



**TM 216**

**Mercury 15 & 20 HP EFI 4-Stroke 2018 – Present**

**Tohatsu 9.9, 15 & 20 HP EFI 4-Stroke 2018 – Present**

**\*This kit fits both Remote Shift & Throttle and Tiller Handle motors**

TrollMaster is a precision throttle control designed to achieve the maximum in trolling speed accuracy. The memory feature included in this control will allow returning to the best fishing speed time and time again. Whether you are pulling your bait or back trolling, TrollMaster is the answer to your speed control needs. Spend your time trolling, not going to the motor to adjust the speed.

CALL:

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Canada V4G 1A3**

FAX:

**1.604.952.2650**





### **TrollMaster Servo Bracket Installation:**

Install Servo Bracket and Servo Motor as shown here on the rear of the motor, do not install throttle cable yet (shown installed). Run servo motor wiring as shown in photo.



### **TrollMaster Servo Installation:**

Servo must be mounted exactly as shown in these photos. Note the gap indicated by the red arrows in the photo on the lower right. Use correct servo mounting holes shown below or the servo will not operate properly. Do not attach throttle cable yet. Servo mounting screw size: 6-32X3/8" Phillips Pan Head SS.





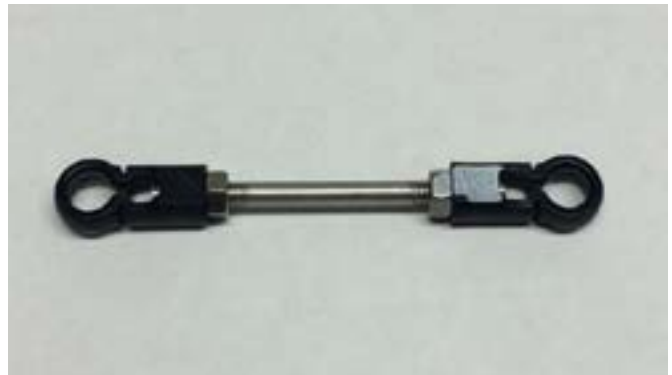
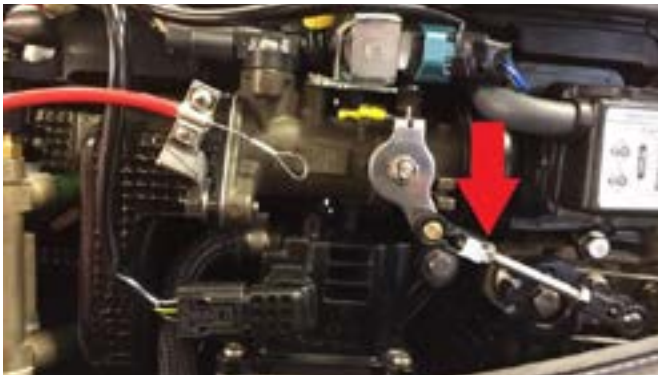
### **TrollMaster Cable Clamp Installation:**

Install the TrollMaster cable clamp using the outboards intake manifold nut and washer as shown below.



### **TrollMaster Throttle Rod Installation:**

Remove the factory throttle rod from outboard, then remove one of the black rod ends and the corresponding jam nut and reinstall on TrollMaster components as shown below. Continued on next page.





### **TrollMaster Throttle Cable Loop Installation:**

Prior to installing the TrollMaster throttle rod on the outboard motor, first hook the TrollMaster throttle cable loop on the brass stud shown below.



### **TrollMaster Throttle Rod Installation, Continued:**

TrollMaster Throttle Rod Installation, Continued: Install the TrollMaster throttle rod as shown. The long loop in the TrollMaster throttle rod should be set all the way forward when the outboard motors throttle linkage is set to neutral. Adjust the TrollMaster rod by loosening the set screw on the TrollMaster adapter piece and sliding the rod forward until it rests against the linkage stud as shown below. Be sure the throttle stays closed and the rod is secure and set screw is tight before moving to next step.







## Connecting to a Power Source:

Prior to running the wiring through the boat it's advised that you test the TrollMaster electronics by hooking to a power source, turning the controller on, plugging in the TrollMaster servo motor and if you have the TrollMaster PRO3 or Wireless PRO3 PLUS and you purchased the Panther Electro Steer to steer your kicker motor, plug in the Electro Steer and test that as well to be sure everything works properly prior to final installation. See operating instruction for further details on operating these devices. Hook the TrollMaster to your 12 volt power source; Red wire to +12 volts DC and the Black wire to -12 volts DC. Best results are obtained when the TrollMaster device is on its own battery and not connected to the same battery as the outboard motor.

## Set The Servo Arm

A servo arm is provided in the hardware kit and should be used instead of the servo arm that comes on the servo. Use the longer arm supplied with this kit because the EFI motors have a longer throttle stroke, if you use the short arm you will not get as much throttle range from your TrollMaster. Be sure you use the longer arm as shown. After connecting to your power source, turn the controller on and put it in IDLE mode. While in IDLE mode, plug in the multi colored servo motor wire to the mating servo control wire from the TrollMaster controller. Once this is done the servo will be powered and you can set the servo arm position and install the servo cable and crimp.

To set the servo arm position once the servo is powered, first remove the screw in the center of the servo arm (Fig. A) and pull the servo arm off the servo body (Fig. B), the servo arm is mounted on a spline stud so pull the arm off the servo body without turning it. Then push the servo arm back on the spline stud in the position shown in Fig. C (see next page), secure it using the screw removed in the first step. If you lose the servo arm screw, the screw size is M3-0.5X6MM Phillips Pan Head SS.



Fig. A



Fig. B



### **TrollMaster Throttle Cable Installation:**

After the servo arm is set you can install the TrollMaster throttle cable and crimp. To do this you leave the TrollMaster powered on and in IDLE mode and leave the servo motor plugged in. Next, loosen the set screw on the servo arm's brass barrel, this will allow the throttle cable to slide through the brass barrel unobstructed. (Fig. D) Set screw size is a #4-40 X 3/16"

Once the TrollMaster throttle cable is through the brass barrel, using a needle nose pliers hold the TrollMaster throttle cable and pull out any slack while making sure the outboard motors throttle linkage stays closed in the neutral throttle setting. When the slack has been removed and the cable is being held tight with the needle nose pliers, tighten down the brass barrel set screw to hold the cable in place. With the outboard motor turned OFF/NOT running, you can now test the throttle function to verify proper install of the TrollMaster throttle cable and servo motor. Throttle cable instructions continued on next page.



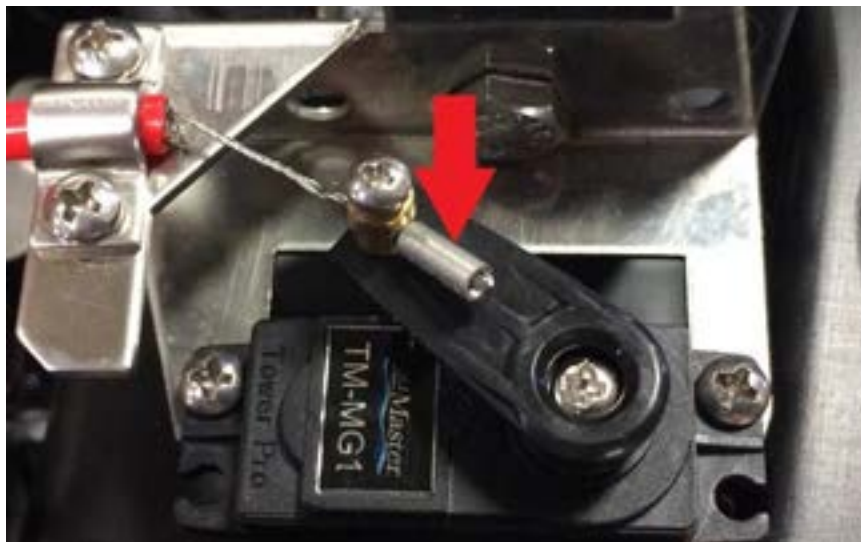
**Fig. C**



**Fig. D**



When you have verified the TrollMaster Servo Arm & Throttle Cable have been installed properly and everything is working as it should be sure the Throttle Cable didn't slip while testing the throttle functions. If it did, loosen the brass barrel set screw and pull the slack out prior to adding the crimp piece. See previous instruction for more details. Cable size: 150 LB test SS Downrigger cable. To add the crimp piece, simply slide the provided crimp piece over the end of the TrollMaster throttle



**Crimp Piece Installed**

cable that is sticking out of the brass barrel. While holding the crimp tight against the brass barrel squeeze it down with a pliers to secure it to the cable. Crimp size: 22-18 GA Parallel Connector.

**Once finished it should look like this:**



Once finished with the hardware installation you can move on to run the wiring through the boat. For best results keep the wiring away from the spark plugs, spark plug wires and power cables for the outboard as this can potentially cause the servo to act erratically due to electrical interference.



## **TrollMaster Replacement Parts:**

### **TrollMaster Servo Motor (TM-MG1)**

Note: A Servo Arm is included with the purchase of a replacement Servo Motor.

### **TrollMaster Servo Arm (TM-Servo Arm)**

Note: A replacement screw to mount the Servo Arm to the Servo Body is included with the purchase of a replacement Servo Arm.

### **TrollMaster Hardware Kit (TMXXXHRDWRKIT)**

Note: Replace the XXX with the Kit number that applies to your outboard motor. See the Application Guide for kit number. Example: TM206HRDWRKIT.

### **TrollMaster Electronics Unit Only (TMXXXUNITONLY)**

Note: Replace the XXXX with the model of Replacement TrollMaster

Electronics you wish to purchase. Comes with controller and wiring only, does not include servo motor or hardware kit. Examples: TMPROUNITONLY, TMPRO2UNITONLY, TMPRO3UNITONLY.

## **To Order Replacement Parts:**

If you would like to order any of the above mentioned replacement parts check with your local retailer, if they do not have the item in stock they can order it for you or you can order from us directly. For pricing and availability call **1.604.940.2010**

## **Installation Guides:**

The installation Guide on this disk can also be found online at [trollmasters.com/installation-guides](http://trollmasters.com/installation-guides) where you will find the Installation Guides for every motor we make a kit to fit. The Application Guide is also on the same web page; the Application Guide shows the full list of motors we make kits to fit with the product part numbers for those kits.





## **SERVICE AND WARRANTY**

Should your unit ever require service please ***do not return the product to your dealer.***

Instead call the number below for special instructions on shipping and handling. Be sure to call between 9 00 AM and 5.00 PM (Pacific Time) Monday through Friday. If the service required is covered by the warranty, it will be repaired or replaced as described below. If the service required is NOT covered by warranty replacement parts are available for purchase and paid for by a major credit card.

The warranty coverage on this equipment is limited to the terms set forth below:

CMP Group LTD. warrants this product to be free of defects in material and workmanship for a period of ONE (1) YEAR from the date of original retail purchase. Positive proof of date of purchase is required for warranty service. If the service required is covered by warranty, you must obtain a ***Return Authorization number*** from CMP Group . The unit will be repaired or replaced with new or factory rebuilt parts at no charge. The defective components must be returned to the address specified, with shipping charges prepaid. Be sure to include your name, address, telephone number and a copy of the sales receipt showing the date of original retail purchase. All sales receipts are subject to verification.

This warranty does not apply if the unit has been damaged by accident, abuse, misuse, poor installation or misapplication, or if it has been modified from its original condition, or if any serial number has been removed or defaced or altered. This warranty does not cover any expense to remove or reinstall the unit or any of its components. If a returned unit is not covered by warranty, the sender will be notified and given an estimate of the charges to repair or replace the unit together with the return shipping charges.

THIS WARRANTY DOES NOT COVER SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO DAMAGE TO OR REPLACEMENT OF OTHER EQUIPMENT AND PROPERTY. THE WARRANTY AND REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. DUE TO THE SPECIAL AND UNIQUE CONDITIONS THAT MAY EXIST IN EACH APPLICATION, THE MANUFACTURER SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NO DEALER, AGENT OR EMPLOYEE IS AUTHORIZED TO MAKE ANY MODIFICATION, EXTENSION OR ADDITION TO THIS WARRANTY.

Some states do not allow exclusion of incidental or consequential damages, so the above exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other legal rights, which may vary from state to state.

**FOR SERVICE CALL: 1.604.940.2010**

