



SR20 – LS1 Alternator Conversion

WARNING! Please read the whole guide before installing this part.

Legals:

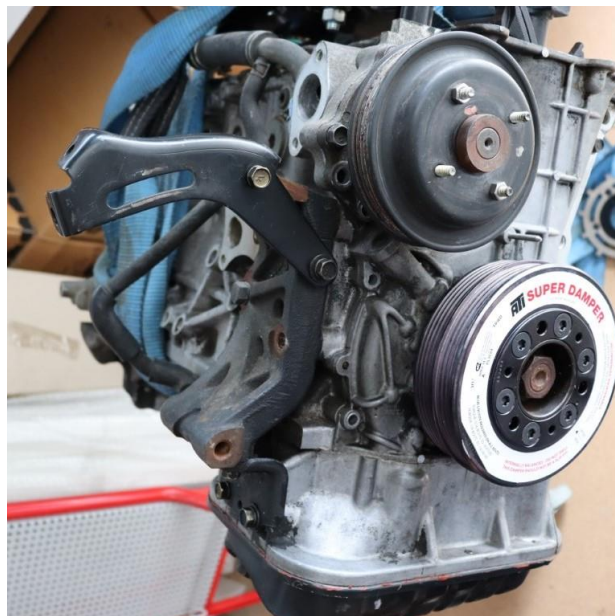
TAARKS LS1 Alternator Conversion kits have been designed and are intended for off-road use only. The installation of this part on a vehicle intended for use on public roads may violate laws and regulations in your country/state. Additionally, this part is sold with a LIMITED warranty that only covers defects in manufacturing. This warranty does not cover any damage incurred by using this part. The installation of this part may also void any vehicle warranties. Refer to a performance specialist for proper installation.

After opening the packaging please check to see if any parts are missing or damaged. If something is missing or damaged please contact us immediately. Do not install the product.

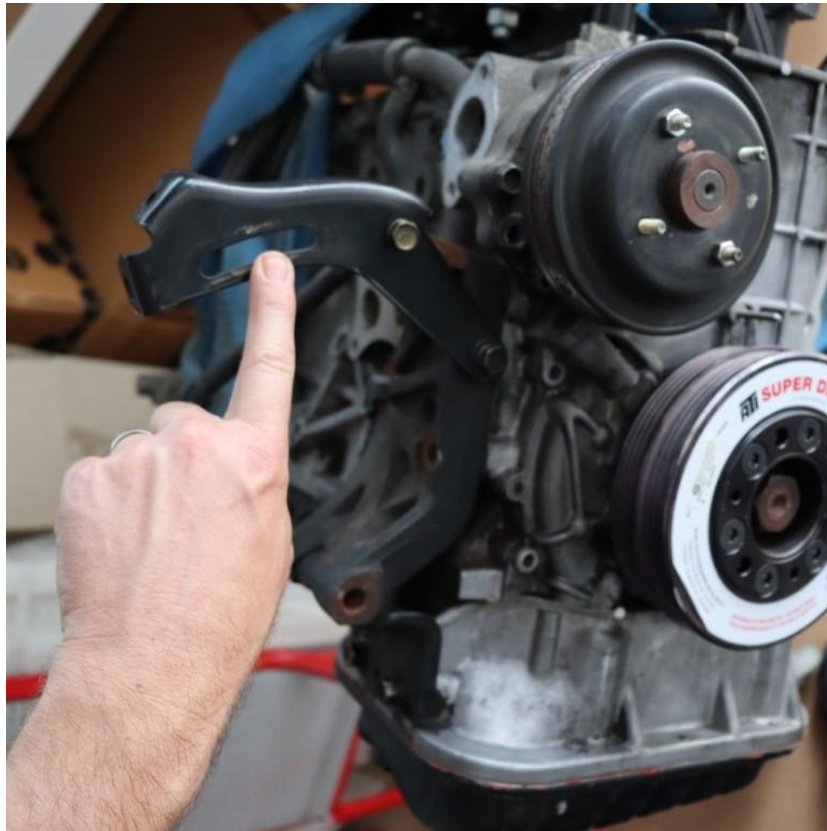
Do not modify this part in any way. Modifying the part may result in failure of the part and voids all possible warranties.

Installation Guide

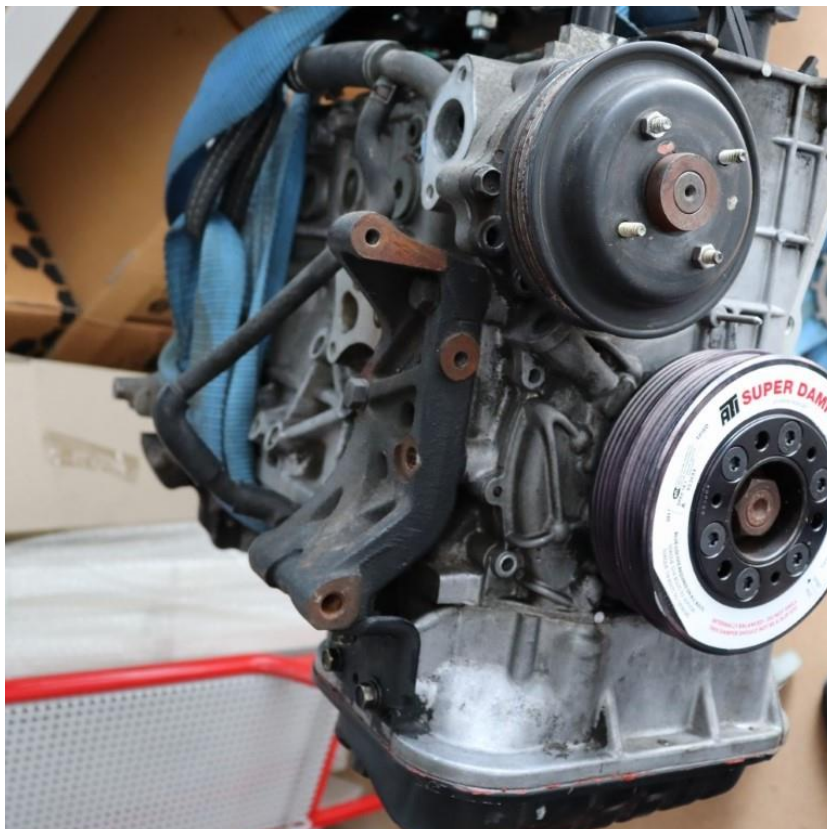
Refer to the factory service manual to remove the power steering belt, A/C belt and factory alternator from the engine.



Remove the factory alternator adjuster bracket.



Removed:



Install the lower alternator bracket using the factory alternator bolt and nut.



Assemble the alternator adjuster bracket as shown below. The black adjust sleeve will only work one way, slide it back and forth to ensure it moves easily. Use the M8 bolt that is threaded along it's entire length for the adjuster bolt.

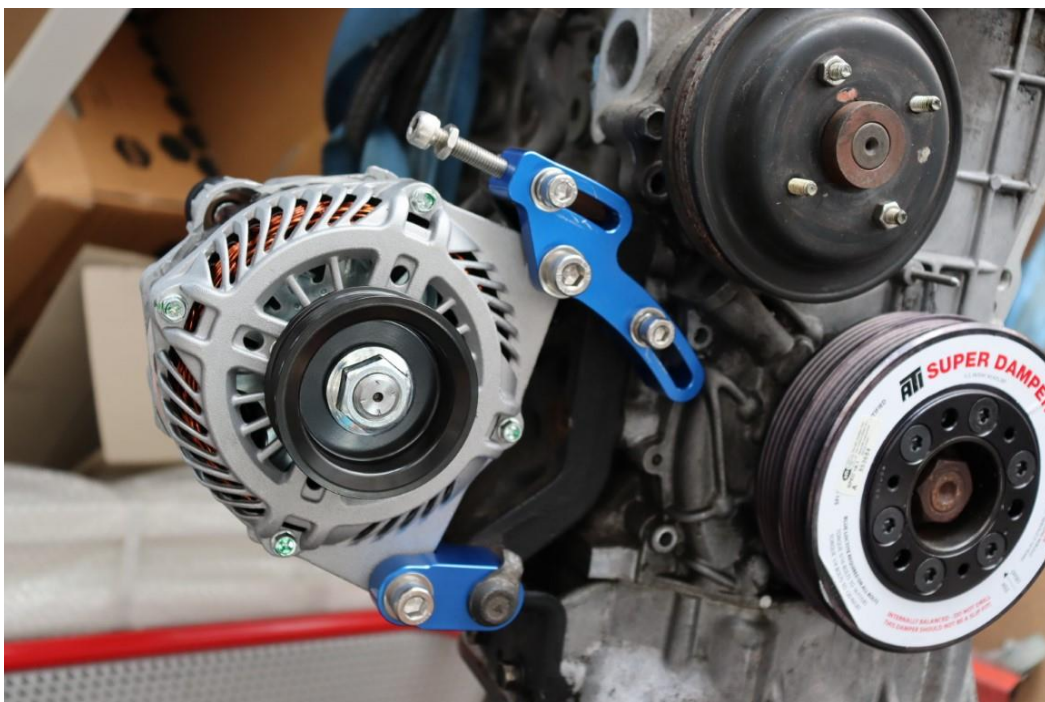


Install the adjuster onto the factory alternator mount. Ensure that the split washer is installed onto the M8 bolt followed by the flat washer as pictured below. Only hand tighten the bolts.

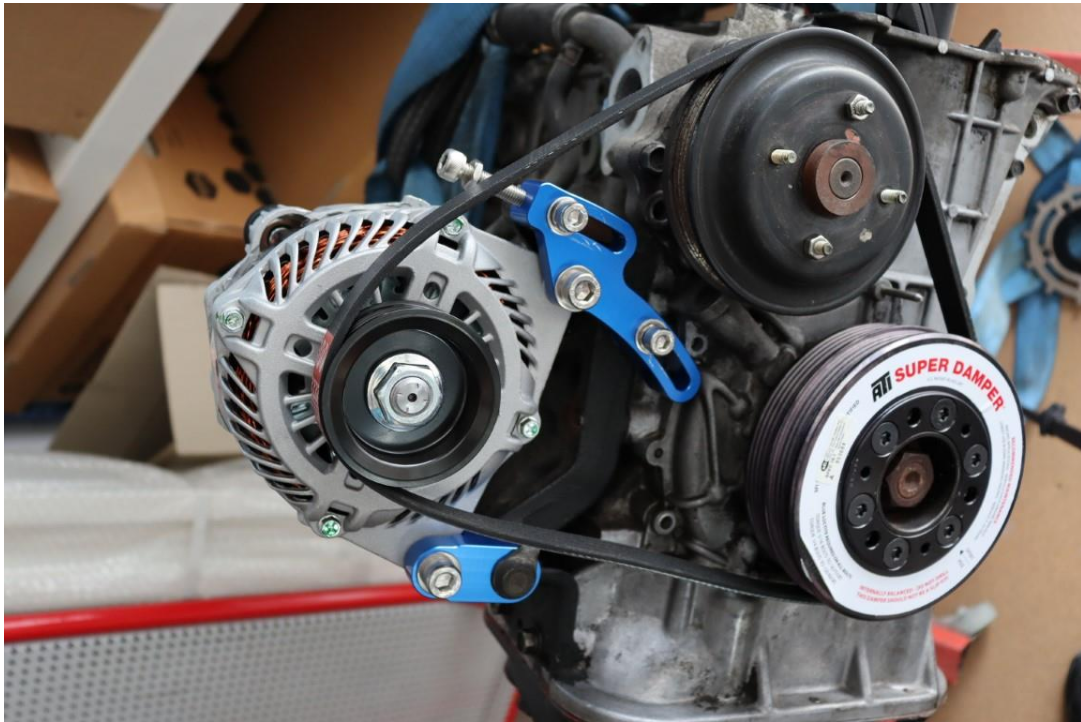


Using the supplied M10x90mm bolt and M10 flat washer install the LS1 alternator onto the lower mount. Once installed another M10 flat washer and M10 nyloc nut is used to secure the bolt. Hand tighten only.

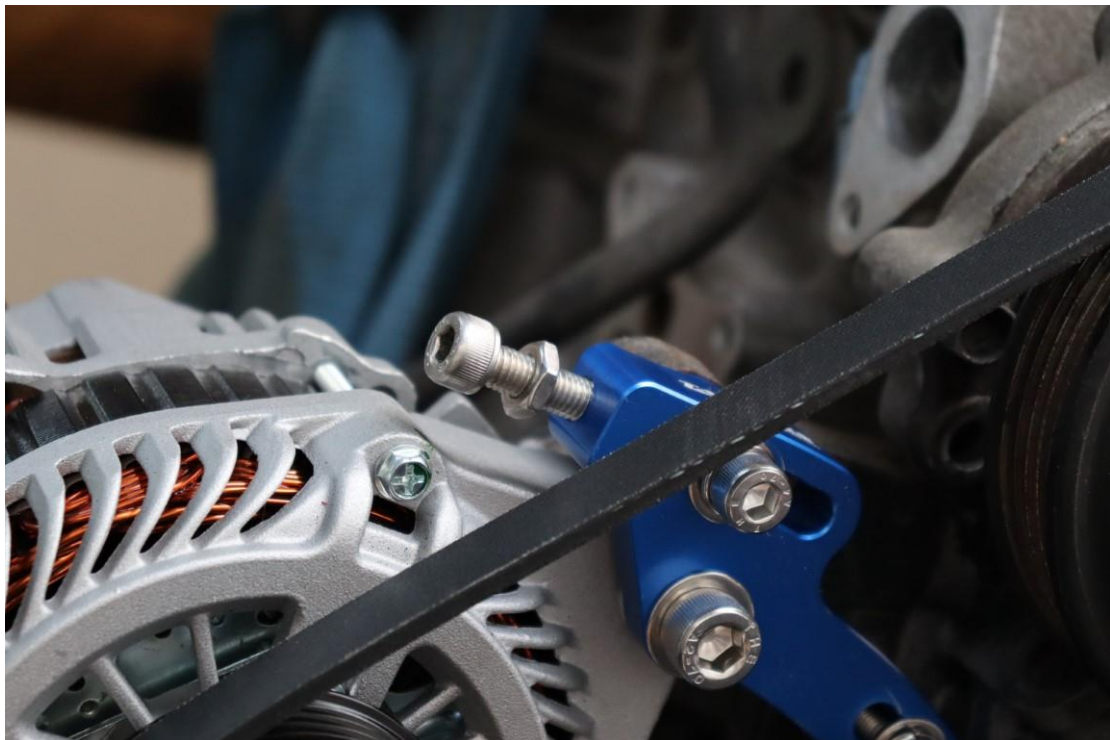
Rotate the alternator so the top alternator mounting point lines up with the adjust bracket. Using the supplied M10x80mm bolt, washers and nyloc nut secure in place, again hand tight only.



Install the new fan belt onto the engine/alternator.



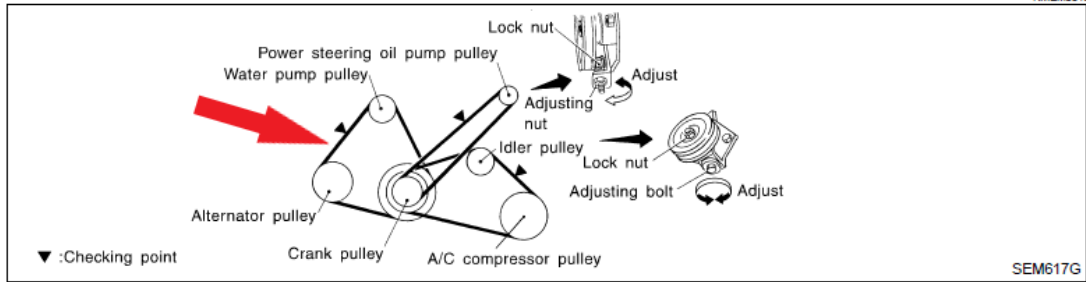
Start screwing the adjuster bolt in to tighten the belt. Use the specifications from the service manual on the next page, 7-8mm deflection at the point indicated with a force of 10kg with the appropriate tool.



DRIVE BELTS

Checking

Checking



1. Inspect belt for cracks, fraying, wear and oil. If necessary, replace.
2. Inspect drive belt deflection or tension at a point on the belt midway between pulleys.
 - Inspect drive belt deflection or tension when engine is cold. Adjust if belt deflection exceeds the limit or if belt tension is not within specifications.
 - Belt tension can also be checked at other points on the belt.

DRIVE BELT DEFLECTION AND TENSION

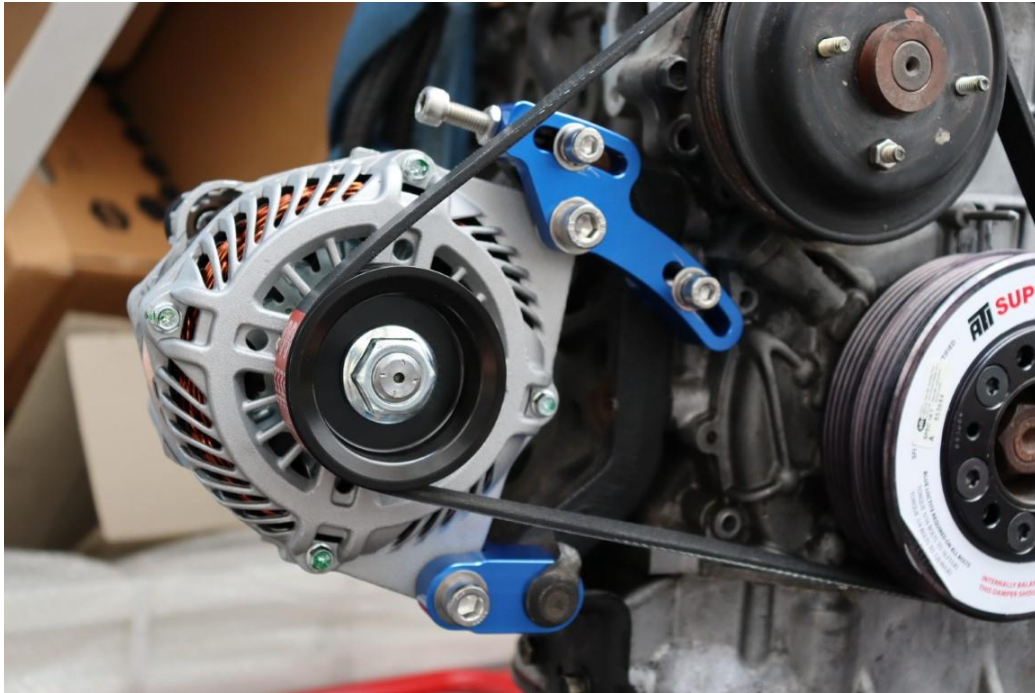
		Deflection adjustment Unit: mm (in)			Tension adjustment *1 Unit: N (kg, lb)		
		Used belt		New belt	Used belt		New belt
		Limit	After adjustment		Limit	After adjustment	
Compressor	With air conditioner compressor	7 - 8 (0.28 - 0.31)	5 - 6 (0.20 - 0.24)	4 - 5 (0.16 - 0.20)	289.3 (29.5, 65)	556.1 - 645.3 (56.7 - 65.8, 125 - 145)	666.9 - 755.1 (68.0 - 77.0, 150 - 170)
Alternator		11 - 13 (0.43 - 0.51)	7 - 8 (0.28 - 0.31)	6 - 7 (0.24 - 0.28)	333.4 (34.0, 75)	645.3 - 733.6 (65.8 - 74.8, 145 - 165)	755.1 - 843.4 (77.0 - 86.0, 170 - 190)
Power steering oil pump		15 - 17 (0.59 - 0.67)	11 - 12 (0.43 - 0.47)	9 - 10 (0.35 - 0.39)	222.6 (22.7, 50)	377.6 - 466.8 (38.5 - 47.6, 85 - 105)	490.4 - 578.6 (50.0 - 59.0, 110 - 130)
Applied pushing force		98 N (10 kg, 22 lb)			—		

*1: If the belt tension gauge cannot be installed at check points shown, check belt tension at a different location on the belt.

Once the desired tension is reached tighten the locking nut in place.



Tighten all the remaining bolts. And re-check the belt tension. Adjust again if necessary.



Re-install the power steering, A/C belts and electrical connectors to the alternator.

And that's it... You're all done. Enjoy & thank you for supporting TAARKS.