4 Cylinder Carbureted Engines

Service Manual

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CASE IH AGRICULTURE

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GENERAL

2. SPECIFICATIONS

DESCRIPTION	1 and 60 Series	2A Series	123 Series	135, 1358 and 153 Series	146 Series	4 Series
Number of cylinders	4	4	4	4	4	4
Bore and stroke-inches	2-5/8 x 2-3/4	3 x 4	3-1/8 x 4	3-1/4 x 4-1/16 3-3/8 x 4-1/4(153)	3-3/8 x 4-1/16	3-3/8 x 4-1/4
Displacement-cubic inches	60	113	123	135, 152 (153)	146	152
RPM-governed	2500	1800	*	*	*	1650
RPM-governed high idle	2750	1980	*	*	*	1815
RPM-governed low idle	450-500	500-550	400-450	*	*	400-450
Compression ratio-gasoline	7.0:1	6.0:1	7.3:1(gasoline) 4.8:1 (distillate)	7.8:1 (135, 1358) 8:1 (153)	7.6:1	5.9:1
Compression pressure at cranking speed (150 rpm)psi.**	– – –	– – –	175(gasoline) 95(distillate)	177 (135) 180(1358,153)	180	– – –
Compression pressure at hand cranking speed (50 rpm) psi.	89-93	119-125	– – –	– – –	– – –	115-120
CRANKSHAFT						
Crank pin diameter-inches	1.498-1.499	1.749-1.750	1.749-1.750	1.809-1.810(135) 2.059-2.060 (1358, 153)	2.059-2.060	2.2475-2.2485
Main journal diameter-inches	1.623-1.624	2.124-2.125	2.124-2.125	2.244-2.245 (135) 2.6235-2.6245 (1358, 153)	2.6235-2.6245	2.4975-2.4985
Maximum permissible journal out-of-roundness-inch	0.003	0.003	0.003	0.003	0.003	0.003
Number main bearings	3	3	3	3	3	3
Main bearing running clearance-inch	0.0004-0.0034	0.0009-0.0039	0.0009-0.0039	0.0009-0.0039	0.0009-0.0039	0.0010-0.0035
Maximum permissible main bearing clearance-inch	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
End Clearance-inch	0.006-0.010 (1) 0.004-0.008(60)	0.006-0.010	0.004-0.010	0.004-0.010(135) 0.004-0.010(1358, 153)	0.004-0.010	0.004-0.008
Maximum permissible end clearance-inch	0.012	0.012	0.012	0.012	0.012	0.012
Thrust taken by	Center main bearing	Rear main bearing	Rear main bearing	Rear main bearing	Rear main bearing	Center main bearing

* – Refer to Operators Manual
** – Compression pressures are based on the following conditions: Engine warmed up, battery fully charged, throttle wide open and all spark plugs removed.

Compression gauge readings given will apply at sea level barometric pressure. For each 1000 feet above sea level deduct 3-1/2 percent. For engines with high altitude pistons, the readings given will apply at 5000 feet. Deposits in combustion chambers will increase readings to some extent.

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