



SI M24 01 18
Automatic Transmission

February 2018
Technical Service

AISIN AUTOMATIC TRANSMISSION: RIGHT SIDE OUTPUT SHAFT SEAL REPLACEMENT

MODEL

R55 Cooper Clubman	R55 Cooper S Clubman	R55 Cooper S Clubman JCW	R56 Cooper
R56 Cooper S	R56 Cooper S JCW	R57 Cooper Convertible	R57 Cooper S Convertible
R57 Cooper S Convertible JCW	R58 Cooper Coupe	R58 Cooper Coupe	R58 Cooper S Coupe
R58 Cooper S Coupe JCW	R59 Cooper Roadster	R59 Cooper S Roadster	R59 Cooper S Roadster JCW
R60 Cooper Countryman	R60 Cooper S Countryman	R60 Cooper S Countryman ALL4	R60 Cooper S Countryman JCW
R61 Cooper Paceman	R61 Cooper S Paceman	R61 Cooper S Paceman ALL4	R61 Cooper S Paceman JCW

INFORMATION

A new repair instruction and procedure for replacing the automatic transmission right side output shaft seal, part number 24 27 7 560 915, will soon be available.

The current ISTA/D repair instruction is incorrect.

When the ISTA/D repair instructions are corrected, this bulletin will be updated.

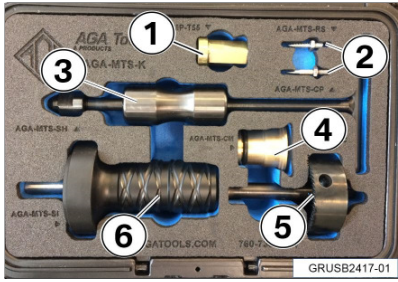
PROCEDURE

The attached updated repair procedure incorporates the use of the newly available Repair kit (seal removal and installation tool), part number **83 30 2 452 307**, that is shown below.

The new FRU labor time allowances for performing this repair using the updated repair procedure are:

Labor Operation:	Labor Allowance:	Description:
24 21 230	19 FRU	Replacing the rotary mechanical seal, right (output shaft seal) on differential gearbox (new procedure) (Main work)
Or:		
24 21 730	18 FRU	Replacing the rotary mechanical seal, right (output shaft seal) on differential gearbox (new procedure) (Plus work)

Note: The FRU time allowances for labor operation 24 21 230 or 24 21 730 will be updated as shown above and become affective with the release of the February/2018 KSD2.

	<p>Repair (tool) kit contents:</p> <ol style="list-style-type: none"> 1. Plug socket for topping up the transmission fluid 2. Pierce pin and screw tip 3. T-Handle Side Hammer for pulling the seal 4. Cutter Guide Bushing 5. Milling tool/cutter with arbor 6. Seal installer/seal driver <p>Refer to tool bulletin M04 01 18 or more information.</p>
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PARTS INFORMATION

Part Number	Description	Quantity
24 27 7 560 915*	Shaft seal	1
24 27 7 551 100	O-ring	1

*This shaft seal part number may have multiple uses on the transmission assembly.

Bulk Materials - Sublet

Part Number	Description	Quantity
83 22 2 220 438	ATF JWS3309 – 1L	Up to 2.0 liters

Also refer to the ETK and the applicable repair instructions for one-time use fasteners and/or component information regarding additional or replacement screws, gaskets, and seals that need to be installed and claimed.

WARRANTY INFORMATION

This service information bulletin provides technical, diagnostic and/or repair-related information.

Eligible and Covered Repairs

When used to **repair a verified defect in materials or workmanship**, this new procedure is covered under the terms of the MINI limited warranty that applies.

To submit a claim, as applicable with defect code 2400494800, please following the established and applicable warranty policy and procedures (Labor including diagnosis /Parts/Sublet: Bulk Materials) that apply to this this repair.

Only one Main operation can be claimed per repair visit and please do not claim Inclusive FRs separately.

Work time labor operation codes require individual punch times and explanations on the repair order and in the claim comments section.

SPECIAL TOOL WARRANTY AND REPLACEMENT PARTS

The Repair kit (part number 83 30 2 452 307: Seal removal and installation tool) is not covered by the BMW Special Tool Warranty.

The limited warranty is administered by All German Auto – see the details below.

The warranty period is 12 months from the date of purchase.

In the event of a warranty or service replacement part-related issue, please refer to the AGA Contact information below.

AGA Tools and Products

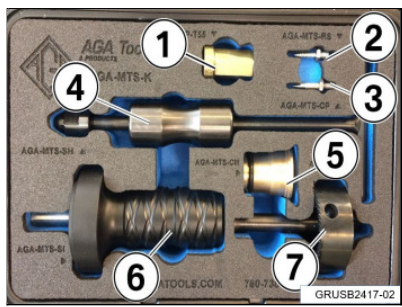
1327 Simpson Way

Escondido, CA 92029

Phone: 760-738-4084

Email: rich@agatools.com

Fax: 760-738-8013

	<table border="1"> <tr> <td>1</td> <td>AGA-MTS-TX55</td> <td>Plug Socket</td> </tr> <tr> <td>2</td> <td>AGA-MTS-CP</td> <td>Pierce Pin</td> </tr> <tr> <td>3</td> <td>AGA-MTS-RS</td> <td>Pulling Pin</td> </tr> <tr> <td>4</td> <td>AGA-MTS-SH</td> <td>T-Handle Side Hammer</td> </tr> <tr> <td>5</td> <td>AGA-MTS-CM</td> <td>Cutter Guide Bushing</td> </tr> <tr> <td>6</td> <td>AGA-MTS-SI</td> <td>Seal Driver</td> </tr> <tr> <td>7</td> <td>AGA-MTS-BC</td> <td>Cutter with Arbor</td> </tr> </table> <p>Refer to tool bulletin M04 01 18 or more information.</p>	1	AGA-MTS-TX55	Plug Socket	2	AGA-MTS-CP	Pierce Pin	3	AGA-MTS-RS	Pulling Pin	4	AGA-MTS-SH	T-Handle Side Hammer	5	AGA-MTS-CM	Cutter Guide Bushing	6	AGA-MTS-SI	Seal Driver	7	AGA-MTS-BC	Cutter with Arbor
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ATTACHMENTS

View PDF attachment [M240118 Procedure](#).

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N12, N14, N16, N18 Engines:

Remove and install the radial shaft seal for the right axle shaft with the special tool 83 30 2 452 307

Do not remove the transmission from the vehicle.

Necessary preliminary tasks:

Disconnect battery negative lead

Unscrew the nuts (1) on the right front wheel guide joint (2).

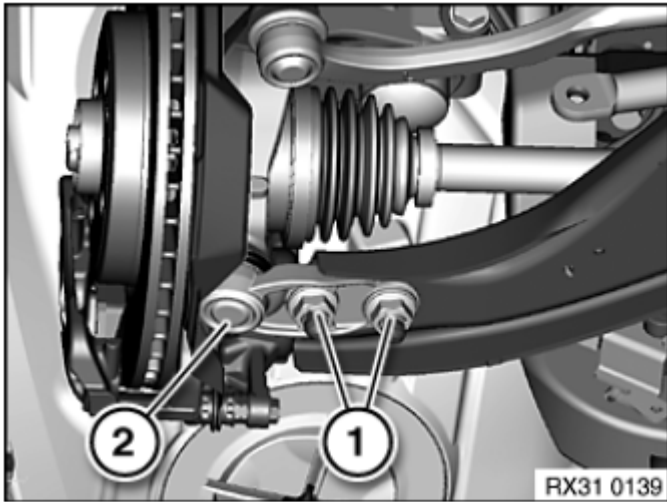
Replace the nuts (1)

Tightening torque:

Replace the nuts.

Joining torque: 50 Nm

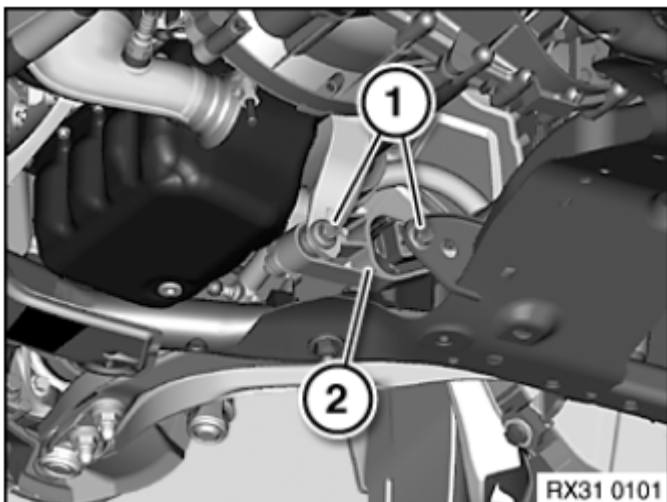
Angle of rotation: 90°

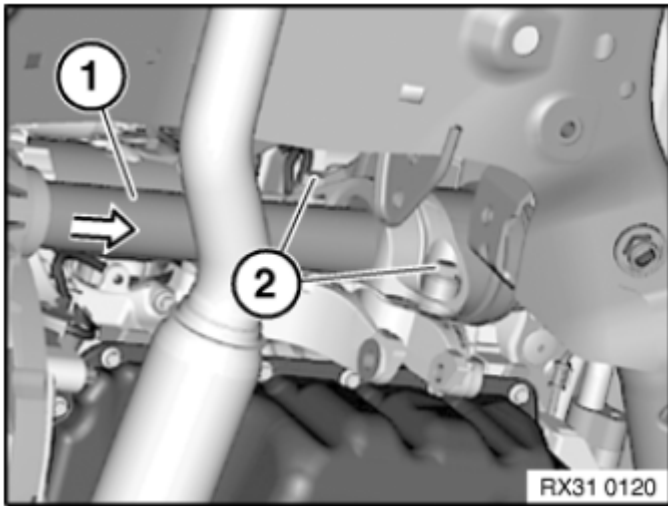


Release the screws (1) and remove the anti-roll bar link (2).

Tightening torque:

Torque: 108 Nm





Loosen the screws for the bearing support (2).

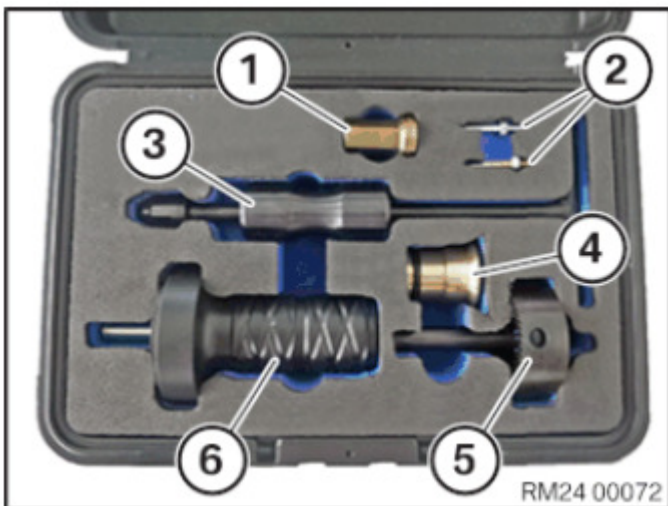
Tightening torque:

Torque: 38 Nm

Lever the output shaft (1) out of the transmission and hang it to the side.



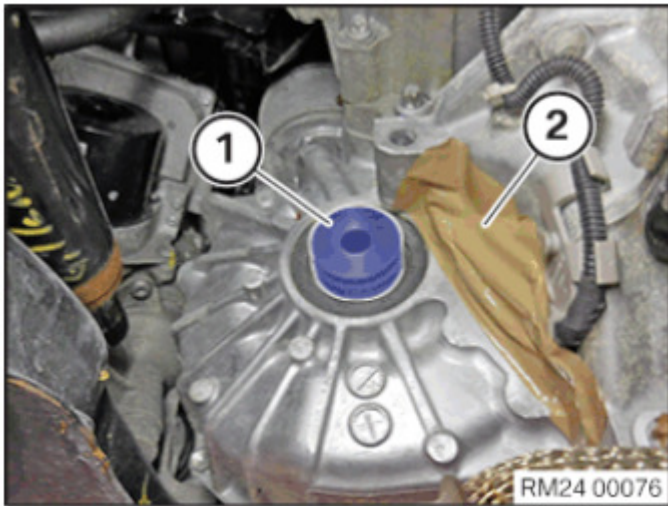
The engine crankcase material overlaps (1) with the output shaft seal.



To replace the radial shaft seal, special tool 2 452 307 (shaft seal repair kit) will be needed to remove the overlapping material of the engine crankcase.

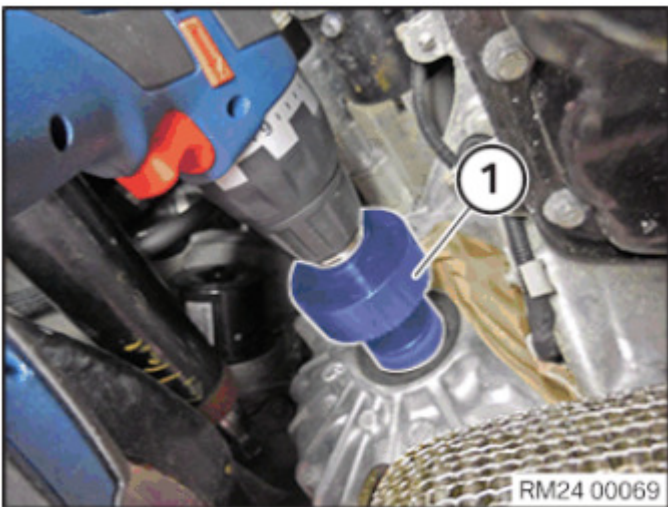
Tool kit contents:

- (1) Plug socket for topping up the transmission fluid
- (2) Centre punch and screw tip
- (3) Seal puller
- (4) Guide sleeve
- (5) Milling tool
- (6) Seal installer



Mask off the opening to the transmission bell housing with adhesive tape (2).

Install the guide sleeve (1) for the milling tool.

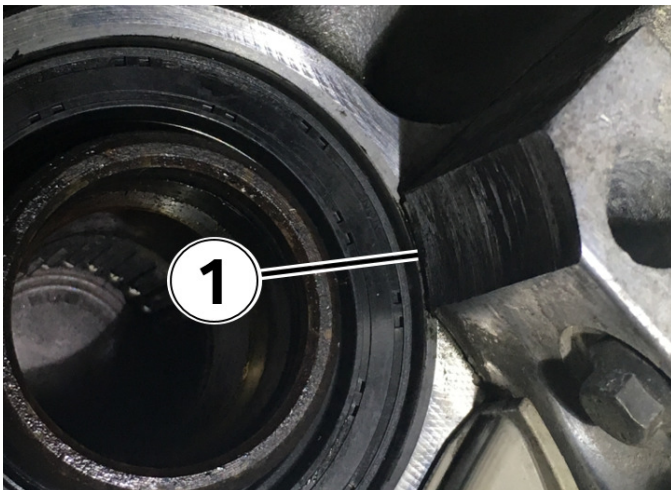


Install the milling tool into a cordless drill with an adjustable clutch.

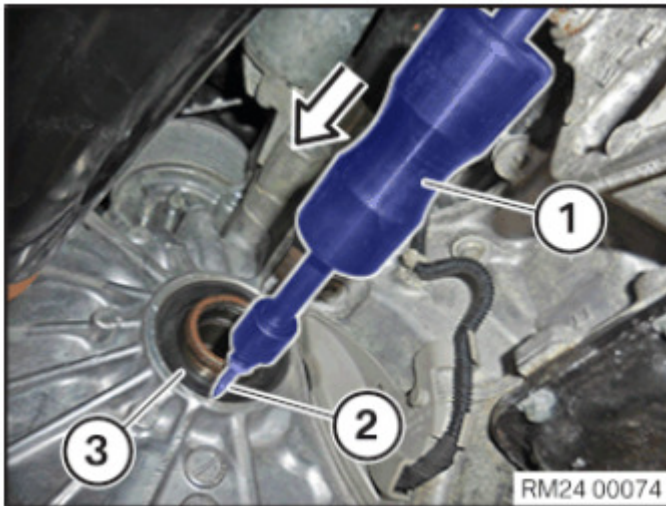
Adjust the clutch for safety.

Cut the overlapping crankcase material with the milling tool (1).

When complete remove the chips and clean the area surrounding the transmission.



When complete the crankcase material (1) will have been milled away by approximately 3.5 mm.

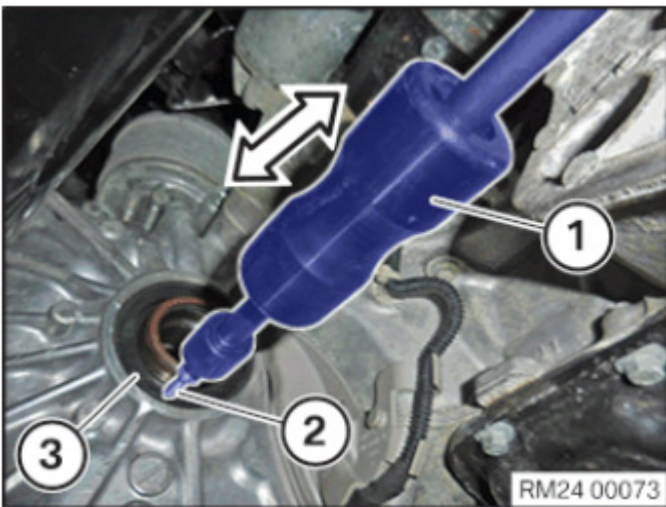


Use the screw-in center punch (2) and the seal puller (1).

Use the weight of the seal puller (1) to create a hole in the radial shaft seal (3).

Attention!

Do not use a drill, debris lost in the transmission may result in a transmission malfunction.



Use the seal puller (1) with the screw-in tip (2)

Rotate the tool tip clockwise into the radial shaft seal hole (3).

Pull the radial shaft seal (2) out with the impact weight of the puller (1).

Clean the sealing surface once removed.



Coat sealing lips of new radial shaft seal with clean transmission oil.

Drive the radial shaft seal into the transmission with the seal installer (1) and a suitable hammer.

Reassemble the vehicle and top up the automatic transmission fluid.

Refer to Repair Instruction 00 11 500 "Checking/topping up oil level in automatic transmission (AISIN)."

Use the plug socket found in the shaft seal repair kit tool number 2 452 307 for topping up the transmission fluid.