

## Pipe/Power Pipe

Recognizing the need for a high flow capacity air pipe in congested metropolitan wire centers, System Studies Incorporated designed a new method of pressurized air delivery and monitoring called the Power Pipe System™. This new air pipe system expands the capabilities of existing ½ inch air pipe systems while offering numerous monitoring advantages.

The Power Pipe System is comprised of a high density, polyethylene and a variety of hardware fittings and monitoring devices. The pipe has an inside diameter of 1 inch and an outside diameter of approximately 1¼ inches. Although only twice the diameter of ½ inch CA3131 air pipe, the Power Pipe can supply as much as six times the air flow capacity as the smaller pipe.

There are numerous hardware components designed for the Power Pipe System which greatly simplify installation and provide full versatility for every installation requirement. This catalog section includes product numbers and descriptions for these important components. It also lists some of the standard ½ inch air pipe components and equipment used with the Power Pipe System.

Note: System Studies no longer sells the actual pipe used in the system. Please contact us for possible vendor recommendations.

### POWER PIPE PANELS

#### **9800-3099 Panel, Power Pipe**



The Power Pipe Panel™ is a specially designed central office source panel that accommodates a high capacity, 1" air pipe (Power Pipe).

The panel contains a pressure regulator to control air dryer output pressure, a 0-475 SCFH (13,450 LPH) Flow Finder™ and High Resolution Dual Transducer™ to remotely measure delivery pressure and flow rates, and a shutoff valve.

### POWER PIPE FIELD EQUIPMENT

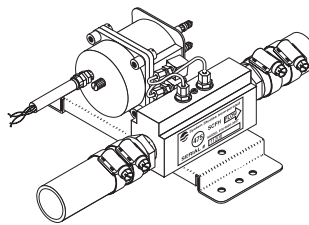
#### **9800-3097 Flow Finder, 0-475, Bracket, No Pipe Fittings**



This High Range Flow Finder™ is designed for use in 1" air pipe systems (Power Pipe Systems). It provides accurate flow readings up to 475 SCFH, with extended reading capabilities to 950 SCFH. This Flow Finder is supplied with mounting bracket and valves for taking readings with Flow Gauge™.

#### **9800-3063-YY-PP-1 Flow Finder, Assembly, 0-475 SCFH, 1" Pipe Fittings, Flow Transducer**

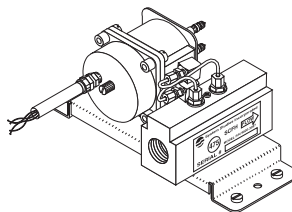
#### **9800-3063-YY-PP-2 Flow Finder, Assembly, 0-475 SCFH, 1" Pipe Fittings, Dual Transducer**



These "YY-PP" assemblies include a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer™, which is pneumatically connected to a 0-475 SCFH Flow Finder using two 1/8" preformed stainless steel tubes. To provide the coupling to the 1" air pipe, two 3/4" NPT male to 1" pipe connectors are provided.

#### **9800-3063-YY-NN-1 Flow Finder, Assembly, 0-475 SCFH, No Pipe Fittings, Flow Transducer**

#### **9800-3063-YY-NN-2 Flow Finder, Assembly, 0-475 SCFH, No Pipe Fittings, Dual Transducer**



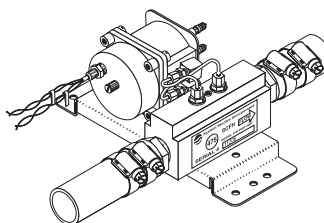
The Flow Finders on the "YY-NN" high range Flow Finder Monitoring Assemblies™ are not supplied with air pipe connectors. They consist of a stainless steel mounting bracket with either a High Resolution Flow or Dual Trans-

ducer pneumatically connected to a 0-475 SCFH Flow Finder.

The High Range Flow Measurement Assemblies listed below are only slightly different from the ones described above. The transducers on these assemblies are supplied with a 37° flared stainless steel conductor tube fitting. Model numbers 3063 are supplied with a nickel-plated brass fitting for standard 3/8" plastic tubing.

#### **9800-3066-YY-PP-1 Flow Finder, Assembly, 0-475 SCFH, 1" Pipe Fittings, Flow Transducer**

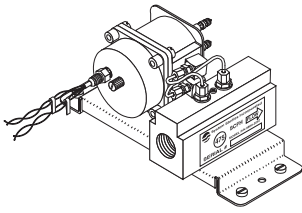
#### **9800-3066-YY-PP-2 Flow Finder, Assembly, 0-475 SCFH, 1" Pipe Fittings, Dual Transducer**



These assemblies includes a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer, which is pneumatically connected to a 0-475 SCFH Flow Finder using two 1/8" preformed stainless steel tubes. To provide the coupling to the 1" air pipe, two

3/4" NPT male to 1" pipe connectors are provided.

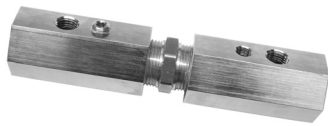
- 9800-3066-YY-NN-1** Flow Finder, Assembly, 0-475 SCFH, 1" Pipe Fittings, Flow Transducer
- 9800-3066-YY-NN-2** Flow Finder, Assembly, 0-475 SCFH, 1" Pipe Fittings, Dual Transducer



The Flow Finders on the "NN" high range Flow Finder Monitoring Assemblies are not equipped with air pipe connectors. They consist of a stainless steel mounting bracket with either a High Resolution Flow ("1" designation) or Dual ("2" designation) Transducer pneumatically connected

to a 0-475 SCFH Flow Finder.

**6510-0085 Pipe/Power Pipe, Four Port Manifold**



System Studies offers this manifold for use with one inch air pipe (Power Pipe). It is comprised of two P/N 6510-0086 manifolds

joined by a 3/4" NPT-M hex nipple. The fitting contains four 1/4" NPT-F ports to facilitate the installation of 1/2" air pipe connectors, 3/8" tubing connectors, etc. It also contains two 1/8" NPT-F ports, one of which is plugged, to accommodate the installation of a standard tank valve (not supplied). The unused ports can be plugged with P/N 6240-0043 1/4" Hex Head Plugs (ordered separately).

**6510-0086 Pipe/Power Pipe, Two Port Manifold**

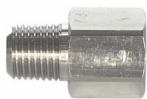


This specially designed manifold is used with the Power Pipe System to provide a means of connecting additional components, such as air delivery connectors used

with 1/2" air pipe and 3/8" tubing. For this purpose, it contains two 1/4" NPT-F ports, plus it has a 1/8" NPT-F port to accommodate a standard tank valve (not supplied). Located on each end is a 3/4" female thread. Hex head plugs and an end cap must be ordered separately, as needed, for each installation.

**POWER PIPE FITTINGS**

**9800-3035 Fitting, Flow Limiter, 1/4" NPT-M to 1/4" NPT-F**



This 1/4" adapter has a special orifice that is designed to limit air flow. It is used to limit the air flow when connecting a manifold to the Power Pipe.

fold to the Power Pipe.

**9800-3036 Fitting, Flow Limiter, 1/4" NPT-M to 1/4" NPT-M**



System Studies provides this 1/4" NPT male, nickel-plated brass nipple fitting with a special orifice that intentionally limits air flow. This nipple is used when

connecting CA3131 pipe to a Power Pipe. It has a hex surface to accommodate common wrench sizes and simplify installation and removal.

**9800-3037 Fitting, Reducer, 3/4" NPT-F to 1/4" NPT-F**



The 3/4" NPT Female to 1/4" NPT Female Reducer is used in any Power Pipe application where you need to connect a product with a 1/4" male fitting to a product

equipped with a 3/4" male NPT.

**9800-0140 Fitting, Power Pipe Straight Splice, Quadruple O-Ring per Side**



The straight splice connector is used when joining two sections of Power Pipe. It is equipped with four O-rings per side and multiple grooves for gripping power.

Requires a total of four Part No. 6200-0022 stainless steel clamps. Please note that this fitting has a machined outside diameter (O.D.) 0.980" and a final O.D. at the O-ring of 1.040". It is designed to be used with one inch pipe having an internal diameter (I.D.) between .985" and 1.030".

**9800-0141 Fitting, Power Pipe End Connector, 3/4" NPT-M to Quadruple O-Ring**



This nickel plated brass Power Pipe fitting provides the connection between the Power Pipe and 3/4" threaded components, such as the two or four port manifold.

It is equipped with four O-rings, which ensure a leak-free connection and multiple grooves for gripping power. Requires two Part No. 6200-0022 stainless steel clamp, which are placed over the O-rings. This fitting has an identical O.D. to the Part No. 9800-0140 fitting described above. It should be used only with one inch pipe having an internal diameter (I.D.) between .985" and 1.030".

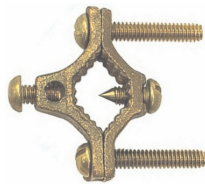
**6240-0120 Fitting, Power Pipe, Street L, 3/4" NPT-M to 3/4" NPT-F, Bar Stock**



To help simplify one inch air pipe installations, particularly at locations where the pipe needs to be routed around corners, we provide a 3/4-inch NPT Street L fitting. This fitting is intended to be used with the Part No. 9800-

0141 Power Pipe End Connector. It has a 3/4" NPT-F on one end and a 3/4" NPT-M on the other.

**6240-0144 Fitting, Power Pipe Bonding Strap Clamp**



This pipe clamp is recommended for use with a bonding strap whenever a splice occurs in a section of one inch air pipe (two required for each splice). The clamp is fully adjustable to accommodate variations in pipe outside diameters, and it is supplied with a pointed and threaded bonding screw. The screw is intended to penetrate the pipe's polyethylene outer jacket and make contact with the inner aluminum tape. Bonding continuity is established by inserting a bonding strap or wire into the ¼ inch (I.D.) hole on the top of the clamp and securing it in place with the ¼-20 screw provided.

At straight splice locations, the fitting will eliminate the need for one of the Power Pipe High Torque Clamps (Part No. 6200-0022) on each side of the splice. The clamp accommodates pipe sizes in the range of ½ inch to 1 inch. It is constructed of high strength, highly conductive copper alloy; all screws are brass for corrosion resistance.

**6240-0157 Fitting, Elbow, 3/4" NPT-F (2 Places)**



Used in Power Pipe (1" air pipe) installations, this elbow fitting makes it possible to route sections of pipe around 90° corners and/or obstructions. It is joined to Power

Pipe using two Power Pipe end pipe connectors (Part No. 9800-0141).

**6240-0001 Fitting, Tank Valve (with Cap)**



The nickel-plated Tank Valve is typically used with air pipe connectors or on any pressurization equipment requiring a pressure testing valve. The

Tank Valve offers the durability and dependability needed for accurate pressure readings.

**6200-0022 Fitting, Power Pipe High Torque Clamp**



Part No. 6200-0022 is used to secure the Power Pipe to the standard 1" pipe connector (Part No. 6240-0089) and straight splice connector (Part No. 6240-0060). This high

torque clamp is placed around the pipe and pipe connection.

**6240-0018 Fitting, Plug, 1/8" NPT-M Hex Head**



The 1/8" NPT-M plug has a variety of applications in an air pressure system. One of the more common uses is to plug the 1/8" NPT-F connection

when a tank valve is not desired.

**6240-0043 Fitting, Plug, 1/4" NPT-M Hex Head**



This nickel-plated brass hex head plug is useful for any application where a 1/4 NPT-M plug is required. One notable application is to seal one of

the ports in a Power Pipe two or four port manifold (Part Nos. 6510-0085 and 6510-0086). It is also used with the 3/4" NPT-F to 1/4" NPT-F cap fitting (Part No. 9800-3037).

**6240-0021 Fitting, Plug, 3/4" NPT-M Hex Head**



This Hex-Head socket plug can be used to plug unused 3/4" openings on air pipe connectors or other pressurization equipment.

**6240-0042 Fitting, Bushing, 3/4" NPT-M to 1/4" NPT-F**



This bushing is used in any application where you need to connect a product with a 1/4" male fitting to a product

equipped with a 3/4" female NPT.

**6240-0050 Fitting, Power Pipe Cross, 3/4" NPT-F (4 Places), Forged**



The Power Pipe Cross is used in Power Pipe applications where a "T" needs to be placed in the pipe. The fourth connection is usually used to attach 3/8" tubing, or plugged with a 3/4" Hex Head Plug, Part No. 6240-0021.

**6240-0058 Fitting, Bushing, 1/4" NPT-M to 1/8" NPT-F**



This bushing is used in any application where you need to connect a product with a 1/8" male fitting to a product

equipped with a 3/4" female NPT.

**6240-0047 Fitting, Nipple, 1/4" NPT-M to 1/4" NPT-M**



This nickel-plated brass nipple fitting is used to make a variety of pneumatic plumbing connections. It has a hex surface to accommodate common wrench sizes and simplify installation and removal.

**6240-0003 Fitting, 1/4" NPT-M to 3/8" Tubing**



The 3/8" Plastic Tubing Connector with 1/4" NPT-M is used in any application where you need to install a length of pneumatic tubing to equipment containing a 1/4" NPT-M connection. For example, it is one of the fitting types supplied on our Flow Finder Manifolds and High Resolution Transducer wire cover assemblies. It can also be used to install a device, such as a Flow Finder, in a length of 3/8" pneumatic tubing.

**6240-0145 Fitting, Check Valve, 3/4" NPT-F to 3/4" NPT-F**

This 3/4" NPT-F to 3/4" NPT-F check valve is a one-piece cast brass (non-plated) fitting with a stainless steel internal stem, spring and cup washer. The valve poppet is Buna-N Rubber. The check valve meas-

ures 3.31" in length and has a valve diameter of 1.62". It designed to operate in any position and provide a positive seal to prevent back flow. The P/N 6240-0145 fitting can be used in most pneumatic applications where a check valve is required in a 1" air pipe delivery system. For 1" Nylobraid poly tubing installations, use two P/N 6240-0009 3/4" NPT-M barbed connectors.

**MISCELLANEOUS POWER PIPE ITEMS****6522-0013****Pipe/Power Pipe, Spacer**

This plastic Power Pipe System component helps solidify Power Pipe to 1/2" pipe splices in applications where the pipes need to be installed in parallel. It is used with the two or four port Power Pipe Manifolds and 90° Street L fitting.

The spacer's optimal thickness and two "V" grooves help hold the pipes securely in place. It is supplied with plastic pipe ties.

**6522-0046****Pipe/Power Pipe, 1" Air Pipe Tapered Cap Plug**

This simple plug prevents foreign particles from entering the Power Pipe during storage and transport.

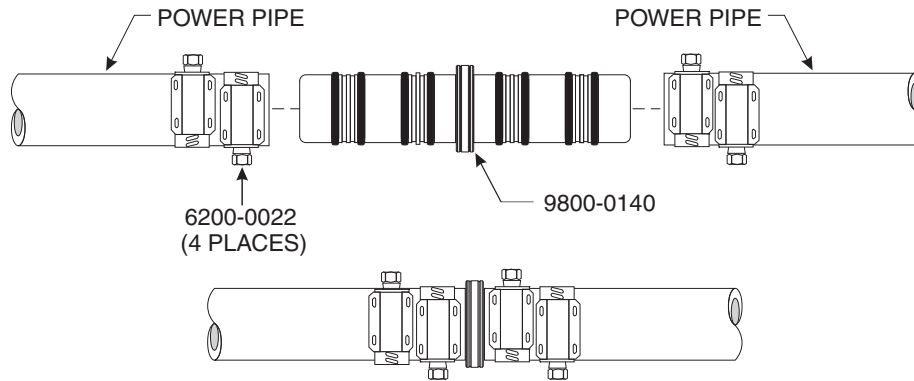
**6522-0012****Pipe/Power Pipe, 1" Air Pipe Cap Plug**

This cap plug provides the same function as the tapered cap plug described above.

**POWER PIPE ASSEMBLY KITS**

**9801-2100 Pipe/Power Pipe, Installation Assembly Kit, Straight Splice**

This Power Pipe assembly includes four (4) Part No. 6200-0022 High Torque Stainless Steel Clamps and one (1) Part No. 9800-0140 Power Pipe Straight Connector. Power Pipe is not included.

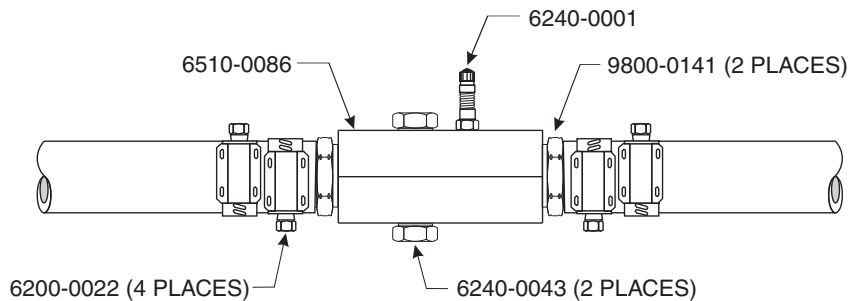


**2100 ASSEMBLY**

**9801-2200 Pipe/Power Pipe, Installation Assembly Kit, Straight Splice with Valve**

Similar in function to the Part No. 9801-2100 assembly described above, this Power Pipe assembly also includes a tank valve. The assembly is comprised of the listed below. Please note that Power Pipe is not included.

- 2 9800-0141 Power Pipe End Connector
- 4 6200-0022 High Torque Stainless Steel Clamps
- 2 6240-0043 1/4" NPT-M Hex Head Plug
- 1 6240-0001 Pressure Testing Valve
- 1 6510-0086 Two Port Power Manifold



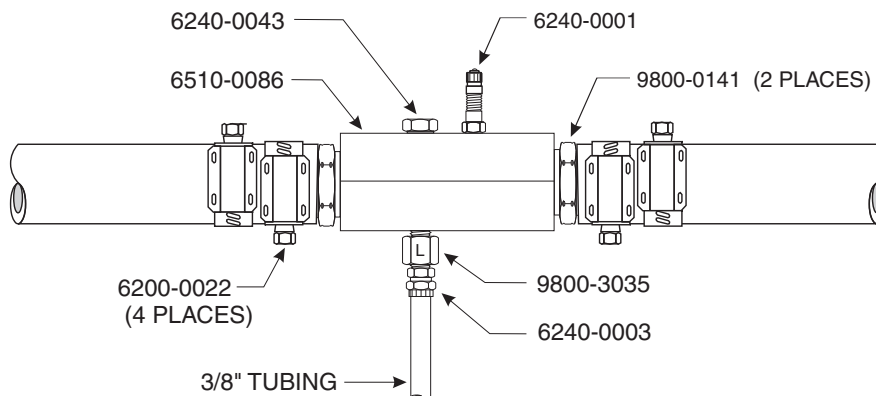
**2200 ASSEMBLY**



**9801-2201 Pipe/Power Pipe, Installation Assembly Kit, 1" Pipe to One 3/8" Tubing**

As indicated in the product description, this Power Pipe installation kit makes it possible to feed a single 3/8" tube from a non-terminating length of Power Pipe. While this kit does not include Power Pipe, it is supplied with the following components:

- 2 9800-0141 Power Pipe End Connector
- 3 6200-0022 High Torque Stainless Steel Clamps
- 1 6240-0003 1/4" NPT-M Straight to 3/8" Tubing Connector
- 1 6240-0043 1/4" NPT-M Hex Head Plug
- 1 6240-0001 Pressure Testing Valve
- 1 9800-3035 1/4" NPT-M to 1/4" NPT-F Adapter w/Flow Limiter
- 1 6510-0086 Two Port Power Manifold

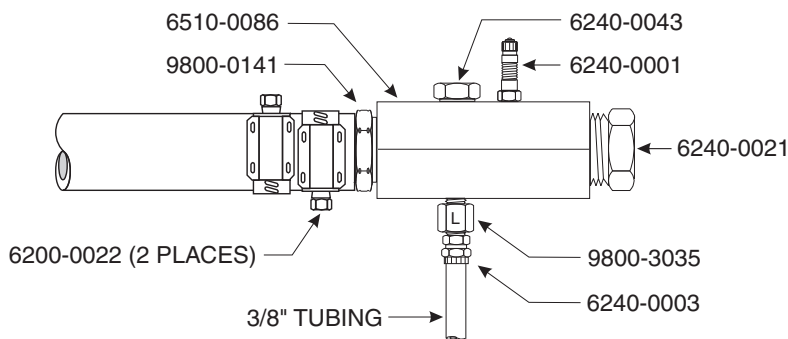


**2201 ASSEMBLY**

**9801-2201E Pipe/Power Pipe, Installation Assembly Kit, 1" Pipe End Point to One 3/8" Tubing**

As the name implies, this installation kit is used at the end of the pipe run where a single 3/8" pressure tube is required. The kit components are listed below (no Power Pipe supplied):

- 1 9800-0141 Power Pipe End Connector
- 2 6200-0022 High Torque Stainless Steel Clamps
- 1 6240-0003 1/4" NPT-M Straight to 3/8" Tubing Connector
- 1 6240-0021 3/4" NPT-M Hex Head Plug
- 1 6240-0043 1/4" NPT-M Hex Head Plug
- 1 6240-0001 Pressure Testing Valve
- 1 9800-3035 1/4" NPT-M to 1/4" NPT-F Adapter w/Flow Limiter
- 1 6510-0086 Two Port Power Manifold

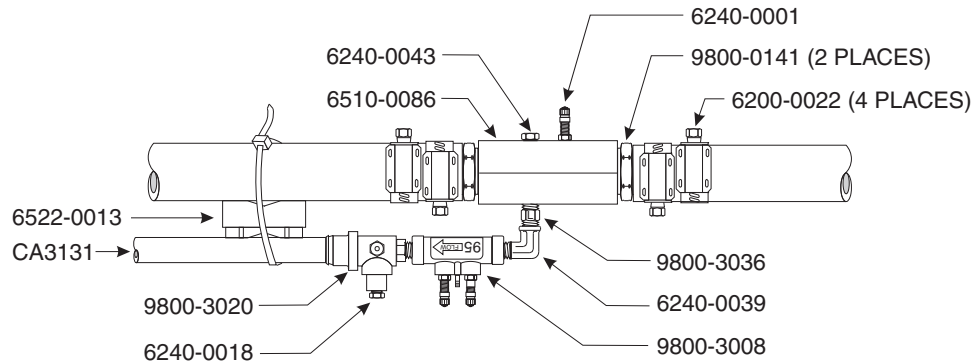


**2201E ASSEMBLY**

**9801-2202 Pipe/Power Pipe, Installation Assembly Kit, 1" Pipe to One CA3131 1/2" Pipe**

This kit is a variation of the Part No. 9801-2201 installation package. Instead of 3/8" tubing components, it includes the parts necessary for the Power Pipe to single CA3131 air pipe connection. Please note that the Power Pipe and 1/2" CA3131 air pipe are not included with the following kit components:

- 2 9800-0141 Power Pipe End Connector
- 1 9800-3008 0-95 SCFH Flow Finder w/o Check Valve
- 3 6200-0022 High Torque Stainless Steel Clamps
- 1 6240-0043 1/4" NPT-M Hex Head Plug
- 1 6240-0018 1/8" NPT-M Hex Head Plug
- 1 6240-0001 Pressure Testing Valve
- 1 9800-3020 AMP Pipe to 1/4" NPT-M Connector, Type L
- 1 9800-3036 1/4" NPT-M to 1/4" NPT-M Adapter w/Flow Limiter
- 1 6510-0086 Two Port Power Manifold
- 1 6240-0039 1/4" NPT Street L
- 1 6522-0013 Air Pipe Spacer



**2202 ASSEMBLY**

**9801-3061 Manifold, Installation Assembly Kit, 3061 Assemblies**

This kit will suit most installation applications for the 9800-3061 series manifold monitoring assemblies. It contains the following fittings:

- 4 6240-0002 1/8" NPT-M to 3/8" Tubing Straight Connector
- 1 6240-0003 1/4" NPT-M to 3/8" Tubing Straight Connector
- 3 6240-0022 1/8" NPT-M to 3/8" Tubing Street L
- 3 6240-0065 1/8" NPT-M to 1/8" NPT-F Extender Adapter
- 1 6240-0125 1/8" NPT-M to 1/8" NPT-F Street Tee

**9801-3062 Manifold, Installation Assembly Kit, 3062 Assemblies**

This kit will suit most installation applications for the 9800-3062 series manifold monitoring assemblies. It contains the following fittings:

- 8 6240-0002 1/8" NPT-M to 3/8" Tubing Straight Connector
- 1 6240-0003 1/4" NPT-M to 3/8" Tubing Straight Connector
- 6 6240-0022 1/8" NPT-M to 3/8" Tubing Street L
- 6 6240-0065 1/8" NPT-M to 1/8" NPT-F Extender Adapter
- 2 6240-0125 1/8" NPT-M to 1/8" NPT-F Street Tee

**MISCELLANEOUS 1/2" AIR PIPE EQUIPMENT**

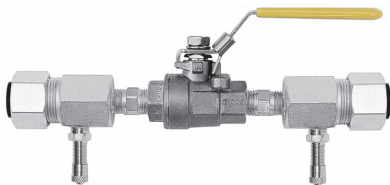
**9800-3001 Fitting, 1/2" Air Pipe 3-Way Tee**



This pipe tee fitting is a combination of the 9800-3054 and 9800-3057 fittings. It provides a durable leak-free connection for locations where three sections of CA3131 air pipe need to be joined together. Like the other half inch air pipe fittings supplied by System Studies Incorporated, the fitting's individual coupler components are constructed of nickel-plated brass.

Six sleeves are included with the fitting (three standard and three large diameter pipe) to provide options for connecting half inch air pipe whose outside diameter is slightly larger than standard. Also included with the 1/2" Air Pipe 3-way Tee Fitting are two ground lug connectors and a 1/8" NPT-M hex head plug. If desired the plug can be replaced with a standard pressure test valve (not supplied) to provide the means of measuring pipe pressure at the three-way splice.

**9800-3051 Fitting, Shutoff Valve**



This shutoff valve fitting enables technicians to shut off air flow into a pipe section during certain leak locating and maintenance procedures. Part No.

9800-3051 includes the following components: a 1/2" air pipe shutoff valve, two Part No. 9800-3054 couplers, two tank valves, two ground lug connectors, and large diameter pipe sleeves. The supplied tank valves enable pressure readings to be taken to confirm that the shutoff valve does not allow air to pass through the pipe.

**9800-3054 Fitting, 1/2" Air Pipe to 1/4" NPT-M, with Ground Lug**

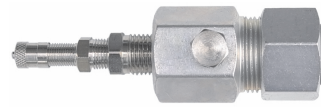


This nickel-plated brass fitting has a 1/2" air pipe coupler connection on one end and a 1/4" NPT-M hex nipple on the other. It is

the ideal fitting to use when installing a System Studies Flow Finder™ in a half inch CA 3131 air pipe. Note: two fittings are required for this application.

The center hex section of the fitting contains a 1/8" NPT-F thread to accommodate a standard tank valve (not included) and a 3/16" NPT-F thread for a ground lug connector (included). Because a tank valve is not supplied with this item, a 1/8" NPT-M hex head plug is provided. Both the plug and the ground lug connector are shipped with the fitting but not pre-installed. Please note that this fitting is also supplied with a separate large diameter pipe sleeve, which is recommended for use when it is difficult to use the standard sleeve included in the coupler connection.

**9800-3055 Fitting, 1/2" Air Pipe End Cap Coupler with Tank Valve**



The 1/2" Air Pipe End Cap Coupler is intended for use at the end of an air pipe where the pipe does not terminate at a Flow Finder Manifold or Manifold Monitoring Assembly.

The fitting is similar to Part No. 9800-3054, but rather than having a 1/4" NPT-M hex nipple on one end, it includes a pressure testing valve with a 1/4" NPT-M thread that screws into the coupler. The tank valve not only seals the fitting, it also provides the means of taking end-of-pipe pressure measurements.

The center hex section of the fitting contains a 1/8" NPT-F thread to accommodate a 1/8" NPT-M hex head plug. It also contains a 3/16" NPT-F thread for a ground lug connector. Like the other 1/2" CA3131 air pipe fittings listed, Part No. 9800-3055 includes a separate large diameter pipe sleeve that can be used when it is difficult or impossible to use the standard sleeve supplied in the coupler connection.

**9800-3057 Fitting, Air Pipe Coupler, with Tank Valve**



The 1/2" air pipe coupler fitting is used to connect two lengths of CA 3131 air pipe. It is constructed of nickel-plated brass and is equipped with air pipe coupler components on each end. The center hex section of the fitting includes two 1" NPT-M threads (one for each coupler connection)

and two 9/16" O.D. connection tubes, which are placed into the air pipe ends. This center section also includes female threads for inserting a ground lug connector and a standard tank valve. Both items are supplied but not installed.

Each coupler connection includes a 1" NPT-F nut and a 3/4" I.D. standard sleeves, both of which need to be slipped over the end of the air pipe end before the fitting's connection tube is inserted into the pipe. Also included with P/N 9800-3057 are two large diameter pipe sleeves. These sleeves are recommended for use when slightly larger outside pipe diameter makes it difficult to use the standard sleeves.

**9900-0500 Fitting, Teflon Ferrule (Qty. 10)**



The large diameter pipe sleeves provided with the nickel-plated brass 1/2" air pipe fittings (Part Nos. 9800-3051, 9800-3054, 9800-3055 and 9800-3057) are used as an alternative to the standard sleeves supplied with the fittings. Slight variations in the outside diameter of 1/2" pipe sometimes make it impossible to use the standard sleeves. The slightly larger diameter of the large diameter pipe sleeves allows them to be used on all 1/2" pipes. When properly placed over the free end of the pipe and carefully inserted into the connector fitting, the large diameter pipe sleeve provides a lasting, leak-free connection.



**9800-3031 Flow Finder, Twin Tubing**

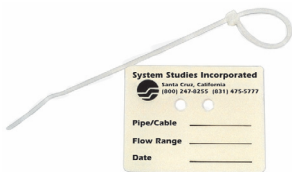


This part number designates a 50 foot quantity of Santoprene twin tubing. The tubing is used to connect all Flow Finder Measurement Equipment (High Resolution Transducer, High Valves, Flow Finder Panels, etc.) with the Flow Finders.

**9800-3031-C Flow Finder, Twin Tubing, 2,000 Foot Reel**

In order to offer quantity pricing and greater availability of twin tubing for installation crews and maintenance technicians, we now offer twin tubing in 2,000 foot reels. Like the 50 foot quantity (Part No. 9800-3031), this tubing is provided with tracer ridge to assist in the proper connection from Flow Finder to transducer or high valve.

**9800-3515 Pipe/Power Pipe, Cable ID Tags**



These Cable ID Tags and ties are supplied in a box of 100. As the name indicates, they are used primarily to record cable numbers and additional information such as cable length and flow rate. The tags are typically used in both central office and field locations.

**9800-3039 Flow Finder, Jumper Strap**



This jumper strap provides electrical continuity when a Flow Finder or other cable pressurization system component is spliced into an air pipe. The strap is made of stranded,

insulated 12-10 copper wire, and it is compatible with most air pipe connectors.

**AIR PIPE AND TUBING**

**6522-0029 Pipe/Power Pipe, 3/8-Inch Poly Tubing**

This 3/8" polyethylene tubing is used by most operating companies as the standard pneumatic tubing from transducers, air pipe manifolds and distribution panels to the cables in the air pressure system. The tubing is available in 500 foot reels.

**7900-0011 Pipe/Power Pipe, One-Inch Nylobraid Tubing**



This clear, flexible vinyl-braided PVC tubing is used in the central office to connect air dryer output to the office balance manifold, and then to the vertically-mounted equipment rack manifold(s) and the panels.

In offices where an externally-mounted Emergency Air Delivery Access Cabinet (Part No. 9800-0905) is used, Nylobraid tubing provides the air feed from the cabinet to the balance manifold inside the central office. The tubing is available in a 100 foot length or in smaller lengths of 10 feet or less.

**7900-0025 Pipe/Power Pipe, One-Inch Stainless Steel Reinforced Poly Tubing**

For telcos with requirements for reinforced stainless steel tubing in the central office, we supply this poly tubing in 100 foot lengths. It serves the same function as our Nyla-Braid Tubing (Part No. 7900-0011), but offers superior strength and longevity.

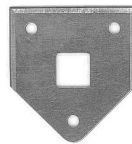
**ASSOCIATED TOOLS**

**9800-3508 Tool, Air Pipe Cutter, 1/2" Pipe**



This air pipe cutter is the ideal tool to use when installing Flow Finders™ and other pressurization system components in CA3131 air pipe. Using this tool will ensure a clean, 90 degree crosscut and will prevent the pipe from going out of round. It is also ideal for making clean cuts on 3/8" plastic tubing.

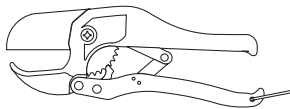
**9800-3509 Tool, Replacement Blades, Pipe and Tubing Cutter**



Replacement blades are available for the Air Pipe & Tubing Cutter (Part No. 9800-3508). These blades, which are supplied in a package of two, help ensure that the cutting tool will continue to achieve a

clean, precision cut of air pipe or pneumatic tubing.

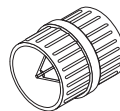
**9800-3505 Tool, Air Pipe Cutter, Power Pipe**



This hand-held plastic pipe cutter simplifies the task of making precision crosscuts of Power Pipe (1" O.D.). The tool uses a ratchet mechanism and razor sharp blade to grip and

cut the plastic tubing. It is used with the Power Pipe Reamer (Part No. 9800-3504) when installing Power Pipe connector fittings.

**9800-3504 Tool, Power Pipe Reamer**

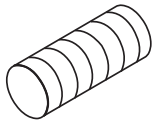


This tool is designed to remove burrs from the end of a section of Power Pipe before inserting either a Power Pipe straight splice fitting (Part No.

9800-0140) or a Power Pipe end connector fitting (Part No. 9800-0141). One end of the reamer is used to bevel the outside circumference of the pipe; the other end bevels the inside.

6522-0048

**Tool, Power Pipe, Water Removal Plug**

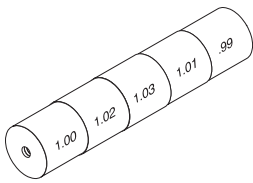


This Power Pipe System component is a specially designed neoprene plug that can be used prior to the turn up of a Power Pipe when water is detected in a

section of installed Power Pipe. It is used with a portable, regulated air source to blast the water through the pipe section. The plug contains an internal bolt and end washers and nuts that can be tightened or loosened as needed to modify the plug's diameter for optimum performance.

9800-3507

**Tool, Power Pipe, Plug Gauge**



This one inch air pipe gauge is used to determine variations in the internal diameter of one inch air pipe. It is constructed of a cylindrical piece of solid, finished aluminum, measuring 1.030" in diameter by

5" long. The ends of the gauge have a half inch, 1/4-20 tap to accept a pipe puller or similar fitting to assist in removing the gauge after sizing pipe. The outside diameter of the gauge varies in diameter from one end to the other as follows: 1.00", 1.020", 1.030", 1.010" and 0.990". These five stepped outside diameters indicate the approximate internal diameter of a particular section of one inch pipe.

The words Power Pipe System™, Power Pipe Panel™, Power Pipe Return Panel™, Positive Air Flow System™, High Range Flow Finder™, Flow Finder™, Flow Gauge™, High Resolution Flow and Dual Transducers™ are trademarks of System Studies Incorporated.