

I'm not a robot



Weve been counting down the most common Hypertherm Powermax fault codes for the past month.Number 5: 0-19Number 4: 0-50Number 3: 0-21Number 2: 0-12And now, without further ado, we present the Number 1, most frequent error code we get calls about. Are you ready?Drumroll please0-30 is the most common fault code seen on the Hypertherm Powermax65, Powermax85, Powermax105, and Powermax125, regardless of whether it is used as a hand held or with a CNC machine. It can mean that there are issues related to your consumables or there could be external factors impacting system operation. To clear this code, start by checking the following first: Did you change your torch consumables while the power supply was on? If yes, shut down and then power up your power supply.Do you have the right consumables installed? If no, change the consumables.Is the swirl ring deformed or damaged? If yes, replace.Is the electrode surface damaged or pitted? If yes, replace.Is your air wet or oily? Fix the compressor and/or replace filters.Is your plasma torch damaged? Test with a spare machine torch known to work and replace torch, if needed. 0-30 fault code Powermax plasma cutter troubleshooting If you've checked all of the above and the error code still hasn't cleared, its time to switch into service mode. Weve explained how to do this in the Number 2 post, but for those of you who need a reminder, here it is. Look at the front of the system and press the two buttons below the LCD display at the exact same time until you see the screen change. Then look for the letter F on the left on the display, fifth-row down from the top. Youll notice that the fault codes are longer. Youll either see a 0-30-0 (torch stuck open) or 0-30-1 (torch stuck closed). Fault code 0-30-0 means the electrode and the nozzle not making electrical contact. Reasons may include:Wrong consumablesGas valve is open or leakingPhysical damage to the torch and/or consumablesA deformed swirl ring is stopping electrode movementAn over tightened retaining cap has damaged the swirl ringFault code 0-30-1 means the nozzle and electrode are stuck together and cannot create an arc. Possible causes may include:Low gas pressureGas restrictions-check your pressure gaugeGas leaks caused by a damaged torch lead or regulatorHose diameter impacting gas or air flow rateExternal filters may be constricting the gas flow, verify all flow rates for components feeding the power supplyGas restrictionsA deformed or damaged swirl ring is stopping electrode movementRegulator needs to be replacedTo troubleshoot, place the unit in gas test mode and refer to the operators manual for Test 6. Ensure that only the dump valve light is on during the gas test.If you're still having trouble: more resourcesRegardless of the amperage in your power supply, or whether you are using it on as part of CNC plasma table or other automated system, you dont have to go full DIY mode. Hypertherm Cutting Institute offers a short course with a full video on troubleshooting and resolving a 0-30 fault code. Hypertherms North American Technical Service Team can help. If youre in the United States or Canada, call (800) 643-9878, oremail the team.If you need a new or replacement part, we recommend reaching out to one of our authorized distributors or service centers. For a list of locations near you, visit our where to buy page. Hypertherm 0-30 Code Solved! Troubleshooting 0-30 Code on Powermax Sync and Legacy Powermax45 XP, Powermax 65, Powermax85, and Powermax105 "Listen, my friend, youre at a crossroads. Youre running your CNC plasma table and your Powermax cutters throwing up the 0-30 code, and thats a signal. It's telling you somethings off in the system, and it's your job to find the solution. This is where your power comes in lets break it down and take control. Youve got this. Now lets turn this challenge into an opportunity to rise to the occasion." 1. First, Check Your Air Supply. Youre looking for one thing here: consistent power. You need that air pressure dialed in at 90-120 PSI. This is the fuel for your fire. If it's off, the machines not going to work the way you want it to and cause a cnc plasma table nightmare. Dont let that stop you. Go check it, make sure it's where it needs to be, and feel the control you have over this. 2. Next, Inspect the Air Filter and Regulator. You've got to clear the path for success. The filter might be clogged, and thats a simple fix clean it out, replace it if you need to. The regulator? Its your guiding force make sure its set right. This is you taking charge and ensuring nothings holding you back. 3. Check for Leaks. Leaks are just like distractions in life they drain your energy. Tighten those connections. Tighten your focus. Theres no room for anything slipping through the cracks. Seal those leaks and step into your power. 4. Look at the Consumables. Your consumables the nozzle, the electrode are the heart of the machine. If theyre worn, replace them. If youve been running on old energy, its time to refresh it. Your equipment deserves the same level of excellence you bring to everything you do. 5. Inspect the Cutting Torch. Its like your weapon check it, make sure its in top form. If it's been through the grind, it may need a reset. Dont underestimate how important the details are in keeping everything aligned. 6. Do a System Reset. Now that youve fixed the issues, give it a fresh start. Turn it off, turn it back on. Youve cleared the roadblocks; now its time to reset and move forward with full force. 7. Review Your Powermax Manual. Theres a blueprint for success. The manuals your map to getting through any challenge. Lean into it, tap into that knowledge, and use it as your guide to mastery. 8. And Finally, Reach Out for Support. If youve done everything and the 0-30 code is still hanging on, thats your cue to reach out for expert help. No shame in it in fact, its a sign of strength. Connect with the pros at Hypertherm technical support and get the advice you need to keep moving forward. "Now, heres the bottom line: challenges come. But you are stronger than any obstacle that stands in your way. Take control. Take action. And let that machine work for you, not the other way around. This is your moment embrace it."If you are getting 0-30 error on the LCD screen of your Hypertherm Powermax plasma cutter follow the recommendations below to troubleshoot this. Replace ALL torch consumables on the torch. This includes the Electrode, Nozzle, Swirl Ring and even the Cap (the big cylinder that holds all the parts). 90% of the time this error is caused by worn or damaged consumables Test Air Supply: Place some brown paper or similar material underneath the plasma torch. This should show up any moisture or dirt coming through the torch during testing. On the front of the Hypertherm power source, simultaneously press the automatic/manual and current/gas mode selectors for approximately two (2) seconds. This will display the service screen on the LCD as follows: Press the current/gas mode selector button until the Asterix (*) is beside the G (Gas Test). Rotate the Adjustment Knob to change the gas setting to 1 (On). Run the gas test for 15 mins Take careful note (or better still take video) of the Air Pressure Reading on the screen. If the Air Pressure Reading drops to more than 2psi less than the Air Pressure Setting then this indicates there is an issue. If you find there is a significant drop in the above test: Install an air pressure regulator at the back of the machine (as close to the power source as possible) to measure the air pressure entering the power source. Repeat the above test This time also take note if the air pressure on the regulator drops noticeably at the same time as the Air Pressure Reading on the screen. If the air pressure on the regulator is dropping this likely indicates that there is an issue with the air supply (air compressor, filters, air lines, etc.) If the air pressure on the regulator is stable but the Air Pressure Reading on the screen is dropping more than 2psi then this may indicate that the Hypertherm power source has an internal fault. If you observe moisture or dirt on the brown paper this may be the cause of the fault. Replace any filter elements in your air supply system Ensure you have adequate filters in your air supply system If you dont have a refrigerated air dryer in your air supply and the paper is showing a lot of moisture it is highly recommended that you install one. If there is any dirt coming through this would suggest that filtration has been inadequate. Dirt can also clog or damage internal components which may be the cause of the error. If the above tests dont reveal an issue the fault is most likely to be in the torch. You may need to replace the torch head or the entire torch assembly. In Mach3 next to the file tab in the top left of the window, select Config, then select General Config. Skilled operators and well-maintained plasma arc cutting (PAC) equipment are essential for maximizing efficiency and minimizing costs in any cutting Hypertherm plasma cutters are known for their high quality cuts. However, there are a few common problems that can occur Discussion on 0-30 fault codes cstroke 3 Star Elite Contributing Member Posts: 408 Joined: Thu May 24, 2012 7:45 pm Post by cstroke Wed May 18, 2022 6:46 pm Going batty with the 0-30 code.Hypertherm 85 I'm posting this because I will get to the bottom of it, I've been battling this for a month or so. I'm a member of a facebook group and have posted this there.Have a job which requires a ton of pierces 711 in a piece thats 16"ish x 46 ish. 1/2" ar 400 plate. Anyhow its been a mess lately I cant walk away from the machine.I've gotten in and adjusted the air pressure in the machine, I've eliminated the filter piece on the plasma unit, I've regulated the pressure at the machine, I've gotten rid of the quick connect, I've increased the air going into the refrigerated air dryer, I'm in the process of running a new pipe to the machine that's 1 1/4" and neck down at the machine with a new filter just before the machine. Nothing is helping So I bought an adapter and he was having the problems. This helped alot but I got the code a few times but, not near as often and it seemed to get it around pierce 900 or so...I'm assuming the consumable is shot at that point.Regular consumables at \$17 bucks a set, compared to \$53 for a sync. The regular consumable I get a full run out of 711 pierces for \$17. Sync is 900 pierces for \$53. This is what I've seen so far. I know the \$17 is a good number for how many times I've made these parts So as per a recommendation from Russell at CNC Shop and services(Dynatorch) I've ordered Hypertherm Kit:M65/M85/M65M/M85M/M105/M105M Torch Main Body Replacement. -228716. So we will see, I'm just hoping to get back with the old consumables, it's cutting into the profit with the Sync's.As far as cut quality I'd say the sync's have the edge, and speed and cost per pierce I'm liking my old ones.I'll update this as I learn more. Any thoughts please chime in. Thanks in advanceChris 6x12 Dynatorch powermax 8512 Wysong brake5x 5/16 wysong rolls3.8x10 shear65 Ton ironworkerBoss laser 3655 150 watt CO2.SFX 100watt MopaQuincy 7.5hpSquare wave tig, Multimatics, Miller bobcat efi. WyoGreen 4 Star Member Posts: 895 Joined: Tue Mar 04, 2014 8:36 pm Location: Cheyenne, Wyoming Post by WyoGreen Wed May 18, 2022 8:04 pm It seems like we see a lot of this 0-30 code complaint on here. Perhaps it's time for Hypertherm to spend some time researching this to find out what is going on. I had thought about upgrading from my old reliable Powermax 45 to a bigger machine, but this and other recent developments are making me think twice about that thought.I hope you come up with a fix, Steve Precision Plasma gantryCommandCNC Linux controller w/Feather Touch & PN200 hand controllerHT-45 plasma cutterPlate MarkerRouterLaser adbuch 6 Star Elite Contributing Member Posts: 11441 Joined: Thu Sep 21, 2017 5:22 pm Location: Tucson, Arizona Contact: Post by adbuch Thu May 19, 2022 2:27 am I'm happy to hear that the Syncs are giving you better edge quality, but unfortunately at a much greater consumable cost. I had heard reports of the Sync cartridges not playing nice with some the units, but I'm not sure it that was the Sync on an adapter or an actual Sync machine. I know that Robert Johnson was doing some testing using the Sync adapter with Duramax torch cutting on a Plasmacam table and he was having the problems. It seems like some have fixed this particular problem by replacing o-rings in the torch body. I have both the Powermax 85 and 45xp and have not yet experienced the 0-30 error in the 5 1/2 years the machines have been in the shop. I will look forward to hearing if and how you resolve your problem.David weldguy 4.5 Star Elite Contributing Member Posts: 2381 Joined: Fri Apr 17, 2009 11:48 am Post by weldguy Thu May 19, 2022 11:12 am Hey cstroke, there is an entire forum dedicated to Hypertherm error codes and solutions other members have found here on the 0-30 error viewforum.php?f=210 May want to sift through those and see if you anything catches your attention. Sounds like you have your air supply beefed up so that shouldn't be an issue. As for setting pressure at the front of the Hypertherm unit I would keep it in Auto mode and let the machine set the pressure for you. Have you entered the advanced diagnostic screen to see what advanced codes are listed in there?What consumables are you using? I am guessing Fincuts... cstroke 3 Star Elite Contributing Member Posts: 408 Joined: Thu May 24, 2012 7:45 pm Post by cstroke Thu May 19, 2022 7:00 pm The consumables that give me fits are 85 amp ones.Just ran a file today that is 45 amp aluminum 3/16" and it ran the entire job without an 0-30 code.Thank you for the link.Chris 6x12 Dynatorch powermax 8512 Wysong brake5x 5/16 wysong rolls3.8x10 shear65 Ton ironworkerBoss laser 3655 150 watt CO2.SFX 100watt MopaQuincy 7.5hpSquare wave tig, Multimatics, Miller bobcat efi. weldguy 4.5 Star Elite Contributing Member Posts: 2381 Joined: Fri Apr 17, 2009 11:48 am Post by weldguy Fri May 20, 2022 11:40 am cstroke wrote: Thu May 19, 2022 7:00 pmThe consumables that give me fits are 85 amp ones.Just ran a file today that is 45 amp aluminum 3/16" and it ran the entire job without an 0-30 code.Thank you for the link.Chris No problem and be sure to look at the diagnostic screen, it has helped me to resolve many issue sin the past and many people do not know about it. Check this link out viewforum.php?f=224 super helpful Listen, my friend, youre at a crossroads. Youre running your CNC plasma table and your Powermax cutters throwing up the 0-30 code, and thats a signal. Its telling you somethings off in the system, and its your job to find the solution. This is where your power comes in lets break it down and take control. Youve got this. Now lets turn this challenge into an opportunity to rise to the occasion. First, Check Your Air Supply.Youre looking for one thing here: consistent power. You need that air pressure dialed in at 90-120 PSI. This is the fuel for your fire. If its off, the machines not going to work the way you want it to and cause a cnc plasma table nightmare. Dont let that stop you. Go check it, make sure its where it needs to be, and feel the control you have over this. Next, Inspect the Air Filter and Regulator.Youve got to clear the path for success. 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Youve cleared the roadblocks; now its time to reset and move forward with full force. Review Your Powermax Manual.Theres a blueprint for success. The manuals your map to getting through any challenge. Lean into it, tap into that knowledge, and use it as your guide to mastery. And Finally, Reach Out for Support.If youve done everything and the 0-30 code is still hanging on, thats your cue to reach out for expert help. No shame in it in fact, its a sign of strength. Connect with the pros at Hypertherm technical support and get the advice you need to keep moving forward.Now, heres the bottom line: challenges come. But you are stronger than any obstacle that stands in your way. Take control. Take action. And let that machine work for you, not the other way around. This is your moment embrace it. Plasma cutting and gouging systems sometimes have cutting disruptions. To get back to work faster, you need to know what the symptoms are, what faults are creating cutting failures, how to locate the fault codes on your system, how to troubleshoot possible solutions to resolve the fault code, and when to contact an expert for additional assistance.Today, we will review the 0-30 fault code on the Powermaxproduct line.What is a 0-30 fault code? 0-30 is the most common fault code seen on the Powermax65, Powermax85, Powermax105, and Powermax125 systems. It can indicate issues related to your consumables or there could be external factors impacting system operation.The typical symptom of a 0-30 fault is the torch not firing. There are two types of 0-30 errors.1. The0-30-0 fault code indicates a torch stuck open fault, where the nozzle and the electrode are not touching after the trigger is pulled. Common causes include:a. Using the wrong consumablesb. An open or leaking gas valvec. Physical damage to the torch and/or consumablesd. A deformed swirl ring that is stopping electrode movemente. An over tightened retaining cap that has damaged the swirl ring2. The0-30-1 fault code indicates a torch stuck closed fault, where the nozzle and electrode will not separate after the trigger is pulled. Common causes include:a. Low gas pressure i. Gas restrictions ii. Gas leaks caused by a damaged torch lead or regulator iii. Hose diameter impacting flow rateb. External filters constricting the gas flow. You need to verify all flow rates for components feeding the power supplyc. Gas restrictionsd. A deformed or damaged swirl ring that is stopping electrode movemente. The regulator needs to be replacedWhere to find the 0-30 fault code Always check the status screen on the front panel of your Powermax for loss of power or fault codes. Using the manual for your system, locate the 0-30 fault code on the table or find the symptoms you are experiencing with your system. You can access all Powermax manuals online if you no longer have a paper copy.Different Powermax systems display these codes differently: For lower amperage machines, such as the Powermax 30 Air, 30XP or 45XP, a blinking torch cap LED on the front of the machine indicates a 0-30 error. A slow blinking light indicates a torch stuck open fault. A fast blinking light indicates a torch stuck closed fault. For higher amperage machines, such as the Powermax65, 85, 105, or 125, the 0-30 error will appear on the status screen located on the front of the system. To determine which type of 0-30 error you have, access the service screen by holding down the Automatic/Manual Pressure Setting Mode Selector and the Current Gas Selector buttons for two seconds. Once the service screen is open, you will find the complete fault code (0-30-0 or 0-30-1).Troubleshooting the 0-30 fault code To resolve the 0-30 error, begin with a series of quick checks:Did you change your consumables while the power supply was on? If yes, restart the PowermaxTurn the power supply off and check the consumables.a. Do you have the right consumables installed? If not, change the consumablesb. Were the consumables installed correctly? Remove the consumables from the machine and confirm that they were properly installed. Reinstall them correctc. Are the consumables in good repair? Inspect and replace the consumables if you find damage or excessive weard. Does the torch show signs of damage? Inspect the torch for any signs of damage or pitting on the electrode contact surfacee. Is the swirl ring deformed or damaged? If you see signs of deformation or damage, replace the swirl ringf. Is the electrode surface damaged or pitted? If you see evidence of surface damage or pitting, replace the electrodeOnce the consumables have been properly inspected and installed, turn the system back on. This should clear the error code from the screenIf the 0-30 fault code still appears, and the consumables are not damaged and are properly installed, then the torch or power supply may be damaged. You should contact your Hypertherm distributor or an authorized repair facility with the full 0-30 fault code for further assistance.Additional testing for 0-30-1 fault codesFor a 0-30-1 fault code that continues, place the unit in gas test mode to check the output gas pressure from the Powermax system. To access the gas test node, open the service screen by holding down the Automatic/Manual Pressure Setting Mode Selector and the Current Gas Selector buttons for two seconds.In the top left corner of the service screen, you will find a blinking cursor. Move the cursor through the service screen by pressing the Automatic/Manual Pressure Setting Mode Selector and the Current Gas Selector buttons. Move the cursor so that it sits between the G and the 0 on the second row. Turn the adjustment knob clockwise. The G0 will turn into a G1 and gas should start flowing from the torch.The actual pressure should be within one to two PSI of the set pressure. If the pressure differs from the set pressure by more than one or two PSI, check your supply input pressure to ensure your incoming gas pressure is correct. Set the G1 back to G0 and exit the service screen.If your gas test results and supply input pressure are both normal, contact your Hypertherm distributor or an authorize repair facility for assistance. Know your Powermax system The best way to avoid cutting interruptions is to properly install the correct consumables and maintain the system with routine inspections and maintenance. Only use the system as it is intended and for jobs within the systems specifications. Be aware of any change in system performance and check the system for damage or excessive wear if you notice a decline in cutting quality.When disruptions do occur, understanding how to quickly diagnose fault codes and troubleshoot problems will minimize your downtime and let you can get back to work faster.

Hypertherm fault codes. Hypertherm powermax 65 error codes. Hypertherm powermax 30 not working. How to use hypertherm powermax 30. Hypertherm 0-30 error code. Hypertherm powermax 65 error code 0-30. Hypertherm powermax 125 error code 0-30.