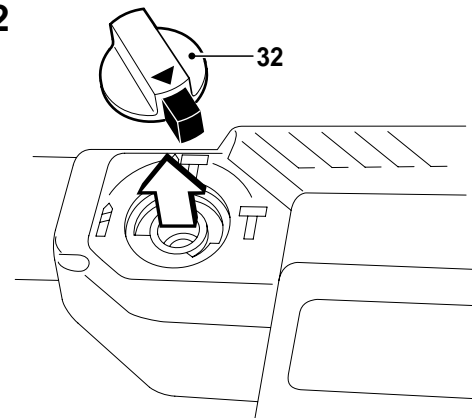
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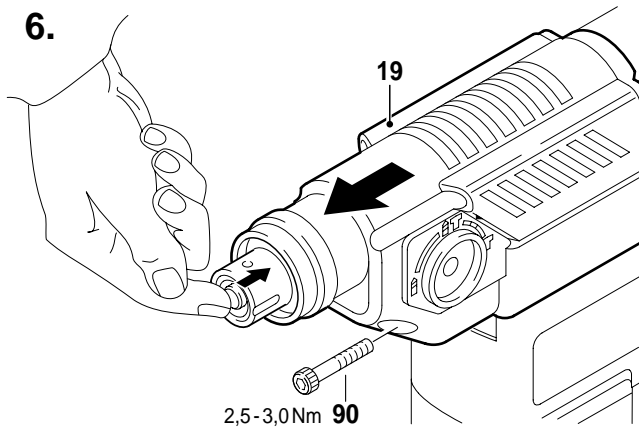
5.1



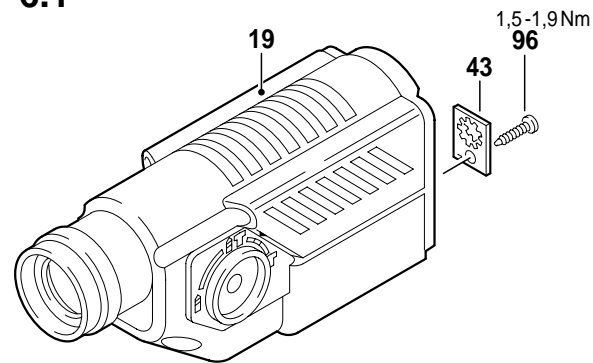
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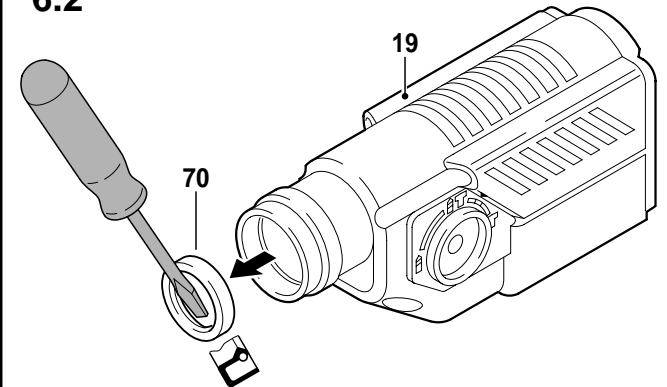
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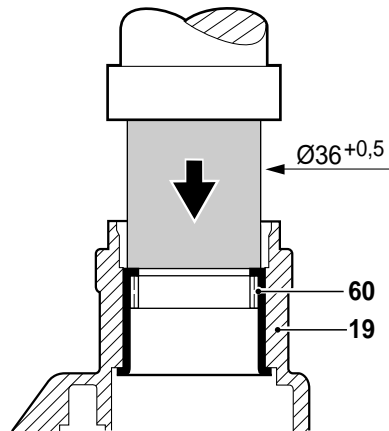
6.1



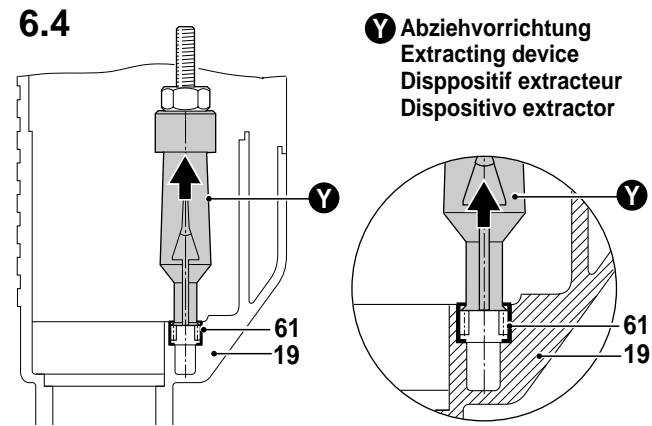
6.2



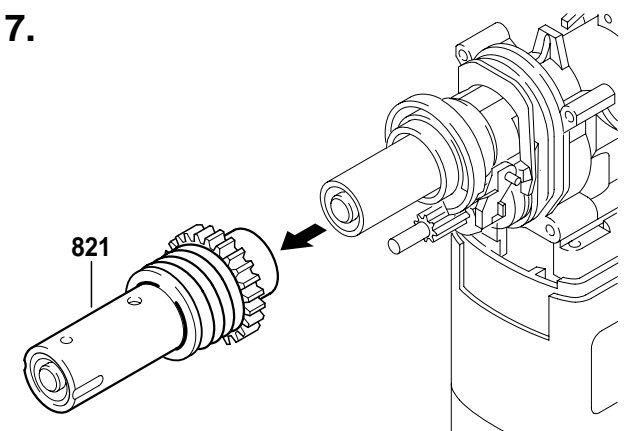
6.3




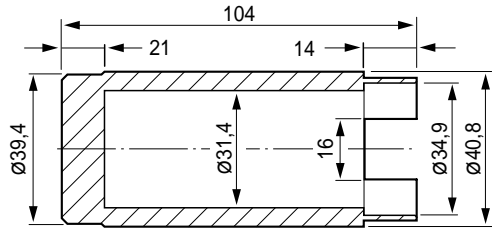
6.4



7.

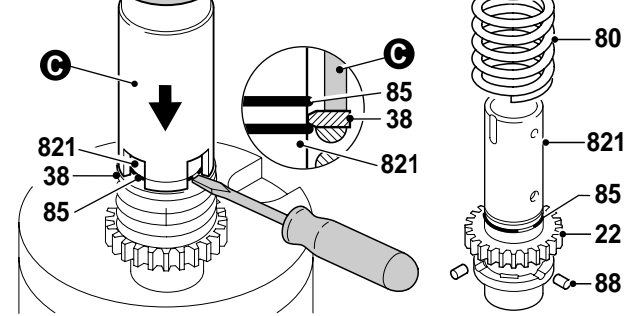


**7.1**  **Hilfswerkzeuge zum Selbstanfertigen**  
**Auxiliary tools (for your own manufacture)**  
**Outil auxiliaire (fabrication locale)**  
**Utile (fabricación particular)**

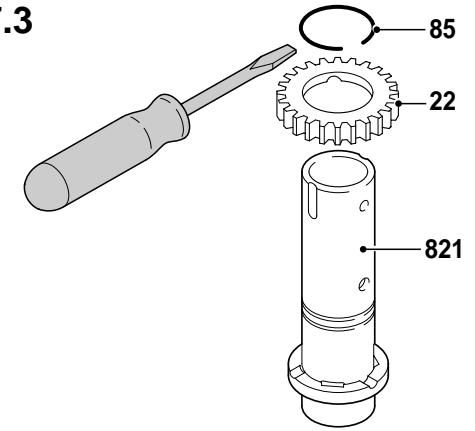


Maße in mm / Dimensions in mm  
 Cotes en mm / Medidas en mm

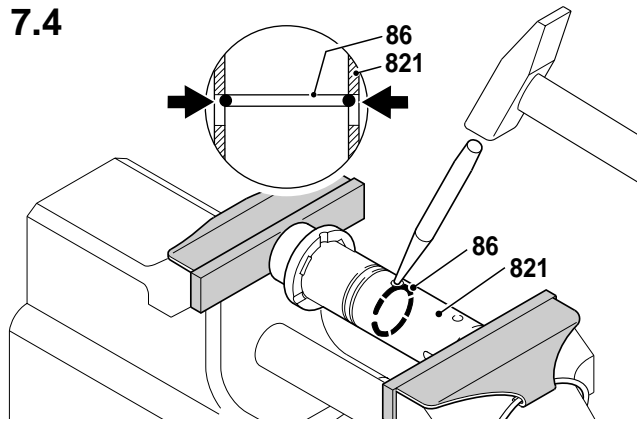
**7.2**  **Hilfswerkzeug**  
**Auxiliary tool**  
**Outil auxiliaire**  
**Utile**



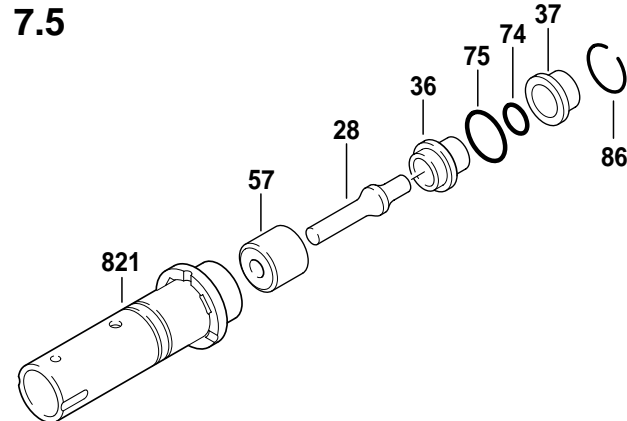
**7.3**



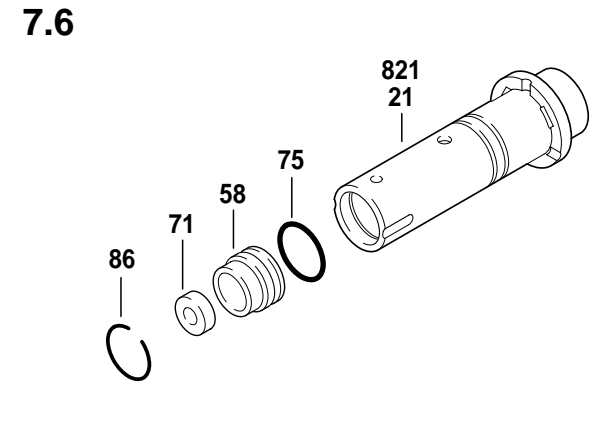
**7.4**



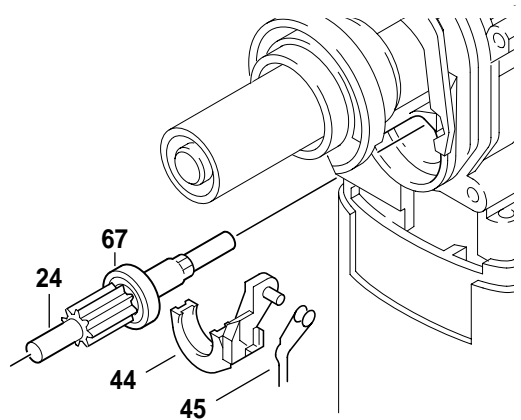
**7.5**



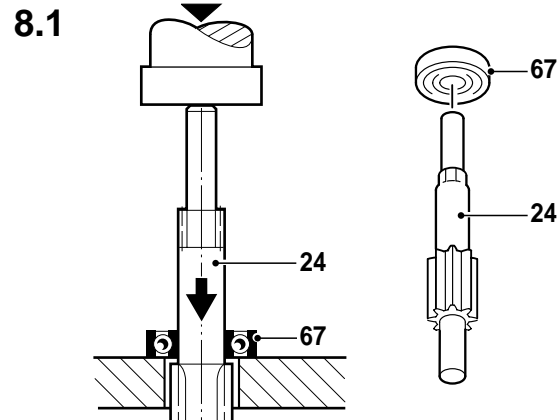
**7.6**



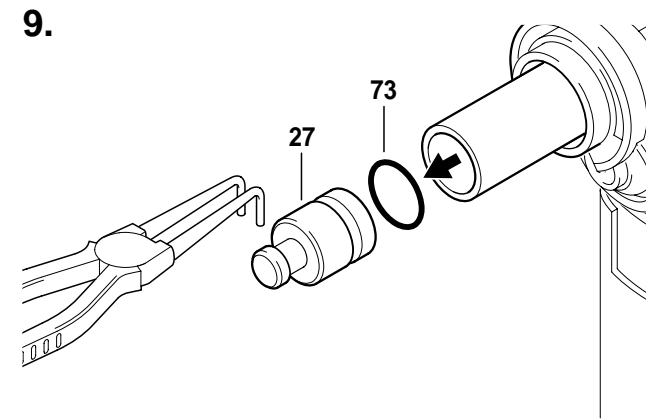
**8.**



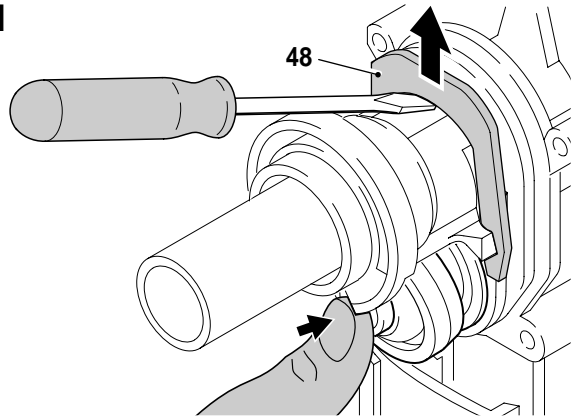
**8.1**



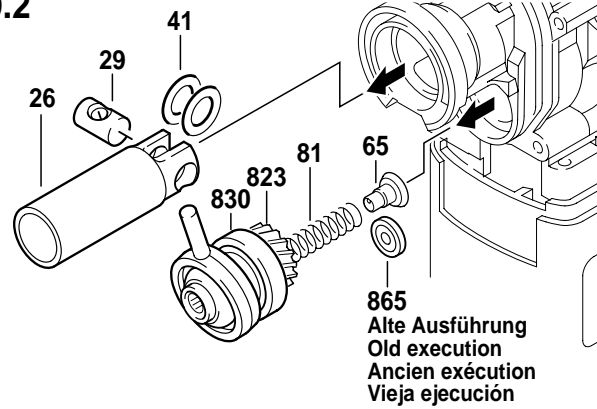
**9.**



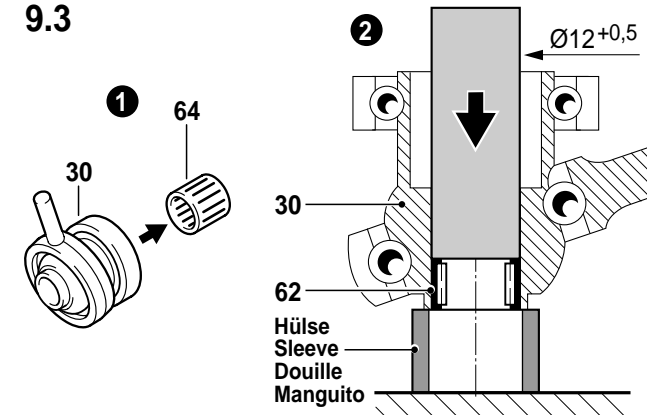
9.1



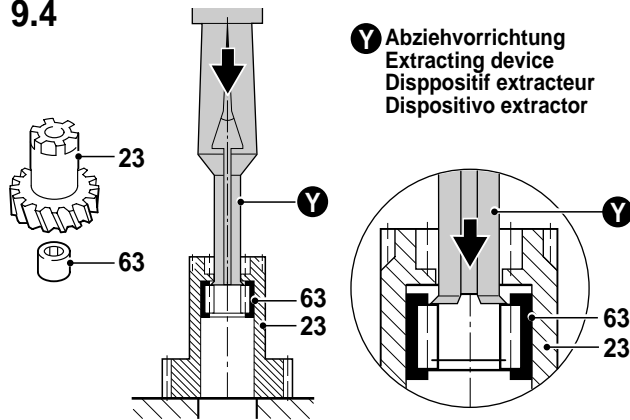
9.2



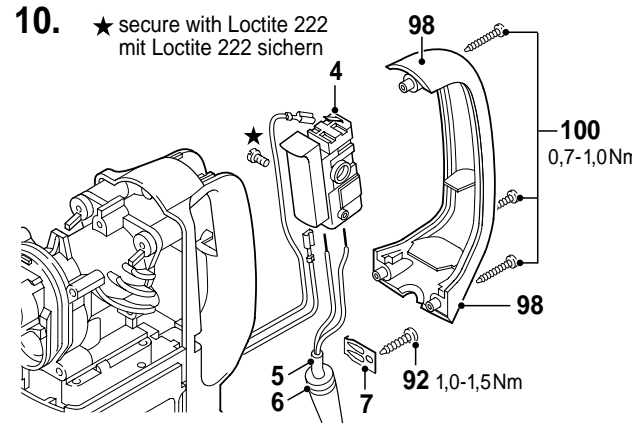
9.3



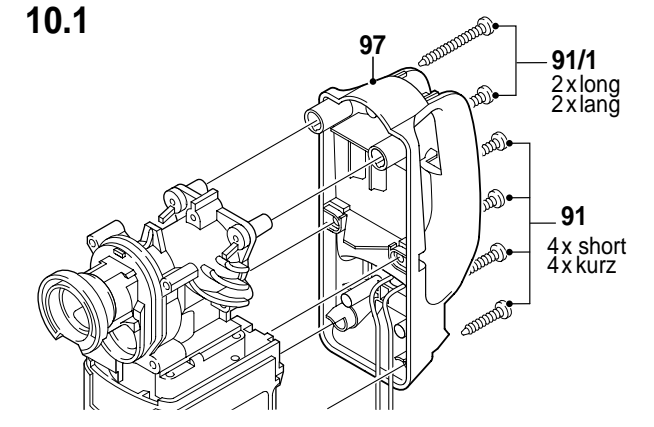
9.4



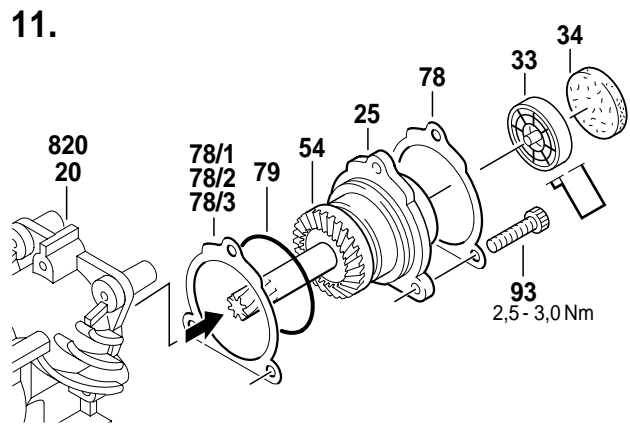
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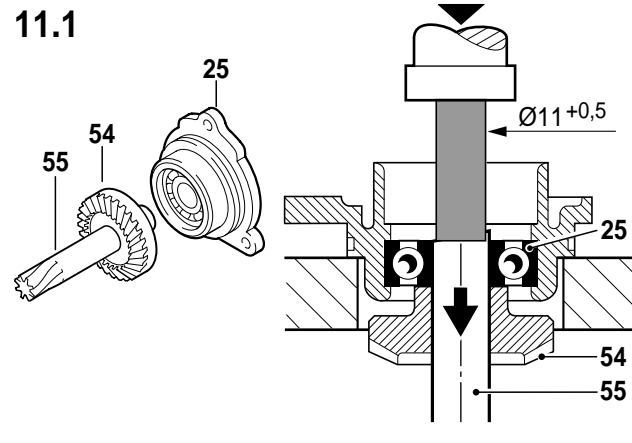
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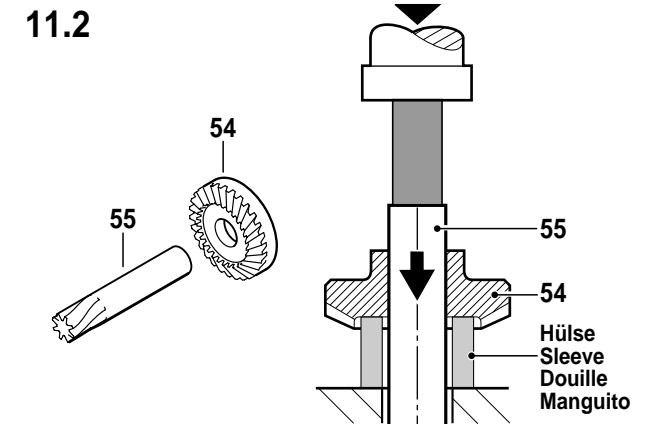
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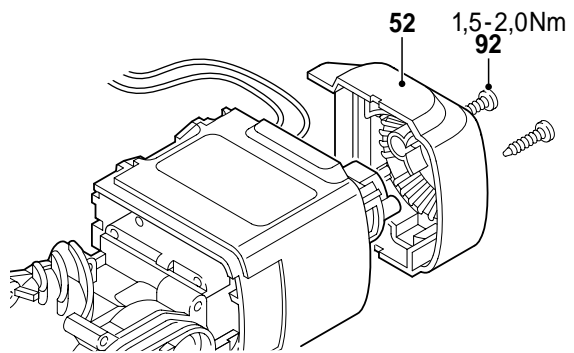
11.1



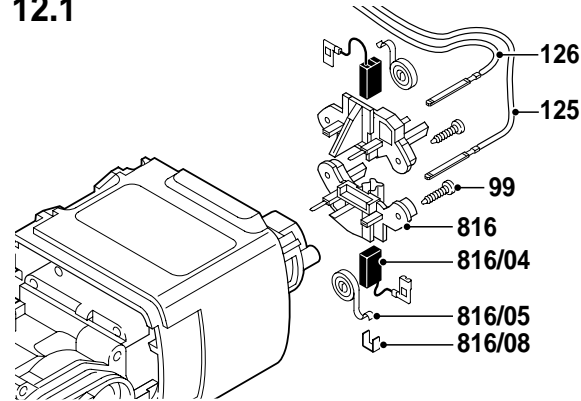
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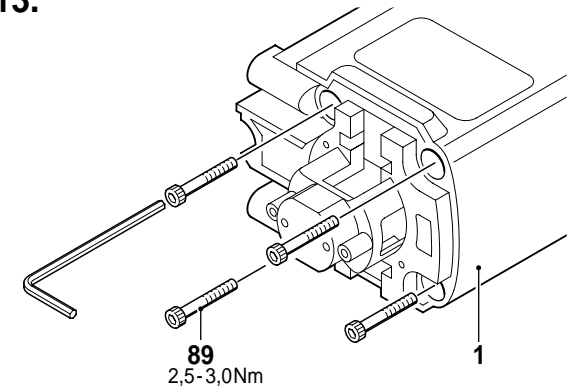
12.



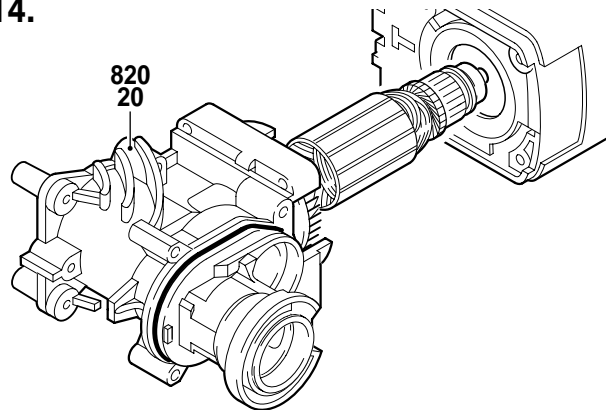
12.1



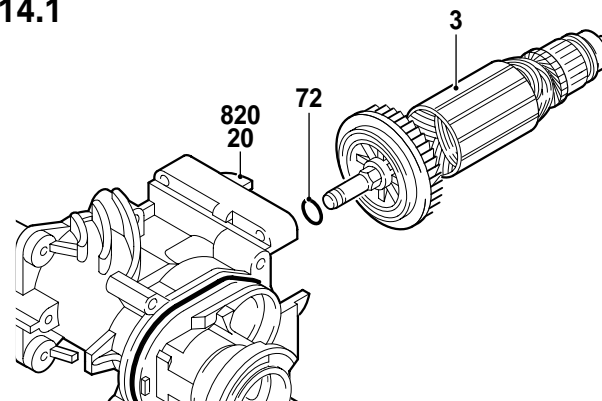
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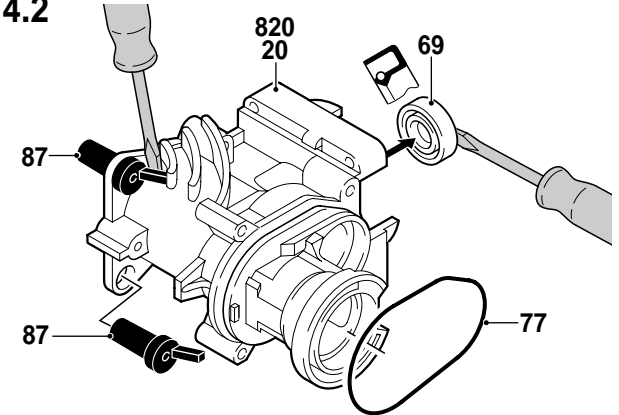
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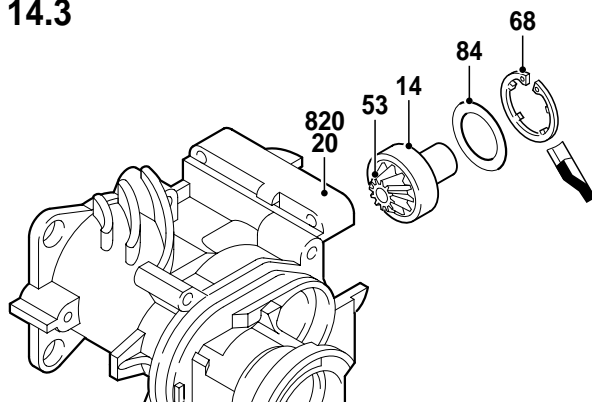
14.1



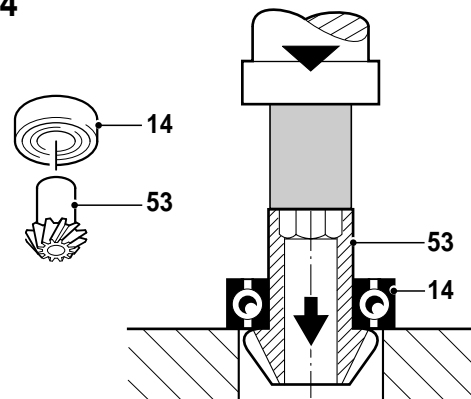
14.2



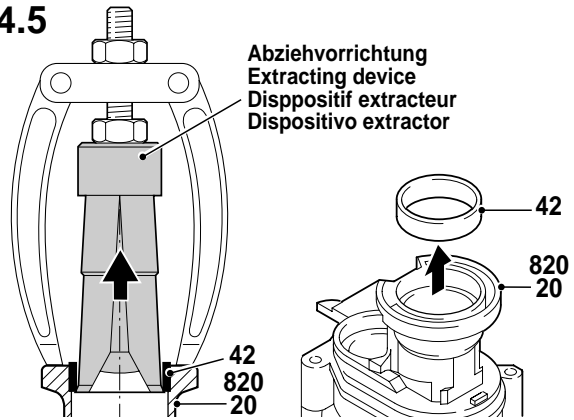
14.3



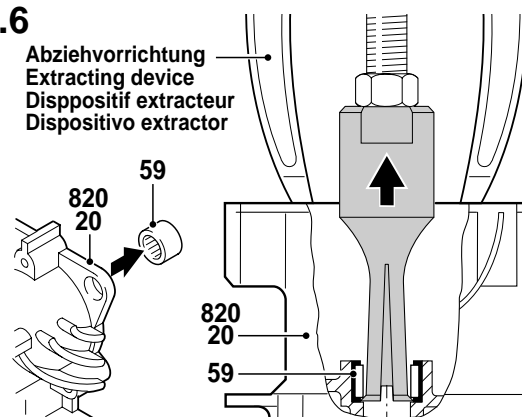
14.4



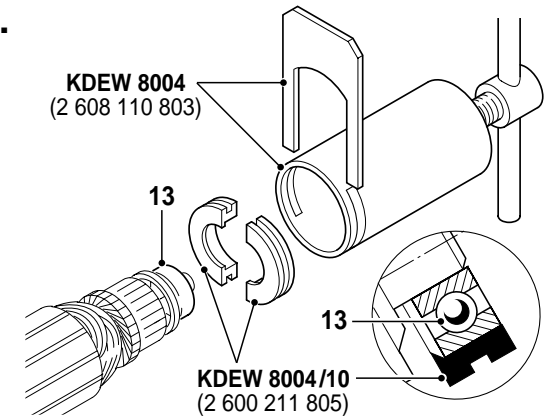
14.5



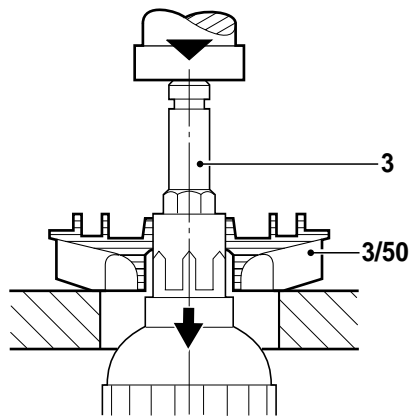
14.6



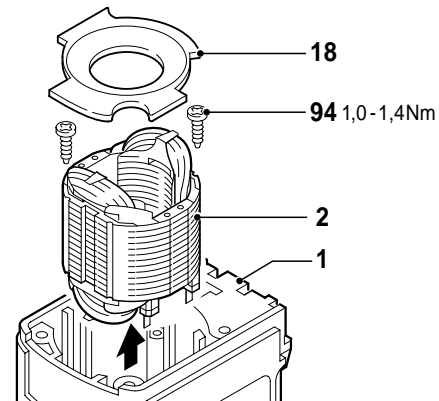
15.



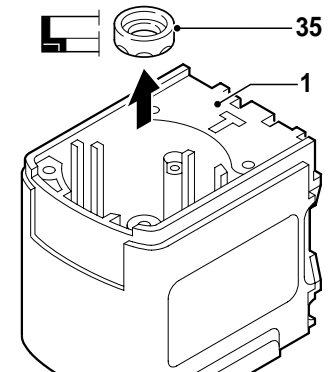
15.1



16.



17.



### Zusammenbau

Montage nach Explosionszeichnung und diesem Instandsetzungshinweis.

Alle Teile sind gereinigt, abgenutzte und beschädigte Teile werden ersetzt.

Nur Original-Ersatzteile verwenden.

Zähne aller Zahnräder mit Fett **1 615 430 002** bestreichen.

Bitte Schmierhinweise beachten!

### Assembly

Assembly using explosion drawings and these repair instructions!

Clean all parts, replace worn-out and damaged parts.

Use only original spare parts!

Grease all gear teeth **1 615 430 002**.

Please note lubrication instructions!

### Montage

Le montage s'effectue selon la vue éclatée et les instructions de réparation suivantes.

Toutes les pièces sont nettoyées, les pièces usées ou endommagées doivent être remplacées par des nouvelles. Pour le remplacement de pièces, n'utiliser que des pièces d'origine.

Les dents graisser **1 615 430 002**.

Respecter les instructions de graissage!

### Montaje

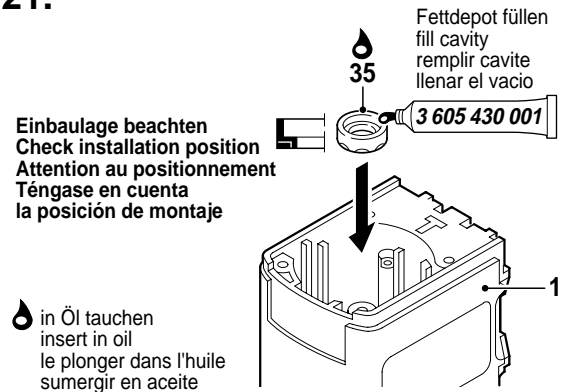
Realizar el montaje conforme a los dibujos en perspectiva y a estas instrucciones de reparación.

Todas las piezas deben estar limpias. Las piezas desgastadas o danadas deben reemplazarse por piezas nuevas. Utilizar solamente piezas de repuesto originales.

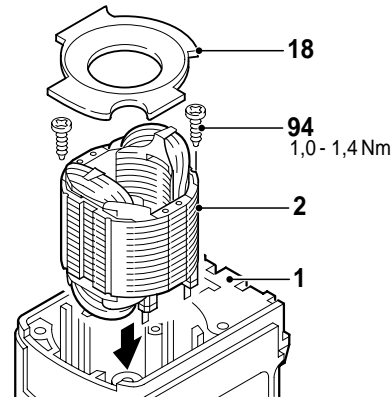
Dientes engrasar **1 615 430 002**.

Observar las instrucciones de lubricación!

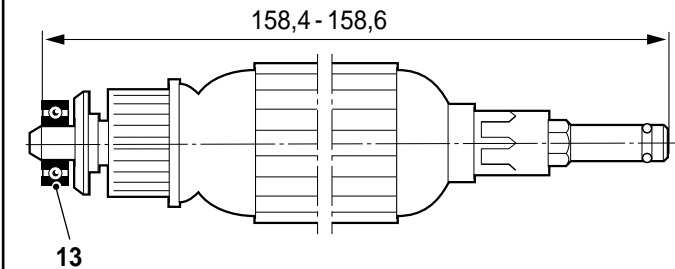
21.



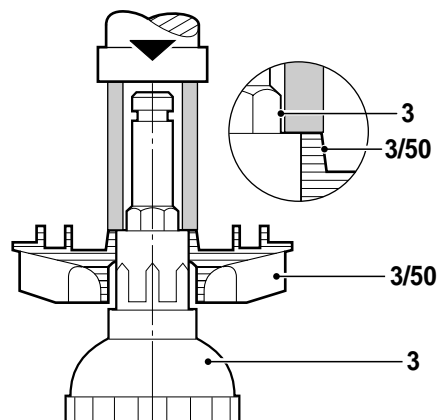
22.



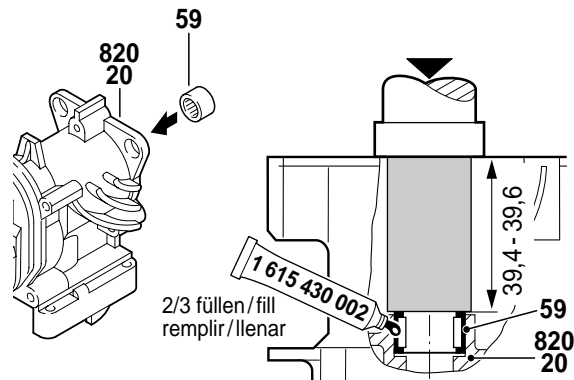
22.1



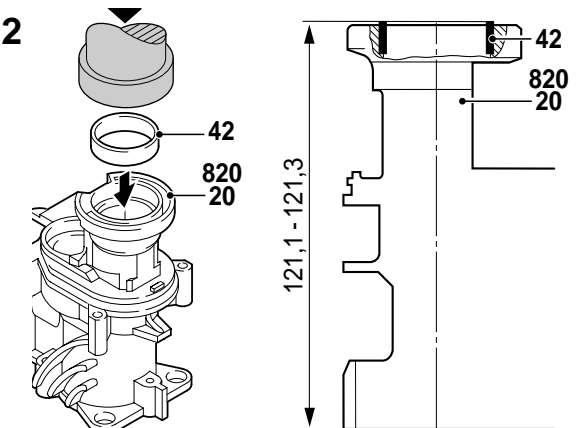
23.



23.1

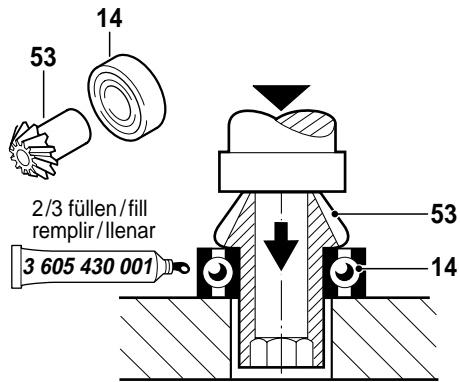


23.2

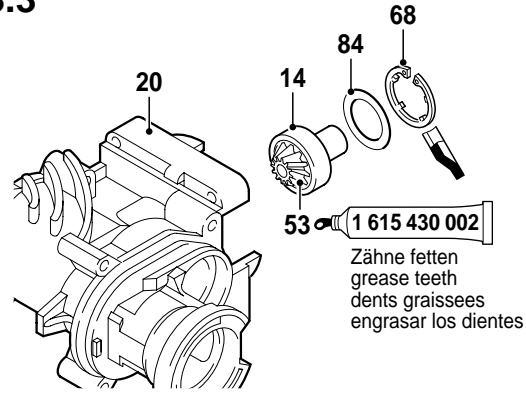




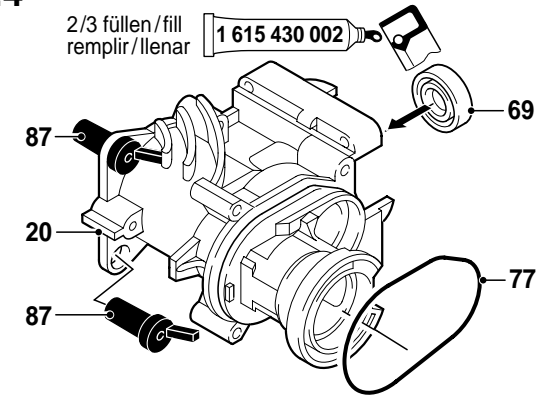
### 23.2



### 23.3

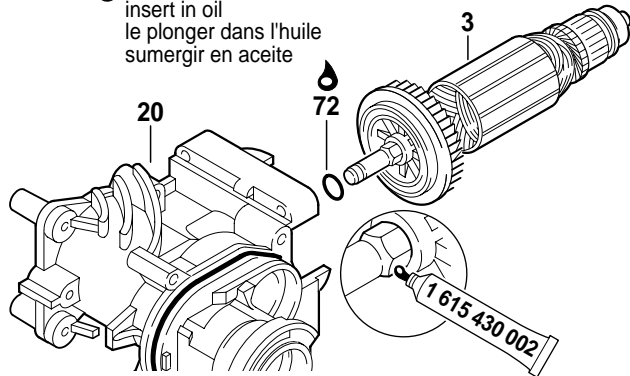


### 23.4

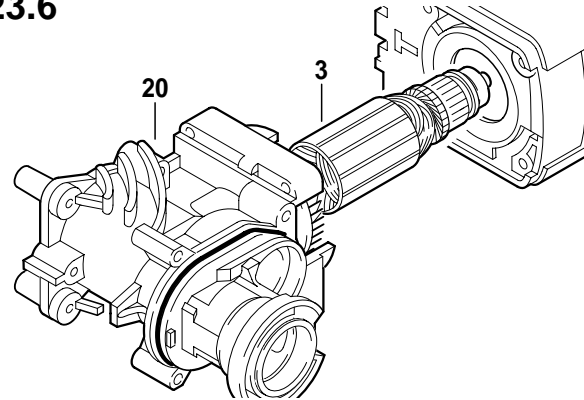


### 23.5

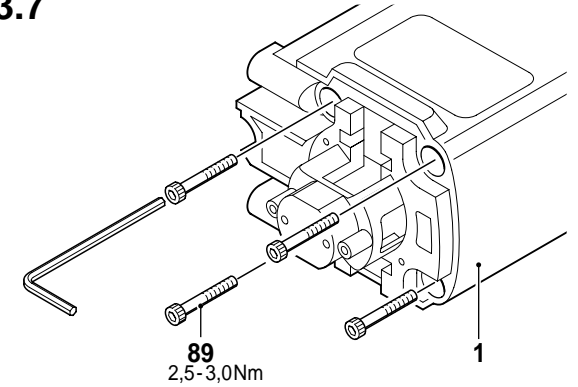
in Öl tauchen  
insert in oil  
le plonger dans l'huile  
sumergir en aceite



### 23.6

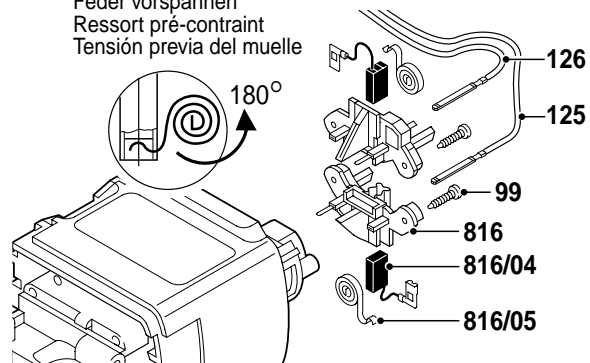


### 23.7

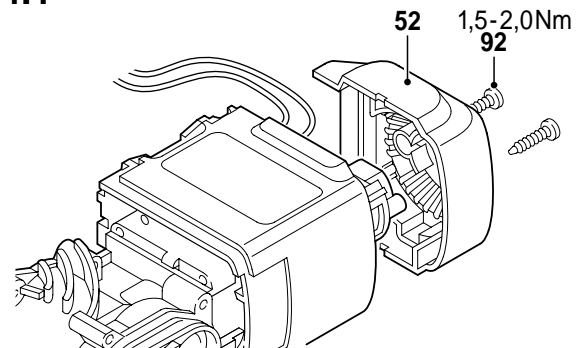


### 24.

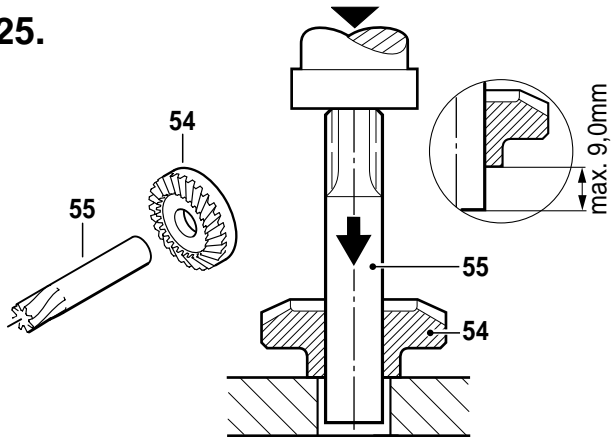
Spring tension  
Feder vorspannen  
Ressort pré-contraint  
Tensión previa del muelle



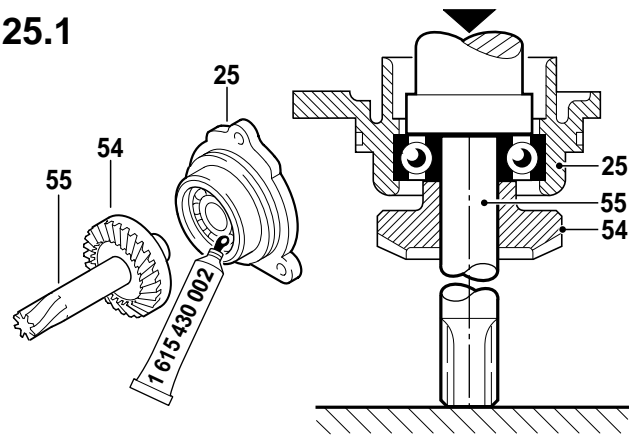
### 24.1



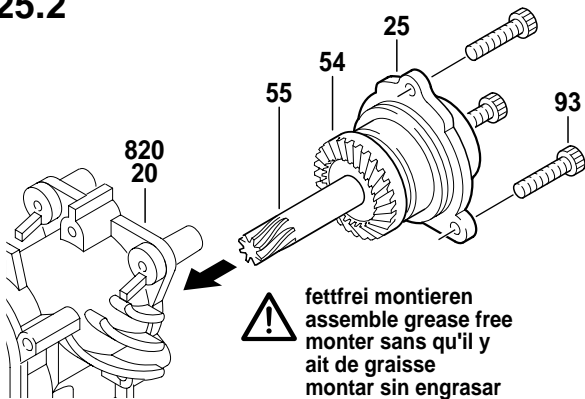
25.



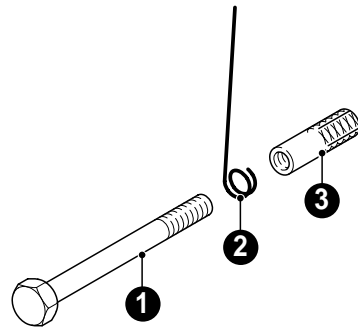
25.1



25.2



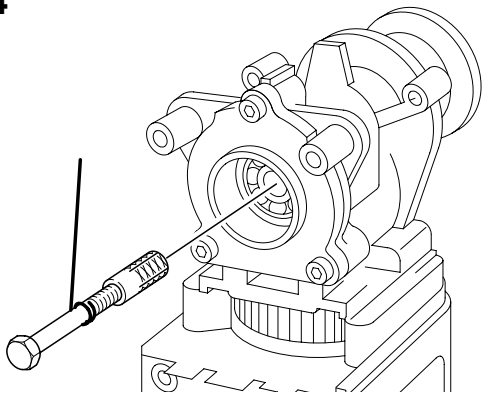
25.3



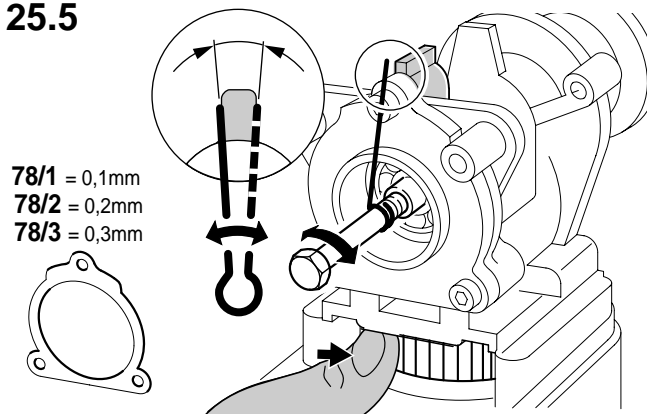
Meßwerkzeug zum Selbstanfertigen  
Measuring tool (for your own manufacture)  
Outil de mesure (fabrication locale)  
Utile de medición (fabricación particular)

- ① Schraube M6 / Bolt M6 / Vis M6 / Tornillo M6
- ② Draht / Wire / Fil de fer / Hilo metálico
- ③ Messingdübel M6 / Brass dowel M6  
Goujon de laiton / Taco de latón M6

25.4



25.5



78/1 = 0,1mm  
78/2 = 0,2mm  
78/3 = 0,3mm

Zahnspiel **fettfrei** messen!  
Spiel zwischen Pos. 53 und Pos. 54 = 0,2 - 0,3mm.  
Ausgleich mit Pos. 78/1, 78/2, 78/3.

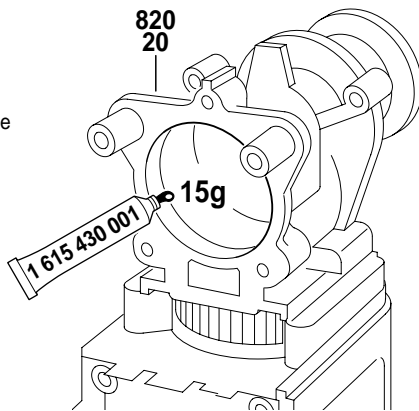
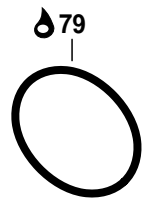
Measure gear play **grease free!**  
Play between pos. 53 and pos. 54 = 0,2 - 0,3mm.  
Compensate with pos. 78/1, 78/2, 78/3.

Mesurer le jeu des dents **sans qu'il y ait de graisse!**  
Le jeu entre pos. 53 et pos. 54 = 0,2 - 0,3mm.  
Compensation avec pos. 78/1, 78/2, 78/3.

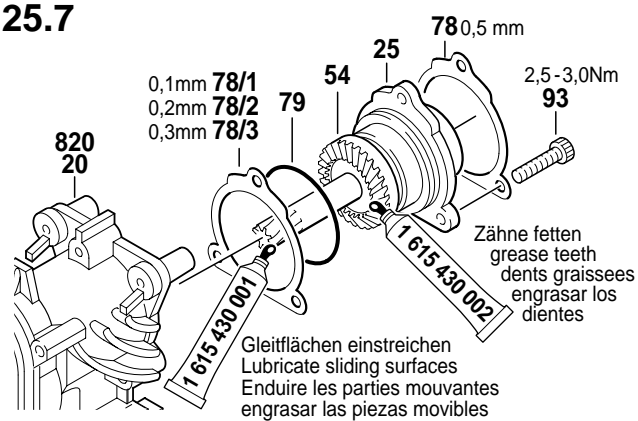
Medir el juego entre dientes **sin haber aplicado grasa!**  
El juego entre pos. 53 y pos. 54 = 0,2 - 0,3mm.  
El reglaje se realiza con pos. 78/1, 78/2, 78/3.

## 25.6

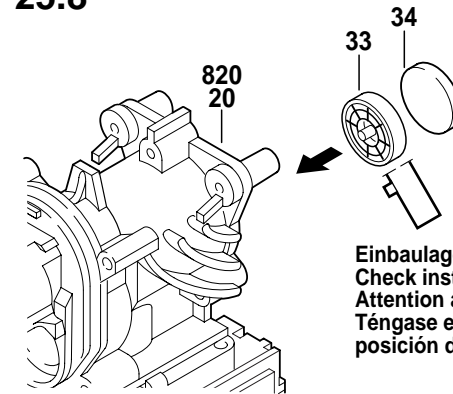
in Öl tauchen  
insert in oil  
le plonger dans l'huile  
sumergir en aceite



## 25.7

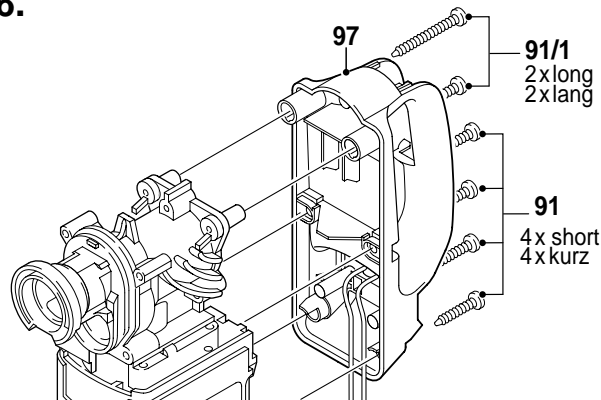


## 25.8



Einbauage beachten  
Check installation position  
Attention au positionnement  
Téngase en cuenta la posición de montaje

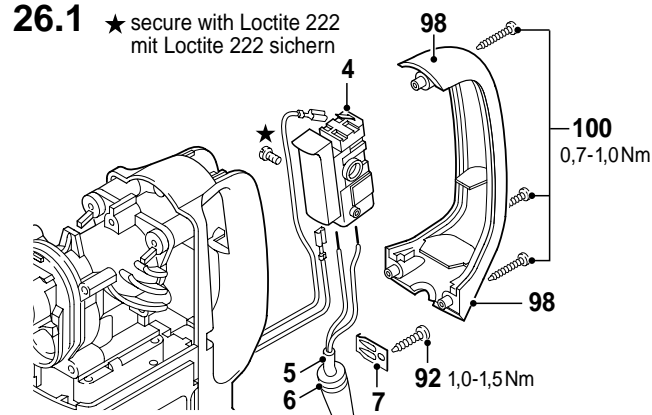
## 26.



91/1  
2x long  
2x lang

91  
4x short  
4x kurz

## 26.1

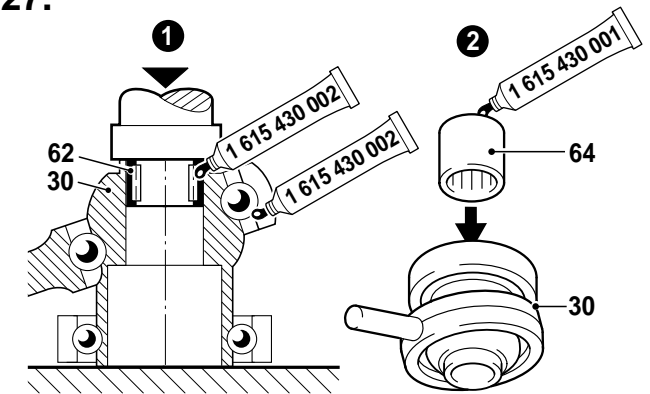


★ secure with Loctite 222  
mit Loctite 222 sichern

100  
0,7-1,0Nm

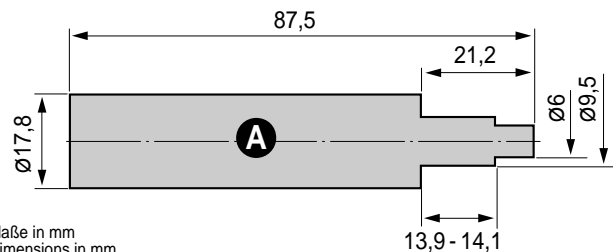
92 1,0-1,5Nm

## 27.



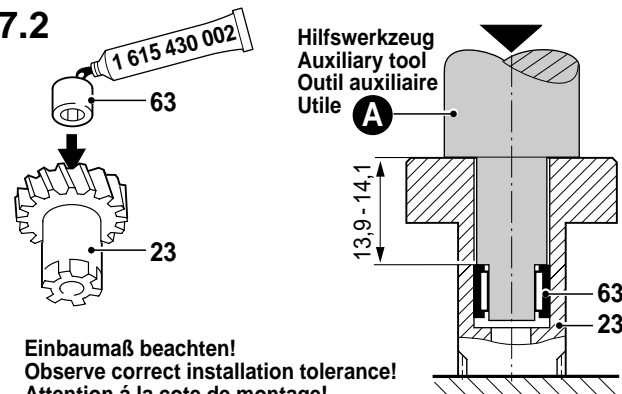
## 27.1

**A** Hilfswerkzeug zum Selbstanfertigen  
Auxiliary tool (for your own manufacture)  
Outil auxiliaire (fabrication locale)  
Utile (fabricación particular)



Maße in mm  
Dimensions in mm  
Cotes en mm  
Medidas en mm

## 27.2

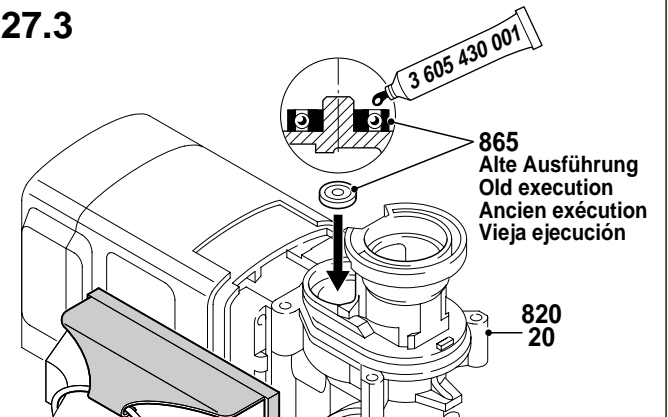


Hilfswerkzeug  
Auxiliary tool  
Outil auxiliaire  
Utile

13,9-14,1

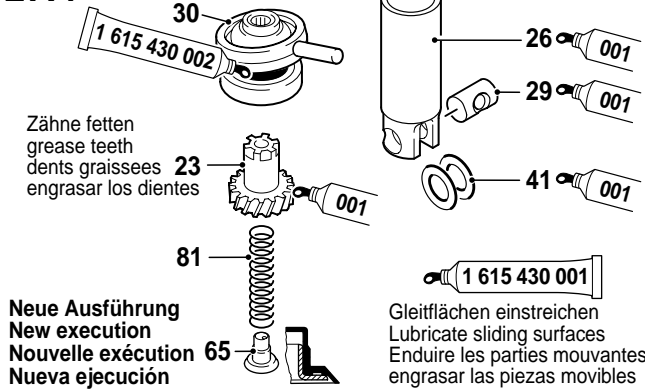
Einbaumaß beachten!  
Observe correct installation tolerance!  
Attention à la cote de montage!  
Obsérvese la medida de montaje!

## 27.3

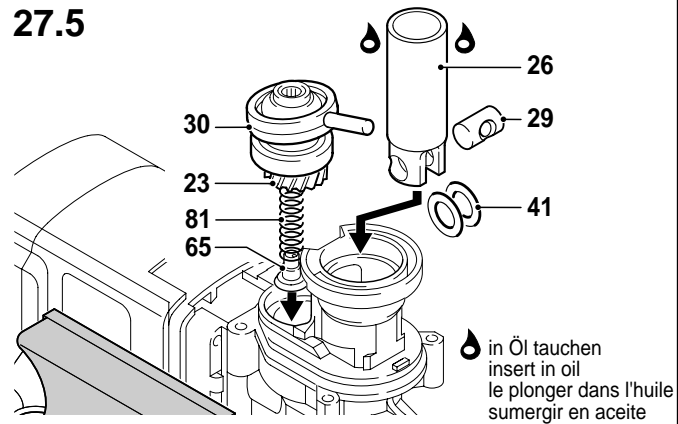


865  
Alte Ausführung  
Old execution  
Ancien exécution  
Vieja ejecución

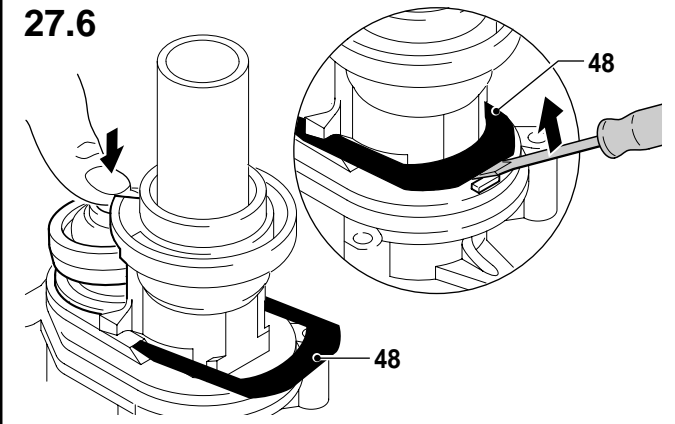
27.4



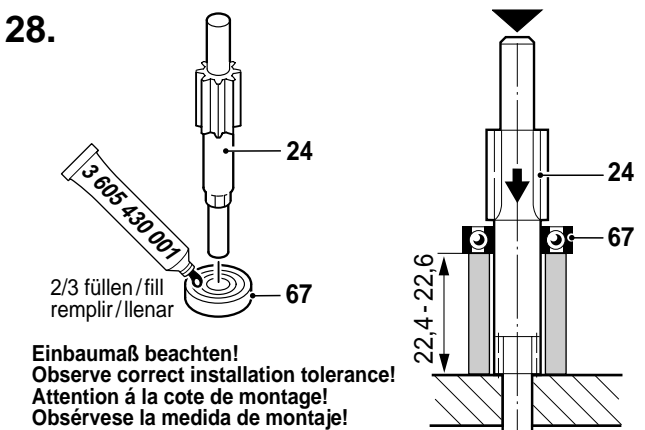
27.5



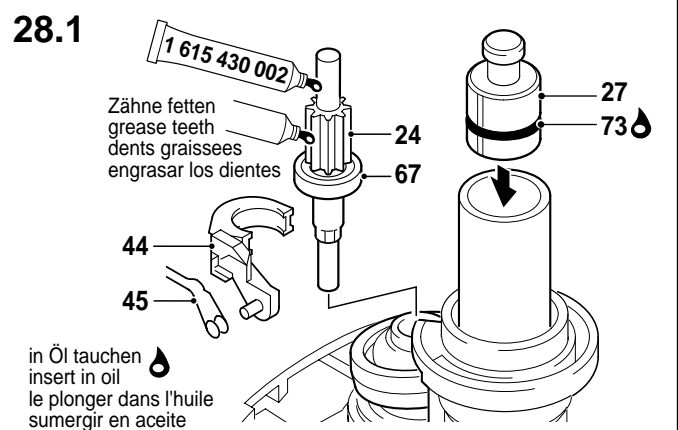
27.6



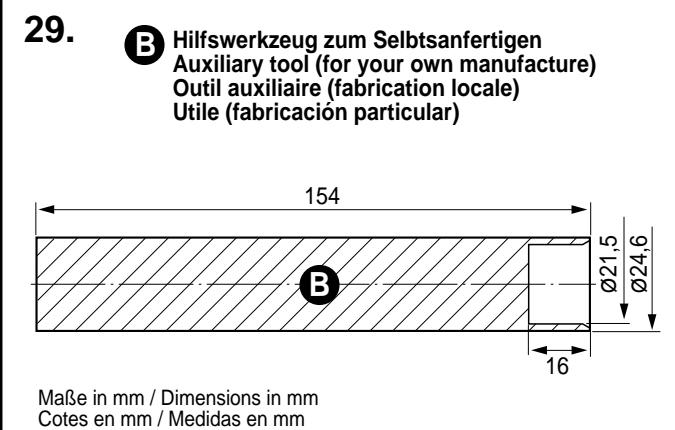
28.



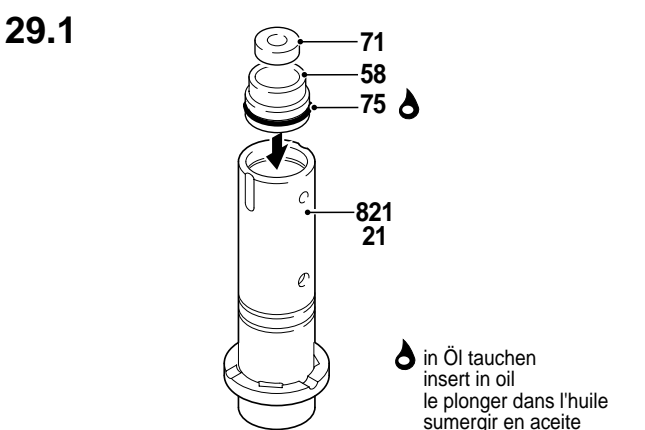
28.1



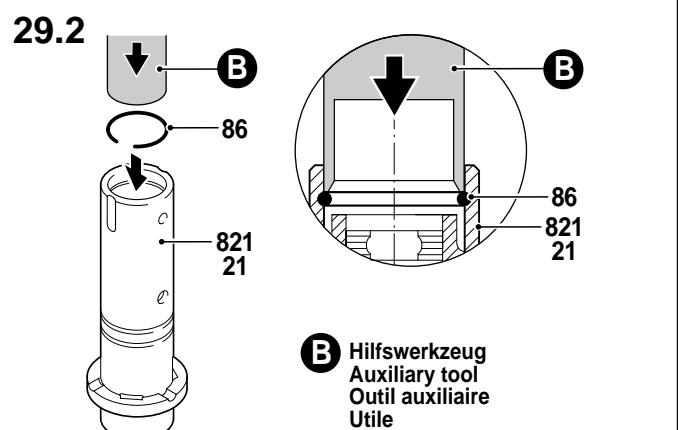
29.



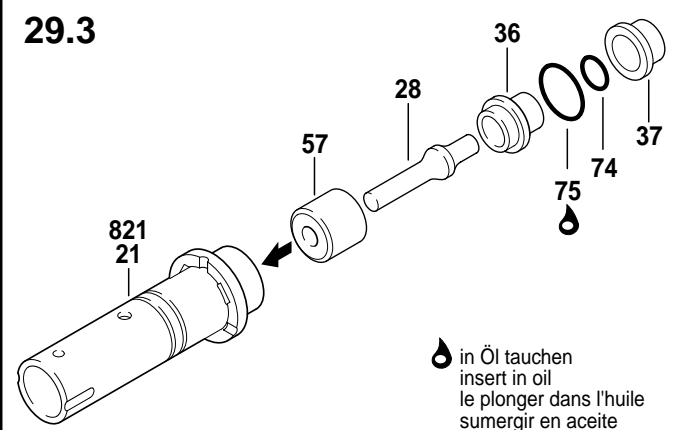
29.1



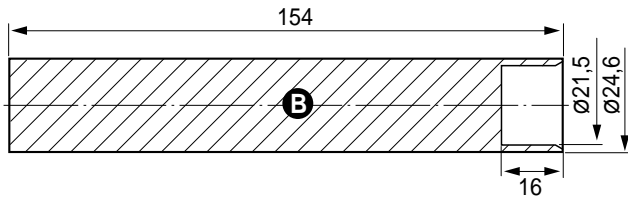
29.2



29.3

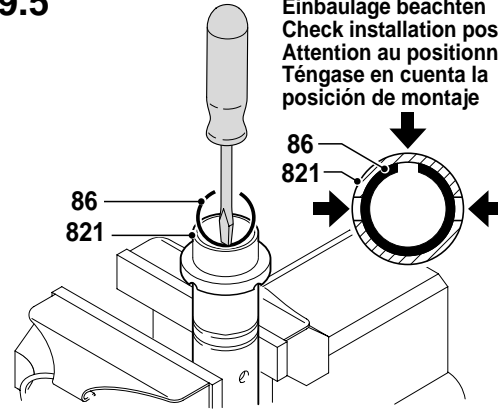


**29.4** **B** Hilfswerkzeug zum Selbstanfertigen  
 Auxiliary tool (for your own manufacture)  
 Outil auxiliaire (fabrication locale)  
 Utile (fabricación particular)

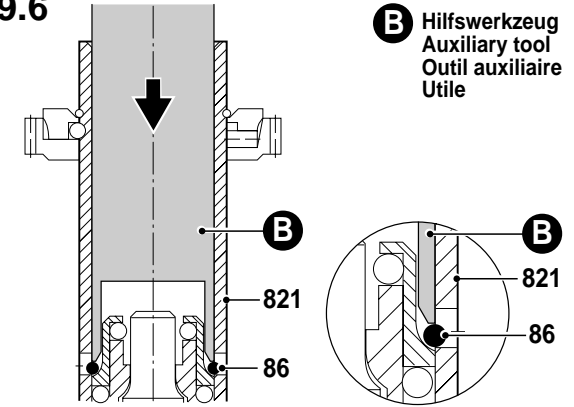


Maße in mm / Dimensions in mm  
 Cotes en mm / Medidas en mm

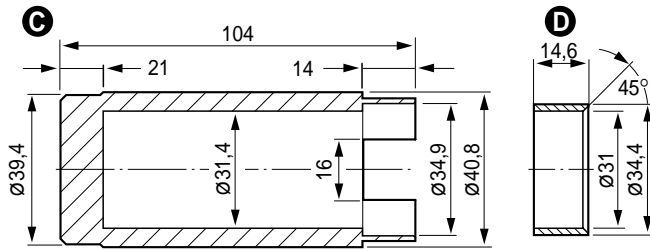
**29.5** Einbaurage beachten  
 Check installation position  
 Attention au positionnement  
 Téngase en cuenta la posición de montaje



**29.6** **B** Hilfswerkzeug  
 Auxiliary tool  
 Outil auxiliaire  
 Utile

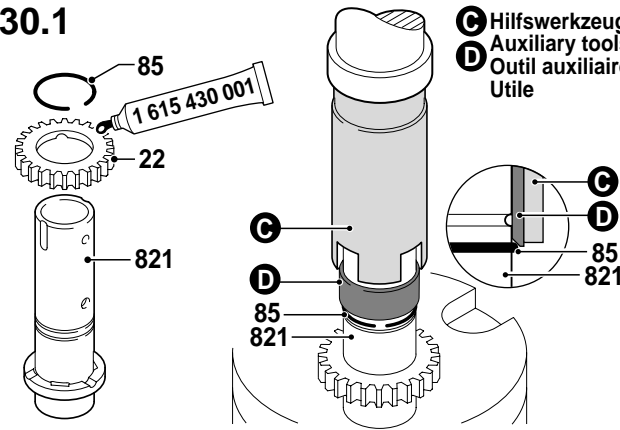


**30.** **C** **D** Hilfswerkzeuge zum Selbstanfertigen  
 Auxiliary tools (for your own manufacture)  
 Outil auxiliaire (fabrication locale)  
 Utile (fabricación particular)

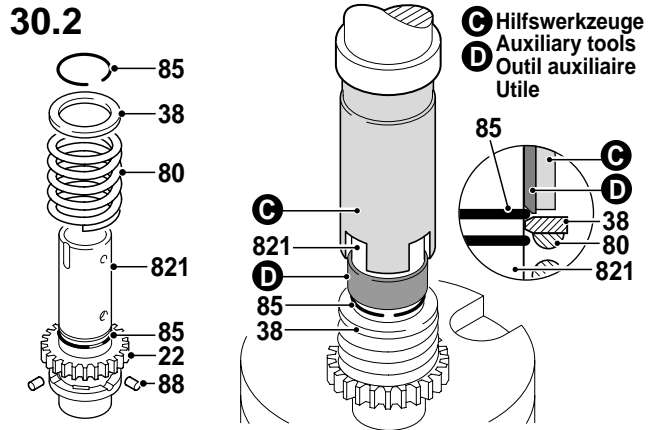


Maße in mm / Dimensions in mm  
 Cotes en mm / Medidas en mm

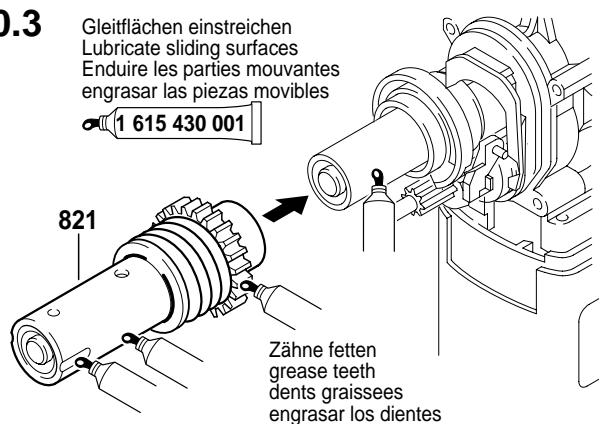
**30.1** **C** Hilfswerkzeuge  
 Auxiliary tools  
 Outil auxiliaire  
 Utile



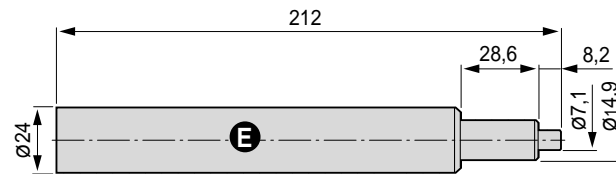
**30.2** **C** Hilfswerkzeuge  
 Auxiliary tools  
 Outil auxiliaire  
 Utile



**30.3** Gleitflächen einstreichen  
 Lubricate sliding surfaces  
 Enduire les parties mouvantes  
 engrasar las piezas móviles

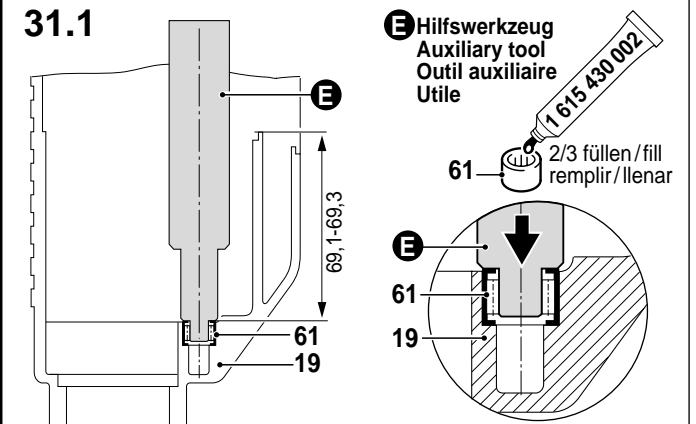


**31.** **E** Hilfswerkzeug zum Selbstanfertigen  
 Auxiliary tool (for your own manufacture)  
 Outil auxiliaire (fabrication locale)  
 Utile (fabricación particular)

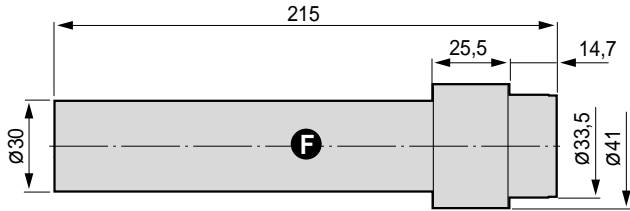


Maße in mm / Dimensions in mm  
 Cotes en mm / Medidas en mm

**31.1** **E** Hilfswerkzeug  
 Auxiliary tool  
 Outil auxiliaire  
 Utile

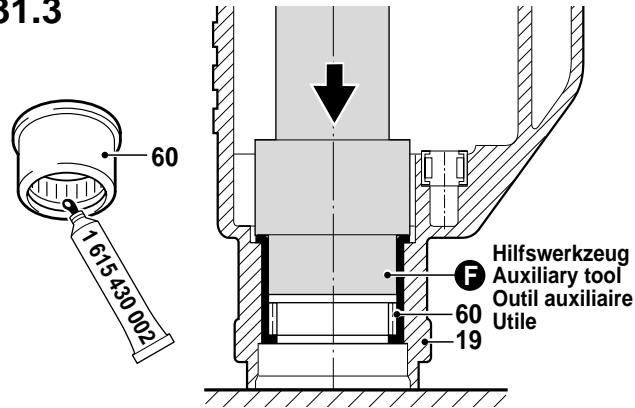


**31.2** **F** Hilfswerkzeug zum Selbstanfertigen  
 Auxiliary tool (for your own manufacture)  
 Outil auxiliaire (fabrication locale)  
 Utile (fabricación particular)

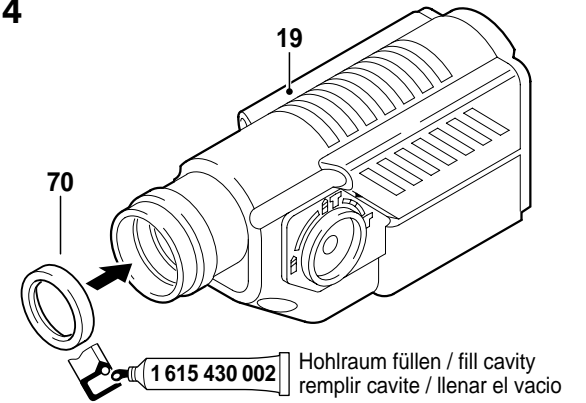


Maße in mm / Dimensions in mm  
 Cotes en mm / Medidas en mm

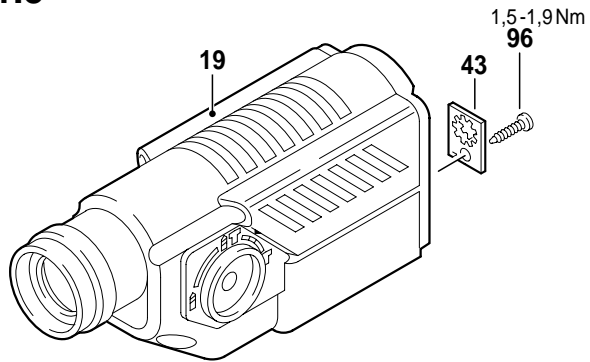
**31.3**



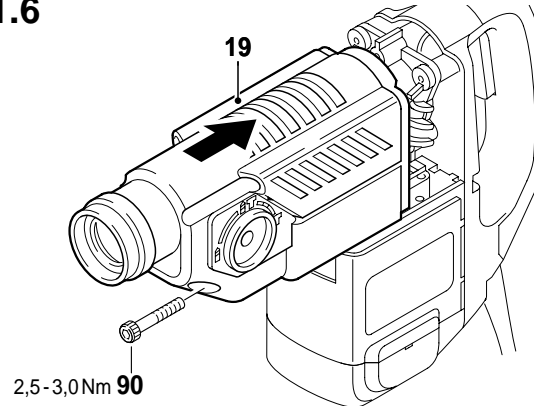
**31.4**



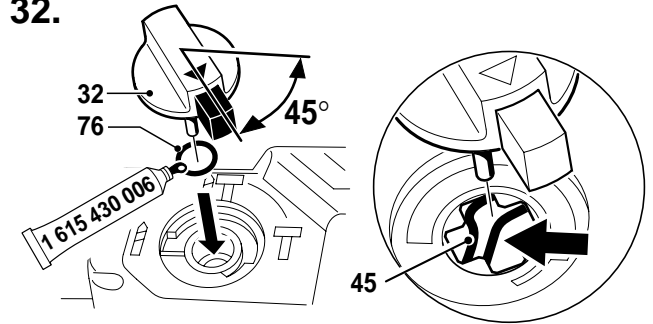
**31.5**



**31.6**

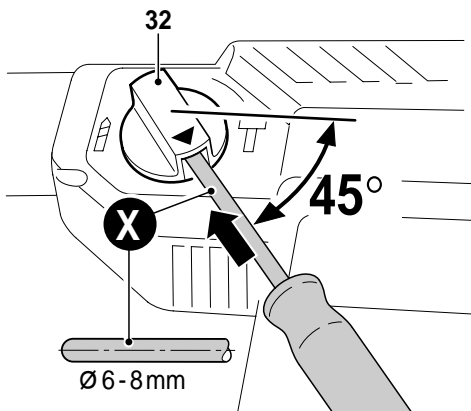


**32.**

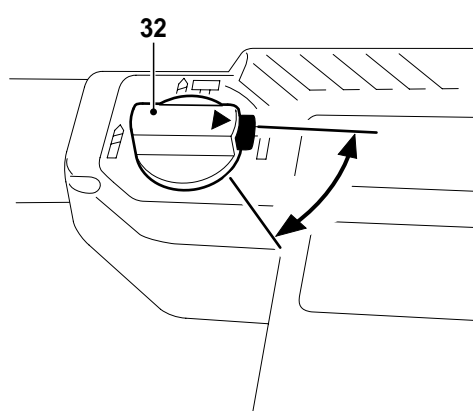


Gleitflächen einstreichen  
 Lubricate sliding surfaces  
 Enduire les parties mouvantes  
 engrasar las piezas móviles

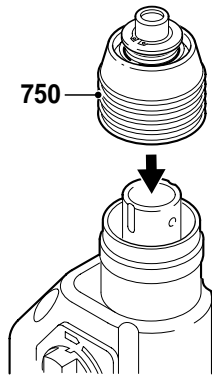
**32.1**



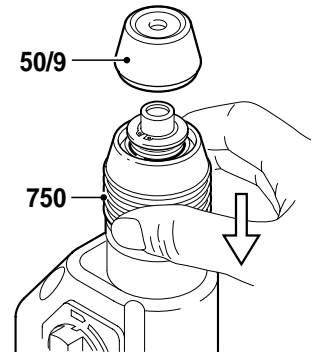
**32.2**



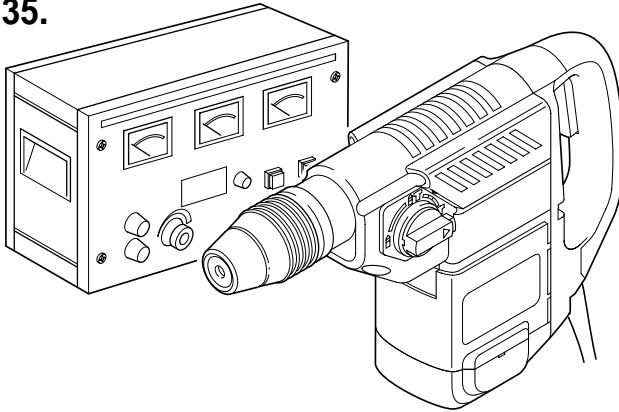
33.



34.



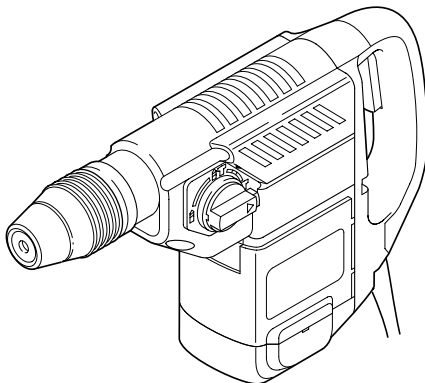
35.



34. Hochspannungsprüfung durchführen.  
**Beachten:**  
Die Sicherheitsvorschriften nach DIN, VDE, CEE, AFNOR und weitere in den einzelnen Ländern gültigen Vorschriften sind einzuhalten.
34. Carry out power supply check.  
**Attention:**  
Safety regulations according to DIN, VDE, CEE, AFNOR and further regulations applicable in individual countries must be observed.

34. Effectuer un contrôle à haute tension.  
**Attention:**  
Respecter les instructions de sécurité selon DIN, VDE, CEE, AFNOR et les autres instructions valables dans les pays respectifs.
34. Efectuar la prueba de alta tensión.  
**Atención:**  
Atenerse a las prescripciones de seguridad según DIN, VDE, CEE, AFNOR y a las prescripciones adicionales específicas que pudieran existir en los respectivos países.

36.



35. Probelauf, Schlagtest, elektrische und mechanische Prüfung durchführen.
35. Perform test run, impact test, electrical and mechanical check-up.

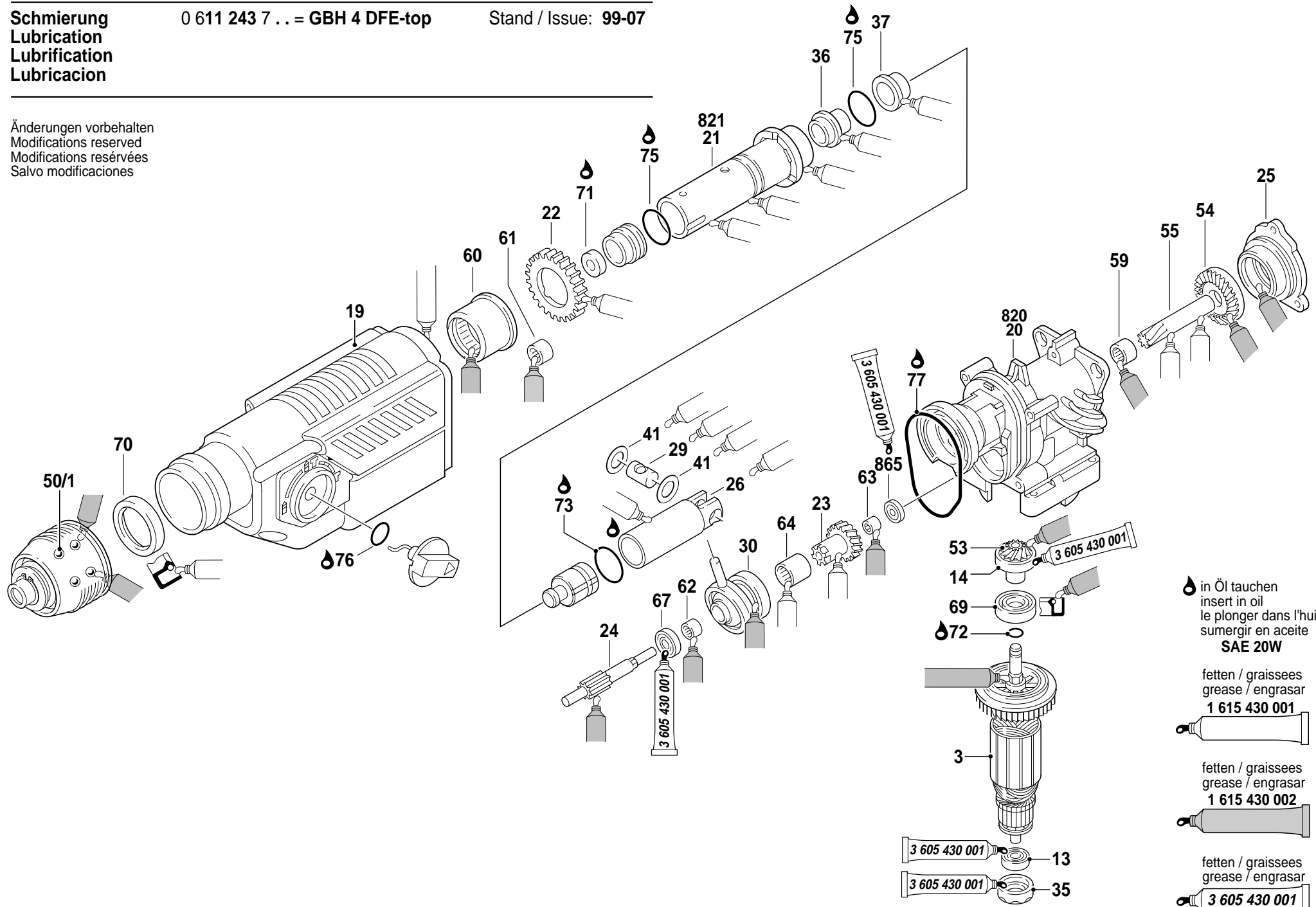
35. Marche à titre d'essai, contrôle de frappe et depercage, effectuer un contrôle mécanique et électrique.
35. Realizar un control funcional, una prueba de taladrado con y sin percusión y los ensayos eléctricos y mecánicos correspondientes.

**Schmierung  
Lubrication  
Lubrification  
Lubricacion**

0 611 243 7 .. = GBH 4 DFE-top

Stand / Issue: 99-07

Änderungen vorbehalten  
Modifications reserved  
Modifications réservées  
Salvo modificaciones



in Öl tauchen  
insert in oil  
le plonger dans l'huile  
sumergir en aceite  
**SAE 20W**

fetten / graisses  
grease / engrasar  
**1 615 430 001**

fetten / graisses  
grease / engrasar  
**1 615 430 002**

fetten / graisses  
grease / engrasar  
**3 605 430 001**



**Schmierung  
Lubrication  
Lubrification  
Lubricacion**

0 611 243 7 . . = GBH 4 DFE-top

Stand / Issue: 99-07

Änderungen vorbehalten  
Modifications reserved  
Modifications réservées  
Salvo modificaciones

Schmierstelle Lubrication point Point de lubrification Punto de lubricacion	Fig./Pos.	Schmierstoff Fett Öl Lubricant grease oil Lubrifiant graisse huile Lubricante grasa aceite	Mengen Quantity Quantite Cantidad	Schmiervorschrift Lubricating instructions Indications de graissage Instrucciones de lubricacion
Getriebe und Schlagwerkraum Gear and percussion mechanism space Carter de l' engrenage et boitier du systeme de frappe Engranaje y parte de engranaje	19	1 615 430 001	35 - 40g	Teile fetten, Rest in Getrieberaum grease the parts, rest into gear compartment graisser les pieces, la graisse restante dans le compartiment d'engrenage engrasar las piezas, resto en el compartimento del engranaje
Gleitende Teile Sliding parts Pieces glissantes Piezas deslizantes	820(20) 21; 22 26; 29 36; 37			Gleitflächen einstreichen lubricate sliding surfaces enduire les parties mouvantes engrasar las piezas movibles
Nadelhülse Needle bushing Douille a aiguilles Casquillo de agujas	64			*fetten grease graisser engrasar
Ritzel; Tellerrad Pinion; crown gear Pignon; Couronne d'angle Pinon; rueda dentada	53 54		10g	Zähne fetten grease teeth dents graissees engrasar los dientes
Zahnhülse gear sleeve Douille dentee Casquillo de dentado ext	23			Zähne fetten grease teeth dents graissees engrasar los dientes
Zwischenwelle, Jack shaft, Arbre intermediaire Arbol intermediario	55			Zähne fetten grease teeth dents graissees engrasar los dientes
Wellendichtring Shaft sealing ring Joint a levres Reten para arboles	70			Hohlraum zwischen Dichtlippen füllen fill cavity between sealing lips remplir cavite entre les levres du joint llenar el vacio entre los labios del reten
Gummiring Rubber ring Bague en caoutchouc Anillo de goma	35	3 605 430 001		Fettdepot füllen fill cavity remplir cavite llenar el vacio
Rillenkugellager Deep-groove ball bearing Roulement a billes rigide Rodamiento radial rigido	13 14 67 865			*2/3 füllen fill remplir llenar

Schmierstelle Lubrication point Point de lubrification Punto de lubricacion	Fig./Pos.	Schmierstoff Fett Öl Lubricant grease oil Lubrifiant graisse huile Lubricante grasa aceite	Mengen Quantity Quantite Cantidad	Schmierstoffvorschrift Lubricating instructions Indications de graissage Instrucciones de lubricacion
Ankerwellen-Sechskant Armature hexagon shaft Arbre d' induit Arbol de inducido	3	1 615 430 002 (GLL 6N3)		fetten grease graisser engrasar
Zahnrad; Ritzel Toothed gear; pinion Roue d'engrenage; pignon Rueda de engranaje; pinon	24 53 54			Zähne füllen, fetten Fill teeth, grease remplir les dents, graisser Llenar dientes, engrasar
Kugellager Ball bearing Roulement a billes Rodamiento a bolas	25 30			*2/3 füllen fill remplir llenar
Nadelhülse Needle bushing Douille a aiguilles Casquillo de agujas	59 60; 61 62; 63			*2/3 füllen fill remplir llenar
Wellendichtring Shaft sealing ring Joint a levres Reten para arboles	69			Hohlraum zwischen Dichtlippen füllen fill cavity between sealing lips remplir cavite entre les levres du joint llenar el vacio entre los labios del reten
Kugeln Balls Billes Bolas	50/1			fetten grease graisser engrasar
Gummiring Rubber ring Bague en caoutchouc Anillo de goma	35	SAE 20 W Mineralöl, handelsüblich Mineral oil, standard / Huile minerale en vente dans le commerc Aceite usual en el comercio		einölen; in Öl tauchen oil; dip in oil huiler; le plonger dans l'huile engrasar con aceite; sumergir en aceite
O-Ring; Abstreifer O-ring; scraper Joint torique; racloir Anillo toroidal; separator	71; 72 73; 75 76; 77			einölen; in Öl tauchen oil; dip in oil huiler; le plonger dans l'huile engrasar con aceite; sumergir en aceite
Hammerkolben Hammer piston Piston de marteau Embolo del martillo	26			Vor Montage in Öl tauchen dip in oil before assembly le plonger dans l'huile avant assemble engrasar con aceite, montaje

\*sofern Lager ungefettet  
if bearing is unlubricated  
si roulement n'est pas graisse  
en caso de que el rodamiento esta son grasa

**Prüfwerte**  
**Testing values**  
**Valeurs de vérification**  
**Valores de control**

0 611 243 7 .. = GBH 4 DFE-top

Stand / Issue: 99-07

Spannung Voltage Voltage Voltaje	Leerlauf no-load running marche à vide marcha en vacío		Widerstand (20°C/ 68°F) resistance résistance resistencia		Zulässige Übertemperatur im Leerlauf admissible over temperature at no-load élévation admissible de température à vide sobretemperatura admisible en vacío		
V Typ	A	Spindeldrehzahl speed of spindle vitesse de la broche velocidad del husillo 1/min - rpm - t/mn - rpm Stufe	des Ankers of rotor du rotor del rotor Ω	einer Feldspule of one stator coil d'une bobine du stator de una bobina del estator Ω	Motor motor moteur motor °C	Getriebe gear engrenage engrenaje °C	Arbeitsspindel spindle broche husillo °C
100	5.110 - 6.490	- 576 - 784 - 0 - 0	0.340 - 0.470	0.339 - 0.469	15	25	35
110	4.920 - 6..280	- 576 - 784 - 0 - 0	0.455 - 0.597	0.339 - 0.469	15	25	35
115	4.435 - 6..165	- 576 - 784 - 0 - 0	0.477 - 0.643	0.339 - 0.469	15	25	35
230	1.695 - 2.505	- 682 - 859 - 0 - 0	2.574 - 3.276	1.873 - 2.397	15	25	35
240	1.695 - 2.505	- 682 - 859 - 0 - 0	2.574 - 3.276	1.873 - 2.397	15	25	35

Bemerkung: Überrasstmoment der Kupplung 25 - 31 Nm. Bei nicht erreichen von 25 Nm, Kupplung ersetzen.  
 For your notice: Slipping point of clutch 25 - 31 Nm. Under 25 Nm replace clutch.

Kollektor-Mindestdurchmesser: mm  
 Minimum diameter of commutator:  
 Diamètre minimum du collecteur:  
 Diámetro mínimo del colector:

Kohlebürsten-Mindestlänge:  
 Minimum length of brushes:  
 Longueur minimale des balais:  
 Longitud mínima de las escobillas:

= X Abschaltkohlen  
 cut-off brushes  
 charbon rupteur  
 carbón de desconexión

**Änderungen vorbehalten**

Unsere Erzeugnisse werden stets dem neuesten technischen Stand angepaßt. Deshalb müssen wir uns Änderungen von technischen Daten vorbehalten.

**Modifications**

Our products are constantly modified to meet new technical standards. We there-fore reserve the right to alter data and specifications without prior notice.

**Modifications**

Nos produits sont continuellement adaptés aux dernières nouveautés techniques et les dates sont données sous réserve de changement.

**Modificaciones**

Nuestros fabricados van siendo adaptados constantemente a las últimas conquistas técnicas. Por ello, tenemos que reservarnos el derecho de introducir modificaciones en los datos técnicos.