



INSTRUCTIONS 206 e

Section	
Effective	C
Replaces	

Translation of the original instructions

Pumps

P15 - P25 - P40 - P60 - P100

Blocdir shaft seal with lubricant reservoir

INSTALLATION

OPERATION

MAINTENANCE



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Your distributor :

FUNCTION

The shaft **501** produces the rotary motion of the monobloc rotating part **697** through the agency of the drive **641** which is solidly joined to the shaft by means of bolts **642**.

The stationary **604** forms an integral unit with the O-ring holder **601** through the O-ring **605** and the retainer **627**.

THE SEALING IS ACHIEVED:

- 1 - On the shaft, by the O-ring **613** of the rotating part **697**.
- 2 - By the contact face between the monobloc rotating part **697** and the fixed stationary part **604**.
- 3 - Between the fixed stationary part **604** and the O-ring holder **601** by the O-ring **605**.
- 4 - Between the O-ring holder **601** and the outboard bearing **725** by the seal **602**.
- 5 - Between the outboard bearing **725** and the cover **401** by the O-ring **727**.

The sealing is dependent therefore on the state of the contact surfaces and the O-rings.

COMMENT :

The lubricant reservoir **645** is necessary for the situation where the pumped product solidifies under atmospheric conditions.

LEAKING GASKET

- O-ring damaged during fitting (scratching of the friction faces...),
- O-ring ill-suited to the product being pumped, resulting in chemical or mechanical attack (abrasion) of the seals and counterparts,
- O-ring subject to normal wear.

DISASSEMBLY

Before any disassembly, make sure that the pump has been drained and take all the necessary precautions to prevent it from starting up. The pump must not start up, even accidentally.

Tools required

- Flat spanners for bolts **723, 729, 726**
- Opening circlip pliers
- Flat screwdriver
- Extractor (e.g. FACOM U-35L)
- Socket head spanner for bolts **617**
- Bushing **739**

DISASSEMBLY

Uncouple the pump by removing the coupling.

Remove the key **508**.

Carefully clean the shaft end to remove any traces of paint, oxidation, burrs...

Loosen the bolts **723** and remove the cover **705** without damaging the seal **707**.

Remove the circlips **537**.

Remove the washer **731**.

Loosen the 3 bolts **726**.

Remove the ball bearing **703** by means of the extractor: pass the grippers behind the ball bearing while sliding them into the holes of the outboard bearing **725**, using the shaft end **501** as a support, and remove the second washer **731**.

Loosen the 3 bolts **726** and slide the outboard bearing assembly along the shaft.

Do not dismantle the cover **401** from the pump cylinder.

Position the outboard bearing assembly **725** vertically, the gasket being at the top.

Loosen the 2 bolts **729** and remove the 2 square nuts **730**.

Pull the gasket holder **601** and extract it through the side hole of the outboard bearing **725**.

In the case of an assembly with lubricant reservoir, first remove the cover unit **645** with its seals **647** and **646** by sliding it through the side hole of the outboard bearing **725**.

Withdraw the stationary **604** and its O-ring **605** which remain in the outboard bearing.

Withdraw the rotating part **697** by sliding it along the shaft **501**.

RE-ASSEMBLY

Check that the contact surfaces of the stationary **604** and the rotating part **697** are in good condition.

Make sure the O-rings **605** and **613** are in good condition.

Fit the stationary **604** with its O-ring **605** in the gasket holder **601** by engaging the pin **627** in the slot of the stationary. Clean the contact faces of the gasket using a clean rag.

Check the condition of the 2 seals **602** and change them as needed.

Insert the gasket holder **601** with its seals **602** through the side aperture of the outboard bearing **725**.

Lightly lubricate the shaft **501**.

Abut the rotating part **697** with its O-ring **613** against the drive **641** while engaging the keys of the rotating part in the slots. Check that the bolts **642** are properly tightened.

Screw the 2 square nuts **730** onto the 2 bolts **729**.

Check that the seals **727** and **716** are in good condition, change them if necessary.

Slide the whole outboard bearing assembly onto the shaft **501** as far as the support on cover **401**. Take care not to knock the edge of the stationary **604** of the gasket.

Tighten the 3 bolts **726**.

Place the first washer **731** as support on the shoulder of the shaft **501**.

Couple the ball bearing **703** to the shaft by hand, push it by means of a suitable bushing until supported against the washer **731**.

FAILURE TO FOLLOW THIS INSTRUCTION CAN SERIOUSLY DAMAGE THE INTERIOR OF THE PUMP.

In no case must the ball bearing be pushed on to the shaft without support for the shaft.

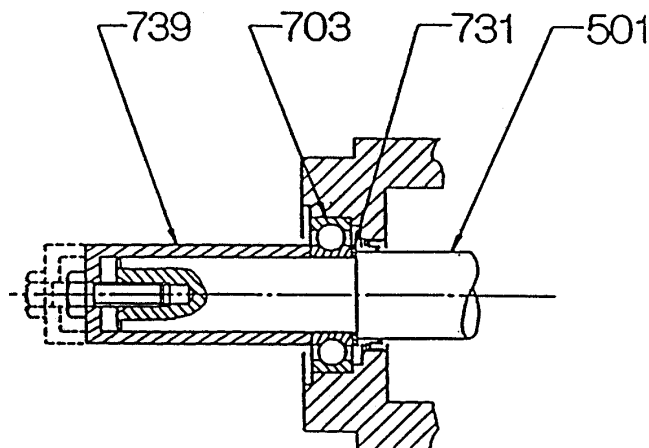
Place the second washer **731** against the ball bearing.

Fit the circlips **537**.

Clean the sides of the cover **705** and of the outboard bearing **725** with a clean rag.

Fit the cover **705** with its seal **707** after applying sealing paste to the contact surface between the cover **705** and the outboard bearing **725**.

Tighten the 4 bolts **723**.



RE-ASSEMBLY IN THE CASE OF THE OPTION WITH LUBRICANT RESERVOIR

In the case of an assembly with lubricant reservoir, carry out operations No.1 (see § RE-ASSEMBLY).

Check the seals **646** and **647** and change them if necessary. Take care when fitting seal **647** to have the lips pointing towards the shaft output.

Slide the cover **645** with its seals **646** and **647** through the side aperture of the outboard bearing **725** while positioning the lubricator **644** towards the bottom and the snifter valve **643** towards the top, screw the 2 bolts **729** into the square nuts **730** without tightening.

Carry out re-assembly operations no.3 (see § RE-ASSEMBLY)

Unscrew the 2 bolts **729** and push the cover **645** outwards.

Use a grease gun to pump grease into the internal volumes of the gasket holder **601** and the cover **645** so as to prevent air from getting into the grease reservoir as far as possible.

Carry out operations no.2 (see § RE-ASSEMBLY)

Fill the lubricant reservoir with the lubricator **644** until the grease overflows through the snifter valve **643**.

Carry out operations no.4 (see § RE-ASSEMBLY).

MAINTENANCE

The mechanical gaskets require very little maintenance. In each case you should follow the instructions appertaining to the particular model.

Lubrication of the ball bearing 703

Use a good-quality ball bearing grease.

Lubrication:

- for pumps working at ambient temperature and protected from the weather, lubricate every 1000 operating hours
- for all other cases : lubricate every 500 operating hours

For pumps operating at elevated temperatures (in principle, from 100°C), choose a grease with a high drop point.

Topping up the lubricant reservoir 645

Every 500 operating hours the lubricant reservoir must be filled to overflowing by means of the snifter valve **643**.

SPARE PARTS LIST

Key : ° = Assemblies and parts available for supply.

Ref	No	DESIGNATION
°	600	1 BLOCDIR SHAFT SEAL, COMPLETE
°	610	1 STATIONARY PART, COMPLETE
	604	1 Stationary part
	605	1 Stationary part seal (see 699)
°	697	1 ROTATING PART *
	613	1 Seal (see 699)
	617	3 Gasket drive bolt
It is recommended that the sets of washers and outboard bearing seals 715 should also be supplied		
°	699	1 SET OF SHAFT SEAL SEALS (605 + 613)
°	609	1 HOLDER
	511	1 Circlips (see 715)
	601	1 Holder
	602	2 Holder seal (see 715)
	627	1 Retainer
	641	1 Carrier
	642	2 Carrier bolt
	729	2 Holder screw
	730	2 Holder nut
°	715	1 SET OF WASHERS (511+537+602+646+647+707+716+727)
°	720	1 OUTBOARD BEARING, COMPLETE
	703	1 Ball bearing of outboard bearing (see 715)
	716	1 Lip seal (see 715)
	725	1 Outboard bearing
	726	3 Outboard bearing bolt
	727	1 Outboard bearing seal (see 715)
	731	2 Roller bearing support washer (see 704)
°	740	1 OUTBOARD BEARING COVER, COMPLETE
	705	1 Outboard bearing cover
	707	1 Lip seal
	708	1 Lubricator
	723	4 Cover bolt
°	704	1 BALL BEARING KIT
	537	1 Circlips
	703	1 Ball bearing
	731	2 Support washer

VARIANT

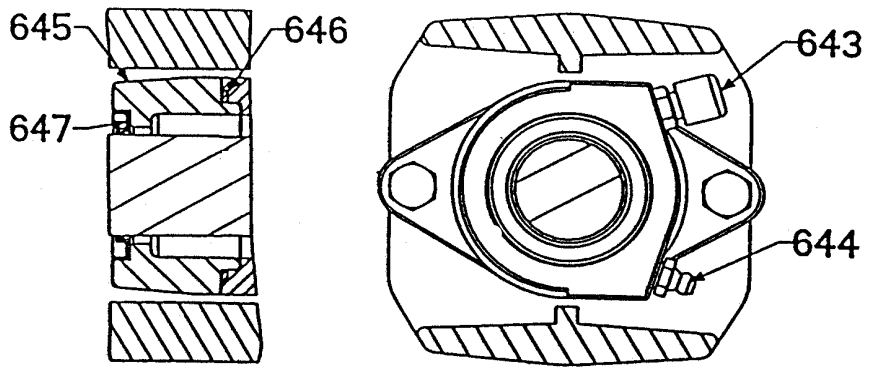
°	640	1	LUBRICANT RESERVOIR, COMPLETE	
	643	1	Valve	
	644	1	Lubricator	
	645	1	Seal holder cover	
	646	1	Cover seal	(see 715)
	647	1	Lip seal	(see 715)

To order spare parts, please indicate :

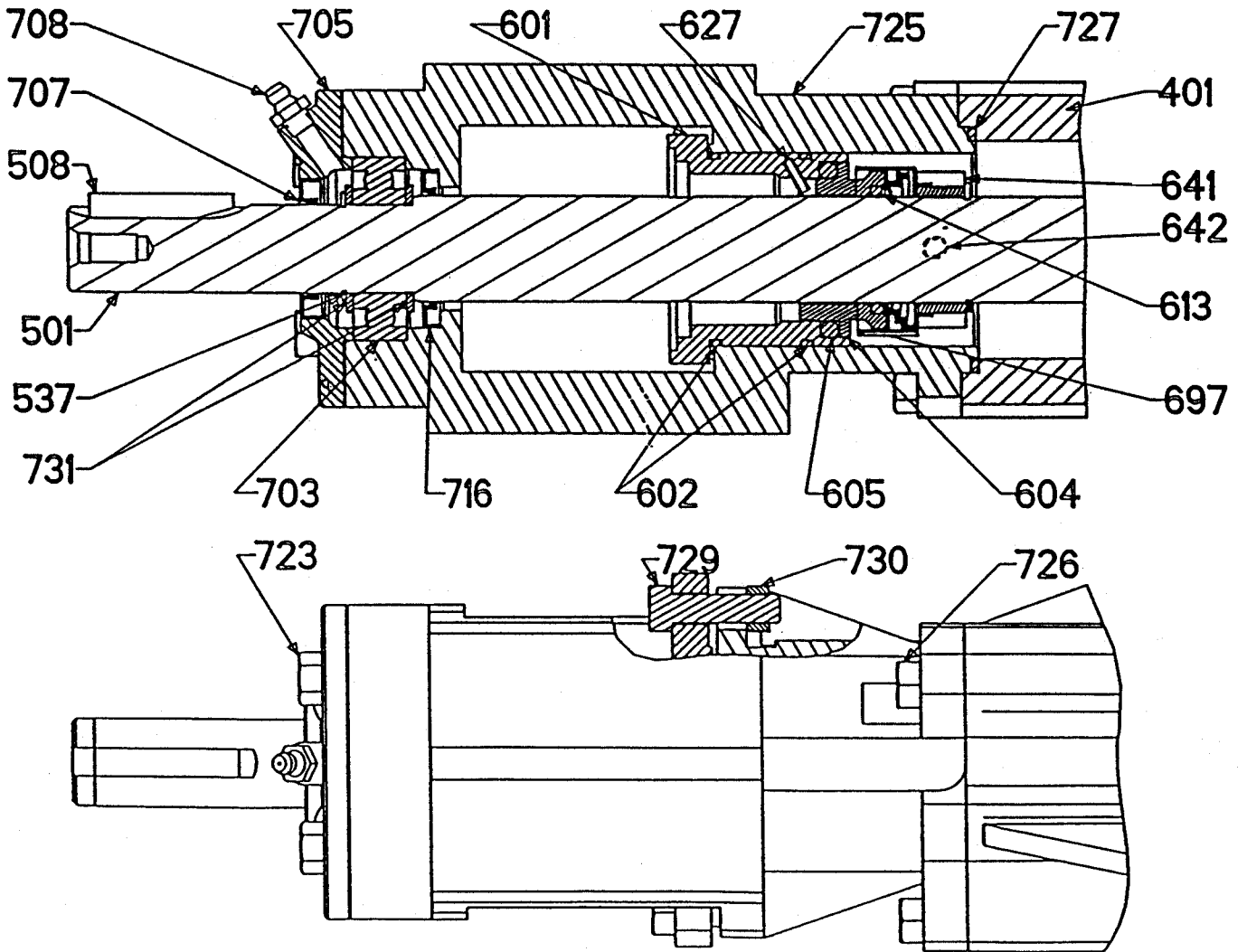
- TYPE and SERIAL NO. of the pump (stamped on pump plate)
- Instructions 206.
- REFERENCES and DESIGNATIONS of the desired parts. Only those parts (complete assemblies or separate parts) whose reference is preceded by (°) can be supplied.

CROSS-SECTION DRAWINGS

OPTION :
LUBRICANT RESERVOIR



P15 - P25 - P40 - P60



P100

