

CYLINDER BLOCK GUIDE
PART NUMBER A-6015
AS OF
NOVEMBER 11, 2007

The following study/guide is an update from an article that appeared in the May-June, 2003 issue of Model A News titled "The Evolution of the Model "A" Ford Cylinder Block, A-6010". The "Cylinder Block" itself is actually A-6015! A-6010, Cylinder, not only includes the block but also the cylinder oil hole plug, cylinder head studs, cylinder head nuts, exhaust and intake manifold studs, manifold stud nuts, manifold clamps, manifold glands, and manifold gaskets.

NOTE: THE NUMBERS IN PARENTHESIS, TO THE RIGHT OF THE DATES, INDICATES THE AMOUNT OF BLOCKS BETWEEN THE "OLD" FEATURE (TOP) AND THE "NEW" FEATURE (BOTTOM).

THE "RELEASE" INFORMATION OF OCTOBER 12, 1927, INDICATED:

- "MOVED PAD FOR ENGINE NUMBER TO TOP OF BLOCK AND REDUCED SIZE";
- "REDUCED SIZE OF WATER OUTLET (INLET) CONNECTION PAD TO AGREE WITH CONNECTION";
- "ADDED 1/32 X 45 DEG. CHAMFER ON BOTTOM OF 0.9365--0.9375 DIAMETER REAM FOR OIL PUMP SHAFT".

THE "RELEASE" INFORMATION OF OCTOBER 26, 1927, INDICATED:

- "BOSS FOR BREATHER PIPE CHANGED FROM 20 DEGREES TO 22 DEGREES";
- "1 INCH DIMENSION AT BOTTOM OF CYLINDER REMOVED AND 2-1/2 INCH DIMENSION AT CENTERLINE BOSS ADDED";
- "23/32 INCH DIMENSION LOCATING HOLE FOR OIL PUMP DOWEL CHANGED TO 0.713--0.723 TO REDUCE VARIATION".

CYLINDER BLOCK TO SPARK AND THROTTLE CONTROL ASSEMBLY CONNECTION AREA AT BACK OF CYLINDER BLOCK: GROUND "FLAT" OR WITH TWO PROTRUDING BOSSES

FLAT	# 435	NOVEMBER 07, 1927	
TWO BOSSES	# 739	NOVEMBER 28, 1927	(304)
(CONTINUE TO JANUARY-FEBRUARY, 1929)			

WATER INLET PORT BAFFEL AREA BETWEEN BAFFEL AND # 3 CYLINDER

LARGE GAP	# 354	NOVEMBER 04, 1927	
SMALL GAP	# 852	NOVEMBER 29, 1927	(498)
(CONTINUE TO APRIL-MAY, 1929)			

EARLY PAD TO 2" PAD SIZE (ENGINE SERIAL NUMBER PAD)

EARLY	# 616	NOVEMBER 27, 1927	
2" PAD	# 633	NOVEMBER 27, 1927	(17)
(CONTINUE TO DECEMBER, 1927)			

2" PAD TO 2-1/2" PAD SIZE (ENGINE SERIAL NUMBER PAD)

2" PAD	# 1,276	DECEMBER 03, 1927	
2-1/2" PAD	# 2,157	DECEMBER 14, 1927	(881)

(SEE BELOW)

THE "RELEASE" INFORMATION OF DECEMBER 5, 1927, INDICATED:

- "ADDED 1.4335—1.4345 DIMENSION FROM CENTERLINE OF BOLT HOLES TO REAR THRUST FACE OF BABBITT OF REAR MAIN BEARING";
- "ADDED LIMITS ON DIMENSION FROM CENTERLINE OF REAR BEARING BOLT HOLES TO CENTERLINE #4 CYLINDER OF 3.124—3.126";
- "INCREASED DIAMETER OF BOSS AROUND FRONT CAMSHAFT BEARING FROM 2-1/16 INCH DIAMETER TO 2-3/8 INCH DIAMETER";
- "RADIUS LOCATING SIZE OF BOSS AROUND DRILLED OIL HOLE TO FRONT CAMSHAFT BEARING CORRECTED TO READ 3/8 INCH RADIUS INSTEAD OF 3/4 INCH RADIUS";
- "INCREASED DEPTH OF BOSSES FOR TAPPED HOLES FOR CYLINDER HEAD STUDS FROM 1-1/8 INCH TO 1-3/16 INCH";
- "INCREASED DEPTH OF TAP DRILL FROM 7/8 INCH TO 15/16 INCH AND ADDED 29/64 INCH DIAMETER DRILL 1/32 INCH DEEP";
- "CHANGED ANGLE OF DRILLED HOLE FOR OIL LEVER INDICATOR FROM 20 DEGREES TO 22 DEGREES".

2-1/2" PAD TO 2-3/4" PAD SIZE (ENGINE SERIAL NUMBER PAD)

2-1/2" PAD	# 2,339	DECEMBER 15, 1927	
2-3/4" PAD	# 4,408	DECEMBER 27, 1927	(2,069)

(CONTINUE TO FEBRUARY, 1929)

MIDDLE OIL DAM HEIGHT FROM INSIDE BASE OF VALVE CHAMBER TO TOP OF DAM

1-1/16 INCHES	# 31,313	FEBRUARY 23, 1928	
1-7/16 INCHES	# 45,396	MARCH 12, 1928	(14,083)

(CONTINUED THROUGH END OF PRODUCTION)

FRONT OIL DAM HEIGHT, ABOVE OR BELOW TOP OF PUSH ROD BOSS

1/4 INCH ABOVE	# 31,313	FEBRUARY 23, 1928	
1/4 INCH BELOW	# 45,396	MARCH 12, 1928	(14,083)

(CONTINUED THROUGH END OF PRODUCTION)

THE "RELEASE" INFORMATION OF FEBRUARY 14, 1928, INDICATED:

- "HEIGHT OF THE OIL RETAINING WALL IN OIL POCKET AT # 1 CYLINDER INCREASED TO TOP OF PUSH ROD BOSS";
- "OVERFLOW HOLE THRU FRONT WALL OF POCKET LOWERED 9/16 INCH INCREASING 1-3/16 INCH OPENING TO 1-3/4 INCH AND REDUCING 3 INCH DIMENSION TO 2-7/16 INCH";
- "PITCH DIAMETER ON 3/8 - 16 TAPPED HOLES CHANGED FROM 0.334—0.339 INCH TO 0.3344—0.3389 INCH AND ON 7/16 - 14 TAPPED HOLES (EXCEPT STUD HOLES) FROM 0.381—0.396 TO 0.3911—0.3960 INCH".

WATER OUTLET HOLE ON TOP CENTER OF CYLINDER BLOCK

ROUND	# 41,841	MARCH 07, 1928	
ELONGATED	# 45,396	MARCH 12, 1928	(3,555)
(CONTINUED THROUGH END OF PRODUCTION)			

THE "RELEASE" INFORMATION OF MARCH 15, 1928, INDICATED:

- "CORED HOLE ON TOP OF BLOCK TO WATER PASSAGE ADDED".

ADDITION OF TWO RE-ENFORCEMENT RIBS, "\/" SHAPE, AT REAR MAIN BEARING

NO RIBS	# 41,841	MARCH 07, 1928	
RIBS "\/"	# 45,396	MARCH 12, 1928	(3,555)
(CONTINUE TO JUNE, 1929)			

THE "RELEASE" INFORMATION OF MARCH 15, 1928, INDICATED:

- "RIBS AND METAL BETWEEN BOSSES ADDED INSIDE OF CASE AT REAR BEARING";
- "BOSSES FOR FLYWHEEL HOUSING BOLTS, OIL PLUG AND ENGINE SERIAL NUMBER REVISED";
- "THICKNESS OF FLANGE AT FRONT END INCREASED AND 3-3/32 INCH R CLEARANCE ADDED ON TWO BOSSES";
- "FLANGE AT FRONT AND REAR BEARINGS REVISED";
- "OIL FEED TUBE TO CENTER MAIN BEARING RELOCATED AND OIL GROOVE REVISED ACCORDINGLY".

ACCORDING TO FORD'S RECORDS OF DAILY PRODUCED ENGINES, THAT WERE ASSEMBLED BETWEEN JULY 9, 1928, (#236,787), AND OCTOBER 2, 1928, (#477,642), A NUMBER OF "SPECIAL EXPERIMENTAL" ENGINES WERE PRODUCED. THE RETURN OIL PIPE ASSEMBLY, A-6645, ALONG WITH THE OIL RETURN PIPE CONNECTIONS ON THE BLOCK, A-6015, AND VALVE COVER CHAMBER, A-6520, WERE ALL DELETED. THE ADDITION OF OIL RETURN HOLES WERE DRILLED ON THE FLOOR OF THE VALVE CHAMBER TO ALLOW THE OIL TO DRAIN BACK INTO THE OIL PAN. EACH ENGINE HAD THE REGULAR MODEL A ENGINE NUMBER STAMPING TO INDICATE 1928 PRODUCTION. BETWEEN 1353 AND 1355 ENGINES OF THIS TYPE WERE BUILT. THESE CAN BE SUBSTANTIATED BY THE "RELEASE" DATA OF APRIL 23, 1928 FOR EACH SPECIFIC PART AND THOSE FEW WHICH HAVE BEEN DOCUMENTED TODAY. ONE ENGINE NUMBER WHICH HAS BEEN DOCUMENTED SO FAR IS #286,625 (JULY 29, 1928). I AM SURE THERE ARE LOTS OF OTHERS.

THE AUGUST 27, 1928, "RELEASE" DATA INDICATED:

- "OIL HOLES IN SIDE (BLOCK) AND PIPE TAPS IN ENDS OF HEADER REMOVED AND BOSS FOR OUTSIDE OIL LINE, (A-6645), REPLACED";
- "BOSS FOR OIL PUMP ON BOTTOM FLANGE REDUCED TO REMOVE EXCESS METAL" (SEE AUGUST 17, 1929 BELOW).

5 OR 3 CAMSHAFT BEARINGS

5	# 481,204	OCTOBER 03, 1928	
3	# 492,408	OCTOBER 06, 1928	(11,204)

(SEE FORD SERVICE BULLETIN: JANUARY, 1929)
(CONTINUED THROUGH END OF PRODUCTION)

THE "RELEASE" INFORMATION OF SEPTEMBER 28, 1928, INDICATED:

- "REMOVED SECOND AND FOURTH CAMSHAFT BEARINGS".

BOTTOM OF PUSH ROD BOSSES INSIDE CRANKCASE, RAISED OR FLAT

RAISED	# 763,548	DECEMBER 17, 1928	
FLAT	# 804,976	DECEMBER 28, 1928	(41,428)

(CONTINUE TO MARCH, 1930)

THE "RELEASE" INFORMATION OF JANUARY 10, 1929, INDICATED:

- "PUSH ROD BOSSES ON THE UNDERSIDE OF THE BOTTOM WALL FOR THE VALVE CHAMBER, CHANGING LENGTH OF BOSSES FROM 1-23/32 INCHES TO 1-19/32 INCHES";
- "MOVED OUTER PART OF BOTTOM WALL FOR VALVE CHAMBER UP 1/16 INCH, CHANGING DISTANCE TO BOTTOM OF BLOCK FROM 3-15/16 INCHS TO 4 INCHES";
- "CHANGED ANGLE AT BOTTOM OF VALVE CHAMBER ON OUTSIDE FROM 30 DEGREES TO 19 DEGREES";
- "CHANGED THICKNESS OF BACK WALL FROM 3/16 INCH TO 7/32:9/32 INCH AND RADIUS OF OFFSET ON INSIDE FROM 2-13/16 INCH TO 2-5/8 INCH".

INTAKE/EXHAUST PORTS, COUNTERBORE OR NON-COUNTERBORE (FLAT)

CB/CB	# 891,720	JANUARY 17, 1929	
NCB/NCB	# 950,016	JANUARY 26, 1929	(58,296)

(SEE FORD SERVICE BULLETIN: JANUARY, 1929)
(CONTINUE TO MARCH, 1929)

THE "RELEASE" INFORMATION OF JANUARY 10, 1929, INDICATED:

- "REMOVED 1.502--1.506 INCH DIAMETER COUNTERBORE FOR MANIFOLD GLAND".

CYLINDER BLOCK TO SPARK AND THROTTLE CONTROL ASSEMBLY CONNECTION AREA AT BACK OF CYLINDER BLOCK: WITH TWO PROTRUDING BOSSES OR GROUND "FLAT"

TWO BOSSES	# 988,170	FEBRUARY 01, 1929	
FLAT	# 989,671	FEBRUARY 02, 1929	(1,501)

(CONTINUED THROUGH END OF PRODUCTION)

THE "RELEASE" INFORMATION OF JANUARY 10, 1929, INDICATED:

- "CHANGED BOSSES ON THE REAR END FOR BRACKET FROM TWO BOSSES TO ONE LONG BOSS CHANGING WALL FOR WATER JACKET TO CORRESPOND".

2-3/4" PAD TO 3-1/4" PAD SIZE (ENGINE SERIAL NUMBER PAD)

2-3/4" PAD	# 975,432	JANUARY 30, 1929	
3-1/4" PAD	# 988,170	FEBRUARY 01, 1929	(12,738)

(CONTINUED THROUGH END OF PRODUCTION)

THE "RELEASE" INFORMATION OF FEBRUARY 18, 1929, INDICATED:

- "SPECIFIED THAT CORNERS OF BABBITT IN BEARINGS BE RELIEVED WITH 1-13/16 INCH DIAMETER OUTER BEFORE BORING, DEPTH OF RELIEF TO BE 3/16 INCH, INSTEAD OF CHAMFERING CORNERS 1/32 X 30 DREGREES".

INTAKE/EXHAUST PORTS, COUNTERBORE OR NON-COUNTERBORE (FLAT)

NCB/NCB	# 1,187,002	MARCH 12, 1929	
NCB/CB	# 1,213,500	MARCH 18, 1929	(26,498)

(CONTINUED THROUGH END OF PRODUCTION)

THE "RELEASE" INFORMATION OF MARCH 13, 1929, INDICATED:

- "ADDED 1.502--1.506 INCH DIAMETER COUNTERBORE IN EXHAUST PORTS ONLY".

THE "RELEASE" INFORMATION OF MARCH 28, 1929, INDICATED:

- "CHANGED DIAMETER OF LINE REAMED HOLES FOR CAMSHAFT FROM 1.5615-1.565 INCHES TO 1.5615--1.5625 INCHES TO REDUCE BEARING CLEARANCE";
- "SPECIFIED 1/32 INCH MINIMUM CHAMFER AT LOWER END OF CYLINDER BORES TO PREVENT SCRATCHING PISTONS".

DRILLED OIL PASSAGE HOLE FOR REAR CAMSHAFT BEARING

NO HOLE	# 1,362,039	APRIL 11, 1929	
HOLE	# 1,422,949	APRIL 22, 1929	(60,910)

(SEE FORD SERVICE BULLETIN: MAY, 1929)
(CONTINUED THROUGH END OF PRODUCTION)

THE "RELEASE" INFORMATION OF APRIL 22, 1929, INDICATED:

- "3/16 INCH OIL HOLE WAS ADDED TO REAR CAMSHAFT BEARING".

WATER INLET PORT BAFFEL AREA BETWEEN BAFFEL AND # 3 CYLINDER

SMALL GAP	# 1,466,823	APRIL 29, 1929	
LARGE GAP	# 1,482,472	MAY 01, 1929	(15,649)

(CONTINUED THROUGH END OF PRODUCTION)

ADDITION OF MIDDLE RE-ENFORCEMENT RIB AT REAR MAIN BEARING WALL

“\ /” TYPE # 1,569,217 MAY 15, 1929
 “\ I /” TYPE # 1,598,353 MAY 20, 1929 (29,136)
 (SEE FORD SERVICE BULLETIN: JULY, 1929)
 (CONTINUE TO JUNE-AUGUST, 1930)

THE “RELEASE” INFORMATION OF JULY 10, 1929, INDICATED:

- “3/8 INCH HIGH X 3/8 INCH WIDE RIB” WAS “LOCATED IN CENTER ON INNER FACE OF REAR WALL”.

THE “RELEASE” INFORMATION OF JULY 10, 1929, INDICATED:

- “INCREASED HEIGHT OF RIB 17/32 INCH ON INNER FACE OF REAR WALL LOCATED BETWEEN MAIN BEARING AND FLYWHEEL HOUSING SCREW HOLE”;
- “DIMENSIONED HEIGHT 13/16 INCH FROM INNER FACE INSTEAD OF 5/8 INCH FROM OUTER FACE”;
- “MADE SIDES OF BOSS AROUND SCREW HOLE FLAT INSTEAD OF CURVED”;
- “SPECIFIED HOLE TO BE TAPPED 11/16 INCH DEEP INSTEAD OF THRU”;
- “INCREASE HEIGHT OF RIB 5/16 INCH ADJACENT TO OIL LEAD ON INNER SIDE OF REAR WALL BY RELOCATING 1-3/4 INCH FROM CENTERLINE OF CYLINDER #4 INSTEAD OF 3/4 INCH FROM INNER FACE OF WALL”;
- “INCREASED THICKNESS OF REAR WALL AT MAIN BEARING FROM 7/32-9/32 TO 5/16-3/8 INCH”.

EXTRA METAL RE-ENFORCEMENT “SHIELD” OR NOT “HEART” AT OIL PUMP BASE

SHIELD #2,153,966 AUGUST 17, 1929
 HEART #2,290,037 SEPTEMBER 11, 1929 (136,071)
 (DURING THIS CONVERSION, SOME BLOCKS MAY HAVE ONE SIDE WITH THE EXTRA METAL AND THE OTHER SIDE WITHOUT THE EXTRA METAL AS SEEN WITH # 2,222,973 AND 2,227,666, BOTH AUGUST 28, 1929 STAMPINGS)
 (SEE “RELEASE” INFORMATION FOR AUGUST 27, 1928 ABOVE)
 (CONTINUED THROUGH END OF PRODUCTION)

THE “RELEASE” INFORMATION OF SEPTEMBER 30, 1929, INDICATED:

- “CHANGED POSITION OF RIB BETWEEN MAIN BEARING AND FLYWHEEL HOUSING SCREW HOLE (ON INNER FACE OF REAR WALL) BY SHIFTING LOCATING POINT AT BOTTOM OF RIB FROM CENTER OF MAIN BEARING TO 9/16 INCH OFF VERTICAL CENTERLINE”;
- “REMOVED ANGLES FORMING BOSS AT TOP OF RIB, REPLACING WITH 7/16 INCH RADIUS”;
- “CHANGED HEIGHT OF RIB FROM 13/16 INCH TO 11/16-3/4 INCH”;
- “CHANGED THICKNESS OF REAR WALL AT MAIN BEARING FROM 5/16-3/8 INCH TO 9/32-11/32 INCH”.

THERE WERE NO OTHER KNOWN “RELEASES” CONCERNING THE MODEL A/AA ENGINE BLOCK, A-6015, AFTER SEPTEMBER 30, 1929.

BOTTOM OF PUSH ROD BOSSES INSIDE CRANKCASE, FLAT OR COUNTERSUNK

FLAT	# 2,972,380	MARCH 08, 1930	
COUNTERSNK	# 3,002,539	MARCH 12, 1930	(30,159)
(CONTINUE TO MAY, 1930)			

BOTTOM OF PUSH ROD BOSSES INSIDE CRANKCASE, COUNTERSUNK OR FLAT

COUNTERSNK	# 3,481,035	MAY 26, 1930	
FLAT	# 3,506,256	MAY 29, 1930	(25,221)
(CONTINUED THROUGH END OF PRODUCTION)			

RE-ENFORCEMENT RIBS AT REAR MAIN BEARING WALL BECOME PARLELL

"\ I /" TYPE	# 3,790,621	AUGUST 06, 1930	
"I I I" TYPE	# 3,792,191	AUGUST 06, 1930	(1,570)
(CONTINUED THROUGH END OF PRODUCTION)			

"OLD" STYLE SERIAL NUMBERS TO "NEW" STYLE SERIAL NUMBERS (1, 6, AND 9)

OLD	# 4,299,173	JANUARY 27, 1931	
NEW	# 4,319,643	FEBRUARY 03, 1931	(20,470)
(SEE FORD SERVICE BULLETIN: FEBRUARY, 1931)			

(MARC/MAFCA RESTORATION GUIDELINES AND JUDGING STANDARDS RELATE THIS CHANGE WAS IN MARCH, 1931)

(THE APRIL 10, 1931 CHICAGO ASSEMBLY PLANT'S FORD SERVICE LETTERS INDICATE "THIS REVISED STAMPING OF FIGURES ONE, SIX, AND NINE WILL BE STARTED WITH ENGINE NO. 4,365,834". THIS IS A FEBRUARY 18, 1931 STAMPING)

(THERE WAS A LATE "FRAME" WITH ENGINE NUMBER 4,307,001 THAT HAD THE "NEW" NUMBER "1" STAMPED IN THE FRAME. THIS WAS A JANUARY 28, 1931 STAMPING. NO ENGINE HOWEVER WAS AVAILABLE)
(CONTINUED THROUGH END OF PRODUCTION)

If anyone can supply some block information to upgrade this study, please contact: Steve C. Plucker... 12650 Touchet North Rd.... Touchet, Washington 99360... 509-394-2831... E-mail: steve@plucks329s.org.