

Mercedes-Benz StarParts Windscreen Wiper Test



Quality always prevails.

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Mercedes-Benz



Mercedes-Benz StarParts. For new business. For older models.

The growing market of vehicles in segment II+ is of particular interest to dealers thanks to the increasing scope for maintenance and repair work. With the new and competitively priced StarParts parts line, Mercedes-Benz partners and independent workshops have a broad and steadily growing product portfolio at their disposal, which opens up the possibility of being even more successful in this lucrative segment. Mercedes-Benz StarParts are newly developed parts that are specified, tested and approved in accordance with strict Mercedes-Benz quality and safety standards. The price advantage is essentially realised through a use of alternative materials, a reduction in add-on functionality and a targeted standardisation of variants.

Tested and approved.

The independent VOLKE Group based in Wolfsburg tested Mercedes-Benz StarParts windscreen wipers from Mercedes-Benz against various competitors in an independent trial on 10.01.2018. The result showed the Mercedes-Benz StarParts windscreen wipers to be far ahead of their competition in safety-related tests. The products tested were purchased for this purpose on the open market and are all marketed to fit the Mercedes-Benz C-Class (W204, year of manufacture 2009-2012).

See the test results for yourself on the following pages.

Mercedes-Benz StarParts windscreen wipers are developed to perfectly fit their corresponding vehicle model and to ensure optimum visibility.

FACTORS CONTRIBUTING TO A POTENTIAL COST ADVANTAGE

Removal of wear indicator and three-dimensional Mercedes-Benz star.

- Decreased production costs with no reduction in wiping performance.
- Use of a printed StarParts logo.

Added adapter clip – can be used for various models.

- Fewer variants – higher quantities – lower production costs.
- Simple assembly, stable connection.

Assured quality according to Mercedes-Benz standards – intensive testing under the same conditions as for Mercedes-Benz Genuine Parts.

- Identical wear and tear performance.
- Higher quality standards than many competitors (temperature resistance, protection against environmental influences such as salt, etc., reliability at high speeds).

Sample image

Dependable. Safe. Economical.

Windscreen wipers must function reliably even at high speeds and in extreme weather conditions, therefore safety-related tests are of particular importance. However, these independent tests included an intensive competitive product comparison across all relevant areas.

SAFETY, A PRECISE FIT AND CONVENIENCE

High speeds

Tested for streaking, residual water build-up and chatter lines at driving speeds of up to 160 km/h.

Optimum wipe pattern

Quality inspection of new windscreen wipers, both at room temperature and under cold conditions.

Design and handling

Testing of user-friendliness when fitting the wipers as well as anomalies in terms of dimensions, robustness and play in the connector.

Optimum noise behaviour

Testing of noise levels for products in new condition during endurance testing and high-speed driving.

ECONOMIC EFFICIENCY

Service life

Inspection of the windscreen wipers in continuous operation (72 hours, corresponds to approx. 200,000 wiping cycles).

Blocking testing

Testing for blade functionality after a blocked wiper is suddenly freed by switching it on, after being frozen to the windscreen in cold conditions.

Impact testing

Inspection of damage to wiper blade components at sub-zero temperatures.

Heat deflection temperature testing

Inspection of the dimensional stability of the wiper blades at high temperatures (storage at 70 °C for 100 h).

Ozone testing

Testing for cracking in wiper blade rubber caused by accelerated ageing.

Windscreen wipers – Products tested

C-Class (W204, year of manufacture 2009–2012)

Mercedes-Benz StarParts
A204 820 1300 95

Bosch
AP24U

Trico
Neoform NF606

SWF
VeloFlax 119299

Valeo
HydroConnect 600SL

Champion
AFL6060E/C02

Heyner
Hybrid 600SL

Visibly convincing. Also at **high speed**.

At high speeds, excellent visibility plays a key role in terms of safety.
Mercedes-Benz StarParts windscreen wipers offer convincingly good performance.

TEST CONTENT

- The fit of the wiper blade against the curvature of the windscreen
- The aerodynamics of the entire wiper blade
- Whether wiping performance is negatively impacted by airflow

TESTING CONDITIONS

- Vehicle speeds of up to 160 km/h
- Testing for streaking, water build-up and chatter lines



TEST RESULTS

good

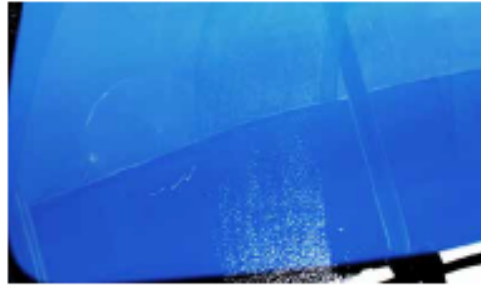
Mercedes-Benz StarParts, Bosch, Trico Neoform: Good high-speed performance, temporary streak in the outer wiping radius at 160 km/h

satisfactory

SWF VisioFlex, Valeo HydroConnect, Heyner Hybrid, Champion: Several small, temporary streaks within the wiped area at 160 km/h

Mercedes-Benz StarParts windscreen wipers. Perfect wiping results at any temperature.

Whether it's hot or cold outside, windscreen wipers must always perform perfectly. Just like StarParts wipers from Mercedes-Benz.



Large areas of residual water with Champion, even when new

TEST CONTENT

- The wiping performance of the blades when new- at room temperature and in cold conditions
- The influence of the wiper blade rubber compound on smearing and streaking at low temperatures

TESTING CONDITIONS

- Tests conducted at 23 °C and at +5 °C, 0 °C, -5 °C and -10 °C

TEST RESULTS

good



Mercedes-Benz StarParts, Bosch: Good wiping performance also at low temperatures, minor streaks visible in the outer wiping radius in some cases.

satisfactory



Trico Neoform, Valeo HydroConnect: Adequate wiping quality with various wiping errors in cold weather

unsatisfactory



SWF VisioFlex, Heyner Hybrid: Serious wiping malfunction with build-up of substantial-areas of water on the windscreen in some cases

Champion: Major build-up of residual water across the whole wiped area

Genuine Mercedes-Benz quality. Good design and handling.

Never compromise when fitting windscreen wipers.
User-friendliness is very important, but the safety of your customers is paramount.

TEST CONTENT

- Ease of wiper replacement
- Presence of a wiper blade wear indicator
- Safety risks, e.g. loosening of wiper blade or restricted visibility

TESTING CONDITIONS

- Testing the fitting and removal process
- Faults in terms of dimensions, play and robustness

TEST RESULTS

good

Mercedes-Benz StarParts, Trico Neoform, SWF VisioFlex, Valeo HydroConnect: No faults in terms of design and handling, but no wear indicator

satisfactory

Bosch, Heyner Hybrid, Champion: Design does not prevent incorrect installation on the wiper arm



It is possible to install the Bosch AP24U adapter the wrong way round (left: correct fitting, right: incorrect fitting)

Quieter than ever before. StarParts wipers are **among the quietest** on the market.

To ensure that comfort and performance are not negatively impacted while driving, the action of the windscreen wipers must not produce any noise disturbance. Here, again, you can rely on the premium quality of the StarParts line from Mercedes-Benz.

TEST CONTENT

- Rattling, squeaking or chattering

TESTING CONDITIONS

- Evaluation of the noise level of new products during endurance testing and high-speed driving

TEST RESULTS

very good

Mercedes-Benz StarParts, Trico Neoform, Champion:
No intrusive noises

good

Valeo HydroConnect: Occasional distracting noises possible at low temperatures

satisfactory

Bosch: Occasional noises briefly in dry operation

unsatisfactory

Heyner Hybrid, SWF VisioFlex: Distracting noises during different test phases

Reliable performance over full service life.

TEST CONTENT

- Wiping quality during continuous operation

TESTING CONDITIONS

- Continuous operation of the windscreen wipers for 72 hours, corresponds to the stress of approximately 200,000 wiping cycles
- Testing for streaking, water build-up and chatter lines

TEST RESULTS

good

Mercedes-Benz StarParts: Consistently good wiping performance, occasional streaks only in the outer wiping radius

satisfactory

Bosch, Trico Neoform, SWF VisioFlex: Good wiping performance at the start of the test, however loss of quality over the continued duration of the test

unsatisfactory

Valeo HydroConnect, Heyner Hybrid: Serious wiping malfunction under continuous stress such as streaks in the field of vision and water build-up on the windscreen

Champion: Considerable build-up of water across the entire wiped area, significant impairment of driver visibility

Best functionality in the blocking test.

TEST CONTENT

- Testing for blade functionality after a blocked wiper is suddenly freed by switching it on, after having been frozen to the windscreen in cold conditions.

TESTING CONDITIONS

- Wiper blades frozen to the windscreen with a fine spray at -20 °C
- Wipers activated 5 times until the heating mechanism kicks in

TEST RESULTS

very good

All tested windscreen wipers passed the test without any damage or loss of function

Test successfully passed. Very good verdict in impact test.

It is an absolute test of endurance for windscreen wipers to strike to the windscreen after de-icing in winter sub-zero temperatures. Mercedes-Benz StarParts are a safe and reliable choice.



TEST CONTENT

- Damage to wiper blade components

TESTING CONDITIONS

- Pre-conditioning of the wiper blades at -30 °C
- Test conducted at -30 °C
- 50 strikes on the windscreen from a lifted-up position at the upper turning point

TEST RESULTS

very good

Mercedes-Benz StarParts, Trico Neoform, Bosch, SWF VisioFlex, Champion: No damage or loss of function

satisfactory

Heyner Hybrid: No damage, but loss of graphite and resulting deterioration in wiping quality

unsatisfactory

Valeo HydroConnect: Damage to various wiper blade components such as wiper rubber and end caps



Valeo HydroConnect:
Cracked wiper blade lip

Very good verdict in thermal resistance test.

TEST CONTENT

- Dimensional stability of the wiper blade rubber
- Whether the wiper blade rubber sticks either to itself or to the windscreen
- Whether the blade reverts to original form for full functionality

TESTING CONDITIONS

- Wiper blade placed on a flat pane of glass with normal contact pressure
- Storage at 70 °C for 100 hours, followed by function test

TEST RESULTS

very good

Mercedes-Benz StarParts, Bosch, Heyner Hybrid:
No sticking

good

Trico Neoform: Slight sticking, wiping quality fully restored after one wiping cycle

satisfactory

SWF VisioFlex, Champion, Valeo HydroConnect:
More pronounced sticking, wiping quality fully restored after five wiping cycles

Top score in the ozone test.

TEST CONTENT

- Cracking of wiper blade rubber as the result of accelerated ageing

TESTING CONDITIONS

- Ageing of wiper blade rubber with ozone in an artificially enriched atmosphere

TEST RESULTS

very good

Mercedes-Benz StarParts, Bosch, SWF VisioFlex, Trico Neoform, Valeo HydroConnect, Heyner Hybrid, Champion: No anomalies

All test results at a glance.

The test results show that you can offer your customers the highest quality with Mercedes-Benz StarParts windscreen wipers. Don't compromise on safety and reliability – and boost your parts business for older vehicles, too.

C-Class (W204, year of manufacture 2009–2012)

Test content

| Test content | Mercedes-Benz StarParts | Bosch AP24U | Trico Neoform NF606 | SWF VstolFlex 119299 | Valeo HydroConnect 600 SL | Champlon AFL6060E/C02 | Heyner Hybrid 600SL |
|-------------------------------|-------------------------|-------------|---------------------|----------------------|---------------------------|-----------------------|---------------------|
| Test | | | | | | | |
| High-speed performance | + | + | + | 0 | 0 | 0 | 0 |
| Wipe pattern in new condition | + | + | 0 | - | 0 | - | - |
| Design and handling | + | 0 | + | + | + | 0 | 0 |
| Noise characteristics | ++ | 0 | ++ | - | + | ++ | - |
| Endurance testing | + | 0 | 0 | 0 | - | - | - |
| Blocking test | ++ | ++ | ++ | ++ | ++ | ++ | ++ |
| Impact test | ++ | ++ | ++ | ++ | - | ++ | 0 |
| Thermal resistance test | ++ | ++ | + | 0 | 0 | 0 | ++ |
| Corrosion test | - | ++ | - | ++ | ++ | - | - |
| Ozone test | ++ | ++ | ++ | ++ | ++ | ++ | ++ |
| Ranking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

++ very good + good 0 satisfactory - unsatisfactory