StarGazer - Wake Edition
Mechanical

June 2009

9/17/2009

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Tip: To adjust contrast on LCD Screen, Press MENU and UP Keys together. See Page 7.

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Section 1 Initial System Start Up

The very first time your PerfectPass is turned on, it may ask you two questions:

1. "Initial Hours 000". If this hour meter feature is present, use the UP Key to enter the number of hours on your boat. PerfectPass will start counting from that position. Press MENU Key to continue.
2. **[Read in MPH ^ = Yes]** If you want your system to display in MPH, press the Up Key. For metric, press the Down Key.
3. **[WAKE EDITION ^ = YES]** Press UP Key to confirm Wake Edition software.

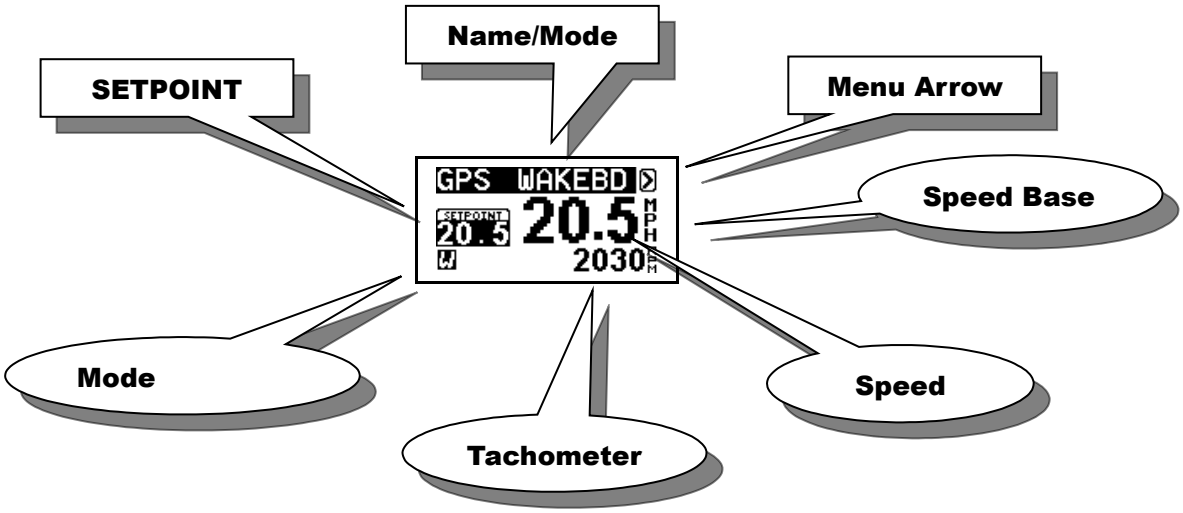
USING STARGAZER WAKE EDITION

There are three operating modes to choose from: (1) **Wakeboard Mode** is speed based and controls from the GPS Sensor; (2) **RPM Mode** allows the user to set an RPM value; and (3) **Slalom Mode** allows recreational slalom skiers to enter a speed for open water skiing. (24 – 36 mph). (This requires calibration).

The ON/OFF key is pressed to turn control ON or OFF. System should always be in OFF mode when not in use. Turning system ON or OFF is always done at neutral or at idle for safety. You may be asked to confirm you are in neutral as follows [IN NEUTRAL ^ = Yes]. Press UP Key to confirm.

Typically, wakeboarders prefer the pull characteristics of the speed based Wakeboard Mode. This mode is designed for 9 – 25 mph. Open water skiers at higher speeds should use the RPM or Slalom Mode.

Wakeboard Mode (Speed Based)



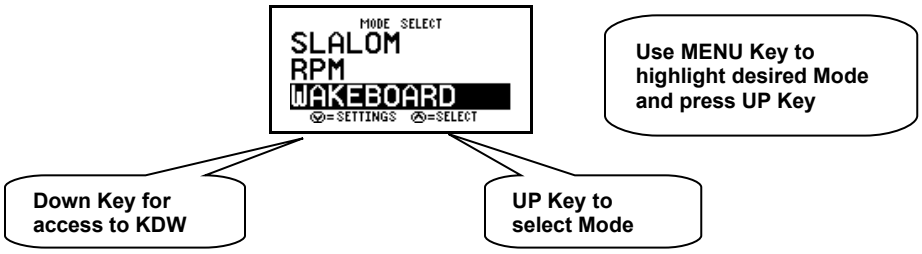
When system is ON, the screen will appear as above with set point speed at left. By using Menu Key you can move around the screen and highlight set point to make speed changes.
Once desired speed has been set, you can simply pull up the rider and when set point has been reached or exceeded the system will engage and take over automatically. (You will hear an audile beep and "WAKEBD" heading will become highlighted to confirm engagement.

To disengage system, pull back on the throttle.

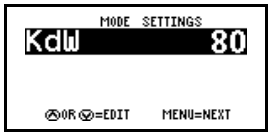
The key to good driving is to smoothly drive to engagement speed so PerfectPass can seamlessly take control. If you have a heavily laden boat and need full throttle from start, slowly pull back on handle as speed increases to help PerfectPass engage smoothly.

If the rider falls, pull throttle back and system will disengage. Return slowly to rider and pull them back up. PerfectPass will once again engage when set speed is reached.

Menu Arrow ⊠ – To move to another mode, use menu key to highlight Menu arrow in upper right corner and press up key to confirm. The following screen will appear with other operating modes you can select.



KDW Adjustable Pull Parameter – This background setting allows you to tailor the pull characteristics. To access, highlight Menu Key ⊠, and press the DOWN Key to access this KDW screen:

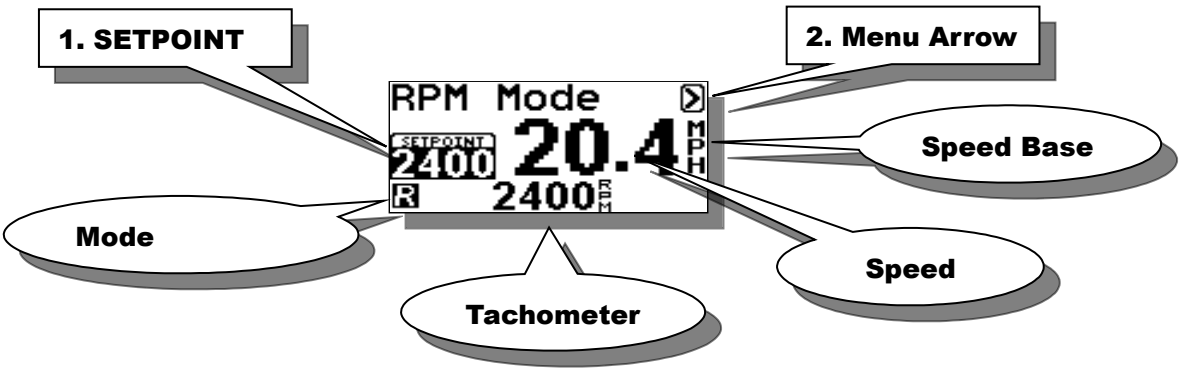


KDW (Throttle Pull Rate) – KDW can be changed using up or down keys. The higher the value, the more aggressive the control. Heavy boats may need higher values. Factory setting is about 90. Normal range is 50 – 150. (If this value is set too high, the control may become a little erratic and engagement may not be as smooth).

Section 2 RPM Mode

USING RPM MODE

In this mode, the screen will appear as follows:



Operating in this mode is very similar to using the Wakeboard or Trick modes, except the system is now controlling to an RPM **SETPOINT**.

RPM DRIVING

Prior to towing the rider / skier, select the RPM **SETPOINT** by using the **UP** or **DOWN** keys with the SETPOINT highlighted on the screen. Pull the rider up smoothly and continue to accelerate up to or beyond the RPM **SETPOINT** so the system can engage and take control. The digital tachometer should match the RPM set point.

Changes can be made to the RPM SETPOINT while the system in engaged ("on the fly") to fine-tune the RPM you desire.

Section 3 Slalom Mode **(Requires Calibration)**

SIMPLE SLALOM

This Simple mode is for open water skiing and will provide an excellent, tournament quality pull, however, it is not designed to be as accurate as the tournament class Slalom modes.

This mode allows you to set speeds in 2 mph increments ranging from 24 – 36 mph. It is designed for those wishing to use the system primarily for open water skiing.

Auto Calibration Procedure (Capture)

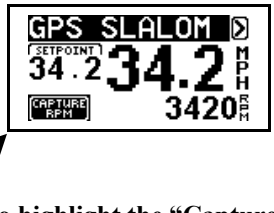
The Slalom Mode is RPM Based so therefore the internal "baseline rpm value" needs to be set so it is correct for your boat. This can be done very easily on the fly in slalom mode. (This process needs to be performed for each speed you intend to use).

Step.1 Set speed in Slalom Mode. (Ex: 34.2)

Step.2 Drive up and engage system. You will hear engagement beep and after a few seconds the boat speed will adjust on its own and settle at 34.2 mph.

Step.3 Use Menu Key and highlight the "**Capture RPM"** on main screen. When highlighted, Press Up Key. (The system is now calibrated forever at this speed).

Step.4 Change set speed (i.e.: 32.3) mph and repeat.



Use Menu Key to highlight the "Capture RPM", then press UP Key and calibration is complete.

Section 3 Slalom Mode (Continued)

Slalom Course Skiing

If using this system in a course without timing magnets, etc, we recommend that once you have performed the CAPTURE procedure at each speed, that you do a further tweak at each speed setting. You can access the background "BASECAL" screen by highlighting the Menu Arrow ▷ in upper right corner, then press the Down Key.

To access baseline screen, highlight Menu Arrow ▷ and press the Down Key

Use UP Key to add extra RPM

This screen example shows the RPM that was captured on this boat was 3385 for 34.0 mph. Because when you tow a skier additional RPM is required, we recommend you add 160 RPM to each of your captured baselines (ie. adjust for each speed setting). In this screen, we recommend you manually adjust it up to 3545 (3385 + 160). This tweak will allow for a quicker, more accurate engagement and control for course skiers.

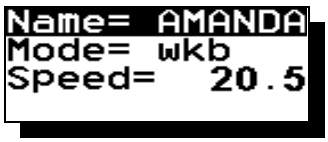
Section 4 Using Name List

Additional PerfectPass features are accessed by pressing the **MENU** & **UP** keys together. The features available vary depending on the make and model of your boat. If a feature is not present on your PerfectPass then it is not available on your system. To move to the next feature press the **MENU** key.

NAME LIST

This version of PerfectPass allows you to store up to eight names and their preferred speed. The Name List can be accessed by pressing the **UP** key when the NAME/MODE section is highlighted or by going into the SUBMENU and selecting the Name List. Once in the Name List press the **MENU** key to move through the list. With the desired name highlighted press the **UP** key to select the name from the list and load their settings or press the **DOWN** key to edit the name.

Creating Names – First enter the Quick List. Press the **MENU** key until [**NEW ENTRY**] is highlighted. Then press the **UP** key to enter a new name. The following screen will then appear:



Scroll through the alphabet using **UP** & **DOWN** keys, and then press **MENU** to move to next position. Press` the **MENU** key to move through the settings. If you are programming a JUMP or SLALOM name there will be another page of settings to enter.

Deleting/Editing Names – As you scroll through list of names, instead of pressing **UP** key to select that name, press the **DOWN** key to edit or delete.

Note: Names can be changed by "Editing Names" but can only be deleted by performing "System Reset".

Section 5 Other Features

Press **Menu & Up keys** together to access the following:

Screen Contrast – By pressing up or down keys you can change the contrast level. Range is 1 – 5. Lower values = better visibility in extreme sun. 3 is normal.

User Settings – Enter this to switch from MPH<>KPH.

Engine Set Up – If you do not have a standard V-8 engine and your PerfectPass digital tach is not correct, you can select a V-6, etc. from this screen.

Name List – You can get to the name list through this feature, or by highlighting the mode or name on main screen and press up.

System Info – This screen will display software version #, battery voltage, engine selection, hour meter and water temperature. (Some information not on all boats).

GPS Info – Latitude, Longitude and Clock.

Device Test – Troubleshooting information for servo motor or electronic throttle systems.

More Throttle – If you see the # sign flashing in the upper right part of screen, this means the system is running out of manual throttle. Advance the handle forward a little until the # sign disappears.

QUICK REFERENCE GUIDE (Display Operation)

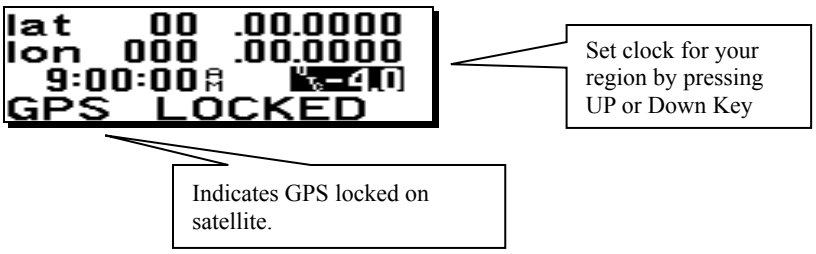
Change Modes
Highlight Menu arrow in upper corner and press UP Key.

Name List (Short Cut)
Highlight mode (ie. Wakeboard) or name on screen and press Up Key.

Screen Contrast, Name List, System Info, Water Temp, Device Test
Press Menu and Up Keys together.

GPS INFO

Shows latitude and longitude as well as GPS Clock.



The Clock will need to be set for your region of the world.

Section 6 Driving Tips

1. Always pull a rider up smoothly. If you accelerate too far past the target speed, you can gently pull the throttle handle back to assist PerfectPass in taking control. When PerfectPass engages you will hear an audible “beep”. In addition when engaged the Modes (Wakeboard) or Name on Screen will become highlighted.

2. Always leave your hand on the throttle and keep an eye on the lake ahead. Pull back throttle to neutral to stop boat. (The system will immediately disengage and the boat will be under manual control).

3. When returning to a rider in the water, drive very slowly and carefully. Always turn engine off when loading or unloading a rider from platform. Never back a boat up when someone is in water behind.

4. The speed based mode is not designed for skiing & speeds over 30 mph as the control may not be smooth. RPM or Slalom mode is designed for smooth control over 30 mph.

5. “More throttle” If you see the # sign on the screen, this means PerfectPass is running out of control room, press throttle handle slightly ahead until the # disappears.

6. You can temporarily over-ride the system by applying more throttle. The engine speed will increase for about 5 seconds before PerfectPass regains control.

Section 7 Troubleshooting

Common Questions & Answers

1. Condition:
In Wakeboard Mode under heavy load system is surging after engagement.

Solution:

If it is smooth without load, but surges under heavy load then the KDW may be too high. (The response to speed change is too aggressive). Try lowering KDW until control is smooth.

2. Condition:
In both Wakeboard & RPM mode the system beeps to engage, but boat speed never settles in and "hunts" above & below Set Speed.

Solution:
It appears that the PerfectPass throttle cable does not have free movement and is rubbing against engine cover or some other obstacle. A ***Linkage Test*** *should be performed.* *See Page 11.*

3. Condition:
System beeps to confirm engagement, but boat continues past set speed and never locks in.

Solution:
Computer is attempting to control, but servo not responding. A ***Servo Motor Test*** *should be performed. (Servo motor could be seized).* *See Page 11.*

4. Condition:
PerfectPass green light in display is on, but no data on screen.

Solution:
Check to see if servo motor is powered, if not then the system does not have adequate voltage or is poorly grounded and will not start. (Measure voltage on PerfectPass power cable, which should be in excess of 12 V).
Note: When ignition is OFF, the black knob on servo motor turns easily. When powered, knob is stiff and is difficult to turn by hand.
If servo motor is powered and performs auto tighten rotation but Display has no data, then Display should be changed.

5. Condition:
PerfectPass has no digital speed reading.

Solution:
1. *Check Master Module to ensure GPS cable is properly connected and pins are in proper position and not bent.*
2. *Does main screen show "No GPS Data"? If so, it does not see the GPS connected.*

6. Condition:
UP key on Display does not respond.

Solution:
Make sure all 10 pins on Master Module are in-line where display connects. If connection is OK, key pad switch is faulty, return to PerfectPass for repair.

7. Condition:
Boat speed drops and throttle handle must be pushed far down to get acceleration.

Solution:
Servo motor is not holding and rotating properly usually due to a bad connection at the servo motor. See Servo Motor Test, Page 11.

8. Condition:
System is blowing the 5 amp, 1.25" fuse on 12 V power cable.

Solution:
Generally caused by a short or "grounding" problem with the red 12 V power cable on servo motor. Closely inspect wiring particularly around gold resistor. (Remember, resistor & servo motor will run very hot which is normal).

9. Condition:
Speed in Slalom mode not accurate.

Solution:
You must calibrate each speed. See Page 4 for details.

10. Condition:
Set in KPH but want MPH

Solution:
Press Menu and UP Keys together. Go to User Settings.

11. Condition:
My digital tach reading is wrong.

Solution:
Go to User Settings (Menu and UP Keys together) and go to "Engine Set Up".

SYSTEM RESET

Turn key ON and quickly press and hold “ON/OFF” and “Menu Keys” together for about 5 seconds until [SYSTEM RESET ^ = YES] appears. Answer the questions including YES to [Wake Edition Only ^ = YES].

LINKAGE TEST

This test should confirm whether the PerfectPass throttle cable & linkage connection is properly working.

With key OFF, turn black knob on servo motor in clockwise direction until snug. (This is the normal start position of the knob). It should always return to this position when returning to neutral. Now push the manual throttle to 1/2 open position. Now take black knob on servo and slowly turn the knob in a counterclockwise direction, and then in a clockwise direction.

As you rotate the knob back & forth, you should see the throttle lever on engine opening & closing very smoothly with each step of the motor. As you turn the knob counterclockwise which lets out cable, the throttle will close back towards neutral. When you rotate it clockwise the throttle will open.

As you rotate the knob back and forth (slowly and quickly), the throttle should open & close very smoothly and the brass L Adapter at linkage should be rotating as well to follow cable. At no point should the throttle cable catch, hook or come into interference with any part that could disrupt the cable movement.

If the cable is rubbing against a decorative engine cover, fuel rail, motor box etc, adjust servomotor and cable to improve alignment. Many plastic decorative engine shrouds can cause this problem. Remove temporarily and run boat if you suspect this could be a problem.

Final Test: With key OFF, push manual throttle to full open position. Watch PerfectPass throttle cable to ensure it can move freely without binding or interference.

Throttle Return Spring: PerfectPass can open the throttle (by turning clockwise), but relies on the engine return spring to close the throttle when the servo turns counterclockwise. (The return spring is always applying pressure against the throttle back towards the neutral position). If the servo turns counterclockwise to slow the boat, but the throttle lever on engine does not move or moves very slowly, the return spring could be weak, broken, etc.

If you feel the spring is weak or damaged, an external return spring can be added.

Servo Motor Test / Auto Tighten Test

Every time you return the boat to neutral when PerfectPass is on, the servo will wind in the cable until snug in a clockwise direct. This is the normal starting point for the servo.
Each time you turn the key on or start the boat, PerfectPass becomes powered and the servo will perform an “auto tighten” function and will attempt to wind in the cable to confirm it is in normal position. (If in proper position, it will appear simply as a “click”, “click”, “click”).

To check servo & servo power wire, with key off turn black knob on servo motor counter clockwise ¾ of a turn. Now turn key on and black knob should turn clockwise about ¾ of a turn as part of auto tighten. If it does, repeat procedure, except this time hold black knob gently to apply some resistance to auto tighten. If it rotates with good strength then it would appear servo & servo power cable are fine.

If it does not rotate or just vibrates, then a wiring phase coming to the servo may be loose or broken. Inspect all wiring around servo. Pull both white plugs apart at servo & inspect pins to ensure they are in place. Gently tug on each wire to ensure they are securely in crimp. Check at Master Module where cable is connected.

If you cannot locate problem, contact PerfectPass.

Important Notes:

1. The gold resistor will run extremely hot. This is normal.
2. If system is new, make sure servo power cable is plugged into Master Module correctly and not upside down. Tips on plug should point up towards label on Module.

Section 8 Installation Instructions PerfectPass Wakeboard Pro

Step 1. Installation of Servo Motor

Using the two provided hose clamps, loosely mount the servo motor on top of the cooling water hose leading to drivers side exhaust manifold (starboard side on standard inboard engines). See Figure A. Tighten later after final positioning. (See amended installation details "Photo" if inserted for certain engines for servo motor mounting position).

Remove ball joint connector from throttle control lever and remove from the coupling end of Morse control / Teleflex cable. (See Figure B).

Position servo motor throttle cable in line with the throttle control lever. Ensure the locking 10/32 nut is in place on Morse control / Teleflex throttle cable. Screw threaded brass hex connector on the PerfectPass cable onto the end of the Morse control throttle cable. (Do **not** over tighten hex nut). Install L shaped brass throttle adapter to throttle control lever using identical hole as original ball joint. (L adapter must be able to swivel). Using an Allen key, tighten L shaped adapter mounting bolt. (See Figure C). You may find it helps to move the Morse control lever into gear during installation to allow more clearance. (Be sure the washer is against the brass L-Adapter and not under the nut).

Check and adjust position of servo motor ensuring the motor box cover closes properly and servo throttle cable is not in contact with any moving parts. Make sure servo motor cable has 2 or 3 inches of free travel. Securely tighten hose clamps on servo motor. (Do not "tie wrap" cable as it must be able to move freely).

With the throttle in neutral position, adjust brass hex connector if necessary to ensure there is **no gap** between it and the end of the servo motor cable (any gap may cause engine to surge up and down in neutral). Adjust and snugly tighten all parts. (See photo's, **DO NOT OVER TIGHTEN**).

Turn the black servo motor knob in a clockwise position until **snug**. With throttle in neutral, the linkage should appear as in Figure C.

Linkage Test – This is a quick & easy test to check throttle cable & linkage.
With key OFF, push throttle lever to ¾ open position. Now take the black knob on servo motor and wind it counter clockwise a full turn and then clockwise a full turn. Do this slowly in each direction and as you do this the engine throttle arm should be opening and closing very smoothly. If the cable is "rubbing" or "catching" on a fuel rail or decorative engine cover, the servo & cable should be repositioned to eliminate this. The stainless cable inside the black jacket MUST be able to seamlessly move for the control to work properly.

With key off, push manual throttle to full open position and back to neutral. PerfectPass cable should move freely in both directions.

IMPORTANT:
- Never "tie wrap" PerfectPass throttle cable.
- Make sure all wires are tied away from hot or moving parts and there is adequate clearance.
- The manual throttle on your boat should operate and feel the same as before the PerfectPass was installed, or you may have to adjust the hex nut.

Step 2. Installation of Master Module

Mount the Master Module under the dash normally on the bulkhead accessible behind and right of the passenger seat in a dry location. It can also be installed on the left side of driver's bulkhead. The wires from under the dash pod can be easily fed across the bulkhead.
Route servo motor power cable from Master Module to servo motor and connect. (Use tie wraps to keep cable away from moving parts). Make sure the tips **on the plug are facing up** towards the top of the Master Module box. A wire snake will be helpful.

Step 3. Mount Dash Display

Remove the right speedometer (if boat has two speedometers) or remove tachometer and install the **In Dash PerfectPass Display** and connect into Master Module. (If there is a speedo tube on back, it should be clamped).

Step 4. Connect Power Wire

Depending on the boat and model, there are a number of ways to connect to a switched (12 volt) power source.

1. On boats with traditional analogue gauges and posts on back of tachometer, there is a 12 volt (+) post often marked (IGN) which is an easy connection to the purple wire. The black wire end can attach to the ground (-) post marked (GND).
2. On boats with Borg Warner gauges with no posts, attach the PerfectPass purple power wire to the purple wire leading to the ignition terminal. The black wire can be securely grounded to the grounding bar or other suitable ground location.
3. **2000 - 2005 Nautiques** – There is a main wiring harness and large white plug located behind the dash pod. Connected to this plug is a purple wire carrying the switched 12 volts and a black wire which is a suitable ground connection.
4. **2002 – 2005 MasterCraft** – Power, RPM and Paddle Wheel speed is all located in the special plug and play harness supplied with each system. The MasterCraft supplied white connector is on every boat specifically for PerfectPass. You may have to remove the driver's foot panel to locate this connector in the boat's wiring harness.
5. **2005 Malibu** – There is a plug & play harness for speed, RPM and Power.

Step 5. RPM Cable Installation

This connection will depend on the brand and year of boat you own.

(1) **Standard Installation** (Older boats and boats with traditional Analogue gauges with Posts on back)

The **Gray wire** with ring terminal can be easily attached to the "SEND" post on back of tachometer. This Gray wires picks up the raw engine rpm from this post. The **Black wire** ring terminal can be attached to any suitable ground, including the ground post on the tachometer. (If there is not a post, connect to the solid gray wire coming from the tachometer).

(2) **2002 - 2005 MasterCraft** – The custom wiring harness supplied by PerfectPass allows for plug & play for RPM, Power & Paddle Wheel.

(3) **1998- 2004 Malibu** (Borg Warner Gauge System)

In behind the dash pod on most models, Malibu has left a Gray (RPM) wire that terminates at a large female spade connector. If you can locate this, you can simply attach the Gray wire on the rpm sensor cable to this connector.

Alternatively, you can locate the solid gray wire in the main wiring harness that leads into the Borg Warner control box under the dash. Use a blue "Tee Tap" connector to connect to this gray wire. You can then attach the gray rpm sensor wire to this using a push on spade connector. The black wire can be securely connected to any suitable ground.

LS-1 On this engine (pre 2002 only), you only connect the Black wire on the RPM Sensor cable to the Gray wire leading to the Borg Warner control box. (same as LT-R MasterCraft). The gray RPM sensor wire is left un-connected.

2005 Malibu – See plug & play harness.

(4) **1999 – 2001 MasterCraft, 2000 Supra, 2000-2002 Infinity (All Other Brands Using Borg Warner Gauges)**

TBI & Multi Port Engines (except LT-R) – Locate the solid gray wire in the main wiring harness that leads from the engine into the Borg Warner control box under the dash. This solid gray wire carries the raw engine rpm. Use a blue "Tee Tap" connector to connect to this gray wire. You can then attach the gray wire on the rpm sensor to this using a push on spade connector. The black wire can be securely connected to any suitable ground.

LT-R / LT-1 - On this engine the Gray wire lead on the PerfectPass RPM Sensor cable is not used and can be taped off. The separate **Black wire** end must be connected to the Gray wire located in the main wiring harness leading into the Borg Warner MDC Control box. It is on the engine side of the box that the raw rpm is located. You can attach a blue "Tee Tap" connector to this Gray wire, and attach the RPM sensor cable end to this "Tee Tap" using a supplied spade connector.

(5) **2000 – 2002 Nautiques**

Same as standard #1 above, except the rpm signal can be picked from the Gray wire coming from the back of the tachometer.

(6) **2003 - 2005 Nautiques**

Located behind the dash pod is a large wiring harness with a large white plug. The Gray wire in this plug carries the raw rpm of the engine and has been brought to the pod solely for the PerfectPass system. This gray wire is not connected to any gauge. Use a blue "Tee Tap" connector or other splice method to attach the gray wire on the PerfectPass rpm sensor cable to this Gray wire in the harness. The Black wire (ground) on the RPM Sensor cable can be attached to the black wire in this same boat harness.

Step 6. Install GPS Receiver – The GPS Receiver can be installed anywhere on the boat where the top of GPS faces up towards the sky. The most common place is on the dash looking up through wind screen. Connect GPS to Master Module when indicated. After key is turned on, it can take up to 6 minutes for the GPS to initially find a "fix" on the satellites.

Step 7. Test system power by turning on key and answer the initial start up questions. Following a short delay the black servo knob should be difficult to turn indicating system is powered.

A final and easy test to ensure servo motor and cabling is working properly is to turn key OFF, then turn the black knob on servo motor counter clockwise by ¾ of a turn. Now turn key ON and system should perform an "Auto-Tighten" function and wind cable in a clockwise direction until tight. (Must be in Wakeboard Mode or a Slalom Mode in order for "Auto-Tighten" to occur).

(If motor does not wind in, but simply vibrates for 5-6 seconds, the servo power cable at Master Module may be plugged in upside down or a connector at servo motor may be damaged. (Pull plugs apart and inspect pins).

For assistance call (902) 468-2150.

Step 8 GPS RECEIVER INSTALLATION

Installation: The GPS Receiver can be installed on the dash board looking up through the wind screen. As long as the receiver has a clear unobstructed view of the sky, it will work properly, even if sitting at an angle to the sky.

(It can also be installed under the dash looking up through the fiberglass. In this case you will need to move the Velcro to the top of the GPS Puck or use a 2-sided industrial strength tape. The puck must be mounted with top looking up to the sky).

On a new system, after connection and initial power up it will take up to 10 minutes for the GPS Receiver to find its new location. Once a proper fix has been made, **GPS** will appear in the top left of screen. (If after 10 minutes you do not see **GPS**, turn key off and back on and wait a few more minutes).

Until a fix is made, it will appear as "**No GPS Fix"**. If you see "**No GPS Data**" on screen, then the system does not see the Receiver connected. (Check plug in connection).

WARNING: <u>ONLY</u> connect into Master Module in port marked "GPS" or the Receiver will become damaged.

WARNING
RELEASE OF LIABILITY – ASSUMPTION OF RISK

IMPORTANT
(Detach, sign and mail immediately)

YOU MUST READ THIS!

The PerfectPass Speed Control device is a high performance mechanism designed solely for use with water ski and wakeboard boats operating under ideal, calm conditions utilizing a spotter and all other safety crew and requirements of tournament water skiing. The PerfectPass Speed Control device should not be used for any other purpose or under any other conditions.

YOUR USE OF YOUR PERFECTPASS SPEED CONTROL DEVICE IS CONDITIONAL UPON YOU ASSUMING ALL RISKS, LOSSES AND DANGERS RELATING TO USE OF THIS DEVICE.

Both purchaser and/or anyone utilizing the PerfectPass Speed Control device acknowledges that their purchase and or use of this device is conditional upon them releasing and forever discharging PerfectPass Speed Control Systems Inc., its directors, officers, employees, agents and/or dealers, their heirs, and assigns **from any and all liability for personal injury or property loss** and from any other claims, demands, losses or causes of action, whether occurring prior to, during, or subsequent to or directly or indirectly connected with the use of the PerfectPass Speed Control device, **and whether caused by any persons negligence or otherwise**.

The PerfectPass release of liability, and warranty agreement shall be interpreted in accordance with the laws of the Province of Nova Scotia, Canada, and **IT IS FURTHER AGREED** that any legal proceedings that either directly or indirectly relate to the PerfectPass Speed Control device shall be conducted within the Province of Nova Scotia, Canada, regardless of where arising.

The purchaser hereby agrees to inform any subsequent purchasers or anyone using the PerfectPass Speed Control device, of the conditions of this Release of Liability, Assumption of Risk Agreement. It is agreed that there shall be absolutely no alterations to this agreement whether by implication or otherwise.

_____ _____

Purchaser Signature Date

_____

Address

_____ _____

Serial Number
(found on Master Control Module)

_____

Name (Please Print)

(Must be signed to affect valid purchase and activate warranty agreement, detach and mail immediately to PerfectPass Control Systems Inc., 14 Trider Crescent, Dartmouth, Nova Scotia, B3B 1R6, Canada).

LIMITED WARRANTY

During the first 12 months from date of original retail purchase, any PerfectPass component that fails due to defects in materials or workmanship will be repaired or replaced at the option of PerfectPass at no charge.

All warranty claims must be authorized in advance and a Return Authorization (R/A #) issued. All packages, correspondence, documents and packing slips must reference this R/A #.

Warranty excludes components damaged my improper installation or improper use of boat. Servo Motors are water resistant, but not water proof. Servo motors may become damaged if excess water is run in a boats bilge and this may void warranty. Ensure your boat is properly "bilged" prior to operating.

Warranty Service:

1. If your PerfectPass was factory installed, any warranty issues should be directed to your authorized dealer. PerfectPass encourages all customers to contact us prior to visiting your dealer for "technical support" as many issues may be easily handled direct with customer.
2. If your PerfectPass was purchased and installed by a dealer you may contact your dealer direct or initiate a warranty claim with PerfectPass.
3. If your PerfectPass was purchased directly from the Company, contact us at the number below.

Warranty Service / Technical Support
PerfectPass Control Systems Inc.
14 Trider Crescent
Dartmouth, Nova Scotia
CANADA B3B 1R6
(902) 468-2150

(Hours: Monday to Friday, 8:00 am – 4:00 pm EST)