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**HARDI Solenoid Control**  
**Instruction book**  
670770-GB-11/2002

HARDI INTERNATIONAL A/S reserve the right to make changes in design or to add new features without any obligation in relation to implements purchased before or after such changes.
EU Declaration of Conformity

Manufacturer,
HARDI INTERNATIONAL A/S
Helgeshøj Allé
DK 2630 Taastrup
DENMARK

Importer,

 declare that the following product;

 .................................................................
 .................................................................

Adhere extra shipping package labels to inside cover.


B. was manufactured in conformity with the standards current at that time that implements a harmonised standard in accordance with Article 5 (2) and other relevant standards.

Taastrup 06.11.2002

[Signature]

Product Development Manager
Lars Bentsen
HARDI INTERNATIONAL A/S
Operator safety

Watch for this symbol ⚠️. It means WARNING, CAUTION, NOTE. Your safety is involved so be alert!
Note the following recommended precautions and safe operating practices.

⚠️ Read and understand this instruction book before using the equipment. It is equally important that other operators of this equipment read and understand this book.

⚠️ Local law may demand that the operator be certified to use spray equipment. Adhere to the law.

⚠️ Pressure test with clean water.

⚠️ Wear protective clothing.

⚠️ Rinse and wash equipment after use and before servicing.

⚠️ Depressurize equipment after use and before servicing.

⚠️ Never service or repair the equipment whilst it is operating.

⚠️ Disconnect electrical power before servicing.

⚠️ Do not eat, drink or smoke whilst spraying or working with contaminated equipment.

⚠️ Wash and change clothes after spraying.

⚠️ Wash tools if they have become contaminated.

⚠️ In case of poisoning, seek doctor or ambulance. Remember to identify chemicals used.

⚠️ Keep children away from the equipment.

⚠️ If any portion of this instruction book remains unclear after reading it, contact your HARDI dealer for further explanation before using the equipment.
Description
HARDI SC Solenoid Control is a remote control unit for your sprayer. Simple to use and maintain, the HARDI SC unit is perfect as your first electric remote control.

Available in 3, 4 or 5 section control kits with choice of electric or manual pressure regulation.

The Hardi SC remote operated solenoid control system has been designed for in cab sectional control of spraying equipment. Ideal for sectional control on small and medium sized spraying equipment. The SC solenoids are easy to install and simple to maintain. The control unit can include foam marker operation—see page 9.

Operation

1 Pressure regulation
   (only for units where pressure regulation is fitted)

2 Main ON/OFF

3 Sections ON/OFF

4 Multi pin connection plug
Foam marker
The Hardi SC control box can incorporate the foam marker switching to facilitate a more user-friendly single in cab switch box.

1. Pressure regulation
   (only for units with electric pressure regulation)
2. Main ON/OFF
3. Boom ON/OFF
4. Foam marker
   Right side ON
   OFF
   Left side ON

To fit foam marker
Ground (neg.) must be supplied from main power supply to the foam marker.

Right and left (pos.) shall be connected to 5th section cable (See electric diagram).

For adjusting frequency of foam blobs - adjustment are to be made on the foam marker compressor unit.
SC operating unit control box

The control box is fitted at a convenient place in the tractor cabin. The control box has 4 screw holes in the back cover. Mount it on flat surface, - alternative use the HARDI universal bracket.

Power requirement is 12V DC. Note Polarity!

For EVC: Brown pos. (+), Blue neg. (-).
Liquid diagram

1. Suction filter
2. Pump
3. Pressure control (manual or electric)
4. Liquid return to tank
5. Pressure filter
6. Pressure gauge
7. Outlet for pressure agitation or spraygun
8. Solenoid section valves

Assembly instructions
11 bar max.

Drill hole if not predrilled in tank.

<table>
<thead>
<tr>
<th></th>
<th>Ømm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>33</td>
</tr>
<tr>
<td>F</td>
<td>93</td>
</tr>
<tr>
<td>B</td>
<td>48</td>
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</table>

Ø 48 mm
Fault finding

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuse blow</td>
<td>Polarity wrong</td>
<td>Change polarity</td>
</tr>
<tr>
<td></td>
<td>Short circuit on cables</td>
<td>Renew harness</td>
</tr>
<tr>
<td>Defective diode in control box</td>
<td>Renew control box (PCB)</td>
<td></td>
</tr>
<tr>
<td>Section valve power consumption</td>
<td>Renew valve</td>
<td></td>
</tr>
<tr>
<td>Section valve will not open</td>
<td>Fuse blown</td>
<td>Renew fuse</td>
</tr>
<tr>
<td></td>
<td>Section valve defective</td>
<td>Renew section valve</td>
</tr>
<tr>
<td>Valve will not close</td>
<td>Dirt in servo hole</td>
<td>Clean side hole in diaphragm</td>
</tr>
<tr>
<td>Leaking</td>
<td>Center bolt loose</td>
<td>Tighten centerbolt</td>
</tr>
<tr>
<td></td>
<td>Defective pressure</td>
<td>Renew pressure relief valve</td>
</tr>
<tr>
<td></td>
<td>relief valve</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Defective seals</td>
<td>Relief valve</td>
</tr>
<tr>
<td>Section valve, pressure valve,</td>
<td>Current to low</td>
<td>Check 12 volt power supply</td>
</tr>
<tr>
<td>HARDI-Matic works slow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric pressure valve,</td>
<td>Relais worn</td>
<td>Change relais</td>
</tr>
<tr>
<td>HARDI-Matic not works</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tecnical specification

Power supply: 12 V
Fuse: 6.3 A
Temperature range: 2°C - 60°C
Power consumption pr. valve: 800mA
Max. pressure: 11 bar
Maximum allowed flow for control unit: 20 l/min

<table>
<thead>
<tr>
<th>Pressure loss over the valve</th>
<th>l/min</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>bar</td>
<td>0.3</td>
<td>1</td>
<td></td>
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</tbody>
</table>
Electric diagram

280233 connection cable for armature SC3 & SC4
72119600 connection cable for armature SC5

SC3..5 Control box

4 diodes not mounted. For future use.

GND Spdt

+12V Spdt

Section 1 262113
Section 2 262113
Section 3 262113
Section 4 262113
Section 5 262113

2A/600V
2A/600V
2A/600V
2A/600V
2A/600V

Dry/Off 262113

Pressure 262113

Foam bkp disp 262113

From kill/right 262114