

2003

Johnson®

Service Manual

ST 2 Stroke Models:
55 WRL COMMERCIAL



SAFETY INFORMATION



Before working on any part of the outboard, read the SAFETY section at the end of this manual.



This manual is written for qualified, factory-trained technicians who are already familiar with the use of Bombardier Special Tools. This manual is not a substitute for work experience. It is an organized guide for reference, repair, and maintenance of the outboard(s).

This manual uses the following signal words identifying important safety messages. These safety alert signal words mean:

ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

	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.

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

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

To reduce the risk of personal injury, a safety review is provided at the beginning of each section.

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 adhered to. 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 manual, **YOU ALONE** must decide if your actions might injure people or damage the outboard.

LEAK TEST PROCEDURE

Drain lubricant before testing.

STEP 1

Install lubricant drain/fill plug and seal, thread pressure test gauge fitting and seal in lubricant level hole.

Pressurize 3 to 6 psi (21 to 42 kPa).

If pressure gauge indicates leakage, submerge the gearcase in water to determine source of leak.

If the gearcase pressure gauge does not indicate leakage, increase pressure to 16 to 18 psi (110 to 124 kPa). Check for leakage.

Make necessary repairs and repeat test.

STEP 2

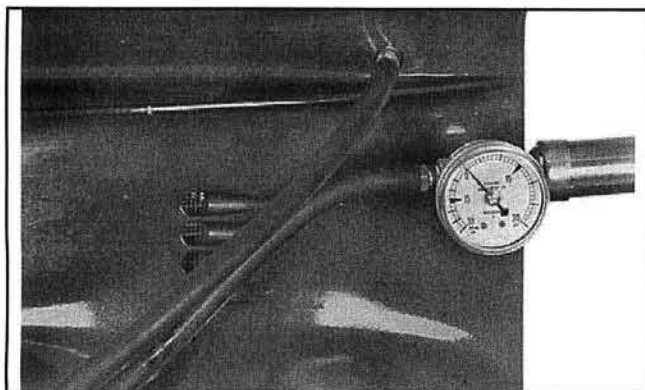
Complete successful **STEP 1** before proceeding.

Install vacuum test gauge. Apply 3 to 5 in. of vacuum (76 to 127 mm) Hg. with pump.

Check for leakage.

If leakage occurs, apply oil around suspected seal. If leak then stops or oil is drawn in, that seal is defective.

Repeat test, gearcase must hold minimum of 15 in. (381 mm) Hg.



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REMOVAL AND INSTALLATION

Removal



WARNING

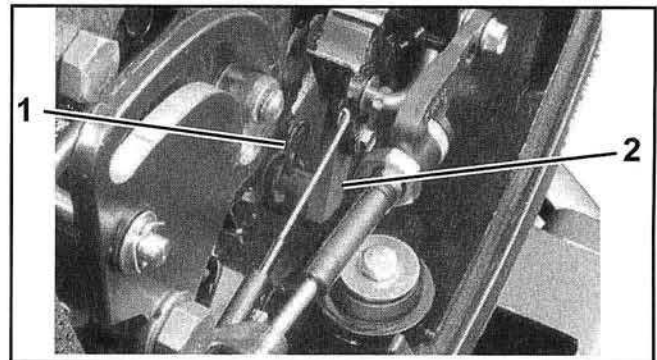


To prevent accidental starting while servicing, twist and remove all spark plug leads.

During service, the outboard may drop unexpectedly. Avoid personal injury; always support the outboard's weight with a suitable hoist or the tilt support bracket during service.

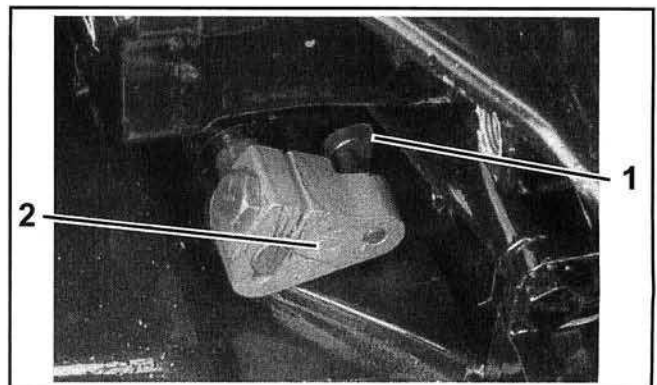
Remove the shift lever retaining pin.

Push the shift lever toward the powerhead to disengage shift rod lever from the lower shift rod on the port side of the outboard.



1. Shift lever retaining pin
2. Shift lever

001202



1. Shift rod
2. Shift rod lever

001282

Note where the index mark on the gearcase aligns with the index number of the adjustable trim tab so