

2017 ASE Correlation Chart

Automatic Transmissions/ Transaxles (A2)

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 #
A. General: Transmission and Transaxle Diagnosis							
1.	Identify and interpret transmission/transaxle concern, differentiate between engine performance and transmission/transaxle concerns; determine needed action.	P-1		✓	✓	1711-1721	426
2.	Research vehicle service information including fluid type, vehicle service history, service precautions, and technical service bulletins.	P-1	✓	✓	✓	127-133; 1718-1721	24-26; 28; 420
3.	Diagnose fluid loss and condition concerns; determine needed action.	P-1	✓ Fluid condition and check for leaks only	✓	✓	1716-1717	425
4.	Check fluid level in a transmission or a transaxle equipped with a dip-stick.	P-1	✓	✓	✓	148; 1716-1717	425
5.	Check fluid level in a transmission or a transaxle not equipped with a dip-stick.	P-1	✓	✓	✓	148; 1716-1717	425

(5)	Identify drive train components, and configuration.	P-1	✓ (MLR only)			1675-1690	421
	Task	Priority	MLR	AST	MAST	Text Page #	Task Page #
6.	Perform pressure tests (including transmissions/transaxles equipped with electronic pressure control); determine needed action.	P-1			✓	1718-1719	426
7.	Diagnose noise and vibration concerns; determine needed action.	P-2			✓	1662-1673	429
8.	Perform stall test; determine needed action.	P-2		✓	✓	1714-1716	427
9.	Perform lock-up converter system tests; determine needed action.	P-3		✓	✓	1715-1717	428
10.	Diagnose transmission/transaxle gear reduction/multiplication concerns using driving, driven, and held member (power flow) principles.	P-1		✓	✓	1718	430
11.	Diagnose electronic transmission/transaxle control systems using appropriate test equipment and service information.	P-1			✓	1713	430; 432
12.	Diagnose pressure concerns in a transmission using hydraulic principles (Pascal's Law).	P-2		✓	✓	1718-1719	423
B. In-Vehicle Transmission/Transaxle Maintenance and Repair							
1.	Inspect, adjust, and/or replace external manual valve shift linkage, transmission range sensor/switch, and/or park/neutral position switch.	P-1	✓	✓	✓	1720	431
2.	Inspect for leakage; replace external seals, gaskets, and bushings.	P-2	✓	✓	✓	1719-1720	434; 440
(2)	Inspect for leakage at external seals, gaskets, and bushings.	P-1	✓ (MLR only)			1719-1720	425

	Task	Priority	MLR	AST	MAST	Text Page #	Task Page #
3.	Inspect, test, adjust, repair, and/or replace electrical/electronic components and circuits including computers, solenoids, sensors, relays, terminals, connectors, switches, and harnesses; perform demonstrated understanding of the relearn procedure.	P-1		✓	✓	1731-1732	430
4.	Drain and replace fluid and filter(s); use proper fluid type per manufacturer specification.	P-1	✓	✓	✓	148; 1732	424
5.	Inspect, replace and/or align powertrain mounts.	P-2	✓	✓	✓	276	433
C. Off-Vehicle Transmission and Transaxle Repair							
1.	Remove and reinstall transmission/transaxle and torque converter; inspect engine core plugs, rear crankshaft seal, dowel pins, dowel pin holes, and mounting surfaces.	P-2		✓	✓	1734-1735	435; 442
2.	Inspect, leak test, flush and/or replace transmission/transaxle oil cooler, lines, and fittings.	P-1		✓	✓	1720; 1732	440
3.	Inspect converter flex (drive) plate, converter attaching bolts, converter pilot, converter pump drive surfaces, converter end play, and crankshaft pilot bore.	P-2		✓	✓	1725	441
4.	Describe the operational characteristics of a continuously variable transmission (CVT).	P-3	✓	✓	✓	1685-1688	455
5.	Describe the operational characteristics of a hybrid vehicle drive train.	P-3	✓	✓	✓	1046-1050	455
6.	Disassemble, clean, and inspect transmission/transaxle.	P-1			✓	1723-1724	436

AT6- Halderman

7.	Inspect, measure, clean, and replace valve body (includes surfaces, bores, springs, valves, switches, solenoids, sleeves, retainers, brackets, check valves/balls, screens, spacers, and gaskets).	P-2			✓	1626	437
8.	Inspect servo and accumulator bores, pistons, seals, pins, springs, and retainers; determine needed action.	P-2			✓	1728	438
9.	Assemble transmission/transaxle.	P-1			✓	1729-1732	439
10.	Inspect, measure, and reseal oil pump assembly and components.	P-2			✓	1730-1731	443
11.	Measure transmission/transaxle end play or preload; determine needed action	P-1			✓	1730-1731	444
12.	Inspect, measure, and/or replace thrust washers and bearings.	P-2			✓	1728-1729	445
13.	Inspect oil delivery circuits, including seal rings, ring grooves, and sealing surface areas, feed pipes, orifices, and check valves/balls.	P-2			✓	1726-1727	446
14.	Inspect bushings; determine needed action.	P-2			✓	1730	447
15.	Inspect and measure planetary gear assembly components; determine needed action.	P-2			✓	1729	448
16.	Inspect case bores, passages, bushings, vents, and mating surfaces; determine needed action.	P-2			✓	1727-1729	449
17.	Diagnose and inspect transaxle drive, link chains, sprockets, gears, bearings, and bushings; perform needed action.	P-2			✓	1725	450
18.	Inspect measure, repair, adjust or replace transaxle final drive components.	P-2			✓	1685-1686	451

AT6- Halderman

19.	Inspect clutch drum, piston, check-balls, springs, retainers, seals, friction plates, pressure plates, and bands; determine needed action.	P-2			✓	1729-1730	452
20.	Measure clutch pack clearance; determine needed action.	P-1			✓	1729	453
21.	Air test operation of clutch and servo assemblies.	P-1			✓	1729-1730	453
22.	Inspect one-way clutches, races, rollers, sprags, springs, cages, retainers; determine needed action.	P-2			✓	1730	454