



HDD ROLLER-CONE REAMING TOOLING

Repair Inspection Record

Printable traceability, incoming condition, component replacement, dimensional verification and release record for bolt-on hole openers.

Document scope

Use with the controlled drawing and approved repair procedure. This form does not create repair limits or authorize welding, machining, heat treatment or component substitution.

Model	Drawing	OD	Overall length	Connection	Roller / nozzle reference
12 in Bolt-On Hole Opener	D260907B-1	304.8 mm	1000 mm	2-7/8 IF BOX, both ends	4 replaceable roller-cone assemblies shown; 6 nozzles (4 front + 2 back)
14 in Bolt-On Hole Opener	D260902-B2	355.6 mm	1118 mm	3-1/2 IF BOX, both ends	4 replaceable roller-cone assemblies shown; 6 nozzles (4 front + 2 back)
16 in Millteeth Hole Opener	D260701B-2	406.4 mm	1250 mm	6-5/8 FH BOX (upper) / 6-5/8 FH PIN (lower)	4 milled-tooth roller cones; drawing identifies IADC 327; 6 NPT-thread nozzles (4 front + 2 rear)
32 in Bolt-On TCI Hole Opener	D260428B-1	812.8 mm	1880 mm	4-1/2 REG BOX, both ends	7 x 12MH-3R replaceable roller-bit assemblies; No nozzle count or size stated on drawing

Verified facts and project-controlled inputs

Verified from supplied drawings	Must be confirmed for the project
Model, drawing/date/revision, outside diameter, overall length, connection, shown roller arrangement, identified nozzle arrangement and hardfacing notes.	Formation suitability, actual mass, lift plan, makeup procedure, rotation, torque, pullback, thrust, flow, pressure, staging and acceptance limits.

Four-step controlled use

1 Identify	2 Match	3 Inspect	4 Approve
Confirm model and drawing.	Check bore, rig and connection.	Verify delivered configuration.	Release under the project plan.

Controlled-use notice: Drawing fields for weight are blank. Do not infer weight or universal operating limits from nominal diameter, connection or drawing scale.



A. Identification and incoming condition

Customer / project	
Inspection date / location	
Inspector	
Model / nominal size	
Drawing / revision	
Serial / batch reference	
Bore interval / operating hours	
Reason for inspection	

Select model

☐ 12 in Bolt-On Hole Opener D260907B-1	2-7/8 IF BOX, both ends
☐ 14 in Bolt-On Hole Opener D260902-B2	3-1/2 IF BOX, both ends
☐ 16 in Millteeth Hole Opener D260701B-2	6-5/8 FH BOX (upper) / 6-5/8 FH PIN (lower)
☐ 32 in Bolt-On TCI Hole Opener D260428B-1	4-1/2 REG BOX, both ends

Incoming condition checklist

- ☐ Identification and traceability legible and consistent. Status: _____ Ref.: _____
- ☐ Tool cleaned sufficiently for inspection. Status: _____ Ref.: _____
- ☐ Overall, front, rear and side photographs recorded. Status: _____ Ref.: _____
- ☐ Abnormal event and operating history attached. Status: _____ Ref.: _____
- ☐ Tool quarantined and protected against unintended use. Status: _____ Ref.: _____
- ☐ Actual mass and safe support/lift arrangement verified. Status: _____ Ref.: _____

B. Roller/bit position inspection

Number positions consistently in the direction defined by the repair procedure. For the 32-inch model, record all seven 12MH-3R positions; add an attachment if needed.

Position	Roller/bit ID	Rotation / play	Teeth or inserts	Mount / fastener / retention	Disposition
1					
2					
3					
4					
5					
6					
7					



Observed damage and likely cause

Wear pattern / locations	
Missing or damaged components	
Related operating event / formation	

C. Body, hydraulics and connection inspection

Body and hardfacing

- [] Body straightness/shape visually checked against controlled criteria. Status: _____ Notes: _____
- [] No visible crack, deformation, washout or unauthorized weld/repair. Status: _____ Notes: _____
- [] Hardfacing and wear surfaces inspected by location. Status: _____ Notes: _____
- [] Weld areas and mounting blocks inspected under the approved method. Status: _____ Notes: _____

Hydraulics

- [] Nozzle count/arrangement compared with the drawing or approved hydraulic plan. Status: _____ Notes: _____
- [] Nozzles, threads and retention inspected where applicable. Status: _____ Notes: _____
- [] Fluid passages clean and checked for erosion, blockage or damage. Status: _____ Notes: _____

Connections

- [] Upper and lower connection type verified. Status: _____ Notes: _____
- [] Threads checked for galling, cross-threading, corrosion and impact. Status: _____ Notes: _____
- [] Shoulders/contact surfaces checked for damage and cleanliness. Status: _____ Notes: _____
- [] Protectors available and fitted after completion. Status: _____ Notes: _____

Measurement and examination record

Feature / location	Drawing or acceptance reference	Measured / observed	Result
Outside diameter / gauge			
Overall length if required			
Roller mounting interface			
Upper connection			
Lower connection			
Nozzle / passage			
Body / weld / hardfacing			
Other			



D. Repair and replacement record

Authorization required Do not weld, machine, heat, straighten, drill, modify or substitute a roller/bit assembly without an approved repair instruction and qualified process.

Item / position	Removed ID / condition	Installed part / batch	Procedure / fastener / torque ref.	Technician / date

Required post-repair verification

- [] Correct approved part/roller designation and orientation. Status: _____
- [] Mounting faces clean and fully seated. Status: _____
- [] Approved fasteners/retention installed and documented. Status: _____
- [] Rotation, clearance/play and retention meet controlled criteria. Status: _____
- [] Body, weld and connection examinations completed as required. Status: _____
- [] Nozzles/passages clear and hydraulic configuration confirmed. Status: _____
- [] Final photographs, traceability and inspection evidence attached. Status: _____



E. Disposition and authorized release

Disposition

- ☐ ACCEPTED FOR SERVICE - all applicable controlled criteria met.
☐ CONDITIONAL RELEASE - restrictions and written engineering approval attached.
☐ FURTHER REPAIR / REVIEW REQUIRED - tool remains quarantined.
☐ REJECTED - not approved for service; final disposition record required.

Evidence package

- ☐ Incoming and final overall photographs
☐ Roller/bit-by-position photographs
☐ Mounting/fastener/retention evidence
☐ Body, weld, hardfacing and hydraulic inspection evidence
☐ Upper and lower connection photographs
☐ Measurement/examination reports
☐ Repair procedure and engineering authorization
☐ Replacement-part traceability

Release record

Final disposition reference	
Service restrictions	
Inspector / signature / date	
Repair reviewer / signature / date	
Authorized release / signature / date	

Nonconformance / follow-up

Item	Condition	Required action / authority	Close-out

Release control	A completed record is not approval by itself. Release requires the applicable acceptance criteria and an authorized signature.
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