AUTOMATE A FLEET OF CARTS WITH JUST ONE BST AGV DRIVE UNIT.

The Creform CA-A50060-NSB BST AGV Tugger

A Creform BST AGV works as an automated tugger, traveling along a magnetic tape guideway, slipping under a stationary cart, extending a tow pin into the cart's frame and then conveying it to a designated workstation or unload point. After disengaging from the cart, it travels to its next assignment. One BST AGV has the ability to mobilize multiple carts or a series of BSTs for an entire fleet.

The Creform NSB model featured here has several new attributes over the Standard, Low Profile and TiteSpace models, and it is manufactured in our South Carolina facility. It has added safety features, extra size to accommodate larger batteries, operational and physical improvements and an optical communications device. Its safety features include a non-contact laser bumper obstacle sensor with e-stop and an electromechanical brake, all of which qualify for a category 2-safety standard. It also has an 8-bit optical communication device, which can be used for remote starting. The raise-lower function of the drive wheel has been improved for operational convenience.

• Run-Ready with prompt shipment from stock. Made in USA.
• Safety — audible warning and flashing light, obstacle sensor, non-contact laser bumper and e-stop. Safety category 2 standard.
• Easy access engage/disengage lever.
• Follows magnetic tape guideway.
• Embedded magnetic strips available for high-traffic areas.
• Command tapes initiate AGV functions such as speed and obstacle sensor view changes, route selection and extend/retract tow pin.
• Standard 8 bit optical communication device. Often use for remote starting.
• For options such as a PLC, RF and RFID, please consider Creform AGV model CA-A50060-NSI.
• Service & Support: Programming, cart/structure designs, kitting or assembly assistance along with route layout installation available from Creform.

Creform line-side gravity flow racks are easily sized to specific needs.

Creform carts can be built to safely handle sequenced large parts.

A single BST AGV can manage an entire fleet of sequenced parts carts.
## CREFORM CA-A50060-NSB BST AGV TUGGER SPECIFICATIONS

<table>
<thead>
<tr>
<th>Part number</th>
<th>CA-A50060-NSB</th>
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<tbody>
<tr>
<td>Guidepath</td>
<td>50mm wide Creform magnetic tape and/or 6mm wide embedded magnetic strip</td>
</tr>
<tr>
<td>Direction/speeds</td>
<td>Forward only; 3-50m/min (10 to 164 ft/min)</td>
</tr>
<tr>
<td>Braking system</td>
<td>Regenerative electromechanical emergency &amp; parking brake</td>
</tr>
<tr>
<td>Minimum turning radius</td>
<td>800mm R (31.5&quot; R) - 180º turn</td>
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<tr>
<td>Power supply</td>
<td>24V DC (two 12V batteries) - 110 AH for typical 10 hrs of run time</td>
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<tr>
<td>Control method</td>
<td>Magnetic command tapes</td>
</tr>
<tr>
<td>Floor condition</td>
<td>Surface roughness 10mm or less between min. &amp; max. height slope 1% or less; step 2mm or less; trough 10mm or less</td>
</tr>
<tr>
<td>Usage conditions</td>
<td>Indoor only; 0-40ºC, 32-104ºF; 30 to 80% humidity - no dew formation</td>
</tr>
<tr>
<td>Safety devices</td>
<td>Audible warning and flashing light, obstacle sensor, non-contact laser bumper and e-stop</td>
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</tbody>
</table>
| Protective circuits | Over current prevention on motor (protect with motor driver)  
|                     | Over current protection on power source (15A breaker)  |
| Draw bar/load capacity | 26kg (57lb)/600kg (1320lb)* - includes cart plus AGV |
| Tow pin             | 30mm shaft OD/approximately 50mm vertical stroke  |
| Unit weight/with batteries | 138kg (304lb)/212kg (468lb)             |

*Capacity depends on floor conditions and caster selection on the cart.*

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**TOP VIEW**

- Warning/Status Light
- Engage/Disengage Handle
- Multi-Monitor
- Lockable Emergency Stop
- Removable Battery w/ Tray
- Hinged Access Cover

**SIDE VIEW**

- Obstacle Sensor Guard
- Cam Follower
- Obstacle Sensor
- Cam Follower
- Lockable Emergency Stop
- Tow Pin
- Audible Warning
- Wear Strip
- Cam Follower
- Removable Battery w/ Tray
- Drive Motor
- Guide Sensor
- Command Sensor

**FRONT VIEW**

- Obstacle Sensor
- 8 Bit Optical Transceiver
- 269, 317, 507

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*Made in USA*

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South Carolina Office  
Ph 864-989-1700 • Fax 864-877-3863  
SCsales@creform.com

Michigan Office  
Ph 248-926-2555 • Fax 248-926-2565  
MIsales@creform.com

www.creform.com  
800-839-8823

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1/2011