



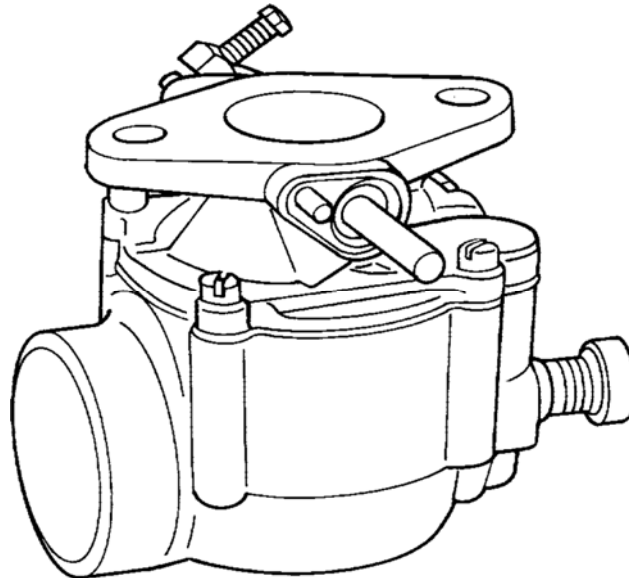
# CARBURETORS & MIXERS

## MODEL 55 CARBURETOR

CARBURETORS & MIXERS



## MODEL CA55 CARBURETOR

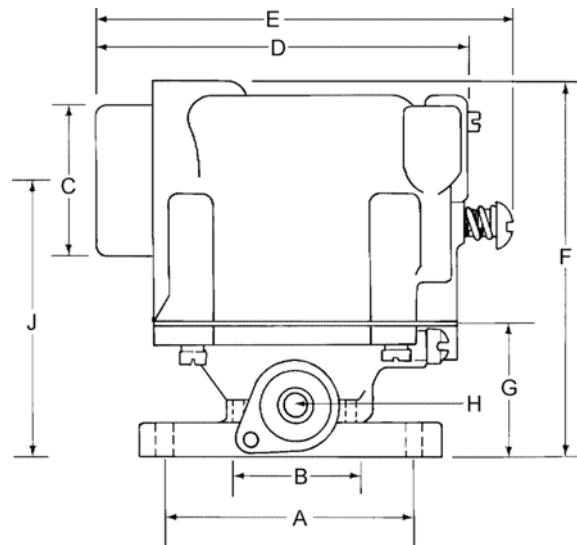


### DESCRIPTION

IMPCO's CA55 model carburetors are offered in four design variations, providing proven, effective solutions for optimum metering and delivery of either LPG vapor or Natural Gas. The standard model can be mounted in either an updraft, downdraft, or side draft orientation, supplying either LPG or Natural Gas to engines up to 73 hp (1 to 54kW), with a flow rate of 118 CFM (55.7 L/s). Various SAE flanges and air horn sizes are available.

### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type .....                   | LPG Vapor or Natural Gas  |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....            | Vertical  |
| Diaphragm Material.....           | N/A   |
| HP/kW Rating.....                 | Up to 73 hp (54 kW) @ 118 CFM (55.7 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**


| Carburetor | Mixer     | Throttle Body | SAE Flange | NPT Fuel Inlet | Center to           | Bore                | Air Horn            | Overall             | Max Width          | Overall             | Throttle            | Throttle          | Flange to           |
|------------|-----------|---------------|------------|----------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|-------------------|---------------------|
|            |           |               |            |                | Center Bolt Spacing | Diameter            | Width               | Incl. Idle Screw    | Height             | Body Height         | Shaft Dia.          | Ctr. Of Air Horn  |                     |
| CA55-4     | CA55M-2   | AT2-25        | 3/4"       | 3/8"           | 57.2mm<br>(2.250")  | 27.0mm<br>(1.188")  | 41.3 mm<br>(1.875") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-6     | CA55M-4   | AT2-26        | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 47.6 mm<br>(1.875") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-8     | CA55M-5   | AT2-27        | 1 1/4"     | 3/8"           | 68.3 mm<br>(2.688") | 30.2 mm<br>(1.188") | 52.4 mm<br>(2.063") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-017   | CA55M-1   | BT2-27-322    | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 38.1 mm<br>(1.500") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-20    | CA55M-2   | AT2-26        | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 41.3 mm<br>(1.625") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-20-2  | CA55M-2-2 | AT2-26        | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 41.3 mm<br>(1.625") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-40    | CA55M-5   | AT2-26        | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 52.4 mm<br>(2.063") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-64    | CA55M-2   | BT2-26-8      | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 41.3 mm<br>(1.625") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-66    | CA55M-2   | BT2-26-8      | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 41.3 mm<br>(1.625") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CT55-10    | CNG T/R   | AT2-26        | 1"         | 3/8"           | 60.3 mm<br>(2.375") | 30.2 mm<br>(1.188") | 47.6 mm<br>(1.875") | 96.9 mm<br>(3.813") | 122 mm<br>(4.813") | 95.3 mm<br>(3.750") | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CA55-171   | NSS       | BT2-71-2      | 3/4"       | 3/8"           | 76.0mm<br>(2.992")  | 32.5mm<br>(1.28")   | 52.1mm<br>(1.97")   | 142.5mm<br>(5.6")   | 142.5mm<br>(5.6")  | 133mm<br>(5.27")    | 33.4 mm<br>(1.313") | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |
| CT55-0679  | NSS       | AT2-15983     |            | 3/8"           | 60.3 mm<br>(2.375") | 25.4mm<br>(1.00")   | 52.1mm<br>(2.05")   | 104.6mm<br>(4.12")  | 70mm<br>(2.75")    | 109.22mm<br>(4.30") | 26.1mm<br>(1.03")   | 6.4 mm<br>(.250") | 71.5 mm<br>(2.813") |

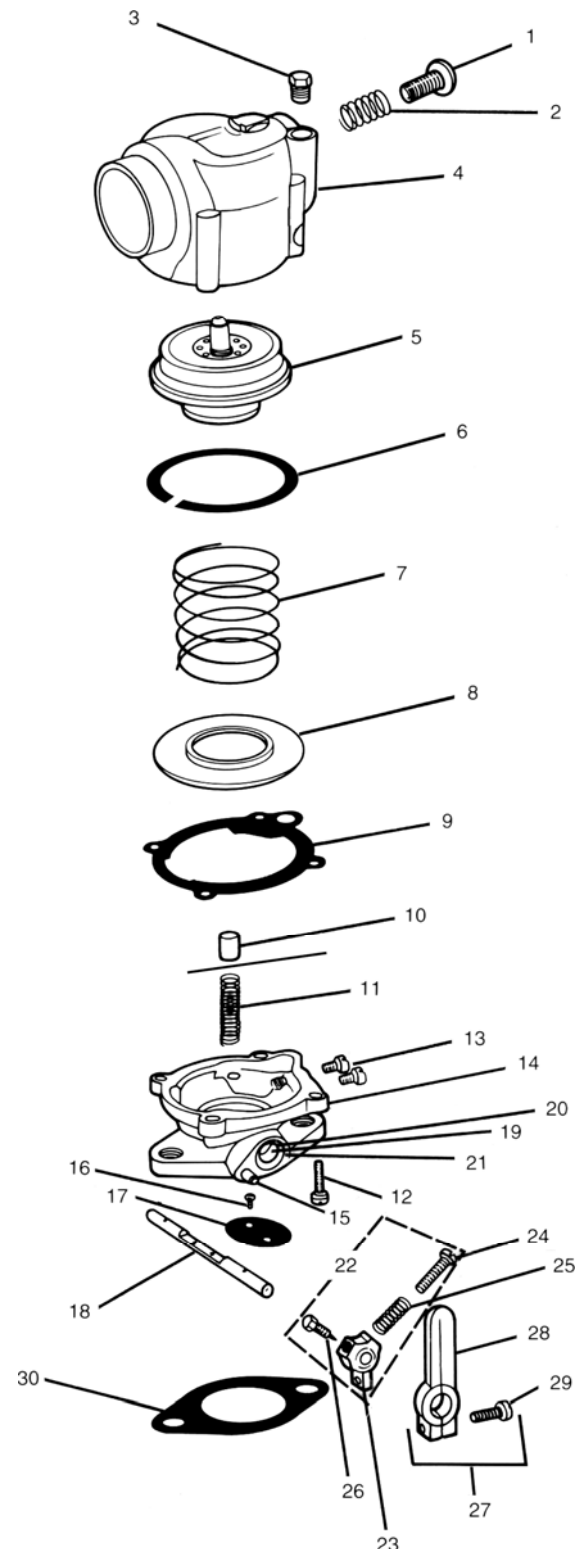
# MODEL 55 CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS

| ITEM | P/N         | DESCRIPTION                            |
|------|-------------|--|
| 1    | S1-74       | Screw, idle                            |
| 2    | NSS         | Spring, idle screw                     |
| 3    | NSS         | Plug, 1/8 NPT                          |
| 4    | NSS         | Body assy                              |
| 5    | NSS*        | Air valve Assy                         |
| 6    | AV1-14925-3 | Air valve Assy (Rich)                  |
| 7    | NSS*        | Ring, air valve sealing                |
| 8    | NSS         | Spring, air valve                      |
| 9    | S2-14681    | Spring, air valve, light tension       |
| 10   | NSS*        | Plate, ass'y                           |
| 11   | G1-92*      | Gasket, throttle body to mixer         |
| 12   | NSS         | Piston, idle cutoff                    |
| 13   | NSS         | Spring, idle cutoff                    |
| 14   | NSS         | Screw, 10-24 x 5/8" SEMS (4)           |
| 15   | S1-69       | Screw, 1/4-28 x 5/16(2)                |
| 16   | NSS         | (Refer to AT2 Throttle body charts)    |
| 17   | NSS         | Pin, throttle stop (2)                 |
| 18   | NSS         | Screw, 6-32 x 1/4 SAE (2)              |
| 19   | NSS         | Butterfly, 19.1 mm (.750")             |
| 20   | NSS         | Butterfly, 25.4mm (1.000)              |
| 21   | S5-6        | Throttle shaft, 6.4mm (.250) dia.      |
| 22   | NSS         | Bearing, Oilite, 6.4mm (.250") ID. (2) |
| 23   | NSS         | Bearing, Needle, .687 x .500 x .625    |
| 24   | NSS         | Seal, 6.4mm (.250") shaft (2)          |
| 25   | NSS         | Ring, seal retainer (2)                |
| 26   | AL1-8-1     | Throttle stop ass'y: 6.4mm (.250) ID.  |
| 27   | NSS         | Throttle stop lever                    |
| 28   | NSS         | Stop screw, 10-32 x 3/4                |
| 29   | NSS         | Spring, idle stop screw                |
| 30   | S2-15       | Pin screw, throttle stop               |
|      | AL1-7-1     | Throttle lever w/screw                 |
|      | NSS         | Throttle lever                         |
|      | NSS         | Screw, 10-24 x 5/8"                    |
|      | NSS         | Gasket, 1/2 SAE flange                 |
|      | G1-16       | Gasket, 3/4" SAE flange                |
|      | G1-17       | Gasket, 1" SAE flange                  |
|      | G1-18       | Gasket, 1-1/4" SAE flange              |
|      | G1-120      | Gasket, flange                         |



\*Included in Repair Kit



# MODEL 55 CARBURETOR

## CARBURETORS & MIXERS

### ASSEMBLIES & ACCESSORIES

#### MIXER ASSEMBLIES

| P/N     | BODY ASS'Y | AIR/GAS VALVE | AIR HORN DIA.      | OVERALL WIDTH      | OVERALL HEIGHT     |
|---------|------------|---------------|--------------------|--------------------|--------------------|
| CA55M-1 | NSS        | AV1-14925     | 38.1mm<br>(1.500") | 81.0mm<br>(3.188") | 61.9mm<br>(2.438") |
| CA55M-2 | NSS        | AV1-14925     | 41.3mm<br>(1.625") | 81.0mm<br>(3.188") | 61.9mm<br>(2.438") |
| CA55M-4 | NSS        | AV1-14925     | 47.6mm<br>(1.875") | 81.0mm<br>(3.188") | 61.9mm<br>(2.438") |
| CA55M-5 | NSS        | AV1-14925     | 52.4mm<br>(2.063") | 81.0mm<br>(3.188") | 61.9mm<br>(2.438") |

#### TAMPER RESISTANT MIXER ASSEMBLIES

| P/N       | BODY ASS'Y | AIR/GAS VALVE                          | AIR HORN DIA.     | OVERALL WIDTH  |
|-----------|------------|--|-------------------|----------------|
| CT55M-2   | CT55M-2SUB | NSS                                    | 41.4mm<br>(1.63") | 96.8mm (3.81") |
| CT55M-5-1 | AB1-35-4   | AV1-14925 (std.)<br>AV1-14925-3 (rich) |                   |                |
| CT55M-5-3 | AB1-35-4   | AV1-14925 (std.)<br>AV1-14925-3 (rich) |                   |                |
| CT55M-8   | AB1-35-4   | AV1-14925 (std.)<br>AV1-14925-3 (rich) |                   |                |

#### THROTTLE BODIES

| P/N      | DESCRIPTION  |
|----------|--|
| AT2-26   | 1" SAE flange, 6.4 (0.25") shaft dia.                        |
| AT2-26-2 | 1" SAE flange, 6.4 (0.25") shaft dia., w/ vacuum advance     |
| AT2-27   | 1-1/4" SAE flange, 6.4 (0.25") shaft dia.                    |
| AT2-27-2 | 1-1/4" SAE flange, 6.4 (0.25") shaft dia., w/ vacuum advance |
| AT2-44   | Metric, 53.0 mm (2.087"), 27.0 mm (1.063") bore, offset      |

#### EXPANSION PLUGS

| P/N        | DESCRIPTION    |
|------------|----------------|
| P3-17956-3 | Expansion Plug |

#### REPAIR KIT

| P/N       | DESCRIPTION                |
|-----------|----------------------------|
| RK-CA55   | Repair Kit, Mdl CA55       |
| RK-CA55-2 | Repair Kit, CA55 Carb Lean |

#### BRACKET (OPTIONAL)

| P/N    | DESCRIPTION                                 |
|--------|---|
| AB4-23 | Bracket Assy, Bodwn Wire: B4-23, C2-1, S1-8 |

#### LEVERS

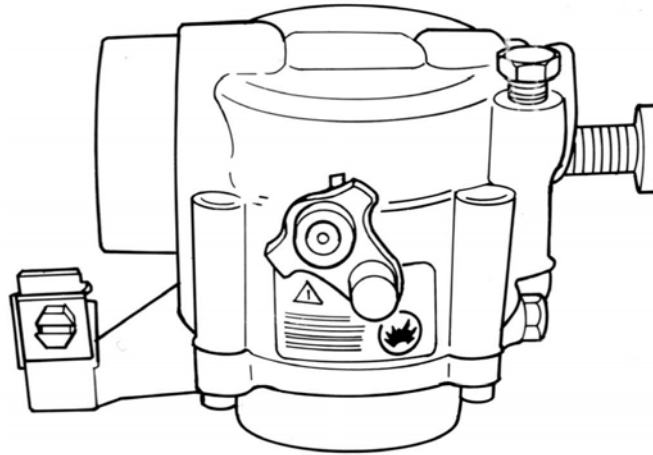
| P/N      | DESCRIPTION  |
|----------|--|
| AL1-7-1  | Assembly, 44.4 mm (1.75") long (standard)  |
| AL1-7-2  | Assembly, with 6.4 mm (.25") ball stud, 44.4 mm (1.750") long                          |
| AL1-7-3  | Assembly, 33.4 mm (1.313") long  |
| AL1-7-4  | Assembly, w/ swivel, 44.4 mm (1.75") long  |
| AL1-7-5  | Assembly, w/ Wisconsin swivel, 6.4 mm (0.25") mounting                                 |
| AL1-8-1  | Stop assembly, 6.4 mm (0.25") mounting I.D., 19.1 mm (.75") wide (standard)            |
| AL1-25-1 | Assembly, spring loaded, floating, 6.4 mm (0.25") mounting I.D., 34.9 mm (1.375") long |
| AL1-26-1 | Assembly, floating, 6.4 mm (.25") mounting I.D., 54.0 mm (2.125") long                 |
| AL1-31   | Assembly, shaft clamp, 6.4 mm (.250") mounting I.D., 49.2 mm (1.938") long             |

## MODEL 55-250L MIXER

### CARBURETORS & MIXERS



## MODEL CA55-250L MIXER



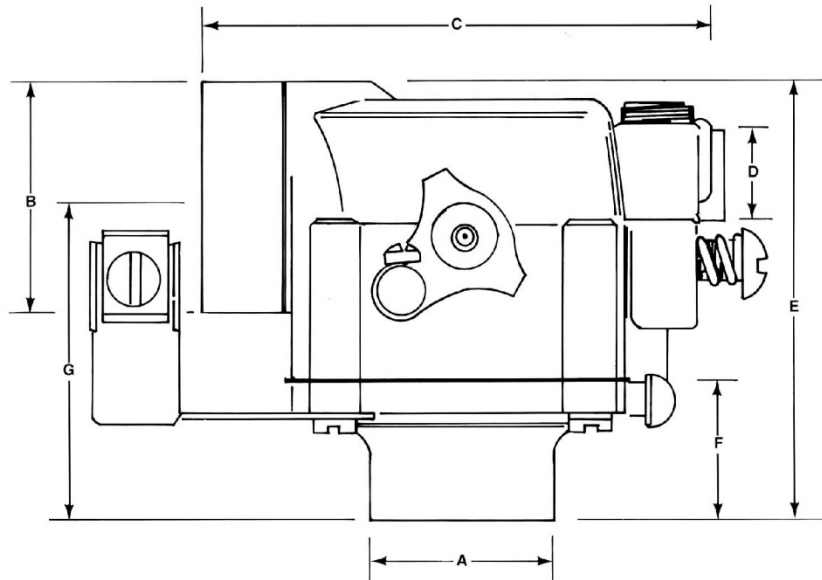
### DESCRIPTION

Engineered for bi-fuel applications, this model features a movable air-valve assembly, thus providing additional air flow requirements of LPG Vapor or Natural Gas in gasoline bi-fuel applications. It is designed for use on engines up to 73 hp (1 to 54kW), with a flow rate of 118 CFM (55.7 L/s).

### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type .....                   | LPG Vapor or Natural Gas, Bi-Fueled with Gasoline                           |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....            | Vertical  |
| Diaphragm Material.....           | N/A   |
| HP/kW Rating.....                 | Up to 73 hp (54 kW) @ 118 CFM (55.7 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**



|                         | A            | B                   | C                   | D                   | E                  | F        | G                   |                     |                     |
|-------------------------|--------------|---------------------|---------------------|---------------------|--------------------|----------|---------------------|---------------------|---------------------|
|                         | HOSE ADAPTER |                     | AIR HORN            | MAX WIDTH           |                    | NPT FUEL | HOSE ADAPTER        | FLANGE TO           |                     |
| STD. CARB.              | ADAPTER      | DIA.                | DIA.                | OVERALL WIDTH       | INCL. IDLE SCREW   | INLET    | OVERALL HEIGHT      | ADAPTER HEIGHT      | AIR HORN FLANGE     |
| CA55-256L               | A3-83        | 47.6 mm<br>(1.875") | 47.6 mm<br>(1.875") | 96.9 mm<br>(3.813") | 127 mm<br>(5.000") | 3/8"     | 88.9 mm<br>(3.500") | 25.4 mm<br>(1.000") | 63.5 mm<br>(2.500") |
| CA55-258<br>(no lifter) | A3-84        | 52.4 mm<br>(2.063") | 52.4 mm<br>(2.063") | 96.9 mm<br>(3.813") | 127 mm<br>(5.000") | 3/8"     | 88.9 mm<br>(3.500") | 25.4 mm<br>(1.000") | 63.5 mm<br>(2.500") |
| CA55-258L               | A3-84        | 52.4 mm<br>(2.063") | 52.4 mm<br>(2.063") | 96.9 mm<br>(3.813") | 127 mm<br>(5.000") | 3/8"     | 88.9 mm<br>(3.500") | 25.4 mm<br>(1.000") | 63.5 mm<br>(2.500") |

# MODEL 55-250L MIXER

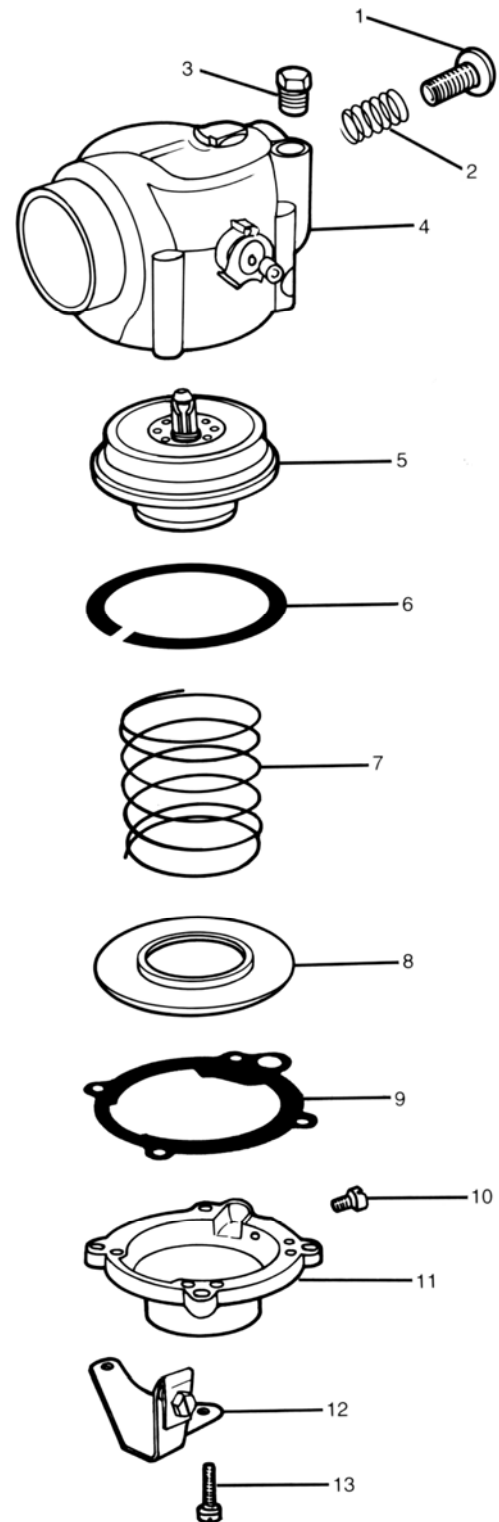
## CARBURETORS & MIXERS



### COMPONENTS

| ITEM | P/N        | PART DESCRIPTION                    |
|------|------------|-------------------------------------|
| 1    | S1-74      | Screw, idle                         |
| 2    | S2-88      | Spring, idle screw                  |
| 3    | NSS        | Plug, 1/8NPT                        |
| 4    | NSS        | Body Assy                           |
| 5    | AV1-14925* | Air valve Assay (std.)              |
| 6    | NSS*       | Ring, Air Valve Sealing             |
| 7    | NSS        | Spring, air valve                   |
|      | NSS        | Spring, Air Valve (Europe)          |
| 8    | NSS*       | Plate Assay                         |
| 9    | G1-92*     | Gasket, throttle body to mixer      |
| 10   | S1-69      | Screw, 114-28x5/16(2)               |
|      | NSS        | Adapter hose mount, 38.1 mm (1.500) |
|      | NSS        | Adapter hose mount, 41.3 mm (1.625) |
| 11   | A3-83      | Adapter hose mount, 47.6 mm (1.875) |
|      | A3-84      | Adapter hose mount, 52.4 mm (2.063) |
|      | NSS        | Adapter hose mount, 58.8mm (2.313)  |
| 12   | AB4-13     | Bracket Assembly, Boden wire        |
| 13   | S1-3       | Screw, 10-24x5/8" SEMS(4)           |

\*Included in repair kit







**MODEL 55-250L MIXER**

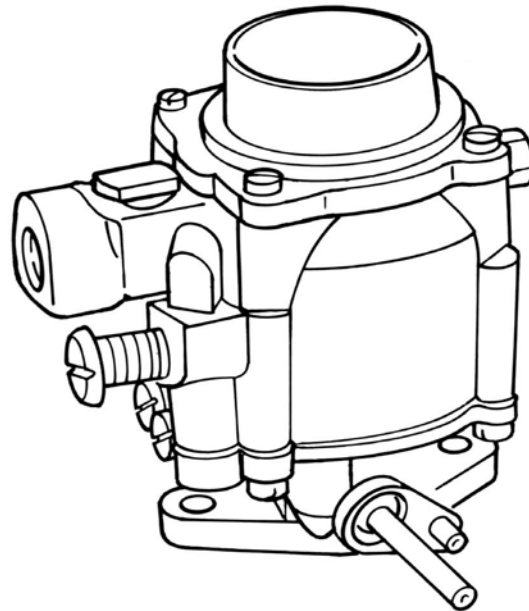
**CARBURETORS & MIXERS**

## MODEL 55-500L CARBURETOR

CARBURETORS & MIXERS



## MODEL CA55-500L CARBURETOR

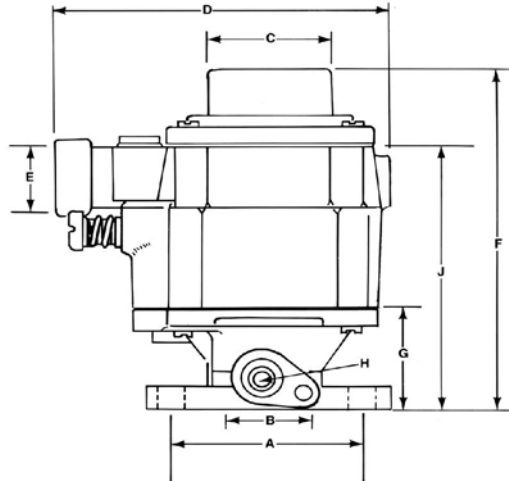


### DESCRIPTION

This Model CA55 is for use with either LPG Vapor or Natural Gas on engines from 1.5 to 73 hp (1 to 54 kW) with a flow rate of 118 CFM (59.0 L/s). This flow-through design may be mounted in either a downdraft, updraft, or side draft configuration. Various air horns and flange sizes are available.

### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type .....                   | LPG Vapor or Natural Gas  |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....            | Vertical  |
| Diaphragm Material.....           | N/A   |
| HP/kW Rating.....                 | Up to 73 hp (54 kW) @ 118 CFM (55.7 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**


| Standard Carb | Mixer                                       | Throttle Body | SAE Flange | Air Horn Adapt. | Ctr. To Ctr. Bolt Spacing | Air Horn Bore       | Air Horn Dia.       | Overall Width        | NPT Fuel Inlet | Overall Height       | Throttle Body Height | Throttle Shaft Dia. | Flange to Top of Mixer |
|---------------|---|---------------|------------|-----------------|---------------------------|---------------------|---------------------|----------------------|----------------|----------------------|----------------------|---------------------|------------------------|
|               |   |               |            |                 | A                         | B                   | C                   | D                    | E              | F                    | G                    | H                   | J                      |
| CA55-271      | Replacement carburetor for Toyota 4Y engine |               |            |                 |                           |                     |                     |                      |                |                      |                      |                     |                        |
| CA55-503      | CA55M-500                                   | BT2-27-173    | 1-1/4"     | A2-66           | 68.3 mm<br>(2.375")       | 30.2 mm<br>(1.188") | 57.2 mm<br>(1.875") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-508      | CA55M-500                                   | AT2-27        | 1-1/4"     | A2-39           | 68.3 mm<br>(2.688")       | 30.2 mm<br>(1.188") | 52.4 mm<br>(2.063") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-510      | CA55M-500                                   | AT2-27        | 1-1/4"     | A2-41           | 68.3 mm<br>(2.688")       | 30.2 mm<br>(1.188") | 74.6 mm<br>(2.938") | 104.8 mm<br>(4.125") | 3/8"           | 117.5 mm<br>(4.625") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-524      | CA55M-500                                   | BT2-26-6L     | 1"         | A2-35           | 60.3 mm<br>(2.375")       | 30.2 mm<br>(1.188") | 54.0 mm<br>(2.125") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-542      | CA55M-500                                   | BT2-26-4      | 1"         | A2-35           | 60.3 mm<br>(2.375")       | 30.2 mm<br>(1.188") | 54.0 mm<br>(2.125") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-553      | CA55M-500                                   | BT2-26-7      | 1"         | A2-65           | 60.3 mm<br>(2.375")       | 30.2 mm<br>(1.188") | 49.2 mm<br>(1.938") | 104.8 mm<br>(4.125") | 3/8"           | 128.6 mm<br>(5.063") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-553-2    | CA55M-500                                   | BT2-26-7      | 1"         | A2-65           | 60.3 mm<br>(2.375")       | 30.2 mm<br>(1.188") | 49.2 mm<br>(1.938") | 104.8 mm<br>(4.125") | 3/8"           | 128.6 mm<br>(5.063") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-576      | CA55M-500                                   | BT2-44-1      |            | A2-59           | 53.0 mm<br>(2.087")       | 27.0 mm<br>(1.063") | 43.0 mm<br>(1.693") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-577      | CA55M-500                                   | BT2-44-2      |            | A2-59           | 53.0 mm<br>(2.087")       | 27.0 mm<br>(1.063") | 43.0 mm<br>(1.693") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-577-2    | CA55M-500                                   | BT2-44-2      |            | A2-59           | 53.0 mm<br>(2.087")       | 27.0 mm<br>(1.063") | 43.0 mm<br>(1.693") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-577-3    | CA55M-500                                   | BT2-44-2      |            |                 | 53.0 mm<br>(2.087")       | 27.0 mm<br>(1.063") | 43.0 mm<br>(1.693") | 104.8 mm<br>(4.125") | 3/8"           | 112.7 mm<br>(4.438") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-596      | CA55M-500                                   | BT2-27-027    | 1-1/4"     | A2-61           | 68.3 mm<br>(2.688")       | 30.2 mm<br>(1.188") | 63.5 mm<br>(2.500") | 104.8 mm<br>(4.125") | 3/8"           | 103.2 mm<br>(4.063") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-596-2    | CA55M-500                                   | BT2-27-027    | 1-1/4"     | A2-61-2         | 68.3 mm<br>(2.688")       | 30.2 mm<br>(1.188") | 63.5 mm<br>(2.500") | 104.8 mm<br>(4.125") | 3/8"           | 103.2 mm<br>(4.063") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-598-2    | CA55M-500                                   | AT2-27-2      | 1-1/4"     | A2-61-2         | 68.3 mm<br>(2.688")       | 30.2 mm<br>(1.188") | 63.5 mm<br>(2.500") | 104.8 mm<br>(4.125") | 3/8"           | 103.2 mm<br>(4.063") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-599-2    | CA55M-500                                   | BT2-27-6      | 1-1/4"     | A2-61-2         | 68.3 mm<br>(2.688")       | 30.2 mm<br>(1.188") | 63.5 mm<br>(2.500") | 104.8 mm<br>(4.125") | 3/8"           | 103.2 mm<br>(4.063") | 33.4 mm<br>(1.313")  | 6.4 mm<br>(.250")   | 87.3 mm<br>(3.438")    |
| CA55-756M     | AB1-38                                      | Mixer Only    | N/A        | A3-84           | N/A                       | N/A                 | 52.4mm<br>(2.116")  |                      | 3/8"           |                      |                      | N/A                 |                        |

# MODEL 55-500L CARBURETOR

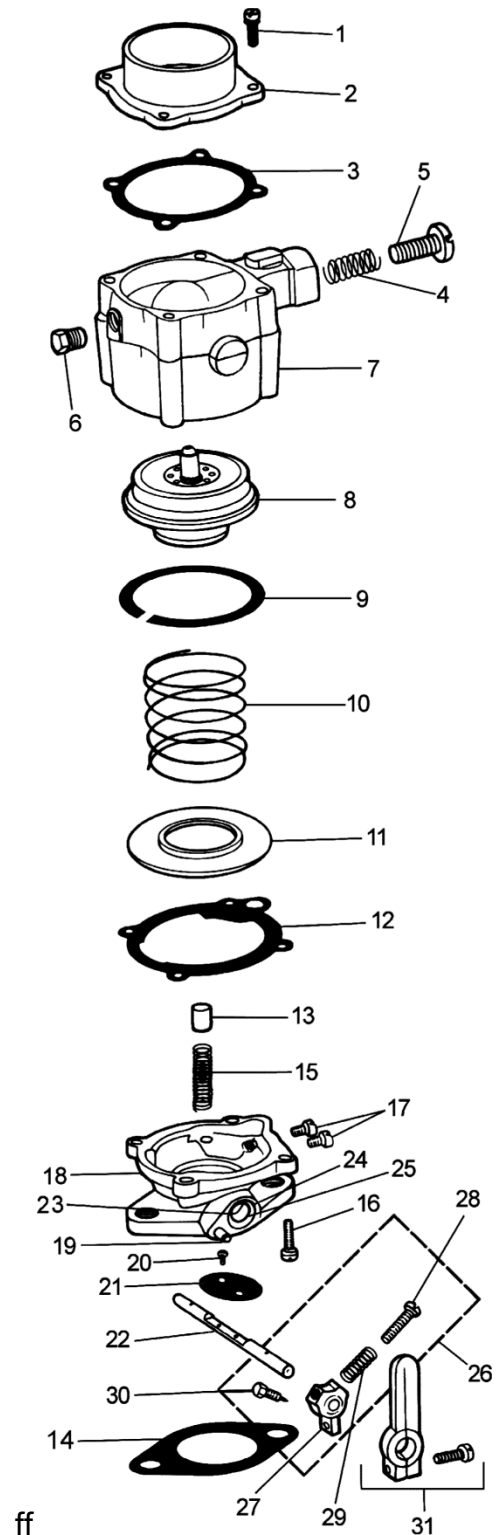
## CARBURETORS & MIXERS



### COMPONENTS

| Item | Part        | Description                               |
|------|-------------|---|
| 1    | S1-3        | Screw, 10-24 x 5/8" SEMS (4)              |
| 2    | See Table   | Air Horn Adapter, Ref. to table in Acces. |
| 3    | G1-101      | Gasket, air horn                          |
| 4    | S2-88       | Spring, Idle Screw                        |
| 5    | S1-74       | Screw, idle                               |
| 6    | NSS         | Plug, 1/8" pipe                           |
| 7    | NSS         | Body Assy                                 |
| 8    | AV1 -14925* | Air Valve Assy (std.)                     |
| 9    | NSS*        | Ring, Air Valve Sealing                   |
| 10   | NSS         | Spring, Air Valve                         |
| 11   | NSS*        | Plate Assy                                |
| 12   | G1-92*      | Gasket, Throttle Body to Mixer            |
| 13   | P4-1        | Piston, Idle Cutoff                       |
|      | NSS         | Gasket, 1/2" SAE Flange                   |
| 14   | G1-16       | Gasket, 3/4" SAE Flange                   |
|      | G1-17       | Gasket, 1" SAE Flange                     |
|      | G1-18       | Gasket, 1-1/4" SAE Flange                 |
| 15   | NSS         | Spring, Idle Cutoff                       |
| 16   | S1-3        | Screw, 10-24 x 5/8" SEMS (4)              |
| 17   | S1-69       | Screw, 1/4-28 x 5/16" (2)                 |
| 18   | NSS         | Throat, 1/2" SAE flange                   |
| 19   | NSS         | Pin, Throttle Stop                        |
| 20   | S1-22       | Screw, 6-32 x 1/4" SEMS (2)               |
| 21   | NSS         | Butterfly, 19.1 mm (.750")                |
|      | NSS         | Butterfly, 25.4 mm (1.000")               |
| 22   | S5-6        | Throttle Shaft, 6.4 mm (.250") dia.       |
| 23   | NSS         | Bearing, Oilite, 6.4 mm (.250") ID. (2)   |
| 24   | NSS         | Seal, 6.4 mm (.250") shaft (2)            |
| 25   | R1-9        | Ring, Seal Retainer (2)                   |
| 26   | AL1-8-1     | Throttle Stop Ass'y., 6.4mm (.250") ID.   |
| 27   | NSS         | Throttle Stop Lever                       |
| 28   | S1-21       | Stop Screw, 10-32 x 3/4"                  |
| 29   | S2-15       | Spring, Idle Stop Screw                   |
| 30   | S1-18       | Screw Pin, Throttle Stop                  |
| 31   | AL1-7-1     | Throttle Lever w/Screw                    |

\*Included in repair kit



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# MODEL 55-500L CARBURETOR

## CARBURETORS & MIXERS

### ASSEMBLIES & ACCESSORIES

#### MIXER ASSEMBLIES

| MIXER       | BODY ASSY | AIR/GAS VALVE | OVERALL WIDTH    | OVERALL HEIGHT  |
|-------------|-----------|---------------|------------------|-----------------|
| CA55M-500   | NSS       | AV1-14925     | 104.8MM (4.125") | 57.2MM (2.250") |
| CA55M-500-2 | NSS       | AV1-14926     | 104.8MM (4.125") | 57.2MM (2.250") |
| CA55M-500-4 | NSS       | AV1-14925     | 104.8MM (4.125") | 57.2MM (2.250") |
| CA55M-500-9 | NSS       | AV1-14925     | 104.8MM (4.125") | 57.2MM (2.250") |
| CA55M-500   | NSS       | AV1-14925     | 104.8MM (4.125") | 57.2MM (2.250") |

#### THROTTLE BODIES

| PART #     | DESCRIPTION   |
|------------|---|
| AT2-25     | 3/4" SAE Flange 6.4mm (.250") shaft dia.                |
| AT2-25-2   | 3/4" SAE Flange 6.4mm (.250") shaft dia. w/vacuum       |
| AT2-26     | 1" SAE Flange 6.4mm (.250") shaft dia.                  |
| AT2-26-2   | 1" SAE Flange 6.4mm (.250") shaft dia. w/vacuum         |
| AT2-27     | 1 1/4" SAE Flange 6.4mm (.250") shaft dia.              |
| AT2-27-2   | 1 1/4" SAE Flange 6.4mm (.250") shaft dia. w/vacuum     |
| AT2-27-4   | 1 1/4" SAE Flange 6.4mm (.250") shaft dia. w/AL1-7-3 &  |
| AT2-44-577 | Metric, 53.0mm (2.087") 1-1/16" bore, offset (modified) |

#### AIR HORN ADAPTERS

| PART #  | DESCRIPTION                                  |
|---------|--|
| A2-36   | 1.500" (38.1mm) dia.                         |
| A2-37   | 1 5/8" (41.3mm) dia.                         |
| A2-38   | 1 7/8" (47.6mm) dia.                         |
| A2-39   | 2 1/16" (52.4mm) dia.                        |
| A2-41   | 2.312" (58.8mm) dia.                         |
| A2-44   | AF1-5 Air Cleaner to CA55-500 Series Adapter |
| A2-59   | Adapter, Air Cleaner 1.69" OD                |
| A2-61-2 | Air Horn Adapt., tapped 8 mm                 |
| A2-65   | Air Horn, Toyot 4Y CA55                      |

#### LEVERS (See Lever Section for Other Lever Options)

| PART #   | DESCRIPTION   |
|----------|---|
| AL1-25-1 | Assembly, Spring Loaded, Floating 6.4mm (.250")       |
| AL1-26-1 | Assembly, Floating, 6.4mm (.250") mounting ID, 54.0mm |
| AL1-31   | Assembly, Shaft Clamp, 6.4mm (.250") mounting ID,     |

#### RETURN SPRING ASSEMBLIES (OPTIONAL)

| PART # | DESCRIPTION                                 |
|--------|---|
| AB4-23 | Bracket Assy, Boden Wire: B4-23, C2-1, S1-8 |
| S2-29  | Spring/Loaded Lever                         |

#### AIR CLEANER (OPTIONAL)

| PART # | DESCRIPTION  |
|--------|--|
| AF1-5  | Assy, 4.25 m3/min (150cfm), 171.5mm (6.750") OD., 60.3mm (2.374") high |

#### THROTTLE SHAFTS

| PART # | DESCRIPTION  |
|--------|--|
| S5-1   | 6.4mm (.250") diameter, 114.3mm (4.500") Long              |
| S5-6   | 6.4mm (.250") diameter, 120.7 mm (4.7500") Long (standard) |

#### NEEDLE BEARINGS

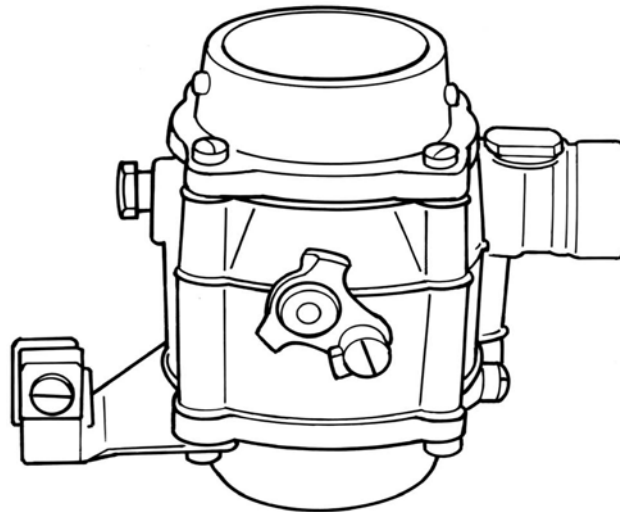
| PART # | DESCRIPTION                      |
|--------|----------------------------------|
| B2-6   | Bearing, Needle .438 x 250 x 312 |

## MODEL 55-750L MIXER

CARBURETORS & MIXERS



## MODEL CA55-750L MIXER



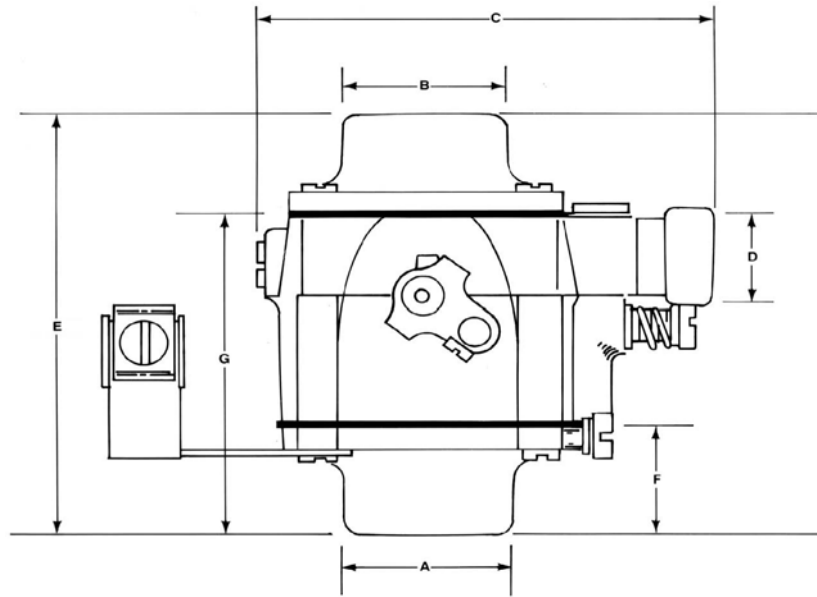
### DESCRIPTION

The Model CA55-750L is a 118 CFM (59.0 L/s) bi-fuel mixer, suitable for engines from 1.5 to 73 hp (1 to 54 kW). The moveable air/valve assembly optimizes air flow for LPG Vapor or Natural Gas in gasoline bi-fuel applications. The flow-through design allows mounting in the inlet air stream. Various Air Horn sizes are available to suit individual applications.

### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type .....                   | LPG Vapor or Natural Gas, Bi-Fueled with Gasoline                           |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....            | Vertical  |
| Diaphragm Material.....           | N/A   |
| HP/kW Rating.....                 | Up to 73 hp (54 kW) @ 118 CFM (55.7 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**



|           |            |              |                | A                   | B                   | C                    | D              | E                    | F                   | G                         |
|-----------|------------|--------------|----------------|---------------------|---------------------|----------------------|----------------|----------------------|---------------------|---------------------------|
|           |            |              |                | HOSE ADAPTER DIA.   | MIXER AIR HORN DIA. | OVERALL WIDTH        | NPT FUEL INLET | OVERALL HEIGHT       | HOSE ADAPTER HEIGHT | FLANGE TO AIR HORN FLANGE |
| STD. CARB | MIXER      | HOSE ADAPTER | MIXER AIR HORN | 47.6 mm<br>(1.875") | 47.6 mm<br>(1.875") | 104.8 mm<br>(4.125") | 3/8"           | 104.8 mm<br>(4.125") | 25.4 mm<br>(1.000") | 79.4 mm<br>(3.125")       |
| CA55-754L | CA55M-750L | A3-83        | A2-38          | 52.4 mm<br>(2.063") | 52.4 mm<br>(2.063") | 104.8 mm<br>(4.125") | 3/8"           | 104.8 mm<br>(4.125") | 25.4 mm<br>(1.000") | 79.4 mm<br>(3.125")       |
| CA55-756L | CA55M-750L | A3-84        | NSS            | 58.8 mm<br>(2.313") | 58.8 mm<br>(2.313") | 104.8 mm<br>(4.125") | 3/8"           | 104.8 mm<br>(4.125") | 25.4 mm<br>(1.000") | 79.4 mm<br>(3.125")       |
| CA55-758L | CA55M-750L | NSS          | A2-41          |                     |                     |                      |                |                      |                     |                           |

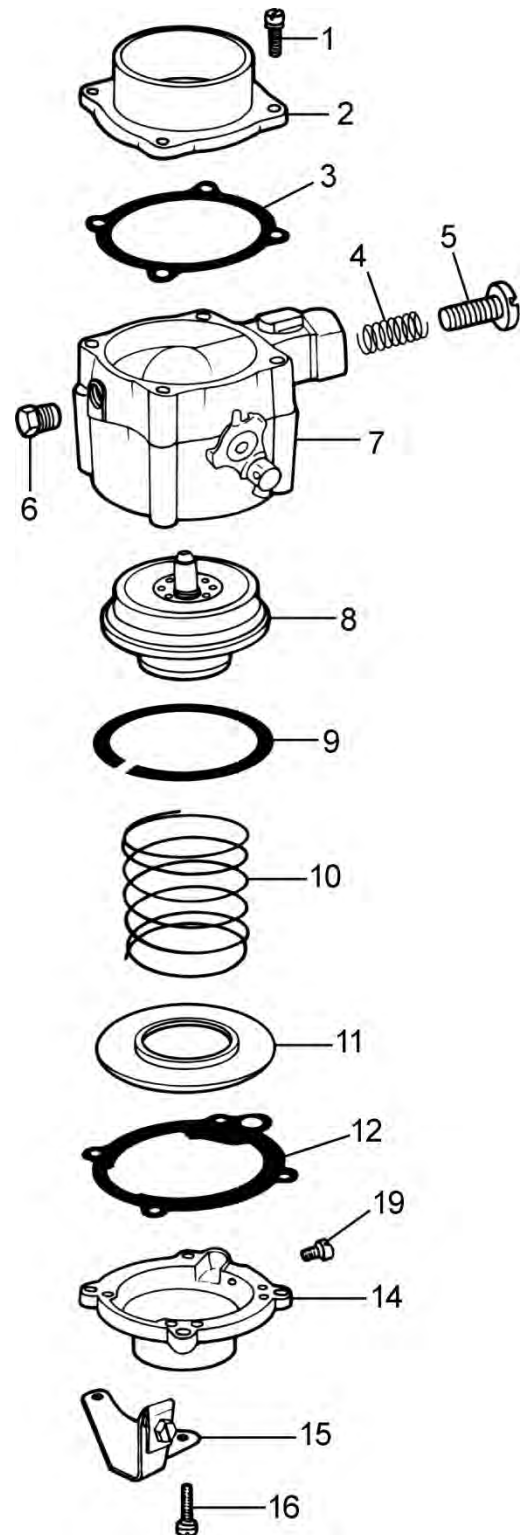
# MODEL 55-750L MIXER

## CARBURETORS & MIXERS



### COMPONENTS

| ITEM | PART       | DESCRIPTION                                       |
|------|------------|---|
| 1    | S1-3       | Screw, 10-24 x 5/8" SEMS (4)                      |
| 2    | See Table  | Air horn adapter (refer to table for proper size) |
| 3    | G1-101     | Gasket air horn                                   |
| 4    | S2-88      | Spring, idle screw                                |
| 5    | S1-74      | Screw, idle                                       |
| 6    | NSS        | Plug, 1/8"NPT                                     |
| 7    | NSS        | Body ass'y, complete w/lifter                     |
|      | AV1-14925* | AI valve ass'y                                    |
| 8    | NSS        | Air valve ass'y (lean)                            |
|      | NSS        | Air valve ass'y (Europe)                          |
| 9    | NSS*       | Ring, air valve sealing                           |
| 10   | NSS        | Spring, air valve                                 |
|      | NSS        | Spring, air valve (Europe)                        |
| 11   | NSS*       | Plate ass'y                                       |
| 12   | G1-92*     | Gasket throttle body to mixer                     |
| 13   | S1-69      | Screw, 1/4-28 x 5/16" (2)                         |
|      | NSS        | Adapter, hose mounting, 38.1mm (1.500")           |
|      | NSS        | Adapter, hose mounting, 41.3mm (1.625")           |
| 14   | A3-83      | Adapter, hose mounting, 47.6mm(1.875")            |
|      | A3-84      | Adapter, hose mounting, 52.4mm (2.063")           |
|      | NSS        | Adapter, hose mounting, 58.8mm (2.313")           |
| 15   | AB4-13     | Bracket ass'y, Boden wire                         |
| 16   | S1-3       | Screw, 10-24 x 5/8" SEMS (4)                      |



\*Included in Repair Kit





**ASSEMBLIES & ACCESSORIES**

**MIXER ASSEMBLIES**

|                | Body | Air/Gas   | Overall              |                | Overall            |
|----------------|------|-----------|----------------------|----------------|--------------------|
| Standard Mixer | Assy | Valve     | Width                | NPT Fuel Inlet | Height             |
| CA55M-750L     | NSS  | AV1-14925 | 104.8 mm<br>(4.125") | 3/8"           | 57.2mm<br>(2.250") |

**AIR HORN ADAPTERS**

| PART# | DESCRIPTION                                  |
|-------|--|
| A2-36 | 38.11mm (1.500") dia.                        |
| A2-37 | 41.3mm (1.625") dia.                         |
| A2-38 | 47.6mm (1.875") dia.                         |
| A2-39 | 52.4mm (2.063") dia.                         |
| A2-41 | 58.8mm (2.313") dia.                         |
| A2-44 | AF1-5 air cleaner to CA55-500 Series adapter |

**AIR CLEANERS (OPTIONAL)**

| PART# | DESCRIPTION   |
|-------|---|
| AF1-5 | Assy 4.25 m3/min (150 cfm), 171.5 mm<br>(6.750") O.D. 60.3 mm (2.375") high |

# MODEL 55-750L MIXER

## CARBURETORS & MIXERS



### CA55 MIXERS & CARBURETORS

#### CA55 SERIES 90° AIR HORN CARBURETORS

| PART#     | DESCRIPTION  |
|-----------|--|
| CA55-20   | Carb, 1" SAE flange 1-5/8" Air Horn  |
| CA55-20-2 | Carb, 1" SAE flange 1-5/8" Air Horn, lean air gas valve ass'y.               |
| CA55-258  | Carb, 2-1/16" hose, 2-1/16" Air Horn w/o lifter                              |
| CA55-258L | Carb, 2-1/16" Air Horn, 2-1/16" hose, dual fuel, w/ lifter                   |
| CA55-271  | Carburetor   |
| CA55-4    | Carb, 3/4" SAE flange, 1-5/8" Air Horn                                       |
| CA55-40   | Carb, 1" SAE flange, 2-1/16" Air Horn  |
| CA55-6    | Carb, 1" SAE flange, 1-7/8" Air Horn   |
| CA55-64   | Carb, 1" SAE flange, 1-5/8" Air Horn, w/ 1/4" hole in lever at 1"R, 4" shaft |
| CA55-66   | Carb, 1" SAE flange, 1-5/8" Air Horn, w/ 1/4" hole in lever at 1"R, 4" shaft |
| CA55-8    | Carb, 1-1/4" SAE flange, 2-1/16" Air Horn                                    |

#### CA55 SERIES 90° AIR HORN MIXERS

| PART#   | DESCRIPTION                  |
|---------|------------------------------|
| CA55M-2 | Mixer, 1-5/8" Air Horn HDTM  |
| CA55M-3 | Mixer, 1-3/4" Air Horn Black |
| CA55M-4 | Mixer, 1-7/8" Air Horn HDTM  |
| CA55M-5 | Mixer Ass'y Model CA55M      |

#### CA55 SERIES STRAIGHT DRAFT CARBURETORS

| PART#      | DESCRIPTION   |
|------------|---|
| CA55-503   | Carb, 1-1/4" SAE flange, 2-1/4" Air Horn, with drilled shaft                |
| CA55-508   | Carb. 1-1/4 SAE 1-2/16 HDTM   |
| CA55-510   | Carb, 1-1/4" SAE flange, 2-5/16" Air Horn                                   |
| CA55-524   | Carb, 1" SAE flange, Toyota   |
| CA55-542   | Carb, 1" SAE flange, Toyota   |
| CA55-553   | Carb, 1" SAE flange, w/ A2-65 & A3-113                                      |
| CA55-553-2 | Carb, 1" SAE flange, w/ A2-65 & A3-113 adapters, lean flow, Toyota          |
| CA55-576   | Carb, Hyster special flange, 43 mm Air Horn, short lever w/ throttle return |
| CA55-577   | Carb, 53 mm flange, 43 mm Air Horn, standard flow                           |
| CA55-577-2 | Carb, 53 mm flange, 43 mm Air Horn, lean flow                               |
| CA55-577-3 | Carb, 53 mm flange, 43 mm Air Horn, lean flow                               |
| CA55-596   | Carb, 1-1/4" SAE flange, A2-61 Air Horn                                     |
| CA55-596-2 | Carb, 1-1/4" SAE flange, A2-61 Air Horn w/Tapped A/H 8 mm                   |
| CA55-598-2 | Carb, W/A2-61-2 HTDM LPG  |
| CA55-599-2 | HTDM Carb, 1-1/4" SAE flange, 2-1/4" Air Horn, tapped 8 mm less levers      |
| CA55-756L  | Carb, 2-1/16" Air Horn, 2-1/16" hose, dual fuel,                            |
| CA55-758L  | Mixer, 2-5/16" Air Horn, 2-5/16 hose, dual fuel, with lifter                |

#### CA55 SERIES STRAIGHT DRAFT MIXERS

| PART#       | DESCRIPTION  |
|-------------|--|
| CA55M-500-2 | Series 500, straight draft mixer with lean air/gas valve ass'y.  |
| CA55M-500-4 | Series 500, straight draft mixer with lean body, lean full range |
| CA55M-500-9 | Series 500, straight draft mixer with lean body, WOT             |
| CA55M-750L  | Series 500, straight draft mixer assembly with lifter, dual fuel |



**MODEL 55-750L MIXER**

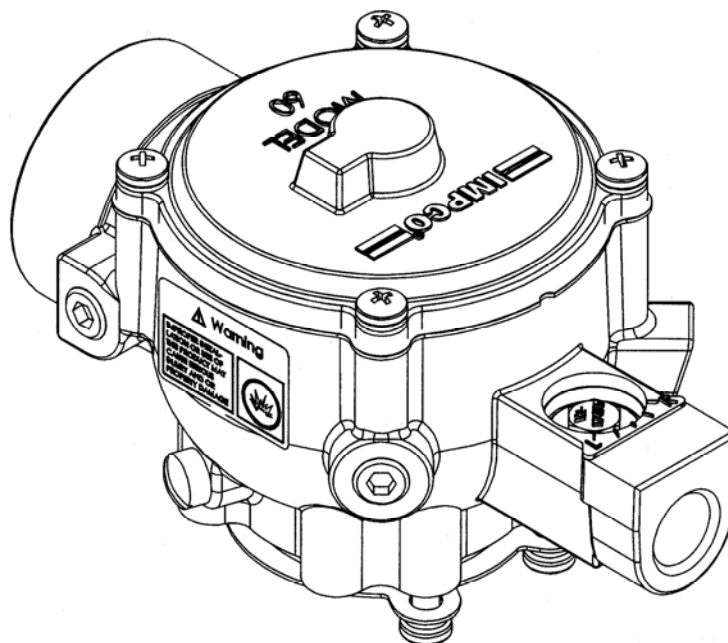
**CARBURETORS & MIXERS**

# MODEL 60 MIXER

## CARBURETORS & MIXERS



### MODEL 60 MIXER



### DESCRIPTION

The IMPCO Model 60 is an air-gas valve/diaphragm mixer designed to fit engines from 79 to 183 cubic inches (1.3 to 3 liters) in displacement and up to 95 CFM (44.8 L/s) air flow. It is a 90° air horn design available with a 2.06 inch (52.4mm) air horn and fits most current CA100 throttle bodies and adapters. It can also be used in-line, separate from the throttle body.

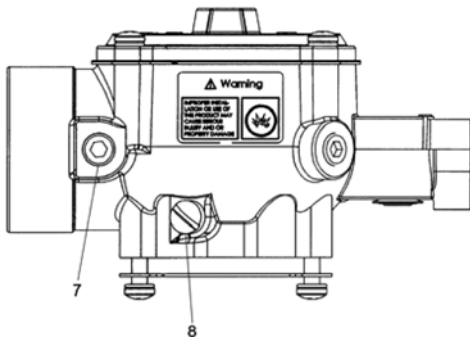
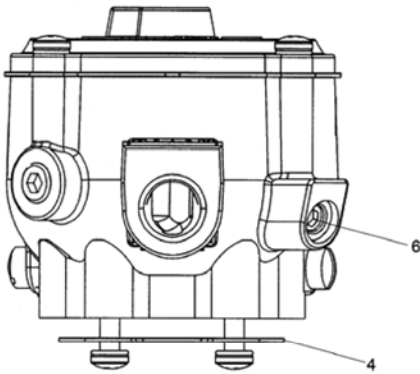
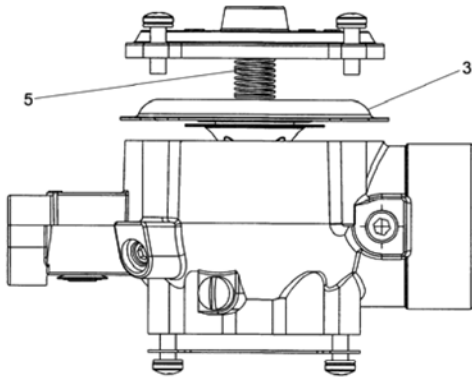
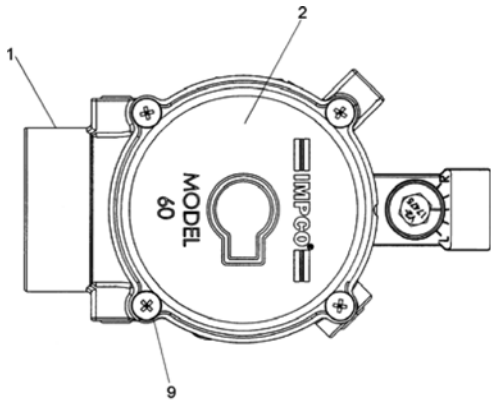
The mixer comes in two configurations: the CT version for open-loop engine applications without an electronic engine controller, and the FT version for use with the IMPCO Commander digital closed-loop fuel controller. Custom flow specifications for the mixer can be set and sealed at the factory.

Tamper resistant plugs are available for installation by your technicians after the IMPCO Model 60 mixer has been adjusted at your facility to fit your application.

### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type .....                   | LPG Vapor or Natural Gas, Bi-Fueled with Gasoline                               |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....            | Vertical  |
| Diaphragm Material.....           | Silicone  |
| HP/kW Rating.....                 | Up to 73 hp (1 to 53 kW) @ 95 CFM (44.8 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS & COMPONENTS**

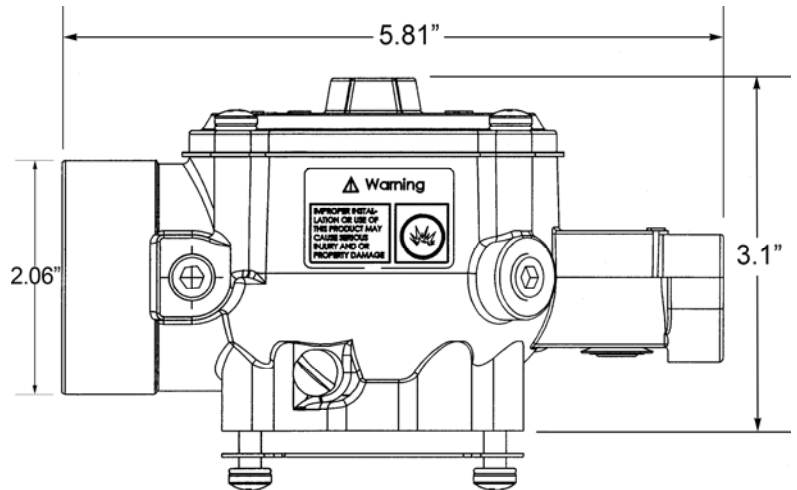


**MODEL 60 MIXER PART NUMBERS**

| PART#   | DESCRIPTION               |
|---------|---------------------------|
| FT60M-3 | Feedback, 2.06" Air Horn  |
| CT60M-3 | Open-Loop, 2.06" Air Horn |

| ITEM # | PART #    | DESCRIPTION                     |
|--------|-----------|---------------------------------|
| 1      | NSS       | Body, 60 Series Mixer Assembly  |
| 2      | NSS       | Cover, 60 Series Mixer          |
| 3      | AV1-25590 | Air/Gas Valve Assembly          |
|        | AV1-30115 | Air/Gas Valve Assembly          |
| 4      | G1-11     | Gasket, Throttle Body to Mixer  |
| 5      | S2-35-1   | Spring, Secondary (Blue Stripe) |
| 6      | NSS       | Screw, M8 x 1.25 Idle Adjust    |
| 7      | NSS       | Plug, Set Screw                 |
| 8      | S1-69     | Screw, 1/4"-28 x 5/16"          |
| 9      | NSS       | Screw, M5 x .8 x 16mm Long      |

**DIMENSIONS**



# MODEL 60 MIXER

## CARBURETORS & MIXERS



### COMPONENTS

#### CARBURETOR

| PART#      | DESCRIPTION  |
|------------|--|
| CT60-30673 | 2.06" Air Horn w/BT2-23-30682 Throttle Body for Hyster<br>2.0L Upgrade Kit |

#### THROTTLE BODIES

| PART#    | DESCRIPTION  |
|----------|--|
| AT2-1    | 3/4" SAE flange, 6.4mm (0.25) shaft dia.   |
| AT2-2    | 1" SAE flange, 6.4mm (0.25) shaft dia.   |
| AT2-2-5  | 1" SAE flange, 6.4mm (0.25") shaft dia., w/ vacuum advance                         |
| AT2-3    | 1-1/4" SAE flange, 8.0mm (0.31") dia.  |
| AT2-3-8  | 1-1/4" SAE flange, 8.0mm (0.31") shaft dia. w/vacuum advance                       |
| AT2-4-1  | 1-1/2" SAE flange, 8.0mm (0.31") shaft dia   |
| AT2-4-3  | 1-3/4" SAE flange, 8.0mm (0.31") shaft dia   |
| AT2-4-6  | 1-3/4" ASE flange, 8.0mm (0.31") shaft dia., w/needle bearings                     |
| AT2-16-1 | 1-1/4" to 1-1/2" SAE flange, 8.0mm (0.31") shaft dia., no vacuum advance           |
| AT2-16-4 | 1-1/4" to 1-1/2" flange, 8.0mm (0.31") shaft dia., w/needle bearings & vacuum port |
| AT2-23   | 1-1/4" SAE flange, 8.0mm (0.31") dia.  |
| AT2-23-4 | 1-1/4" SAE flange, 8.0mm (0.31") shaft dia.  |

Note: The above throttle bodies are offset.

#### AIR/GAS VALVE ASSEMBLIES

| PART#     | DESCRIPTION                            |
|-----------|--|
| AV1-30115 | Air/Gas Valve Assy, Silicone FT Series |
| AV1-25590 | Air/Gas Valve Assy, Silicone CT Series |

#### ADAPTERS

| Part#    | DESCRIPTION  |
|----------|--|
| AA3-29-1 | Adapt. 100M to 2-1/16" hose                        |
| AA3-29-2 | Adapt.100M to 2-1/16" hose, 12-24 Thrth Bodies     |
| AA3-32-1 | Adapt.100M to IMPCO 2B throttle body               |
| AA3-49   | Adapt.100M to Datsun C5-P5 Nikki throttle body     |
| AA3-50   | Adapt.100M to Datsun C3-P3 throttle body           |
| A3-58    | Adapt.100M to throttle body, offset 11.1mm (0.44") |
| A3-67    | Adapt.100M to Mitsubishi lift truck throttle body  |

#### GASKETS

| Part# | DESCRIPTION                    |
|-------|--------------------------------|
| 416   | Gasket, Flange 1-1/4" SAE TB60 |

#### BEARINGS

| Part#  | DESCRIPTION                   |
|--------|-------------------------------|
| 1-5022 | Bearing, Throttle Shaft       |
| 1-5019 | Bearning, Throttle Shaft 1/4" |

#### RETURN SPRING ASSEMBLIES

| Part#    | DESCRIPTION                          |
|----------|--------------------------------------|
| AS2-50-1 | Throttle return, 6.4mm (0.25") shaft |
| AS2-50-2 | Throttle return, 8.0mm (0.31") shaft |

#### BRACKET ASSEMBLIES

| Part#  | DESCRIPTION                             |
|--------|---|
| AB4-2  | Bracket, Boden Wire                     |
| AB4-19 | Bracket, AS2-50-2Throttle Return Spring |

#### FUEL CONTROLLERS

| Part#     | DESCRIPTION                |
|-----------|----------------------------|
| EK-CDP-1  | Commander Kit              |
| CDP-1DX-6 | Kit, Microprocessor 6 Cyl. |

#### LEVERS

| Part#    | DESCRIPTION   |
|----------|---|
| AL1-7-1  | Assy, 44.5mm (1.75") long (st. on AT2-3, AT2-4-1, AT2-4-3, AT2-16-1)  |
| AL1-7-2  | Assy, w/ 6.4mm (0.25") ball stud, 44.5mm (1.75") long   |
| AL1-7-3  | Assy, 33.3mm (1.31") long (std on AT2-1, AT2-2, AT2-2, AT2-23)  |
| AL1-7-4  | Assy, w/swivel, 44.5mm (1.75") long   |
| AL1-7-5  | Assy, w/Wisconsin swivel, 6.4mm (0.25") mounting ID, 20.6mm (0.81") long                                      |
| AL1-8-1  | Stop assy, 6mm (0.25") mounting ID, 19.1mm (0.75") long (std. on AT2-1, AT2-2)                                |
| AL1-8-2  | Stop assy, 8.0mm (0.31") mounting ID 19.1mm (0.75") long (std. on AT2-3, AT2-4-1, AT2-4-3, AT2-16-1, AT2-23). |
| AL1-25-1 | Assy, spring loaded, flating, 6.4mm (0.25") mounting ID, 34.9mm (1.38" long w/ AC2-14-1)                      |
| AL1-25-2 | Assy, spring loaded, flating, 6.4mm (0.31") mounting ID, 34.9mm (1.38" long w/ AC2-14-2)                      |
| AL1-26-1 | Assy, flating 6.4mm (0.25") mounting ID, 54.0mm (2.13") long, w/AC2-11  |
| AL1-26-2 | Assy floating, w/swivel, 6.4mm (0.25") mounting ID 54.0mm (2.12") long, w/ AC2-11                             |
| AL1-27-1 | Assy floating 8.0mm (0.31" mounting ID, 54.0mm (2.13") long w/AC2-12  |
| AL1-27-2 | Assy, floating w/swivel, 8.0mm (0.31") mounting ID 54.0mm (2.13") long, w/AC2-12                              |
| AL1-31   | Assy, shaft clamp, 6.4mm (0.25") mounting ID 49.2mm (1.94") long  |
| AL1-33   | Assy shaft clamp, 8.0mm (0.31") mounting ID 49.2mm (1.94") long   |
| AL1-46   | Assy steel shaft clamp, 8.0mm (0.31") mounting ID, 47.6mm (1.88") long  |



**MODEL 60 MIXER**

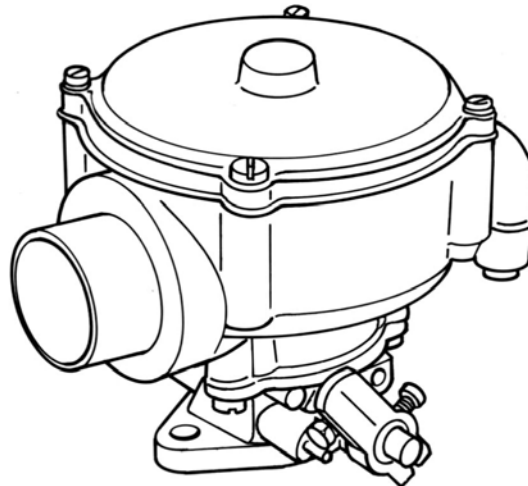
**CARBURETORS & MIXERS**

# MODEL 100 CARBURETOR

## CARBURETORS & MIXERS



### MODEL CA100 CARBURETOR



#### DESCRIPTION

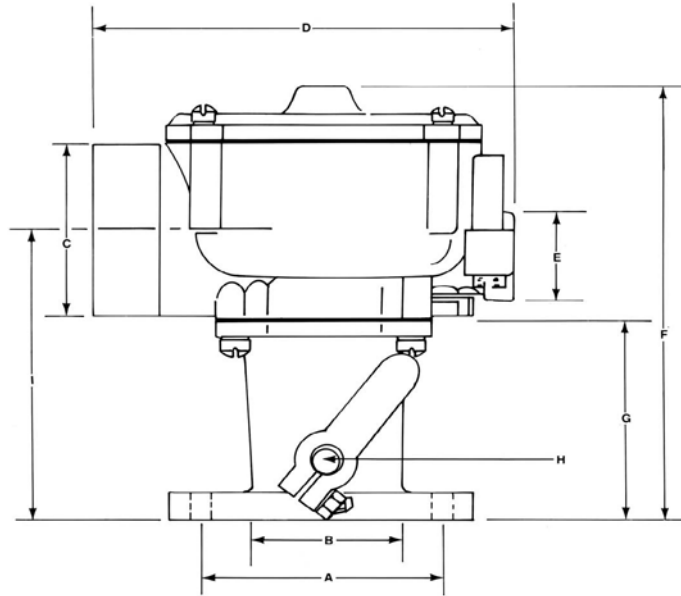
The Model 100 is a single diaphragm air-gas valve carburetor/mixer. It offers a 90 degree air inlet to provide low overhead clearance, and is available with several Air Horn and throttle body options. This unit is available for LPG Vapor and Natural Gas applications with air flow requirements up to 197 CFM (93 L/s). The Model 100 is also available for feedback applications with the 'FB' designation.

The 100 mixer provides a convenient 1/8 NPT balance port and two separate air valve vacuum ports. Additional low speed, idle mixture control can be obtained to lean air/fuel mixtures through the use of optional shims.

#### SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Fuel Type .....                   | LPG Vapor or Natural Gas   |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)   |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)  |
| Mounting Position.....            | Vertical   |
| Diaphragm Material.....           | Hydrin or Silicone   |
| HP/kW Rating.....                 | 106 HP (79 kW) @ 170 CFM (80 L/s) and 1.5" in Hg manifold depression<br>123 HP (91.7 kW) @ 197 CFM (93 L/s) and 2.0" in Hg manifold depression |



**DIMENSIONS**


| STD.CARB  | MIXER      | THROTTLE BODY | SAE FLANGE | MIXER                     |                     | D                   | E                  | F    | G                  | H                   | I                  |                     |
|-----------|------------|---------------|------------|---------------------------|---------------------|---------------------|--------------------|------|--------------------|---------------------|--------------------|---------------------|
|           |            |               |            | CTR. TO CTR. BOLT SPACING | AIR HORN DIA.       |                     |                    |      |                    |                     |                    | OVERALL WIDTH       |
| CA100-6   | CA100M-2   | AT2-2         | 1"         | 60.3mm<br>(2.375")        | 30.2mm<br>(1.188")  | 47.6mm<br>(1.875")  | 133 mm<br>(5.25")  | 1/2" | 117mm<br>(4.625")  | 34.9 mm<br>(1.375") | 6.4mm<br>(0.250")  | 67.0mm<br>(2.625")  |
| CA100-8   | CA100M-3   | AT2-3         | 1-1/4"     | 68.3 mm<br>(2.688")       | 36.5 mm<br>(1.438") | 52.4 mm<br>(2.063") | 133 mm<br>(5.25")  | 1/2" | 149 mm<br>(5.875") | 69.1 mm<br>(2.719") | 8.0 mm<br>(0.313") | 67.0 mm<br>(2.625") |
| CA100-10  | CA100M-4   | AT2-3         | 1-1/4"     | 68.3 mm<br>(2.688")       | 36.5 mm<br>(1.438") | 58.8 mm<br>(2.313") | 133 mm<br>(5.25")  | 1/2" | 150 mm<br>(5.92")  | 69.1 mm<br>(2.719") | 8.0 mm<br>(0.313") | 99.6 mm<br>(3.92")  |
| CA100-12  | CA100M-4   | AT2-4-1       | 1-1/2"     | 74.6 mm<br>(2.938")       | 42.9 mm<br>(1.688") | 58.8 mm<br>(2.313") | 131 mm<br>(5.156") | 1/2" | 154 mm<br>(6.063") | 71.4 mm<br>(2.813") | 8.0 mm<br>(0.313") | 99.6 mm<br>(3.92")  |
| CA100-35  | CA100M-4-2 | AT2-4-1       | 1-1/2"     | 74.6 mm<br>(2.938")       | 42.9 mm<br>(1.688") | 58.8 mm<br>(2.313") | 131 mm<br>(5.156") | 1/2" | 150 mm<br>(5.92")  | 69.1 mm<br>(2.719") | 8.0 mm<br>(0.313") | 99.6 mm<br>(3.92")  |
| CA100-46  | CA100M-4   | AT2-4-3       | 1-3/4"     | 84.1 mm<br>(3.313")       | 42.9 mm<br>(1.688") | 58.8 mm<br>(2.313") | 133 mm<br>(5.25")  | 1/2" | 150 mm<br>(5.92")  | 71.4 mm<br>(2.813") | 8.0 mm<br>(0.313") | 99.6 mm<br>(3.92")  |
| CA100-64  | NSS        | AT2-23        | 1-1/4"     | 68.3 mm<br>(2.688")       | 36.5 mm<br>(1.438") | 52.4 mm<br>(2.063") | 131 mm<br>(5.156") | 1/2" | 116 mm<br>(4.58")  | 34.9 mm<br>(1.375") | 8.0 mm<br>(0.313") | 65.5mm<br>(2.58")   |
| CA100-64G | CA100M-3   | N/A           | -          | 80.1mm<br>(3.155")        | Custom              | 52.4 mm<br>(2.063") | 131 mm<br>(5.156") | 1/2" | 111mm<br>(4.37")   | N/A                 | N/A                | 60.2mm<br>(2.37")   |
| CA100-66  | CA100M-4   | AT2-4-1       | 1-1/2"     | 74.6 mm<br>(2.938")       | 42.9 mm<br>(1.688") | 58.8 mm<br>(2.313") | 131 mm<br>(5.156") | 1/2" | 150 mm<br>(5.92")  | 69.1 mm<br>(2.719") | 8.0 mm<br>(0.313") | 99.6 mm<br>(3.92")  |

# MODEL 100 CARBURETOR

## CARBURETORS & MIXERS

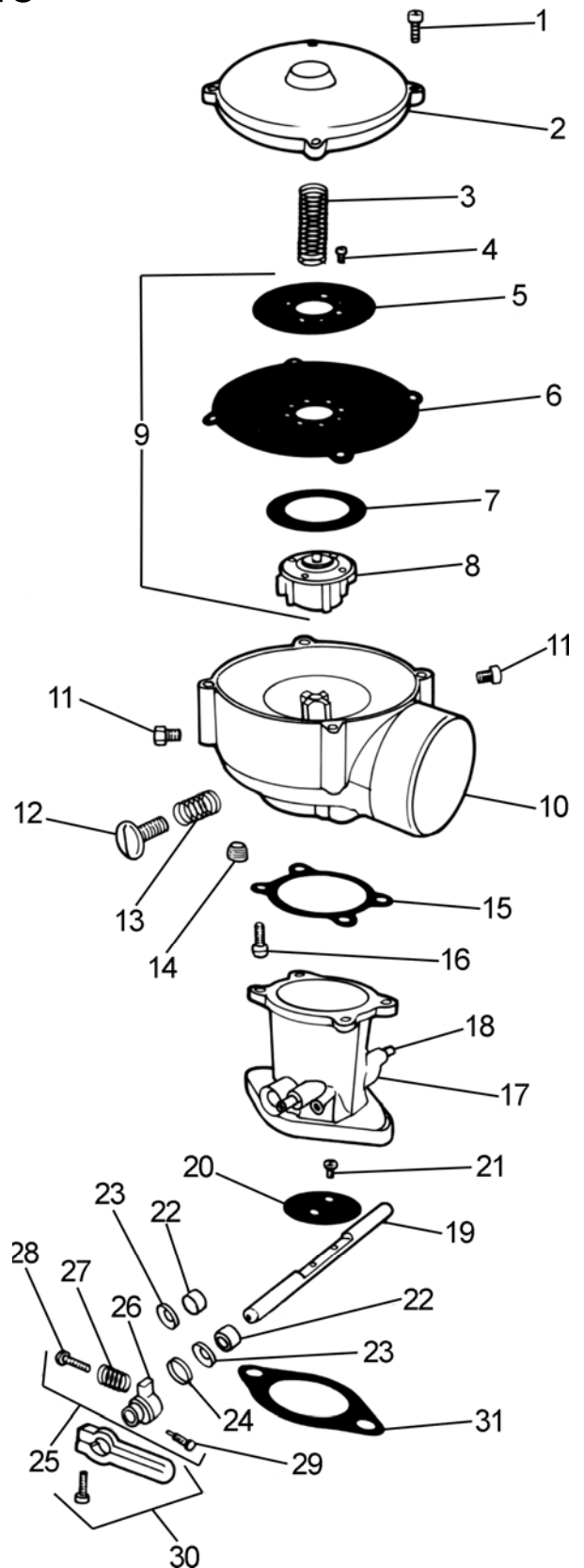


### DIMENSIONS (CONTINUED)

| STD. CARB   | MIXER    | THROTTLE BODY | SAE FLANGE | CTR. TO CTR. BOLT SPACING | BORE               | MIXER AIR HORN DIA. | OVERALL WIDTH      | NPT INLET | OVERALL HEIGHT      | THROTTLE BODY HEIGHT | THROTTLE SHAFT DIA. | FLANGE TO CTR. OF AIR HORN |
|-------------|----------|---------------|------------|---------------------------|--------------------|---------------------|--------------------|-----------|---------------------|----------------------|---------------------|----------------------------|
| CA100-90    | CA100M-4 | AT2-16-4      | 1.25-1.5"  | 71.6mm<br>(2.82")         | 42.9mm<br>(1.688") | 58.8mm<br>(2.313")  | 131mm<br>(5.156")  | 1/2"      | 122.7mm<br>(4.83")  | 41.3mm<br>(1.625")   | 8.0mm (0.313")      | 71.9mm<br>(2.83")          |
| CA100-108   | NSS      | AT2-23-6      | 1.25"      | 68.3mm<br>(2.688")        | 36.5mm<br>(1.438") | 52.4 mm<br>(2.063") | 131mm<br>(5.156")  | 1/2"      | 116.3 mm<br>(4.58") | 34.9mm<br>(1.375")   | 8.0mm (0.313")      | 67.06mm<br>(2.64")         |
| CA100-110   | CA100M-3 | NSS           | 1"         | 68.1mm<br>(2.688")        | 30.0mm<br>(1.188") | 52.4mm<br>(2.063")  | 131mm<br>(5.156")  | 1/2"      | 117mm<br>(4.625")   | 36.5mm<br>(1.438")   | 6.4mm (0.250")      | 67.06mm<br>(2.64")         |
| CA100-112   | CA100M-3 | NSS           | 1.25"      | 68.3 mm<br>(2.688")       | 37.6mm<br>(1.438") | 131 mm<br>(5.156")  | 131mm<br>(5.156")  | 1/2"      | 116.3mm<br>(4.58")  | 34.9mm<br>(1.375")   | 8.0mm (0.313")      | 65.53mm<br>(2.58")         |
| CA100-124-2 | CA100M-4 | BT2-2-3       | 1"         | 60.3mm<br>(1.188")        | 30.0mm<br>(1.188") | 58.8mm<br>(2.313")  | 131mm<br>(5.156")  | 1/2"      | 117 mm<br>(4.625")  | 36.5 mm<br>(1.438")  | 6.4mm (0.250")      | 67.06mm<br>(2.64")         |
| CA100-134   | CA100M-3 | NSS           | 1"         | 60.3mm<br>(1.188")        | 30.0mm<br>(1.188") | 131mm<br>(5.156")   | 131mm<br>(5.156")  | 1/2"      | 117 mm<br>(4.625")  | 36.5 mm<br>(1.438")  | 6.4mm (0.250")      | 67.06mm<br>(2.64")         |
| CA100-136   | CA100M-3 | BT2-23-10     | 1.25"      | 68.3mm<br>(2.688")        | 36.5mm<br>(1.438") | 52.4mm<br>(2.063")  | 131mm<br>(5.156")  | 1/2"      | 116.3 mm<br>(4.58") | 34.9 mm<br>(1.375")  | 8.0mm (0.313")      | 67.06mm<br>(2.64")         |
| CA100-138   | CA100M-3 | NSS           | 1"         | 60.3mm<br>(2.375")        | 30.0mm<br>(1.188") | 30.0 mm<br>(1.188") | 131mm<br>(5.156")  | 1/2"      | 117 mm<br>(4.625")  | 36.5 mm<br>(1.438")  | 6.4mm (0.250")      | 67.06mm<br>(2.64")         |
| CA100-139   | CA100M-3 | NSS           | 1"         | 68.3mm<br>(2.688")        | 36.5mm<br>(1.438") | 52.4mm<br>(2.063")  | 131mm<br>(5.156")  | 1/2"      | 117 mm<br>(4.625")  | 36.5 mm<br>(1.438")  | 6.4mm (0.250")      | 67.06mm<br>(2.64")         |
| CA100-180   | NSS      | BT2-23-849    | 1.25"      | 68.3mm<br>(2.688")        | 36.5mm<br>(1.438") | 52.4mm<br>(2.063")  | 131mm<br>(5.156")  | 1/2"      | 116.3mm<br>(4.58")  | 36.5 mm<br>(1.438")  | 6.4mm (0.250")      | 67.06mm<br>(2.64")         |
| CA100-245   | NSS      | NSS           |            | 71.6mm<br>(2.82")         | 42.2mm<br>(1.66")  |                     |                    |           |                     |                      |                     |                            |
| CA100-272   | CA100M-3 | AT2-23-6      | 1.25"      | 68.3 mm<br>(2.688")       | 37.6mm<br>(1.438") | 52.4mm<br>(2.063")  | 131mm<br>(5.156")  | 1/2"      | 116.3mm<br>(4.58")  | 34.9mm<br>(1.375")   | 8.0mm (0.313")      | 65.53mm<br>(2.58")         |
| CA100-183   | N/A      | NSS           |            | 74.7mm<br>(2.94")         | 31.0mm<br>(1.22")  | 52.3mm<br>(2.06")   | 100.3mm<br>(3.95") | 1/2"      | 134.6 mm<br>(5.30") | 41.1 mm<br>(1.62")   | 8.0mm (0.313")      | 82.55mm<br>(3.25")         |

### COMPONENTS

| ITEM# | PART#        | DESCRIPTION                               |
|-------|--------------|---|
| 1     | S1-3         | Screw, 10-24 x 5/8" SEMS (4)              |
| 2     | C1-17        | Cover                                     |
| 3     | S2-85        | Spring, air valve                         |
| 4     | S1-22        | Screw, 5-32 X 1/4" SEMS (4)               |
| 5     | P2-22        | Plate, backup                             |
| 6     | D1-17        | Diaphragm                                 |
|       | D1-17-2      | Diaphragm, Silicone                       |
| 7     | R1-19        | Ring, air valve                           |
| 8     | NSS          | Air Valve                                 |
| 9     | AV1-14       | Air Gas Valve Assy, Complete              |
|       | AV1-14-2-962 | Air Valve 30/35                           |
| 10    | NSS          | Body, CA100M & 110M 2-5/6" AH             |
| 11    | S1-69        | Screw, 1/4-28 x 5/16" (2)                 |
| 12    | S1-74        | Screw Idle                                |
| 13    | S2-88        | Spring, Idle Screw                        |
| 14    | NSS          | Plug, 1/8 NPT                             |
| 15    | G1-11        | Gasket, Throttle Body to Mixer            |
| 16    | S1-19        | Screw, 12-24 x 5/8" SEMS (4)              |
| 17    | NSS          | Throttle Body                             |
| 18    | NSS          | Pin, Throttle Stop (2)                    |
| 19    | S5-1         | Throttle shaft, 6.4 mm (0.25") dia.       |
|       | NSS          | Fly, 19.1mm (0.75")                       |
| 20    | NSS          | Fly, 25.4mm (1.00")                       |
|       | NSS          | Fly, 31.8mm (1.25")                       |
|       | NSS          | Fly, 38.1mm (1.50")                       |
| 21    | NSS          | Screw, 6-32 x 1/4" SEMS (2)               |
|       | NSS          | Bearing Oilite, 6.4mm (0.25") I.D. (2)    |
| 22    | NSS          | Bearing Oilite, 8.0mm (0.31") I.D. (2)    |
|       | NSS          | Bearing Needle, 8.0mm (0.31) I.D. Opt.    |
|       | NSS          | Seal, 6.4mm (0.25") shaft (2)             |
| 23    | NSS          | Seal, 8.0 mm (0.31") shaft (2)            |
|       | S3-25        | Seal, internal, 8.0 mm (0.31") I.D., Opt. |
| 24    | R1-9         | Ring, Seal Retainer                       |
| 25    | AL1-8-1      | Throttle Stop ass'y, 6.4 mm (0.25") I.D.  |
|       | AL1-8-2      | Throttle Stop ass'y, 8.0 mm (0.31") I.D.  |
| 26    | NSS          | Throttle Stop Lever, 6.4mm (0.25") I.D.   |
| 27    | S1-21        | Stop screw, 10-32 x 3/4"                  |
| 28    | S2-15        | Spring, Idle Stop Screw                   |
| 29    | S1-18        | Pin, Screw, Throttle Stop                 |
|       | NSS          | Throttle Lever, Short w/Screw             |
| 30    | NSS          | Throttle Lever, Long w/Screw              |
|       | G1-16        | Gasket, 19.1 mm (0.75") Flange            |
|       | G1-17        | Gasket, 25.4 mm (1.00") Flange            |
|       | G1-18        | Gasket, Flange 1-1/4" SAE                 |
| 31    | NSS          | Gasket, 31.8 mm (1.25") Flange            |



# MODEL 100 CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES

#### CA100 CARBURETORS

| PART#       | DESCRIPTION  |
|-------------|--|
| CA100-10    | Carb, 1-1/4" SAE flange, 2-5/16" Air Horn, lean flow   |
| CA100-108   | Carb, 1-1/4" SAE flange (short), 2-1/16" Air Horn, lean flow, low profile  |
| CA100-110   | Carb, 1" SAE flange, 2-1/16" Air Horn, drilled shaft, AL1-26-401   |
| CA100-112   | Carb, 1-1/4" SAE flange, 2-1/16" Air Horn, lean flow, short shaft  |
| CA100-12    | Carb, 1-1/2" SAE flange, 2-5/16" Air Horn  |
| CA100-124-2 | Carb. 1" x 2-1/16" Air Horn AT2-2  |
| CA100-134   | Carb, 1" SAE flange, 2-1/16" Air Horn, lean flow   |
| CA100-136   | Carb, 1-1/4" SAE flange, 2-1/16" Air Horn  |
| CA100-138   | Carb, 1" SAE flange, 1-1/16" Air Horn, Yale  |
| CA100-139   | Carb, 1" SAE flange, 2-1/16" Air Horn w/ bracket & swivel  |
| CA100-180   | Carb, 1-1/4" SAE flange, 2-1/16" Air Horn w/ L1-33, Clark  |
| CA100-183   | Carburetor Ass'y   |
| CA100-194   | Carb, AA3-67 adapter, 2-1/16" Air Horn, Clark  |
| CA100-270   | Carb Assy 1-1/4 X 2-1/16 Wis-Co  |
| CA100-272   | Carb, 1-1/4" SAE flange, 2-1/16" Air Horn, 100% flow, low Caterpillar  |
| CA100-35    | Carb, 1-1/2" SAE flange, 2-5/16" Air Horn, AL1-7-1 lever, silicone dia.  |
| CA100-46    | Carb, 1-3/4" SAE flange, 2-5/16" Air Horn  |
| CA100-498   | Carb. Ass'y NAACO (1389498)  |
| CA100-6     | Carb. 1" x 1 7/8"  |
| CA100-621   | Carb. 2-5/16 Air Horn, Mazda 2.2L, Yale  |
| CA100-64    | Carb, 1-1/4" SAE flange (short), 2-1/16" Air Horn  |
| CA100-64G   | Carb, 2-1/6" Air Horn, 70/75 flow, no throttle ass'y.  |
| CA100-66    | Carb, 1-1/2" SAE flange, 2-5/16" Air Horn, 72/80 flow 1-1/4" SAE flange, 2-5/16" Air Horn, 72/80 flow, low profile |
| CA100-7108  | Carburetor Ass'y (2817108)   |
| CA100-8     | 1-1/4" SAE flange, 2-1/16" Air Horn  |
| CA100-90    | 1-1/4" SAE flange, 2-5/16" Air Horn, lean flow, long shaft   |
| CA100-91A   | Carburetor Ass'y   |

#### MIXERS

| PART#      | DESCRIPTION                         |
|------------|-------------------------------------|
| CA100M-1   | 38.1mm (1.50") Air Horn             |
| CA100M-2   | 47.6mm (1.88") Air Horn             |
| CA100M-2-2 | 47.6mm (1.88") Air Horn Silicone    |
| CA100M-3   | 52.4mm (2.06") Air Horn             |
| CA100M-3-2 | 52.4mm (2.06") Air Horn Silicone    |
| CA100M-3-9 | Mixer Assembly                      |
| CA100M-4   | 58.7mm (2.31") Air Horn             |
| CA100M-4-2 | 58.7mm (2.31") Air Horn Silicone    |
| CA100M-4-9 | 58.7mm (2.31") Air Horn Special     |
| CA100M-5   | 41.3mm (1.63") Air Horn             |
| FB100M-4   | 58.7mm (2.31") Air Horn for Feeback |
| CA100M-636 | Mixer Ass'y Clark (2802636)         |

#### THROTTLE BODIES (STANDARD)

| PART#    | DESCRIPTION   |
|----------|---|
| AT2-1-5  | 3/4" SAE Flange, 6.4mm (0.25") Shaft Dia. w/vacuum                      |
| AT2-2    | 1" SAE flange, 6.4mm (0.25") Shaft dia.                                 |
| AT2-2-5  | 1" SAE flange, 6.4mm (0.25") Shaft dia. w/vacuum                        |
| AT2-2-6  | Throttle Assy 1" Long Shaft   |
| AT2-3    | 1-1/4" SAE flange, 8.0mm (0.31") dia.                                   |
| AT2-3-8  | 1-1/4"SAE Flange, 8.0mm (0.31") dia. Shaft w/vacuum                     |
| AT2-4-1  | 1-1/2" SAE flange, 8.0mm (0.31") Shaft dia.                             |
| AT2-4-3  | 1-3/4" SAE flange, 8.0mm (0.31") Shaft dia.                             |
| AT2-16-1 | 1-1/4" to 1-1/2" SAE flange, 8.0mm (0.31") Shaft dia.,                  |
| AT2-16-2 | 1-1/4" to 1-1/4" SAE flange, 8.0mm w/S5                                 |
| AT2-16-4 | 1-1/4" to 1-1/2" SAE flange, 8.0mm (0.31") Shaft dia. w/needle bearings |
| AT2-23   | 1-1/4" SAE flange, 8.0mm (0.31") Shaft dia.                             |
| AT2-23-4 | 1-1/4" SAE flange, 8.0mm (0.31") dia.                                   |
| AT2-23-5 | Throttle Body 1 - 1/4 w/S5-11   |
| AT2-23-6 | Throttle Body 1 - 1/4 w/T1-17   |
| AT2-23-7 | T/B w/T2-23 Tapped (LP Gas)   |

#### AIR GAS VALVES

| PART#        | DESCRIPTION                                  |
|--------------|--|
| AV1-14       | Standard, w/Hydrin Diaphragm, LPG            |
| AV1-14-12    | Air Valve Assy                               |
| AV1-14-2-838 | Air Gas Valve, 30/35 Clark                   |
| AV1-14-3     | Standard, w/Silicone Diaphragm, LPG          |
| AV1-14-76-2  | Air Valve With Silicone 61/68                |
| AV1-14-9-2   | Air Valve Ass'y, w/2 Check Valve             |
| AV1-14-2     | Lean, w/Hydrin Diaphragm, LPG                |
| AV1-14-220-2 | w/Silicone Diaphragm, LPG, for non-Feedback  |
| AV1-1447-2   | For standard feedback, w/ silicone diaphragm |
| AV1-25413    | Valve Assembly, Gas Air                      |
| AV1-14-12-2  | Air Valve Assy, Silicone                     |
| AV1-14-4     | Lean, w/Silicone Diaphragm, LPG              |
| CV1-14       | Air Gas Valve Ass'y,                         |
| CV1-14-2     | Special lean, w/ silicone diaphragm          |
| EV1-14-2     | w/ 42 valve & silicone diaphragm             |
| EV1-14-9     | Air Gas Valve V2 for CA100M-636              |



**ASSEMBLIES & ACCESSORIES  
(CONTINUED)**

**CLAMP**

| PART # | DESCRIPTION           |
|--------|-----------------------|
| AC2-29 | Clamp Ass'y, CA125-76 |

**GOVERNOR**

| PART # | DESCRIPTION                       |
|--------|-----------------------------------|
| AD1-85 | Diaphragm Assy, Throttle Governor |

**RING SPACER SPACERS ( OPTIONAL)**

| PART # | DESCRIPTION  |
|--------|--|
| R1-29  | Ring, air valve spacer, AV1-14 (to lean idle mixtures) |

**THROTTLE SHAFTS**

| PART # | DESCRIPTION   |
|--------|---|
| S5-1   | 6.4mm (0.25") dia. 114mm (4.50") long (stud on AT2-1, AT2-2)                            |
| S5-2   | 8.0mm (0.31")dia. 127mm (5.00") long (std on AT2-3, AT2-4-1, AT2-4-3, AT2-16-1, AT2-23) |
| S5-6   | 6.4mm (0.25") dia., 121mm (4.75") long  |
| S5-7   | 8.0mm (0.31") dia., 133mm (5.25") long  |
| S5-11  | 8.0mm (0.31") dia., 133mm (6.13") long  |

**ADAPTERS**

| PART #   | DESCRIPTION  |
|----------|--|
| AA3-29-1 | 100M to 2-1/16" hose   |
| A3-29-2  | 100M to 2-1/16" hose, tapped 12-24   |
| A3-31    | 100M to 2-1/4" hose  |
| AA3-32-1 | 100M to IMPCO 2B throttle body   |
| A3-31    | 100M to 2-1/4" hose  |
| AA3-32-1 | 100M to IMPCO 2B throttle body   |
| AA3-49   | 100M to Datsun C5-P5 Nikki throttle body   |
| AA3-50   | 100M to Datsun C3-P3 throttle body   |
| AA3-58   | 100M to throttle body, offset 11.1mm (0.44")   |
| A3-94    | Datsun 4-bolt to 1" SAE flange   |
| AS3-10   | Ass'y, 12.7 mm (0.50"), to turn Air Horn 90° A110-DP Model 110 Mixer (also repair kit) |

**LEVERS**

| PART #  | DESCRIPTION  |
|---------|--|
| AL1-7-1 | Ass'y 44.5mm (1.75") long (std. on AT2-3, AT2-4-1, AT2-4-3, AT2-16-1)        |
| AL1-7-2 | Ass'y w/ 6.4mm (0.25") ball stud, 44.5mm (1.75") long                        |
| AL1-7-3 | Ass'y, 33.3mm (1.31") long (std. on AT2-1, AT-2, AT2-23)                     |
| AL1-7-4 | Ass'y, w/ swivel, 44.5mm (1.75") long  |
| AL1-7-5 | Ass'y, w/ Wisconsin swivel, 6.4mm (0.25") mounting I.D., 20.6mm (0.81") long |
| AL1-8-2 | Stop ass'y, 8.0mm (0.31") mounting I.D., 19.1mm (0.75") long                 |

**LEVERS (CONTINUED)**

| PART#    | DESCRIPTION  |
|----------|--|
| AL1-25-1 | Ass'y, spring loaded, floating, 6.4mm (0.25") mounting I.D., 34.9mm (1.38") long w/ AC2-14-1 |
| AL1-25-2 | Ass'y, spring loaded, floating, 6.4mm (0.25") mounting I.D., 34.9mm (1.38") long w/ AC2-14-2 |
| AL1-26-1 | Ass'y, floating 6.4mm (0.25") mounting I.D., 54.0mm (2.13") long, w/ AC2-11                  |
| AL1-26-2 | Ass'y, floating, w/ swivel 6.4mm (0.25") mounting I.D., 54.0mm (2.13") long, w/ AC2-11       |
| AL1-27-1 | Ass'y, spring loaded, floating, 8.0mm (0.31") mounting 54.0mm (2.13") long, w/ AC2-12        |
| AL1-27-2 | Ass'y, floating w/ swivel, 8.0mm (0.31") mounting I.D., 54.0mm (2.13") long w/AC2-12         |
| AL1-31   | Ass'y Shaft clamp, 6.4mm (0.25") mounting I.D., 49.2mm (1.94") long                          |
| AL1-33   | Ass'y Shaft clamp, 8.0mm (0.31") mounting I.D., 49.2mm (1.94") long                          |
| AL1-46   | Ass'y Shaft clamp, 8.0mm (0.31") mounting I.D 47.6mm (1.88") long                            |

**RETURN SPRINGS**

| PART#    | DESCRIPTION                          |
|----------|--------------------------------------|
| AS2-50-1 | Throttle return, 6.4mm (0.25") Shaft |
| AS2-50-2 | Throttle return, 8.0mm (0.31") Shaft |

**BRACKET ASSEMBLIES (OPTIONAL)**

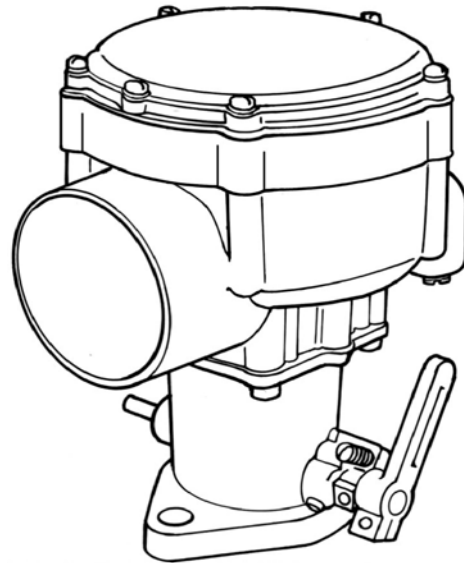
| PART#  | DESCRIPTION                     |
|--------|---------------------------------|
| AB4-2  | Boden Wire                      |
| AB4-19 | AS2-50-2 Throttle Return Spring |

## MODEL 110 CARBURETOR

### CARBURETORS & MIXERS



### MODEL CA110 CARBURETOR



#### DESCRIPTION

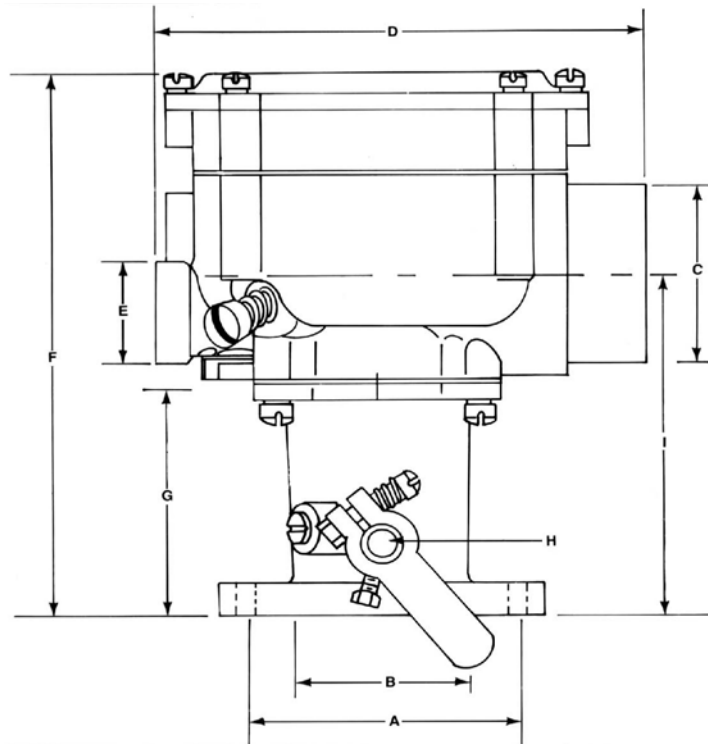
The Model 110 carburetor/mixer is designed primarily for one and two cylinder engines where severe intake manifold pressure pulsations are present. However, its use is not limited to these applications. Improved mixture control and air-gas valve durability can also benefit other applications in intake systems where pressure pulsations could adversely affect a standard 100/125 model assembly.

The Model 110 can be used with LPG Vapor or Natural Gas in applications requiring up to 170 CFM (80.2 L/s). All mixers and complete carburetors use a standard air-gas metering valve that provides adequate fuel mixture range with the appropriate positive (Natural Gas) or negative (LPG Vapor) vaporizer/regulator. It is possible to use other air-gas metering valves and body assemblies from the 100/125 model and may have to be ordered as a separate component part.

#### SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Fuel Type .....                   | LPG Vapor or Natural Gas   |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)   |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)                                      |
| Mounting Position.....            | Vertical   |
| Diaphragm Material.....           | Hydrin or Silicone   |
| HP/kW Rating.....                 | 106 HP (79 kW) @ 170 CFM (80.2 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**



| STD. CARB. | MIXER  | THROTTLE BODY | SAE FLANGE | CTR. TO CTR. BOLT SPACING | BORE               | MIXER AIR HORN DIA | OVERALL WIDTH     | NPT INLET FITTING | OVERALL HEGITH    | THROTTLE BODY HEIGHT | THROTTLE SHAFT DIA. | FLANGE TO CTR. OF AIR HORN |
|------------|--------|---------------|------------|---------------------------|--------------------|--------------------|-------------------|-------------------|-------------------|----------------------|---------------------|----------------------------|
| 110-12     | 110M-4 | AT2-4-1       | 1-1/2"     | 74.6mm<br>(2.938")        | 42.9mm<br>(1.688") | 58.7mm<br>(2.313") | 131mm<br>(5.156") | 1/2"              | 159mm<br>(6.281") | 69.1mm<br>(2.719")   | 7.9mm<br>(0.313")   | 99.6mm (3.92")             |
| 110-66-2   | 110M-4 | AT2-4-1       | 1-1/2"     | 74.6mm<br>(2.938")        | 42.9mm<br>(1.688") | 58.7mm<br>(2.313") | 131mm<br>(5.156") | 1/2"              | 159mm<br>(6.281") | 69.1mm<br>(2.719")   | 7.9mm<br>(0.313")   | 99.6mm (3.92")             |

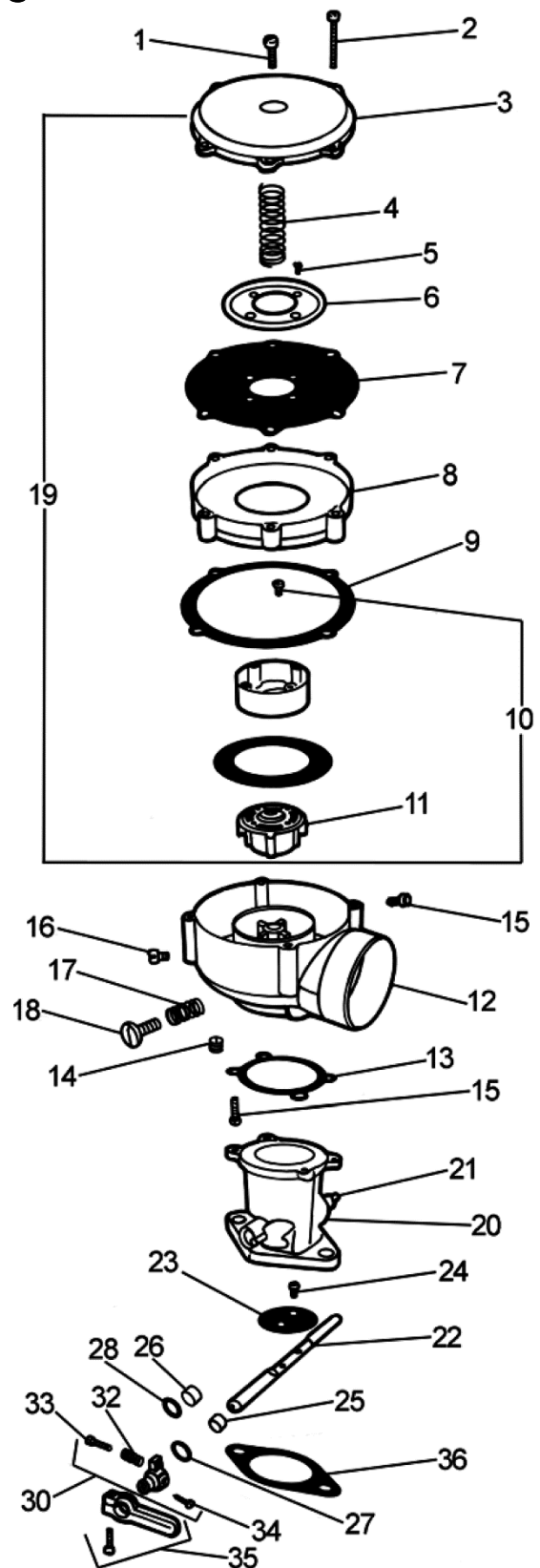
# MODEL 110 CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS

| ITEM# | PART#     | DESCRIPTION                              |
|-------|-----------|--|
| 1     | NSS       | Screw, 10-24 x 5/8" SEMS (2)             |
| 2     | S1-41     | Screw, 10-24 x 1-3/8" SEMS (4)           |
| 3     | NSS       | Cover                                    |
| 4     | S2-13     | Spring, air valve                        |
| 5     | S1-12     | Screw, 8-32 x 5/16" SEMS (4)             |
| 6     | P2-15     | Plate, backup                            |
| 7     | D1-13     | Diaphragm                                |
|       | D1-13-2   | Diaphragm, silicone                      |
| 8     | P2-14     | Plate, divide                            |
| 9     | G1-13     | Gasket, plate to body                    |
| 10    | NSS       | Spacer Assy                              |
|       | NSS       | Spacer Only                              |
| 11    | BV1-14    | Air gas valve Assy, complete             |
| 12    | NSS       | 1-8-4 Body Assy                          |
| 13    | G1-11     | Gasket, throttle body to mixer           |
| 14    | NSS       | Plug, 1/8 NPT                            |
| 15    | S1-19     | Screw, 12-24 x 5/8" SEMS (4)             |
| 16    | S1-69     | Screw, 1/4 -28 x 5/16" (2)               |
| 17    | S2-88     | Spring, idle scre                        |
| 18    | S1-74     | Screw, idle                              |
| 19    | A110-DP   | Dashpot Assy                             |
|       | A110-DP-2 | Dashpot Assy, Silicone                   |
| 20    | NSS       | Throat, 3/4" SAE flange                  |
| 21    | NSS       | Pin, throttle stop (2)                   |
| 22    | S5-1      | Throttle shaft, 6.4 mm (0.25") dia.      |
|       | S5-2      | Throttle shaft, 8.0 mm (0.31") dia.      |
| 23    | NSS       | Fly, 19.1 mm (0.75")                     |
|       | NSS       | Fly, 25.4mm (1.00")                      |
|       | NSS       | Fly, 38.1 mm (1.50")                     |
|       | NSS       | Fly, 44.5 mm (1.75")                     |
| 24    | S1-22     | Screw, 6-32 x 1/4" SEMS (2)              |
|       | S1-12     | Screw, 8-32 x 5/16" SEMS (2)             |
| 25    | NSS       | Bearing Oilite, 6.4 mm (0.25") ID.       |
| 26    | NSS       | Bearing needle, 6.4 mm (0.25")           |
| 27    | NSS       | Seal, 6.4 mm (0.25") shaft (2)           |
|       | NSS       | Seal, 8.0 mm (0.31") shaft (2)           |
| 28    | S3-25     | Seal, internal, 8.0mm (0.31") ID.,       |
| 29    | R1-9      | Ring, seal retainer (2)                  |
| 30    | NSS       | Throttle stop ass'y, 6.4mm (0.25") ID.   |
|       | AL1-8-2   | Throttle stop ass'y, 8.0mm (0.31") ID.   |
| 31    | NSS       | Throttle stop lever                      |
| 32    | S2-15     | Spring, idle stop screw                  |
| 33    | S1-21     | Stop screw, 6-32 x 1/4"                  |
| 34    | S1-18     | Pin, screw, throttle stop                |
| 35    | NSS       | Throttle lever, short w/screw            |
|       | AL1-7-1   | Throttle lever, long w/screw             |
| 36    | G1-16     | Gasket, 19.1 mm (0.75") flange           |
|       | G1-17     | Gasket, 25.4mm (1.00") flange            |
|       | G1-18     | Gasket, 31.8mm (1.25") flange            |
|       | G1-19     | Gasket, 38.1 mm (1.50") flange           |
|       | G1-23     | Gasket, 44.5mm (1.75") flange            |
|       | G1-56     | Gasket, 31.8-38.1 mm (1.25-1.50") flange |







# MODEL 110 CARBURETOR

## CARBURETORS & MIXERS

### ASSEMBLIES & ACCESSORIES

#### MIXERS, LP GAS (STANDARD)

| PART#    | DESCRIPTION              |
|----------|--------------------------|
| 110M-4   | 58.7 mm (2.31") Air Horn |
| 110M-4-2 | 58.7 mm (2.31") Air Horn |

#### LEVERS

| PART#    | DESCRIPTION  |
|----------|--|
| AL1-7-1  | Ass'y, 44.5 mm (1.75") long  |
| AL1-7-2  | Ass'y, w/ 6.4 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   |
| AL1-7-5  | Ass'y, w/ Wisconsin swivel, 6.4 mm (0.25") mounting I.D., 20.6 mm (0.81") long                 |
| AL1-8-1  | Stop ass'y, 6.4 mm (0.25") mounting I.D., cutdown, 19.1 mm (0.75") long (std. on AT2-1, AT2-2) |
| AL1-8-2  | Stop ass'y, 8.0 mm (0.31") mounting I.D., 19.1 mm (0.75") long                                 |
| AL1-25-1 | Ass'y, spring loaded, floating, 6.4 mm (0.25") mounting I.D., 34.9mm(1.38") long, w/ AC2-14-1  |
| AL1-25-2 | Ass'y, spring loaded, floating, 8.0 mm (0.31") mounting I.D., 34.9 mm(1.38") long, w/AC2-14-2  |
| AL1-26-1 | Ass'y, floating, 6.4 mm (0.25") mounting I.D.,   |
| AL1-26-2 | 54.0 mm (2.13") long, w/AC2-11   |
| AL1-27-1 | Ass'y, floating, w/ swivel, 6.4 mm (0.25") mounting I.D., 54.0 mm (2.13") long, w/AC2-11       |
| AL1-27-2 | Ass'y, floating, 8.0 mm (0.31") mounting I.D.,   |
| AL1-31   | 54.0 mm (2.13") long, w/AC2-12   |
| AL1-33   | Ass'y, floating, w/swivel, 8.0 mm (0.31") mounting I.D., 54.0 mm (2.13") long, w/AC2-12        |
| AL1-46   | Ass'y, shaft clamp, 6.4 mm (0.25") mounting I.D., 49.2 mm (1.94") long                         |
| AL1-27-2 | Ass'y, shaft clamp, 8.0 mm (0.31") mounting I.D., 49.2 mm (1.94") long                         |

NOTE: AL1-7-1 through AL1-7-4 levers used w/AL1-8 lever stop.

#### THROTTLE SHAFTS

| PART# | DESCRIPTION                              |
|-------|--|
| S5-1  | 6.4 mm (0.25") dia., 114 mm (4.50") long |
| S5-2  | 8.0 mm (0.31") dia., 127 mm (5.00") long |
| S5-6  | 6.4 mm (0.25") dia., 121 mm (4.75") long |
| S5-7  | 8.0 mm (0.31") dia., 133 mm (5.25") long |
| S5-11 | 8.0 mm (0.31") dia., 156 mm (6.13") long |

#### THROTTLE BODIES (STANDARD)

| PART#    | DESCRIPTION  |
|----------|--|
| AT2-1    | 1" SAE flange, 6.4 mm (0.25") shaft dia.   |
| AT2-2    | 1" SAE flange, 6.4 mm (0.25") shaft dia., w/ vacuum advance                                |
| AT2-2-5  | 1-1/4" SAE flange, 8.0 mm (0.31") dia.   |
| AT2-3    | 1-1/4" SAE flange, 8.0 mm (0.31") dia., w/ vacuum advance                                  |
| AT2-3-8  | 1-1/2" SAE flange, 8.0 mm (0.31") shaft dia.   |
| AT2-4-1  | 1-3/4" SAE flange, 8.0 mm (0.31") shaft dia.   |
| AT2-4-3  | 1-3/4" SAE flange, 8.0 mm (0.31") shaft dia., w/ needle bearings                           |
| AT2-16-1 | 1-1/4" to 1-1/2" flange, 8.0 mm (0.31") shaft dia., w/ needle bearings & internal seal     |
| AT2-16-3 | 1-1/4" to 1-1/2" SAE flange, 8.0 mm (0.31") shaft dia., w/ needle bearings                 |
| AT2-16-4 | 1-1/4" SAE flange, 8.0 mm (0.31") shaft dia.   |
| AT2-23   | 1-1/4" to 1-1/2" SAE flange, 8.0 mm (0.31") shaft dia., w/ needle bearings & internal seal |
| AT2-23-4 | 1-1/4" SAE flange, 8.0 mm (0.31") shaft dia., w/ vacuum advance                            |

#### RETURN SPRING ASSEMBLIES

| PART#    | DESCRIPTION   |
|----------|---|
| AS2-50-1 | Throttle return, 6.4 mm (0.25") shaft AB4-2 Boden wire AS2-50-2 Throttle return, 8.0 mm (0.31") shaft |

#### SPACERS (OPTIONAL)

| PART#  | DESCRIPTION   |
|--------|---|
| AS3-10 | Ass'y, 12.7 mm (0.50"), to turn Air Horn 90° A110-DP Model 110 Mixer (also repair kit)        |
| AS3-22 | 16.7 mm (0.66"), air valve A110-DP-2 Model 110 Mixer, w/ silicone diaphragm (also repair kit) |
| AS3-43 | Ass'y, 4.8 mm (0.19"), to turn Air Horn 90°   |

#### CARBURETORS/MIXERS

| PART#    | DESCRIPTION  |
|----------|--|
| 110-12   | Carb, 1-1/2" SAE flange, 2-5/16" Air Horn, Oilite bearings w/ Silicone |
| 110-12-2 | Carb, 1-1/4 x 2-5/16 w/ AS2-50-2                                       |
| 110-164  | Carb, 1-1/2" SAE flange, 1-1/4X2-5/16 W/As2-50-2                       |
| 110-66-2 | Carb, 2-5/16" Air Horn, silicone diaphragm                             |
| 110M-4-2 | Mixer, with Silicone   |

#### BRACKETASSEMBLIES(OPTIONAL)

| PART# | DESCRIPTION |
|-------|-------------|
| AB4-2 | Boden Wire  |

#### DASHPOT ASSEMBLIES (STANDARD)

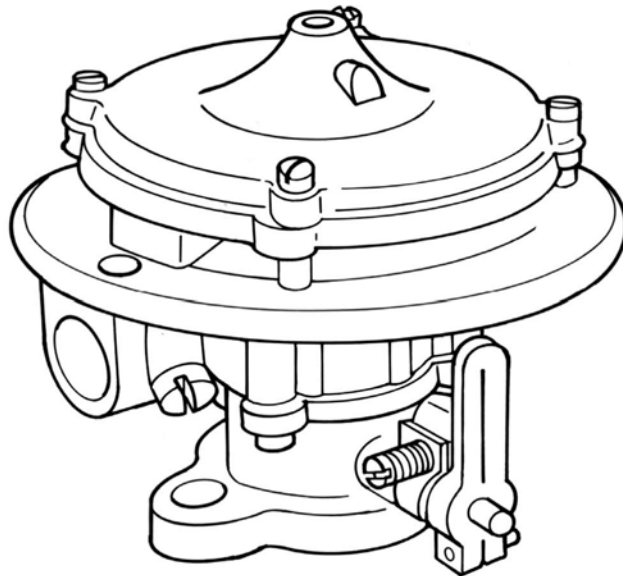
| PART#     | DESCRIPTION                      |
|-----------|----------------------------------|
| A110-DP   | Dashpot Assy 110 Mixer           |
| A110-DP-2 | Dashpot Assy 110 Mixer, Silicone |

# MODEL 125 CARBURETOR

## CARBURETORS & MIXERS



### MODEL CA125 CARBURETOR



#### DESCRIPTION

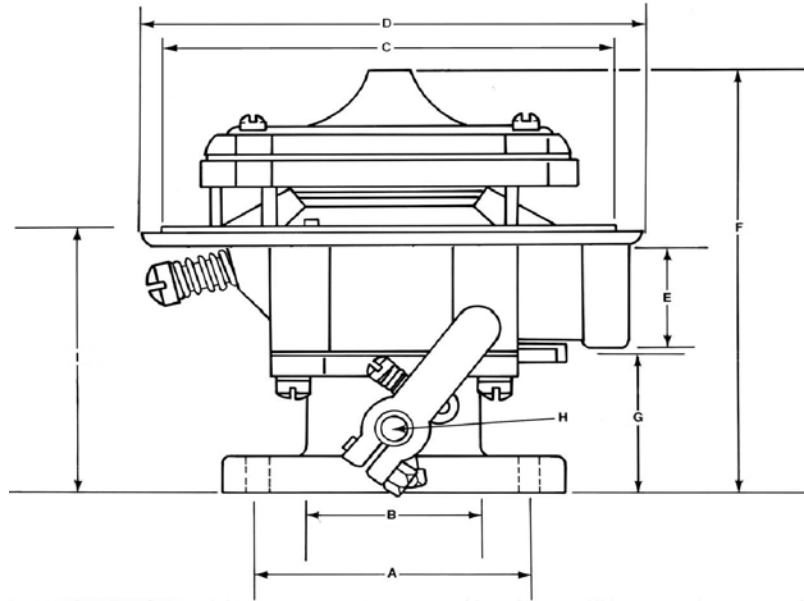
The Model 125 carburetor is a single-diaphragm air valve carburetor/mixer for applications requiring air flow up to 235 CFM (111 L/s). It offers a down draft air inlet that can be used for remote air filtration or open-element type air filters. This unit is available for LPG Vapor and Natural Gas Vapor applications. The Model 125 is also available for feedback applications with the "FB" designation.

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.

#### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type .....                   | LPG Vapor or Natural Gas  |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)                                       |
| Mounting Position.....            | Vertical  |
| Diaphragm.....                    | Hydrin or Silicone  |
| HP/kW .....                       | 126 HP (94kW) @ 202 CFM (95 L/s) and 1.5" in Hg manifold depression     |
|                                   | 146 HP (108.8kW) @ 235 CFM (111 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**



| STD. CARB   | MIXER     | THRTL. BODY | SAE FLANGE    | A                               | B                  | C                     | D                 | E            | F                   | G                        |
|-------------|-----------|-------------|---------------|---------------------------------|--------------------|-----------------------|-------------------|--------------|---------------------|--------------------------|
|             |           |             |               | CTR. TO<br>CTR. BOLT<br>SPACING | BORE               | MIXER AIR<br>HORN DIA | OVRAL.<br>WIDTH   | NPT<br>INLET | OVERALL<br>HEIGHT   | THRTL.<br>BODY<br>HEIGHT |
| CA125-6     | CA125M    | AT2-16-1    | 1.25" X 1.50" | 71.4mm<br>(2.813")              | 42.9mm<br>(1.688") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 141mm<br>(5.563")   | 41.3mm<br>(1.625")       |
| CA125-8     | CA125M    | AT2-16-1    | 1.25" X 1.50" | 71.4mm<br>(2.813")              | 42.9mm<br>(1.688") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 141mm<br>(5.563")   | 41.3mm<br>(1.625")       |
| CA125-26    | CA125M    | AT2-16-1    | 1.25" X 1.50" | 71.4mm<br>(2.813")              | 42.9mm<br>(1.688") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 141mm<br>(5.563")   | 41.3mm<br>(1.625")       |
| CA125-38    | CA125M    | AT2-23-5    | 1.25"         | 68.3mm<br>(2.688")              | 36.5mm<br>(1.438") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 119mm<br>(4.688")   | 34.9mm<br>(1.375")       |
| CA125-44    | CA125M    | AT2-3-3     | 1.25"         | 68.3mm<br>(2.688")              | 36.5mm<br>(1.438") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 154.1mm<br>(4.688") | 69.1mm<br>(2.719")       |
| CA125-52    | CA125M    | AT2-16-1    | 1.25" X 1.50" | 71.4mm<br>(2.813")              | 42.9mm<br>(1.688") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 141mm<br>(5.563")   | 41.3mm<br>(1.625")       |
| CA125-76-2  | CA125M -2 | AT2-23-6    | 1.25"         | 68.3mm<br>(2.688")              | 36.5mm<br>(1.438") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 119mm<br>(4.688")   | 34.9mm<br>(1.375")       |
| CA125-100-2 | CA125M-2  | BT2-16-100  | 1.25" X 1.50" | 71.4mm<br>(2.813")              | 42.9mm<br>(1.688") | 130mm<br>(5.125")     | 140mm<br>(5.500") | 1/2"         | 141mm<br>(5.563")   | 41.3mm<br>(1.625")       |
| CA125-134   | NSS       | AT2-60G-1   | N/A           | N/A                             | N/A                | N/A                   | N/A               | 1/2"         | N/A                 | N/A                      |

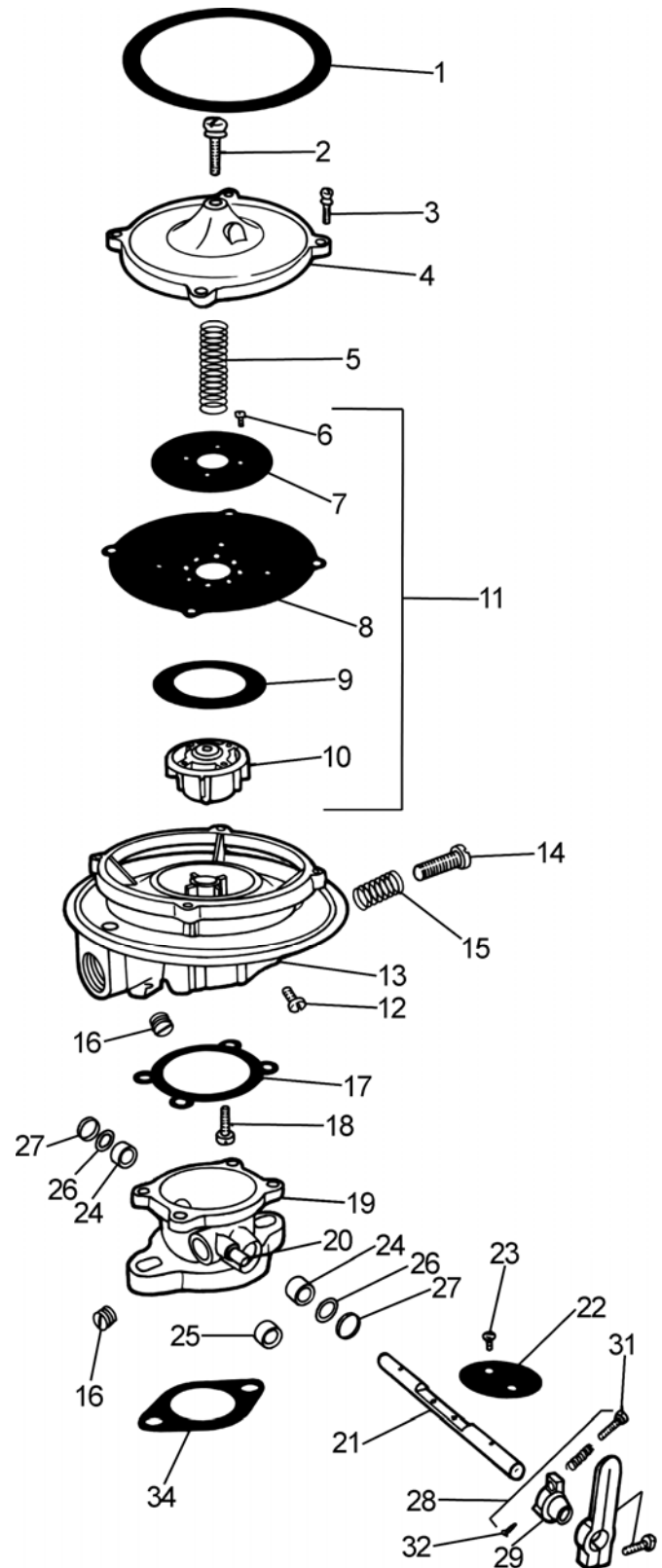
# MODEL 125 CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS

| ITEM# | PART#    | DESCRIPTION                                       |
|-------|----------|---|
| 1     | G1-66    | Gasket, mixer to Air Horn                         |
| 2     | NSS      | Screw, 1/4-20 x 1" SEMS                           |
| 3     | S1-3     | Screw, 10-24 x 5/8" SEMS (4)                      |
| 4     | C1-26    | Cover, air valve                                  |
| 5     | S2-85    | Spring, air valve                                 |
| 6     | S1-22    | Screw, 5-32 x 1/4" SEMS (4)                       |
| 7     | P2-22    | Plate, backup                                     |
| 8     | D1-17    | Diaphragm   |
|       | D1-17-2  | Diaphragm, silicone                               |
| 9     | R1-19    | Ring, air valve                                   |
| 10    | BV1-14   | Air gas valve ass'y, complete                     |
| 11    | AV1-14   | Std Valve & Diaphragm, LPG                        |
|       | AV1-14-3 | Std Valve & Diaphragm, Silicone LPG               |
| 12    | S1-69    | Screw, 1/4-28 x 5/16" (3)                         |
| 13    | NSS      | Body ass'y  |
| 14    | NSS      | Screw, idle                                       |
| 15    | S2-16    | Screw, idle screw                                 |
| 16    | NSS      | Plug, 1/8 NPT                                     |
| 17    | NSS      | Gasket, throttle body to mixer                    |
| 18    | S1-19    | Screw, 12-24 x 5/8" SEMS (4)                      |
| 19    | NSS      | (Refer to chart for correct AT2-assembly)         |
| 20    | NSS      | Pin, throttle stop (2)                            |
| 21    | S5-1     | Throttle shaft, 6.4 mm (0.25") dia.               |
|       | S5-2     | Throttle shaft, 8.0 mm (0.31") dia.               |
| 22    | NSS      | Fly, 19.1 mm (0.75")                              |
|       | NSS      | Fly, 25.4 mm (1.00")                              |
|       | NSS      | Fly, 38.1 mm (1.50")                              |
|       | NSS      | Fly, 44.5 mm (1.75")                              |
| 23    | NSS      | Screw, 6-32 x 1/4" SEMS (2)                       |
|       | S1-12    | Screw, 8-32 x 5/16" SEMS (2)                      |
| 24    | NSS      | Bearing Oilite, 6.4 mm (0.25") I.D. (2)           |
| 25    | NSS      | Bearing needle, 6.4 mm (0.25") I.D.,              |
|       | NSS      | Seal, 6.4 mm (0.25") shaft (2)                    |
| 26    | NSS      | Seal, 8.0 mm (0.31") shaft (2)                    |
|       | S3-25    | Seal, internal, 8.0 mm (0.31") I.D., opt. (2)     |
| 27    | R1-9     | Ring, seal retainer (2)                           |
| 28    | NSS      | Throttle stop ass'y 8.0 mm (0.31") I.D.           |
| 29    | NSS      | Throttle stop lever                               |
| 30    | S2-15    | Spring, idle stop screw                           |
| 31    | S1-21    | Stop screw, 10-32 x 3/4"                          |
| 32    | S1-18    | Pin, screw, throttle stop                         |
| 33    | AL1-7-3  | Throttle lever, short, w/screw                    |
|       | AL1-7-1  | Throttle lever, long, w/screw                     |
| 34    | G1-16    | Gasket, 19.1 mm (0.75") flange                    |
|       | G1-17    | Gasket, 1" flange                                 |
|       | NSS      | Gasket, 25.4 mm (1.00") flange                    |
|       | NSS      | Gasket, 31.8 mm (1.25") flange                    |
|       | NSS      | Gasket, 38.1 mm (1.50") flange                    |
|       | G1-23    | G1-23 Gasket, 44.5 mm (1.75") flange              |
|       | G1-56    | G1-56 Gasket, 31.8 - 38.1 mm (1.25 -1.50") flange |





# MODEL 125 CARBURETOR

## CARBURETORS & MIXERS

### ASSEMBLIES & ACCESSORIES

#### MIXERS, LP GAS (STANDARD)

| PART#       | DESCRIPTION                                     |
|-------------|---|
| CA125M      | Mixer   |
| CA125M-10   | Mixer, complete vac. Lifter 100% Flow           |
| CA125M-10-2 | Mixer, complete vac. Lifter 100% Flow, Silicone |
| CA125M-2    | ASM Mixer w/ silicone diaphragm dia.            |
| CA125M-292  | Mixer, Ass'y for CA125-134                      |
| CA125M-3    | Mixer, Lean                                     |

#### THROTTLE SHAFTS

| PART# | DESCRIPTION                              |
|-------|--|
| S5-1  | 6.4mm (0.25") dia., 114mm (4.50") long   |
| S5-2  | 8.0 mm (0.31") dia., 127 mm (5.00)" long |
| S5-6  | 6.4 mm (0.25") dia., 121 mm (4.75)" long |
| S5-7  | 8.0 mm (0.31") dia., 133 mm (5.25)" long |
| S5-11 | 8.0 mm (0.31") dia., 156 mm (6.13)" long |

#### RING SPACERS

| PART# | DESCRIPTION                                      |
|-------|--|
| R1-20 | Donaldson, V, 58.7 mm (2.31") dia                |
| R1-29 | Air valve spacer, AV1-14 (to lean idle mixtures) |

#### AIR CLEANER ASSEMBLIES

| PART#   | DESCRIPTION   |
|---------|---|
| AF1-5   | 71 L/s (150 cfm), 172 mm (6.75") O.D., 60.3 mm (2.38") high   |
| F1-5    | Filter, elem Air CA125 150cfm                                 |
| AF1-8   | 118 L/s (2.50 cfm), 234 mm (9.25") O.D., 76.2 mm (3.00")      |
| AL1-8-2 | 118 L/s (2.50 cfm), 234 mm (9.25") O.D., 76.2 mm (3.00") high |
| AF1-14  | 236 L/s (500 cfm), 228 mm (9.00") O.D., 191 mm (7.50")        |
| C1-28   | Cover, F1-5   |

#### THROTTLE BODIES (STANDARD)

| PART#    | DESCRIPTION  |
|----------|--|
| AT2-1    | 3/4" SAE flange, 6.4mm (0.25") Shaft dia.                  |
| AT2-2    | 1" SAE flange, 6.4 mm (0.25") shaft dia.                   |
| AT2-2-5  | 1" SAE flange, 6.4 mm (0.25") shaft dia., w/vacuum advance |
| AT2-3    | 1-1/4" SAE flange, 8.0 mm (0.31") shaft dia.               |
| AT2-3-8  | 1-1/4" SAE flange, 8.0 mm (0.31") shaft dia., w/ vacuum    |
| AT2-4-1  | 1-1/2" SAE flange, 8.0 mm (0.31") shaft dia.               |
| AT2-4-3  | 1-3/4" SAE flange, 8.0 mm (0.31") shaft dia.               |
| AT2-16-1 | 1-1/4" to 1/2" SAE flange, 8.0 mm (0.31") shaft dia., no   |
| AT2-16-4 | 1-1/4" to 1/2" SAE flange, 8.0 mm (0.31") shaft w/needle   |
| AT2-23   | 1-1/4" SAE flange, 8.0 mm (0.31") shaft dia.               |
| AT2-23-4 | 1-1/4" to 1/2" SAE flange, 8.0 mm (0.31") shaft dia., w/   |
| AT2-2-6  | Throttle Ass'y, 1" Long Shaft                              |

NOTES: \* AT2-16's have vacuum port.

\* The above throttle bodies are offset.

#### SPACERS (OPTIONAL)

| PART#  | DESCRIPTION                                  |
|--------|--|
| AS3-10 | Ass'y, 12.7 mm (0.50"), to turn Air horn 90° |
| AS3-43 | Ass'y, 4.8 mm (0.19"), to turn Air horn 90°  |

#### BRACKET ASSEMBLIES (OPTIONAL)

| PART#  | DESCRIPTION                       |
|--------|-----------------------------------|
| AB4-2  | Throttle Cable/Boden Wire Bracket |
| AB4-19 | AS2-50-2 Throttle Return Springs  |

#### RETURN SPRING ASSEMBLIES

| PART#    | DESCRIPTION                           |
|----------|---------------------------------------|
| AS2-50-1 | Throttle return, 6.4 mm (0.25") shaft |
| AS2-50-2 | Throttle return, 8.0 mm (0.31") shaft |

#### LEVERS

| PART#    | DESCRIPTION   |
|----------|---|
| AL1-7-1  | Ass'y, 44.5 mm (1.75") long                         |
| AL1-7-2  | Ass'y, w/ 6.4 mm (0.25") ball stud, 44.5 mm, long   |
| AL1-7-3  | Ass'y, 33.3 mm (1.31") long                         |
| AL1-7-4  | Ass'y, w/ swivel, 44.5 mm (1.75") long              |
| AL1-7-5  | Ass'y, w/ Wisconsin swivel, 6.4 mm (0.25")          |
| AL1-8-1  | Stop ass'y, 6.4 mm (0.25") mounting I.D., 19.1      |
| AL1-8-2  | Stop ass'y, 8.0 mm (0.31") mounting I.D., 19.1      |
| AL1-25-1 | Ass'y, spring loaded, floating, 6.4 mm (0.25")      |
| AL1-25-2 | Ass'y spring loaded, floating, 8.0 mm (0.31")       |
| AL1-26-1 | Ass'y, floating, 6.4 mm (0.25") mounting I.D., 54.0 |
| AL1-26-2 | Ass'y, floating, w/ swivel, 6.4 mm (0.25")          |
| AL1-27-1 | Ass'y, floating, 8.0 mm (0.31") mounting I.D., 54.0 |
| AL1-27-2 | Ass'y, floating, w/ swivel, 8.0 mm (0.31")          |
| AL1-31   | Ass'y, shaft clamp, 6.4 mm (0.25") mounting I.D.,   |
| AL1-33   | Ass'y, shaft clamp, 8.0 mm (0.31") mounting I.D.,   |
| AL1-46   | Ass'y, steel shaft clamp, 8.0 mm (0.31") mounting   |

#### CLAMP

| PART#  | DESCRIPTION          |
|--------|----------------------|
| AC2-29 | Clamp Assy, CA125-76 |

#### GOVERNOR

| PART#     | DESCRIPTION                         |
|-----------|-------------------------------------|
| AD1-85    | Diaphragm, Asst. Throttle, governor |
| AT2-60G-1 | Governor, Hyster 2V                 |
| AT2-77G   | Governor, Assy                      |
| AT2-200   | Governor, Assy LPG                  |

#### ADAPTERS

| PART#   | DESCRIPTION                                 |
|---------|---|
| A1-53   | Adapter, 125 Series Carb                    |
| A2-7    | Air Horn, 66.7 mm (2.63") dia.              |
| A2-8    | Air Horn, 58.7 mm (2.31") dia.              |
| A2-9    | Air Horn, 56.4 mm (2.22") dia.              |
| A2-33   | Air Horn, 80 mm (3.16") dia.                |
| A2-34   | Air Horn, 54 mm (2.13") dia.                |
| A3-28   | 200M, CA22M to 77.8 mm (3.06") hose (use w/ |
| A3-29-1 | Adapt. CA100M to CA125M to 2-1/16"          |

# MODEL 125 CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES

#### ADAPTERS (CONTINUED)

| PART#    | DESCRIPTION                                     |
|----------|---|
| AA3-29-1 | CA125M to 52.4 mm (2.06") hose                  |
| AA3-29-2 | CA125M to 52.4 mm (2.06") hose, tapped 12-24    |
| A3-31    | CA125M to 57.2 mm (2.25") hose                  |
| AA3-32-1 | CA125M to IMPCO 2B throttle body                |
| AA3-49   | CA125M to Datsun C5-P5 Nikki throttle body      |
| AA3-50   | CA125M to Datsun C3-P3 throttle body            |
| AA3-58   | CA125M to throttle body, 11.1 mm (0.44") offset |
| A3-94    | Datsun 4 bolt to 1" SAE Flange                  |

#### AIR-GAS VALVE ASSEMBLIES

| PART#         | DESCRIPTION                              |
|---------------|--|
| AV1-14        | Std, w/hydrin, diaphragm, LPG            |
| AV1-14-2      | Lean, w/hydrin, diaphragm, LPG           |
| AV1-14-3      | Std, w/silicone, diaphragm, LPG          |
| AV1-14-4      | Lean, w/silicone, diaphragm, LPG         |
| AV1-14-220-2  | W/silicone, diaphragm, for non-feedback  |
| AV1-1447-2    | For std. feedback, w/silicone, diaphragm |
| CV1-14        | Special lean, w/hydrin, diaphragm        |
| CV1-14-2      | Special lean, w/silicone, diaphragm      |
| EV1-14        | W/42 valve                               |
| EV1-14-2      | W/42 valve & silicone diaphragm          |
| EV1-14-4      | Air Gas Valve Assembly                   |
| AV1-30692-001 | Air Gas Valve Assembly                   |



**MODEL 125 CARBURETOR**

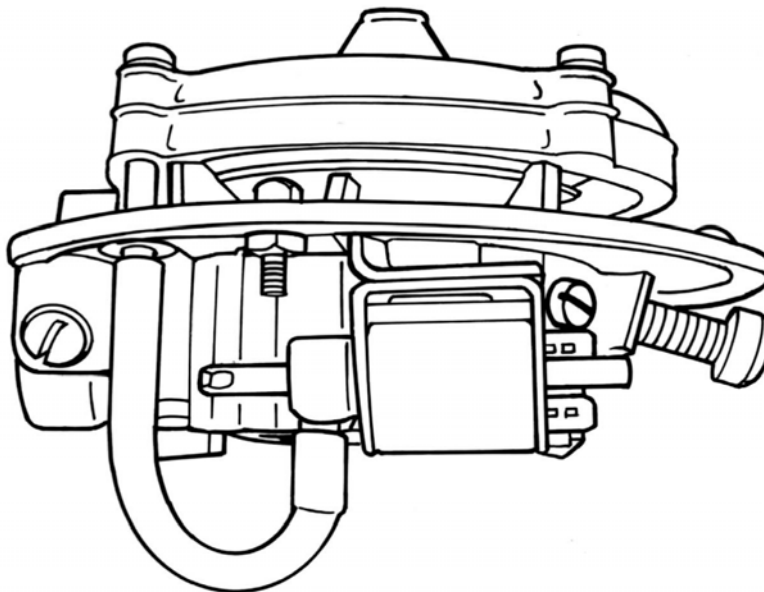
**CARBURETORS & MIXERS**

## MODEL 125M-10 MIXER

### CARBURETORS & MIXERS



## MODEL CA125M-10 MIXER



### DESCRIPTION

The Model 125M-10 is a vacuum lift mixer designed to reduce inlet restrictions in dual fuel installations with air flow requirements up to 235 CFM (111 L/s). In some applications, inlet restrictions cannot be tolerated with a conventional gasoline carburetor as they will cause it to run rich.

The 125M-10 provides an electrically-operated solenoid that directs manifold vacuum to the top diaphragm chamber when gasoline operation is desired. This provides full air valve lift, reducing air inlet restriction to a minimum. The 125M-10 is available with standard type air-gas metering valves and feedback control systems.

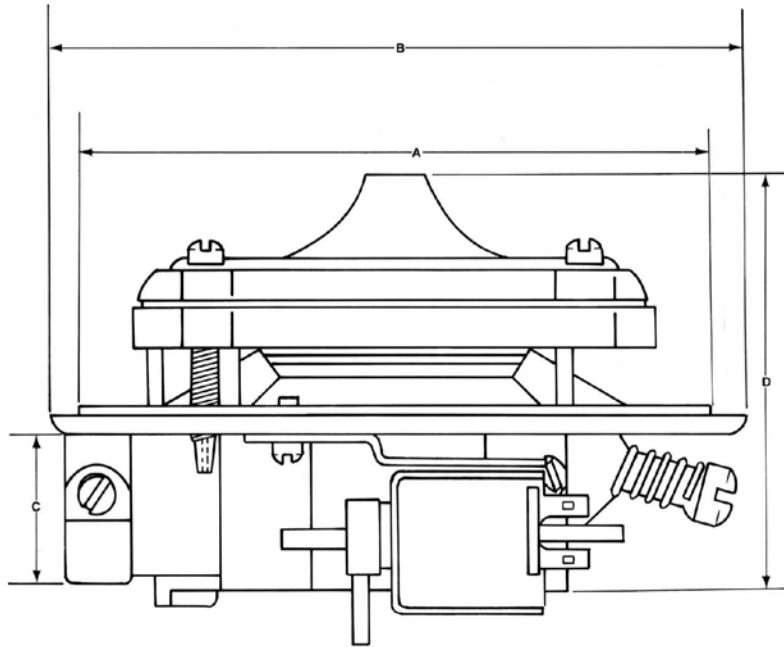
### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type .....                   | LPG Vapor, Natural Gas  |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)                                       |
| Mounting Position.....            | Vertical  |
| Diaphragm Material.....           | Hydrin or Silicone  |
| HP/kW .....                       | 146 hp (175.2kW) @ 235 CFM (111 L/s) and 2.0" in Hg manifold depression |





**DIMENSIONS**



|              | <b>A</b>                   | <b>B</b>             | <b>C</b>                 | <b>D</b>              |
|--------------|----------------------------|----------------------|--------------------------|-----------------------|
| <b>MIXER</b> | <b>MIXER AIR HORN DIA.</b> | <b>OVERALL WIDTH</b> | <b>NPT INLET FITTING</b> | <b>OVERALL HEIGHT</b> |
| CA125M-10    | 130MM<br>(5.13")           | 140MM<br>(5.50")     | 1/2"                     | 100MM<br>(3.94")      |
| CA125M-10-2  | 130MM<br>(5.13")           | 140MM<br>(5.50")     | 1/2"                     | 100MM<br>(3.94")      |

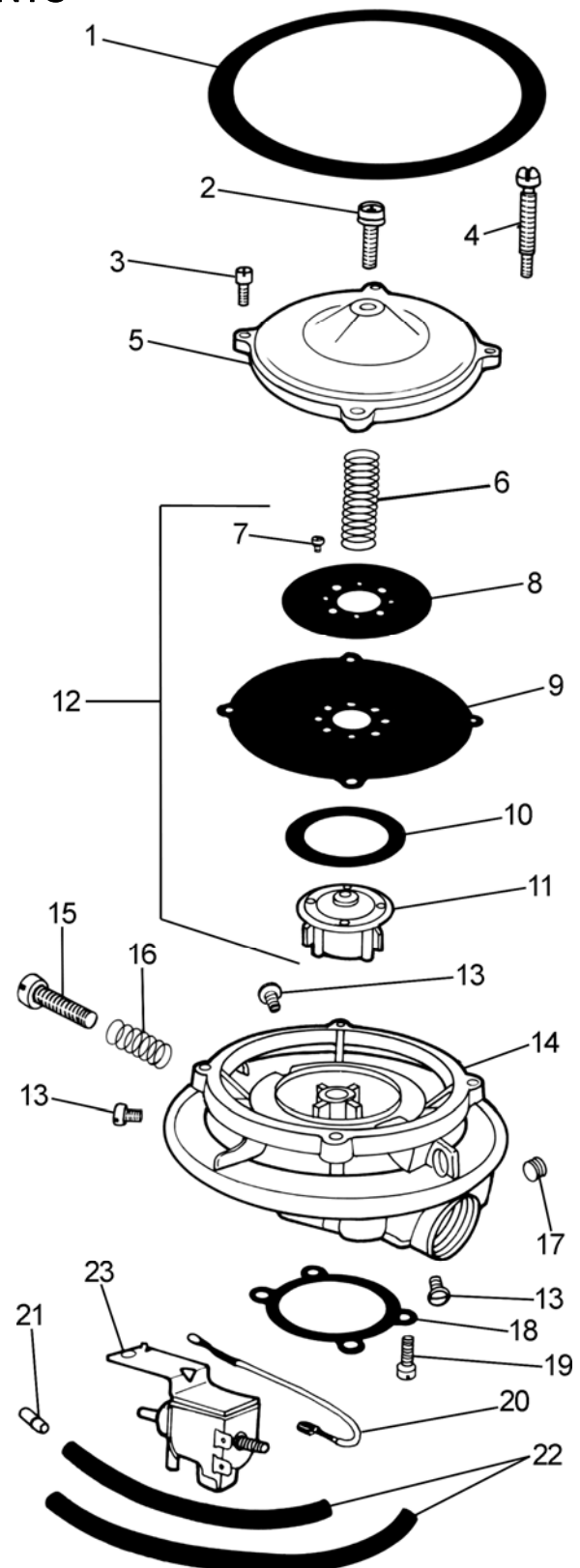
# MODEL 125M-10 CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS

| ITEM# | PART#     | DESCRIPTION                                |
|-------|-----------|--|
| 1     | G1-66     | Gasket, Mixer to Air Horn                  |
| 2     | NSS       | Screw, 1/4-20 x 1" SEMS                    |
| 3     | S1-3      | Screw, 10-24 x 5/8" SEMS (4)               |
| 4     | NSS       | Screw, 1/4 x 1-3/4" fillister head,        |
| 5     | NSS       | Cover, Air Valve                           |
| 6     | S2-85     | Spring, air valve                          |
| 7     | S1-22     | Screw, 5-32 x 1/4" SEMS (4)                |
| 8     | P2-22     | Plate, backup                              |
| 9     | D1-17     | Diaphragm                                  |
|       | D1-17-2   | Diaphragm, Silicone                        |
| 10    | R1-19     | Ring, air valve                            |
| 11    | BV1-14    | Air Gas Valve Assy, Complete               |
| 12    | AV1-14-12 | Valve & diaphragm Assy, Complete           |
|       | EV1-14-5  | Valve & diaphragm Assy, Silicone, Complete |
| 13    | S1-69     | Screw, 1/4-28 x 5/16" (3)                  |
| 14    | NSS       | Body ass'y                                 |
| 15    | NSS       | Screw, Idle                                |
| 16    | S2-16     | Spring, idle screw                         |
| 17    | NSS       | Plug, 1/8 NPT                              |
| 18    | G1-11     | Gasket, throttle body to mixer             |
| 19    | S1-19     | Scrw, 12-24 x 5/8" SEMS (4)                |
| 20    | NSS       | Wire, terminal                             |
| 21    | F4-2      | Fitting, 1/4-28 to 1/4" hose               |
| 22    | NSS       | Hose                                       |
| 23    | NSS       | Fitting, 1/4-28 to 3/16" hose              |





**ASSEMBLIES & ACCESSORIES**

**AIR GAS VALVE ASSEMBLIES**

| PART#       | DESCRIPTION  |
|-------------|--|
| AV1-14-12   | Dual fuel for vacuum lift CA125M-10, w/ Hydrin diaphragm   |
| AV1-14-12-2 | Dual fuel for vacuum lift CA125M-10, w/ silicone diaphragm |
| AV1-1447-2* | For std. feedback, w/silicone diaphragm                    |

\*Modification required for vacuum lift operation.

**AIR CLEANER ASSEMBLIES**

| PART#  | DESCRIPTION   |
|--------|---|
| AF1-5  | 71L/s (150 cfm), 172 mm (6.75") O.D., 60.3 mm (2.38") high  |
| AF1-8  | 118L/s (250 cfm), 234 mm (9.25") O.D., 76.2 mm (3.00") high |
| AF1-14 | 236L/s (500 cfm), 228 mm (9.00") O.D., 191 mm (7.50") high  |

**ADAPTERS**

| PART#    | DESCRIPTION                                  |
|----------|--|
| A2-7     | Air Horn 66.7 mm (2.63") dia.                |
| A2-8     | Air Horn 58.7 mm (2.31") dia.                |
| A2-9     | Air Horn 56.4 mm (2.22") dia.                |
| A2-33    | Air Horn 80 mm (3.16") dia.                  |
| A2-34    | Air Horn 54 mm (2.13") dia.                  |
| A2-47    | Adapter, Air Cleaner Base                    |
| AA3-29-1 | CA125M to 2-1/16" hose                       |
| AA3-29-2 | CA125M to 2-1/16" hose, tapped 12-24         |
| A3-29-3  | CA125M to 2-1/16" hose, w/ mounting base     |
| A3-30    | 200M, CA225M to 2-5/8" hose (use w/ A3-32-1) |
| A3-31    | CA125M to 2-1/4" hose                        |
| AA3-32-1 | CA125 to IMPCO 2B throttle body              |

**CA125 SERIES CARBURETORS**

| PART#       | DESCRIPTION  |
|-------------|--|
| CA125-100-2 | Carburetor, 1-1/2" SAE flange w/ Silicone                                      |
| CA125-134   | Carburetor, governor ass'y, Hyster forklift                                    |
| CA125-26    | Carburetor, 1-1/2" SAE flange, 2-5/8" Air Horn                                 |
| CA125-38    | Carb, 1-1/4" SAE flange, 2-5/16" Air Horn, EV1-14 72/80 flow                   |
| CA125-44    | Carburetor, 1-1/4" SAE flange, 2-5/16" Air Horn                                |
| CA125-52    | Carb, 1-1/4" & 1-1/2" SAE flange, no Air Horn, w/ bracket & swivel             |
| CA125-6     | Carb 1-1/4" & 1-1/2" SAE flange, 2-5/16" Air Horn                              |
| CA125-76-2  | Carb, 1-1/4" SAE flange (short), 80 mm Air Horn, spring hole R, w/ AV1-14-76-2 |
| CA125-8     | Carb, 1-1/4" & 1-1/2" SAE flange, 2-5/16" center stud Air Horn                 |

**CA125 SERIES MIXERS**

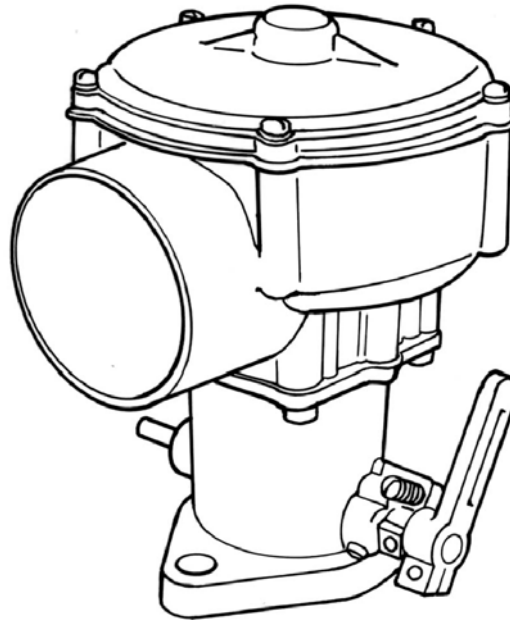
| PART#           | DESCRIPTION   |
|-----------------|---|
| CA125M          | Mixer with Hydrin Diaphragm                                 |
| CA125M-10       | Mixer, dual fuel, vacuum lift mixer with Hydrin diaphragm   |
| CA125M-10-2     | Mixer, dual fuel, vacuum lift mixer with Silicone diaphragm |
| CA125M-2        | Mixer with Silicone diaphragm                               |
| CA125M-292      | Mixer Assembly for CA125-134                                |
| CA125M-3        | Lean flow mixer with Silicone diaphragm                     |
| FB125-30672-001 | Mixer Assembly Feedback 4.3 L SCAQMD                        |

# MODEL 200 CARBURETOR

## CARBURETORS & MIXERS



### MODEL 200 CARBURETOR



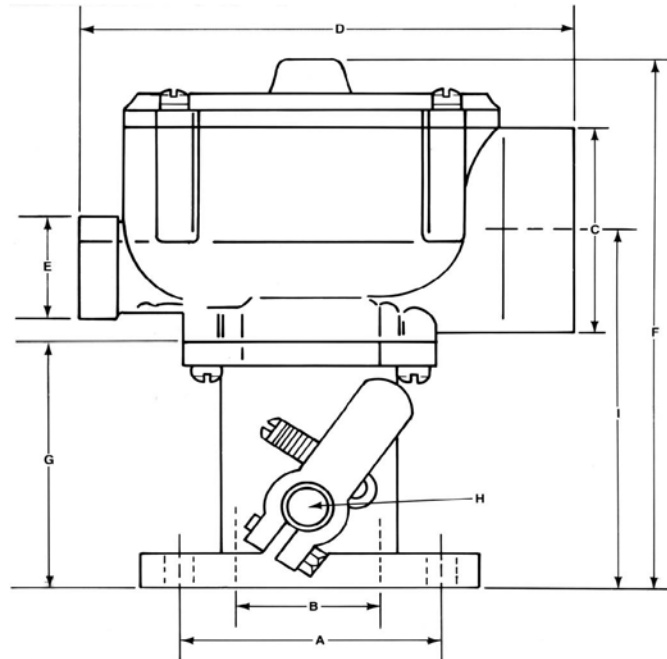
#### DESCRIPTION

The Model 200 is a single diaphragm air-valve carburetor/mixer. It offers a 90° air inlet to provide low overhead clearance, and is available with several air horn and throttle valve options. This unit is available for LPG Vapor or Natural Gas for applications with air flow requirements up to 345 CFM (162.8 L/s). All DG model mixers reduce air flow by 30%.

The Model 200 is also available for feedback applications with the 'FB' designation. The 200 mixer provides a convenient 1/8" balance port at the air inlet. Additional low speed idle mixture control can be obtained to lean air/fuel mixtures through the use of optional shims.

#### SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Fuel Type .....                   | LPG Vapor or Natural Gas   |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)   |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)  |
| Mounting Position.....            | Vertical   |
| Diaphragm Material.....           | Hydrin (Standard), Silicone (Optional)                                     |
| HP/kW .....                       | 172 hp (128kW) @ 276 CFM (130 L/s) and 1.5" in Hg manifold depression      |
|                                   | 215 hp (160.3 kW) @ 345 CFM (162.8 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**


| STD. CARB. | MIXER    | THRTL. BODY | SAE FLANGE | CTR. TO CTR. BOLT SPACING | BORE             | MIXER AIR HORN DIA. | OVERALL WIDTH   | NPT INLET FITTING | OVERALL HEIGHT  | THROTTLE BODY HEIGHT | THROTTLE SHAFT DIA. | FLANGE TO CTR. OF AIR HORN |
|------------|----------|-------------|------------|---------------------------|------------------|---------------------|-----------------|-------------------|-----------------|----------------------|---------------------|----------------------------|
| 200-2      | 200M-1   | AT2-4-2     | 1-1/2"     | 74.6 mm (2.938")          | 42.9 mm (1.688") | 66.7 mm (2.625")    | 165 mm (6.500") | 3/4"              | 175 mm (6.875") | 69.9 mm (2.750")     | 7.9 mm (0.313")     | 110 mm (4.334")            |
| 200-2-2    | 200M-1-2 | AT2-4-2     | 1-1/2"     | 74.6 mm (2.938")          | 42.9 mm (1.688") | 66.7 mm (2.625")    | 165 mm (6.500") | 3/4"              | 175 mm (6.875") | 69.9 mm (2.750")     | 7.9 mm (0.313")     | 110 mm (4.334")            |
| 200-4      | 200M-1   | AT2-5       | 1-3/4"     | 84.1 mm (3.313")          | 49.2 mm (1.938") | 66.7 mm (2.625")    | 165 mm (6.500") | 3/4"              | 187 mm (7.375") | 82.6 mm (3.250")     | 9.5 mm (0.375")     | 123 mm (4.844")            |
| 200-6      | 200M-2   | AT2-6       | 2"         | 90.5 mm (3.563")          | 55.6 mm (2.188") | 77.8 mm (3.063")    | 165 mm (6.500") | 3/4"              | 187 mm (7.375") | 82.6 mm (3.250")     | 9.5 mm (0.375")     | 123 mm (4.844")            |
| 200-6-2    | 200M-2-2 | AT2-6       | 2"         | 90.5 mm (3.563")          | 55.6 mm (2.188") | 77.8 mm (3.063")    | 165 mm (6.500") | 3/4"              | 187 mm (7.375") | 82.6 mm (3.250")     | 9.5 mm (0.375")     | 123 mm (4.844")            |
| 200-8      | 200M-2   | AT2-5       | 1-3/4"     | 84.1 mm (3.313")          | 49.2 mm (1.938") | 77.8 mm (3.063")    | 165 mm (6.500") | 3/4"              | 187 mm (7.375") | 82.6 mm (3.250")     | 9.5 mm (0.375")     | 123 mm (4.844")            |
| 200-8-2    | 200M-2-2 | AT2-5       | 1-3/4"     | 84.1 mm (3.313")          | 49.2 mm (1.938") | 77.8 mm (3.063")    | 165 mm (6.500") | 3/4"              | 187 mm (7.375") | 82.6 mm (3.250")     | 9.5 mm (0.375")     | 123 mm (4.844")            |
| DG200-29   | NSS      | NSS         |            | 90.5 mm (3.563")          | 55.6 mm (2.188") | 77.8 mm (3.063")    | 165 mm (6.500") | 3/4"              | 187 mm (7.375") | 82.6 mm (3.250")     | 9.5 mm (0.375")     | 123 mm (4.844")            |

**MIXERS ONLY**

| MIXER       | MIXER AIR HORN DIA. | OVERALL WIDTH   | NPT INLET FITTING | FLANGE TO CTR. OF AIR HORN |
|-------------|---------------------|-----------------|-------------------|----------------------------|
| LH200M-2-2  | 77.8 mm (3.063")    | 165 mm (6.500") | 3/4"              | 123 mm (4.844")            |
| DG200M-2 -2 | 77.8 mm (3.063")    | 165 mm (6.500") | 3/4"              | 123 mm (4.844")            |

Note: All DG model mixers reduce air flow by 30%.

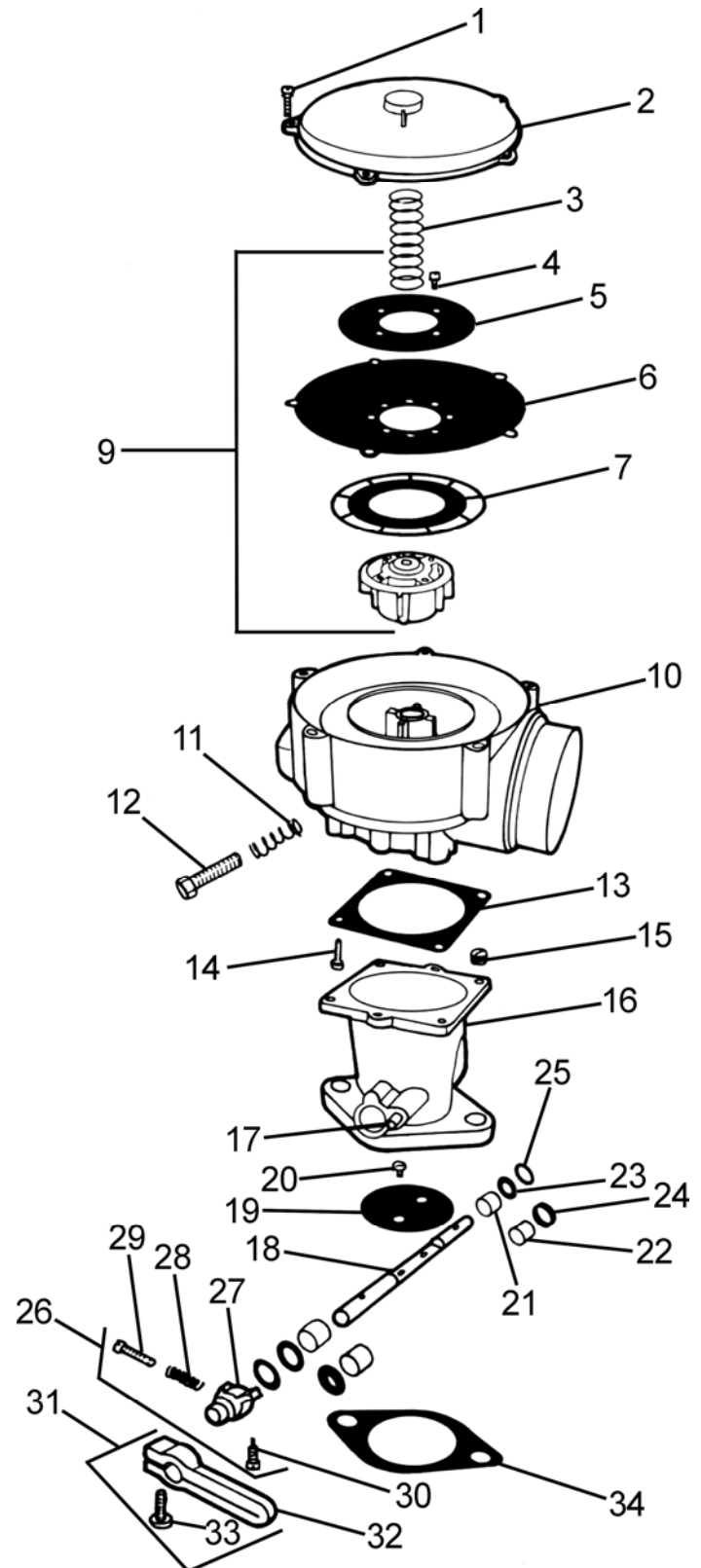
# MODEL 200 CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS

| ITEM# | PART#       | DESCRIPTION   |
|-------|-------------|---|
| 1     | S1-3        | Screw, 10-24 x 5/8" SEMS (4)                            |
| 2     | C1-18       | Cover   |
| 3     | S2-17       | Spring, Air Valve                                       |
| 4     | S1-12       | Screw, 8-32 x 5/16" SEMS (4)                            |
| 5     | P2-21       | Plate, backup   |
| 6     | D1-16-1     | Diaphragm   |
|       | D1-16-2     | Diaphragm, Silicone                                     |
| 7     | R1-17       | Ring, air valve   |
| 8     | NSS         | Air-gas Valve Assy                                      |
| 9     | AV1-12-6    | Air-gas Valve Assy w/diaphragm                          |
|       | DG-AV1-12-2 | Digester Gas Valve Assy w/Silicon diaphragm             |
| 10    | NSS         | Body Assy, 66.7mm (2.625") Air Horn                     |
|       | AB1-11-2    | Body ass'y, 77.8 mm (3.063") Air Horn                   |
| 11    | S2-16       | Spring, Idle Screw                                      |
| 12    | NSS         | Screw, Idle   |
| 13    | G1-21       | Gasket, throttle body to mixer                          |
| 14    | S1-19       | Screw, 12-24 x 5/8 SEMS (4)                             |
| 15    | NSS         | Plug, 1/8 NPT   |
| 16    | NSS         | (Refer to Throttle Body Chart)                          |
| 17    | NSS         | Pin, throttle stop (2)                                  |
| 18    | S5-2        | Throttle Shaft, 7.9mm (0.313") dia.                     |
|       | S5-3        | Throttle Shaft, 9.5mm (0.375") dia.                     |
|       | NSS         | Butterfly, 38.1 mm (1.500")                             |
| 19    | NSS         | Butterfly, 44.5 mm (1.750")                             |
|       | NSS         | Butterfly, 50.8 mm (2.000")                             |
| 20    | S1-12       | Screw, 8-32 x 5/16" SEMS (2)                            |
| 21    | B2-13       | Bearing, Oilite, 7.9 mm (0.313") I.D. (2)               |
| 22    | B2-7        | Bearing, needle, 7.9 mm (0.313") I.D.                   |
|       | NSS         | Bearing, needle, 9.5 mm (0.375") I.D.                   |
| 23    | NSS         | Seal, 7.9 mm (0.313") shaft (2)                         |
|       | S3-11       | Seal, 9.5 mm (0.375") shaft (2)                         |
| 24    | S3-20       | Seal, Internal 9.5mm (0.375") ID Optional               |
| 25    | R1-9        | Ring, seal retainer, 7.9 mm (0.313") shaft (2)          |
|       | R1-8        | Ring, seal retainer, 9.5 mm (0.375") shaft (2)          |
| 26    | AL1-8-2     | Throttle Stop Assy 7.9mm (0.313") ID                    |
|       | AL1-10      | Throttle Stop Assy 9.5 mm (0.375") ID                   |
| 27    | NSS         | Throttle stop lever, 7.9 mm (0.313") I.D                |
|       | NSS         | Throttle stop lever, 9.5 mm (0.375") I.D                |
| 28    | S2-15       | Spring, Stop Screw                                      |
| 29    | S1-21       | Stop screw, 10-32 x 3/4"                                |
| 30    | S1-18       | Pin Screw, Throttle Stop                                |
| 31    | AL1-7-1     | Throttle Lever, w/S1-17, L1-7                           |
|       | AL1-9-1     | Throttle Lever, w/S1-26, L1-9                           |
|       | AL1-9-1A    | Throttle Lever 58.7 mm (2.31") long, 0.562" mounting ID |
| 32    | NSS         | Throttle Lever  |
| 33    | NSS         | Screw, 10-24 x 5/8"                                     |
|       | NSS         | Screw, 12-24 x 5/8"                                     |
| 34    | G1-19       | Gasket, 38.1 mm (1.500") flange                         |
|       | G1-23       | Gasket, 44.5 mm (1.750") flange                         |
|       | G1-24       | Gasket, 50.8 mm (2.000") flange                         |





**MODEL 200 CARBURETOR**

**CARBURETORS & MIXERS**

**ASSEMBLIES & ACCESSORIES**

**MIXERS, LP GAS (STANDARD)**

| PART#       | DESCRIPTION  |
|-------------|--|
| 200M-1      | For 66.7 mm (2.63") Air Horn                                 |
| 200M-1-2    | For 66.7 mm (2.63") Air Horn, w/ silicone diaphragm          |
| 200M-2      | For 77.8mm (3.06") Air Horn                                  |
| 200M-2-2    | For 77.8mm (3.06") Air Horn, w/ silicone diaphragm           |
| 200M-2-3    | For 77.8mm (3.06") A.H., w/4 Air Valve Vac Ports             |
| FB200M-1-2  | For ATECO, feedback, 66.7 mm (2.63") Air Horn                |
| FB200M-2-2  | For feedback, 77.8 mm (3.06") Air Horn, w/silicone diaphragm |
| LH200M-2-2  | Mixer, 3 1/16" Air Horn LH VMQ                               |
| DG200M-2 -2 | Mixer, 3 1/16" Air Horn DG VMQ                               |

**ADAPTERS**

| PART#    | DESCRIPTION                            |
|----------|--|
| AA3-19   | Adapt. 200M to Holley 2B throttle body |
| A3-28    | Adapt. 200M to 3-1/16" hose            |
| A3-30    | Adapt. 200M to 2-5/8" hose             |
| AA3-32-2 | Adapt. 200M to CA100 throttle body     |
| AA3-47-2 | Adapt. 200M to CA425 throttle body     |
| AA3-48-2 | Adapt. 200M to CA425 hose elbow        |

**RING SPACER**

| PART# | DESCRIPTION  |
|-------|--|
| R1-30 | Ring, Air Valve Spacer, for AV1-12 (to lean mixture) |

**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 |

| PART#   | DESCRIPTION  |
|---------|--|
| AT2-4-2 | Standard, 38.1 mm (1.50") flange, 7.9 mm (0.31") shaft dia.  |
| 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 |

**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.                 |

**THROTTLE SHAFTS**

| PART# | DESCRIPTION   |
|-------|---|
| S5-2  | 7.9 mm (0.31") dia., 127 mm (5.00") long, standard 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 (5.00")                          |
| S5-11 | 7.9 mm (0.31") dia., 156 mm (6.13") long                                  |

**SPACERS**

| PART#  | DESCRIPTION                 |
|--------|-----------------------------|
| AS3-45 | Spacer 20.6 mm (0.81") high |

# MODEL 200 CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES (CONTINUED)

#### 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")  |
| 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 AT2-3, AT2-4-1, AT2-4-3, AT2-16-1, AT2-23) |
| AL1-8-4  | Stop ass'y, 7.9 mm (0.31") mounting I.D., 19.1 mm (0.75") long   |
| AL1-9-1  | 58.7 mm (2.31") long, standard on AT2-11-1, AT2-6)   |
| AL1-9-1A | 58.7 mm (2.31") long, 0.562" mounting ID   |
| AL1-10   | Lever stop ass'y, 9.5 mm (0.38") mounting ID 22.2mm (0.88") long, standard on AT2-5, AT2-6                         |
| AL1-11-1 | Lever stop ass'y, 11.1 mm (0.44") mounting ID 25.4mm (1.00") long, standard on AT2-11-1, AT2-12, AT2-13-1, AT2-15  |
| AL1-12-1 | 77.8mm (3.06") long  |
| AL1-12-3 | 58.7mm (2.31") long, standard on AT2-11-1, AT2-13-1, AT2-12-1-, AT2-15   |
| AL1-25-2 | Ass'y, spring loaded, floating 7.9 mm (0.31") mounting I.D., 34.9 mm (1.38") long, w/ AC2-14-2                     |
| 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                                       |

#### NOTE:

AL1-7-1 through AL-17-4 levers used w/ AL1-8 lever stop

AL1-9 levers used a/AL1-10 lever stop

AL1-12 lever used w/AL1-11 lever stop

See Accessories section of catalog for other optional levers.

#### 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                             |
| AV1-1245-4  | Feedback, richer idle   |
| 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 | Valve Ass'y, Low Heat, Silicone                                     |
| CV1-12      | Valve Ass'y, Natural Gas  |
| CV1-12-2    | For Natural Gas, w/Silicone diaphragm                               |

#### SLEEVE DIGESTER MIXER

| PART# | DESCRIPTION   |
|-------|---------------|
| S6-1  | Sleeve DG200  |
| S6-2  | Sleeve DG200T |





**MODEL 200 CARBURETOR**

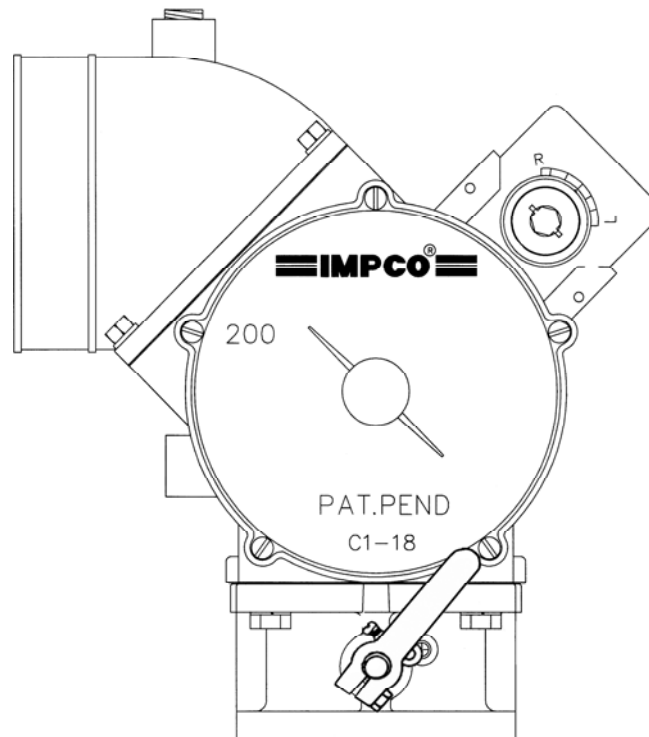
**CARBURETORS & MIXERS**

# MODEL 200D CARBURETOR

## CARBURETORS & MIXERS



### MODEL 200D CARBURETOR



#### DESCRIPTION

The Model 200D is a dual diaphragm air-valve carburetor/ fuel mixer. It offers a 90° air inlet to provide low overhead clearance, and is available with several Air Horn and throttle valve options. This unit is available for LPG Vapor, Natural Gas, Digester/Landfill Gas applications as low as 500 BTU for with air flow requirements up to 468 CFM (221 L/s). All DG model mixers reduce air flow by 30%.

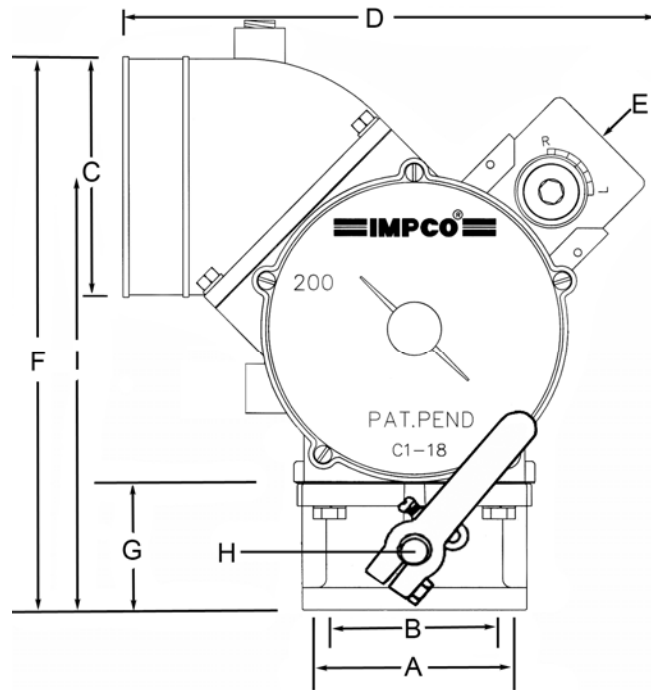
The Model 200D is also available for feedback applications with the 'FB' designation, and offers tamper resistant compliance using the optional tamper resistant mixture adjustment caps. The 200D mixer provides a convenient 1/4" balance port at the air inlet, and a slow speed "idle" adjustment. Additional low speed idle mixture control can be obtained to lean air/fuel mixtures through the use of optional shims. The valve can be turned with an imperial 5/16" or metric 8mm hex key from both sides and can be made tamper resistant by using a cap to comply with tamper resistant emission regulations by using Tamper Resistant Plug, part number P3-17956-20, purchased separately.

#### SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Fuel Type .....             | LPG Vapor, Natural Gas and Digester/Landfill Gas<br>(550-2,500 BTU)                                      |
| Inlet Pressure .....        | -1.5" w.c. (-0.37 kPa)   |
| Operating Temperature ..... | -40°F to +250°F (-40°C to +121°C)  |
| Mounting Position.....      | Vertical   |
| Diaphragm Material.....     | Hydrin (Standard), Silicone (Optional)   |
| HP/kW .....                 | 292 hp (217.7kW) @ 468 CFM (221 L/s) and 2,500 BTU<br>per cubic foot with 2.0" in Hg manifold depression |



**DIMENSIONS**



**A B C D E F G H I**

| STD CARD | MIXER   | THRTL BODY | SAE FLANGE | CTR. TO CTR. BOLT SPACING | BORE              | MIXER AIR HORN DIA. | OVERALL WIDTH      | NTP INLET | OVERALL HEIGHT     | THRTL BODY HEIGHT | THRTL SHAFT DIA. | FLANGE TO CTR OF AIR HORN |
|----------|---------|------------|------------|---------------------------|-------------------|---------------------|--------------------|-----------|--------------------|-------------------|------------------|---------------------------|
| 200D-1   | 200DM   | AT2-7      | 2.5"       | 73.0mm<br>(2.875")        | 68.2mm<br>(2.69") | 88.9mm<br>(3.50")   | 224.6mm<br>(8.84") | 1-1/4"    | 227.3mm<br>(8.95") | 53.9mm<br>(2.13") | 11.1mm<br>(.44") | 183.0mm<br>(7.2")         |
| 200D-3   | 200DM   | AT2-7      | 2.5"       | 73.0mm<br>(2.875")        | 68.2mm<br>(2.69") | 101.6mm<br>(4.00")  | 224.6mm<br>(8.84") | 1-1/4"    | 233.7mm<br>(9.20") | 53.9mm<br>(2.13") | 11.1mm<br>(.44") | 183.0mm<br>(7.2")         |
| 200D-3-2 | 200DM-2 | AT2-7      | 2.5"       | 73.0mm<br>(2.875")        | 68.2mm<br>(2.69") | 101.6mm<br>(4.00")  | 224.6mm<br>(8.84") | 1-1/4"    | 233.7mm<br>(9.20") | 53.9mm<br>(2.13") | 11.1mm<br>(.44") | 183.0mm<br>(7.2")         |
| 200D-5   | 200DM   | AT2-8      | 3"         | 82.6mm<br>(3.25")         | 82.6mm<br>(3.25") | 101.6mm<br>(4.00")  | 224.6mm<br>(8.84") | 1-1/4"    | 235.0mm<br>(9.27") | 56.0mm<br>(2.19") | 11.1mm<br>(.44") | 184.7mm<br>(7.27")        |
| 200D-7   | 200DM   | AT2-7      | 2.5"       | 73.0mm<br>(2.875")        | 68.2mm<br>(2.69") | 101.6mm<br>(4.00")  | 224.6mm<br>(8.84") | 1-1/4"    | 233.7mm<br>(9.20") | 53.9mm<br>(2.13") | 11.1mm<br>(.44") | 183.0mm<br>(7.2")         |
| DG200D-3 | N/A     | AT2-7      | 2.5"       | 73.0mm<br>(2.875")        | 68.2mm<br>(2.69") | 101.6mm<br>(4.00")  | 224.6mm<br>(8.84") | 1-1/4"    | 233.7mm<br>(9.20") | 53.9mm<br>(2.13") | 11.1mm<br>(.44") | 183.0mm<br>(7.2")         |

Note: All DG model mixers reduce air flow by 30%.

**TAMPER RESISTANT PLUG**

| PART #      | DESCRIPTION     |
|-------------|-----------------|
| P3-17956-20 | Plug, Expansion |

# MODEL 200D CARBURETOR

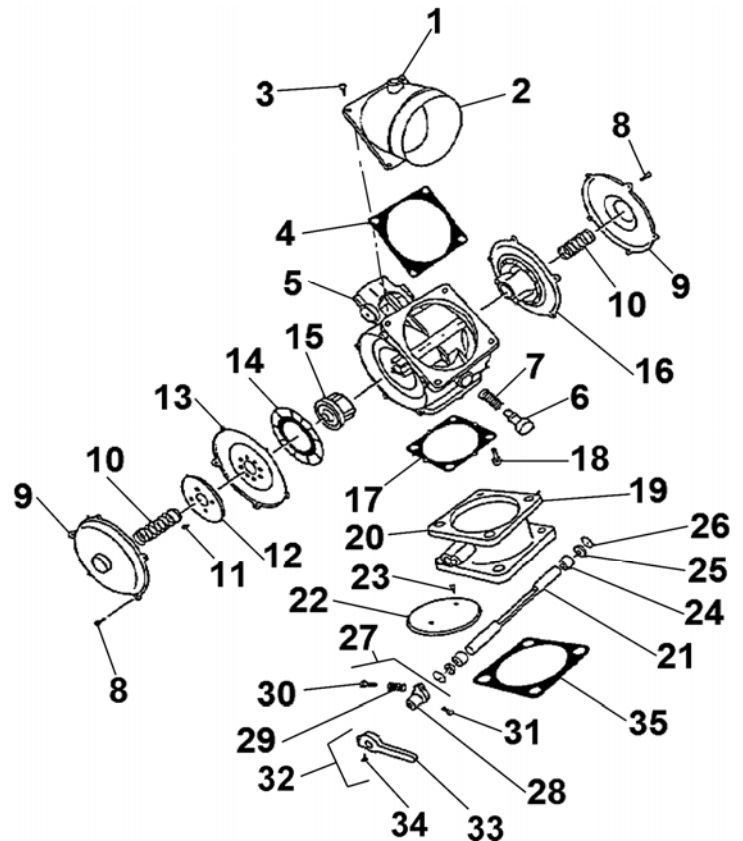
## CARBURETORS & MIXERS



### COMPONENTS

| ITEM # | PART #      | DESCRIPTION                      |
|--------|-------------|----------------------------------|
| 1      | NSS         | Plug, 1/4" NPT                   |
| 2      | E1-7 / E1-8 | Air Horn                         |
| 3      | NSS         | Screw, 1/4-20 x 3/4" SEMS        |
| 4      | G1-26*      | Gasket, Air Horn                 |
| 5      | AB1-12L     | Body Assy, Left Hand 200 DM      |
|        | AB1-12R     | Body Assy, Right Hand 200 D      |
| 6      | AS1-33      | Screw, Idle (Early Models Only)  |
| 7      | S2-18       | Spring, Idle (Early Models Only) |
| 8      | S1-3        | Screw, 10-24 x 5/8" SEMS         |
| 9      | C1-18       | Cover                            |
| 10     | S2-17       | Spring, air valve                |
| 11     | S1-12       | Screw, 8-32 x 5/16" SEMS         |
| 12     | NSS         | Plate, Back up                   |
| 13     | D1-16-1     | Diaphragm                        |
|        | D1-16-2*    | Diaphragm, Silicone              |
| 14     | R1-17       | Ring, Air Valve                  |
| 15     | BV1-12      | Air Gas Valve Ass'y              |
| 16     | AV1-12*     | Valve and Diaphragm Ass'y        |
|        | AV1-12-2*   | Air Valve Assy w/Silicone Diagr. |
| 17     | G1-25*      | Gasket, Throttle Body to Mixer   |
| 18     | S1-30       | Screw, 5/16 - 18 x 7/8" Hex      |
| 19     | NSS         | Throat Assy                      |
| 20     | P1-6        | Pin, throttle Stop               |
| 21     | S5-4        | Throat Shaft, 7/16" Dia          |
| 22     | F2-7        | Fly, 2 - 1/2"                    |
|        | F2-8        | Fly, 3"                          |
| 23     | NSS         | Screw, 12-24 x 5/8" SEMS         |
| 24     | B3-44       | Permaglide Bearing, 7/16" ID     |
|        | B2-9*       | Needle Bearing, 7/16" ID         |
| 25     | S3-96       | Seal, Internal 7/16" Shaft       |
|        | S3-19*      | Seal, 7/16" Shaft                |
| 26     | R1-52       | Ring, Seal Retainer              |
|        | R1-11*      | Ring, Seal Retainer              |
| 27     | AL1-11-1    | Throttle Stop Ass'y              |
| 28     | NSS         | Throttle Stop Lever              |
| 29     | S2-15       | Spring, Idle Stop                |
| 30     | S1-12       | Screw, Idle Stop 10-32 x 3/4"    |
| 31     | S1-18       | Pin, Screw Throttle Stop         |
| 32     | AL1-12-3    | Throttle Lever Ass'y, Long       |
| 33     | NSS         | Throttle Lever                   |
| 34     | S1-32       | Screw, 1/4 - 20 x 7/8" Hex       |
| 35     | G1-27*      | Gasket, 2-1/2" Flange            |
|        | G1-28*      | Gasket, 3" Flange                |

\*Included in Repair Kit RK-200D-1



\*Note that during reassembly, the Diaphragm, Air Valve and Assembly must be installed with the Paper Gasket facing downward and the two slots in the center of the Air Valve installed at a 90 degree angle to the square boss. It is recommended that prior to disassembly of Air Valve & Diaphragm Assembly, the individual parts be marked noting placement and orientation to ensure proper reassembly. Refer to IMPCO TSB-132 for additional information



**MODEL 200D CARBURETOR**

**CARBURETORS & MIXERS**

**ASSEMBLIES & ACCESSORIES**

**MIXERS**

| PART #    | DESCRIPTION                    |
|-----------|--------------------------------|
| 200DM-901 | Mixer, Ass'y Turbo Cummins L10 |

**THROTTLE BODIES**

| PART # | DESCRIPTION           |
|--------|-----------------------|
| AT2-7  | Throat Assy, 2.5" SAE |
| AT2-8  | Throat Assy, 3.0" SAE |

**THROTTLE SHAFT**

| PART # | DESCRIPTION        |
|--------|--------------------|
| S5-4   | Shaft 7/16" X 7.06 |

**AIR-GAS VALVE ASSEMBLIES**

| PART #      | DESCRIPTION                                |
|-------------|--|
| AV1-12      | Air Gas Valve Ass'y, STD. Hydrin           |
| AV1-12-3    | Air Gas Valve Ass'y, STD. w/ Silicone      |
| AV1-1245    | Air Gas Valve Ass'y, STD. w/ Ball Check    |
| AV1-1245-2  | Air Gas Valve Ass'y, Feedback Silicone     |
| CV1-12      | Air Gas Valve Ass'y, Natural Gas Hydrin    |
| CV1-12-2    | Air Gas Valve Ass'y, Natural Gas Silicone  |
| DG-AV1-12   | Air Gas Valve Ass'y, Digester Gas Hydrin   |
| DG-AV1-12-2 | Air Gas Valve Ass'y, Digester Gas Silicone |
| LH-AV1-12-2 | Air Gas Valve Ass'y, Low heat Gas Silicone |

**ADAPTERS**

| PART # | DESCRIPTION                                   |
|--------|---|
| E1-7   | Air Horn, 45° elbow 4" Dia.                   |
| E1-8   | Air Horn, 45° elbow 3.5" Dia.                 |
| E1-7-2 | Air Horn, 45° elbow 4" Dia. (3) Balance Ports |

**LEVERS**

| PART #   | DESCRIPTION                      |
|----------|----------------------------------|
| AL1-11-1 | Stop Assembly, 7/16" mounting ID |
| AL1-12-1 | Assembly, 3-1/16" long           |
| AL1-12-3 | Assembly, 2-5/16" long Std.      |

**RETURN SPRINGS**

| PART #   | DESCRIPTION           |
|----------|-----------------------|
| AS2-50-4 | 7/16" Throttle Return |

**RING SPACER**

| PART # | DESCRIPTION            |
|--------|------------------------|
| R1-30  | Ring, Air Valve Spacer |

**BRACKET ASSEMBLY**

| PART # | DESCRIPTION                                       |
|--------|---|
| AB4-4  | Bracket, Throttle Cable/Boden<br>(Used on 200D-7) |

**GASKETS**

| PART # | DESCRIPTION              |
|--------|--------------------------|
| G1-26  | Air Horn to Mixer Body   |
| G1-27  | 2.5" SAE Flange to Mixer |
| G1-28  | 3.0" SAE Flange to Mixer |

**REPAIR KIT**

| PART #       | DESCRIPTION      |
|--------------|------------------|
| RK-200DM-887 | Repair Kit, 200D |
| RK-200D-1    | Repair Kit, 200D |

**TAMPER RESISTANT CAPS**

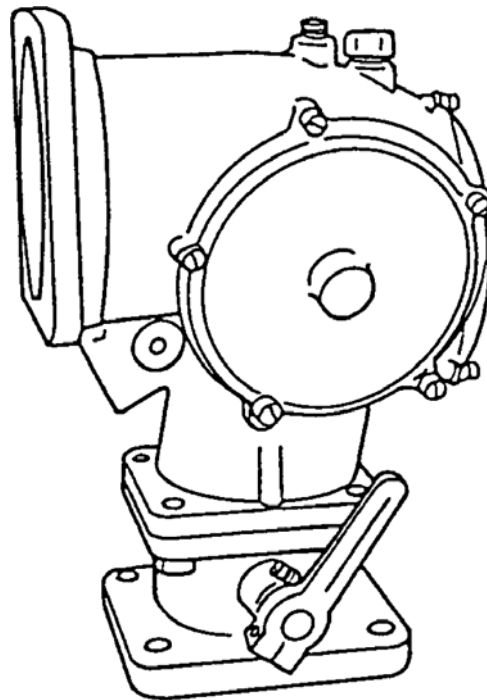
| PART #      | DESCRIPTION |
|-------------|-------------|
| P3-17956-20 | Cap/Plug    |

# MODEL 200T CARBURETOR

## CARBURETORS & MIXERS



### MODEL 200T CARBURETOR



#### DESCRIPTION

The Model 200T is a triple diaphragm air-valve carburetor/mixer that offers a 90° air inlet to provide low overhead clearance, and is available with several air horn and throttle valve options. This unit is available for LPG Vapor, Natural Gas, and Digester Gas applications as low as 500 BTU with air flow requirements up to 680 CFM (320.9 L/s). All DG model mixers reduce air flow by 30%. The Model 200T is also available for feedback applications with the 'FB' designation.

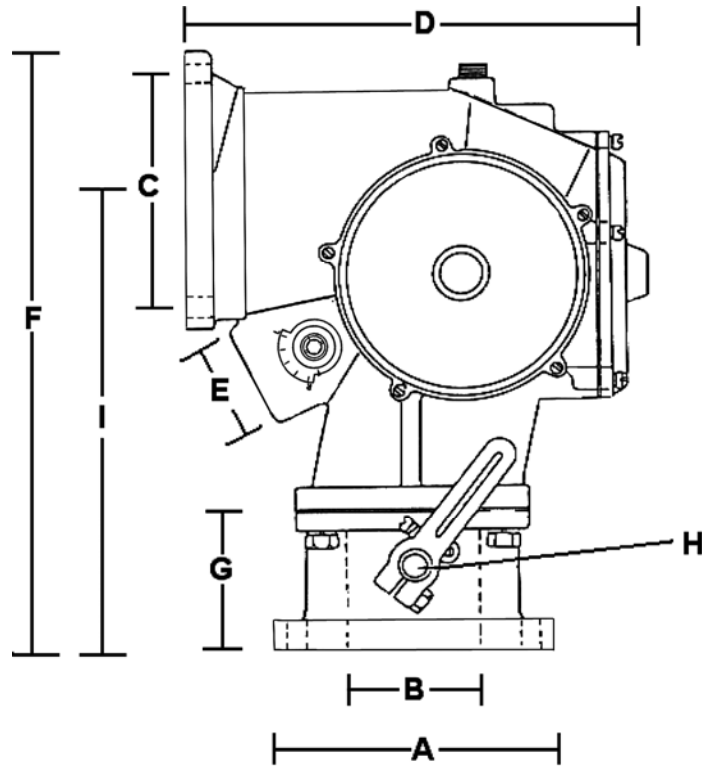
The 200T mixer provides a convenient 1/4" balance port at the air inlet. Additional low speed idle mixture control can be obtained to lean air/fuel mixtures through the use of optional shims.

#### SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Fuel Type .....             | LPG Vapor, Natural Gas and Digester/Landfill Gas<br>(550-2,500 BTU)          |
| Inlet Pressure .....        | -1.5" w.c. (-0.37 kPa)   |
| Operating Temperature ..... | -40°C to 120°C (-40°F to 250°F)  |
| Mounting Position.....      | Vertical   |
| Diaphragm.....              | Hydrin or Silicone   |
| HP(kW).....                 | 425 hp (316.9kW) @ 680 CFM (320.9 L/s) and 2.0"<br>in Hg manifold depression |



**DIMENSIONS**



| STD. CARB. | MIXER     | THRTL. BODY | SAE FLANGE | CTR. TO CTR. BOLT SPACING | MIXER AIR BORE     | MIXER AIR HORN DIA. | OVRAL. WIDTH       | NPT INLET | OVRAL. HEIGHT       | THRTL. BODY HEIGHT | THRTL. SHAFT DIA. | FLANG. TO CTR. OF AIR HORN |
|------------|-----------|-------------|------------|---------------------------|--------------------|---------------------|--------------------|-----------|---------------------|--------------------|-------------------|----------------------------|
| 200T-1     | 200TM-1   | AT2-9       | 3-1/2"     | 94.4 mm<br>(3.72")        | 93.6 mm<br>(3.69") | 98.4 mm<br>(3.88")  | 226.6 mm<br>(9.0") | 1-1/4"    | 279.4 mm<br>(11.0") | 66.6 mm<br>(2.63") | 12.7 mm<br>(.50") | 222.2 mm<br>(8.75")        |
| 200T-1-2   | 200TM-1-2 | AT2-9       | 3-1/2"     | 94.4 mm<br>(3.72")        | 93.6 mm<br>(3.69") | 98.4 mm<br>(3.88")  | 226.6 mm<br>(9.0") | 1-1/4"    | 279.4 mm<br>(11.0") | 66.6 mm<br>(2.63") | 12.7 mm<br>(.50") | 222.2 mm<br>(8.75")        |
| 200T-3     | 200TM-1   | AT2-10      | 4"         | 104.7 mm<br>(4.13")       | 93.6 mm<br>(3.69") | 114.3 mm<br>(4.50") | 226.6 mm<br>(9.0") | 1-1/4"    | 304.8 mm<br>(12.0") | 69.8 mm<br>(2.75") | 12.7 mm<br>(.50") | 234.9mm<br>(9.25")         |
| 200T-3-2   | 200TM-1   | AT2-10      | 4"         | 104.7 mm<br>(4.13")       | 93.6 mm<br>(3.69") | 114.3 mm<br>(4.50") | 226.6 mm<br>(9.0") | 1-1/4"    | 304.8 mm<br>(12.0") | 69.8 mm<br>(2.75") | 12.7 mm<br>(.50") | 234.9mm<br>(9.25")         |

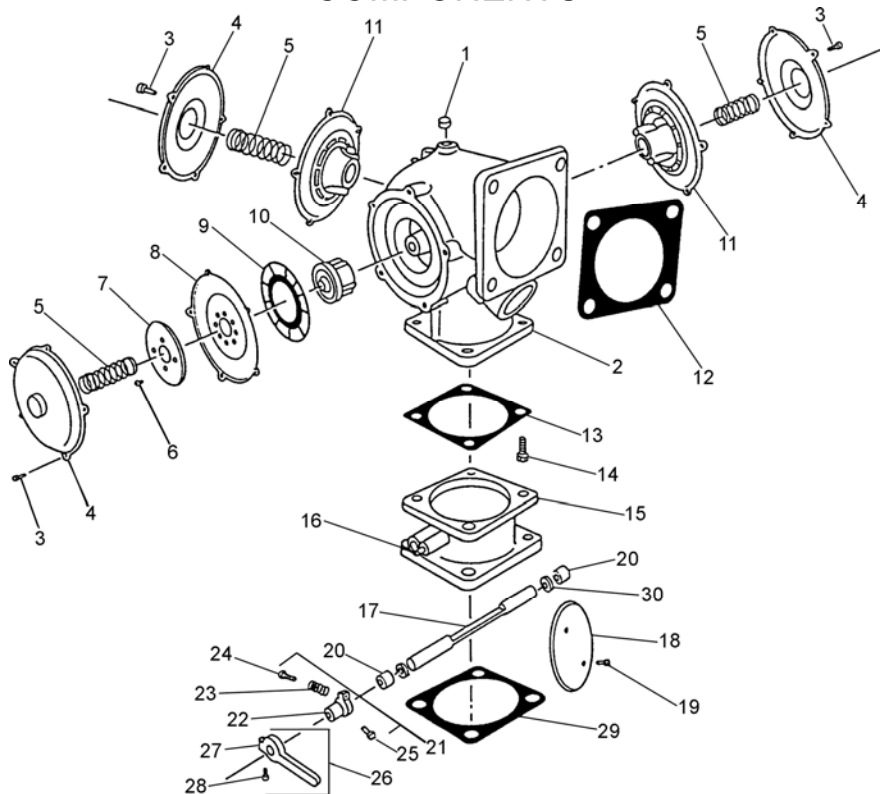
\*Caterpillar only

# MODEL 200T CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS



\*Note: During reassembly, the Diaphragm, Air Valve and Assembly must be installed with the paper gasket facing downward and the two slots in the center of the Air Valve installed at a 90 degree angle to the square boss. It is recommended that prior to disassembly of Air Valve & Diaphragm Assembly, the individual parts be marked noting placement and orientation to ensure proper reassembly. Refer to IMPCO TSB-132.

| ITEM # | PART #  | DESCRIPTION                    |
|--------|---------|--------------------------------|
| 1      | NSS     | Plug, 1/4" NPT                 |
|        | AB1-14  | Body Assy, 3 1/2"              |
| 2      | AB1-14L | Body Assy, 3 1/2", Left Hand   |
|        | AB1-18  | Body Assy 200T 4"              |
| 3      | S1-3    | Screw, 10-24 x 5/8" SEMS       |
| 4      | C1-18   | Cover                          |
| 5      | S2-17   | Spring, Air Valve              |
| 6      | S1-12   | Screw, 8-32 x 5/16" SEMS       |
| 7      | P2-21   | Plate, Back up                 |
| 8      | D1-16-1 | Diaphragm                      |
|        | D1-16-2 | Diaphragm, Silicone            |
| 9      | R1-17   | Ring, Air Valve                |
| 10     | BV1-12  | Air Gas Valve Ass'y            |
| 11     | AV1-12* | Valve and Diaphragm Ass'y      |
| 12     | G1-31   | Gasket, 3-1/2" Air Horn        |
| 13     | G1-30   | Gasket, Throttle Body to Mixer |
| 14     | S1-34   | Screw, 3/8 - 16 x 1" SEMS      |

| ITEM # | PART #   | DESCRIPTION                   |
|--------|----------|-------------------------------|
| 15     | NSS      | Throat                        |
| 16     | AV1-12   | Pin, Throttle Stop            |
| 17     | S5-5     | Shaft, Throttle 1/2" (AT2-9)  |
|        | S5-4     | Shaft, Throttle 7/16" (AT2-8) |
| 18     | F2-9     | Fly, 3-11/16" Dia.            |
| 19     | S1-35    | Screw, 10-32 x 3/8" SEMS      |
| 20     | B3-43    | Permaglide Bearing, 1/2" ID   |
|        | B3-44    | Permaglide Bearing, 7/16" ID  |
| 21     | AL1-11-2 | Throttle Stop Ass'y, 1/2" ID  |
| 22     | NSS      | Throttle Stop Lever, 1/2" ID  |
| 23     | S2-15    | Spring, Idle Stop Screw       |
| 24     | S1-21    | Stop, Screw 10-32 x 3/4"      |
| 25     | S1-18    | Pin, Screw Throttle Stop      |
| 26     | AL1-12-1 | Throttle Lever s/screw        |
| 27     | NSS      | Throttle Lever                |
| 28     | S1-32    | Screw, 1/4" -20 x 7/8" Hex    |
|        | G1-29    | Gasket, 3-1/2" Flange         |
| 29     | G1-38    | Gasket, Flange SAE AT2-10     |
|        | G1-39    | Gasket, Flange 4" Air Horn    |
| 30     | S3-93    | Seal, Internal 7/16" Shaft    |





**MODEL 200T CARBURETOR**

**CARBURETORS & MIXERS**

**ASSEMBLIES & ACCESSORIES**

**MIXERS**

| PART #    | DESCRIPTION                 |
|-----------|-----------------------------|
| 200T-1    | Carb.3-1/2" SAE Flange R.H. |
| 200T-1-2  | Carb.3-1/2"SAE, W/Sil       |
| 200T-3    | Carb 4"SAE Flg Rh Or Lh     |
| 200T-3-2  | Carb 4" SAE W/Sil Diaphragm |
| 200TM-1-2 | Mixer,3-1/2" W/Silicone     |

**THROTTLE BODIES**

| PART # | DESCRIPTION                                 |
|--------|---|
| AT2-9  | 3-1/2" SAE Flange, 7/16" Shaft w/ permglid. |

**AIR-GAS VALVE ASSEMBLIES**

| PART #      | DESCRIPTION                                |
|-------------|--|
| AV1-12      | Air Gas Valve Ass'y, STD. Hydrin           |
| AV1-12-2    | Air Gas Valve Ass'y, STD. w/ Silicone      |
| AV1-12-3    | Air Gas Valve Ass'y, STD. w/ Ball Check    |
| AV1-1245    | Air Gas Valve Ass'y, Feedback Hydrin       |
| AV1-1245-2  | Air Gas Valve Ass'y, Feedback Silicone     |
| CV1-12      | Air Gas Valve Ass'y, Natural Gas Hydrin    |
| CV1-12-2    | Air Gas Valve Ass'y, Natural Gas Silicone  |
| LH-AV1-12-2 | Air Gas Valve Ass'y, Low heat Gas Silicone |

**LEVERS**

| PART #   | DESCRIPTION                     |
|----------|---------------------------------|
| AL1-11-1 | Stop Assembly 7/16" mounting ID |

**RETURN SPRINGS**

| PART #   | DESCRIPTION           |
|----------|-----------------------|
| AS2-50-4 | 7/16" Throttle Return |

**ADAPTERS**

| PART # | DESCRIPTION                     |
|--------|---------------------------------|
| E1-7   | Air Horn, 45° elbow 4" Dia.     |
| E1-8   | Air Horn, 45° elbow 3-1/2" Dia. |

**RING SPACER**

| PART # | THROTTLE BODIES        |
|--------|------------------------|
| R1-30  | Ring, Air Valve Spacer |

**TAMPER RESISTANT CAPS**

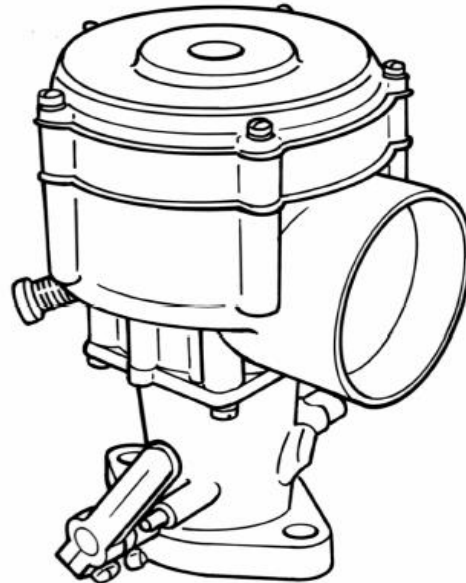
| PART #      | DESCRIPTION |
|-------------|-------------|
| P3-17956-20 | Cap/Plug    |

# MODEL 210 CARBURETOR

## CARBURETORS & MIXERS



### MODEL 210 CARBURETOR



#### DESCRIPTION

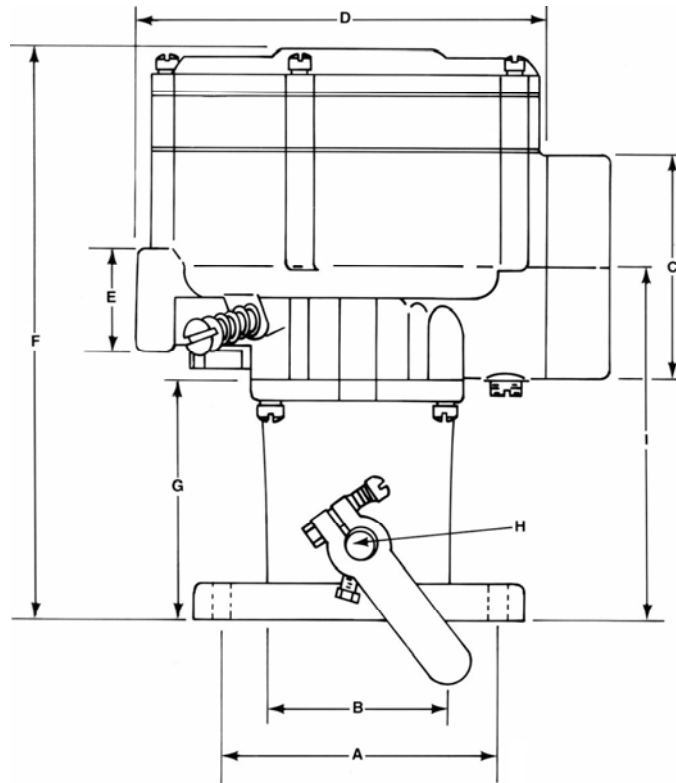
The Model 210 can be used with LPG Vapor or Natural Gas for applications with air flow requirements up to 345 CFM (162.8 L/s). The 210 carburetor/mixer is designed primarily for one and two cylinder engines where severe intake manifold pressure pulsations are present. However, its use is not limited to these applications. Improved mixture control and air-gas valve durability can also benefit other applications in tuned intake systems where resonant pressure changes could adversely affect a standard 200/225 model assembly.

Note that the diaphragm is different from the standard 200/225 model and may have to be ordered as a separate component part (see dashpot assembly on pg 83).

#### SPECIFICATIONS

|                             |   |
|-----------------------------|---|
| Fuel Type .....             | LPG Vapor or Natural Gas  |
| Inlet Pressure .....        | -1.5" w.c. (-0.37 kPa)  |
| Operating Temperature ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....      | Vertical  |
| Diaphragm.....              | Hydrin (Standard), Silicone (Optional)                                      |
| HP/kW .....                 | 215 hp (160.3 kW) @ 345 CFM (162.8 L/s) with 2.0" in Hg manifold depression |

**DIMENSIONS**



| STD. CARB. | MIXER    | THRTL. BODY | SAE FLANGE | CTR. TO CTR. BOLT SPACING | B                  | C                   | D                 | E         | F                 | G                  | H                 | I                          |
|------------|----------|-------------|------------|---------------------------|--------------------|---------------------|-------------------|-----------|-------------------|--------------------|-------------------|----------------------------|
|            |          |             |            |                           |                    | MIXER AIR HORN DIA. | OVRAL. WIDTH      | NPT INLET | OVRAL. HEIGHT     | THRTL. BODY HEIGHT | THRTL. SHAFT DIA. | FLANG. TO CTR. OF AIR HORN |
| 210-4      | 210M-1   | AT2-5       | 1-3/4"     | 84.1 mm<br>(3.31")        | 49.2 mm<br>(1.94") | 66.7 mm<br>(2.63")  | 165 mm<br>(6.50") | 3/4"      | 206 mm<br>(8.13") | 82.6m<br>(3.250")  | 9.5 mm<br>(.38")  | 123 mm<br>(4.84")          |
| 210-6      | 210M-2   | AT2-6       | 2"         | 90.5 mm<br>(3.56")        | 55.6 mm<br>(2.19") | 77.8 mm<br>(3.06")  | 165 mm<br>(6.50") | 3/4"      | 206 mm<br>(8.13") | 82.6m<br>(3.25")   | 9.5 mm<br>(.38")  | 123 mm<br>(4.84")          |
| 210-8      | 210M-2   | AT2-5       | 1-3/4"     | 84.1 mm<br>(3.31")        | 49.2 mm<br>(1.94") | 77.8 mm<br>(3.06")  | 165 mm<br>(6.50") | 3/4"      | 206 mm<br>(8.13") | 82.6m<br>(3.25")   | 9.5 mm<br>(.38")  | 123 mm<br>(4.84")          |
| 210-8-2    | 210M-2-2 | AT2-5       | 1-3/4"     | 84.1 mm<br>(3.31")        | 49.2 mm<br>(1.94") | 77.8 mm<br>(3.06")  | 165 mm<br>(6.50") | 3/4"      | 206 mm<br>(8.13") | 82.6m<br>(3.25")   | 9.5 mm<br>(.38")  | 123 mm<br>(4.84")          |

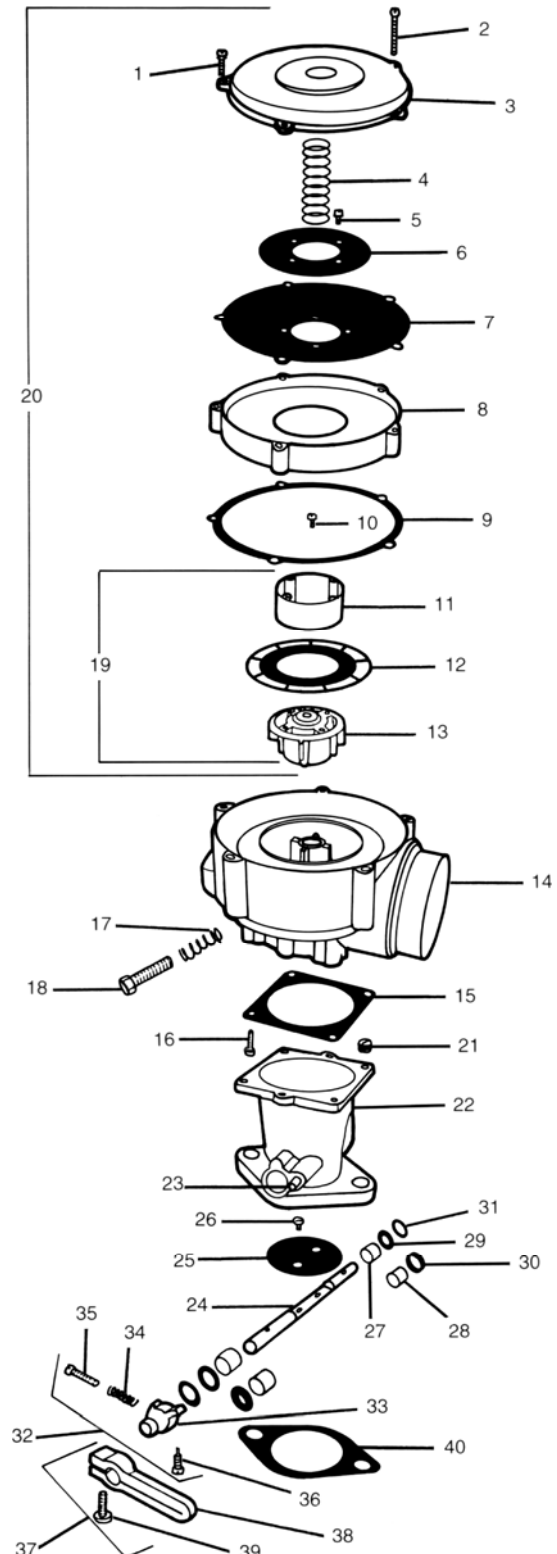
# MODEL 210 CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS

| ITEM # | PART #    | DESCRIPTION                                     |
|--------|-----------|---|
| 1      | S1-3      | Screw, 10-24 x 5/8" SEMS (2)                    |
| 2      | S1-41     | Screw, 10-24 x 1-3/8" SEMS (3)                  |
| 3      | NSS       | Cover   |
| 4      | S2-17     | Spring, air valve                               |
| 5      | S1-12     | Screw, 8-32 x 5/16" SEMS (4)                    |
| 6      | P2-13     | Plate, backup                                   |
| 7      | D1-12     | Diaphragm                                       |
|        | D1-12-2   | Diaphragm, silicone                             |
| 8      | NSS       | Plate, divider                                  |
| 9      | G1-20     | Gasket, plate to body                           |
| 10     | S1-12     | Screw, 8-32 x 5/16" SEMS (4)                    |
| 11     | NSS       | Spacer  |
| 12     | R1-17     | Ring, air valve                                 |
| 13     | BV1-12    | Valve ass'y                                     |
| 14     | AB1-11-2  | Body ass'y, 77.8 mm (3.06") Air Horn            |
| 15     | G1-21     | Gasket, throttle body to mixer                  |
| 16     | S1-19     | Screw, 12-24 x 5/8" SEMS (4)                    |
| 17     | S2-16     | Spring, idle screw                              |
| 18     | NSS       | Idle screw                                      |
| 19     | AS3-21    | Valve & spacer ass'y                            |
| 20     | A210-DP   | Dash Pot Ass'y                                  |
|        | A210-DP-2 | Dash Pot Ass'y, Silicone                        |
| 21     | NSS       | Plug, 1/8 NPT                                   |
| 22     | NSS       | (Refer to Throttle body charts)                 |
| 23     | NSS       | Pin, throttle stop (5)                          |
| 24     | S5-2      | Throttle shaft, 7.9 mm (0.31") dia.             |
|        | S5-3      | Throttle shaft, 9.5 mm (0.38") dia.             |
|        | NSS       | Butterfly, 38.1 mm (1.50")                      |
| 25     | NSS       | Butterfly, 44.5 mm (1.75")                      |
|        | NSS       | Butterfly, 50.8 mm (2.00")                      |
| 26     | S1-12     | Screw, 8-32 x 5/16" SEMS (2)                    |
| 27     | NSS       | Bearing, Oilite, 7.9 mm (0.31") I.D. (2)        |
|        | B2-13     | Bearing, Oilite, 9.5 mm (0.38") I.D. (2)        |
| 28     | B2-7      | Bearing, needle, 7.9 mm (0.31") I.D. (2), opt.  |
| 29     | NSS       | Seal, 7.9 mm (0.31") shaft (2)                  |
|        | S3-11     | Seal, 9.5 mm (0.38") shaft (2)                  |
| 30     | S3-20     | Seal, internal, 9.5 mm (0.38") I.D., optional   |
| 31     | R1-9      | Ring, seal retainer, 7.9 mm (0.31") shaft (2)   |
|        | R1-8      | Ring, seal retainer, 9.5 mm (0.38") shaft (2)   |
| 32     | AL1-8-2   | Throttle stop ass'y, 7.9 mm (0.31")             |
|        | AL1-10    | Throttle stop ass'y, 9.5 mm (0.38")             |
| 33     | NSS       | Throttle stop lever                             |
| 34     | S2-15     | Spring, stop screw                              |
| 35     | S1-21     | Stop screw, 10-32 x 3/4"                        |
| 36     | S1-18     | Pin screw, throttle stop                        |
|        | AL1-7-1   | Throttle lever, w/ S1-17, L1-7-1                |
|        | AL1-9-1   | Throttle lever, w/ S1-26, L1-9-1                |
| 37     |           | Throttle Lever 58.7 mm (2.31") long, 0.562" mtg |
|        | AL1-9-1A  | ID  |
| 38     | NSS       | Throttle lever                                  |
| 39     | NSS       | Screw, 10-24 x 5/8"                             |
|        | NSS       | Screw, 12-24 x 5/8"                             |
|        | G1-19     | Gasket, 38.1 mm (1.50") flange                  |
| 40     | G1-23     | Gasket, 44.5 mm (1.75") flange                  |
|        | G1-24     | Gasket, 50.8 mm (2.00") flange                  |





# MODEL 210 CARBURETOR

## CARBURETORS & MIXERS

### ASSEMBLIES & ACCESSORIES

#### MIXERS

| PART #   | DESCRIPTION                           |
|----------|---------------------------------------|
| 210M-2   | 77.8 mm (3.06") Air Horn              |
| 210M-2-2 | 77.8 mm (3.06") Air Horn, w/ silicone |

#### THROTTLE BODIES

| PART #   | DESCRIPTION                                  |
|----------|--|
| AT2-4-2  | Standard, 38.1 mm (1.50") flange, 7.9 mm     |
| AT2-5    | Standard, 44.5 mm (1.75") flange, 9.5 mm     |
| AT2-6    | Standard, 50.8 mm (2.00") flange, 9.5 mm     |
| AT2-6-3  | 50.8 mm (2.00") flange, 9.5 mm (0.38") shaft |
| AT2-11-1 | Standard, 31.8 mm (1.25") flange, 11.1 mm    |
| AT2-12   | Standard, 38.1 mm (1.50") flange, 11.1       |
| AT2-13-1 | Standard, Holley, 11.1 mm (0.44") shaft      |

#### THROTTLE SHAFTS

| PART # | DESCRIPTION                               |
|--------|---|
| S5-2   | 7.9 mm (0.31") dia., 127 mm (5.00") long, |
| S5-3   | 9.5 mm (0.38") dia., 138 mm (5.44") long, |
| 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  |

#### DASHPOT ASSEMBLIES

| PART #    | DESCRIPTION                               |
|-----------|---|
| A210-DP   | For Model 210 Mixer                       |
| A210-DP-2 | For Model 210 Mixer, w/silicone diaphragm |

#### SPACERS

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

#### GASKETS

| PART # | DESCRIPTION                    |
|--------|--------------------------------|
| G1-47  | Gasket, Flange 2B Holley T2-13 |

#### 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/ 6.4 mm (0.25") ball stud, 44.5 mm (1.75") long                                       |
| AL1-7-3  | Ass'y, 33.3 mm (1.31") long  |
| 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                                 |
| AL1-9-1  | 58.7 mm (2.31") long (standard on AT2-5, AT2-6)  |
| AL1-9-1A | 58.7 mm (2.31") long, 0.562" mounting ID   |
| 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 |
| AL1-33   | Ass'y, shaft clamp, 7.9 mm (0.31") mounting I.D., 49.2 mm (1.94") 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.

See Small Parts & Accessories section of catalog for other optional levers.

#### ADAPTERS

| PART #   | DESCRIPTION                     |
|----------|---------------------------------|
| A3-28    | 200M to 3-1/16" hose            |
| A3-30    | 200M to 2-5/8" hose             |
| AA3-19   | 225M to Holley 2B throttle body |
| AA3-32-2 | 200M to CA100 throttle body     |
| AA3-47-2 | 200M to CA425 throttle body     |
| AA3-48-2 | 200M to CA425 hose elbow        |

#### RETURN SPRINGS

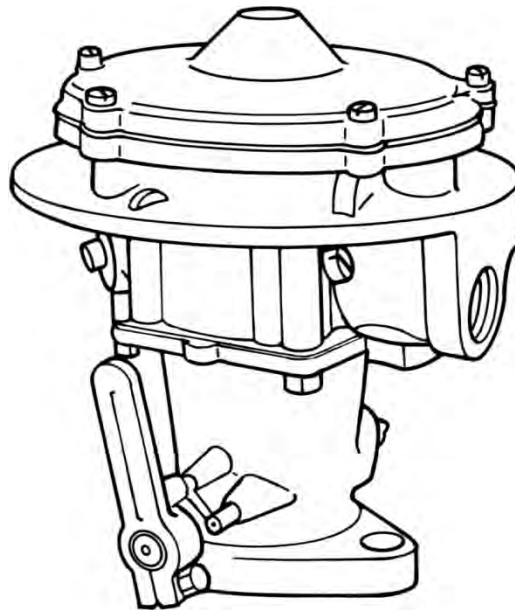
| PART #   | DESCRIPTION                    |
|----------|--------------------------------|
| AS2-50-2 | 7.9 mm (0.31") throttle return |
| AS2-50-3 | 9.5 mm (0.38") throttle return |

# MODEL 225 CARBURETOR

## CARBURETORS & MIXERS



## MODEL 225 CARBURETOR



### 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 LPG Vapor or Natural Gas applications with air flow requirements up to 380 CFM (179.3 L/s).

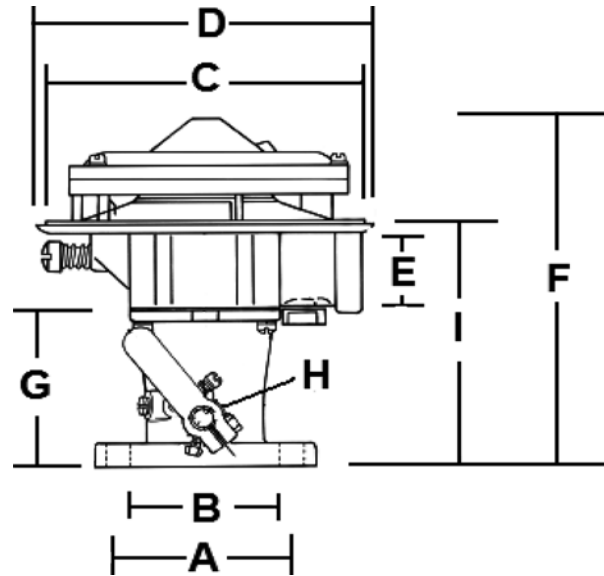
The Model 225 is also available for feedback applications with the 'FB' designation. Note: All DG model mixers reduce air flow by 30%.

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 ring spacers/shims. Check the Accessories section for more information.

### SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Fuel Type .....                   | LPG Vapor or Natural Gas   |
| Inlet Pressure .....              | -1.5" w.c. (-0.37 kPa)   |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)  |
| Mounting Position.....            | Vertical   |
| Diaphragm Material.....           | Hydrin (Standard), Silicone (Optional)                                     |
| HP/kW .....                       | 205 hp (153kW) @ 329 CFM (155 L/s) and 1.5" in Hg manifold depression      |
|                                   | 237 hp (176.7 kW) @ 380 CFM (179.3 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**



| CARB     | THRTL. BODY | SAE FLANGE | CTR. TO CTR. BOLT SPACING | BORE            | MIXER AIR HORN DIA. | OVRAL. WIDTH    | NPT INLET | OVRAL. HEIGHT   | THRTL. BODY HEIGHT | THRTL. SHAFT DIA. | FLANG. TO CTR. OF AIR HORN |
|----------|-------------|------------|---------------------------|-----------------|---------------------|-----------------|-----------|-----------------|--------------------|-------------------|----------------------------|
| 225-94   | AT2-6       | 2"         | 60.45mm (2.38")           | 55.6mm (2.188") | N/A                 | 159 mm (6.250") | 3/4"      | 184 mm (7.250") | 69.9mm (2.750")    | 7.9 mm (.313")    | 114 mm (4.500")            |
| 225-94-2 | AT2-6       | 2"         | 60.45mm (2.38")           | 55.6mm (2.188") | 148 mm (1.688")     | 159 mm (6.250") | 3/4"      | 191 mm (7.500") | 82.6mm (3.250")    | 9.5 mm (.375")    | 127 mm (5.000")            |
| CA225-94 | AT2-6       | 2"         | 60.45mm (2.38")           | 55.6mm (2.188") | 148 mm (1.688")     | 159 mm (6.250") | 3/4"      | 191 mm (7.500") | 82.6mm (3.250")    | 9.5 mm (.375")    | 127 mm (5.000")            |

# MODEL 225 CARBURETOR

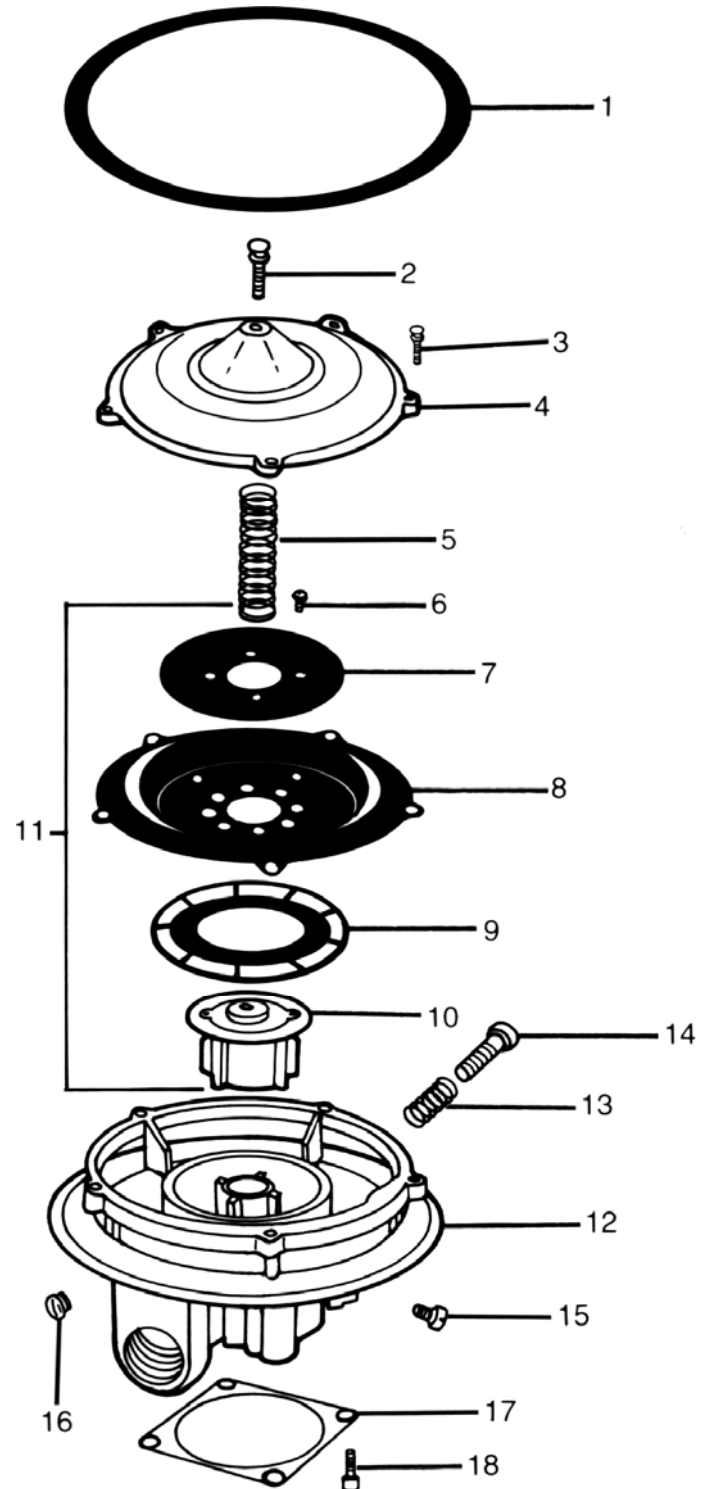
## CARBURETORS & MIXERS



### COMPONENTS

| 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          |
|        |         | Air-gas valve ass'y, complete w/ |
| 11     | AV1-12  | diaphragm, LPG                   |
|        |         | Air-gas valve ass'y, complete w/ |
|        | CV1-12  | 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 CARBURETOR**

**CARBURETORS & MIXERS**

**ASSEMBLIES & ACCESSORIES**

**MIXERS**

| PART #       | DESCRIPTION  |
|--------------|--|
| 225M-2       | For NG, w/silicone diaphragm                       |
| FB225M-2     | For feedback, w/ silicone diaphragm                |
| FB225M-F6T49 | Mixer assembly, Model 225 Tamper Rest For Ford QVM |
| CA225M       | For LPG  |
| CA225M-2     | Use CA225M-3-2 Instead                             |
| FB225M-2TP   | Feedback Mix w/Sil Diaphragm Temp Resistant        |

**THROTTLE BODIES (ONE BARREL)**

| PART #  | DESCRIPTION  |
|---------|--|
| AT2-4-2 | Standard, 38.1 mm (1.50") flange, 7.9 mm (0.31") shaft dia.  |
| 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 8.8 mm (0.031") unless otherwise noted.

**THROTTLE BODIES (TWO BARREL)**

| PART #   | DESCRIPTION           |
|----------|-----------------------|
| AB1-24-1 | Body Assy 2B Throttle |

**ACCESSORIES**

| PART # | DESCRIPTION                 |
|--------|-----------------------------|
| VCS    | Valve, Solenoid Vacuum Lift |

**ADAPTERS**

| PART # | DESCRIPTION                    |
|--------|--------------------------------|
| A2-55  | Adapter, Air Cleaner Base 225M |

**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 |

# MODEL 225 CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES (CONTINUED)

#### 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<br>Stop ass'y, 7.9 mm (0.31") mounting I.D., 19.1 mm                           |
| AL1-8-2  | (0.75") long (std. on AT-3, AT2-4-1, AT2-4-3, AT2-16-1, AT2-23)   |
| AL1-9-1  | 58.7 mm (2.31") long (standard on AT2-5, AT2-6)   |
| AL1-9-1A | 58.7 mm (2.31") long, 0.562" mounting ID  |
| AL1-9-2  | Lever 200 w/Swivel  |
| 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., 49.2mm (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.



**MODEL 225 CARBURETOR**

**CARBURETORS & MIXERS**

**ASSEMBLIES & ACCESSORIES (CONTINUED)**

**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                             |
| 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 |

**RING SPACERS**

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

**AIR CLEANERS**

| PART #   | DESCRIPTION  |
|----------|--|
| AF1-17-2 | Offset, 260 L/s (550 cfm), 356 mm (14.00") O.D., 106 mm (4.19") high |

**GASKETS**

| PART # | DESCRIPTION                      |
|--------|----------------------------------|
| G1-51  | Gasket, H.L. Governor for AA3-19 |

**BEARING, T/B SHAFT**

| PART # | DESCRIPTION        |
|--------|--------------------|
| B2-14  | Bearing, T/B Shaft |

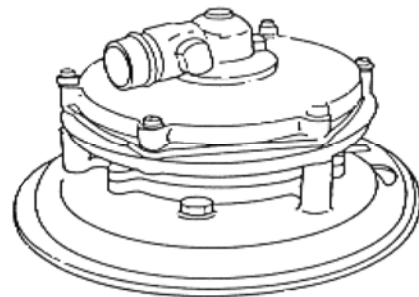
Note: All DG model mixers reduce air flow by 30%.

# MODEL 300A CARBURETOR

## CARBURETORS & MIXERS



### MODEL 300A



**300A Mixer Without Air Cleaner**



**Mixer With 10" Air Cleaner**



**Mixer With 14" Air Cleaner**

### DESCRIPTION

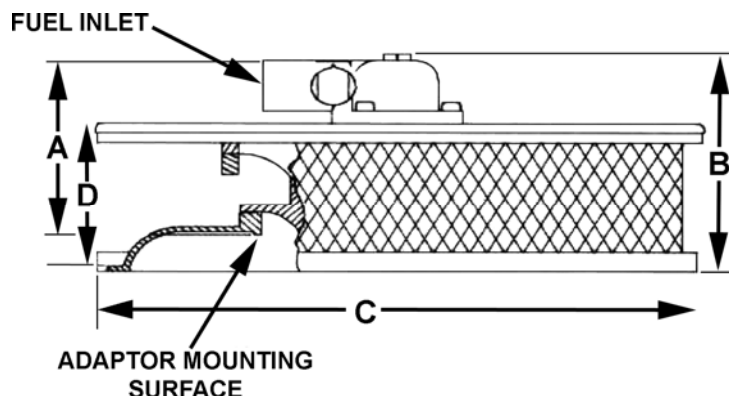
The Model 300A mixer is a single-diaphragm air valve for applications. It offers a down-draft air inlet that can be used for remote air filtration or open-element type air filters. This unit is available for LPG Vapor and Natural Gas applications with air flow requirements up to 348 CFM (164 L/s) or 432 CFM (204 L/s) depending on the part number. The 300A has numerous adapters to allow the installer to fit the 300A into most under hood vehicle applications.

The Model 300A is also available for feedback applications with the 'FB' designation. The 300A can also be equipped with a cam mechanism to allow the air valve to be raised to its full open position to minimize any restriction in the base vehicle air stream. Optional air cleaner assemblies are also available for engines which require higher CFM air flow.

### SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Fuel Type .....                   | LPG Vapor, Natural Gas                                   |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)                        |
| Diaphragm Material.....           | Hydrin (Standard), Silicone (Optional)                   |
| HP/(kW) (1 & 20).....             | 217 hp (161.8 kW) @ 348 CFM (164 L/s) w/1.5" Hg manifold |
| HP/(kW) (50 & 70).....            | 270 hp (201.3 kW) @ 432 CFM (204 L/s) w/1.5" Hg manifold |
| Certification .....               | UL (AU2317), Inquire for specific ECE approval           |

**DIMENSIONS**



|              | A                                     | B                 | C                        | D                  |           |                                     |                      |     |
|--------------|---------------------------------------|-------------------|--------------------------|--------------------|-----------|-------------------------------------|----------------------|-----|
| MIXER        | MOUNTING SURFACE TO TOP OF FUEL INLET | OVERALL HEIGHT    | MIXER ONLY OVERALL WIDTH | AIR CLEANER HEIGHT | GAS VALVE | DIAPHRAGM (BLACK HYDRIN S-SILICONE) | BODEN CABLE INCLUDED | CAM |
| CA300A-M-2   | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-11     | S                                   | Y                    | Y   |
| CA300A-M-3   | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-11     | B                                   | N                    | Y   |
| CA300A-M-3-2 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-11     | S                                   | N                    | Y   |
| CA300A-M-4-2 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-11     | S                                   | N                    | N   |
| CA300AM-50-2 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-39     | S                                   | Y                    | Y   |
| CA300AM-50-3 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-39     | S                                   | N                    | Y   |
| CA300AM-50-4 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-39     | S                                   | N                    | N   |
| FB300A-M-2   | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-49     | S                                   | Y                    | Y   |
| FB300A-M-4-2 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-49     | S                                   | N                    | N   |
| FB300AM-50-2 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-50     | S                                   | Y                    | Y   |
| FB300AM-50-4 | 88.9 mm (3.5")                        | 104.7 mm (4.125") | 206.3 mm (8.125")        | 69.8 mm (2.75")    | V2-50     | S                                   | Y                    | N   |

# MODEL 300A CARBURETOR

## CARBURETORS & MIXERS



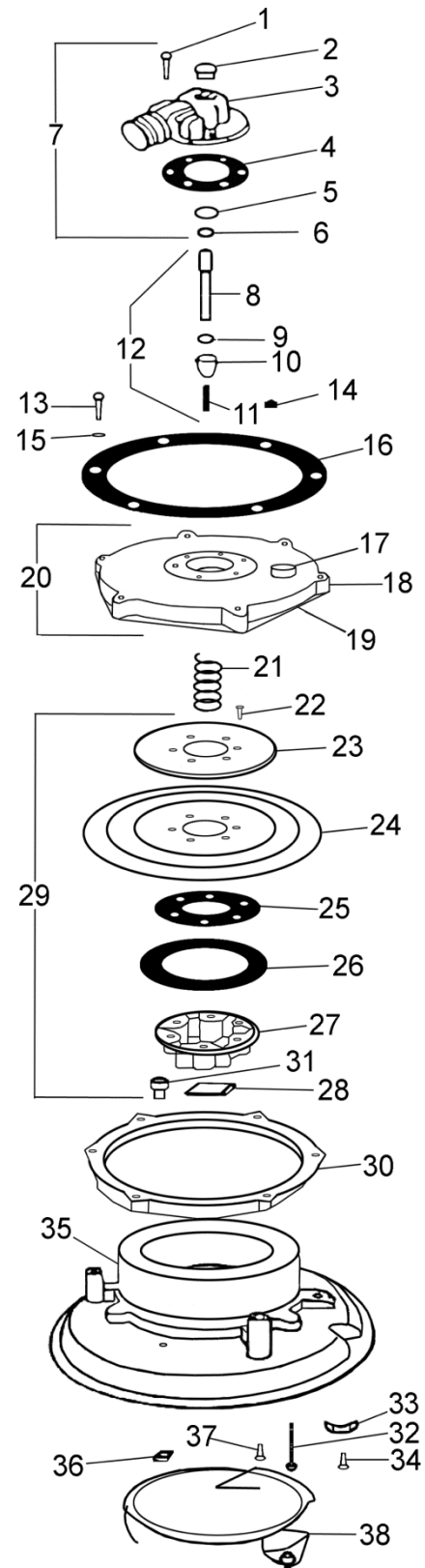
### MODEL 300A 1 AND 50 COMPONENTS

| ITEM | PART #  | DESCRIPTION                                    |
|------|---------|--|
| 1    | S1-3    | † Screw, 10-24 x 5/8" SEMS (3)                 |
| 2    | P3-2    | Plug, idle adjustment                          |
| 3    | AE1-4   | Elbow with power adjustment: E1-4, V2-9, W1-12 |
| 4    | NSS     | *† Gasket, gas elbow                           |
| 5    | R1-9    | *† Ring, seal retainer                         |
| 6    | NSS     | *† Seal, idle screw                            |
| 7    | BE1-4-1 | Elbow ass'y, complete: P3-2, AE1-4, R1-9, S3-3 |
| 8    | S1-15   | Screw, idle adjustment                         |
| 9    | NSS     | † Seat, gas valve                              |
| 10   | NSS     | Valve Gas Mixer, 300A Series                   |
| 10   | V2-49   | Valve Gas Mixer FB300A                         |
| 10   | V2-50   | Valve Gas Mixer FB300A                         |
| 11   | NSS     | Spring, gas valve                              |
| 12   | NSS     | † Gas valve ass'y, complete                    |
| 12   | NSS     | Gas valve ass'y, complete                      |
| 13   | NSS     | † Screw 10-24 x 1" (3)                         |
| 14   | NSS     | † Nut, dome 10-24 (3)                          |
| 15   | NSS     | † Washer, No.10 light flat (6)                 |
| 16   | NSS     | *† Gasket, filter cover                        |
| 17   | NSS     | † Rivet, vent valve                            |
| 18   | NSS     | † Valve cover vent                             |
| 19   | NSS     | Cover, diaphragm                               |
| 20   | NSS     | Cover assy., diaphragm with vent valve         |
| 20   | NSS     | † Cover assy., diaphragm with vent valve       |
| 21   | S2-2    | † Spring, air valve                            |
| 22   | S1-12   | Screw, 8-32 x 5/16" SEMS (6)                   |
| 23   | P2-1    | Plate, diaphragm backup                        |
| 24   | NSS     | * Diaphragm, air valve                         |
| 24   | NSS     | * Diaphragm, air valve, silicone               |
| 25   | NSS     | * Gasket, air valve                            |
| 26   | R1-2    | Ring, air valve                                |
| 27   | NSS     | Valve, air metering: V1-10, L1-3, B3-24        |
| 28   | NSS     | * Lock, nylon idle adjustment                  |
| 29   | NSS     | † Air valve assy, w/diaphragm                  |
| 29   | NSS     | † Air valve Assy, Silicone, w/diaphragm        |
| 30   | NSS     | Ring, diaphragm support                        |
| 31   | S1-5    | Screw, 1/4"-20 x 5/8" hex head SEMS (3)        |
| 32   | NSS     | † Screw, 10-24 x 1-1/2" SEMS (3)               |
| 33   | NSS     | Clamp, Boden wire                              |
| 34   | NSS     | Screw, 10-32 x 5/8" hex head                   |
| 35   | NSS     | Base ass'y, complete                           |
| 36   | NSS     | Nut, square, 1/4"-20                           |
| 37   | S1-69   | Screw, 1/4"x 5/16" (plug)                      |
| 38   | AC2-2   | Cam ass'y: C2-2, W1-2, S1-7                    |

**NSS = NOT SERVICED SEPARATELY**

\* Indicates components of minor repair kit.

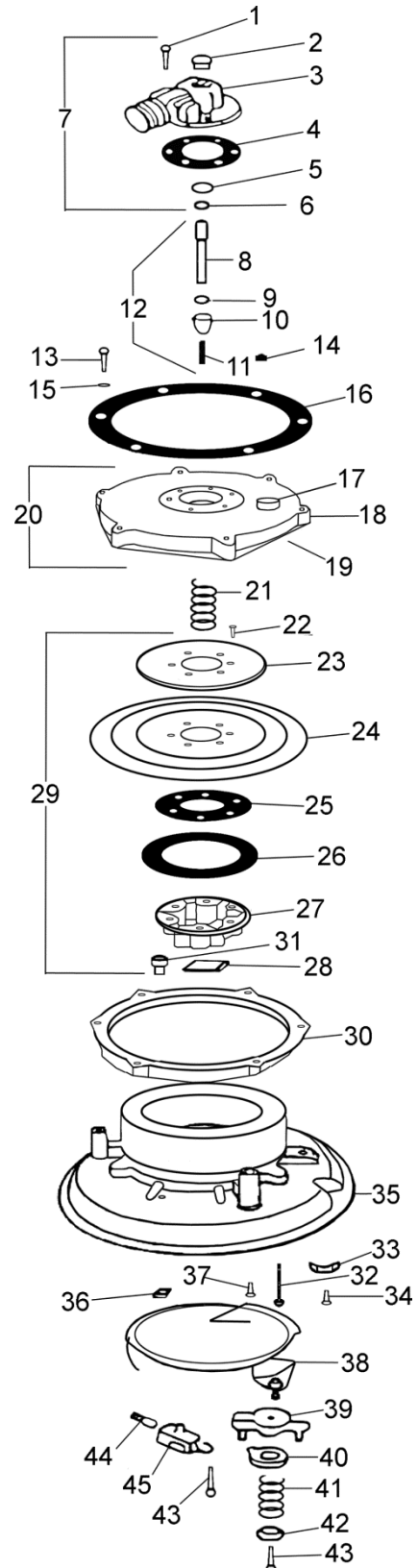
† Indicates components of major repair kit.



### MODEL 300A 20 AND 70 COMPONENTS

| Item # | Part #  | Description  |
|--------|---------|--|
| 1      | S1-3    | † Screw, 10-24 x 5/8" SEMS (3)                     |
| 2      | P3-2    | Plug, idle adjustment                              |
| 3      | AE1-4   | Elbow with power adjustment                        |
| 4      | NSS     | *† Gasket, gas elbow                               |
| 5      | R1-9    | *† Ring, seal retainer                             |
| 6      | NSS     | *† Seal, idle screw                                |
| 7      | BE1-4-1 | Elbow ass'y, complete: P3-2, AE1-4, R1-9, S3-3     |
| 8      | S1-15   | Screw, idle adjustment                             |
| 9      | NSS     | † Seat, gas valve                                  |
| 10     | V2-49   | Valve, gas metering                                |
| 10     | V2-50   | Valve, gas metering                                |
| 11     | NSS     | Spring, gas valve                                  |
| 12     | NSS     | † Gas valve ass'y, complete                        |
| 12     | NSS     | Gas valve ass'y, complete                          |
| 13     | NSS     | † Screw 10-24 x 1" (3)                             |
| 14     | NSS     | † Nut, dome 10-24 (3)                              |
| 15     | NSS     | † Washer, No.10 light flat (6)                     |
| 16     | NSS     | *† Gasket, filter cover                            |
| 17     | NSS     | † Rivet, vent valve                                |
| 18     | NSS     | † Valve cover vent                                 |
| 19     | NSS     | Cover, diaphragm                                   |
| 20     | NSS     | Cover ass'y, diaphragm with vent valve             |
| 21     | S2-2    | † Spring, air valve                                |
| 22     | S1-12   | Screw, 8-32 x 5/16" SEMS (6)                       |
| 23     | P2-1    | Plate, diaphragm backup                            |
| 24     | NSS     | * Diaphragm, air valve                             |
| 24     | NSS     | * Diaphragm, air valve, silicone                   |
| 25     | NSS     | * Gasket, air valve                                |
| 26     | R1-2    | Ring, air valve                                    |
| 27     | NSS     | Valve, air metering: V1-10, L1-3, B3-24            |
| 28     | NSS     | * Lock, nylon idle adjustment                      |
| 29     | NSS     | AV1-10-1† Air valve ass'y, complete with diaphragm |
| 29     | S1-5    | AV1-10-2† Air valve ass'y, complete with diaphragm |
| 30     | NSS     | Ring, diaphragm support                            |
| 31     | NSS     | Screw, 1/4"-20 x 5/8" hex head SEMS (3)            |
| 32     | NSS     | † Screw, 10-24 x 1-1/2" SEMS (3)                   |
| 33     | NSS     | Clamp, Boden wire                                  |
| 34     | NSS     | Screw, 10-32 x 5/8" hex head                       |
| 35     | S1-69   | Base ass'y, complete                               |
| 36     | AC2-2   | Nut, square, 1/4"-20                               |
| 37     | NSS     | Screw, 1/4"x 5/16" (plug)                          |
| 38     | NSS     | Cam ass'y: C2-2, W1-2, S1-7                        |
| 39     | NSS     | Body vacuum valve: B1-41, P1-20                    |
| 40     | NSS     | Valve, rotary                                      |
| 41     | NSS     | Spring, vacuum valve                               |
| 42     | NSS     | Cap, vacuum valve                                  |
| 43     | NSS     | Screw, 4-40 x 3/4" (3)                             |
| 44     | NSS     | Connector, wire (2)                                |
| 45     | NSS     | Switch, gasoline                                   |

**NSS = NOT SERVICED SEPARATELY**  
 \* Indicates components of minor repair kit.  
 † Indicates components of major repair kit.



# MODEL 300A CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES

#### ADAPTERS

| PART #   | DESCRIPTION   |
|----------|---|
| A1-4     | Adapter, CA300A, mixer to 2-5/8" Air Horn, center stud  |
| A1-50-2  | Adapter, CA300A   |
| A1-6     | Adapter, CA300A, mixer to 3-1/16" Air Horn, center stud |
| A1-63    | Adapter, CA300 Machined                                 |
| AA1-40   | Adapter, CA300 2 5/8" w/ Clamp Nuts                     |
| AA1-50-5 | Adapter, Assy CA300/CA425                               |
| AA3-75   | Adapter, CA300A & CA425M                                |
| A3-96    | Adapter, CA300 Holley 4B                                |
| A1-16-1  | Adapter, CA300, 5-1/8" Center Stud                      |
| A1-16-2  | Adapter, CA300, 1/2" Shorter than A1-16-1               |
| A1-54    | Adapter, 3-1/8" Air Horn                                |
| A1-55    | Adapter, 2-5/8" Air Horn                                |
| A1-56    | Adapter, 2-5/16" Air Horn                               |
| A1-62    | Adapter, 5-1/8" Air Horn                                |
| AA1-57   | Adapter, Ass'y Hood                                     |
| AA1-67   | Adapter, Ass'y 175A to Hose                             |

#### CABLES

| PART # | DESCRIPTION                   |
|--------|-------------------------------|
| C2-32  | Cable, Boden Wire 300A Series |
| C2-1   | Clamp, Boden Cable            |

#### FILTERS

| PART # | DESCRIPTION                                    |
|--------|--|
| AF1-1  | Filter Assy (C1-4 Cover & F1-1 Filter) 350 CFM |
| F1-1   | Filter Element, CA300A, 350 CFM                |
| C1-4   | Cover, CA300A 350 CFM                          |
| C1-40  | Cover, Air Filter, 500 CFM                     |
| F1-9   | Air Filter Element, 500 CFM                    |

#### ADAPTERS

| PART #  | DESCRIPTION                     |
|---------|---------------------------------|
| A2-73   | Adapt 1/2" Spacer Adapter 5" ID |
| A1-50-2 | Adapter, CA300A                 |

#### MIXERS

| PART #       | DESCRIPTION                                    |
|--------------|--|
| CA300A-M-2   | Mixer only, w/O Filter w/ Boden Wire, Silicone |
| CA300A-M-3   | Mixer, w/O Fitting, Filter, Cable,             |
| CA300A-M-3-2 | Mixer, Silicone, w/O cable, & Filter Fitting.  |
| CA300A-M-4-2 | Mixer w/O C2-32, AC2-2 Silicone                |
| CA300AM-50-2 | Mixer only, w/O Filter, w/ AC2-2               |
| CA300AM-50-3 | Mixer only, w/O Filter, C2-32                  |
| CA300AM-50-4 | Mixer Ass'y, w/O Cable & Cam                   |
| FB300A-M-2   | Mixer Ass'y, w/ FB. Air Valve                  |
| FB300A-M-4-2 | Feedback Mixer w/ C2-32                        |
| FB300AM-50-2 | Mixer Ass'y Feedback, w/O Filter               |
| FB300AM-50-4 | Mixer Ass'y, w/O Filter, & Cam Cable           |

#### AIR VALVE ASSY

| PART # | DESCRIPTION               |
|--------|---------------------------|
| AV2-50 | Gas Valve Ass'y, Complete |

#### REPAIR KITS

| PART #          | DESCRIPTION   |
|-----------------|---|
| RK300MA-1/20    | Major Repair Kit for Standard or -20 models with Hydrin Diaphragm   |
| RK300MA-1/20-2  | Major Repair Kit for Standard or -20 models with Silicone Diaphragm |
| RK300MA-50/70-2 | Major Repair Kit for -50 or -70 models with Silicone Diaphragm      |
| RK300MI-1/20-2  | Minor Repair Kit Minor for -20 models with Silicone Diaphragm       |
| RK300MI-50/70-2 | Minor Repair Kit for -50 or -70 models with Silicone Diaphragm      |

#### POWER VALVES

| PART # | DESCRIPTION             |
|--------|-------------------------|
| V2-9   | Valve, Power Adjustment |

#### GASKETS

| PART # | DESCRIPTION    |
|--------|----------------|
| G1-130 | Gasket, Flange |





**MODEL 300A CARBURETOR**

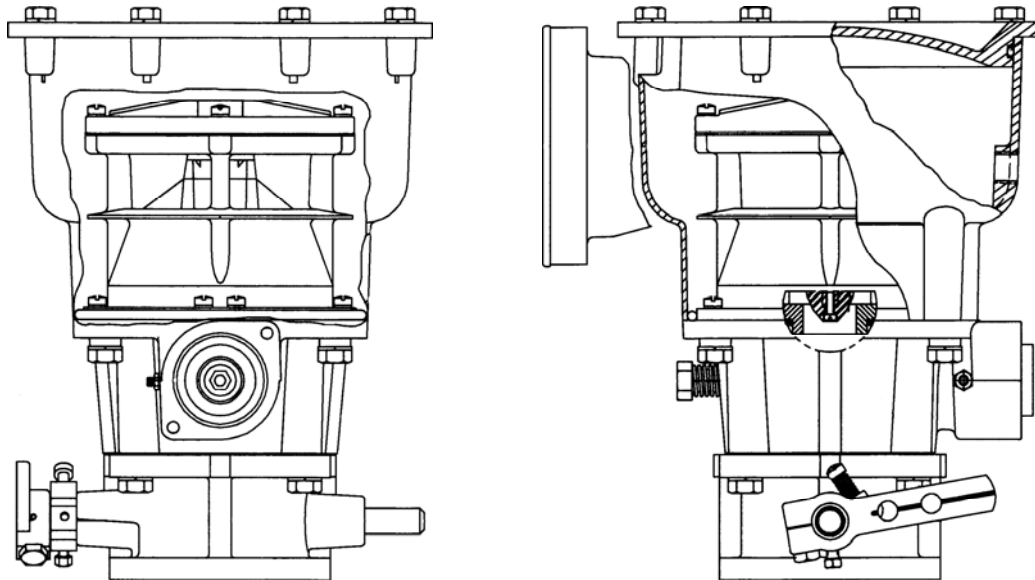
**CARBURETORS & MIXERS**

# MODEL 400VF CARBURETOR

## CARBURETORS & MIXERS



### MODEL 400VF CARBURETOR



#### DESCRIPTION

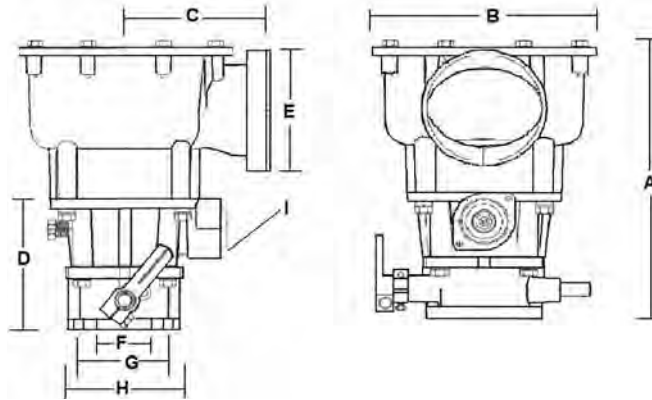
The Model 400VF Mixer is a concentric flow type air valve carburetor with a precision gas metering valve attached to the air valve for applications with air flow requirements up to 500 CFM (236.0 L/s). The air valve and gas valve motion is linear in relation to the volumetric flow. The air/fuel ratio is controlled by the adjustable power valve, the shape of the gas metering valve and the pressure from the gas regulator. The most suitable gas valve and matching jet is selected from several sizes best suited for various fuels such as LPG Vapor, Natural Gas and Landfill Gas. Gas valves are shaped to provide A/F versus flow characteristics defined by each customer.

#### SPECIFICATIONS

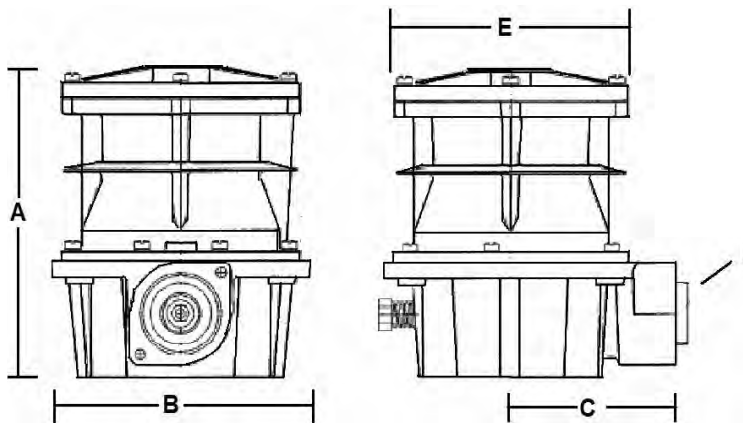
|                                   |   |
|-----------------------------------|---|
| Fuel Type                         |   |
| LPG Vapor .....                   | 90% + Propane   |
| Natural Gas.....                  | 85% + Methane   |
| Digester Gas.....                 | 56-72% Methane  |
| Landfill Gas.....                 | 45-56% Methane  |
| Inlet Pressure .....              | 5" w.c. over Air Inlet (Idle Setting)   |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....            | Various, depending on configuration (updraft, downdraft, side draft)                                |
| Diaphragm Material.....           | Silicone  |
| HP/kW .....                       | 320HP (238.6 kW) @ 500 CFM (236.0 L/s) with 2.0" in Hg manifold depression using T2-7 throttle body |



**DIMENSIONS**



**View A**



**View B**

| STD. CARB.    | AIR VALVE<br>BODY ASSY | GAS VALVE<br>CONV. | GAS BODY<br>ASSY | AIR<br>INLET<br>ASSY | THROAT<br>ASSY | VIEW |
|---------------|------------------------|--------------------|------------------|----------------------|----------------|------|
| NG400VF3X-3-2 | AB 1-66-3X             | CKV2-77            | AB1-67           | AA2-70               | AT2-7-303      | A    |

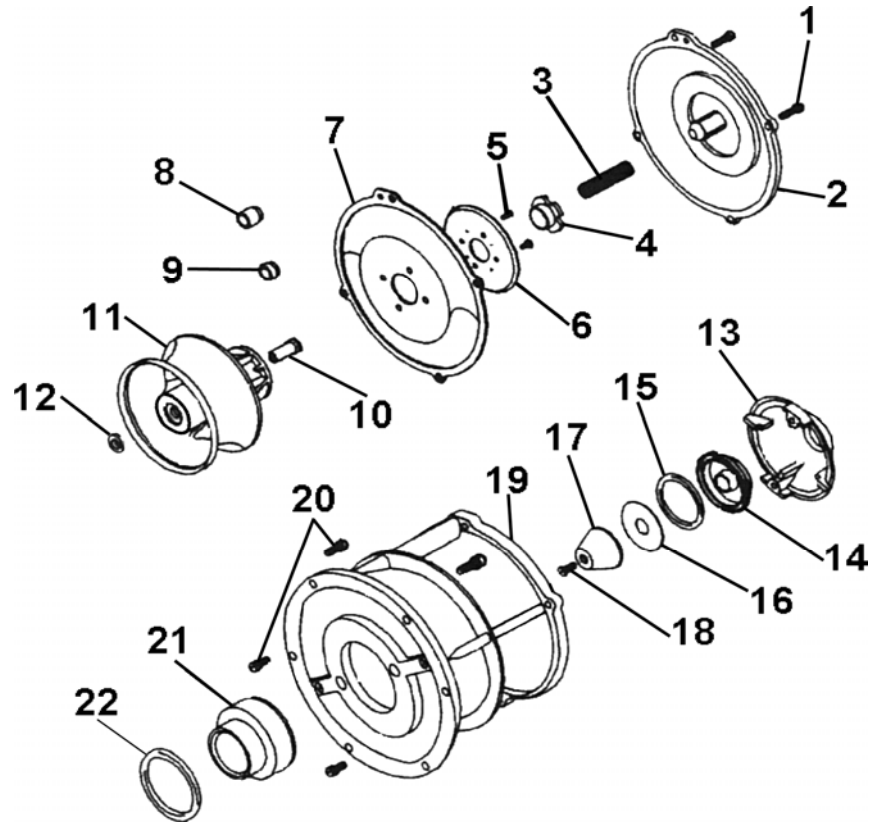
| STD. CARB.    | A                   | B                   | C                   | D                          | E                 | F                  | G                  | H                  | I                    |
|---------------|---------------------|---------------------|---------------------|----------------------------|-------------------|--------------------|--------------------|--------------------|----------------------|
|               | OVERALL<br>HEIGHT   | OVERALL<br>WIDTH    | CTR TO<br>INLET     | THROTTLE<br>BODY<br>HEIGHT | INLET DIA.        | BORE               | CTR. TO            | FLANGE<br>WIDTH    | FUEL<br>INLET<br>NPT |
| NG400VF3X-3-2 | 245.8 mm<br>(9.68") | 182.8 mm<br>(7.20") | 123.9 mm<br>(4.88") | 112.0 mm<br>(4.41")        | 101.6mm<br>(4.0") | 68.3 mm<br>(2.69") | 72.8 mm<br>(2.87") | 95.2 mm<br>(3.75") | 31.7 mm<br>(1.25")   |

# MODEL 400 VARIFUEL CARBURETOR

## CARBURETORS & MIXERS



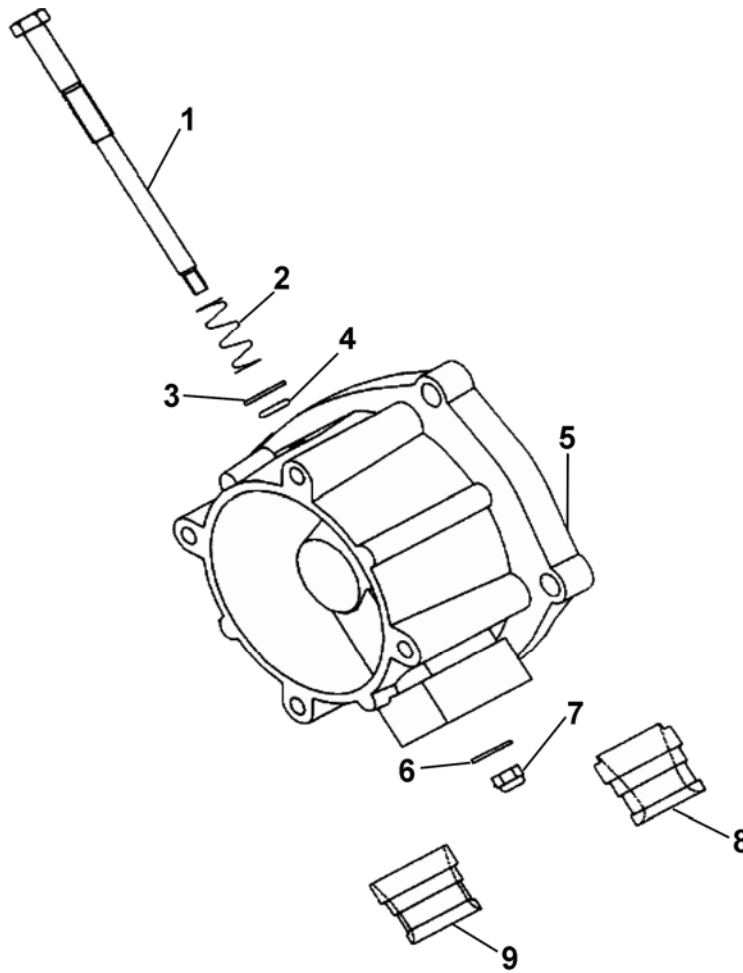
### COMPONENTS



| ITEM # | PART #    | DESCRIPTION                    |
|--------|-----------|--------------------------------|
| 1      | S1-3      | Screw                          |
| 2      | C1-30     | Cover                          |
| 3      | S2-30     | Spring, Air Valve              |
|        | S2-41     | Spring, Air Valve 600 High     |
| 4      | B3-57     | Bushing                        |
| 5      | S1-22     | Screw                          |
| 6      | P2-62-2   | Plate, Back up Diaphragm 400VF |
| 7      | D1-25     | Diaphragm                      |
| 8      | S4-39     | Updraft Spacer                 |
| 9      | S4-38     | Sidedraft Spacer               |
| 10     | NSS       | Shaft                          |
| 11     | AB1-66-3U | Air Valve Body, Updraft        |
|        | AB1-66-3X | Air Valve Body, Downdraft      |
| 12     | NSS       | O-ring                         |
| 13     | NSS       | Jet Cover                      |
| 14     | P4-4      | Piston                         |
| 15     | S3-132    | O-ring                         |
|        | S3-42     | O-ring                         |
|        | S3-78     | O-ring                         |
|        | S3-82     | O-ring                         |

| ITEM #    | PART #   | DESCRIPTION                        |
|-----------|----------|------------------------------------|
| 16        | W1-100   | Washer                             |
|           | V2-43    | Gas Valve                          |
|           | V2-78    | Gas Valve, ULB                     |
| 17        | V2-88    | Valve, Gas Mixer FB Rich           |
|           | V2-89    | Valve, Gas Mixer FB Lean           |
|           | V2-122   | Valve, Gas 400VF NG Ulb            |
| 18        | NSS      | Screw                              |
| 19        | NSS      | Body, 400VF                        |
| 20        | NSS      | Screw                              |
| 21        | NSS      | Jet                                |
| 22        | S3-133   | O-ring Nitrile, Natural Gas        |
|           | S3-133-2 | O-ring Viton Landfill/Digester Gas |
| Not Shown | S3-103   | O-ring, 90° Cover 400VF            |
|           | S3-138   | O-ring, 90° Cover 400VF            |

**COMPONENTS (CONTINUED)**



| ITEM #    | PART # | DESCRIPTION                   |
|-----------|--------|-------------------------------|
| 1         | NSS    | Power Adjust Screw            |
| 2         | S2-16  | Spring                        |
| 3         | W1-33  | Washer                        |
| 4         | S3-27  | O-ring                        |
| 5         | NSS    | Gas Body                      |
| 6         | NSS    | Washer Power Valve            |
| 7         | NSS    | Ny Loc Nut                    |
| 8         | J1-36  | Jet Natural Gas & Propane     |
| 9         | J1-48  | Jet Landfill & Digester       |
| Not Shown | B2-9   | Bearing, Needle AT2-7         |
| Not Shown | NSS    | Washer, .394x1.246.051, Almn. |
| Not Shown | NSS    | Washer, .263x1.744.051, Steel |

# MODEL 400 VARIFUEL CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES

#### ACCESSORIES

| PART#  | DESCRIPTION                |
|--------|----------------------------|
| AA2-69 | Air Horn, 4.0" Hose        |
| AA2-70 | Air Horn, 90 Deg 4.0" Hose |

#### GAS VALVE/JET KIT

| PART#   | DESCRIPTION  |
|---------|--|
| CKV2-77 | (NG) Natural gas, stoichiometric w/J1-45 (also for Propane w/EB converter) |
| CKV2-78 | (UL) Natural gas, ultralean (l=1.4 to 1.6), w/J1-44                        |
| CKV2-79 | (DG) Digester gas, (540-640 BTU/ft3), stoichiometric, w/J1-47              |
| CKV2-80 | (LF) Landfill gas, (450-540 BTU/ft3), stoichiometric, w/J1-47              |
| CKV2-88 | (FR) Natural gas, throttling feedback, (l=0.85-1.05), w/J1-46              |
| CKV2-89 | (FB) Natural gas, enrichment feedback, (l=1.2-1.4), w/J1-45                |

#### GAS JETS

| PART# | DESCRIPTION            |
|-------|------------------------|
| J1-36 | Power Jet, 400VF       |
| J1-44 | Jet, Gas 400VF .600 ID |
| J1-45 | Jet, Gas 400VF .750 ID |
| J1-46 | Jet, Gas 400VF, .900ID |
| J1-47 | Jet, Gas 400VF 1.060ID |

#### BUSHINGS

| PART# | DESCRIPTION              |
|-------|--------------------------|
| B3-58 | Bushing, Lower A/V 400VF |

#### JET COVER ASSEMBLY

| PART#    | DESCRIPTION              |
|----------|--------------------------|
| BC1-29-3 | Assembly, Jet Cover, VF3 |



**MODEL 400 VARIFUEL CARBURETOR**

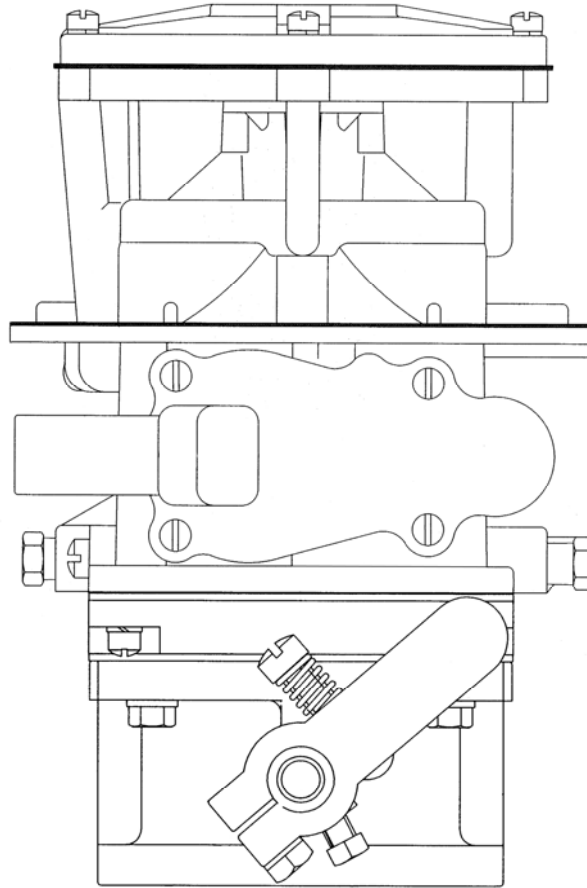
**CARBURETORS & MIXERS**

# MODEL 425 CARBURETOR

## CARBURETORS & MIXERS



### MODEL 425 CARBURETOR



#### DESCRIPTION

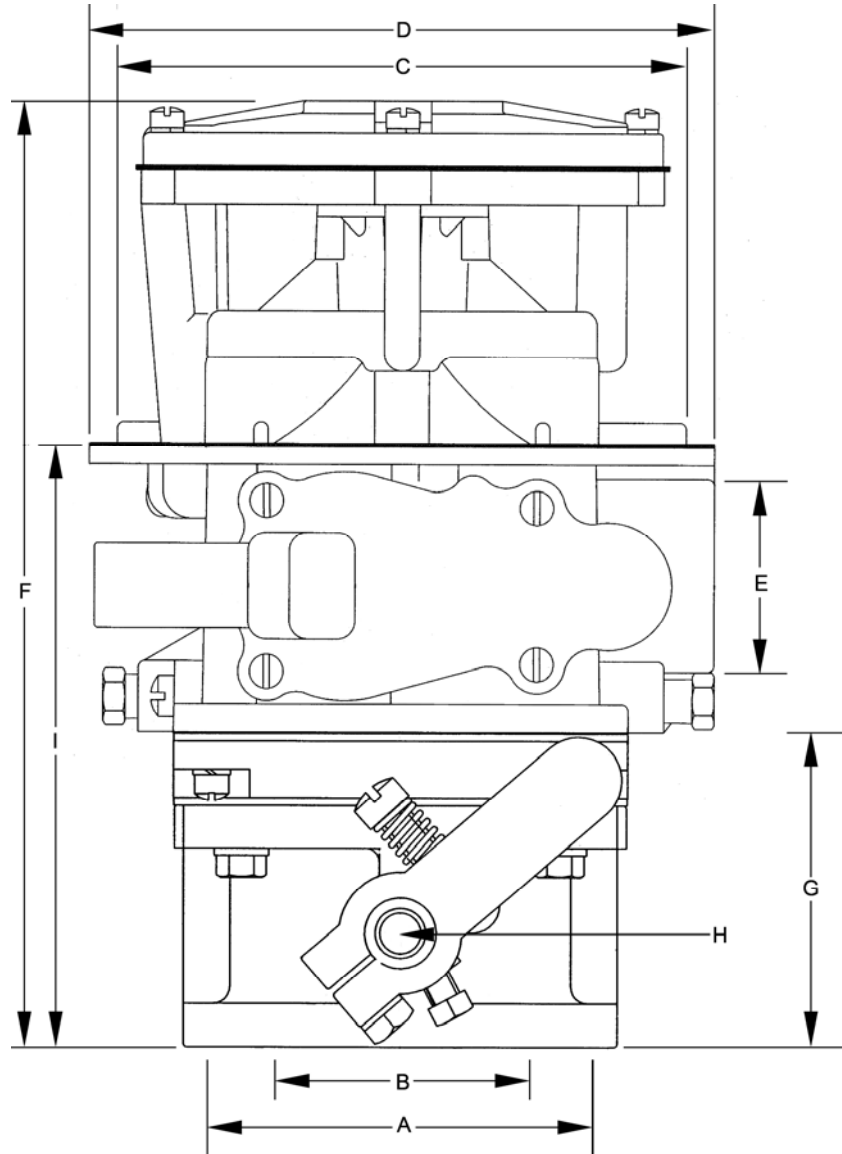
The Model 425 carburetor is a single-diaphragm air valve carburetor/mixer. It offers a down draft air inlet that can be used for remote air filtration or open-element type air filters. This unit is available for LPG Vapor and Natural Gas for applications requiring up to 460 CFM (217.1 L/s). The Model 425 is also available for feedback applications with the 'FB' designation. These FB mixers are available in a tamper resistant configuration, indicated by the "-CT" in the part number.

#### SPECIFICATIONS

|                             |   |
|-----------------------------|---|
| Fuel Type .....             | LPG Vapor, Natural Gas  |
| Inlet Pressure .....        | 8.0" w.c. Natural Gas/LPG Vapor   |
| Operating Temperature ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....      | Vertical  |
| Diaphragm Material.....     | Hydrin (Standard), Silicone (Optional)  |
| Hp/kW .....                 | 287hp (214kW) @ 460 CFM (217.1 L/s) and 1.5" Hg manifold depression<br>333hp (248kW) @ 533 CFM (252L/s) and 2.0" Hg manifold depression |



**DIMENSIONS**



|            |        |             |            | A                         | B                    | C                     | D                   | E              | F                     | G                   | H                   | I                         |
|------------|--------|-------------|------------|---------------------------|----------------------|-----------------------|---------------------|----------------|-----------------------|---------------------|---------------------|---------------------------|
| STD. CARB. | MIXER  | THRTL. BODY | SAE FLANGE | CTR .TO CTR. BOLT SPACING | BORE                 | MIXER AIR HORN DIA.   | OVERALL WIDTH       | NPT FUEL INLET | OVERALL HEIGHT        | THRTL. BODY HEIGHT  | THRTL. SHAFT DIA.   | FLANGE TO AIR HORN FLANGE |
| CA425-2    | CT425M | BT2-7-4     | 2-1/2"     | 73.03 mm<br>(2.875")      | 67.95 mm<br>(2.688") | 130.18 mm<br>(5.125") | 139.7 mm<br>(5.50") | 1"             | 212.73 mm<br>(8.375") | 53.98MM<br>(2.125") | 11.11mm<br>(0.438") | 130.18 mm<br>(5.125")     |
| CT425-2    | CT425M | BT2-7-4     | 2-1/2"     | 73.03 mm<br>(2.875")      | 67.95 mm<br>(2.688") | 130.18 mm<br>(5.125") | 139.7 mm<br>(5.50") | 1"             | 212.73 mm<br>(8.375") | 53.98MM<br>(2.125") | 11.11mm<br>(0.438") | 130.18 mm<br>(5.125")     |

# MODEL 425 CARBURETOR

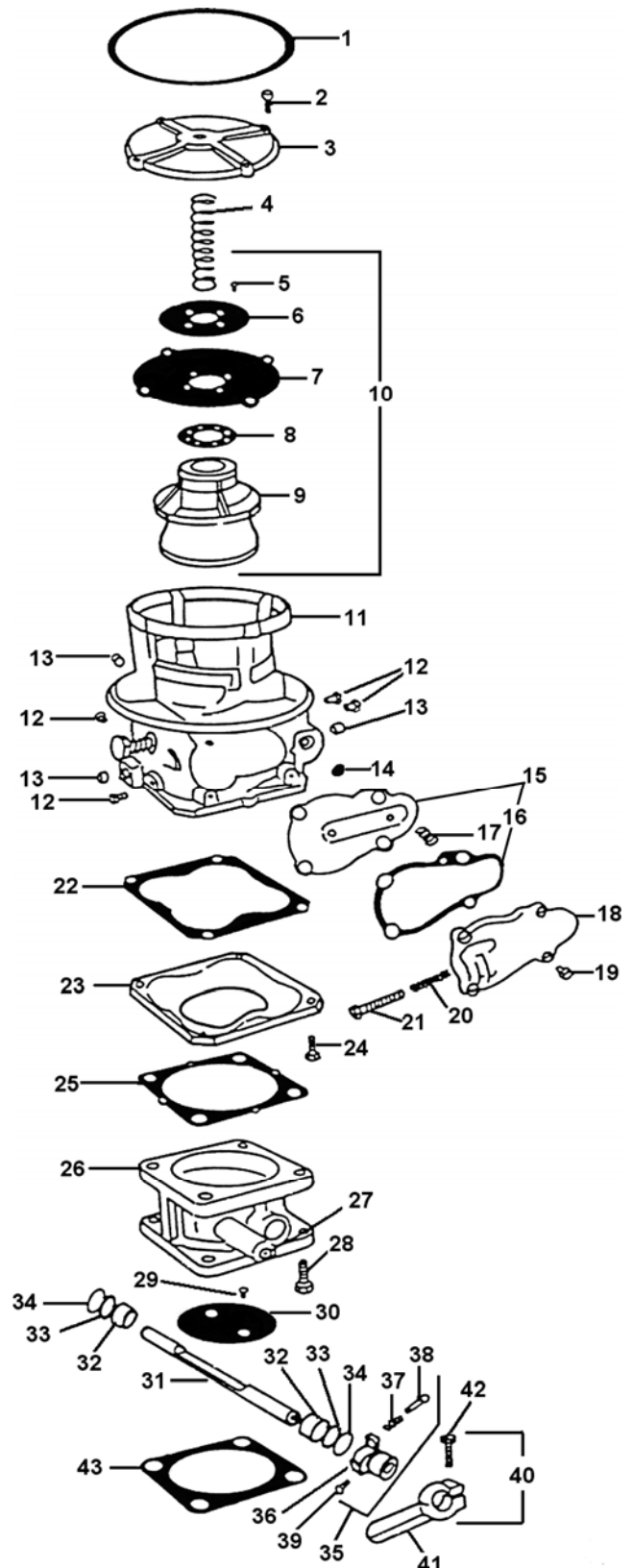
## CARBURETORS & MIXERS



### COMPONENTS

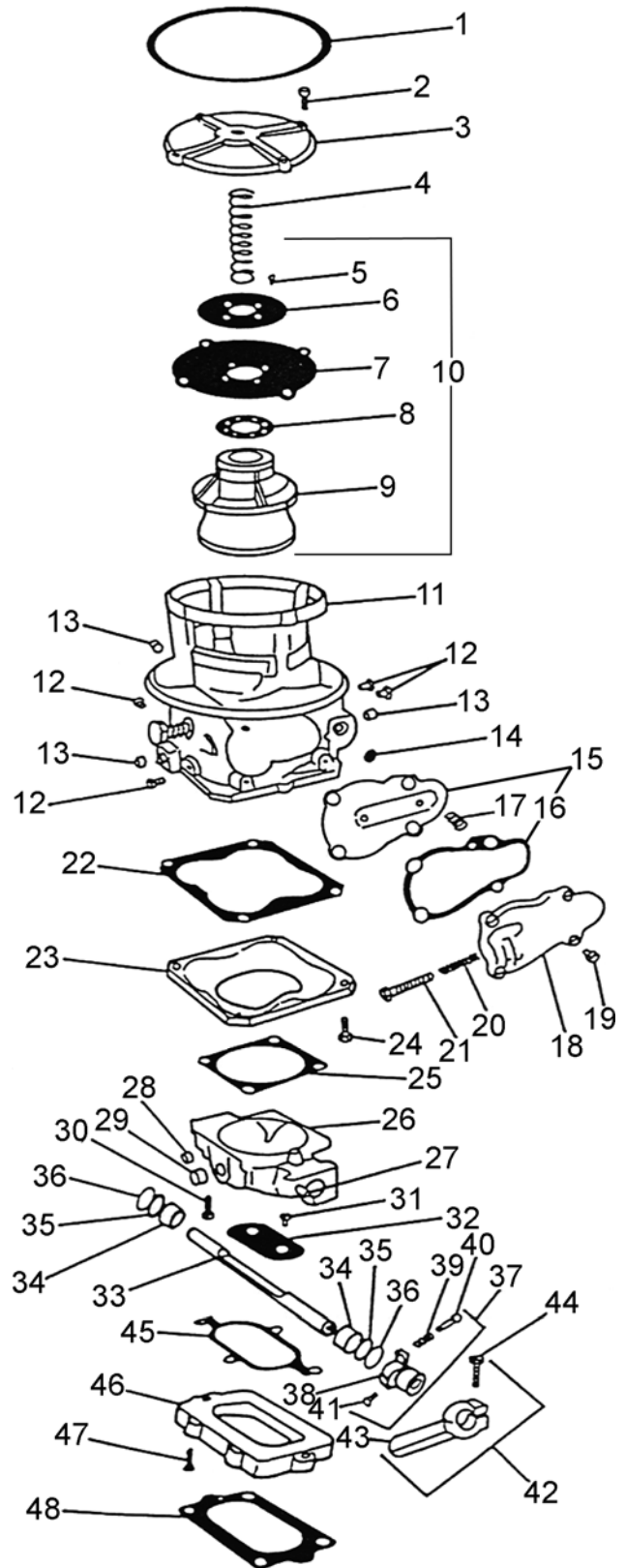
| ITEM # | PART #   | DESCRIPTION                         |
|--------|----------|-------------------------------------|
| 1      | G1-66    | Gasket, Air Horn                    |
| 2      | S1-3     | Screw, 10-24 x 5/8" SEMS (4)        |
| 3      | C1-30    | Cover, air valve diaphragm          |
| 4      | S2-30    | Spring, air valve                   |
| 5      | NSS      | Screw, 6-32 x 1/4" SEMS (4)         |
| 6      | NSS      | Plate, backup                       |
| 7      | D1-18    | Diaphragm, air valve                |
|        | D1-25    | Diaphragm, air valve, silicone      |
| 8      | NSS      | Gasket air valve                    |
| 9      | NSS      | Air-gas valve                       |
| 10     | AV1-16   | Air-gas valve assembly              |
| 11     | NSS      | Body Assembly                       |
| 12     | S1-69    | Screw, 1/4" -28 x 5/16" (3)         |
| 13     | NSS      | Plug, 1/8" pipe                     |
| 14     | NSS      | Seat, idle valve                    |
| 15     | AD1-28-1 | Idle diaphragm assy (Includes #16)  |
| 16     | NSS      | Gasket, idle diaphragm (Incl w/#15) |
| 17     | S2-24    | Spring, idle valve                  |
| 18     | C1-31    | Cover, idle valve                   |
| 19     | S1-40    | Screw, 10-24 x 3/8" SEMS (4)        |
| 20     | S2-89    | Spring, idle adjustment             |
| 21     | NSS      | idle adjust, 10-32 x 1-1/4"         |
| 22     | G1-74    | Gasket, mixer to adapter            |
| 23     | NSS      | Adapter, mixer to throttle body     |
| 24     | S1-19    | Screw, 12-24 x 5/8" SEMS (4)        |
| 25     | G1-25    | Gasket, adapter to throttle body    |
| 26     | NSS      | Throat, 2-1/2" SAE flange           |
| 27     | NSS      | Pin, throttle stop (2)              |
| 28     | S1-30    | Screw, 5/16"-18 x 7/8"              |
| 29     | NSS      | Stop screw, 10-32 x 5/16"           |
|        | F2-7     | Fly, 2-1/2"                         |
| 30     | NSS      | Fly, 3.0"                           |
|        | F2-9     | Fly, 3.5"                           |
| 31     | NSS      | Throttle shaft, 7/16" diameter      |
| 32     | B3-44    | Permaglide bearing, 7/16" I.D.      |
| 33     | S3-96    | Seal, internal, 7/16" I.D. (2)      |
| 34     | R1-52    | Ring, seal retainer (2)             |
| 35     | AL1-11-1 | Throttle stop assembly: 7/16"       |
| 36     | NSS      | Throttle stop lever, 7/16" I.D.     |
| 37     | S2-15    | Spring, idle stop screw             |
| 38     | S1-21    | Stop screw, 10-32 x 3/4" SEMS (2)   |
| 39     | S1-18    | Pin, screw, throttle stop           |
| 40     | AL1-12-3 | Throttle lever, long, with screw    |
| 41     | NSS      | Throttle lever, long                |
| 42     | S1-32    | Screw, 1/4" -20 x 7/8"              |
| 43     | G1-27    | Gasket, 2-1/2" Flange               |
|        | G1-28    | Gasket, 3" Flange                   |

NSS = Not Serviced Separately



### COMPONENTS (CONTINUED)

| ITEM # | PART #   | DESCRIPTION                         |
|--------|----------|-------------------------------------|
| 1      | G1-66    | Gasket, Air Horn                    |
| 2      | S1-3     | Screw, 10-24 x 5/8" SEMS (4)        |
| 3      | C1-30    | Cover, air valve diaphragm          |
| 4      | S2-30    | Spring, air valve                   |
| 5      | NSS      | Screw, 6-32 x 1/4" SEMS (4)         |
| 6      | NSS      | Plate, backup                       |
| 7      | D1-18    | Diaphragm, air valve                |
| 7      | D1-25    | Diaphragm, air valve, silicone      |
| 8      | NSS      | Gasket, air valve                   |
| 9      | NSS      | Air-gas valve                       |
| 10     | AV1-16   | Air-gas valve assembly              |
| 11     | AB1-67   | Gas Body Assy, (High BTU)           |
| 11     | AB1-67-3 | Gas Body Assy, (Low BTU)            |
| 12     | S1-69    | Screw, 1/4" -28 x 5/16" (3)         |
| 13     | NSS      | Plug, 1/8" pipe                     |
| 14     | S4-13    | Seat, idle valve                    |
| 15     | AD1-28-1 | Idle diaphragm assy (Includes #16)  |
| 16     | NSS      | Gasket, idle diaphragm (Incl w/#15) |
| 17     | S2-24    | Spring, idle valve                  |
| 18     | C1-31    | Cover, idle valve                   |
| 19     | S1-40    | Screw, 10-24 x 3/8" SEMS (4)        |
| 20     | S2-89    | Spring, idle adjustment             |
| 21     | S1-51    | Screw, 10-32 x 1-1/4", idle adjust  |
| 22     | G1-74    | Gasket, mixer to adapter            |
| 23     | A3-47    | Adapter, mixer to throttle body     |
| 24     | S1-19    | Screw, 12-24 x 5/8" SEMS (4)        |
| 25     | G1-21    | Gasket, adapter to throttle body    |
| 26     | NSS      | Body, 2B throttle                   |
| 27     | NSS      | Pin, throttle stop (2)              |
| 28     | NSS      | Plug, 1/8" pipe                     |
| 29     | NSS      | Plug, 1/4" pipe                     |
| 30     | S1-19    | Screw, 12-24 x 5/8" SEMS (4)        |
| 31     | NSS      | Stop screw, 10-32 x 5/16" SEMS (2)  |
| 32     | NSS      | Fly, 2B                             |
| 33     | NSS      | Throttle shaft, 7/16" diameter      |
| 34     | B2-9     | Bearing, needle 7/16"               |
| 35     | S3-12    | Seal, 7/16" shaft                   |
| 35     | S3-19    | Seal, internal (optional), 7/16"    |
| 36     | R1-11    | Ring, seal retainer (2)             |
| 37     | AL1-11-1 | Throttle stop assembly: 7/16"       |
| 38     | NSS      | Throttle stop lever, 7/16" I.D.     |
| 39     | S2-16    | Spring, idle stop screw             |
| 40     | S1-21    | Stop screw, 10-32 x 3/4"            |
| 41     | S1-18    | Pin, screw, throttle stop           |
| 42     | AL1-12-3 | Throttle lever, long, with screw    |
| 43     | NSS      | Throttle lever, long                |
| 44     | S1-32    | Screw, 1/4" -20 x 7/8" hex head     |
| 45     | G1-44    | Gasket, throttle body to flange     |
| 46     | BT2-11   | Flange, 1-1/4" 2B, with gasket      |
| 47     | S1-19    | Screw, 12-24 x 5/8" SEMS (4)        |
| 48     | G1-45    | Gasket, 1-1/4" 2B flange            |

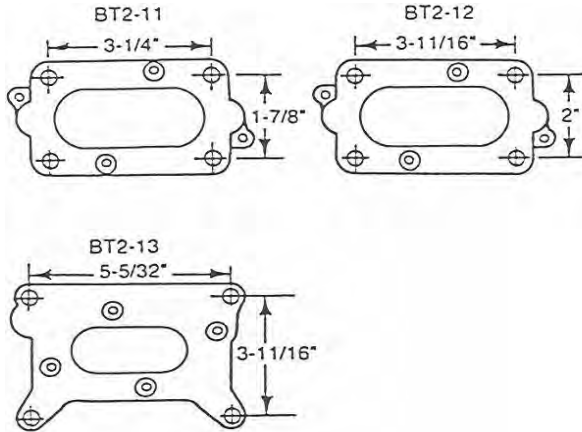


# MODEL 425 CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES



#### THROTTLE BODIES: ONE BARREL

| PART # | DESCRIPTION        |
|--------|--------------------|
| AT2-7  | Throttle Body 2.5" |
| AT2-8  | Throttle Body 3.0" |

#### THROTTLE BODIES: TWO BARREL

| PART #   | DESCRIPTION                     |
|----------|---------------------------------|
| AT2-11-1 | Throttle Body, 2V, 1-1/4" Flng. |
| AT2-12   | Throttle Body, 2V, 1-1/2" Flng. |
| AT2-13-1 | T/B Holley, 7/16" Shaft         |

#### THROTTLE SHAFTS

| PART # | DESCRIPTION                |
|--------|----------------------------|
| S5-4   | Shaft, 7/16" Diameter Long |

#### RETURN SPRINGS

| PART #   | DESCRIPTION               |
|----------|---------------------------|
| AS2-50-4 | 7/16" Return Spring Ass'y |

#### BRACKETS

| PART # | DESCRIPTION                       |
|--------|-----------------------------------|
| AB4-4  | Bracket, Boden Wire               |
| AB4-6  | Bracket, Rear Fly Booster, Spring |

#### TAMPER RESISTANT PLUG

| PART #       | DESCRIPTION            |
|--------------|------------------------|
| P3-51519-001 | Plug, Tamperproof, 425 |

#### THROTTLE BODIES

| PART # | DESCRIPTION           |
|--------|-----------------------|
| BT2-11 | Body Flange w/ Gasket |
| AT2-12 | Body Flange w/ Gasket |
| BT2-13 | Body Flange w/ Gasket |

#### CARBURETORS

| PART #  | DESCRIPTION                                    |
|---------|--|
| CA425-2 | Carb. Ass'y, 2-1/2 SAE 5" C/S Air Horn         |
| CT425-2 | Carb. Ass'y, 2-1/2 SAE 5" C/S A/H Tamper Rest. |

#### MIXERS

| PART #     | DESCRIPTION                             |
|------------|---|
| CT425M     | Mixer Ass'y, Tamper Resistant           |
| CT425M-2   | Mixer Ass'y, Tamper Resistant, Silicone |
| CT425M-510 | Mixer Ass'y, 425                        |
| FT425M-2   | Mixer Ass'y, Feedback, Tamper Resistant |
| FB425M     | Mixer Assy, Model 425                   |

#### LEVERS

| PART #   | DESCRIPTION              |
|----------|--------------------------|
| AL1-11-1 | Stop Ass'y, 7/16" Long   |
| AL1-12-1 | Stop Ass'y, 3-1/16" Long |
| AL1-12-3 | Stop Ass'y, 2-5/16" Long |

#### NOTES:

Note: AL1-12 levers used with AL1-11 lever stop. See lever section of catalog for other optional levers.

#### AIR GAS VALVE ASSEMBLIES

| PART #     | DESCRIPTION                           |
|------------|---------------------------------------|
| AV1-16     | Air Gas Valve Ass'y, Hydrin           |
| AV1-16-2   | Air Gas Valve Ass'y, Silicone         |
| AV1-1637-2 | Air Gas Valve, w/ V2-37 Silicone      |
| AV1-1644-2 | Air Gas Valve, w/ V2-44 Silicone      |
| AV1-16-510 | Air Gas Valve, for 425-10             |
| AV1-1651-2 | Air Gas Valve, w/ V2-51, FB, Silicone |
| AV1-20875  | Air/Gas Valve Assy                    |

#### ADAPTERS

| PART # | DESCRIPTION                       |
|--------|-----------------------------------|
| A3-129 | Adapter, 400VF Machined           |
| A2-73  | Adapter 1/2" Spacer Adapter 5" ID |

**ASSEMBLIES & ACCESSORIES (CONTINUED)**

**ADAPTERS**

| PART #   | DESCRIPTION                            |
|----------|--|
| AA1-50-5 | Adapter Assy                           |
| AA2-14   | Adapter Air Horn 90° X 3-1/2"          |
| AA2-15   | Adapter Air Horn 90° X 4"              |
| AA2-40   | Adapter Air Horn 90° X 5"              |
| AA2-46   | Adapter, Air Horn 90° X 5"             |
| AA2-49   | Adapter, A/H Ford & Chevy 1.5" spacer  |
| AA3-19   | Adapter, 225M to Holley 2B             |
| AA3-35   | Adapter, 425 to 2.5" & 3" T/B          |
| AA3-47   | Adapter, 225 to CA425 T/B              |
| AA3-48   | Adapter, CA425M to AA3-19              |
| AA3-75   | Adapter, CA425 to CA300A               |
| AA3-80   | Adapter, Dual 425 Mixer to Holley      |
| AA3-86   | Adapter, 425 Mixer to Rochester. Q-Jet |
| AA3-129  | Adapter Assy, 3" Hose                  |
| A2-47    | Adapter, Air Cleaner Base 125 - 425M   |
| A2-54    | Adapter, Air Cleaner Base 425M         |
| A2-55    | Adapter, Air Cleaner Base 425M         |
| A1-79    | Adapter, 425 Carb., Small              |
| A1-80    | Adapter, 425 Carb., Large              |
| A2-73    | Adapter, 1/2" Spacer, 5" ID            |

**AIR CLEANER ASSEMBLIES**

| PART #   | DESCRIPTION          |
|----------|----------------------|
| AF1-14   | Filter Ass'y, 500CFM |
| AF1-15   | Filter Ass'y, 400CFM |
| AF1-16-2 | Filter Ass'y, 550CFM |
| AF1-16-3 | Filter Ass'y, 550CFM |

**FILTER**

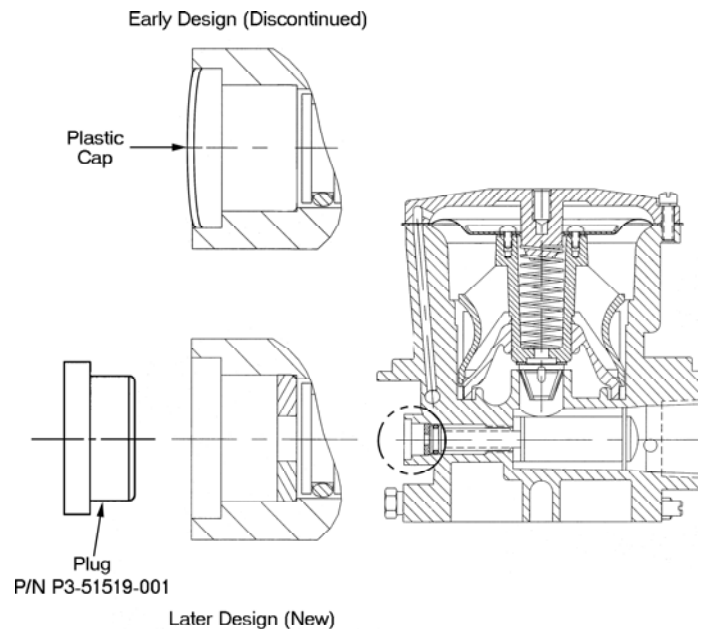
| PART # | DESCRIPTION                   |
|--------|-------------------------------|
| F1-14  | Filter, Element 500CFM        |
| F1-7   | Filter, Element UL Approved   |
| F1-9   | Filter, Element 500CFM        |
| C1-48  | Cover, Filter, AF1-14 & AF1-8 |
| C1-60  | Cover, Filter, AF1-7          |

**GASKET AND SEALS**

| PART #  | DESCRIPTION                     |
|---------|---------------------------------|
| G1-30   | Gasket, Flange 425              |
| G1-46   | Gasket, Flange 1-1/2" 2B T2-12  |
| G1-65   | Gasket, plate Venturi P2-24     |
| G1-75-3 | Gasket, Adapter A3-37 Mod 425   |
| G1-96   | Gasket, Mixer Adapter 425M      |
| G1-126  | Gasket, Throttle Adapter, A3-67 |

**TAMPER RESISTANT CAPS**

The optional plastic cap used to cover the idle adjustment screw, has been discontinued. A new plug (part number P3-51519-001) is available separately to comply with tamper resistance requirements



**TAMPER RESISTANT CAPS**

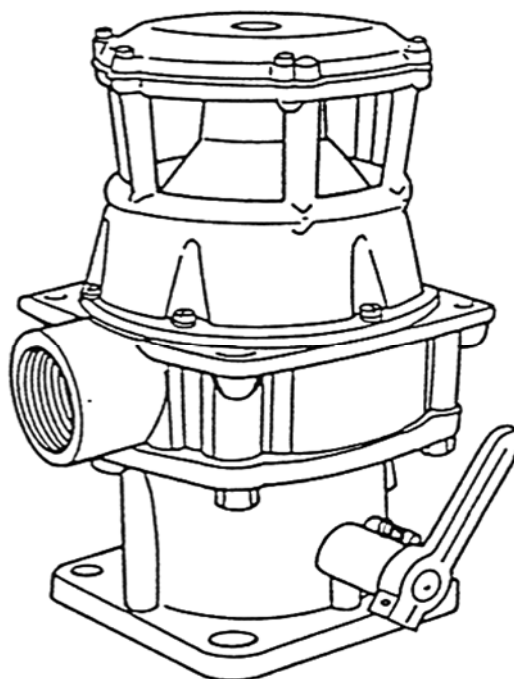
| PART #       | DESCRIPTION           |
|--------------|-----------------------|
| P3-51519-001 | Plug, Tamperproof 425 |

# MODEL 600 CARBURETOR

## CARBURETORS & MIXERS



### MODEL 600 CARBURETOR



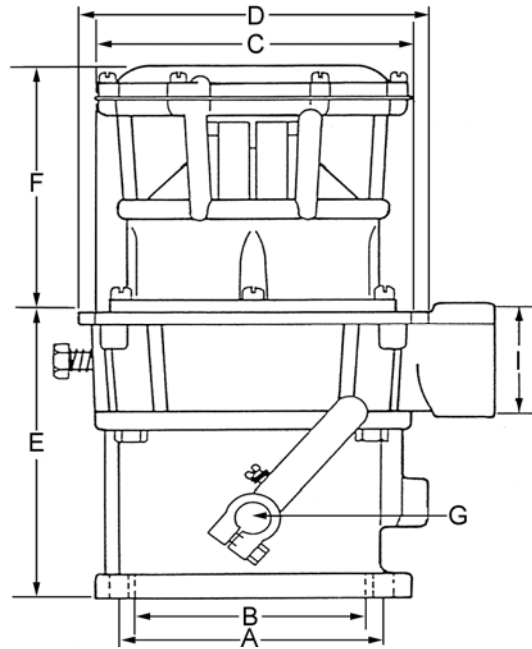
#### DESCRIPTION

The 600 is a gaseous fuel carburetor of the concentric flow air valve type. This mixer is suitable for LPG Vapor, Natural Gas, Landfill and Digester gases for applications requiring up to 960 CFM (453.1 L/s). A precision gas metering valve is attached to the air valve. Both the air and gas valve motions are linear in relation to volumetric flow. The air/fuel ratio is controlled by the adjustable power valve, shape of the gas metering valve, and the pressure from the gas regulator. Gas valves are shaped to provide A/F ratio versus flow characteristics defined by the fuel composition.

#### SPECIFICATIONS

|                             |   |
|-----------------------------|---|
| Fuel Type                   |   |
| LPG Vapor.....              | 90% + Propane   |
| Natural Gas .....           | 85% + Methane   |
| Digester Gas .....          | 56-72% Methane  |
| Landfill Gas .....          | 45-56% Methane  |
| Gas Inlet Nominal.....      | +5" w.c. over Air Inlet   |
| Operating Temperature ..... | -40°F to +250°F (-40°C to +121°C)                                       |
| Mounting Position.....      | Vertical  |
| HP/kW .....                 | 600hp (447 kW) @ 960 CFM (453.1 L/s) and 2.0" in Hg manifold depression |

**DIMENSIONS**



| STD. CARB. | MIXER         | THRTL BODY | SAE FLANGE | CTR TO CTR BOLT SPACING | B BORE             | C AIR HORN FLANGE BOLT CTR TO CTR | D OVERALL AIR HORN WIDTH | E THRTL BODY TO AIR HORN | F AIR HORN TO TOP OF MIXER | G THROTTLE SHAFT DIAMETER | H THROTTLE SHAFT LENGTH | I NPT FUEL INLET  |
|------------|---------------|------------|------------|-------------------------|--------------------|-----------------------------------|--------------------------|--------------------------|----------------------------|---------------------------|-------------------------|-------------------|
| 600-1      | 600-51218-001 | AT2-17     | 4"         | 106.3mm<br>(4.19")      | 107.9mm<br>(4.25") | 5" Sq.                            | 174.6mm<br>(6.87")       | 146.0mm<br>(5.75")       | 123.8mm<br>(4.89")         | 12.7mm<br>(.50")          | 212.7mm<br>(8.38")      | 38.1mm<br>(1.50") |
| 600-1-2    | 600-51218-004 | AT2-17     | 4"         | 106.3mm<br>(4.19")      | 107.9mm<br>(4.25") | 5" Sq.                            | 174.6mm<br>(6.87")       | 146.0mm<br>(5.75")       | 123.8mm<br>(4.89")         | 12.7mm<br>(.50")          | 212.7mm<br>(8.38")      | 38.1mm<br>(1.50") |
| 600-77     | 600-51218-007 | AT2-17     | 4"         | 106.3mm<br>(4.19")      | 107.9mm<br>(4.25") | 5" Sq.                            | 174.6mm<br>(6.87")       | 146.0mm<br>(5.75")       | 123.8mm<br>(4.89")         | 12.7mm<br>(.50")          | 212.7mm<br>(8.38")      | 38.1mm<br>(1.50") |

# MODEL 600 CARBURETOR

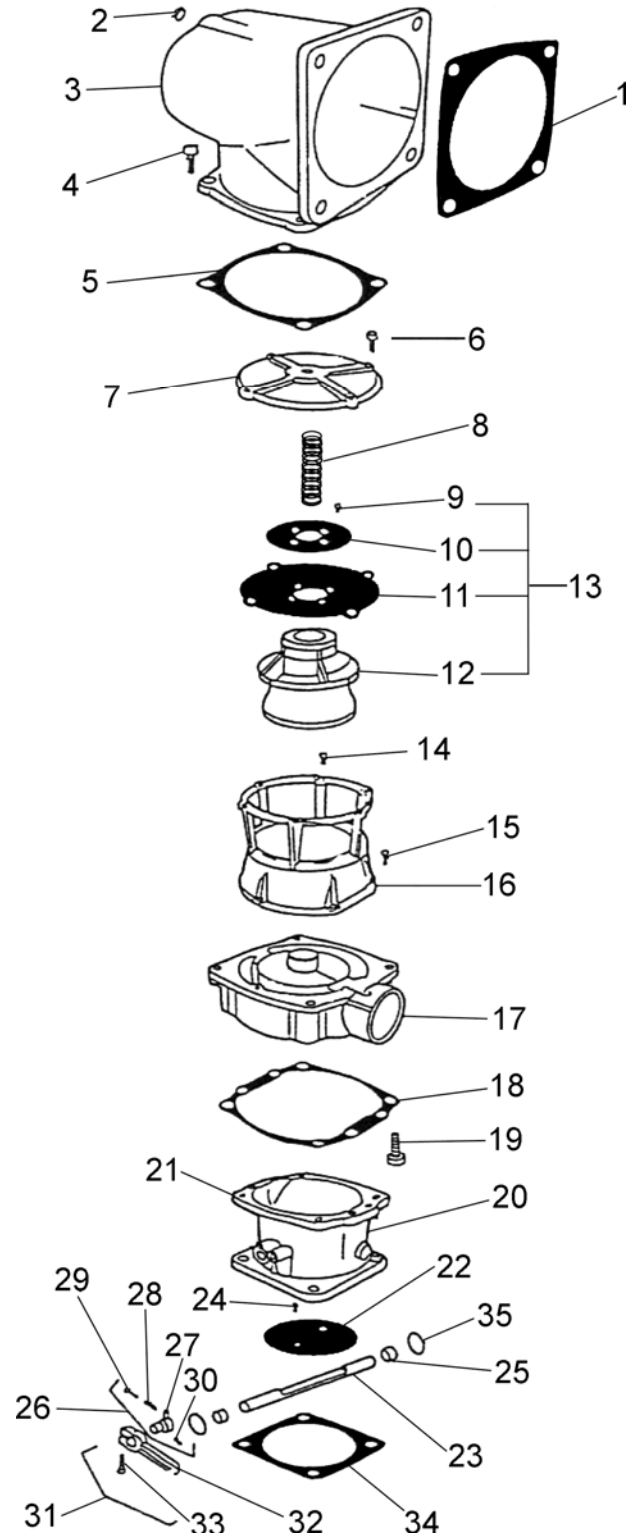
## CARBURETORS & MIXERS



### COMPONENTS

| ITEM# | PART #      | DESCRIPTION                           |
|-------|-------------|---------------------------------------|
| 1     | G1-77*      | Gasket, Air Horn                      |
| 2     | NSS         | Plug, 3/8" pipe                       |
| 3     | NSS         | Air Horn, 5-5/8" bolt centers         |
| 4     | S1-34       | Screw, 3/8-16 x 1" SEMS (4)           |
| 5     | G1-76-1*    | Gasket, body to Air Horn              |
| 6     | S1-3        | Screw, 10-24 x 5/8" SEMS (6)          |
| 7     | C1-32       | Cover, air valve diaphragm            |
| 8     | S2-32-1     | Spring, air valve, updraft            |
|       | S2-32-2     | Spring, air valve, downdraft (yellow) |
| 9     | S1-12       | Screw, 8-32 x 5/16" SEMS (4)          |
| 10    | NSS         | Plate, backup                         |
| 11    | D1-20-1     | Diaphragm                             |
|       | D1-20-2*    | Diaphragm, Silicone                   |
| 12    | BV1-17      | Air valve assembly, Propane           |
|       | AV1-17      | Air-gas valve assembly, complete      |
| 13    | AV1-17-26-4 | Air-gas valve, natural gas 900 BTU    |
|       | LHAV1-17-2  | Valve Assy, Silicone                  |
| 14    | S1-3        | Screw, 10-24 x 5/8" SEMS (2)          |
| 15    | S1-19       | Screw, 12-24 x 5/8" SEMS (6)          |
|       | B1-30       | Body, air valve                       |
| 16    | NSS         | Body, air valve, digester gas         |
|       | NSS         | Body Horizontal Mount                 |
| 17    | AB1-31      | Gas inlet body assembly               |
| 18    | G1-78-1*    | Gasket, throttle body to mixer        |
| 19    | S1-34       | Screw, 3/8"-16 x 1" SEMS (4)          |
| 20    | NSS         | Throat, 4" SAE flange                 |
| 21    | NSS         | Pin, throttle stop (2)                |
| 22    | F2-11       | Fly, 4-13/16" diameter                |
|       | F2-9        | Fly, 3-11/16" diameter                |
| 23    | S5-10       | Throttle shaft, 1/2" dia.             |
|       | S5-14       | Throttle shaft, 9/16" dia., 4" fly    |
| 24    | S1-35       | Screw, 10-32 x 3/8" SEMS              |
| 25    | B2-16       | Bearing, needle, 5/16" I.D.           |
|       | B3-43       | Bearing, needle, 1/2" shaft (2)       |
| 26    | AL1-11-2    | Throttle stop assembly: 1/2" I.D.     |
| 27    | L1-11-2     | Throttle stop lever, 1/2" I.D.        |
| 28    | S2-15       | Spring, idle stop screw               |
| 29    | S1-21       | Stop screw, 10-32 x 3/4"              |
| 30    | S1-18       | Pin, screw, throttle stop             |
| 31    | AL1-12-1    | Throttle lever, with screw            |
| 32    | NSS         | Throttle lever                        |
| 33    | S1-32       | Screw, 1/4"-20 x 7/8" hex             |
| 34    | G1-38*      | Gasket, 4" flange                     |
|       | G1-29       | Gasket, 3-1/2" flange                 |
| 35    | S3-93       | Throttle shaft seal, 1/2"             |

\*Included in Repair Kit RK-600-1







**MODEL 600 CARBURETOR**

**CARBURETORS & MIXERS**

**ASSEMBLIES & ACCESSORIES**

**MIXER: UPDRAFT - STANDARD**

| PART # | DESCRIPTION                  |
|--------|------------------------------|
| 600M-2 | Updraft Mixer w/Silicone     |
| 600M-3 | Mixer Assy, Turbo w/Silicone |

**MIXER: DOWNDRAFT - STANDARD**

| PART #  | DESCRIPTION                |
|---------|----------------------------|
| 600XM-2 | Downdraft Mixer w/Silicone |

**THROTTLE BODIES**

| PART #     | DESCRIPTION                          |
|------------|--------------------------------------|
| AT2-9      | 3-1/2" SAE Flange                    |
| AT2-17     | 4" SAE 1/2 Permaglidle, Shaft Offset |
| AT2-17-2   | 4" SAE 9/16" N/B, Shaft Offset       |
| AT2-17     | Throttle Body Assy                   |
| BT2-18-356 | Throttle Assy 1-1/4 Permaglidl       |

**ADAPTERS**

| PART # | DESCRIPTION                              |
|--------|--|
| AA2-16 | Adapter, Air Horn 6" Dia. x 90°          |
| AA2-19 | Adapter, Air Horn 6" Dia. to 4-5/8" Dia. |

**REPAIR KITS**

| PART #     | DESCRIPTION                                  |
|------------|--|
| RK-B3-43   | Repair Kit, T2-9, 10 & 17 Permaglidle        |
| RK-B3-43-1 | Retro Kit, to Upgrade T2-9, 10 & 17          |
| RK-600-1   | Repair Kit, 600 (Includes RK-B3-43-1)        |
| RK-B3-479  | Repair Kit (Includes bearing, seal & sleeve) |

**THROTTLE SHAFTS**

| PART # | DESCRIPTION                |
|--------|----------------------------|
| S5-10  | 1/2" Dia. 8-3/8" Long      |
| S5-14  | 9/16" Dia. 9" Long, 4" Fly |

**AIR GAS VALVES ASSEMBLIES**

| PART #      | DESCRIPTION                              |
|-------------|--|
| AV1-17      | Air Gas Valve Assembly                   |
| AV1-17-2    | Air Gas Valve Assembly, Silicone         |
| AV1-17-3    | Air Gas Vlv. Ass'y, Silic. Waukesha Tbo. |
| AV1-17-4    | Air Gas Valve Ass'y, w/ Diaph. 600       |
| AV1-17-6    | Air Gas Valve Ass'y, Waukesha            |
| AV1-17-7    | Air Gas Valve Ass'y, w/ V2-71            |
| DG-AV1-17-2 | Air Gas Valve, Digester, Silicone        |

**GAS MIXER VALVES**

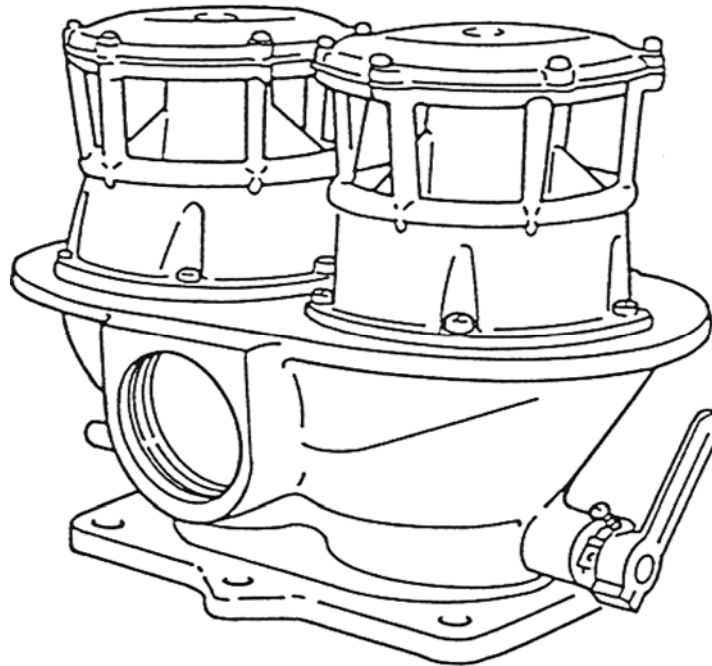
| PART #  | DESCRIPTION                  |
|---------|------------------------------|
| V2-21   | Valve, Gas Mixer, 600 Series |
| V2-26-4 | Valve, Natural Gas 900 BTU   |
| V2-31   | Valve, Gas Mixer Low Heat    |
| V2-41   | Valve, Gas Mixer Turbo       |
| V2-55   | Valve, Gas Mixer Wauk        |
| V2-71   | Valve Gas Mixer Cat 35-16    |
| V2-75   | Valve Gas Mixer 600 (493662) |

# MODEL 600D CARBURETOR

## CARBURETORS & MIXERS



### MODEL 600D CARBURETOR



#### DESCRIPTION

The Model 600D mixer is a concentric flow type air valve carburetor. This mixer is suitable for LPG Vapor, Natural Gas, Landfill and Digester gases for applications requiring up to 1600 CFM (7551 L/s). A precision gas metering valve is attached to the air valve. The air valve and gas valve motion is linear in relation to the volumetric flow. The air/fuel ratio is controlled by the adjustable power valve, jet, shape of the gas metering valve and the pressure from the gas regulator. Gas valves are shaped to provide A/F versus flow characteristics defined by the fuel composition.

#### SPECIFICATIONS

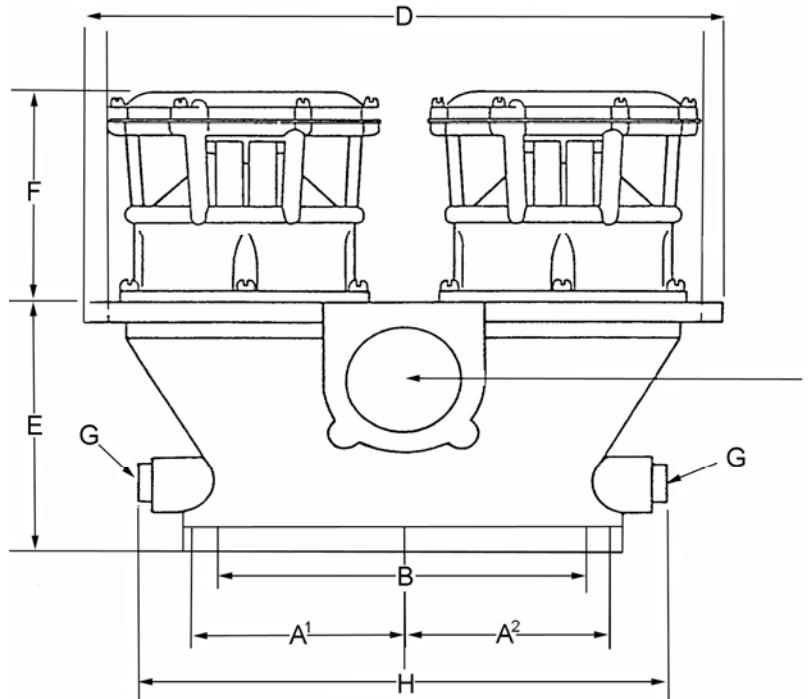
|                                   |  |
|-----------------------------------|--|
| Fuel Type                         |  |
| LPG Vapor.....                    | 90% + Propane  |
| Natural Gas .....                 | 85% + Methane  |
| Digester Gas .....                | 56-72% Methane   |
| Landfill Gas .....                | 45-56% Methane   |
| Inlet Pressure                    |  |
| Nominal .....                     | +5" w.c. (1.25 kPa) over Air Inlet (Idle Setting)                            |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)  |
| Mounting Position.....            | Vertical   |
| HP/kW .....                       | 1,000hp (745.7kW) @ 1600 CFM (755 L/s) and<br>2.0" in Hg manifold depression |

# MODEL 600D CARBURETOR



## CARBURETORS & MIXERS

### DIMENSIONS



"A" VIEW

| STANDARD CARB | MIXER    | THROTTLE BODY | SAE FLANGE | A1<br>CENTER TO CENTER BOLT SPACING | A2<br>CENTER TO CENTER BOLT SPACING | B<br>BORE          | C<br>AIR HORN ADAPTER | D<br>OVERALL AIR HORN WIDTH | E<br>THROTTLE BODY TO AIRHORN HEIGHT | F<br>AIRHORN TO TO OF MIXER | G<br>THROTTLE SHAFT DIAMETER | H<br>THROTTLE SHAFT LENGTH | I<br>NPT FUEL INLET |
|---------------|----------|---------------|------------|-------------------------------------|-------------------------------------|--------------------|-----------------------|-----------------------------|--------------------------------------|-----------------------------|------------------------------|----------------------------|---------------------|
| 600D-1-2      | 600DXM-2 | NSS           | 4" Duplex  | 104.7 mm (4.125")                   | 4"                                  | 204.7 mm (8.0625") | NSS                   | 339.7 mm (13.375")          | 146.05 mm (5.75")                    | 123.8 mm (4.875")           | 12.7 mm (.50")               | 315.91 mm (12.4375")       | 63.50 mm (2.5")     |
| 600D-22H      |          | NSS           | 4" Duplex  | 104.7 mm (4.125")                   | 4"                                  | 204.7 mm (8.0625") |                       | 339.7 mm (13.375")          | 146.05 mm (5.75")                    | 123.8 mm (4.875")           | 12.7 mm (.50")               | 315.91 mm (12.4375")       | 63.50 mm (2.5")     |

**Notes:**

DG (Digester gas) carburetors reduce air flow 30%

-X (or DX) indicates downdraft carburetor.

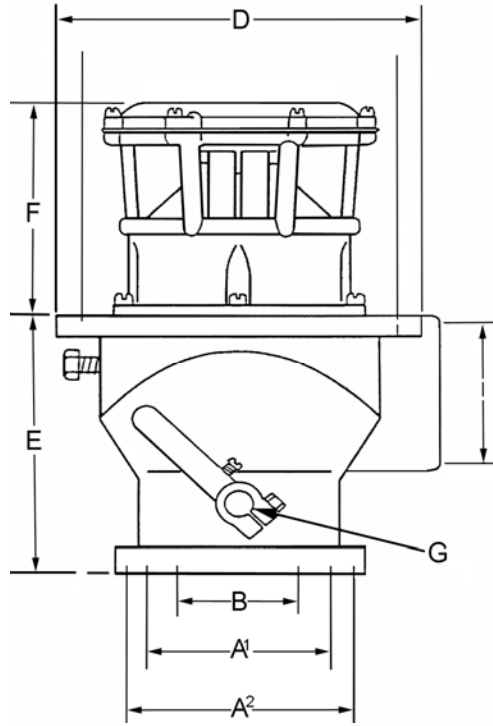
Refer to A2 Air Horn adapter section for additional Adapter not shown in picture

# MODEL 600D CARBURETOR

## CARBURETORS & MIXERS



### DIMENSIONS (CONTINUED)

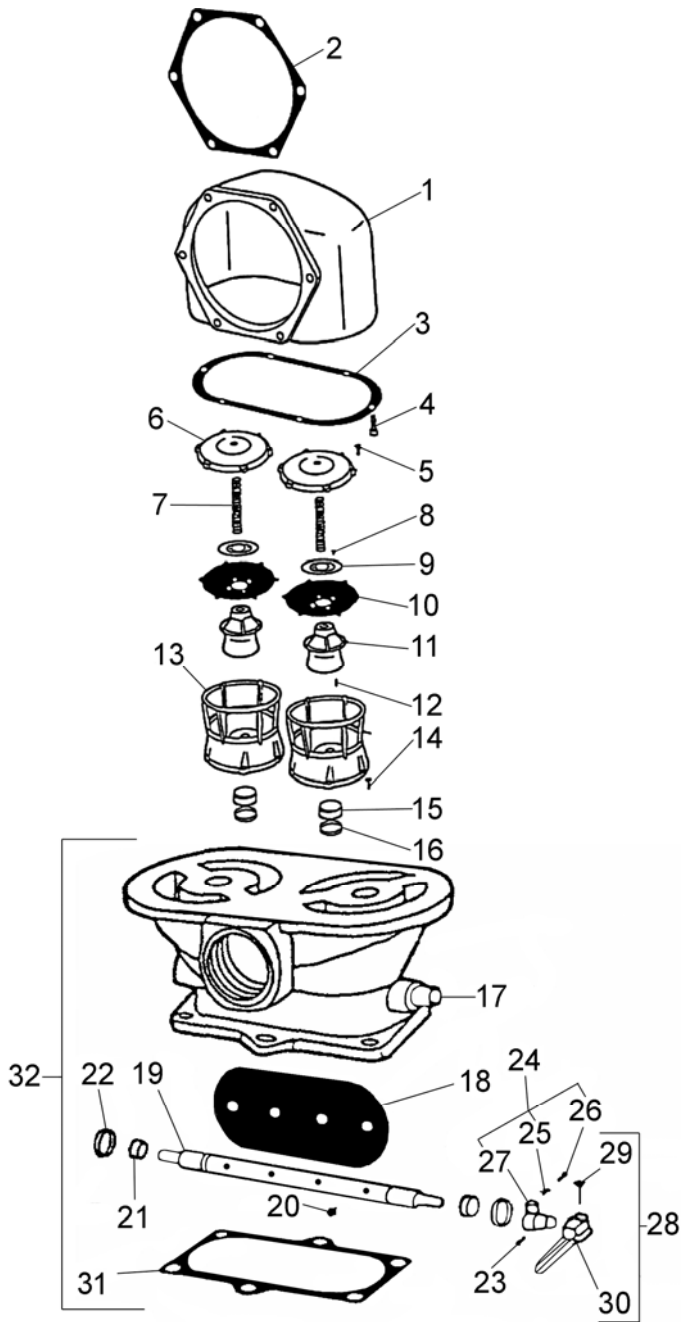


"B" VIEW

|               |          | "B" VIEW      |            |                               |                               |                   |                  |                        |                                 |                         |                         |                       |                 |
|---------------|----------|---------------|------------|-------------------------------|-------------------------------|-------------------|------------------|------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|-----------------|
|               |          | A1            | A2         | B                             | C                             | D                 | E                | F                      | G                               | H                       | I                       |                       |                 |
| STANDARD CARB | MIXER    | THROTTLE BODY | SAE FLANGE | CENTER TO CENTER BOLT SPACING | CENTER TO CENTER BOLT SPACING | BORE              | AIR HORN ADAPTER | OVERALL AIR HORN WIDTH | THROTTLE BODY TO AIRHORN HEIGHT | AIRHORN TO TOP OF MIXER | THROTTLE SHAFT DIAMETER | THROTTLE SHAFT LENGTH | NPT FUEL INLET  |
| 600D-1-2      | 600DXM-2 | NSS           | 4" Duplex  | 98.4 mm (3.875")              | 136.5 mm (5.375")             | 96.8 mm (3.8125") | AT2-18           | 339.7 mm (13.375")     | 146.05 mm (5.75")               | 123.8 mm (4.875")       | 12.7 mm (.50")          | 315.91 mm (12.4375")  | 63.50 mm (2.5") |
| 600D-22H      | 600DXM-2 | NSS           | 4" Duplex  | 98.4 mm (3.875")              | 136.5 mm (5.375")             | 96.8 mm (3.8125") | AT2-18           | 339.7 mm (13.375")     | 146.05 mm (5.75")               | 123.8 mm (4.875")       | 12.7 mm (.50")          | 315.91 mm (12.4375")  | 63.50 mm (2.5") |

### COMPONENTS

| ITEM # | PART #   | DESCRIPTION                       |
|--------|----------|-----------------------------------|
| 1      | A2-18    | Air Horn, 8" 90°                  |
| 2      | G1-82*   | Gasket, Air Horn Inlet            |
| 3      | G1-151   | Gasket, Air Horn to Throttle Body |
|        | NSS*     | Gasket, Air Horn to Throttle Body |
| 4      | S1-34    | Screw, 3/8" - 16 x 1" SEMS        |
| 5      | S1-3     | Screw, 10-24 x 5/8" SEMS          |
| 6      | C1-32    | Cover                             |
| 7      | S2-32-1  | Spring, Air Valve Updraft         |
|        | S2-32-2  | Spring, Air Valve Downdraft       |
| 8      | S1-12    | Screw, 8-32 x 5/16" SEMS          |
| 9      | P2-21    | Plate, Backup                     |
| 10     | D1-20-2* | Diaphragm Silicone                |
|        | D1-20-3  | Diaphragm, Mixer FVMQ             |
| 11     | BV1-17   | Air Valve, Ass'y Propane          |
| 12     | S1-3     | Screw, 10-24 x 5/8" SEMS          |
| 13     | B1-30    | Body                              |
| 14     | S1-19    | Screw, 12-24 x 5/8 SEMS           |
| 15     | J1-6     | Jet                               |
| 16     | S3-39*   | Seal                              |
| 17     | P1-6     | Pin, Throttle Stop                |
| 18     | F2-12    | Fly, 8"                           |
|        | F2-20    | Fly, 7.75 X 2.75 Oval             |
| 19     | AS5-9    | Throttle Shaft, Slotted 1/2" Dia. |
| 20     | NSS      | Screw, 10-32 x 3/8 SEMS           |
| 21     | B3-42    | Permaglide Bearing                |
| 22     | S3-92    | Seal                              |
| 23     | S1-18    | Pin, Screw Throttle Stop          |
| 24     | AL1-11-2 | Throttle Stop Assembly            |
| 25     | S2-15    | Spring, Idle Stop Screw           |
| 26     | S1-21    | Stop, Screw                       |
| 27     | NSS      | Throttle Stop Lever               |
| 28     | NSS      | Throttle Lever, w/ Screw          |
| 29     | S1-32    | Screw, 1/4 - 20 x 7/8"            |
| 30     | AT2-62-2 | Throttle Lever                    |
| 31     | G1-80*   | Gasket, Manifold                  |
| 32     | NSS      | Throttle Body Complete            |



Not Shown  
 W1-60 Washer, .500x1.25x.029 SS  
 W1-68 Washer, .500x.936x.059 Steel  
 P3-12 Plug, 3/8 NPT 5/16 Hex Sch Brass

\*Included in Repair Kit RK-600DX-1

# MODEL 600D CARBURETOR

## CARBURETORS & MIXERS



### ASSEMBLIES & ACCESSORIES

#### MIXERS: UPDRAFT - STANDARD

| PART #    | DESCRIPTION  |
|-----------|--|
| 600DM-791 | Mixer, Updraft, 4" SAE 2B flange, no Air Horn, special |
| 600DXM-2  | Carb., 4" 2B Downdraft, Less Air Horn, w/ Sil.         |

#### THROTTLE BODIES

| PART #   | DESCRIPTION   |
|----------|---|
| AT2-18-1 | 4" SAE flange, 3/4" shaft diameter, w/ Permaglride bearings, (standard) |

#### THROTTLE SHAFTS

| PART # | DESCRIPTION  |
|--------|--|
| AS5-9  | 1/2" diameter, 2-7/16" long, with inner bearings, 3/4" O.D. (standard) |

#### GASKETS

| PART # | DESCRIPTION                     |
|--------|---------------------------------|
| G1-151 | Gasket, Air-Horn-Throttle 600D  |
| G1-86  | Gasket, Flange 8" A3-44 Adapter |

#### LEVERS

| PART #     | DESCRIPTION                                    |
|------------|--|
| AL1-11-2   | Stop Assy 1/2" Mounting ID, 1" Long (Standard) |
| AL1-12-1   | Stop Assy, 3-1/16" Long (Standard)             |
| AL1-12-18E | Lever Throttle (59018E)                        |

Notes:

AL1-1 Levers Used with AL1-11 Lever Stops.

See Lever Section of Catalog for Others

#### AIR GAS VALVES ASSEMBLIES

| PART #      | DESCRIPTION                                   |
|-------------|---|
| AV1-17      | Air Gas Valve Assembly                        |
| AV1-17-2    | Air Gas Valve Assembly, Silicone              |
| AV1-17-3    | Air Gas Valve, Ass'y, Silic. Waukesha, Turbo  |
| AV1-17-4    | Air Gas Valve Ass'y, w/Diaph 600, w/V2-41     |
| AV1-17-6    | Air Gas Valve Ass'y, Waukesha w/ V2-55        |
| AV1-17-7    | Air Gas Valve Ass'y, w/ V2-71                 |
| DG-AV1-17-2 | Air Gas Valve, Di/Gas (550 - 750BTU), w/ Sil. |
| LHAV1-17-2  | Air Gas Valve Lo/Heat (750 - 950BTU), w/ Sil. |
| P2-53       | Plate, Air Valve Piston                       |

#### ADAPTERS

| PART #   | DESCRIPTION                               |
|----------|---|
| AA2-16   | Air Horn, 90° by 6" to 600                |
| AA2-17   | Air Horn, Ingersoll Rand 8SVG             |
| AA2-18   | Air Horn, 8" diameter x 90 degrees (side) |
| AA2-18-2 | Air Horn, 8" 90° w/ Baffle                |
| AA2-62   | Air Horn, 90° 7" End                      |
| AA3-38   | Adapter assembly, Ingersoll Rand 8SVG     |
| AA3-44   | Adapter, 600D Base 7.75" Bolt             |

#### GASKETS

| PART # | DESCRIPTION              |
|--------|--------------------------|
| G1-79  | Gasket for Adapter A3-38 |

#### DIAPHRAGMS

| PART #   | DESCRIPTION           |
|----------|-----------------------|
| AD1-20-3 | Diaphragm, Mixer Assy |

#### REPAIR KITS

| PART #     | DESCRIPTION                                     |
|------------|---|
| RK-B3-42-1 | Retrofit kit to upgrade, T2-18, throttle bodies |
| RK-600DX-1 | Repair Kit, 600DX (Includes RK-B3-42-1)         |

#### SPRINGS

| PART # | DESCRIPTION         |
|--------|---------------------|
| S2-33  | Spring/600 Load Adj |

#### AIR HORNS

| PART # | DESCRIPTION  |
|--------|--------------|
| A2-22  | Air Horn 600 |
| A2-23  | For 600DX-5  |



**MODEL 600D CARBURETOR**

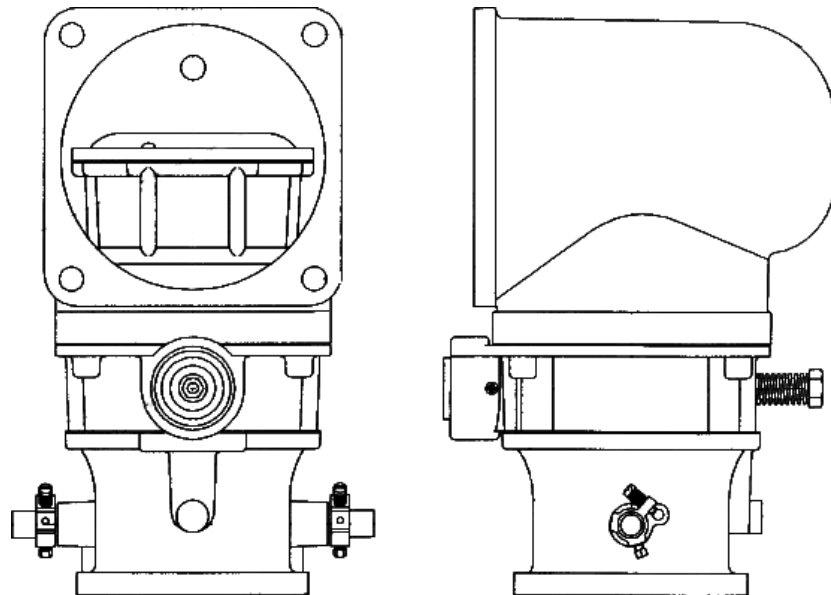
**CARBURETORS & MIXERS**

# MODEL 600 VARIFUEL CARBURETOR

## CARBURETORS & MIXERS



### MODEL 600 VARIFUEL CARBURETOR



### DESCRIPTION

The Model 600VF mixer is a concentric flow type air valve carburetor with a precision gas metering valve attached to the air valve for applications requiring up to 960 CFM (453.1 L/s). The air valve and gas valve motion is linear in relation to the volumetric flow. The air/fuel ratio is controlled by the adjustable power valve and the shape of the gas metering valve and the pressure from the gas regulator.

Gas valve and jet combinations may be selected to meet various fuel and burn strategies. The gas valves and jets are easily replaced to provide performance as defined by each customer or meet specific emission levels. Gas valves and jets can be ordered in matching sets (see pg 122). These units are designed for 14,000 MTBF (mean time between failures). Advanced guide bushing material provides a more durable solution over the standard 600 carburetor.

The 600 Varifuel Mixer is not available as an assembly, but it is ordered in modular components to be assembled to the desired configuration.

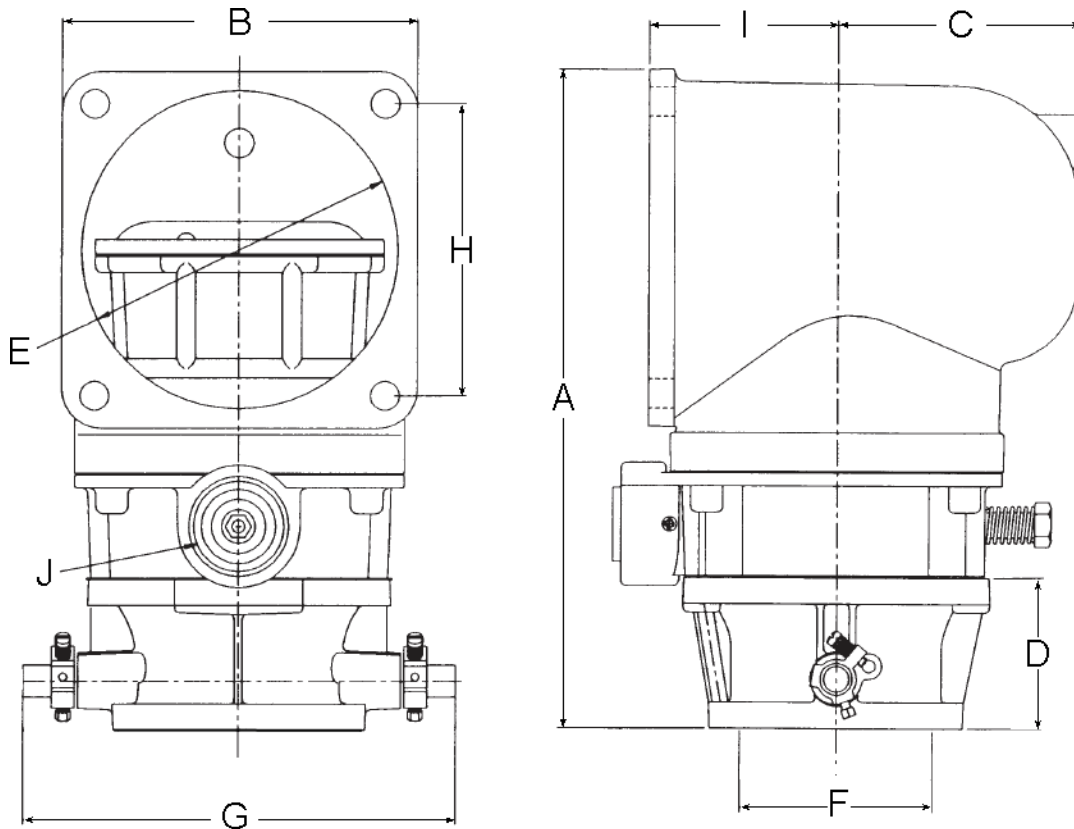
### SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Fuel Type                         |   |
| LPG Vapor .....                   | 90% + Propane   |
| Natural Gas.....                  | 85% + Methane   |
| Digester Gas.....                 | 56-72% Methane  |
| Landfill Gas.....                 | 45-56% Methane  |
| Inlet Pressure .....              | +5" w.c. over Air Inlet   |
| Operating Temperature Range ..... | -40°F to +250°F (-40°C to +121°C)   |
| Mounting Position.....            | Various (updraft, downdraft, side draft)                                  |
| Diaphragm Material.....           | Fluorosilicone  |
| HP/kW .....                       | 600 HP (447.4kW) @ 960 CFM (453.1 L/s) and 2.0" in Hg manifold Depression |





**DIMENSIONS**



**STANDARD 600 VARIFUEL CARBURETOR**

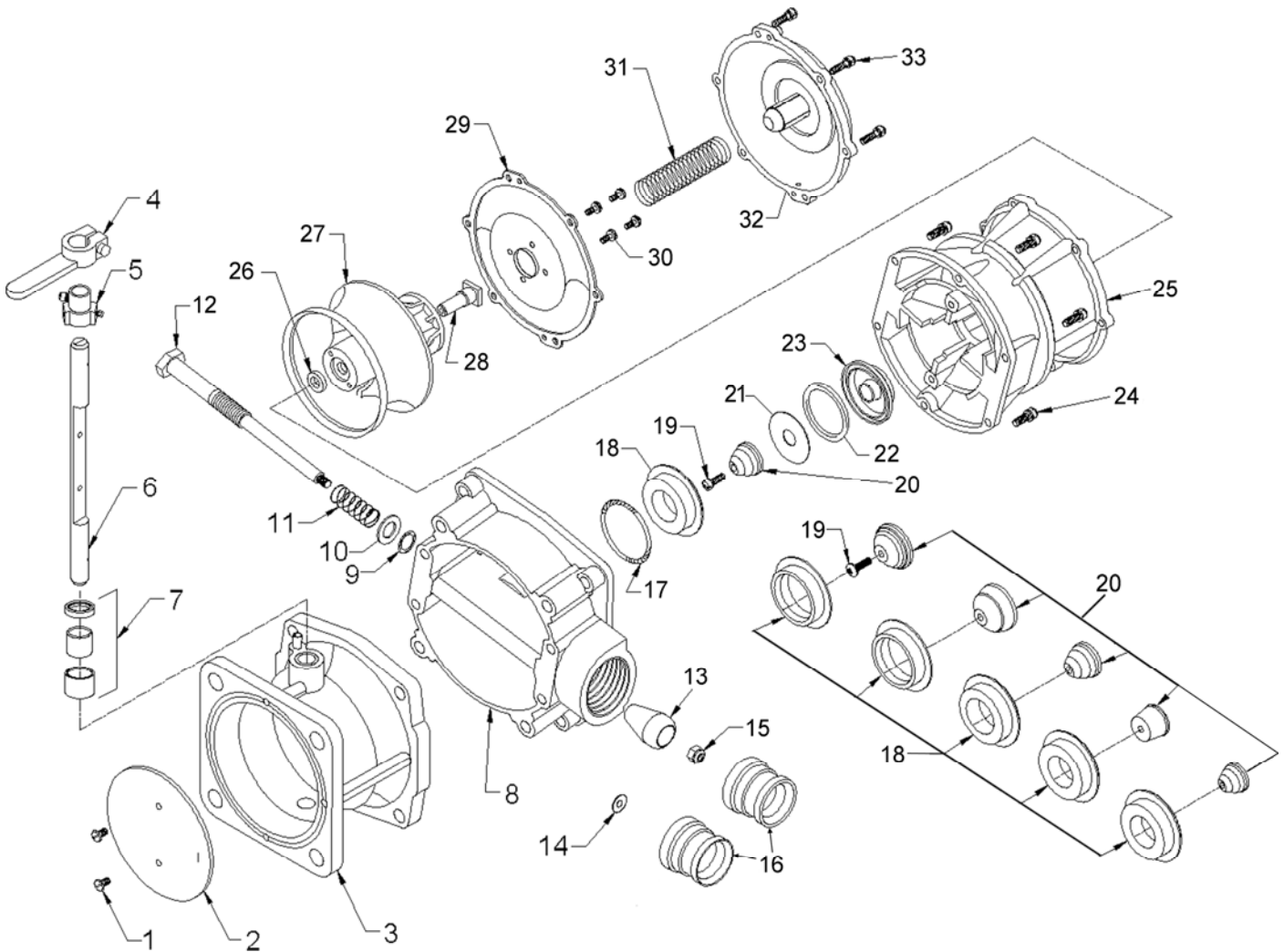
| A                 | B                  | C                  | D                    | E                  | F                 | G                  | H                  | I                | J                 |
|-------------------|--------------------|--------------------|----------------------|--------------------|-------------------|--------------------|--------------------|------------------|-------------------|
| OVERALL HEIGHT    | FLANGE WIDTH       | CTR TO INLET       | THROTTLE BODY HEIGHT | INLET DIA.         | BORE              | MAX WIDTH          | HOLE SPACING       | FUEL INLET NPT   | FRONT TO CENTER   |
| 13.56"<br>344.4mm | 6.88"<br>(174.8mm) | 4.66"<br>(118.4mm) | 3.75"<br>(95.25mm)   | 6.13"<br>(155.7mm) | 3.69"<br>(93.7mm) | 8.38"<br>(212.8mm) | 5.63"<br>(143.0mm) | 1.5"<br>(39.4mm) | 3.63"<br>(92.2mm) |

# MODEL 600 VARIFUEL CARBURETOR

## CARBURETORS & MIXERS



### COMPONENTS





# MODEL 600 VARIFUEL CARBURETOR

## CARBURETORS & MIXERS

### COMPONENTS

| ITEM# | PART #     | DESCRIPTION                                   |
|-------|------------|---|
| 1     | S1-12      | Screw,Pan Hd,8-32 X 5/16 L                    |
| 2     | F2-11      | Fly, 4.00" (For T2-17)                        |
|       | F2-9       | Fly, 3.50" (For T2-67 & T2-80)                |
| 3     | NSS        | Throttle, Model 600, 4.19" Bore               |
|       | NSS        | Throttle, Model 600, 3.69" Bore               |
|       | NSS        | Throttle, Model 600, 3.69" Bore               |
| 4     | AL1-12-1   | Lever, 200D Throttle                          |
| 5     | AL1-11-2   | Lever, Thr Stop 1/2"                          |
| 6     | S5-10      | Shaft/600-1/2In, 4.19" Bore                   |
|       | S5-39      | Shaft, Throttle 600VF                         |
|       | S5-5       | Shaft, Throttle 1/2" 3.69" Bore               |
| 7     | RK-B3-43-1 | Repair Kit, Bearing Seal Housing              |
| 8     | B1-31-2    | Gas Body, 600VF (High Btu)                    |
| 9     | S3-35      | O-Ring, .479"Id .101"Cs Viton                 |
| 10    | W1-38      | Washer, .515X.872X.056, Steel                 |
| 11    | S2-33      | Spring/600 Load Adj                           |
| 12    | NSS        | Screw, Power Valve                            |
| 13    | V2-60      | Valve, Load Adj 600VF 1000Btu                 |
| 14    | W1-63      | Washer, .263X.744X.051, Steel                 |
| 15    | N1-22      | Nut,Lock W/Nylon Insert,1/4-28                |
| 16    | J1-33      | Power Jet, 600VF Lo Btu                       |
|       | NSS        | Jet, Load Adj 600VF                           |
| 17    | S3-78      | O-Ring, 1.734"Id .139"Cs Nbr                  |
| 18    | J1-23      | Jet, Gas 600VF 1.125"Id                       |
| 19    | S1-3       | Screw 10-24X5/8 Sltdfil Sltdzn                |
| 20    | V2-21-3    | Valve, Gas Mixer 600 Series Ng                |
|       | NSS        | Valve, Gas Mixer Land Fill                    |
|       | V2-64      | Valve, Gas Mixer 600VF1 Dg                    |
|       | V2-63      | Valve, Gas Mixer 600 Ulb Mflow                |
|       | NSS        | Valve, Gas Mixer Lean FB                      |
| 21    | W1-99      | Washer, .379X1.500X.032,18-8Ss                |
| 22    | S3-76      | O-Ring, 1.460"Id .139"Cs Viton                |
| 23    | P4-3       | Piston, Air Valve 600VF                       |
|       | P4-9       | Piston, Air Valve 600VF                       |
| 24    | S1-19      | Screw 12-24X5/8 Sltdfil Sltdzn                |
| 25    | NSS        | Body Assy, 600                                |
| 26    | S3-82      | O-Ring, .359"Id .139"Cs Nbr                   |
| 27    | NSS        | Air Valve Assy, 600                           |
| 28    | S5-29      | Shaft, Gas Valve 600                          |
| 29    | AD1-20-3   | Diaphragm, Assy Mixer Fvmq 600                |
| 30    | S1-12      | Screw,Pan Hd,8-32 X 5/16 L                    |
| 31    | S2-32-1    | Spring, Air Valve, Updraft Zinc               |
|       | S2-32-2    | Spring, Air Valve, Downdraft, Yellow          |
|       | S2-32-3    | Spring, Air Valve, Sidedraft, Green           |
|       | S2-123     | Spring, Air Valve, Updraft, H.Flow, Blue      |
|       | S2-41      | Spring, Air Valve, Updraft, Waukesha, VHP RED |
| 32    | C1-32      | Cover, Air Valve 600 / 600VF                  |
| 33    | S1-3       | Screw 10-24X5/8 Sltdfil Sltdzn                |

# MODEL 600D VARIFUEL CARBURETOR

## CARBURETORS & MIXERS



### MODULE COMPONENTS & ACCESSORIES

#### MIXERS

| PART#      | DESCRIPTION                    |
|------------|--------------------------------|
| AB1-30-23L | Mixer 600VF3 Updraft 59023L    |
| AB1-30-3   | Mixer Assembly 600VF1          |
| AB1-30-3X  | Mixer Assembly 600VF1          |
| AB1-30-6   | Mixer 600VF3 Updraft           |
| AB1-30-6S  | Mixer 600VF3 Sidedraft         |
| AB1-30-6SL | Mixer 600VF3 Sidedraft .435 Ht |
| AB1-30-6X  | Mixer 600VF3 Downdraft         |

#### THROTTLE BODIES

| PART#      | DESCRIPTION                  |
|------------|------------------------------|
| AS5-38     | Shaft Throttle 600VFD Assy   |
| AT2-18-3   | Throttle Body Assy 600VFD    |
| AT2-18-573 | Throttle Body 600VFD         |
| AT2-67     | T'Body, 600VF, 3.5", W/Lever |

#### AIR HORN/INLET

| PART#  | DESCRIPTION                 |
|--------|-----------------------------|
| AA2-16 | Air Horn 90Deg By 6" To 600 |
| AA2-22 | In-line, Sand Cast 6"       |

#### GAS INLET

(BODY, PWR SCREW, JET, GASKETS & BOLTS)

| PART#    | DESCRIPTION        |
|----------|--------------------|
| AB1-31   | Gas Body           |
| AB1-31-2 | Gas Body, High BTU |
| AB1-31-3 | Gas Body, Low BTU  |

#### MIXTURE OUTLET

(BODY, FLY, BEARINGS, SHAFT, LVR & GASKETS)

| PART#  | DESCRIPTION                    |
|--------|--------------------------------|
| AT2-17 | Throat Assy, Sae 4" Flange: 4" |
| AT2-67 | T'Body, 600VF, 3.5", W/Lever   |

#### REPAIR KIT

| PART#      | DESCRIPTION                              |
|------------|--|
| RKD1-20-3  | Rep.Kit600VF Diaph/Plate/Bush            |
| RK-B3-43-1 | Repair Kit, Bearing Seal Housing         |
| RK-B3-479  | Repair Kit (Inc. bearing, seal & sleeve) |

#### GAS VALVE/JET KIT

(GAS VALVE, JET, SCREW, O-RING & LABEL)

| PART#          | DESCRIPTION                     |
|----------------|---------------------------------|
| CKV2-21-3      | 600VF N/G                       |
| CKV2-21-4      | Kit, VF 600 NG F/Back           |
| CKV2-50679-001 | Kit, VF 600 Low BTU             |
| CKV2-62        | 600VF Feedback Lean (Catalytic) |
| CKV2-63        | 600VF ULB Med. Flow             |
| CKV2-64        | 600VF DG                        |
| CKV2-64-3      | Kit, VF 600 DG 500-650          |
| CKV2-65        | 600VF LF 450-540 Stoich         |
| CKV2-69        | 600VF LFG (400Btu/Ft3)          |
| CKV2-84        | Kit, 600 VF Cat (336-6861)      |
| CKV2-87        | Waukesha OEM SRS                |
| CKV2-94        | Conversion Kit, Feedback Rich   |
| CKV2-95        | Kit, VF 600 NG 850-900          |
| CKV2-95-2      | Kit, VF 600 NG 850-900          |
| CKV2-96        | 600VF Propane (Pos. Pressure)   |
| CKV2-101       | Kit, VF 600 DG                  |
| CKV2-113       | Kit, VF 600 NG 700-800          |
| CKV2-116       | Kit, 600 VF Conversion          |
| CKV2-118       | Kit, 600 VF                     |
| CKV2-125       | Kit, VF 600 NG                  |