

## 2025 ASE Correlation Chart

### Suspension and Steering (A4)

**MLR-** Maintenance & Light Repair

**AST-** Auto Service Technology (Includes MLR)

**MAST-** Master Auto Service Technology (Includes MLR and AST)

	Task	Priority	MLR	AST	MAST	Text Page #	Task Page #
<b>A. General</b>							
1.	Research vehicle service information such as fluid type, vehicle service history, service precautions, technical service bulletins, and recalls including xEV and vehicles equipped with advanced driver assistance systems (ADAS).	P-1	✓	✓	✓	1-7; 260-268; 364-369	
2.	Identify suspension and steering system components and configurations.	P-1	✓	✓	✓	117-140	
3.	Retrieve and record DTCs, OBD monitor status, and freeze frame data; clear codes and data when directed.	P-1	✓	✓	✓	85-90; 208; 276-278	
4.	Disable and enable supplemental restraint system (SRS); verify indicator lamp operation.	P-1	✓ (P-2)	✓	✓	210-212	
5.	Identify and interpret suspension and steering system concerns; determine needed action.	P-1		✓	✓	92-279	
<b>B. Steering Systems</b>							
1.	Inspect rack and pinion steering gear tie rod ends (sockets) and bellows boots; repair or replace as needed.	P-1	✓	✓	✓	229-231	

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2.	Inspect power steering fluid level and condition.	P-2	✓	✓	✓	260-261	
3.	Drain and replace power steering system fluid; use proper fluid type per manufacturer specification.	P-2	✓	✓	✓	260-262	
4.	Inspect for power steering fluid leakage; determine needed action.	P-2	✓	✓	✓	260-261	
5.	Remove, inspect, replace, and/or adjust power steering pump drive belt.	P-2	✓	✓	✓	259-260	
6.	Inspect, remove, and/or replace power steering hoses and fittings.	P-2	✓	✓	✓	261	
7.	Inspect, remove, and/or replace pitman arm, relay (center link/intermediate) rod, idler arm, mountings, and steering linkage damper.	P-3	✓	✓	✓	238-240	
8.	Inspect, replace, and/or adjust tie rod ends (sockets), tie rod sleeves, and clamps (non-rack and pinion).	P-3	✓ Inspect only	✓	✓	238-240	
9.	Inspect and test electric power steering system; determine needed action.	P-1	✓ (P-2)	✓ (P-2)	✓	276-277	
10.	Remove and replace steering wheel; center/time supplemental restraint system (SRS) coil (clock spring).	P-1		✓	✓	211-212	
11.	Diagnose steering column noises, looseness, and binding concerns (including tilt/telescoping mechanisms); determine needed action.	P-2		✓	✓	212-216	
12.	Diagnose power steering gear (non-rack and pinion) binding, uneven turning effort, looseness, hard steering, and noise concerns; determine needed action.	P-3		✓	✓	259-263	

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13.	Diagnose power steering gear (rack and pinion) binding, uneven turning effort, looseness, hard steering, and noise concerns; determine needed action.	P-1		✓ (P-2)	✓	259-264	
14.	Inspect steering shaft universal joint(s), flexible coupling(s), collapsible column, lock cylinder mechanism, and steering wheel; determine needed action.	P-2		✓	✓	212-216	
15.	Remove and replace rack and pinion steering gear; inspect mounting bushings and brackets.	P-2		✓	✓	222-226	
16.	Remove and reinstall power steering pump	P-2		✓	✓	263-265	
	<b>Task</b>	<b>Priority</b>	<b>MLR</b>	<b>AST</b>	<b>MAST</b>	<b>Text Page #</b>	<b>Task Page #</b>
17.	Remove and reinstall press fit power steering pump pulley; check pulley and belt alignment.	P-2		✓	✓	263-264	
18.	Test power steering system pressure; determine needed action.	P-3			✓	261-263	
<b>C. Suspension Systems</b>							
1.	Inspect, remove, and/or replace upper and/or lower control arms, bushings, and shafts.	P-2	✓	✓	✓	163-165	
2.	Inspect and replace rebound/jounce bumpers.	P-2	✓ (P-3)	✓	✓	136-140	
3.	Inspect, remove, and/or replace track bar, strut rods/radius arms, and related mounts and bushings.	P-2	✓ Inspect only	✓	✓	176-180	
4.	Inspect, remove, and/or replace upper and/or lower ball joints (with or without wear indicators).	P-2	✓ Inspect only	✓ (P-3)	✓	150-155	
5.	Inspect, remove, and/or replace suspension system coil springs and spring insulators.	P-2	✓ Inspect only	✓	✓	161-162	

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6.	Inspect, remove, and/or replace torsion bars and mounts	P-3	Inspect only	✓	✓	164	
7.	Inspect, remove, and/or replace front/rear stabilizer bar (sway bar) bushings, brackets, and links.	P-2	✓	✓	✓	176-180	
	<b>Task</b>	<b>Priority</b>	<b>MLR</b>	<b>AST</b>	<b>MAST</b>	<b>Text Page #</b>	<b>Task Page #</b>
8.	Inspect, remove, and/or replace strut assembly, strut coil spring, insulators, and upper strut bearing mount.	P-2	✓	✓	✓	158-160	
9.	Inspect, remove, and/or replace components of rear suspension systems (Coil, Leaf, and Torsion Beam).	P-1	Inspect only	✓	✓	176-182	
10.	Inspect, remove, and/or replace components of electronically controlled suspension systems.	P-1	Inspect only	✓	✓	192-199	
11.	Inspect, remove, and/or replace steering knuckle assemblies.	P-2		✓	✓	163	
12.	Diagnose suspension system noises, body sway, and uneven ride height concerns; determine needed action	P-1		✓	✓	172-182	
<b>D. Related Suspension and Steering Service</b>							
1.	Inspect, remove, and/or replace shock absorbers; inspect mounts and bushings.	P-1	✓	✓	✓	156-158; 177-178	
2.	Inspect, service, and/or replace front and rear wheel bearings.	P-1	Inspect only	✓	✓	285-294	
3.	Describe the function of electronically controlled suspension and steering systems and components, (i.e., active suspension and stability control).	P-2	✓	✓	✓	184-199	

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<b>E. Wheel Alignment</b>							
<b>Task</b>	<b>Priority</b>	<b>MLR</b>	<b>AST</b>	<b>MAST</b>	<b>Text Page #</b>	<b>Task Page #</b>	
1. Determine the need to recalibrate a vehicle's advanced driver assistance system (ADAS) after repairs or adjustments.	P-1	✓	✓	✓	340-365		
2. Perform pre-alignment inspection, place vehicle in service mode as required; measure vehicle ride height; determine needed action.	P-1	✓ (P-2)	✓	✓	340-345		
3. Describe four-wheel alignment angles (camber, caster, and toe) and effects on vehicle handling/tire wear.	P-1	✓	✓	✓	350-354		
4. Prepare vehicle for wheel alignment on alignment machine; perform four-wheel alignment by checking and adjusting front caster, front and rear camber, and toe as required; center steering wheel.	P-1		✓	✓	340-365		
5. Check toe-out-on-turns (turning radius); determine needed action.	P-1		✓	✓	347		
6. Check steering axis inclination (SAI) and included angle; determine needed action	P-1		✓	✓	347		
7. Check rear wheel thrust angle; determine needed action.	P-1		✓	✓	351		
8. Check for front wheel setback; determine needed action.	P-1		✓	✓	337		
9. Identify front and/or rear cradle (subframe) misalignment; determine needed action.	P-1		✓	✓	349-350		
10. Reset steering angle sensor.	P-1		✓	✓	364-365		
11. Diagnose vehicle wander, drift, pull, hard steering, bump steer, memory steer, torque steer, and steering return concerns; determine needed action.	P-1		✓	✓	340-344		

<b>F. Wheels and Tires</b>							
<b>Task</b>	<b>Priority</b>	<b>MLR</b>	<b>AST</b>	<b>MAST</b>	<b>Text Page #</b>	<b>Task Page #</b>	
1. Inspect tire condition; identify tire wear patterns; check for correct tire size, application (load and speed ratings) and air pressure as listed on the tire information placard/label.	P-1	✓	✓	✓	94-95		
2. Rotate tires according to manufacturer's recommendation including vehicles equipped with tire pressure monitoring systems (TPMS)	P-1	✓	✓	✓	97-98		
3. Dismount, inspect, and remount tire on wheel (with/without TPMS); balance wheel and tire assembly.	P-1	✓	✓	✓	100-103		
4. Inspect tire and wheel assembly for air loss; determine needed action.	P-1	✓	✓	✓	92-94		
5. Repair tire following tire manufacturer approved procedure.	P-1	✓	✓	✓	107-109; 113-114		
6. Identify indirect and direct tire pressure monitoring system (TPMS); calibrate/relearn system; verify operation of instrument panel lamps.	P-1	✓	✓	✓	80-83		
7. Demonstrate knowledge of steps required to remove and replace sensors (per OEM/sensor manufacturer) in a tire pressure monitoring system (TPMS).	P-1	✓	✓	✓	82-90		
8. Perform Road Force balance/match mounting.	P-1	✓ (P-3)	✓	✓	103-107		
9. Diagnose wheel/tire vibration, shimmy, and noise; determine needed action.	P-1		✓	✓	98-103		

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<b>10.</b>	Measure wheel, tire, axle flange, and hub runout; determine needed action.	P-2		✓	✓	98-100	
<b>11.</b>	Diagnose tire pull problems; determine needed action.	P-1		✓	✓	64-65; 92-95	