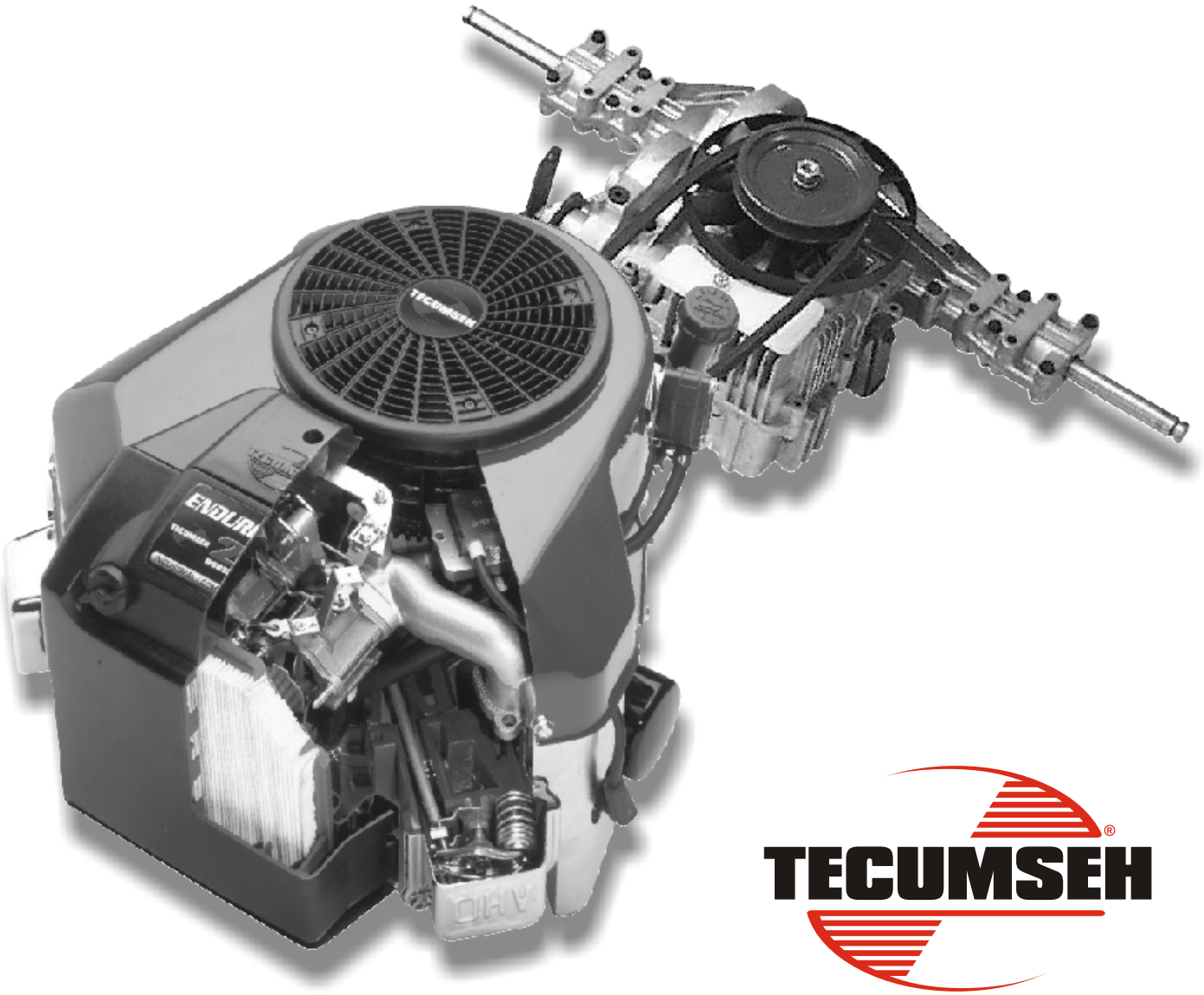
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Tecumseh Update 2001



TECUMSEH®

FACTORY TRAINING

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Welcome to the 2001 Technician's Update Seminar presented by your Tecumseh representative.

WELCOME! We are glad to have you with us today. The Education Department would like to welcome you to the 2001 Update Seminar. We are excited to share with you some new changes to our Engines and Motion-Drive systems as well as brand new and innovative products that we are rolling out during the 2001 season.

We would especially like to welcome our Tecumseh Master Technicians (TMTs) to the 2001 Update Seminar. Remember the full benefits of being a TMT are only in effect when you are employed by a Premier Service Dealer. Your TMT number and Dealer Code number must be in our records for warranty decisions to be accepted by Tecumseh.

We have also listened to your feedback regarding more "Hands-On" demonstrations to improve shop efficiency. These demonstrations will include some new tools to further that goal.

This year's update will introduce you to the "NEW" limited service LTH hydrostatic transaxle, which will be used by several OEMs this season. We also review policy changes made to the VST serviceability and "R" (remanufactured) program.

We look forward to hearing your continued feedback regarding Tecumseh's educational approach and content as well as seeing you at one of the training schools. Remember that if you choose to attend a Tecumseh factory school or a Tecumseh Service Network (TSN) school, dependent on the dealer level you have chosen, you may be eligible for tuition reimbursement under Tecumseh's scholarship program.

TMT TESTING AND BENEFITS

Tecumseh has begun offering the most in-depth Master Technician certification test in our industry. This test covers all areas that are involved in normal daily repair of our products. The 2.5-hour test is comprised of the following:

- 100 questions- multiple choice, covering Four-cycle, Two-cycle, Warranty, Carburetion and Motion-Drive products.
- Hands on failure analysis of two failed products drawn at random, one Engine and one Motion-Drive failure. An ESA warranty claim form needs to be properly filled out listing your decision as to whether the repair is warrantable and listing all parts required for the repair. If the repair is warrantable you will be responsible to sign the claim in the area previously reserved for your distributor representative.
- Once certified, you will receive a special code reserved for you alone, not a dealership. When you are employed by a Premier Dealer you are empowered to replace Engine, Short Block or Motion-Drive units without distributor approval.
- Recertification is required every four years.
- Proof of holding the OPE Four-cycle certification must be supplied prior to taking the TMT test.

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Contents

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Copyright © 2000 by Tecumseh Products Company

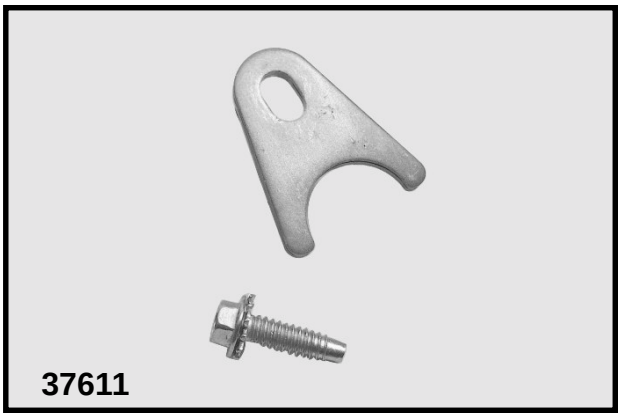
All rights reserved. No part of this book may be reproduced or transmitted, in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Tecumseh Products Company Training Department Manager.

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

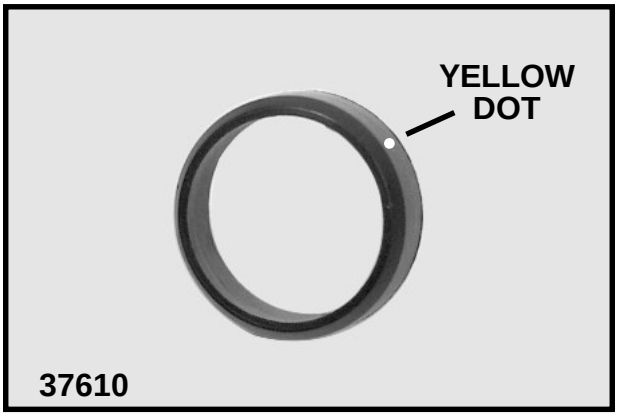
New Fill Tube Clamp

We have developed a new fork style retainer part **# 37611** to increase the oil fill tube sealing force on LEV and OVRM engine applications. This new system requires changes to the oil sump casting and therefore is not retrofitable. You will see it rolled out per OEM request on our lightweight vertical engines during the 2001 model year.



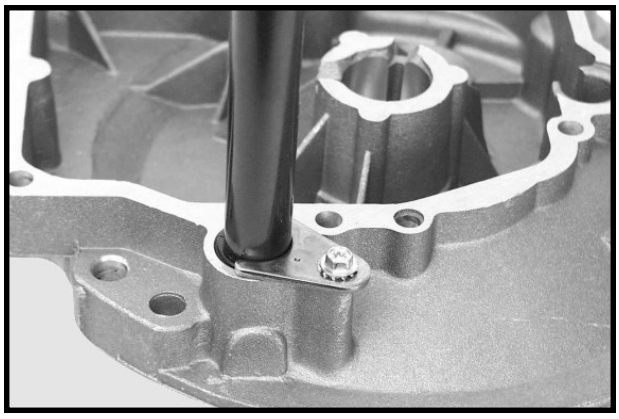
Improved Fill Tube Seal

We have developed a new oil-fill tube seal also for lightweight vertical engines. This Viton rubber seal can be used on lightweight flanges that utilize the deeper oil fill tube seal which is referenced in our 97'-98' update book. String trimmers and similar applications are susceptible to customer neglect by not keeping the cooling air inlet free of debris. If the cooling air inlet becomes blocked with debris, the oil temperature can increase to such a level causing this seal to deteriorate. The engineering group made a running change to this Viton seal, which can better handle these higher temperature applications. This seal part **# 37610** will have a yellow dot on it for identification purposes and will supersede the old seal part **# 36996**.



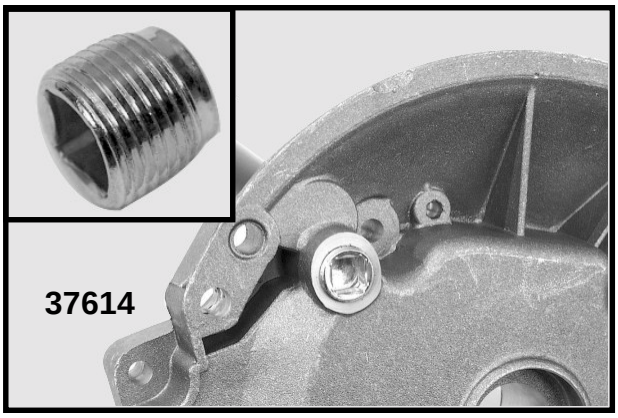
Flange change for lightweights

The lightweight flange has been changed to add an additional mounting boss to accommodate the oil-fill tube clamp and screw. You will see this new flange in 2001 production.



Pipe thread drain plug

Another change to our lightweight verticals is the addition of the new oil drain plug. This plug part **# 37614** has the better sealing capability than the plastic style plug and will be an across the board change starting to be used in production late spring 2001. After an oil change, we recommend applying pipe sealant to the threads. Torque this plug to 100 lbs. (135.58 Nm).



www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

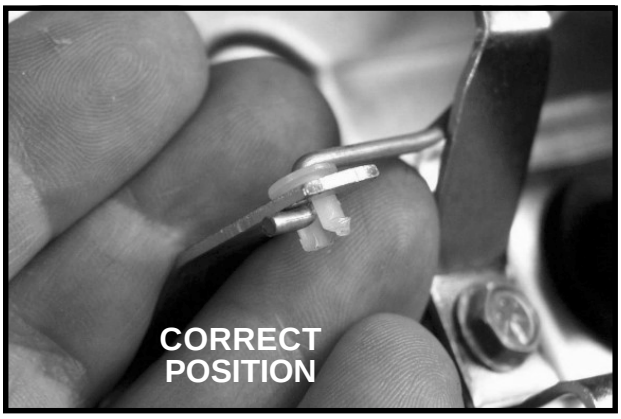
OHH/OHSK Low Tone Muffler

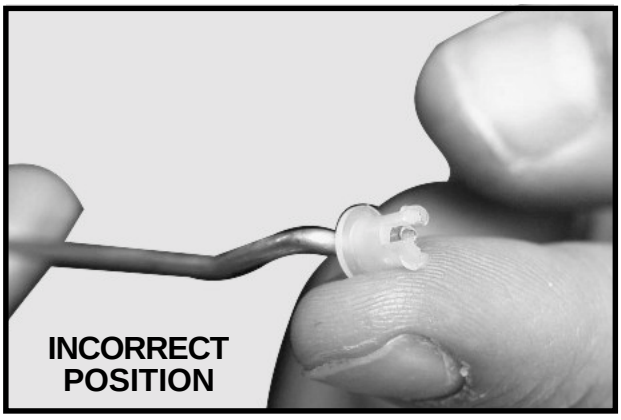
At the request of several of our generator and pressure washer customers, we have developed a new low tone muffler. This noise reduction is very noticeable at full power on this horizontal engine. The new muffler was an OEM option and will now supersede the original mufflers to offer both side and rear discharge designs. These mufflers are available under service part # **37595** for the side discharge and # **37596** for the rear discharge, should your customer request one for any OHH/OHSK engine.

The spark arrestor service kit # **36085** can be added to either muffler. Spark arrestors for other models are listed in the service engine specification book part # **692531**.

Expanded Use of Link Bushings

We have further expanded the use of throttle link bushings to the HM and OHM product. These bushings are used to reduce free play in the linkage, which improves governor response. We suggest that you stock these bushings part # **36288** in case they are lost during service. It is critical these be re-installed properly when repairs are done. The illustration shown to the right shows proper installation.

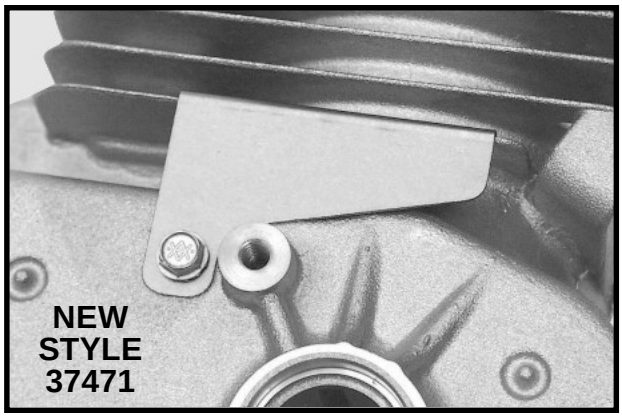




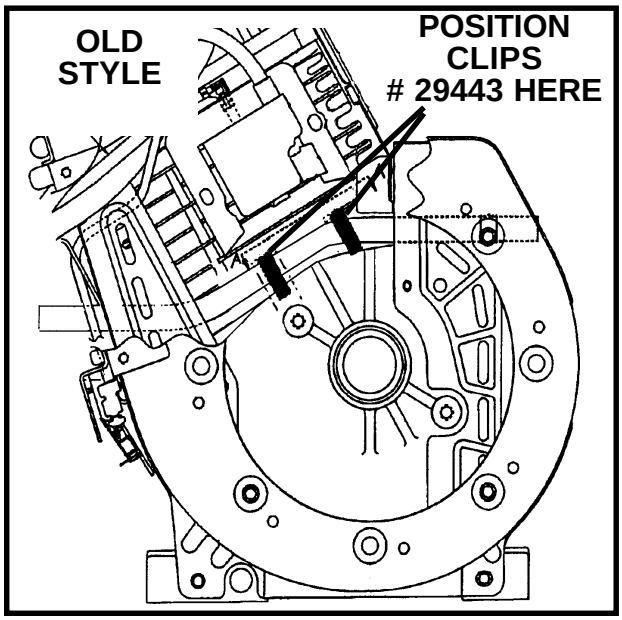
www.mymowerparts.com

Improved Fuel Line Retention

Beginning with the 2000 model year, we have installed a fuel line guide bracket on the OHH and OHSK 5-7 HP engines. If you replace a fuel line on this family of product, be sure to cut the fuel line to the exact length and install under the new retainer bracket**.** If not retained, the flywheel could cut the fuel line causing a leak. This new bracket has a part **# 37471** and cannot be retrofitted to the older style OHH/OHSK cylinder.



Earlier models used the clips shown, part **# 29443.** Make sure fuel line is installed during service, and always check for these clips to be in place. This older style OHH cylinder needs the two clips shown and doesn't have the threaded hole to accept the new fuel line bracket.



Rocker Switch Now Basic

Effective with the 2001 product line changes, we are making the on/off rocker switch basic on all recreational vehicle applications. Should you encounter a lack of spark, you will need to isolate the switch from the ignition module as a possible problem area before replacing the module. The addition of the switch complies with the American Society For Testing Measures (ASTM).

We have also received customer calls regarding the international symbols required by the European Union. We have included on page 48 in this booklet an explanation of the various symbols. Regarding the rocker switch, the '0' represents "off" and the 'I' represents a "run" position.

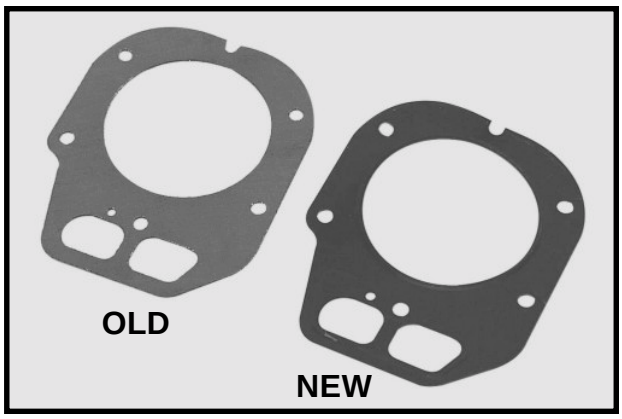
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

New Rope Guide

We have been evaluating failed recoil starter ropes returned from many of you. This evaluation has shown the rope at times can bind between the pulley and housing causing wear and eventual failure. This can occur if the customer allows the rope to fly back into the starter housing. To prevent this, we have added an additional rope guide, which is welded to the recoil housing. This guide directs the rope back onto the pulley, preventing wear and binding of the rope. We will start implementing the new recoil starters on all engines for the 2001 model year.

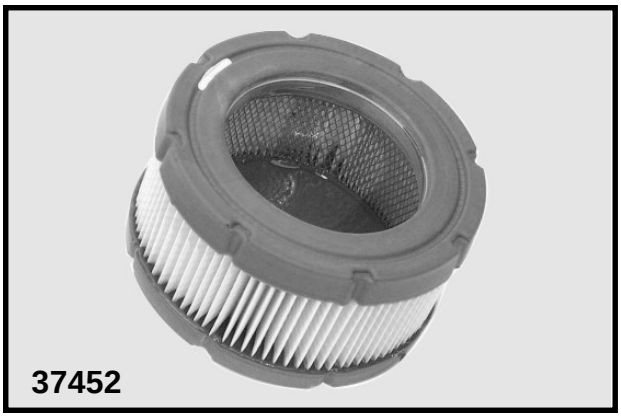
New OHV Head Gasket

A graphite gasket part # **37493** has been designed to replace the # **36337** metal gasket. This gasket is used on the OHV 13.5 through 17.5 hp engine. The graphite is less sensitive to damage during handling and provides a better seal due to its high density and better thermal properties. The cylinder head has been machined down to maintain compression ratio. Therefore, the gaskets are not interchangeable.



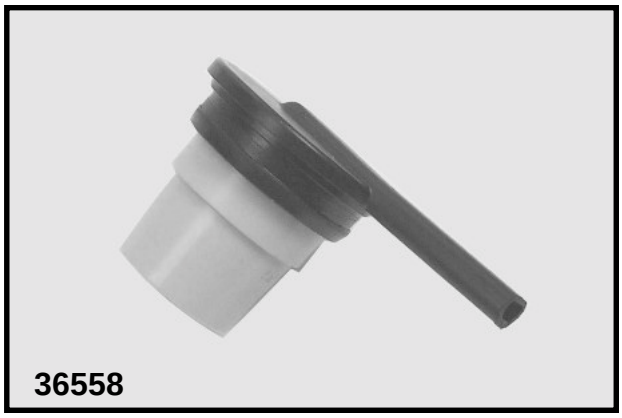
OHM Air Filter Improvement

On certain applications, the top of the air filter for OHM 80-110 engines would pulse at high speeds. This would cause a low pressure condition in the filter cavity and pump oil to the filter through the breather. The thickness of the material on the top of the filter has been increased to eliminate this pulsing and oil saturation. This filter, # **37452** will be a running change, which will be implemented in the 2001 production year.

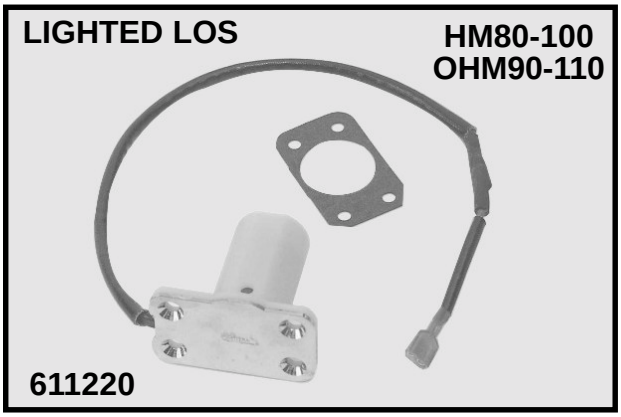


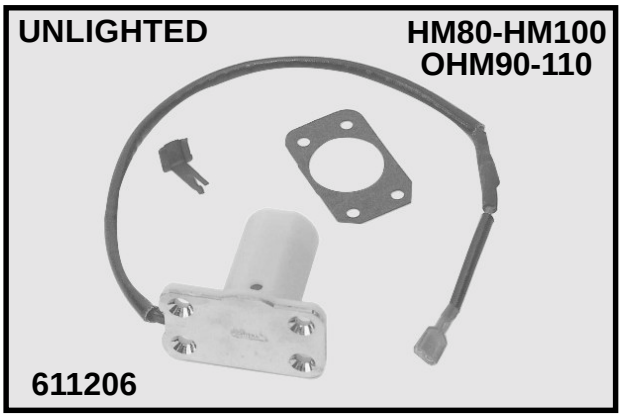
Breather Material changed

We have made a running change to the breathers on our small frame engines. High wheel string trimmers can develop heavy concentrations of flying debris, which can accumulate on the cool air inlet of the starter housing. This will cause higher than normal engine temperatures. These high temperatures may cause the older style breather grommet material to lose its sealing capability and leak. We have successfully tested this new breather material at temperatures exceeding 300°F. (148.88^{0}C).



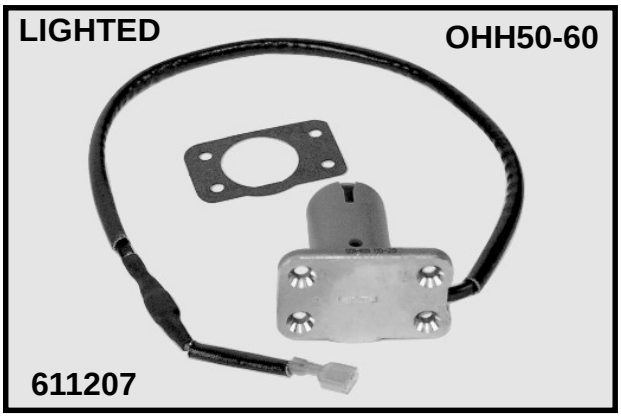
www.mymowerparts.com





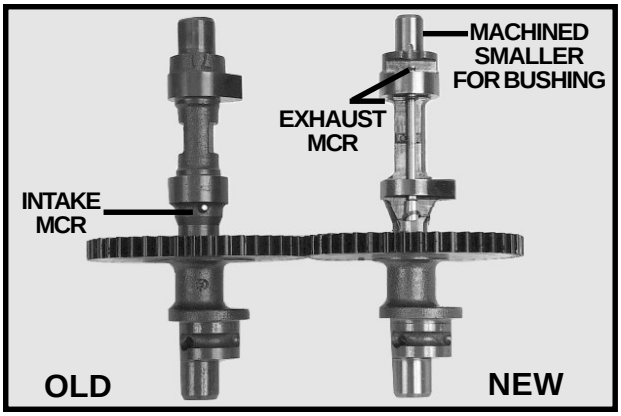
Low Oil Shutdown Improvements and Reed Switch Improvements

The three LOS systems that we use on OHH, HM and OHM products have received some internal changes. These switch part numbers # **611206,** # **611220** and # **611207** were previously manufactured with a neoprene rubber lining which has been changed to an adhesive style and secured with epoxy. This has provided an improved run performance by reducing problems caused by shock load.

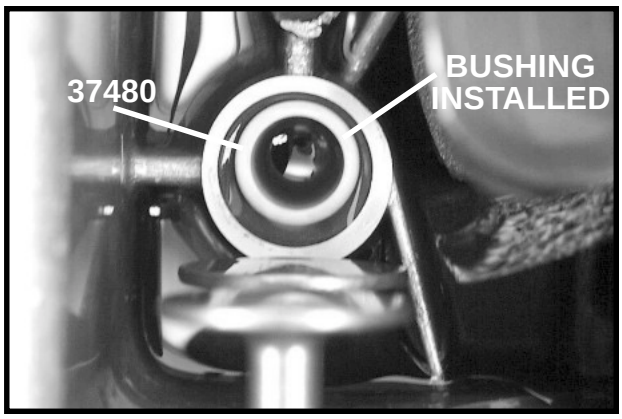


LEV / OVRM Camshaft bushing = Easier Starts?

Yes it's true, starting in late 1999 an across the board change was made from an intake MCR (mechanical compression release) design to an exhaust MCR on the LEV/OVRM camshafts. This cam and plastic sleeve are retrofitable to engines manufactured prior to 11-15-99. The cylinder's cam bearing pocket did not change in size. The change from intake MCR to the exhaust MCR was made to improve startability. With the MCR back on the exhaust side, the camshaft end needed to be machined smaller to provide clearance for the exhaust MCR pin. The plastic sleeve is serviceable under part # **37480**.



If you need to remove the bushing, use an easy-out and position cylinder on the edge of a workbench with the flywheel side up. The reason for this is to prevent any possible chips from the plastic bushing from getting in the oil galley. To install, lubricate the bushing and bearing pocket and insert the bushing into place using the corresponding end of the camshaft. If necessary, lightly tap the end of the cam with a non-metallic hammer until bushing is flush with the casting.



New "Hot Plugs"

In an effort to further maximize our CDI ignition coil, we have decided to partner with Sears and offer two new spark plugs for the rotary engine line. The Champion RN4C4 part # **37599** will be gapped at **.045" (1.14 mm)**. This "Hot Plug" will be featured on OVRM engines for Sears. Sears LEV engines will be built with a Champion RJ19LM4 plug part # **37598** which will also be gapped at **.045" (1.14 mm).** These are new spark plugs, not just re-gapped. They improve starting with marginal quality fuel because of the longer arc length from the larger plug gap. The older style plugs can be used, but MUST be gapped at .030" (1.143 mm).

New Magnetic Oil Drain Plug

A further enhancement to the LEV 120 H.O. 6.75 hp engine is a new "pipe-thread style" magnetic drain plug for the 2001 season. This plug is an exclusive to Sears and will be used on propelled models only. Production using this magnetic plug # **37615** starts December 2000.

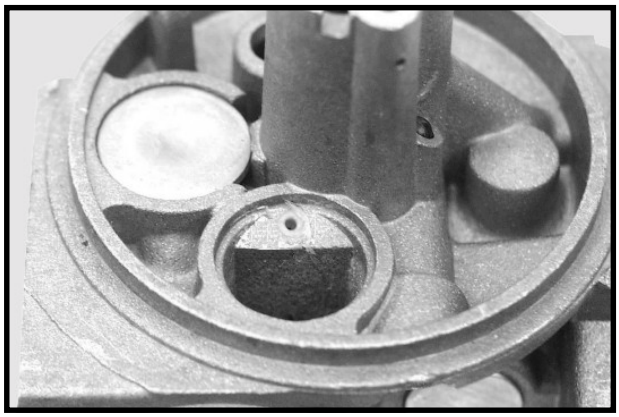
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

DEMONSTRATION

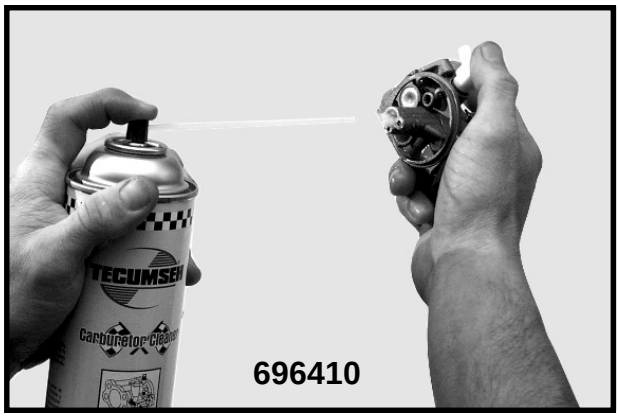
Carburetion

Carburetor Cleaning - Series 11

Note to the instructor: Please have removed idle circuit and additional fuel welch plugs. Have technicians remove emulsion tube, O-rings, and float needle assembly with carburetor tool # 670377. Have the students clean all passages with .012" (.304 mm) wire. Finish cleaning procedure with Tecumseh carb cleaner.



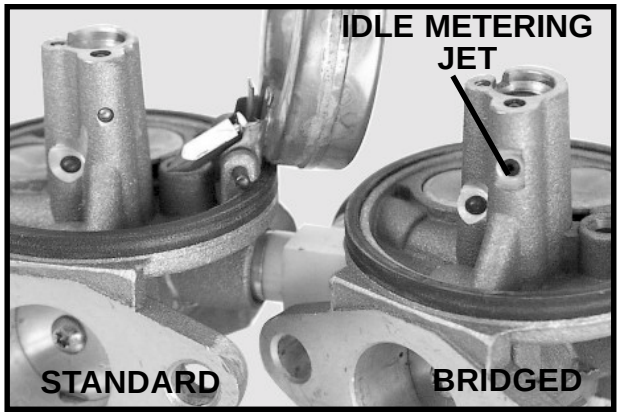
With the additional fuel well welch plug removed, you can see the small plastic metering jet, which can be distorted if left to soak in a carb dip tank. Currently, this metering jet is not a serviceable part. Our position has been to soak a carburetor no more than ½ hour but the exception is the Series 11 carburetor. To be safe, service all our carburetors with Carburetor Spray **# 696410** along with a .012" (.304 mm) gauge wire. Guitar strings are sold in this dimension as well as larger gauge for minimal cost.



2 Series 11 Carburetors

There are two versions of this carburetor, the standard and the bridged style. Both Series 11 carburetors have an additional fuel well so that at start up, performance results are non-surging and smooth running. The standard Series 11 has replaced the Series 8 on all lightweight vertical engines.

The Bridged Series 11 is built exclusively for the OVRM 120. It has a metering jet on the side of the center leg of the carburetor body. The Bridged 11 will draw fuel to the idle circuit from two sources; the main nozzle/idle route as well as the metering jet on the side of the center leg. This metering jet is a plastic composite and can be cleaned with a .012" (.304 mm) gauge wire. Both the inner well metering jet under the welch plug and the side metering jet on the Bridged Series 11 are .0125" (.317 mm) in diameter.

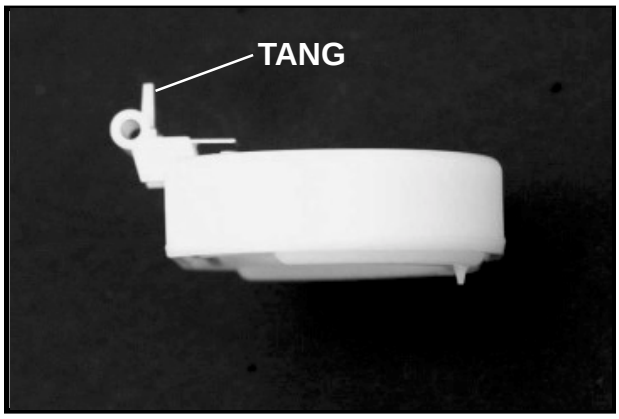


www.mymowerparts.com

Plastic Float Implemented

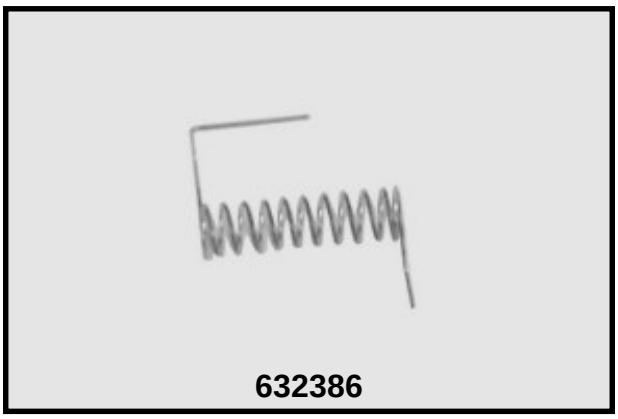
Last year we introduced the plastic float to reduce corrosion in the float bowl brought on by re-formulated gasoline. Based on the success of this limited release, we eliminated the brass float in our horizontal medium frame engines and a majority of the latest OVRM 120 specs. The part number for the float is **# 632802** and the float height adjustment is the same as the brass-style floats. This plastic float can be used on any aluminum bowl carburetor with the exception of RV specifications, which utilize brass floats with dampening springs.

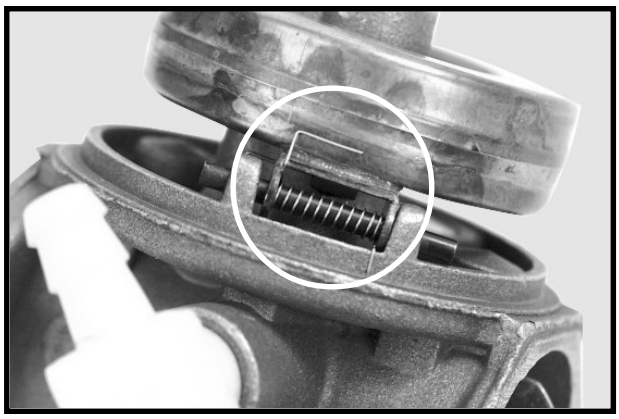
Please note the tang shown in the photo to the right. If you try to flip back the float for needle/seat service, you could break off the tang and possibly crack the float. The hinge pin has to be removed to lift the float straight out of the carb body for servicing. Use the new carburetor tool **# 670377** to perform this service.



Float Return/Dampening Spring standard for RV Carbs

The float return spring has been standard for H series PowerSport® carburetors and soon will be introduced on the OHH slant series engines for the 2001 model year. As in the H series PowerSport engines, run quality in rough terrain is improved with this float dampening spring part **# 632386.**



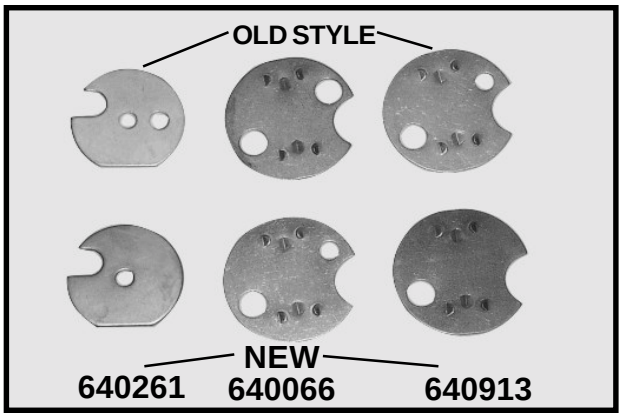


This photo shows proper installation.

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

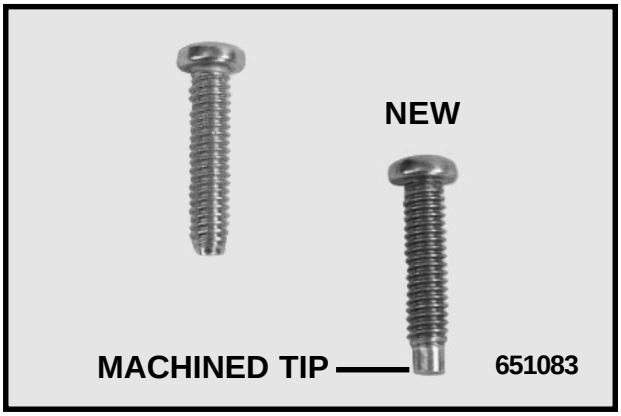
Better Cold Starts

We continue to receive comments from the field regarding poor cold weather starting on recoil starter-equipped OHV and medium frame series engines. A more aggressive choke shutter was made across the board for these engines as of December 1999. The part number for the TVM/HM series engine choke shutter is # **640261**, # **640913** for OHV 11-13 hp. engines and # **640066** for OHV 13.5-17.5 hp engines. These more aggressive shutters dramatically improve starting.



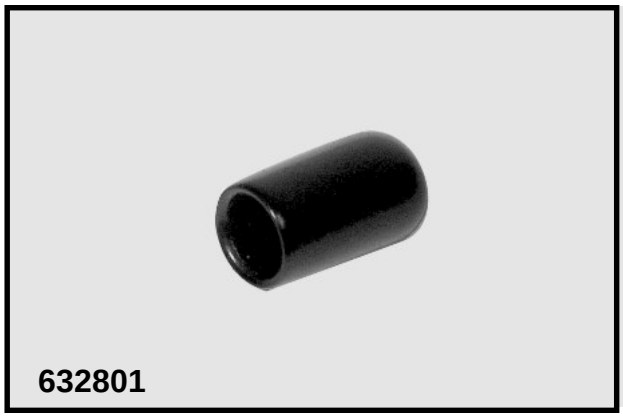
New True-idle screw

We have changed the true idle screw on some applications. The fine thread screw has been machined with a chamfer around the end. The tip has also been machined smooth. This idle screw has been included on engines that use a diaphragm carburetor or that do not have a governed idle system. The PowerSport® (non-governed idle) carburetor will now have a more precise adjustment to the idle speed on applications that require greater sensitivity at idle operation.



Tamper Resistant cap

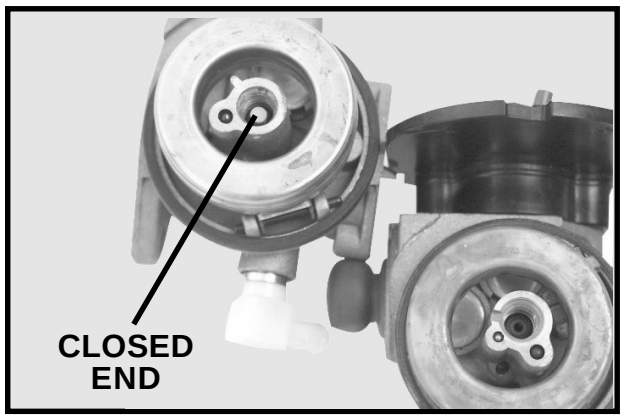
A tamper resistant cap is being used to prevent changes to the true-idle RPM on recreational, PowerSport engines. This is being done to eliminate the possibility of tampering with the idle speed, causing the clutch to engage at an inappropriate time. The part number for this cap is # **632801**.

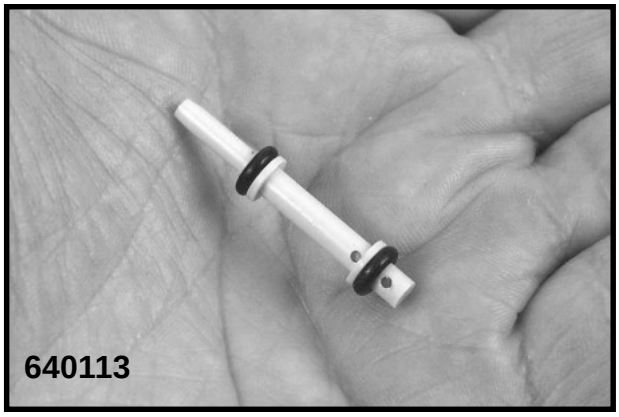


www.mymowerparts.com

Pink Emulsion Tube

The Series 3-emissionized carburetor used on many Summer HM's, Formula® OHV 120 engines and TVM engines are being built with a pink colored emulsion tube. This carburetor incorporates a new pink main nozzle/emulsion tube that does ***not*** have an open end on the bottom but instead utilizes two additional pick-up holes below the bottom "O"-ring. Because this is the only main nozzle/emulsion tube we have that is closed on the end it may appear defective. Closer examination after its removal reveals two metering holes on either side as shown. This new type of emulsion tube improves the engine run quality at light to no load conditions. This new nozzle requires the use of a new bowl nut with more clearance to allow fuel to enter the emulsion tube. When service is needed, please follow the parts look-up system closely to obtain the correct parts.





All Primer Bulbs are Not Created Equal

This is just a reminder that we introduced a high volume primer for the Series '11' carburetor part **# 640259** in late 1999. This bulb ***CANNOT*** be used on older carburetors or it will cause an over-primed condition. The bulbs shown here are all in production today. The original bulb **# 36045A** shown, is used on our OHH Series 8 carburetors today. Please follow the parts look-up system to obtain the correct primer bulb for your carburetor.

Improved VLV (High Torque) Float Bowl Kits

In our continuous effort to improve your dealership efficiency, we have created the following kits to make carburetor service literally a snap! Bowl kits are complete and ready to install.

Technicians advised us that when they removed the bowl drain screw to remove stale fuel they still had problems when they found tiny pieces of threading coming loose; these sometimes caused the jets to be plugged. To prevent this, we now form the thread as part of the mold process. This 'molded in' feature was part of the Series 7 float bowl. This was a running change that took place mid-2000. Please see Bulletin 126 regarding these kits. Please remember that it is a violation of both EPA and CARB regulations to install a non-emission grade bowl kit on an emissionized engine.

Descriptions of our Vector® new carb kits

Emissionized Engines

Model	Kit number
VLV Yellow Nozzle, Yellow Jet	730637A

Non-emissionized Engines

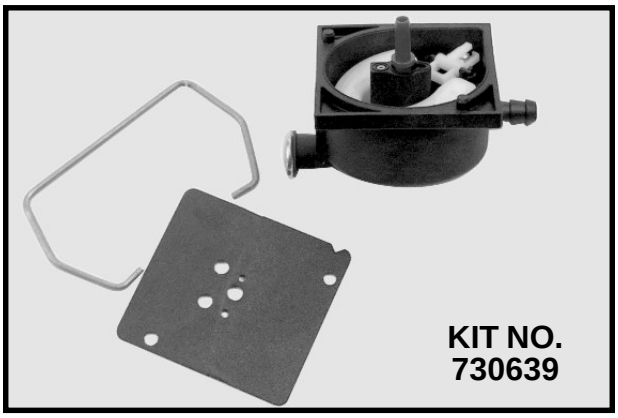
Models	Kit Number
VLV Red Nozzle, Red main Jet	730235B
VLV (Victa model) Green Nozzle	730641

Series 7 Fuel Bowl Standardized

We have standardized the float bowl on the Series 7 carburetor with the Vector bowl. This change required a new float bowl retainer that will come with every Series 7 kit. This change took place in Spring 2000.

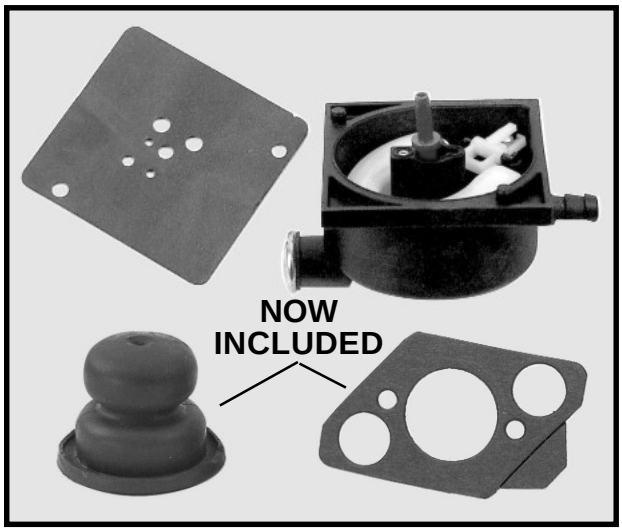
Series 7
OHV 110-135* Black Nozzle, Pink Jet 730638
Series 7
OHV 140*-175 Blue Nozzle, Brown Jet 730639

*Note: Model OHV135 with spec numbers ranging from 203500 thru 203599 use kit number 730639.



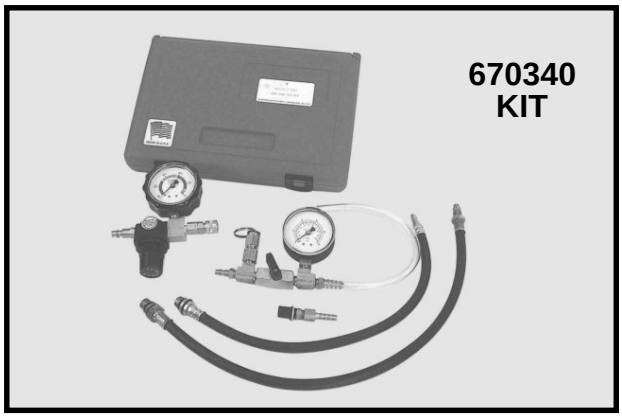
www.mymowerparts.com

VLV (High Torque) tip:
We have been hearing from technicians that after installation of a bowl kit they still have a leaking/ flooding carburetor. Our evaluation of this situation has found one of two issues caused the problem. These are either a damaged filter box gasket and/ or a shrunken primer bulb. Either can cause a closure of the atmospheric vent. When this passage is blocked, it can cause a siphoning effect and appear to be a defective needle and seat. To insure a complete repair is performed, we will be including both the primer bulb and the air filter box gasket in the bowl kits. When servicing the VLV (High Torque) you should install all the parts contained in the kit to insure a satisfied customer. Parts may also be ordered separately.



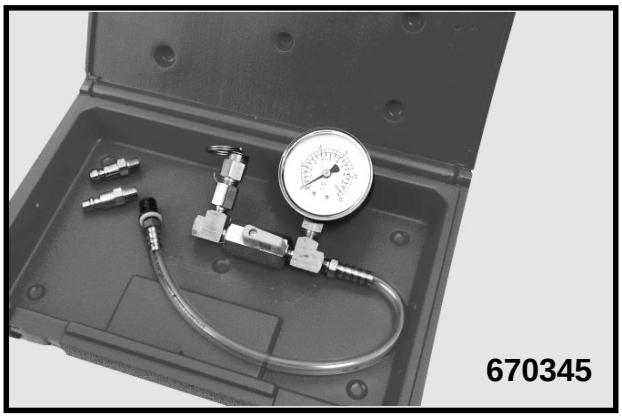
Leak Test Kits
If you have a need to check ring and valve seal on an engine, needle to seat seal, or an MST transaxle case seal this tool is for you.

For example, the MST series transaxle was our first new model in fifteen years to use 80/90 EP oil instead of grease. When a repair is needed, proper resealing is CRITICAL. If you do not pressure test for leaks, the unit could slowly run low of oil, causing a failure. This tool makes a low pressure leak-down test quick and easy.



Two kits are available; the first is a complete kit including the primary regulator, low pressure gauge and all necessary adaptors. This kit is available through your distributor as service part # **670340**. The second kit is designed to be an add-on unit for a wide variety of leak down testers and contains only the low-pressure part of the system. Order service part # **670345** from your distributor. Both kits include a pressure relief valve to prevent excessive pressure buildup.

The following pages show this important tool in action.



For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Engine Leak Down Test

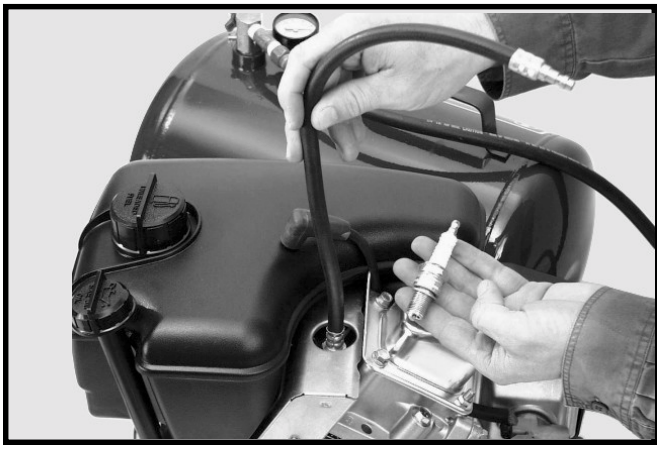
DEMONSTRATION

Step One: To perform this test, remove spark plug and make sure the crankshaft is held in place firmly at **TOP DEAD CENTER** on the compression stroke. John Klas demonstrates how to retain the crankshaft with a holding device that none other than he himself designed for us in the education department.

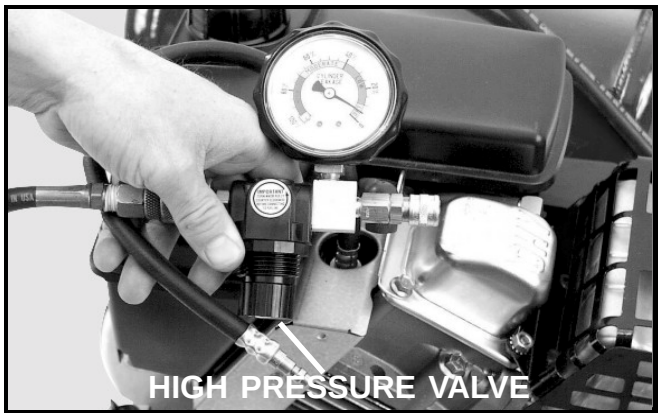
John machined the first prototypes of our new carb tool and countless other tools and parts to help us teach more effectively. John is now in his 40th. year serving Tecumseh Grafton Operations as an expert machinist.

Step Two: With the spark plug removed, insert the spark plug adaptor provided in the leak down kit **# 670340.**

CAUTION: To prevent possible damage to the gauges **ALWAYS** turn the high pressure valve off (counter clockwise).



Step Three: With the high pressure regulator connected to the shop air line, open the high pressure regulator valve until needle is in the "SET" position.



Step Four: Connect the regulator to the spark plug adaptor and watch the needle. If the needle is in the green area, you have an acceptable 40% (or less) leak down. (If 100% leak down occurs, check to see if air is escaping from the muffler or air cleaner). This test **MUST** be performed on Top Dead Center (TDC) on the compression stroke.

Isolate valve or rings: If excessive leakage is noted, you should next add several drops of oil into the cylinder. Then slowly turn the engine over several times to wet the bore and rings. Then perform the test again. If the percentage of leakage changes more than a few percent, you need to completely inspect the piston, rings and bore. If little change is seen, the valves or a blown head gasket is the problem.

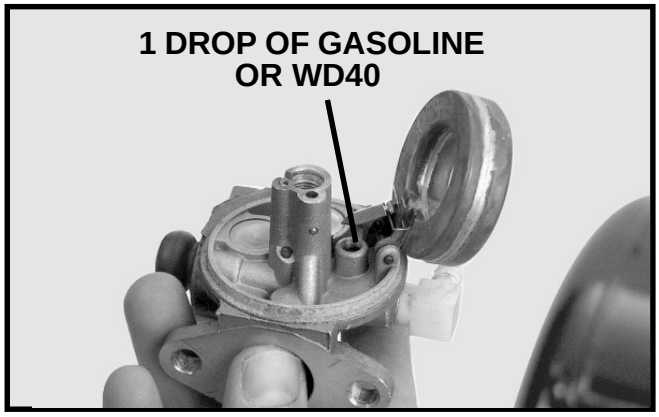
www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

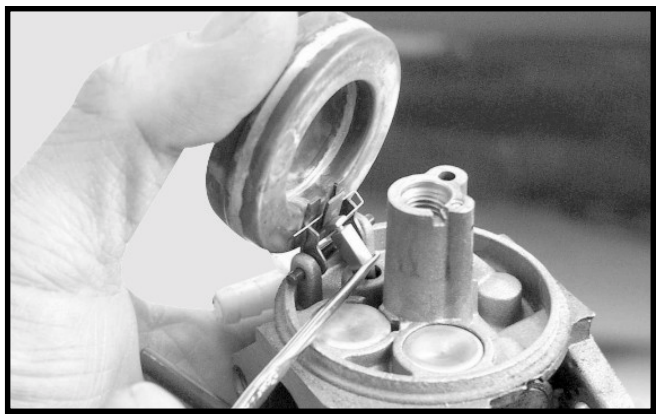
DEMONSTRATION

Carburetor Needle Pop-Off Test

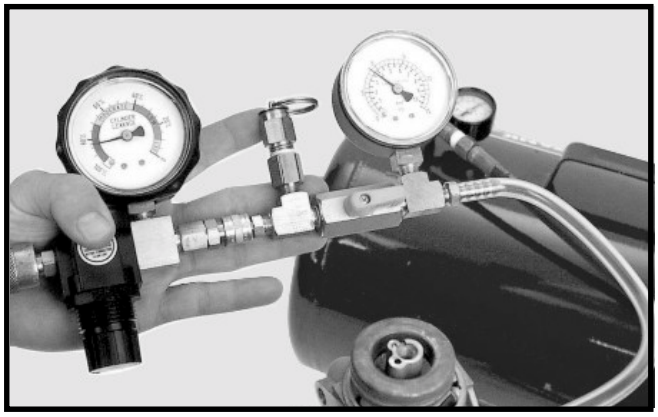
Step One: Remove carburetor bowl and open float all the way to remove needle from the seat orifice. Then apply one drop of WD40 or gasoline to wet the seat.



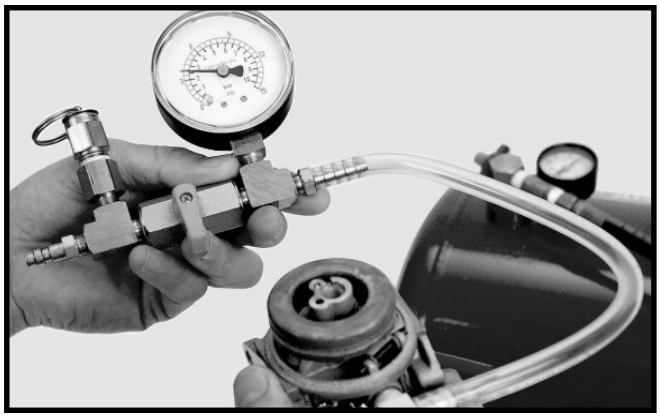
Step Two: Next, insert needle back to it's original position. Now with air valves closed on both regulators, connect them to each other and the air tank with the clear plastic air line to the low pressure regulator and the fuel inlet on carburetor.



Step Three: With carburetor held in a level position, open the gate valve on the low pressure regulator. Then begin adjusting the high pressure regulator valve to obtain a reading of 5 PSI (.34 Bars) on the low pressure regulator.



Step Four: Take care to keep carburetor level then close the gate valve on the low pressure regulator and disconnect from the high pressure regulator. Observe the needle, the leak-down should not go below 1.5 PSI (.1 Bars) in a one minute time frame. If a lower reading is noted, replace needle and seat.

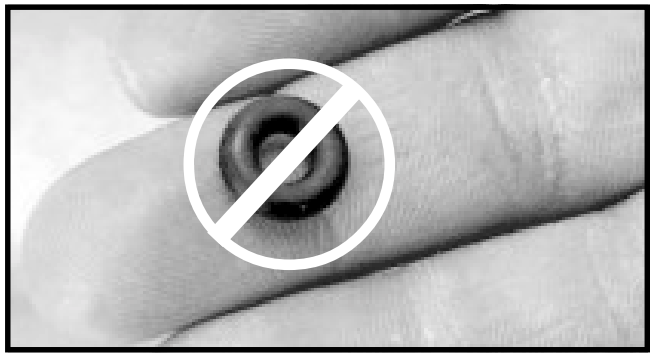


www.mymowerparts.com

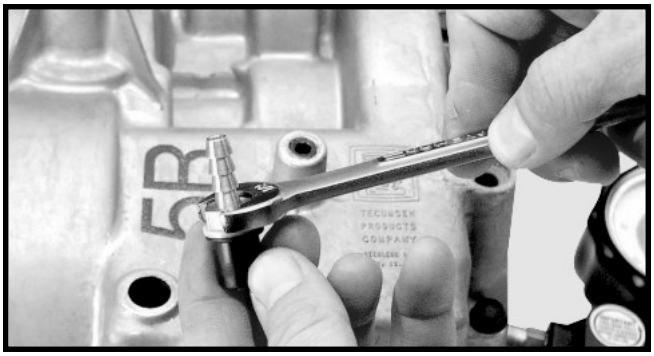
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

MST Pressure Test DEMONSTRATION

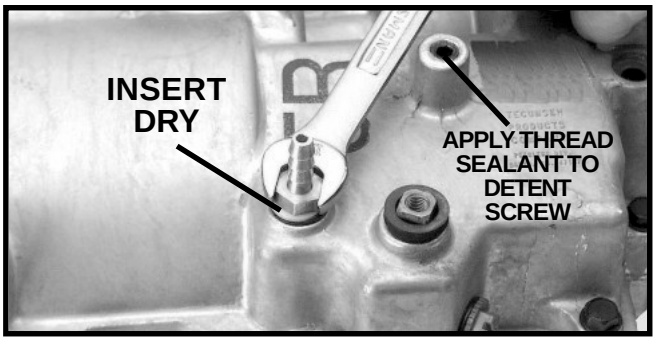
Using pressure leak test kit 670340 the O-ring pictured is not necessary.



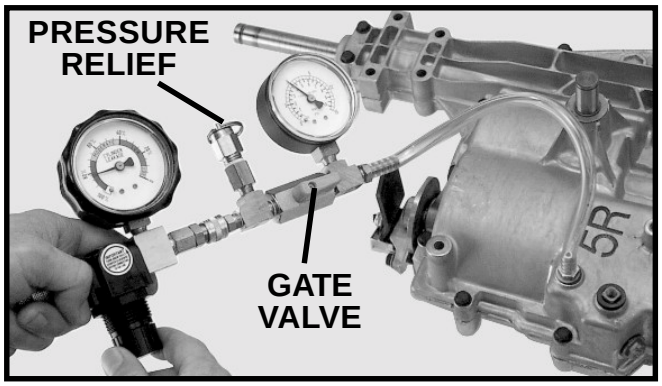
Turn the fitting with a 1/2" wrench a turn or two while holding the rubber end of the air fitting. This will enlarge the fitting to fit snug in the case cover.



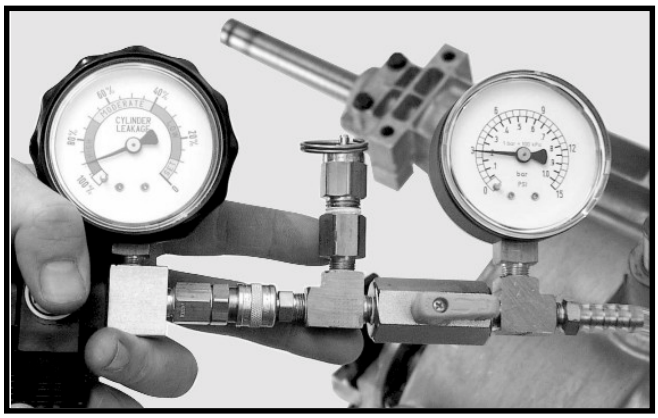
Once installed in the case cover, you may have to turn the fitting a few turns to make a snug fit.



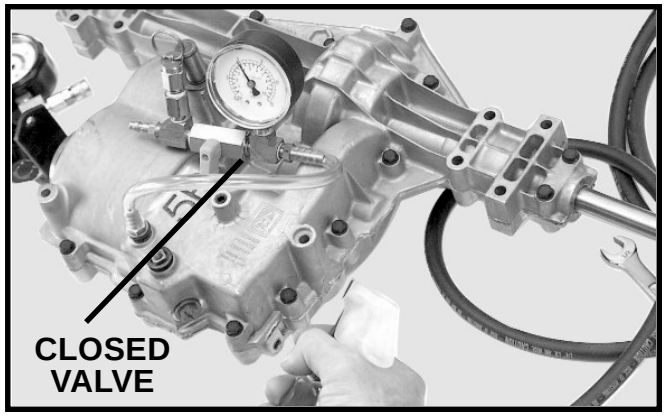
Making sure the high pressure gauge is closed and both high and low pressure gauges are connected open gate valve on the low pressure gauge. Slowly open high pressure valve until low pressure gauge reads 6 PSI (.4 Bars).



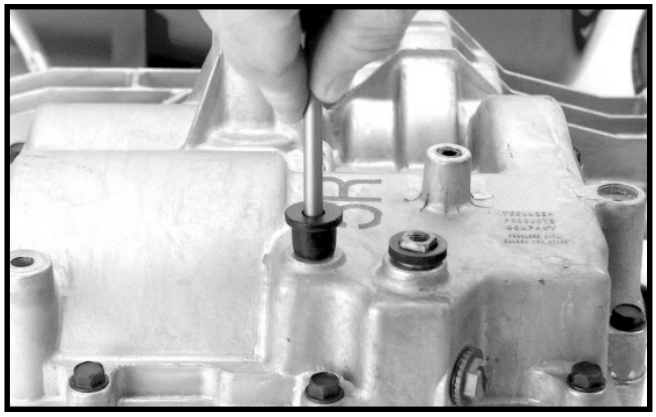
WARNING: Pressure beyond 9 PSI (.62 Bars) can cause a seal failure on the MST. Fresh RTV will not seal nearly as well as that applied and cured for 24 hours. With fresh RTV **DO NOT** pressurize above 3 PSI (.2 Bars).



Close the gate-valve and watch the pressure for one minute, if no pressure drop is noted, the unit is ready for re-installation. Should a drop occur repressurize the unit, then apply a soap/water solution to the perimeter of the unit until the trouble area is found. Reapply RTV to the cover and retest the unit before it leaves the shop.



Lubricate the plug then use the blunt end of a Torx 30 to reinstall the oil fill plug.



www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Tecumseh Starter Ring Tool
Part Number 670346
Instructions

DEMONSTRATION

Always work in a safe environment and WEAR SAFETY GLASSES.

1. Remove the starter motor from the engine.
2. Rotate the starter bendix up on the armature shaft (Fig 1).
3. Using the Starter Ring Tool (SRT) crimping pliers, remove the dust cover from the end of the armature shaft (fig 2).
4. The SRT has two separate usable sides. When installing it on all TECUMSEH starters the deep recess must face up. Use the SRT to press down the spring retainer. Make sure the jaws of the SRT are located in the split of the ring and the v-groove is aligned with the backside of the ring (fig 3).
5. Slowly tighten the handle in a clockwise direction until the split ring is open enough to be removed from the armature shaft.
6. Service the starter components as necessary.
7. Use the SRT crimping pliers to securely crimp a new split ring back into position (Fig 4).
8. Replace the dust cover by snapping it back over the spring retainer.

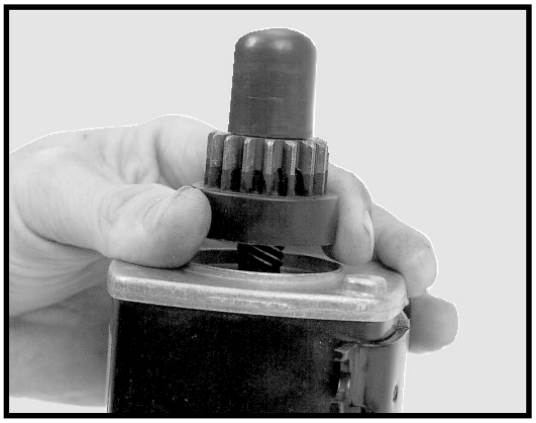


Fig 1

Fig 2

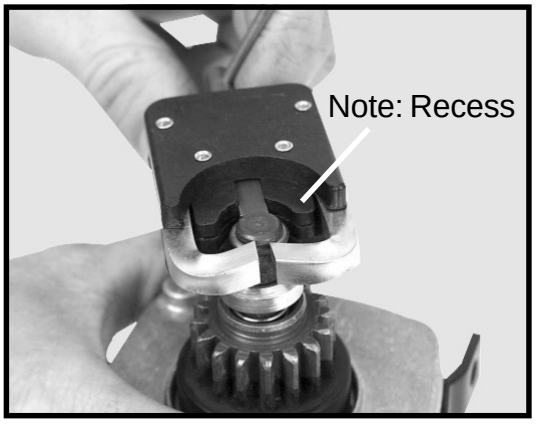


Fig 3

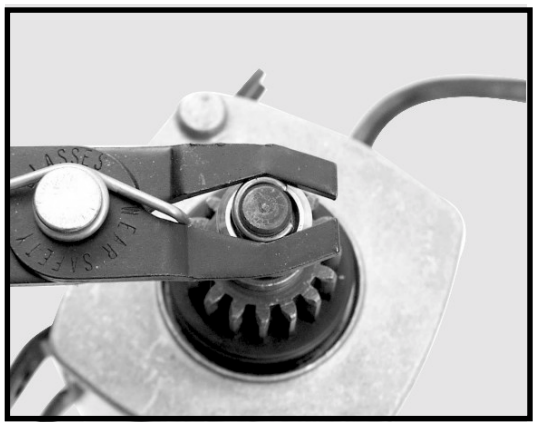


Fig 4

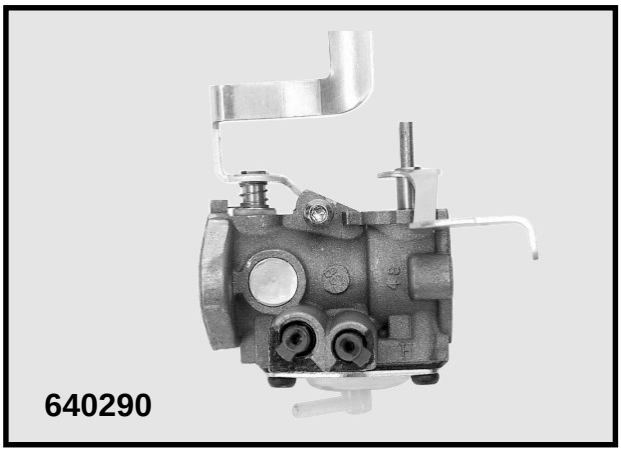
www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Limited Adjust AV Carburetor

The AV 520/600-diaphragm carburetor now has a limited-adjust cap system similar to the one used on the TC diaphragm carburetor. This system is for winter use only and consists of two metering screws part # **640291, # 640292** and caps part # **640293.**

For extreme cold weather, the engine will run better by using varying degrees of the choke. This carburetor will be ready to install and pre-set with limiter caps placed over adjustment screws. This carburetor will function in high altitudes as they are set in production on the “richer” end of the mixture range thus limiting the technician to adjust in the “lean” direction only. The new limited adjust AV carburetor part **# 640290** replaces the current, non-adjustable emission carburetor.

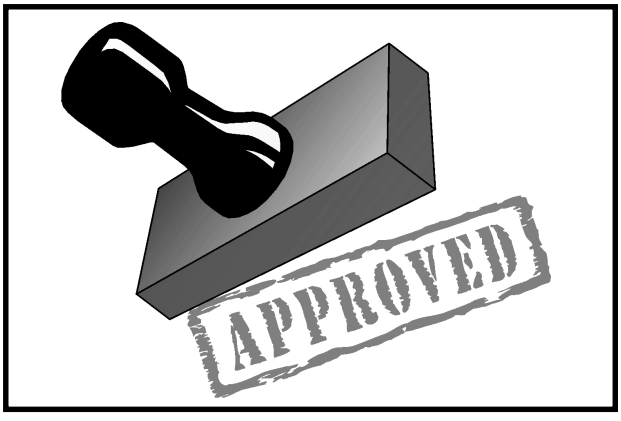


640290

Oil Classification

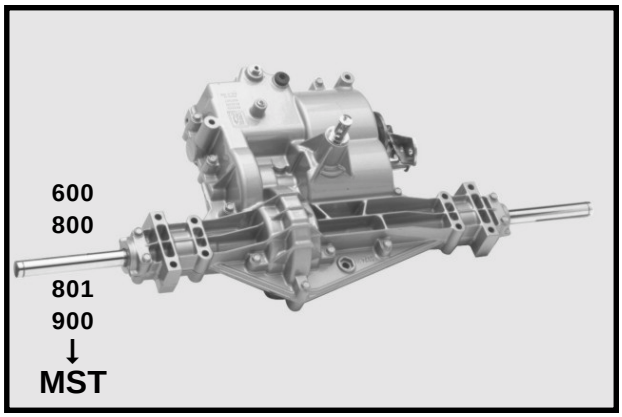
Tecumseh Products Company has approved the use of JASO (Japanese Automobile Standards Organization) FB & FC 2-cycle oil classifications. JASO is a well established organization and their FB & FC classifications are comparable to the present NMMA TC-W3 or API TC two cycle oils we recommend. This approval was official February 2000.

Remember all certified oils MUST be mixed to Tecumseh's recommended ratio. Tecumseh will not be responsible for engine damage if our mix ratios are not used.



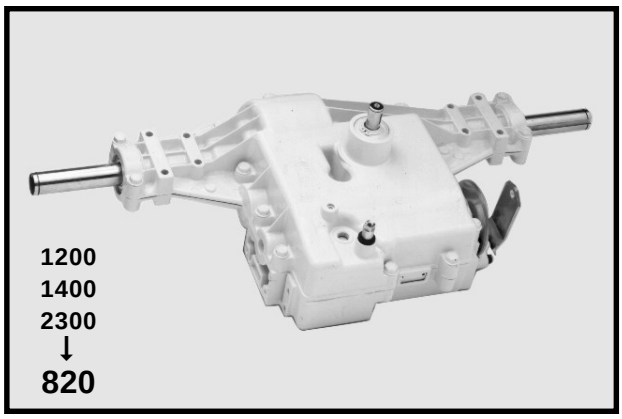
www.mymowerparts.com

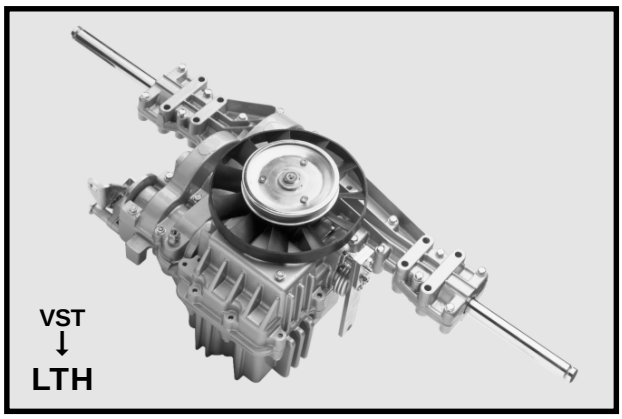
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983



Evolution

Tecumseh has been building the following motion-drive units since 1966. Over the years, customer needs have changed and Tecumseh has embraced those needs with three high-quality motion-drive products. There has been an evolution of the 600, 800, 801, and 900 series transaxles into the MST transaxle. The 1200, 1400, 2300 have evolved into the 820 series transaxle. The 2800 series production has ceased but we will continue to service this unit and all fore-mentioned transaxles listed above. The VST Hydrostatic transaxles are replaced by the new easy-to-service LTH (Lawn Tractor Hydro). Tecumseh has listened to the Technician and we are building motion-drive products that are of the highest quality in the field. We trust that when servicing and maintaining these units, our new designs will be gladly embraced by all in the power equipment industry.



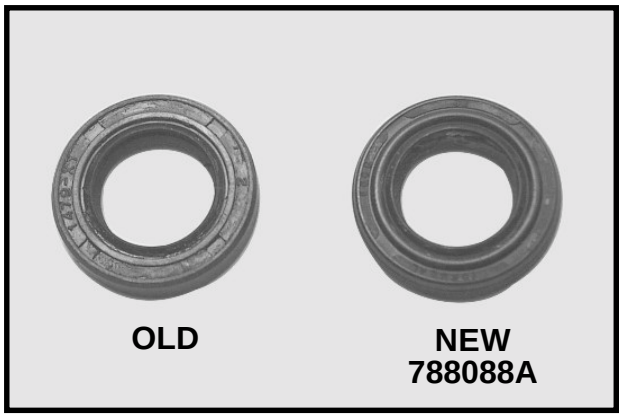


www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

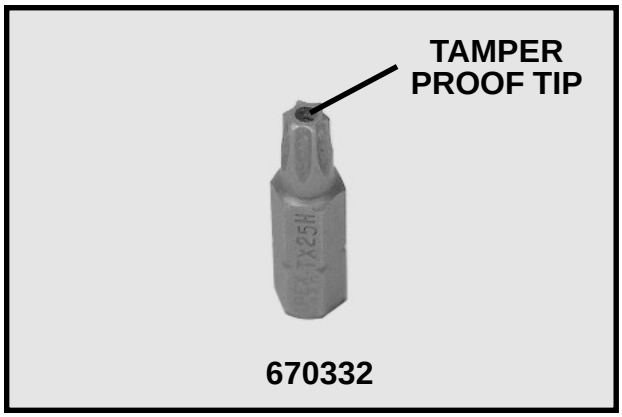
New MST Seals

Since September of 1999, we have been using a new style of seal on the axle and shifter/brake shafts. It is called a balloon seal, which uses a softer and more flexible rubber that adapts to the shaft and also seals the pocket in the case and cover better. The part numbers are **# 788088A** - axle seals and **#788089A** - brake shaft seals. The axle seals are already in production and the brake shaft seals will be implemented during the 2001 production year. This was a running change. When sealing the two case halves, remember to take care and not block the oil passage in the cover when applying the RTV sealant. Also be careful to ensure the axle shafts are free from sealant as this could create a leak at the seal when the RTV cures.



VST Baffle Cover Tool

This hollow point Torx 25 is now available through your normal source of supply under part **# 670332.** It is used to remove the bellows cover on the VST. The bellows is now a serviceable part of the VST. Because it was fastened with tamper proof screws it will be necessary to have this torx bit in your tool box for cover removal.



www.mymowerparts.com

Miscellaneous Product News

Tecumseh Cleaners and Lubricants

Tecumseh is pleased to announce and present to you our new line of high performance lubricants and cleaners. These products are designed for use in the shop as well as for retail sales. The Program gives you a full range of products attractively packaged with a motorsports theme. Ask your distributor for information on our introductory packages and programs.

All cases are 12 cans per case
* 32 oz. (960 ml) Liquid, 14 oz. (420 ml) aerosol

Product Description	Part	UPC#
Battery Protector, Case	696407	00202
Battery Neutralizer, Case	696417	00213
H/D Parts Cleaner, Case	696408	00203
Hand Cleaner, Case	696411	00206
Lithium Grease, Case	696409	00204
Carburetor Cleaner, Case	696410	00205
Rubber Lube, Case	696418	00214
Penetrating Oil, Case	696412	00207
Dry Teflon Lubricant, Case	696413	00208
Contact Cleaner, Case	696414	00209
Aerosol Degreaser, Case	696415	00210
Spray Teflon Grease, Case	696416	00212

Ultra Fresh™ Gasoline Preservative

Tecumseh's latest gasoline stabilizer, Ultra-Fresh™, offers more value than traditional liquid fuel additives. Ultra-Fresh™ is nontoxic, nonstaining, and nonflammable. Its granular formula dissolves quickly into gasoline and performs better than major brands for up to **24 months**. As today's fuels may start deteriorating in 30 days, it is important to educate the consumer about the benefits of using Ultra-Fresh™. Tecumseh offers multiple merchandising options (see below). At the request of many dealers, we now offer a shop canister that includes its own dispenser. The shop jar treats up to **96 gallons** (364 liters). Treating each customer's engine coming into your shop will keep your customers satisfied while having a long lasting product in your work area. Ask your distributor sales person about profit opportunities from Ultra-Fresh™.

Merchandising Options	Part #
Counter display consists of 5 g (0.2 oz) packet (each packet treats 2.5 gallons (10 liters of fresh gasoline.	**730255A**
Shop canister	***730260***
GREAT FOR LANDSCAPERS	
3-packet bubble pack (5 card pkg)	**740063**

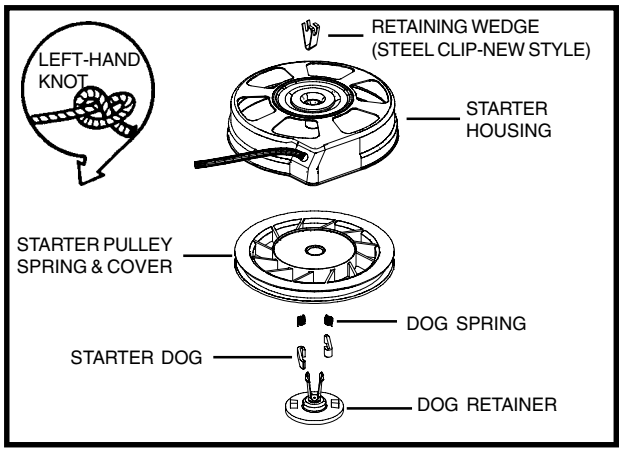
www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Service Tips

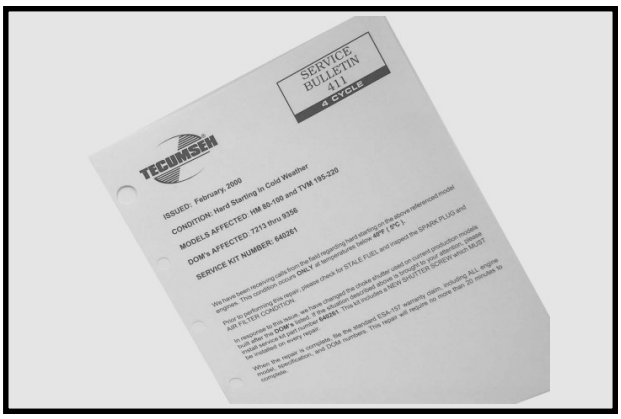
Quick Starter Service DEMONSTRATION

We have been receiving calls from technicians regarding servicing of the new style recoil starters. These calls revolve around two issues. The first is how many turns on the pulley spring; and second how to install the rope on the pulley. We are changing the text in all repair manuals to read; turn spring tight on the pulley then back off no more than ***1 turn*** to install a new replacement rope. Cauterizing the end to a point insures ease of installation while going through the grommet hole for rope replacement.



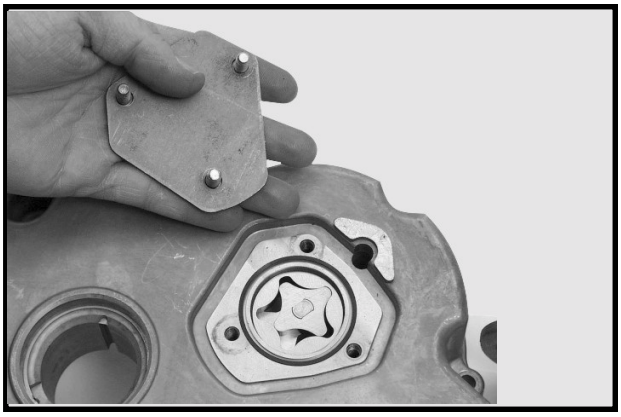
Hard Starting Engines

We continue to receive phone calls from customers regarding hard starting HM and TVM engines at temperatures below 40°F degrees 5°C. This is a reminder to carefully read service **Bulletin 411** to obtain a more aggressive choke shutter for all affected HM and TVM models. Provided the choke linkage and cable are adjusted properly to allow 'full-travel' of the choke, this new shutter brings us back to one or two pull starts at temperatures below 40°F (5°C).



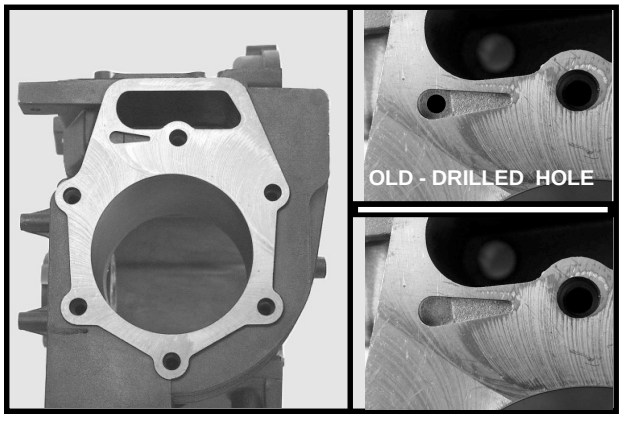
G-Rotor Pump Included

We have made an across the board change to the oil pump used in the OHV Enduro engines. This new pump will be included with the oil sump as an assembly should you require a new flange. The new G-Rotor pump produces less volume of oil compared to the older-style pump. Our studies have shown that our older style G-Rotor pumps created too high of volume being circulated in the engine. The oil pump included in a new flange is a better match for current production OHV's. These pumps will not interchange with older-style flanges.



Don't be Fooled

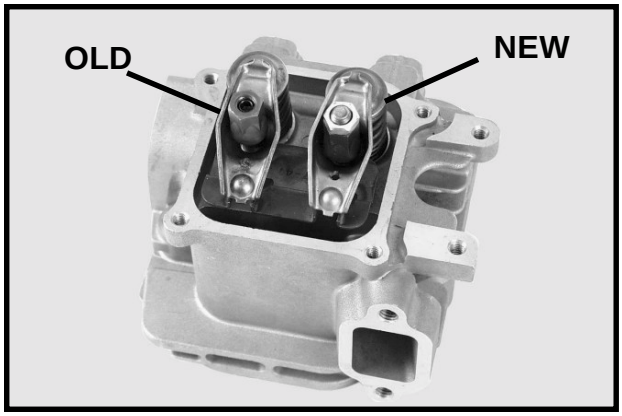
Just a reminder to those service technicians who are observant. When replacing a shortblock for an OHV 15-17.5 engine, the original block may have a small hole drilled from the upper cam bearing to the cylinder head; this passage is no longer drilled. Its purpose was to lubricate the rocker arm bearings in the valve box. They still get lubrication; but through what means? TSIM ROPAV



www.mymowerparts.com

OHV 13.5-17 Rocker Arm Adjusters

We have changed the system previously used on this family of engines. The new system shown here is addressed in service **Bulletin 127** and available under service part # **730636**. This new system will eliminate adjuster breakage, which was caused by over-tightening during adjustment. The kit includes all parts needed for both rocker arms.

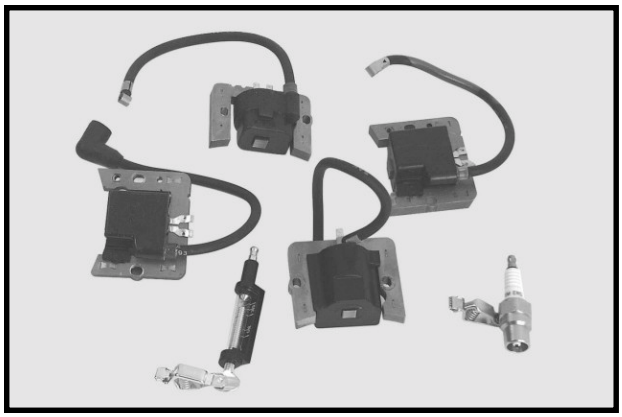


No Spark

We continue to recall solid state ignition modules that test as good working modules. We have decided to review again the step-by-step diagnostic procedure to check before replacing any ignition component. We now regret that beginning 2001 we will return these modules and reject warranty claims if the modules test out as good units.

These are:

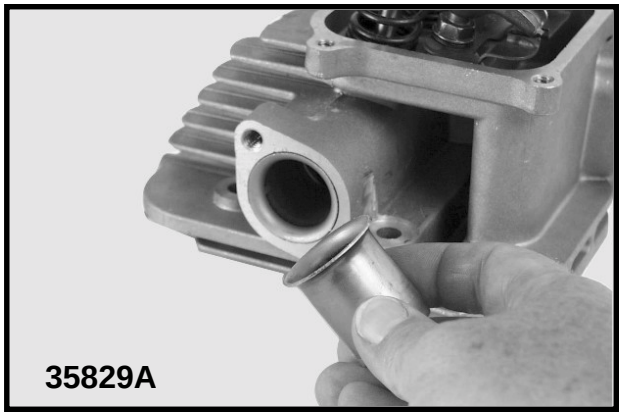
1. Using our spark tester service part # **670366**, install tester in spark plug wire and ground to a non-painted surface. Test Spark. If spark is present, continue to the next step. If spark is lost, continue to step three and repeat.
2. Next, connect the tester ground to the spark plug post, and check spark. If spark is lost, replace the plug.
3. Isolate the engine ignition from the equipment's wiring harness. Test for spark, if spark is present, review the equipment wiring harness system. If no spark, continue with the next step.
4. Remove blower housing and disconnect the ground wire at the module. Then test for spark. If spark is present, check for pinched wires or grounded wires at all connection points, including the compliance brake if so equipped. If no spark exists, this step proves that a short circuit is present-you need to replace the defective module.



www.mymowerparts.com

OHV Cylinder Port Liner # 35829A

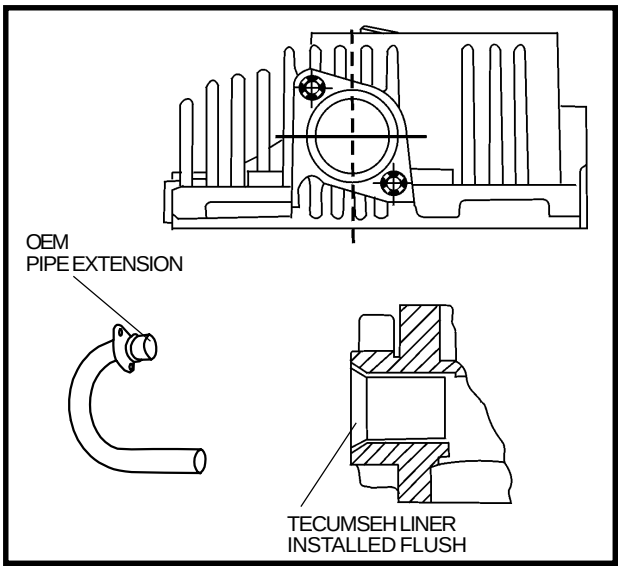
We have been evaluating service cylinder heads that have been returned as warranty defective. This evaluation found that the exhaust port liner was not installed as needed. The absence of this port liner will cause head temperatures to run high increasing wear and oil consumption. If cylinder head service is necessary, the OEM muffler must have the port liner included as an extension into the exhaust port. If this liner is not present, it is **CRITICAL** that the port liner be installed. We have now included the port liner with the purchase of a new cylinder head. **To install, simply lubricate exhaust port and liner and lightly tap into the cylinder head until flush.**



Cylinder Head Port Liner Installation Instructions Form # 696460

The enclosed cylinder head port liner is vital to proper cylinder head temperature control.

If the OEM supplied muffler does NOT have an extension as shown, this port liner **MUST** be installed. Press it in until flush with the flange surface.

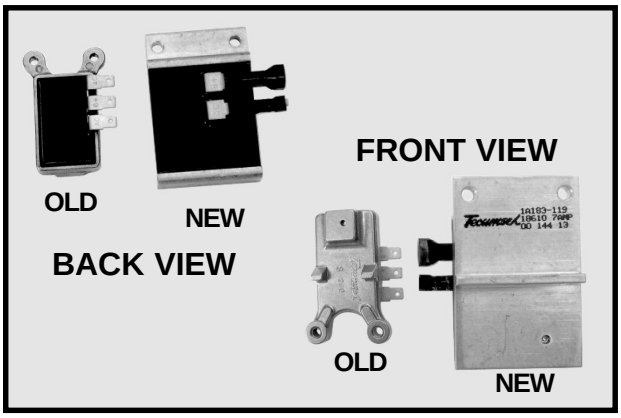


New Engine Smokes

We have received calls from customers that their new engine smokes, and an oil leak is presumed to be the problem. The smoking of a new engine is simple to explain. We use a sealant as the final curing process of non-painted parts to prevent corrosion of the aluminum cylinders. As you are aware, we run all our engines on the assembly line, but not long enough to completely cure the protective sealant. Should you encounter this concern please advise the customer this will go away after a few hours of operation and that it is normal.

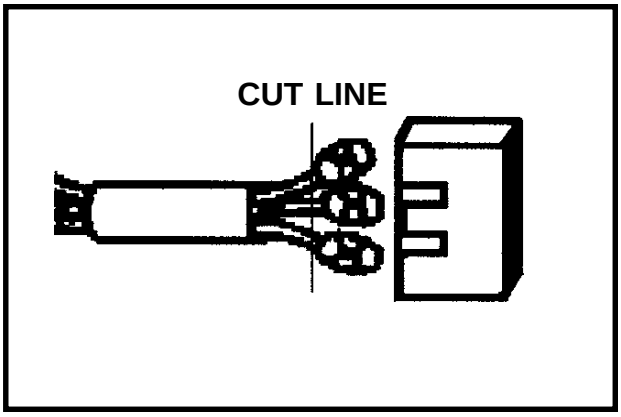
Upgrading to the New Style 7 amp Regulator

We have obsoleted the original 3 wire 7 amp regulator and replaced it with a new design. If servicing an older model engine, you will need to modify the wire harness coming out of the charging system. The new two-wire connector and instructions are included with the **# 611098B**-regulator kit.



1. Remove wires from the electrical connector as illustrated, cut the wires as close to the terminal connections as possible. IT IS IMPORTANT NOT TO CUT THE WIRES TOO SHORT

2. Strip approximately 3/16" (4.7 mm) of insulation off each wire. Using the two insulated female terminals included, make the new terminal ends as follows:

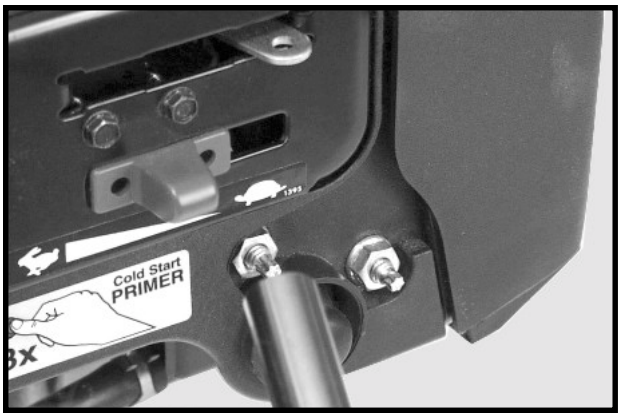


3. Using the larger ¼" terminal, insert (1) yellow wire (either one) and the red wire. Crimp together. Next, using the smaller 3/16" terminal, insert the remaining yellow wire and crimp. MAKE CERTAIN THESE CONNECTIONS ARE SECURE BY PULLING ON THE TERMINAL.

4. Mount the new regulator and make your connection by matching the female terminals to their corresponding sized male blades on the regulator. Secure all wires so they do not contact moving parts.

VLV (High Torque) Filter Box

Please take caution not to over-tighten the mounting nuts on the air filter box as it could warp, causing a bad seal which has potential to dirt wash the engine. The mounting nuts should be torqued no more than 35-45 inch pounds (3.9 - 5 Nm) which can be found in the VLV technician manual part **# 695578.**



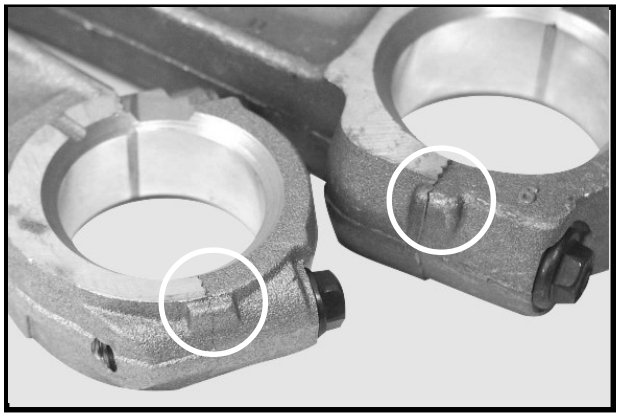
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

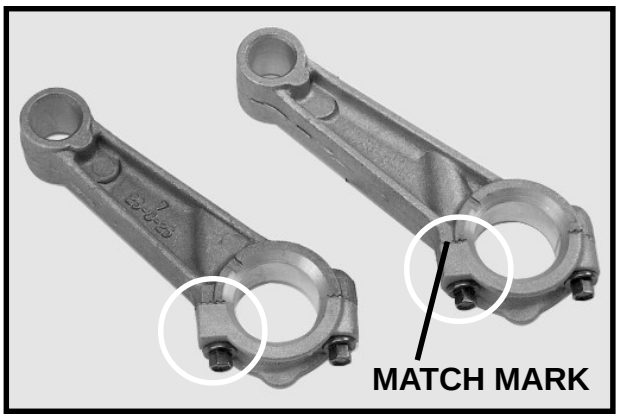
Chemicals Hotline

Should a situation arise where you or a customer have questions about any of our chemicals please call Chem-Tel. Customers from the United States, Canada, Virgin Islands and Puerto Rico should call **1-800-255-3924,** this is a 24-hour, 7 days-a-week service. All other International customers may call **813-248-0585**. Depending on location, appropriate international access codes to the United States would apply.

Improved Rod Match Marks

We have received calls from technicians stating “the match marks are difficult to find.” The photos to the right demonstrate a variety of connecting rods to show the match marks inside the white circles. While servicing, please take care to install these correctly by positioning the match marks facing toward the PTO/flange side of the engine.



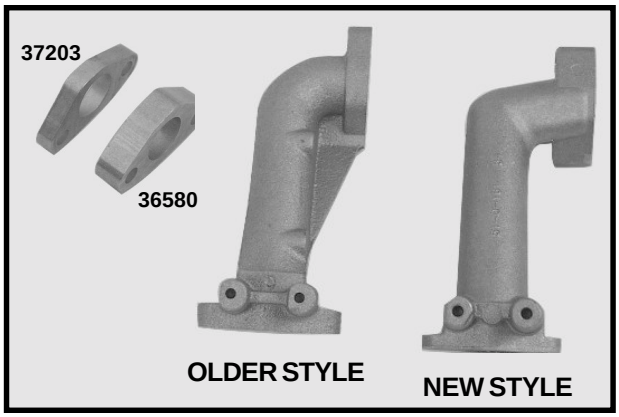


www.mymowerparts.com

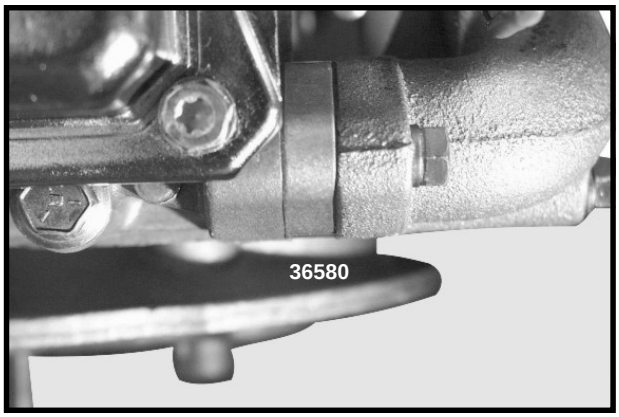
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

OVRM Intake Improvements

Specification numbers for the OVRM 105-21033F, OVRM 105-21034F, OVRM 120-22032D, and OVRM 120-22033D built prior to March 22, 2000 (DOM 0082) were built with spacer # **36580** which is assembled between the sand-cast intake pipe part # **36579** and the cylinder head. Assembly using the older style intake pipe and forgetting the spacer will cause the fuel line to be pinched by the air filter housing, cause the carburetor bowl to rub on the cylinder and the muffler guard will not fit properly.



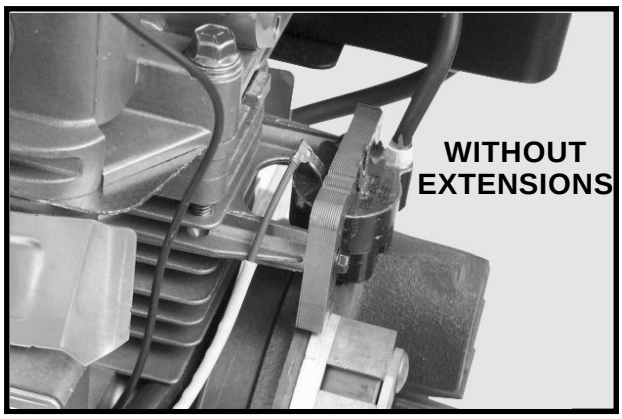
All rotary application OVRM engines built after a DOM of 3-22-00 (0082) use the new intake pipe without the spacer. In case a spacer is lost a new intake kit is available # **37532** which includes the new intake pipe # **37531,** intake gasket # **36581**, a new intake mounting screw # **651043**, and the instruction sheet # **696377.**

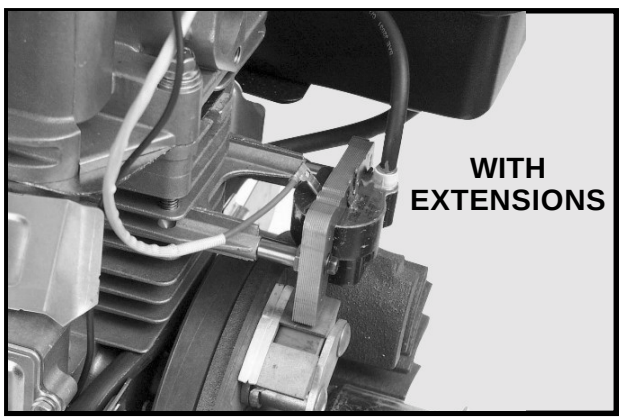


NOTE: We are continuing to build OVRM engines using the sand-cast intake pipe and two different spacers for utility applications. The Centura® styling uses the narrow spacer. All other styling packages use the wide spacer.

No Spark After Short Blocking

The following may sound hard to believe but we regularly get calls from technicians that get no spark after a short block is installed!?! The answer is simple on HM, OHM, and OHV engines. We use post extensions / spacers when mounting the solid-state CDI ignition coil, these often are forgotten when the new short block is installed. If these are left off the engine, the magnets do not pass the module and no spark is generated.

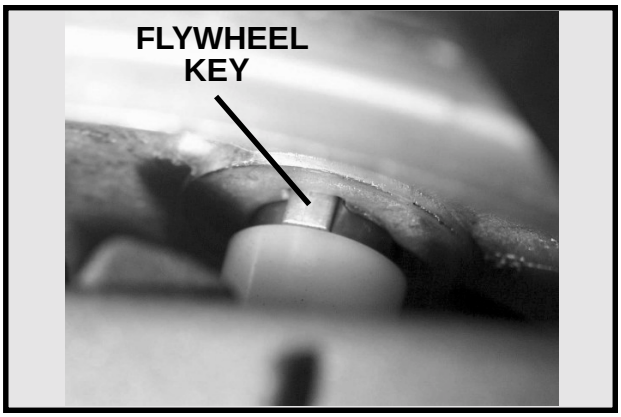




www.mymowerparts.com

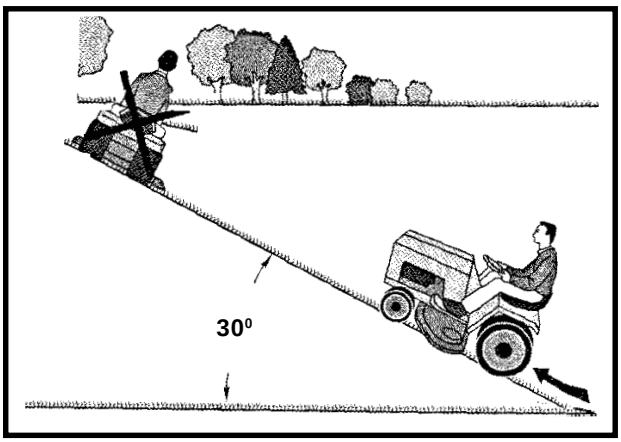
Quick Check for Flywheel Key Damage

We received a great timesaving tip from a Sears technician to check for flywheel key damage on most rotary mower applications. First remove air filter and use a small flashlight to look up through the underside opening of the blower housing as shown. You then can see if the flywheel key is sheared or bent. It is not required that the engine be removed from the mower deck to accomplish this check.



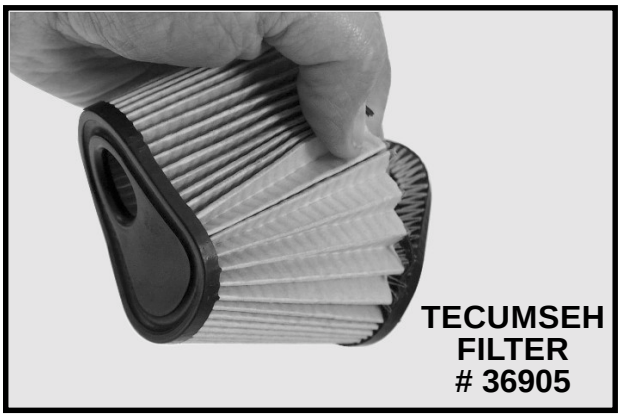
Engine Operational Angle Limits

We have seen an increased failure rate of engines on High Wheel String Trimmer products. Through discussions with dealers and customers, we have found operators using this product at excessive angles. Another finding shows operators are not cleaning the debris from the air intake screen nor the cylinder fins on the engine. We have asked the OEMs, no matter what the application, to install warning labels not to exceed 20 degrees continuous duty and 30 degrees ***ONLY*** for intermittent operation. Should you encounter a failure because of operation beyond this angle or debris build up; no warranty applies.



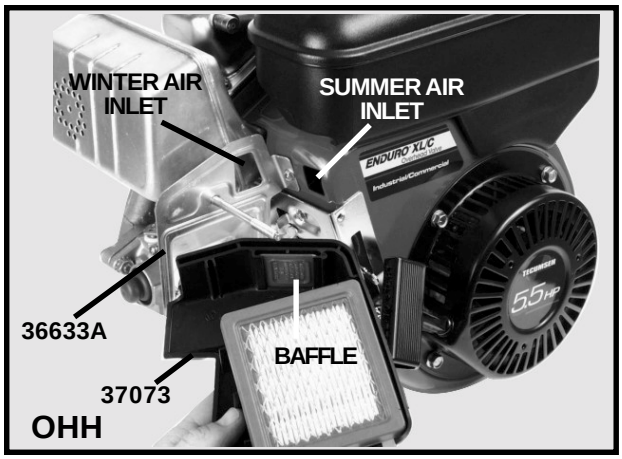
Air Filters-Are they all the same?

Tecumseh Products recommends only original service parts. We have received complaints of newer engines getting dirt washed inside. When inquiring about which air filters were used, the following was discovered by our engineering group. The evaluations show that the after-market filters that were analyzed do not meet Tecumseh's dust-room tests. The filter shown illustrates the seams on our filters are glued not just overlapped with one pleat. Our engineering standard is a multiple pleat over lap or a glued seam. Should an engine failure occur from dirt ingestion due to a non-Tecumseh air filter, Tecumseh will deny the claim.



OHH Conversion To Climate Guard®

The parts listed can upgrade the OHH with the Climate Guard feature which will provide all season reliability.



OHH Climate Guard Conversion
A/C Body # 36633A
A/C Cover Kit # 37073 (Includes Baffle)

High Oil Consumption at Cold Temperature OHH/HM/OHM

During early spring and late fall we receive calls from customers about oil soaked air filters or high oil use. Both of these situations will occur if the customer has not put the Climate Guard in the correct position to prevent breather **freeze-up.** If they have an emissions grade engine the Climate Guard kit is needed, please note the parts listed underneath each picture to convert to Climate Guard.

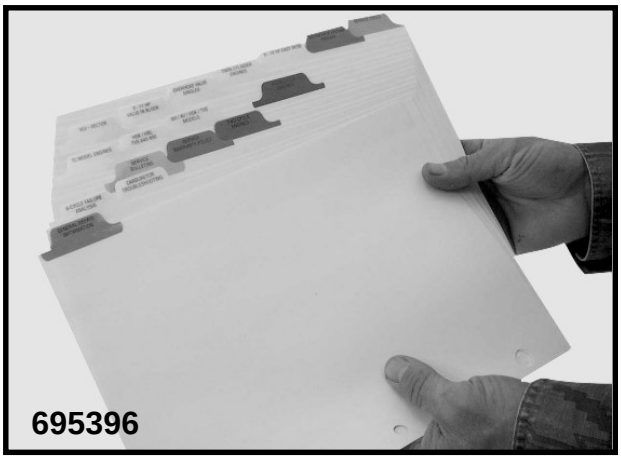
HM Climate Guard Conversion
Kit # 730630

Climate Guard is a Standard Feature on the OHM

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

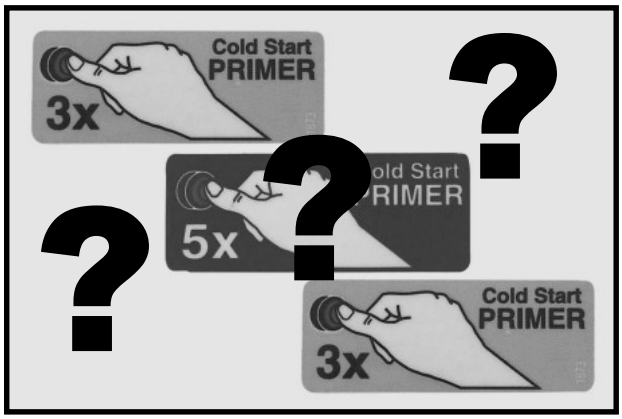
New Tabs for the Technician Manual Binders

We have dramatically enhanced the tabbing system to more easily find information in our Technical manuals. We have added a color coded version with more specific verbiage to assist you in finding information on Warranty, Two Cycle, Four Cycle, Motion Drive, and Service Tools sections more easily. This tab set is part # **695396**. New manual will include these tabs.



How Many Primes 3-5-3?

During the past few years of emission regulated engines we have been changing the number of primes required on various models. With our developments in carburetor and engine design we are going to 3-primes on all LEV, VLV and OVRM engines at temperatures above 55°F (13°C). This is accomplished through the combination of a new exhaust MCR (mechanical compression release) and an increase in the primer bulb volume. With 3-primes the exhaust MCR will return Tecumseh to 1 or 2 pull starts.



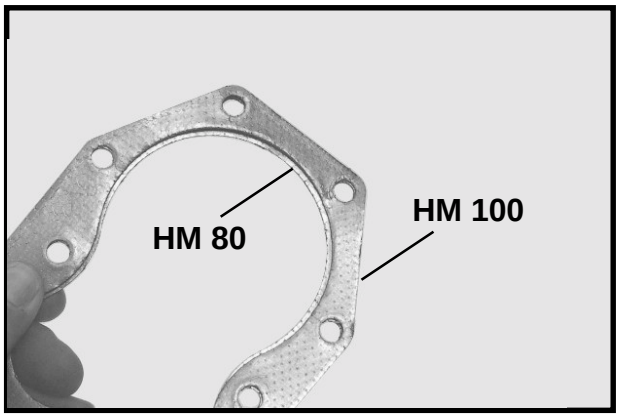
www.mymowerparts.com

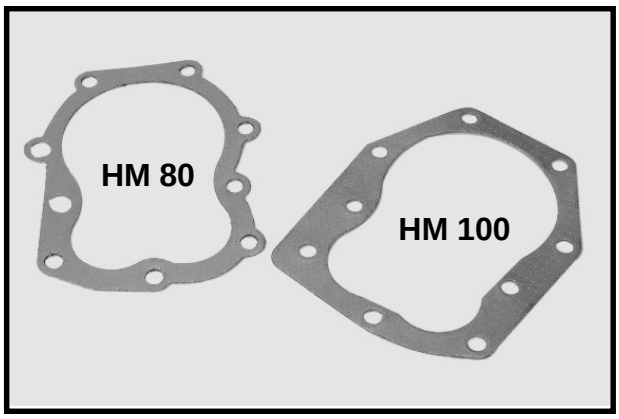
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Getting the Correct Head Gasket

This is a reminder that technicians need to follow the parts lookup system to locate the correct head gasket for their engine which is **CRITICAL** to proper engine performance. With a variety of gaskets in use, it is not enough to physically "eyeball" gaskets that have the same shape. Tecumseh Products Company uses a variety of materials and thickness in our head gaskets, which can greatly affect emissions and compression ratios.

As seen in the photo, gaskets can look identical but can produce not-so-pleasant results if the incorrect one is used. Technicians in the field have mistakenly used a HM 80 head gasket for the HM 100 gasket. The bolt pattern is the same but the inside diameter of the gasket is slightly smaller on the HM 80 version. If used on a HM 100 engine, substantial engine noise will result from the piston contacting the edge of the gasket. The middle photo shows the smaller HM 80 gasket overlaid by the HM 100 gasket.





www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

New VST Service Policy and Limited Service Effective November 2000

Effective August 1, 2000 Tecumseh stopped the manufacturing of the VST model transaxle. The new, serviceable LTH Model is replacing this model. Where possible we will be making available retrofit kits to the LTH in cooperation with OEM manufacturers. However due to the complexity of upgrading, we expect limited availability of such kits.

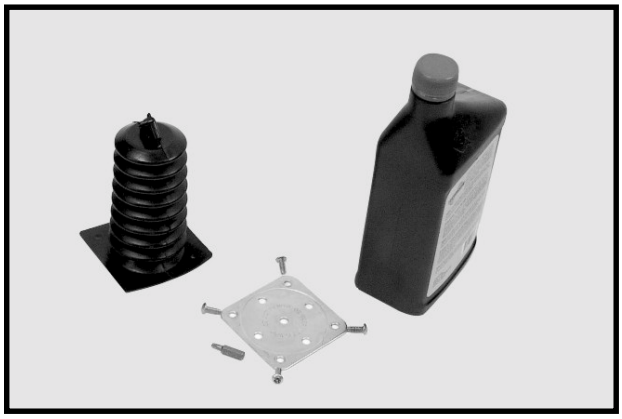
With this change, we are revising two key areas of service on the VST. The first is a change to the in warranty policy covered under service bulletin 307 Revised November 2000. The second is to allow limited service of OUT OF WARRANTY units.

In Warranty Replacement: The changes for in warranty repair are the addition of a **NEW** core exchange program and availability of "**R**" units from your normal Tecumseh parts supplier. The core(s) have a value of $100 US dollars per unit and must be returned freight prepaid to your Tecumseh distributor, **NOT TECUMSEH DIRECTLY.** When the core is returned, freight prepaid, you will be issued credit for the core, in the amount paid. The freight both ways should be listed on the warranty claim.

Out of Warranty Replacement: As most of you are aware the VST model has remained sealed because the unit does not contain a filter to capture any impurities allowed in during service. For this reason should an internal failure occur, it would continue to require replacement. However this replacement can now be with a remanufactured unit.

The core exchange program as listed above is available to QUALIFYING models with a **B or C** suffix **ONLY.** Earlier models of 1800, VST plain or "A" Suffix letter **DO NOT** qualify for the program and should be replaced with a NEW unit. Example: VST 205-011 **"B"** qualifies for the program. NO refund will be given on the 1800 model, a VST plain unit or "A" models.

Repair: Effective November, 2000 we are making available the following parts to enable repair of a leaking bellows or to add oil as the result of a leak. Should a major internal failure occur, it would require a remanufactured or new unit be installed. It should be noted that use of any oil other than the special synthetic oil part **# 730228** would result in potential problems.



Parts Available:

- ❑ Expansion chamber bellows,
  Service Part Number 798003
- ❑ Bellows cover,
  Service Part Number 798007
- ❑ Tamper proof torx screws,
  Service Part Number 792155
- ❑ Tamper proof torx bit,
  Service Part Number 670332

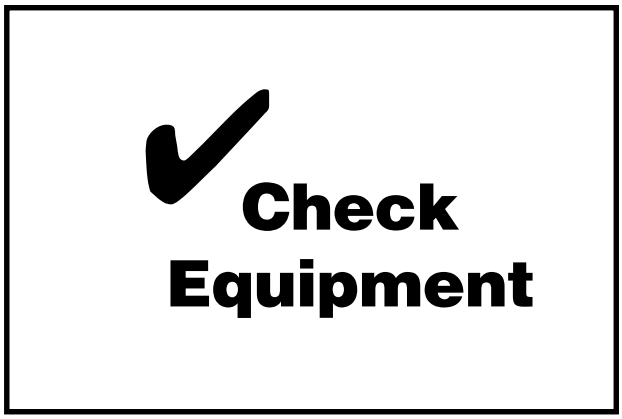
Special synthetic oil, 32 oz (.95 liter),
Service Part Number 730228

www.mymowerparts.com

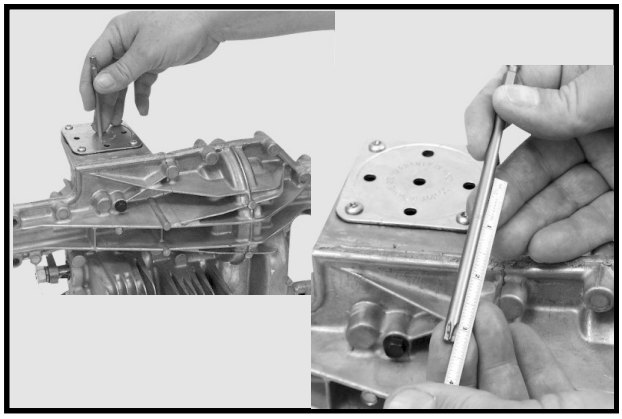
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Replacing Bellows or Adding Oil: The following step by step procedure **MUST** be followed exactly if a proper repair is to be done.

Step One: Before assuming the transaxle has an internal problem causing low power or slow speed, it is critical to check the belt system. Many problems of this nature are in fact a glazed or worn belt, a damaged pulley or a tension problem requiring service.

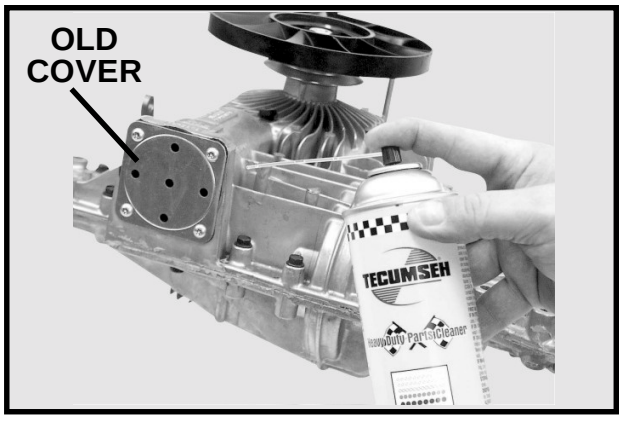


Step Two: Before adding oil, it is critical to determine if it is low. This is done by using a blunt instrument as shown. The depth should be 3-1/4 to 3-1/2 inches (8.25-8.9 cm)

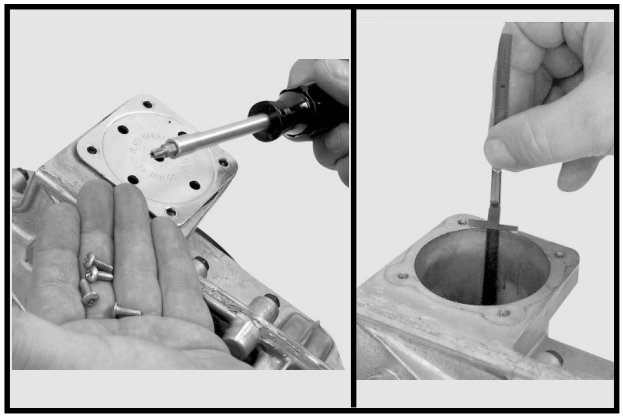


Step Three: If the measurement is beyond the dimensions listed, the next step is to remove the transaxle from the frame. Then thoroughly wash and blow dry the bellows cover area as shown. Remove all impurities before removing the bellows cover.

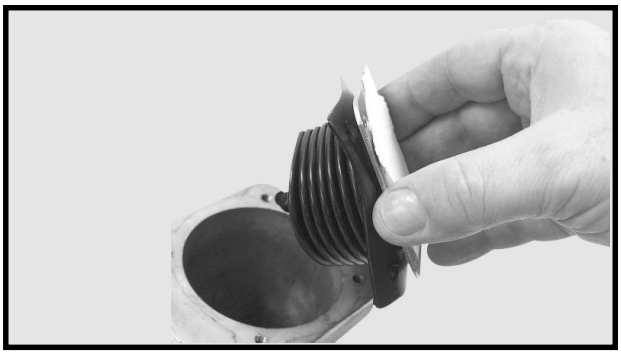
CAUTION! ANY IMPURITIES ALLOWED INTO THE UNIT CAN CAUSE UN-REPAIRABLE DAMAGE.



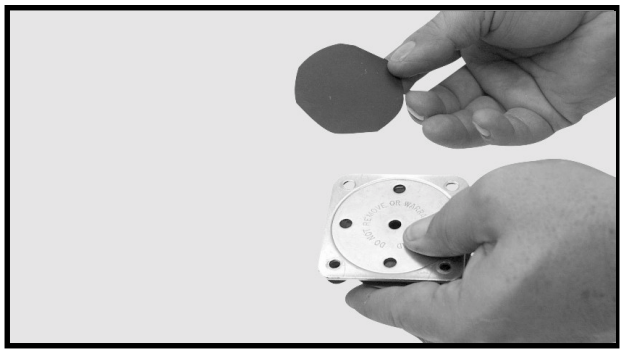
Step Four: Turn the unit so that the bellows chamber faces up as shown. Remove the bellows cover screws using Tecumseh tool part # **670332** torx bit. Then add oil part # **730228** until the amount present measures 1-29/32 inch (48.41 mm) from the top edge of the bellows housing.



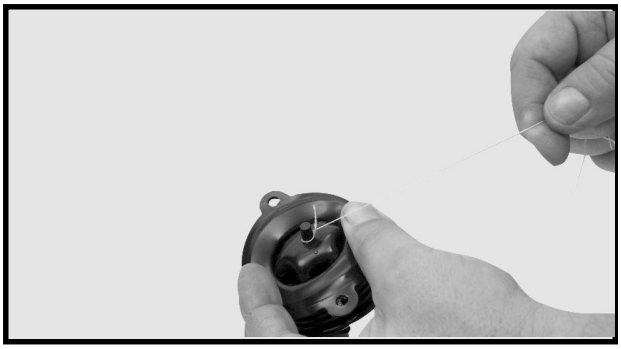
www.mymowerparts.com



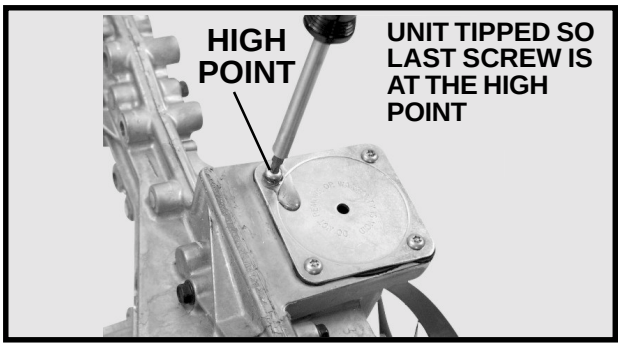
Step Five: To prepare the "**NEW"** bellows for installation, place the bellows on the cover as shown. Then compress the bellows and place a piece of tape over the hole to keep it compressed during installation. This can also be done by using a refrigerator magnet cut to cover the hole. (The new bellows cover comes with only one hole in the center and seals very easily).



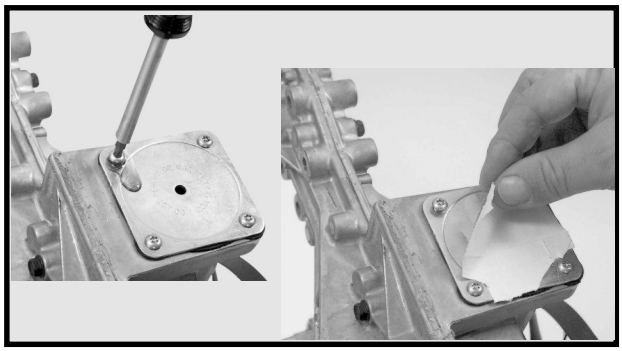
When reusing the old cover it is difficult to seal all five holes. One other way to compress the bellows is to invert the inside tab and place a slip knot made from thin string over it. Push the end of the bellows back to its original form and pull the string through the cover. When step six is complete, cut the string.



Step Six: Install the bellows snugging down three of the four screws, DO NOT tighten them completely. Install the fourth screw a few threads then tip the unit slightly so the highest point is at the loose screw.



Step Seven: Remove the tape or cut the string allowing the bellows to expand into the oil. This expansion into the oil will push out most of the air from the chamber. When oil comes out from the loose screw tighten it and all other screws in a "X" pattern to a torque of 18-30 inch lbs. (2-3Nm). The unit is ready for installation.

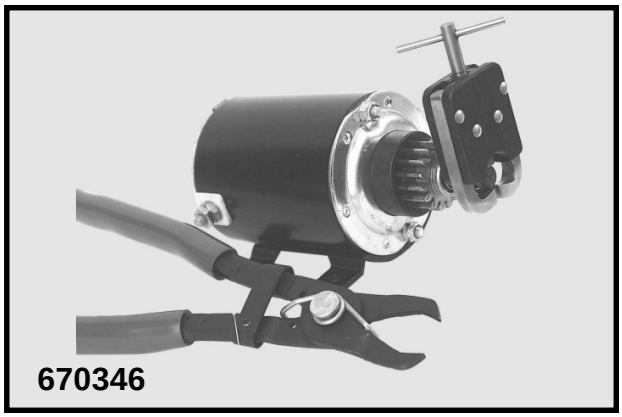


www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Best Tools We Have Seen

Starter bendix ring removal tool
This has been designed to work on all electric starters. Saves time and reduces risk of injury.



DEMONSTRATION

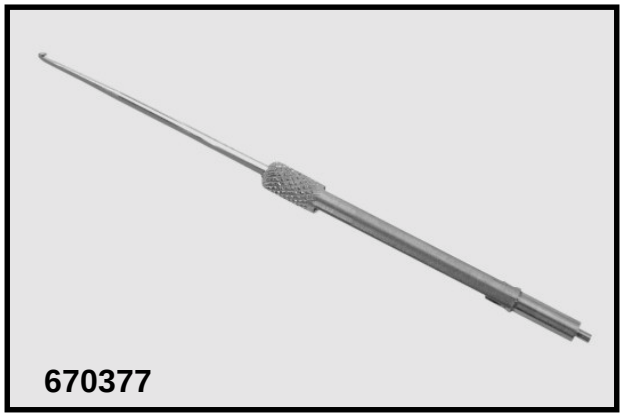
Oil Vacuum Pump
Pump can be used with the **# 670367** oil tank or with your own home-made airtight system. The pump will do all the work while you perform other repairs or maintenance on the equipment. Saves time by not having to remove drain plugs. At the request of our distribution system, we have upgraded the oil tank and pump to a complete it. The kit part # is **670379**.

New Magnet
This quality, telescoping magnet is made for us by Snap-On Tools. Extendable to 26 inches (66 cm) long, this magnet also has a non-magnetic shield which surrounds the tip, so that faster retrieval from tight spots is now made easy!

DEMONSTRATION

Carburetor Tool
A multifunctional tool that allows the technician to perform many tasks on the carburetor during cleaning.

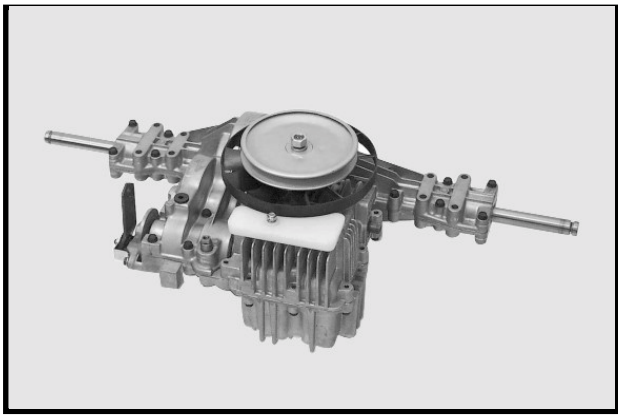
- Removes/Installs Seat
- Removes/Installs Float Hinge Pin
- Removes/Installs Emulsion Tube
- Removes O-Rings
- Gauges Float Height



www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Explore The SilentTrac™ LTH

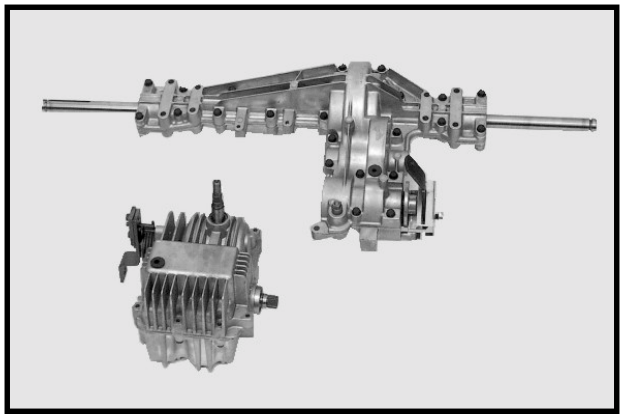


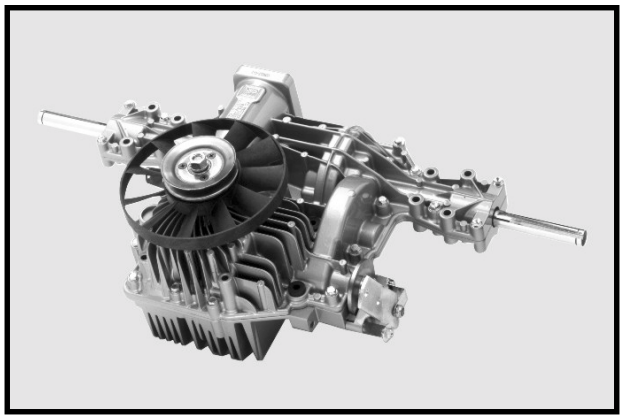
What Is It?

Automatic: No Shifting into gears with fluid power transmissions

Modular: Only manufacturer that uses two separate sealed units

Ultra Low Noise: Smaller castings reduce noise transfer





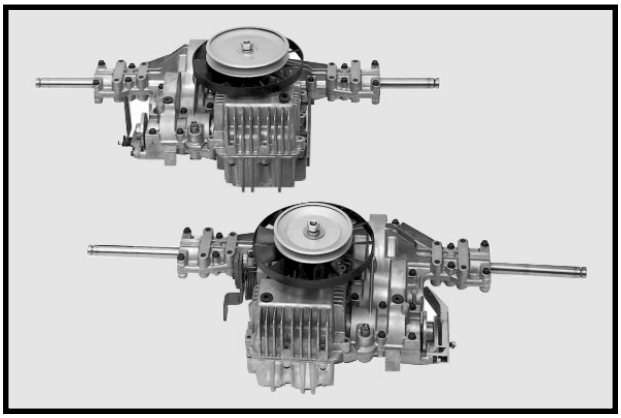
Where can it be used:

Replaces VST in product line - has same footprint but not shift mechanism

The LTH is available with either a “A” or “B” input. The “B” input may be needed on applications such as rear engine riders or all-wheel steer units. These two options allow the OEM the ability to forward or reverse mount the transaxle in the equipment.

Up to 22" (55.88 cm) rear tires - expanded opportunity

165 ft. lbs. (223.71 Nm) output torque - nothing better in its class

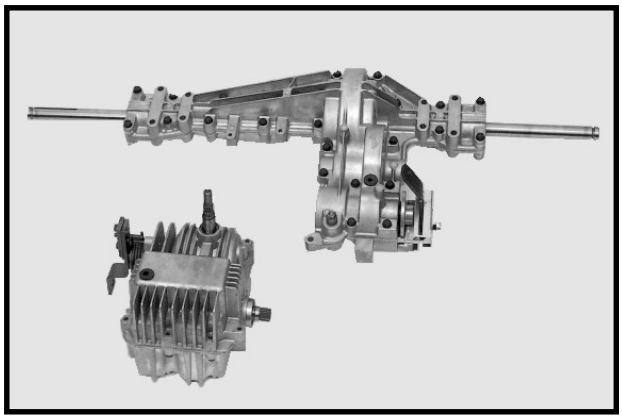


www.mymowerparts.com

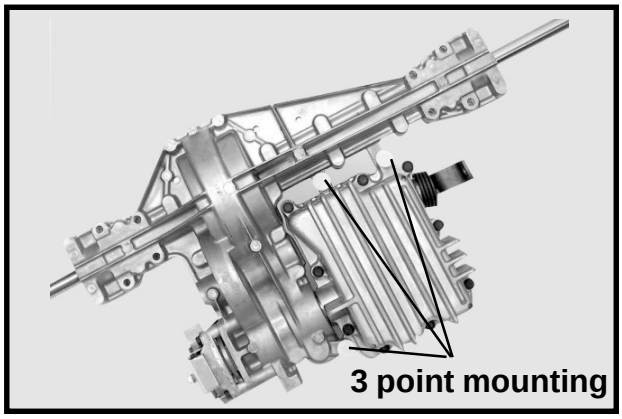
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

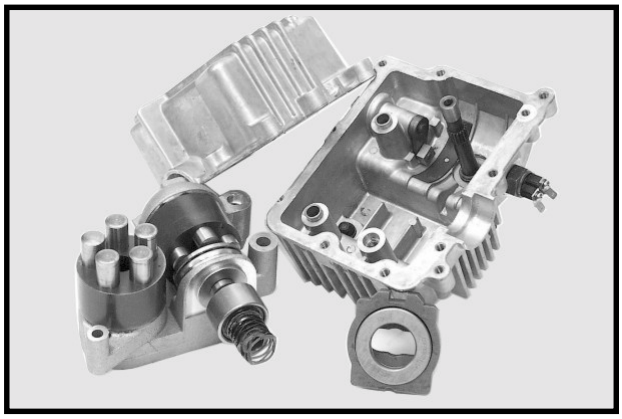
New Components

- Modular Casting
  - Noise reduction
  - Isolates hydraulic fluid from gear lube
  - Very low temperature

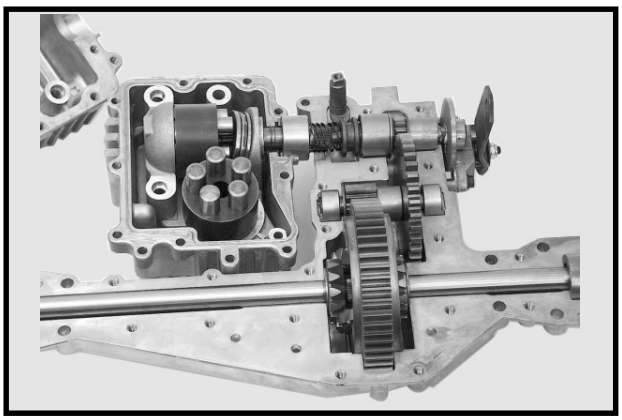


- No need to remove complete transaxle should pump service be required





- Axial piston motor and pump
  Smooth quiet performance

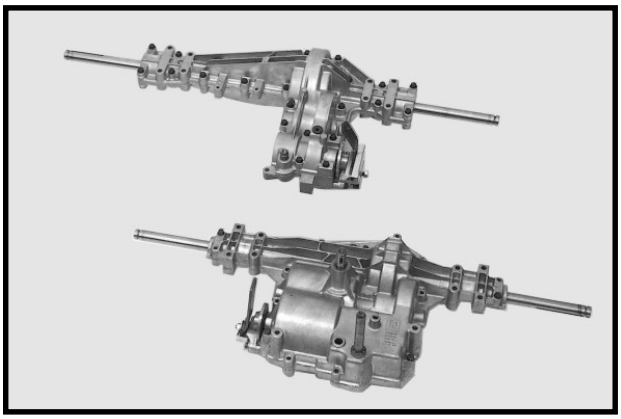


www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

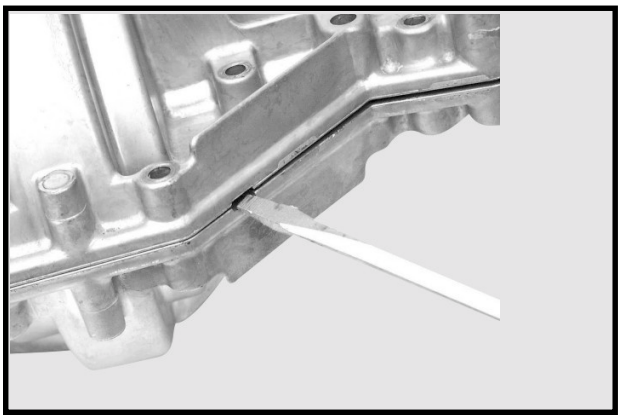
Components with proven reliability

- Drive train design from the MST200

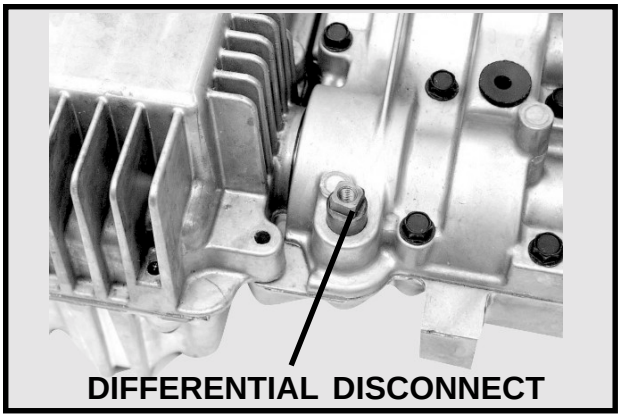


- Large Splines
  Easy removal and attachment
  Durability and strength

- Pry points on differential casting
  Preserves integrity of split line for sealing

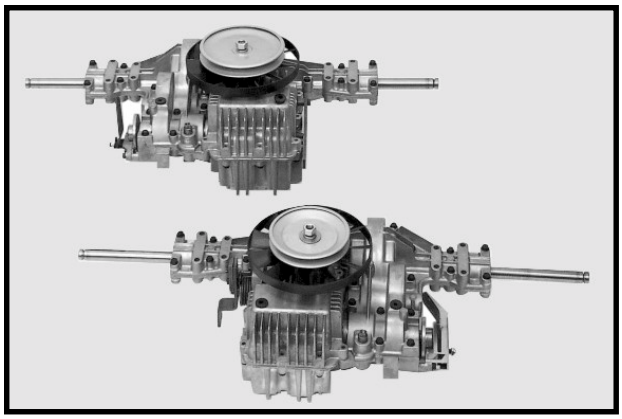


- Internal mechanical disconnect
  Easy to move



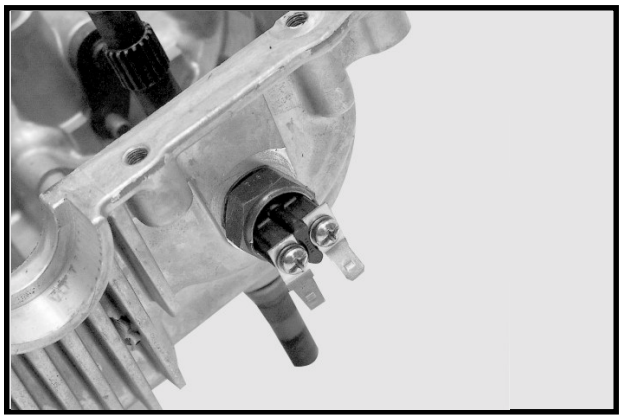
www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983



Advantages:

- Quietest LT transaxle
  Extremely low effort controls
  Greater operator safety - Less variation in speed up and down hill
  Mirror image versions
  No filter



- Optional internal neutral safety switch

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Europa News

Welded Pulley
The older style recoil starter pulley had the spring retainer *pressed* on the pulley assembly. Manufactured up to Jan '00 Serial number S0031.

The new recoil starter pulley assembly has the spring retainer pressed and *welded* onto the pulley to prevent the retainer from becoming dislodged because of spring tension. Manufactured starting Feb. '00 Serial number S0032.

Cool-Air inlet/starter improvement
Starter housings have been enhanced to feature alternatively punched and extruded slots to improve rigidity. This modification was done in January '00. Serial number S0001

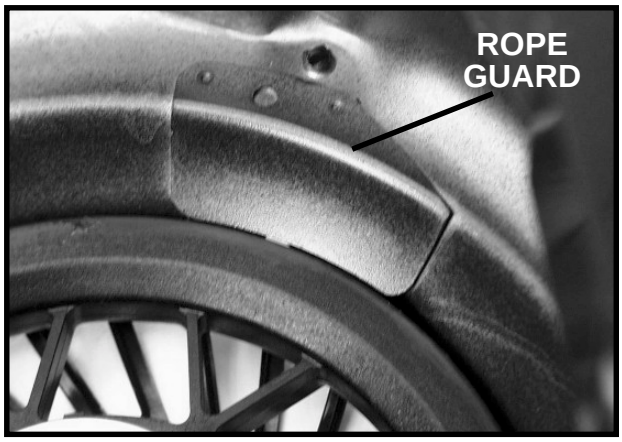
www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Integral blower housing and starter with rope protection

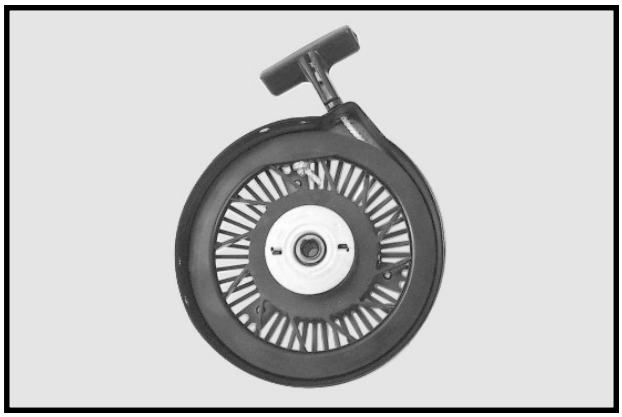
Old style blower housing without rope protection was manufactured through May '00. Serial number S0152.

The new style blower housing *with* rope protection was introduced for production engines starting June '00. The serial number S0153. This change was to ensure that the rope feeds back onto the pulley in the event that the customer releases the rope when it is completely extended.



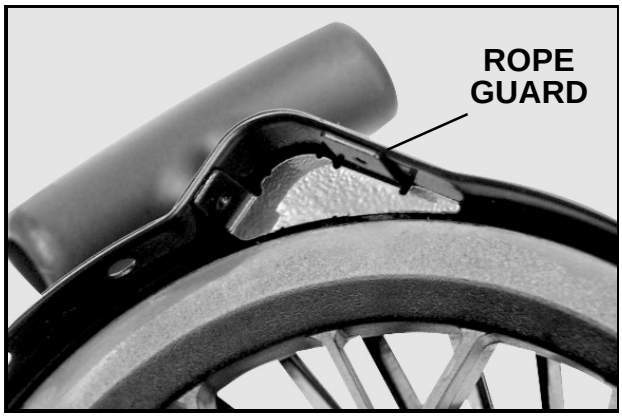
Separate recoil starter without rope protection

Similar modification has taken place with the separate recoil starter. The old starter without rope protection was built through April '00, serial number S0121. The starter shown on the left is without rope protection.

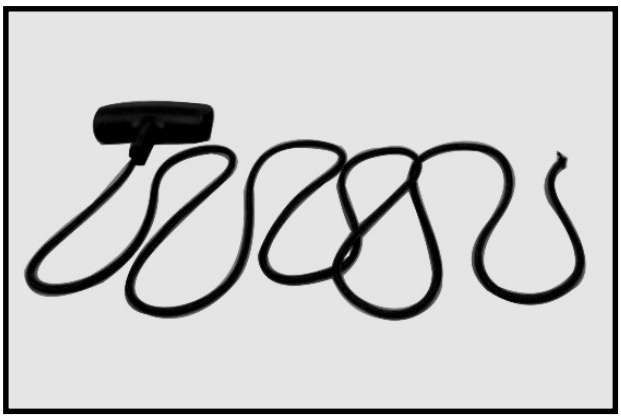


New separate starter *with* rope protection

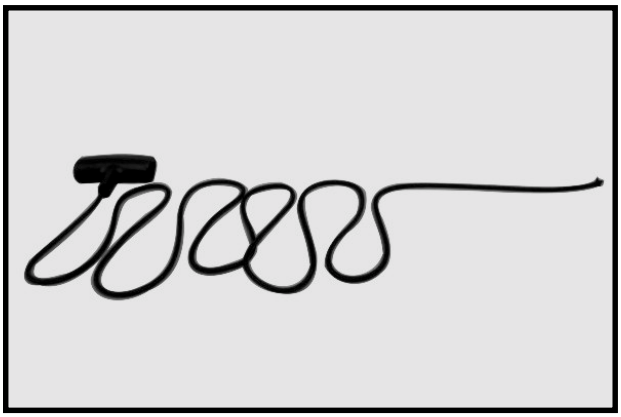
Built from May '00, serial number S0122. Housing is shown *with* rope protection. As mentioned above, the added rope protection ensures that the rope feeds back onto the pulley in the event the rope is released abruptly after being fully extended.



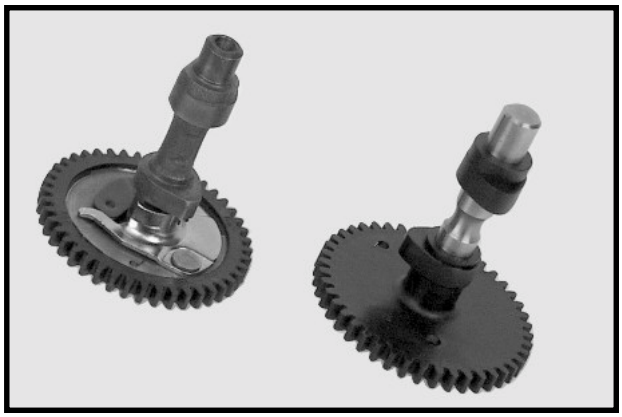
www.mymowerparts.com



New length on starter ropes
Old style rope assembly built up until Jan. 15 '00. Serial number S0015 Rope length is 2,13 m (7.03 ft.)



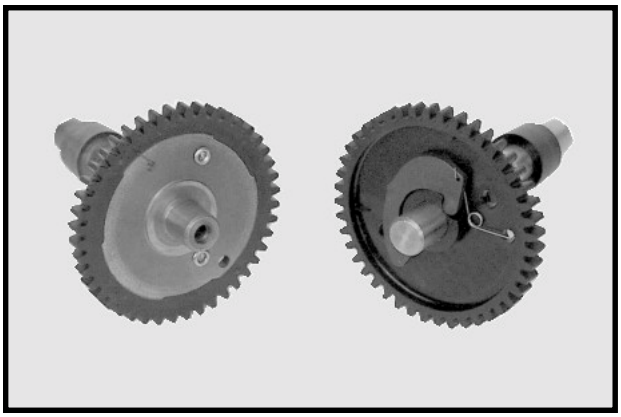
New rope assembly built since Jan. 17 '00. Serial number S0017 Rope length is 2,33 m (7.60 ft.)
The longer rope was added to avoid pulley stress in certain applications.



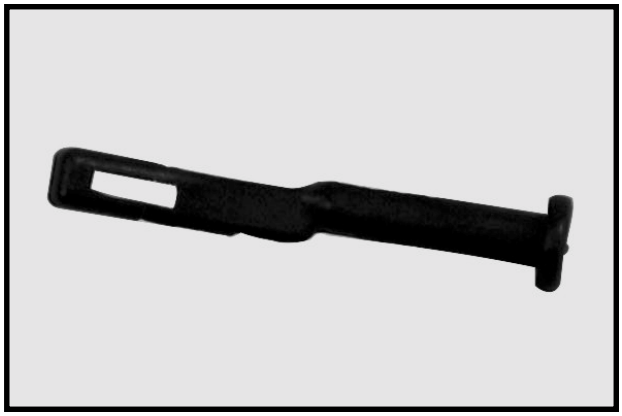
New Camshaft for Horizontals
Following a successful program of utilizing plastic cam lobes on our vertical shaft engines, we have now introduced a camshaft featuring plastic lobes for our horizontal shaft engine line. The main advantage of these camshafts is an appreciable reduction in engine noise.

Present MCR used on horizontal engines features cast iron cam lobes.

"*New*" style MCR used on horizontal engines will feature plastic cam lobes for more quiet operation.



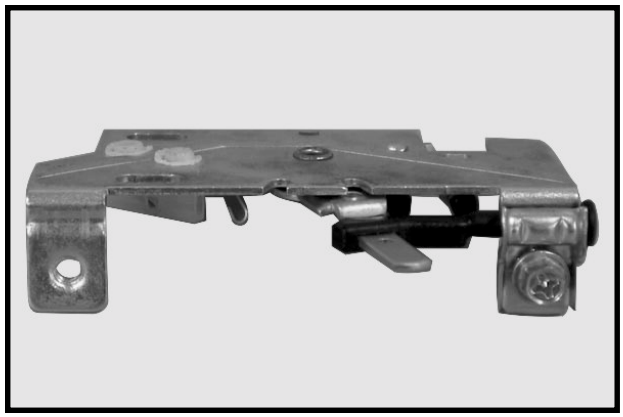
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983



Convert variable speed to fixed speed

Retainer has been in production since Jan '00. Now vertical engines with variable speed throttle controls can be converted to a fixed speed control.

Introduced in January '00 was a plastic retainer which locks the throttle control in the high-speed position. This is used to convert a variable speed primer carburetor to that of a fixed-speed style. This retainer part **# 27250058,** is especially useful to service, as in-stock variable speed replacement engines can easily be converted to fixed-speed if needed. **CAUTION:** With this fixed-speed retainer installed, customers need to make sure their equipment has a ignition stop switch or flywheel brake lever and that it is working properly.



Geotec® Changes

Two changes have been introduced to the Geotec range of engines this season. In an effort to stay ahead of upcoming safety regulations by the European Union, Tecumseh Europa has made a change to shorten the back side of the fuel tank. This allows even more air space between the muffler and the fuel tank. This is to ensure the tank from damage by excessive heat in extreme conditions. The mounting of the tank has also been improved by the introduction of a new bracket at the front of the tank.

Secondly, the 'D' type directly linked governor system featured on the Geotec series has proven to be very successful in reducing governor "droop" to minimum levels. To further improve the durability of this system, the governor and governor rod have been modified.

These modifications were introduced in June '00, engine serial number S0164. The new components, being interchangeable with the original parts, retain the existing part numbers.

Lever	27240145
Governor Rod	22750017

www.mymowerparts.com

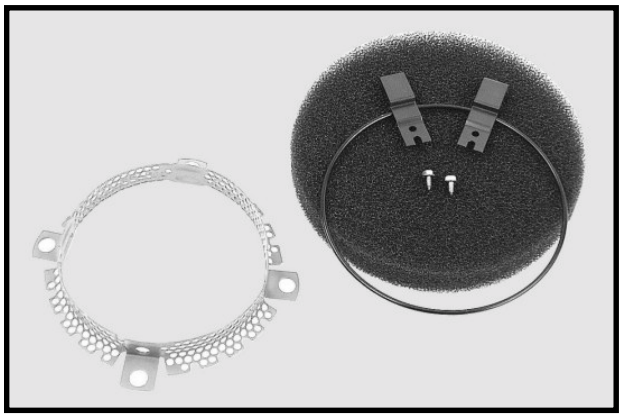
Centura® Air Filter

The filter assembly used on the LX models which uses a paper element air filter, has been modified to improve the location of the air filter cover. This revised version now also uses a paper gasket to seal against the carburetor flange in place of the 'O' ring. Parts are not interchangeable. Check the engine specification number to identify the correct parts.

Overheating Engines

During the last couple of seasons, we have seen increased incident of both two and four stroke engines overheating as a result of the air intake and cooling fins being blocked by grass debris. This is prevalent on hover mowers and nylon filament trimmers, because these machines do create a large amount of airborne debris.

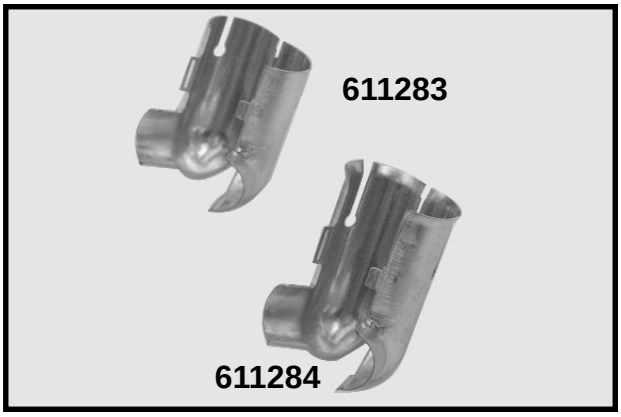
Please point out to customers who are using these machines the importance of keeping air intakes, cooling fins and other areas, free from grass and other debris. We can offer some optional grass screens if this helps the customer. Machines using the MV100S can be retrofitted with an intake screen, part # **100.41.003.000**. When fitting this screen, which is mounted underneath the starter, it will be necessary to remove the spinning screen which is mounted on the flywheel. On machines using TVXL840 and VLV engines, a starter muff, part # **730604** is available for retrofitting. When fitting these optional screens it is necessary again to point out to your customer that they must be kept clear of grass.



Flymo hover machines L400 and L470 - both use foam elements to pre-clean air for the cooling system. Again these must be in place and in good condition, and kept clear from debris if the engine is to cool properly.

Spark Plug Shields-Basic for Export

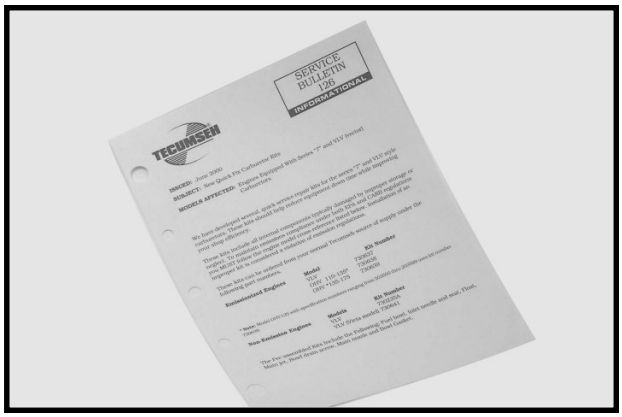
In order to comply with Radio Frequency Interference (RFI) Standards mandated by the European Union, Australia, and Canadian markets; we have developed two Spark plug shields part # **611283** for small frame and part # **611284** for medium to large frame. These shields encapsulate our Capacitor Discharge Ignition (CDI) rubber boot and attach to the base of the spark plug. RFI's emitted around the spark plug are grounded out to the plug base. This standard is voluntary in the United States.



Service Bulletins

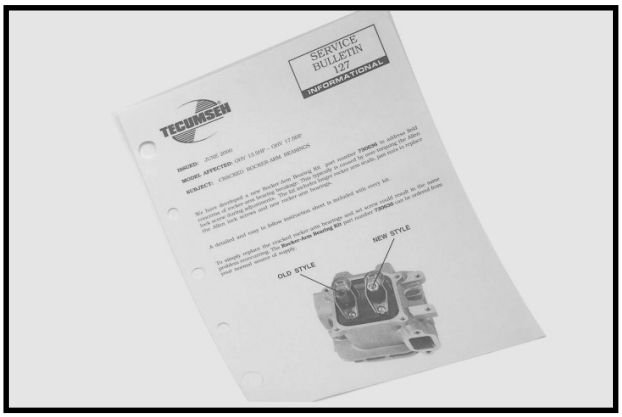
Bulletin 126
Quick Fix Carburetor Kits

This bulletin lists the quick service repair kits for Series "7" and "VLV" style carburetors. These kits can be used when the damage to the internal components caused by neglect or improper storage is extensive. This will help reduce downtime and improve shop efficiency. The kits include the fuel bowl, inlet needle and seat, float, main jet, bowl drain screw, main nozzle and bowl gasket.



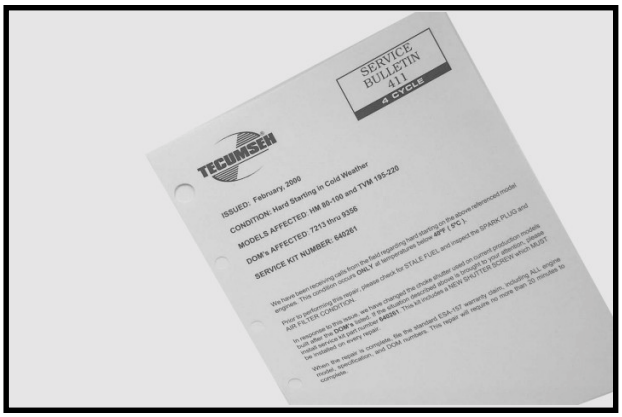
Bulletin 127
Cracked Rocker-Arm Bearings

This bulletin covers the installation of a kit developed to address rocker-arm breakage caused by over-torquing the Allen head lock screw. The kit includes longer rocker arm studs, jam nuts to replace the Allen head lock screws and new rocker arm bearings. The kit part number is **730636.**



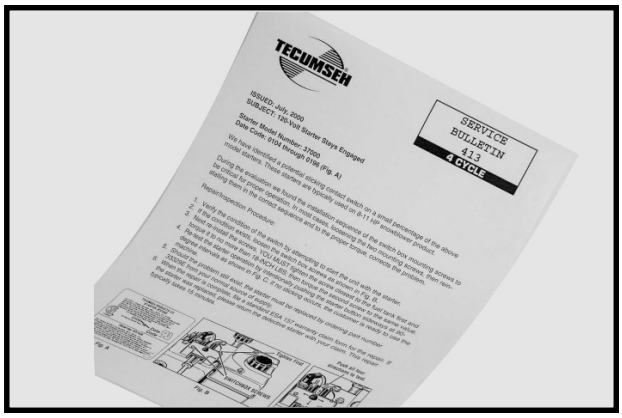
Bulletin 411
Hard Starting in Cold Weather

This bulletin introduces a kit part **# 640261** designed to resolve cold starting problems at below 40°F (5°C). The kit includes a more aggressive choke plate and a new shutter screw to complete the repair. If you have an engine that is an HM80-100 or TVM195-220 built between the date codes 7213 thru 9356 this should resolve any cold start problems. Before replacing any parts, always inspect the spark plug, check for stale fuel and/or plugged air filters and be sure that the throttle or choke cable is positioned properly to allow for full-travel into the choke position.



Bulletin 413

This bulletin was issued to address a concern with the electric starter engagement button sticking on 8-11 hp engines. This does not occur on every unit, and loosening the screws, re-tightening them in the proper sequence and to the correct torque will resolve the majority of these instances. The bulletin details the corrective actions required should this situation persist.



www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

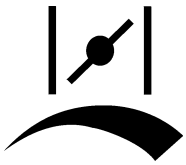
EXPLANATION OF INTERNATIONAL SYMBOLS

This rocker switch identification is based on the binary code with the number 1=ignition on and 0=ignition off.

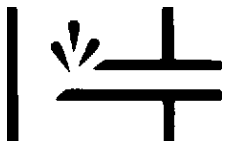
A throttle speed range with the rabbit symbolizing fast and the turtle designating slow.

STOP is stopping the ignition of the engine, or moving parts, or blades of a particular application.

The choke symbol, symbolizes the choke plate in the carburetor body from a vertical view. The “swoosh” line increasing in thickness to right side indicates more choke to the right.



Primer symbol displays gasoline coming out of an emulsion tube (on it’s side) inside the carb Venturi when the primer button is pressed.



Ignition key symbol, simply displaying spark only possible when the key is used.

The large plastic key most common in snow applications, when the key inserted will allow the engine to run and when key is removed it is STOPPED.

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Service Tool List and Order Form

Special Service, Diagnostic, Measurement & Repair Tools Description	Part Number	User Cost	Premier Dealer	Standard Dealer	Limited Dealer	On Hand	On Order
*Tool Kit	670195E		M	M	M		
Tachometer (Inductive or Vibratach)	670156 Vibratach or 670365 Inductive		M or R	M or R	M or R		
Ignition Tester	670366		M	M	M		
Multi Meter VOM & Temperature	670349		M	M	M		
Compression Tester	670358		M	M	M		
Outside Micrometers 0-1"	670350		M	R	R		
1-2:	670351		M	R	R		
2-3"	670352		M	R	R		
3-4:	670353		M	R	R		
Telescoping Gauge Set	670357		M	R	R		
Dial Indicator	670241		M	R	R		
Inspection Plate (Plate Glass) - Obtain Locally			R	R	R		
Feeler Gauge Set	670361		M	M	M		
Inch Pound Torque Wrench 0-600 inch lbs.	670363		M	M	M		
Valve Spring Compressor "C" Type	670362		M	M	M		
Piston Ring Compressor	670359		M	M	M		
Piston Ring Expander	670117		M	M	M		
**Valve Seat (Neway LG3000 Kit or comparable)	670347		M	M	M		
**Face Cutting Set (Neway 612 Gizmatic)	670348		R	R	R		
Cylinder Hone (Flex)	670360		M	M	M		
Starter Bendix Ring Tool	670346		M	R	R		
Crankcase Vacuum / Oil pressure adapter	670364A		M	R	R		
Hole Gauge Set	670356		M	M	M		
Oil Vacuum 110 Volt Pump only	670354		R	R	R		
Extreme Duty Oil Tank	670367		R	R	R		
Oil Vacuum Kit (Includes vac and tank)	670379		R	R	R		
Leak Test Kit - Complete	670340		R	R	R		
Leak Test Transaxle / Carburetor Adapter Kit	670345		R	R	R		
Dial Caliper, 6"	670368		R	R	R		

* See Tecumseh Form #694862 for Complete Tool Kit List
** Neway LG2000 or 102 kits can be upgraded by calling Neway direct: 1-800-248-3889
M = Mandatory Tools (Must have or place order)
R = Recommended Tools
NOTE: Prices subject to change
Equivalent tools may be used.

Dealer Name _____
Address _____
City, State, Zip _____
Phone _____
Account No. _____

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

SEND US YOUR TIPS

Many of the bits of information that we pass along in our schools come from our dealer network. We want to give you the opportunity to contribute to next year's Technician's Seminar Booklet. Please write down your tip(s) and fax or send it to:

Tecumseh Products Company
900 North Street
Grafton, WI 53024-1499
Attn: Education Department

FAX NO. 262-377-4485

Name: _____
Company: _____
Address: _____
City, State, Zip Code _____

The Top 5 responses will receive a prize from Tecumseh.

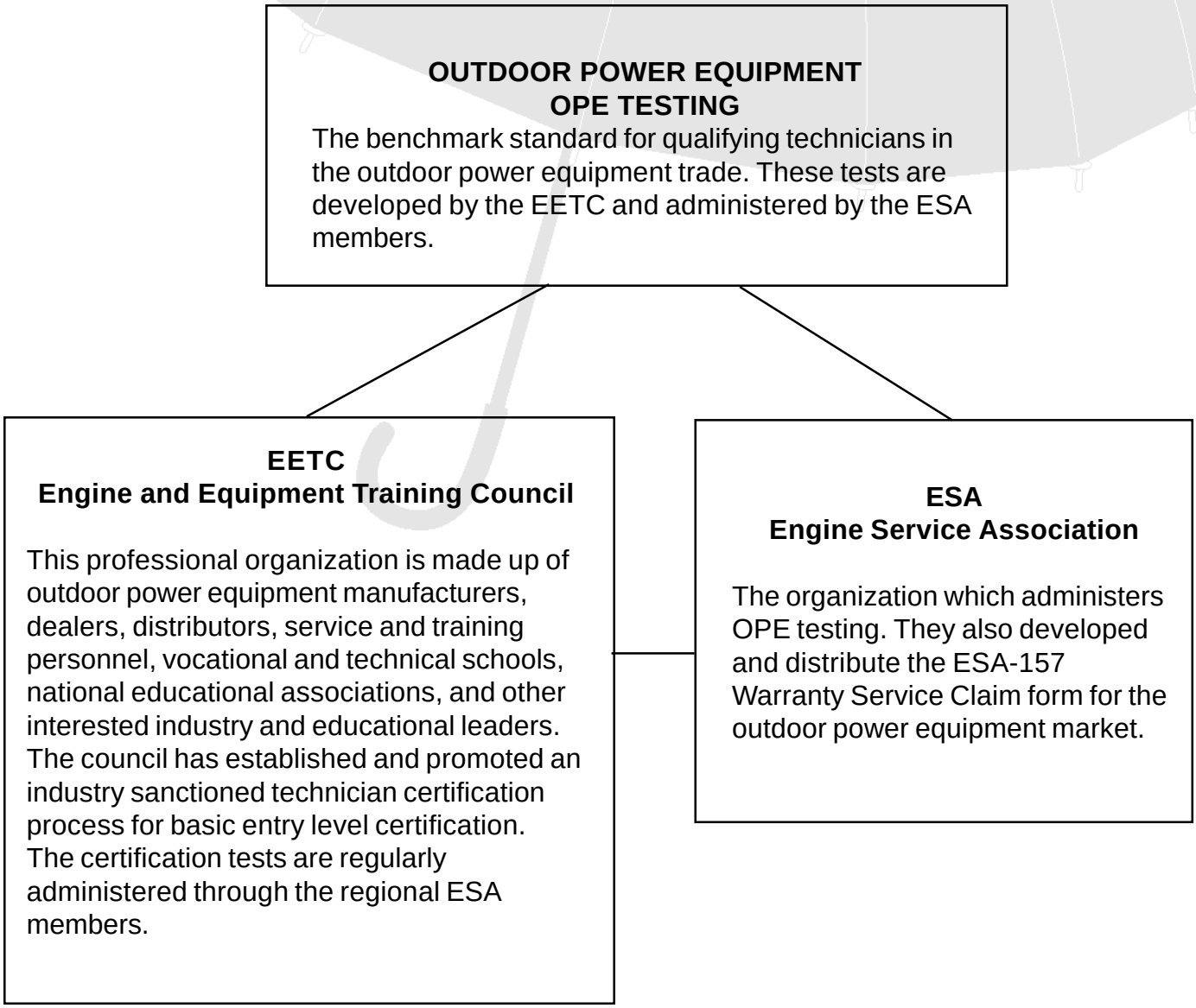
Thank you in advance for your input.

www.mymowerparts.com

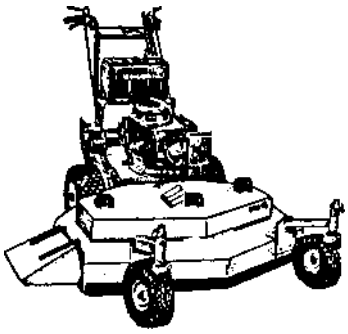
For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

The OPE Umbrella

Tecumseh Products Company is a proud member of the Engine and Equipment Training Council (**EETC**). This Council is the organization that creates and updates the **OPE** tests. The tests are regularly administered by your regional, Engine Service Association (ESA) member and have become the industry's basic standard for qualifying technicians. Please contact your Tecumseh Distributor to obtain a testing schedule.



www.mymowerparts.com



TECHNICIAN SHORTAGE

Skilled service technicians in the equipment and engine industry are in short supply. Prospects are not good for improving this shortage through traditional educational channels and with current educational processes. At a recent industry meeting, one equipment manufacturer indicated that their dealers were short more than 2,500 technicians to service their products. It is conceivable that the real numbers for the whole industry may be many times this figure.

The technician shortage is due to a number of complicated problems. A study done by a major university for the automotive service industry regarding why young people choose not to become service technicians, found these critical reasons:

- Mom and Dad
- Guidance Counselors
- Perception that it is a "dead-end" job
- Limited pay and benefits
- Lack of knowledge about what the industry has to offer

CHANGING THE PERCEPTION

You certainly can't blame parents for wanting the best future for their children. We must take the lead in changing their perception of our industry. If the image of the technical service technician remains negative, then we have very little hope of developing a new generation of skilled service professionals.

Did you know that the average age of a service technician in a dealership today is 51 years. The challenge is clear. In order to change the perception of our profession and attract young people to our industry, we must begin to develop a career path for the young, entry level service technician. He/she needs to understand the potential in the industry – not just in terms of salary and benefits, but also in terms of increasing responsibility within a company and the industry. Along with pride and self- esteem for professionalism and knowledge of complex technical products and processes.

We, as an industry, must take advantage of the growth in the service sector by educating parents and counselors in the benefits of becoming a professional service technician. We must also insure that educational institutions offer the exact competencies our industry needs today and in the future.

YOUR CHALLENGE...

We need your help to insure that skilled professional service is available for the products we are selling today and developing for tomorrow. For as little as $175.00 a year, you can support the industry's efforts in insuring the availability of skilled service technicians. Also your membership supports the availability and professionalism of industry-approved educational institutions to teach industry-required skills. Won't you please join us in this worthwhile endeavor and become a member of the Equipment and Engine Training Council. Your industry needs your support.

For More Information Call (512) 442-1788 or E-mail: eetc@eetc.org

COMPLETE THE MEMBERSHIP FORM BELOW AND MAIL WITH YOUR CHECK TO:

Equipment & Engine Training Council
1946 So. IH-35, Suite 100-A
Austin, TX 78704
(512) 442-1788 • Fax (512) 442-1789

General Membership: $195.00
Dealer Membership $125.00

Name: _____ Title: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Update Seminar Technician Video Test

1. Which statement is true about improvements made to Tecumseh small frame vertical shaft engines?
   A. New Viton Oil-fill seal and clamp, a new oil drain plug
   B. A new flange with a mounting boss to accommodate clamp
   C. Longer stroke connecting rod
   D. Both A and B are correct

2. Throttle/Governor link bushings for HM/OHM engines can be installed in any direction.
   A. TRUE B. FALSE

3. The ignition rocker switch symbol **"0"** designates a complete circuit with the engine running.
   A. TRUE B. FALSE

4. The OHH/OHSK horizontal engine line has been improved how?
   A. It now comes with a “stroker” style crankshaft and new connecting rod.
   B. Includes a wider gapped / hotter spark plug.
   C. It comes with a new soft-pull starter.
   D. It features a new quiet tone muffler.

5. Regardless of the material in head gaskets, compression ratios will not change no matter which gasket is used because this is only dependent on combustion chamber size.
   A. TRUE B. FALSE

6. Tecumseh’s recoil starters have changed how?
   A. They use Bentonite grease in the pulley
   B. Use an improved nylon rope
   C. Have a new welded-in rope guide
   D. Features the new ‘Easy-Grip’ handle made from Viton rubber

7. The new spark plugs are gapped at .045”in. (.1143cm) and offer which of the following to the customer?
   A. Gives a 5 horsepower improvement
   B. Provides a cleaner exhaust/better emissions
   C. Easier starting on marginal quality fuel
   D. All of the above

8. The ‘pipe style’ oil drain plug for small frame vertical shaft engines are retrofitable on all older-style flanges.
   A. TRUE B. FALSE

9. To insure a safe cleaning of all Tecumseh carburetors; it’s best to . . .
   A. Soak carb in a carb-dip tank overnight
   B. Soak in a carb-dip tank for 1 hour and use tag wire
   C. Use Tecumseh Carburetor cleaner spray along with .012” tag wire
   D. Soak Carburetor for ½ hour in a carb-dip tank and then use .012” tag wire

10. What are the differences between the two Series 11 carburetors?
    A. The Bridged version connects the emulsion tube to the primer bulb and the Standard Series 11 uses strictly a gas-prime prime system.
    B. The Bridged version draws fuel to the idle circuit from two sources; the main jet/center leg and the outside metering jet while the Standard version does not.
    C. The Bridged version has an additional fuel well and the Standard does not.
    D. The Bridged version utilizes a closed end emulsion tube and the Standard has the normal style open end emulsion tube.

11. The new Power Sport® carburetors will include which features?
    A. Float return/dampening spring and a Tamper Resistant Cap on the idle adjustment screw
    B. True-Idle adjustment screw for PowerSport carbs with a non-governed idle
    C. The new plastic float
    D. A & B

12. The Series 11 carburetor uses which type of primer bulb to insure a 3 prime start?
    A. LARGER B. SMALLER

13. The Vector/Series 7 carburetor bowl kits have changed to a standardize bowl which features molded threads for the fuel drain screw.
    A. TRUE B. FALSE

14. New engines that smoke slightly during the first hours of operation most likely are. . .
    A. Experiencing blow-by past the rings.
    B. 4-cycle engines and must be burning a 2-cycle fuel/oil mixture instead of straight unleaded fuel.
    C. Finalizing the curing process of the anticorrosive sealant we put on cylinders during assembly.
    D. Have a breather leak of oil onto the muffler

15. It’s not that important how tight the mounting nuts are on the VLV air filter box.
    A. TRUE B. FALSE

16. The only importance of lining up match marks is the following. . .
    A. It aligns rod cap with connecting rod as they were machined from Tecumseh
    B. Rod cap only fits on the connecting rod one way
    C. Provides correct orientation of the piston/rod assembly in the cylinder when facing out toward the PTO end of the crankshaft
    D. Both A and C

17. OVRM engines with a date of manufacture (DOM) later than 3-22-00 (0082-Julian calendar) could use the spacer and sand-cast intake pipe?
    A. TRUE B. FALSE

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

18. Why are some mechanics loosing spark after short-blocking an HM, OHM or an OHV engine as stated in this book?
    A. They must have forgotten to reconnect the fuel line.
    B. They have a plugged carburetor.
    C. Ignition module spacers were not installed.
    D. The Capacitor Discharge Ignition (CDI) just all-of-a-sudden "went bad."

19. What is the quick check for flywheel key damage on rotary mower applications?
    A. Quickly lift up deck with flywheel pinned by a large screwdriver. Move blade and check if it's loose.
    B. Quickly disconnect the air filter and look under the shroud with a flashlight.
    C. Quickly remove the tank, shroud, and flywheel then inspect the flywheel key.
    D. Shine a flashlight through the cool air inlet of the starter recoil housing and inspect the flywheel key.

20. The angle which to operate a Tecumseh engine is 30° continuously and 40° intermittently.
    A. TRUE B. FALSE

21. The new "pipe-thread" style oil drain plug will be an across the board change to Tecumseh's small frame vertical engines.
    A. TRUE B. FALSE

22. How is the new Viton oil-fill tube seal identified?
    A. It doesn't look any different from the old seal, so it isn't identified.
    B. It has an extra 'balloon-type' lip on the seal.
    C. It has a yellow dot.
    D. It's wider than the old seal.

23. Why is exhaust MCR (mechanical compression release) important?
    A. It makes starting easier.
    B. It provides increased horsepower while the engine is cold.
    C. It's better for the environment.
    D. It prevents kickback more than the intake MCR system.

24. The Bridged Series 11 Carburetor is built exclusively for the OVRM 120.
    A. TRUE B. FALSE

25. The new plastic float will help reduce corrosion in the float bowl brought on by stale fuel.
    A. TRUE B. FALSE

26. Currently the float return/dampening spring will be a standard feature on the . .. .
    A. Vertical shaft medium frame engines for small riding tractors.
    B. Horizontal shaft small frame engines for snow blowers.
    C. Horizontal shaft 20 hp. V-Twins for generators.
    D. Horizontal shaft PowerSport® engines.

27. Regarding pink emulsion tubes, which statement is true?
    A. The pink tubes offer low emission ratings and are retrofitable to all TCP carburetors.
    B. The pink tube/main nozzle has a closed end and two additional fuel pick-up holes.
    C. The pink tube provides smooth running at high speed/no load conditions and utilizes an exclusive bowl nut.
    D. B & C True statements.

28. If I as a technician install the larger primer bulb on an OHH Series 8 carburetor, a flooded condition most likely will develop.
    A. TRUE B. FALSE

29. To leak test the carburetor's needle and seat, you need to wet the seat with a drop of fuel or WD 40.
    A. TRUE B. FALSE

30. To leak test a MST transaxle it will handle 11 PSI (.76 Bars) of air pressure before blowing out a seal.
    A. TRUE B. FALSE

31. What is a true statement about the new Limited Adjust AV carburetor for 2-Cycle engines?
    A. The carburetor can be adjusted to a richer mixture.
    B. It is against CARB and EPA regulations to remove the limiter caps and it can be used in high altitude regions.
    C. It can be used in extreme cold, possibly needing to apply a small amount of the choke.
    D. B & C are true statements.

32. With the new LTH, to service the pump the technician needs to remove the entire transaxle from the tractor and then send in the pump through the Central Warehouse Distributor (CWD) exchange program.
    A. TRUE B. FALSE

33. Our new small frame engines have received an improvement in the breather. What does this do for the customer?
    A. It provides sealing capability of temperatures up to 400° F (204^0 C).
    B. The softer umbrella seal releases crankcase pressure faster.
    C. The rubber hose that connects to the carburetor has a longer tube which is tied in to the carburetor and accommodates engine vibration better.
    D. The new breather material seals with temperatures exceeding 300° F (148^0 C).

34. The LTH has 80/90 gear lube in the differential portion of the unit.
    A. TRUE B. FALSE

35. The LTH pump has more moving parts in it than the VST Hydro.
    A. TRUE B. FALSE

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

36. What criteria does the Cylinder Leakdown test demand?
    A. The Oil-fill cap be on tight and the engine to be at TDC on the intake stroke.
    B. That the engine needs to have its crankshaft retained.
    C. That the engine needs to be at TDC on the compression stroke.
    D. Both B and C.

37. On a Cylinder Leakdown test what does 100% leakdown most likely indicate?
    A. The engine is not on the compression stroke at TDC.
    B. The oil in the engine is of a thinner grade than SAE 30.
    C. The pressure in the air line is too high.
    D. That you are not servicing a Tecumseh engine!

38. Before reinstalling the cover on the MST transaxle, I need to . . .
    A. Remember to inspect the paper gasket.
    B. Apply 32 ounces of Bentonite Grease to all moving parts.
    C. Apply RTV around the cover but not in the oil galley nor axles shafts.
    D. Both A and C.

39. When servicing a recoil starter, how many turns against the spring do you turn the pulley when installing a new rope?
    A. Turn until tight then back off no more than 1 turn to thread rope.
    B. Turn 6-8 times and then thread the new rope.
    C. Turn 4-6 times and thread rope, because more than 6 turns will eventually break the spring.
    D. Turn until tight and thread a new rope.

40. Why is the torque spec. of 35-45 inch pounds (4 - 5 Nm) important when working on a VLV?
    A. This is the torque spec. of the connecting rod cap bolts.
    B. This is the torque spec. of the carburetor/intake pipe mounting bolts.
    C. This is the torque spec. of the mounting flange cover mounting bolts.
    D. This is the torque spec. of the air filter box mounting nuts.

41. What can occur when an atmospheric vent/bowl vent passage is blocked by a shrunken primer bulb or an air filter box gasket?
    A. Nothing, the engine will run fine.
    B. The carb will siphon gas from the tank out of the carb and into the cylinder.
    C. The gas will not drain from the tank into the bowl without the bowl vented.
    D. The engine will surge and then correct to a smooth steady sound.

42. For rotary mower applications, the OVRM engine does not use the spacer and sand-cast pipe if the DOM is after 3-22-00?
    A. TRUE B. FALSE

43. The Series 11 Carburetor is unique because...
    A. It has a larger Venturi
    B. Its additional fuel well delivers smooth running at start-up.
    C. Its primer bulb only needs to be pressed one time.
    D. Its durability allows soaking in a parts tank overnight.

44. The exhaust port liner is important for keeping engine temps cooler.
    A. TRUE B. FALSE

45. Which statement is true regarding the new carb tool # 670377?
    A. It installs & removes seat and it guides needle when installing a float/needle assembly.
    B. Removes emulsion tubes and O' rings and it gauges float height.
    C. It makes a nice gift for a Tecumseh Master Technician who truly understands carburetion.
    D. All of the above

46. The Tecumseh Oil Vac system works well if?
    A. You draw solvent into the vac once a week to clean out the dirty oil.
    B. A technician doesn't draw oil directly into the vacuum pump, but uses a tank.
    C. One hose is used to create a vacuum in the tank and the other to draw out the oil from the engine.
    D. Both B and C

47. When short-blocking a Medium Frame engine, as discussed in this book, that once had spark and now doesn't you might . . .
    A. Change the flywheel key
    B. Clean the carburetor
    C. Make sure your CDI mounting spacers are in place
    D. Change the air filter

48. Many of our head gaskets have the same bolt pattern, look similar, but still might contact the piston and make substantial noise when running.
    A. TRUE B. FALSE

49. According to Bulletin 127, which is a true statement ?
    A. The older style rocker-arm adjusters did not hold adjustment.
    B. Valve lash used to change radically because of steel push rods.
    C. The rocker-arm adjusters cracked at high speeds.
    D. The Allen type adjusters were a good design but were over-torqued and broken by many Technicians in the field.

50. The MST already has the new balloon type seal on the axles and will be getting the shifter/brake shaft seals during the 2001 production period.
    A. TRUE B. FALSE

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Notes

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Answer Sheet for Video Test

Return to Your Distributor for Scoring NOT Tecumseh

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
6.	A	B	C	D
7.	A	B	C	D
8.	A	B	C	D
9.	A	B	C	D
10.	A	B	C	D
11.	A	B	C	D
12.	A	B	C	D
13.	A	B	C	D
14.	A	B	C	D
15.	A	B	C	D
16.	A	B	C	D
17.	A	B	C	D
18.	A	B	C	D
19.	A	B	C	D
20.	A	B	C	D
21.	A	B	C	D
22.	A	B	C	D
23.	A	B	C	D
24.	A	B	C	D
25.	A	B	C	D
26.	A	B	C	D
27.	A	B	C	D
28.	A	B	C	D
29.	A	B	C	D
30.	A	B	C	D
31.	A	B	C	D
32.	A	B	C	D
33.	A	B	C	D
34.	A	B	C	D
35.	A	B	C	D
36.	A	B	C	D
37.	A	B	C	D
38.	A	B	C	D
39.	A	B	C	D
40.	A	B	C	D
41.	A	B	C	D
42.	A	B	C	D
43.	A	B	C	D
44.	A	B	C	D
45.	A	B	C	D
46.	A	B	C	D
47.	A	B	C	D
48.	A	B	C	D
49.	A	B	C	D
50.	A	B	C	D

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

TECUMSEH FACTORY TRAINING APPLICATION

Please Print

Dealership Name _____ Phone No. _____ Code No. _____

Address _____ City _____ State _____ Zip _____

Student's Name _____ Student's Signature _____

Employer's Name _____ Employer's Signature _____

4-DAY 2001 SCHOOL SCHEDULE - Factory Facilities

Douglas, Georgia
Date
Dec. 3-8, 2000
Jan. 7-12, 2001
Feb. 4-9
March 4-9
Nov. 11-16

Grafton, Wisconsin
Date
Nov. 5-10, 2000
Feb. 18-23, 2001
March 18-23
April 1-6
April 22-27
Dec. 9-14

2001 TEACHER'S SCHOOL

Douglas, Georgia
Date
June 10-15, 2001

Grafton, Wisconsin
Date
Jul. 29-Aug. 3, 2001

FACTORY CERTIFIED TRAINING ☐ Application to attend

TEACHER'S SCHOOL ☐ Application to attend

Master Technician Testing will only be offered for pre-registered applicants with proof of holding OPE 4-Cycle certification.

Master Technician Test ☐ I would like to take the Master Technician Test at the reduced cost of $45.00.

School Dates: 1st choice _____ 2nd choice _____

Please check *all* that apply

☐ Single Accommodations **$475.00**

☐ Double Accommodations **$350.00**

☐ Tecumseh Master Technician Test **$45.00**

☐ Smoker

☐ Non-Smoker

☐ No Room Needed

To make payment using a credit card, please fill out the following information:

(Check One)

☐ Master Charge ☐ Visa ☐ Discover

Print Name (as it appears on card): _____

Account Number: _____

_____
Signature of Card Holder

Exp. Date: _____ Phone Number: _____

For registration information call the Education Department: 262-377-2700 or fax your application: 262-376-8238.
The Central Warehouse Distributors in your area may hold in-house Factory Certified Training.
Please contact them for further information.

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

FOUR-DAY TECHNICIAN EDUCATION PROGRAM

Tecumseh has been working with our distributor education team to develop a completely updated factory level school program. This new program has been engineered to meet the needs of today's dealers and the technicians they employ.

On your behalf, an extensive commitment has been made by all of us to you, with educational programs offered by the Tecumseh Network Support level. Using their facilities, the course is now the equivalent to that of being educated at one of our factory facilities. These extensive hands-on programs will be available starting this January, 2001 in the USA and Canada through your regional Tecumseh distributors.

The following program outline will give you a taste of what you can expect from all of these classes. At the end of the Four-Day session, testing will be offered in both the Outdoor Power Equipment (OPE) and Tecumseh Master Technician (TMT) certifications. During the coming months, you will be hearing from your Tecumseh sales person about the special benefits that are a part of being TMT certified. All certifications stay with the technician and dependent on your level of proficiency should increase your value to the dealership.

Best of all, the course itself may be free or available to you at reduced cost. Your distributor sales person can give you more details regarding this special offer.

Day One Information Retrieval Systems Computer, Microfiche and Paper 2-Cycle Engine Theory and hands on covering TC, HSK and AV Product	**Day Three** Enduro VT Twin Teardown/ Reassembly Fuel Systems New Emissions Carburetors Electrical/Charging Systems
Day Two 4-Cycle Overview L-Head and Overhead Valve OHH Enduro Teardown/Rebuild and Running Adjustments LEV Teardown/Reassembly	**Day Four** Failure Analysis Warranty Procedures Transaxle Teardown/Reassembly MST, 800 Series LTH and VST Overview

Inside the back cover page we have listed all of the training directors from your regional distributors. These Team Tecumseh educators can supply you with a complete list of classes available to you.

Please contact them directly.

The Tecumseh Factory School Schedule and Application is on page 58.

www.mymowerparts.com

For Discount Tecumseh Engine Parts Call 606-678-9623 or 606-561-4983

Tecumseh Factory Education Facilities

BILLIOU'S INC.
1343 S. Main
Porterville, CA 93257
Phone No. 559-784-4102
Fax No. 559-781-1875
EDUCATION DIRECTOR: RICK GROVES

CENTRAL POWER DISTRIBUTORS
1101 McKinley St.
Anoka, MN 55303
Phone No. 612-576-0901
Fax No. 612-576-0920
EDUCATION DIRECTOR: BILL TORGERUD

CPD-OH
8181 Washington Church Rd.
Dayton, OH 45458
Phone No. 612-576-0901
Fax No. 612-576-0920
EDUCATION DIRECTOR: BILL TORGERUD

CENTRAL POWER DISTRIBUTORS
N90W14635 Commerce Dr.
Menomonee Falls, WI 53051
Phone No. 612-576-0901
Fax No. 612-576-0920
EDUCATION DIRECTOR: BILL TORGERUD

W.J. CONNELL CO.
65 Green St.
Foxboro, MA 02035
Phone No. 508-543-3600
Fax No. 508-543-8394
EDUCATION DIRECTOR: BRIAN O'NEIL

ENGINES SOUTHWEST
1255 N. Hearne
P.O. Box 67 (Zip Code 71161-0067)
Shreveport, LA 71107-7108
Phone No. 318-222-3871
Fax No. 318-425-4638
EDUCATION DIRECTOR: BRYAN CLARK

MEDART - KANSAS CITY
2644 S. 96th Street
Edwardsville, KS 66111-3483
Phone No. 636-282-2300
Fax No. 1-800-695-9530
EDUCATION DIRECTOR: GARY FIEBIG & BRIAN JONES

MEDART - ST. LOUIS
124 Manufacturers Drive
Arnold, MO 63010-4727
Phone No. 636-282-2300
Fax No. 1-800-695-9530
EDUCATION DIRECTOR: GARY FIEBIG & BRIAN JONES

POWER EQUIPMENT SYSTEMS
1645 Salem Industrial Dr., NE
PO Box 669 (Zip Code 97308)
Salem, OR 97303
Phone No. 503-585-6120
Fax No. 800-637-9243
EDUCATION DIRECTOR: WAYNE WENDLAND

SMITH ENGINES INC.
4205 Golf Acres Dr.
P.O. Box 668985
Charlotte, NC 28266-8985
Phone No. 704-392-3100
Fax No. 704-392-5208
EDUCATION DIRECTOR: HARRY WILLIAMS

SMITH ENGINES INC.
2303 Premier Row
Orlando, FL 32809
Phone No. 407-855-4288
Fax No. 407-855-4736
EDUCATION DIRECTOR: BILL ROBERTS

SMITH ENGINES INC.
1665 Lakes Parkway Suite 116
Lawrence, GA 30243
Phone No. 770-237-0707
Fax No. 770-237-0210
EDUCATION DIRECTOR: JOHN VANEK

TECUMSEH PRODUCTS COMPANY
900 North Street
Grafton, WI 53024
Phone No. 262-377-2700
Fax No. 262-377-4485
CONTACT: PAUL BECHWAR

TECUMSEH DOUGLAS FACILITY
Tecumseh Products Company
1545 Kellog Drive
Douglas, GA 31535
Phone No. 262-377-2700
Fax No. 262-377-4485
CONTACT: PAUL BECHWAR

CPT CANADA POWER TECH. LTD.
161 Watline Ave.
Mississauga, ON L4Z 1P2
Phone No. 905-890-6900
Fax No. 905-890-0147
EDUCATION DIRECTOR: ROBERT BARTON

CPT CANADA POWER TECH. LTD.
#101 - 10411 0 178 Street
Edmonton, AB T5S 1R5
Phone No. 780-453-5791
Fax No. 780-454-8377
EDUCATION DIRECTOR: BILL BERNARD

CPT CANADA POWER TECH. LTD.
MONTREAL BRANCH
226 Migneron
St. Laurent, PQ H4T 1Y7
Phone No. 514-731-3559
Fax No. 514-731-0064
EDUCATION DIRECTOR: MICHAEL BOISVERT

www.mymowerparts.com