



**ALTERNATOR / VACUUM PUMP MOUNT BILLET ALUMINUM  
FOR LS ENGINES WITH A BBC ELECTRIC WATER PUMP  
PART NUMBER 63870**

**Note:** This kit is designed to mount a 93MM Nipondenso style alternator and a Moroso 22842 Vacuum Pump to a GM LS Series engine with a front drive distributor timing cover. A Moroso 63547 BBC electric water pump kit, 64887 offset vacuum pump pulley, 63849 drive mandrel kit, and a 63615 LS water pump adapter kit are required to complete the installation. Additionally, Gates Green Stripe XL 9305 and 9309 are the ideal belts for the alternator and vacuum pump respectively.

Item	Description	Qty.	Item	Description	Qty.
A	COMBO BRACKET	1	I	3/8 NYLOCK NUTS	2
B	STANDOFFS	4	J	TURNBUCKLE	1
C	3/8-16 X 5.500 SHCS	4	K	LH ROD END	1
D	MANDREL SPACER	1	L	LH JAM NUT	1
E	3/8-16 X 2.00 SHCS	3	M	RH ROD END	1
F	1.350" SPACER	1	N	RH JAM NUT	1
G	1.875" SPACER	1	O	M8 X 1.25 X 30MM HHCS	1
H	3/8-16 X 3.25 SHCS	2	P	1/4-20 X .750 SHCS	1

1. Use the 3/8 X 2.00" SHCS's to mount the drive mandrel spacer and drive mandrel to the balancer. It is optional to mount the spacer to the balancer prior to mounting the mandrel using the counter bored holes on the spacer (Fasteners NOT Included).
2. Install the 63615 Driver and Passenger side water pump adapters using the (6) M8 SHCS and O-ring provided.
3. Stack the components in the following order as illustrated on Page 2 to ensure no leaks occur after assembly. The water pump adapter plates from the 63615 Kit, BBC Gasket, the BBC Water Pump Plates, BBC Gasket, the BBC Water Pump, Standoffs, and then Combo Bracket.

Note: Make certain that the radius on the pump adapter plates faces toward the water pump.

4. Insert the (4) 3/8 X 5.500" SHCS through the stacked components and mount the assembly to the 63615 adapters on the engine.
5. Attach the large lug of the alternator to the top mounting hole on the combo bracket using the 1.350" Spacer, 3/8 X 3.250 Bolt and Nylock Nut provided.

**For Technical Assistance, Call Moroso's Tech Line at  
(203) 458-0542, 458-0546 8:30am – 5:00pm Eastern Time**

MOROSO PERFORMANCE PRODUCTS, INC  
80 CARTER DR • GUILFORD, CT 06437-2116

Rev. A  
041018

Visit Us At [www.moroso.com](http://www.moroso.com)

63870INST

6. The kit provides an 8MM fastener to connect the Turnbuckle/Rod End Assembly to the lower lug on the alternator. We recommend drilling and tapping the lug for a 3/8 inch fastener for increased strength (Fasteners NOT Included). Make certain to mask off any openings in the alternator when doing so.
7. At this time, install the 9305 belt on the alternator. Fasten the other end of the Turnbuckle/Rod End Assembly to the combo bracket using the 1.875" Spacer, 3/8 X 3.250 Bolt and Nylock Nut provided. The belt will straddle the spacer when installed properly.
8. Place the vacuum pump through the backside of the combo bracket with the outlet facing upward, and hand tighten the 1/4 X .750" clamp bolt. Then install the offset pulley (Moroso P/N 64887) using the three bolts supplied with the pulley.
9. At this point, using the spacers from the 63849 drive mandrel kit, align the 4.000" diameter pulley for the alternator and 2.500" diameter pulley for the vacuum pump accordingly.
10. Loosen the vacuum pump clamp bolt, install the 9309 belt, and rotate the pump counter-clockwise until the desired tension is achieved, then retighten the bolt.
11. Install the 9305 belt on the 4.000" mandrel pulley and tension the alternator belt as necessary.

