



## CONGRATULATIONS

on your selection of a Mercury propulsion package featuring the SmartCraft DTS (Digital Throttle & Shift) control system, and welcome to a select family of boaters and fishermen. As a discerning boat owner, we share your passion for the water and we created the SmartCraft DTS control system with you in mind. Because your absolute delight is our priority, we ask that you first take a few minutes to orient yourself with the basic operating procedure for DTS along with all of the exciting new features at your fingertips before you take command of your vessel.

This quick reference guide is designed to get you started by providing an overview of some of the most important functions of the DTS system and how they work. We recommend you keep it somewhere handy in your boat. It is important to note that it should be used in addition to your operator's manual, which we recommend you thoroughly review prior to your first trip out on the water.

This guide also provides a brief description of each DTS feature and how you might use it to help tailor your DTS control system operation to the way you operate your boat. Please note that some of the features described in this guide are only available if your boat is rigged for a specific application.

You'll also find a section briefly describing how Mercury's Engine Guardian protection system works to help maximize your time on the water.

Mercury's SmartCraft DTS (Digital Throttle & Shift) is a fully computer-controlled engine control system, proven and validated to over 50,000 hours of reliability. It provides smooth, effortless, quiet shifting and instantaneous throttle control and response throughout the power band.

## DUAL CONTROL DTS

### REMOTE CONTROL FEATURES



- A** Engine Power Trim & Tilt
- B** Neutral Lights
- C** Troll Control™
- D** Auto Sync On/Off
- E** Single Lever Mode
- F** Throttle Only Mode
- G** Helm Transfer
- H** Docking Mode

### CAN PAD FEATURES

## ENGINE START UP



- Turn key to the ON position. A single horn beep will be heard to indicate system is working properly.

**NOTE:** Position the lanyard stop switch (if equipped) to the RUN position.



- Position the control handles in neutral position.



- When the control handles are in neutral, the NEUTRAL indicator lights turn on.



- Turn key to the START position and release the key. The Smart Start feature will automatically crank the engine for starting.

**NOTE:** If a push button start/stop panel is used, turn the key to the ON position and push button to start or stop the engine.

## THROTTLE ONLY MODE

Allows the boat operator to operate the engine throttle without shifting the engine into gear. This feature is useful to warm up the engines.



- Position the control handles in neutral position.



- Press and release the THROTTLE button. The neutral lights will start flashing and the horn will sound once.



- Advance the control handles to the forward detent position.

The horn will sound twice when the Throttle Only Mode is engaged.



- Advance the control handles to increase engine speed.



- To disengage, bring the control handles back to neutral and push and release the THROTTLE button. The horn will sound once.

## STATION TRANSFER

If the boat has dual control stations, station transfer allows engine control to be transferred from one control station to the other.

**NOTE:** It is preferred to have the engines in neutral position when doing a station transfer. If conditions do not allow the remote controls to be placed in neutral position, a station transfer can be made while the engine is in gear.

**Station Transfer can be made by following Method 1 below or Method 2 on the reverse side.**

**METHOD 1 - Transfer Delay:** This method delays station transfer until the control handles at the station you are transferring to match the handle positions of the station you are transferring from.



- Press and release the TRANSFER button at the control station where you want to take control. A beep will be heard.

The NEUTRAL light will turn on.



- The lights will blink if the positions of the control handles are not aligned with the control handles at the station you are transferring from. Move the control handles until the blinking stops and the lights are solid.

**NOTE:** The lights will blink faster as the handles are nearing their matched position.



- Press and release the TRANSFER button a second time. A beep will be heard. This completes the transfer.

**NOTE:** Station transfer is cancelled if not completed within ten seconds. Press and release the TRANSFER button again to re-initiate a station transfer.



- Adjust the control handles to the desired throttle and gear position

METHOD 2 on reverse side...



This quick reference guide is intended to be used in concert with your engine Operator's Manual. Your engine Operator's Manual provides information on this subject matter in greater detail as well as other important topics such as basic maintenance, maintenance intervals, winterization, warranty, your pre-starting checklist, lanyard stop switch operation, power trim operation, and other engine operating procedures.

For additional information on your Mercury engine, SmartCraft, or your nearest Mercury dealer, please visit our website at [www.mercurymarine.com](http://www.mercurymarine.com)



## STATION TRANSFER CONT.

If the boat has dual control stations, station transfer allows engine control to be transferred from one control station to the other.

**NOTE:** It is preferred to have the engines in neutral position when doing a station transfer. If conditions do not allow the remote controls to be placed in neutral position, a station transfer can be made while the engine is in gear.

Station Transfer can be made by following Method 1 on the reverse side or Method 2 below.

**METHOD 2 - Immediate Transfer:** This method requires you to press the TRANSFER button twice at the control station where you want to take control. This completes the transfer. Engine speed and gear position will automatically adjust at a slow rate to the handle settings at the new active station.



1. Press and release the TRANSFER button two times at the control station where you want to take control. Two beeps will be heard (One beep for each button push). This completes the transfer.



2. Adjust the control handles to the desired throttle and gear position.

### ⚠ WARNING

Avoid serious injury or death from loss of boat control. The boat operator should never leave the active station while the engine is in gear. Helm transfer should only be attempted while both stations are manned. One person helm transfer should only be performed while engine is in neutral.

## TROLL CONTROL™ MODE

Allows the boat operator to set the engine speed for slow speed trolling or maneuvering.



1. Advance the control handles into forward detent.



2. To engage, press and release the TROLL button.

The horn will beep once and the TROLL button light will turn on when the system is in Troll Control™ Mode.

Use the **-** or **+** buttons to decrease or increase engine speed. Engine speed is limited while in Troll Control™ Mode.

**NOTE:** If the Troll Control Mode is set at a desired speed and then turned off, the system will remember the speed setting and will return to that speed when Troll Control™ Mode is re-engaged.



3. To disengage, use one of the three following options:

- Move the control handles back to neutral.
- Press and release the TROLL button. The horn will beep once.
- Move the control handles to a faster engine speed.



## SINGLE LEVER MODE

Allows the throttle and shift function of all engines to be controlled by the port side control handle. This feature is especially useful on longer runs or in rough water conditions.



1. To engage, press and release the 1 LEVER button.

The 1 LEVER light will turn on and the horn will sound once when the system is in Single Lever Mode. The port side control handle now has control of the engines.



2. Make all engine throttle and shift adjustments using the port side control handle.



3. To disengage, bring the control handles back to neutral and press and release the 1 LEVER button. The horn will sound once.

**NOTE:** When the Single Lever Mode is "engaged", the starboard control handle may be placed into the full reverse position as a reminder to the operator that single lever mode is active.



## DOCKING MODE

Changes engine throttle response by reducing throttle sensitivity by approximately one half.



1. Position the control handles into neutral.



2. To engage, press and release the DOCK button.

The dock light will turn on and the horn will sound once when in Docking Mode.



3. To disengage, bring the control handles back to neutral and press and release the DOCK button. The horn will sound once.



## AUTO SYNC

When Auto Sync is engaged, the system will automatically adjust the speed of the multiple engines to match the starboard engine speed.

To automatically synchronize the engines, the engines must be in forward gear and above idle speed for two seconds and the control handles must be adjusted so they are within 10% of each other. Auto Sync will disengage when engine speed exceeds 95% throttle opening.



1. Position the control handles into neutral.



2. Engage the synchronization function as follows:

- Press and release the SYNC button. The yellow SYNC light will turn on and the horn will sound once.
- Advance the control handles into forward and increase engine speed.
- Adjust the control handles so they are within 10% of each other. As the controls get closer the yellow SYNC light will flash red.



3. To turn off Auto Sync, bring the control handles back to neutral and press and release the SYNC button. The horn will sound once.



**NOTE:** The Auto Sync mode last used will be retained even when the engines are turned off and re-started.

## ENGINE GUARDIAN PROTECTION SYSTEM

Your Mercury propulsion system is designed to provide you with many years of trouble-free operation and to maximize your time on the water. To help insure this, your engine is equipped with an exclusive Engine Guardian protection system which is designed to proactively protect your engine while providing you with as much engine power as possible to return to port should the situation arise. Engine Guardian is functional whenever your engine is operating, so you never have to be concerned about whether or not you are protected. Should Engine Guardian engage on your vessel, your SmartCraft instrumentation will indicate this and advise you to reduce throttle if necessary. Engine Guardian may also proactively reduce throttle for you if the situation requires it.

Mercury's 2007 Engine Guardian protection system is very straightforward and intuitive.

In the unlikely event that Engine Guardian becomes active, a warning horn will sound. The purpose of the horn is to alert you that a fault is active and to advise you of what you should do next. There are two types of warning horns:

1. **Continuous, 6-second Horn:** Indicates a critical fault. You should return to port immediately and contact your servicing dealer.
2. **Intermittent 6-second Horn:** Indicates a non-critical fault. A fault of this nature does not require immediate attention. You may continue using your boat as normal, but you should contact your servicing dealer at your earliest convenience.

It is important to note that in either of the above scenarios, the horn will only sound one time. If you key the engine off and re-start it, the horn will sound again, one time, if the fault is still present.

In addition, you may see different types of visual warning indicators ranging from a simple warning light to full descriptive fault text (which describes in detail the nature of the fault and what you should do), depending on the instrumentation in your boat.



QUICK REFERENCE GUIDE