

Gebraiksaanwijzing / Onderdelenlijst  
Manual / Parts List  
Bedienungsanleitung / Ersatzteil Verzeichnis  
Instructions d'Entretien / Liste de Pièces Detachées

**POWER**  
SCHOENMACHINES

# Power Finisher

**VAN DER MEIJDEN**

## WAARSCHUWING

1. CONTROLEER, ALVORENS DE MACHINE OP HET ELECTRICITEITSNET AAN TE SLUITEN, OF DE NETSPANNING OVEREENKOMT MET DE OP DE LABEL STAANDE WAARDEN EN CONTROLEER OF DE DRAAIRICHTING GOED IS.
2. VOOR HET WISSELEN VAN DE SCHUURBANDEN E.D. OF ONDERHOUDS/REPARATIE WERKZAAMHEDEN, ALTIJD DE STROOM UITSCHAKELEN EN WACHTEN TOT ALLE ASSEN STILSTAAN.

## ACHTUNG

1. PRÜFEN SIE, OB IHRE NETZSPANNUNG MIT DEN ANGABEN AUF DER KARTE, DIE SICH AM ANSCHLUSSKABEL BEFINDET, ÜBEREINSTIMMT, UND OB DREHRICHTUNG STIMMT.  
BEI DEFEKTEN, DIE DURCH ANSCHLUSS AN FALSCHER NETZSPANNUNG ENTSTEHEN ERLISCHT JEDER GARANTIEANSPRUCH.
2. VOR SCHLEIFBANDWECHSEL ODER WARTUNGSARBEITEN MASCHINE ABSCHALTEN.

## ATTENTION

1. VEULLIEZ CONTROLER SI LE VOLTAGE DANS VOTRE ATELIER EST LE MEME QUE LE VOLTAGE INDIQUE SUR LA CARTE QUI TROUVE AU FILS ELECTRIQUE. S'IL Y A DES PANNES CAUSES PAR UN VOLTAGE INCORRECT VOUS PERDEZ LE DROIT DE GARANTIE.
2. AVANT DE CHANGER LES BANDES SANS FIN OU AVANT DE COMMENCER L'ENTRETIEN DE LA MACHINE, IL FAUT COUPER LE COURANT ELECTRIQUE ET ATTENDRE JUSQU'A TOUTS LES ARBRES SONT ARRETES.

## CAUTION

1. BEFORE "PLUGGING IN", CHECK IF VOLTAGE IN YOUR PREMISES IS THE SAME AS INDICATED ON THE LABEL WHICH YOU WILL FIND WITH THE MACHINE OR WHICH IS INDICATED ON THE PLATES OF THE ELECTRICAL MOTOR. ENSURE THAT THE EARTH CONNECTION IS ADEQUATE. BEFORE LEAVING THE MACHINE UNATTENDED TURN OFF ALL SWITCHES. FAILURES CAUSED BY INCORRECT ELECTRICAL CONNECTIONS WILL INVALIDATE ANY WARRANTY CLAIMS.
2. BEFORE FITTING THE SCOURING BANDS OR OTHER TOOLS ON THE MACHINE ALWAYS SWITCH OFF ALL SWITCHES AND FOR FURTHER SAFETY WAIT UNTILL EVERY SHAFT STOPS COMPLETELY.

## OPERATING

DO NOT OPERATE THE MACHINE IF ANY OF THE SAFETY DEVICES OR GUARDS ARE REMOVED, INCORRECTLY ADJUSTED OR ALTERED FROM THEIR ORIGINAL DESIGN. DO NOT TOUCH ANY MOVING PART OR TOOL WHICH IS IN MOTION.

## SERVICING

ISOLATE THE MACHINE ELECTRICALLY WHEN SERVICING OR ADJUSTING THE MACHINE. DO NOT LEAVE THE MACHINE UNATTENDED WITH GUARDS REMOVED.

## SMERING

1. ALLE KOGELLAGERS IN DE MACHINE ZIJN ONDERHOUDS VRIJ EN VOOR DE GEHELE LEVENSDUUR GESMEERD.
2. HET VERDIENT AANBEVELING OM DE CENTRALE AS VAN DE REVOLVERFRAISKOP (REF.NO.45 PAG.12) EENS PER MAAND EEN DRUPPEL OLIE TE GEVEN VIA DE NIPPEL DIE ZICH HIEROP BEVINDT.
3. DIT GELDT OOK VOOR DE SMEERGAATJES DIE ZICH BEVINDEN IN DE ONDERDELEN REF.NR.5 EN 7 OP PAG.15.

## SCHMIERUNG

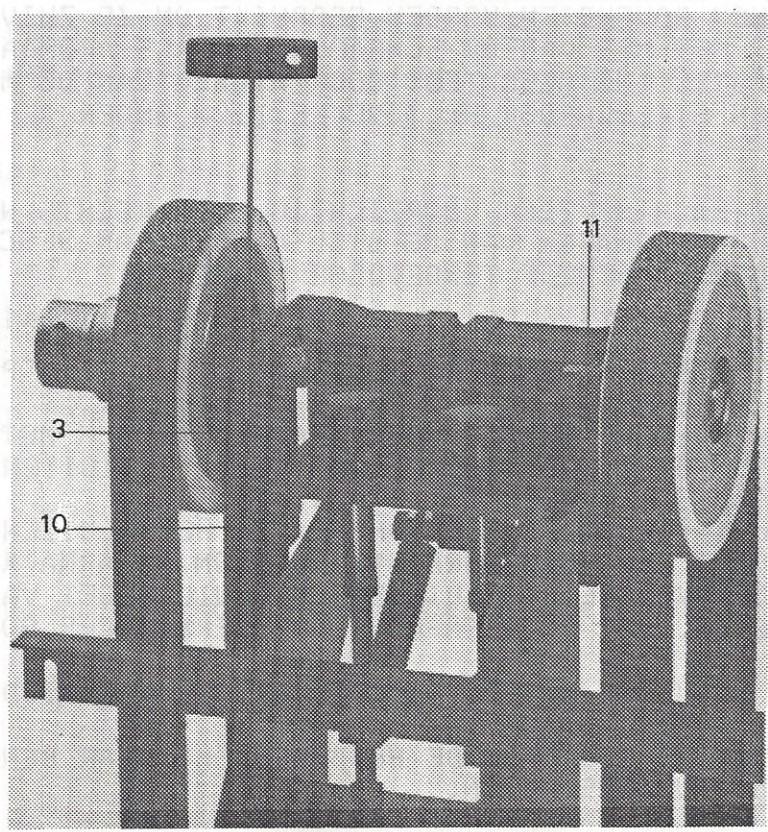
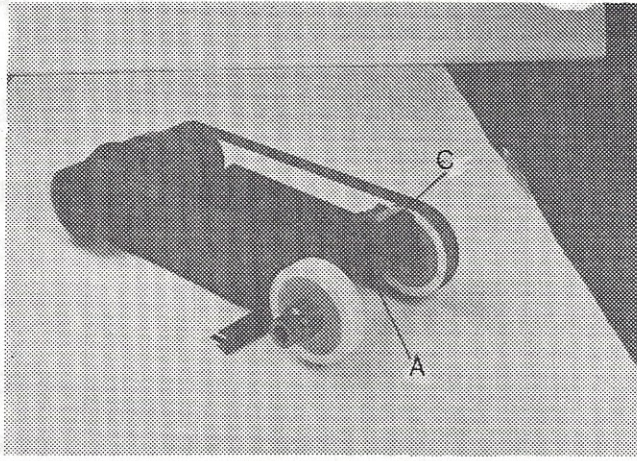
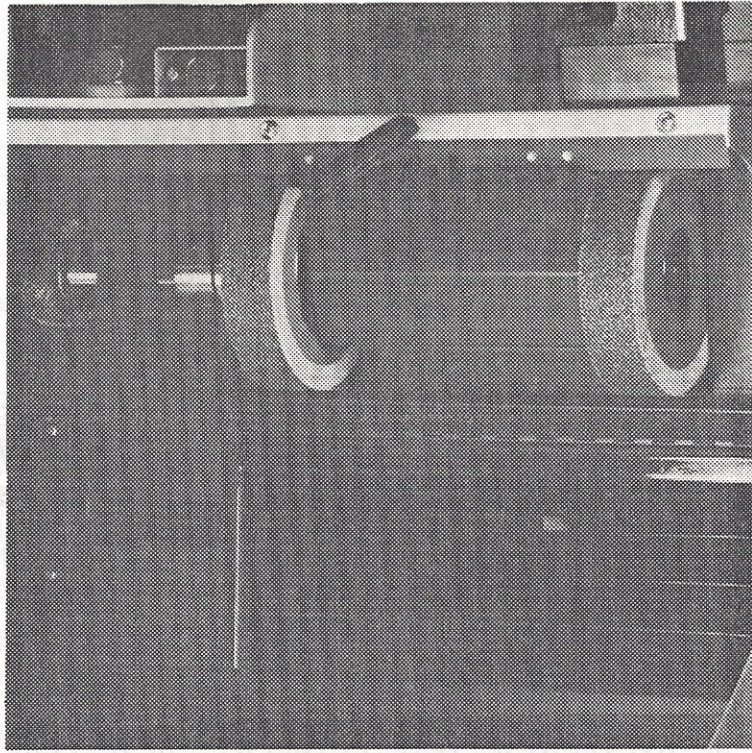
1. ALLE KUGELLAGER SIND WARTUNGSFREI UND FÜR DIE GANZE LEBENSDAUER GESCHMIERT.
2. ES IST RATSAM DIE ZENTRALE WELLE DES REVOLVERKOPFES (REF.NR.45, SEITE 12) MONATLICH MIT EINEM TROPFEN ÖL ZU VERSEHEN IN DEN NIPPEL WELCHER SICH IN DEM KOPF BEFINDET.
3. DIESES TRIFFT AUCH ZU FÜR DIE ÖLLÖCHER DIE SICH BEFINDEN IN DEN TEILEN REF.NR.5 UND 7 SEITE 15.

## LUBRICATION

1. ALL BALLBEARINGS ARE LUBRICATED FOR LIFE AND COMPLETELY SERVICE FREE.
2. IT IS ADVISABLE TO OIL EVERY MONTH THE CENTRAL SHAFT OF THE MULTIPLE HEAD TRIMMER REF.NO.45 PAGE 12 THROUGH THE NIPPLE ON THIS PART.
3. THIS ALSO APPLIES TO THE PARTS REF.NR.5 AND 7 PAGE 15.

## GRAISSAGE OF LUBRIFICATION

1. TOUS LES ROULEMENTS ONT ETE GRAISSE POUR LA DUREE DE LA VIE ET SONT SANS SERVICES D'ENTRETIEN.
2. IL EST A ADVISER DE GRAISSER L'AXE CENTRAL DE LA TETE REVOLVER REF.NO 45 PAGE 12 TOUS LES MOIS PAR LE TROU DE CETTE PIECE.
3. CELA S'APPLIQUE AUSSI AUX PIECES REF.NR 5 ET 7 PAGE 15.



## SCHUURBANDEN WISSELEN (ZIE PAG.3)

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 SCHAKEL DE MACHINE UIT, NIET ALLEEN MET DE EVENTUELE VOETSCHAKELAAR, MAAR OOK MET DE MOTORSCHAKELAAR OM ONGEWENST INSCHAKELEN TE VOORKOMEN EN WACHT TOT DE BANDEN STILSTAAN.

OPEN DE KLEP BOVEN EN/OF VOOR DE SCHUURBANDEN EN ZET DEZE VAST MET DE ZICH HIERACHTER BEVINDENDE METALEN STEUN. (BIJ POWER MASTER/FINISHER/STAR PAG.5 BIJ RECHTERDEEL POWER UNIT PAG.5)

BIJ HET LINKERDEEL VAN DE POWER UNIT WORDT DE BOVENKLEP DOOR EEN MAGNEET OPENGEHOUDEN.

DUIW KNOP (a) IN EN OMHOOG, WAARNA U DEZE NAAR VOREN KUNT TREKKEN EN ZODOENDE DE BAND ONTSPANT. DE BAND KAN NU WORDEN AFGENOMEN.

NA HET OMLEGGEN VAN DE NIEUWE SCHUURBAND, BOVENGENOEMDE HANDELINGEN IN OMGEKEERDE VOLGORDE UITVOEREN. DAN MET DE HAND DE BANDEN IN DE JUISTE DRAAIRICHTING BEWEGEN, BIJ EEN GROTE AFWIJKING NAAR LINKS OF NAAR RECHTS DE STELBOUT (c) MET DE BIJBEHORENDE SLEUTEL NR.6

VERDRAAIEN, TOT DE BANDEN ZO GOED MOGELIJK OP DE VILTSCHIJVEN LOPEN.

NU DE MOTOR EVEN KORT INSCHAKELEN EN CONTROLEREN OF DE BANDEN MIDDEN OP DE VILTSCHIJVEN LOPEN EN ZONODIG MET STELBOUT (c) BIJSTELLEN.

OM DE SPANNING VAN DE BANDEN TE VERANDEREN, DIENT MEN KNOP (a) LINKS-OM VOOR HOGERE, EN RECHTSOM VOOR LAGERE SPANNING TE DRAAIEN.

INDIEN EEN BAND OP DE VILTSCHIJF IETS SLINGERT, DEZE EERST ENIGE TIJD LATEN DRAAIEN, MEESTAL ZAL ZICH DAT DAN HERSTELLEN.

BLIJFT DE BAND ECHTER OOK NA LANGERE TIJD SLINGEREN, DAN LIGT DAT NIET AAN DE MACHINE, CG. ROLLEN, MAAR ZAL DE BAND DOOR EEN ANDERE VERVANGEN MOETEN WORDEN.

N.B. BIJ LANGERE STILSTAND VAN DE MACHINE, BIJV. GEDUREND HET WEEK-  
 ----- EINDE, DE BANDEN ONTSPANNEN MET KNOP (a).

U VOORKOMT DAN DAT DE VILTSCHIJF AAN EEN ZIJDE ENIGSZINS WORDT INGEDRUKT EN ZODOENDE KAN GAAN STOTEN.

## SCHRAPER VOOR BANDSCHUURSCHIJF (ZIE PAG 3)

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 OP ALLE SCHUURMACHINES KUNNEN OP VERZOEK SCHRAPERS GEMONTEERD WORDEN ACHTER DE BANDSCHUURSCHIJVEN ZIE PAG.3 DOOR GEBRUIK TE MAKEN VAN EEN SPECIALE AS REF.NR.12 EN 13 PAG.25 MET SMALLERE BORST.

DEZE SCHRAPERS KUNNEN BOVENDIEN WORDEN GEBRUIKT OM ZE ZUIVER ROND TE HOUDEN OF TE MAKEN. HET MES VAN DE SCHRAPER KAN ALS AFDRAAIBEITEL GEBRUIKT WORDEN. AFSTELLING GESCHIEDT DOOR MIDDEL VAN DE MEEGELEVERDE INBUSSLEUTEL NR.3 EN STELSCHROEF NR.3 WELKE ZICH ONDER DE SCHRAPER NR 10-11 BEVINDT.

LFT OP. BIJ LOPENDE MACHINE ZEER VOORZICHTIG NAAR RECHTS NASTELLEN.

----- EEN TE VEEL AANDRAAIEN VAN DE STELSCHROEF KAN BESCHADIGING VAN DE BANDSCHUURSCHIJF TENGEVOLGE HEBBEN.

## REINIGING VAN DE STOFAFZUIGING EN FILTERINSTALLATIE.(ZIE PAG.5)

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 DE MOTOR UITSCHAKELEN, NIET MET DE VOETSCHAKELAAR DOCH MET DE HANDBEDIENDE SCHAKELAAR, OM ONGEWENST INSCHAKELEN UIT TE SLUITEN.

WACHTEN TOT DE STOFZUIGER GEHEEL STILSTAAT !

DAN DE KLEP VOOR/BOVEN DE STOFZUIGER OPENEN EN HET PLUIZEN-ROOSTER UITNEMEN, DIT KAN DAN EENVOUDIG GEREINIGD WORDEN, DAARNA CONTROLEREN OF ZICH AAN DE BLADEN VAN DE STOFZUIGER GEEN VUIL HEEFT VASTGEHECHT, ZO JA, DIT VERWIJDEREN. HET PLUIZEN-ROOSTER HIERNA WEER GOED OP Z'N PLAATS ZETTEN.

DE STOFZAKKEN GOED SCHUDDEN MET DE KNOPPEN AAN DE VOORZIJDE VAN DE MACHINE.

VOOR HET UITNEMEN VAN DE STOFLADE DE HEFBOMEN (h) NAAR BENEDEN DUWEN DE LADE KAN NU WORDEN UITGESCHOVEN.

REGELMATIGREINIGEN HOUDT DE STOFAFZUIGING OP PEIL.

### Schleifbänder wechseln (siehe Seite 3)

Schalten Sie die Maschine aus, nicht nur mit dem evtl. montierten Fußschalter, sondern auch mit dem Motorschalter, um nicht gewolltes Einschalten zu vermeiden und warten Sie, bis die Schleifbänder stillstehen.

Öffnen Sie die Klappe über und evtl. vor den Schleifbändern und setzen Sie diese fest mit der sich dahinter befindlichen Stütze (bei Power Master/Finisher/Star/ rechter Teil der Power Unit - siehe Seite 5)

Beim linken Teil bzw. der Vorschleifmaschine der Power Unit wird die Klappe durch ein Magnet offengehalten. Drücken Sie Knopf (a) ein und hoch, worauf Sie diesen nach vorne ziehen können und dadurch das Schleifband entspannt wird. Das Schleifband kann jetzt abgenommen werden. Nach dem Auflegen eines neuen Schleifbands obengenannte Handgriffe in umgekehrter Reihenfolge ausführen. Dann mit der Hand die Schleifbänder in der richtigen Drehrichtung bewegen. Bei einer großen Abweichung nach links oder nach rechts die Stellschraube (c) mit dazu geliefertem Inbusschlüssel Nr. 6 verdrehen, bis die Schleifbänder so gut wie möglich über die Kontaktscheibe laufen.

Jetzt den Motor kurz einschalten und kontrollieren, ob die Schleifbänder mitten über die Kontaktscheibe laufen. Wenn nötig, mit Stellschraube (c) nachstellen.

Um die Spannung des Schleifbandes zu verändern, muß man Knopf (a) links herum für höhere und rechts herum für niedrigere Spannung drehen. Wenn ein Schleifband unruhig läuft, lassen Sie es erst einmal einige Zeit laufen. Meist wird es dann wieder ruhig laufen. Ist nach längerer Zeit der Lauf des Schleifbandes immer noch unruhig, empfehlen wir, es durch ein anderes zu ersetzen.

Bei längerem Stillstand der Maschine, z.B. während des Wochenendes die Schleifbänder mit Knopf (a) entspannen. Sie vermeiden dadurch, dass die Kontaktscheibe an einer Seite eingedrückt wird und deshalb schlägt.

### Abstreifer für Bandschleifscheibe

An allen Bandschleifanlagen kann gegen Aufpreis und mit einem speziellen Bolzen (siehe Nr. 12 + 13 auf Seite 25) hinter der Kontaktscheibe ein Abstreifer montiert werden. Diese Abstreifer können auch benutzt werden, um die Kontaktscheiben sauber und rund zu halten oder zu machen.

Das Messer des Abstreifers kann als Abdrehwerkzeug benutzt werden. Das Einstellen wird mit dem mitgelieferten Inbusschlüssel Nr. 3 und der Stellschraube Nr. 3, die sich unter dem Abstreifer Nr. 10-11 befindet, gemacht.

Achtung: Bei laufender Maschine sehr vorsichtig nach rechts nachstellen. Durch zu starkes Andrehen der Stellschraube kann die Kontaktscheibe beschädigt werden.

#### Reinigung von Staubabzug und Staubfilter (siehe Seite 5)

Den Motor ausschalten, nicht mit dem Fußschalter, sondern mit dem handbedienten Schalter, um ungewolltes Einschalten auszuschließen. Warten, bis der Flügel ganz stillsteht! Dann die Klappe vorne/oben an der Staubabsaugung öffnen und das Gitter herausnehmen. Dieses Gitter kann leicht gereinigt werden. Dann kontrollieren, ob sich an den Schaufeln des Flügels kein Schmutz festgesetzt hat. Wenn ja, entfernen Sie diesen Schmutz. Das Gitter dann wieder richtig einlegen. Die Filtersäcke mit den Knöpfen an der Vorderseite der Maschine gut schütteln. Zum Herausnehmen der Schublade die Hebel (h) nach unten drücken. Die Schublade kann jetzt herausgezogen werden. Regelmäßiges Reinigen sichert Ihnen einen guten Staubabzug.

## TO CHANGE SCOURING BANDS

SWITCH OFF THE MACHINE, NOT WITH THE FOOT SWITCH IF PRESENT BUT WITH THE MOTOR SWITCH, TO PREVENT ANY POSSIBLE START UP. WAIT UNTIL THE MACHINE STOPS COMPLETELY.

OPEN THE METAL COVERS ABOVE AND/OR IN FRONT OF THE SCOURING BANDS, AND MOVE THE METAL SUPPORT. (POWER MASTER/FINISHER PAGE 5, RIGHT-HAND SECTION POWER UNIT, PAGE 5).

ON THE LEFTHAND SECTION OF THE POWER UNIT, THE TOP COVER IS HELD OPEN BY A MAGNET.

PUSH KNOB (a) INWARDS AND UP, AFTER WHICH YOU CAN PULL IT FORWARD AND TAKE THE TENSION OFF THE BAND. YOU MAY NOW EXCHANGE THE BAND, AND HANDLE AS ABOVE, IN RESERVE ORDER. AFTER FITTING A NEW BAND, ROTATE THE FELT ROLL A FEW TURNS BY HAND IN THE NORMAL RUNNING DIRECTION AND CHECK IF IT RUNS TRUE.

IF THE TRACKING REQUIRES ADJUSTMENT, USE ALLENHEAD KEY NR. 6 IN BOLT (c) AND TURN LEFT OR RIGHT UNTIL THE BAND RUNS EXACTLY OVER THE MIDDLE OF THE ROLL.

BY TURNING KNOB (a) LEFT OR RIGHT, YOU CAN ADJUST THE TENSION ON THE SCOURING BANDS. WITH THIS UNIQUE FEATURE, YOU CAN COMPENSATE FOR DIFFERENCES IN BAND LENGTH.

### NOTE

DURING A LONG STANDSTILL, E.G. DURING THE WEEKEND, TAKE THE TENSION OFF THE BANDS.

## SCRAPER FOR BANDSCOURING ROLL (OPTIONAL)

ON ALL MACHINES, SCRAPERS CAN BE FITTED BEHIND SCOURING ROLLS (SEE PAGE 3/25) BY MEANS OF A SPECIAL SHAFT (REF. NR. 12 AND 13 PAGE 25, WITH SLIMMER BOSS. THIS IS AN OPTIONAL EXTRA. THESE SCRAPERS KEEP THE FELT ROLLS CLEAN, AND CAN BE USED FOR TRUING. THE KNIFE OF THE SCRAPER CAN BE ADJUSTED WITH SCREW NO. 3 UNDERNEATH, USING ALLENHEAD KEY NO. 3 SUPPLIED WITH THE MACHINE.

### ATTENTION

WHEN TRUING A RUNNING MACHINE, TURN ADJUSTING SCREW VERY CAREFULLY CLOCKWISE UNTIL ROLL IS TRUE AND SQUARE. ADJUSTMENT WHICH IS TOO HEAVY AND TOO QUICK CAN RUIN THE FELT ROLL.

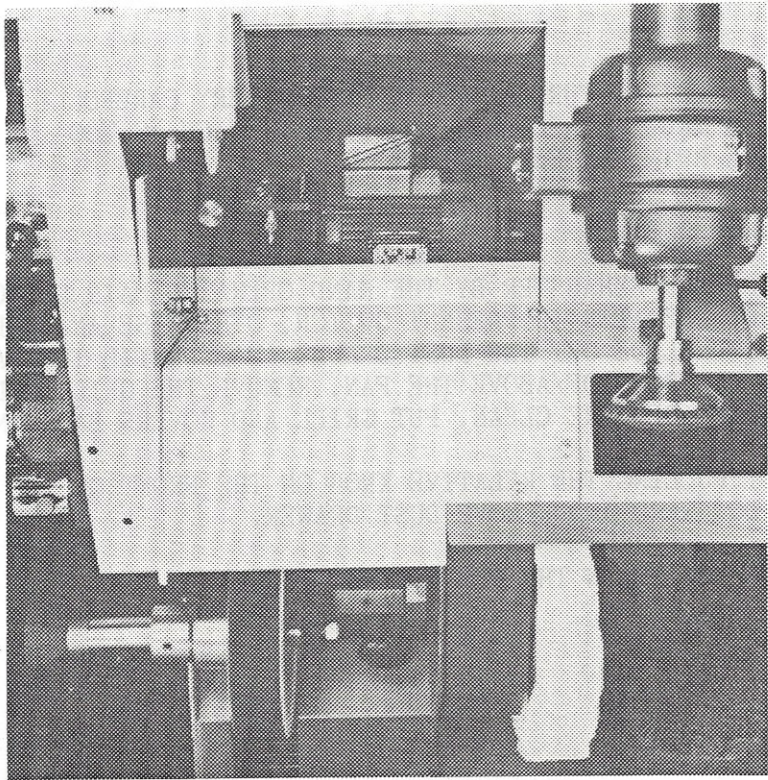
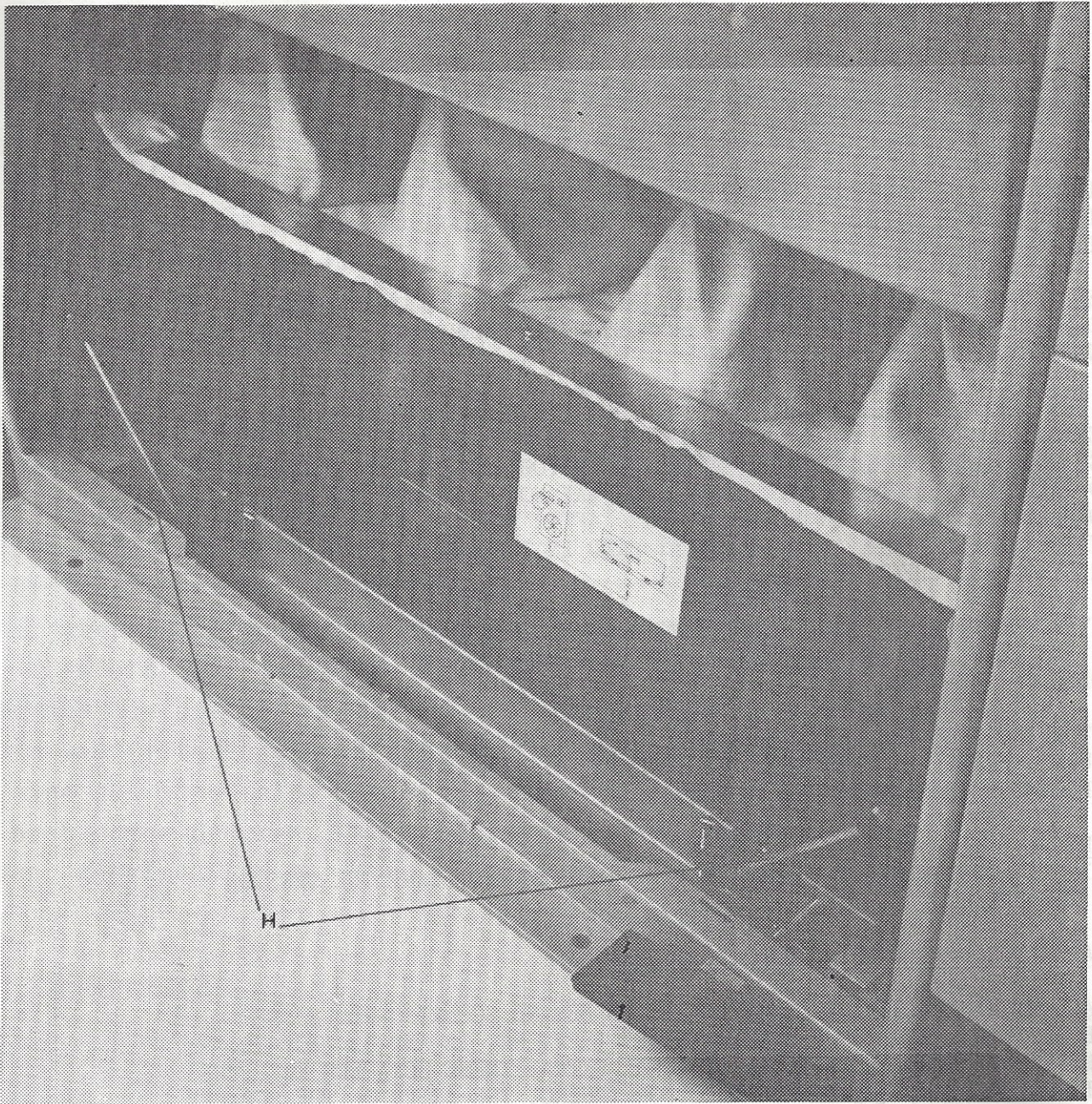
## CLEANING THE DUST FILTER SYSTEM

SWITCH OFF THE MOTOR OF THE EXHAUSTER BY THE HAND OPERATED MAIN SWITCH IN ADDITION TO THE FOOT OPERATED IF PRESENT SWITCH, OTHERWISE AN UNDESIREED START IS LIKELY WHEN YOU SLIDE OUT THE DUST DRAWER. WAIT UNTIL THE FAN STOPS, OPEN THE COVER IN FRONT OF/ABOVE THE FAN, REMOVE THE GRILL, CLEAN IT AND CHECK IF THE FANBLADES ARE CLEAN. PUT GRILL AND COVERS BACK IMMEDIATELY.

SHAKE THE DUST BAGS BY PULLING THE RELATIVE KNOB ON THE FRONT OF THE MACHINE, THEN PUSH LEVERS (h) DOWNWARD AND REMOVE DUST DRAWER.

CLEANING REGULARLY WILL MAINTAIN THE DUST EXTRACTION.





1-10-64  
MACHINE

11

MULTIPLE HEAD TRIMMER (IF PRESENT)

TO ROTATE THE CUTTERS, PUSH HANDLE (k) TO THE LEFT AND PULL THE HEAD DOWNWARDS WITH KNOB (j). RELEASE (k) AT ONCE, AND PULL (j) UNTIL THE FOLLOWING KNOB (J) ENGAGES IN HANDLE (k).

AFTER SOME EXPERIENCE, THIS CAN BE DONE WITH ONE HAND ON A RUNNING MACHINE AS FOLLOWS: PUSH HANDLE (k) WITH ONE OR TWO FINGERS TO THE LEFT, KNOB (j) IMMEDIATELY DOWNWARDS WITH THE THUMB, AND THEN RELEASE HANDLE (k) IMMEDIATELY. REPEAT THIS ACTION UNTIL THE RIGHT POSITION IS REACHED.

HEEL SCOURING BAND (IF PRESENT)

TO CHANGE THIS NARROW BAND, THE SPRING LOADED ROLLER (L) IS PULLED FORWARDS. NOW THE HEEL SCOURING BAND CAN BE REMOVED. AFTER REFITTING THIS BAND, ROTATE IT IN THE RIGHT DIRECTION A FEW TURNS BY HAND, AND CHECK IF THE BAND RUNS EXACTLY OVER THE ROLL. IF NECESSARY, MAKE A FURTHER ADJUSTMENT BY TURNING WINGBOLT (m).

HEAD AND CUTTER AND STATIONARY SHIELD

IT IS OF VITAL IMPORTANCE TO ADJUST THE SHIELD VERY CAREFULLY. THE SPACE BETWEEN CUTTER AND SHIELD SHOULD BE MINIMAL.

THE WIDTH CAN BE ADJUSTED AFTER RELEASING SCREW (z) AND MOVING THIS SCREW DOWN OR UPWARDS, CAUSING THE BUSH TO MOVE TO THE LEFT OR RIGHT. WHEN THE REQUIRED WIDTH HAS BEEN ACHIEVED, TURN SCREW (z) TIGHT. TO ENSURE THAT THE BUSH IN WHICH GUIDE (y) IS PUSHED WILL SLIDE EASILY, ALWAYS KEEP THIS AREA CLEAN, AND OIL LIGHTLY.

CUTTER SHARPENING

FOR QUICK AND GOOD TRIMMING, IT IS ESSENTIAL TO KEEP YOUR TOOLS SHARP. BEAR IN MIND THAT POSTPONING THE SHARPENING WILL COST MUCH MORE TIME, BECAUSE THE CUTTING IS SLOWER AND 'BURNING' IS LIKELY.

SHARPENING IS CARRIED OUT ON THE SPECIALLY INSTALLED GRINDING CONSTRUCTION. THE SHAFT SHOULD BE ADJUSTED AS INDICATED ON THE FOLLOWING SKETCH (OF COURSE WITH THE MOTOR SWITCHED OFF). THE POSITION OF THE SHAFT TOWARDS THE SHARPENING STONE IS VERY IMPORTANT IN ORDER TO MAINTAIN THE RIGHT ANGLE AT THE CUTTER TEETH. BEFORE SWITCHING ON, ENSURE THAT THE STONE RUNS FREELY BETWEEN THE TEETH OF THE CUTTER.

NOW SWITCH ON, AND PUSH THE CUTTER LIGHTLY AGAINST THE FLAT SIDE OF THE STONE, SLIDE ONCE BACKWARDS AND FORWARDS, REPEAT UNTIL ALL TEETH ARE CORRECTLY SHARPENED.

WITH MACHINES WHICH ARE EQUIPPED WITH MULTIPLE HEAD TRIMMER, AN ADJUSTABLE GUIDE IS FITTED. THIS EXTRA GUIDE IS ADJUSTED SO THAT THE TEETH TOUCH THE GRINDING STONE, EXACTLY AS DESCRIBED ABOVE.

ATTENTION

THE FASTENING SCREWS OF ALL CUTTERS ARE LEFTHAND THREADED, SO UNFASTEN COUNTERCLOCKWISE.

Revolverfräskopf (falls vorhanden)

Die Rotation der Fräser erfolgt dadurch, dass man mit der linken Hand den Knopf (k) nach links schiebt und dann den Knopf (j) nach unten drückt. Knopf (k) sofort wieder loslassen und Knopf (j) so weit nach unten drücken, bis der Revolverkopf in die nächste Stellung einrastet. Evtl. wiederholen, bis der gewünschte Fräser in Betrieb ist. Nach einiger Übung ist es möglich, dieses mit einer Hand zu machen. Man drückt dann mit einem oder 2 Fingern Knopf (k) nach links und direkt danach Knopf (j) mit dem Daumen nach unten und läßt Knopf (k) direkt wieder los. Dieses wiederholen, bis der benötigte Fräser wieder einrastet.

Fleckschleifband (falls vorhanden)

Zum Wechseln des Fleckschleifbandes zieht man die Umlenkrolle (1) nach vorne. Danach kann das Band abgenommen werden. Nach dem Auflegen des Bandes mit der Hand einige Umdrehungen machen und kontrollieren, ob es gut auf der Rolle läuft. Wenn nötig, kann man es durch Drehen der Schraube (m) verstellen.

Fleckfräser und Führung

Richtiges Funktionieren des Fleckfräasers mit stillstehender Führungsscheibe (o) erfordert eine genaue Einstellung. Der Raum zwischen Fräser und Scheibe (o) muß minimal sein und auch die Höheneinstellung muß sehr genau erfolgen. Zur Einstellung der Führungsmuffe dreht man die Schraube (z) etwas los und nach Belieben nach unten oder oben, wodurch sich die Muffe nach links oder nach rechts bewegt. Wenn die gewünschte Breite erreicht ist, Schraube (z) wieder fest drehen. Für eine leicht-gängige Bewegung ist es erforderlich, die Hülse, auf der sich die Muffe (y) hin und her bewegt, regelmäßig zu säubern und leicht einzuölen.

Fräser schleifen

Für gutes und schnelles Fräsen ist es notwendig, die Fräser regelmäßig zu schleifen. Wenn man dies rechtzeitig macht, ist es viel weniger Arbeit als wenn man es aufschiebt, bis die Messer gar nicht mehr schneiden bzw. schon "brennen". Das Schleifen geschieht an der auf der Maschine angebrachten Schleifvorrichtung. Das Einstellen der Schleifführung muß immer bei stillstehendem Schleifstein gemacht werden.

Die Einstellung muß gemacht werden, wie auf der Skizze (III) gezeigt wird. Man schiebt den Fräser über die Führung hin und her, während man leicht gegen die flache Seite des Schleifsteins drückt.

Alle Zähne gleichmäßig schleifen!

Maschinen mit Revolverfräsanlage sind mit einer verstellbaren Schleifführung ausgerüstet. Diese kann man so einstellen, dass man alle Zähne wie oben beschrieben schleifen kann.

Achtung: Die Fräser sind mit Linksgewindeschrauben befestigt, beim Demontieren also in Uhrzeigerichtung drehen!

Fleckschleifband (falls vorhanden)

Zum Wechseln des Fleckschleifbandes zieht man die Umlenkrolle (1) nach vorne. Danach kann das Band abgenommen werden. Nach dem Auflegen des Bandes mit der Hand einige Umdrehungen machen und kontrollieren, ob es gut auf der Rolle läuft. Wenn nötig, kann man es durch Drehen der Schraube (m) verstellen.

Fleckschleifband (falls vorhanden)

Richtiges Funktionieren des Fleckschleifbandes mit stillstehender Führungsscheibe (o) erfordert eine genaue Einstellung. Der Raum zwischen Fräser und Scheibe (o) muß minimal sein und auch die HöhenEinstellung muß sehr genau erfolgen. Zur Einstellung der Führungsmuffe dreht man die Schraube (1) etwas los und nach Belieben nach unten oder oben wodurch sich die Muffe nach links oder nach rechts bewegt. Wenn die gewünschte Breite erreicht ist, Schraube (1) wieder fest drehen. Für eine leicht-gängige Bewegung ist es erforderlich, die Hülsen auf der sich die Muffe (v) hin und her bewegt, regelmäßig zu säubern und leicht einzufetten.

Fräser schleifen

Für gutes und schnelles Fräsen ist es notwendig, die Fräser regelmäßig zu schleifen. Wenn man dies rechtzeitig macht, ist es viel weniger Arbeit als wenn man es aufschleibt, bis die Messer gar nicht mehr schneiden bzw. sich "brennen". Das Schleifen geschieht an der auf der Maschine angebrachten Schleifvorrichtung. Das Einstellen der Schleifführung muß immer bei stillstehendem Schleifstein gemacht werden.

## REVOLVERFRAISKOP (INDIEN AANWEZIG) (ZIE PAG.6)

HET ROTEREN VAN DE FRAISMESSEN DOET MEN DOOR MET DE LINKERHAND KNOP (k) NAAR LINKS TE DUWEN EN DAN KNOP (j) NAAR ONDER TE BEWEGEN. KNOP (k) DIRECT WEER LOSLATEN EN KNOP (j) DOOR TE DRUKKEN TOT DE REVOLVERKOP DE VOLGENDE STAND INNEEMT. ZONODIG DEZE HANDELING HERHALEN TOT HET GEWENSTE FRAISMES IN BEDRIJF IS.

NA ENIGE OEFENING IS HET MOGELIJK OM DIT MET EEN HAND TE DOEN. MEN DUWT DAN MET EEN OF MET TWEE VINGERS KNOP (k) NAAR LINKS EN DIRECT DAARNA KNOP (j) MET DE DUIM NAAR ONDER EN LAAT KNOP (k) DIRECT WEER LOS. DEZE HANDELING HERHALEN TOT DE JUISTE STAND IS BEREIKT.

## HAKSCHUURBANDJE (INDIEN AANWEZIG)

VOOR HET VERWISSSELEN VAN HET HAKSCHUURBANDJE TREKT MEN ROL (L) NAAR VOREN. HIERNA KAN HET BANDJE VERWIJDERD WORDEN. NA HET OPLEGGEN HET BANDJE MET DE HAND ENIGE OMWENTELINGEN BEWEGEN EN CONTROLEREN OF DIT GOED OP DE ROL LOOPT. ZONODIG KAN MEN DIT BIJSTELLEN DOOR KNOP (m) TE VERDRAAIEN.

## HAKFRAISMES + GELEIDING

EEN GOEDE WERKING VAN HET HAKFRAISMES MET DE NIET MEEDRAAIENDE GELEIDE PLAAT O VEREIST EEN PRECIESE AFSTELLING. DE RUIMTE TUSSEN MES EN PLAAT O MOET MINIMAAL ZIJN EN OOK DE HOOGTE VERSTELLING MOET ZEER NAUWKEURIG GESCHIEDEN.

VOOR DE AFSTELLING VAN DE BREEDTE GELEIDER DRAAIT MEN SCHROEF (z) IETS LOS EN DUWT DEZE SCHROEF NAAR BEHOEFTE NAAR ONDER OF NAAR BOVEN, WAARDOOR DE GELEIDER NAAR LINKS OF NAAR RECHTS BEWEEGT.

ALS DE GEWENSTE BREEDTE IS BEREIKT, SCHROEF (z) WEER VAST DRAAIEN. OM DEZE HANDELING MAKKELIJK TE DOEN, IS HET BESLIST NOODZAKELIJK OM DE HULS WAAROP GELEIDER (y) SCHUIFT, REGELMATIG SCHOON TE MAKEN EN LICHT TE OLIEËN.

## FRAISMES SLIJPEN

VOOR GOED EN SNEL FRAISEN IS HET NOODZAKELIJK OM DE FRAISMESSEN REGELMATIG TE SLIJPEN. ALS MEN DIT TIJDIG DOET IS HET VEEL MINDER WERK, DAN WANNEER MEN HET UITSTELT TOT DE MESSEN IN 'T GEHEEL NIET MEER SNIJDEN. (BRANDEN)

HET SLIJPEN GEBEURT OP DE SPECIAAL HIERVOOR OP DE MACHINE AANGEBRACHTE SLIJPINRICHTING. HET INSTELLEN VAN DE SLIJPGELEIDER MOET ALTIJD BIJ STAANDE SLIJPSTEEN GEBEUREN. DE AFSTELLING DIENST TE GESCHIEDEN ZOALS OP BIJGAANDE SCHETS IS AANGEGEVEN. HIERBIJ DIENST MEN EROP TE LETTEN, DAT HET SLIJPSTEENTJE MET VOLDOENDE RUIMTE DOOR DE RUIMTE TUSSEN TWEE TANDEN BEWOGEN KAN WORDEN. ALS DIT HET GEVAL IS, LAAT MEN DIT STEENTJE DRAAIEN EN SCHUIFT MEN HET MES OVER DE GELEIDER. LANGS DE LINKERZIJDE (VLAKKE KANT) VAN DE DRAAIENDE SLIJPSTEEN MET EEN LICHTE DRUK EENMAAL HEEN EN TERUG. NU HET MES ZOVER DRAAIEN DAT DE VOLGENDE TAND GESLEPEN KAN WORDEN. DIT HERHALEN TOT ALLE 16 TANDEN GESLEPEN ZIJN. INDIEN NODIG DEZE HANDELING HERHALEN TOT ALLE TANDEN WEER SCHERP ZIJN. BIJ MACHINES DIE ZIJN UITGERUST MET EEN REVOLVERFRAIS-INRICHTING IS EEN VERSTELBARE GELEIDER AANWEZIG.

DEZE EXTRA GELEIDER STELT MEN ZO AF, DAT DE TANDEN PRECIES OP DE BOVEN OMSCHREVEN WIJZE DE SLIJPSTEEN RAKEN.

LET OP. DE FRAISMESSEN ZIJN BEVESTIGD MET SCHROEVEN MET LINKSE SCHROEFDRAAD, HET LOSDRAAIEN GESCHIEDT DUS IN DE RICHTING VAN DE WIJZERS VAN DE KLOK !!

O N D E R D E L E N .

BIJ BESTELLING ALTIJD HET CODE-NUMMER EN DE OMSCHRIJVING  
OPGEVEN. VOOR MOTOREN OF DELEN VAN ELECTRISCHE INSTALLATIE  
TEVENS DE SPANNING (VOLT), AANTAL PERIODEN (HZ) EN 1 OF 3  
PHASE VERMELDEN.  
MACHINENUMMER VERMELDEN !

DE DELEN ZONDER CODE.NR. ZIJN HANDELSARTIKELN ZOALS BOUTEN,  
MOEREN E.D. DIE OVER 'T ALGEMEEN OVERAL VERKRIJGBAAR ZIJN.

E R S A T Z T E I L    V E R Z E I C H N I S

BEI BESTELLUNGEN IMMER KODENR. UND TEILBEZEICHNUNG AUFGEBEN.  
FÜR MOTORE UND ELECTROTEILE IMMER SPANNUNG UND STROMSORTE  
AUFGEBEN.  
BITTE MASCHINENUMMER ANGEBEN.

DIE TEILE OHNE CODE NR. SIND HANDELS ÜBLICHE ARTIKEL WIE  
SCHRAUBEN, MUTTER U.S.W. HIER IST DIE 'DIN' NR. ANGEGBEN.

P A R T S    C A T A L O G .

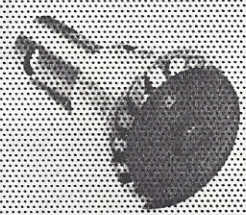
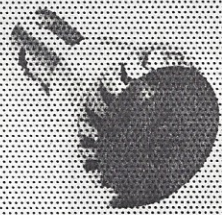
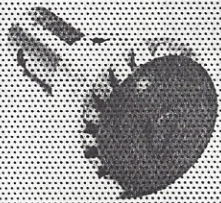
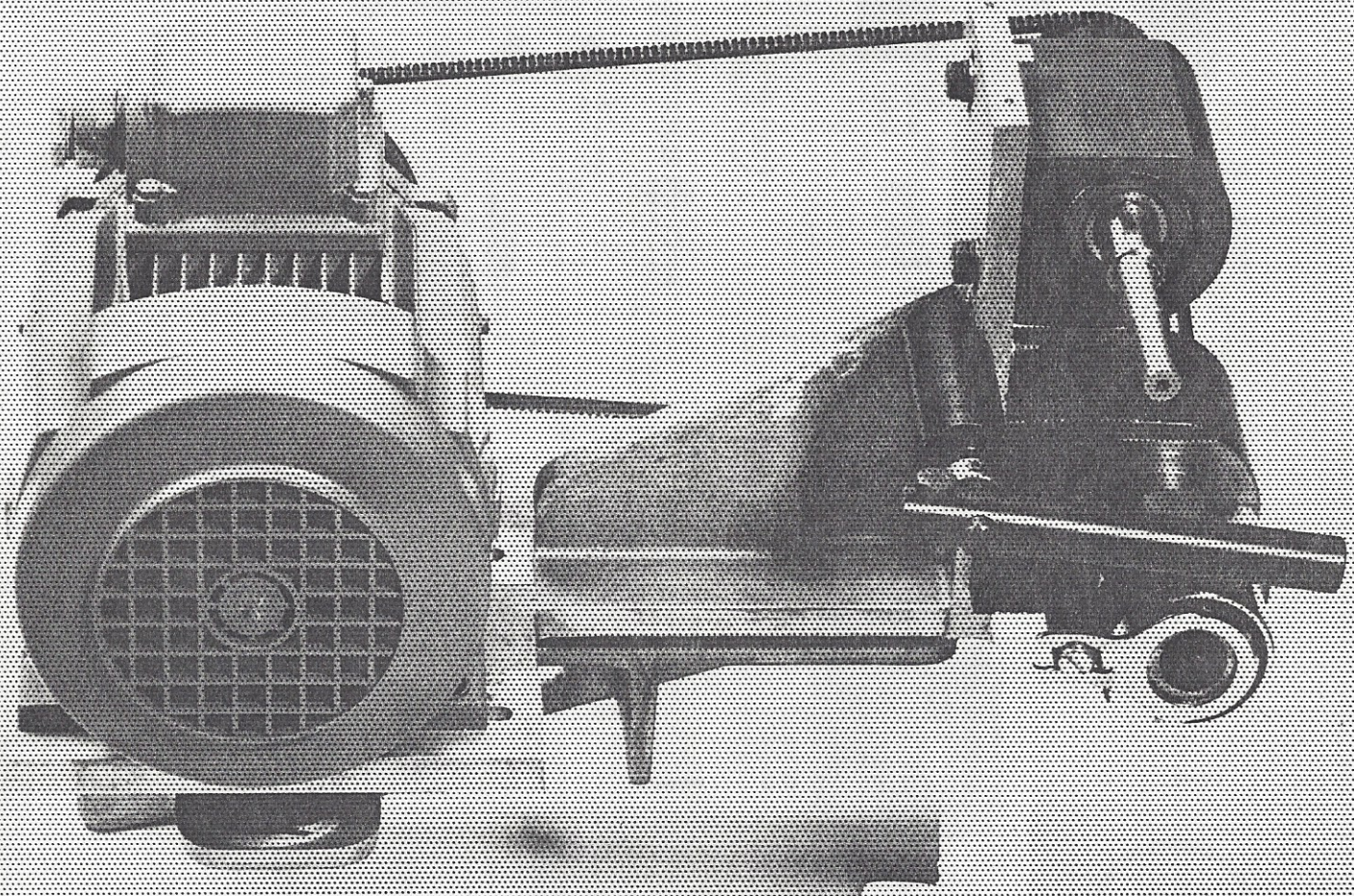
ALWAYS MENTION CODE NR. AND DESCRIPTION WHEN ORDERING PARTS.  
ELECTRICAL MOTORS OR SWITCHES ETC. ALWAYS MENTION VOLTAGE, NR.  
OF CYCLES AND 3 PHASE OR 1 PHASE  
STATE NUMBER OF MACHINE.

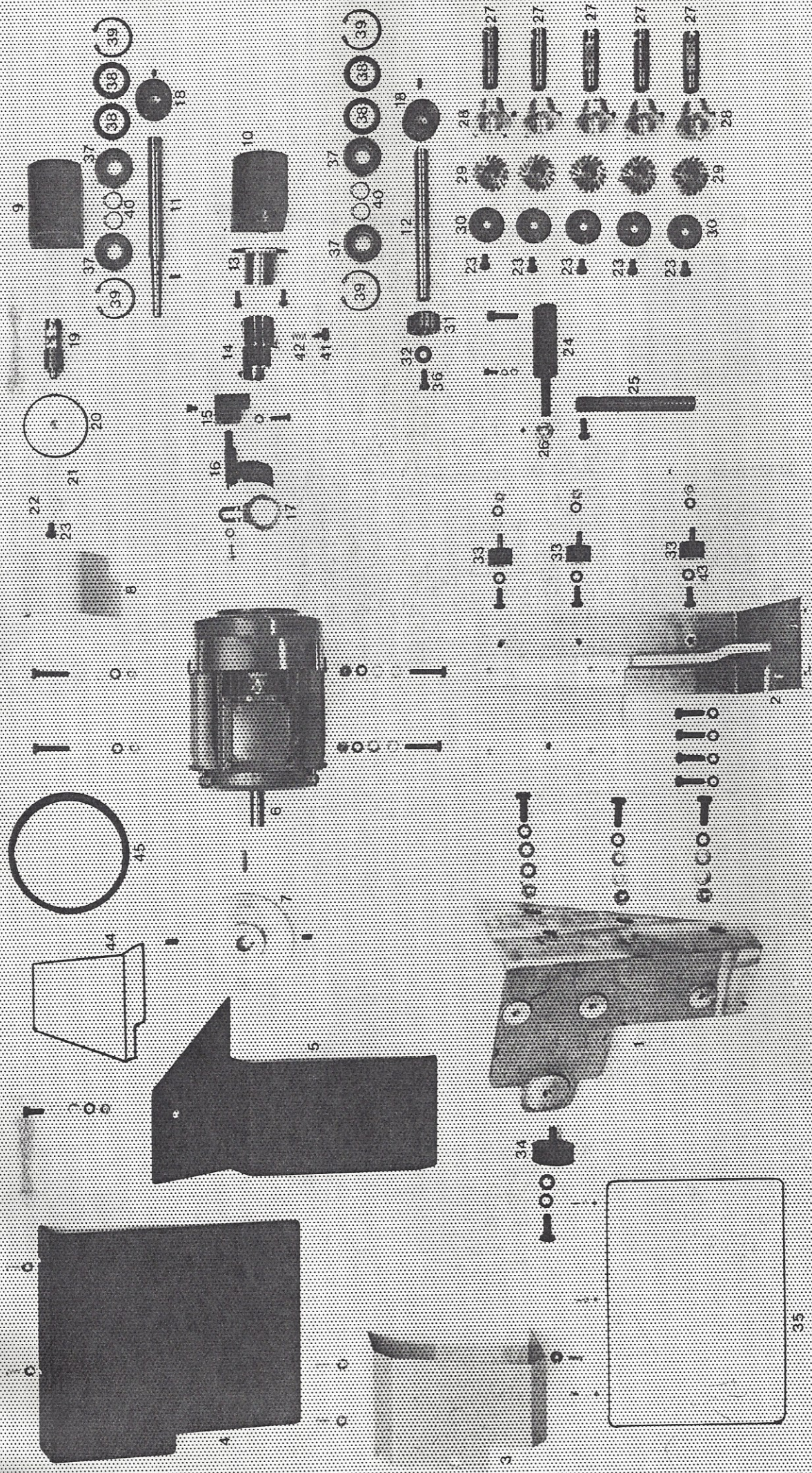
PARTS WITHOUT CODE NR. ARE BOLTS, SCREWS, NUTS, WASHERS E.T.C.  
GENERALLY AVAILABLE.

L I S T E    D E    P I E C E S    D E T A C H E E S

PRIERE D'INDIQUER LA REFERENCE (CODE) ET LA DESCRIPTION DES  
PIECES DETACHEES. POUR LES MOTEURS OU PARTIES DE L'INSTALLATION  
ELECTRIQUE VEUILLEZ INDIQUER EGALEMENT LE VOLTAGE, NOMBRE DES  
PERIODES (HZ) ET MONOPHASE OU TRIPHASE.  
INDIQUEZ LE NUMERO DE LA MACHINE.

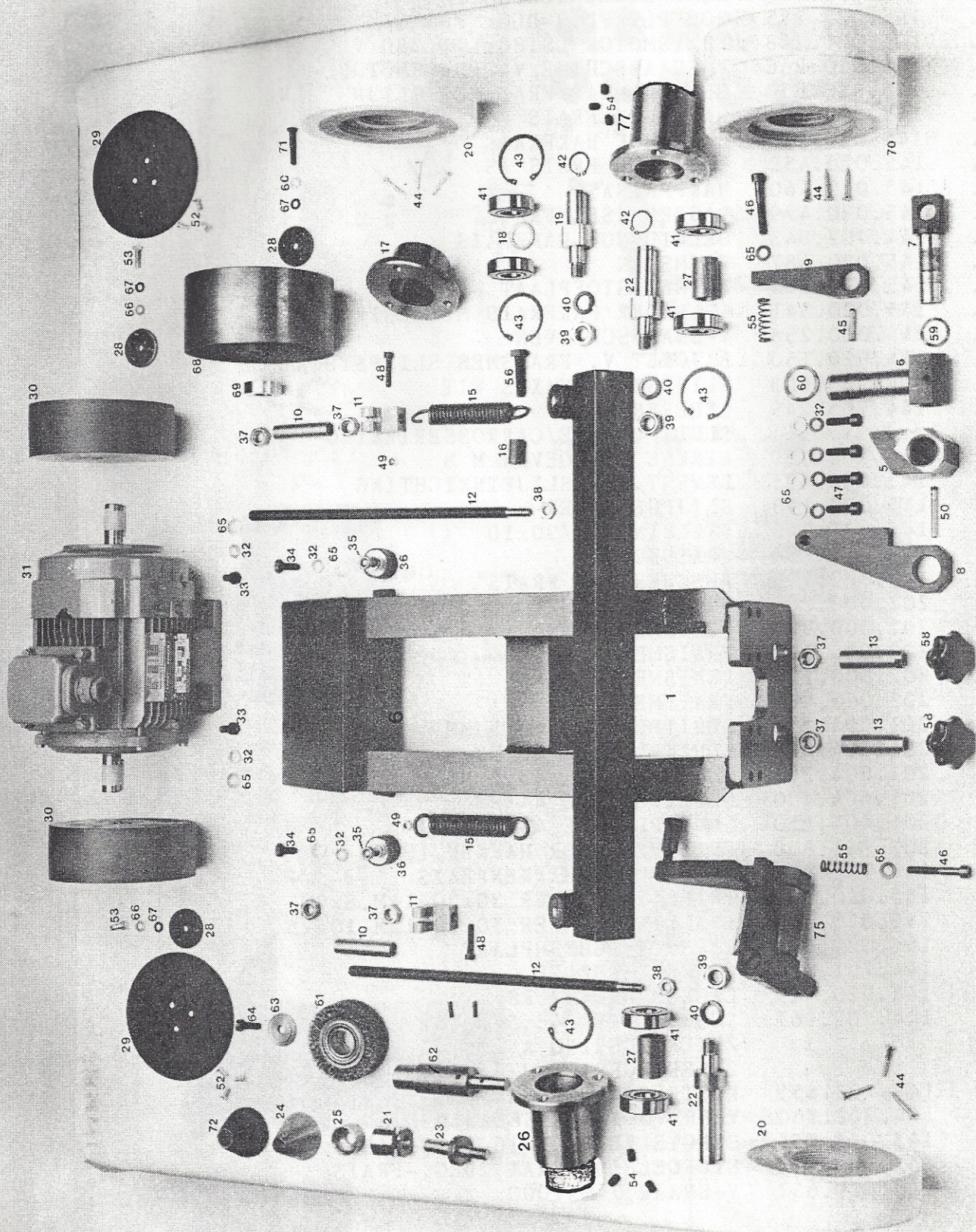
LES PIECES DETACHEES SANS NUMERO DE CODE SONT DES ARTICLES DE  
COMMERCE COMME DES BOULONS, ECROUS E.T.C., QUI PEUVENT EN  
JEUERAS ETRE OBTENUS PARTOUT.





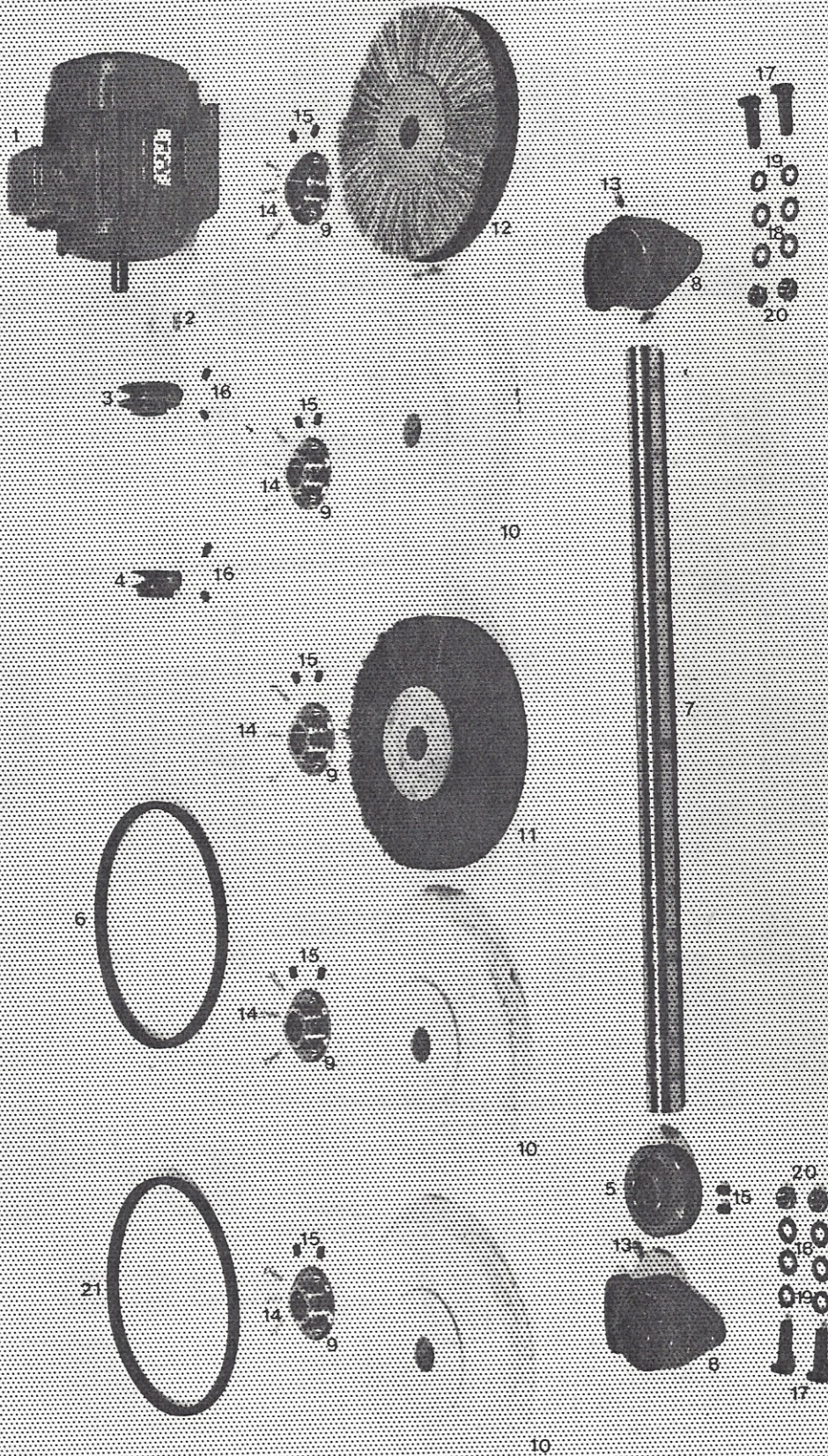


1.	145.020.410	MONTAGESTEUN
2.	145.020.428	MONTAGE FRAME
3.	145.020.509	SCHERMKAP LAGERBOKKEN
4.	145.020.517	KLEP SCHARNIEREND 2-DLG. FRAIS
5.	145.025.525	HOEKPL.AFD.2-DLG. FRAIS
6.	145.020.738	FRAISMOTOR LS.80.L.1 380 V
7.	145.020.266	V-SNAARSCHIJF V. FRAISMOTOR
8.	145.020.550	BESCHERMKAP FRAISMES SLIJPSTEEN
9.	145.020.444	LAGERBOK FRAIS
10.	145.020.436	LAGERBOK HAKFRAIS
11.	145.020.452	KONISCHE FRAIS AS
12.	145.020.460	HAKFRAISAS
13.	145.020.479	LAGERDEKSEL FRAIS
14.	144.702.843	GELEIDEMOF HAKFRAIS
15.	145.020.487	KLEMSTUK
16.	145.020.568	AS MET STOFPLAAT
17.	145.020.541	GELEIDER HAKFRAIS MET KNIK
18.	145.020.258	V-SNAARSCHIJVEN
19.	145.020.150	BAJONET V. FRAISMES SLIJPSTEEN
20.	200.965.603	SLIJPSTEEN NAXOS WIT
21.	144.705.249	LEDEREN RING
22.		SLUITPLAATJE/CARROSSERIERING
23.	144.760.789	LINKSE SCHROEVEN M 8
24.	145.020.495	BEVEST.-AS SLIJPINRICHTING
25.	145.020.118	SLIJPGELEIDER
26.	145.020.746	STELRING 12/20x10
27.	144.760.754	FRAISKOP
28.	144.703.106	BESCHERMKAP FRAIS
29.	202.000.206	FRAISMES 2 MM
	202.000.303	FRAISMES 3 MM
	202.000.508	FRAISMES 5 MM
	202.000.702	FRAISMES 7 MM
	202.000.907	FRAISMES 9 MM
30.	201.604.256	SLUITPLAATJE 42,5 MM
	201.604.302	SLUITPLAATJE 43 MM
	201.604.353	SLUITPLAATJE 43,5 MM
	201.604.400	SLUITPLAATJE 44 MM
	201.604.450	SLUITPLAATJE 44,5 MM
31.	202.041.808	FRAISMES VOOR HAKKEN 18 MM
32.	144.702.886	SLUITPLAAT HAKKENFRAIS
33.	145.010.368	TRILLINGSDEMPEM 30x20 1xM.8x20
34.	145.020.363	TRILLINGSDEMPEM 50x20 1xM.10x25
35.	145.020.533	PERSPEX SCHERMPLAAT
36.	144.701.014	LINKSE SCHROEF
37.	142.020.419	LAGERS 6204-2 RS
38.	144.702.967	SCHOTELVEER 46,5/30,5x1,5x0,6
39.		ZEKERINGSRING A 20x1,2 - DIN 471
40.		ZEKERINGSRING J 47x1,75 - DIN 471
41.	144.702.851	KARTELSCHROEF HAKFRAIS
42.	144.702.860	VEER VOOR FRAISGELEIDEMOF
43.	145.025.756	SCHOTELVEER DU=16 DI=8,2 S=1
44.	145.020.576	STOFGELEIDEPLAAT 2DLG.-FRAIS
45.	145.020.657	V-SNAAR 7 Mx1000

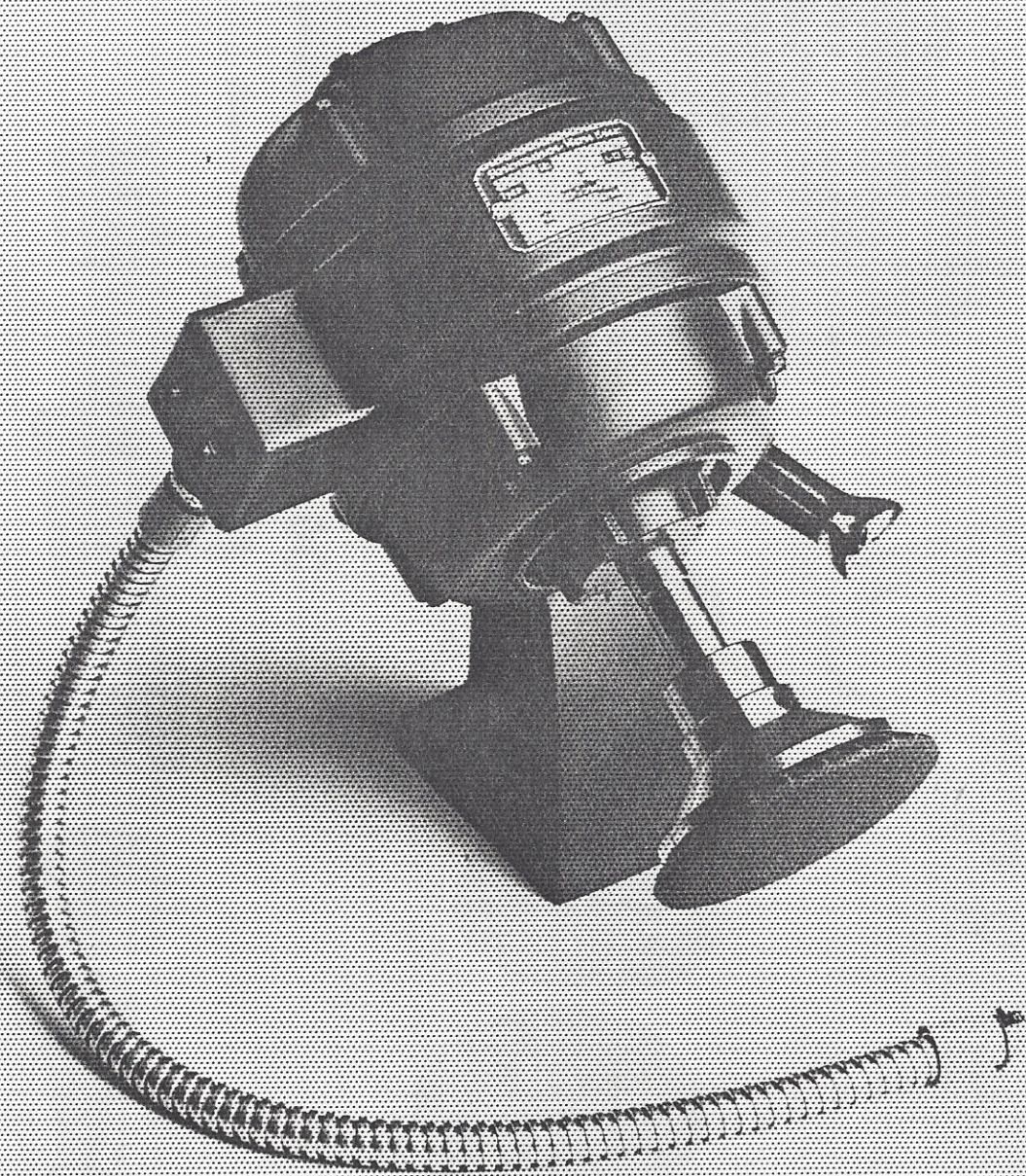


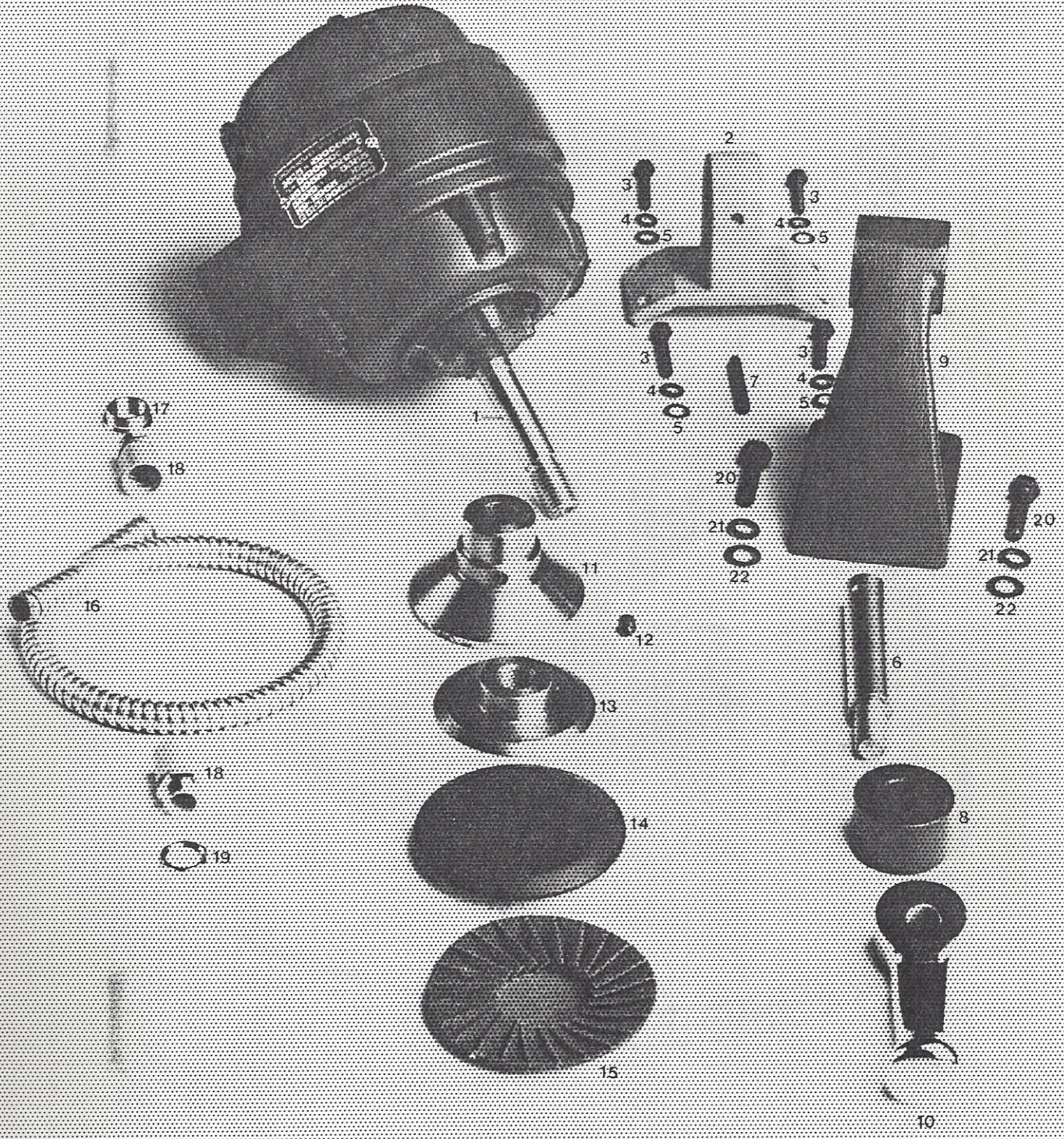
Ref	Code	Omschrijving:
1	145.010.007	frame
5	145.010.058	lagerbok
6	145.010.074	draaist. bandverst.
7	145.010.066	scharnier as
8	145.010.082	arm span
9	145.010.090	stelarm
10	145.010.104	pijpstuk
11	145.010.112	veerspanstuk
12	145.010.120	draadstang
13	145.010.139	draadbus
14		
15	145.010.155	trekveer
16	145.010.163	veerafst. bus
17	144.700.786	lagerflens kort
18	144.700.808	afstandsbus
19	145.010.198	lageras kort
20	140.375.040	viltschijf 40 mm
21	145.010.210	bajonet bus
22	145.010.228	lageras lang
23	145.010.236	baj. as v. hakfr.
24	144.739.917	hakfrontkegel
25	144.704.579	ring v. hakfront
26	145.010.260	lagerflens lang
27	145.010.279	afstand bus
28	144.700.417	sluitplaat
29	144.700.433	stofplaat
30	144.700.409	achterlooprol
31	144.737.779	motor 220-380 v. 50 Hz
32		veerring 8 DIN 127
33		bout 8.25 933
34		bout 8.20 933
35		moer 8 934
36	145.010.368	trillingdemper 8.20 30-20
37		moer 12 934
38		moer 10 439a
39		moer 14 934
40		veerring 14 127
41	142.020.419	kogellager 6204 LLU A <sup>1</sup>
42		zekeringsring 20.471
43		zekeringsring 47.472
44		houtschroef 5.30.97
45		borgpen 5.30.1473
46		bout 8.50 912
47		bout 8.25 912
48		bout 6.30 912
49		moer 6 934
50		borgpen 6.45 1473
51		veerring 5 127
52		schroef 5.15 85
53		bout 6.16 933
54		stelschr. 8.10 913
55	145.010.554	drukveer
56		bout 10.45 912
57		veerring 10 127
58	145.010.589	sterknop
59		golfring 26 61520
60		golfring 21 61480

61	203.803.426	ruwmaker U 342
62	145.010.627	baj. as r.m.
63	144.701.006	sluitplaat r.m.
64	144.701.014	L. schroef
65		sluitring 8
66		sluitring 6
67		veerring 6 127
68	145.010.708	brede achterlooprol
69		vulring
70	140.375.082	brede viltschijf
71		bout 6.35 912
72	185.103.030	hakfrontkapje
75	130.010.758	bandverst. arm kompl. L
76	130.010.766	bandverst. arm kompl. R
77	145.010.998	lagerflens viltschijf 75 mm



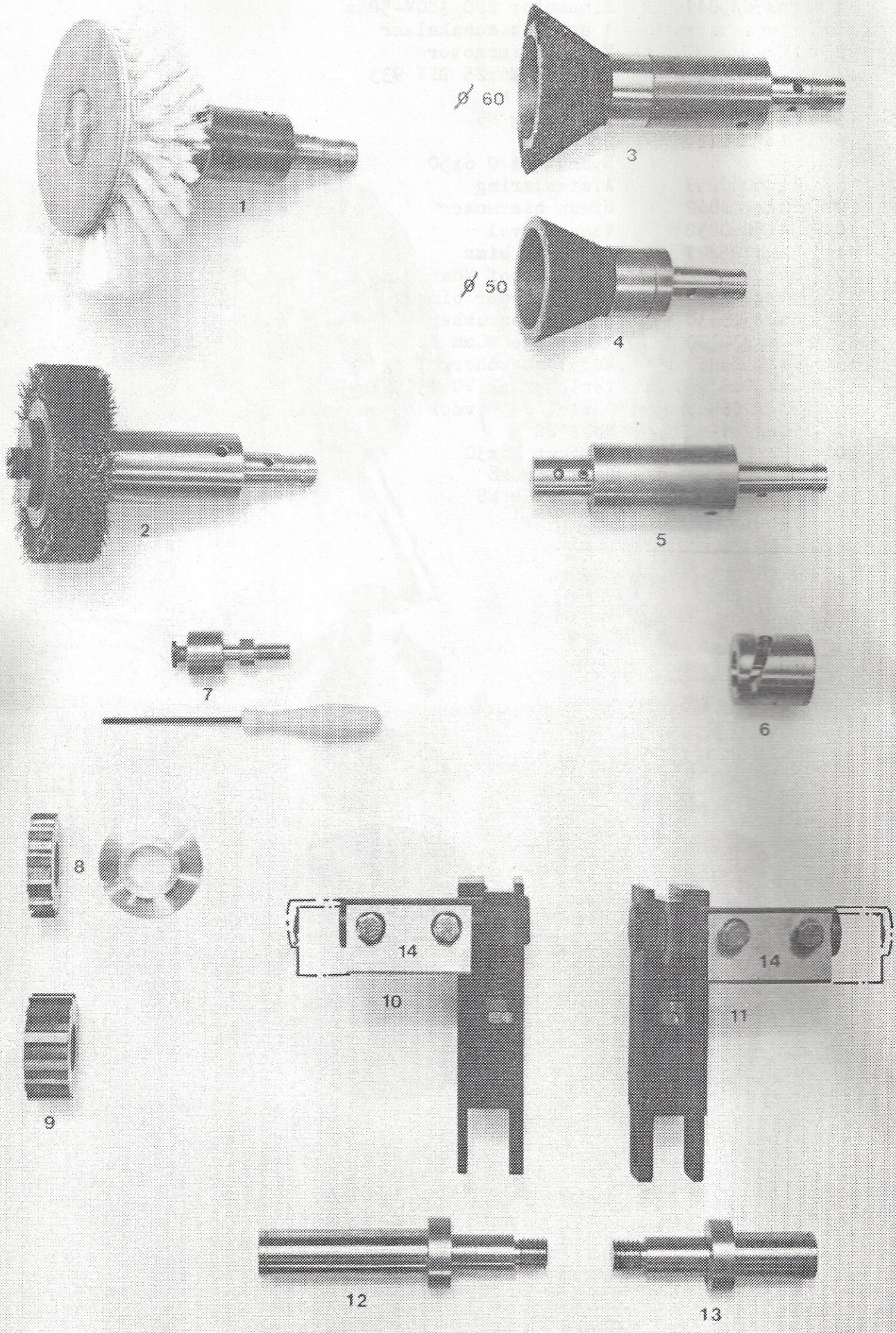
1	144.761.920	Motor poetsas 220/380 V - 50 Hz
2		Spie 6x6x32
3	145.130.908	V-snaarschijf Ø 67
4	145.130.924	V-snaarschijf Ø 53
5	144.704.102	V-snaarschijf 78x31
6	149.280.076	V-snaar 13x800 (A31,5)
7	144.838.605	Poetsas Ø 30x654
8	144.704.722	Lagerblok UCFA 206
9	141.134.100	Flens voorborstel Ø 30
10	200.945.009	Lappenschijf 240x40
11	200.975.501	Harenborstel 240x40 bruin
12	200.975.900	Harenborstel 240x40 zwart
13		Smeernippel
14		Houtschroef 5x30
15		Stelschroef M 8x8
16		Stelschroef M 8x10
17		Tapbout M 10x30
18		Sluitring M 10
19		Veerring M 10
20		Moer M 10
21	149.278.071	V-snaar 13x780



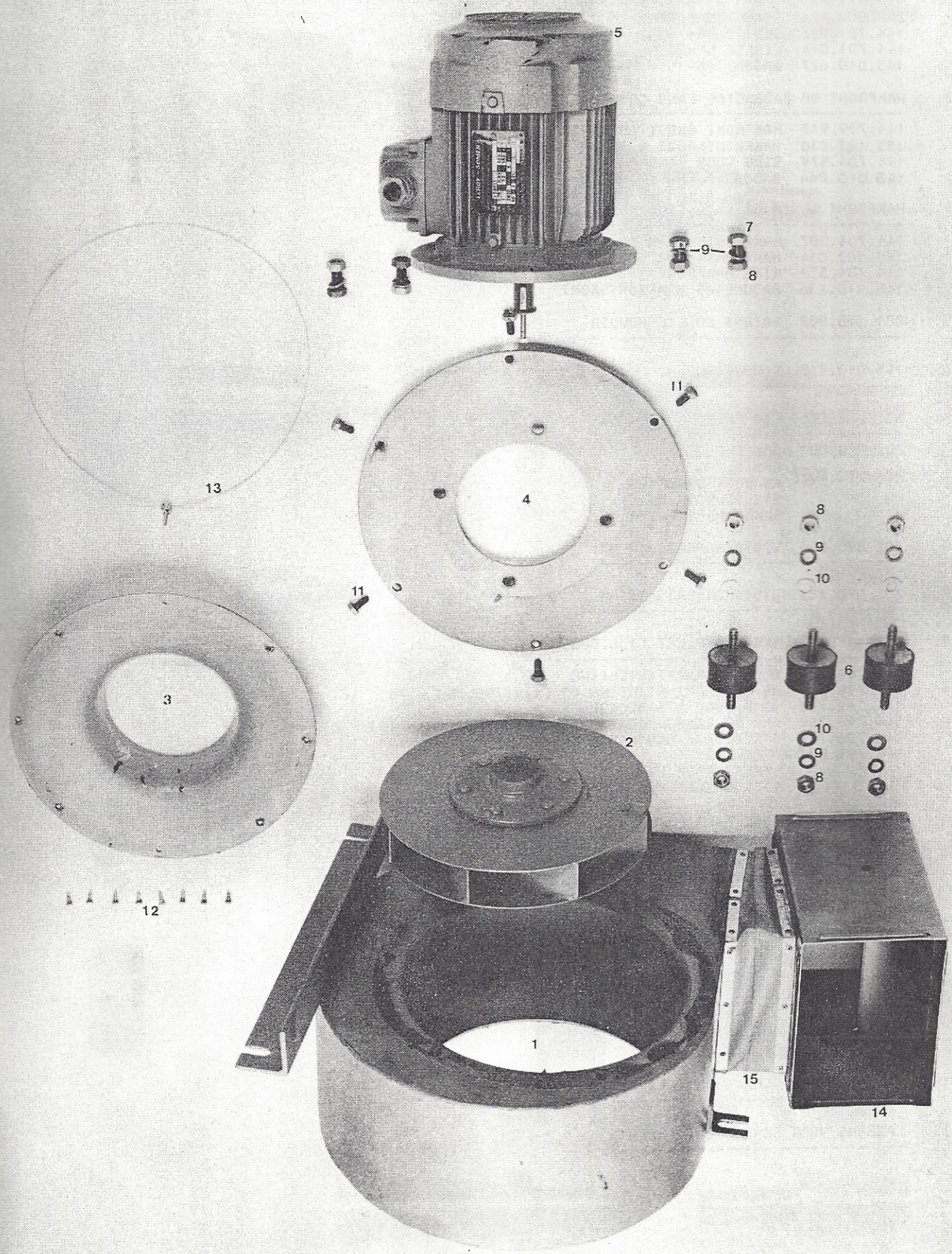


Ref.Nr.	Code Nr.	Omschrijving
1	145040011	Bimsmotor 220/380V-50Hz 1 assig z.schakelaar
2		Houder bimsmotor
3		Tapbout M6x25 DIN 933
4		Veerring M6
5		Sluitring M6
6	145040127	Ophangas
7		Spanstift $\varnothing$ 6x50
8	145040259	Afstandring
9	144704862	Steun bimsmotor
10	145040232	Vaszethevel
11	144705427	Bovenkap bims
12		Stelschroef M8x6 punt
13	144705451	Kussenhouder bims
14	144705338	Bimskussenrubber
15	183330323	Bimskapje 90mm K60
16	144706962	Metalenbeschermslang
17	144706806	Verloopring PG 13,5/Pg 9
18	144706946	Wartel PG 9 voor beschermslang
19	144706954	Moer PG 9
20		Tapbout M8x30
21		Veerring M8
22		Sluitring M8



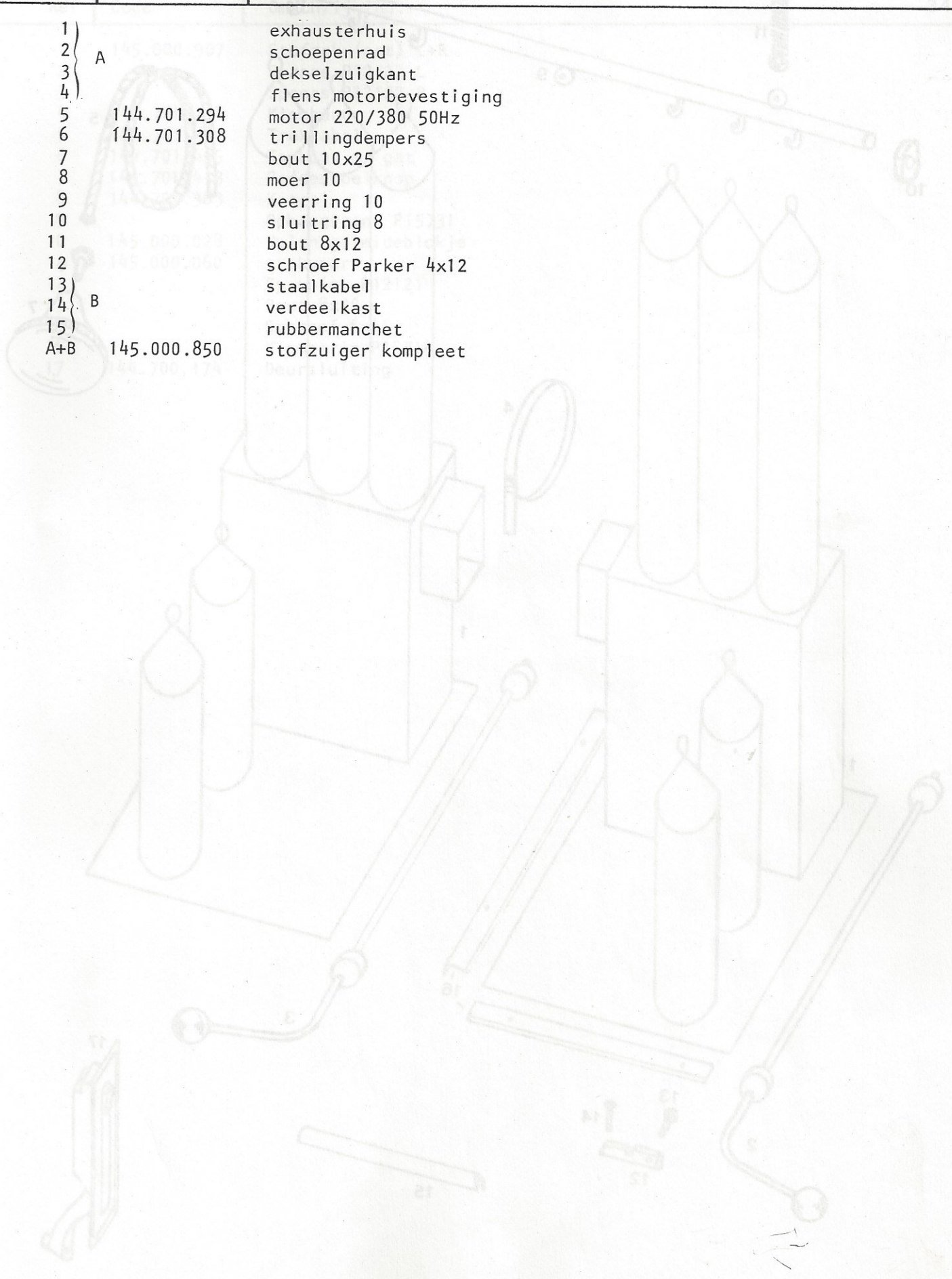


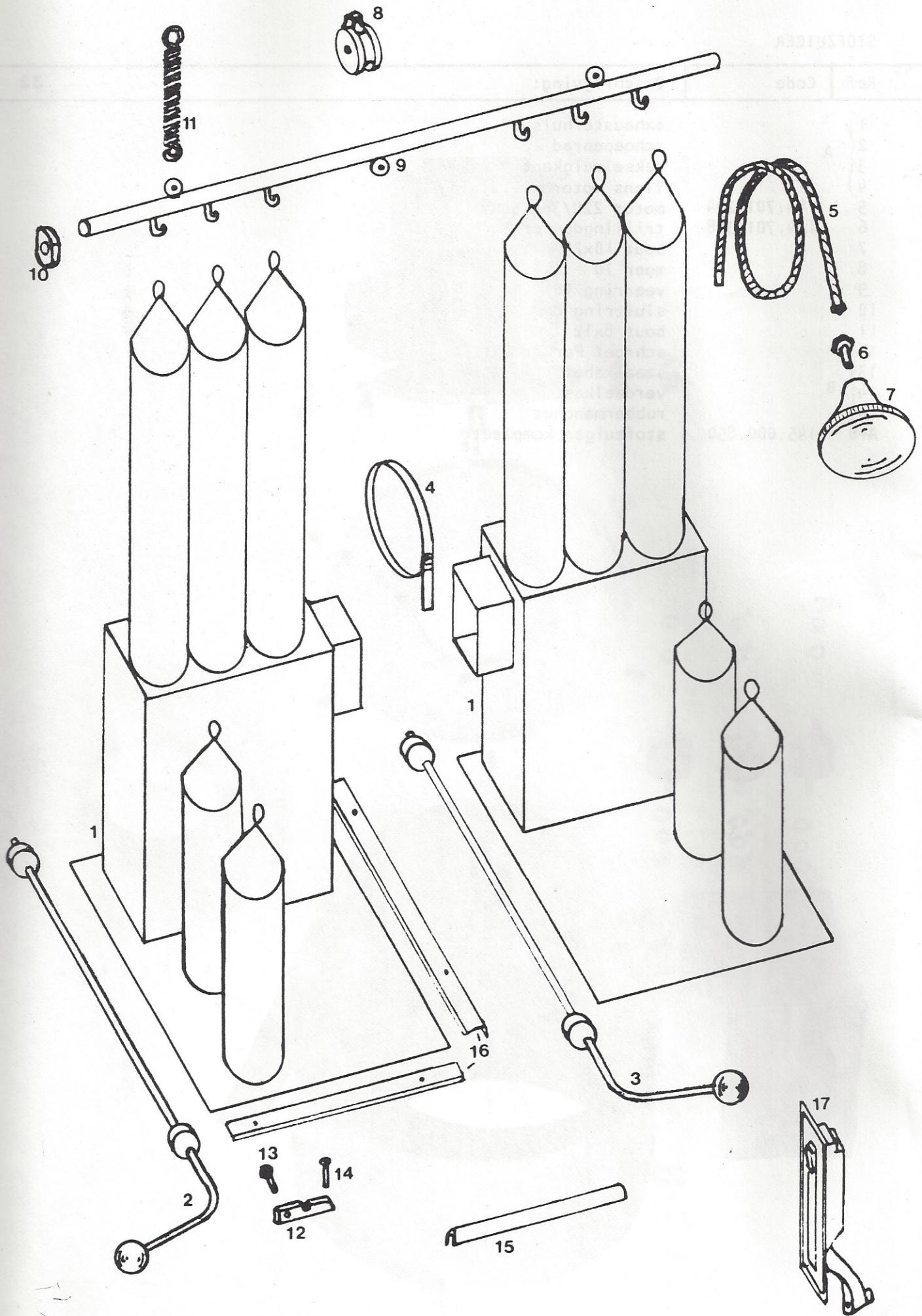
1. NYLONBORSTEL OP BAJONETAS COMPLEET  
-----  
200.960.008 NYLONBORSTEL  
141.134.100 FLENS 30 MM  
145.010.627 BAJONETAS  
STELSCHROEF M8x8  
HOUSCHROEF 5x50
2. STALENRUWMAKER OP BAJONETAS COMPLEET  
-----  
203.803.426 STALENRUWMAKER  
144.701.006 SLUITPLAAT R.M.  
144.701.014 LINKSE SCHROEF  
145.010.627 BAJONETAS
3. HAKFRONT OP BAJONETAS LANG COMPLEET  
-----  
144.739.917 HAKFRONT GROOT 60 MM  
185.103.030 HAKFRONTKAPJE Ø 60 MM  
144.704.579 RING VOOR HAKFRONT  
**145.010.244** BAJONETAS HAKFRONT LANG
4. HAKFRONT KLEIN OP BAJONETAS KORT COMPLEET  
-----  
144.704.587 HAKFRONT KLEIN 50 MM  
185.102.034 HAKFRONTKAPJE 50 MM  
144.704.579 RING HAKFRONT  
145.010.236 BAJONETAS HAKFRONT KORT
5. 201.150.808 PATENT COULIESHOUDER  
-----
6. 145.010.210 BAJONETBUS  
-----
7. GROEFMESFRAIS COMPLEET  
-----  
202.070.000 GROEFMESJE  
AFSTELBUS  
**202.070.808** AS VOOR GROEFMES  
STELSCHROEF M4x4  
SCHROEVENDRAAIER
8. 202.090.000 WIDIAHAKFRAIS 10 MM  
-----
9. 202.090.183 WIDIAHAKFRAIS 18 MM  
-----
10. SCHRAAPUNIT LINKS COMPLEET (130.000.000)  
-----  
144.798.719 BLOK SCHRAAPINRICHTING  
144.798.735 AS SCHRAAPINRICHTING 40 (144.798.786 = 75)  
144.798.743 ASJE VOOR STELBLOKJE  
14. 144.798.760 MES SCHRAAPINRICHTING 40 (144.798.794 = 75)  
144.798.778 STELBLOKJE SCHRAAPINRICHTING  
144.798.883 DRUKVEER  
STELSCHROEF M6x12 916  
STELSCHROEF M6x50 916  
MOER M6  
BOUT M6x16  
SLUITRING M6
11. SCHRAAPUNIT RECHTS COMPLEET (130.000.019)  
-----  
144.798.719 BLOK SCHRAAPINRICHTING  
144.798.735 AS SCHRAAPINRICHTING 40 (144.798.786 = 75)  
144.798.743 ASJE VOOR STELBLOKJE  
14. 144.798.760 MES SCHRAAPINRICHTING 40 (144.798.794 = 75)  
144.798.778 STELBLOKJE SCHRAAPINRICHTING  
144.798.883 DRUKVEER  
STELSCHROEF M6x12 916  
STELSCHROEF M6x50 916  
MOER M6  
BOUT M6x16 933  
SLUITRING M6
12. LAGERAS VOOR SCHRAAPUNIT LINKS  
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13. LAGERAS VOOR SCHRAAPUNIT RECHTS  
-----



STOFZUIGER

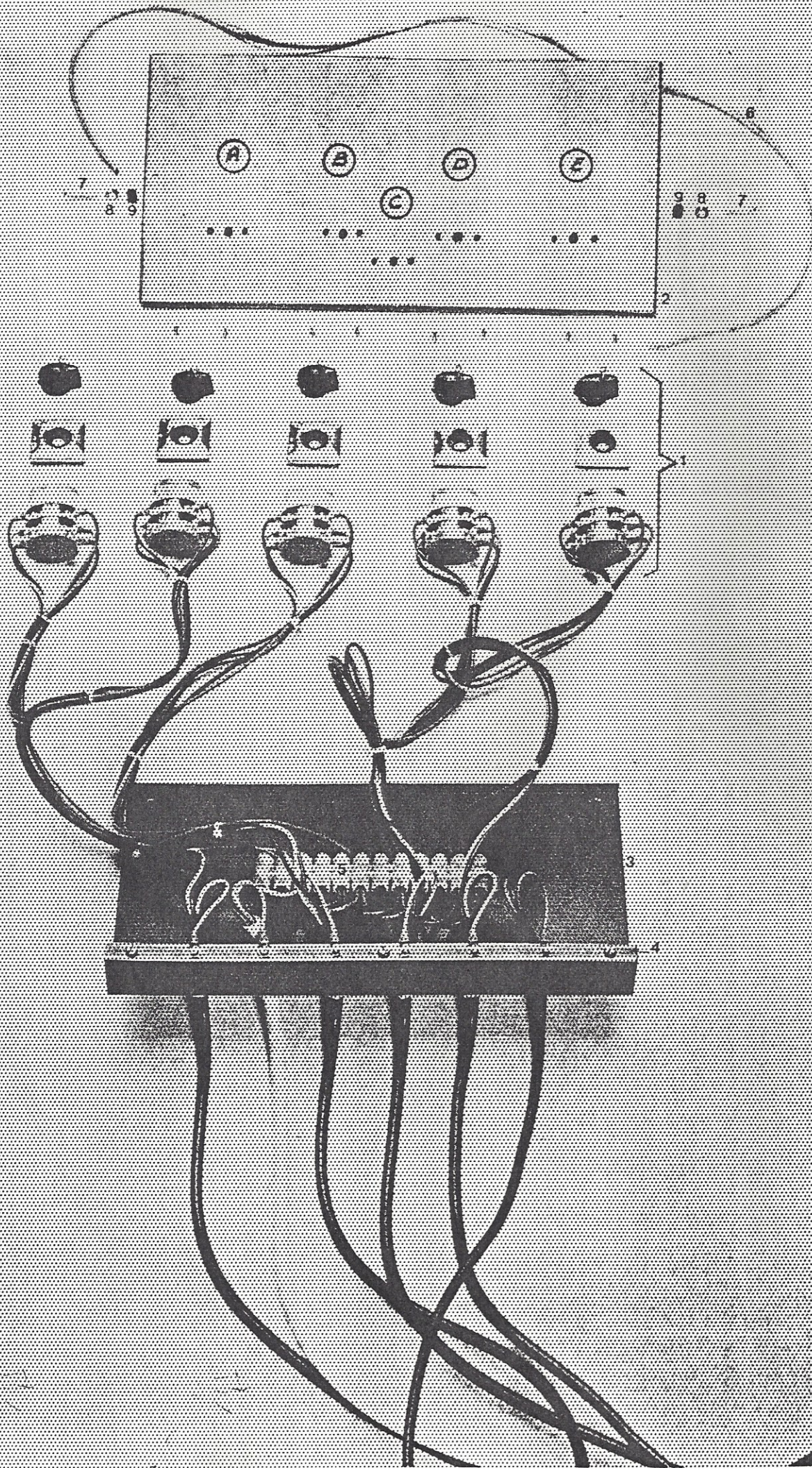
Ref	Code	Omschrijving:
1		exhausterhuis
2		schoepenrad
3	A	dekselzuigkant
4		flens motorbevestiging
5	144.701.294	motor 220/380 50Hz
6	144.701.308	trillingdempers
7		bout 10x25
8		moer 10
9		veerring 10
10		sluitring 8
11		bout 8x12
12		schroef Parker 4x12
13		staalkabel
14	B	verdeelkast
15		rubbermanchet
A+B	145.000.850	stofzuiger compleet





## STOFFILTERING

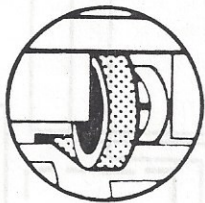
Ref	Code	Omschrijving:	34
1	145.000.907	Stofzak (set) L+R	
2		Spanas P12122 L	
3		Spanas P12122 R	
4	144.701.278	Klemband	
5	144.701.367	Trekkabel	
6	144.701.405	Tapbout m. gat	
7	144.701.413	Paddestoelknop	
8	144.701.383	Katrol	
9		Ophangstang P15731	
10	145.000.028	Nylon geleideblokje	
11	145.000.060	trekveer	
12		Spanblok P12121	
13		Bout 8x30	
14		Schroef 6x45	
16		Klemstrip P15714	
17	144.700.174	Deursluiting	



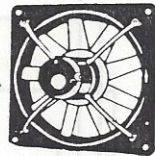
Ref	Code	Omschrijving:
1	145.060.055	draaischakelaar
2	145.027.252	voorplaat
3	145.027.244	imbouwplaat
4	145.027.406	aardestrip
5		kroonstrip
6		sierrand
7		lensschroef 6x25
8		sierring 7
9		vulring



**A**



**B**



**C**

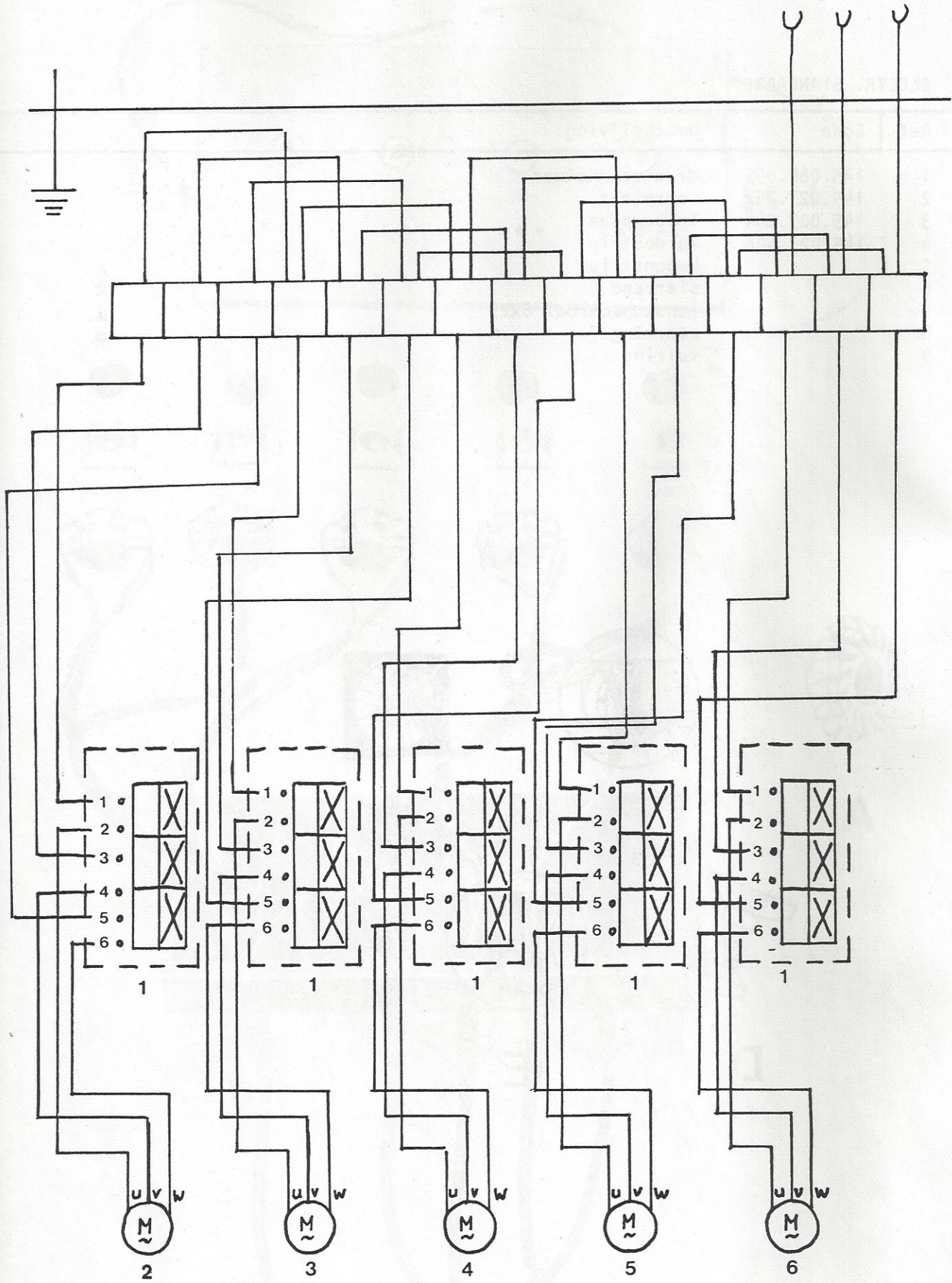


**D**



**E**





SERVICE AND TROUBLE SHOOTING

- 1 Draaischakelaar
- 2 Fraismotor
- 3 Schuurbandmotor
- 4 Stofzuigermotor
- 5 Bimsmotor
- 6 Poetsmotor

IN THE SCOURING BANDS START TO MAKE A LOT OF NOISE OR WANDER. FIRST CHECK IN THE FELT ROLL AND THE BACKSTOP. CLEAN, VERY OILY, RUBBER OR GREASE TAPES ARE STICKING ON.

- 1 Drehschalter
- 2 Fräsmotor
- 3 Schleifbandmotor
- 4 Staubsaugermotor
- 5 Bimsmotor
- 6 Poliermotor

IF SCOURING BANDS ARE WANDERING LEFT AND RIGHT, IT IS LIKELY THAT THERE IS A FAULT ON THE BAND. IF YOU NOTICE THAT THE SCOURING BAND IS NOT RUNNING ON THE FELT ROLL, THIS CAN BE CHANGED BY MEANS OF THE SCREW ON THE TRACKING MECHANISM. THE BACK STOP IS ADJUSTED BY TURNING THE SCREW ON THE TRACKING MECHANISM. THE BACK STOP IS ADJUSTED BY TURNING THE SCREW ON THE TRACKING MECHANISM.

IF EVERYTHING IS ALRIGHT, BUT YOU STILL HAVE EXCESSIVE VIBRATION AND NOISE, IT IS POSSIBLE THAT SOME OF THE HARDENERS INTO THE COILING BAR OF THE ELECTRIC MOTOR AND THE WAY THE MOTOR THE BALANCE OF THE MOTOR SHAFT IN THIS CASE, THE MOTOR NEEDS TO BE TAKEN OUT OF THE SCOURING ASSEMBLY. THE WHOLE SCOURING UNIT CAN BE REMOVED FROM THE MACHINE BY SIMPLY UNDOING THE NUTS ON THE FRONT HOUSING JOINTS (VARIATION DRIVERS) OF THE SCOURING FRAME NO. 1 ON PAGE 13. ONCE THE TWO NUTS ARE MOVED, YOU CAN PULL THE WHOLE UNIT REMOVING YOU. IN THE BACK THE UNIT IS CLAMPED IN WITH CLAMPERS NO. 2. AFTER PULLING THE UNIT FORWARD, THE ELECTRICAL CONNECTION CAN BE DISCONNECTED THROUGH THE TOP DOOR OF THE MACHINE.

AT THE END OF THE SCOURING UNIT CAN BE REMOVED FROM THE MACHINE AND THE MOTOR CAN BE REASSEMBLED. IT IS POSSIBLE TO CLEAN THE COILING BAR WITH AN AIR GUN. YOUR MACHINE IS ALSO FITTED WITH A PRESS AND A COMPRESSOR. WITH THE AIRGUN, MOST DUST AND GIRD CAN BE REMOVED FROM ALL PARTS OF THE MACHINE.

IF A FELT ROLL IS COMPLETELY WORN AND HAS TO BE EXCHANGED, THIS CAN BE DONE BY REMOVING THE SCOURING UNIT. THE FELT ROLL IS VERY TIGHTLY ON THE FLANGES, SO CAREFULLY, THEY HAVE TO BE REMOVED OFF AND ON. IT IS VERY EASY TO EARN THE SHOP SHOULD YOU HAVE TO DO THIS. IT IS VERY EASY TO EARN THE SHOP FLANGE AND BEAT FROM THE MACHINE BY USING THE BALL BEARING WHEN BALL BEARINGS OF THE SCOURING ROLL BEGIN TO MAKE EXCESSIVE NOISE, THE EASIEST WAY IS TO TAKE A COMPLETELY NEW SET OF BALLS WITH SPARE AND BALL BEARING IS TO EXCHANGE THE BALL BEARINGS. YOUR SCOURING UNIT AND THE BEARINGS HAVE A VERY TIGHT FIT. THE MOTOR IS NOT TO BE REMOVED FROM THE SCOURING FROM THESE PARTS. DO NOT WORK WITH THE MOTOR CAREFULLY. WE ONLY USE BELTED BEARINGS WHICH ARE ORDERED IN THE FACTORY AND LUBRICATED FOR LIFE. IT IS ADVISABLE TO USE THE BEARINGS WITH EXACTLY THE SAME SPECIFICATION AS INDICATED ON THE BEARINGS IN THE MACHINE. THE BEARINGS ARE SECURED BY USING SPRING RINGS AND DISC SPRINGS. PART NOS. 43 AND 44.



## SERVICE AND TROUBLE SHOOTING

YOU HAVE ACQUIRED ONE OF THE FINEST MACHINES IN THE WORLD, WHICH HAS BEEN BUILT WITH THE UTMOST CARE, USING THE FINEST MATERIALS, AND IT SHOULD BE VERY RARE THAT FAULTS WILL OCCUR. HOWEVER, WE GIVE YOU HEREWITH THE ACTION TO BE TAKEN, SHOULD THIS OCCUR:

### SCOURING SECTION

1. IF THE SCOURING BANDS START TO MAKE A LOT OF NOISE OR WANDER, FIRST CHECK IF THE FELT ROLLS AND THE BACKSTAND ROLLS ARE CLEAN. VERY OFTEN, RUBBER OR CREPE PARTS ARE STICKING ON THE ROLLS AND ARE THE CAUSE OF EXCESSIVE NOISE. THIS CAN BE AVOIDED BY FITTING THE OPTIONAL SCRAPERS (SEE PAGE 3).
2. IF SCOURING BANDS ARE WANDERING LEFT AND RIGHT, IT IS MOST LIKELY THAT THERE IS A FAULT ON THE BAND, SO TRY ANOTHER SCOURING BAND. IF A SCOURING BAND IS NOT RUNNING CORRECTLY IN THE MIDDLE OF THE FELT ROLL, THIS CAN BE CHANGED BY MEANS OF THE ADJUSTMENT SCREW ON THE TRACKING MECHANISM (SEE PAGE 3 TOP).
3. IF EVERYTHING IS ALRIGHT, BUT YOU STILL HAVE EXCESSIVE VIBRATION AND/OR NOISE, IT IS POSSIBLE THAT SOME DIRT HAS ENTERED INTO THE COOLING FAN OF THE ELECTRIC MOTOR, AND THIS MAY HAVE UPSET THE BALANCE OF THE MOTOR SHAFT. IN THIS CASE, THE MOTOR NEEDS TO BE TAKEN OUT OF THE SCOURING ASSEMBLY.  
THE WHOLE SCOURING UNIT CAN BE REMOVED FROM THE MACHINE BY SIMPLY UNDOING TWO NUTS, NO. 35 ON THE FRONT MOUNTING POINTS (VIBRATION DAMPERS) OF THE SCOURING FRAME NO. 1 ON PAGE 15.  
ONCE THE TWO NUTS ARE MOVED, YOU CAN PULL THE WHOLE UNIT TOWARDS YOU. IN THE BACK, THE UNIT IS CLAMPED IN NYLON CLAMP NO. 3. AFTER PULLING THE UNIT FORWARD A FEW INCHES, THE ELECTRICAL CONNECTION CAN BE DISCONNECTED THROUGH THE TOP DOOR OF THE MACHINE.  
AFTER THAT, THE WHOLE SCOURING UNIT CAN BE REMOVED FROM THE MACHINE AND THE MOTOR CAN BE REACHED EASILY.  
GENERALLY, THIS OPERATION WILL NOT BE NECESSARY AS IT IS POSSIBLE TO CLEAN THE COOLING FAN WITH AN AIR GUN, IF YOUR MACHINE IS ALSO FITTED WITH A PRESS AND A COMPRESSOR.  
WITH THE AIRGUN, MOST DUST AND DIRT CAN BE REMOVED FROM ANY PART OF THE MACHINE.

4. IF A FELT ROLL IS COMPLETELY WORN AND HAS TO BE EXCHANGED, THIS CAN BE DONE BY REMOVING THE 3 WOODSCREWS NO. 44. THE ROLLS FIT VERY TIGHTLY ON THE FLANGES, SO GENERALLY, THEY HAVE TO BE HAMMERED OFF AND ON.

SHOULD YOU HAVE TO DO THIS, IT IS VERY EASY TO TAKE THE WHOLE FLANGE AND FELT ROLL FROM THE MACHINE BY UNDOING NUT NO. 39.

WHEN BALL BEARINGS OF THE SCOURING ROLLS BEGIN TO MAKE EXCESSIVE NOISE, THE EASIEST WAY IS TO TAKE A COMPLETE NEW UNIT, TOGETHER WITH SHAFT AND BALL BEARINGS. IF YOU WISH TO EXCHANGE THE BALL BEARINGS YOURSELF, BEAR IN MIND THAT THE BEARINGS HAVE A VERY TIGHT FIT ON THE SHAFTS NO. 19 AND 22, AND REMOVING THE BEARINGS FROM THESE SHAFTS HAS TO BE DONE WITH THE UTMOST CARE. EQUALLY, THE MOUNTING OF NEW BEARINGS HAS TO BE DONE VERY CAREFULLY.

WE ONLY USE SELECTED BEARINGS WHICH ARE NOISE-TESTED IN THE FACTORY AND LUBRICATED FOR LIFE, SO IT IS ADVISABLE TO USE BEARINGS WITH EXACTLY THE SAME SPECIFICATION AS INDICATED ON THE BEARINGS IN THE MACHINE.

THE BEARINGS ARE SECURED BY USING SPRING RINGS AND DISC SPRINGS, PART NOS. 42 AND 43.

DUST EXTRACTION

ALWAYS CHECK IF THE FAN IS TURNING IN THE RIGHT DIRECTION, INDICATED BY AN ARROW, WHICH CAN BE SEEN FROM UNDERNEATH THE FAN HOUSING.

AS ALL OTHER PARTS ON YOUR MACHINE, THE FAN HAS BEEN BALANCED VERY CAREFULLY, AND IT SHOULD RUN WITHOUT VIBRATION. IF YOU NOTICE EXCESSIVE VIBRATION, IT IS MOST LIKELY THAT DIRT HAS SETTLED ON THE FAN BLADES. THIS CAN BE CLEANED BY REMOVING THE GRILL ON THE INLET SIDE OF THE FANHOUSING.

**ALWAYS ENSURE THAT IT IS IMPOSSIBLE TO START THE MACHINE WHEN YOU ARE WORKING ON THE FAN - REALISE THAT THIS IS VERY DANGEROUS.**

ELECTRICAL INSTALLATION

YOUR MACHINE WILL MOST LIKELY HAVE OVERLOAD SWITCHES FOR EVERY MOTOR.

THESE SWITCHES WILL AUTOMATICALLY SWITCH OFF THE MOTOR IF IT IS BEING OVERLOADED.

IF THIS HAPPENS, YOU WILL HAVE TO WAIT FOR 10 TO 20 MINUTES AND LET THE MOTOR COOL DOWN, BEFORE YOU CAN SWITCH ON AGAIN.

IF THIS HAPPENS FREQUENTLY YOU MUST CHECK IF THE MOTOR RUNS FREELY. CONSULT AN ELECTRICIAN, WHO WILL CHECK IF THE SWITCH IS ADJUSTED PROPERLY AND IS ABLE TO CHECK THE WIRING. IF THE MOTOR DOES NOT TURN EASILY, THERE IS SOMETHING WRONG WITH THE MOTOR ITSELF AND IT NEEDS TO BE REPAIRED BY A SPECIALIST.

RIGHTHAND SECTION OF POWER UNIT AND OTHER FINISHERS, SUCH AS POWER MASTER, POWER FINISHER, POWER STAR, ETC.TRIMMING SECTION

THIS CAN BE A SIMPLE TWOSPINDLE TRIMMING SECTION, OF WHICH ONE HAS A CONICAL SHAFT WITH INTERCHANGEABLE BAYONET FITTINGS, OR A MULTIPLE HEAD TRIMMER WITH 5 SOLE TRIMMERS, ONE HEEL TRIMMER AND A HEEL SCOURING BAND.

TWO SPINDLE VERSION**ATTENTION**

THE SCREWS WHICH MOUNT THE CUTTERS ON THE BAYONET FITTING AND ON THE SHAFT ARE LEFTHAND THREADED. THIS MEANS THAT THEY HAVE TO BE UNFASTENED CLOCKWISE.

IF A BAYONET FITTING IS STUCK ON THE SHAFT, YOU CAN PUT THE BAR OF THE ALLENHEAD KEY IN THE HOLE OF THE SHAFT, IN ORDER TO OBTAIN MORE GRIP.

ALWAYS KEEP THE INSIDE OF THE BAYONET FITTINGS CLEAN.

ADJUSTMENT OF THE V BELT

AS WE USE GATES POLYFLEX BELTS FOR THE TRIMMING SECTIONS, IT IS VERY UNLIKELY THAT IT WILL BE NECESSARY TO RE-ADJUST THE TENSION OF THE V BELTS DUE TO THE POLYESTER REINFORCING STRINGS IN THESE BELTS. THEY DO NOT STRETCH, AND THEIR LIFE IS VERY LONG. SHOULD RE-ADJUSTMENT OF THE TENSION EVENTUALLY BE NECESSARY, THIS CAN BE DONE VERY EASILY BY SLIDING THE UPPER HOUSING OF THE UPPER SHAFT UPWARDS.

#### ADJUSTMENT OF THE V BELT CONT'D....

TO DO THIS, REMOVE THE TINWORK GUARDING AT THE FRONT, WHICH IS ATTACHED BY FOUR SCREWS, THEN THE MOUNTING SCREWS OF THE UPPER HOUSING CAN BE REACHED AT THE BACK OF THE ALUMINIUM FRAME NO. 2. AFTER SLACKENING THE TWO BOLTS OF THIS HOUSING, IT CAN BE PRESSED UPWARDS UNTIL THE V BELT HAS MORE TENSION. AFTER THAT, THE BOLTS MUST BE TIGHTENED FIRMLY AND THE GUARD HAS TO BE FITTED AGAIN IMMEDIATELY.

IF BALL BEARINGS START TO MAKE EXCESSIVE NOISE, THEY CAN BE EXCHANGED IN THE SAME WAY, AS DESCRIBED FOR THE SCOURING SECTION. ALWAYS TAKE CARE THAT THE V BELT PULLEYS REMAIN CLEAN AND DRY. NO OIL SHOULD ENTER INTO THE GROOVES OF THE PULLEYS, AND THE INSIDE SURFACE OF THE PULLEYS MUST BE VERY SMOOTH. IT IS ALSO ESSENTIAL THAT THE ALIGNMENT OF THE PULLEYS IS CORRECT - **THIS IS DONE IN OUR WORKS WITH SPECIAL TOOLS, SO NEVER CHANGE THE POSITION OF THE PULLEYS ON THE SHAFT.**

#### MULTIPLE HEAD TRIMMER

THIS UNIT ALSO IS ALMOST SERVICE FREE, DUE TO THE USE OF HIGH QUALITY NOISE TESTED BEARINGS, LUBRICATED FOR LIFE, AND THE USE OF GATES POLYFLEX V BELTS, WHICH ARE COMPLETELY ENDLESS AND REINFORCED WITH POLYESTER STRINGS.

ALWAYS KEEP THE V BELT PULLEY GROOVES CLEAN AND SMOOTH. UNDER NORMAL CIRCUMSTANCES THE LIFE OF THE V BELTS IS EXTREMELY LONG, AND IT WILL NOT BE NECESSARY TO CHANGE THEM OFTEN. HOWEVER, IF IT SHOULD BE NECESSARY, IT CAN BE DONE WITHOUT REMOVING THE UNIT FROM THE MACHINE.

IF IT PROVES TO BE DIFFICULT TO FIND A MECHANIC TO DO THE JOB FOR YOU, IT IS POSSIBLE TO DO IT YOURSELF.

FIRST, TAKE OFF THE TINWORK GUARD AT THE FRONT, REF. NO. 153 (PAGE NO. 10), SLACKEN NUT REF. NO. 111 (PAGE 12) AND UNFASTEN BACK SCREW 81, WHICH IS FITTED IN LEVER 39. AFTER THIS, THE LEVER CAN BE MOVED TO THE LEFT, FAR ENOUGH THAT THERE IS ROOM FOR THE V BELT TO SLIDE BETWEEN THE MULTIPLE HEAD NO. 45 AND THE LEVER. THEN THE V BELTS CAN BE REMOVED BY HAND FROM THE PULLEYS WITHOUT SLACKENING OFF THE IDLER NO. 56.

#### ATTENTION

THIS IS NOT THE IDEAL WAY TO TACKLE THIS, BUT IF YOU HAVE TO DO IT YOURSELF, IT IS THE EASIEST WAY, AND IF YOU ARE CAREFUL IT IS UNLIKELY THAT THE V BELTS WILL BE DAMAGED.

ALWAYS USE V BELTS TO THE SPECIFICATION SHOWN ON PAGE 10 OF THE MANUAL.

IF IT IS NECESSARY TO ADJUST THE TENSION OF THE V BELT, THIS CAN NORMALLY BE DONE BY SLACKENING THE FOUR BOLTS NO. 78 OF THE IDLER NO. 56. MOVE THIS PART IN AN UPWARD DIRECTION UNTIL THE V BELTS ARE SUFFICIENTLY TIGHT AND THEN TIGHTEN UP THE FOUR BOLTS.

IF THE SMALL V BELT, WHICH DRIVES THE HEEL SCOURING BAND, (REF. NO. 17 PAGE 10) HAS TO BE READJUSTED, IT IS POSSIBLE TO REMOVE THE WHOLE SECTION ON WHICH THE HEELTRIMMER AND THE HEEL SCOURINGBAND HOUSING ARE MOUNTED, BECAUSE THESE 2 SHAFTS ARE MOUNTED ON PLATE REF. NO. 37 PAGE 10.

THIS WHOLE PLATE IS MOUNTED WITH TWO BOLTS NO. 104. AFTER REMOVING THESE, THE SUBASSEMBLY CAN BE REMOVED, AND AT THE BACK YOU WILL FIND THAT THE UPPERHOUSING IS FITTED WITH FOUR BOLTS IN ELONGATED HOLES.

AFTER SLACKENING THESE BOLTS, THE UPPERHOUSING CAN BE MOVED UNTIL CORRECT TENSION ON THE V BELT IS ACHIEVED.

THEN THE ABOVE OPERATIONS ARE REVERSED. ALWAYS FIT THE TINWORK GUARDING PROPERLY, AND IN SUCH A WAY THAT IT WILL NOT TOUCH THE MAIN FRAME OF THE MACHINE. THIS IS BECAUSE THE TRIMMING SECTION IS MOUNTED ON RUBBER VIBRATION DAMPERS TO ISOLATE IT FROM THE FRAME OF THE MACHINE, AND THEREFORE ALL THE PARTS ATTACHED TO THESE UNITS HAVE TO BE MOUNTED SO THAT THEY CANNOT CONTACT THE MAIN FRAME.

WHEN WORK HAS BEEN CARRIED OUT, ADJUSTING SCREW NO. 81 IN LEVER NO. 39 HAS TO BE PLACED IN ITS ORIGINAL POSITION WHICH MEANS ADJUSTING THE LEVER IN SUCH A WAY TO RESTRICT MOVEMENT I.E. SO THAT PART NO. 40 FROM MULTIPLE HEAD NO.45 CAN JUST PASS THE CLAMP IN PART NO. 39.

THE MOST FORWARD SCREW, NO. 81, SHOULD BE ADJUSTED SO THAT THE V SHAPED CLAMP OF PART NO. 39 HOLDS PART NO. 40 FIRMLY.

IF HEAD NO. 45 BEGINS TO TURN HEAVILY, IT PROBABLY MEANS THAT YOU FORGOT TO OIL THE NIPPLE, WHICH OILS THE CENTRAL SHAFT NO. 44, FOR A LONG TIME.

IF THIS IS THE CASE, IT IS USUALLY POSSIBLE TO FREE THE HEAD AFTER LUBRICATION.

THE MULTIPLE HEAD IS ADJUSTED SO THAT IT TURNS WITH A SLIGHT RESISTANCE, TO PREVENT IT FROM SPINNING. THE ADJUSTMENT IS CARRIED OUT WITH SCREWS NO. 76 FROM PAGE 10 WITH WHICH WASHER NO. 50 IS PRESSED ON FIBRE WASHER NO. 132.

IF RE-ADJUSTMENT IS NECESSARY, THE WHOLE TRIMMING SECTION MUST BE REMOVED FROM THE FRAME OF THE MACHINE. THIS IS DONE BY REMOVING THE TINWORK AROUND IT AND UNFASTENING BOLTS NO. 101 AND NUTS NO. 113, WHICH HOLD THE FOUR VIBRATION DAMPERS ON WHICH THE UNIT IS MOUNTED. THE ELECTRICAL WIRING, OF COURSE, ALSO HAS TO BE DISCONNECTED FROM THE MOTOR.

#### HEEL SCOURINGBAND

IF THIS SMALL SCOURINGBAND BEGINS TO MAKE EXCESSIVE NOISE, IT IS LIKELY THAT DIRT HAS SETTLED ON ROLL NO. 64, PAGE 10. THIS MUST BE CLEANED VERY CAREFULLY WITH A PIECE OF ABRASIVE.

IF THE ROLL PROVES TO BE VERY PITTED, AND NOT COMPLETELY ROUND ANY MORE, IT HAS TO BE EXCHANGED. THIS CAN BE DONE EASILY BY UNDOING FLATHEAD SCREW NO. 100 IN A CLOCKWISE DIRECTION.

#### SOLID POLISHING SHAFT (POWER UNIT, RIGHTHAND SECTION OR POWER FINISHER)

THE TENSION OF THE V BELT WHICH DRIVES THIS SHAFT CAN EASILY BE ADJUSTED BY PIVOTING THE WHOLE SHAFT TOWARDS YOU. SLACKEN BOLTS NO. 17 WITH WHICH BOTH BEARINGS ARE FITTED TO THE VERTICAL STRUCTURES OF THE MACHINE.

THE UPPER HOLES IN THE BEARINGS ARE ELONGATED. ALWAYS ENSURE THAT THE SHAFT REMAINS PARALLEL TO THE FRONTSIDE OF THE TINWORK SO THAT THE ALIGNMENT OF BOTH PULLEYS ON MOTOR AND SHAFT WILL NOT BE DISTURBED.

EXCHANGE OF MOPS OR BRUSHES

THIS CAN BE DONE VERY QUICKLY AND EASILY BY TAKING OUT THE WHOLE POLISHING SHAFT AFTER REMOVING THE FOUR NUTS, NO. 20. THE MAIN BEARINGS ARE FITTED TO THE SHAFT BY RING NO. 21. TO REMOVE THE BEARINGS FROM THE SHAFT, YOU HAVE TO UNDO THE ALLENHEADSCREW IN THESE RINGS, THEN THE SHAFT WILL SLIDE FROM THE BEARINGS.

THE FASTENING SCREWS HOLD THE SHAFT IN A GROOVE, SO THAT THE SHAFTS THEMSELVES WILL NOT BE DAMAGED BY THE SCREWS.

THIS ALSO APPLIES TO THE SCREWS ON THE FLANGES OF THE BRUSHES, SO THAT THEY COME OFF THE SHAFT QUICKLY.

PADS AND BRUSHES ARE USED FOR VARIOUS MACHINES, AND HAVE A BORE OF 30 M.M. THEY CAN BE USED ON SHAFTS OF 20 M.M. ALSO AND IN THIS CASE THE BRUSHES ARE MOUNTED ON THE FLANGE BY MEANS OF A SPECIAL TOOL SO THAT THEY ARE EXACTLY CENTRALISED.

MACHINES BUILT SINCE 1984 HAVE FLANGES WITH A CENTERING BOSS, SO THAT THE BRUSHES AND MOPS WITH A 30 M.M. BORE CAN BE MOUNTED EXACTLY IN THE MIDDLE OF A FLANGE WITH A 20 M.M. BORE.

WHEN FITTING NEW BRUSHES OR MOPS, PRE-DRILL WITH A 3 M.M. DRILL AND ALWAYS USE WOODSCREWS OF THE SAME SIZE AS ORIGINALLY USED ON THE MACHINE.

WHEN REFITTING BRUSHES ON THE SHAFT, LEAVE THEM LOOSE UNTIL YOU HAVE REFITTED THE TINWORK AROUND THE BRUSHES, AND TIGHTEN THE SCREWS OF THE FLANGES AS SOON AS YOU HAVE PLACED THEM IN THE MIDDLE OF THE TINWORK SURROUNDINGS.

WHEN TENSIONING THE V BELT, ADJUST IT IN SUCH A WAY THAT THE BELT CAN BE DEPRESSED IN THE MIDDLE SECTION BETWEEN THE PULLEYS APPROXIMATELY 15 M.M.

AFTER FASTENING BOLTS NO. 20, TIGHTEN THE RINGS OF THE BEARING TO AVOID AXIAL STRESS, AND CHECK THE ALIGNMENT OF THE PULLEYS.

ON THE POWER FINISHER, THE MOTOR CAN BE REACHED THROUGH THE HINGED BACKPLATE OF THE BRUSHES. ON THE POWER UNIT, THE POLISHING SHAFT IS DRIVEN BY THE SAME MOTOR WHICH DRIVES THE SCOURING BAND AND CAN BE REACHED THROUGH THE DOOR THROUGH WHICH YOU EXCHANGE YOUR SCOURING BELTS.

TO REMOVE THE WHOLE DRIVE UNIT ON THE POWER UNIT, YOU HAVE TO REMOVE THE FRONT PIECE OF THE TINWORK - SEE PAGE 17.

POLISHING SHAFTS ON FINISHERS LIKE THE POWER MASTER WITH ROTATINGPOLISHING SHAFTS

THESE MACHINES, WHICH ARE EITHER FITTED WITH HAND OPERATED TUMBLING SECTION, OR AN ELECTRICALLY OPERATED TUMBLING SECTION, HAVE 3 POLISHING SHAFTS WITH VARIOUS MOPS OR RAGWHEELS AND BRUSHES. THE DRIVING V BELT IS SPRING LOADED, AND DOES NOT REQUIRE ATTENTION.

WHEN MOPS AND BRUSHES HAVE TO BE REMOVED, YOU HAVE TO TAKE OUT THE RELATIVE SHAFT. THIS CAN BE DONE VERY EASILY BY UNFASTENING THE FOUR BOLTS NO. 37, PAGE 15 OR 17.

AFTER UNFASTENING THESE BOLTS, THE WHOLE SHAFT COMES OFF AS SOON AS YOU HAVE REMOVED THE V BELT FROM THE PULLEY. YOU CAN SLIDE OUT THE LEFT AND RIGHTHAND BRUSH FROM THE SHAFT WITHOUT FURTHER DISMANTLING.

THE MIDDLE ONE CAN BE TAKEN OFF EASILY, BY REMOVING ONE OF THE BEARINGS. THESE BEARINGS ARE MOUNTED ON THE SHAFT BY MEANS OF AN EXCENTRIC RING.

POLISHING SHAFTS, CONT'D...

AFTER UNDOING THE SET SCREWS, THIS RING CAN BE MOVED UPWARDS WHILE YOU HOLD THE SHAFT FIRMLY. AFTER THAT, THE SHAFT SLIDES OFF EASILY.

HERE ALSO, ALL FASTENING POINTS ON THE SHAFTS HAVE GROOVES, SO THAT THE SHAFTS ARE NOT DAMAGED BY THE SECURING SCREWS.

THIS MEANS THAT WHEN YOU ARE REFITTING THE BRUSHES, YOU MUST TIGHTEN THE SECURING SCREWS LAST, IN ORDER TO SET THE BRUSHES IN THE MIDDLE OF THE SURROUNDING TINWORK.

FOR FURTHER DETAILS, SEE THE INSTRUCTIONS UNDER: SOLID SHAFT.

TO CHANGE DRIVING V BELT

ON THE HAND OPERATED TUMBLING SECTION, FIRST REMOVE THE SURROUNDING TINWORK, INCLUDING THE PROTRUDING TINWORK BOX ON THE RIGHTHAND SIDE PLATE OF THE MACHINE.

THEN UNFASTEN THE SECURING BOLTS OF BUSH NO. 10. THIS IS A SPECIAL EXPANDING BUSH WHICH SECURES PART NO. 25 ON THE CENTRAL SHAFT OF THE TUMBLING SECTION. AFTER REMOVING PART 10, PART 25 ALSO COMES OFF.

THEN REMOVE RIGHTHAND BEARING NO. 9. THIS IS EXACTLY THE SAME BEARING AS USED FOR THE POLISHING SHAFTS.

REMOVING INSTRUCTIONS ---- SEE 'POLISHING SHAFT'.

THEN REMOVE PART 19 BY UNFASTENING SCREWS 38, THEN THE WHOLE TUMBLING SECTION CAN BE LIFTED AND YOU HAVE ROOM TO REMOVE THE V BELT.

ASSEMBLE IN REVERSE ORDER.

ATTENTION

NEVER REMOVE BRACKETS NO. 21 OR 23 BECAUSE YOU WILL AFFECT THE ALIGNMENT. AFTER REFITTING THE V-BELT YOU MUST ALIGN THE RIGHTHAND BEARING TO ENSURE THAT THE POLISHING SHAFTS ARE ALWAYS PARALLEL TO THE SURROUNDING TINWORK.

ROTATING BRUSH SECTION ELECTRICALLY OPERATED BY BRAKE MOTOR NO. 86 (PAGE 15).

FIRST REMOVE THE SURROUNDING TINWORK, INCLUDING THE TINWORK BOX ON THE RIGHTHAND SIDE PLATE OF THE MACHINE.

THEN TAKE OUT THE CONNECTING SHACKLE OF THE DRIVING CHAIN NO. 99 AND REMOVE THE LEFTHAND SIDE BEARING OF THE CENTRAL SHAFT NO. 9 BY UNFASTENING BOLTS NO. 33.

NOW THE LEFTHAND SIDE OF THE TUMBLING SECTION CAN BE LIFTED.

SLIDE THE V BELT OVER THE WHOLE BRUSH SECTION TO THE LEFTHAND SIDE AND THEN SLIP THROUGH BRACKET 8 CENTRAL SHAFT.

RE-ASSEMBLE IN REVERSE ORDER.

ATTENTION

RIGHTHAND SIDE BEARINGS CAN BE LEFT IN POSITION. THEY ARE RUBBER MOUNTED AND ALLOW SUFFICIENT SPACE ON THE LEFTHAND SIDE.

ATTENTION

NEVER REMOVE BRACKETS NO. 85 AS THIS WILL UPSET THE WHOLE ADJUSTMENT. WHEN REFITTING THE LEFTHAND BEARING, TAKE CARE THAT THE BRUSH SHAFTS ARE PARALLEL WITH THE TINWORK SURROUNDINGS.



## ELECTRICS

THE BRAKE MOTOR IS OPERATED BY TWO MICRO SWITCHES, ONE NO. 26 MOUNTED BEHIND TREADLE NO. 37, AND ONE MOUNTED AT THE RIGHTHAND SIDE PLATE, BEHIND THE TINWORK.

THE BRUSH SECTION STARTS TO ROTATE AFTER DEPRESSING TREADLE 37.

SWITCH 26 CAN BE ADJUSTED WITH PLATE 25 AND SHOULD BE ADJUSTED SO THAT THERE IS STILL SOME PLAY IN EITHER POSITION ON PART 27.

SWITCH NO. 90 (PAGE 15) IS MOUNTED ON PLATE NO. 87, WITH WHICH THE SWITCH CAN BE ADJUSTED SO THAT ROTATION STOPS WITH THE BRUSH SHAFT AT THE NORMAL WORK HEIGHT.

SWITCH NO. 90 IS OPERATED BY CAM NO. 84.

SHOULD THE WORKING HEIGHT OF THE BRUSH SHAFTS BE INCORRECT, ADJUSTMENT CAN BE MADE BY TURNING THE CAM ON SHAFT NO. 81 - IN THIS WAY THE STOPPING POINT OF THE TUMBLING SECTION CAN BE ALTERED.

SHOULD, FOR SOME REASON, THE TUMBLING SECTION NOT ROTATE, FIRST CHECK THE OVERLOAD SWITCH (PAGE 27) WHICH SECURES THE BRAKE MOTOR - IT IS THE RELAY MOUNTED ON THE RIGHTHAND SIDE IN THE PANEL.

AFTER ABOUT 15 MINUTES, YOU CAN DEPRESS THE KNOB ON THIS RELAY. AFTER THIS, THE MOTOR SHOULD OPERATE AGAIN.

IF IT OCCURS VERY OFTEN THAT THE OVERLOAD SWITCH IS STOPPING THE CURRENT, YOU SHOULD CONSULT AN ELECTRICIAN IN ORDER TO FIND THE FAILURE.

## ELECTRICS

IN GENERAL, THERE ARE THREE ELECTRICAL SYSTEMS ON OUR RANGE OF FINISHING MACHINES:

1. THE MOST SIMPLE ONE, WHICH IS INDICATED ON PAGE 25 WITH NORMAL ON/OFF SWITCHES.
2. THE VERSION WHICH IS MAINLY USED IN NORTH AMERICAN COUNTRIES, WITH OVERLOAD SWITCHES FOR EVERY MOTOR.

THESE OVERLOAD SWITCHES ARE MOUNTED ON A RAIL IN THE CONNECTION BOX, BEHIND THE FRONT PLATE OF THE MACHINE.

### ATTENTION

ALWAYS ISOLATE THE MACHINE ELECTRICALLY BEFORE REMOVING THE FRONT PLATE.

EXCHANGE OF OVERLOAD SWITCHES CAN BE CARRIED OUT EASILY - THEY ARE MOUNTED ON THE RAIL BY A 'CLICK ON/CLICK OFF' SYSTEM.

THREE PHASE POWER UNITS AND FINISHERS WITH OPTIONAL FRONT-OPERATED MAIN SWITCHES HAVE A MORE COMPREHENSIVE ELECTRICAL SYSTEM WITH ADDED MAGNET SWITCHES NO. 5 (PAGE 32/29).

MACHINES WITH MORE THAN TWO ELECTRIC MOTORS HAVE TWO SWITCHES, ONE OF WHICH OPERATES WITH A TIME DELAY SO THAT THE MACHINE STARTS TO WORK IN TWO STAGES, THEREBY REDUCING THE PEAK CURRENT.

THIS TIME DELAY SWITCH SHOULD ALWAYS BE ADJUSTED A FEW SECONDS LATER THAN THE OTHER MAGNET SWITCH.

### ATTENTION

MACHINES WITH AN OPTIONAL FOOT-OPERATED MAIN SWITCH (NO. 26) ALWAYS REQUIRE AN ADDITIONAL SINGLE PHASE ELECTRICAL CONNECTION FOR OPERATING THE MAGNET SWITCHES.

THIS MEANS THAT YOU REQUIRE A THREE PHASE MAIN CONNECTION FOR THE OVERLOAD RELAY AND A SINGLE PHASE CONNECTION FOR THE MAGNET SWITCHES WHICH OPERATE THE RELAY OR OVERLOAD SWITCHES.

GENERALLY SPEAKING, IT IS ADVISABLE TO CONSULT AN ELECTRICIAN IF YOU HAVE DIFFICULTY WITH ANY OF THE ELECTRICAL DIAGRAMS THAT YOU FIND IN THIS MANUAL. HE WILL, NO DOUBT, BE ABLE TO HELP YOU.

#### MANUAL POWER PRESS

THIS PRESS IS NOW EQUIPPED WITH THE NEWLY DEVELOPED ELECTRONIC SAFETY SYSTEM.

##### OPERATION:

PUSH IN THE MAIN SWITCH A - YOU WILL SEE THE CONTROL LAMP GLOWING. WAIT UNTIL THE COMPRESSOR HAS REACHED AT LEAST 4 BAR PRESSURE. NOW THE MACHINE IS READY FOR USE.

BY PUSHING BUTTONS B SIMULTANEOUSLY, BOTH PADS DESCEND. A BUILT-IN SAFETY SYSTEM ENSURES THAT THE DOWNWARD MOVEMENT CAN BE REVERSED BY RELEASING THE BUTTONS.

MAXIMUM PRESSURE BUILDS UP ONLY WHEN THE DISTANCE BETWEEN PADS AND SHOES IS LESS THAN 6 M.M. (1/4") AND THE BUTTONS CAN BE RELEASED.

THIS FEATURE, TOGETHER WITH THE FACT THAT TWO BUTTONS MUST BE PRESSED AT THE SAME TIME (I.E. 1 BUTTON CANNOT BE WEDGED IN) ARE SAFETY FEATURES OF CONSIDERABLE IMPORTANCE.

##### POSITION 1:

PUSH THE HAND SYMBOL ON THE KEYBOARD AND THE RELATIVE LAMP WILL GLOW.

IN THIS POSITION, THE MACHINE ONLY WORKS BY PUSHING IN THE TWO BUTTONS - B.

AFTER RELEASING THEM, THE PADS RETURN IMMEDIATELY TO THEIR 'UP' POSITION.

##### POSITION 2:

PUSH THE CLOCK SYMBOL ON THE KEYBOARD. THE RELATIVE LAMP WILL GLOW. THIS IS A FULLY AUTOMATIC OPERATION.

IN THIS POSITION, THE DWELL TIME CAN BE ADJUSTED WITH THE SELECTOR - F - FROM 0 UNTIL 15 SECONDS MAXIMUM. AT THE END OF THE CYCLE THE PADS RISE AUTOMATICALLY AND THE LASTS CAN BE WITHDRAWN.

##### POSITION 3

PUSH ETERNAL SYMBOL. THE RELATIVE LAMP WILL GLOW. IF A LONGER DWELL TIME IS REQUIRED, I.E. FOR P.V.C., YOU SHOULD USE THIS POSITION.

NOW THE DWELL TIME IS INDEFINITE, AND THE PRESS WILL REMAIN IN THIS POSITION UNTIL YOU PUSH ONE OF THE OTHER SYMBOLS.

##### PRESSURE RELIEF VALVE

THIS IS THE FIRST SHOE PRESS TO BE EQUIPPED WITH A SUPER, FAST RELIEF VALVE WHICH, EVEN DURING THE PRESSING CYCLE, ENABLES ADJUSTMENT OF THE PRESSURE FROM 1 TO 4 BY MEANS OF A SIMPLE ADJUSTMENT LEVER.

THE PRESSURE CAN BE READ OFF ON THE PRESSURE GAUGE WHICH IS MOUNTED IN THE FRONT COVER OF THE MACHINE.

N.B.

THE MAXIMUM PRESSURE AT WHICH THE MACHINE CAN BE SET IS 4.5 ATM (CHANGES WHICH WOULD ENABLE A HIGHER PRESSURE ARE PROHIBITED).

ON THE KEYBOARD, YOU WILL FIND THREE SYMBOLS WITH ARROW. WHEN YOU PUSH THE ARROW SYMBOL ON THE LEFTHAND SIDE, ONLY THE LEFTHAND CYLINDER WILL OPERATE.

IF YOU PUSH THE RIGHTHAND ARROW, ONLY THE RIGHTHAND CYLINDER WILL OPERATE.

IF YOU PUSH THE MIDDLE ONE, BOTH CYLINDERS WILL OPERATE.

THE ELECTRONIC SYSTEM WORKS ON 24 VOLTS, THEREFORE A TRANSFORMER, PART NO. 3, IS MOUNTED. YOU WILL FIND THIS TRANSFORMER AFTER REMOVING SCREWS NO. 35 AND THE FRONT COVER. THIS TRANSFORMER IS EQUIPPED WITH A FUSE, NO. 4.

TROUBLE SHOOTING

IF THE MACHINE DOES NOT OPERATE, FIRST CHECK THAT THERE IS SUFFICIENT PRESSURE AND THAT THE ELECTRICAL CURRENT (SINGLE PHASE) IS CONNECTED. THIS CAN BE CHECKED THROUGH THE CONTROL LAMP IN THE MAIN SWITCH NO. 5.

FURTHER CHECK IF THE LAMPS ON THE KEYBOARD ARE GLOWING.

IF THE MACHINE STILL DOES NOT OPERATE, REMOVE BOTH RETAINING SCREWS OF THE ELECTRONIC KEYBOARD AND MOVE THE KEYBOARD FORWARD.

YOU WILL THEN FIND THE MULTI-CONNECTOR AT THE END OF THE WIRE.

CHECK IF THIS MULTI-CONNECTOR IS MOUNTED PROPERLY, AND THAT BOTH RETAINING CLIPS ON THE SIDE HAVE REACHED THE GROOVES IN WHICH THEY HAVE TO CLIP.

IF NOT, TIGHTEN BOTH HALVES OF THE MULTI-CONNECTOR PROPERLY.

NOW THE MACHINE MUST BE READY FOR USE.

IT IS VERY UNLIKELY THAT THE ELECTRONIC KEYBOARD WILL FLAIL.

HOWEVER, SHOULD THIS HAPPEN, IT CAN BE EXCHANGED VERY EASILY AND QUICKLY BY SIMPLY TAKING APART THE MULTI-CONNECTOR AND FITTING ANOTHER KEYBOARD.

THESE ELECTRONIC DEVICES ARE REPAIRABLE, BUT MUST BE SENT BACK TO THE MANUFACTURER THROUGH YOUR LOCAL AGENT.

PNEUMATICS

ALL MACHINES ARE EQUIPPED WITH A FULLY AUTOMATIC AIRCLEANER, WHICH IS MOUNTED BETWEEN THE AIR RECEIVER AND THE PRESS.

THIS SHOULD KEEP THE INTERNAL PARTS OF THE PNEUMATIC SYSTEM CLEAN AND THEREFORE IT IS VERY UNLIKELY THAT THE VALVES OF YOUR PRESS WILL GIVE PROBLEMS.

HOWEVER, IN CASE ONE OF THE VALVES NO. 13 SHOULD FAIL TO OPERATE, FIRST CHECK IF THE ELECTRICAL SIGNAL (24 VOLT) IS REACHING THE MAGNET WHICH OPERATES THIS VALVE. IF THIS IS THE CASE, THE PROBLEM IS A PNEUMATIC ONE AND THE VALVE HAS TO BE TAKEN APART.

PNEUMATICS CONT'D...

IN ORDER TO DISMANTLE THE PLASTIC TUBING, DEPRESS THE COPPER RING WHICH HOLDS THE PLASTIC TUBES. AFTER DEPRESSING THIS RING, THE TUBES CAN BE REMOVED WITHOUT ANY DAMAGE.

REFITTING CAN BE CARRIED OUT BY DEPRESSING COMPLETELY, AFTER WHICH THE CONNECTION IS AIRTIGHT AGAIN.

WHEN YOU HAVE TAKEN OFF ALL THE TUBING, REMOVE THE PLASTIC NUT WHICH ATTACHES THE ELECTRICS TO THE VALVE, YOU CAN TAKE OUT THE WHOLE VALVE.

ATTENTION

TAKE CARE THAT YOU REFIT THE VARIOUS PARTS AND GASKETS IN EXACTLY THE SAME POSITION AS YOU FOUND THEM - OTHERWISE YOU WILL BE IN TROUBLE.

NORMALLY, A THOROUGH CLEANING UP OF THE INTERNALS OF THE VALVE WILL SOLVE THE PROBLEMS.

IF THE MACHINE IS VERY OLD, IT IS POSSIBLE THAT THE RUBBER O-RINGS NEED TO BE EXCHANGED. IN THIS CASE, HOWEVER, IT IS ADVISABLE TO CHANGE THE WHOLE UNIT.

ALL MACHINES ARE ALSO EQUIPPED WITH A QUICK EXHAUST VALVE ON THE CYLINDER, WHICH ENABLES THE AIR TO BE WITHDRAWN FROM THE CYLINDER AS QUICKLY AS IT ENTERS. THESE QUICK EXHAUST VALVES ARE ALMOST SERVICE-FREE, BUT IF YOU DO EXPERIENCE TROUBLE BECAUSE THE PISTONS ARE RETURNING VERY, VERY SLOWLY, IT IS POSSIBLE TO TAKE THEM APART QUITE EASILY FOR CLEANING. THEN A NEW RUBBER O-RING CAN BE MOUNTED, No. 15.

AIR RELIEF VALVE NO. 12

THESE VALVES ARE ADJUSTED IN OUR WORKS, AND THIS SHOULD NOT BE ALTERED.

HOWEVER, IF THIS ITEM HAS BEEN DISMANTLED AND NEW ADJUSTMENT IS NECESSARY, ALWAYS ENSURE THAT THE RELIEF VALVE HAS A RANGE FROM 1 TO 4 BARS. THIS CAN BE CARRIED OUT BY THE RING NUT, WHICH ENSURES THE DISTANCE BETWEEN PART NO. 11 AND PART NO. 12.

SWITCHES

THE MAIN SWITCH AND BOTH OPERATION BUTTONS NO. 7 ARE OF THE SAME CONSTRUCTION.

THE SWITCH ELEMENT AND THE BUTTONS CAN BE SEPARATED BY PUSHING THE PLASTIC LEVER ON THE TOP OF THE SWITCH ELEMENT ASIDE.

THEN BOTH PARTS ARE SEPARATED, AND CAN EVENTUALLY BE EXCHANGED VERY EASILY.

ATTENTION

BEFORE ANY WORK IS DONE BEHIND THE FRONT COVER OF THE MACHINE, ALWAYS ISOLATE THE MACHINE ELECTRICALLY.