

C. Johnson
12-1-72

SERVICE

PARTS

This booklet has been compiled to aid in the proper identification of service parts.

Identifying part features have been listed along with major component parts.

Engineering approved part substitutions have been listed where known.

Additional information will be added to this booklet as it becomes available.

Please refer any questions to Dave Halsted,
Ext. 3-5806.

QUALITY CERTIFICATION TAGS

USE OF TAG: The tag is to certify the material as meeting specifications. When the tag is completed and hung on the material, the inspector is placing his personal stamp of approval on it.

The Service Dept. depends entirely on the Quality Certification Tag for shipping material to dealers. It has to be correct. An error can lose a customer.

1. Never write a Quality Certification Tag if you are in doubt as to the proper identification of the material. The proper identification of material on a Quality Certification Tag is as important as identification of parts during yearly inventory.

MAKE SURE YOU ARE CORRECT. If you are in doubt, check the print for positive identification.

2. Make sure you can see the parts to properly identify them. If parts have previously been covered and banded, it may be necessary to have production uncover the material so that a correct identification can be made.

3. Fill out the following items on the Quality Certification Tag.

(A) Part Number

(B) Part Name

(C) Vendor (Engine Plant or Engine Parts Plant)

(D) Date

(E) Quantity

(F) OK or Deviation (If material is not to print specifications but a T.D.A. has been issued approving it for use, list the T.D.A. number and persons name authorizing the T.D.A.)

(G) Inspector (List complete clock number)

(H) Shift (Days, Afternoon, or Midnight)

4. Tear off the Inspection copy of the tag and turn it in to the Quality Control foreman of the area or to the Inspection Office. Leave the #2 and #3 copy of the tag on the material.

INDEX

- Section 1 - Cyl. Heads
- Section 2 - Engine Assemblies
- Section 3 - Pistons & Rods
- Section 4 - Exhaust Manifolds
- Section 5 - Intake Manifolds
- Section 6 - Water Pumps
- Section 7 - Fuel Tanks
- Section 8 - Camshafts
- Section 9 - Oil Filler Tubes & Flywheels
- Section 10 - Oil Pumps, Water Outlet
Generator Bracket

SECTION 1

CYL. HEADS

"1969"
 Service Cylinder Head Assemblies
 (Plugged Heads)

Service PART Number	Head		Valve Seats		Usage
	CASTING	Machined NUMBER	Exhaust	INTAKE	
230341	397742 "5"	397742	45°	45°	350
230342	394548 "C"	394548	45°	45°	455
230343	394548 "C"	394500	45°	30°	442 + TORO
230612	400370 "D"	400370	45°	30°	W30
230619	397742 "5"	402207 Double BROACHED	45°	45°	W31

"1970"
Service Cylinder Head Assemblies
(Plugged Heads)

Service PART NUMBER	Head		Valve Seats		Usage
	CASTING	Machined NUMBER	EXHAUST	INTAKE	
230894	403859 "6"	403859	45°	45°	350
230895	403859 "6"	405026 Double BROACH	45°	45°	W31
230896	403686 "E" (Use 413191 "K")	403825	45°	30°	442 + TORO
230897	404438 "F"	404438	45°	30°	W30
230898	403686 "E" (Use 413191 "K")	403686	45°	45°	455
230991	403686 "E" (Use 413191 "K")	230992 sub- Assembly	45° INSERT	45°	* IRRIGATION Complete Head Ash. 387596 RETAINER 231004 SPACER 387720 SPRING 405874 INT. VALVE

"1971"

Service Cylinder Head Assemblies (Plugged Heads)

Service PART NUMBER	Head		Valve Seats		Usage
	CASTING	Machined NUMBER	EXHAUST	INTAKE	
231250	409147 "7"	409147	45°	45°	350
231251	409100 "G" (Use 413191 "K")	409100	45°	45°	455
231252	409100 "G" (Use 413191 "K")	409159	45° INSERTS	30°	442 & TORO
231253	409160 "H"	409160	45°	30°	W 30

"1972"
 Service Cylinder Head Assemblies
 (Plugged Heads)

Service PART NUMBER	Head		Valve Seats		Usage
	CASTING	MACHINED NUMBER	EXHAUST	INTAKE	
231252 (CHAMFERED Dowel Hole)	409100 "G" (Use 413191 "K")	409159	45° INSERTS	30°	455 W30 455 "A" Body S/M MARINE
231322	409147 "7"	411191	30°	45°	350
231324	409100 "G" (Use 413191 "K")	411211	30°	45°	455
231325 (COUNTERBORED Dowel Hole)	409100 "G" (Use 413191 "K")	411208	45° INSERTS	45°	TORO IRRIGATION

"1973"
 Service Cylinder Head Assemblies
 (Plugged Heads)

Service PART NUMBER	Head		Valve Seats		Usage
	CASTING	Machined NUMBER	EXHAUST	INTAKE	
231470	411929 "8"	411429	30°	45°	350
231472	411783 "J"	411783	30°	45°	455 A/T
231473 "Counter bore"	413191 "K"	413419	45° INSERTS	30° Cart. 179	455 S/M MARINE + IRRIGATION (Same as 1970 Toro)

Service Cylinder Head Assemblies (Plugged Heads)

Service PART NUMBER	Head		Valve Seats		USAGE
	CASTING	Machined NUMBER	EXHAUST	INTAKE	
394189	389394 "3"	388246 Air Injection holes	45°	45°	* Air injection hole plugs. 1966 330
394190	389395 "B"	388247 Air Injection holes	45°	30°	* Air injection hole plugs. 1966 425 B/C
396056	394548 "C"	395088 Air Injection holes	45°	30°	* Air injection hole plugs. 1967 400 & Toro
—	403686 "E" (Use 413191 "X")	230993	Machined FOR INSERTS (Less inserts)	45°	IRRIGATION 1970 Machined only Less inserts

"197" 1970
Cyl. Head Assemblies

ASTING	Machined Head	Sub-Asm. Service	Head ASM.	INTAKE Valve	Exhaust Valve	INT. Valve Spring OR ASM.	Exh. Valve Spring OR ASM.	Valve ROTATOR	Oil Deflector		USAGE
									INT.	Exh.	
403859 "6"	403859	 	408187 PINK	399809 Yellow	401768 Blue	397583 ASM.	397583 ASM.				350 4 Bbl. S/M
			405584 Yellow			45°	45°				387720 SPRING
		405026	 	405585 ORANGE	405874 BLACK	401762 white	398247 ASM.				398247 ASM.
403686 "E"	403686	 	405586 Red	45°			387720 SPRING	387720 SPRING	INTAKE + Exhaust	10652 401823	657 Exc. W3 664 Exc W3
(Use 413191 "K")	403825 	 	402 A015 405587 Blue	403350 GREEN	45°	397583 ASM.	397583 ASM.				657 with W3 659 Exc W3 TORO W34
	404438	 	406741 Silver			30°	398247 ASM.				398247 ASM.
404438 "F"	404438	 	SMT 405588 GREEN			404729 ASM.	404729 ASM.				W30 S/M

"1951"
Cyl. Head Assemblies

ASTING	Machined Head	Sub-Assembly	Head ASM.	INTAKE Valve	EXHAUST Valve	INT. Valve SPRING OR ASM.	EXH. Valve SPRING OR ASM.	Oil DEFLECTOR		USAGE	
								INT.	EXH.		
409147 "7"	409147	—	409386 Yellow	399809 Yellow 45°	401768 Blue 45°	387720 SPRING	397583 ASM.	397583 ASM.	ROTATORS ON INTAKE ONLY	350 Exc. 4261 S/M	
			409388 PINK			397583 ASM.				350 4261. S/M	
409100 "6"	409100	—	409390 Red	389451 BLACK (Use 412821) 45°	401762 white 45°	387720 SPRING		106595	401823	455	
(Use 413191 "K")	409159	409361	409389 Blue	403350 GREEN 30°		397583 ASM.					442 Exc WX TORO MARINE IRRIGATION
409160 "H"	409160	409362	409392 Silver			398247 ASM.	398247 ASM.			ROTATORS ON INTAKE + EXHAUST	W30

197
Cyl. Head Assemblies

CASTING	Machined Number	Sub-Asm	Head ASM.	INTAKE Valve	Exhaust Valve	INT. VALVE SPRING OR ASM.	Exh. Valve SPRING OR ASM.	VALVE ROTATOR	Oil Deflector		USAGE
									INT.	Exh.	
409147 "7"	411191	—	411185 Yellow	399809 Yellow 45°	409265 Yellow 30°		411225 ASM				350
	—	—	—	—	—	411226 SPRING	—				—
409100 "G" (Use 413191 "K")	411211	—	411186 Red	389451 BLACK 45°	409270 BLACK 30°		411225 ASM.	INTAKE & Exhaust	406575	40182	455 "B" Body 455 "A" Body A/T Exc. W30
	409159	409361	411187 GREEN	403350 Red 30°	401762 white 45°	411225 ASM.					455 W30 455 "A" Body MARINE
	411207	411208 Counterbore	411188 Blue	411202 white (Use 412821) 45°		411226 SPRING	411226 SPRING				

"1970"
Cyl. Head Assemblies

CASTING	Machined Number	Sub-ASM.	Head ASM.	INTAKE Valve	Exhaust Valve	INT. Valve SPRING OR ASM.	Exh. Valve SPRING OR ASM.	VALVE ROTATOR	Oil DEFLECTOR		USAGE
									INT.	Exh.	
411929 "8"	411929	—	412478 Yellow	412354 Yellow 45°	412615 No color 30°	411226 SPRING	411226 SPRING	INT. + Exh.	406595	401823	350
411783 "J"	411783	—	412480 Red	412821 Red 45°							455 A/T
413191 "K"	413191	413419	413418 Blue	415784 will replace 403350 GREEN 30°	401762 white 45°	411225 ASM.	411225 ASM.				455 S/M

SECTION 2

ENGINE

ASSEMBLIES

"1968"
Block + Piston ASM.
(Service)

Service PART Number	Block		Piston ASM. (Use #398295 Pin)	
	CASTING	Block ASM.		
230346	395558 "2"	400427 OR 400428	*400611 Thru 400614 Deep dish (1) Rd. Notch	*Use codes AS REQUIRE
230348	396026 "G"	399772 OR 399773	*400628 Thru 400631 Piston #39909 Deep dish (2) Rd. Notches	*Use codes AS REQUIRE
230351	396021 "F"	399774 OR 399775	*400581 Thru 400584 Deep dish (2) Rd. Notches	*Use codes AS REQUIRE

Dowel Pins - Cyl. Head, oil switch TRANSFER hole, FRONT cover To block, TRANSMISSION FLANGE To block, + oil pump To BRG. CAP
dowel pins ARE To be installed.

Plugs - All oil PASSAGE + CAM plugs ARE To be installed.
Cyl. block DRAIN plugs ARE To be installed.

Seal - Installed.

PLAIN BRG. Shells - PLAIN coded shells / M400 MATERIAL except on #5
FOR PART #230346 which TAKES M100.

Piston Rings - Installed.

Block + Piston ASM. (SERVICE)

Service PART NUMBER	Block		Piston ASM.	
	CASTING	Block ASM.		
393956	389244 "D"	391918 OR 391919	*388620 - 388623 Deep dish (1) Rd. Notch	*Use AS REQUIRED
396232	389244 "D"	394379 OR 394380	*388620 - 388623	*Use AS REQUIRED
396226	381917 "1"	394415 OR 394416	*385034 - 385037	*Use AS REQUIRED

Dowel Pins - Cyl. Head, oil switch TRANSFER hole, FRONT cover To block, TRANSMISSION FLANGE To block, + oil pump To BRG. cap
dowel pins ARE To be INSTALLED.

PLUGS - All oil PASSAGE + CAM PLUGS ARE To be INSTALLED.
Cyl. block DRAIN PLUGS ARE To be INSTALLED.

Crane Seal - INSTALLED.

PLAIN BRG. Shells - PLAIN coded shells

Piston Rings - INSTALLED.

"1969"
Service ENGINE Assemblies

Service PART NUMBER	Block		CRANK	Piston + Rod Shop Asm.	CAM	
	CASTING	Block ASM.				
o w32 230822	396026 "G"	399776	230816 S/M No Pilot BRG. Yellow PAINT	399992-3 shallow dish (2) "V" Notches	393859 (2) Blue	
o 1/c 230823			397923 A/T Double Polish Yellow PAINT		402486 (3) ORANGE	
o w30 230824	396026 "G"	401407 "A" PISTON BRONZE Block	230816 S/M No Pilot BRG. Yellow PAINT	(2) "V" NOTCHES 401404-5 Code "A" PISTON BRONZE Rod	402569 (2) GREEN (1) WHITE	328/328 MAX

" 1970 "
Service Engine Assemblies

Service PART Number	Block		CRANK	Piston + Rod Shop Asm.	CAM	-	
	CASTING	Block ASH.					
50 231009	395558 "2"	400427 OR 400428	230905 S/M No Pilot BRG.	399986-7 Low Comp. (1) Rd. Notch	400084 (1) Blue STRIPE		
50 231010		402205 "A" BORES		399988-9 High Comp. (1) "Y" Notch	402208-9 FLAT TOP (1) "Y" + (1) Rd. Notch	402194 (1) White STRIPE	
50 231011 W-31		399774		404068-9 (1) "Y" Notch CHROMIUM Lower COMP. RING	406768 (2) ORANGE STRIPES	406768 (2) ORANGE STRIPES	294/296 (1517)
5 442 SMT 231016	396021 "F"	406454 "A" BORES	230908 S/M Double Polish No Pilot BRG.	406456-7	402569 (2) GREEN (1) White	308/305 W-31 (57AA)	
5 W30 231017		405363 Double Polish A/T	code "A" pistons (1) "V" Notch	400165 (2) White STRIPES	328/325 (57AB)		
5 W30 AMT 231018		230907 S/M No Pilot BRG.	399996-7 (1) Rd. Notch	400117 (1) GREEN STRIPE	235/287 151D		
5 231012	399774	405361 A/T	399998-9 (1) "Y" Notch	400165 (2) White STRIPES			
5 231013		230908 S/M Double Polish No Pilot BRG.	404068-9 (1) "Y" Notch CHROMIUM Lower COMP. RING	400165 (2) White STRIPES			
5 W33 231015		405361 A/T	399998-9 (1) "Y" Notch	402486 (3) ORANGE STRIPES			
5 TORO 231014	399776 Stud bolts in #1 + 4 BRG. CAPS	405361 A/T	399998-9 (1) "Y" Notch	402486 (3) ORANGE STRIPES			

"1971" Service Engine Assemblies (SHORT BLOCK ASM)

Service PART NUMBER	Block		CRANK	Piston + Rod Shop ASM.	CAM
	CASTING	Block ASM.			
TC/TD/TE 231132					409717 (1) Blue (2)
QB/QO 231133	395558 "2"	400427 OR 400428	230905 S/M No Pilot BRG.	409162-3 (1) Rd. Notch	402486 (3) ORANGE STRIPES
QV/QW/QI/QJ/QK 231275					400084 (1) Blue
TU/TATN 231135		399774	406452 S/M	409164-5 (2) Rd. Notches CHROMIUM LOWER COMP. RING	409691 286/287 (3) GREEN STRIPES
W30 TS/TB 231136		406454 "A" BORES	Double Polish with Pilot BRG.	409170-1 (2) Rd. Notches CHROMIUM LOWER COMP. RING	409759 294/296 (2) GREEN STRIPES (151AW)
W30 TT 231137	396021		405363 Double Polish A/T	"A" PISTONS	409691 286/287 (3) GREEN STRIPES (151AW)
UC/UD/UN/US/UT 231138	"F"		230908 S/M Double Polish No Pilot BRG.	409166-7 (2) Rd. Notches	400117 (1) GREEN STRIPE
TW/TV 231139			405363 Double Polish A/T	409164-5 (2) Rd. Notches CHROMIUM LOWER COMP. RING	400165 285/287 (2) White STRIPES (151D)
TARO (CND Type) 231312		397776 STUD bolts IN #1-4 RRG. CAPS	405361 A/T	409166-7 (2) Rd. Notches	400117 (1) GREEN STRIPE
W30 TL 231249		406454 "A" BORES	405363 Double Polish A/T	409170-1 (2) Rd. Notches CHROMIUM LOWER COMP. RING - "A" PISTON	400165 285/287 (2) White STRIPES
TARO (CST Type) 231140 US	396021 "F"	397776 STUD bolts IN #1-4 RRG. CAPS	405361 A/T	409166-7 (2) Rd. Notches	402486 (3) ORANGE STRIPES

"1972"
Service Engine Assemblies
(SHORT Block Asm.)

Service PART NUMBER	Block		CRANK	Piston + Rod Shop Asm.	CAM
	CASTING	Block ASM.			
50 QD/QE 231383	395558 "2"	400427 OR 400428	230905 S/M No Pilot BRG.	410993 (1) Rd. Notch	402486 (3) ORANGE STRIPES
0 QA/QB/QC/QD QE/QN/QO/QP 231384					400084 (1) BLUE STRIPE
5 UD/UE 231385			406452 Double Polish S/M with Pilot BRG.	410995 (2) Rd. Notches CHROMIUM Lower COMP. RING	409691 (3) GREEN STRIPES
5 UA/UB/US /UU/UV 231386		399776 Stud bolts in #1-4 BRG. CAPS	405361 A/T	410994 (2) Rd. Notches	400117 (1) GREEN STRIPE
5 UL/UN 231387	396021 "F"		406452 Double Polish S/M with Pilot BRG.	410995 (2) Rd. Notches	409759 (2) GREEN STRIPES
5 UO 231388		406454 "A" BORES	405363 Double Polish A/T	CHROMIUM Lower COMP. RING	409691 (3) GREEN STRIPES
IRIGATION 231626		399776 Stud bolts in #1-4 BRG. CAPS	230908 S/M Double Polish No Pilot BRG.	410996 (1) "V" Notch CHROMIUM Lower COMP. RING	400117 (1) GREEN STRIPE

286/287

294/296

"1973"
Service ENGINE Assemblies
(SHORT Block ASM.)

Service PART NUMBER	Block		CRANK	Piston & Rod Shop ASM.	CAM
	CASTING	Block ASM.			
50 SA 231482	395558 "2"	400427 OR 400428	230905 S/M No Pilot BRG.	412613 (1) "V" Notch	402486 (3) ORANGE STRIPES
50 SB 231483					400084 (1) Blue STRIPES
5 SX 231385	396021 "F"	399776	405359 Double Polish S/M with Pilot BRG.	410995 (2) Rd. Notches CHROMIUM Lower Comp. RING	409691 (3) GREEN STRIPES
5 SY 231386		STUD bolts IN # 1-4 BRG. CAPS	405361 Double Polish A/T	410994 (2) Rd. Notches	
IGATION SW 231626			230908 S/M Double Polish No Pilot BRG.	410996 (1) "V" Notch CHROMIUM Lower Comp. RINGS	400117 (1) GREEN STRIPES

SECTION 3

PISTONS

&

RODS

Service Piston Assemblies

Service Part Number	Piston	Piston Size Code	Piston Pin	Size	
400561	398666 shallow dish (1) "V" Notch	A	398295	Std - High Comp.	
400562		B			
400563		C			
400564		D			
400565	400413 shallow dish (1) "V" Notch	J		.010 Oversize - High Comp.	
400566		K			
400567		L			
400568		M			
400569	400570	Non-Coded			.030 Oversize - High Comp.
400571	398591 Deep dish (1) Rd. Notch	A		398295	Std - STANDARD Fuel
400572		B			
400573		C			
400574		D			
400578	400412	Non-Coded		.010 Oversize - Std. Fuel	
400579	400580	Non-Coded		.030 Oversize - Std Fuel	
400581	400160 Deep dish (2) Rd. Notches	A	398295	Std. - EXPORT	
400582		B			
400583		C			
400584		D			
400585	400547	Non-Coded		.010 Oversize - EXPORT	
400586	400587	Non-Coded		.030 Oversize - EXPORT	

Service Piston Assemblies

Service Number	Piston	Piston Size Code	Piston Pin	Size	
400591		A	398295	STd - Low Comp.	
400592	398661	B			
400593	Deep dish	C			
400594	(1) Rd. Notch	D			
400598	400414	Non-Coded			.010 Oversize - Low Comp.
400599	400600	Non-Coded			.030 Oversize - Low Comp.
400601		A			STd - High Comp.
400602	398665	B			
400603	Shallow dish	C			
400604	(1) "Y" Notch	D			
400605		J			
400606	400415	K			
400607		L			
400608		M			
400609	400610	Non-Coded		.030 Oversize - High Comp.	
400611		A		STd. - Export	
400612	400432	B			
400613	Deep dish	C			
400614	(2) Rd. Notches	D			
400615	400546	Non-Coded			.010 Oversize - Export
400616	400617	Non-Coded	.030 Oversize - Export		
400618		A	STd. - High Comp.		
400619	398454	B			
400620	Shallow dish	C			
400621	(2) "Y" Notches	D			
400622		J			
400623	400423	K			
400624		L			
400625		M			
400626	400627	Non-Coded		.030 Oversize - High Comp.	
400628		A		STd. - Low Comp.	
400629	399909	B			
400630	Deep dish	C			
400631	(2) Rd. Notches	D			
400635	400424	Non-Coded	.010 Oversize - Low Comp.		
400636	400637	Non-Coded	.030 Oversize - Low Comp.		

Service PISTON Assemblies

Service PART Number	PISTON	Piston Size Code	Piston PIN	Size
388601		A	380048	Std - High Comp.
388602	386047	B		
388603	Shallow dish	C		
388604	(1) "V" Notch	D		
388605		W		
388606	387800	X		.005 oversize - High Comp
388607	Shallow dish	Y		
388608	(1) "V" Notch	Z		
388609		J		
388610	387801	K		.010 oversize - High Comp.
388611	Shallow dish	L		
388612	(1) "V" Notch	M		
388613	388394	Non-Coded		.030 oversize - High Comp.
388614		A		
388615	386048	B		Std - STARFIRE
388616	Very shallow dish	C		
388617	(1) "V" Notch	D		
388618	388586	Non-Coded		
388619	388393	Non-Coded		.010 oversize - STARFIRE
388620		A		
388621	386049	B		.030 oversize - STARFIRE
388622	Deep dish	C		
388623	(1) Rd. Notch	D		
388624	388585	Non-Coded		
388625	388392	Non-Coded		Std. - STANDARD Fuel
			.010 oversize - STANDARD Fuel	
			.030 oversize - STANDARD Fuel	

Service Piston Assemblies

Service PART Number	Piston	Piston size code	Piston Pin	Size
388626		A		
388627	387364	B		
388628	Deep dish	C		
388629	(2) Rd. Notches	D		
388630	388587	Non-Coded		.010 Oversize - Export
388631	388395	Non-Coded		.030 Oversize - Export
			380048	STD - Export

Service Piston Assemblies

Service PART Number	Piston	Piston Size Code	Piston Pin	Size
231101		A	398295	STANDARD Size
231102	409074	B		
231103	Deep dish (1) Rd. Notch	C		
231104		D		
231105		J		
231106	409172	K		.010 Oversize
231107	Deep dish (1) Rd. Notch	L		
231108		M		
231109	231099	Non-Coded		
231110		A		
231111	409112	B	STANDARD Size	
231112	Deep dish (2) Rd. Notches	C		
231113		D		
231114		J		
231115	409173	K		
231116	Deep dish (2) Rd. Notches	L	.010 Oversize	
231117		M		
231118	231100	Non-Coded		
231433		A		STANDARD Size
231434	411891	B		
231436	Shallow dish (1) "V" Notch	C		
231437		D		
231438		J		
231439	412289	K	.010 Oversize	
231440	Shallow dish (1) "V" Notch	L		
231441		M		
231443	231431 Shallow dish (1) "V" Notch	Non-Coded		
				.030 Oversize

Service PISTON Assemblies

Service ART Number	PISTON	Piston Size Code	PISTON PIN	Size
385034		A		
385035	381312	B		
385036	Deep dish	C		
385037	(1) Rd. Notch	D		
			380048	

STD - Low Comp.

Service Piston Assemblies

Service PART NUMBER	Piston	Piston Size code	Piston Pin	Size
385042		A		
385043	381308	B		
385044	shallow dish	C		STd. - High Comp
385045	(1) "V" Notch	D		
385046		W		
385047	384235	X	380048	
385048	shallow dish	Y		.005 oversize - High Comp
385049	(1) "V" Notch	Z		

"1969"

Pistons

PART Number	HISTORY CARD code	IDENTIFICATION	USAGE
398661	6	Deep dish (1) Rd. NoTch	350 Low COMP
400432	8	Deep dish (2) Rd. NoTches	350 EXPORT
398665	4	Shallow dish (1) "V" NoTch	350 High COMP
402211	9	FLAT Top (1) "V" + (1) Rd. NoTch	350 W31
398454	1	Shallow dish (2) "V" NoTches	400
400160	7	Deep dish (2) Rd. NoTches	455 EXPORT
398591	5	Deep dish (1) Rd. NoTch	455 Low COMP
398666	3	Shallow dish (1) "V" NoTch	455 High COMP

"1970"
Pistons

PART Number	History CARD Code	IDENTIFICATION	Usage
398661	6	Deep dish (1) Rd. NoTch	350 Low COMP
400432	8	Deep dish (2) Rd. NoTches	350 EXPORT
398665	4	Shallow dish (1) "V" NoTch	350 High COMP.
402211	10	FLAT Top (1) "V" + (1) Rd. NoTch	350 W31
400160	7	Deep dish (2) Rd. NoTches	455 EXPORT
398591	5	Deep dish (1) Rd. NoTch	455 Low COMP
398666	3	Shallow dish (1) "V" NoTch	455 High COMP

"1971"

PisTons

PART NUMBER	HISTORY CARD CODE	IDENTIFICATION	USAGE
409074	1	Deep dish (1) Rd. NoTch	350
409112	2	Deep dish (2) Rd. NoTches	455
398666	8	Shallow dish (1) "V" NoTch	455 MARINE H/ + IRRIGATION

"1972"

PistONS

PART NUMBER	HISTORY CARD code	IDENTIFICATION	USAGE
409074	1	Deep dish (1) Rd. NoTch	350
409112	2	Deep dish (2) Rd. NoTches	455
398666	6	Shallow dish (1) "V" NoTch	455 MARINE H, & IRRIGATION

"1973"
PisTons

PART NUMBER	HISTORy CARD code	IDENTIFICATION	USAGE
411891	1	Shallow dish (1) "V" NoTch	350
409112	2	Deep dish (2) Rd. NoTches	455
398666	6	Shallow dish (1) "V" NoTch	MARINE H/C + IRRIGATION

Rod Shop Assemblies

Rod Shop Asm. PART NUMBER	PISTON	REMARKS
350 399986 R/H	398661	
350 399987 L/H	Deep dish (1) Rd. Notch	
55 399996 R/H	398591	
55 399997 L/H	Deep dish (1) Rd. Notch	
50 W31 402208 R/H	402211	
50 W31 402209 L/H	FLAT Top (1) "V" + (1) Rd. Notch	
55 404068 R/H	398666 Shallow dish (1) "V" Notch	All Rod Shop Assemblies include pistons, rods, rod bolts + nuts, upper + lower compression rings, spacer + rails.
55 404069 L/H	Chromium lower Comp. Ring	
55 406456	398666	
55 406457	shallow dish (1) "V" Notch	
50 410993	409074 Deep dish (1) Rd. Notch	
55 410996	398666 shallow dish (1) "V" Notch Chromium lower Comp. Ring	

Rod Assemblies

PART NUMBER

IDENTIFICATION

397858

455 (Spit hole in
CRANK end)

401406

455 (BRONZE PAINT
NARROW ROD)

410997

350 (No spit hole
IN CRANK end)

410999

455 (No spit hole
IN CRANK end)

402212

350 (Spit hole in
CRANK end
ORANGE PAINT)

398410

350 (SPIT hole IN
CRANK end)

* Rod Assemblies
include rod, rod cap,
& rod bolts & nuts.

SECTION 4

EXHAUST
MANIFOLDS

SHAFT ASH - HEAT CONTROL

PART NUMBER	SHAFT	WEIGHT	
386997	386958	383644	
392855	392856	392857	

EXHAUST MANIFOLDS

PART NUMBER	PIN	PLUG	STOP	THERMOSTAT	SHAFT ASH.	SHAFT	WEIGHT	BUSHING	VALVE	MANIFOLD
393185	141165	103891	382722	392850	392855	392856	392857	392859	393188	39324 "I" 380001 CASTIN
393227	141165	172529	382722	392850	392855	392856	392857	392859	393188	393271 "2" 380145 CASTIN
393229	141165	172529	382722	392850	392855	392856	392857	392859	393189	393272 "A" 384785 CASTIN
393231	141165	172529	382722	392850	392855	392856	392857	392859	393189	393273 "X" 389269 CASTIN
403003	141165	103891	382722	392850	392855	392856	392857	392859	393189	402295 "W" 402295 CASTIN
395752	—	—	—	—	—	—	—	—	—	395752 "G"
398704	—	—	—	—	—	—	—	—	—	398704 "4"
398708	—	—	—	—	—	—	—	—	—	398708 "T"
402294	—	—	—	—	—	—	—	—	—	402294 "Z"
406301	—	—	—	—	—	—	—	—	—	40630 "X"
407103	—	—	—	—	—	—	—	—	—	407103 "J"
411230	—	—	—	—	—	—	—	—	—	411230 "4" FIAT OUTLE 398704 CASTIN
411961	—	—	—	—	—	—	—	—	—	411961 "1"
411962	—	—	—	—	—	—	—	—	—	411962 "5"
411970	—	—	—	—	—	—	—	—	—	411970 "H"
412287	—	—	—	—	—	—	—	—	—	412287 "X"
587193	—	—	—	—	—	—	—	—	—	587193
393383	—	—	—	—	—	—	—	—	—	393383 "2" 380145 CASTIN EXIT HEAT EXCH

SECTION 5

INTAKE
MANIFOLDS

INTAKE MANIFOLDS

Service PART Number	CASTING	Machined Number	REMARKS:
231315	410350 "T"	231316	PLUG in left REAR hole.
231397	410670 "13"	231397	(3) VACUUM holes AT REAR OF CARB. PAD
231398	410446 "14"	231398	(3) VACUUM holes AT REAR OF CARB. PAD
231399	410448 "U"	231399	(3) VACUUM holes AT REAR OF CARB. PAD
397357	397357 "G"	397357	
398583	398583 "8"	398583	
398625	398625 "H"	398625	
398663	398663 "9"	398663	1968-1969 350
398664	398664 "K"	398664	
406114	406114 "W-350"	406114	ALUMINUM INTAKE
406115	406115 "W-455"	406115	ALUMINUM INTAKE
407564	407564 "11"	407564	
407565	407565 "12"	407565	
407566	407566 "P"	407566	
407567	407567 "R"	407567	
407568	407567 "R"	407568	DUAL VENT. nipple hole IN FRONT OF INTAKE
407569	407569 "S"	407569	
407570	407570 "W455" "A"	407570	ALUMINUM INTAKE DUAL VENT. nipple hole

SECTION 6

WATER
PUMPS

SECTION 7

FUEL TANKS

Fuel TANKS

TANK ASM.	Body ASM.	Upper OR INNER	Lower OR OUTTER	BAFFLE	GAGE RING	VENT Pipe	Filler Neck	FLAN
380806	584831	580278	580279	—	—	—	380807	5588
385293	385294	382955	382954	—	579365	383510	380801	—
—	389915	386101	385914	389916	3774094	386102 386103	—	—
390282	381446	381447	381448	—	3774094	381449	390283	—
391178	391180	XR 79774	385914	389916	3774094	385915	385916	—
391179	391180	XR 79774	385914	389916	3774094	385915	385923	—
393003	393004	393005	385914	394927	3774094	393006 393007	393011	—
—	393017	393005	385914	394927	3774094	393006 393007	—	—
394561	397103	394562	390838	394243	3774094	390841 391688 393848 393849	389446	—
394901	394455	394456	381448	—	3774094	393007 394457	394904	—
394906	394907	394908	381448	—	3774094	—	381986	—
394910	394911	394912	382764	—	3774094	—	382765	—
398168	—	398170	398169	—	3774094	—	399290	—
399447	399730	399731	394934	399732	394935	394027 393007	399450	—
—	399730	399731	394934	399732	394935	394027 393007	—	—
400235	—	400237	390838	399727	394935	390841	398738	—
404078	404079	398224	398024	—	3774094	398229 393007	404080	—
404160	—	404161	398169	—	3774094	—	399290	—

Fuel TANKS

TANK ASM.	Body ASM.	Upper OR INNER	Lower OR OUTTER	BAFFle	GAGE RING	VENT Pipe	Filler Neck
404964	—	404965	398169	—	3774094	404966	404967
—	404984	404757	398024	404936 INNER TANK	3774094	404985 404986	—
405010	404984	404757	398024	404936 INNER TANK	3774094	404985 404986	405395
405018	404987	404759	394934	404937 INNER TANK	394935	404985 404988	405428
405019	404987	404759	394934	404937 INNER TANK	394935	404985 404988	405454
405081	—	404763	390838	404938 INNER TANK	394935	406821 390841 405946	405083
10507	—	405051	390838	399727	394935	390841 393848 393849	405083
105109	405110	405049	398024	—	3774094	398229 393007	405395
105150	405152	405050	394934	399732	394935	394027 393007	405428
105151	405152	405050	394934	399732	394935	394027 393007	405454
—	406032	406033	398024	—	3774094	393007	—
107292	—	407293	407294	—	409682	407295	408440
108082	407805	407806	407807	407808	3774094	407773 407828	408852
108439	—	404965	398169	—	3774094	404966	408440
108589	407769	407770	407771	407772	409682	3972254 407773 409658 407774	408854
109384	—	405231	398169	—	3774094	404966	408440
09873	—	409874	409875	—	412460	409876	408440

Fuel TANKS

TANK ASM.	Body ASM.	Upper OR INNER	Lower OR OUTER	BAFFle	GAGE RING	VENT Pipe	Filler Neck
410364	—	410365	410400	—	409682	407295	408440
411827	411710	411497	411498	412092	412460	—	411775
480646	—	9799981	480647	—	9795488	—	—
480649	—	477608	480647	477609 INNER TANK	9795488	480166 478014	—
231813	405152	405050	394934	399732	394935	394027 393007	1231814
233035	405152	405050	394934	399732	394935	394027 393007	1232645
2773	404987	404759	394934	404937 INNER TANK	394935	404985 404988	1231814
234123	405110	405049	398024	—	3774094	398229 393007	1234124
234125	404984	404757	398024	404936 INNER TANK	3774094	404985 404986	1234124
235529	407769	407770	407771	407772	409682	3972254 407773 409058 407774	1235530
235674	407805	407806	407807	407808	3774094	407773 407828	1238354 OR 1235673
235871	407381	407288	407771	409546	409682	407774 407773	1235872
240678							
240702	411748	411487	411486	412095	412460	—	1240701
240772	411748	411487	411486	412095	412460	—	1240729 OR 1241784
240776	411748	411487	411486	412095	412460	—	1240751
348494							

SECTION 8

CAMSHAFTS

CAMSHAFTS

SHAFT A.S.M.	Machined Number	Color Code	STAMP ON END OF #5 JOURNAL
387484	387487	(1) Blue (1) ORANGE	484
388828	388829	(1) ORANGE (2) White	828
390961	390962	(3) White	961
393859	393854	(2) Blue	859
393964	393965	(2) GREEN (1) ORANGE	964
396190	396191	(1) ORANGE (1) White	190
400084	400085	(1) Blue	—
400117	400118	(1) GREEN	—
400165	400166	(2) White	165
402194	402195	(1) White	194
402486	402487	(3) ORANGE	486
402569	402570	(2) GREEN (1) White	569
406768	406767	(2) ORANGE	768
409691	409690	(3) GREEN	
409717	409718	(1) Blue (2) ORANGE	717

EXPERIMENTAL CAMSHAFTS
TORO ENGINE

SMALL LIFTER S.S.

CAMSHAFT		INTAKE MASTER CAM DATA						EXHAUST MASTER CAN DATA						DESIGN NUMBER AND REMARKS
PART NUMBER	INDEX	OPENS B.T.C.	CLOSES A.B.C.	CL A.T.C.	VALVE LIFT	MASTER CAM NUMBER	INDEX	OPENS B.B.C.	CLOSES A.T.C.	CL B.T.C.	VALVE LIFT	MASTER CAM NUMBER	INDEX	
EG-16202	151A	28°	77°	114°	.472		151A			116°			151A	E-37
EG-16203	151B			114°	.472		151B	78°	29°	116°	.472		151B	E-38
EB-16204	151C	28°	77°	114°	.472	EG-16202	151A	78°	29°	116°	.472	EG-16203	151B	
EB-16378	151D	24°	81°	118°	.472	EG-16202	151A	74°	33°	112°	.472	EG-16203	151B	151-C RET. 4°
EG-16904	151E	24°	82°	118°	.474		151E	74°	32°	112°	.474		151E	E-37 FOR QUIETER
EB-16905	151F	24°	82°	118°	.474	EG-16904	151E	74°	33°	112°	.472	EG-16203	151B	
EG-17073	151G	28°	66°	108°	.470		151G	66°	28°	110°	.470		151G	E-32 W. 294 LIFT E-
EG-17074	151H	34°	66°	108°	.470		151H	72°	28°	110°	.470		151H	E-33 W. 294 LIFT E-
EB-17075	151J	28°	66°	108°	.470	EG-17073	151G	72°	28°	110°	.470	EG-17074	151H	2-AF W/.470 V. 21
EB-17210	151K	24°	81°	118°	.472	EG-16202	151A	78°	29°	116°	.472	EG-16203	151B	151-D W. 294 ADV. 4
EB-17211	151L	24°	81°	118°	.472	EG-16202	151A	70°	37°	108°	.472	EG-16203	151B	" " " RET 4
EB-17437	151M	24°	81°	118°	.472		151A	68°	39°	106°	.472	"	151B	" " " 6
EB-17438	151N	24°	81°	118°	.472		151A	66°	41°	104°	.472	"	151B	" " " 8
EB-17439	151P	24°	82°	118°	.474	EG-16904	151E	70°	37°	108°	.472	"	151B	151-F W. EXH. RET.
EB-17599	151Q	24°	82°	118°	.474	EG-16904	151E	68°	39°	106°	.472	"	151B	" " " "
EG-17602	151R	28°	86°	118°	.472		151R	76°	38°	110°	.472		151R	E-37 + 8° EVENT E
EG-17603	151S	30°	86°	116°	.472		151S	78°	38°	112°	.472		151S	E-38 + 8° " E-
EB-17604	151T	30°	84°	116°	.472	EG-17602	151R	78°	38°	112°	.472	EG-17603	151S	
EB-17841	151U	32°	73°	110°	.472		151A	76°	31°	114°	.472		151B	151-M ADV. 8°
EB-17842	151V	32°	74°	110°	.474		151E	76°	31°	114°	.472		151B	151-Q-ADV. 8°
EB-18036	151W			112°	.472		151R			116°	.472		151S	151-T ADV. 4°
EB-18310	151X	28°	78°	114°	.474		151E	78°	29°	116°	.472		151B	151-F ADV. 4°
EB-18311	151Y	32°	74°	110°	.474		151E	78°	29°	116°	.472		151B	151-P " 8°
EB-19076	151Z			110°	.472	EG-11274	16B			122°	.472	EG-11274	16B	35-N W/EXH. + 4
EB-19077	151AA	24°	70°	112°	.470	EG-17073	151G	72°	28°	110°	.470	EG-17074	151H	151-J W/INT. - 4
EB-19078	151AB	22°	72°	114°	.470	"	151G	72°	28°	110°	.470	"	151H	151-J " - 6
EB-20486	151AC	30°	76°	112°	.474	EG-16904	151E	76°	31°	114°	.472	EG-16203	151B	151-P + 6°

EXPERIMENTAL CAMSHAFTS
ENGINE

CAMSHAFT		INTAKE MASTER CAM DATA						EXHAUST MASTER CAN DATA						DESIGN NUMBER AND REMARKS
PART NUMBER	INDEX	OPENS B.T.C.	CLOSES A.B.C.	CL A.T.C.	VALVE LIFT	MASTER CAM NUMBER	INDEX	OPENS B.B.C.	CLOSES A.T.C.	CL B.T.C.	VALVE LIFT	MASTER CAM NUMBER	INDEX	
EB-17523	57AB	56°	92°	110°	.475	EG17162	57Z	96°	52°	110°	.475	EG17162	57Z	57-Z ADV. 8°
EB-17524	57AC	56°	92°	110°	.475	"	57Z	100°	48°	114°	.475	"	57Z	57-AB W EXH. AL
EB-17525	57AD	56°	92°	110°	.475	"	57Z	92°	56°	106°	.475	"	57Z	" " " RET.
EG17653	57AE	56°	92°	110°	.400		57AE	96°	52°	110°	.400		57AE	E-53 x.841751
EB-18479	57AF	38°	90°	114°	.474	EG15008	57D	96°	52°	110°	.475	EG17162	57Z	57AB/w. 57D INT.
EB-18480	57AG	44°	84°	108°	.474	"	57D	96°	52°	110°	.475	"	57Z	57AB/ " "
EB-18481	57AH	54°	74°	98°	.474	"	57D	96°	52°	110°	.475	"	57Z	57AB/ " "
EB-18482	57AJ	56°	92°	110°	.475	EG17162	57Z	94°	34°	122°	.474	EG15008	57D	57AB/w. 57D EXH.
EB-18483	57AK	56°	92°	110°	.475	"	57Z	90°	38°	118°	.474	"	57D	57AB/ " "
EB-18484	57AL	56°	92°	110°	.475	"	57Z	78°	50°	106°	.474	"	57D	57AB/ " "
EG18951	57AM	64°	102°	110°	.475		57AM	104°	62°	110°	.475		57AM	E-53/w. 346° DURANT E
EB-18952	57AN	56°	92°	110°	.475	EG17162	57Z	94°	72°	100°	.475	EG18951	57AM	57-AB/w. E-60.
EB-18953	57AP	56°	92°	110°	.475	"	57Z	104°	62°	110°	.475	"	57AM	57-AN/ EXH. +10
EB-18954	57AQ	56°	92°	110°	.475	"	57Z	114°	52°	120°	.475	"	57AM	57-AN/ " +20
EB-19127	57AR	56°	92°	110°	.475	"	57Z	98°	68°	104°	.475	"	57AM	57-AN/ " +4
EB-19128	57AS	56°	92°	110°	.475	"	57Z	90°	76°	96°	.475	"	57AM	57-AN/ " -4
EB-19140	57AT	56°	92°	110°	.475	"	57Z	108°	58°	114°	.475	"	57AM	57-AN/ " +14
EB-19141	57AU	56°	92°	110°	.475	"	57Z	100°	66°	106°	.475	"	57AM	57-AN/ " +6
EB-19237	57AV	60°	88°	106°	.475	"	57-Z	102°	64°	108°	.475	"	57AM	57-AR ADV. 4
EG19880	57AW			110°	.485	"	57AW			118°	.485		57AW	CHEV. Z-28 ^{ME} LIF
EB-19881	57AX			110°	.485	EG19880	57AW			114°	.485	EG19880	57AW	" EXH. -4° "
EB-19882	57AY			110°	.485	"	57AW			122°	.485	"	57AW	" EXH. +4° "
EG19883	57AZ			108°	.510		57AZ			108°	.510		57AZ	CHEV. - SMALL "
EG19884	57BA			112°	.554		57BA			103°	.554		57BA	595 ISV. OIL LBS
EB-20485	57BB	36°	92°	116°	.474		57D	82°	46°	110°	.474		57D	57-D -8° CRAN
EB-20488	57BC	64°	84°	102°	.475	EG17162	57Z	106°	60°	112°	.475	EG18951	57AM	57-AV +4° "

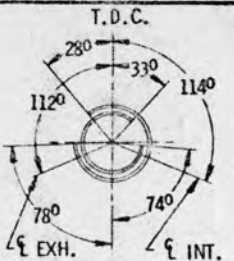
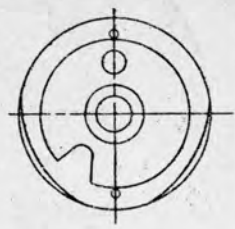

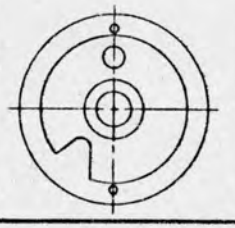
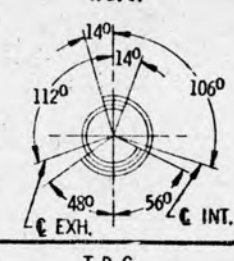



EXPERIMENTAL CAMSHAFTS

442 ENGINE

48° HI-SPEED

CAMSHAFT		INTAKE MASTER CAM DATA						EXHAUST MASTER CAN DATA						DESIGN NUMBER AND REMARKS
PART NUMBER	INDEX	OPENS B.T.C.	CLOSES A.B.C.	℄ A.T.C.	VALVE LIFT	MASTER CAM NUMBER	INDEX	OPENS B.B.C.	CLOSES A.T.C.	℄ B.T.C.	VALVE LIFT	MASTER CAM NUMBER	INDEX	
EG-14852	57A	58°	98°	108°	.480		57A	104°	52°	118°	.480		57A	89-G x .9556
EG-14896	57B			108°	.460		57B			118°	.460		57B	89-G x .91578
EG-14897	57C			108°	.440		57C			118°	.440		57C	89-G x .87596
397329 EG-15008	57D	44°	84°	108°	.474		57D	90°	38°	118°	.474		57D	-17.2 x 10 ⁻⁵ ACC. E.
EB-15200	57E			104°	.474	EG-15008	57D			118°	.474	EG-15008	57D	
EB-15201	57F	52°	76°	100°	.474	"	57D			118°	.474	"	57D	
EB-15202	57G	40	88	112°	.474	"	57D			118°	.474	"	57D	
EB-15203	57H	36°	92°	116°	.474	"	57D	90°	38°	118°	.474	"	57D	
EB-15204	57J			108°	.474	"	57D			122°	.474	"	57D	
EB-15205	57K			108°	.474	"	57D			126°	.474	"	57D	
EB-15206	57L			108°	.474	"	57D			114°	.474	"	57D	
EB-15207	57M			108°	.474	"	57D			110°	.474	"	57D	
EG-15453	57N	44°	84°	108°	.474		57N	90°	38°	118°	.474		57N	FATTER E-29 E
EG-15454	57P	44°	84°	108°	.482		57P	90°	38°	118°	.482		57P	E-30 x 1.017736
EG-15612	57Q	46°	86°	108°	.482		57Q	92°	40°	118°	.482		57Q	E-31 LOW NEG. 3A ST. FIRE POS. 3A
EG-16514	57R	44°	84°	108°	.461		57R	90°	38°	118°	.461		57R	57-D/LESS LIFT E
EG-16515	57S	48°	88°	108°	.474		57S	94°	42°	118°	.474		57S	57-D/LONGER EVENT.
EG-16516	57T	48°	88°	108°	.461		57T	94°	42°	118°	.461		57T	E-40 x .972972.
EG-16517	57U	48°	88°	108°	.482		57U	94°	42°	118°	.482		57U	E-40 x 1.021959
EG-16600	57V	21°	77°	116°	.410		57V			117°	.410		57V	
EG-16601	57W			116°	.410		57W	76°	26°	117°	.410		57W	
EB-16602	57X	21°	77°	116°	.410	47° 21°	57V	76°	26°	117°	.410	232	57W	35-T x K
EG-17161	57Y	48°	100°	118°	.500		57Y	88°	60°	102°	.500		57Y	ENGL E HL-26 TIMING -4° _{MIN} E-5
EG-17162	57Z	48°	100°	118°	.475		57Z	88°	60°	102°	.475		57Z	" " E-5
EB-17206	57AA	40°	88°	112°	.474	EG-15008	57D	86°	42°	114°	.474	EG-15008	57D	57-D RET. 4°

1975 PRODUCTION CAMSHAFTS

CAMSHAFT ASM	CAMSHAFT	INDEX	ENGINE USAGE	VALVE LIFT	VALVE TIMING	CAMSHAFT IDENTIFICATION		CASTING	
						SHAFT GRIND	COLOR CODE	IDENT.	PART NO.
(A) 409691	409690	151AU	455 MARINE	INT. .474 EXH. .472	T. D. C. 		3 GREEN STRIPES	2 CAST RINGS	389410
400117	400118	2AF	L74 L78 95 99	INT. .435 EXH. .435	T. D. C. 		ONE GREEN STRIPE	NONE	401348
(A) 550638	550639	462AN	LV8		T. D. C. 		RED		
400084	400085	2K	L34	INT. .400 EXH. .400	T. D. C. 		ONE BLUE STRIPE		

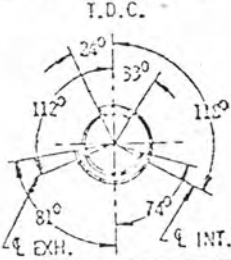
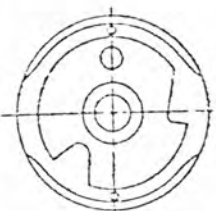
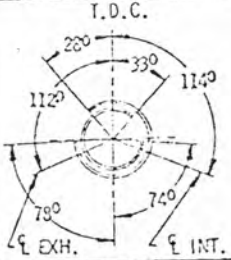
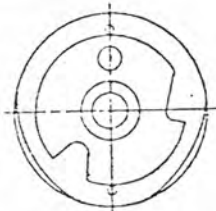
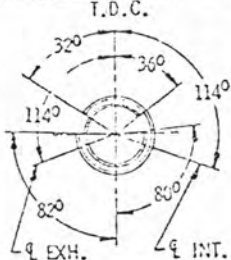
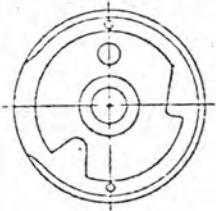
CAUTION - PRELIMINARY
INFORMATION SHOWN
MAY NOT BE RELEASED
ISSUE DATE 2-6-77



FULLY DRIVEN, SEATED
AND NOT STRIPPED

						TITLE CHART - CAMSHAFT IDENTIFICATION							
						DATE FEBRUARY 6, 1974		OLDSMOBILE ENGINE ASSEMBLY MANUAL		PART NO. 417959		SERIES	
						DR. CUBET MAY		CK. P. B. Barnhart		APPR.		YEAR 1975	
						4-2374 A2 CAMSHAFTS ADDED		APPR.		MANUAL SEC. 6		PAGE 16	
DATE	SYM	REVISION	DR. CK.	DATE	SYM	REVISION	DR. CK.	APPR.					

1971 PRODUCTION CAMSHAFTS

CAMSHAFT ASM	CAMSHAFT	INDEX	ENGINE USAGE	VALVE LIFT	VALVE TIMING	CAMSHAFT IDENTIFICATION		CASTING	
						SHAFT GRIND	COLOR CODE	IDENT.	PART NO.
(A) 400165	400166	151-D	659 AT EXC W30 NOV A/C W30 A/C 285°	INT. .472 EXH. .472	T.D.C. 		TWO WHITE STRIPES	2 CAST RINGS	389410
409691	409690	151AU	W30 AT EXC A/C 659 S.M. EXC W30 286°	INT. .474 EXH. .472	T.D.C. 		3 GREEN STRIPES		
409759	409760	151 AW	W30 S.M. 294°	INT. .472 EXH. .472	T.D.C. 		TWO GREEN STRIPES		

DATE 6/25/70		FIRST USED 1971		TITLE CHART - CAMSHAFT IDENTIFICATION	
DW BY CURT MAY		OLDSMOBILE ENGINE ASSEMBLY MANUAL		PAGE 6	
CHECKED BY [Signature]		REV. 609		PART NO. 40726	
DATE 9-23-70		BY [Signature]		REV. 1	

SECTION 9

OIL FILLER TUBE

FLYWHEELS

SECTION 10

OIL PUMPS
WATER OUTLET
GENERATOR BRKT.

Oil Pumps

ASM. Number	Screen	Spring	Valve	COTter PIN	SHAFT ASM.	SHAFT	GEAR	Body	GASKET	Screw ASM.	Cover
102386	402387	401366	557238	103375	382157	555737	585582	387803	382160	193938	39795

Oil Pump SHAFT ASM.

ASM. PART NUMBER	SHAFT	RETAINER
579237	579238	575011

WATER OUTLET Assembly

ASM. PART NUMBER	OUTLET	PIPE
409037	409038	409039

GENERATOR BRACKET

PART NUMBER
397209