INSTRUCTIONS – PARTS LIST

INSTRUCTIONS!
This manual contains important warnings and information.
READ AND KEEP FOR REFERENCE.

Autoquip, Inc.

Ultrasonic Level Sensor with Control

Note: Electric agitator is safe for hazardous locations (Class I; Division 1; Groups C and D)

AUTOQUIP, INC.
N57 W13440 REICHERT AVENUE  MENOMONEE FALLS, WI 53051
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**Warning Symbol**

This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

**Caution Symbol**

This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

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**WARNING**

**EQUIPMENT MISUSE HAZARD**

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are not sure, call your Autoquip distributor.
- Do not alter or modify this equipment. Use only genuine Autoquip parts.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Use fluids and solvents that are compatible with the equipment wetted parts. Refer to the Technical Data section of all equipment manuals. Read the fluid and solvent manufacturer’s warnings.
- Always wear protective eyewear, gloves, clothing, and respirator as recommended by the fluid and solvent manufacturer.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.
WARNING

FIRE AND EXPLOSION HAZARD
Improper grounding, poor ventilation, open flames, or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.

- Ground the equipment and the object being sprayed. Refer to Grounding on page 5.
- If there is any static sparking or you feel an electric shock while using the equipment, stop spraying immediately. Do not use the equipment until you identify and correct the problem.
- Do not use 1,1,1-trichloroethane, methylene chloride, other Halogenated hydrocarbon solvents, or fluids containing such solvents in aluminum components. Such use could result in a serious chemical reaction, with the possibility of explosion.
- Do not use kerosene or other flammable solvents or combustible gases to flush the unit.
- Provide fresh ventilation to avoid the buildup of flammable fumes from solvents or the fluid being sprayed.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Before operating this equipment, electrically disconnect all equipment in the spray area.
- Before operating this equipment, extinguish all open flames or pilot lights in the spray area.
- Do not smoke in the spray area.
- Do not turn on or off any light switch in the spray area while spraying or while there any fumes in the air.
- Do not operate a gasoline engine in the spray area.

MOVING PARTS HAZARD
Moving parts, such as the rotating blades of the agitator, can pinch or amputate your fingers or other body parts and can cause splashing in the eyes or on the skin.

- Keep clear of all moving parts when starting or operating the agitator.
- Always shut off the agitator and disconnect the air or electric power line before adjusting the angle of the agitator, removing the agitator from the drum or tank, or checking or repairing any part of the agitator.

HAZARDOUS VAPORS
Hazardous fluids or toxic fumes from solvents or other chemicals can cause serious injury or death if splashed in the eyes or on the skin, swallowed, or inhaled. When flushing the air motor, keep your face away from the exhaust port. When handling hazardous materials, proper eye and skin protection should be worn.

United States Government safety standards have been adopted under the Occupational Safety and Health Act. You should consult these standards – particularly the General Standards, Part 1910, and the Construction Standards, Part 1926.
Installation:

GROUNDING:

Check your local code for detailed grounding instructions for your area and type of equipment. Be sure to ground the mix tank by connecting one end of a 12 awg (1.5 mm²) minimum ground wire to the pressure tank and the other end of the wire to a true earth ground.

SETTING UP THE LEVEL SENSOR:

PROGRAMMING:

EC4: (Set EC4 at your low level)
1. Hold [MENU] key until EC4 appears in display.
2. Release [MENU] key and wait until a value appears. This value is the current measured level value.
3. If this is acceptable, press [SET] to lock the value as the new EC4 set point. If not, press either the [▲] or [▼] keys once and the old setting for the EC4 will appear.
4. From here, use the [▲] or [▼] keys to raise or lower the value to the desired value.
5. Press the [SET] key to enter this value as the new EC4 set point.

EC20:
1. Hold [MENU] key until EC20 appears in display.
2. Release [MENU] key and wait until a value appears. This value is the current measured level value.
3. If this is acceptable, press [SET] to lock the value as the new EC20 set point. If not, press either the [▲] or [▼] keys once and the old setting for the EC4 will appear.
4. From here, use the [▲] or [▼] keys to raise or lower the value to the desired value.
5. Press the [SET] key to enter this value as the new EC20 set point.

SAF1/SAF2/SAF3:
1. Hold [MENU] key until SAF1, SAF2 or SAF3 appears in the display.
2. Release [MENU] key and hold [SET] key to toggle between SAF1, SAF2 and SAF3.
3. When desired setting is reached, release [SET] key. The last displayed setting will be locked into memory. To change, start again at step 1.

FAST/SLOW:
1. Hold [MENU] key until FAST or SLOW appears in the display.
2. Release [MENU] key and hold [SET] key to toggle between FAST and SLOW.
3. When desired setting is reached, release [SET] key. The last displayed setting will be locked into memory. To change, start again at step 1.

ALIN:
1. Hold [MENU] key until ALIN appears in the display.
2. Continue to hold [MENU] key until OFF appears in the display.
3. Release [MENU] key and hold [SET] key to toggle from OFF to ON.
4. Release [SET] key. The LU20 is now in ALIN mode.
5. To exit ALIN mode, repeat steps 1–4 changing from ON to OFF.

MAXR:
1. Hold [MENU] key until MAXR appears in the display.
2. Continue to hold [MENU] key until a value appears in the display. This value is the current MAXR setting.
3. If this is acceptable, press [SET] to lock the value as the MAXR setting. If not, use the [▲] or [▼] keys to raise or lower the value to the desired setting.
4. Press the [SET] key to enter this value as the new MAXR setting.

MINR:
1. Hold [MENU] key until MINR appears in the display.
2. Continue to hold [MENU] key until a value appears in the display. This value is the current MINR setting.
3. If this is acceptable, press [SET] to lock the value as the MINR setting. If not, use the [▲] or [▼] keys to raise or lower the value to the desired setting.
4. Press the [SET] key to enter this value as the new MINR setting.

NOTE: EC4 and EC20 are variable. All other settings are factory direct.
The Level Sensor System can be used to detect a high level or a low level or both a high and a low level with outputs for each state.

There are 5 states that a tank may be in:
- Low Level – Alarm state needing immediate operator interaction.
- Low Action Level – Automatic refill control with optional operator notification.
- Normal Level – No action required state
- High Action Level – Automatic drain control with optional operator notification.
- High Level – Alarm state needing immediate operator interaction.

For each of these levels there are five solenoids that may be turned on to control a valve or indicator and an alarm horn for operator notification.

Typical uses are:
- Waste tank with automatic transfer to a waste drum.
  - Use the High Warning Level to cause the pump to run.
    - Chirp the horn to indicate what is happening (Optional)
    - Turn on a pneumatic indicator in the area (Optional)
  - Use the High Level to cause a valve to close to stop an over fill condition.
    - Warning horn to an operator to indicate what is happening.
    - Turn on a pneumatic indicator in the area (Optional)
- Paint tank with automatic transfer from a supply drum.
  - Use the Low Warning Level to cause the pump to run.
    - Chirp the horn to indicate what is happening (Optional)
    - Turn on a pneumatic indicator in the area (Optional)
  - Use the Low Level to cause a system stop or conveyor stop to avoid an empty tank causing air in the paint supply lines.
    - Warning horn to an operator to indicate what is happening.
    - Turn on a pneumatic indicator in the area (Optional)
  - Use the High Level Alarm to know if a valve is stuck open.
HOME Screen: (Startup Screen)

- Displays logo, unit identification, and contact information.

CURR. STATE ALL Screen:

- SILENCE Button and Timer: (toggle on)
  - Silences horn during currently active alarm/state for duration of SILENCE HORN TIME (configurable in SYSTEM SETUP), resets if another alarm/state becomes active, when timer counts to zero, or when RESET button is pressed.

- CURRENT LEVEL % Indicator:
  - Displays current Level, in percent of full.
  - Based on setup of Level Sensor in internal menu (20mA = 100% full, 4mA = 0% empty)

- TANK LEVEL Bar Graph:
  - Displays Current Level.
  - Changes color if Level crosses Red Line.
  - Red Line indicates current HIGH or LOW LEVEL SETTING.
  - Toggled with MATERIAL SUPPLY/WASTE TANK Button. (Sys. Setup)

- HIGH LEVEL ALARM Indicator:
  - If Current Level is greater than or equal to High Level Alarm, and High Level Alarm is enabled in System Setup, the High Level Alarm State becomes active and the indicator turns red.

- HIGH WARNING LEVEL Indicator and Timer:
o If Current Level is greater than or equal to High Warn Level, and High Warn Level is enabled in System Setup, the High Warn Level State becomes active and the indicator turns orange.
  o Deactivated by an active High Level Alarm.
  o If the Timer is used, the time remaining is displayed to the right of the High Warn Level Indicator.

• LOW WARNING LEVEL SETTING Indicator and Timer:
  o If Current Level is less than or equal to Low Warn Level, and Low Warn Level is enabled in System Setup, the Low Warn Level State becomes active and the indicator turns orange.
  o Deactivated by an active Low Level Alarm.
  o If the Timer is used, the time remaining is displayed to the right of the Low Warn Level Indicator.

• LOW LEVEL ALARM Indicator:
  o If Current Level is less than or equal to Low Level Alarm, and Low Level Alarm is enabled in System Setup, the Low Level Alarm State becomes active and the indicator turns red.

• RESET Button: (momentary on)
  o Deactivates all active states.
  o States may reactivate immediately, if the conditions for the state are still true, as soon as button is released.

• CURR. OUTS Indicators:
  o Displays current status of the six available outputs.
  o H/1 = Horn, 2-6 = Solenoid Valves

CURR. STATE X Screen:
• This screen works the same for each of the Pumps 1, 2 or 3.

• SILENCE Button and Timer: (toggle on)
  o Silences horn during currently active alarm/state for duration of SILENCE HORN TIME (configurable in SYSTEM SETUP), resets if another alarm/state becomes active, when timer counts to zero, or when RESET button is pressed.

• CURRENT LEVEL % Indicator:
  o Displays current Level, in percent of full.
Based on setup of Level Sensor in internal menu (20mA = 100% full, 4mA = 0% empty)

- **TANK LEVEL Bar Graph**
  - Displays Current Level.
  - Changes color if Level crosses Red Line.
  - Red Line indicates current HIGH or LOW LEVEL SETTING.
  - Toggled with MATERIAL SUPPLY/WASTE TANK Button. (Sys. Setup)

- **HIGH LEVEL ALARM Indicator**
  - Displays current setting of High Level Alarm.
  - If Current Level is greater than or equal to High Level Alarm, and High Level Alarm is enabled in System Setup, the High Level Alarm State becomes active and the indicator turns red.

- **HIGH WARNING LEVEL Indicator and Timer**
  - Displays current setting of High Warn Level.
  - If Current Level is greater than or equal to High Warn Level, and High Warn Level is enabled in System Setup, the High Warn Level State becomes active and the indicator turns orange.
  - Deactivated by an active High Level Alarm.
  - If the Timer is used, the time remaining is displayed to the right of the High Warn Level Indicator.

- **LOW WARNING LEVEL SETTING Indicator and Timer**
  - Displays current setting of Low Warn Level.
  - If Current Level is less than or equal to Low Warn Level, and Low Warn Level is enabled in System Setup, the Low Warn Level State becomes active and the indicator turns orange.
  - Deactivated by an active Low Level Alarm.
  - If the Timer is used, the time remaining is displayed to the right of the Low Warn Level Indicator.

- **LOW LEVEL ALARM Indicator**
  - Displays current setting of Low Level Alarm.
  - If Current Level is less than or equal to Low Level Alarm, and Low Level Alarm is enabled in System Setup, the Low Level Alarm State becomes active and the indicator turns red.

- **RESET Button** (momentary on)
  - Deactivates all active states.
  - States may reactivate immediately, if the conditions for the state are still true, as soon as button is released.

- **CURR. OUTS Indicators**
  - Displays current status of the six available outputs.
  - H/1 = Horn, 2-6 = Solenoid Valves
SYS. X SETUP:
• This screen works the same for each of the Pumps 1, 2 or 3.

**SYSTEM 1 SETUP**

- **HIGH LEVEL ALARM SETUP:**
  - Navigates to the High X Level Alarm Setup Screen.

- **HIGH WARN LEVEL SETUP:**
  - Navigates to the High X Warning Level Setup Screen.

- **LOW WARN LEVEL SETUP:**
  - Navigates to the Low X Warning Level Setup Screen.

- **LOW LEVEL ALARM SETUP:**
  - Navigates to the Low X Level Alarm Setup Screen.

- **NORMAL LEVEL SETUP:**
  - Navigates to the Normal X Level Setup Screen.

- **SYSTEM BYPASS Button:** (toggle)
  - Disables all outputs if System Bypass is ON.
  - Generally used for troubleshooting and to temporarily disable outputs.
  - Required to be set to OFF for normal operation.

- **ALARM BYPASS Button:** (toggle)
  - Disables High Level Alarm States if Alarm Bypass is ON.
  - Generally used for troubleshooting and recovering from an alarmed condition.
  - Should be set to OFF for normal operation.

- **MATERIAL SUPPLY/WASTE TANK Button:** (toggle)
  - Toggles Bar Graph between showing Red Line as HIGH LEVEL SETTING or LOW LEVEL SETTING Levels.

- **SILENCE HORN TIME s:**
  - Timer used if Horn is enabled during an active state, and the SILENCE Button is pressed.
  - Enter value for the amount of time to silence an active horn.
  - Seconds, 0-999

- **HORN CHIRP OFF TIME mS:**
  - Timer used if Horn is enabled (H/1) during an active High Warn Level State.
  - Typically used to indicate different tones for different tanks that are in an alarm state.
Enter value for the amount of time to keep the horn OFF during an active High Warn Level State. Recommended setting: >2000 Milliseconds, 0-32767 (32.767 seconds)

- **HORN CHIRP ON TIME mS:**
  - Timer used if Horn is enabled (H/1) during an active High Warn Level State.
  - Enter value for the amount of time to keep the horn ON during an active High Warn Level State. Recommended setting: 400 Milliseconds, 0-32767 (32.767 seconds)

**SYS. X SETUP – HIGH LEVEL ALARM SETUP:**

- This screen works the same for each of the Pumps 1, 2 or 3.

  - **ENABLED:** (toggle)
    - Enables/Disables High Level Alarm State from occurring.

  - **HIGH LEVEL ALARM:**
    - Enter value for the High Level Alarm: 0 – 100 %.
    - High Level Alarm State becomes active if the Current Level is greater than or equal to High Level Alarm, and High Level Alarm is enabled.

  - **OUTPUTS USED:** (toggle)
    - If the High Level Alarm State is active, the selected Outputs will also become active.
    - H/1 = Horn, 2-6 = Solenoid Valves
    - High Level Alarm State does not use Chirp Timers for H/1.
      - (Continuous ON if active, same as other outputs)

  - **PREV:**
    - Navigates to the System X Setup Screen.

  - **NEXT:**
    - Navigates to the High Warning Level X Setup Screen.
SYS. X SETUP – HIGH WARNING LEVEL SETUP:

- This screen works the same for each of the Pumps 1, 2 or 3.

**HIGH WARNING LEVEL SETUP**

- **ENABLED:** (toggle)
  - Enables/Disables High Warning X Level State from occurring.

- **HIGH WARNING LEVEL SETTING**
  - Enter value for the High Warning Level Setting: 0 – 100%
  - Should be less than High Level Alarm if High Level Alarm is enabled.
  - High Warning Level State becomes active if the Current Level is greater than or equal to High Warning Level Setting, and High Warning Level is enabled.
  - Deactivated if High Level Alarm becomes Active.

- **OUTPUTS USED:** (toggle)
  - If High Warning Level State is active, the selected Outputs will also become active.
  - H/1 = Horn, 2-6 = Solenoid Valves
  - High Level State uses Chirp Timers for H/1.
    - (configurable in SYSTEM SETUP)

- **TIME ON SECONDS:**
  - Enter value for Timer to run while High Level State is active.
  - 0 – 999 seconds.
  - Zero disables Timer.
  - If Time-On-Seconds Timer is set to zero (disabled), OFF AT LEVEL and TIMED ALARM DISABLED are automatically set.

- **OFF LEVEL:**
  - Enter value for level, to deactivate High Warning Level State, if Current Level is less than or equal to Off Level.
  - 0 – 100% of full.

- **OFF AT LEVEL/TIME:** (toggle)
  - Select whether High Warning Level State should deactivate at end of Time-On-Seconds Timer, or if Off-Level is reached.
  - If Time-On Timer is enabled and OFF AT TIME is selected, then when High Warning Level becomes active, it will stay active until:
    - Timer counts to zero or,
    - If Timer reaches zero and the Low Warning Level State is still active the timer will restart.
    - High Level Alarm becomes active.
If Time-On Timer is enabled and OFF AT LEVEL is selected, then when High Warning Level becomes active, it will stay active until:

▪ Off Level is reached or,
▪ Timer counts to zero or,
▪ High Level Alarm becomes active.

If Time-On Timer is disabled, then when High Warning Level becomes active, it will stay active until:

▪ Off Level is reached or,
▪ High Level Alarm becomes active.

• ALARM IF NOT AT OFF LEVEL AT END OF TIME/TIMED ALARM DISABLED: (toggle)
  o If the Alarm-If-Not-At-Off-Level-At-End-Of-Time is set and Off-Level is not reached before the end of the Timer, High Level Alarm State becomes Active.
  o If Time-On Timer is set to zero (disabled), OFF AT LEVEL and TIMED ALARM DISABLED are automatically set.

• PREV:
  o Navigates to the High Level X Alarm Setup Screen.

• NEXT:
  o Navigates to the Low Warning X Level Setup Screen.

SYS. X SETUP – LOW WARNING LEVEL SETUP:
  • This screen works the same for each of the Pumps 1, 2 or 3.

  • ENABLED: (toggle)
    o Enables/Disables Low Warning Level State from occurring.

  • LOW WARNING LEVEL SETTING:
    o Enter value for the Low Warning Level Setting: 0 – 100
    o Should be less than Low Level Alarm if Low Level Alarm is enabled.
    o Low Warning Level State becomes active if the Current Level is less than or equal to Low Warning Level Setting, and Low Warning Level is enabled.
    o Deactivated if Low Level Alarm becomes Active.

  • OUTPUTS USED: (toggle)
    o If Low Warning Level State is active, the selected Outputs will also become active.
- H/1 = Horn, 2-6 = Solenoid Valves
- Low Warning Level State uses Chirp Timers for H/1.
  - (configurable in SYSTEM SETUP)

**TIME ON SECONDS:**
- Enter value for Timer to run while Low Warning Level State is active.
- 0 – 999 seconds.
- Zero disables Timer.
- If Time-On-Seconds Timer is set to zero (disabled), OFF AT LEVEL and TIMED ALARM DISABLED are automatically set.

**OFF LEVEL:**
- Enter value for level, to deactivate Low Warning Level State, if Current Level is greater than or equal to Off Level.
- 0 – 100 % of full.

**OFF AT LEVEL/TIME:** (toggle)
- Select whether Low Warning Level State should deactivate at end of Time-On-Seconds Timer, or if Off-Level is reached.
  - If Time-On Timer is enabled and OFF AT TIME is selected, then when Low Warning Level becomes active, it will stay active until:
    - Timer counts to zero or,
    - Low Level Alarm becomes active,
  - If Time-On Timer is enabled and OFF AT LEVEL is selected, then when Low Warning Level becomes active, it will stay active until:
    - Off Level is reached or,
    - Timer counts to zero or,
    - Low Level Alarm becomes active,
  - If Time-On Timer is disabled, then when Low Warning Level becomes active, it will stay active until:
    - Off Level is reached or,
    - Low Level Alarm becomes active

**ALARM IF NOT AT OFF LEVEL AT END OF TIME/TIMED ALARM DISABLED:** (toggle)
- If the Alarm-If-Not-At-Off-Level-At-End-Of-Time is set and Off-Level is not reached before the end of the Timer, Low Level Alarm State becomes Active.
- If Time-On Timer is set to zero (disabled), OFF AT LEVEL and TIMED ALARM DISABLED are automatically set.

**PREV:**
- Navigates to the High Warning X Level Setup Screen.

**NEXT:**
- Navigates to the Low Level X Alarm Setup Screen.
SYS. X SETUP – LOW LEVEL ALARM SETUP:
- This screen works the same for each of the Pumps 1, 2 or 3.

- **ENABLED:** (toggle)
  - Enables/Disables Low Level Alarm State from occurring.

- **LOW LEVEL ALARM:**
  - Enter value for the Low Level Alarm: 0 – 100%.
  - Low Level Alarm State becomes active if the Current Level is less than or equal to Low Level Alarm, and Low Level Alarm is enabled.

- **OUTPUTS USED:** (toggle)
  - If the Low Level Alarm State is active, the selected Outputs will also become active.
  - H/1 = Horn, 2-6 = Solenoid Valves
  - Low Level Alarm State does not use Chirp Timers for H/1.
    ▪ (Continuous ON if active, same as other outputs)

- **PREV:**
  - Navigates to the Low Warning X Level Setup Screen.

- **NEXT:**
  - Navigates to the Normal X Level Setup Screen.

SYS. X SETUP – NORMAL LEVEL SETUP:
- This screen works the same for each of the Pumps 1, 2 or 3.

- **ENABLED:** (toggle)
  - Enables/Disables Normal Level State from occurring.
  - Normal Level State is active if enabled and no other state is active.

- **OUTPUTS USED:** (toggle)
If the Normal Level State is active, the selected Outputs will also become active.

- H/1 = Horn, 2-6 = Solenoid Valves
- Normal Level State does not use Chirp Timers for H/1.
  - (Continuous ON if active, same as other outputs)

**PREV:**
- Navigates to the Low Level X Alarm Setup Screen.

**NEXT:**
- Navigates to the System X Setup Screen.
## Parts:

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<td>Control Enclosure</td>
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<td>2</td>
<td>Enclosure Back Panel</td>
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<td>3</td>
<td>Color HMI</td>
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<tr>
<td>4</td>
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<td>Click PLC</td>
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<td>9</td>
<td>Cable</td>
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<td>11</td>
<td>Zenner Barrier</td>
<td>3068-01-49B</td>
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<td>14</td>
<td>Solenoid 5 Bank</td>
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<td>5 Bank Mounting Bracket</td>
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<td>Fuse Block 120VAC</td>
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<td>Fuse Block 24VDC</td>
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<td>Single Height Terminal Block</td>
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<tr>
<td>20</td>
<td>Single TB End Cover</td>
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<tr>
<td>21</td>
<td>Double Height Terminal Block</td>
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<td>22</td>
<td>Double TB End Cover</td>
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<td>23</td>
<td>TB 3 Place Jumper</td>
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<td>End Anchor</td>
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<td>27</td>
<td>2 Pos Rotary Switch/Ind Contact</td>
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<td>Switch off on Placard</td>
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<tr>
<td>29</td>
<td>Buzzer</td>
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</tbody>
</table>
Technical Data:

Range: 0.5 to 18 feet (15 cm to 5.4 m)
Beam width: 8° conical
Temperature rating: F: -40º to 140º C: -40º to 60º Temp. compensation: Automatic over entire range
Pressure rating: 30 psi (2 bar) @ 25 ºC., derated @ 1.667 psi (.113 bar) per ºC. above 25 ºC.
Enclosure rating: NEMA 4X (IP65)
Enclosure material: Polypropylene (PP), U.L. 94VO
Transducer material: Polyvinylidene Fluoride (PVDF)
Mounting gasket: Viton (2”) metric only
Power Requirements: 120 VAC @ 2 Amps
Level Sensor Cable Requirements: 2 Wire Shielded, 18 Gallon Cable
Intrinsically safe when used with an approved I.S. barrier
Typical Signal Output: GP: 4-20 mA, 12-36 VDC / IS: 4-20 mA, 12-32 VDC
Mounting Threads: 2” NPT (2” G)
Conduit Connection: 1/2” NPT (1/2” BSP)
CE Compliance: EN 50082-2 immunity
EN 55011 emission
CSA Certificate: LR79326-10

NOTE: Level sensor is
intrinsically safe. See local code
for installation guide lines.
Autoquip Standard Warranty

Autoquip Inc. warrants all equipment manufactured by Autoquip Inc. and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Autoquip Inc. distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Autoquip Inc., Autoquip Inc. will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Autoquip Inc. to be defective. This warranty applies only when the equipment is installed, operated, and maintained in accordance with Autoquip Inc.’s written recommendations.

This warranty does not cover, and Autoquip Inc. shall not be liable for general wear and tear, or any malfunction, damage, or wear and tear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Autoquip Inc. component parts. Nor shall Autoquip Inc. be liable for malfunction, damage or wear caused by the incompatibility of Autoquip Inc. equipment with structures, accessories, equipment or materials not supplied by Autoquip Inc., or the improper design, manufacture, installation, operation or maintenance of structure, accessories, equipment or materials not supplied by Autoquip Inc.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Autoquip Inc. distributor for verification of the claimed defect. If the claimed defect is verified, Autoquip Inc. will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

**THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

Autoquip Inc.’s sole obligation and buyer’s sole remedy for any breach of warranty shall be set forth above. The buyer agrees that no other remedy (including, but not limited to incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Autoquip Inc. makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, material or components sold but not manufactured by Autoquip Inc. These items sold, but not manufactured by Autoquip Inc. (such as electric motors, switches, hose, etc.) are subject to the warranty, if any, from their manufacturer. Autoquip Inc. will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Autoquip Inc. be liable for indirect, incidental, special or consequential damage resulting from Autoquip Inc. supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to breach of contract, breach of warranty, the negligence of Autoquip Inc., or otherwise.

**FOR AUTOQUIP, INC. CANADA CUSTOMERS**

The parties acknowledge that they required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présent document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procedures concernées.

**Autoquip Phone Numbers**

**TO PLACE AN ORDER,** contact your Autoquip distributor, or call this number to identify the distributor closest to you:

(262) 781-6133

All written and visual data contained in this document reflects the latest product information available at the time of publication. Autoquip reserves the right to make changes at any time without notice.

Sales Offices: MENOMONEE FALLS, WI (262) 781-6133

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