McCULLOCH SERVICE BULLETIN

NO. 1704

MODEL: POWER MAC 300 CHAIN SAWS (12-) DATE: December 1, 1980

SUBJECT: BUILD LEVEL CHANGES

Power Mac 300 Chain Saws now being manufactured are identified by:

MODEL	MODEL NUMBER	SERIAL NO. PREFIX
PM 310	600042	12-
PM 320	600021	12-
PM 330	600043	12-

The Illustrated Parts List for these models is P/N 95817. I.P.L., P/N 95817 supersedes and replaces I.P.L., P/N 94105.

CHANGES AND IMPROVEMENTS

PM 300 series units with serial number prefix 12- are now being manufactured with new fasteners used in a number of areas for improved retention. The areas affected by these fastener changes are:

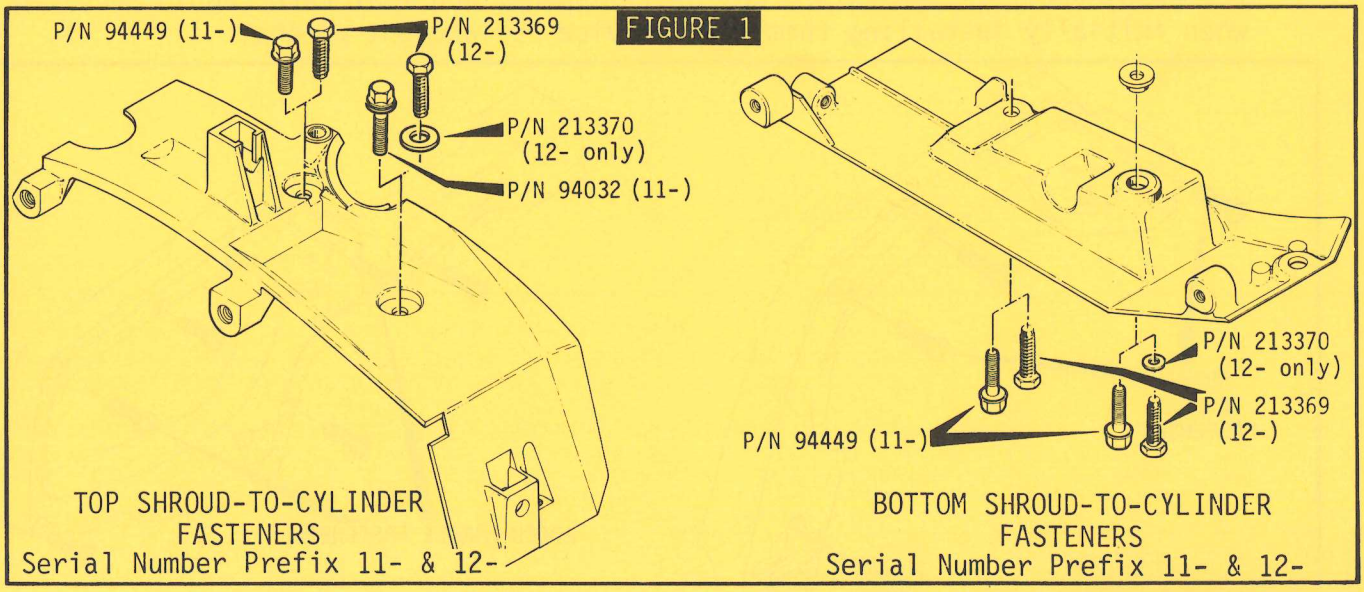
A. Shrouds

Self-tapping 6mm shroud-to-cylinder fasteners are now being used. The increase in thread diameter (5mm to 6mm) and the self-tapping feature of these screws provides considerably improved retention. Insulating Washer, P/N 213370, is also being used with the rear shroud-to-cylinder fastener (top and bottom shroud) for this purpose (Figure 1).

Please note that Bottom Shroud Kit, P/N 214154, and Top Shroud Kit, P/N 214152, are available as service replacement on all PM 300 series units. An instruction sheet is included in both kits explaining the use of these shrouds on units with serial number prefix 11-.

NOTE: Use Figure 1 as reference for ordering 5mm shroud-to-cylinder fasteners for use on PM 300 units with serial number prefix 11-. These fasteners were inadvertantly left out of I.P.L., P/N 95817.

FIGURE 1



TOP SHROUD-TO-CYLINDER FASTENERS
Serial Number Prefix 11- & 12-

BOTTOM SHROUD-TO-CYLINDER FASTENERS
Serial Number Prefix 11- & 12-

Printed in U.S.A.

B. Muffler

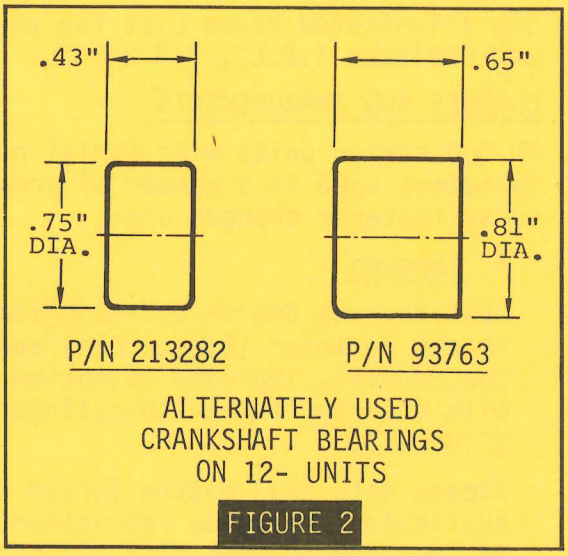
The thread size of the muffler retaining screws has also been increased from 5mm to 6mm. However, these fasteners are not self-tapping.

C. Cylinder/Crankcase Kit, P/N 214150

This assembly is now the only replacement cylinder/crankcase assembly for all PM 300 series units. The muffler and shroud-to-cylinder fastener holes in this cylinder are designed only to accept 6mm fasteners. Included with this kit are all 6mm shroud and muffler retainers and an instruction sheet explaining how to modify muffler bodies and shrouds (originally retained by 5mm fasteners) to accept these screws.

CAUTION: Be certain to insert any self-tapping screws (in this case, shroud-to-cylinder fasteners) at the proper angle, as threads are being formed in the casting of service replacement cylinders during this installation. Also, lead-in resistance will be felt during this procedure.

NOTE: Early production cylinders on PM 300 units with serial number prefix 12- were manufactured with two types of crankshaft bearings (Figure 2). One, Crankshaft Bearing, P/N 213282, is the same type and size previously used on the PM 300 series. However, a limited number of units were manufactured with the Pro Mac 510-type Bearing Sleeve Assembly, P/N 93763. Please note the substantial size difference between these two crankshaft bearings. Replacement bearings must be the same as originally used with the cylinder. Identify parts before ordering. Also note that all P/N 214150 service replacement cylinders are being manufactured to accept only Crankshaft Bearing, P/N 213282.



ALTERNATELY USED CRANKSHAFT BEARINGS ON 12- UNITS

FIGURE 2

D. Handle Assemblies

Both types of PM 300 series handle assemblies are now being manufactured with additional fasteners for better retention (Figure 3). Please note that all of the handle-half fasteners are now self-tapping, and that care should be taken when initially installing them into service replacement pieces.

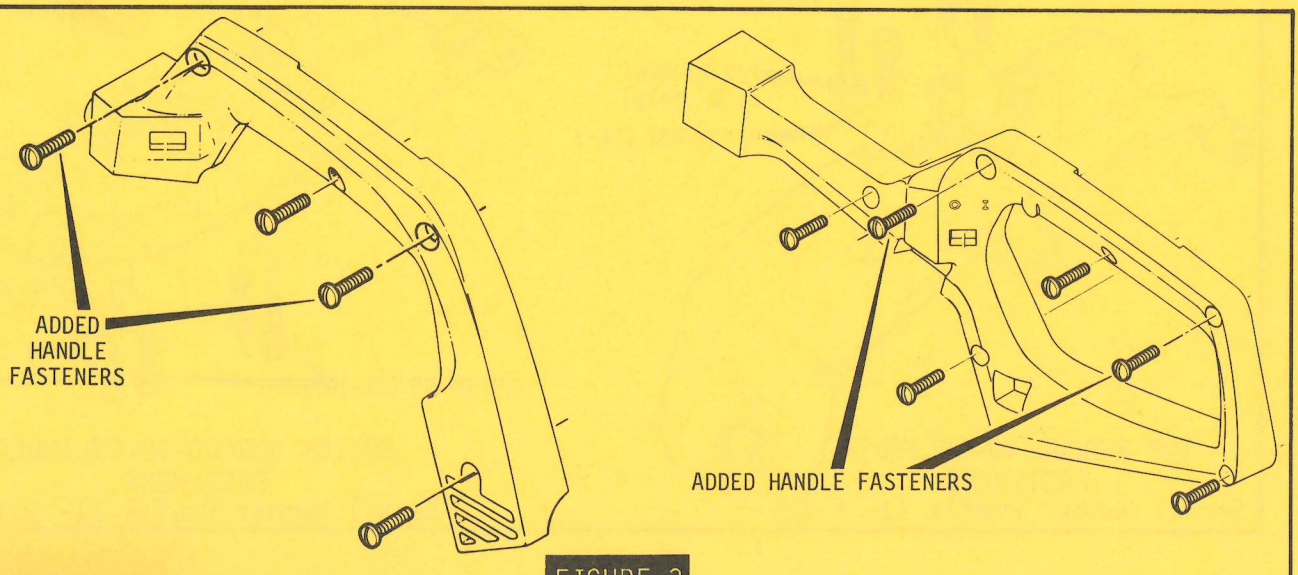


FIGURE 3

Changes have also been made to the throttle trigger and throttle wire. The throttle wire is now inserted through a hole in the trigger (as opposed to the clip-type method previously used) from the right side of the trigger (Figure 4). Please note that, when the throttle wire is properly installed into the trigger, the hook at the carburetor end of the wire will loop downward (Figure 5).

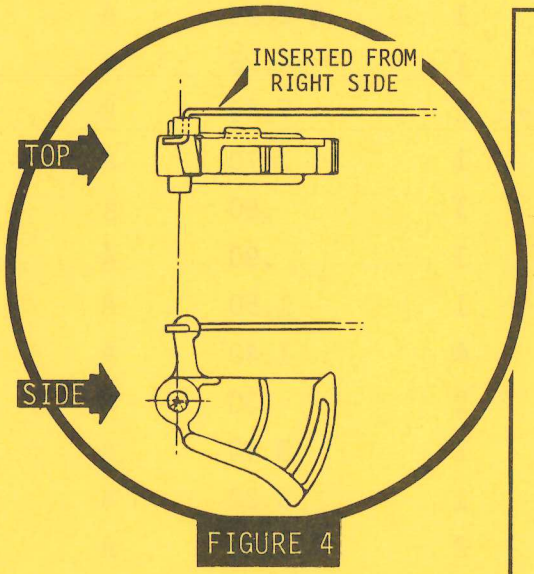


FIGURE 4

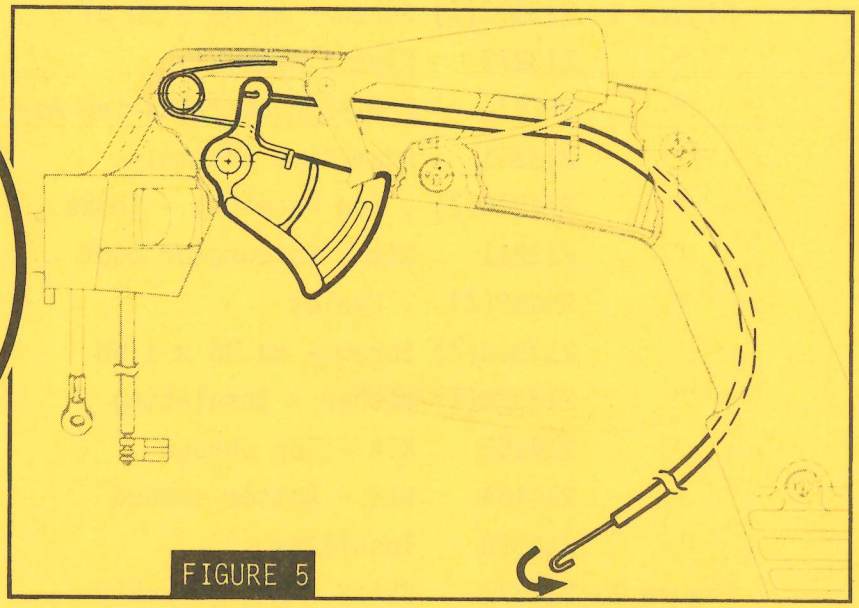


FIGURE 5

E. Carburetor Boot Kit, P/N 213211

In addition to the fastener changes already mentioned, Eyelet, P/N 95656, is now being used as an insert on all current production PM 300 units. This eyelet is installed into the carburetor end of the boot, and improves both engine idle and roll-out performance (Figure 4). Please note that all orders for Carburetor Boot, P/N 92746, will be filled with Carburetor Boot Kit, P/N 213211, which contains this eyelet.

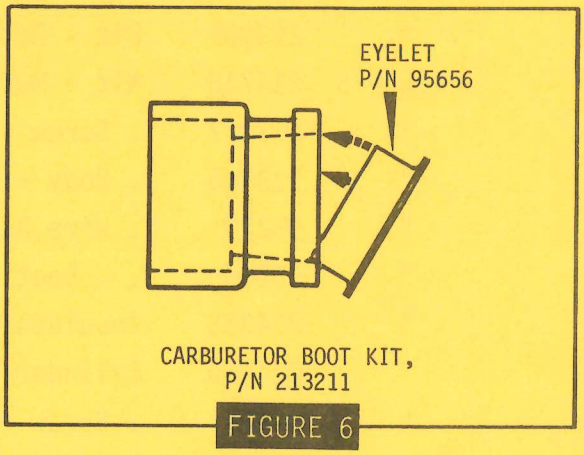


FIGURE 6

The following corrections should be made to IPL, P/N 95817:

1. Fig. 1, Item 66; Replace Carburetor Boot, P/N 92746, with Carburetor Boot Kit, P/N 213211. Include Eyelet, P/N 95656, in this kit.
2. Add the following fasteners to the Figure 1 list and note that they are used as shroud retainers on cylinders with 5mm retaining holes (original equipment on PM 300 with serial number prefix 11-):
   a. P/N 94449, Screw, Hx hd M5 x .8 x 16 WS - top shroud to cylinder (front).
   b. P/N 94032, Screw, Hx hd M5 x .8 x 16 PH - top shroud to cylinder (rear).
   c. P/N 94449, Screw, Hx hd M5 x .8 x 16 WS - bottom shroud to cylinder (both).
3. Fig. 2, CHAIN BRAKE Assembly; change P/N 213373 to P/N 214373.
4. Fig. 4, Item 4; change P/N 68565 to P/N 83755.

Domestic (U.S.) Power Mac 310 units are identified by suffix letter F. Domestic (U.S.) Power Mac 320 units are identified by suffix letters H and U. Domestic (U.S.) Power Mac 330 units are identified by suffix letter U.

Information concerning those parts used in the Power Mac 300 series, Model Numbers 600042, 600021, and 600043, Serial Number prefix 12-, which differ from the previous Power Mac 300 IPL is presented in the following table.

IPL LOCATION	PART NUMBER	DESCRIPTION	QTY	MFG. SUGG. LIST PRICE	STOCK CODE
Figure 1	213103(Z)	Screw - Hx M5 x 50 ST	1	$ 2.40	A
"	213277	Clutch Assembly	1	14.05	A
"	95197	Drum/Sprocket/Bearing Asy	1	7.49	B
"	213261	Drum/Rope Assembly	1	7.70	A
"	214316(Z)	. Rod Assembly - Choke	1	.90	B
"	213211	Kit - Carburetor boot	1	.90	A
"	95656(Z)	. Eyelet	1	1.50	A
"	213369(Z)	Screw - Hx M6 x 1 WH	4	1.40	A
"	213370(Z)	Washer - Insulating	2	.30	A
"	214152	Kit - Top shroud	1	8.40	A
"	214154	Kit - Bottom shroud	1	8.20	A
"	214350	Insulator	2	3.00	A
Figure 2	214373	CHAIN BRAKE Assembly	1	33.10	B
"	214368	Bearing - Roller	1	2.35	A
"	213907	Pin - Roller	1	.85	A
Figure 5	214746	Kit - Muffler	1	6.20	B
"	213327	. Screw - Special M6	2	5.10	A
"	213346	. Body - Cover	1	4.80	A
"	95273	. Wire Asy - Spark Plug	1	1.45	A
"	95266	. . Boot - Spark plug	1	1.35	A
"	214353	Insulator - Carburetor	1	1.09	B
"	214150	Cylinder/C'Case Assembly	1	63.20	A
"	94654	. Screw - Connecting rod	2	1.35	A
"	213282	Bearing - Crankshaft	2	3.05	B
"	93763	Sleeve Asy - Bearing	1	4.70	A
Figure 6	213230	Handle Asy (PM 310, 320)	1	17.20	A
"	213231	Handle Asy (PM 330)	1	21.30	A
"	111032(Z)	. Screw - Pan hd 10-16 x 5/8	A/R*	.40	A
"	213229	. Handle - Right half	1	2.70	A
"	213224	. Handle - Long right	1	5.30	A
"	213228	. Handle - Left half	1	2.70	A
"	213226	. Handle - Long left	1	5.05	A
"	213232	. Trigger - Throttle	1	.40	A
"	213234	. Wire Assembly - Throttle	1	.75	A
"	213233	. Wire Assembly - Throttle	1	1.20	A