

SETTING THE PARAMETERS WITH THE KEY PAD

All the parameters that can be modified with the key pad are displayed: they are 38 in all, including fine-tuning, input and output configurations and internal operation values: the following is a list with the description of the functions and of the range of values that can be selected.

| | |
|--------------|--|
| P1, KP, | Proportional gain of the P1 digital speed adjuster |
| P2, KI, | Integral gain of the P1 digital speed adjuster |
| P3, KPP, | Proportional gain of the P1 digital position adjuster |
| P4, W_MAX, | Maximum speed value |
| P5, I_MAX, | Maximum current value |
| P6, ACC_RP, | Positive speed ramp in a counterclockwise direction |
| P7, DEC_RP, | Negative speed ramp in a counterclockwise direction |
| P8, ACC_RN, | Positive speed ramp in a clockwise direction |
| P9, DEC_RN, | Negative speed ramp in a clockwise direction |
| P10, IN3_CF, | Configuration of input 3 |
| P11, IN4_CF, | Configuration of input 4 |
| P12, OUT1_A, | Configuration of DAC1 analog output |
| P13, DA1SHF, | Analog output 1 shift |
| P14, OUT2_A, | Configuration of DAC2 analog output |
| P15, DA2SHF, | Analog output 2 shift |
| P16, DIG_01, | Configurable digital output |
| P17, DIG_02, | Configurable digital output |
| P18, IN_MOT, | Motor rated current |
| P19, TH_MOT, | Motor thermic time constant |
| P20, OFF_AN, | 12 bit A/D converter offset for the analog speed reference: it must not be modified. |
| P21, OFFMED, | It makes an accurate measurement of the 12 bit A/D converter offset for the analog speed reference. |
| P22, TF_AN, | Digital filter time constant on the analog speed reference; 0 value indicates that the filter is disconnected. |
| P23, K_LEAD, | It is set at a default value of 8 and must not be modified. |
| P24, TF_VEL, | Digital filter time constant on the speed feedback. |
| P25, MAX_F, | Maximum input frequency: it sets the bottom of the scale for the input frequency of the analog speed reference. |
| P26, ENC_IN, | Determines the number of impulses/revolution of the encoder used as external speed reference. |
| P27, RATIO, | Sliding ratio between the Slave axis and the Master axis. |
| P28, ALARM, | Alarm log. This parameter cannot be modified. |
| P29, RS_OFF, | It fixes the phase difference of the resolver as compared with the drive shaft: needed in order to time the resolver. It must not be modified. |
| P30, R_ADG, | Amplification of the reference signal to be sent to the resolver. |
| P31, IU_OFF, | It must not be modified. |
| P32, IV_OFF, | It must not be modified. |
| P33, POLES, | Number of motor polar torques |
| P34, RES_PP, | Number of resolver polar torques |
| P35, BAUD_R, | Baud rate of the RS 485 serial interface |
| P36, EN_RES, | It fixes the output resolution of the of the simulation encoder. |
| P37, TOP_W, | It fixes the width of the TOPO impulse for the simulation encoder. |
| P38, SER_ID, | Serial code: RS 485 serial interface operation code. |

PARAMETER ANHAND DER TASTATUR EINSTELLEN

Auf dem Display werden alle Parameter, die anhand der Tastatur geändert werden können, angezeigt. Es handelt sich um insgesamt 38 Parameter: Eichungen der Einstellungen, Ein- und Ausgangskonfigurationen und Antriebswerte. Nachstehend die Liste mit der Beschreibung der Funktion und des Bereichs der wählbaren Werte.

| | |
|--------------|---|
| P1, KP, | Proportionalgewinn des digitalen Geschwindigkeitsreglers P1 |
| P2, KI, | Integralgewinn des digitalen Geschwindigkeitsreglers P1 |
| P3, KPP, | Proportionalgewinn des digitalen Positionsreglers |
| P4, W_MAX, | Max. Geschwindigkeitswert |
| P5, I_MAX, | Max. Stromwert |
| P6, ACC_RP, | Positive Geschwindigkeitsrampe gegen den Uhrzeigersinn |
| P7, DEC_RP, | Negative Geschwindigkeitsrampe gegen den Uhrzeigersinn |
| P8, ACC_RN, | Positive Geschwindigkeitsrampe im Uhrzeigersinn |
| P9, DEC_RN, | Negative Geschwindigkeitsrampe im Uhrzeigersinn |
| P10, IN3_CF, | Konfiguration Eingang 3 |
| P11, IN4_CF, | Konfiguration Eingang 4 |
| P12, OUT1_A, | Konfiguration Analogausgang DAC1 |
| P13, DA1SHF, | Analog output 1 shift |
| P14, OUT2_A, | Konfiguration Analogausgang DAC2 |
| P15, DA2SHF, | Analog output 2 shift |
| P16, DIG_01, | Konfigurierbarer Digitalausgang |
| P17, DIG_02, | Konfigurierbarer Digitalausgang |
| P18, IN_MOT, | Nennstrom des Motors |
| P19, TH_MOT, | Thermozeitkonstante des Motors |
| P20, OFF_AN, | Offset des 12 Bit A/D-Umsetzers für den analogen Geschwindigkeitsbezugswert: darf nicht verändert werden. |
| P21, OFFMED, | Setzt das genaue Maß für das Offset des 12 Bit A/D-Umsetzers für den analogen Geschwindigkeitsbezugswert fest. |
| P22, TF_AN, | Zeitkonstante des Digitalfilters gegenüber dem analogen Geschwindigkeitsbezugswert; ein Wert 0 zeigt an, daß der Filter ausgeschaltet ist. |
| P23, K_LEAD, | Ist auf den Default-Wert 8 festgesetzt und darf nicht verändert werden. |
| P24, TF_VEL, | Zeitkonstante des Digitalfilters gegenüber der Geschwindigkeitsrückführung. |
| P25, MAX_F, | Maximum input frequency: setzt den Endwert für den Frequenzeingang des analogen Geschwindigkeitsbezugswertes fest. |
| P26, ENC_IN, | Bestimmt die Zahl der Impulse/Umdrehungen des als externen Geschwindigkeitsbezugswert verwendeten Encoders. |
| P27, RATIO, | Gleitverhältnis zwischen Slave- und Master-Achse |
| P28, ALARM, | Speicherung der eingetretenen Alarme. Dieser Parameter kann nicht verändert werden. |
| P29, RS_OFF, | Setzt die Phasenverschiebung des Resolvers gegenüber der Motorwelle fest: dies ist für die Taktierung des Resolvers notwendig. Der Parameter darf nicht verändert werden. |
| P30, R_ADG, | Verstärkung des zum Resolver zu sendenden Bezugssignals |
| P31, IU_OFF, | Der Parameter darf nicht verändert werden. |
| P32, IV_OFF, | Der Parameter darf nicht verändert werden. |
| P33, POLES, | Zahl der Polar-Drehmomente des Motors. |
| P34, RES_PP, | Zahl der Polar-Drehmomente des Resolvers. |
| P35, BAUD_R, | Baud rate der serienweisen Schnittstelle RS 485. |
| P36, EN_RES, | Setzt die Ausgangsaufösung des simulierten Encoders fest. |
| P37, TOP_W, | Setzt die Breite des Impulses TOP0 für den simulierten Encoder fest. |
| P38, SER_ID, | Serial code: Antriebscode für die serienweise Schnittstelle RS 485. |

FINESTRA DEI FLAG

Sono visualizzati tutti i flag che è possibile settare, sia quelli di configurazione che quelli di procedura; si riporta la lista nell'ordine in cui vengono visualizzati. Sia le procedure che le configurazioni sono abilitate quando il flag è settato (SET).

| | |
|------------|--|
| F1 | Auto phasing: flag di procedura di autofasatura del resolver |
| F2 | Reference from pot.: quando è settato abilita il riferimento analogico di velocità |
| F3 | Enable ramp: abilita le rampe di accelerazione e decelerazione sui quattro quadranti |
| F4 | Enable electric shaft: flag di configurazione per l'abilitazione dell'asse elettrico |
| F5 | Eprom gains: flag di procedura che legge tutti i parametri di default |
| F6 | Torque reference: flag di configurazione per abilitare il riferimento di coppia. |
| F7 | External reference: flag di configurazione per abilitare il riferimento esterno di velocità |
| F8 | Position loop: flag di configurazione per abilitare il controllo di posizione sul giro meccanico dell'albero motore |
| F9 | Thermic probe: flag di configurazione che indica il tipo di sonda termica montata sul motore. |
| F10 | Pole paris calculation: flag di procedura che abilita il calcolo automatico del numero di coppie polari del motore. |
| F11 | Resolver tuning: flag di procedura che abilita la taratura automatica dei segnali di resolver: viene fatta una volta per tutte e se il resolver è già stato scelto in ditta, non occorre eseguirla. |
| F12 | Store on eeprom: flag di procedura per la memorizzazione dei parametri e della configurazione globale dell'azionamento in EEPROM. |
| F13 | A/D converter tuning: flag di procedura per la taratura del convertitore A/D a 12 bit usato per il riferimento analogico di velocità |
| F14 | Encoder input: flag di configurazione utilizzato nelle due distinte gestioni del riferimento esterno. |
| F15 | EEPROM gains: flag di procedura che permette di selezionare tutti i parametri così come sono memorizzati in EEPROM. Può essere utilizzato quando si sono modificati alcuni parametri e si vuole tornare alla condizione di partenza. |
| F16 | Analog current limit: flag di configurazione che permette di usare il riferimento analogico di corrente come limite di coppia. |

FENÊTRES DES INDICATEURS

Tous les indicateurs, de configuration comme de procédure, qu'il est possible de définir, sont visualisés. Nous reportons ci-dessous la liste dans l'ordre dans lequel ils sont visualisés. Les procédures, comme les configurations sont habilitées quand l'indicateur a été défini.

| | |
|------------|---|
| F1 | Automatique Phasing : indicateur de procédure de mise en phase automatique du réducteur |
| F2 | Reference from pot. : quand il est défini, il habilite la référence analogique de vitesse |
| F3 | Enable ramp : habilite les pentes d'accélération et de décélération sur les quatre cadrans |
| F4 | Enable electric shaft : indicateur de configuration pour l'habilitation de l'axe électrique |
| F5 | Eprom gains : indicateur de procédure qui lit tous les paramètres par défaut |
| F6 | Torque reference : indicateur de configuration pour habilitier la référence de couple |
| F7 | External reference : indicateur de configuration pour habilitier la référence externe de vitesse |
| F8 | Position loop : indicateur de configuration pour habilitier le contrôle de position sur le tour mécanique de l'arbre moteur |
| F9 | Thermic probe : indicateur de configuration qui indique le type de sonde thermique montée sur le moteur |
| F10 | Pole paris calculation : indicateur de procédure qui habilite le calcul automatique du nombre de couples polaires du moteur |
| F11 | Resolver tuning : indicateur de procédure qui habilite l'étalonnage automatique des signaux du réducteur : il est effectué une fois pour toutes et si le réducteur a déjà été choisi en usine, il n'est pas nécessaire de le faire. |
| F12 | Store on eeprom : indicateur de procédure pour la mémorisation des paramètres et de la configuration globale de l'actionnement en EEPROM |
| F13 | A/D converter tuning : indicateur de procédure pour l'étalonnage du convertisseur A/D à 12 bits utilisé pour la référence analogique de vitesse. |
| F14 | Encoder input : indicateur de configuration utilisé dans les deux listes de gestion de la référence externe. |
| F15 | EEPROM gains : indicateur de procédure qui permet de sélectionner tous les paramètres tels qu'ils sont mémorisés dans EEPROM. Il peut être utilisé quand certains paramètres ont été modifiés et que l'on veut revenir à la condition initiale. |
| F16 | Analog current limit : indicateur de configuration qui permet d'utiliser la référence analogique de courant comme limite de couple. |

FLAG WINDOW

All the flags that can be set are displayed, both the configuration and procedure ones. The list below follows the order in which they are displayed. Both the procedures and the configurations are enabled when the flag is set (SET).

| | |
|-----|--|
| F1 | Auto phasing: resolver auto phasing procedure flag |
| F2 | Reference from pot.: when set it enables the speed analog reference |
| F3 | Enable ramp: it enables the acceleration and deceleration ramps on the four dials |
| F4 | Enable electric shaft: configuration flag that enables the electric shaft |
| F5 | Eprom gains: procedure flag that reads all the default parameters |
| F6 | Torque reference: configuration flag that enables the torque reference. |
| F7 | External reference: configuration flag that enables the external speed reference |
| F8 | Position loop: configuration flag that enables the position control on the mechanical revolution of the motor shaft |
| F9 | Thermic probe: configuration flag that indicates the type of thermic probe mounted on the motor. |
| F10 | Pole paris calculation: configuration flag that enables the automatic calculation of the number of motor pole torques. |
| F11 | Resolver tuning: configuration flag that enables the automatic calibration of the resolver signals: it is done only once and, if the resolver is selected at the firm, there is no need to do it. |
| F12 | Store on eeprom: configuration flag for the memorization of the parameters and of the over all configuration of the EEPROM control. |
| F13 | A/D converter tuning: configuration flag for the calibration of the A/D 12 bit converter used for the speed analog reference |
| F14 | Encoder input: configuration flag used in the two separate managements of the external reference. |
| F15 | EEPROM gains: procedure flag that allows the selection of all the parameters as they are memorized in EEPROM. It can be used when you have modified certain parameters and you wish to return to the original condition. |
| F16 | Analog current limit: configuration flag that allows you to use the analog current reference as torque limit. |

FLAG-FENSTER

Auf dem Display werden alle einstellbaren Konfigurations- und Verfahrens-Flags angezeigt. Nachstehend die Liste der nacheinander angezeigten Flags. Die Verfahren und Konfigurationen sind bereit, sobald die Flag eingestellt (SET) ist.

| | |
|-----|--|
| F1 | Auto phasing: Verfahrens-Flag für die Selbsttaktierung des Resolvers. |
| F2 | Reference from pot: wenn eingestellt, ist der analogische Geschwindigkeitsbezugswert aktiviert. |
| F3 | Enable ramp: aktiviert die positiven und negativen Beschleunigungsrampen auf den vier Quadranten. |
| F4 | Enable electric shaft: Konfigurations-Flag für die Aktivierung der elektrischen Achse. |
| F5 | Eeprom gains: Verfahrens-Flag, liest alle Default-Parameter. |
| F6 | Torque reference: Konfigurations-Flag zur Aktivierung des Drehmomentbezugswertes. |
| F7 | External reference: Konfigurations-Flag zur Aktivierung des externen Geschwindigkeitsbezugswertes. |
| F8 | Position loop: Konfigurations-Flag zur Aktivierung der Positionskontrolle an der mechanischen Umdrehung der Motorwelle. |
| F9 | Thermic probe: Konfigurations-Flag, zeigt den am Motor montierten Temperaturfühler an. |
| F10 | Pole paris calculation: Verfahrens-Flag zur Aktivierung der automatischen Berechnung der Zahl der Polardrehmomente des Motors. |
| F11 | Resolver tuning: Verfahrens-Flag zur Aktivierung der automatischen Eichung der Resolver signale. Die Eichung erfolgt ein einziges Mal; wenn der Resolver bereits im Werk gewählt wurde, ist die Eichung nicht erforderlich. |
| F12 | Store on eeprom: Verfahrens-Flag zur Speicherung der Parameter und der Gesamtkonfiguration des EEPROM-Antriebs. |
| F13 | A/D converter tuning: Verfahrens-Flag zur Eichung des für den analogischen Geschwindigkeitsbezugswert verwendeten 12 Bit A/D-Umsetzers. |
| F14 | Encoder input: Konfigurations-Flag für die beiden getrennten Anwendungen des externen Bezugswertes. |
| F15 | EEPROM gains: Verfahrens-Flag, ermöglicht die Auswahl aller Parameter, so wie sie in EEPROM gespeichert sind. Kann verwendet werden, wenn einige Parameter verändert wurden und die Ausgangsbedingung wieder erreicht werden soll. |
| F16 | Analog current limit: Konfigurations-Flag, ermöglicht die Verwendung des analogischen Strombezugswertes als Drehmomentbegrenzer. |

DEMOLIZIONE E SMALTIMENTO RIFIUTI

- Scaricare l'olio dai riduttori e dalla testa porta sega.
- Scaricare l'olio dalla centralina idraulica
- Scaricare l'emulsione refrigerante dalla vasca
- **NB.:** I fluidi scaricati non vanno mescolati tra loro e vanno conservati in recipienti chiusi evitando la contaminazione con sostanze estranee. Far ritirare gli oli usati dagli appositi consorzi di smaltimento.

Smontare e separare in modo selettivo:

- materiale elettrico
- Materiale plastico
- Tubazioni idrauliche
- Acciaio o ghisa
- Altri materiali

ATTENZIONE: Lo smaltimento dei materiali sopra indicati deve essere fatto secondo le norme vigenti per tipologia di prodotto.

ELIMINATION ET TRAITEMENT DES DECHETS

- évacuer l'huile du réducteur
- évacuer l'huile de l'unité hydraulique
- évacuer l'émulsion réfrigérante de la cuve
- **N.B. :** Les fluides évacués ne doivent pas être mélangés et doivent être conservés dans des récipients clos de manière à éviter toute contamination avec des substances étrangères. Faire retirer les huiles usées par les organismes spécialisés dans le traitement des déchets.

Démonter et trier :

- le matériel électrique
- le matériel plastique
- les tuyauteries hydrauliques
- l'acier ou la fonte
- les autres matériaux

ATTENTION : l'élimination des matériaux indiqués ci-dessus doit être faite conformément aux normes en vigueur par typologie de produit.

DEMOLITION AND WASTE DISPOSAL

- Drain reduction unit oil
- Drain hydraulic unit oil
- Empty cooling liquid tank
- **Note:** The drained liquids must not be mixed together and must be kept in closed containers, avoiding contamination with foreign substances. Oils should be disposed of by authorized disposal and recycling plants.

Disassemble and separate selectively:

- electrical material
- plastic material
- water pipes
- steel and cast iron
- other materials

Warning: The above-mentioned materials must be disposed of according to the regulations in force and the type of product.

ABBRUCH UND ABFALLENTSORGUNG

- Öl der Untersetzereinheit entleeren
- Kühlemulsion aus der Wanne ablassen.
- NB.:** Die zu entsorgenden Flüssigkeiten dürfen nicht vermischt werden und sind in geschlossenen Behältern aufzubewahren, in welchen sie nicht durch andere Substanze verunreinigt werden können. Die Entsorgung der Gebrauchttöle obliegt den dafür zuständigen Entsorgungskonsortien.

Folgende Materialien sind getrennt auszubauen und zu entsorgen:

- elektrische Bestandteile
- Kunststoffteile
- Hydraulikrohre
- Stahl oder Gußeisen
- altre Materialien

ACHTUNG: Die Entsorgung der oben genannten Materialien muß entsprechend den für die jeweilige Produktklasse geltenden Vorschriften erfolgen.

CAPITOLO 3.6

RICAMBI CONSIGLIATI
PIECES DE RECHANGE CONSEILLEES
RECOMMENDED SPARE PARTS
EMPFOHLENE ERSATZTEILE

RICAMBI CONSIGLIATI UNITÀ DI TAGLIO

| CODICE | QUANTITA' | DESCRIZIONE |
|-------------|-----------|--|
| 4.29.502.07 | 1 | VOLANTINO D.140 3BR.B.F 18H7 BOTTECO 21414018H7/00 |
| 3.24.103.17 | 1 | CATENA ISO 06.B2 - 159 MAGLIE TERMINALI MASCHIO (REX REGINA) |
| 3.24.192.05 | 1 | MAGLIA DI GIUNZIONE PER CATENA ISO 06.B2 |
| 3.34.219.15 | 1 | BOBINA PER ELETTROVALVOLA REXROTH |
| 3.44.101.30 | 1 | RELE RP412024 INPUT 24V DC LOAD 8A (SCHRACK) |
| 3.44.101.31 | 1 | RELE G3R 202 PN-02 INPUT 24V DC LOAD 8A (OMRON) |
| 3.42.615.52 | 1 | INTERRUTTORE DI SICUREZZA A ROTELLA TIPO FA 4615 (PIZZATO) |
| 3.42.614.47 | 1 | MICROINTERRUTTORE F.C. C/CAVO L=2000 MOD.XCM-A-1102 (TELEMECANIQUE) |
| 3.26.228.02 | 1 | LIVELLOSTATO EL/MAGNETICO LM2TB (ELETTROTEC) |
| 3.42.660.29 | 1 | FINECORSO PROSSIMITA' 3RG4024-OAG33 (SAIET) |
| 3.42.660.05 | 1 | FINECORSO DI PROSSIMITA' (PNP V.24 DC) E-A1TM/SAP (M12X1) (SAIET) |
| 3.42.660.06 | 1 | FINECORSO DI PROSSIMITA' EA1PMU (M12X1) (SAIET) |
| 3.42.601.01 | 1 | INTERRUTTORE SICUREZZA/EMERGENZA TQ441-0V01 YÜR |
| 3.41.910.74 | 1 | ELETTROPOMPA SPV12 (SACEMI) |
| 3.42.332.11 | 1 | PULSANTE LUMINOSO ART.080QPLVG VERDE (CEMA) |
| 3.42.332.48 | 1 | OPERATORE SELETORE 3 POSIZIONI NERO CON RITORNO AL CENTRO DA DX. A SX. TIPO 080 QSMZN RC (CEMA) |
| 3.42.332.19 | 1 | PULSANTE A FUNGO ART. 080RER (CEMA) |
| 3.42.332.06 | 1 | PULSANTE ART. 080QPNG NERO (CEMA) |
| 3.42.332.08 | 1 | PULSANTE ART. 080QPRS (CEMA) |
| 3.42.330.63 | 1 | LAMPADA SPIA ART. 080QLSB BIANCA (CEMA) |
| 3.44.556.23 | 3 | RELE GRD - XO2 PN-2 (OMRON) |
| 3.44.556.24 | 3 | RELE JW1FSN-DC24-V (MITSUSHITA) |
| 4.85.001.03 | 1 | SPORTELLLO TRASPARENTE |
| 4.62.611.25 | 1 | GANASCIA |
| 4.62.517.83 | 1 | GANASCIA ANTIBAVA |
| 3.20.093.65 | 2 | BOCCOLA AUTOLUBRIFICANTE MB 50-30 DU (D.50X55X30) |
| 3.20.093.30 | 2 | BOCCOLA AUTOLUBRIFICANTE MB-16-20-DU (D.16/18X20) |
| 4.36.631.01 | 2 | BRONZINA AUTOLUBRIFICANTE |
| 3.20.093.25 | 2 | BOCCOLA AUTOLUBRIFICANTE MB 14-10 DU (D.14X16X10) |
| 3.20.093.26 | 1 | BOCCOLA AUTOLUBRIFICANTE MB- 14-20-DU (D.14/16X20) |
| 3.20.092.14 | 8 | BOCCOLA DRYMET 701-2230 (D.22X25X30) |
| 3.20.093.23 | 2 | BOCCOLA AUTOLUBRIFICANTE MB/12-15-DU (D.12/14X15) |
| 3.20.093.37 | 1 | BOCCOLA AUTOLUBRIFICANTE MB 20-25 DU (D.20X23X25) |
| 3.20.093.51 | 1 | BOCCOLA AUTOLUBRIFICANTE MB 30-40 DU (D.30X34X40) |
| 3.20.90.77 | 7 | BOCCOLA AUTOLUBRIFICANTE MB 2030 DU (D.20X23X30) |
| 3.20.093.30 | 4 | BOCCOLA AUTOLUBRIFICANTE MB-16-20-DU (D.16/18X20) |
| 3.20.093.29 | 2 | BOCCOLA AUTOLUBRIFICANTE MB 16-15 DU (D.16X18X15) |
| 4.62.602.10 | 1 | GUARNIZIONE IN FIBRA |
| 3.37.021.32 | 1 | GUARNIZIONE OR 4337 DI 85,32 T=3,53 |
| 3.37.014.35 | 1 | GUARNIZIONE BASL 60-75-8/10 CORCOS |
| 3.37.020.82 | 1 | GUARNIZIONE OR4081 |
| 3.37.020.54 | 1 | GUARNIZIONE OR3125 |
| 3.37.028.19 | 1 | GUARNIZIONE MU/P 4032 (POLYPAC) |
| 3.37.028.16 | 1 | GUARNIZIONE MU/P 3628 (POLYPAC) |
| 3.37.052.25 | 1 | GUARNIZIONE E/GR 0520 (POLYPAC) |
| 3.37.020.68 | 1 | GUARNIZIONE OR3212 |
| 3.37.021.30 | 2 | GUARNIZIONE OR 4312 DI 78,97 T= 3,53 |
| 3.37.021.28 | 1 | GUARNIZIONE OR 177 DI 74,61 T=3,53 |
| 3.37.021.04 | 1 | GUARNIZIONE OR 153 DI 49,21 T=3,53 |
| 3.37.150.05 | 1 | MANOMETRO WIKA 213 D.63 S.1-100 |
| 3.37.120.11 | 1 | CARTUCCIA RICAMBIO FILTRO CR 60/1 (FBO) |
| 3.20.745.36 | 4 | CUSCINETTO HK 2030 (F20-26-30) (DURKOPP) |
| 3.20.745.26 | 8 | CUSCINETTO HK 1522 (F15-21-22) (DURKOPP) |
| 3.37.005.16 | 4 | ANELLO DI TENUTA DH20264(F20-26-4) (DURKOPP) |
| 3.20.701.37 | 1 | CUSCINETTO 6003-2RS (F17-35-10) (SKF) |
| 4.30.676.01 | 6 | RULLO DI SUPPORTO |
| 4.30.675.01 | 6 | RULLO DI CONTENIMENTO |
| 4.28.524.01 | 6 | MOZZO CONICO |
| 4.28.525.01 | 6 | MOZZO DI CARICAMENTO |
| 4.30.132.01 | 4 | CAMICIA IN BRONZO PER RULLO TRAINO |

PIECES DE RECHANGE CONSEILLEES

| CODE | QUANTITE | DESCRIPTION |
|-------------|----------|--|
| 4.29.502.07 | 1 | VOLANT D.140 3BR.B.F 18H7 BOTTECO 21414018H7/00 |
| 3.24.103.17 | 1 | CHAÎNE ISO 06.B2 - 159 MAILLONS TERMINAUX MÂLES (REX REGINA) |
| 3.24.192.05 | 1 | MAILLE DE JONCTION POUR CHAÎNE ISO 06.B2 |
| 3.34.219.15 | 1 | BOBINE POUR SOUPAPE ÉLECTRIQUE REXROTH |
| 3.44.101.30 | 1 | RELE RP412024 INPUT 24V DC LOAD 8A (SCHRACK) |
| 3.44.101.31 | 1 | RELE G3R 202 PN-02 INPUT 24V DC LOAD 8A (OMRON) |
| 3.42.615.52 | 1 | INTERRUPTEUR DE SÉCURITÉ À GALET TYPE FA 4615 (PIZZATO) |
| 3.42.614.47 | 1 | MICROINTERRUPTEUR DE FIN DE COURSE - CÂBLE L=2000 MOD.XCM-A-1102 (TELEMECANIQUE) |
| 3.26.228.02 | 1 | RÉGULATEUR DE NIVEAU EL/MAGNETIQUE LM2TB (ELETTROTEC) |
| 3.42.660.29 | 1 | INT. DE FIN DE COURSE DE PROXIMITÉ 3RG4024-OAG33 (SAIET) |
| 3.42.660.05 | 1 | INT. DE FIN DE COURSE DE PROXIMITÉ (PNP V.24 DC) E-A1TM/SAP (M12X1) (SAIET) |
| 3.42.660.06 | 1 | INT. DE FIN DE COURSE DE PROXIMITÉ EA1PMU (M12X1) (SAIET) |
| 3.42.601.01 | 1 | INTERRUPTEUR DE SÉCURITÉ/D'URGENCE TQ441-0V01 YÜR |
| 3.41.910.74 | 1 | ELECTROPOMPE SPV 12 (SACEMI) |
| 3.42.332.11 | 1 | BOUTON LUMINEUX ART.080QPLVG VERT (CEMA) |
| 3.42.332.48 | 1 | OPÉRATEUR SÉLECTEUR 3 POSITIONS NOIR AVEC RETOUR AU CENTRE DE DROITE À GAUCHE TYPE 080 QSMZN RC (CEMA) |
| 3.42.332.19 | 1 | BOUTON D'URGENCE ART. 080RER (CEMA) |
| 3.42.332.06 | 1 | BOUTON ART. 080QPNG NOIR (CEMA) |
| 3.42.332.08 | 1 | BOUTON ART. 080QPRS (CEMA) |
| 3.42.330.63 | 1 | VOYANT LUMINEUX ART. 080QLSB BLANC (CEMA) |
| 3.44.556.23 | 3 | RELE GRD - XO2 PN-2 (OMRON) |
| 3.44.556.24 | 3 | RELE JW1FSN-DC24-V (MITSUSHITA) |
| 4.85.001.03 | 1 | PORTE TRANSPARENTE |
| 4.62.611.25 | 1 | MACHOIRE |
| 4.62.517.83 | 1 | MACHOIRE ANTI-ÉBARBURE |
| 3.20.093.65 | 2 | DOUILLE AUTOLUBRIFIANTE MB 50-30 DU (D.50X55X30) |
| 3.20.093.30 | 2 | DOUILLE AUTOLUBRIFIANTE MB-16-20-DU (D.16/18X20) |
| 4.36.631.01 | 2 | COUSSINET EN BRONZE AUTOLUBRIFIANT |
| 3.20.093.25 | 2 | DOUILLE AUTOLUBRIFIANTE MB 14-10 DU (D.14X16X10) |
| 3.20.093.26 | 1 | DOUILLE AUTOLUBRIFIANTE MB- 14-20-DU (D.14/16X20) |
| 3.20.092.14 | 8 | DOUILLE DRYMET 701-2230 (D.22X25X30) |
| 3.20.093.23 | 2 | DOUILLE AUTOLUBRIFIANTE MB/12-15-DU (D.12/14X15) |
| 3.20.093.37 | 1 | DOUILLE AUTOLUBRIFIANTE MB 20-25 DU (D.20X23X25) |
| 3.20.093.51 | 1 | DOUILLE AUTOLUBRIFIANTE MB 30-40 DU (D.30X34X40) |
| 3.20.90.77 | 7 | DOUILLE AUTOLUBRIFIANTE MB 2030 DU (D.20X23X30) |
| 3.20.093.30 | 4 | DOUILLE AUTOLUBRIFIANTE MB-16-20-DU (D.16/18X20) |
| 3.20.093.29 | 2 | DOUILLE AUTOLUBRIFIANTE MB 16-15 DU (D.16X18X15) |
| 4.62.602.10 | 1 | GARNITURE EN FIBRE |
| 3.37.021.32 | 1 | GARNITURE OR 4337 DI 85,32 T=3,53 |
| 3.37.014.35 | 1 | GARNITURE BASL 60-75-8/10 CORCOS |
| 3.37.020.82 | 1 | GARNITURE OR4081 |
| 3.37.020.54 | 1 | GARNITURE OR3125 |
| 3.37.028.19 | 1 | GARNITURE MU/P 4032 (POLYPAC) |
| 3.37.028.16 | 1 | GARNITURE MU/P 3628 (POLYPAC) |
| 3.37.052.25 | 1 | GARNITURE E/GR 0520 (POLYPAC) |
| 3.37.020.68 | 1 | GARNITURE OR3212 |
| 3.37.021.30 | 2 | GARNITURE OR 4312 DI 78,97 T= 3,53 |
| 3.37.021.28 | 1 | GARNITURE OR 177 DI 74,61 T=3,53 |
| 3.37.021.04 | 1 | GARNITURE OR 153 DI 49,21 T=3,53 |
| 3.37.150.05 | 1 | MANOMÈTRE WIKA 213 D.63 S.1-100 |
| 3.37.120.11 | 1 | CARTOUCHE DE RECHANGE DU FILTRE CR 60/1 (FBO) |
| 3.20.745.36 | 4 | COUSSINET HK 2030 (F20-26-30) (DURKOPP) |
| 3.20.745.26 | 8 | COUSSINET HK 1522 (F15-21-22) (DURKOPP) |
| 3.37.005.16 | 4 | BAGUE D'ÉTANCHÉITÉ DH20264(F20-26-4) (DURKOPP) |
| 3.20.701.37 | 1 | COUSSINET 6003-2RS (F17-35-10) (SKF) |
| 4.30.676.01 | 6 | ROULEAU DE SUPPORT |
| 4.30.675.01 | 6 | ROULEAU D'ENDIGUEMENT |
| 4.28.524.01 | 6 | MOYEU CONIQUE |
| 4.28.525.01 | 6 | MOYEU DE CHARGEMENT |
| 4.30.132.01 | 4 | CHEMISE EN BRONZE POUR ROULEAU D'ENTRAÎNEMENT |

RECOMMENDED SPARE PARTS

| CODE | QUANTITY | DESCRIPTION |
|-------------|----------|---|
| 4.29.502.07 | 1 | HANDWHEEL D.140 3BR.B.F 18H7 BOTTECO 21414018H7/00 |
| 3.24.103.17 | 1 | CHAIN ISO 06.B2 - 159 MALE END LINKS (REX REGINA) |
| 3.24.192.05 | 1 | JUNCTION LINK FOR CHAIN ISO 06.B2 |
| 3.34.219.15 | 1 | COIL FOR REXROTH SOLENOID VALVE REXROTH |
| 3.44.101.30 | 1 | RELE RP412024 INPUT 24V DC LOAD 8A (SCHRACK) |
| 3.44.101.31 | 1 | RELE G3R 202 PN-02 INPUT 24V DC LOAD 8A (OMRON) |
| 3.42.615.52 | 1 | WHEEL SAFETY SWITCH TYPE FA 4615 (PIZZATO) |
| 3.42.614.47 | 1 | LIMIT SWITCH MICROSWITCH W/CABLE L=2000 MOD.XCM-A-1102 (TELEMECANIQUE) |
| 3.26.228.02 | 1 | ELECTRIC/MAGNETIC LEVEL GAUGE LM2TB (ELETTROTEC) |
| 3.42.660.29 | 1 | PROXIMITY LIMIT SWITCH 3RG4024-OAG33 (SAIET) |
| 3.42.660.05 | 1 | PROXIMITY LIMIT SWITCH (PNP V.24 DC) E-A1TM/SAP (M12X1) (SAIET) |
| 3.42.660.06 | 1 | PROXIMITY LIMIT SWITCH EA1PMU (M12X1) (SAIET) |
| 3.42.601.01 | 1 | SAFETY/EMERGENCY LIMIT SWITCH TQ441-0V01 YÜR |
| 3.41.910.74 | 1 | PUMP SPV 12 (SACEMI) |
| 3.42.332.11 | 1 | LIGHT PUSH-BUTTON ITEM 080QPLVG GREEN (CEMA) |
| 3.42.332.48 | 1 | 3-POSITION BLACK SELECTOR OPERATOR WITH RETURN TO CENTRE FROM RIGHT TO LEFT TYPE 080 QSMZN RC (CEMA) |
| 3.42.332.19 | 1 | MUSH-ROOM PUSH-BUTTON ITEM 080RER (CEMA) |
| 3.42.332.06 | 1 | PUSH-BUTTON ITEM 080QPNG BLACK (CEMA) |
| 3.42.332.08 | 1 | PUSH-BUTTON ITEM 080QPRS (CEMA) |
| 3.42.330.63 | 1 | WARNING LIGHT ITEM 080QLSB WHITE (CEMA) |
| 3.44.556.23 | 3 | RELE GRD - XO2 PN-2 (OMRON) |
| 3.44.556.24 | 3 | RELE JW1FSN-DC24-V (MITSUSHITA) |
| 4.85.001.03 | 1 | TRANSPARENT HATCH |
| 4.62.611.25 | 1 | JAW |
| 4.62.517.83 | 1 | ANTI-BURR JAW |
| 3.20.093.65 | 2 | SELF-LUBRICATING BUSH MB 50-30 DU (D.50X55X30) |
| 3.20.093.30 | 2 | SELF-LUBRICATING BUSH MB-16-20-DU (D.16/18X20) |
| 4.36.631.01 | 2 | SELF-LUBRICATING BEARING BRASS |
| 3.20.093.25 | 2 | SELF-LUBRICATING BUSH MB 14-10 DU (D.14X16X10) |
| 3.20.093.26 | 1 | SELF-LUBRICATING BUSH MB- 14-20-DU (D.14/16X20) |
| 3.20.092.14 | 8 | DRYMET BUSH 701-2230 (D.22X25X30) |
| 3.20.093.23 | 2 | SELF-LUBRICATING BUSH MB/12-15-DU (D.12/14X15) |
| 3.20.093.37 | 1 | SELF-LUBRICATING BUSH MB 20-25 DU (D.20X23X25) |
| 3.20.093.51 | 1 | SELF-LUBRICATING BUSH MB 30-40 DU (D.30X34X40) |
| 3.20.90.77 | 7 | SELF-LUBRICATING BUSH MB 2030 DU (D.20X23X30) |
| 3.20.093.30 | 4 | SELF-LUBRICATING BUSH MB-16-20-DU (D.16/18X20) |
| 3.20.093.29 | 2 | SELF-LUBRICATING BUSH MB 16-15 DU (D.16X18X15) |
| 4.62.602.10 | 1 | FIBRE PACKING |
| 3.37.021.32 | 1 | O-RING 4337 DI 85,32 T=3,53 |
| 3.37.014.35 | 1 | BASL PACKING 60-75-8/10 CORCOS |
| 3.37.020.82 | 1 | O-RING4081 |
| 3.37.020.54 | 1 | O-RING3125 |
| 3.37.028.19 | 1 | MU/P PACKING 4032 (POLYPAC) |
| 3.37.028.16 | 1 | MU/PACKING 3628 (POLYPAC) |
| 3.37.052.25 | 1 | E/GR PACKING 0520 (POLYPAC) |
| 3.37.020.68 | 1 | O-RING3212 |
| 3.37.021.30 | 2 | O-RING 4312 DI 78,97 T= 3,53 |
| 3.37.021.28 | 1 | O-RING 177 DI 74,61 T=3,53 |
| 3.37.021.04 | 1 | O-RING 153 DI 49,21 T=3,53 |
| 3.37.150.05 | 1 | WIKA PRESSURE GAUGE 213 D.63 S.1-100 |
| 3.37.120.11 | 1 | FILTER CARTRIDGE CR 60/1 (FBO) |
| 3.20.745.36 | 4 | HK 2030 BEARING (F20-26-30) (DURKOPP) |
| 3.20.745.26 | 8 | HK 1522 BEARING (F15-21-22) (DURKOPP) |
| 3.37.005.16 | 4 | SEAL RING DH20264(F20-26-4) (DURKOPP) |
| 3.20.701.37 | 1 | BEARING 6003-2RS (F17-35-10) (SKF) |
| 4.30.676.01 | 6 | SUPPORT ROLLER |
| 4.30.675.01 | 6 | ALIGNMENT ROLLER |
| 4.28.524.01 | 6 | BEVEL HUB |
| 4.28.525.01 | 6 | LOADING HUB |
| 4.30.132.01 | 4 | BRONZE LINING FOR DRIVE ROLLER |

EMPFOHLENE ERSATZTEILE

| CODE | MENGE | BESCHREIBUNG |
|-------------|-------|---|
| 4.29.502.07 | 1 | HANDRAD D.140 3BR.B.F 18H7 BOTTECO 21414018H7/00 |
| 3.24.103.17 | 1 | KETTE ISO 06.B2 - 159 MASCHEN MIT STECKENDEN (REX REGINA) |
| 3.24.192.05 | 1 | VERBINDUNGSMASCHE FÜR KETTE ISO 06.B2 |
| 3.34.219.15 | 1 | SPULE FÜR ELEKTROVENTIL REXROTH |
| 3.44.101.30 | 1 | RELE RP412024 INPUT 24V DC LOAD 8A (SCHRACK) |
| 3.44.101.31 | 1 | RELE G3R 202 PN-02 INPUT 24V DC LOAD 8A (OMRON) |
| 3.42.615.52 | 1 | UNFALLVERHÜTUNGSSCHALTER MIT RÄDCHEN TYP FA 4615 (PIZZATO) |
| 3.42.614.47 | 1 | MIKROENDSCHALTER M/KABEL L=2000 MOD.XCM-A-1102 (TELEMECANIQUE) |
| 3.26.228.02 | 1 | EL/MAGNETISCHER STANDMESSER LM2TB (ELETTROTEC) |
| 3.42.660.29 | 1 | PROXIMITY-ENDSCHALTER 3RG4024-OAG33 (SAIET) |
| 3.42.660.05 | 1 | PROXIMITY-ENDSCHALTER (PNP V.24 DC) E-A1TM/SAP (M12X1) (SAIET) |
| 3.42.660.06 | 1 | PROXIMITY-ENDSCHALTER EA1PMU (M12X1) (SAIET) |
| 3.42.601.01 | 1 | UV-NOTENDSCHALTER TQ441-0V01 YÜR |
| 3.41.910.74 | 1 | ELEKTROPUMPE SPV 12 (SACEMI) |
| 3.42.332.11 | 1 | LEUCHTTASTE ART.080QPLVG GRÜN (CEMA) |
| 3.42.332.48 | 1 | WÄHLSCHALTER 3 STELLUNGEN SCHWARZ MIT RÜCKKEHR IN DIE MITTE VON RECHTS NACH LINKS TYP 080 QSMZN RC (CEMA) |
| 3.42.332.19 | 1 | PILZFÖRMIGE TASTE ART. 080RER (CEMA) |
| 3.42.332.06 | 1 | DRUCKTASTE - ART. 080QPNG SCHWARZ (CEMA) |
| 3.42.332.08 | 1 | DRUCKTASTE ART. 080QPRS (CEMA) |
| 3.42.330.63 | 1 | KONTROLLEUCHE ART. 080QLSB WEISS (CEMA) |
| 3.44.556.23 | 3 | RELE GRD - XO2 PN-2 (OMRON) |
| 3.44.556.24 | 3 | RELE JW1FSN-DC24-V (MITSUSHITA) |
| 4.85.001.03 | 1 | DURCHSICHTIGE SCHUTZHAUBE |
| 4.62.611.25 | 1 | SPANNBACKE |
| 4.62.517.83 | 1 | ANTIGRATSPANNBACKE |
| 3.20.093.65 | 2 | SELBSTSCHMIERENDE BUCHSE MB 50-30 DU (D. 50X55X30) |
| 3.20.093.30 | 2 | SELBSTSCHMIERENDE BUCHSE MB 16-20 DU (D. 16/18X20) |
| 4.36.631.01 | 2 | SELBSTSCHMIERENDES BRONZELAGER |
| 3.20.093.25 | 2 | SELBSTSCHMIERENDE BUCHSE MB 14-10 DU (D. 14X16X10) |
| 3.20.093.26 | 1 | SELBSTSCHMIERENDE BUCHSE MB 14-20 DU (D. 14/16X20) |
| 3.20.092.14 | 8 | BUCHSE DRYMET 701-2230 (D.22X25X30) |
| 3.20.093.23 | 2 | SELBSTSCHMIERENDE BUCHSE MB/12-15 DU (D.12/14X15) |
| 3.20.093.37 | 1 | SELBSTSCHMIERENDE BUCHSE MB 20-25 DU (D.20X23X25) |
| 3.20.093.51 | 1 | SELBSTSCHMIERENDE BUCHSE MB 30-40 DU (D.30X34X40) |
| 3.20.90.77 | 7 | SELBSTSCHMIERENDE BUCHSE MB 2030 DU (D.20X23X30) |
| 3.20.093.30 | 4 | SELBSTSCHMIERENDE BUCHSE MB 16-20 DU (D.16/18X20) |
| 3.20.093.29 | 2 | SELBSTSCHMIERENDE BUCHSE MB 16-15 DU (D.16X18X15) |
| 4.62.602.10 | 1 | KUNSTFASERDICHTUNG |
| 3.37.021.32 | 1 | O-DICHTUNG 4337 DI 85,32 T=3,53 |
| 3.37.014.35 | 1 | DICHTUNG BASL 60-75-8/10 CORCOS |
| 3.37.020.82 | 1 | O-DICHTUNG 4081 |
| 3.37.020.54 | 1 | O-DICHTUNG3125 |
| 3.37.028.19 | 1 | DICHTUNG MU/P 4032 (POLYPAC) |
| 3.37.028.16 | 1 | DICHTUNG MU/P 3628 (POLYPAC) |
| 3.37.052.25 | 1 | DICHTUNG E/GR 0520 (POLYPAC) |
| 3.37.020.68 | 1 | O-DICHTUNG3212 |
| 3.37.021.30 | 2 | O-DICHTUNG 4312 DI 78,97 T= 3,53 |
| 3.37.021.28 | 1 | O-DICHTUNG 177 DI 74,61 T=3,53 |
| 3.37.021.04 | 1 | O-DICHTUNG 153 DI 49,21 T=3,53 |
| 3.37.150.05 | 1 | DRUCKMESSER WIKA 213 D.63 S.1-100 |
| 3.37.120.11 | 1 | ERSATZFILTEREINSATZ CR 60/1 (FBO) |
| 3.20.745.36 | 4 | LAGER HK 2030 (F20-26-30) (DURKOPP) |
| 3.20.745.26 | 8 | LAGER HK 1522 (F15-21-22) (DURKOPP) |
| 3.37.005.16 | 4 | DICHTRING DH20264(F20-26-4) (DURKOPP) |
| 3.20.701.37 | 1 | LAGER 6003-2RS (F17-35-10) (SKF) |
| 4.30.676.01 | 6 | STÜTZROLLE |
| 4.30.675.01 | 6 | EINSCHRÄNKUNGSROLLE |
| 4.28.524.01 | 6 | KEGELNABE |
| 4.28.525.01 | 6 | BELASTUNGSNABE |
| 4.30.132.01 | 4 | BRONZEGEHÄUSE FÜR ZUGROLLE |

RICAMBI CONSIGLIATI ALIMENTATORE A SCIVOLO

| CODICE | QUANTITA' | DESCRIZIONE |
|-------------|-----------|--|
| 3.42.660.12 | 1 | FINECORSO DI PROSSIMITÀ (PNP V.24) DCA-30-5709-S (B D C) |
| 3.42.615.48 | 1 | FINECORSO DI SICUREZZA A ROTELLA FA4615 (PIZZATO) |
| 3.42.301.10 | 1 | ELEMENTO DI CONTATTO NC XEN-L1121 (TELEMECANIQUE) |
| 3.85.001.06 | 1 | SPORTELLO TRASPARENTE |
| 4.85.001.01 | 1 | SPORTELLO TRASPARENTE |
| 3.42.614.52 | 1 | MICROINTERRUTTORE F.C. A ROTELLA FISSA C/CAVO L=5000 MOD. XCM-A-1025 (TELEMECANIQUE) |
| 3.42.650.11 | 1 | BASE PORTACONTATTI (PG 13,5) TIPO 114-FCB-11F (CEMA) |
| 3.42.659.14 | 1 | TESTINA OPERATRICE PERNO ROTANTE MOMENTO TORCENTE RIDOTTO 114-FCTLR (CEMA) |
| 8.188.11.01 | 1 | GR. LEVETTA PER FINECORSO |
| 3.24.300.04 | 1 | MANIGLIA KP 55 M8X20 NERO |

RICAMBI CONSIGLIATI ALIMENTATORE A CESTO

| CODICE | QUANTITA' | DESCRIZIONE |
|-------------|-----------|---|
| 3.42.660.12 | 1 | FINECORSO DI PROSSIMITÀ (PNP V.24) DCA-30-5709-S (B D C) |
| 3.42.615.48 | 1 | FINECORSO DI SICUREZZA A ROTELLA FA4615 (PIZZATO) |
| 3.42.301.10 | 1 | ELEMENTO DI CONTATTO NC XEN-L1121 (TELEMECANIQUE) |
| 4.85.001.02 | 1 | SPORTELLO TRASPARENTE |
| 3.42.614.52 | 1 | MICROINTERRUTTORE F.C. A ROTELLA FISSA C/CAVO L=5000 MOD. XCM-A-1025 (TELEMECANIQUE) |
| 3.42.650.11 | 1 | BASE PORTACONTATTI (PG 13,5) TIPO 114-FCB-11F (CEMA) |
| 3.42.659.14 | 1 | TESTINA OPERATRICE PERNO ROTANTE MOMENTO TORCENTE RIDOTTO 114-FCTLR (CEMA) |
| 8.188.11.01 | 6 | GR. LEVETTA PER FINECORSO |
| 3.24.240.34 | 6 | CINGHIA ART. NS/SV 65 - SENZA ASOLE - LARGH. 60 MM. - LUNGH. 3.4 MT - CARICO 1000 KG. |
| 3.24.300.04 | 2 | MANIGLIA KP 55 M8X20 NERO |
| 3.24.257.12 | 5 | CINGHIA A DOPPIA DENTATURA 330 H DD 100 (P=12,7 L=838,2) |
| 3.24.257.30 | 1 | CINGHIA A DOPPIA DENTATURA 480 H DD 100 (P=12,7 L=1219,2) |
| 3.42.614.47 | 1 | MICROINTERRUTTORE F.C. A PULSANTE C/CAVO L=2000 MOD. XCM-A-1102 (TELEMECANIQUE) |

RICAMBI CONSIGLIATI TESTA A CINGHIE DENTATE

| CODICE | QUANTITA' | DESCRIZIONE |
|-------------|-----------|--|
| 3.24.250.12 | 1 | CINGHIA DENTATA 330 H200 (P=12,7 Z=66 L=2") |
| 3.24.250.09 | 1 | CINGHIA DENTATA 330 H150 |
| 3.20.093.30 | 2 | BOCCOLA AUTOLUBRIFICANTE MB-16-20-DU (D.16 / 18 X20) |

RICAMBI CONSIGLIATI TESTA VITE/CORONA

| CODICE | QUANTITA' | DESCRIZIONE |
|-------------|-----------|--|
| 3.24.231.30 | 1 | CINGHIA TRAPEZOIDALE LARGA CW 37 X 10 LI 955 (ART. 14008122) |
| 2.77.005.02 | 1 | CORONA ELICOIDALE (CAD) |
| 4.42.504.01 | 1 | ALBERO CON VITE SENZA FINE |
| 3.37.020.89 | 1 | GUARNIZIONE OR 4118 DI 29.75 T=3,53 |
| 3.37.012.07 | 1 | GUARNIZIONE SM 48-62-8 DIN 3760 |
| 3.37.014.35 | 1 | GUARNIZIONE BASL 60-75-8/10 CORCOS |
| 3.37.021.27 | 1 | GUARNIZIONE OR 176 DI 73.03 T=3,53 |
| 2.74.048.01 | 1 | FLANGIA BLOCCA SEGA |
| 4.13.506.01 | 2 | SPINA INTAGLIATA |
| 4.25.016.01 | 1 | VITE TCEI SINISTRA |

RICAMBI CONSIGLIATI TESTA A INGRANAGGI

| CODICE | QUANTITA' | DESCRIZIONE |
|-------------|-----------|---|
| 3.24.211.10 | 1 | CINGHIA TRAPEZOIDALE XPZ24 L=637 (ROFLEX) |
| 3.37.014.35 | 1 | GUARNIZIONE BASL 60-75-8/10 CORCOS |
| 4.37.020.63 | 1 | GUARNIZIONE OR 3181 DI 45.69 T=2,62 |
| 4.32.558.07 | 1 | FLANGIA BLOCCA SEGA |
| 4.13.506.01 | 2 | SPINA INTAGLIATA |
| 3.37.020.05 | 1 | GUARNIZIONE OR 2018 DI 4.48 T=1,78 |
| 3.37.020.68 | 1 | GUARNIZIONE OR 3212 DI 53.65 T=2,62 |
| 3.37.011.28 | 1 | GUARNIZIONE SMIM 30-47-7 DIN 3760 |
| 3.37.020.22 | 1 | GUARNIZIONE OR 2100 DI 25.12 T=1,78 |
| 3.24.231.15 | 1 | CINGHIA TRAPEZOIDALE LARGA CW 33 X 10 X 850 |
| 3.37.020.62 | 2 | GUARNIZIONE OR 3175 DI 44.12 T=2,62 |
| 3.37.028.11 | 1 | GUARNIZIONE TIPO MU/P 3022 (POLYPAC) |
| 3.37.027.59 | 1 | ANELLO RASCHIATORE RM 2232 (ANGST & PFISTER) |
| 3.37.052.24 | 1 | GUARNIZIONE "RING-TEF" PER PISTONI E/GR-0500-A-55-4470 (D.50) (POLYPAC) |
| 3.37.020.41 | 1 | GUARNIZIONE OR 3068 DI 17.13 T=2,62 |

PIÈCES DE RECHANGE CONSEILLÉES POUR L'ALIMENTATEUR À GOULOTTE

| CODE | QUANTITE' | DESCRIPTION |
|-------------|-----------|---|
| 3.42.660.12 | 1 | INTERRUPTEUR DE FIN DE COURSE DE PROXIMITÉ |
| 3.42.615.48 | 1 | INTERRUPTEUR DE FIN DE COURSE DE SÉCURITÉ À GALET |
| 3.42.301.10 | 1 | ÉLÉMENT DE CONTACT |
| 3.85.001.06 | 1 | PORTE TRANSPARENTE |
| 4.85.001.01 | 1 | PORTE TRANSPARENTE |
| 3.42.614.52 | 1 | MICROINTERRUPTEUR DE FIN DE COURSE À GALET FIXE AVEC CÂBLE L = 5000 |
| 3.42.650.11 | 1 | BASE DE SUPPORT DES CONTACTS (PG 13,5) TYPE |
| 3.42.659.14 | 1 | TÊTE GOUJON PIVOTANT À MOMENT DE TORSION RÉDUIT |
| 8.188.11.01 | 1 | GR. LEVIER POUR INTERRUPTEUR DE FIN DE COURSE |
| 3.24.300.04 | 1 | POIGNÉE - NOIRE |

PIÈCES DE RECHANGE CONSEILLÉES POUR L'ALIMENTATEUR À COURROIES

| CODE | QUANTITE' | DESCRIPTION |
|-------------|-----------|---|
| 3.42.660.12 | 1 | INTERRUPTEUR DE FIN DE COURSE DE PROXIMITÉ |
| 3.42.615.48 | 1 | INTERRUPTEUR DE FIN DE COURSE DE SÉCURITÉ À GALET |
| 3.42.301.10 | 1 | ÉLÉMENT DE CONTACT |
| 4.85.001.02 | 1 | PORTE TRANSPARENTE |
| 3.42.614.52 | 1 | MICROINTERRUPTEUR DE FIN DE COURSE À GALET FIXE AVEC CÂBLE L = 5000 |
| 3.42.650.11 | 1 | BASE DE SUPPORT DES CONTACTS (PG 13,5) TYPE |
| 3.42.659.14 | 1 | TÊTE GOUJON PIVOTANT À MOMENT DE TORSION RÉDUIT |
| 8.188.11.01 | 6 | GR. LEVIER POUR INTERRUPTEUR DE FIN DE COURSE |
| 3.24.240.34 | 6 | CHAÎNE À ROULEAUX SIMPLE ISO 08-B1 |
| 3.24.300.04 | 2 | POIGNÉE DE JONCTION ISO-08B-1-N.26 |
| 3.24.257.12 | 5 | COURROIE À DOUBLE DENTURE |
| 3.24.257.30 | 1 | COURROIE À DOUBLE DENTURE |
| 3.42.614.47 | 1 | MICROINTERRUPTEUR DE FIN DE COURSE À BOUTON AVEC CÂBLE L = 2000 |

PIÈCES DE RECHANGE CONSEILLÉES POUR TÊTE À COUR- ROIES DENTÉES

| CODE | QUANTITE' | DESCRIPTION |
|-------------|-----------|-------------------------|
| 3.24.250.12 | 1 | COURROIE DENTÉE |
| 3.24.250.09 | 1 | COURROIE DENTÉE |
| 3.20.093.30 | 2 | DOUILLE AUTOLUBRIFIANTE |

PIÈCES DE RECHANGE CONSEILLÉES POUR TÊTE À VIS/ COURONNE

| CODE | QUANTITE' | DESCRIPTION |
|-------------|-----------|--|
| 3.24.231.30 | 1 | COURROIE TRAPÉZOÏDALE LARGE |
| 2.77.005.02 | 1 | COURONNE HÉLICOÏDALE |
| 4.42.504.01 | 1 | ARBRE AVEC VIS SANS FIN |
| 3.37.020.89 | 1 | JOINT OR |
| 3.37.012.07 | 1 | JOINT |
| 3.37.014.35 | 1 | JOINT |
| 3.37.021.27 | 1 | JOINT OR |
| 2.74.048.01 | 1 | BRIDE DE BLOCAGE DE LA SCIE |
| 4.13.506.01 | 2 | GOUPILLE À CRÉNEAU |
| 4.25.016.01 | 1 | VIS À TÊTE CYLINDRIQUE À SIX PANS CREUX GAUCHE |

PIÈCES DE RECHANGE CONSEILLÉES POUR TÊTE À EN- GRENAGES

| CODE | QUANTITE' | DESCRIPTION |
|-------------|-----------|-----------------------------|
| 3.24.211.10 | 1 | COURROIE TRAPÉZOÏDALE |
| 3.37.014.35 | 1 | JOINT OR |
| 4.37.020.63 | 1 | BRIDE DE BLOCAGE DE LA SCIE |
| 4.32.558.07 | 1 | GOUPILLE À CRÉNEAU |
| 4.13.506.01 | 2 | JOINT OR |
| 3.37.020.05 | 1 | JOINT OR |
| 3.37.020.68 | 1 | JOINT |
| 3.37.011.28 | 1 | JOINT OR |
| 3.37.020.22 | 1 | COURROIE TRAPÉZOÏDALE LARGE |
| 3.24.231.15 | 1 | JOINT OR |
| 3.37.020.62 | 2 | JOINT TYPE... |
| 3.37.028.11 | 1 | ANNEAU RACLEUR |
| 3.37.027.59 | 1 | JOINT |
| 3.37.052.24 | 1 | JOINT OR |
| 3.37.020.41 | 1 | JOINT OR |

RECOMMENDED SPARE PARTS FOR THE FEEDING CHUTE

| CODE | QUANTITY' | DESCRIPTION |
|-------------|-----------|---|
| 3.42.660.12 | 1 | PROXIMITY LIMIT SWITCH (PNPV.24) DCA-30-5709-S(BDC) |
| 3.42.615.48 | 1 | ROLLER SAFETY LIMIT SWITCH FA4615 (PIZZATO) |
| 3.42.301.10 | 1 | CONTACT ELEMENT CXEN-L1121 (TELEMECANIQUE) |
| 3.85.001.06 | 1 | TRANSPARENT DOOR |
| 4.85.001.01 | 1 | TRANSPARENT DOOR |
| 3.42.614.52 | 1 | END OF STROKE MICROSWITCH WITH FIXED ROLLER W/ CABLE L=5000 MOD. XCM-A-1025 |
| 3.42.650.11 | 1 | (TELEMECANIQUE) |
| 3.42.659.14 | 1 | CONTACT HOLDING BASE (PG 13.5) TYPE 114-FCB-11F (CEMA) |
| 8.188.11.01 | 1 | ROTATING PIN OPERATING HEAD WITH REDUCED TORQUE 114-FCTLR (CEMA) |
| 3.24.300.04 | 1 | LARGE LEVER FOR END OF STROKE HANDLE KP55M8X20 BLACK |

RECOMMENDED SPARE PARTS FOR THE FEEDING BASKET

| CODE | QUANTITY' | DESCRIPTION |
|-------------|-----------|---|
| 3.42.660.12 | 1 | PROXIMITY LIMIT SWITCH (PNPV.24) DCA-30-5709-S(BDC) |
| 3.42.615.48 | 1 | ROLLER SAFETY LIMIT SWITCH FA4615 (PIZZATO) |
| 3.42.301.10 | 1 | CONTACT ELEMENT CXEN-L1121 (TELEMECANIQUE) |
| 4.85.001.02 | 1 | TRANSPARENT DOOR |
| 3.42.614.52 | 1 | END OF STROKE MICROSWITCH WITH FIXED ROLLER W/ CABLE L=5000 MOD. XCM-A-1025 |
| 3.42.650.11 | 1 | CONTACT HOLDING BASE (PG 13.5) TYPE 114-FCB-11F (CEMA) |
| 3.42.659.14 | 1 | ROTATING PIN OPERATING HEAD WITH REDUCED TORQUE 114-FCTLR (CEMA) |
| 8.188.11.01 | 6 | LARGE LEVER FOR END OF STROKE |
| 3.24.240.34 | 6 | BELT |
| 3.24.300.04 | 2 | HANDLE KP55M8X20 BLACK |
| 3.24.257.12 | 5 | BELT WITH DOUBLE TOOTH FORM 330HDD100 (P=12.7 L=838.2) |
| 3.24.257.30 | 1 | BELT WITH DOUBLE TOOTH FORM 480HDD100 (P=12.7 L=1219.2) |
| 3.42.614.47 | 1 | END OF STROKE MICROSWITCH WITH BUTTON W/ CABLE L=2000 MOD. XCM-A-1102 |

RECOMMENDED SPARE PARTS FOR THE HEAD WITH TOOTHED BELTS

| CODE | QUANTITY' | DESCRIPTION |
|-------------|-----------|--|
| 3.24.250.12 | 1 | TOOTHED BELT 330 H200 (P=12.7 Z=66 L=2") |
| 3.24.250.09 | 1 | TOOTHED BELT 330 H150 |
| 3.20.093.30 | 2 | SELF-LUBRICATING BUSH MB-16-20-DU (D.16/18X20) |

RECOMMENDED SPARE PARTS FOR SCREW/CROWN GEAR HEAD

| CODE | QUANTITY' | DESCRIPTION |
|-------------|-----------|---|
| 3.24.231.30 | 1 | BROAD V BELT CW 37X10 LI955 (ART. 14008122) |
| 2.77.005.02 | 1 | HELICAL CROWN GEAR (CAD) |
| 4.42.504.01 | 1 | SHAFT WITH WORM SCREW |
| 3.37.020.89 | 1 | GASKET OR 4118 DI 29.75 T=3.53 |
| 3.37.012.07 | 1 | GASKET SM 48-62-8 DIN3760 |
| 3.37.014.35 | 1 | GASKET BASL60.75-8/10 CORCOS |
| 3.37.021.27 | 1 | GASKET OR 176 DI 73.03 T=3.53 |
| 2.74.048.01 | 1 | SAW BLOCKING FLANGE |
| 4.13.506.01 | 2 | NOTCHED PIN |
| 4.25.016.01 | 1 | LEFT SCREW TCEI |

RECOMMENDED SPARE PARTS FOR HEAD WITH GEARS

| CODE | QUANTITY' | DESCRIPTION |
|-------------|-----------|--|
| 3.24.211.10 | 1 | V BELT XPZ24 L=637 (ROFLEX) |
| 3.37.014.35 | 1 | GASKET BASL60.75-8/10 CORCOS |
| 4.37.020.63 | 1 | GASKET OR 3181 DI 45.69 T=2.62 |
| 4.32.558.07 | 1 | SAW BLOCKING FLANGE |
| 4.13.506.01 | 2 | NOTCHED PIN |
| 3.37.020.05 | 1 | GASKET OR 2018 DI 4.48 T=1.78 |
| 3.37.020.68 | 1 | GASKET OR 3212 DI 53.65 T=2.62 |
| 3.37.011.28 | 1 | GASKET SMIM 30-47-7 DIN36760 |
| 3.37.020.22 | 1 | GASKET OR 2100 CI 25.12 T=1.78 |
| 3.24.231.15 | 1 | BROAD V BELT CW 33X10X850 |
| 3.37.020.62 | 2 | GASKET OR 3175 DI 44.12 T=2.62 |
| 3.37.028.11 | 1 | GASKET TYPE MU/P3022 (POLYPAC) |
| 3.37.027.59 | 1 | SCRAPER RING RM2232 (ANGST & PFISTER) |
| 3.37.052.24 | 1 | "RING-TEF" GASKET FOR PISTONS E/GR-0500-1-55-4470 (D.50) (POLYPAC) |
| 3.37.020.41 | 1 | GASKET OR 3068 DI 17.13 T=2.62 |

EMPFOHLENE ERSATZTEILE LADERUTSCHE

| CODE | MENGE' | BESCHREIBUNG |
|-------------|--------|---|
| 3.42.660.12 | 1 | NÄHERUNGSENDSCHALTER |
| 3.42.615.48 | 1 | SICHERHEITS-ROLLENENDSCHALTER |
| 3.42.301.10 | 1 | KONTAKTSTÜCK |
| 3.85.001.06 | 1 | DURCHSICHTIGE ABDECKUNG |
| 4.85.001.01 | 1 | DURCHSICHTIGE ABDECKUNG |
| 3.42.614.52 | 1 | MIKRO-ENDSCHALTER MIT FESTER ROLLE UND KABEL |
| 3.42.650.11 | 1 | KONTAKTTRÄGER (PG 13,5) TYP |
| 3.42.659.14 | 1 | EINHEITSKOPF MIT DREHBOLZEN UND UNTERSETZTEM DREHMOMENT |
| 8.188.11.01 | 1 | KONTAKTHEBEL FÜR ENDSCHALTER |
| 3.24.300.04 | 1 | GRIFF KP 55 M 8X20 SCHWARZ |

EMPFOHLENE ERSATZTEILE KORBLADEVORRICHTUNG

| CODE | MENGE' | BESCHREIBUNG |
|-------------|--------|--|
| 3.42.660.12 | 1 | NÄHERUNGSENDSCHALTER |
| 3.42.615.48 | 1 | SICHERHEITS-ROLLENENDSCHALTER |
| 3.42.301.10 | 1 | KONTAKTSTÜCK |
| 4.85.001.02 | 1 | DURCHSICHTIGE ABDECKUNG |
| 3.42.614.52 | 1 | MIKRO-ENDSCHALTER MIT FESTER ROLLE UND KABEL |
| 3.42.650.11 | 1 | KONTAKTTRÄGER (PG 13,5) TYP |
| 3.42.659.14 | 1 | EINHEITSKOPF MIT DREHBOLZEN UND UNTERSETZTEM DREHMOMENT |
| 8.188.11.01 | 6 | KONTAKTHEBEL FÜR ENDSCHALTER |
| 3.24.240.34 | 6 | RIEMEN ART. NS/SV65-OHNE ÖSEN-BREITE 60MM-LÄNGE 3,4M- BELAST.1000 KG |
| 3.24.300.04 | 2 | GRIFF KP 55 M 8X20 SCHWARZ |
| 3.24.257.12 | 5 | DOPPELZAHNRIEMEN |
| 3.24.257.30 | 1 | DOPPELZAHNRIEMEN |
| 3.42.614.47 | 1 | MIKRO-DRUCKKNOPFENDSCHALTER MIT KABEL |

EMPFOHLENE ERSATZTEILE ZAHNRIEMENKOPF

| CODE | MENGE' | BESCHREIBUNG |
|-------------|--------|--------------------------|
| 3.24.250.12 | 1 | ZAHNRIEMEN |
| 3.24.250.09 | 1 | ZAHNRIEMEN |
| 3.20.093.30 | 2 | SELBSTSCHMIERENDE BUCHSE |

EMPFOHLENE ERSATZTEILE SCHRAUBEN-/KRANZKOPF

| CODE | MENGE' | BESCHREIBUNG |
|-------------|--------|-----------------------------|
| 3.24.231.30 | 1 | BREITER KEILRIEMEN |
| 2.77.005.02 | 1 | SCHRÄGKRANZ |
| 4.42.504.01 | 1 | WELLE MIT ENDLOSER SCHRAUBE |
| 3.37.020.89 | 1 | O-RING |
| 3.37.012.07 | 1 | DICHTUNG |
| 3.37.014.35 | 1 | DICHTUNG |
| 3.37.021.27 | 1 | O-RING |
| 2.74.048.01 | 1 | SÄGEKLEMMFLANSCH |
| 4.13.506.01 | 2 | KERBSTIFT |
| 4.25.016.01 | 1 | LINKSGÄNGIGE SCHRAUBE |

EMPFOHLENE ERSATZTEILE GETRIEBEKOPF

| CODE | MENGE' | BESCHREIBUNG |
|-------------|--------|--------------------------------|
| 3.24.211.10 | 1 | KEILRIEMEN |
| 3.37.014.35 | 1 | DICHTUNG |
| 4.37.020.63 | 1 | O-RING |
| 4.32.558.07 | 1 | SÄGEKLEMMFLANSCH |
| 4.13.506.01 | 2 | KERBSTIFT |
| 3.37.020.05 | 1 | O-RING |
| 3.37.020.68 | 1 | O-RING |
| 3.37.011.28 | 1 | DICHTUNG |
| 3.37.020.22 | 1 | O-RING |
| 3.24.231.15 | 1 | BREITER KEILRIEMEN |
| 3.37.020.62 | 2 | O-RING |
| 3.37.028.11 | 1 | DICHTUNG TYP |
| 3.37.027.59 | 1 | ÖLABSTREIFRING |
| 3.37.052.24 | 1 | DICHTUNG "RING-TEF" FÜR KOLBEN |
| 3.37.020.41 | 1 | O-RING |

CAPITOLO 3.7

TAVOLE RICAMBI
TABLEAUX PIECES DE RECHANGE
SPARE PARTS TABLES
ABBILDUNGEN DER ERSATZTEILE

Italiano

N.B. - Per la richiesta dei pezzi di ricambio bisogna specificare :

- **Modello macchina**
- **Numero di matricola**
- **Numero riferimento pezzo e tavola relativa**

Français

N.B. - Pour la demande des pièces de rechange, il faut spécifier :

- **Modèle de la machine**
- **Numéro de matricule**
- **Numéro de référence de la pièce et de table correspondante**

English

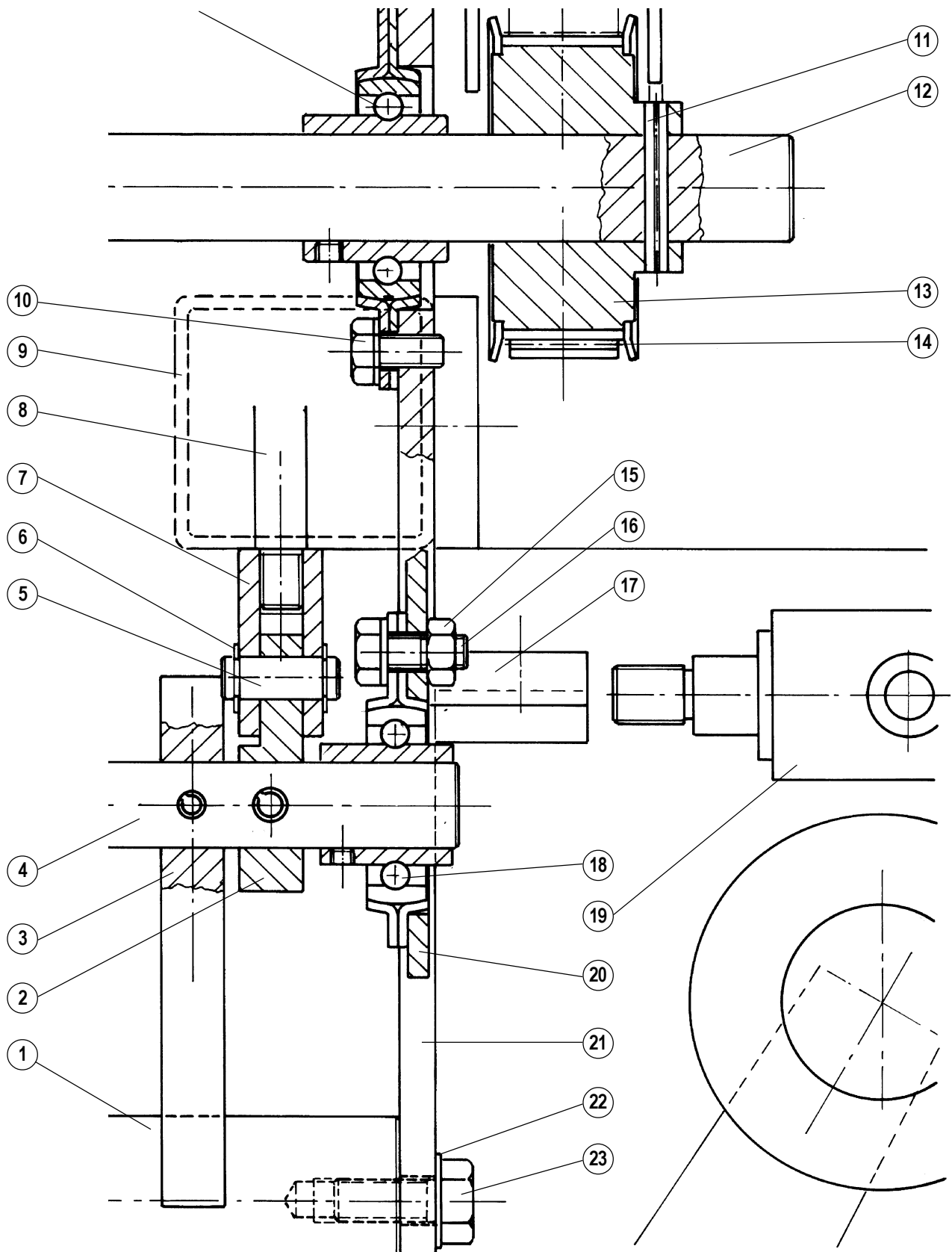
Notes - When ordering spare parts, please specify :

- **Machine model**
- **Serial number**
- **Reference number and relative table**

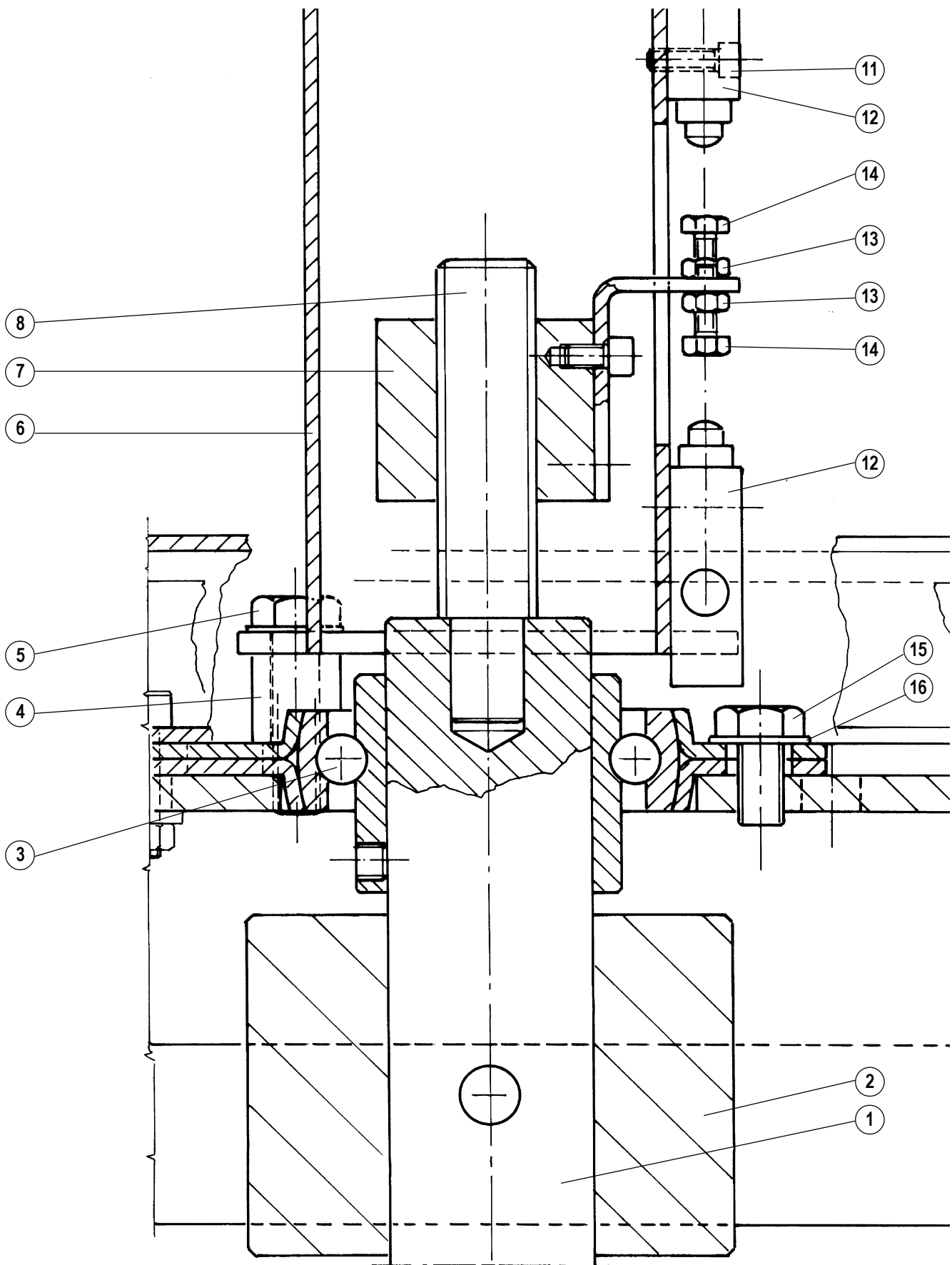
Deutsch

N.B. - Bei der Bestellung der Ersatzteile muß folgendes angegeben werden :

- **Modell der Maschine**
- **Matrikel nummer**
- **Bezugsnummer der Ersatzteils und entsprechende Tafel.**



TAV. I
 ALIMENTATORE A CESTO - GRUPPO DI CARICAMENTO
 BASKET FEEDER - LOADING GROUP
 ALIMENTATEUR A PANIER - GROUPE DE CHARGEMENT
 LADEGERÄT - LADE GRUPPE



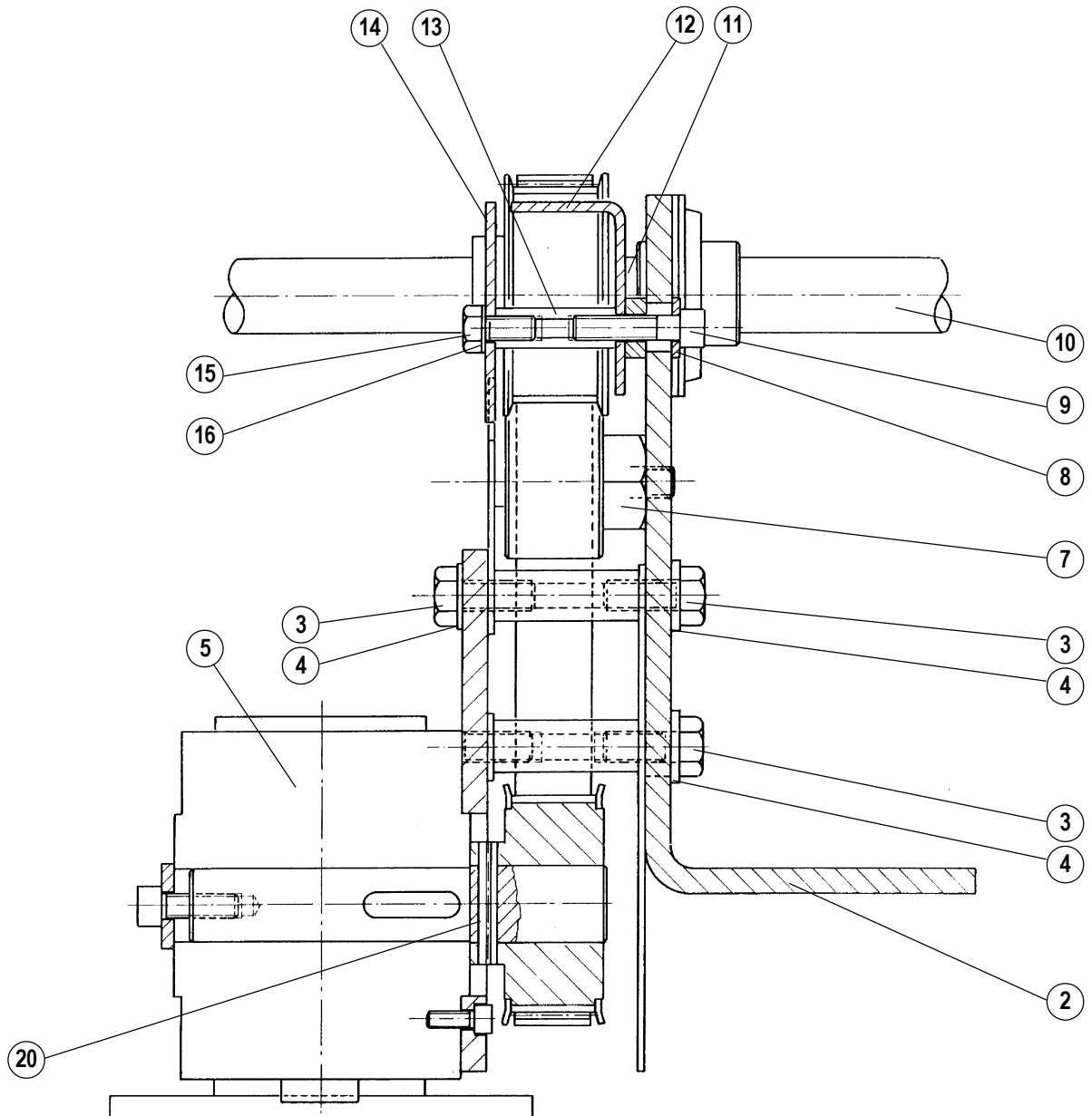
TAV. II

ALIMENTATORE A CESTO - FINECORSO SALITA/DISCESA CINGHIE

BASKET FEEDER - BELTS ASCENT/DESCENT ENDS OF STROKE

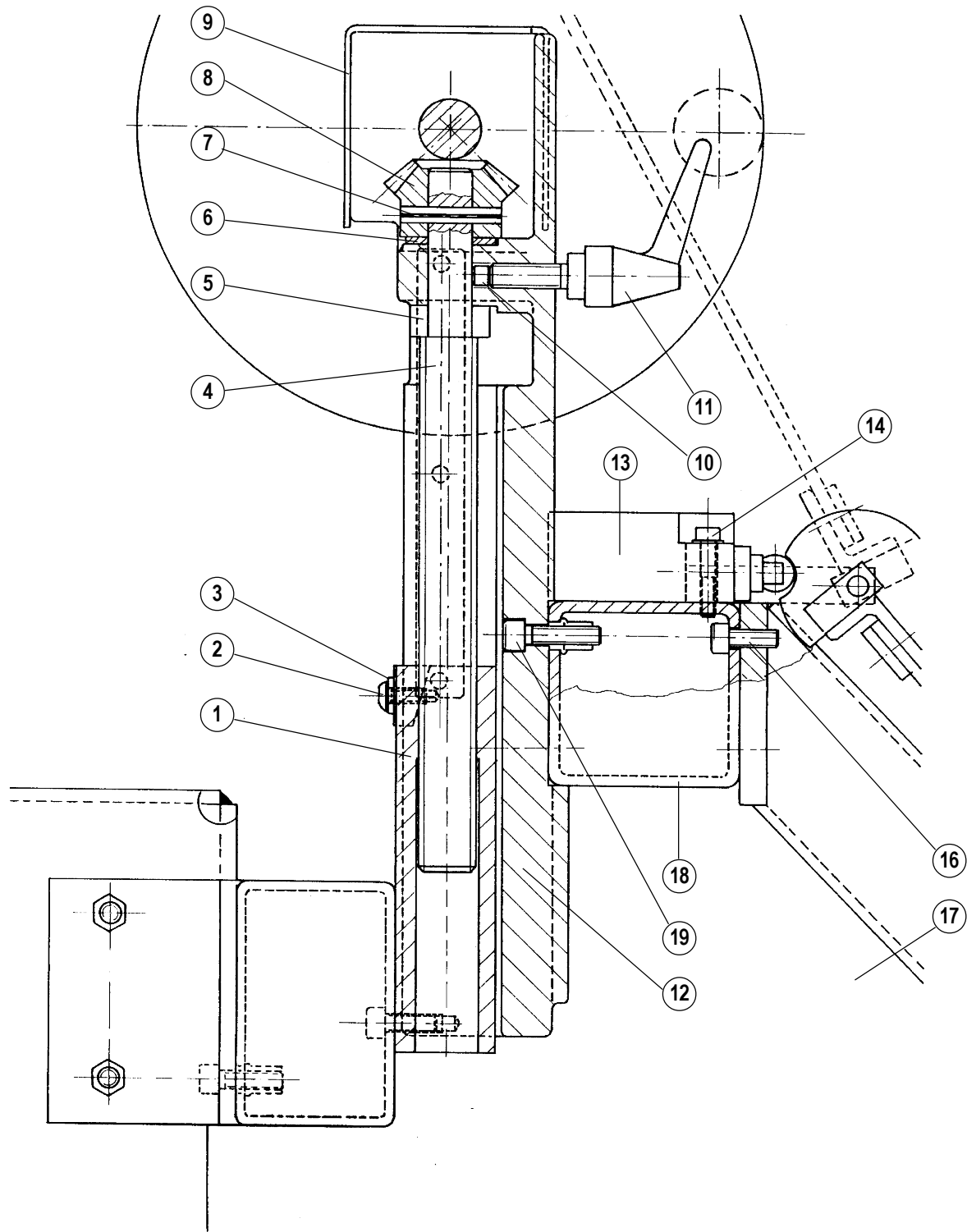
ALIMENTATEUR A PANIER - BUTEE DE FIN COURSE MONTEE/DESCENT COURROIES

LADEGERÄT - ENDSCHALTER RIEMEN ANSTIEG/NEIGUNG



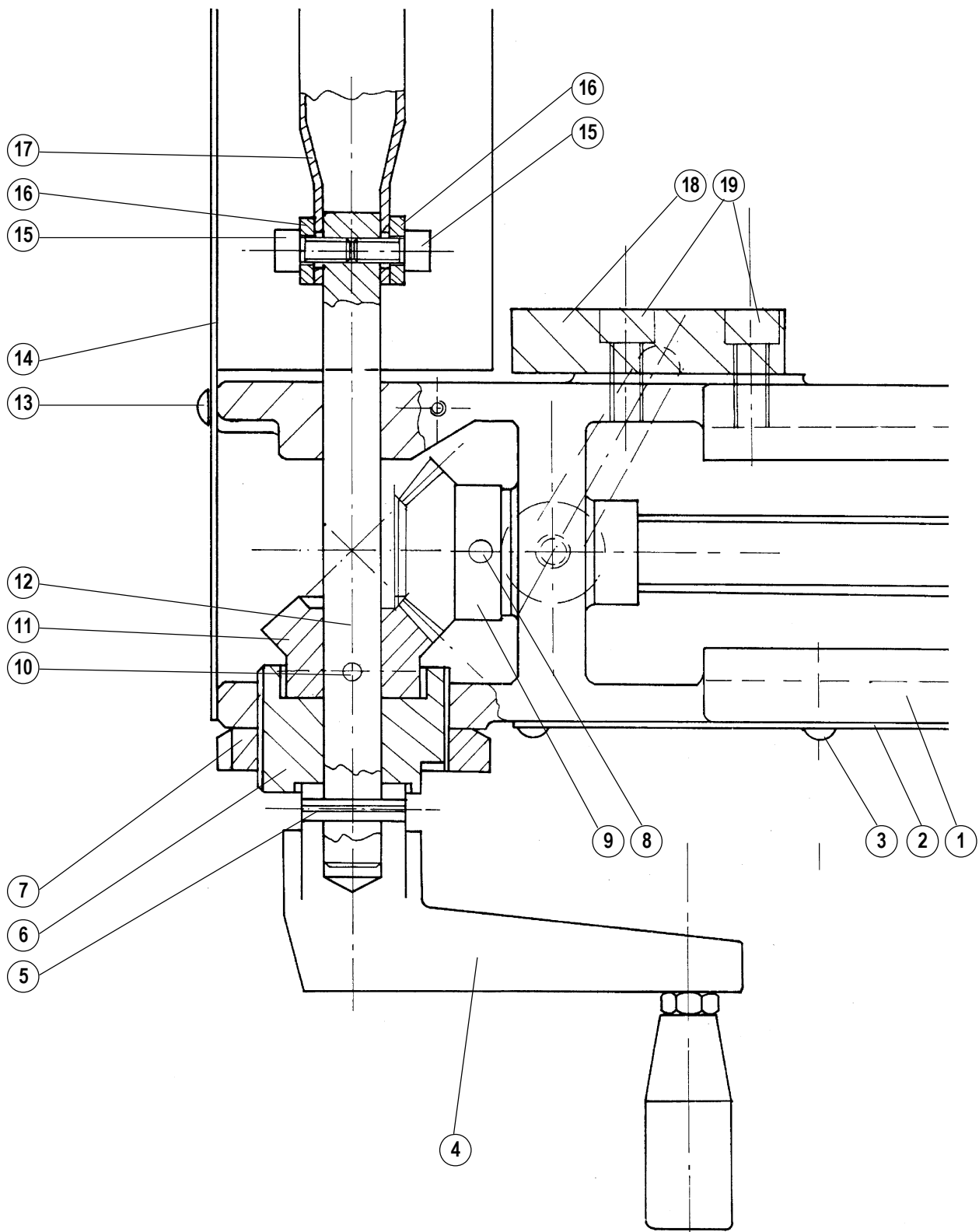
TAV. III

ALIMENTATORE A CESTO - SEZIONE GRUPPO DI CARICAMENTO
 BASKET FEEDER - LOADING GROUP SECTION
 ALIMENTATEUR A PANIER - SECTION GROUPE DE CHARGEMENT
 LADEGERÄT - SEKTION LADE GRUPPE

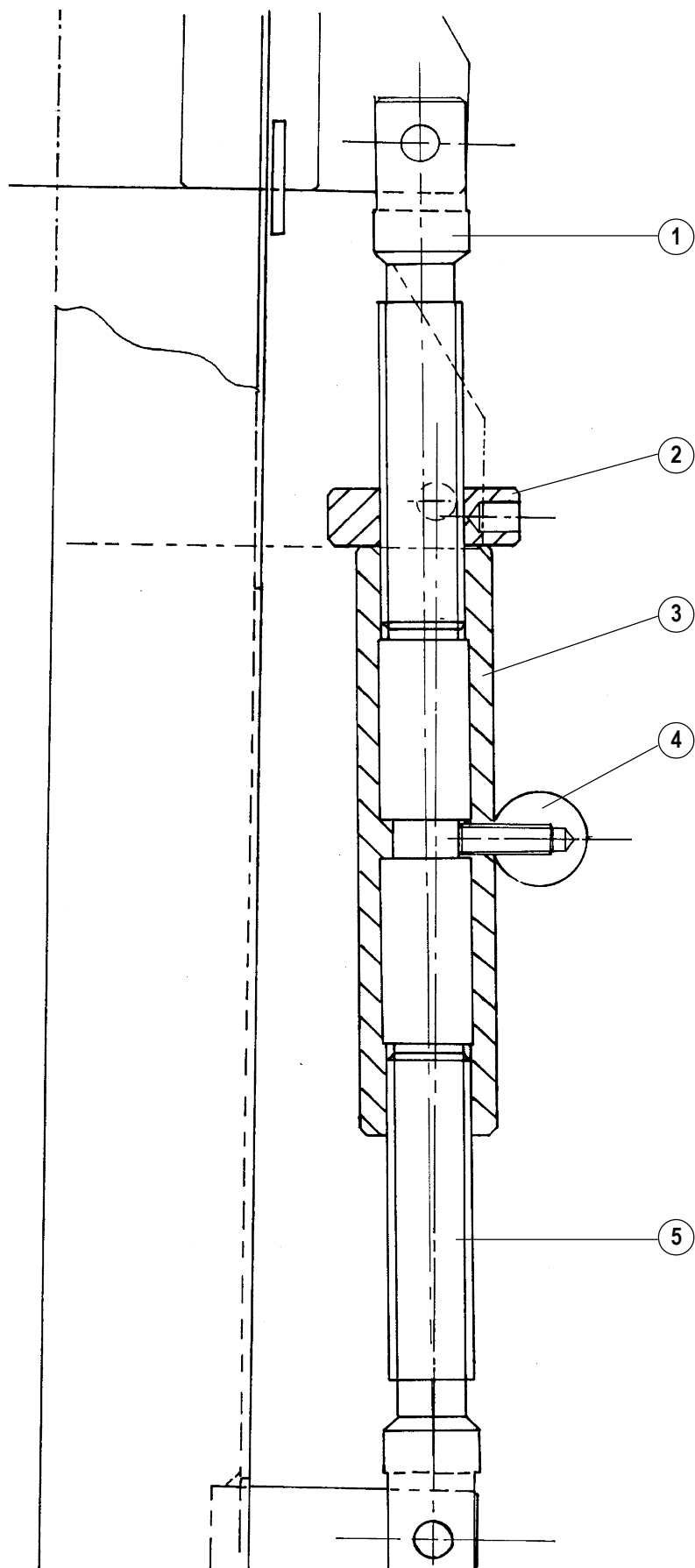


TAV. IV

ALIMENTATORE A CESTO - CARRELLO REGOLAZIONE VERTICALE
 BASKET FEEDER - VERTICAL CARRIAGE ADJUSTMENT
 ALIMENTATEUR A PANIER - CHARIOT DE REGLAGE VERTICAL
 LADEGERÄT - SCHLITTEN VERTIKAL EINSTELLUNG



TAV. V
 ALIMENTATORE A CESTO - COMANDO REGOLAZIONE VERTICALE
 BASKET FEEDER - VERTICAL ADJUSTMENT
 ALIMENTATEUR A PANIER - REGLAGE VERTICAL
 LADEGERÄT - BEFEHL VERTIKAL EINSTELLUNG



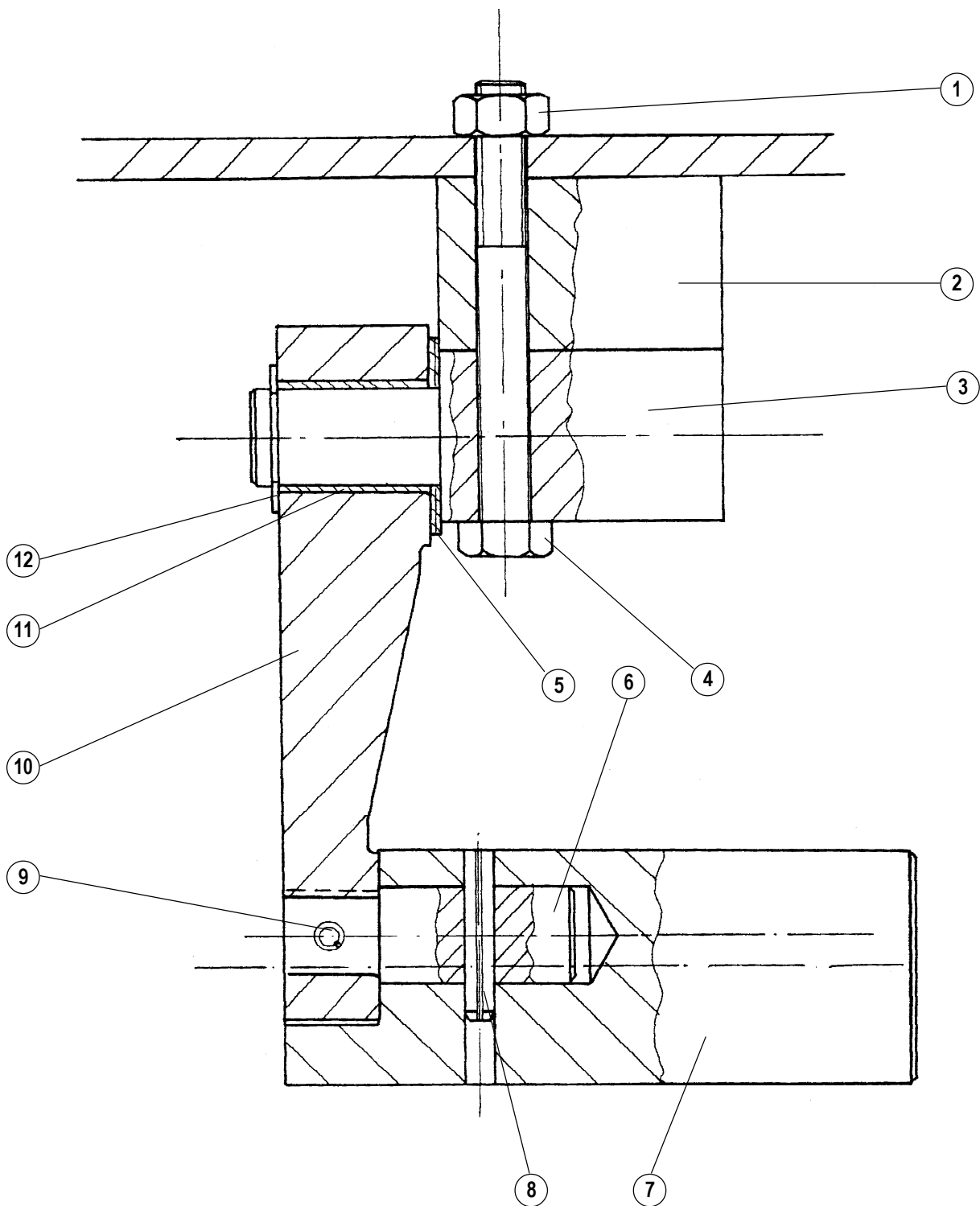
TAV. VI

ALIMENTATORE A CESTO - COMANDO REGOLAZIONE ORIZZONTALE

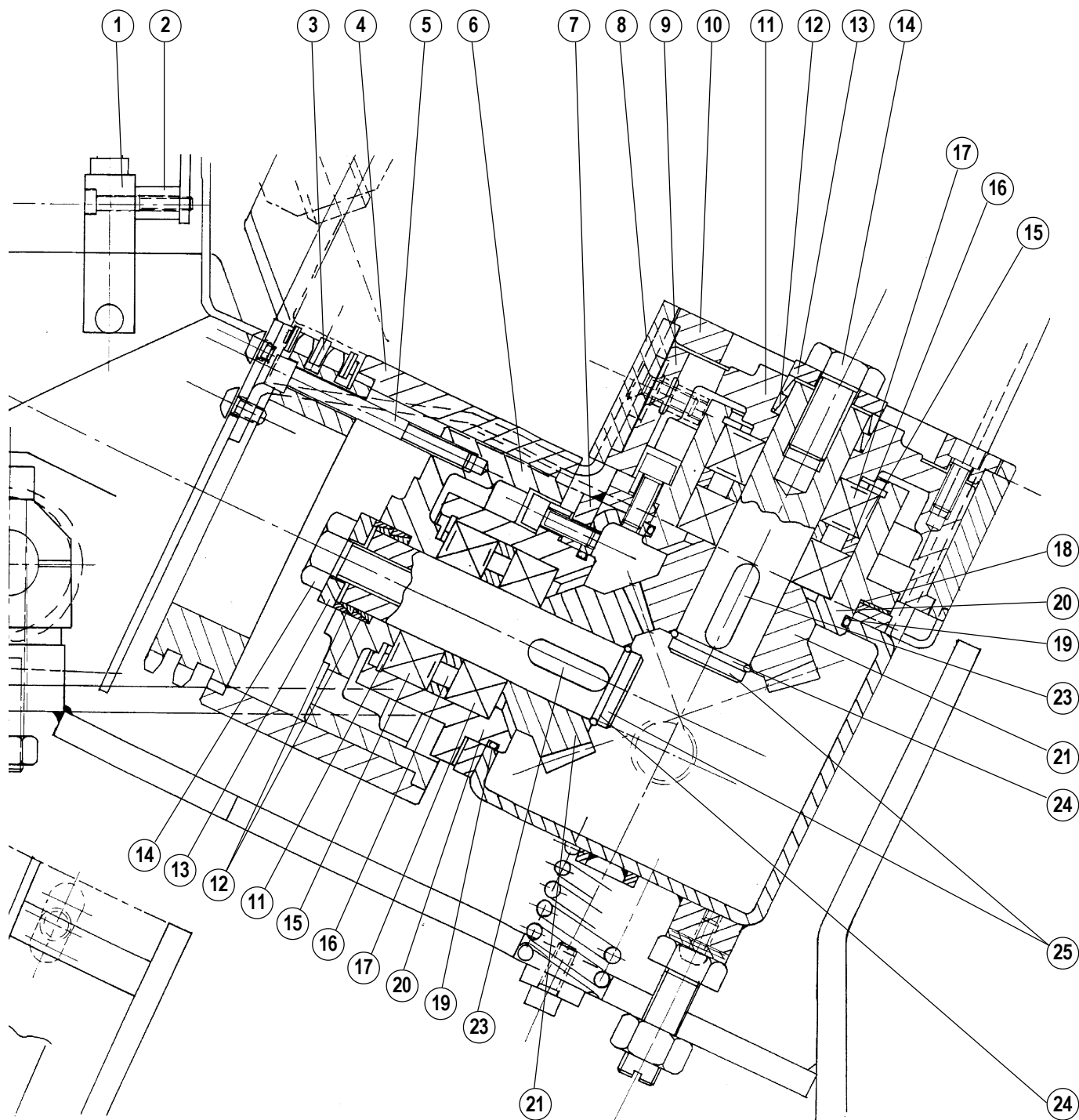
BASKET FEEDER - HORIZONTAL ADJUSTMENT

ALIMENTATEUR A PANIER - REGLAGE HORIZONTAL

LADEGERÄT - BEFEHL HORIZONTAL EINSTELLUNG



TAV. VII
 ALIMENTATORE A CESTO - PALETTA DI CARICO
 BASKET FEEDER - LOADING FORKS
 ALIMENTATEUR A PANIER - PALETTE DE CHARGEMENT
 LADEGERÄT - LADE KLAPPE



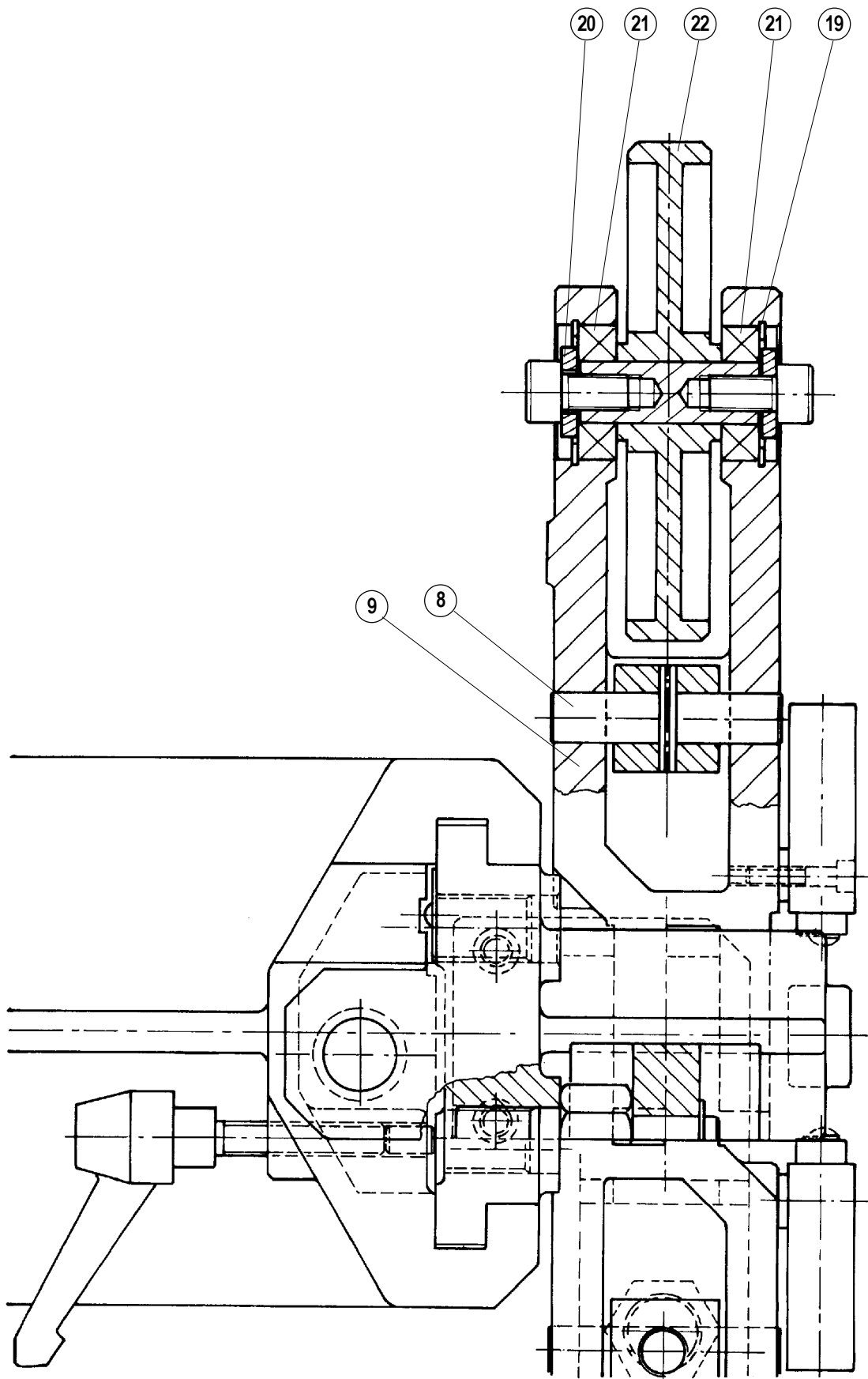
TAV. VIII

GRUPPO TRAINO VERGHE - RULLI DI TRAINO

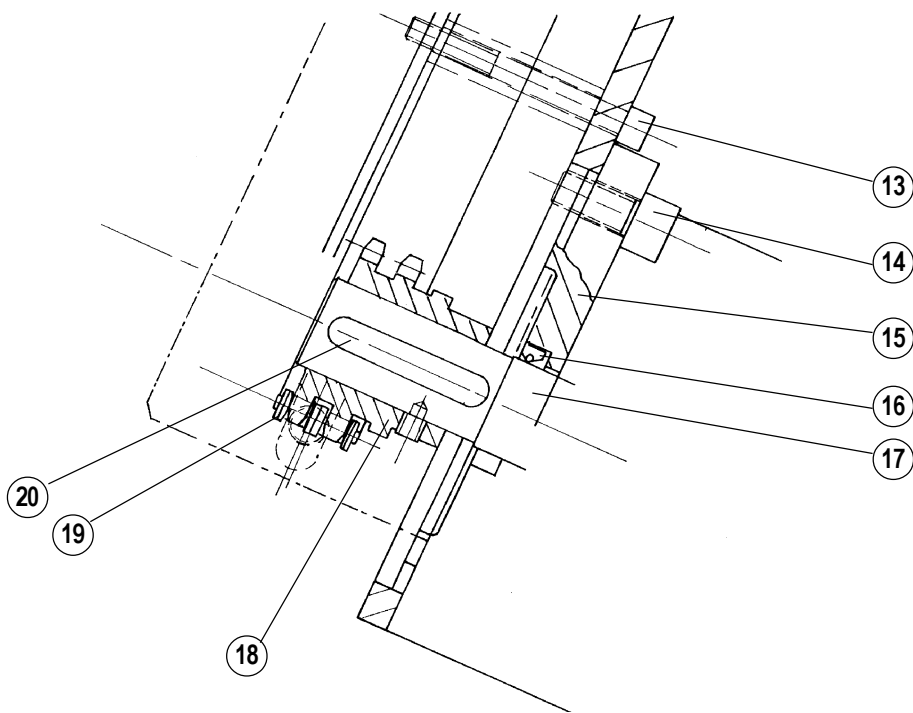
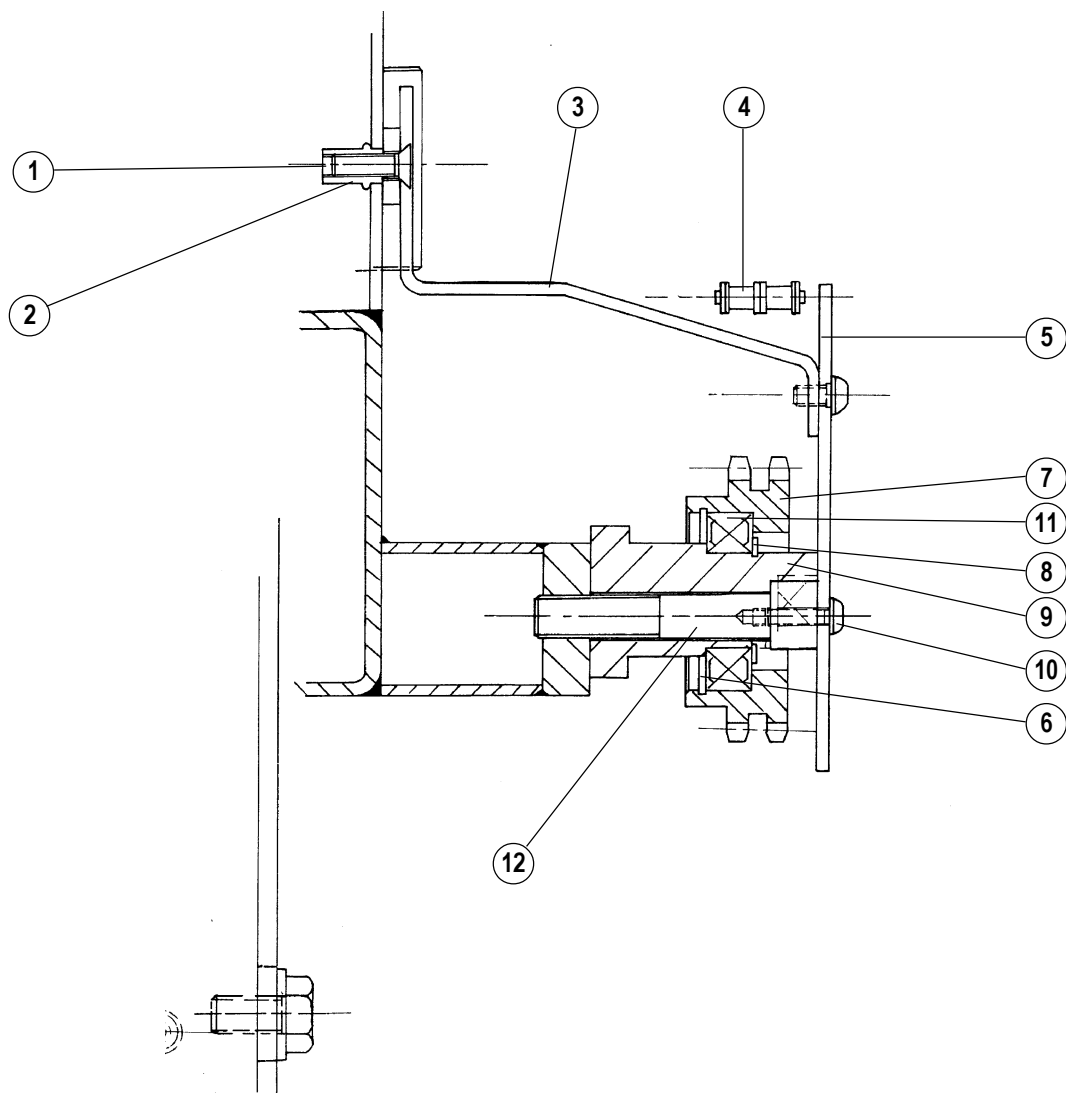
BAR PULLING GROUP - PULLING ROLLERS

GROUPE DE TRAINEMENT BARRES - ROULEAUX DE TRAINEMENT

STANGENSLEPP-GRUPPE - SCHLEPPROLLEN



TAV. IX
GRUPPO TRAINO VERGHE POSTERIORE
REAR BAR PULLING GROUP
GROUPE DE TRAINEMENT BARRES ARRIERE
HINTERE STANGENSCHLEPP GRUPPE



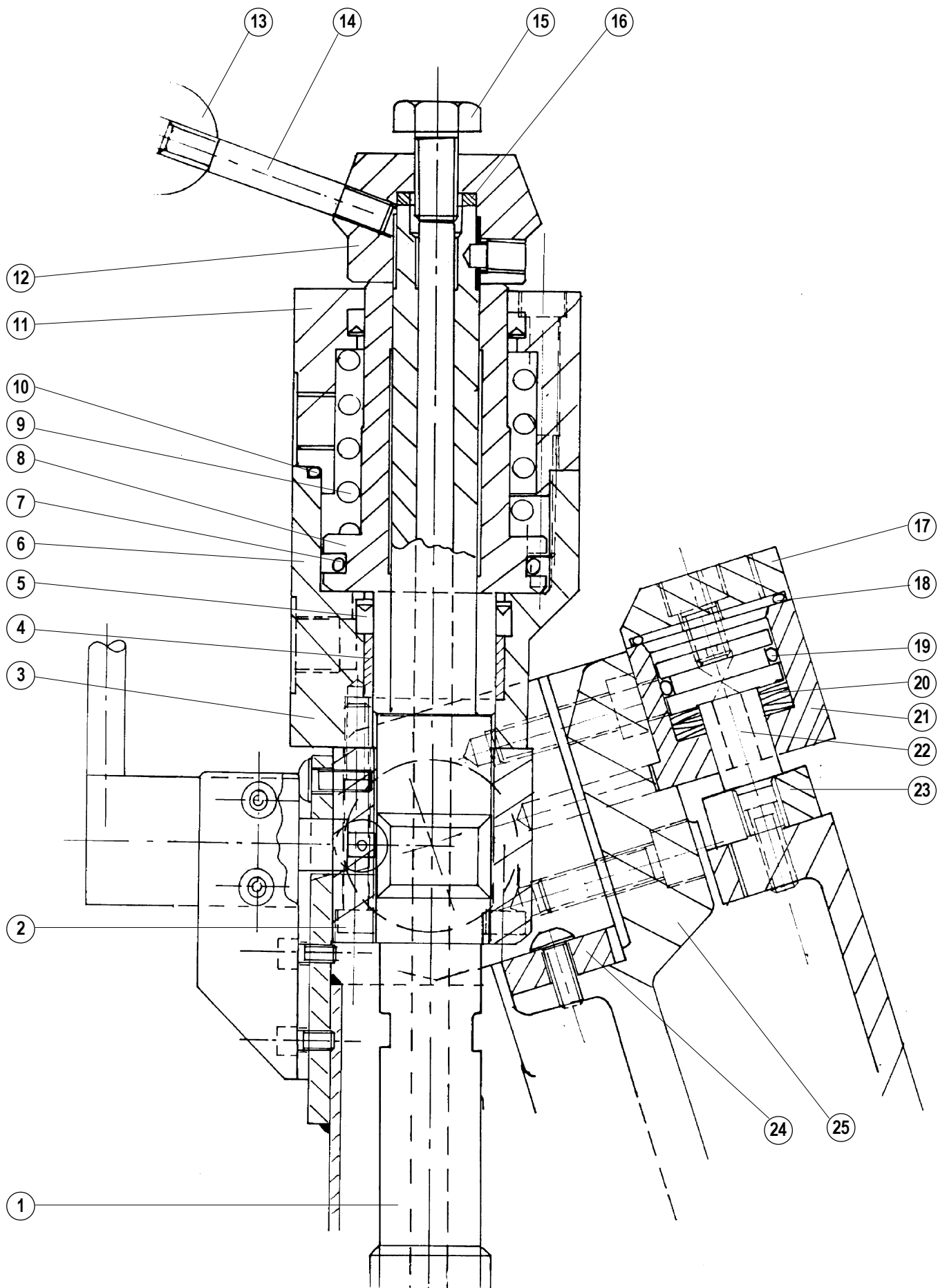
TAV. X

GRUPPO TRAINO VERGHE - RULLO TENDI CINGHIE

BAR PULLING GROUP - BELT STRETCHER ROLLER

GROUPE TRAINEMENT BARRES - ROULEAU TENDEURS DE COURROIES

STANGENSCHLEPP-GRUPPE - ROLLE FÜR RIEMENSPPANNUNG



TAV. XI
 GRUPPO MORSA - CILINDRO PRESSIONE DI BLOCCAGGIO
 VICE GROUP - CLAMPING PRESSURE CYLINDER
 GROUPE ETAU - CYLINDRE PRESSION DE BLOCAGE
 SPANNSTOCKGRUPPE - SPANNDRUCKZYLINDER

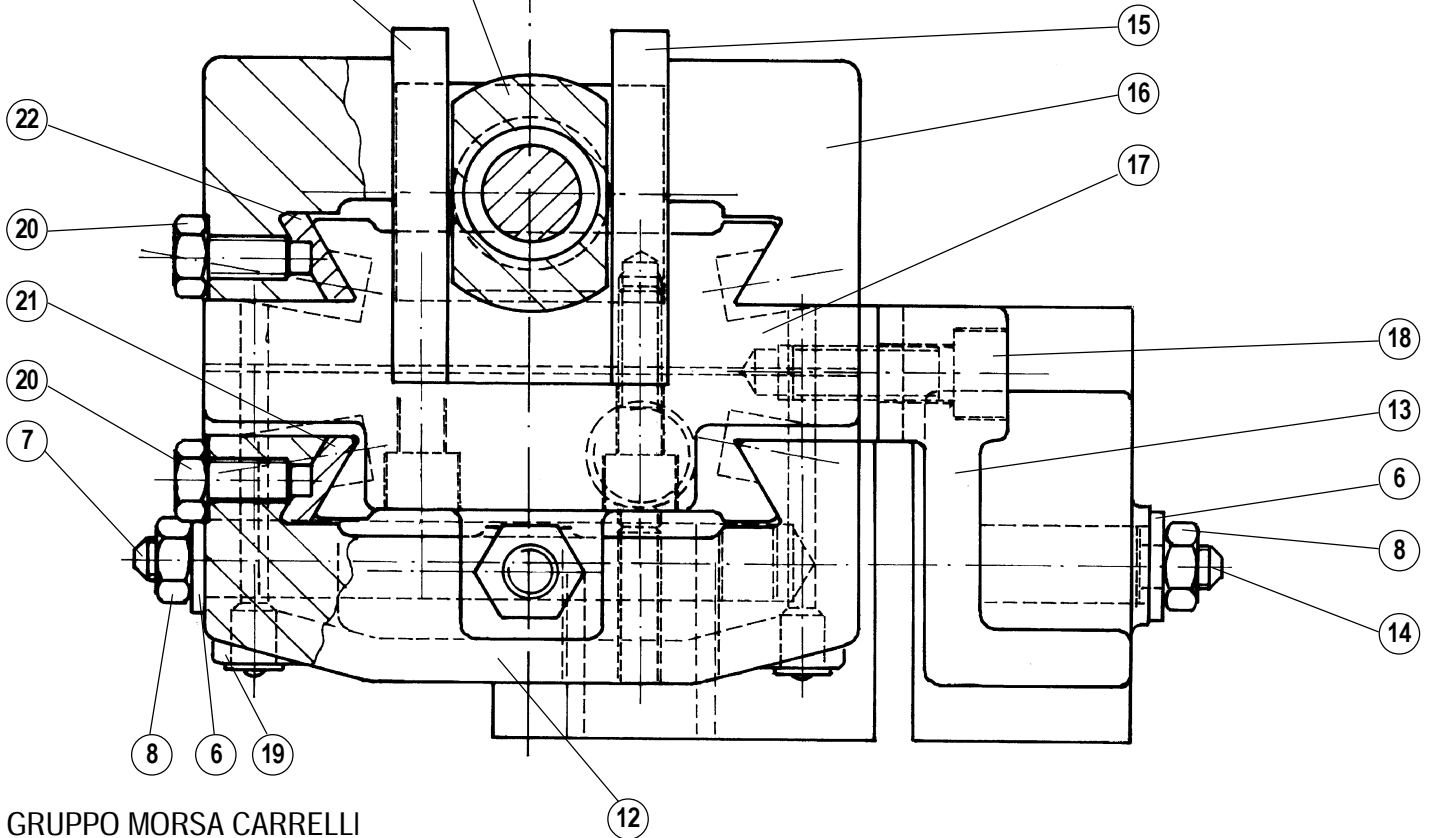
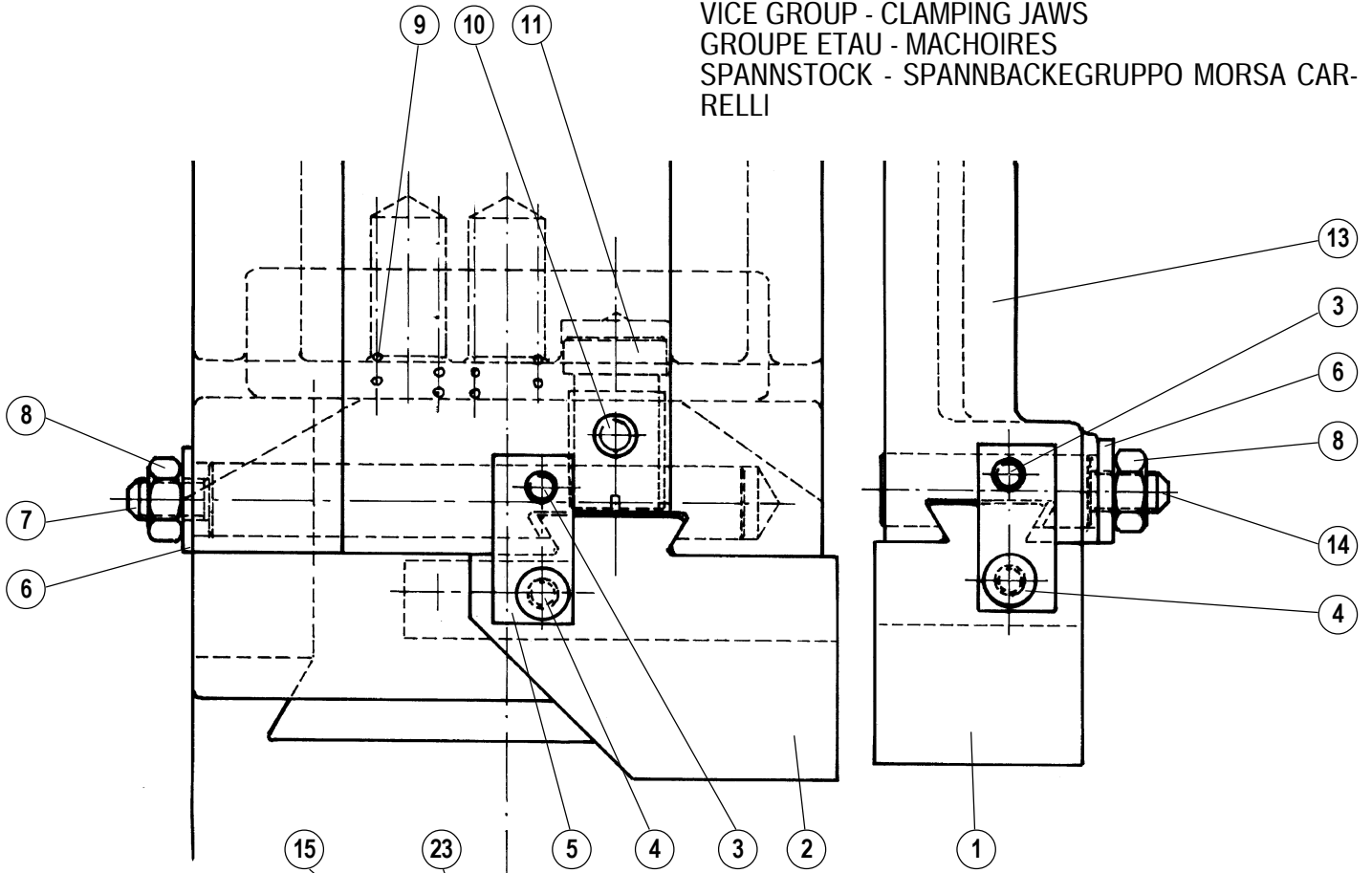
TAV. XII

GRUPPO MORSA - GANASCE DI BLOCCAGGIO

VICE GROUP - CLAMPING JAWS

GROUPE ETAU - MACHOIRES

SPANNSTOCK - SPANNBACKEGRUPPO MORSA CARRELLI

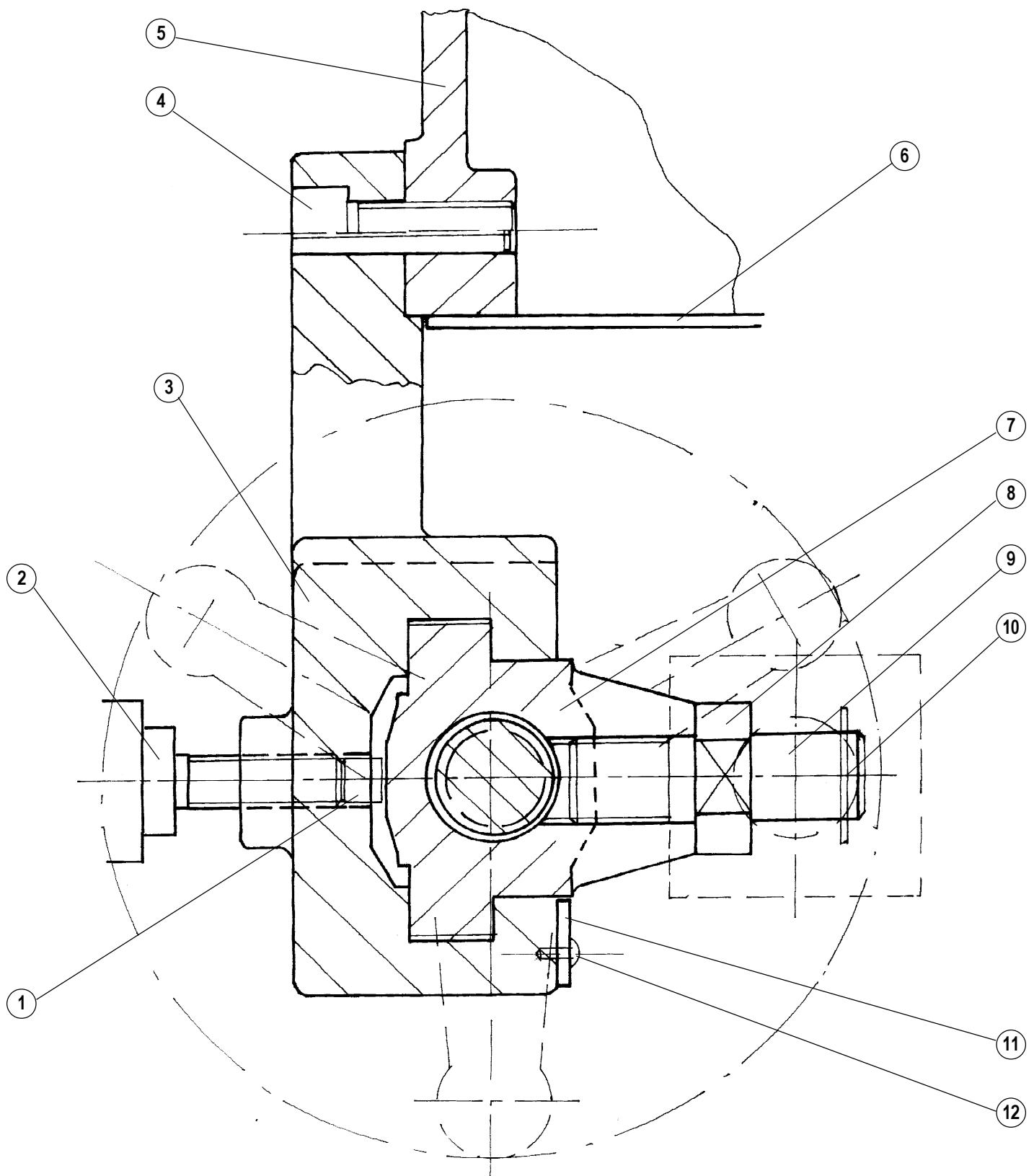


GRUPPO MORSA CARRELLI

CARRIAGE VICE GROUP

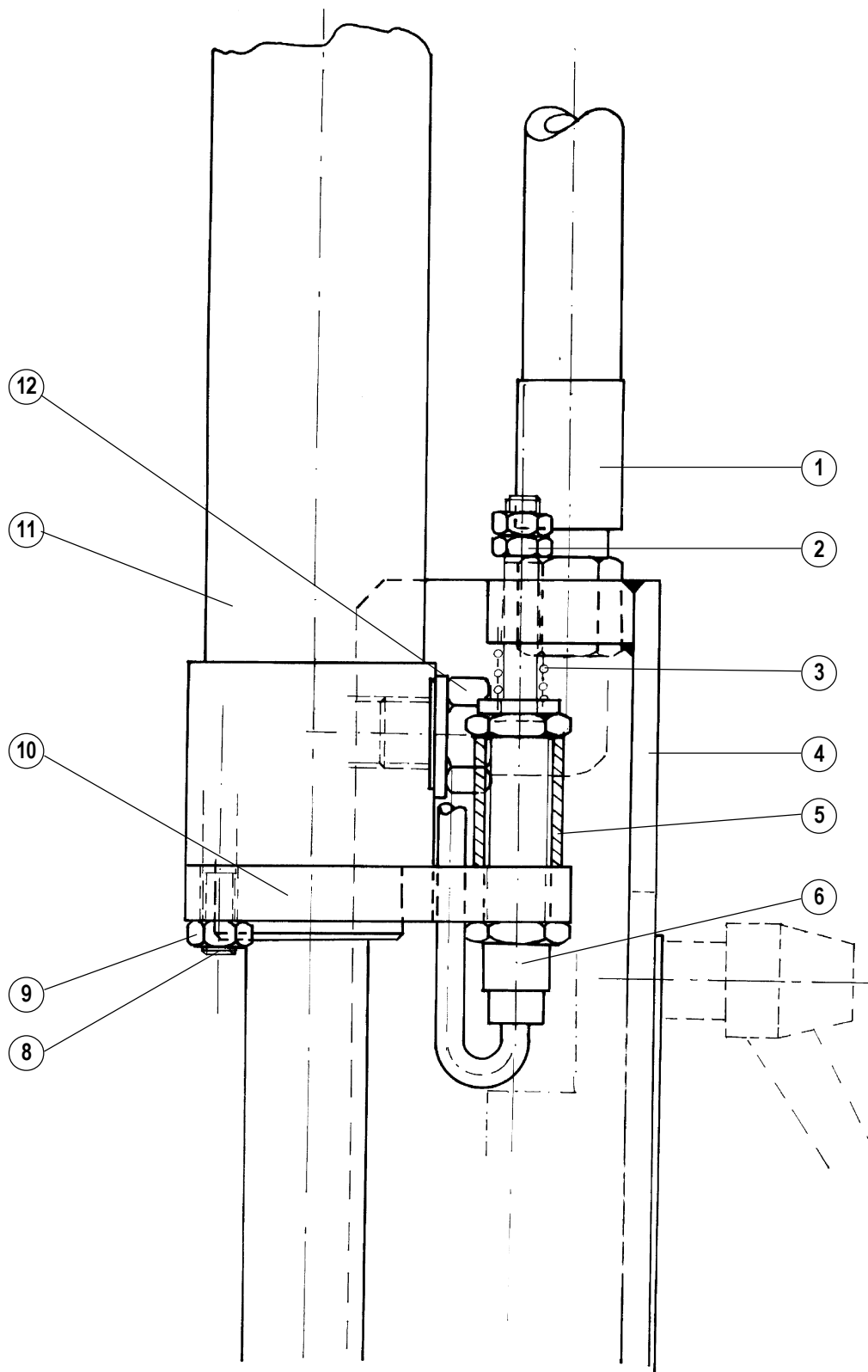
GROUPE ETAU - CHARIOTS

SPANNSTOCKGRUPPE - SCHLITTEN



TAV. XIII

GRUPPO CILINDRO COMANDO TESTA - SLITTA SUPPORTO CERNIERA CILINDRO
 CYLINDER GROUP GOVERNING THE HEAD - SUPPORTING SLIDE CYLINDER HINGE
 GROUPE CYLINDRE GOUVERNANT LA TETE - COULISSEA DE SUPPORT CHARNIERE CYLINDRE
 ZYLINDERGRUPPE ZUR SÄGEKOPFSTEUERUNG - ZYLINDER SCHARNIERTRÄGERSCHLITTEN



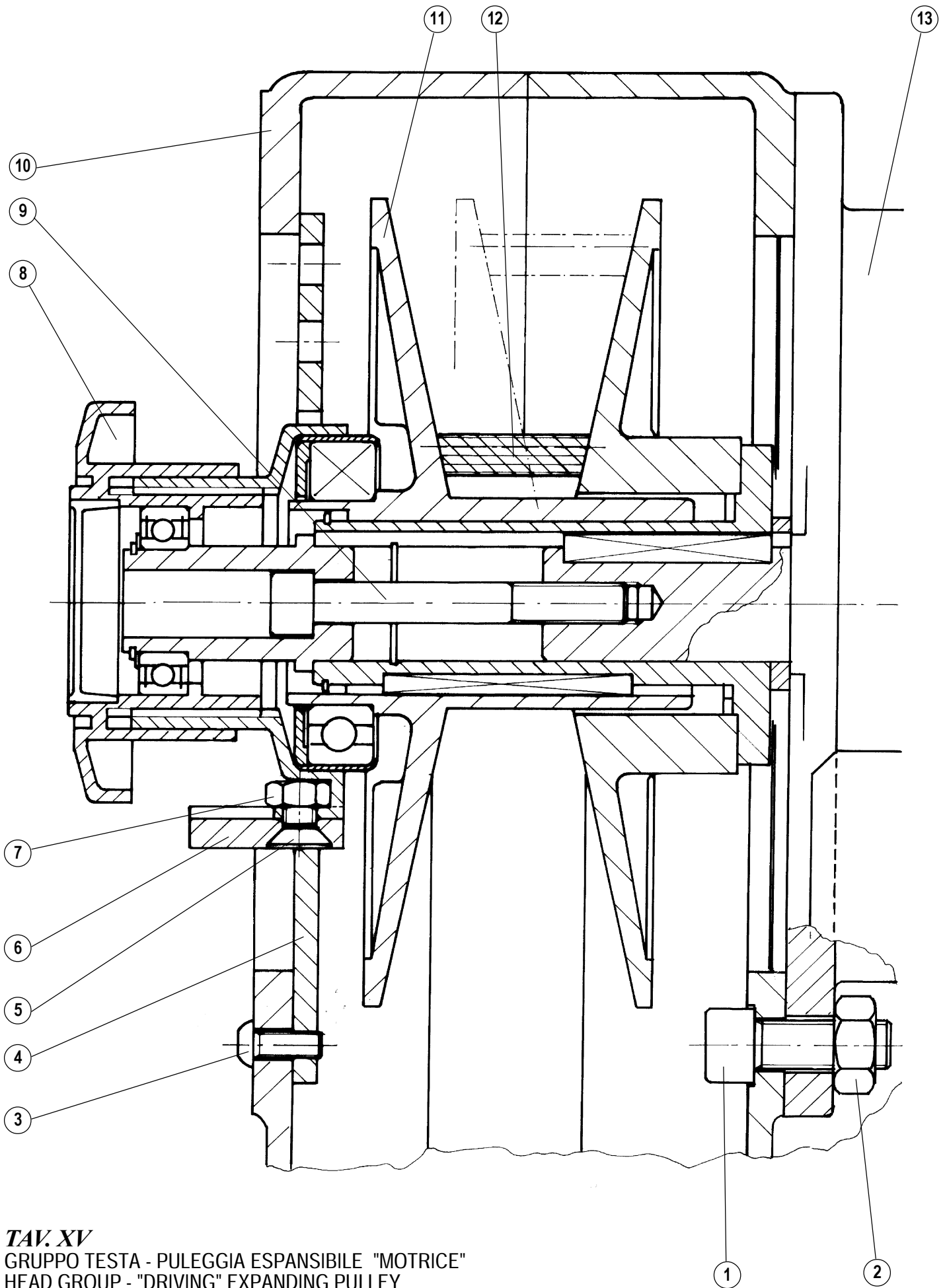
TAV. XIV

GRUPPO CILINDRO COMANDO TESTA - FINECORSA

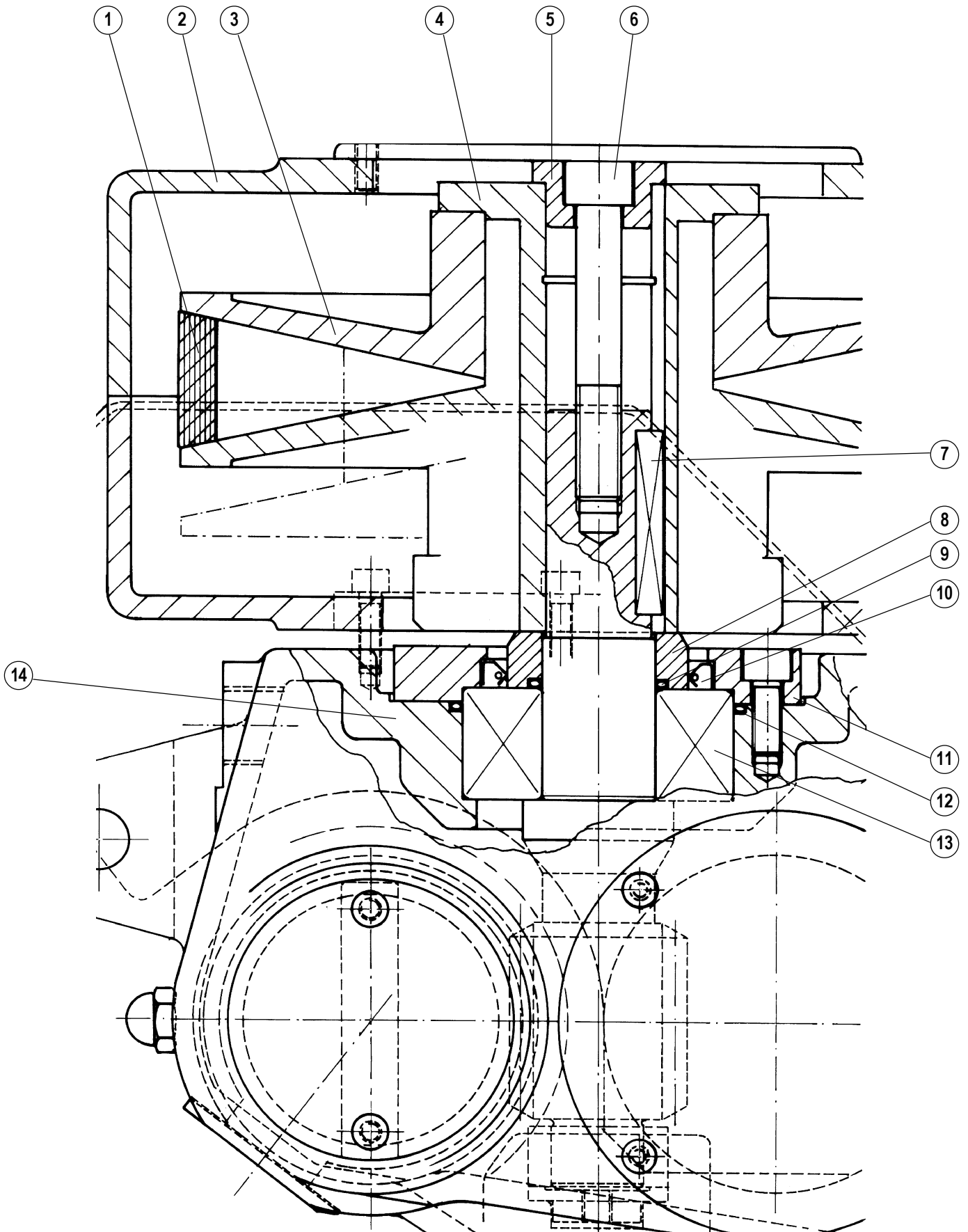
CYLINDER GROUP GOVERNING THE HEAD - END OF STROKE

GRUPE CYLINDRE GOUVERNANT LA TETE - BUTEE DE FIN DE COURSE

ZYLINDERGRUPPE ZUR SÄGEKOPFSTEUERUNG - ENDSCHALTER



TAV. XV
 GRUPPO TESTA - PULEGGIA ESPANSIBILE "MOTRICE"
 HEAD GROUP - "DRIVING" EXPANDING PULLEY
 GROUPE TETE - POULIE A EXTENSION "DE COMMANDE"
 SÄGEKOPFGRUPPE - DEHNBARE RIEMENSCHLEIBE (ANTRIEB)



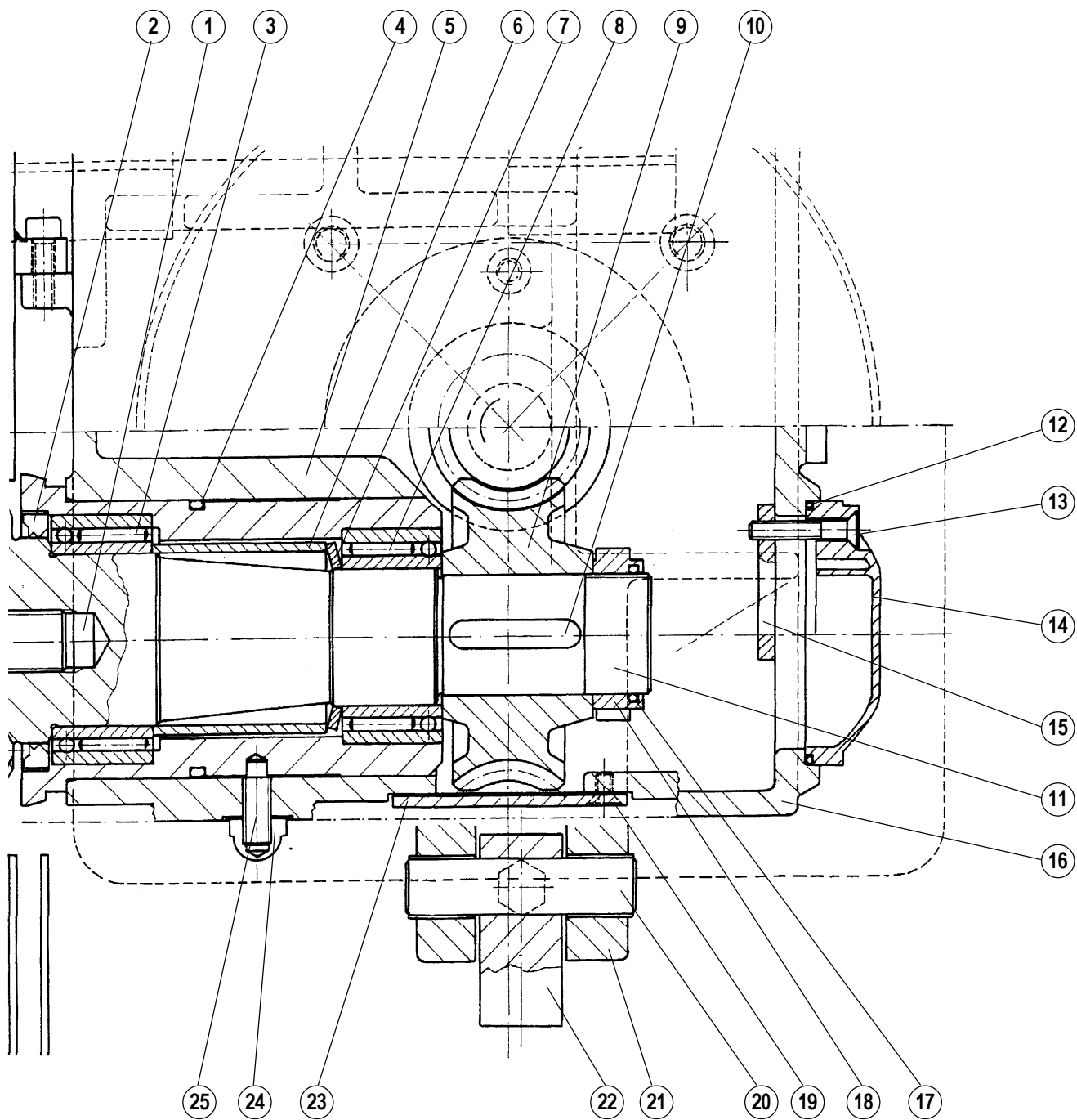
TAV. XVI

GRUPPO TESTA - PULEGGIA ESPANSIBILE "CONDOTTA"

HEAD GROUP - "DRIVEN" EXPANDING PULLEY

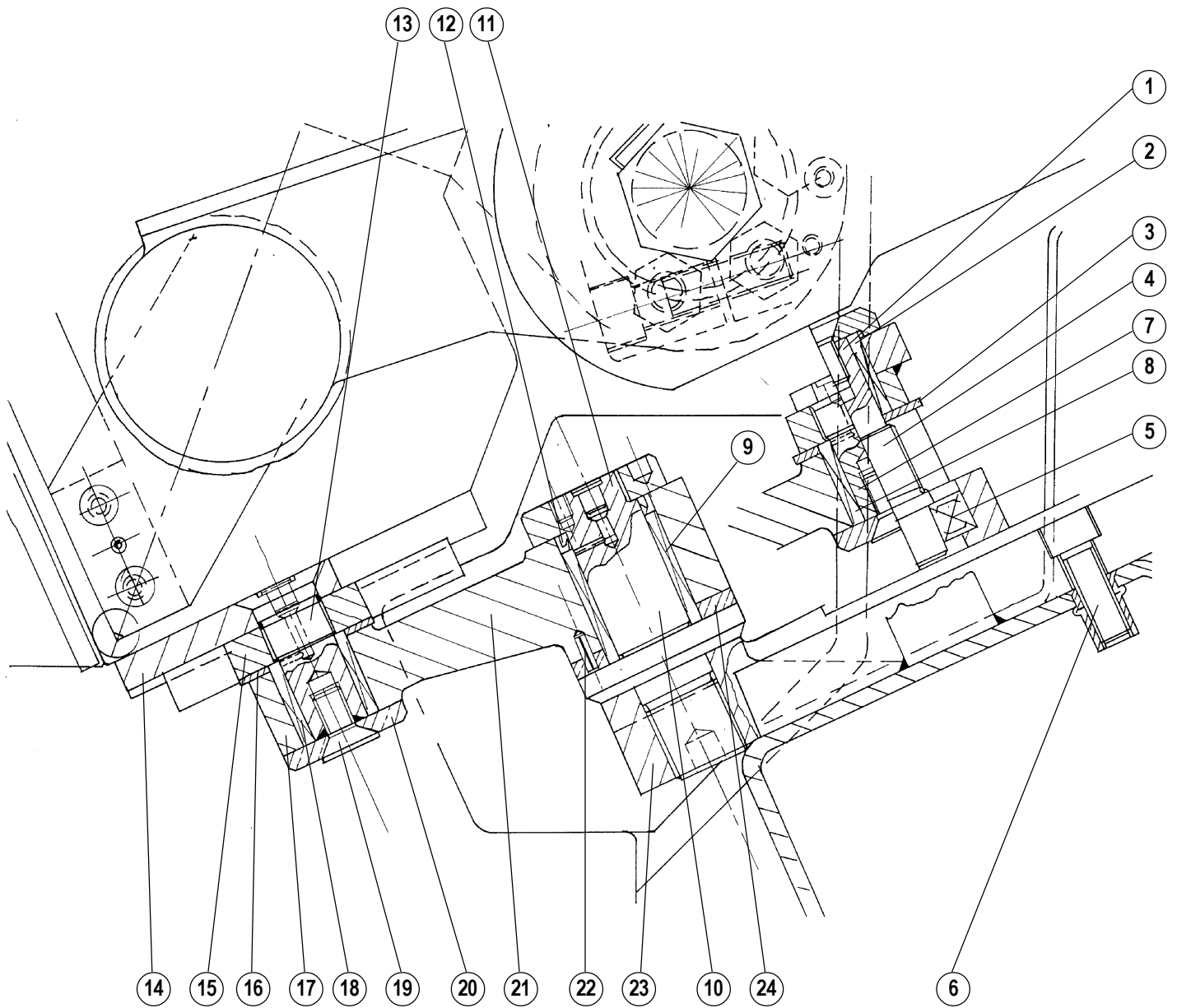
GROUPE TETE - POULIE A EXTENSION "CONDUITE"

SÄGEKOPFGROPPE - DEHNBARE RIEMENSCHLEIBE (FÜHRUNG)



TAV. XVII

GRUPPO TESTA - ALBERO SUPPORTO SEGA
 HEAD GROUP - BLADE-BEARING SHAFT
 GROUPE TETE - ARBRE SUPPORT SCIE
 SAGEKOPFGRUPPE - SÄGEBLATTWELLE



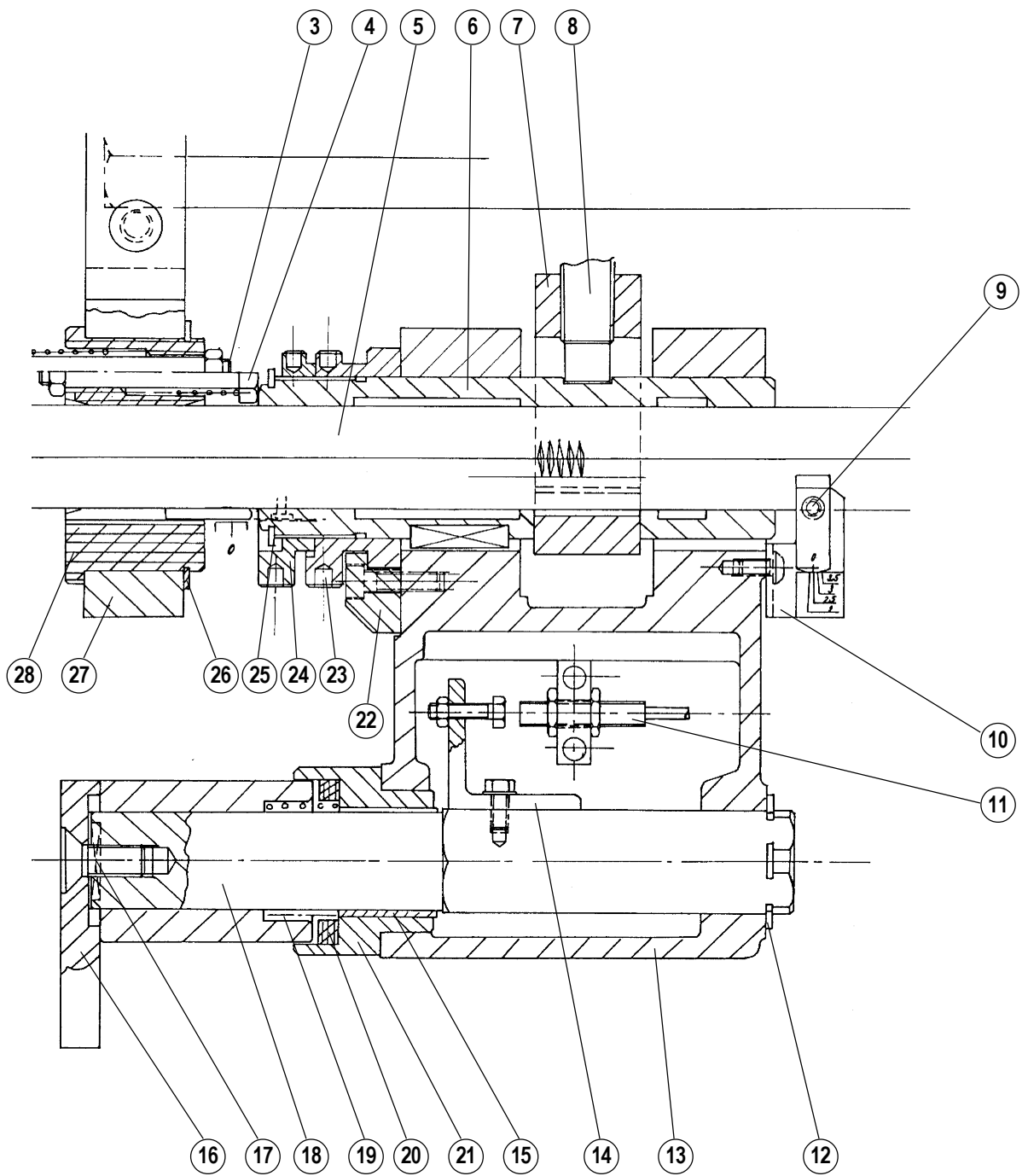
TAV. XVIII

GRUPPO TEGOLO SCARICO - BIELLA DI SUPPORTO

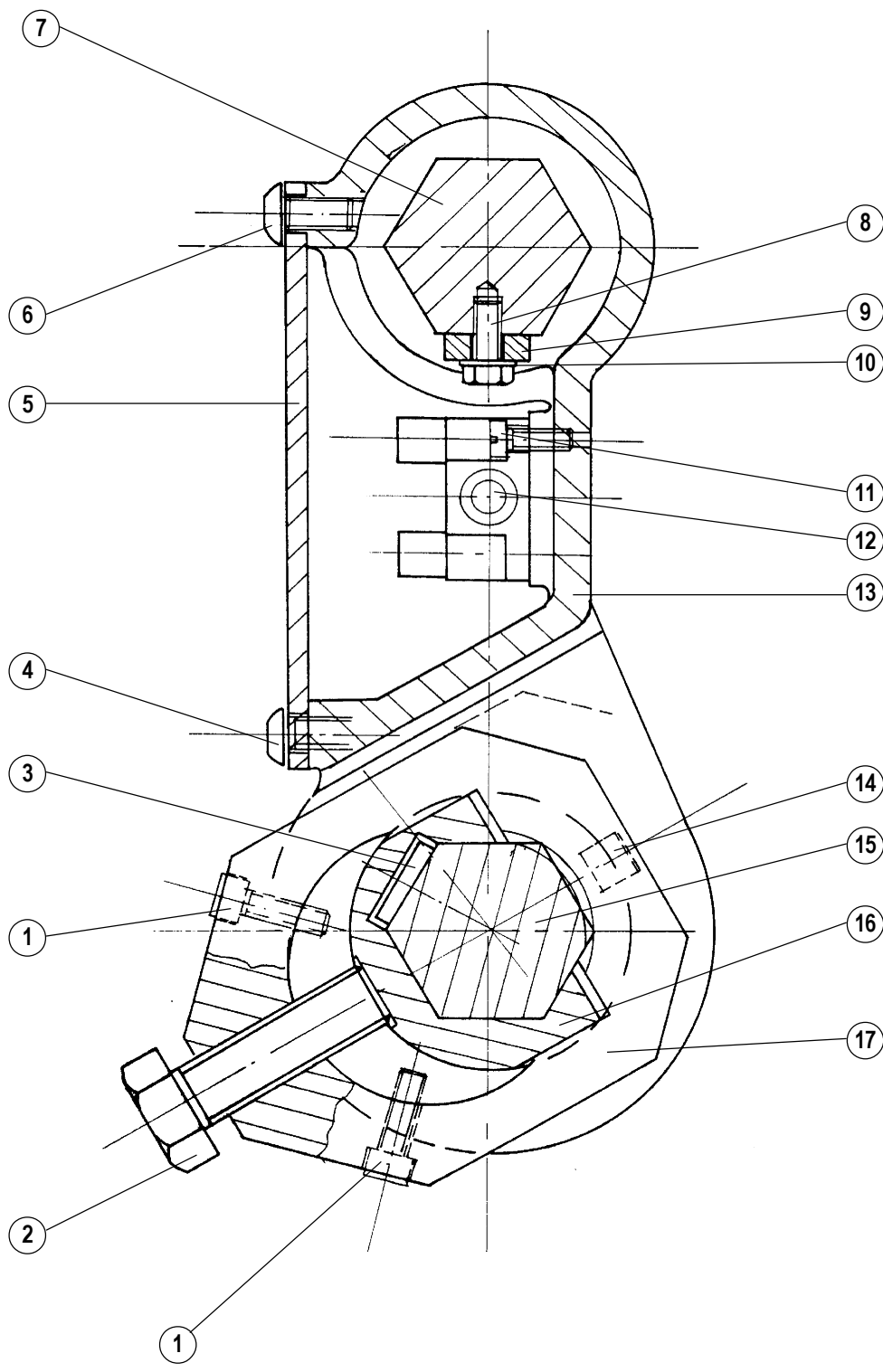
UNLOADING CHUTE GROUP - SUPPORTING ROD

GRUPE DISPOSITIF DE DECHARGEMENT - BIELLE DE SUPPORT

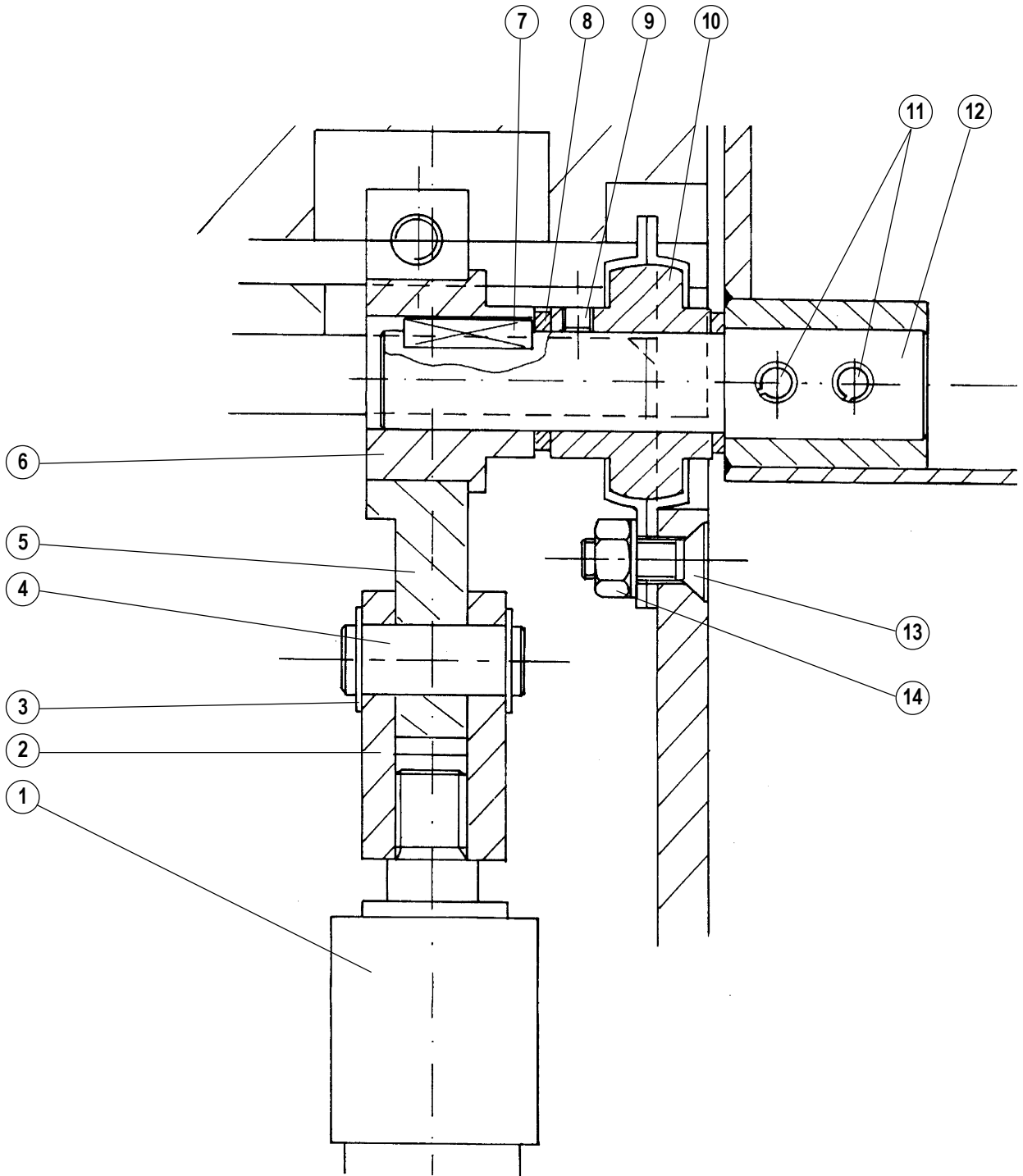
ENTLADERUTSCHE - PLEUELSTANGENTRÄGER



TAV. XIX
 GRUPPO FERMO BARRA
 BAR STOP GROUP
 GROUPE ARRET BARRE
 STANGENANSCHLAG



TAV. XX
 GRUPPO FERMO BARRA
 BAR STOP GROUP
 GROUPE ARRET BARRE
 STANGENANSCHLAG



TAV. XXI
CILINDRO COMANDO TEGOLI SELEZIONATORI
VERIN DE COMMANDE DISPOSITIFS SELECTIONNEURS
SELECTING FLAPS CONTROL CYLINDER
STEUERZYLINDER DER SORTIERVORRICHTUNG

