Audi dealers that wish to have their VAG1331 (MRT Tool) and VAG1332 (MRT Tool) torques wrenches calibrated can do so by contacting <a href="TRANSCAT Calibration Services">TRANSCAT Calibration Services</a> (Peter Hadeed - see below contact information). TRANSCAT service includes accredited calibration, certificate with data and an estimated 5 day turn time for the cost of \$65.00 (standard pricing subject to change) for each torque wrench. Calibration service for other "Optional" VAG/VAS torque wrenches also available at same location.

Equipment Number	Equipment Name	Interval	Calibration and Maintenance Interval	Picture
VAG1331	Stahlwille GmbH Torque Wrench	6 months	Every 6 months	
(MRT)	60-50 (Nm)	Type >	Measured Variable/Calibration Specification	
		Note >	Torque (Nm)	
			Range is 6-50 N m/5-36 ft lbs with a +/- 4% deviation of indication.	01 5
		Important Note!	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address	
			For VAG1331 calibration contact TRANSCAT Calibration Services:  Peter Hadeed - 800-828-1470 ext 3384	
			Business Development Manager Calibration and Compliance Services phadeed@transcat.com	

VAG1332	Stahlwille GmbH Torque Wrench	6 months	Every 6 months	
(MRT)	40-200 (Nm)	Type >	Measured Variable/Calibration Specification	6.
		Note >	Torque (Nm)	10 /
			Range is 40-200 Nm/30-145 ft lbs with a +/- 4% deviation of indication	
		Important Note!	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address For VAG1332 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	

Dealers need to insure they submit/enclose the following information:  1. Company Name  2. Dealer Name and Number  3. Contact (name and number)	
<ul><li>4. Bill to address</li><li>5. Ship to address</li></ul>	C 1-1
For VAG1410 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	
	following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address  For VAG1410 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services

VAG1576	Stahlwille GmbH	6 months	Dealers need to insure they submit/enclose the	
	Torque Wrench		following information:	
(Optional)	80-400 (Nm)		1. Company Name	
	, , ,		2. Dealer Name and Number	3
	Calibration		3. Contact (name and number)	
	Tolerance = +/- 4 %		4. Bill to address	
			5. Ship to address	1
	Graduations = <b>10nm</b>			
			For VAG1576 calibration contact TRANSCAT	
			Calibration Services:	
			<b>Peter Hadeed -</b> 800-828-1470 ext 3384	
			Business Development Manager	
			Calibration and Compliance Services	
			phadeed@transcat.com	

VAG1601	Stahlwille GmbH	6 months		
	Torque Wrench		Dealers need to insure they submit/enclose the	
(Optional)	150-800 (Nm)		following information:	
			1. Company Name	
	Calibration		2. Dealer Name and Number	
	Tolerance = +/- 4 %		3. Contact (name and number)	
			4. Bill to address	
	Graduations =20 nm		5. Ship to address	
			•	
			For VAG1601 calibration contact TRANSCAT	
			Calibration Services:	
			Peter Hadeed - 800-828-1470 ext 3384	
			Business Development Manager	
			Calibration and Compliance Services	
			phadeed@transcat.com	

VAG1756A	Stahlwille GmbH Torque Wrench –	6 months		
(Optional)	digital with angle.		Dealers need to insure they submit/enclose the	1
	10-200 (Nm)		following information: 1. Company Name	OP.
	Calibration		2. Dealer Name and Number	Ol. 1 mans
	Tolerance = +/- 3 %		<ul><li>3. Contact (name and number)</li><li>4. Bill to address</li></ul>	
	Graduations = N/A		5. Ship to address	
			For VAG1756A calibration contact TRANSCAT	
			Calibration Services:	
			Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager	
			Calibration and Compliance Services	
			phadeed@transcat.com	

VAS5820 (Optional)	Stahlwille GmbH Torque Wrench 20-100 (Nm)	6 months	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address For VAS5820 calibration contact TRANSCAT Calibration Services:  Peter Hadeed 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	
VAS6222 (Optional)	Stahlwille Friction Gauge 0-60 (Ncm)	6 months	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address For VAS6222 calibration contact TRANSCAT Calibration Services:  Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	

VAS6583 (Optional)	Stahlwille GmbH Torque Wrench 3-60 (Nm) Calibration Tolerance = +/- 3 %	6 months	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address For VAS6583 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	
VAG1783 (Optional)	Hazet GmbH Torque Wrench 2-10 (Nm)  Accuracy with right- hand thread ± 2% of gauge reading.  Graduation: 0.2 Nm	6 months	Dealers need to insure they submit/enclose the	

VAS6854 (Optional)	Hazet GmbH Mini Torque Wrench 5-13 (Nm) Increments: 0.2 Nm Tolerance: +/- 4%	6 months	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address For VAS6854 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	WINS BEAL S
VAS6253A (Optional)	Carl Walter GmbH & KG Torque Wrench 40-200 (Ncm) Tolerance: +/- 4%	6 months	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address For VAS6253 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	

VAS6494 (Optional)	Hazet GmbH Torque Screwdriver 1.5- 3 (Nm) Tolerance +/- 6 %	6 months	Dealers need to insure they submit/enclose the following information:  1. Company Name 2. Dealer Name and Number 3. Contact (name and number) 4. Bill to address 5. Ship to address For VAS6494 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager	
			Calibration and Compliance Services <a href="mailto:phadeed@transcat.com">phadeed@transcat.com</a>	
VAS6942 (Optional)	GWK Gerlach Digital Torque Wrench 2-400 (Nm)  Tolerance: +/- 1% (from torque scale and from turning angle)	6 months	Dealers need to insure they submit/enclose the following information:  6. Company Name 7. Dealer Name and Number 8. Contact (name and number) 9. Bill to address 10. Ship to address For VAS6942 calibration contact TRANSCAT Calibration Services: Peter Hadeed - 800-828-1470 ext 3384 Business Development Manager Calibration and Compliance Services phadeed@transcat.com	

#### Transcat NVLAP Accredited Facilities (red on legend)







#### CERTIFICATE OF CALIBRATION

Customer: Transcat Demo account

Customer Nbr: 1-999-000
PO Nbr: SAMPLE

35 VANTAGE POINT DRIVE ROCHESTER, NY 14624 Date Received: March 29, 2011

Cert/SO Nbr: 1-SAMPLE01-1-1 (\*)

Date Completed: March 29, 2011

Manufacturer: Mitutoyo Model Nbr: 293-185 Due Date: March 29, 2012

Calibrated To: Manufacturer Specification

Description: Outside Micrometer
Serial Nbr: SAMPLE 321

ID Nbr: DIMENSIONAL-NUMBER 3-LAB 2

Calibration Proc: 1-AC27434-1

Item Received: In Tolerance

Item Returned: In Tolerance

Unit Barcode: 039A0000071

For calibration data, see Supplemental Report for SO Nbr 1-SAMPLE01-1-1 (\*)

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2005. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number on this Certificate of Calibration. Any measurements on an accredited calibration not covered by that Lab's Scope are listed in the notes section of the certificate. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Transcat calibrations, as applicable, are performed in compliance with the requirements of ISO 9001:2008, ISO TS16949, ANSI/NCSL Z540-1994, and ISO 10012-1992. When specified contractually, the requirements of 10CFR21, 10CFR50 App. B and NQA-1 are also covered.

Traceability includes no less than: An unbroken chain of comparison, realization of SI units, measurement uncertainty, documentation, competence, periodic recalibration, and measurement assurance. Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST) or the National Research Council of Canada (NRC), or other recognized national measurement institutes (NMI's) or international standard bodies, or to measurable conditions created in our laboratory, or accepted fundamental and/or natural physical constants, ratio type of calibration, or by comparison to consensus standards. The specific path of traceability for the reported measurement results is maintained at the Transcat facility and is available there for review.

Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are shown on the Supplemental Report.

The results in this report relate only to the item calibrated or tested, and the determination of in or out of tolerance is specific to the model/serial no. referenced above based on the tolerances shown on the supplemental report; these tolerances are either the original equipment manufacturer's (OEM's) warranted specifications or the client's requested specifications.

The applied uncertainty is the uncertainty of the calibration process. The Test Uncertainty Ratio (TUR) is calculated as per NCSL International RP-9, section 8.2. All calibrations have been performed using processes having a TUR of 4: 1 or better, unless otherwise noted on the Supplemental Report. Uncertainties have been estimated at a 95 percent confidence level (k=2). Calibration at a 4:1 TUR (or greater) provides reasonable confidence that the instrument is within the stated tolerances. For measuring instruments, in order to consider the contribution to the uncertainty from reproducibility of the unit under test (UUT), add 0.6 of the UUT's least significant digit to the reported uncertainty. For mass calibrations: Conventional mass referenced to 8.0 g/cm<sup>3</sup>.

Any number of factors can cause a unit to drift out of tolerance at any time following its calibration. Limitations on the uses of this instrument are detailed in the OEM's operating instructions.

Notes:

Calibrated At:

35 Vantage Point Dr Rochester, NY 14624 By: Sean Frys Digitally Signed On March 29, 2011 Facility Responsible:

35 Vantage Point Dr Rochester, NY 14624 585-352-9720

Reprinted on November 02, 2011

Digitally Signed By Chris Herrmann
Date: March 29, 2011

Chris Herrmann Lab Manager



#### **SUPPLEMENTAL REPORT FOR 1-SAMPLE01-1-1**

#### CALIBRATION LAB DATA AS FOUND / AS LEFT

Service Order Nbr: 1-SAMPLE01-1-1 Mfg: Mitutoyo

Description: Outside Micrometer Model: 293-185

Serial: SAMPLE 321

Customer: Transcat Demo account

Calibrated: 3/29/2011 PO Nbr: SAMPLE

Date Due: 3/29/2012 ID Nbr: DIMENSIONAL-NUMBER 3-LAB 2

Service Type: R6 Calibration Proc: 1-AC27434-1

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	0 0 T	Uncertainty (k=2; ±)	TUR
Anvil and Spindle Flatness								
Anvil Flatness within 12 μin			Р	P	Р			
Spindle Flatness within 12 μin			P	P	P			
Length Measure								
Linearity	0.21000in	±( 0.00005 in)	0.20995	0.21005	0.21000 in			
	0.42000in	±( 0.00005 in)	0.41995	0.42005	0.42000 in			
	0.60500in	±( 0.00005 in)	0.60495	0.60505	0.60500 in			
	0.81500in	±( 0.00005 in)	0.81495	0.81505	0.81500 in			
	1.00000in	±( 0.00005 in)	0.99995	1.00005	1.00000 in			
Function Check								
Inch to mm conversion			Р	P	Р			

The reported uncertainty is the uncertainty of the calibration process. For measuring instruments, add 0.6 of the least significant digit to the reported uncertainty to obtain the measurement uncertainty of the unit under test at the specific test point.

Service Order Nbr: 1-SAMPLE01-1-1



#### **SUPPLEMENTAL REPORT FOR 1-SAMPLE01-1-1**

#### CALIBRATION LAB DATA AS FOUND / AS LEFT

Description	Setpoints	Accuracy	Low Limit High Limit	As Found / As Left O	Uncertainty (k=2; ±)	Т	TUR	
As Found and As Left Data reco	As Found and As Left Data recorded on 3/29/2011							
Temperature: 68.0°F / 20.0°C	Relative Humidit	y: 21% Temp/RH Asset:	3026					
<u>Asset</u> <u>N</u>	<u>Ianufacturer</u>	Model	Description	<u>Cal Date</u>	<u>Due Date</u>	Traceability Numbers		
3043 N	fitutoyo	516-201-26	Gage Block Set, 81 pcs.	2/14/2011	8/31/2011	547026		
K0058	an Keuren	Optical Flat	Optical Flat	12/7/2006	12/31/2011	418097		

Service Order Nbr: 1-SAMPLE01-1-1