

Floor-Concealed Glass-Door Closer Replacement JHA

Worked instructional example

Work and worksite

A qualified door-service crew will replace an intact sealed dormakaba BTS80 floor closer in its accepted existing case at a ground-level glazed aluminum entrance. The matching center-hung A package governs retention and reinstallation. The leaf moves to independently accepted support before exchange and stays controlled through function checks. This fictional example contains planned controls, without inspection findings or authorization.

- The actual entrance, closer function, spindle, pivot and bottom-arm package are identified. Manufacturer-accepted removal and independent-support arrangements for this leaf are supplied before work. Installation diagrams alone do not establish a safe removal method.
- Current dormakaba support links older BTS80 instructions 08076346, dated 8/96, and A-package instructions 08076341, dated 1/97. Verify applicability and resolve current product or package differences with the manufacturer; do not interchange adjustment instructions between variants.
- Glass repair 238150-28 and glass-door installation 238150-10 are partial connections: sealed closer exchange in a retained accepted case only. New cement cases, frameless patch-fitted doors, spring/hydraulic-body opening, electrical hold-open units, fire-door alterations, glazing replacement and structural frame repair are excluded.

Questions before work

- Which exact door, closer, spindle and pivot package is accepted, and who resolves a mismatch before removal?
- What independently accepted equipment and method will support the glazed leaf before either pivot or closer engagement changes?
- Who controls entrance closure and verifies retained-leaf engagement and required operating performance before reopening?

Task Hazard Control

1 Accept the exact replacement and support method

Hazard: An incorrect closer or unverified pivot package can release the heavy glazed leaf or produce an entrance that will not operate safely.

Control: Service lead identifies leaf, frame, closer function, case, spindle and package against current accepted service information. Obtain manufacturer-accepted leaf removal and support instructions rather than reversing an installation drawing. Resolve suitability, retained-part condition and any conflicting manual before moving the leaf; no sealed-body dismantling is included.

Verification: Lead records matched parts and accepted removal/support method.

Reasoning: Compatibility must cover the complete retained doorway.

2 Close the entrance and establish independent support

Hazard: A pedestrian, unrestrained door or unsuitable handling device can enter a glass fall or crushing path when the crew changes leaf retention.

Control: Coordinate the temporary entrance closure and alternate access with the building lead. Separate both swing sides and the case opening from public movement. Stage the approved handling device and protected rack within accepted loads and clearances. Assign one signal lead and verify independent leaf support before any pivot engagement is released.

Verification: Lead verifies closure, handling readiness and independent support.

Reasoning: Support must precede changes to door retention.

3 Remove and restrain the retained glazed leaf

Hazard: Changing upper-pivot or bottom engagement while the leaf is unsupported can tip it suddenly and expose hands or nearby people to severe cuts.

Control: Crew follows the supplied manufacturer-accepted removal sequence with the identified support equipment carrying the leaf. Maintain control at every retention transition and keep hands outside pinch and edge paths. Transfer the intact leaf to its accepted restrained support. Stop for unexpected binding, damaged glass, inadequate engagement or any method that differs from the accepted package.

Verification: Lead verifies restrained leaf and safe case access.

Reasoning: A stationary door can still be free to fall.

Complete the work and hand over

4 Exchange the sealed closer in the retained case

Hazard: Case defects, a missing spindle washer or incorrect alignment can leave the replacement unstable or prevent reliable leaf retention.

Control: With the leaf independently restrained, expose the case through the actual service instructions and accept its condition. Exchange the complete sealed unit under the existing-installation branch. Fit the identified spindle and required washer, locate its center correctly for the pivot, and complete the specified fastening. Refer case defects or uncertain components; do not open the closer body.

Verification: Lead verifies accepted case, washer, alignment and fastening.

Reasoning: The exchange must preserve accepted bearing and pivot geometry.

5 Reinstall with support through retention acceptance

Hazard: Releasing handling support before bottom-arm and top-pivot engagement is complete can allow the glazed leaf to drop or twist into the crew.

Control: Use the matching A-package reinstallation instructions and the independently accepted handling plan. Keep support until the specified bottom engagement, top-pivot engagement, bearing position and fastenings are verified. Check actual clearances and level without forcing the leaf or substituting parts. Communicate the retention release before withdrawing support; maintain entrance separation.

Verification: Lead checks full retention before handling support ends.

Reasoning: Handling support ends only after full door retention.

6 Check controlled movement and hand over service status

Hazard: Uncontrolled closing, an unprotected floor case or an unrecorded defect can injure the next user even when the door appears reinstalled.

Control: From protected positions, complete the actual model's adjustment and project-required operating checks with the swing path clear. Do not apply another variant's valve directions or open sealed internals. Install the specified cover or threshold without fastening it to the adjustable closer body. Record unresolved performance, support or access issues and retain closure until the responsible lead accepts reopening.

Verification: Receiving lead accepts operating findings and entrance restrictions.

Reasoning: Function checks and access acceptance release the entrance.

Pause and reassess

- Closer function, spindle, pivot package, leaf condition or retained case differs from the accepted replacement plan.
- Independent handling support, public separation, communication or accepted removal/reinstallation method cannot be maintained.
- Binding, glass damage, incomplete pivot engagement or unacceptable closing/clearance findings requires a protected hold and technical resolution.

Improve the controls

Needs improvement: It is a BTS80, so any BTS80 instruction will do.

More useful: Lead matches the actual leaf, A package, closer variant and accepted service documents; inconsistent directions are resolved before any retention changes.

Needs improvement: A coworker can hold the door while the closer is changed.

More useful: Approved independent support carries and restrains the leaf through removal, protected storage and full reinstallation-retention acceptance.

Decisions that change the analysis

What if only the older installation diagrams are available?

They can identify applicable parts and reinstallation checks, but they do not supply a manufacturer-accepted leaf removal and support plan. Hold service until that method and its equipment are provided for the actual glazed leaf. Do not invent a reverse sequence, pry against glass or treat a person's hands as the missing support. Resolve contradictory variant instructions with the manufacturer.

What must the crew record for actual use?

Record leaf/closer, case, spindle and package identities, document dates and manufacturer clarifications, accepted removal/support method and entrance closure. Add support transitions, washer/retention, clearances, operating results, defects and reopening authority. Identify actual checkers and dispositions; this example supplies no service findings or doorway release.

Training needs

- System-specific service instruction for the identified BTS80 and center-hung A package, including the accepted leaf removal/support route, sealed-unit exchange, spindle retention and manufacturer-controlled adjustment.
- Team practice in entrance closure, independent leaf support, pinch-zone exclusion, controlled reinstallation and communication, with authority to hold defects and preserve alternate egress arrangements.

Confirm applicable qualifications and actual training evidence for the people assigned. Related toolbox talks support discussion; they do not establish competence.

References and adaptation

dormakaba BTS80 support index, current linked templates and instructions

<https://dhwsupport.dormakaba.com/hc/en-us/articles/360046705034-BTS80-Series-Templates-and-Instructions>

BTS80/BTS80F instructions 08076346, dated August 1996, existing-installation replacement branch

https://dhwsupport.dormakaba.com/hc/article_attachments/360068131254

BTS A/G center-hung package instructions 08076341, dated January 1997, applicable package reinstallation

https://dhwsupport.dormakaba.com/hc/article_attachments/360067850794

OSHA 1926.300, safe tool condition and protection from operating hazards

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.300>

References reviewed October 13, 2026. Use actual equipment and product instructions, project design and site requirements. This original draft supplies no fabricated inspection, signature or approval.