

List of Possible Vehicles Requiring External Transponders

There are certain vehicle features that may cause interior-mounted transponder performance to degrade. For the vehicle features listed below, an alternative that would facilitate continued transponder performance levels is the use of an exterior transponder.

- Metallic/insulated/heated glass
- Solar/infrared reflective glass
- Low E glass
- Automatic sensing wipers
- Night View Assist™

Additionally, there are some passenger vehicles that have windshield features that may cause interior-mounted transponder performance to degrade. It is recommended vehicle owners check their owner's manual or contact the vehicle manufacture or dealer prior to acquiring an interior-mounted transponder to determine whether their specific vehicle model has a feature listed above. The list of vehicles, shown below, have in the past been identified to have such features, or shown to have characteristics that prevent the use of an interior-mounted transponder, and thus an exterior mounted transponder would be indicated for such vehicles.

Please refer to the vehicle owner's manual, or contact the vehicle manufacturer or dealer to determine the recommended mounting location. It is recommended to mount an interior-mounted transponder in accordance with transponder manufacturer instruction only when the vehicle manufacturer-proposed location is near the top center of the windshield. If the vehicle manufacturer proposes other locations, Kapsch recommends using an exterior transponder.

There may be other features that may also cause interior-mounted transponders performance to degrade. If you believe that your transponder is not working properly, contact your tolling agency for assistance. The agency will be able to assist you to replace the transponder if it is defective, or to obtain an exterior transponder if necessary.

The following list of vehicles contains data from various sources, may not be complete or current, and is subject to change without notice. Kapsch does not warrant or guarantee the accuracy or completeness of this list. Vehicle owners should make an independent inquiry as to their specific vehicle's make and model. Entries marked "Maybe" indicate that an interior-mounted transponder may not function correctly when installed according to transponder instructions.

VEHICLE MAKE	VEHICLE MODEL	VEHICLE YEAR	ALTERNATIVE MOUNTING LOCATION?	EXT. DEVICE NEEDED?	WINDSHIELD FEATURE POSSIBILITY AFFECTING INTERIOR TRANSPONDER	ALTERNATIVE PLACEMENT
Aston Martin	Vaughish	2001-2007	No	Yes	Insulated/heated glass	
Aston Martin	Vantage	2003-2008	No	Yes	Insulated/heated glass	
Audi	A4	1995-1998	No	Yes		
Audi	A6	1998-2013	No	Yes	Pilkington Automotive Siglasol™ solar/heat reflection windshield	
Audi	A8	1998-2003	No	Yes	Pilkington Automotive Siglasol™ solar/heat reflection windshield	
Bentley	Continental (all versions)	All	No	Yes		
BMW	BMW's with automatic sensing wipers	All	No	Yes		
BMW	BMW's with optional infrared reflecting windshield	All	No	Maybe	Optional Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
BMW	128	2008-Current	No	Maybe		
BMW	All 5 Series	2004-Current	No	Maybe		
BMW	645	2004-2013	No	Maybe		
BMW	All 7 Series	1999-Current	No	Yes		
BMW	X3	2011-Current	No	Yes		
BMW	X5	1999-Current	No	Yes		
BMW	X6	2008-Current	No	Yes		
BMW	Xf	2000-2006	No	Yes		
Buick	LeSabre	1994-1999	No	Yes	Solar Control™ solar reflection windshield	
Buick	PARK AVENUE	1991-1996	No	Yes	Solar Control™ solar reflection windshield	
Buick	Rendezvous	2002-2005	No	Yes	Solar Control™ solar reflection windshield	
Buick	Roadmaster	1991-1996	No	Yes	PPG Sungate® Low E glass	
Cadillac	Catera	1997-2001	No	Yes	Solar ray	
Cadillac	Concours	1993-1998	No	Yes	Heated windshield	
Cadillac	DeVille	1989-1999	No	Yes	Heated windshield	
Cadillac	Eldorado	1992-2002	No	Yes	Heated windshield	
Cadillac	Fleetwood	1989-1996	No	Yes	Heated windshield or PPG Sungate® Low E glass	
Cadillac	SEVILLE	1992-1999	No	Yes	Heated windshield	
Cadillac	Sixty Special	1993 Only	No	Yes	Heated windshield	
Cadillac	Touring Sedan	1992-1998	No	Yes	Heated windshield	

VEHICLE MAKE	VEHICLE MODEL	VEHICLE YEAR	ALTERNATIVE MOUNTING LOCATION?	EXT. DEVICE NEEDED?	WINDSHIELD FEATURE POSSIBILITY AFFECTING INTERIOR TRANSPONDER	ALTERNATIVE PLACEMENT
Car Hauler with Overhead Rack		All	No	Yes		
Chevrolet	Astra	2006-2009	No	Yes		
Chevrolet	Caprice	1991-1996	No	Yes	PPG Sungate® Low E glass	
Chevrolet	Corvette	1990-1998	No	Yes	Heat reflective/Solar control	
Chevrolet	Impala	1993-2002	No	Yes	PPG Sungate® Low E glass	
Chevrolet	Lumina	All	No	Yes	Solar Control™ solar reflection windshield	
Chevrolet	Venture	All	No	Yes	Solar Control™ solar reflection windshield	
Ford	Crown Victoria	1987-2006	No	Yes	Insta-Clear™ windshield	
Ford	Taurus	Prior to 1995	No	Yes	Heated windshield	
Ford	Transit Connect	2011-2015	No	Yes	Heated windshield	
Jaguar	E Pace	2018-Current	Yes	Maybe	Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Jaguar	F Pace (SUV)	2017	Yes	Maybe	Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Jaguar	S-TYPE	2000-2004	No	Yes	Heated windshield	
Jaguar	VDP	1999-2004	No	Yes	Heated windshield	
Jaguar	XE	2017-Current	Yes	Maybe	Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Jaguar	XF	2010-Current	No	Yes	Heated windshield	
Jaguar	XJ SERIES	1999-2004	No	Yes	Heated windshield	
Jaguar	XK SERIES	1999-2004	No	Yes	Heated windshield	
Lamborghini	URUS	All	Maybe	Yes	Optional Heated or Heat -Reflective windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Land Rover	Discovery Sport	2015-2016	Yes	Maybe	Optional Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Land Rover	LR2	2008-2015	No	Yes	Optional Heated or Infrared reflecting windshield	
Land Rover	LR3	2004-2016	No	Yes	Optional Heated or Infrared reflecting windshield	
Land Rover	LR4	2009-2016	No	Yes	Optional Heated or Infrared reflecting windshield	
Land Rover	Range Rover with optional IR Coating	2014-Current	Yes	Maybe	Optional Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Land Rover	Range Rover Evoque	2012-Current	No	Yes	Optional Heated or Infrared reflecting windshield	
Land Rover	RR Sport	2016-Current	Yes	Maybe	Optional Heated or Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Land Rover	Range Rover	2003-2013	Yes	Maybe	Optional Heated or Infrared reflecting windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Land Rover	Range Rover Velar	2018-Current	Yes	Maybe	Optional Heated or Infrared reflecting windshield	Top of windshield in black shaded area, left of rear-view mirror post
Lincoln	Continental	1988-1994 2001-2002 2017-Current	Yes	Maybe	Insta-Clear™ windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Lincoln	Navigator	2018-Current	Yes	Maybe	Insta-Clear™ windshield	Top of windshield in black shaded area, left or right of rear-view mirror post
Lincoln	Town Car	1990-1997	No	Yes	Insta-Clear™ windshield	
Lincoln	Town Car	2001-2002	No	Yes	Insta-Clear™ windshield	
Maybach	57	All	No	Yes	Infrared reflecting windshield	
Maybach	62	All	No	Yes	Infrared reflecting windshield	
Mazda	626	1990-1997	No	Maybe	Solar Control™ solar reflection windshield	
Mazda	929	1988-1997	No	Maybe	Solar Control™ solar reflection windshield	

VEHICLE MAKE	VEHICLE MODEL	VEHICLE YEAR	ALTERNATIVE MOUNTING LOCATION?	EXT. DEVICE NEEDED?	WINDSHIELD FEATURE POSSIBILITY AFFECTING INTERIOR TRANSPONDER	ALTERNATIVE PLACEMENT
Mercedes-Benz	All models	1998-2001	Yes	Maybe		Centered below rearview mirror. Half of the tag should be in the shaded/tinted area, the other half out.
Mercedes-Benz	Mercedes models with "Night View Assist"	All	Yes	Maybe		Top of windshield, within shaded/tinted area if possible
Mercedes-Benz	Mercedes models with IR (infrared reflecting) windshield	All	Yes	Maybe		Top of windshield, within shaded/tinted area if possible
Mercedes-Benz	CL500	2002-2006	No	Yes		
Mercedes-Benz	CLS500	2006-2013	No	Yes		
Mercedes-Benz	E320	2003-2009	No	Yes		
Mercedes-Benz	E350	2010-2013	No	Yes		
Mercedes-Benz	GL class	2007-2013	No	Yes		
Mercedes-Benz	ML class	2006-2012	No	Yes		
Mercedes-Benz	R Class	2006-2012	No	Yes		
Mercedes-Benz	S Class	2001-2013	No	Yes		
Mercedes-Benz	S Coupe	2015-Current	Maybe	Yes		Centered below rearview mirror within the cut-out.
Mercedes-Benz	SL Class (except SL500 & SL600)	2003-2008	No	Yes		
Mercury	Grand Marquis	1988-1994	No	Yes	Insta-Clear™ windshield	
Mercury	Grand Marquis	2001-2002	No	Yes	Insta-Clear™ windshield	
Mercury	Sable	1986-1994	No	Maybe	Metallized windshield	
Mercury	Sable	2001-2002	No	Maybe	Metallized windshield	
Oldsmobile	Custom Cruiser	1990-1992	No	Yes	Solar Control™ solar reflection windshield	
Oldsmobile	Eighty-Eight	1994-1999	No	Yes	Solar Control™ solar reflection windshield	
Oldsmobile	LSS	1997-1999	No	Yes	Solar Control™ solar reflection windshield	
Oldsmobile	Ninety-Eight	1991-1996	No	Yes	Solar Control™ solar reflection windshield	
Oldsmobile	Silhouette	All	No	Yes	Metallized windshield	
Pontiac	Aztek	2001-2006	No	Maybe	EZ VIEW	
Pontiac	Bonneville	1992	No	Yes	Solar Control™ solar reflection windshield	
Pontiac	Bonneville	1993-1999	No	Maybe	Solar Control™ solar reflection windshield	
Pontiac	Montana	1999-2009	No	Yes	Solar Control™ solar reflection windshield	
Pontiac	Transport	Prior to 2002	No	Yes	Solar Control™ solar reflection windshield	
Porsche	Cayenne	2003-2013	No	Maybe	Solar Control™ solar reflection windshield (Optional)	
Porsche	Macan	2015-Current	No	Maybe	Optional Thermal insulated glass	
Porsche	Panamera	All	No	Yes		
Rolls-Royce	Phantom	2004-2007	No	Maybe	Infrared reflecting windshield	
Rolls-Royce	Wraith	2014-2016	No	Maybe	Infrared reflecting windshield	
Subaru	SVX	All	No	Yes		
Tesla	Model 3	All	No	Yes		
Tesla	Model S	All	No	Yes		
Tesla	Model X	All	No	Yes		
Tesla	Model Y	All	No	Yes		
Volkswagen	Rabbit	2006-2009	No	Yes		
Volvo	S80	1999-2013	No	Yes		
Volvo	XC90	2003-2013	No	Yes		