



Allison AT Series - Proper Torque Specifications

Driver cover bolts (540, 542, 542N, 545, 545N, 1500 series)	57-68 N•m	42-50 lb ft
Flexplate nuts	46-54 N•m	34-40 lb-ft
Transmission to engine bolts	Tighten to vehicle manufacturer's specifications	
Transmission to frame mounting bolts	220-260 N•m	164-192 lb ft
Output flange retaining bolt	138-164 N•m	102-121 lb ft
Companion flange or universal joints bolts	Tighten to vehicle manufacturer's specifications	
Manual selector valve nut	20-27 N•m	15-20 lb ft
PTO mounting bolts	35-43 N•m	26-32 lb ft
Modulator control retaining bolt	14-22 N•m	10-16 lb ft
Parking brake mounting bolts	110-132 N•m	81-97 lb ft
Bellcrank and cable support brackets to transmission	57-67 N•m	42-49 lb ft
Hydraulic line fittings in transmission housing or retarder valve	20-30 N•m	15-22 lb ft
Primary cooler fittings in retarder valve body	54-68 N•m	40-50 lb ft
Fill tube fitting	88-102 N•m w/ 0.675" long oil pan boss: 122-136 N•m	65-75 lb ft w/ 0.675" long oil pan boss: 90-100 lb ft
Drain plug	20-27 N•m	15-20 lb ft
Speedometer driven gear assembly to rear cover	61-68 N•m	45-50 lb ft
Neutral start switch to transmission housing	68-81 N•m	50-60 lb ft
Reverse signal switch to transmission housing	5-7 N•m	4-5 lb ft
Modulator retaining bolt	14-21 N•m	10-16 lb ft
Retarder low speed cutoff switch in transmission housing	5-7 N•m	4-5 lb ft
Retarder temperature sensor fitting in retarder valve body	22-27 N•m	15-20 lb ft
Retarder main pressure sensor fitting in transmission housing & in retarder valve body	4-25 N•m	4-5 lb ft