

A/C TOOLS

TOOL ADAPTORS Catalog

RADIATOR & POWER STEERING TOOLS

BRAKE, WINDSHIELD WASHER, TRANSMISSION TOP-OFF, LEAK TEST, & MANUAL ADAPTORS

PCU Production Control Units, Inc. 2280 West Dorothy Ln., Dayton Ohio 45439-1892, USA Phone: 937-299-5594 • FAX: 937-299-3843 • www.pcuinc.com

REGISTERED ISO 9001: 2008, ISO 14001: 2004



We specialize in custom Couplers to suit your application.



www.pcuinc.com

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Production Control Units, Inc.-Coupler Products

2280 West Dorothy Lane, Dayton, Ohio 45439-1892 USA - Phone (937) 299-5594 - FAX: (937) 299-4843 PCU Web Site: www.pcuinc.com - E-mail: couplers@pcuinc.com

Coupler Application Data Inquiry

Company		Phone # _	
Contact		Fax #	
Address		E-mail	
City	_ State	Country	Zip
Type & brand name for current c	oupler		
Customer product manufactured			
	Type of coup	ler required	
Size and type of tube or port to b	e sealed		
□ Straight □ Swaged	□ Expanded	Other	
Length of tube or port available f	or coupler		
Quantity required			
Delivery due date			
F	low will the cou	ipler be used?	
Refrigerant processing What type of refrigerant? Oil processing What type of oil (Mineral, Leak Burst testing Maximum pressure & type Vacuum What level of vacuum nee What Oil be present durin If "yes", what type of oil?	(HFC-134a, HP6 Polyol Ester, PA e of test media? eds to be achieve g vacuum pump	62, R-22, etc.) G, etc.) (Air, Helium, etc.) ed? down?	(Attach MSDS)
А	dditional proce	ss information	



- •Minimum refrigerant loss
- •Automatic disconnect capability
- •Zero connection force with clamp tell-tale
- •Automatic operation, upon connection to fitting
- •High vacuum and refrigerant flow rates
- Air operated
- Lightweight
- •Connection to J639 High-Side fitting

Series 13000-003 Evacuation & Refrigerant Charging Tool



Standard Series # 13000-003 High-Side J639



Extended Nose Model

Reduce labor content and minimize emission of refrigerant to the atmosphere!

The Model 13000-003 Charging Tool is the interface adapter for a refrigerant charging system. It is designed for direct connection to quick-connect HFC-134a A/C process fittings for evacuation and refrigerant charging, with de minimis refrigerant loss to atmosphere from the tool, and the additional benefit of automatic disconnect at cycle completion.

Tool operation is controlled automatically in that the operator only has to locate the tool on the process fitting. The tool then clamps (indicated by the tell-tale), seals, and initiates the charging machine cycle including evacuation, vacuum check and refrigerant charging. After cycle completion, the process fitting seal is reseated and the tool disconnects.

The clamping mechanism used is the time proven ball lock method. The six hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Model 13000-003 Charging Tool is used with hydraulic driven ram charging systems. Application to other equipment, including competitive charging systems, can also be accomplished.

Save money with the PCU Model 13000-003 Charging Tool. Contact us with your application and equipment specifications at (1-937-299-5594).

Series 13000-003 Evacuation & Refrigerant Charging Tool



STANDARD STOCK PART NUMBER: 48440

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	TECHNICAL SPECIFICATIONS:	
	Weight	Air pilots
	Vacuum range 0–760 TORR (0–760 mmHg) Vacuum flow 2.5 SCFM	Air port fittings 1/4" dia. one touch connectors, color coded
	Refrigerant	Process fitting compatibilitySAE J639 Process fitting nose seal Molded Process fitting clamp systemPCU BalLoc
	Refrigerant port fitting	Oil compatibility Polyolester or PAG
	(Typical value based on external drive force of 750 PSI)	PATENTS: This tool is manufactured under U. S. Patent No. 4,805,417

STANDARD PART NUMBER 48440:

- 1.5" Nose Extension: Part No. 101576
- 1.75" Nose Extension: Part No. ...209920-001
- 3.0" Nose Extension: Part No. 100876
- 5.0" Nose Extension: Part No. ...209901-001

* Please refer to PB053 for series 15000 low-side tool.



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Production Control Units, Inc.



- Minimum refrigerant loss
- •Automatic disconnect capability
- Zero connection force with clamp tell-tale
- Automatic operation, upon connection to fitting
- High vacuum and refrigerant flow rates
- Air operated
- Lightweight
- Connection to J639 Low-Side fitting

Series 15000-003 Evacuation & Refrigerant Charging Tool



Standard Series # 15000-003 Low-Side J639



Extended Nose Model

Reduce labor content and minimize emission of refrigerant to the atmosphere!

The Model 15000-003 Charging Tool is the interface adapter for a refrigerant charging system. It is designed for direct connection to quick-connect low-side HFC-134a A/ C process fittings for evacuation and refrigerant charging, with de minimis refrigerant loss to atmosphere from the tool, and the additional benefit of automatic disconnect at cycle completion.

Tool operation is controlled automatically in that the operator only has to locate the tool on the process fitting. The tool then clamps (indicated by the tell-tale), seals, and initiates the charging machine cycle including evacuation, vacuum check and refrigerant charging. After cycle completion, the process fitting seal is reseated and the tool disconnects.

The clamping mechanism used is the time proven ball lock method. The six hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Model 15000-003 is used with hydraulic driven ram charging systems.Application to other equipment, including competitive charging systems, can also be accomplished.

Save money with the PCU Model 15000-003 Charging Tool. Contact our Order Department at (1-937-299-5594) with your application and equipment specifications.



TECHNICAL SPECIFICATIONS:	
Weight	Air pilots
Vacuum range 0–760 TORR (0–760 mmHg) Vacuum flow 2.5 SCFM	Air port fittings 1/4" dia. one touch connectors, color coded
Refrigerant	Process fitting compatibilitySAE J639 Process fitting nose sealMolded Process fitting clamp systemPCU BalLoc
Refrigerant port fitting	Oil compatibility Polyolester or PAG
(Typical value based on external drive force of 750 PSI)	PATENTS: This tool is manufactured under U. S. Patent No. 4,805,417

STANDARD PART NUMBER 49946:

- 1.5" Nose Extension: Part No. ...102997-001
- 3.0" Nose Extension: Part No. ...102997-002

* Please refer to PB023 for series 13000 high-side tool.



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Production Control Units, Inc.



- •Minimum refrigerant loss
- •Automatic disconnect capability
- •Zero connection force
- •Automatic operation, upon connection to fitting
- •High vacuum and refrigerant and oil flow rates
- •Air operated
- Lightweight
- •Separate Refrigerant and oil vacuum connections

Series 104 Evacuation & Refrigerant Charging Tool





104001-700 Straight Manifold

104001-002 Straight Manifold



104001-004 90° Manifold

Reduce labor content and minimize emission of refrigerant to the atmosphere!

The Series 104 Charging Tool is the interface adapter for a refrigerant/oil charging system. It is designed for direct connection to quick-connect HFC-134a A/C hi-side process fittings for evacuation and refrigerant/oil charging, with de minimis refrigerant loss to atmosphere from the tool, and the additional benefit of automatic disconnect at cycle completion.

Tool operation is controlled automatically. The operator only has to locate the tool on the process fitting, it clamps, seals, and initiates the charging machine cycle including evacuation, vacuum check and refrigerant charging. After cycle completion, the process fitting seal is reseated and the tool disconnects.

The clamping mechanism used is the time proven ball lock method. The eight hardened steel balls are constrained in the charge gate body, and secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal. The Tool is designed to operate with the Mass Flowmeter Refrigerant Charging System. It is also adaptable to applications that require air-piloted valve operation with automatic clamping and fitting stem operation.

The tool contains three separate fluid circuits, controlled by air pilot pressure, which may be used for vacuum, refrigerant, salvage, oil, or any other fluid.

Standard series 104 is designed for high flow rate up to 300 g/sec at 200 PSI. Slower flow rates are available please contact PCU Engineering with your application and equipment specifications.

Save money with the PCU Series 104 Charging Tool. Contact our Order Department (1-937-299-5594) with your application and equipment specifications.

Compucharge Series 104 Evacuation & Refrigerant Charging Tool



(104001-002 Shown)

STANDARD STOCK PART NUMBERS: 104001-002 (STRAIGHT MANIFOLD) 104001-004 (90° MANIFOLD)

TECHNICAL SPECIFICATIONS:	
Weight	Air pilots
Vacuum range 0–760 TORR (0–760 mmHg)	Air supply pressure
Refrigerant	Air port fittings 1/4" dia. one touch connectors
	Flow Capacity (Refrig., Vacuum, Oil) 0.9Cv
Oil Polyolester or PAG	(typical)
	Process fitting compatibilitySAE J639
Tool flow rate (typical) 300 g/sec at 200 PSI (Contact PCU for Slower Flow Rates)	Process fitting nose seal
Max Refrigerant Pressure200 psig @ 70 psi air	Oil compatibility Polyolester or PAG
	PATENTS:
500 psig @ 100 psi air	This tool is manufactured under U. S. Patent No.
Vacuum port fitting 1/2" JIC flare	6,298,886
Refrigerant & oil port fitting 3/8" JIC flare	

Contact PCU for extended nose Series 104.

Series 104 can easily be modified to mate with Series 250: Hansen 2HK, 3HK, and J639 Low-Side Fittings. Please contact PCU Engineering for Custom Series 104 to meet your application.



Production Control Units, Inc.



Series 130 Valve Block

FEATURES

- Universal Valve Block for various applications.
- High vacuum and fluid and oil flow rates
- Air operated poppet valves
- Lightweight
- Separate fluid and oil vacuum connections
- Easy Valve Body Maintenance



The Series 130 Valve Block Tool is the interface between a manual or automatic clamping mechanism and the fill system. Standard design includes a 3/8" NPT female connection for any manual coupler, power coupler or an automatic clamping mechanism. Refer to product bulletins, PB47 for manual coupler; and PB 49 for power coupler series 130 designs.

The Series 130 Valve Block Tool is designed to operate with Mass Flowmeter Fill System. Tools with automatic clamping are available. Please contact PCU for further information. The tool contains three separate fluid circuits, controlled by air pilot pressure, which may be used for vacuum, refrigerant, salvage, oil, or any other fluid.

Save money with the PCU Series 130 Valve Block Tool. Contact our Order Department at (1-937-299-5594) with your application and equipment specifications.

Series 130 Valve Block



(3 valve design shown, please contact PCU Engineering for 4 valves and larger.)



STANDARD STOCK PART NUMBER: 130077-302

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TECHNICAL SPECIFICATIONS:	
Weight	Air port fittings 1/4" dia. one touch connectors
Max Refrigerant Pressure200 psig @ 70 psi air	Tool Valve Block Flow Capacity (Fluid, Vacuum, Oil)
	Process fitting compatibility 3/8" NPT
Vacuum port fitting. 1/2" JIC flare Fluid. 1/4" NPT Male Oil Port Fitting 3/8" SAE flare Air pilots. (Vacuum, Fluid, Oil) Air supply pressure 70 PSIG (4.9 kg/cm²)	PATENTS: Patent Pending

* For other configurations and multiple poppet valves, please contact PCU Engineering for dimensions and availability.





- Minimum
 refrigerant loss
- Manual connection force
- Manual operation, upon connection to fitting
- High vacuum and refrigerant and oil flow rates
- Air operated poppet valves
- Lightweight
- Separate Refrigerant and oil vacuum connections

Series 130 Evacuation & Refrigerant Charging Tool With Manual Coupler



Reduce labor content and minimize emission of refrigerant to the atmosphere!

The Series 130 Charging Tool is the interface adapter for a refrigerant/oil charging system. It is designed for direct connection to quick-connect HFC-134a A/C high-side process fittings for evacuation and refrigerant/ oil charging, with de minimis refrigerant loss to atmosphere.

Tool valve operation is controlled automatically after the operator manually clamps BalLoc coupler on the process fitting and starts cycle. Charging machine cycle includes evaluation, vacuum check, and refrigerant charging. After cycle completion, the operator will remove BalLoc coupler by pulling on sleeve to release BalLoc clamping.

The manual clamping mechanism used is the time proven BalLoc method. The eight hardened steel balls

which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Series 130 Charging Tool is designed to operate with Mass Flowmeter Refrigerant Charging System. Tools with automatic clamping are available. Please contact PCU for further information.

The tool contains three separate fluid circuits, controlled by air pilot pressure, which may be used for vacuum, refrigerant, salvage, oil, or any other fluid.

Save money with the PCU Series 130 Charging Tool. Contact our Order Department at (1-937-299-5594) with your application and equipment specifications.

Series 130 Evacuation & Refrigerant Charging Tool with Manual Coupler



* For other configurations and multiple poppet valves, please contact PCU Engineering for dimensions and availability.



STANDARD STOCK PART NUMBER: 130187-050 (50 g/sec) (At 200 PSI) Refer to PB049 for Series 130 Power Coupler.

TECHNICAL SPECIFICATIONS:

Weight
Opens with pressure air @ 70 psig
OII Polyolester or PAG
Opens with pressure air @ 70 psig
Standard Charge Rate
Max Refrigerant Pressure 200 psig @ 70 psi air
Vacuum port fitting
Refrigerant
Oil Port Fitting
Air pilots(Vacuum, Refrigerant, Oil)

Air supply pressure 70 PSIG (4.9 kg/cm ²)
Air port fittings 1/4" dia. one touch connectors
Tool Valve Block Flow Capacity (Refrig., Vacuum,
Oil)
0.9cv (Typical)
Process fitting compatibility SAE J639
Process fitting nose sealO-Ring
Process fitting clamp system PCU BalLoc
Oil compatibility Polyolester or PAG

Manual Coupler P/N

186 =	86VT311
187 =	87VT331FL
050 =	62VT337FL
041 =	67VT337



Production Control Units, Inc.



- Minimum refrigerant loss
- Minimal connection force
- Semi-Automatic operation, upon connection to fitting
- High vacuum and refrigerant and oil flow rates
- Air operated poppet valves
- Lightweight
- Separate Refrigerant and oil vacuum connections

Series 130 Evacuation & Refrigerant Charging Tool With Power Coupler



Reduce labor content and minimize emission of refrigerant to the atmosphere!

The Series 130 Charging Tool is the interface adapter for a refrigerant/oil charging system. It is designed for direct connection to quick-connect HFC-134a A/C high-side process fittings for evacuation and refrigerant/ oil charging, with de minimis refrigerant loss to atmosphere.

Tool valve operation is controlled automatically after the operator positions power coupler on the process fitting and starts cycle. Charging machine cycle includes evaluation, vacuum check, and refrigerant charging. After cycle completion, power coupler will automatically unclamp and operator will remove from high side fitting. The Power Coupler clamping mechanism used is the time proven Ball Lock method. The eight hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Series 130 Charging Tool is designed to operate with Mass Flowmeter Refrigerant Charging System. Tools with automatic clamping are available. Please contact PCU Engineering for further information.

The tool contains three separate fluid circuits, controlled by air pilot pressure, which may be used for vacuum, refrigerant, salvage, oil, or any other fluid.

Save money with the PCU Series 130 Charging Tool. Contact our Order Department at (1-937-299-5594) with your application and equipment specifications.

Series 130 Evacuation & Refrigerant Charging Tool With Power Coupler



* Power coupler 086 & 087 shown for other configurations and multiple poppet valves, please contact PCU Engineering for dimensions and availability.



STANDARD STOCK PART NUMBER: 130087-050 (50 g/sec)

Refer to PB047 for Series 130 with Manual Coupler

TECHNICAL SPECIFICATIONS:	
Weight	Air pilots
Vacuum port fitting	PATENTS: Patent Pending



Production Control Units, Inc.



- Minimum
 refrigerant loss
- Manual connection force
- Manual operation, upon connection to fitting
- High vacuum and refrigerant and oil flow rates
- Air operated poppet valves
- Lightweight
- Separate Refrigerant and oil vacuum connections
- Connects to 1/4 flare fitting with Schrader core

Reduce labor content and minimize emission of refrigerant to the atmosphere!

The Series 130 Charging Tool is the interface adapter for a refrigerant/oil charging system. It is designed for direct connection to 1/4 flare thread with Schrader core process fittings for evacuation and refrigerant/oil charging, with de minimis refrigerant loss to atmosphere.

Tool valve operation is controlled automatically after the operator positions coupler on the process fitting and starts cycle. Charging machine cycle includes evaluation, vacuum check, and refrigerant charging. The operator will remove coupler by pulling on sleeve to release clamping. The Series 130 Charging Tool is designed to operate with Mass Flowmeter Refrigerant Charging System. Tools with automatic clamping are available. Please contact PCU for further information.

The tool contains three separate fluid circuits, controlled by air pilot pressure, which may be used for vacuum, refrigerant, salvage, oil, or any other fluid.

Save money with the PCU Series 130 Charging Tool. Contact our Order Department at (1-937-299-5594) with your application and equipment specifications.

Series 130 Evacuation & Refrigerant Charging Tool with Manual Coupler for 1/4" Schrader Fitting





* For other configurations and multiple poppet valves, please contact PCU Engineering for dimensions and availability.



Refer to PB047 for Series 130 with Manual Coupler and PB049 for Series 130 with Power Coupler.

 TECHNICAL SPECIFICATIONS:	
Weight2.6 lbs (1.18 kg)Vacuum range0–760 TORR (0–760 mmHg)RefrigerantHFC-134aOpens with pressure air @ 70 psigOilPolyolester or PAGOpens with pressure air @ 70 psigStandard Charge Rate50 g/sMax Refrigerant Pressure200 psig @ 70 psi air	Refrigerant.3/8" JIC flareOil Port Fitting3/8" SAE flareAir pilots.(Vacuum, Refrigerant, Oil)Air supply pressure70 PSIG (4.9 kg/cm²)Air port fittings1/4" dia. one touch connectorsTool Valve Block Flow Capacity (Refrig., Vacuum,Oil)Oil)Process fitting compatibility1/4 Flare Schrader ValveProcess fitting nose sealO-RingOil compatibilityPolyolester or PAG





- Minimum refrigerant loss
- Manual disconnect
- High vacuum & refrigerant flow rates
- Lightweight
- •Connection to J639 High-Side fitting
- Relief style refrigerant & oil valve
- Air operated vacuum valve
- Easily adapted to different style process fittings
- Easily modified for multiple refrigerants
- Optional selector switch for multiple charge size
- Independent stem operation
- Scavenge optional

Series 300 Evacuation & Refrigerant Charging Tool



The PCU Series 300 A/C Charging Tool is part of an automated charging system designed to process the A/C system on appliances and vehicles. The system normally consists of a charger which provides a fast precise method of dispensing refrigerant, along with product vacuum checking prior to charging. A line accumulator and/or booster pump which maintain a consistent refrigerant supply.

The automatic 3 valve charging tool, hose, and control cable assembly permits tool connection evacuation, automatic process coupler valve actuation, unit vacuum checking as well as refrigerant and oil charging through a single connection to the product.

The tool oil and refrigerant valves are of the relief type they open and close in accordance with fluid pressure as provided by the charger. The vacuum valve and process coupler valve actuator are operated by spring backed air pistons. The tool is normally adapted for use with the PCU series 250 process coupler. However other process couplers are available. This tool is electrically heated and thermostatically controlled at a temperature of 112°F (33°C) to prevent condensation of moisture on the coupler and to force refrigerant liquid from the connector into the unit at the end of the cycle. The charging machine cycle "Start" switch is usually mounted on the tool assembly and tool is normally supported by a tool balancer.

To operate the tool, the operator squeezes the handles, positions the tool on the process fitting and releases the handles, and then depresses the cycle "Start pushbutton on the tool. Afterwards the evacuation cycle, vacuum check and refrigerant charging takes place automatically.

Contact our Order Department (1-937-299-5594) with your application and equipment specifications.



Series 300 Evacuation & Refrigerant Charging Tool



Production Control Units, Inc.



Series 106 Radiator Fill Tool

FEATURES

- Simple attachment
- Air operated valve
- Dry evacuation circuit
- Drip free operation
- High vacuum flow rate
- High coolant flow rate
- Automated disconnect
- Fail safe operation
- Rugged
 & durable
 construction
- Easily maintained
- Light Weight



The PCU Compufill Series 106 Radiator Fill Tool connects to engine cooling systems for evacuation and filling. This tool adapts the filling equipment to the cooling system.

The PCU Compufill Series 106 tool can be operated in conjunction with all PCU and other compatible radiator fill machines. This series of tools includes models which can be attached to most common radiator fill necks and surge tank inlets.

Typical tool operation is semi-automatic in that the operator has only to locate the tool onto the fill neck. Upon initiation of the fill cycle, the tool, under control of the fill machine will automatically seat and seal in order that the evacuation, leak check, filling, and fill quality operation can proceed. Upon completion of these operations, the tool unseats and can then be retracted. All models are designed to provide minimum drip operation.

The PCU Compufill Series 106 tool provides flexibility from manual operations to those which are fully automated when attached to an tool presentation arm.

Series 106 tools can be easily modified for power steering, fuel, and transmission applications. Contact our Order Department at (1-937-299-5594) for your application requirements.

Series 106 Radiator Fill Tool



- Tools can be used with PCU tool presentation arms for manual connect pick and place semi-auto attachment to vehicle reservoirs.
- Fits large and small radiator necks and all size surge tanks.
- Large internal porting for high flow rate.
- Tool designs for volume or pressure fill.
- Tools are built with spring returns on the valve ports for fail-safe operation during power loss.
- Tool design includes the ability to fill the overflow bottle during the normal cycle.

- All phases of evacuation and fill cycle internal to tool are automatically controlled by the evacuate and fill machine.
- Tools are compatible for operation with programmable logic, relay, or computer based control systems.
- Interfaces to the Compufill Series 106 tool include clamp, seal and valve control air, coolant mixture and vacuum.
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.

TECHNICAL SPECIFICATIONS:

Weight	Maximum Fluid Pressure	
Fluid Engine Coolant	Radiator/Surge Tank Common sizes for Rad & Surge Tanks	
Fluid/Vacuum Port Fitting 1/2", 3/4", or 1" Barbed Hose	Tool Flow Rates:	
Air Supply Pressure 60 psig (4.2 kg/cm ²) Min.	(Based off Standard Design)	
	Hose I/sec GPM	
Air Port Fitting 1/4" Dia. one Touch Connectors	3/4" 1.58 25.1	
Flow Capacity	1" 1.74 27.6	
Fluid or Vacuum. 9.3 Cv Typical Overflow 0.7 Cv Typical	PATENTS: This tool is manufactured under U.S Patent No. 6,257,285.	

Production Control Units, Inc.



- •Simple attachment
- Air operated valves
- Dry evacuation circuit
- Drip free operation
- •High vacuum flow rate
- High fluid flow rate
- •Automated disconnect
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- •Light Weight
- •Optional handle for 2 hand operation



The PCU Compufill Series 114 Brake Fill Tool connects to brake master cylinder reservoirs for evacuation and filling. This tool adapts the filling equipment to the brake system.

This series of tools includes models which can be attached to most common brake fill necks and can be customized for other applications.

Typical tool operation is semiautomatic in that the operator has only to locate the tool onto the fill neck. Upon initiation of the fill cycle, the tool, under control of the fill machine will automatically clamp and seal in order that the evacuation, leak check, filling, and scavenges cycle can proceed. Upon completion of these operations, the tool unclamps and can then be removed. All models are designed to provide minimum drip operation.

Series 114

Brake Fill Tool

The PCU Compufill Series 114 tool provides flexibility from manual operations to those which are fully automated when attached to a tool presentation arm.

Series 114 Brake Fill Tool



- Designed for two different scavenge levels.
- Scavenge flow path is independent of fluid or vacuum circuit.
- Tool designed with secondary shutoff value for dripless operation.
- Tools can be used with PCU tool presentation arms for manual connect - pick and place - semi-auto attachment to vehicle reservoirs.
- Fits large and small brake necks.
- Internal porting for higher flow rate
- Tool designs for volume or pressure fill.

TECHNICAL SPECIFICATIONS:

• Tools are built with spring returns on the valve ports for fail-safe operation during power loss.

- All phases of evacuation and fill cycle internal to tool are automatically controlled by the evacuate and fill machine.
- Tools are compatible for operation with programmable logic, relay, or computer based control systems.
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.
- Tool designed with independent blowdown circuit for fluid circuit clean out.
- Optional straight or 90° manifolds.

Flow Capacity Fluid or Vacuum or Air Blowdown.0.82 Cv Typical			
Maximum Fluid Pressure150 psi			
Flow Rates: DOT 3 Brake Fluid			
3/8"	" Hose		
Fill Pressure	L/sec	GPM	
70 PSI (4.8 BAR)	0.2	3	
90 PSI (6.2 BAR)	0.24	3.8	
1	aximum Fluid Pressure Flow Rates: DO 3/8" Fill Pressure 70 PSI (4.8 BAR) 90 PSI (6.2 BAR)	aximum Fluid Pressure Flow Rates: DOT 3 Brake Fl 3/8" Hose Fill Pressure L/sec 70 PSI (4.8 BAR) 0.2 90 PSI (6.2 BAR) 0.24	aximum Fluid Pressure

Production Control Units, Inc.



- •Simple manual attachment
- Air operated valves
- Dry evacuation circuit
- Drip free operation
- •High vacuum flow rate
- High fluid flow rate
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- •Light Weight

Series 125 Manual Brake Fill Tool



The PCU Compufill Series 125 Brake Fill Tool connects to brake master cylinder reservoirs for evacuation and filling. This tool adapts the filling equipment to the brake system.

This series of tools includes models which can be attached to most common brake fill necks and can be customized for other applications. Typical tool operation is semiautomatic in that the operator inserts tool into reservoir and manually rotates sleeve to clamp and seal. Once the cycle start button is pressed, the system will control the air piloted valves for evacuation, leak check, filling and scavenge cycle. Upon completion of these operations, the operator will manually rotate sleeve to unclamp. Tool is designed for minimum drip operation.

Series 125 Manual Brake Fill Tool



- Scavenge flow path is independent of fluid or vacuum circuit.
- Tool designed with secondary shutoff value for dripless operation.
- Refer to series 114 for auto clamp brake tool PB038.
- Fits large and small brake necks.
- Internal porting for higher flow rate.
- Tool designs for volume or pressure fill.
- Tools are built with spring returns on the valve ports for fail-safe operation during power loss.

- All phases of evacuation and fill cycle internal to tool are automatically controlled by the evacuate and fill machine.
- Tools are compatible for operation with programmable logic, relay, or computer based control systems.
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.
- Tool designed with independent blowdown circuit for fluid circuit clean out.
- Optional straight or 90° manifolds.

TECHNICAL SPECIFICATIONS:

Weight 4.25 lbs (2 kg)	Flow Capacity Fluid or Vacuum or Air Blowdown . 0.82 Cv Typical				
FluidBrake Fluid Fluid & Scavenge Port Fitting	Maxir	Maximum Fluid Pressure150 psi			
Vacuum Port Fitting1/2" JIC	Flow Rates: DOT 3 Brake Fluid				
Blowdown Port Fitting 1/4" DIA one touch	ort Fitting 1/4" DIA one touch 3/		" Hose		
connector		Fill Pressure	L/sec	GPM	
Air Supply Pressure70 psig (4.9 kg/cm²) Min.		70 PSI (4.8 BAR)	0.2	3	-
Air Port Fitting 1/4" Dia. one Touch Connectors		90 PSI (6.2 BAR)	0.24	3.8	

Production Control Units, Inc.



- •Simple attachment
- Air operated valve
- Drip free operation
- High fluid flow rate
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- Light Weight



The PCU Compufill Series 115 Transmission Fill Tool connects to engine systems for filling. This tool adapts the filling equipment to the transmission system.

The PCU Compufill Series 115 tool can be operated in conjunction with all PCU and other compatible transmission fill machines. This series of tools includes models which can be attached to most transmission fill tubes or transmission threaded ports.

Typical tool operation is for the operator to locate the tool onto the transmission fill port and start cycle.

After filling, the fill machine will shut off fluid and open the valve for dripless operation. The operator can then remove the fill tool from the transmission system.

The PCU Compufill Series 115 tool provides flexibility from manual operations to those which are fully automated when attached to an tool presentation arm.

Series 115 tools can be easily modified to meet your application. Please contactour Order Department at (1-937-299-5594) for your application requirements.

Series 115 Transmission Fill Tool

- Tools are used for manual connect pick and place semi-auto attachment to vehicle transmissions.
- Fits large and small transmission fill ports.
- Tool designs for volume fill.
- Tools are built with spring returns on the valve ports for fail-safe operation during power loss.
- Evacuation and fill cycle internal to tool are automatically controlled by the evacuate and fill machine.

- Tools are compatible for operation with programmable logic, relay, or computer based control systems.
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.

_	TECHNICAL SPECIFICATIONS:		
	Weight 2 lbs (0.91 kg)	Flow Capacity	
	FluidFluid	Fluid 0.9 Cv Typical Vacuum 0.73 Cv Typical	
	Fluid/Dripless Port Fitting	Typical Fluid Pressure 50 to 150 psi	
	Air Supply Pressure 60 psig (4.2 kg/cm ²) Min.		
	Air Port Fitting 1/4" Dia. one Touch Connector		

Production Control Units, Inc.

- •Simple attachment
- Air operated valve
- Drip free operation
- •High vacuum flow rate
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- Light Weight

The PCU Compufill Series 117 Windshild Washer Fill Tool connects to the engine windshield washer bottle for filling.

The PCU Compufill Series 117 tool can be operated in conjunction with all PCU and other compatible windshield washer fill machines. This series of tools includes models which can be attached to most common fill necks.

Typical tool operation is that the operator has only to locate the tool onto the fill neck. Upon initiation of the fill cycle, the tool, under control of the fill machine will automatically open tool valve and fill reservior with a predetermined volume of fluid. Upon comletion, the operator removes the tool and places it back into the tool cup holder. All models are designed to provide minimum drip operation.

Series 117

Series 117 tools can be easily modified to fit you applications. Contact our Order Department at (1-937-299-5594) for your application requirements.

Please contact PCU Engineering for further information.

- manual connect pick and place semi-auto attachment to vehicle reservoirs.
- Fits large and small windshield washer necks.
- Large internal porting for high flow rate.
- Tool designs for volume fill.
- Tools are built with spring returns on the valve ports for fail-safe operation during power loss.
- All phases of fill cycle internal to tool are automatically controlled by the fill machine.

- Tools can be used with PCU tool presentation arms for Tools are compatible for operation with programmable logic, relay, or computer based control systems.
 - Interface to the Compufill Series 117 tool include valve control air, fluid mixture, fluid vacuum and port for water and winshield washer fluid.
 - · A robust design and durable construction work well in a constant use production environment.
 - Aluminum and plastic construction are used to minimize weight and eliminate corrosion.

TECHNICAL SPECIFICATIONS:

Weight (typical) 2.5 lbs (1.13 kg)	Air Port Fitting1/4" Dia. one Touch Connectors
Fluid Windshield Washer and Water	Flow Capacity
Fluid/Vacuum Port Fitting 3/8" or 1/2" SAE FL	Maximum Eluid Pressure 30 psi
Air Supply Pressure 60 psig (4.2 kg/cm ²) Min.	

Production Control Units, Inc.

Series 120 Oil Fill Tool

FEATURES

- Simple attachment
- Drip free operation
- High oil flow rate
- Pick-N-Place
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- •Light Weight

The PCU Compufill Series 120 Fill Tool connects to front or rear differential for filling. This tool adapts the filling equipment to the differential system.

Typical tool operation is for only the operator to locate the tool into the fill port. Upon initiation of the fill cycle, the tool, under control of the fill machine will fill to a

specified volume. Upon completion, the tool will shut off fluid and start dripless cycle. All models are designed to provide minimum drip operation.

Series 120 tools can be easily modified to fit your fill port. Contact our Order Department at (1-937-299-5594) for your application requirements.

Series 120 Oil Fill Tool

- Fits large and small fill ports.
- Large internal porting for high flow rate.
- Tool designs for volume fill.
- Tools are built with spring returns on the valve ports for fail-safe operation during power loss.
- All phases of evacuation and fill cycle internal to tool are automatically controlled by the fill machine.

- Interfaces to the Computill Series 120 tool include fill port and vacuum (dripless port).
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.

TECHNICAL SPECIFICATIONS:		
Weight	Fluid/Vacuum Port Fitting 1/4" NPT (Female)	
Fluid Oil	Min. Fluid Pressure	

Series 106 Radiator Leak Test Tool

FEATURES

- Simple attachment
- •Air operated valve
- High flow rate
- Automated disconnect
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- Light weight

Internal BalLoc Style

External Thread Lock Style

The PCU Compufill Series 106 Leak Test Tool connects to engine cooling systems for pressure decay test. This tool adapts the test equipment to the cooling system.

This series of tools includes models which can be attached to most common radiator fill necks and surge tank inlets.

Typical tool operation is semi-automatic in that the operator has only to locate the tool onto the fill neck. Upon initiation of the fill cycle, the tool, under control of the fill machine will automatically seat and seal in order that the pressure test operation can proceed. Upon completion of these operations, the tool unseats and can then be retracted.

The PCU Compufill Series 106 tool provides flexibility from manual operations to those which are fully automated when attached to an tool presentation arm.

Series 106 tools can be easily modified for power steering, fuel or other fluid applications. Contact our Order Department at (1-937-299-5594) for your application requirements.

External Thread Lock Shown

- Tools can be used with PCU tool presentation arms for manual connect pick and place semi-auto attachment to vehicle reservoirs.
- Fits large and small radiator necks and all size surge tanks.
- Large internal porting for high flow rate.

CUNICAL ODECIEICATIONS.

 All phases of evacuation and fill cycle internal to tool are automatically controlled by the evacuate and fill machine.

- Tools are compatible for operation with programmable logic, relay, or computer based control systems.
- Interfaces to the Compufill Series 106 tool include clamp, seal and valve control air.
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.

TECHNICAL SPECIFICATIONS.		
Weight	Air Port Fitting 1/4" Dia. one Touch Connectors	
FluidAir	Flow Capacity Fluid	
Pressure Port Fitting	······································	
Barbed Hose (Other part eizes are sysilable)	Maximum Fluid Pressure	
(Other port sizes are available)	Dedictor (Ourse Tarly Oceaning circo for	
Min. Air Supply Pressure .70 psig (4.9 kg/cm ²) Min.	Radiator/Surge Tank Common sizes for Rad & Surge Tanks	

Production Control Units, Inc.

- Simple attachment
- Air operated valve
- •Clamp and seal detection
- Drip free operation
- High fluid flow rate
- •Automated disconnect
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- Light Weight

The PCU Computill Series 116 Fuel Fill Tool connects to engine fuel systems for leak test and/or filling. This tool adapts the filling equipment to the fuel system.

The PCU Compufill Series 116 tool can be operated in conjunction with all PCU and other compatible fuel fill machines. This series of tools includes models which can be attached to most common fuel fill necks.

Typical tool operation is semi-automatic in that the operator has only to locate the tool onto the fill neck. Upon initiation of the fill cycle, the tool, under control of the fill machine will automatically seat and seal check for proper clamping before leak check, and filling operation can proceed. Upon completion of these operations, the tool unseats and can then be retracted. All models are designed to provide minimum drip operation.

Series 116

Fuel Test Tool

The PCU Compufill Series 116 tool provides flexibility from manual operations to those which are fully automated when attached to an tool presentation arm.

Series 116 tools can be easily modified to meet your applications. Contact our Order Department at (1-937-299-5594) for your application requirements.

Series 116 Fuel Test Tool

- Tools can be used with PCU tool presentation arms for manual connect pick and place semi-auto attachment to vehicle reservoirs.
- Fits large and small fuel necks.
- Large internal porting for high flow rate.
- Tool designs for volume fill.
- Tools are built with spring returns on the valve ports for fail-safe operation during power loss.
- Tool design includes the ability to detect if properly clamped on fill neck.

- All phases of fill cycle internal to tool are automatically controlled by the fill machine.
- Tools are compatible for intrinsically safe operation with programmable logic, relay, or computer based control systems.
- Interfaces to the Compufill Series 116 tool include clamp, seal and valve control air, and fluid air.
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.

TECHNICAL SPECIFICATIONS:

Weight	Flow Capacity 2.93 Cv Typical
FluidPetrol	Maximum Fluid Pressure
Fluid Port Fitting (female) 3/4" NPT	
(Other sizes are available)	PATENTS:
Air Supply Pressure110 psig (7.7 kg/cm ²) Min.	This tool is manufactured under U.S. Patent No. 6,799,614 B1.
Air Port Fitting 1/4" Dia. one Touch Connectors	

Production Control Units, Inc.

Series 99 and 106 Manual Adapters

FEATURES

- Simple attachment (manual or auto clamp)
- Secondary reservoir fill
- •Repair Bay Fill
- Dry evacuation circuit
- Drip free operation
- •High vacuum flow rate
- High fluid flow rate
- •Manual disconnect
- Fail safe operation
- Rugged & durable construction
- Easily maintained
- Light Weight

The PCU Compufill Series 99 and 106 manual adapters is the interface between a reservoir and the filling tool adapter. When multiple fill necks exist on the same production line, custom adapters are required to use one common tool.

Series 99 adapters adapt to brake or power steering fill necks and series 106 adapters adapt to radiator/coolant fill necks.

Typical tool operation requires an operator to insert adapter in fill neck, rotate sleeve

(Or drop sleeve to lock)

to lock and seal. Operator will locate fill tool on adapter and initiate start cycle. Upon completion, operator removes tool and adaptor.

Series 99 and 106 manual adapters can be easily modified for your application. Also, semi-automatic adaptors are available which clamp onto reservoir by air activated piston. Contact PCU engineering for your application requirements.

Series 99 and 106 Manual Adapters

Series 99

Series 106

- * Typical dimensions are shown, your dimensions will very per your application.
- Adaptors are used for Pick-and-Place semi-auto attachment to vehicle reservoirs.
- Fits large and small fill necks and all size surge tanks.
- Large internal porting for high flow rate.
- Adaptor designs for volume or pressure fill.
- Adaptors can include the ability to fill the overflow bottle during the normal cycle.
- Interfaces to the Compufill Series 106 tool include clamp, seal and valve control air, coolant mixture and vacuum.
- A robust design and durable construction work well in a constant use production environment.
- Aluminum and stainless steel construction are used to minimize weight and eliminate corrosion.

TECHNICAL SPECIFICATIONS:

Production Control Units, Inc.

WE SPECIALIZE IN CUSTOM COUPLERS & TOOLING TO SUIT YOUR APPLICATION.

Series 25	Series 86	Series 87	Series 91
		A REAL PROPERTY OF	At a second
Series 93	Series 98	Series 100 & 101	Series 109
		COLUMN T	
Series 250	Series 410	Series 500	Series 250 Evac & Charge
	A REAL PROPERTY OF		
Series 13000	Series 104	Series 106	Series 106 Adapter
Call our Coupler & Specialty Tooling Team for more information. Phone: (937) 299-5594 FAX: (937) 299-3843 Web Site: www.PCUInc.com Fmail: couplers@PCUInc.com			