



## TILLER HANDLE KIT, P/N 5007118 INSTALLATION INSTRUCTIONS

### APPLICATION

Use this instruction sheet when installing the above tiller handle kit on **2004 (SR) and newer Evinrude® E-TEC™ outboards, 40 – 60 HP**. DO NOT install on any other models.

### SAFETY INFORMATION

For safety reasons, this kit should be installed by an authorized *Evinrude®/Johnson®* dealer. This instruction sheet is not a substitute for work experience. Additional helpful information may be found in other service literature for your engine.

This instruction sheet uses the following signal words identifying important safety messages.

|   |               |  |
|---|---------------|--|
|   | <b>DANGER</b> |  |
| Indicates an imminently hazardous situation which, if not avoided, <b>WILL</b> result in death or serious injury. |               |  |

|   |                |  |
|---|----------------|--|
|   | <b>WARNING</b> |  |
| Indicates a potentially hazardous situation which, if not avoided, <b>CAN</b> result in severe injury or death. |                |  |

|  |                |  |
|--|----------------|--|
|  | <b>CAUTION</b> |  |
| Indicates a potentially hazardous situation which, if not avoided, <b>MAY</b> result in minor or moderate personal injury or property damage. It also may be used to alert against unsafe practices. |                |  |

**IMPORTANT:** Identifies information that will help prevent damage to machinery and appears next to information that controls correct assembly and operation of the product.

These safety alert signal words mean:

**ATTENTION!**  
**BECOME ALERT!**  
**YOUR SAFETY IS INVOLVED!**

Always follow common shop safety practices. If you have not had training related to common shop safety practices, you should do so to protect yourself, as well as the people around you.

It is understood that this instruction sheet may be translated into other languages. In the event of any discrepancy, the English version shall prevail.

DO NOT do any repairs until you have read the instructions and checked the pictures relating to the repairs.

Be careful, and never rush or guess a service procedure. Human error is caused by many factors: carelessness, fatigue, overload, preoccupation, unfamiliarity with the product, and drugs and alcohol use, to name a few. Damage to a boat and outboard can be fixed in a short period of time, but injury or death has a lasting effect.

When replacement parts are required, use *Evinrude/Johnson Genuine Parts* or parts with equivalent characteristics, including type, strength and material. Using substandard parts could result in injury or product malfunction.

Torque wrench tightening specifications must be strictly followed. Replace any locking fastener (locknut or patch screw) if its locking feature becomes weak. Definite resistance to turning must be felt when reusing a locking fastener. If replacement is specified or required because the locking fastener has become weak, use only authorized *Evinrude/Johnson Genuine Parts*.

If you use procedures or service tools that are not recommended in this instruction sheet, YOU ALONE must decide if your actions might injure people or damage the outboard.

**TO THE INSTALLER:** Give this sheet and the operating instructions to the owner. Advise the owner of any special operation or maintenance information contained in the instructions.

**TO THE OWNER:** Save these instructions in your owner's kit. This sheet contains information important to the future use and maintenance of your engine.



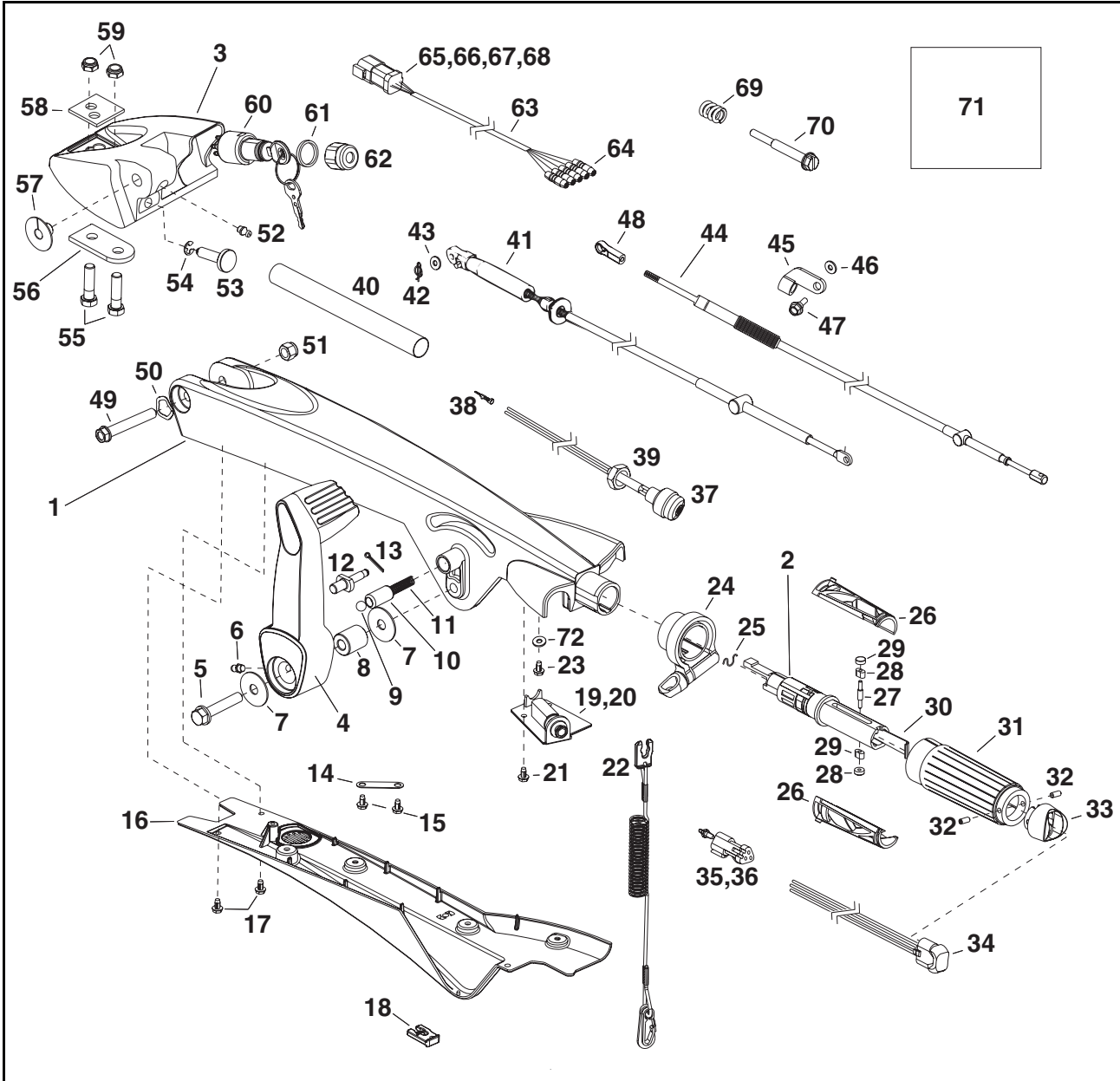


# WARNING



Do not install this kit unless you have the ability to communicate with the engine using *Evinrude E-TEC* Diagnostics Software. Complete installation of this kit requires reprogramming the Engine Management Module (EMM) to provide start-in-gear protection.

## TILLER CONVERSION KIT (*Evinrude E-TEC* 40 – 60 HP)



## 5007118

## TILLER CONVERSION KIT

| Ref | P/N    | Name of Part                  | Qty         | Ref | P/N     | Name of Part                      | Qty          |
|-----|--------|-------------------------------|-------------|-----|---------|-----------------------------------|--------------|
| 1   | 352290 | STEERING HANDLE, Blue         | 1           | 40  | 350310  | SLEEVE                            | 1            |
| 2   | 329878 | STEERING HANDLE, Inner        | 1           | 41  | 5006160 | CABLE, Shift                      | 1            |
| 3   | 352292 | BRACKET, Steering handle      | 1           | 42  | 333774  | RETAINER CLIP                     | 1            |
| 4   | 352291 | HANDLE, Shift                 | 1           | 43  | 328702  | WASHER                            | 1            |
| 5   | 329885 | SCREW, Shift handle mount     | 1           | 44  | 5006159 | CABLE, Throttle                   | 1            |
| 6   | 313607 | LUBE FITTING                  | 1           | 45  | 334083  | ANCHOR, Throttle cable            | 1            |
| 7   | 327400 | WASHER, Shift handle          | 2           | 46  | 328739  | WASHER, Anchor to bracket         | 1            |
| 8   | 334815 | BUSHING, Shift handle         | 1           | 47  | 329160  | SCREW, Anchor to bracket          | 1            |
| 9   | 318626 | BALL                          | 1           | 48  | 334153  | CONNECTOR, Throttle cable         | 1            |
| 10  | 327178 | GUIDE                         | 1           | 49  | 350989  | SCREW, Steering handle to bracket | 1            |
| 11  | 309247 | SPRING                        | 1           | 50  | 328733  | WASHER, Spring                    | 1            |
| 12  | 351932 | PIN, Shift handle to cable    | 1           | 51  | 307160  | LOCKNUT, Steering handle screw    | 1            |
| 13  | 303049 | COTTER PIN                    | 1           | 52  | 313607  | LUBE FITTING                      | 1            |
| 14  | 351995 | RETAINER, Shift cable         | 1           | 53  | 352295  | THUMBSCREW, Height adjustment     | 1            |
| 15  | 336481 | SCREW, Retainer               | 2           | 54  | 203470  | RETAINER CLIP                     | 1            |
| 16  | 352293 | COVER, Steering Handle        | 1           | 55  | 325729  | SCREW, Bracket to steering arm    | 2            |
| 17  | 336481 | SCREW, Cover                  | 7           | 56  | 333374  | SHIM, Steering arm extension      | 1            |
| 18  | 333499 | CLIP, Emergency stop          | 1           | 57  | 325452  | BUSHING, Steering handle to brkt. | 2            |
| 19  | 586830 | STOP SWITCH Assy              | 1           | 58  | 352625  | PLATE, Angle adjustment           | 1            |
| 20  | 514679 | *PIN, Terminal                | 2           | 59  | 315077  | NUT, Steering bracket             | 2            |
| -   | 514696 | CONNECTOR, 2 pin receptacle   | <b>NS</b> 1 | 60  | 5005800 | SWITCH, Ignition & key assy       | 1            |
| -   | 514697 | LOCKWEDGE, 2 pin receptacle   | <b>NS</b> 1 | 61  | 127251  | SPACER                            | 1            |
| 21  | 336481 | SCREW, Stop switch            | 3           | 62  | 127237  | NUT, Keyswitch                    | 1            |
| 22  | 398602 | CLIP & LANYARD Assy           | 1           | 63  | 586262  | HARNESS, Keyswitch                | 1            |
| 23  | 336481 | SCREW, Inner handle retaining | 1           | 64  | 514679  | *TERMINAL                         | 5            |
| 24  | 394522 | THROTTLE FRICTION CONTROL     | 1           | 65  | 514688  | *CONNECTOR, 6 Pin receptacle      | 1            |
| 25  | 332089 | RETAINER CLIP                 | 1           | 66  | 910446  | *TERMINAL, Socket                 | 5            |
| 26  | 339722 | HELIX, Twist grip             | 2           | 67  | 514684  | *LOCKWEDGE, 6 pin receptacle      | 1            |
| 27  | 329880 | PIN                           | 1           | 68  | 514690  | *SEAL PLUG                        | 1            |
| 28  | 329879 | GUIDE                         | 2           | 69  | 551113  | SPRING, Steering friction         | 1            |
| 29  | 329881 | ROLLER, Helix to cable        | 2           | 70  | 332945  | SCREW, Steering friction          | 1            |
| 30  | 352104 | GUIDE, Wire                   | 1           | 71  | 586895  | HARNESS, Tiller handle            | 1            |
| 31  | 352813 | TWIST GRIP, Assy              | 1           | -   | 176295  | *CONNECTOR, 2 Socket plug         | <b>NS</b> 2  |
| 32  | 324967 | SCREW                         | 2           | -   | 514685  | *CONNECTOR, 3 Socket plug         | <b>NS</b> 2  |
| 33  | 352103 | HOUSING, Trim switch          | 1           | -   | 514687  | *CONNECTOR, 6 Socket plug         | <b>NS</b> 1  |
| 34  | 352270 | SWITCH, Trim & Tilt           | 1           | -   | 514688  | *CONNECTOR, 6 Pin receptacle      | <b>NS</b> 1  |
| 35  | 514686 | CONNECTOR, Trim & Tilt        | 1           | -   | 514690  | *SEAL PLUG                        | <b>NS</b> 5  |
| 36  | 514682 | LOCKWEDGE, 3 pin receptacle   | 1           | -   | 335299  | DECAL, Emergency stop clip        | <b>NS</b> 1  |
| 37  | 586827 | START SWITCH Assy             | 1           | -   | 333978  | DECAL, Start warning (blue)       | <b>NS</b> 1  |
| 38  | 514679 | *PIN, Terminal                | 2           | -   | 333979  | DECAL, Gear shift (blue)          | <b>NS</b> 1  |
| -   | 514696 | CONNECTOR, 2 pin receptacle   | <b>NS</b> 1 | -   | 320107  | TIE STRAP                         | <b>NS</b> 12 |
| -   | 514697 | LOCKWEDGE, 2 pin receptacle   | <b>NS</b> 1 | -   | 317893  | TIE STRAP                         | <b>NS</b> 2  |
| 39  | 327805 | NUT, Start switch             | 1           | 72  | 328739  | WASHER                            | 1            |

**NS** Not Shown

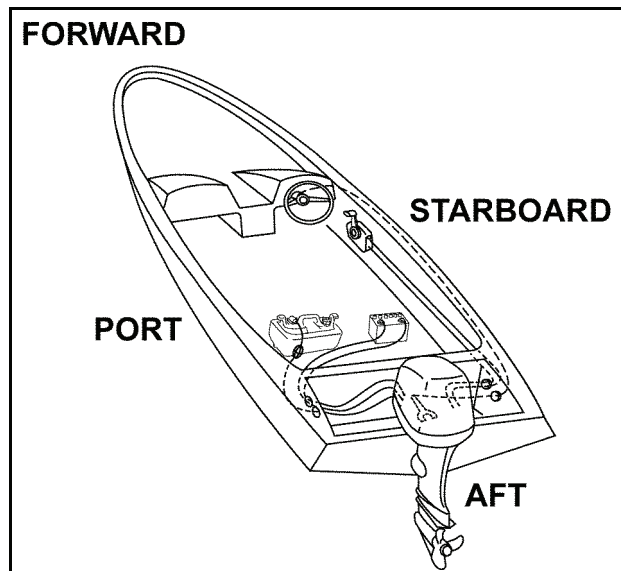
**⚠ WARNING ⚠**

Improper installation of this kit could result in personal injury due to loss of boat control.

A boat designed for remote steering might have a lower maximum rated horsepower for a tiller-steered outboard than shown on the certification plate. To avoid overpowering a boat designed and rated for remote steering, contact boat manufacturer for tiller-steered maximum rated horsepower.

To prevent accidental starting while servicing, disconnect battery leads from battery. Twist and remove all spark plug leads.

To prevent injury from contact with a rotating propeller, remove propeller before servicing and when running outboard on a flushing device.



Nautical Orientation

## INSPECTION

Before installation, check boat for obstructions that could interfere with free movement of tiller handle when steering or tilting outboard.

**⚠ CAUTION ⚠**

To avoid damaging the tiller handle when tilting the outboard up, position the outboard to clear obstacles in the motor well and boat.

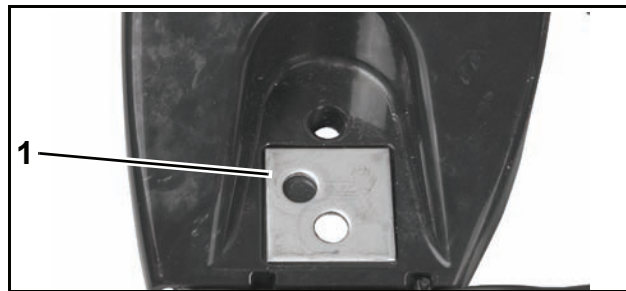
## INSTALLATION

Disconnect the battery cables at the battery.

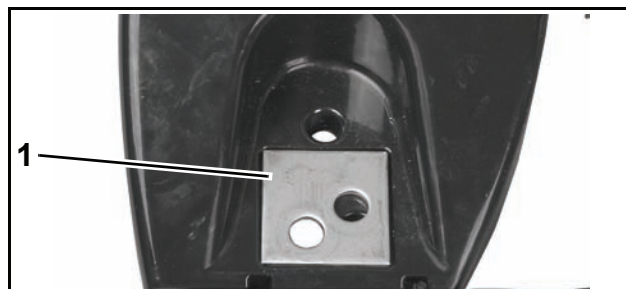
Remove any screws from steering arm holes. Make sure all paint or locking material is cleaned from threads.

Place angle adjustment plate in pocket of steering arm bracket.

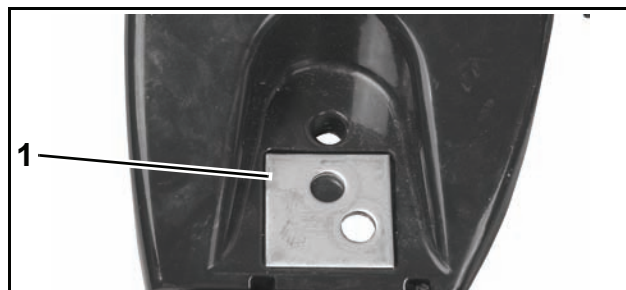
The steering arm can be positioned straight, or angled 15° port or starboard by moving the adjustment plate.



1. Plate adjustment for tiller in CENTER position. 005083



1. Plate adjustment for tiller in PORT position. 005084

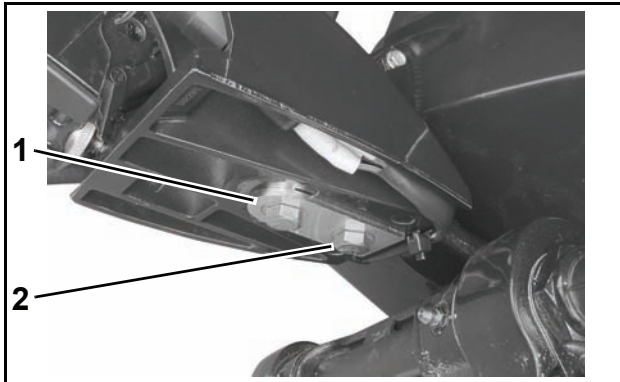


1. Plate adjustment for tiller in STARBOARD position. 005085



Place shim plate on bottom of tiller handle. Insert steering arm screws through plate and handle.

Place tiller handle on steering arm from the bottom. Thread steering arm screws into steering arm and tighten to a torque of 18 to 20 ft. lbs. (25 to 27 N·m).

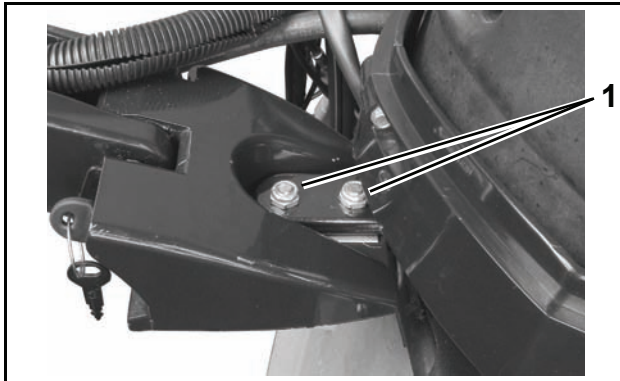


1. Shim plate
2. Steering arm screw

005112

**IMPORTANT:** Be sure that wires are not pinched.

Install locknuts on screws on top of steering arm. Hold screws with a wrench and tighten locknuts to 18 to 20 ft. lbs. (25 to 27 N·m).



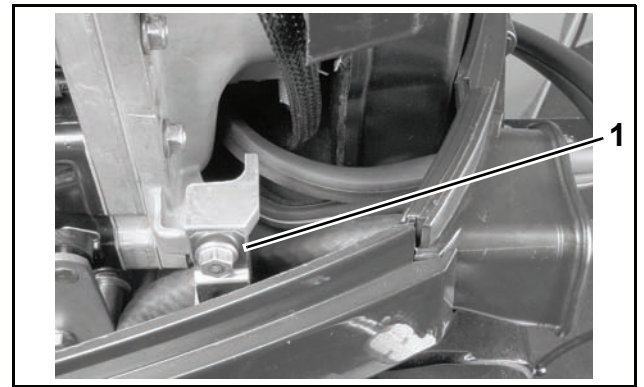
1. Locknuts

005113

## CONTROL CABLE INSTALLATION

**IMPORTANT:** DO NOT complete final attachment of cables to shift and throttle levers until all cables, wires, and hoses have been routed and grommet has been placed into the lower engine cover.

Remove cable retainer from anchor block.

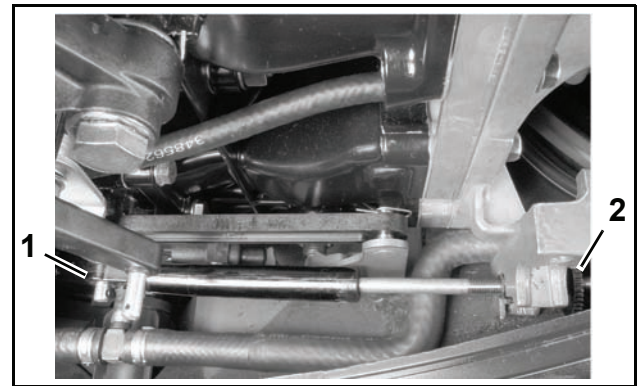


1. Cable retainer

002099

Remove grommet from lower engine cover and insert shift cable through opening.

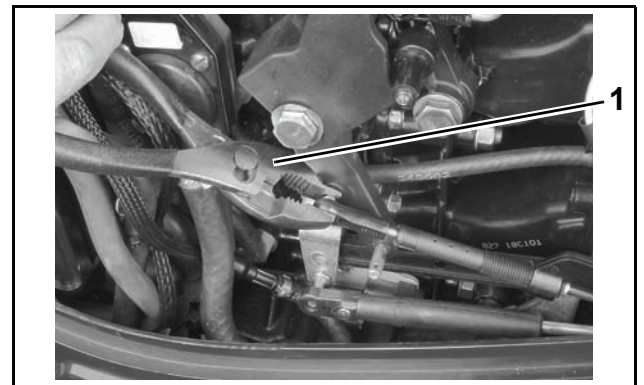
Pull firmly on shift cable casing to remove backlash. With outboard and tiller handle shift lever in NEUTRAL, place the cable trunnion into the lower anchor pocket. Adjust the trunnion nut so the casing fits onto the shift lever pin.



1. Shift lever pin
2. Trunnion nut

002100

Use Ball Socket Installer tool, P/N 342225, to snap throttle cable connector onto throttle cam pin. (Use Remover tool, P/N 342226, to remove cable.)

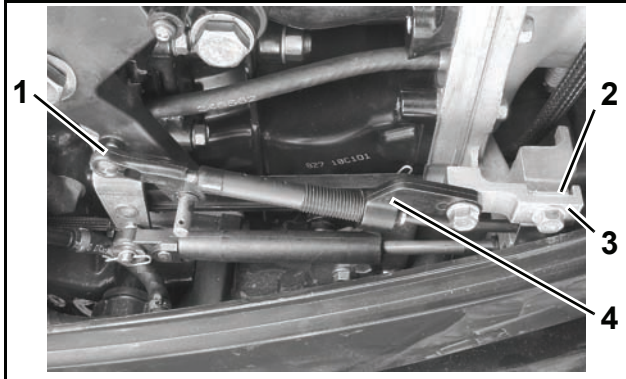


1. Installer tool

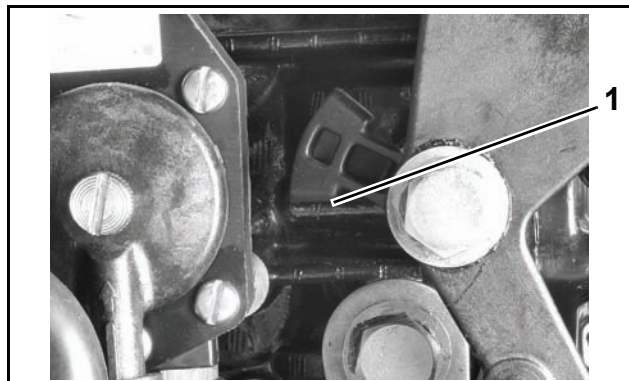
005106

Place throttle cable in upper anchor pocket. Install cable retainer and anchor bracket on anchor block using screw supplied with kit. Tighten screw 60 to 84 in. lbs. (7 to 9 N·m).

Adjust cable anchor so throttle cam is against stop when twist grip is at IDLE. Install washer, cable anchor, and cable anchor screw. Tighten screw securely.

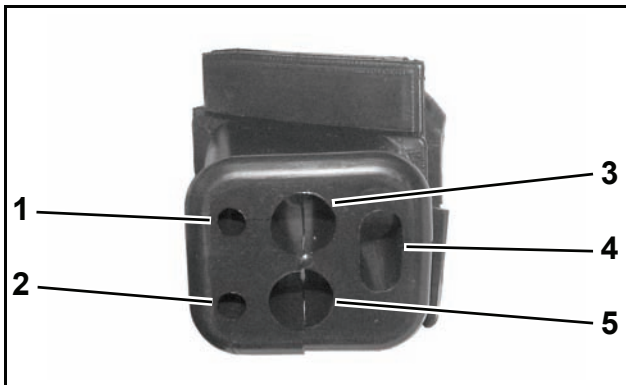


1. Throttle cable connector  
2. Trunnion retainer  
3. Anchor bracket  
4. Cable anchor  
005096



1. Throttle stop  
005114

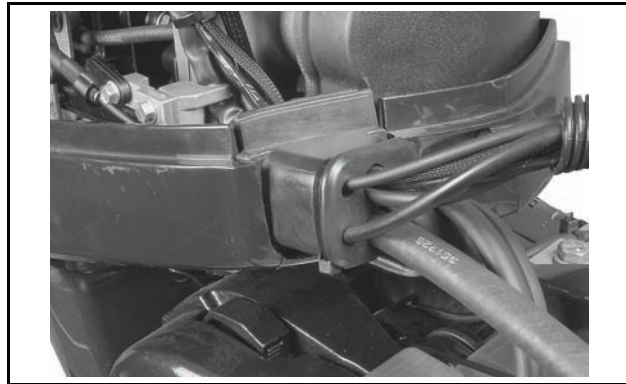
Apply soapy water to the inside surfaces of grommet and install cables and fuel line as shown:



1. Throttle cable  
2. Shift cable  
3. Wiring harnesses  
4. Battery cable  
5. Fuel line  
001998

Place the grommet into position in the lower motor cover.

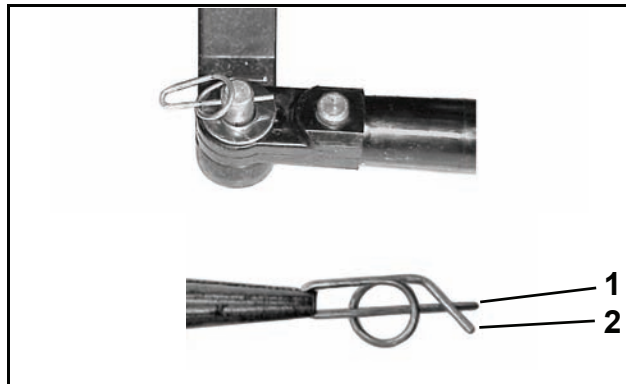
When grommet is in place and all cables have been installed, tighten a tie strap, P/N 500081, around the outside of the grommet to form a watertight seal around the cables.



005097

Secure control cables to the throttle and shift lever pins. For proper installation of shift cable, review the following steps:

- Place washer on pin.
- Position retainer clip with straight section on the bottom and angled section on the top.
- Use long noses pliers to insert straight section of clip into linkage pin hole.



1. Straight section  
2. Angled section  
DP0818  
DP0817

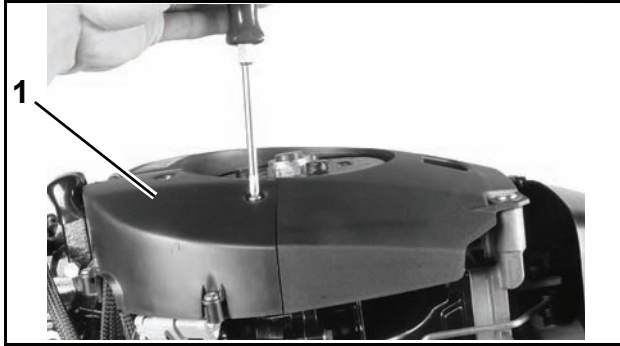
- Push the clip towards the hole while lifting on the curved end with the pliers.
- Be sure retainer clip fully engages the pin.
- Lock the retainer by moving the angled section **behind** the straight section.



**Locked Retainer Clip**  
1. Angled section behind straight section  
DP0817a

## ELECTRICAL CONNECTIONS

Remove electrical cover.

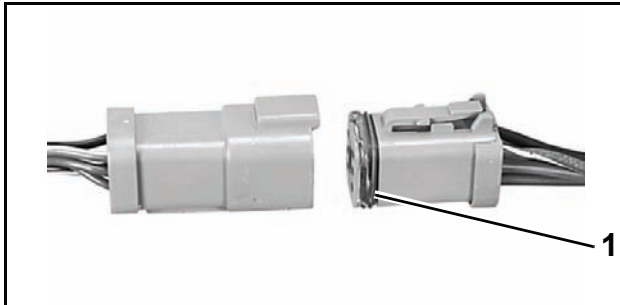


1. Electrical cover

002421

Route wiring harnesses from tiller handle through channel in flywheel cover.

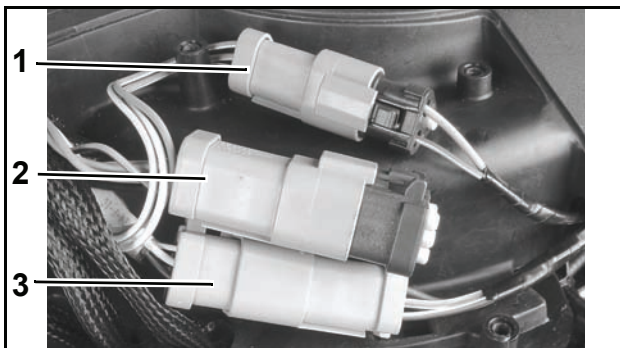
Apply *Electrical Grease* to connector seals, then connect tiller handle wiring harness to engine harness.



1. Seal

42079a

Arrange connectors in flywheel cover, as shown, and install electrical cover. Seal unused *SystemCheck* connector with 6-Pin Connector Seal, P/N 586076 (not included with kit).



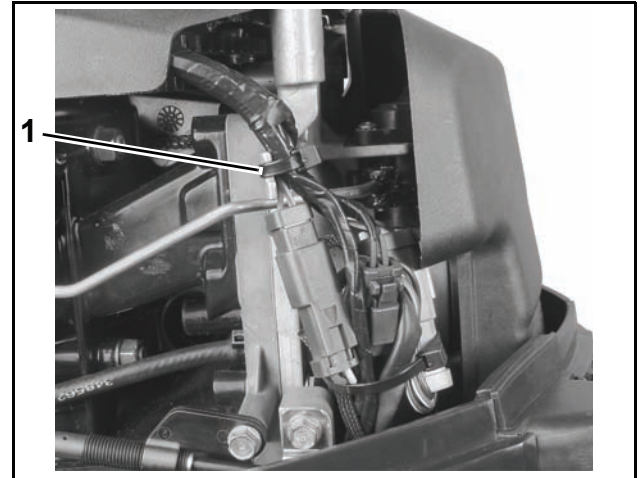
1. Trim and tilt harness

2. SystemCheck™ connector (Shown with seal)

3. Start/stop harness

005098

Use tie straps to secure harness to throttle body bracket.



1. Bracket

005115

**IMPORTANT:** Route and secure all wires to avoid contact with moving parts.

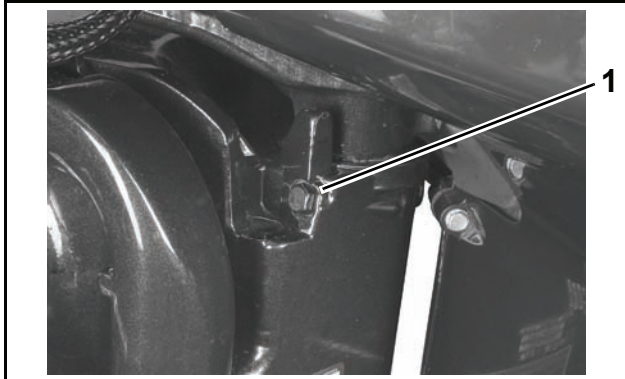
Use *Evinrude E-TEC* Diagnostics Software to reprogram Engine Management Module (*EMM*) for Tiller Model start-in-gear protection.

|  |                |  |
|--|----------------|--|
|  | <b>WARNING</b> |  |
| <p>After installation, dealer must use <i>Evinrude E-TEC</i> Diagnostics Software to reprogram Engine Management Module (<i>EMM</i>) to provide start-in-gear protection. Failure to provide start-in-gear protection could create a risk of personal injury or property damage.</p> |                |  |



## STEERING FRICTION

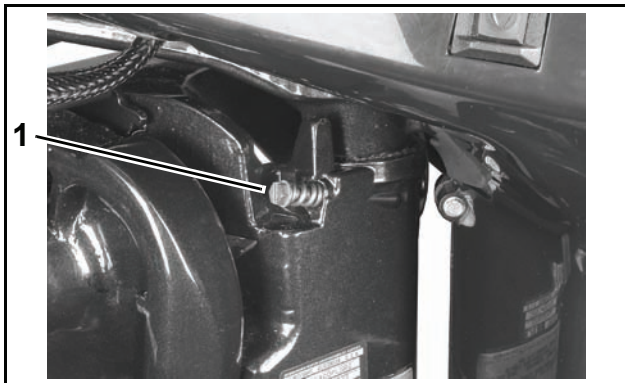
Remove plug from port side of swivel bracket.



1. Plug

005116

Apply *Triple-Guard*<sup>®</sup> grease to threads of steering friction adjustment screw. Install spring and screw.



1. Steering friction screw

005117

Steer outboard from side to side. Adjust steering friction screw until steering effort is comfortably stiff with only slight drag.



### WARNING



Steering friction device is not intended to hold boat on a set course. **DO NOT** overtighten steering friction screw for “hands-off” steering. Reduced control of the boat could result in loss of control by the operator, creating a risk of personal injury or property damage.

## CHECK INSTALLATION

Make sure the following operate properly before returning outboard to customer:

- Engine stop circuit
- Emergency stop switch and lanyard
- Steering movement and friction control
- Throttle control (IDLE to WIDE OPEN)
- Shift control and proper gear engagement
- Start-in-gear protection
- Trim and tilt control



### WARNING



Only shift outboard with throttle in IDLE position. If outboard is shifted into gear with throttle setting above IDLE speed, the boat could accelerate suddenly, injuring boat occupants and bystanders.



# OPERATING INSTRUCTIONS

**IMPORTANT:** Store these instructions onboard the boat with the operator's guide.

## SAFETY INFORMATION

**⚠ DANGER ⚠**

**DO NOT** run the engine indoors or without adequate ventilation or permit exhaust fumes to accumulate in confined areas. Engine exhaust contains carbon monoxide which, if inhaled, can cause serious brain damage or death.

Contact with a rotating propeller is likely to result in serious injury or death. Assure the engine and prop area is clear of people and objects before starting engine or operating boat. Do not allow anyone near a propeller, even when the engine is off. Blades can be sharp and the propeller can continue to turn even after the engine is off. Always shut off the engine when near people in the water.

**⚠ WARNING ⚠**

The engine cover is a machinery guard. **DO NOT** operate your outboard with the cover off unless you are performing maintenance or emergency starting, and then be careful to keep hands, hair, and clothing clear of all moving parts. Contact with moving parts could cause injury.

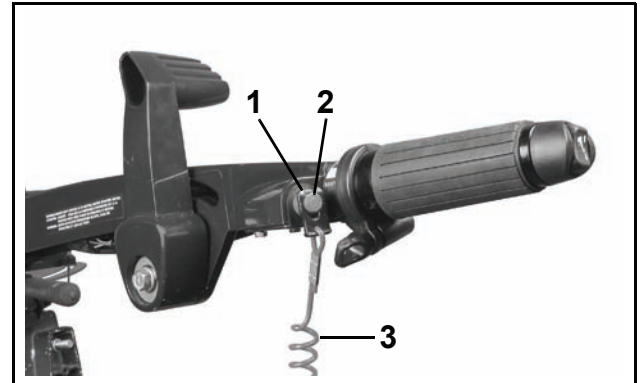
- ⚠ Always shut off the outboard when your boat is near people who are in the water.
- ⚠ Be familiar with the waters you are operating in. The gearcase of this outboard extends below the water surface and could potentially come in contact with underwater obstructions. Contact with underwater obstructions may result in loss of control and personal injury.

## ENGINE STARTING

Refer to the **Routine Inspection Checklist** in the *Evinrude E-TEC Operator's Guide* for pre-launch checks before using your outboard.

You **MUST** supply water to the engine before starting. Engine damage can occur quickly.

Connect the clip to the emergency stop switch. Snap the lanyard to a **secure** place on the operator's clothing or life vest — not where it might tear away instead of activating the stop switch.



1. Clip
2. Emergency stop switch
3. Lanyard

005099

**IMPORTANT:** The operator should always use the clip and lanyard anytime the engine is running.

**⚠ WARNING ⚠**

**Always use the safety lanyard when operating your boat to help prevent a runaway boat and reduce the risk of personal injury or death.**

**Avoid knocking or pulling the clip off the stop switch during normal boating. The resulting unexpected loss of forward motion can throw occupants forward, causing injury.**

**Your emergency stop switch can be effective only when in good working condition. At each outing, inspect clip and lanyard for cuts, breaks, or wear. Replace worn or damaged parts.**

**Keep the lanyard free from obstructions and entanglements.**

**WARNING**

At each outing, test the system's operation. With the engine running, remove the clip from the switch by pulling the lanyard. If the engine does not stop running, see your Dealer.

If clip and lanyard should be lost overboard, a spare clip can be found on the bottom of the tiller handle.

**IMPORTANT:** Spare clip is for emergency use only. Clip with lanyard should always be attached to operator during normal operation.



1. Spare emergency clip 005105

Move the shift lever to NEUTRAL. Refer to **Shifting and Speed Control**.

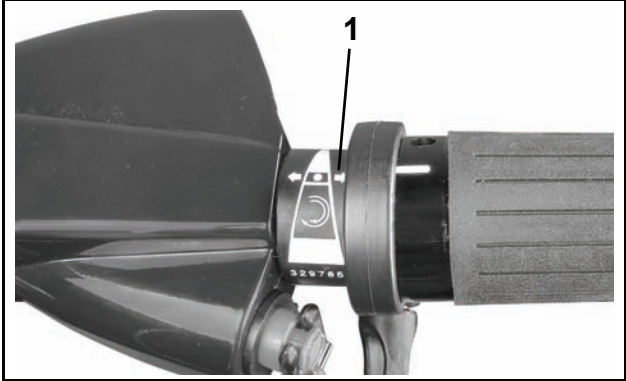


1. NEUTRAL 005100

**WARNING**

Always shift to NEUTRAL before starting the outboard to prevent sudden boat movement, which can cause injury.

Twist throttle grip to slowest IDLE position. Refer to **Speed Control**.



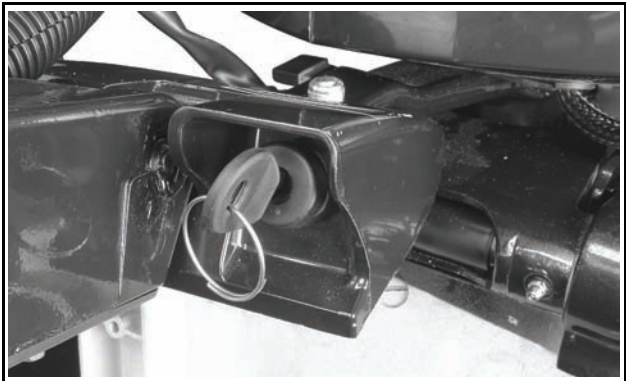
1. SHIFT position 005101

**DO NOT** advance the throttle before start-up. Advancing the throttle overrides the electronic idle control system. After the engine starts, the engine management module (EMM) will automatically increase idle speed slightly. Idle speed will decrease as the engine warms up.

If the outboard is started at wide open throttle, twist the throttle grip back to IDLE before shifting.

**Key Switch**

While seated, turn the key switch fully clockwise to the START position. Crank the engine no longer than 20 seconds.



005118

**IMPORTANT:** The starter motor can be damaged if operated **continuously** for more than 20 seconds.

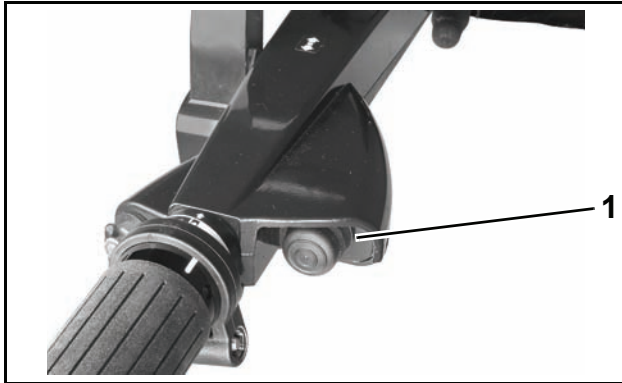
Upon start-up, release the key.

If the engine did not start, release the key momentarily, then try again.

**IMPORTANT:** Engine will crank but will not start if outboard is in gear.

## Start Button

While seated, press the start button. (Key switch must be in the ON position.) Crank the engine no longer than 20 seconds.



1. Start button
2. NEUTRAL

005104

**IMPORTANT:** The starter motor can be damaged if operated **continuously** for more than 20 seconds.

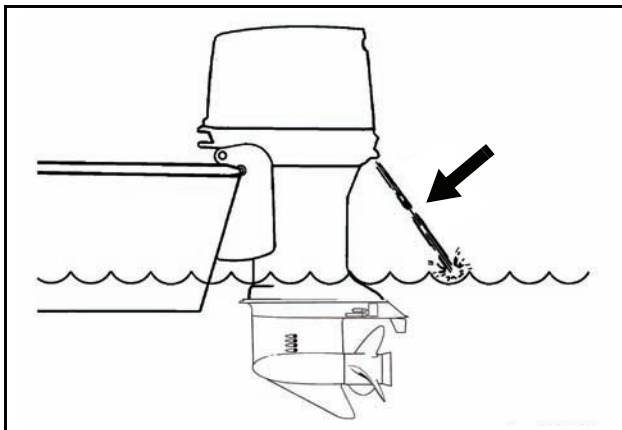
Upon start-up, release the start button.

If the engine did not start, release the start button momentarily, then try again.

**IMPORTANT:** Engine will crank but will not start if outboard is in gear, or if key switch is in OFF position.

## After Engine Starts

Check the water pump indicator. A steady stream of water indicates the water pump is working. If a steady stream of water from the water pump indicator is not visible, stop the engine. Refer to **Engine Overheating** in the *Evinrude E-TEC Operator's Guide*.



Water Pump Indicator

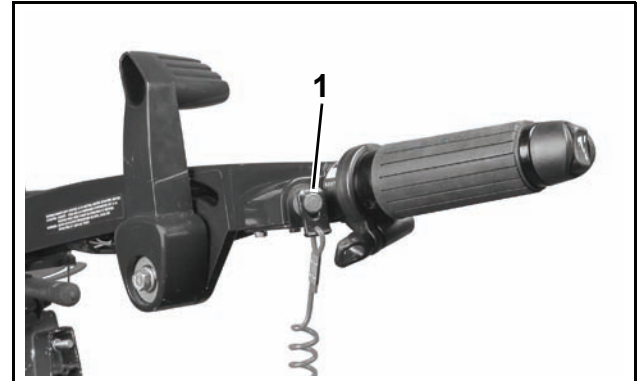
drc4952a

## ENGINE STOPPING

Twist the throttle grip to IDLE position.

Move shift lever to NEUTRAL.

Outboard may be stopped by turning the key switch to the OFF position, or by pressing the STOP button until the outboard stops running.



1. STOP button

005099

**IMPORTANT:** Be sure to turn key OFF when outboard is not in use to avoid discharging the battery.

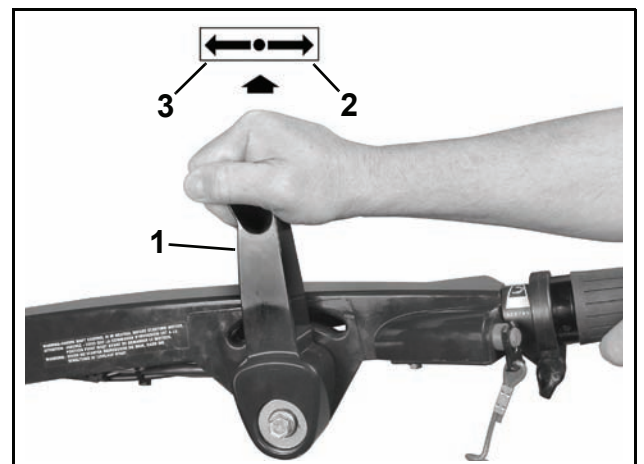
## SHIFTING AND SPEED CONTROL

**IMPORTANT:** Carefully check the function of all control and engine systems before leaving the dock. DO NOT shift the outboard into FORWARD or REVERSE while it is shut OFF.

### Shifting

With engine running, twist the throttle grip to IDLE position.

Move the shift lever briskly and decisively to FORWARD or REVERSE.



1. Shift lever
2. FORWARD
3. REVERSE

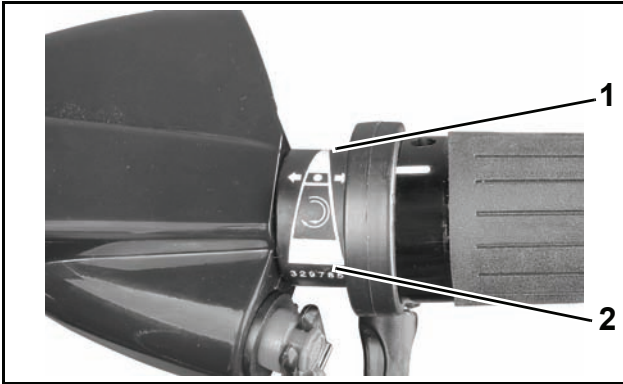
005100

**IMPORTANT:** When shifting from FORWARD to REVERSE or from REVERSE to FORWARD, pause at NEUTRAL until the engine is at idle speed and the boat has slowed.

### Speed Control

With the outboard running, twist throttle grip:

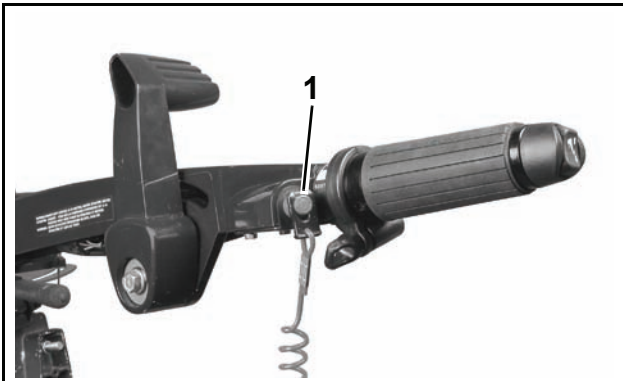
- Clockwise to decrease speed; or
- Counterclockwise to increase speed.



1. Decrease speed
2. Increase speed

005101

Tiller is equipped with a throttle friction adjustment knob. Tighten the knob to reduce the effort required to hold a throttle setting.



1. Throttle friction knob

005099

**WARNING**

Tighten knob only enough to hold throttle at a constant engine speed. Overtightening will prevent quick throttle change in case of emergency.

### TRIM CONTROL

Tiller includes a handle mounted trim/tilt switch.



1. Trim/tilt switch

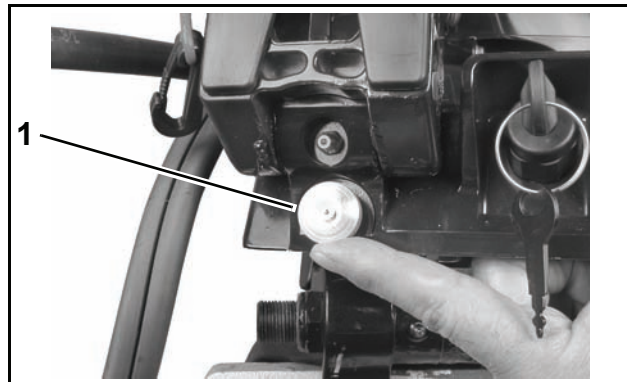
005107

**CAUTION**

If tiller kit is installed on a manual tilt outboard, DO NOT use tiller as a lever to help tilt the outboard. Damage can result.

### TILLER HEIGHT

The angle of the tiller handle can be raised or lowered by adjusting a thumbscrew under the handle.



1. Height adjustment screw

005108



## STORAGE (WINTERIZATION)

You can winterize your outboard either in the water or on a trailer. DO NOT start the outboard once winterization is completed.

### In the Water

Prepare your outboard for the off-season by following these steps:

- 1) Make sure that the throttle is in NEUTRAL and the water intake screens are completely submerged.
- 2) Add 2+4<sup>®</sup> Fuel Conditioner to the fuel tank and fill it with fuel.
- 3) Advance the throttle to 1/2 throttle position and start the outboard. The outboard will run at idle speed.
- 4) After approximately 15 seconds, move the throttle to IDLE position. Run the outboard at idle for another 15 seconds, then advance the throttle again to 1/2 throttle position.
- 5) The outboard will automatically go to fast idle and fog itself. Allow the outboard to run until it shuts itself off (about one minute).
- 6) Top off the oil reservoir and inspect the fuel filter. If there is debris in the fuel filter, it must be replaced.

**IMPORTANT:** When finished, leave the outboard in a vertical position long enough to completely drain the water from the powerhead.

- 7) If equipped, disconnect the speedometer pickup at the upper connection and blow all water out of the hose using air pressure of 25 psi (172 kPa) or less. Reconnect the speedometer pickup after all of the water has been removed.

## On a Trailer

|  |                |   |
|--|----------------|---|
|   | <b>WARNING</b> |  |
| <b>To prevent injury from contact with rotating propeller, remove the propeller before servicing and when running the outboard with a flushing device.</b> |                |   |

Prepare your outboard for the off-season by following these steps:

- 1) Make sure that the throttle is in NEUTRAL. Remove the propeller.
- 2) Add 2+4<sup>®</sup> Fuel Conditioner to the fuel tank and fill it with fuel.
- 3) Attach a garden hose to the flushing port and turn on the water.
- 4) Advance the throttle to 1/2 throttle position and start the outboard. The outboard will run at idle speed.
- 5) After approximately 15 seconds, move the throttle to IDLE position. Run the outboard at idle for another 15 seconds, then advance the throttle again to 1/2 throttle position.
- 6) The outboard will automatically go to fast idle and fog itself. Allow the outboard to run until it shuts itself off (about one minute).
- 7) After the outboard shuts itself off, detach garden hose.
- 8) Top off the oil reservoir and inspect the fuel filter. If there is debris in the fuel filter, it must be replaced.
- 9) Apply the recommended lubricant to the propeller shaft splines, then install the propeller.

**IMPORTANT:** When finished, leave the outboard in a vertical position long enough to completely drain the water from the powerhead.

- 10) If equipped, disconnect the speedometer pickup at the upper connection and blow all water out of the hose using air pressure of 25 psi (172 kPa) or less. Reconnect the speedometer pickup after all of the water has been removed.

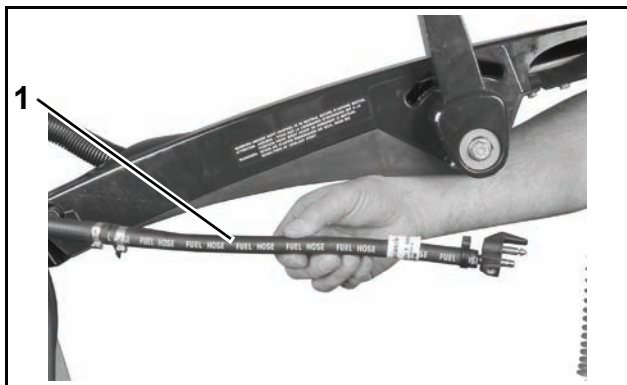
When using this winterization procedure, engine oil may appear on the skeg below the gearcase area. **This is normal.** Avoid potential oil stains by placing a shop towel or suitable container under the propeller and skeg for the duration of the storage.

## OPTIONAL ACCESSORIES

Owners of tiller equipped outboards may be interested in adding the following additional equipment:

**Modular Wiring System (MWS) Harness Kit, P/N 586853**—Allows addition of a *SystemCheck* warning system gauge.

**Quick Disconnect Hose Kit, P/N 398339**—Provides easy connection to a portable fuel tank.



1. Quick disconnect kit

005109