

# agrifac

## PYTHON DRAIN CLEANER

**USER MANUAL**  
INCLUDING SPARE PARTS LISTS







Art. No. XXXXXXXX

Python-UM-PM-R0-20120203-en

Agrifac Machinery B.V.




READ THIS MANUAL BEFORE USING THE MACHINE

Manufacturer	:	Agrifac Machinery B.V.
Postal address	:	PO Box 78, 8330 AB Steenwijk, The Netherlands
Visiting address	:	Eesveenseweg 15, 8332 JA Steenwijk, The Netherlands
 Telephone	:	+31 (0)521-527210
 Fax	:	+31 (0)521-517328
 E-mail	:	<a href="mailto:info@agrifac.com">info@agrifac.com</a>
 Internet	:	<a href="http://www.agrifac.com">www.agrifac.com</a>
Copyright ©	:	All rights reserved. No part of this publication may be duplicated, stored in a computer data file, or made public in any form or by any means whether electronic, mechanical, by photocopy, recording in any way, without the prior permission in writing of Agrifac Machinery B.V.
Changes	:	This document is based on information that was current at the time of publication. Because Agrifac's policy involves a continuous product improvement, this publication may be changed without prior notification.
Liability	:	This publication was compiled with the greatest care; however, errors may occur in it. Agrifac is not liable for any errors in this publication, nor for any consequences of these.
Language	:	<input type="checkbox"/> Original manual. <input checked="" type="checkbox"/> Translation of the original manual.

## Dealer

Fill in the details of your dealer:

Name	:	
Address	:	
 Telephone	:	
 Fax	:	
 E-mail	:	

## Machine identification

Fill in the identification details of the machine. These details can be found on the identification plate. Also fill in the delivery date:

Agrifac Machinery B.V.		CE	
Steenwijk, Holland			
Type	Serialnummer Fz ident-nr.	Bouwjaar Baujahr	
Toeelbaar totaalgewicht Zulassiges Gesamtgewicht	Kg.	Banden Reifen	Druk Druck bar
Maximale belasting vooras Zulassige Achslast Vorne	Kg.		
Maximale belasting achteras Zulassige Achslast Hinten	Kg.		

Type	:	
Serial number	:	
Year of manufacture	:	
Delivery date	:	

## Preface

Dear customer, congratulations on your new Agrifac machine! Because your machine has been developed in accordance with our “4E” concept (Efficient, Economical, Ergonomic and Ecological) you will have many years of pleasure from it.

For your safety it is important that the machine is correctly operated and properly maintained. Read this manual before using the machine. Follow the instructions to avoid injury or property damage. Do not hesitate to contact your dealer if you have any questions.

## Intended use

The drain cleaner is intended for cleaning field drains. Do not use the drain cleaner for anything else.

## Intended audience

Only adequately trained persons who have read and understood this manual may operate and maintain the drain cleaner.



If desired, a training course can be followed at the “Agrifac Academy”.

## About this manual

This manual describes the operation and maintenance of the drain cleaner.

### Documentation provided

The drain cleaner is accompanied by the following documentation:


- User Manual (including spare parts lists).
- Manual for the power take-off drive shaft.

### Availability

The user manual must always be present in the cabin.

If you lose a manual, order a new one from your dealer.

### Text characteristics

- This symbol indicates a summary of information.
- 1. Preceding numbers identify a mandatory sequence of actions.
- [1] Numbers in straight brackets refer to parts in an illustration.
-  The number next to this symbol refers to a page. One mouse click on the number will take you to the page.

### Left, right, front and rear

The indications “left”, “right”, “front” and “rear”, are as seen from the driver’s seat in the forward driving direction.

## Customer service



Contact your dealer in case of problems. Your dealer's service technicians are trained to solve problems.

## Warranty

You are naturally entitled to a warranty if, despite correct operation and proper maintenance, a defect occurs. You have no right to a warranty if the defect is attributable to:

- Normal wear.
- Failure to obey instructions on the drain cleaner.
- Failure to obey instructions in this manual.
- Lack of maintenance.
- The use of parts other than genuine parts.
- Abnormal external influences.
- A modification not authorised by Agrifac.

Contact your dealer for the warranty terms and conditions.

## EC declaration of conformity

Only applicable to machines sold in member states of the European Union.

See the next page for the EC declaration of conformity.



**EC declaration of conformity**  
(directive 2006/42/EC, Annex IIA)

# AGRIFAC MACHINERY B.V.

P.O. Box 78, 8330 AB Steenwijk, the Netherlands

declares that           **DRAIN CLEANER**  
                                  **PYTHON**  
                                  with serial number P01xxxx

complies with directive 2006/42/EC on machinery.

Steenwijk, January 2012.

A handwritten signature in blue ink, consisting of a stylized 'D' followed by a long horizontal stroke.

D. Blaauw

Technical director  
Agrifac Machinery B.V.

## TABLE OF CONTENTS

1	SAFETY .....	9
2	GENERAL DESCRIPTION .....	11
3	START-UP .....	13
4	OPERATION .....	15
5	MAINTENANCE .....	19
6	TROUBLESHOOTING .....	25
7	ENVIRONMENT .....	27
8	DISPOSAL PHASE .....	29
9	TECHNICAL SPECIFICATIONS .....	31
10	SPARE PARTS .....	33

-

# 1 SAFETY

## Introduction

Read this manual before using the machine. Follow the instructions to avoid injury or property damage. Do not hesitate to contact your dealer if you have any questions.

**BE ALERT! THIS CONCERNS YOUR SAFETY AND THE SAFETY OF OTHERS!**

## Symbols in this manual

The following symbols are used in this manual:



### **WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious physical injury.

---

---

### **NOTICE**

Indicates a hazardous situation which, if not avoided, could result in property damage.

---



This symbol indicates additional information and tips. This symbol is not used to indicate a hazardous situation.

---

-

## 2 GENERAL DESCRIPTION

### Introduction

The drain cleaner consists of the following parts:

- Frame
- Power take-off drive shaft
- Hydraulic system
- Reel
- Side arm with hose drive
- Metre counter
- Guide arm
- Diaphragm pump
- Pressure regulator
- Filters
- Flexible hose part
- Cleaner nozzle

### Frame

The frame has pick-up points for the use of a fork-lift truck. The frame is be attached to the three-point linkage of your tractor.

### Power take-off drive shaft

The drain cleaner is supplied with a power take-off drive shaft. The power take-off drive shaft is driven by the power take-off shaft.

### Hydraulic system

The hydraulic system is connected to the double-acting valve of the tractor or to the single-acting valve with a free return. The machine is operated with the triple valve block. The valve block can be mounted on the rear side or in the cabin. The rewinding and unwinding speed is adjusted with the speed control valve next to the valve block.

### Reel

Because of its large diameter, the reel can carry a flushing hose of maximum 500 m.

### Side arm with hose drive

The side arm is operated with a hydraulic cylinder to position the guide arm in front of the drain. The standard hose drive consists of 2 driven rubber rollers and 2 adjustable pressure rollers.

### Metre counter

The metre counter is located behind the drive rollers. The counter measures the unwound hose length and can indicate the location of a blockage.

### Guide arm

For road transport, the guide arm must be dismantled and be put on the back of the frame.

## Diaphragm pump

The water pump is a diaphragm pump, driven by the power take-off shaft. The pump's maximum allowed rotational speed is 550 rpm, the minimum rotational speed is 300 rpm.

## Pressure regulator

You can control the water pressure with the pressure regulator. With a lever on the pressure regulator the pump can be relieved, for example while placing the guide arm in front of the drain pipe. The optimum working pressure is 30 - 35 bar.

Pump pressure (bar)	Cleaner nozzle pressure (bar)	L/min at 315 m	Cleaner nozzle pressure (bar)	L/min at 400 m
20	6,0	49,4	5	47,4
25	8,5	56,1	7,4	53,3
<b>30</b>	10,0	61,6	8,5	58,8
<b>35</b>	12,5	67,4	11,3	63,2
40	14,5	71,4	12,9	68,6
45	16,5	75,7	14,8	72,5

The return hose of the pressure regulator is connected to the upper side of the guide arm. The water "lubricates" and cleans the flushing hose.

## Filters

The suction hose is provided with a suction basket. The suction filter is located in front of the diaphragm pump.

## Flexible hose part

The flexible hose part in between the flushing hose and the cleaner nozzle allows the cleaner nozzle to stay in the centre of the drain pipe.

## Cleaner nozzle

The standard cleaner nozzle has 13 holes: 1 hole to the front and 12 holes to the rear at 15°. See [31](#) for options.

## 3 START-UP

### Introduction

- Check the drain cleaner on delivery for any transport damage. Report transport damage immediately to the shipper and your dealer.

### Power take-off drive shaft

The power take-off drive shaft (the external and internal profile pipe and both protection pipes) may have to be shortened.

See the instructions in the manual supplied separately.

---

<b>NOTE</b>	Do not allow the pump to operate without a water supply for a long time.
-------------	--

---

### Start-Up after winter storage

- Diaphragm pump: drain the anti-freeze (if applicable). Dispose of the anti-freeze in accordance with the national legislation.

-

## 4 OPERATION

### Introduction

This chapter describes the operation of the drain cleaner.

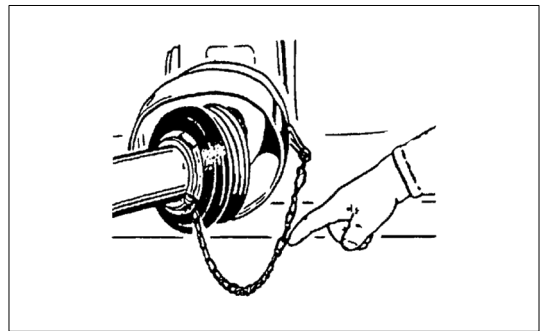
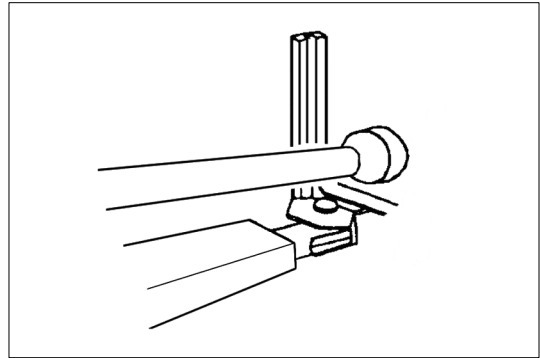
### Safety



- Never run the tractor engine in an enclosed space (not even when the doors and windows are open) because of the risk of carbon monoxide poisoning!
- Place the guide arm on the back of the frame on the appropriate brackets prior to transport.
- Fully lift the side arm and lock it on the frame with the chain prior to transport.
- Check the lighting. Get assistance when checking the brake lights.
- Adjust the tractor mirrors as necessary.

## Hooking up to the tractor

1. Illuminate the work area as necessary.
2. Hook-up the drain cleaner to the tractor.
3. Switch the power take-off shaft and the engine off and remove the ignition key.
4. Connect the power take-off drive shaft to the power take-off shaft.
5. Secure the protective tube on the tractor side with the chain to the tractor to prevent it turning too.
6. Check that the protective tube is secured against turning too with the other chain on the drain cleaner side.
7. Connect the hoses and cables.



### NOTE

The maximum allowed speed of the power take-off shaft is 540 rpm. Do not exceed this speed.

### NOTE

Do not use the chains to suspend the power take-off drive shaft.



Do not stand on the power take-off drive shaft. During use, the power take-off drive shaft can become very hot. Do not touch the power take-off drive shaft during or shortly after use.



Revolving parts (power take-off drive shaft).

Use the power take-off drive shaft only with the protective tubes and covers present and undamaged.

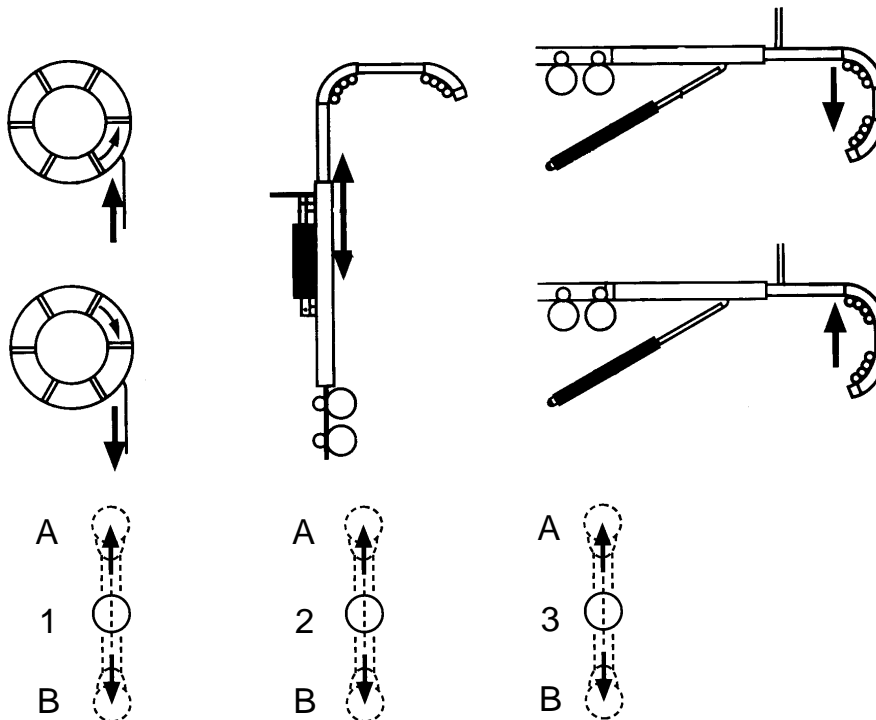
Keep away from the rotating power take-off drive shaft.

Prior to maintenance of the power take-off drive shaft:

Switch off the power take-off shaft and the engine.

Remove the ignition key from the ignition switch.

## Operation



- Put pressure on the hydraulic system.
- Remove the side arm's locking pin.
- Lower the arm: lever [3] in position [A].  
The speed can be adjusted with the speed control valve.
- Mount the guide arm.
- Connect the suction hose.
- Connect the return hose: from the pressure regulator to the overflow connection on top of the guide arm.
- Guide the hose through the guide arm: lever [1] in position [B].  
The speed can be adjusted with the speed control valve.
- Adjust the pressure rollers: the driven rubber rollers must not slip on the hose.
- Set the metre counter at 0.
- Disengage the pressure regulator.
- Place the guide arm in front of the drain, with the end of the arch at 20 cm from the drain.  
Secure the guide arm with the soil pin.
- Engage the power take-off shaft with 540 rpm. Wait until the pump draws water and then tighten the pressure regulator. Adjust the pressure at 30 - 35 bar.

Ensure that there is water running along the guide arm through the overflow hose.

- Place lever [1] in position [B]: the flushing hose enters the drain pipe.
- Set the speed with the speed control valve and the metre counter: about 25 to 30 metres per minute (depending on pollution, kind of soil, ground water level, drain type and operating pressure). Readjust the pressure rollers if necessary.

---

**NOTICE** **ALWAYS STAY WITH THE MACHINE!**

- Stop immediately in case of a blockage!
  - Stop immediately on reaching the end of the drain!
- 

- Retract the hose: lever [1] in position [A].

---

**NOTICE** **RETRACT THE HOSE AT A LOWER SPEED:**

- Reduce the speed to maximum 20 metres per minute.
- 

- If the cleaner nozzle gets stuck in the drain during insertion: switch lever [1] from [B] to [A]. Retract the hose 5 to 10 metres. Move the hose forward. Repeat this until the obstruction is gone.
- If the cleaner nozzle gets stuck in the drain pipe after about 50 metres because of strong pollution: completely retract the hose so that the dirt is flushed out. Clean the next part in the same way.

---

**NOTICE** **WHILE THE CLEANER NOZZLE IS IN THE DRAIN:**

- Do not switch the pump off!
  - Maintain pressure in the hose!
- 

- When the drain has been cleaned: retract the hose until the cleaner nozzle is out of the drain.
- Slowly disengage the pressure regulator with the lever..
- Disengage the power take off shaft and lift the side arm.
- Reduce the pressure of the pressure rollers on the hose.

## 5 MAINTENANCE

### Introduction

This chapter describes the maintenance of the machine. Contact your dealer for maintenance that is not described in this manual.

### Safe maintenance



- Never use the drain cleaner with worn or damaged parts. Use genuine Agrifac spare parts.
- Never run the tractor engine in an enclosed space (not even when the doors and windows are open) because of the risk of carbon monoxide poisoning!
- Wear a close-fitting overall and safety footwear.
- Use suitable and well fitting tools.
- Tighten bolts and nuts to the correct tightening torques (▮ [23](#)).

### Daily maintenance

- Check the covers.
- Check the lighting.
- Clean the suction filter element (▮ [20](#)).
- Check the oil level in the diaphragm pump (▮ [21](#)).
- Check the safety labels.

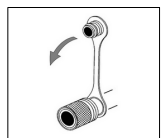
### Hydraulic system



Replace damaged or leaking hydraulic hoses immediately.

Dirt is the worst enemy of hydraulic systems:

- Work with clean hands and clean tools.
- Clean the area around a component before disassembling it.
- Cover the area of a disassembled component.
- Seal a disconnected hose with the cap provided.
- NEVER try to localise a leak using your fingers. Use a piece of cardboard for this. Hydraulic fluid under high pressure can penetrate through the skin. Hydraulic fluid that has penetrated the skin is an emergency situation. Infection hazard! Seek medical assistance immediately!



## Lubrication

- Grease the drive wheels and the pressure roller hinge once a week.
- Grease the reel bearings once a year.
- See [21](#) for the diaphragm pump.

In case of the independent hydraulic pack (option):

- Change the gearbox oil (W90) once a year.

## Power take-off drive shaft



Revolving parts (power take-off drive shaft).

Use the power take-off drive shaft only with the protective tubes and covers present and undamaged.

Keep away from the rotating power take-off drive shaft.

Prior to maintenance of the power take-off drive shaft:

Switch off the power take-off shaft and the engine.

Remove the ignition key from the ignition switch.

Check the power take-off drive shaft every day.

Replace damaged power take-off drive shaft protection tubes and covers immediately.

Use only original parts.

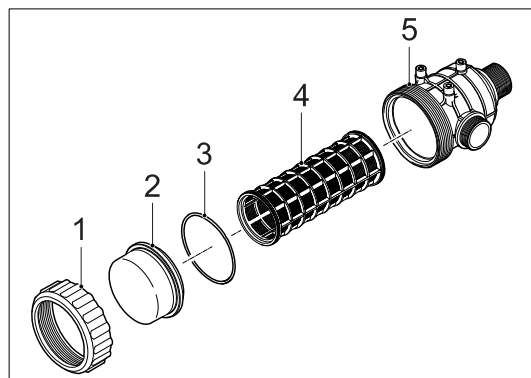
## Flushing hose repair:

If the hose is damaged the damaged part must be removed. The hose parts can be put together again with one hose connector (9820205.0) and two clamping bushings (9820211.0). See [49](#) (pos. 24 and 31).

## Suction filter

Clean the filter element every day:

1. Remove the coupling nut [1].
2. Remove the cap [2].
3. Remove the O-ring [3].
4. Remove and clean the filter element [4].
5. Place the parts back into the filter housing.

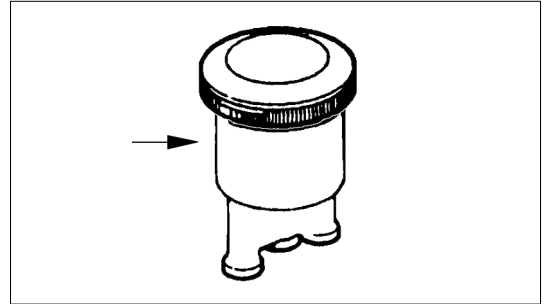


## Diaphragm pump

### Oil level

Check the oil level every day (after the pump has been stopped for at least ten minutes):

1. Check the oil level.
2. Top up the oil as necessary.



Excessive oil consumption or an oil level that has dropped suddenly indicates a ruptured diaphragm. Stop the pump immediately and contact your dealer. A whitish discolouration of the oil indicates a ruptured diaphragm (water in the oil). Stop the pump immediately and contact your dealer.

---

### Diaphragms / oil change

The diaphragms must be replaced 1x per year (preferably at the end of the season). To do this, the pump must be disassembled.



Change the oil (SAE 20W/30 or 20W/40) after the first 300 hours and then 1x per year after replacing the diaphragms.



Contact your dealer for the annual replacement of the diaphragms and the associated oil change.



The life of the diaphragms is determined by the condition of the suction filter and the speed of the pump (mechanical wear).

---

---

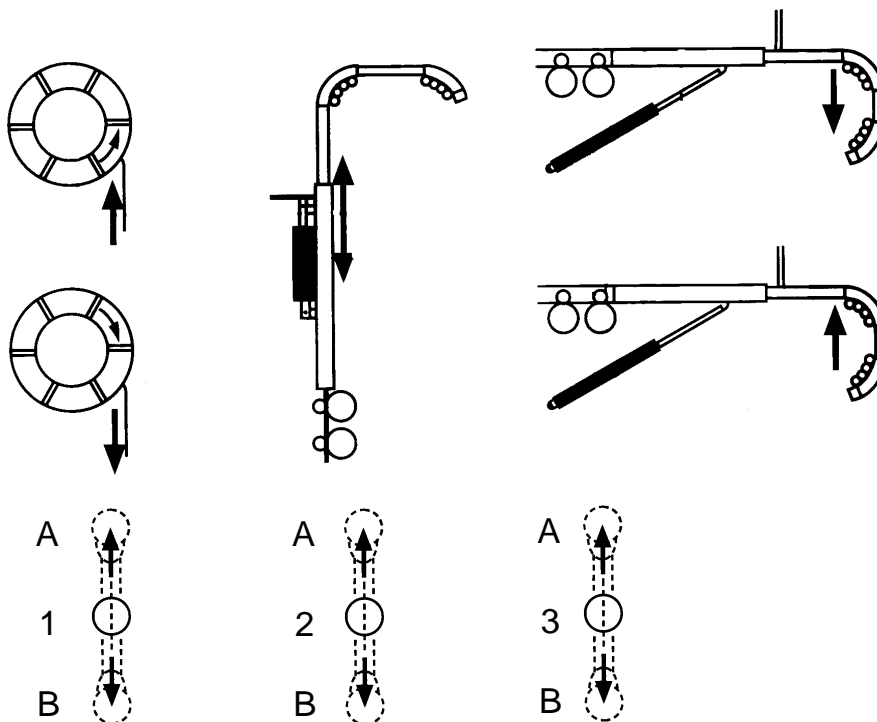
### NOTICE

Do not allow the pump to operate without a water supply for a long time.

---

## Winter storage

1. Clean the machine. Dirt retains moisture and causes rust. If you use a high pressure washer, do not direct it at the bearings.
2. Store the machine in a dry, frost-free area. Never in the vicinity of fertiliser.
3. Repair paint damage.
4. Protect bare metal parts with an anti-corrosive.
5. Empty the suction filter.
6. Wind-up the hose on the reel.
7. Engage the pump and suck some air.
8. Engage the pressure regulator and turn the button fully in.
9. Slowly rewind the hose: lever [1] in position [A]. Water will now spray from the cleaner nozzle. Stop when only air escapes from the cleaner nozzle. Put lever [1] in position [0] and switch off the pump.
10. Disengage the pressure regulator.
11. Order all parts that have to be replaced. Fit the parts when they arrive.



**If the machine is not stored in a dry, frost-free area and the pump diaphragms are not replaced (see [21](#))**

1. Disconnect the suction hose and fill up the pump with antifreeze.
2. Rotate the pump shaft a few turns.

## Tightening torques



Incorrectly tightened bolts and nuts may lead to accidents. Tighten bolts and nuts according to the table below (unless otherwise indicated in this manual).



Non-original bolts may lead to accidents.  
Replace original bolts only with bolts with the same size and bolt grade.

Size	Tightening torques		
	Grade 8.8	Grade 10.9	Grade 12.9
	Nm	Nm	Nm
M 6	10	15	18
M 8	25	37	43
M 10	51	75	87
M 12	87	130	150
M 12 x 1,5	92	135	155
M 14	140	205	240
M 14 x 1,5	150	220	260
M 16	215	310	370
M 16 x 1,5	230	340	390
M 18	300	430	510
M 18 x 1,5	350	490	580
M 20	430	620	720
M 20 x 1,5	480	690	800
M 22	580	830	970
M 22 x 1,5	640	920	1070
M 24	740	1060	1240
M 24 x 2	810	1160	1350
M 24 x 1,5	830	1180	1380
M 27	1100	1550	1850
M 27 x 2	1190	1700	2000
M 30	1500	2100	2500
M 30 x 2	1610	2300	2690
M 33	2000	2800	3400
M 36	2600	3700	4300



The bolt grade is indicated on the bolt head.  
The tightening torques apply to dry bolts.

-

## 6 TROUBLESHOOTING

### Introduction

Consult the table if there are any problems. Contact your dealer if you cannot solve the problem.

### Problems, causes and solutions

Problem	Possible cause	Solution
Diaphragm pump does not suck	• Insufficient water supply to pump	• Fully submerge the suction basket
	• Blocked suction filter	• Clean the filter element
	• Filter cap does not close	• Tighten the filter cap
	• Loose pipes	• Tighten the fittings
	• Leaking hoses / pipes	• Replace the hoses / pipes
	• Leaking diaphragms	• Replace the diaphragms
	• Damaged or worn inlet or outlet valve or valve seatings	• Replace the cylinder head • Replace the pump
Diaphragm pump: pressure too low or fluctuating	• Insufficient water supply to pump	• Fully submerge the suction basket
	• Blocked suction filter	• Clean the filter element
	• Loose pipes	• Tighten the fittings
	• Pressure in accumulator too low	• Pump up the accumulator (3,5 bar)
	• Leaking diaphragms	• Replace the diaphragms
	• Damaged or worn inlet or outlet valve or valve seatings	• Replace the cylinder head • Replace the pump
Pressure cannot be adjusted	• Valve and seat in the pressure regulator are worn	• Replace
Water pressure drops	• Oil level too low	• Fill-up
	• Valve spring broken	• Replace
Pump knocks (taps)	• Suction filter blocked	• Clean the filter element
Hydraulic system does not work	• Speed control valve is completely open	• Close a few turns
Reel does not unwind	• Dirt in flow restrictor: hydraulic motor on reel	• Clean
Reel does not wind-up	• Dirt in flow restrictor: hydraulic motor on hose drive rollers	• Clean
Hydraulic oil overheats	• Hole in flow restrictor (hydraulic motor on hose drive rollers) too small or dirty	• Clean • Drill up the hole (Ø 1,3 mm) by a few tenths of a mm

-

## 7 ENVIRONMENT

### Introduction

During the use and maintenance of the drain cleaner, the environment must be protected as much as possible.

### Measures for protecting the environment

- Operate and maintain your drain cleaner in accordance with the instructions in this manual.
- Dispose of oil filters and waste oil in accordance with the national legislation.
- Dispose of defective parts in accordance with the national legislation.

-

## 8 DISPOSAL PHASE

### Introduction

With normal use and proper maintenance the drain cleaner has a very long service life. When the drain cleaner is disposed of after many years, that must be done in a safe and environmentally responsible manner. Many of the materials used can be recycled.



### Exchange

When the drain cleaner is disposed of after many years, it can be exchanged by your dealer. He will then disassemble the various parts safely and dispose of them in an environmentally responsible manner.

### Procedure for disposal

Follow this procedure:

1. Wear a close-fitting overall, safety shoes and safety goggles.
2. Use suitable and well fitting tools.
3. Use suitable lifting equipment tested for safety.
4. Release the pressure in the hydraulic system and drain the fluid.
5. Dispose of all oil in accordance with the national legislation.
6. Disassemble all rubber and plastic parts.
7. Disassemble all electronic parts.
8. Dispose of all parts in accordance with the national legislation.

-

## 9 TECHNICAL SPECIFICATIONS

### Dimensions and weights

Length	m	0,75
Width	m	2,40
Height	m	2,35
Weight	kg	350

### Diaphragm pump

Make and type	-	Comet™ APS 145 diaphragm pump
Drive	-	Driven by PTO shaft and supplied PTO drive shaft: Walterscheid™ W 2102
Minimum speed	rpm	300
Maximum speed	rpm	550
Maximum pressure	bar	50
Optimum working pressure	bar	30 - 35
Maximum pump capacity	L/min	142

### Hoses and cleaner nozzles

Length suction hose	m	10
Suction filter (standard)	Mesh	32
Suction filter (option)	Mesh	50
Length overflow hose	m	6
Flushing hose		Polyethylene Ø 27 x 3,3 mm
Length flushing hose (standard)	m	315
Length flushing hose (option)	m	400 or 500. See <a href="#">49</a> .
Cleaner nozzle (standard)	-	1 x Ø 2 mm to the front. 12 x Ø 2 mm to the rear at 15°.
Cleaner nozzles (options). See <a href="#">57</a> .	-	For dirt sticking fast to the drain wall: 1 x Ø 2 mm to the front. 12 x Ø 2 mm to the rear at 30°.
	-	For rich clay: 1 x to the front. 3 holes to the rear at 30°.
	-	For large pipe diameters (Ø 60, Ø 75, Ø 100 and Ø 125 mm): Cleaner nozzles with guiding.

### Independent hydraulic pack

Hydraulic oil	-	HV68 / 50 L
---------------	---	-------------

## Sound level



The maximum sound level is produced by the tractor. Consult the tractor documentation for any hearing protection required.

---

## Options

### Drain-shaft arches

For drain cleaning via drain collection points (drain-shafts): for 30 cm and for 40 to 60 cm. See [46](#) and [47](#).

### Extension piece

This 2 metre long extension can be mounted in between side arm and guide arm or in between the two arches. Extension piece 9820217.0 + Handle 9820134.0.

### Telescope system

With this system, the guide arm is telescoped out by a hydraulic cylinder. See [42](#).

### Remote control

With this remote control with a 10 metre cable, hydraulic functions can be operated electrically. The remote control is placed in the tractor cabin. You can take the remote control out of the cabin to the drain. See [60](#).

### Independent hydraulic pack

With the independent hydraulic pack, the tractor hydraulics are not used. The hydraulic pack consists of a hydraulic oil tank and a hydraulic pump. The hydraulic pump is driven via the diaphragm pump. See [64](#).

### Seeking systems

When cleaning drains it is possible that the cleaner nozzle is obstructed. A seeking system consists of a receiver and cleaner nozzle with a transmitter. This transmitter is followed with the receiver to locate the obstruction.

Agrifac can supply 3 systems:

TECTA™ (range 3 metres), no. 7212700.

FARMA™ (range 4 metres and including headphones), no. 7212750.

ALTRA™ (range 10 metres), no. 7212760.

---

## 10 SPARE PARTS

### Spare parts



Contact your dealer to order spare parts. Your dealer has spare parts in stock so that they can help you quickly.

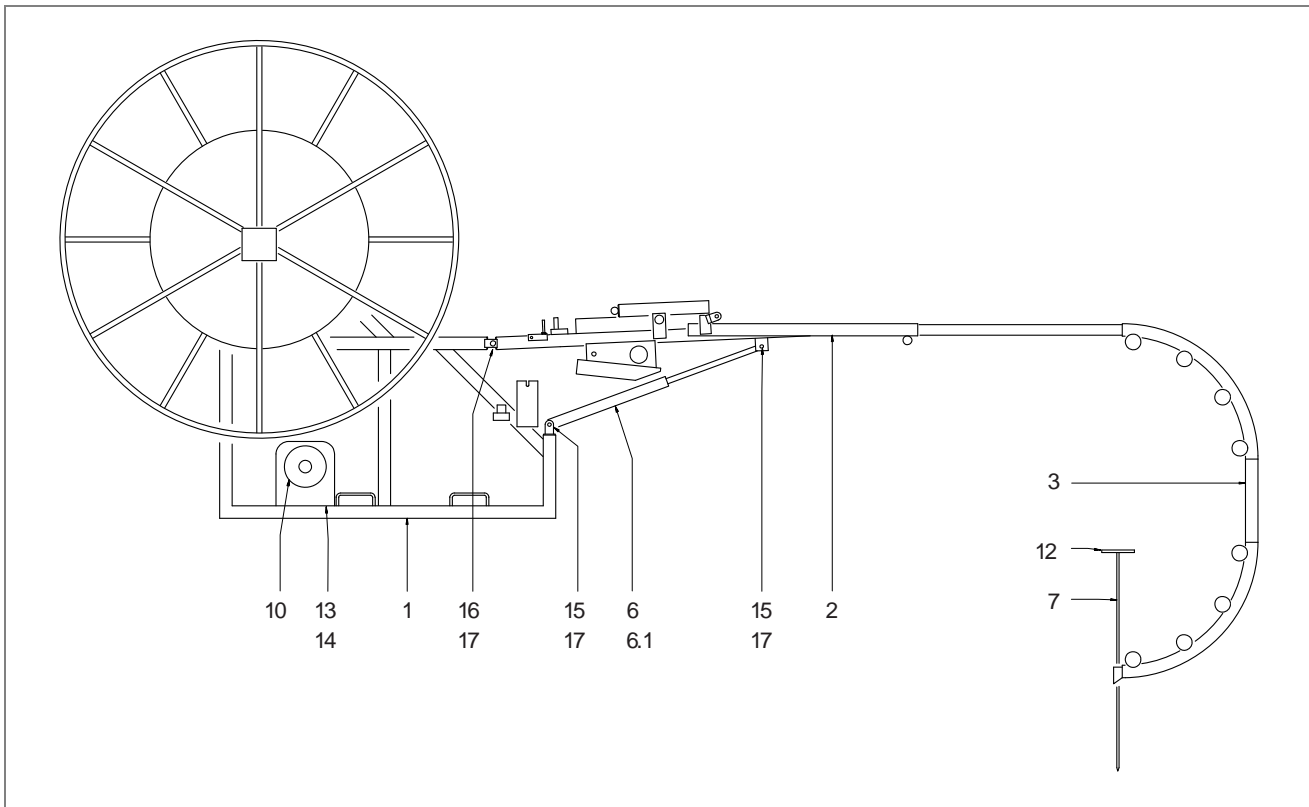
Use genuine Agrifac parts. Genuine Agrifac parts are specially developed for this drain cleaner. Parts other than genuine parts can have a negative effect on the drain cleaner and can make it unsafe. Agrifac is not liable for damage or injury caused by failure to use genuine parts.

### TABLE OF CONTENTS

DRAIN CLEANER .....	34
FRAME .....	36
SIDE ARM WITH 2 DRIVEN WHEELS .....	38
SIDE ARM WITH 4 DRIVEN WHEELS (OPTION) .....	40
SIDE ARM - TELESCOPE SYSTEM (OPTION) .....	42
GUIDE ARM .....	44
DRAIN-SHAFT ARCH - 30 CM (OPTION).....	46
DRAIN-SHAFT ARCH - 40 TO 60 CM (OPTION).....	47
WATER PLUMBING.....	48
DIAPHRAGM PUMP - COMET APS 145 .....	50
SUCTION FILTER - ARAG (BEFORE 2008).....	53
SUCTION FILTER - TECOMECA (SINCE 2008).....	54
SUCTION HOSE .....	55
PRESSURE REDUCER - COMET "VRS" .....	56
CLEANER NOZZLES (OPTIONS).....	57
HYDRAULIC SYSTEM .....	58
REMOTE CONTROL (OPTION).....	60
INDEPENDENT HYDRAULIC PACK (OPTION) .....	64

## DRAIN CLEANER

9821001.0



POS.	PART NO.	DESCRIPTION	QTY.	REMARKS
1	9821002.0	FRAME	1	See <a href="#">36</a>
2	9821003.0	SIDE ARM WITH 2 DRIVEN WHEELS	1	See <a href="#">38</a>
2	9821003.0	SIDE ARM WITH 4 DRIVEN WHEELS (OPTION)	1	See <a href="#">40</a>
2	9821006.0	SIDE ARM - TELESCOPE SYSTEM (OPTION)	1	See <a href="#">42</a>
3	9821004.0	GUIDE ARM	1	See <a href="#">44</a>
4	9821012.0	HYDRAULIC SYSTEM	1	See <a href="#">58</a>
5	9821013.0	WATER PLUMBING	1	See <a href="#">48</a>
6	7020168	CYLINDER	1	Until 1999
6.1	8253426	SEAL KIT		Until 1999
6	7020168.1	CYLINDER	1	Since 1999
6.1	7090028	SEAL KIT		Since 1999
7	9820038.0	SOIL PIN	1	
8	-			
9	-			
10	7860317	PTO DRIVE SHAFT	1	
11	-			
12	7934259	CAP	2	
13	3027630	BOLT	4	
14	3142120	SELF-LOCKING NUT	4	
15	3027716	BOLT	2	
16	3060764	BOLT	2	
17	3142160	SELF-LOCKING NUT	4	

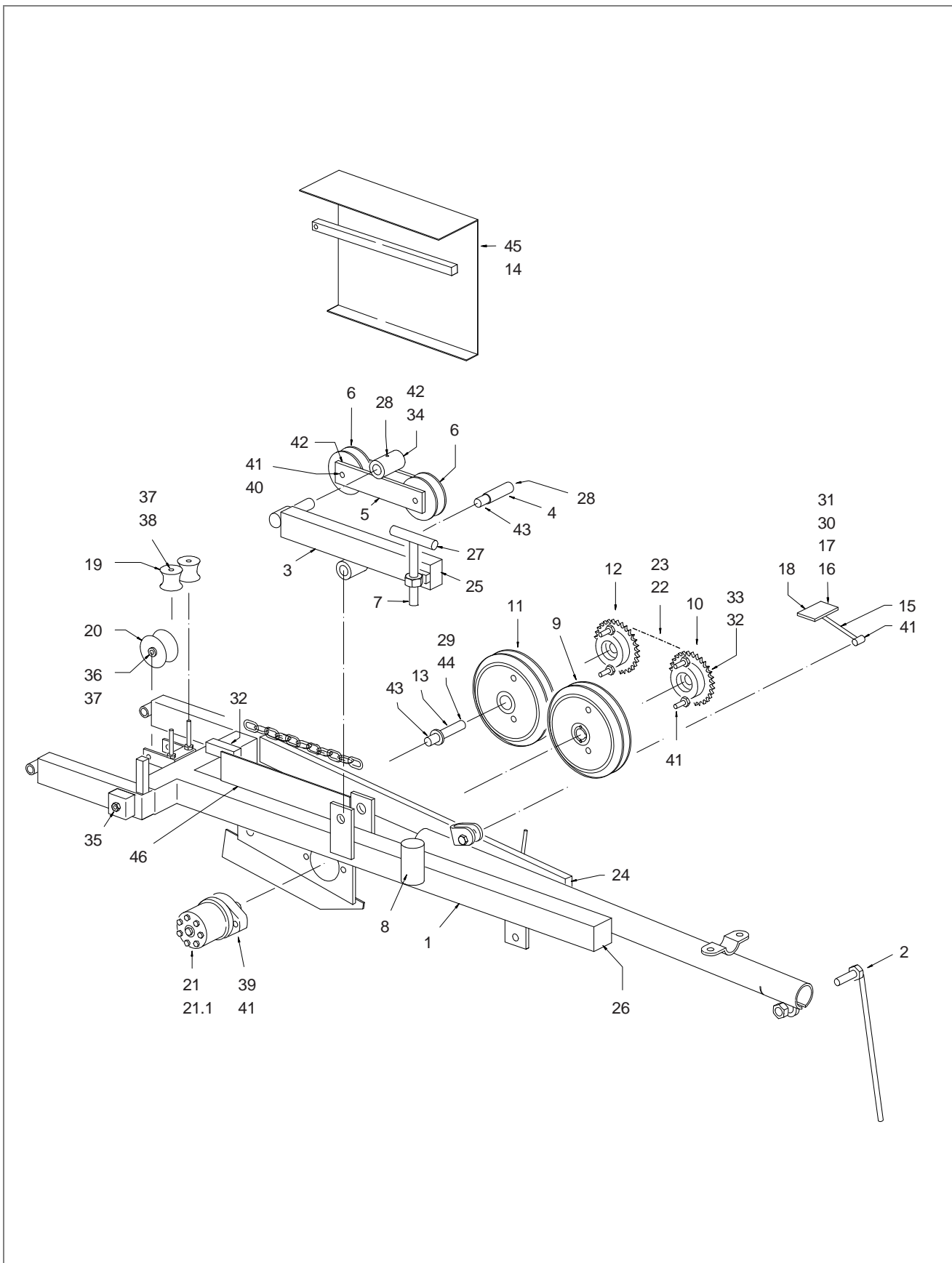
-





## SIDE ARM WITH 2 DRIVEN WHEELS

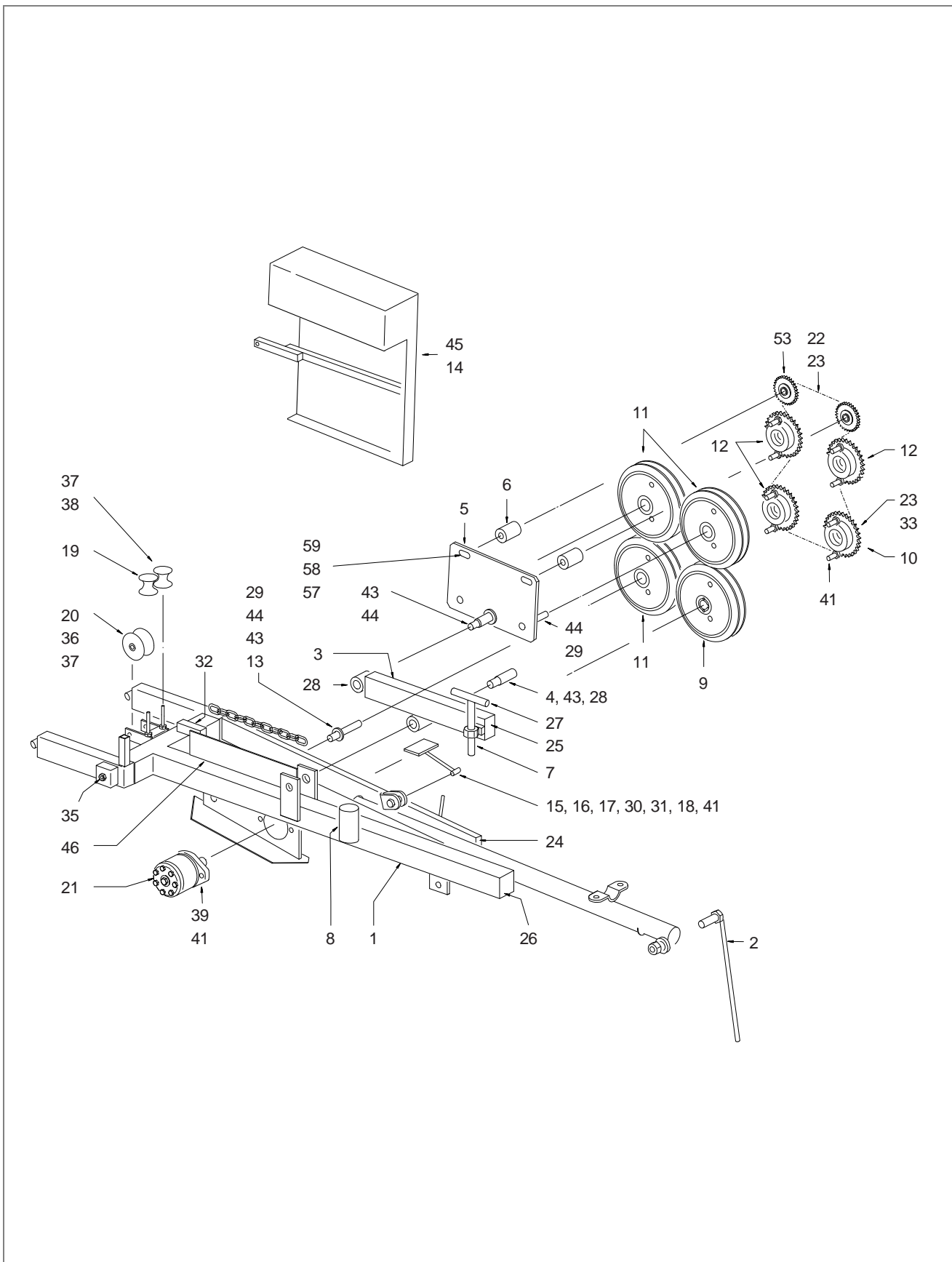
9821003.0





## SIDE ARM WITH 4 DRIVEN WHEELS (OPTION)

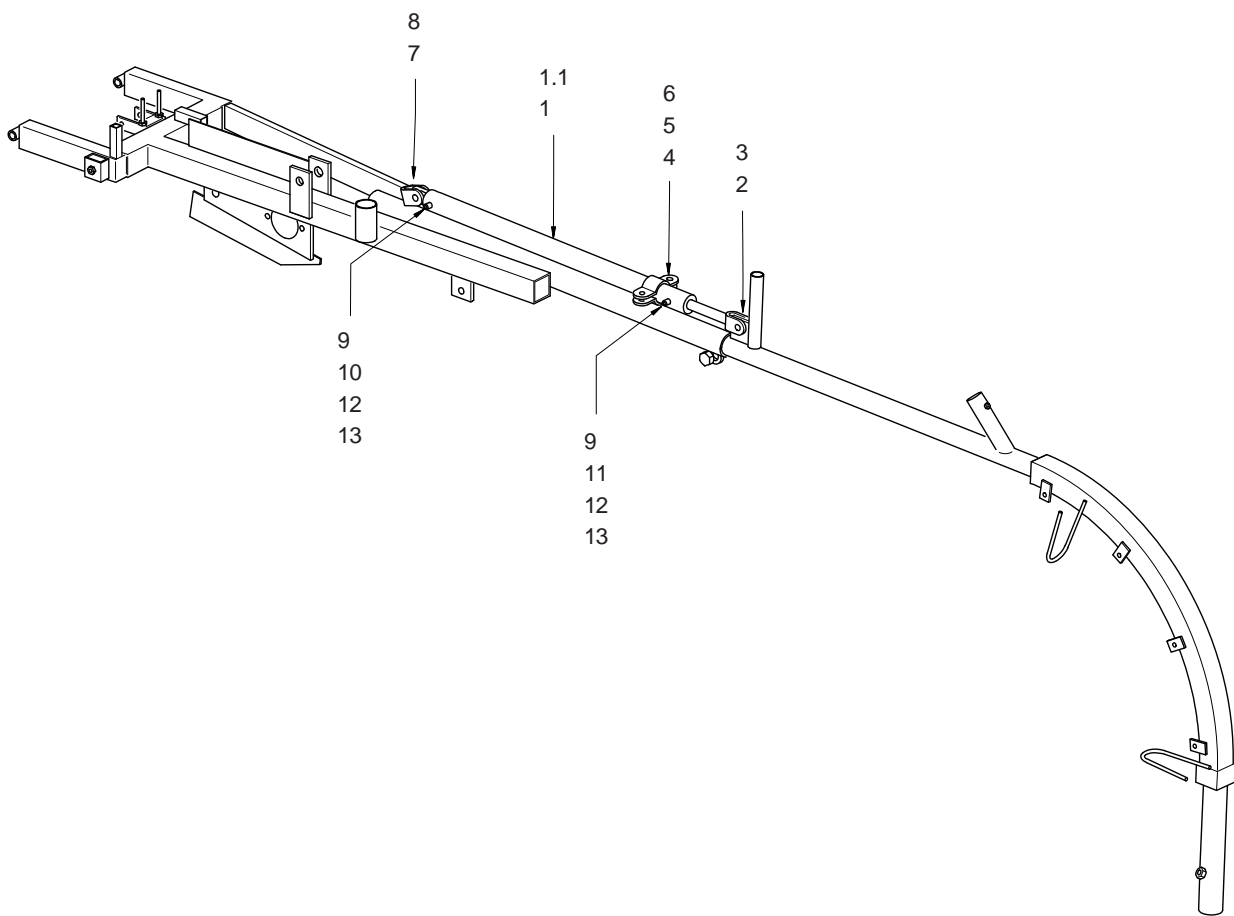
9821014.0



POS.	PART NO.	DESCRIPTION		QTY.	REMARKS
1	9820109.0	SIDE ARM		1	
2	9820134.0	HANDLE		1	
3	9820238.0	ARM		1	
4	9015028.0	BOLT		1	
5	9820239.0	PRESSURE ROLLER HOLDER		1	
6	9820241.0	BUSHING		2	
7	9820142.0	PRESSURE ROLLER ADJUSTING BOLT		1	
8	9820150.0	COMPRESSION SPRING		1	
9	9820014.0	DRIVE WHEEL MOTOR SIDE		1	
10	9820011.0	SPROCKET MOTOR SIDE		1	
11	9820013.0	DRIVE WHEEL + BEARING		3	
12	9820012.0	SPROCKET		3	
13	9820157.0	SHAFT		1	
14	9820240.0	CHAIN COVER		1	
15	9820152.0	METRE COUNTER SUPPORT		1	
16	8200156	METRE COUNTER		1	
17	8200152	METRE COUNTER WHEEL		1	
18	4830140	EXTENSION SPRING		1	
19	8257549	GUIDE ROLLER		2	
20	8257550	GUIDE ROLLER		1	
21	7240755	HYDRAULIC MOTOR		1	Until 2003. Since 2007
21.1	7240780	SEAL KIT		1	
21	7240755.1	HYDRAULIC MOTOR		1	2003 until 2007
21.1	5410120	SEAL KIT		1	
22	6100280	ROLLER CHAIN		1	
23	6180080	MASTER LINK		1	
24	7934590	CAP		1	
25	7934595	CAP		1	
26	7934600	CAP		1	
27	7934259	CAP		2	
28	4110089	GREASE NIPPLE		2	
29	3230390	SPLIT PIN		3	
30	3309480	BOLT		2	
31	3142040	SELF-LOCKING NUT		2	
32	3027540	BOLT		2	
33	3750282	WASHER		1	
34	3027590	BOLT		1	
35	3060638	BOLT		1	
36	3142100	SELF-LOCKING NUT		3	
37	3765100	WASHER		2	
38	3027636	BOLT		2	
39	3142120	SELF-LOCKING NUT		9	
40	3142200	SELF-LOCKING NUT		3	
41	3765200	WASHER		4	
42	-				
43	-				
44	6240404	SPROCKET		2	
45	3060768	BOLT		2	
46	3142160	SELF-LOCKING NUT		2	
47	3765160	WASHER		8	
48	-				
49	-				
50	-				
51	-				
52	-				
53	-				
54	-				
55	-				
56	-				
57	-				
58	-				
59	-				

## SIDE ARM - TELESCOPE SYSTEM (OPTION)

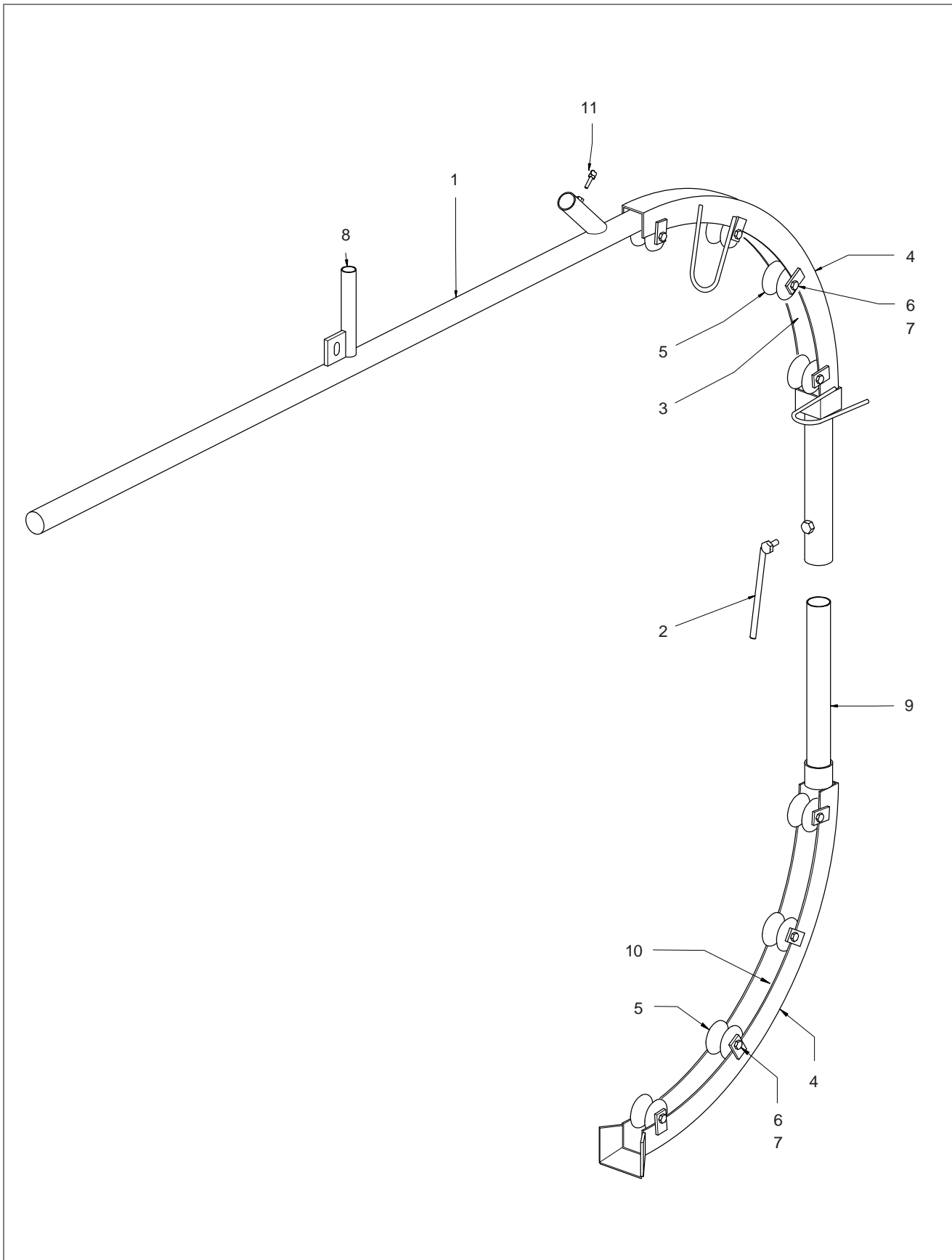
9821006.0





## GUIDE ARM

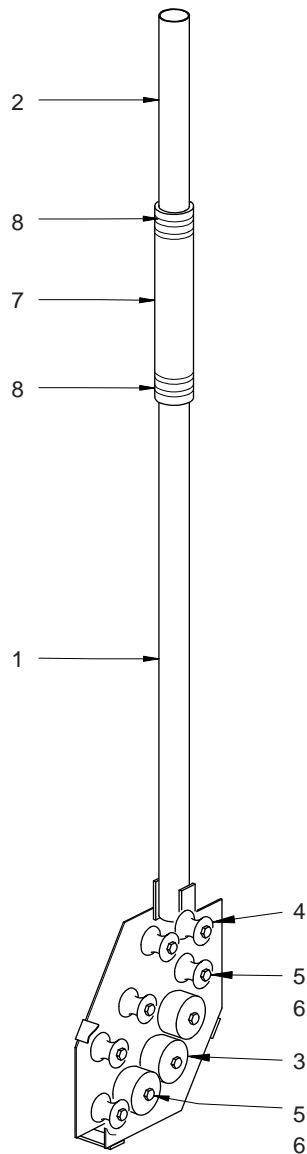
9821004.0





## DRAIN-SHAFT ARCH - 30 CM (OPTION)

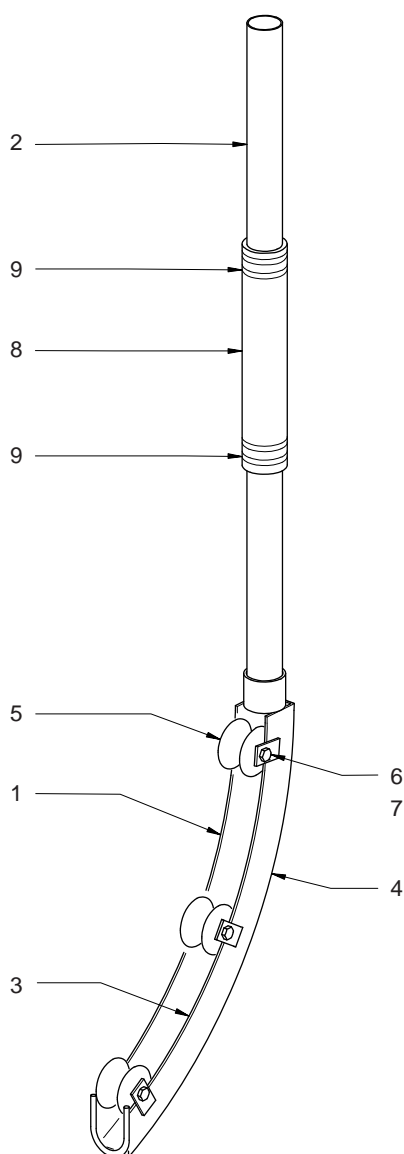
9821007.0



POS.	PART NO.	DESCRIPTION		QTY.	REMARKS
1	9820199.0	HOSE GUIDING		1	
2	9820196.0	EXTENSION TUBE		1	
3	9820023.0	GUIDE ROLLER		3	
4	8257550	GUIDE ROLLER		6	
5	3060638	BOLT		9	
6	3142100	SELF-LOCKING NUT		9	
7	2212860	HOSE		1	
8	4550965	HOSE CLAMP		4	

## DRAIN-SHAFT ARCH - 40 TO 60 CM (OPTION)

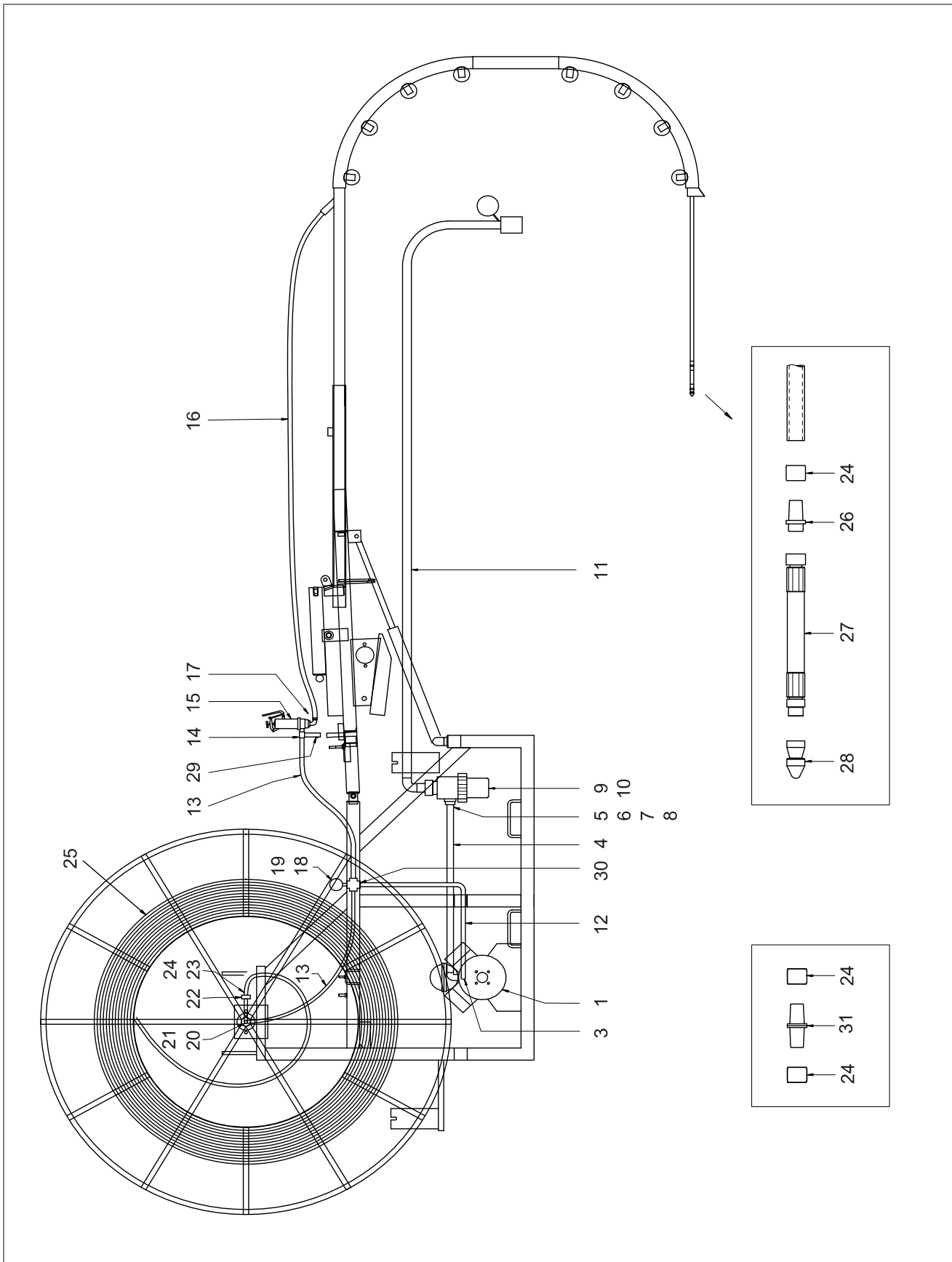
9821008.0



POS.	PART NO.	DESCRIPTION		QTY.	REMARKS
1	9820190.0	HOSE GUIDING		1	
2	9820196.0	EXTENSION TUBE		1	
3	9820195	SLIDE STRIP		1	
4	3250740	RIVET		6	
5	8257550	GUIDE ROLLER		3	
6	3060638	BOLT		3	
7	3142100	SELF-LOCKING NUT		3	
8	2212860	HOSE		1	
9	4550965	HOSE CLAMP		4	

## WATER PLUMBING

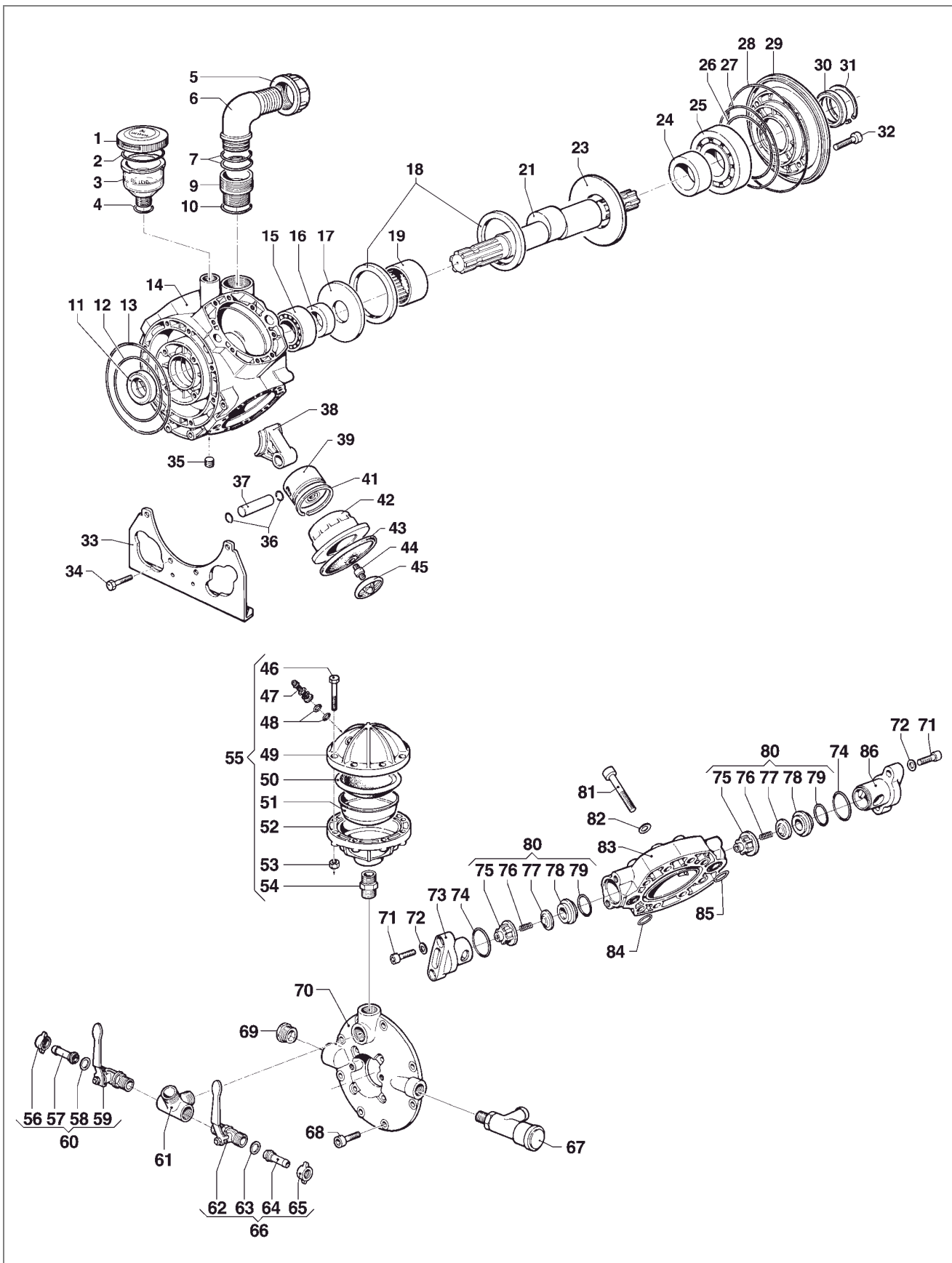
9821013.0





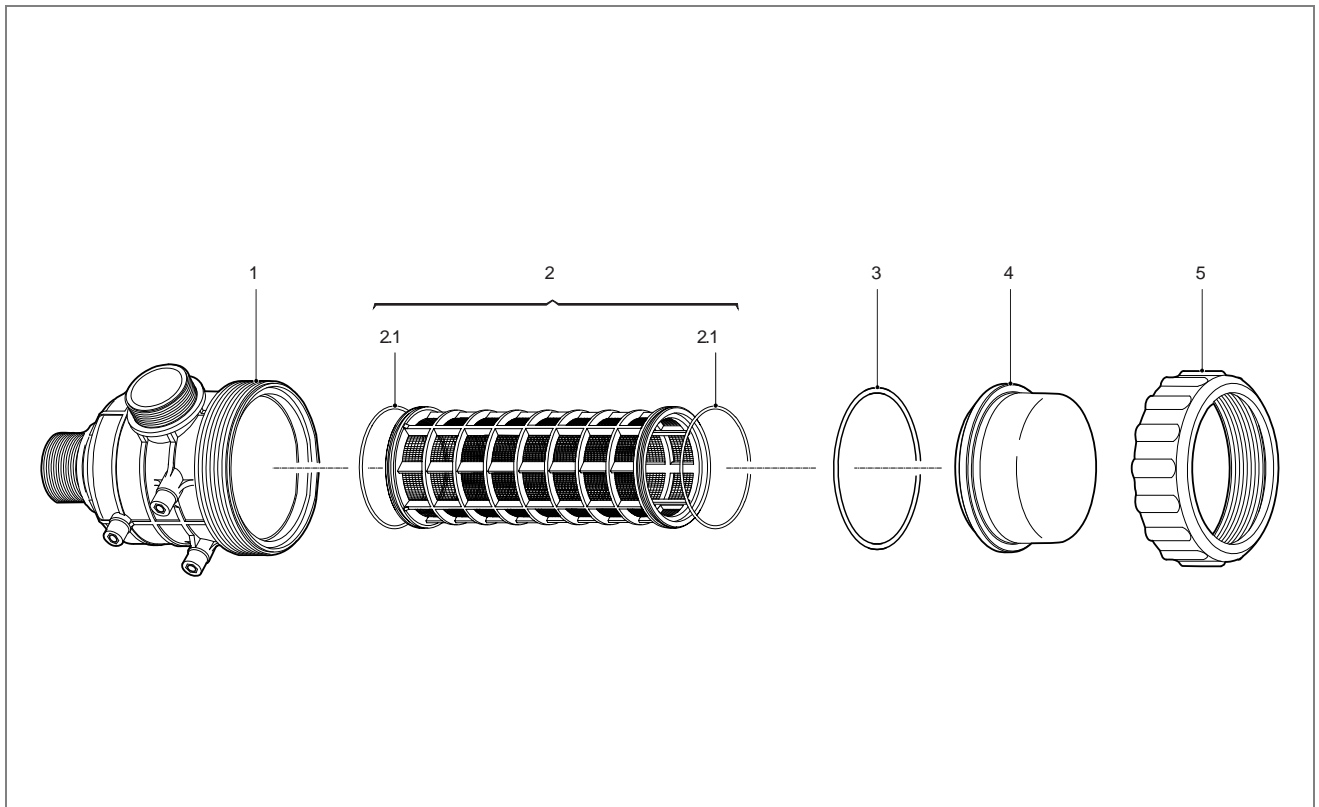
## DIAPHRAGM PUMP - COMET APS 145

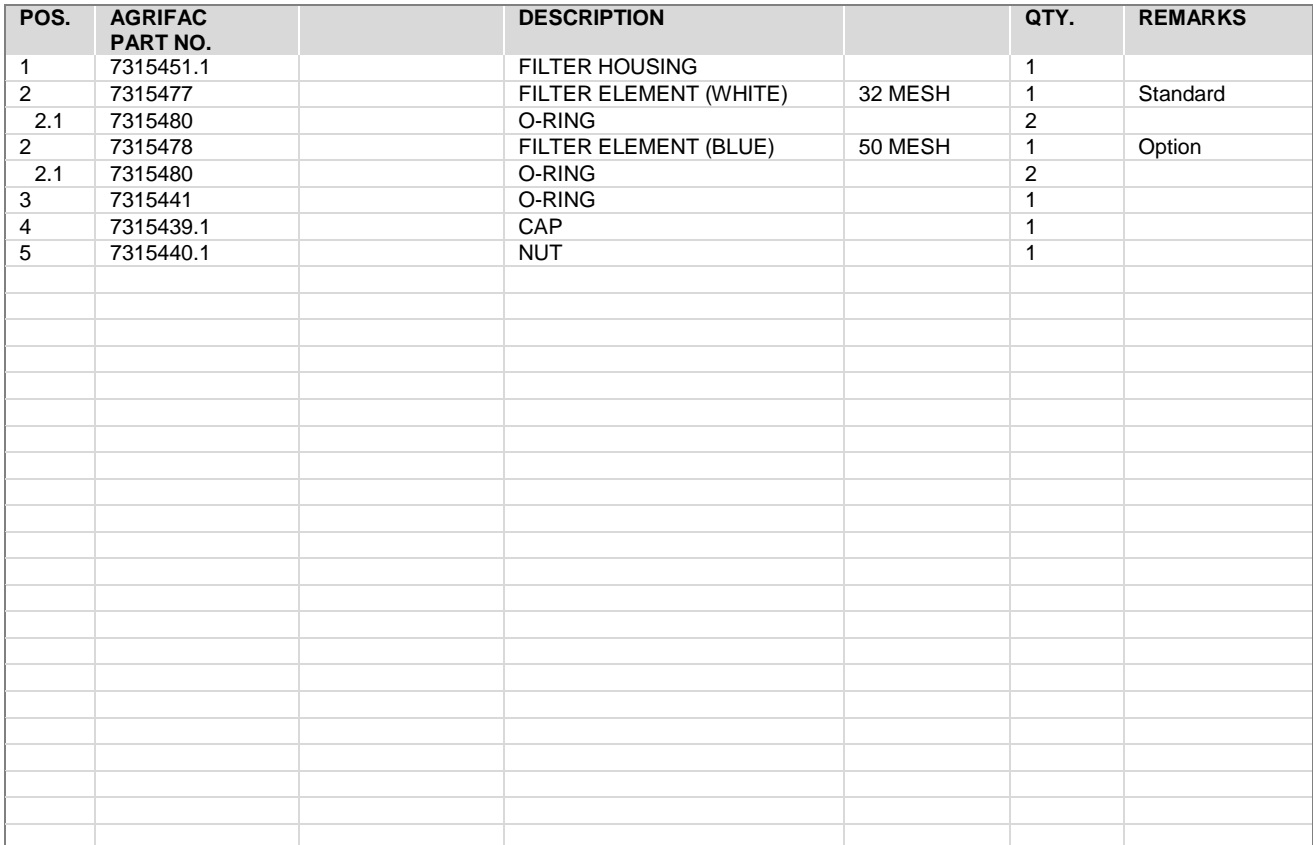
8200081



POS.	AGRIFAC PART NO.	ARAG PART NO.	DESCRIPTION		QTY.	REMARKS
1	8200005		CAP		1	
2	5220727		O-RING		1	
3	8200007		LEVEL GAUGE		1	
4	5220274		O-RING		1	
5	8200060		WING NUT		1	
6	8200061		FITTING		1	
7	7315880		O-RING		2	
8	-					
9	8200062		FITTING		1	
10	7227995		O-RING		1	
11	5200661		SEAL		1	
12	7230225		O-RING		1	
13	5221077		O-RING		1	
14	8201220		BODY		1	
15	-	0438 0078	BEARING		1	
16	-	0601 0264	BUSHING		1	
17	-	2813 0030	WASHER		1	
18	-	0010 0003	RING		2	
19	8200041		BEARING		1	
20	-					
21	-	0001 0409	SHAFT		1	
22	-					
23	-	2813 0070	WASHER		1	
24	-	0601 0279	BUSHING		1	
25	-	0438 0009	BEARING		1	
26	7230245.0.1		O-RING		1	
27	5221057		O-RING		1	
28	7230255		O-RING		1	
29	-	1009 0168	FLANGE		1	
30	5200858		SEAL		1	
31	-	3020 0007	CIRCLIP		1	
32	-	3609 0009	CAPSCREW		8	
33	-	2400 0084	SUPPORT		2	
34	-	3607 0220	BOLT		8	
35	-	3200 0019	PLUG		1	
36	8200035		CIRCLIP		8	
37	8200029		PIN		4	
38	8200063		SET OF 4 CONNECTING RODS		1	
39	8200064		PISTON		4	
40	-					
41	8200065		PISTON RING		4	
42	8200066		CYLINDER		4	
43	8200296		DIAPHRAGM "RUBBER" (STANDARD)		4	
44	8200067		STUD BOLT		4	
45	8200068		DISC		4	
46	-	3607 0025	BOLT		8	
47	8200076		AIR VALVE		1	
48	-	1209 0033	GASKET		2	
49	-	0003 0027	ACCUMULATOR		1	
50	8200052		DIAPHRAGM		1	
51	-	0460 0036	DIAPHRAGM SUPPORT CAP		1	Was 0460 0005
52	-	0002 0031	ACCUMULATOR		1	
53	-	0604 0015	NUT		8	
54	-	2000 0024	FITTING		1	
55	8200278		ACCUMULATOR - COMPLETE		1	
56	-	1200 0038	WING NUT		1	
57	-	2802 0020	HOSE TAIL		1	
58	-	1209 0013	GASKET		1	
59	-	2826 0031	VALVE		1	Was 2826 0006
60	-	1214 0017	VALVE - COMPLETE		1	
61	-	2803 0434	FITTING		1	
62	-	2826 0032	VALVE		1	Was 2826 0005
63	-	1209 0013	GASKET		1	
64	-	2802 0020	HOSE TAIL		1	
65	-	1200 0038	WING NUT		1	

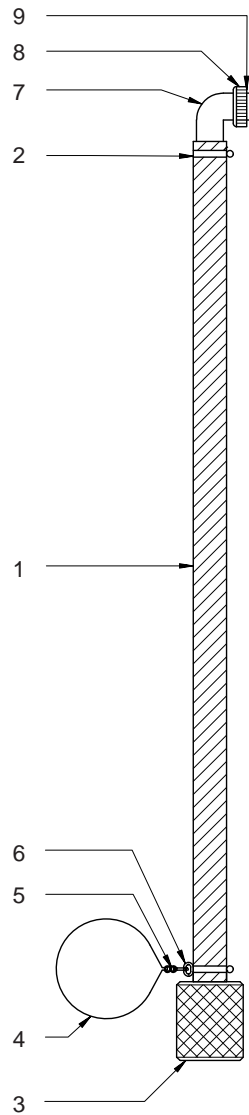


[illegible]



## SUCTION HOSE

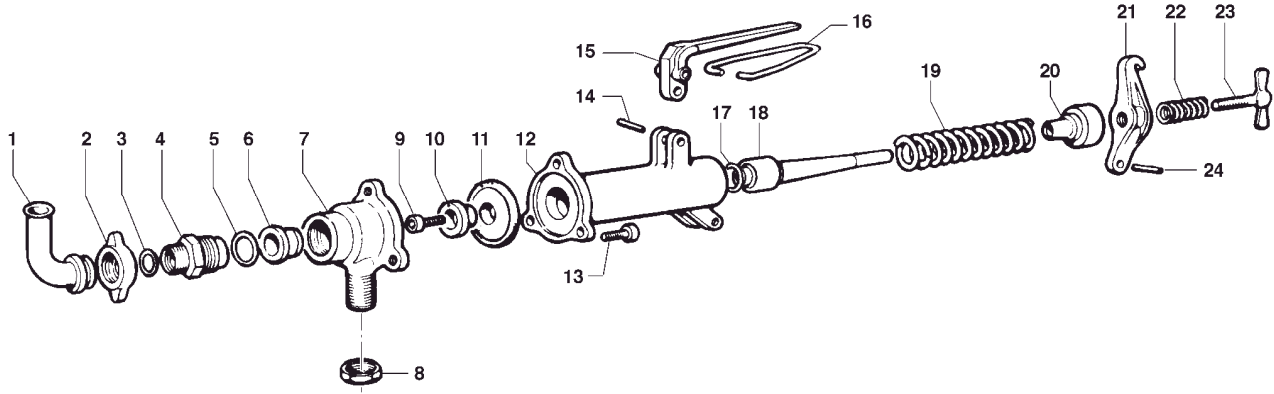
9821005.0



POS.	PART NO.	DESCRIPTION		QTY.	REMARKS
1	2212935	HOSE	L = 10 m	1	
2	4550935	HOSE CLAMP		2	
3	7315415	SUCTION BASKET		1	
4	7914725	FLOAT		1	
5	3290050	S-HOOK		1	
6	0910104	CHAIN		1	
7	7315094	HOSE TAIL		1	
8	7315226	NUT		1	
9	7315874	O-RING		2	

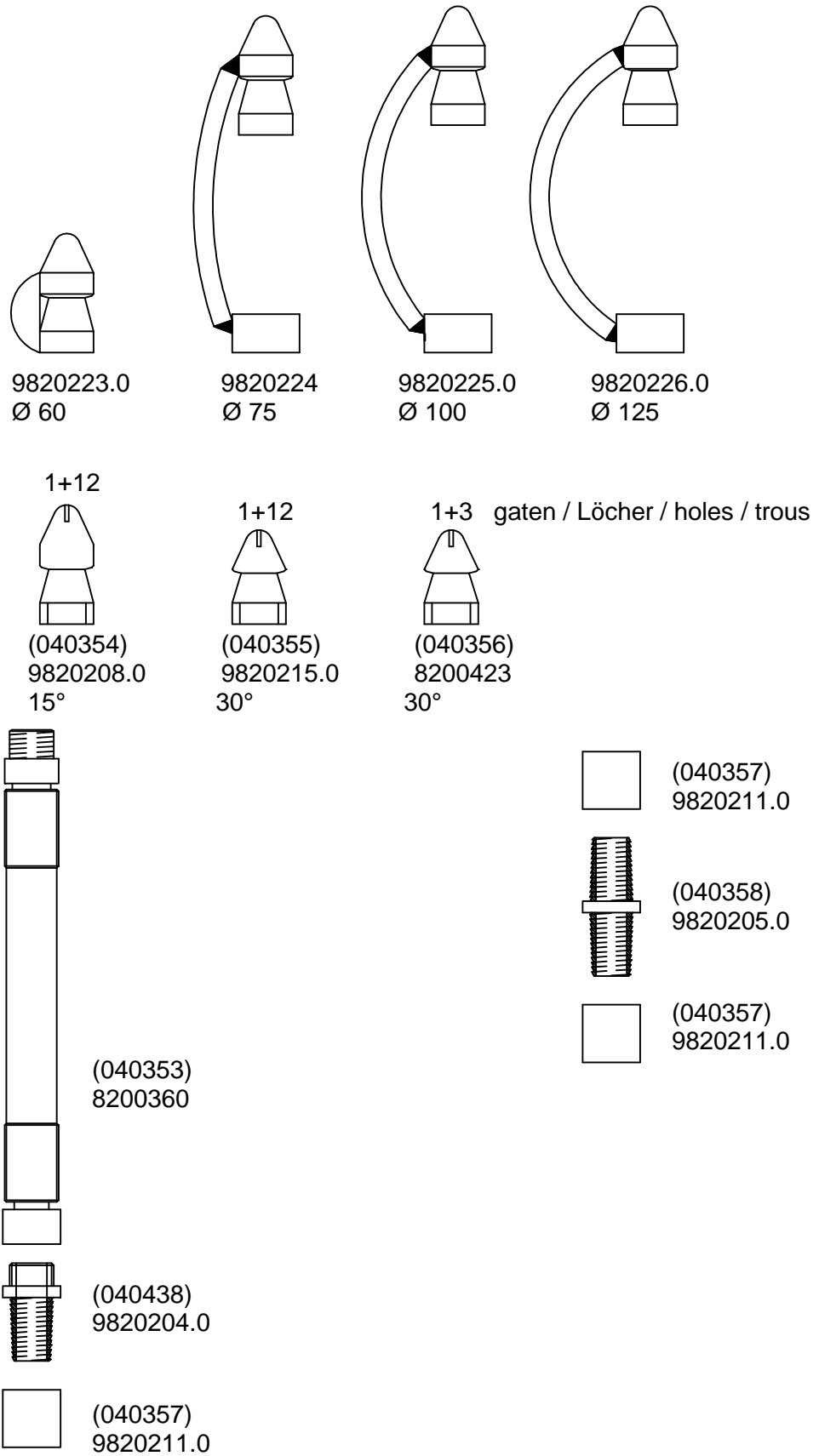
## PRESSURE REDUCER - COMET "VRS"

8200085



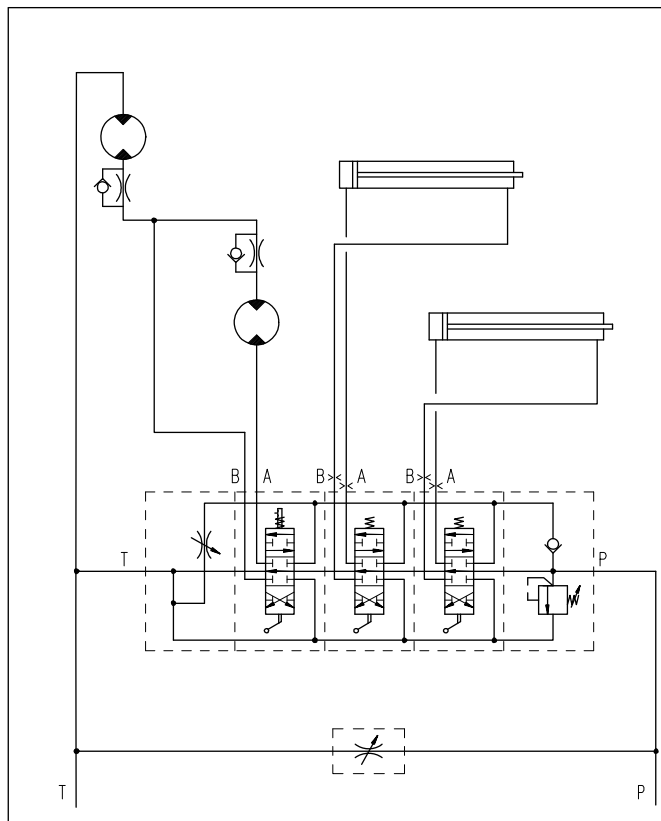
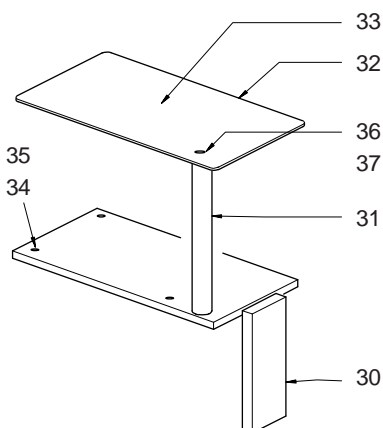
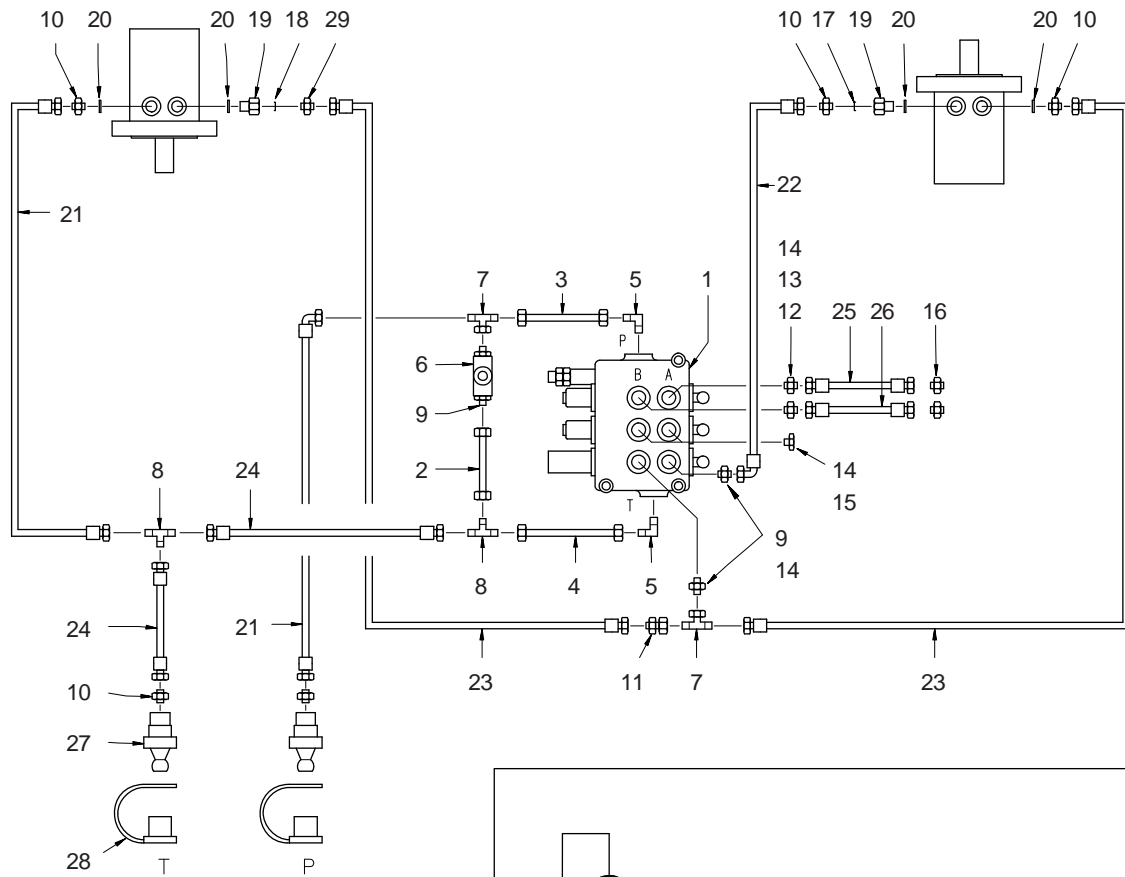
POS.	AGRIFAC PART NO.	COMET PART NO.	DESCRIPTION		QTY.	REMARKS
1	-	2800 0004	FITTING		1	
2	-	1200 0005	WING NUT		1	
3	5220274		O-RING		1	
4	-	2000 0012	FITTING		1	
5	5220367		O-RING		1	
6	8201230		VALVE SEAT		1	
7	8201229		VALVE BODY		1	
8	-	0604 0050	NUT		1	
9	3310614		CAPSCREW		1	
10	8201231		VALVE		1	
11	8201232		DIAPHRAGM		1	
12	-	0424 0077	VALVE BODY		1	
13	-	3609 0157	CAPSCREW		3	
14	-	3021 0011	PIN		1	
15	8201233		HANDLE		1	
16	8200229		CLIP		1	
17	5220367		O-RING		1	
18	8200299		VALVE ROD		1	
19	8201234		COMPRESSION SPRING		1	
20	-	0432 0022	SPRING CAP		1	
21	-	0208 0002	ARM		1	
22	8201235		COMPRESSION SPRING		1	
23	-	3605 0003	ADJUSTING SCREW		1	
24	-	3021 0011	PIN		1	

## CLEANER NOZZLES (OPTIONS)



## HYDRAULIC SYSTEM

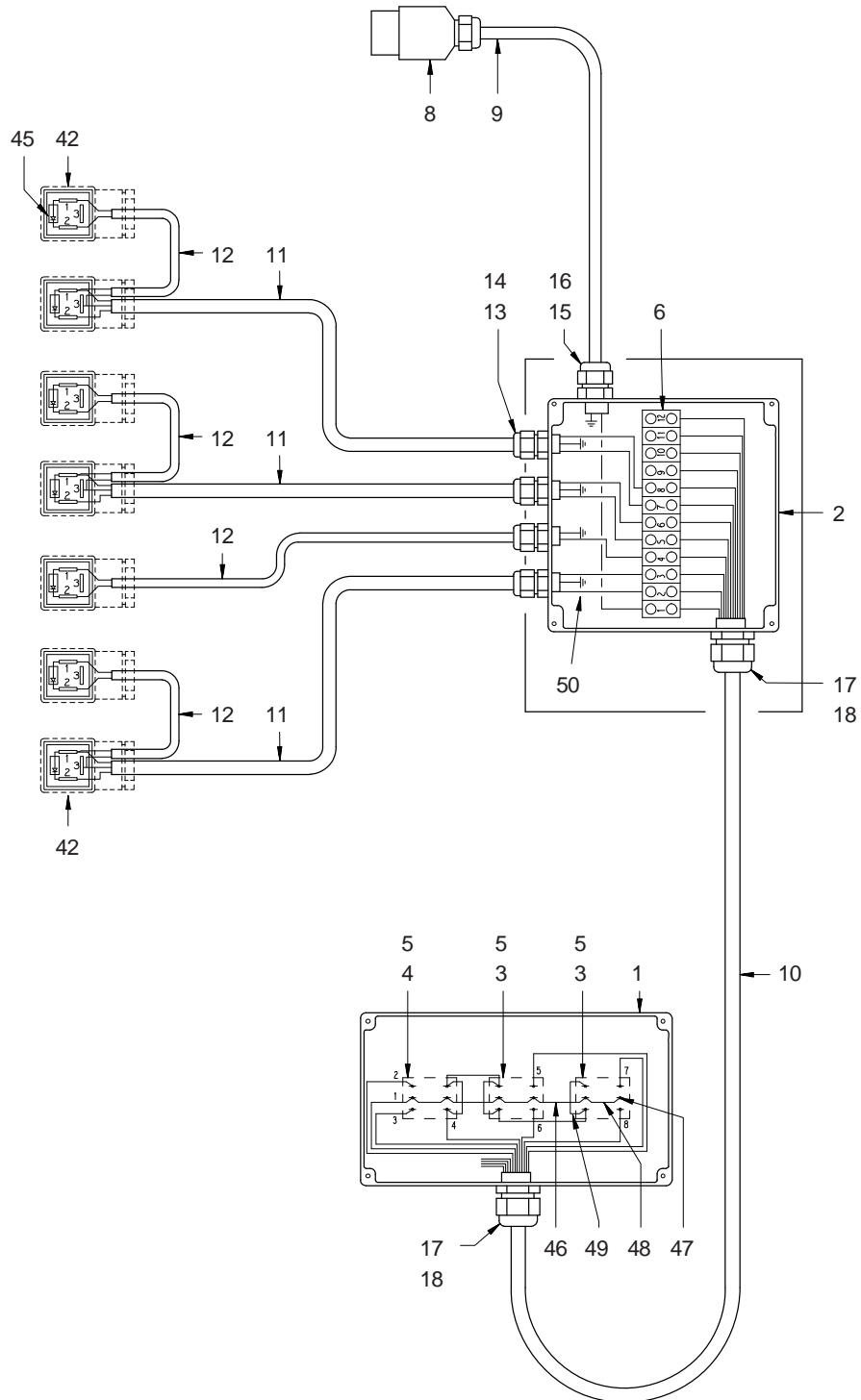
9821012.0







POS.	PART NO.	DESCRIPTION		QTY.	REMARKS
1	7784550	JUNCTION BOX		1	
2	7784600	JUNCTION BOX		1	
3	7779390 + 7779840	SWITCH 6-POLE (mono)		2	
4	7779410 + 7779840	SWITCH 3-POLE		1	
5	7714370	DIODE		7	
6	7742670	TERMINAL STRIP		1	
7	7740220	WIRE-END SLEEVE		40	
8	7774180	PLUG 7-POLE		1	
9	1960042	CABLE	L = 3,5 m	1	
10	1960036	CABLE	L = 10 m	1	
11	1960012	CABLE	L = 1,68 m	1	
12	1960010	CABLE	L = 1,4 m	1	
13	7788302	CABLE GLAND		4	
14	7788402	NUT		4	
15	7788305	CABLE GLAND		2	
16	7788405	NUT		2	
17	7788311	CABLE GLAND		2	
18	7788411	NUT		2	
19	7229005	SELECTOR BLOCK		1	
19.1	7229416.1	BY-PASS MANIFOLD WITH PRESSURE-RELIEF VALVE		1	
19.2	7229216.1	4/2 VALVE		1	
19.3	3311108	CAPSCREW		4	
19.4	7229110	PRESSURE-RELIEF VALVE		1	
19.5	7229389	PLUG - GREY		1	
20	7229008	MANIFOLD - TRIPLE		1	
20.1	7229406.1	MANIFOLD - TRIPLE		1	
20.2	7229311	NON-RETURN VALVE		3	
20.3	7229205.1	4/3 VALVE		3	
20.4	3311110	CAPSCREW		12	
20.5	7229388	PLUG - BLACK		3	
20.6	7229389	PLUG - GREY		3	
21	7320578	FITTING		2	
22	7321449	FITTING		2	
23	9820232.0	PLATE		1	
24	7320556	FITTING		4	
25	9987302.0	FITTING		4	
26	3360757	FLOW RESTRICTOR	M8x8 - 0,7 mm hole	4	
27	7320286	FITTING		4	
28	7320554	FITTING		2	
29	7321443	FITTING		2	
30	7390696	SPEED CONTROL VALVE		1	
31	3309560	SCREW		2	
32	3142050	SELF-LOCKING NUT		2	
33	3027536	BOLT		4	
34	3726080	LOCK WASHER		4	
35	0340138	HYDRAULIC TUBE		1	
36	7320062	CUTTING RING		2	
37	7321361	NUT		2	
38	7320246	FITTING		1	
39	7320267	FITTING		1	
40	7321442	FITTING		1	
41	7321438	FITTING		1	
51	-				
52	-				
53	-				
54	-				



POS.	PART NO.	DESCRIPTION		QTY.	REMARKS
1	7784550	JUNCTION BOX		1	
2	7784600	JUNCTION BOX		1	
3	7779390 + 7779840	SWITCH 6-POLE (mono)		2	
4	7779410 + 7779840	SWITCH 3-POLE		1	
5	7714370	DIODE		7	
6	7742670	TERMINAL STRIP		1	
7	7740220	WIRE-END SLEEVE		40	
8	7774180	PLUG 7-POLE		1	
9	1960042	CABLE	L = 3,5 m	1	
10	1960036	CABLE	L = 10 m	1	
11	1960012	CABLE	L = 1,68 m	1	
12	1960010	CABLE	L = 1,4 m	1	
13	7788302	CABLE GLAND		4	
14	7788402	NUT		4	
15	7788305	CABLE GLAND		2	
16	7788405	NUT		2	
17	7788311	CABLE GLAND		2	
18	7788411	NUT		2	
19	7229005	SELECTOR BLOCK		1	
19.1	7229416.1	BY-PASS MANIFOLD WITH PRESSURE-RELIEF VALVE		1	
19.2	7229216.1	4/2 VALVE		1	
19.3	3311108	CAPSCREW		4	
19.4	7229110	PRESSURE-RELIEF VALVE		1	
19.5	7229389	PLUG - GREY		1	
20	7229008	MANIFOLD - TRIPLE		1	
20.1	7229406.1	MANIFOLD - TRIPLE		1	
20.2	7229311	NON-RETURN VALVE		3	
20.3	7229205.1	4/3 VALVE		3	
20.4	3311110	CAPSCREW		12	
20.5	7229388	PLUG - BLACK		3	
20.6	7229389	PLUG - GREY		3	
21	7320578	FITTING		2	
22	7321449	FITTING		2	
23	9820232.0	PLATE		1	
24	7320556	FITTING		4	
25	9987302.0	FITTING		4	
26	3360757	FLOW RESTRICTOR	M8x8 - 0,7 mm hole	4	
27	7320286	FITTING		4	
28	7320554	FITTING		2	
29	7321443	FITTING		2	
30	7390696	SPEED CONTROL VALVE		1	
31	3309560	SCREW		2	
32	3142050	SELF-LOCKING NUT		2	
33	3027536	BOLT		4	
34	3726080	LOCK WASHER		4	
35	0340138	HYDRAULIC TUBE		1	
36	7320062	CUTTING RING		2	
37	7321361	NUT		2	
38	7320246	FITTING		1	
39	7320267	FITTING		1	
40	7321442	FITTING		1	
41	7321438	FITTING		1	
51	-				
52	-				
53	-				
54	-				

## INDEPENDENT HYDRAULIC PACK (OPTION)

9821011.0

