

1.8 Hydraulic Cart Compressed Air Startup *Guidance*

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This procedure has been prepared to cover the initial application of compressed air to the hydraulic cart compressed air system input at PRV-1.

- 1) Recall that the default state of the hydraulic cart is “compressed.” That means that when the compressed air is applied to the compressed air side of the cart, the pressure will immediately be transmitted to the pneumatic cylinder C-1 and through to C-3.
- 2) Do Not Apply compressed air to a cart that is not fully charged with glycol. If you do, you may cause the pneumatic ram C-3 to slam forcibly to the bottom of its range. This can damage the cylinder.
- 3) First, ensure that the pneumatic ram C-3 is pushing against glycol. To do this, manually drive the hydraulic ram down until it is clearly pushing the pneumatic ram up. At this point you can apply pneumatic force without damaging the pneumatic cylinder.
- 4) After ensuring the manual input valve MV-1 is closed and that the pressure regulator PRV-1 is backed off to zero, apply compressed air to the supply input of the cart.
- 5) Slowly open MV-1
- 6) Using PRV-1, slowly adjust the air pressure to a value slightly greater than 25 psi.
- 7) Observe that the visual digital pressure indicator PT-201 changes from Red to Green at this point, indicating that the low air pressure interlock has been released.
- 8) Slowly adjust the operating pressure up to the nominal value near 50 psi.
- 9) Note that the final adjustment should establish the hydraulic fluid pressure at just over 200 psig.