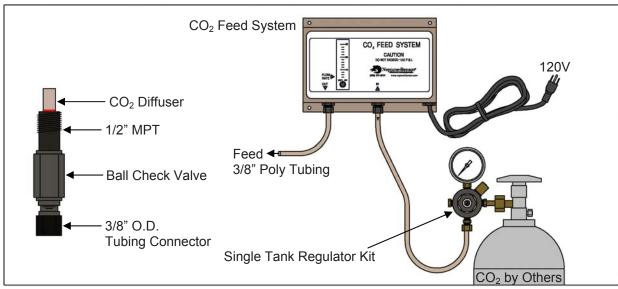
## Single Tank CO<sub>2</sub> pH Control System











Diffuser Assembly P/N 145NBC02DF

# The Neptune-Benson Single tank CO<sub>2</sub> feed system consists of:

## One single tank pressure regulator kit for tank mounting:

- (1) 1/4" NPT pressure regulator, 3000 psi primary and 125 psi secondary, factory set for 50 psi downstream operation. The regulator shall be UL listed #365M for compressed gas and suitable for carbon dioxide service.
- (1) 2 1/2" diameter glycerin filled pressure gauge with stainless steel case, 0-3000 psi range, 1/4" bottom mount connection.
- (1) Brass tank connection with gasket.
- (1) Downstream pressure relief valve rated at 130 psi.
- (1) Chrome plated brass quick disconnect connector for 3/8" O.D. tubing.

### One CO<sub>2</sub> feed/flow system:

- (1) Nonferrous adjustable rate of flow indicator/meter, 1/8" IPS, 30 SCFH range.
- (1) 1/4" FPT solenoid valve, two way, normally closed, 125 psi, grade 420 stainless steel construction, 120V service.
- (1) Chrome plated brass guick disconnect connectors for 3/8" O.D. poly tubing.
- (1) 10 ft. length of 3/8" O.D. poly tubing.
- (1) Injection nozzle/diffuser assembly, 1/2" NPT x 3/8" O.D. tubing.
- (1) 8 ft. power supply cord, 16/3 conductor, UL listed, fully wired to solenoid valve.
- (1) Stainless steel wall mounting bracket with mounting screws and shields to accommodate the above listed items.

  All connections shall be bottom mounted, both electrical and gaseous.

  R-5/26/11



#### CO2 FEED SYSTEM - SINGLE TANK

- A. Unit shall be a single tank C02 metering system and take nominal 800 psi pressure from direct reading pressure gauges. One gauge shall read tank pressure. The other shall read regulated by a T-bar. Unit shall be tank mountable and shall connect to C02 cylinders by 3/16" I.D. braided tubing rated for not less than 1000 psi. Discharge from unit shall be through thick watt 3/8" OD polyethylene tubing to the feed unit.
- B. C02 from the pressure reducing valve shall be brought to the feed unit in thick watt 3/8", OD polyethylene tubing. Feed system shall include 120 volt AC solenoid operated valve for remote on/off control of C02 feed. C02 feed unit shall also include rate adjusting flow meter scaled from 0-30 SCFH and have a pressure rating of 100 psi.
- C. C02 from feed unit shall be injected through ½" NPT fitting. Unit shall cause C02 to be totally diffused and made to go fully into solution without evidence of C02 bubbling at any point where water is open to atmosphere. Unit must be equipped with a check valve to prevent the flow of water into the feed unit.