



Babcock - Highways England Managed Fleet

Highways England Tyre Policy

For inclusion of:

- **Traffic Officer Vehicle Fleet**
- **Incident Screen Trailer Fleet (Operational)**

Protective Marking	Commercial in Confidence
Title & Version	Highways England Tyre Policy v5 270416
Purpose	To detail requirements of fleet tyre policy
Relevant to	Highways England, Babcock Critical Services, Authorized tyre suppliers and service agents.
Author and job title	Quality Assurance Manager, Babcock Critical Services
Contact details	
Date Created	27/04/2016
Review Period and Date	Annually from 1 st October 2016 or subject to periodic fleet and standards revision

Recalls / Highways England Modifications	
Variation of service level	
Technical Information	✓

1.1 VEHICLES AFFECTED

- Traffic Officer Vehicle (TOV) fleet
- Operational Incident Screen Trailer fleet

2.0 BACKGROUND / PURPOSE

This policy has been created to provide guidance to the Highways England, Babcock and all Approved Tyre Suppliers and Service Agents, whilst carrying out maintenance or repairs of tyres fitted to the TOV and Operational Incident Screen Trailer fleets.

This tyre policy will identify current practices and where necessary an improvement to the current practise. This policy will be reviewed periodically to ensure that it remains fit for purpose and is reactive to new practices and changes to the vehicle fleet.

3.1 INSTRUCTION

3.2 Repair & Maintenance TOV:-

Previously with the Highways England TOV fleet it was acceptable to fit a choice of 6 premium brand tyres to the vehicles. This scenario led to vehicles having the potential of having a different make of tyre fitted to each position, which in turn created a large amount of mixed axles sets and dependant on tread patterns, Traffic Officer's noticed variance in driving characteristics.

Going forward this policy recommends that each TOV will be fitted with the tyres that were original fitment when the vehicle left the factory. To provide a resilience solution and to maximise fleet availability this policy accepts that each vehicle make will have an accepted resilience tyre brand. This is subject to the future availability of the tyres and supersession of the tyre models. In the first instance we should always endeavour to fit the original equipment tyre but in unforeseen circumstances the resilience brand will be allowed.

When a resilience brand tyre is fitted it will be as a temporary measure and will then be removed when the original equipment tyre next becomes available. This will be carried out free-off-charge by the allocated area tyre supplier.

This policy change will aim where possible to keep the vehicle to its original tyre specification and to reduce mixed tyre brand axle sets. In the short term it will be accepted that the current TOV fleet may have mixed tyre brand axle sets, until such time these tyres are replaced in normal maintenance occurrences.

3.3 Repair & Maintenance Incident Screen Trailer:-

The Highways England Incident Screen Trailer Fleet is fitted with original equipment tyres which are not of a premium brand (Maxmiler). Following recommissioning of the operational fleet it was necessary to replace an amount of wheels and these have a comparable branded tyre fitted (Trailermaxx).

This policy recommends that since the Maxmiler tyre was considered acceptable by the manufacturer as original equipment that this brand is acceptable. To provide a resilience solution and to maximise fleet availability this policy accepts that the trailer fleet will have an accepted resilience tyre brand (Trailermaxx). This is subject to the availability of the tyres and supersession of the tyre models. In the first instance we should always endeavour to fit the original equipment tyre brand (Maxmiler) but in unforeseen circumstances the resilience brand (Trailermaxx) will be allowed.

When a resilience brand tyre is fitted it will be as a temporary measure and will then be removed when the original equipment tyre next becomes available. This will be carried out free-off-charge by the allocated area tyre supplier.

The trailer tyres will be visually inspected and tyre pressures checked by Highways England staff weekly and furthermore by Babcock during scheduled service events. Any tyre defects found during these events should be reported to the Babcock Managed Service Centre (MSC) for rectification.

This policy change will aim where possible to keep the trailer to its original tyre specification and to reduce mixed tyre brand axle sets.

In the short term it will be accepted that the current Incident Screen Trailer fleet may have mixed axle sets, until such time these tyres are replaced in normal maintenance occurrences or during the scheduled events when these tyres are either repositioned on to the rear axle only or where possible limited to the spare position.

The tyres fitted to the Incident Screen Trailer fleet have no legal maximum tyre life. The trailers have a weekly check and six monthly maintenance regimes in place and any tyre defects found during these occurrences should be reported to the Babcock MSC for rectification at that time.

3.4 Tyre Recommendations:-

The vehicles listed below must only be fitted with the original equipment tyres (O) or the resilience tyre brand (R) in unforeseen circumstances. When a resilience brand tyre is fitted it will be as a temporary measure and will then be removed when the original equipment tyre next becomes available. This will be carried out free-off-charge by the allocated area tyre supplier.

Land Rover Discovery SD4	(O) Goodyear Wrangler	255/55 R19 111V
	(R) Pirelli Scorpion Zero	255/55 R19 111V
Mitsubishi Shogun	(O) Dunlop Grandtrek AT20	265/60 R18 110H
	(R) Bridgestone Dueler H/T	265/60 R18 110H
Mercedes Vito 116 Dualiner	(O) Continental Winter Contact	205/65 R16C 107/105T
	(R) Dunlop Econo Drive	205/65 R16C 107/105T
VW Touareg	(O) Bridgestone Dueler	235/65 R17 108V
	(R) Dunlop Grandtrek PT4000	235/65 R17 108V
Hulco HD30 Incident Screen Trailer	(O) Maxmiler	195/50 R13C 104/101N 8PR
	(R) Trailermass	195/50 R13C 104/101N 8PR
BMW X5 (Cleartone Prototype)	(O) Goodyear Eagle LS2 run flat	255/55 R18 109H
	(R) Dunlop SP Sport 01 run flat	255/55 R18 109H
Mitsubishi Outlander PHEV (Initial 6 month trial)	(O) Toyo R37	255/55 R18 98H
	(O) Goodyear Efficientgrip SUV FP	255/55 R18 98V

All tyres being replaced should be of the same size and specification as listed above and under no circumstances should tyres of different tread patterns or tyre manufacturers be fitted to the vehicle, unless authorised in extreme cases by Highways England or Babcock.

The list above will need reviewing periodically to ensure that it is fit for purpose and should take into account tyre availability, supersession of tyre models and any changes to the TOV or Incident Screen Trailer fleets.

3.5 Tyre Husbandry:-

To ensure that the tyres fitted to the TOV and Incident Screen Trailer fleets are maintained to a consistently high standard it is important to consider the following points below. Any tyres which do not adhere to the standards below should be reported to the Babcock Managed Service Centre (MSC) who will instruct an agent to carry out a suitable repair.

- The replacement or repair of tyres to the TOV or Incident Screen Trailer Fleets should only be carried out by the Approved Tyre Supplier.
- Only original equipment tyres or a (resilience brand tyre, in unforeseen circumstances) should be fitted, in line with the requirement of sections 3.1 and 3.2.
- One-off prototype vehicles will keep stock tyres at base locations, 2 new tyres per vehicle. If used during any repair occurrence the stock level should be adjusted back to 2 tyres. If for any reason the vehicle is relocated then these tyre should also move location.
- Mixed axle sets are not an ideal situation but are allowed in unforeseen circumstances, but should be limited to rear axles only.
- Highways England minimum tread depth is 2mm.
- Babcock will instruct tyres to be replaced if found worn at 3mm or below.
- Any tyre reported to be replaced above 3mm will **not** be authorised for replacement and will be reported to the Highways England 'National Vehicles Team'.
- Spare tyre utilisation. Where a vehicle has a spare wheel with a new tyre fitted, this should be utilised within the vehicles operational life. Wherever a tyre is found to be worn to 4mm then the spare tyre should be swapped with the worn tyre position. This will then leave the vehicle with an operational spare tyre but with utilisation of a new tyre per vehicle.
- The fitment of part-worn or second-hand tyres is **not** permitted in any circumstances. With the exception of a tyre which may have been removed, repaired and stored from a Highways Agency vehicle.
- The fitment of budget or remould type tyres is **not** permitted in any circumstances.
- Any tyres found to be wearing due to 'out of tolerance' steering geometry should be reported to the Babcock MSC, who will arrange for a steering geometry check to be carried out. Both maintaining driving characteristics and extending tyre life.
- Any tyre with visible damage, such as deep cuts, bulges, penetrations to the tyre structure or the tyre wearing out of shape should be reported to the Babcock MSC. The MSC will then arrange for the tyre to be inspected by a competent person to determine if the tyre needs replacement.
- Any tyres with crazed/cracked side walls and/or distorted treads should be reported to the Babcock MSC for replacement.
- Any tyre expected to have had an impact (especially in side wall areas) should be reported to the Babcock MSC. The MSC will then arrange for the tyre to be inspected by a competent person to determine if the tyre needs replacement.
- Puncture repairs are permitted but only if repaired in accordance with British Standard BS AU 159 issued by the BMTA and limited to one repair per tyre.
- It is not a requirement for tyres to be inflated with a nitrogen only gas and as such agents are not authorised to undertake this practise.
- All tyres fitted must be inflated to manufacturer's recommendations cold-heavy laden pressures.

- Please note. 2015 onward Land Rover Discovery tyre pressures have slightly increased (psi only) due to rounding of the figures, please see revised overview section 5.1.
- When towing the Incident Screen Trailer with the Mitsubishi Shogun TOV, the vehicle tyre pressures should be adjusted to the agreed 'Towing Tyre Pressure' (cold) and then returned to the heavy laden pressures once the trailer is uncoupled.
Note: Adjusting the tyre pressure for towing is not required when using the Land Rover Discovery or VW Touareg TOV.
- When **not** in use the Incident Screen Trailer should be stowed in a level position, to ensure that the load is distributed evenly between both axle tyre sets.
- Where a "snap in" rubber valve and cap is fitted, these should be replaced on every tyre repair occurrence.
- The wheel should be dynamically balanced following every tyre repair occurrence.
- Any valve caps found missing should be reported in the vehicle log book. The missing valve caps will then be replaced on the next scheduled maintenance event.
- Sub-contractors must ensure all manufacturers' instructions are followed in relation to suspension settings / modes when lifting the vehicle.
- All wheel fixings should be inspected during all maintenance events to ensure that they are free from defects. Any defective items should **not** be reused under any circumstances and should be reported to the Babcock MSC for rectification.
- All wheel fixings must be torqued to manufacturer's specification following the refitting of any wheels. Please refer to individual manufacturer instructions.
Please note. Secondary retorquing of the wheel fixings is not required for the TOV and Incident Screen Trailers.
- When stowing spare wheels care must be taken to ensure that the wheel is fully stowed.
- Following repair any vehicle jacks or braces used should be correctly stowed inside the vehicle.
- Babcock may require agents to retain removed tyres for inspection. Babcock will inform agents within 24hrs of tyre removal if tyres are required for inspection. Agents will then need to quarantine the affected tyre which Babcock will inspect within a 2 week window.
- Health and Safety is of the utmost importance when working on behalf of Babcock on Highways England vehicles.
 - PPE appropriate to the task must be worn on any site or roadside attendance.
 - Axle stands must be utilised to support the vehicle when removing wheels.
 - Any equipment utilised must be calibrated and certificated.
 - All persons attending must be competent in carrying out the work requested and trained in safe systems of work for their environment.

- Any sub-contractor not adhering to health and safety will be asked to leave the site or location from where they are working. Any financial penalties incurred by Babcock in this situation will be presented to the supplier for compensation.
- Road side repairs - off side vehicle repairs should only be carried out if assessed to be safe by a competent person who is trained to a recognised standard. In no circumstances should an unsafe repair be undertaken. Any vehicle in an unsafe position should be reported to the Babcock MSC who will arrange recovery to a safe location.
- Following any repairs the vehicle log book should be filled out to reflect the repair carried out.

4.1 DEFECT REPORTING

4.2 Tyre attendance – Unscheduled Events:-

Any tyre defects found by the customer during an unscheduled event should be reported to the Babcock MSC.

The unscheduled event could range from a tyre needing a Rapid Response, such as a damaged tyre with a vehicle broken down at the side of the road to a tyre which is wearing near the 2mm limit and needing a Normal Response.

The following table provides guidance when the circumstances dictate a Rapid Response or Normal response, as follows:

Rapid Response Worn Tyre	Not Acceptable	There should be no reason that a tyre should wear quickly enough to attract a RR call out.
Rapid Response Punctured Tyre Vehicle at Base	Not Acceptable	Vehicle is in a safe location, RR should not be required if a vehicle is in a base location, unless there is a fleet shortage at base (VOR), in which case RR is applicable.
Normal Response Punctured Tyre or worn at Base	Acceptable	Normal response should be carried out within the requirements of the SLA.
Rapid Response Roadside	Acceptable	If a tyre is available and the vehicle is in a suitable location for Roadside attendance.
Rapid Response Recovery	Acceptable	If the vehicle is not in a suitable location for Roadside attendance then the vehicle must be recovered to a safe location.
Babcock must record details of Customer requesting a Rapid Response from a Non-Roadside location		

4.3 Tyre attendance – Scheduled Events:-

Any tyre defects found during a scheduled maintenance occurrence should be reported to the Babcock MSC.

Whilst the vehicle is in for service the service agent must report any tyre defect, including any tyres which may be worn too or below 3mm. Rectifying tyre defects during the scheduled events will help to reduce the amount of unscheduled tyre defect occurrences.

Babcock MSC will endeavour to arrange rectification of the additional tyre defects during the scheduled service events where possible.

4.4 Defect response:-

Babcock is contractually obliged to rectify tyre defects within agreed time-scales. To ensure contractual compliance Babcock expects all tyre suppliers to react within set timescales to attend tyre defects.

In addition, Babcock expects tyre suppliers to keep stock of the TOV and Incident Screen Trailer fleet tyres, except in unforeseen circumstances.

Please see the table below for defect timescales.

The timings shown below are for attendance to make a competent decision on the repair, but we will endeavor for the agent to take a new tyre wherever possible.

Punctured tyre or worn tyre at Base (normal response)	4 hours or agreed pre-booked time (professional decision on repair)	If a vehicle is in a base location a normal response will apply. If the Outstation require a more convenient time which is more than 4 hours then a pre-booked time is acceptable.
Punctured tyre or worn tyre at Base (rapid response)	90 minutes (professional decision on repair)	If a vehicle is in a base location which has a fleet shortage then a rapid response will apply.
Roadside (rapid response)	90 minutes (professional decision on repair)	If a vehicle is Roadside and in a safe location, a rapid response will be required.
Recovery (rapid response)	90 minutes (for recovery agent to attend)	If a vehicle is not in a suitable location for Roadside tyre attendance, then the vehicle must be recovered to a safe location. When the vehicle is in a safe location the tyre attendance can then be carried out.

5.1 VEHICLES

This section illustrates each TOV by manufacturer and the Incident Screen Trailer to give a visual overview of the basic tyre requirements of each vehicle type and can be used as a quick reference guide by the Highways England, Babcock and Approved Tyre Suppliers where applicable.

5.2 Overview of the Land Rover Discovery TOV:-



Tyre Size

- 255/55 R19 111V

Agreed tyres

- Original Equipment – Goodyear Wrangler
- Resilience Option – Pirelli Scorpion Zero

Pre 2015 fleet and (2015 onwards)

Tyre pressures – normal operation cold

- Front - 36psi / 2.5bar (37psi / 2.5bar)
- Rear - 42psi / 2.9bar (43psi / 2.9bar)

Tyre pressures – towing tyre pressure Incident Screen Trailer cold

Same as normal operation pressure

- Front - 36psi / 2.5bar (37psi / 2.5bar)
- Rear - 42psi / 2.9bar (43psi / 2.9bar)

Wheel fixing torque – 130-150Nm

5.3 Overview of the Mitsubishi Shogun TOV:-



Tyre Size

- 265/60 R18 110H

Agreed tyres

- Original Equipment – Dunlop Grandtrek AT20
- Resilience Option – Bridgestone Dueler H/T

Tyre pressures – normal operation (cold)

- Front - 35psi / 2.4bar
- Rear - 41psi / 2.8bar

Tyre pressures – towing tyre pressure Incident Screen Trailer (cold)

- Front - 46.4psi / 3.2bar
- Rear - 50.7psi / 3.5bar

Wheel fixing torque – 115Nm +/- 10Nm

5.4 Overview of the Mercedes Vito 116 Dualiner TOV:-**Tyre Size**

- 205/65 R16C 107/105T

Agreed tyres

- Original Equipment – Continental Winter Contact
- Resilience Option – Dunlop Econo Drive

Tyre pressures – normal operation (cold)

- Front – 44psi
- Rear – 56psi

Tyre pressures – towing tyre pressure Incident Screen Trailer (cold)

- Front – N/A
- Rear – N/A

Wheel fixing torque – 200Nm (Steel Wheels)

5.5 Overview of the VW Touareg TOV:-



Tyre Size

- 235/65 R17 108V

Agreed tyres

- Original Equipment – Bridgestone Dueler
- Resilience Option – Dunlop Grandtrek PT4000

Tyre pressures – normal operation (cold)

- Front – 36psi
- Rear – 44 psi

Tyre pressures – towing tyre pressure Incident Screen Trailer (cold)

- Front – 36psi - same as normal operation pressure.
- Rear – 44psi - same as normal operation pressure.

Wheel fixing torque – 180Nm

5.6 Overview of the BMW X5 TOV:-



Tyre Size

- 255/55 R18 109H

Agreed tyres

- Original Equipment – Goodyear Eagle LS2 run flat
- Resilience Option – Dunlop SP Sport 01 run flat

Tyre pressures – normal operation (cold)

- Front – 36psi / 2.5bar
- Rear – 44psi / 3.0bar

Tyre pressures – towing tyre pressure Incident Screen Trailer (cold)

Same as normal operation pressure

- Front – 36psi / 2.5bar
- Rear – 44psi / 3.0bar

Wheel fixing torque – 140 Nm

5.7 Overview of the Mitsubishi Outlander PHEV TOV:-



Please note: Commercial and passenger variants are the same tyre specification

Tyre Size

- 255/55 R18 98H

Agreed tyres

- Original Equipment – Toyo R37
- Resilience Option – Goodyear Efficientgrip SUV FP (V speed rating)

Tyre pressures – normal operation (cold)

- Front – 35 psi / 2.4 bar
- Rear – 41 psi / 2.8 bar

Wheel fixing torque – aligned to manufacturer's specification

5.8 Overview of the Hulco HD30 Incident Screen Trailer:-

Tyre Size 195/50 R13C 104/101N 8PR

Agreed tyres

- **Original Equipment – Maxmiler**
- **Resilience Option – Trailermaxx**

Tyre pressures – normal operation (cold)

- **Front – 85psi**
- **Rear – 85psi**

Wheel fixing torque – 120Nm

6.1 INFORMATION

6.2 Documents Replaced:-

N/A

6.3 References:-

N/A

6.4 Glossary:-

- TOV – Traffic Officer Vehicle
- MSC – Managed Service Centre
- (O) – Original equipment tyre
- (R) – Resilience tyre option
- PPE – Personal Protective Equipment
- RR – Rapid Response defect attendance
- SLA – Service Level Agreement

7.1 REPORTING

7.2 Requirements:-

All legal requirements, standards and recommendations of each tyre supplier must be complied with at all times. Any higher standard stated by the Highways England or Babcock must take preference and be applied.

7.3 Report Frequency / Time Scales:-

The reporting of Rapid Response tyre attendance occurrences – to be supplied monthly to include Reg No and reason for tyre replacement.

8.1 DISTRIBUTION