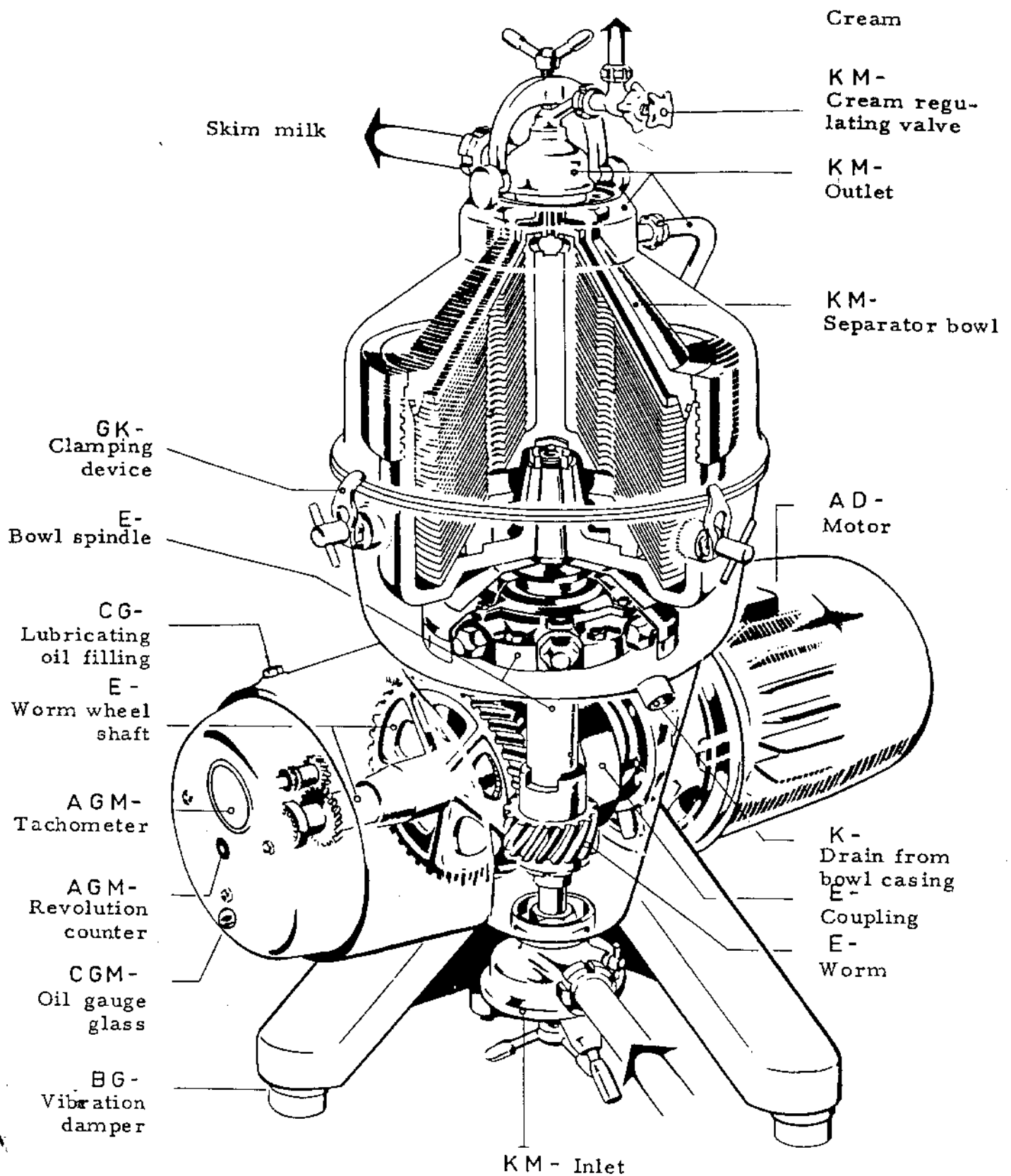


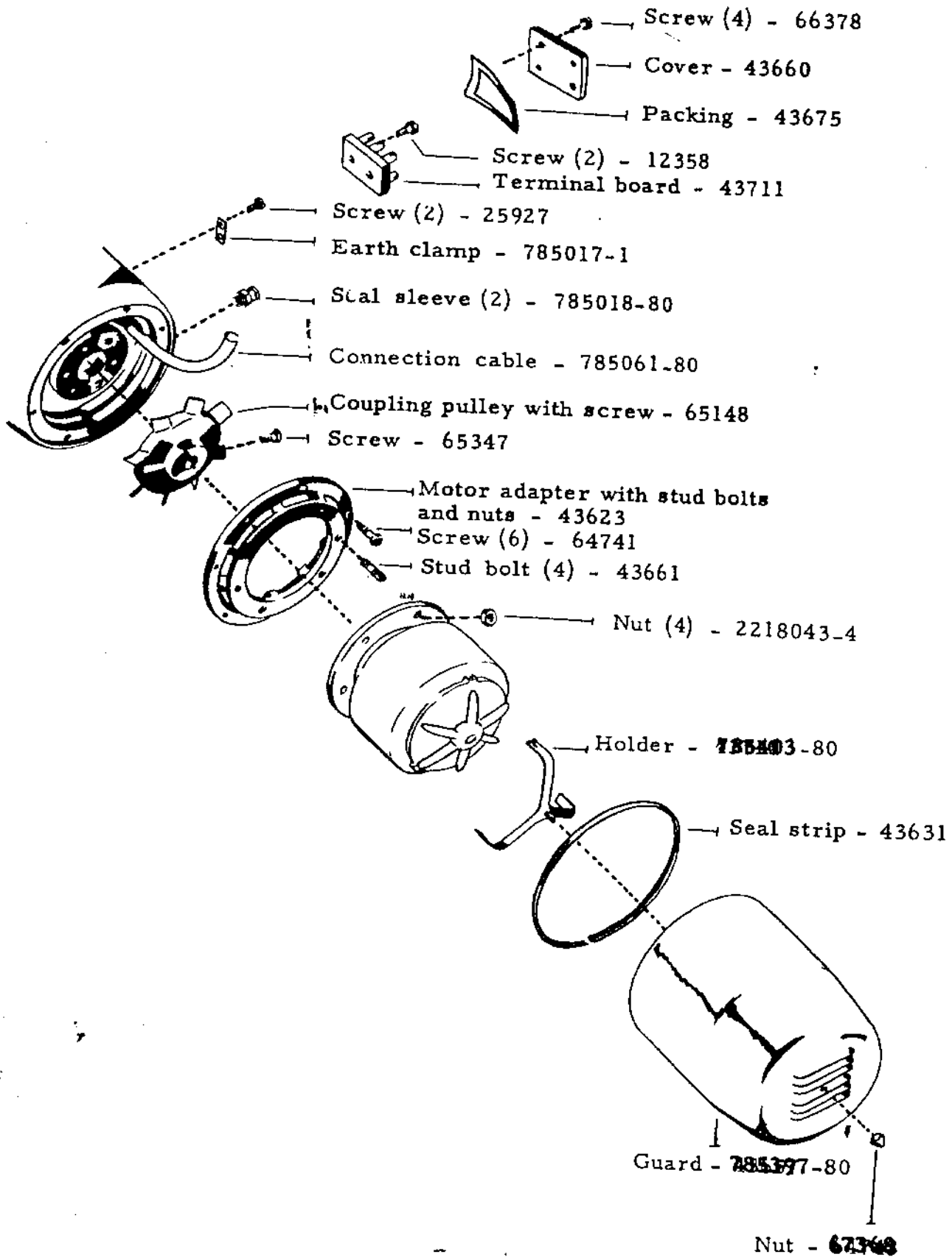
Hutchison-Hayes Separators, Inc.

Model 3196 M Parts List With Diagrams

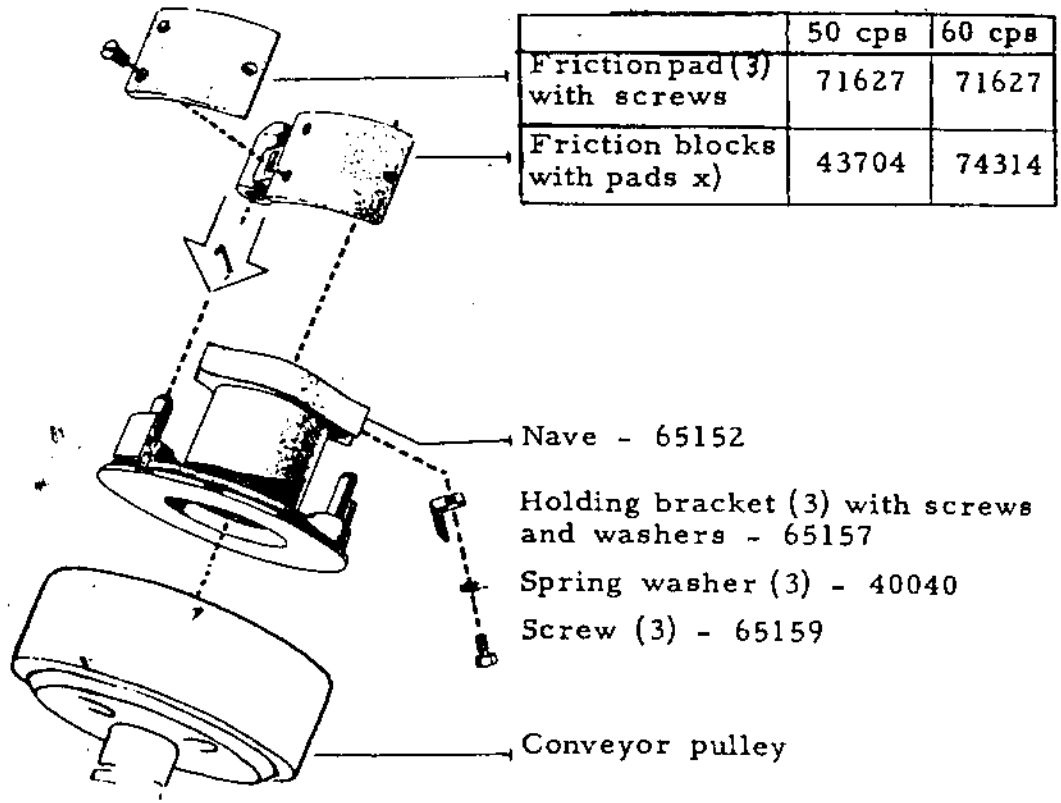
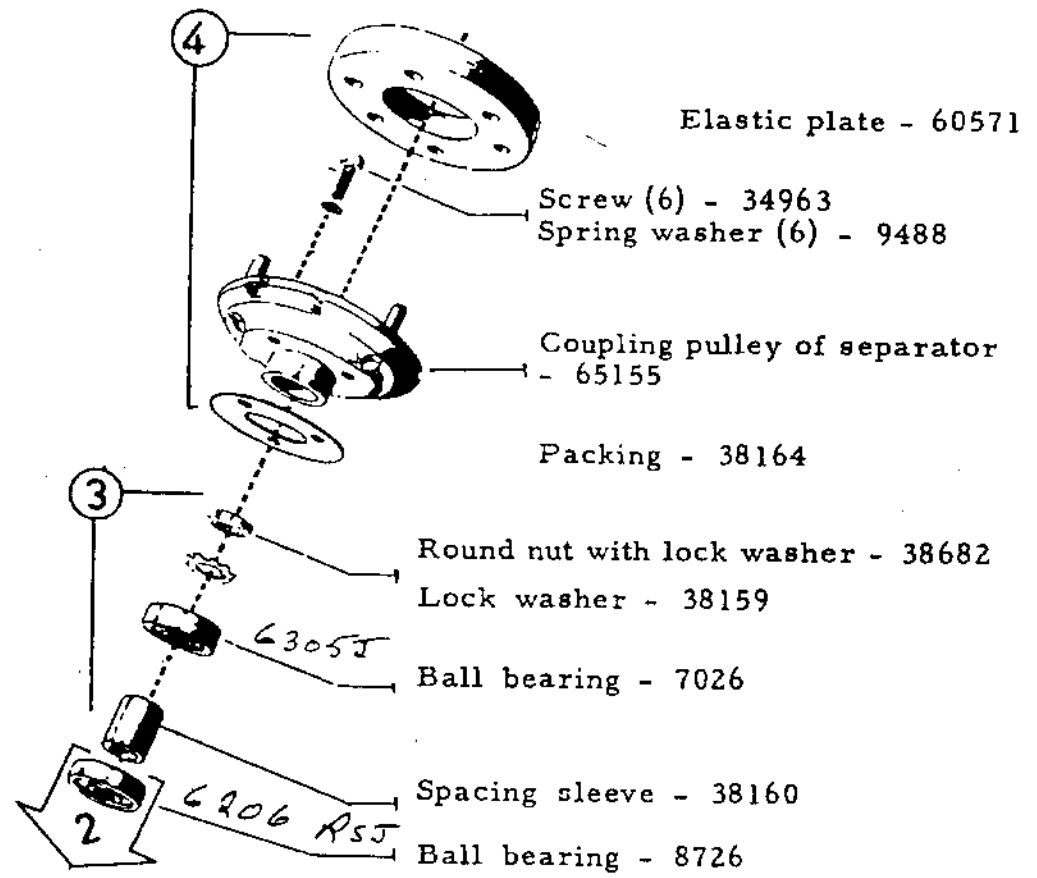
P.O. Box 2965 ♦ Houston, Texas 77252
3520 East Belt ♦ Houston, Texas 77015
(713) 455-9600 ♦ Fax (713) 455-7753



FLANGE MOTOR DRIVE (M drive)



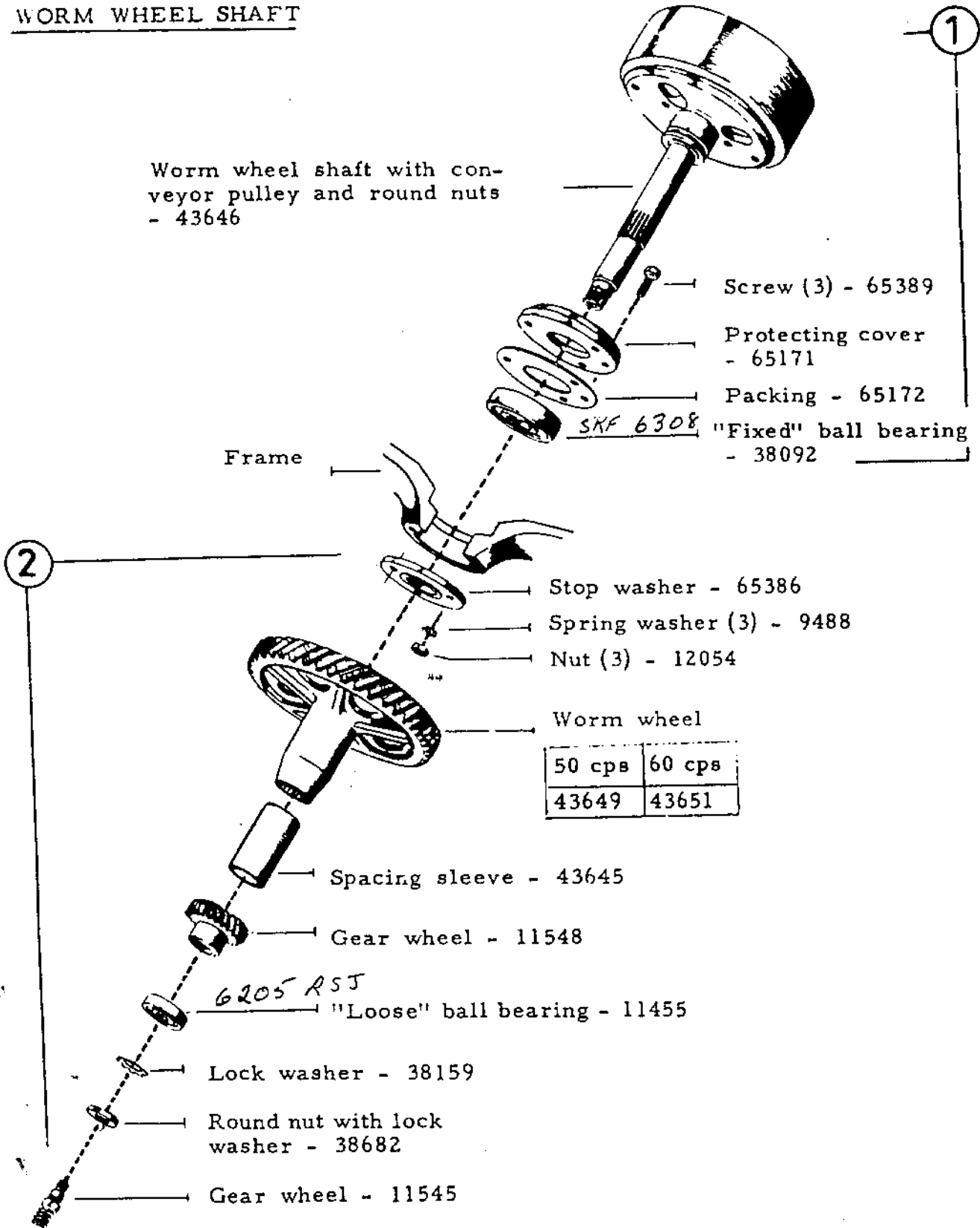
COUPLING



x) Complete set of 3 pieces

WORM WHEEL SHAFT

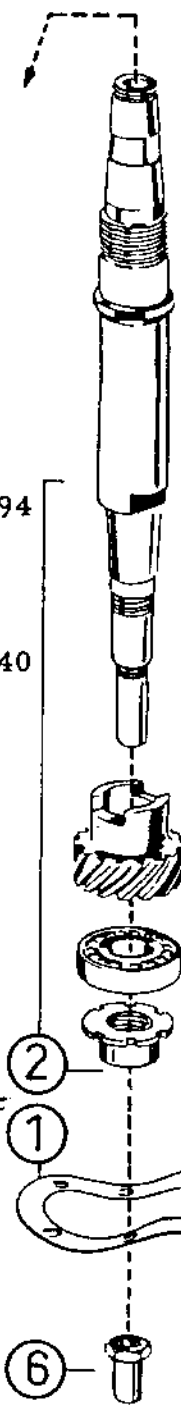
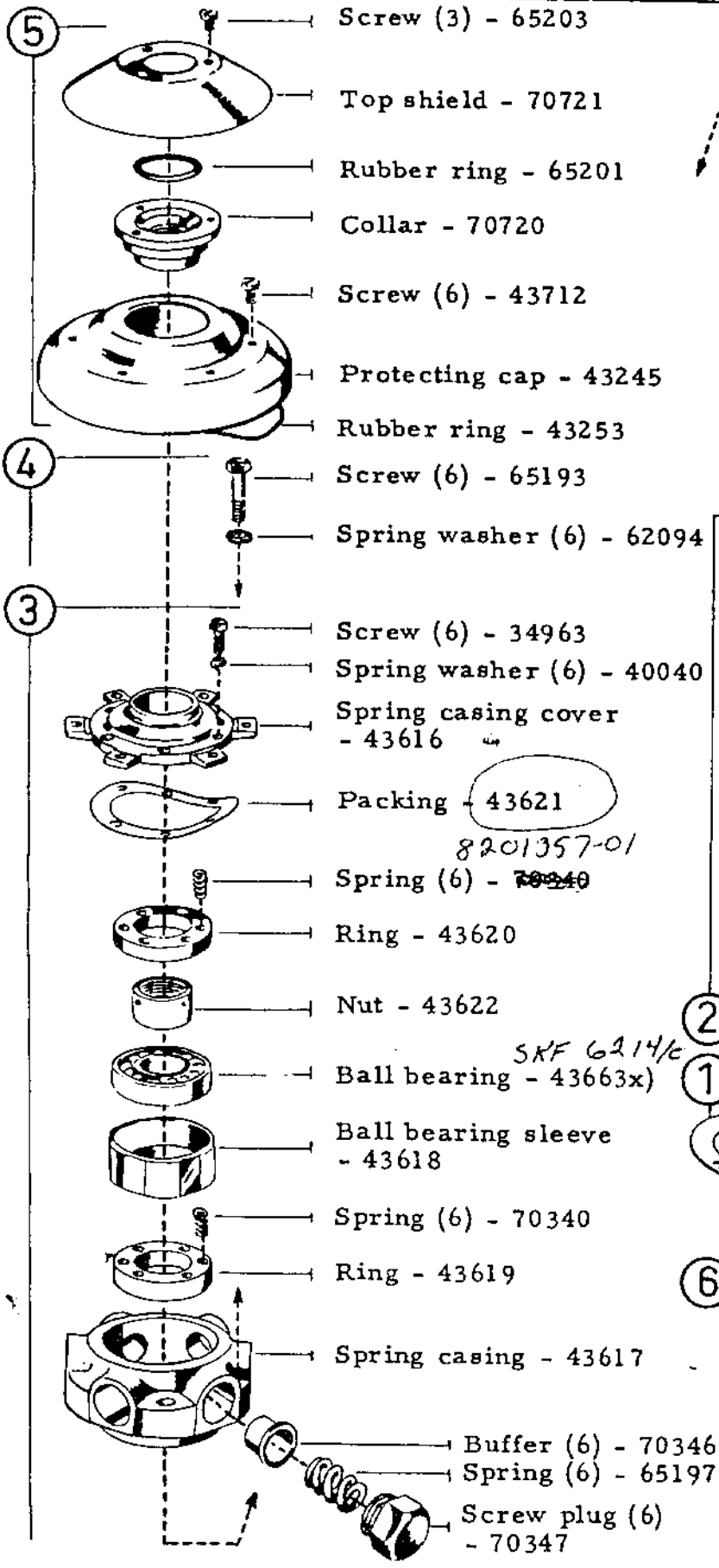
Worm wheel shaft with conveyor pulley and round nuts - 43646



BOWL SPINDLE

The parts appearing in mounting stages (2), (3) and (6) form together the COMPLETE BOWL SPINDLE with part number

50 C/S	60 C/S
43678	43734



Bowl spindle - 43670

Worm

50 C/S	60 C/S
43650	43652

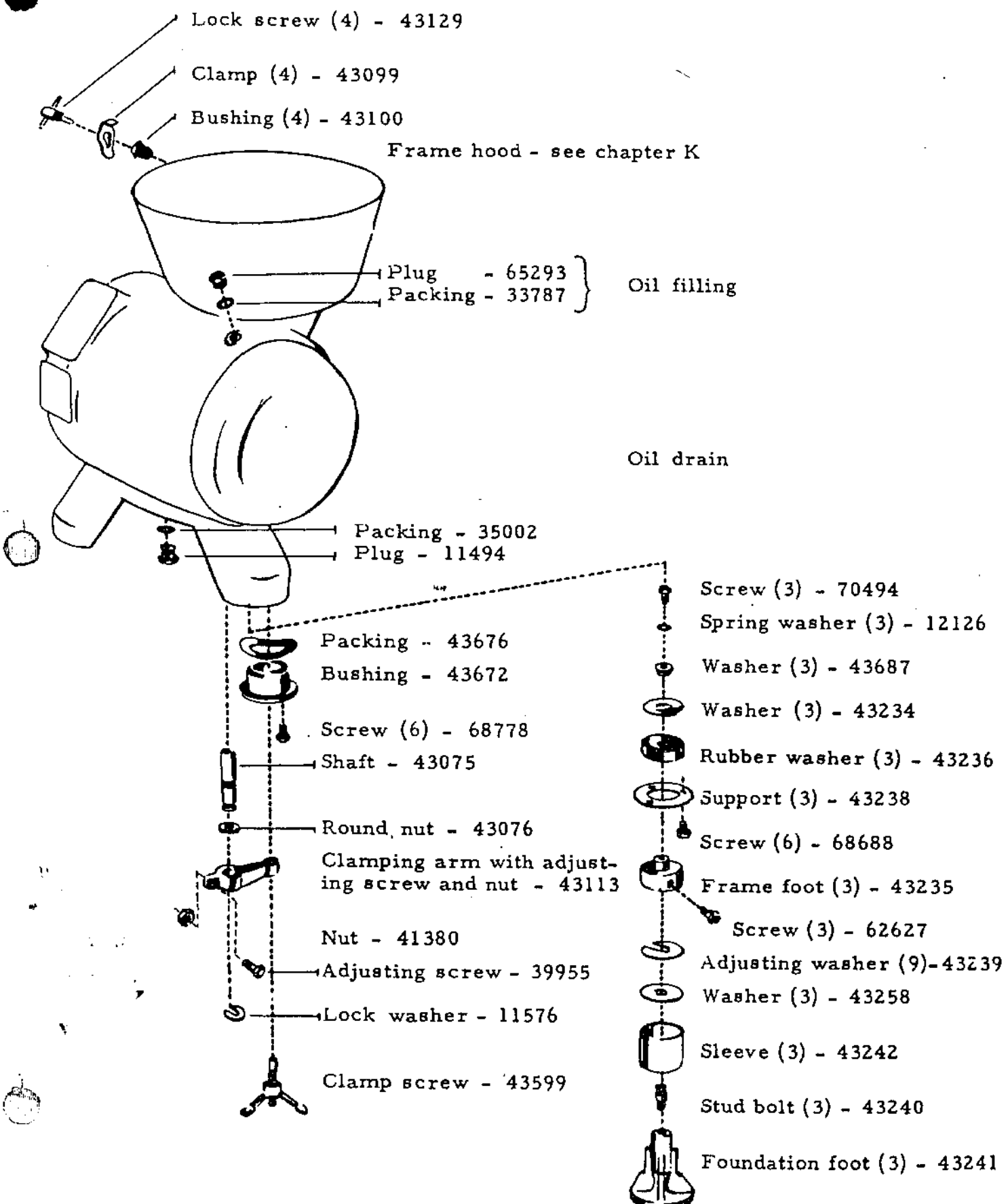
SKF 1308/c3
Ball bearing - 43664 x)

Nut - 43671

Packing - 65192

Wear sleeve - 43684

FRAME PARTS



Lock screw (4) - 43129

Clamp (4) - 43099

Bushing (4) - 43100

Frame hood - see chapter K

Plug - 65293

Packing - 33787

Oil filling

Oil drain

Packing - 35002

Plug - 11494

Packing - 43676

Bushing - 43672

Screw (6) - 68778

Shaft - 43075

Round nut - 43076

Clamping arm with adjusting screw and nut - 43113

Nut - 41380

Adjusting screw - 39955

Lock washer - 11576

Clamp screw - 43599

Screw (3) - 70494

Spring washer (3) - 12126

Washer (3) - 43687

Washer (3) - 43234

Rubber washer (3) - 43236

Support (3) - 43238

Screw (6) - 68688

Frame foot (3) - 43235

Screw (3) - 62627

Adjusting washer (9) - 43239

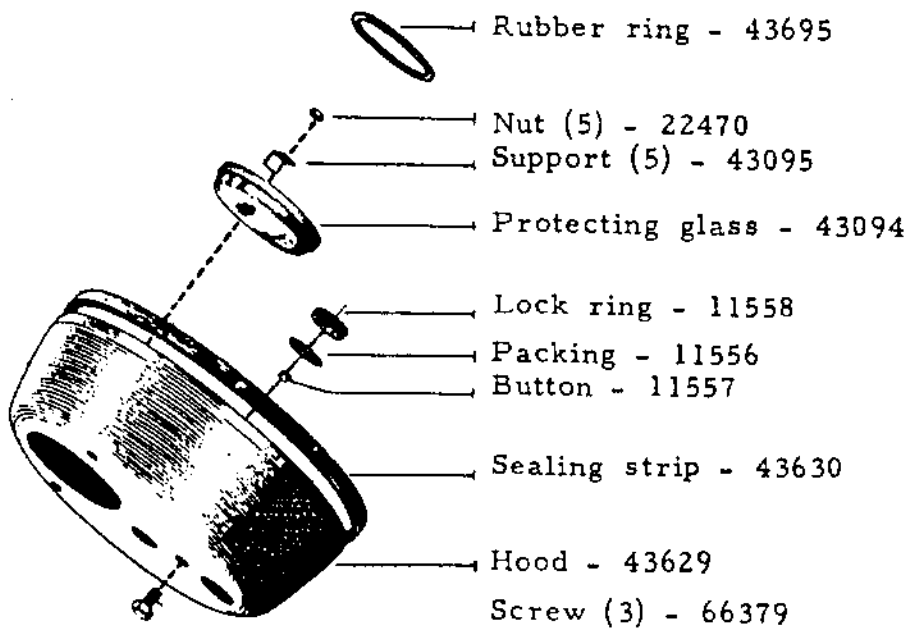
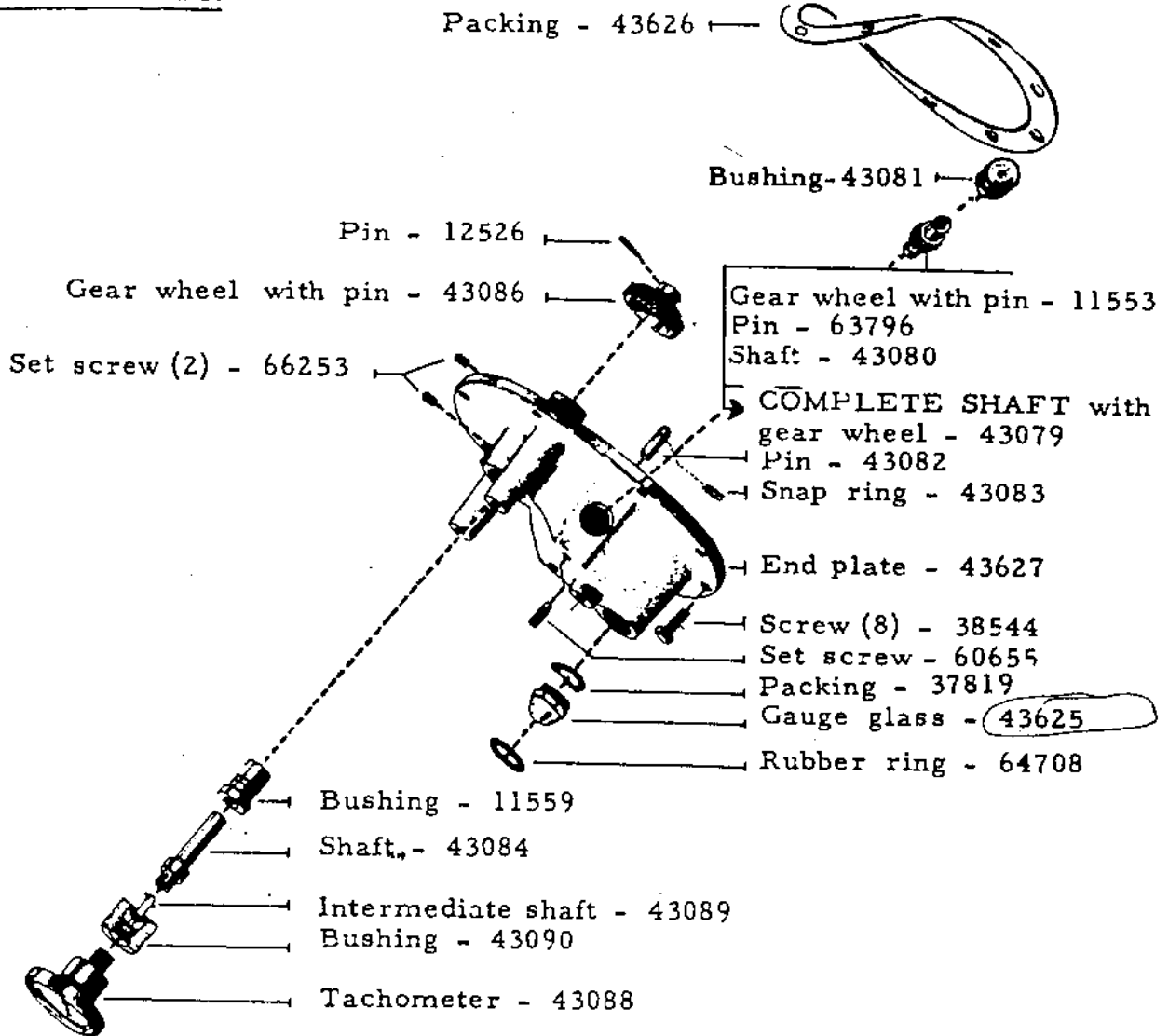
Washer (3) - 43258

Sleeve (3) - 43242

Stud bolt (3) - 43240

Foundation foot (3) - 43241

FRAME END COVER



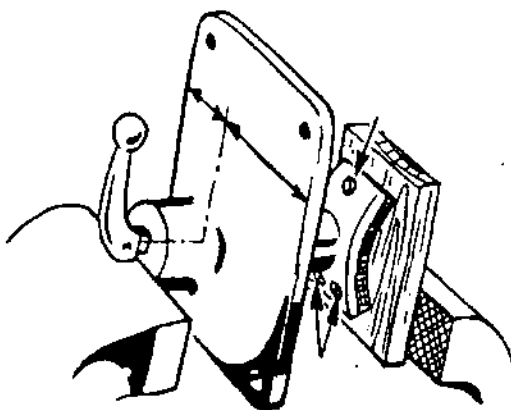
EXCHANGE OF LINING

- o See that brake is released.
- o Remove brake cover.
- o Exchange the lining. Note that both ends of the lining screws are slotted (use angle screw driver).
- o Mount brake cover in such a manner that the handle points downwards.

DISASSEMBLING

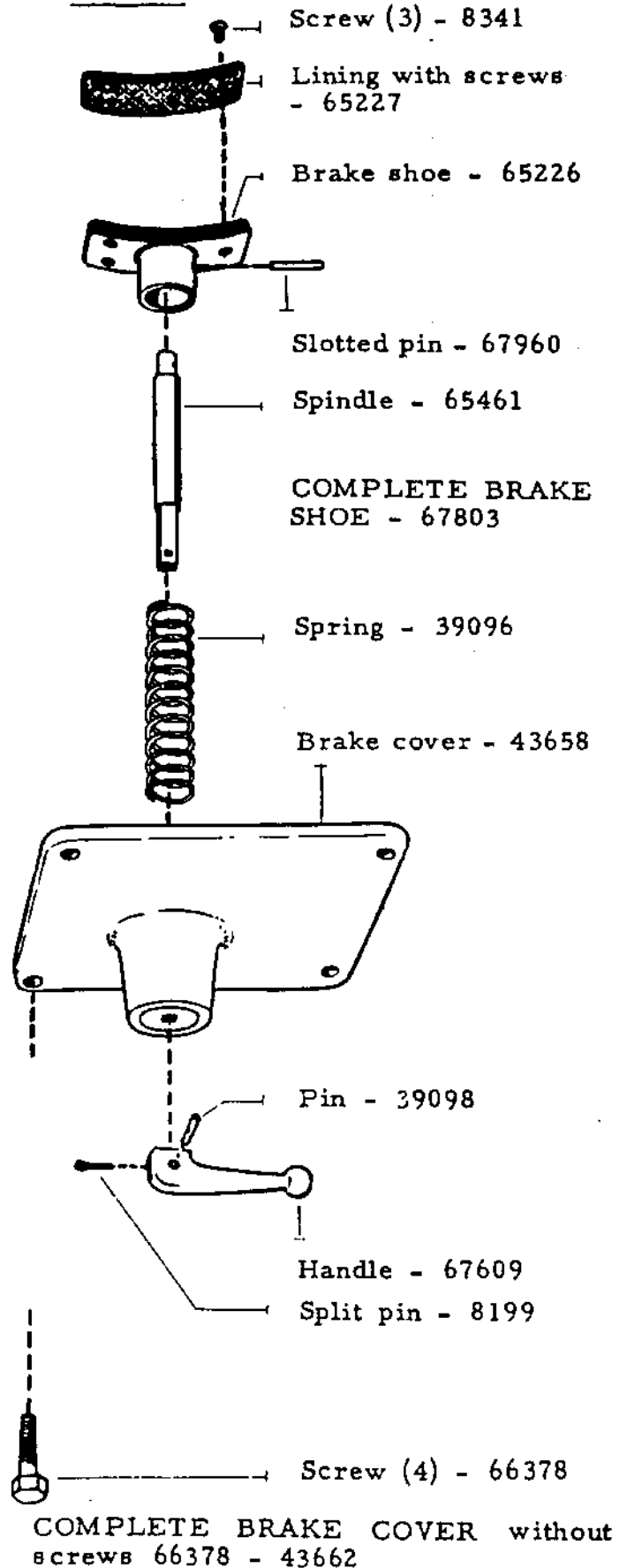
- o Clamp brake cover into a vise.
- o Apply brake.
- o Remove handle.

CLEANING - see chapter A.



ASSEMBLING. Make sure that cover, handle and brake shoe are turned in the way indicated by the arrows in the above illustration. Fasten the cover to the separator in such a way that the handle points downwards.

BRAKE

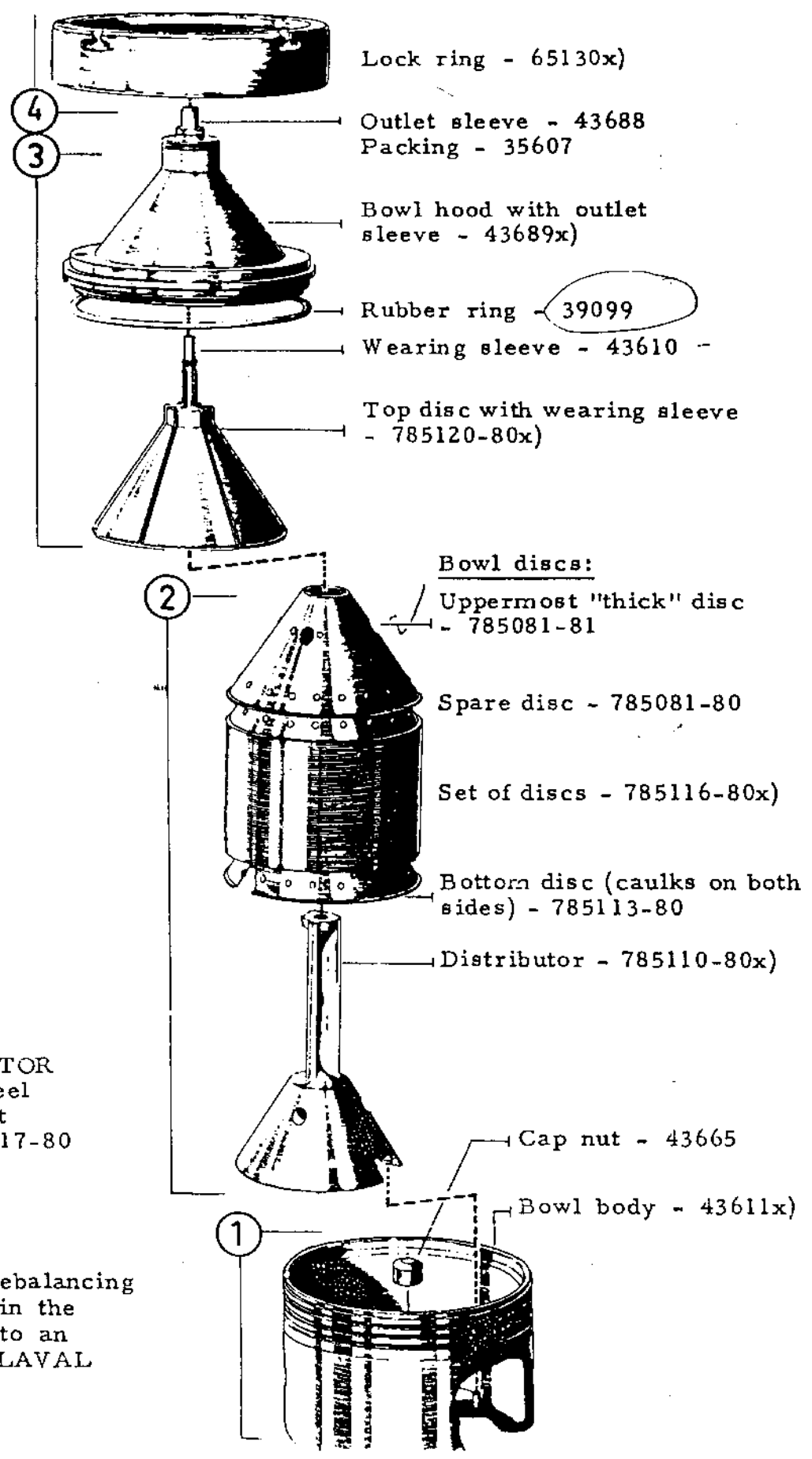


ALFA-LAVAL

SPARE PARTS

<u>Part No.</u>	<u>Quantity</u>	
39099	1	Rubber ring (separator bowl)
785591-1	2	Height adjusting ring (outlet)
785081-80	1	Bowl disc
71627	3	Complete friction pad (friction block)
43708	1	Cup (for packing collar)
11426	8	Packing collar (cream outlet)
43709	8	Packing collar (inlet and milk outlet)

SEPARATOR BOWL



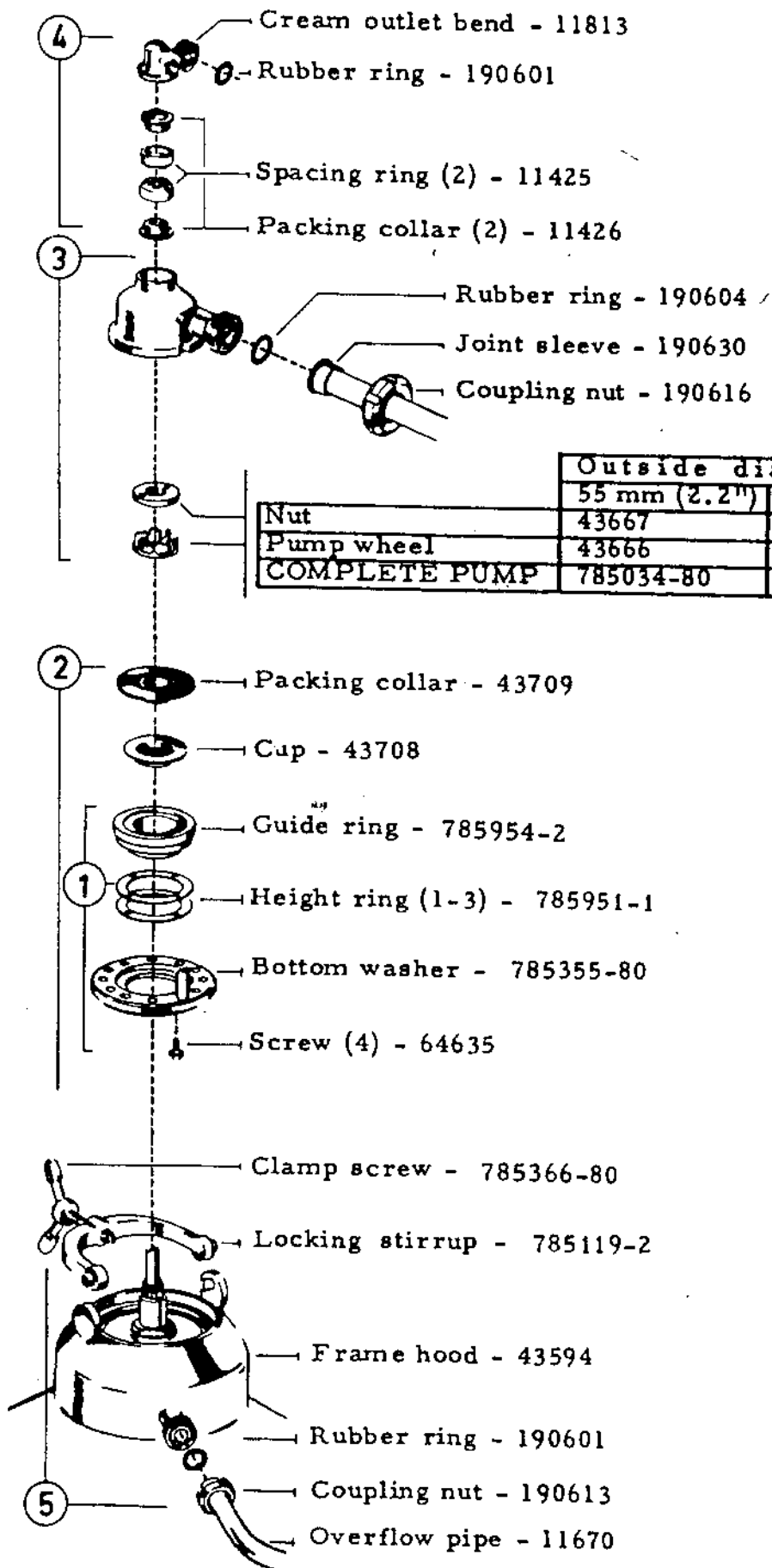
COMPLETE SEPARATOR BOWL with pump wheel ϕ 55 mm (2.17"), but without cap nut - 785117-80

x) Exchange makes rebalancing necessary - send in the COMPLETE bowl to an authorized ALFA-LAVAL representative.

OUTLET

Milk outlet bend - 785033-80

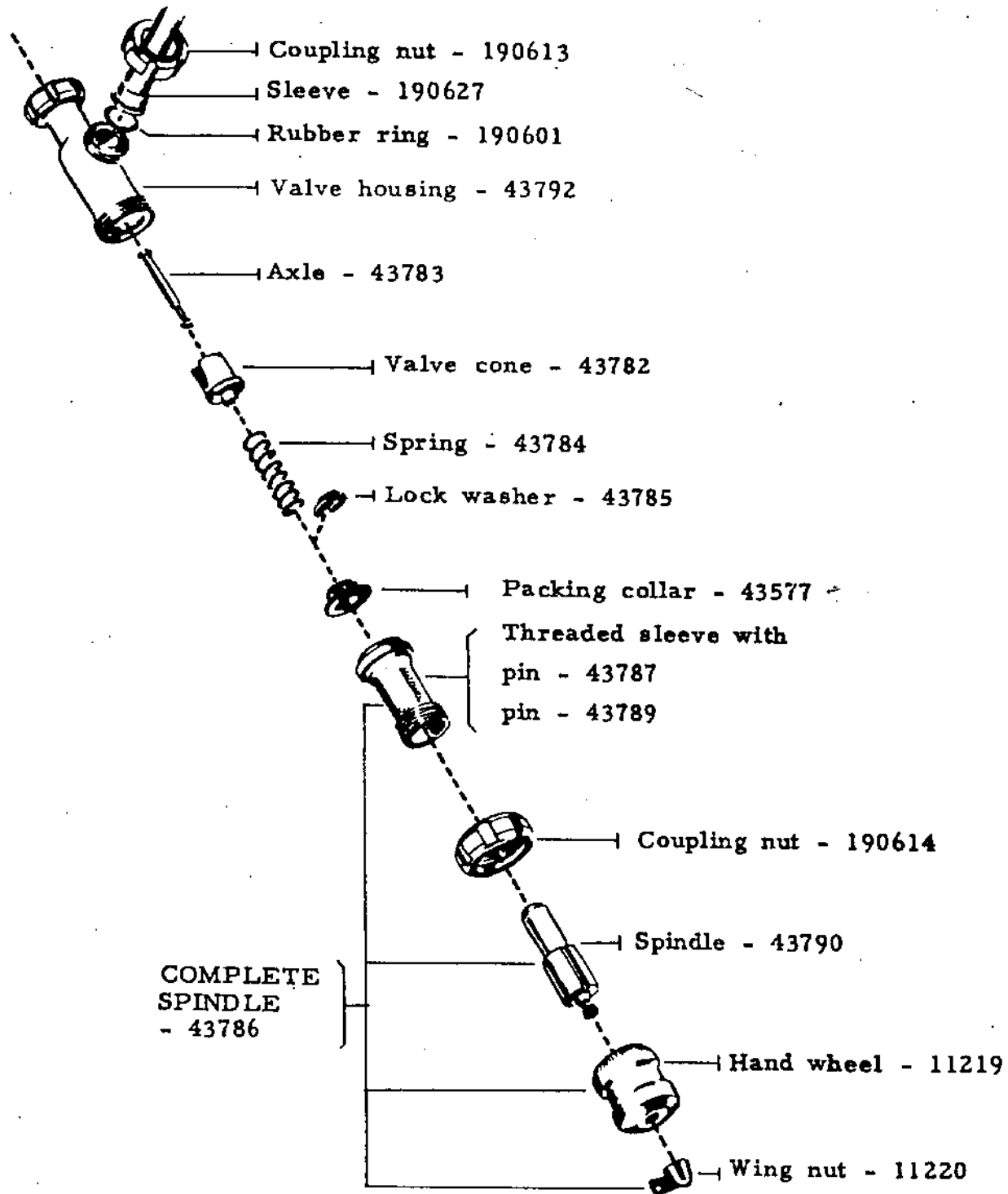
MED HAT
PUMP WHEEL
N 820034.02
2 15/16" O.D.
1 1/16" I.D.



	Outside diameter	
Nut	55 mm (2.2")	75 mm (2.9")
Pump wheel	43667	785026-1x)
COMPLETE PUMP	785034-80	785027-1x)

x) Not included in standard equipment.

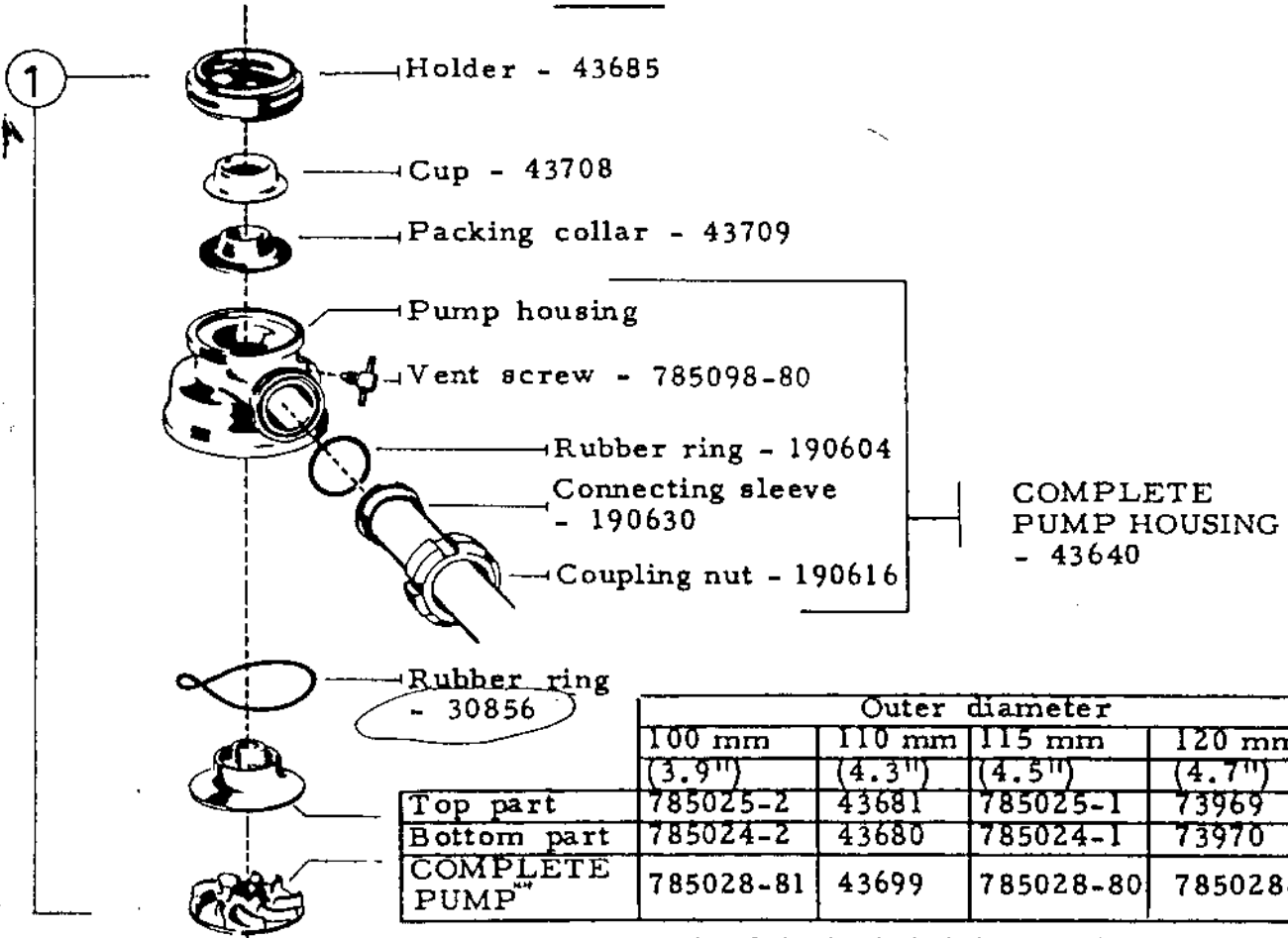




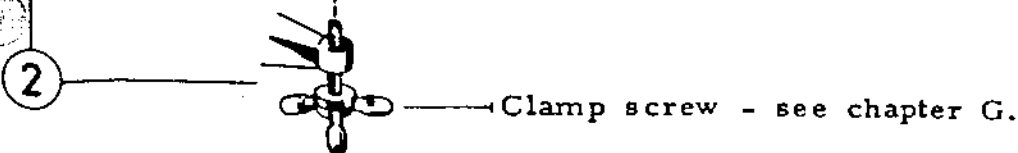
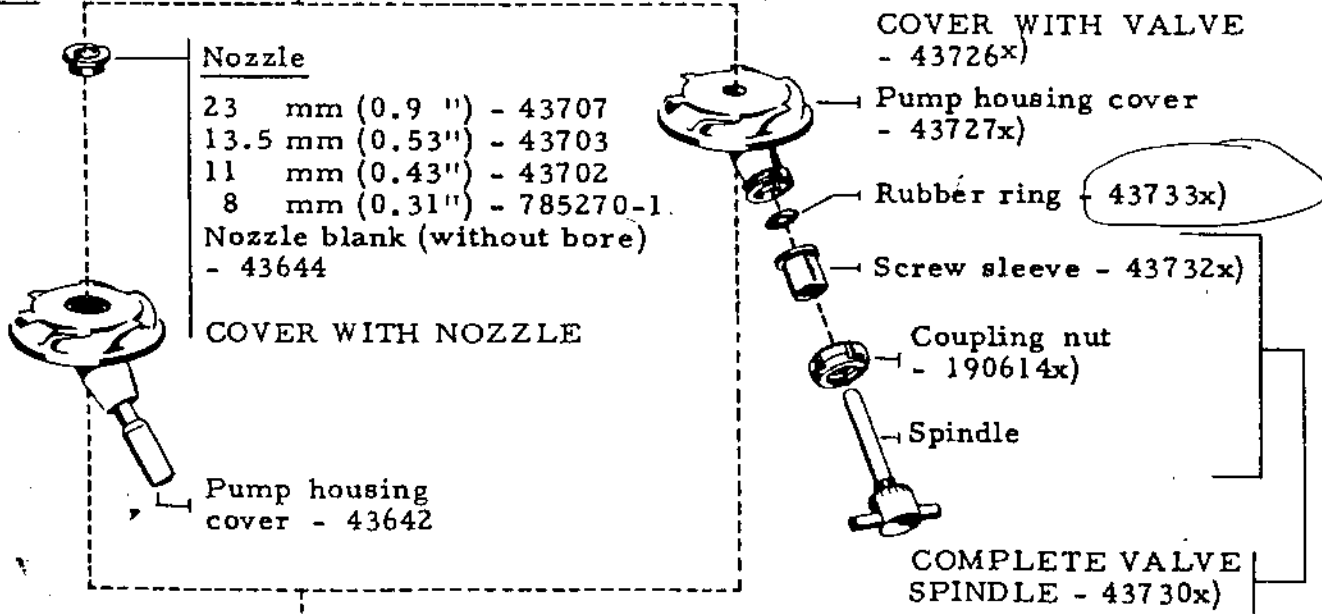
COMPLETE CREAM REGULATING VALVE - 43781

Handle the valve carefully - a damaged valve could stick and cause cream stockage

INLET



Only one pump wheel is included in standard equipment

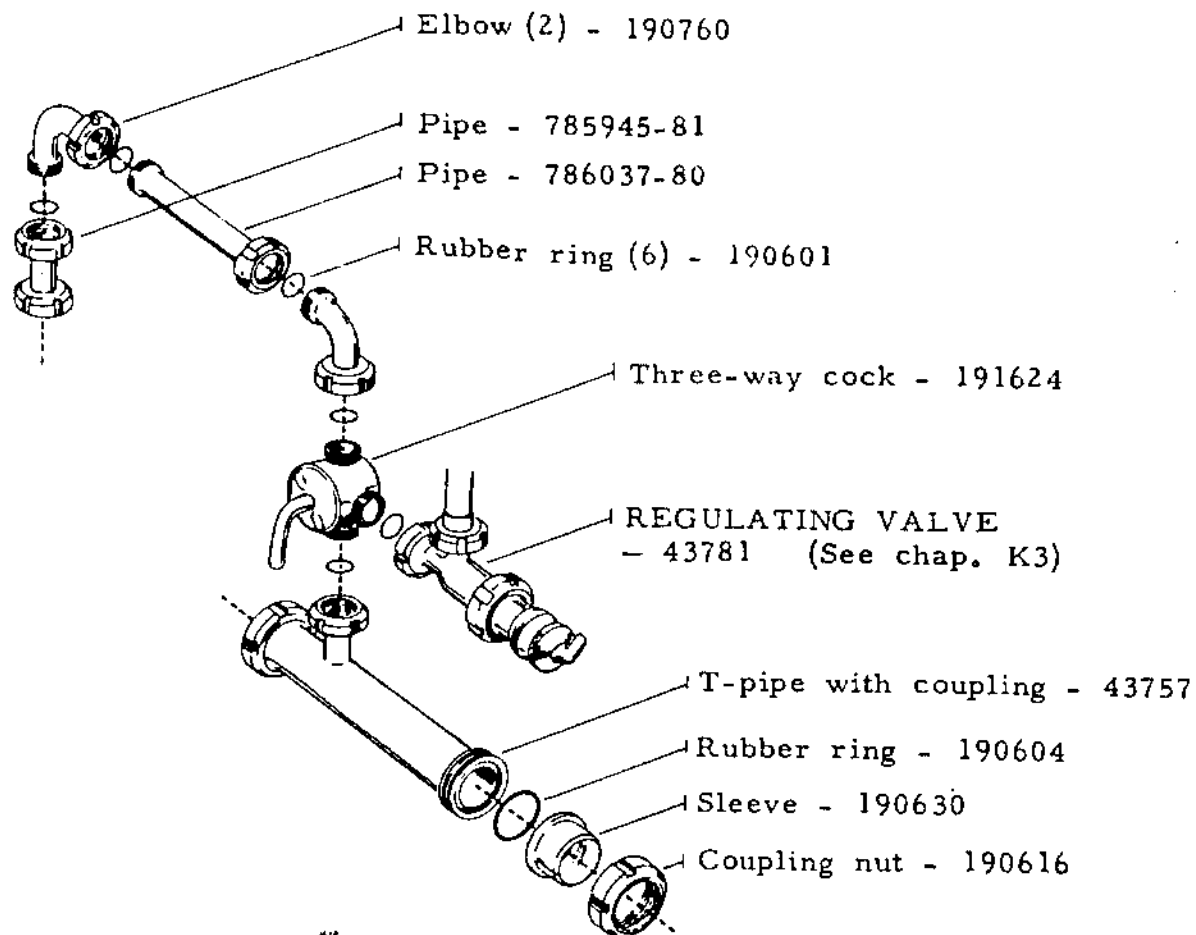


(cont.)



STANDARDIZING DEVICE

- 786038-80

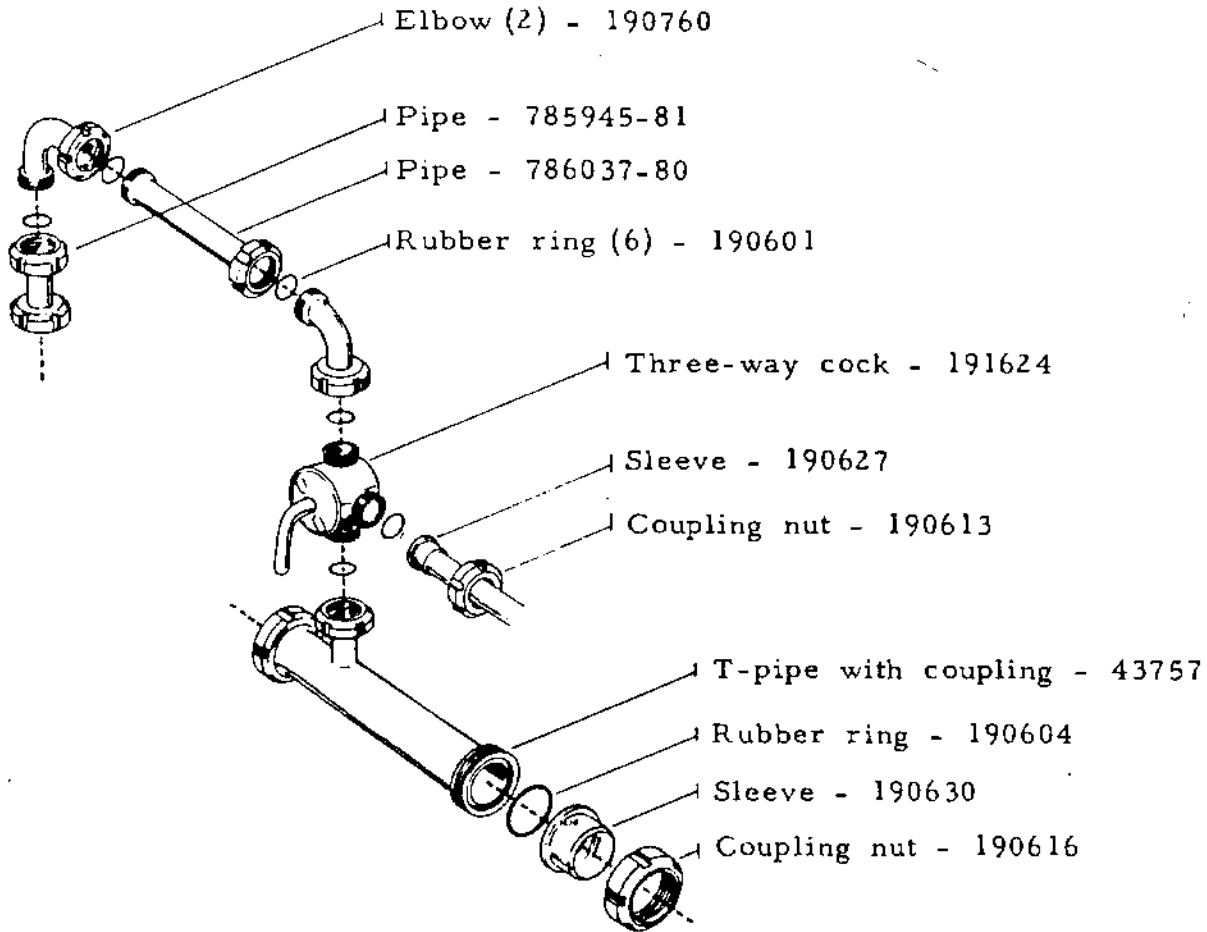
STANDARDIZATION
to lower fat content

For standardization to a lower fat content the following is required:

- o Cream regulating valve of standard equipment.
- o Standardizing device (not included in standard equipment) - 786038-80

The standardization is effected in such a way that such a large part of the separated cream is separately drawn off that the standardized milk obtains the desired fat content. The regulation is effected by means of the regulating valves. The throughput should be kept constant - for checking install a flow meter in the inlet pipe. Always check the fat content of the standardized milk.

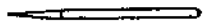
REMIXING DEVICE
- 785301-80



REMIXING

This procedure is used when cheese- or consumption milk is to be clarified in the standard bowl of the separator. The device can also be used for circulating a liquid through the separator when starting, in case of any possible interruption in the whole milk feed as well as during the braking-down period, whereby only a return conduit to the milk tank before the feed pump is required.

TOOLS



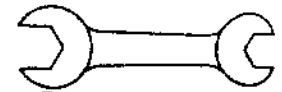
Drift - 2279



Screw driver
- 8594

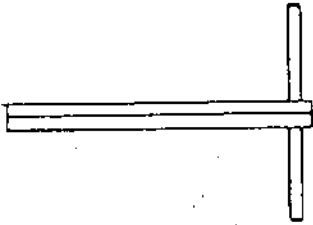


Screw driver .
- 14486



Screw spanner
(23/31 mm)
- 8432

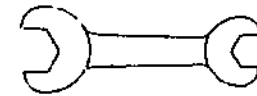
TOOLS for BOWL SPINDLE



Socket wrench
(15 mm) - 11647
Socket wrench
(21 mm) - 63208



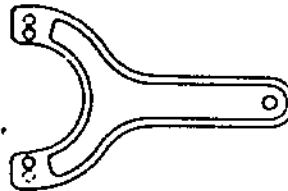
Protecting sleeve
for bowl spindle
- 43750



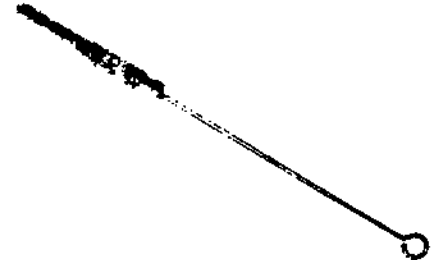
Screw spanner for screw
plugs of top bearing
(16/55 mm) - 65454



Hook spanner for
stop nut of top
bearing - 66988



Pin spanner for
protecting collar
- 65380

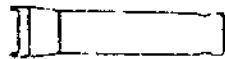


Brush for
bowl spindle - 70832

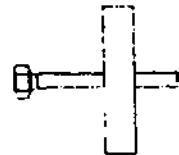
TOOLS for WORM WHEEL SHAFT and DRIVING DEVICE



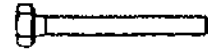
Guide bolt for
motor (2)
- 11649



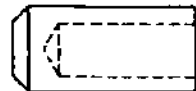
Pin spanner
for round nuts
- 62522



Pulling-off
tool for cou-
pling nave
- 38156

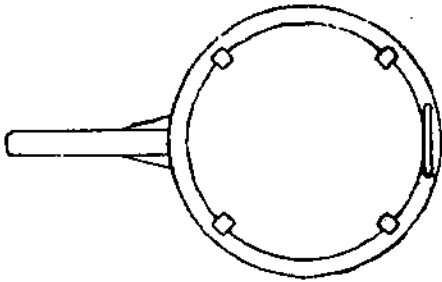


Jack screw
for fixed ball
bearing (2)
- 37909

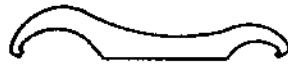


Driving-on sleeve
for ball bearing of
coupling - 65374

TOOLS for SEPARATOR BOWL with INLET and OUTLET



Spanners: for lock ring
- 65372



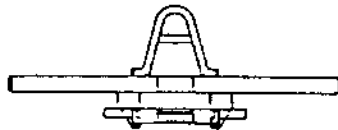
for pipe couplings - 73800



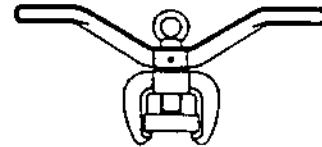
Brush: for top disc
- 32



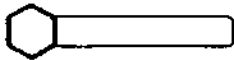
Lifting tool for distributor - 43746



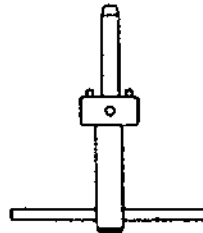
Lifting tool for bowl hood - 43747



Lifting tool for bowl body - 43721



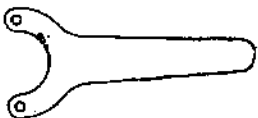
Socket wrench (47 mm) for wearing sleeve of bowl spindle and outlet sleeve - 43744



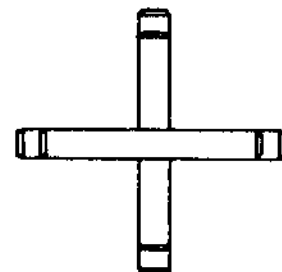
Pin spanner (40 mm) for feed pump - 43752



Protecting sleeve for outlet pipe - 43749



Pin spanner for outlet pump - 3574



Stand for distributor - 43751