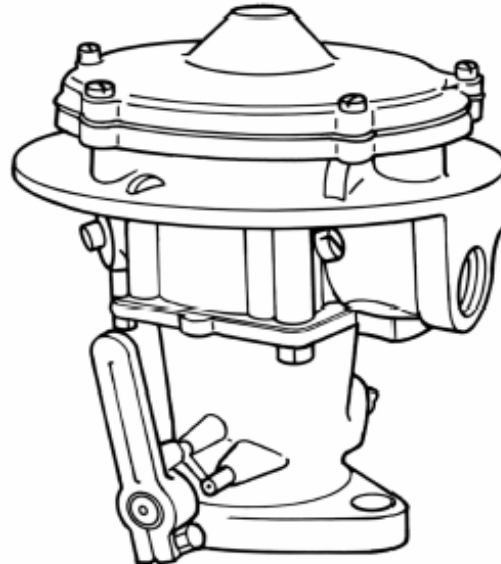


MODEL 225 STANDARD CARBURETOR



TECHNICAL DESCRIPTION

The Model 225 carburetor is a single-diaphragm air valve carburetor / mixer. It offers a down-draft air inlet that can be used for remote air filtration or open-element type air filters. This unit is available for Propane, Natural Gas, and Digester Gas applications. It has been successfully used for other hydrocarbon based vapor fuels as low as 500 BTU.

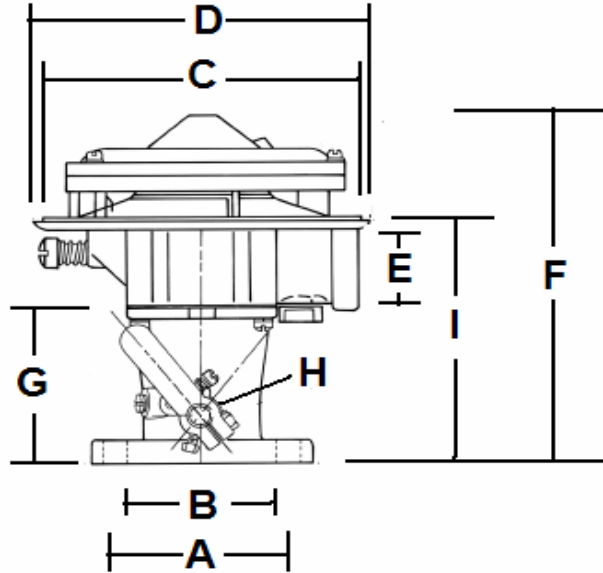
The Model 225 is also available for feedback applications with the 'FB' designation. These FB mixers are available in tamper resistant configuration, indicated by the part number suffix "-TR" on the part number. It is also possible to convert standard units to a tamper resistant configuration through the use of a retrofit kit.

Two separate air valve vacuum supplies are available with this mixer. Additional low speed mixture control can be obtained to lean air-fuel mixtures with optional shims. Check the Accessories section for more information. All 225DG series mixers reduce airflow by 30%.

TECHNICAL SPECIFICATIONS

Fuel Type	Methane / Propane (550 - 2,500 BTU)
Maximum Fuel Inlet Pressure	8.0 in H2O
Maximum Boost Pressure	5.0 psi
Air Flow Capacity.....	80 cfm @ 2.0 in Hg manifold (derate 15% for methane, 30% for digester gas)
Horsepower Rating	237 hp @ 2,500 BTU per cubic feet
Operating Temperature.....	-40°C to 120°C (-40°F to 250°F)
Materials	
Body	Aluminum
Diaphragm	Hydrin (Standard), Silicone (Optional)

DIMENSIONS



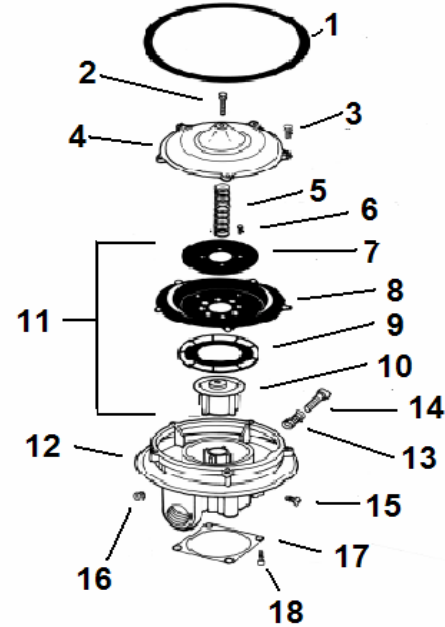
MIXER	THRTL. BODY	SAE FLANGE	A	B	C	D	E	F	G	H	I
			CTR. TO CTR. BOLT SPACING	BORE	MIXER AIR HORN DIA.	OVERALL WIDTH	NPT FUEL	OVERALL HEIGHT	THRTL. BODY HEIGHT	THRTL. SHAFT DIA.	FLANGE TO AIR HORN FLANGE
225M	AT2-4-2	1-1/2"	74.6 mm (2.938")	42.9 mm (1.688")	148 mm (5.813")	159 mm (6.250")	3/4"	184 mm (7.250")	69.9 mm (2.750")	7.9 mm (0.313)	114 mm (4.500")

225M	AT2-5	1-3/4"	84.1 mm (3.313")	42.9 mm (1.688")	148 mm (5.813")	159 mm (6.250")	3/4"	191 mm (7.500")	82.6 mm (3.250")	9.5 mm (0.375")	127 mm (5.000")
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MODEL 225 STANDARD CARBURETOR

ITEM #	PART #	DESCRIPTION
1	G1-73	Gasket, mixer to Air Horn
2	S1-47	Screw, 1/4" -20 x 1" SEMS
3	S1-3	Screw, 10 -24 x 5/8" SEMS (5)
4	NSS	Cover, air valve
5	S2-17	Spring, air valve
6	S1-12	Screw, 8-32 x 5/16" SEMS (4)
7	P2-21	Plate, backup
8	D1-16-1	Diaphragm
	D1-16-2	Diaphragm, Silicone
9	R1-17	Ring, air valve
10	BV1-12	Air-gas valve ass'y, LPG
	DV1-12	Air-gas valve ass'y, NG
11	AV1-12	Air-gas valve ass'y, complete w/ diaphragm, LPG
	CV1-12	Air-gas valve ass'y, complete w/ diaphragm, NG
12	NSS	Body ass'y
13	S2-16	Spring, idle screw
14	NSS	Idle screw
15	S1-69	Screw, 1/4" -28 x 5/16" (3)
16	NSS	Plug, 1/8 NPT, brass
17	G1-21	Gasket, throttle body to mixer
18	S1-19	Screw, 12-24 x 5/8" SEMS

NSS = Not Serviced Separately



MODEL 225 STANDARD CARBURETOR

MIXERS, LP GAS (STANDARD)

PART #	DESCRIPTION
225M	For NG
225M-2	For NG, w/ silicone diaphragm
FB225M	For feedback
FB225M-2	For feedback, w/ silicone diaphragm
FB225M-10	Carb. Ass'y, w/ Vic Lift w/ FB Air Valve
FB225M-F6T49	Mixer assembly, Model 225 Tamper Rest.
CA225M	For LPG
CA225M-2	For LPG, w/ silicone diaphragm
CA225M-10-2	Mixer assembly, w/ Vic. Lift & Silicone

THROTTLE BODIES (ONE BARREL)

PART #	DESCRIPTION
AT2-4-2	Standard, 38.1 mm (1.50") flange, 7.9 mm (0.31") shaft dia.
AT2-4-5	38.1 mm (1.50") flange, 7.9 mm (0.31") shaft dia., w/ needle bearings
AT2-5	Standard, 44.5 mm (1.75") flange, 9.5 mm (0.38") shaft dia.
AT2-6	Standard, 50.8 mm (2.00") flange, 9.5 mm (0.38") shaft dia., center bore
AT2-6-3	50.8 mm (2.00") flange, 9.5 mm (0.38") shaft dia., center bore, w/ needle bearings & internal seal

* All throttle bodies are offset 0.8 mm (0.031") unless otherwise noted.

THROTTLE BODIES (TWO BARREL)

PART #	DESCRIPTION
AT2-11-1	Standard 31.8 mm (1.25") flange, 11.1 mm (0.44") shaft dia.
AT2-12	Standard 38.1 mm (1.50") flange, 11.1 mm (0.44") shaft dia.
AT2-13-1	Standard, Holley, 11.1 mm (0.44") shaft dia.
AT2-13-2	Holley, 11.1 mm (0.44") shaft dia., w/ needle bearings
G1-52	Gasket, Adapter Holley A3-19
AB1-24-1	Body Ass'y, 2B, T/B (No FL)

* All throttle bodies are offset 8.8 mm (0.031") unless otherwise noted.

THROTTLE SHAFTS

PART #	DESCRIPTION
S5-2	7.9 mm (0.31") dia., 127 mm (5.00") long, standard on AT2-4-2
S5-3	9.5 mm (0.38") dia., 138 mm (5.44") long, standard on AT2-5, AT2-6
S5-4	11.1 mm (0.44") dia., 179 mm (7.06") long, standard on 2B throttle bodies
S5-7	7.9 mm (0.31") dia., 133 mm (5.25") long
S5-11	7.9 mm (0.31") dia., 156 mm (6.13") long

MODEL 225 STANDARD CARBURETOR
ADAPTERS

PART #	DESCRIPTION
A2-2	Air Horn, 130 mm (5.13") dia.
A2-3	Air Horn, 66.7 mm (2.63") dia.
A2-6	Air Horn, 77.8 mm (3.06") dia.
AA3-19	200M to Holley 2B throttle body
A3-28	200M to 3-1/16" hose
A3-30	200M to 2-5/8" hose
AA3-32-2	200M to CA100 throttle body
AA3-47-2	200M to CA425 throttle body
AA3-48-2	200M to CA425 hose elbow
A3-124-2	Adapter 125 Solex TB Modified
AA2-21	Adapt Air Horn 90° by 4" to 225

LEVERS

PART #	DESCRIPTION
AL1-7-1	Ass'y 44.5 mm (1.75") long (std. on AT2-3, AT2-4-1, AT2-4-3, AT2-16-1)
AL1-7-2	Ass'y, w/ 64 mm (0.25") ball stud, 44.5 mm (1.75") long
AL1-7-3	Ass'y 33.3 mm (1.31") long (std. on AT2-1, AT2-2, AT2-23)
AL1-7-4	Ass'y, w/ swivel, 44.5 mm (1.75") long
AL1-8-2	Stop ass'y, 7.9 mm (0.31") mounting I.D., 19.1 mm (0.75") long (std. on AT-3, AT2-4-1, AT2-4-3, AT2-16-1, AT2-23)
AL1-8-4	Stop ass'y, 6.4 mm (0.25") mounting I.D., cutdown, 9.5 mm (0.38") long
AL1-9-1	58.7 mm (2.31") long (standard on AT2-5, AT2-6)
AL1-10	Lever stop ass'y, 9.5 mm (0.38") mounting I.D., 22.2 mm (0.88") long, standard on AT2-5, AT2-6
AL1-11-1	Lever stop ass'y, 11.1 mm (0.44") mounting I.D., 25.4 mm (1.00") long, standard on AT2-11-1, AT2-12, AT2-13-1, AT2-15
AL1-12-1	77.8 mm (3.06") long
AL1-12-3	58.7 mm (2.31") long, standard on AT2-11-1, AT2-12, AT2-13-1, AT2-15
AL1-27-1	Ass'y, floating 7.9 mm (0.31") mounting I.D., 54.0 mm (2.13") long, w/ AC2-12
AL1-27-2	Ass'y, floating 7.9 mm (0.31") mounting I.D., 54.0 mm (2.13") long, w/ AC2-12, w/ swivel
AL1-33	Ass'y, shaft clamp, 7.9 mm (0.31") mounting I.D., 49.2 mm (1.94") long
AL1-46	Ass'y, steel shaft clamp, 7.9 mm (0.31") mounting I.D., 47.6 mm (1.88") long

NOTES:

- AL1-7-1 through AL1-7-4 levers used w/ AL1-8 lever stop.
- AL1-9 levers used w/ AL1-10 lever stop.
- AL1-12 levers used w/ AL1-11 lever stop.
- See Accessories section of catalog for other optional levers.

MODEL 225 STANDARD CARBURETOR

AIR-GAS VALVES

PART #	DESCRIPTION
AV1-12	Standard, w/ Hydrin diaphragm
AV1-12-2	Standard, w/ Silicone diaphragm
AV1-12-3	For 1 & 2 cylinder engines, w/ Hydrin diaphragm & ball check ass'y
AV1-12-3-2	For 1 & 2 cylinder engines, w/ Silicone diaphragm & ball check ass'y
AV1-12-6	Rich, w/ Hydrin diaphragm
AV1-1245	Standard feedback, w/ Hydrin diaphragm
AV1-1245-2	Standard feedback, w/ Silicone diaphragm
AV1-1245-2-4	Air Valve Silicone 95 Min Test
DG-AV1-12	For digester gas (550-750 BTU), w/ Hydrin diaphragm
DG-AV1-12-2	For digester gas (550-750 BTU), w/ Silicone diaphragm
LH-AV1-12-2	For low heat gas (750-950 BTU), w/ Silicone diaphragm
CV1-12	For natural gas, w/ Hydrin diaphragm
CV1-12-2	For natural gas, w/ Silicone diaphragm

RETURN SPRINGS

PART #	DESCRIPTION
AS2-50-2	7.9 mm (0.31") throttle return
AS2-50-3	9.5 mm (0.38") throttle return
AS2-50-4	11.1 mm (0.44") throttle return

SPACERS

PART #	DESCRIPTION
AS3-45	Spacer ass'y, 20.6 mm (0.81") high
AS3-10	12.7 mm (0.500") tall, used to rotate mixer Air Horn 90°
AS3-43	4.8 mm (0.188") tall, used to rotate mixture Air Horn 90°

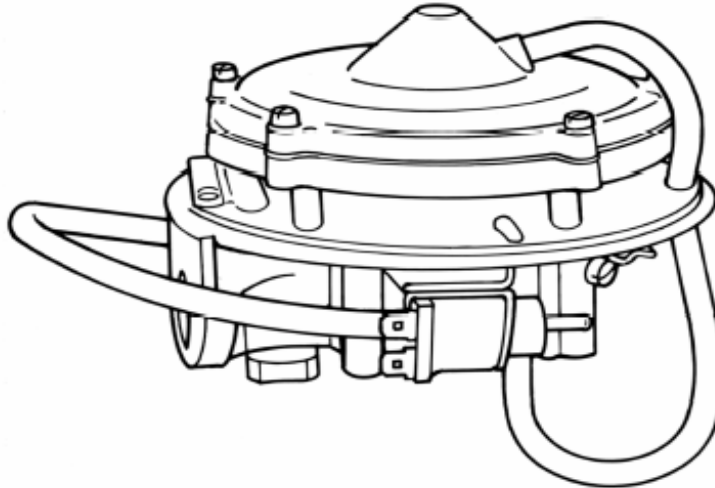
RING SPACERS

PART #	DESCRIPTION
R1-30	Ring, air valve spacer, for AV1-12 (to lean mixture)

AIR CLEANERS

PART #	DESCRIPTION
AF1-17	Offset, 170 L/s (350 cfm), 349 mm (13.75") O.D., 87.3 mm (3.44") high
AF1-17-2	Offset, 260 L/s (550 cfm), 356 mm (14.00") O.D., 106 mm (4.19") high

MODEL 225M-10 STANDARD CARBURETOR



TECHNICAL DESCRIPTION

The Model 225M-10 is a vacuum lift mixer designed to reduce inlet restrictions in dual fuel installations. Inlet restrictions cannot be tolerated with a conventional gasoline carburetor as they will cause it to run rich, similar to the action of a choke system.

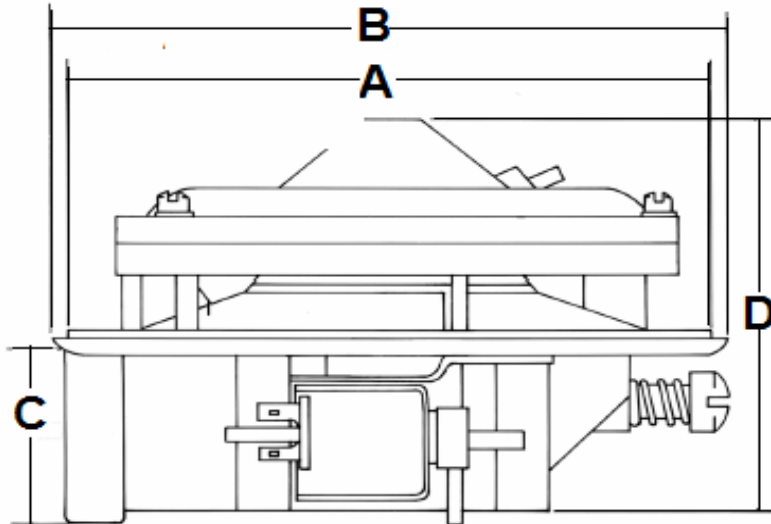
The 225M-10 provides an electrically-operated solenoid that directs air valve vacuum to the top diaphragm chamber when gasoline operation is desired. This provides full air valve lift reducing air inlet restriction to a minimum. This unit has also been used to reduce inlet restrictions on fuel injected engines, as well where physical limitations of space have resulted in a mixer selection slightly smaller than recommended or maximum volumetric efficiency is desired.

The 225M-10 is available with standard type air-gas metering valves and feedback control systems. It is possible to use other 200/225 series air valves with some modification using the P3-10 BB shot plugs.

TECHNICAL SPECIFICATIONS

Fuel Type.....	Methane / Propane (550 - 2,500 BTU)
Maximum Fuel Inlet Pressure	8.0 in H ₂ O
Maximum Boost Pressure	5.0 psi
Air Flow Capacity.....	380 cfm @ 2.0 in Hg manifold (derate 15% for methane, 30% for digester gas)
Horsepower Rating	237 hp @ 2,500 BTU per cubic feet
Operating Temperature.....	-40°C to 120°C (-40°F to 250°F)
Materials	for methane, 30% for digester gas)
Body	Aluminum
Diaphragm	Hydrin (Standard), Silicone (Optional)

DIMENSIONS



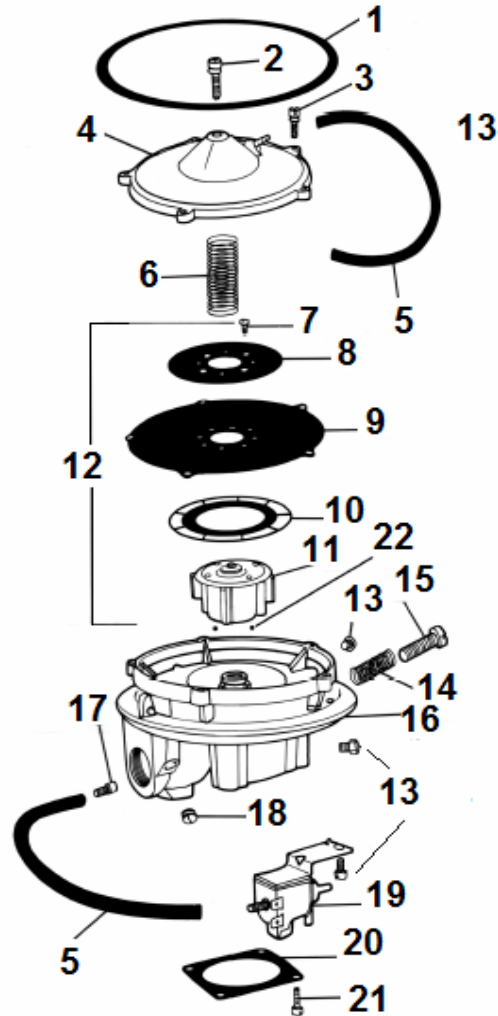
	A	B	C	D
MIXER	MIXER AIR HORN DIAMETER	OVERALL WIDTH	FUEL INLET	OVERALL HEIGHT
CA225M-10-2	130 mm (5.125")	159 mm (6.250")	3/4 NPT	121 mm (4.750")

* All Model 225M-10 Series mixers have identical dimensions.

MODEL 225-10 STANDARD CARBURETOR

ITEM #	PART #	DESCRIPTION
1	G1-73	Gasket, mixer to Air Horn
2	S1-47	Screw, 1/4" -20 x 1" SEMS
3	S1-3	Screw, 10 -24 x 5/8" SEMS (5)
4	NSS	Cover, ass'y, air valve
5	NSS	Hose
6	S2-17	Spring, air valve
7	S1-12	Screw, 8-32 x 5/16" SEMS (4)
8	P2-21	Plate, backup
9	D1-16-1	Diaphragm
	D1-16-2	Diaphragm, silicone
10	R1-17	Ring, air valve
11	NSS	Air-gas valve ass'y
12	NSS	Air-gas valve ass'y, complete w/ diaphragm
13	S1-69	Screw, 1/4" -28 x 5/16" (3)
14	S2-16	Spring, idle screw
15	NSS	Screw, idle
16	NSS	Body ass'y
17	F4-40	Fitting, 1/4" -28 x 5/16") hose
18	NSS	Plug, 1/8 NPT
19	VCS	Vacuum lift solenoid*
20	G1-21	Gasket, throttle body to mixer
21	S1-19	Screw, 12-24 x 5/8"
22	NSS	BB shot plugs
23	NSS	Wire, terminal

NSS = Not Serviced Separately



MODEL 225-10 STANDARD CARBURETOR

MIXERS

PART #	DESCRIPTION
CA225M-10-2	For LPG, w/ vacuum lift, & silicone diaphragm
FB225M-10	For feedback

ADAPTERS

PART #	DESCRIPTION
A2-2	Air Horn, 130 mm (5.13") dia.
A2-3	Air Horn, 66.7 mm (2.63") dia.
A2-6	Air Horn, 77.8 mm (3.06") dia.
AA3-19	200M to Holley 2B throttle body
A3-28	200M to 3-1/16" hose
A3-30	200M to 2-5/8" hose
AA3-32-2	200M to CA100 throttle body
AA3-47-2	200M to CA425 hose elbow
AA3-48-2	200M to CA425 hose elbow

AIR GAS VALVES

PART #	DESCRIPTION
AV1-1245	Standard feedback, w/ Hydrin diaphragm
AV1-1245-2	Standard feedback, w/ Silicone diaphragm

AIR CLEANERS

PART #	DESCRIPTION
AF1-17	Offset, 170 L/s (350 cfm), rain hat, 349 mm (13.75") O.D., 87.3 mm (3.44") high
AF1-17-2	Offset, 260 L/s (550 cfm), 356 mm (14.00") O.D., 106 mm (4.19") high

SPACERS

PART #	DESCRIPTION
AS3-45	Spacer ass'y, 20.6 mm (0.81") high

RING SPACERS

PART #	DESCRIPTION
R1-30	Ring, air valve spacer, for AV1-12 (to lean mixture)

MODEL 225 SERIES MIXERS/CARBURETORS

CARBURETOR DESCRIPTION

PART #	DESCRIPTION
CA225M-10-2	Dual fuel, vacuum lift with silicone diaphragm