

LINCOLN**1966 "V8"**

Mikell Carburetor Parts

AFB FOUR-BORE DOWN-DRAFT CLIMATIC CONTROL CARBURETORS Nos. 4147S - 4148S - 4204S - 4205S

YEAR AND MODEL Lincoln - Continental		ENGINE DISPL.	ORIGINAL CARB. NO.	SERVICE CARB. NO.	ZIP KIT NO.	GASKET SET NO.
1966 W/Air Cond.	A/T	462	4147S	*4148S	902-243	492
1966 W/O Air Cond.	A/T	462	4148S	4148S	902-243	492
1966 W/Air Cond. (Thermactor)	A/T	462	4204S	*4205S	902-243	492
1966 W/O Air Cond. (Thermactor)	A/T	462	4205S	4205S	902-243	492

*NOTE: Use package 213-34U for air conditioning.

CARBURETOR SPECIFICATIONS

FOR 462 CU. IN. ENGINE: VACUUM AT IDLE 17 INCHES

CARB. NO.	THRO. BORE PRIM. & SEC. SIZE	MAIN VENTURI PRIM. & SEC. SIZE	VENTS IN AIR HORN AMT.	LOW SPEED JET IN PRIM. VENTURI SIZE	BY-PASS IN PRIM. VENTURI SIZE	ECON. IN PRIM. VENTURI SIZE	IDLE BLEED IN PRIM. VENTURI SIZE	IDLE PORT SIZE	ANTI- PER BLEED IN PRIM. & SEC. VENTURI SIZE	MAIN VENT TUBE PRIM. & SEC. VENTURI AMT. SIDE HOLES	SEC.- DISCHARGE PORT (P) IN SEC. VENTURI SIZE	PUMP JET IN PRIM. VENTURI SIZE	CHOKE SETTING	VACUUM SPARK PORT SIZE
4147S	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	4	.033	.055	.052	.055	.155 x .030	.028 (P) .043 (S)	9 (P) 3 (S)	.067 (P) .0595 (P) .0292 (S)	.028	1 P. Rich	.105 x .030
4148S	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	4	.033	.055	.052	.055	.155 x .030	.028 (P) .043 (S)	9 (P) 3 (S)	.067 (P) .0595 (P) .0292 (S)	.028	1 P. Rich	.105 x .030
4204S	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	4	.033	.055	.052	.055	.155 x .030	.028 (P) .043 (S)	9 (P) 3 (S)	.067 (P) .0595 (P) .0292 (S)	.028	1 P. Rich	.105 x .030
4205S	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	1 $\frac{1}{16}$ (P) 1 $\frac{1}{16}$ (S)	4	.033	.055	.052	.055	.155 x .030	.028 (P) .043 (S)	9 (P) 3 (S)	.067 (P) .0595 (P) .0292 (S)	.028	1 P. Rich	.105 x .030

MOTOR TUNE-UP - BE ACCURATE!

Spark Plug Gap .032" to .036"	Breaker Point Setting .015"	Ignition Timing Breaker Points to Open 10° B.T.D.C. at Vibration Damper	Float Setting See Adjustments
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IDLE ADJUSTMENT SCREW SETTING: 4147S - 4148S $\frac{1}{2}$ to 1 $\frac{1}{2}$ Turns, 4204S - 4205S (Thermactor) $\frac{1}{2}$ to 1 $\frac{1}{2}$ Turns Open.IDLE R.P.M. SETTING: (Normal Engine Temp.) 4147S - 4148S A/T 450-475 in Drive Range; 4204S - 4205S
A/T (Thermactor) with headlamps on 500 to 525 R.P.M. in Drive Range.

Carter
Carburetor
Division



CARBURETOR ADJUSTMENTS

FLOAT ALIGNMENT: Side of floats, parallel to edge of casting. Minimum clearance between lever and air horn lugs without binding. To adjust, bend float lever.

FLOAT LEVEL: 3/16 inch with solid seat, 5/32 inch with resilient seat plus or minus 1/64 inch between top of floats (at outer end) and air horn gasket. To adjust, bend float lever.

FLOAT DROP: 23/32 inch between top of floats (at outer end) and air horn gasket. To adjust, bend stop tabs on float brackets.

PUMP: 15/32 inch from top of the bowl cover to the top of the plunger shaft with throttle connector rod in center hole (medium stroke) of pump arm. (Throttle valves tightly closed). To adjust, bend throttle connector rod.

CHOKE PISTON LINKAGE ADJUSTMENT: (1) Bend a .026 inch wire gauge at a 90° angle approximately 1/8 inch from its end. (2) Open the choke valve and insert the wire gauge so that the bent portion is between the top of the slot in the choke piston cylinder and the bottom of the slot in the piston. Hold the wire gauge in position and close the choke valve by pressing on the piston lever in the choke housing until resistance is felt. There should now be 7/64 inch between the top of the choke valve and the air horn. (3) To adjust, rotate clamp lever on choke shaft.

FAST IDLE LINKAGE ADJUSTMENT: With slight clearance between lug on fast idle cam and stop on flange casting, and inner countershaft lever contacting lug on outer countershaft lever align index mark on cam with adjusting screw. To adjust, bend fast idle connector rod. It may be necessary to bend stop lug on fast idle cam.

FAST IDLE THROTTLE VALVE CLEARANCE: .026 inch wire gauge between lower edge of valve and bore with adjusting screw on index mark of cam.

FAST IDLE ON CAR: 1600 R.P.M. (Normal Engine Temp.) With fast idle screw on index mark of cam. Trans. in neutral.

UNLOADER: 1/8 inch between upper edge of choke valve and inner wall of air horn with throttle valves wide open. To adjust, bend unloader arm on throttle lever.

SECONDARY THROTTLE LEVER ADJUSTMENT: 1. Block choke valve wide open. 2. With 15/32 inch between lower edge of primary valve and bore (opposite idle port) secondary valves should just start to open. To adjust, bend throttle operating rod. NOTE: At wide open throttle primary and secondary valves will reach vertical position. NOTE: If necessary, bend stop lug on secondary lever to prevent secondary valves from going past wide open. 3. With primary and secondary throttle valves in tightly closed position there should be .010" to .030" between positive closing secondary shoe and cam on primary throttle lever. To adjust, bend shoe on secondary lever.

SECONDARY THROTTLE LOCK-OUT ADJUSTMENT: Crack throttle valves and manually open and close the choke valve. With choke valve closed adjust tang on secondary throttle lever to give .070 inch opening of secondary valves (high side of valves, side adjacent throttle lever) when primary valves are wide open.

DASH POT: 1/8 inch from the top of the bowl cover to the top of the plunger shaft with primary valves tightly closed. To adjust, bend the flat portion of the dash pot lever. Check to be sure dash pot lever does not contact bowl cover attaching screw.

IDLE SPEED AND MIXTURE ADJUSTMENT: (Normal Engine Temp.) In making the idle adjustment on the engine, the air adjustment screw is used to adjust idle speed in a similar manner as the throttle speed screw used previously. Turning the air adjustment screw outward increases engine speeds, but also leans the mixture supplies to the manifold which must be compensated for by adjustment of the idle mixture adjusting screws,

PARTS LIST

Part No.	Part Name	Part No.	Part Name
1A-211	Flange gasket	39-10	Choke valve attaching screw
2-196	Secondary throttle valve	47-34	Spark port Welsh plug
2-255	Primary throttle valve	47-36	Secondary venturi Welsh plug
3-14085	Primary throttle shaft and lever assy.	47-41	Piston housing Welsh plug
3-14095	Secondary throttle shaft and dog assy.	48-2553	Pump jet housing assy.
3-15655	Auxiliary throttle shaft valve and weight assy.	53A-422	Dashpot arm (outer)
4A-201	Primary throttle shaft dog	53A-430	Secondary throttle operating lever
7-2905	Choke valve and lever assy.	53A-431	Dashpot arm (inner)
11B-69	Rivet plug	53A-4615	Lockout arm and collar assy.
11B-194	Pipe plug (4148-4205)	58-6685	Secondary venturi assy. (choke side)
11B-220	Rivet plug (4148-4205)	58-6695	Secondary venturi assy. (pump side)
11B-379	Rivet plug	58-8935	Primary venturi assy. (choke side)
11B-389	Idle port plug	58-8945	Primary venturi assy. (pump side)
11B-390	Passage plug (primary)	61-150	Dashpot return spring
11B-397	Rivet plug (piston housing)	61-226	Step-up piston spring
11B-406	Passage plug (secondary)	61-398	Pump spring (lower)
11B-439	Primary venturi plug	61-585	Step-up rod retaining spring
13-171	Choke shaft	61-599	Idle air adjustment screw spring
14-559	Countershaft lever (to choke valve)	61-691	Fast idle adjustment screw spring
14-740	Inside countershaft lever	61-739	Idle adjustment screw spring
14-819	Choke lever	61-740	Secondary throttle return spring
14-8225	Choke lever and shaft assy. (piston housing)	61-741	Throttle flex spring
14-8235	Choke piston link and lever assy.	63-256	Coil housing retainer
15-585	Fuel inlet fitting assy.	64-1965	Dashpot plunger, rod and check assy.
16-402	Step-up rod (.072" x .065") Standard	64-3245	Pump plunger, rod and spring assy.
17-66	Pump discharge check needle	65-43	Step-up piston cover plate
20-43	Piston housing gasket	98-22	Compression nut (4147-4204)
20-127	Fuel inlet fitting gasket	101-65	Piston housing choke shaft lever attaching screw
20-204	Needle seat gasket	101-1525	Air horn attaching screw and washer assy.
21-1995	Float and lever assy.	101-1845	Pump jet housing attaching screw & washer assy.
24-29	Float lever pin	101-348	Countershaft lever attaching screw
25-3715	Needle and seat assy.	101-3795	Venturi attaching screw and washer assy.
25-7365	Needle and seat assy. (resilient seat)	101-419	Secondary throttle valve attaching screw
30A-80	Idle adjustment screw (4147-4148)	101-420	Primary throttle valve attaching screw
30A-81	Idle adjusting screw (4204-4205)		
30A-116	Idle air adjustment screw		