REPAIR SHEET - Steering system alignement

REASON: Stering system out of alignment.

OPERATOR		WORKSHOP		DATE	
REGISTRATION		TIME	0h 43min	COST	

REQUIRED TOOLS

- [ ] Hydraulic jack
- [ ] Tape measure
- [ ] 14, 17 and 19 fixed hexagonal wrench
- [ ] Impact wrench
- [ ] 19mm impact socket
- [ ] actuator holding tool

SAFETY

- [ ] Safety googles
- [ ] Steel toe cap shoes
- [ ] Gloves

	TOOLS	PROCESS	ASSEMBLY DRAWING	ESTIMATED TIME
1	Hydraulic jack.	**Lift the vehicle:** 1- Use the hydraulic jack to raise the front of the vehicle until the front wheels are suspended.		1
	REMARKS			**REAL TIME**
2	Impact wrench, 19mm socket.	**Wheel removal:** 1- Attach a 19 mm socket to the impact driver. 2- Remove the four nuts securing the wheel to release it. 3- Once loosened, pull the wheel outward to remove it from the vehicle.	 	2
	REMARKS			**REAL TIME**
3	Actuator holding tool.	**Instalation of the actuator holding tool:** 1- Position the actuator holding tool to prevent movement of the steering rods. 2- Align the actuator with the inner plates of the tool (the plates that are closest together). 3- Engage the outer plates (the plates that are farther apart) with the inner sides of the beam until properly seated.	 	5
	REMARKS			**REAL TIME**
4	14,17 and 19mm fixed hexagonal wrenches, tape measure.	**Adjusting the tie rods:** 1. Using three open-end wrenches (14 mm for the center of the bar, 17 mm for the inner nut, and 19 mm for the outer nut), loosen both nuts. **Important: The outer nut is left-hand threaded; turn it clockwise to loosen.** 2- Measure the distance from the nearest inner surface to both ends of the brake disc.. 3- Rotate the tie rod until both measurements are equal. 4-Once the correct position is achieved, hand-tighten the nuts to hold the adjustment in place. 5- Using the appropriate wrenches, fully tighten the nuts while taking care not to alter the previously set distances. 6- Verify that both measurements remain equal. If not, repeat this procedure until proper alignment is achieved.	   	30
	REMARKS			**REAL TIME**

	TOOLS	PROCESS	ASSEMBLY DRAWING	ESTIMATED TIME
5	Impact drill, 19mm hexagonal socket.	**Reinstall the wheels:** 1- Repeat the removal procedure in reverse order. 2- Position the wheel, aligning the four studs with the corresponding holes in the rim. 3- Hand-thread the lug nuts to secure the wheel. 4- Tighten the nuts using the impact wrench. **Important: Tighten the four nuts in a crisscross pattern to ensure even seating of the wheel** **Repeat steps above on both sides**		4
		REMARKS		**REAL TIME**
6	Hidraulic jack.	**Lower the vehicle:** Release the hydraulic jack and gently lower the vehicle to the ground. **Final Check: Perform a short test drive to verify that the adjustment has been carried out correctly and that the vehicle operates as expected**.		1
		REMARKS		**REAL TIME**