PLUMBING OPTIONS ON A CATERPILLAR 3406E



Use this as a general plumbing guide. The photo shows a year 2000 3406E before the Pony Pack installation. Different truck manufacturers utilize coolant access ports differently. Understand that a good strategy may be to relocate some of the existing plumbing to better accomodate the Pony Pack plumbing.

The four coolant plumbing tasks are explained here.

- Install the supply hose (coolant flowing from the truck engine to the Pony Pack).
- Install the RETURN hose (coolant flowing from the Pony Pack to the truck engine).
- Install the coolant fluid thermistor (New, 5/00) or 175° temperature sensor in the truck engine block.
- Install the 12 volt coolant pump in the cab heater core supply line. See instructions on reverse.

Associate the plumbing ports discussed below with the numbers in the photos. See examples on reverse.

- 1. Pressure port in the side of the block, 3/4 FNPT, usually available. The port is nearly always used for the Pony Pack supply hose.
- 2. 1/2 FNPT port. Nearly always available and is the best place to install the block temperature sensor.
- 3-6. Oil cooler ports. 1/2 or 3/4 FNPT. Usually, two of these ports are used to supply the heater cores in the cab and may be to relocate port 6 plumbing to ports 3, 4, or 5, thus making it available for the Pony Pack RETURN hose.
- 7. 1/2 FNPT port on the oil cooler. May be used for the Pony Pack supply hose (coolant flowing from the truck to the Pony Pack).
- 8. Truck water pump. These two ports on the water pump usually have the return hoses from the heater cores installed (as shown in the photo). They are not used for Pony Pack plumbing.
- 9. 1/2 FNPT port, difficult access. May be used for the block temperature sensor if no other ports are available.
- 10. There is a 1/2 FNPT port at this location. On late model engines, this port is unusable because there is no way to spin for the Pony Pack RETURN hose along with a tee for the cab heater core supply.
- Note: Plumbing into ports 2, 3, 4, 5, and 10 is problematic on a VOLVO, KENWORTH T2000, or FREIGHTLINER for better access.

Note: Never move an existing temperature sensor without permission from the appropriate OEM engineering group.











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sleeper. Port 6 is ideal for the Pony Pack RETURN hose. Hot coolant flows in at port 6 and immediately supplies the heater cores through ports 4 and 5. Ports 4 and 5 may also be used for the Pony Pack RETURN hose. The best solution

anything but a straight fitting into the block. On older engines, access is better and this location is a good candidate

CENTURY CLASS because the engine is so far up under the firewall. Usually the air cleaner must be removed

Plumbing Options on a Caterpillar 3406E









Hose from Pony Pack heat exchanger (green hose at rear of the unit) to truck oil cooler, port 6. Installed a 3/4 MNPT x 1/2 FNPT adapter in the block followed by a 1/4 turn 90° ball valve followed by a 1/2 MNPT x 3/4 barb.

Hose from Pony Pack radiator to truck block, port 1, 1/2 MNPT x 1/2 FNPT adapter in the block followed by a 1/2 MNPT x 1/2 FNPT elbow (1/2 street elbow) followed by a 1/2 MNPT 1/4 Turn 90° ball valve followed by a 1/2 MNPT x 3/4 barb.

Temperature sensor in port 2. 1/2 MNPT x 3/8 FNPT adapter in the block followed by the temperature sensor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.

Coolant fluid thermistor (incorporated 5/ 2000). Use a 1/2 MNPT x 3/8 FNPT adapter in the block followed by the thermistor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.

CAB HEAT PUMP

Install the 12 volt coolant pump in the heater core supply hose. It is an inline pump. The end barb is the inlet. The side barb is the outlet. Find the best location to cut the hose and install the pump. Consider orientation, hose bend radius, and surrounding hoses or brackets to secure the pump with tie straps. Pad the pump and hoses as needed.

Note: Pony Pack does not recommend installing the cab heat pump in the sleeper heater core supply hose. Our experience shows that sleeper installations become uncomfortably hot. Truck climate controls usually provide better control in the cab than the sleeper.

Freightliner Century Class Only



Rigid heater core supply lines, indicative of Freightliner Century Class trucks. Install the cab heat pump after the lines convert to rubber hose near the frame.



To minimize heat loss, move the cab heater core return hose (not sleeper heater core) from the radiator outlet to a suction port on the water pump. Use a tee at the water pump if necessary. Install a plug in the radiator outlet pipe.

PLUMBING OPTIONS ON A CUMMINS ISX



Use this as a general plumbing guide. The overall photo shows a year 1999 Cummins Signature 600 before the Pony Pack installation. Different truck manufacturers utilize coolant access ports differently. Understand that a good strategy may be to relocate some of the existing plumbing to better accomodate the Pony Pack plumbing.

The four coolant plumbing tasks are explained here.

- Install the SUPPLY hose (coolant flowing from the truck engine to the Pony Pack).
- Install the RETURN hose (coolant flowing from the Pony Pack to the truck engine).
- Install the coolant fluid thermistor (New, 5/00) or 175° temperature sensor in the truck engine block.
- Install the 12 volt coolant pump in the cab heater core supply line. See instructions on reverse.

Note: The block and oil cooler plugs are 27mm x 2mm (thread pitch) straight thread plugs. Use a 12mm hex wrench to remove them. Pony Pack recommends installing 27mm x 2mm metric male to ³/₄ FNPT bushings wherever a plug is removed. These bushings are not common so it is a good idea to purchase several before beginning work on an ISX engine. They are available from Pony Pack.

Associate the plumbing ports discussed below with the numbers in the photos.

- 1-2. Pressure ports in the engine. Sometimes either port has a factory-installed sensor. Either port is suitable for the Pony Pack SUPPLY hose and/or the temperature sensor.
- 3. This port is down low and on the end of the oil cooler. On some trucks it is inside the frame and hard to reach. If it is unused and accessible, it may be used for the SUPPLY hose.
- 4-6. Usually, one or two of these ports are utilized for heater core supply hoses. The unused port is the best place to plumb the Pony Pack RETURN hose. If all ports are used or the plug cannot be removed, it may be necessary to use a brass street tee or similar arrangement to plumb two hoses into a single port. Any of these ports are also suitable for the temperature sensor if locations 1 and 2 are not available.
- Note: Plumbing into ports 4, 5 and 6, may be problematic on a VOLVO, KENWORTH T2000, or FREIGHTLINER CENTURY CLASS because the engine is so far up under the firewall. Usually the air cleaner must be removed for better access. It still may be difficult to loosen the straight thread plugs in this location, especially on older engines.

Note: Never move an existing temperature sensor without permission from the appropriate OEM engineering group.









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FITTING: The ³/₄ FNPT x 27-2 Metric Male works at all plumbing locations.



Port 1, Temperature sensor. ³/₄ FNPT x 27-2 Metric Male in the block ³/₄ MNPT x ¹/₂ FNPT adapter $\frac{1}{2} x \frac{3}{8}$ adapter

Port 2, Pony Pack SUPPLY hose. ³/₄ FNPT x 27-2 Metric Male in the block ³/₄ MNPT x ¹/₂ FNPT adapter ¹/₂ MNPT quarter turn ball valve ¹/₂ MNPT x ¹/₂ FNPT 90° ¹/₂ MNPT x ³/₄ MNPT Barb



Port 3, Pony Pack SUPPLY hose. ³/₄ FNPT x 27-2 Metric Male in the block ¹¹/₂ MNPT quarter turn ball valve $\frac{1}{2} x \frac{1}{2} x \frac{1}{2}$ Street tee $\frac{1}{2}$ MNPT x $\frac{3}{4}$ barb



Port 4, Pony Pack RETURN hose and previously plumbed heater core supply hose(s). ³/₄ FNPT x 27-2 Metric Male in the block ³/₄ MNPT x ¹/₂ FNPT adapter $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ street tee ¹¹/₂ MNPT quarter turn ball valve ¹/₂ MNPT x ³/₄ barb (not shown) $\frac{1}{2}$ MNPT x $\frac{1}{2}$ FNPT 45° elbow $\frac{1}{2}$ MNPT x $\frac{3}{4}$ barb

Port 5, cab heat exchanger supply hose ³/₄ FNPT x 27-2 Metric Male in the block $\frac{1}{2}$ MNPT x $\frac{1}{2}$ FNPT 45° elbow ¹/₂ MNPT x ³/₄ barb



Port 4, 5 and 6, Pony Pack RETURN hose and previously plumbed accessories

Notice the Cab Heat Pump in the cab heater core supply hose.

Coolant fluid thermistor (incorporated 5/ 2000). Use a 1/2 MNPT x 3/8 FNPT adapter in the block followed by the thermistor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.

Freightliner Century Class Only



Rigid heater core supply lines, indicative of Freightliner Century Class trucks. Install the cab heat pump after the lines convert to rubber hose near the frame.



To minimize heat loss, move the cab heater core return hose (not sleeper heater core) from the radiator outlet to a suction port on the water pump. Use a tee at the water pump if necessary. Install a plug in the radiator outlet pipe.

Install the 12 volt coolant pump in the heater core supply hose. It is an inline pump. The end barb is the inlet. The side barb is the outlet. Find the best location to cut the hose and install the pump. Consider orientation, hose bend radius, and surrounding hoses or brackets to secure the pump with tie straps. Pad the pump and hoses as needed.

Note: Pony Pack does not recommend installing the cab heat pump in the sleeper heater core supply hose. Our experience shows that sleeper installations become uncomfortably hot. Truck climate controls usually provide better control in the cab than the sleeper. Furthermore, on Freightliners an air over electric valve controls sleeper coolant flow and will not work below a certain air pressure.



CAB HEAT PUMP

PLUMBING OPTIONS ON A CUMMINS N14



Tes this as a general plumbing guide. The photos show a 1997 Cummins N14 engine before the Pony Pack installation. Relative to other engine types, plumbing options on an N14 are relatively limited. Different truck manufacturers utilize coolant access ports differently. Understand that a good strategy may be to relocate some of the existing plumbing to better accomodate the Pony Pack plumbing.

The four coolant plumbing tasks are explained here.

- Install the SUPPLY hose (coolant flowing from the truck engine to the Pony Pack).
- Install the RETURN hose (coolant flowing from the Pony Pack to the truck engine).
- Install the coolant fluid thermistor (New, 5/00) or 175° temperature sensor in the truck engine block.
- Install the 12 volt coolant pump in the cab heater core supply line. See instructions on reverse.

Associate the plumbing ports discussed below with the numbers in the photos. See examples on reverse.

- 1. Pressure port (1/2 FNPT) located in the lower rear of the block, usually behind the exhaust, and usually available. protection for the coolant hose. Install high temperature hose loom around the hose or a heat shield around the exhaust.
- 2. Pressure port (1/2 FNPT). Trace the hose to verify that it supplies the existing cab heater core. Install the 12 volt coolant pump in this hose.
- 3. Pressure port (1/2 FNPT). The the cab heater core supply is not at port 2, it may be plumbed here.
- 4. Pressure port (1/2 FNPT) located in the upper rear of the block, usually available. This port is nearly always used for the Pony Pack RETURN hose.
- 5, 6, 7. At least one of these ports is always available. This is an ideal location for the 175° temperature sensor. These locations are not suitable for Pony Pack RETURN or SUPPLY hoses.
- Note: Plumbing into ports 2, 3, and 4 may be problematic on a VOLVO, KENWORTH T2000, or FREIGHTLINER for better access.

Note: Never move an existing temperature sensor without permission from the appropriate OEM engineering group.







Pony Pack, Inc.

This port is nearly always used for the Pony Pack SUPPLY hose. This location in relation to the exhaust requires added

CENTURY CLASS, because the engine is so far up under the firewall. Usually the air cleaner must be removed

Plumbing Options on a Cummins N14



Hose from Pony Pack radiator to truck block, port 1

1/4 turn 90° ball valve in the port 1/2 MNPT x 3/4 barb.



Hose connector for Pony Pack radiator to truck block, port 1.

1/4 turn 90° ball valve in the port 1/2 MNPT x 3/4 barb

The hard heater core supply lines are indicative of Freightliner Century Class trucks.



Hose from Pony Pack heat exchanger (green hose at rear of the unit) to truck port 4.

1/4 turn 90° ball valve in the port 1/2 MNPT x 3/4 barb.



Hose connection for Pony Pack heat exchanger (green hose at rear of the unit) to truck port 2.

1/2 FNPT x 1/2 MNPT in the port 1/2 FNPT x 1/2 MNPT x 45° adapter 1/4 turn 90° ball valve 1/2 MNPT x 3/4 barb.

The hard heater core supply lines are indicative of Freightliner Century Class trucks.

CAB HEAT PUMP

Install the 12 volt coolant pump in the heater core supply hose. It is an inline pump. The end barb is the inlet. The side barb is the outlet. Find the best location to cut the hose and install the pump. Consider orientation, hose bend radius, and surrounding hoses or brackets to secure the pump with tie straps. Pad the pump and hoses as needed.

Note: Pony Pack does not recommend installing the cab heat pump in the sleeper heater core supply hose. Our experience shows that sleeper installations become uncomfortably hot. Truck climate controls usually provide better control in the cab than the sleeper.

Freightliner Century Class Only



Rigid heater core supply lines, indicative of Freightliner Century Class trucks. Install the cab heat pump after the lines convert to rubber hose near the frame.



radiator outlet pipe.



Coolant fluid thermistor (incorporated 5/ 2000). Use a 1/2 MNPT x 3/8 FNPT adapter in the block followed by the thermistor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.



Temperature sensor in ports 7.

- 1/2 MNPT x 3/8 FNPT in the port followed by the temperature sensor.
- NOTE: Do not use teflon tape or any kind of sealant on the sensor.

To minimize heat loss, move the cab heater core return hose (not sleeper heater core) from the radiator outlet to a suction port on the water pump. Use a tee at the water pump if necessary. Install a plug in the

Plumbing Options on a Detroit Diesel Series 60



Tse this as a general plumbing guide. The overall photo shows a year 2000 Series 60 before the Pony Pack installation. Different truck manufacturers utilize coolant access ports differently. Understand that a good strategy may be to relocate some of the existing plumbing to better accomodate the Pony Pack plumbing.

The four coolant plumbing tasks are explained here.

- Install the supply hose (coolant flowing from the truck engine to the Pony Pack).
- Install the RETURN hose (coolant flowing from the Pony Pack to the truck engine).
- Install the coolant fluid thermistor (New, 5/00) or 175° temperature sensor in the truck engine block.
- Install the 12 volt coolant pump in the cab heater core supply line. See instructions on reverse.

Associate the plumbing ports discussed below with the numbers in the photos. See examples on reverse.

- 1-2. Pressure ports in the oil cooler (3/4 FNPT) These ports are nearly always used for the cab and bunk heater core supply supply hose, b) plumb the SUPPLY hose in its place, c) tee the cab heater core supply hose in with the RETURN hose at ports 4 or 5.
- 3. 1/2 FNPT port. This port is at the bottom of the oil cooler. Frequently it is hard to access. If it is unused and accessible, it may be used for the supply hose. It may also be used for the temperature sensor as a last resort.
- 4-5. Engine ports. 3/4 FNPT port. Really, there are three ports in this location. The center port is alway used for an engine best place to plumb the RETURN hose. It is also the best place to plumb the cab heater core supply hose (that was removed from ports 1 or 2 on the oil cooler.) Use a brass street tee or similar arrangement to plumb both hoses into the same port.

If ports 4 and 5 are both available, plumb the RETURN hose into port 4 and the cab heater core supply hose into port 5.

- 6-7. 3/4 FNPT port. Either of these locations are ideal for the temperature sensor.
- Note: Plumbing into ports 1, 2, 3, 4, and 5, is problematic on a VOLVO, KENWORTH T2000, or FREIGHTLINER better access.

Note: Never move an existing temperature sensor without permission from the appropriate OEM engineering group.







hoses. Either port is ideal for the Pony Pack SUPPLY hose. One common strategy is to, a) identify the cab heater core

temperature sensor. Usually, one but not both remaining ports are utilized for a something else. The unused port is the

CENTURY CLASS because the engine is so far up under the firewall. Usually the air cleaner must be removed for

Plumbing Options on a Detroit Diesel Series 60









Hose from Pony Pack heat exchanger (green hose at rear of the unit) to truck block, port 4. Installed a 3/4 MNPT x 1/2FNPT adapter in the block followed by a street tee with a 1/4 turn 90° ball valve in the tee and a 1/2 MNPT x 1/2 FNPT elbow (1/2 street elbow) with a 1/2 MNPT x 3/4barb in the straight. Hose from truck block to Pony Pack radiator, port 1, 1/2 MNPT x 1/2 FNPT adapter in the block followed by a 1/2 MNPT 1/4 Turn 90° ball valve followed by a 1/2 MNPT x 3/4 barb.

Temperature sensor in the truck block. 1/2 MNPT x 3/8 FNPT adapter in the block followed by the temperature sensor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.

Coolant fluid thermistor (incorporated 5/ 2000). Use a 1/2 MNPT x 3/8 FNPT adapter in the block followed by the thermistor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.

CAB HEAT PUMP

Install the 12 volt coolant pump in the heater core supply hose. It is an inline pump. The end barb is the inlet. The side barb is the outlet. Find the best location to cut the hose and install the pump. Consider orientation, hose bend radius, and surrounding hoses or brackets to secure the pump with tie straps. Pad the pump and hoses as needed.

Note: Pony Pack does not recommend installing the cab heat pump in the sleeper heater core supply hose. Our experience shows that sleeper installations become uncomfortably hot. Truck climate controls usually provide better control in the cab than the sleeper.

Freightliner Century Class Only



Rigid heater core supply lines, indicative of Freightliner Century Class trucks. Install the cab heat pump after the lines convert to rubber hose near the frame.



To minimize heat loss, move the cab heater core return hose (not sleeper heater core) from the radiator outlet to a suction port on the water pump. Use a tee at the water pump if necessary. Install a plug in the radiator outlet pipe.

PLUMBING OPTIONS ON A CATERPILLAR C15



Use this as a general plumbing guide. The photo shows a year 2000 3406E before the Pony Pack installation. Different truck manufacturers utilize coolant access ports differently. Understand that a good strategy may be to relocate some of the existing plumbing to better accomodate the Pony Pack plumbing.

The four coolant plumbing tasks are explained here.

- Install the SUPPLY hose (coolant flowing from the truck engine to the Pony Pack).
- Install the RETURN hose (coolant flowing from the Pony Pack to the truck engine).
- Install the coolant fluid thermistor (New, 5/00) or 175° temperature sensor in the truck engine block.
- Install the 12 volt coolant pump in the cab heater core supply line. See instructions on reverse.

Associate the plumbing ports discussed below with the numbers in the photos. See examples on reverse.

- 1,2. Suction ports on the water pump. These ports may have heater core return hoses installed.
- 3-5. Discharge ports on the side of the engine. They are all difficult to access.
- 6-8. Oil cooler ports. Discharge according to Will at Wagner Equipment, ALBQ.
- 9. This port is located at the top back corner of the engine. It is unuseable because you can't spin a fitting into it.
- 10. Sideport on the oil cooler. suction or discharge.
- Note: Plumbing into ports #, #, #, and # is problematic on a VOLVO, KENWORTH T2000, or FREIGHTLINER removed for better access.

Note: Never move an existing temperature sensor without permission from the appropriate OEM engineering group.



Pony Pack, Inc.

CENTURY CLASS because the engine is so far up under the firewall. Usually the air cleaner must be



CAT C15 Plumbing RXX 092705

Plumbing Options on a Cummins N14



Use this as a general plumbing guide. The photos show a 1997 Cummins N14 engine before the Pony Pack installation. Relative to other engine types, plumbing options on an N14 are relatively limited. Different truck manufacturers utilize coolant access ports differently. Understand that a good strategy may be to relocate some of the existing plumbing to better accomodate the Pony Pack plumbing.

The four coolant plumbing tasks are explained here.

- Install the SUPPLY hose (coolant flowing from the truck engine to the Pony Pack).
- Install the RETURN hose (coolant flowing from the Pony Pack to the truck engine).
- Install the coolant fluid thermistor (New, 5/00) or 175° temperature sensor in the truck engine block.
- Install the 12 volt coolant pump in the cab heater core supply line. See instructions on reverse.

Associate the plumbing ports discussed below with the numbers in the photos. See examples on reverse.

- Pressure port (1/2 FNPT) located in the lower rear of the block, usually behind the exhaust, and usually available. This port is nearly always used for the Pony Pack SUPPLY hose. This location in relation to the exhaust requires added protection for the coolant hose. Install high temperature hose loom around the hose or a heat shield around the exhaust.
- 2. Pressure port (1/2 FNPT). Trace the hose to verify that it supplies the existing cab heater core. Install the 12 volt coolant pump in this hose.
- 3. Pressure port (1/2 FNPT). The the cab heater core supply is not at port 2, it may be plumbed here.
- 4. Pressure port (1/2 FNPT) located in the upper rear of the block, usually available. This port is nearly always used for the Pony Pack RETURN hose.
- 5, 6, 7. At least one of these ports is always available. This is an ideal location for the 175° temperature sensor. These locations are not suitable for Pony Pack RETURN or SUPPLY hoses.
- Note: Plumbing into ports 2, 3, and 4 may be problematic on a VOLVO, KENWORTH T2000, or FREIGHTLINER CENTURY CLASS, because the engine is so far up under the firewall. Usually the air cleaner must be removed for better access.

Note: Never move an existing temperature sensor without permission from the appropriate OEM engineering group.







Cummins N14 Plumbing R02 080100

Pony Pack, Inc.

Plumbing Options on a Cummins N14



Hose from Pony Pack radiator to truck Hose connector for Pony Pack radiator to truck block, port 1.

1/4 turn 90° ball valve in the port 1/2 MNPT x 3/4 barb.

1/4 turn 90° ball valve in the port 1/2 MNPT x 3/4 barb

The hard heater core supply lines are indicative of Freightliner Century Class trucks.

Hose from Pony Pack heat exchanger (green hose at rear of the unit) to truck port 4

1/4 turn 90° ball valve in the port 1/2 MNPT x 3/4 barb.



Hose connection for Pony Pack heat exchanger (green hose at rear of the unit) to truck port 2.

1/2 FNPT x 1/2 MNPT in the port 1/2 FNPT x 1/2 MNPT x 45° adapter 1/4 turn 90° ball valve 1/2 MNPT x 3/4 barb.

The hard heater core supply lines are indicative of Freightliner Century Class trucks.



Temperature sensor in ports 7.

1/2 MNPT x 3/8 FNPT in the port followed by the temperature sensor.

NOTE: Do not use teflon tape or any kind of sealant on the sensor.

CAB HEAT PUMP

block, port 1

Install the 12 volt coolant pump in the heater core supply hose. It is an inline pump. The end barb is the inlet. The side barb is the outlet. Find the best location to cut the hose and install the pump. Consider orientation, hose bend radius, and surrounding hoses or brackets to secure the pump with tie straps. Pad the pump and hoses as needed.

Note: Pony Pack does not recommend installing the cab heat pump in the sleeper heater core supply hose. Our experience shows that sleeper installations become uncomfortably hot. Truck climate controls usually provide better control in the cab than the sleeper.



Coolant fluid thermistor (incorporated 5/ 2000). Use a 1/2 MNPT x 3/8 FNPT adapter in the block followed by the thermistor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.



Rigid heater core supply lines, indicative of Freightliner Century Class trucks. Install the cab heat pump after the lines convert to rubber hose near the frame.



To minimize heat loss, move the cab heater core return hose (not sleeper heater core) from the radiator outlet to a suction port on the water pump. Use a tee at the water pump if necessary. Install a plug in the radiator outlet pipe.

Cummins N14 Plumbing R02 080100

PLUMBING OPTIONS ON A MACK E7



U se this as a general plumbing guide. The photo shows a year 2000 3406E before the Pony Pack installation. Different truck manufacturers utilize coolant access ports differently. Understand that a good strategy may be to relocate some of the existing plumbing to better accomodate the Pony Pack plumbing.

The four coolant plumbing tasks are explained here.

- Install the supply hose (coolant flowing from the truck engine to the Pony Pack).
- Install the RETURN hose (coolant flowing from the Pony Pack to the truck engine).
- Install the coolant fluid thermistor in the truck engine block.
- Install the 12 volt coolant pump in the cab heater core supply line. See instructions on reverse.

Associate the plumbing ports discussed below with the numbers in the photos. See examples on reverse.

- 1. Water log, 1/2 FNPT. Candidate for the Pony Pack SUPPLY OR RETURN (REX) hose.
- 2. Water log, 1/2 FNPT. Candidate for the Pony Pack SUPPLY OR RETURN (REX) hose.
- 3. Water log, 1/2 FNPT. Candidate for the Pony Pack SUPPLY OR RETURN (REX) hose.
- 4. Water log, 1/2 FNPT. Likely used for heater core supply hose. Note the upstream tee to supply both heater cores.
- 5. Water log, 1/2 FNPT. Candidate for the Pony Pack SUPPLY OR RETURN (REX) hose.
- 6. Water log, 1/2 FNPT. Candidate for the Pony Pack SUPPLY OR RETURN (REX) hose.

REX, where is a good spot for the temp sensor.

Note: Never move an existing temperature sensor without permission from the appropriate OEM engineering group.









Pony Pack, Inc.

Mack E7 Plumbing RX0 122001

Plumbing Options on a Caterpillar 3406E









Hose from Pony Pack heat exchanger (green hose at rear of the unit) to truck oil cooler, port 6. Installed a 3/4 MNPT x 1/2 FNPT adapter in the block followed by a 1/4 turn 90° ball valve followed by a 1/2 MNPT x 3/4 barb.

Hose from Pony Pack radiator to truck block, port 1, 1/2 MNPT x 1/2 FNPT adapter in the block followed by a 1/2 MNPT x 1/2 FNPT elbow (1/2 street elbow) followed by a 1/2 MNPT 1/4 Turn 90° ball valve followed by a 1/2 MNPT x 3/4 barb.

Temperature sensor in port 2. 1/2 MNPT x 3/8 FNPT adapter in the block followed by the temperature sensor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.

Coolant fluid thermistor (incorporated 5/ 2000). Use a 1/2 MNPT x 3/8 FNPT adapter in the block followed by the thermistor. NOTE: Do not use teflon tape or any kind of sealant on the sensor.

CAB HEAT PUMP

Install the 12 volt coolant pump in the heater core supply hose. It is an inline pump. The end barb is the inlet. The side barb is the outlet. Find the best location to cut the hose and install the pump. Consider orientation, hose bend radius, and surrounding hoses or brackets to secure the pump with tie straps. Pad the pump and hoses as needed.

Note: Pony Pack does not recommend installing the cab heat pump in the sleeper heater core supply hose. Our experience shows that sleeper installations become uncomfortably hot. Truck climate controls usually provide better control in the cab than the sleeper.

Mack E7 Plumbing RX0 122001