

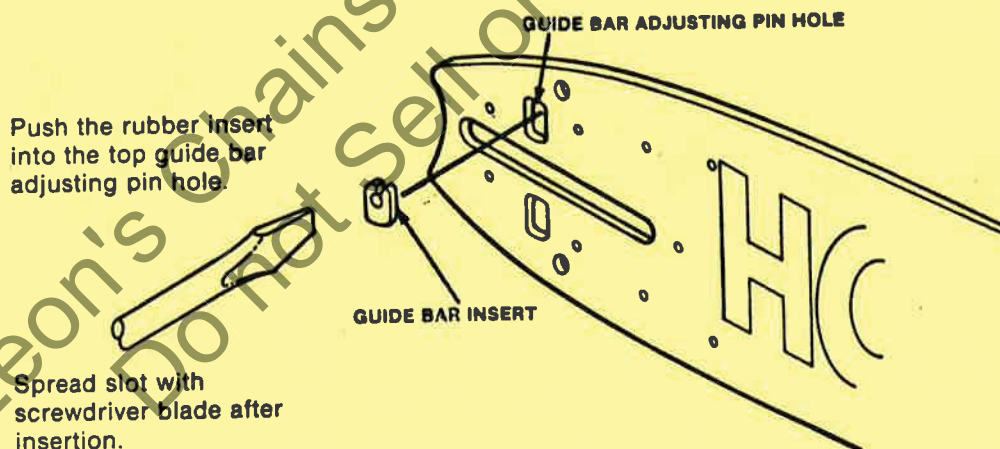


TECHNICAL SERVICE BULLETIN

NO. 182-001**SUBJECT:** GUIDE BAR INSERT KIT #A-96612**AFFECTS:** 360 CHAIN SAW

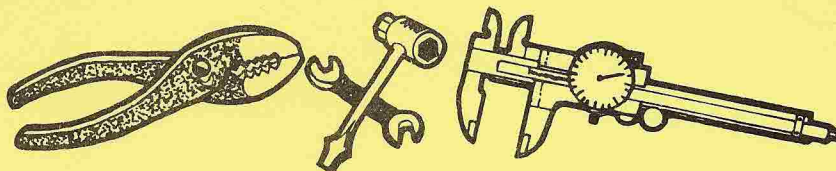
We have had reports from the field that when guide bars longer than 16 inches are used on 360's a minimal amount of oil is getting to the chain. In order to improve the oil flow to the chain a rubber insert for the chain adjusting pin hole of the guide bar has been designed. (See illustration). This insert will route the oil from the oil slot in the guide bar pad directly to the groove of the guide bar.

INSTALLATION OF GUIDE BAR INSERT FOR 360 CHAIN SAWS



This insert will be in the new 360 owners kit. If extra inserts are needed order part number A-96612. This kit will contain 5 inserts and 1 instruction sheet.

Eddie Turner
Service Manager
Forestry Products



TECHNICAL SERVICE BULLETIN

NO. 182-002**SUBJECT:** SAFE-T-TIPS AND USER INSTRUCTIONS**AFFECTS:** ALL CHAIN SAWS

Below is a list of Safe-T-Tips now available to Homelite dealers. Homelite recommends the use of these devices on all Homelite units sold, both new and used, by your dealership.

If a unit is reconditioned and sold as a used unit Homelite recommends installing a Safe-T-Tip on the guide bar before the saw leaves your dealership. Safe-T-Tips are supplied with each new unit along with owners manuals, warranty card, etc. to provide the user with vital safety information and any other needs he may have. If a unit owners kit does not have a Safe-T-Tip or owners manual, etc., notify your nearest Homelite Factory Service Center.

Remember, when properly installed, the Safe-T-Tip prevents dangerous chain saw kickback.

SAFE-T-TIP	FITS	SCREW	TORQUE SPEC.
A-70776-A	Applicable to most guide bars with an E4 suffix. Example: PT-12371-E4	93695	35-45 Inch lbs.
A-70790-A	Applicable to any guide bars with a D3, D5, B1 and E2 suffix. Examples: PT-16381-D3, GW-16001-D5, GW-19003-B1, SP-31403-E2	92335	70-100 Inch lbs.
A-96477 *	Applicable to any narrow nose guide bars used on the electric chain saws. Example: NE-12001-E4	93695	34-45 Inch lbs.

* All electric chain saws built after lot #C159 use the narrow nose guide bars. See illustrations on the back of this page.

Eddie Turner
Service Manager
Forestry Products

A 70776-A



A-70790-A



A-96477





TECHNICAL SERVICE BULLETIN

NO. 182-003

SUBJECT: NEW CARBURETORS NOW AVAILABLE

AFFECTS: XL SERIES AND 330 CHAIN SAW

330

A new Walbro carburetor (WT-4) is now available for the 330 chain saw. The part number is A-94380-A. This carburetor may be serviced with the kits listed below.

REPAIR KIT

96943

INCLUDES:

Inlet Needle
Welch Plug
Screw, mtrg. Lever Pin
Screw, Throttle Valve
Screw, Metering Cover
Spring, Idle Needle
Spring, Throttle Return
Spring, Metering Lever
Spring, Hi Speed Needle
Needle, Lo Speed
Needle, Hi Speed
Screen Fuel Inlet
Pin, Metering Lever
Lever, Metering
Gasket/Diaphragm Kit

GASKET & DIAPHRAGM KIT

96944

INCLUDES:

Met. Dia. Gasket
Gasket, Pump
Diaphragm, Pump
Diaphragm, Met.

XL SERIES

A new Zama carburetor is now available for the XL series of chain saw. The part number is A-96481. This carburetor may be serviced with the kits listed on the back of this page.

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REPAIR KIT

96484

INCLUDES:

Nozzle, Main
Diaphragm, Main
Gasket, Main
Disk
Strainer
Valve, Needle
Spring, Arm
Arm, Needle Valve
Pin, Arm
Screw
Plug, Welch
Diaphragm Kit Pump
Screw, Main Adjust.
Screw, Slow Adjust.
Spring, Adjust Screw
Strainer
Retainer
Plug

GASKET & DIAPHRAGM KIT

96485

INCLUDES:

Diaphragm, Main
Gasket, Main
Diaphragm Kit Pump

Eddie Turner

Eddie Turner
Service Manager
Forestry Products



TECHNICAL SERVICE BULLETIN

NO. 182-004**SUBJECT:** AUTOMATIC OILER RESTRICTOR 93703-B**AFFECTS:** XL CHAIN SAW

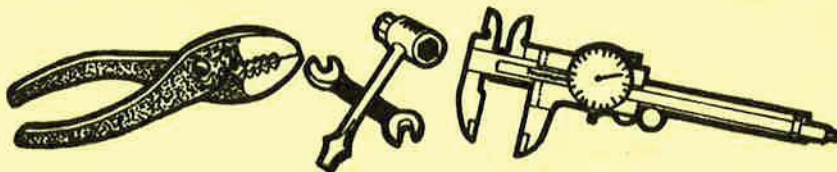
In order to increase the oil flow to the guide bar pad the inside diameter of the restrictor 93703-A has been enlarged. The inside diameter of 93703-A is .031. The new restrictor is part number 93703-B and has an inside diameter of .0465.

The 93703-B should be used in conjunction with oil filter A-78889. Filter A-78889 has a check valve in it which opens and closes as the pressure in the tank increases or decreases. This filter is used to prevent oil from "leaking out" at the guide bar pad when the saw is not running. When A-78889 and 93703-A are used together the oil flow to the guide bar pad is minimal and the flow time (tank to bar) increases. To overcome this problem use the 93703-B with A-78889.

Eddie Turner
Service Manager
Forestry Products

ds

DATE 1/82



TECHNICAL SERVICE BULLETIN

NO. 182-005

SUBJECT: NEW CARBURETOR A-96912

AFFECTS: 410 CHAIN SAW

In order to better the performance of the 410, all saws built after serial number *C3000000 will have an improved carburetor. The new carburetor is a Walbro WS-21, part number A-96912.

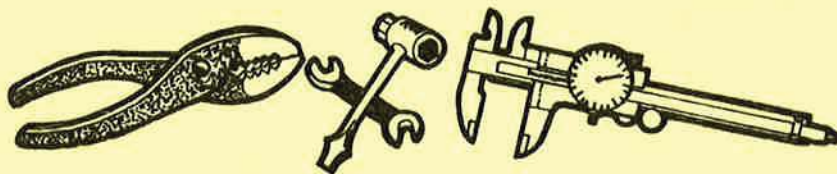
Besides improvements to the calibration of the carburetor the stiffner ring (93323) for the carburetor connector (93327) is now permanently attached to the carburetor venturi bore. This guarantees the carburetor will be properly aligned with the connector.

Before installing the new carburetor onto an older unit you must remove the stiffner ring from the connector and discard it. Apply oil to the stiffner on the carburetor to ease assembly and to minimize the chances of tearing the connector.

Eddie Turner
Service Manager
Forestry Products

ds

DATE 1/82



TECHNICAL SERVICE BULLETIN

NO. 182-006

SUBJECT: NEW CLUTCH**AFFECTS:** 360-AO AFTER SERIAL NUMBER *C3200000

A new lighter clutch is now available for the 360. This clutch will relieve the crankshaft of unnecessary stress experienced with the old clutch and will minimize crankshaft breakage.

The new clutch is 3/8" wide. The old clutch is 7/16" wide. Below you will find a list of part numbers to refer to when ordering clutch parts.

3/8" WIDE CLUTCH
AFTER SERIAL NUMBER *C3200000

96449 - Cover
A-96447 - Shoe
96448 - Spider
96451 - Spring

7/16" WIDE CLUTCH
BEFORE SERIAL NUMBER *C3200000

93628 - Cover
A-93632-A - Shoe
93636 - Spider
93638-A - Spring

Do not mix the parts listed above. For example, do not use a 3/8" wide clutch shoe with a 7/16" wide spider.

Clutch conversion kit A-93867 will be changed to the 3/8" wide clutch. The new part number is A-93867-A.

Eddie Turner
Service Manager
Forestry Products

ds

DATE 1/82



TECHNICAL SERVICE BULLETIN

NO. 182-007

SUBJECT: 1) WINTER KIT A-96708 2) SPRING CLIP 96200
3) THROTTLE ROD BOOT 96889

AFFECTS: 410 CHAIN SAW

- 1) A filter kit (A-96708) for cold weather use is now available for the 410. This kit will prevent or minimize carburetor icing in freezing temperatures by directing warm air from the cylinder to the carburetor.

This kit contains complete instructions for installation and use.

- 2) Spring clip (96200) has been added to the 410 to secure the air deflector to the cylinder cover.
- 3) On page 3 of the 410 parts list (17698), item number 27 throttle rod boot is listed as part number 58348. The correct part number is 69889.

Please add these new part numbers to your parts list.

Eddie Turner
Service Manager
Forestry Products

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DATE _____



TECHNICAL SERVICE BULLETIN

NO. 182-008**SUBJECT:** NEW CYLINDER, CYLINDER SHIELD, MUFFLER**AFFECTS:** 360-AO AFTER SERIAL NUMBER *C3200000

In order to eliminate the plate (93075) and bracket (93063), that attaches the cylinder shield to the cylinder, the shield and cylinder in conjunction with the muffler have been redesigned. This new design eliminates extra parts making the saw easier to service and lengthens the service life of the parts involved.

The cylinder shield is now attached directly to the cylinder. The muffler is attached to the cylinder only eliminating extra stress encountered when it was mounted to both the cylinder and crankcase.

All parts needed to service saws built before this change are still available. Below you will find a list of numbers for the new parts. Please note these changes in your parts list.

360-AO AFTER SERIAL NUMBER *C3200000

PART NUMBER	DESCRIPTION	QUANTITY
A-94781	Cylinder	1
94779-2	Cylinder Shield	1
A-94785-1	Muffler	1
94795-1	Exhaust Plate (Downdraft)	1
94796-1	Exhaust Plate (West Coast)	1
94797	Spark Arrestor Screen	1
82370 (6-32 X 1/4)	Screws (Plate to Muffler)	3
88056 (10-24 X 1 3/4)	Screw (Muffler to Cylinder)	1
88054 (10-24 X 1 1/4)	Screws (Muffler to Cylinder)	2
88054 (10-24 X 1 1/4)	Screw (Shield to Cylinder)	1
88051 (10-24 X 3/4)	Screw (Shield to Cylinder)	1

NOTE: THE NEW PARTS LISTED ARE NOT INTERCHANGEABLE WITH PARTS USED BEFORE THIS CHANGE.

Eddie Turner
Service Manager
Forestry Products



TECHNICAL SERVICE BULLETIN

NO. 182-009

SUBJECT: NEW HELI-COIL THREAD REPAIR KITS AND INSERTS**AFFECTS:** CHAIN SAWS, CONSTRUCTION EQUIPMENT, LAWN & GARDEN

In order to better serve our customers Homelite has joined with Heli-Coil to offer thread repair kits and extra inserts. See the attached literature. We will offer a "tool box" of repair kits that contains four (4) common size kits. We will also offer a spark plug repair kit with five (5) packs of inserts of different lengths. Replacement inserts will be available in seven (7) different sizes. The inserts will be supplied in a plastic tube with the size marked on it. The tubes will be blister packed.

STANDARD KITS AND INSERTS

PART NUMBER	DESCRIPTION	SIZE
17669	Tool Box	Contains 4 kits
Includes:		
17671-02	Kit	10-32
17671-03	"	10-24
17671-04	"	12-24
17671-05	"	1/4-20
Below are extra kits not included in 17669.		
17671-01	Kit	8-32
17671-06	"	5/16-18
17671-07	"	3/8-16

Replacement inserts are available for the kits listed. They are as follows:

PART NUMBER	DESCRIPTION	QUANTITY
17672	8-32	12
17673	10-32	12
17674	10-24	12
17675	12-24	12
17676	1/4-20	12
17677	5/16-18	12
17678	3/8-16	12

continued

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SPARK PLUG REPAIR KIT

PART NUMBER	DESCRIPTION	SIZE
17670	Kit	14-1.25 MM

Replacement inserts for spark plug kit:

PART NUMBER	DESCRIPTION	SIZE
17679	14-1.25 3/8" Reach	6
17680	15-1.25 7/16" Reach	6
17681	14-1.25 1/2" Reach	6
17682	14-1.25 3/4" Reach	6
17683	14-1.25 .472 Reach	6

All repair kits listed contain a drill bit, tap and inserting tool except the spark plug repair kit. This kit does not contain a drill bit.

NOTE: DO NOT USE THE PART NUMBER INDICATED ON THE ATTACHED LITERATURE. USE ONLY THE PART NUMBERS LISTED ON THIS BULLETIN.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

ds
attachment



TECHNICAL SERVICE BULLETIN

NO. 182-010

SUBJECT: CHECK VALVE 96841

AFFECTS: 330 CHAIN SAW

Check valve 96841 is now available from service parts and replaced check valve 69451 in the 330 chain saw only. Check valve 69451 was used in two locations (fuel tank and oil tank). Valve 96841 replaces 69451 in both locations.

This new valve was designed to function where extremely cold temperatures may hamper the performance of valve 69451.

Valve 96841 may also be used on the XL series chain saw. However, 96841 does not supersede 69451. Valve 69451 is still available.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

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DATE 2/82

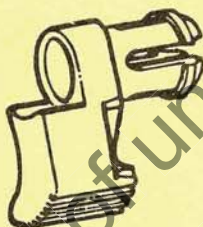


TECHNICAL SERVICE BULLETIN

NO. 182-011**SUBJECT:** NEW CHOKE ROD & LEVER**AFFECTS:** 360-A0 WITH SERIAL NUMBER X1054XXXX AND ABOVE

The choke assembly on the 360 has been redesigned. This new design is being incorporated into all new 360's.

The new choke lever is pictured below.



The choke rod is now routed through a hole in the carburetor chamber and is visible from the outside. The previous choke rod was routed through the throttle handle. A carburetor incorporating a new throttle lever is required with this new design.

Parts required to service the new system:

A-12286-A
A-96320
94765
94977

Fuel tank & throttle handle
Carburetor
Choke lever
Choke rod

Adjust your parts list accordingly.

Eddie Turner
Service Manager
Forestry Products

ds

DATE 2/82



TECHNICAL SERVICE BULLETIN

NO. 182-012

SUBJECT: DIAPHRAGM TYPE AUTOMATIC OILING SYSTEM

AFFECTS: XL CHAIN SAW ABOVE SERIAL NUMBER *D0070000

XL chain saws will no longer be built with the pressurized automatic oiling system. Beginning with lot number D007 all XL chain saws will have the diaphragm type oiling system. This is the same system that has always been used on the XL-2, Super-2, and VI-Super-2.

All parts used to produce the pressurized system are still available. Refer to the current XL chain saw parts list number 24923, Revision 2. This parts list will provide part numbers for both the pressurized system and the diaphragm type system.

Adjust your parts list accordingly.

Eddie Turner
Service Manager
Forestry Products

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DATE 3/82



TECHNICAL SERVICE BULLETIN

NO. 182-013**SUBJECT:** CERAMIC FUEL FILTER 96639**AFFECTS:** XL FAMILY, 240, 330 CHAIN SAWS

A new fuel filter is now available for servicing units with plastic fuel tanks. This is a one piece filter that is made of ceramic material.

This new ceramic filter has better filtering capabilities than the felt filters and it does not swell like the felt filters can.

At this time we will only use these ceramic filters in plastic fuel tanks. If they are used in metal tanks they may break as a result of hitting the tank during use. Felt filters (A-69923 and A-59251) are still available for units with metal tanks. However, use 96639 in place of A-69923 whenever possible.

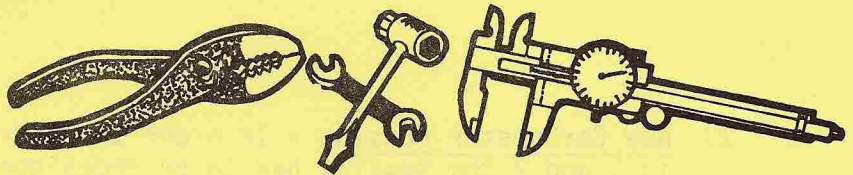
The above mentioned units will be produced with the new ceramic filters.

Note this part change in your parts list.

Eddie Turner
Service Manager
Forestry Products

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DATE 3/82



TECHNICAL SERVICE BULLETIN

NO. 182-014**SUBJECT:** PRODUCT IMPROVEMENTS**AFFECTS:** ST-80, ST-100

Below you will find a list of improvements that have been made to the gasoline trimmer line. All improvements will "back fit" all units built before 1982. This list will provide the new part numbers where necessary. Not all improved parts have new part numbers.

STARTER SYSTEM (ST-80, ST-100)

1. New Rope - Solid braided and flexible for longer life without fraying. The part number is 96648.
2. Powdered Metal Bushing - With larger radii to prevent fraying, with thicker walls to prevent eyelet from wearing through. Contained in starter housing A-93799.
3. Lubricate Starter Post - To prevent starter post wear grease pulley post when repairing starter. This will be done in production also.
4. New Rewind Spring - A non-bottoming spring (during rope pull-out) will help prevent spring failures.
5. Nylon Washer on Knot - To prevent rope pull-out and reduce spreading of pulley flanges. Part number 93862.

FUEL SYSTEM/CARBURETOR (ST-80, ST-100)

1. Adjusting Carburetor - The low speed needle will be accessible so that it can be adjusted without removing the air filter. The carburetor housing will have a hole in line with the needle. This hole will be sealed with plug number 96591.
2. New Fuel Filters - An additional fuel filter (a screen 96820 downstream of the ceramic filter) has been added. Also, the ceramic filter diameter has been increased from 1/4" to 7/16". The new filter is 93153.

continued

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3. New Carburetor Housing - In order to incorporate the changes discussed in 1 and 2 the housing had to be redesigned. Also, the inserts for the carburetor screws will be molded in place to prevent pull out. The new part number is A-95327-A.
4. Choke - The breathing hole has been removed to help unseat the carburetor fuel inlet needles that get stuck due to sour fuel and gum formation during prolonged storage periods. The new part number is 93892-B.
5. Fuel Shut-Off Clamp - Clamp force has been increased to assure shut-off when units are stored. The new part number is 95810-B.
6. Fuel Leaks at Handle - will be prevented with an improved fuel cap. No part number change, A-93805.
7. Air Filter Support - Improved to prevent the filter from choking the engine due to improper assembly. New part number 93890-A.
8. Governed Carburetor (ST-100 ONLY) - In order to reduce the amount of vibration experienced by the string head and to limit the top RPM when running in "free air" a new governed carburetor is available. This carburetor will limit engine RPM to 10,500 with short string. The new carburetor is a Walbro (WA-130) part number A-96530.

STRING ADVANCE SYSTEM

1. Low Speed Shift - Cocking of the low speed advance slider has been increased from 3500 to 4500 RPM. This means that the low speed shift occurs earlier (after the throttle is released) and that the shift will occur even if the idle speed is set too high. This is a significant improvement that can be felt immediately by the user. In order to make this change the low speed spring tension was decreased. The new spring for the ST-80 can only be obtained in slide and spring kit A-96199-A and kit number A-95689-A for the ST-100.
2. Weld-Not Tube and String Head - Tooling has been revised to form a smooth entry to the tube to eliminate burrs on the string which can hamper string advance. The tube will also be retained in the string head with a pin to stop the tube from pounding on the eyelet. This will again prevent burrs on the string as it waits to be advanced through the tube. The weld-not tube for the ST-80 will be made from a flexible, spring like material. The part number is A-96518. The string head for the ST-80 that accepts the new weld-not tube is A-95360-1. The material for the weld-not tube on the ST-100 did not change but, because it is now retained in the string head and includes a retaining pin, the part number is changed to A-96509. The new string head part number is A-94233-1.
3. String - The string used on the ST-100 will be changed from a diameter of .095 to .080 to increase the clearance through the weld-not tube, again preventing string burrs. The length of the string will be changed from 75 feet to 50 feet on the ST-100. This significantly improves the string advance by allowing the string to be spooled around a larger hub

which in turn minimizes string binding and welding. The part number for this new spool of string is DA-93954-A.

4. String Retainer - On the ST-100 the current retainer will be replaced by the lighter ST-80 retainer to prevent the retainer from spinning off. This retainer will also be improved by changing its material and adding an extra "O" ring and a screwdriver slot for improved tightening. The new part number is A-94929.

OTHER IMPROVEMENTS

1. Crankshaft Seal - A new seal will replace the current seal on the string head side of the crankshaft only. This new seal is designed to shear grass that comes in contact with it. This prevents grass from winding around the seal causing air leaks. The new seal is part number 96890. In order to use this part you must remove the old seal (94638) and spacer (69407).
2. Razor Repair Kit - In the past, if the razor that limits the string length had to be replaced a new muffler was required. Now a kit is available that will allow you to replace the razor only. This kit contains a razor and hardware for assembly. The kit part number is A-96889.



Eddie Turner
Service Manager
Forestry Products

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TECHNICAL SERVICE BULLETIN

NO. 182-015

SUBJECT: PRODUCT IMPROVEMENTS**AFFECTS:** ST-200

Below is a list of improvements that have been incorporated into the ST-200 for 1982. All improvements will "back fit" all units built before 1982. This list will include all new part numbers.

STARTER SYSTEM

1. New Rope - Solid braided and flexible for longer life without fraying. The part number is 96648.
2. Powdered Metal Bushing-With larger radii to prevent rope fraying, with thicker walls to prevent eyelet from wearing through. Contained in the starter housing. No part number change.
3. Lubricate Starter Post - To prevent starter post wear grease pulley post when repairing starter. This will be done in production also.
4. New Rewind Spring - A non-bottoming spring (during rope pull-out) will help prevent spring failures. New part number A-96999.
5. Nylon Washer on Knot - To prevent rope pull-out and reduce spreading of pulley flanges. Part number 93862.

FUEL SYSTEM

1. Clamp and Washer - The fuel filter will be retained to the fuel line by a clamp. Also, a washer will be added to the filter to prevent felt expansion. The clamp number is 93426 and the washer number is 64182.
2. Carburetor Spacer - Spacer (manifold) has been improved to reduce air leaks and the inserts will be molded in to prevent pullout. The new part number is 94454-A.
3. Carburetor Gasket - The gasket between the carburetor and spacer has been improved to eliminate lean conditions created when the pulse hole is blocked. The new number is 93505-A.

continued

DATE 3/82

STRING ADVANCE SYSTEM

The ST-200 will have the exact same improvements made to the string advance system as the ST-100. The ST-200 will have .080 diameter string. All part numbers are the same for the ST-200 as those for the ST-100.

OTHER IMPROVEMENTS

Flex Shaft - The flexible shaft will be lengthened and its square size increased to improve it's durability. The new part number is 94406-A.

Flex Shaft Housing - A longer steel insert will be used where the brush head or string head is fastened. This should minimize housing breakage in this area. Also, the tubing wall thickness has been increased. The new housing is part number A-96063-B.

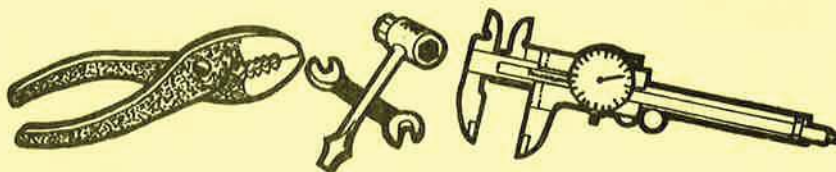
Felt Seal - To retain the shaft grease inside the flex shaft housing a felt seal has been added to the bottom of the housing. The part number is 96978.

Engine Screws - New washers and screws will be used to secure the engine housings to the engine. This will prevent loosening of the screws due to vibration. The screws are part number 96987 and the washers are part number 96984.

Razor Repair Kit - In the past, if the razor that limits the string length had to be replaced a new string head cover was required. Now a kit is available that will allow you to replace the razor only. This kit contains a razor and hardware for assembly. The kit part number is A-96889.



Eddie Turner
Service Manager
Forestry Products



TECHNICAL SERVICE BULLETIN

NO. 182-016

SUBJECT: 1) STARTER PULLEY 69158-A
2) SWITCH LEAD A-96378

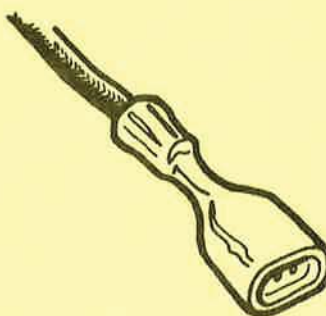
AFFECTS: 240 CHAIN SAW

1. A quantity of 240 chain saws have been built with pulley number 94562-A in the starter housing. The correct pulley for the 240 is part number 69158-A.

This substitution does not create an immediate problem. The only foreseeable problem would be that the pulley may break at some point in time. If this should occur, use pulley 69158-A to make the repair.

Pulley 69158-A and pulley 94562-A are totally interchangeable except when used on the 240.

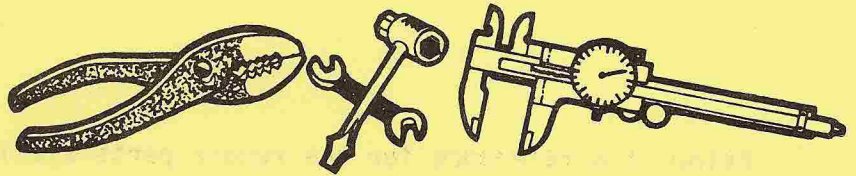
2. Some switch leads, part number A-96378 may have the wrong style connector. Compare your stock to the picture below. The correct connector is colored red and the incorrect is pink. DO NOT use the pink ones for service. They will break after a short time.

INCORRECTCORRECT

Eddie Turner
Service Manager
Forestry Products

bh

DATE 3/18/82



TECHNICAL SERVICE BULLETIN

NO. 182-017**SUBJECT:** REPAIR PARTS**AFFECTS:** ALL HOMELITE CHAIN

Homelite will no longer supply left and right hand cutters for repairing chain. It has been determined by our chain suppliers that replacing only one cutter increases the chance of kickback, especially if the replacement cutter is not sharpened to a length equal to the length of the used cutters.

Also, we will no longer supply the following list of repair parts individually. The reasons for this is as stated above plus the fact that most of these parts are included in the repair kit. Another factor is that the overall usage of these individual parts is extremely low and the usage of the repair kits is high.

PARTS NO LONGER SUPPLIED

Right Hand Cutter
Left Hand Cutter
Preset Left Hand Cutter
Drive Link
Tie Strap
Preset Tie Strap
Rivets

We will continue to supply the repair kits and joining kits.

REPAIR KIT CONTAINS

2 - Preset Tie Straps
2 - Tie Straps
1 - Drive Link

JOINING KIT CONTAINS

8 - Preset Tie Straps
8 - Tie Straps

DATE 3/19/82

Below is a reference for the repair parts available for the various types of chain Homelite supplies:

PART NUMBER

DESCRIPTION

1/4" Pitch

C1-92007-A
C1-92008-A

25-C50-7 Repair Kit
25-C50-8 Joining Kit

37 Low Profile

H1-92007-E
H1-92008-E

R37-C50-7 Repair Kit
R37-C50-8 Joining Kit

.375 Pro Cut

G1-92007-G
G1-92008-G

R375C50-7 Repair Kit
R375C50-8 Joining Kit

NOTE: FOR D375TD50-59 CHAIN (190) USE G1-92007-G

3/8" Semi-Chisel (38M50) and
3/8" Chipper (38C50)

J1-92007-A
J1-92008-A

38-C50-7 Repair Kit
38-C50-8 Joining Kit

3/8" Chisel (38L50)

J1-92007-E

38-L50-7 Repair Kit

3/8" Semi-Chisel Low Kickback
(38ME-50)

J1-92007-L

38-ME50-7

.404 Semi-Chisel

K3-92007-R
K3-92008-R

40M63-7R Repair Kit
40M63-8R Joining Kit

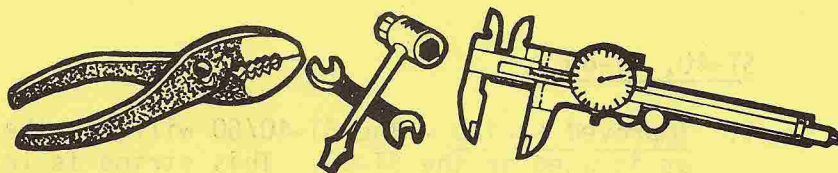
1/2" Chipper

M3-92007-B
M3-92008-B

50-C63-7 Repair Kit
50-C63-8 Joining Kit



Eddie Turner
Service Manager
Forestry Products



TECHNICAL SERVICE BULLETIN

NO. 182-018

SUBJECT: PRODUCT IMPROVEMENTS

AFFECTS: ST-20, ST-40, ST-60 STRING TRIMMERS

Below you will find a list of improvements that have been made to the electric string trimmers. These improved parts will "back fit" all units built before 1982. This list will provide the new part numbers where necessary. Not all improved parts have new part numbers.

ST-20

1. Motor shaft material has been changed to fatigue proof steel to increase shaft strength which prevents shaft bending during service, rough handling, or even normal use. A bent shaft increases vibration levels, overloads the motor, and prevents string advance from working properly. Motor shaft thread run out has also been improved. The new part number is 95120-A.
2. Motor cooling has been improved by increasing the air inlet area. Air inlets can be clogged during usage and reduce air flow causing the motor to overheat. An increased air inlet area reduces inlet clogging and increases cooling air flow. Also, motor support and "fit up" have been improved to prevent motor looseness which increases vibration. These improvements were made through changes to the motor housings. The new part numbers are A-95104-A (left housing) and 95105-A (right housing).
3. String head balance has been improved. This improved balance reduces vibration and thus reduces the power required to swing a full swath of string, thus, more reserve power is available for cutting grass. This, in turn, reduces the overload which can cause motor failures. The new string head part number is A-95128-B.
4. The slider springs, both high and low speed, have been changed to insure that the string will advance whenever more string is needed. The change in the low speed spring also allows the string to advance more quickly after the trigger has been released. These new springs are contained in spool and string part number DA-95159-B. Service now offers a slide and spring kit for the ST-20 that will contain the new springs. The part number is A-96587.

DATE 3/82

ST-40, ST-60

1. Improved string - The ST-40/60 will use the same white string (.065) as is used on the ST-20. This string is less prone to welding at elevated temperatures (created by vibration). The replacement spool and string for the ST-40/60 will also be supplied with this improved white string. This new replacement spool will also be common to both the ST-40 and the ST-60. The new part number is DA-95916-A and replaced both the DA-95160 (ST-40) and DA-95916 (ST-60).
2. Motor support has been improved by revising the plastic housings to prevent motor looseness which greatly increased unit vibration. High vibration causes string welding or string binding which affects string advance. This improvement also reduces motor overload, which of course, reduces the chance of motor burn up. On the ST-40 the new motor housing part numbers are 95155-A (left) and 95154-A (right). For the ST-60 the numbers are 95107-A (left) and 95106-A (right).

SPECIAL NOTE:

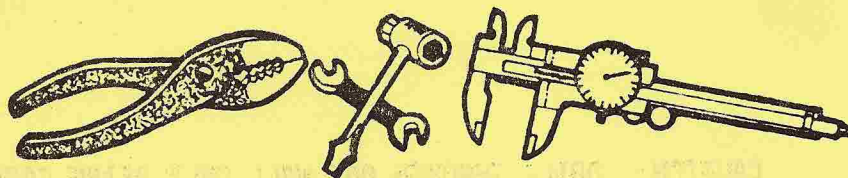
Some ST-40 and ST-60 trimmers were built with a metal shim between the motor and the housing. This was done to immediately solve the loose motor problem. The shim is available through service for these units and any others you may have with this problem. The part number is 96816.

3. Missing string cut-off blades - A large number of burnt motors were caused by motor overloads created by string wrapped around the shaft. It has been confirmed that a large percentage of string cut-off blades were not being installed before use by the consumer. A new handle hang tag has been added to reinforce the importance of installing the cut-off blade to the consumer. The cut-off blade has also been strengthened to prevent breakage. This, again, will reduce motor overload and string wrap up around the motor shaft. The new part numbers are A-95127-A (ST-40) and A-95115-A (ST-60).
4. Slide & spring kit A-96586 - Is now available for the ST-40 and ST-60. Last year these parts were not available separately. In order to obtain them, a new spool and string had to be purchased.



Eddie Turner
Service Manager
Forestry Products

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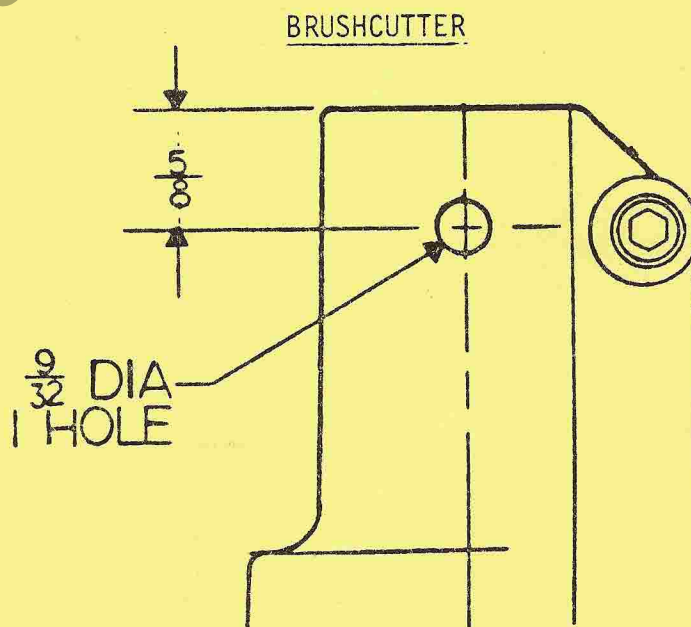
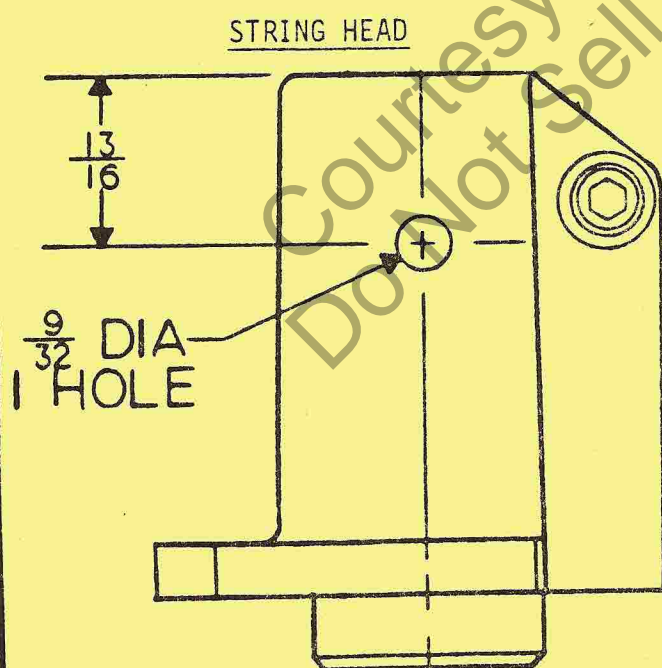
TECHNICAL SERVICE BULLETIN

NO. 182-019

SUBJECT: BRUSHCUTTER KIT A-94479-A**AFFECTS:** ST-200

Before the 1982 season all ST-200's were built with the locating hole for the brushcutter or string head in front of the tube. Some tubes of this type broke just above the brushcutter or string head. In order to correct this in the 1982 season, the locating hole was moved from the front to the side and raised closer to the top of the brushcutter or string head housing.

All units built in 1982 have the hole on the side of the tube. A problem arises when a new 1982 ST-200 (hole in side of tube) is matched with an old brushcutter (hole in front of housing). In order to solve this problem use the templates below to drill a new locating hole in the side. Use a $\frac{9}{32}$ " (.2812) drill bit.



continued

DATE 3/25/82

CAUTION: DRILL THROUGH ONE WALL ONLY BEING CAREFUL NOT TO HIT THE
SHAFT. ALSO COVER THE EXPOSED BALL BEARING WITH PAPER TO
PREVENT METAL SHAVINGS FROM ENTERING IT.

You may also find that when a new tube (hole in side) from service parts
is put on an older ST-200, you must drill the existing string head and/or
brushcutter.



Eddie Turner
Service Manager
Forestry Products

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TECHNICAL SERVICE BULLETIN

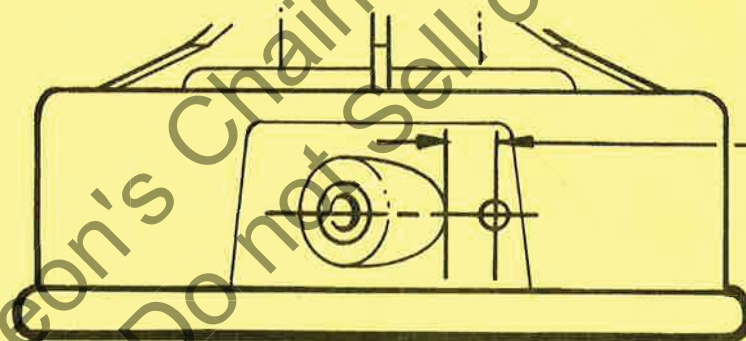
NO. 182-020

SUBJECT: 1) MODIFYING STRINGHEADS TO ACCEPT NEW WELDNOT TUBES
2) NEW CARBURETORS

AFFECTS: ST-80, ST-100, ST-120 and ST-200

1. As stated in a previous bulletin, the Weldnot tubes are now retained to the stringhead with a cotter pin. A hole is drilled through the stringhead near the string eyelet. The pin is then inserted into the hole and spread apart. This keeps the Weldnot tube from "pounding" the eyelet.

Old stringheads can be updated to accept the new Weldnot tubes. A hole must be drilled near the eyelet for the cotter pin. Refer to the drawing below for the location of this hole. The hole diameter is $\frac{1}{8}$ " (.125). The distance from the eyelet to the center of the hole is $\frac{1}{4}$ " to $\frac{3}{8}$ ".



2. Below is an updated list of the most current carburetors to be used on the gas trimmers.

ST-80

A95377 (Walbro WA-83)
96625 Repair Kit
94548 Check Valve Kit
64229 Inlet Needle

Continued

DATE 3/82

ST-100

A96530 (Walbro WA-130)
96625 Repair Kit
94548 Check Valve Kit
64229 Inlet Needle

NOTE: This is a governed carburetor. It will limit the top engine R.P.M. to 10,500 with short string. For best performance, this is the carburetor to use on the ST-100.

ST-120

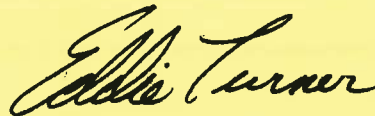
A95628 (Zama)
95856 Repair Kit

A93938-A (Walbro WA-43A)
94549-B Repair Kit
94548 Check Valve Kit
64229 Inlet Needle

NOTE: Because the ST-120 is a vibration isolated trimmer, a governed carburetor could not be used. Therefore, it was necessary to govern the engine speed with the module part number 97036. DO NOT use module 94711 on the ST-120. For identification, the 97036 is equipped with a red ground wire and the 94711 is equipped with a black ground wire.

ST-200

A96949 (Walbro HDC-69)
95688 Repair Kit
93910-A Check Valve Kit
64229 Inlet Needle



Eddie Turner
Service Manager
Forestry Products

bh



TECHNICAL SERVICE BULLETIN

NO. 182-021

SUBJECT: 1. SOLID STATE IGNITION SYSTEM
2. IDLE SPEED SCREWS FOR TILLOTSON CARBURETORS

AFFECTS: 150-A0

1. A new solid state ignition module service assembly number A97026 is available for the 150-A0. This assembly will convert any model 150-A0 from the breaker point ignition system to a "one piece" solid state system. Each assembly comes with an instruction sheet (see back). It is important that you read and follow these instructions closely.

All 150-A0 chain saws, produced in 1982, will have a solid state ignition. They can be identified by the letter "D" in the second position of the serial number. Example: 400321224.

2. The Tillotson carburetor now being used on the 150-A0 is an HK-3D. This model has a 12-32 idle speed screw. Previous HK carburetors had a 10-32 screw. Refer to the list below when ordering idle speed screws.

<u>Carburetor</u>	<u>Description</u>	<u>Part #</u>
HK-3D	Screw (12-32)	94908
HK-3C, 3B, etc.	Screw (10-32)	70119
	Spring	70197

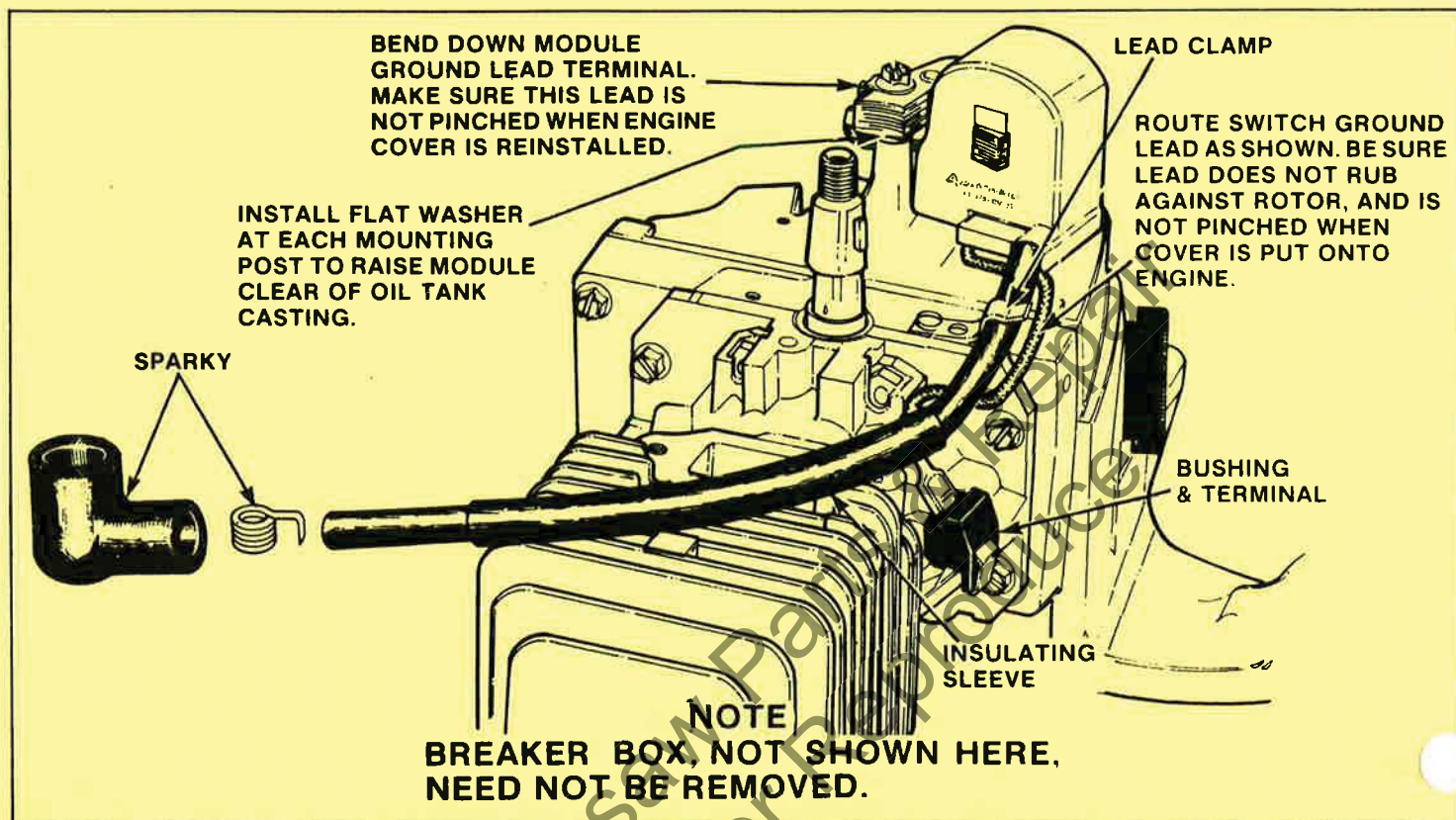
Eddie Turner
Service Manager
Forestry Products

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DATE 5/82

INSTRUCTIONS

FOR CONVERTING MODEL 150 AO TO SOLID STATE IGNITION WITH PARTS FROM KIT #A-97026



A) KIT #A-97026 INCLUDES:

A-96814 Module	1
84101 Washer-Flat (Spacer)	2
82248 Screw-Hex Hd. Mach.	2
96907 Sleeve-Insulating	1
A-33055 Sparky (Terminal & Cover)	1

B) REMOVING OLD PARTS

NOTE

For clarity, the picture of the new installation shows the entire old ignition stripped from the unit. This can be done, but the following instructions tell how the conversion can be made without removal of the breaker box.

1. Remove the engine from the cover. Remove the rotor.
2. If you leave the breaker box in place, cut off the stop switch lead wire as close to the breaker box as possible.
3. Disconnect the siamese stop switch from the bushing and terminal.
4. Remove old coil and hi-tension lead, the condenser and the terminal block along with their fastening parts.

C) INSTALLING KIT #A-97026

1. Using the #84101 flat washers as spacers between the mounting posts and the new module (A-96814), secure module to unit with the two #82248 screws. Note that the short module ground lead must be secured under the head of the bottom screw.
2. Tuck the switch ground lead through the space between the mounting posts and under the module. Route the ground lead as illustrated above.
3. Bend down the terminal of the short module ground lead close to the metal coil core. This is necessary to fit inside the engine cover.
4. Connect the switch ground lead to the existing bushing and terminal.
5. Slide the 5-inch insulating sleeve (96907) onto the hi-tension lead and run it right up to the lead clamp. This sleeve insulates the lead from the cylinder.
6. Install the Sparky spring terminal and cover A-33055 on the hi-tension lead in the usual manner, and connect the lead to the spark plug.
7. After setting the rotor air gap to .012", reinstall the engine in its cover. Be sure the wires are not pinched by the cover.

NOTE

Check the length of the engine cover fastening screws. The screw at the module must not go past the casting boss or it will penetrate the module.

HOMELITE TEXTRON

Homelite Division of Textron Inc.



TECHNICAL SERVICE BULLETIN

NO. 182-022

SUBJECT: CRANKSHAFTS 67168-1, 67168-2, 67168-3, 67168-4**AFFECTS:** 900 SERIES SAWS, XL-98-A, XLS2 PUMPS

There seems to be some confusion as to which crankshaft to use when servicing the above mentioned models.

Refer to the list below when ordering crankshafts.

1. 67168-1 - This crankshaft services the 900 series saws and XL-98 models that were produced with breaker point ignition systems. Because these units have not been produced since 1974, crankshaft 67168-1 will not be supplied when present quantities are exhausted.
2. 67168-2 - Will service XLS2-1A pumps having point ignition systems.
3. 67168-3 - Is to be used on all SXL-925's built with CD or solid state ignition. This shaft does not have a point cam.
4. 67168-4 - Services all XL-98-A saws, XLS2-1B pumps and XLS2-2 pumps. These units have CD or solid state ignition systems.

Listed on reverse side are other identifying factors to be considered when ordering these crankshafts. We would advise that you check the overall length and clutch thread size of the shaft you are replacing before ordering.

Continued

DATE 5/82

<u>Part No.</u>	<u>Model</u>	<u>Overall Length</u>	<u>Clutch Thread</u>	<u>Point Cam</u>
67168-1	XL-923 XL-924 VI-944	6 27/32" (6.8438)	1/2-20	Yes
67168-2	XLS2-1 XLS2-1A	6 17/32" (6.5312)	3/8-24	Yes
67168-3	SXL-925 SXL-925W XL-924W VI-955	6 27/32" (6.8438)	1/2-20	No
67168-4	XL-98A XLS2-1B XLS2-2	6 17/32" (6.5312)	3/8-24	No

It is important that you adjust your parts list according to these changes.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

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TECHNICAL SERVICE BULLETIN

NO. 182-023

SUBJECT: RECOIL SPRING A95233

AFFECTS: XL FAMILY, SEZ-A0 AND STRING TRIMMERS

It has been discovered that recoil spring 69217, now supplied in Service Parts, may not fit some SEZ-A0 with plastic starter housings.

In order to solve this problem, and to comply with requests from the field, Service now offers recoil spring A95233 with the metal container.

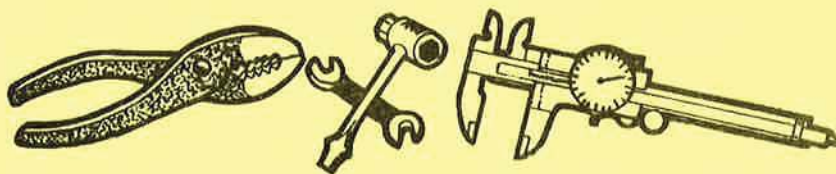
Recoil spring A95233 is now used in production on the models mentioned above.

Spring 69217 is still available to service XL family saws built with magnesium starter housings.

Eddie Turner
Service Manager
Forestry Products

bh

DATE 5/82



TECHNICAL SERVICE BULLETIN

NO. 182-024

SUBJECT: STRING WILL NOT ADVANCE - HIGH SPEED SPRING

AFFECTS: ST-40, ST-60

When a ST-40 or ST-60 is returned because the string will not advance, it may be the high speed spring or the unit is being operated under low voltage conditions. If this occurs, remove the high speed spring (the larger of the two) and using pliers compress the spring completely several times. This will relax the spring and allow the high speed slide to move at a lower R.P.M.

Before installing a slide and spring kit A-96586, compress the spring as described above to insure best operation. Also, do this before installing the spool and string #DA95916-A.

NOTE: Lower than normal R.P.M.'s may be experienced if the customer uses an extension cord that is too long and/or the gauge of the wire is not heavy enough. Also, lower than normal R.P.M.'s will be experienced if the unit is run under a low voltage condition (less than 110 volts).

In order to correct the situations noted above, our recommendations for extension cords for the ST-40 and ST-60 are as follows. Use no more than 100 feet of #18 wire or no more than 150 feet of #16 wire. Homelite offers a 50 foot extension cord made from #16 AWG-2 wire. The part number is 94305.

Eddie Turner
Service Manager
Forestry Products

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DATE 5/82



TECHNICAL SERVICE BULLETIN

NO. 182-025

SUBJECT: 1. SPROCKETS FOR CHAIN BRAKE MODELS
2. SPARK PLUG FOR HELI-COIL REPAIRED CYLINDERS

AFFECTS: ALL CHAIN SAWS

1. Our latest N.P.P.L. lists several sprockets that have a "dash 2" suffix. These sprockets are more expensive than the "plain number" sprocket because they are tungsten coated to be used with chain brake models only.

NOTE: a) A suffix number does not supersede an existing part number.
b) A suffix letter does supersede an existing part number.

EXAMPLE:

A12294-2 does not supersede A12294
93703-B does supersede 93703-A
69659-1A does supersede 69659-1

2. When using a heli-coil insert in a cylinder, you must use a spark plug with a gasket. If the unit originally had a tapered plug substitute with the plug listed below:

Original Plug

65130-S (DJ-6J)
68616-S (DJ-7J)
96169 (DJ-7Y)

Substitute

63547-S (CJ-6)
63547-S (CJ-6)
63547-S (CJ-6)

Eddie Turner
Service Manager
Forestry Products

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DATE 5/82



TECHNICAL SERVICE BULLETIN

NO. 182-026

SUBJECT: 1. NEW HANDLEBAR AND TOP ENGINE HOUSING (LOT #C309 AND ABOVE)
2. BUMPER SPIKES

AFFECTS: 330 CHAIN SAW

1. The top engine housing and handlebar have been redesigned to increase the distance between the handlebar and handguard or chain brake paddle. The new design allows the handlebar to angle back toward the operator. See illustration on back.

Old handlebars and housings cannot be mixed with new handlebars and housings because the handlebar and mounting pocket angles are different. All old parts will remain in service for earlier models.

A plastic throttle lock pin and bushing has been incorporated into the new top engine housing to replace the metal pin used in older housings. The oil pickup line was changed to a line with a smaller outside diameter and smaller wall thickness. This new line is more flexible and will "find" the oil faster when the saw is placed in different positions. These new parts are to be used with the new top engine housing only. Refer to the parts listed below.

<u>New Parts</u>	<u>Description</u>	<u>Old Parts</u>
A96419-A	Engine Housing	A95203
A93853-1	Handlebar	A93853
95671	Throttle Lock Pin	94378
95989	Bushing	
70309-26	Oil Line	93112-26

2. The 330 parts lists shows two bumper spikes. Both spikes will fit any 330. However, the 95838 is designed for the chain brake model. It can be mounted without removing the brake cover and is 1/2" shorter in width than the A12272-C.

Continued

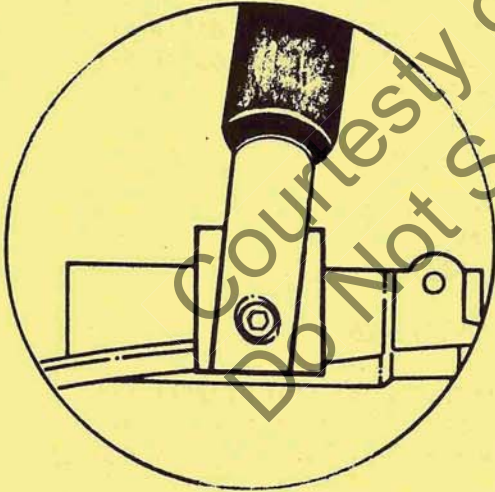
DATE 6/82

Currently kit A12272-C contains a spike and two 10-24 x 3/8 screws (88048). In order to use this spike on later 330 models you must also obtain one 10-24 x 3/4 screw (88051) to substitute for one of the 88048 screws. Soon kit A12272-C will be superseded by A12272-D and will contain two 88048 screws and one 88051. The "-D" kit will fit both the 330 and 360.

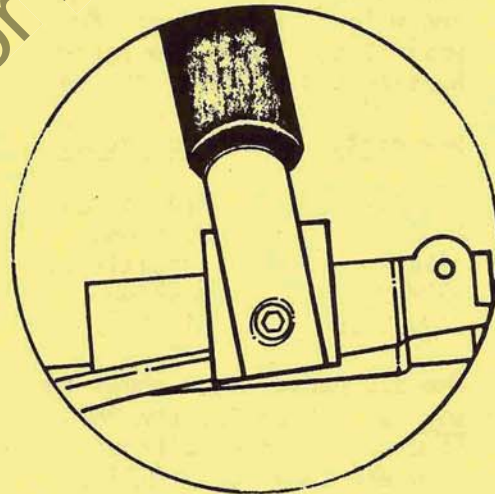
Eddie Turner

Eddie Turner
Service Manager
Forestry Products

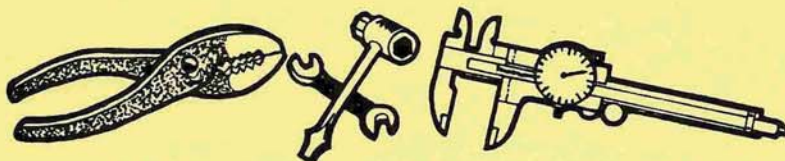
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OLD - ANGLES FORWARD



NEW - ANGLES BACK



TECHNICAL SERVICE BULLETIN

NO. 182-027**SUBJECT:** NEW CHAIN BREAKER ANVIL**AFFECTS:** "RAKER III" CHAIN - 38ME50

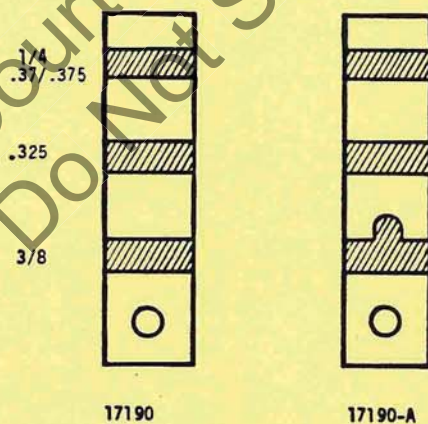
Homelite has introduced a low kickback chain called "Raker III". This chain has three depth gauges or "rakers". (See illustration #1.) The depth gauge tool you are now using for other chain will work on Raker III if you widen the slot to 3/16". New depth gauge tools will be made available as soon as possible. These tools will supersede the existing tools and will service all Homelite chain.

Illustration #1



Also, in order to "break" this chain for repair, it will be necessary to use the new 17190-A anvil. (See illustration #2.)

Illustration #2



17190

17190-A

Eddie Turner
Service Manager
Forestry Products

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DATE 6/82



TECHNICAL SERVICE BULLETIN

NO. 182-028

SUBJECT: 1. FUEL FILTER KIT A95493-D
2. INSTALLATION OF NEW SEAL 96890
3. THROTTLE ROD - ST-200

AFFECTS: ST-80, ST-100 AND ST-200

1. A larger diameter fuel filter (7/16") has been incorporated into the 1982 ST-80 and ST-100 trimmers. In order to use this filter, the carburetor housing filter cavity was enlarged. These changes are illustrated in parts lists 17503 Rev. 1 and 17208 Rev. 2.

The old filter 96184 is 1/4" in diameter and is still available. It is also available in kit #A95493-D until present quantities of the kit are exhausted.

2. To prevent grass from entering the oil seal on the string side of the crankshaft, a new "marine type" oil seal 96890 is now available. This seal will "shear" grass and weeds that come in contact with it. New units that have the seal factory installed will not have a seal spacer (see illustration #1A). When installing this seal on older units, it will be necessary to remove the spacer shown in illustration 1B. The spacer can be removed without separating the crankcase and cylinder.

NOTE: When installing this seal it is important that you discard the plastic grass shield. Two grass shield designs exist on older models. See illustration 2.

Illustration 2



Grass Shield - Discard

Continued

DATE 6/82

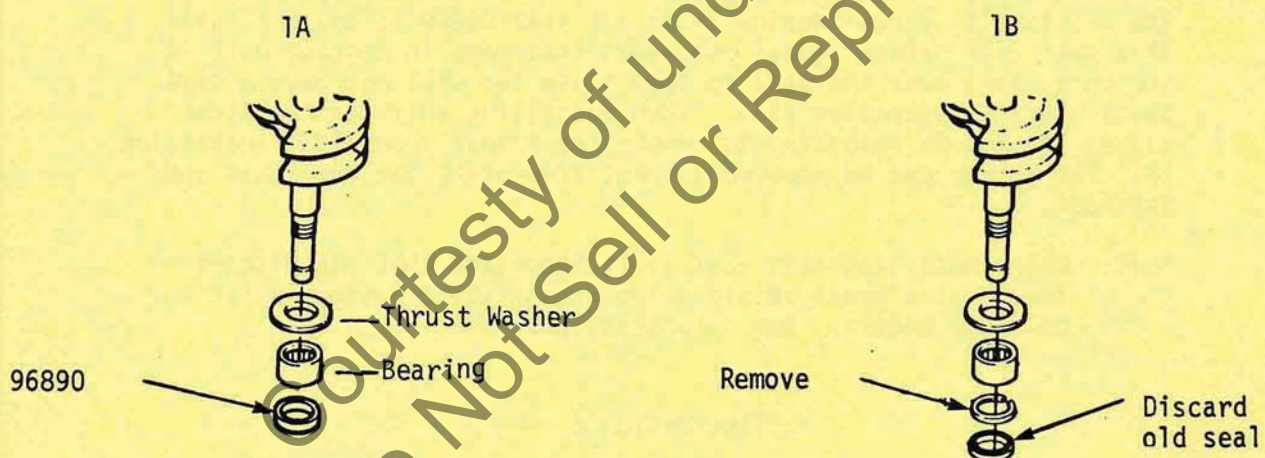
3. After assembling the engine into the left and right housings, on the ST-200, depress and release the trigger several times making sure that it returns to the idle position. If it does not, adjust the throttle rod by bending it slightly.

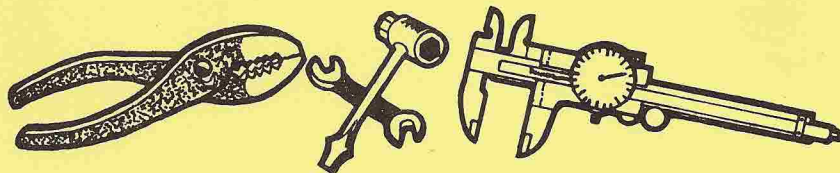
Eddie Turner

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Illustration 1





TECHNICAL SERVICE BULLETIN

NO. 182-029

SUBJECT: CHAIN CROSS REFERENCE

AFFECTS: ALL HOMELITE SAW CHAIN

Attached you will find a list of all the chain and repair parts currently supplied by Homelite.

The left hand column, marked "Description" is the common term used to describe a particular piece of chain. The right hand column, marked "Homelite #", is used to transform the description number into one the computer will accept.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

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DATE 6/82

CHAIN CROSS REFERENCEDESCRIPTION HOMELITE #**1/4**LOOPS - 1/4" PITCH

25C50-61 C1-92061-A
 25C50-69 C1-92069-A

REELS - 1/4" PITCH

25C50-R25 C1-92225-A 25'
 25C50-R100 C1-92300-A 100'

BLISTER PACK - LOOPS 1/4" PITCH

D-25C50-69 D-92400

REPAIR PARTS - 1/4" PITCH

25C50-7 C1-92007-A Repair Kit
 25C50-8 C1-92008-A Joining Kit

3/8LOOPS - 3/8" LOW PROFILE

R37C50-37 H1-92037-E
 R37C50-42 H1-92042-E
 R37C50-48 H1-92048-E
 R37C50-53 H1-92053-E

REELS - 3/8" LOW PROFILE

R37C50-R25 H1-92225-E 25'
 R37C50-R100 H1-92300-E 100'

BLISTER PACK - LOOPS - 3/8" LOW PROFILE

DR37C50-37 D-92421
 DR37C50-42 D-92411-A
 DR37C50-48 D-92412-A
 DR37C50-53 D-92413-A
 DR37C50-59 D-92424-A
 DR37C50-64 D-92429

REPAIR PARTS - 3/8" LOW PROFILE

R37C50-7E H1-92007-E Repair Kit
 R37C50-8E H1-92008-E Joining Kit

D375TD50-59 D-92425-A
 Use G1-92007-G Repair Kit

3/8LOOPS - 3/8" PRO CUT

R37C50-42CN H1-92042-G
 R37C50-48CN H1-92048-G
 R37C50-50CN H1-92050-G
 R37C50-53CN H1-92053-G
 R37C50-59CN H1-92059-G
 R37C50-64CN H1-92064-G

REELS - 3/8" PRO CUT

R37C50-R25CN H1-92225-G 25'
 R37C50-R100CN H1-92300-G 100'

DESCRIPTION HOMELITE #REPAIR PARTS - 3/8" PRO CUT

R37C50-7G H1-92007-G Repair Kit
 R37C50-8G H1-92008-G Joining Kit

3/8LOOPS - 3/8" PITCH SEMI-CHISEL

38M50-48 J1-92048-K
 38M50-49 J1-92049-K
 38M50-52 J1-92052-K
 38M50-54 J1-92054-K
 38M50-55 J1-92055-K
 38M50-58 J1-92058-K
 38M50-59 J1-92059-K
 38M50-60 J1-92060-K
 38M50-69 J1-92069-K
 38M50-70 J1-92070-K
 38M50-71 J1-92071-K
 38M50-81 J1-92081-K
 38M50-84 J1-92084-K
 38M50-92 J1-92092-K
 38M50-98 J1-92098-K
 38M50-103 J1-92103-K

REELS - 3/8" PITCH

38M50-R25 J1-92225-K 25'
 38M50-R100 J1-92300-K 100'

BLISTER PACK - LOOPS 3/8" PITCH

D38M50-59 D-92402-A
 D38M50-60 D-92405-A
 D38M50-70 D-92408-A
 D38M50-81 D-92427

REPAIR PARTS - 3/8" PITCH

38C50-7 J1-92207-A Repair Kit
 38C50-8 J1-92008-A Joining Kit

3/8LOOPS - RAKER III CHAIN

38ME50-59 J1-92059-L
 38ME50-60 J1-92060-L
 38ME50-70 J1-92070-L
 38ME50-81 J1-92081-L

REELS - 3/8 RAKER III CHAIN

38ME50-R25 J1-92225-L 25'
 38ME50-R100 J1-92300-L 100'

REPAIR PART - RAKER III CHAIN

38ME50-7 J1-92007-L Repair Kit

BLISTER PACK - RAKER III CHAIN

D38ME50-59 D-92428
 D38ME50-70 D-92431
 D38ME50-81 D-92432

CHAIN CROSS REFERENCEDESCRIPTION HOMELITE #**3/8**LOOPS - 3/8" PITCH

38L50-59	J1-92059-E
38L50-70	J1-92070-E
38L50-81	J1-92081-E
38L50-92	J1-92092-E
38L50-98	J1-92098-E
38L50-104	J1-92104-E
38L50-116	J1-92116-E
38L50-135	J1-92135-E

REEL - 3/8" PITCH

38L50-R25	J1-92225-E
38L50-R100	J1-92300-E

REPAIR PARTS - 3/8" PITCH

38L50-7	J1-92007-E Repair Kit
---------	-----------------------

.404LOOPS - .404 PITCH .50 GAUGE

40C50-55	K1-92055-A No longer supplied
40C50-73	K1-92073-A when exhausted.

LOOPS - .404 PITCH .063 GAUGE

40M63-62	K3-92062-R
40M63-64	K3-92064-R
40M63-71	K3-92071-R
40M63-73	K3-92073-R
40M63-74	K3-92074-R
40M63-82	K3-92082-R
40M63-89	K3-92089-R
40M63-94	K3-92094-R
40M63-107	K3-92107-R
40M63-123	K3-92123-R
40M63-139	K3-92139-R
40M63-165	K3-92165-R

DESCRIPTIONHOMELITE #**.404**REELS - .404 PITCH .063 GAUGE

40M63-R25	K3-92225-R 25'
40M63-R100	K3-92300-R 100'
40AL63-R100	K3-92300-G 100'

REPAIR PARTS - .404 PITCH .063 GAUGE

40M63-7R	K3-92007-R Repair Kit (for 40C & 40M63)
40M63-8R	K3-92008-R Joining Kit

1/2LOOPS - 1/2" PITCH

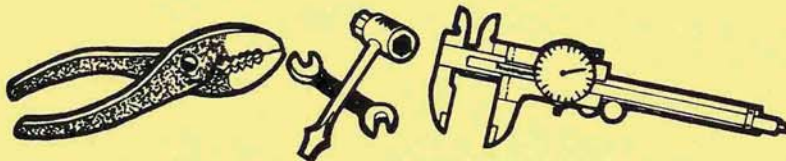
50C63-51	M3-92051-B
50C63-52	M3-92052-B
50C63-57	M3-92057-B
50C63-58	M3-92058-B
50C63-63	M3-92063-B
50C63-64	M3-92064-A
50C63-67	M3-92067-B
50C63-76	M3-92076-B
50C63-87	M3-92087-B
50C63-100	M3-92100-B
50C63-113	M3-92113-B
50C63-127	M3-92127-A
50C63-134	M3-92134-B

REELS - 1/2" PITCH

50C63-R25	M3-92225-B 25'
50C63-R100	M3-92300-B 100'

REPAIR PARTS - 1/2" PITCH

50C63-7	M3-92007-B Repair Kit
50C63-8	M3-92008-B Joining Kit



TECHNICAL SERVICE BULLETIN

NO. 182-030

SUBJECT: 1. NEW OIL PUMP ASSEMBLY A95049
2. CARBURETORS

AFFECTS: 330 CHAIN SAW

1. A new oil pump assembly A95049 is now available for the 330. This assembly includes all of the latest improvements that have been made to the pump and helical spring. This assembly includes:

Oil pump	Not supplied separately
Helical spring	94634
Diaphragm	A94675
Pump cover	94395
Instruction sheet	17711

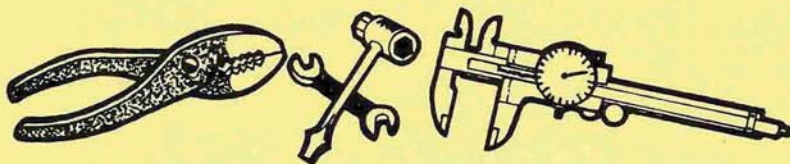
Extra ribs have been added to the cover to prevent warpage which creates a pulse leak. This new cover will be available as soon as possible. Until it is available the old cover may be sanded flat to solve the problem.

2. Currently 330's are being built with either a Zama carburetor (A96421) or a Walbro WT-4 (A94380-A). Earlier models used a Walbro WT-1. This carburetor may be replaced with either the Zama or Walbro WT-4.

Eddie Turner
Service Manager
Forestry Products

bh

DATE 6/82



TECHNICAL SERVICE BULLETIN

NO. 182-031

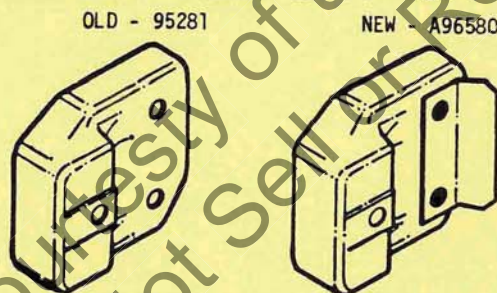
SUBJECT: 1. WEST COAST MUFFLER - VAPOR LOCK
2. OIL LINE 65137

AFFECTS: SEZ-A0

1. This spring we have experienced a number of complaints regarding the SEZ-A0 and vapor lock. The only difference between these units and other SEZ-A0 saws is the addition of the West Coast muffler.

The muffler cap on the West Coast muffler directs the exhaust toward the drivecase cover. As a result the saw will run hotter because the excess heat from the cover transfers through the unit. You may also see discolored air filters and carburetors due to the direction of the exhaust. Heat from these sources contributes to vapor lock.

A deflector has been added to the existing muffler cap to guide the exhaust away from the drivecase cover. See illustration below.



All SEZ-A0's with serial number #D1380000 and above will have the new deflector.

2. Oil line 65137 was obsoleted and superseded by 70310-09 in error. This line is available through your Regional Distribution Center.

Eddie Turner
Service Manager
Forestry Products

bh

DATE 6/82



TECHNICAL SERVICE BULLETIN

NO. 182-032

SUBJECT:

1. BUMPER SPIKE FASTENING NUTS #81261
2. CHAIN BRAKE #A96941
3. SPUR SPROCKET #A95621

AFFECTS: 410 CHAIN SAW

1. The new stop nut, part #81261, will increase the clamping force attaching the bumper spike to the crankcase.
2. A complete chain brake kit can now be ordered through Service Parts. The part number is A96941.
3. Spur sprockets A95621 are available as an alternate to the rim type used in production. Washer 63463 must be used between the spur sprocket and oil pump.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

bh

DATE 7/82



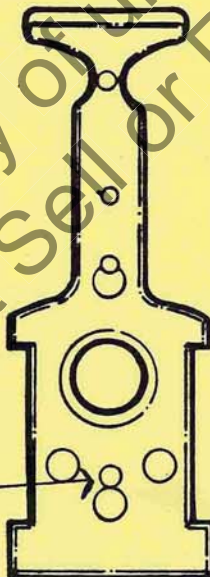
TECHNICAL SERVICE BULLETIN

NO. 182-033**SUBJECT:** STRING TRIMMER FLOODS EASILY DURING START-UP**AFFECTS:** ST-80 AND ST-100

Some trimmers are being returned because the owners have not been able to start them. The majority of these units are flooded and can be started after removing, cleaning and reinstalling the spark plug.

Your customer may complain that the trimmer floods too easily and that he cannot hear the engine "fire" the first time. This can be remedied by drilling a small hole in the choke. See the illustration below for size and location.

Drill Through
#43 Drill Bit



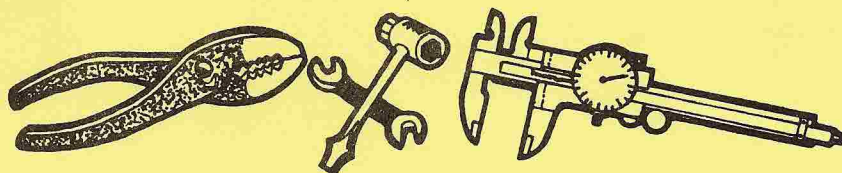
The hole will allow more air to enter the carburetor venturi creating less vacuum and therefore drawing less fuel into the engine.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

bh

DATE 8/82



TECHNICAL SERVICE BULLETIN

NO. 182-034**SUBJECT:** CARBURETORS**AFFECTS:** ST-100 AND ST-120

There seems to be growing confusion as to what carburetor should be used on the ST-100 and ST-120. The following information should help clear up this confusion.

Both the ST-100 and ST-120 have a governed high speed. This was done because it has been determined that the excessive speeds sometimes reached with short string was causing certain types of string assembly failures. The simplest way to govern the ST-100 was to install a governor valve in the carburetor. However, because the ST-120 is vibration isolated a governed carburetor would not function properly mounted to the engine. The alternative was to install a governed module and use the same carburetors used on the ST-100 in previous years.

Below is a list to refer to when ordering parts.

ST-100

Governed by the carburetor
A96530 Carburetor Walbro WA-130

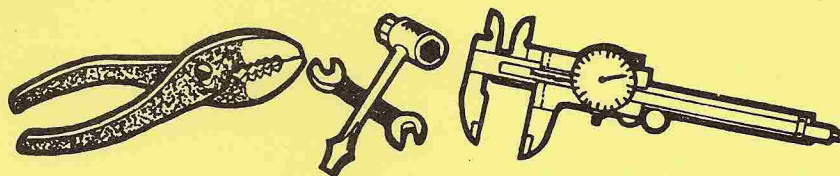
ST-120

Governed by the module 97036
A93938-A Carburetor Walbro WA-43-A
A95628 Carburetor Zama CIS-H2A

Eddie Turner
Service Manager
Forestry Products

bh

DATE 9/82



TECHNICAL SERVICE BULLETIN

NO. 182-035**SUBJECT:** OVERSIZE WORM GEAR 12071**AFFECTS:** 360 CHAIN SAW

A small quantity of oil pump worm gears missed a machining process. The outside diameter of the sleeve area that rides inside the oil seal may be oversize. This condition will rapidly wear the seal creating an air leak and causing the saw to run erratically.

Check the parts you may have in stock. Correct gears will measure .625 to .627. See picture below. Unmachined gears will measure approximately .640. However, any piece measuring over .627 should not be used.



.625 equals 5/8 inch
.625 equals 15.88 mm
.627 equals 15.93 mm
.640 equals 16.26 mm
.640 equals 41/64 inch

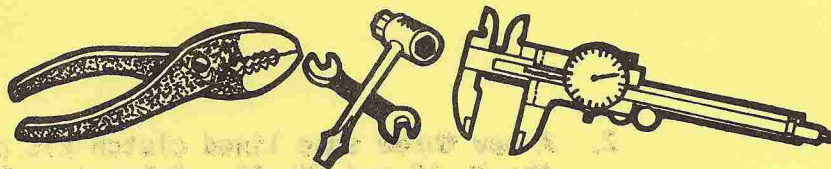
We suspect some gears were placed into units during production. If you have 360's in stock with lot numbers of D235, D236, D237 and D238 remove the clutch and measure the gear sleeve.

NOTE: Lot numbers are found within the serial numbers. Example: serial number 5D2351042, the lot number is D235.

Eddie Turner
Service Manager
Forestry Products

bh

DATE 9/82



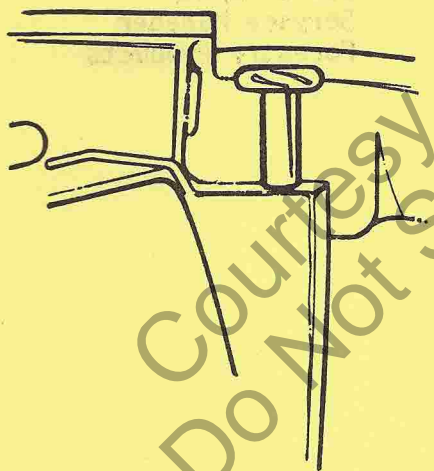
TECHNICAL SERVICE BULLETIN

NO. 182-036

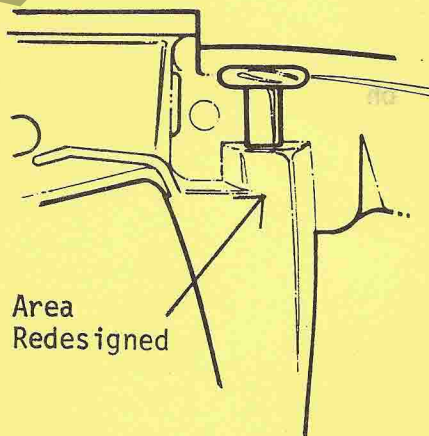
SUBJECT: 1. NEW THROTTLE HANDLE
2. THREE-SHOE LINED CLUTCH KIT

AFFECTS: XL-12 AND SXL-A0

1. The throttle handle has been redesigned to lengthen the bore for the manual oil pump plunger (see illustration). This was done to minimize the "side to side" movement experienced by the plunger when the user depresses the button. The part number did not change. The current number is A93926. This change is effective with the serial number OD2250000 and above.



OLD DESIGN



NEW DESIGN

DATE 10/82

2. A new three shoe lined clutch kit part #A96745 is available to service the XL-12 and SXL-A0. Below is a list of the parts contained in the kit. All of the parts are standard pieces already in service.

A96745 Clutch Kit

Contains:

1	93650	Washer
1	93639	Spider
3	A93632-A	Shoes
3	93814-A	Springs
1	93643	Washer
1	65064	Washer
1	A95621	Sprocket and Drum
1	17668	Instruction Sheet

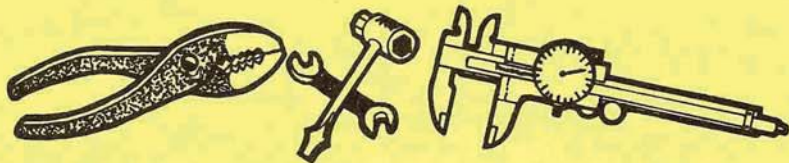
This clutch is strictly optional and does not come on new units. Clutch kit A96745 or its components must not be used in a warranty repair.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

bh

Courtesy of Undee Resources
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TECHNICAL SERVICE BULLETIN

NO. 182-037

SUBJECT: AUTOMATIC OIL PUMPS A69799 AND A65212-B

AFFECTS: SEZ-A0 CHAIN SAWS

This technical bulletin is to remind you that there are two automatic oil pumps available for the SEZ-A0.

Oil Pump A65212-B is designed to function with both the single line and double line oiling systems. This pump requires modification depending upon usage. When our present stock of A65212-B pumps is exhausted it will no longer be supplied.

Once these pumps A65212-B are gone single line units, requiring new automatic oil pumps, will have to be converted to double line systems. This will require a new drive case, oil pump and a modification to the oil tank.

Oil Pump A69799 is designed for the double line oiling system only. This system has been in production since 1974. We encourage you to use this pump on all units with the double line system and to use A65212-B pumps on single line systems.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

bh

DATE 11/82



TECHNICAL SERVICE BULLETIN

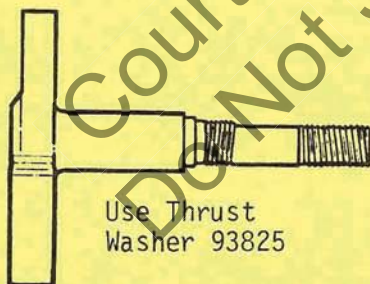
NO. 182-038

SUBJECT: 1. NEW PISTON ASSEMBLY A95882-A
2. NEW CRANKSHAFT ASSEMBLY A96418-B

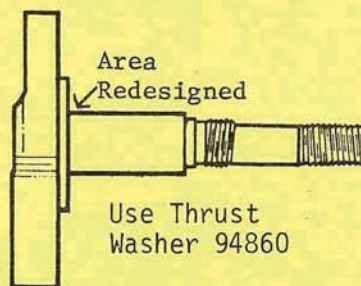
AFFECTS: 330 CHAIN SAW

1. To improve unit performance and durability a new piston design A95882-A is available for all 330 chain saws. This new piston incorporates narrow piston rings number 96510. When "thick ring" pistons A95882 are no longer available the part number will be superseded by A95882-A. Note that the "thick" piston rings 93823 are still available.
2. Also, the crankshaft was redesigned in the thrust washer area to increase crankshaft durability. This change required a redesign of the thrust washers. The new washers are part number 94860. Old thrust washers 93825 are still available for servicing crankshafts made before this change. All new crankshafts A96418-B will include thrust washers. See picture below.

A96418A



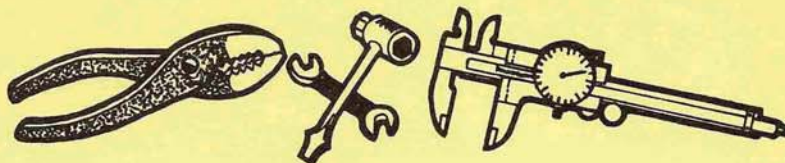
A96418B



Eddie Turner
Eddie Turner
Service Manager
Forestry Products

bh

DATE 11/82



TECHNICAL SERVICE BULLETIN

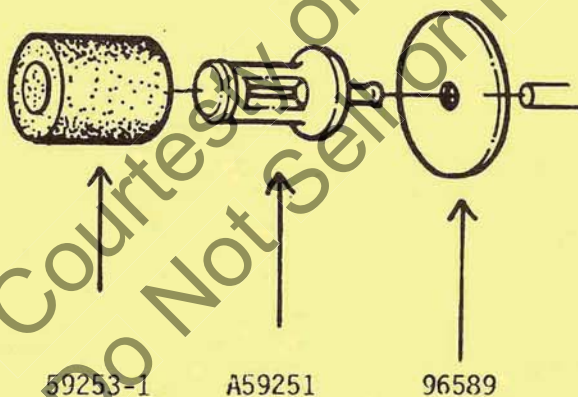
NO. 182-039

SUBJECT:

1. NEW FUEL CAP A93420-A
2. NEW RIM SPROCKET 95058
3. PLASTIC WASHER 96589 ADDED TO THE FUEL PICK UP

AFFECTS: 410 CHAIN SAW

1. The fuel cap material has been changed to prevent deterioration that may occur when gasohol is used. Also, an extra thread was added for better sealing. The new part number is A93420-A.
2. A new rim sprocket 95058 is available from Service Parts. This new rim will supersede sprocket 63284. Both sprockets are 3/8 inch pitch and have seven drive link slots.
3. Plastic washer 96589 has been added to the fuel filter to keep the filter from "hanging up" inside the fuel tank. See picture below.

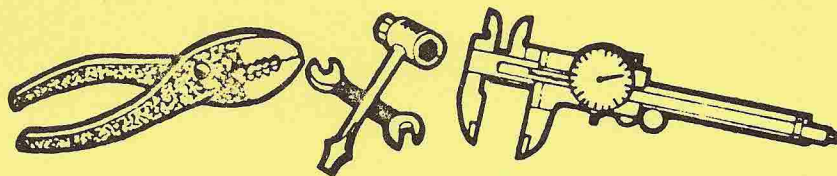


Eddie Turner

Eddie Turner
Service Manager
Forestry Products

bh

DATE 11/82

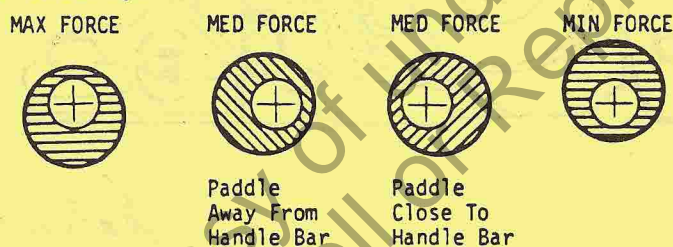


TECHNICAL SERVICE BULLETIN

NO. 182-040**SUBJECT:** CHAIN BRAKE ADJUSTMENTS**AFFECTS:** MODEL 240 SL CHAIN SAW

The actuating force and the distance between the handle bar and the chain brake paddle on the model 240 SL are adjustable. Adjustments are made by rotating the brake lever cam, PN 96170, illustrated as item 12 on page 6 of the illustrated parts list number 17601.

The sketches below show the cam in four positions. Dimensions are somewhat exaggerated and the hexagon head is omitted to show the cam positions clearly.



At MAX FORCE and at MIN FORCE adjustments, the paddle to handle distance is identical and intermediate.

As shown by the two center sketches, intermediate actuating forces may be selected with the paddle moving away from, or toward the handle bar.

To change paddle location, or to change actuating force, study the sketches and rotate the cam accordingly.

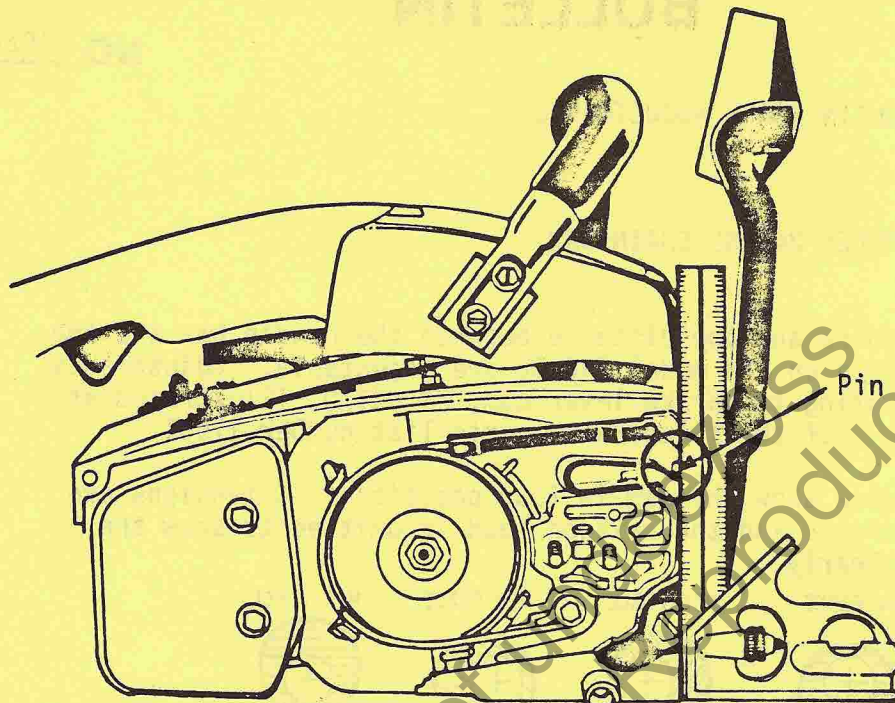
Force adjustment range is approximately $1\frac{1}{2}$ pounds (0,7 kg). Distance adjustment range is approximately .22 inch (5,5 mm).

After cam adjustments have been made, it may be necessary to adjust the retaining clip part number 95406 (item 2 in the illustration on page 6 of the parts book). Sliding the clip forward toward the front of the engine decreases the brake band diameter; this adjustment can, therefore, also be used to control the clearance between brake band and clutch drum.

Continued

DATE 11/82

Normal factory adjustment locates the lock pin of the brake lever arm on a vertical line, tangent to the front of the guide bar pad as shown below.



Walter N. Herold

Walter Herold
Manager, International Service



TECHNICAL SERVICE BULLETIN

NO. 182-041

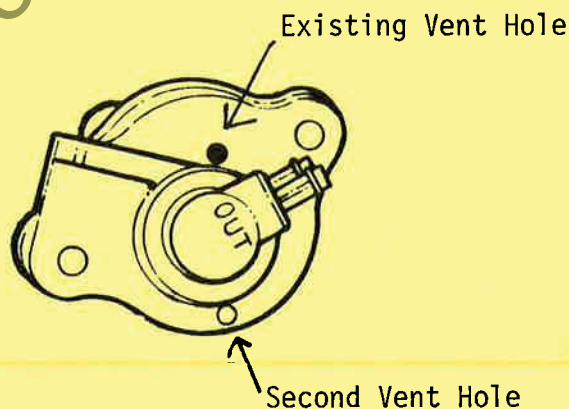
SUBJECT: 1. OIL PUMP
2. MUFFLER

AFFECTS: MODEL 240 CHAIN SAW

1. During factory assembly, we fill the oil pump of the model 240 with oil to provide lubrication for the piston and plunger and to prime the system for the test operation.

Any excess oil will be discharged through the existing vent hole (see illustration below) soon after the saw is put into operation. This situation is normal and should stop after a short while. However, in very cold weather, the oil under the diaphragm may stiffen and reduce the efficiency of the pump. If this happens, disassemble the oil pump, clean it, and lubricate only the plunger before reassembly.

There have also been a few reports that oil is again discharged through the vent hole, even after the cleaning of the pump. Such a situation would be indicative of an internal leak, in which case the oil pump should be replaced. If a new pump is not immediately available, a second vent hole, drilled with a 3/32 inch (2,5 mm) drill 180 degrees from the existing vent hole will prevent excessive oil build-up in the diaphragm chamber.

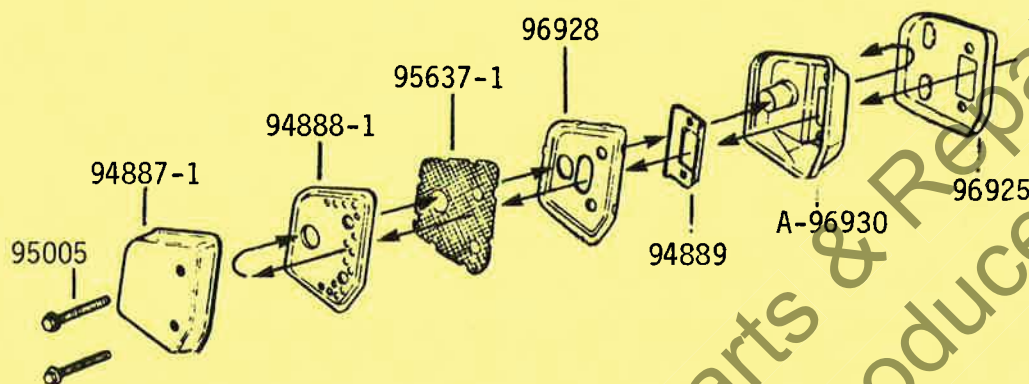


Continued

DATE 12/82

2. A new muffler is used on all 240 chain saws above serial number XD200XXXX. The exhaust is now directed to the rear of the muffler and exits near the cylinder.

NOTE: The muffler cap does not have holes for the exhaust to escape through.



Arrows indicate direction of exhaust flow.

Eddie Turner

Eddie Turner
Service Manager
Forestry Products

bh



TECHNICAL SERVICE BULLETIN

NO. 282-001**SUBJECT:** GENERATOR ROTOR VALUES**AFFECTS:** CURRENT HOMELITE GENERATORS

Below is a list of units with their rotor part number. Beside each rotor number is the resistance value, of that rotor, in ohms at 77° F.

<u>UNIT MODEL</u>	<u>ROTOR NUMBERS</u>	<u>RESISTANCE @ 77° F</u>
9A34-3 9A34-3A	A-53789	33.0 ± 5% ohms
170A15-1A	A-53784	30.5 ± 5% ohms
172A20-1A 172A20-1B	A-42215	34.2 ± 5% ohms
174A27-1A 174A27-1B	A-53785	29.5 ± 5% ohms
176A35-1A 176A35-1B 176A35-1C	A-53786	33.0 ± 5% ohms
178A50-1A 178A50-1B HSB50-1 177D38-1	A-53787	30.0 ± 5% ohms
180A75-1 180A7501A	A-42724	22.8 ± 5% ohms
G3600-1 G3600-2	A-47077	52.3 ± 5% ohms

continued

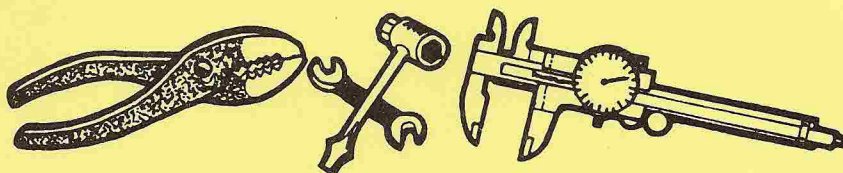
DATE 3/82

<u>UNIT MODEL</u>	<u>ROTOR NUMBERS</u>	<u>RESISTANCE @ 77° F</u>
G4800-1 G4800-2	A-47076	35.5 ± 5% ohms
G7200-1 G7200-2 GD7200-1 GD7200-2	A-47078	29.1 ± 5% ohms
G11800-1 G12000-2 GD12000-1 GD12300-2	A-47224	15.8 ± 5% ohms

Rick Mason
Rick Mason
Technical Service Advisor

ds

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TECHNICAL SERVICE BULLETIN

NO. 282-002**SUBJECT:** GENERATOR ROTOR VALUES**AFFECTS:** E SERIES HOMELITE GENERATORS

Below is a list of E series generators with their rotor part number. Beside each rotor number is the resistance value of that rotor in ohms at 77°F. I hope this list will aid in the repair of generators.

<u>Unit Model</u>	<u>Rotor Number</u>	<u>Resistance @ 77°F.</u>
E-1350-1	A-53781	46.5 \pm 5% ohms
E-1700-1	A-53781	46.5 \pm 5% ohms
E-2250-1	A-53782	52.6 \pm 5% ohms
E-3000-1	A-46142	64.2 \pm 5% ohms
E-4000-1	A-43427	76.0 \pm 5% ohms
E-3000-1A	A-46142	64.2 \pm 5% ohms
E-4000-1A	A-43427	76.0 \pm 5% ohms

Rick Mason
Technical Service Advisor

bh

DATE 3/25/82



TECHNICAL SERVICE BULLETIN

NO. 282-003

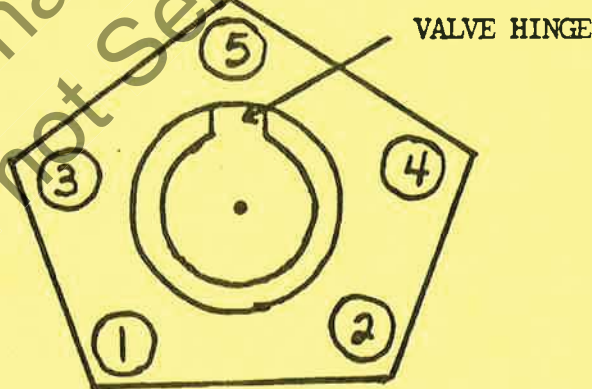
SUBJECT: PROPER ASSEMBLY OF FLAPPER VALVE**AFFECTS:** FP-250

Proper field assembly of the discharge fitting and check valve on the FP-250 has been a problem. Improper assembly may result in an air leak which will prevent the pump from priming properly.

In order to properly service the existing FP-250, discharge fitting and check valve, the following procedure and tests should be used.

1. Coat both the faces of the pump body and the discharge fitting with a lubricant. Dow Corning number 4 compound, Homelite number 22636-B is used in the factory, and has been found to be the most effective.
2. Snug up the bolts in sequence shown in figure "A" but do not torque at this point.

FIGURE "A"

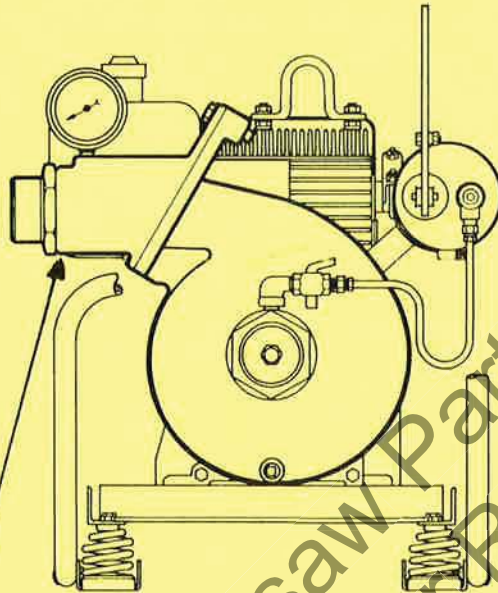


3. Strike the bottom of the valve body several times in an upward direction with a soft mallet, as shown in figure "B". This properly positions the valve on the valve body. Inspect the valve with a flashlight to assure the valve hinge is completely flat against the valve body. This is easily determined by pushing on the hinged area with a screwdriver. If the valve is not flat you will detect movement of the valve.

DATE 3/82

4. Torque all bolts to 240 inch pounds in the sequence shown in figure "A". Check the rubber valve again as described in step number 3. If valve is not flat, repeat procedure.
5. Test pump by measuring maximum vacuum which should be approximately 22 inches of mercury. If maximum vacuum cannot be obtained and the valve is seated properly then the check valve is not the problem.

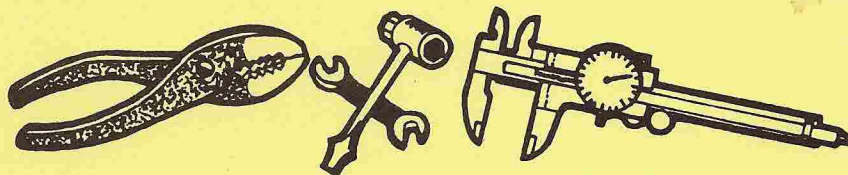
FIGURE "B"



STRIKE BOTTOM OF VALVE IN UPWARD DIRECTION

Rick Mason

Rick Mason
Technical Service Advisor



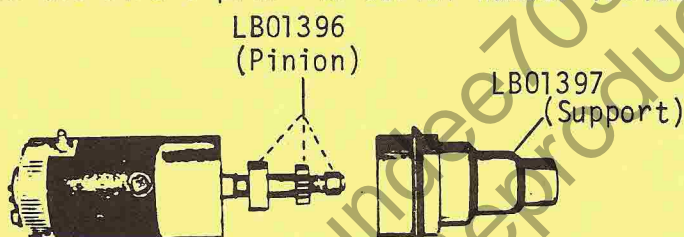
TECHNICAL SERVICE BULLETIN

NO. 282-004

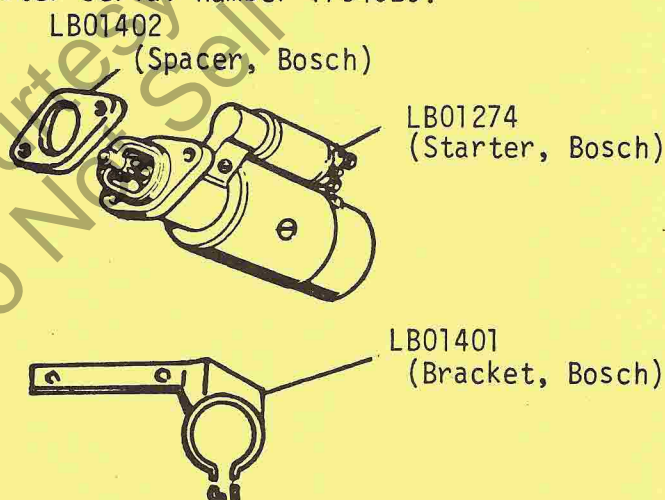
SUBJECT: PRESTOLITE AND BOSCH STARTER PARTS

AFFECTS: DTP3-1 and 177D38-1

The support (LB-01397) and pinion (LB-01396) for the Prestolite starting motors are now available through service parts. This starter was used on the DTP3-1 prior to serial number 1794629.



The Bosch starters have a spacer (LB-01402) and a different bracket (LB-01401) that are used on all 177D38-1. These parts are also used on all DTP3-1 pumps after serial number 1794629.

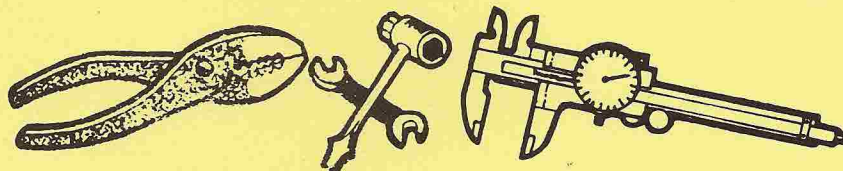


Rick Mason

Rick Mason
Technical Service Advisor

bh

DATE 5/82



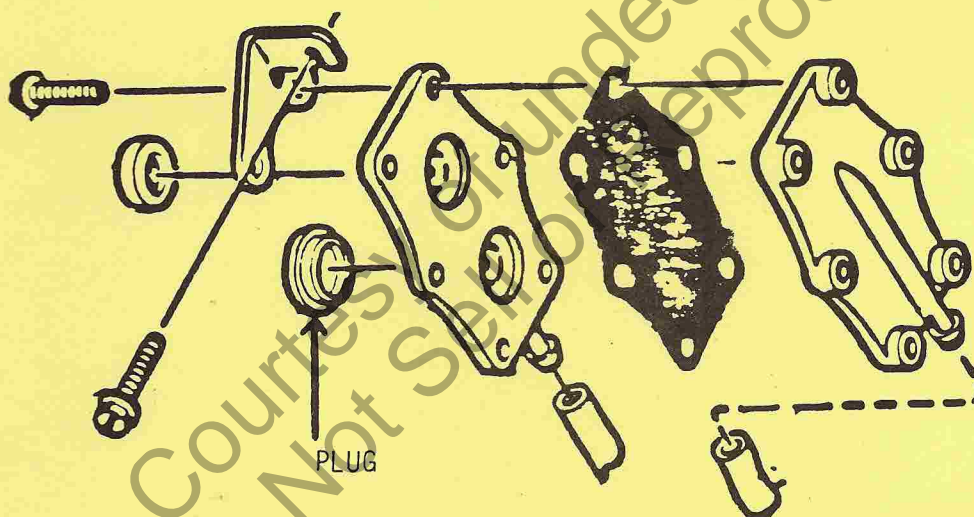
TECHNICAL SERVICE BULLETIN

NO. 282-005

SUBJECT: AIR PUMP, DIFFUSER VANE AND ENGINE SPEED

AFFECTS: HB-280, HB-480 and HB-680

The plug (part number 95789) on the air pump (HB-680) can pop out after a few hours of operation. If this happens there will be a loss of pressure in the fluid tank and the sprayer will not work. The plug must be installed back in place making sure that an adhesive is applied evenly around the outer diameter of the plug (we recommend Zip Grip adhesive, part #70627).



The diffuser vane on the sprayer nozzle of the HB-680 is not made to spin. It should be stationary to give you the swirling wide angle pattern from 5 to 10 feet. The engine speed on all blowers (HB-280, HB-480 and HB-680) is important for proper performance. Idle speed should be set as close to 3500 R.P.M. as possible - not under 3350 R.P.M. nor over 3500 R.P.M. Wide open throttle should be set between 6800 R.P.M. and 7400 R.P.M. for best performance.

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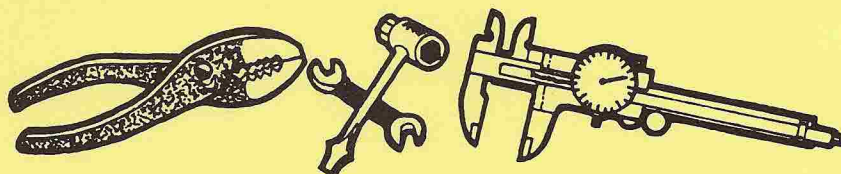
A throttle cable that is not adjusted properly can result in poor performance. When the throttle trigger is fully depressed, the butterfly in the carburetor should be opened completely; if not, then adjust the cable accordingly. The carburetors on all units are fully adjustable. The initial setting should be one turn for both "Hi" and "Lo" needles. The "Lo" needle should not exceed two turns.

Rick Mason

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Technical Service Advisor

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Courtesy of undee70ss
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TECHNICAL SERVICE BULLETIN

NO. 282-006

SUBJECT: BOLT KIT (A-48783)

AFFECTS: DM-50 AND DM-20

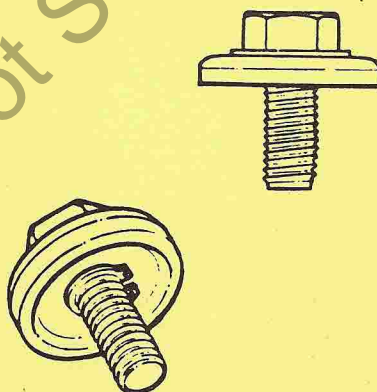
A new bolt and compression washer kit have been released for the above units. This new assembly will increase the holding capability of the cutting wheels and will eliminate any slippage problems that you may be experiencing. Any units that are brought in to you for repair should have this bolt and washer assembly installed before it is returned to the customer.

When you replace the bolt and washer assembly, fill out a warranty claim for reimbursement. We will allow .10 of an hour for labor. Please refer to this memo number in the Conditions Found/Work Performed section of the claim.

Old Part Number - Replaced by - New Part Number

46077

A48783

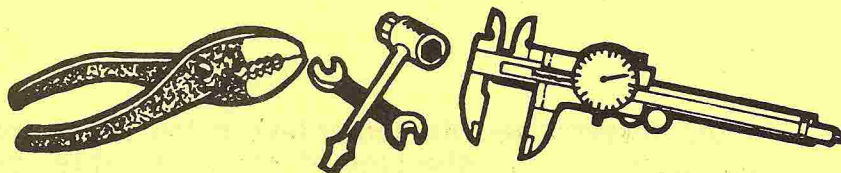


BOLT KIT A-48783

Rick Mason

Rick Mason
Technical Service Advisor

DATE 12/82



TECHNICAL SERVICE BULLETIN

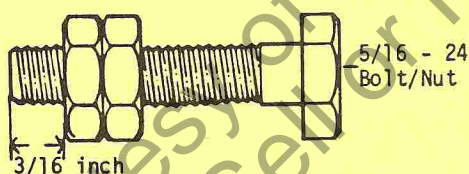
NO. 282-007

SUBJECT: LEAN RUNNING - WILL NOT START

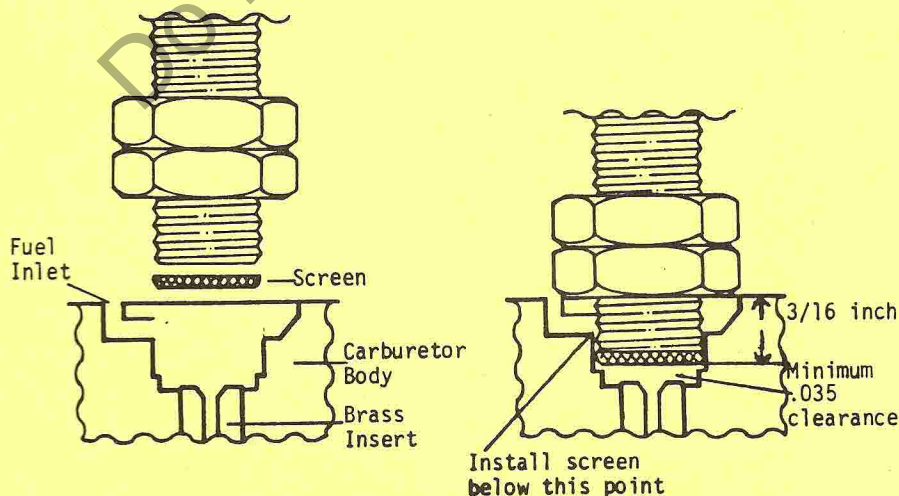
AFFECTS: HB-280, HB-480, HB-680 BLOWERS

We have had a few reports of lean running or no start conditions due to fuel starvation. First check the inlet screen in the carburetor. The very fine screen was installed to ensure complete filtration of the finest particles that may slip by the filter in the gas tank. The dirty screen must be replaced with a new screen #97098 as it is so fine it can't be easily cleaned.

Do not press the screen too deep in the carburetor during installation. a 5/16 - 24 bolt with two nuts is a simple and available tool to install the screen properly.



Use the two nuts to maintain the 3/16 inch depth. This allows the screen to be set in place without blocking the fuel inlet hole, or touching the brass insert pressed into the carburetor body.



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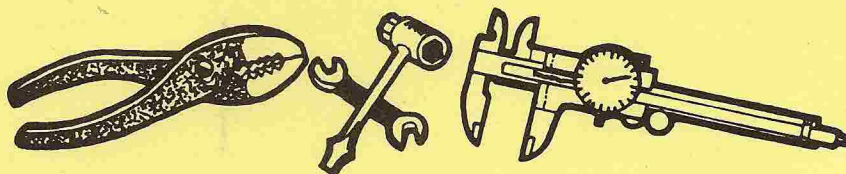
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If the screen comes in contact with the brass insert, the area of filtration is reduced to only the size of the brass inlet hole. This means that the smallest amount of foreign material can prevent the unit from starting. The space between the screen and brass insert is necessary to be sure that the complete area of the screen is used.

Rick Mason
Technical Service Advisor

bh

Courtesy of undee70ss
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TECHNICAL SERVICE BULLETIN

NO. 282-008

SUBJECT: WIRING DIAGRAM FOR GENERATOR AND ENGINE

AFFECTS: HSB-50, HSB-42/50 INTERNATIONAL

The home stand-by generator does not have a wiring diagram in the owners manual or parts list. Enclosed is a wiring diagram for the engine and generator end.

This diagram will be included in the next printing of the owners manual.

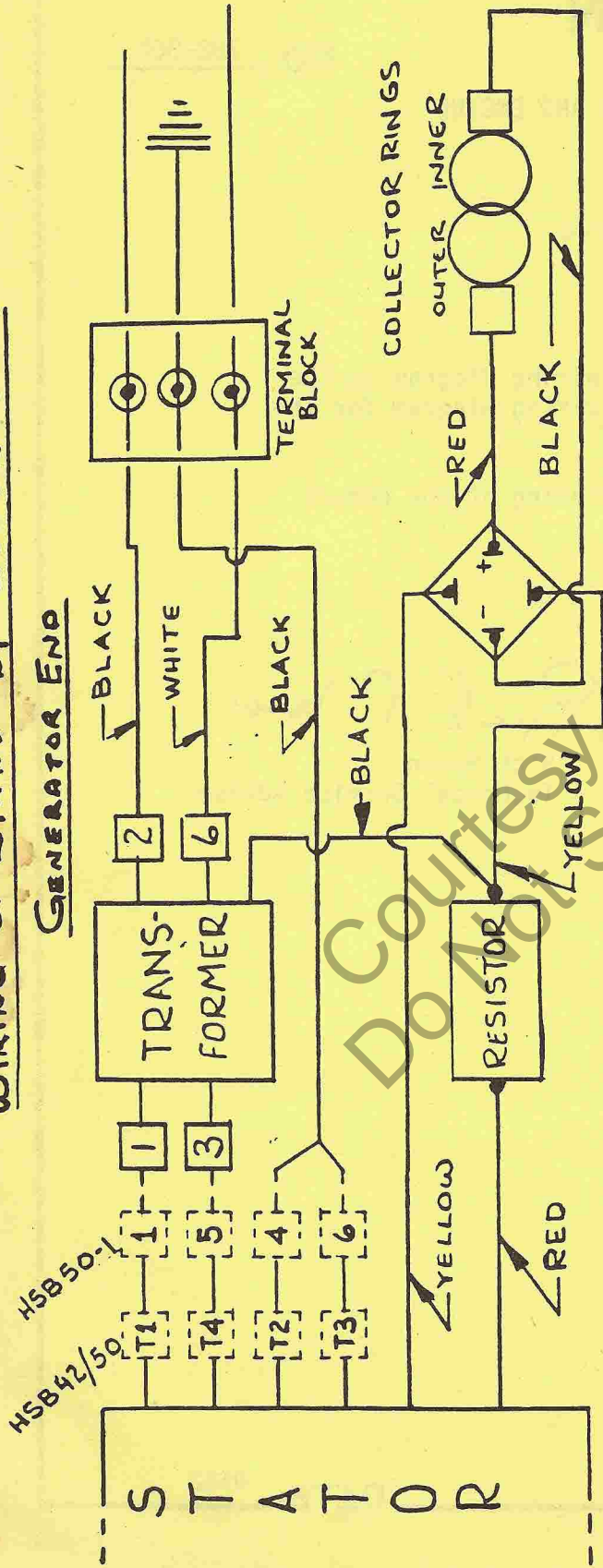
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DATE 6/82

Wiring of Stand-By Generators



ENGINE AND CONTROLS

