Centennial
Flow Charts and Control Positions

Standard Spraybar
with BT-1 Controls
# Etnyre Spray Bar Nozzles

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Part No.</th>
<th>Description</th>
<th>Application Gallons Per Square Yard</th>
<th>Application (Metric) Liters Per Square Meter</th>
<th>US Flow Gallons Per Minute Per Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3353788</td>
<td>V Slot Tack Nozzle 1/8” Rifle Bored</td>
<td>.05 - .20</td>
<td>.23 - .91</td>
<td>3.0 to 4.5</td>
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<tr>
<td></td>
<td>3351013*</td>
<td>V Slot Tack Nozzle 1/16” Coin Slot</td>
<td>.05 - .20</td>
<td>.23 - .91</td>
<td>3.0 to 4.5</td>
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<td></td>
<td>3354904</td>
<td>V Slot Tack Nozzle 1/8” Counterbored</td>
<td>.05 - .20</td>
<td>.23 - .91</td>
<td>3.0 to 4.5</td>
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<tr>
<td>2</td>
<td>3351008</td>
<td>S36-4 V Slot</td>
<td>.10 - .35</td>
<td>.45 - 1.58</td>
<td>4.0 to 7.5</td>
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<tr>
<td>3</td>
<td>3351009</td>
<td>S36-5 V Slot</td>
<td>.18 - .45</td>
<td>.81 - 2.04</td>
<td>7.0 to 10.0</td>
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<tr>
<td>4</td>
<td>3352368</td>
<td>Multi-Material V Slot</td>
<td>.15 - .40</td>
<td>.68 - 1.81</td>
<td>6.0 to 9.0</td>
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<tr>
<td>5</td>
<td>3351015</td>
<td>3/32” Coin Slot</td>
<td>.15 - .40</td>
<td>.68 - 1.81</td>
<td>6.0 to 9.0</td>
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<td>6</td>
<td>3352204</td>
<td>Multi-Material V Slot</td>
<td>.35 - .95</td>
<td>1.58 - 4.30</td>
<td>12.0 to 21.0</td>
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<tr>
<td>7</td>
<td>3355154</td>
<td>End Nozzle (use with 3352204 nozzle)</td>
<td>.35 - .95</td>
<td>1.58 - 4.30</td>
<td>12.0 to 21.0</td>
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<td>8</td>
<td>3355010</td>
<td>Multi-Material V Slot</td>
<td>.29 - .72</td>
<td>1.31 - 3.26</td>
<td>10.0 to 165</td>
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<td>9</td>
<td>3352205</td>
<td>Multi-Material V Slot</td>
<td>.20 - .55</td>
<td>.91 - 2.49</td>
<td>7.5 to 12.0</td>
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<td>10</td>
<td>3352210</td>
<td>End Nozzle (use with 3352205 nozzle)</td>
<td>.20 - .55</td>
<td>.91 - 2.49</td>
<td>7.5 to 12.0</td>
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<tr>
<td>11</td>
<td>3351014</td>
<td>3/16” Coin Slot</td>
<td>.35 - .95</td>
<td>1.58 - 4.30</td>
<td>12.0 to 21.0</td>
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<tr>
<td>12</td>
<td>3351010</td>
<td>1/4” Coin Slot</td>
<td>.40 - 1.10</td>
<td>1.81 - 4.98</td>
<td>15.0 to 24.0</td>
</tr>
</tbody>
</table>
Do not use this machine for any operation which is not described in the Operation manual.
If you have any questions about the operation of this machine, contact the Etnyre Service Department at 1-800-995-2116 or 1-815-732-2116.
Operations that are not approved could cause serious injury or death.
This optional feature is designed for quick in-cab switching between bar circulate and bar suck back for units equipped with automatic tank and bar suck back valves. When the BAR SUCK BACK OVERRIDE switch is ON, all automatically controlled valves are set to their correct positions for BAR SUCK BACK. This overrides any settings of the Function knob and stops the asphalt pump when the PUMP CONTROL switch is in AUTO.

The following steps are performed in the cab while the Function knob is turned to BAR CIRCULATE.

1. Turn the BAR SUCK BACK OVERRIDE switch ON.
2. Press START. The pump will start turning at the desired rate. 200 GPM is recommended.
3. If complete bar suck back is desired, follow the instructions for bar suck back, beginning with the opening of the left bleeder valve. Otherwise continue to the next step.
4. Turn the BAR SUCK BACK OVERRIDE switch OFF.
5. Press START. The pump will start turning at the desired circulation rate.

Note: The pump can be stopped and the automatic tank valve can be closed immediately at any time during operation by turning the POWER switch OFF. Before turning the POWER switch back ON, turn the PUMP SPEED to zero if the PUMP CONTROL switch is in MANUAL, to prevent the pump from turning.
1. SPRAY Switch
Turning this switch to ON when the Function knob (rear panel) is turned to BAR CIRCULATE or BAR SUCK BACK, opens all activated spray valves.

2. START Button
Starts the asphalt pump turning at the target pump rate or starts calibration operations in the setup screens.

3. POWER Switch
Both POWER switches, front and rear, must be ON for the system to be ON. The entire system can be shut down by turning either POWER switch to OFF. Before turning either POWER switch to ON be sure you know what will automatically activate.

4. PUMP SPEED Control Knob
When MANUAL PUMP CONTROL is selected, turning this knob to the right (clockwise) increases the asphalt pump speed. It is possible to over-speed the asphalt pump in MANUAL control since the asphalt pump speed is also dependent on the engine speed.
Always turn the knob back to the left (counter-clockwise) before selecting AUTO PUMP CONTROL or turning ON either POWER switches (front or rear).

5. Function knob
When the desired operation is selected through this knob, the asphalt pump stops turning if the PUMP CONTROL is in AUTO, and all automatic valves (tank valve, 4-way valve, bar suck back valves, and balance valves) are set for the desired operation. The asphalt pump rate is set to the stored preset for the desired operation.
The factory pump rate presets are:
- LOAD/TRANSFER - 100 GPM
- TANK CIRCULATE - 150 GPM
- BAR SUCK BACK - 200 GPM
- BAR FLUSH - 100 GPM
- UNLOAD - 100 GPM
- HAND SPRAY - 50 GPM
When BAR CIRCULATE is selected, the asphalt pump rate is calculated based on the displayed spray width, application rate, and the setting of the %CIRC factor.

6. PUMP CONTROL Switch
With the switch turned to AUTO, the asphalt pump speed is controlled at the desired rate through the computer.
With the switch turned to MANUAL, the asphalt pump speed is controlled with the PUMP SPEED control knob at the desired rate for a specific engine speed.
Load through Manhole

The instructions represented here are a guide and not designed to be comprehensive. Refer to M-103-08 Centennial Operation Manual for complete instructions.

Cab Panel
- POWER Switch OFF

Rear Panel
- Function Switch to LOAD/TRANSFER position
- POWER Switch OFF
Load through Load Line

The instructions represented here are a guide and not designed to be comprehensive. Refer to M-103-08 Centennial Operation Manual for complete instructions.

Cab Panel
- POWER Switch ON
- 100 GPM - adjust using VALUE switch

Rear Panel
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to LOAD/TRANSFER position
- POWER Switch ON
- Push "START" switch
Circulate In Tank

The instructions represented here are a guide and not designed to be comprehensive. Refer to M-103-08 Centennial Operation Manual for complete instructions.

Cab Panel
- POWER Switch ON
- Push START switch
- 100 to 150 GPM - adjust using VALUE switch

Rear Panel
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to TANK CIRCULATE position
- POWER Switch ON
- Push START switch
Circulate In Bar

The instructions represented here are a guide and not designed to be comprehensive. Refer to M-103-08 Centennial Operation Manual for complete instructions.

Cab Panel
- POWER switch ON
- SPRAY switch OFF
- Set the application rate with a MEMORY switch or by using the VALUE switch
- Set spray width with One Foot switches

Rear Panel
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to BAR CIRCULATE position
- POWER switch ON
- Push START switch
NOTE: Unit should already be operating in Bar Circulate and circulating oil to be ready to spray.

Cab Panel
- Spraybar Switches (as desired) "ON"
- When the spray bar reaches the beginning of the shot, turn the SPRAY switch ON, turn the switch OFF at the end of shot.

Rear Panel
- Function Switch to BAR CIRCULATE position
Suckback Spraybar

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Open and close left valve, then right.

Bleeder Valve is last flip lever valve on wings.

Hand Spray Valve Positions
- Off
- Suck Back

Master Handspray Valve
- Off

Suck Back Valve
- Open

Transfer Valve
- Closed

Return Valve
- Open

Transfer Line
- Suck Back Valve - Closed

Tank Valve
- Closed

4 Way Valve
- BAR SUCK BACK (Keyway in 12 o’clock position)

Flush Valve
- Closed

Cab Panel
- POWER switch ON
- 200 GPM - adjust using VALUE switch

Rear Panel
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to BAR SUCK BACK position
- POWER switch ON
- Push START switch
The instructions represented here are a guide and not designed to be comprehensive. Refer to M-103-08 Centennial Operation Manual for complete instructions.

**Cab Panel**
- POWER switch ON
- 50 GPM - adjust using VALUE switch

**Rear Panel**
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to HANDSPRAY position
- POWER switch ON
- Push START switch
Suckback Handspray

Cab Panel
- POWER switch ON
- 200 GPM - adjust using VALUE switch

Rear Panel
- POWER switch ON
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to BAR SUCKBACK or LOAD/TRANSFER position
- Push “START” switch

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Unload with External Pump or (Gravity)

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**Unloading Procedure**

- **Cab Panel**
  - POWER switch ON

- **Rear Panel**
  - POWER switch ON
  - PUMP CONTROL switch AUTO
  - PUMP SPEED knob zero (fully counterclockwise)
  - Function Switch to TANK CIRCLATE position
  - Push “START” switch
  - Operate pump @ 10 GPM in Manual to allow pump to circulate material to prevent pump from getting too cold (if possible).
Unload
(with Pump)

The instructions represented here are a guide and not designed to be comprehensive. Refer to M-103 Centennial Operation Manual for complete instructions.

Cab Panel
• POWER switch ON
• 100 GPM - adjust using VALUE switch

Rear Panel
• POWER switch ON
• PUMP CONTROL switch AUTO
• PUMP SPEED knob zero (fully counterclockwise)
• Function Switch to UNLOAD position
• Push “START” switch
Transfer

The instructions represented here are a guide and not designed to be comprehensive. Refer to M-103-08 Centennial Operation Manual for complete instructions.

Cab Panel
- POWER Switch ON
- 100 GPM - adjust using VALUE switch

Rear Panel
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to LOAD/TRANSFER position
- POWER Switch ON
- Push START switch

Transfer 4 Way Valve
- LOAD/TRANSFER (Keyway in 12 o'clock position)
- Tank Valve Closed
- 4 Way Valve
- Flush Valve Closed
- Return Valve Closed
- Transfer Line Suck Back Valve Closed
- Master Handspray Valve Off
- Hand Spray Valve Positions
- Off
- Suck Back
- Open

Storage
Supply
Flush Pump

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**Cab Panel**
- POWER Switch ON
- 100 GPM - adjust using VALUE switch

**Rear Panel**
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to LOAD/TRANSFER position
- POWER Switch ON
- Push START switch
- WASH PUMP switch (optional) - ON
Flushing Bar

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**Cab Panel**
- POWER switch ON
- 100 GPM - adjust with VALUE switch

**Rear Panel**
- POWER switch ON
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to BAR FLUSH position
- Push “START” switch
- WASH PUMP switch (optional) - ON

If this is the last operation for the day, shut off power before turning Function Switch.
Front Fill
(optional equipment)

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**Front Fill**

**Inside Tank**

**Cab Panel**
- POWER switch ON
- 100 GPM - adjust with VALUE switch

**Rear Panel**
- POWER switch ON
- PUMP CONTROL switch AUTO
- PUMP SPEED knob zero (fully counterclockwise)
- Function Switch to TANK CIRCULATE position
- FRONT LOAD switch (optional) - OPEN
- Push “START” switch