45532686
Edition 2
August 2007

Doser - Heating

Maintenance Manual

Save These Instructions

T2X

Ingersoll Rand

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1 Heating

For all positions of the electric contacts, see appendix at the end of “Doser” Maintenance Manual form 45532660. Make sure that all heating pins have contact with the parts. If the heating pin does not properly fit, it will not transfer the heat properly. The pin will be destroyed in a short period of time.

1.1 The heating pins

1.1.1 Dismounting

All heating pins are mounted in reamed holes, machined as through bore and locked by a small stud screw (M4x5). When the doser leaves our workshop, a special paste is used (see the drawings). The paste increases thermal transmittance and makes it easier to remove the pin. If the removal fails, we can recommend one of the two following methods.

a) If the defect heating-pin is stuck in the hole, there might be a possibility to gently knock out the heating pin.

b) If option a) fails it is necessary to drill out the heating pin. This method should be used as the very last since it is very easy to damage hole. If the heating pin fits badly, it will not transfer the heat properly. The pin will be destroyed in a short period of time.

1.1.2 Mounting

The holes drilled during our manufacturing are reamed and checked according to tolerances and surface roughness.
Note: *When mounting it is very important to make certain that no air is left in grooves and tracks, and thereby leaving air pockets. Air acts as insulation and will reduce the effect of the heating pin.*

NOTICE	**This operation requires, the following tools and preparations:** • **Mounting paste** **Don’t use mounting paste as “filler” in damaged holes.** **Never pull the electrical connections. This may cause a short circuit.**

The mounting paste will prevent heat corrosion. It will also simplify mounting; prevent the pin from getting stuck in the hole and supply good heat transfer.
Note: *Mounting paste is electrically conductive and is not allowed to be in contact with the wires of the pin due to the risk of a short circuit.*

c) The connections are sensitive and are therefore covered by a protection “stocking”. If damage occurs, we recommend changing the complete unit and then sending the damaged one to us for a repair cost estimate.

1.2 The heating jacket

Drawing/Component list: T2X-05-509-IR/-520-IR

The heating jacket is fitted around the doser to keep a constant temperature during operation.
Note: *The element is encapsulated in a jacket of brass. It is covered with insulation, like the one used in the heating pins. When dismounting or mounting the utmost care must be taken not to "break" the hinges or cables of the heating jacket*.

1.2.1 Dismounting

a) Loosen all cables from the heating jacket (8).

b) Remove the heating jacket (8) by unscrewing the screw on the jacket (two screws on x250). *The doser part must be dismantled, se chapter 5.*

c) Carefully remove the heating jacket from the doser chamber.

1.2.2 Mounting

a) Carefully put the heating manschett (8) back on the doser chamber (1).

b) Tighten the screw on the heating manschett (8) (two screws on x250). The heating manschett must fit tightly on the doser chamber (1).

c) Attach all cables to and from the heating manschett (8).

1.3 Temperature sensors

1.3.1 Mounting

The temperature sensor (Pt100) is optimally placed in the units and thereby always gives the correct temperature control. The mounting holes have a recess and a set screw.

Tighten the stud screw carefully.

Always use any mounting paste for the heating pins. Mounting paste is not needed for the heating jacket.

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