Troubleshooting TASC 6100

Problem: The chain will not engage. OR The chain will not shut off

Solution: A TASC 6100 is console that receives input from valves, GPS, and sensors. In order to fix your problem with a minimum of effort and money, you must <u>systematically</u> search for the problem.

1. Check your console. Does it turn on and off?
2. Check your regulating valve. Does it work properly?
3. Check your GPS. Is it receiving signal?
4. Go through your console setup. Make sure your settings are correct.

First check the console. Obviously, if it will not turn on and does not have the proper settings, your system will not work properly.

There is a lot of vibration when a truck travels across a field, if the console doesn't power up, don't assume it is broken. Check to make sure connections have not loosened and power lost.

Now check the connections on the back of the console to confirm they are plugged in properly.

Look at wiring for crimps or frays.

Assuming your console checks out, the next step is to check the regulating valve.

The chain is turned on, speed adjusted and turned off by the regulating valve MD-

One of the best tools you can have for diagnosing troubles in your Mid-Tech precision system is the valve flow test console.

This will allow you to determine if the problem is the valve itself, or the wiring to the valve. Many times customers have replaced what they thought was a bad valve only to discover their wiring was at fault. Remember, vibration loosens connections and sometimes causes a short.

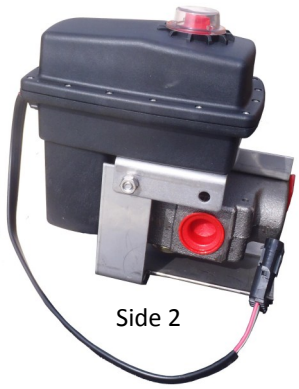
Connect the tester to a power source—usually the battery of your vehicle

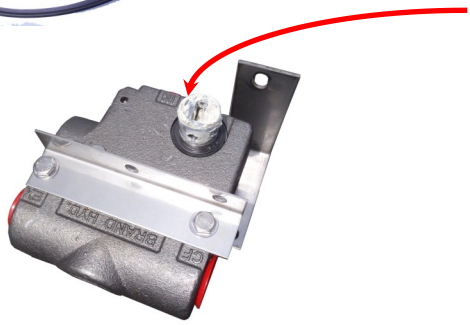

Side 1

The MD-8792030 regulating valve has 2 main components:
MD-8790104 Power Head (sold separately)

Valve Base (not sold separately)

Here we have photos of the entire assembly from both sides.


Side 2



The valve base has a fitting that must turn freely. Sometimes this will “freeze” and cause the valve to malfunction.

It is very easy to test this portion of the valve.

The MD-8792030 in question.

Plug the tester directly into the assembly.

Give it power to see if the valve works. This valve did not work.

Loosen the bolts holding the power head in place and lift off power head from valve base.

After removing the power head, take a pair of pliers and twist the fitting in the valve stem to make sure it moves freely. This stem does NOT move. It is recommended to spray the stem with a lubricant such as Strike Hold or WD40.

It is **IMPORTANT** that you return the stem to its ORIGINAL position or you will get the valve out of alignment! Pay attention to where you start! Now twist the stem back and forth until it glides easily.

At this point in our discussion, let's pause to discuss a favorite topic: **preventative maintenance**

After looking at the photos of this unit, you should have noticed product sitting on catwalks & fittings and plenty of rust.

Fertilizer is corrosive. Letting it sit for months in your unit after use is *foolish*. Clean your unit! Empty product from the hopper, sweep off the catwalks and fittings (or even better, power wash), then spray your unit entirely with used motor oil to prevent rust. Your equipment will run better and last longer by simply performing a little cleaning at the end of each season.

Why spend a large amount of money on a sophisticated piece of equipment and simply let it corrode? Is it any wonder the valve was frozen when you look at these photos?!

OK, I got that complaint off my chest, so let's continue trying to repair this unit!

Now we must determine if the entire valve is bad, the power head is bad or the valve base only. We will methodically test various components.

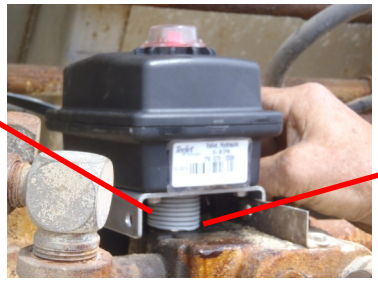
Place new power head on valve base. Plug the tester into the new head and power on.

The valve base should rotate and you will hear a clicking sound as it moves.

In this case, the valve base resumed working after being lubricated and turned. However, the frozen fitting had caused the power head to burn up. In this case we will replace the power head (MD– 8790104) only and save our customer about $400.

Keeping the stem clean & lubricated would have saved this customer money, time and a lot of aggravation!

The old protective cover—corroded and covered in rust.



The new protective cover—clean and coated with lubricant.

Before we plug our repaired assembly into the wiring, we squeeze a generous squirt of dielectric grease into the socket to keep our moisture and debris.

Connect the ends securely.

Remove the tester and plug regulating valve into spreader wiring. Return to the cab of the truck, power up the TASC 6100 and see if you can turn the bed chain on & off.

TASC 6100 did turn chain on & off → The problem was the power head on the regulating valve.

TASC 6100 did NOT turn chain on & off → The problem was the power head on the regulating valve PLUS something else. Your next step is to check your wiring from console to valve for crimps or shorts.

In this repair the console, valve and wiring are operating correctly. Return to the cab of the truck and go through the setup for your TASC 6100. Your TASC should hold your settings even when the console is turned off, however, NCI strongly recommends you verify all your settings at the beginning of each working season and after any maintenance has been performed involving your Mid-Tech system.

NCI has developed several "Cheat Sheets" to help you program your system easily. Please see separate Technical Tips for this information.

The speed simulator shown here used to test GPS.

It is a very handy tool when troubleshooting your precision product.

