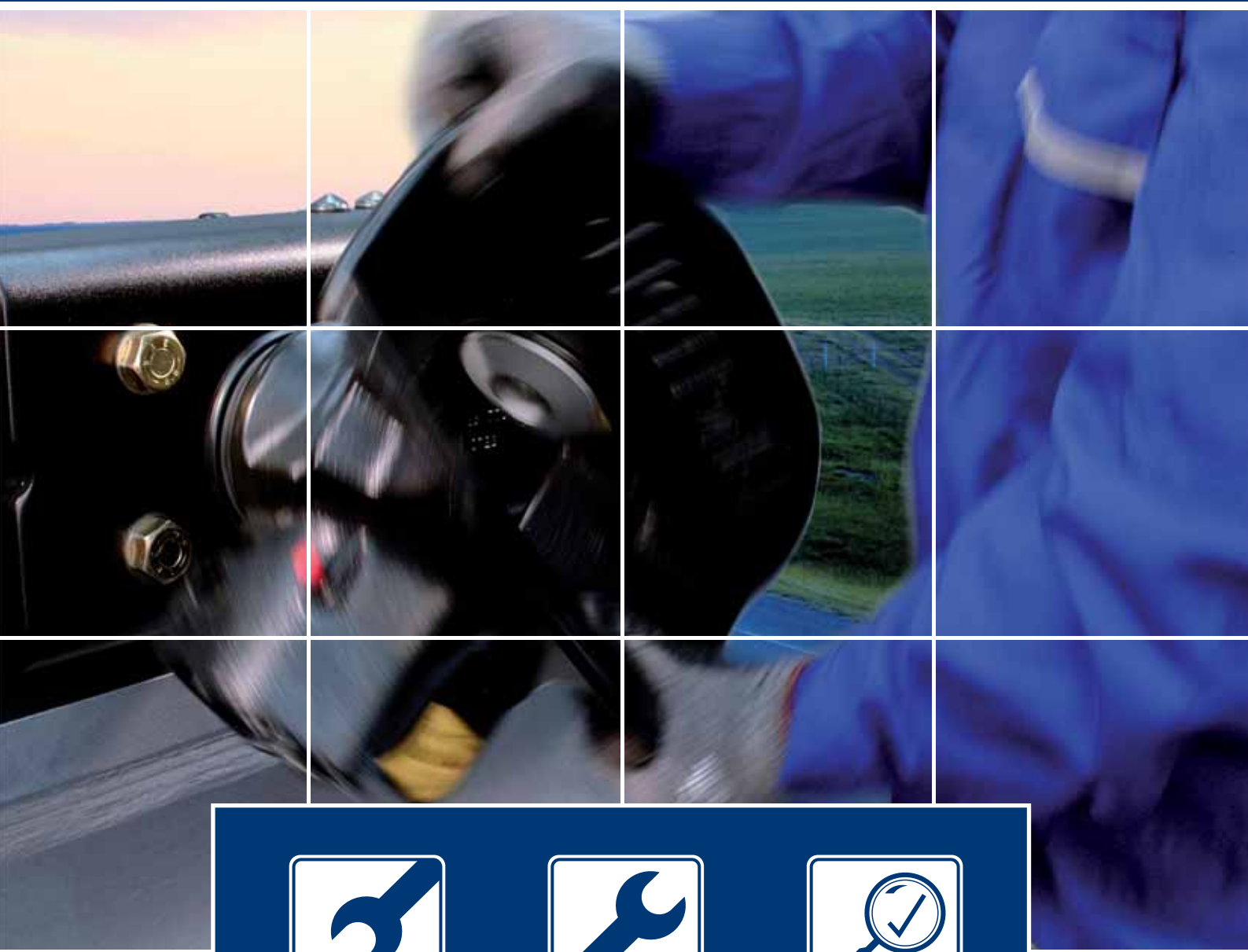




RINGFEDER



Inspection

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Explosionsdarstellungen | Exploded diagrams

8 Gruppe I. | Group I.

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Fahrzeug | Vehicle

12 Demontage vom Fahrzeug | Dismantling from vehicle

13 Montage am Fahrzeug | Fitting on vehicle

Reparaturanleitung | Repair instructions

14 Gruppe I. | Group I.

24 Gruppe II. | Group II.

38 Gruppe III. | Group III.

59 Montage Schwenkwinkelwarnanzeige | Fitting the collision alert

60 Demontage des Sensors | Dismantling the sensor

62 Montage des Sensors | Fitting the sensor

Reparaturen sollten nur in einer Fachwerkstatt durchgeführt werden.

Bei jedem Versplinten der Kronenmutter ist ein neuer, korrosionsgeschützter Splint zu verwenden!

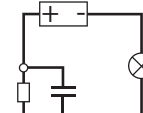
Beim Austausch von Bauteilen der Anhängerkupplung sind nur Original RINGFEDER-Ersatzteile zu verwenden, da ansonsten keine sichere Funktion gewährleistet ist und keinerlei Gewährleistungsansprüche bestehen.

Repairs should only be carried out by a professional workshop.

To fix the castellated nut with a cotter pin attend to always using new, corrosion-resisting cotter pin!

When replacing component parts of the trailer coupling only original RINGFEDER spare parts are to be used, since otherwise a safe performance cannot be safe guarded and every guarantee ceases.

Zeichenerklärung | Signs and Symbols

 Explosionsdarstellung Explosion diagram	 Anzugsmoment Tightening torque	 Erst Druckluftzufuhr stoppen First cut off supply of compressed air
 Demontage Dismantling	 Achtung! Caution!	 Schweißpunkt mit Flex trennen Disconnect spotweld with angle grinder
 Montage Fitting	 Verletzungsgefahr – Hand wird gequetscht Risk of injury – Hand is crushed	 Schweißen! Elektrode Ø 3,25 mm Heftstelle 15 mm, a = 3 mm Weld! Electrode Ø 3.25 mm Tack weld 15 mm, a = 3 mm ENIGB3/ENIGB2 (1), DIN 8573!
 Tabelle beachten! (Seite 5) Follow the table! (Page 5)	 Visuelle Kontrolle Visual control	 Schaltplan zur Montage LED und Steuereinheit Wiring scheme for fitting LED and control unit
 Lochbild (e1 x e2) Hole pattern (e1 x e2)	 Verschleißteil entsorgen und nicht wiederverwenden Dispose the wear part and do not reuse it	 Prüfung visuelle Kontrolle Inspection of visual control
 Schraube, Scheibe, Mutter Screw, washer, nut	 Reinigen Cleaning	 V (- +)
 Kronenmutter Castle nut	 Fetten (Bechem Berolub FR 16) Lubricate (Bechem Berolub FR 16)	 Kabel optional Id. - Nr. 14996737 Cable optional ID no.14996737
 Schlüsselweite Spanner opening	 Intervall 1 x pro Monat Interval 1 x per month	 Kabel vom Kunden Cable from customer

Kupplungsübersicht | Overview Couplings

Gruppe Group	 Seite Page	Ø 40 mm Typ Type ...	Ø 50 mm Typ Type ...
I.	8	 86 G/110	 80 A/B

Gruppe Group	 Seite Page	Ø 40 mm Typ Type ...	Ø 50 mm Typ Type ...
II.	9	 4040 A/B	 5050 A/B
		 4040 AM, AM/RL	 5050 AM, AM/RL
		 4045 A/B	
		 4045 AM, AM/RL	

Gruppe Group	 Seite Page	Ø 40 mm Typ Type ...	Ø 50 mm Typ Type ...
III.	10, 11	—	 5055 A
			 5055 AM, AM/RL
			 5055 AP
			 5055 AW

Tabellen | Tables

						
e1 x e2 (mm)	Ø d2 (mm)		ISO 7089	ISO 7042	Nm (± 5%)	mm
83 x 56	10,5	M 10 (≥ 8.8)	≥ 200 HV	≥ 8	47	17 (16)
120 x 55	15	M 14 (≥ 8.8)	≥ 200 HV	≥ 8	130	22
140 x 80	17	M 16 (≥ 8.8)	≥ 200 HV	≥ 8	200	24
140 x 80	17	M 16 (≥ 8.8)	≥ 200 HV	≥ 8	200	24

1		

	 Nm	 mm
M 30	≥ 250	46
M 36 x 3	≥ 350	55
M 45 x 3	≥ 500	70

	2	

Identifizierung der Kupplung | Identification of coupling

Typenschild | Type plate



Zugstange | Connecting rod



Der auf der Zugstange eingestanzte Code kann auch zur Identifizierung des Kupplungstypen dienen

The code stamped into the connecting rod can also serve to identify the coupling type

Diagnosetabellen | Diagnosis tables

Kuppelmechanismus löst nicht aus | Coupling mechanism does not release

Bauteil Component	Rep.-Nr. Rep-No
Verschleißplatte Wear plate	1
Zugösenauge am Anhänger verschlissen Hitch ring eye on the trailer is worn	

zuviel Spiel in Stangenführung | Too much play in rod guidance system

Bauteil Component	Rep.-Nr. Rep-No
Gummifedern Rubber springs	6
Lagerbuchsen Stangenführung Guide bushings on rod guidance system	7
Führungsbuchsen Guide bushings	10

Kuppelbolzen bleibt nicht oben | Coupling bolt does not stay up

Bauteil Component	Rep.-Nr. Rep-No
Abschlussdeckel End cap	4

Öffnungs- und Schließvorgang ist gestört | Opening and closing process is faulty

Bauteil Component	Rep.-Nr. Rep-No
Handhebel - Sperrhebel Hand lever – locking lever	8

Signalstift bleibt trotz geschlossener Kupplung draußen | Signal pin stays out despite closed coupling

Bauteil Component	Rep.-Nr. Rep-No
Sicherung Safety device	9
Sensor Sensor	15

Kupplung öffnet nicht richtig | Coupling does not open properly

Bauteil Component	Rep.-Nr. Rep-No
Kuppelkörper Coupling body	11
Rückstellfeder Return spring	3
Bei Typ 5055 Verschleißplatte On type 5055 wear plate	1

Höhenspiel in Stangenführung | Vertical play in rod guidance system

Bauteil Component	Rep.-Nr. Rep-No
Lagerbuchsen Guide bushings	7
Dämpfungspaket falsch eingebaut Damping assembly fitted incorrectly	Seite Page 13

Funktionsstörung der Fernbetätigung | Function fault in remote control

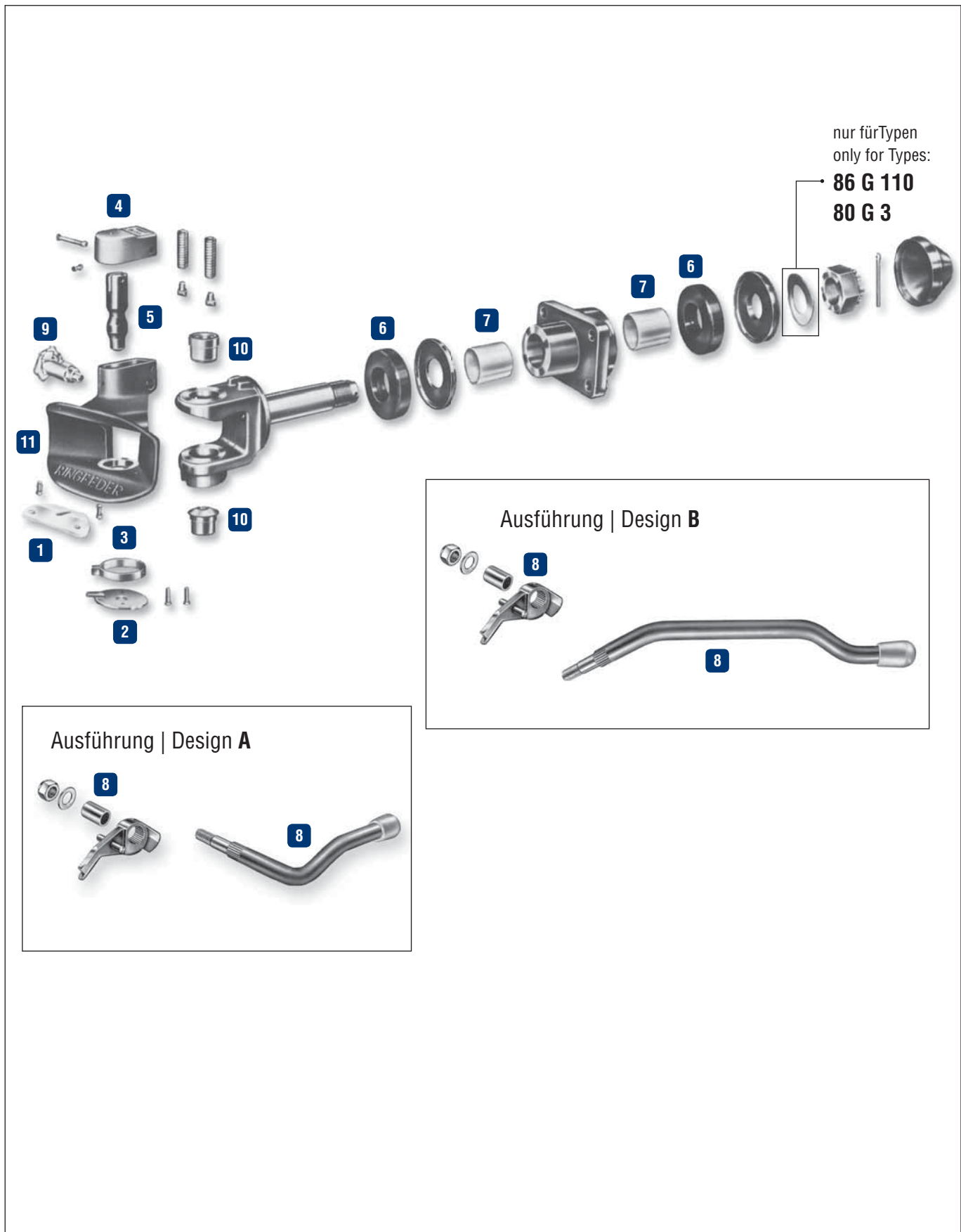
Bauteil Component	Rep.-Nr. Rep-No
Abschlussdeckel End cap	4

Reparaturanleitung | Repair instructions

Rep.-Nr. Rep-No	Reparatur / Austausch Repair / exchange	Gruppe Group	 Seite (Abb.) Page (Fig)	 Seite (Abb.) Page (Fig)
1	Verschleißplatte Wear plate	I.	16 (I.1-7)	21 (I.39-48)
		II.	26 (II.1-10)	33 (II.55-61)
		III.	45 (III.1-37)	50 (III.67-77)
2	Nasenscheibe Tab washer	I.	16 (I.1-9)	21 (I.37-48)
		II.	26 (II.1-12)	33 (II.53-61)
		III.	–	–
3	Rückstellfeder Return spring	I.	16 (I.1-9)	21 (I.37-48)
		II.	26 (II.1-12)	34 (II.53-61)
		III.	39 (III.1-3)	52 (III.75-77)
4	Abschlussdeckel End cap	I.	15 (I.1)	23 (I.48)
		II.	25 (II.1)	36 (II.61)
		III.	39 (III.1-4)	52 (III.74-77)
5	Kuppelbolzen Coupling bolt	I.	15 (I.1-3)	23 (I.46-48)
		II.	25 (II.1-6)	35 (II.59-61)
		III.	39 (III.1-4)	51 (III.72-77)
6	Gummifedern Rubber springs	I.	17 (I.1-8)	21 (I.34-48)
		II.	28 (II.1-21)	32 (II.40-61)
		III.	46 (III.1-46)	48 (III.56-77)
7	Lagerbuchsen / Stangenführung Guide bushings / rod guidance system	I.	18 (I.1-21)	19 (I.22-48)
		II.	28 (II.1-25)	31 (II.32-61)
		III.	46 (III.1-50)	48 (III.51-77)
8	Handhebel / Sperrhebel Hand lever / locking lever	I.	15 (I.1-4)	22 (I.45-48)
		II.	26 (II.1-7)	35 (II.58-61)
		III.	40 (III.1-7)	51 (III.71-77)
9	Sicherung Safety device	I.	15 (I.1-6)	22 (I.40-48)
		II.	26 (II.1-9)	35 (II.56-61)
		III.	44 (III.1-34)	51 (III.69-77)
10	Obere / untere Führungsbuchse Upper / lower guide bushing	I.	16 (I.1-15)	19 (I.27-48)
		II.	27 (II.1-18)	33 (II.46-61)
		III.	45 (III.1-43)	49 (III.59-77)
11	Kuppelkörper Coupling body	I.	17 (I.1-13)	20 (I.29-48)
		II.	27 (II.1-16)	33 (II.48-61)
		III.	45 (III.1-43)	50 (III.66-77)
12	Besonderheiten bei 4045 Special features on 4045	II.	29 (II.26-31)	31 (II.37-39) 32 (II.43-45)
13	Besonderheiten bei AM, AM/RL, AP, AW Special features on AM, AM/RL, AP, AW	II.	25 (II.2-4)	36 (II.62-II.65)
		III.	40 (III.8-33)	53 (III.78-106)
14	Schwenkwinkelwarnanzeige Swivel angle indicator	III.	-	59 (III.107)
15	Demontage / Montage Sensor Dismantling / fitting of sensor	-	61 (S1-4)	62 (S5-8)



I. Typen | Types: 86 G/110 - 80 A/B





II. Typen | Types: 4040 A/B, AM, AM/RL · 4045 A/B, AM, AM/RL · 5050 A/B, AM, AM/RL

13

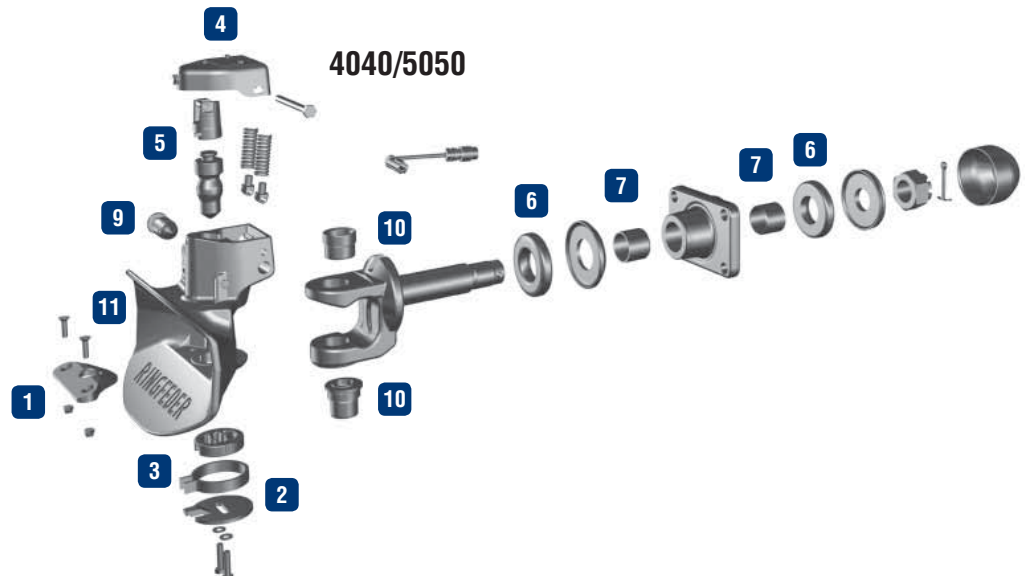


Ausführung | Design
AM, AM/RL

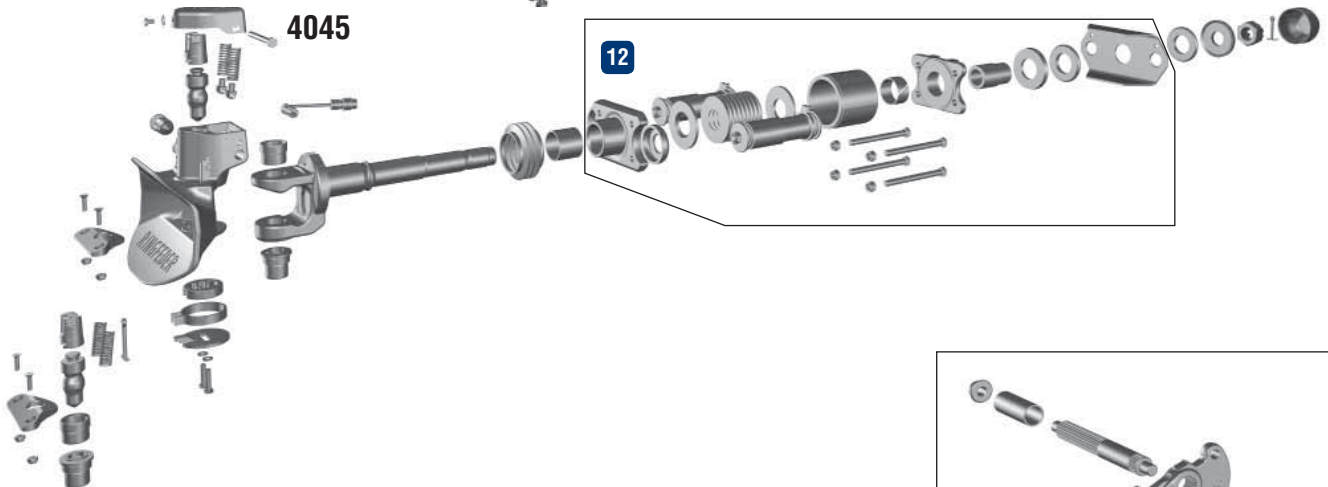
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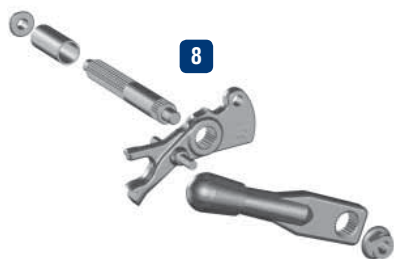
Ausführung | Design
5050 AM/RL



4045



Ausführung | Design A



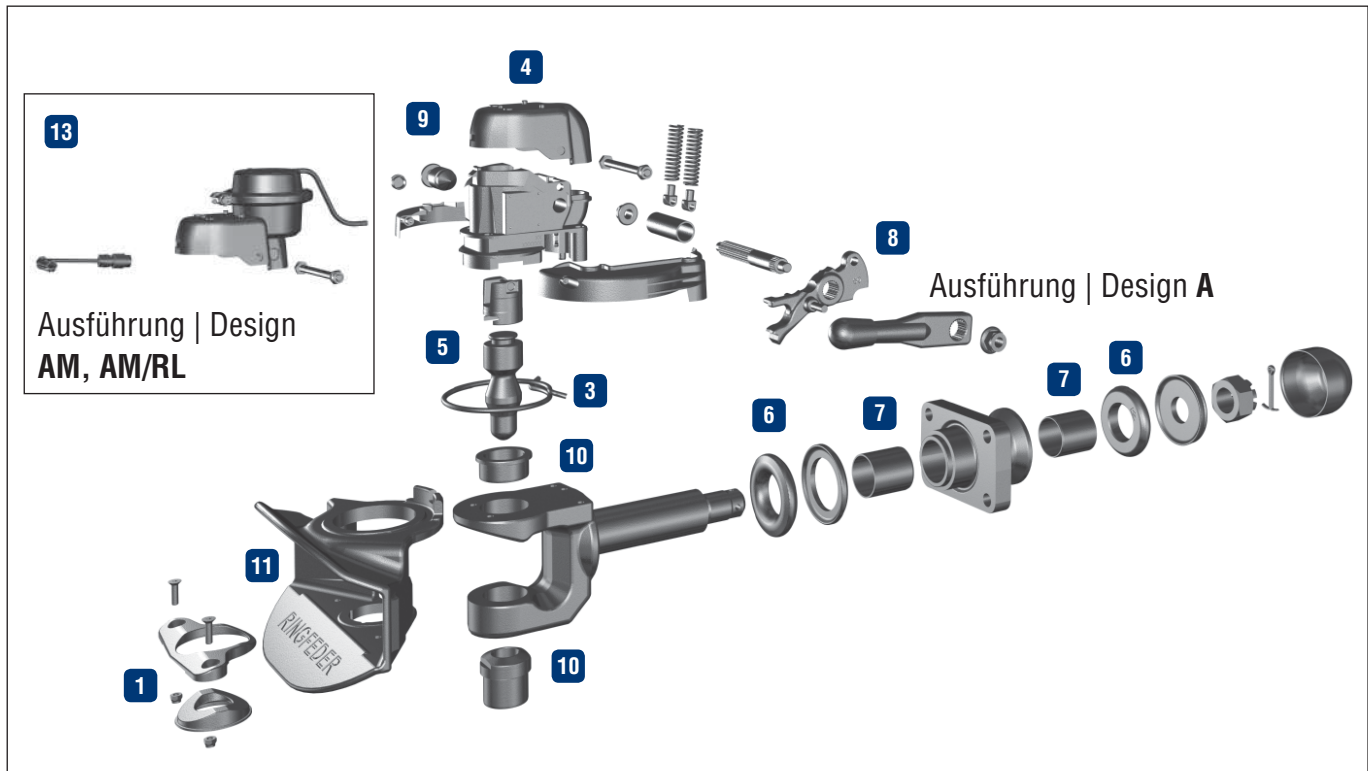
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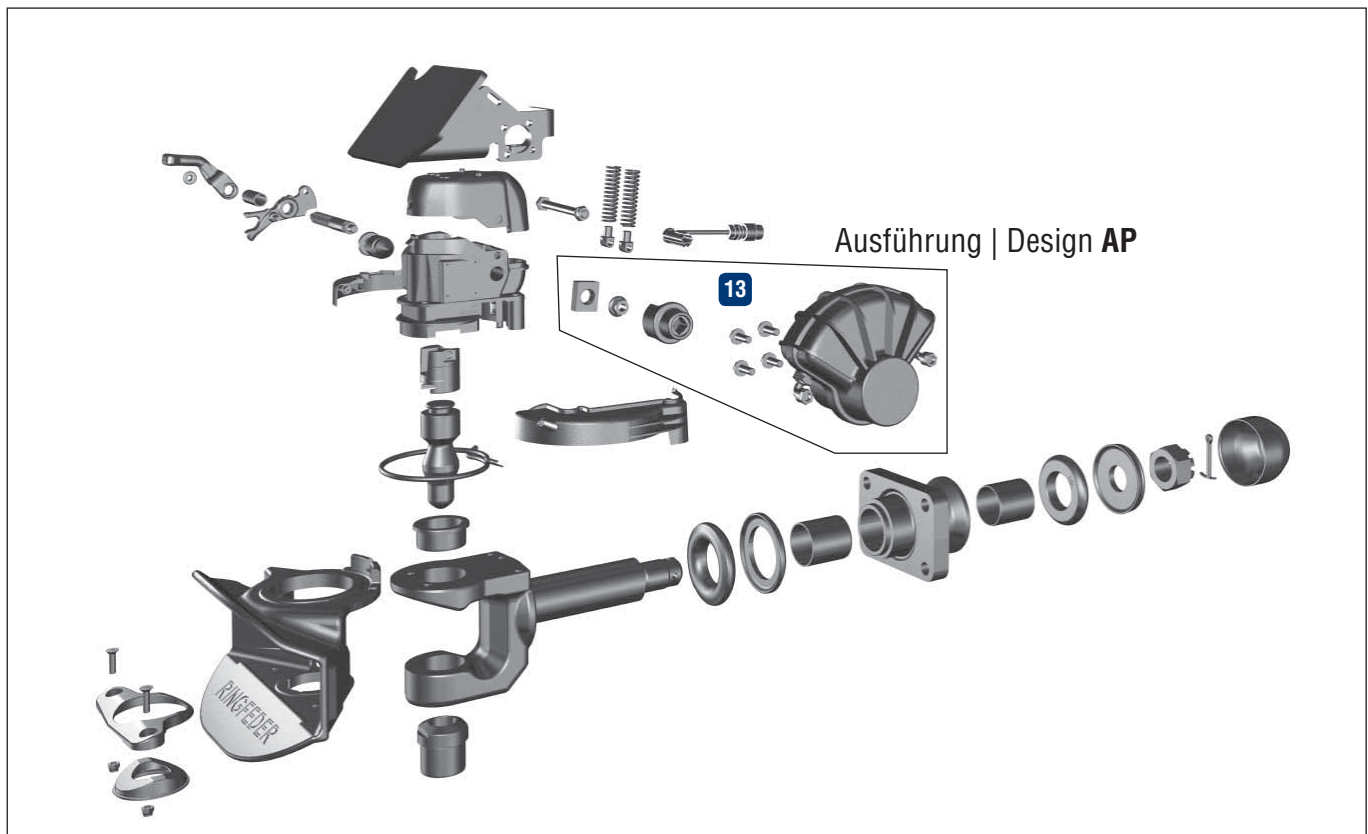
Ausführung | Design B



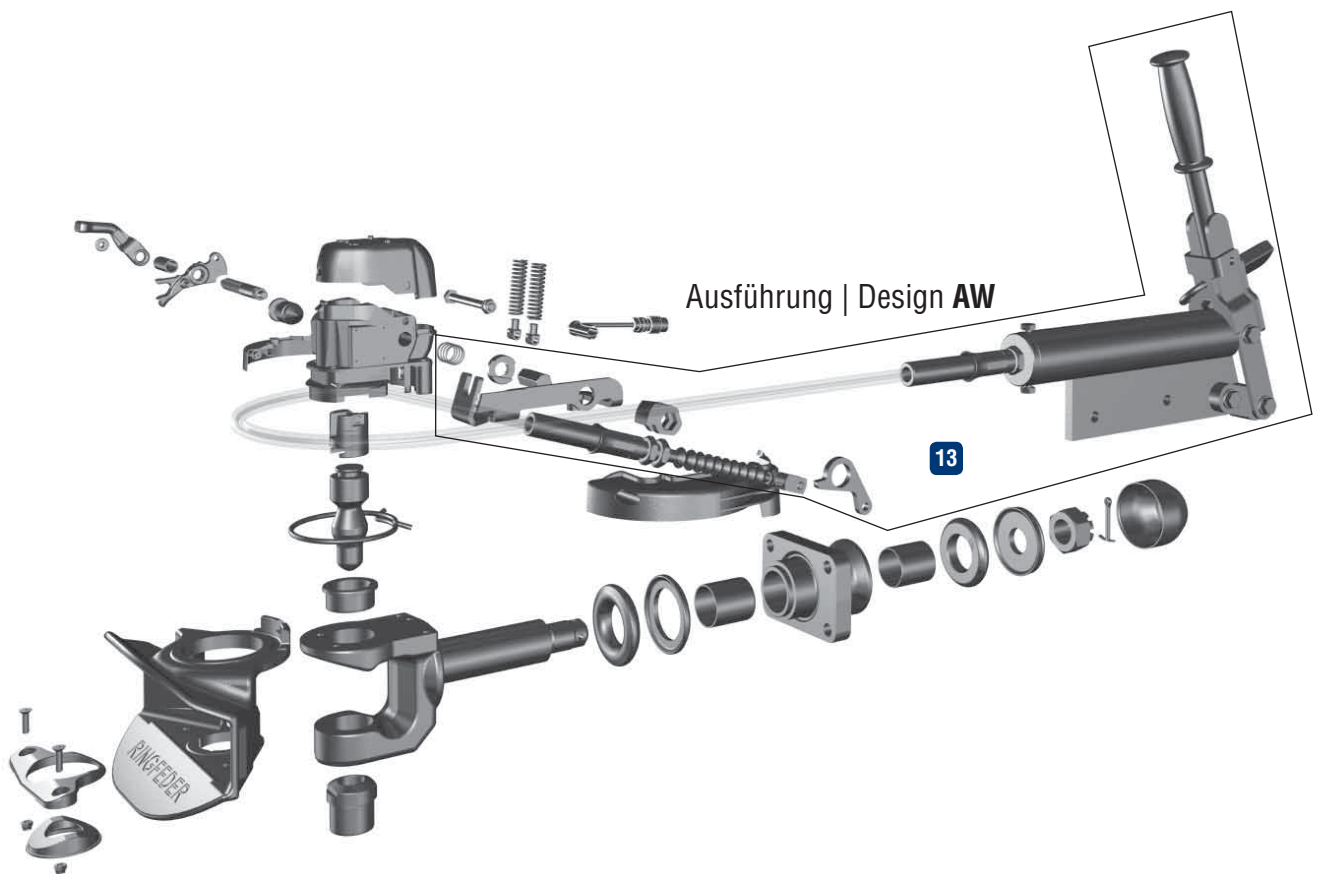
III. Typen | Types: 5055 A, AM, AM/RL

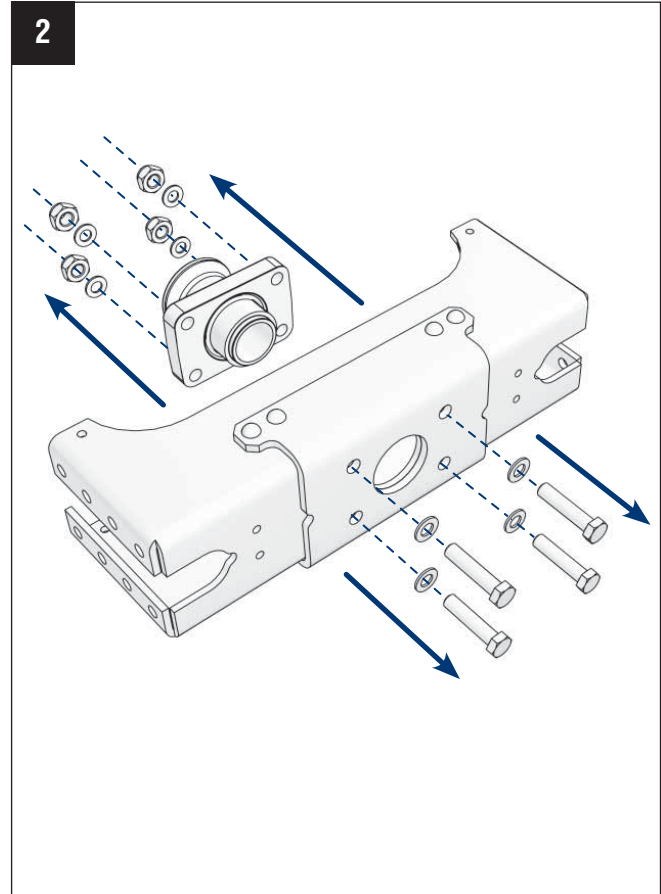
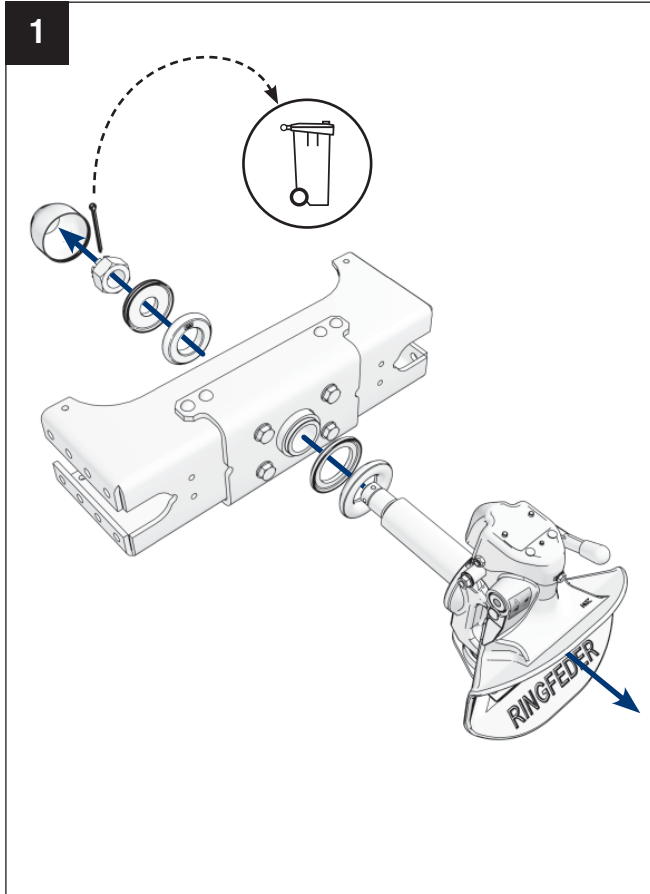


III. Typen | Types: 5055 AP

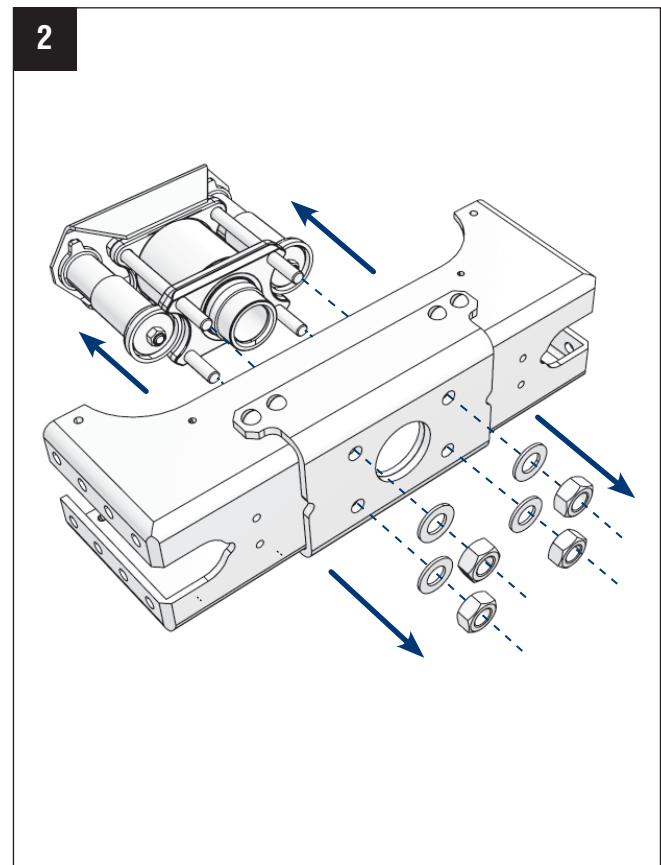
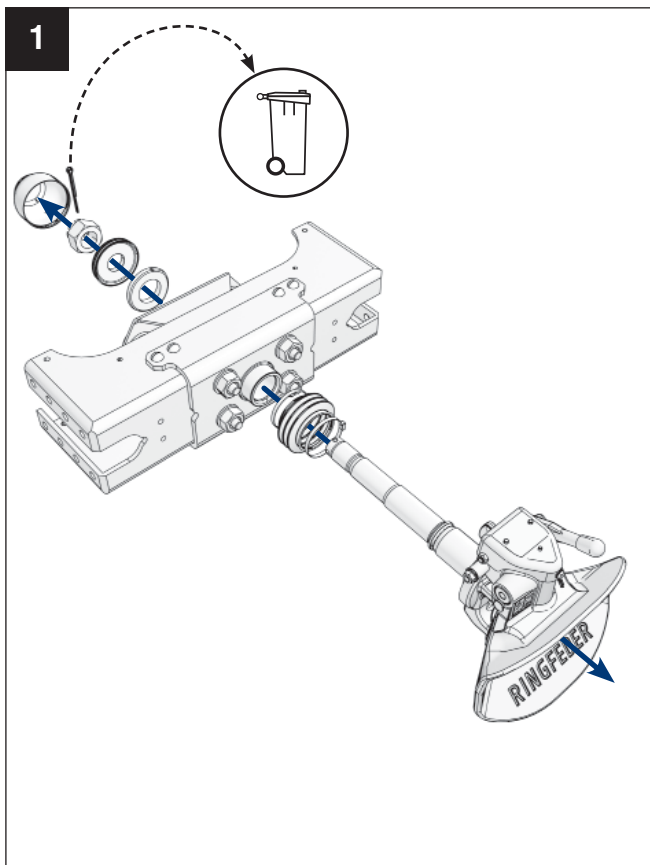


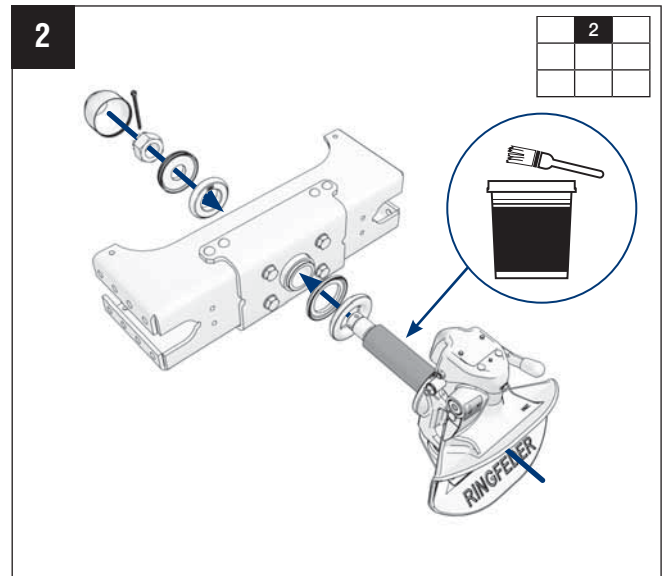
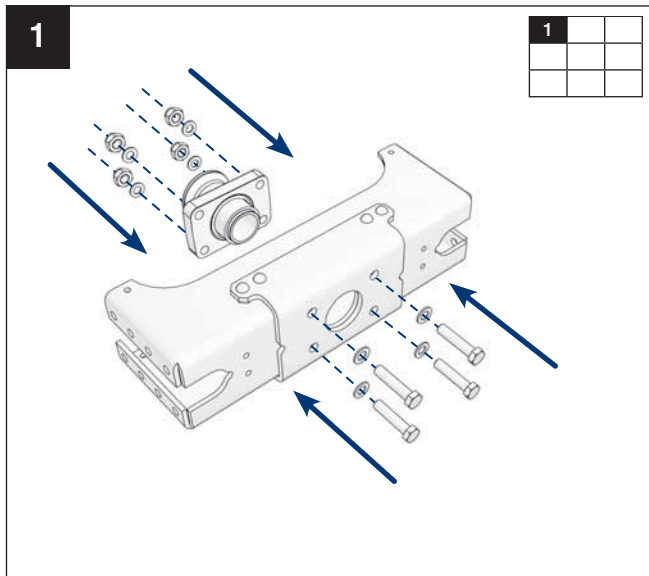
III. Typen | Types: 5055 AW



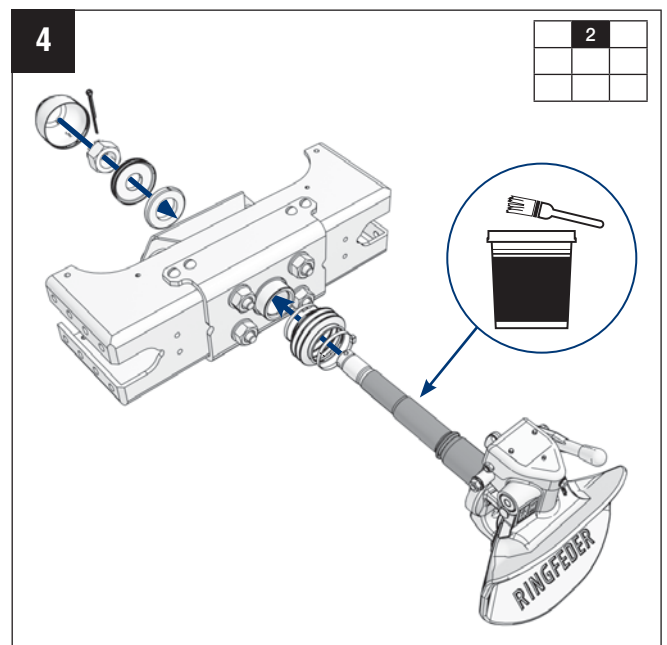
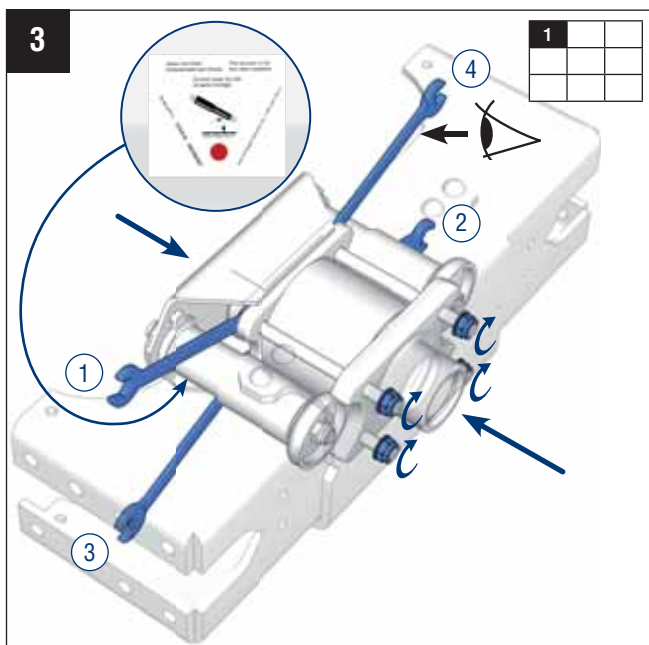


mit Dämpfungspaket | with damping assembly

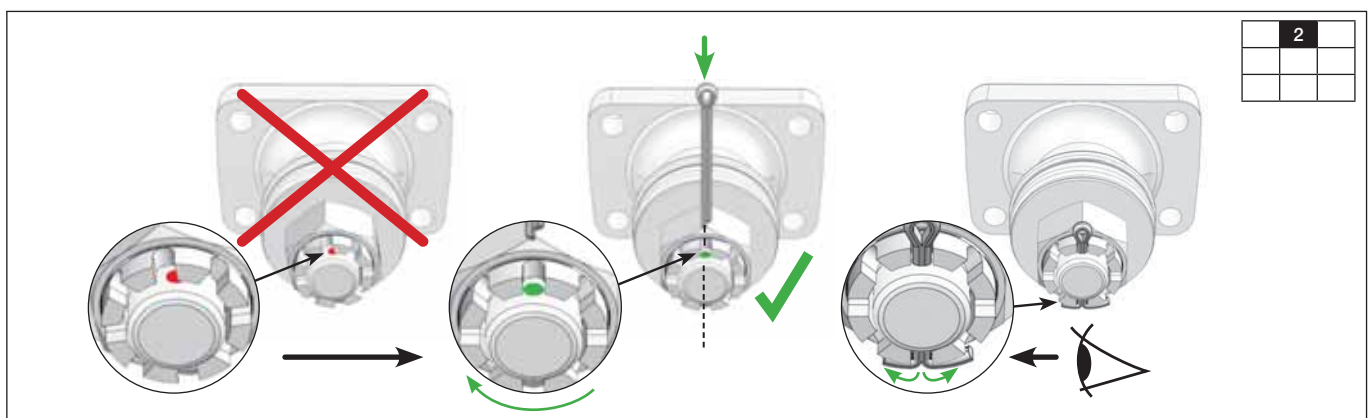




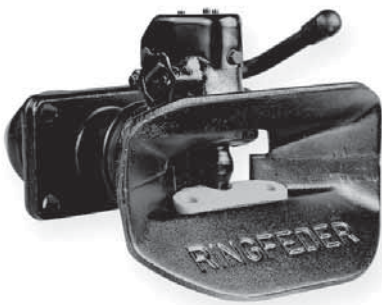
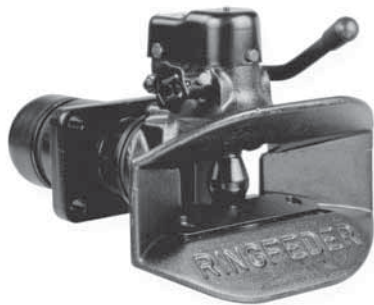
mit Dämpfungspaket | with damping assembly

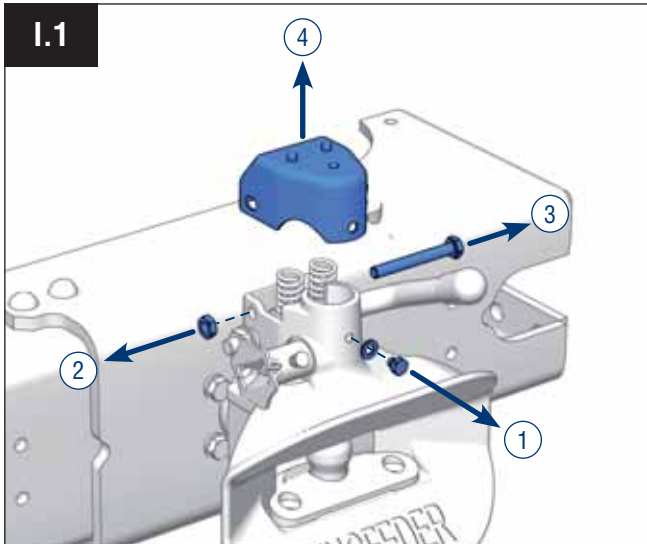


Splint | Splint

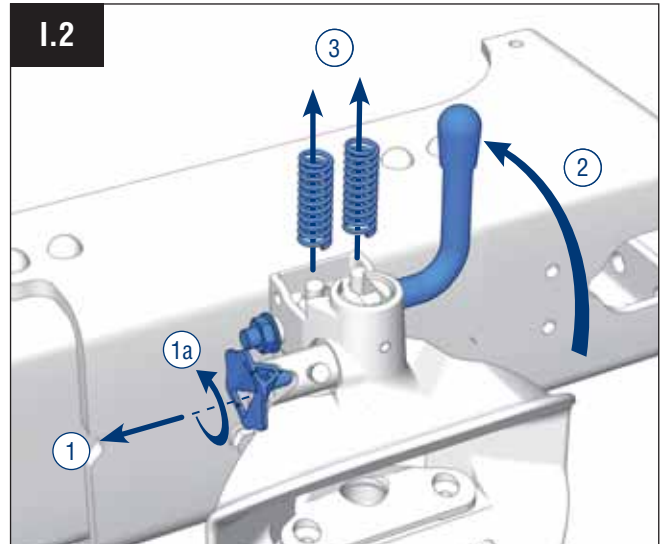


Gruppe | Group I.

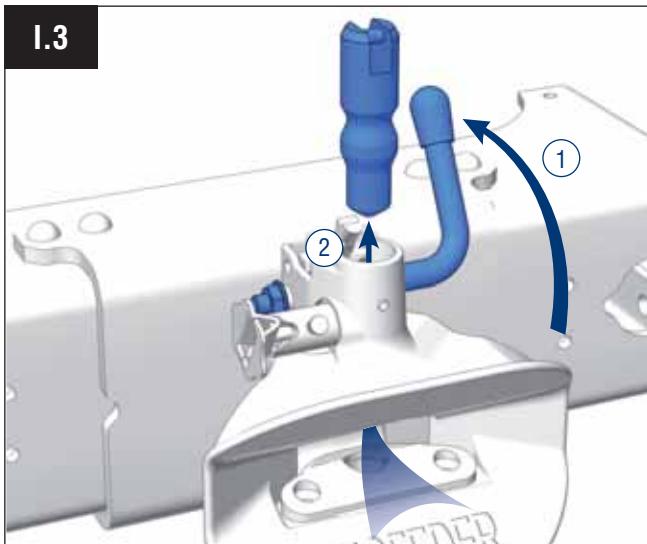
 Seite Page	Ø 40 mm Typ Type ...	Ø 50 mm Typ Type ...
8	 86 G/110	 80 A/B



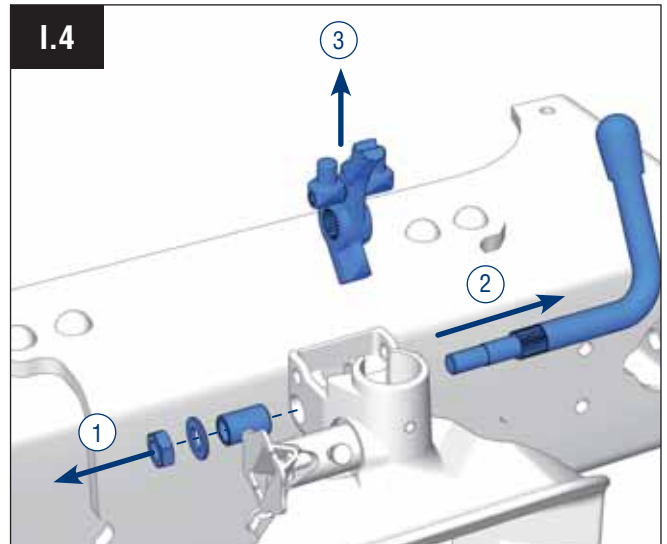
Demontage Abschlussdeckel | Dismantling of end cap



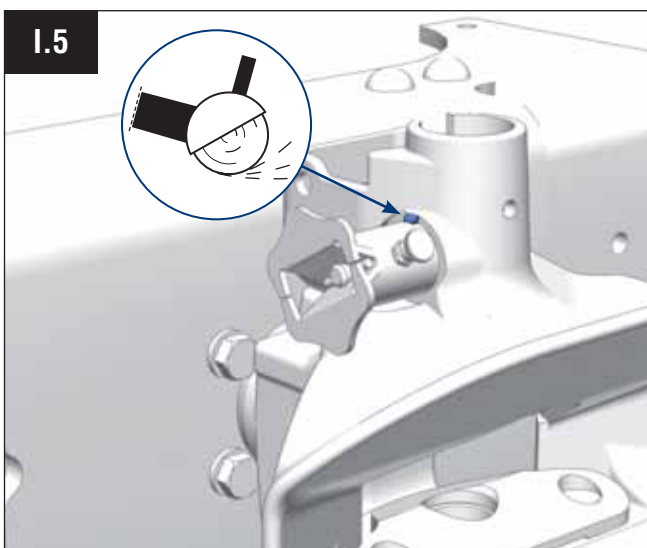
Demontage Schließfedern | Dismantling of closing spring



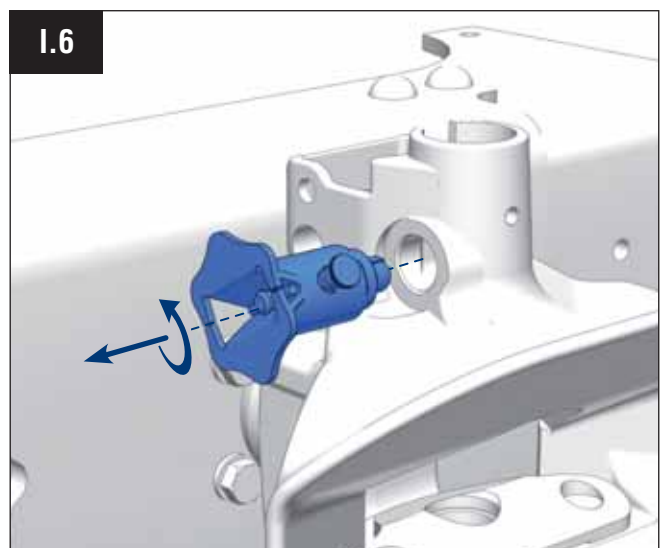
Demontage Kuppelbolzen | Dismantling of coupling bolt



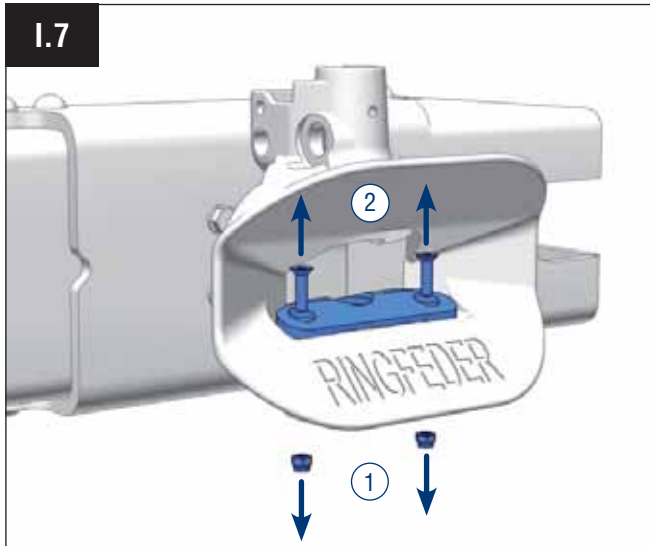
Demontage Handhebel, Demontage Sperrhebel
Dismantling of hand lever, dismantling of locking lever



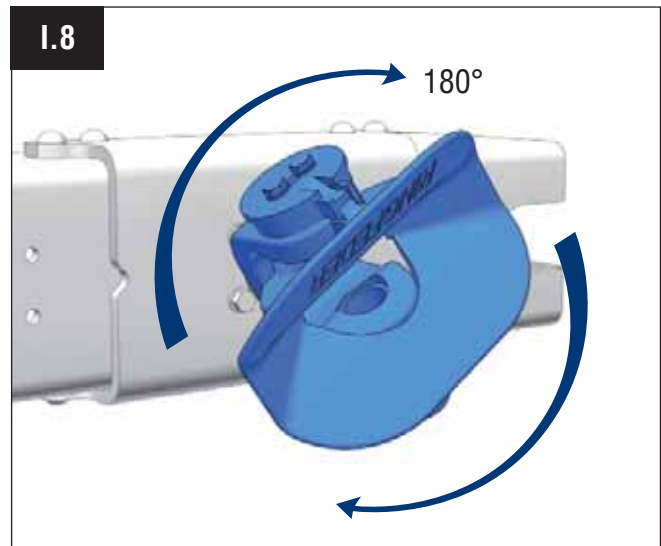
Ausbau der Sicherung (1) | Removal of safety device (1)



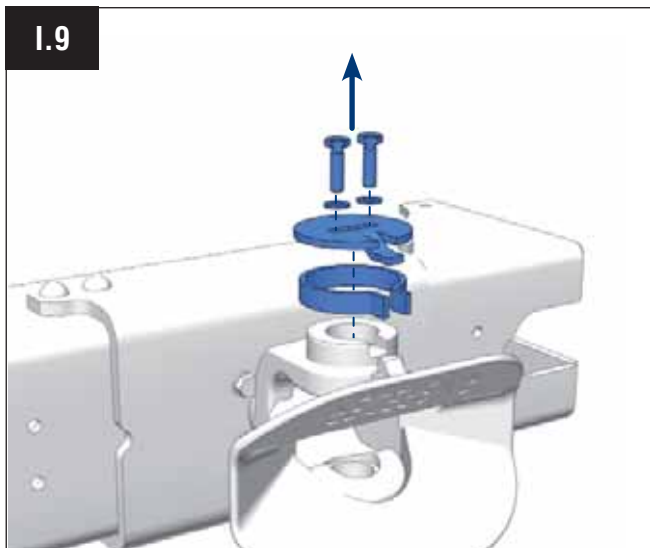
Ausbau der Sicherung (2) | Removal of safety device (2)



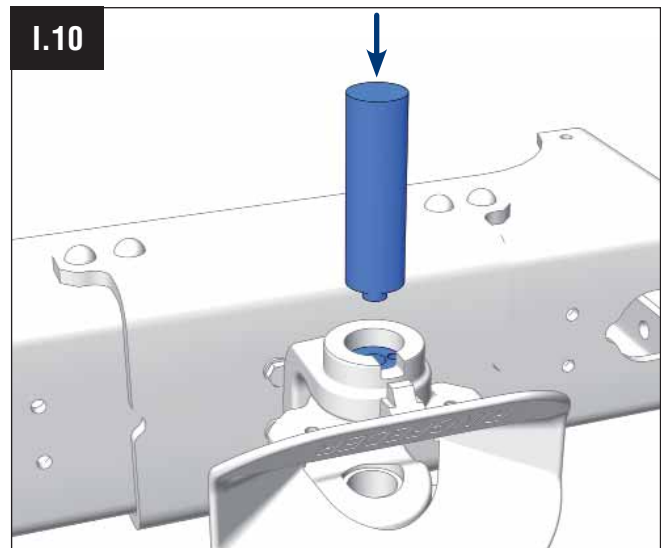
Demontage Verschleißplatte | Dismantling of wear plate



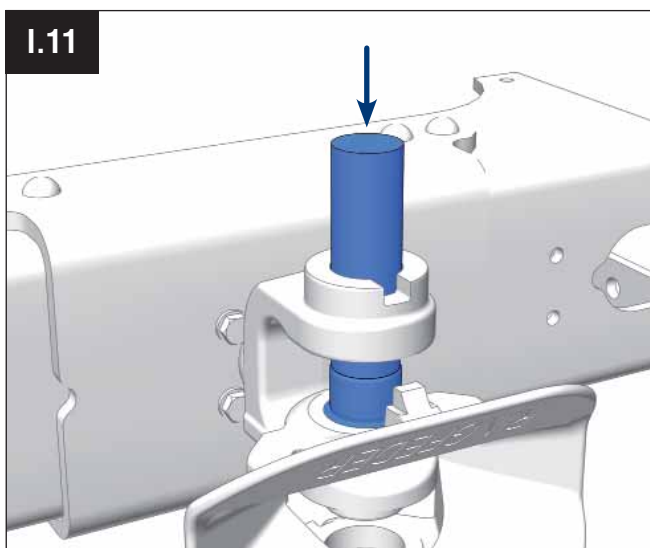
Drehung der Kupplung | Rotation of coupling



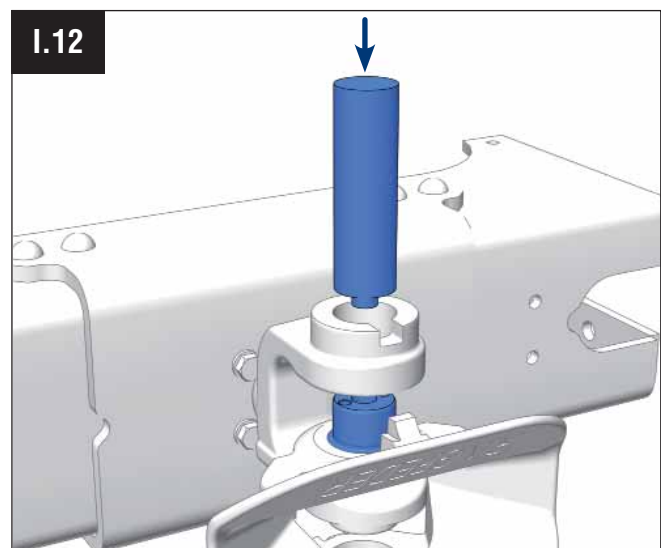
Demontage der Nasenscheibe, Demontage der Rückstellfeder
Dismantling of the tab washer, dismantling of the return springs



Demontage der unteren Führungsbuchse und des Kuppelkörpers (1)
Dismantling of the lower guide bushing and the coupling assembly (1)



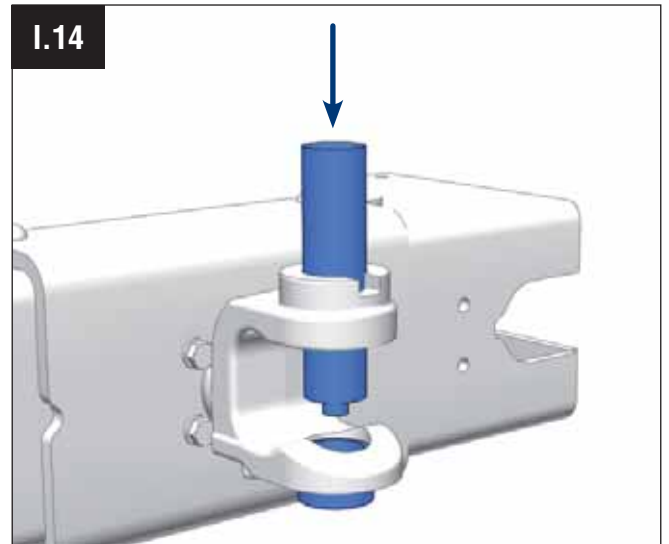
Demontage der unteren Führungsbuchse und des Kuppelkörpers (2)
Dismantling of the lower guide bushing and the coupling assembly (2)



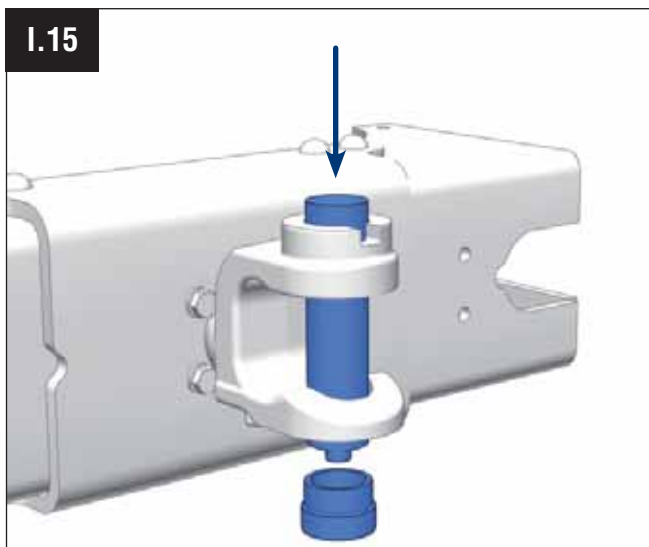
Demontage der unteren Führungsbuchse und des Kuppelkörpers (3)
Dismantling of the lower guide bushing and the coupling assembly (3)



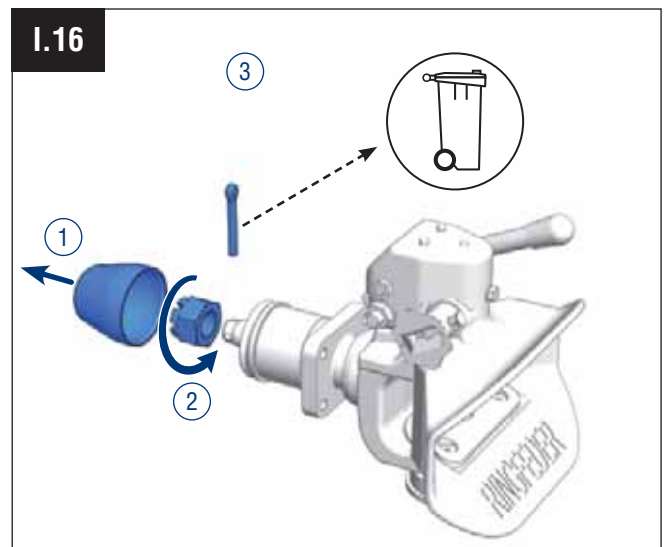
Demontage der unteren Führungsbuchse und des Kuppelkörpers (4)
Dismantling of the lower guide bushing and the coupling assembly (4)



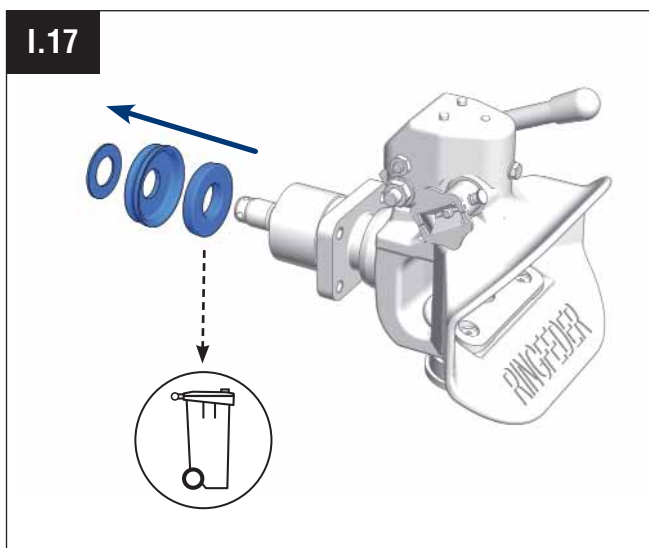
Demontage der oberen Führungsbuchse (1)
Dismantling of the upper guide bushing (1)



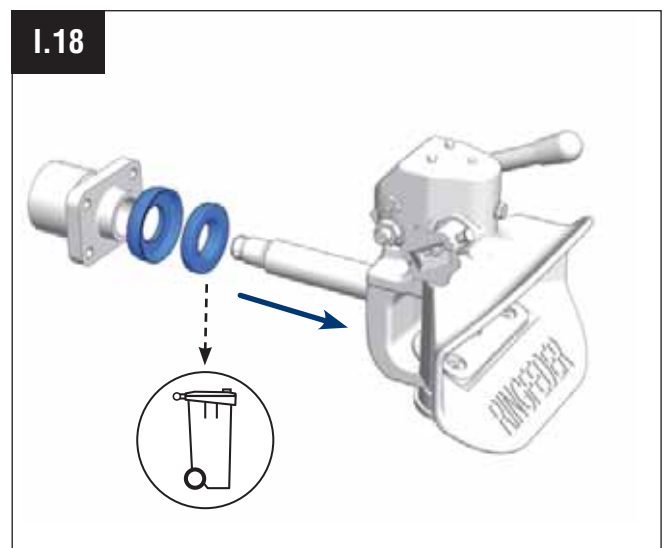
Demontage der oberen Führungsbuchse (2)
Dismantling of the upper guide bushing (2)



Demontage der Gummifedern (1)
Dismantling of the rubber springs (1)



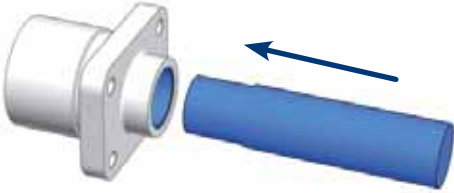
Demontage der Gummifedern (2)
Dismantling of the rubber springs (2)



Demontage der Gummifedern (3)
Dismantling of the rubber springs (3)

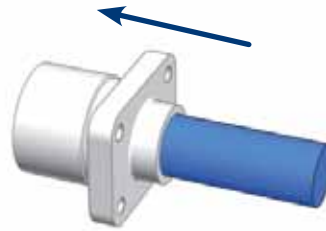


I.19



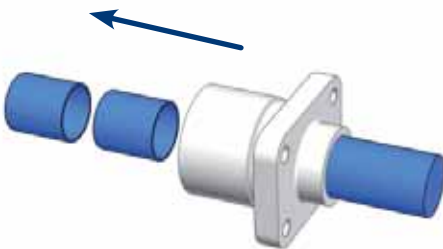
Demontage der Lagerbuchsen/Stangenführung (1)
Dismantling of the bearing bushing /rod guidance system (1)

I.20

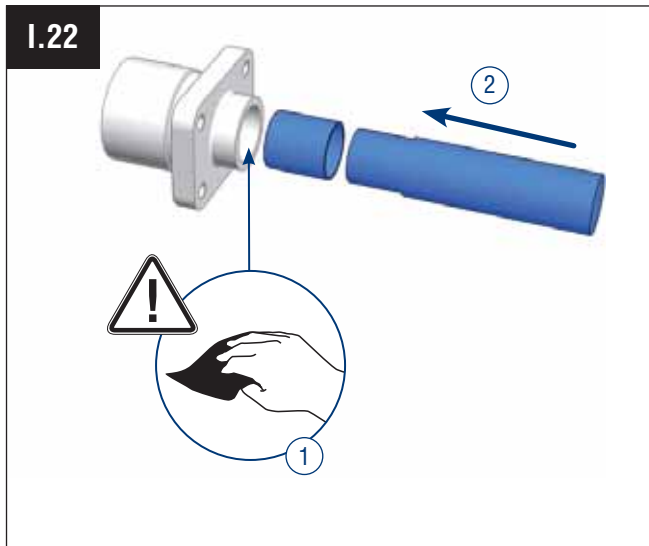


Demontage der Lagerbuchsen/Stangenführung (2)
Dismantling of the bearing bushing /rod guidance system (2)

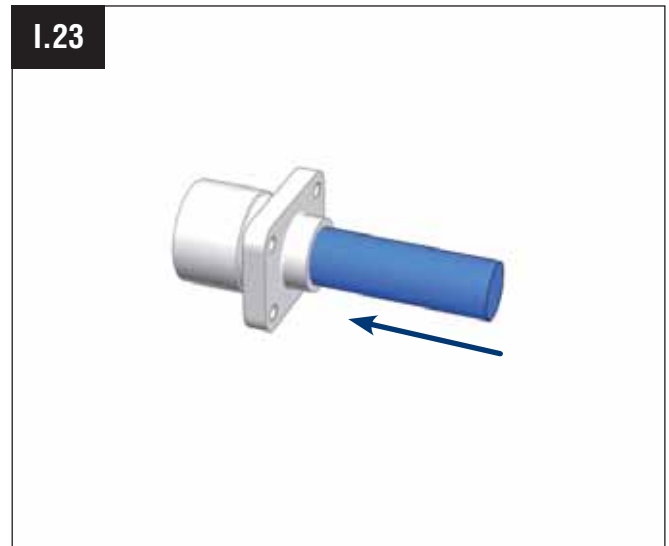
I.21



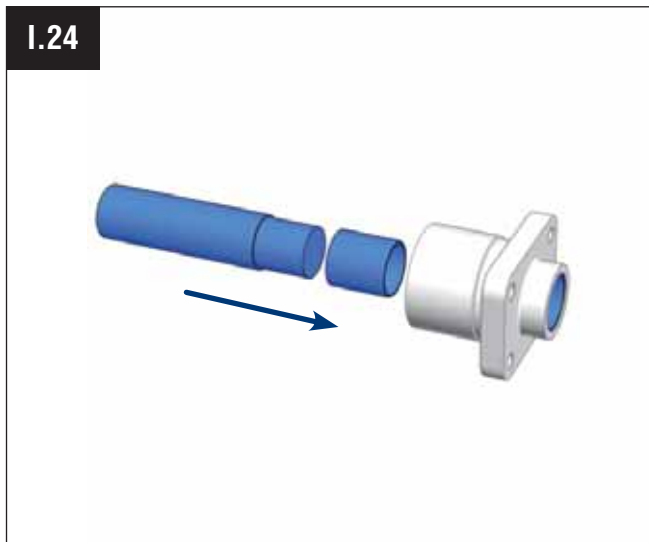
Demontage der Lagerbuchsen/Stangenführung (3)
Dismantling of the bearing bushing /rod guidance system (3)



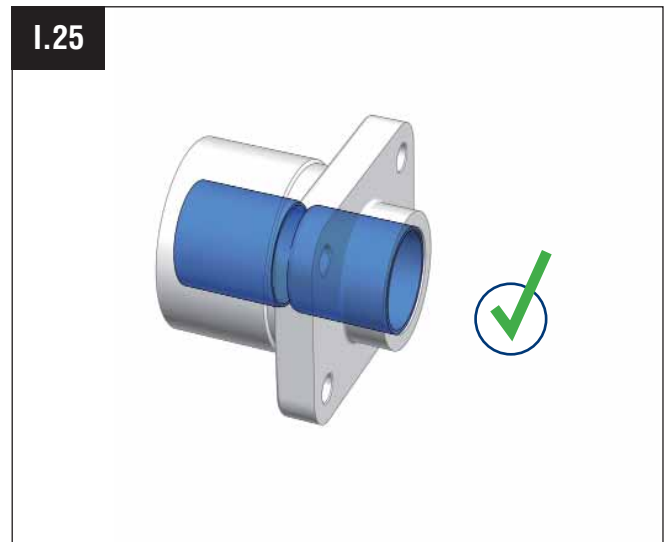
Montage der Lagerbuchsen/Stangenführung (1)
Fitting of the bearing bushing/rod guidance system (1)



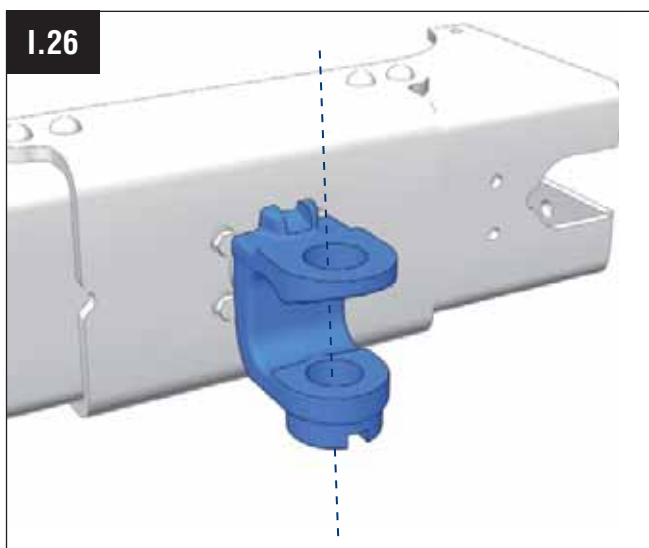
Montage der Lagerbuchsen/Stangenführung (2)
Fitting of the bearing bushing/rod guidance system (2)



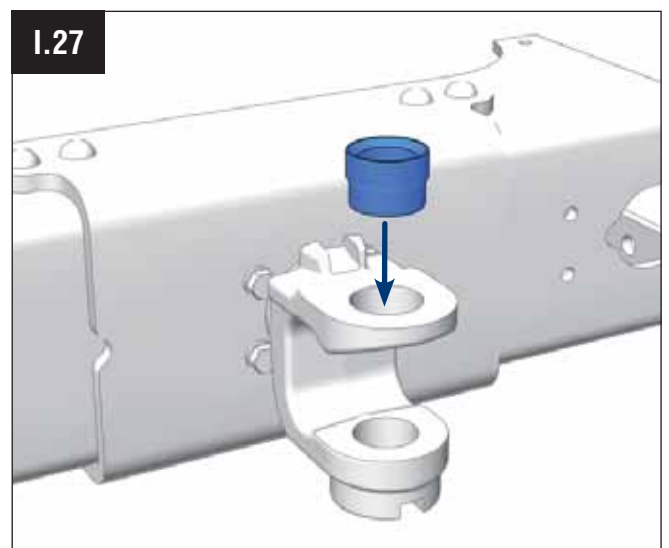
Montage der Lagerbuchsen/Stangenführung (3)
Fitting of the bearing bushing/rod guidance system (3)



Montage der Lagerbuchsen/Stangenführung (4)
Fitting of the bearing bushing/rod guidance system (4)



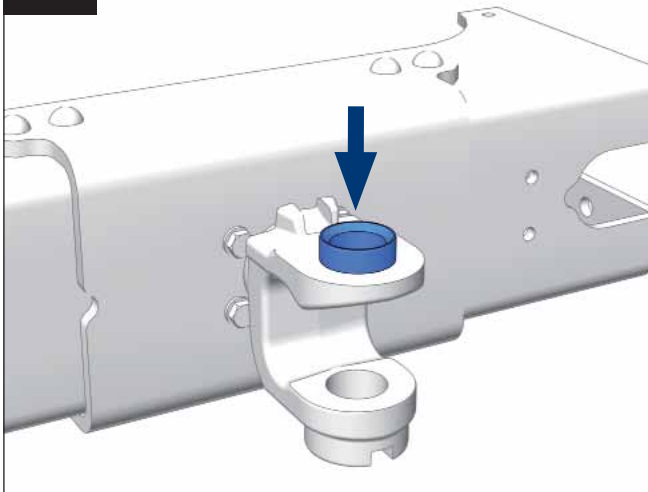
Position Zugstange | Position of the pull rod



Montage der oberen Führungsbuchse (1)
Fitting of the upper guide bushing (1)



I.28



Montage der oberen Führungsbuchse (2)
Fitting of the upper guide bushing (2)

I.29



Montage des Kuppelkörpers
Fitting of the coupling assembly

I.30



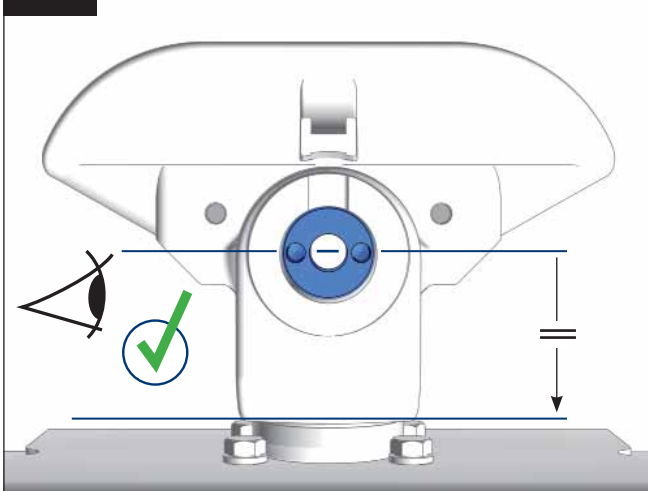
Montage der unteren Führungsbuchse (1)
Fitting of the lower guide bushing (1)

I.31



Montage der unteren Führungsbuchse (2)
Fitting of the lower guide bushing (2)

I.32



Montage der unteren Führungsbuchse (3)
Fitting of the lower guide bushing (3)

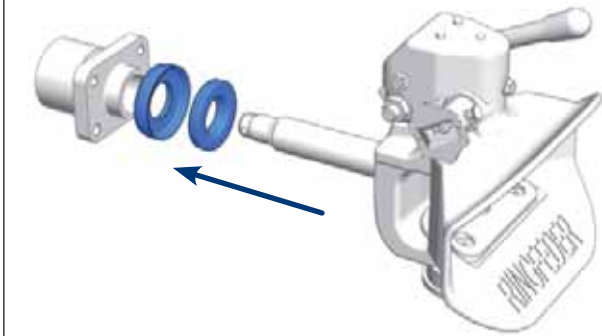
I.33



Montage der unteren Führungsbuchse (4)
Fitting of the lower guide bushing (4)

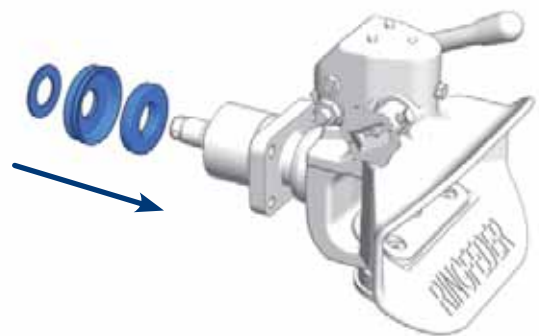


I.34



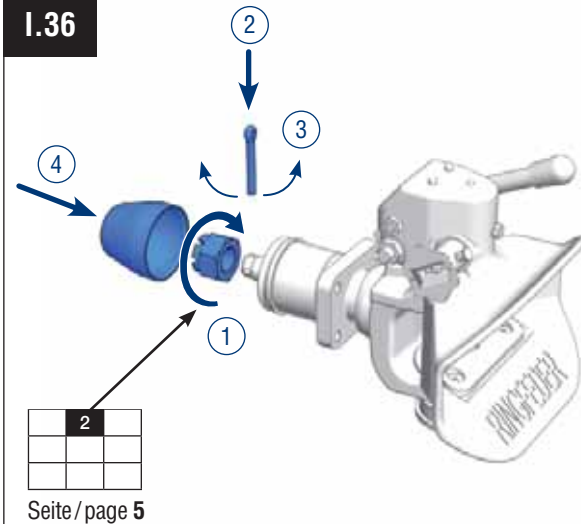
Montage der Gummifedern (1)
Fitting of the rubber springs (1)

I.35



Montage der Gummifedern (2)
Fitting of the rubber springs (2)

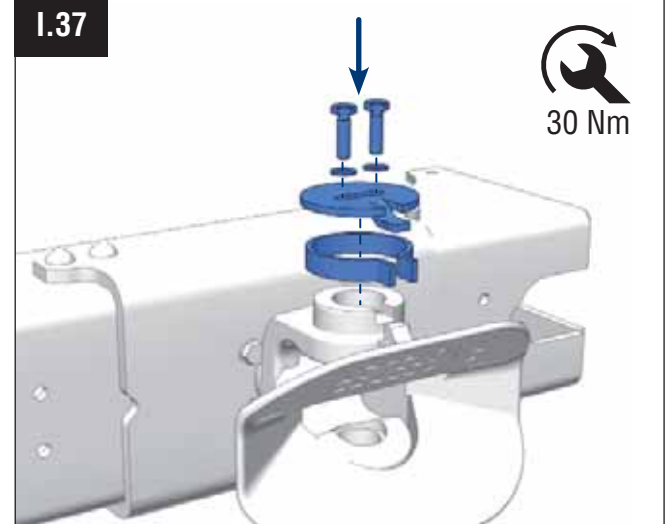
I.36



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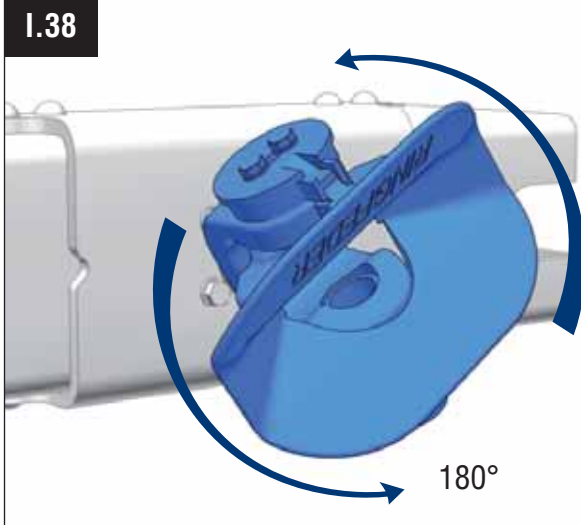
Montage der Gummifedern (3)
Fitting of the rubber springs (3)

I.37



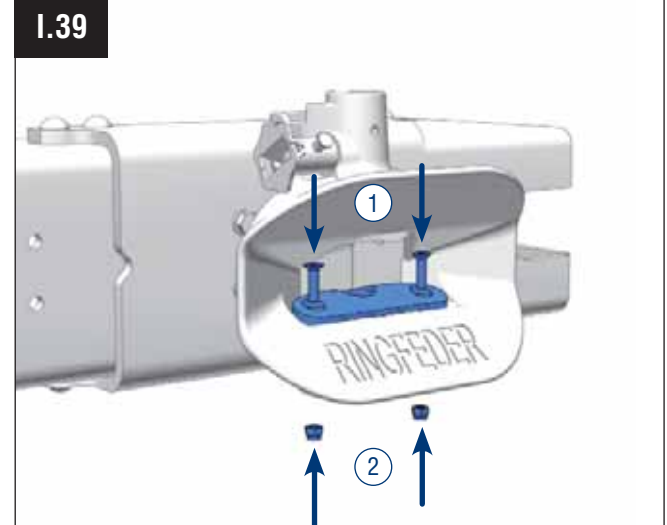
Montage der Nasenscheibe, Montage der Rückstellfeder
Fitting of the tab washer, fitting of the return springs

I.38

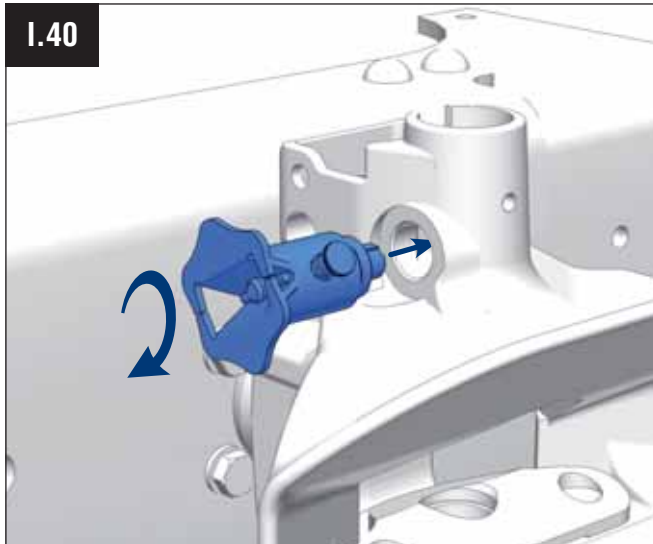


(Zurück-) Drehung der Kupplung
Rotate the coupling (back)

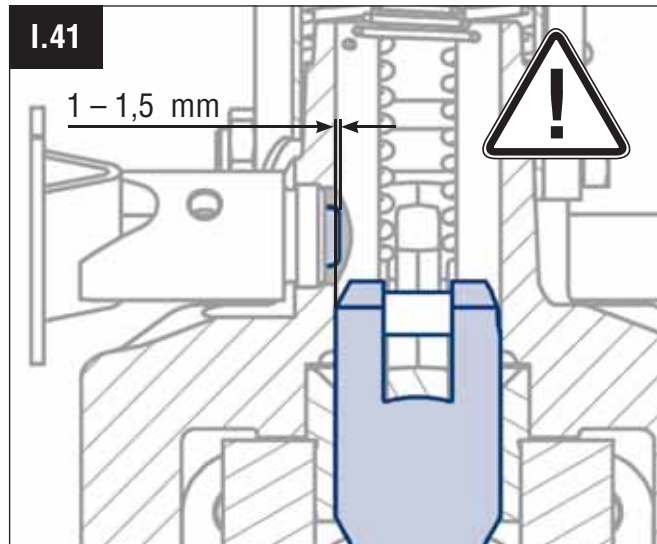
I.39



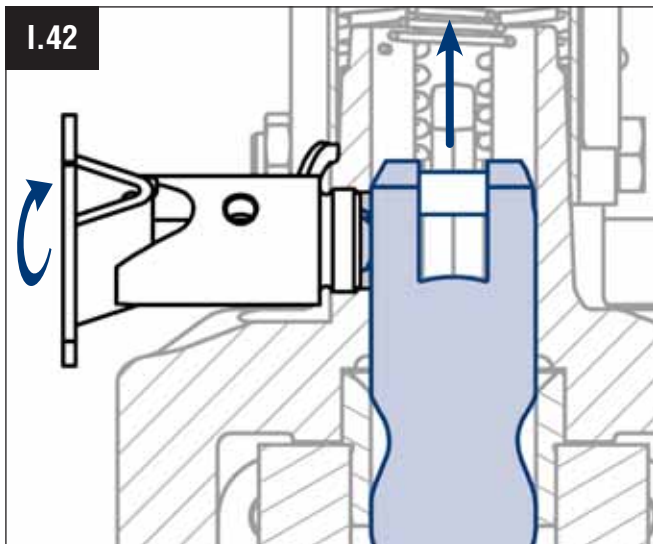
Montage Verschleißplatte
Fitting of wear plate



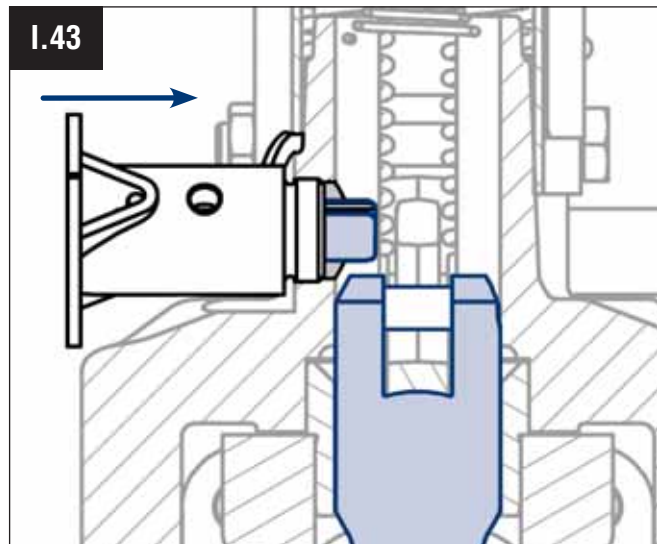
Montage der Sicherung (1)
Fitting of safety device (1)



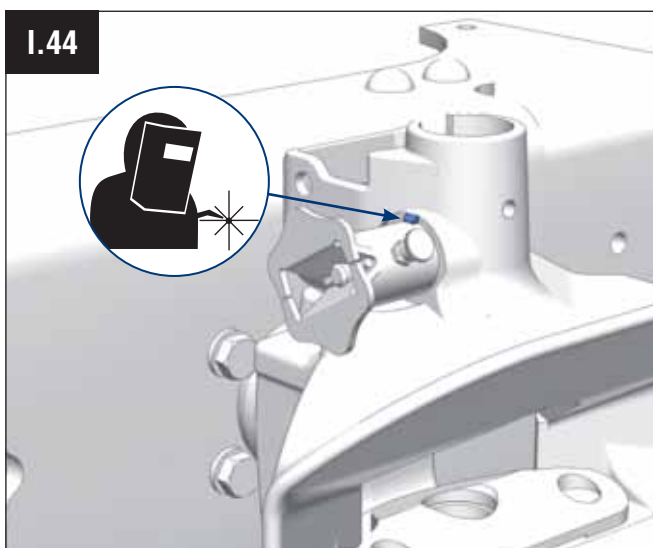
Montage der Sicherung (2)
Fitting of safety device (2)



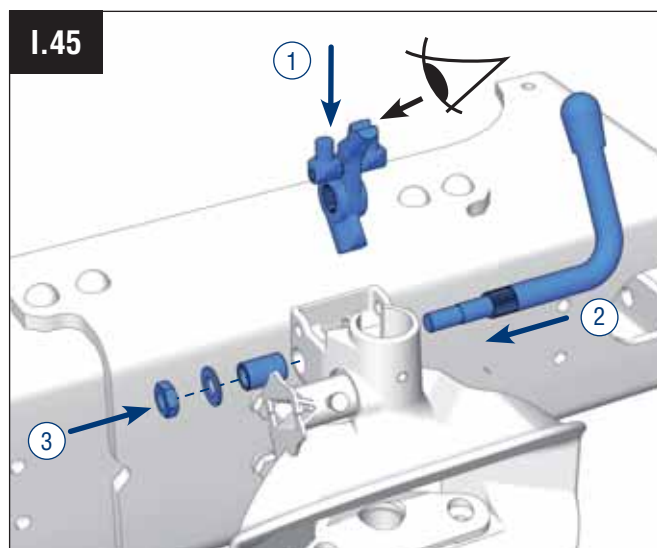
Funktionsprüfung der Sicherung vor dem Verschweißen (1)
Function test on safety device before welding (1)



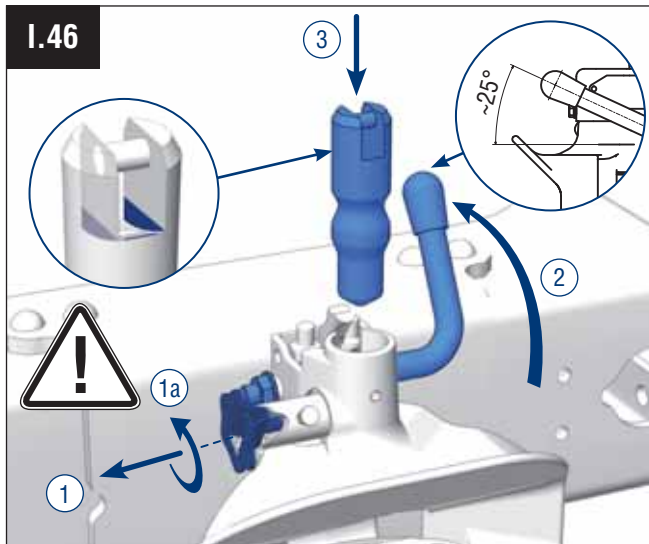
Funktionsprüfung der Sicherung vor dem Verschweißen (2)
Function test on safety device before welding (2)



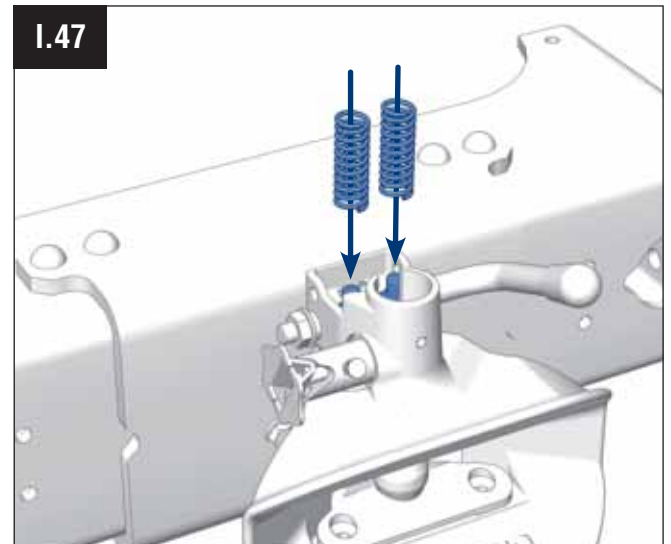
Montage der Sicherung (3)
Fitting of safety device (3)



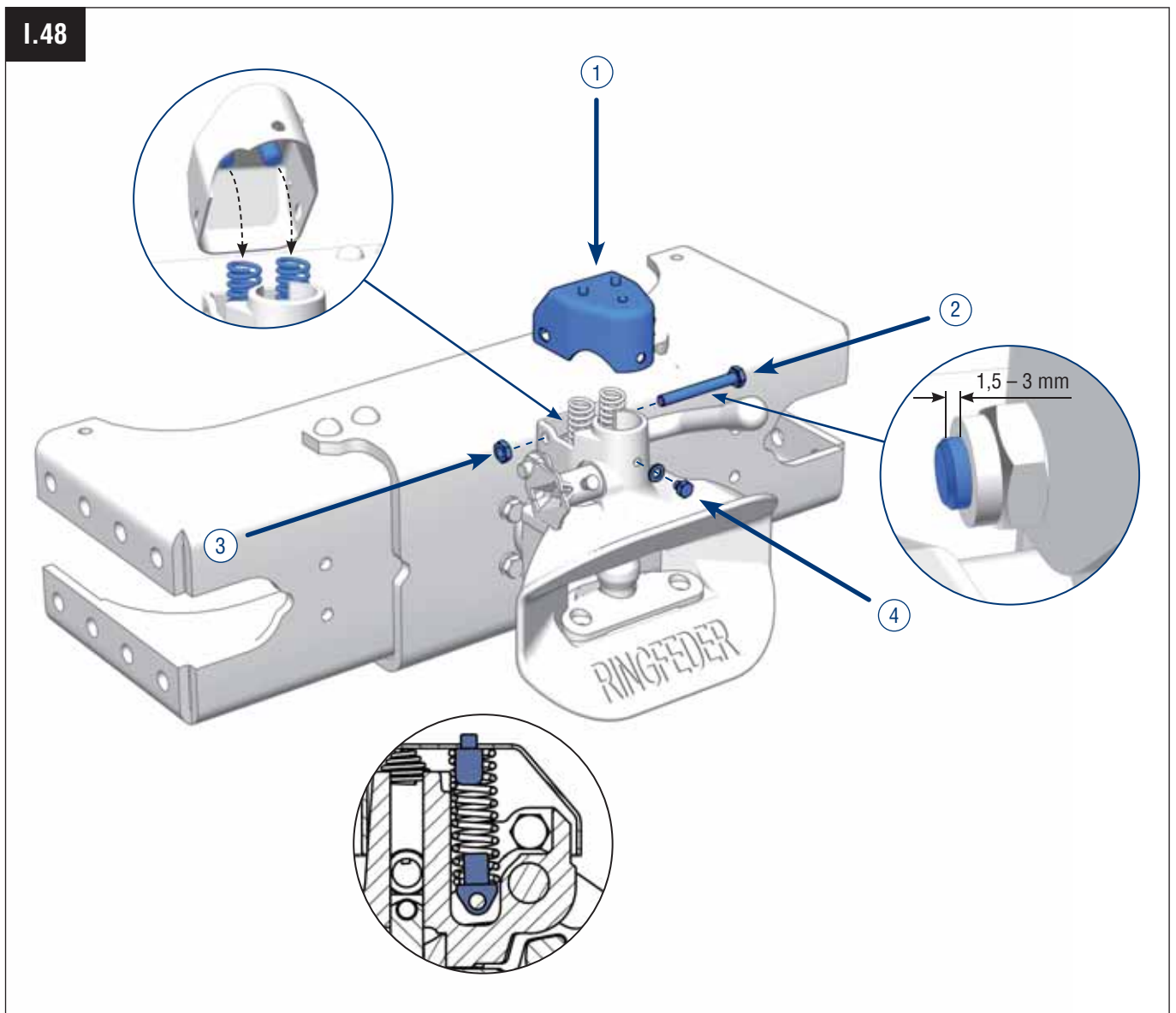
Montage Handhebel, Montage Sperrhebel
Fitting of hand lever, fitting of locking lever



Montage Kuppelbolzen
Fitting of coupling bolt



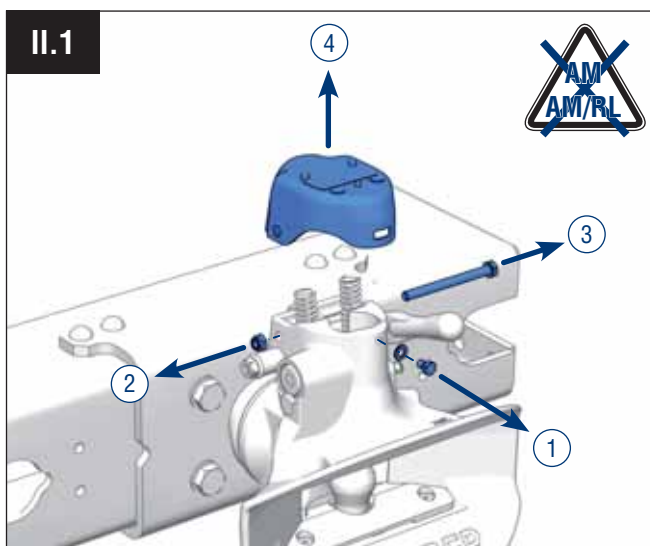
Montage Schließfedern
Fitting of closing spring



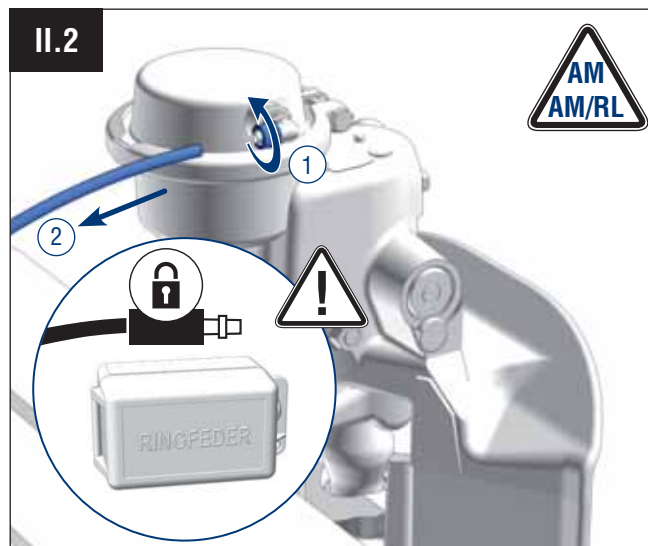
Montage Abschlussdeckel
Fitting of end cap

Gruppe | Group II.

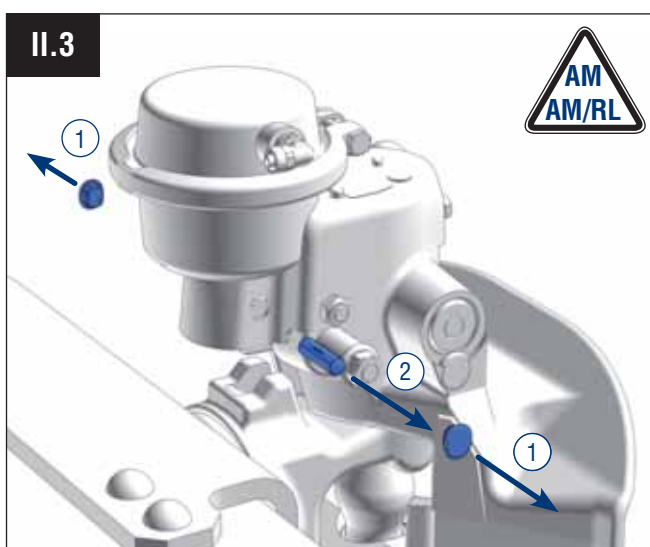
 Seite Page	Ø 40 mm Typ Type ...	Ø 50 mm Typ Type ...
9	 4040 A/B	 5050 A/B
9	 4040 AM,AM/RL	 5050 AM,AM/RL
9	 4045 A/B	
9	 4045 AM,AM/RL	



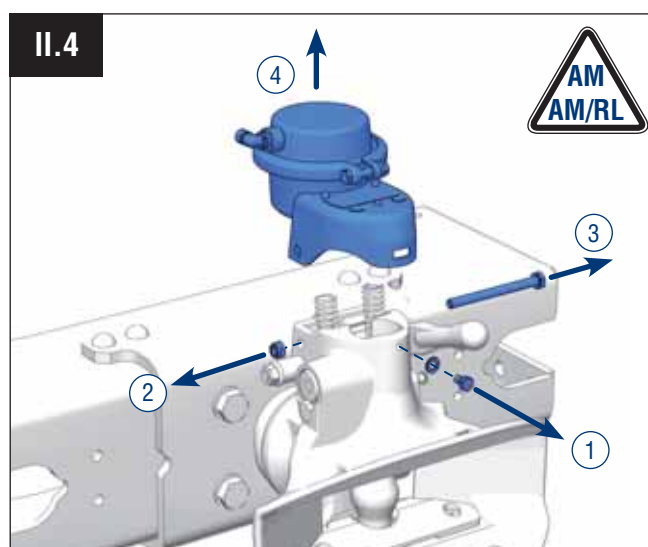
Demontage Abschlussdeckel
Dismantling of end cap



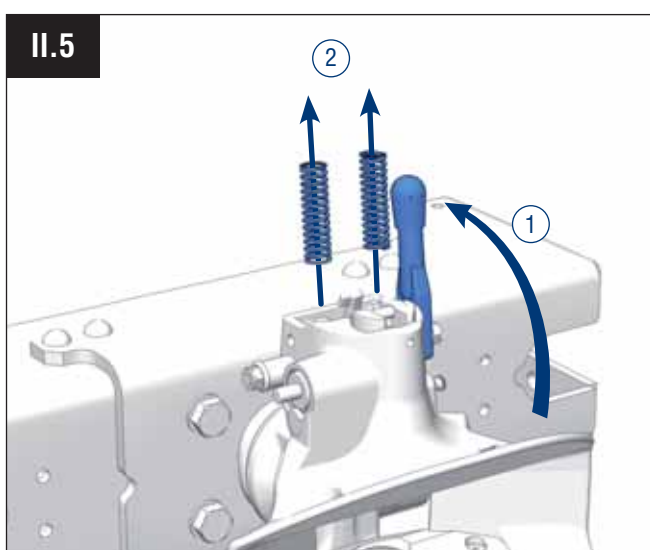
Druckluftleitung lösen | Release compressed air supply



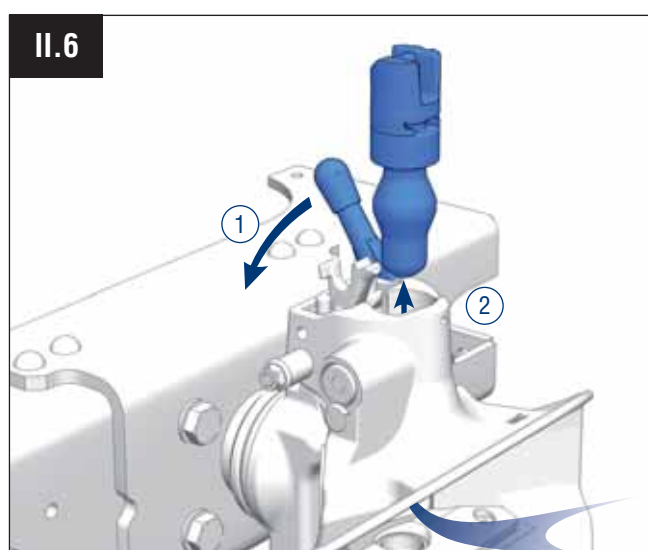
Spiralspannstift austreiben
Drive out spiral pin



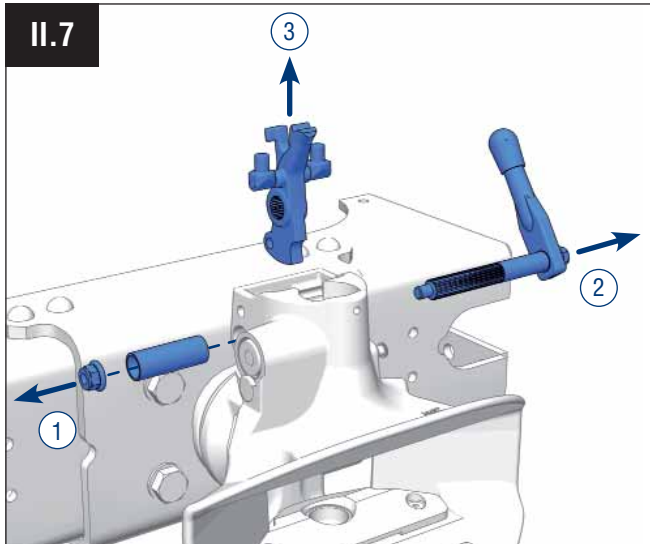
Demontage AM Deckel | Dismantling of AM cap



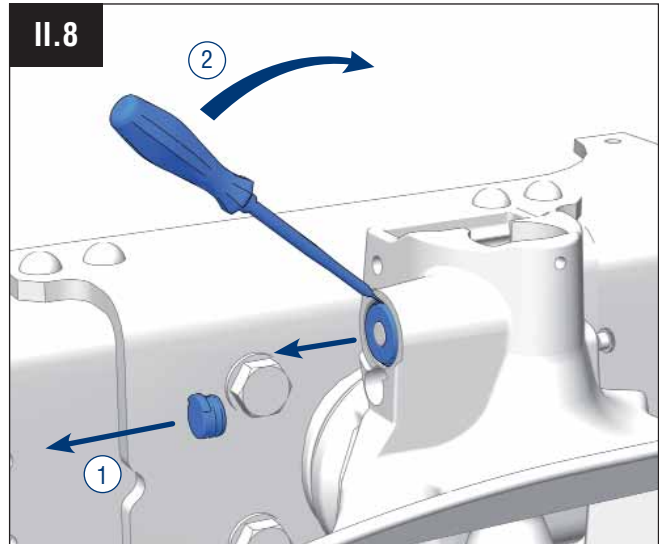
Demontage Schließfedern
Dismantling of closing springs



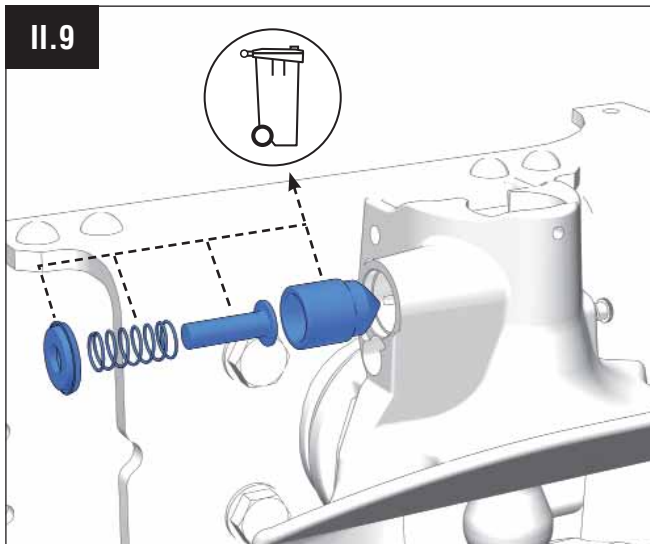
Demontage Kuppelbolzen
Dismantling of coupling bolt



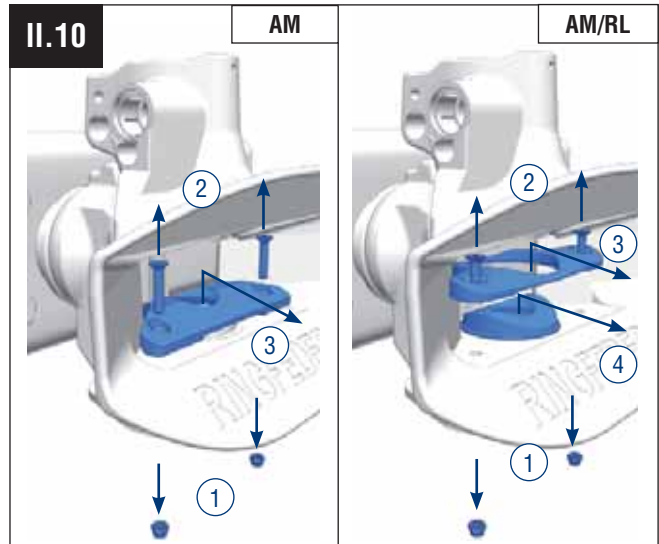
Demontage Handhebel, Demontage Sperrhebel
Dismantling of hand lever, dismantling of locking lever



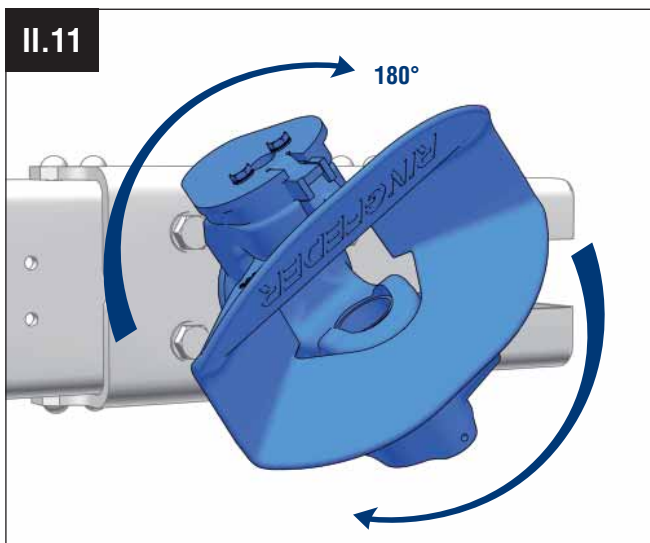
Ausbau der Sicherung (1)
Removal of safety device (1)



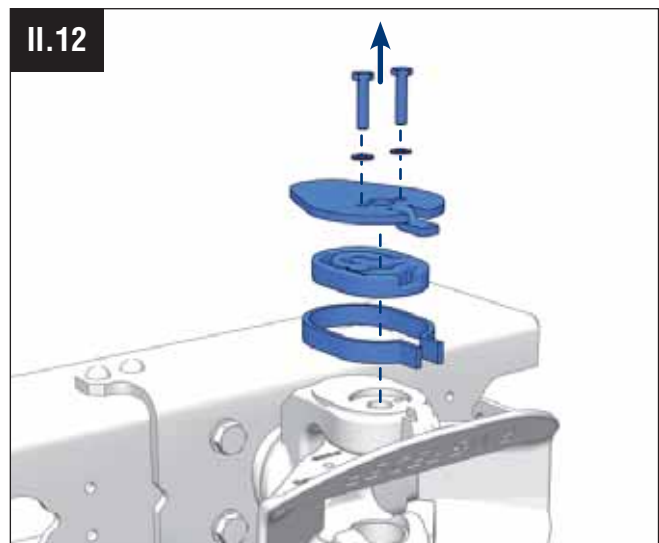
Ausbau der Sicherung (2)
Removal of safety device (2)



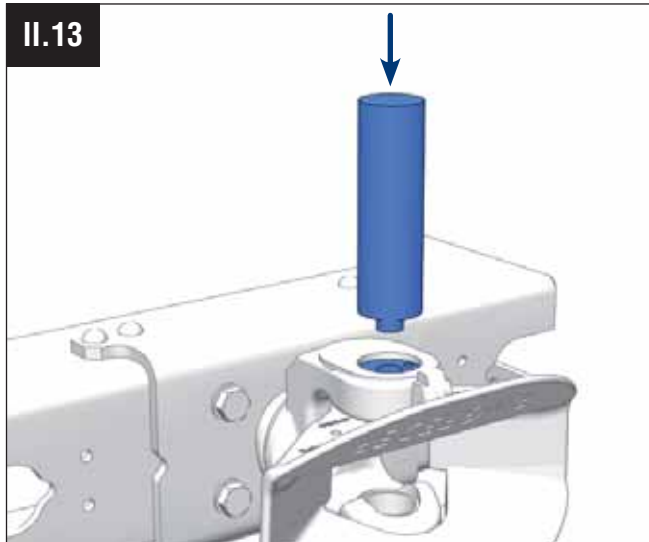
Demontage Verschleißplatte
Dismantling of wear plate



Drehung der Kupplung
Rotate coupling

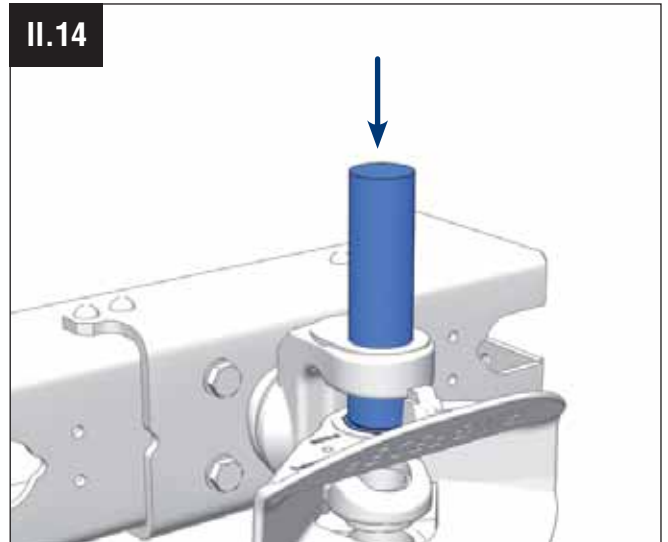


Demontage der Nasenscheibe, Demontage der Rückstellfeder
Dismantling of tab washer, dismantling of return spring



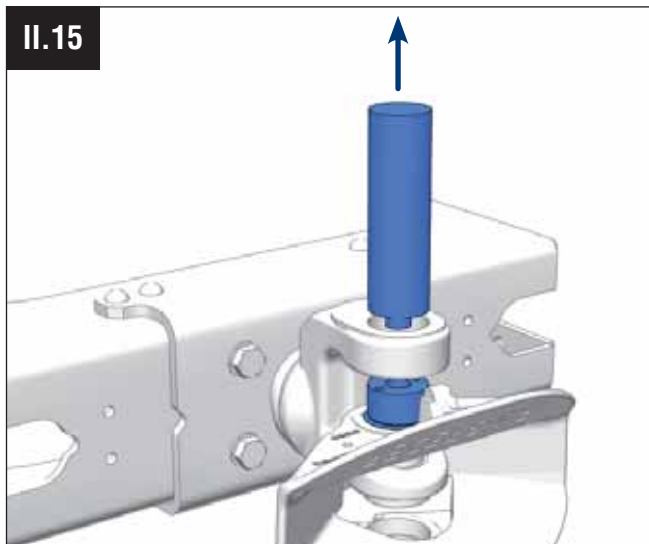
II.13

Demontage der unteren Führungsbuchse und des Kuppelkörpers (1)
Dismantling of lower guide bushing and of the coupling assembly (1)



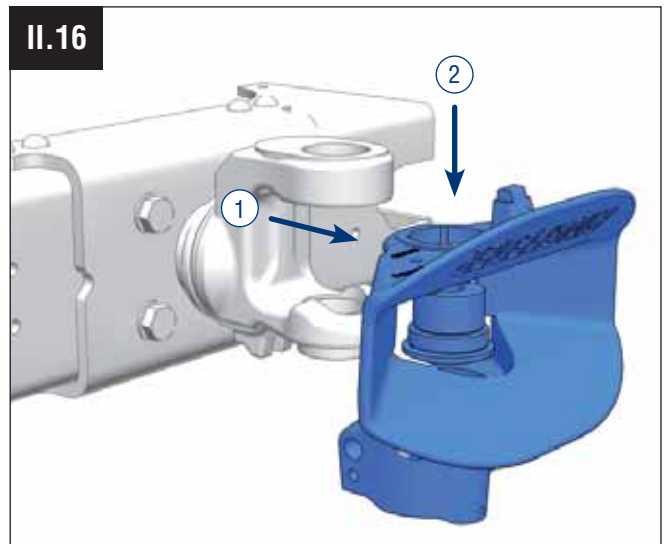
II.14

Demontage der unteren Führungsbuchse und des Kuppelkörpers (2)
Dismantling of lower guide bushing and of the coupling assembly (2)



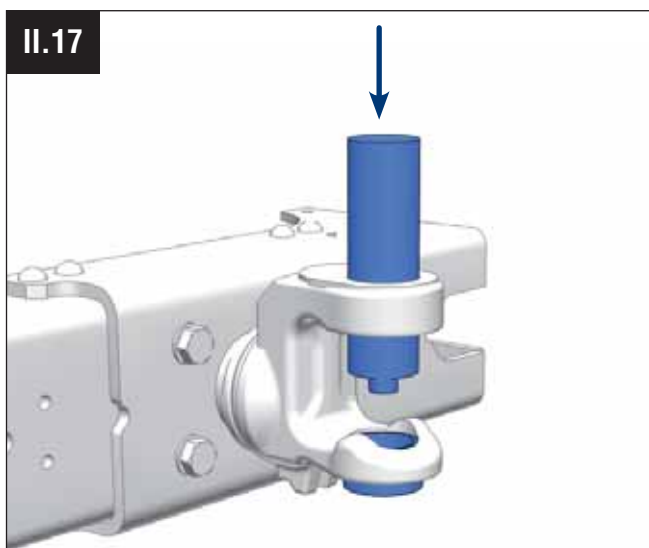
II.15

Demontage der unteren Führungsbuchse und des Kuppelkörpers (3)
Dismantling of lower guide bushing and of the coupling assembly (3)



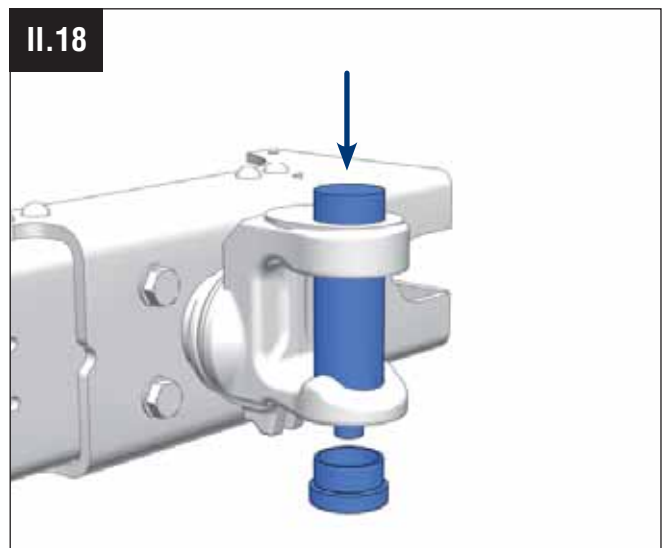
II.16

Demontage der unteren Führungsbuchse und des Kuppelkörpers (4)
Dismantling of lower guide bushing and of the coupling assembly (4)



II.17

Demontage der oberen Führungsbuchse (1)
Dismantling of the upper guide bushing (1)

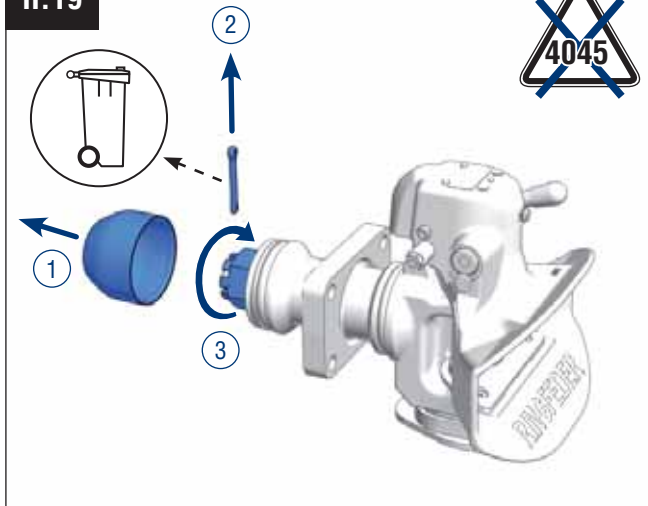


II.18

Demontage der oberen Führungsbuchse (2)
Dismantling of the upper guide bushing (2)

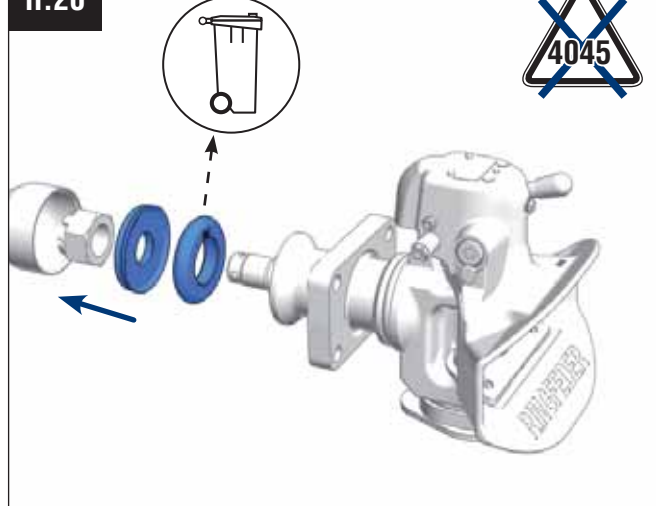


II.19



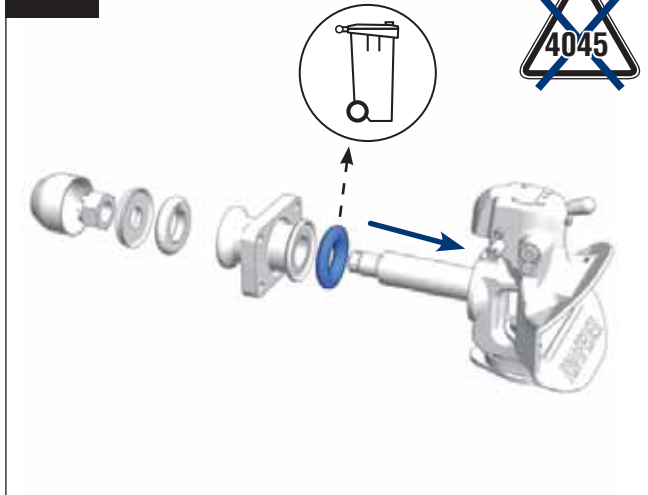
Demontage der Gummifedern (1)
Dismantling of rubber springs (1)

II.20



Demontage der Gummifedern (2)
Dismantling of rubber springs (2)

II.21



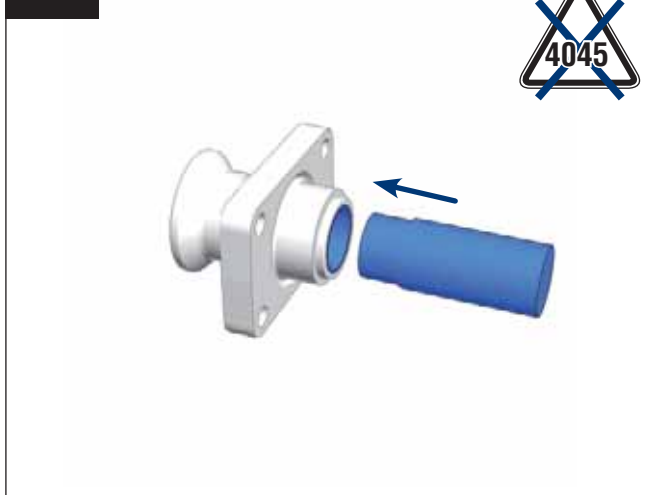
Demontage der Gummifedern (3)
Dismantling of rubber springs (3)

II.22



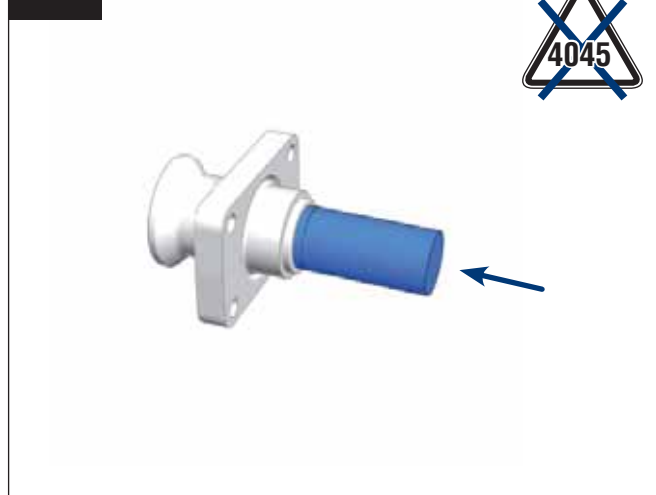
Demontage der Lagerbuchsen / Stangenführung (1)
Dismantling of bearing bushing / rod guidance system (1)

II.23

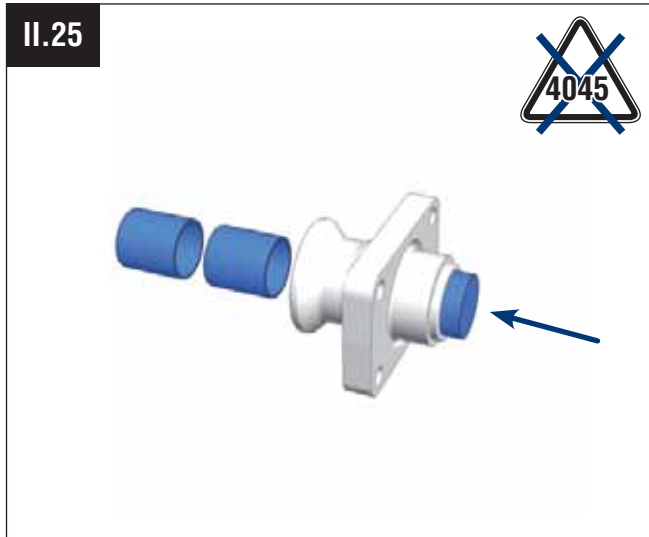


Demontage der Lagerbuchsen / Stangenführung (2)
Dismantling of bearing bushing / rod guidance system (2)

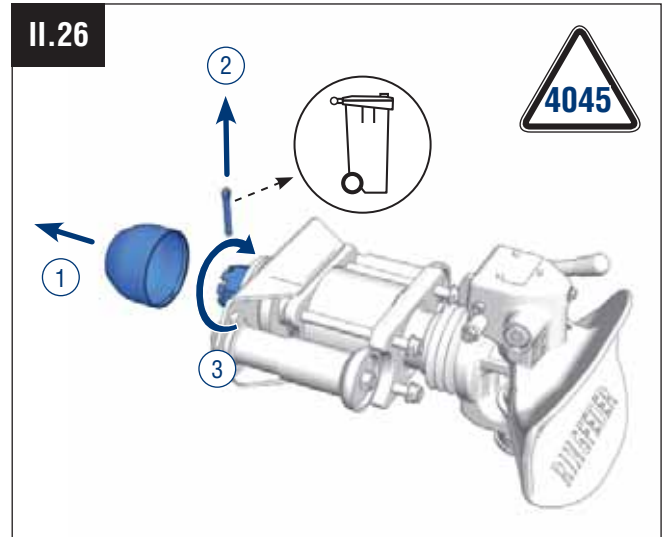
II.24



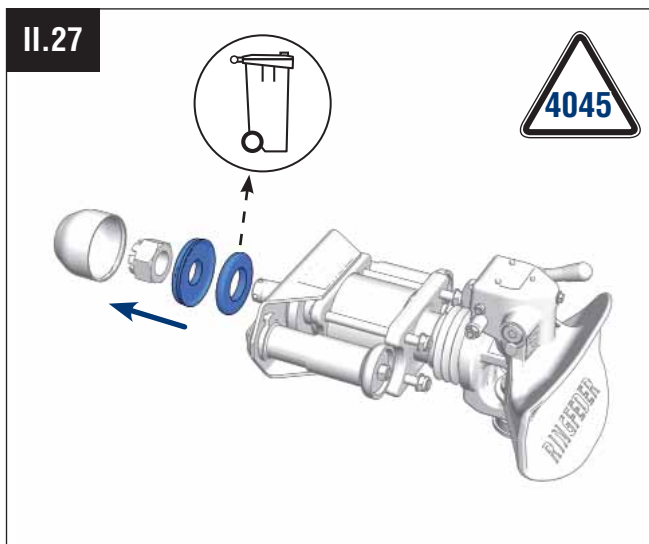
Demontage der Lagerbuchsen / Stangenführung (3)
Dismantling of bearing bushing / rod guidance system (3)



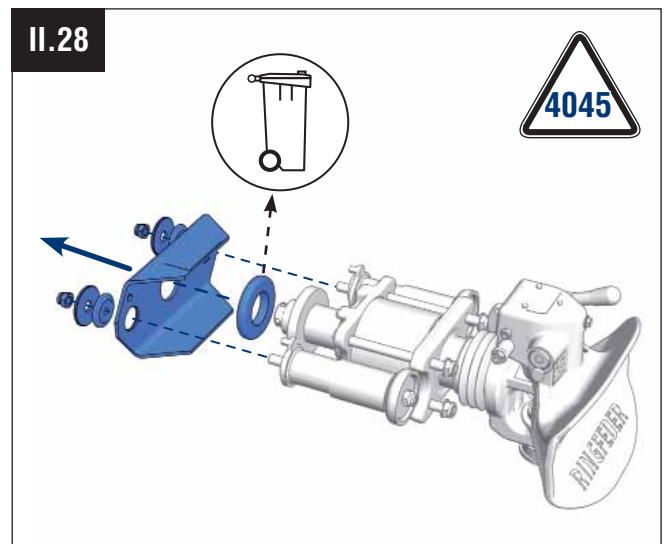
Demontage der Lagerbuchsen/Stangenführung (4)
Dismantling of bearing bushing/rod guidance system (4)



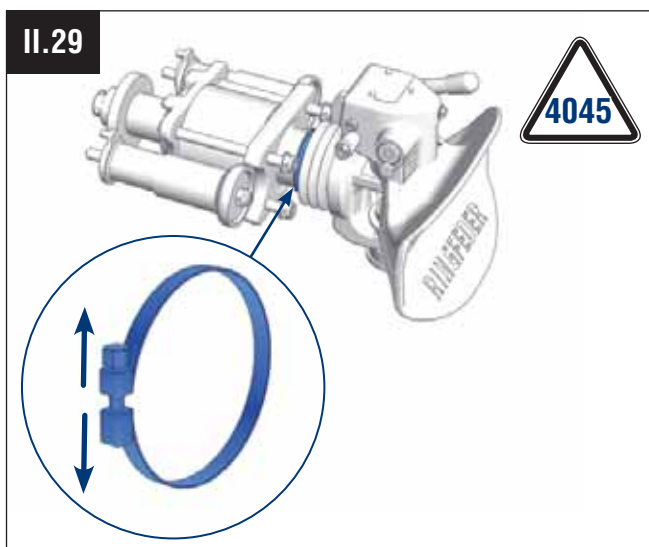
Demontage der Gummifedern (1)
Dismantling of the rubber springs (1)



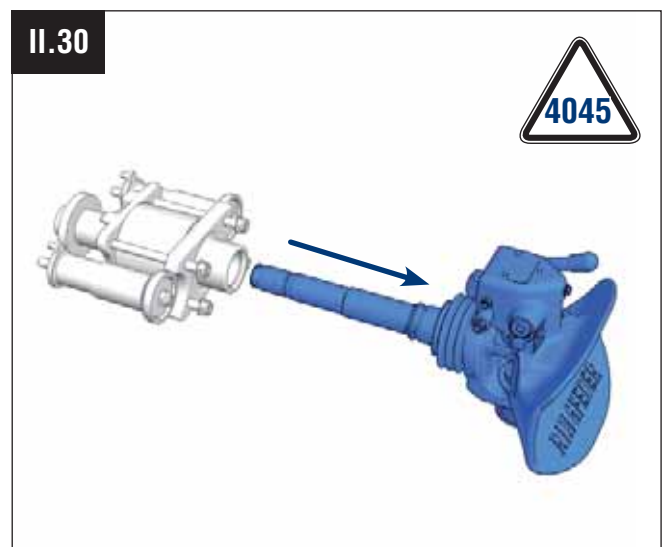
Demontage der Gummifedern (2)
Dismantling of the rubber springs (2)



Demontage der Gummifedern (3)
Dismantling of the rubber springs (3)



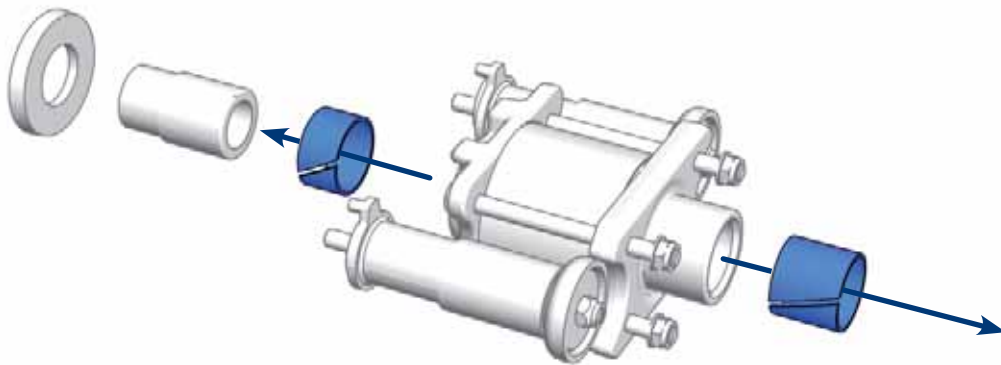
Demontage der Lagerbuchsen/Stangenführung (1)
Dismantling of bearing bushing/rod guidance system (1)



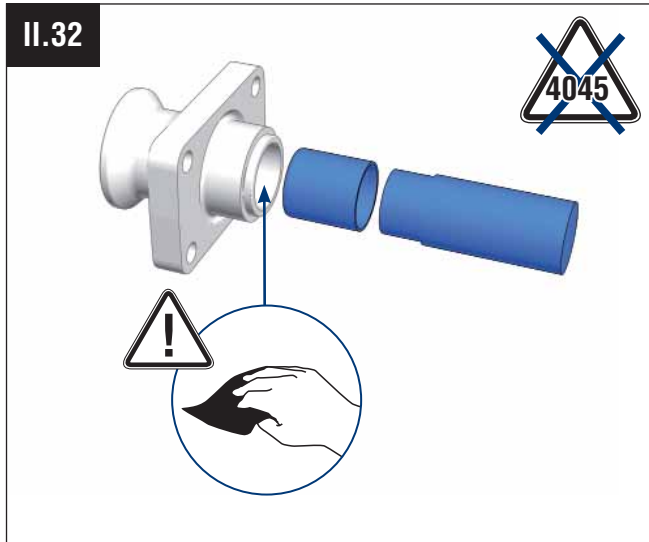
Demontage der Lagerbuchsen/Stangenführung (2)
Dismantling of bearing bushing/rod guidance system (2)



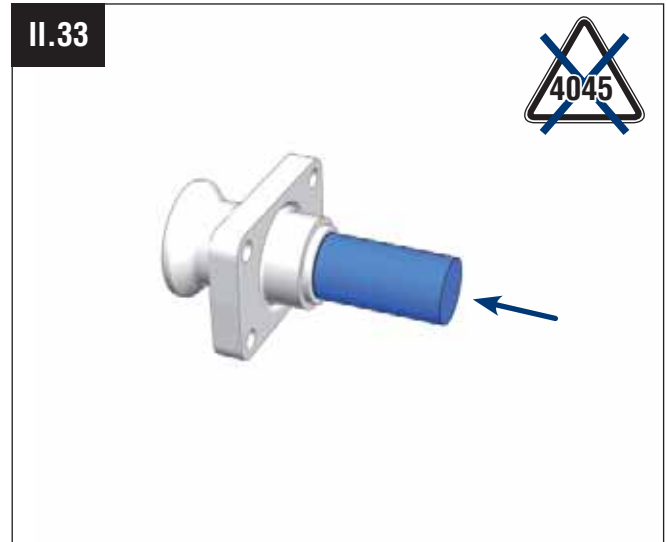
II.31



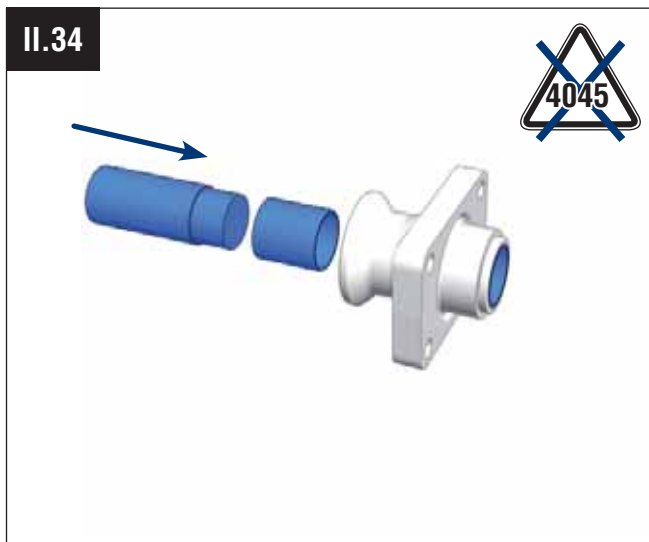
Demontage der Lagerbuchsen/Stangenführung (3)
Dismantling of bearing bushing/rod guidance system (3)



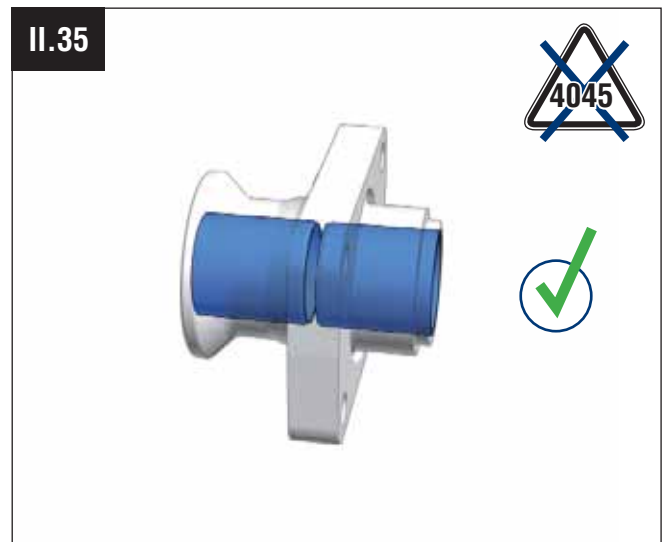
Montage der Lagerbuchsen / Stangenführung (1)
Fitting of bearing bushing/rod guidance system (1)



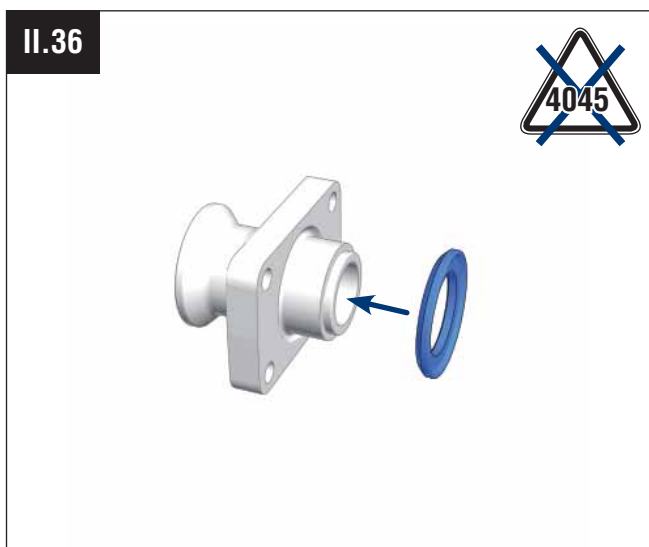
Montage der Lagerbuchsen / Stangenführung (2)
Fitting of bearing bushing/rod guidance system (2)



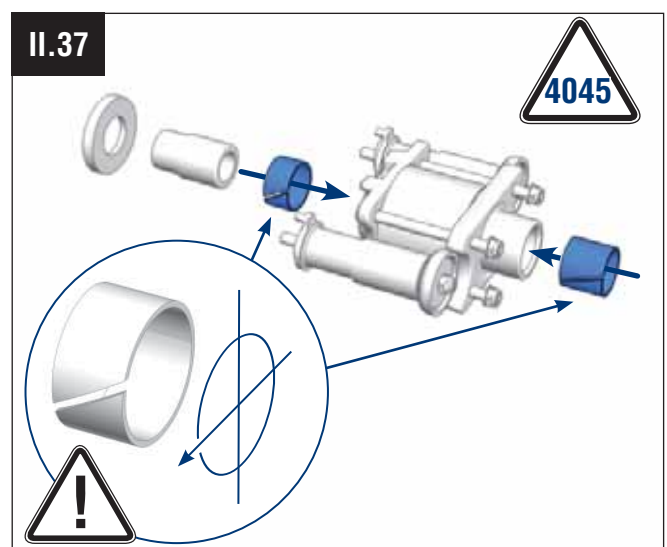
Montage der Lagerbuchsen / Stangenführung (3)
Fitting of bearing bushing/rod guidance system (3)



Montage der Lagerbuchsen / Stangenführung (4)
Fitting of bearing bushing/rod guidance system (4)



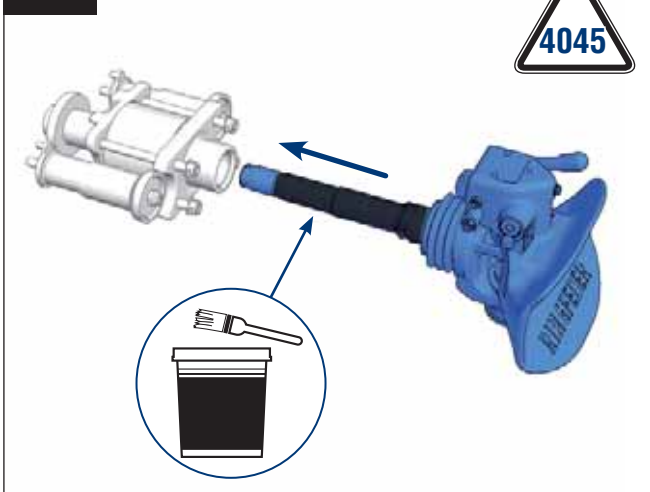
Montage der Lagerbuchsen / Stangenführung (5)
Fitting of bearing bushing/rod guidance system (5)



Montage der Lagerbuchsen / Stangenführung (1)
Fitting of bearing bushing/rod guidance system (1)

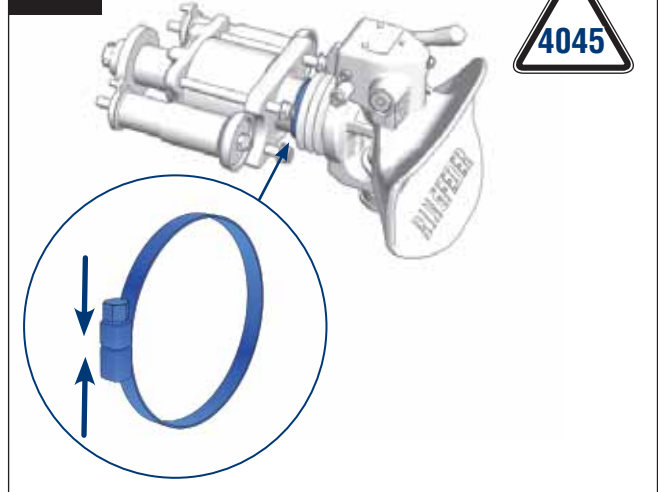


II.38



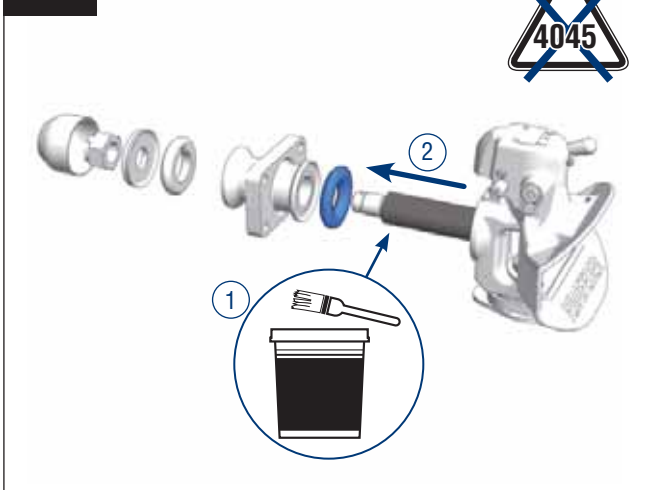
Montage der Lagerbuchsen/Stangenführung (2)
Fitting of bearing bushing/rod guidance system (2)

II.39



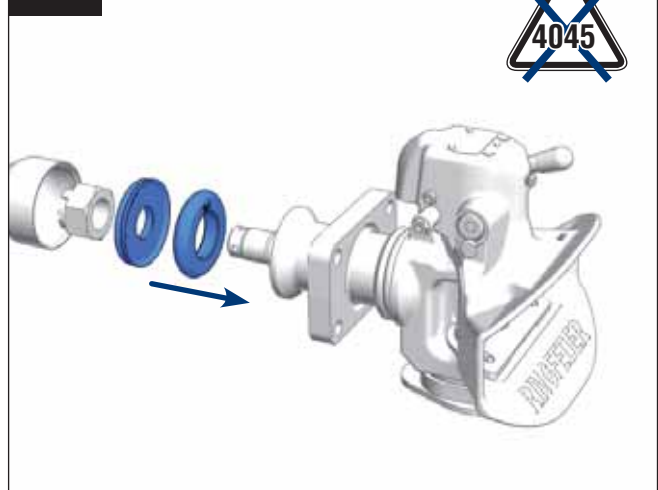
Montage der Lagerbuchsen/Stangenführung (3)
Fitting of bearing bushing/rod guidance system (3)

II.40



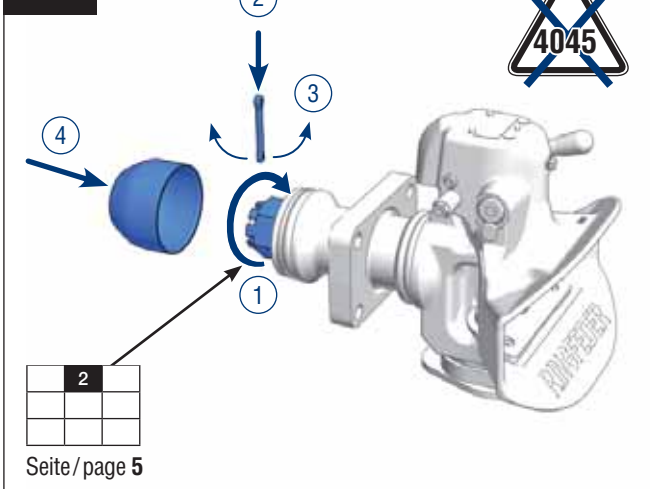
Montage der Gummifedern (1)
Fitting of the rubber springs (1)

II.41



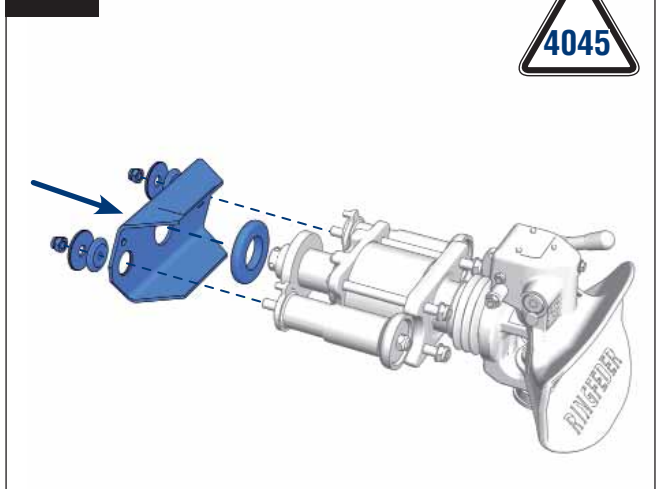
Montage der Gummifedern (2)
Fitting of the rubber springs (2)

II.42

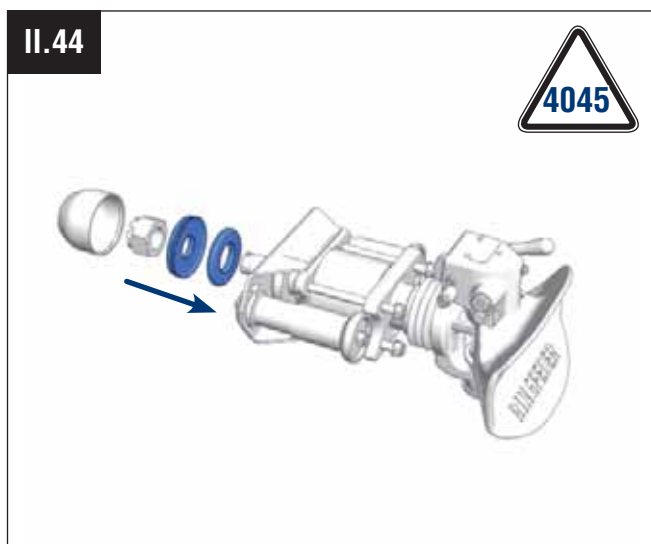


Montage der Gummifedern (3)
Fitting of the rubber springs (3)

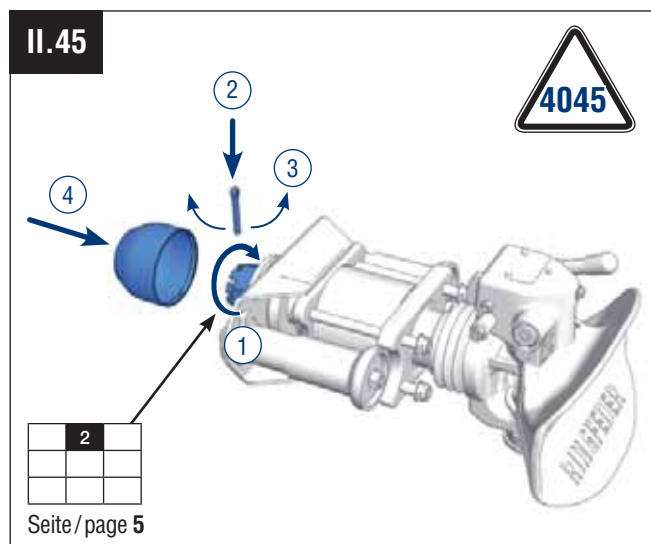
II.43



Montage der Gummifedern (1)
Fitting of the rubber springs (1)



Montage der Gummifedern (2)
Fitting of the rubber springs (2)



Montage der Gummifedern (3)
Fitting of the rubber springs (3)

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Montage der oberen Führungsbuchse (1)
Fitting of the upper guide bushing (1)



Montage der oberen Führungsbuchse (2)
Fitting of the upper guide bushing (2)



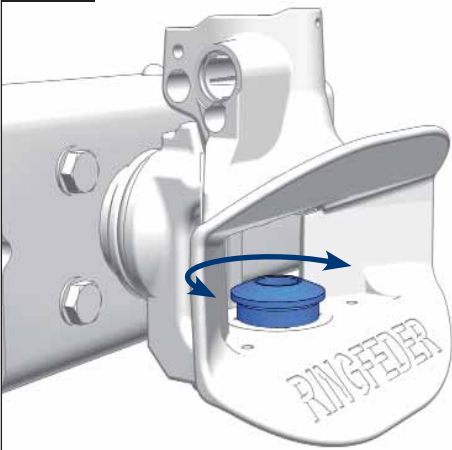
Montage des Kuppelkörpers
Fitting of the coupling assembly



Montage der unteren Führungsbuchse (1)
Fitting of the lower guide bushing (1)

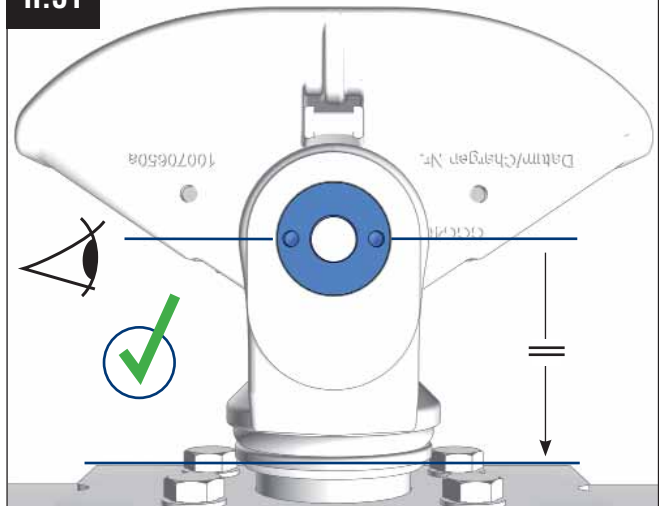


II.50



Montage der unteren Führungsbuchse (2)
Fitting of the lower guide bushing (2)

II.51



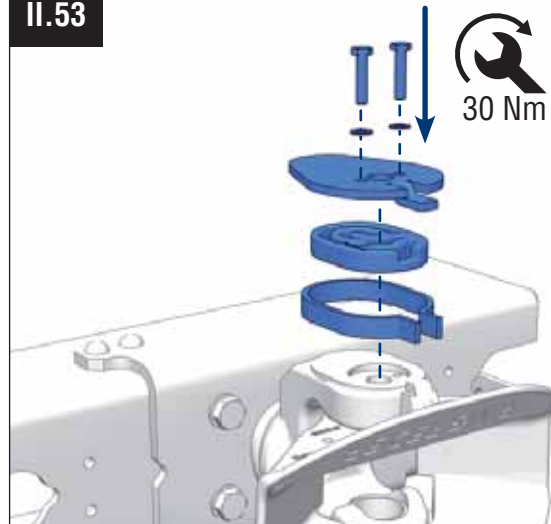
Montage der unteren Führungsbuchse (3)
Fitting of the lower guide bushing (3)

II.52



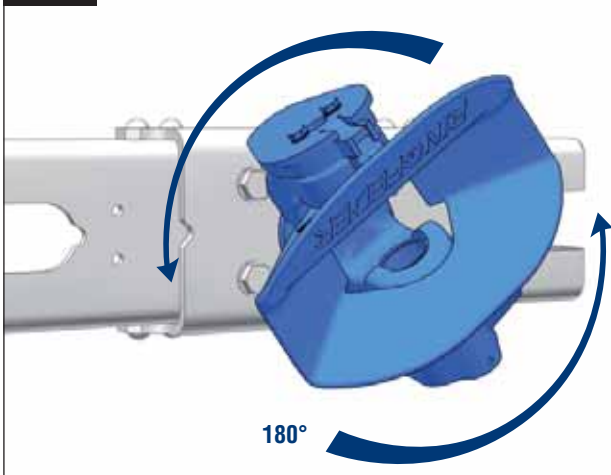
Montage der unteren Führungsbuchse (4)
Fitting of the lower guide bushing (4)

II.53



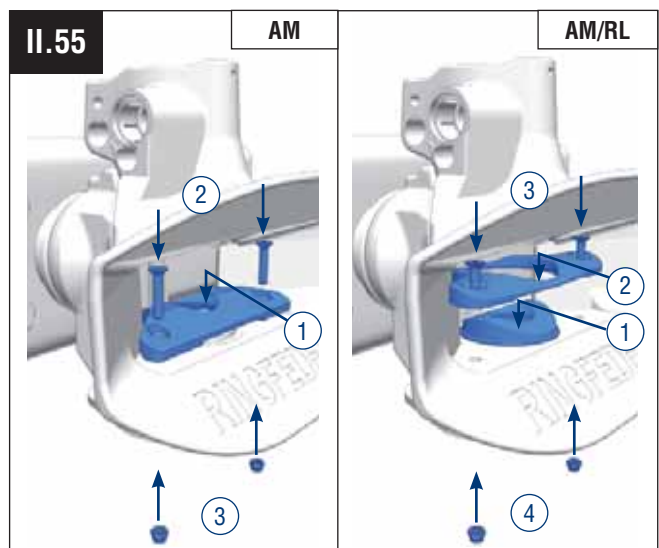
Montage der Nasenscheibe, Montage der Rückstellfeder
Fitting of the tab washer, fitting of the return springs

II.54

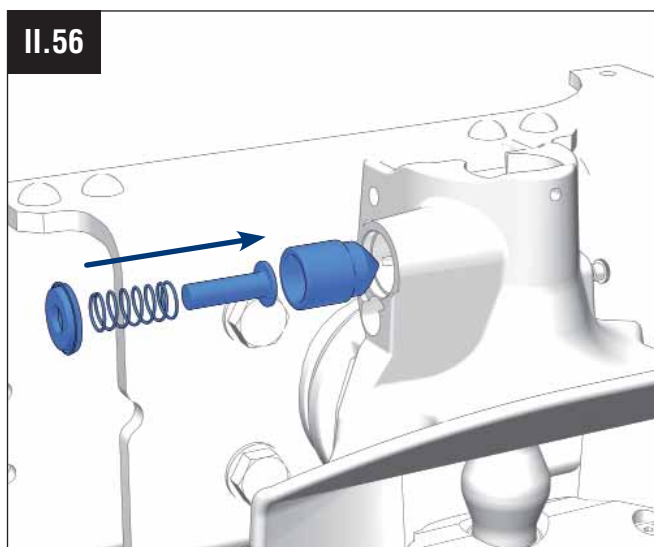


(Zurück-) Drehung der Kupplung)
Rotate the coupling (back)

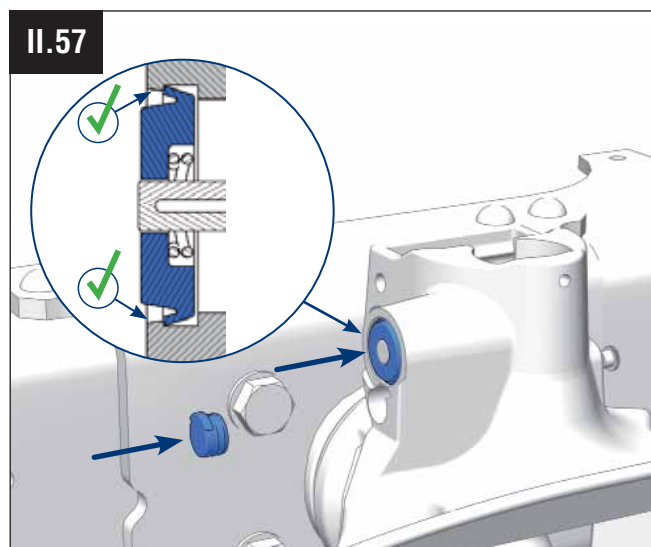
II.55



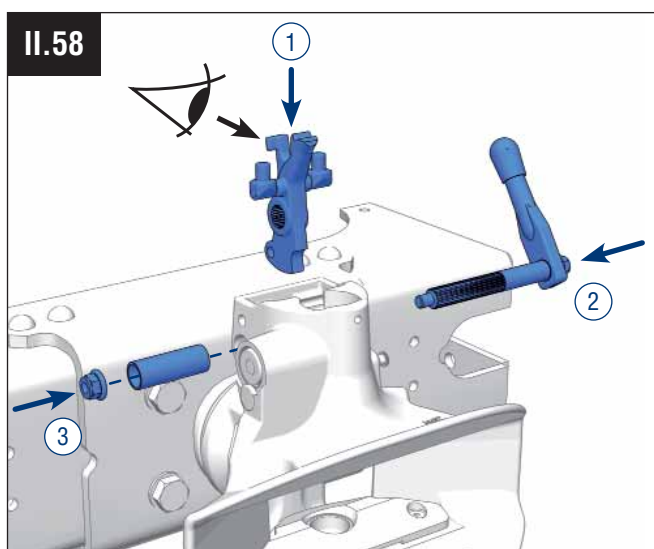
Montage Verschleißplatte
Fitting of wear plate



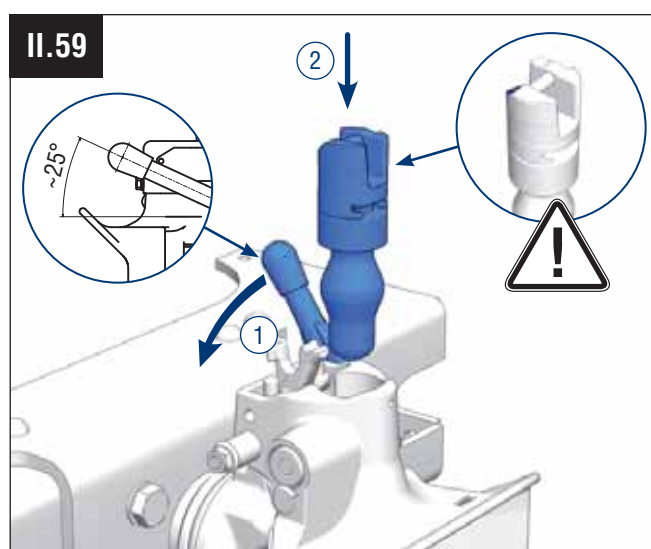
Montage der Sicherung (1)
Fitting of safety device (1)



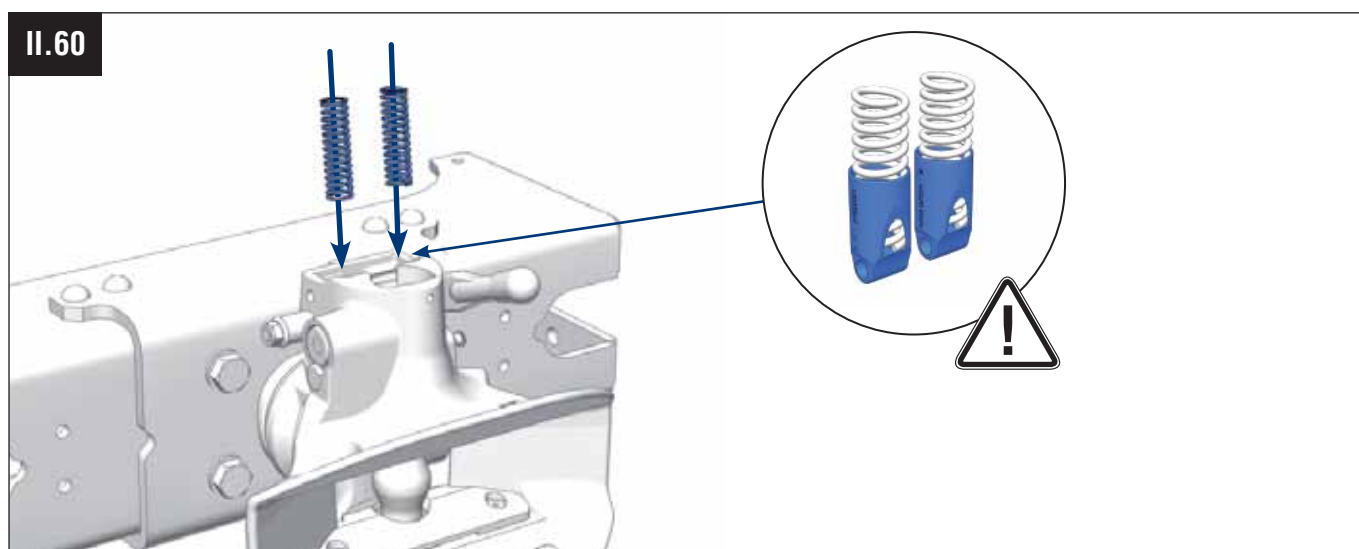
Montage der Sicherung (2)
Fitting of safety device (2)



Montage Handhebel, Montage Sperrhebel
Fitting of hand lever, fitting of locking lever



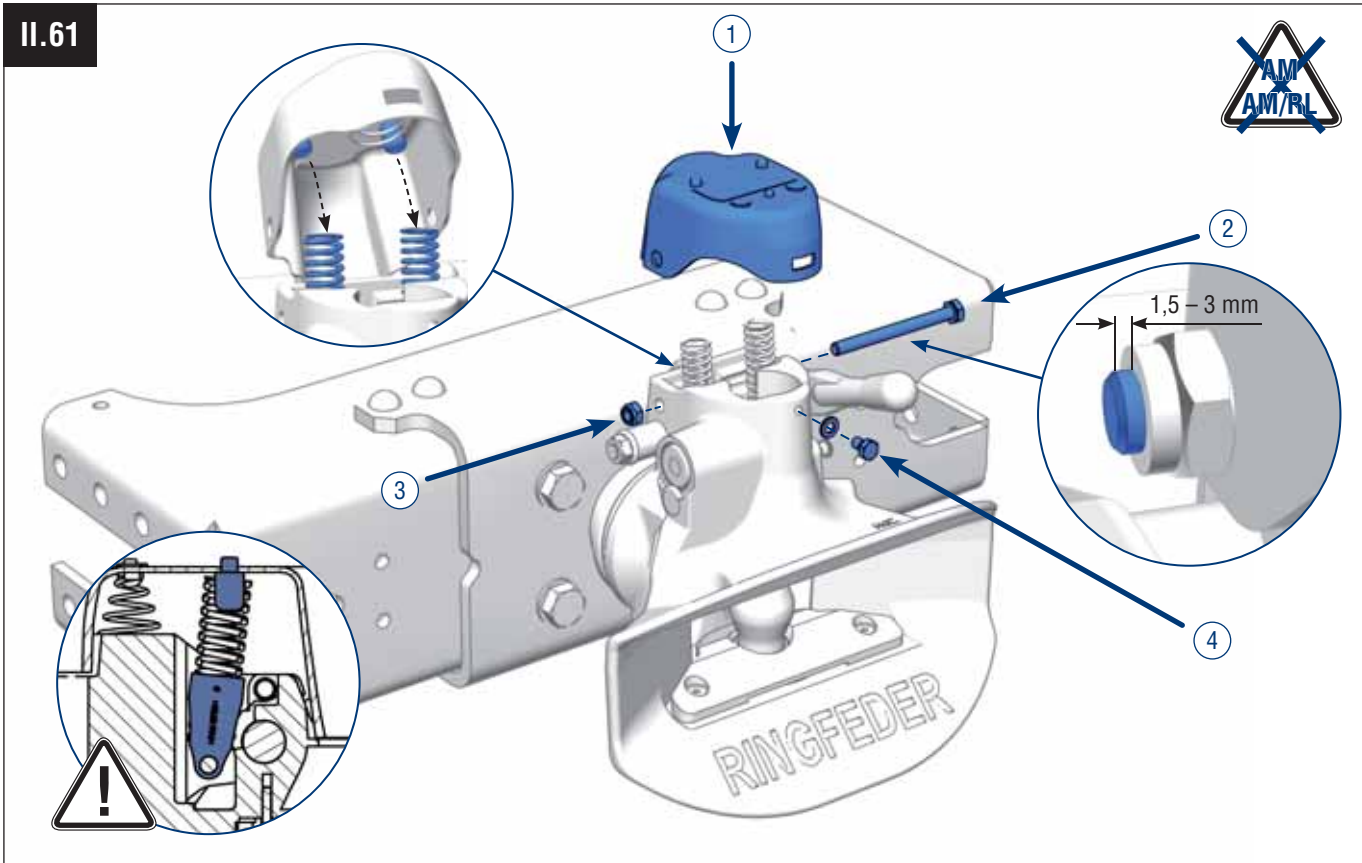
Montage Kuppelbolzen
Fitting of coupling bolt



Montage Schließfedern
Fitting of closing springs

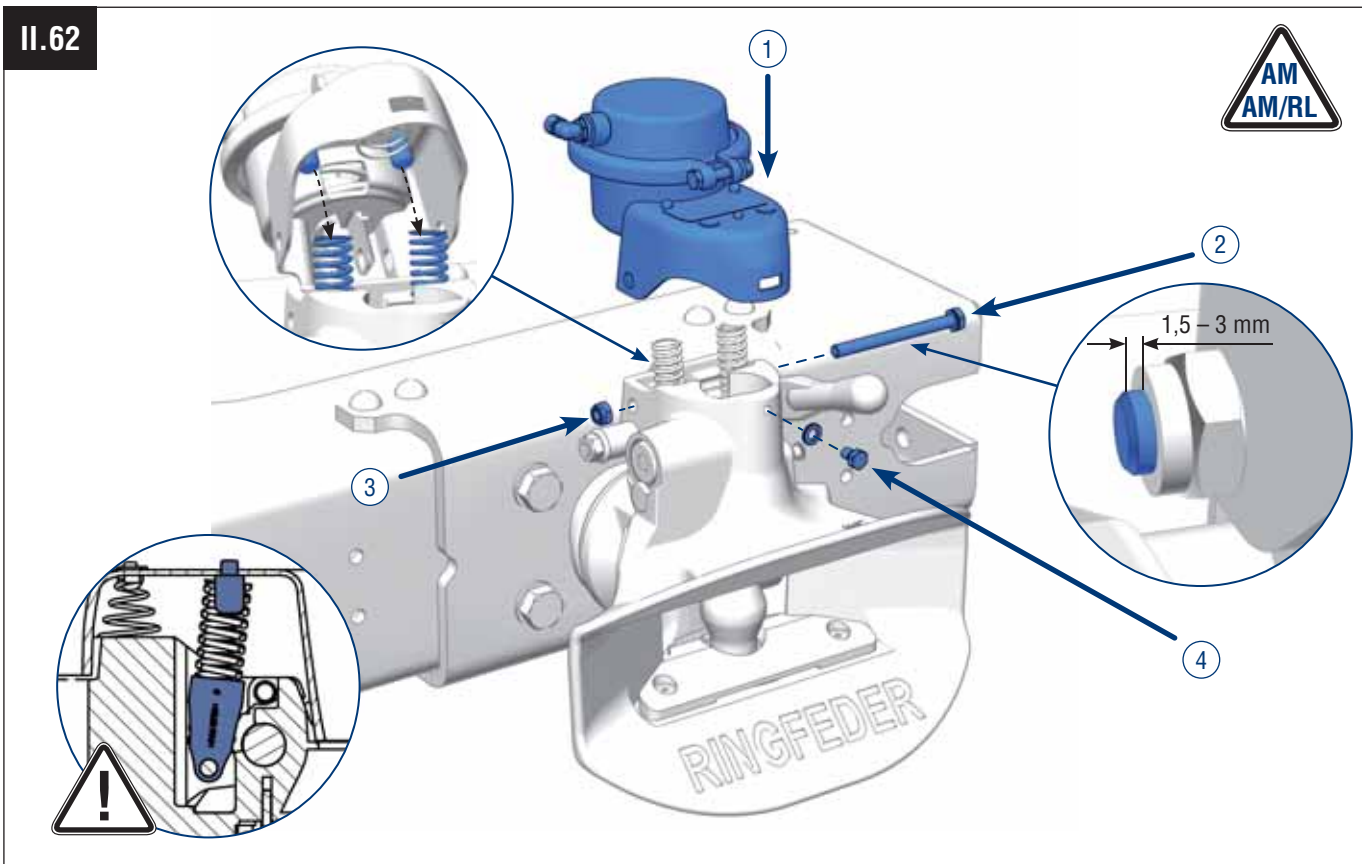


II.61



Montage Abschlussschloß
Fitting of end cap

II.62



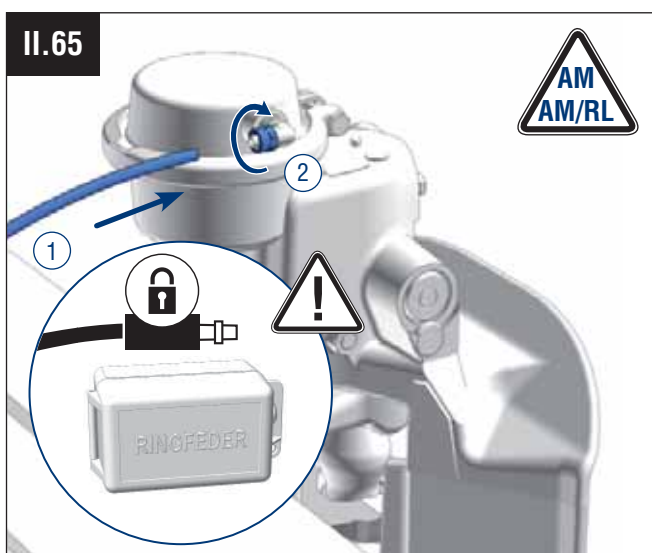
AM Abschlussschloß montieren
Fit AM end cap



Spiralspannstift eintreiben (1)
Drive in spiral pin (1)



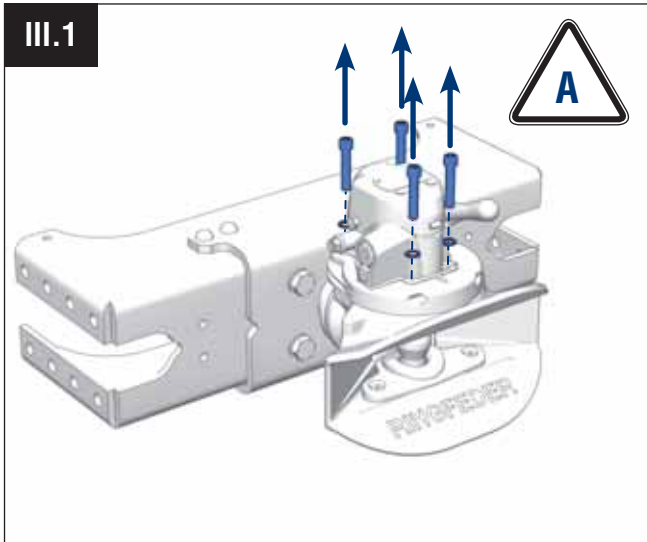
Spiralspannstift eintreiben (2)
Drive in spiral pin (2)



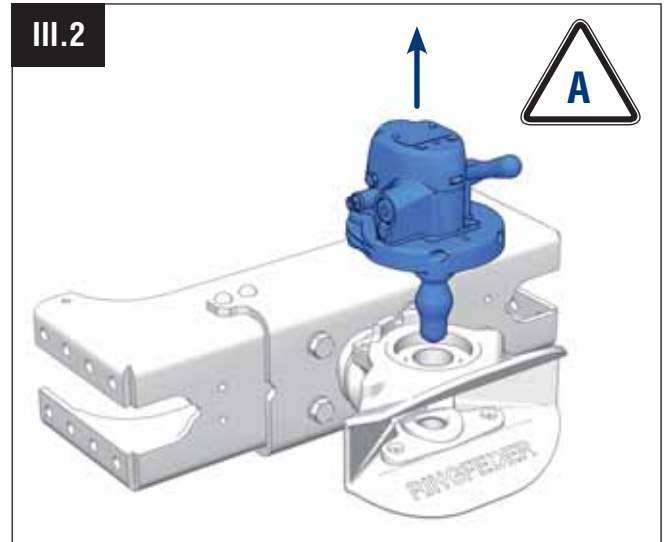
Druckluftleitung anschliessen
Connect compressed air supply

Gruppe | Group III.

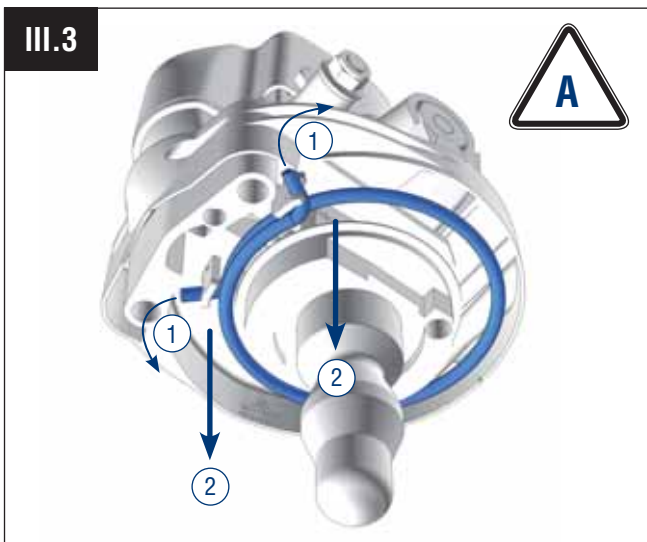
 Seite Page	Ø 40 mm Typ Type ...	Ø 50 mm Typ Type ...
10	-	 5055 A
10	-	 5055 AM, AM/RL
10	-	 5055 AP
11	-	 5055 AW



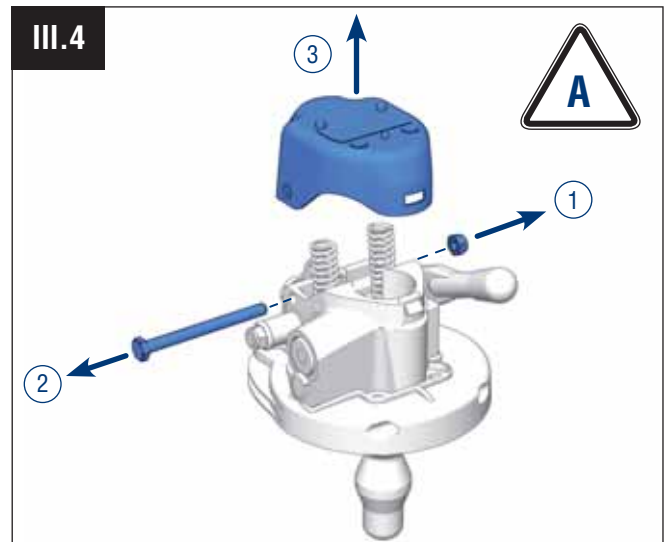
Demontage Kopfeinheit (1)
Dismantling of head unit (1)



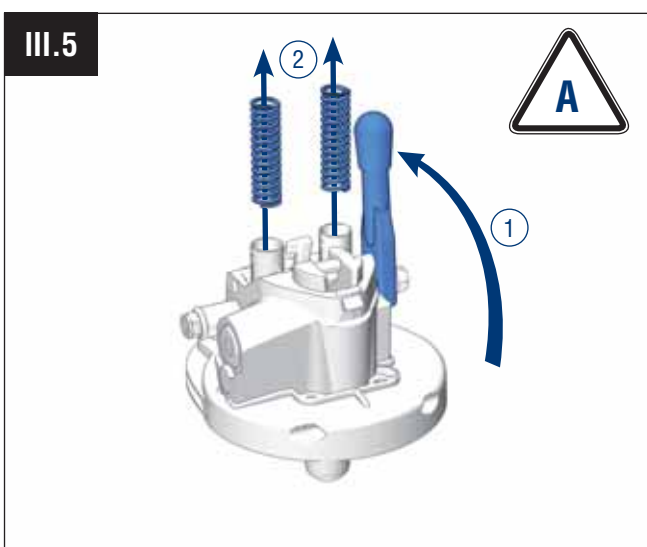
Demontage Kopfeinheit (2)
Dismantling of head unit (2)



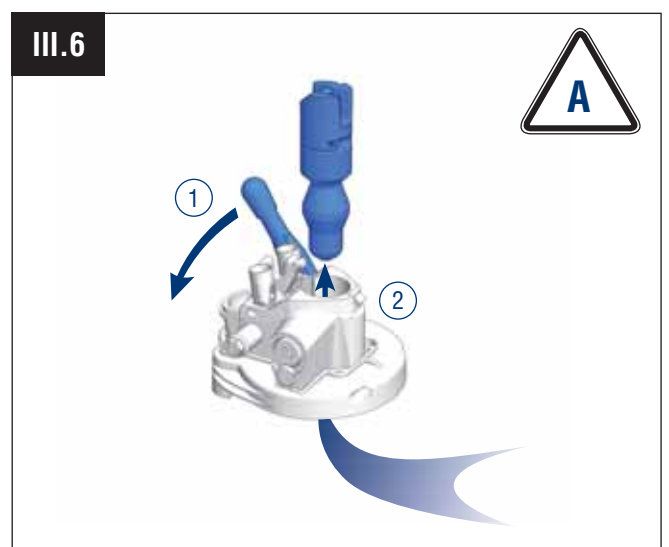
Demontage Rückstellfeder
Dismantling of return springs



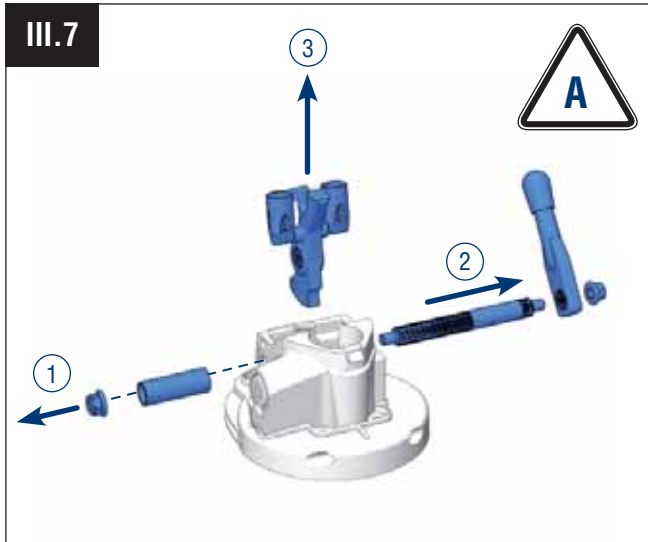
Demontage Abschlussdeckel
Dismantling of end cap



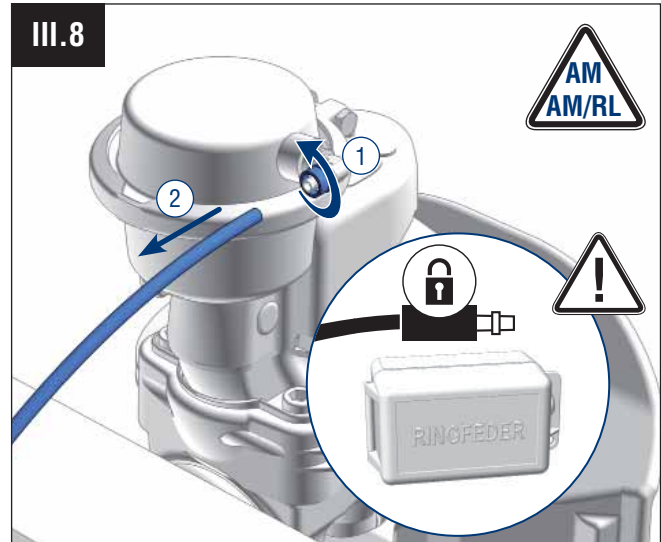
Demontage Schließfedern
Dismantling of closing springs



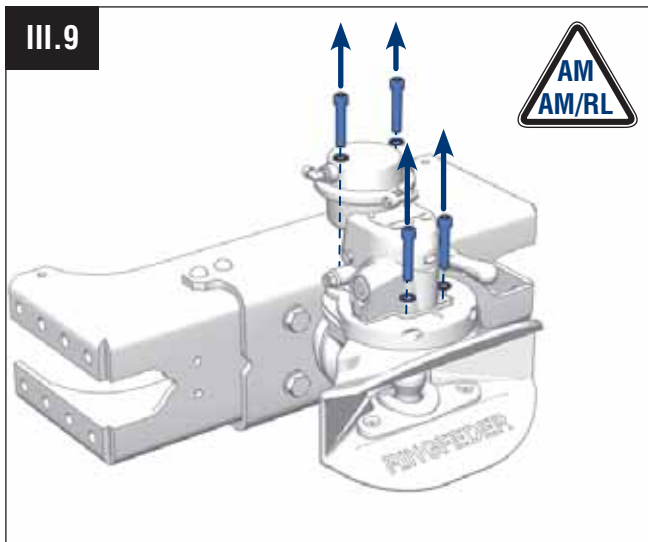
Demontage Kuppelbolzen
Dismantling of coupling bolt



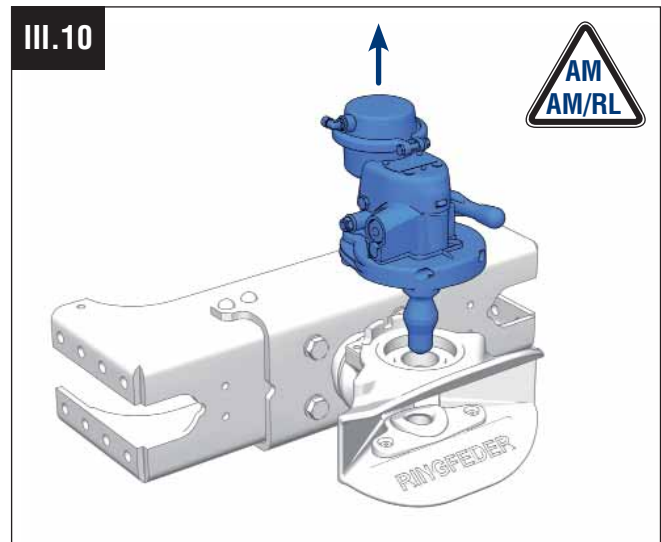
Demontage Handhebel, Demontage Sperrhebel
Dismantling of hand lever, dismantling of locking lever



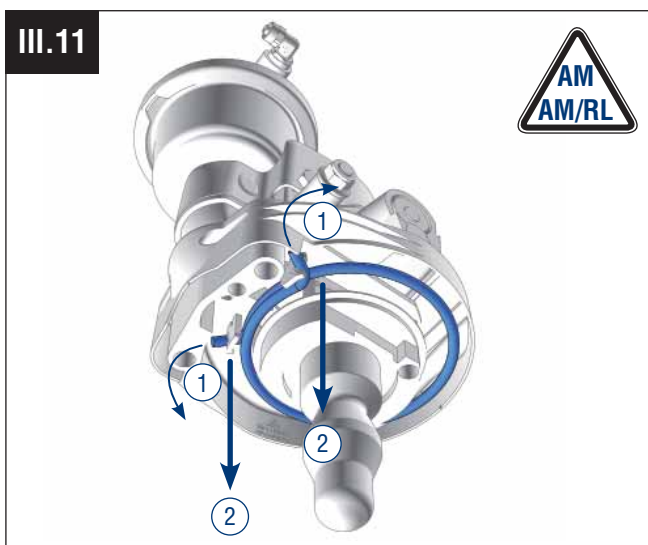
Druckluftleitung lösen
Release compressed air supply



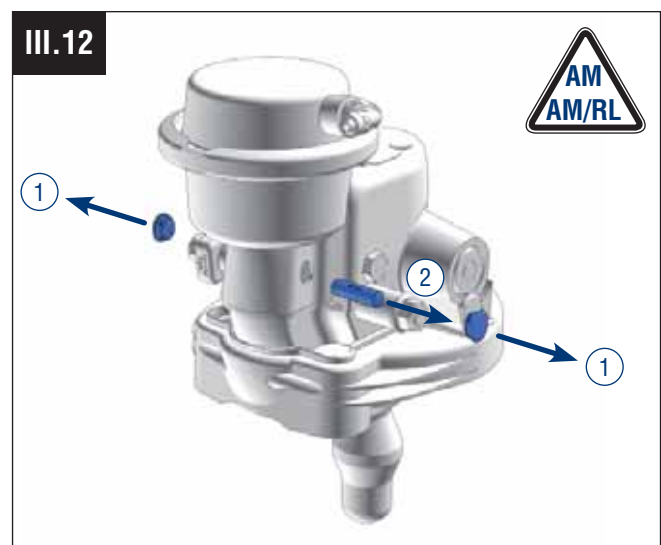
Demontage Kopfeinheit (1)
Dismantling of head unit (1)



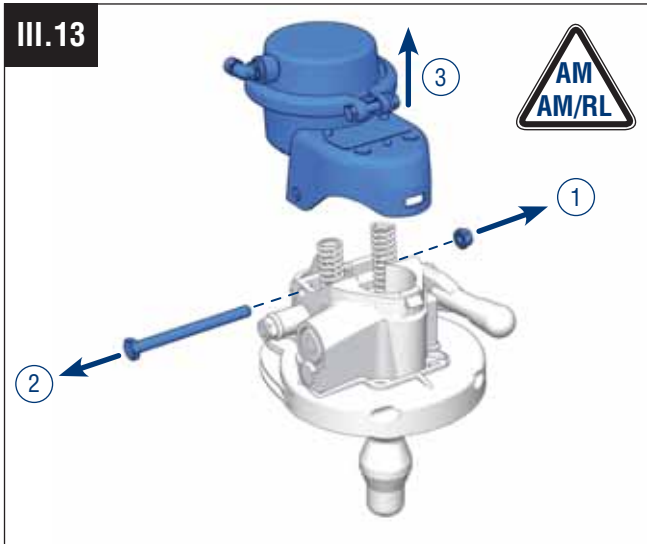
Demontage Kopfeinheit (2)
Dismantling of head unit (2)



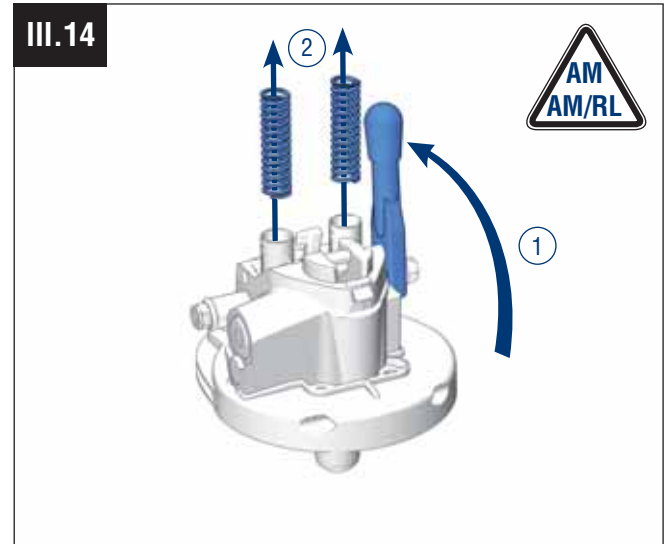
Demontage Rückstellfedern
Dismantling of return springs



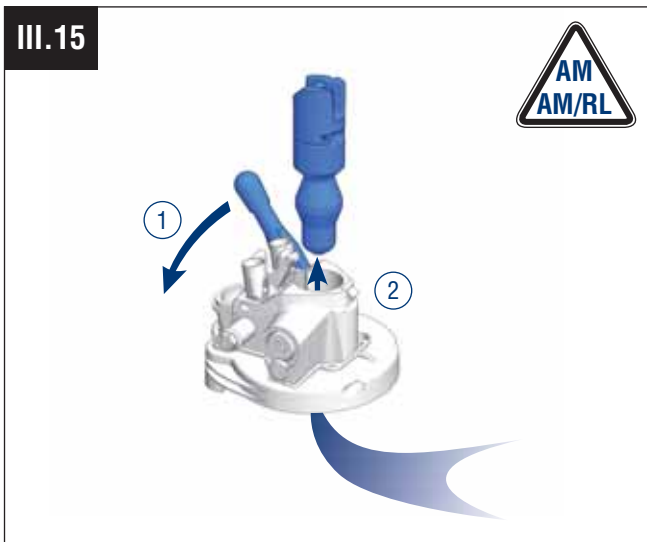
Demontage Spiralspannstift
Dismantling of spiral pin



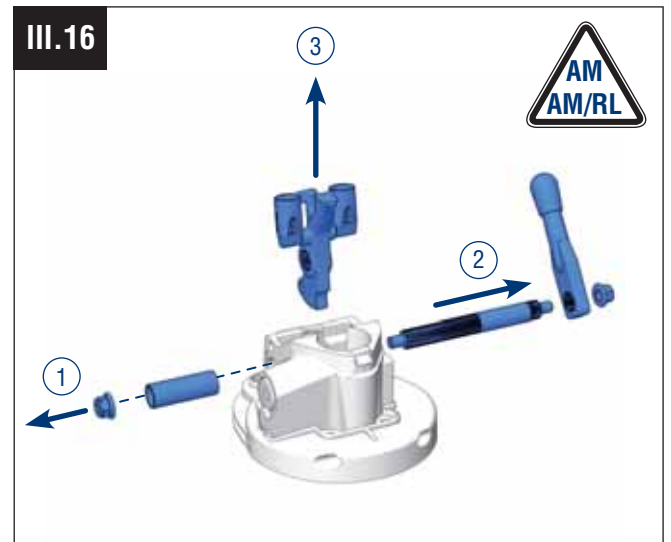
Demontage AM-Deckel
Dismantling of AM cap



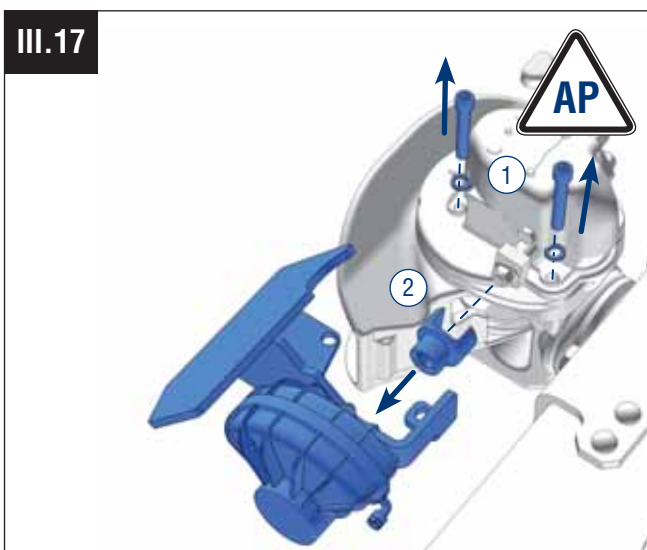
Demontage Schließfedern
Dismantling of closing springs



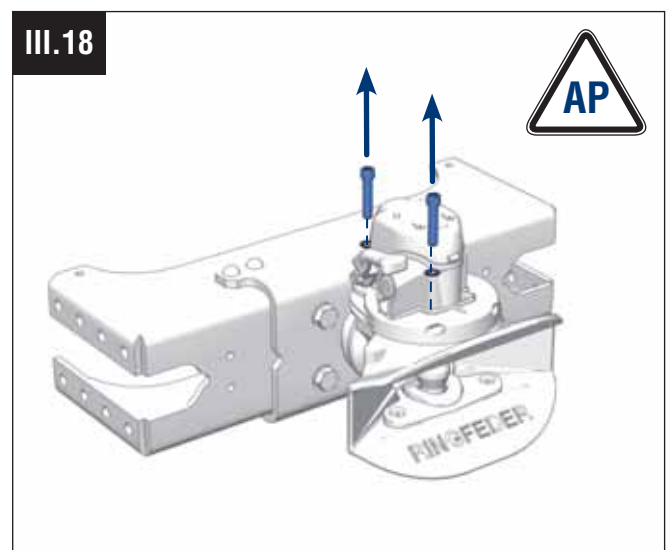
Demontage Kuppelbolzen
Dismantling of coupling bolt



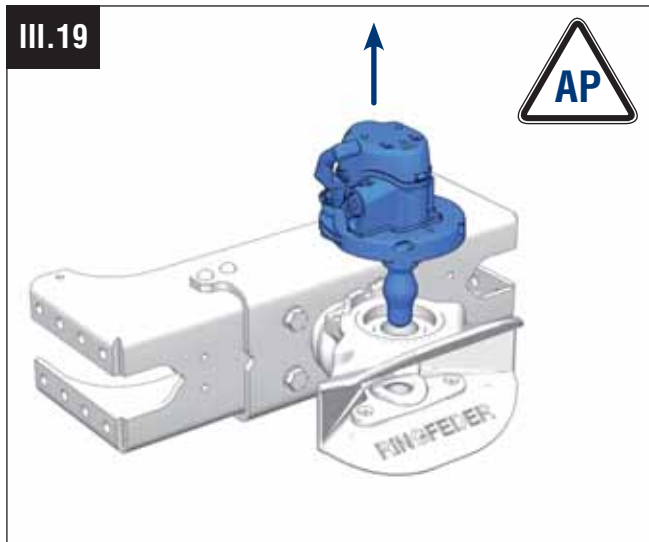
Demontage Handhebel, Demontage Sperrhebel
Dismantling of hand lever, dismantling of locking lever



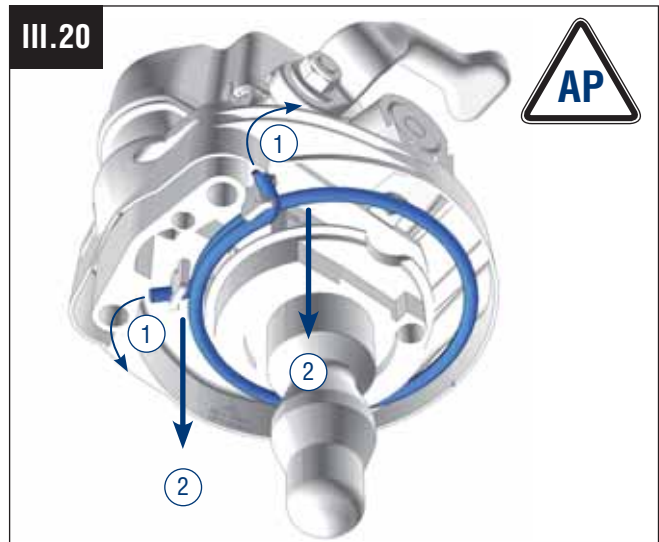
Demontage Power Actuator
Dismantling of power actuator



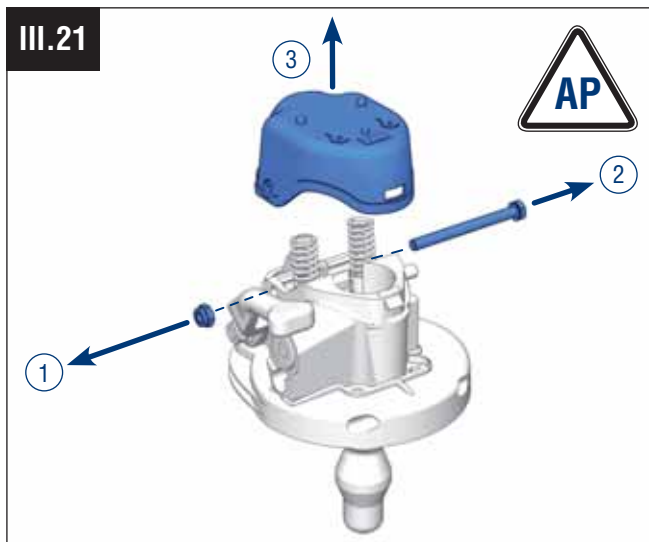
Demontage Kopfeinheit (1)
Dismantling of head unit (1)



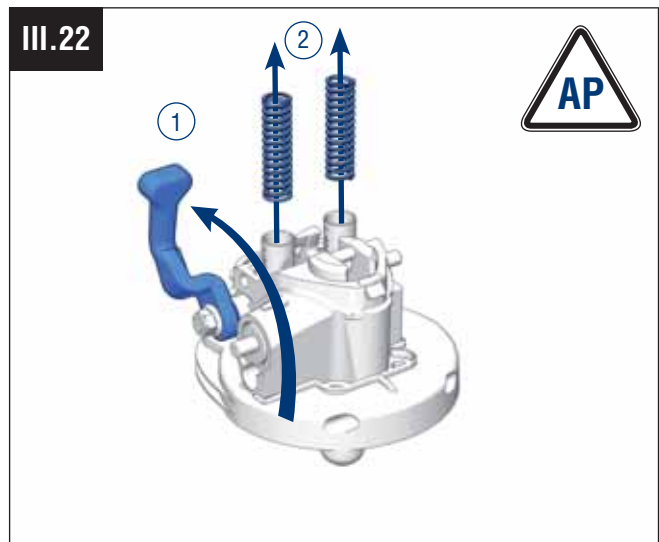
Demontage Kopfeinheit (2)
Dismantling of head unit (2)



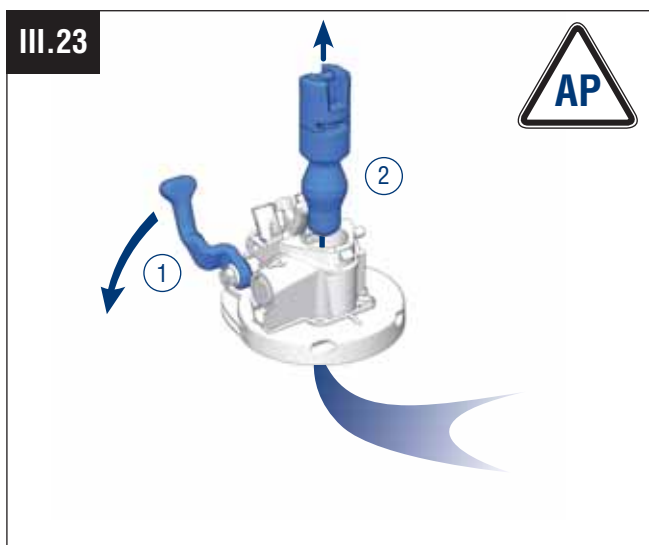
Demontage Rückstellfeder
Dismantling of return springs



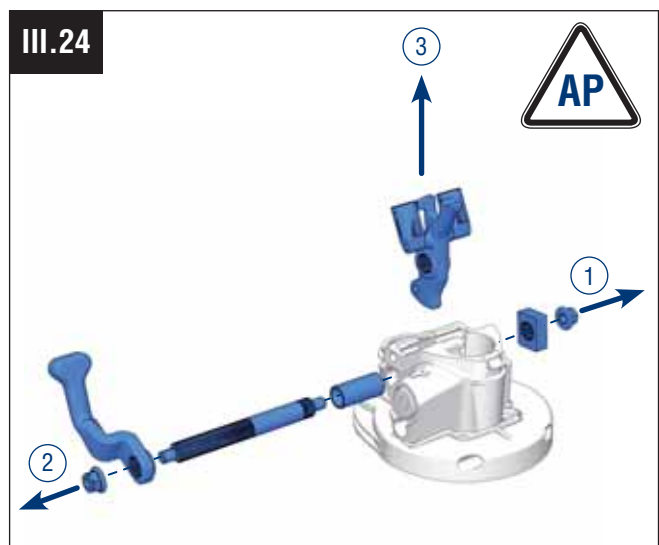
Demontage AP-Deckel
Dismantling of AP cap



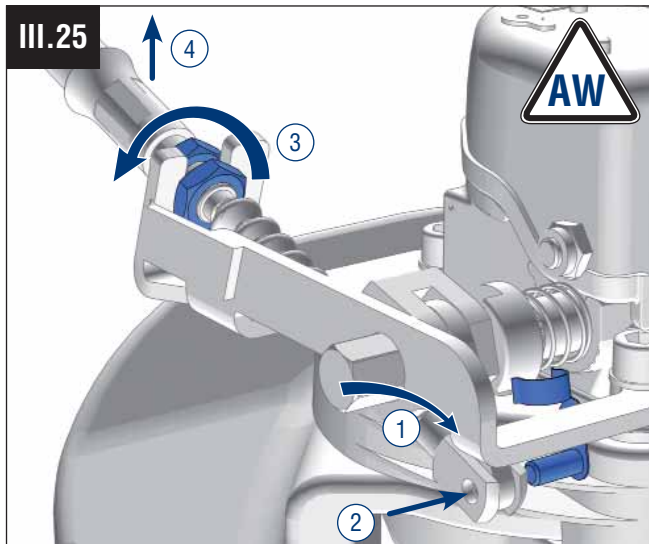
Demontage Schließfedern
Dismantling of closing springs



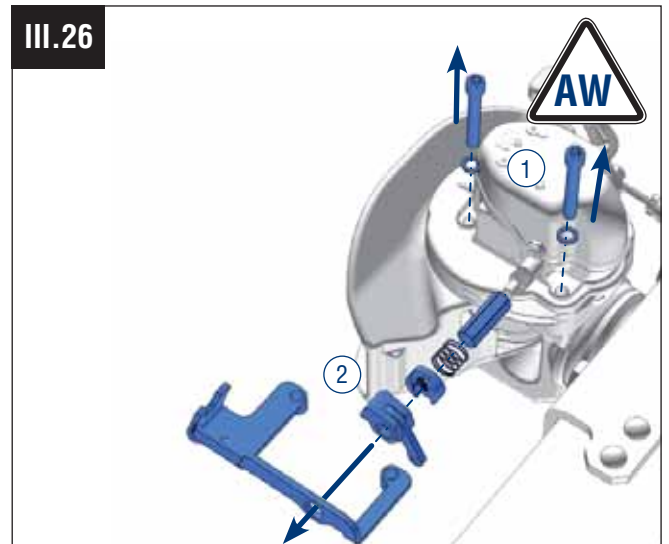
Demontage Kuppelbolzen
Dismantling of coupling bolt



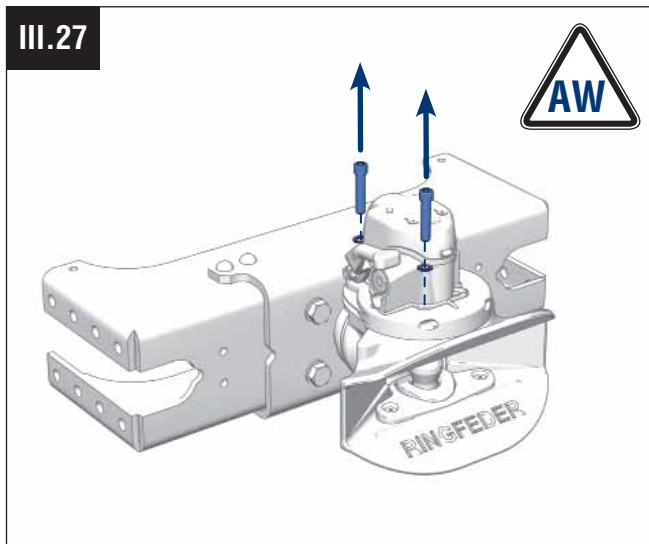
Demontage Handhebel, Demontage Sperrhebel
Dismantling of hand lever, dismantling of locking lever



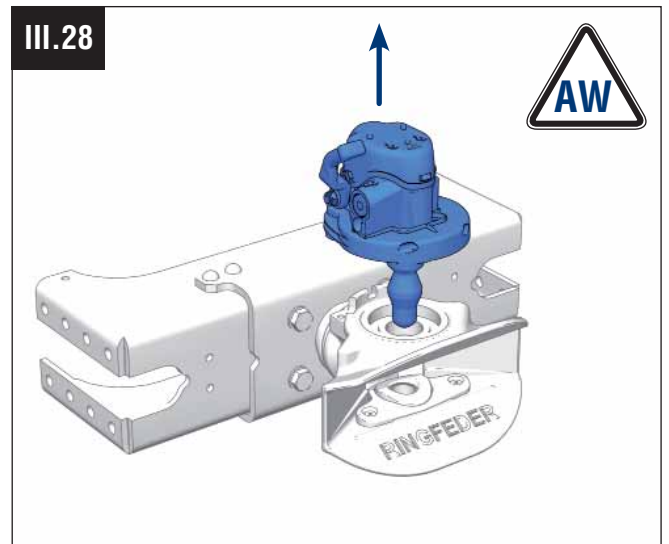
Seilzug lösen
Release cable pull



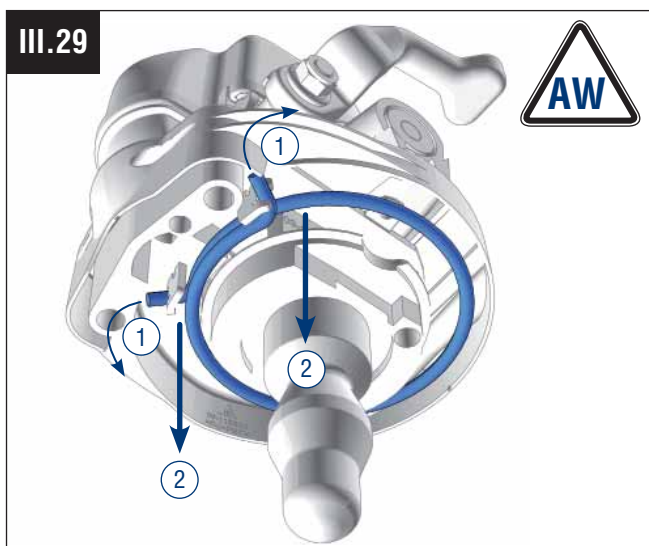
Demontage Gegenlager-/ Adaptersatz
Dismantling of counter-bearing / adapter set



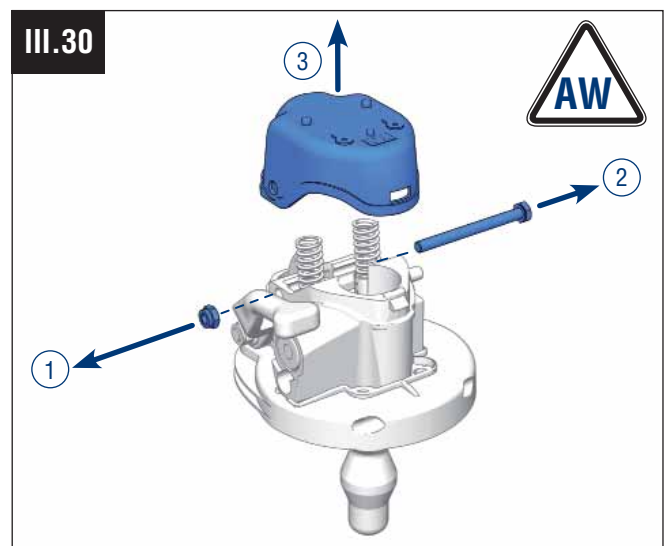
Demontage Kopfeinheit (1)
Dismantling of head unit (1)



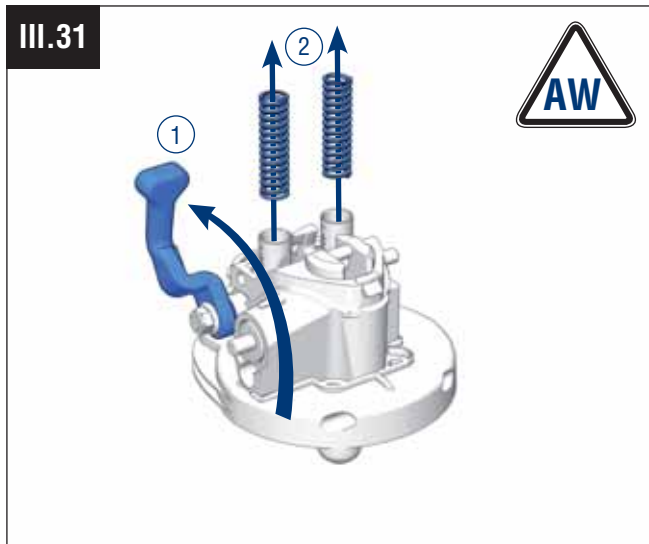
Demontage Kopfeinheit (2)
Dismantling of head unit (2)



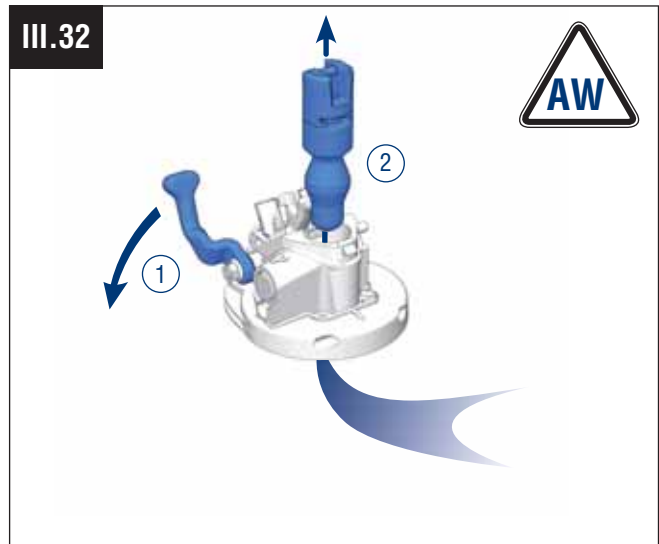
Demontage Rückstellfeder
Dismantling of return springs



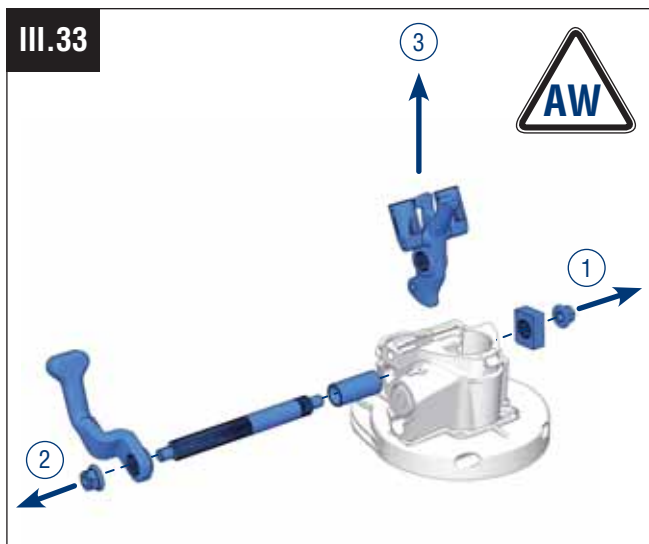
Demontage AW-Deckel
Dismantling of AW cap



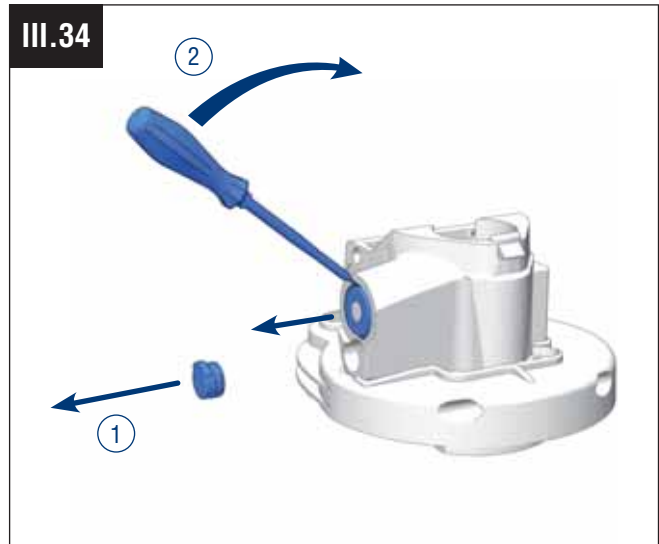
Demontage Schließfedern
Dismantling of closing springs



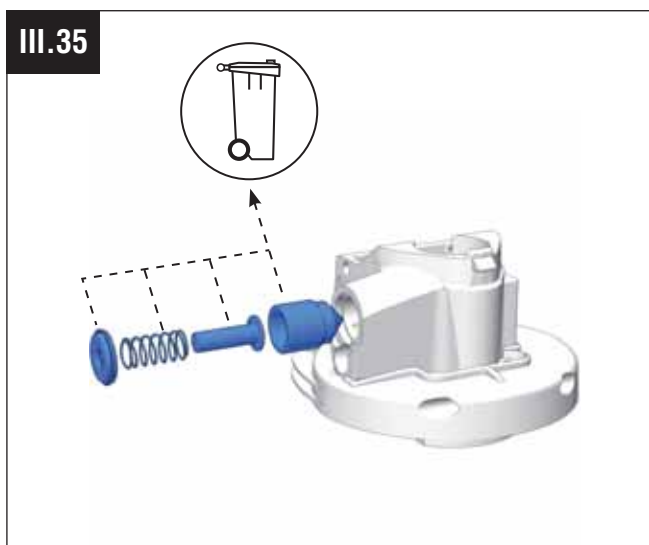
Demontage Kuppelbolzen
Dismantling of coupling bolt



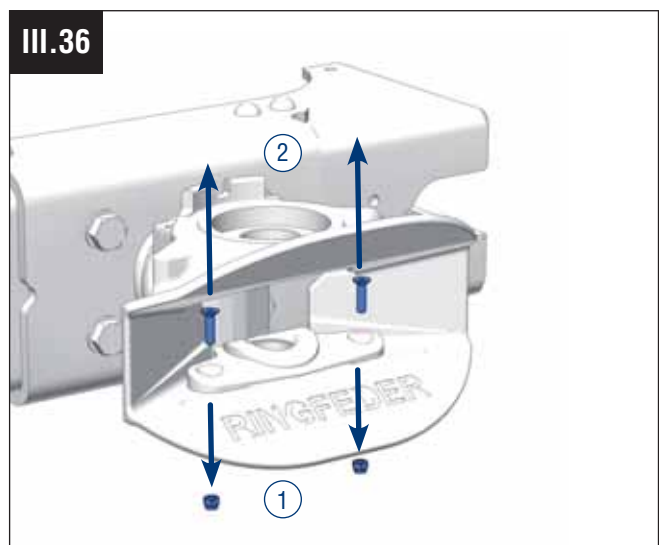
Demontage Handhebel, Demontage Sperrhebel
Dismantling of hand lever, dismantling of locking lever



Demontage Sicherung (1)
Dismantling of safety device (1)



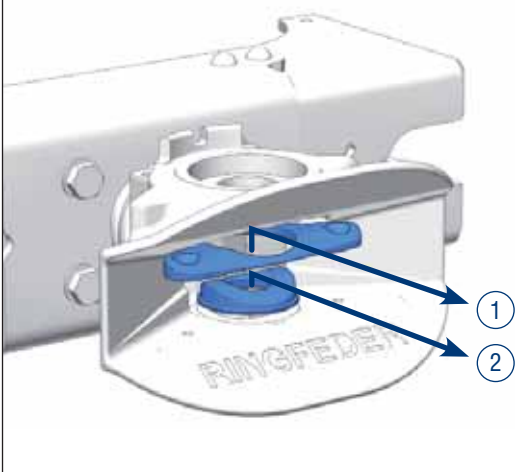
Demontage Sicherung (2)
Dismantling of safety device (2)



Demontage Verschleißplatte (1)
Dismantling of wear plate (1)

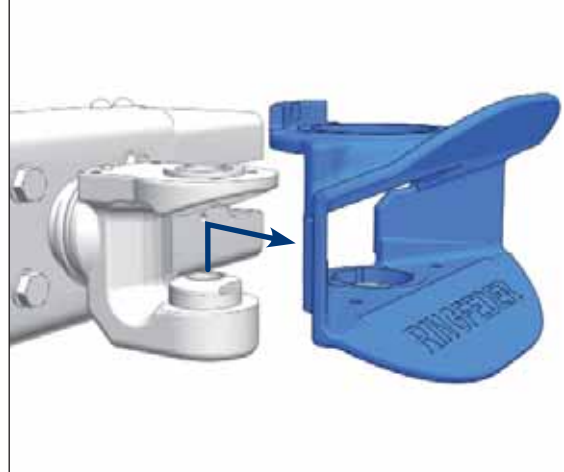


III.37



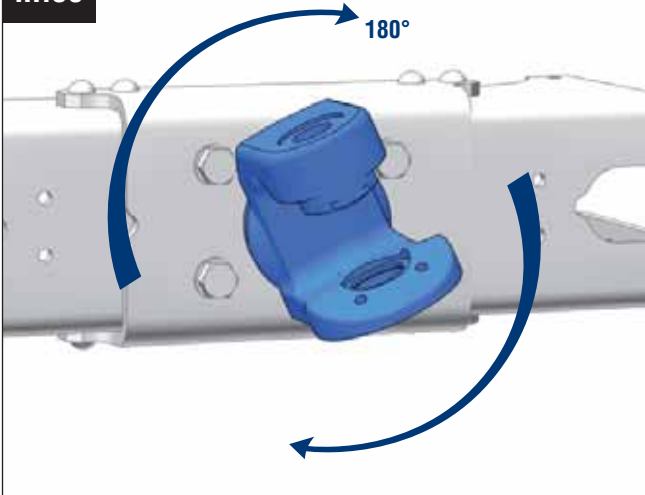
Demontage Verschleißplatte (2)
Dismantling of wear plate (2)

III.38



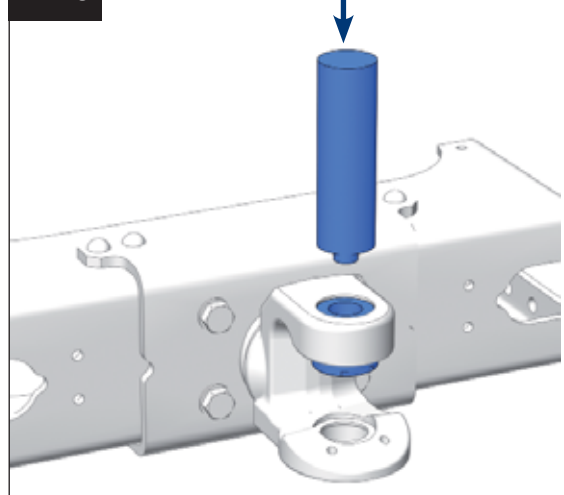
Demontage des Kuppelkörpers
Dismantling of coupling assembly

III.39



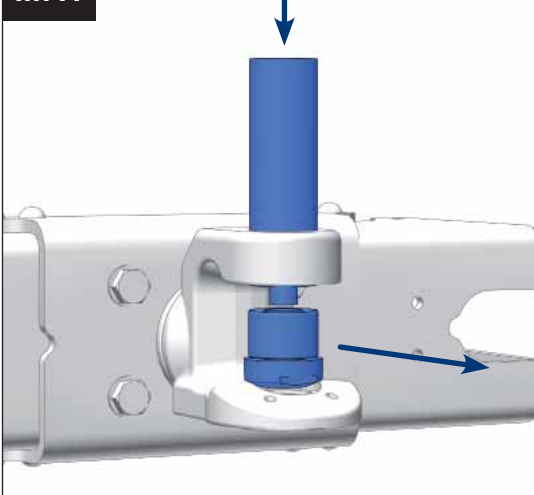
Drehung der Zugstange
Turning of pull rod

III.40



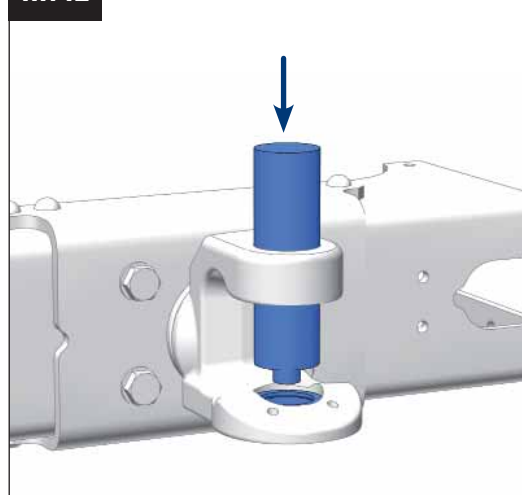
Demontage der unteren Führungsbuchse (1)
Dismantling of the lower guide bushing (1)

III.41

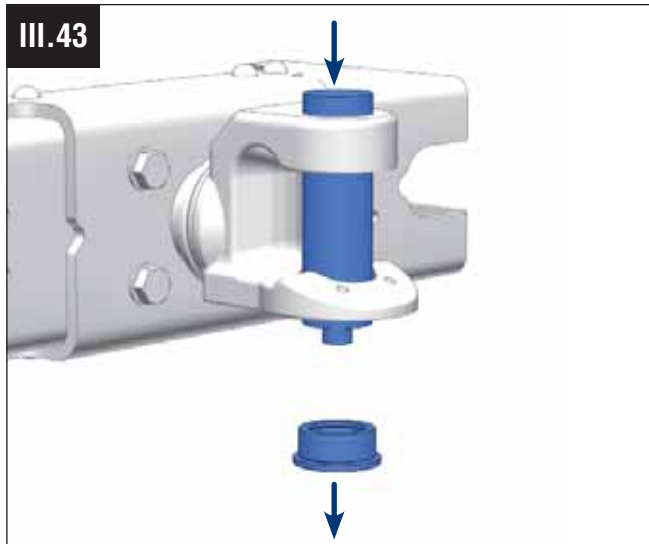


Demontage der unteren Führungsbuchse (2)
Dismantling of the lower guide bushing (2)

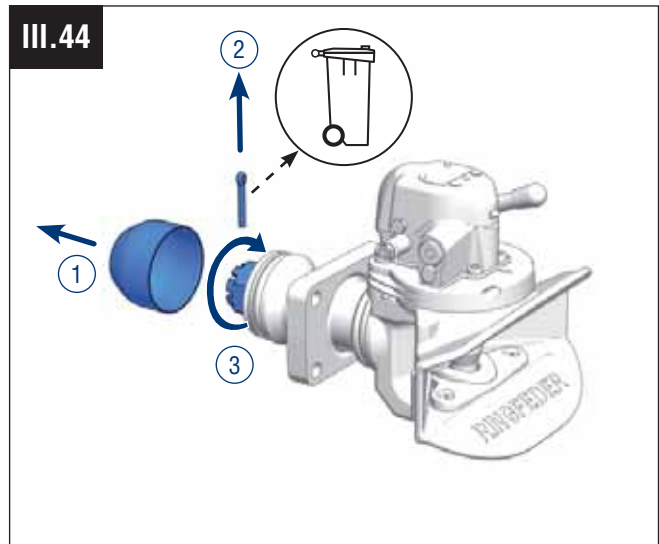
III.42



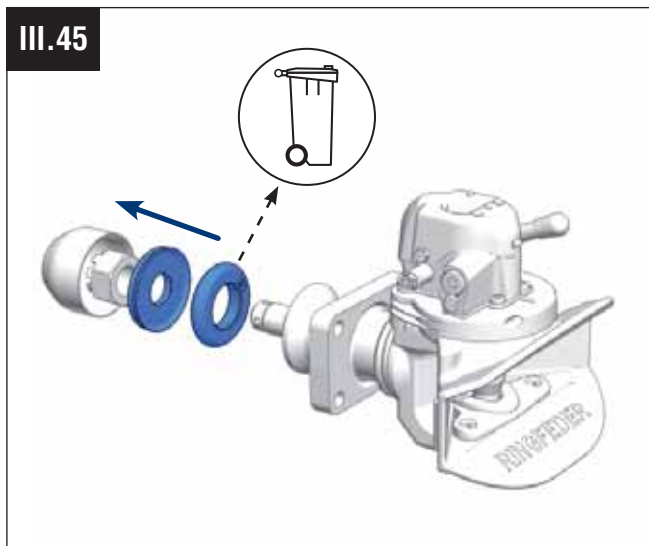
Demontage der oberen Führungsbuchse (1)
Dismantling of the upper guide bushing (1)



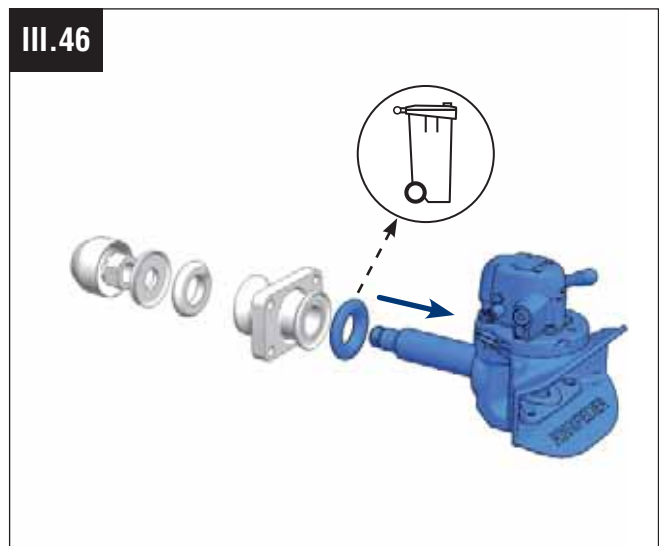
Demontage der oberen Führungsbuchse (2)
Dismantling of the upper guide bushing (2)



Demontage der Gummifedern (1)
Dismantling of the rubber springs (1)



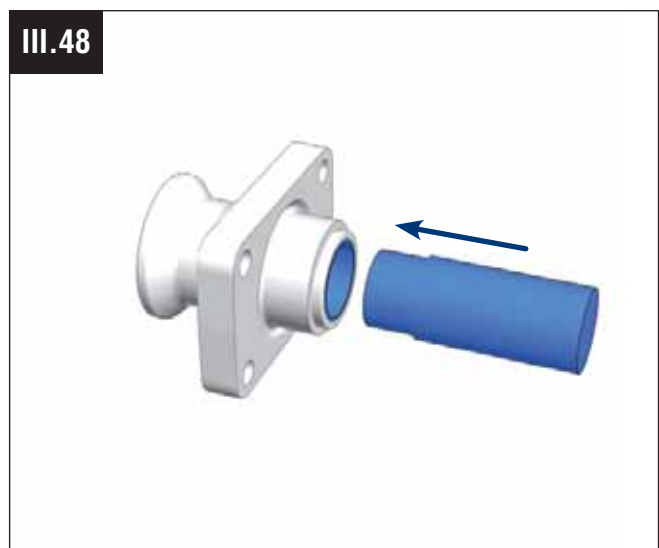
Demontage der Gummifedern (2)
Dismantling of the rubber springs (2)



Demontage der Gummifedern (3)
Dismantling of the rubber springs (3)



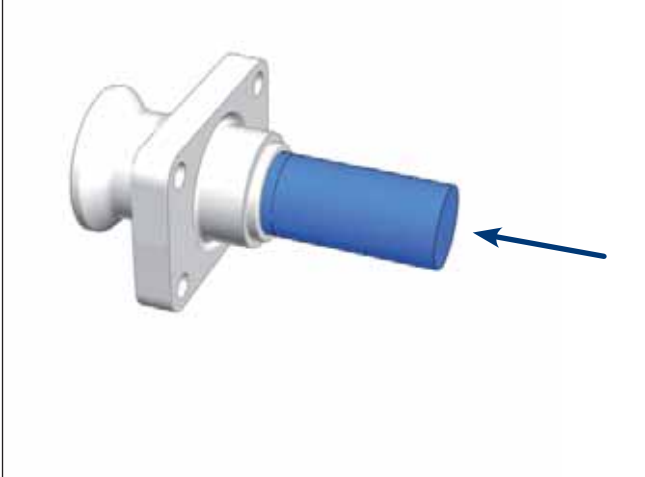
Demontage der Lagerbuchsen/Stangenführung (1)
Dismantling of bearing bushing/rod guidance system (1)



Demontage der Lagerbuchsen/Stangenführung (2)
Dismantling of bearing bushing/rod guidance system (2)

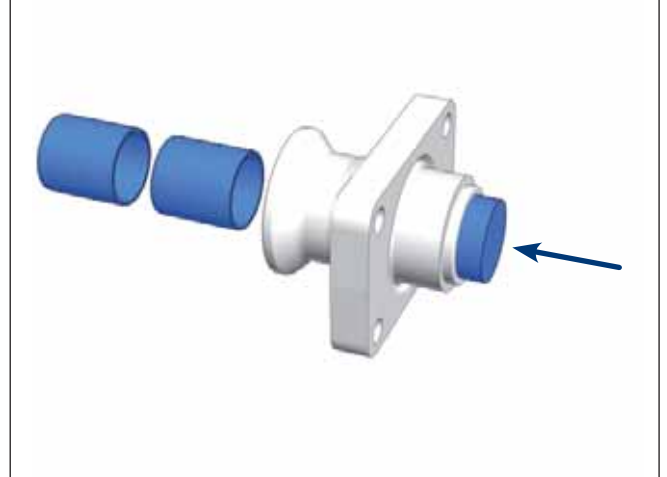


III.49



Demontage der Lagerbuchsen/Stangenführung (3)
Dismantling of bearing bushing/rod guidance system (3)

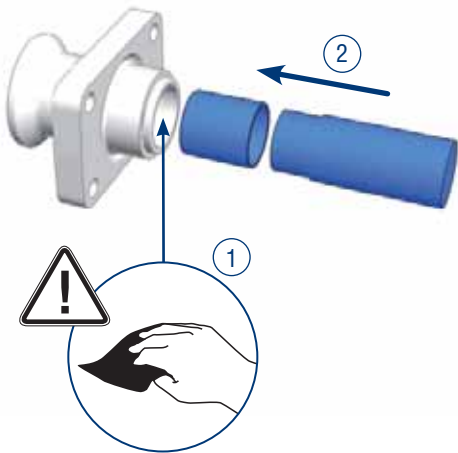
III.50



Demontage der Lagerbuchsen/Stangenführung (4)
Dismantling of bearing bushing/rod guidance system (4)



III.51



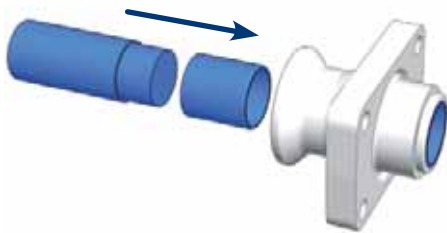
Montage der Lagerbuchsen/Stangenführung (1)
Fitting of bearing bushing/rod guidance system (1)

III.52



Montage der Lagerbuchsen/Stangenführung (2)
Fitting of bearing bushing/rod guidance system (2)

III.53



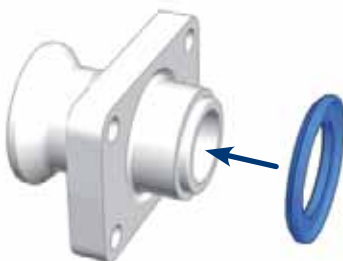
Montage der Lagerbuchsen/Stangenführung (3)
Fitting of bearing bushing/rod guidance system (3)

III.54



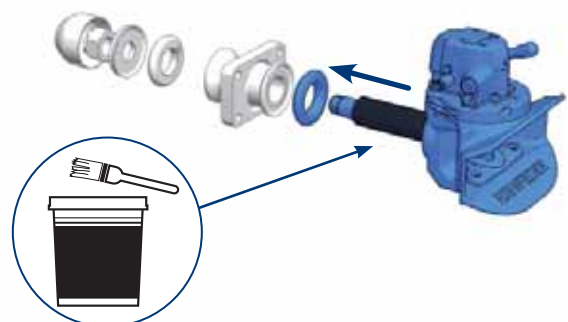
Montage der Lagerbuchsen/Stangenführung (4)
Fitting of bearing bushing/rod guidance system (4)

III.55



Montage der Lagerbuchsen/Stangenführung (5)
Fitting of bearing bushing/rod guidance system (5)

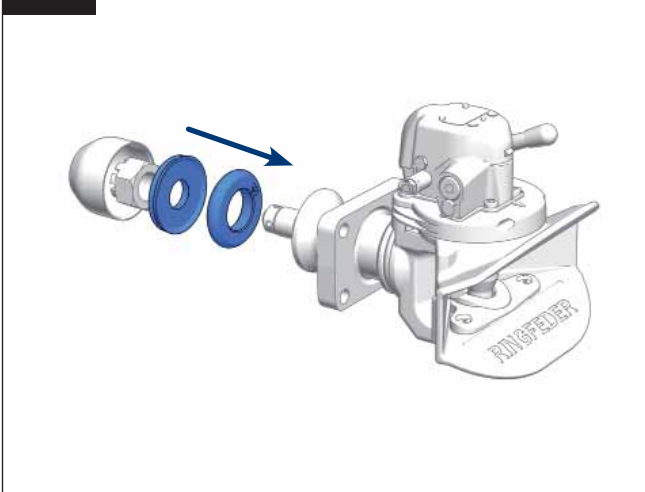
III.56



Montage der Gummifedern (1)
Fitting of the rubber springs (1)

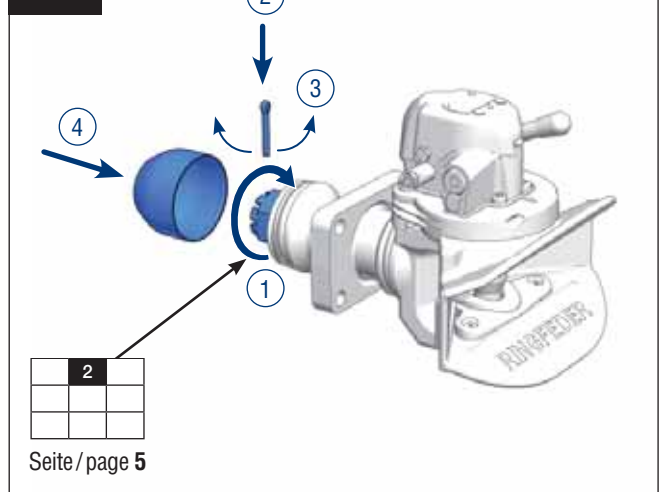


III.57



Montage der Gummifedern (2)
Fitting of the rubber springs (2)

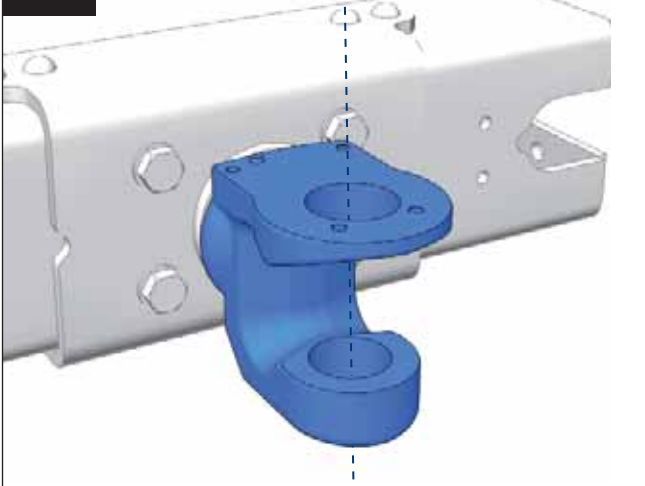
III.58



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Montage der Gummifedern (3)
Fitting of the rubber springs (3)

III.59



Position Zugstange
Position of pull rod

III.60



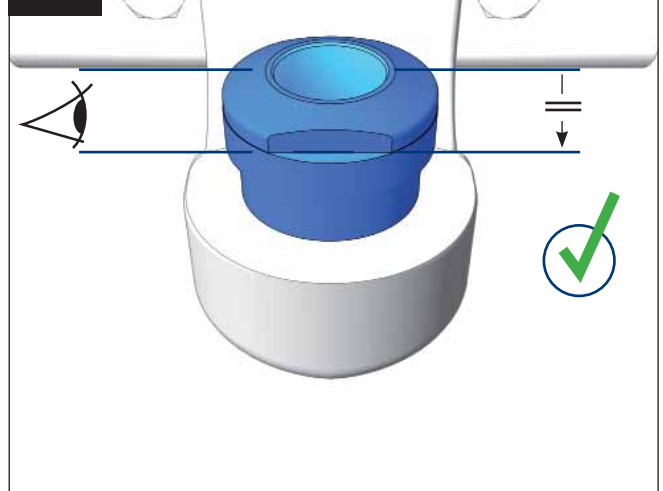
Montage der unteren Führungsbuchse (1)
Fitting of lower guide bushing (1)

III.61



Montage der unteren Führungsbuchse (2)
Fitting of lower guide bushing (2)

III.62



Montage der unteren Führungsbuchse (3)
Fitting of lower guide bushing (3)

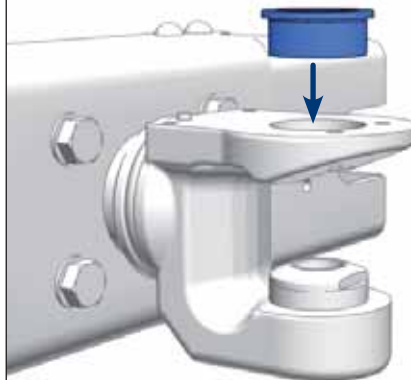


III.63



Montage der unteren Führungsbuchse (4)
Fitting of lower guide bushing (4)

III.64



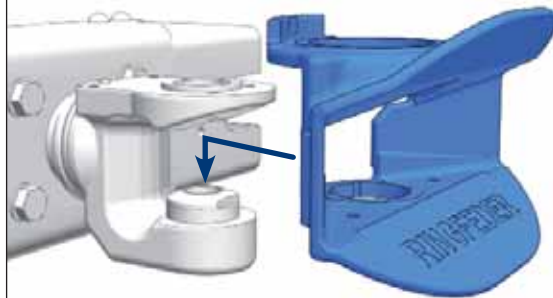
Montage der oberen Führungsbuchse (1)
Fitting of the upper guide bushing (1)

III.65



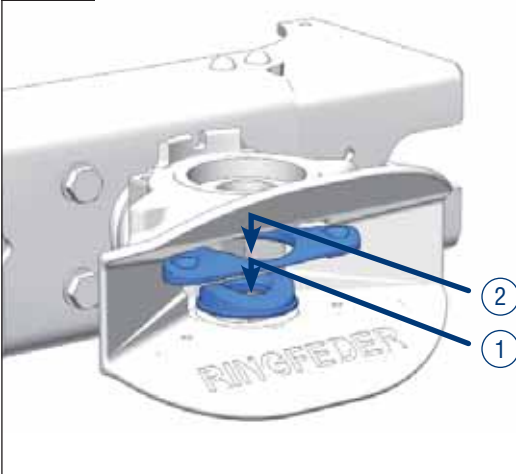
Montage der oberen Führungsbuchse (2)
Fitting of the upper guide bushing (2)

III.66



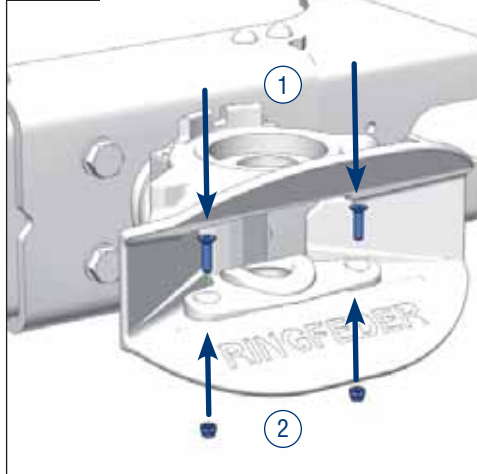
Montage des Kuppelkörpers
Fitting of the coupling assembly

III.67



Montage Verschleißplatte (1)
Fitting of wear plate (1)

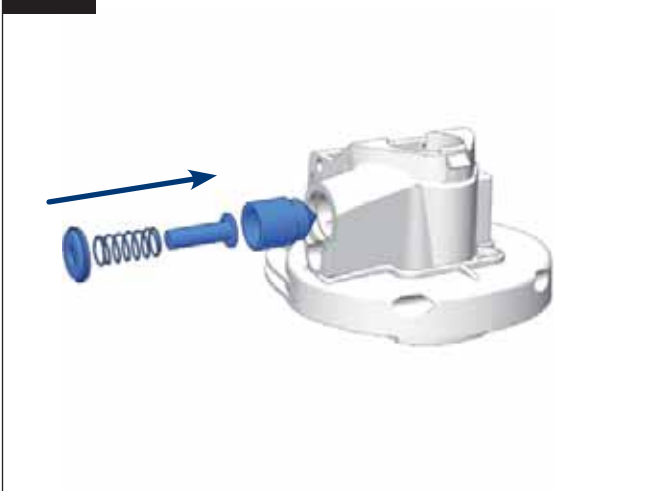
III.68



Montage Verschleißplatte (2)
Fitting of wear plate (2)

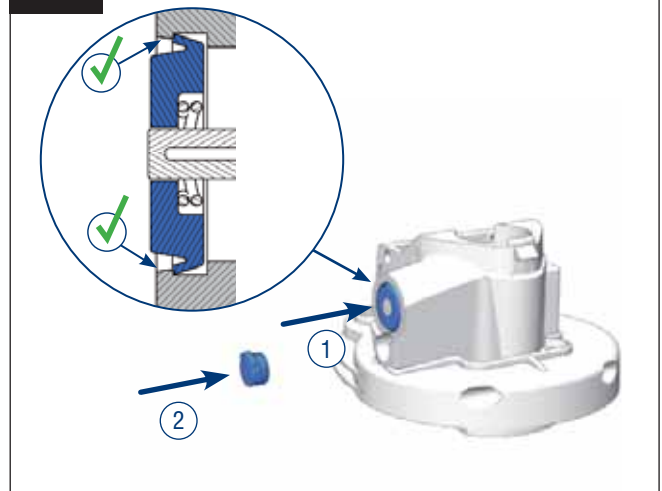


III.69



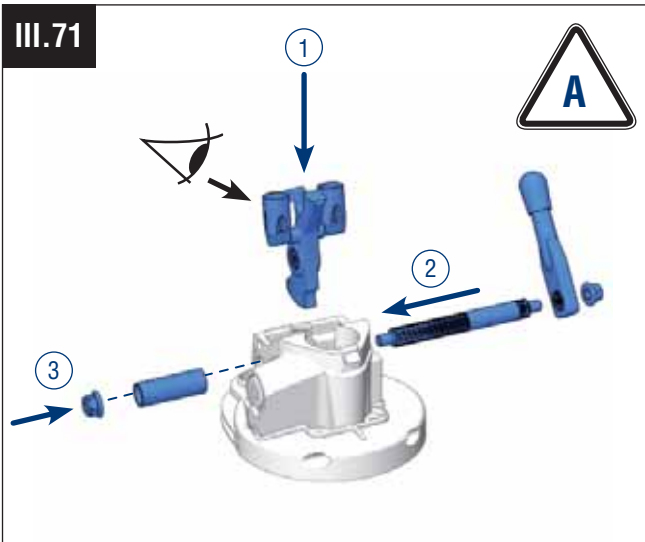
Montage Sicherung (1)
Fitting of safety device (1)

III.70



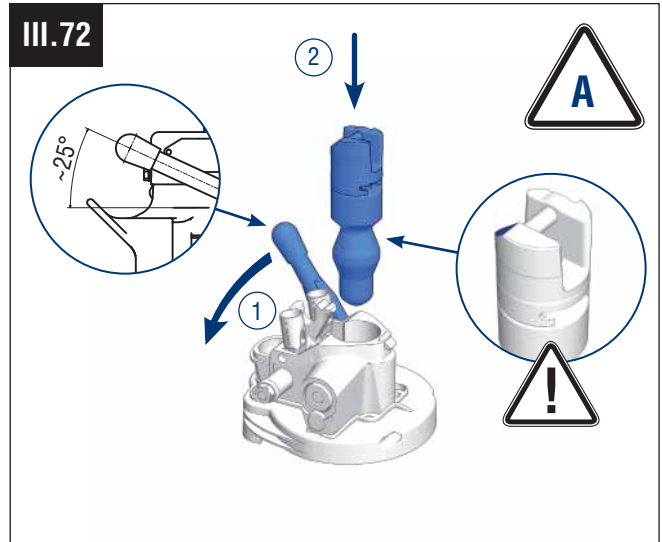
Montage Sicherung (2)
Fitting of safety device (2)

III.71



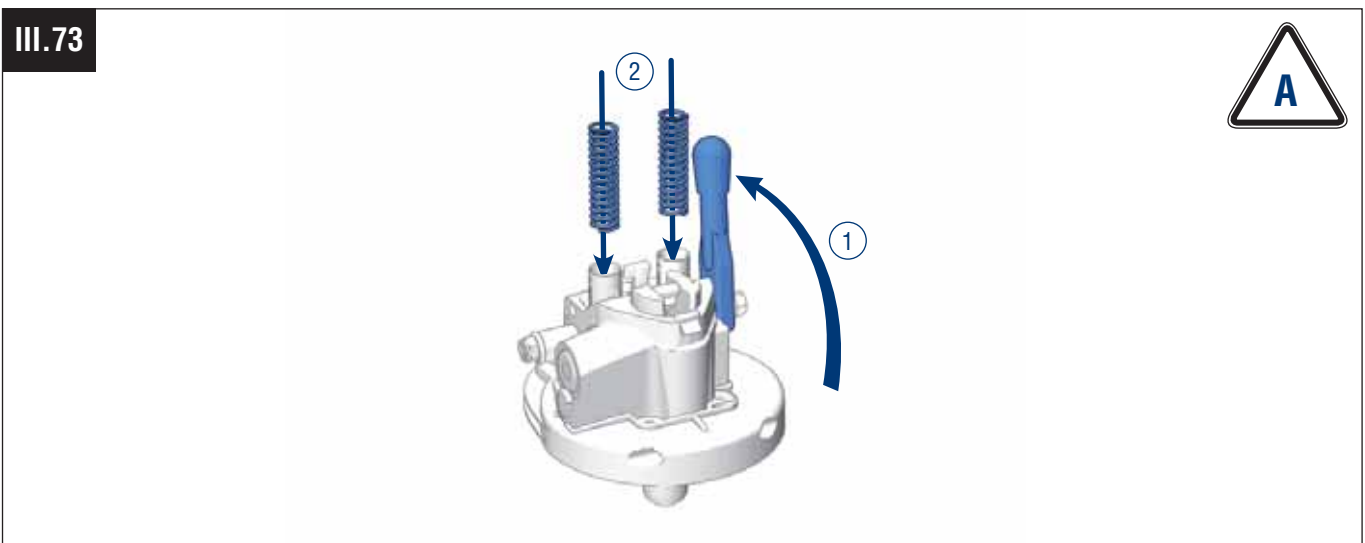
Montage Handhebel, Montage Sperrhebel
Fitting of hand lever, fitting of locking level

III.72



Montage Kuppelbolzen
Fitting of coupling bolt

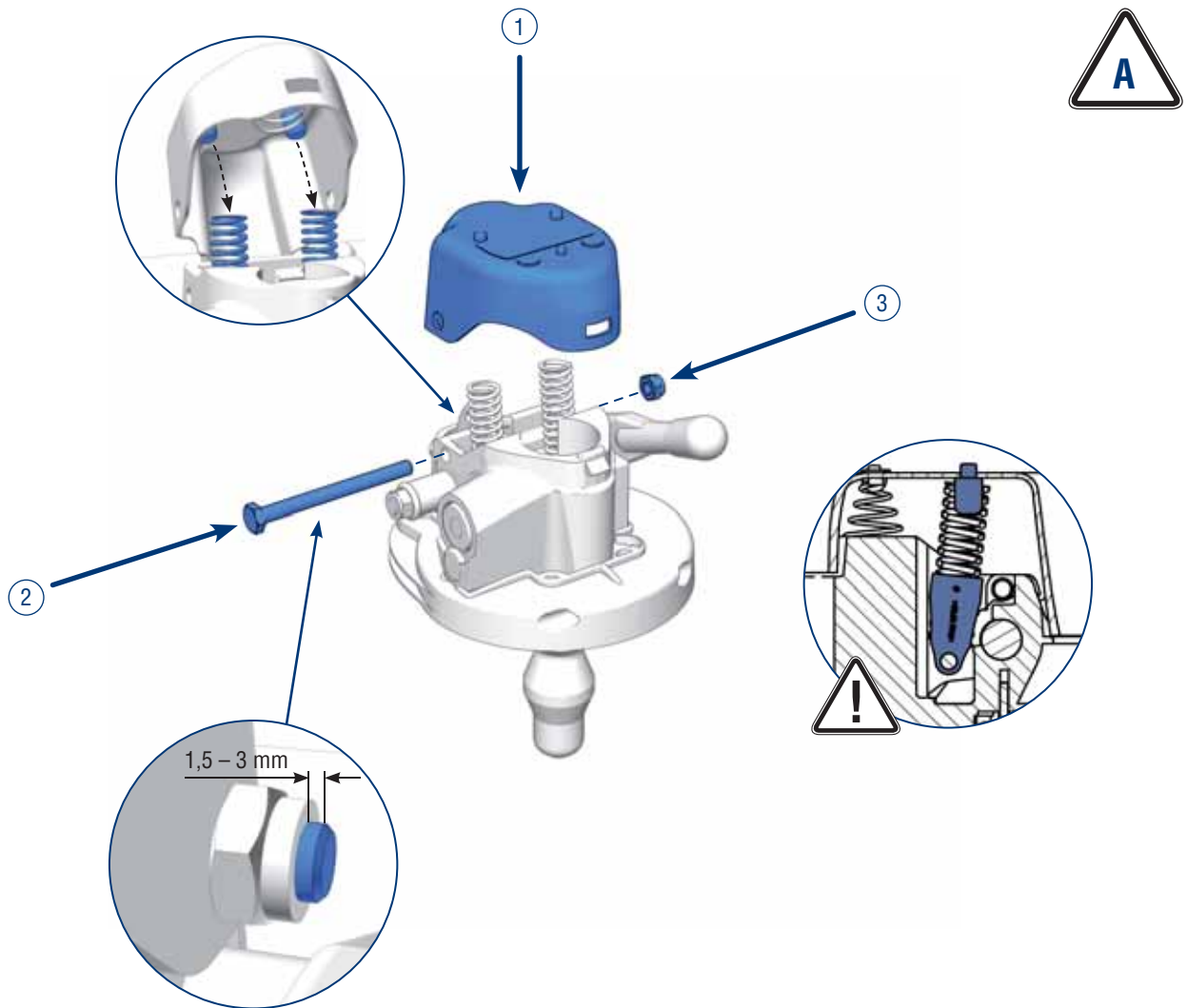
III.73



Montage Schließfedern
Fitting of closing springs

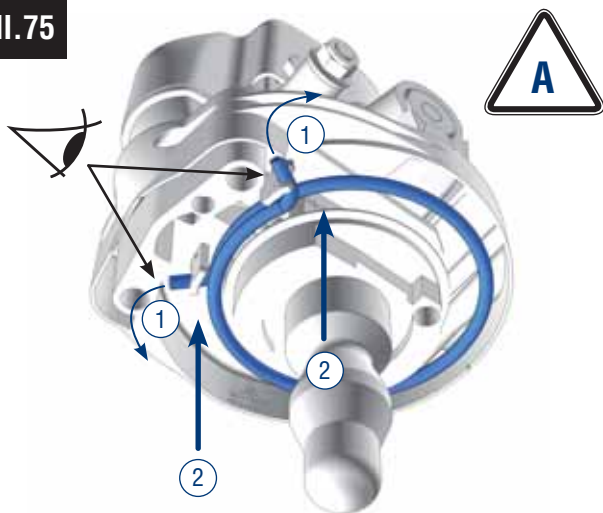


III.74



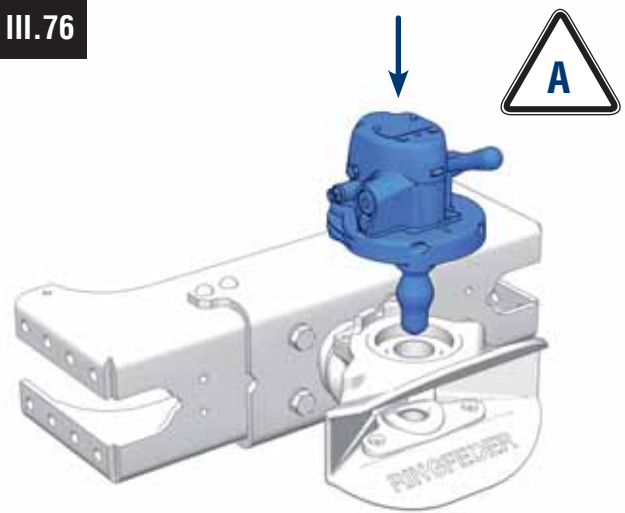
Montage Abschlussdeckel
Fitting of end cap

III.75

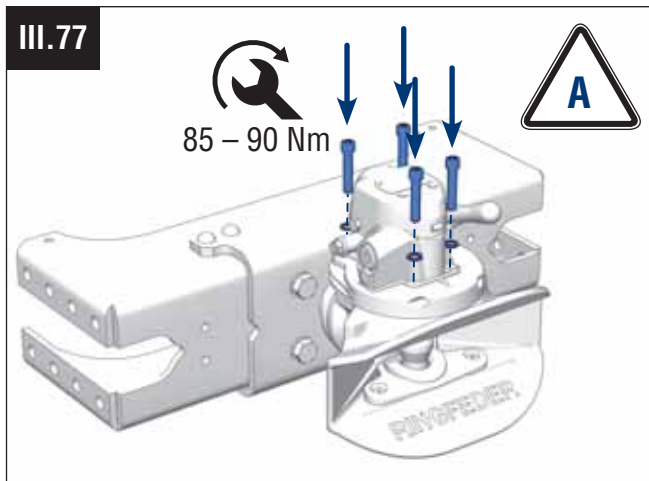


Montage Rückstellfeder
Fitting of return springs

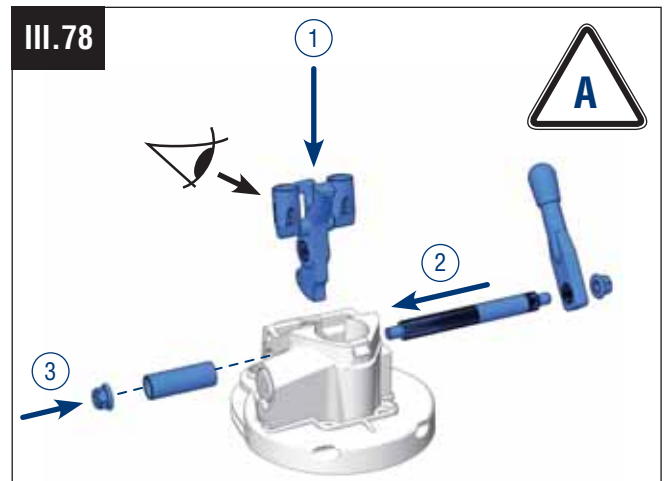
III.76



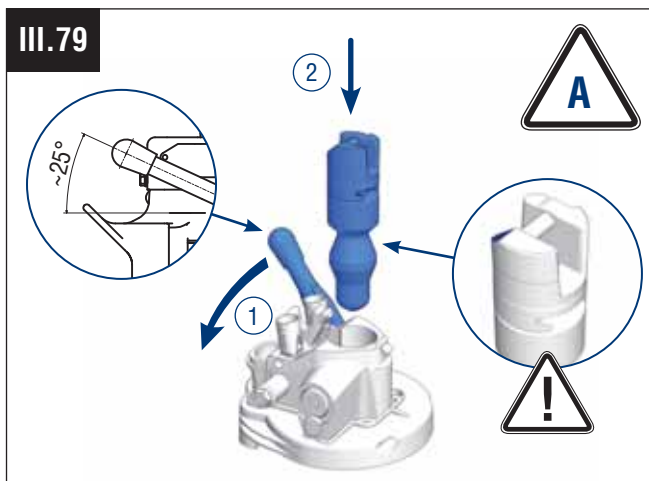
Montage Kopfeinheit (1)
Fitting of head unit (1)



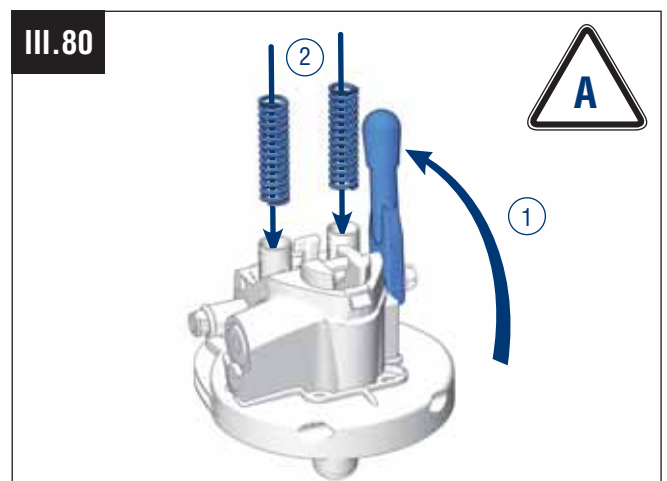
Montage Kopfeinheit (2)
Fitting of head unit (2)



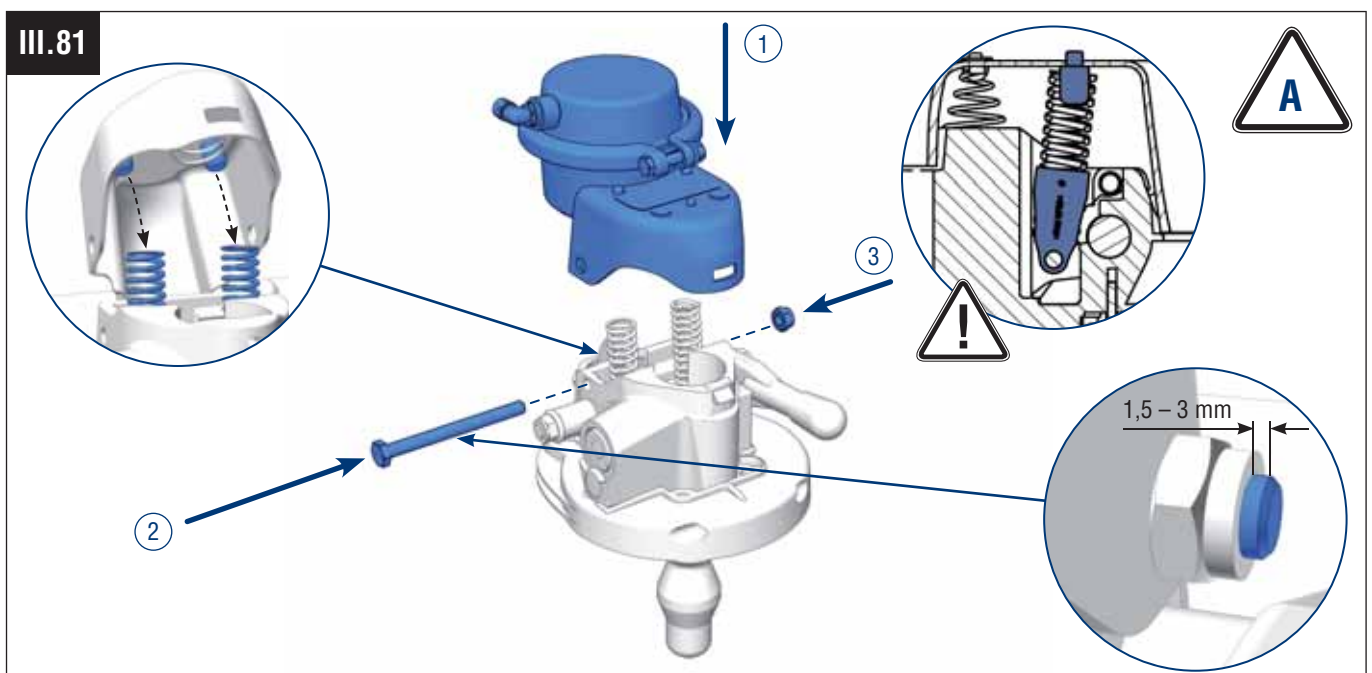
Montage Handhebel, Montage Sperrhebel
Fitting of hand lever, fitting of locking lever



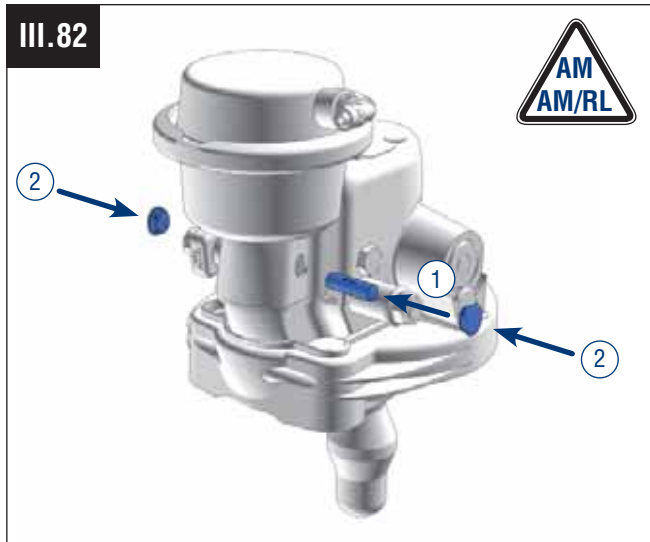
Montage Kuppelbolzen
Fitting of coupling bolt



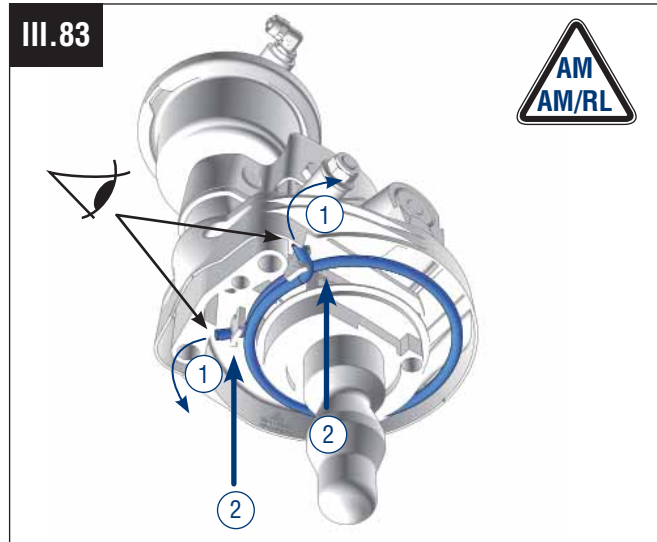
Montage Schließfedern
Fitting of closing springs



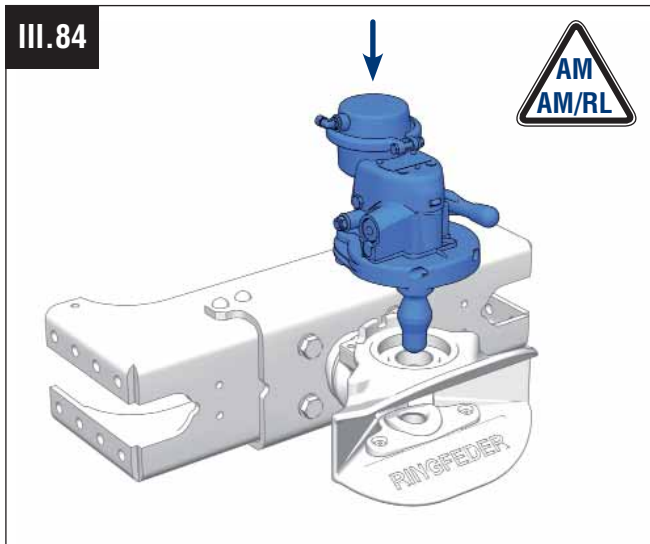
Montage AM-Deckel
Fitting of AM cap



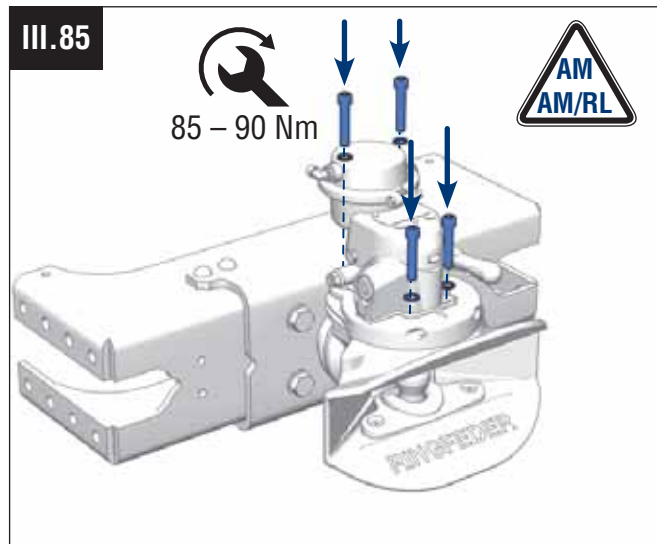
Montage Spiralspannstift
Fitting of spiral pin



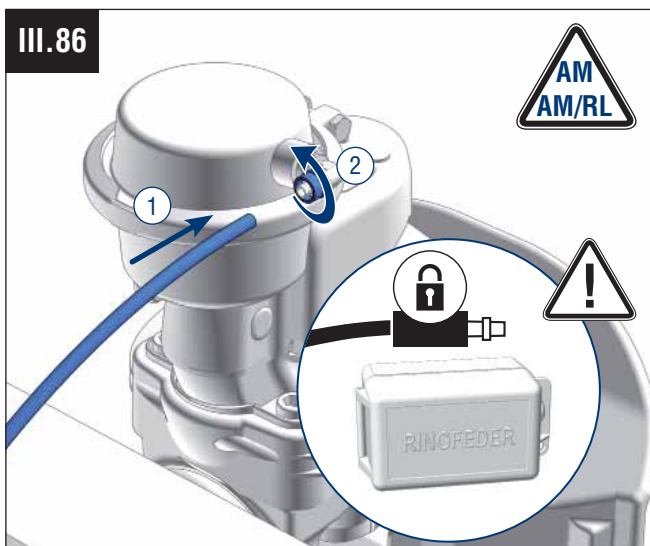
Montage Rückstellfedern
Fitting of return springs



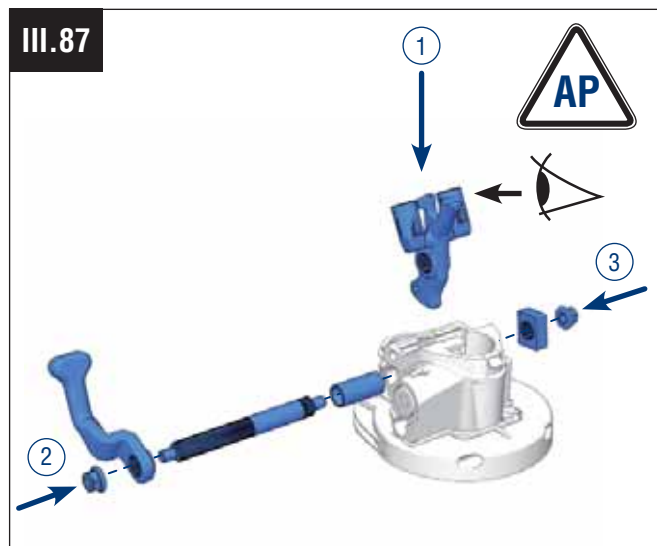
Montage Kopfeinheit (1)
Fitting of head unit (1)



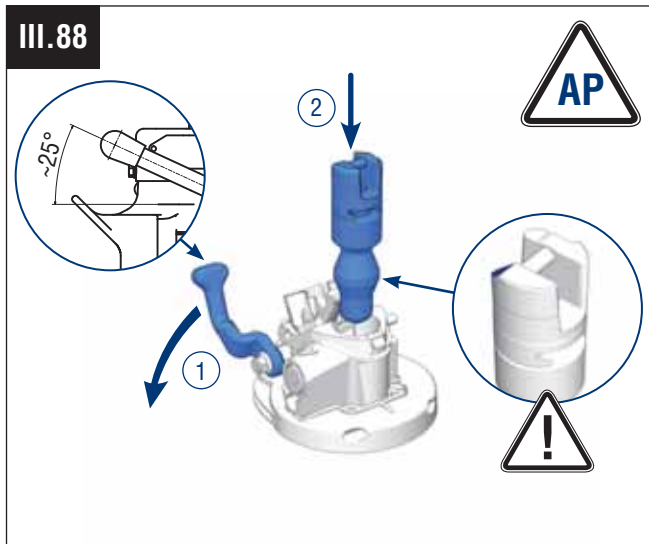
Montage Kopfeinheit (2)
Fitting of head unit (2)



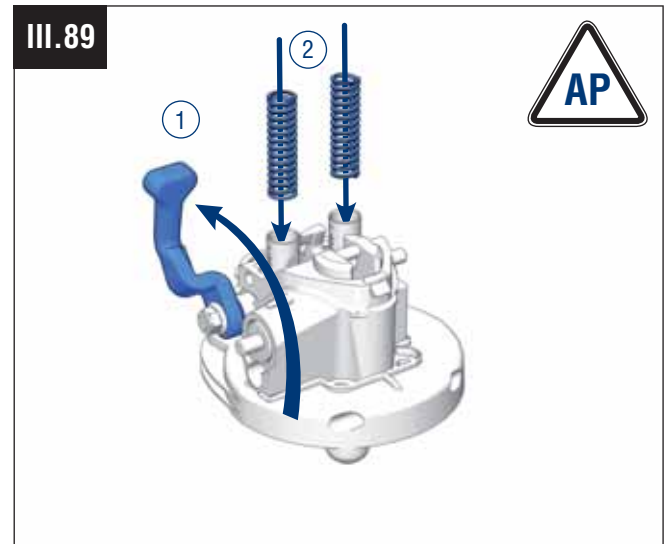
Montage Kopfeinheit (3)
Fitting of head unit (3)



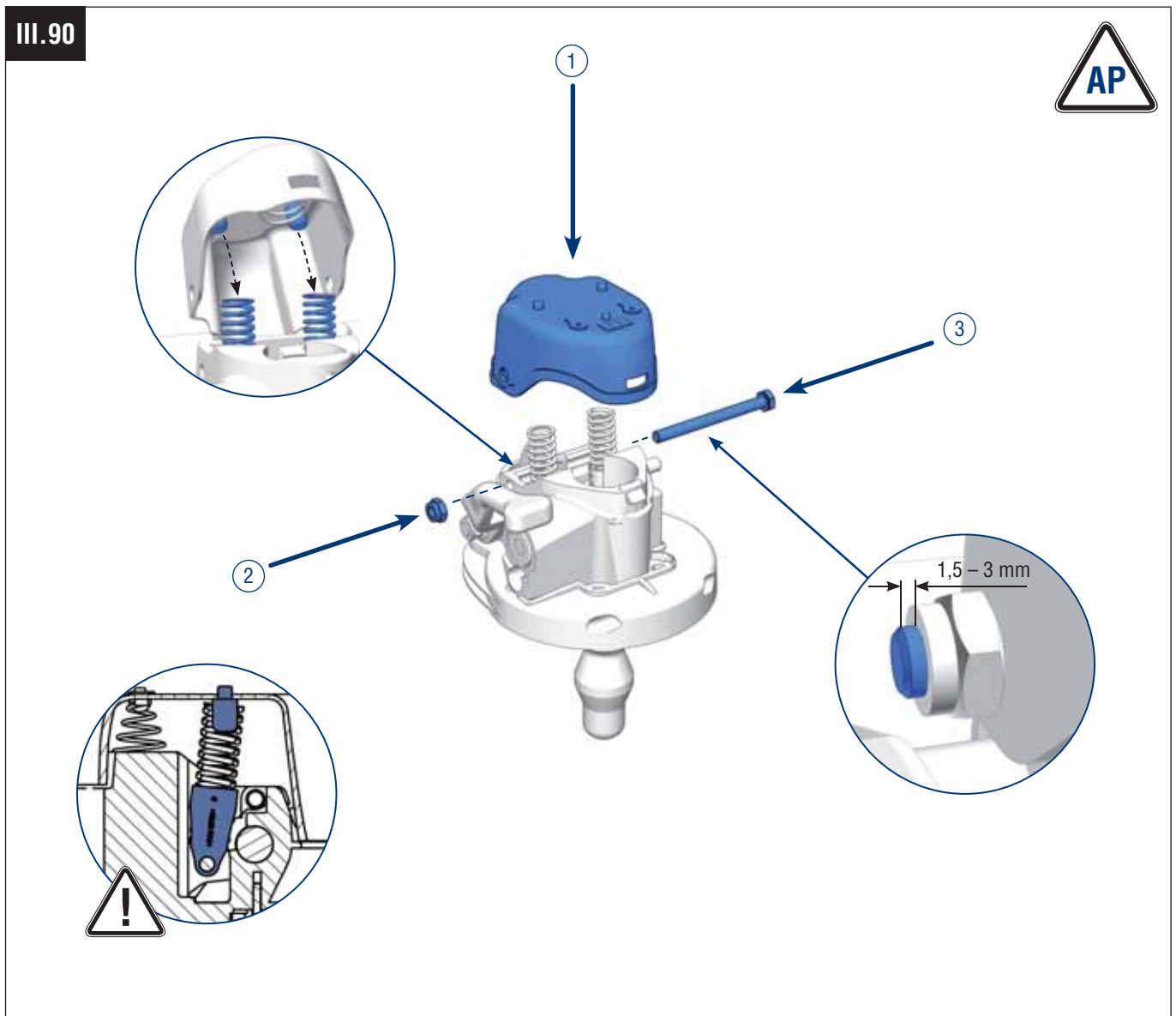
Montage Handhebel, Montage Sperrhebel
Fitting of hand lever, fitting of locking lever



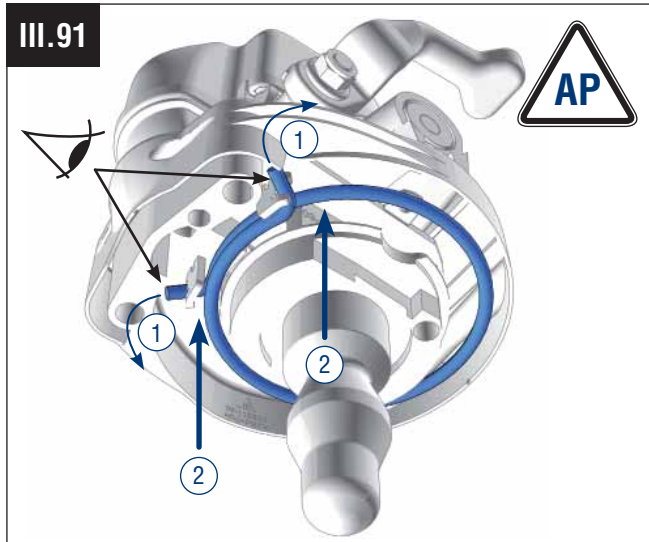
Montage Kuppelbolzen
Fitting of coupling bolt



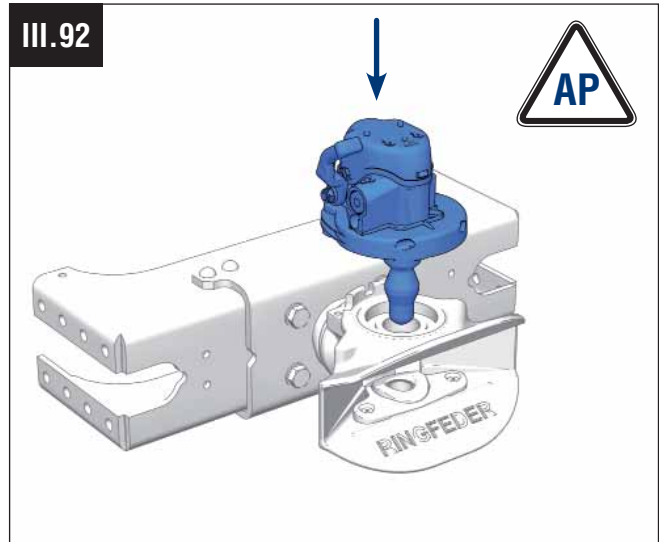
Montage Schließfedern
Fitting of closing springs



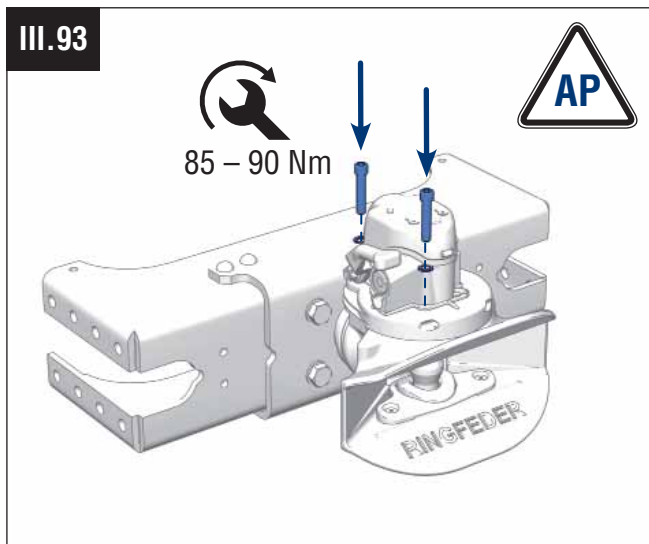
Montage AP-Deckel
Fitting of AP cap



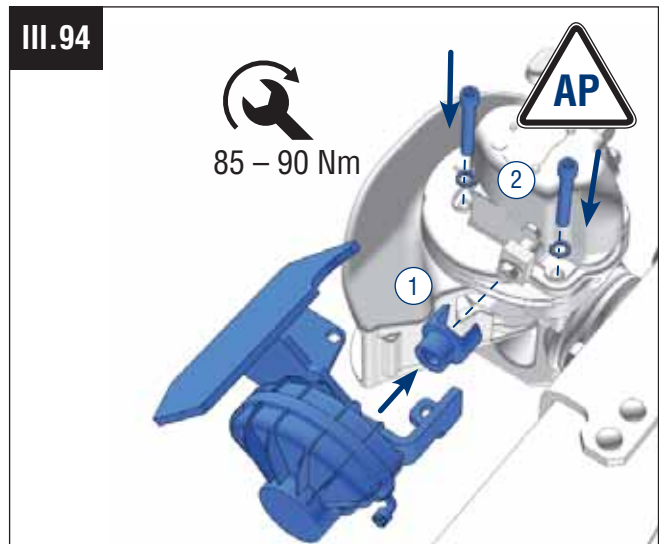
Montage Rückstellfeder
Fitting of return springs



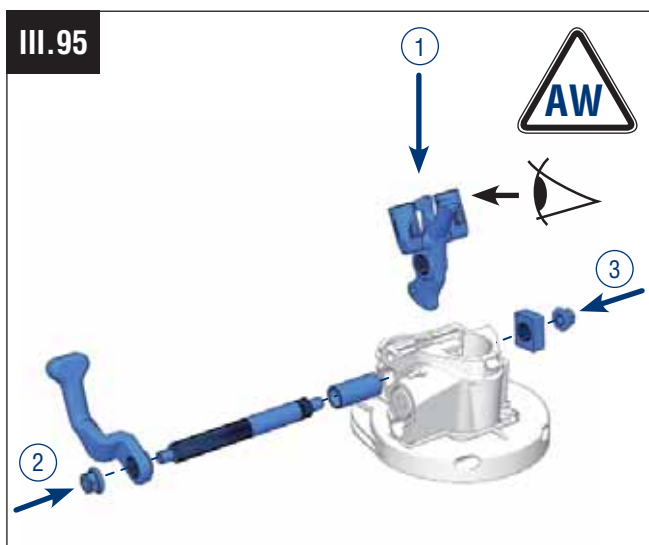
Montage Kopfeinheit (1)
Fitting of head unit (1)



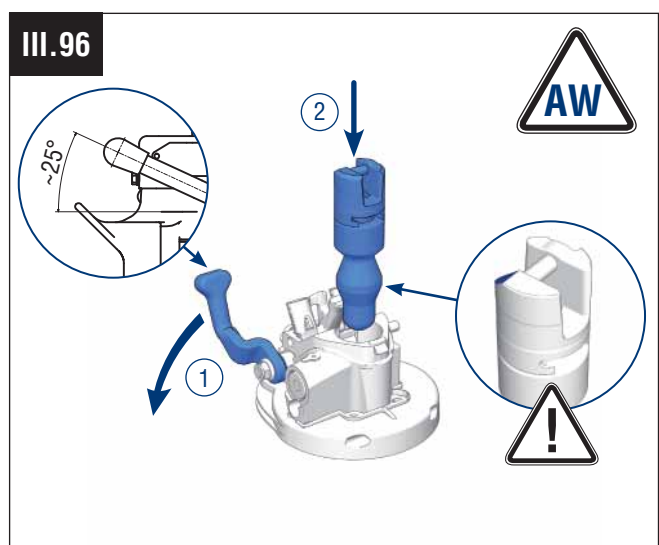
Montage Kopfeinheit (2)
Fitting of head unit (2)



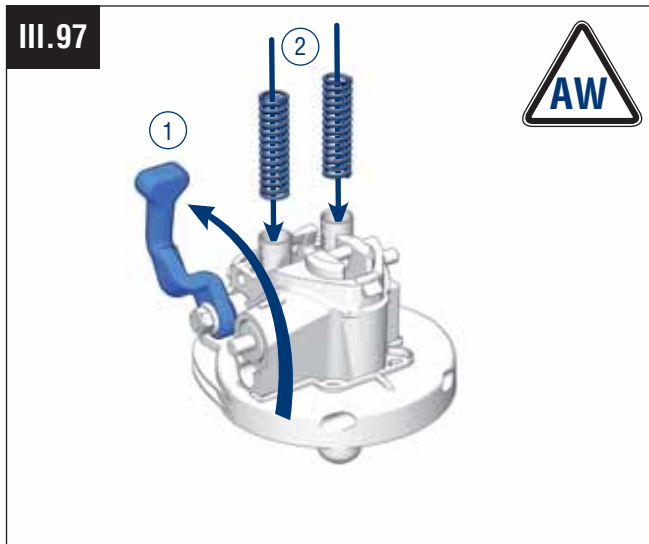
Montage Power Actuator
Fitting of power actuator



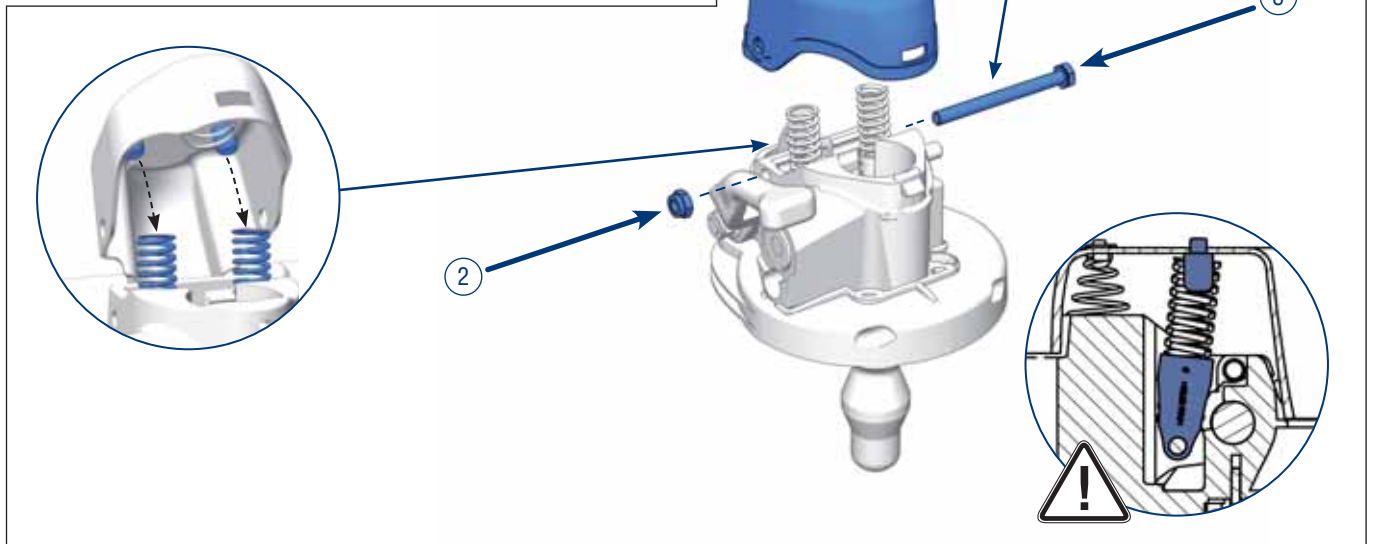
Montage Handhebel, Montage Sperrhebel
Fitting of hand lever, fitting of locking lever



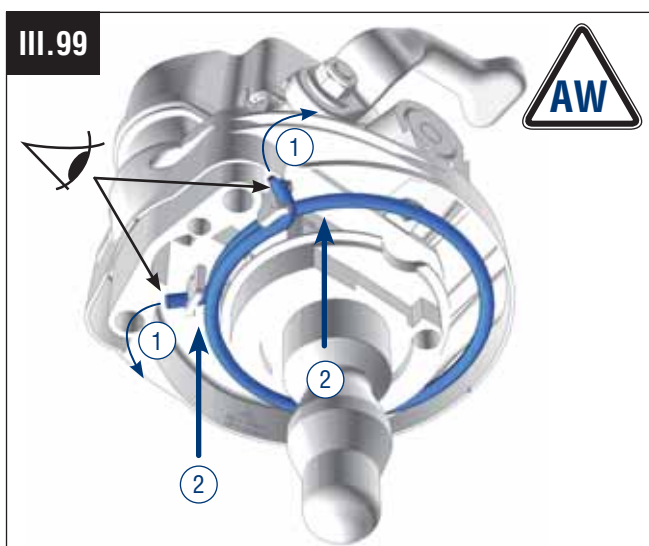
Montage Kuppelbolzen
Fitting of coupling bolt



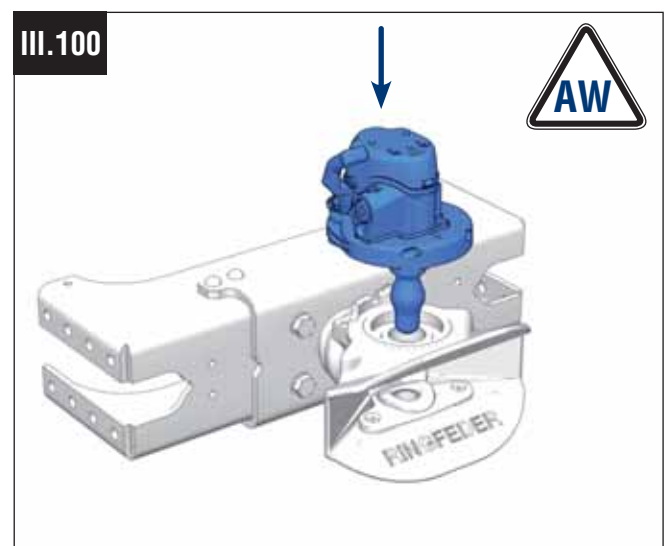
Montage Schließfedern
Fitting of closing springs



Montage AP-Deckel
Fitting of AP cap



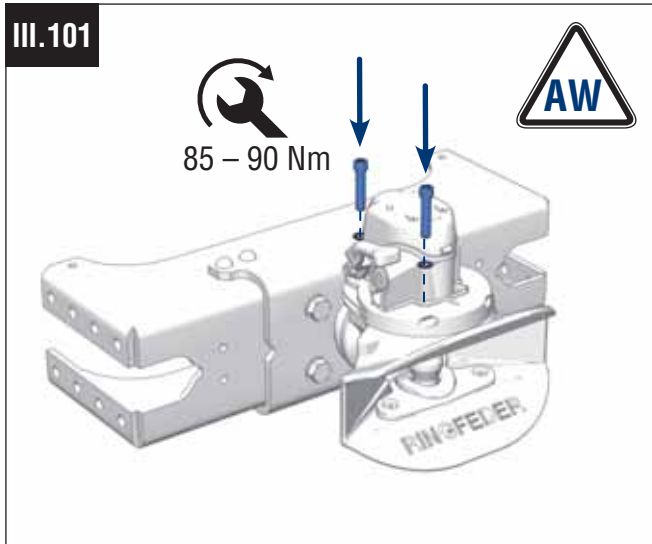
Montage Rückstellfeder
Fitting of return springs



Montage Kopfeinheit (1)
Fitting of head unit (1)

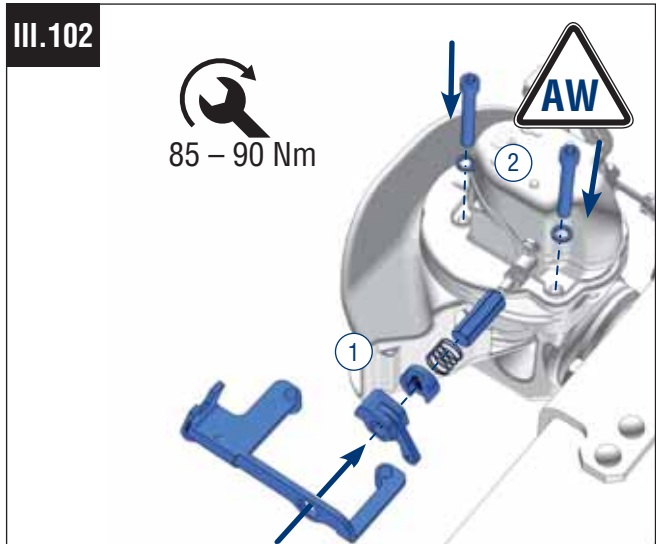


III.101



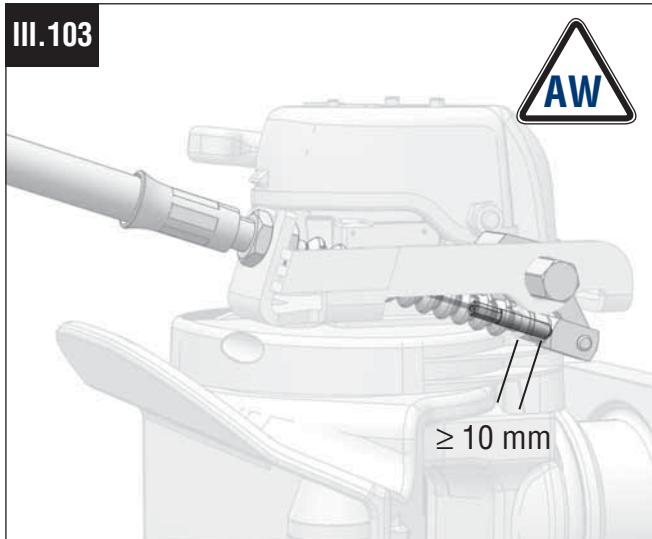
Montage Kopfeinheit (2)
Fitting of head unit (2)

III.102



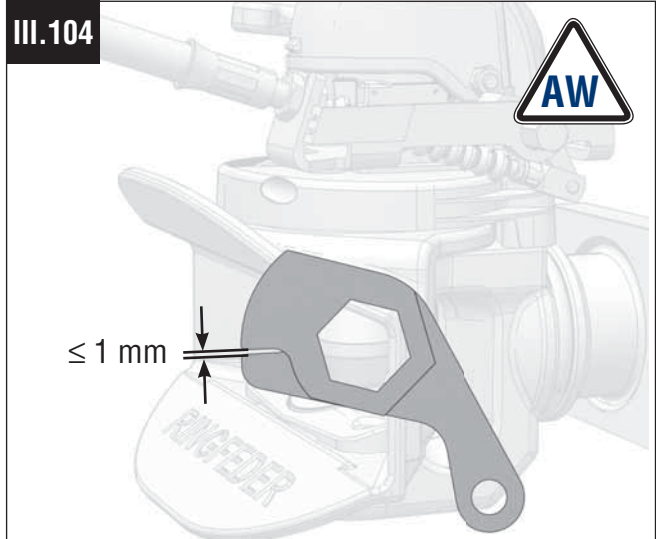
Montage Gegenlager-/ Adaptersatz
Fitting of counter-bearing / adapter set

III.103



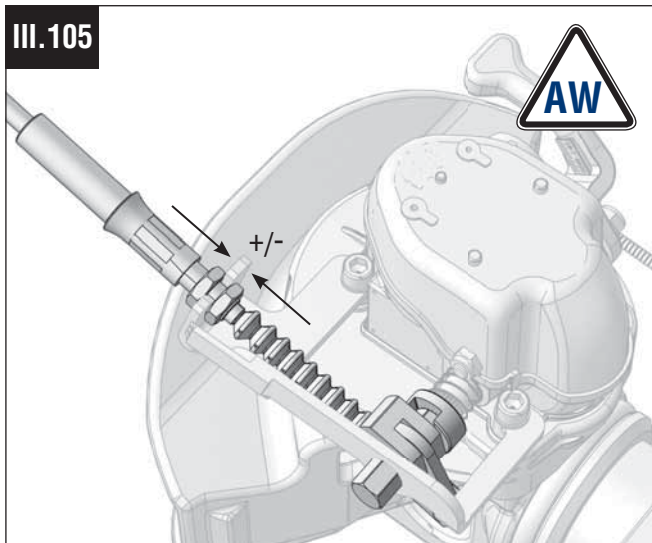
Justage (1)
Adjustment (1)

III.104



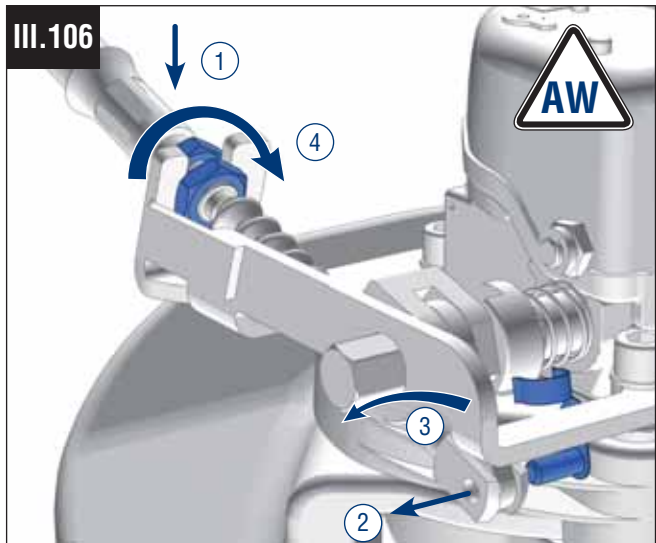
Justage (2)
Adjustment (2)

III.105



Justage (3)
Adjustment (3)

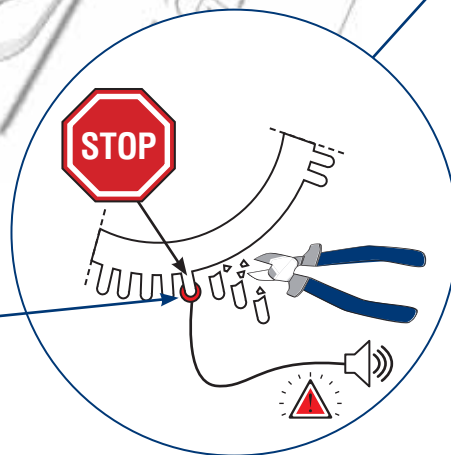
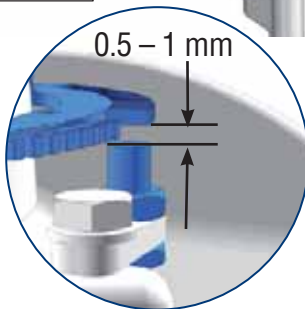
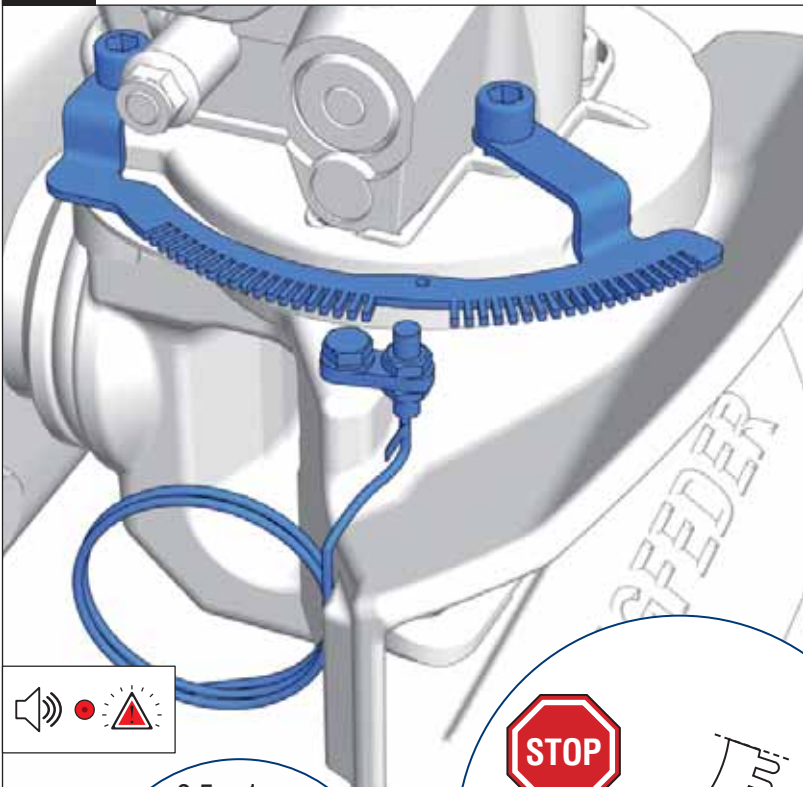
III.106



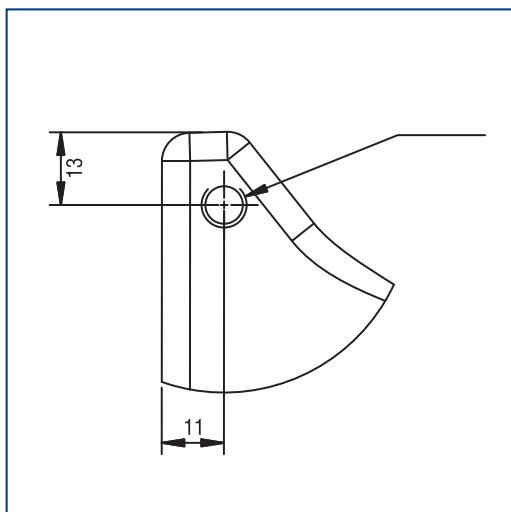
Seilzug anbringen
Attach rope pull



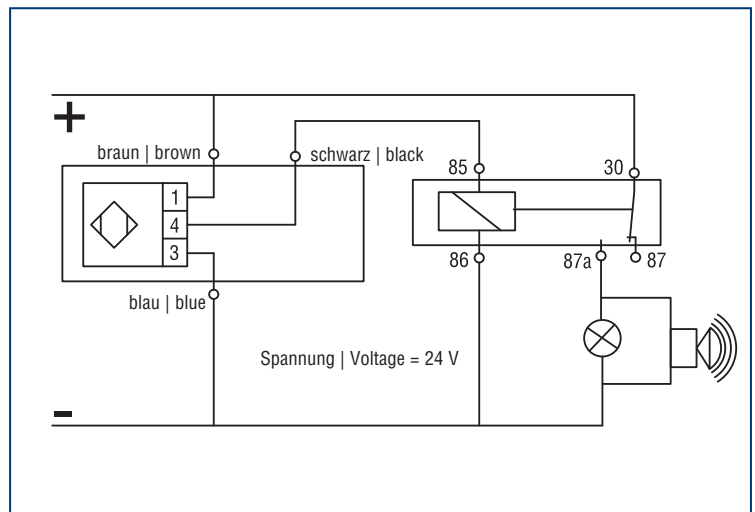
III.107 Schwenkwinkelwarnanzeige | Collision Alert



Einstellung der Schwenkwinkelwarnanzeige
Adjustment of the Collision Alert

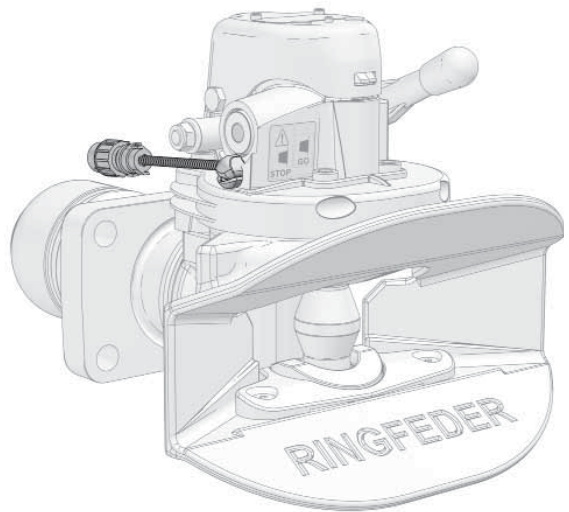
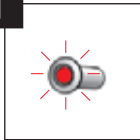


Position der Gewindebohrung im Kuppelmaul
M8 x 20 tief
Position of the tapped hole in the coupling mouth
M8 x 20 deep



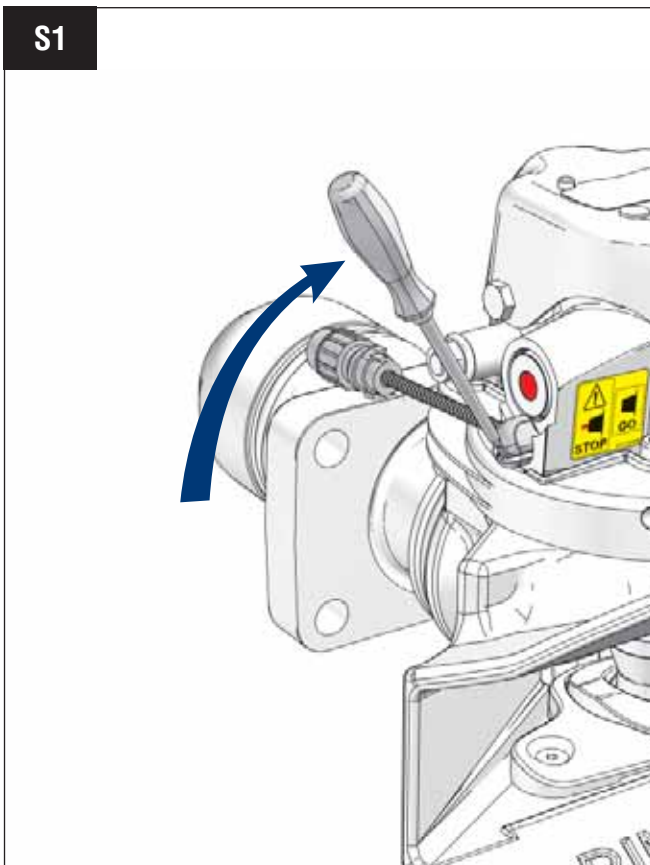
Schaltplan | Wiring scheme

Sensor | Sensor



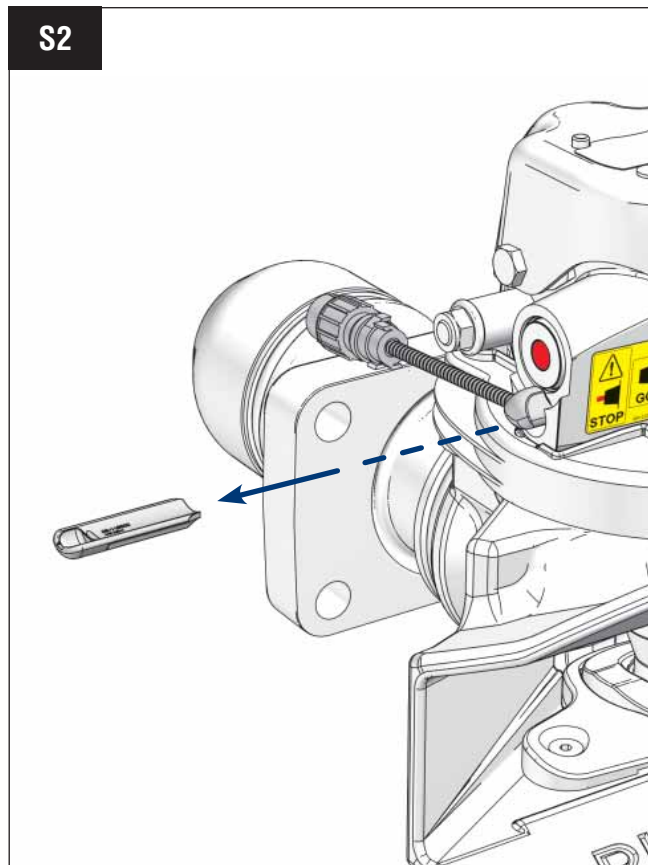


S1



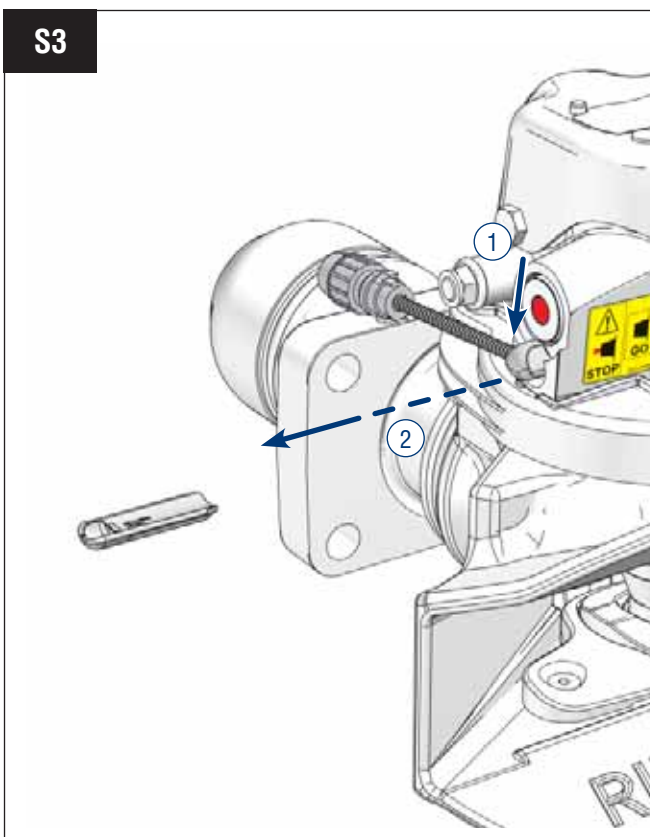
Wechseln des Sensors (1)
Change of sensor (1)

S2



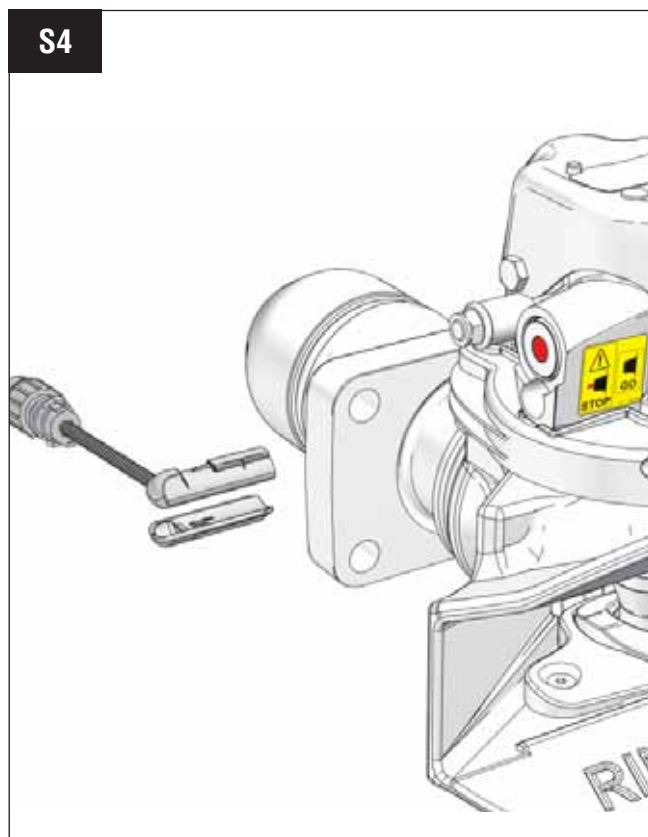
Wechseln des Sensors (2)
Change of sensor (2)

S3



Wechseln des Sensors (3)
Change of sensor (3)

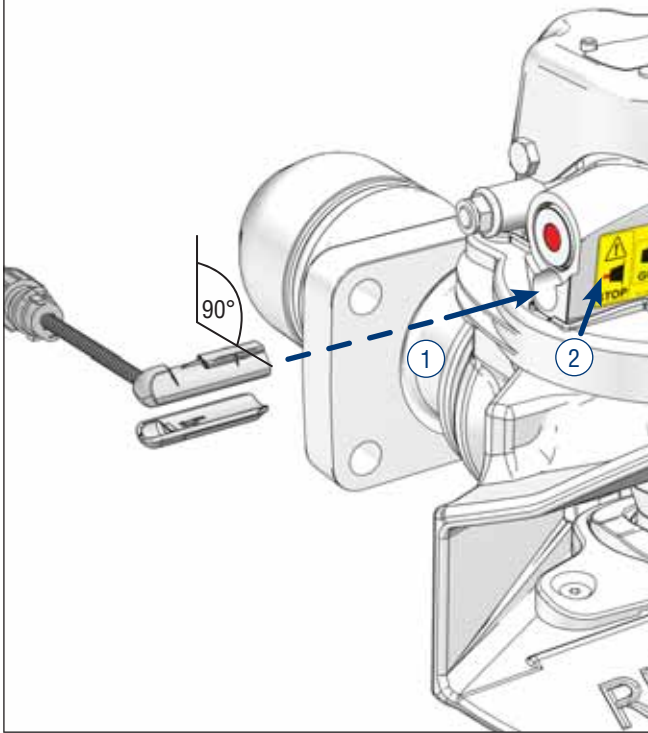
S4



Wechseln des Sensors (4)
Change of sensor (4)

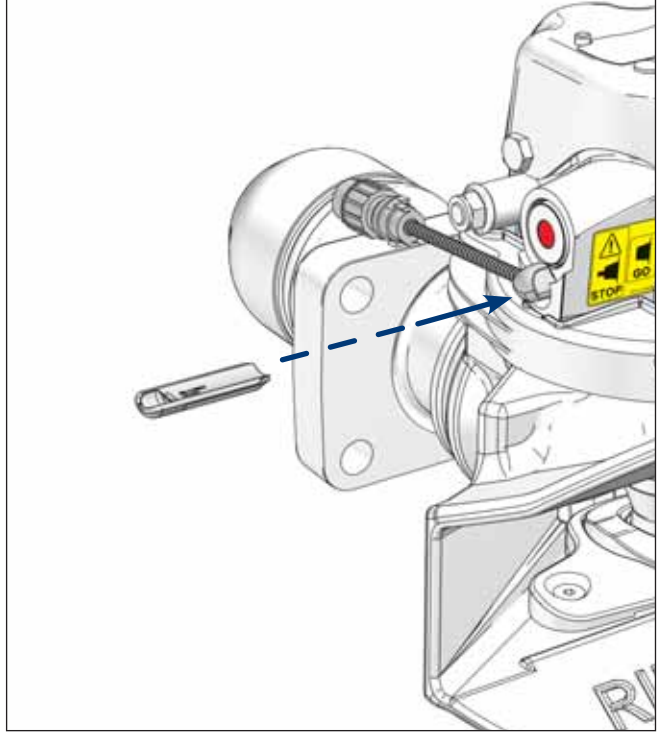


S5



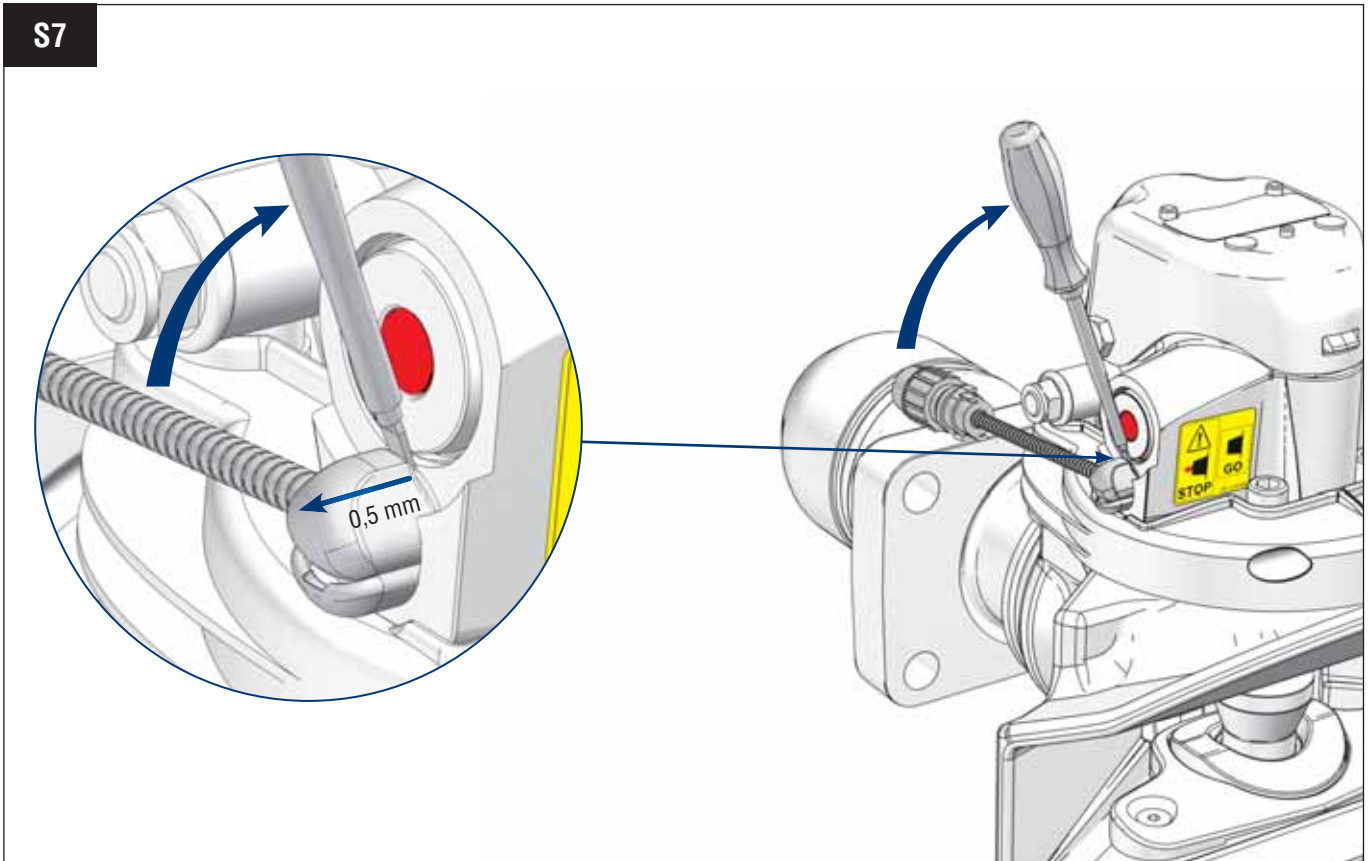
Wechseln des Sensors (5)
Change of sensor (5)

S6



Wechseln des Sensors (6)
Change of sensor (6)

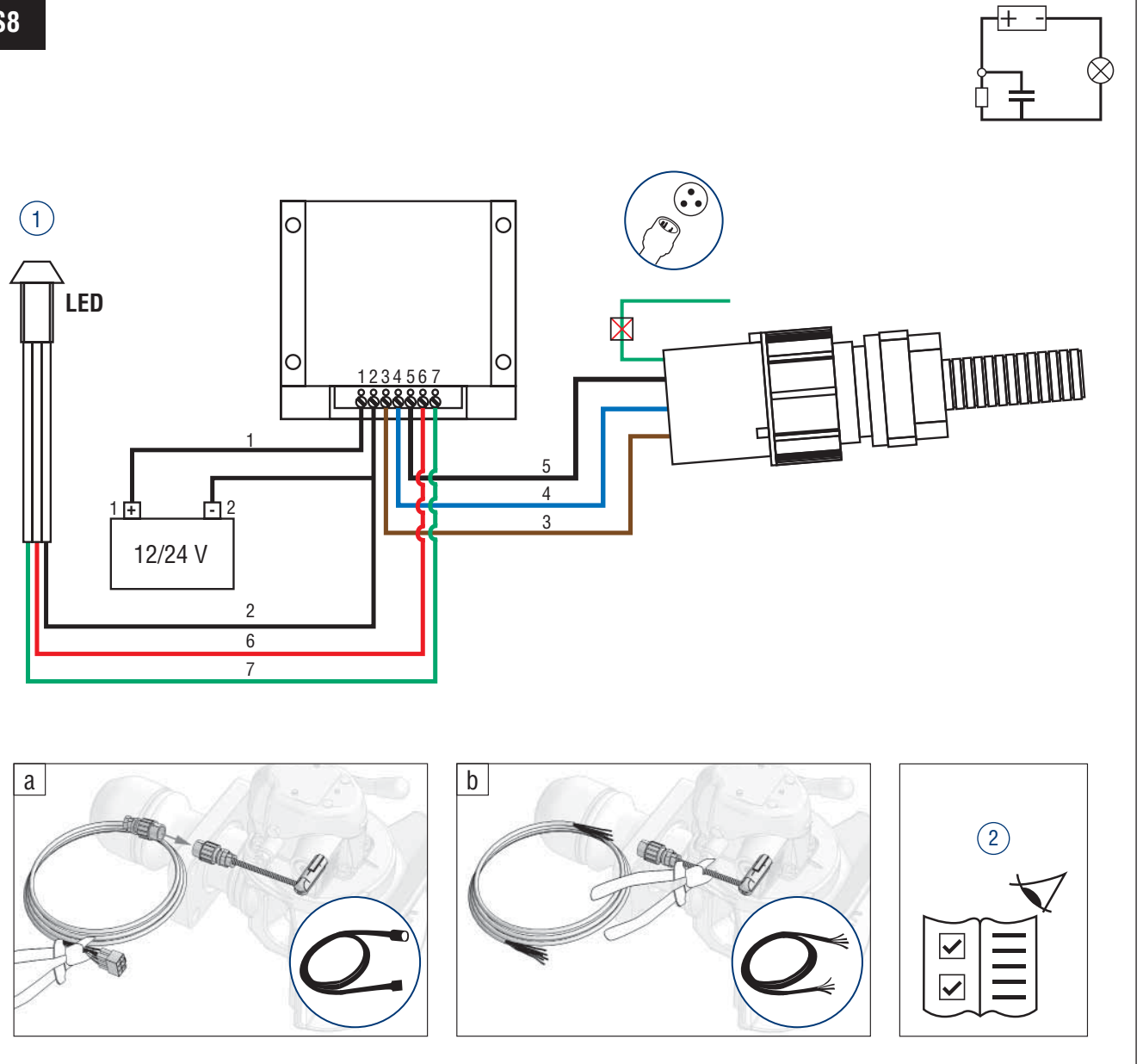
S7



Wechseln des Sensors (7)
Change of sensor (7)



S8



Wechseln des Sensors (8)
Change of sensor (8)



Montage, Bedienung, Wartung Installation, Operation, Maintenance www.ringfeder.de



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5050 AM, 5055 AM



Sensoreinbau · Fitting sensor

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