1965-73 153" 4 CYL., 194", 230", 250" 6 CYL. ENGINES

GENERAL SPECIFICATIONS

Year	Displ. Cu. Ins.	Carburetor	HP at RPM	Torque (Ft. Lbs. at RPM)	Compr. Ratio	Bore	Stroke
1965	153	1-Bbl.	90@4000	152@2400	8.5-1	3.875"	3.250"
	194	1-Bbl.	120@4400	177@2400	8.5-1	3.563"	3.250"
	230	1-Bbl.	140@4400	220@1600	8.5-1	3.875"	3.250"
1966	153	1-Bbl.	90@4400	152@2400	8.5-1	3.875"	3.250"
	194	1-Bbl.	120@4400	177@2400	8.5-1	3.563"	3.250"
	230	1-Bbl.	140@4400	220@1600	8.5-1	3.875"	3.250"
	250	1-Bbl.	150@4200	235@1600	8.5-1	3.875"	3.530"
1967-69	153	1-Bbl.	90@4400	152@2400	8.5-1	3.875"	3.250"
	194	1-Bbl.	120@4400	177@2400	8.5-1	3.563"	3.250"
	230	1-Bbl.	140@4400	220@1600	8.5-1	3.875"	3.250"
	250	1-Bbl.	155@4200	235@1600	8.5-1	3.875"	3.530"
1970	153	1-Bbl.	90@4000	152@2400	8.5-1	3.874"	3.250"
	230	1-Bbl.	140@4400	220@1600	8.5-1	3.874"	3.250"
	250	1-Bbl.	155@4200	235@1600	8.5-1	3.874"	3.530"
1971	250	1-Bbl.	145@4200	230@1600	8.5-1	3.875"	3.530"
1972	250	1-Bbl.	110@3800	185@1600	8.5-1	3.875"	3.530"
1973	250	1-Bbl.	100@3600	175@1600	8.2-1	3.87"	3.53"

► *NET HORSEPOWER & TORQUE NOTE — Horsepower and Torque figures given for 1972 and later are NET. NET Horsepower and Torque represent power at the flywheel when the engine is installed in the vehicle, with wide open throttle and all systems operating such as; air cleaner, exhaust system, water pump, generator, oil pump and air conditioning.*

ENGINE NUMBER

Stamped on pad on right side of engine directly behind distributor. See below for identification of lettering:

① ② ③ ④
F 12 10 B

① - Engine Plant - **F** Flint, **T** Tonawanda.
② - Month Built. **12** December.
③ - Day Built. **10** Tenth.
④ - Engine number suffix letter indicating engine displacement, transmission type, model application, and other equipment. *See "Engine Production Number Code" below:*

1965

Engine	Suffix Letters
153" 4 Cyl.	OA, OC, OH, OG, OJ
194" 6 Cyl. (Chevy II)	OK, OM, OR, OQ, OT
(Chevelle)	AA, AG, AC, AH, AL, AR, AK, AN
230" 6 Cyl. (Chevy II)	PV, PX
(Chevelle)	CA, CB, CC, CD
(Chevrolet)	FA, FL, FE, FF, FM, FR, FK, FP

1966

Engines	Suffix Letters
153" 4 Cyl.	OA,OC,OH
194" 6 Cyl. Chevy II	ZY,ZV,ZX,OK,OM,OR
Chevelle	AS,AT,AW,AU,AX,AY
	AA,AG,AC,AH,AL,AR
230" 6 Cyl. Chevy II	PC,PI,PV,PX
Chevelle	BN,BO,BL,BM,CA,CB,CC,CD
250" 6 Cyl. Chevrolet	FV,FY,GP,GQ,FZ,GR,FA
	FL,FE,FF,FM,FR,FK,FP

1967

Engine	Suffix Letters
153" 4 Cyl.	OA,OC,OH
194" 6 Cyl. (Chevy II)	OK,OM,OR,ZY
230" 6 Cyl. (Chevelle)	BC,BB,BN,BL,BO
	BM,CA,CB,CC,CD
(Camaro)	LA,LB,LC,LD,LE,LF,LG,LH
250" 6 Cyl. (Camaro)	FM,FR,GP,GQ,LP,LQ,LN,LO
(Chevelle)	CM,CN,CQ,CR,CO,CS,CP,CT
(Chevy II)	PC,PI,PV,PX
(Chevrolet)	FA,FE,FF,FK,FL,FM,FP
	FR,FV,FY,FX,GP,GQ,GR

1968

Engines	Suffix Letters
153" (Chevy II)	OA,OC,OH
230" (Chevelle)	BC,BB,BN,BL,BO,BM,CA,CB,CC,CD
(Camaro)	LE,LA,LB,LF,LG,LC,LD,LH
250" (Chevelle)	CM,CQ,CN,CR,CO,CS,CP,CT
(Camaro)	FM,FR,GP,GQ,LP,LQ,LN,LO
(Chevy II)	PV,PX,PC,PI
(Chevrolet)	FA,FM,FE,FL,FF,FR,FK
	FP,FV,FY,FZ,GP,GQ,GR

1969

Engines	Suffix Letters
153" (Chevy Nova)	AA,AB
230" (Chevelle)	
(Chevy Nova)	
(Camaro)	AD,AM,AN,AO,AP,AQ,AR
250" (Chevrolet)	BA,BG,BJ,BL,BO,BP,BQ
(Chevelle)	
(Chevy Nova)	
(Camaro)	BB,BC,BD,BE,BF,BH

1970

Engine	Suffix Letters
153" (Nova)	CCA, CCB
230" (Nova)	CCD
250" (Camaro & Chevy)	CCM, CCG, CCH, CCK,
	CCZ, CCL, CRF, CRG

1965-73 153" 4 CYL., 194", 230", 250" 6 CYL. ENGINES (Cont.)

1971

Engine	Suffix Letters
250" (Police & Taxi, Synchro-mesh)	CAC
(Police & Taxi, Auto. Trans.)	CAD
250" (Synchro-mesh)	CAA
(Auto. Trans.)	CAB

1972

Engine	Suffix Letters
250" (Synchro-mesh)	CBG, CNJ, CBH
(Auto. Trans.)	CBJ, CBK

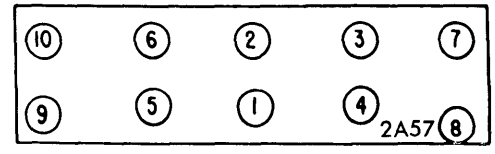
1973

Engine	Suffix Letters
250" (Man. Trans.)	CCL,CCM,CCC,CCD
(Auto. Trans.)	CCA,CCB

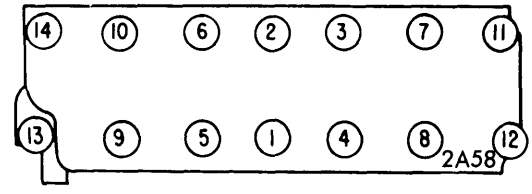
CYLINDER HEAD INSTALLATION

NOTE — Do not use gasket sealer on composition steel asbestos gasket.

Coat cylinder head bolts with sealing compound and tighten to specifications in sequence shown in illustration.



4 CYL. ENGINE CYLINDER HEAD TIGHTENING SEQUENCE



6 CYL. ENGINE CYLINDER HEAD TIGHTENING SEQUENCE

TIGHTENING SPECIFICATIONS

153", 194" ENGINES

Application	Ft. Lbs.
Cylinder Head	90-100
Intake Manifold	①15-20
Intake-to-Exhaust Manifold	20-25
Exhaust Manifold	①15-20
Oil Pan — 1/4-20	6.5-7.5
5/16-18	9-12
Main Bearing Caps	60-70
Connecting Rod Caps	30-35
Camshaft Thrust Plate	6-7.5
Flywheel-to-Crankshaft	55-70
Crankshaft Pulley	15-20
Rocker Arm Cover	3-4
Engine Front Cover	6.5-7.5
Water Pump	13-17
Water Outlet	18-23
Thermostat Housing-to-Cylinder Head	25-30
Oil Pump	9-11
Oil Pump Cover-to-Body	5-6
Oil Filter	Hand Tight
Clutch or Converter Housing	28-38

230", 250" ENGINES

Application	Ft. Lbs.
Cylinder Head	90-100
Intake Manifold	25-35
Exhaust Manifold	①15-20
Oil Pan — 1/4-20	6-7.5
5/16-18	7
Main Bearing Caps	65
Connecting Rod Caps	35-45
Camshaft Thrust Plate	6-7.5
Flywheel-to-Crankshaft	60
Clutch or Converter Housing	45-55
Crankshaft Pulley	15-20
Rocker Arm Cover	20-25 Inch Lbs.
Rocker Arm Support Bracket	25-30
Engine Front Cover	6-7.5
Water Pump	25-35
Thermostat Housing-to-Cylinder Head	25-30
Oil Pump Cover-to-Body	6-9
Oil Filter	Hand Tight
Oil Pump Mounting	9

① — Tighten two center bolts to 25-30 Ft. Lbs.

PISTONS, PINS, RINGS

Engine	PISTONS	PINS		RINGS		
	①Clearance	②Piston Fit	③Rod Fit	Rings	End Gap	② Side Clearance
1965-71	.0005-.0011"	.00015-.00025"	Press Fit	1	.010-.020"	.0012-.0035"
				2	.010-.020"	.0012-.0035"
				3	.015-.055"	.0012-.005"
1972	.0005-.0015"	.00015-.00025"	Press Fit	1	.010-.020"	.0012-.0027"
				2	.010-.020"	.0012-.0032"
				3	.015-.055"	.000-.005"
1973	.0015-.0025"	.00015-.00025"	.0008-.0016"	1	.010-.020"	.0012-.0027"
				2	.010-.020"	.0012-.0032"
				3	.015-.055"	.005" Max.

① — Wear Limit — .0025" ② — Wear Limit — .001" ③ — Interference fit.

1965-73 153" 4 CYL., 194", 230", 250" 6 CYL. ENGINES (Cont.)

ENGINE REMOVAL

See Engine Removal at end of ENGINE Section.

OIL PAN REMOVAL

See Oil Pan Removal at end of ENGINE Section.

PISTON PIN REPLACEMENT

Removal - Install pilot of Tool J-9510 on piston pin. Install piston and rod assembly on support and place assembly in an arbor press. Press pin out of rod.

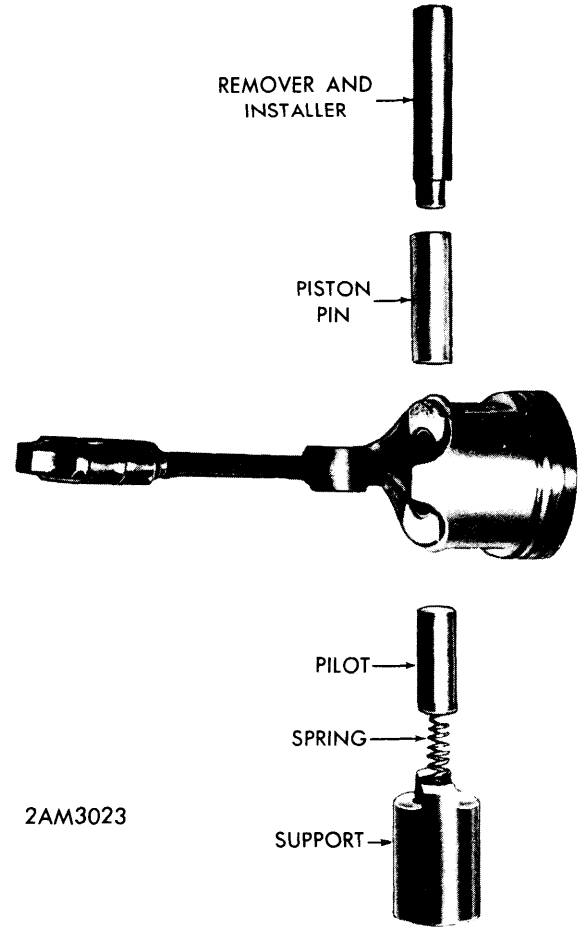
Installation - Using Tool J-9510 (see illustration), position rod in piston so that flange or heavy side of rod (at bearing end) will be to front of piston (cast depression in top of piston head). Install pin on installer and pilot spring and pilot in support. Install piston and rod on support (indexing pilot through piston and rod). Using an arbor press, start pin into piston and press on installer until pin pilot bottoms. Check pin for freedom of movement in piston bore.

FITTING PISTONS

1965-73 – To check piston fit, measure piston bore diameter with a telescopic gauge approximately 2 1/2" from top of bore. Measure piston skirt diameter at piston pin centerline height. *Refer to Pistons, Pins, Rings specification table for clearance.*

PISTON & ROD INSTALLATION

Cast depression in piston head towards front of engine. Oil hole in rod towards camshaft (flange or heavy side of rod must face front of engine).



PISTON PIN ASSEMBLY

VALVES								
Engine & Valve		Head Diam.	Face Angle	Seat Angle	Seat Width	Stem Diameter	Stem Clearance	Valve Lift
153"								
1965-67	Int.	1.720"	45°	46°	.031-.063"	.3404-.3417"	.0010-.0033"	.397"
	Exh.	1.500"	45°	46°	.063-.094"	.3410-.3417"	.0010-.0027"	.397"
1968-70	Int.	1.720"	45°	46°	.031-.063"	.3410-.3417"	.0010-.0027"	.397"
	Exh.	1.500"	45°	46°	.063-.094"	.3410-.3417"	.0015-.0032"	.397"
194"								
1965-67	Int.	1.720"	45°	46°	.031-.063"	.3404-.3417"	.0010-.0033"	.332"
	Exh.	1.500"	45°	46°	.063-.094"	.3410-.3417"	.0010-.0027"	.332"
230" & 250"								
1965-67	Int.	1.720"	45°	46°	.031-.063"	.3404-.3417"	.0010-.0033"	.332"①
	Exh.	1.500"	45°	46°	.063-.094"	.3404-.3417"	.0010-.0027"	.332"①
1968-71	Int.	1.720"	45°	46°	.031-.063"	.3410-.3417"	.0010-.0027"	.332"①
	Exh.	1.500"	45°	46°	.063-.094"	.3410-.3417"	.0015-.0032"	.332"①
1972	Int.	1.720"	45°	46°	.031-.063"	.3410-.3417"	.0010-.0027"	.388"
	Exh.	1.500"	45°	46°	.063-.094"	.3410-.3417"	.0015-.0032"	.388"
1973	Int.	1.715-1.725"	45°	46°	.031-.062"	.3410-.3417"	.001-.0027"	.....
	Exh.	1.495-1.505"	45°	46°	.062-.094"	.3410-.3417"	.0015-.0032"	.....

① – 250" Engine .388".

1965-73 153" 4 CYL., 194", 230", 250" 6 CYL. ENGINES (Cont.)

VALVE ARRANGEMENT

4 Cyl. – E-I-I-E-E-I-I-E (front to rear).
6 Cyl. – E-I-I-E-E-I-I-E-E-I-I-E (front to rear).

VALVE GUIDES

Integral with cylinder head. Oversize valve stems are available in .003, .015 & .030" sizes.

VALVE STEM SEALS

"O" Ring type used on all valves. Installed in lowest groove on upper part of stem below locks and against cap.

HYDRAULIC LIFTER SERVICE

Two types of lifters are used. They are interchangeable as complete assemblies, but their parts are not interchangeable. Type **A** has a groove near its base which type **B** lacks. Type **B** uses an inertia valve and retainer which should be removed from the push rod seat. To check type **B**, shake the push rod seat and inertia valve assembly and the valve should move. Lifters are serviced as assemblies. *CAUTION – Do not pump lifter assembly during leakdown test.*

HYDRAULIC LIFTER ADJUSTMENT

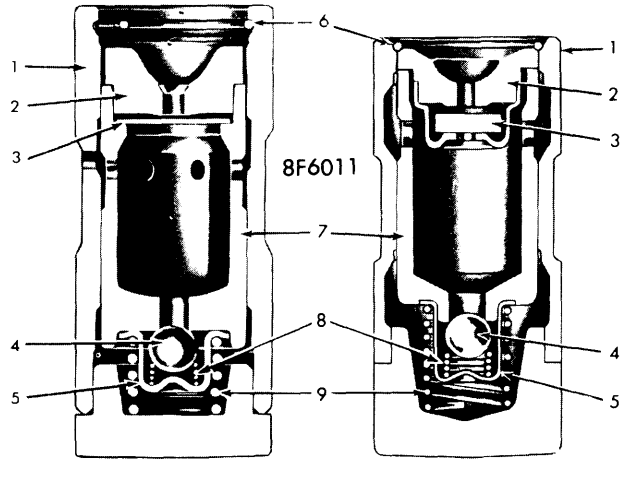
"Bump" engine around until rotor is at number 1 cylinder position and points are just open. Adjust the following valves:

Intake – Nos. 1, 2, 4. **Exhaust** – Nos. 1, 3, 5.

Back out rocker arm adjusting nut until lash is felt at push rod, then turn in nut until all lash is removed. Turn adjusting nut in one full additional turn.

"Bump" engine around until rotor is at No. 6 cylinder position and points are just open. Adjust the following valves:

Intake – Nos. 3, 5, 6. **Exhaust** – 2, 4, 6



LIFTER A LIFTER B

1. Lifter Body
2. Push Rod Seat
3. Metering Valve (Lifter A) Inertia Valve (Lifter B)
4. Check Ball
5. Check Ball Retainer
6. Push Rod Seat Retainer
7. Plunger
8. Check Ball Spring
9. Plunger Spring

HYDRAULIC VALVE LIFTER ASSEMBLIES

VALVE SPRINGS			
		PRESSURE (LBS.)	
Engine	Free Length	Valve Closed	Valve Open
153"			
1965-70	2.08"	78-86@1.66"	170-180@1.26"
194"			
1965	2.03"	56-64@1.66"	170-184@1.33"
1966-67	1.92"	56-64@1.66"	170-184@1.33"
230"			
1965	2.03"	56-64@1.66"	170-184@1.33"
1966-70	1.92"	56-64@1.66"	170-184@1.33"
250"			
1966-73	1.90"	56-64@1.66"	180-192@1.27"

VALVE SPRING HEIGHT

Installed height of valve spring should be 1 21/32", ±1/32". Measure from top of spring seat in head to top of spring or spring shield. If measurement exceeds specification, install a 1/16" spring seat shim. Do not shim to obtain a height under the minimum specified.

Camshaft Gear Removal - Use support sleeve in back of gear and press shaft out of gear. *CAUTION* - Thrust plate must be positioned so no damage will result (by woodruff key in shaft) while shaft is being pressed out of gear.

Camshaft Gear Installation - Support shaft directly back of front bearing journal and install gear spacer ring and thrust plate. Install woodruff key in shaft keyway. Press camshaft gear onto shaft until it bottoms against gear spacer ring. End clearance of thrust plate should be .001-.005". Install camshaft assembly in block. Line up gear teeth (see illustration), then push camshaft into position. Install camshaft thrust plate-to-block screws and tighten securely. Gear runout should not exceed .004" (camshaft), .003" (crankshaft). Backlash between timing gear teeth should be .004-.006". *CAUTION* - Press on hub only when installing gear.

CAMSHAFT			
Engine	Journal Diam.	Clearance	Lobe Lift
All	1.8682-1.8692"	.....	①

① – See "Cam Lobe Lift" table.

CAMSHAFT LOBE LIFT CHECK

1) Remove valve rocker cover, gaskets, rocker arms and balls.
2) Attach Tool J-8520 to stud, then position clamp and indicator with ball socket adapter of Tool J-8520 to push-rod. *NOTE* - Pushrod must be in lifter socket.
3) Rotate crankshaft slowly in direction of rotation until lifter is on heel of cam lobe. At this point, pushrod will be at lowest position.
4) Set dial indicator to zero, then rotate crankshaft slowly or attach an auxiliary starter switch and "bump" engine over until pushrod is in fully raised position. *NOTE – Ground primary wire on coil before cranking.*
5) Total lift on indicator should be as shown in table.

1965-73 153" 4 CYL., 194", 230", 250" 6 CYL. ENGINES (Cont.)

Cam Lobe Lift

Engine	Lift
153"	
1965-67	.227"
1968-69	.1712"
1970	.227"
194"	
1965-67	.1896"
230"	
1965-70	.1896"
250"	
1966-72	①.2217"
1973	.2217"

① — 1972 California: Intake .2217". Exhaust .2315".

CAMSHAFT ENDPLAY

Taken by thrust plate between camshaft sprocket and front bearing journal.

CAMSHAFT REMOVAL

NOTE — In some models it will be necessary to remove engine from vehicle before camshaft can be removed.
If camshaft is to be removed with engine in car, remove radiator and grille, then remove engine front cover (see "Engine Front Cover Removal"). Remove valve cover and gasket, and pivot rocker arms clear of pushrods. Remove distributor (note position of rotor). Remove coil, side cover, pushrod, and lifters. Remove camshaft thrust plate screws (work through holes in camshaft gear). Remove camshaft and gear assembly from engine. *CAUTION — Support shaft to prevent bearing damage.* When installing new camshaft, add 16 oz. can of Engine Oil Supplement to crankcase and pour 2-3 oz. of supplement directly onto camshaft. Apply a suitable heavy duty lubricant to foot of each valve lifter.

CAMSHAFT BEARING REPLACEMENT

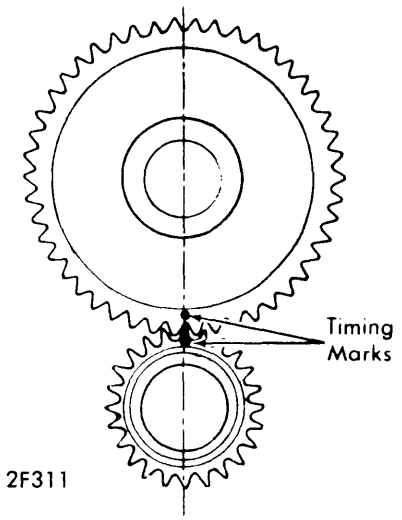
Use suitable tools for removal and installation and note the following:

Front Bearing — Front bearing must be driven approximately 1/8" behind front of cylinder block to uncover oil hole to timing gear oil nozzle.

Rear Bearing — Rear bearing installed position is flush with inner edge of rear cam bearing bore in block.

TIMING GEAR SERVICE

Gears are press fit on camshaft and crankshaft. Use suitable tools for removal and installation.



TIMING GEAR MARKS

ROCKER ARM STUD REPLACEMENT

Studs that have damaged threads or are loose in head should be replaced. Studs are available in .001", .003" or .013" oversize. Ream hole for oversize studs and coat press fit area of stud with hypoid axle lubricant. *CAUTION — Do not attempt to install oversize studs without reaming stud hole.*

CRANKSHAFT MAIN & CONNECTING ROD BEARINGS

	MAIN BEARINGS				CONNECTING ROD BEARINGS		
Engine	Journal Diam.	Clearance	Thrust Bearing	Crankshaft Endplay	Journal Diam.	Clearance	② Sideplay
153"							
1965-67	2.300"	.0003-.0029"	No.5	.002-.006"	1.999-2.000"	.0007-.0027"	.009-.013"
1968-70	2.2983-2.2993"	.0003-.0029"	No.5	.002-.006"	1.999-2.000"	.0007-.0027"	.009-.013"
194"							
1965-67	2.300"	.0003-.0029"	No.7	.002-.006"	1.999-2.000"	.0007-.0027"	.009-.013"
230" & 250"							
1965-67	2.300"	.0003-.0029"	No.7	.002-.006"	1.999-2.000"	.0007-.0027"	.009-.013"
1968-72	2.2983-2.2993"	.0003-.0029"	No.7	.002-.006"	1.999-2.000"	.0007-.0027"	.009-.013"
1973	2.2983-2.2993"	①.0035" Max.	No.7	.002-.006"	1.9928-2.000"	.0035" Max.	.007-.016"

① — No. 1 Bearing .002" Max.
② — Total two rods.

1965-73 153" 4 CYL., 194", 230", 250" 6 CYL. ENGINES (Cont.)

CRANKSHAFT PULLEY (4 CYL.)

Removal – Remove radiator and shroud as a unit. Remove belt and pulley. Install suitable puller tool on hub using two 3/8" x 2" and one 5/16" x 2" bolts.

Installation – Coat hub seal contact area with engine oil, position hub on crankshaft(key aligned) and drive hub onto shaft with Tool J-5590 (or suitable tool) until hub bottoms against crankshaft gear. *NOTE – Crankshaft extends through hub and tool must be used to ensure seating hub properly on shaft.* Install pulley and tighten mounting bolts securely.

REAR MAIN BEARING OIL SEAL

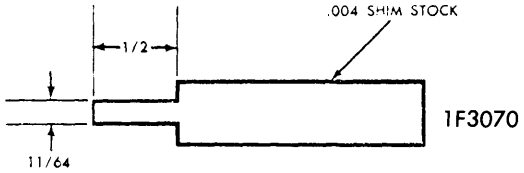
NOTE – Replace upper and lower seal halves as a unit. Install seal with lip facing front of engine. With the rear main bearing cap removed, proceed as follows:

1) Remove old seal from bearing cap. Use small brass drift punch to tap the upper seal until the end protrudes far enough to be removed with pliers.

2) To replace upper seal, fabricate a tool from .004" shim stock (see illustration). Position tool between crankshaft and seal seat, then position seal between crankshaft and tip of tool so that seal bead contacts tip of tool.

3) Roll seal around crankshaft using tool as a "shoe-horn" to protect seal bead from sharp corner of seal seat surface. Remove tool, being careful not to withdraw seal.

4) Install lower seal in bearing cap, using tool as a "shoe-horn". Feed seal into cap using light thumb pressure. Apply sealant to bearing cap interface, being careful to keep sealant off seal split line. Install bearing cap and torque to specification.



REAR MAIN OIL SEAL INSTALLING TOOL

ENGINE NOTES

►*1970 CHEVROLET 250" PISTON CHANGE:* A new piston was introduced in 1970 and is currently being used. This new design uses a 5/64" thick compression ring, instead of the 1/16" thick compression ring used on the first type pistons. *These rings are not interchangeable.*

ENGINE OILING

Crankcase Capacity – 3 1/2 qts. (1965-67 4 Cyl.), 4 qts. (1968-70 4 Cyl.) Add 1/2 qt. with filter change. All 6 Cyl. 4 qts. Add 1 qt. with filter change.

Oil Filter Replacement – Change oil filter at first oil change (6000 miles), then every second oil change thereafter.

Oil Pressure – 30-40 psi. at 1500 RPM (1965-67); 50-65 psi. at 2000 RPM (1968-70); 40 psi. at 2000 RPM (1971-73).

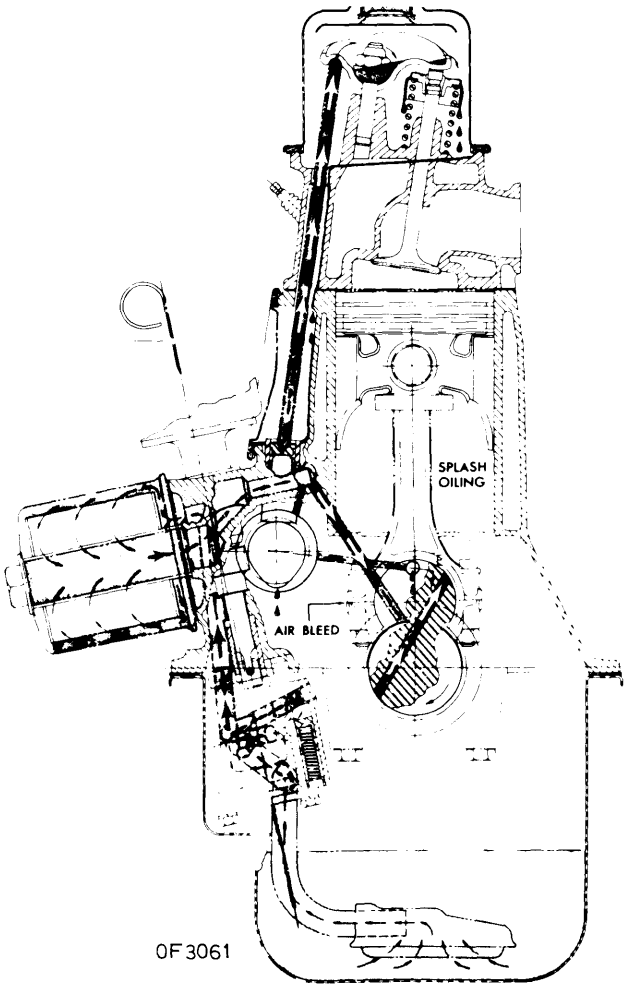
Pressure Regulator Valve – Located in oil pump body, not adjustable.

ENGINE OILING SYSTEM

Oil pump mounted on right lower flange of crankcase in oil pan draws oil from pan through a floating screen and delivers oil through passage in pump body and crankcase to full flow filter on right side of engine. Oil flows from filter to main oil gallery in block and is distributed as detailed below. Pressure regulator valve is located in oil pump and a bypass valve is located in filter base.

Crankshaft & Camshaft Bearings - Each main and camshaft bearing is fed oil by a passage extending through crankcase webs from main oil gallery.

Connecting Rods & Pistons - Oil is delivered from each main bearing to adjacent connecting rod bearing through drilled passages in crankshaft. A hole in connecting rod sprays oil onto cylinder walls for piston and pin lubrication, when holes in rod and journal index. Oil hole in rod is towards camshaft side of engine.



ENGINE OILING SYSTEM

1965-73 153" 4 CYL., 194", 230", 250' 6 CYL. ENGINES (Cont.)

ENGINE OILING (Cont.)

Valve Lifters - Main oil gallery intersects lifter bores and lifters are supplied with oil directly from gallery. Lifter has metering valve directly below hole in pushrod seat to permit oil to pass into hollow pushrod.

Rocker Arms & Valve Stems - Oil passes up through hollow pushrods to a hole in upper end of pushrods that matches hole in rocker arm. Oil sprayed from this hole and across rocker arm lubricates valve stem tip. Oil in rocker arm chamber drains down through pushrod holes to valve lifter chamber, then returns to crankcase through drain holes.

Timing Gears - Lubricated by oil flow from nozzle pressed in front face of block above crankshaft gear. Oil is fed to nozzle through cross-passage from front camshaft bearing.

Distributor Drive Gear - Lubricated by oil drainage from valve lifter compartment (drain hole directs oil onto gears).

DISTRIBUTOR DRIVE SHAFT LOWER BEARING

Bushing pressed into lower side of cylinder block (with or without thrust washer at upper end) and serves as lower bearing for distributor shaft (inside diameter), and as pilot for oil pump shaft (outside diameter). Replace bushing (and thrust washer) when distributor shaft-to-bushing clearance exceeds .0035 .

Removal - Use Tool J-9534 and slide hammer to remove bearing. Drive out thrust washer with suitable drift.

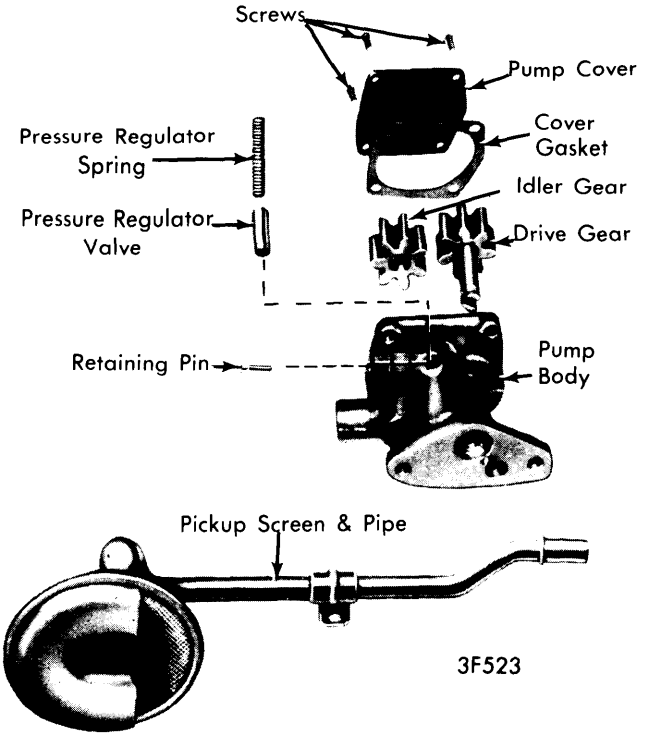
Installation – Drive new thrust washer into place with Tool J-9535. Using Tool J-9535 with driver-bolt in the driver handle, install driver into new bushing from large inside diameter. Drive bushing into position.

NOTE – Proper position of bushing is determined when tool bottoms against cylinder block. Withdraw tool from bushing. If bushing seizes on installer arbor, remove tool with slide hammer. Bushing will not be damaged and tool is designed for this purpose.

OIL PUMP

Removal – Mark gears so they may be reassembled with the same teeth indexing. Do not disturb pickup screen on pipe. Screen is serviced as an assembly. *NOTE – If pump gears or body are damaged or worn, replacement of entire pump assembly is required.*

Installation – Apply sealer to end of pipe and tap into place. Install idler gear in pump body with smooth side of gear toward cover opening. *NOTE – Bottom of screen must be parallel with bottom of pan.*



ENGINE OIL PUMP (TYPICAL)