

U6XXICA REAR POWER SEAT HMI REQUIREMENT

TAO HE
ALEX RUAN

REQ-HMI-SWITCH01

REQ-HMI-SWITCH01:

Physical switch is needed as user input, include

- Seat slide/recline switch

- EZ entry/return switch

- 2nd row fold (left, both, right) switch (optional)

- 3rd row fold (left, both, right) switch (optional)

Seat slide/recline switch

- Seat slide/recline switch should be located on door trim(Lincoln) or seat side(Ford)

EZ entry/return switch

- EZ entry/return switch should be located on outside shoulder of seat

- EZ entry/return switch need to be a two-way switch to clearly capture user's target direction of EZ entry or return.

2nd row fold (left, both, right) switch

- 2nd row fold (left, both, right) switch should located in trunk if equipped

3rd row fold (left, both, right) switch

- 3rd row fold (left, both, right) switch should located in trunk if equipped

REQ-HMI-DI01~02

REQ-HMI-DI01:

It is highest recommended that if cluster can show information/warning message with alert to driver, if cluster is not available, then IVI should show information/warning message with alert to driver.

REQ-HMI-DI02:

Information message text popup as message bar with alert to inform driver that rear seat function inhibit when seat occupied.

Alert

information type: 1 * 1s_Alert

Warning design

Message bar - level3

10s timer completed, will go to pull-down screen

Further same notification will not create duplicated message record in pull-down screen



后排座椅被占用，相关功能暂时禁用。

消息横幅level3 10s, 进下拉屏，后续重复提示则覆盖

REQ-HMI-DI03

REQ-HMI-DI03:

Information message text popup as message bar with alert to inform driver that rear seat function inhibit when vehicle speed above 5km/h

Alert

information type: 1 * 1s_Alert

Warning design

Message bar - level3

10s timer completed, will go to pull-down screen

Further same notification will not create duplicated message record in pull-down screen

参考文案：
车辆行驶中，后排座椅功能暂时禁用。



车辆行驶中，后排座椅功能暂时禁用。

消息横幅level3 10s, 进下拉屏，后续重复提示则覆盖

REQ-HMI-DI04

REQ-HMI-DI04:

Warning message level5 popup (with return button on IVI) with alert to warn driver that Vehicle speed above 5km/h when 2R seat cushion not locked on track.

alert

Warning type: 5 * 0.5s_Alert for each time warning

alert will stop if pop up warning cleared within 5 * 0.5s_Alert time duration

First time warning popup, will be cleared until

Return button pressed;

or 3s after warning popup, Cancel button show up and pressed;

or Rear Power Seat HMI Warning Arbitrator removes request

Second time warning shall be performed since first time warning triggered and Rear Power Seat HMI Warning Arbitrator keep requesting this warning for 30s.

If first time warning cleared, second time warning shall popup with alert;

or if first time warning not cleared, alert shall be performed only, and popup move to top layer, and will be cleared until

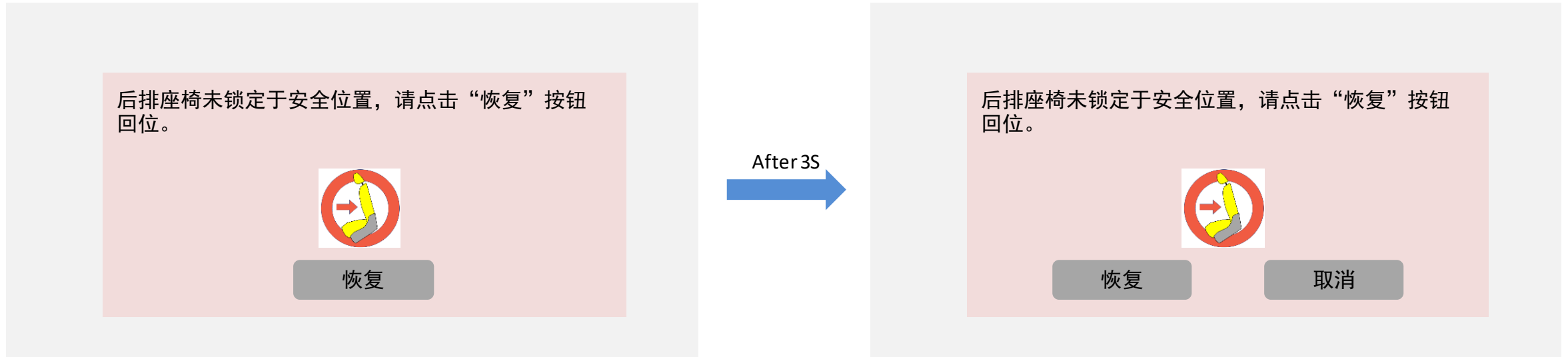
Return button pressed;

or if first time warning not cleared before, Cancel button pressed;

or if first time warning cleared before, then 3s after second warning popup, Cancel button show up and pressed;

or Rear Power Seat HMI Warning Arbitrator removes request

3rd/4th/5th/6th time warning shall be performed since last time warning triggered and Rear Power Seat HMI Warning Arbitrator keep requesting this warning for 30s. 6th time is the last time warning, no further warning popup if Rear Power Seat HMI Warning Arbitrator keep requesting this warning.



参考文案：
后排座椅未锁定于安全位置，请点击“恢复”按钮回位。

Level 5, move to top layer every 30s if active

REQ-HMI-DI05

REQ-HMI-DI05:

Information message level5 popup with alert to inform driver that rear power seat module is malfunction, need dealer service or refer to owner manual alert

Warning type: 3 * 0.5s_Alert

Warning popup, will be cleared until

3s after warning popup, OK button show up and pressed

or Rear Power Seat HMI Warning Arbitrator removes request

This Popup will be presented one time per day only, not every ignition cycle.

REQ-HMI-DI05

参考文案：
左侧后排座椅故障，请参考用户手册或联系经销商。

左侧后排座椅故障，请参考用户手册或联系经销商。



After 3S



左侧后排座椅故障，请参考用户手册或联系经销商。



OK

参考文案：
右侧后排座椅故障，请参考用户手册或联系经销商。

右侧后排座椅故障，请参考用户手册或联系经销商。



After 3S



右侧后排座椅故障，请参考用户手册或联系经销商。



OK

popup level 5, 1 time per day

REQ-HMI-IVI-01

REQ-HMI-IVI-01:

IVI should have HMI to give driver an easy access to return 2nd row seat from EZ entry position during driving to eliminate potential safety risk.



Use case flow:

1. Passenger use rear EZ in/out, seat still in EZ in/out position, forget to return seat to floor;
2. Driver start drive vehicle alone and get warning message on cluster "Please Return 2nd row seat to secured position";
3. Driver use IVI soft button on pop up window or voice command to return seat to floor, without stopping vehicle and get to 2nd row to use hard switch to return.

REQ-HMI-IVI-02

REQ-HMI-IVI-02:

IVI should have HMI to let customer return 2nd row seat to default position incase customer don't know how to return seat back to default position.



Use case flow:

1. Passenger use any 2nd row power seat function and seat in any position not intent;
2. Driver use IVI soft button or voice command to return seat to default position easily.

参考文案:

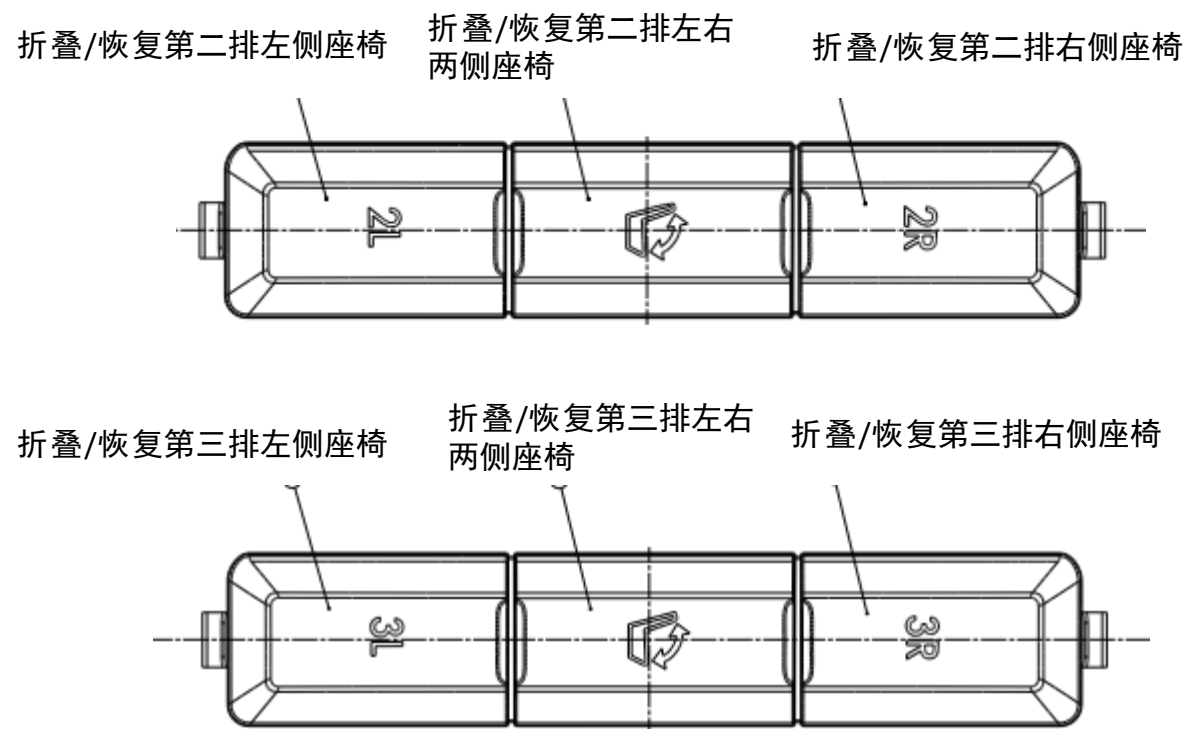
菜单名称（标题）：后排座椅控制

按钮名称：恢复二排左侧座椅，恢复二排右侧座椅

REQ-HMI-IVI-03

REQ-HMI-IVI-03:

IVI seat return control HMI (defined in previous page REQ-HMI-IVI-02) shall have or have entry (e.g. “!” symbol can be touched) of operation instruction of rear seat trunk switch.



后排座椅控制



恢复二排
左侧座椅

恢复二排
右侧座椅

如遇后排座椅功能故障报警，可同时长按第三排左右键10秒尝试激活后排座椅位置复位自学习

REQ-HMI-IVI-04

REQ-HMI-IVI-04:

IVI should support voice control command to return 2nd row seat and give user feedback regardless of operating result.

Voice Command	“恢复二排座椅”	Return 2 nd row both side seat to default position
	“恢复二排左侧座椅”	Return 2 nd row left side seat to default position
	“恢复二排右侧座椅”	Return 2 nd row right side seat to default position
Feedback	“好的”	