Hypertherm®

MAXPRO200®

Preventive Maintenance Program

Instruction Manual

808800 | Revision 10 | English |

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August, 2015

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Contents

Preventive maintenance overview

Congratulations on the purchase of your Hypertherm MAXPRO200 plasma system.

Hypertherm designs its plasma systems to withstand the demands of rugged industrial environments for many years of service. To maintain optimal system performance, minimize overall operating costs, and prolong system life, regular preventive maintenance practices must be followed. When properly maintained, your Hypertherm plasma system will serve you for many years and provide consistent operational performance. Hypertherm has developed this Preventive Maintenance Program (PMP) specifically for your MAXPRO200 plasma system.

If you have questions about how to maintain your Hypertherm plasma system, contact your regional Hypertherm Technical Service team. Contact information for each regional office is available at:

http://www.hypertherm.com/en/About_us/Contact_us/index.jsp

The PMP has two parts: a cleaning and inspection plan and a component replacement plan.

Cleaning and inspection plan

This plan consists of a daily, weekly, and monthly schedule of cleaning and inspection tasks. Detailed instructions in support of each task are included in the PMP to help guide your production and maintenance personnel in understanding what to do and what to look for during each prescribed task.

Table 1on page 8 outlines the cleaning and inspection schedule. A monthly log sheet, found on the back cover of this manual, allows you to make photocopies so your production staff can record the tasks they have performed and can anticipate the tasks they must perform before the end of the month.

Cleaning and inspection schedule

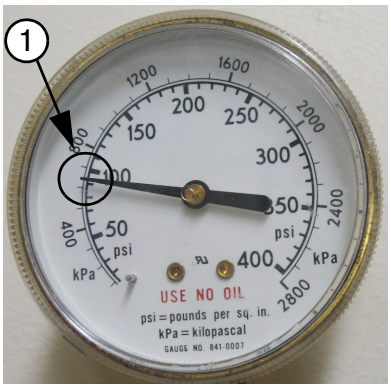
In general, Daily and weekly tasks are tasks that the operator might perform while the monthly tasks are more likely to be performed by maintenance personnel.

Table 1

Maintenance Task or Activity	Daily	Weekly	Monthly
Verify inlet pressures	X		
Inspect all air filters	X		
Verify coolant level and condition	X		
Inspect and lubricate o-rings	X		
Inspect the water tube and torch for damage	X		
Inspect hoses and leads		X	
Inspect for gas leaks		X	
Verify coolant flow		X	
Check coolant level		X	
Clean inside the power supply			X
Check for coolant system leaks			X
Inspect the main contactor			X
Perform coolant flow test			X
Inspect gas line connections			X
Inspect for hose restrictions			X
Inspect cables			X
Inspect the ground connections			X
Inspect the table-to-workpiece connection			X

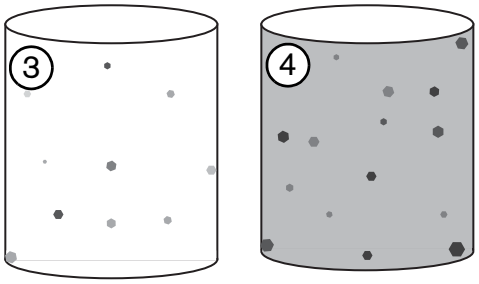
Daily cleaning and inspection instructions

Verify inlet pressures



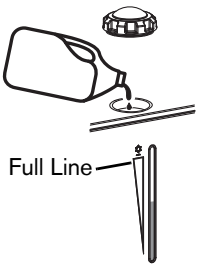
1. With gas flowing in the 004 diagnostic mode (Flow gas at full pressure), verify that the pressure at each supply regulator is set to 6.2 bar (90 psi).
2. For complete instructions about setting supply regulators, see *Setting the supply gas regulators* in your system's instruction manual (807700).

Inspect all air filters



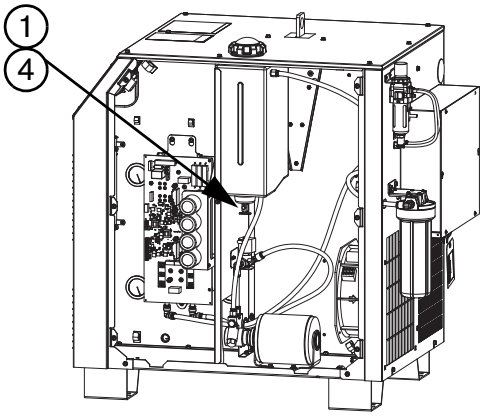
1. Inspect all air filters for moisture, oil, and particulates.
2. If moisture or oil is present, replace the air filter.
3. If a moderate amount of dust or other particulates is present, blow or vacuum it out of the filter.
4. If there is a large build-up of dust or particulates, replace the air filter (011093). Refer to *Air filter element replacement* in your system's instruction manual (807700) for replacement details.

Verify coolant level and condition



- Verify that the coolant tank is full. If the level is below the full line, add Hypertherm premixed coolant (028872). Record the number of liters (gallons) your system requires in *Coolant requirements* on page 25.
- Inspect the coolant tank for dirt and particulates. If either are present:

1. Drain the tank. Locate the coolant drain valve and use a 20 liter (5 gallon) container to catch the coolant. Coolant will flow as soon as the drain is opened.
2. Close the drain when the coolant stops flowing.
3. Fill the tank with clean coolant or water and run the pump to flush the system.
4. Drain the tank again.
5. Refill the coolant tank to the full line with clean coolant.
6. Run the system to fill hoses and leads with coolant.
7. If necessary, add more coolant to the tank. Refer to *Fill the power supply with coolant* in your system's instruction manual (807700) for more details.

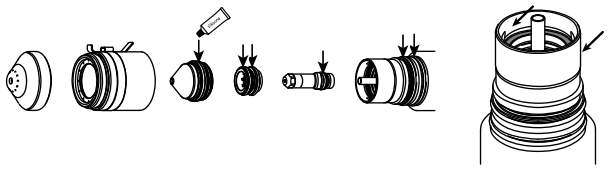


Inspect and lubricate o-rings

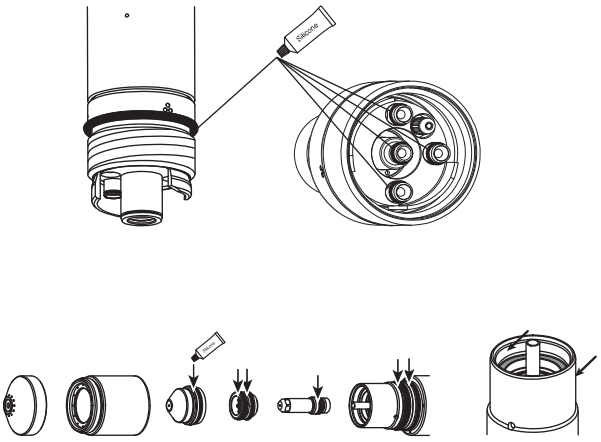
1. Remove the black o-rings on the torch and replace them if they are damaged.

   O-rings, bullet plugs, a water tube, and silicone lubricant are available for the main torch body of the quick disconnect torch as part of kit 228780. See kits 428333 or 428334 for o-rings, a water tube and silicone lubricant for the straight torch. Other o-rings are included with the consumables.

2. Apply a thin film of silicone lubricant (027055) to all o-rings.



Straight torch



Quick-disconnect torch

3. The o-rings should look shiny, but there should not be any excess or built-up lubricant.

4. Replace all o-rings so they fit snugly.

5. Inspect all threaded consumables and remove any dirt in the threads.

6. Reassemble the torch.

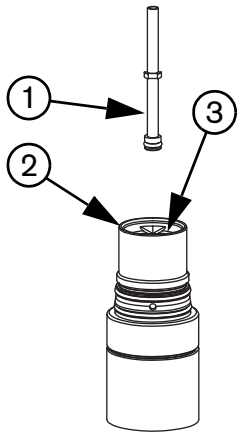
Inspect the water tube and torch for damage

1. Verify that the water tube is not bent and has no pitting. Replace the water tube (220521) if it is damaged.

2. Verify that the nozzle and electrode mating surfaces on the torch main body are not damaged and have no pitting.

3. Use a clean cloth to wipe off the torch inside and outside. Use a cotton swab to access hard-to-reach internal surfaces. Verify that you do not leave any cotton fibers inside the torch main body.

4. Use compressed air to blow away any remaining particulates from internal and external surfaces.



Weekly cleaning and inspection instructions

Inspect hoses and leads

Visually inspect all air hoses, coolant hoses, and torch leads for wear, restrictions, or both. Look especially for:

- Scrapes or cuts
- Punctures
- Chemical spills or burns
- Kinks or bends that restrict flow or damage the hose or lead.

Replace all damaged hoses or leads. Refer to *Part numbers for MAXPRO200 cables, hoses, and leads* on page 24 for lengths and part numbers.

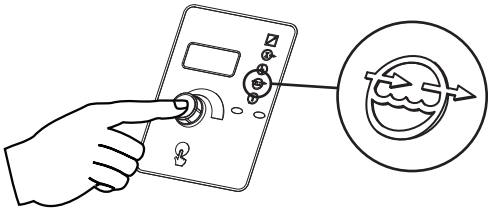
Inspect for gas leaks

For more information, see *Gas leak tests* in the *Maintenance* section of your system's instruction manual (807700).

Verify coolant flow

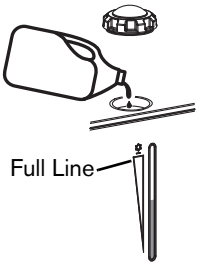
For more information, see *Coolant flow test* in the *Maintenance* section of your system's instruction manual (807700).

1. Turn ON the power to the power supply and select the coolant flow icon on the front panel of the power supply BEFORE the purge cycle is complete. The flow switch will be overridden and coolant will continue to flow for 30 seconds.
2. Record the flow rate in the maintenance log at the end of this document.

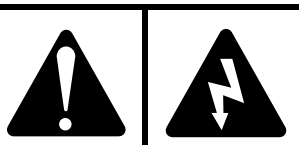


Check coolant level

1. Open the cover of the coolant tank on the top of the power supply enclosure.
2. Verify that the tank is full of coolant.
3. If the level of coolant is below the full line, add coolant until it reaches the full line.

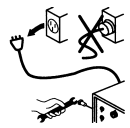


Monthly cleaning and inspection instructions



WARNING!

ELECTRIC SHOCK CAN KILL



Disconnect electrical power before performing any maintenance.

All work requiring removal of the power supply cover must be performed by a qualified technician.

See the *Safety* section of the system's manual for more safety precautions.

Clean inside the power supply

1. Turn OFF the power to the power supply.
2. Remove the top and side panels.
3. Blow out or vacuum any accumulation of dust and particulates from:
   - ❑ The top and side panels
   - ❑ The inside of the power supply
   - ❑ Fans
4. Gently remove dust and particulates from circuit boards, taking extra care not to damage them.
5. Replace the top and side panels before you turn ON the power.

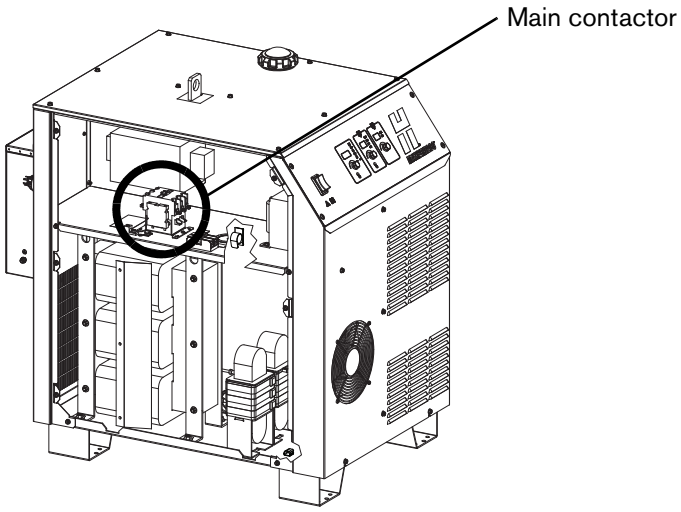
Check for coolant system leaks

Inspect the coolant-circulating system for coolant leaks at all connection points. Primary locations to inspect are:

- The torch main body
- The internal connection in the power supply

Inspect the main contactor

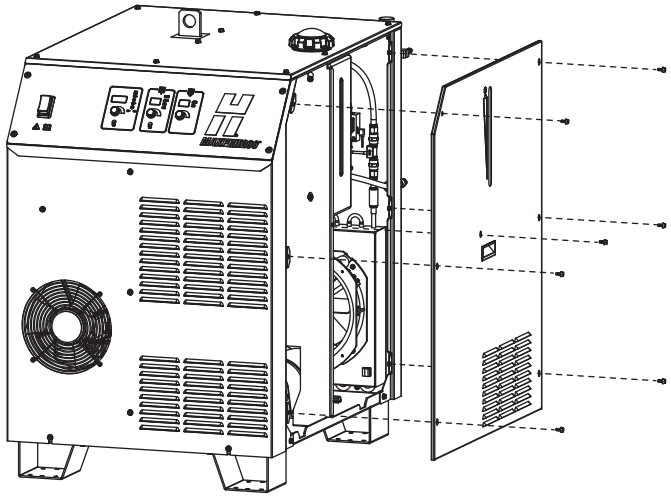
Visually inspect the main contactor for excessive pitting and for blackened or rough surfaces on any of the contacts. If this condition exists, replace the main contactor.



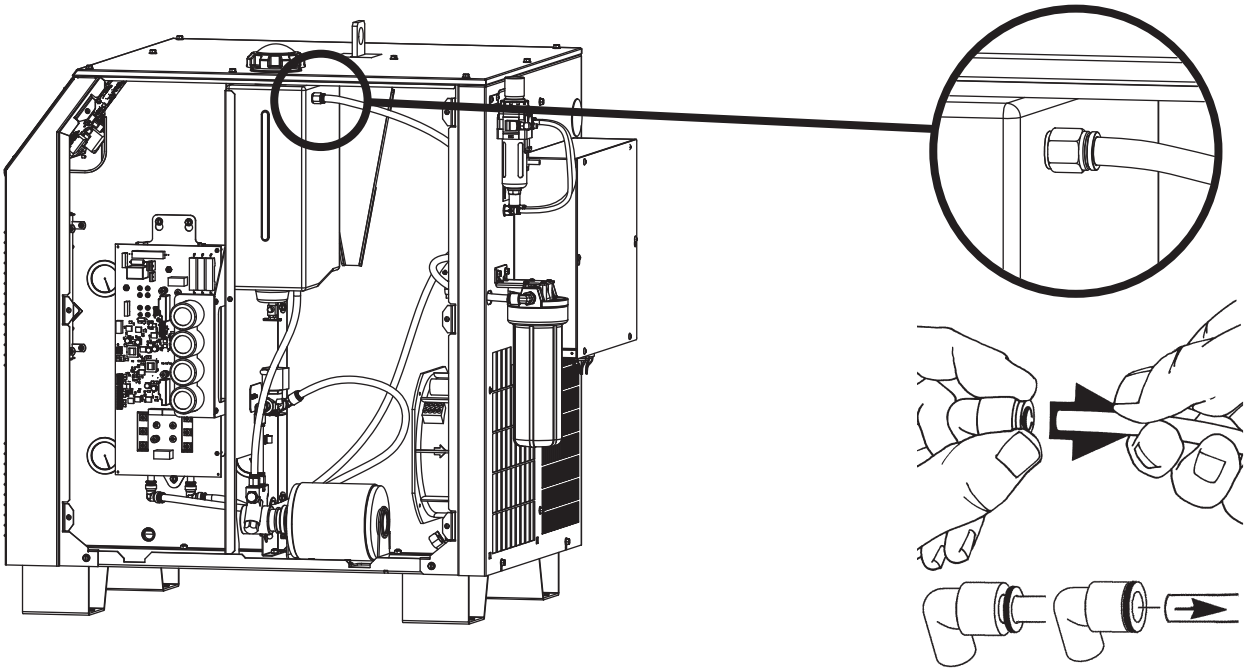
Perform coolant flow test

The control board receives an electrical signal in Hz from the flow sensor, that is converted and shown as flow in gallons per minute (gpm). Normal flow is 4.5 lpm (1.2 gpm), but this will vary depending on lead lengths and whether the power is 50 Hz or 60 Hz. PCB4 will allow the system to operate if the coolant flow is 1.9 lpm (0.5 gpm) or greater. If the system shows a coolant flow error (093) the system will need to be turned OFF and then ON again and the following test needs to be performed to determine if the problem is coolant flow or the flow switch.

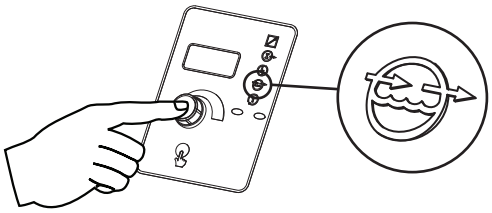
1. Turn OFF the power, and remove the right-side panel from the power supply.



2. Disconnect the return hose from the top of the coolant tank. Push the connector-collar toward the fitting, and pull the hose away from the fitting This will release the coolant hose. No tools required. Put the end of the return hose into a 4 liter (1 gallon) container.



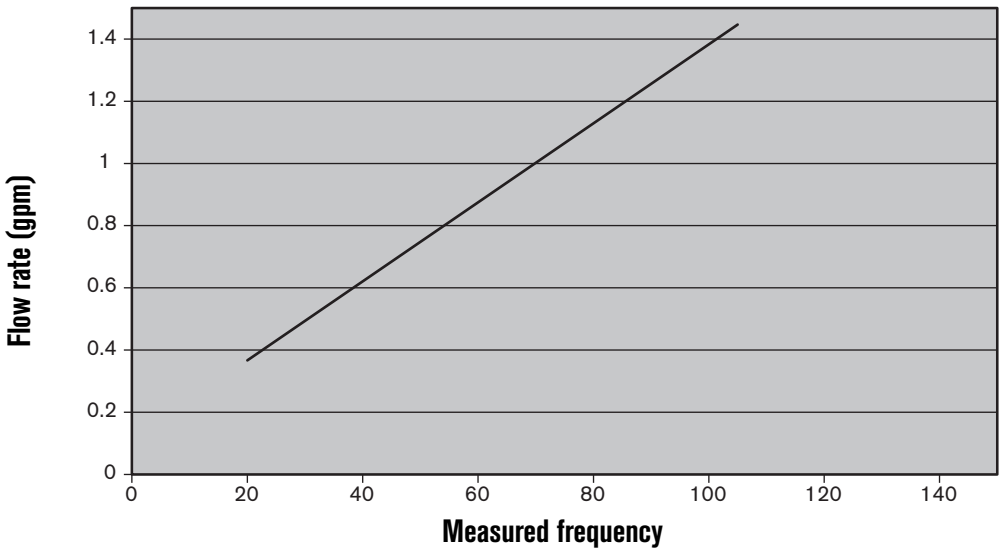
3. You will need to enable the flow function before the count reaches 5 in the 3-digit display. Turn ON the power and press and release the current knob twice until the flow function is enabled. Turn OFF the power after the coolant flows for 30 seconds.



4. Measure the amount of coolant in the container. There should be about 2 liters (0.5 gallon). If there is less than 1 liter (0.25 gallon) there may be a restriction in the coolant system or a problem with the pump or flow sensor.

5. Verify the flow sensor output by measuring the flow output (in frequency) at the control board. Measure the Frequency on J21 pin 3 (pulse) and pin 2 (ground). Once you have the frequency use the chart below to get the flow sensors measured flow rate. If this number differs more than 0.8 lpm (0.2 gpm) from your bucket test, the flow sensor may need to be replaced.

Note: The 3-digit display shows actual coolant flow. You can compare that measurement to the measurement you get in step 5 to troubleshoot for a PCB problem.



Inspect gas line connections

Check all supply gas line connections by spraying them with soapy water. If bubbles appear on a gas line, tighten the connection or replace it as necessary. Refer to *Part numbers for MAXPRO200 cables, hoses, and leads* on page 24 for lengths and part numbers.

CAUTION!

Do not clean brass connections with ammonia-based cleaners. Ammonia causes brass to crack and become brittle.

Inspect for hose restrictions

Check for hose restrictions as follows:

- Check each hose to verify that it has no kinks or sharp bends that can restrict gas flow or damage the hose.
- If the cutting table uses a power track system to support leads from the power supply to the gas console or torch, check the position of the leads in the power track to ensure the leads do not twist or kink, causing a possible restriction.

Inspect cables

Check all cables for scratches or unusual wear. If the outside insulation has been cut or otherwise damaged, replace the cable. Refer to *Part numbers for MAXPRO200 cables, hoses, and leads* on page 24 for lengths and part numbers.

Inspect the ground connections

Verify that all components of the system are individually grounded to a driven earth ground, as described in the *Installation and Grounding* section of your system's instruction manual (807700).

Inspect the table-to-workpiece connection

Check the work lead (+) connection, particularly where the work lead (+) connects to the cutting table.

To prevent arc-transfer problems, there should be no paint, oil, or dirt on the workpiece that would prevent a clean metal-to-metal contact between the work lead and the cutting table or workpiece.

Component replacement plan

This plan lists the components and their recommended replacement schedule after 500 hours of accumulated arc hours of use (1 year for hand torches). See Table 2 – Mechanized torch parts replacement schedule on page 18 for the component replacement schedule.

Hypertherm believes that using arc hours is the most accurate method of monitoring the proper time to replace a component. We have provided a guide that will help you to estimate an arc-hours-per-year model, based on the average number of 8-hour shifts during which the system operates on an average work day.

Finally, we want you to understand that the component replacement plan is a starting point. Your operating environment and cutting applications can accelerate the wear rate of some components within your plasma system. We have highlighted the most likely environmental and application factors that can lead to accelerated component wear.

The following tables and checklists are provided so you can record relevant information about your system and its replacement requirements:

- *Part numbers for MAXPRO200 cables, hoses, and leads* on page 24
- *System voltage* on page 25
- *Coolant requirements* on page 25

Component replacement schedule

The component replacement schedule found in Table 2 – Mechanized torch parts replacement schedule is based on the cumulative arc hours of the cutting system, for mechanized torches, and is calendar based for hand held torches. The hand held torch maintenance schedule is based on a 500 arc hours per year model. Use table 2 to determine when components should be replaced to maintain the system's optimal performance and to minimize unplanned downtime during the life of the system.

You can estimate the system's cumulative cutting time using the following guides:

Mechanized torches

Average number of shifts per day	Estimated number of arc hours per year
1 shift	500 arc hours/year
2 shifts	1000 arc hours/year
3 shifts	1500 arc hours/year

Hand held torches

Average number of shifts per day	Estimated time for maintenance
1 shift	Every twelve months
2 shifts	Every six months
3 shifts	Every four months

Table 2 – Mechanized torch parts replacement schedule

Item No.	Qty.	Component	Cumulative number of arc hours											
			500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
428331	1	Quick disconnect torch rebuild and filter kit (without coolant)[1]	X	X	X	X	X	X	X	X	X	X	X	X
428332	1	Quick disconnect torch rebuild and filter kit (with coolant)[2]	X	X	X	X	X	X	X	X	X	X	X	X
428333	1	Straight torch rebuild and filter kit (without coolant)[3]	X	X	X	X	X	X	X	X	X	X	X	X
428334	1	Straight torch rebuild and filter kit (with coolant)	X	X	X	X	X	X	X	X	X	X	X	X
028872	3–4	Coolant (in gallons)[2]	X	X	X	X	X	X	X	X	X	X	X	X
220921	1	MAXPRO quick disconnect torch		X		X		X		X		X		X
420087	1	MAXPRO straight torch		X		X		X		X		X		X
003233	1	Contactor for 200 V, 220 V, and 240 V systems		X		X		X		X		X		X
003249	1	Contactor for 380 V, 400 V, 415 V, 440 V, 480 V and 600 V systems		X		X		X		X		X		X
420033	1	Torch quick-disconnect receptacle				X				X				X
428043	1	Coolant pump				X				X				X
	1	Torch leads[4]				X				X				X
006075	1	Coolant check valve						X						X
027079	2	Front fan						X						X
127091	2	Heat exchange fan						X						X
428037	1	Flow meter						X						X
428039	1	Coolant pump motor						X						X
228993	1	Coolant solenoid valve						X						X
003257	1	Control board relay										X		
428040	1	Ignition board										X		
229487	1	High frequency transformer										X		
428036	1	Chopper												X
428042	1	Pressure transducer												X
428034		Gas manifold												X

[1] The kit includes an air filter (011093), a coolant filter (027005), and a HyPro torch kit (228780).

[2] Kits with coolant contain 4 gallons of Hypertherm premixed coolant (028872). The number of gallons you need depends on the length of the leads. Refer to your system's instruction manual (807700) for more information then record this number in *Coolant requirements* on page 25.

[3] The kit includes a water tube (220521), a tube of silicone lubricant, 2 o-rings, an air filter (011093), and a coolant filter (027005).

[4] Record part numbers for cables and leads in *Part numbers for MAXPRO200 cables, hoses, and leads* on page 24 so you can refer to this information when you replace these components.

Table 3 – Handheld torch parts replacement schedule

Item No.	Qty.	Component	Calendar schedule											
			year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	year 11	year 12
428333	1	Hand torch rebuild and filter kit (without coolant)[1]	X	X	X	X	X	X	X	X	X	X	X	X
428334	1	Hand torch rebuild and filter kit (with coolant)[2]	X	X	X	X	X	X	X	X	X	X	X	X
028872	3–4	Coolant (in gallons)[2]	X	X	X	X	X	X	X	X	X	X	X	X
428108	1	65-degree hand torch main body		X		X		X		X		X		X
428109	1	90-degree hand torch main body		X		X		X		X		X		X
003233	1	Contactor for 200 V, 220 V, and 240 V systems		X		X		X		X		X		X
003249	1	Contactor for 380 V, 400 V, 415 V, 440 V, 480 V and 600 V systems		X		X		X		X		X		X
428043	1	Coolant pump				X				X				X
	1	Torch leads[3]				X				X				X
006075	1	Coolant check valve						X						X
027079	2	Front fan						X						X
127091	2	Heat exchange fan						X						X
428037	1	Flow meter						X						X
428039	1	Coolant pump motor						X						X
228993	1	Coolant solenoid valve						X						X
003257	1	Control board relay										X		
428040	1	Ignition board										X		
428042	1	Pressure transducer										X		
229487	1	High frequency transformer										X		
428036	1	Chopper												X
428042	1	Pressure transducer												X
428034		Gas manifold												X

[1] The kit includes a water tube (220521), a tube of silicone lubricant, 2 o-rings, an air filter (011093), and a coolant filter (027005).

[2] Kits with coolant contain 4 gallons of Hypertherm premixed coolant (028872). The number of gallons you need depends on the length of the leads. Refer to your system's instruction manual (807700) for more information then record this number in *Coolant requirements* on page 25.

[3] Record part numbers for cables and leads in *Part numbers for MAXPRO200 cables, hoses, and leads* on page 24 so you can refer to this information when you replace these components.

Environmental and application impacts

The component replacement schedule serves as a starting point for your replacement plans. Your operating environment and cutting applications may include conditions that accelerate the wear rate of some components within your plasma system. This accelerated wear will increase the frequency of component replacements. This section highlights the top environmental or application-specific conditions known to decrease the life expectancy of components in the MAXPRO200 Manual Gas plasma system.

Several environmental and application-specific conditions are described in the following sections. While the quantifiable effect of each condition on the expected life of your system's components is difficult to determine, each condition is known to have a negative impact on system performance and the life expectancy of certain components.

Review each section for the explanation of the effect on your system and components that each environmental condition can have. If any of these conditions apply, consider adjusting your component replacement schedule.

If you have questions about the details of your replacement schedule, contact your regional Hypertherm Technical Service team.

Poor compressed air quality

To maintain optimal performance of your system, it is important that the source of incoming air is free of contaminates such as dirt, oil, and water. If the incoming air contains contaminates, system components can become clogged or fail to function properly. Poor air quality usually results in increased system errors, poor cut quality, or both. The most common components to be affected by contaminated incoming air are:

- Air filter elements, solenoids and check valves. Debris in these parts limits the flow of air in the system, resulting in poor cutting performance and gas errors (044, 053, 057, 058).
- The quick-disconnect torch head. Debris in this part restricts air flow and reduces cut quality. Oil in the system may also cause a fire in the torch head as the oil reacts with the oxygen cutting process.
- Pressure sensors. Debris in these sensors can cause false pressure readings, resulting in cut performance issues and gas errors.

If you have poor incoming air quality, consider adjusting the replacement schedule for the following components:

Description	Part number
Filter element	011093
Mechanized torches: See Table 2 – Mechanized torch parts replacement schedule on page 18 for part numbers	
Handheld torches: See Table 3 – Handheld torch parts replacement schedule on page 19 for part numbers	
Gas assembly	428034
Pressure transducer	428042

If you can, improve the quality of the air that enters your system to prevent this condition from impacting the life of your system. Contact your regional Hypertherm Technical Service team if you need help or advice on the best way to improve incoming air quality.

Short cut cycle time

Applications where the cut sequence is very short, such as those that include cutting many small holes or frequent markings for numbers and letters, can cause premature wear of torch parts and starting components. In these types of applications:

- The shield, retaining cap, and torch main body are exposed to more heat and stress during piercing, which can deform the components and make them more difficult to replace.
- The starting components, such as the high frequency transformer and the high frequency ignition board, can wear out faster than normal and result in misfires and error codes (020, 021).

Description	Part number
Contactor	003249 - 380 V, 400 V, 415 V, 440 V, 480 V, and 600 V power supplies 003233 - 200/208 V, 220 V, and 240 V power supplies
Mechanized torches: See Table 2 – Mechanized torch parts replacement schedule on page 18 for part numbers	
Handheld torches: See Table 3 – Handheld torch parts replacement schedule on page 19 for part numbers	
High frequency transformer	229487
I/O PCB	428040

Consumable overuse

If you allow consumables to reach complete failure, they can melt and pieces of copper can break off and enter into the coolant. In the coolant, these pieces of copper can:

- Become caught in the torch head and torch receptacle and can obstruct coolant flow and increase coolant flow errors (093) or damage consumables by allowing them to overheat.
- Become caught in the coolant filter and pump, which can cause coolant flow errors (093) or excessive wear in the coolant pump.
- Shorten the life of the check valve if copper pieces lodge on the inside of the seal of the valve and cause coolant to leak when you change consumables.
- Shorten the life of the coolant flow switch by obstructing the movement of the sensor wheel within the switch and cause inaccurate coolant flow readings and coolant flow errors (093).

When you perform maintenance checks, inspect the coolant filter for melted copper pieces. If you find pieces of copper in the coolant filter, both the filter and coolant must be replaced. If coolant flow errors (093) occur after you replace the filter and coolant, use the troubleshooting procedure in your system's instruction manual (807700) to determine the appropriate action.

The simplest way to address consumable overuse is to follow the usage guidelines for your consumables. However, if overuse occurs, consider adjusting the replacement schedule for the following components:

Description	Part number
Coolant (30/70 mix)	028872
Mechanized Torches: See Table 2 – Mechanized torch parts replacement schedule on page 18 for part numbers	
Handheld torches: See Table 3 – Handheld torch parts replacement schedule on page 19 for part numbers	
Quick-disconnect torch receptacle	420033
Coolant filter	027005
Coolant pump	428043
Coolant check valve	006075
Coolant flow sensor	428037

Metal dust inside power supply cabinet

One of the byproducts of plasma cutting is metal dust. If metal dust builds up inside the plasma power supply cabinet, the life expectancy of some components will be shorter than expected. Periodic cleaning inside the power supply is strongly recommended to extend the life of the fans and coolant pump motor. For cleaning details, see *Clean inside the power supply* on page 12.

If metal dust builds up on fans (main power supply, chopper, and heat exchanger) it can reduce their output level or stop them from working, resulting in temperature-related errors (065, 066, 067, 071).

The coolant pump motor can also be impacted by metal dust, which results in overheating or stopping the motor.

If you have metal dust inside your power supply, consider adjusting the replacement schedule for the following components:

Description	Part number
Front fan	027079
Heat exchanger fan	127091
Coolant pump motor	428039

Dirty external work environment

Metal dust and dirt that collect on unused and unprotected consumables and torch assemblies can cause the following conditions:

- Metal dust and dirt from the cutting process will prevent o-rings and seals of the torch heads and receptacles from sealing properly. Incomplete seals can allow dirt and grease to be trapped in parts of the torch head.
- Torch heads and receptacles that are not protected from the elements will have to be changed or repaired more frequently.
- Metal dust and dirt that build up on the torch and consumables may enter the coolant system and create excessive wear on the pump. In this type of environment, the coolant pump may have to be replaced more frequently.
- The flow switch uses magnetic pick-ups and will be affected by a coolant system that has dirt and metal dust trapped in it. Flushing the coolant system will help, as well as cleaning the flow switch. However, you may need to replace the coolant switch to recover proper functionality of the coolant loop system.

The simplest way to address the effects of a dirty work environment on your consumables or torch heads is to store them within a covered space, away from metal dust and dirt. Another solution is to use compressed air to blow the dust or dirt off these parts before you install them.

If you cannot store your consumables and torch heads in a covered space, consider adjusting the replacement schedule for the following components:

Description	Part number
Mechanized Torches: See Table 2 – Mechanized torch parts replacement schedule on page 18 for part numbers	
Handheld torches: See Table 3 – Handheld torch parts replacement schedule on page 19 for part numbers	
Quick-disconnect torch receptacle	420033
Coolant pump	428043
Coolant flow sensor	428037

Part numbers for MAXPRO200 cables, hoses, and leads

Part number	Length	Part number	Length
CNC Interface Cable			
223327	1.3 m (5 ft)	223330	15 m (50 ft)
223328	3 m (10 ft)	223331	22.5 m (75 ft)
223329	7.5 m (25 ft)	223332	30 m (100 ft)
Air Hose			
024671	3 m (10 ft)	024740	25 m (82 ft)
024658	4.5 m (15 ft)	024744	35 m (115 ft)
024659	7.5 m (25 ft)	024678	45 m (150 ft)
024765	10 m (35 ft)	024680	60 m (200 ft)
024660	15 m (50 ft)	024767	75 m (250 ft)
024766	20 m (65 ft)		
Nitrogen Hose			
024210	3 m (10 ft)	024739	25 m (82 ft)
024203	4.5 m (15 ft)	024451	35 m (115 ft)
024134	7.5 m (25 ft)	024120	45 m (150 ft)
024211	10 m (35 ft)	024124	60 m (200 ft)
024112	15 m (50 ft)	024764	75 m (250 ft)
024763	20 m (65 ft)		
Oxygen Hose			
024607	3 m (10 ft)	024738	25 m (82 ft)
024204	4.5 m (15 ft)	024450	35 m (115 ft)
024205	7.5 m (25 ft)	024159	45 m (150 ft)
024760	10 m (35 ft)	024333	60 m (200 ft)
024155	15 m (50 ft)	024762	75 m (250 ft)
024761	20 m (65 ft)		
Torch Lead (machine torch)			
229477	7.5 m (25 ft)	229479	22.5 m (75 ft)
229478	15 m (50 ft)	229480	30 m (100 ft)
Torch Lead (hand torch)			
229498	7.5 m (25 ft)	229500	22.5 m (75 ft)
229499	15 m (50 ft)	229501	30 m (100 ft)
Work Lead			
223335	7.5 m (25 ft)	223337	22.5 m (75 ft)
223336	15 m (50 ft)	223338	30 m (100 ft)

System information

Model number _____ **Serial number** _____

System voltage

- ☐ 200/208 V
- ☐ 220 V
- ☐ 240 V
- ☐ 380 V (CCC)
- ☐ 400 V (CE)
- ☐ 415 V (CE)
- ☐ 440 V
- ☐ 480 V (CSA)
- ☐ 600 V (CSA)

Coolant requirements

- ☐ 3 gallons
- ☐ 4 gallons
- ☐ 5 gallons
- ☐ 6 gallons
- ☐ 7 gallons

Notes

Maintenance log for MAXPRO200 plasma systems

Daily tasks	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**
Verify inlet pressures																															
Inspect all air filters																															
Verify coolant level and condition																															
Inspect and lubricate o-rings																															
Inspect the water tube and torch for damage																															

Weekly tasks	**Week beginning:**	**Week beginning:**	**Week beginning:**	**Week beginning:**	**Week beginning:**
Inspect hoses and leads					
Inspect for gas leaks					
Verify coolant flow					

Monthly tasks

circle one: **January** **February** **March** **April** **May** **June** **July** **August** **September** **October** **November** **December**

Clean inside the power supply		**Notes:**
Check for coolant system leaks		
Inspect the main contactor		
Perform coolant flow test		
Inspect gas line connections		
Inspect for hose restrictions		
Inspect cables		
Inspect the ground connections		
Inspect the table-to-workpiece connection		