

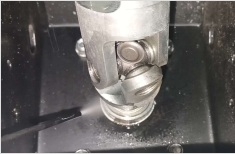
REPAIR SHEET - Steering Column and Steering Wheel Replacement

REASON:

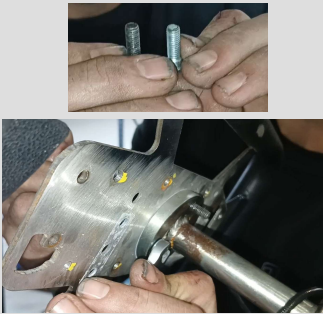
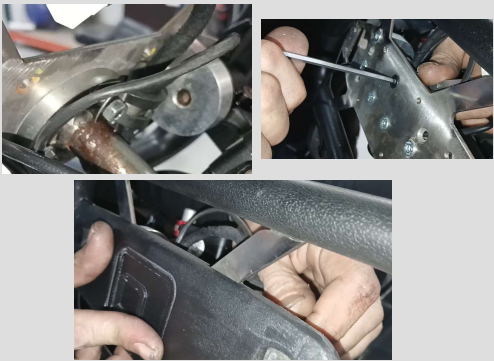
OPERATOR	WORKSHOP	DATE
REGISTRATION	TIME 55min	COST

REQUIRED TOOLS				SAFETY	
☐ Allen key set	☐ 10mm open-end wrench	☐ Circlip pliers	☐ Safety shoes		
☐ Grease	☐	☐	☐ Safety gloves		
☐	☐	☐	☐		
☐	☐	☐	☐		

TOOLS	PROCESS	ASSEMBLY DRAWING	ESTIMATED TIME
1	Steering Wheel Removal (Button Panel and RC8): 1- Remove the button panel and the RC8 from the steering wheel (refer to the button panel and RC8 replacement sheet). Leave the plastic front panel removed.		13
REMARKS			REAL TIME
2	Allen key set Steering Wheel Removal (Brake Master Cylinders): 1- Using an Allen key, loosen the mounting bolts of both brake master cylinders and remove them from their bracket.	 	2
REMARKS			REAL TIME
3	Allen key set Steering Wheel Removal (Center Trim): 1- Using an Allen key, loosen and remove the mounting screws of the steering wheel center trim. 2- Remove the center trim.	 	1
REMARKS			REAL TIME

	TOOLS	PROCESS	ASSEMBLY DRAWING	ESTIMATED TIME
4	Allen key set	Steering Wheel Removal (Brake Master Cylinder Bracket): 1- Using an Allen key, loosen and remove the mounting screws of the brake master cylinder bracket. 2- Remove the brake master cylinder bracket.	 	2
		REMARKS		REAL TIME
5	Allen key set, 10mm open-end wrench	Steering Wheel Removal: 1- Using an Allen key and a 10 mm wrench, loosen and remove the three mounting bolts of the steering wheel. 2- Remove the steering wheel.	 	1
		REMARKS		REAL TIME
6	Allen key set	Steering Column Removal: 1- Lubricate the steering column to facilitate removal. 2- Using an Allen key, loosen and remove the two mounting bolts of the omega bearing on the steering joint. 3- Using an Allen key, loosen and remove the mounting bolt of the steering column.	   	4
		REMARKS		REAL TIME

	TOOLS	PROCESS	ASSEMBLY DRAWING	ESTIMATED TIME
7	Circlip pliers	Steering Column Removal: 1- Separate the steering column U-joint from the steering column. 2- Using circlip pliers, remove the lower circlip from the steering column. 3- Extract the steering column.	   	3
		REMARKS	REAL TIME	
8	Allen key set, grease	Installation of the New Steering Column: 1- Before installing the new components, apply lubricant to facilitate assembly. 2- Place the steering column in its housing and install a new circlip using circlip pliers. 3- Position the steering column U-joint, ensuring the steering column is in the correct orientation (1 hole up, 2 holes down). If necessary, have another operator help maintain the correct position of the column while installing the U-joint. 4- Once the U-joint is positioned, install the mounting bolt. This bolt fits into a slot between the teeth of the shaft: If the bolt does not thread in completely by hand, it means the slot is not aligned. Adjust the U-joint until the slot is correctly aligned. When the bolt is fully threaded by hand, tighten it with an Allen key.	    	6
		REMARKS	REAL TIME	
9	Allen key set	Installation of the New Steering Column: 1- Once the steering column U-joint is connected to the steering column, install and tighten the two mounting bolts of the U-joint's omega bearing. Then, tighten the locking bolt integrated into the omega bearing.		3
		REMARKS	REAL TIME	

	TOOLS	PROCESS	ASSEMBLY DRAWING	ESTIMATED TIME
10	Allen key set, 10mm open-end wrench	Steering Wheel Installation: 1- Of the three steering wheel mounting bolts, two are short and one is long. Install the long bolt in the upper hole and the two short bolts in the lower holes. 2- Using an Allen key and a 10 mm wrench, install and tighten the two short steering wheel mounting bolts along with their nuts.		1
		REMARKS	REAL TIME	
11	Allen key set	Steering Wheel Installation (Brake Master Cylinder Bracket): 1- Position the brake master cylinder brackets and, using an Allen key, install and tighten the bracket mounting bolts. The left bracket is installed in the two upper holes. The right bracket is installed in the two lower holes.		2
		REMARKS	REAL TIME	
12	Allen key set	Steering Wheel Installation (Brake Master Cylinders): 1- Place the brake master cylinders on their brackets and, using an Allen key, install and tighten the mounting bolts of both brake master cylinders.		2
		REMARKS	REAL TIME	
13	Allen key set, 10mm open-end wrench	Steering Wheel Installation (Center Trim): 1- Before installing the center trim, place the rubber clamp, ensuring the corresponding wires are inside it, and install the nut for the upper steering wheel bolt. 2- Using an Allen key, install and tighten the mounting screws of the steering wheel center trim.		2
		REMARKS	REAL TIME	

TOOLS		PROCESS	ASSEMBLY DRAWING	ESTIMATED TIME
14	Steering Wheel Installation (Button Panel and RC8): 1- Install the button panel and the RC8 (refer to the button panel and RC8 installation sheet). Note: Once the steering wheel is installed, turn it fully to the right and to the left, making sure no cables are under tension.			13
	REMARKS			REAL TIME

Steering Wheel Installation (Button Panel and RC8):

1- Install the button panel and the RC8 (refer to the button panel and RC8 installation sheet).

Note: Once the steering wheel is installed, turn it fully to the right and to the left, making sure no cables are under tension.