

410" Press

DOKUMENTATION

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VARITREND ^{VP-102-6-P}

EIN- UND MEHRFARBEN-
BOGENROTATIONS-
OFFSETDRUCKMASCHINE

FORMAT 4

HINWEISE ZUR INSTANDHALTUNG

Maschine N64 ^{VCF} VD 5+1
Bau-Nr. 306958
SW-Nr.

 **KBA-PLANETA AC**

Ein Unternehmen der Gruppe Koenig & Bauer-Albert

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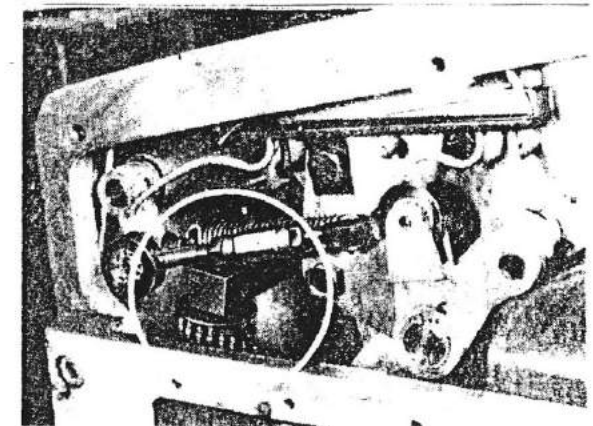
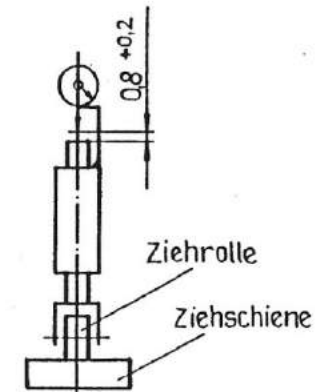
20.2 Anlage

Einstellung der Ziehmarken und Ziehschienen prüfen

Prüfgerät: Meßuhr mit Skaleneinteilung 0,01 mm

- Überdrückung der Ziehrolle (ohne Papier) prüfen: (Abb. oben)
- Korrektur an der Zugstange (Abb. unten) vornehmen
- Aufsetzen der Ziehrolle auf Ziehschiene bei $105^\circ + 2^\circ$
- Bewegungsbeginn der Ziehschiene bei $105^\circ + 5^\circ$
- Grundstellung der Ziehschienen (Abb. Mitte)

Zur Korrektur: Kette des Ziehmarkenantriebes (Abb. unten) nachstellen



Die Seitenansläge (Ziehmarken)

- Sie sollen zur Bogenkante ca. 0,05 mm bis 0,1 mm schräg stehen.

Höhe des Tischbleches zu den Schwinggreiferaufschlägen

- Mittels Haarlineal prüfen

Die Greiferaufschläge stehen $0 \text{ mm} + 0,02 \text{ mm}$ ($= x$) unter dem Tischblech

Bei Korrektur Stifte $\varnothing 8 \text{ mm}$ ziehen, Schrauben zu den Seitenwänden lösen und Tisch so einschwenken, bis die Ebenheit $0 \text{ mm} + 0,02 \text{ mm}$ erfüllt ist. Stiftbohrungen nachreiben.

Überdrückung der Schwinganlage-Greifer

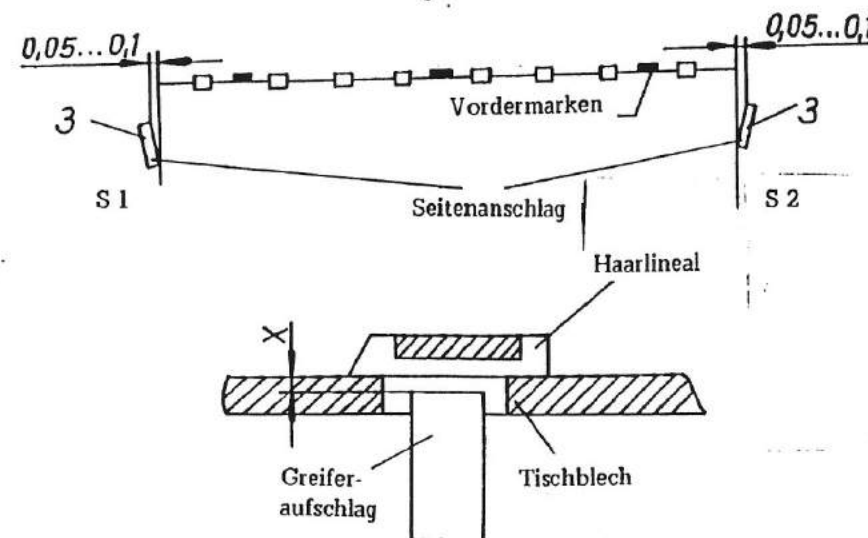
- Rollenhebel (Seite 2, innen) auf den tiefsten Punkt der Kurve bringen
- einen Greifer auf dem Aufschlag liegend festklemmen
- Kurve drehen, bis der Greifer 0,7 mm geöffnet ist.
- in dieser Stellung alle Greifer ohne Spannung auf den Aufschlägen liegend festklemmen. (Seidenpapier muß sich noch herausziehen lassen).

Die Überdrückung an der Greiferspitze beträgt nun

$0,7 \text{ mm} \pm 0,1 \text{ mm}$

Blasluft für pneumatische Bogentrennung

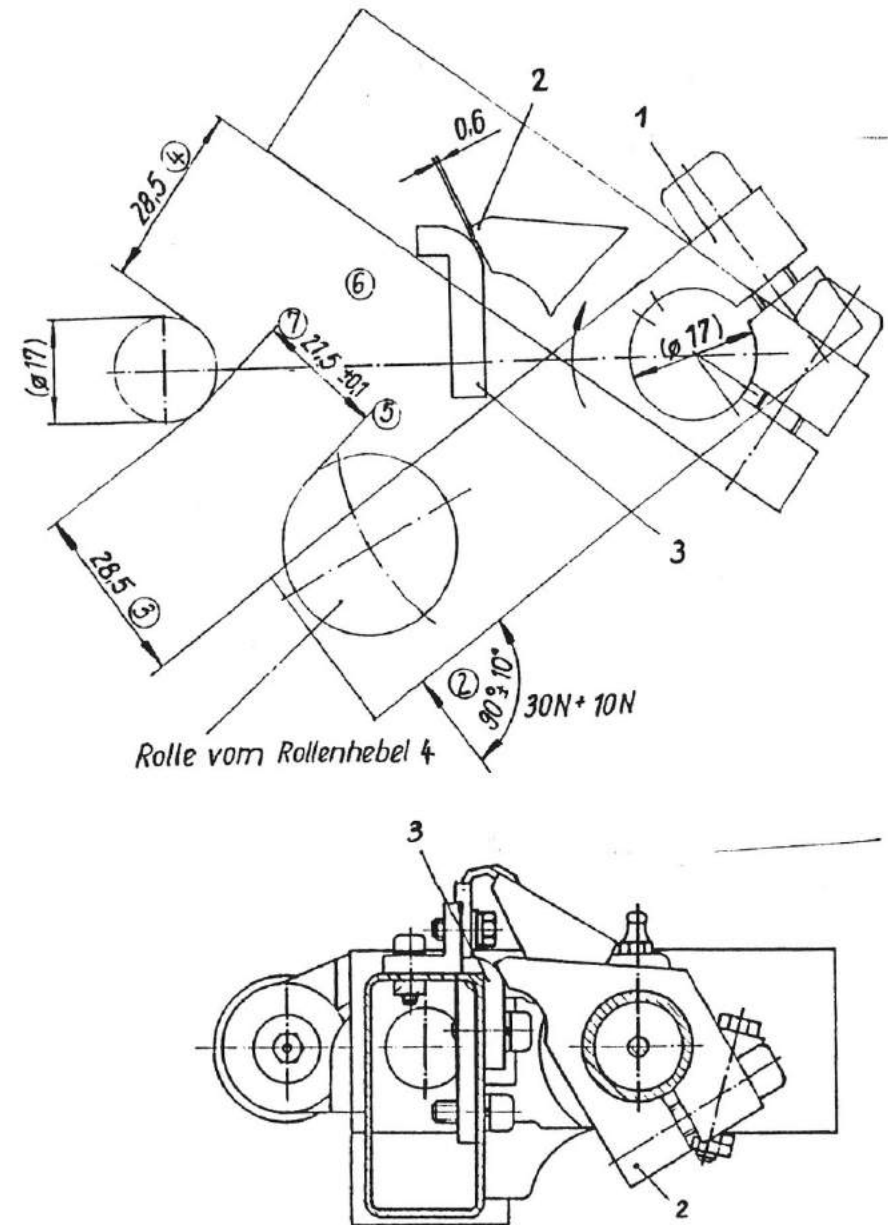
- Zwischen Rolle und niederem Punkt der Kurve (unter dem Anlegtisch) muß ein Spalt von 0,2 mm sein.
- Das Ventil für Bogentrennung und Blasfingerleiste erreicht die max. Öffnung bei $310^\circ \pm 0,5^\circ$ der Skala am Anlegdruckwerk.
- Beginn des Blasens muß bei $280^\circ \pm 0,5^\circ$ erfolgen.

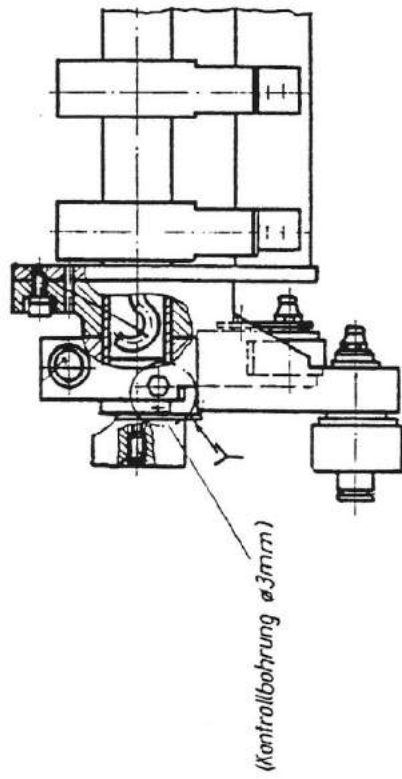


20.3. Auslage

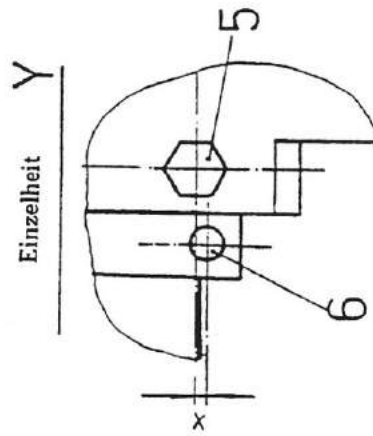
Einstellvorschrift
Drehstabfeder im Greiferwagen spannen

- ① Einstellhebel⁽¹⁾ auf Wagenrollenbolzen($\varnothing 17$) der Greiferwelle (52) bis zur seitlichen Anlage aufschieben und klemmen.
- ② Drehstabfeder mit $30N \pm 10N$ mittels Einstellhebel⁽¹⁾ vorspannen (Einstellhebel in beliebiger Stellung zur Greiferwelle); Anschlaghebel⁽²⁾ an Anschlag⁽³⁾ anlegen und klemmen.
- ③ Einstellhebel⁽¹⁾ auf Ausgangsmaß $28,5$ einstellen und klemmen.
- ④ Weiter spannen der Drehstabfeder, indem der Einstellhebel⁽¹⁾ in Pfeilrichtung gedreht wird, bis Einstellmaß $28,5$ erreicht ist. Lage fixieren!
- ⑤ Greifer auf Greiferaufschläge auflegen und mit Überdrückung 0 festziehen, Anschlaghebel mit $0,6$ mm Beilage auf Anschlag auflegen und festziehen.⁽²⁾⁽³⁾
- ⑥ $0,6$ mm Beilage am Anschlaghebel⁽²⁾ entfernen; Fixierung des Einstellhebels⁽¹⁾ lösen; Einstellhebel⁽¹⁾ entfernen.
- ⑦ Rollenhebel⁽⁴⁾ auf Einbaumaß $21,5 \pm 0,1$ einstellen und klemmen
Kontrolle: Kegelschmierkopf⁽⁵⁾ am Rollenhebel im gekennzeichneten Bereich - Abweichung Mitte Kegelschmierkopf gegenüber Kontrollbohrung⁽⁶⁾ in Greiferwelle ($\varnothing 3$ mm) 4 mm am Umfang der Greiferwelle noch beiden Seiten.





$$x = 0 \text{ mm} \pm 4 \text{ mm}$$



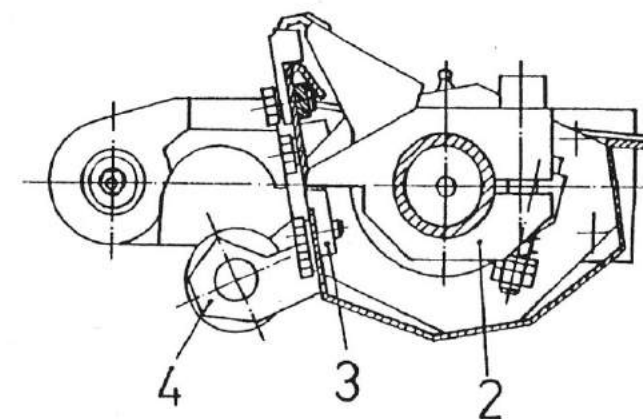
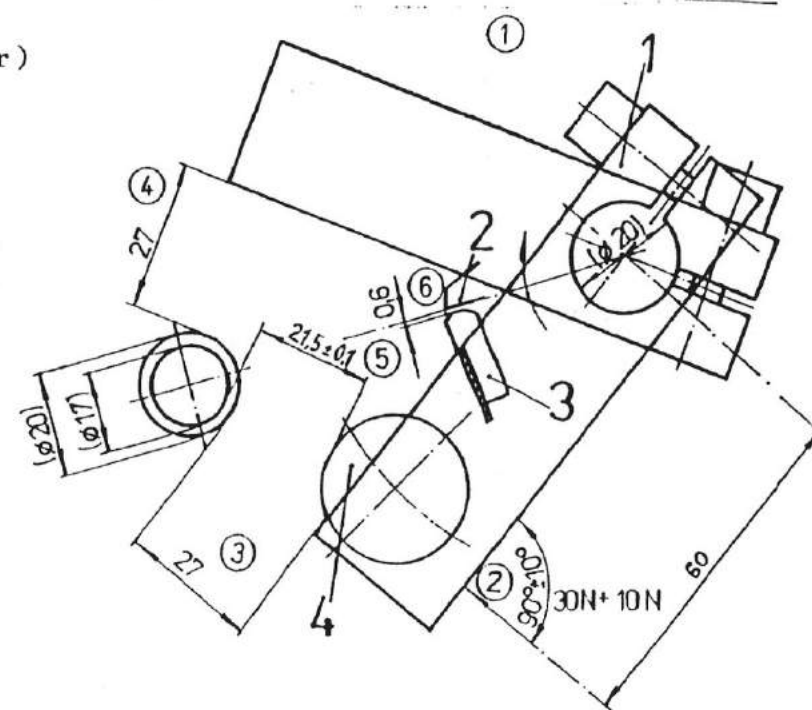
(Kontrollbohrung Ø 3 mm)

Greiferwagen - Strahlungstrockner (Sonderzubehör)

Einstellvorschrift

Drehstabfeder im Greiferwagen spannen

- ① Einstellhebel (1) auf Wagenrollenzapfen ($\varnothing 20$) der Greiferwelle (Seite 2) bis zur seitlichen Anlage aufschieben und klemmen.
- ② Drehstabfeder mit $30\text{ N}^{+10}\text{ N}$ mittels Einstellhebel (1) vorspannen (Einstellhebel in beliebiger Stellung zur Greiferwelle); Anschlaghebel (2) an Anschlag (3) anlegen und klemmen.
- ③ Einstellhebel (1) auf Ausgangsmaß 27 einstellen und klemmen.
- ④ Weiterspannen der Drehstabfeder, indem der Einstellhebel (1) in Pfeilrichtung gedreht wird, bis das Einstellmaß 27 erreicht ist; Anschlaghebel (2) an Anschlag (3) anlegen und klemmen.

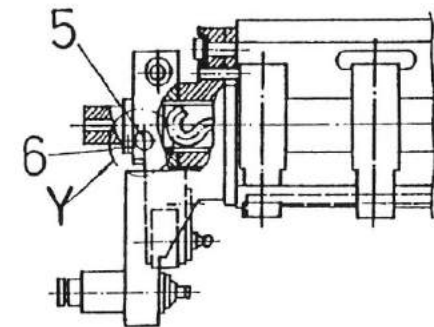


- ⑤ Rollenhebel (4) auf Einbaumaß $215 \pm 0,1$ einstellen und klemmen.

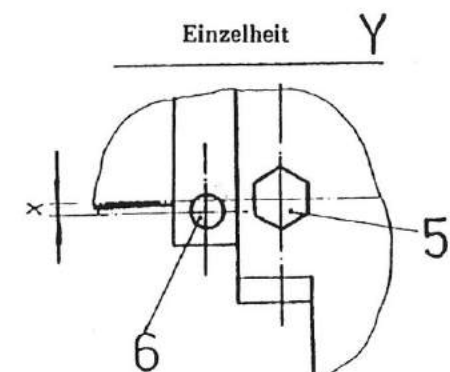
Kontrolle: Mittels Kegelschmierkopf (5) am Rollenhebel im gekennzeichneten Bereich:
Die Abweichung Mitte Kegelschmierkopf (5) gegenüber der Kontrollbohrung (6) ($\varnothing 3\text{mm}$) in der Greiferwelle kann bis zu 4mm am Umfang der Greiferwelle nach beiden Seiten betragen.

Überdrückung der Greifer

- ⑥ Einstellung der Greifer auf den Greiferaufschlägen:
0,6mm zwischen Anschlag (3) und Anschlaghebel (2) einstellen;
Greifer auflegen und mit Überdrückung 0 festziehen.



$$x = 0 \text{ mm} \pm 4 \text{ mm}$$



(Kontrollbohrung $\varnothing 3 \text{ mm}$)

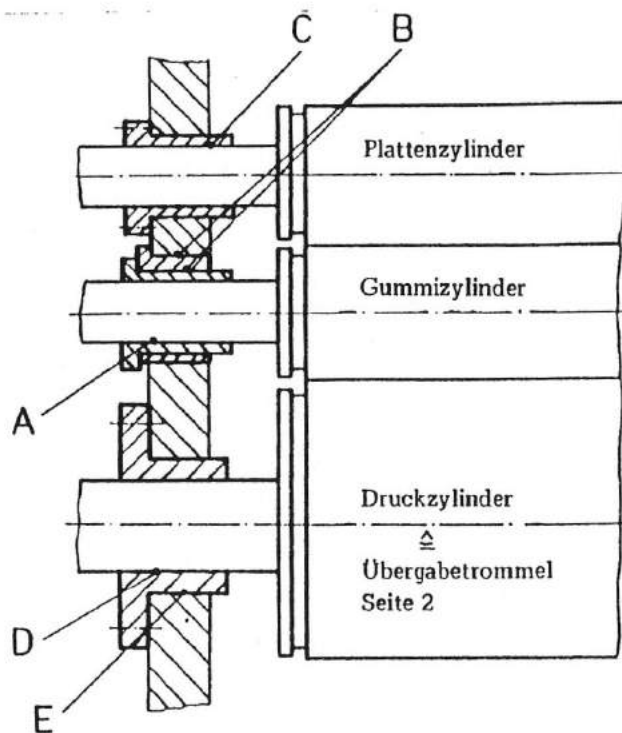
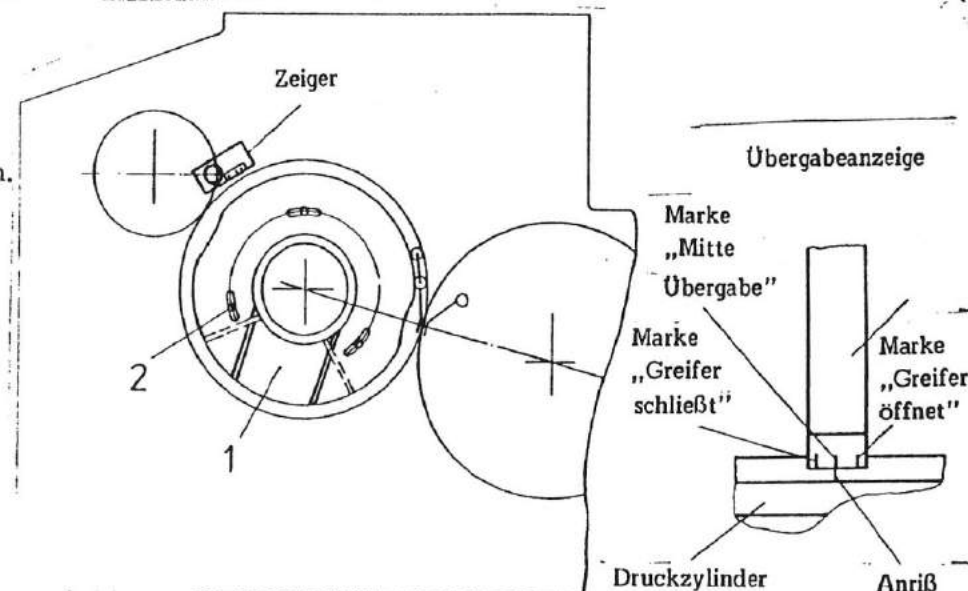
20.4.

Druckwerke

Grundeinstellung der Greiferöffnungskurve am Druckzylinder

Sie ist mit Hilfe der Übergabeanzeige (an Seite 1 innen) vorzunehmen. Die Stellung des Zeigers darf dabei nicht verändert werden.

- Anriß mit Marke „Greifer schließt“ am Zeiger (siehe Abbildung) in Deckung bringen.
- Schrauben (2) des Kurvensegments (1) lockern, Kurve verschieben, bis sich ein Teststreifen von 0,03 mm Dicke gleichmäßig in allen Greifern ziehen läßt. - Schrauben wieder festziehen.
- Anriß mit Marke „Greifer öffnet“ am Zeiger in Deckung bringen.
- Einstellung in gleicher Weise bei „Greifer schließt“ ausführen.



Lagerspiele der Druckzylinder

Beim Austausch der Zylinderlager die Lagerspiele beachten:

- | | | |
|--|---|---------------------|
| - A = Laufspiel Schenkel/Buchse | = | 0,02 mm + 0,01 mm |
| - B = Spiel zwischen Buchse und Wand)
bzw. Buchse und Buchse) | = | 0,008 mm + 0,004 mm |
| am Gummizylinder | | |
| Summe der Einzelspiele
Buchse/Buchse und Buchse/Wand | ≠ | 0,02 mm |
| Summe aller Spiele am
Gummizylinder | = | 0,028 mm + 0,022 mm |
| - C = Laufspiel Schenkel/Buchse | = | 0,02 mm + 0,01 mm |
| - D = Laufspiel Schenkel/Buchse | = | 0,02 mm + 0,02 mm |
| - E = Spiel zwischen Buchse und Wand | ≠ | 0,03 mm |

Grundeinstellung der Skala

- Zwischen Greiferwelle und Druckabstellwelle einen Meßstein von 174 mm Länge (Genauigkeitsgrad 3) anlegen.

Der Winkel an der Skala muß betragen.

$$147^{\circ} 30' \pm 15'$$

Papier im Greifer

- Alle Greifersysteme müssen 5 mm Papier fassen. (siehe Montageanweisung). Werden die angegebenen Toleranzen überschritten, ist die Einstellung zu korrigieren.

Zu diesem Zweck

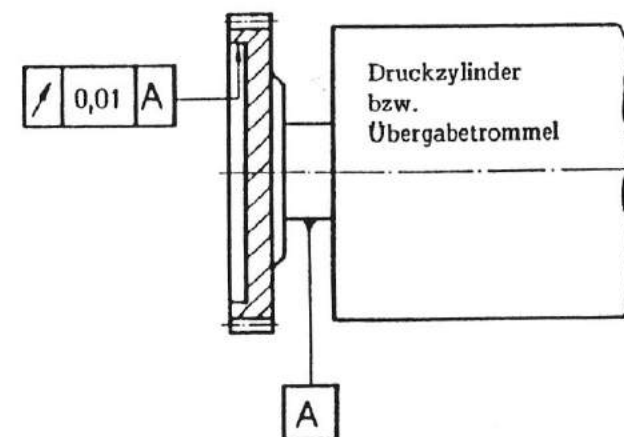
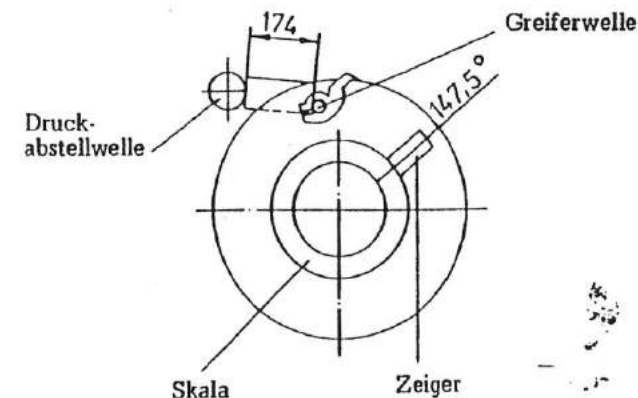
- Zahnkranz vom Radkörper lösen, Zylinder in der entsprechenden Richtung drehen und den Zahnkranz wieder festschrauben.
- Rundlauf des Zahnrades mittels Stellschrauben herstellen (max. zulässige Rundlaufabweichung 0,01 mm; im Übergabebereich 0,005 mm).
- Die gefaßte Papierkante aller nachfolgenden Übergabetrommeln und Druckzylinder ist danach erneut zu prüfen.

Überdrückung der Greifer

- Erforderliche Werte an der Anlegtrommel = $1,9 \text{ mm} \pm 0,1 \text{ mm}$
 - an den Druckzylindern = $1,8 \text{ mm} \pm 0,3 \text{ mm}$
 - an den Übergabetromm. bzw. Wendetrommel = $1,8 \text{ mm} \pm 0,3 \text{ mm}$
- Zur Einstellung Rollenhebel auf den hohen Hub der Kurve (an Seite 1, innen) bringen
- einen Greifer auf dem Aufschlag liegend festklemmen
- Trommel bzw. Druckzylinder drehen, bis der Greifer um das betreffende Maß geöffnet ist.
- In dieser Stellung alle Greifer ohne Spannung auf dem Aufschlag liegend festklemmen. Papierprobe durchführen.

Einstellung der Überdrückung mittels Meßsteinen:

- Druckzylinder: Maß 11,25 mm zwischen Rollenbolzen und Kurve hohe Rast.
- Übergabetrommel: Maß 15,75 mm zwischen Rolle und Kurve niedere Rast.



Auswechseln der Greifer (Feinguß) an Übergabe-, Wende- und Anlegtrommel und am Druckzylinder

Muß ein Bogengreifer wegen Verschleißes ersetzt werden, ist wie folgt zu verfahren:

Herausnehmen eines Greifers

- Die Feineinstellschraube (2) zurückdrehen und die Feder (3) herausnehmen.
- Die beiden Sechskantmutter (4), Federteller und Druckfeder (5) entfernen. Wird nun der Greiferhalter (7) mittels Schraube (8) gelöst, läßt sich der Greifer (1) aushängen.

Montieren des neuen Greifers

- Greifer einhängen, mit den dazugehörenden Teilen in entsprechender Reihenfolge komplettieren.
- Zum Einsetzen der Feder (3) muß die Schraube (2) zurückgedreht, danach aber sofort angezogen werden, damit die Feder nicht herausfällt.

Einstellung des Greifers $\varnothing 30$ (Feinguß) an Übergabe- und Wendetrommel

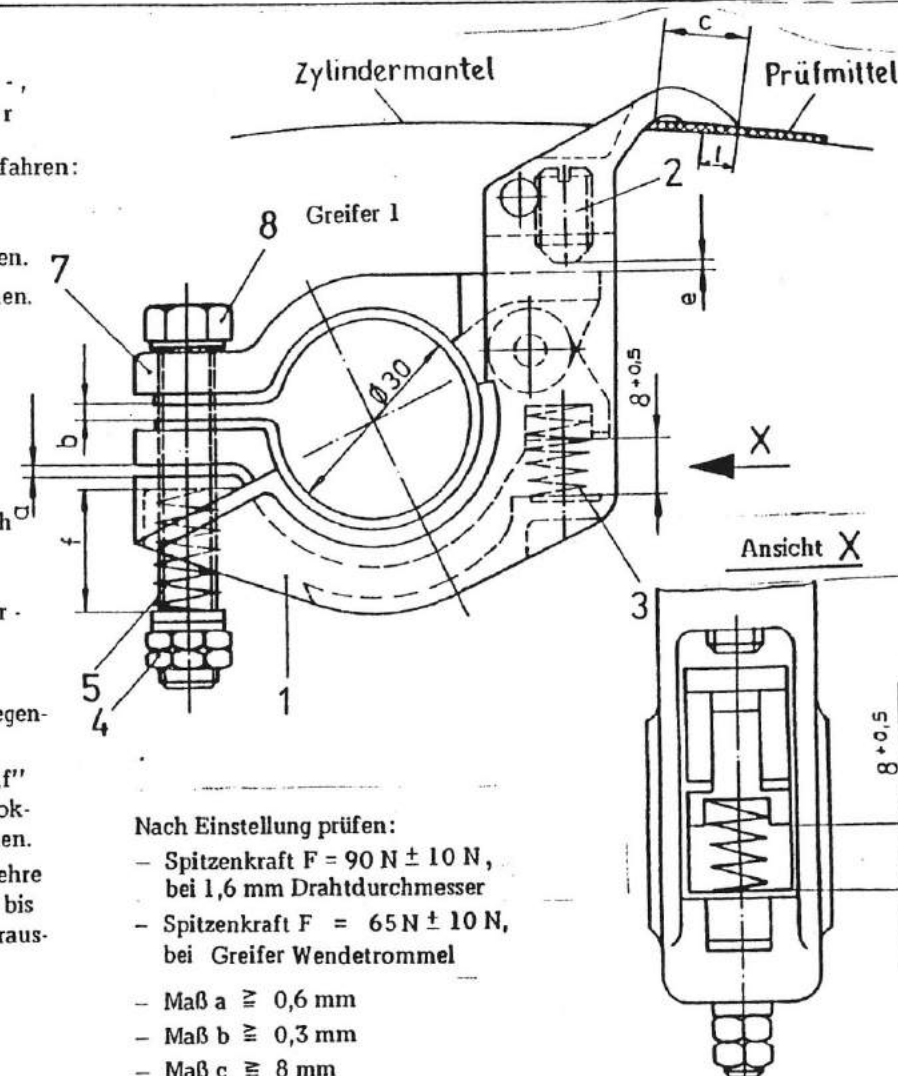
- Greiferwelle in maximale Schließstellung bringen.
- Druckfeder (5) auf nachstehend gegebenes Vormaß einstellen und mit Gegenmutter sichern.
- Feineinstellschraube (2) soweit vordrehen, daß das Federmaß dem Maß „f“ entspricht. In dieser Stellung den Greiferhalter (7) mittels Schraube (8) lokern, den Greifer auf den Aufschlag legen und den Halter wieder festziehen.
- Zwischen die Feineinstellschraube (2) und den Greiferhalter eine Fühlerlehre entsprechend dem Maß „e“ einschieben und die Schraube zurückdrehen, bis die Greiferzunge auf dem Anschlag liegt (Seidenpapier muß sich noch herausziehen lassen).
- Nach dem Entfernen der Fühlerlehre hat der Greifer die entsprechende Grundeinstellung.

Einstellmaße	Vormaß	Maß f	Maß e
Übergabetrommel	16,5 mm	16 mm	$\geq 1,6$ mm
Wendetrommel	–	20 mm	–

Beachten:

Spitzenkraft-Erhöhung nur an Feder (5) vornehmen!

Die minimale Federlänge beträgt 16 mm, bei 1,6 mm Drahtdurchmesser.



Nach Einstellung prüfen:

- Spitzenkraft $F = 90 \text{ N} \pm 10 \text{ N}$, bei 1,6 mm Drahtdurchmesser
- Spitzenkraft $F = 65 \text{ N} \pm 10 \text{ N}$, bei Greifer Wendetrommel
- Maß $a \geq 0,6$ mm
- Maß $b \geq 0,3$ mm
- Maß $c \geq 8$ mm
- Beweglichkeit: Seitlicher Abstand zwischen Greifer und Halter $\geq 0,2$ mm
guter Sitz des Greifers auf der Welle
- Auflagefläche der Greiferzunge auf Greiferaufschlag:
Auf voller Breite (21 mm bzw. 25 mm) und mindestens $l = 3 \text{ mm} + 2 \text{ mm}$
- Greiferöffnung nach Überdrückung ≥ 1 mm

Einstellung des Greifers Ø30 (Feinguß) am Druckzylinder

- Rollenbolzen ziehen, Stützrolle entfernen, Rollenbolzen wieder montieren.
- Meßstein 11,25 mm zwischen Rollenbolzen und Kurve (hohe Rast).
- Am Greifer die Maße „f“ und $8 + 0,5$ einstellen.
- Greiferhalter mittels Schraube (8) lockern, Greiferspitze auf den Greiferaufschlag legen und Halter wieder festziehen (zwischengelegtes Seidenpapier muß sich noch herausziehen lassen).
- Stützrolle wieder montieren.

Einstellmaße	Maß f	Maß e
Druckzylinder	16 mm	–

Beachten:

Spitzenkrafterhöhung nur an Feder (5) vornehmen.

Die minimale Federlänge ist 16 mm, bei 1,6 mm Drahtdurchmesser.

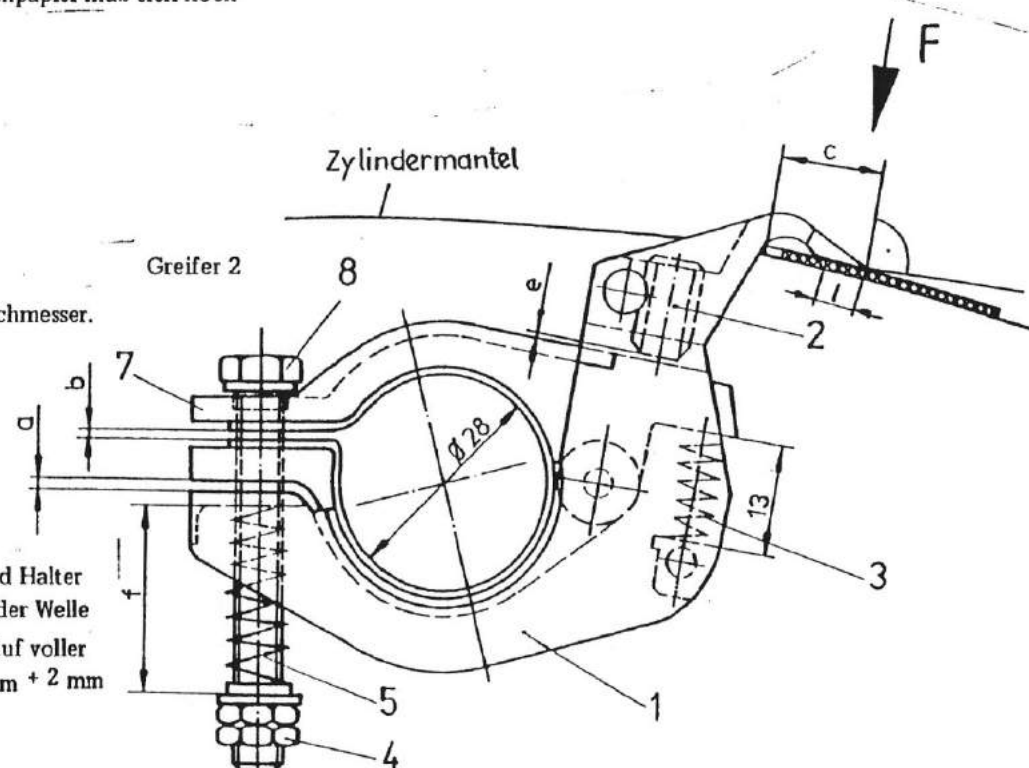
Nach Einstellung prüfen:

- Spitzenkraft $F = 90 \text{ N} \pm 10 \text{ N}$, bei 1,6 mm Drahtdurchmesser
- Maß a $\approx 0,6 \text{ mm}$
- Maß b $\approx 0,3 \text{ mm}$
- Maß c $\approx 8 \text{ mm}$
- Beweglichkeit: seitlicher Abstand zwischen Greifer und Halter $\approx 0,2 \text{ mm}$, guter Sitz des Greifers auf der Welle
- Auflagefläche der Greiferzunge auf Greiferaufschlag: Auf voller Breite (21 mm bzw. 25 mm) und mindestens $1 = 3 \text{ mm} + 2 \text{ mm}$
- Greiferöffnung nach Überdrückung $\geq 1 \text{ mm}$

Einstellung des Greifers Ø28 (Feinguß) an der Anlegtrommel

Siehe Einstellung des Greifers Ø30 (Feinguß) an Übergabe- und Wendetrommel.

Einstellmaße	Maß f	Maß e
Anlegtrommel	16 mm	–



Auswechseln der Greifer $\varnothing 28$ (Blech) an der Schwinganlage, der Anleg- und der Wendetrommel und den Auslegwagen

Die Arbeitsgänge sind die gleichen wie beim Feingußgreifer beschrieben (Herausnehmen und Montieren).

Das Lösen des Greiferhalters ist an der Schwinganlage und den Auslegwagen nicht erforderlich.

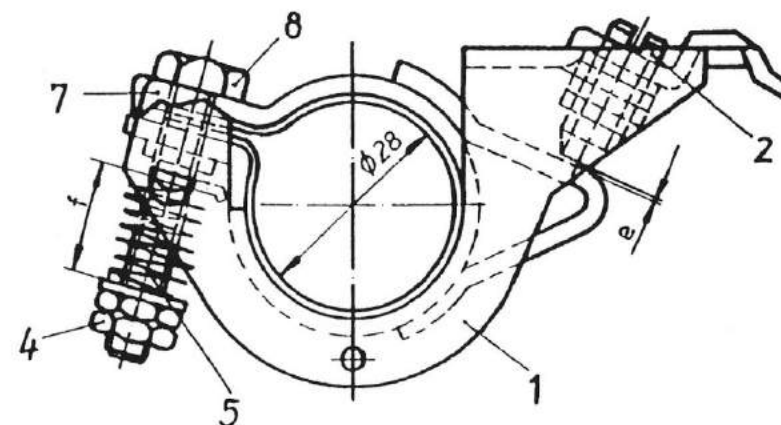
Ebenso entfällt das Herausnehmen der Feder (3).

Einstellen des Greifers

- Greiferwelle in maximale Schließstellung bringen.
- An Schwinganlage und Auslegwagen ist nur das Federmaß „f“ einzustellen und die Feineinstellschraube (2) bis zum Aufsitzen auf den Greiferhalter einzuschrauben.
- Maß „e“ mit der Fühlerlehre wie beim Feingußgreifer beschrieben einstellen.

Einstellmaße	Maß f	Maß e
Schwinganlage	19,6 mm	0,15 mm
Anlegtrommel	19,6 mm	0,95 mm
Auslegwagen	19,6 mm	0,15 mm
Wendetrommel	17 mm	–

Greifer 3



Druckan- und -abstellung

- Ausgangsstellung: Druck ab
- Klinkenschälthebel (6) umlegen auf „Druck an“
- Maschine drehen, bis die Skala den Wert „b“ anzeigt.
In dieser Stellung muß der Schneidenbolzen (2) fest an der Klinke anliegen.

Zur Korrektur:

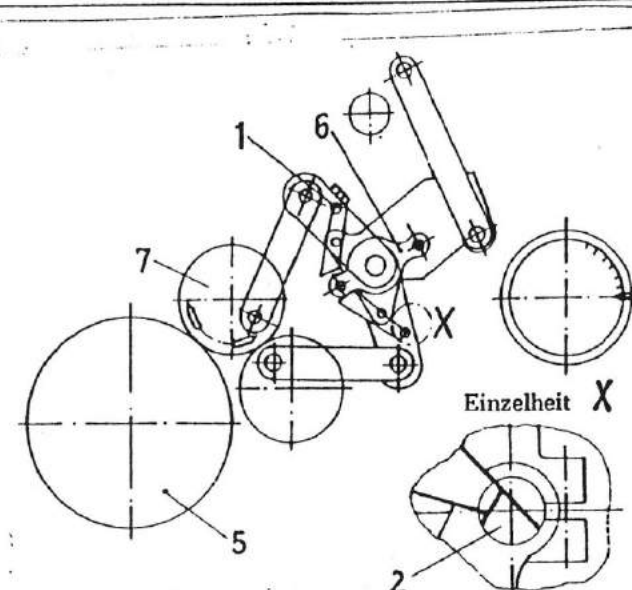
- Zahnrad (5) lösen, entsprechend verdrehen und wieder festschrauben.

Ausgangsstellung „Druck an“

- Klinkenschälthebel (6) umlegen auf „Druck ab“
- Maschine drehen, bis die Skala den Wert „a“ anzeigt.
In dieser Stellung muß der Schneidenbolzen (1) fest an der Klinke anliegen.

Zur Korrektur:

- Exzentrerscheibe (7) entsprechend verdrehen.



Einstellwerte der Skala

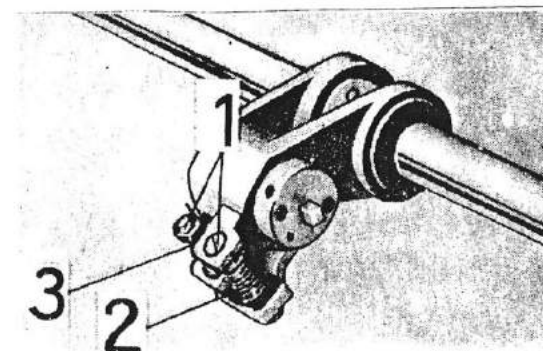
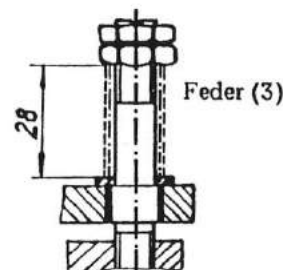
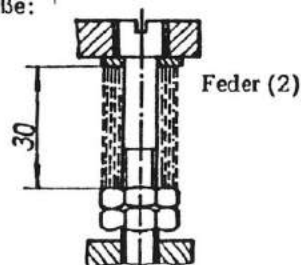
Schieberegister	Kontaktgreifer
a 120°	119°
b 55°	38°

Einstellung des Feuchthebers

- Parallelität zum Dukt und Wasserzylinder durch Verstellen der Federschraubenpaare (1) an den Heberlagerhebeln.

Beachten: Federschrauben stets paarweise in der gleichen Richtung und um den gleichen Wert nachstellen.

Einstellmaße:



20.5. Wendetrommel

Achtung: Vor Beginn den Hauptschalter am Schaltschrank ausschalten!
Die Maschine mit dem Handantrieb betätigen.

Grundeinstellung der Wendetrommel

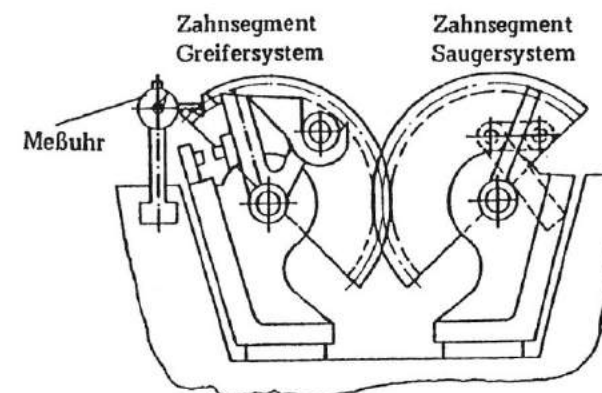
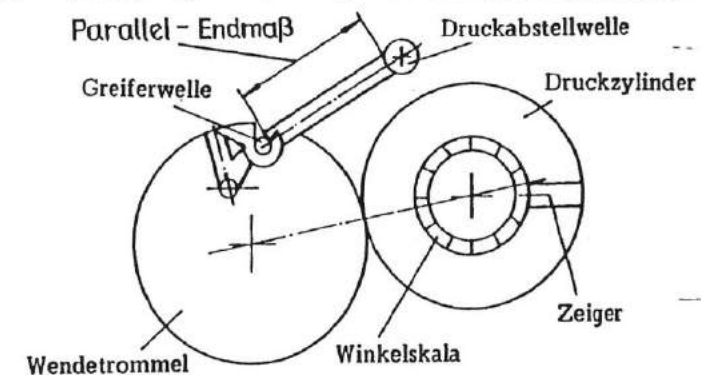
Zwischen der Druckabstellwelle und der Greiferwelle der Wendetrommel ist ein Parallel-Endmaß von 261 mm (Genauigkeitsgrad III) zur Anlage zu bringen.

Der Zeiger der Skala des Druckwerkes, dem die Wendetrommel zugeordnet ist, muß 193° anzeigen. Eine Abweichung von $\pm 1^\circ$ ist zulässig.

Kontrolle der Schwingsteuerung

Einschwingen Beginn: Bewegungsfortschritt mit Feinmeßzeiger am Zahnsegment (Greifersystem) gemessen.

Bewegungsfortschritt von $257^\circ - 265^\circ : 0,5 \pm 0,05 \text{ mm}$



Schwingbewegung der Leitsegmente

Der Magnethalter mit dem Feinmeßanzeiger ist so am Trommelkörper zu befestigen, daß an beliebiger Stelle auf dem Umfang des Leitsegmentes Seite 1 gemessen werden kann.

Der Index am Rolllenhebel ist in der flachen Nut eingerastet.

Ende des Ausschwingens bei	$90^\circ - 20^\circ$	} der Winkelskala.
Beginn des Einschwingens bei	$254^\circ + 20^\circ$	

Lage der Leitsegmente

(in Umfangsrichtung gemessen)

Segmente ausgeschwungen	ca. 4 mm	} Spalt zwischen Segment/Sauger
Segmente eingeschwungen	2 mm	

Erforderliche Veränderungen sind an den Schrauben /1 vorzunehmen.

Pressung der Leitsegmente

Die Pressung der Leitsegmente am Druckzylinder vor der Wendetrommel soll so groß sein, daß sich ein Streifen Kunstdruckpapier (ca. 120 g/m²) noch zwischen beiden hindurchziehen läßt.

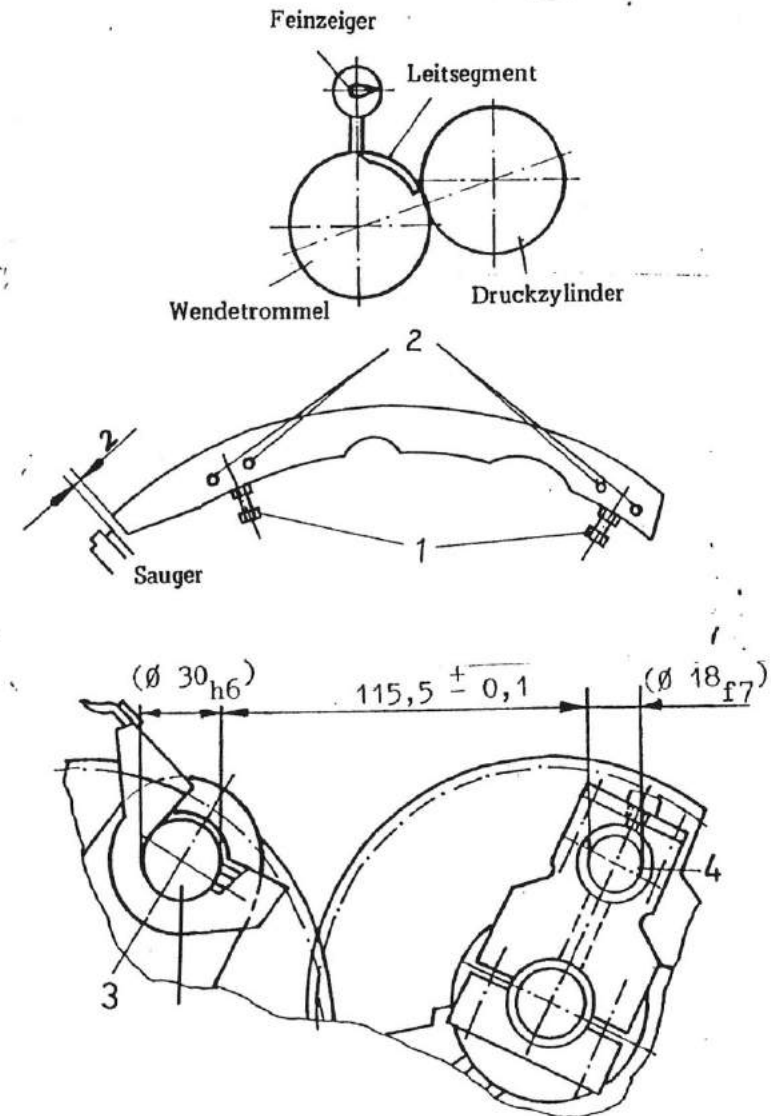
Die Leitsegmente müssen auf ihrem ganzen Umfang gleichmäßig aufliegen. (Kontrolle mit abfärb. Mittel).

Eventuelle Änderungen sind nach Lösen der Schrauben /2 vorzunehmen.

Einstellung des Saugerschwingers

Zur genauen Justierung gilt das Maß zwischen der Greiferwelle /3 und der Steuerwelle /4

$$= 115,5 \text{ mm} \pm 0,1 \text{ mm}$$



Höhe der Saugerköpfe

- Saugerabdruck mit abfärbenden Mitteln (Kreide, Farbe) am Druckzylinder mit aufgespanntem Aufzug prüfen.
- Korrektur durch Unterlegen von Kartonplättchen unter die Saugerköpfe.

Funktion der Sauger

- Mittels eines an der Vakuumpumpe montierten Unterdruckmeßgerätes prüfen:

bei geschlossenem Sauger	erforderl. Enddruck 0,2 bar (absolut) (Mindestwert)
am Punkt „öffnen“ (Übernahme des Bogens)	0,6 bar (abs.) – 0,1 bar
am Punkt „schließen“ (Übergabe des Bogens)	0,5 bar (abs.) – 0,1 bar

- Regulierung an der Vakuumpumpe.

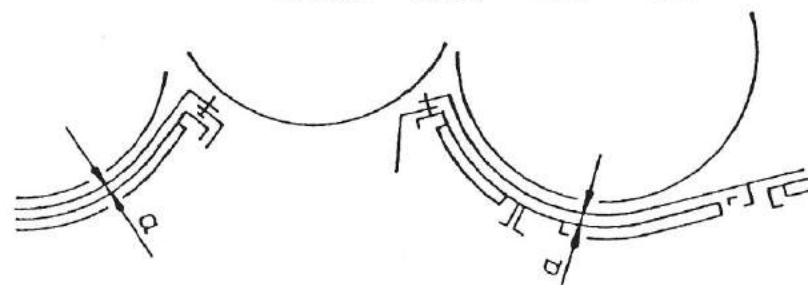
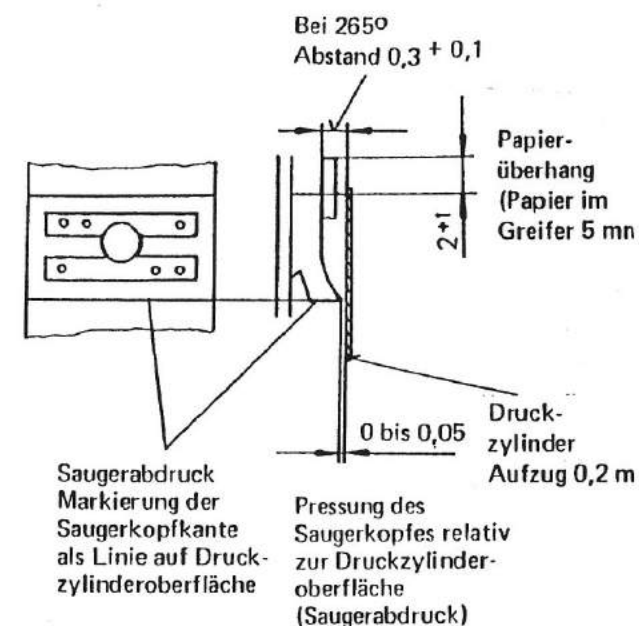
Bogenleiteinrichtung – Trennen

- Blasen, Beginn (nur SW1) Einstellwert 150°;
Luftaustritt am Blasrohr über ganze Breite.

Stababstand a vom Blech über ganze Stablänge

Benötigt: Prüflehre

$$a = 3 \pm 1 \text{ mm}$$

Einstellung der Bogenleitstäbe:
siehe Betriebsanleitung

20.6. Antrieb

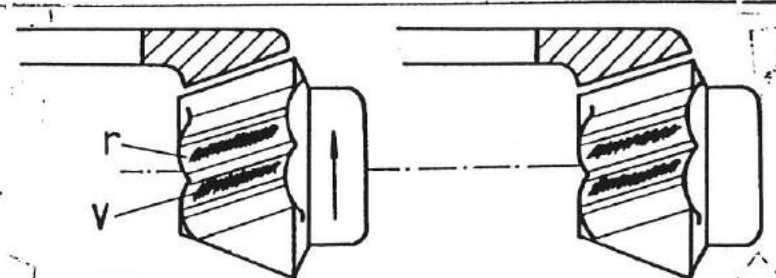
Einstellung des Kegelradsatzes

Der Einbau der Kegelräder ist unter Beachtung richtiger Flankenanlage vorzunehmen.
(Die folgenden Angaben beziehen sich auf das treibende Kegelrad).

– Einstellung des Kegelrades

Dazu die Zahnflanken eines Rades mit dünner Ölfarbe bestreichen, das Getriebe einige Umdrehungen in Richtung „Bewegung vorwärts“ machen lassen.
Die entstehenden Tragbilder werden als blanke Stellen sichtbar.

Richtige Flankenanlage:	im unbelasteten Zustand	im belasteten Zustand
Zahnluft = 0,15 ... 0,20 mm	auf Vorwärtsflanke v	Tragbild in der Mitte
Länge des Tragbildes zur Zahnlänge = minimal 50 %	Rückwärtsflanke r	näher am großen Ø



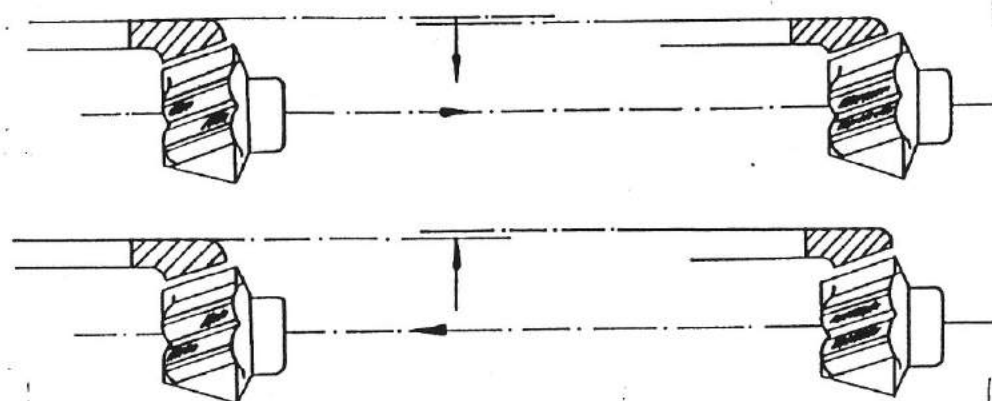
- Beachten:
- Niemals Zahnberührung am kleinen Durchmesser!
 - Bei kürzeren Tragbildern wird die Festigkeit verringert und die Geräuschbildung begünstigt.

Abweichungen der Flankenanlage:

fehlerhafte Flankenanlage

auszuführende Korrektur

normales Tragbild nach korrigierter Kegelrad-Stellung

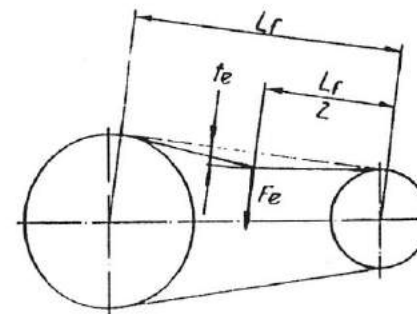


Einstellen der Keilriemenvorspannung (an Gleichstrommotoren)

Die regelmäßige Kontrolle und Einhaltung der vorgeschriebenen Keilriemenvorspannung verhindert eine vorzeitige Zerstörung der Keilriemen und einen vorzeitigen Verschleiß der Wellenlager.

Durchführung der Vorspannungskontrolle

- In der Mitte der freien Trumlänge L_f erfolgt die Messung der Eindrücktiefe t_e des Keilriemens mit Hilfe eines Keilriemenvorspanngerätes (siehe Abb.).
- Die Eindrücktiefe t_e ist abhängig von der zu übertragenden Leistung und wird der Baugröße des Gleichstrommotors zugeordnet (siehe Bezeichnung am Typenschild).



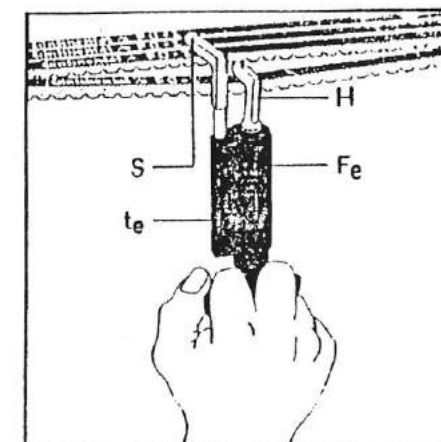
Motor - Baugröße	Eindrücktiefe t_e mm
EFGEF 112 L	19
EFGEF 132 S	15
EFGEF 132 L	
EFGEF 160 S	
EFGEF 160 M	9
EFGEF 160 L	

F_e = Prüfkraft (N)

$$\frac{t_e}{L_f} \cdot 100 = \frac{\text{Eindrücktiefe}}{\text{Trumlänge}} \cdot 100$$

- Meßvorgang: (siehe Abb.)
- 1. Meßgerät mit Lasthaken H in Trummittle auflegen.
- 2. Schleppzeiger S in Position bringen.
- 3. Profilabhängige Prüfkraft nach Skala F_e aufbringen. Dazu Meßgerät rechtwinklig zum Trum ziehen. *)
- 4. An Skala t_e des Schleppzeigers Eindrücktiefe ablesen.
- 5. Vorspannung mit Hilfe der Spannschrauben auf den Motorspannschienen gegebenenfalls korrigieren bis errechnete Eindrücktiefe erreicht ist.

*) Vorgeschriebene Prüfkraft für FO - Z XPB Keilriemen beträgt 75 N.



DOCUMENTATION

VARITREND

MULTICOLOR
SHEET-FEED
ROTARY OFFSET MACHINE

FORMAT 4

LIST OF SPARE PARTS

Machine **NG4** VCF
No. **306958** VD5+1
E / Ersatzteil

 **KBA-PLANETA AG**

Ein Unternehmen der Gruppe Koenig & Bauer-Albert

Please note:

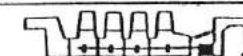
To avoid errors and faulty supply of spare parts ordered, please specify as follows:

- | | |
|--------------------------------------|---------------------------------|
| a) Type of machine | e.g. N 4 |
| b) No. and year of construction | 306 500/1991 |
| c) Identification (catalog) no. | 313.06-01994/4 |
| d) Page no. | B 4 |
| e) Item no. | 01 |
| f) Designation | plate cylinder,
complete, |
| g) Quantity required | |
| h) For parts of electrical equipment | current
voltage
frequency |

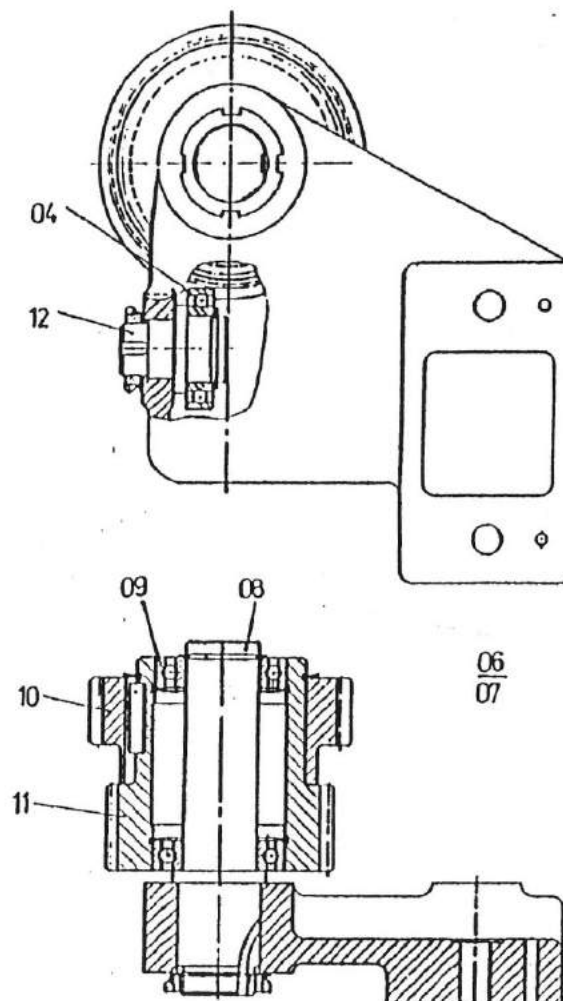
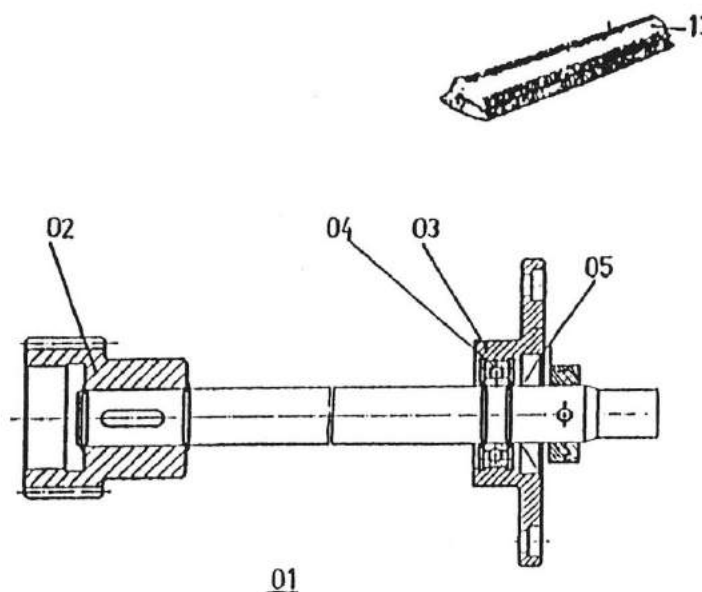
Underlined item nos. indicate that these components are supplied completely, i. e. with all pertaining elements.

The operator's side is specified as S 1, the drive end as S 2.
If a component cannot be found in the catalog, please send us a sketch.

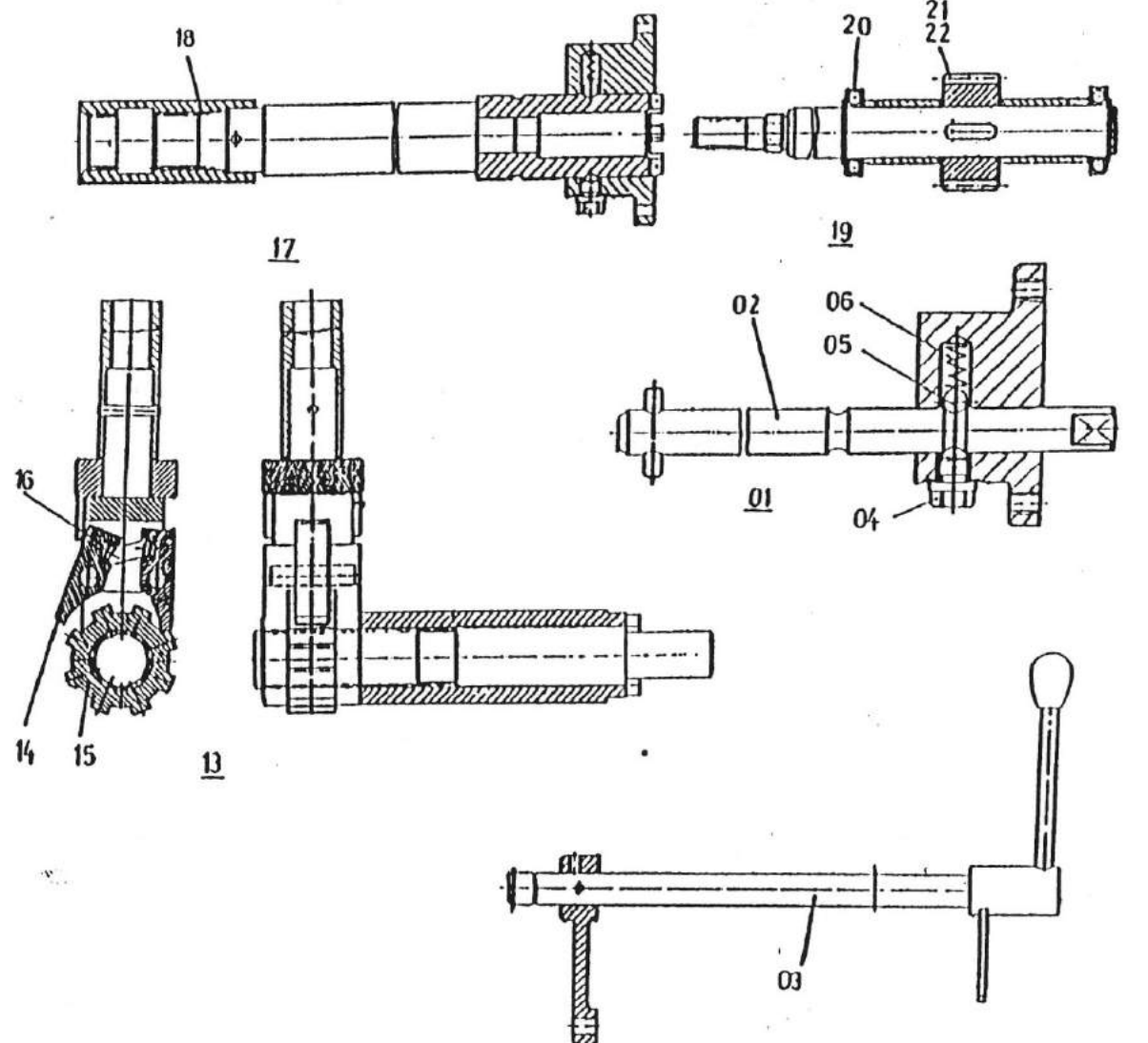
Antrieb	Drive	Mécanisme de commande
Zylinder	Cylinders	Cylindres
Trommeln	Drums	Tambours
Anlage	Feeding mechanism	Mécanisme de marge
Auslage	Sheet delivery	Sortie des feuilles
Farbwerk	Inking unit	Mécanisme d'encre
Walzenabstellung	Roller checking device	Débrayage des rouleaux
Druckabstellung	Cylinder trip motion	Débrayage de l'impression
Feuchtwerk	Dampening unit	Mécanisme de mouillage
SW-Einrichtung	Perfecting device	Equipement R/V
Schmierung	Lubrication	Grasage
Felder entspr. Maschinenvariante		

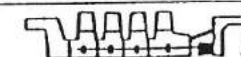


item no.	identification no.	designation
01	313.00-03760/1	drive shaft, complete
02	313.51-01070/0	spiral gear
03	313.16-01094/0	cover
04	3021-000 057	grooved ball bearing DIN 625-6006
05	7510-100 661	shaft sealing ring DIN 3760-A 30x62x7
06	313.00-03759/0	bearing rest, complete
07	313.74-01001/0	bearing rest
08	313.09-01059/0	shaft
09	3021-000 058	grooved ball bearing DIN 625-6007
10	313.51-01064/0	helical gear, 36 teeth
11	313.51-01065/0	spiral gear, 24 teeth
12	313.22-01030/0	bolt
13	1699-000 003	sectional rubber, without illustration A length 4,595) no. 3463 B length 3,575) quality 3.1538



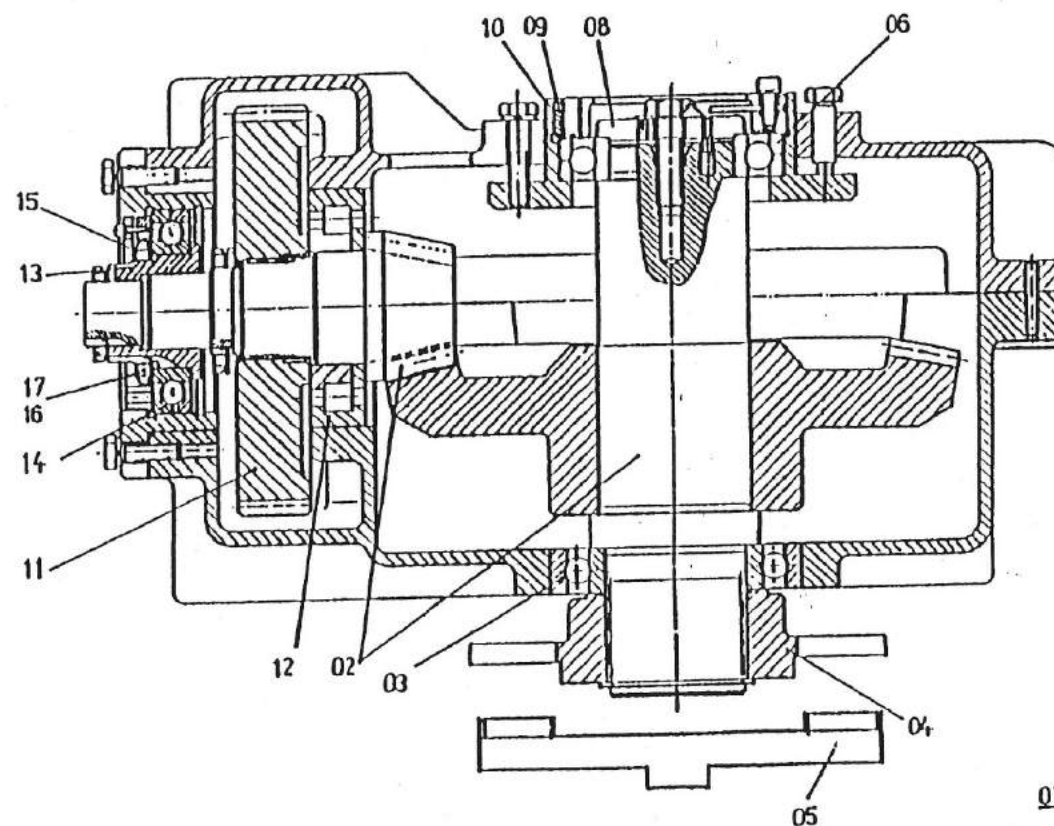
item no.	identification no.	designation
01	313.00-08381/0	control shaft, complete
02	313.40-01765/0	control shaft
03	313.41-01117/0	control shaft
04	313.22-01164/0	screw plug
05	3041-000 034	ball 9 mm II TGL 15515
06	2552-001 118	pressure spring C 1.2x8.5x7.5 TGL 18395
07	313.00-05090/0	control shaft, complete
08	313.76-01141/0	control lever
09	313.21-01157/0	control block
10	313.01-01653/0	control hub
11	971.99-00014/0	pressure spring 1.6/I P 25.52
12	7510-100 391 shaft	sealing ring DIN 3760 A-20x32x7-NBR 70
13	313.00-00050/0	ratchet, complete
14	313.66-00002/0	locking latch
15	313.58-00002/0	locking wheel
16	2552-000 931	pressure spring 1/55 P 25.52 A 1x11x11.5 TGL 18395
17	313.00-08382/0	hand-operated driving shaft, complete
18	313.58-01174/0	bush
19	313.00-05089/0	hand-operated driving shaft, complete
20	3021-000 060	grooved ball bearing DIN 625-6009
21	313.51-01123/0	spiral gear for N 14 to N 34, 22 teeth
22	313.51-01124/0	spiral gear for N 44 to N 64, 16 teeth





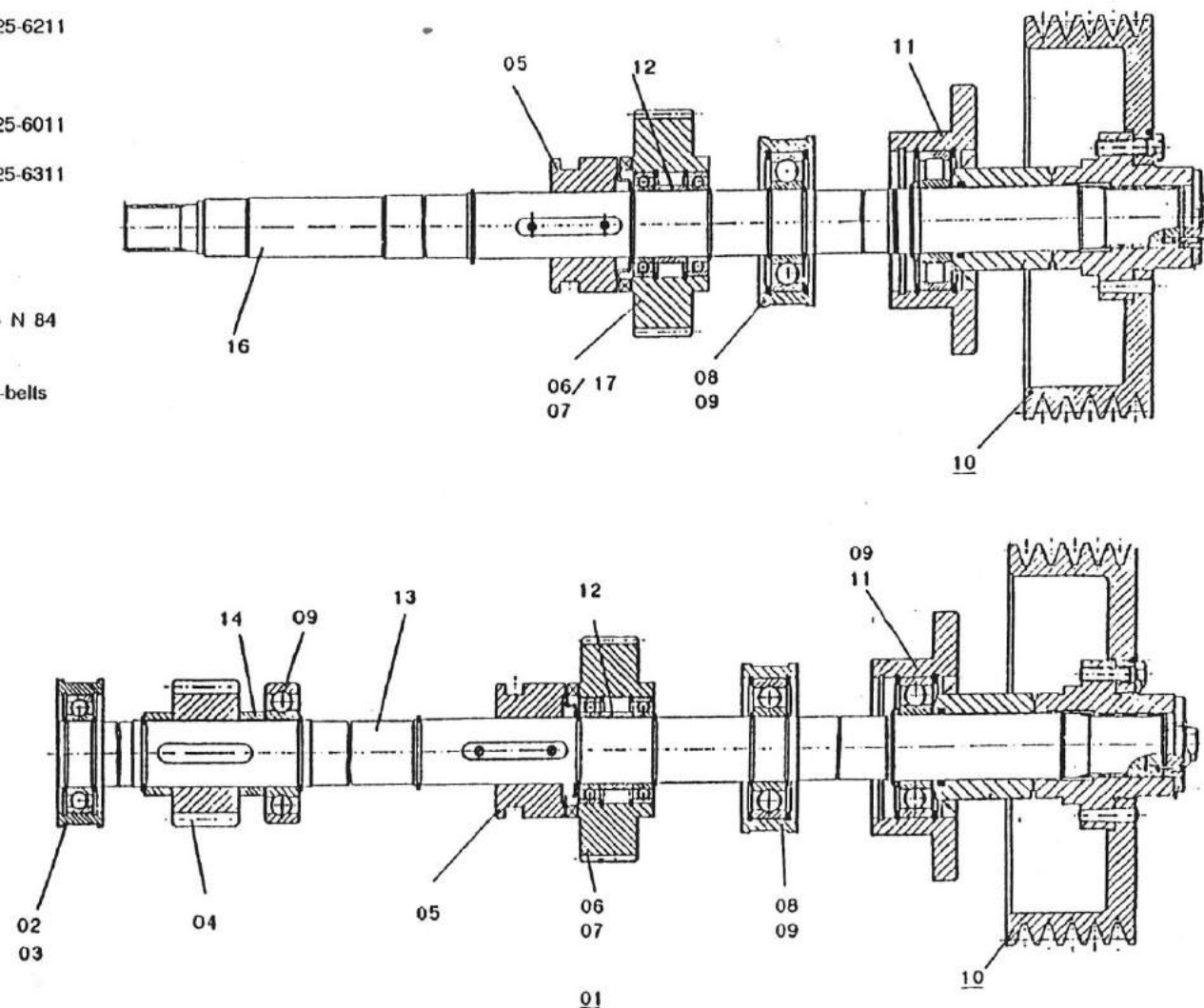
item no.	identification no.	designation
01	313.06-15170/0	bevel and spur gear unit
02	313.03-01420/0	bevel gear pair 1), F 4 - GK 6, complete
03	3021-000 114	grooved ball bearing DIN 625-6216
04	313.58-00106/2	coupling flange
05	313.10-01186/2	coupling ring
06	3022-000 105	Inclined ball bearing Q 214 TGL 2982
07		
08	313.11-01102/0	end plate
09	313.15-01045/0	threaded ring
10	313.26-01176/0	bearing cover
11	313.58-01286/0	helical gear, 42 teeth
12	3028-100 276	cylindrical roller bearing DIN 5412 NUP 312
13	313.26-01060/1	bearing bush
14	3022-000 103	inclined ball bearing Q 212 TGL 2982
15	313.10-01107/1	threaded ring
16	2312-000 055	locking plate 55 DIN 462-55-OXBR
17	2217-000 016	grooved nut DIN 1804 M 55x1.5 W

1) supplied in common only



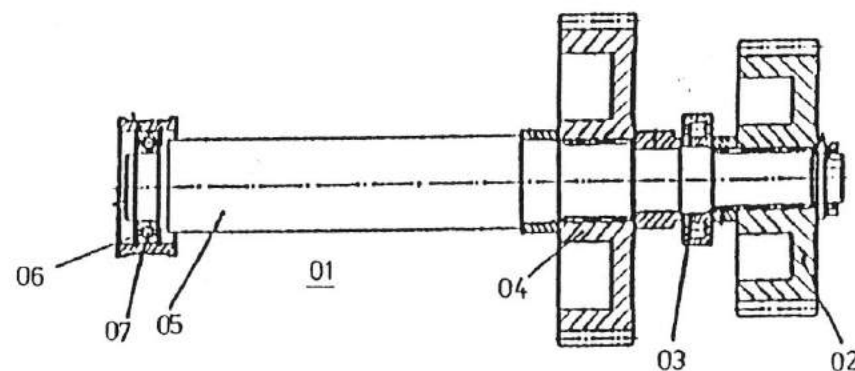
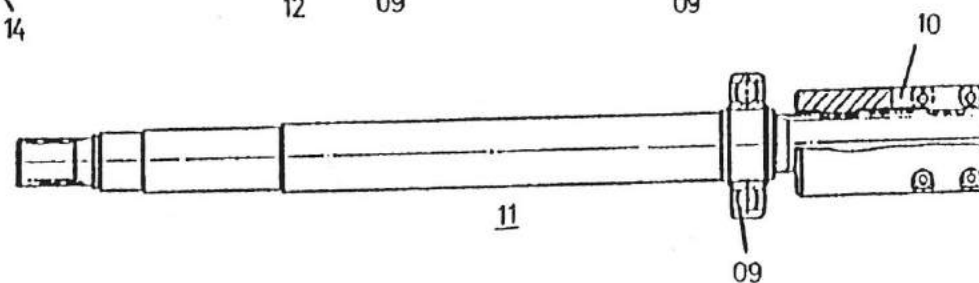
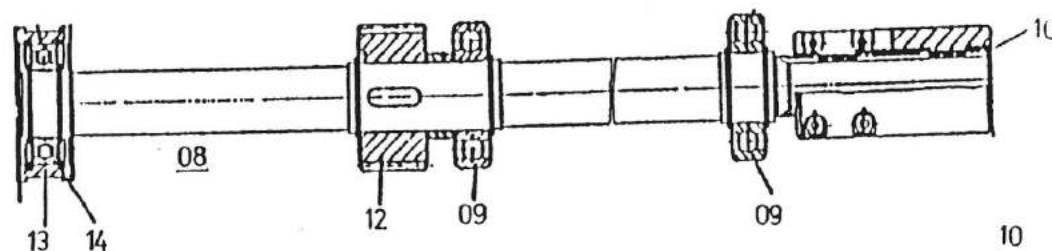
Main driving shaft

item no.	identification no.	designation
01	313.00-11262/0	main driving shaft for N 14 to N 24
02	313.20-01151/0	bearing bush
03	3021-000 109	grooved ball bearing DIN 625-6211
04	313.51-01382/1	helical gear
05	313.28-00001/0	coupling sleeve
06	313.51-01119/0	spiral gear for N 14 to N 34
07	3021-000 062	grooved ball bearing DIN 625-6011
08	313.23-00002/0	bearing bush
09	3021-000 225	grooved ball bearing DIN 625-6311
10	313.00-08647/0	vee-belt pulley, complete
11	313.11-00010/0	flange bushing
12	313.20-00002/0	spacer ring
13	313.58-01452/0	shaft
14	313.10-02619/0	spacer sleeve
15	313.00-11263/0	main driving shaft for N 44 to N 84
16	313.58-01427/0	shaft
17	313.51-01120/0	spiral gear for N 44 to N 84
18	3413-129 305	set of FO-Z heavy-duty vee-belts 5 x SPB 1600 LW LR



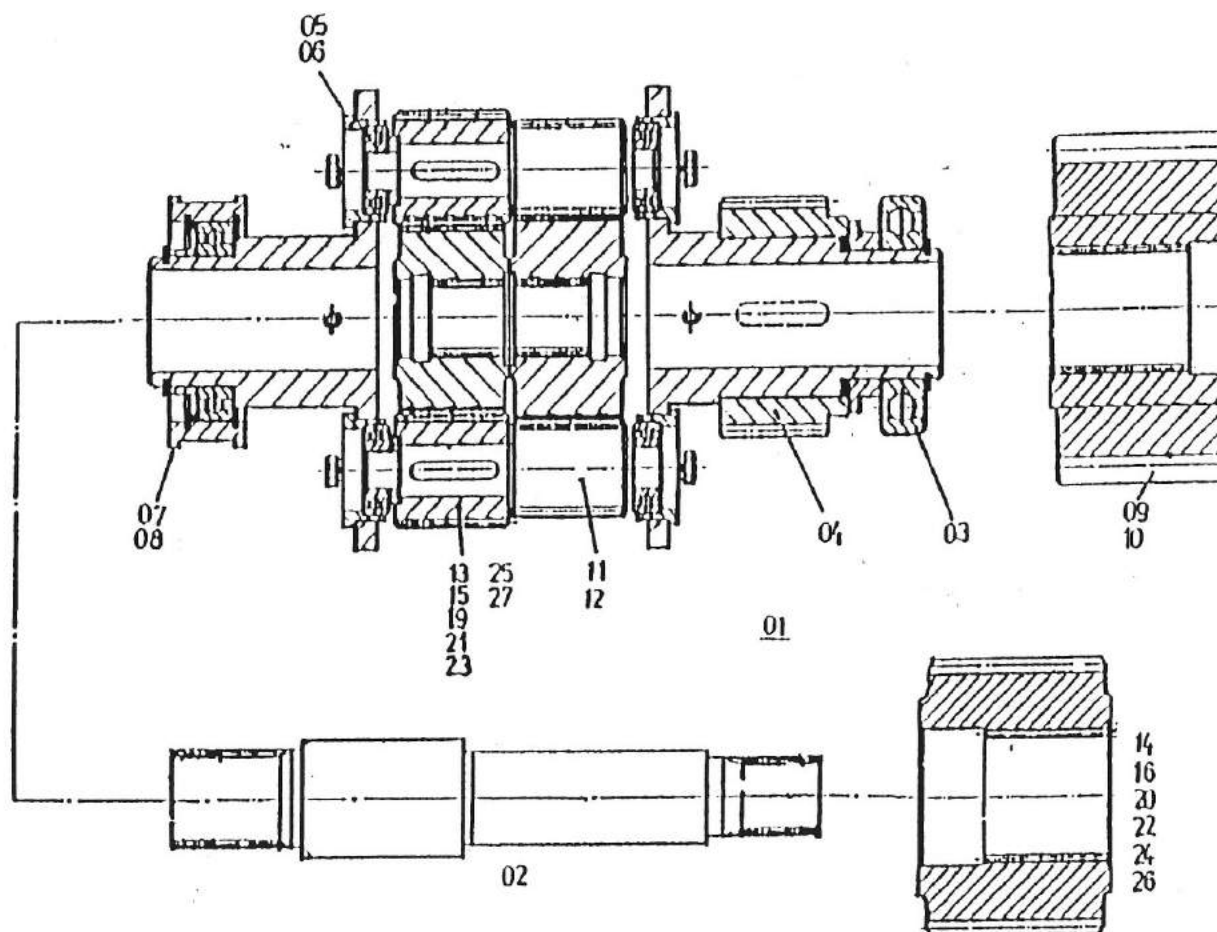


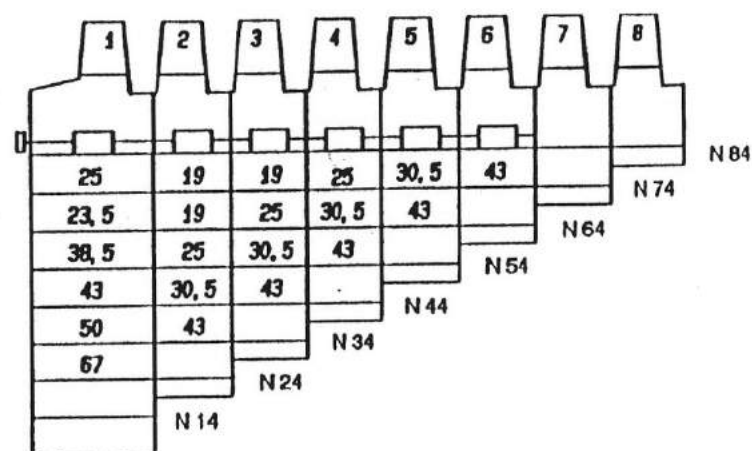
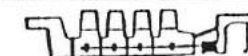
item no.	identification no.	designation
01	313.00-12236/0	intermediate shaft, complete
02	313.58-01466/0	helical gear, 30 teeth
03	3028-100 104	cylindrical roller bearing DIN 5412 NUP 208
04	313.58-01284/0	helical gear, 36 teeth
05	313.58-01129/0	shaft
06	313.20-01137/0	bearing bush
07	3021-000 059	grooved ball bearing DIN 625-6008
08	313.00-04922/0	driving shaft for follower printing unit, complete
09	3021-000 225	grooved ball bearing DIN 625-6311
10	313.58-01047/0	coupling
11	313.00-04923/0	driving shaft for delivery printing unit, complete
12	313.51-01382/0	helical gear, 21 teeth
13	313.20-01151/0	bearing bush
14	3021-000 109	grooved ball bearing DIN 625-6211



Planetary gear shaft

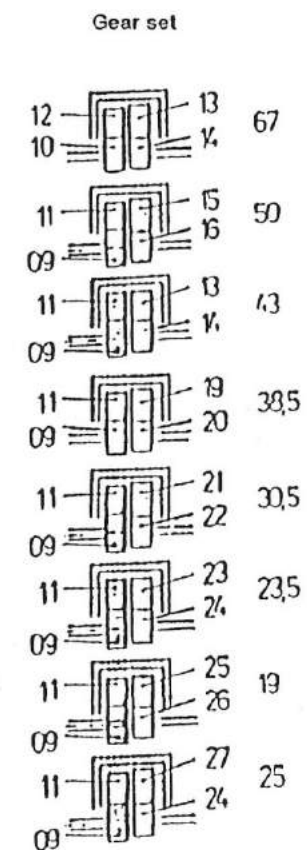
item no.	identification no.	designation
01	313.06-03958/0	planetary gear shaft, complete
02	313.58-01073/0	shaft
03	3021-000111	grooved ball bearing DIN 625-6213
04	313.51-01381/0	helical gear, 22 teeth
05	313.18-01006/0	bearing bush
06	3021-000102	grooved ball bearing DIN 625-6204
07	3021-000064	grooved ball bearing DIN 625-6013
08	313.20-01151/0	bearing bush
09	313.58-01048/0	straight spur gear, 33 teeth
10	313.58-01049/0	straight spur gear, 39 teeth
11	313.55-01005/0	straight spur gear shaft, 14 teeth
12	313.55-01003/0	straight spur gear shaft, 10 teeth
13	313.51-01141/0	straight spur gear, 21 teeth
14	313.58-01053/0	straight spur gear, 27 teeth
15	313.51-00023/0	straight spur gear, 23 teeth
16	313.58-01315/0	straight spur gear, 27 teeth
19	313.51-00021/0	straight spur gear, 20 teeth
20	313.58-01054/0	straight spur gear, 30 teeth
21	313.51-00019/0	straight spur gear, 19 teeth
22	313.58-01051/0	straight spur gear, 30 teeth
23	313.51-00017/0	straight spur gear, 18 teeth
24	313.58-01050/0	straight spur gear, 30 teeth
25	313.51-00015/0	straight spur gear, 17 teeth
26	313.58-01269/0	straight spur gear, 33 teeth
27	313.51-01363/0	straight spur gear, 17 teeth
	313.06-10160/0	gear set 67
	313.06-10162/0	gear set 50
	313.06-03849/0	gear set 43
	313.06-03852/0	gear set 39.5
	313.06-03866/0	gear set 30.5
	313.06-03877/0	gear set 23.5
	313.06-10172/0	gear set 19
	313.06-08853/0	gear set 25



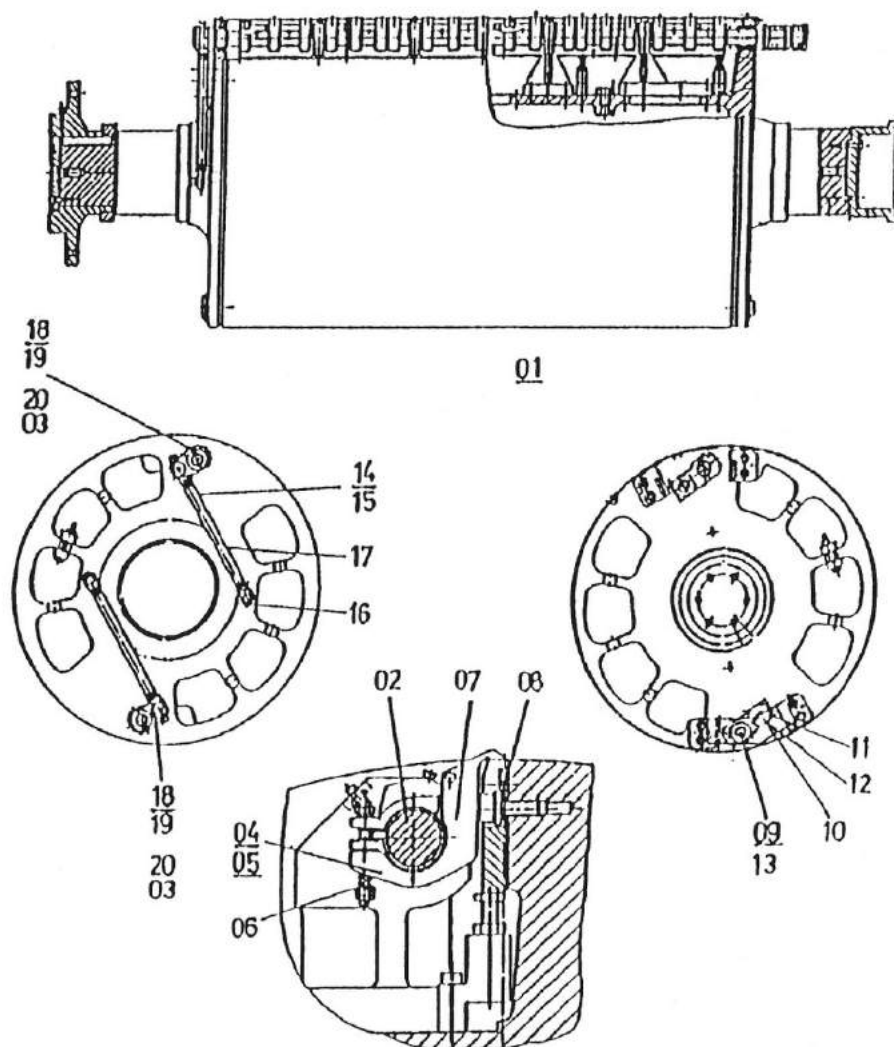


Differential distribution for varnishing machines

25	19	19	22	25	38,5	—	NL 94
23,5	19	22	25	38,5	—	—	NL 84
30,5	22	25	38,5	—	—	—	NL 74
38,5	23,5	38,5	—	—	—	—	NL 64
43	38,5	—	—	—	—	—	NL 54
56	—	—	—	—	—	—	NL 44

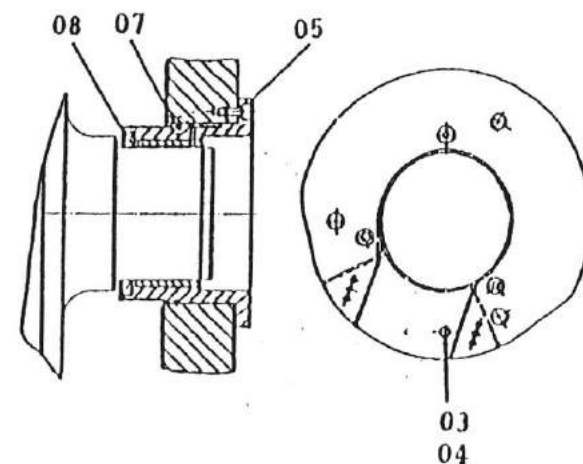
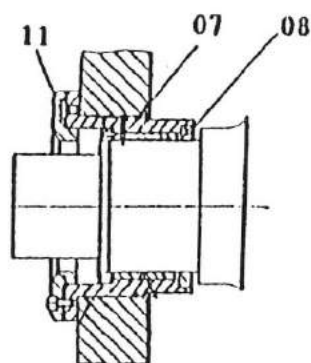
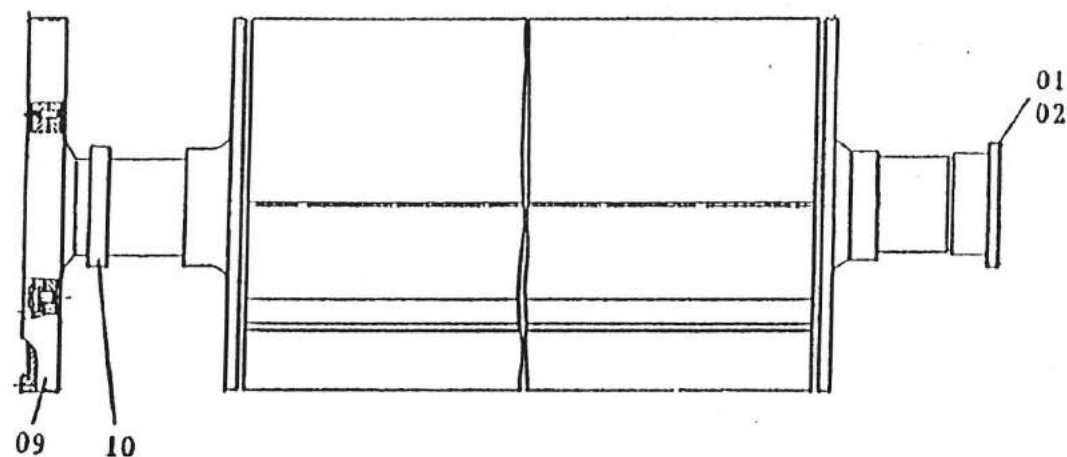


item no.	Identifier no.	designation
01	313.00-08692/0	impression cylinder, complete
	313.00-07869/0	impression cylinder, complete
	313.00-08947/0	follower printing unit behind perfector
	313.00-07868/0	impression cylinder, complete
	313.00-07868/0	feed printing unit for SW
	313.00-07868/0	impression cylinder, complete
02	313.41-01320/0	gripper shaft
	313.41-01271/0	gripper shaft (impression cylinder behind perfector)
03	3028-102 423	cylindrical roller bearing NU 4906 TNGAP C2 TGL 2988
04	313.00-06422/0	gripper 30/21 (spray-coated), complete
05	313.00-06420/0	sheet gripper 30/25 (impression cylinder behind perfector), complete
06	971.99-0001570	pressure spring 11-60 TGL 46-0158
07	2552-001 118	pressure spring 1.2/42 P 25.52
08	313.06-1575170	gripper pad bar, complete (for perfector)
	313.06-1575270	gripper pad bar, complete (behind perfector)
09	313.00-07431/1	roller lever, complete
10	313.33-0104570	eccentric bolt
11	313.20-0176470	roller
12	3028-100 421	cylindrical roller bearing NU 4905 TNGAP TGL 2988
13	3028-102 421	cylindrical roller bearing NU 4905 TNGAP C2 TGL 2988
14	313.00-0792070	spring bar, complete
15	313.46-0110170	bolt
16	3019-000 003	needle bearing race DIN 5405 K 12x16x13
17	971.99-0002070	pressure spring 4/2 P 25.52
18	313.00-0791970	spring lever, complete
19	3021-000 025	grooved ball bearing 629-2Z TGL 2981
20	313.22-0114270	bolt



Impression cylinder

item no.	identification no.	designation
01	313.51-01146/0	guide bushing for feed printing unit
	313.51-01145/0	guide bushing for follower printing unit
02	313.10-01179/0	bearing ring
03	313.19-01847/0	gripper opening cam of feed printing unit, complete
	313.19-01848/0	gripper opening cam of follower printing unit, complete
04	313.29-01210/0	cam holder
05	313.39-01109/0	impression cylinder bearing, side 1
07	7515-005 920	O-ring 205 x 5 TGL 6365
08	7510-104 141	shaft sealing ring AD 160x200x14-NBR 70 TGL 16454
09	313.51-00048/0	impression cylinder rim gear 1.1, 192 teeth
		feed printing unit without perfector
		follower printing unit without perfector
		except printing unit behind perfector
	313.51-00050/0	impression cylinder rim gear 5.1, 192 teeth
		printing unit behind perfector
	313.00-04290/0	impression cylinder rim gear 2.1, 192 teeth
		printing unit with perfector
10	313.29-01328/0	gear body
11	313.39-01110/0	impression cylinder bearing, side 2



502-878-9969

Blanket cylinder

item no.	identification no.	designation
01	313.00-07420/0	blanket cylinder, complete
02	313.39-01388/0	blanket cylinder ring, complete
03	313.00-04944/0	O-Ring 130x5-N 70 B
04	7515-308 503	shaft sealing ring
05	7510-104 101	AD 130x160x14-NBR 70
06	313.39-01074/8	outer bearing, side 1, + 0.05
07	313.39-01074/9	outer bearing, side 1, + 0.03
08	7515-309 623	O-Ring 185x5-N 70 B
09	7515-005 520	O-ring 160 x 5 TGL 6365-WS 1.957
10	313.39-01161/8	inner bearing, side 1, + 0.05
11	313.39-01161/9	inner bearing, side 1, + 0.03
12	3026-000 021	axial grooved ball bearing DIN 711-51122
13	313.19-01340/0	setting segment, side 1
14	313.39-01075/8	outer bearing, side 2, + 0.05
15	313.39-01075/9	outer bearing, side 2, + 0.03
16	313.39-01162/8	inner bearing, side 2, + 0.05
17	313.39-01162/9	inner bearing, side 2, + 0.05
18	313.29-01040/1	gear body
19	313.59-01018/0	rim gear, 96 teeth
20	313.19-01341/0	setting segment, side 2
21	313.00-05178/0	clamping shaft, complete
22	313.00-07419/0	clamping shaft, complete
23	313.54-01015/0	worm gear, right
24	313.69-01740/0	lower cover rail
25	313.69-01739/0	upper cover rail
26	2552-000 630	pressure spring C 0.7 x 7 x 7.5 TGL 18395
27	313.21-01115/0	fitting screw
28	313.31-01219/0	index bolt
29	313.54-01059/0	worm
30	313.20-01724/0	bushing
31	313.10-01676/0	housing
32	313.00-09410/0	paper tensioning unit, complete
33	313.04-01146/0	channel covering, complete
34	971.99-00032/0	pressure spring 1.5 P 25.52

6mm X 5/8 BOLT
FOR BLANKET BAR

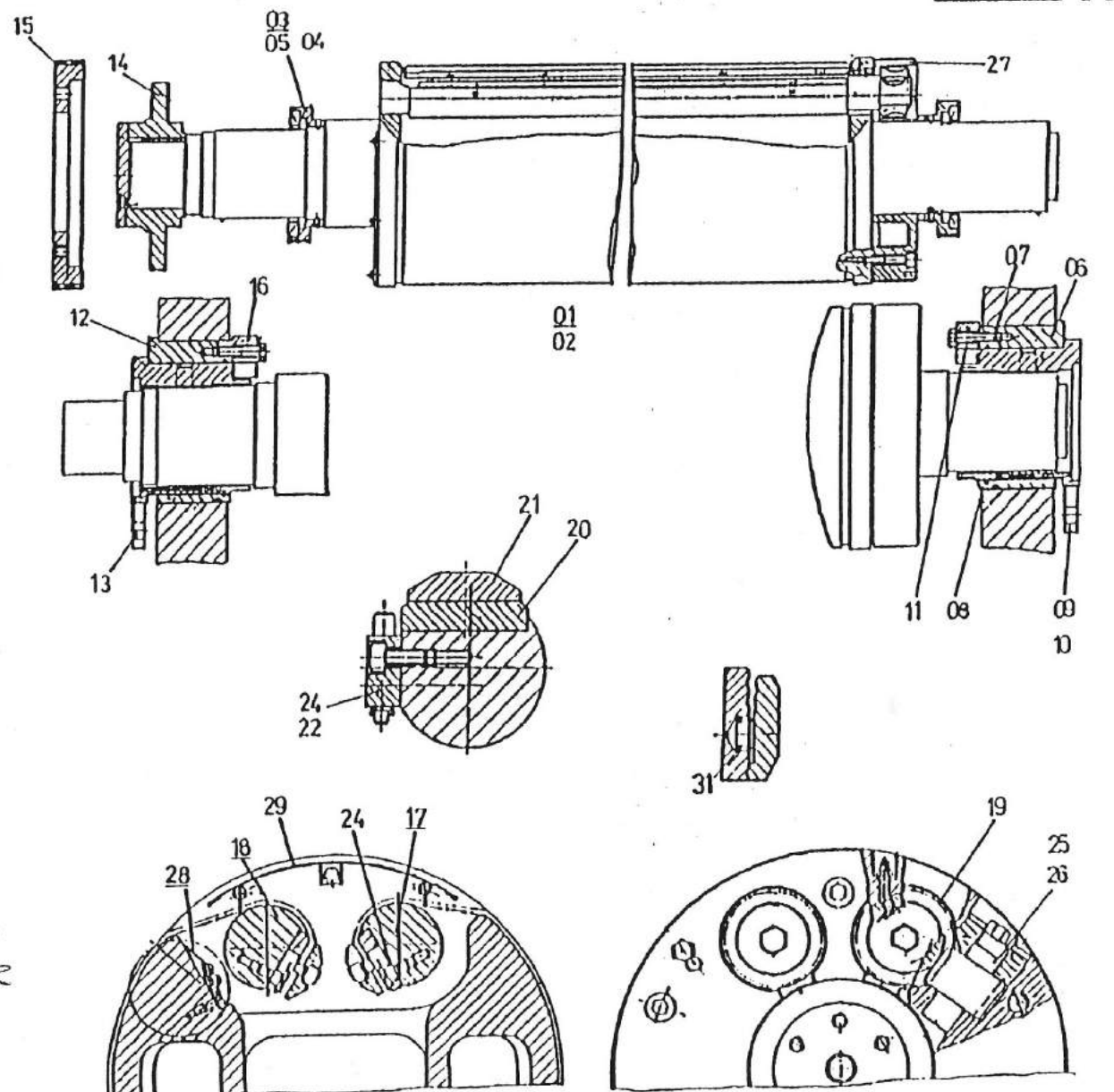
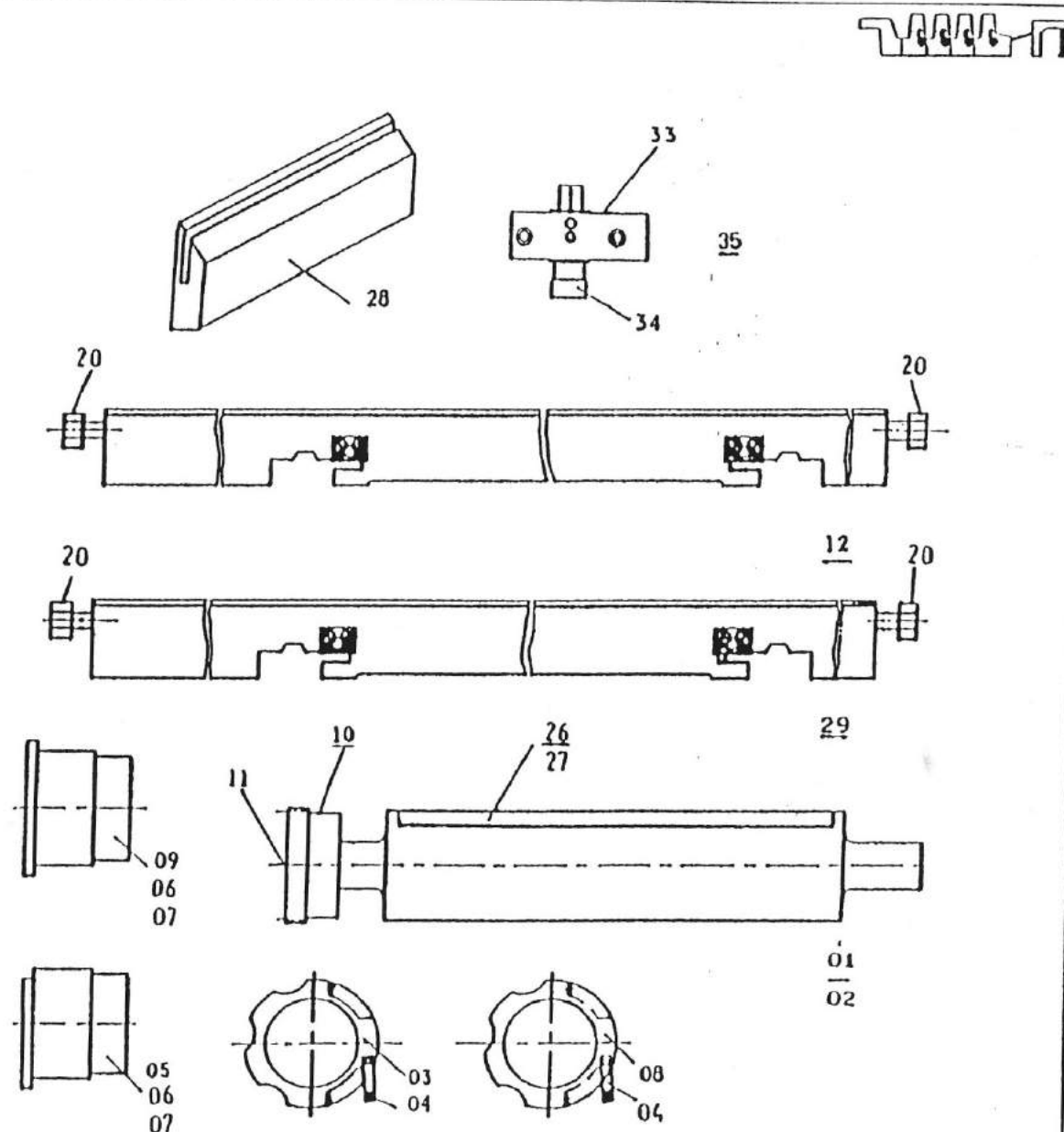


Plate cylinder

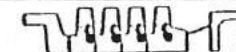
item no.	identification no.	designation
01	313.06-01994/4	plate cylinder, complete
02	313.39-01655/0	plate cylinder
03	313.03-00397/1	roller deactivation cam, side 1, complete
04	313.62-00506/0	drawbar
05	313.39-01113/9	plate cylinder bearing, side 1
06	7510-000 085	shaft sealing ring D 120x140x12 L 16454
07	7515-308 953	O-Ring 150x5-N 70 B
08	313.03-00398/1	roller deactivation cam, side 2, complete
09	313.39-01114/9	plate cylinder bearing, side 2
10	313.00-07726/0	plate cylinder gear, complete
11	7510-100 591	shaft sealing ring DIN 3760-A 28x40x7-NBR 70
12	313.00-07417/0	plate clamping unit, front
20	313.21-00245/0	setscrew
26	313.00-05888/0	channel covering, complete
27	2552-001 331	pressure spring A 1.6 x 17 x 11.5 TGL 18395
28	313.66-01690/0	straightedge
29	313.00-11566/0	plate clamping unit, rear
33	313.60-03898/0	bearing block
34	313.55-01071/0	pinion
35	313.00-11565/0	drive unit



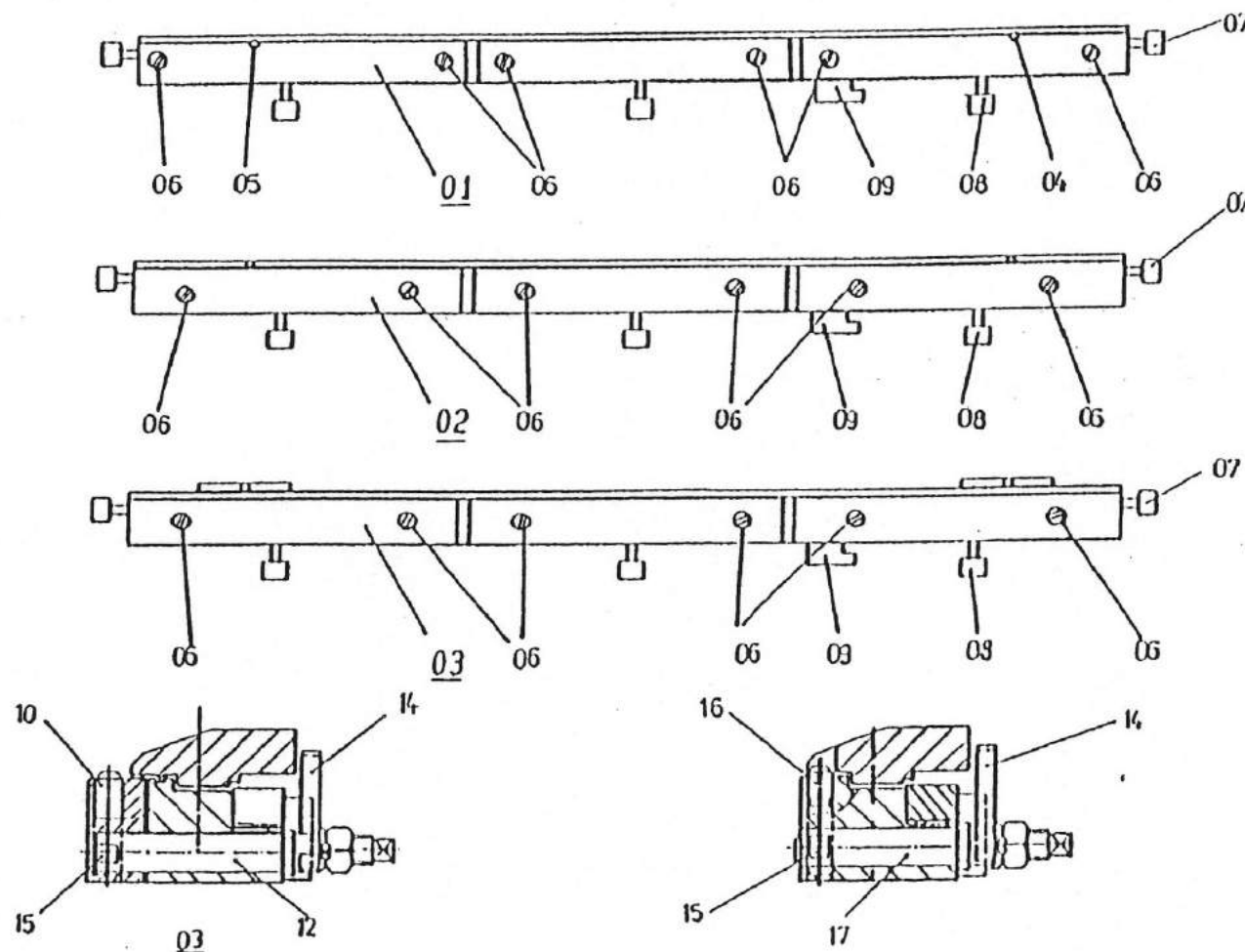


item no.	identification no.	designation
01	313.06-11615/0	plate cylinder, complete
02	313.39-01557/0	plate cylinder
03	313.03-00397/1	roller deactivation cam, side 1, complete
04	313.62-00506/0	drawbar
05	313.39-01113/9	plate cylinder bearing, side 1
06	7510-000 085	shaft sealing ring D 120 x 140 x 12 TGL 16454
07	7515-004 820	O-ring 150 x 5 TGL 6365 WS 1,957
08	313.03-00398/1	roller deactivation cam, side 2, complete
09	313.39-01114/9	plate cylinder bearing, side 2
10	313.00-04678/1	plate cylinder gear, complete
11	7510-100 591	shaft sealing ring DIN 3760 A 28x40x7-NBR 70
12	313.00-07417/0	plate clamping unit, complete
26	313.00-09739/0	channel covering, complete
27	2552-001331	pressure spring A 1,6 x 17 x 11,5 TGL 18395
28	313.66-01690/0	straightedge

Plate clamping



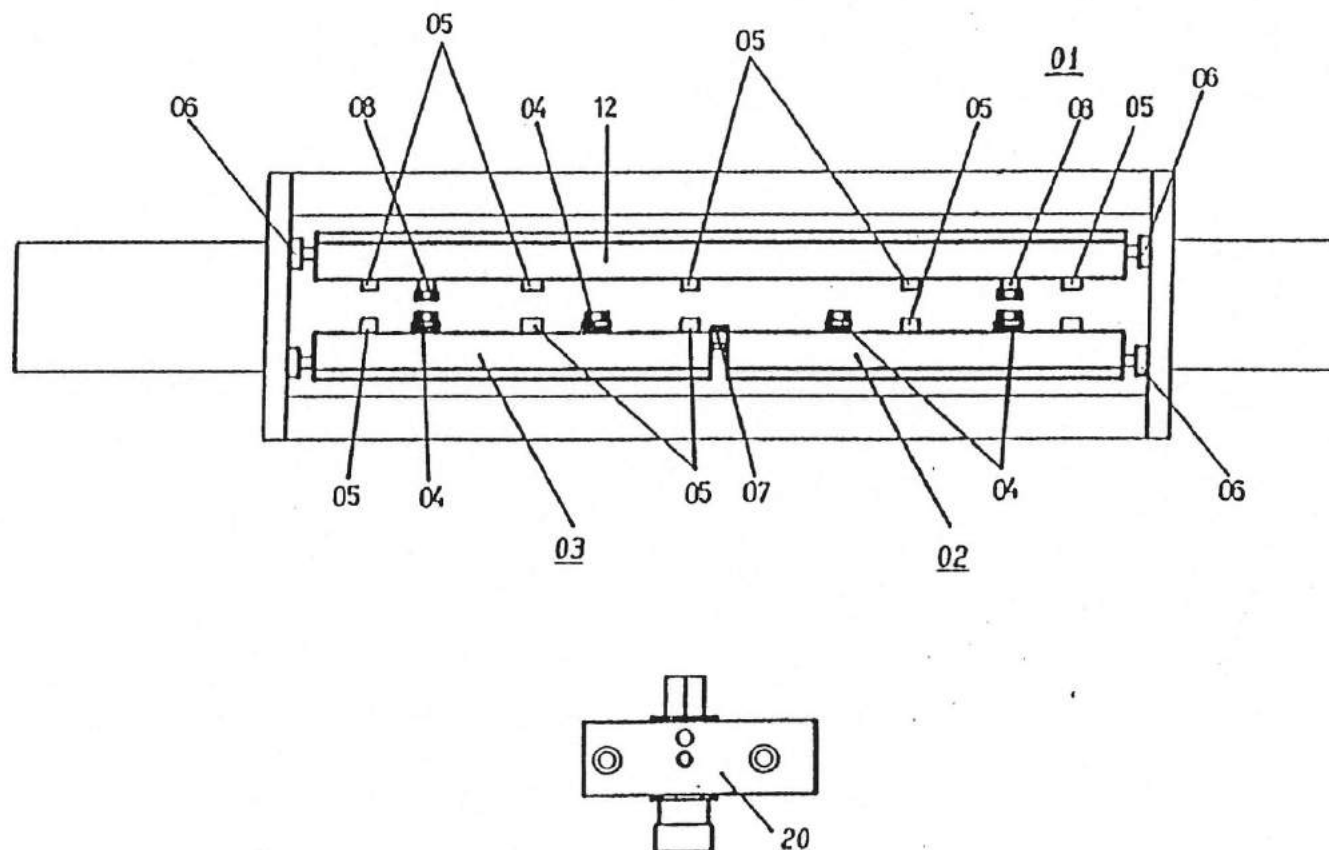
item no.	identification no.	designation
01	313.00-11473/2	plate clamping, BACHER system
02	313.00-11868/0	plate clamping, PROTOKOL system
03	313.00-11867/0	plate clamping, GDR system
04	313.20-02444/0	fitting pin
05	313.20-02445/0	fitting pin
06	313.24-01121/1	ball-type screw
07	313.21-02191/1	setscrew
08	313.31-02247/0	setscrew
09	313.28-01152/2	driver
10	313.30-02025/0	fitting bolt
11	313.34-01102/0	spherical element
12	313.35-01244/0	shaft 18, right
13	313.35-01246/0	shaft 18, left
14	313.64-02905/0	lever
15	313.34-01102/0	spherical element
16	313.30-02026/0	fitting bolt
17	313.35-01245/0	shaft 8, right
18	313.35-01243/0	shaft 8, left





item no.	identification no.	designation
01	313.00-07941/1	plate clamping rail, complete
02	313.00-11567/0	plate clamping, right
03	313.00-11568/0	plate clamping, left
04	313.31-02249/0	special screw
05	313.04-01145/0	clamping bolt
06	313.21-00245/0	setscrew
07	313.32-01234/0	setscrew
08	313.31-01547/0	special screw

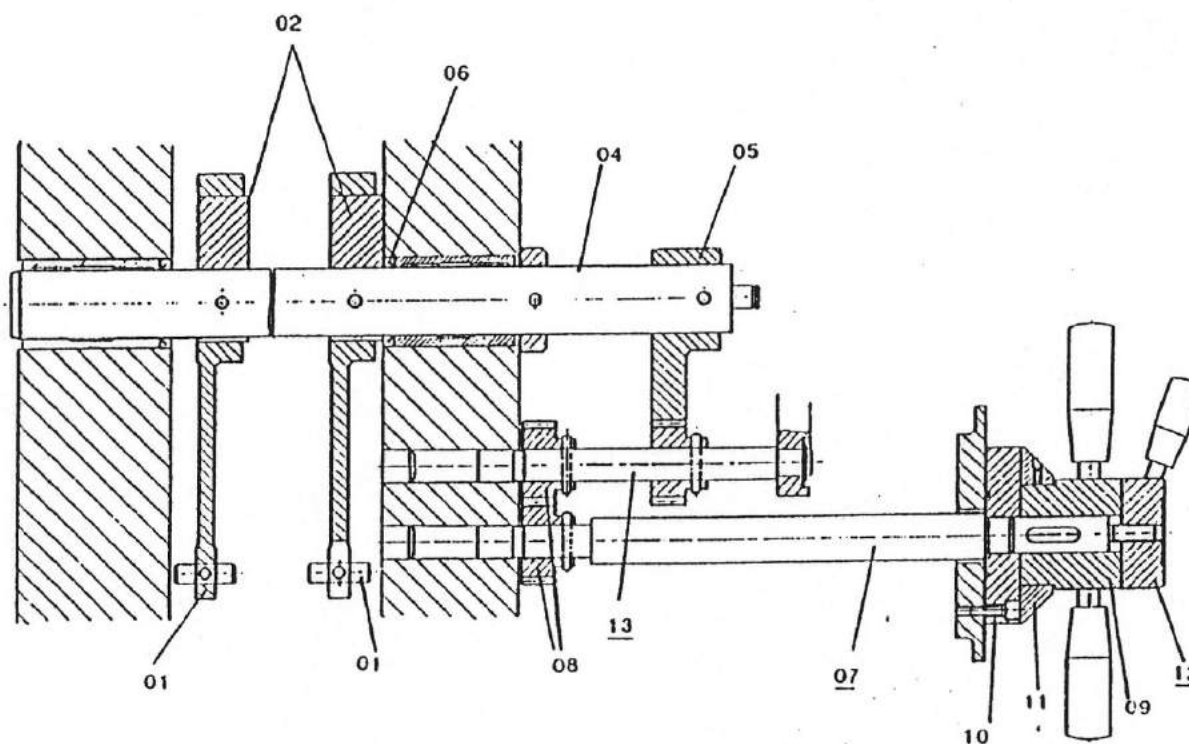
20 313.00-1565/0 drive unit

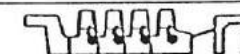


Pressure setting

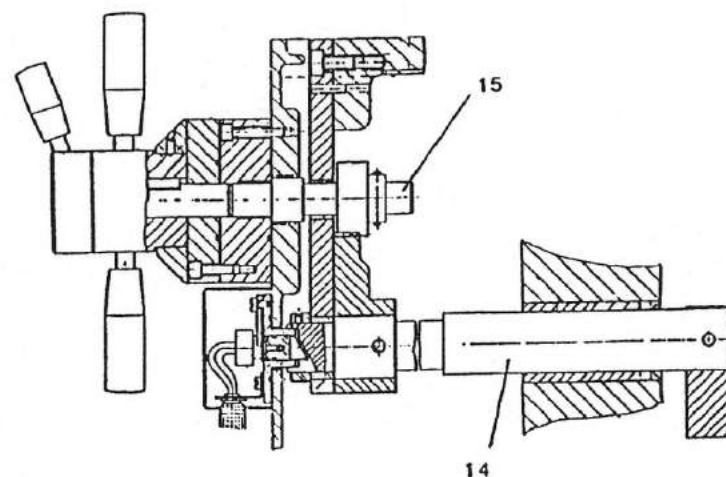
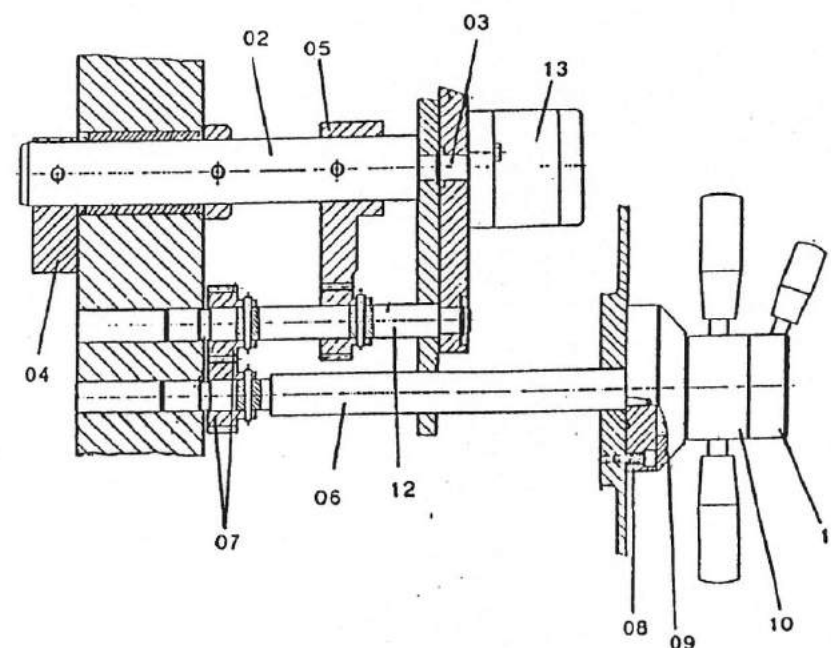


item no.	identification no.	designation
01	313.76-01431/0	coupler
02	313.23-01036/0	eccentric element
03		
04	313.06-09546/0	pressure setting shaft, complete
05	313.59-01019/0	toothed segment
06	7510-100 811	shaft sealing ring DIN 3760-A 40x52x7-NBR 70
07	313.00-12779/0	setting shaft, complete
08	313.51-01072/0	pinion
09	313.00-12782/1	setting lever, complete
10	313.19-02309/0	indicator ring
11	313.19-02307/0	graduated ring
12	313.00-12781/0	clamping lever
13	313.00-08605/0	countershaft, complete



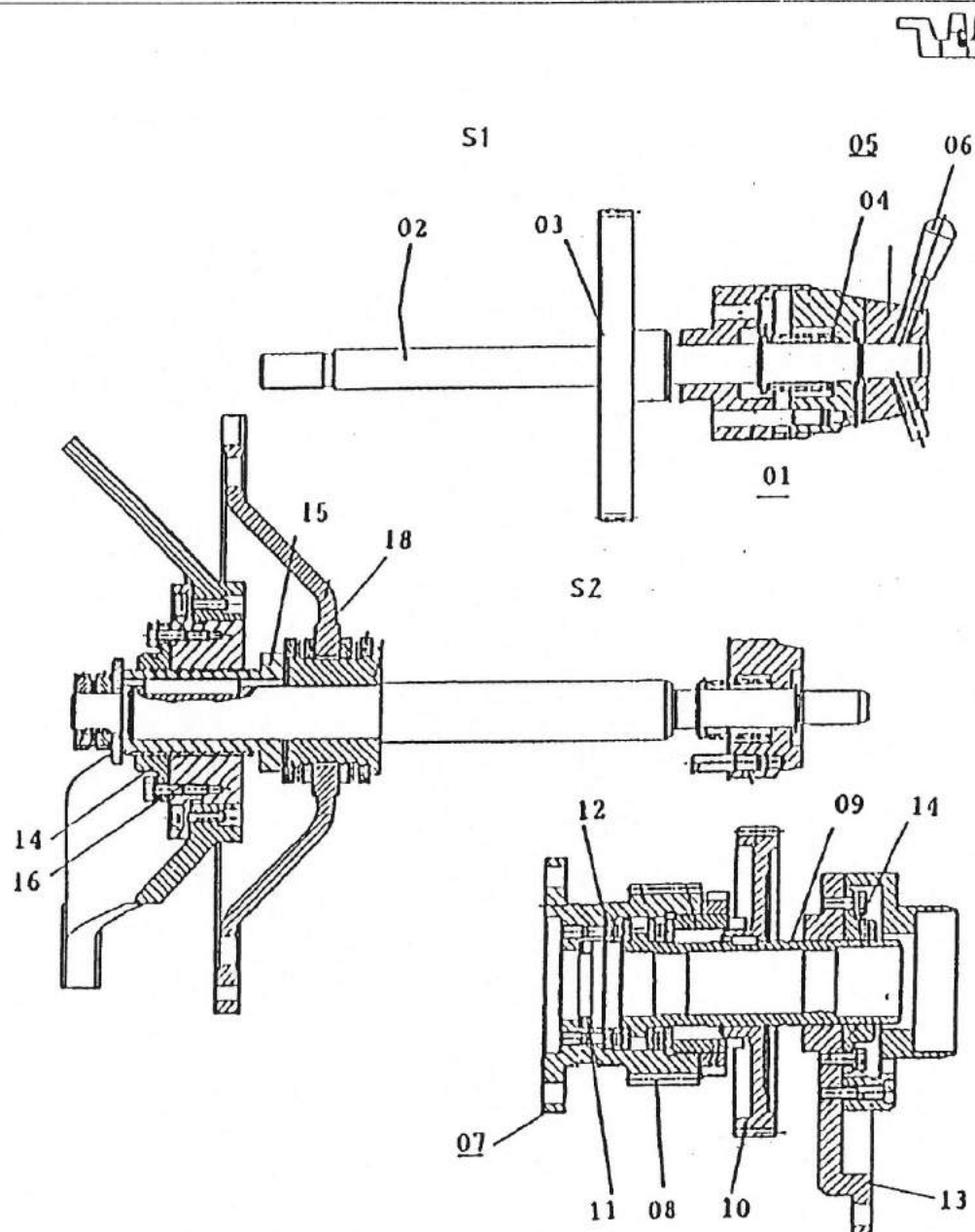


item no.	identification no.	designation
01	313.06-16246/0	pressure setting, split, side 1
02	313.06-16245/0	pressure setting shaft, side 1
03	313.31-02403/0	shaft, side 1
04	313.23-01036/0	eccentric element
05	313.59-01209/1	toothed segment
06	313.00-12779/0	setting shaft, side 1
07	313.51-01072/0	pinion
08	313.19-02309/0	indicator ring
09	313.19-02307/0	graduated ring
10	313.00-12782/0	control lever
11	313.00-12781/0	clamping lever
12	313.00-08605/0	countershaft
13	313.00-12924/0	potentiometer
14	313.06-16247/0	pressure setting shaft, side 2
15	313.42-01680/0	setting shaft, side 2



Pressure setting

item no.	identification no.	designation
01	313.00-02829/0	setting shaft, complete
02	313.42-01035/0	setting shaft
03	313.51-01074/0	gear, 70 teeth
04	2552-002 115	pressure spring
05	313.00-02824/1	control lever, complete
06	871.24-90001/0	ball handle B 16 (thread deepened) TGL 2950, black
07	313.03-00367/0	setting bush (axial setting), complete
08	313.51-01077/1	gear, 30 teeth
09	313.32-00172/0	threaded bush
10	313.51-01076/0	gear, 70 teeth
11	7510-100 591	shaft sealing ring
12	3026-000 009	DIN 3760-A 28x40x7-NBR 70 axial grooved ball bearing
13	313.16-01016/0	cover
14	313.11-01192/0	nut
15	313.21-01130/0	threaded bush
16	313.11-01034/0	bush
18	3026-000 011	axial grooved ball bearing
		DIN 711-51110



item no.	identification no.	designation
01	313.00-08779/1	gear unit for axial setting, complete, without items. 05 and 07
02	3021-000 073	grooved ball bearing DIN 625-6005 N
03	3021-000 099	grooved ball bearing DIN 625-6201
04	313.26-01263/1	driver
05	313.00-09820/1	plate, complete
06	7510-000 075	shaft sealing ring DIN 3760-A 80x100x10-NBR 70
07	313.00-09805/0	motor for axial setting, complete (motor BMRE 56 K 41 M 3001-...see List of switching components)
08	313.21-01541/0	driver
09	313.62-02044/0	block
10	313.52-01020/1	double gear, 40/39 teeth
11	313.52-01021/1	gear, 48/42 teeth
12	313.00-08780/1	gear unit for tangential setting, complete, without items 15 and 16
13	313.52-01019/1	double gear, 38/41 teeth
14	313.52-01022/1	gear, 48/41 teeth
16	313.00-07255/0	motor for tangential setting, complete (motor BMRE 56 K 4 IM 3001-...see List of switching components)

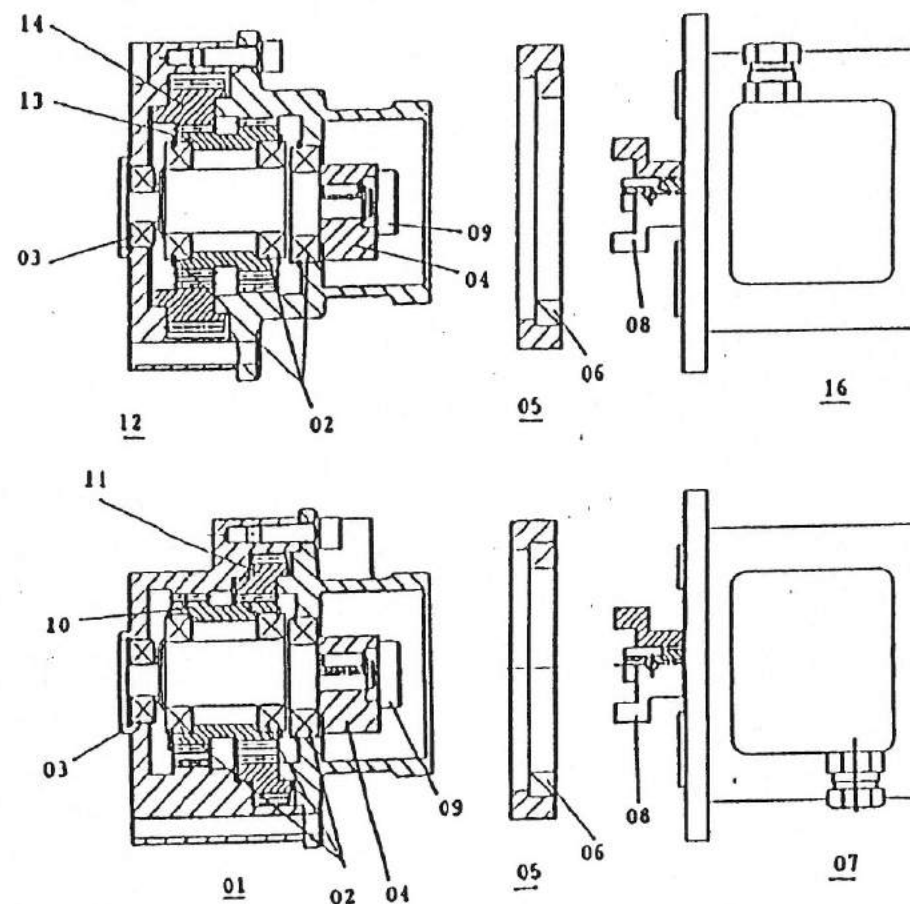
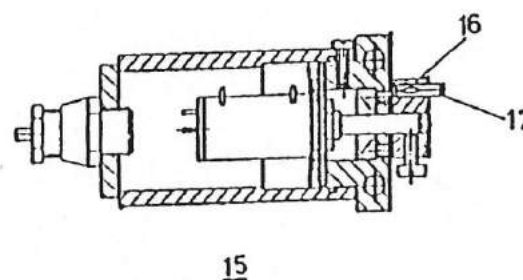
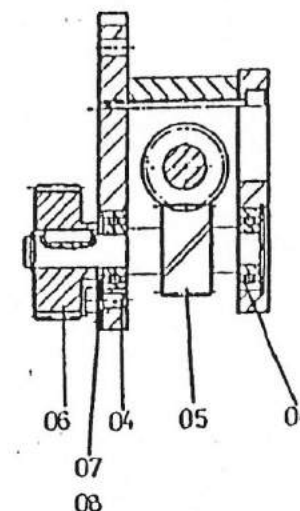
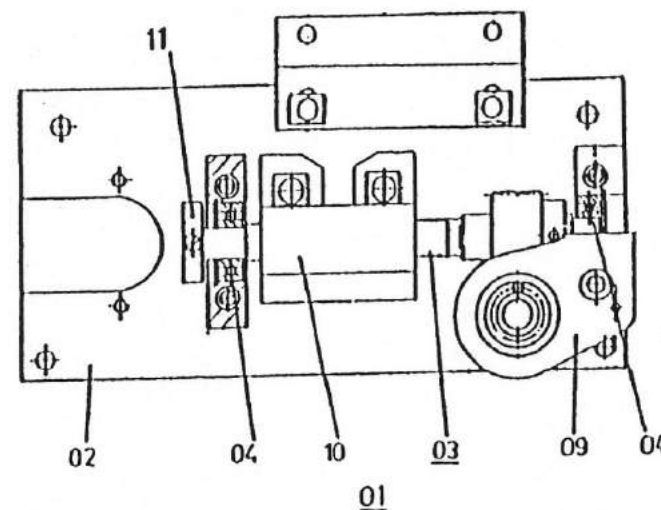


Plate cylinder remote setting



item no.	identification no.	designation
01	313.00-09322/0	control plate, axial, complete
02	313.62-02530/0	plate
03	313.00-09312/0	shaft, complete
04	3021-000 051	grooved ball bearing DIN 625-6000
05	313.55-01035/0	pinion, 18 teeth
06	313.51-01457/0	gear, 18 teeth
07	2324-000 151	precision washer 18x0.1 TGL 10404 St
08	2324-000 153	precision washer 18x0.2 TGL 10404 St
09	313.73-01043/0	bearing plate
10	313.85-01285/0	nut
11	313.10-01961/0	washer
15	313.00-11010/0	potentiometer setting unit, complete
16	313.26-01455/0	journal
17	2635-000 028	notched pin 4x16 TGL 0-1474
18		
19		
20		
21	7515-001 900	O-ring 40x2 TGL 6365-SW 1.957





item no.	identification no.	designation
01	313.51-01456/0	gear, 50 teeth
02	313.00-09632/0	control plate, tangential, complete
03	313.85-01286/0	plate
04	313.00-09617/0	shaft, complete
05	3021-000 051	grooved ball bearing DIN 625-6000
06	313.85-01285/0	nut
07	313.51-01535/0	gear, 39 teeth
08	313.00-09613/0	shaft, complete
09	2324-000 151	precision washer 18 x 0.1 TGL 10404 St
10	2324-000 15	precision washer 18 x 0.2 TGL 10404 St
11	313.63-01185/0	bearing plate
12	313.10-01961/0	washer
13	313.51-01470/0	gear, 35 teeth
15	313.00-11010/0	potentiometer setting unit, complete
16	313.26-01455/0	journal
17	2635-000 028	notched pin 4x16 TGL 0-1474 TGL 6365-WS 1.957

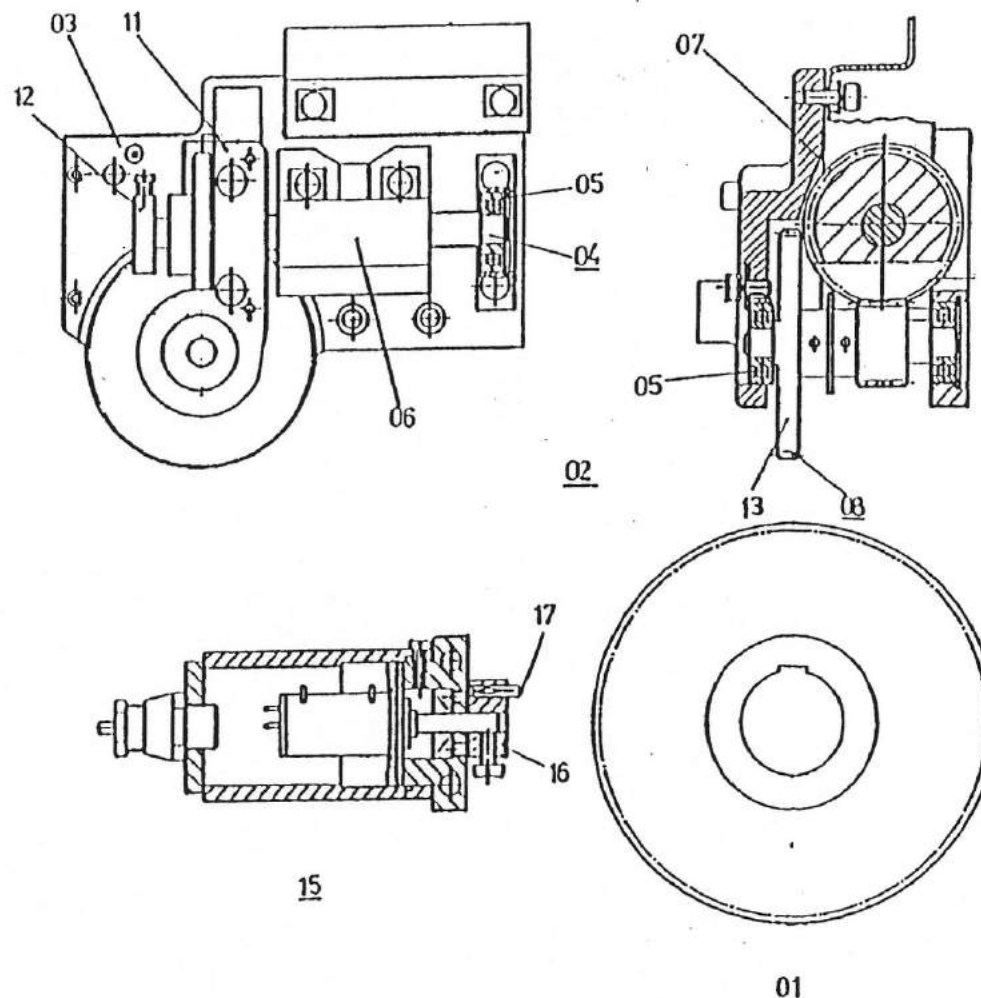
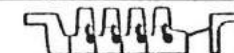
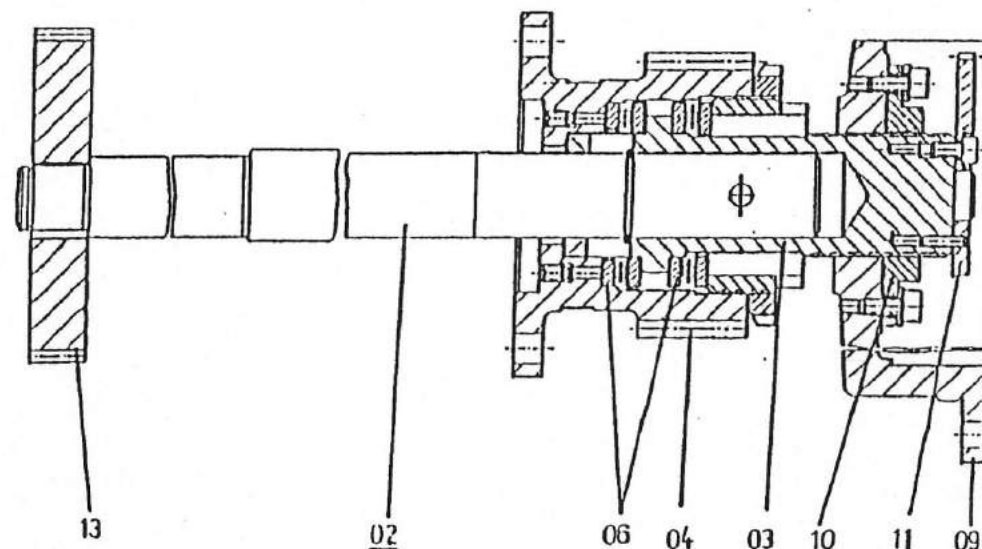


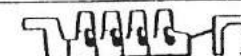
Plate cylinder remote setting



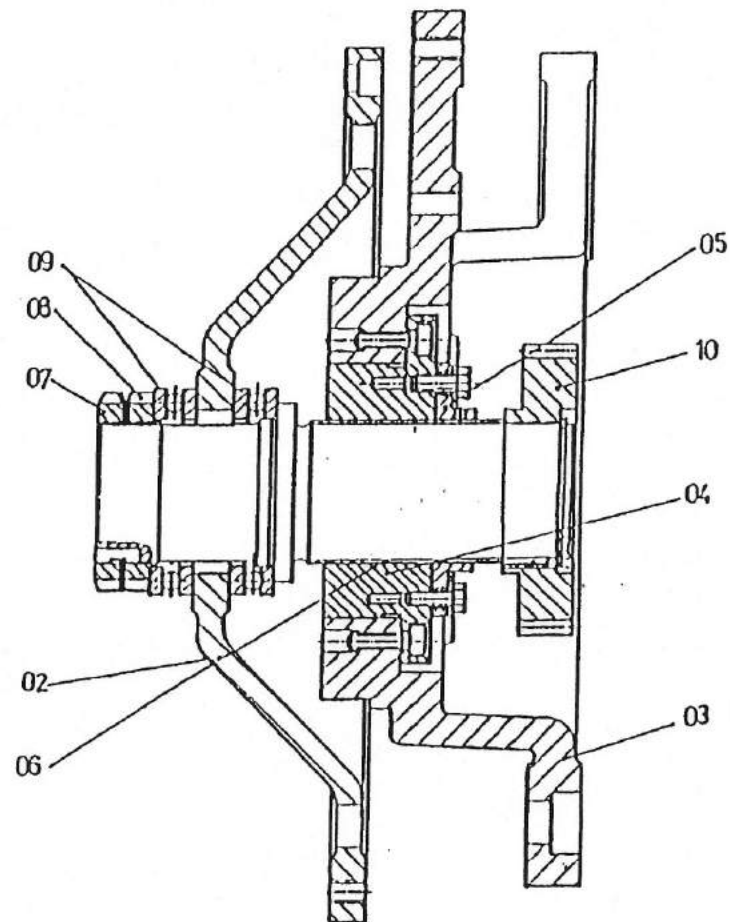
item no.	identification no.	designation
01	313.00-09823/0	setting bush, complete
02	313.00-09329/0	setting shaft, complete
03	313.37-01077/0	threaded bush
04	313.51-01077/1	gear, 30 teeth
05	7510-100 591	shaft sealing ring DIN 3760-A 28x40x7-NBR 70
06	3026-000 009	axial grooved ball bearing DIN 711-51108
07	313.21-01905/0	threaded ring
08	313.10-02211/0	grooved nut
09	313.16-01073/0	cover
10	313.11-01192/0	nut
11	313.51-01536/0	gear, 90 teeth
13	313.51-01456/0	gear, 50 teeth



01

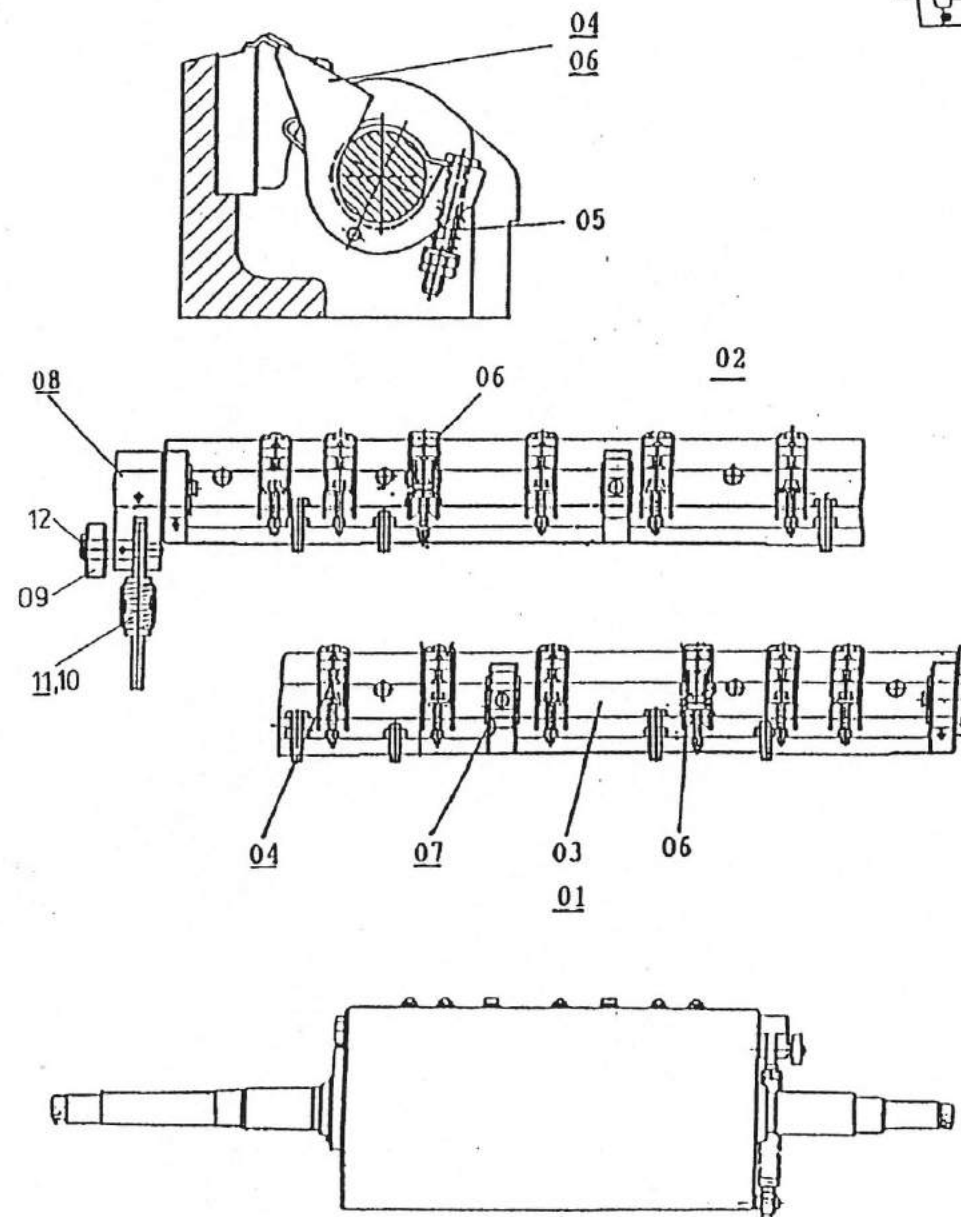


item no.	identification no.	designation
01	313.00-09825/0	plate cylinder remote setting, side 2, complete
02	313.18-01005/0	flange
03	313.87-01193/0	cover
04	313.11-01193/0	bushing
05	313.11-01186/0	nut
06	313.37-01131/0	threaded bush
07	2217-000 015	grooved nut DIN 1804-M 48x1.5
08	313.11-01191/0	grooved nut
09	3026-000 011	axial grooved ball bearing DIN 711-51110
10	313.51-01347/0	gear, 47 teeth



01

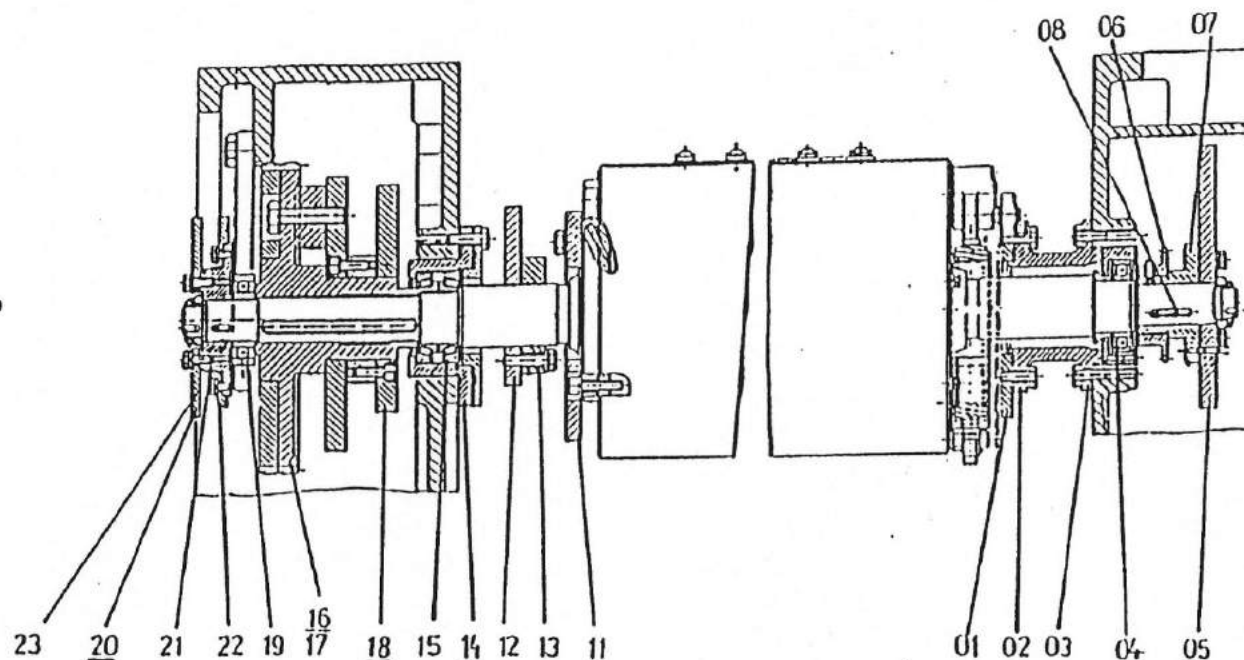
item no.	identification no.	designation
01	313.00-07932/0	feed drum, complete, with items 11, 12, 16, 18, 20, page 716/2
02	313.00-07910/0	gripper crossbeam, complete
03	313.40-01818/0	gripper shaft
04	971.00-00021/0	sheet gripper, complete A 60/1.6 TGL 46-0158
05	971.99-00015/0	pressure spring 11-60 TGL 46-0158
06	313.00-06176/0	sheet gripper, complete, 28/21 (2 grippers)
07	313.00-03846/0	needle bearing, complete
08	313.00-06934/0	roller lever, complete
09	3021-000 304	grooved ball bearing DIN 625-6302-2 RS
10	3020-500 018	needle bearing DIN 617-NA 4900
11	313.00-06933/0	tension spring
12	313.31-01423/0	bolt

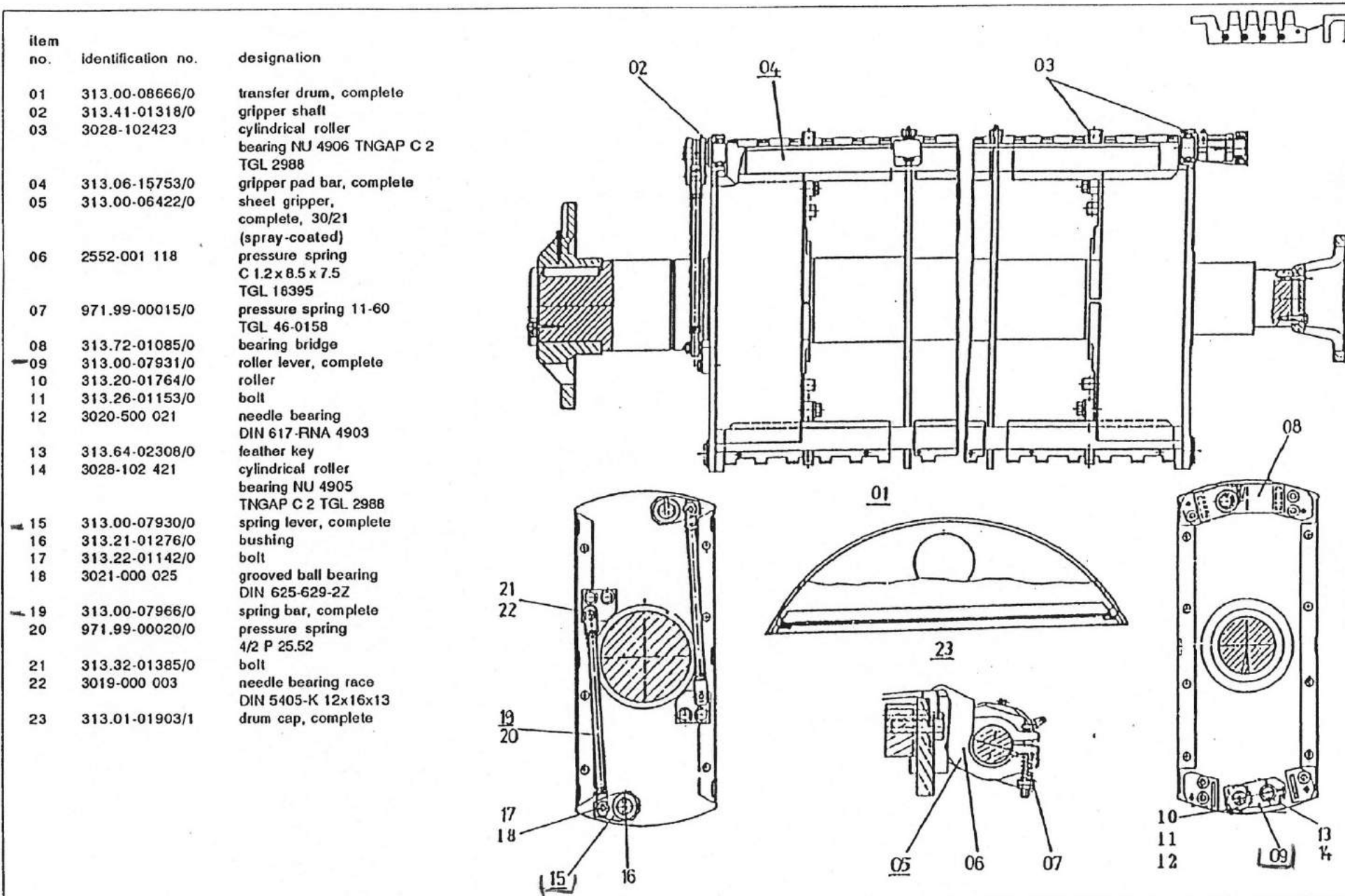


Feed drum



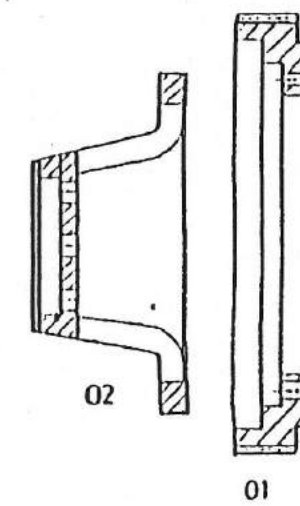
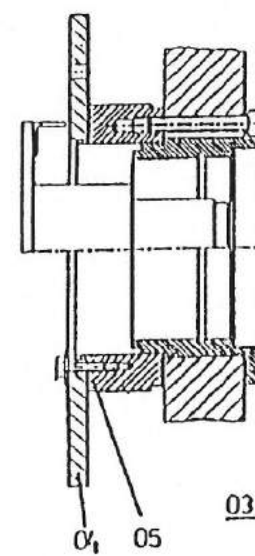
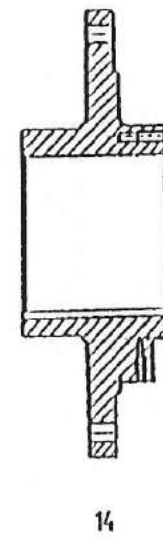
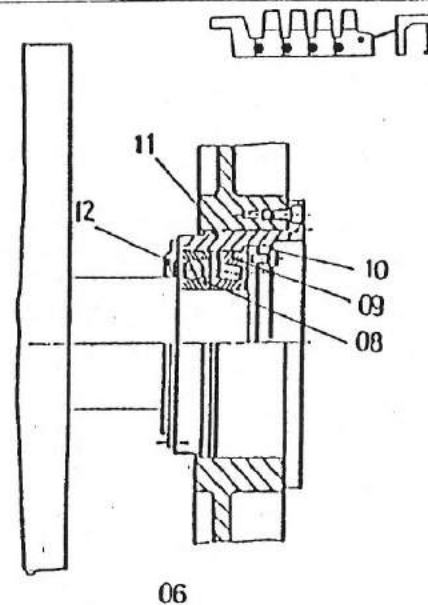
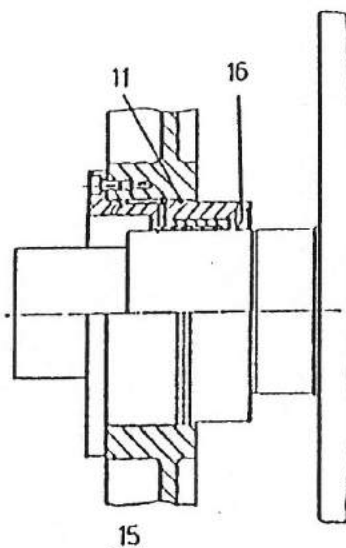
item no.	identification no.	designation
01	313.19-01249/2	gripper opening cam
02	313.29-01211/0	cam holder, side 1
03	313.25-01121/0	bearing housing, side 1
04	3021-060 108	grooved ball bearing DIN 625-6210 P6
05	313.00-07976/1	lay control cam, complete
06	313.57-01151/0	sprocket wheel
07	313.22-01556/0	flange
08	313.64-01494/0	feather key
11	313.19-01386/1	paper hold-down cam
12	313.19-01671/0	swing gripper control cam
13	313.10-01762/0	ring
14	313.00-07943/0	bearing, side 2, complete
15	3031-000 008	tapered roller bearing DIN 720-30210
	7515-004 210	O-ring 120x3-N 70 B
	7510-000 063	shaft sealing ring DIN 3760-A 60x75x8-NBR 70
16	313.02-00167/0	drive gear, complete
17	313.23-01021/0	eccentric bolt
18	313.00-00470/2	rocker drive cam, complete
19	3021-000 222	grooved ball bearing DIN 625-6308
20	313.00-07975/0	pull lay cam, complete
21	313.16-00112/0	cam carrier
22	313.19-01445/1	pull lay rail cam
23	313.19-02164/0	pull lay roller cam
24	313.64-02092/0	feather key
25	313.60-01347/0	feather key

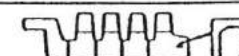




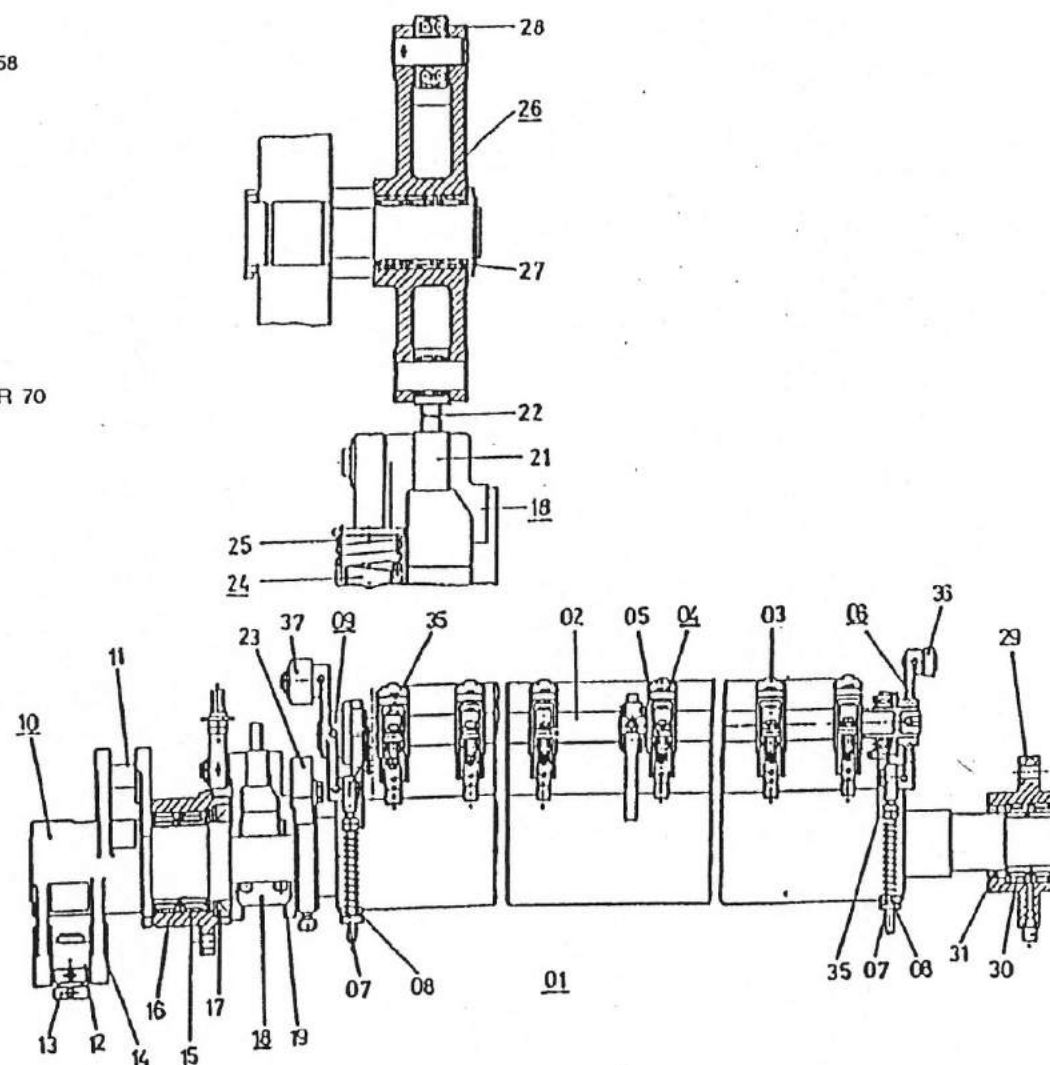
Transfer drum

item no.	identification no.	designation
01	313.51-00127/0	rim gear for pressure deactivation
02	313.26-00118/1	gear body
03	313.06-07219/1	gripper opening cam, complete
04	313.19-01685/0	gripper cam
05	313.29-01271/0	cam holder
06	313.00-02549/1	turning drum bearing, side 1
07	313.26-00155/1	bearing bush, side 1
08	3022-000020	inclined ball bearing DIN 628-7220 B
09	3031-000017	tapered roller bearing DIN 720-30220
10	313.15-01021/0	threaded ring
11	7515-309 963	O-ring 205 x 5-70 B
12	7510-101 491	shaft sealing ring DIN 3760-A 125x150x12-NBR 70
13	313.59-01024/0	rim gear
14	313.29-01329/0	gear body
15	313.39-01109/0	impression cylinder bearing, side 1
16	7510-104 141	shaft sealing ring AD 160x200x14-NBR 70

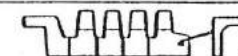




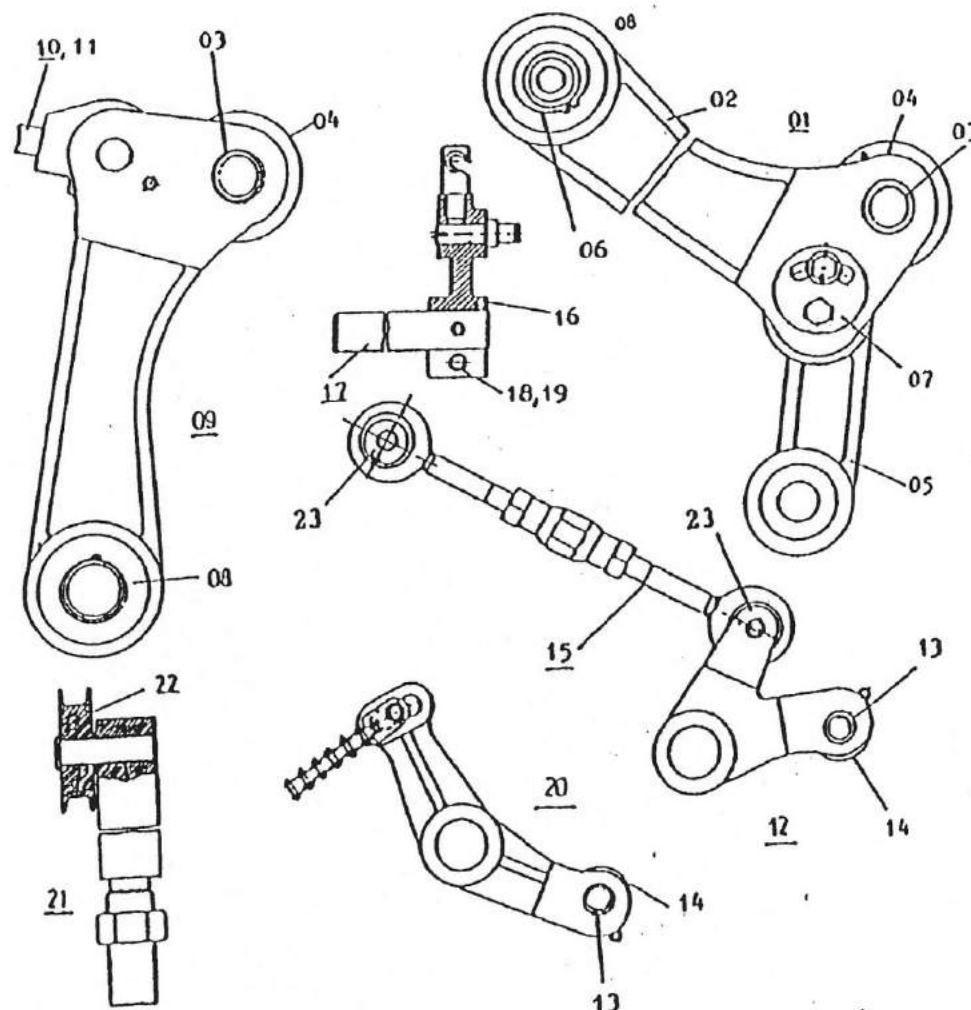
item no.	identification no.	designation
01	313.00-00820/3	swing feed unit, complete
02	3028-100 422	needle bearing NU 49/28 TNGAP TGL 2988
03	313.99-01393/0	gripper pad
04	971.00-00021/0	sheet gripper, complete, A 60/1.6 TGL 46-0158
05	971.99-00015/0	pressure spring
06	313.00-03873/2	roller lever, side 1, complete
07	313.41-01461/0	spring bar
08	2.5/5 P 25.52	pressure spring
09	313.00-03874/2	roller lever, side 2, complete
10	313.00-03875/1	driving lever, complete
11	313.35-01021/0	bolt
12	313.32-01488/0	bolt
13	313.21-01116/0	threaded bush
14	3020-500 022	needle bearing DIN 617-NA 4904
15	3020-500 034	needle bearing DIN 617-NA 4913
16	313.27-01020/1	bearing bush, side 2
17	7510-101 241	shaft sealing ring DIN 3670-A 70x100x10-NBR 70
18	313.00-08383/0	cam carrier, complete
19	313.79-01019/0	cam carrier
21	3020-500 065	needle bearing DIN 617-RNA 4901
22	313.76-01413/0	drawbar
23	313.19-01672/0	cam segment
24	313.00-08380/0	spring bar, complete
25	971.99-00039/0	pressure spring 5/6 P 25.52
26	313.00-08368/0	driving lever, complete
27	3020-000 034	needle bearing RNA 4905 TGL 3889
28	3022-000 062	inclined ball bearing DIN 628-3302
29	313.28-01013/0	bearing housing, side 1
30	3020-500 030	needle bearing DIN 617-NA 4909
31	7510-100 941	shaft sealing ring DIN 3760-A 50x65x8-NBR 70
35	3028-300415	cylindrical roller bearing RNU 4900 TNGAP TGL 2988
36	3021 000 051	grooved ball bearing DIN 625-6000
37	3022-000 062	inclined ball bearing DIN 628-3302



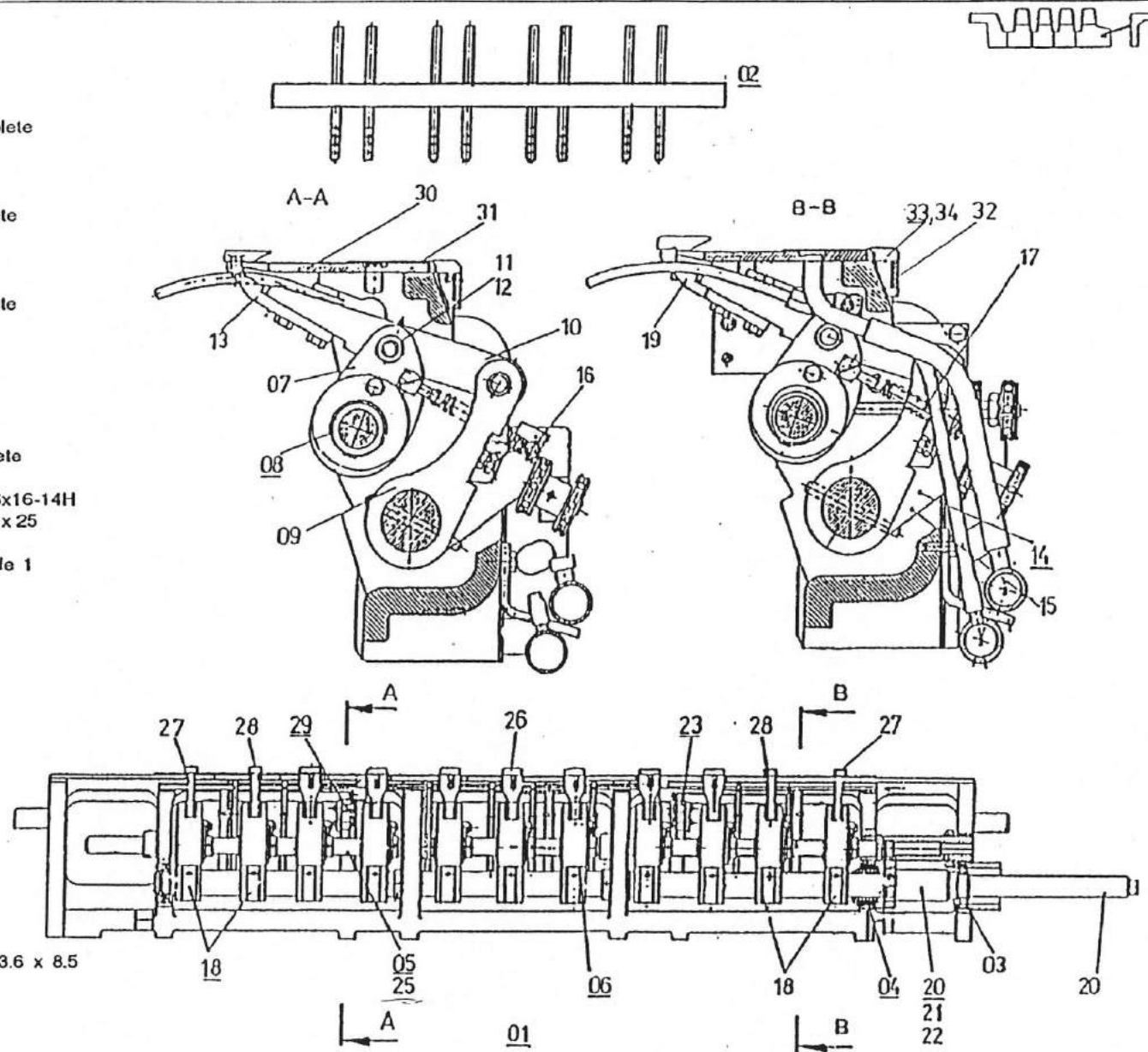
Swing drive - Roller levers



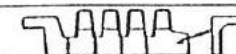
item no.	identification no.	designation
01	313.00-03878/1	roller lever for main cam, complete
02	313.78-01249/0	roller lever
03	313.20-01176/0	hollow bolt
04	3023-000 123	self-aligning ball bearing DIN 630-2306 P 6
05	313.76-01104/1	coupler
06	3021-000 055	grooved ball bearing DIN 625-6004
07	313.32-00111/0	eccentric bolt
08	3028-100 424	cylindrical roller bearing NU 49/32 TNGAP TGL 2988
09	313.00-03879/1	roller lever for compensation cam, complete
10	313.00-11899/0	spring bar
11	2554-000 111	cup spring A 16s TGL 18399
12	313.00-00447/0	roller lever for pull lay cam, complete
13	313.20-00137/0	hollow bolt
14	3021-000 054	grooved ball bearing DIN 625-6003
15	313.00-00446/0	drawbar, complete
16	313.76-01360/1	lever
17	313.00-07361/0	lever shaft, complete
18	971.31-00021/0	spring hook M 10x16 P 25.72
19	2553-002 015	tension spring A 3.6x25x25 TGL 18397
20	313.00-00451/0	roller lever for pull bar cam, complete
21	313.00-00445/0	chain corner pulley, complete
22	313.13-00101/0	roller
23	3023-000 006	self-aligning ball bearing DIN 630-1200



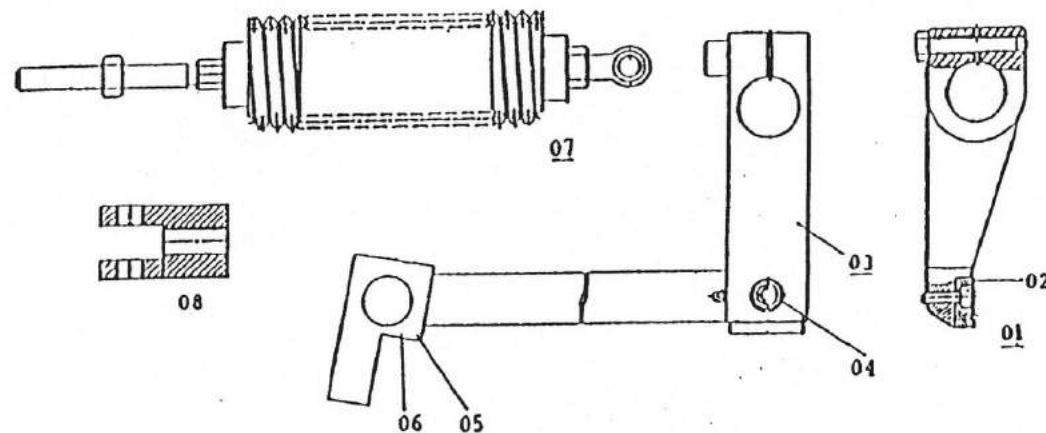
item no.	identification no.	designation
01	313.00-00585/5	feed table, complete
02	313.01-00131/0	blower finger bar, complete
03	3021-000 057	grooved ball bearing DIN 625-6006
04	313.00-01074/0	needle bearing
05	313.00-01076/0	eccentric shaft, complete
06	313.00-00495/0	lay transmission unit, complete
07	313.78-00110/0	fork lever
08	313.00-00479/0	needle bearing, complete
09	313.78-00109/0	double fork lever
10	313.73-00113/0	coupler
11	3020-500 018	needle bearing DIN 617-RNA 4900
12	313.30-00168/0	wood bolt
13	313.92-00159/0	lay
14	313.00-00494/0	lay setting lever, complete
15	313.78-00111/0	setting lever
16	2135-000 024	grubscrew DIN 427-M 6x16-14H
17	2553-001 416	tension spring B 1.8 x 12 x 25 TGL 18397
18	313.00-00798/0	lay transmission unit, side 1 and side 2, complete
19	313.92-00158/0	lay
20	313.00-00614/4	driving leg, complete
21	313.21-00167/0	bushing
22	313.46-01108/0	leg
23	313.00-07440/0	sheet scanning, side 1
25	971.99-01001/0	tension spring 1.2/9 P 25.53
26	313.62-02252/1	cover lay
27	313.60-02191/1	cover lay
28	313.60-02192/1	cover lay
29	313.00-07441/0	sheet scanning, side 2
30	313.94-03575/0	nozzle plate
31	313.69-02121/0	table plate
32	313.01-03470/0	guiding rail
33	313.61-01154/0	block
34	2552-000 213	pressure spring 0.32 x 3.6 x 8.5 TGL 18394



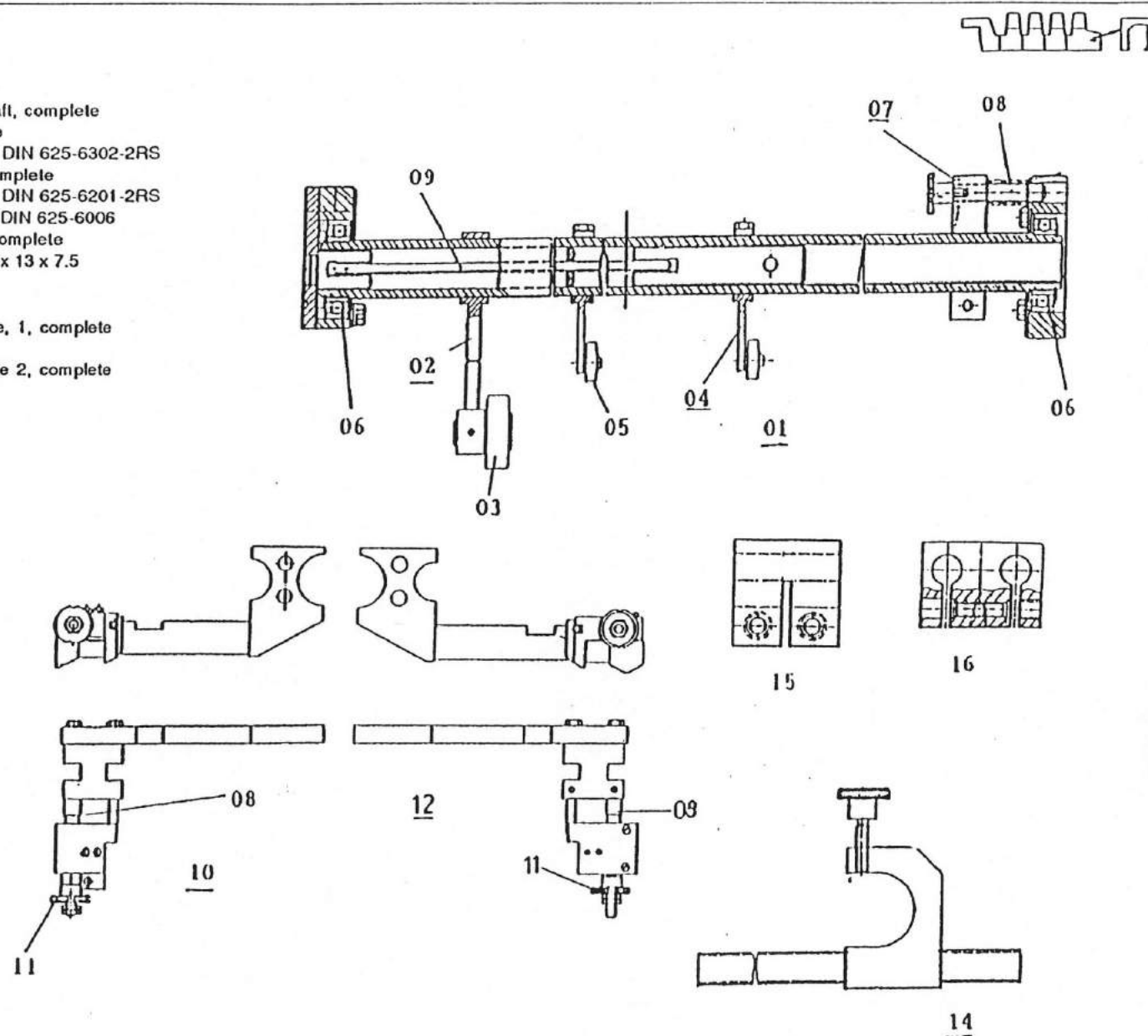
Feed table



item no.	identification no.	designation
01	313.00-12708/0	locking lever, complete
02	313.60-12708/0	stop block
03	313.00-00496/2	drive lever, complete
04	3021-000 055	grooved ball bearing DIN 625-6004
05	313.76-01257/1	drawbar
06	3020-500 065	needle bearing DIN 617-RNA 4901
07	313.00-06684/0	tension spring, complete
08	313.60-01726/0	block

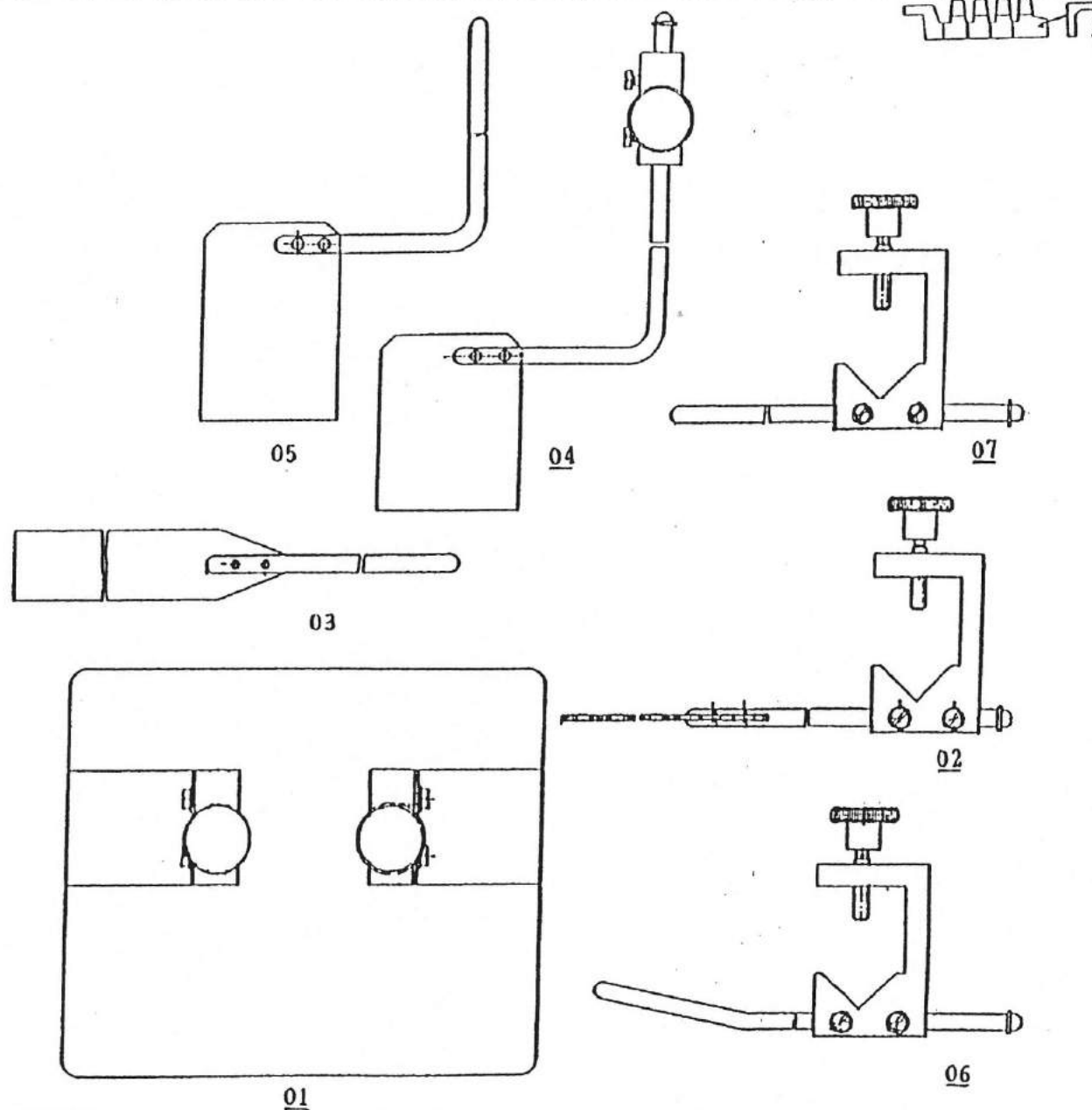


item no.	identification no.	designation
01	313.00-07390/0	paper hold-down shaft, complete
02	313.00-05258/0	roller lever, complete
03	3021-000 304	grooved ball bearing DIN 625-6302-2RS
04	313.00-10335/0	paper hold-down, complete
05	3021-000 202	grooved ball bearing DIN 625-6201-2RS
06	3021-000 057	grooved ball bearing DIN 625-6006
07	313.00-06513/0	deactivation lever, complete
08	2552-001 130	pressure spring C 1.2 x 13 x 7.5 TGL 18395
09	313.91-01066/0	torsional bar spring
10	313.00-11274/0	side lay checking side, 1, complete
11	313.21-01351/0	knurled nut
12	313.00-11275/0	side lay checking. side 2, complete
14	313.00-05881/1	holder, complete
15	313.60-02300/0	clamping element
16	313.60-02385/0	clamping element



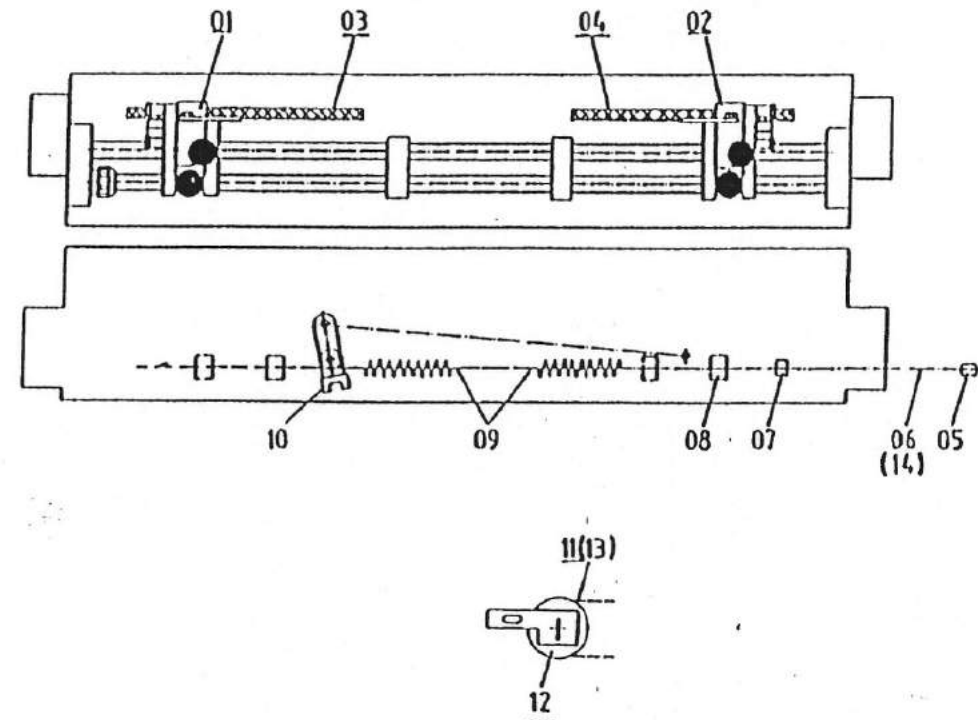
Feed table

item no.	Identification no.	designation
01	313.00-08817/0	guiding plate
02	313.00-08822/0	paper hold-down
03	313.04-01128/0	hold-down for board
04	313.00-08819/0	paper hold-down
05	313.04-01128/0	paper hold-down
06	313.00-08820/0	sheet guiding bar
07	313.00-08821/0	sheet guiding bar

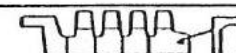




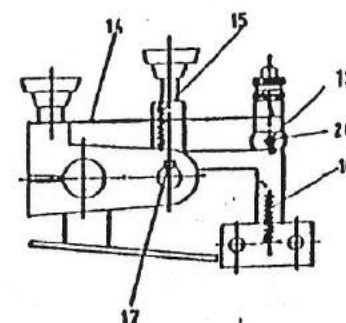
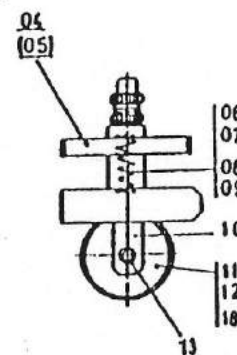
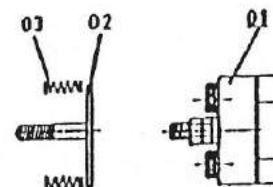
item no.	identification no.	designation
01	704.13-4040.0	pull lay, side 1, complete
02	704.13-4000.0	pull lay, side 2, complete
03	704.14-3115.0	pull lay bar, side 1, complete
04	704.14-3120.0	pull lay bar, side 2, complete
05	704.13-3132.1	end piece
06	3442-020000	roller chain 06 B-1 TGL 11796
07	704.13-1127.5	end piece
08	704.13-3108.0	guide
09		tension spring B 1.4 x 15 x 40 TGL 18397
10	704.13-3124.0	fork lever
11	704.15-3167.0	roller chain, complete
12	704.16-3163.0	idler pulley, complete
13	3442-000025	chain link D 05 B-1 TGL 11796
14	3442-000026	chain link D 06 B-1 TGL 11796

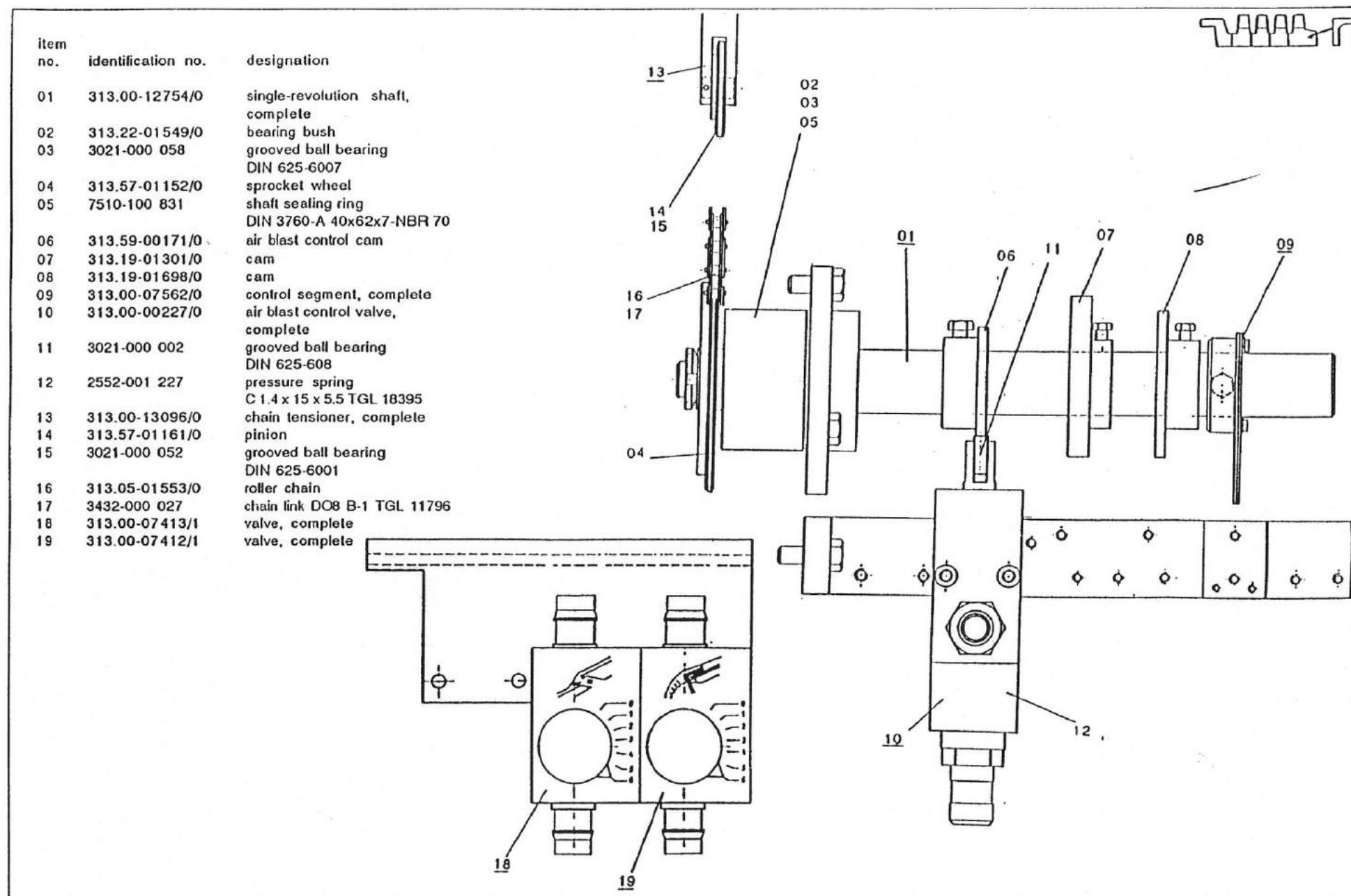


Intermediate table - Pull lays



item no.	identification no.	designation
01	704.13-4038.0	cover lay, complete
02	704.13-4023.0	side lay
03		pressure spring B 1 x 5 x 11,5 TGL 18395
04	704.13-4041.0	roller holder, side 1, complete
05	704.13-4036.0	roller holder, side 2, complete
06		pressure spring A 0.7 x 12 x 7.5 TGL 18395
07		pressure spring A 0.9 x 10 x 11.5 TGL 18395
08		pressure spring A 1.1 x 12 x 11.5 TGL 18395
09		pressure spring A 1.6 x 11 x 11.5 TGL 18395
10	704.13-4008.0	roller bolt
11	704.13-4011.1	pull lay roller, rubber
12	704.13-4035.1	pull lay roller, hard (Miramid)
13	704.13-4012.1	bolt
14	704.13-4029.1	connecting spring
15		pressure spring A 0.63 x 4.5 x 17.5 TGL 18395
16		pressure spring B 1 x 5 x 17.5 TGL 18395
17	704.13-0437.1	leather key
18	704.13-9043.1	pull lay roller (for TS 112)
19	704.13-4005.1	small block
20	704.13-4006.1	bolt





Bei planmäßigen Instandhaltungsmaßnahmen sowie bei Schadensreparaturen wird es notwendig, Teile der Maschine zu demontieren, um Einzelteile oder ganze Baugruppen austauschen zu können.

Um danach die erforderliche exakte Grundeinstellung vornehmen zu können, geben wir Ihnen die nachfolgenden Hinweise. (Bereits in der Montageanweisung enthaltene Einstellwerte sind hier nicht mit erfaßt).

20.1. Anleger

Die Abnahmerolle an Seite 2

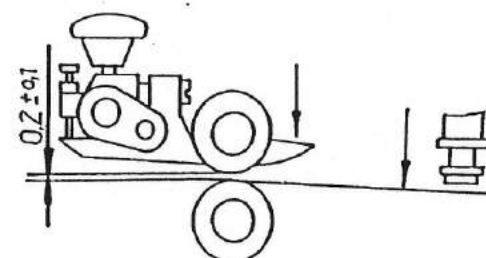
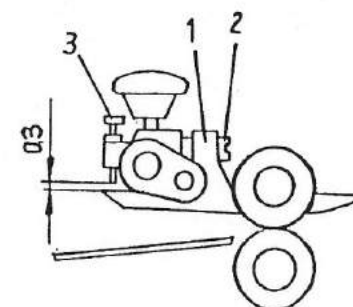
- Spalt zwischen Hebel (1) und Anschlagsschraube (3) bei unterster Stellung der Rolle = 0,3 mm

Das ist die Grundeinstellung, die später nicht verändert werden darf.

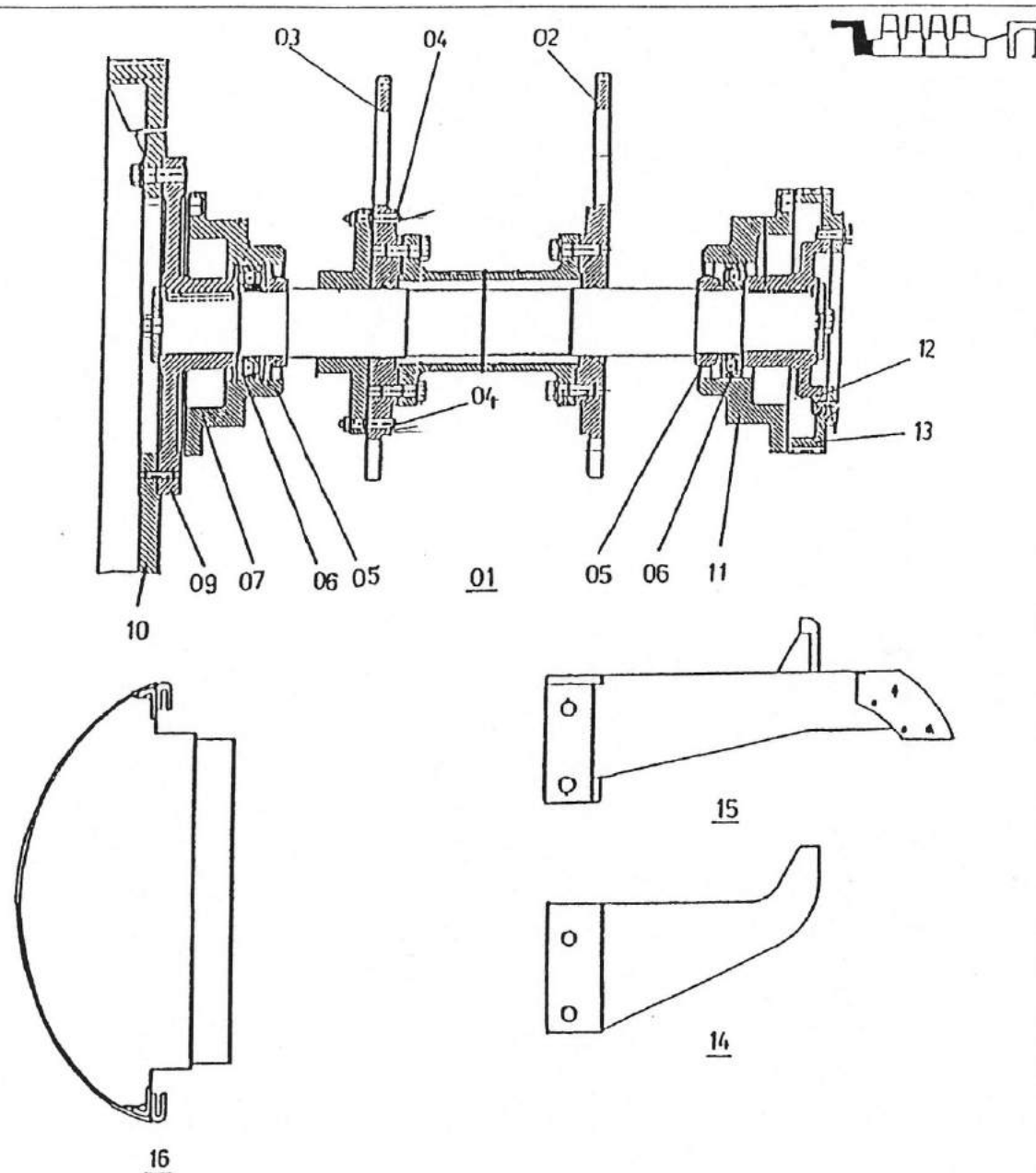
Spätere Korrekturen nur an Seite 1 vornehmen!

Die Abnahmerolle an Seite 1 ist so zu stellen, daß sie mit der auf Seite 2 gleichzeitig aufsetzt.

- Auflagedruck der Abnahmerollen mit Gewindestift (2) regulieren, er muß an beiden Rollen gleich sein.
- Übergabe Transportsauger - Abnahmerollen (Moment des Abfallens):
bei 190° der Anlegerskala ist der Abstand zwischen Abnahmerolle und Transportwalze 0,2 mm

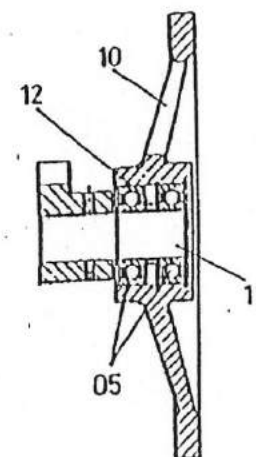


Item no.	Identification no.	designation
01	313.00-04093/0	carriage drive shaft, complete
02	313.57-01013/0	sprocket wheel
03	313.57-01121/0	sprocket wheel
04	313.34-01011/0	securing bolt
05	7510-104 071	shaft sealing ring AD 90x120x10-NBR 70
06	3021-000 111	grooved ball bearing DIN 625-6213
07	313.26-01089/2	bearing bush, side 2
08	7515-310 023	O-ring-210 x 5-N 70 B
09	313.29-01056/0	gear body
10	313.59-01117/0	rim gear, 192 teeth
11	313.26-01087/2	bearing bush, side 1
12	313.26-00119/0	gear body
13	313.51-00127/0	rim gear for pressure deactivation
14	313.85-01028/0	bearing rest, side 1
15	313.85-01025/0	bearing rest, side 2
16	313.00-11727/0	drum cap

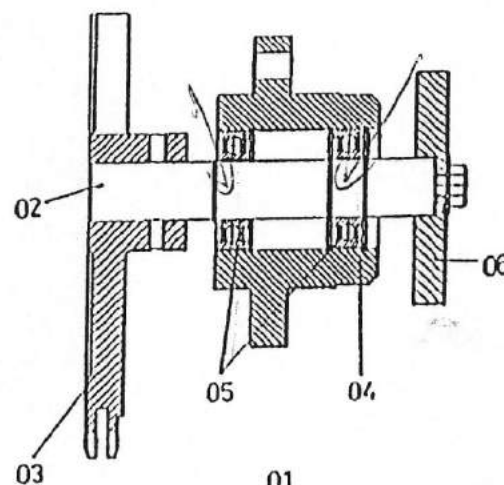


Sprocket wheels. chain pulleys

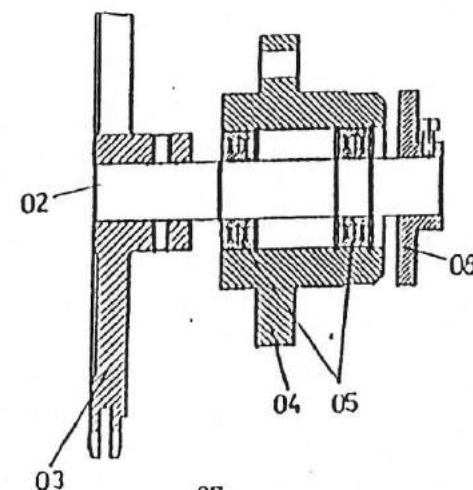
item no.	identification no.	designation
01	313.00-06636/0	sprocket wheel, side 2, complete
02	313.35-01053/0	shaft
03	313.57-01053/0	sprocket wheel
04	313.22-01087/0	bearing bush
05	3021-000 207	grooved ball bearing (DIN 625-6206-2 RS)
06	313.13-01013/0	eccentric disk
07	313.00-03894/1	sprocket wheel, side 1, complete
08	313.59-00248/0	cam for control switch
09	313.00-11466/0	chain pulley, complete
10	313.16-01160/0	chain pulley
11	313.30-01982/0	bearing bolt
12	3128-002 310	ring A 30 x 40 x 10 TGL 28-46



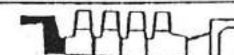
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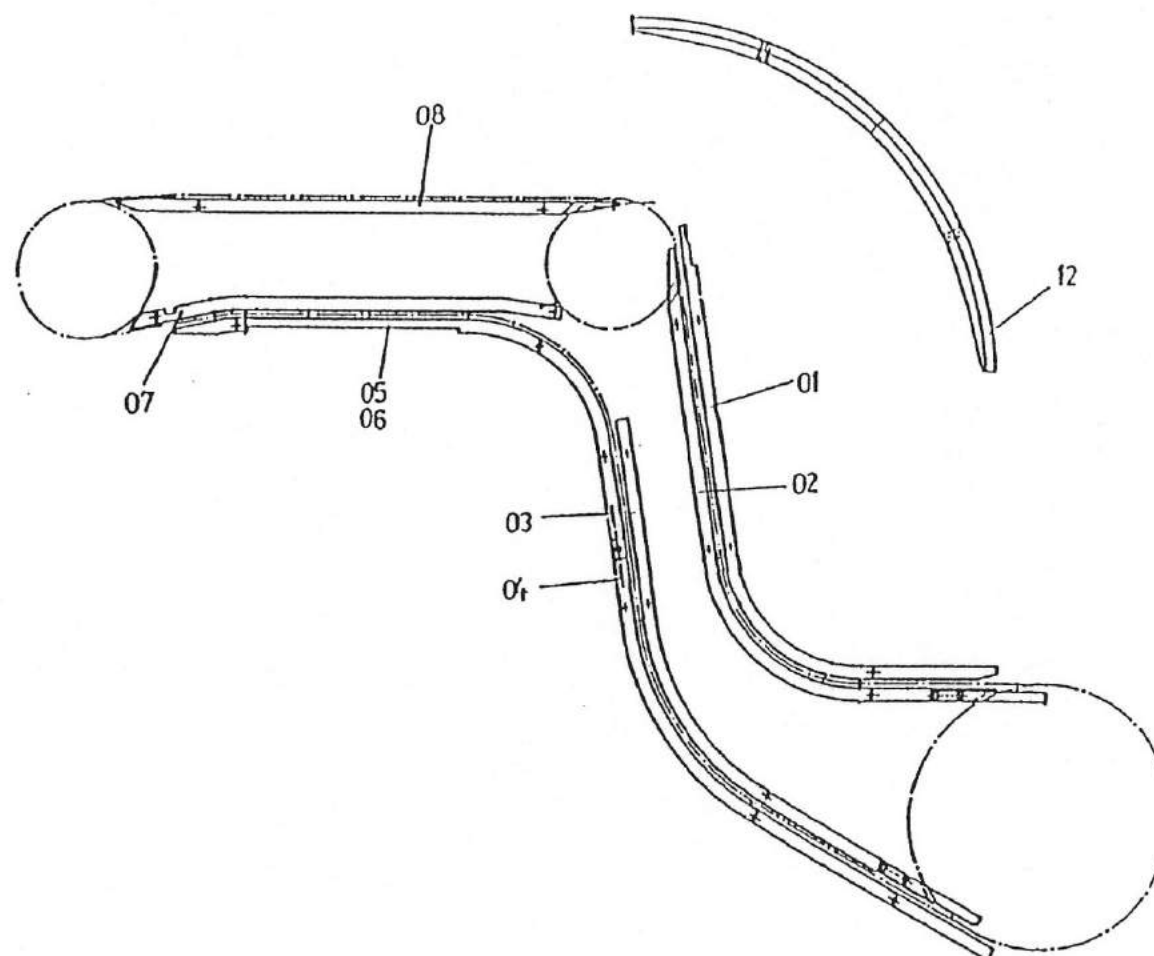
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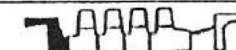
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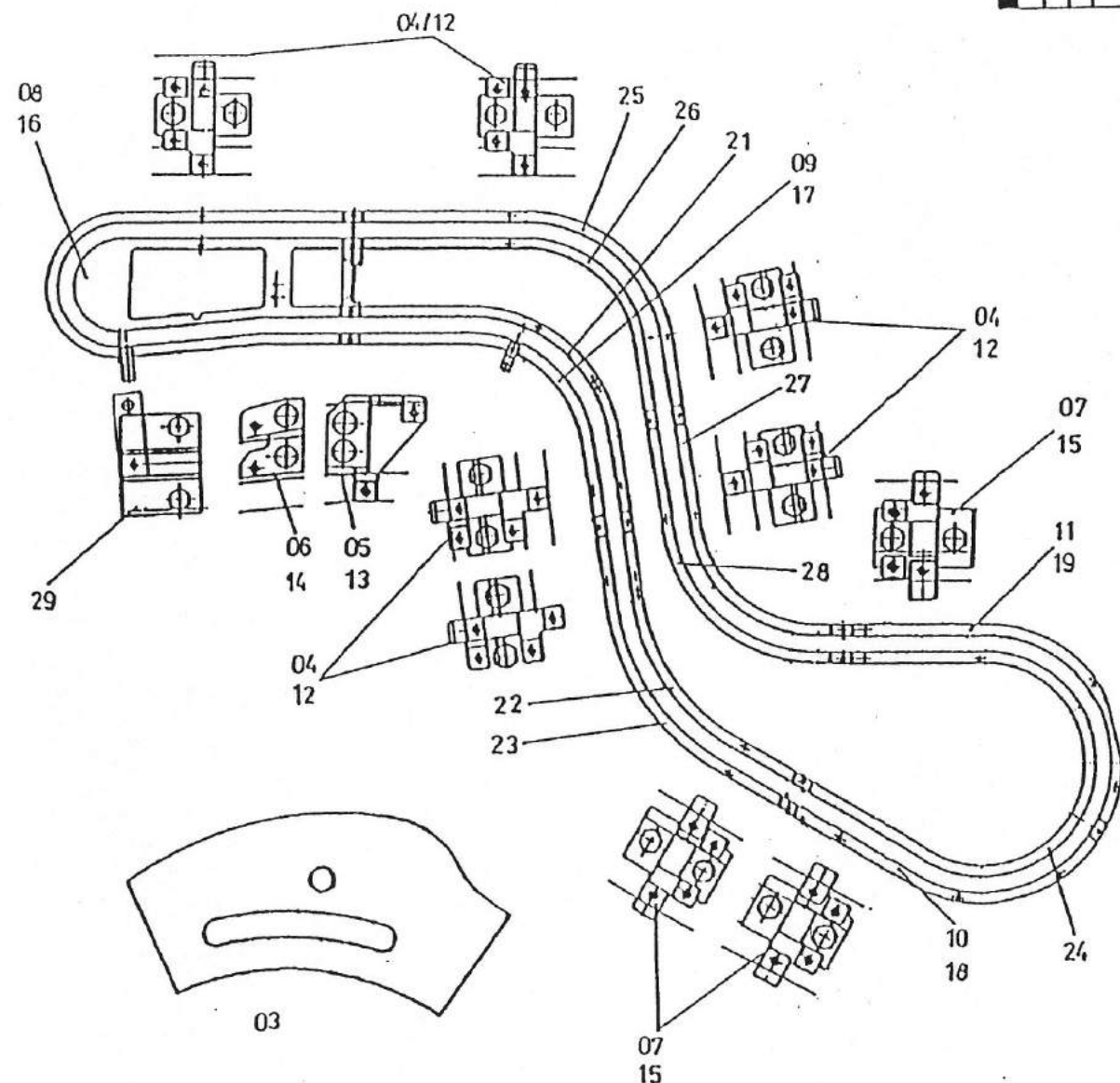
item no.	identification no.	designation
01	313.99-01067/1	chain rail
02	313.99-01068/1	chain rail
03	313.99-01066/1	chain rail
04	313.99-01065/1	chain rail
05	313.99-01084/1	chain rail, side 1
06	313.99-01085/2	chain rail, side 2
07	313.99-02071/0	chain rail
08	313.69-02143/0	chain rail
09	313.66-01254/0	tongue
10	979.34-00004/0	set of roller chains (without illustration)
11	313.00-08502/0	chain connector, complete (without illustration)
12	313.99-02056/0	chain segment

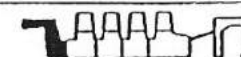


Carriage rails

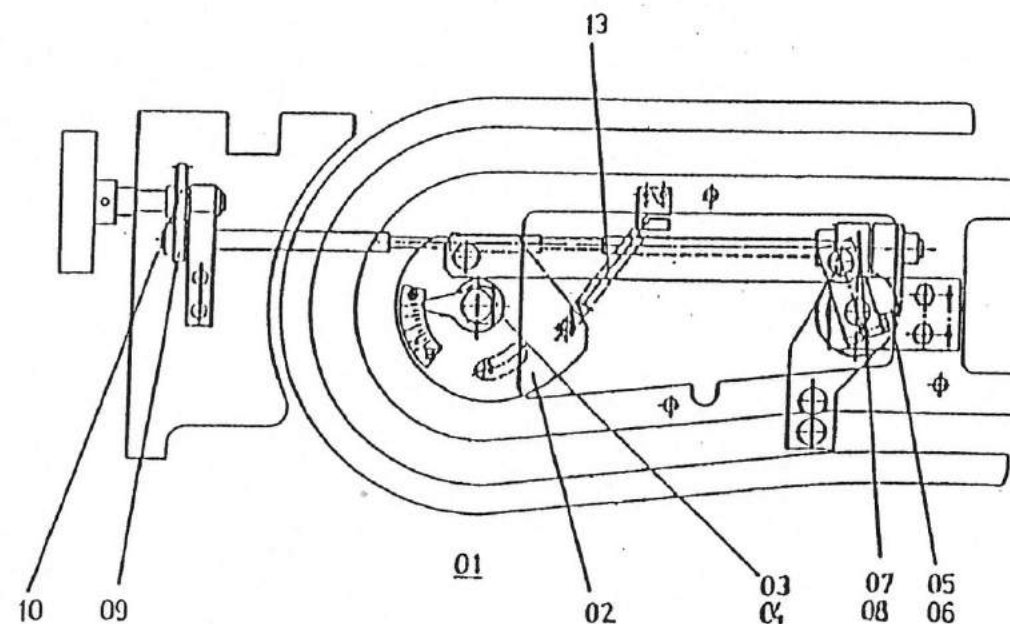


item no.	identification no.	designation
03	313.19-01253/0	cam
04	313.85-01024/0	chain rest, side 1
05	313.85-01439/0	chain rest, side 1
06	313.85-01427/0	chain rest, side 1
07	313.85-01030/0	chain rest, side 1
08	313.69-02285/0	carriage rail, side 1
09	313.99-01074/1	carriage rail
10	313.99-01469/0	carriage rail, side 1
11	313.99-01474/0	carriage rail, side 1
12	313.85-01023/0	chain rest, side 2
13	313.85-01440/0	chain rest, side 2
14	313.85-01428/0	chain rest, side 2
15	313.85-01029/0	chain rest, side 2
16	313.69-02286/0	carriage rail, side 2
17	313.99-01231/1	carriage rail, side 2
18	313.99-01468/0	carriage rail, side 2
19	313.99-01475/0	carriage rail, side 2
21	313.99-01075/1	carriage rail
22	313.99-01073/1	carriage rail
23	313.99-01072/1	carriage rail
24	313.99-01467/0	carriage rail
25	313.99-01077/1	carriage rail
26	313.99-01076/1	carriage rail
27	313.99-01079/1	carriage rail
28	313.99-01078/1	carriage rail
29	313.85-01147/0	rest

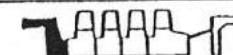




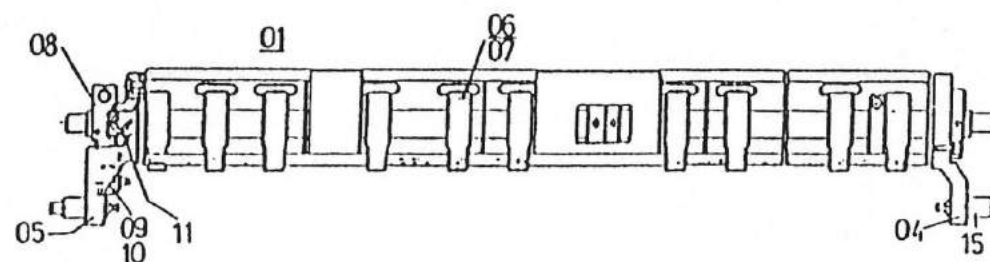
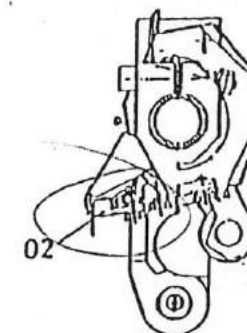
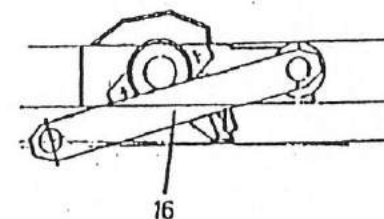
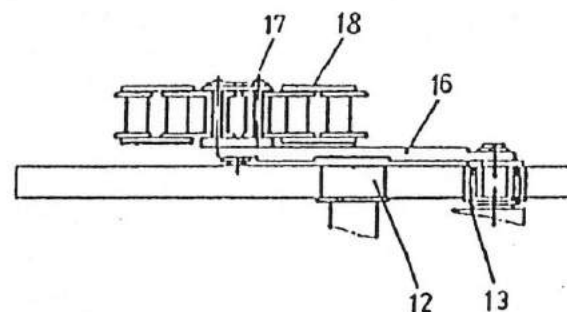
item no.	identification no.	designation
01	313.06-15048/0	gripper opening cam, complete
02	313.19-02275/0	gripper opening cam
03	313.21-02339/0	bearing bolt
04	3020-000 006	cylindrical roller bearing NA 49/22 TNGAP TGL 2988
05	313.00-07892/0	worm gear shaft
06	313.54-01035/1	worm gear
07	313.00-07893/1	worm gear shaft
08	313.54-01034/1	worm
09	313.51-01329/0	gear, 16 teeth
10	313.51-01330/0	gear, 17 teeth
11	313.00-06378/0	control lever, complete
12	3714-000013	ball handle B 25 TGL 2950, black
13	2553-001518	tension spring 2/44 P 2553 or B 2.0 x 14 x 40 TGL 18397

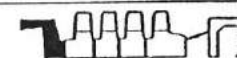


Gripper carriage

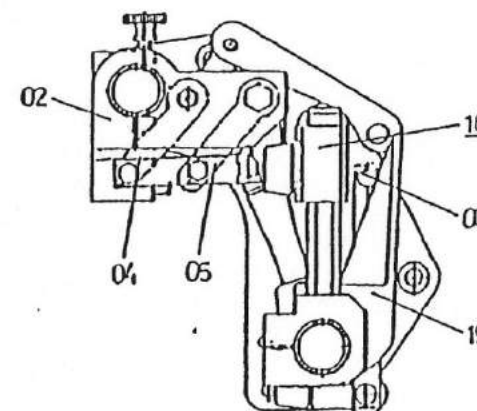
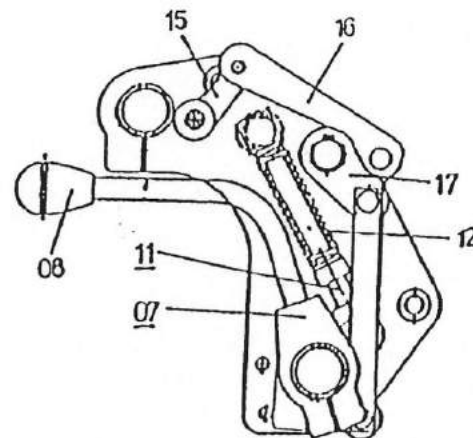
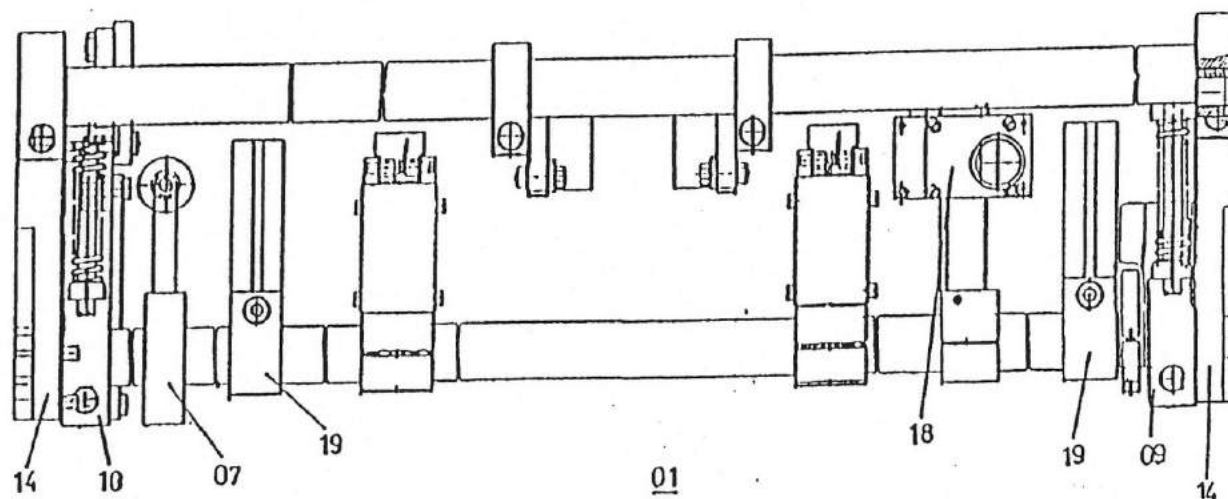


item no.	identification no.	designation
01	313.00-09684/1	gripper carriage, complete
02	313.69-01727/0	gripper pad
04	313.00-10166/1	carriage plate, side 1
05	313.00-10167/1	carriage plate, side 2
06	313.00-08547/0	gripper (spray-coated), complete
07	2552-000 927	pressure spring C 1 x 11 x 5.5 TGL 18395
08	313.00-10168/0	gripper roller lever, complete
09	3019-000 003	needle bearing cage K 12 x 16 x 13 TGL 11553
10	313.20-01815/0	guiding roller
11	313.91-01066/0	torsional bar spring
12	3020 800 000	needle ball bearing F-218783 NKIB 17x43,5x22,5 NA
13	3020 800 001	needle ball bearing F-219083 NKIB 17x36x22,5 NA
15	313.35-01154/1	bolt
16	313.66-02081/2	drawbar
17	313.00-08502/0	chain connector
18	313.00-03903/0	roller chain





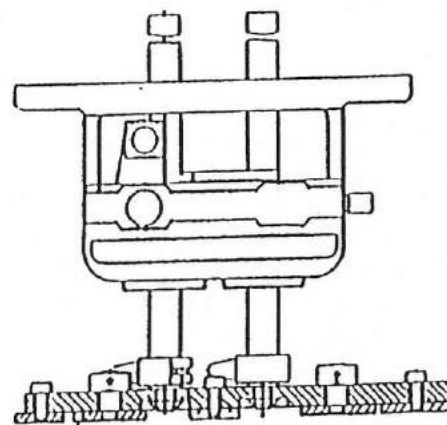
item no.	identification no.	designation
01	313.00-08013/0	sheet stop shaft, complete
02	313.70-00124/0	clamping bearing
03	313.66-01963/0	removing finger
04	313.75-01126/1	lever
05	313.75-01125/0	lever
06		
07	313.00-08551/0	control lever, complete
08	3714-000 024	ball handle C 32 TGL 2950
09	313.78-01215/0	stop lever, side 1
10	313.78-01216/0	stop lever, side 2
11	313.02-01467/0	spring bar, complete
12	971.99-00008/0	pressure spring 2.2/1 P 25.52
13	313.63-01226/0	bearing plate, side 1
14	313.63-01227/0	bearing plate, side 2
15	313.76-01107/0	lever
16	313.76-01358/0	drawbar
17	313.76-01359/0	lever
18	313.00-11279/0	pile scanning, complete
19	313.75-01127/0	jogger stop



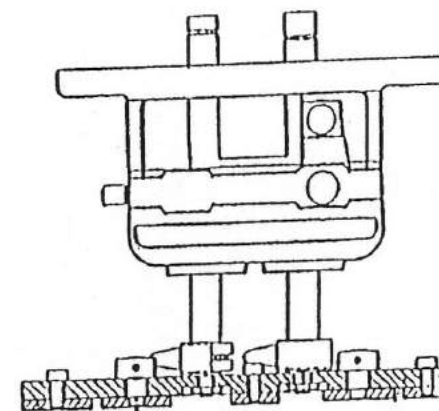
Lateral jogger



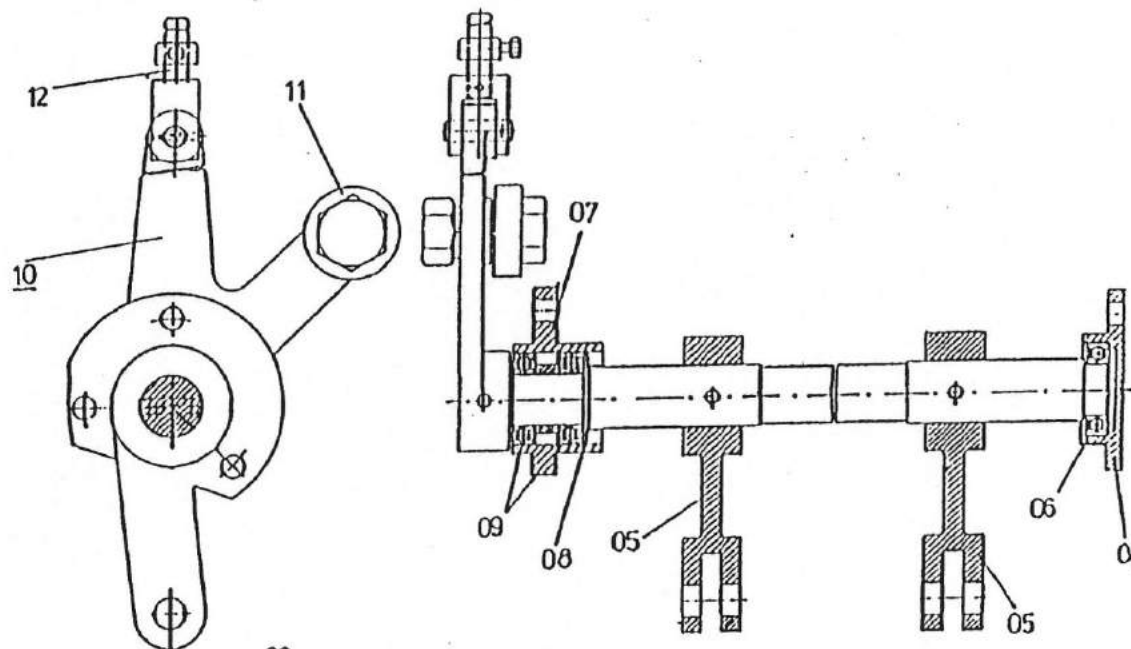
item no.	identification no.	designation
01	313.00-01009/0	lateral jogger, side 1, complete
02	313.00-01010/0	lateral jogger, side 2, complete
03	313.00--3891/1	transverse shaft for lateral jogger, complete
04	313.26-01074/0	flange bearing, side 1
05	313.78-01057/0	fork lever
06	3021-000 348	grooved ball bearing DIN 625-6005 Z
07	313.22-00121/1	flange bearing, side 2
08	7510-000 040	shaft sealing ring D 32x47x7 TGL 16454
09	3021-000 056	grooved ball bearing DIN 625-6005
10	313.00-03888/1	roller lever for jogger, complete
11	3021-000 102	grooved ball bearing DIN 625-6204
12	971.99-0009/0	pressure spring 3.2/11 P 25.52



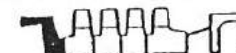
01



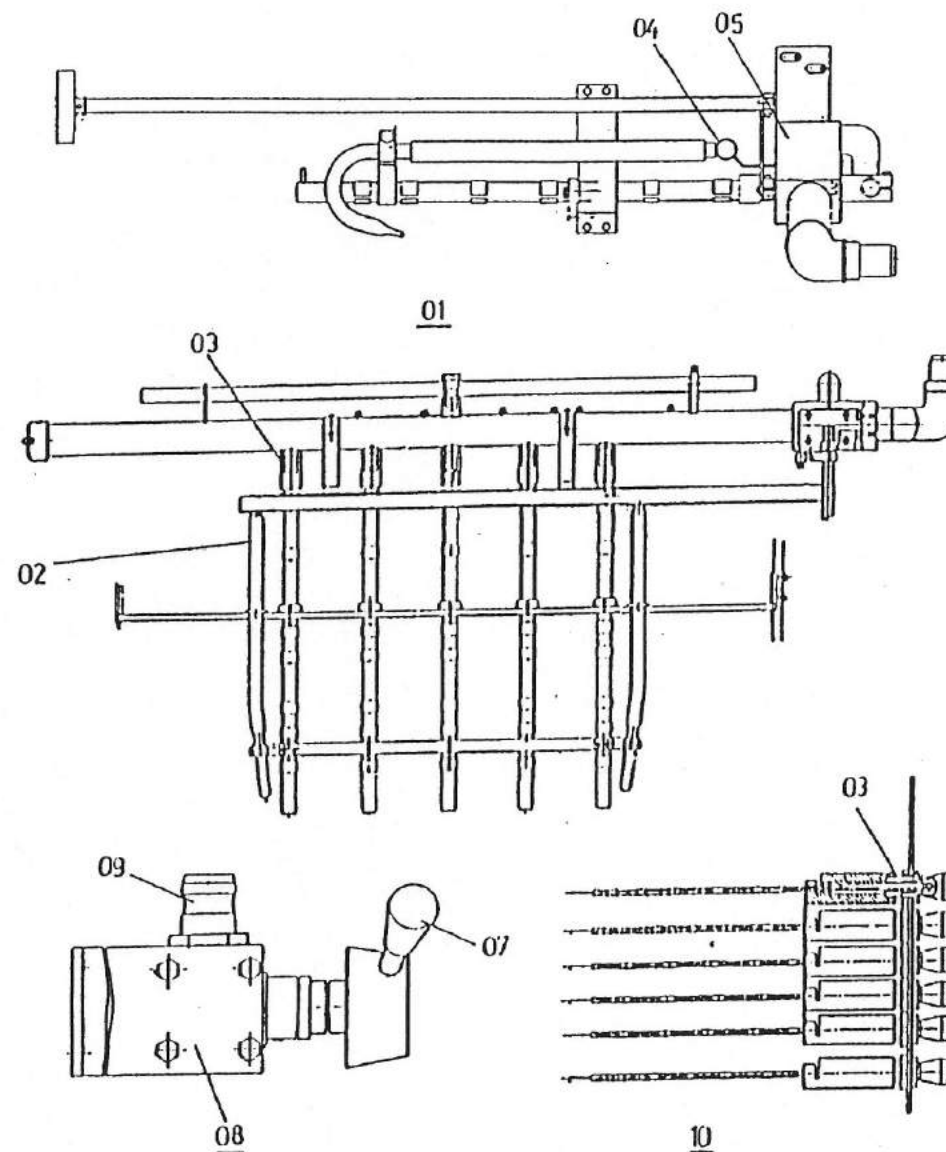
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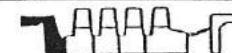


03

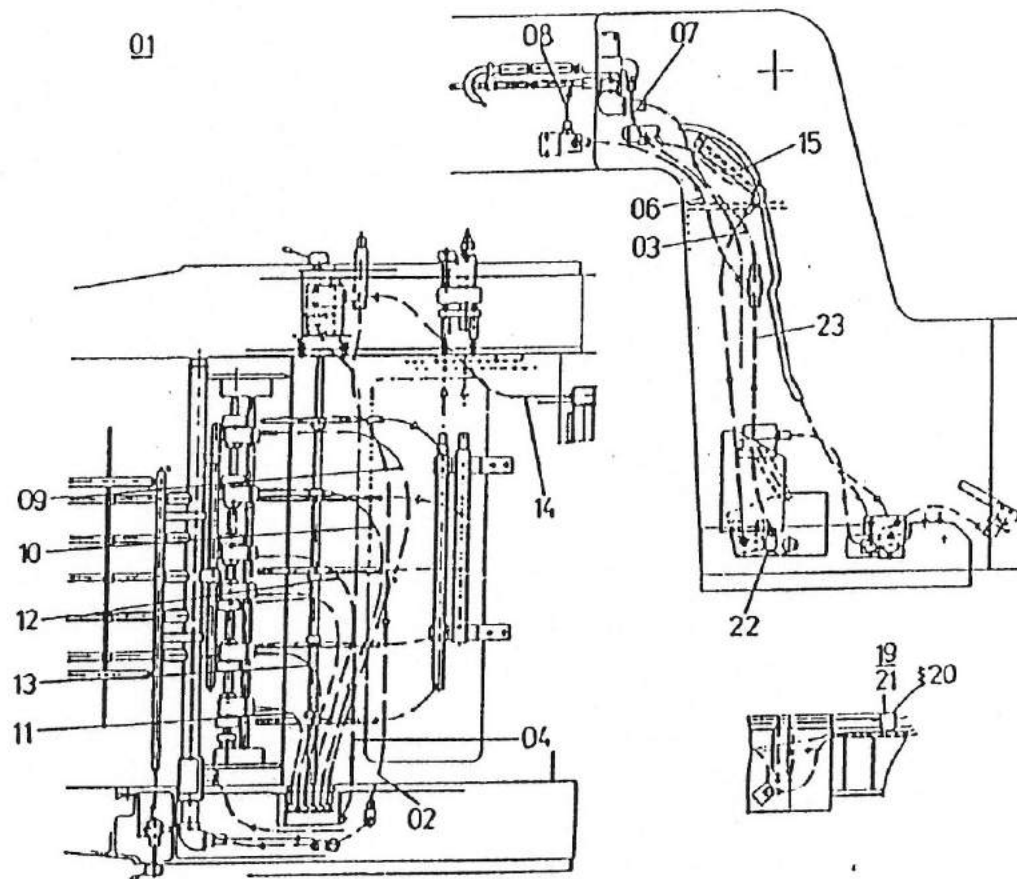


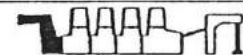
item no.	identification no.	designation
01	313.06-08544/2	blower unit, complete
02	971.93-00061/0	hose 16x4x500 PS 16.10 A
03	7515-302 373	O-ring-18x2-N 70 B
04	7515-302 843	O-ring-22x3-N 70 B
05	313.00-08012/0	air blast valve, complete
08	313.00-08011/0	valve of separating blower unit, complete
09	313.29-01231/0	hose connector
10	313.00-08027/2	setting unit, complete
11	3741-000 023	ball handle C 25 TGL 2950, black
13	7515-306 223	O-ring 70x3-N 70 B
14	7515-303 113	O-ring 25x3-N 70 B



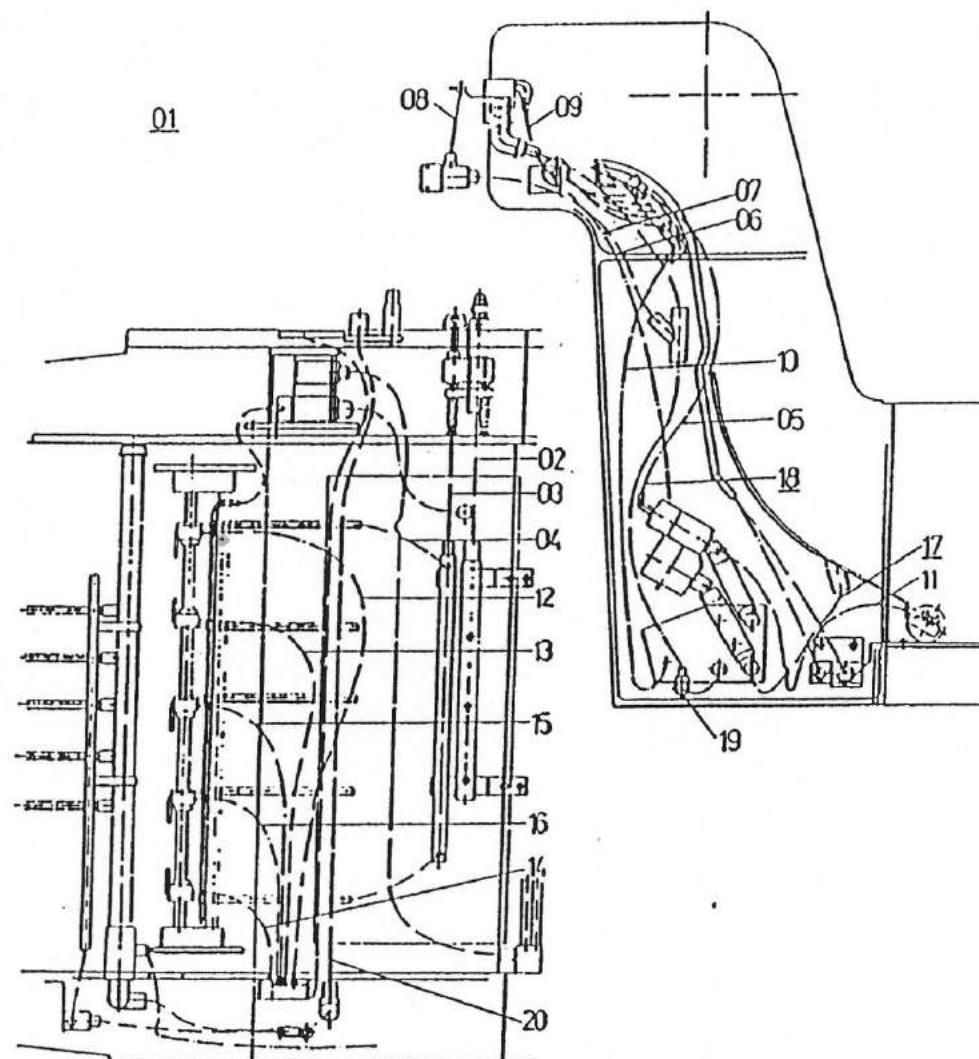


item no.	identification no	designation
01	313-06-13963/0	air control unit, complete
02	971.93-00262/0	hose 40x1600 PS 16.10 C
03	971.93-00098/0	hose 40x900 PS 16.10 C
04	971.93-00191/0	hose 25x2800 PS 16.10 C
05		
06	971.93-00079/0	hose 25x1000 PS 16.10 C
07	971.93-00080/0	hose 25x1200 PS 16.10 C
08	971.93-00095/0	hose 25x300 PS 16.10 C
09	971.93-00223/0	hose 9x13x1700 PS 15.22 K
10	971.93-00222/0	hose 9x13x1600 PS 15.22 K
11	971.93-00221/0	hose 9x13x1200 PS 15.22 K
12	971.93-00109/0	hose 9x13x1400 PS 15.22 K
13	971.93-00099/0	hose 9x13x1300 PS 15.22 K
14	971.93-00084/0	hose 25x1400 PS 16.10 F
15	313.00-10994/0	setting valve, complete
16	3816-100 002	hose clamp 25 TGL 29732
17	3816-100 004	hose clamp 40 TGL 29732
18	3816-100 005	hose clamp 50 TGL 29732
19	313.00-10142/1	filter, complete
20	2552-000 539	pressure spring C 0.63x10.5x5.5 TGL 18395
21	7755-010 012	air filter insert A 130/82 39-474
22	313.01-03206/0	pipe elbow
23	971.93-00239/0	hose 40x600 PS 16.10 C





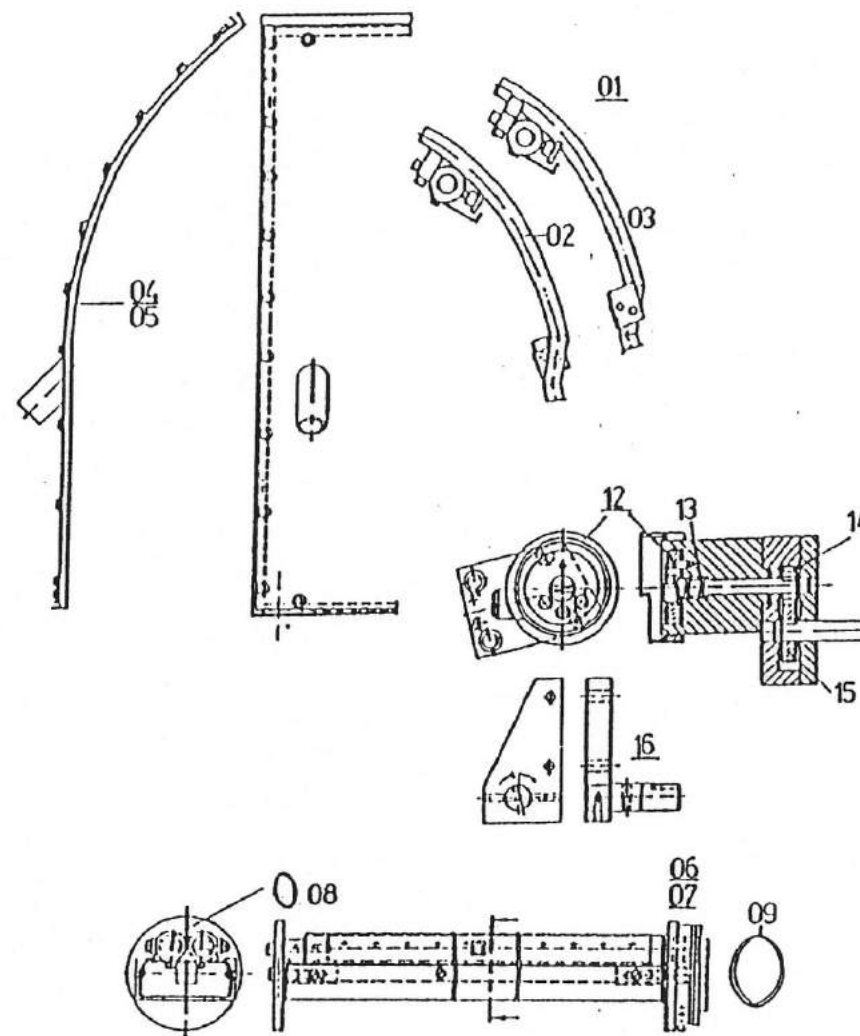
item no.	identification no.	designation
01	313.06-12551/0	air control unit, complete
02	971.93-00086/0	hose 40 x 400 PS 16.10 C
03	971.93-00031/0	hose 25 x 400 PS 16.10 C
04	971.93-00091/0	hose 19 x 600 PS 16.10 C
05	971.93-00239/0	hose 40 x 600 PS 16.10 C
06	971.93-00098/0	hose 40 x 900 PS 16.10 C
07	971.93-00034/0	hose 25 x 1000 PS 16.10 C
08	971.93-00095/0	hose 25 x 300 PS 16.10 C
09	971.93-00035/0	hose 25 x 1200 PS 16.10 C
10	971.93-00191/0	hose 25 x 2800 PS 16.10 F
11	971.93-00224/0	hose 25 x 2100 PS 16.10 F
12	971.93-00223/0	hose 9 x 13 x 1700 PS 15.22 K
13	971.93-00222/0	hose 9 x 13 x 1600 PS 15.22 K
14	971.93-00221/0	hose 9 x 13 x 1200 PS 15.22 K
15	971.93-00109/0	hose 9 x 13 x 1400 PS 15.22 K
16	971.93-00099/0	hose 9 x 13 x 1300 PS 15.22 K
17	971.93-00225/0	hose 40 x 850 PS 16.10 C
18	971.93-00192/0	hose 12 x 3 x 1500 PS 16.10 A
19	313.01-03206/0	pipe elbow
20	971.93-00262/0	hose 40 x 1600 PS 16.10 C



Sheet guiding equipment - Delivery with perfector

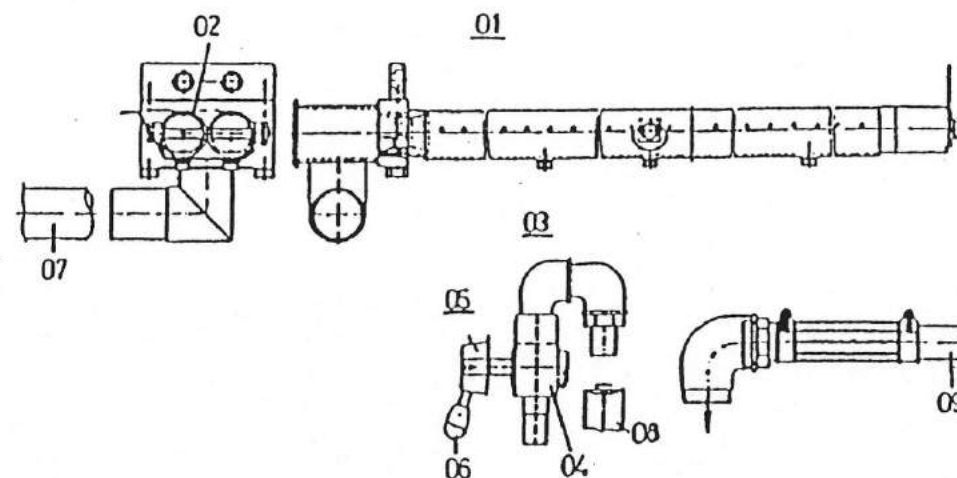


item no.	identification no.	designation
01	313.06-12471/0	sheet guiding bars, complete
02	313.00-10045/0	sheet guiding bars, side 1
03	313.00-10046/0	sheet guiding bars, side 2
04	313.06-12472/0	sheet guiding plate, complete
05	313.41-01319/0	stud bolt
06	313.06-12473/0	sheet smoothening equipment
07	313.00-10097/0	smoothening guide element
08	7515-302 373	O-ring 18x2-N 70 B
09	7515-306 473	O-ring 75x3-N 70 B
10	313.21-02055/0	tensioning bush
11	2552-001826	pressure spring B 2.8x30x5.5 TGL 18395
12	313.00-10098/0	bearing, side 1
13	2552-001227	pressure spring C 1.4x15x5.5 TGL 18395
14	313.51-01526/0	gear, 17 teeth
15	313.51-01525/0	gear, 34 teeth
16	313.00-10093/0	bearing, side 2



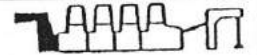


item no.	identification no.	designation
01	313.00-09459/0	sheet smotherer, complete
02	7515-302 373	O-ring 18x2-N 70 B
03	313.00-09447/1	setting valve, complete
04	7515-303 703	O-ring 32x2-N 70 B
05	313.02-01682/0	control lever, complete
06	3714-000023	ball handle C 25 TGL 2950, black
07	971.93-00026/0	hose 25 x 550 PS 16.10 C
08	971.93-00096/0	hose 25 x 700 PS 16.10 C
09	313.00-07953/0	hose

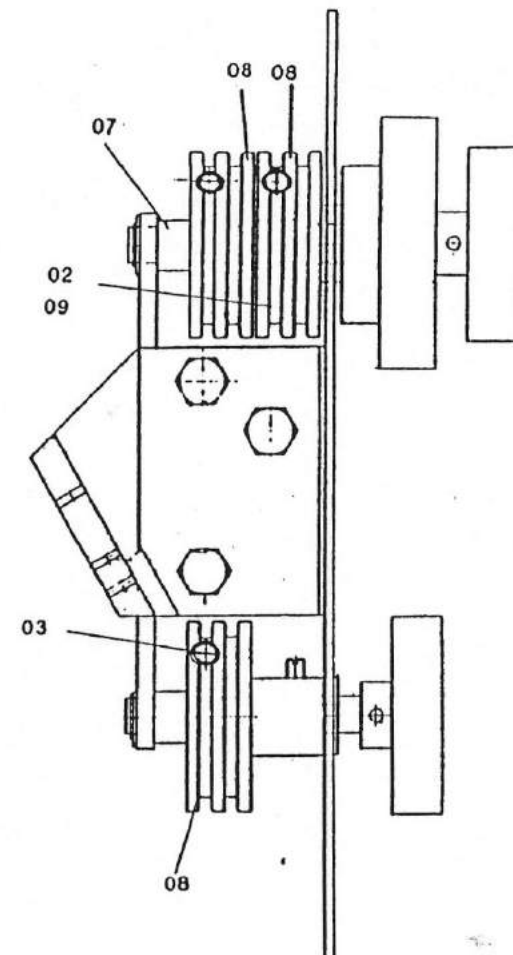
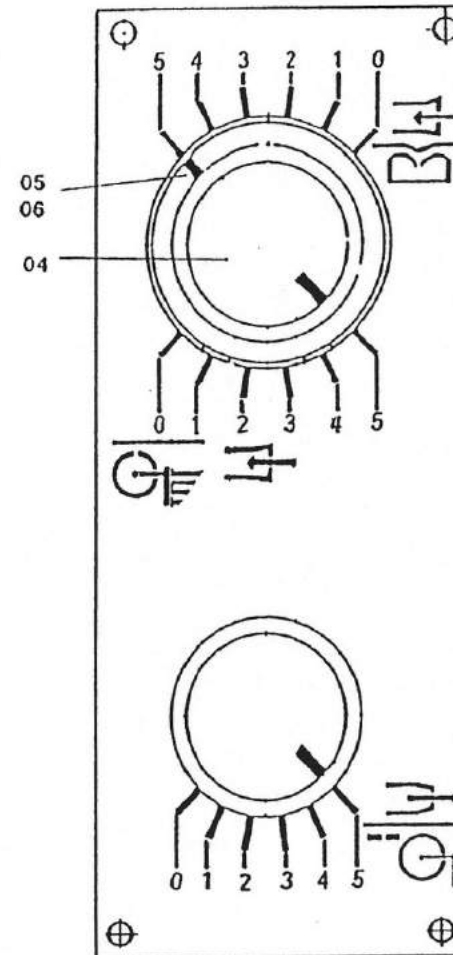


100





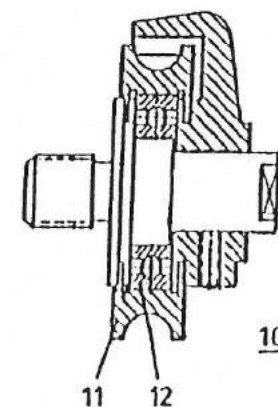
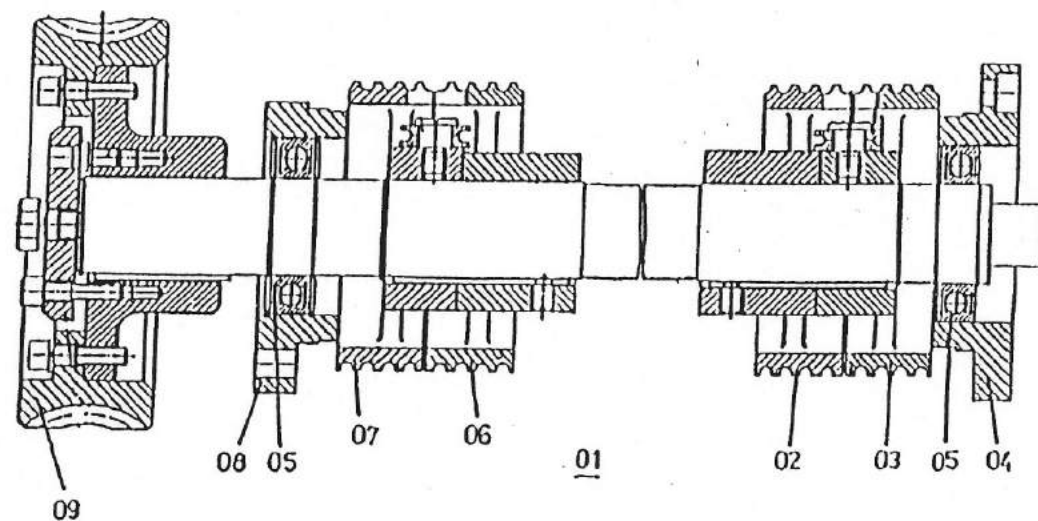
item no.	identification no.	designation
01	313.06-12228/1	setting unit, complete
02	313.26-01372/0	setting shaft
03	313.01-04007/0	setting shaft
04	313.21-02479/0	handle disk
05	313.11-01382/0	handle disk
06	313.19-02311/0	annular plate
07	313.32-01493/0	shaft
08	313.20-01943/0	roller
09	3019-000 003	needle cage race DIN 5405-K 12 x 16 x 13



01

Rope drum shaft

item no.	identification no.	designation
01	313.00-07364/0	rope drum shaft, complete
02	313.29-01048/0	rope drum half, side 1, inside
03	313.29-01047/0	rope drum half, side 1, outside
04	313.11-01092/0	bearing bush, side 1
05	3021-000 211	grooved ball bearing DIN 625-6210-2RS
06	313.29-01050/0	rope drum half, side 2, inside
07	313.29-01049/0	rope drum half, side 2, outside
08	313.11-01145/0	bearing bush, side 2
09	313.00-01034/0	worm gear, complete, 39 teeth
10	313.00-03912/0	rope sheave, complete
11	313.14-01003/0	roller
12	3021-000 057	grooved ball bearing DIN 625-6006
13	979.34-00002/0	rope (without illustration)



Lowering table drive - Normal and special design
(delivery elevation 300 mm and 400 mm)

item no.	identification no.	designation
01	313.00-01032/0	gear unit housing, complete
02	313.54-00109/0	worm gear, 21 teeth
03	313.54-00110/0	worm shaft
04	313.27-01023/0	flange bushing
05	3021-000 061	grooved ball bearing DIN 625-6010
06	3026-000 011	axial grooved ball bearing DIN 711-51110
07	3021-000 060	grooved ball bearing DIN 625-6009
08	313.00-01030/0	worm shaft, complete
09	313.54-00112/0	worm shaft
10	313.27-00115/0	flange bearing
11	313.24-00125/0	vee-belt pulley
12	3021-000 104	grooved ball bearing 6206 TGL 2981
13	7510-104 031	shaft sealing ring AD 45x62x10-NBR 70
14	7515-003510	O-ring 85x3-N 70 B
15	313.24-00113/0	vee-belt pulley
16	3411-002 071	vee-belt 2 A-2000 TGL 6554 (without illustration)
17	313.06-07226/0	control disk for pileboard, complete
18	313.51-01309/0	control gear, 100 teeth
19	313.51-01198/0	pinion, 20 teeth
20	313.32-01158/0	bolt
21	3021-000 052	grooved ball bearing DIN 625-6001

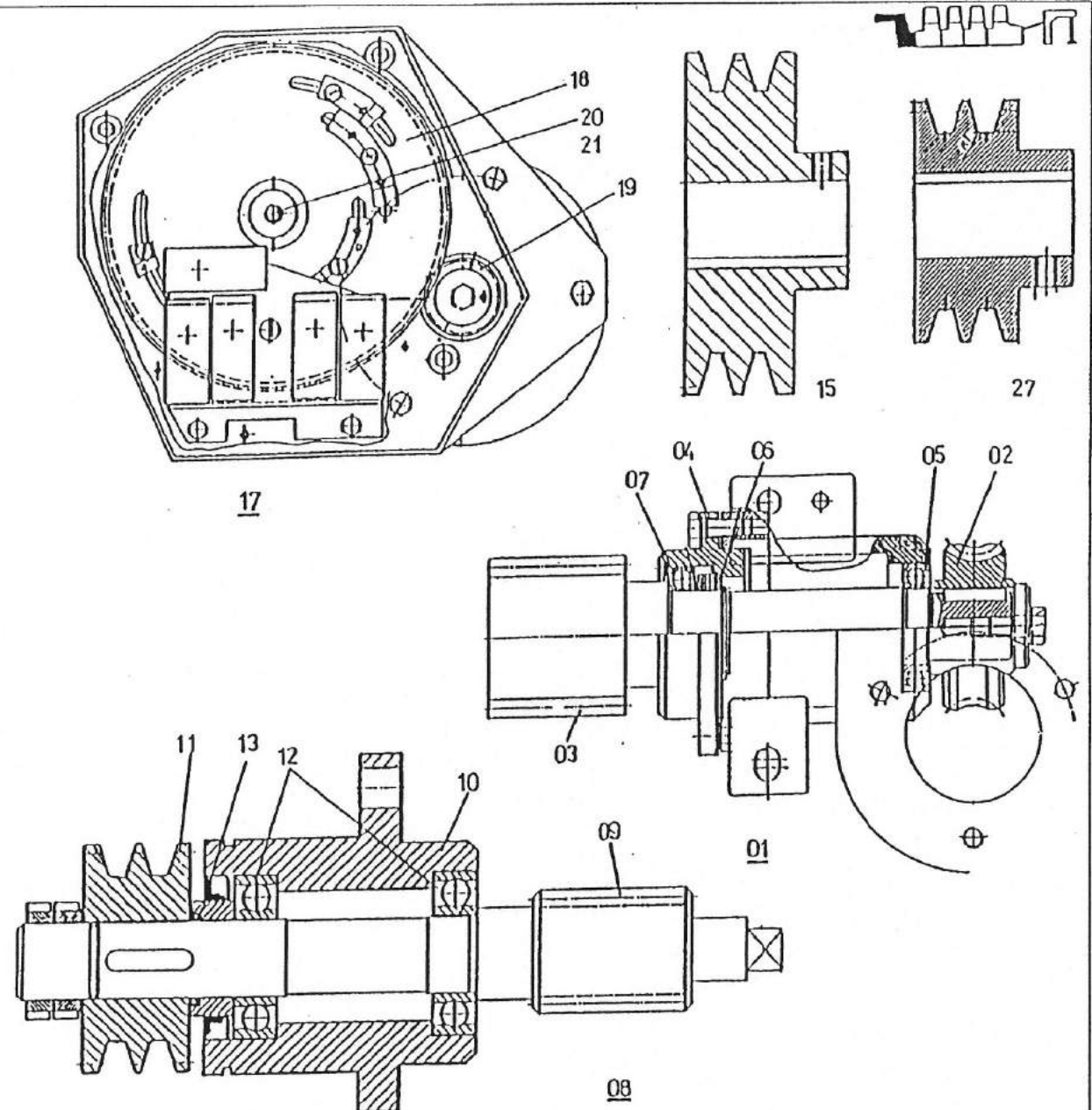
Delivery elevation 300 mm

25 979.34-00013/0 rope (without illustration)

Delivery elevation 400 mm

26 979.34-00014/0 rope (without illustration)

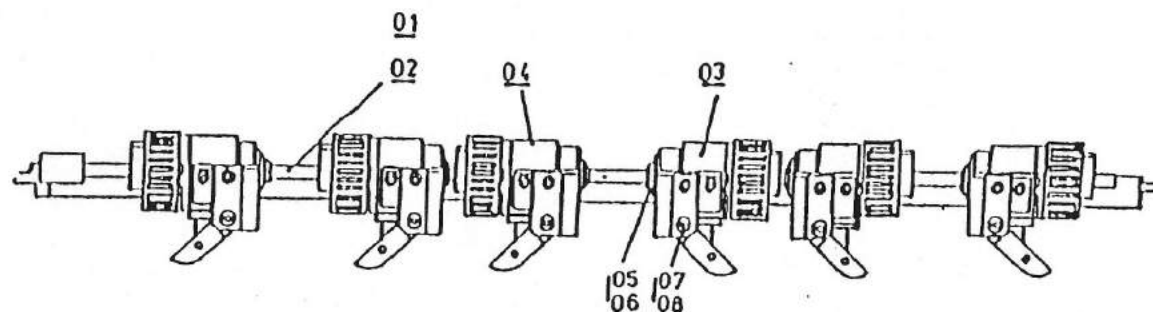
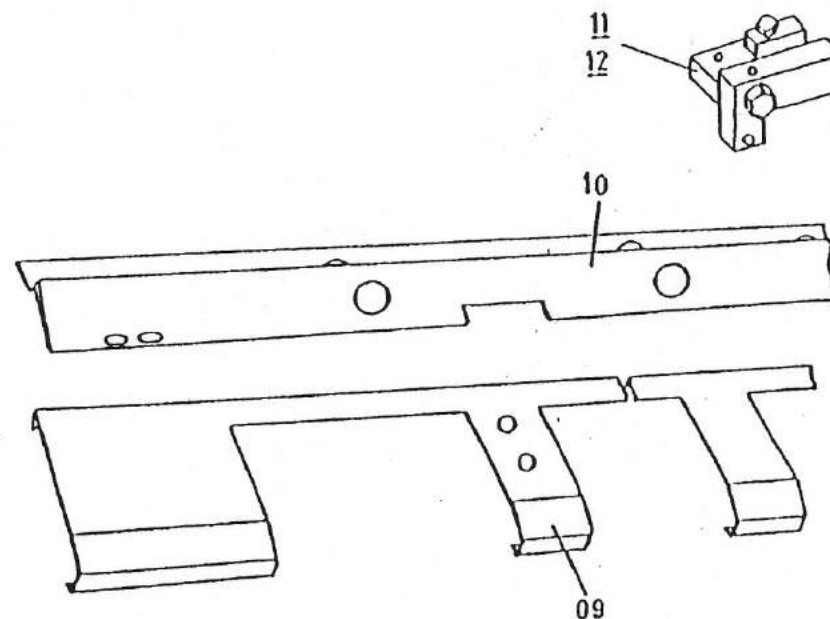
27 313.29-01287/0 vee-belt pulley



Suction roller for board

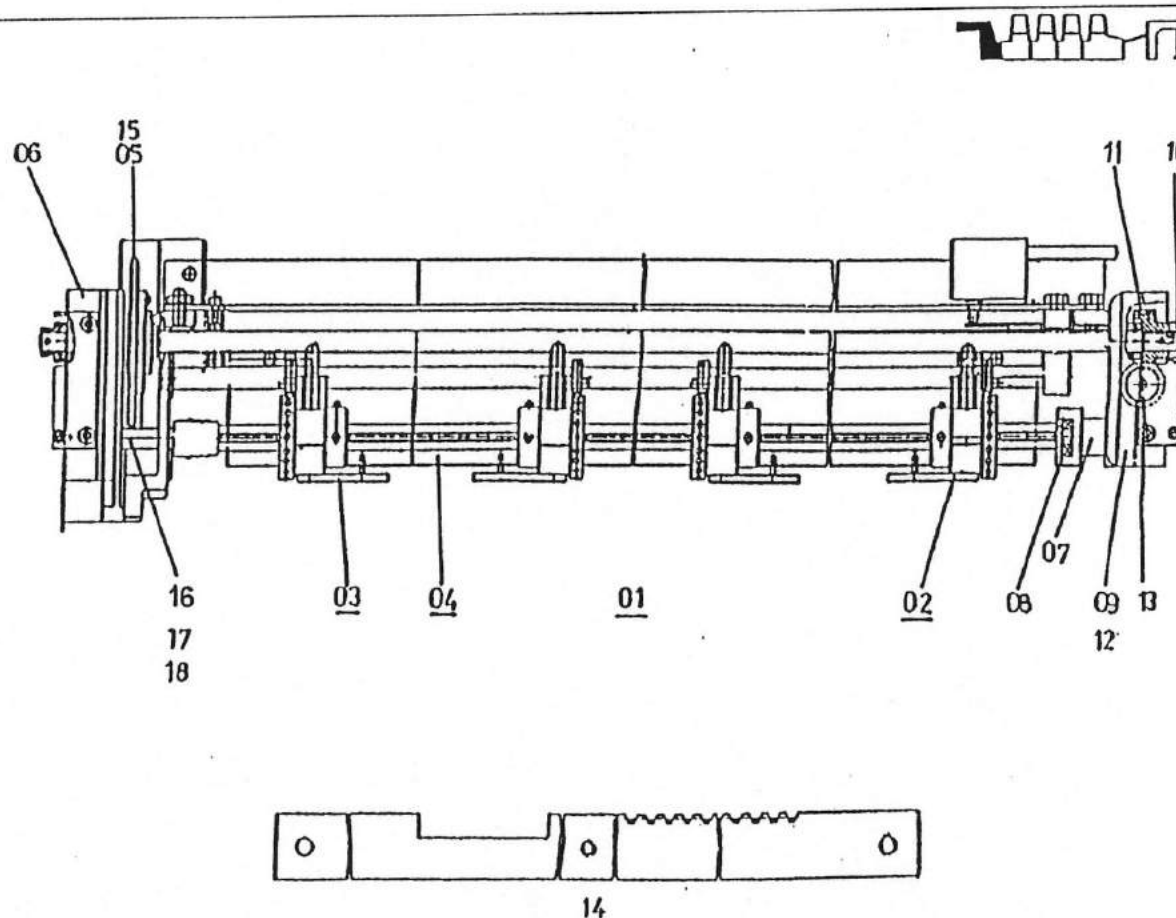


item no.	identification no.	designation
01	313.06-12601/0	suction roller for board
02	313.00-09205/0	suction roller, complete
03	313.00-09206/0	suction ring, side 1
04	313.00-09207/0	suction ring, side 2
05	7510-100 381	shaft sealing ring DIN 3760-A 20x30x7-NBR 70
06	3020-500 067	needle bearing DIN 617-RNA 4902
07	313.23-01128/0	eccentric bolt
08	2552-000 333	pressure spring C 0.5 x 5.5 x 11.5 TGL 18395
09	313.01-03450/0	guiding plate
10	313.94-03576/0	control plate
11	313.00-09200/0	bearing block, side 1
12	313.00-09201/0	bearing block, side 2

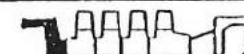


Suction roller

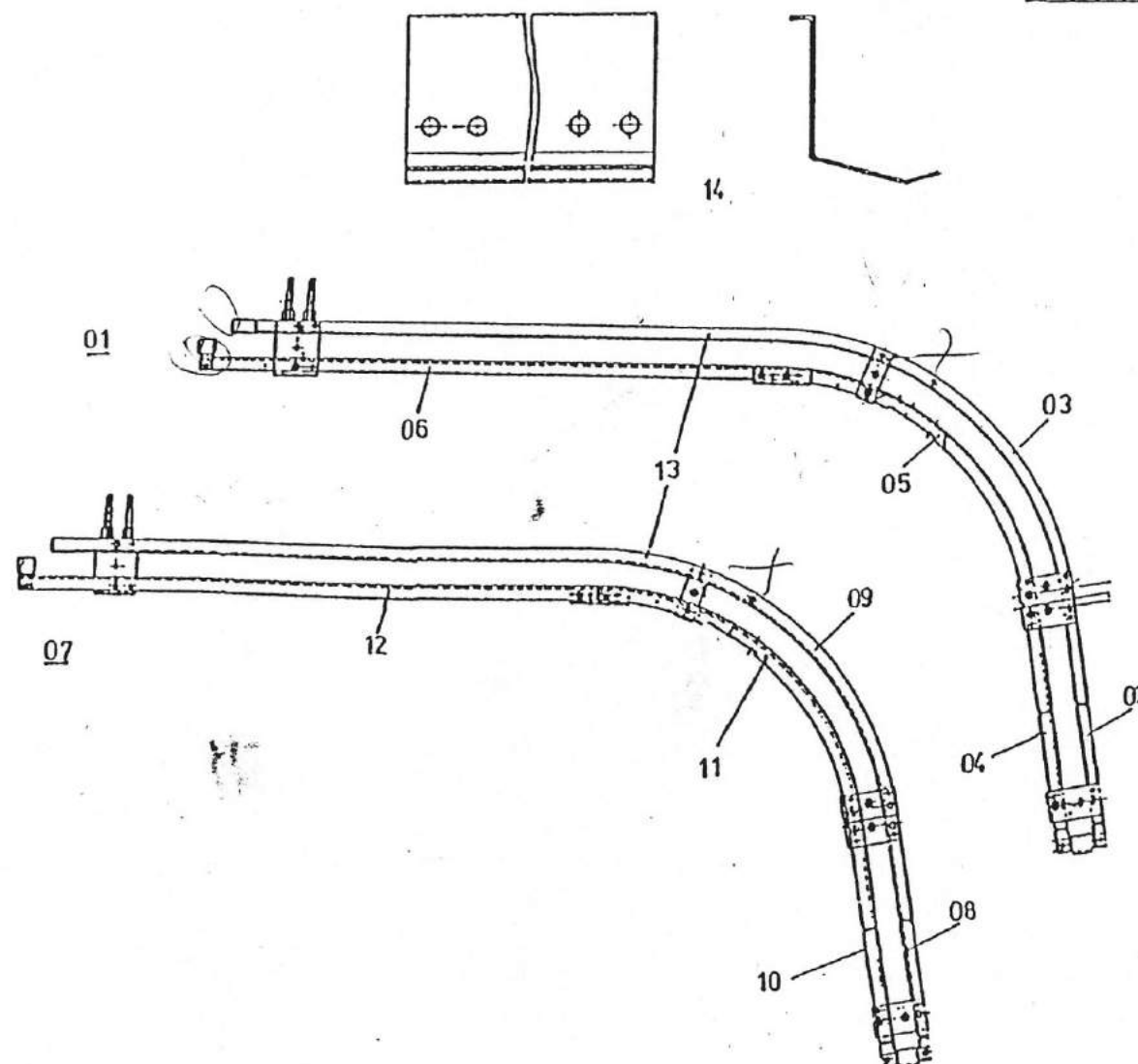
location no.	designation
0-08024/0	suction roller, complete
0-08014/0	sucker body, complete
0-08015/0	sucker body, complete
0-08017/0	sucker bar, complete
7-00116/0	sprocket wheel
0-10966/0	gear unit, complete
3-01061/0	bolt
00 202	grooved ball bearing DIN 625-6201-2RS
3-00424/0	side plate, complete
1-00163/0	gear, 14 teeth
1-01116/0	worm gear, 23 teeth
00 003	star handle 50 TGL 2951, black
1-01117/0	worm shaft
1-00122/0	rack
00 206	grooved ball bearing DIN 625-6205-2RS
1-02360/0	bushing
00 204	grooved ball bearing DIN 625-6203-2RS
00 411	shaft sealing ring DIN 3760-A 20x40x7-NBR 70





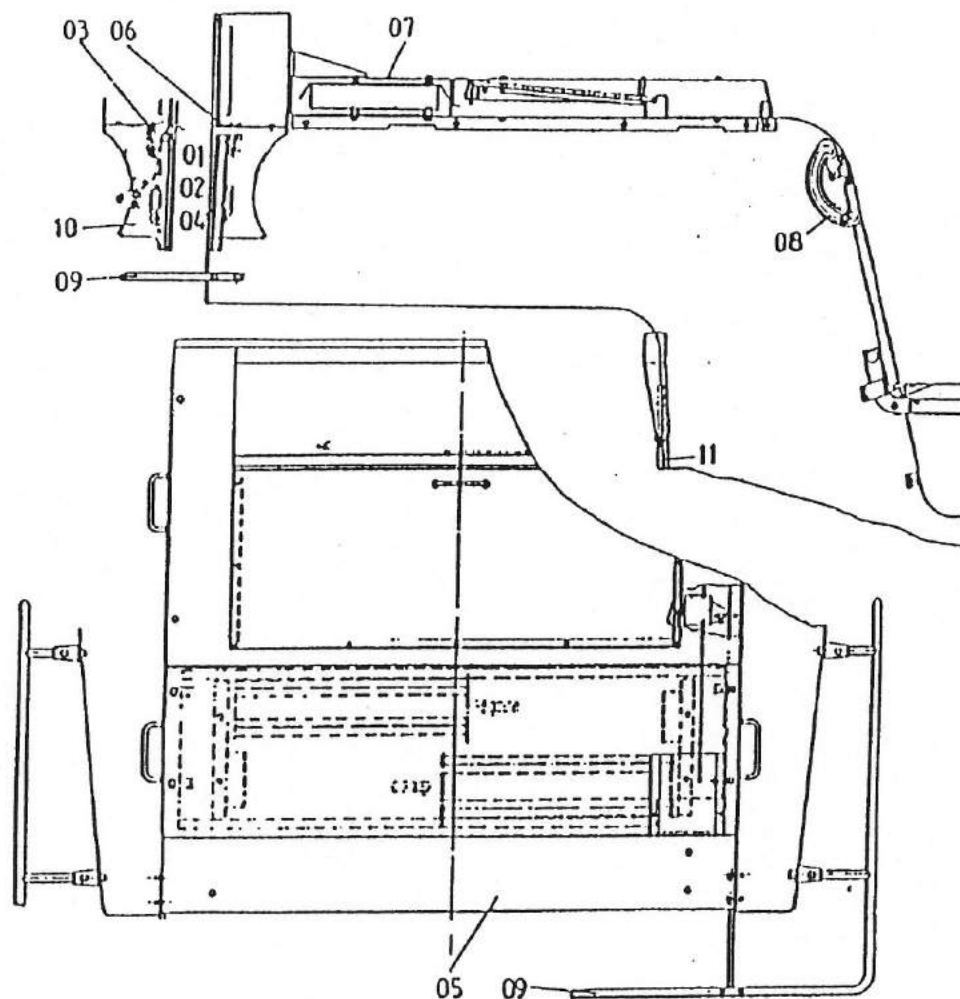


item no.	identification no.	designation
01	313.00-02297/0	carriage guideway, side 1, complete
02	313.69-01002/0	chain rail, side 1
03	313.99-01004/0	chain rail, side 1
04	313.69-01005/0	supporting rail, side 1
05	313.99-01095/0	supporting rail, side 1
06	313.65-00130/0	supporting rail, side 1
07	313.00-02298/0	carriage guideway, side 2, complete
08	313.69-01003/0	chain rail, side 2
09	313.99-01003/0	chain rail, side 2
10	313.69-01004/0	supporting rail, side 2
11	313.99-01096/0	supporting rail, side 2
12	313.65-00131/0	supporting rail, side 2
13	313.58-00124/0	rack
14	313.94-03383/0	control plate

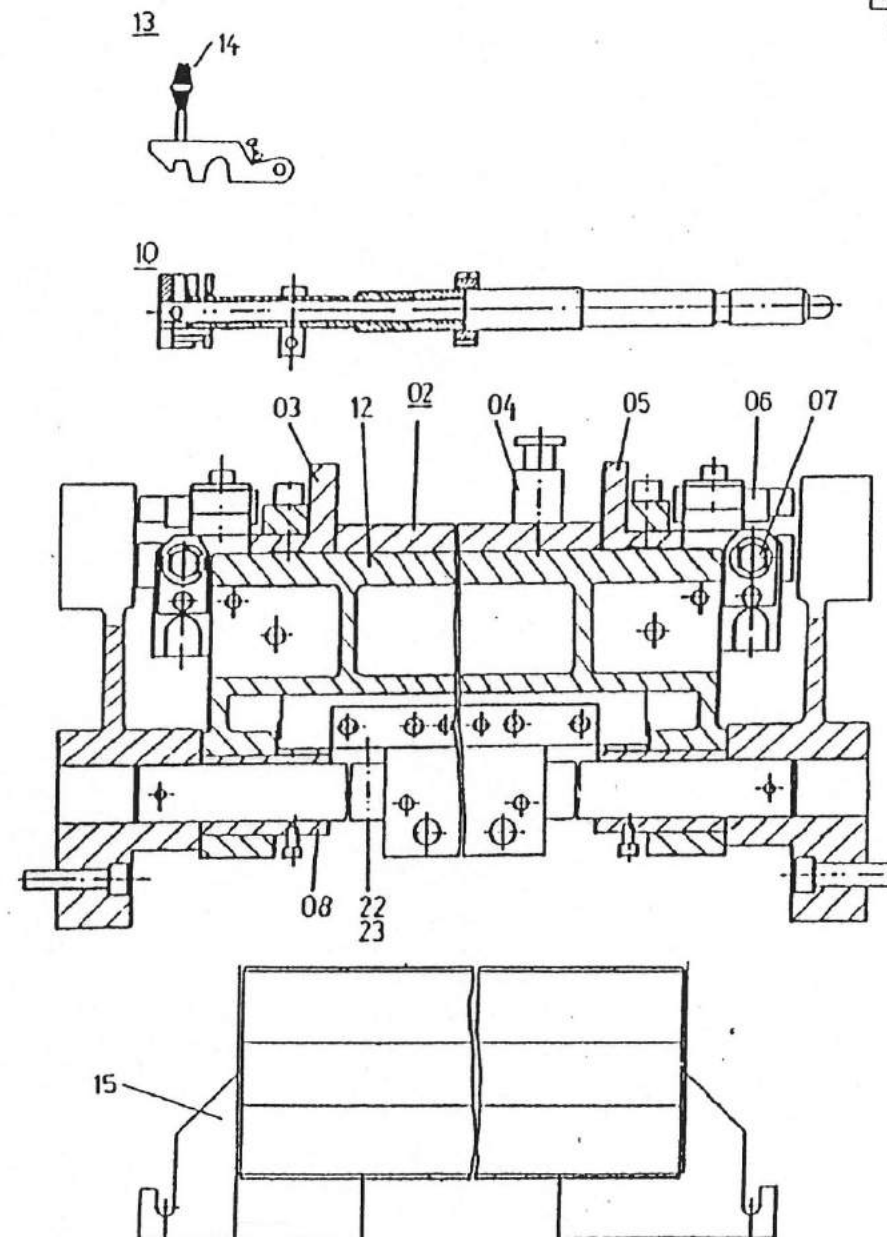




item no.	identification no.	designation
01	313.06-09540/0	hinged guard
02	313.66-02082/0	plate
03	313.19-01858/0	control cam
04	3851-000 030	magnet activation B 50 TGL 36512, white
05	313.06-08104/0	cross beam
06	313.05-01109/0	bar hinge
07	313.06-08105/0	covering guard
08	313.06-09543/0	protective plate
09	313.06-07220/0	protective bracket
10	313.06-09542/0	side guard
11	313.06-05343/0	guard

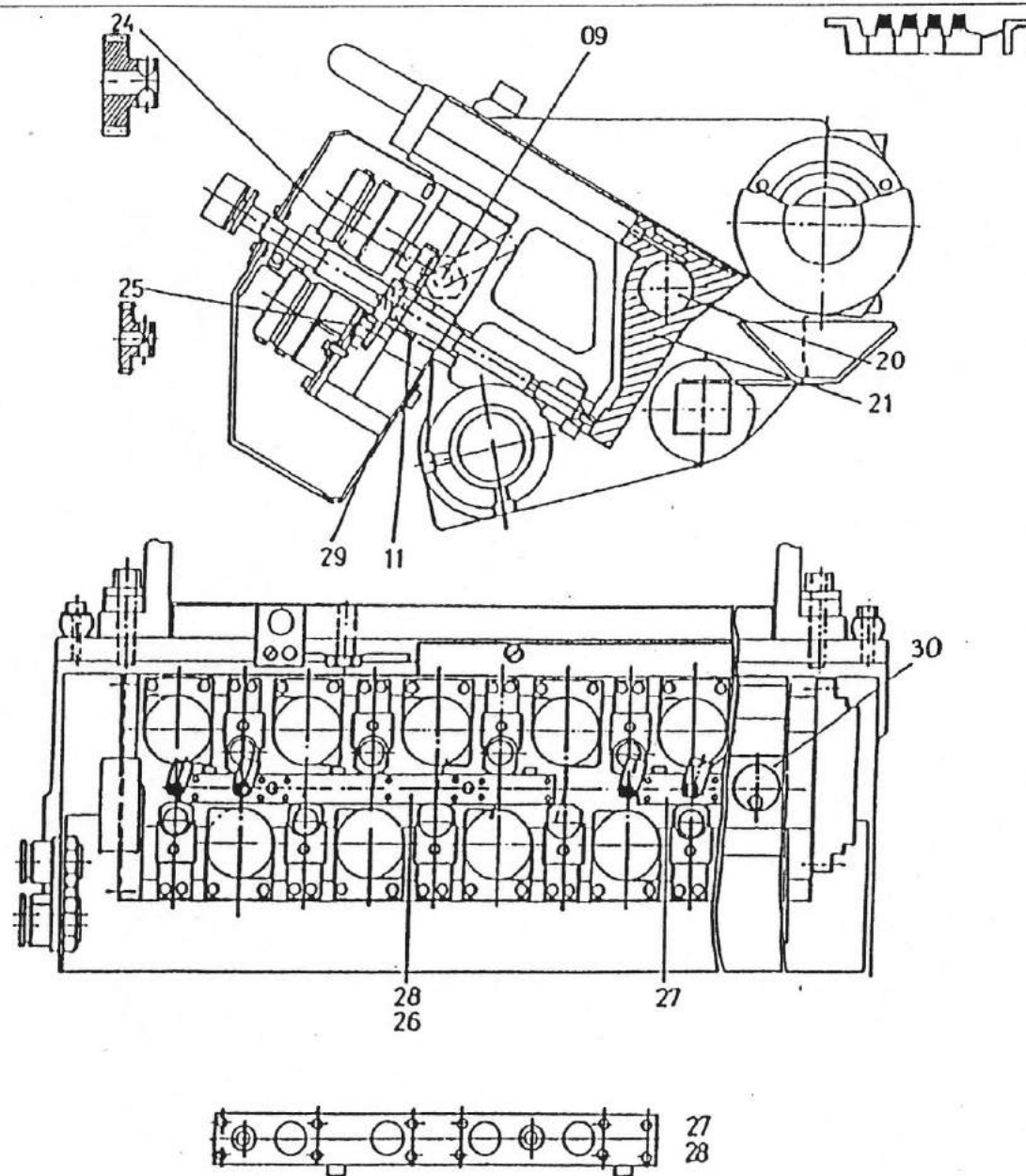


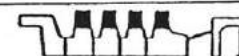
item no.	identification no.	designation
01	313.00-08351/0	VARICONTROL ink dosing unit, complete
02	313.69-01669/0	ink blade, complete
03	313.89-01023/0	ink fountain jaw, side 2
04	313.00-04059/0	ink jaw, complete
05	313.89-01022/0	ink fountain jaw, side 1
07	313.31-01949/0	stopscrew
09	313.31-01693/0	bolt
10	313.00-08807/3	setscrew, complete
11		
12	313.83-01063/0	ink fountain
13	313.00-08114/0	latch
14	313.31-02163/0	ball handle B 22 TGL 2949
15	313.01-02910/0	ink pan



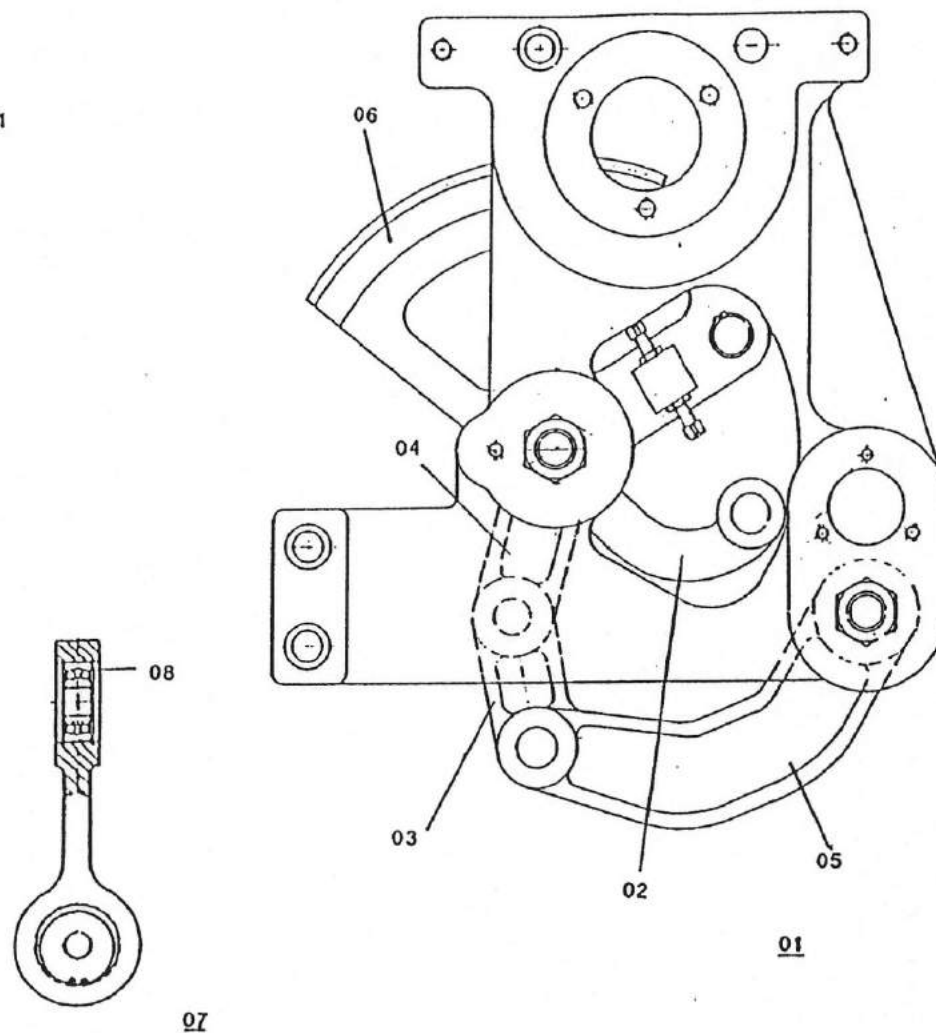
Ink dosing unit - VARICONTROL version

item no.	identification no.	designation
20	313.40-01870/0	shaft
21	313.75-01202/0	lever
22	313.64-02131/1	rail
23	313.64-02132/1	rail
24	313.51-01527/0	gear, 26 teeth
25	313.51-01319/0	gear, 17 teeth
26	313.36-01246/0	stud bolt
27	313.02-01641/0	stop rail
28	313.02-01642/0	stop rail
29	313.01-02902/0	housing
30	313.02-01489/0	cover





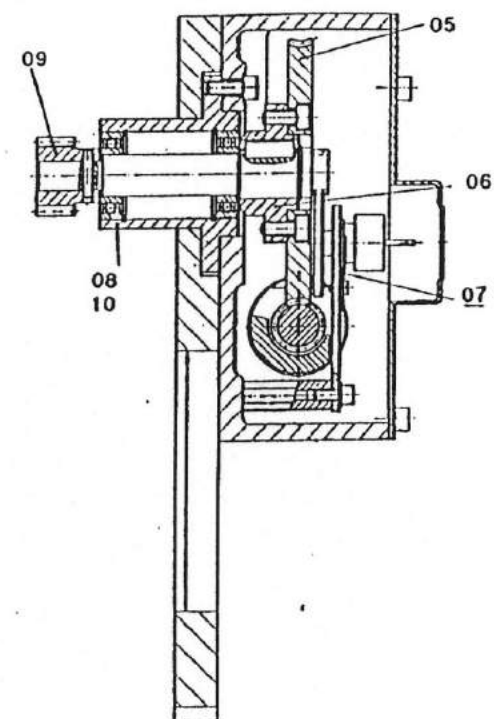
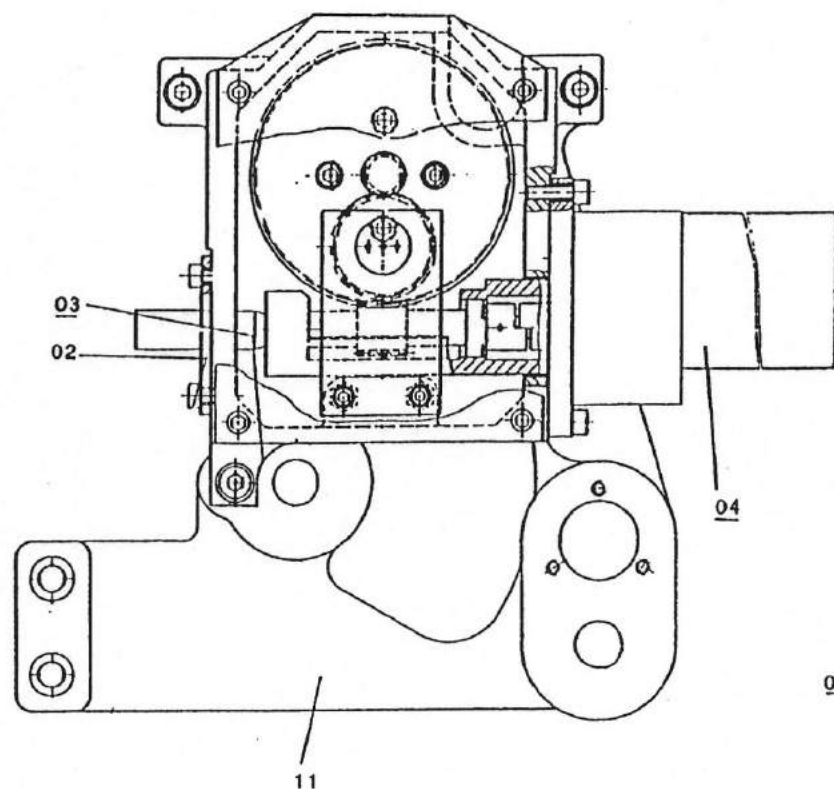
item no.	identification no.	designation
01	313.00-13178/0	ink duct roller drive, complete
02	313.76-01127/0	driving lever
03	313.76-01139/0	intermediate lever
04	313.64-01310/0	setting lever
05	313.00-04056/0	guiding lever, complete
06	313.00-04055/0	segment, complete
07	313.00-04057/0	connecting bar, complete
08	3023-000 045	self-aligning ball bearing DIN 630-1301



Ink duct roller drive - VARICONTROL version

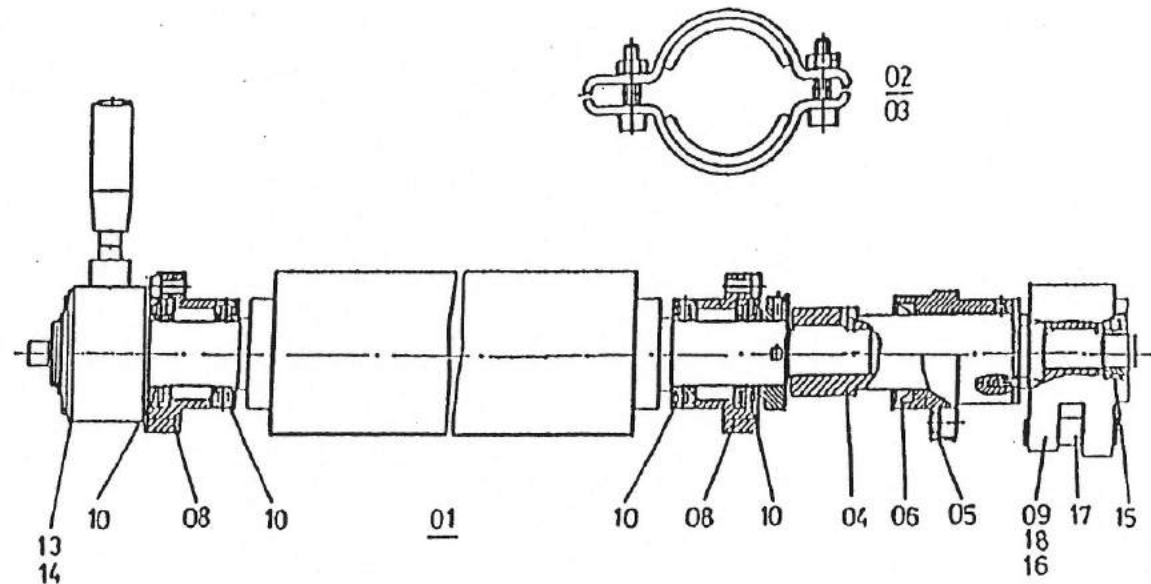


item no.	identification no.	designation
01	313.00-12682/0	gear unit, complete
02	313.62-04434/0	plate
03	313.00-13171/0	worm bearing
04	313.00-12685/0	motor
05	313.54-01118/0	worm gear
06	313.22-01461/0	hub
07	313.00-12686/0	potentiometer
08	313.22-01462/0	bushing
09	313.51-01110/0	gear
10	3021-000 380	grooved ball bearing DIN 625-6003-2 RS
11	313.73-01073/0	plate



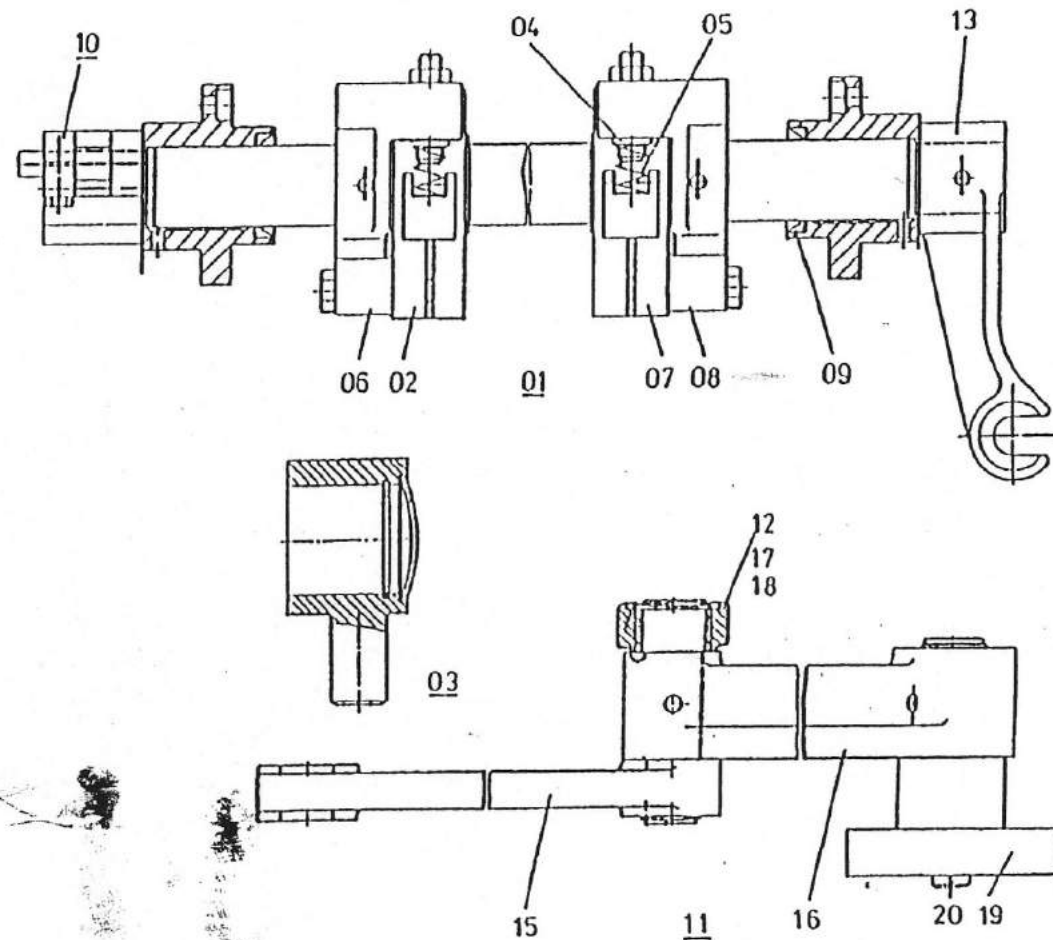


Item no.	Identification no.	designation
01	313.49-01749/0	VARICONTROL ink duct roller S
02	313.00-03984/0	brake, complete
03	313.98-01172/0	brake tape 20x65 Cosid 3000
04	313.36-01202/2	leg
05	313.27-01106/0	bearing bush
06	7510-104 031	shaft sealing ring AD 45x62x10-NBR 70
07		
08	313.26-01321/0	bearing bush
09	313.00-03790/2	drive clutch, complete,
10	3021-050 351	grooved ball bearing DIN 625-6008 Z P 5
11	313.00-05132/2	hand-operated lever, complete
12		
13	2552-000 213	pressure spring 0.32x3.6x8.5 TGL 18394
14	3043-000 009	cylindrical roller 5x25 II TGL 15517
15	3021-000 102	grooved ball bearing DIN 625-6204
16	3622-010 002	Stieber-type clamp roller freewheeling AE 20
17	313.30-01096/0	bolt
18	313.60-03952/0	retainer spring



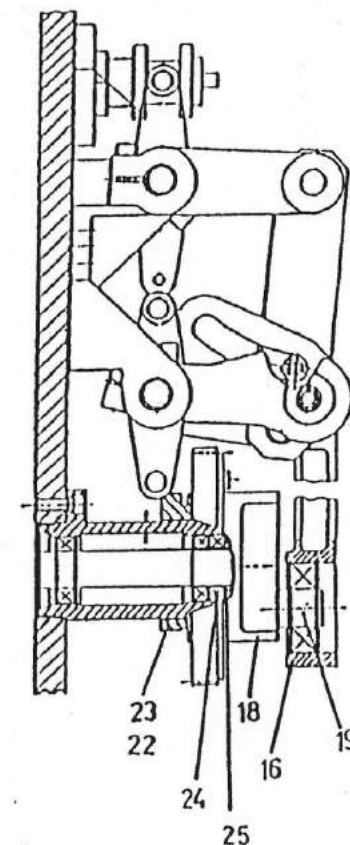
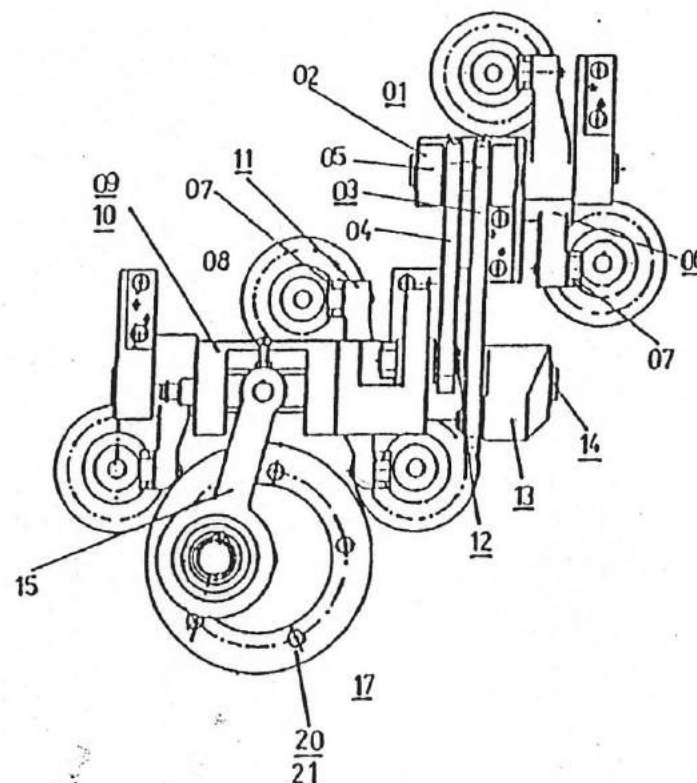
Ink vibrator shaft

item no.	identification no.	designation
01	313.00-03982/1	vibrator shaft, complete
02	313.77-01004/0	vibrator bearing lever, side 1
03	313.00-03932/0	vibrator bearing, complete
04	313.26-01251/0	pressure bolt
05	2552-001 816	pressure spring A 2.8x20x7.5 TGL 18395
06	313.75-01034/0	vibrator spring lever, side 1
07	313.77-01003/0	vibrator bearing lever, side 2
08	313.75-01033/0	vibrator spring lever, side 2
09	7510-100 811	shaft sealing ring DIN 3760-A 40x52x7-NBR 70
10	313.00-03979/0	fork lever, side 1, complete
11	313.00-03981/0	drive linkage, complete
12	313.25-01128/0	runner roller
13	313.78-01065/0	spring lever, side 2
14	971.99-00011/0	pressure spring 4/3 P 25.52
15	313.76-01124/0	bar
16	313.76-01125/1	roller lever
17	313.31-01637/1	bolt
18	3019-000 014	needle bearing race DIN 5405 K 20x24x13
19	313.01-00249/0	flange bearing
20	313.31-00264/0	bolt





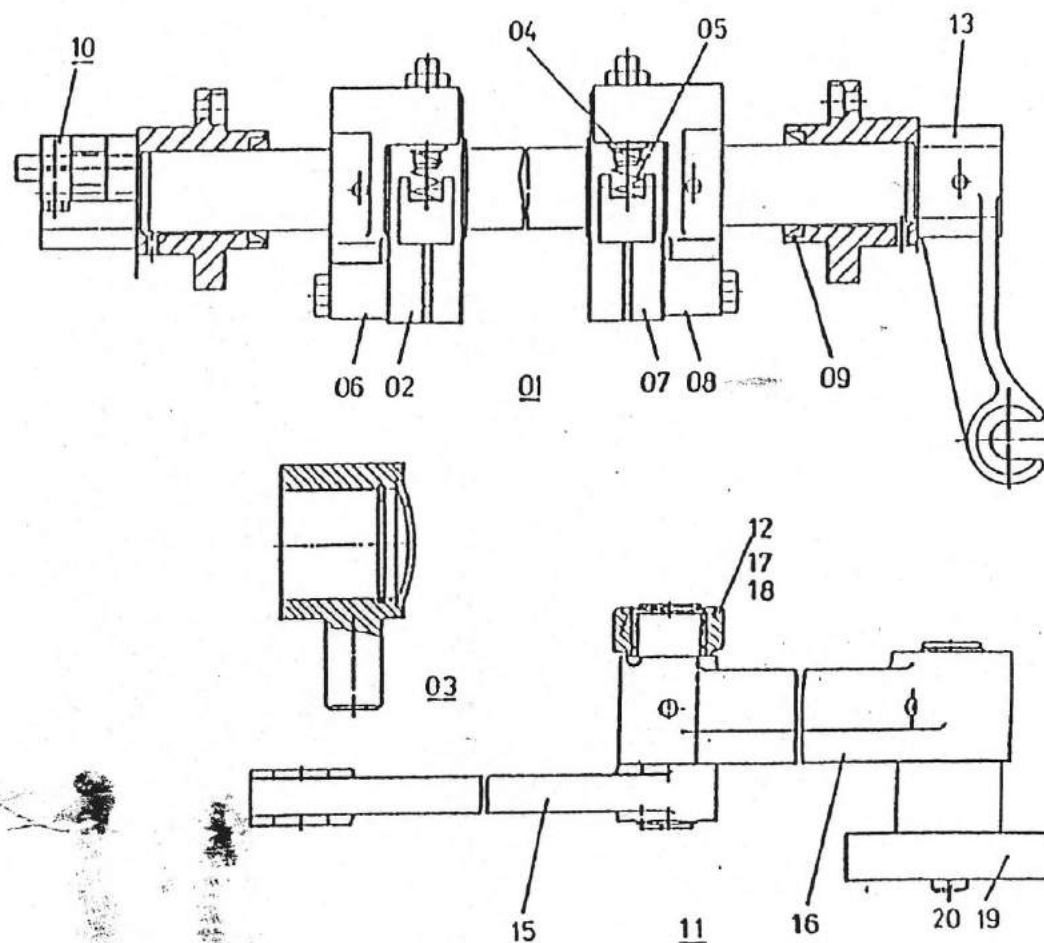
item no.	identification no.	designation
01	313.00-06947/0	upper distributor unit, complete
02	313.78-01144/0	fork lever
03	313.03-01201/0	connector, complete
04	313.03-01203/0	connector, complete
05	3023-000 009	self-aligning ball bearing DIN 630-1203
06	313.03-01057/2	distributor lever, complete
07	3028-100 445	cylindrical roller bearing NU 4903 V TGL 2988
08	313.00-06948/1	lower distributor unit, complete
09	313.00-06908/0	driving lever, complete
10	313.03-01200/1	distributor lever, complete
11	313.03-01202/1	distributor lever, complete
12	313.03-01204/0	bolt, complete
13	313.00-12361/0	lever, complete
14	313.40-01675/0	shaft
15	313.00-03933/0	eccentric bar, complete
16	3023-000 050	self-aligning ball bearing DIN 630-1306
17	313.00-00750/1	rotating drive link
18	313.00-05860/2	shaft, complete
19	313.30-01109/0	bolt
20	313.51-01206/2	gear, 60 teeth, complete
21	313.19-01442/0	graduated ring
22	313.59-00191/0	cam
23	313.10-01418/0	ring
24	3021-000 057	grooved ball bearing DIN 625-6006
25	7510-000 038	shaft sealing ring DIN 3760-A 30x62x7-NBR 70



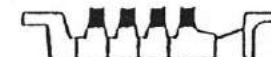
Ink vibrator shaft



item no.	identification no.	designation
01	313.00-03982/1	vibrator shaft, complete
02	313.77-01004/0	vibrator bearing lever, side 1
03	313.00-03932/0	vibrator bearing, complete
04	313.26-01251/0	pressure bolt
05	2552-001 816	pressure spring A 2.8x20x7.5 TGL 18395
06	313.75-01034/0	vibrator spring lever, side 1
07	313.77-01003/0	vibrator bearing lever, side 2
08	313.75-01033/0	vibrator spring lever, side 2
09	7510-100 811	shaft sealing ring DIN 3760-A 40x52x7-NBR 70
10	313.00-03979/0	fork lever, side 1, complete
11	313.00-03981/0	drive linkage, complete
12	313.25-01128/0	runner roller
13	313.78-01065/0	spring lever, side 2
14	971.99-00011/0	pressure spring 4/3 P 25.52
15	313.76-01124/0	bar
16	313.76-01125/1	roller lever
17	313.31-01637/1	bolt
18	3019-000 014	needle bearing race DIN 5405 K 20x24x13
19	313.01-00249/0	flange bearing
20	313.31-00264/0	bolt



Vibrator locking unit

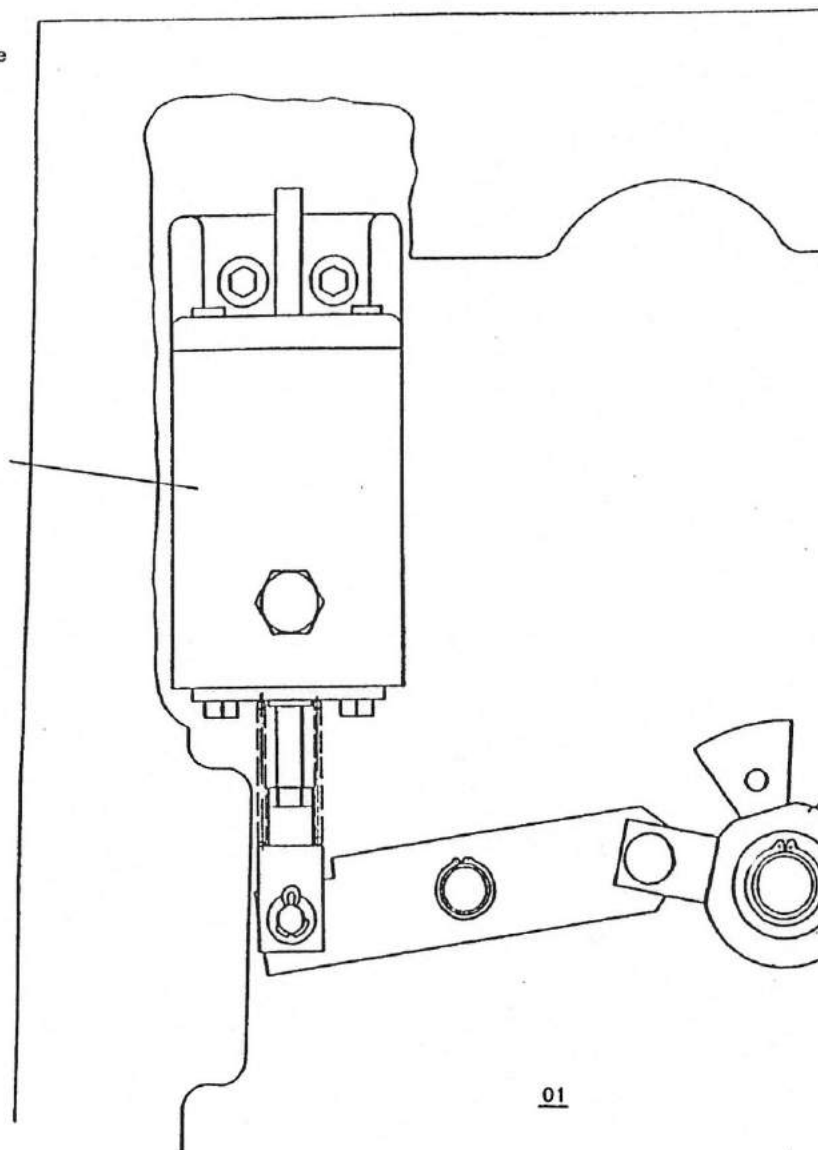


item no.	identification no.	designation
01	313.00-12576/0	vibrator locking unit, complete
02	313.01-05787/0	locking lever
03	313.00-12568/0	vibrator magnet

03

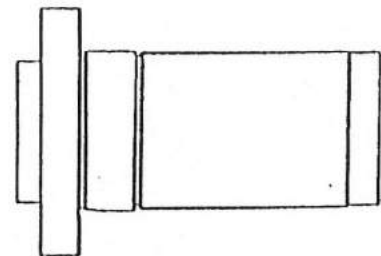
02

01

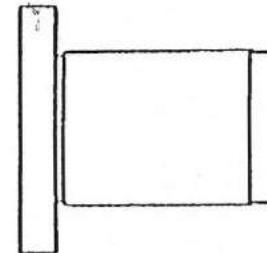


item no.	identification no.	designation
01	ink duct roller see page F 5	
02	313.02-01389/0	ink vibrator, complete
03	313.58-01169/0	ink distribution cylinder D 68,8, complete
04	313.00-13717/0	ink distribution cylinder D 100, VD/VDL complete
05	313.58-01170/1	ink distribution cylinder D 100, complete
06		
07	313.27-01025/1	flange bushing for lower ink distribution cylinder
08	313.27-01026/1	flange bushing for upper ink distribution cylinder
09	7510-100 811	shaft sealing ring DIN 3760-A 40x52x7-NBR 70
10		
11	313.00-05891/0	application roller D 63, complete 1)
12	313.00-05890/0	application roller D 68, complete 1)
13	313.00-09817/0	application roller D 75, complete 1)
14	313.00-09818/0	application roller D 80, complete 1)
15	313.42-00379/0	distribution roller D 56
16	313.49-02193/0	distribution roller D 104
17	313.42-00381/0	distribution roller D 90
18	313.49-01502/0	rider roller D 50
19	313.49-01501/0	rider roller D 63
20	313.00-12808/0	rider roller D 70
21	3021-000 203	grooved ball bearing DIN 625-6202-2 RS
22	313.49-01498/0	ink distribution cylinder D 100
23		
24	313.10-01104/0	washer
25	313.10-02643/0	washer

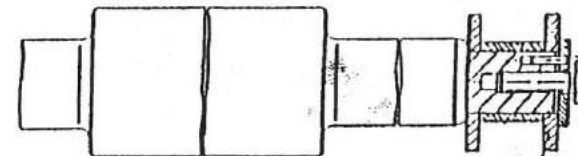
1) Inclusive of grooved ball bearing DIN 625-6202-2 RS 3021-000203



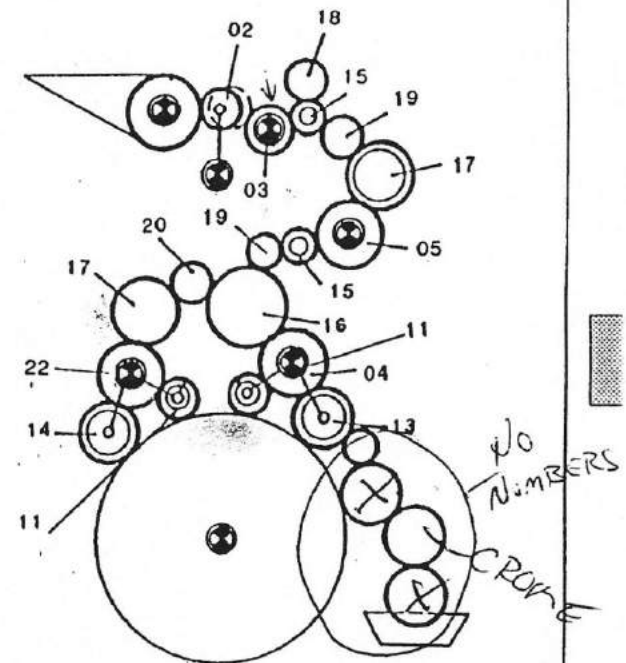
07, 09 (for 04 and 22)



08, 09 (for 03 and 05)

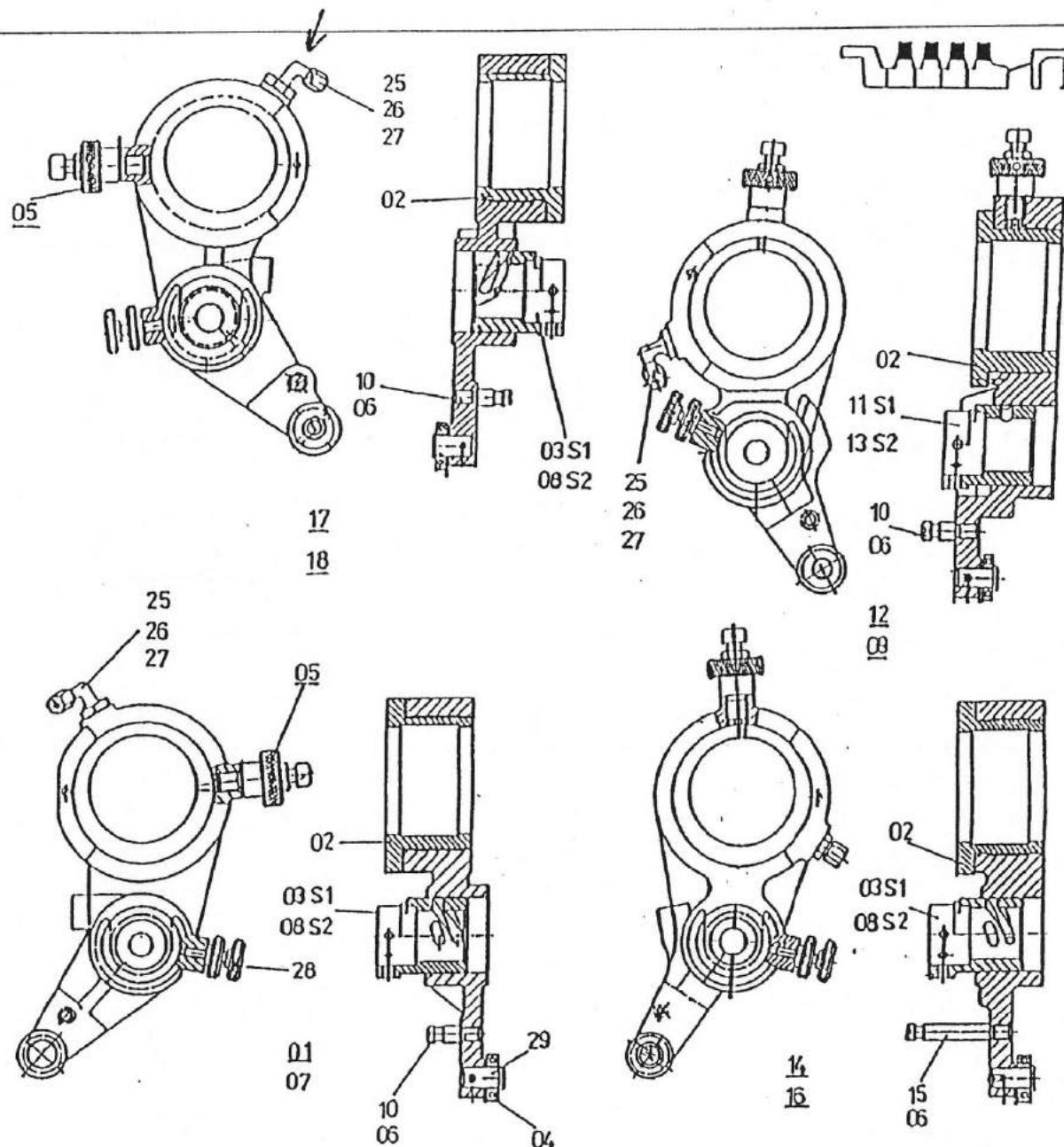


24 for 03, 05, 22
25 for 04

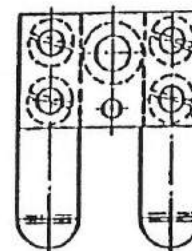


Application roller bearing

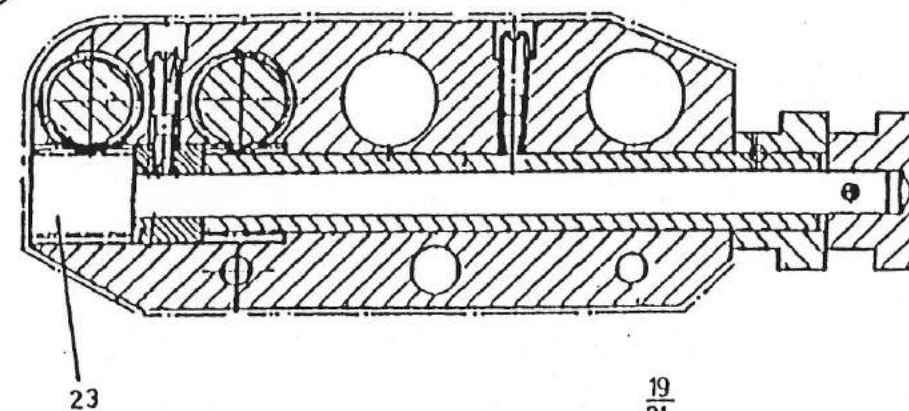
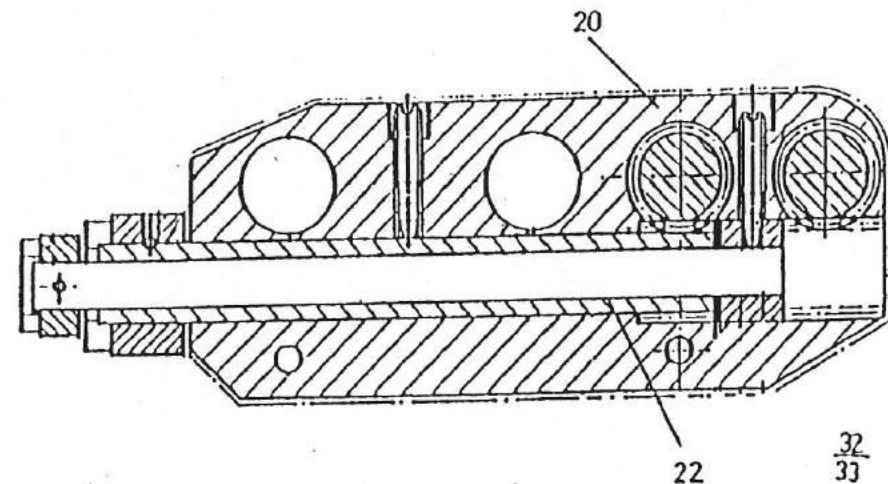
item no.	identification no.	designation
01	313.00-01081/4	bearing lever 1, side 1, complete
02	313.23-01019/0	eccentric setting element
03	313.26-00145/1	bearing bush
04	3021-000 052	grooved ball bearing DIN 625-6001
05	313.00-07725/0	clampscrew, complete
06	971.99-01003/0	tension spring for bearing lever 2.8/5 P 25.53
07	313.00-01082/4	bearing lever 1, side 2, complete
08	313.26-00146/1	bearing bush
09	313.00-01083/4	bearing lever 2, side 1, complete
10	313.05-00146/0	grubscrew
11	313.26-00148/1	bearing bush
12	313.00-01084/3	bearing lever 2, side 2, complete
13	313.26-00147/1	bearing bush
14	313.00-01085/3	bearing lever 3, side 1, complete
15	313.05-00145/0	grubscrew
16	313.00-01086/3	bearing lever 3, side 2, complete
17	313.00-01087/3	bearing lever 4, side 1, complete
18	313.00-01088/3	bearing lever 4, side 2, complete



item no.	identification no.	designation
19	313.00-04009/0	setting rest, side 1, complete
20	313.23-01024/0	eccentric element
21	313.00-04010/0	setting rest, side 2, complete
22	313.54-01017/0	setting worm
23	313.54-01018/0	setting worm
24	313.55-01004/0	helical spur gear, 20 teeth
25	7512-000 800	sealing ring A 8x11.5 TGL 0-7603 Cu
26	7241-000 001	cutler sleeve 4-10 TGL 03861 St
27	7240-020 550	fitting HV 4-10 TGL 0-2353 St
28	313.21-00195/0	knurled screw
29	313.21-01334/0	bolt
30	313.00-04014/0	setting index, complete
31	313.00-09316/0	sleeve, complete
32	313.00-09319/0	setting rest, side 1, complete
33	313.00-09320/0	setting rest, side 2, complete

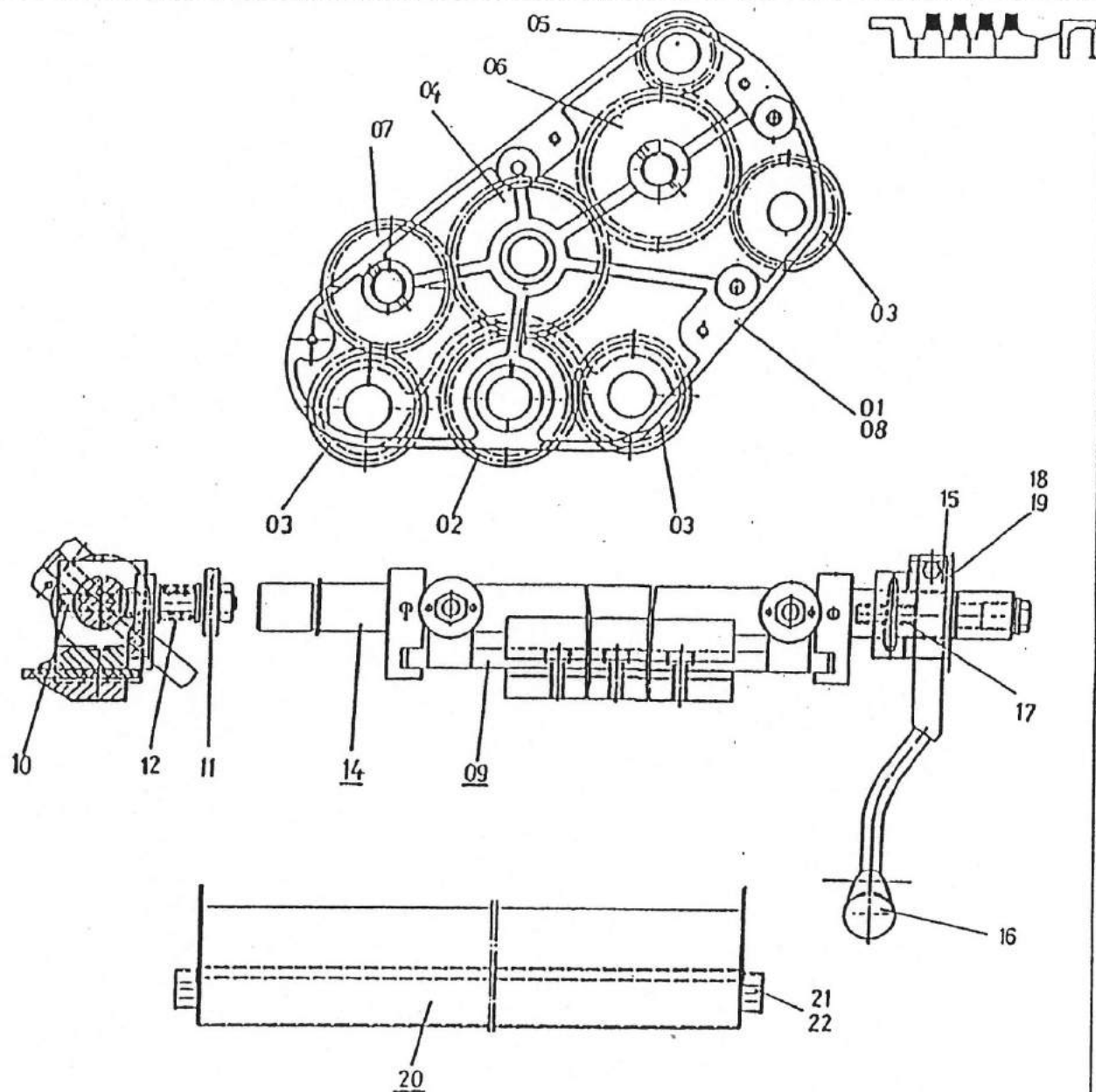


30



Inking unit gear plate, roller washing equipment

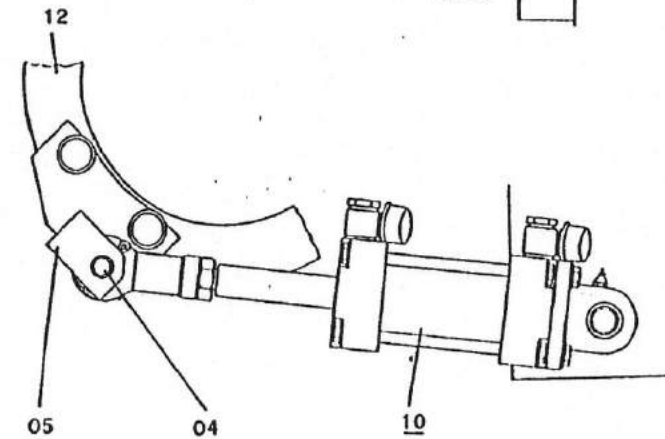
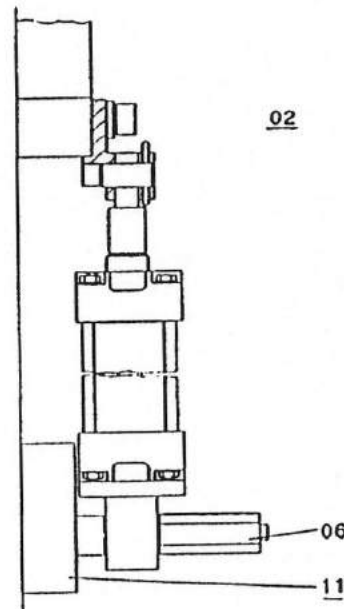
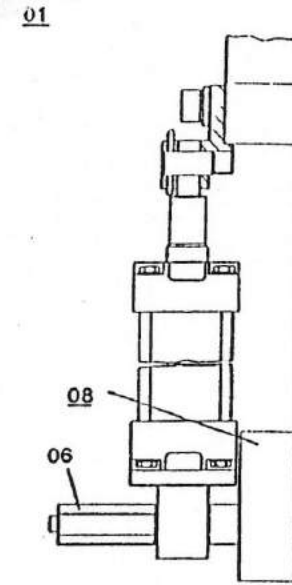
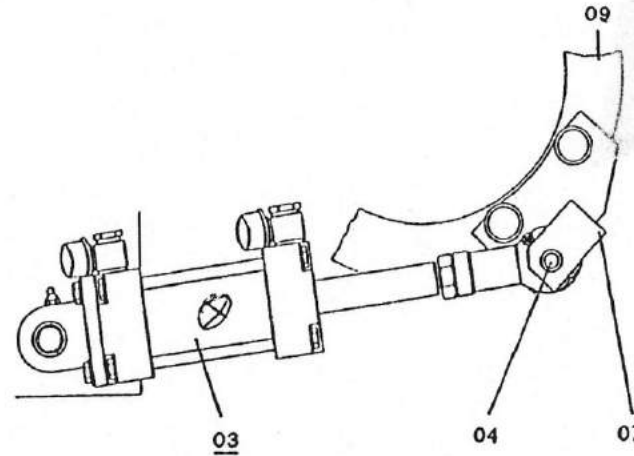
item no.	identification no.	designation
01	313.87-01361/0	gear plate
02	313.00-03935/0	driving gear, complete
03	313.58-01025/0	distribution cylinder gear, 32 teeth
04	313.58-01505/0	intermediate gear, 45 teeth
05	313.00-11257/0	distribution cylinder gear, 22 teeth
06	313.51-01148/0	intermediate gear, 37 teeth
07	313.51-01147/0	intermediate gear, 46 teeth
08	313.87-01362/0	gear plate, upper part
09	313.00-04062/1	blade bar, complete
10	313.32-01310/0	bolt
11	313.11-01139/0	knurled nut
12	2552-001 715	pressure spring C2.5 x 18 x 5.5 TGL 18395
13	313.93-00370/0	blade
14	313.00-04064/1	blade shaft, complete
15	313.00-04054/1	control hub, complete
16	3714-000 024	ball handle C 32 TGL 2950, black
17	971.99-00014/0	pressure spring 1.6/1 P 25.52
18	7510-100 591	shaft sealing ring DIN-A 28x40x7-NBR 70
19	313.26-01086/1	bearing, side 2
20	313.01-01377/0	washing tray
21	313.85-01039/1	holder, side 2
22	313.85-01040/1	holder, side 1



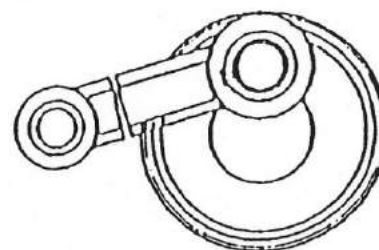
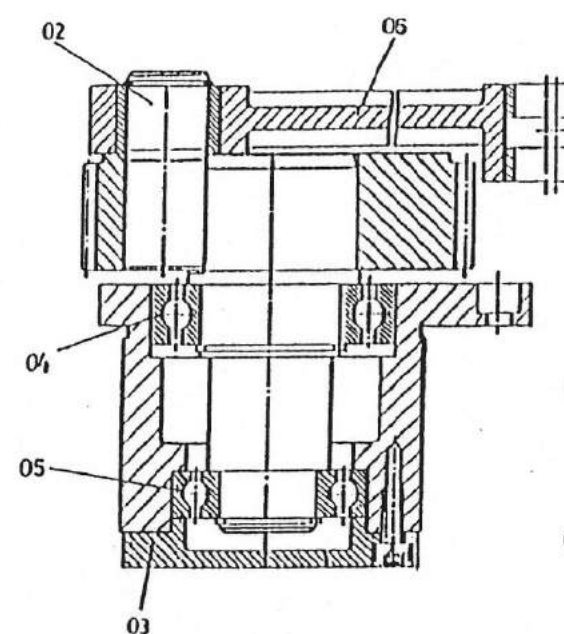
47th Form ASSEMBLY

Roller deactivation

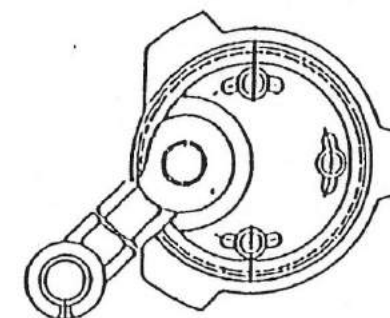
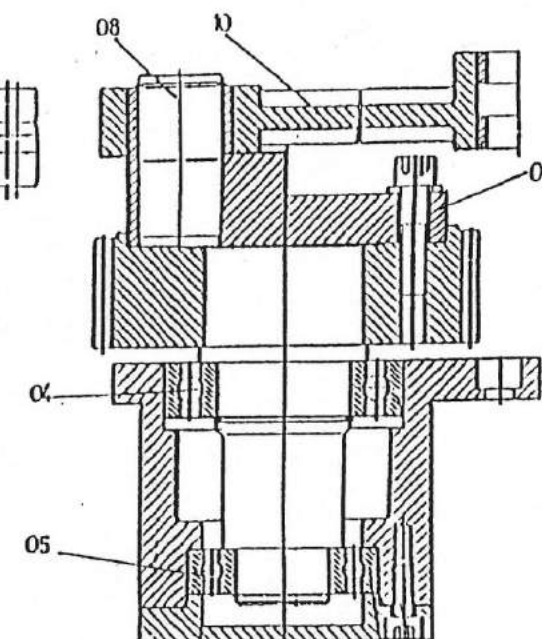
item no.	identification no.	designation
01	313.06-16165/0	pneumatic application roller deactivation, side 1
02	313.06-16166/0	pneumatic application roller deactivation, side 2
03	313.00-13172/0	working cylinder, side 1
04	313.30-01865/0	bolt
05	313.68-01158/0	bearing rest, side 2
06	313.36-01459/0	bolt
07	313.68-01157/0	bearing rest, side 1
08	313.00-12677/0	roller bearing, side 1
09	313.19-02197/0	roller deactivation curve, side 1
10	313.00-13173/0	working cylinder, side 2
11	313.00-12678/0	roller bearing, side 2
12	313.19-02198/0	roller deactivation curve, side 2



item no.	Identification no.	designation
01	313.00-00974/0	rotating link drive, complete (pressure ON)
02	313.04-00001/0	rotating link bolt
03	313.26-00012/0	bearing bush
04	3021-000 108	grooved ball bearing DIN 625-6210
05	3021-000 105	grooved ball bearing DIN 625-6207
06	313.01-00265/0	rotating link rod
07	313.00-03380/0	rotating link drive, complete (pressure OFF)
08	313.55-01002/0	rotating link bolt
09	313.13-01001/0	eccentric disk
10	313.01-00264/0	rotating link rod



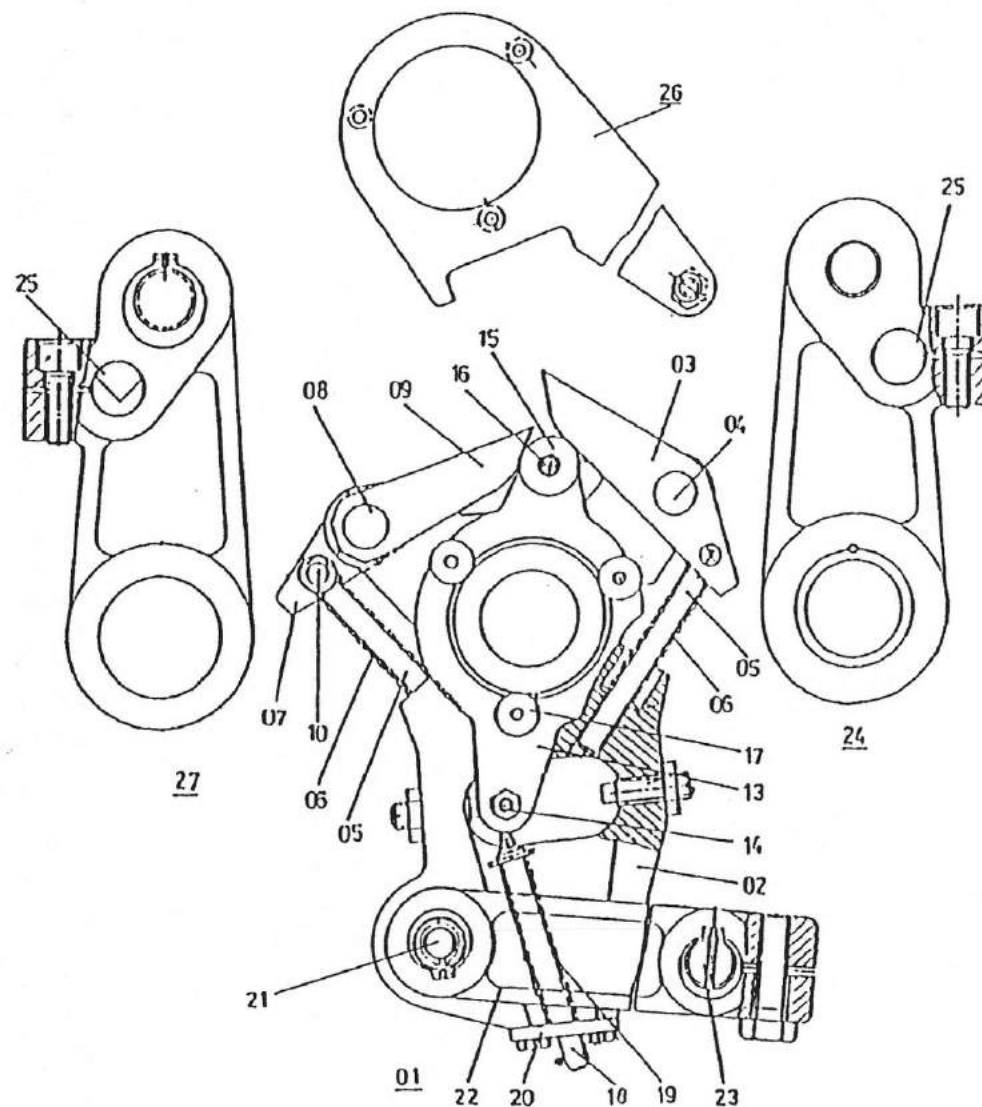
01



07

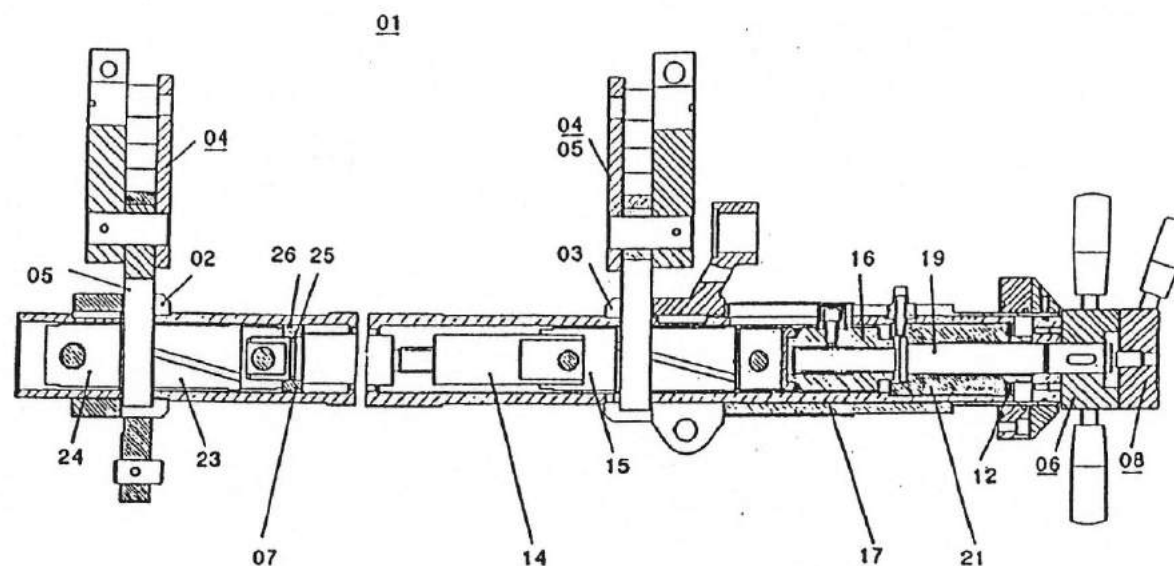
Pressure deactivation - Latch lever

item no.	Identification no.	designation
01	313.00-03771/0	latch lever, complete
02	313.76-01129/0	latch lever
03	313.64-01320/0	latch
04	313.31-01160/0	latch bolt
05	313.36-01035/0	spring bar
06	971.99-00016/0	pressure spring 0.8/1 P 25.52
07	313.60-01221/0	latch
08	313.32-01077/0	latch bolt
09	313.64-01316/0	sliding lever
10	313.37-01014/0	bolt in latch
13	313.68-01004/0	latch control lever
14	313.21-01148/0	stop bolt
15	3021-000 003	grooved ball bearing DIN 625-609
16	313.32-01076/0	bolt
17	313.10-00137/0	roller
18	313.41-01083/0	spring bar
19	971.99-00017/0	pressure spring 1/6 P 25.52
20	313.62-01225/0	plate
21	313.31-01159/0	bolt
22	313.76-01074/0	coupler
23	313.33-01012/0	eccentric bolt
24	313.00-03723/0	knife blade lever, bottom, complete
25	313.30-01081/1	knife blade bolt
26	313.00-03993/0	stop lever, complete
27	313.00-03722/0	knife blade lever, top, complete



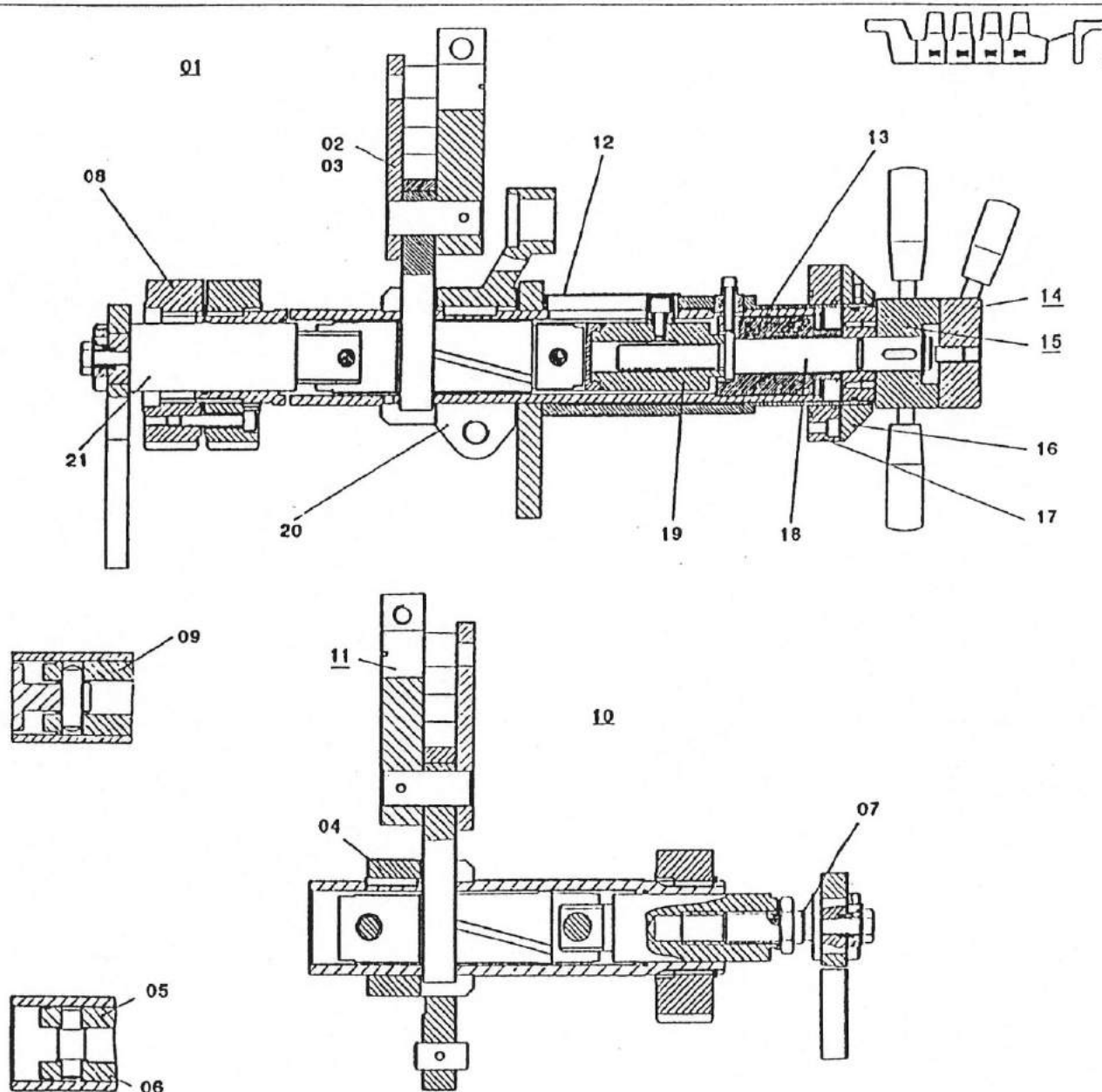


item no.	identification no.	designation
01	313.00-12780/1	pressure deactivation shaft, complete
02	313.76-01130/1	pressure deactivation lever, side 2
03	313.78-01044/1	pressure deactivation lever, side 1
04	313.00-03995/0	pair of pull connecting bars, complete
05	313.64-01318/1	block
06	313.00-12783/0	control lever, complete
07	313.10-01991/0	sealing ring
08	313.00-12781/0	clamping lever, complete
11		
12	7515-304 973	O-ring 48x3-N 70 B
14	313.35-01024/0	intermediate element
15	313.19-01878/0	half-piston
16	313.31-01315/0	threaded portion
17	313.36-01511/1	sleeve
19	313.42-01663/0	screw
21	313.26-01739/1	tube bottom
23	313.19-01879/0	half-piston
24	313.19-01880/0	half-piston
25	7515-302 843	O-ring 22x3-N 70 B
26	7515-304 043	O-ring 36x3-N 70 B

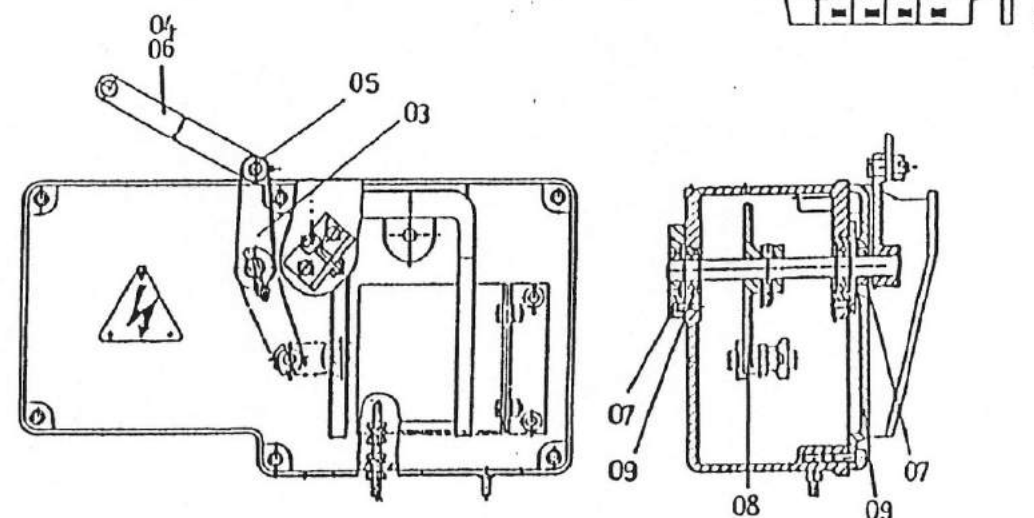


Pressure deactivation shaft

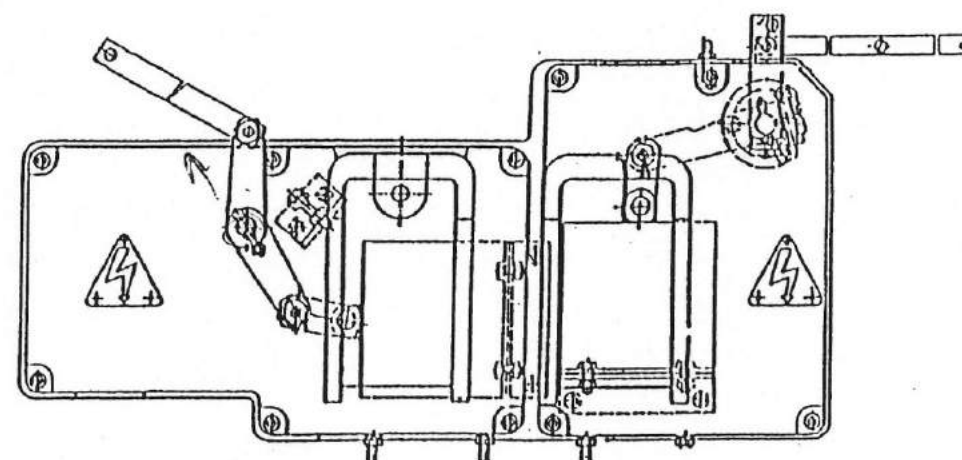
Item no.	identification no.	designation
01	313.00-12859/0	pressure deactivation shaft, side 1
02	313.00-03995/0	pair of pull connecting bars, complete
03	313.64-01318/1	block
04	313.76-01130/1	pressure deactivation lever, side 2
05	313.19-01879/0	half-piston
06	313.19-01880/0	half-piston
07	313.27-01271/0	setscrew
08	313.19-01493/0	roothed segment
	313.00-12781/0	clamping lever, complete
09	313.19-01878/0	half-piston
10	313.00-11505/0	pressure deactivation shaft, side 2
11	313.00-03995/0	pair of pull connecting bars
12	313.98-01153/0	covering sleeve
13	313.26-01756/0	tube bottom
14	313.00-12781/0	clamping lever
15	313.00-12783/0	control lever
16	313.19-02310/0	graduated ring
17	313.19-02308/0	indicator ring
18	313.32-01983/0	screw
19	313.31-02214/0	threaded portion
20	313.78-01044/1	pressure deactivation lever, side 1
21	7515-304 363	O-ring 40 x 3 N 70 B



item no.	identification no.	designation
01	313.00-00678/0	housing, complete (feed printing unit)
02	313.00-05180/0	housing, complete (follower printing unit)
03	313.76-01136/0	lever
04	313.66-01277/0	coupler
05	313.21-00012/0	bolt
06	971.99-01013/0	tension spring 1.2/8 P 25.53
07	7510-100 131	shaft sealing ring DIN 3760-A 12x22x7-NBR 70
08	313.76-01261/0	lever
09	3021-000 052	grooved ball bearing DIN 625-6001



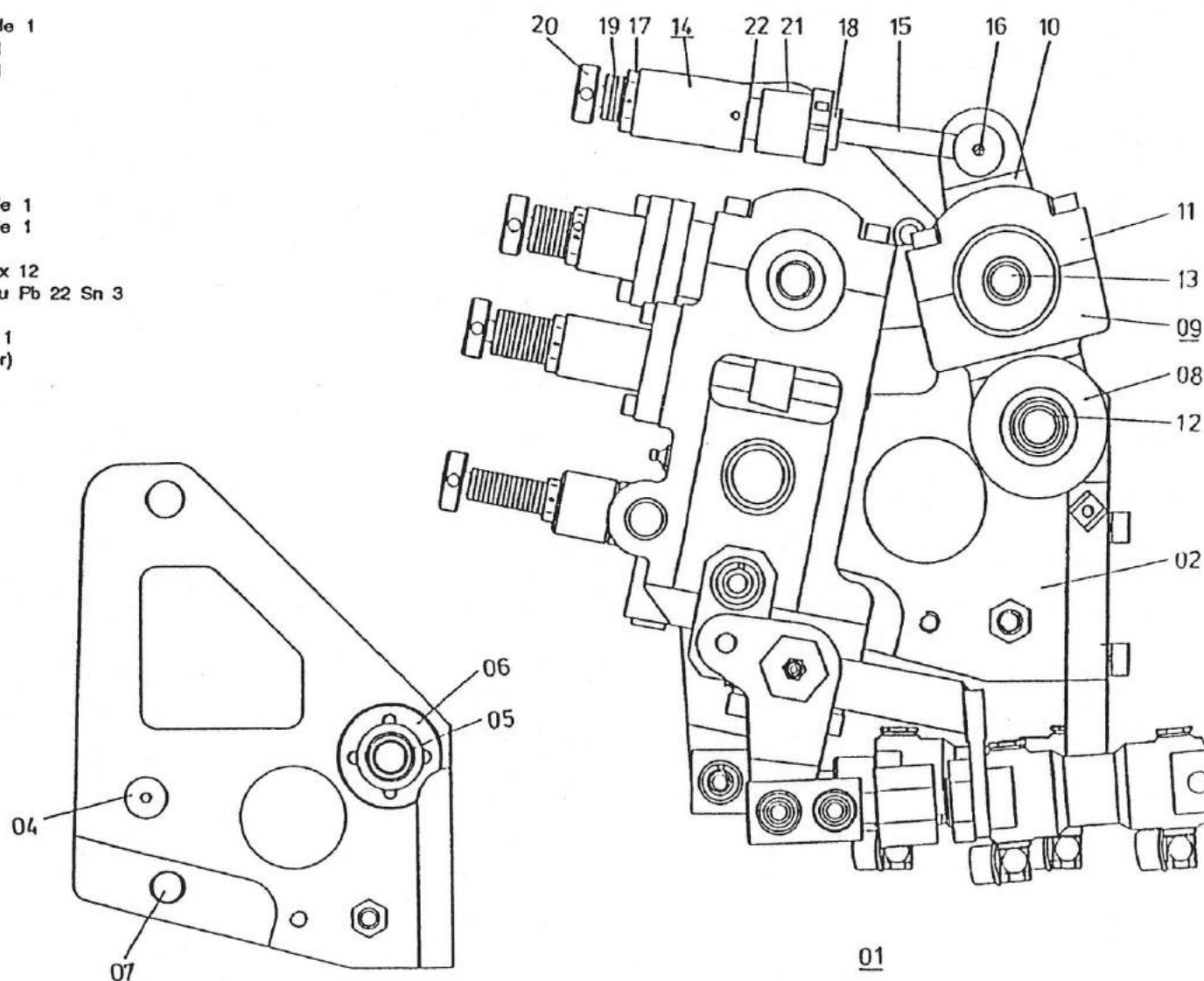
02



01

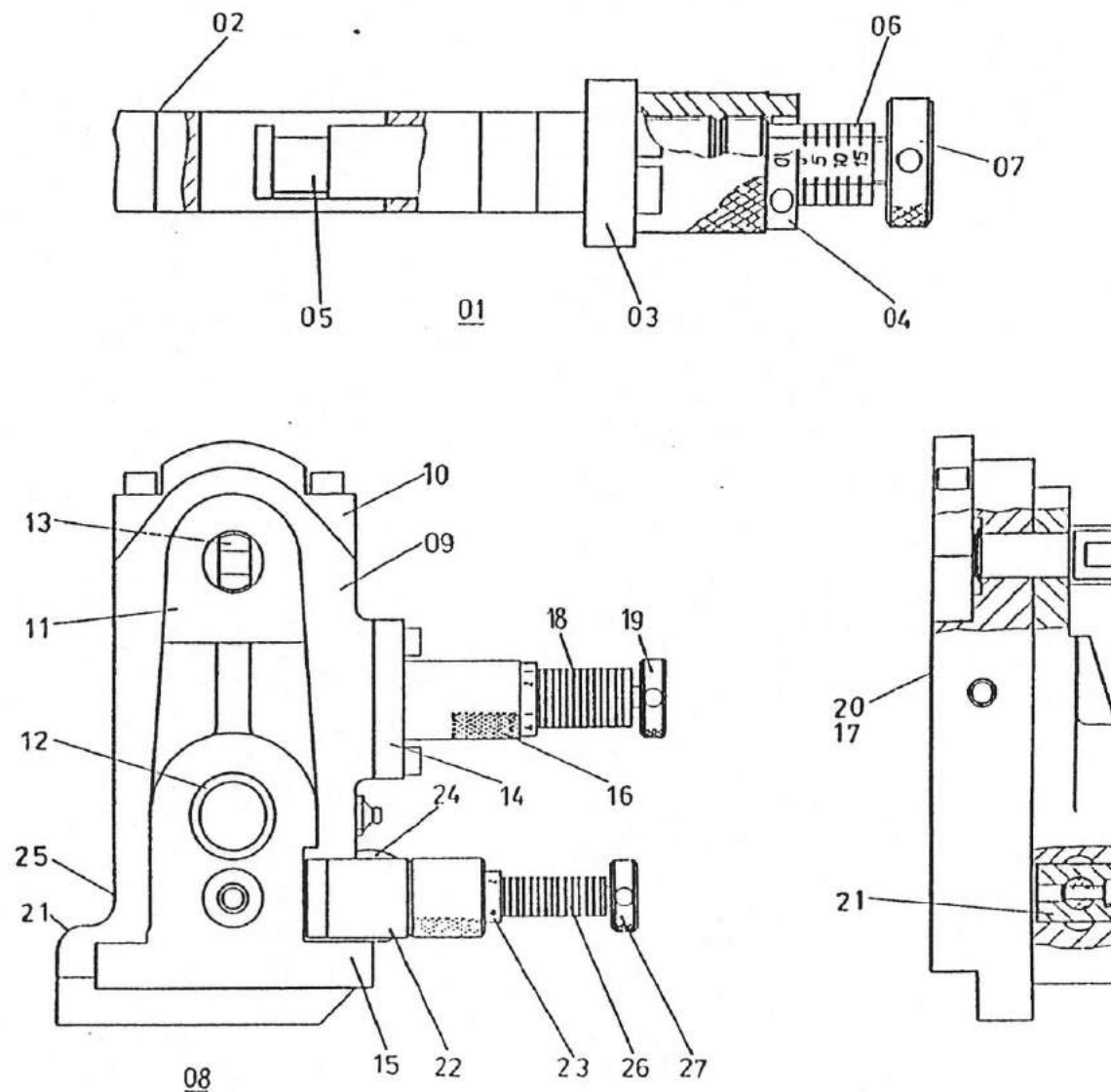


item no.	identification no.	designation
01	313.00-12677/0	roller bearing, side 1
02	313.00-12675/0	baseplate, side 1
03	313.87-01271/0	baseplate, side 1
04	313.36-01188/0	bolt
05	313.32-01551/1	flanged bolt
06	313.10-01971/0	washer
07	313.20-02103/0	special bolt
08	313.51-01486/1	gear
09	313.00-08799/0	bearing lever, side 1
10	313.72-01096/0	bearing lever, side 1
11	313.60-02921/0	cover
12	3013-240 073	bushing H 25/32 x 12 TGL 6558-GVB-Cu Pb 22 Sn 3
13	313.13-01572/0	bolt, side 1
14	313.00-09844/0	setting unit, side 1 (application roller)
15	313.32-01566/0	setscrew
16	313.21-01548/0	bolt, side 1
17	313.19-01641/0	setting bush
18	313.19-01643/0	clamping ring
19	313.19-01650/0	indicator sleeve
20	313.02-01649/0	clampscrew
21	313.31-01565/0	block, side 1
22	313.10-02215/0	washer



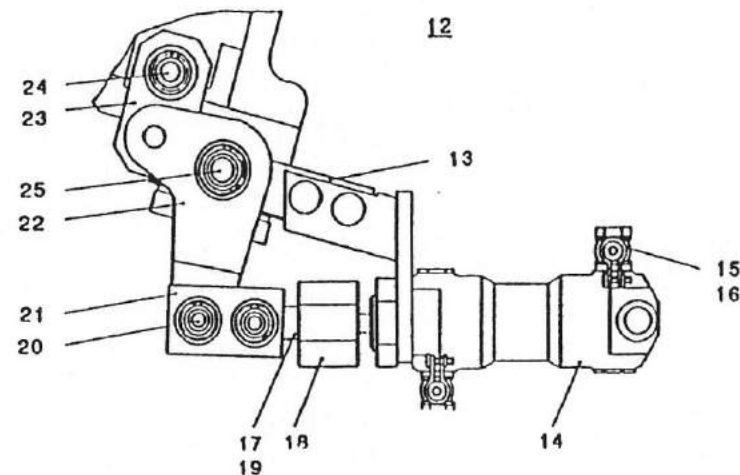
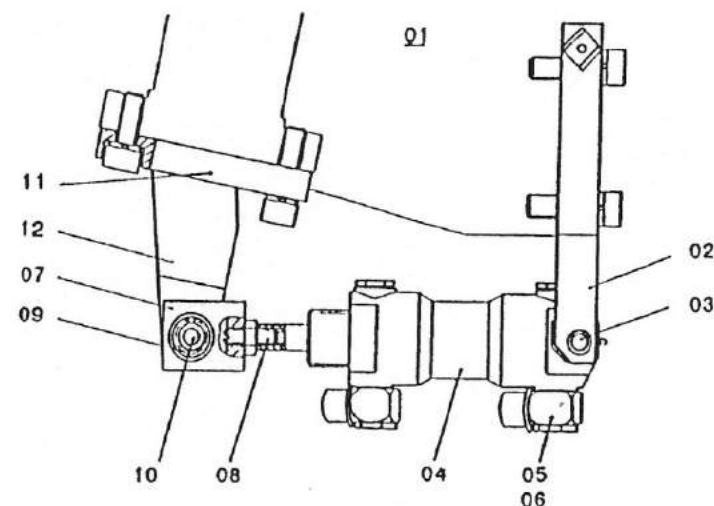
Damping roller bearing

item no.	identification no.	designation
01	313.00-09336/1	drawbar, side 1 and side 2
02	313.01-03876/0	drawbar
03	313.15-01096/0	cover
04	313.19-01636/0	setting bush
05	313.32-01567/0	setscrew
06	313.19-01639/0	indicator sleeve
07	313.02-01648/0	clampscrew
08	313.00-09334/1	lever, side 1 (rear end)
09	313.73-01046/0	bearing lever, side 1
10	313.60-02418/0	cover
11	313.71-01041/0	swivelling lever
12	3013-240 073	bushing H 25/32 x 12 TGL 6558-GVB Cu Pb 22 Sn 3
13	313.31-01568/1	bolt, side 1
14	313.15-01095/0	cover
15	971.30-00004/0	safety pin 7 TGL 46-0158
16	313.19-01634/0	setting bush
17	313.32-01565/0	setscrew
18	313.19-01635/0	indicator sleeve
19	313.02-01650/0	clampscrew
20	313.60-02416/1	stop
21	313.25-01147/0	bolt
22	313.21-01909/0	block
23	313.19-01631/0	setting bush
24	313.10-02214/0	ring
25	313.32-01563/0	setscrew
26	313.19-01632/0	indicator sleeve
27	313.21-01911/0	clampscrew



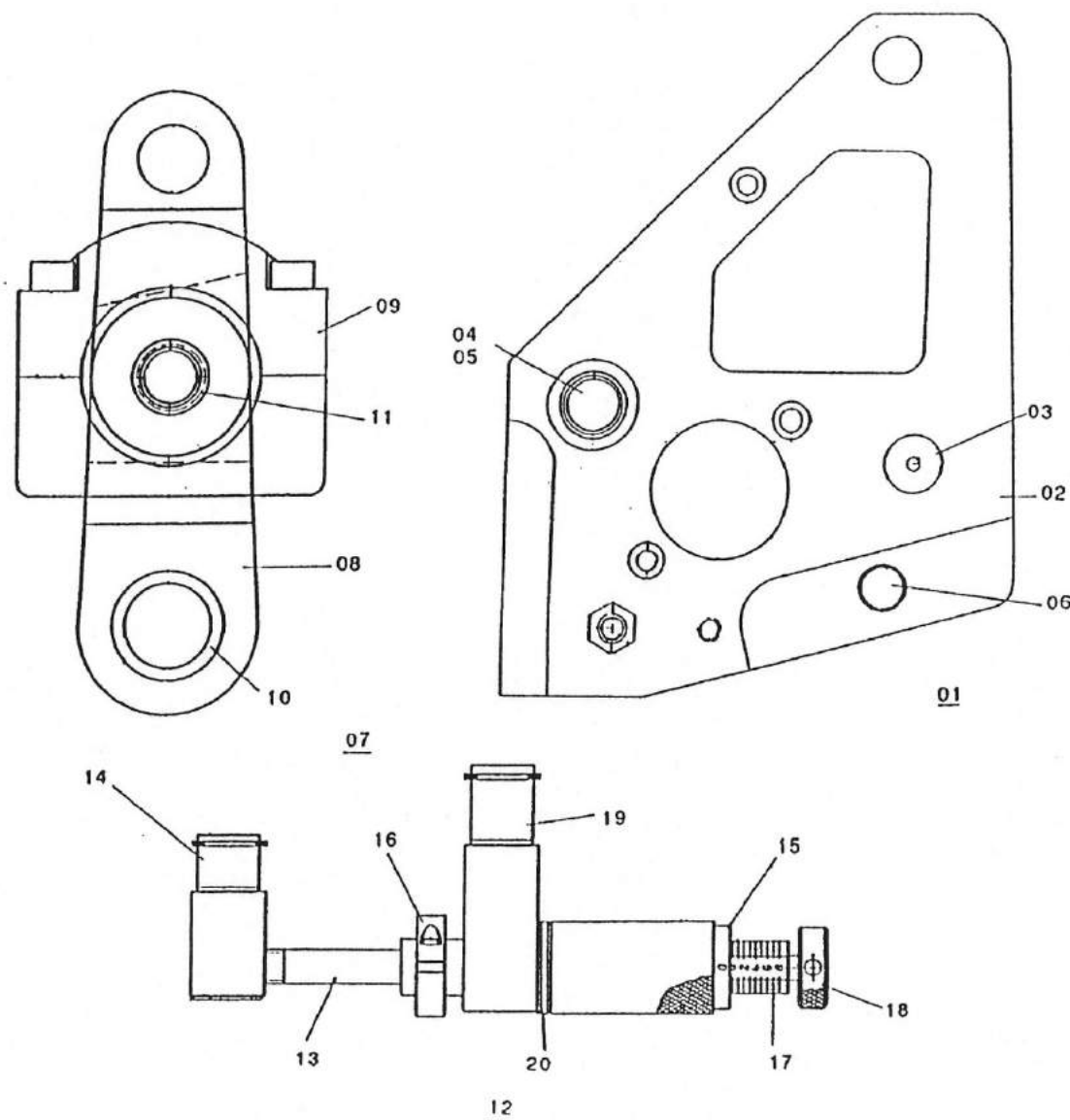


item no.	identification no.	designation
01	313.00-12673/0	pneumatic setting, side 1
02	313.00-04110/0	holder, side 1
03	313.30-01686/1	bolt
04	7722-512 080	Mecman-type cylinder 1300 DV-32 x 32
05	7247-000 114	L-type quick-action screwing fixture LCK-1/4-PK-6-KU
06	7521-000 006	rubber cap 15/19 PS 75.21
07	313.60-02419/0	connecting rod head
08	313.30-01690/0	threaded piece
09	3021-000 019	grooved ball bearing DIN 625-608-2 Z
10	313.30-01440/0	bolt
11	313.01-03502/0	hinged part, side 1
12	313.00-09350/3	end-of-work control, side 1
13	313.01-03507/3	holder, side 1
14	7722-512 080	Mecman-type cylinder 1300 DV-32 x 32
15	7247-000 114	L-type quick-action screwing fixture LCK-1/4-PK-6-KU
16	7521-000 006	rubber cap 15/19 PS 75.21
17	313.60-02903/0	block
18	313.25-01142/0	stop sleeve
19	313.30-01690/0	threaded piece
20	313.30-01440/0	bolt
21	313.03-01227/0	connecting link
22	313.78-01183/0	angular lever
23	313.00-08792/0	connecting link
24	313.30-01435/0	bolt
25	313.21-01914/0	bearing bolt



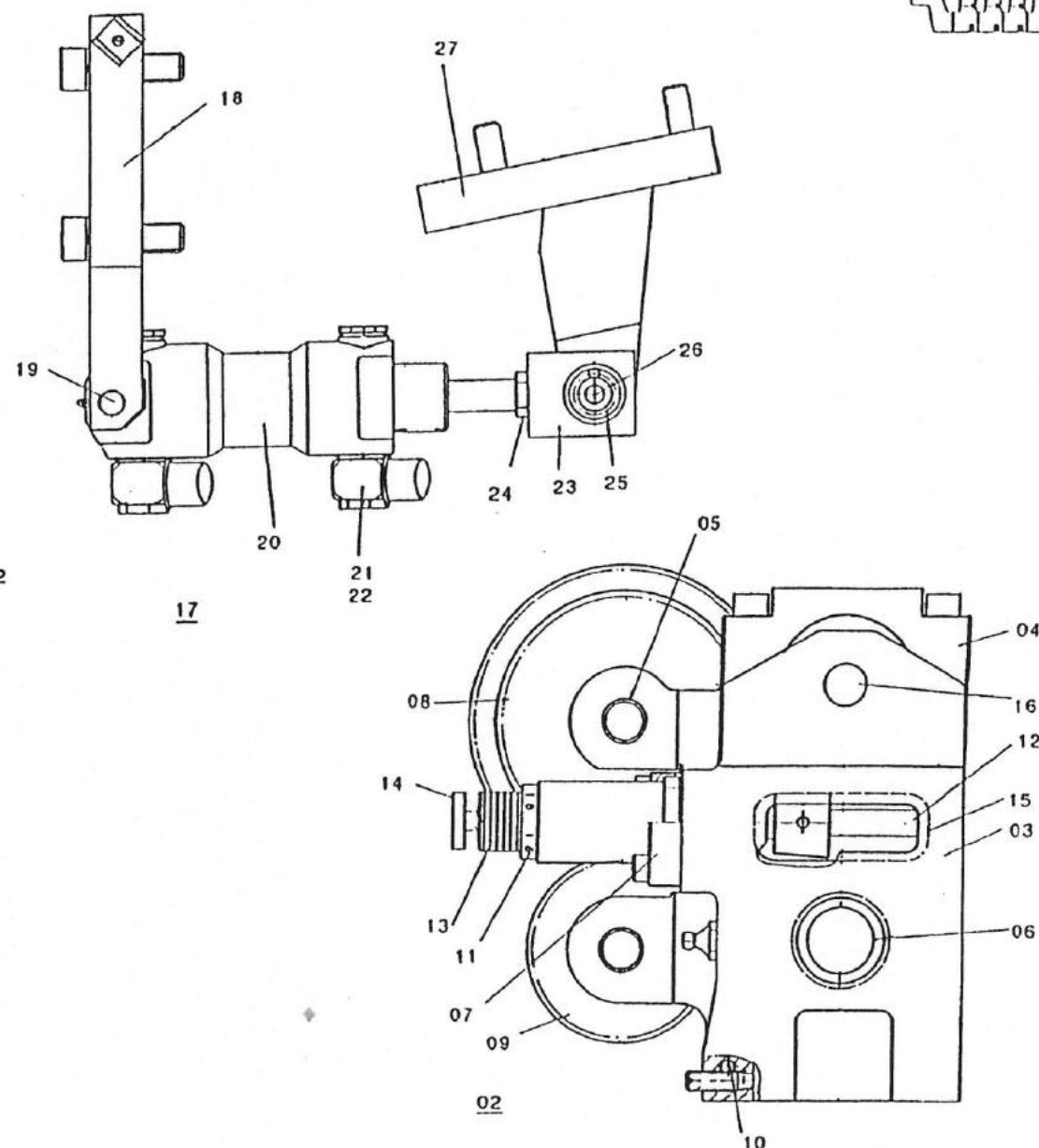
Damping roller bearing, side 2

Item no.	Identification no.	designation
01	313.00-12674/0	baseplate, side 2
02	313.87-01272/0	baseplate
03	313.36-01188/0	bolt
04	313.31-01579/0	bolt
05	313.10-01971/0	washer
06	313.20-02103/0	special bolt
07	313.00-08798/0	bearing lever, side 2
08	313.72-01095/0	bearing lever, side 2
09	313.60-02418/0	cover
10	3013-240 074	bushing H 25/32 x 18 TGL 6558-GVB-Cu Pb 22 Sn 3
11	313.31-01573/0	bolt, side 2
12	313.00-09845/0	setting unit, side 2 (application roller)
13	313.32-01566/0	setscrew
14	313.21-01549/0	bolt, side 2
15	313.19-01641/0	setting bush
16	313.19-01643/0	clamping ring
17	313.19-01650/0	indicator sleeve
18	313.02-01649/0	clampscrew
19	313.31-01566/0	block, side 2
20	313.10-02215/0	washer



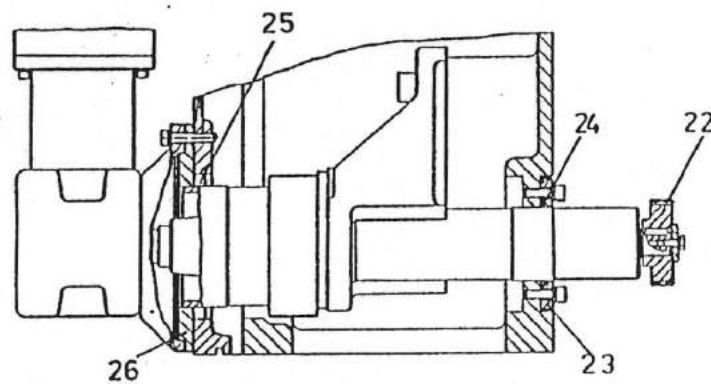
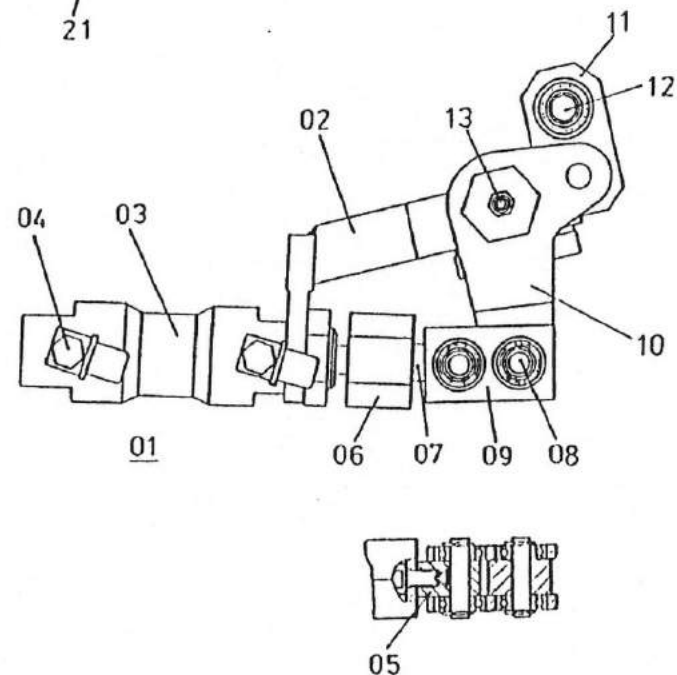
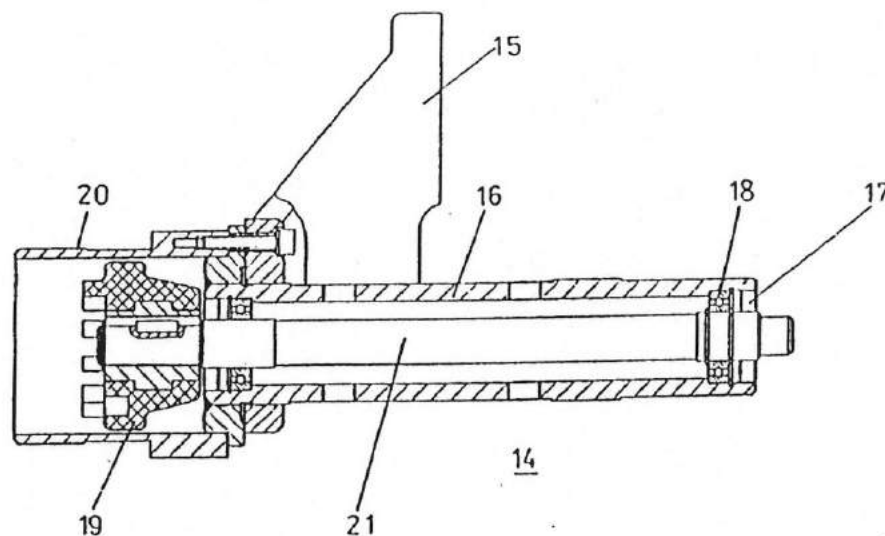


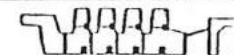
item no.	Identification no.	designation
01		
02	313.00-09335/1	bearing lever, side 2
03	313.73-01047/0	bearing lever, side 2
04	313.60-02915/0	cover
05	313.37-01076/0	bolt
06	31013-240 073	bushing H 25/32 x 12 TGL 6558 GVB CuPb 22 Sn 3
07	313.15-01094/0	cover
08	313.00-09311/0	double gear 1
09	313.00-09309/0	double gear 3
10	971.30-00004/0	safety pin 7 TGL 46-0158
11	313.19-01634/0	setting bush
12	313.32-01564/0	setscrew
13	313.19-01635/0	indicator sleeve
14	313.02-01650/0	clampscrew
15	313.60-02417/1	stop, side 2
16	313.20-02037/1	bolt, side 2
17	313.00-12676/0	pneumatis setting, side 2
18	313.60-02939/0	holder, side 2
19	313.30-01686/1	bolt
20	7722-512 080	Mecman-type cylinder 1300 DV-32 x 32
21	7247-000 114	L-type quick-action screwing fixture LCK-1/4-PK-6-KU
22	7521-000 006	rubber cap 15/19 PS 75.21
23	313.60-02419/0	connecting rod head
24	313.30-01690/0	threaded piece
25	3021-000 019	grooved ball bearing DIN 625-608-2 Z
26	313.30-01440/0	bolt
27	313.01-03505/0	hinged part, side 2



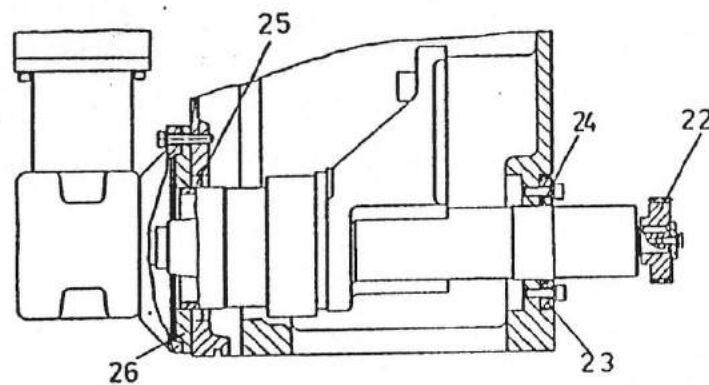
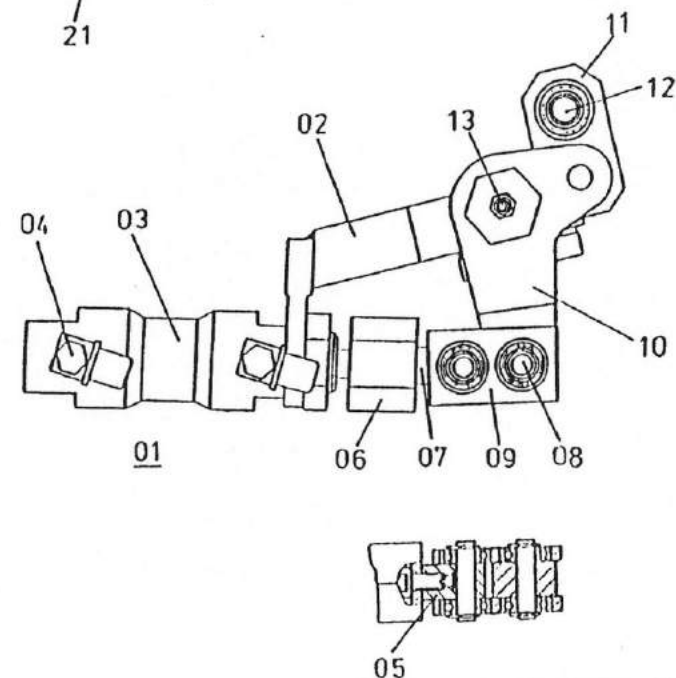
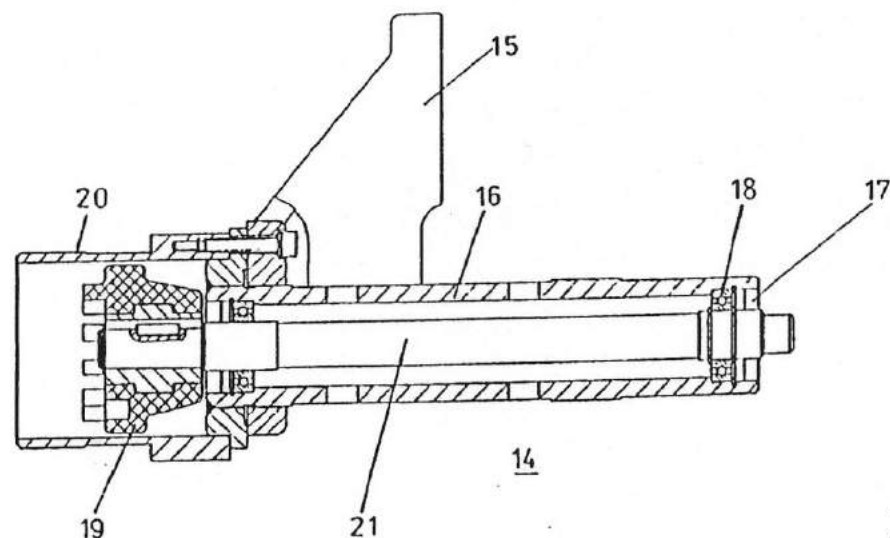


Item no.	Identification no.	designation
01	313.00-09332/3	end-of-work control, side2
02	313.01-03503/3	holder, side 2
03	7722-512 080	Mecman-type cylinder 1300 DV-32 x 32
	7247-000 114	L-type quick-action screwing fixture LCK-1/4-PK-6-KU
04	7521-000 006	rubber cap 15/19 PS 75.21
05	313.60-02903/0	block
06	313.25-01142/0	stop sleeve
07	313.25-01142/0	threaded piece
08	313.30-01440/0	bolt
09	313.03-01227/0	connecting link
10	313.78-01183/0	angular lever
11	313.00-08792/0	connecting link
12	313.30-01435/0	bolt
13	313.21-01914/0	bearing bolt
14	313.00-09327/0	bearing rest, complete
15	313.72-01094/0	bearing rest
16	313.37-01075/0	tube
17	7510-000 031	shaft seal D 25 x 47 x 7 TGL 16454
18	3021-000 056	grooved ball bearing DIN 625-6005
19	3616-032 025	elastic claw clutch 4-20-25 TGL 23252
20	313.21-01904/0	flange
21	313.47-01085/0	shaft
22	313.51-01680/0	gear
23	313.10-01964/0	plate
24	7515-002 720	O-ring 60 x 5 TGL 6365-WS 1.957
25	7510-000 080	shaft seal D 100 x 120 x 10 TGL 10454
26	313.10-01189/0	plate

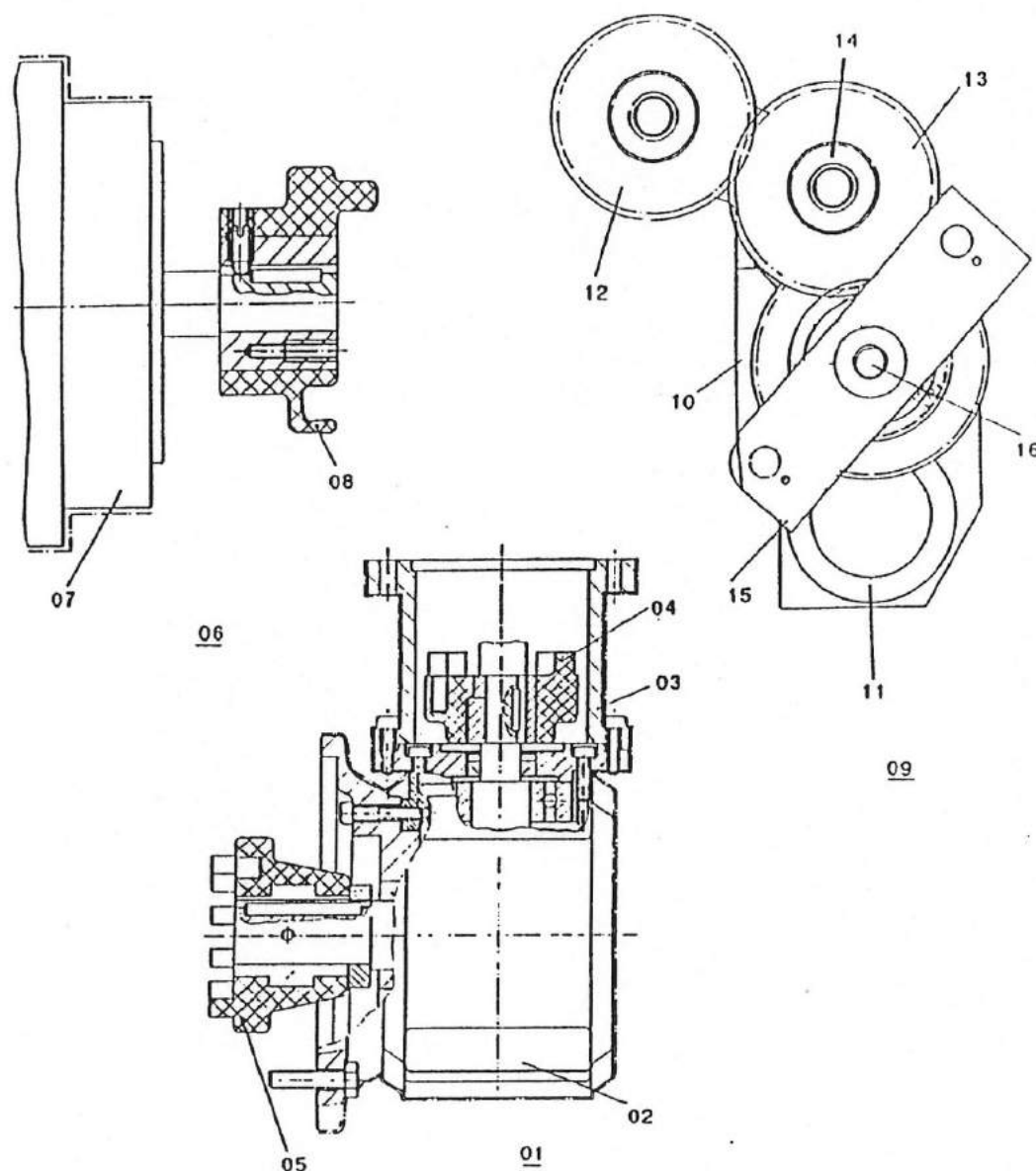


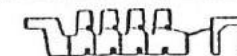


item no.	identification no.	designation
01	313.00-09332/3	end-of-work control, side2
02	313.01-03503/3	holder, side 2
03	7722-512 080	Mecman-type cylinder 1300 DV-32 x 32
	7247-000 114	L-type quick-action screwing fixture LCK-1/4-PK-6-KU
04	7521-000 006	rubber cap 15/19 PS 75.21
05	313.60-02903/0	block
06	313.25-01142/0	stop sleeve
07	313.25-01142/0	threaded piece
08	313.30-01440/0	bolt
09	313.03-01227/0	connecting link
10	313.78-01183/0	angular lever
11	313.00-08792/0	connecting link
12	313.30-01435/0	bolt
13	313.21-01914/0	bearing bolt
14	313.00-09327/0	bearing rest, complete
15	313.72-01094/0	bearing rest
16	313.37-01075/0	tube
17	7510-000 031	shaft seal D 25 x 47 x 7 TGL 16454
18	3021-000 056	grooved ball bearing DIN 625-6005
19	3616-032 025	elastic claw clutch 4-20-25 TGL 23252
20	313.21-01904/0	flange
21	313.47-01085/0	shaft
22	313.51-01680/0	gear
23	313.10-01964/0	plate
24	7515-002 720	O-ring 60 x 5 TGL 6365-WS 1.957
25	7510-000 080	shaft seal D 100 x 120 x 10 TGL 10454
26	313.10-01189/0	plate

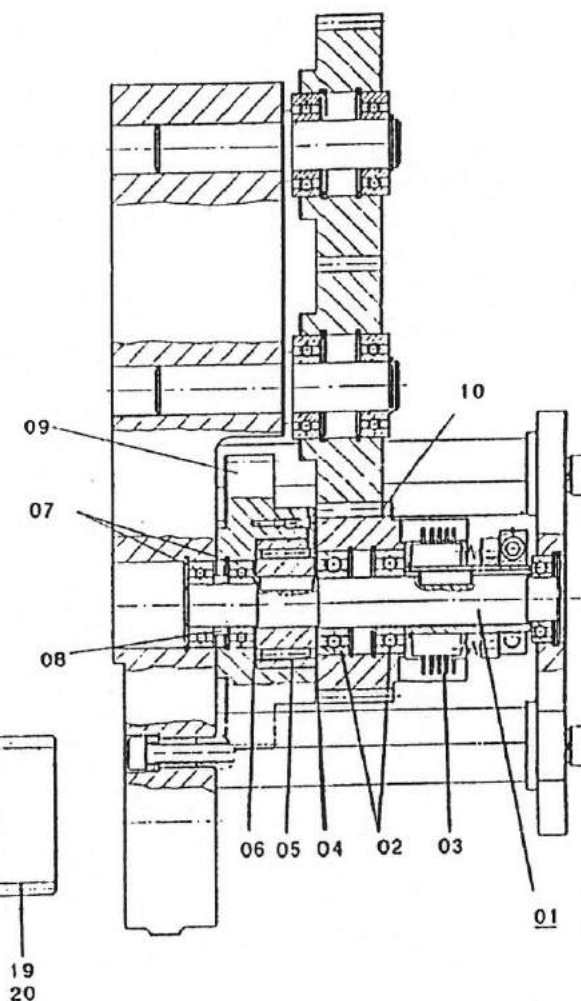
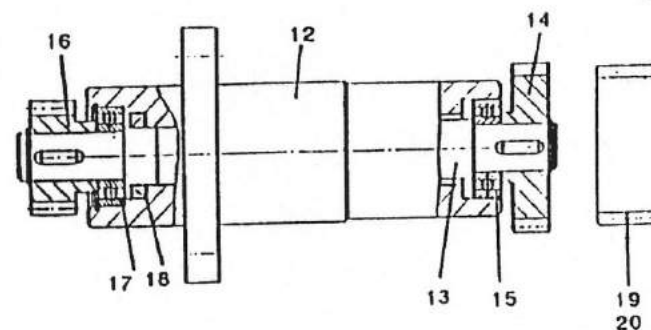


item no.	identification no.	designation
01	313.00-09602/1	gear unit, complete
02	313.08-00609/0	worm gear unit 12 V 1-50 x 15 C.L.J.S. GWS 11024
03	313.28-01169/0	fastening flange
04	313.05-01248/0	clutch
05	313.05-01242/1	clutch
06	313.00-11433/0	motor, complete
07	313.05-01451/0	motor RMS 10
08	313.05-01248/0	clutch
09	313.00-09314/0	gear plate
10	313.03-01231/1	gear plate
11	313.36-01190/0	bolt
12	313.51-01469/0	gear
13	313.51-01468/0	gear
14	3021-000 055	grooved ball bearing DIN 625-6004
15	313.62-02525/0	plate
16	313.32-01552/0	shaft





item no.	identification no.	designation
01	313.00-09314/0	shaft of gear plate
02	3021-000 055	grooved ball bearing DIN 625-6004
03	3604-129 020	safety disk clutch S 5 x 2.5-20 TGL 20774
04	2324-000 154	precision washer 18 x 0.5 TGL 10404-St
05	3622-000 002	clamping roller clutch A 4 TGL 27862
06	2324-000 146	precision washer 17 x 1 TGL 10404-St
07	3021-000 054	grooved ball bearing DIN 625-6003
08	3128-001 406	washer A 17 x 24 x 6 TGL 28-46
09	313.51-01467/0	gear
10	313.51-01465/0	gear
11	313.00-09318/0	intermediate shaft
12	313.27-01098/1	flange
13	313.42-01407/1	shaft
14	313.51-01463/0	gear
15	3021-000 381	grooved ball bearing DIN 625-6004-2 RS
16	313.51-01464/1	gear
17	3021-000 055	grooved ball bearing DIN 625-6004
18	7510-000 027	shaft sealing ring 25 x 35 x 7 TGL 16454
19	313.51-01466/1	gear
20	3021-000 381	grooved ball bearing DIN 625-6004-2 RS

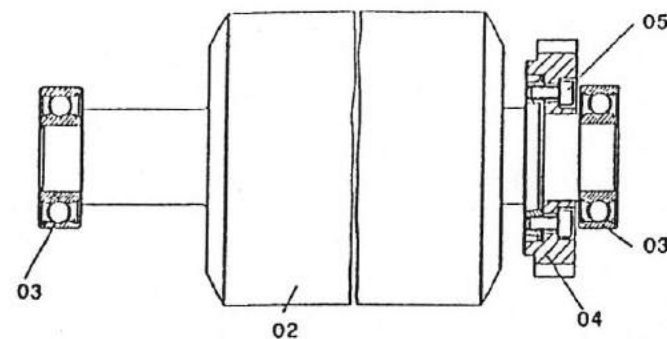


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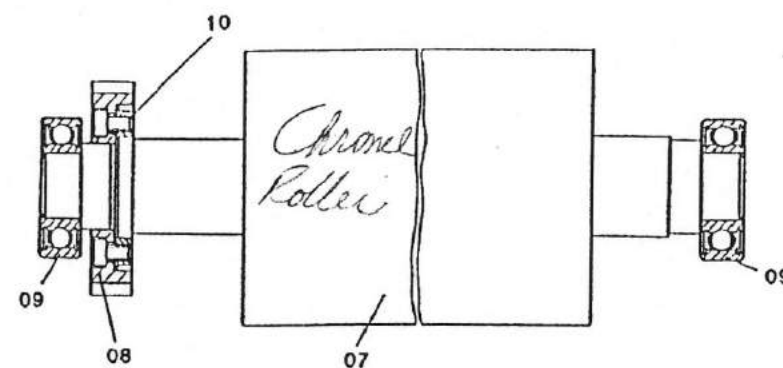
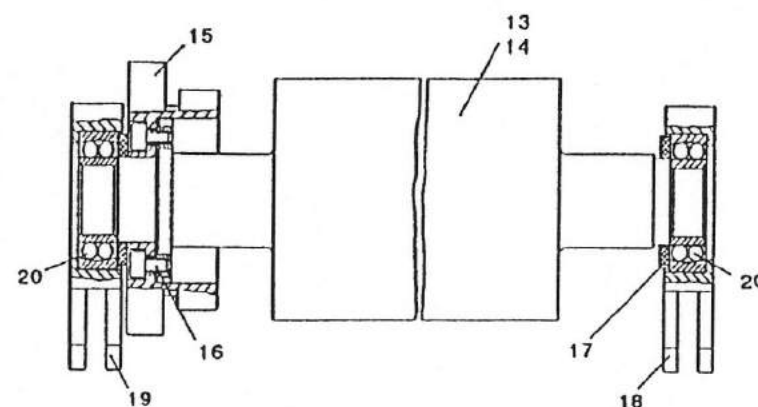


Item no.	identification no.	designation
01	313.00-08782/1	application roller
02	313.49-02118/0	application roller
03	3021-000 206	grooved ball bearing DIN 625-6205-2 RS
04	313.51-01462/0	gear, 33 teeth
05	313.21-01547/0	fillister screw
06	313.00-08783/0	transfer roller
07	313.42-01403/0	roller body
08	313.51-01460/0	gear, 30 teeth
09	3021-000 206	groove ball bearing DIN 625-6205-2 RS
10	313.21-01547/0	fillister screw
11	313.00-08784/1	dosing roller, complete
12	313.00-11772/0	varnish dosing roller, complete
13	313.49-02121/0	dosing roller
14	313.49-02156/0	varnish dosing roller
15	313.52-01010/0	gear, 31 teeth/39 teeth
16	313.21-01547/0	fillister screw
17	313.98-01641/0	seal
18	313.62-02515/1	sliding block, side 1
19	313.62-02516/1	sliding block, side 2
20	3023-000 011	self-aligning ball bearing DIN 6300-1205

01



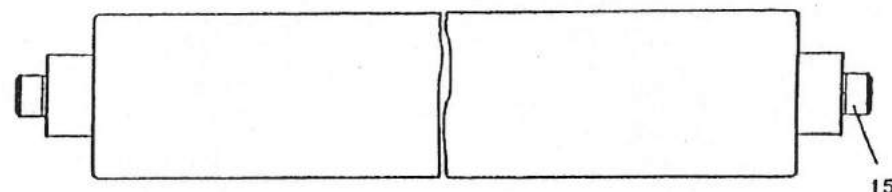
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11
12

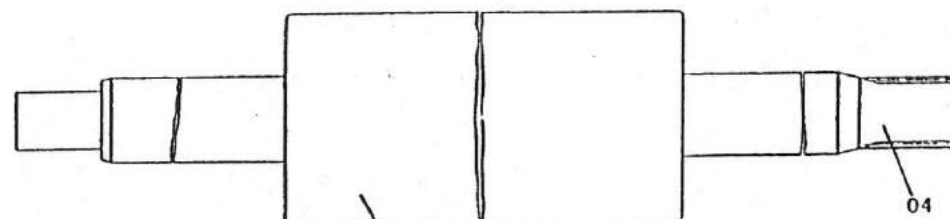
Ink distribution cylinder / Bridge roller



item no.	identification no.	designation
01	313.94-02626/0	angular plate
02	313.00-07262/0	ink distribution cylinder
03	313.45-01236/0	cylinder body
04	313.00-09313/0	cylinder shaft
05	313.21-01543/0	bushing
06	3021-000 429	grooved ball bearing DIN 625-60,10-2 RS
07	2324-000 336	precision washer 50 x 1 TGL 10404-St
08	313.26-01257/0	annular bushing
09	3021-000 428	grooved ball bearing DIN 625-6009-2 RS
10	313.10-01104/0	washer
11	313.20-01135/0	intermediate bushing
12	313.10-00191/0	end plate
13	313.00-09828/0	bridge roller
14	313.42-01288/0	bridge roller
15	3021-000 202	grooved ball bearing DIN 625-6201-2 RS



14



03

02

04

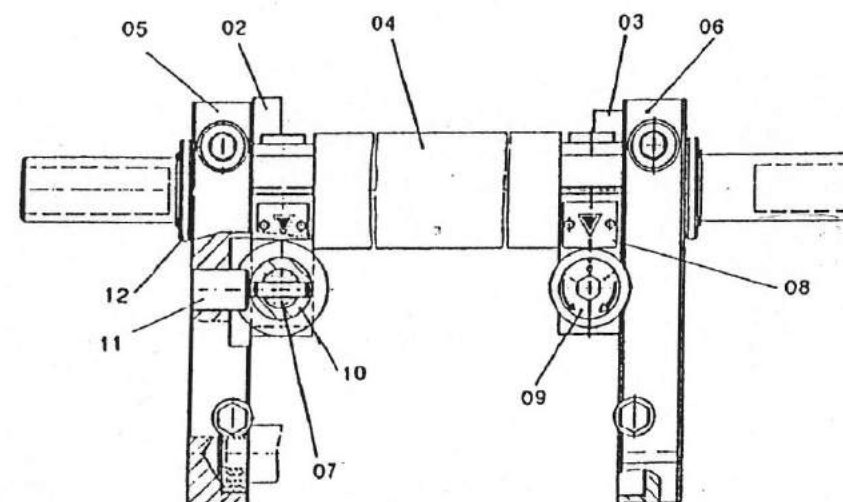
05 09
06 10
07 11
08 12



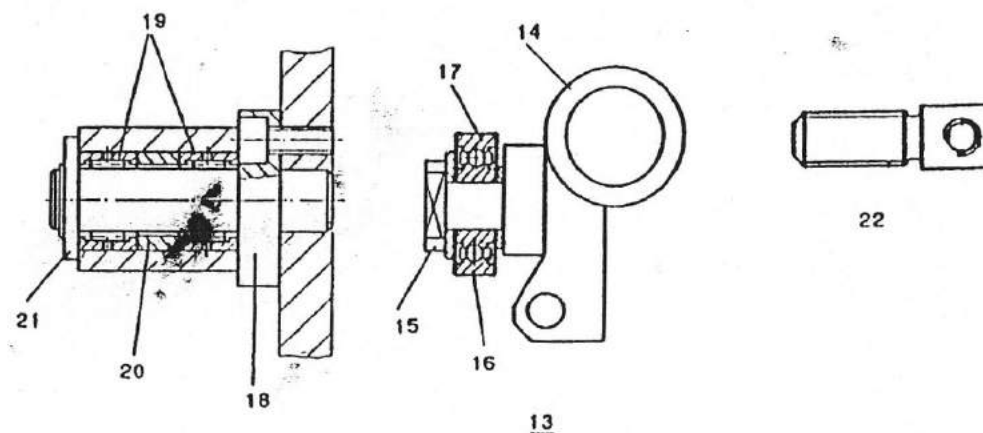
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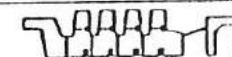
item no.	identification no.	designation
01	313.00-09827/0	bridge roller bearing
02	313.63-01382/0	bearing plate, side 1
03	313.63-01383/0	bearing plate, side 2
04	313.42-01410/0	crossbeam
05 X	313.64-02370/0	bearing lever, side 1
06 X	313.64-02551/0	bearing lever, side 2
07	313.36-01191/0	screw
08	313.69-01591/0	plate
09	313.19-01649/0	plate
10	313.22-01186/0	grooved nut
11	313.20-02104/0	bolt
12	971.10-00009/0	washer 25 P 23.23
13	313.00-09346/1	bearing, side 1
14	313.01-03511/1	bearing, side 2
15	2431-000 029	bolt DIN 1445-12 H 9 13 x 14
16	3021-000 202	grooved ball bearing DIN 625-6201-2 RS
17	2324-000 094	precision washer DIN 988-12 x 0.5
18	313.11-01183/0	bearing bolt
19	3020-000 028	needle bearing RNA 4900 TGL 3889
20	3128-001 210	ring A 15 x 22 x 10 TGL 28-46
21	313.10-01974/0	washer
22	313.31-01551/0	bolt



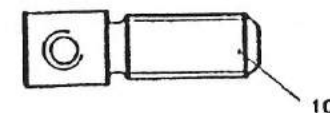
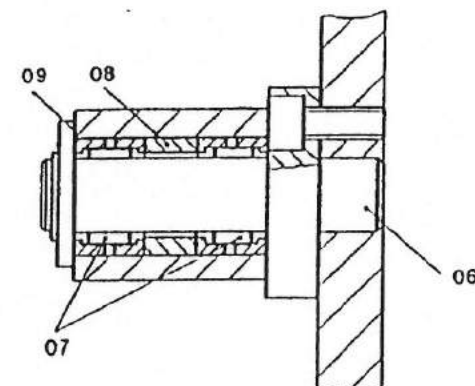
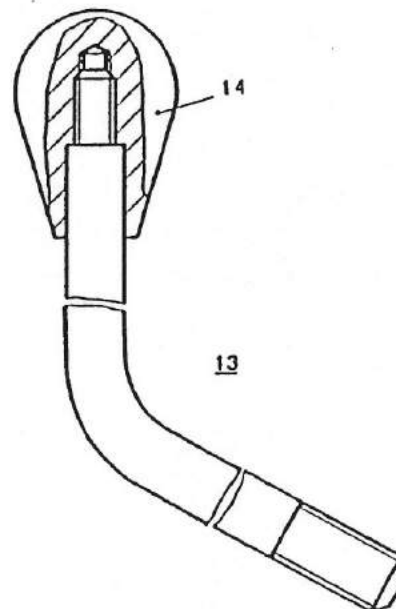
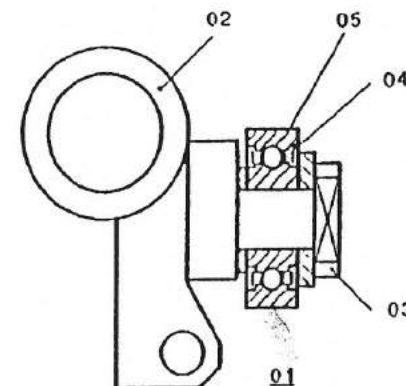
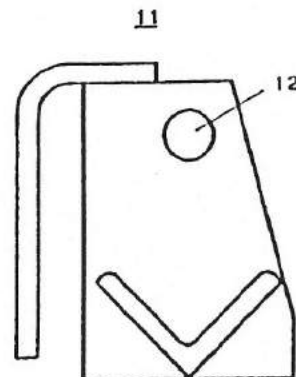
Q1



Roller bearing

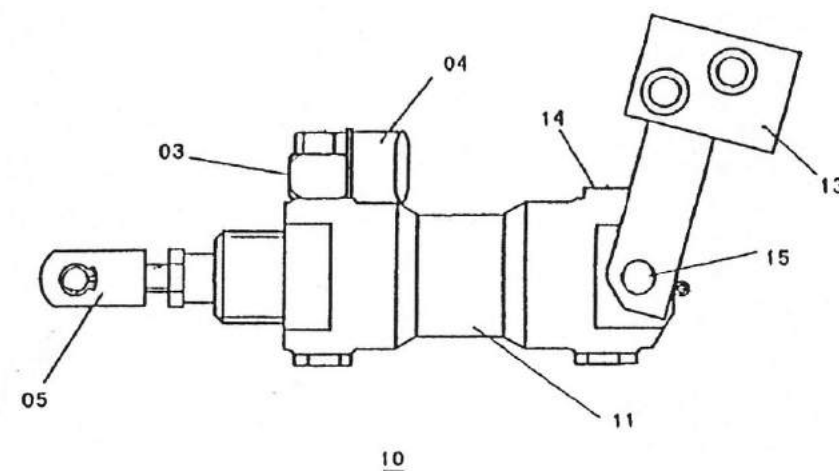
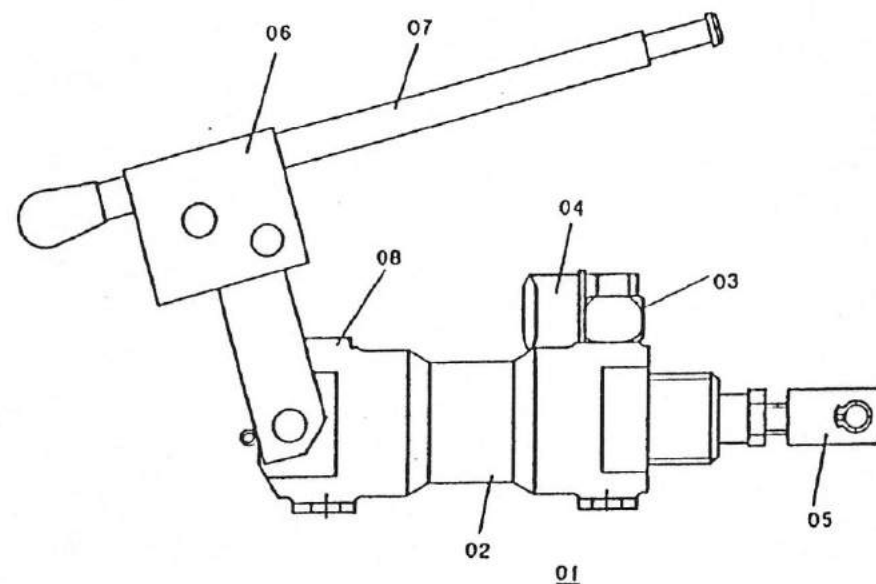


item no.	identification no.	designation
01	313.00-09347/1	bearing, side 1
02	313.01-03510/1	bearing, side 2
03	2431-000 029	bolt DIN 1445-12 H9 13 x 14
04	3021-000 202	grooved ball bearing DIN 625-6201-2 RS
05	2324-000 094	precision washer DIN 988-12 x 0.5
06	313.22-01183/0	bearing bolt
07	3020-000 028	needle bearing RNA 4900 TGL 3889
08	3128-001 210	ring A 15 x 22 x 10 TGL 28-46
09	313.10-01974/0	washer
10	313.31-01551/0	bolt
11	313.01-03532/0	angle
12	971.21-00010/0	fitting screw 10 f7 x 8 P 21.31
13	313.00-09348/0	handle bar
14	3174-000 024	ball handle C 32 TGL 2950

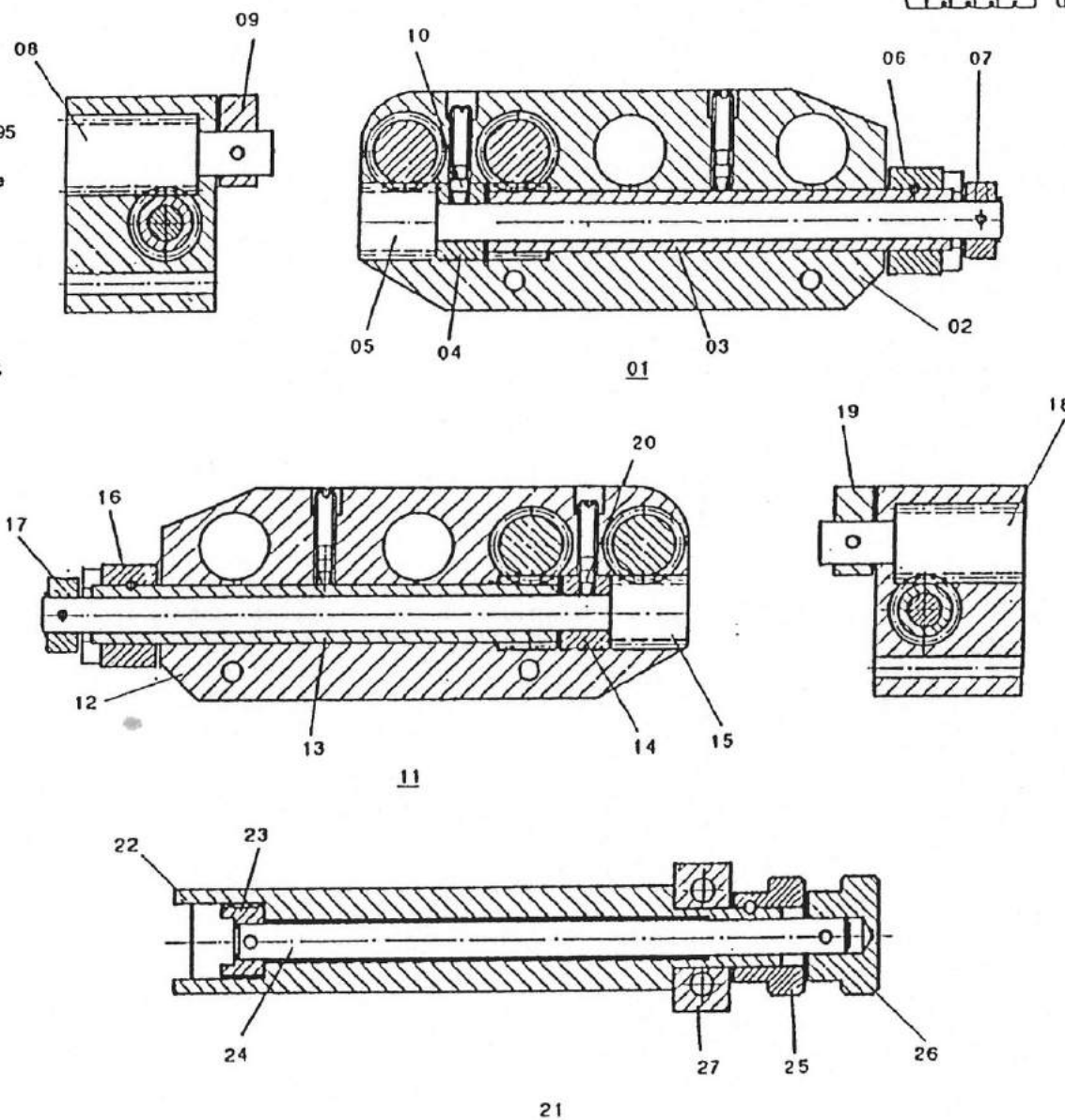




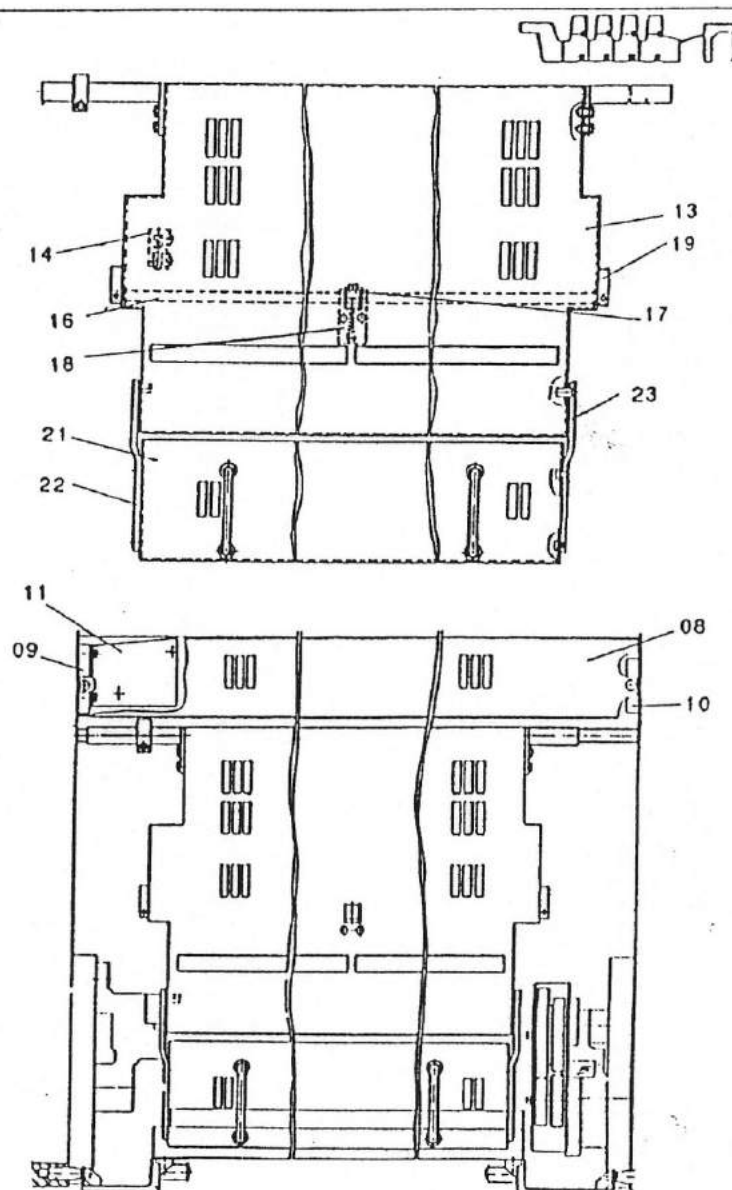
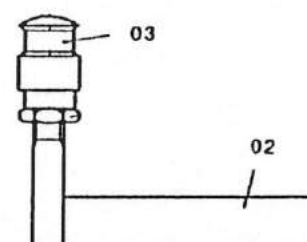
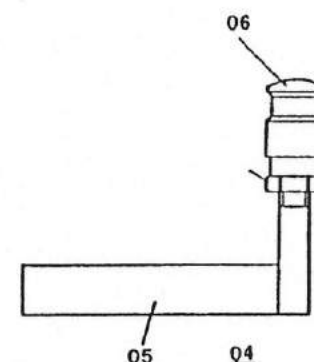
item no.	identification no.	designation
01	313.00-09325/2	working cylinder, side 1
02	7722-512 080	Mecman-type cylinder 1300 DV-32 x 32
03	7247-000 114	L-type quick-action screwing fixture LCK-1/4-PK-6-KU
04	7521-000 006	rubber cap 15/19 PS 75.21
05	7722-519 780	Mecman-type fork clutch SF-12
06	313.01-03515/1	block, side 1
07	313.91-01236/0	screw
08	313.20-02108/0	screw plug
09	313.30-01686/0	bolt
10	313.00-09326/2	working cylinder, side 2
11	7722-512 080	Mecman-type cylinder 1300 DV-32 x 32
12	7247-000 114	L-type quick-action screwing fixture LCK-1/4-PK-6-KU
13	313.01-03514/1	block, side 2
14	313.20-02108/0	screw plug
15	313.30-01686/1	bolt



item no.	identification no.	designation
01	313.00-10053/0	valve, complete
02	7515-306 223	O-ring 70x3-N 70 B
03	2552-001 227	pressure spring C' 1.4 x 15 x 5.5 TGL 18395
04	313.02-01596/0	control lever, complete
05	313.00-10030/0	sheet smoothen for perfecting, complete
06	971.93-00189/0	hose 40 x 150 PS 16.10 C
07	313.06-12238/0	shifting element (1 set)
08	313.00-08812/0	valve, complete
09	7515-304 023	O-ring 36x2-N 70 B
10	313.00-08823/0	valve, complete
11	7515-302 843	O-ring 22x3-N 70 B
12	313.00-10054/0	valve, complete
13	2552-000 730	pressure spring C 0.8 x 8 x 7.5 TGL 18395
14	313.02-01597/0	control lever, complete
15	971.93-00028/0	hose 25 x 90 PS 16.10 C
16	971.93-00093/0	hose 25 x 80 PS 16.10 C
17	313.00-09463/0	valve, complete
18	7515-304 363	O-ring 40x3-N 70 B
19	3714-000 022	ball handle C 20 TGL 2950, black
20	313.00-10052/0	valve, complete



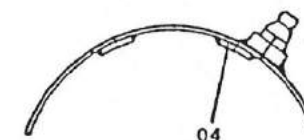
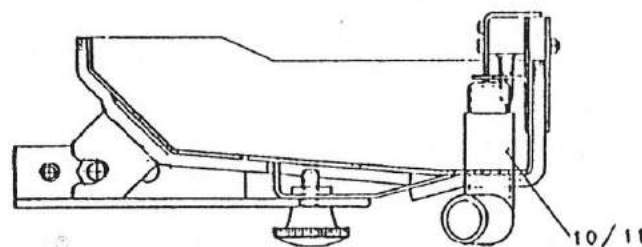
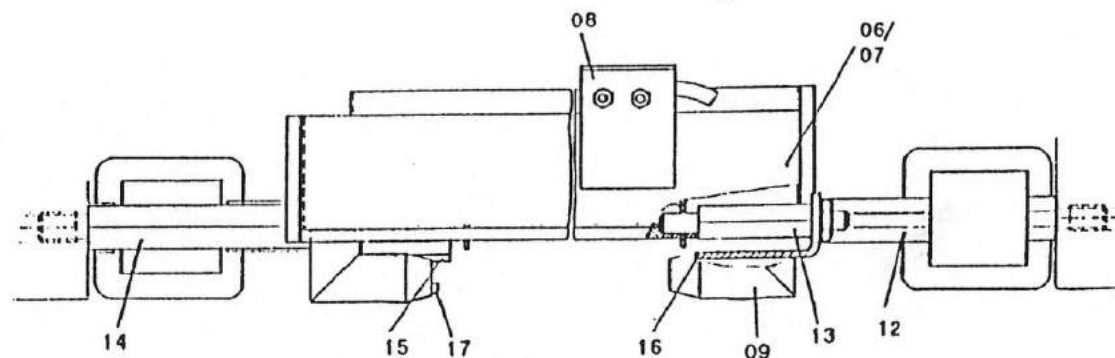
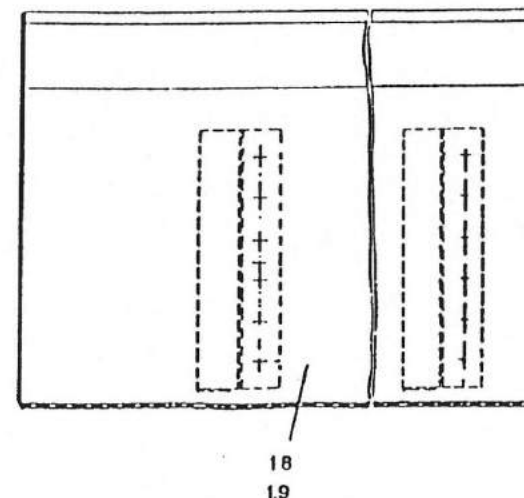
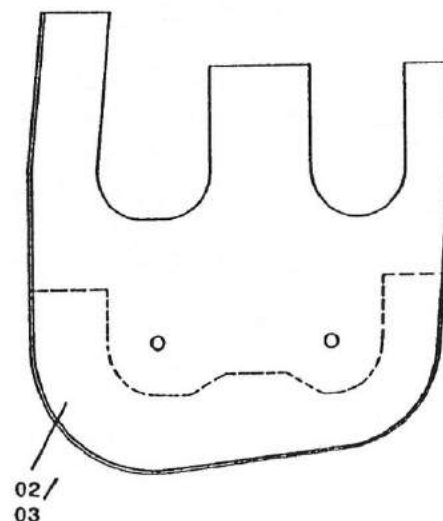
item no.	identification no.	designation
01	313.00-09813/0	stop, side 1
02	313.01-03854/0	stop, side 1
03	313.26-01454/0	stop cap
04	313.00-09814/0	stop, side 2
05	313.01-03855/0	stop, side 2
06	313.26-01454/0	stop cap
07	313.00-09623/0	loose guard parts of VARIDAMP
08	313.96-01805/0	frontal inking roller guard
09	313.60-02938/0	fastening element, side 1
10	313.60-02934/0	fastening element, side 2
11	313.94-03869/0	holder
12	313.00-09811/0	roller guard
13	313.01-03853/0	upper guard
14	313.60-02928/0	indexing block
15	313.30-01685/0	indexing bolt
16	313.40-02106/0	shaft
17	313.60-02929/0	latch
18	313.01-03858/0	latch bearing
19	313.60-02930/0	pressure element
20	2553-000 822	tension spring B 0.9 x 10 x 10 A 1 TGL 18397
21	313.96-01448/0	lower guard
22	313.01-03856/0	cover plate, side 1
23	313.01-03857/0	cover plate, side 2





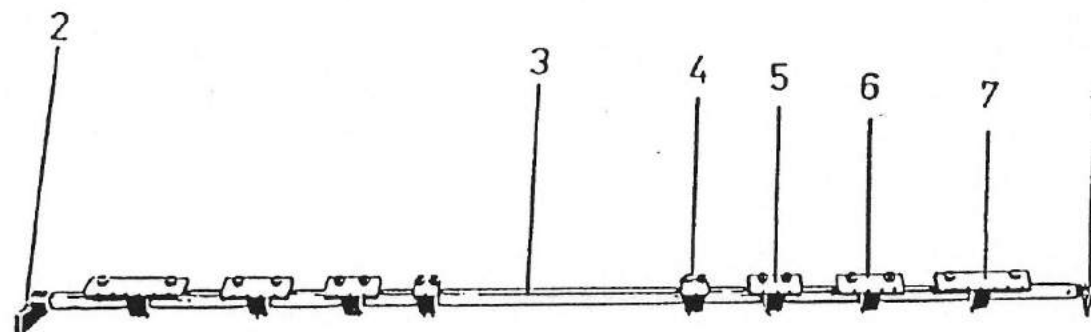
item no.	Identification no.	designation
01	313.00-09623/0	gear guard, side 2
02	313.00-09815/0	gear guard, side 2
03	313.01-03523/0	gear guard, side 2 ()
04	313.01-03542/0	gear guard, side 1
05	313.06-14451/0	damping agent reservoir
06	313.02-01976/0	damping agent reservoir
07	313.02-01977/0	varnish reservoir ()
08	313.00-11425/1	filling level inspection, complete
09	313.01-03529/0	elbow
10	313.31-01577/1	overflow pipe
11	313.21-01908/1	overflow pipe ()
12	313.32-01840/0	stud bolt
13	313.32-01841/0	stud bolt
14	313.36-01434/0	stud bolt
15	313.94-04877/0	angle, side 1
16	313.94-04878/0	angle, side 2
17	971.07-00008/0	knurled screw
18	313.06-14473/0	drip pan
19	313.01-05008/0	drip pan

() in varnishing unit





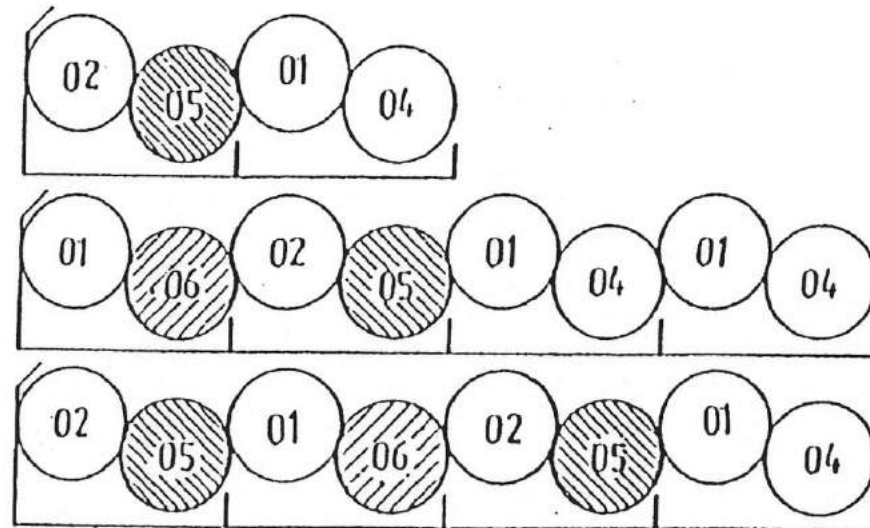
item no.	identification no.	designation
01	313.01-03524/0	blade holder, side 1
02	313.01-03535/0	blade holder, side 2
03	313.44-01021/0	blade bar
04	313.00-09854/0	varnish scraper 28
05	313.00-09852/0	varnish scraper 56
06	313.00-09853/0	varnish scraper 70
07	313.00-09855/0	varnish scraper 98



*Perfecting equipment - Rim gears for impression cylinders and drums
in perfecting machines*



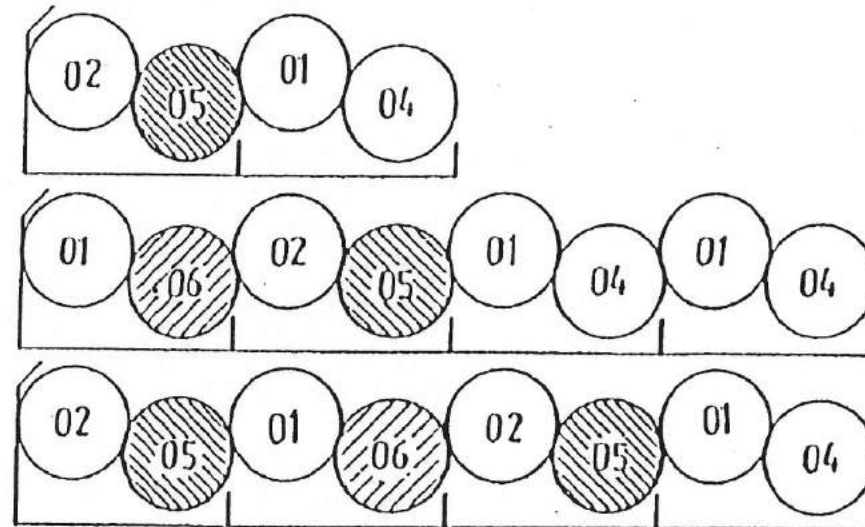
item no.	identification no.	designation
01	313.51-00048/0	rim gear for impression cylinder
02	313.00-04290/0	rim gear for impression cylinder
03		
04	313.59-01024/0	rim gear for drum
05	313.51-00053/0	rim gear for turning drum
06	313.51-00045/0	rim gear for drum



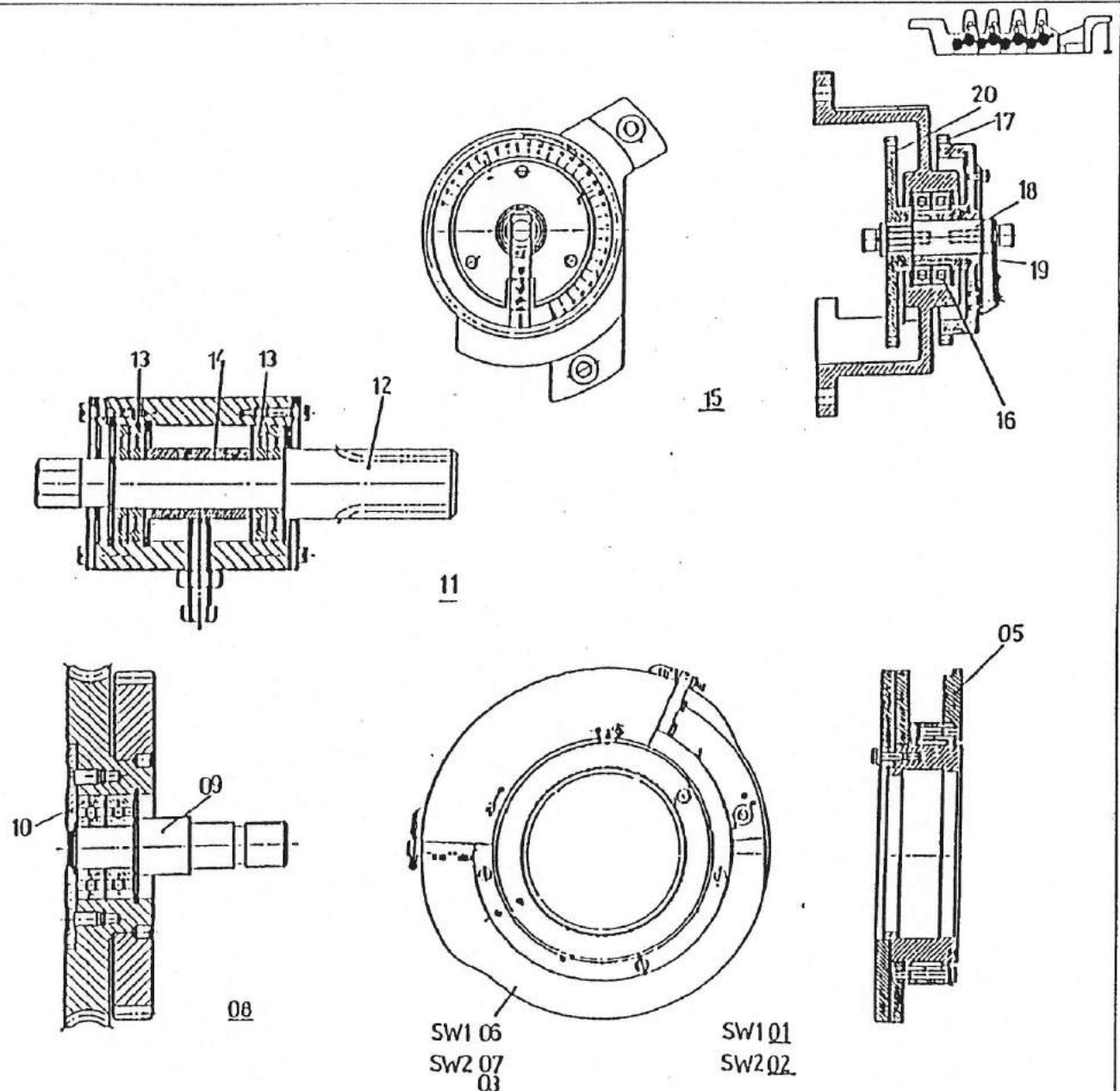
*Perfecting equipment - Rim gears for impression cylinders and drums
in perfecting machines*



item no.	identification no.	designation
01	313.51-00048/0	rim gear for impression cylinder
02	313.00-04290/0	rim gear for impression cylinder
03		
04	313.59-01024/0	rim gear for drum
05	313.51-00053/0	rim gear for tuning drum
06	313.51-00045/0	rim gear for drum

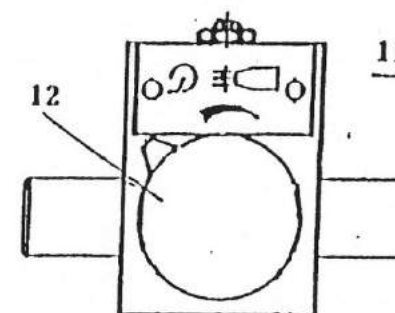
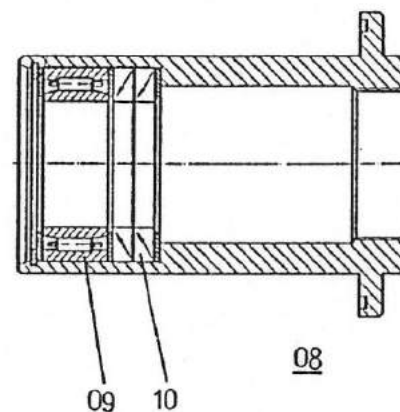
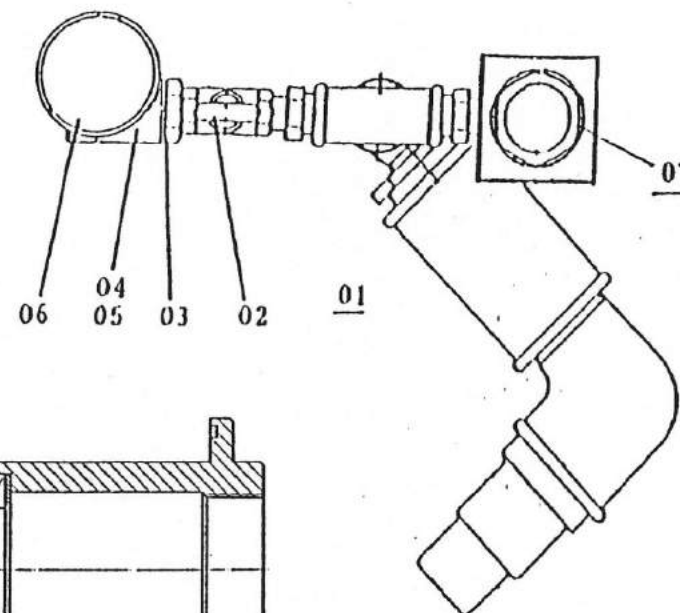


item no.	identification no.	designation
01	313.00-08858/0	gripper control cam, complete, SW 1
02	313.00-08859/0	gripper control cam, complete, SW 2
03	313.26-01285/0	cam holder
05	313.59-01108/0	toothed segment
06	313.19-01888/0	cam set SW 1
07	313.19-01889/0	cam set SW 2
08	313.00-00924/0	intermediate gears, complete
09	313.32-00014/0	bolt
10	3021-000 100	grooved ball bearing DIN 625-6202
11	313.00-00927/0	worm gear drive, complete
12	313.54-00001/1	worm gear shaft
13	3021 000 101	grooved ball bearing DIN 625-6203
14	313.20-00016/0	spacer bushing
15	313.00-00928/2	format setting indicator, complete
16	3021-000 059	grooved ball bearing DIN 625-6008
17	313.51-00052/2	gear, 48 teeth
18	313.36-01053/1	shaft
19	313.19-01312/2	indicator disk
20	313.51-00049/0	gear, 48 teeth
21	313.00-05867/0	packing A (without illustration)

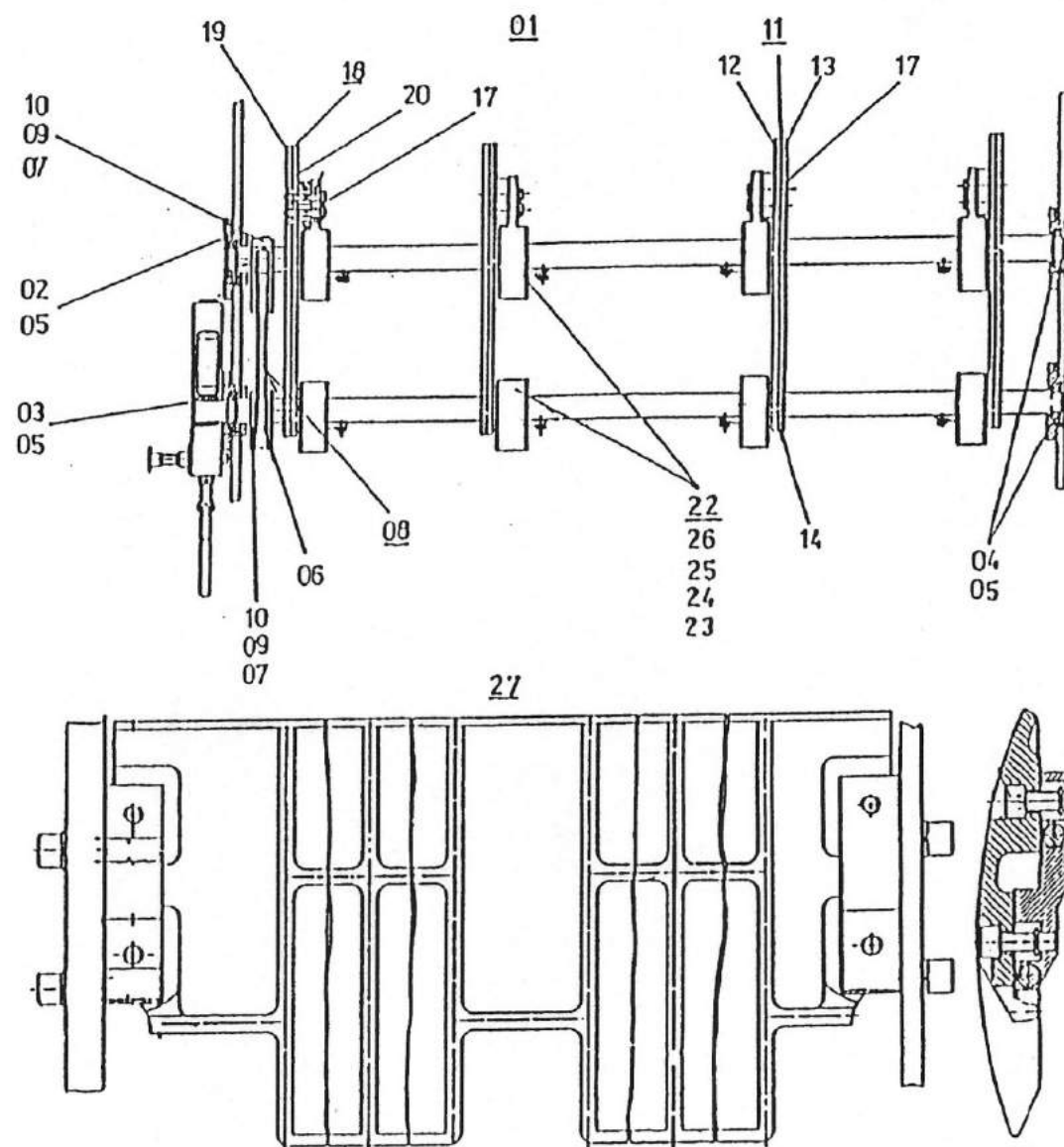




item no.	identification no.	designation
01	313.00-07861/0	exhaust air connection
02	7302-000 008	stopcock B 3/8 in article no. 1355321101038011
03	7512-002 300	sealing ring DIN 7603-A 17 x 21 Cu
04	313.26-01131/0	connecting element
05	7515-000 200	O-ring 10x2-N 70 B
06	7450-002 140	vacuum gauge C 0-1.6 TGL 16372
07	7399-000 090	vacuum controller 979.73-00009/0(4)
08	313.00-12331/0	bushing
09	3028-100 426	bearing NU 4908 TNGAP TGL 2988
10	7510-000 048	shaft sealing ring DIN 3760-A 40x62x7
11	313.00-04627/0	valve
12	3708-000 600	rotary knob Az 35/6 TGL 200-7115 SW/SW

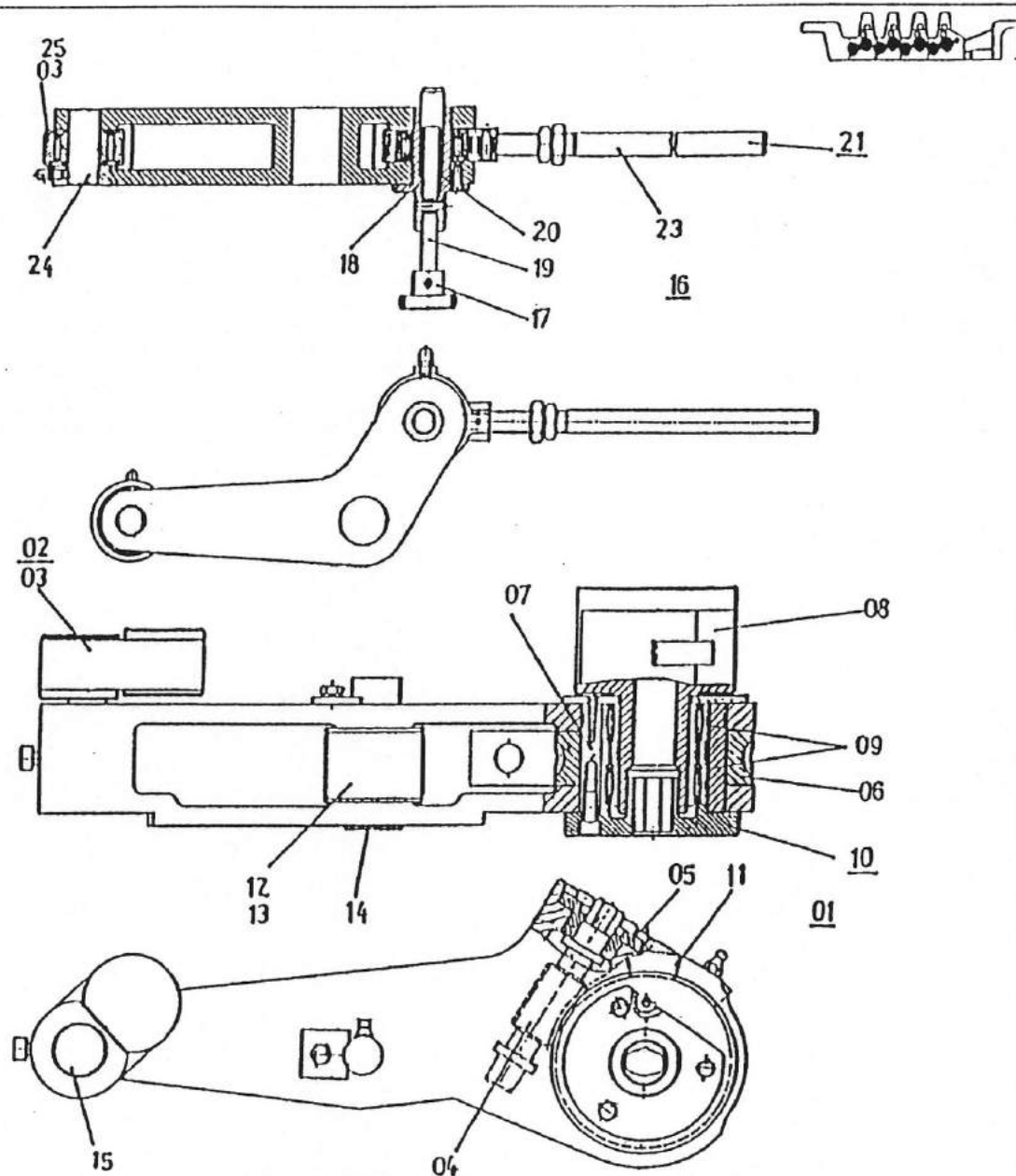


Item no.	Identification no.	designation
01	313.03-00423/1	controlled guiding equipment, complete
02	313.16-00120/0	flange bearing
03	313.16-00122/0	flange bearing
04	313.16-00121/0	flange bearing
05	3021-000 056	grooved ball bearing DIN 625-6005
06	313.00-01138/1	parallel rocker, complete
07	3020-000 039	needle bearing DIN 617-RNA 4901
08	313.76-00226/0	coupler, complete
09	313.20-00234/0	bolt
10	313.76-00225/0	rocker
11	313.00-01153/1	guide segment, side 1, complete
12	313.92-00180/1	segment
13	313.92-00181/1	segment
14	2552-001 118	pressure spring C 1.2x8.5x7.5 TGL 18395
15		
16	313.98-01175/1	rubber strip (without illustration)
17	313.31-01309/0	setscrew
18	313.00-01152/1	guiding segment, side 2, complete
19	313.92-00182/1	segment
20	313.92-00183/1	segment
21		
22	313.00-01154/2	segment holder, complete
23	313.23-01111/0	eccentric element
24	313.60-02153/0	sliding feather key
25	3020-500 077	needle bearing DIN 617-RNA 4910
26	313.10-01288/0	washer
27	313.06-09120/1	fixed guiding equipment, complete

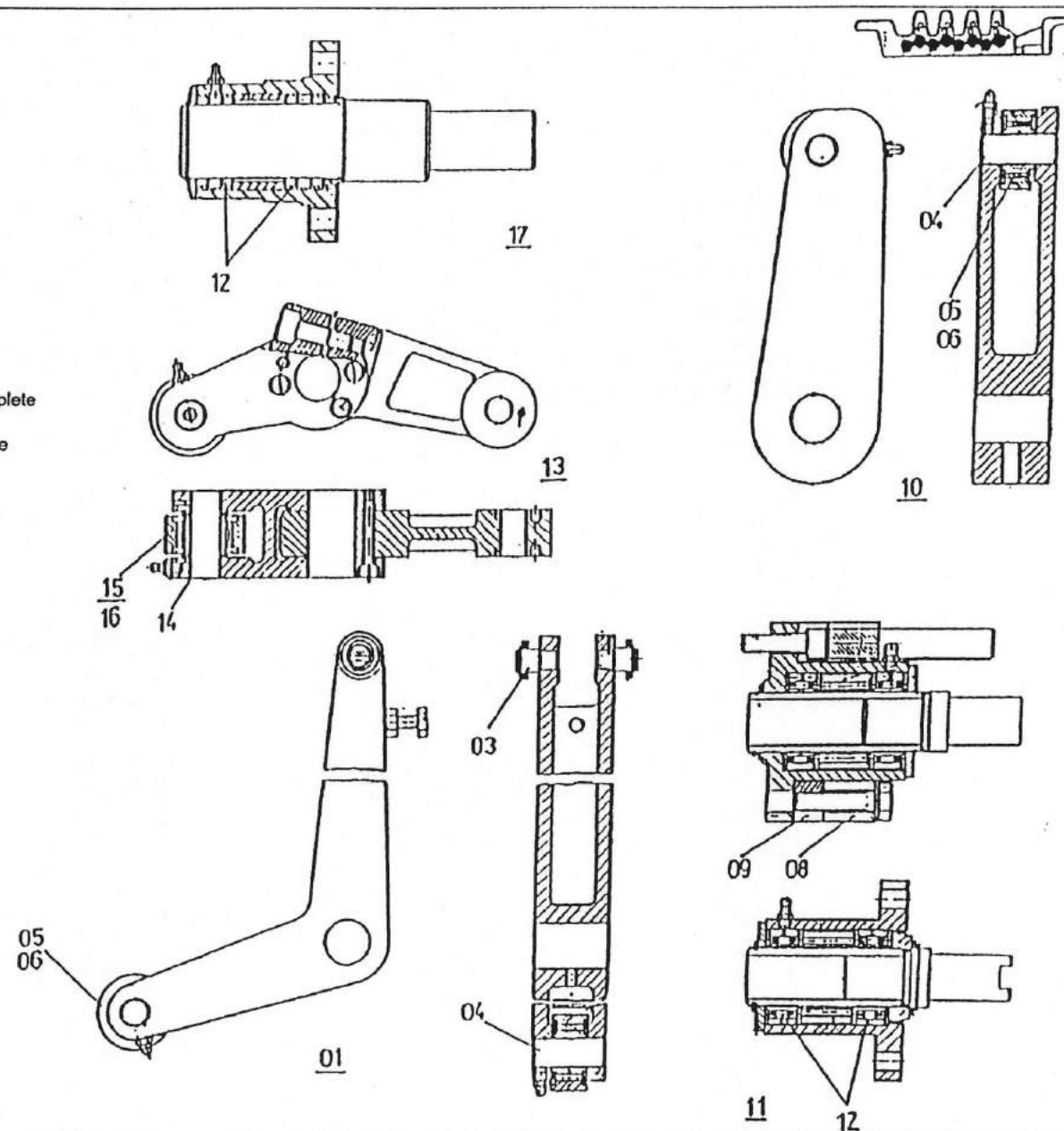


Roller levers for control

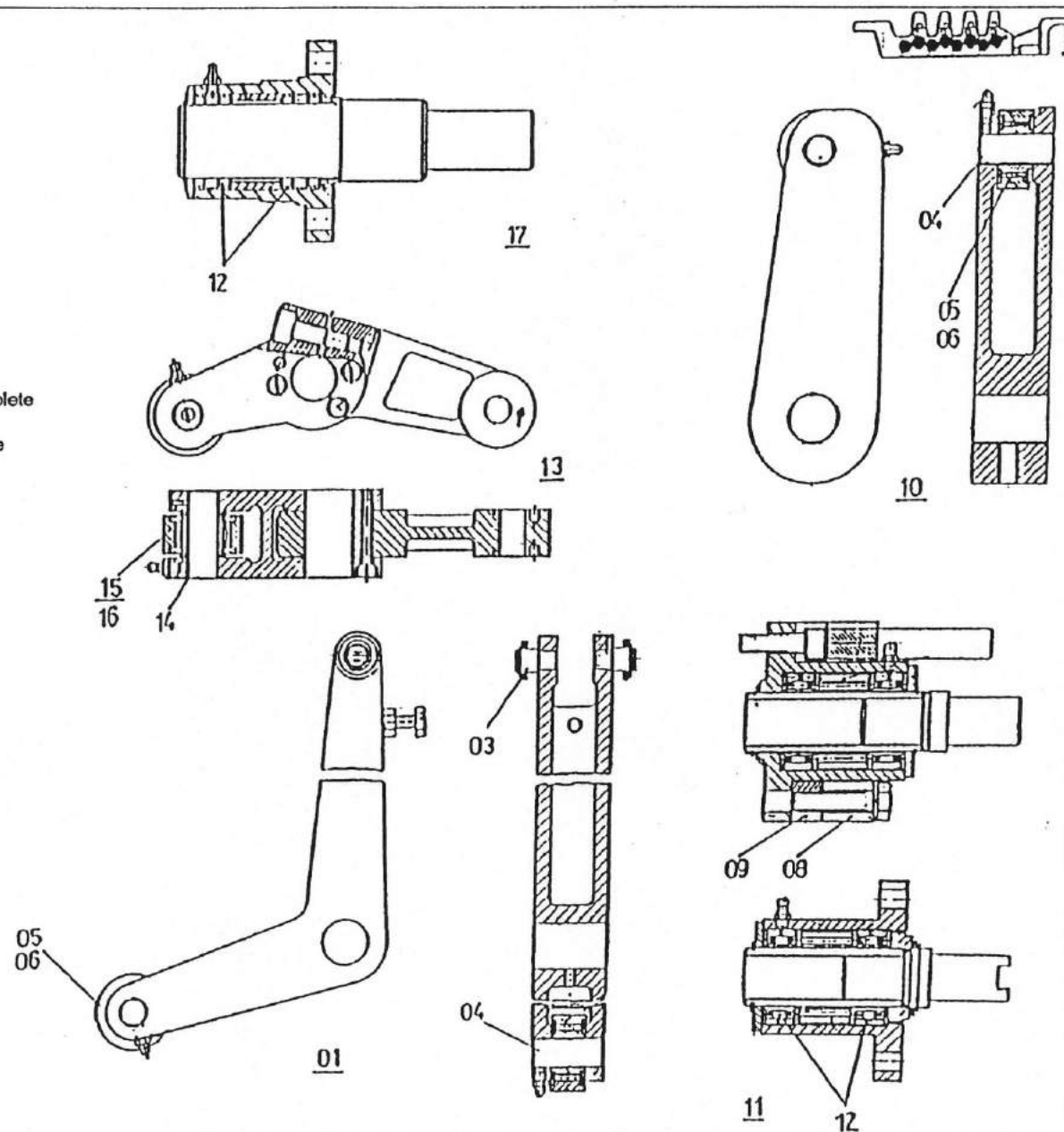
item no.	Identification no.	designation
01	313.00-07905/1	roller lever for rocker control, complete
02	313.00-03264/0	coupler, complete
03	3020-500 067	needle bearing DIN 617-RNA 4903 V
04	313.54-00114/1	worm
05	313.26-01304/0	bushing
06	313.54-00113/1	worm gear
07	313.23-01121/0	eccentric bushing
08		
09	3028-102 429	cylindrical roller bearing NU 4907 TNGAP C2 TGL 2988
10	313.26-01328/1	driver
11	313.19-01809/0	segment
12	313.20-01913/0	roller
13	3028-300 446	cylindrical roller bearing NU 4904 V TGL 2988
14	313.36-01244/0	bolt
15	313.36-01171/0	bolt
16	313.00-01135/1	roller lever for guiding segment, complete
17	313.00-01146/1	Index, complete
18	313.27-00122/1	Index bushing
19	313.31-00225/1	bolt
20	2552-000 930	pressure spring C 1x11x7.5 TGL 18395
21	313.00-01134/0	spring bar, complete
23	2552-002 115	pressure spring C 4x28x5.5 TGL 18395
24	313.30-00255/1	bolt
25	313.00-07438/0	guiding roller, complete



Item no.	Identification no.	designation
01	313.00-01334/0	roller lever for sucker control, complete
02		
03	313.21-00020/0	bolt
04	313.30-00255/1	bolt
05	313.00-07438/0	guiding roller, complete
06	3020-200 053	needle bearing RNA 4903 V TGL 3889
07	313.00-00981/0	bearing for sucker system, complete
08	313.01-00216/0	plate, complete
09	313.10-00241/0	plate
10	313.00-01150/2	roller lever for spring compensation, complete
11	313.00-00985/0	bearing for spring compensation, complete
12	3020-000 010	needle bearing NA 49/32 TGL 3889
13	313.00-07436/2	roller lever for gripper control, complete
14	313.35-01074/2	bolt
15	313.00-08853/0	guiding roller, complete
16	3020-200 054	needle bearing RNA 4904 V TGL 3889
17	313.00-00980/2	bearing for gripper control, complete

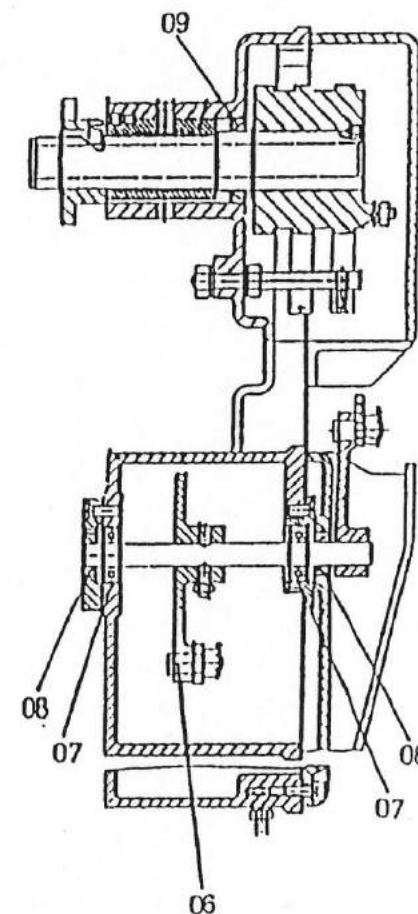
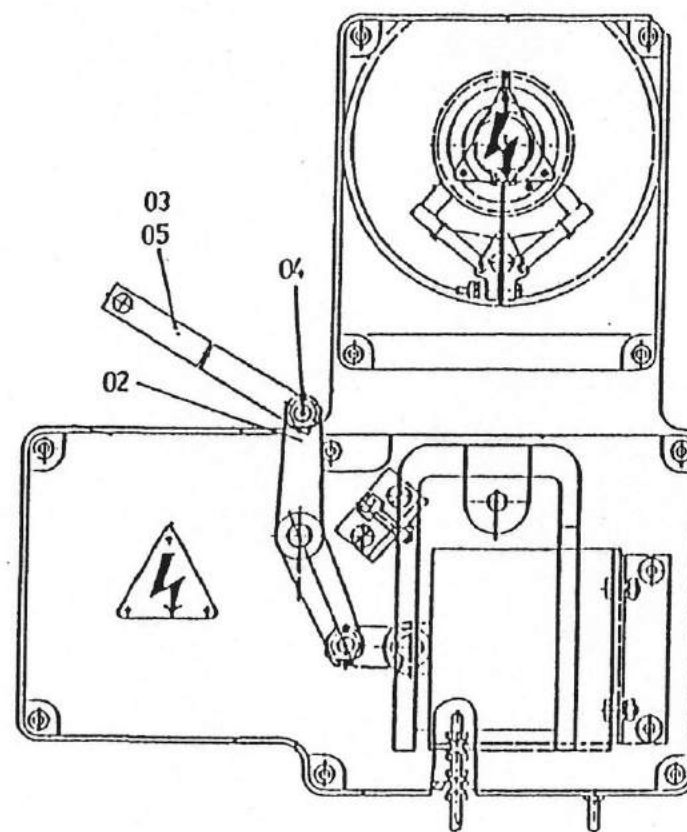


Item no.	Identification no.	designation
01	313.00-01334/0	roller lever for sucker control, complete
02		
03	313.21-00020/0	bolt
04	313.30-00255/1	bolt
05	313.00-07438/0	guiding roller, complete
06	3020-200 053	needle bearing RNA 4903 V TGL 3889
07	313.00-00981/0	bearing for sucker system, complete
08	313.01-00216/0	plate, complete
09	313.10-00241/0	plate
10	313.00-01150/2	roller lever for spring compensation, complete
11	313.00-00985/0	bearing for spring compensation, complete
12	3020-000 010	needle bearing NA 49/32 TGL 3889
13	313.00-07436/2	roller lever for gripper control, complete
14	313.35-01074/2	bolt
15	313.00-08853/0	guiding roller, complete
16	3020-200 054	needle bearing RNA 4904 V TGL 3889
17	313.00-00980/2	bearing for gripper control, complete



item no.	Identification no.	designation
01	313.00-00679/0	housing, complete (for follower printing unit behind perfector)
02	313.76-01136/0	lever
03	313.66-01277/0	coupler
04	313.21-00012/0	bolt
05	971.99-01013/0	pressure spring 1.2/8 P 25.53
06	313.76-01261/0	lever
07	3021-000 052	grooved ball bearing DIN 625-6001
08	7510-000 008	shaft sealing ring DIN 3760-A 12x22x7-NBR 70
09	7510-000 033	shaft sealing ring DIN 3760-A 28x30x7-NBR 70

Electrical elements:
see List of switching components





Item no.	Identification no.	designation
01	313.05-01053/0	gear pump, single-flow, side 1, complete
02	313.51-01117/0	gear, side 1, 14 teeth
03	313.05-01043/0	gear pump, single-flow, side 2, complete
04	313.51-01114/0	gear, side 2, 13 teeth
05	313.00-04084/0	gear, complete
06	313.51-01115/0	gear, 67 teeth
07	313.51-01116/0	gear, 22 teeth
08	313.00-10937/0	gear, complete
09	313.51-01695/0	gear, 31 teeth
10	313.51-01692/0	gear, 42 teeth
11	313.00-05664/0	filter combination, complete
12	313.10-01024/0	flange
13	7201-404 120	hose line AA 10 x 800 HF PS 18113
14	7201-404 160	hose line AA 10 x 1250 HF PS 18113
15	7799-000 240	micronic filter MS 10 M 16x1.5
16	313.22-01008/0	threaded portion
17	313.00-05670/0	valve portion, complete
18	7321-000 203	non-return valve A 10-16-0.3 TGL 10969
19	7410-000014	sightglass US 33 TGL 31720
20	313.98-01157/0	sealing ring
21	313.98-01158/0	seal
22	313.60-01593/0	distributor, side 1 and 2
23	7512-100 633	sealing ring DIN 7603-A 22x27-Cu
24	7512-100 127	sealing ring for oil drain pipe DIN 7603-A 18x22-Cu
25	7512-100 612	sealing ring DIN 7603-A 10x13,5 Cu
26	313.10-01157/0	seal washer 12/6 x 1, leather
27	7512-100 608	sealing ring DIN 7603-A 8x11,5 Cu
28	7241-000 001	cutter sleeve 4 - 10 TGL 0-3861 St
29	1525-001 047	pipe PA 6-HV 4 x 1 TGL 35681
30	7708-400 001	piston pump EE 6 TGL 32526
31	7241-000 008	cutter sleeve 12-63 TGL 0-3861 St
32	7241-000 003	cutter sleeve 6-10 TGL 0-3861 St
34	7246-010 001	locking washer 6 TGL 22710
35	7521-000 001	rubber cap 5/10 PS 75.21
36	7512-100 637	sealing ring DIN 7603-A 24x29-Cu
37	7512-100 623	sealing ring DIN 7603-A 16x24-Cu



R12/36



A 8
B 8

01/02/16



C 4/10
C 6/10
C 8/10

03



A 8/40

04/05



E 8/10
E 8/40

06



C 12/16

07



D 12/16

08/18



E 12/16
E 12/32

09



D 12/32

10/15



H IV 6/10
H IV 4/10

11



H V 12/32

12



C 12/32

13/14



Q 6/10
O 12/32

Pipe fittings, conical head lubrication nipples

item no.	Identification no.	designation
01	7240-003 570 pipe fitting C 6-10 TGL 0-2353 St	
02	7240-003 580 pipe fitting C 8-10 TGL 0-2353 St	
03	7240-001 040 pipe fitting A 8-40 TGL 0-2353 St	
04	7240-005 040 pipe fitting E 8-40 TGL 0-2353 St	
05	7240-005 580 pipe fitting E 8-10 TGL 0-2353 St	
06	7240-003 080 pipe fitting C 12-16 TGL 0-2353 St	
07	7240-004 080 pipe fitting D 12-16 TGL 0-2353 St	
08	7240-005 080 pipe fitting E 12-16 TGL 0-2353 St	
09	7240-004 700 pipe fitting D 12-32 TGL 0-2353 St	
10	7240-020 570 pipe fitting HV 6-10 TGL 0-2353 St	
11	7240-020 700 pipe fitting HV 12-32 TGL 0-2353 St	
12	7240-003 700 pipe fitting C 12-32 TGL 0-2353 St	
13	7240-015 700 pipe fitting Q 12-32 TGL 0-2353 St	
14	7240-015 570 pipe fitting Q 6-10 TGL 0-2353 St	
15	7240-020 550 pipe fitting HV 4-10 TGL 0-2353 St	
16	7240-003 550 pipe fitting C 4-10 TGL 0-2353 St	
17	7240-016 700 pipe fitting F 12-32 TGL 0-2353 St	
18	7240-005 700 pipe fitting E 12-32 TGL 0-2353 St	
19	7411-000 002 conical head lubrication nipple A 8 TGL 0-71412	
20	7411-000 004 conical head lubrication nipple B 8 TGL 0-71412	
21	7411-000 001 conical head lubrication nipple A 6 TGL 0-71412	
22	7411-000 006 conical head lubrication nipple C 8 TGL 0-71412	

