 HYUNDAI Technical Service Bulletin	GROUP AUTOMATIC TRANSMISSION	NUMBER 19-AT-021H-1
	DATE DECEMBER 2019	MODEL SEE LIST BELOW
SUBJECT: AUTOMATIC TRANSMISSION STALL TEST PROCEDURE		

This TSB supersedes TSB 19-AT-021H to update the AD/ADa model years.

Description: If you are servicing a vehicle with a transmission slipping concern, follow the Service Procedure shown below and perform a stall test. This TSB provides a procedure to test each clutch in the transmission. If the vehicle fails the stall test, replace the transmission.

- **PASS:** Stall speed is between 1700~2900 rpm (See shop manual for stall speed).
- **FAIL:** Engine revs to redline limit (6,000~6,500 rpm). If so, replace the transmission.

Applicable Vehicles:

8AT FWD	2018~ 2019~ 2020~	Sonata (LFA) 2.0T Santa Fe (TMA) 2.0T/2.4L Palisade (LX2) 3.8L	Step 8
8AT RWD	2013~16 2012~14 2015~16 2012~16	Genesis Coupe (BK) Genesis Sedan (BH) Genesis Sedan (DH) Equus (VI)	Step 9
6AT FWD	2012~17 2018~ 2011 2012~17 2011~16 2013~17 2018~ 2013~14 2017~19 2018~ 2010~12 2013~18 2011~14 2015~19 2011~15 2016~19 2016~19 2010~15 2018~ 2016~ 2013~15 2019~	Accent (RB) Accent (HC) 1.6L Azera (TG) Azera (HG) Elantra (MD/UD) Elantra GT (GD) Elantra GT (PD) 2.0L Elantra Coupe (JK) Elantra (AD/ADa) 2.0L Kona (OS) 2.0L Santa Fe (CM) Santa Fe Sport (AN) 2.0L/2.4L Sonata (YF) Sonata (LF) Sonata Hybrid (YF HEV) Sonata Hybrid (LF HEV) Sonata Plug-in Hybrid (LF PHEV) Tucson (LM) Tucson (TL) 2.4L Tucson (TL) 2.0L Veloster (FS) 1.6T Veloster (JS) 2.0L	Step 10

Warranty Information: Normal warranty applies

Service Procedure - Stall Test Procedure without A/T Tester:

1. Check the automatic transmission fluid level according to the related TSB. Add ATF, if necessary, to bring the level within the “HOT” range.
2. Apply the parking brake and place blocks in front of and behind both front wheels.



CAUTION

Do not allow anyone to stand in front of or behind the vehicle.

3. Start the engine and move the shift lever to “R”.
4. Press and hold the brake pedal, then fully depress the accelerator for 3 seconds and record the highest engine speed observed. Perform the test only one time to prevent excessive ATF temperatures.

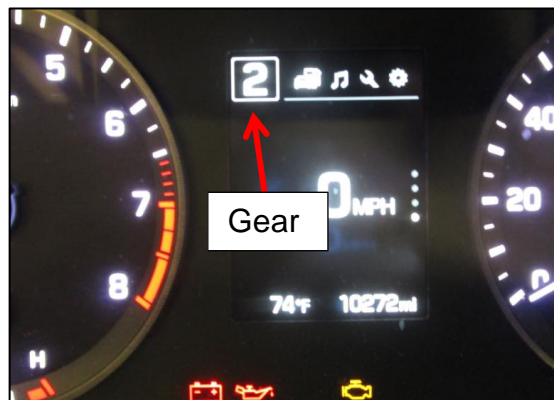


CAUTION

Do not hold the throttle fully open for more than 3 seconds. Release the throttle and allow the engine to idle in “P” for 15 seconds.

NOTE: Record the highest engine speed observed during the 3 second test.

5. Confirm the stall speed is within the specifications shown in the related shop manual (approximately 1700~2900 rpm at sea level, depending on model). If the stall speed is higher than specification or the engine revs to the redline limit, one or more clutches may be slipping.
6. Move the shift lever to “D”, and then repeat Steps 4~5 one time. Go to Step 7.
7. Move the shift lever to the Manual Mode position (if equipped) and repeat Steps 4~5 in “Gear 1”. Move the shift lever forward to select “Gear 2” and repeat Steps 4~5 one time.



8. **8-SPEED FRONT-WHEEL DRIVE:** Perform a stall test in the following gears:
NOTE: ATF Level – Refer to shop manual. USE SP-4 ATF, P/N 00232-19057.

SHIFT LEVER POSITION	BRAKE		CLUTCH			
	28	LR	UD	OD	46	37R
REVERSE		X				X
DRIVE		X	X			
MANUAL MODE 1		X	X			
MANUAL MODE 2	X		X			
DRIVE IN MANUAL MODE 4			X		X	
DRIVE IN MANUAL MODE 5			X	X		

Test 46 clutch: Drive in Manual Mode 4th gear and confirm the clutch does not slip or rev to redline at full throttle.

Test OD clutch: Drive in Manual Mode 5th gear and confirm the clutch does not slip or rev to redline at full throttle.

9. **8-SPEED REAR-WHEEL DRIVE:** Perform a stall test in the following gears:
NOTE: ATF Level TSB 19-AT-011H. USE SP-IV-RR ATF, P/N 00232-19052.

SHIFT LEVER POSITION	BRAKE		CLUTCH			
	8LR	27	UD	6	4&OD	35R
REVERSE	X					X
DRIVE	X		X			
MANUAL MODE "1"	X		X			
MANUAL MODE "2"		X	X			
DRIVE IN MANUAL MODE "6"				X	X	

Test 6 clutch and 4&OD clutch: Drive in Manual Mode 6th gear and confirm the clutch does not slip or rev to redline at full throttle.

10. **6-SPEED FRONT-WHEEL DRIVE:** Perform a stall test in the following gears.
NOTE: ATF Level TSB 16-AT-004. USE SP4-M ATF, P/N 00232-19057.

SHIFT LEVER POSITION	BRAKE			CLUTCH	
	LR	UD	26	35R	OD
REVERSE	X			X	
DRIVE	X	X			
MANUAL MODE "1"	X	X			
MANUAL MODE "2"		X	X		
DRIVE IN MANUAL MODE "4"		X			X

Test OD clutch: Drive in Manual Mode 4th gear and confirm the clutch does not slip or rev to redline at full throttle.