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Your Bosch washing machine, which is more than 7 years old and priced between \$400-\$500, is displaying error code F21 and is not spinning. The F21 error code typically indicates a motor or control unit fault. This issue can prevent the washing machine from spinning and completing its cycle. Steps to Try at Home 1. Power Reset: Turn off the washing machine and unplug it from the power source. Leave it unplugged for a few minutes, then plug it back in and turn it on. This can sometimes clear the error code and reset the machine. 2. Check for Blockages: Ensure that the drum is not overloaded and that there are no items stuck in the drum that could be preventing it from spinning. 3. Inspect the Door Lock: Make sure the door is properly closed and latched. Sometimes, the machine will not spin if the door is not securely locked. 4. Drain Excess Water: If there is water remaining in the drum, use the emergency drain hose to remove it. A high water level inside the machine can sometimes prevent it from spinning. What an Experienced Engineer Will Check 1. Motor Function: The engineer will assess the washing machine's motor for any signs of wear or malfunction. They may check the motor brushes, which can wear out over time and prevent the motor from functioning correctly. 2. Control Unit: The control unit will be inspected to identify any electrical issues that could be triggering the F21 error code. This includes checking for faulty connections or damaged components. 3. Drive Belt: The drive belt, which connects the motor to the drum, will be examined for any signs of wear or damage. A worn or broken belt can prevent the drum from spinning. 4. Door Lock Mechanism: The technician will also check the door lock mechanism to ensure it's functioning properly and not contributing to the issue. Considering the Appliance's Age and Value Given the machine's age (over 7 years) and original purchase price, it's important to consider whether a repair is cost-effective. Depending on the diagnosis, the repair cost might be significant relative to the value or replacement cost of a new washing machine. Expert Advice The F21 error is a sign of a potentially serious issue that may require professional intervention, especially if the initial steps do not resolve the problem. Due to the technical nature of motor and control unit faults, DIY repairs are not recommended. Next Steps If the problem persists after trying the recommended steps, or if you're unable to safely access the emergency drain hose, it's advisable to contact a professional appliance repair service with experience in Bosch washing machines. Additionally, consider the cost of repairs against the benefits of upgrading to a newer model, especially given the advancements in efficiency and features over the last seven years. Finding a Repair Engineer - Top Tips When seeking a reputable repair engineer or service company, keep the following advice in mind: Check Online Reviews: Look for feedback from previous customers on platforms like Trustpilot or Google to gauge the service's reputation. Ask About Free Estimates: Find out if they can provide you with a no-obligation quote before any work is performed. Work Guarantee: Confirm that they offer a warranty on the repairs conducted for added peace of mind. Transparent Pricing: Ensure the quoted price includes all potential costs, such as call-out fees, labour, and parts. Parts Replacement: Determine if there will be additional charges for any parts required during the repair process. Who Provides the Parts: It's usually best if the engineer sources the parts to ensure they're of the correct specification. Payment Terms: Understand when payment is due—whether it's upfront, after diagnosis, or upon completion of the repair. By following these steps and advice, you can effectively address the F21 error code on your Bosch washing machine and make an informed decision about repair or replacement. There are some errors in the work of the washing machines, which appear to be really dangerous, so if you see an F21 code on the display of your appliance or a combination of blinking indicators 1000, 800 and rinsing (or 800, 600 and rinsing for the older models), instantly unplug and unfasten your washer from the water supply, and call the repairman. The error occurs when the drum of the machine can not rotate. The washer tries to fix it with its self-control mechanisms, but after numerous attempts, the drum doesn't start spinning and the code is indicated on the display. What causes the F21 Error code? So your washer didn't start working, or just stopped rotating the drum while washing process. After the appliance tried to fix the issue and failed, it showed the F21 code on the control panel, and you immediately turned the machine off in order to avoid electric shock. Now its time to find out why this could happen and how big the danger is. The first and the most simple thing, that can cause the drum cycle issues of the washer is the weak voltage, which has nothing to do with improper exploitation or serious parts damage. But, unfortunately, this is a very rare case. Another easy solution — there is a foreign object in the tank, which prevents the ro-rotation. You can check it by simply spinning the drum manually, and if you hear an abnormal sound — the mystery is solved. Actually, it is pretty dangerous, as sharp objects can pierce the tank or drum and cause the leakage, which can burn the electronic system of the appliance. So make sure you remove the foreign object as soon as you notice it. Besides the simple explanations, there are a few severe ones, that will definitely need professional intervention. Here is what the explanation of the F21 Error code can be: The failure of the Hall sensor. This sensor, also known as the rotor position sensor, if the one, that controls the work of the engine during the washing cycle. So when it doesn't receive data on the speed of the motor — it stops the operation of the machine and indicates the error code on the screen. The breakage of the motor. When it comes to troubles with the engine, the washer just can't start running. After a few tries to begin the rotation process it gives up and indicates the error. Possibly, it can be explained by the failure of the engine's brushes, which is a common thing for the Bosch appliances. Another probability is the motor leakage, in this case, you will have to replace the entire engine. One more explanation for this error code lays in between the motor and the sensor — in the chain, that powers them. In this case, both RPS and the engine are fine, but the wires of the chain have to be checked and replaced. How to fix the F21 Error? As we already mentioned, it is better to call the specialist as soon as your machine's control panel indicates the F21 Error Code. But if you feel you are experienced enough, you can replace the engine brushes and even try to check the Hall sensor yourself. After unplugging and disconnecting the machine, take off the rear wall and the transmission belt, in order to get a better entry to the engine. The RPS is located on the case of the engine, so to get to it you will need to take off the motor. It is recommended to take a few photographs of the proper connections and wired before dividing the motor. After you subtract the mechanism from the washer, you can take off the Hall sensor and carefully examine it, looking for signs of breakage. The reason may be in the dirt, which you have to clean off. But the most important step is checking the RPS with a multimeter. If it shows that the detector is out of order even after you cleaned it properly — it has to be replaced. In case you found the reason and performed all the necessary actions, there is one thing about the F21 error code — it won't disappear even after it is fixed, so you will have to reset the appliance manually, for it to start working normally again. There are four steps to reset it after you put the program selector bar in the Off mode: Start spinning the bar, slowly, until you see the error code on the display. Press the drum rev button for several seconds. Switch the selector bar to Drain. Press the spin button. If you hear a sound and see the blinking, the system has been reset. If not — repeat all the steps once again. If none of the above-mentioned steps helped to get rid of the error, you should call the expert, as the F21 can be much more than serious, especially in case of tank leakage. What is the breakdown of the F21 error in Bosch affecting your washing machine? If you have a Bosch washing machine and you see an F21 error code on the display, it means you have a somewhat serious problem with your appliance. However, there's no need to worry too much because every error is repairable, and that's why we're here to help you with this issue. The F21 error code on your Bosch washing machine indicates that there's a problem with the washing machine's motor, which can have several causes and solutions. It's important to address this situation as soon as possible to prevent further damage to the appliance. In this article, we will explain what the F21 error code is, what its possible causes are, and how you can best resolve it. The F21 error code refers to a fault in the washing machine's motor, which prevents it from spinning correctly and completing washing cycles. This failure can be due to various reasons, such as: The motor brushes are worn out or broken: Motor brushes are components that make contact with the motor's collector and allow electrical current to flow. If the brushes are in poor condition, the motor doesn't receive sufficient power and won't operate correctly. The motor wiring is damaged or disconnected: The wiring consists of the cables that connect the motor to the washing machine's electronic control board. If any of these cables are broken, cut, burnt, scorched, or simply loose and disconnected, the motor won't receive the proper signals and won't function as desired. There's some foreign object stuck in the motor: Sometimes, a small object like a coin, paperclip, or button can inadvertently find its way into the washing machine drum and reach the motor. This can cause the motor to become blocked and unable to spin. As you may have noticed, these causes can be quite invasive when it comes to repairs, as you will need to disassemble parts of your washing machine to get to the root of the problem. However, in the list of solutions, we'll also provide some options that may not be as invasive. Regardless, you always have the option of calling Bosch's technical service to have them inspect the motor of your washing machine. How to fix the F21 error on your Bosch washing machine? This type of error can have a quick solution if you carefully follow all the instructions we provide below. There are some possible solutions you can try before calling Bosch's technical service, and they are as follows: Reset the washer to recalibrate the sensors: Sometimes, the F21 error code can be a false positive caused by a power surge or electrical interference. In that case, you can try resetting the washer to recalibrate the sensors and clear the error. To do this, unplug the washer from the electrical outlet for a few minutes and then plug it back in. Turn it on, start a short washing cycle, and check if the error has disappeared. Inspect the motor brushes and replace them if necessary: If the problem is worn or broken motor brushes, you'll need to replace them with new ones. To do this, you'll have to remove the back panel of the washer and access the motor. Then, remove the old brushes and replace them with compatible ones for your washer model. Reassemble all the parts and run a test wash to see if the washer operates correctly. Check the motor wiring and repair it if necessary: If the issue is damaged, burnt, scorched, or disconnected motor wiring, you'll need to repair or replace it. Also, inspect the cable tips and their respective connections, as they can sometimes corrode due to moisture or detergent. To do this, you'll have to remove the back panel of the washer and access the motor. Then, check for any broken, cut, or loose wires and solder or reconnect them properly. Take the opportunity to perform preventive maintenance with electronic cleaner on the cable tips, connections, and the electronic board. Afterward, reassemble everything and check if the washer operates correctly by running a washing cycle. Check for any foreign objects stuck in the motor and remove them if necessary. If the problem is a foreign object stuck in the motor, you'll need to carefully remove it to free the motor. To do this, you'll have to remove the back panel of the washer and access the motor. Now, manually rotate the motor shaft and check for any obstructions. If you find any, carefully extract them without damaging the motor. Reassemble everything and start your washer on a washing cycle to check if it operates correctly. Repeat all the previous steps if the problem persists: If after trying all the possible solutions mentioned earlier, the F21 error code continues to appear on your Bosch washer, there may be a more serious issue with the motor or electronic board. In that case, you'll need to repeat all the previous steps and verify that everything is in order. If you don't find any abnormalities, it's possible that the motor or electronic board is defective and needs replacement. Contact Bosch technical support to resolve the issue: If after repeating all the previous steps, the F21 error code still appears on your Bosch washer, it's most likely a problem that requires the intervention of a qualified professional. In that case, you'll need to get in touch with Bosch's technical support and request a home visit from a specialized technician. In conclusion, we can tell you that the F21 error code is a fault related to your washer's motor. It could be due to the motor getting blocked by a foreign object, an issue with your washer's wiring, or worn motor brushes. To find a solution for the F21 error code on Bosch washers, you should follow these steps in the respective order: Reset the washer to recalibrate the sensors Inspect the motor brushes and replace them if necessary Check the motor wiring and repair it if necessary Check for any foreign objects stuck in the motor and remove them if necessary Repeat all the previous steps if the problem persists Contact Bosch technical support to resolve the issue We genuinely hope we've been able to help you resolve the F21 error code on your Bosch washer. Remember that to prevent such situations with your appliance, it's ideal to maintain your washer with regular preventive maintenance. Periodically, every few months, request a visit from a specialized technician for a comprehensive maintenance check of your washer. This way, you'll extend its lifespan. Good luck and happy washing! Details Written by: Errors Code Ultimate Category: Bosch Washer Errors Codes Published: 26 October 2023 Hits: 456 When a Bosch washing machine displays the F21 error code, it's generally interpreted as a motor-related fault—often pointing toward issues such as a blocked drum, worn-out brushes, or faulty control board. But what if the motor is running, the drum spins as expected, yet the F21 error persists? This situation is more common than many homeowners think, and the root cause can often be traced back to a hidden problem: a malfunctioning tachogenerator. What is the F21 Error on Bosch Washing Machines? The F21 error typically signifies a motor fault—especially a failure in the motor's rotation or issues with feedback signals. Bosch washers are designed to monitor the motor's performance continuously. If the machine detects inconsistencies in the expected behavior of the motor, it stops the cycle and triggers the F21 code. But what if the motor spins without a problem? The machine fills with water, the drum rotates during the wash cycle, and even the spin cycle starts—yet the F21 code interrupts the process. This points to a subtler, often overlooked issue: inaccurate RPM readings from the tachogenerator. Understanding the Tachogenerator's Role The tachogenerator (or tachometer) is a critical component responsible for sending real-time feedback about the drum's rotational speed to the control board. It is usually attached to the motor shaft. The control module uses these readings to adjust motor power and ensure optimal performance for different washing phases. If the tachogenerator fails to send accurate signals—or sends erratic data—the control board may believe the motor is behaving abnormally, even if it's spinning normally. In such cases, the system will falsely interpret the issue as a motor failure and display the F21 error. Signs the Tachogenerator May Be the Problem When the F21 error appears but the engine still runs, look out for these signs: Motor starts but jerks or hesitates. Inconsistent drum rotation speed. Cycles stop abruptly even though washing is in progress. F21 appears after a high-speed spin starts. These symptoms suggest that while the motor is operational, the system is not receiving valid feedback from the tachogenerator. That feedback gap confuses the electronics, prompting a safety shutdown. Why the Tachogenerator Fails There are a few key reasons the tachogenerator might malfunction: Physical damage or loose connection - Vibrations can loosen the wires or damage the sensor housing. Worn-out magnet - The sensor relies on a magnetic field to detect movement. If the magnet weakens over time, accuracy declines. Internal coil failure - The tachogenerator contains a coil that can burn out or short, rendering it ineffective. Corrosion or moisture - If the washing machine is used in humid environments or not regularly serviced, moisture can corrode the sensor or connector pins. How to Diagnose the Issue A multimeter can help check the resistance of the tachogenerator coil. Normally, you should read between 100-250 ohms, depending on the model. If the reading is significantly outside this range—or if there's no continuity at all—the tachogenerator is likely defective. You can also perform a quick functional test: Disconnect the wires from the tachogenerator. Spin the motor shaft by hand while measuring voltage at the terminals. You should see a small alternating voltage (around 1-3 V AC). If there is no voltage, the tachogenerator isn't working. However, if you're not confident handling electrical components, it's better to leave the diagnostics to professionals. Why You Should Act Quickly Ignoring an F21 error—even if your washer seems to function normally—can cause more serious problems over time. Incorrect RPM readings can lead to poor wash quality, motor overload, or even premature wear of the control board. Plus, continuous cycle interruptions can damage clothing or leave loads unfinished. Addressing the root cause early can save you money and extend your washer's life. Trust the Experts While it might be tempting to open the machine and try to fix things on your own, modern Bosch washers involve complex electronic systems that require precise diagnostics. At Home Appliance Service Center, our trained technicians specialize in Bosch appliances and have the tools and experience to identify the exact cause of your F21 error. We'll check the tachogenerator, inspect the motor and control board, and get your washer back to working like new—quickly and affordably. Don't let a hidden sensor issue cause more damage. If your Bosch washing machine shows an F21 error while the motor is still running, it's time to call the professionals. Contact Home Appliance Service Center today and restore your washer's performance the smart way. Contact us (619) 928-5000 By performing routine checks and maintenance tasks, you can:* Prevent clogs and blockages* Ensure proper drainage* Maintain optimal performance* Reduce the risk of F21 errorsDiagnosing the F21 Error Code: Common Causes and SolutionsNow that we've emphasized the importance of maintenance, let's explore the common causes of the F21 error code and their solutions.1. Clogged Drain Pump FilterA clogged drain pump filter is the most common cause of the F21 error code. Lint, dirt, and debris can accumulate in the filter, blocking water flow and triggering the error code.Solution:1. Unplug your washing machine from the power outlet.2. Locate the drain pump filter, usually located at the bottom of the machine or behind a removable panel.3. Remove the filter and clean it with warm soapy water.4. Reassemble the filter and ensure it's securely in place.5. Plug your washing machine back in and run a test cycle to verify the issue is resolved.2. Blocked Drain HoseA kinked, clogged, or improperly installed drain hose can cause water to back up into the washing machine, resulting in the F21 error code.Solution:1. Check the drain hose for kinks, twists, or blockages.2. Ensure the drain hose is properly connected to the washing machine and the drain pump.3. Inspect the drain hose for any signs of damage or wear. Replace it if necessary.4. Check the drain pump filter (as mentioned earlier) to ensure it's clean and free from debris.3. Faulty Drain PumpA faulty drain pump can cause the F21 error code. If the pump is damaged or malfunctioning, it may not be able to drain water efficiently.Solution:1. Consult your user manual or contact a professional to diagnose and replace the drain pump if necessary.2. Ensure the drain pump is properly installed and connected to the washing machine.4. Unbalanced or Overloaded Washing MachineAn unbalanced or overloaded washing machine can cause vibrations, which may trigger the F21 error code.Solution:1. Ensure the washing machine is properly leveled and balanced.2. Check the load size and redistribute clothes to prevent overloading.2. Faulty Water Inlet ValveA faulty water inlet valve can prevent the washing machine from filling with water, leading to the F21 error code.Solution:1. Check the water inlet valve for blockages or mineral buildup.2. Clean or replace the valve if necessary.3. Incorrect Detergent or Softener UsageUsing excessive detergent or softener can cause clogs and trigger the F21 error code.Solution:1. Check your detergent and softener usage guidelines.2. Adjust your detergent and softener amounts according to the manufacturer's recommendations.Additional Tips for Preventing F21 ErrorsTo minimize the risk of F21 errors and ensure your Bosch washing machine operates smoothly, follow these additional tips:* Regularly clean the gasket and seals around the lid to prevent mold and mildew buildup.* Run a cleaning cycle with a washing machine cleaner every 1-2 months.* Check and clean the detergent dispenser regularly.* Ensure the washing machine is properly ventilated to prevent moisture buildup.ConclusionThe F21 error code on your Bosch washing machine can be frustrating, but with the right troubleshooting steps and maintenance habits, you can quickly identify and fix the issue. By following the steps outlined in this article, you'll be able to diagnose and resolve common causes of the F21 error code. Remember to perform regular maintenance, inspect your drain pump filter and hose, and address any underlying issues to prevent F21 errors from recurring. With a little patience and attention to detail, your Bosch washing machine will be running smoothly again, providing you with clean, fresh laundry for years to come.FAQsWhy is my F21 Bosch washing machine not spinning?The F21 error code on your Bosch washing machine indicates a problem with the spin cycle. This can be caused by a blockage in the drain pump filter, a faulty drain pump, or a malfunctioning electronic control unit. To troubleshoot the issue, start by checking the drain pump filter for any blockages or debris. Make sure to clean or replace the filter as needed.If the filter is clear, the next step is to check the drain pump itself. Ensure that it is functioning properly and not making any unusual noises. If the pump is faulty, it may need to be replaced. Finally, if the issue persists, it's possible that the electronic control unit is malfunctioning and may need to be repaired or replaced by a professional.How do I reset my F21 Bosch washing machine?To reset your F21 Bosch washing machine, start by unplugging it from the power outlet. Wait for 30 minutes to allow any residual power to dissipate. Then, plug the machine back in and turn it on. If the error code persists, you may need to perform a more detailed reset. To do this, press and hold the "Start" button while simultaneously turning the dial to the "Off" position.Keep holding the "Start" button until the display shows "0" and the lights start flashing. Release the button and turn the dial to the "On" position. The machine should now be reset and ready for use. If the error code still persists, it's possible that there is a more serious issue with your machine that requires professional attention.What does the F21 error code mean on my Bosch washing machine?The F21 error code on your Bosch washing machine indicates a problem with the drain system. This can include issues with the drain pump, drain hose, or drain pump filter. The error code is designed to alert you to a problem that needs to be addressed to prevent further damage to the machine.To diagnose the issue, start by checking the drain pump filter for any blockages or debris. Ensure that the drain hose is properly connected and not kinked or blocked. If the issue persists, it may be necessary to check the drain pump itself or seek the assistance of a professional repair technician.Why is my F21 Bosch washing machine making a loud noise?A loud noise from your F21 Bosch washing machine can be caused by a variety of factors, including an unbalanced load, faulty bearings, or a blockage in the drum. To troubleshoot the issue, start by checking the load balance and ensuring that it is evenly distributed. If the noise persists, check the drum for any blockages or debris that may be causing the noise.If the issue is not related to the load or drum, it's possible that the bearings or another mechanical component is failing. In this case, it may be necessary to seek the assistance of a professional repair technician to diagnose and repair the issue.How do I fix a F21 Bosch washing machine that won't drain?If your F21 Bosch washing machine won't drain, the first step is to check the drain pump filter for any blockages or debris. Make sure to clean or replace the filter as needed. Next, check the drain hose for any kinks or blockages, and ensure that it is properly connected to the machine.If the issue persists, it may be necessary to check the drain pump itself or seek the assistance of a professional repair technician. In some cases, the drain pump may need to be replaced or the machine may require more extensive repairs.Can I fix a F21 Bosch washing machine myself?While some issues with your F21 Bosch washing machine can be fixed yourself, others may require the assistance of a professional repair technician. If you are comfortable with DIY repairs and have a basic understanding of the machine's components, you may be able to fix issues such as a blocked drain pump filter or a faulty drain hose.However, more complex issues such as faulty bearings or a malfunctioning electronic control unit may require specialized knowledge and tools. In these cases, it's recommended to seek the assistance of a professional repair technician to ensure that the issue is properly diagnosed and repaired.How much does it cost to repair a F21 Bosch washing machine?The cost to repair a F21 Bosch washing machine can vary widely depending on the nature of the issue and the extent of the repairs needed. In some cases, a simple fix such as cleaning or replacing the drain pump filter may cost very little. However, more complex repairs such as replacing the drain pump or electronic control unit can be more expensive.On average, the cost of repairing a F21 Bosch washing machine can range from \$50 to \$500 or more, depending on the repair and any replacement parts needed. In some cases, it may be more cost-effective to replace the machine rather than repair it.1.8K If your Bosch washing machine displays error F21, this is a sign of a problem with the machine's motor. Read here what to look out for then How to fix error F21 of the Bosch washing machine If your Bosch washing machine displays error code F21, this indicates possible damage to your machine's motor. The motor carbons may be worn out or there may be no connection to the motor control. Both are common faults in washing machines. To reset the control module, you must follow a few steps. First, turn the switch to the off position and close the door of the washing machine. Position the knob vertically downwards so that it is in the "6 o'clock" position. Now move the switch left and right for a few seconds until the light flashes to "Start/Pause". Follow this by pressing and holding the centrifugal button. Meanwhile, turn the switch to the "7 o'clock" position. After waiting a few seconds, release the knob and move the switch to the "off" position. This should complete the reset. If this did not work, repeat the process, the machine may not have responded yet. If this does not help either, you will probably have to take the washing machine in for repair. The worn motor carbons need to be replaced. BoschErrorTroubleshootingWashingMachine 0 comments 0 FacebookTwitterPinterestEmail If your washing machine Bosch once gives an F21 error and doesn't knock out the plugs at the same time, you are very lucky. Having seen this failure, immediately disconnect the Bosch washing machine from the mains. Only then call a specialist. Self-search for a problem solution, especially in a powered technique, increases the risk of electric shock. However, we will not intimidate you ahead of time, let's deal with this error step-by-step.Bosch washer error codes f21Interpretation and description of the F21 code of the Bosch washing machineError F21 in the Bosch washing machine may appear not only in the form of alpha-numeric code. Often it occurs as a set of blinking indicators on a control panel. This happens because some models of Bosch washing machines are not equipped with a display. Thus, the F21 code cannot be shown.You can distinguish dozens of errors using the system of flashing indicators. Specialists do it even without thinking as they have a lot of experience with such devices. A user can also perform this following a special table of error codes.In the picture below we prove how the F21 code is shown on the Bosch appliance without a display. The following stages happen. The washing machine freezes and stops responding to button presses. Then, it turns the program selector knob. Three light bulbs begin to flash or blink at the same time (1000 revolutions, 800 revolutions, and rinsing). If you have an older model of the washing machine, then the indicators of 800/600 revolutions and rinsing will turn on. Older devices perform spinning at eight hundred revolutions, the maximum.Error code F21 on the Bosch washer control panelThe error explanation is simple. But finding the reasons for its occurrence is quite complicated. Masters interpret the F21 error code the next way. There is no possibility to rotate the drum of the Bosch washing machine. In fact, the appliance tries to start the rotation several times. And if it does not succeed, the code F21 appears on the control panel. So what causes the code appearance? Why the washing machine can't start the rotation of the drum?Tacho sensor is defective. A module doesn't get information about the engine speed. So, it stops the Bosch washing machine and gives the F21 error code.The engine is out of order. If the motor is broken, it is not able to rotate. Accordingly, the module makes several attempts to start the engine. Then it issues the specified error.A chain which powers the motor or a Hall sensor (tacho sensor) is damaged. In this case, the sensor and the motor are in order, but their feeding wiring is broken or rather oxidized.The cause for the F21 error can be a foreign object. It often gets the tank during washing and hinders the drum. Another reason for F21 error code is a voltage drop in the mains.Hall sensor (Tachogenerator tacho sensor) is defectiveTacho Generator tacho sensor Hall sensor within motor Bosch washerThere are no universal recipes for troubleshooting. It's necessary to start checking all the above reasons in a convenient order. Do it until you come across a breakdown.Let's start with the Hall sensor. Most likely, you attempt to choose a different order, from simple to complicated. Of course, it is quite reasonable. For example, it's a good idea to check the rotation of the drum for foreign objects first. Then check the voltage in the mains and only then get into the case to test the engine and the Hall sensor.Many users get troubles obtaining access to the tacho sensor and the motor of the Bosch washing machine. How to get to these details?Slowly turn off the device and pull it out somewhere, where is more space.Disassemble the rear wall of the washing machine body. Next, remove the transmission belt, because it will hinder your work.Using your phone, take pictures of the wires and fasteners location in order not to mix it up later. Then remove the engine.If you want to quickly remove the motor from the Bosch washing machine, do the following. Firstly, disconnect the terminals from it. After this, unscrew the tightening bolts and press the body of the part. Slightly move it forward and pull down.The tacho sensor is located on the engine case, so remove it and carefully inspect. There may be marks of oxide and grease on the inner surface of the ring of the tacho-sensor. Remove it. Next, take the multimeter and check the Hall sensor. In case it turns out that the tachogenerator is burnt, you need to change the part immediately.Engine problemsWasher motor BoschThe Bosch washing machine is often "marked" of serious engine issues. The problem with the brushes is the simplest thing that can happen to this part. Brushes on collector engines are erased quite often. So, their replacement for the master is a common thing. An amateur may have some troubles when dealing with brushes. But anyway this repair belongs to the category of easy breakages. So you will be able to fix it with your own hands. It will be much worse if the motor gives a leakage current to the housing. Or it has pierced several turns of the winding. In 99% of cases, you will need to change the motor completely. At least, it will be cheaper than the restoration of an old engine. If there is no leakage, check each turn of the winding, trying to detect the rupture. The work is quite painstaking, but it will allow you to determine exactly whether the engine is in order or not.Other malfunctionsBefore we proceed to other malfunctions that cause the F21 code, let's discover how to reset the error of the Bosch washing machine. What is the reason to reset the failure if in the case of its elimination it disappears? It's a common question. We'll explain everything to you now. The point is that the error won't disappear even if you perform the repair correctly. If you do not drop the settings, the code will still be here and hinder the start of the machine.How to reset an error of the Bosch washing machine?Turn the program selector to the off position.Turn the selector to the spin. At this stage, you need to wait until the error appears again on the control panel.Press and hold the button responsible for switching the revolutions of the drum. Hold it for a few seconds and then release.Turn the program selector to set the "drain" mode.Press on the button of turns switching again and wait some seconds.If all the lights blink and the machine is making the loud sound, the error is reset. But if nothing happens after you release the spin button for the last time, then you need to repeat the above-described actions.Some foreign object can cause the F21 error code in Bosch washers. It often gets into the tank, which is considered to be quite a common situation. It seems like masters have already extracted everything from the washing machines tanks. For example, coins, pins, bones from bras, buttons, small details from children's toys, etc.All this stuff poses a danger for washing machine details. For example, there were some cases when sharp objects jammed between the tank and the drum. It led to piercing the tank and leakage.Other faults of the Bosch washer with error code F21How to make sure that the drum jams the foreign object and don't dismantle the washing machine? It is necessary to open the hatch door of the previously disconnected appliance. Try to turn the drum by hand. If you hear a metal rattle, and the part jams while spinning, then something has hit the tank. A foreign object must be immediately removed.If the Bosch washing machine refuses to work and shows the F21 code, it's time to take radical measures. The fault may be caused by foreign object damage. In addition, it happens due to a strong voltage drop in the power grid. Otherwise, once such a drop can burn out all the electronics of the device. And it will exactly send your "helper" to the trash.To summarize, the F21 error code of the Bosch washing machine is a common problem. The fault's reasons are diverse. We tried to describe the most common of them.