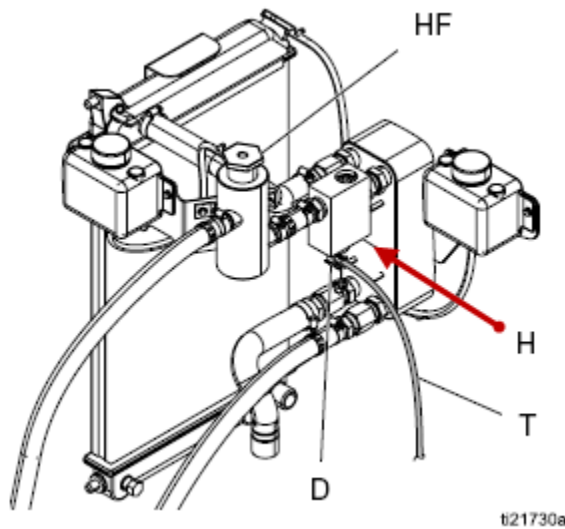


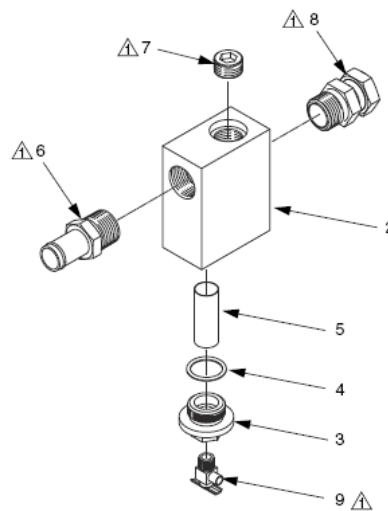
Read, understand and follow all instruction manuals and warning labels supplied with all equipment. Only trained and qualified personnel should perform repairs on the equipment. To access the latest manuals in your preferred language go to "www.Graco.com" and use the "Search" function.

Before starting engine

Pull heater exchange (Hx) coolant loop filter "H" and clean.



24T027 Coolant Filter Housing Kit



Remove sight glass filter "F" if 24T027 coolant filter housing if installed, pull and clean if not.

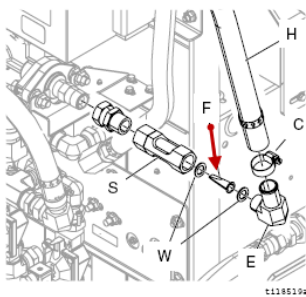
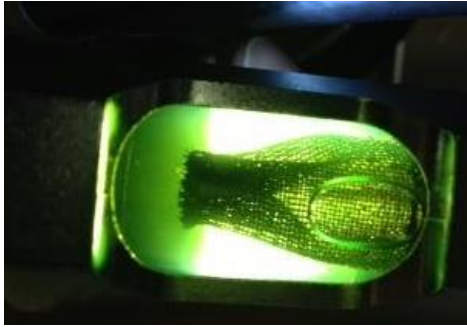
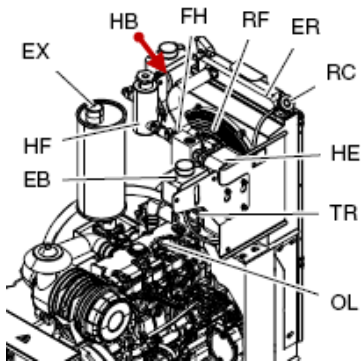


FIG. 1: Sight Glass Filter

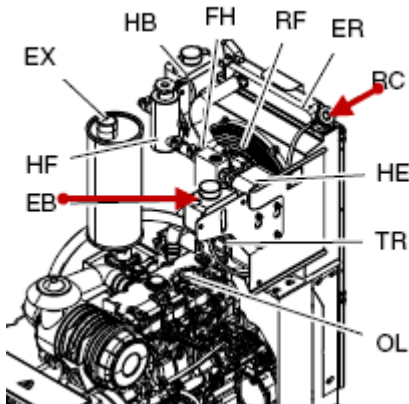
Use flash light to back light the coolant sight glass to verify clean



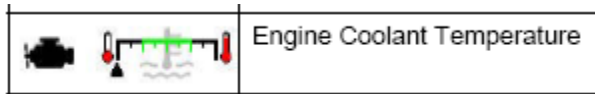
Top off Hx coolant expansion bottle "HB" 50 / 50 glycol mix



Verify engine coolant is into the radiator neck "RC" and in the engine coolant expansion bottle "EB" is filled to the cold level line.

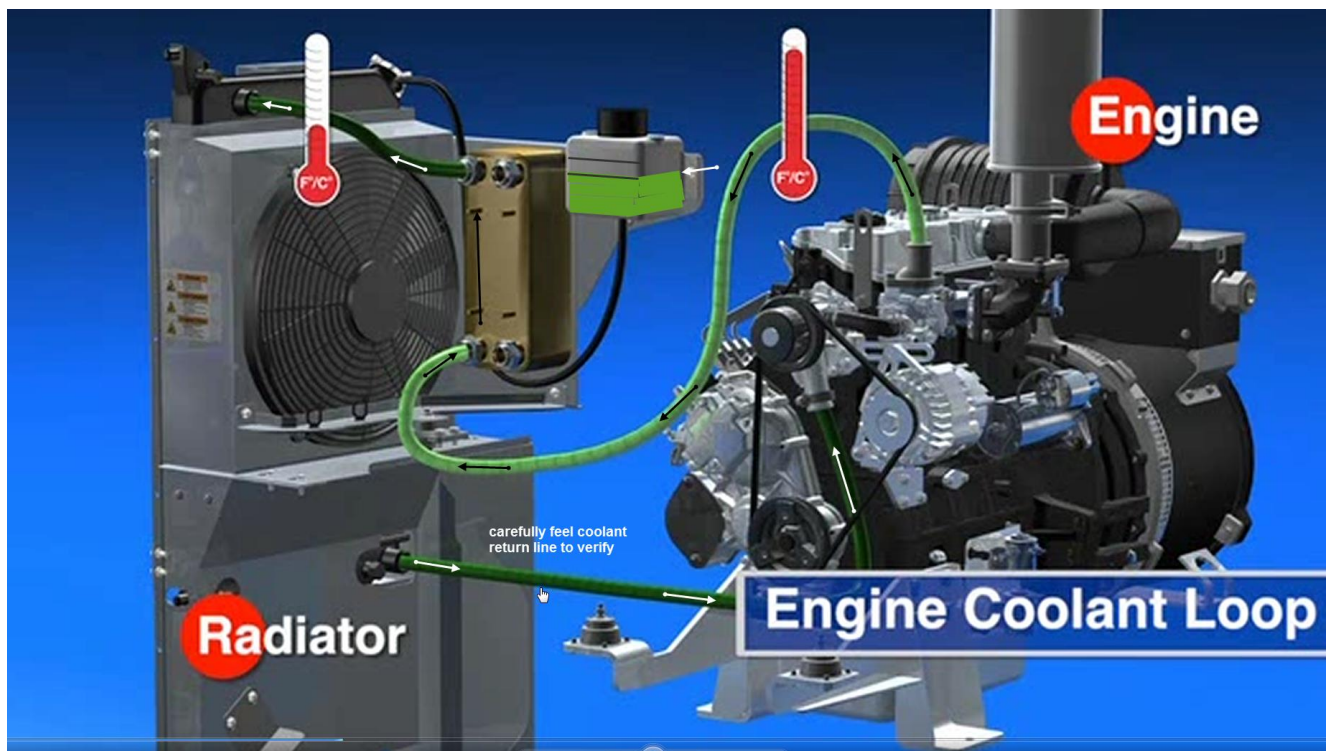


Start engine and allow engine coolant loop to reach operating temperature. Verify Hx loop flow through sight glass.

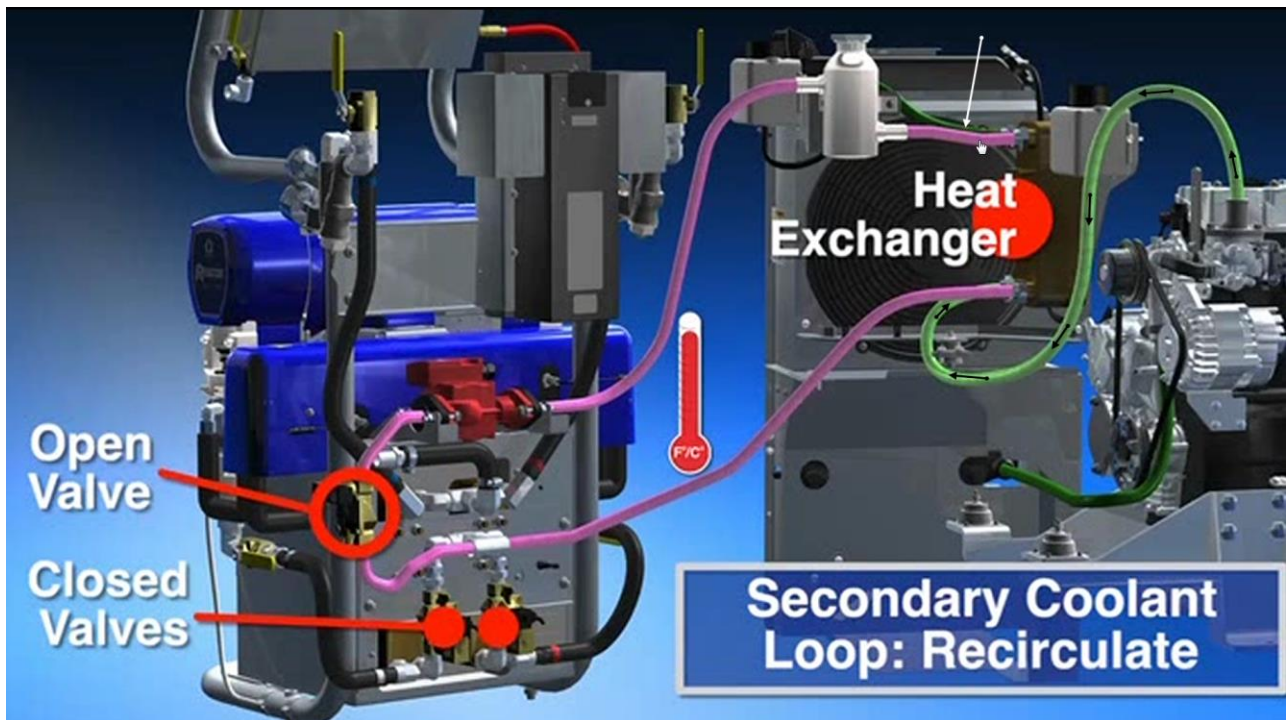


10/21/11 02:43		
Diagnostic		Recipes
E-301 Active		No Active Errors
Hx A Chem.	Hx B Chem.	CPM
82 °F	82 °F	0
Boost A Chem.	Boost B Chem.	Hose Chem.
82 °F	82 °F	82 °F
Boost A Current	Boost B Current	Hose Current
0 A	0 A	0 A
Boost A PCB	Boost B PCB	Hose PCB
82 °F	82 °F	82 °F
Pressure A	Pressure B	Hose Voltage
0 psi	0 ps	0 V
MCM Bus	Coolant Outlet	Total Cycles
0 V	200 °F	5

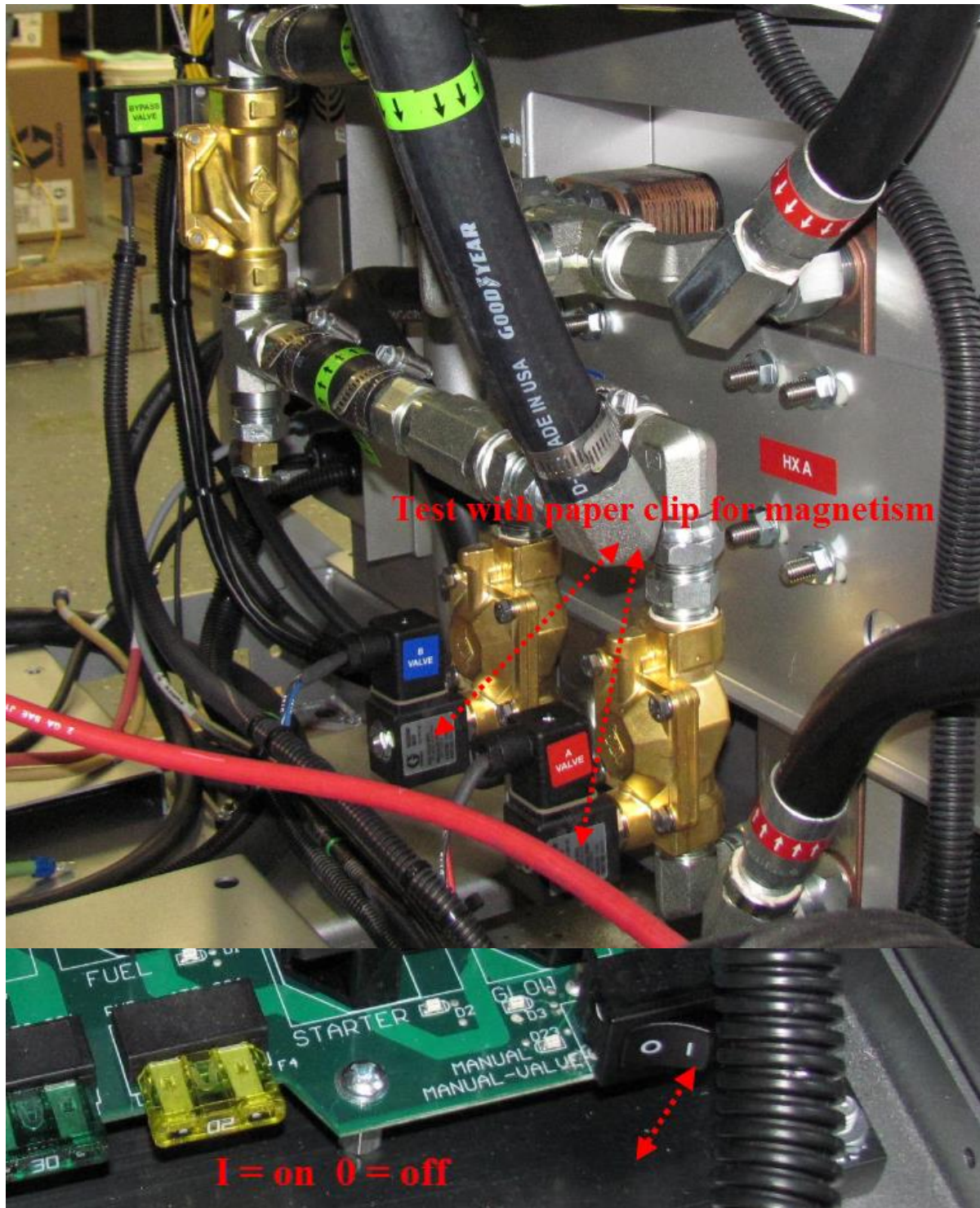
Verify engine return coolant line is at temperature



Before turning on any heat zones, verify Hx coolant loop is at temperature



Turn on manual bypass switch on load center and test coils with paper clips



Turn on A zone only and toggle to Diagnostic screen and monitor Hx A Chem, Boost A Chem, and Boost A Current

10/21/11 02:48	← Diagnostic	Recipes →
E-30i Active	No Active Errors	
<u>Hx A Chem</u> 82 °F	<u>Hx B Chem</u> 82 °F	<u>CPM</u> 0
<u>Boost A Chem</u> 82 °F	<u>Boost B Chem</u> 82 °F	<u>Hose Chem</u> 82 °F
<u>Boost A Current</u> 0 A	<u>Boost B Current</u> 0 A	<u>Hose Current</u> 0 A
<u>Boost A PCB</u> 82 °F	<u>Boost B PCB</u> 82 °F	<u>Hose PCB</u> 82 °F
<u>Pressure A</u> 0 psi	<u>Pressure B</u> 0 psi	<u>Hose Voltage</u> 0 V
<u>MCM Bus</u> 0 V	<u>Coolant Outlet</u> 200 °F	<u>Total Cycles</u> 5

Turn off A zone then turn on B zone and repeat.

10/21/11 02:48	← Diagnostic	Recipes →
E-30i Active	No Active Errors	
<u>Hx A Chem</u> 82 °F	<u>Hx B Chem</u> 82 °F	<u>CPM</u> 0
<u>Boost A Chem</u> 82 °F	<u>Boost B Chem</u> 82 °F	<u>Hose Chem</u> 82 °F
<u>Boost A Current</u> 0 A	<u>Boost B Current</u> 0 A	<u>Hose Current</u> 0 A
<u>Boost A PCB</u> 82 °F	<u>Boost B PCB</u> 82 °F	<u>Hose PCB</u> 82 °F
<u>Pressure A</u> 0 psi	<u>Pressure B</u> 0 psi	<u>Hose Voltage</u> 0 V
<u>MCM Bus</u> 0 V	<u>Coolant Outlet</u> 200 °F	<u>Total Cycles</u> 5

Shut off all heat zones then proceed to normal start up