

ABB 3HAC032140-004

TMO 150 Lubricating Oil

ABB 3HAC032140-004 is the 10 L type designation for TMO 150 lubricating oil supplied for controlled ABB Robotics maintenance where the applicable product manual specifies this lubricant.

Job objective

Replace, install or verify the exact module without changing unrelated wiring, configuration, dimensions, weight or other stored product data.

Safe-work boundary

Identify Match the complete model and every suffix or secondary code.	Isolate Apply the plant-approved electrical and process isolation procedure.
Preserve Back up configuration and photograph all connections.	Control Use ESD protection and revision-controlled documentation.

Required evidence before work

Nameplate photo; slot/rack record; connector map; project backup where applicable; fault history; approved acceptance procedure.

Evidence and release scope

- Exact identity: ABB 3HAC032140-004
- Primary evidence: ABB Robotics spare-parts page for 3HAC032140-004
- Supporting evidence: ABB product listing: TMO150 oil, ABB type designation 10L
- Purpose: support controlled identification, preparation and acceptance without transferring sibling-model data.

Readiness checklist

Exact identity	ABB 3HAC032140-004 matches the work order and physical unit
System position	Rack, slot and functional assignment are recorded
Configuration	Parameters, firmware or project data are backed up when applicable
Connections	Every cable, terminal, jumper and shield is labeled
Condition	Connector, board and packaging condition are inspected
Test plan	Expected states and acceptance evidence are agreed

Interface preparation

Container label	Complete 3HAC032140-004 and TMO 150 identity
Maintenance instruction	Defines the robot, axis or gearbox position and required quantity
Dispensing equipment	Clean, lubricant-compatible equipment reserved for the specified oil
Service documentation	Records batch identity, quantity, date and post-service inspection

Engineering questions to close

- Installed assignment: confirm the physical location and functional duty against the controlled drawing.
- Interfaces: verify every connected device, termination and selector state before work.
- Energy boundary: identify all electrical, mechanical, process or stored-energy sources.
- Return-to-service boundary: agree the expected states, tests and sign-off authority in advance.

Controlled replacement workflow

1	Confirm isolation and absence of hazardous energy
2	Compare old and replacement identities and revisions
3	Photograph and label all connections
4	Remove the existing module using ESD-safe handling
5	Inspect slot, connector, grounding and cooling path
6	Install the exact replacement without forcing connectors
7	Restore cables, jumpers and settings from the controlled record
8	Perform a final visual and continuity check before energization

STOP POINT

Do not energize if the model, slot, connector orientation, grounding, jumper state or documented system assignment is unresolved.

Configuration-control record

- Nameplate record: model, suffix, revision and label condition.
- As-found record: position, connections, settings and fault indication.

- Source record: manufacturer document title, revision and applicable section.
- As-left record: measured results, restored configuration and outstanding actions.

Staged return to service

Stage	Action	Acceptance
Stage 1	Visual inspection and isolation release	Expected controlled result
Stage 2	Apply control power under observation	Expected controlled result
Stage 3	Confirm module recognition or status	Expected controlled result
Stage 4	Verify communication and affected signal paths	Expected controlled result
Stage 5	Exercise the documented function	Expected controlled result
Stage 6	Archive measured results and as-left configuration	Expected controlled result

Product-specific acceptance focus

1 Use clean, lubricant-compatible dispensing tools to avoid contamination.	2 Drain and fill only at the plugs and robot position stated in the applicable product manual.
3 Collect removed oil in a suitable vessel and dispose of it under site environmental procedures.	4 After service, inspect plugs and seals for leakage and record the quantity added.

Acceptance evidence to capture

- Visual acceptance: correct identity, secure mounting, intact connector or container condition.
- Functional acceptance: expected sequence, status, signal or service result is demonstrated.
- Protection acceptance: alarms, interlocks and fail-state response are confirmed.
- Documentation acceptance: evidence is dated, attributable and stored with the maintenance record.

Fault isolation and final record

1	Unexpected state: stop and capture evidence
2	Recheck identity, power, slot and connectors
3	Compare configuration and revision records
4	Test surrounding system before condemning the module
5	Restore a safe state and document the outcome

Apter Power handover record

Model identity	Keep the complete ABB model code and every suffix in purchasing, installation and acceptance records.
Verification boundary	Confirm the physical nameplate, installed position and revision-controlled project documents before field work.
Apter Power support	Use the contact details and Apter Power website links in this document for product and sourcing support.

Related Apter Power references	Scope note
ABB 3HAC028017-003 gearbox with motor	Portfolio reference only; verify compatibility independently.
ABB 3HAC044361-003 robotics spare	Portfolio reference only; verify compatibility independently.
ABB Robots product catalog	Portfolio reference only; verify compatibility independently.



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