<table>
<thead>
<tr>
<th>German</th>
<th>French</th>
<th>English</th>
<th>Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getriebekasten und Lager</td>
<td>Boîte à engrenages et paliers</td>
<td>Gear case and bearings</td>
<td>Füllung</td>
</tr>
<tr>
<td>Spindel (Rollenlager)</td>
<td>Broche (Roulements à rouleaux)</td>
<td>Spindle (Roller bearings)</td>
<td>Handpumpe</td>
</tr>
<tr>
<td>Gleitlager</td>
<td>Paliers lisses</td>
<td>Slide bearings</td>
<td>Docht</td>
</tr>
<tr>
<td>Allgemeine Schmierung,</td>
<td>Craissage général,</td>
<td>General lubrication,</td>
<td>Kanne</td>
</tr>
<tr>
<td>Gleitbahnen</td>
<td>glissières</td>
<td>slide ways</td>
<td>Burette</td>
</tr>
<tr>
<td>Hydraulik (Revolverautomaten)</td>
<td>Système hydraulique (tours revolvers)</td>
<td>Hydraulic system (turret lathes)</td>
<td>Umlauf</td>
</tr>
</tbody>
</table>

MOBIL OIL COMPANIES
OPERATING INSTRUCTIONS

General

a) Unpacking
The machines and their accessories are to be carefully unpacked and checked off against the delivery note to ensure all items are complete. The packing material is to be thoroughly searched for items.

b) Cleaning
On despatch, the machines are treated with a protective coating against rust. This must be washed off clean with benzine. The bare parts are then to be immediately oil-coated.

Mounting

a) Bench lathes
The supporting surfaces for the feet of the machine on the workbench are to be accurately adjusted so that when the machine is clamped up, the bed is completely trued up. An accurate spirit-level of the type used for machines, is necessary for checking this up.

Great care has to be taken to ensure that the bed lies in the lead longitudinally and transversely.

b) Lathes on bed castings
The machine is mounted in its working position after the foundation holes have been effected in the ground and the anchor bolts have been placed in their holes.

The machine is trued up by the four regulating screws beside the anchors, and then the anchor bolts are cast in. After hardening, the machine can again be accurately adjusted and the feet grouted.
DIRECTIONS FOR USE

Headstock Type W with Roller Bearings, Drawing No. 03802

To Dismantle and Assemble the Spindle

1. If the headstock is equipped with a rapid chucking device the latter must be removed first.
2. Unscrew the cover 1.
3. Loosen the nut 3 with a hock spanner and remove together with the locking washer.
4. Unscrew the screws of the cover 12.
5. Withdraw the shaft 8 through the front bearing, taking care to maintain the pulley 9.
6. The outer ring of the cylindrical roller bearing 11 and the sealing ring 10 may be left in place (unless the bearing has to be replaced).

To assemble proceed in inverse order.

Front Bearing

Only remove the inner ring of the cylindrical roller bearing 11 if the shaft 8 is to be replaced.

Rear bearing

Loosen the covers 2 and 6 and remove together with the spacer ring 7 and the spring 5. Dismantle the inclined bearing 4.

Before assembling clean the anti-friction bearing carefully with gasoline.

Lubrication

Lubricate the oil points A with mineral oil of 3-5° E. at 50° as required.
Operating Instructions - Tailstock

No. 110001/2/3/4

Dismounting the tailstock sleeve

In the centre of the tailstock there is a bolt fixed with two cylinder head studs. These studs, as well as the threaded pin in the middle of the bolt, are screwed out. One of the cylinder head studs is screwed into the middle thread hole and thus the bolt is withdrawn. Now the tailstock sleeve, together with the nut, can be taken out.

Dismounting the spindle nut

The thread ring at the end of the tailstock sleeve for the handwheel is screwed out. Now the whole spindle unit with the nut can be pulled out from the tailstock sleeve. By standing the tailstock sleeve up on its rear end, the ejector falls out.

The mounting of the tailstock sleeve and spindle nut is carried out in the opposite sequence to the dismounting.

Cross feed for 110 003/4

Beside the chuck lever behind the tailstock are two hollow hexagonal screws. The right hand one, i.e. the one nearer to the handwheel, pushes the upper part of the tailstock forward when it is turned to the right, and the other backwards.

If it is required for it to be pushed forward, then first of all the left hand screw is loosened by turning to the right. Then the right hand screw is displaced for the required measurement by turning it to the right, and finally the left hand screw is fixed by turning to the left.

Backward displacement is obtained by the reverse process.