

SUBJECT: NEW AUTOMATIC STRING ADVANCE FOR ST-40**AFFECTS:** ST-40 (UT-21511-B)

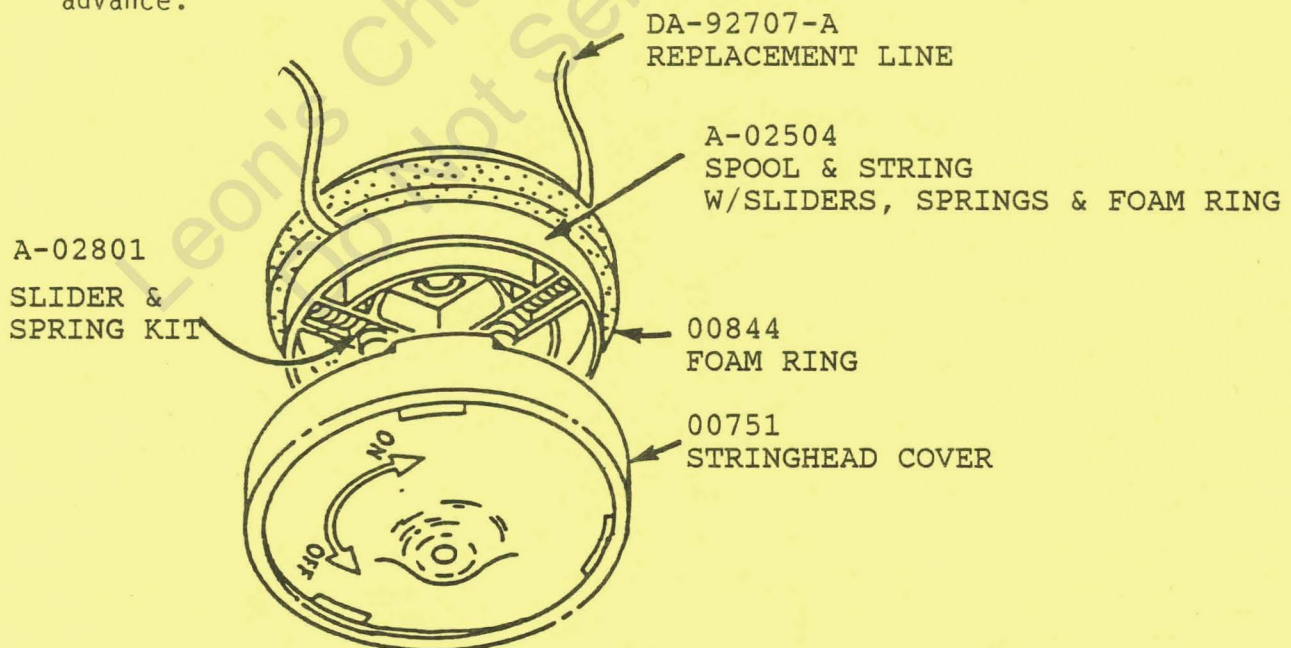
Effective with UT # 21511-B, the model ST-40 string trimmer is equipped with a new automatic string advance system. This is a dual line system incorporating a set of three (3) identical sliders and springs.

The operation of this new system is similar to the previous Idle-Line (TM) system. The difference is the new automatic system may give an advance at full rpm while the trigger is still depressed.

SERVICE NOTE

The string head for the new ST-40 is pressed into the motor shaft. These string heads are non-servicable and no attempt should be made to replace them.

Refer to the illustration below when ordering parts for the new string advance.

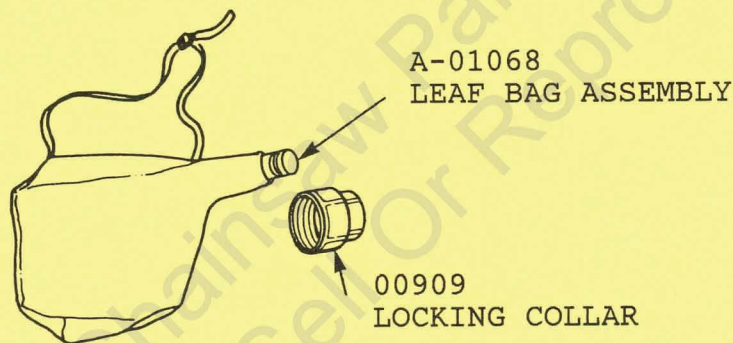


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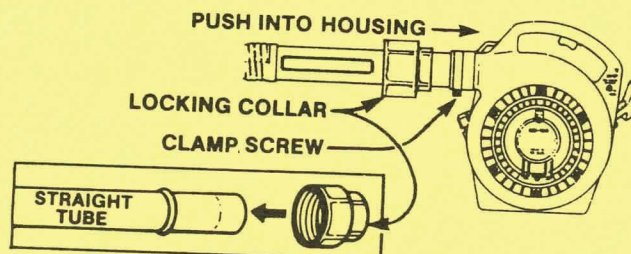
SUBJECT: NEW LEAF BAG A-01068 and LOCKING COLLAR 00909**AFFECTS:** HB-180V (STARTING WITH SERIAL NUMBER HK1210001)
A-00390-D & -E VACUUM KIT

A revised leaf bag and locking collar has been implemented on the subject units and vacuum kits shown above.

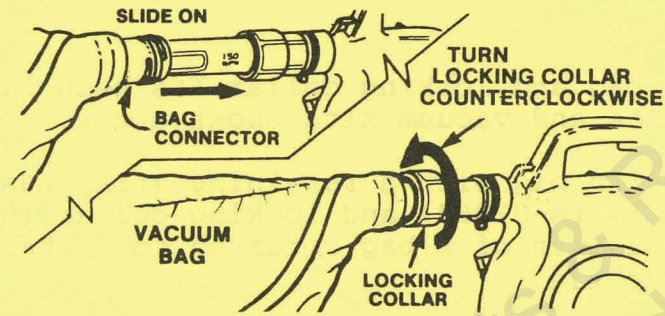
The earlier design bag with a retaining strap has been replaced by a bag assembly (A-01068) and locking collar (00909). The bag assembly consists of a bag retained to a short tube section by a large cable tie.



Installation consists of removing the straight tube from the unit. Place the locking collar over the straight tube and reinstall into blower.



Slide the bag assembly over the straight tube and screw the locking collar and bag tube together. Installation is complete.



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SUBJECT:

- 1) IGNITION MODULE RETURN PROGRAM DISCONTINUED (VOID TECHNICAL SERVICE BULLETIN 189-004, 8/89)
- 2) COLOR CHANGE TO HOMELITE TWO-CYCLE OIL

AFFECTS:

ALL UNITS

1. Effective immediately, the ignition module return program implemented in August has been discontinued. Samples collected have been returned to our ignition vendors for their evaluation and analysis in an effort to improve overall quality.

Your support in this return program is greatly appreciated and will help Homelite and its vendors create a more reliable product. I also want to thank all of those who returned modules in a timely manner.

2. Several concerns have been voiced by dealers recently over the change in color to the Homelite two-cycle engine oils (16:1, 32:1, and Exact Mix). The color change took place as a result of an improved new anti-oxidant additive package. This new additive package was the result of extensive tests done by Homelite on different anti-oxidant additives in the presence of both alcohol and non-alcohol enhanced fuel blends. While the overall oil performance has improved (particularly in respect to storage life) the brown hue of the new additive package resulted in a "muddled" oil color.

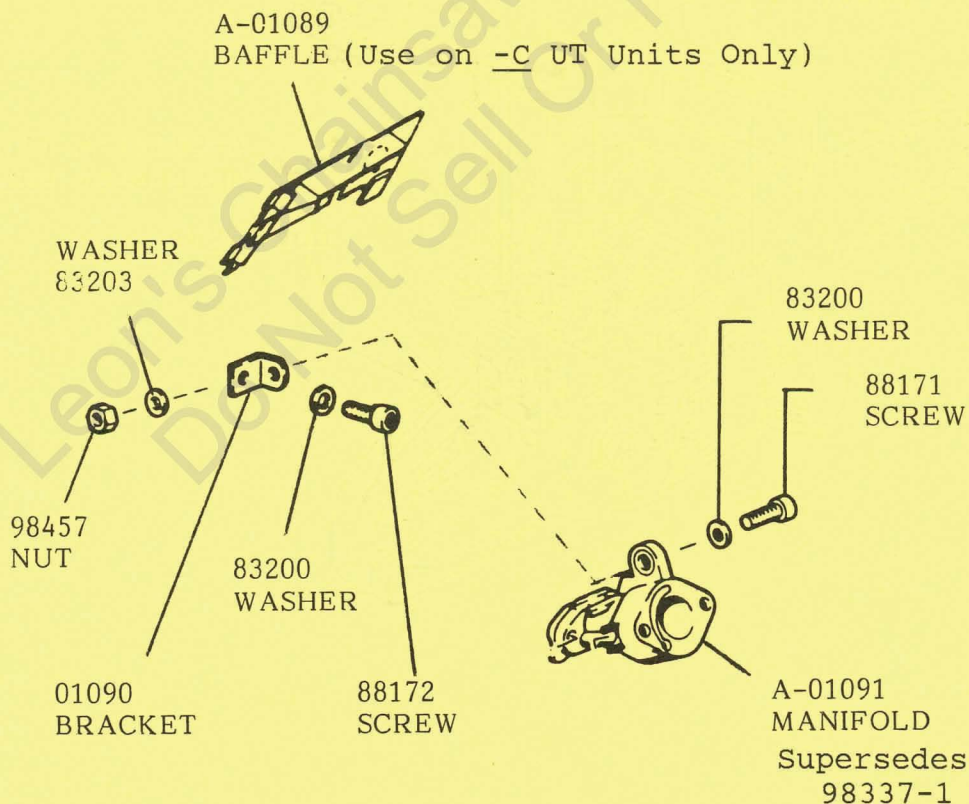
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SUBJECT: IMPROVEMENT TO MODEL 340 CHAIN SAWS**AFFECTS:** 340 (UT-10660-C)

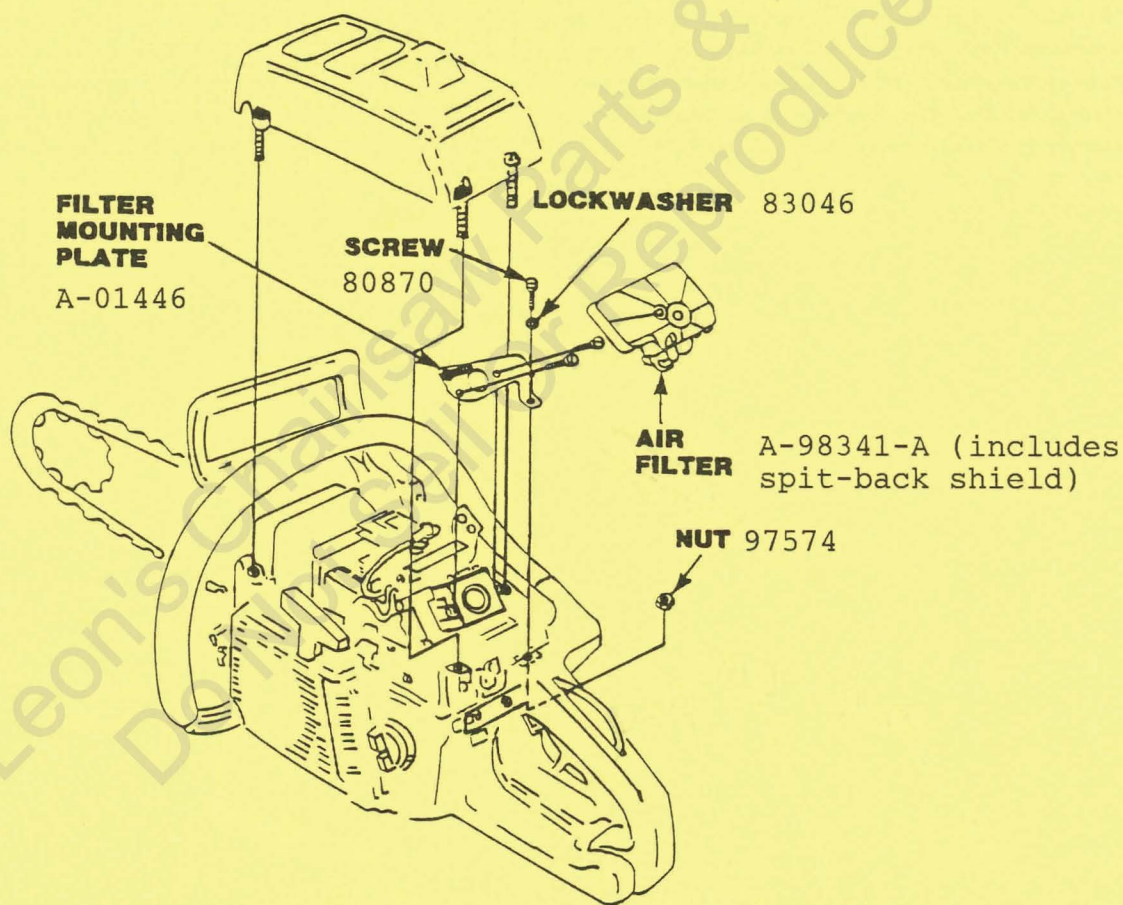
Effective with the subject UT # several improvements have been made to the Model 340 saw particularly in the areas of manifold, carburetor, and muffler retention.

Later 340's were built with the three-point manifold A-01091 which uses an L-bracket 01090 bolted to the cylinder. This required a new baffle A-01089 which incorporates a slot for the bracket. The new manifold will supersede the old manifold (98337-1) and can be used to service units made with or without the L-bracket. The new baffle, however, should only be used on the -C UT # units. Using the new baffle on older units may result in vapor lock. Baffle 98390 will still be available to service older units.

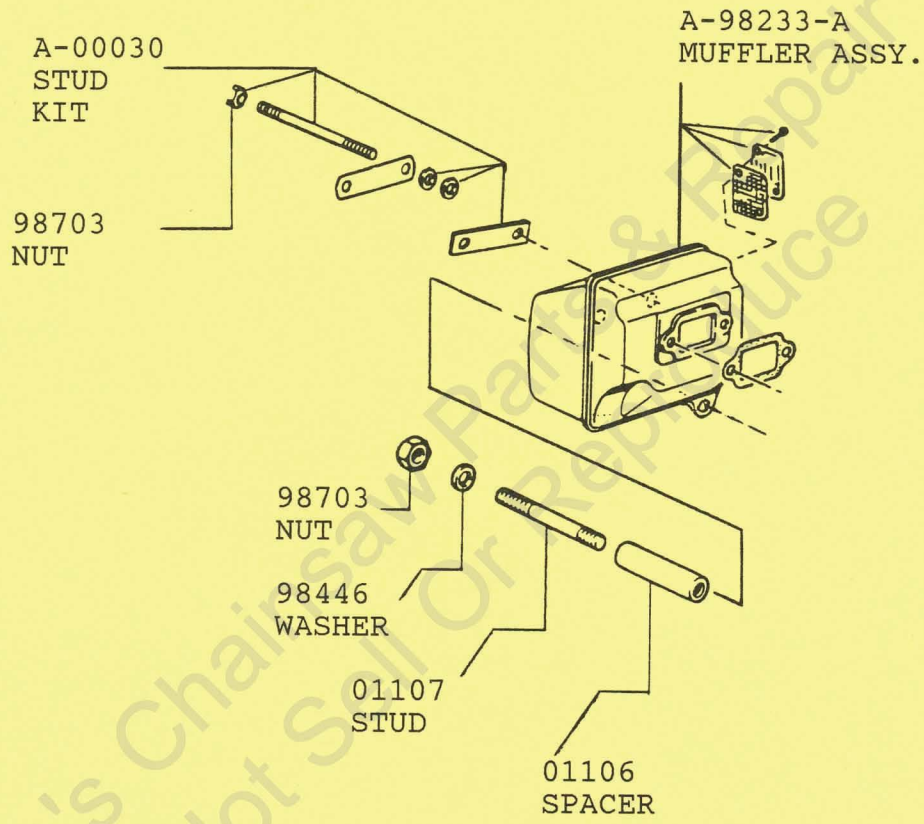


A new three-point filter mounting bracket A-01446 was also implemented effective with the -C UT #. This bracket will prevent the manifold from possible loosening resulting in poor performance and in some cases, piston/cylinder scuffing. Air filter assembly A-98341-A includes a combination choke plate/spit-back shield to prevent the air filter from becoming soaked with fuel mix.

Air filter mounting plate A-01446 can be used on 290 & 340 chain saws and includes fastening parts, a new air filter assembly and installation instructions.



The new three-point muffler assembly A-98233-A will be supplied by service and can be used on units built with either a two-point or three-point mount.



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SUBJECT: ALTERNATE IGNITION SYSTEMS**AFFECTS:** XL, Super 2
240
25cc String Trimmers & Brushcutters
25cc Blowers

Homelite is now using one of three (3) ignition systems on the subject model units listed above.

The Phelon module 94711-BS and rotor A-95007 will continue to be the primary source for small chain saws, 25cc trimmers & blowers and will be used on the majority of these units. A percentage of these units will be built with an alternate SEMS-Walbro system (module - 01341). The SEMS-Walbro and Phelon components are completely interchangeable (i.e. mix and match) with each other, therefore, service will supply only the A-95007 rotor for both systems.

A Sawafuji ignition system (module - 02008, rotor - A-02010) will be used on some ST-175 and HB Blower units. This system can be identified by the black rotor. The Sawafuji system is not compatible with either the Phelon or SEMS-Walbro systems.

It is important, therefore, that the ignition system be identified prior to replacing or ordering parts particularly if the unit is a blower or ST-175 trimmer.

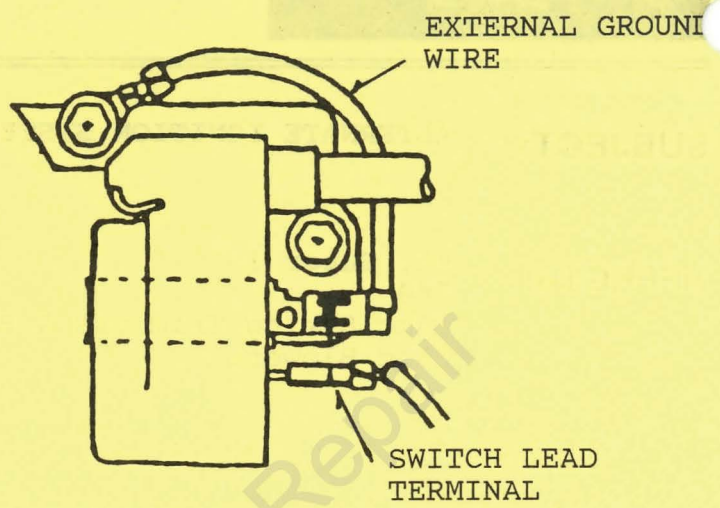
Refer to the illustrations on the reverse side when identifying the various ignition systems.

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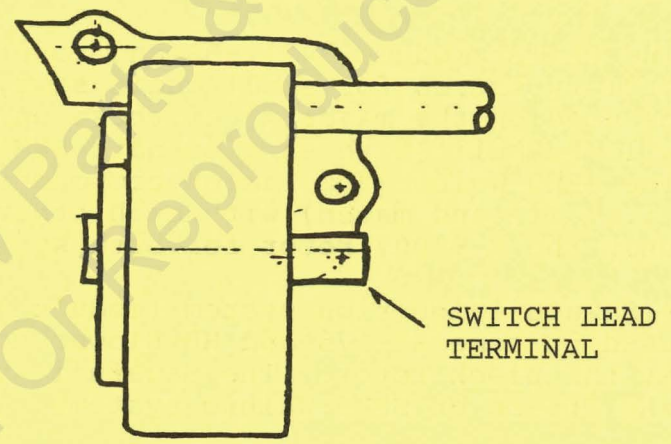
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ROTOR
A-95007
USE WITH

PHELON
MODULE
94711-BS

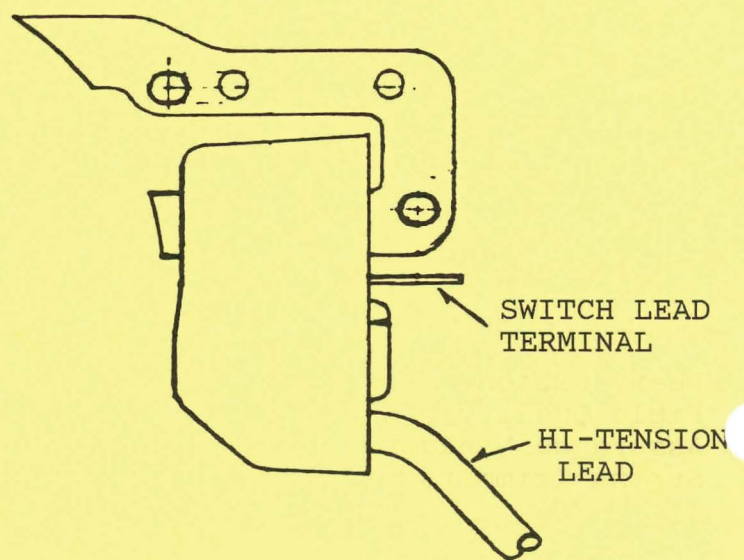


SEMS-WALBRO
MODULE
01341



ROTOR (BLACK)
A-02010
USE WITH

SAWAFUJI
MODULE
02008



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SUBJECT: PRODUCT IMPROVEMENTS TO 1990 MODEL HEDGETRIMMER**AFFECTS:** HT-17 (UT-18007-A)

Several significant improvements have been made to the Model HT-17 shortblock effective with UT-18007-A. Most of the new shortblock components will not retrofit the earlier (1989) Model HT-17.

Improvements include:

1. A one-piece crankcase and backplate assembly (similar to 25cc units) requiring a crankcase cover.
2. Revised crankshaft due to the location of the larger main ball bearing and seal in the crankcase being reversed (from earlier models).
3. Exhaust outlet tube in muffler cover requiring the outlet hole in cylinder casting be closed off.

The earlier cylinder A-01523 is superseded by a new cylinder & muffler assembly A-01523-A containing the new muffler cover with outlet tube. The other components used on the 1989 model HT-17 shortblock will remain available.

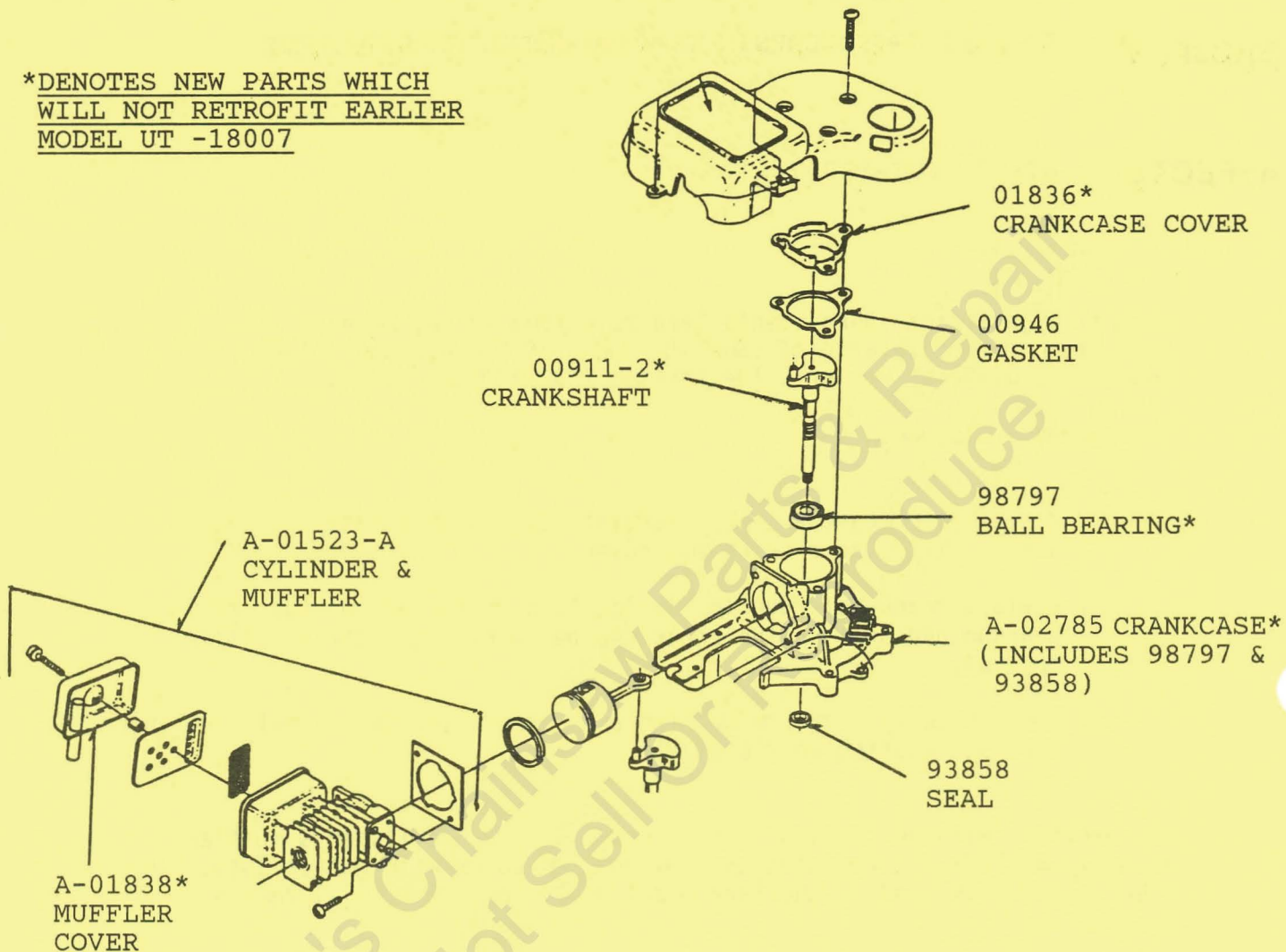
Refer to the illustration on the reverse side when ordering parts for the new HT-17 UT-18007-A shortblock.



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HT-17 (UT-18007-A)
SHORT BLOCK COMPONENTS

*DENOTES NEW PARTS WHICH
WILL NOT RETROFIT EARLIER
MODEL UT -18007



SUBJECT:

1. VENTED TUBE ADAPTER & CLUTCH ADAPTER KIT
2. E-Z-LINE STRING ADVANCE WITH .095" (2,4mm) LINE
3. SERVICE PARTS FOR ST-175-BC
4. BULK REPLACEMENT TRIMMER LINE

AFFECTS:

1. ALL 25cc TRIMMERS & BRUSHCUTTERS WITH CLUTCH
2. ST-385, 485
3. ST-175-BC (UT-20553-B)
4. ALL TRIMMERS & BRUSHCUTTERS

1. Effective with the 1990 build season, all clutch model 25cc string trimmers and brushcutters are equipped with longer, vented tube adapters (plastic - ST175BC, 185, 285 and aluminum - ST385, 485). This will provide air flow through the tube adapter resulting in a cooler running clutch and drum. The clutch adapter was also lengthened by 0.130 in. (3,3mm) providing increased clearance between the rear clutch plate and face of the engine housing.

SERVICE NOTE

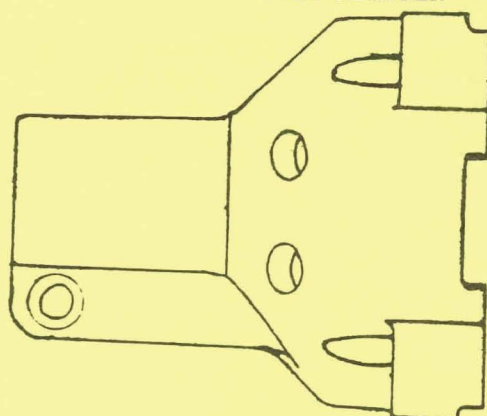
The longer clutch adapter must be used together with the longer, vented tube adapter.

Service has and will continue to supply only the aluminum tube adapter. The earlier tube adapters A-98931 (red) & A-01139 (black) and the clutch adapter 98930 have been superseded to a new vented tube adapter kit A-02396.

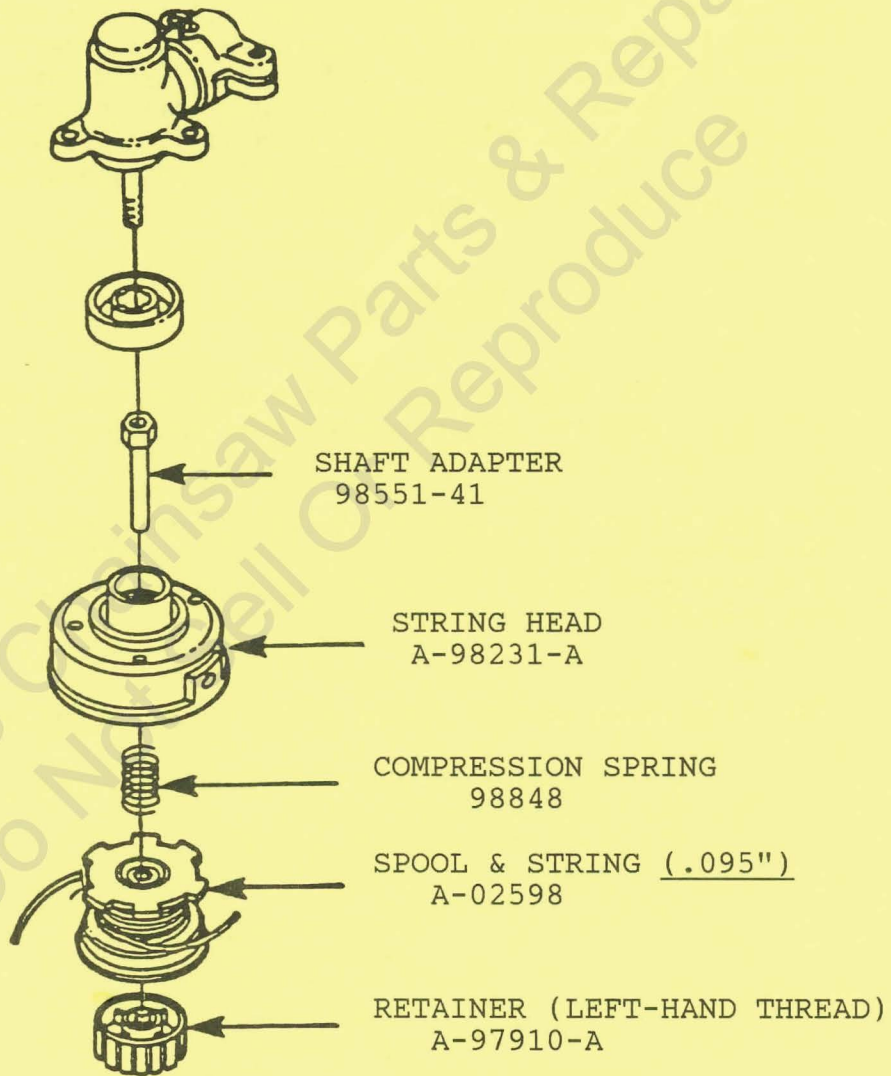
The vented tube adapter (shown below) kit will include:

- (1) Aluminum vented tube adapter (black)
- (1) Clutch adapter 01547
- (1) Lock nut (10-24) 81208
- (1) Screw (10 - 24 x 1 1/4) 88054

ALUMINUM VENTED
TUBE ADAPTER



2. Model ST-385 & 485 units are now equipped with the E-Z-Line string advance system and .095 in (2,4mm) line. Refer to the illustration below when ordering parts.



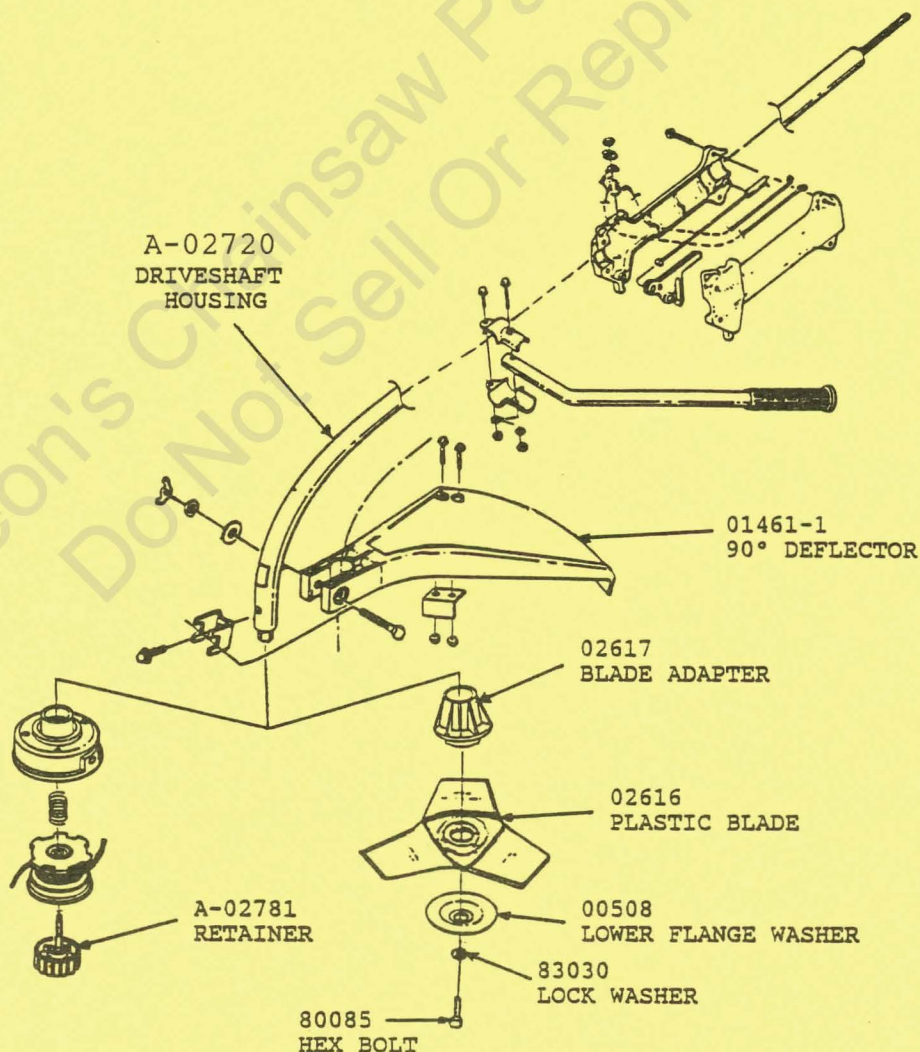
3. The Model ST-175C has been replaced with the Model ST-175BC (UT-20553B). This unit is equipped with a string head assembly and a plastic tri-arc blade designed for cutting heavy grass only. The blade adapter is also designed such that a metal blade cannot be installed on the unit.

CAUTION

The ST-175BC is designed to accept the plastic tri-arc blade only. Any modification made by the customer or the dealer to accept a metal blade may result in damage to the unit, particularly the lower drive housing assembly.

The unit is also equipped with a 90° deflector, L-handle and toggle switch in the rear handle grip.

Refer to the illustration below for the parts which are unique to the ST-175-BC (UT-20553-B). Otherwise refer to the Parts List 17968-B.



4. Service will be supplying three sizes of replacement trimmer line in 1 lb. and 3 lb. spools. Part numbers are listed below:

	<u>DIAMETER</u>	<u>LENGTH</u>	<u>PART NUMBERS</u>
1 lb spool	.080 in (2,0mm)	402 ft.(122m)	98011-05
3 lb spool	.080 in (2,0mm)	1206 ft.(368m)	98011-06
1 lb spool	.095 in (2,4mm)	285 ft.(87m)	02599-05
3 lb spool	.095 in (2,4mm)	855 ft.(261m)	02599-06
1 lb spool	.105 in (2,7mm)	233 ft.(71m)	98071-01
3 lb spool	.105 in (2,7mm)	701 ft.(214m)	98071-04

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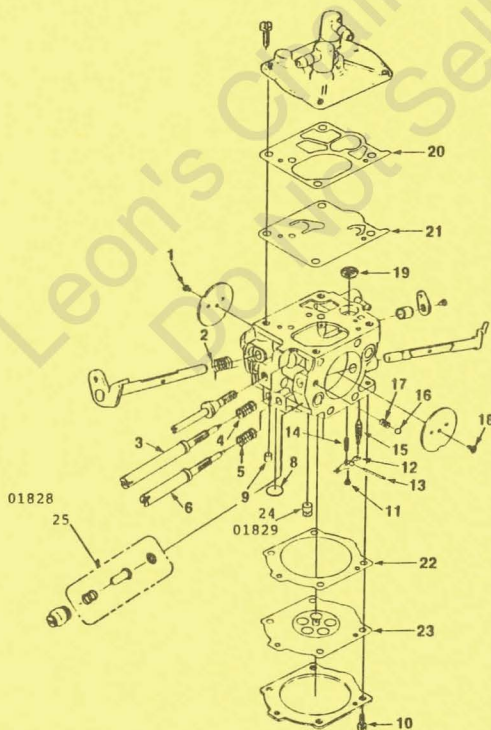
SUBJECT: WJ SERIES WALBRO CARBURETOR**AFFECTS:** 1. 410 CHAIN SAW (HL0010001)
2. DM-40 MULTIPURPOSE SAW

Beginning with the above serial number the model WJ-5 carburetor is now being used on the 410 Chain saw.

The new carburetor will have an accelerator pump in it. This will improve the idling and acceleration and will make the transition from idle to full throttle smoother.

Carburetor repair parts for the old WS series will not interchange with the WJ series. Refer to the breakdown below when ordering parts for the WJ series carburetor.

When servicing the carburetor on the DM-40 you will still be able to order repair kits for the WS series. If the carburetor needs to be replaced you should then change it over to the WJ series.



A-01085 - Carburetor
(Walbro WJ-5)
01800 - Repair Kit
(Items 1-23)
01801 - Gasket/Diaphragm
Kit
(Items 20-23)
01828 - Accelerator Kit
(Item 25)
01829 - Nozzle Check Valve
(Item 24)

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Field Quality
Assurance Manager
Forestry Equipment

SUBJECT: TOGGLE SWITCH & LEAD**AFFECTS:** S/2 WITH PLASTIC ENGINE HOUSING

The switch and lead listed in Parts List # 17868 is incorrect. Part number A-94721 is a lead only used on the S/2 with the aluminum engine housing. When ordering the switch for the unit with the plastic housing you will have to order the lead separately.

Figure 1

Item #10 Old Number A-94721 Switch & Lead New Number 93653 Switch

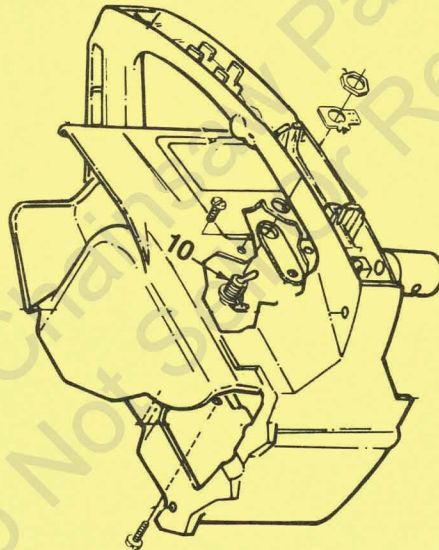
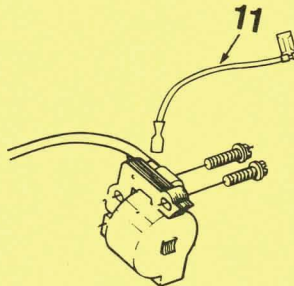


Figure 2

Item #11 A-94721 Ground Lead - to be used with 93653 Switch





NO. 190-011

Please mark your Parts List with these number changes.

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SUBJECT: 1. ST-70 TRIMMERS OVERFEEDING STRING
2. CORD SETS, HANDLES & MOTOR HOUSINGS

AFFECTS: 1. ST-70 W/AUTOMATIC ADVANCE (UT-21524-A)
2. ALL ELECTRIC TRIMMERS

1. Several field complaints have been received concerning the Model ST-70 overfeeding string. Our investigation has revealed that the ST-40 springs will solve the problem without affecting the operation of the string advance. As a result slide/spring kit (ST-70) A-01791 will be superceded by A-02801 slider/spring kit (ST-40).
2. Strain reliefs were recently added to the cord sets on all electric string trimmer models. This was done to meet current UL requirements. The addition of the strain relief required a change to the handles (ST-10,10A,20,40) and motor housing (ST-30,70).

In the future all cord sets will be supplied with their applicable handle halves or motor housings. Refer to the list below when ordering these parts for electric trimmers. Cord sets alone will no longer be supplied.

ST-10,10A	Handle halves w/cord set	A-02972
ST-20	Handle halves w/cord set	A-02973
ST-40,60	Handle halves w/cord set	A-02974
ST-30,70	Motor housing halves w/cord set	A-02975

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SUBJECT: PRESS-ON STRINGHEADS & DRIVE CONNECTORS FOR ELECTRIC
STRING TRIMMERS

AFFECTS: ST-10, ST-10A, ST-20, ST-40, ST-30, 70

Due to the numerous requests from the field, Service is now supplying the press-on stringheads and drive connector for the subject model electric string trimmers. The motor should be removed from the housing prior to pressing the stringhead or drive connector in place.

CAUTION

Care must be taken to assure that the stringhead or drive tube is pressed straight onto the motor shaft or excessive vibration and possible motor damage will occur.

Refer to the list below for the applicable part numbers:

ST-10 (all units)	-	Stringhead	98992-A
ST-10A (all units)	-	Stringhead	A-00071
ST-20 (UT-21510-A)	-	Stringhead	A-00071
ST-40 (UT-21511-B)	-	Stringhead	A-00837
ST-30,70 (all units)	-	Drive Connector	00417-B

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SUBJECT: UNIQUE PARTS FOR MODEL 35SL CHAIN SAW**AFFECTS:** 35SL (UT-10670)

The Model 35SL (UT-10670) chain saw (originally sold in Canada) is now being sold domestically in place of the 360SL. The 35SL is basically the same saw as the 360SL with the following exceptions:

1. The air intake system is a downdraft design (i.e. similar to SXL-AO) instead of an updraft design (as is the 360). This design requires a revised engine housing/throttle handle without the inlet screen in the bottom of the carburetor chamber. The air filter is solid (does not have 3/4" diameter hole and grommet in center) and the air filter cover has elongated intake slots on each side.
2. The ignition system is a one-piece Phelon module (same one as used on 330 chain saws). Mounting this module to the cylinder requires the cylinder be machined to accept a module mounting plate, spacers and fasteners. A new switch lead is also required.
3. Due to the air intake system grommets are required for both the throttle and choke rods.

When ordering parts for the 35SL refer to the list below. Otherwise refer to 360 Parts List 17080 Rev. 3.

<u>DESCRIPTION</u>	<u>P/N</u>	<u>QTY.</u>
Engine housing/Throttle Handle	A-79357-A	1
Air Filter Element	78209	1
Air Filter Cover	70425-6	1
Cylinder	A-02677	1
Ignition Module Assembly (same as 330)	A-94361-A	1
Switch Lead	A-94850	1
Module Mounting Plate	79332-1	1
Flathead allen screw (8.32 x .250") (for mounting plate)	97605	1
Hex screw (for mounting plate 8.32 x .500")	80983	1
Spacers (for module screws)	79331	2
Module mounting screws (10-24 x 1.125")	88054	2
Insert shield (replaces transformer) & receptable on cyl. shield)	79295-1	1
Hex-Sems Screw (8.32 x 3.75")	88041	2
Nut (8-32)	81223	2
Flat Washer (#8)	84025	2
Grommet (for throttle & choke rods)	58348	2

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SUBJECT:

1. BAYONET LOCKING BLOWER TUBES
2. NEW GUTTER MAINTENANCE KIT

AFFECTS:

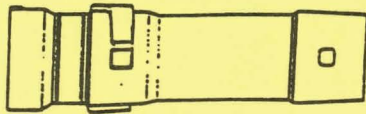
1. HB-100 (EFFECTIVE WITH UT-08017-A)
BP-250 (EFFECTIVE WITH UT-08011-A)
HB-280, 380, 480, 680 SERVICE
BP-250 SERVICE (UT-08017)
2. HB-100, 180, 180V
BP-250

Effective with the UT numbers shown above, the Models HB-100 and BP-250 are supplied with bayonet locking tubes. These bayonet locking tubes eliminate the need for clamps and assure the tubes do not separate during use.

The extruded tubes used on the earlier BP-250 and older models HB-280, 380, 480 & 680 are no longer available and have been superseded to a bayonet locking tube kit A-03036.

The blow-molded tubes 00372-A and 00373-A used on the earlier HB-100 are still available and will continue to be used on the HB-180, 180V. The bayonet locking tubes will not allow use of a vacuum attachment.

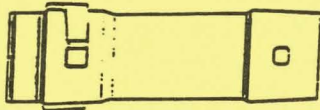
Refer to the illustration below for part numbers and usage:
reference for the bayonet locking tubes.



02898

Straight Tube

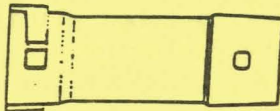
Use on HB-100



02898-1*

Straight Tube

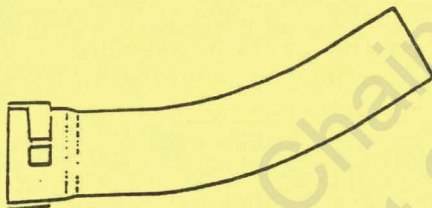
BP-250
HB-280,380
Use on HB-480,680



02998-2*

Straight Tube

Use on BP-250
HB-480,680



02899*

Elbow

HB-100
BP-250
Use on HB-280,380
HB-480,680

* CONTAINED IN BLOWER TUBE KIT A-03036

2. A new Gutter Maintenance Kit (A-02514-A) is available with the bayonet locking tubes. This kit replaces and supersedes the earlier A-02514 (for HB-100, 180, 180V) and A-02515 (for BP-250) gutter kits.

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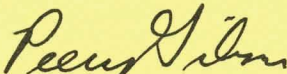
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SUBJECT: 1. PISTON & ROD ASSEMBLY A-01036-A
2. T-27 TORX SCREW FOR CYLINDER RETENTION
3. REPLACEMENT GREASE SCREW FOR GEARHEADS
4. REPLACEMENT STRINGHEAD FOR HK UNITS

AFFECTS: 1. ALL 25cc ENGINES (TRIMMERS & BLOWERS)
2. TRIMMERS, BLOWERS, HEDGE TRIMMERS
3. ST-285, 385, 485
4. HK-24 & 28

1. A new piston & rod assembly A-01036-A will supersede the previously used A-00256-A, A-00239-A, and A-01036. This will be the service piston & rod for ALL 25cc engines. The piston looks very similar to the power-flow piston used on the ST-385 and 485 except the areas around the piston pin are not machined away and, therefore, no longer has an open skirt.
2. For improved retention, the cylinder screws on the 25cc and 16cc engines now use a T-27 torx head. Homelite has available a T-27 Torx bit (3 1/2" long, 1/4" shank) under part number 18566-01. The T-27 torx head screw part number is 82569.
3. The part number for the replacement grease screw in the ST-385,485 gearhead is 00436-17 (M10 X 1.25). The grease screw for the ST-285 gearhead is 80325 (1/4 - 20 X 1/4").
4. The manual advance stringhead was revised on the 1988 and later model HK-24 and 28. Parts for this stringhead system will not be supplied by Homelite. The 81272-1 retainer will fit if the ends are filed off slightly (to fit down into the spool without binding). Any other parts require conversion to the Homelite design manual stringhead by ordering part number A-00116-A.

A-00116-A Stringhead Assembly
includes:
00490 Drive Connector
A-00144 Housing & Eyelet
A-00143 Spool & String (.105" line)
81272-1 Retainer


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- SUBJECT:**
1. CARBURETOR LEAKAGE
 2. REVISED CARBURETORS AND THROTTLE CABLES
 3. PRIMER BASE ASSEMBLIES (ZAMA)
 4. REVISED PRIMER BULB (ZAMA)

- AFFECTS:**
1. 25cc TRIMMERS & BLOWERS
 2. ST-145 THRU ST-385
 - 3&4 TRIMMERS, BLOWERS, HEDGE TRIMMERS

1. Several field complaints have been received recently concerning fuel leakage through the carburetor on string trimmers and blowers. The problem has been traced to the check valves in the primer base. Once the fuel tank is pressurized, the check valves start to leak. Fuel is pushed back into the metering chamber and out the main nozzle.

Field fix- install fitting 01327 and duck bill valve 98819 on the end of the primer overflow line (inside the fuel tank).

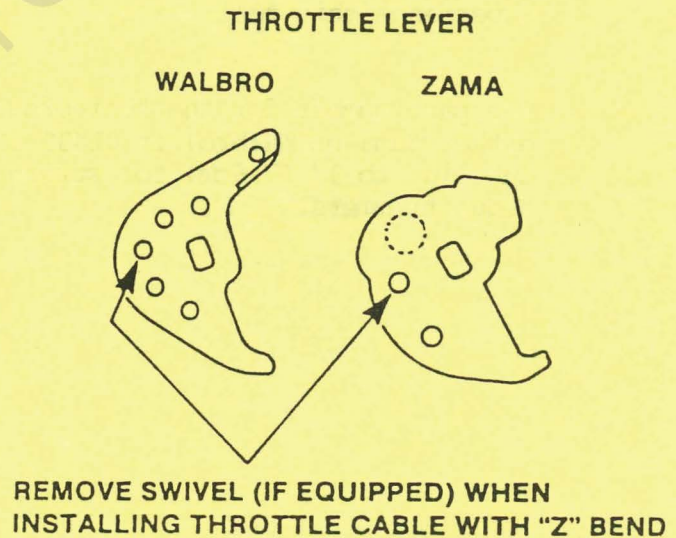
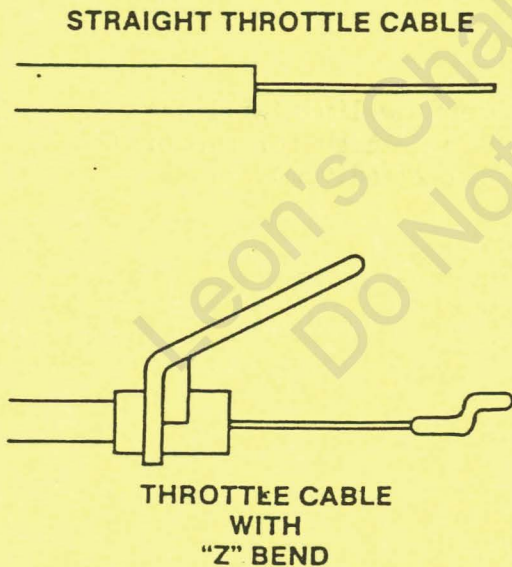
Both carburetor vendors (Walbro & Zama) recently revised the check valves in their primer bases. Future production units should not experience this fuel leakage.

The part number for the "universal" primer overflow line (will fit either Zama or Walbro) is 01439-32 (8" - 20.3 cm length for blowers). Cut line to 3" (7.6cm) for string trimmers, 3 1/2" (8.9cm) for hedge trimmers.

2. The carburetor and throttle cables on the gasoline string trimmers were recently revised.

The carburetors now have limited adjust caps on both the Hi and Lo speed mixture needles. These caps limit the needle travel to 120°, thus eliminating lean operation due to mis-adjustment.

Implemented at approximately the same time (on all units except the ST-485) was a new throttle cable with a "Z" bend where it attaches to the carburetor (eliminating the swivel assembly) and a molded, plastic cable bracket (see diagram below). Adjustment of the cable is achieved by loosening the engine housing screw and sliding the cable bracket up or down.



Due to these revisions several service kits have been created. Refer to the list below for part numbers.

Carburetors:

A-98803-B will supersede to A-03002 (Walbro WT-165)

includes: Swivel Kit A-00289 packed loose

Repair Kit	A-02665
Gasket/Diaphragm Kit	A-00285-A
Primer Base Assembly	A-01200-A
Primer Bulb	01201

A-00047-E will supersede to A-03003 (Zama CIU-H18)

includes: Swivel Kit A-00289 packed loose

Repair Kit	A-00288-A
Gasket/Diaphragm Kit	A-01197-A
Primer Base Assembly (plastic)	A-03062
Primer Bulb (Dome Shape)	A-01195-A

Throttle Cables:

98807 will supersede to A-03006 "Z" bend throttle cable w/bracket (ST-145 thru ST-285).

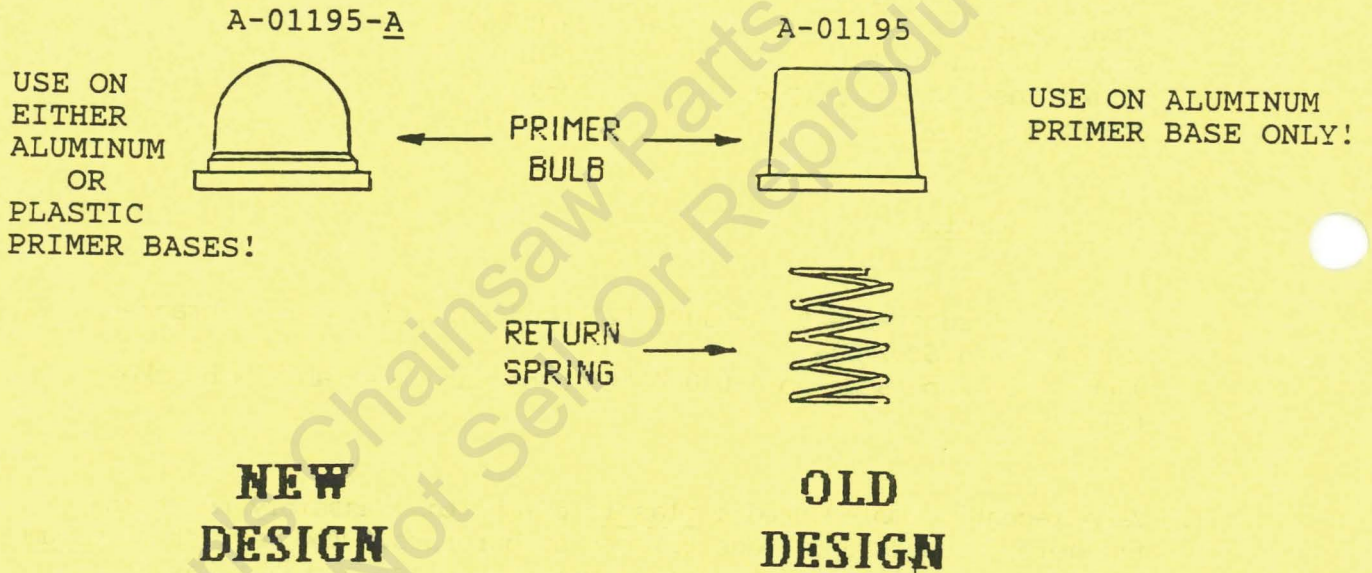
00685 will supersede to A-03004 "Z" bend throttle cable w/bracket (ST-385).

3. Zama recently implemented a plastic primer base assembly on string trimmers, blowers and hedge trimmer carburetors. The earlier aluminum primer bases will not interchange with the plastic primer bases. Service will supply both aluminum and plastic primer bases for the aforementioned units. Refer to list below for part numbers.

<u>Primer Base (Zama)</u>	<u>String Trimmers</u>	<u>Blowers</u>	<u>Hedge Trimmers</u>
Aluminum	A-01194	A-01196-A	01784
Plastic*	A-03062	A-02846	02934

* Requires dome shape primer bulb A-01195-A (see item #4)

4. The Zama primer bulb was recently revised (see diagram below) and the spring removed. The earlier, flat top primer bulb with spring will only fit on aluminum primer bases. The new dome shape bulb will fit either the aluminum or plastic primer bases.



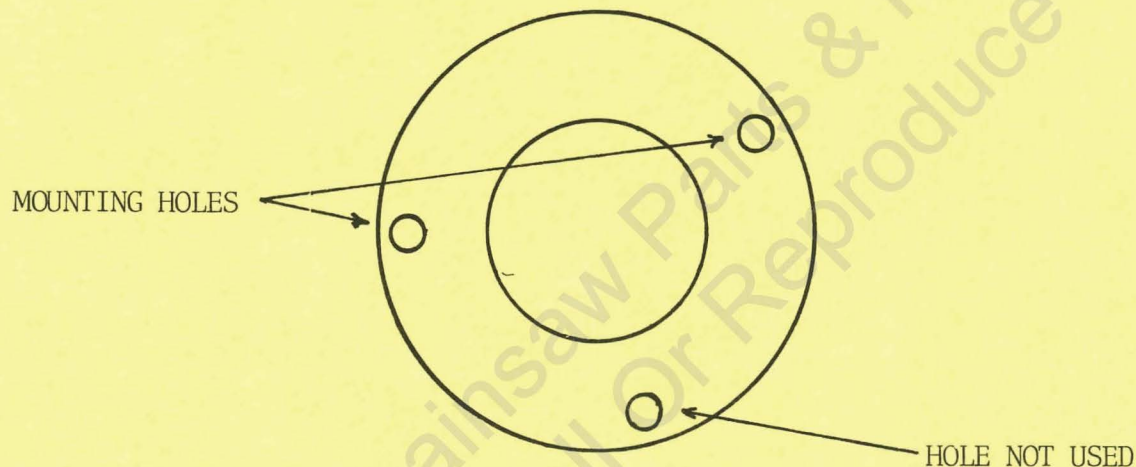
Peery Gibson

Peery Gibson
Field Quality Assurance

SUBJECT: BEARING RETAINER**AFFECTS:** DM-54 SAWS

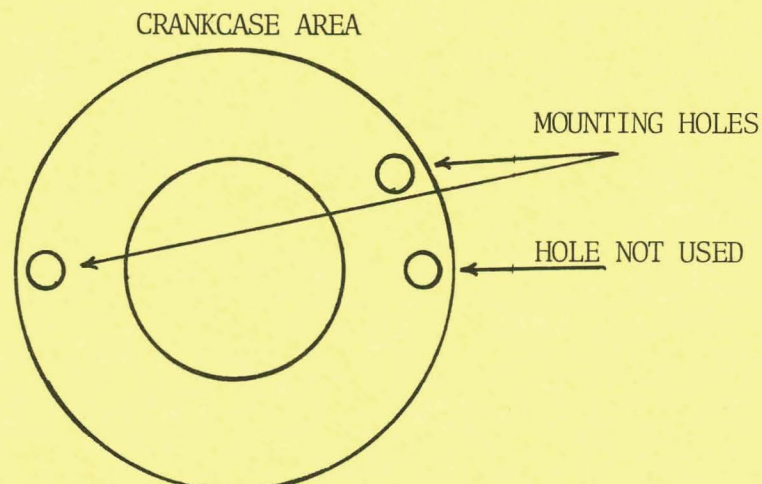
When ordering crankcase assembly (A-49771) for the above unit, there is confusion when it comes to mounting the bearing retainer. Some of the crankcases have three holes drilled in them as illustrated below:

BEARING RETAINER

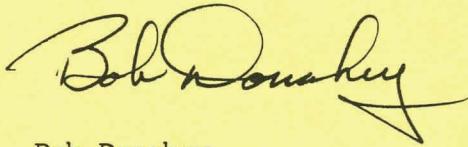


One hole is located at the nine o'clock position. The other two are located at the 2:30 and 3:00 o'clock positions respectively.

When installing the bearing retainer use the gasket and plate supplied. You will find that two of the holes in the plate match the holes at the 9:00 o'clock and 2:30 o'clock positions. Disregard the third hole in the plate. IT IS NOT NEEDED.



The two mounting holes are located 165° apart and will hold the plate down sufficiently to retain the bearing and seal the crankcase.

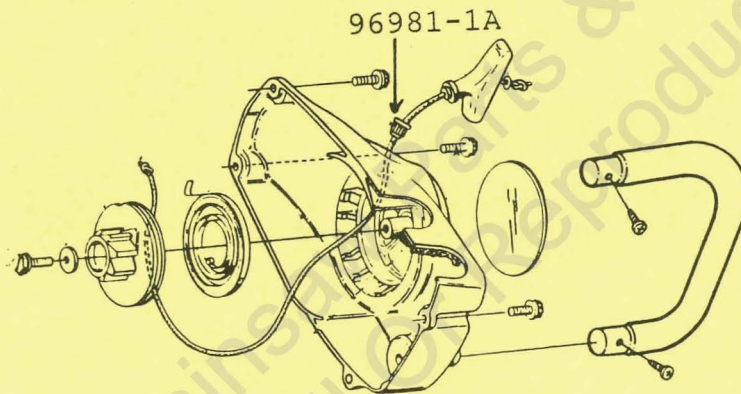


Bob Donahey
Field Quality
Assurance Manager

Leon's Chainsaw Parts & Repair
Do Not Sell Or Reproduce

SUBJECT: CHANGE, STARTER BUSHING**AFFECTS:** XL, S-2, 240, 330 CHAIN SAWS

The steel bushing, part number 96981-1A has been removed from the starter housing on the above saws. There have been numerous reports of this bushing vibrating loose.



This bushing is being replaced by a Brass eyelet, part number 03015. The brass eyelet will be pressed in and flared at the factory and will not be replaceable in the field.

Bob Donahey
Field Quality
Assurance Manager



TECHNICAL SERVICE BULLETIN

NO. 190-019

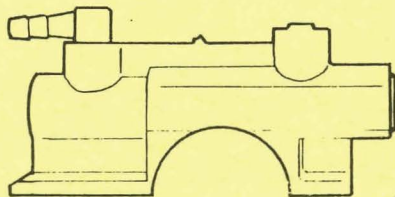
SUBJECT: CHANGE OIL PUMP

AFFECTS: 250

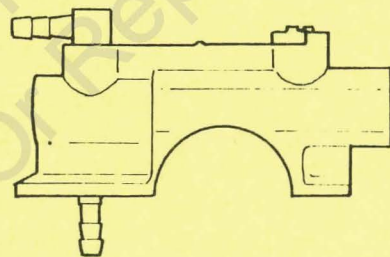
In order to eliminate a potential problem with the oiling on the above saw, the following changes have been made:

The oil pump (A-02944) has been changed to (A-02802-A). A fitting for the oil line has been installed in the new pump. The (01806-A) rubber gasket will no longer be needed.

Old Pump
(A-02944)

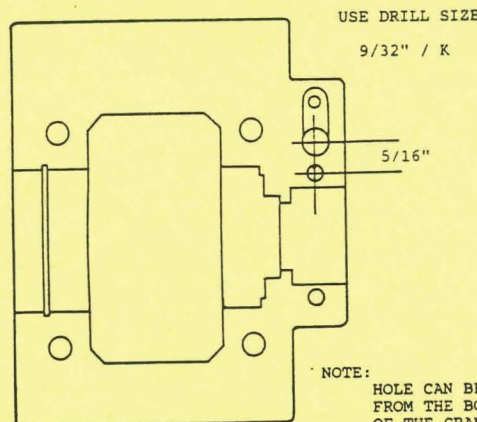


New Pump
(A-02802-A)



When installing the new oil pump on early production saws (before HL2130521), the crankcase will need to have a hole drilled in it so that the fitting will be able to go through for the oil line. The following drawing will give you the location and size of the hole to be drilled.

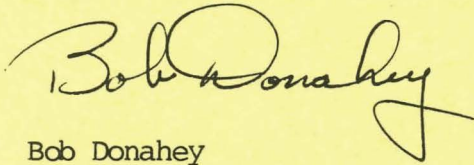
NOTE: Remove old fitting from crankcase and discard.



NOTE:
HOLE CAN BE DRILLED FROM THE BOTTOM SIDE OF THE CRANKCASE. CRANKCASE DOES NOT HAVE TO BE TORN APART.

The crankcase and cylinder assembly (A-02577) has been superseded to (A-02577-B). This assembly has already been drilled out to accept the (A-02802-A) oil pump.

All saws manufactured with a serial number higher than (HL2130521) have the new oil pump installed.



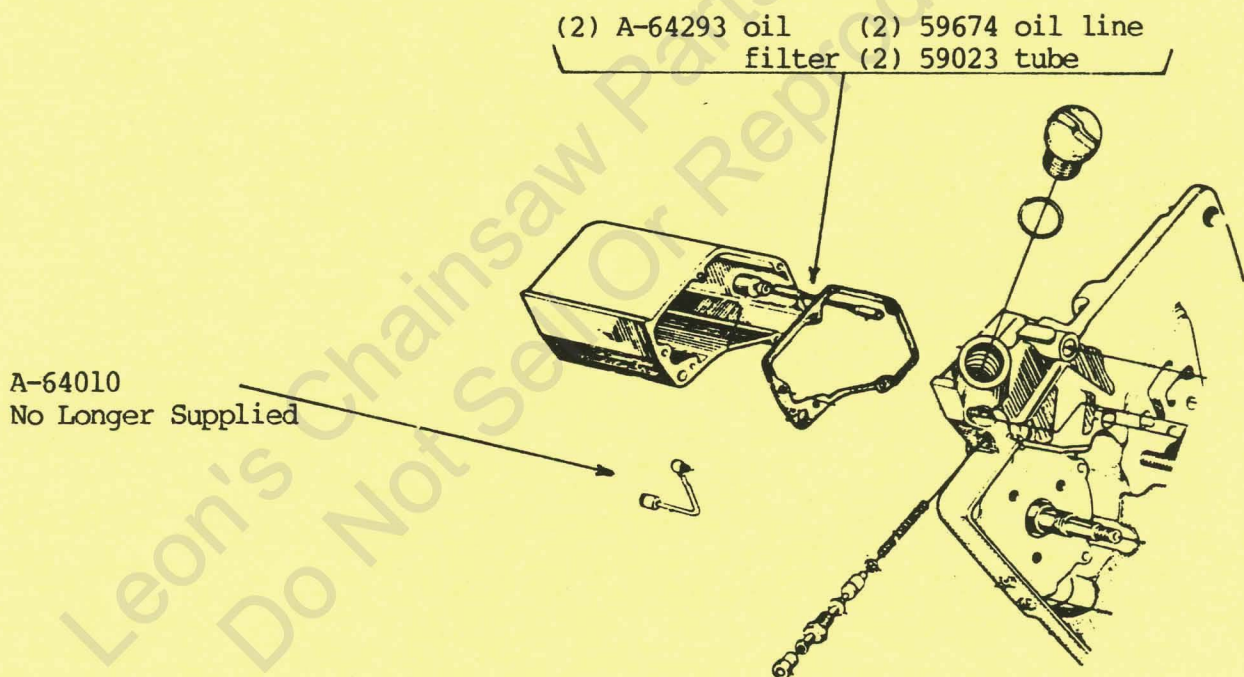
Bob Donahey
Field Quality
Assurance Manager

Leon's Chainsaw Parts & Repair
Do Not Sell Or Reproduce

SUBJECT: OIL PICKUP LINE**AFFECTS:** S-1050 CHAIN SAW

When replacing the oil pick up line and filter for the manual oiler you will have to remove the 90° fitting on the drivecase (64011) and replace it with a straight tube (59023).

The A-64010 oil pick up line will no longer be supplied. By replacing the fitting in the crankcase you can use the A-64293 oil filter and 59674 oil pick up line to service the oiler



Each unit will now use two of each A-64293 oil line, 59674 oil line, and 59023 tube. One set for the manual oiler and one set for the automatic oiler.

Bob Donahey
Field Quality
Assurance Manager

SUBJECT: RAMMERS**AFFECTS:** HR-80 AND HR-65 RAMMERS

The drive gear and crank gear for Homelite Rammers have been changed. The new gears are not interchangeable with the old.

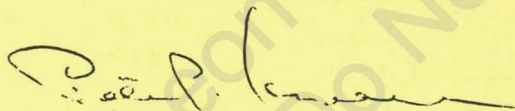
Gears must be replaced as a set. If serial number begins with an HJ or HK.

Units with H. serial numbers will have the new style gears.

New Part Numbers:

Drive Gear and Drum	49902-89
Crank Gear HR-65	49902-88
Crank Gear HR-80	49903-65

NOTE: OLD PART NUMBERS HAVE BEEN OBSOLETE



Peter P. Knoell
Field Quality
Assurance Manager
Construction Equipment

SUBJECT: AP PUMPS**AFFECTS:** AP PUMPS WITH SERIAL NUMBERS BEGINNING WITH HL

AP Pumps built in 1990 will have the following changes to assembly:

1. Some pumps will have up to Three (3) 0.030 shims JA-32814-7 under the ceramic seat in the impeller. These shims are glued with "Black Max" to prevent rotation.
2. Carbon seal will have an O-Ring installed with silastic.
3. An impeller shim is used only as required.

When replacing seal assembly it is important that only one (1) shim remain in the seat bore of the impeller.

The impeller is being redesigned to eliminate the need for the .030" shims. When this change is made a Technical Service Bulletin will be issued.

Peter Knoell

Peter P. Knoell
Field Quality
Assurance Manager
Construction Equipment

SUBJECT: STATOR COLOR CODE**AFFECTS:** HG SERIES, 170B, 170R, 180R SERIES GENERATORS

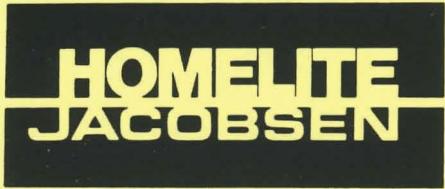
1. Stator wires are now color coded. The following shows new colors in relation with "T" designation:

T1	- Blue
T2	- Brown
T3	- White
T4	- Black
Ground	- Green
Quad	- Yellow

2. Please Note: Idle Control Fuse Part Number 49318.
3. The EH Series Generator Battery has been changed, order 49833 as a replacement battery instead of JA-376080.

Peter Knoell

Peter Knoell
Field Quality
Assurance Manager
Construction Equipment



TECHNICAL SERVICE BULLETIN

NO. 290-004

SUBJECT: PARTS LIST 17965 CORRECTIONS

AFFECTS: 176BI48A, 176BI40A, 176RI42A, AND 180RI62A GENERATORS

Parts List 17965 has a column reversed. The following is the correct part numbers for Stator and Rotors.

<u>MODEL</u>	<u>STATOR</u>	<u>ROTOR</u>
176BI48A	A-49124-S	A-49095-S
176BI40A	A-49128-S	A-49089-S
176RI42A	A-49330-S	A-49095-S
180RI62A	A-49331-S	A-49094-S

Columns for 176BI48A and 176RI42A should be reversed.

Parts List 17894 shows the correct part numbers.

Peter Knoell
 Peter Knoell
 Field Quality
 Assurance Manager
 Construction Equipment

SUBJECT: AP PUMP IMPELLER**AFFECTS:** ALL AP PUMPS

1. The AP Pump impeller has been changed to eliminate the need for a shim under the ceramic seat. New impeller part number is 43274-B. All parts ordered for the old part number will automatically supersede to the new number. AP Pumps with serial number HL106 and above will include the changed impeller.
2. AP Pump slinger has been changed to an O-Ring, part number 02964.
3. AP-320: Nylon 2" pipe fitting, part number 03040 will come standard on this pump. Steel fittings are available as an accessory.

2" - part number 75663-1

1½"- part number 75959-1

Also available is an 1½" nylon fitting, part number 03041.



Peter P. Knoell
Field Quality
Assurance Manager
Construction Equipment

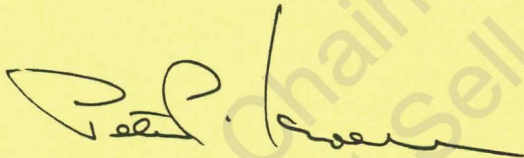
SUBJECT: 120TP3 MOUNTING BOLTS**AFFECTS:** 120TP3 PUMPS

120TP3 Pumps made before serial number HL2450001 were assembled with the impeller housing to engine mounting bolts under torqued.

Under torqued bolts may result in the impeller housing coming loose from the engine during operation.

All pumps currently in stock should be checked and the bolts should be retorqued to 180 in-lbs.

Failure Code: CV280
Job Code: CV28
Flat Rate: 0.5 hrs.



Peter P. Knoell
Field Quality
Assurance Manager
Construction Equipment

ALL PUMPS RECEIVED AFTER 9-10-90 WILL HAVE ALREADY BEEN REWORKED AT THE WAREHOUSE.

SUBJECT: ELECTRIC MOTOR WARRANTY**AFFECTS:** HPW1000E PRESSURE WASHER AND 111B BLOWER

Attached is a copy of Magnetek Century Electric Warranty for OEM Motors. Century motors are used on HPW1000E Pressure Washers and 111B Blowers.

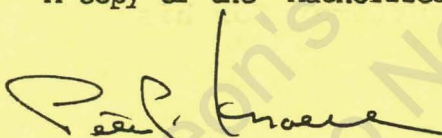
Repairs to these motors can only be performed, under warranty by authorized service shops.

If the motor is beyond repair, the customer will be given a copy of form 1048. This copy should be returned to:

Peter Knoell
14401 Carowinds Blvd.
Charlotte NC 28217

When the form 1048 is received a motor will be released to replace the failed motor. The blue copy must be returned we will not accept any copies of the form.

A copy of the "Authorized Warranty Service Report is also attached.


Peter P. Knoell
Field Quality
Assurance Manager
Construction Equipment

WARRANTY PROCEDURE FOR OEM MOTORS

All motors of the Company's manufacture are warranted to be free of defects in workmanship and materials for a period of twelve (12) months from the date of installation or twenty-four (24) months from the date of manufacture, whichever ever occurs sooner. The Company agrees to remedy any defect or furnish replacements, provided inspection by the Company, or its Authorized Service Shop discloses such motors contain defects in workmanship or material.

In order to determine if the warranty applies, the motor must be delivered or shipped freight prepaid to the nearest MagneTek Authorized Service Center, or returned freight prepaid (after proper authorization) to the plant of manufacture.

After examination of the motor, a determination will be made as to whether the warranty applies and the purchaser of the motor will be so advised.

If the motor cannot be repaired or replaced by a motor suitable for the application, the customer will be directed to a representative of the manufacturer or the equipment on which the MagneTek motor was installed. The Warranty Report Form (FORM 1048) should be completed at this time. The District Office copy of Form 1048 (blue copy) with written certification that the motor failed within warranty, should be given to the customer for his use to obtain a replacement OEM motor.

SUBJECT: IDLE CONTROL KITS
A-48676
A-48677

AFFECTS: 174A27, 176A35, 178A50 SERIES
180A75 SERIES

The above Idle Control Kits are no longer supplied. The parts for these kits can be ordered individually. Attached is an Instruction Sheet and Parts List.

A-48676			<u>QTY</u>
1.	PC Board	A-49654	1
2.	Clamp	50729	2
3.	Spacer	50909	3
4.	Screw	80022	3
5.	Lead	A-48590	1
6.	Washer	84025	2
7.	Lead	A-48588	1
8.	Lead	A-42918	1
9.	Lead	A-48788	1

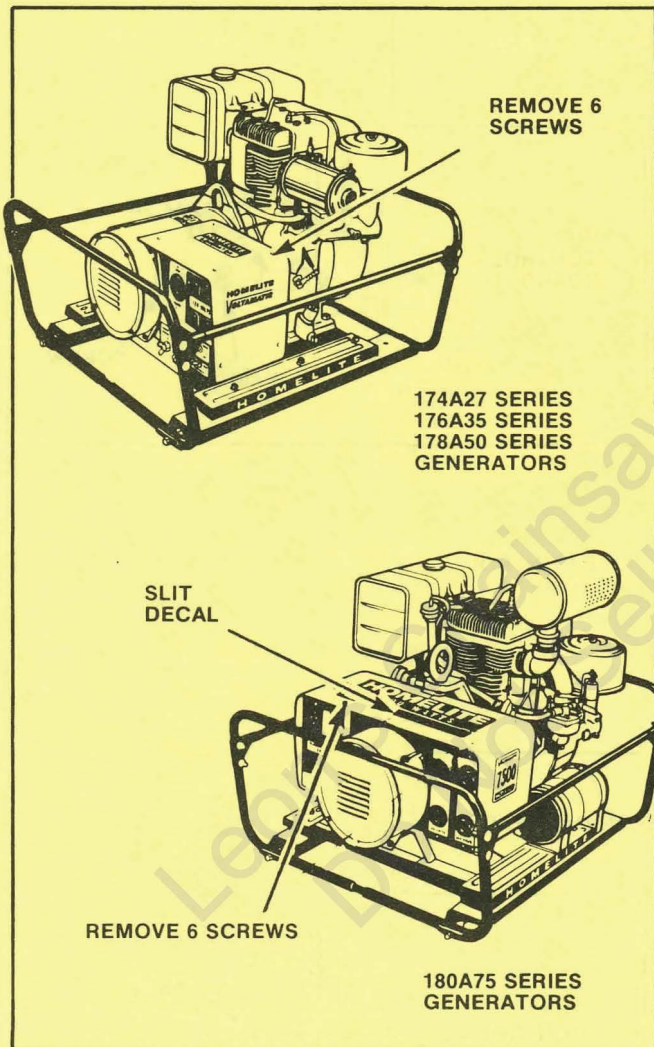
A-48677			
1.	PC Board	A-49654	1
2.	Spacer	50909	3
3.	Screw	80022	3
4.	Washer	84025	3
5.	Clamp	50729	2
10.	Lead	A-42818	1
11.	Lead	A-48788	1



Peter P. Knoell
Field Quality
Assurance Manager
Construction Equipment

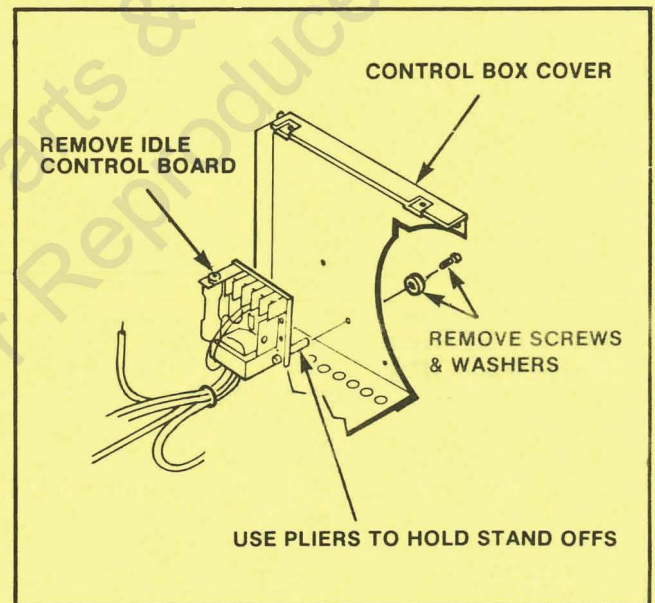
INSTALLATION INSTRUCTIONS for IDLE CONTROL KITS A-48676 and A-48677

1. Remove the six screws holding down the control box cover and remove the cover. Save the screws.
If you have a 180A75-1 or 180A75-1A generator, slit the generator decal at the joint of the control box covers and remove the left cover.



2. Remove the wire nuts from wires #2 and #5. With a screwdriver remove lead #1 from the 240 V receptacle and #6 from the full power switch.
On the 180A75 series, remove the 4 wire nuts on wires #2, #3, #6 and #7. Save the wire nuts.

3. Disconnect the two small black wires from the idle control switch.
4. Disconnect the white, yellow and red wires from the idle control board.
For the 180A75 series, disconnect two yellow wires and a red wire from the idle control board.
5. In order to remove the screws from the idle control board, use vise grip pliers to prevent rotation of the stand offs. Remove the board. Save the screws and washers.



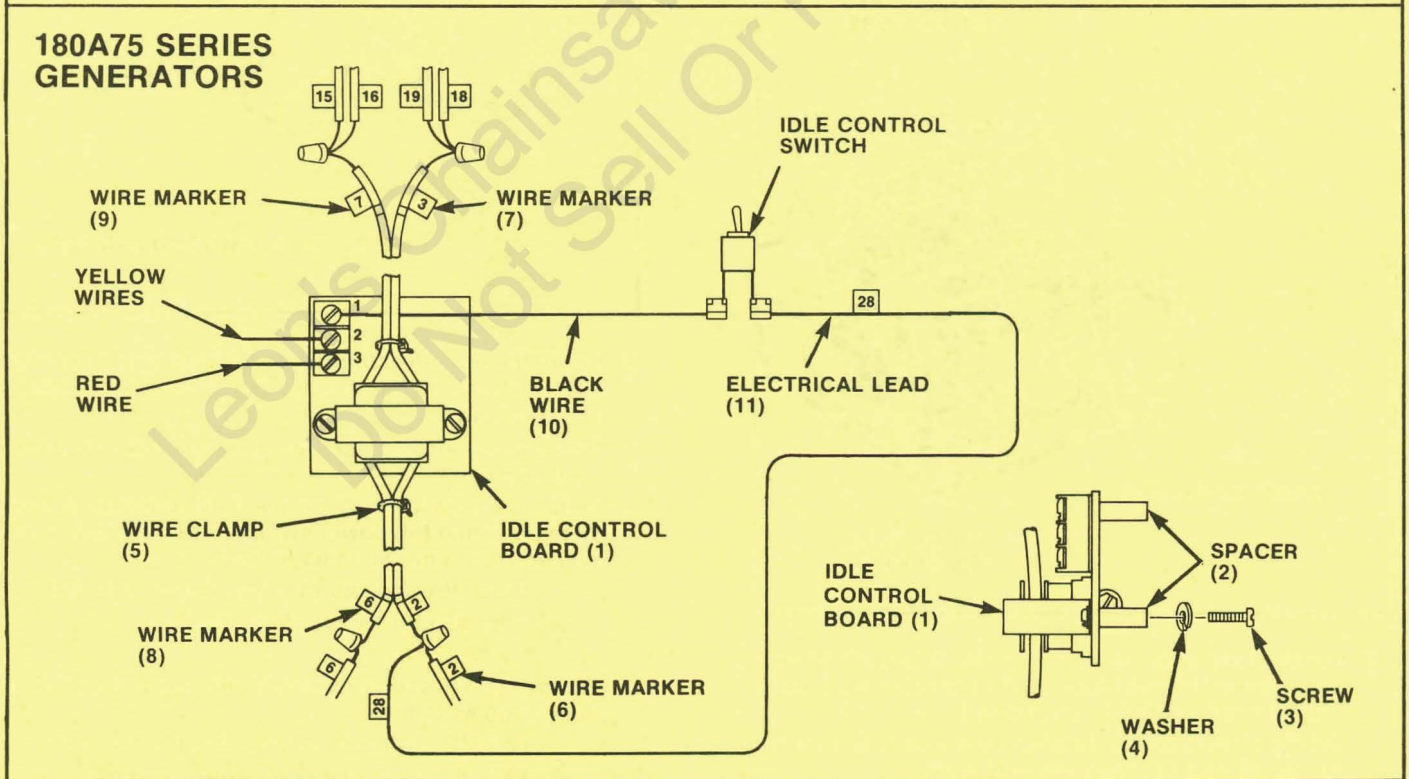
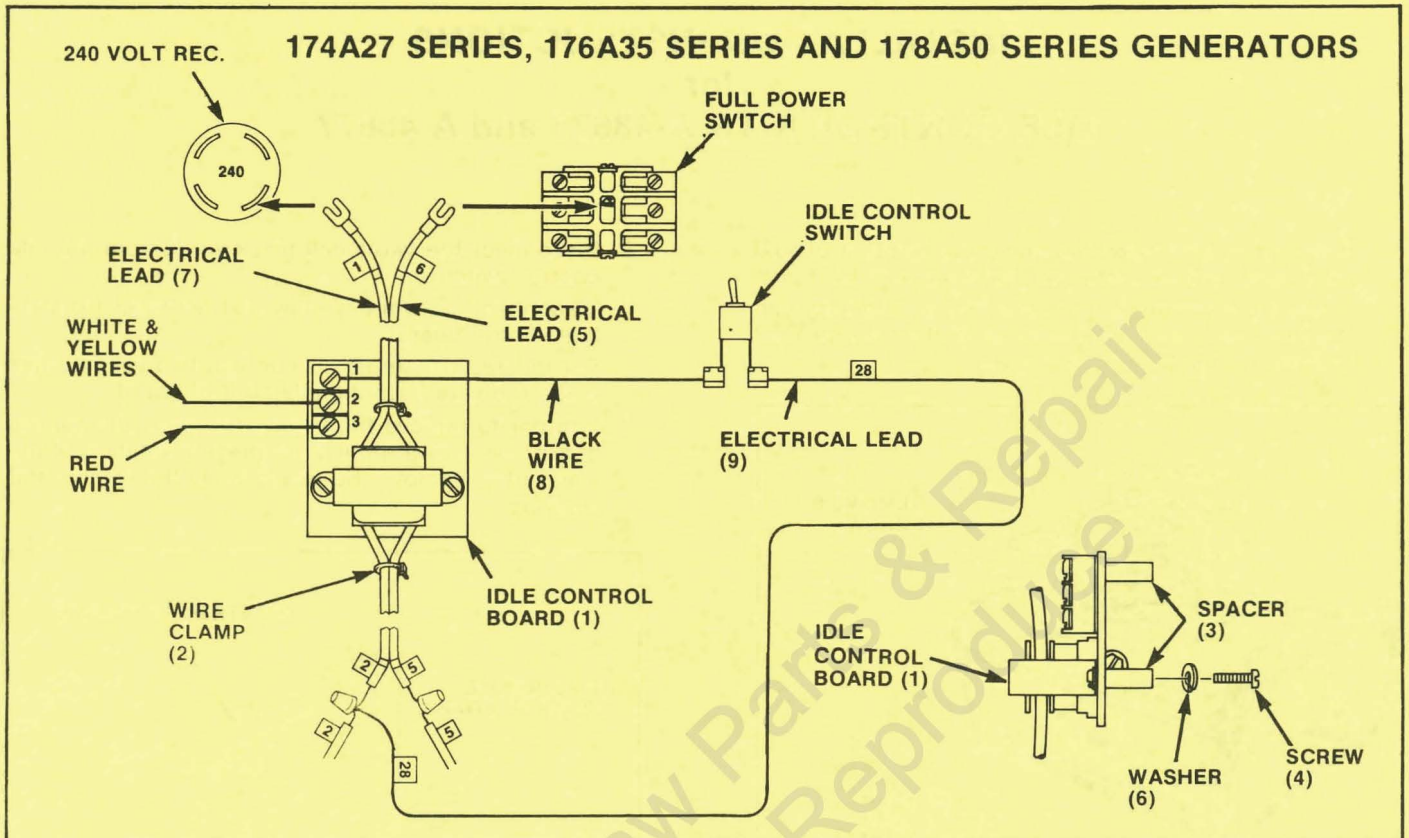
6. Install the new idle control board, with the old screws and washers, in the same location as the idle board just removed.
7. Connect the small black wire and Wire #28 to the idle control switch.
8. Install the new Wire #1 on the 240V receptacle and Wire #6 on the full power switch. Use the 2 wire nuts and connect new wires as follows:
Wire #2 connects to Wire #2 and Wire #28.
Wire #5 connects to Wire #5.

On the 180A75 series, use the 4 wire nuts and connect new wires as follows:

- Wire #2 connects to Wire #2 and Wire #28.
- Wire #3 connects to Wires #18 and #19.
- Wire #6 connects to Wire #6.
- Wire #7 connects to Wires #15 and #16.

9. On the terminal board of the idle control board, connect the white and yellow wires to position #2 and the red wire to position #3.

For the 180A75 series connect both yellow wires to position #2 of the terminal board and the red wire to position #3.



10. Reinstall the cover with the screws removed in Step #6.

NOTE

Be sure that the wires are not pinched or likely to be cut.

SUBJECT: HOMELITE RAMMERS**AFFECTS:** HR-65, UT-06040 AND HR-80, UT-06041

BE ADVISED:

1. Engine governors are preset at the Factory at 3700 R.P.M.
2. Increasing the engine speed by increasing governor speed will cause failure of the Rammer.
3. Evidence of tampering with the engine governor will void the warranty.

PETER KNOELL
QUALITY ASSURANCE

SUBJECT: BATTERY WARRANTY REIMBURSEMENT**AFFECTS:** ALL HOMELITE/JACOBSEN BATTERIES

Effective March 1, 1990 all batteries used on Homelite/Jacobsen equipment will be subject to a four (4) month warranty period and a twenty (20) month adjustment policy. If a battery should fail due to a defect in material and/or workmanship within the first four (4) months we will repair or replace the battery at no charge.

If the battery should fail due to a defect in material and/or workmanship in the 5th thru 24th month we will replace the battery charging the customer 1/24th of the current purchase price for each month or fraction thereof the battery has been in their possession or repair the battery free at our option.

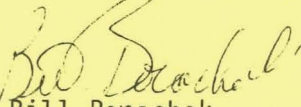
A Homelite Battery Limited Warranty must be filled out completely at time of purchase and must accompany the dealers warranty claim before reimbursement will be issued.

The accompanying charts indicate the amount the customer must pay for the replacement battery and the amount of credit Homelite will issue to the dealer.

Battery life can be greatly extended if:

- a. Battery is not activated until sale to the customer.
- b. Battery is kept charged during storage. The customer must be made aware that when he stores his product during the off season he must charge the battery at least once a month.

We thank you for your cooperation in this matter.


Bill Borachok
Field Quality
Assurance Manager
Lawn & Garden.

HOMELITE®

BATTERY REPLACEMENT FORM

Battery replacement form must be completed by the dealer and retained by the customer.

For battery replacement this warranty form must be properly filled in and accompanied by a copy of the sales receipt to be valid.

BATTERY P/N

CIRCLE THE YEAR, MONTH AND DAY OF PURCHASE AT TIME OF DELIVERY.

1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999

JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEPT. OCT. NOV. DEC.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

22 23 24 25 26 27 28 29 30 31

UNIT DESCRIPTION AND OWNERS INFORMATION:

MODEL NO. _____

SERIAL NO. _____

CUSTOMER NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE NO.: _____

DEALER NAME: _____

DEALER NUMBER: _____

HOMELITE BATTERY

LIMITED WARRANTY

Homelite Division of Textron Inc. warrants to the original retail purchaser that this battery is free from defects in material and workmanship for four (4) months from the date of purchase. Should the battery fail because of a defect in material or workmanship during this period, Homelite will at its option, repair or replace it without charge.

This battery is further subject to the following adjustment policy covering any defects in material or workmanship. Should the battery prove defective in material or workmanship within twenty-four (24) months from date of purchase return it to the dealer and Homelite will replace it with a new battery, same size and type, charging you only for 1/24th of the current price for each month or fraction thereof the battery has been in your possession, or repair it free at its option.

This warranty and adjustment does not apply to breakage of the container cover. A battery that has been opened, frozen or damaged due to obvious ill use or abuse including fire, explosion or wreckage is not covered. If acid is added after the battery has been in service or if the battery used is an electrical size smaller than that recommended for use in the unit by the unit manufacturer, it is not covered by this warranty.

SAVE YOUR SALES SLIP

Proof of purchase in the form of your dated sales receipt, cash register slip, etc. showing the serial and/or part number, the model of your Product and a completed Battery Replacement Form will be required before our dealers can perform warranty service on this Product.

You must at your own expense arrange to deliver or ship the Product for warranty repairs and arrange for pickup or return of the Product after repairs have been made.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY OR OTHERWISE, APPLICABLE TO THIS PRODUCT, SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY. HOMELITE SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

HOW TO OBTAIN WARRANTY SERVICE

Warranty service can be obtained from a Homelite dealer authorized to make warranty repairs. If you need warranty service, check first with the Homelite dealer from whom you purchased the Product, or call the following phone number(s) for the name and location of the nearest dealer providing warranty service.

1-800-242-4672 - Contiguous United States, Hawaii, Puerto Rico and Virgin Islands.

1-800-521-5165 - North Carolina

IN CANADA: You may also obtain this information from our Sales Offices located as follows:

3260 Viking Way Richmond, B.C. V6V 1N6	1850 55th Avenue Lachine, Que. H8T 3J5	16520, 111th Avenue Edmonton, Alta. T5M 3V8	45 Brandon Street Moncton, N.B. E1C 7E7	595 Canartic Drive Downsview (Toronto) Ontario, Canada M3J 2P9
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Homelite will not make any reimbursements for warranty service, except to Homelite dealers authorized to make warranty repairs. You must present your sales receipt when making any claim for warranty service.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty is given by Homelite Division of Textron, Inc. Post Office Box 7047, 14401 Carowinds Blvd., Charlotte, North Carolina 28241.

Printed in U.S.A.
19821

HOMELITE TEXTRON
Homelite Division of Textron, Inc.

PART NO. JA-99499-8

BATTERY WARRANTY PAYMENT CHART CUSTOMER COST

PART NUMBER	UNIT	LIST PRICE	MONTHS SINCE PURCHASE											
			1	2	3	4	5	6	7	8	9	10	11	12
JA-99220-2	YT	\$72.13	\$0.00	\$0.00	\$0.00	\$0.00	\$12.02	\$15.03	\$18.03	\$21.04	\$24.04	\$27.05	\$30.05	\$33.06
JA-37608-0	LTX, 180RIE	\$43.20	\$0.00	\$0.00	\$0.00	\$0.00	\$ 7.20	\$ 9.00	\$10.80	\$12.60	\$14.40	\$16.20	\$18.00	\$19.80
JA-99449-7	JR, RE	\$58.87	\$0.00	\$0.00	\$0.00	\$0.00	\$ 9.81	\$12.26	\$14.72	\$17.17	\$19.62	\$22.08	\$24.53	\$26.98
JA-51880-8	OLD SUPER BAG	\$56.20	\$0.00	\$0.00	\$0.00	\$0.00	\$ 9.37	\$11.71	\$14.05	\$16.39	\$18.73	\$21.08	\$23.42	\$25.76
JA-99145-0	6V SUPER BAG	\$40.00	\$0.00	\$0.00	\$0.00	\$0.00	\$ 6.67	\$ 8.33	\$10.00	\$11.67	\$13.33	\$15.00	\$16.67	\$18.33
JA-99352-7	HR	\$60.33	\$0.00	\$0.00	\$0.00	\$0.00	\$10.06	\$12.57	\$15.08	\$17.60	\$20.11	\$22.62	\$25.14	\$27.65
JA-99122-3	SUPER BAG	\$47.20	\$0.00	\$0.00	\$0.00	\$0.00	\$ 7.87	\$ 9.83	\$11.80	\$13.77	\$15.73	\$17.70	\$19.67	\$21.63
49833	EHE 4400	\$50.43	\$0.00	\$0.00	\$0.00	\$0.00	\$ 8.41	\$10.51	\$12.61	\$14.71	\$16.81	\$18.91	\$21.01	\$23.11

PART NUMBER	UNIT	LIST PRICE	MONTHS SINCE PURCHASE											
			13	14	15	16	17	18	19	20	21	22	23	24
JA-99220-2	YT	\$72.13	\$36.07	\$39.07	\$42.08	\$45.08	\$48.09	\$51.09	\$54.10	\$57.10	\$60.11	\$63.11	\$66.12	\$69.12
JA-37608-0	LTX, 180RIE	\$43.20	\$21.60	\$23.40	\$25.20	\$27.00	\$28.80	\$30.60	\$32.40	\$34.20	\$36.00	\$37.80	\$39.60	\$41.40
JA-99449-7	JR, RE	\$58.87	\$29.44	\$31.89	\$34.34	\$36.79	\$39.25	\$41.70	\$44.15	\$46.61	\$49.06	\$51.51	\$53.96	\$56.42
JA-51880-8	OLD SUPER BAG	\$56.20	\$28.10	\$30.44	\$32.78	\$35.13	\$37.47	\$39.81	\$42.15	\$44.49	\$46.83	\$49.18	\$51.52	\$53.86
JA-99145-0	6V SUPER BAG	\$40.00	\$20.00	\$21.67	\$23.33	\$25.00	\$26.67	\$28.33	\$30.00	\$31.67	\$33.33	\$35.00	\$36.67	\$38.33
JA-99352-7	HR	\$60.33	\$30.17	\$32.68	\$35.19	\$37.71	\$40.22	\$42.73	\$45.25	\$47.76	\$50.28	\$52.79	\$55.30	\$57.82
JA-99122-3	SUPER BAG	\$47.20	\$23.60	\$25.57	\$27.53	\$29.50	\$31.47	\$33.43	\$35.40	\$37.37	\$39.33	\$41.30	\$43.27	\$45.23
49833	EHE 4400	\$50.43	\$25.22	\$27.32	\$29.42	\$31.52	\$33.62	\$35.72	\$37.82	\$39.92	\$42.03	\$44.13	\$46.23	\$48.33

BATTERY WARRANTY PAYMENT CHART DEALER CREDIT FROM HOMELITE

PART NUMBER	UNIT	LIST PRICE	MONTHS SINCE PURCHASE												
			1	2	3	4	5	6	7	8	9	10	11	12	
JA-99220-2	YT	\$72.13	\$72.13	\$72.13	\$72.13	\$72.13	\$72.13	\$60.11	\$57.10	\$54.10	\$51.09	\$48.09	\$45.08	\$42.08	\$39.07
JA-37608-0	LTX, 180RIE	\$43.20	\$43.20	\$43.20	\$43.20	\$43.20	\$43.20	\$36.00	\$34.20	\$32.40	\$30.60	\$28.80	\$27.00	\$25.20	\$23.40
JA-99449-7	JR, RE	\$58.87	\$58.87	\$58.87	\$58.87	\$58.87	\$58.87	\$49.06	\$46.61	\$44.15	\$41.70	\$39.25	\$36.79	\$34.34	\$31.89
JA-51880-8	OLD SUPER BAG	\$56.20	\$56.20	\$56.20	\$56.20	\$56.20	\$56.20	\$46.83	\$44.49	\$42.15	\$39.81	\$37.47	\$35.13	\$32.78	\$30.44
JA-99145-0	6V SUPER BAG	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$33.33	\$31.67	\$30.00	\$28.33	\$26.67	\$25.00	\$23.33	\$21.67
JA-99352-7	HR	\$60.33	\$60.33	\$60.33	\$60.33	\$60.33	\$60.33	\$50.28	\$47.76	\$45.25	\$42.73	\$40.22	\$37.71	\$35.19	\$32.68
JA-99122-3	SUPER BAG	\$47.20	\$47.20	\$47.20	\$47.20	\$47.20	\$47.20	\$39.33	\$37.37	\$35.40	\$33.43	\$31.47	\$29.50	\$27.53	\$25.57
49833	EHE 4400	\$50.43	\$50.43	\$50.43	\$50.43	\$50.43	\$50.43	\$42.03	\$39.92	\$37.82	\$35.72	\$33.62	\$31.52	\$29.42	\$27.32

PART NUMBER	UNIT	LIST PRICE	MONTHS SINCE PURCHASE											
			13	14	15	16	17	18	19	20	21	22	23	24
JA-99220-2	YT	\$72.13	\$36.07	\$33.06	\$30.05	\$27.05	\$24.04	\$21.04	\$18.03	\$15.03	\$12.02	\$9.02	\$6.01	\$3.01
JA-37608-0	LTX, 180RIE	\$43.20	\$21.60	\$19.80	\$18.00	\$16.20	\$14.40	\$12.60	\$10.80	\$ 9.00	\$ 7.20	\$5.40	\$3.60	\$1.80
JA-99449-7	JR, RE	\$58.87	\$29.44	\$26.98	\$24.53	\$22.08	\$19.62	\$17.17	\$14.72	\$12.26	\$ 9.81	\$7.36	\$4.91	\$2.45
JA-51880-8	OLD SUPER BAG	\$56.20	\$28.10	\$25.76	\$23.42	\$21.08	\$18.73	\$16.39	\$14.05	\$11.71	\$ 9.37	\$7.02	\$4.68	\$2.34
JA-99145-0	6V SUPER BAG	\$40.00	\$20.00	\$18.33	\$16.67	\$15.00	\$13.33	\$11.67	\$10.00	\$ 8.33	\$ 6.67	\$5.00	\$3.33	\$1.67
JA-99352-7	HR	\$60.33	\$30.17	\$27.65	\$25.14	\$22.62	\$20.11	\$17.60	\$15.08	\$12.57	\$10.06	\$7.54	\$5.03	\$2.51
JA-99122-3	SUPER BAG	\$47.20	\$23.60	\$21.63	\$19.67	\$17.70	\$15.73	\$13.77	\$11.80	\$ 9.83	\$ 7.87	\$5.90	\$3.93	\$1.97
49833	EHE 4400	\$50.43	\$25.22	\$23.11	\$21.01	\$18.91	\$16.81	\$14.71	\$12.61	\$10.51	\$ 8.41	\$6.30	\$4.20	\$2.10