



GLACIER 412 OPERATION MANUAL

BREAKER: FG2-15050

MANUFACTURER: Square D, Schneider

VOLTAGE: 15kV

CURRENT: 1200A-2000A

SAFETY FIRST

Always observe safety precautions and use personal protective equipment (PPE) as required by local site procedures. This equipment is designed to further minimize exposure risk to the operator.

PARTS LIST

1. Smart Drive Bracket (SDB) - Two (2) Pieces
2. Tool Adapter Assembly (TAA)
3. Motor Drive Unit (MDU)
4. Two (2) batteries with charger
5. One (1) SR-U Handheld Controller (HHC)
6. 50' Communication Cable*
7. Polymer Storage Case



SETUP SEQUENCE

SMART DRIVE BRACKET (SDB)

1. Assure that cubicle and Smart Drive Bracket (SDB) are both labeled with GLACIER color code. Remove SDB Connecting Pin from SDB and set aside until step 3.
2. Bracket is stored in two pieces. To assemble SDB, place alignment plate of Drive Ring section into alignment plate of Switching Magnet piece.
3. Secure two pieces of SDB together using the SDB connecting pin. Ensure that pin is completely engaged before proceeding.
4. Align SDB with racking port of breaker. Once placed correctly, secure using switching magnets. Ensure that all switching magnets are engaged before proceeding.

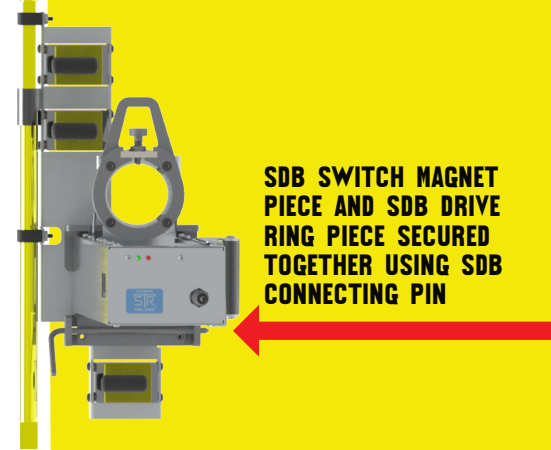
MOTOR DRIVE UNIT (MDU) &

TOOL ADAPTER ASSEMBLY (TAA)

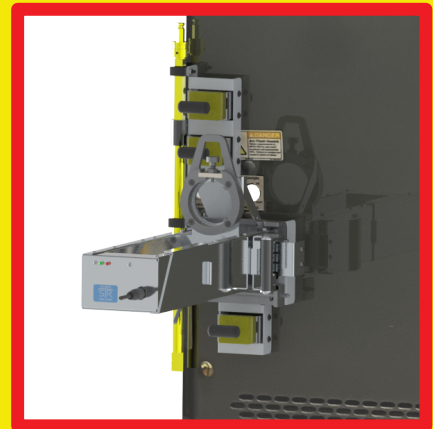
1. Using Quick Change Coupling, insert Tool Adapter Assembly (TAA) into Motor Drive Unit (MDU) and release collar. Assure that TAA is secured before proceeding.
2. Attach fully charged battery to MDU.
3. Set the locking pin on SDB to an open position and insert MDU & attached TAA into the drive rings on SDB.
4. Align and engage the MDU with drive rings. Once aligned, release locking pin to hold MDU in place. Confirm that MDU is secured before proceeding.
5. Connect SDB communication cable to port in MDU.
Note: Red line on communication cables indicates correct alignment with port.

HANDHELD CONTROLLER (HHC)

1. Connect 50' Communication Cable to second port in MDU.
2. Connect other end of 50' Communication Cable to Handheld Controller (HHC)*.
3. Move a safe distance away from the breaker.



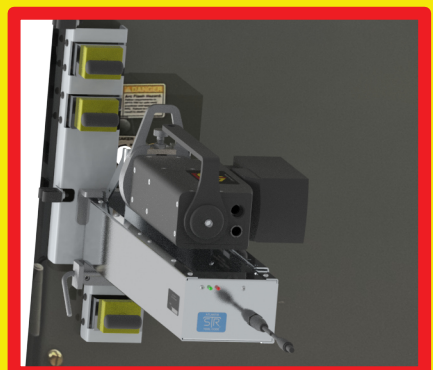
**SDB SWITCH MAGNET
PIECE AND SDB DRIVE
RING PIECE SECURED
TOGETHER USING SDB
CONNECTING PIN**



**SDB SUSPENDED FROM CUBICLE
USING SWITCHING MAGNETS**



MDU WITH ATTACHED TAA



**MDU AND ATTACHED TAA ENGAGED
WITH DRIVE RINGS AND LOCKING
PIN, READY FOR SDB AND HHC
COMMUNICATION CORDS**

**Note: Multiple cables can be used to increase safe distance from breaker. Additional cables sold separately. Contact Remote Solutions LLC for more information.*

POWER ON

1. Twist the E-Stop switch on HHC to activate the system.
2. Several screens will flash as unit powers up. Once HHC has powered up, **verify correct application screen is displayed.**

SYSTEM OPERATION

1. Follow the on-screen prompts to complete racking procedure. Navigate selections using perimeter buttons on HHC (backlit in green). “Right” and “Left” will advance through menu screens. “Up” and “Down” will toggle selections on screen.
2. Navigating HHC in this manner, select current location and desired destination of breaker. When selection is highlighted, click center button (backlit in red) to confirm selection. **This will initiate the racking process.**
3. System will perform action as selected, displaying progress on screen.
4. Upon successful operation, HHC will display a completed racking screen.

POWER DOWN & STORAGE

1. Power down the unit by pressing the E-Stop button. Remove battery from MDU.
2. Unplug power cord and HHC communication cord from SDB.
3. Remove TAA from MDU and return it to storage clip on SDB.
4. Stow 50' Communication Cable, HHC, MDU, and batteries in storage case.
5. Remove SDB from cubicle by releasing switching magnets.
6. Remove SDB Connecting Pin and separate SDB into two parts. Return pin to SDB for storage.
7. Store both halves of SDB in provided polymer case.

BATTERY REQUIREMENT

Note: System will ask to verify battery level. Check battery level is at 4 bars before attempting to rack. If racking multiple breakers, please verify battery level between each racking attempt.



CARE & MAINTENANCE

To ensure longevity of the Portable Kit and SDB, store the tools in the provided polymer case in a dry, temperate environment. The tools are weather resistant but should be used with care in rain and snow.

Remote Solutions reserves the right to change or update product or documentation without prior notice.

ERROR RECOVERY

If a problem occurs, programmed recoveries will happen automatically and the system will attempt to recover the breaker to a known position.

When racking in/out, if an obstruction or mechanism failure occurs, the system will attempt to recover the breaker to a safe position. Actions will be displayed on HHC with an asterisk (*) in front of them. When the system has completed recovery operations, HHC will display current expected location of the breaker. Note the expected location and approach the breaker with caution. Determine cause of the failure and remedy the situation prior to attempting additional remote racking.

NOTE: Attempting to stop or shutting down the system mid-process once it has started is not recommended, as this will leave the breaker in an unknown position. The Remote Racking System will only operate from known positions.



EMERGENCY STOP

The red E-Stop button on the HHC serves as both the power and Emergency Stop button. If an E-stop is initiated, the system will shut down. Operator must then manually recover the breaker to a known position. Follow all safety procedures and wear appropriate PPE when recovering a breaker manually.

For any questions, concerns, information, or missing/replacement parts, contact Remote Solutions below or follow the QR link to our website.



SR **SAFE-T-RACK**
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