

ASE Education Foundation
2025 ASE Correlation Chart
Brakes (A5)

MLR- Maintenance & Light Repair

AST- Auto Service Technology (Includes MLR)

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

	Task	Priorit y	MLR	AST	MAST	Text Page #	Task Page #
A. General: Brake Systems Diagnosis							
1.	Research vehicle service information such as fluid type, vehicle service history, service precautions, technical service bulletins, and recalls including vehicles equipped with advanced driver assistance systems (ADAS).	P-1	✓	✓	✓	699;1 108- 1111; 1273- 1281	
2.	Identify brake system components and configurations.	P-1	✓	✓	✓	1071- 1077	
3.	Retrieve and record on-board diagnostic DTCs, OBD monitor status, and freeze frame data; clear codes and data when directed.	P-1	✓	✓	✓	1273- 1281	
4.	Perform calibration/recalibration, initialization, or relearn procedure as required.	P-1	✓	✓	✓	1289; 1318- 1320	
5.	Place vehicle in service mode as needed before servicing the brake system.	P-1	✓	✓	✓	1206	
6.	Describe procedure for performing a road test to check brake system operation, including an anti-lock brake	P-1	✓	✓	✓	1158; 1184; 1273	

	system (ABS).						
7.	Install wheel and torque lug nuts/wheel fasteners.	P-1	✓	✓	✓	1326-1327	
8.	Identify and interpret brake system concerns; determine needed action.	P-1	✓	✓	✓	1096-1098; 1158; 1184;	
B. Hydraulic System							
1.	Diagnose pressure concerns in the brake system using hydraulic principles (Pascal's Law).	P-1	✓ Discuss only	✓	✓	1088-1097	
2.	Measure brake pedal height, travel, and free play (as applicable); determine needed action.	P-1	✓ Discuss only	✓	✓	1077	
3.	Check primary cylinder for internal/external leaks and proper operation; determine needed action.	P-1	✓	✓	✓	1076-1078	
	Task	Priorit y	MLR	AST	MAST	Text Page #	Task Page #
4.	Inspect brake lines, flexible hoses, and fittings for leaks, dents, kinks, rust, cracks, bulging, wear, and loose fittings/supports; determine needed action.	P-1	✓	✓	✓	1113-1119	
5.	Select, handle, store, and fill brake fluids to proper level; use proper fluid type per manufacturer specification.	P-1	✓	✓	✓	1108-1113	
6.	Bleed and/or replace fluid in the brake system.	P-1	✓	✓	✓	1118-1127	
7.	Test brake fluid for contamination.	P-2	✓	✓	✓	1111-1112	
8.	Identify, inspect, test, and replace components of brake warning light system.	P-2		✓	✓	1099-1102	
9.	Remove, bench bleed, and reinstall primary cylinder.	P-1		✓	✓	1198	
10.	Diagnose poor stopping, pulling, or dragging concerns caused by malfunctions in the hydraulic system; determine	P-1		✓ (P-2)	✓	1184-1186	

	needed action.						
11.	Replace brake lines, hoses, fittings, and supports.	P-2		✓	✓	1113-1119	
12.	Fabricate brake lines using proper material and flaring procedures.	P-2		✓	✓	1114-1116	
C. Drum Brakes							
1.	Remove, clean, and inspect brake drum; measure brake drum diameter; determine serviceability.	P-2	✓	✓	✓	1158-1159; 1212-1213	
2.	Refinish brake drum and measure final drum diameter; compare with specification.	P-2	✓ (P-3)	✓	✓	1212-1213; 1227-1233	
	Task	Priorit y	MLR	AST	MAST	Text Page #	Task Page #
3.	Remove, clean, inspect, and/or replace brake shoes, springs, pins, clips, levers, adjusters/self-adjusters, other related brake hardware, and backing support plates; lubricate and reassemble	P-2	✓ (P-3)	✓	✓	1158-1169	
4.	Inspect wheel cylinders for leaks and proper operation; remove and replace as needed.	P-2	✓ (P-3)	✓	✓	1162-1163	
5.	Pre-adjust brake shoes and parking brake; install brake drums or drum/hub assemblies and wheel bearings; perform final checks and adjustments.	P-2	✓ (P-3)	✓	✓	1164-1165	
6.	Diagnose poor stopping, noise, vibration, pulling, grabbing, dragging, or pedal pulsation concerns; determine needed action.	P-2		✓	✓	1165-1166	
D. Disc Brakes							
1.	Remove and clean caliper assembly; inspect for leaks, damage, and wear; determine needed action.	P-1	✓	✓	✓	1184-1191	

2.	Inspect caliper mounting and slides/pins for proper operation, wear, and damage; determine needed action	P-1	✓	✓	✓	1188	
3.	Remove, inspect, and/or replace brake pads and retaining hardware; determine needed action.	P-1	✓	✓	✓	1185-1191	
4.	Lubricate and reinstall caliper, brake pads, and related hardware; seat brake pads against rotor; inspect for leaks.	P-1	✓	✓	✓	1187-1188	
5.	Clean and inspect rotor and mounting surface; measure rotor thickness, thickness variation, and lateral runout; determine needed action.	P-1	✓	✓	✓	1219-1220	
	Task	Priorit y	MLR	AST	MAST	Text Page #	Task Page #
6.	Remove and reinstall/replace rotor.	P-1	✓	✓	✓	1185; 1219	
7.	Refinish rotor on vehicle; measure final rotor thickness and compare with specification.	P-1	✓ (P-3)	✓ (P-2)	✓	1241-1245	
8.	Refinish rotor off vehicle; measure final rotor thickness and compare with specification.	P-2	✓ (P-3)	✓	✓	1219-1226 1233-1245	
9.	Retract and re-adjust caliper piston on an integrated parking brake system.	P-1	✓ (P-2)	✓	✓	1185-1187	
10.	Describe importance of operating vehicle to burnish/break-in replacement brake pads according to manufacturer's recommendation.	P-1	✓	✓	✓	1189-1190	
11.	Diagnose poor stopping, noise, vibration, pulling, grabbing, dragging, or pulsation concerns; determine needed action.	P-1		✓	✓	1191	

E. Power-Assist Units							
1.	Check brake pedal travel with and without engine running to verify proper power booster operation.	P-2	✓	✓	✓	1253-1254	
2.	Identify components of the brake power assist system (vacuum/ hydraulic/electric).	P-2	✓	✓	✓	1249-1253	
3.	Inspect vacuum-type power booster unit for leaks; inspect the check-valve for proper operation; check vacuum supply (manifold or auxiliary pump) to vacuum-type power booster, determine needed action.	P-2		✓	✓	1253	
	Task	Priorit y	MLR	AST	MAST	Text Page #	Task Page #
4.	Inspect and test hydraulically-assisted power brake system for leaks and proper operation; determine needed action.	P-2		✓	✓	1255-1257	
5.	Inspect electric power booster unit; determine needed action	P-3			✓	1056-1057	
F. Related Systems (i.e. Wheel Bearings, Parking Brakes, Electrical)							
1.	Remove, clean, inspect, repack/replace, and install wheel bearings; remove and install bearing races; replace seals; install hub and adjust bearings.	P-3	✓ (P-3)	✓	✓	1133-1136	
2.	Check parking brake system components for wear, binding, and corrosion; clean, lubricate, adjust and/or replace as needed.	P-2	✓	✓	✓	1203-1204	
3.	Check parking brake operation (including electric parking brakes); check parking brake indicator light system operation; determine needed action.	P-2	✓	✓	✓	1203-1206	
4.	Check operation of brake stop light system.	P-1	✓	✓	✓	1105-1106	
5.	Inspect and replace wheel studs/ fasteners .	P-2	✓	✓	✓	1226	

6.	Remove, reinstall, and/or replace sealed wheel bearing assembly.	P-1		✓	✓	1137	
7.	Diagnose wheel bearing noises, wheel shimmy, and vibration concerns; determine needed action.	P-1		✓ (P-2)	✓	1140- 1141	
G. Electronic Brake Control Systems: Antilock Brake (ABS), Traction Control (TCS), and Electronic Stability Control Systems (ESC)							
1.	Identify and inspect electronic brake control system components and describe function (ABS, TCS, ESC); determine needed action.	P-1	✓ (P-2)	✓	✓	1261- 1268; 1283- 1289	
2.	Describe the operation of a regenerative braking system.	P-2	✓ (P-3)	✓	✓	1053- 1058	
	Task	Priorit y	MLR	AST	MAST	Text Page #	Task Page #
3.	Bleed the electronic brake control system hydraulic circuits.	P-1		✓ (P-2)	✓	1125- 1126	
4.	Diagnose poor stopping, wheel lock-up, abnormal pedal feel, unwanted application, and noise concerns associated with the electronic brake control system; determine needed action.	P-2			✓	1275- 1281	
5.	Diagnose electronic brake control system electronic control(s) and components by retrieving diagnostic trouble codes, and/or using recommended test equipment; determine needed action.	P-2			✓	1275- 1277	
6.	Depressurize high-pressure components of an electronic brake control system.	P-2			✓	1280- 1281	
7.	Test, diagnose, and service electronic brake control system speed sensors (digital and analog), toothed ring (tone wheel), and circuits using a graphing multimeter	P-2			✓	1278- 1280	

	(GMM)/digital storage oscilloscope (DSO) (includes output signal, resistance, shorts to voltage/ground, and frequency data).						
8.	Diagnose electronic brake control system braking concerns caused by vehicle modifications (tire size, curb height, final drive ratio, etc.).	P-2			✓	1275-1281	