



**INSTRUCTIONS 206-A00 e**

Section	206
Effective	February 2023
Replaces	September 2018

Original instructions

# **HYDRIVE 2010A - 2020A**



**INSTALLATION  
OPERATION  
MAINTENANCE  
SAFETY  
STORAGE**

**EC CERTIFICATE OF CONFORMITY :**

The EC Certificate of Conformity (paper version) is systematically attached to the equipment when shipped.

**WARRANTY :**

Hydraulic coolers are covered 24 months by warranty within the limits mentioned in our General Sales Conditions. In case of a use other than that mentioned in the Instructions manual, and without preliminary agreement of MOUVEX, warranty will be canceled.



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# HYDRAULIC COOLERS

## SAFETY, STORAGE, INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS MODELS : HYDRIVE 2010A & 2020A

### Definition of safety symbols



This is a SAFETY ALERT SYMBOL.

When you see this symbol on the product, or in the manual, look for one of the following signal words and be alert to the potential for personal injury, death or major property damage.



Warns of hazards that **WILL** cause serious personal injury, death or major property damage.



Warns of hazards that **CAN** cause serious personal injury, death or major property damage.



Warns of hazards that **CAN** cause personal injury or property damage.

### NOTICE

Indicates special instructions which are very important and must be followed.

### NOTE :

The numbers after part names correspond to items in the spare parts lists.

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### NOTICE :

The HYDRIVE **MUST** only be installed in systems which have been designed by qualified engineering personnel. The system **MUST** conform to all applicable local and national regulations and safety standards.

This manual is intended to assist in the installation and operation of the HYDRIVE and **MUST** be kept with the HYDRIVE.

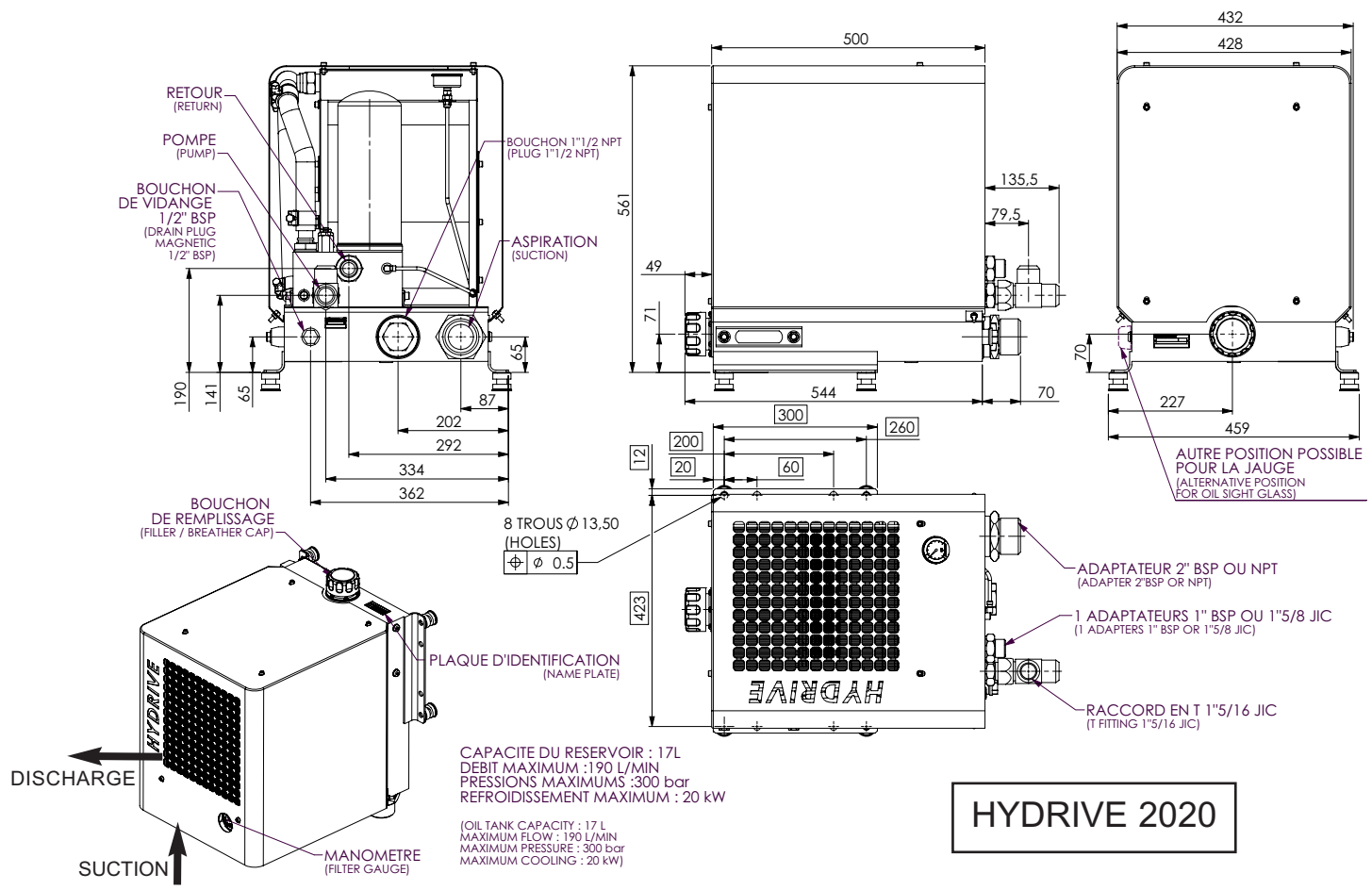
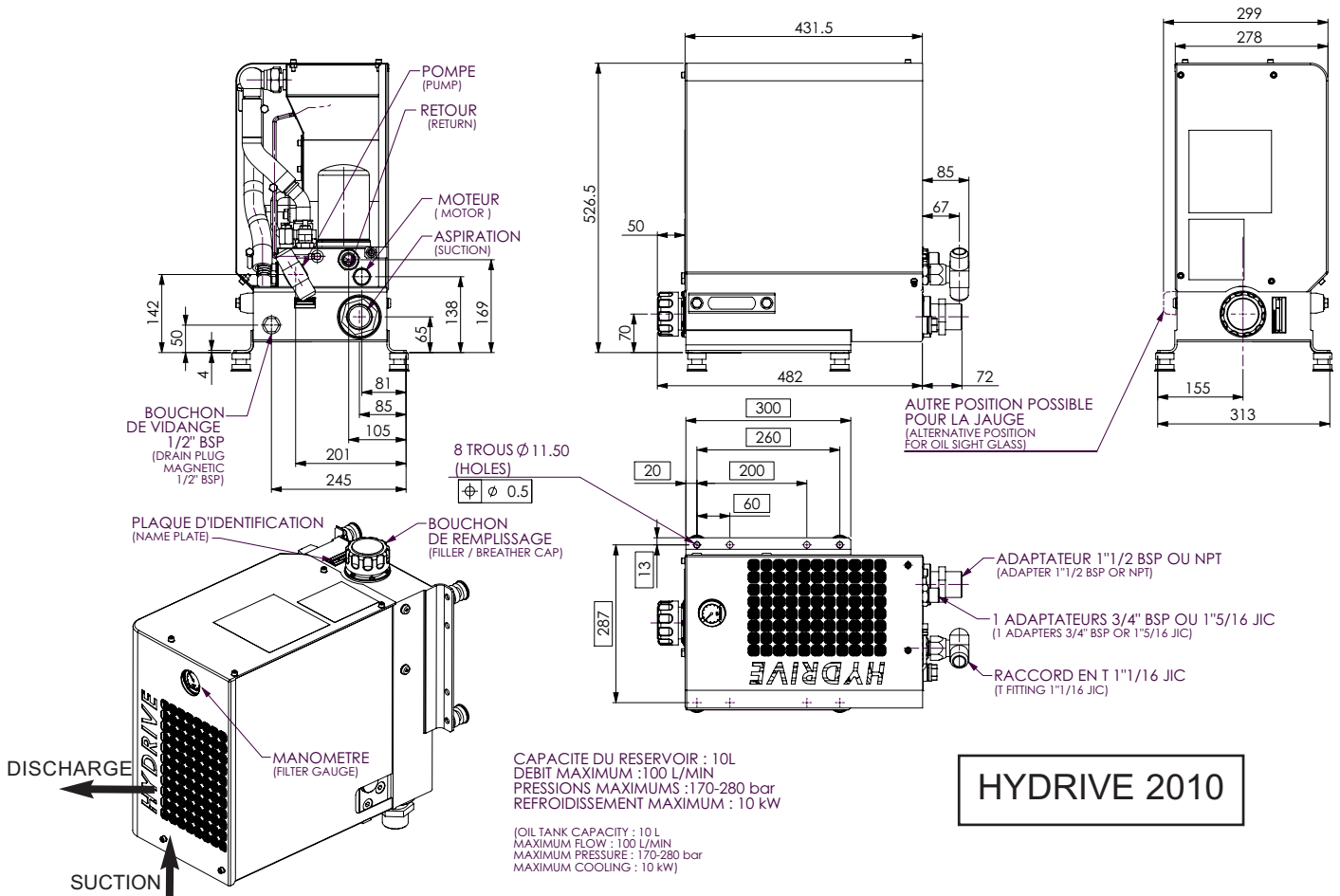
HYDRIVE service shall be performed by qualified technicians **ONLY**. Service shall conform to all applicable local and national regulations and safety standards.

Thoroughly review this manual, all instructions and hazard warnings, **BEFORE** performing any work on the HYDRIVE

Gloves shall be worn when handling sheet metal to avoid any risk of injury.

Maintain **ALL** system and HYDRIVE operation and hazard warning decals.

# 1. OVERALL DIMENSIONS



## 2. TECHNICAL DATA

<b>HYDRIVE 2010A</b>		
Oil Flow Rate	15 - 32 US GPM	55 - 120 l / min
Circuit pressure 2 possible versions : 170 bar 270 bar <b>Maximum pressure allowed</b>	RV set @ : 2465 PSI 3916 PSI 4061 PSI	RV set @ : 170 bar 270 bar 280 bar
Fan speed	2800 rpm	2800 rpm
Return pressure	15 - 75 PSI	1 - 5 bar
Heat Dissipation	13.5 HP for 70°F temperature rise	10 kw for 40 °C Temperature rise
Fan Motor Flow	1.5 U.S GPM	5.5 l / min
Weight (Dry)	68 lbs	31 kg
Oil Tank Capacity	2.5 US Gallons	10 liters

<b>HYDRIVE 2020A</b>			
Oil Flow Rate	2020 - 150 2020 - 200	15 - 40 US GPM 15 - 53 US GPM	55 - 150 l / min 55 - 200 l / min
Circuit pressure <b>Maximum pressure allowed</b>	RV set @ 3625 PSI 4061 PSI	RV set @ 250 bar 280 bar	
Fan speed	2800 rpm	2800 rpm	
Return pressure	15 - 75 PSI	1 - 5 bar	
Heat Dissipation	26 HP for 70°F temperature rise	20 kw for 40 °C Temperature rise	
Fan Motor Flow	2.2 U.S GPM	8.2 l / min	
Weight (Dry)	102 lbs	46 kg	
Oil Tank Capacity	4.5 US Gallons	17 liters	

## 3. INSTALLATION

### 3.1 Hydraulic circuits

Figure 1 shows the hydraulic circuit for a single motor drive system. If driving a motor in both directions, install a directional control valve in the circuit as shown.

The HYDRIVE is NOT suitable for use for systems using tipping rams (hydraulic cylinders).

#### NOTE

Use bulkhead fittings to prevent any overstressing of the hoses and connections between the tractor and trailer.

#### NOTICE :

The HYDRIVE must only be installed in systems designed by qualified engineering personnel. System design must conform with all applicable regulations and codes and must provide warning of all system hazards.

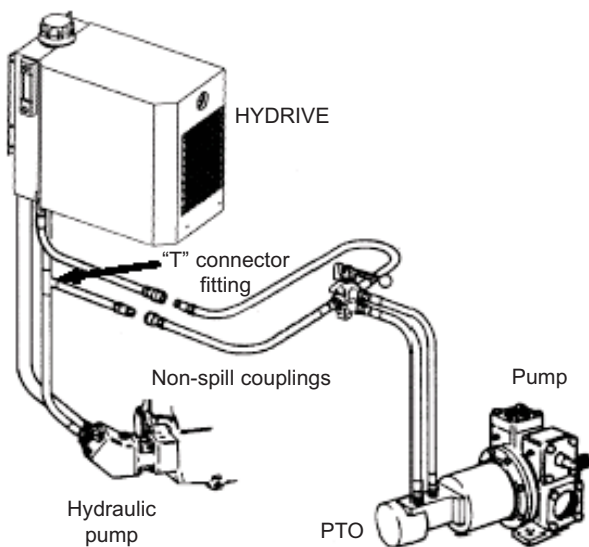
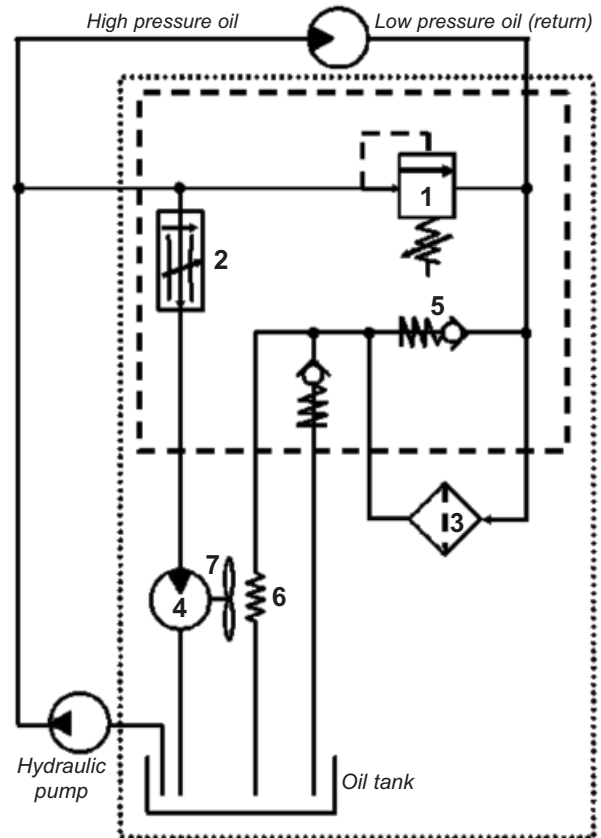


Figure 1  
System layout

Use a remote ON/OFF valve on hydraulic systems.

### HYDRIVE 2010A & 2020A HYDRAULIC CIRCUIT



1. Adjustable relief valve
2. Fan speed control valve
3. Return line filter
4. Fan motor
5. Filter by-pass valve
6. Oil cooler radiator
7. Fan

#### NOTES

The driven machine, pump or compressor, will start automatically when the hydraulic pump is engaged unless a remote ON/OFF control valve is installed in the system.

A cold start bypass protects the cooler and quickly warms the oil to its normal working temperature.

### 3. INSTALLATION (continued)

#### 3.2 Mounting

1. Position the HYDRIVE so that the filler plug and the gauge are accessible, and that the front of the radiator (where the air exits) is not obstructed.

**NOTE :**

**For easy installation, the gauge can be mounted on either side of the tank.**

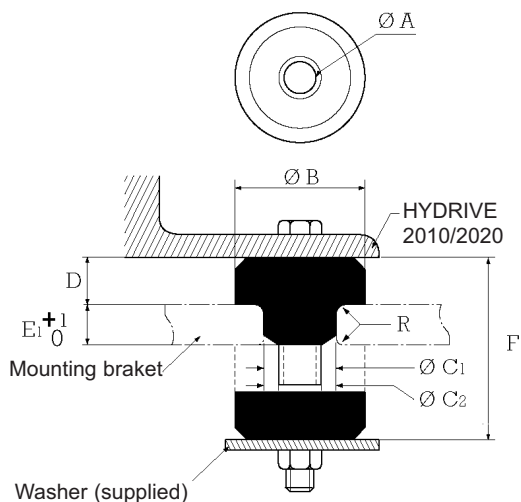
2. The HYDRIVE must be mounted using at least four of the eight mounting holes and the anti-vibration pads supplied. The minimum distance between attachment points must be 7 inches (180 mm).

Do not put any strain on the tank fabrication or distort the mounting lugs.

To help reduce the vibration and stress between the truck frame and HYDRIVE, users may install additional mounting brackets to offset the HYDRIVE from the frame rail and adapt the anti-vibration pads supplied. The brackets are application specific and must be made by the installer when needed.



The HYDRIVE must be mounted as high above the hydraulic pump as possible to avoid hydraulic pump cavitation.



- C1 : Metallic bore Ø
- C2 : Dampener Ø
- F : Free height
- R : Necessary radii on angles

Using the supplied washers contributes to the vibration protect.



	Ø A mm	Ø B mm	Ø C1 mm	Ø C2 mm	D mm	E1 mm	F mm	R mm	Weight g
2010	10,4	33,2	19	20,1	12,3	9,5	31,7	1	43
2020	13,5	47,7	31,7	33	19,8	14	49,2	1,5	142

3. Mount the HYDRIVE in a position away from the wheels and road spray to protect the radiator from impact damage from road debris, stones, loose hoses, etc. (see Figure 2).
4. Allow provisions and space to install test equipment in the discharge line of the HYDRIVE (see Figure 3-4).

	<b>WARNING</b>
	<p><b>FAILURE TO SET THE VEHICLE EMERGENCY BRAKE AND CHOCK WHEELS BEFORE PERFORMING SERVICE CAN CAUSE SEVERE PERSONAL INJURY OR PROPERTY DAMAGE.</b></p>
<p><b>Hazardous machinery can cause severe personal injury or property damage.</b></p>	

### 3. INSTALLATION (continued)

#### 3.2.1 CONNECTING

1. Connect the suction hose from the hydraulic block port marked "Pump" to the inlet of the hydraulic pump via bulkhead fittings. The suction hose must be a steel wire reinforced, vacuum rated, suction hose. See board below.

Do not put any strain on the tank fittings. The suction hose must be as short as possible, without any tight bends or kinks. The hose must also be free of air leaks.

To minimize the possibility of cavitation, use the following hose size guidelines :



Hose bore size	Maximum recommended flow	
	GPM	l/min
60 mm (2" ¼)	26	100
65 mm (2" ½)	40	150
80 mm (3")	53	200

#### NOTE

**Hose length must follow hose manufactures recommendations.**

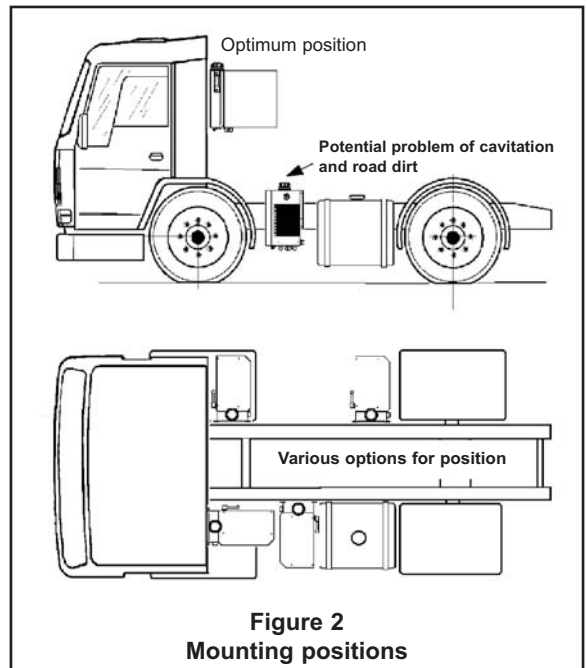
2. Pressure and return hoses must be connected using pressure (swaged) type fittings, installed to the hose manufactures recommendations.
3. All seals must be made using bonded washers, O-ring or coned fittings.

MOUVEX does not recommend the use of PTFE tape or liquid sealant, as these may contaminate the hydraulic oil or plug the system.

 <b>WARNING</b>	<b>SYSTEM FITTINGS AND HOSES MUST BE CAPABLE OF WITHSTANDING OPERATING PRESSURES.</b>
	
<b>Hazardous pressure can cause personal injury or property damage.</b>	

4. Some hydraulic pumps and motors require a case drain to return to the HYDRIVE tank. For these applications, remove the tank drain plug 9 and connect the drain line to ½" BSP female connection (Figure 3-4, Item 4).
5. Connect a high pressure hose from outlet of the hydraulic pump to the inlet of the hydraulic motor. Insert a "T" connector into this line and connect to the fitting on the control block marked "MOTOR" (see Figure 1).

6. Connect the low pressure return hose from the driven motor to the fitting on the control block marked "RETURN". The return hose must be rated for minimum 300 PSI (20 bar) working pressure.





**Figure 2**  
**Mounting positions**

7. On tractor/truck and semi-trailer mounted applications, hoses/piping to the hydraulic motor must be connected by quick release (non-spill) couplings. To reduce back-pressure on the motor, one size larger couplings than the return line must be used.

#### NOTICE

**QUICK RELEASE COUPLINGS MUST BE PROTECTED FROM CONTAMINATION AND DAMAGE AND BE PROPERLY CLEANED BEFORE RE-CONNECTION.**

 <b>WARNING</b>	<b>QUICK RELEASE COUPLINGS MUST BE FULLY CONNECTED. FAILURE TO DO SO CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.</b>
	
<b>Hazardous pressure can cause personal injury or property damage.</b>	



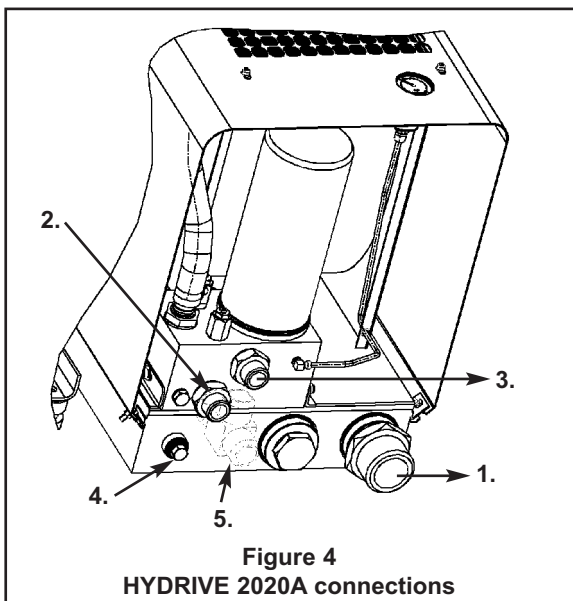
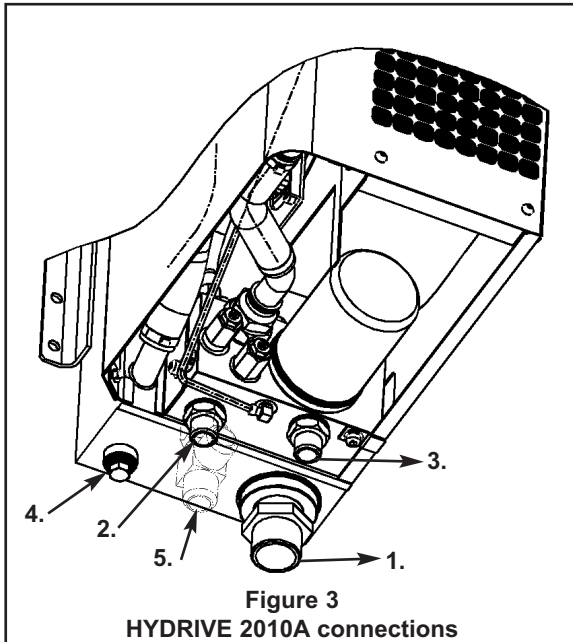
### 3. INSTALLATION (continued)

#### Hydrive connections

	Hydrive 2010	Hydrive 2020
1. Pump inlet	<i>1" 1/2 NPT</i> 1" 1/2 BSP	<i>2" NPT</i> 2" BSP
2. Pump return	<i>1" 1/16 - JIC</i> 3/4" BSP	<i>1" 5/16 - JIC</i> 1" BSP
3. Motor return	<i>1" 5/16 - JIC</i> 3/4" BSP	<i>1" 5/8 - JIC</i> 1" BSP
4. Drain	1/2" BSP	
5. T-junction *	<i>1" 1/16 - JIC</i>	<i>1" 5/8 - JIC</i>

*The characters in italics denote connections supplied with Hydrive for North America.*

\* T junctions are offered on NPT HYDRIVE.



#### 3.3 Hydraulic oil

The System must be filled with one of the following anti-foaming hydraulic oils, or an equivalent oil :

	Normal ambient temperature*	
	-9°C to 26°C 15°F to 80°F	26°C and more 80°F and more
BP	ENERGOL HP32	ENERGOL HP46
SHELL	TELLUS 32	TELLUS 46
CASTROL	HYSPIN AWS 32	HYSPIN AWS 46
KENDALL	AW32	
ESSO	NUTO - H 32	NUTO - H 46
TOTAL	AZZOLLA 32	AZZOLLA 46

\* For colder temperatures use KENDAL GLACIAL BLUE, HYD-RELF XV32 or equivalent hydraulic oil of polar quality.

Before filling the tank with hydraulic oil, all hoses and fittings as well as the tank must be rinsed with hydraulic oil according to the following procedure :



1. Fill the oil reservoir with suitable hydraulic oil (see examples above).
2. Disconnect return hose at the control hydraulic block and provide a suitable container to collect waste hydraulic oil. Properly dispose of waste hydraulic oil.
3. Thoroughly flush the entire system, refilling the reservoir as necessary, until free of all contamination.
4. Reconnect the return hose.

**NOTICE**  
**DO NOT ALLOW DEBRIS TO ENTER THE HYDRAULIC SYSTEM DURING INSTALLATION OR SERIOUS DAMAGE TO SYSTEM COMPONENTS MAY OCCUR.**



## 3. INSTALLATION (continued)

### 3.4 Priming the system

 <b>WARNING</b>	<b>SET THE VEHICLE EMERGENCY BRAKE BEFORE ENGAGING THE PTO.</b>
	
<b>Hazardous machinery can cause severe personal injury or property damage.</b>	

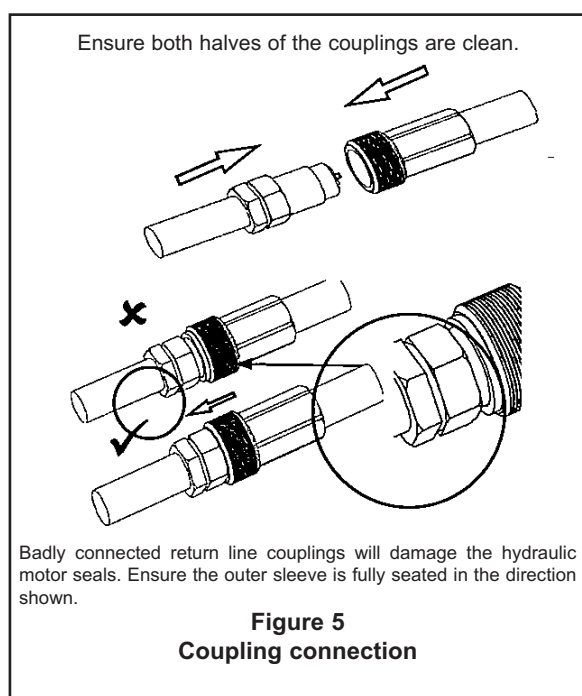
#### BEFORE engaging the PTO follow these steps :

1. Fill the tank with the recommended hydraulic oil, until the oil reaches the **YELLOW** mark of the gauge.
2. Non-spill (dry-break) couplings must be fully connected. Failure to do so can damage the hydraulic motor seals.
3. Have a container of suitable hydraulic oil available to refill the reservoir as necessary. **DO NOT OVERFILL.**

#### NOTE

Do not fill the reservoir while the hydraulic system is running. The level drops during operation and returns to the full level when not in operation.

4. Make sure the driven cargo pump (or compressor) is vented and cannot develop pressure.



#### NOTICE

**THE FOLLOWING SYSTEM PRIMING INSTRUCTIONS MUST BE FOLLOWED TO AVOID ENTRAPPING AIR.**

1. Depress the clutch and engage the PTO. Release the clutch slowly. After approximately 2 seconds depress the clutch and disengage the PTO.
2. To insure that all system components, hoses and fittings are completely filled with hydraulic oil, crack the return connection 3 at the hydraulic block allowing any trapped air to escape.
3. During the priming procedure, insure that the hydraulic oil does not drop below the **RED** mark of the gauge.
4. Operate any system selector valves and directional control valves to insure that all hoses and fittings are free of air.
5. Repeat steps 1 through 4 until system is fully primed.
6. Secure the hydraulic block return connection 3.

### 3.5 Engaging hydraulic motor

1. Move the system **ON/OFF** control valve and any directional valves to the correct position for running the hydraulic motor.
2. Increase tractor engine rpm to the required operating speed.

#### NOTICE

**DO NOT OVERSPEED THE TRACTOR ENGINE, AS THIS WILL CAUSE SERIOUS DAMAGE TO SYSTEM COMPONENTS.**



3. Inspect the hydraulic system for leaks. If any leaks are present, shut down the system immediately and repair as necessary. Return to the § PRIMING THE SYSTEM.
4. Following the procedure provided in the § SETTING FAN SPEED, check the fan to verify the factory setting.
5. Using an optical tachometer, check the speed of the driven unit. On engine-driven pump arrangements, insure the engine speed is governed to prevent overspeeding of the driven unit(s).

#### NOTICE

**THE HYDRIVE MUST BE FREE OF VIBRATION, HYDRAULIC OR MECHANICAL, WHEN IN OPERATION, OR SERIOUS DAMAGE TO THE COMPONENT PARTS WILL OCCUR.**

## 3. INSTALLATION (continued)

### 3.6 Adjusting the relief valve

 <b>WARNING</b>	<b>INCORRECT SETTINGS OF THE PRESSURE RELIEF VALVE CAN CAUSE SYSTEM COMPONENT FAILURE, PERSONAL INJURY, AND PROPERTY DAMAGE.</b>
	
<b>Hazardous pressure can cause personal injury or property damage.</b>	

The HYDRIVE is equipped with a pressure relief valve that is factory set, the pressure value is stamped on the plate (see § TECHNICAL DATA).

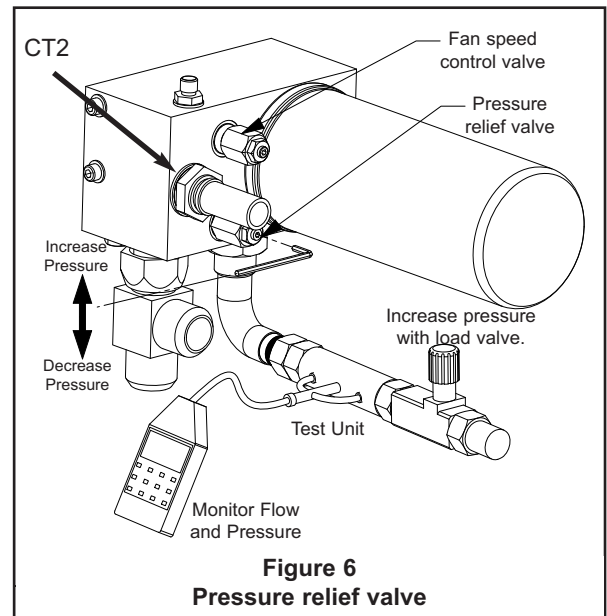


These settings are suitable for the majority of applications. Insure that the HYDRIVE setting is functional with all ancillary equipment. **DO NOT** exceed lowest system component pressure rating or those of the hydraulic cooler. **ALWAYS** use an appropriately sized, calibrated pressure gauge when adjusting the pressure relief valve. The equipment required includes: 17 mm wrench and 5 mm hex socket key.

1. Install test equipment in the high pressure line per the manufacturers recommendations.

#### NOTE

The use of quick connect fittings in the hydraulic motor line allows easier installation of test equipment.



**Figure 6**  
**Pressure relief valve**



2. With the system operating, and the driven unit(s) under no load, loosen the pressure relief valve lock-nut by turning it counter-clockwise, then turn the adjusting screw one full turn clockwise.
3. Increase system pressure by turning the tester load valve clockwise until a pressure of 10% ABOVE the system operating pressure is obtained.
4. Turn the pressure relief screw counter-clockwise until a decrease in pressure is seen on the tester. Note the pressure at this point.
5. Tighten the pressure relief valve lock-nut, rechecking the pressure on the tester has not exceeded the pressure in step 4. If the pressure has changed, repeat steps 2 through 4 until the desired pressure has been obtained.
6. Turn OFF the system, bleed OFF all pressure, and remove the test equipment. Reinstall the highpressure line.
7. Following steps 1 through 6 in the § PRIMING THE SYSTEM, refill and remove any trapped air.

#### NOTE

**If the HYDRIVE pressure relief valve is set above the recommended 2500 PSI (170 bar) follow steps 1 through 4 of § SETTING FAN SPEED.**

## 3. INSTALLATION (continued)

### 3.7 Setting fan speed

	<b>DANGER</b>
	<p>FAN SPEEDS ABOVE 3000 RPM WILL CAUSE SERIOUS PERSONAL INJURY, DEATH OR MAJOR PROPERTY DAMAGE.</p>
<p>Hazardous machinery can cause severe personal injury, death or property damage.</p>	

The fan speed is factory set to 2800 rpm.

#### NOTE

The fan will not reach rated speeds without adequate system pressure.

Fan speed may be adjusted to control the HYDRIVE operating temperature.

The equipment required includes :

- optical tachometer,
- 4 mm allen key
- 13 mm wrench.

#### NOTICE

System components **MUST** be operating at full load to properly set the fan speed.

#### NOTE

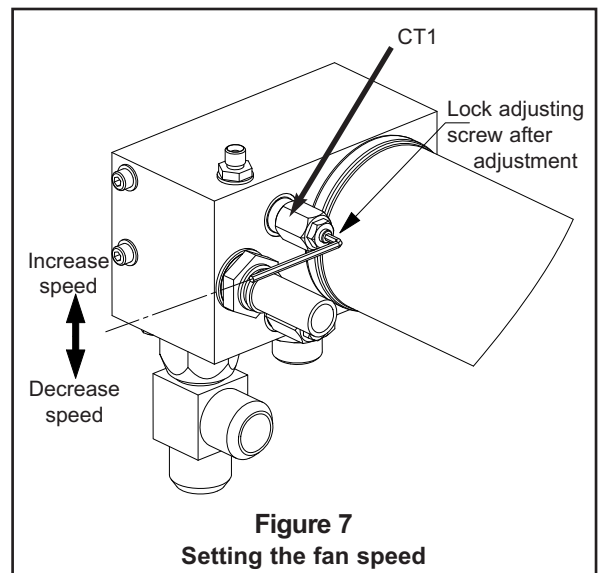
A minimum 725 PSI (50 bar) is required to operate the fan. MOUVEX recommends the fan speed remain at the factory setting of 2,800 rpm.



1. Operate hydraulic system at full load to properly set fan speed.

#### NOTE

Creating an artificial load of the factory relief valve setting, is the best way to set the fan speed. Refer to the § ADJUSTING THE RELIEF VALVE.

2. Loosen the fan speed lock-nut by turning counterclockwise.
3. While constantly checking the fan speed with an optical tachometer, decrease the fan speed by turning the adjusting screw counterclockwise. Increase the fan speed by turning clockwise.
4. When desired fan speed is obtained, tighten the lock-nut by turning it clockwise.
5. Unload system so that the fan speed slows or stops.
6. Reload the system and recheck the fan speed. Readjust if necessary.





	<b>DANGER</b>
	<p>INSERTING ANY OBJECT INTO FAN DURING OPERATION WILL CAUSE SERIOUS PERSONAL INJURY, DEATH OR MAJOR PROPERTY DAMAGE.</p>
<p>Hazardous machinery can cause severe personal injury, death or property damage.</p>	



## 4. OPERATION

### 4.1 Pre-start up check list

1. Check the reservoir to make sure it is full of clean, uncontaminated oil, and that the level is no lower than the RED mark on the gauge.

	<b>WARNING</b>
	<b>QUICK RELEASE COUPLINGS MUST BE FULLY CONNECTED. FAILURE TO DO SO CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.</b>
<b>Hazardous pressure can cause personal injury or property damage.</b>	

2. Check the radiator 44 for obstructions and dirt. Clean as necessary.

	<b>WARNING</b>
	<b>FAILURE TO SET THE VEHICLE EMERGENCY BRAKE AND CHOCK WHEELS BEFORE PERFORMING SERVICE CAN CAUSE SEVERE PERSONAL INJURY OR PROPERTY DAMAGE.</b>
<b>Hazardous machinery can cause severe personal injury or property damage.</b>	

### 4.2 Operation

1. Set the tractor speed to idle RPM, depress the clutch and engage the PTO. Release the clutch SLOWLY.
2. Set the tractor RPM to the required speed to obtain desired system operation. DO NOT overspeed the MOUVEX pump or compressor.
3. Inspect system for hydraulic oil leaks and for fan operation. If leaks or incorrect fan operation are observed, shut down the system immediately. Repair as necessary.
4. When system operation has been stabilized, check the operating temperature located on the tank oil gauge. Maximum recommended operating temperature for the HYDRIVE is 180°F (82°C).
5. The operator should remain nearby the equipment through-out the use to ensure the proper functioning of the system.

## 5. MAINTENANCE

### NOTICE

HYDRIVE SERVICE SHALL BE PERFORMED BY QUALIFIED TECHNICIANS ONLY. SERVICE SHALL CONFORM TO ALL APPLICABLE LOCAL AND NATIONAL REGULATIONS AND SAFETY STANDARDS.

Before any work is performed on the HYDRIVE, remove the cover and thoroughly clean the unit to remove all traces of dirt. Do not allow water vapor to enter the hydraulic system during the cleaning process.

### 5.1 Maintenance schedule

#### After the first 10 hours of operation

1. Inspect hydraulic system for hydraulic oil leaks. If leaks are observed, shut down system immediately and repair as necessary.
2. Replace the return filter 19.
3. Inspect all mounting bolts, fittings and hoses. Tighten and replace as necessary.
4. Check the fan speed and relief valve setting. Adjust as required, following the instructions in the § SETTING FAN SPEED and ADJUSTING THE RELIEF VALVE.

#### Every 3 months

1. Follow the sections 1, 3 and 4 provided in the "After 10 hours of operation" section.
2. When the HYDRIVE hydraulic oil is cold, the oil restriction gauge 20 may read in the RED area of the gauge. After the HYDRIVE warms to operating temperature, the oil restriction gauge MUST return to the GREEN level. If the reading fails to return to the GREEN level the return filter 19 MUST be replaced.
3. Inspect the radiator 44 and fan 31 for damage. Carefully clean with air or steam. DO NOT remove the fan blade balancing clips.

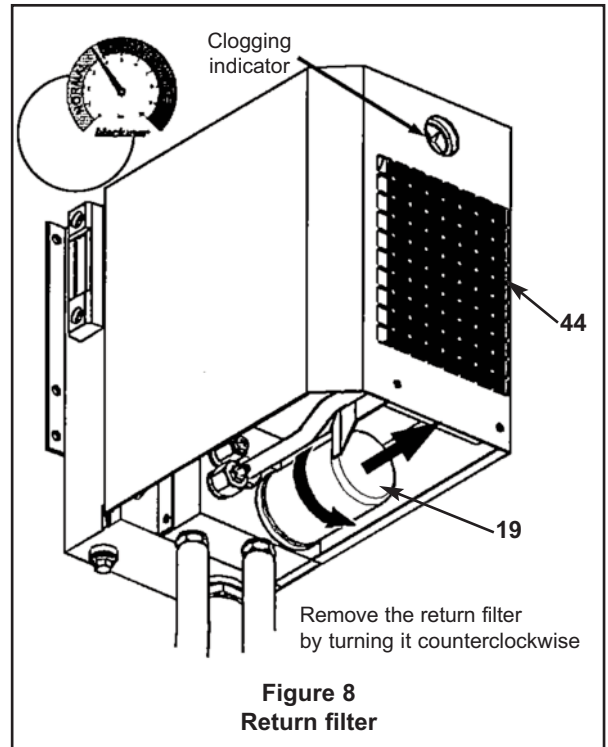
#### Every 12 months

1. Follow ALL instructions provided in "Every 3 Months" section.
2. Replace hydraulic oil following the instructions in the § HYDRAULIC OIL and PRIMING THE SYSTEM.

### 5.2 Return filter replacement

Check the return filter 19 at least every 3 months and replaced at least every 12 months.

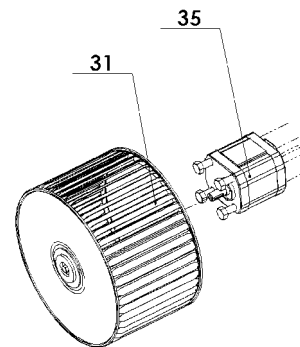
1. Remove filter by turning it counter-clockwise. If necessary use a filter wrench to remove canister. Properly dispose of the old filter element.
2. Install new filter element 19. DO NOT overtighten filter canister.
3. Refill the resevoir following the instructions in the § HYDRAULIC OIL and PRIMING THE SYSTEM.



### 5.3 Fan replacement

The new fan 31 must be fitted on the hydraulic shaft 35 without forcing :

- Remove any burrs.
- Apply some grease.
- After tightening, check that it rotates perfectly round and doesn't touch the structure.



## 6. TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTIVE ACTION
<b>Aeration of the oil (oil goes milky)</b>	Insufficient oil getting to the pump. Air entering the system. Water entering the system.	See "Cavitation". See "Air Entering the System". Tighten up all hose connections. Inspect suction pipe for splits. Replace as required.
<b>Air entering the system</b>	Low oil level in the tank. Leaks in suction hose or fittings.	Fill reservoir and re-prime. Tighten up all hose connections. Inspect suction pipe for splits. Replace as required.
<b>Cavitation</b>	Suction line too small. Suction line too long. Pump is higher than tank.  Suction line has too many restrictions or elbows. Pump speed is too high.	Use large bore pipe. Move Hydrive closer to pump. Re-position Hydrive to ensure there is a positive head pressure at the pump inlet. Re-route pipe, and keep number of fittings to a minimum. Reduce pump speed or select smaller displacement pump.
<b>Distorted / Cracked tank</b>	Tank under strain from piping. Mounting surface is not flat. Tank damaged by mishandling. Vibration.	Install bulkhead fittings. Use shims (if necessary), to ensure a flat mounting surface. Do not step on Hydrive or use to carry extra weight. See "Vibration".
<b>High/excessive circuit pressure</b>	Incorrect hydraulic pump selection. Driven unit requires higher torque.	Re-check hydraulic calculations. Check driven unit for seizure or blocked lines.
<b>High/excessive oil temperature</b>	Insufficient fan speed. Radiator blocked. Relief valve opening. Cold start bypass opened.	Check fan speed. Adjust if required. Clean radiator. See "Relief valve problems". Clean cold start bypass.
<b>Motor seals damaged or leaking</b>	Seals worn. Drain line not connected. Excessive return line pressure. High oil temperature.	Repair or replace. Install case drain and replace motor seals. See "Return line pressure too high". See "Excessive oil temperature".
<b>Motor not turning at correct speed</b>	Relief valve opening. Pump or motor damaged. Driven unit seized or blocked. System design.	See "Relief valve problems". Overhaul unit. See manual for driven unit. Re-check hydraulic calculations.
<b>Pump leaks</b>	Seals worn. Excessive circuit pressure.	Repair or replace. See "Excessive circuit pressure".
<b>Radiator burst</b>	Return pressure too high.	See "Return pressure too high".
<b>Return pressure too high</b>	Return line too small. Return line too long. Excessive flow. Blocked return. Improperly installed quick release couplings.	Increase pipe size. Reposition Hydrive. Reduce speed of driven unit. Replace return filter. Ensure couplings are properly installed.
<b>Relief valve problems</b>	Continuously opening. Sticking or un-settable relief valve.	Reset the valve 10% above circuit pressure. Replace with new relief valve.
<b>Vibration - Hydraulic</b>	Relief valve opening intermittently. Aeration of the oil.	See "relief valve problems". See "Aeration of oil".
<b>Vibration - Véhicule</b>	Normal vibration from vehicle. Whole vehicle vibrates badly.	Use anti vibration mounts to isolate Hydrive. Ensure engine is not mis-firing.

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## **7. STORAGE CONDITIONS**

The equipment must be systematically stored in an area sheltered from bad weather.

The equipment must bear its original protective components until it is installed in its final application.

If installation is interrupted, put back in place the original protective components or equivalent components.

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## **8. SCRAPPING**

The cooler must be scrapped in compliance with the regulations in force.

During this operation, particular care must be paid to the drainage stages of the cooler.