

Fitment and Required Components Guide



Holley Accessory Drive Kit Part Number 20-133

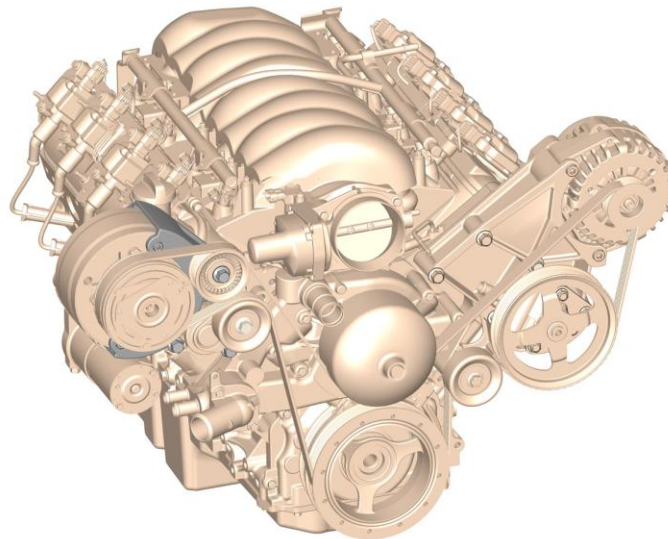
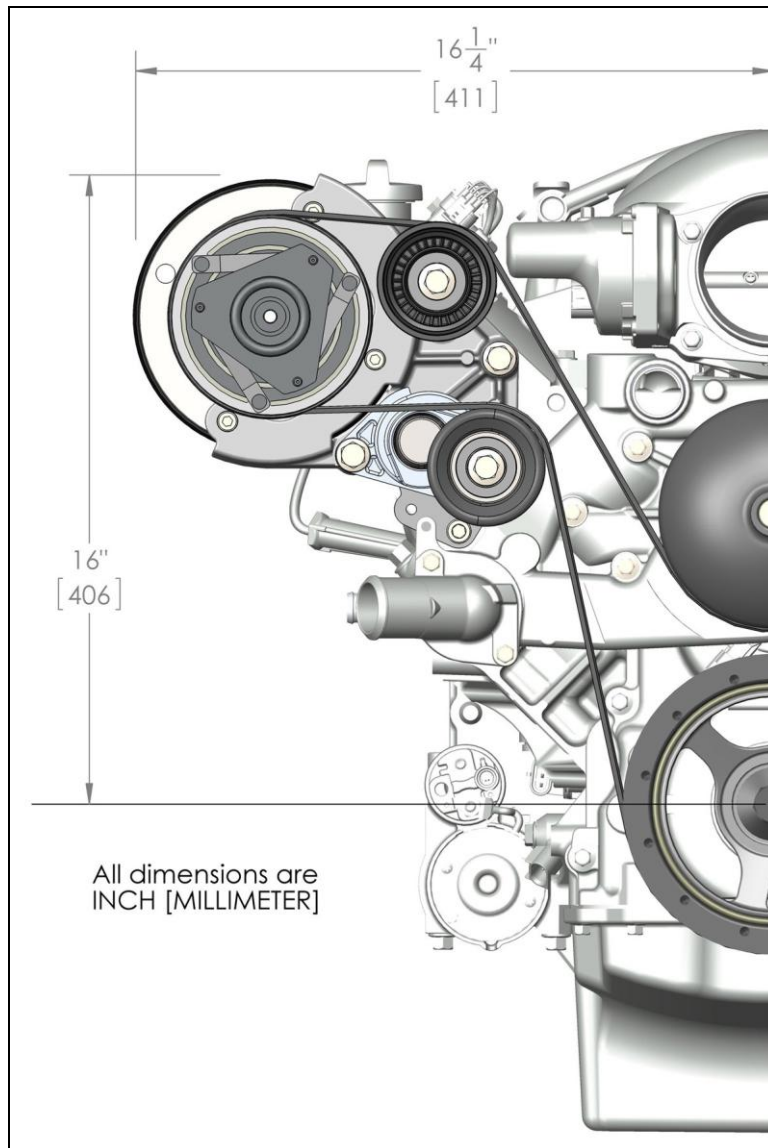


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Introduction:

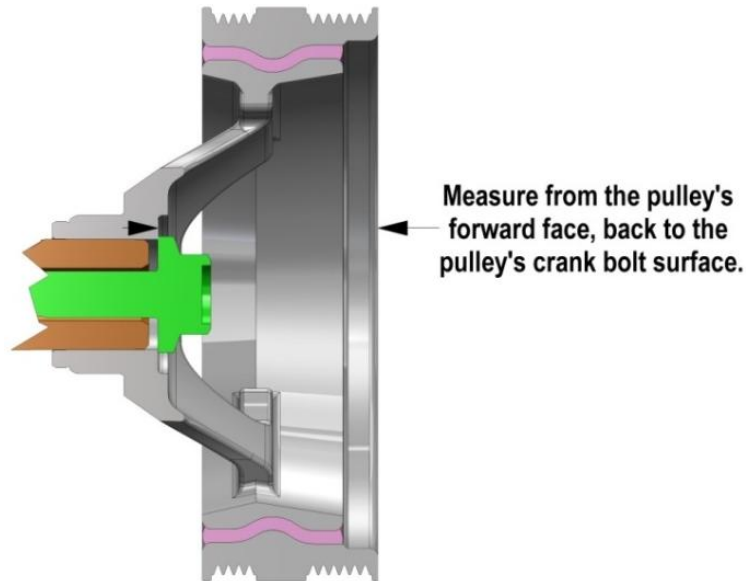
Holley's accessory drive kits offer clean, economical mounting of all LS engine accessories. These brackets look truly at home on any LS engine as if they came from the factory this way.

Holley's kits supply the required brackets and hardware needed for installation, but allow you to choose the source for supplemental accessories and components that are often already on the donor engine or the vehicle the engine is going into. Whether sourcing from the salvage yard, the local auto parts store, your GM parts dealer, or Holley and their premium matched components; you pick the source that matches your expectations and budget.

This guide will help with locating and sourcing components, as well as supplying notes and helpful hints for each. The first step is to determine which belt alignment you want to proceed with. This is determined by the crank pulley and often, but not always, the water pump. If clearance to the radiator is an issue, the compact STANDARD spacing common on the Corvette may be preferred. Otherwise, it is most cost effective to retain the existing crank pulley/water pump and space the bracket and other accessories to match. An application specific installation kit (part # 21-1, 21-2, or 21-3) is REQUIRED for ALL bracket kits.

Note: All Corvette part application references in this guide are to NON-supercharged LS engines.

Crank Pulley Belt Alignment Determination:



See the chart below for reference dimensions.

Overview of Parts Needed (but NOT included with 20-133 bracket kit):

Components with specific belt alignments

Belt Alignment Group	LS Application (Alignment Specific)	Holley Installation Kit (Alignment Specific)	Crank Pulley (Reference Dimension)		Water Pump (Alignment Specific)	Original Equipment Driver's Side Bracket
					GM #	GM # (Numerous)
Standard	Corvette / CTS-V / G8	21-1	1.5"	37 MM	19256263, 89018052, or 12604630	Most LS driver's side brackets and components can be used with this kit, but only in conjunction with the corresponding alignment's installation kit (21-1, 21-2, or 21-3)
Middle	F-body / GTO	21-2	2.25"	55 MM	19256263	
Long	Camaro ('10-UP) / Truck (all)	21-3	3"	75 MM	19207665 or any truck WP	

Components that will work with all belt alignments

Tensioner Assembly	Smooth Idler Pulley	A/C compressor (R4 Radial Type)	Driver's Side Bracket
Holley # / GM #	Holley # / GM #	Holley # / GM #	Holley #
97-151 / 12559325	97-150 / 12564401	199-100 / 80964063	20-135

Water Pump Determination:

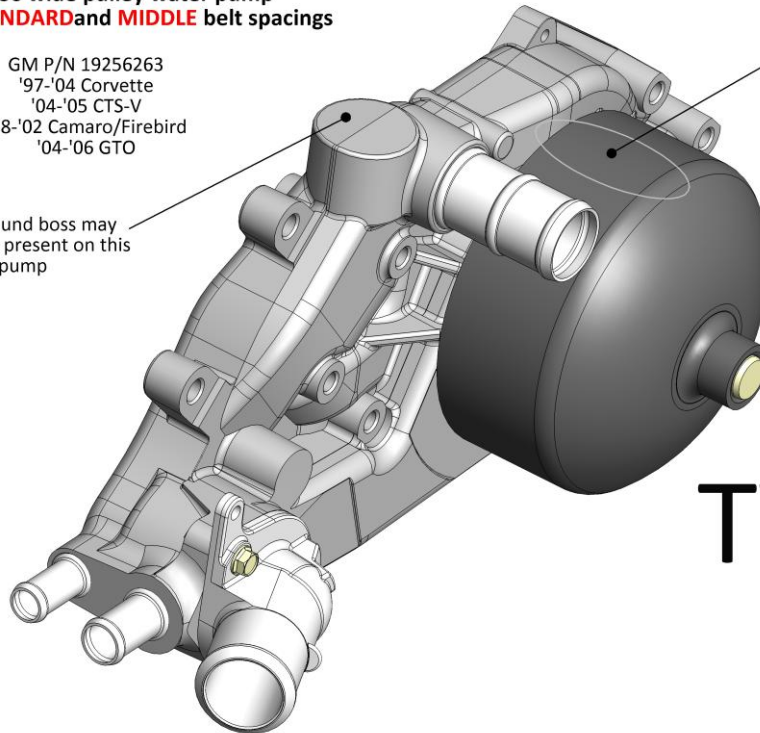
To determine which water pump type you have, refer to the following illustrations:

LS1/LS2/LS6 wide pulley water pump
Works with **STANDARD** and **MIDDLE** belt spacings

GM P/N 19256263
'97-'04 Corvette
'04-'05 CTS-V
'98-'02 Camaro/Firebird
'04-'06 GTO

This round boss may not be present on this water pump

Identifying feature:
Wide pulley allowing for both standard and middle belt spacings

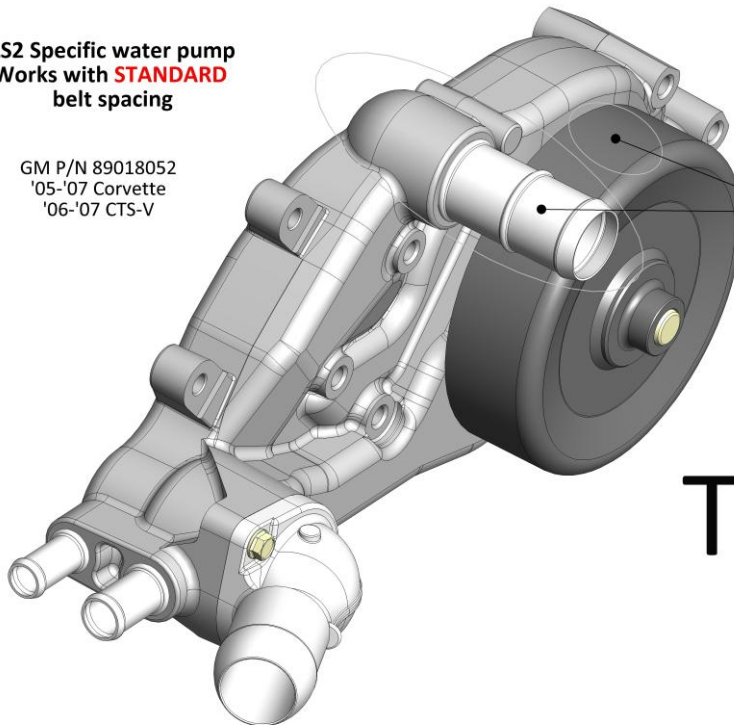


TYPE
1

LS2 Specific water pump
Works with **STANDARD** belt spacing

GM P/N 89018052
'05-'07 Corvette
'06-'07 CTS-V

Identifying features:
Narrow pulley and passenger's side outlet



TYPE
2

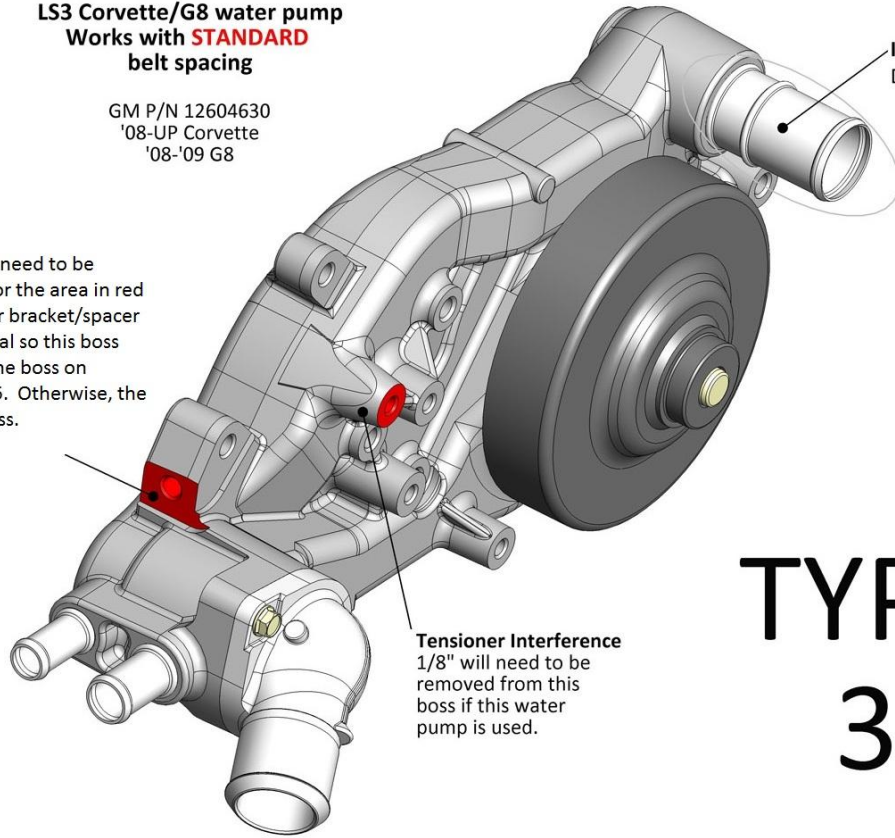
LS3 Corvette/G8 water pump
Works with **STANDARD**
belt spacing

GM P/N 12604630
'08-UP Corvette
'08-'09 G8

Identifying feature:
Driver's side outlet

Bracket Bolt Access

Either the water pump will need to be installed after the bracket or the area in red will need to be removed for bracket/spacer access. Remove the material so this boss shape is similar to that of the boss on water pumps TYPE 1, 2, or 5. Otherwise, the bolt will not pass by the boss.



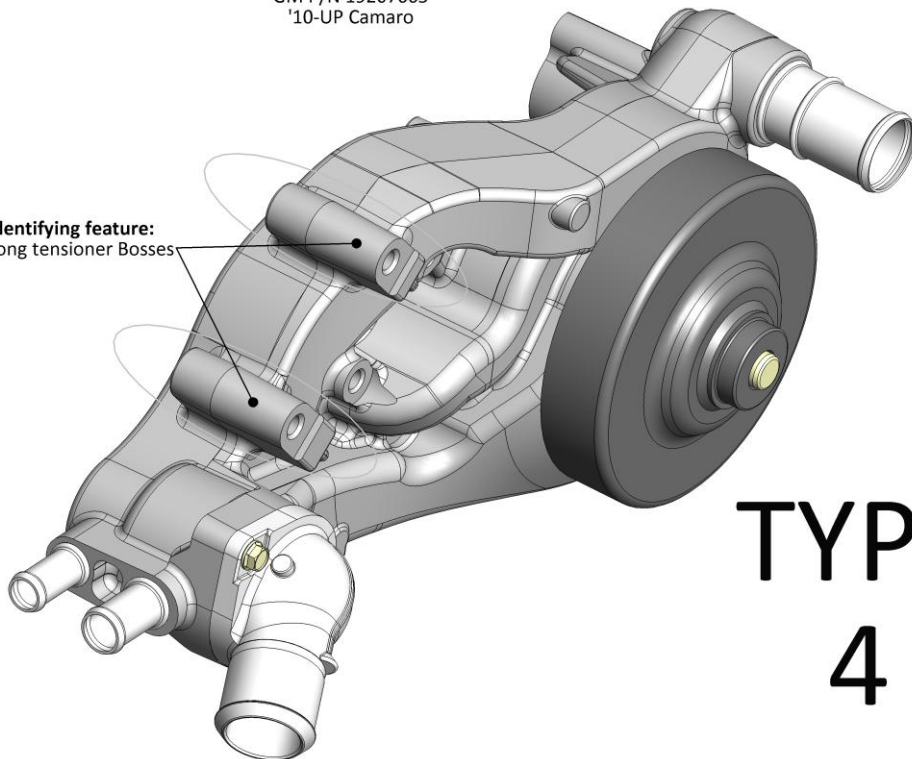
Tensioner Interference
1/8" will need to be removed from this boss if this water pump is used.

TYPE
3

LS3/L99 Camaro water pump
Works with **LONG** belt spacing

GM P/N 19207665
'10-UP Camaro

Identifying feature:
Long tensioner Bosses

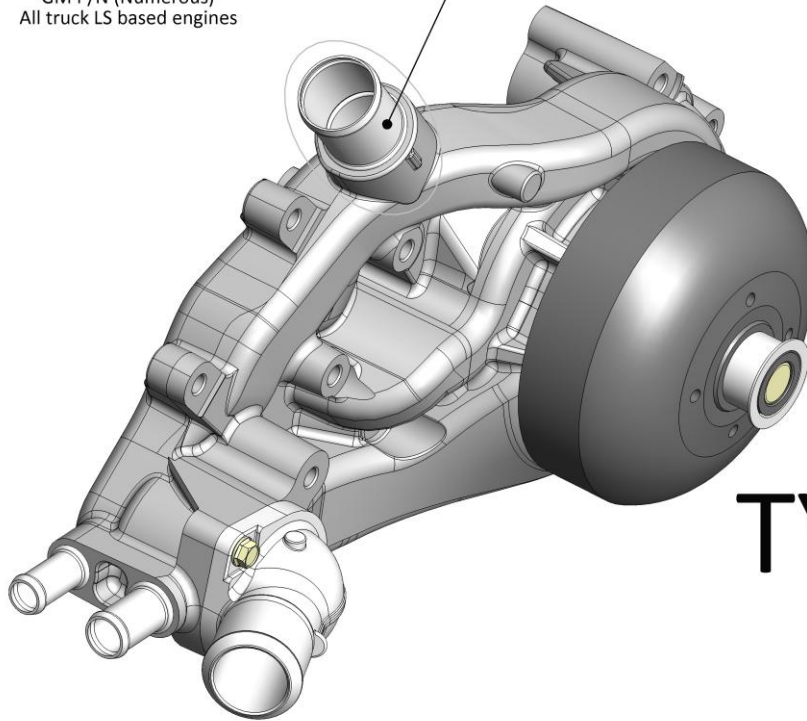


TYPE
4

TRUCK water pump
Works with **LONG** belt spacing

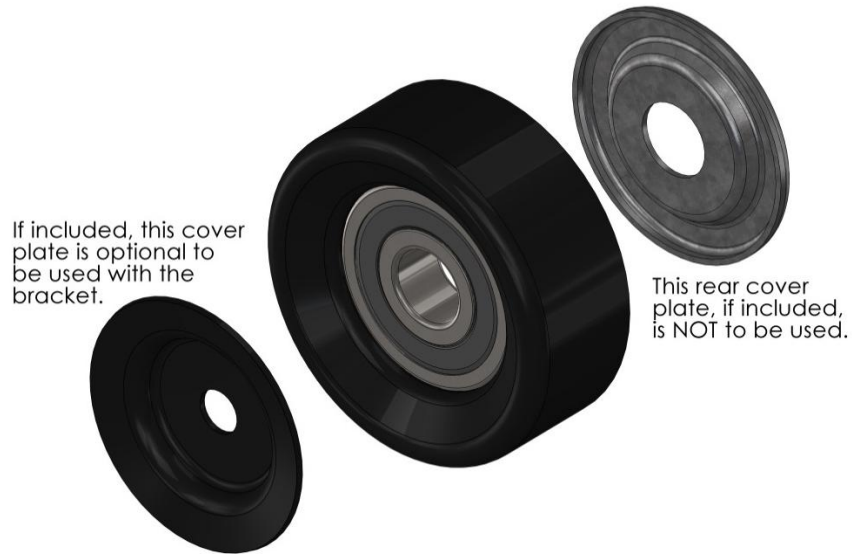
GM P/N (Numerous)
All truck LS based engines

Identifying feature:
Upward pointing
inlet



TYPE
5

Idler Pulley Options:



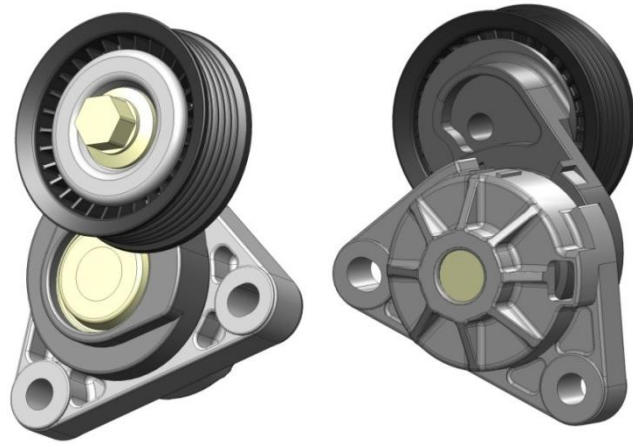
Idler pulley, 76 mm smooth
Holley part # 97-150
Application: '97 Corvette
DAYCO # 89059
GM # 12564401

When installing the passenger's side A/C bracket, a smooth pulley will need to be installed on the tensioner assembly. Retain the removed grooved pulley for bracket assembly.



Late model idler pulleys such as GM # 12568996 found on '05-up Corvette have a double bearing and will NOT align with this bracket system.

Tensioner Assembly Options:



Tensioner assembly with 68 mm grooved pulley

Holley part # 97-151

Application: '97 Corvette

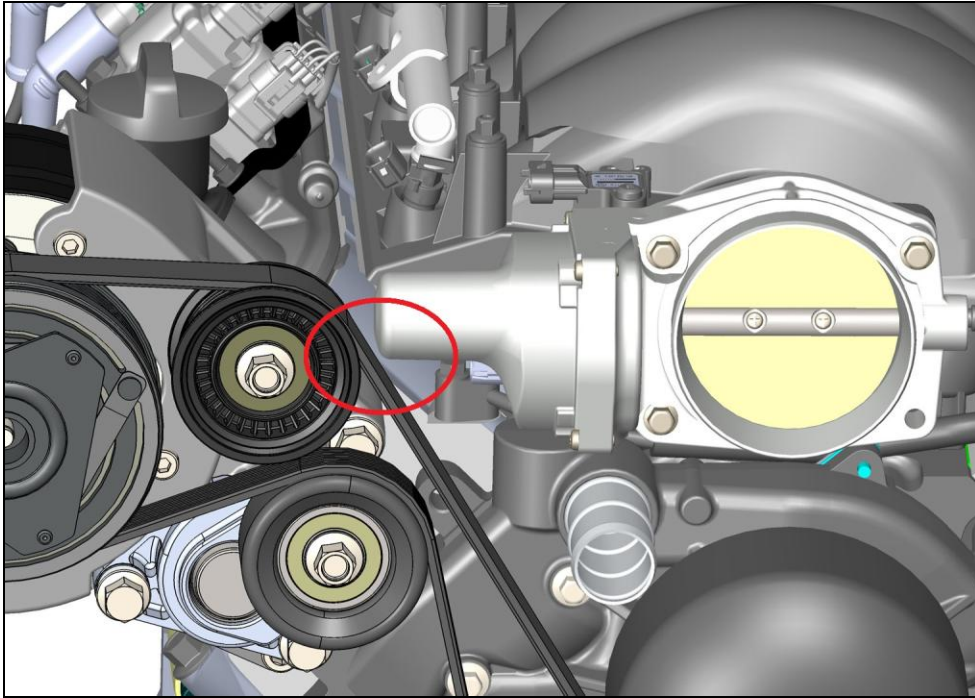
GATES # 38194

GM # 12559325

Because of a tensioner design change, Dayco # 89337 will no longer work with this bracket.

The above is the only style of tensioner that will work with the Holley bracket kits. The recommended version is common on 1997 - 2004 Corvettes. GM tensioner # 12569301 found on 2005 and up Corvettes may also be used if salvaged from the donor accessory drive, but confirm the tensioner pulley properly aligns with the belt after installation.

IMPORTANT: If your application is the “standard” belt spacing AND you are using a stock LS3/LS7 throttle body, you must replace the grooved idler pulley with the below 59 mm pulley to allow adequate belt clearance.



Idler pulley, 59 mm grooved
Holley part # 97-153
Application: '04 SAAB 9-5 AERO, 2.3L
Application: '97 Ford Contour, 2.5L
DAYCO # 89095

A/C Compressors Options and Warnings:

WARNING: LS engines are capable of high RPMs that can damage A/C compressor's complex moving internal parts. A tach or TPS monitoring RPM switch, such as NOS part # 15982NOS (for wiring information, see diagram on pg. 11), should be configured to deactivate the compressor clutch when the engine is above 4000 RPM. There are two pulley diameters for R4 compressors (5" and 4.25"). For safe high RPM operation and better belt tension, Holley recommends only compressors with the 5" pulley.

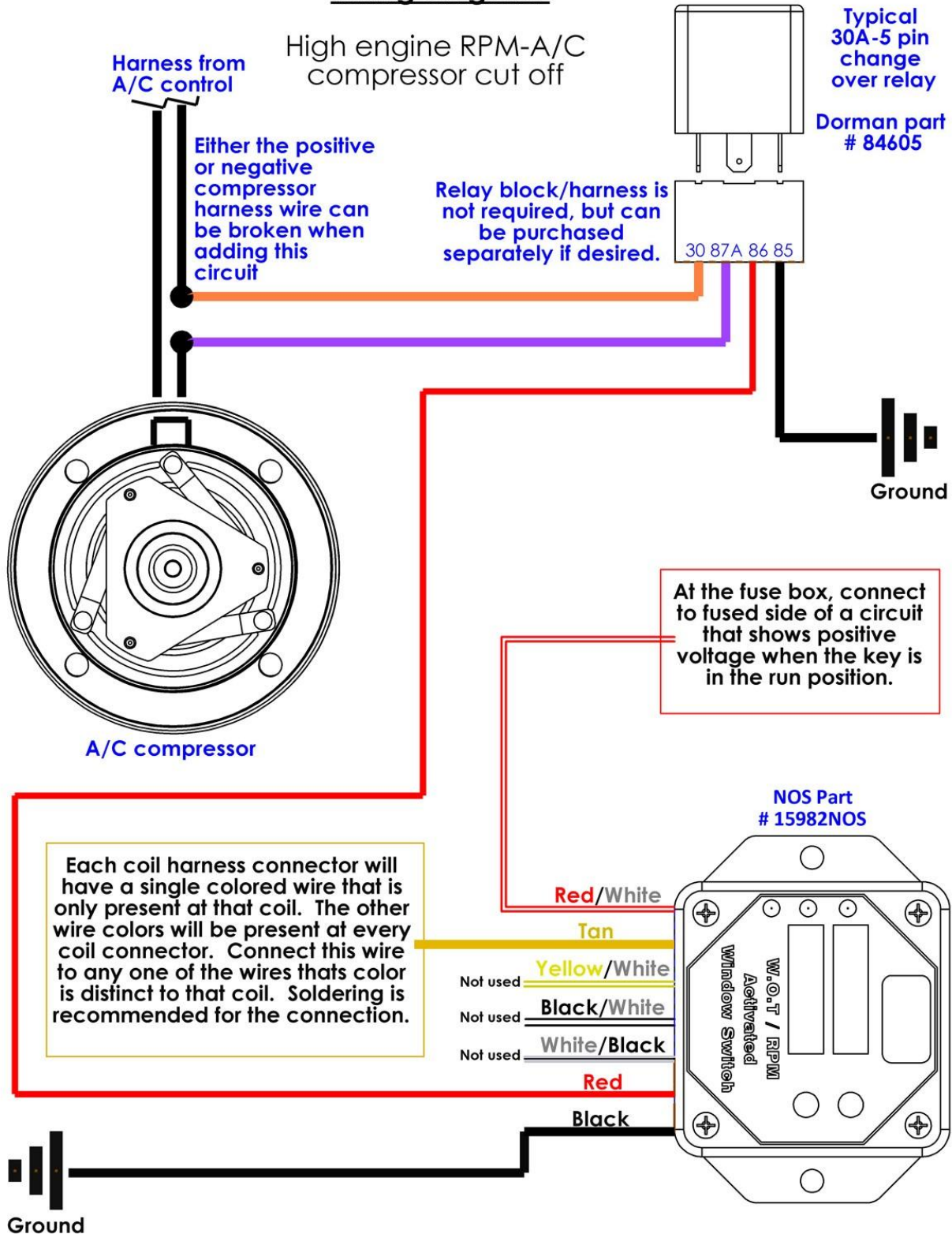


R4/Radial Compressor (6 groove, 5" pulley, metric fittings, pressure switch allowance)
Holley part # 199-100
Application: '91 Camaro (all)
GM # 88964863
Holley harness pigtail # 199-200

The passenger's side bracket is designed to work with the R4 radial compressor common on '75-'86 GM vehicles. Any R4 compressor with a 6-groove clutch pulley should work in this bracket. There are two types of clutch harness plugs. The early type is a flat spade connector type where the above references use the later style 8 mm pin, sealed connector.

HELPFUL HINT: There is typically no polarity when wiring the two connectors for the A/C clutch. In a few cases a diode may be inline. After installation, if the clutch does not function properly, reverse the polarity.

Wiring diagram



After reviewing the components needed for your specific application, parts can be sourced and the Holley kits can be installed. See the included assembly instructions for installation procedures.