

緊急救援、事故脫困及安全技術評等

- 本項評等屬「成人保護」安全領域，分數介於-2分至2分
- 本評可分為下列三個領域

救援表單(-2分)

緊急救援

事故後脫困(-1分)

- 自動門鎖解鎖
- 車門開啟力
- 安全帶帶扣開脫力
- 電動伸縮車門把手

碰撞後科技(2分)

- 先進eCall
- 二次碰撞預煞車系統

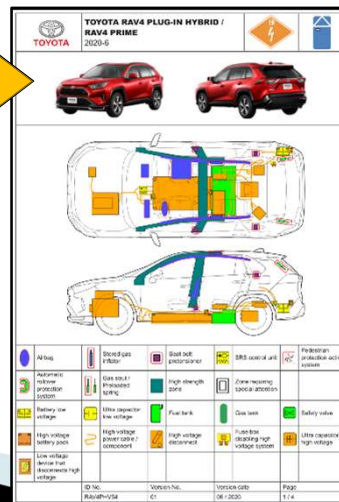
事故脫困

安全技術

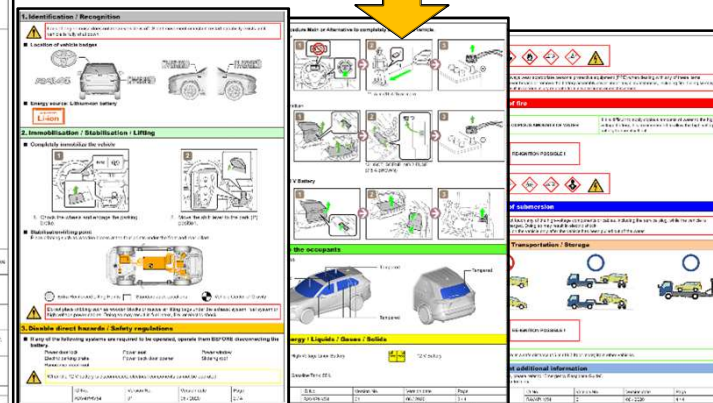
緊急救援評等

評等項目	確認內容	未符合要求
救援表單	• 具有救援表單	-2
	• 救援表單應為PDF格式，且每個車型各一個檔案	-1
	• 救援表單不應超過四張A4大小頁面	
	• 商業授權/專有出版權不得影響Euro NCAP向社會大眾免費提供救援表單之權利	
	• 救援表單至少提供中文	
	• 救援表單必須符合ISO 17840 Part 1格式，且應含括17840 Part 3之摘要	
	• 救援表單內容須正確	
總計		-2

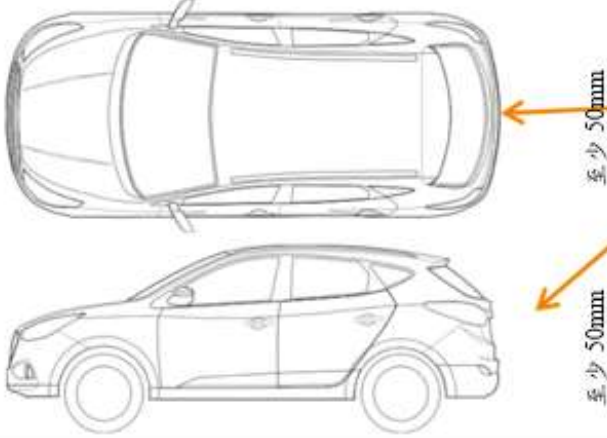
ISO 17840 Part1
救援表單



緊急應變指南摘要



救援表單範例

廠牌 標號	廠牌與車型名稱 救援表單涵蓋之車身外型 (初產年份-停產年份*) *若為底特產，請留白。	ISO第4 部分符號	右駕圖示或左駕圖示 備註：若同一張救援表單 包含左駕與右駕，請留 白。																																							
頁訂預留區 (紙本版本)																																										
																																										
	<table border="1"> <tr> <td></td> <td>安全气囊</td> <td></td> <td>壓力充氣裝置</td> <td></td> <td>安全帶預張裝置</td> <td></td> <td>SRS 控制系統</td> <td></td> <td>車輛式件人體保護系統</td> </tr> <tr> <td></td> <td>自動剎車防鎖死系統</td> <td></td> <td>液壓/氣壓剎車</td> <td></td> <td>高強度區域</td> <td></td> <td>特別警告區域</td> <td></td> <td></td> </tr> <tr> <td></td> <td>液壓蓄電池</td> <td></td> <td>液壓蓄電池</td> <td></td> <td>燃油箱</td> <td></td> <td>特殊標</td> <td></td> <td>安全鎖</td> </tr> <tr> <td></td> <td>液壓蓄電池組</td> <td></td> <td>液壓蓄電池/組件</td> <td></td> <td>液壓蓄電池組</td> <td></td> <td>液壓蓄電池組保險盒</td> <td></td> <td>液壓蓄電池組</td> </tr> </table>				安全气囊		壓力充氣裝置		安全帶預張裝置		SRS 控制系統		車輛式件人體保護系統		自動剎車防鎖死系統		液壓/氣壓剎車		高強度區域		特別警告區域				液壓蓄電池		液壓蓄電池		燃油箱		特殊標		安全鎖		液壓蓄電池組		液壓蓄電池/組件		液壓蓄電池組		液壓蓄電池組保險盒	
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補充資訊可填寫於此處，例如車型適用之國家或地區。																																										

頁首—第1部分
廠牌與車輛資訊等

頁首—第2部分
車輛透視圖(照片或模擬)

車輛俯視圖與側視圖(繪圖)
使用圖示標明相關組件/功能之位置

圖例
標準化圖示與文字

頁尾

ISO 17840 Part1 救援表單

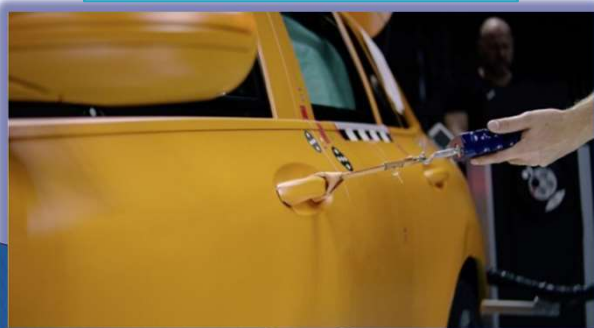
緊急應變指南摘要

1. 識別/辨認
2. 固定/穩定/舉升
3. 解除直接性危害/安全規範
4. 接近乘員途徑
5. 儲存之能源/液體/氣體/固體
6. 火災處置
7. 沉沒處置
8. 拖吊/運輸/存放
9. 重要補充資訊
10. 使用圖示說明

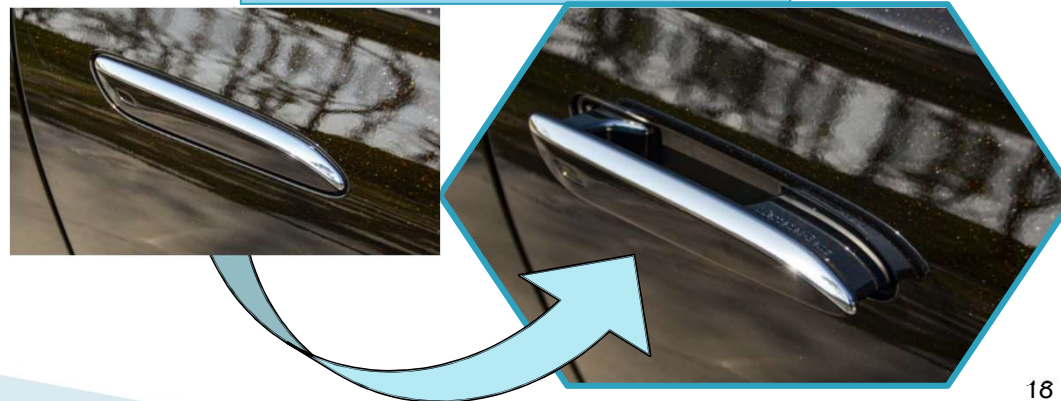
事故脫困評等

評等項目	確認內容	未符合 要求
事故後 脫困	• 配備自動門鎖之車輛，碰撞試驗後檢查每個側門(前方碰撞)/非撞擊側車門(側方碰撞)須解鎖	-1
	• 前方碰撞試驗後，車門開啟力<750N	
	• 前方碰撞試驗後，鉸鏈式側門開啟角度≥45度；滑門開啟≥500mm	
	• 配備電動伸縮車門把手之車輛，碰撞試驗後所有側門把手必須處於伸出/可開啟位置，或雖維持縮回位置但救難人員不用任何工具即能抓握車門把手	
	• 前方碰撞試驗後，安全帶帶扣開脫力≤60N	
總計		-1

車門開啟力



電動伸縮車門把手



110年10月26日臺灣新車安全評等(TNCAP)工作組第十三次會議資料

項次	TNCAP在地化評等規章	修訂項目	新增項目	頁碼
1	緊急救援、事故脫困及安全技術試驗與評等規章		◎	P.1

RESCUE, EXTRICATION & SAFETY TEST & ASSESSMENT PROTOCOL 緊急救援、事故脫困及安全技術試驗與評等規章

Euro NCAP 原文	TNCAP條文草案	說明
1 INTRODUCTION Rescue services require detailed but readily-understood information regarding the construction of individual vehicles to extract trapped occupants as quickly and safely as possible. This is becoming more pressing as vehicles become stronger (e.g. use of high strength steels or composite materials), use different sources of power (e.g. electric/hybrid, hydrogen) and are equipped with an increasing number of safety devices (e.g. airbags, pre-tensioners, active pedestrian protection bonnets). Car makers have invested in “Rescue sheets” but their timely and free-of-charge availability and dissemination across Europe is not always guaranteed. Through the application of this protocol, Euro NCAP in collaboration with the International Service of Fire & Rescue Services (CTIF) promotes the appropriate availability of ISO 17840 compliant rescue sheets and response guides for new car models. To further assist the extrication efforts of first responders, the correct functioning of automatic door locks, i.e. unlocking after a crash, is checked. Finally, incentives are given for availability of technology that supports rescue activities and helps to prevent any further collisions with oncoming traffic or roadside structures, after the initial impact. Thanks to these new requirements, Euro NCAP	<u>1 簡介</u> <u>救援服務需要個別車輛之構造詳細但容易理解資訊，以盡可能快速且安全救出受困人員。隨著車輛變得愈堅固(例如使用高強度鋼或複合材料)、使用不同動力來源(例如純電動/混合動力、氫燃料)，且配備愈多安全裝置(例如空氣囊、預負載裝置、行人保護之主動式前方車蓋(即引擎蓋))，此議題也越來越迫切。</u> <u>車輛業者已投資製作《救援表單》，但無法保證其即時、免費可用，且散布至歐洲各地。透過本規章之應用，提倡新車型符合 ISO 17840 之救援表單及應變指南，確保妥適可用。為進一步協助第一線救難人員解救工作，將檢查自動門鎖功能是否正常，亦即檢查碰撞後車門解鎖。最後，針對支持救援活動、於首次撞擊後協助避免與迎面而來之車流或路邊結構進一步碰撞之技術給予獎勵。因為新增這些要求，TNCAP 首次將「三級安全」納入評等。</u>	

Euro NCAP 原文	TNCAP條文草案	說明
includes for the first time Tertiary Safety into its assessment. The assessments to be performed in the areas of Rescue, Extrication and Safety contribute to the adult occupant protection rating. The requirements detailed in this protocol are divided into three areas: 1. Rescue: Information for First Responders – Rescue Sheet 2. Extrication: Unlocking of automatic door locking, door opening forces & seat belt unbuckling forces 3. Safety: Advanced eCall and Multi Collision Brake technology	<u>緊急救援、事故脫困及安全技術方面進行之評等有助於成人保護評等。本規章中詳列之要求分為三個領域：</u> <u>1. 緊急救援：提供第一線救難人員之資訊 - 《救援表單》</u> <u>2. 事故脫困：自動門鎖解鎖、車門開啟力及安全帶帶扣開脫力</u> <u>3. 安全技術：先進 eCall 及二次碰撞預煞車技術</u>	
2 DEFINITIONS 2.1 Rescue Sheet (ISO 17840 part 1): Operational Summary sheet for a vehicle produced for rescue services containing relevant information on vehicle hazards such as electrical systems, pyrotechnic devices, material location and properties (high strength steel etc), fuel storage location and properties etc. Rescue Sheet is the main document that first and second responders use at the scene of an accident. 2.2 Emergency Response Guide (ERG ISO 17840 part 3): a template for more in-depth emergency response information to be used in combination with the Rescue Sheet for non-conventional engine vehicle. It is generally used by first and second responders as a source of information for training on non-conventional engine vehicles. 2.3 ISO standard 17840 - Road vehicles - Information for first and second responders – Containing the following 4 parts: Rescue sheet for passenger cars and light commercial vehicles (Part 1), buses, coaches and heavy commercial vehicles (Part 2), ERG template with all the needed pictograms in ERG and in Rescue Sheet (Part 3) and a	<u>2. 名詞釋義</u> <u>2.1 救援表單 (ISO 17840 第一部分)：係指針對救援服務所製作之車輛操作摘要表，其中包含車輛風險相關資訊，例如電氣系統、火藥裝置、材料位置與屬性（高強度鋼等）、燃料儲存位置與屬性。救援表單為第一線與第二線救難人員於事故現場使用之主要文件。</u> <u>2.2 緊急應變指南 (Emergency Response Guide, ERG ISO 17840 第三部分)：針對非傳統引擎車輛，更深入之緊急應變資訊範本，與救援表單結合使用。第一線與第二線救難人員於非傳統引擎車輛之培訓時會將其作為資訊來源。</u> <u>2.3 ISO 17840 標準-道路車輛-提供第一線與第二線救難人員之資訊-包括以下四個部分：客車及輕型商用車救援表單（第一部分）；市區公車、長途客運、遊覽車及重型</u>	

Euro NCAP 原文	TNCAP條文草案	說明
standard for identification of the propulsion fuel or energy (Part 4). 2.4 Automatic Door Locking (ADL): System in the vehicle whereby the door latches automatically lock once the vehicle has reached a certain speed. They should also automatically unlock in the event of an accident, post impact. Short term deactivation for one single journey is permitted. 2.5 eCall: System fitted to a vehicle that sends an automatic message to an emergency call centre in case of a crash of the vehicle. eCall technology capable of sending advanced content, beyond what is legally specified (ECE 144), is referred to as eCall+ or Advanced eCall. 2.6 Multi Collision Brake (MCB): System fitted to a vehicle that applies the brakes to prevent or mitigate a subsequent impact when a vehicle has been involved in a collision of sufficient severity. In response to a primary collision with or without airbag deployment, information is sent to the braking system to decelerate the vehicle with the intention to bring the vehicle to a standstill. It must not be possible to deactivate the MCB by the driver. After a crash and the vehicle coming to a standstill it is allowed for the MCB to release the brakes in order to help first responders move the vehicle.	<u>商用車救援表單（第二部分）；包含 ERG 及救援表單中所有必要圖示之 ERG 範本（第三部分）；動力推進燃料或能量之識別標準（第四部分）。</u> <u>2.4 自動門鎖（Automatic Door Locking，ADL）：係指車輛達特定速度，自動讓車門上鎖之系統。系統於事故發生時(撞擊後)亦應自動解鎖。允許單次旅程短時間解除。</u> <u>2.5 eCall：係指車輛碰撞時自動向緊急救援中心傳送訊息之系統。能夠傳送超出法規規定（UN R144）之先進內容 eCall 技術，稱為 eCall+或先進 eCall。</u> <u>2.6 二次碰撞預煞車（Multi Collision Brake，MCB）：當車輛發生足夠嚴重之碰撞時，會進行煞車以避免或減輕之後再次碰撞之系統。空氣囊有無開展之主要碰撞中，資訊會傳送至煞車系統以降低車速，使車輛完全停止。駕駛不得關閉 MCB。碰撞後且車輛完全停止時，MCB 可釋放煞車，以協助第一線救難人員移動車輛。</u>	
3 SCORING SCHEME 3.1 The score achieved from the Rescue, Extrication & Safety assessment is directly applied to Adult Occupant Protection (Box1) without scaling. The score ranges from -2 points to +2 points. 3.2 A penalty will be applied, where the Rescue sheet is not available	<u>3.評分方式</u> <u>3.1 於《緊急救援、事故脫困及安全技術評等》中所獲得之分數可直接應用於《成人保護》(欄位 1)，無需調整比例。分數範圍從-2 分至+2 分。</u> <u>3.2 若未具有救援表單（-2 分）或不符合本規章 4.之規定</u>	

Euro NCAP 原文	TNCAP條文草案	說明
(-2 points) or non-compliant (-1 point) in accordance with the requirements in Chapter 4 of this protocol. No penalty in section 3.2 is a pre requisite to score points (see 3.5). 3.3 A -1 point penalty can be applied in accordance with the Extrication requirements in Chapter 5 of this protocol. 3.4 The sum of the penalties in sections 3.2 and 3.3 cannot exceed -2 points. 3.5 If no penalty in section 3.2 has been applied, 2 points can be scored: • 1pt can be scored when the vehicle is equipped with eCall+ in accordance with the requirements in Chapter 6. • 1pt can be scored when the vehicle is equipped with Multi-Collision Brake technology in accordance with the requirements in Chapter 7. Both technologies must meet the Vehicle Selection, Specification, Testing And Retesting (VSSTR) protocol fitment requirements to be awarded.	<u>(-1 分)，則給予扣分。3.2 節未被扣分為得分之前提條件（參閱 3.5 節）。</u> <u>3.3 依照本規章 5.之事故脫困要求可扣 1 分。</u> <u>3.4 3.2 節及 3.3 節之扣分總和不超過-2 分。</u> <u>3.5 若 3.2 節無扣分，則最高可獲得 2 分：</u> <u>•車輛配備符合 6.規定之 eCall+，則可獲得 1 分。</u> <u>•車輛配備符合 7.規定之 MCB 技術，則可獲得 1 分。</u> <u>兩項技術皆須符合《車輛規格、贊助、試驗及重新試驗》（Vehicle Selection, Specification, Testing And Retesting，VSSTR）規章之配置要求。</u>	
4 RESCUE SHEET 4.1 The Rescue Sheet(s) (the model variant rated by Euro NCAP as well as other variants covered by the rating) must be submitted before inspection with additional information for database (i.e. links to OEM website, photo, etc.). 4.2 These Rescue Sheets (final version after inspection) must be available to the general public for the model variant rated by Euro NCAP as well as all the other variants covered by the rating that are	<u>4.救援表單</u> <u>4.1 查驗前須先提交救援表單（TNCAP 評等之車款以及評等所涵蓋之其他車款），並檢附資料庫額外資訊（即車輛業者網站連結、照片等）。</u> <u>4.2 針對 TNCAP 評等之車款以及發布時可用評等所涵蓋之其他所有車款，其救援表單（查驗後最終版本）必須提供給社會大眾。</u>	

Euro NCAP 原文	TNCAP條文草案	說明
available at the time of publication. 4.3 Each Rescue Sheet should be provided in PDF format as a unique document i.e. one file per model variant. Each Rescue Sheet should be no more than four A4 sized pages when printed. Where commercial licences and/or exclusive publishing rights exist, these should not infringe on the rights of Euro NCAP and its members to make Rescue Sheets available at no cost to the general public. 4.4 Rescue Sheets must be supplied in at least the following languages: English, German, French and Spanish (and all languages covering the Euro NCAP Application Area/EAA from the start of 2023). 4.5 The Rescue sheet(s) must meet ISO 17840 Part 1 format (layout, order of information and pictograms) and should include a summary following ISO 17840 Part 3. The Rescue Sheet shall be tailored to each vehicle, that is, for a conventional ICE vehicle not all parts of the ISO standard need to be addressed. However for a pure EV for example then more information according to the ISO standard is required. 4.5.1 Content must be correct - Rescue Sheet will be checked during normal post-crash inspection on tested vehicles. The vehicle manufacturer will be permitted to make corrections before publication, as long as all material issued by the company is updated as well. (Copy of Rescue Sheet checklist is available as a separate document for download from the Euro NCAP website along with a Technical Bulletin offering guidance on how to create an ISO complaint Rescue Sheet - TB030 - Technical Bulletin Rescue Sheet	<u>4.3 各救援表單應以 PDF 格式個別提供，即每個車型各一個檔案。印出時，救援表不得超過四張 A4 大小頁面。若有商業授權及/或專有出版權，則這些不得影響 TNCAP 向社會大眾免費提供救援表單之權利。</u> <u>4.4 救援表單必須至少提供中文。</u> <u>4.5 救援表單必須符合 ISO 17840 第一部分之格式（排版、資訊順序及圖示），且應含括遵循 ISO 17840 第三部分之摘要。救援表單應針對各車輛量身制定，即對於傳統內燃機引擎之車輛，不需處理 ISO 標準所有部分，惟對於如純電動車輛，則須根據 ISO 標準提供更多資訊。</u> <u>4.5.1 內容必須正確—救援表單應於受驗車輛執行一般碰撞後查驗時進行檢查。發布前允許車輛業者進行修正，惟該公司發布之所有資訊亦須更新。（可從 TNCAP 網站上個別下載救援表單檢核表及如何製作符合 ISO 規範之救援表單—救援表單指引。）</u>	

Euro NCAP 原文	TNCAP條文草案	說明
Guidelines).		
5 EXTRICATION	5.事故脫困	
5.1.0 Automatic Door Locking	5.1.0 自動門鎖	
Euro NCAP understands the need for vehicles to be equipped with automatic locking doors due to such issues as security when stopped in traffic. However in the event of an accident the locked doors should automatically unlock, post impact, to allow the occupants to exit but also for entry by first responders.	TNCAP 瞭解由於車流停滯時安全問題，車輛需要配備自動門鎖。惟發生事故時，上鎖之車門應於撞擊後自動解鎖，使乘員離開也讓第一線救難人員得以進入。	
5.1.1 The Euro NCAP Secretariat will check with the OEM if their vehicle is fitted with automatic locking door latches as standard and inform the test laboratory accordingly.	5.1.1 TNCAP 執行機構將與車輛業者檢查其車輛自動門鎖是否為標準配備，並告知檢測機構。	
5.1.2 If ADL is fitted as standard and by default always ON then the doors will be locked by the lab personnel prior to ALL full-scale tests. The test lab will be informed by the OEM of the procedure to ensure the doors are manually locked for the tests.	5.1.2 若自動門鎖為標準配備且預設始終維持開啟狀態，則執行所有實車撞擊試驗前，檢測機構人員應將車門上鎖。車輛業者應告知檢測機構程序，確保手動車門上鎖以進行試驗。	
5.1.3 If ADL is not fitted as standard but fitted to the test variant then doors will be locked in the frontal MPDB test and the side oblique Pole test. The doors will be left unlocked in the frontal Full Width test and Side Barrier test. If the ADL activates by itself in the Full width frontal test that is not an issue.	5.1.3 若自動門鎖非標準配備，而安裝於受驗車款，則車門應於前方偏置撞擊移動式漸進可變形碰撞壁(MPDB)試驗及側方立柱撞擊試驗時上鎖。前方全寬撞擊試驗及側方撞擊試驗時，車門則保持未上鎖狀態。若自動門鎖於前方全寬撞擊試驗中自行致動，則不視為問題。	
5.1.4 Post-test the lab personnel will immediately check if any of the side doors in the front crash tests and any of the non-struck side doors in the side crash tests has remained locked/has not automatically unlocked. A maximum -1 point penalty will be applied if this issue is identified in at least one of the two tests where the	5.1.4 試驗後，檢測機構人員應立刻檢查前方偏置撞擊與前方全寬撞擊試驗時任何側門及側方撞擊與側方立柱撞擊試驗時任何非受撞擊側之側門是否保持上鎖狀態/未自動解鎖。撞擊前已上鎖之車門若於試驗中至少一次發現此問題，則應最高扣 1 分。此應依照 5.1.5 至 5.1.14 節之	

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doors were locked pre impact. This will follow the procedure for door opening in 5.2. 5.1.5 Door opening forces 5.1.6 The post impact door opening forces are measured after the two frontal impact tests. Only the side doors (not the tailgate for example) will be checked. 5.1.7 The unlatching/unlocking of the side doors will already have been checked as part of the automatic door locking section. 5.1.8 Using a gauge attached to the door handle pull the door handle until a maximum force of 750N is registered. The opening force should be applied perpendicular to the door, in a horizontal plane, unless this is not possible. If the door opens before the 750N level is reached note down the opening force. If the door does still not open upon reaching 750N then use tools to open the door. 5.1.9 When dealing with a sliding door the opening force of [750N] shall be applied in a direction following the vehicle centreline – door should be pulled in this direction once the door unlatching forces have been carried out (as mentioned previously the unlatching/unlocking check of the side doors will already have been checked as part of the automatic locking doors section.) 5.1.10 An open hinged door is defined as a door that is opened to an angle of at least 45° relative to the door hinge axis, allowing enough room for occupant extraction. 5.1.11 An open sliding door is defined as a door that, when opened, presents a minimum opening of at least 500mm compared to the	<u>車門開啟程序。</u> <u>5.1.5 車門開啟力</u> <u>5.1.6 前方偏置撞擊與前方全寬撞擊試驗後，測量撞擊後之車門開啟力。僅檢查側門（不檢查尾門）。</u> <u>5.1.7 側門之解門/解鎖(Unlatching/Unlocking)已包含於自動門鎖中進行檢查。</u> <u>5.1.8 使用連接於車門把手之量測儀器拉動車門把手，直到記錄最大力量至 750N。除非無法執行，否則開啟力應垂直施加於車門水平平面。若於 750N 前即開啟車門，則記錄此開啟力量。若達到 750N 時車門仍無法開啟，則使用工具開啟車門。</u> <u>5.1.9 滑門 750N 之開啟力應順著車輛中線方向施加—施加車門解門力後，應沿此方向拉門（如上所述，側門解門/解鎖於自動門鎖部分進行檢查）。</u> <u>5.1.10 開啟鉸鏈車門係指相對於車門鉸鏈軸，至少開啟 45° 角度之車門，具有足夠空間救出乘員。</u> <u>5.1.11 開啟滑門係指相較於車門關閉位置，車門最小開啟至少為 500mm，允許解救乘員。</u>	

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closed position of the door, that would allow the extrication of an occupant. 5.1.12 To summarise there are 2 stages to the door opening forces procedure: Load gauge up to 750N and then tools. 5.1.13 Penalty only applied if load exceeds 750N and tools are required to open a door. 5.1.14 A maximum -1 point penalty will be applied if this issue is identified for at least one of the side doors in at least one of the two frontal tests. 5.2 Additional requirements for Electric door handles or handles retracting into door panel and having no possibility for physical grip More and more vehicles are now coming to the market with electric retracting door handles that sink into the door panel flush/level with the door panel surface. Obviously this can create an issue in an emergency situation where first responders need to be able to use the door handle to open the door. 5.2.1 The door handle should be in the retracted / vehicle in motion position for the test. 5.2.2 The OEM should inform both the Euro NCAP Secretariat and the test laboratory if any special action is needed, for example if the engine must be running for the retracting door handles to operate as normal in the test. 5.2.3 For a retracting door handle it is permitted to apply special actions at the handle to have access to it. For example, pushing in one corner to pivot it and then hold the handle (if no tools are needed	<u>5.1.12 車門開啟力程序分為兩階段：量測儀器施加負載至最大 750N，接著使用工具。</u> <u>5.1.13 僅在負載超過 750N 且需要使用工具才能開啟車門給予扣分。</u> <u>5.1.14 若於前方偏置撞擊與前方全寬撞擊試驗中至少一次、至少一個側門有此問題，則應最高扣 1 分。</u> <u>5.2 電動車門把手或縮回門板且無法實體抓握把手之額外要求</u> <u>目前市面上越來越多電動伸縮車門把手會沉入門板/與門板表面齊平。顯然可能會在緊急情況下造成問題，因第一線救難人員必須能使用車門把手來開啟車門。</u> <u>5.2.1 試驗時，車門把手應處於縮回位置/車輛運動位置。</u> <u>5.2.2 若需要進行任何特殊動作，車輛業者應告知 TNCAP 執行機構及檢測機構，例如引擎是否必須運轉，伸縮車門把手才能於試驗中正常運作。</u> <u>5.2.3 針對縮回之車門把手，允許進行特殊動作以碰觸把手。例如推壓一角使其移動再握住把手（若完全不需要任何工具）。試驗前須與 TNCAP 執行機構討論，且必須</u>	

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at all). This needs to be discussed with Euro NCAP Secretariat prior to tests and it must be explained in the Rescue Sheet and also in the vehicle handbook.	<u>於救援表單及車主手冊中說明。</u>	
5.2.4 For the full scale tests, with the exception of the struck side doors in the side impacts, the handles of all side doors must be in the extended/ready to open (as explained in 5.2.3) position immediately after the test. It is assumed that by design the door handles will extend outwards ready for use when the SRS system deploys any airbag/detects a severe impact or the door handle remains in its retracted position but can be grabbed nevertheless by the first responder without any tool. The test laboratory personnel will note down the status of each door handle post impact.	<u>5.2.4 針對實車撞擊試驗，除了側方撞擊中受撞擊側之車門外，所有側門之把手皆須於試驗後立即處於伸出/可開啟（如 5.2.3 所述）位置。假定根據設計，當 SRS 系統開展任何空氣囊/偵測到嚴重撞擊時，車門把手會向外伸出，處於可使用狀態，或車門把手維持於縮回位置，但第一線救難人員可不用任何工具即能抓握。檢測機構人員應記錄各車門把手撞擊後之狀態。</u>	
5.2.5 A maximum penalty of -1 point will be applied where any of the side door handles listed in 5.2.4 cannot be used as normal or accessed without tools after the test.	<u>5.2.5 試驗後，若 5.2.4 所列之任何側門把手無法正常使用或須使用工具碰觸，則應最高扣 1 分。</u>	
5.2.6 It is not acceptable to direct the user/owner/rescuer of the vehicle to a cable release for the door in the luggage area for example or to have to connect a slave battery to the vehicle in order to extend the door handles. A vehicle equipped with electric door handles will not be given any special treatment compared to a vehicle with conventional door handles.	<u>5.2.6 不允許引導車輛使用者/所有人/救難人員至如行李廂區內車門之纜線釋放裝置，或必須將輔助電池連接至車輛才能伸出車門把手。配備電動車門把手車輛與傳統車門把手車輛相同，不應享有任何特殊待遇。</u>	
5.3 Seat belt buckle unlatching (defined force to open a seat belt buckle) No extrication assessment would be complete without also dealing with the belted occupants and ensuring that the seat belt itself can be	<u>5.3 安全帶帶扣解開（安全帶帶扣開脫力）</u> <u>處理繫上安全帶之乘員，確保安全帶本身可正常解開便於解救乘員於事故脫困評等中必不可少。</u>	

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unlatched as normal to allow extrication of the occupant. 5.3.1 Any position where the seat belt is used for the full scale tests shall be checked post-test once all of the door opening forces have been measured. (For both adult and child if car seatbelt is used to restrain child dummy and/or CRS in test). 5.3.2 Frontal impacts - The seat belt buckle shall completely open under a load of no more than 60N applied directly to the centre point and in the direction of the opening movement of the buckle release button. The operator shall hold the buckle with one hand ensuring the application of the force measurement in the correct orientation with the other hand to measure in the axis of the buckle opening movement.. The measurement shall provide a load versus time / displacement information of the opening behaviour to identify potential measurement artefacts, which could be derived from a second contact of the buckle release button after release with the buckle housing. In such a case the first peak of force should be interpreted as the opening force. The point of contact of the test equipment shall comply with the definition in UNECE R.16 7.8.2. It is permitted to move the adult dummy, child dummy or CRS in order to access the buckle. 5.3.3 Side impacts – The seat belt buckle shall completely open under a load of no more than the limit value applied directly to the buckle release button. As a first step in 2020, 2021 and 2022 the unlatching force value shall be monitored for all side impact vehicles. It is anticipated that for these side tests the unbuckling load limit should	<u>5.3.1 測量所有車門開啟力後，應於實車撞擊試驗後檢查有使用安全帶之任何位置。(若於試驗中使用車輛安全帶束縛兒童人偶及/或兒童保護裝置，則成人與兒童皆然)。</u> <u>5.3.2 前方偏置撞擊/前方全寬撞擊—安全帶帶扣應在不超過 60N 負載下完全開啟，施加力直接作用於中心點並沿帶扣釋放按鈕之開啟方向。操作員應一手握住帶扣，確保施力量測正確，另一手測量帶扣開啟移動軸。量測應提供開啟行為之負載相對於時間/位移資訊，以辨識潛在量測人為瑕疵，此可能是因帶扣釋放按鈕釋放後與帶扣外殼之二次接觸所產生。在此情況下，力量之首次峰值應解釋為開啟力。測試設備之接觸點應符合 UN R16 7.8.2 之定義。可移動成人人偶、兒童人偶或兒童保護裝置以碰觸帶扣。</u> <u>5.3.3 側方撞擊/側方立柱撞擊—安全帶帶扣應在不超過直接施加於帶扣釋放按鈕之限制負載下完全開啟。2020 年、2021 年及 2022 年第一階段應監控所有側方撞擊車輛之帶扣開脫力。預估這些側方撞擊試驗，帶扣解開負載限制值應介於 60N 至 100N 之間。</u>	

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be defined as a value between 60N and 100N. 5.3.4 No further steps will be taken to open the buckle or tools allowed to cut the belt, unbolt the buckle from the car etc. 5.3.5 The test laboratory should note the load at which each buckle releases. 5.3.6 A maximum penalty of -1 will be applied where any of used buckles in the frontal tests do not open when a load of up to 60N is applied.	<u>5.3.4 不會採取進一步措施解開帶扣或允許使用工具剪斷安全帶、從車上拔除帶扣等。</u> <u>5.3.5 檢測機構應記錄每個帶扣開啟之負載。</u> <u>5.3.6 當施加負載至最大 60N，前方撞擊試驗中任何使用之帶扣仍未解開，應最高扣 1 分。</u>	
6 POST-CRASH TECHNOLOGY - ADVANCED eCall 6.1 The advanced eCall system must provide the number of occupants and/or recent vehicle locations N1 and N2. The rewards shall be 0.5 points for number of occupants and 0.5 points for recent vehicle locations N1 and N2. 6.2 Functions that qualify are listed in the table below: (請參考頁末表格) 6.3 Euro NCAP will require the following data from the OEM: 1. Extract of ECE 144 approval document or (EU)2015/758 approval document 2. Copy of the MSD content (the text message/SMS as sent by the car to the PSAP)	<u>6 碰撞後技術—先進 eCall</u> <u>6.1 先進 eCall 系統必須提供乘員人數及/或最後車輛位置 N1 與 N2。乘員人數可獲得 0.5 分，最後車輛位置 N1 與 N2 可獲得 0.5 分。</u> <u>6.2 合格功能詳列於下表：</u> <u>(請參考頁末表格)</u> <u>6.3 TNCAP 要求車輛業者提供下列資料：</u> <u>1.UN R144 核准文件、(EU) 2015/758 核准文件摘要或符合性證明文件。</u> <u>2.MSD 內容副本 (車輛傳送至 PSAP(Public/ Private Safety Answering Point)之簡訊/SMS)</u>	
7. POST-CRASH TECHNOLOGY – MULTI COLLISION BRAKE 7.1 In the past, in order to qualify for a Euro NCAP “Advanced” reward OEM’s needed to provide a dossier containing data on how their Multi Collision Braking (MCB) system worked and also how it was tested by OEM to prove that it functioned correctly. This was	<u>7.碰撞後技術—二次碰撞預煞車</u> <u>7.1 車輛業者須提供二次碰撞預煞車 (MCB) 系統如何運作，以及如何試驗以證明其正常運作之資料，MCB 系統才能獲得分數。此資料必須於車輛進行完整 TNCAP 試驗及評等前提交。根據車輛業者偏好，此資料可由車廠</u>	

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done with both simulations and full scale testing. It is now the intention for the OEM to provide a similar set of data from 2020 onwards for the MCB system to be awarded points. This data must be provided before the car goes through the full Euro NCAP tests and assessment. This data can be generated in-house or by a Euro NCAP accredited laboratory, according to the preference of the OEM. 7.2 The OEM must mention in the vehicle handbook that the vehicle is equipped with an MCB system and it should explain how it works. Definitions 7.3 Multi Collision Brake (MCB): System fitted to a vehicle that applies the brakes to prevent or mitigate a subsequent impact when a vehicle has been involved in a collision of sufficient severity. In response to a primary collision with or without airbag deployment, information is sent to the braking system to decelerate the vehicle with the intention to bring the vehicle to a standstill. It must not be possible to deactivate the MCB by the driver. After a crash and the vehicle coming to a standstill it is allowed for the MCB to release the brakes in order to help first responders move the vehicle. 7.4 MCB trigger signal: Signal sent from the crash detection function to the braking system during a primary collision. Overview 7.5 The test procedure for the Multi Collision Brake technology consists of two parts: Part A) a destruction-free demonstration of braking caused by the	<u>內部自行產出，亦可由 TNCAP 認可之檢測機構產出。</u> <u>7.2 車輛業者必須於車主手冊中提及該車輛配備 MCB 系統，並應說明其運作原理。</u> <u>名詞釋義</u> <u>7.3 二次碰撞預煞車 (Multi Collision Brake, MCB): 當車輛發生足夠嚴重之碰撞時，會進行煞車以避免或減輕之後再次碰撞之系統。空氣囊有無開展之主要碰撞中，資訊會傳送至煞車系統以降低車速，使車輛完全停止。駕駛不得關閉 MCB。碰撞後且車輛完全停止時，MCB 可釋放煞車，以協助第一線救難人員移動車輛。</u> <u>7.4 MCB 觸發訊號: 於首次碰撞期間，碰撞偵測功能傳送至煞車系統之訊號。</u> <u>概覽</u> <u>7.5 二次碰撞預煞車技術之試驗程序包含兩部分:</u> <u>A 部分) MCB 觸發訊號所引發之非破壞性煞車展現，</u>	

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MCB trigger signal, Part B) documentation showing that the MCB trigger signal is sent during a Frontal crash test. Part A) Destruction-free MCB test 7.6 The vehicle under test drives in a straight line on a dry surface at a velocity of 15km/h $\pm$1km/h. 7.7 The MCB trigger signal is simulated on the vehicle network using test and development equipment of the OEM. 7.8 If declared necessary by the OEM, the acceleration pedal shall be disengaged immediately prior to simulation of the MCB trigger signal. 7.9 The brake pedal must not be engaged by the driver or other means during the entirety of the test. 7.10 The MCB test is passed if the vehicle exceeds a minimum deceleration of 3m/s² with brakes lights on. Part B) Documentation to be provided by the OEM before official Euro NCAP testing 7.11 The OEM can choose any full scale Frontal crash test where the MCB will be activated. 7.12 Video recording of the test at a ¾ angle from the rear on driver side to show the brakes lights are ON. 7.13 Data from this test that shows that the MCB trigger signal is sent on the vehicle network during the crash. Transition Period	B 部分) 文件證明前方碰撞試驗期間有傳送 MCB 觸發訊號。 A 部分) 非破壞性 MCB 試驗 7.6 受驗車輛於乾燥表面上以 15km/h $\pm$1km/h 速度直線行駛。 7.7 使用車輛業者試驗及開發設備，於車輛網絡模擬 MCB 觸發訊號。 7.8 若車輛業者宣告有必要，模擬 MCB 觸發訊號前得鬆開加速踏板。 7.9 整個試驗過程中，駕駛或其他方式皆不得踩煞車踏板。 7.10 若煞車燈點亮且車輛減速度超過 3m/s²，則通過 MCB 試驗。 B 部分) 車輛業者於正式 TNCAP 試驗前提供之文件 7.11 車輛業者得選擇任何可致動 MCB 之實車前方偏置撞擊或前方全寬撞擊試驗。 7.12 從駕駛側後方以 3/4 之角度錄製試驗影片，顯示煞車燈確實點亮。 7.13 試驗資料顯示碰撞期間，MCB 觸發訊號傳送至車輛網絡。 過渡期 7.14 《MCB 規章》生效後三年過渡期內，車輛業者可在 TNCAP 或其認可之檢測機構人員監測下，僅以 B 部分	

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7.14 During a transition period of three years after the MCB Protocol is active (2020, 2021 and 2022), OEMs can also score the MCB point using Part B only, witnessed by either Euro NCAP or Euro NCAP accredited laboratory personnel. Additional Requirements and Provisions 7.15 The Multi Collision Brake must be described in the user manual of the tested vehicle. 7.16 An OEM-specific name for the MCB technology can be used in the manual. 7.17 The test procedure is organized and performed by the OEM. 7.18 The test procedure can be performed using a pre-series vehicle.	<u>獲得 MCB 分數。</u> <u>額外要求及規定</u> <u>7.15 受驗車輛之車主手冊中必須描述二次碰撞預煞車。</u> <u>7.16 手冊中 MCB 技術可使用車輛業者專用名稱。</u> <u>7.17 試驗程序由車輛業者組織及執行。</u> <u>7.18 試驗程序可使用量產前之車輛執行。</u>	

(Euro NCAP原文)

6.2 Functions that qualify are listed in the table below:

Function	Description	Points awarded (2020)
Potential number of occupants	Send information about likely number of occupants involved in impact (at least using belt use as an indicator)	0.5
Recent vehicle locations N1& N2	N1, Known location of the vehicle some time before the generation of the data for the MSD message and N2, known location of the vehicle some time before recent vehicle location N1	0.5

(TNCAP條文草案)

6.2合格功能詳列於下表：

<u>功能</u>	<u>描述</u>	<u>獲得分數</u>
<u>可能之乘員人數</u>	<u>傳送撞擊包含之乘員人數資訊（至少根據安全帶使用作為指標）</u>	<u>0.5</u>
<u>最後車輛位置N1與N2</u>	<u>N1：MSD(Minimum Set of Data)訊息資料產生前車輛已知位置； N2：N1位置前最後的車輛已知位置</u>	<u>0.5</u>

Rescue Sheet Guidelines 救援表單指引

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INTRODUCTION The purpose of this document¹ is to specify and illustrate how to design the content and layout for a Rescue Sheet in accordance with ISO 17840 standard (Part 1:2015 and subsequently updated in 2020, as well as Part 3 and Part 4). Following these instructions, the rescue sheet will be compliant with present Euro NCAP requirements. Examples included (labelled “<u>EXAMPLE</u>” in the text) can come from official rescue sheets or they can be made up to illustrate a point. No rights can be derived from these examples. The purpose of the Rescue Sheet format is to use as less text as possible in order to make their understanding as easy as possible and overcome language barriers. The rescue sheet (ISO 17840 Part 1) is “quick information” for the first responders on the accident scene. The ISO 17840 Part 3 Emergency Response Guide (ERG) gives “in-depth information” by adding text in addition to the pictures or the pictograms from the Rescue Sheet. The ERG contains crucial and in-depth information linked to the Rescue Sheet to inform, train, and develop rescue procedures by first responders. The headings/contents of the Rescue Sheet and the ERG information are aligned with each other, i.e. the ERG information works as an extension to the Rescue Sheet. Both ERG and the Rescue Sheet follow a flowchart of the main actions to take by first and second responders, arriving at the accident scene or performing towing and other activities afterwards.	<u>簡介</u> <u>本文件旨在明訂並描述如何設計救援表單之內容與布局，並須符合ISO 17840國際標準（第1部分:2015年與之後2020年更新之內容，以及第3部分與第4部分）。若遵循指示，救援表單將能符合現行TNCAP要求。</u> <u>範例（文中標為「範例」之內容）包含官方救援表單以及特別繪製來說明之圖示。這些範例無法產生任何權利。</u> <u>救援表單格式之目的為盡可能以最少量文字，傳達最易懂之訊息，跨越語言障礙。救援表單（ISO 17840第1部分）為提供第一線救難人員於事故現場之「快速資訊」。</u> <u>ISO 17840第3部分「緊急應變指南」（Emergency Response Guide，ERG）於救援表單之圖片與圖示旁增加說明文字，提供「深度資訊」。ERG包含救援表單相關之關鍵深度資訊，協助第一線救難人員接收、訓練、發展救援程序。救援表單之頁首與內容，以及ERG資訊須相互對應，亦即此ERG資訊視為相關救援表單之延伸。</u> <u>ERG與救援表單需要依照流程圖上之內容而定，即第一線與第二線救難人員所採取之主要行動，包含抵達事故現場、執行拖吊作業或其他後續活動。</u>	

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General Recommendations It is recommended to use as little text as possible, and instead use the pictograms defined in ISO 17840 – Part 1 and/or Part 3. This way, this the information is straightforward for the first responders, and the effort to edit versions in all the different languages will be less. 1) Always use pictograms coming from ISO 17840-Part 1 and/or Part 3. Seek expert advice if you are uncertain about which pictogram to use. 2) Ensure the quality of the picture / drawings / photos / pictograms are following the General Recommendations in ISO 3864-1. This is to make certain that the document is readable and easy to understand. 3) Important information must be emphasized: • Hazards/Danger: Red border RGB: 255/0/0, in RED CAPITAL LETTERS • Recommendation: Green border RGB: 0/176/80, in BLACK CAPITAL LETTERS (請參考頁末圖示) Colour Codes from ISO To understand and classify the parts, equipment, and dangers at first glance, it is important that the ISO colour codes are respected. Table 1. ISO Colour Coding Principles (Source: ISO 17840-Part 3). (請參考頁末表格) Front Page Layout and Content (請參考頁末表格) Header - Part 1	<u>一般性建議</u> <u>建議將文字量減至最低，盡可能以ISO 17840第1部分及第3部分所定義之圖示表達。如此第一線救難人員可簡單明瞭地接收資訊，各語言版本更新時亦能更為簡便。</u> <u>1)僅能使用ISO 17840第1部分及第3部分之圖示。圖示選擇出現疑慮時，得尋求專家建議。</u> <u>2)圖片、繪圖、照片及圖示皆須符合ISO 3864-1之一般性建議，以確保文件易讀易懂。</u> <u>3)請務必強調重要資訊：</u> • <u>危害/危險：紅框，RGB：255/0/0，紅色大寫字母。</u> • <u>建議事項：綠框，RGB：0/176/80，黑色大寫字母。</u> <u>(請參考頁末圖示)</u> <u>ISO色碼表</u> <u>為能立即掌握並分類零件、設備及危險，請遵循ISO色碼表。</u> <u>表1. ISO色碼原則（資料來源：ISO 17840第3部分）。</u> <u>(請參考頁末表格)</u> <u>首頁排版與內容</u> <u>(請參考頁末表格)</u>	

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(請參考頁末表格) Check the following: 1) Both brand name and model name are listed, even if the logo shows the brand in full letters. 2) Do not forget to check the name of the model is not different in one specific country. 3) List all body types of the model covered by this rescue sheet. For example: 3 doors-5 doors, 5 seaters vs 7 seaters, hatchback, sedan... (請參考頁末表格) Check the following: 4) ISO propulsion energy identification according to ISO 17840 - Part 4. Use approved symbols only: (請參考頁末圖表) Check the following:  (RHD)  (LHD) 5) Use one of these pictograms, or leave blank: 6) Never put the 2 pictograms at the same time! Purpose of this pictogram is to inform that the RHD rescue sheet contains significant differences from the LHD version and therefore 2 distinct Rescue Sheets are needed. In most of the vehicles this distinction is not needed. Therefore, the pictogram should not be used if there is no	<u>頁首-第1部分</u> <u>(請參考頁末表格)</u> <u>請檢視下列指示：</u> <u>1)即使廠牌標誌已完整呈現廠牌名稱，仍須列出廠牌與車型名稱。</u> <u>2)請記得檢查特定國家之車型名稱是否與其他地區不同。</u> <u>3)列出救援表單涵蓋車型之全部車身外型。例如3門至5門；5人座與7人座；掀背車；轎車...。</u> <u>(請參考頁末表格)</u> <u>請檢視下列指示：</u> <u>4)遵照ISO 17840第4部分之動力推進系統識別規範，僅能使用下列核准符號：</u> <u>(請參考頁末圖表)</u> <u>請檢視下列指示：</u>  (左駕)  (右駕) <u>5)圖示擇一或留空白：</u> <u>6)不得同時使用兩個圖示！此圖示之目的係為告知右駕救援表單與左駕救援表單有明顯之差異，故需要兩種不同之救援表單。多數車輛無須特別區分差異，因此若不用製作另一種駕駛方向之救援表單，無須標示此圖示。</u>	

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Rescue Sheet for the other hand of drive. Header - Part 2 Ensure the quality of the (colour) image is minimum 300 dpi and the size of the pictures is large enough to be able to distinguish the details for a first responder trying to identify the car to ensure this is the right Rescue Sheet. Please check the following: 1) ISO standard asks for 2 pictures, not less, not more. 2) The image can be a photo of the real car, or a digital, virtual representation of the car model. <u>EXAMPLE</u> (請參考頁末圖示) Top and Side Views (請參考頁末圖示) Please check the following: 1) Use the pictograms as shown in the legend (from ISO Part 1). If you need to use pictograms from Part 3, do not forget to add a line in the legend to display them (see page 13). 2) The technology of the High Voltage (HV) battery shall be stated (e.g. Li-Ion or Ni-MH), to help even more the first responders (shown in the example below). The battery voltage (in V) may be mentioned, as it may affect the intervention strategy. 3) Do not deform (stretch) existing symbols but draw realistic adapted components (e.g. HV battery) (請參考頁末圖示)	<u>頁首—第2部分</u> <u>彩色圖片之畫質不得小於300dpi，且圖片尺寸必須夠大，使第一線救難人員能辨識車輛細部，確保救援表單正確無誤。</u> <u>請檢視下列指示：</u> <u>1)ISO國際標準要求提供兩張圖片，不要多也不要少。</u> <u>2)圖片可使用真實車輛之照片，亦可使用數位虛擬之車輛模型。</u> <u>範例</u> <u>(請參考頁末圖示)</u> <u>俯視圖與側視圖</u> <u>(請參考頁末圖示)</u> <u>請檢視下列指示：</u> <u>1)使用圖例中之圖示（取自ISO第1部分）。若需要使用ISO第3部分之圖示，記得於圖例中另外加上一行（請見第12頁）。</u> <u>2)應列出「高電壓」電池零組件（例如鋰電池或鎳氫電池），給予第一線救難人員更多協助（如下範例所示）。可列出電池電壓（V），因其可能影響處置策略。</u> <u>3)請勿變更（拉展）現有符號，但可繪製符合實際樣貌之擬真組件（例如高電壓電池）。</u>	

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The HV battery type/voltage can be indicated with an arrow and a text box: (請參考頁末圖示) Double Frame Rectangle To highlight specific items, you can combine the double frame rectangle with the reference to the chapter number together with its colour code. A double frame rectangle can be displayed on the 2nd part of header or on the top or side view. It is recommended to do so for any new equipment the first responders are not used to see in the accidents. (請參考頁末圖示) <u>EXAMPLE</u> Example below show the case for the far side airbag (also called centre airbag - CeAB). This airbag is unknown to most European car models, however expected to be more popular in the coming years because of Euro NCAP's incentive. It will remain scarcely present in accidents for the coming years due to the low market penetration of new models. Therefore, it is important to highlight this new system and its location to first responders, as shown below. (請參考頁末圖示) Gas Strut The Red colour code has been initially reserved for actively triggered equipment only (e.g. via pyrotechnic) as shown in Table 1. However, gas struts have traditionally been displayed in the Rescue Sheets with a red contoured pictogram and first responders are used to see this	<u>(請參考頁末圖示)</u> <u>可用箭頭與文字框說明高電壓電池之類型/電壓：</u> <u>(請參考頁末圖示)</u> <u>雙框矩形</u> <u>為強調特定項目，可以結合雙框矩形與對應之章節編號，並加上顏色來呈現。</u> <u>可將雙框矩形放至頁首之第2部分，或俯視圖與側視圖上。</u> <u>若有新設備，建議以此方式處理，因第一線救難人員不常於事故中看到這些新設備。</u> <u>(請參考頁末圖示)</u> <u>範例</u> <u>下圖範例係呈現車輛遠端碰撞乘員保護空氣囊（又稱中央空氣囊，CeAB）。多數歐洲車款未使用此類空氣囊，不過在Euro NCAP推動之下，預期幾年後將有更多人知道。只是新車型之市場佔有率低，接下來幾年之事故中仍較少看到此類空氣囊。因此，為第一線救難人員標示新系統及其位置極為重要，如下所示。</u> <u>(請參考頁末圖示)</u> <u>氣壓桿</u> <u>起初紅色色碼僅供主動式觸發之設備使用（例如火藥觸發），如表1所示。然而，傳統上救援表單皆使用紅色邊線之圖示來繪製氣壓桿，因此第一線救難人員已習慣看</u>	

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equipment displayed in this way. Initially, before ISO 17840 creation, the red contour was used to distinguished between a pre-loaded spring and a gas-strut. This distinction was considered crucial because in case of fire the gas strut can be a real danger compared to a pre-loaded spring. For this reason, the ISO Working Group has decided to change the definition of the red colour code, in order to keep the red contour for any gas strut in the ISO 17840 Part 1 new version (publication pending). (請參考頁末圖示) Legend The FULL and EXACT legend of ISO 17840-Part 1:2015 must be displayed. This is a requirement from this version of the standard. Otherwise, the Rescue Sheet is not compliant with ISO and therefore not compliant with Euro NCAP requirements. If you need to use pictograms from Part 3, add a line in the legend to display them. (請參考頁末圖示) Footer Check the following: 1) The total number of pages of the Rescue Sheet must be listed in the footer. Additional Pages Layout and Content Additional information is organised in Chapters. Page 2 list the relevant headers with colours, as shown below. The RGB colours are imposed	<u>到氣壓桿以此方式呈現。</u> <u>於ISO 17840建立之前，使用紅色邊線以區分預負載彈簧與氣壓桿，區隔兩者非常重要，因為若車輛起火，與預負載彈簧相比，氣壓桿更加危險。</u> <u>因此，ISO工作小組決定變更紅色色碼之定義，使ISO 17840第1部分新版救援表單之所有氣壓桿皆能保留紅色邊線（出版待定）。</u> <u>(請參考頁末圖示)</u> <u>圖例</u> <u>ISO 17840第1部分2015年之圖例務必「完整」且「精確」，此為標準版之要求。若未遵守規範，則救援表單不符合ISO標準，亦不符合TNCAP之要求。</u> <u>若需要使用第3部分之圖示，請於圖例中另外加上一行。</u> <u>(請參考頁末圖示)</u> <u>頁尾</u> <u>請檢視下列指示：</u> <u>1)須於頁尾列出救援表單之完整頁碼。</u> <u>補充頁面之排版與內容</u> <u>補充資訊應以章節形式整理。於第2頁以顏色列出相關頁</u>	

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by ISO 17840 Part 3. The Rescue Sheet with additional information must not exceed 4 pages (including the front page). (請參考頁末表格) If there is no specific information to give in one chapter, then the header of the chapter does not need to be displayed. But the next chapter will keep the chapter number as displayed above. There is no renumbering. However, if a hazard is applicable to several chapters, the general principle is that it should be repeated under each chapter. Euro NCAP expects that for BEV, HEV, PHEV, Hydrogen, Fuel Cell powered vehicles almost all chapters will be completed. Even for a traditional ICE (Internal Combustion Engines e.g. Diesel or Gasoline) vehicle, some information is relevant to be presented in the Rescue Sheet, such as: • 48 Volt battery, • New type of airbags (such as Occupant to Occupant Side Airbag), • Other new active or passive safety technology/items, • Special constructions/materials that has been used, • New types of access to the vehicle, • New types of communication V2X, etc.. Remember that the ISO 17840 Emergency Response Guide is made to be used as a direct link with the ISO 17840 Rescue Sheet to give further in-depth information. The combination of the two documents therefore can be very effective. General It is recommended that each of the additional page contains a small	<u>首，如下所示。請依照ISO 17840第3部分之RGB顏色規則。救援表單補充資訊不得超過4頁（包含首頁）。</u> <u>(請參考頁末表格)</u> <u>若該章節沒有特定資訊，則無須列出章節頁首，惟下一章之編號仍依照上述規則進行標示，無須重新編號。若危害資訊適用數個章節，則各章節底下皆應重複此項資訊。</u> <u>對於純電動車、油電混合車、插電式油電混合車、氫燃料車、燃料電池車，TNCAP希望所有章節底下皆有補充資訊。甚至搭載傳統內燃機（例如柴油或汽油）之車輛須於救援表單呈現相關資訊，例如：</u> <u>• 48V電池</u> <u>• 新型空氣囊（例如中央空氣囊）</u> <u>• 其他新型主動或被動安全技術/項目</u> <u>• 使用之特殊構造/材料</u> <u>• 新型進入車內之方式</u> <u>• 新型車聯網通訊系統等</u> <u>ISO 17840之緊急應變指南(EGR)係設計用來直接連結ISO 17840之救援表單，以補充深度資訊，因此結合兩份文件更有效。</u>	

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header listing: the brand / model / type and validity. (請參考頁末表格)	<u>通則</u> <u>建議於補充資訊之每一頁加上小頁首，列出：廠牌/車型/車身外型與適用性。</u> (請參考頁末表格)	
Chapter 1 – Identification / Recognition 1. Identification / Recognition When applicable, please start with the following warning (for Electric, Hybrid, Fuel Cell vehicles): LACK OF ENGINE NOISE DOES NOT MEAN VEHICLE IS OFF: SILENT MOVEMENT OR INSTANT RESTART CAPABILITY EXISTS UNTIL VEHICLE IS FULLY SHUT DOWN. WEAR APPROPRIATE PPE. Focus on the following key points: 1) General safety remarks are needed to approach safely the vehicle and give the possibility to identify/recognize safely the vehicle model. 2) All relevant information with applicable symbols/drawings/pictures/photos for the full identification of the vehicle. Information concerning symbols, model name, etc. on the vehicle, such as brand logo, model logo. 3) Information to identify the propulsion system: • Information of what to identify under the hood, • Information of what to identify on the dashboard,	<u>第一章-識別/辨認</u> 1.識別/辨認 <u>依實際狀況，針對純電動車、油電混合車、燃料電池車請依下列之警告開頭：</u> 沒有引擎聲不代表車輛已關閉：車輛完全停止運轉前，仍可能安靜地移動或突然重新啟動。請穿戴合宜之個人防護裝備。 <u>請注意下列事項</u> <u>1)一般安全警語有助於安全地靠近車輛，安全地識別/辨認車型。</u> <u>2)具有適用符號、繪圖、圖片、照片之所有相關資訊皆有助於完整識別車輛。此資訊包含車輛上之符號、車型名稱等，例如廠牌標誌、車型標誌。</u> <u>3)推進系統之識別資訊：</u> • <u>引擎蓋下方應識別之部分；</u>	

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• Specific information to recognize this vehicle (e.g. hybrid, EV, FCEV, or other identification), • Specific REESS or alternative propulsion fluid / energy source, • Identification of the type of battery: chemistry family, voltage class, location in vehicle, • Inclusion of applicable ISO 17840 pictograms. <u>EXAMPLE</u> (請參考頁末圖示)	• <u>儀表板上應識別之部分；</u> • <u>辨認車輛之特定資訊（例如油電混合車、純電動車、燃料電池電動車或其他識別資訊）；</u> • <u>特定可充電式電能儲存系統或替代動力推進液體/動力源；</u> • <u>電池種類識別資訊：化學族、電壓等級、車內位置；</u> • <u>包含適用ISO 17840之圖示。</u> <u>範例</u> (請參考頁末圖示)	
Chapter 2 – Immobilisation / Stabilisation / Lifting 2. Immobilisation / Stabilisation / Lifting Focus on the following key points: 1) Show relevant information for immobilisation and/or stabilisation actions on/around the vehicle • Provide images/illustrations of these elements, • Identify appropriate vehicle specific stabilisation-lifting points, • Identify prohibited vehicle specific stabilisation-lifting points. 2) It is recommended to separate the two main items, as follows: A. IMMOBILIZE THE VEHICLE. Generally, recommend to: • block the wheels, • Set the parking brake, • Put the car in “P” for automatic gearbox, • Use pictures to show parking brake, • location and gear lever location.	第2章-固定/穩定/舉升 2.固定/穩定/舉升 <u>請注意下列事項：</u> <u>1)呈現車輛上/車旁進行固定與穩定行動之相關資訊。</u> • <u>提供這些要素之圖片/圖解；</u> • <u>識別車輛適當之穩定舉升特定位置；</u> • <u>識別車輛禁止之穩定舉升位置。</u> <u>2)建議分為兩個主要項目，如下：</u> <u>A.「固定車輛」。一般建議：</u> • <u>擋住車輪；</u> • <u>作動駐煞車；</u> • <u>自排檔位移至「P檔」；</u> • <u>以圖片呈現駐煞車；</u> • <u>位置與排檔桿位置。</u>	

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B. LIFTING POINTS. Generally, a bottom view of the car to show the jack points and the High Voltage cables, if any Use the titles above (A and B) to be consistent with other Rescue Sheets. <u>EXAMPLE</u> (請參考頁末圖示)	<u>B.「舉升位置」。一般以仰視圖呈現車輛舉升點以及高電壓電纜(依實際狀況)。</u> <u>使用上述標題 (A與B)，以與其他救援表單用詞一致。</u> <u>範例</u> <u>(請參考頁末圖示)</u>	
Chapter 3 – Disable Direct Hazards / Safety Regulations 3. Disable Direct Hazards / Safety Regulations Focus on the following key points: 1) Use as little text as possible to avoid language difficulties. Extensive use of the pictograms from ISO 17840-Part 3 is recommended. These pictograms can be on the left side of the page to symbolise the actions to take and where to do them (see example on next page). 2) It is important as well to define if the disabling process needs to be done with PPE, or not. Extra care should be taken of the correct use of the following pictograms (ISO 17840-Part 3): (請參考頁末圖示) 3) Generally, there are some main actions and then some different alternatives for the hazard disabling. To avoid confusion, clearly identify MAIN and ALTERNATIVE disabling methods, as follows: • MAIN DISABLING METHOD • ALTERNATIVE DISABLING METHOD(S) • ACCESS Use the text above to be consistent with other rescue sheets.	第3章-解除直接性危害/安全規範 3.解除直接性危害/安全規範 <u>請注意下列事項：</u> <u>1)為避免語言障礙，盡可能將文字量降至最低。建議多使用ISO 17840第3部分之圖示。可將圖示置於左側，呈現採取之行動與施加之位置（參見範例）。</u> <u>2)標明解除程序是否需要穿戴個人防護裝備。正確使用下方圖示（ISO 17840第3部分）以呈現額外處置：</u> <u>(請參考頁末圖示)</u> <u>3)通常解除危害有時採取主要行動，有時則採取不同之替代選項。為避免混淆，須清楚區別「主要」與「替代」之解除方式，如下所示：</u> • <u>「主要解除方式」</u> • <u>「替代解除方式」</u> • <u>「途徑」</u>	

Euro NCAP 原文	TNCAP條文草案	說明
4) Recommended content for this Chapter includes: • How to eliminate immediate danger, which safety requirements are needed; • Including “preferred” procedure and “alternative” procedure(s) for disabling direct hazards (e.g. disabling high voltage or shutting off gas pressure); • Procedure when EV / PHEV are connected on charging; • Provide detailed images of “specific type” of disconnections, with necessary information. <u>EXAMPLES</u> (請參考頁末圖示)	<u>使用上述文字，以與其他救援表單用詞一致。</u> <u>4)建議本章內容包含：</u> <u>• 如何排除立即危險，須採取之安全措施；</u> <u>• 解除直接性危害時(例如切斷高壓電或釋放氣體壓力)，列出「優先」程序與「替代」程序；</u> <u>• 純電動車/插電式油電混合車充電時應採取之程序；</u> <u>• 提供「特定類型」之解除詳圖，並附上必要資訊。</u> <u>範例</u> <u>(請參考頁末圖示)</u>	
Chapter 4 – Access to the Occupants 4. Access to the occupants Focus on the following key points: 1) Identify glass types (All windows): Laminated and Tempered glass. It is also possible to add information in this chapter in case the car as very specific or distinct features, that are not present or located in the same place as most other cars, or that are not operated in the usual way. For this reason, in addition to 1), information could be included, such as: 2) Seat adjustment (electric/mechanical); 3) Steering column adjustment; 4) High strength steel in body;	<u>第 4 章-接近乘員途徑</u> <u>4.接近成員途徑</u> <u>請注意下列事項：</u> <u>1)玻璃類型（所有車窗）：「膠合玻璃」與「強化玻璃」。</u> <u>若車輛具有非常特別或特殊之功能，其他車輛大多沒有、位置不同或並非一般操作方式，亦可於此章補充資訊。因此除了1) 之外，亦可納入下列資訊：</u> <u>2)座椅調整（電動/機械）；</u> <u>3)轉向機柱調整；</u> <u>4)高強度鋼車體；</u>	

Euro NCAP 原文	TNCAP條文草案	說明
5) Door latches/command. <u>EXAMPLE</u> (請參考頁末圖示)	<u>5)門鎖/控制系統。</u> <u>範例</u> <u>(請參考頁末圖示)</u>	
Chapter 5 – Stored Energy / Liquids / Gases / Solids 5. Stored Energy / liquids / gases / solids Focus on the following key points: 1) Primarily use pictograms here. A more detailed table will be available in the ERG so it is not needed in the Rescue Sheet. 2) List of stored energy/ liquids/Gases/Solids with mention of the dangers with the use of ISO 17840 pictograms: • Batteries with mention of voltage; • Propulsion fuel tank with mention of content in litre; • Propulsion gas tanks with mention of content in litre; • Solar cells with mention of voltage; • Carbon / Magnesium / Titanium used in vehicle; • Dangers when broken/leaks/dust (e.g Carbon fibres); • HV battery pack coolant; • Specific air-conditioning coolant. Do not mention braking fluids, motor oil, etc. if they do not present any specific hazard. 3) For specific materials mentioned above, the location must be displayed on the front page with a double frame rectangle and the reference to this chapter (see also Double Frame Rectangle, page 11). <u>EXAMPLE</u>	<u>第 5 章-儲存之能源/液體/氣體/固體</u> <u>5.儲存之能源/液體/氣體/固體</u> <u>請注意下列事項：</u> <u>1)本章請以圖示為主。ERG會包含更詳盡之表格，故救援表單無須重複。</u> <u>2)列出儲存之能源/液體/氣體/固體，使用ISO 17840圖示標明危險：</u> <u>• 電池標明電壓；</u> <u>• 動力推進燃油箱標明內容物公升數；</u> <u>• 動力推進儲氣槽標明內容物公升數；</u> <u>• 太陽能電池標明電壓；</u> <u>• 標明車輛使用之碳/鎂/鈦；</u> <u>• 標明如遇破損/洩漏/粉塵（例如碳纖維）之危險；</u> <u>• 標明高電壓電池組冷卻液；</u> <u>• 標明特定空調冷卻液。</u> <u>若煞車液、機油等不會產生任何危害，則請勿標出。</u> <u>3)上述特定材料之位置須於首頁以雙框矩形標明，並於本章標註（參見第11頁「雙框矩形」）。</u>	

Euro NCAP 原文	TNCAP條文草案	說明
(請參考頁末圖示)	<u>範例</u> <u>(請參考頁末圖示)</u>	
Chapter 6 – In Case of Fire 6. In case of fire Focus on the following key points: 1) Again, mainly use pictograms here. 2) Extinguish method: recommendations specific for this type/model (e.g.) • How to put water into the HV battery (e.g. Fireman access, direction of jet of water for better efficiency, ...); • Clear warning if it is not recommended to apply a certain methodology to extinguish fire (e.g. not to put the car into container with water). 3) Hazards specific for this type/model. 4) Hazards also after fire (e.g. Carbon Fibres, reignition). 5) Recommendations specific for this model e.g. venting direction of the CNG or of the HV battery, if any. <u>EXAMPLE</u> (請參考頁末圖示)	<u>第6章-火災處置</u> 6.火災處置 <u>請注意下列事項：</u> <u>1)再次提醒，本章請以圖示為主。</u> <u>2)滅火方式：建議採用針對特定車型/車款之方式</u> • <u>如何將水注入高電壓電池（例如消防人員途徑，效率較佳之噴射水柱方向……）；</u> • <u>若不宜採用特定之滅火方法，則須明確警告（例如請勿將車輛放入裝有水之容器內）。</u> <u>3)特定車型/車款之特殊危害。</u> <u>4)起火後產生之危害（例如碳纖維、復燃）。</u> <u>5)針對該車款之特定建議，例如請提供壓縮天然氣或高電壓電池之通風方向(依實際狀況)。</u> <u>範例</u> <u>(請參考頁末圖示)</u>	
Chapter 7 – In Case of Submersion 7. In case of submersion Focus on the following key points: 1) In most cases, a reference to Chapter 3 will suffice.	<u>第 7 章-沉沒處置</u> 7.沉沒處置 <u>請注意下列事項：</u> <u>1)多數情況下，僅需要標註如第3章即可。</u>	

Euro NCAP 原文	TNCAP條文草案	說明
2) Where specific functions exist in the vehicle, addition information can be presented here, such as: • What to do in case of immersion in water, the specific dangers. • Which procedure to follow concerning e.g. high voltage. <u>EXAMPLE</u> (請參考頁末圖示)	<u>2)針對車輛之特定功能，可在此加入補充資訊，例如：</u> <u>• 沉入水中該如何處置，該注意哪些特定危險。</u> <u>• 該採取何種處置，例如遇到高壓電。</u> <u>範例</u> <u>(請參考頁末圖示)</u>	
Chapter 8 – Towing / Transportation / Storage 8. Towing / transportation / storage This section is specially made for second responders like towing services, garage technicians, etc.. Focus on the following key points: 1) Present the location of the towing hook tool, and where to secure this tool in the car (front and rear) • Towing/transportation method specific for this type/model or general. • Storage method specific for this type/model or general. • Hazards and recommendations specific for this type/model or general. <u>EXAMPLE</u> (請參考頁末圖示)	<u>第 8 章-拖吊/運輸/存放</u> 8.拖吊/運輸/存放 <u>本章資訊主要係提供第二線救難人員，例如拖吊服務業者、車廠技師等。請注意下列事項：</u> <u>1)標明拖曳鉤工具存放位置，以及鎖緊此工具之車體位置（前方或後方）。</u> <u>• 特定車型/車款或一般車輛之拖吊/運輸方式。</u> <u>• 特定車型/車款或一般車輛之存放方式。</u> <u>• 特定車型/車款或一般車輛之危害與建議處理方式。</u> <u>範例</u> <u>(請參考頁末圖示)</u>	
Chapter 9 – Important Additional Information 9. Important additional information Standard information that can be displayed here is: 1) Contact information manufacturer.	<u>第 9 章-重要補充資訊</u> 9.重要補充資訊 <u>本章之標準資訊呈現方式為：</u> <u>1)車輛業者聯絡資訊。</u>	

Euro NCAP 原文	TNCAP條文草案	說明
2) Link to ERG (effective working link). In addition, this chapter can be used to share more details about new to market technology, such as the deployed state of a new airbag system (centre or roof airbag for instance). 3) Attention can be drawn to the first responders using a double frame rectangle and the reference to this chapter (or to Chapter 3) that will be displayed on the front page (see also page 11).	<u>2)ERG連結（有效可用之連結）。</u> <u>另可於本章分享市場新技術之細節，例如新型空氣囊系統之開展狀態（如中央空氣囊或車頂空氣囊）。</u> <u>3)針對第一線救難人員需要特別留意之資訊，請使用雙框矩形，並於首頁（參見第11頁）標明請見本章（或第3章）。</u>	
Chapter 10 – Explanation of Pictograms Used 10. Explanation of pictograms used When there is enough space to fit this chapter inside the Rescue Sheet, it is good practice to insert a table with all the pictograms that are not yet presented in the legend displayed in the 1st page. Otherwise if not possible, insert the link to the ISO 17840 ERG where they can be displayed and defined. <u>EXAMPLE</u> (請參考頁末圖示)	<u>第 10 章-使用圖示說明</u> 10.使用圖示說明 <u>若救援表單還有足夠空間加上本章，放入表格完整呈現所有圖示之作法較佳，因為部分圖示未出現於第1頁之圖例。</u> <u>若無法加入完整表格，建議插入ISO 17840之ERG連結，以查詢圖示之樣貌與定義。</u> <u>範例</u> <u>(請參考頁末圖示)</u>	
Appendix: ISO Symbols and Translations (請參考頁末表格)	<u>附錄：ISO 符號與翻譯</u> <u>(請參考頁末表格)</u>	

(Euro NCAP原文)

General Recommendations

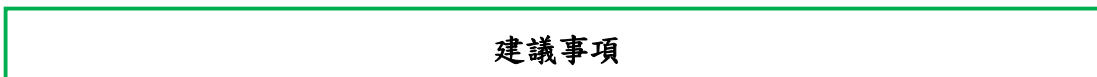
- Hazards/Danger: Red border RGB: 255/0/0, in RED CAPITAL LETTERS
- Recommendation: Green border RGB: 0/176/80, in BLACK CAPITAL LETTERS



(TNCAP條文草案)

一般性建議

- 危害/危險：紅框，RGB：255/0/0，紅色大寫字母。
- 建議事項：綠框，RGB：0/176/80，黑色大寫字母。



(Euro NCAP原文)

Colour Codes from ISO

Table 1. ISO Colour Coding Principles (Source: ISO 17840-Part 3).

Colour	RGB Code*	Components/functions
Yellow	RGB: 255,255,0	Low voltage electrical system/components, including SRS control unit
Orange	RGB: 255,165,0	High voltage (class B voltage) electrical system/components
Blue	RGB: 77,77,255	Occupant protection system, e.g. airbags
Purple	RGB: 152,43,143	Seat belt pretensioner
Red	RGB: 255,0,0	Surrounding colour for triggered systems e.g. airbag, gas inflator or preloaded spring actively triggered by sensor or similar
Lime green	RGB: 0,255,0	Gas, liquid, and pre-tensioned spring components
Sea green	RGB: 0,128,128	High strength zones
Grey	RGB: 127,127,127	Liquid group 1 (Diesel, Bio Diesel, ...) tank/lines
Dark red	RGB: 139,0,0	Liquid group 2 (Petrol/Gasoline, Ethanol, ...) tank/lines
Green	RGB: 0,176,80	Gas tank/lines (generic)
White	RGB: 255,255,255	Cryogen Gas Group (LNG, ...) tank/lines
Light blue	RGB: 0,176,240	Hydrogen tank/lines
Purple	RGB: 204,0,204	Air-condition components/lines
Brown	RGB: 183,120,29	Oil tank/lines
White	RGB: 255,255,255	Air tank
*RGB colour components as expressed in terms of digital 8-bit per channel (from 0 to 255).		

(TNCAP條文草案)

ISO色碼表

表 1. ISO 色碼原則（資料來源：ISO 17840 第 3 部分）。

顏色	RGB 色碼*	組件/功能
黃	RGB：255,255,0	低電壓電子系統/組件，包括乘員輔助束縛系統(SRS)控制單元
橘	RGB：255,165,0	高電壓（B 級電壓）電力系統/組件
藍	RGB：77,77,255	乘員防護系統，例如空氣囊
紫	RGB：152,43,143	安全帶預負載裝置
紅	RGB：255,0,0	觸發系統周圍顏色，例如感測器或類似裝置主動觸發之空氣囊、充氣裝置、預負載彈簧
萊姆綠	RGB：0,255,0	氣體、液體以及預負載彈簧組件
海藻綠	RGB：0,128,128	高強度區域
灰	RGB：127,127,127	1 類液體（柴油、生質柴油……）箱/管
暗紅	RGB：139,0,0	2 類液體（石油/汽油、乙醇……）箱/管
綠	RGB：0,176,80	儲氣槽/管（通用）
白	RGB：255,255,255	低溫氣體（液化天然氣……）槽/管
淺藍	RGB：0,176,240	氫氣槽/管
紫	RGB：204,0,204	空調組件/管
棕	RGB：183,120,29	機油箱/管
白	RGB：255,255,255	空氣儲氣槽
*RGB 顏色值以 8 位元表示，每項色碼包含 0 至 255。		

(Euro NCAP原文)

Front Page Layout and Content

Logo of brand	Name of manufacturer and vehicle model Body type(s) covered by the rescue sheet (year of start of production – year of end of production) <i>*) Leave empty, if the car is still in production</i>	ISO part 4 symbol	RHD pictogram or LHD pictogram Note: Leave blank when LHD and RHD are covered by the same rescue sheet																			
Reserved for holder (paper version)																						
	 min. 50 min. 50																					
	Legend <table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																					
Field may be used for additional information, e.g. applicable country or region for the vehicle model.																						

Header – Part 1
Brand and vehicle information, etc.

Header – Part 2
Perspective views of the vehicle (photos or virtual representations)

Top and Side Views
of the vehicle (drawings)

Pictograms are used to locate relevant components/functions

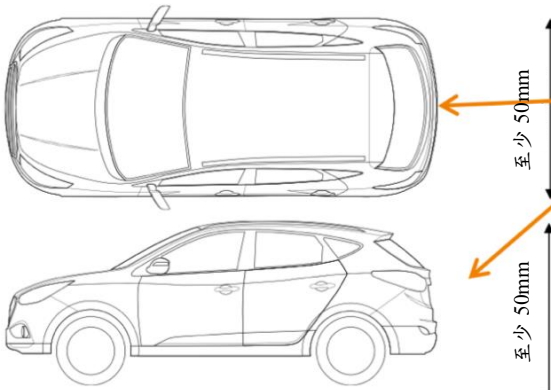
Legend
Standardized pictograms and text

Footer

Source: ISO 17840 Part 1

(TNCAP條文草案)

首頁排版與內容

廠牌 標誌	廠牌與車型名稱 救援表單涵蓋之車身外型 (初產年份-停產年份*) *若尚未停產，請留白。	ISO 第 4 部分符號	右駕圖示或左駕圖示 備註：若同一張救援表單 包含左駕與右駕，請留 白。																							
裝訂預留區 (紙本版本)																										
																										
	<table border="1"><tr><td>圖例</td><td> 空氣囊</td><td> 壓力充氣裝置</td><td> 安全帶預負載裝置</td><td> SRS 控制單元</td><td> 主動式行人保護系統</td></tr><tr><td></td><td> 自動翻滾防護系統</td><td> 氣壓桿/預載彈簧</td><td> 高強度區域</td><td> 特別留意區域</td><td></td></tr><tr><td></td><td> 低電壓電池</td><td> 低電壓超級電容</td><td> 燃油箱</td><td> 儲氣槽</td><td> 安全閥</td></tr><tr><td></td><td> 高電壓電池組</td><td> 高電壓電纜/組件</td><td> 高電壓斷路裝置</td><td> 高電壓斷路保險絲盒</td><td> 高電壓超級電容</td></tr></table>			圖例	空氣囊	壓力充氣裝置	安全帶預負載裝置	SRS 控制單元	主動式行人保護系統		自動翻滾防護系統	氣壓桿/預載彈簧	高強度區域	特別留意區域			低電壓電池	低電壓超級電容	燃油箱	儲氣槽	安全閥		高電壓電池組	高電壓電纜/組件	高電壓斷路裝置	高電壓斷路保險絲盒
圖例	空氣囊	壓力充氣裝置	安全帶預負載裝置	SRS 控制單元	主動式行人保護系統																					
	自動翻滾防護系統	氣壓桿/預載彈簧	高強度區域	特別留意區域																						
	低電壓電池	低電壓超級電容	燃油箱	儲氣槽	安全閥																					
	高電壓電池組	高電壓電纜/組件	高電壓斷路裝置	高電壓斷路保險絲盒	高電壓超級電容																					
補充資訊可填寫於此處，例如車型適用之國家或地區。		ID 號碼	原本號碼																							

頁首—第 1 部分
廠牌與車輛資訊
等。

頁首—第 2 部分
車輛透視圖（照
片或模擬）。

車輛俯視圖與側
視圖（繪圖）。

使用圖示標明相
關組件/功能之
位置。

圖例
標準化圖示與文
字。

頁尾

資料來源：ISO 17840 第 1 部分

(Euro NCAP原文)

Header - Part 1

Logo of brand	Name of manufacturer and vehicle model Body type(s) covered by the rescue sheet (year of start of production – year of end of production*) <i>*) leave empty if the car is still in production</i>	ISO part 4 symbol	RHD pictogram or LHD pictogram <i>Note: Leave blank when LHD and RHD are covered by the same rescue sheet</i>
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Source: ISO 17840 Part 1

(TNCAP條文草案)

頁首-第1部分

廠牌標誌	廠牌與車型名稱 救援表單涵蓋之車身外型 (初產年份—停產年份*) *若尚未停產，請留白。	ISO第4部 分符號	右駕圖示或左駕圖示 備註：若同一張救援表單包含左駕與右駕，請留白。
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資料來源：ISO 17840 第1部分

(Euro NCAP原文)

Header - Part 1

Logo of brand	Name of manufacturer and vehicle model Body type(s) covered by the rescue sheet (year of start of production – year of end of production*) <i>*) leave empty if the car is still in production</i>	ISO part 4 symbol	RHD pictogram or LHD pictogram <i>Note: Leave blank when LHD and RHD are covered by the same rescue sheet</i>
---------------	---	-------------------	--

Source: ISO 17840 Part 1

(TNCAP條文草案)

頁首-第1部分

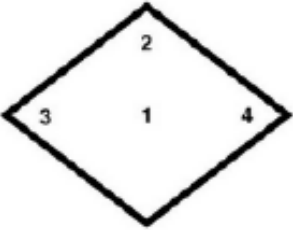
廠牌標誌	廠牌與車型名稱 救援表單涵蓋之車身外型 (初產年份—停產年份*) *若尚未停產，請留白。	ISO第4部分符號	右駕圖示或左駕圖示 備註：若同一張救援表單包含左駕與右駕，請留白。
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第1部分

(Euro NCAP原文)

Header - Part 1

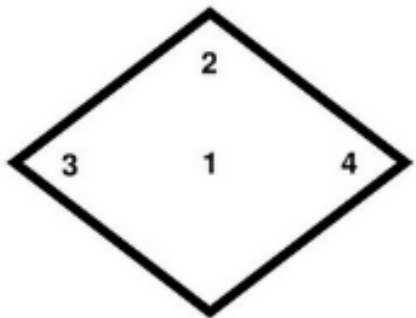
4) ISO propulsion energy identification according to ISO 17840 - Part 4. Use approved symbols only:

	1. First energy source
	2. Second energy source
	3. Density towards air
	4. Stored state

(TNCAP條文草案)

頁首-第1部分

4)遵照 ISO 17840 第 4 部分之動力推進系統識別規範，僅能使用下列核准符號：

	1.主要動力源
	2.次要動力源
	3.空氣密度
	4.儲存狀態

(Euro NCAP原文)

Header - Part 1

4) Example

EXAMPLES



Logo of brand	Name of manufacturer and vehicle model Body type(s) covered by the rescue sheet (year of start of production – year of end of production*) * Leave empty if the car is still in production	ISO part 4 symbol	RHD pictogram or LHD pictogram <i>Note: Leave blank when LHD and RHD are covered by the same rescue sheet</i>
---------------	--	-------------------	--

Source: ISO 17840 Part 1

(TNCAP條文草案)

頁首-第1部分

4)範例

範例



廠牌標誌	廠牌與車型名稱 救援表單涵蓋之車身外型 (初產年份—停產年份*) *若尚未停產，請留白。	ISO 第 4 部分符號	右駕圖示或左駕圖示 備註：若同一張救援表 單包含左駕與右駕，請 留白。
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資料來源：ISO 17840 第 1 部分

(Euro NCAP原文)

Header - Part 2

EXAMPLE



(TNCAP條文草案)

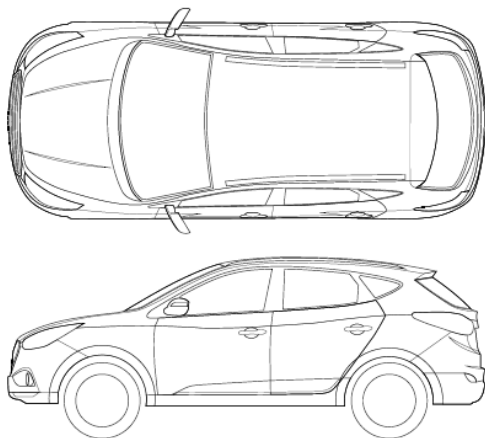
頁首－第2部分

範例



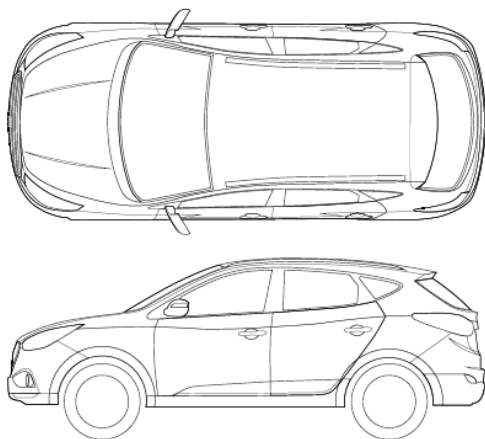
(Euro NCAP原文)

Header - Part 2 Top and Side Views



(TNCAP條文草案)

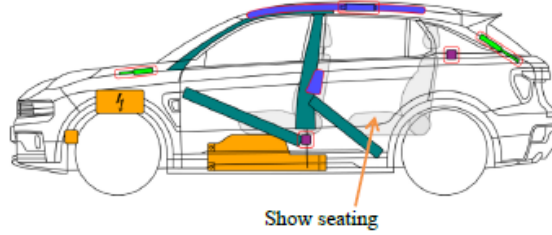
頁首—第2部分 俯視圖與側視圖



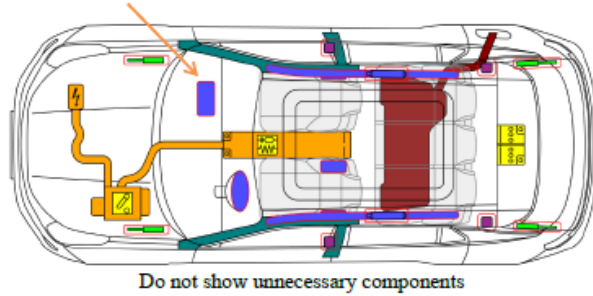
(Euro NCAP原文)

EXAMPLES

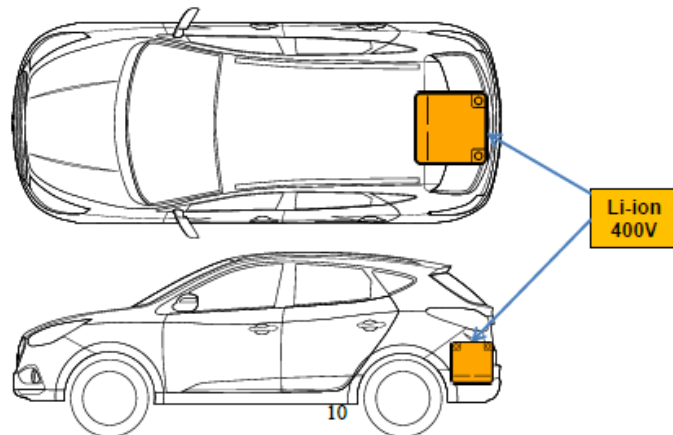
Realistic adapted components



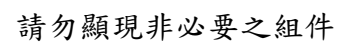
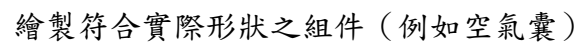
Draw realistic shape components (e.g. airbag)



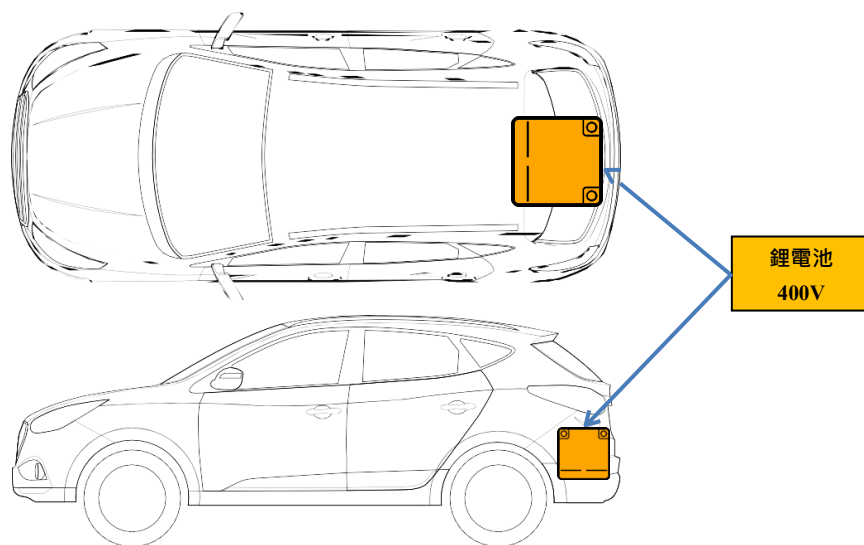
The HV battery type/voltage can be indicated with an arrow and a text box:



符合實際樣貌之擬真組件



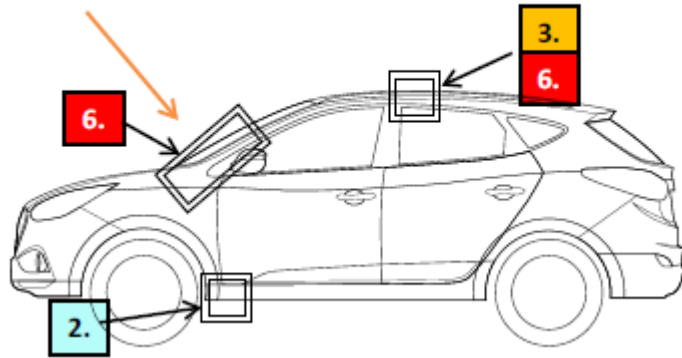
45



(Euro NCAP原文)

Double Frame Rectangle

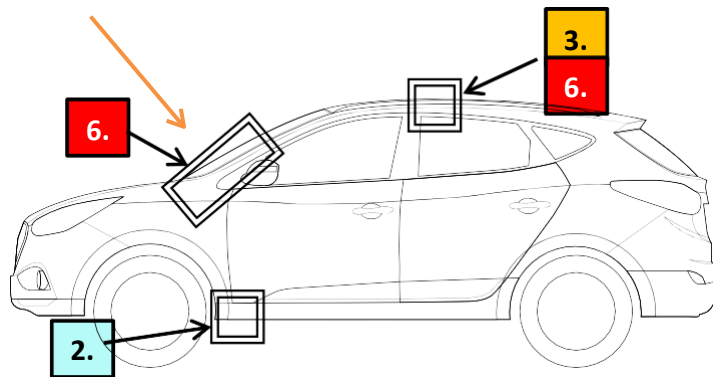
Use the double frame rectangle with the reference to the chapter number together with its colour code:



(TNCAP條文草案)

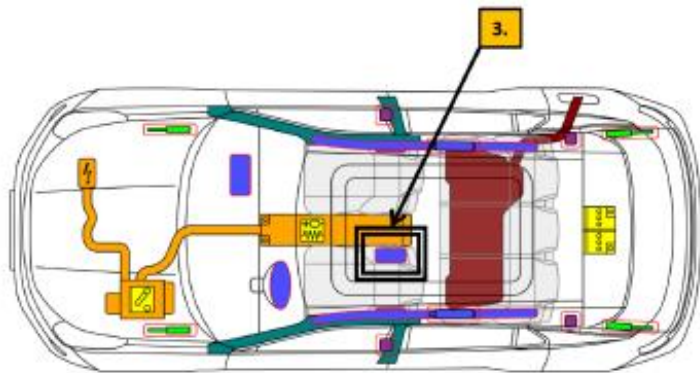
雙框矩形

使用雙框矩形、對應章節編號與顏色：



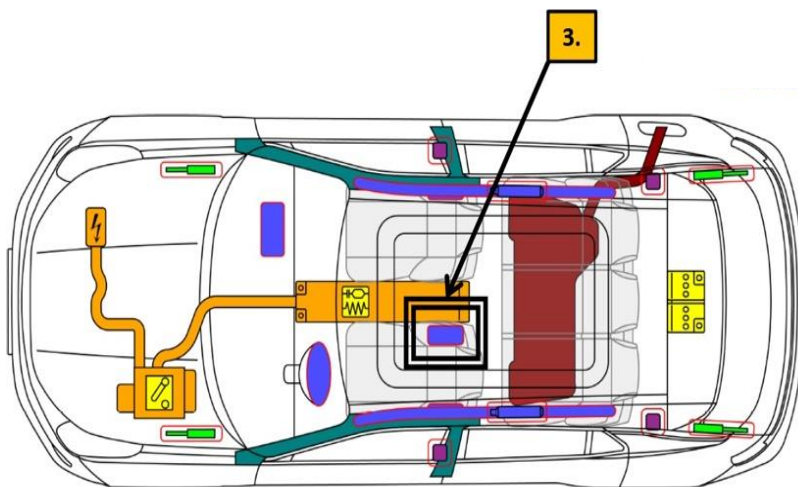
(Euro NCAP原文)

EXAMPLE



(TNCAP條文草案)

範例



(Euro NCAP原文)

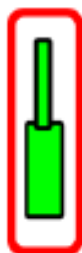
Gas Strut

Colour	RGB Code	Components/functions
Red	RGB: 255,0,0	Surrounding colour for triggered systems e.g. airbag, gas inflator, a trigger preloaded spring / gas strut or non-triggered gas strut

Check the following:



- 1) For pre-loaded spring
- 2) For triggered pre-loaded spring
- 3) For triggered gas strut



For non-triggered gas strut

(TNCAP條文草案)

氣壓桿

顏色	RGB色碼	組件/功能
紅	RGB : 255,0,0	觸發系統周圍顏色，例如空氣囊、充氣裝置、觸發型預負載彈簧/氣壓桿或非觸發型氣壓桿

請檢視下列資訊：



預負載彈簧



- 1) 非觸發型氣壓桿
- 2) 觸發型預負載彈簧
- 3) 觸發型氣壓桿

(經查預負載彈簧與預負載氣壓桿應使用紅色邊線加以區分，且TB030 2.0版已配合修正，故研判此處誤植已調整如上所示)

(Euro NCAP原文)

Legend

EXAMPLE

Legend of
ISO 17840-
Part 1:2015

	Airbag		Stored gas inflator		Seat belt pretensioner		SRS control unit		Pedestrian protection active system
	Automatic rollover protection system		Gas strut/Preloaded spring		High strength zone		Zone requiring special attention		
	Battery low voltage		Ultra capacitor, low voltage		Fuel tank		Gas tank		Safety valve
	High voltage battery pack		High voltage power cable/component		High voltage disconnect		Fuse box disabling high voltage system		Ultra capacitor, high voltage

Additional
pictograms
from Part 3

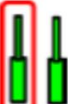
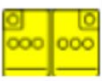
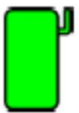
	High voltage disconnect (cutting solution)		Disconnect high voltage device		Fuel tank content gasoline / ethanol				
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(TNCAP條文草案)

圖例

範例

ISO 17840 第 1
部分 2015 年之
圖例

	空氣囊		壓力充氣裝置		安全帶預負載裝置		SRS 控制單元		主動式行人保護系統
	自動翻滾防護系統		氣壓桿/預載彈簧		高強度區域		特別留意區域		
	低電壓電池		低電壓超級電		燃油箱		儲氣槽		安全閥
	高電壓電池組		高電壓電纜/組件		高電壓斷路裝置		高電壓斷路保險絲盒		高電壓超級電

第 3 部分之新
增圖示

	高電壓斷路裝置(切斷法)		高電壓斷路裝置		燃油箱/乙醇汽油				
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(Euro NCAP原文)

Additional Pages Layout and Content

1. Identification / recognition

2. Immobilisation / stabilisation / lifting

3. Disable direct hazards / safety regulations

4. Access to the occupants

5. Stored energy / liquids / gases / solids

6. In case of fire

7. In case of submersion

8. Towing / transportation / storage

9. Important additional information

10. Explanation of pictograms used

(TNCAP條文草案)

補充頁面之排版與內容

1. 識別/辨認

2. 固定/穩定/舉升

3. 解除直接性危害/安全規範

4. 接近乘員途徑

5. 儲存之能源/液體/氣體/固體

6. 火災處置

7. 沉沒處置

8. 拖吊/運輸/存放

9. 重要補充資訊

10. 使用圖示說明

(Euro NCAP原文)

General

It is recommended that each of the additional page contains a small header listing: the brand / model / type and validity.

Logo of brand	Name of manufacturer and vehicle model Body type(s) covered by the rescue sheet (year of start of production – year of end of production*) <i>*) leave empty if the car is still in production</i>	ISO part 4 symbol	RHD pictogram or LHD pictogram <i>Note: Leave blank when LHD and RHD are covered by the same rescue sheet</i>
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Source: ISO 17840 Part 1

(TNCAP條文草案)

通則

建議於補充資訊之每一頁加上小頁首，列出：廠牌/車型/車身外型與適用性。

廠牌標誌	廠牌與車型名稱 救援表單涵蓋之車身外型（初產年份－停產年份*） *若尚未停產，請留白。	ISO第4部分符號	右駕圖示或左駕圖示 備註：若同一張救援單表包含左駕與右駕，請留白。
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資料來源：ISO 17840 第1部分

(Euro NCAP原文)

EXAMPLE

1. Identification / recognition

 LACK OF ENGINE NOISE DOES NOT MEAN VEHICLE IS OFF. SILENT MOVEMENT OR INSTANT RESTART CAPABILITY EXISTS UNTIL VEHICLE IS FULLY SHUT DOWN. WEAR APPROPRIATE PPE.

Brand logo



Model name



Source: Lynk & Co

(TNCAP條文草案)

1. 識別/辨認

 沒有引擎聲不代表車輛已關閉：車輛完全停止運轉前，仍可能安靜地移動或突然重新啟動。請穿戴合宜之個人防護裝備。

廠牌標誌



車型標誌



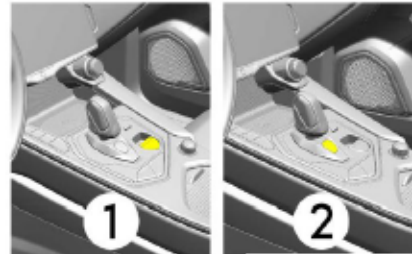
資料來源：Lynk & Co

EXAMPLE

2. Immobilisation / stabilisation / lifting

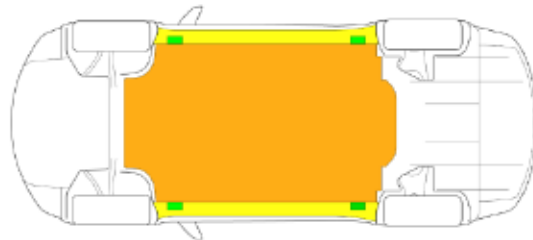
Immobilize vehicle:

1. Block wheels and set parking brake;
2. Push the P (park) button to select the P (park) position;



Source: Lynk & Co

Stabilisation-lifting points:



- Appropriate stabilisation-lifting points
- Appropriate stabilisation points vehicle on side
- High voltage battery

Source: TESLA

(TNCAP條文草案)

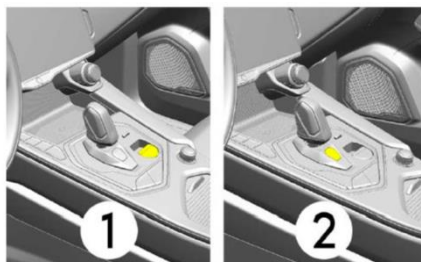
第2章

範例

2. 固定/穩定/舉升

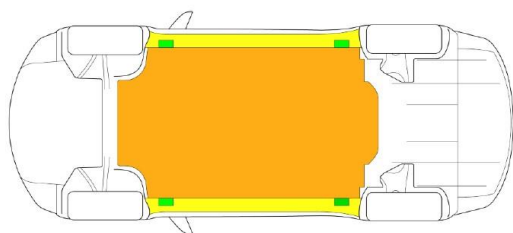
固定車輛：

1. 擋住車輪，作動駐煞車；
2. 按下 P 檔（駐車）鈕，以選擇 P 檔（駐車）位置。



資料來源：Lynk & Co

舉升位置：



- 適當之穩定舉升位置
- 車側邊適當之穩定位置
- 高壓電池

資料來源：TESLA

(Euro NCAP原文)

Chapter 3

2) Extra care should be taken of the correct use of the following pictograms (ISO 17840-Part 3):



Disconnect High Voltage Device (HVD)

To identify HVD that disconnect the high voltage where appropriate PPE is needed for the action



Disconnect High Voltage Device (HVD)

To identify the low voltage device that disconnect the high voltage (No PPE required)

(TNCAP條文草案)

第3章

2)標明解除程序是否需要穿戴個人防護裝備。正確使用下方圖示（ISO 17840第3部分）以呈現額外處置：



高電壓斷路裝置

識別能夠切斷高電壓之高壓裝置(執行時需穿戴個人防護裝備)



高電壓斷路裝置

識別能夠切斷高電壓之低壓裝置（執行時無需穿戴個人防護裝備）

EXAMPLES

3. Disable direct hazards / safety regulations

MAIN METHOD

A) SHUT POWER OFF



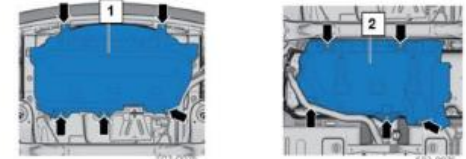
B) MANUALLY CLOSE VALVES ON THE GAS TANKS

OVERVIEW CNG TANKS



If required, the shut-off valves can be manually closed on the gas tanks as follows.

1. Raise the rear of the vehicle so that the covers for the natural gas tank are accessible.



2. Use the handwheel - T50026 - (SKODA special tool) or pliers to close the shut-off valves on both natural gas tanks in the direction of the arrow shown.

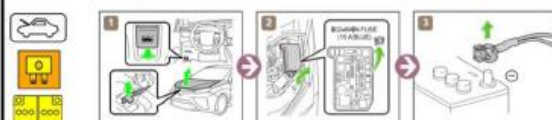


3. Disable direct hazards / safety regulations

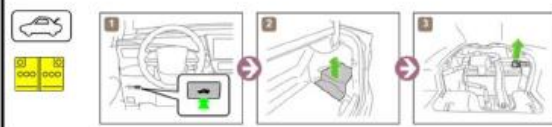
MAIN METHOD



ALTERNATIVE METHOD



ACCESS TO 12V BATTERY



Be aware that not every high voltage component is labelled.
Always wear the appropriate PPE.
Do not attempt to open the high voltage battery

Source: ŠKODA

Source: Toyota

(TNCAP條文草案)

第3章

範例

3. 解除直接性危害/安全規範

主要方式

A) 切斷電源



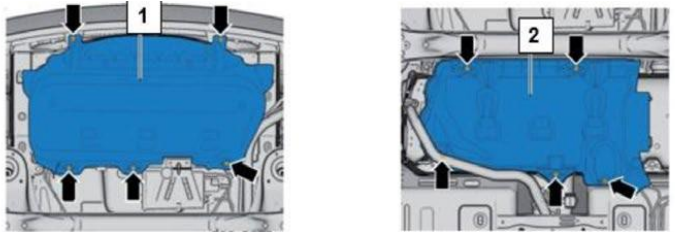
B) 手動關閉天然氣儲氣槽關閉閥

天然氣儲氣槽外觀



必要時，手動關閉靠近儲氣槽之關閉閥，如下。

1. 打開車輛後方車蓋，才能看到天然氣槽之外蓋。

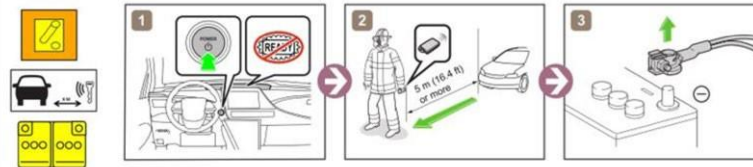


2. 使用手輪-T50026- (ŠKODA 特殊工具) 或鉗子關閉兩個天然氣槽之關閉閥，方向如圖中箭頭所示。

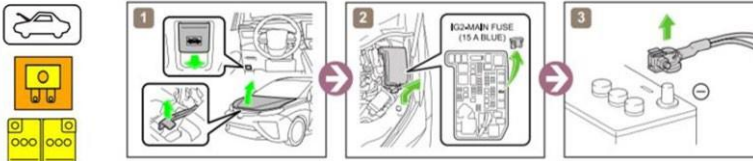


3. 解除直接性危害/安全規範

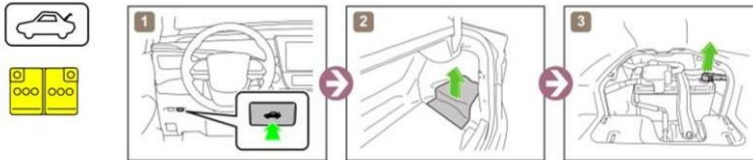
主要方式



替代方式



找出 12V 電池



注意不是所有高電壓組件皆有標籤。
請隨時穿戴合宜之個人防護裝備。
請勿試圖打開高電壓電池。

資料來源：Toyota

資料來源：ŠKODA

(Euro NCAP原文)

Chapter 4

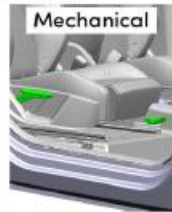
EXAMPLE

4. Access to the occupants

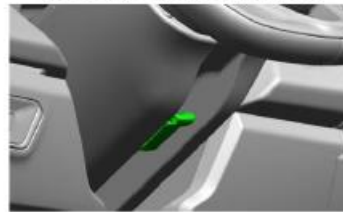
High strength steel in body



Seat adjustment



Steering column adjustment



Glass types:

- A. Laminated glass.
- B. Tempered glass.



Source: Lynk & Co

(TNCAP條文草案)

第四章

範例

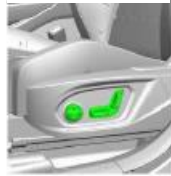
4. 接近乘員途徑

高強度車體

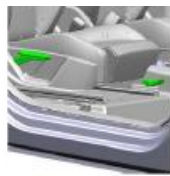


座椅調整

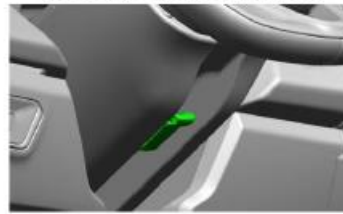
電動



機械



轉向機柱調整



玻璃種類：

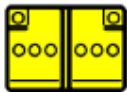
A. 膠合玻璃

B. 強化玻璃



資料來源：Lynk & Co

EXAMPLE

		Full body
		48 V
		400V
		700 bar
		50 l
		0,9 l



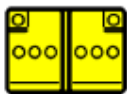
When coolant leaks from the battery pack, it can become unstable with risk of thermal runaway. Check battery pack temperature with thermal imaging camera.



(TNCAP條文草案)

第五章

範例

		全部車體
		48 V
		400 V
		700 bar
		50 l
		0.9 l



電池組冷卻液洩漏可能導致狀態不穩定，有熱失控之風險。



EXAMPLES

Electric Powered

6. In case of fire

USE LARGE AMOUNTS OF WATER



BATTERY RE-IGNITION!

DO NOT SUBMERGE VEHICLE TO EXTINGUISH BATTERY

CNG Powered

6. In case of fire

Temperature Pressure Release Device(TPRD) opens at 110°C (loud hissing noise)
90 seconds before all CNG gas is released from a tank



NEVER PUT WATER ON TPRD

Fuel Cell Powered

6. In case of fire

Temperature Pressure Release Device(TPRD) opens at 110°C (loud hissing noise)



USE LARGE AMOUNT OF WATER ON
BATTERY PACK



NEVER PUT WATER ON TPRD

BATTERY RE-IGNITION

65

第六章

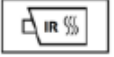
範例

電動車輛

6.火災處置

 使用大量的水



 注意電池復燃！

 請勿將車輛放入水中以撲滅起火之電池

壓縮天然汽車

6.火災處置

110°C 時，熱致動壓力釋放裝置 (Temperature Pressure Release Device, TPRD) 將會開啟 (嘶嘶作響)，90 秒內釋放槽內全部之壓縮天然氣。



 切勿將水倒在 TPRD 上



燃料電池車輛

6.火災處置

110°C 時，熱致動壓力釋放裝置 (Temperature Pressure Release Device, TPRD) 將會開啟 (嘶嘶作響)。



 於電池組使用大量的水



 切勿將水倒在 TPRD 上



 注意電池復燃

66

(Euro NCAP原文)

Chapter 7

EXAMPLE

7. In case of submersion

Wear appropriate PPE. Remove the vehicle from the water and continue with normal high voltage (see chapter 3). Vehicles submerged in salt water should be handled with a greater potential risk of a HV battery fire.

Tilt the vehicle to one side to allow water to drain out of the vehicle and the high voltage battery.

(TNCAP條文草案)

第七章

範例

7.沉沒處置

穿戴合宜之個人防護裝備。將車輛移出水體，並遵循一般高壓電處置方式（參見第3章），於鹽水域沉沒之車輛其高電壓電池著火之風險更高。

將車輛側放，使車內及高電壓電池內之水流出。

EXAMPLE



(TNCAP 條文草案)

第8章

範例



(Euro NCAP原文)

Chapter 10

EXAMPLE

10. Explanation of pictograms used			
	Smart key distance		Risk of flammability
	Warning high voltage		Risk of damaging human health
	Caution		Risk of acute toxicity
	Warning low temperature		Risk of an explosion
	Air-conditioning component		Risk of corrosive material / substances
	Hybrid Gasoline vehicle		Use water to extinguish the fire
	Use IR Camera (thermal imaging)		Bonnet
			Trunk

(TNCAP條文草案)

第10章 範例

範例

10.使用圖示說明			
	智慧鑰匙感應距離		易燃風險
	高壓電警告		人體有害風險
	小心		劇毒風險
	低溫警告		爆炸風險
	空調組件		腐蝕性材料/物質風險
	油電混合車		用水滅火
	使用紅外線攝影機（熱成像）		前方車蓋(即引擎蓋)
			後方車蓋(即行李廂)

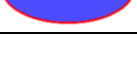
(Euro NCAP原文)

Appendix: ISO Symbols and Translations (1)

						
	Vehicle on fuel of liquid group 1 Diesel	Fahrzeug mit Treibstoff der Kl. 1 Diesel	Véhicule fonctionnant avec un carburant liquide du groupe 1 (Diesel)	Vehículo con combustible del grupo líquido 1 Diesel	Voertuig op brandstof van vloeistofgroep 1 Diesel	Veicolo a carburante liquido gruppo 1 (gasolio)
	Vehicle on fuel of liquid group 2 Gasoline/ethanol	Fahrzeug mit Treibstoff der Kl. 2 (Benzin, Ethanol, ...)	Véhicule fonctionnant avec un carburant liquide du groupe 2 (essence, ethanol)	Vehículo con combustible del grupo líquido 2 Gasolina / etanol	Voertuig op brandstof van vloeistofgroep 2 Benzine / ethanol	Veicolo a carburante liquido gruppo 2 (benzina, etanolo ...)
	Vehicle on LPG	Flüssiggasfahrzeug	Véhicule au GPL	Vehículo en GPL	Voertuig op LPG	Veicolo alimentato a Gas Petrolio Liquefatto LPG
	Vehicle on CNG	Erdgas betriebenes Fahrzeug	Véhicule au GNC	Vehículo en GNC	Voertuig op CNG	Veicolo alimentato a Gas Naturale Compresso CNG
	Electric Vehicle	Elektrofahrzeug	Véhicule électrique	Vehículo eléctrico	Elektrisch voertuig	Veicolo elettrico
	Hybrid Electric Vehicle on fuel of liquid group 1 Diesel	Elektrohybridfahrzeug mit Kraftstoff der Kl. 1	Véhicule électrique hybride au carburant du groupe liquide 1 Diesel	Vehículo eléctrico híbrido con combustible del grupo líquido 1 Diesel	Hybride elektrisch voertuig op brandstof van vloeistofgroep 1 Diesel	Veicolo ibrido elettrico a carburante liquido gruppo 1 (gasolio)
	Hybrid Electric Vehicle on fuel of liquid group 2 Gasoline/ethanol	Elektrohybridfahrzeug mit Kraftstoff der Kl. 2	Véhicule électrique hybride au carburant du groupe liquide 2 Essence / ethanol	Vehículo eléctrico híbrido con combustible del grupo líquido 2 Gasolina / etanol	Hybride elektrisch voertuig op brandstof van vloeistofgroep 2 Benzine / ethanol	Veicolo ibrido elettrico a carburante liquido gruppo 2 (benzina, etanolo)
	Vehicle on Hydrogen Fuel Cell Electric Vehicle	Fahrzeug auf Wasserstoffzellen antrieb	Véhicule électrique à pile à combustible	Vehículo eléctrico de pila de combustible	Brandstofcel voertuig	Veicolo elettrico alimentato a Idrogeno con celle di combustibile
	Vehicle on LNG	Fahrzeug mit flüssigem Naturgas	Véhicule au GNL	Vehículo en GNL	Voertuig op LNG	Veicolo alimentato a Gas Naturale Liquido LNG
	Vehicle on DME	Fahrzeug mit DME-Antrieb (Methanol)	Véhicule au DME	Vehículo en DME	Voertuig op DME	Veicolo a DME
	Battery Low Voltage	Niedervolt-Batterie	Batterie basse tension	Batería de bajo voltaje	Laag spanning-batterij	Batteria bassa tensione
	Airbag	Airbag	Airbag	Airbag	Airbag	Airbag

(TNCAP條文草案)

附錄：ISO 符號與翻譯 (1)

	<u>1 類液體車輛</u> <u>(柴油)</u>
	<u>2 類液體車輛</u> <u>(汽油/乙醇)</u>
	<u>液化石油氣車輛</u>
	<u>壓縮天然氣車輛</u>
	<u>純電動車輛</u>
	<u>1 類液體油電混合</u> <u>車輛</u>
	<u>2 類液體油電混合</u> <u>車輛</u>
	<u>氫燃料車輛</u> <u>燃料電池電動車輛</u>
	<u>液化天然氣車輛</u>
	<u>二甲醚車輛</u>
	<u>低電壓電池</u>
	<u>空氣囊</u>

(Euro NCAP 原文)

Appendix: ISO Symbols and Translations (2)

						
	Stored gas inflator	Gas generator	Générateur de gaz	Generador de gas	Gasgenerator	Cartuccia gas degli airbag
	Seat belt pretensioner	Gurtstraf	Prétensionneur de ceinture de sécurité	Pretensores de los cinturones de seguridad	Gordelspanner	Prétensionatore delle cinture di sicurezza
	Gas strut / Preloaded spring	Gedruckte Feder / vorgeprespannte Feder	Varin à gaz, ressort précontraint	Cilindros de gas a presión	Gedruktveer	Pistoni a gas/ Molla precaricata
	Pedestrian protection active system	Aktives Fußgängererkennungssystem	Système de protection active des piétons	Sistema activo protección de peatones	Actieve voetgangerbescherming	Sistema attivo di protezione per i pedoni
	High strength zone	Karosserie-Verstärkung	Zone de haute résistance	Zona de alta resistencia	Versterking	Zona ad alta resistenza
	Right hand drive	Rechtslenker Fahrzeug	Conduite à droite	Volante a la derecha	Rechtszijdig sturen	Volante a destra
	Left hand drive	Linkslenker Fahrzeug	Conduite à gauche	Volante a la izquierda	Linkszijdig sturen	Volante a sinistra
	Ultra-capacitor, low-voltage	Niedervolt-Kondensator	Ultra capacité basse tension	Ultra condensador de bajo voltaje	Lage voltage condensator	Super condensatore a bassa tensione
	SRS control unit	SRS Steuergerät	ECU Airbag	Módulo de control SRS	SRS module	Scheda elettronica SRS - Airbag
	Battery pack, high-voltage	Hochvolt-Batterie	Batterie haute tension	Batería de alto voltaje	Hoge spanning batterij	Pacco batterie ad alta tensione
	Automatic rollover protection system	Automatisches Überroll-Schutzsystem	Système automatique de protection en cas de retournement	Sistema automático de protección antivolco	Rolover protectie	Sistema automatico di protezione in caso di ribaltamento
	Fuel tank	Treibstofftank	Réservoir de carburant	Deposito de combustible	Brandstof tank	Serbatoio del carburante

(TNCAP條文草案)

附錄：ISO符號與翻譯 (2)

	<u>壓力充氣裝置</u>
	<u>安全帶預負載裝置</u>
	<u>氣壓桿/預負載彈簧</u>
	<u>主動式行人保護系統</u>
	<u>高強度區域</u>
	<u>右駕</u>
	<u>左駕</u>
	<u>低電壓超級電容器</u>
	<u>SRS 控制單元</u>
	<u>高電壓電池組</u>
	<u>自動翻滾防護系統</u>
	<u>燃油箱</u>

(Euro NCAP原文)

Appendix: ISO Symbols and Translations (3)

						
	Gas tank	Gastank	Reservoir de gaz	Depósito de gas	Gastank	Servatoio di gas
	Safety valve	Sicherheitsventil	Soupepe de securité	Válvula de seguridad	Veiligheidsventiel	Valvola di sicurezza
	High voltage power cable	Hochvolt-Kabel / Bauteil	Câble / composant d'énergie haute tension	Cablado de alto voltaje	Hoge spanningkabel	Cablaggi di alimentazione Alta tensione
	High voltage ultra-capacitor	Hochvolt-kondensator	Condensateur haute tension	Condensador de alto voltaje	Hoge spanning capacitor	Condensatore ad alta tensione
	Low voltage device that disconnects high voltage	Niederspannungsele ment das die Hochspannung abschaltet	Deconnecteur basse tension de la batterie haute tension	Seccionador de bajo voltaje de la batería de alto voltaje	Lage spanningonderdeel dat hoge spanning uitschakelt	sezionatore a bassa tensione di scollegamento della batteria alta tensione
	Fuse box disabling high voltage	Sicherungen / Abschalten der Hochspannung	Bottier de fusibles de désactivation de la haute tension	Caja de fusibles de desactivación de alto voltaje	Zekering dat hoge voltage uitschakelt	scatola dei fusibili per disabilitare l'alta tensione
	Cable cut	Kabeldurchtrennung	Coupure de câble	Corte de cable	Kabel knip	Taglio del cavo
	High voltage device that disconnects high voltage	Hochspannungselement das die Hochspannung abschaltet	Deconnecteur haute tension de la batterie haute tension	Seccionador de alto voltaje de la batería de alto voltaje	Hoge spanningonderdeel dat de hoge spanning uitschakelt	Sezionatore ad alta tensione di scollegamento della batteria alta tensione
	Fuel tank content Diesel	Diesellokstofftank	Reservoir de carburant diesel	Depósito de diesel	Diesel tank	Servatoio gasolio
	Fuel tank content gasoline/ethanol	Benzin-Ethanolkraftstoff tank	Reservoir de carburant essence / Ethanol	Depósito de gasolina /Etanol	Benzine/Ethanol tank	Servatoio benzina / etanolo
	High voltage component	Hochspannungskomponente	Composant haute tension	Componente de alto voltaje	Hoge spanning onderdeel	Componenti ad alta tensione
	Emergency door opener	Notausgangsöffnung	Dispositif d'ouverture de secours des portes	Dispositivo de apertura de puertas en caso de emergencia	Noodbediening	Apertura d'emergenza porta

(TNCAP條文草案)

附錄：ISO符號與翻譯 (3)

	<u>儲氣槽</u>
	<u>安全閥</u>
	<u>高電壓電纜</u>
	<u>高電壓超級電容器</u>
	<u>高電壓斷路低壓裝置</u>
	<u>高電壓斷路保險絲盒</u>
	<u>高電壓斷路裝置 (切斷法)</u>
	<u>高電壓斷路高壓裝置</u>
	<u>燃油箱內容物 (柴油)</u>
	<u>燃油箱內容物 (汽油/乙醇)</u>
	<u>高電壓組件</u>
	<u>緊急出口開關</u>

(Euro NCAP 原文)

Appendix: ISO Symbols and Translations (4)

						
	Bonnet	Motorhaube	Capot	Capó	Motorkap	Portellone anteriore
	Boot	Kofferraum	Coffre	Maletero	Koffer	Portellone posteriore
	Hood release, truck	Motorhaubenöffnung - LKW	Ouverture du capot, camion	Apertura del capo, camion	Motorkap opener vrachtwagen	Apertura del cofano motore, camion
	Device to shut down power in vehicle	Stromloschaltung des Fahrzeuges	Dispositif de coupure de l'alimentation dans le véhicule	Dispositivo de corte de energía del vehículo	Stroomonderbreker voertuig	Dispositivo di interruzione alimentazione del veicolo
	Dangerous voltage	Gefährliche Spannung	Tension dangereuse	Voltaje peligroso	Gevaarlijke spanning	Pericolo tensione
	Vehicle induction charging	Induktionsladung	Charge par induction du véhicule	Carga por inducción del vehículo	Inductielading voertuig	Sistema di ricarica ad induzione del veicolo
	Height control bus, by air system	Pneumatisches Bushöhenkontrollsystem	Contrôle de la hauteur du bus par un système pneumatique	Control de la altura del camión por sistema neumático	Lucht gestuurde hoogteregeling bus	Controllo pneumatico dell'altezza del bus
	Height control truck, by air system	Pneumatisches LKW-Höhenkontrollsystem	Contrôle de la hauteur du camion par un système pneumatique	Control de la altura del camión por sistema neumático	Lucht gestuurde hoogteregeling vrachtwagen	Controllo pneumatico dell'altezza del camion
	Steering wheel, tilt control	Regelung der Lenkachsneigung	Commande d'inclinaison du volant	Control de la inclinación del volante	Stuurverstelling	Controllo dell'inclinazione dello sterzo
	Seat height adjustment	Pneumatisches Sitzhöhenverstellung	Règlage de la hauteur du siège par un système pneumatique	Ajuste de altura del asiento por sistema neumático	Hoogteregeling stoel	Regolazione altezza sedile
	Seat adjustment, longitudinal	Horizontale Sitzverstellung	Règlage longitudinal du siège	Ajuste longitudinal del asiento	Stoelverstelling Horizontal	Scorimento sedile
	Lifting point, central support	Anschlagpunkt	Point de levage	Punto de elevación, Soporte central	Heffpunt	Punto di sollevamento

(TNCAP條文草案)

附錄：ISO符號與翻譯 (4)

	<u>前方車蓋</u>
	<u>後方車蓋</u>
	<u>貨車前方車蓋開關</u>
	<u>車輛電源關閉裝置</u>
	<u>危險電壓</u>
	<u>車輛無線充電</u>
	<u>氣壓系統之大客車 高度控制</u>
	<u>氣壓系統之貨車高 度控制</u>
	<u>方向盤傾斜控制</u>
	<u>座椅高度調整</u>
	<u>座椅前後調整</u>
	<u>舉升點；中央支撐</u>

(Euro NCAP 原文)

Appendix: ISO Symbols and Translations (5)

						
	Carbon structure	Carbonfaserstruktur	Structure en carbone	Estructura de fibra de carbono	Carbon stuktur	Struttura in carbonio
	Fuel cell component	Brennstoffzelle	Composant de piles à combustible	Componente de pila de combustible	Brennstoffzel	Sistema cella a combustibile
	Tank content oil (e.g. hybrid oil technology)	Öltank (z.B. aus Hybridtechnologie)	Réservoir d'huile (ex: technologie d'huile hybride)	Depósito de aceite (ej: Tecnología de aceite híbrido)	Oljetank	Serbatoio dell'olio idraulico
	Gas tank with gas type indication (CNG)	Komprimiertes Erdgas (CNG)	Réservoir de gaz GNC	Depósito de gas GNC	CNG Tank	Serbatoio Gas Naturale Compresso - CNG
	Manual gas shut-off valve with gas type indication (CNG)	Manueller Absperrhahn (CNG)	Robinet d'arrêt manuel du gaz GNC	Válvula de cierre manual de gas GNC	Manuale afdrukken CNG	Valvola manuale di intercettazione del Gas Naturale Compresso - CNG
	Automatic gas overpressure safety valve with gas type indication (CNG)	Automatisches Überdruckventil CNG	Soupape de sécurité automatique pour un réservoir de gaz GNC	Válvula automática de seguridad de sobrepresión de gas GNC	Overdrukventiel CNG	Valvola automatica di sovrappressione del Gas Naturale Compresso - CNG
	Gas tank with gas type indication (LPG)	Gas tank mit Inhablungsmerkmal g (LPG)	Réservoir de gaz GPL	Depósito de gas GLP	LPG tank	Serbatoio Gas di Petrolio Liquefatto - GPL
	Manual gas shut-off valve with gas type indication (LPG)	Manueller Absperrhahn (LPG)	Robinet d'arrêt manuel du gaz GPL	Válvula de cierre manual de gas GLP	Manuale afdrukken LPG	Valvola manuale di intercettazione del Gas di Petrolio Liquefatto LPG
	Automatic gas overpressure safety valve with gas type indication (LPG)	Automatisches Überdruckventil LPG	Soupape de sécurité automatique pour un réservoir de gaz GPL	Válvula automática de seguridad de sobrepresión de gas GLP	Overdrukventiel LPG	Valvola automatica di sovrappressione del Gas di Petrolio Liquefatto - GPL
	Gas tank with gas type indication (DME)	Gas tank mit Inhablungsmerkmal g (DME)	Réservoir de gaz DME	Depósito de gas DME	DME tank	Serbatoio gas Elere Dimetilico - DME
	Manual gas shut-off valve with gas type indication (DME)	Manueller Absperrhahn (DME)	Robinet d'arrêt manuel du gaz DME	Válvula de cierre manual de gas DME	Manuale afdrukken DME	Valvola automatica di sovrappressione del Gas Elere Dimetilico - DME
	Automatic gas overpressure safety valve with gas type indication (DME)	Automatisches Überdruckventil DME	Soupape de sécurité automatique pour un réservoir de gaz DME	Válvula automática de seguridad de sobrepresión de gas DME	Overdrukventiel DME	Valvola automatica di sovrappressione del gas Elere Dimetilico - DME

(TNCAP條文草案)

附錄：ISO符號與翻譯 (5)

	<u>碳纖維結構</u>
	<u>燃料電池組件</u>
	<u>油箱內容物（例如混合油技術）</u>
	<u>儲氣槽，標明氣體種類（壓縮天然氣）</u>
	<u>手動氣體關閉閥，標明氣體種類（壓縮天然氣）</u>
	<u>自動氣體過壓安全閥，標明氣體種類（壓縮天然氣）</u>
	<u>儲氣槽，標明氣體種類（液化石油氣）</u>
	<u>手動氣體關閉閥，標明氣體種類（液化石油氣）</u>
	<u>自動氣體過壓安全閥，標明氣體種類（液化石油氣）</u>
	<u>儲氣槽，標明氣體種類（二甲醚）</u>
	<u>手動氣體關閉閥，標明氣體種類（二甲醚）</u>
	<u>自動氣體過壓安全閥，標明氣體種類（二甲醚）</u>

(Euro NCAP 原文)

Appendix: ISO Symbols and Translations (6)

						
	Gas tank with gas type indication (LNG)	Gas tank mit Inhaltbezeichnung (LNG)	Réservoir de gaz GNL	Depósito de gas GNL	LNG Tank	Serbatoio Gas Naturale Liquefatto - LNG
	Manual gas shut-off valve with gas type indication (LNG)	Manueller Absperrhahn (LNG)	Robinet d'arrêt manuel du gaz GNL	Valvula de cierre manual de gas GNL	Manuale afsluiteren LNG	Valvola manuale di intercettazione del Gas Naturale Liquefatto - LNG
	Automatic gas overpressure safety valve with gas type indication (LNG)	Automatisches Überdruckventil LNG	Soupepe de sécurité automatique pour un réservoir de gaz GNL	Valvula automática de seguridad de sobrepresión de gas GNL	Overdrukventiel LNG	Valvola automatica di sovrappresione del Gas Naturale Liquefatto - LNG
	Gas tank with gas type indication (H2)	Gas tank mit Inhaltbezeichnung (H2)	Réservoir de gaz H2	Depósito de gas H2	Wasserstof tank	Serbatoio gas Idrogeno - H2
	Manual gas shut-off valve with gas type indication (H2)	Manueller Absperrhahn (H2)	Robinet d'arrêt manuel du gaz H2	Valvula de cierre manual de gas H2	Manuale afsluiteren H2	Valvola manuale di intercettazione dell'Idrogeno - H2
	Automatic hydrogen overpressure safety valve with gas type indication	Automatisches Überdruckventil H2	Soupepe de sécurité automatique pour un réservoir de gaz H2	Valvula automática de seguridad de sobrepresión de gas H2	Overdrukventiel H2	Valvola manuale di intercettazione dell'Idrogeno - H2
	Air tank	Lufttank	Réservoir d'air	Depósito de aire	Lucht tank	Serbatoio aria
	Air conditioning component	Klimaanlage Komponente	Climatisation composant	Aire acondicionado componente	Air conditioning component	Aria condizionata componente
	Gas line (generic)	Gasleitung (Allgemein)	Tuyauterie de gaz (générique)	Tuberia de gas (genérica)	Gas leiding	Linea del gas (generico)
	Gas line (H2)	Gasleitung H2	Tuyauterie de gaz (H2)	Tuberia de gas (H2)	Gas leiding H2	Linea del gas (Idrogeno - H2)
	Air-conditioning line	Zuleitung Klimaanlage	Tuyauterie de climatisation	Tuberia de aire acondicionado	Airco Leiding	Linea impianto condizionamento
	Direction gas overpressure safety valve (e.g. LPG) in vehicle	Ausströmrichtung des Gasüberdruckventils	Sens d'échappement du gaz (ex GPL) via la soupape de sécurité	Dirección de escape de gas (ej. GLP) a través de la válvula de seguridad	Richting Overdrukventiel (voorbeeld LPG)	Direzione dello scarico della valvola di sovrappresione (es. Gas Petrolio Liquefatto - GPL) nei veicoli

(TNCAP條文草案)

附錄：ISO符號與翻譯 (6)

	<u>儲氣槽，標明氣體種類 (液化天然氣)</u>
	<u>手動氣體關閉閥，標明氣體種類 (液化天然氣)</u>
	<u>自動氣體過壓安全閥，標明氣體種類 (液化天然氣)</u>
	<u>儲氣槽，標明氣體種類 (氫氣)</u>
	<u>手動氣體關閉閥，標明氣體種類 (氫氣)</u>
	<u>自動氣體過壓安全閥，標明氣體種類 (氫氣)</u>
	<u>儲氣罐</u>
	<u>空調組件</u>
	<u>氣體管線 (通用)</u>
	<u>氣體管線 (氫氣)</u>
	<u>空調管線</u>
	<u>車輛氣體過壓安全閥方向 (例如液化石油氣)</u>

(Euro NCAP 原文)

Appendix: ISO Symbols and Translations (7)

						
	Direction hydrogen overpressure safety valve in vehicle	Ausstrichrichtung des H ₂ -Überdruckventils	Sens d'échappement de l'hydrogène (H ₂) via la soupape de sécurité	Dirección de escape de gas (H ₂) a través de la válvula de seguridad	Richting Overdrukventiel waterstof	Direzione dello scarico della valvola di sovrappressione Idrogeno nei veicoli
	General warning sign	Gefahr	Signe générique d'avertissement	Señal de advertencia genérica	Algemeen waarschuwings	Attenzione Pericolo Generale
	Warning: Electricity	Spannungsgefahr	Avertissement: électricité	Advertencia: electricidad	Opgelet: electriciteit	Attenzione: elettricità
	Warning: low temperature	Warnung: niedrige Temperatur	Avertissement: basse température	Advertencia: baja temperatura	Opgelet: lage temperatuur	Attenzione: basse temperature
	Attention: hydrogen burns with an almost invisible flame	Achtung: Wasserstoff brennt mit einer beinahe farblosen Flamme	Attention : brûlures par l'hydrogène avec une flamme presque invisible	Atención: el hidrógeno arde con una llama casi invisible	Opgelet: waterstof brand met bijna onzichtbare vlam	Attenzione: l'idrogeno brucia con una fiamma pressoché invisibile
	Use thermal Infrared camera	IR-Wärmebildkamera benutzen	Utiliser une caméra thermique infrarouge	Usar cámara térmica infrarroja	Gebruik warmtebeeld camera	Utilizzare termocamera a infrarossi
	Automatic fire suppression system	Automatisches Löschesystem	Système d'extinction automatique	Sistema de extinción automática	Automatisch blussysteem	Sistema automatico d'estinzione
	Special battery access	Zugang zur Hochspannungsbatterie	Accès spécifique pour éteindre la batterie HT en feu	Acceso específico de extinción de batería de alto voltaje	Speciale batterijtoegang	Accesso specifico per estinzione incendio batteria alta tensione
	Use water to extinguish the fire	Mit Wasser löschen	Utiliser de l'eau pour éteindre le feu	Usar agua para extinción del fuego	Gebruik water om te blussen	Usare l'acqua per spegnere l'incendio
	Use wet foam to extinguish the fire	Verwenden Sie feuchten Schaum, um das Feuer zu löschen	Utiliser de la mousse humide pour éteindre le feu	Usar extintor húmedo para extinción del fuego	Gebruik nat schuim om te blussen	Usare l'acqua per spegnere l'incendio
	Use dry foam to extinguish the fire	Mit Trockenschaum löschen	Utiliser de la mousse sèche pour éteindre le feu	Usar extintor seco para extinción del fuego	Gebruik droog schuim om te blussen	Usare schiuma secca per spegnere l'incendio
	Use ABC powder to extinguish the fire	Mit ABC-Pulver löschen	Utiliser une poudre ABC pour éteindre l'incendie	Usar extintor de polvo ABC para extinción del fuego	Gebruik een ABC bluspoeder	Usare polvere ABC per spegnere l'incendio

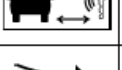
(TNCAP條文草案)

附錄：ISO符號與翻譯 (7)

	<u>車輛氫氣過壓安全閥方向</u>
	<u>一般警告標誌</u>
	<u>電力警告</u>
	<u>低溫警告</u>
	<u>注意：氫氣燃燒，幾乎無法看到火焰</u>
	<u>使用熱成像紅外線攝影機</u>
	<u>自動火災消防系統</u>
	<u>特殊電池途徑</u>
	<u>用水滅火</u>
	<u>用濕泡沫滅火</u>
	<u>用乾泡沫滅火</u>
	<u>用 ABC 乾粉滅火</u>

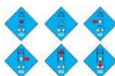
(Euro NCAP原文)

Appendix: ISO Symbols and Translations (8)

						
	Do not extinguish with water	NICHT met Wasser löschen	Ne pas éteindre avec de l'eau	No extinguir con agua	Eens niet met water	Non usare l'acqua per spegnere l'incendio
	Explosive	Explosionsgefahr	Explosif	Explosivo	Explosief	Esplosivo
	Flammable	Brandbar	Inflammable	Inflammable	Brandbaar	Inflammabile
	Gases under pressure	Druckgas	Gas sous pression	Gas a presión	Gas onder druk	Gas compresso
	Oxidizer	Oxydationsmittel	Comburant	Comburente	Brandbevorderend	Comburente
	Corrosive	Korroïf	Corrosif	Corrosivo	Corrosief	Corrosivo
	Hazardous to the human health	Sensibilisierung der Atemwege und Haut	Dangereux pour la santé humaine	Peligro grave para la salud	Schadelijk voor de gezondheid	Pericoloso per la salute umana
	Acute toxicity	Hoch giftig	Toxicité aigüe	Toxicidad aguda	Giffig	Tossicità elevata
	Environmental hazard	Gewissersgefahr	Danger pour l'environnement	Peligro para el medio ambiente	Gevaar voor milieu	Pericoloso per l'ambiente
	Direction of overpressure valve	Richtung des Überdruckventils	Sens d'échappement de la soupape de sécurité	Dirección de la válvula de seguridad de sobrepresión	Richting overdrukklep	Direzione delle valvole di sovrappressione
	Remove smart key	Smart-Schlüssel entfernen	Eloigner la clé main-libre	Alejar la llave inteligente	Verwijder smart-key	Allontanare la smart key
	Air intake	Luftzufuhr Lufteinlass	Prise d'air	Toma de aire	Lucht inlaat	Prese d'aria

(TNCAP條文草案)

附錄：ISO符號與翻譯 (8)

	<u>請勿用水滅火</u>
	<u>爆炸</u>
	<u>易燃</u>
	<u>加壓氣體</u>
	<u>氧化物質</u>
	<u>腐蝕性物質</u>
	<u>危害人體健康</u>
	<u>劇毒</u>
	<u>危害環境</u>
	<u>過壓閥方向</u>
	<u>移開智慧鑰匙</u>
	<u>進氣口</u>