

## BRANCH SERVICE MEMO NO. 888CS

DEALER SERVICE MEMO NO. 575

TO:All Districts & Branches and C/S DealersSUBJECT:Model #150 Chain Saw Engine Cover #A-68644-1DATE: 2/74

The design of the subject engine cover consists of two halves, fastened together with 8 screws and epoxied. This creates a trouble free integral assembly.

It is not intended that these halves be disassembled and in most cases is impossible to do so, due to the epoxy flow around the screw threads.

Some dealers are attempting to disassemble the halves and are naturally having great difficulty, breaking off the screw heads in the process. Since all service can be performed without disassembly, there is no reason to do so.

Please inform your Service Personnel accordingly.

Joe Shuhy, Service Manager Forestry Equipment



BRANCH SERVICE MEMO NO. 889CS

DEALER SERVICE MEMO NO. 576

**Distribution:** 

TO:	All Districts, Branches and Chain Saw Dealers	
SUBJECT:	350 Chain Saw Owners Manual #24821	

DATE: 3/74

Here is a 350 Owner's Manual for your use. We suggest that you read it carefully and keep it on hand for reference, as it contains trouble-shooting, repair and maintenance information of value to servicemen as well as customers.

Because the manual is supplied to consumers, the text covers no repairs necessitating removal of the rotor, disassembly of the engine "short block", or any procedures requiring use of special tools.

To fill this information gap, we are planning dealer distribution of other testing and repair bulletins. One such, an illustrated Model 350 special tool sheet (the first of a new special tool information series) is now being printed. You can expect to receive your copy of this in a short while.

Jöseph Shuhy, Service Manager Forestry Equipment

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#### BRANCH SERVICE MEMO NO. 890CE

DEALER SERVICE MEMO NO. 577

TO: All Districts, Branches and Construction Equipment Dealers SUBJECT: DATE: 5/74 Transformer Mounting Bracket

Sufficient requests have been made for Service to carry 50982 bracket, transformer mounting due to some breakage.

You can now order #50982 from Service Parts in Gastonia. Four pieces are required and will fit the following transformers:

Part No.	Model O
<b>A-5</b> 3900	151A15-1, 151A15-1A, 151A15-1B
A-53901-A	152A25-1, 152A27-1A, 152A27-2, A27-1
A-53902-A	9A34-1, 9A34-1A, 9A34-2, 153A35-1A 153A35-2, A37-1, 153A35-1
A-53903-A	155A50-1A, 155A50-2, 155A50-1
A-53904	154A20-1, 270A20-1A, 270A20-1B, 270A20-1C

Lars Johnson National Service Manager



# BRANCH SERVICE MEMO NO. 891 CS

DEALER SERVICE MEMO NO. 578

**TO:** All Districts, Branches and C/S Dealers

**SUBJECT:** Roller Bearing #63867 (DD-38069) Stamped on Bearing Face)

**DATE:** 5/74

USAGE: 350 Chain Saw

The subject roller bearing #63867 has been re-instated for use on the model #350 chain saw.

All of our model 350 chain saws were built with this bearing and must be serviced with this bearing only. Any information to the contrary is to be disregarded.

Roller bearing #67395 (DD-43667) is similar to #63867 but must not be used to service the model 350. Bearing #67395 will still be required to service the XL-100 series saws as specified. It has a longer roller and smaller roller end radius that will cause a lock up if used in the model #350 chain saw.

Joseph Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 893CS

DEALER SERVICE MEMO NO. 580

All Branch & District and Chain Saw Dealers

SUBJECT:

TO:

Kit, Trigger & Screw - A-12966 Includes: DATE: 7/74

- (1) Trigger (not supplied separately)
- (1) Screw, Trigger Latch #12094-1A (Supplied separately)

USAGE: 350 - 350HG - 350SL

Kit #A-12966 is available as a service replacement for Trigger #12090 or Screw, Trigger Latch 12094-1 on the above model saws.

The two Kit parts (trigger & screw) must be used together in order to obtain the desired trigger latch "locking."

The new parts prevent the unintentional engagement of the trigger latch. It will be necessary to depress both the trigger lock and the trigger in order to engage the trigger latch.

All triggers part #12090 and screws #12094-1 in district or branch stock are to be scrapped when Kits are available and returned to Port Chester using a warranty claim form.

Mark your records accordingly.

J. Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 894CS

DEALER SERVICE MEMO NO. 581

TO: All District & Branch Managers & Chain Saw DealersSUBJECT: Seal #12282-A

DATE: 7/74

Seal #12282-A will replace seal #12282 & 58688-A in all usage. This new seal will standardize on an improved elastomeric compound that will be identified with a yellow Dykem Garter Spring.

All existing seals #12282 & 58688-A are to be used where previously specified until exhausted.

Note: Do not under any circumstances use seal #58688-A in any model 350 or 650 chain saws.

Mark your records accordingly.

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Joe Shuhy, Service Manager Forestry Equipment

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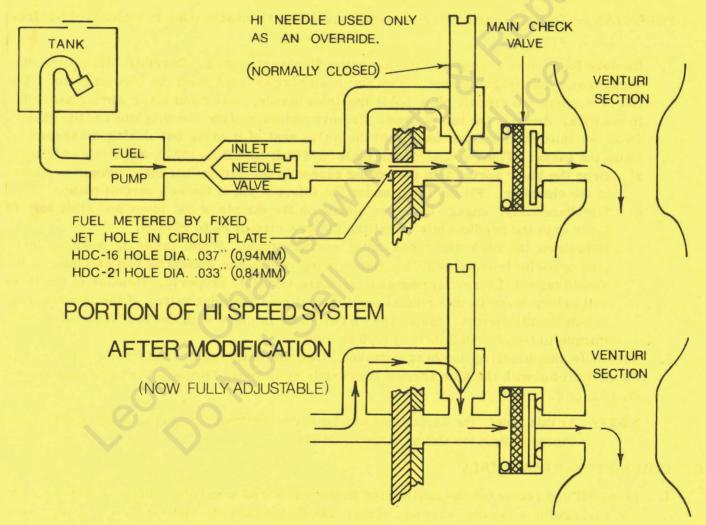


DEALER SERVICE MEMO NO. 583

**TO:** District & Branch Managers and Chain Saw Dealers

SUBJECT: Kit A-12958 to make 350 Chain Saw Carburetors DATE: 8/74 HDC-16 and HDC-21 fully adjustable for altitude conditions.

HI SPEED SYSTEM OF CARBURETOR BEFORE MODIFICATION



The HDC-16 and HDC-21 carburetors supplied as original equipment are identical except for the diameter of the fixed high speed jet (fuel take-off) holes in their circuit plates. Both of these circuit plates may supply too much fuel for proper operation at high altitudes. To assure proper operation at high altitudes this kit has been made available. The kit contains a gasket and a circuit plate without a fixed jet hole. It also contains sheet #24907 for instructions on correct adjustment of the modified carburetors, plus a triangular label which is to be put on the outside of the air filter cover so the owner will know that the carburetor is adjustable. With this blank circuit plate installed, all of the fuel will flow through the bypass channel and be metered by the HI SPEED NEEDLE (see drawings). The carburetor adjustment Instruction Sheet #24907, should be given to the saw owner.

#### INSTRUCTIONS FOR MODIFYING THE CARBURETOR

#### A. REMOVING CARBURETOR

- 1. Drain the fuel tank.
- 2. Remove air filter cover and air filter.
- 3. Clean the carburetor chamber and the outside of the carburetor as thoroughly as possible.
- 4. Take out only the two long screws holding the air filter spring plate, flange bushing and carburetor to the carburetor connector at the bottom of the chamber.
- 5. Angle the carburetor and lift as required to pull the needle grommet out of the slots in the chamber wall. Disconnect the carburetor from the throttle and choke rods, and from the fuel and pulse lines.
- 6. Wash carburetor with solvent.

#### B. INSTALLING KIT PARTS

IMPORTANT: Once the carburetor is opened up, all work must be done in a clean, dust free area.

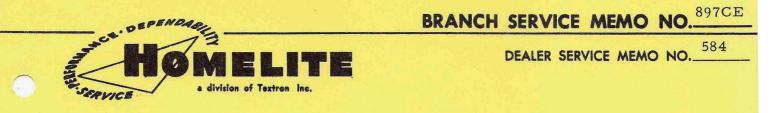
- 1. Remove four cover screws and the metering diaphragm cover. Carefully lift out the diaphragm and diaphragm gasket. Two flat head screws hold down the circuit plate. The fulcrum pin of the circuit plate holds the inlet needle, lever and lever spring assembly in position. Remove the two screws. Remove and discard the circuit plate and the gasket. Drop the inlet needle valve back into the valve seat if it came out during disassembly.
- 2. Using the gasket #67367-A and circuit plate #67382 from Kit A-12958, assemble as follows:
  - a) Drop the lever spring into the spring recess in the carburetor body. Position gasket in the chamber. Fit the lever under the fulcrum pin of the new circuit plate.
  - b) Simultaneously, engage the lever spring on the dimple of the lever and slide fork of lever onto the needle while installing the new circuit plate #67382.
  - c) Hold down the plate and check lever/spring action. While pressing down on lever (end opposite inlet valve fork), light spring resistance should be felt and inlet valve should unseat if lever, spring and valve are installed properly. Release of the lever will return lever to its original position and seat the inlet valve. If the lever/spring action is satisfactory, fasten the circuit plate in place with the two flat head screws (torque to 6-1/2 pound inches) (7, 5 kg/cm).
- 3. Assemble the metering diaphragm gasket, then the diaphragm, and finally the cover to the carburetor with the four screws previously removed. Torque to 6-1/2 pound inches. (7, 5 kg/cm).
  - NOTE: At this point, the carburetor can be pressure tested for leakage as described in Pictorial Service Guide 24329 or 24534.

#### C. COMPLETING REASSEMBLY

- 1. Reinstall and reconnect the carburetor to the lines and controls. Before tightening the two carburetor mounting screws, center the flange bushing and air filter spring plate over the carburetor so that the air filter cover can be aligned properly on the saw. Torque the two mounting screws to 45 pound inches, (51, 8 kg/cm).
- 2. Stick the triangular label to the top of the air filter cover. This label gives notice that the saw now has a fully adjustable carburetor that must be adjusted according to instructions in this sheet #24907.

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Joseph Shuhy, Service Manager Forestry Equipment



# TO:All Districts, Branches and Construction Equipment DealersSUBJECT:Correct Engine Speed Adjustment of Kohler K91J<br/>Engine of PCS-30 Compactor is Essential for Good<br/>Soil CompactionDATE:

The engine speed should be set to 3100 - 3200 with the aid of a tachometer. Before doing this, be sure to check the throttle control for proper assembly and action. Referring to the drawing, proceed as follows:

- 1. The screw and nut in the throttle cable clamping bracket should have the screw head on the inside and nut on the outside. If installed in the reverse, remove and reinstall properly.
- 2. Check that the throttle cable is hooked into the third hole clockwise from the cutout in the throttle control disc.
- 3. Check that the throttle cable is clamped in a position in which the cable wire can fully open and close the throttle. If the cable was clamped too shortly for full travel, loosen the bracket clamp. Then reposition the cable in the clamp, as required, and reclamp it.
- 4. Start the engine and check the full throttle speed with a tachometer. The full throttle speed should be 3100 3200 rpm. If the engine is not running within this speed range stop the engine and proceed as follows:
  - a. Put the throttle control handle to the full throttle position.
  - b. Loosen (but do not remove) the nut which holds the governor arm to the throttle cross shaft.
  - c. Using pliers, rotate the throttle cross shaft as required -- clockwise to decrease, counterclockwise to increase speed.
  - d. Tighten the nut to lock the governor arm to the cross shaft. Start engine and check speed with a tachometer. Repeat steps a) through d) if required, until the engine runs at 3100 - 3200 rpm. \_\_THROTTLE CONTROL

Bil Bouchek

Bill Borachok Service Manager

3<sup>rd</sup>HOLE THROTTLE CABLE CROSS SHAFT CLAMPING BRACKET NUT-CABLE NUT

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BRANCH SERVICE MEMO NO. 899CE

DEALER SERVICE MEMO NO. 586

TO:All Districts, Branch Managers & C/E DealersSUBJECT:Toran Submersible Pumps

DATE: 10/74

A new Switch Box and Cover (A-42659) supersedes 62735 Switch Box and 62736 Switch Box Cover. The new item has been released as an assembly because the cover and box alone will not be interchangeable with the old parts. When either a box or cover is damaged the assembly must be replaced with the A-42659 Switch Box and Cover.

Bill Brachak

Bill Borachok Service Manager, Construction Equipment



# BRANCH SERVICE MEMO NO. 901CS

DEALER SERVICE MEMO NO. 588

TO:	All Districts, Branches and Chain Saw Dealers		
SUBJECT:	Crankshafts XL-12 Series	DATE:	10/74

For purpose of standarization and to reduce the number of crankshafts being carried by Service, the following changes will be made.

Crank- <u>Shaft</u>	Connecting Rod	Units	Remarks
58439 To be Obsoleted	A-67745-A	XL-12, SXL-12, XL-100 XL-120, XLBC, XLBC-A, XLA115-1, XL-15	When exhausted use 63497-1 Crankshaft and A-63477-A Connecting Rod for everything <u>except for</u> <u>XL-15</u> . For XL-15 use 63497-4 and A-63477-A Rod.
58439-1 To be Obsoleted	A-67745-A	XLS1 1/2-1, -1A, -2	When exhausted use 63497-1 Crankshaft and A-63477-A Connecting Rod.
63497 To be Obsoleted	A-63477-A	XL-12, SXL-12, XL-100 XL-120, XL-100G, XLBC XLBC-A, XLBC-B, XLBC-4 XL-15, XLA-115-1	When exhausted use 63497-1 Shaft and A-63477-A for all listed units <u>except XL-15</u> . For XL-15 use 63497-4 and A-63477-A.
63497-1 Replaces 58439-1	A-63477-A	XLS11/2 Pumps	Will now be used also for Chain Saws listed under 63497 <u>except XL-15</u> .
63497-4 Replaces 63497 and 58439	A-63477-A	New - Gear Saws Only	Additional Heat Treatment on one end for Planetary Drive. 63497-4 is exactly the same as 63497.

- NOTE: (1) The only difference between 63497 and 63497-1 is that the length of the 1/2 20 L.H. Thread is 11/32" on 63497-1 and 1/4" on 63497, with Heat Treated end for XL-15.
  - (2) Part #63497-4 has been assigned to the XL-15 Gear Saw Crankshaft which requires the hardened end.

Those Branches and Dealers requiring Crankshaft for XL-15 repair should take a quantity of #63497 before they are exhausted and stock them as #63497-4. The two part numbers are identical.

Joseph Shuhy Service Manager Chain Saws

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# BRANCH SERVICE MEMO NO. 903CS

DEALER SERVICE MEMO NO. 590

TO:	All Districts, Branches and Chain Saw Dealers		
SUBJECT:	"O" Ring #58785	DATE:	10/74
USAGE:	XL-123, VI-123, VI-125, 350-350 HG, 350SL		

Subject "O" Ring has been reinstated for use on above units.

Please mark your records accordingly.

Joseph Shuhy, Service Manager Forestry Equipment



DEALER SERVICE MEMO NO. 591

TO: All Districts, Branches And Construction Equipment Dealers

SUBJECT: HD65F and HD85F

DATE: 11/74

It has been brought to our attention that some heaters manufactured with serials numbers from 42130001 to 42730001 may have had some of the problems listed below. If you have any heaters in this range would you please inspect for and correct the following items:

1. The line cord may have been wrapped around the fan before the cover was installed which will make it impossible to retrieve the cord through the rear opening. You must remove the top cover and unwind the cord. The cord may be folded and placed back in the rear opening for storage.

2. The motor starting relay may have been installed 180° from its proper position. The terminal end of the motor starting relay should be at the rear of the heater (away from the burner end).

3. With the relay in its proper position the piggy back terminal must be installed with the heavy side towards the motor. This will prevent the terminal from coming in contact with the sheet metal.

4. The fan may be positioned so that it can contact the clips that hold the wire away from the fan. The proper position for the fan is  $3/8^{11}$  from the end of the shaft.

5. The flame detector should be positioned 1/8''-1/4'' from the burner and not touching the burner.

While correcting the above difficulties it would be advisable to check for any missing or loose fasteners.

The above difficulties have been corrected on heaters after the above serial numbers and your cooperation in correcting these will be greatly appreciated.

Bill Bórachok, Service Manager Construction Equipment



#### BRANCH SERVICE MEMO NO. 904CS

DEALER SERVICE MEMO NO. 592

TO:	All Districts, Branches and Chain Saw Dealers		
SUBJECT:	Handle Bars & Associated Parts	DATE:	11/74
USAGE:	EZ & Super EZ AO Chain Saws		

I. A new method of fastening the handle bar on the lower end has been incorporated into the subject units which requires the use of new handle bars.

EZ Chain Saw - Handle Bar A-69676 replaces A-65163-2.

Super EZ AO Chain Saw - Handle Bar A-69675 replaces A-69024 - effective after s/n 41411665.

Using the new method of assembly, the handle bar is fastened to the <u>drivecase</u> mounting using (1) #82268 screw.

The second fastening to the fuel tank mounting in accomplished using (1) washer #69890 between the bar and the tank mount so that the handle bar is clamped against a solid surface, and fastened using (1) #82268 screw.

#### II. The following parts are changed:

(1)	A-69676 - Handle Bar (EZ)	supersedes A-65163-2
(1)	A-69675 - Handle Bar (Super EZ AO)	supersedes A-69024
	includes:	
	(2) $82268 - Screw (10 - 32 \times 7/8)$	
	(1) 69890 - Washer (.101-110 thick)	
(1)	A-65201-B - Drivecase (EZ)	supersedes A-65201-A
(1)	A-65200-1 - Drivecase (Super EZ AO)	supersedes A-65200-A
(1)	65037-7 - Tank, Fuel & Oil (EZ-Super EZAO)	supersedes 65037-2
(1)	A-69832 - Cover, Fuel & Oil Tank (Super EZ & EZ)	supersedes 65115-2

III. Units built prior to and after these changes will all be serviced with the new handle bars #A-69675 and A-69676.

However, if only the handle bar is replaced on units prior to above changes. It will require the following.

Delete these parts:

- \* (2) 65121 Screw, Shoulder
- \* (2) 65670 Plate, Handle Bar
- \* (2) 65122 Grommet

The two rubber pads # 65124 will be clamped solid between the bar and the casting, using the new screws #82268 (2) (10-32  $\times$  7/8). Washer #69890 (1) will not be required in this application.

The deleted parts (\*) and 65124 pad will still be available to service units prior to these changes. Pad, rubber 65124 will not be used on units after S/N 41411665.

IV. Since the new fuel tank #65037-7 and drivecases A-65200-1 and A-65201-B have added metal in the handle bar mounting pockets, it will be necessary to omit the rubber pads #64124 when ever a new tank or drivecase has been added and the old bar is reused.

In this situation, the old handle bar may be used if condition warrants, with the existing shoulder screws #65121 and grommet #65122.

Please mark your parts list accordingly.

Joe Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 905CS

DEALER SERVICE MEMO NO. 593

**TO:** All Districts, Branches and Chain Saw Dealers

SUBJECT: Starter A56540-6A

DATE: 11/74

Usage: Super Wiz 55, Super Wiz 66, Super Wiz 80

A new starter A56540-6A supersedes A56540-6 in the above model chain saws.

The new starter has a stationary screen #70046 that replaces the rotating screen #56442 on the starter cup portion of the old starter.

Since the stationary screen is an improvement, it is recommended that dealers advise customers of the availability of the new stationary screen when servicing their saws.

Mark your parts list accordingly.

Joe Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 907CS

DEALER SERVICE MEMO NO. 595

**Distribution:** 

**TO:** All Districts, Branches and Chain Saw Dealers

SUBJECT: Model 150 Chain Saw Ignition

DATE: 11/74

The following changes were made to insure proper seating of the breaker box at assembly.

This will in turn improve breaker box sealing and also alignment of breaker points. Please mark your parts list accordingly.

1. Seal #69973 supersedes #69446

The new seal is both a softer durometer and thinner than the present seal.

2. A new smaller O.D. primary wire is being used between the breaker box and the coil.

These two changes will keep the plastic breaker box from buckling when the mounting screws are tightened in assembly. This will eliminate the excessive misalignment of the breaker points.

Joe Shuhy, Service Manager Forestry Equipment



BRANCH SERVICE MEMO NO. 908CS

DEALER SERVICE MEMO NO. 596

TO: All Districts, Branches and Chain Saw DealersSUBJECT: Gasket, Carburetor #63655-A

DATE: 11/74

Usage: Super Wiz Series, C-72

Subject gasket #63655-A will supersede #55553-3 on the C-72 and Super Wiz series.

This change is made for purposes of standardization since 63655-A is presently used on the Super 1050 series, Super 2100 Auto and Super 1130G Auto.

Please mark your parts list accordingly.

Joe Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 909CS

DEALER SERVICE MEMO NO. 597

**TO:** All Districts, Branches and Chain Saw Dealers

**SUBJECT:** Improved Clutch Cover (Kit #A-24921)

**DATE:** 11/74

Usage: XL-900 Series Saws

A new Clutch Cover Kit #A-24921 is available to service all the subject saws. The kit consists of a clutch cover and two belleville washers.

The two existing Screw #80361-1 will be used to fasten the clutch cover to the spider, using the two Belleville Washers #12940 under the heads of the screws.

This new clutch cover is an improvement over the old and should be recommended to customers where replacement is required.

Delete Clutch Cover #69884 and #12772 from your parts list and supersede by #A-24921.

Joe Shuhy, Service Manager

Forestry Equipment



## BRANCH SERVICE MEMO NO. 910CS

DEALER SERVICE MEMO NO. 598

**TO:** All Districts, Branches and Chain Saw Dealers

SUBJECT: Driven Gear and Sprocket Shaft

DATE: 11/74

USAGE: Super Wiz 55, 66 and 80

A change to increase the reliability of the driven gear and sprocket shaft has been made in the subject saws.

The new method has a driven gear with a hub that has pressed in plug nuts. Four (4) 1/4 - 20 flat head socket cap screws fasten the sprocket shaft to the gear hub.

No staking of screws is required, however, loctite will still be used.

A-56516-A	Driven Gear supersedes	A-56516
A-56824-A	Driven Gear supersedes	A-56824
56070-A	Sprocket Shaft supersedes	56070
82289	Screw, flat head supersedes	80651
	$(1/4-20 \times .375)$	$(12-28 \times .375)$

When using the new driven gears to service saws built prior to this change, the new Sprocket Shaft #56070-A and Screws #82289 must also be used.

Mark your parts list accordingly.

Joe Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 911CS

DEALER SERVICE MEMO NO. 599

TO:	All Districts, Branches and Chain Saw Deal	ers
SUBJECT:	Automatic Oil Pump	DATE: 11/74
USAGE:	Super EZ AO Series	fitomis ne hadmande

The chain oiler system of the subject saws is redesigned to incorporate individual oil pick up lines for the manual and automatic oilers. Effective on units after S/N 42042785.

This should eliminate many of the complaints due to hard to find vacuum leaks in the long inlet of the oil system.

The oil tank cover has a drilled hole that accepts a separate short extruded rubber line that goes directly to a fitting on the side of the automatic oil pump.

Parts required for saws after S/N 42042785 --

1	A-69807	Drivecase
1	A-69832	Cover, Fuel & Oil Tank
1	A-65212-B	Pump, Oil (automatic) supersedes A-65212-A
1	A-65172	Finder, Oil
1	69755	Line. Oil

#### Drivecase A-69807

This drivecase is drilled for the independent automatic oiler pick-up and can be recognized by only one drilled hole on the oil pump mounting face and an additional drilled hole in the rim to accommodate the automatic oil pick-up line. It is to be used only to service the new system or when converting to the new system. A-65200-1 drivecase is still required for units with single pick up oil system.

#### Cover, Fuel and Oil Tank A-69832

This cover will be used to service all Super EZ series saws built prior to or after these changes. Instruction Sheet #24883 will be included with cover showing requirements for individual applications.

The cover has a drilled hole to accept the oil pick-up line on units with the independent system. This hole must be plugged with a duck bill check valve #69451 (included) when not required on units prior to this change.

Pump, Oil (Automatic) A-65212-B

This pump will be used to service all Super EZ series saws built prior to or after above changes.

Instruction Sheet #24883 will be included with pump showing requirements for individual applications. A separate fitting and plug are included and must be assembled as specified in the instruction sheet.

A new oil line #69755 connects the fitting on the side of the automatic oiler, directly to the oil tank, using oil finder #A-65172. (Same finder as manual pump).

NOTE: To convert older units to the new system will require a new Drivecase A-69807, Oil Pump A-65212-B, Oil Finder A-65172 and Oil Line 69755.

The old oil tank cover can be drilled according to Instruction Sheet 24883 to accept the separate pick up.

Joe Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 912CS

DEALER SERVICE MEMO NO. 600

**TO:** All Districts, Branches and Chain Saw Dealers

SUBJECT: Model #150 Chain Saw Oiler Changes

DATE: 11/74

A. The following changes were made to improve the 150 Automatic Oiler and will be included on saws above s/n 42411583.

Saws built with these changes will no longer continue pumping and wasting oil at idle. Oil output must be checked at high speed no load (approximately 10,000 rpm.) for periods not to exceed 5 seconds. This may be repeated several times, each time coming back to idle. Oil pump operates at cutting speeds when under load.

A-68643-C - Cylinder & Crankcase	supersedes A-68643-B
A-68624-C - Short Block	supersedes A-68624-B
A-68583-B - Plunger, Oil Pump	supersedes A-68583-A
A-69363 Pump, Auto. Oiler	supersedes A-68585
	* - Filter, Felt

Please mark your parts list accordingly.

\* These three parts are deleted but will be available to service old style units prior to these changes if so desired.

\*68617 - Sleeve (rubber)

\*68650-A- Gasket, Oil Pump (2)

B. Cylinder & Crankcase #A-68643-C (new) and Short Block #A-68624-C (new).

These <u>assemblies</u> will service all 150 chain saws built prior to or after changes. However, they must be used with .025" oiler diaphragm A-68583-B and not with older .010" diaphragm.

The changes incorporated into these two new assemblies are as follows:

- 1. Drilled vent hole from diaphragm chamber thru cylinderflange eliminated.
- 2. Cast slot added to crankcase, to vent diaphragm chamber (dry side) into pulse hole for oil pump.
- 3. Felt filter in crankcase vent passage eliminated.

- 4. Rubber sleeve #68617 eliminated.
- 5. Post for rubber sleeve eliminated.
- C. Oil Pump Plunger #A-68583-B (.025 thick diaphragm) (new).

This new plunger assembly is completely interchangeable and will be used to service all 150 saws built prior to or after these changes.

NOTE: Gasket #68650-A (2) not required when using this new .025 thick diaphragm.

- D. Pump, Auto. Oiler #A-69363
   This automatic oiler assembly will service all model 150 saws and will include
   (2) #68650-A gaskets for use with the old diaphragm A-68583-A, not required for A-68583-B.
- E. Procedure to update older units to the new system. (SEE SCHEMATIC)
  - 1. Disassemble oil tank and oil pump.
  - 2. Remove rubber sleeve #68617 that was bonded to post.
  - \*3. Seal vent in (dry side) diaphragm chamber with R.T.V. silastic (part #24823). Clean hole of oil for good adhesion.
  - \* 4. Drill vent hole (.070/.090 dia.) from dry side of diaphragm chamber, diagonally into pulse hole for oil pump. (see schematic) Use extreme care to keep drill chips out of crankcase. Remove crankcase if necessary.
    - 5. Replace plunger A-68583-A (.010 thick dia.) with A-68583-B (.025 thick dia.) and eliminate gasket #68650-A (2).
  - \* Items #3 & 4 may be omitted providing the original vent hole is open to atmosphere, however, with these omitted the oil pump will pump oil at idle.
    - NOTE: Check mating surfaces of oil pump and crankcase to assure they are smooth and flat. Roughness or out of flat condition may be corrected by rubbing a few strokes over #180 grit emery paper on a flat surface plate.
    - Replace oil pump and plunger and pressure test through oil inlet line at 8-10 psi. Inlet line and pump must be full of oil when testing.
    - NOTE: As an extra precaution, it would be a good idea to pressure test the cylinder and crankcase for leaks, to prevent possibility of future problems and another tear down.

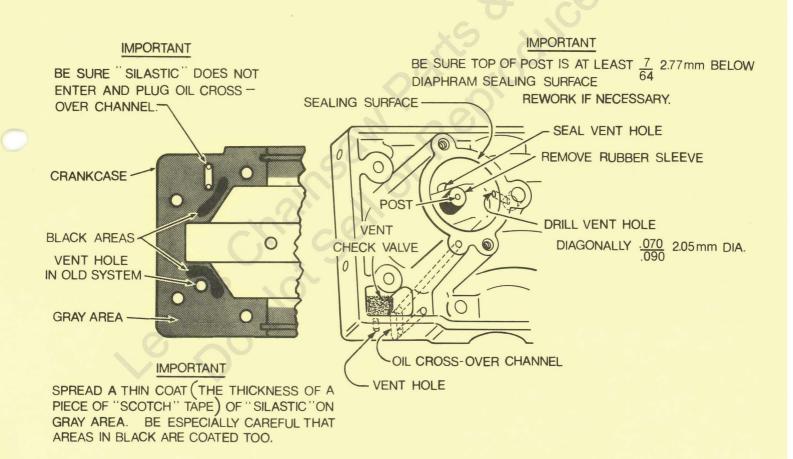
Cont'd.

F. Check mating surfaces of crankcase and oil tank to assure they are smooth and flat for good sealing. Oil tank face may be dressed up on a flat surface plate and emery for better sealing.

The crankcase sealing surface has cast sealing ridges that cannot be touched up and must be in good condition in order to seal.

Apply R.T.V. silastic to both surfaces and reassemble with gasket. Allow 15 minutes for drying and pressure test oil tank at 6-8 psi for leaks.

NOTE: It is apparent that many of the non-oiling problems are due to plugging of the oil outlet crossover hole with excess silastic. This is the slot on the face of the crankcase that mates with the cylinder face. It must be keptfree of silastic, since this is part of the outlet passage. It is just as important to apply the sealer around entire slot so that crankcase pressure does not leak out through the slot.



Joe Shuhy, Service Manager Forestry Equipment



BRANCH SERVICE MEMO NO. 913CS

DEALER SERVICE MEMO NO. 601

TO: All Districts, Branches and Chain Saw Dealers

SUBJECT: Starter Rope Grip W/Insert and Cap #A-69962 DATE: 12/74

USAGE: Chain Saws, Pumps, Power Tools

A new starter rope grip with insert and cap #A-69962 is available for service use.

This new three piece assembly includes a grip, insert #12649 and cap #12782. Grip #12624 will no longer be supplied separately, as it is now part of A-69962 assembly.

A-69962 Starter Rope Grip w/Insert and Cap supersedes:

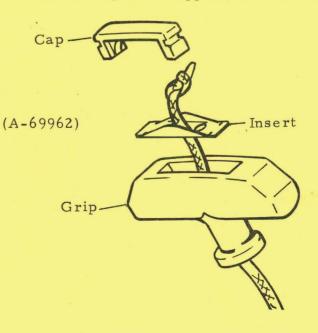
58915-1	Grip	XL-98, XL-98A
58847	Insert	
58915	Grip	XL-12, XL-900's SXL-Auto,
		XLS11/2-4
58847	Insert	
55937	Grip	SWiz-80, S1050 Auto, S1130G Auto
		S Wiz-55
58517	Insert	
12624	Grip	650, SXL-925, VI-955

The new parts of the three piece starter rope grip assembly are not individually interchangeable with the old two piece type. They can only be used as two or three piece sets.

Starter Rope Kits #A-24266 and A-24792 will no longer be supplied for Service use.

Mark your parts list accordingly.

Joe Shuhy, Service Manager Forestry Equipment





#### BRANCH SERVICE MEMO NO. 914CS

DEALER SERVICE MEMO NO. 602

#### **TO:** All Districts, Branches and Chain Saw Dealers

SUBJECT: Kit, Air Restrictor A-70066

DATE: 12/74

USAGE: 350 Series Chain Saws

Subject Air Restrictor Kit A-70066 is available for improved performance and to prevent icing in cold weather operation.

The restrictor is intended for use in temperatures below 32° F only. It includes an instruction sheet for installation.

Heat Exchanger #12253 must be installed in cylinder shield when using the restrictor. The restrictor must be removed in temperatures above 32° F. However, the heat exchanger must only be removed when it causes vapor lock.

Mark your parts list accordingly.

Joseph Shuhy, Service Manager Forestry Equipment



## BRANCH SERVICE MEMO NO. 915CS

DEALER SERVICE MEMO NO. 603

**IO:**All Districts, Branches and Chain Saw DealersDATE: 12/74

 SUBJECT:
 Carburetor A-12160HDC-16 (Circuit Plate #12277 - .037 Hole Dia.)

 A-12977HDC-21 (Circuit Plate #12976 - .033 Hole Dia.)

USAGE: 350 Series Chain Saw

#### A. Carburetor #A-12160 HDC-16

The 350 series chain saws prior to s/n 42890257 were built with #A-12160 HDC-16 fixed jet carburetor. This carburetor includes a circuit plate #12277 with a .037 dia. metering hole to supply the fuel. It is intended for use at the lower altitudes below 5,000 feet. This carburetor will normally have the high speed needle fully closed when properly adjusted for best operation.

B. Carburetor A-12977 HDC-21

Model #350 AO chain saws built after s/n 42890257 will have a new carburetor A-12977 HDC-21 with circuit plate #12976 that has a .033 dia. metering hole. This is the result of requests from certain sections of the country for a leaner running carburetor, especially when using the longer 20" & 24" guide bars. This carburetor will normally have the high speed needle fully closed when properly adjusted for best operation.

C. Kit, High Altitude A-12958

When used at high altitudes, above 5,000 feet, the HDC-16 and HDC-21 carburetors require a modification to a fully adjustable carburetor. For this purpose, a high altitude Kit A-12958 is available per Branch Service Memo #896.

This modification is also recommended to correct saws with complaints of rich running, when circuit plates #12277 or 12976 do not prove successful. Instruction sheet #24907 for carburetor adjustment after modification will be included in the Kit.

D. Carburetor A-12160-HDC-16 Modified into A-12977 HDC-21

Saws built with the original A-12160 HDC-16 carburetor can be changed into A-12977 HDC-21 by replacing circuit plate #12277 with 12976. When changeover is made, HDC-21 should be scratched into carburetor in place of the stamped HDC-16 to identify the new circuit plate. District and dealers who receive complaints of rich running saws should consider making this modification which should satisfy most customers.

It is important that no load speed does not exceed 12,500 rpm maximum with properly tensioned bar and chain with filter and cover in place. This may require opening high speed needle slightly, (to limit speed) especially with the shorter guide bars.

A supplemental sheet #24950 will be inserted into the 350 owners manual sometime in January covering adjustments of the various model carburetors.

Joseph Shuhy, Service Manager Forestry Equipment