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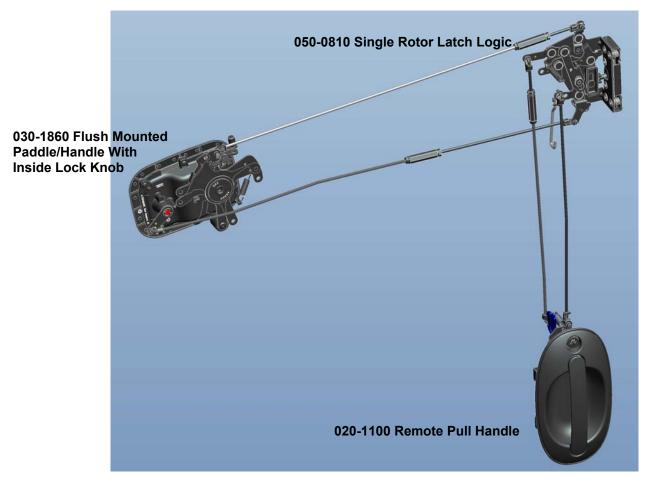
Tri*Mark* Door Systems

Door Systems – Providing the Big Picture Solutions for Tri*Mark* Customers

Designing and implementing a true full door system solution takes a wide range of products to ensure that all the components work together to form a rugged and reliable system to suit the intended application. Tri*Mark's* range of latches, strikers, handles, hinges, linkages, locks, accessories and related system components assure compatibility – our products not only set the standards for excellence, design and value, they are proven in the field time and time again.

Considerations must also be made regarding system details such as opening/closing efforts, structural support, appearance, door construction, safety, security, ease of assembly, quality, durability, sound of operation and value. Our Application Engineering Experts are available to assist you in properly selecting the components and products to complete your individual system solution.







100-5010 TriGuard Heavy Duty Door Hardware Module VI

This robust door hardware kit features modular construction that allows for simple customization, including remote or integrated exterior handle placement to accommodate variable door sizes. Designed for medium to heavy duty doors of 23-455kg (50-1000 lbs.) for entrance and rear door applications. The kit also allows for a minimum of assembly fasteners as well as providing a support system when adding significantly more weight to the door.

FEATURES/BENEFITS:

- Heavy duty modular construction is received fully assembled and tested
- Cuts door assembly time by as much as 50% to 70%
 improving vehicle cost and throughput
- Improved serviceability in the field and ability to retrofit into existing applications
- Interior locking mechanism provides additional safety for occupants
- Single handle egress
- Integrated weight support system
- Incorporates TriMark's proven 050-0850 Heavy Duty Latch

AVAILABLE:

- Remote or integrated exterior handle options (remote version shown)
- Right or left hand versions
- Customization features available. Please inquire:
 - Mounting detailsLength of grab bar
 - ◆ Exterior handle location

MATERIAL:

- Standard—high strength steel construction
- Available with advanced lightweight aluminum alloy

FINISH:

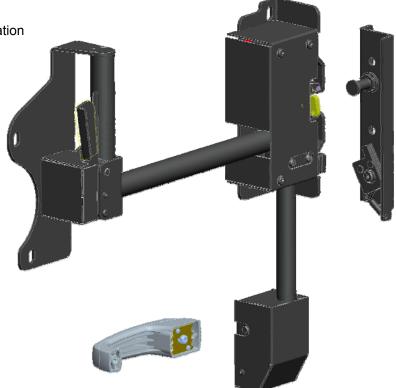
- Standard low gloss black powder coated
- Mil-Spec soft grip nylon coated handle
- 1000 hour corrosion protection
- Optional finishes available including: Black Magni™ coating, Tan/Olive CARC paint and Tan/Olive powder coating

INSTALLATION:

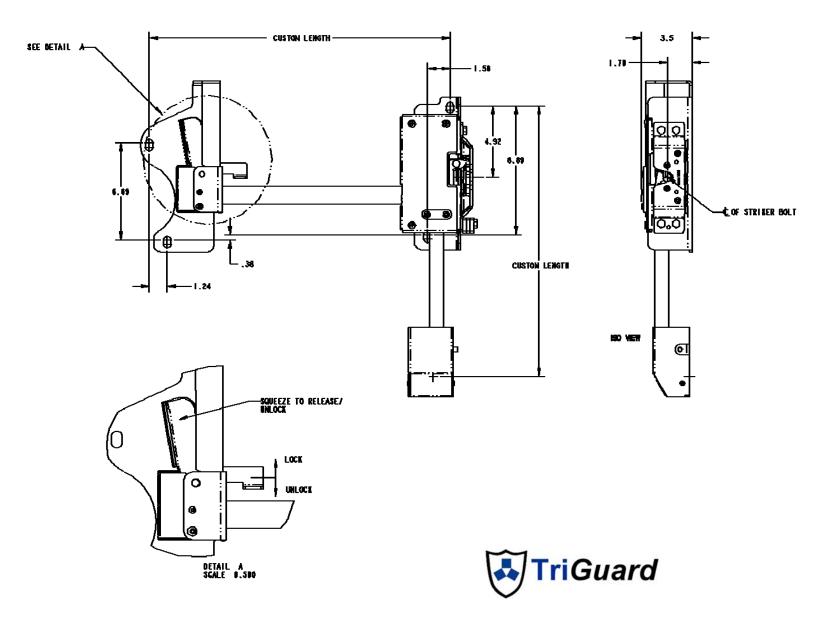
- Easy to install, mounts with (4) M10 X 1.75 fasteners and (3) M6 X 1.0 fasteners
- Tighten to the manufacturers' recommended torque value

U.S. Patent No. 8,091,933

Note that this product complies with FMVSS 206 when tested in accordance with SAE J839 and that this system meets FMVSS 206 loads and locking requirements and may be used in FMVSS 206 applications pending Tri*Mark* application approval. Please refer to page 151 for the complete FMVSS 206 statement.



100-5010 cont.



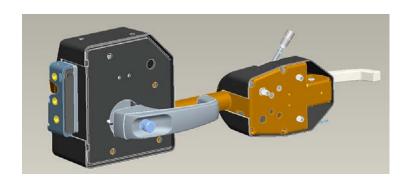


100-5120 TriGuard Heavy-Duty Slimline Hardware Module V2

Similar to the V1, the 100-5120 provides automotivelike functionality and style in a low profile one-piece module. Featuring Tri Mark's 050-1600 Tri Guard Slimline Heavy Duty Latch, this robust product allows for power-locking and is compliant to FMVSS 206.

FEATURES/BENEFITS:

- Heavy duty modular construction is received fully assembled and tested
- Cuts door assembly time by as much as 50% to 70% -- improving vehicle cost and throughput
- Improved serviceability in the field and ability to retrofit into existing applications
- Interior locking mechanism provides additional safety for occupants
- Single handle egress
- Integrated weight support system
- Incorporates Tri Mark's proven 050-0850 Heavy Duty Latch





AVAILABLE:

- Remote or integrated exterior handle options (remote version shown)
- Right or left hand versions
- Customization features available. Please inquire:
 - Mounting details
 - Length of grab bar
 - Exterior handle location

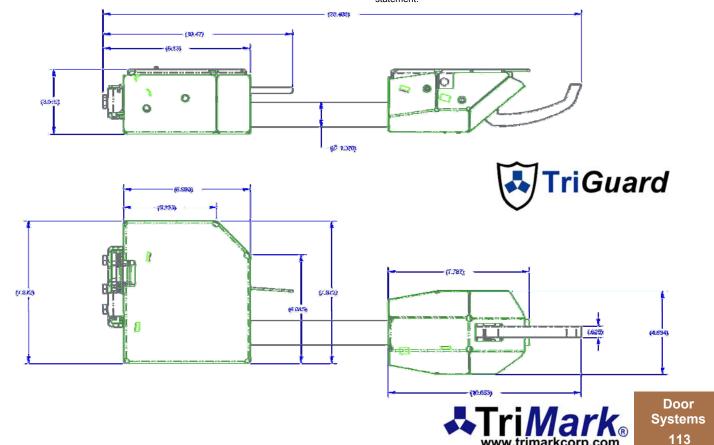
MATERIAL:

- Standard—high strength steel construction
- Available with advanced lightweight aluminum alloy

- Standard low gloss black powder coated
- Mil-Spec soft grip nylon coated handle
- 1000 hour corrosion protection
- Optional finishes available including: Black Magni™ coating, Tan/Olive CARC paint and Tan/Olive powder coating

U.S. Patent No. 8,091,933

Note that this product complies with FMVSS 206 when tested in accordance with SAE J839 and that this system meets FMVSS 206 loads and locking requirements and may be used in FMVSS 206 applications pending TriMark application approval. Please refer to page 151 for the complete FMVSS 206 statement.



100-5200 COMMANDoor Plus

COMMANDoor Plus is a complete power assist module that can simply and safely open and close the heaviest of armored vehicle doors with one intuitive motion and can be custom engineered to fit virtually any vehicle. The door fully integrates combat locks with a power-assist actuation and control system to open and close the door for those vehicles with very heavy doors. The inside control handle's unique 2-axis electromechanical design allows for simple and intuitive hand motions by the soldier to activate the open and close action of the door. Powered integration of the combat locks-automatically engaging them after door closure and automatically opening during the door opening, allows for the opening and closing of rear seat personnel doors remotely by the driver or commander from the front seat.

FEATURES/BENEFITS:

- Designed to withstand the rigors of battle and rugged offroad abuse the system easily operates heavy armored doors by a 5th percentile female soldier, but stands up to the adrenalin-driven strength of a 95th percentile male soldier.
- The centerpiece of the COMMANDoor functionality is the COMMAND Handle. By designing a system in which a single control handle's motion coincides with the desired direction of door travel, TriMark has provided the first true Intuitive Motion Control System for the war fighter's ingress and egress from heavily armored vehicles.
- Soldier can actuate combat locks and open and close powered doors and ramps with a single inside release from both the interior and exterior
- Door Module contains linear door actuator, integrated control system, back-up power source, control sensors, safety strips and all mechanical hardware to articulate door or ramp to open and closed positions
- Lower current demands reducing on-board electrical draw and battery requirements





SAFETY:

- Integrated safety features assure users and first responders' safe and reliable use.
- Releasing the *COMMAND* Handle at any time immediately stops door movement
- The system incorporates safety strips to stop door movement and relieve pinch points
- An emergency stop provision disables powered motion and allows for manual control
- An emergency latch release feature allows disengagement of the combat locks from the outside and permits opening COMMANDoor on a vehicle that is damaged or whose personnel have been disabled
- Interior locking mechanism provides additional safety for occupants plus an emergency latch release feature allows disengagement of the combat locks from the outside and permits opening COMMANDoor on a vehicle that is damaged or whose personnel have been disabled

AVAILABLE:

- Configurable to work with electric, pneumatic or electrichydraulic actuators
- Remote actuation via a switch that can be dash mounted or door mounted
- Right or left hand versions for side hinges doors or ramp doors
- TriMark's proven 050-0850 Heavy Duty Latch provides FMVSS 206 compliancy
- Can be purchased as separate products or complete one-piece modules ready for installation
- Customization features available—please inquire.

U.S. Patent No. 8,132,844 / 8,506,002 Other Patent Pending

Note that this product complies with FMVSS 206 when tested in accordance with SAE J839 and that this system meets FMVSS 206 loads and locking requirements and may be used in FMVSS 206 applications pending Tri*Mark* application approval. Please refer to page 151 for the complete FMVSS 206 statement.





