

REMOTE CONTROL CONVERSION KIT, P/N 5035775 INSTALLATION INSTRUCTIONS

APPLICATION

This kit is designed for use on **2000 (SS) and newer Evinrude® or Johnson® 25 and 30 HP (597cc) 4 Stroke outboards**. 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.

	DANGER	
Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.		

	WARNING	
Indicates a potentially hazardous situation which, if not avoided, CAN result in severe injury or death.		

	CAUTION	
Indicates a potentially hazardous situation which, if not avoided, MAY 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*.

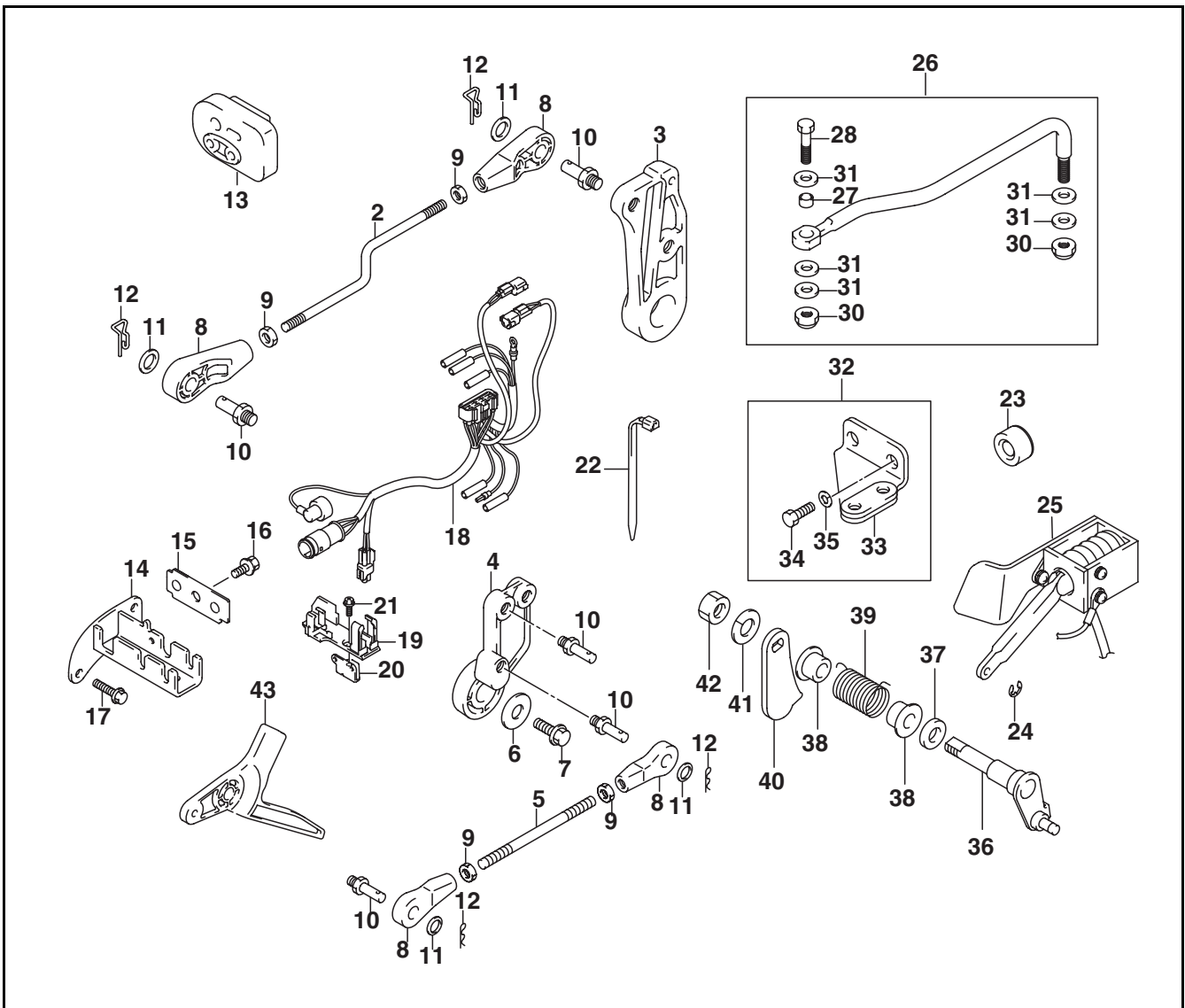
If you use procedures or service tools that are not recommended in this instruction sheet, YOU ALONE must decide if your actions might injure people or damage the outboard.

TO THE INSTALLER: Give this sheet 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.



REMOTE CONTROL CONVERSION KIT – 25/30HP (597cc) 4-Stroke



EPC3727

Ref	P/N	Name of Part	Qty	Ref	P/N	Name of Part	Qty
1	5035775	REMOTE CONTROL CONVERSION KIT	1	22	5030589	*CLAMP, HARNESS CONNECTOR	1
2	5032183	*LINK, CLUTCH LEVER	1	23	5030840	*SEAL, STEERING CABLE	1
3	5032184	*LEVER, CLUTCH CONTROL	1	24	5032179	*E-RING, CHOKE LINK	1
4	5032182	*LEVER, THROTTLE CONTROL	1	25	5032187	*CHOKE SOLENOID AY	1
5	5032191	*ROD, REMOTE THROTTLE	1	26	5032200	*DRAG LINK KIT	1
6	5030056	*WASHER	1	27	5032173	**SPACER	1
7	5030988	*BOLT	1	28	5032174	**BOLT	1
8	5032155	*CONNECTOR	6	30	5032175	**NUT	2
9	5030956	*NUT, CONNECTOR	4	31	5032176	**WASHER	5
10	5032289	*PIN, CONNECTOR	5	32	5034729	*STEERING BRACKET KIT	1
11	5031080	*WASHER	6	33	5032188	**BRACKET	1
12	5030575	*CLIP	6	34	5032177	**BOLT	2
13	5032189	*GROMMET	1	35	5031611	**WASHER, LOCK	2
14	5032190	*BRACKET, REMOTE CABLE	1	36	5032404	*SHAFT AY	1
15	5030954	*STOPPER, REMOTE CABLE	1	37	5034668	*SPACER	1
16	5031121	*BOLT (6X15)	1	38	5032375	*BUSHING	2
17	5030989	*BOLT	1	39	5032412	*SPRING	1
18	5034731	*HARNESS, WIRING	1	40	5032411	*LEVER	1
19	5032194	*HOLDER, CONNECTOR HOLDER	1	41	5030068	*SPRING WASHER	1
20	5032351	*BRACKET, CONNECTOR HOLDER	1	42	5032415	*NUT	1
21	5031638	*BOLT	1	43	5034673	*CAM	1



WARNING



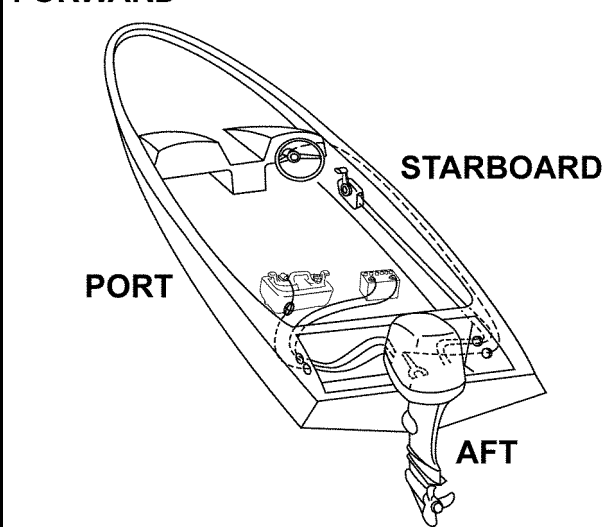
Improper installation of this kit could result in personal injury due to loss of boat control.

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.

FORWARD



Nautical Orientation

REMOTE CONTROL SELECTION

Before performing these procedures, be sure that the throttle and shift cables are installed in the remote control box according to the remote control manufacturer's instructions.

Remote control styles and applications are described in the *Evinrude/Johnson Genuine Parts and Accessories Catalog*. Plan the installation of all remote controls carefully. Read the outboard's Operator's Guide and the remote control's installation instructions prior to installation.

The remote control used must have the following features:

- Start-in-gear prevention
- Emergency stop / key switch
- Shift stroke must conform to the outboards specifications, 1.125 to 1.330 in. (28.6 to 33.8 mm) measured between NEUTRAL and FORWARD.
- All wiring must be compatible with Modular Wiring System (MWS) components.

Use *Evinrude Johnson Snap-In* type remote control cables.

INSPECTION

Before installation, check boat for obstructions that could interfere with free movement of engine control wiring and cables when steering or tilting outboard.



CAUTION



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

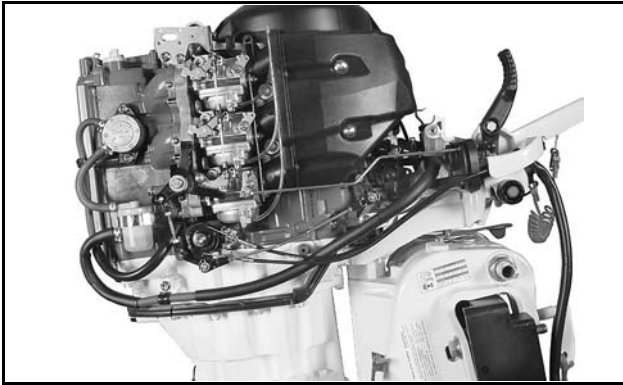
IMPORTANT: Prior to starting installation, perform the following:

- Stop the engine.
- Disconnect battery cables from outboard.
- Make sure the engine is sufficiently cooled.

PARTS REMOVAL

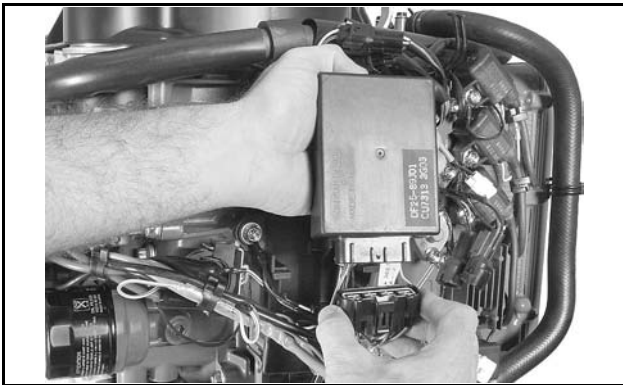
Remove the parts in the following procedures prior to installing the Remote Control Conversion Kit.

Remove the upper motor cover and both lower motor covers.



003537

Remove electrical cover. Remove wire harness connector from ECU.



003583

Remove clamps from wiring harness. Remove ground wires from electrical bracket screw and wire from oil pressure sender.



1. Clamps
2. Ground wires

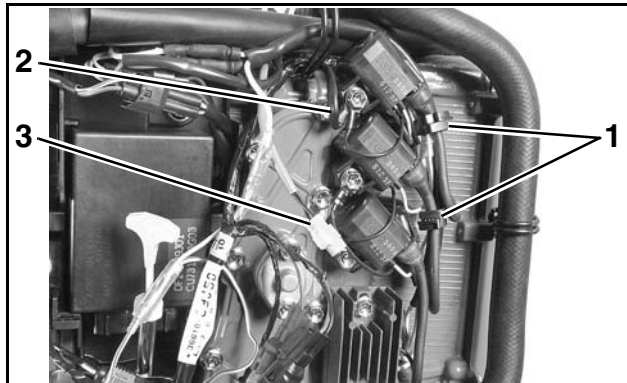
003540

Disconnect start switch, stop switch and neutral switch wiring from engine wire harness connectors.



003538

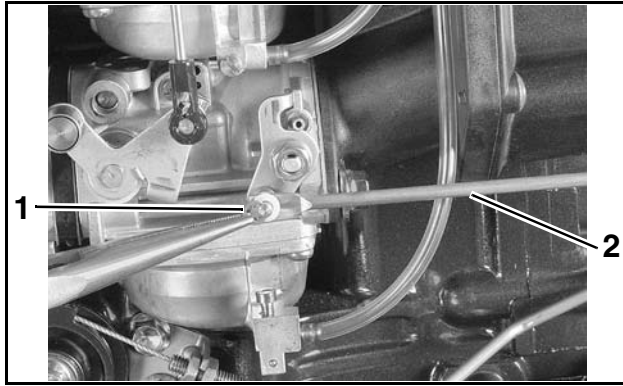
Remove clamps from coil wires and disconnect wire harness connectors from ignition coils. Remove ground wire from top ignition coil mounting screw. Disconnect temperature switch connector and remove engine wire harness.



1. Clamps
2. Ground wire
3. Connector, temperature switch

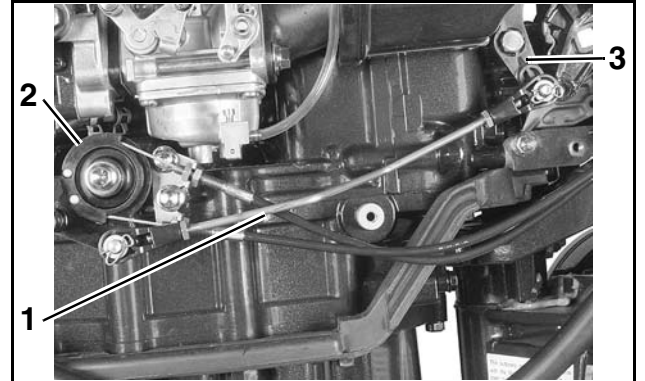
003539

Remove retainer that secures choke rod to carburetor choke plate pin. Remove choke rod.



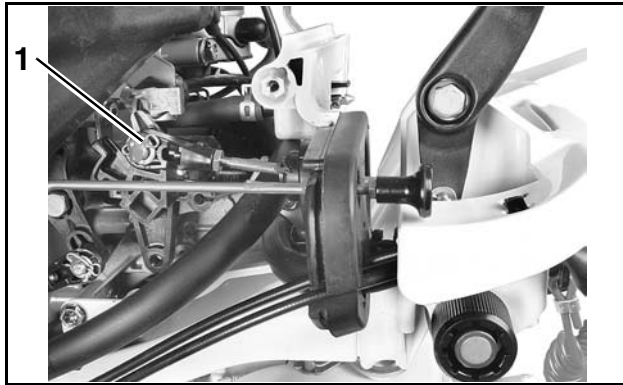
1. Retainer
2. Choke rod
003410

Remove retainer pins and washers and remove throttle limit rod from throttle drum and throttle limiter lever. Remove throttle limiter lever.



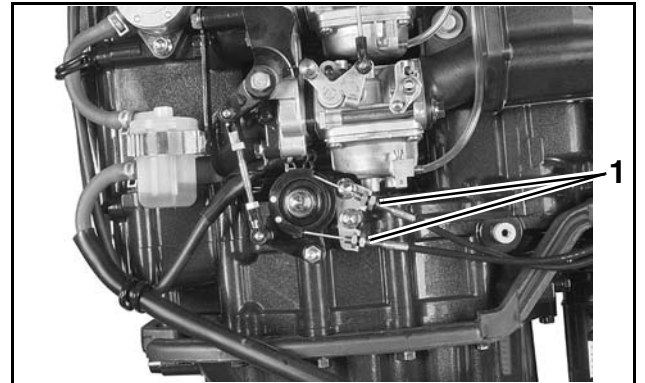
1. Rod
2. Drum
3. Lever
003408

Remove retainer clip and washer from shift pin and shift link connector from shift linkage.



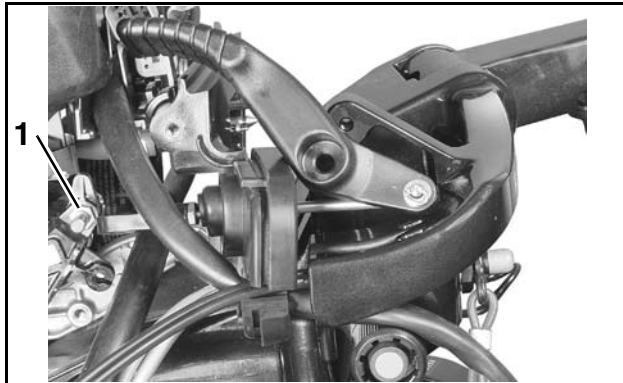
1. Clip
003584

Loosen retaining nuts and remove throttle cables from throttle drum.



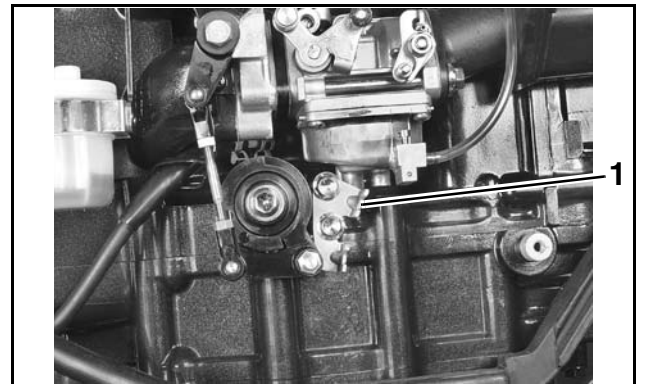
1. Retaining nuts
003406

Remove shift lever screw from tiller bracket. Remove shift link and lever and lower motor cover grommet. Remove shift notch plate pin.



1. Pin, shift notch plate
003293

Remove the throttle cable bracket from block.



1. Bracket
003405

Remove cable clamp and fuel hose from tiller bracket.



- 1. Clamp
- 2. Fuel hose

03893

Remove steering friction assembly by removing nut, stud and bolts.



003894

Remove tiller bracket to steering arm screws and then tiller bracket assembly.

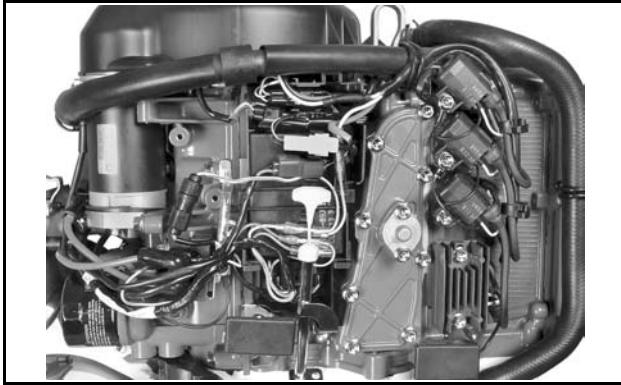


- 1. Screws

003542

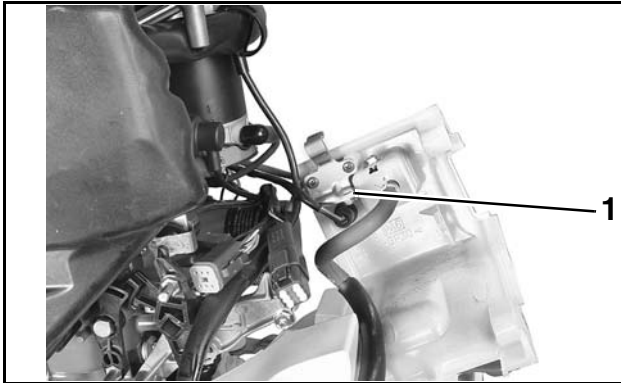
INSTALLATION

Install new engine wire harness in reverse order of removal.



003582

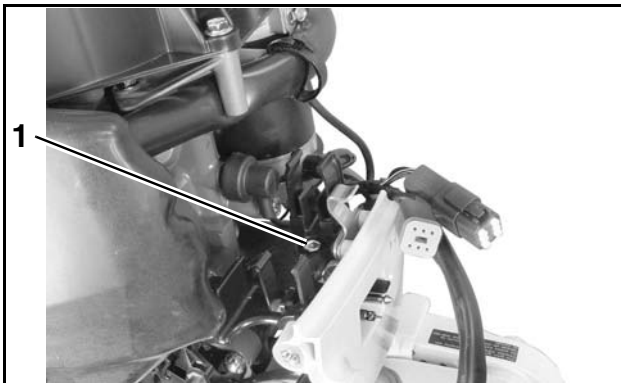
Remove the front panel of the lower engine cover to install the electrical connector holder bracket. Secure bracket under the upper motor cover fastener hook screws.



1. Bracket

003543

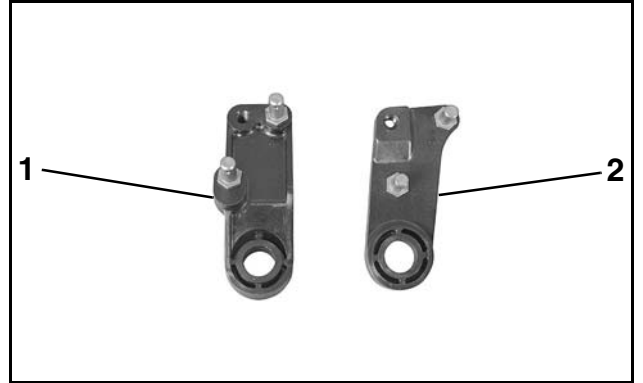
Install electrical connector holder to bracket with retaining screw provided.



1. Screw

003544

Degrease the **new** connector pins and apply *Three Bond 1738* adhesive or equivalent to threads. Install connector pins in shift and throttle levers as shown and in lower position of shift notch plate. Torque pins to 16 in. lbs. (1.75 N-m).



1. Throttle lever
2. Shift lever

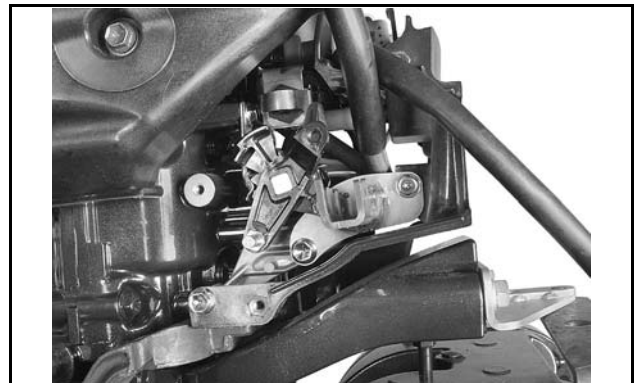
003887



1. Pin, shift notch plate (lower position)

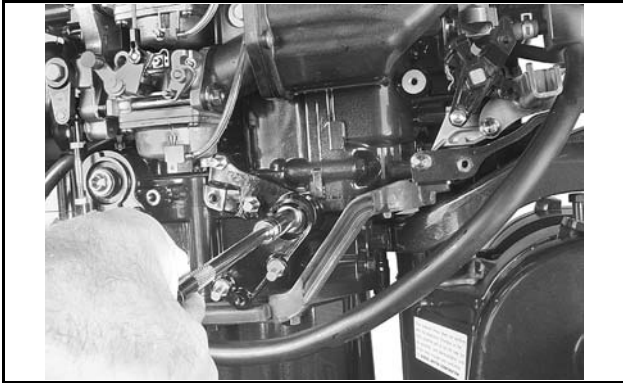
003586

Move shift notch plate into REVERSE position. Install the control cable anchor bracket and front panel. Tighten mounting screws securely. Route battery cables through connector holder.



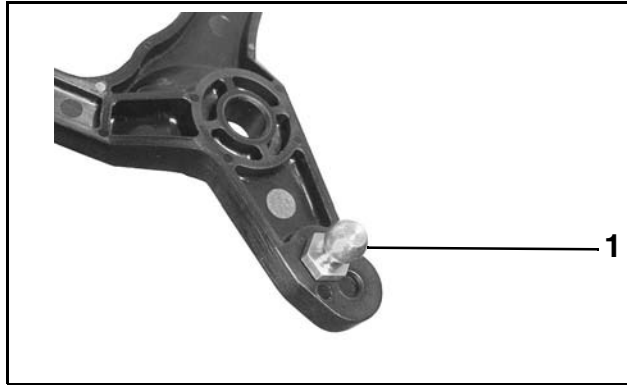
003287

Install shift and throttle levers with screw and washer provided and torque screw to 90 in. lbs. (10 N·m).



003281

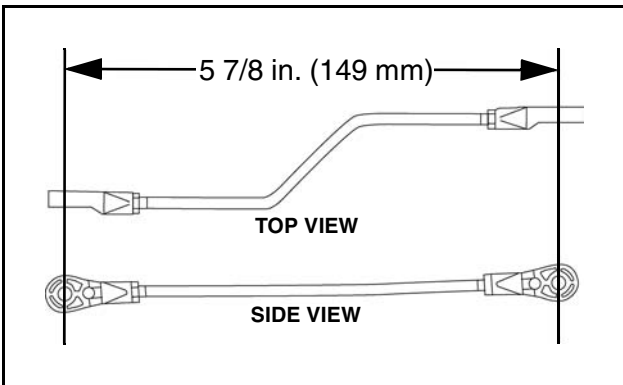
Remove cam and then ball stud. Clean and degrease the threads of ball stud and apply *Three Bond 1738* adhesive or equivalent to threads. Install ball stud into new throttle cam.



1. Ball stud

003892

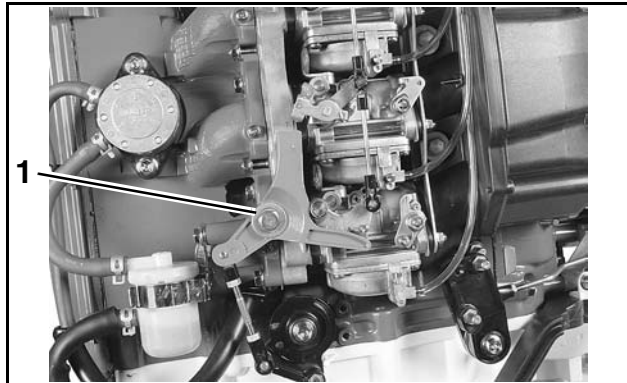
Install the locking nuts and connectors on the shift link. With thread engagement of both connectors equal, make sure link is adjusted to 5 7/8 in. (149 mm). Tighten locking nuts.



Shift Link

003587

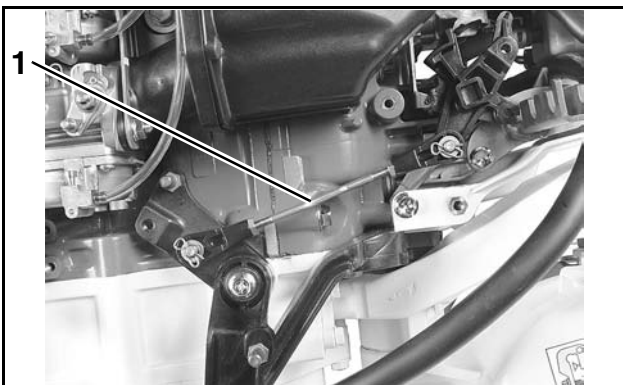
Install new throttle cam and torque bolt to 90 in. lbs. (10 N·m).



1. Throttle cam

003884

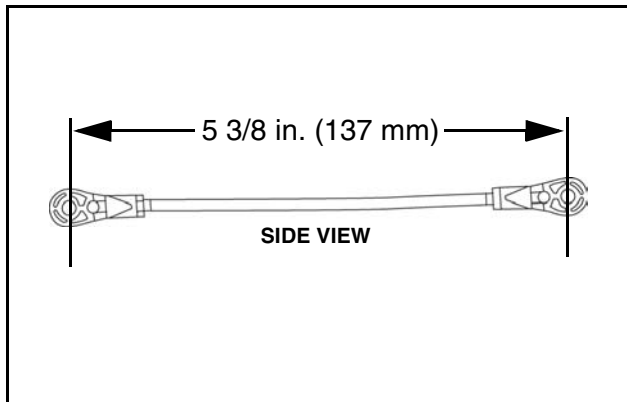
Install shift link on shift lever and notch plate. Secure with washers and retainer clips.



1. Shift link

003885

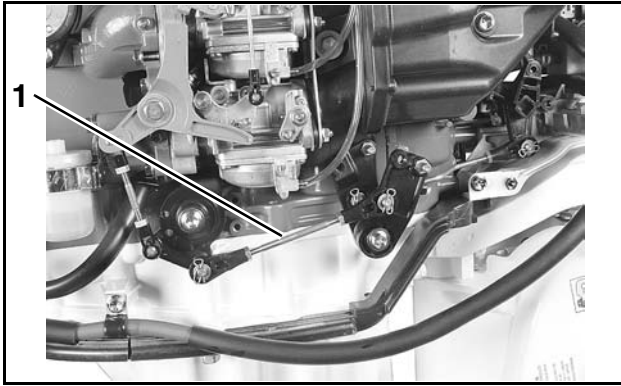
Install the locking nuts and connectors on the throttle control rod. With thread engagement of both connectors equal, make sure rod is adjusted to 5 3/8 in. (137 mm). Tighten locking nuts.



Throttle Control Rod

003588

Install throttle link on throttle drum and throttle lever. Secure with washers and retainer clips.

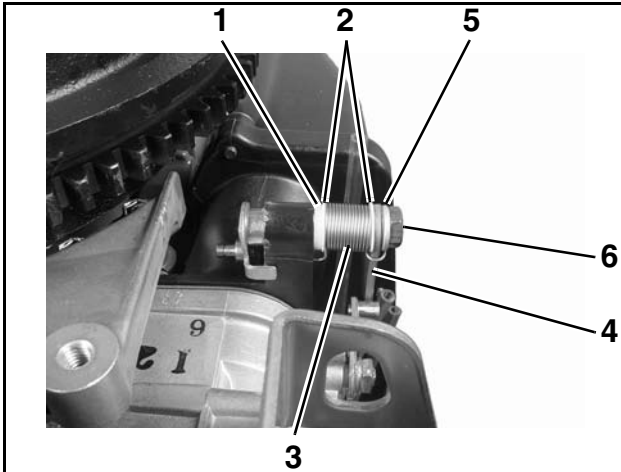


1. Throttle link

003883

Remove flywheel cover, flywheel and support bracket. Refer to appropriate Service Manual for removal and installation procedures.

Install choke shaft, spacer, bushings, spring, lever, lock washer and nut in support of air silencer as shown. Tighten nut securely.

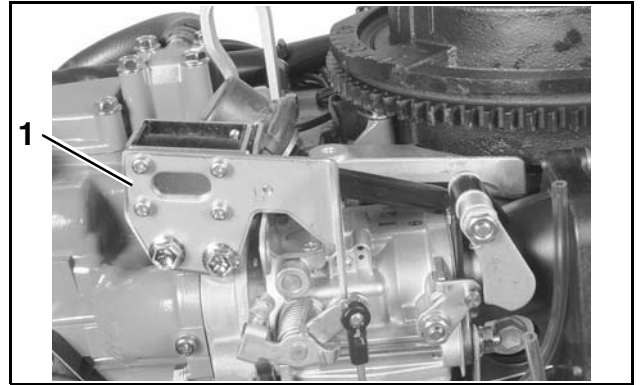


1. Spacer
2. Bushing(s)
3. Spring
4. Lever
5. Lock washer
6. Nut

003881

Install support bracket and flywheel after choke shaft has been installed. Refer to appropriate Service Manual installation procedures.

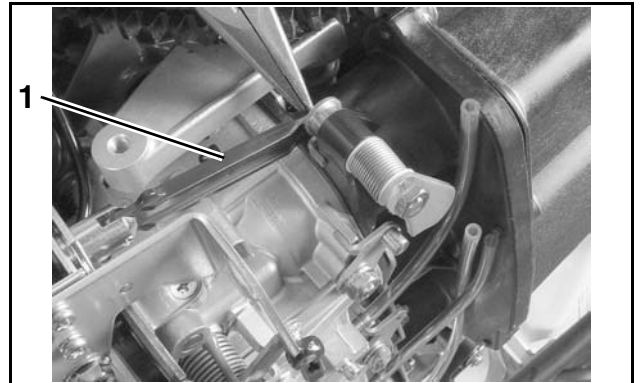
Remove carburetor bracket and fasten choke solenoid to bracket with five screws provided. Reinstall bracket on engine. Fit choke plunger into choke solenoid.



1. Bracket

003879

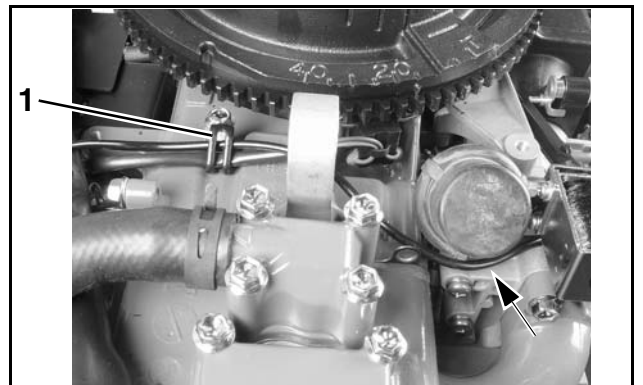
Position choke plunger and link on shaft. Install retainer on choke shaft to retain choke link.



1. Choke link

003888

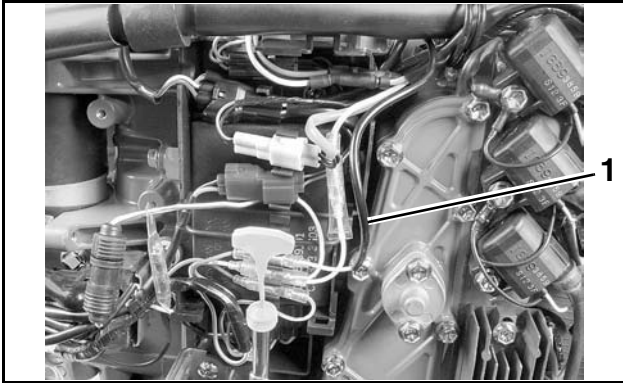
Route choke solenoid wire as shown to electrical box on port side of powerhead. Make sure wire is routed through clamp and does not interfere with flywheel.



1. Clamp

003889

Connect choke wire connector to engine wire harness connector at electrical box. Route wiring and fasten in retainer of electrical box as shown.



1. Choke wire

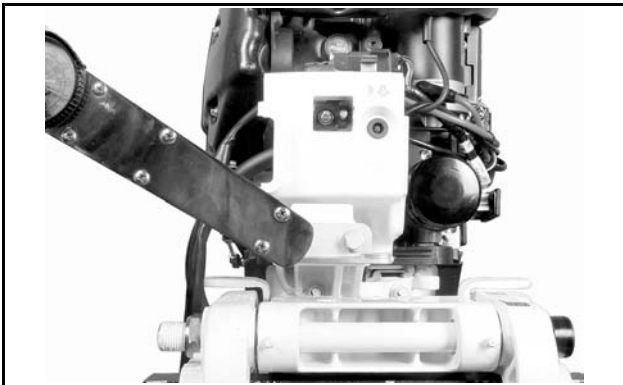
003878

Position wire in electrical box and install cover. Install flywheel cover.



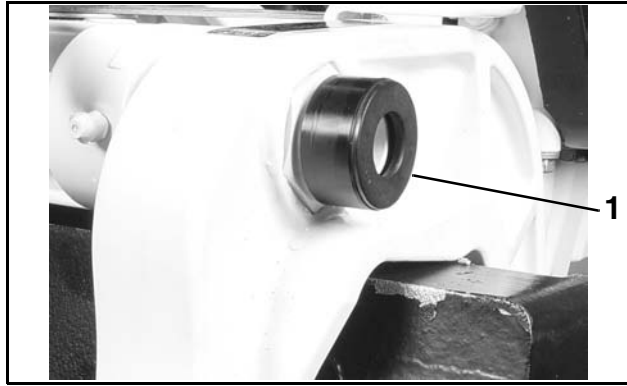
003890

Install steering bracket on front of steering arm with screws and lock washers provided. Torque screws to 25 ft. lbs. (34 N·m).



003877

Install steering wiper nut on port side of steering tube threads.



1. Wiper nut

003891

Install drag link assembly. Follow instructions provided with drag link assembly.

Install remote controls, cables and wiring as described in installation instructions provided with those components.

CHECK INSTALLATION

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

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

WARNING
<p>To avoid loss of engine control, thoroughly test the starting, shifting, throttle and steering functions before delivering the boat and outboard to your customer.</p>