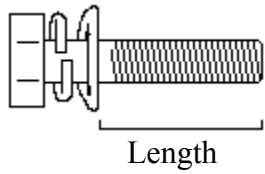
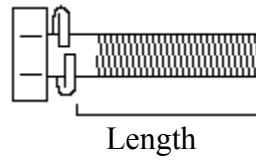


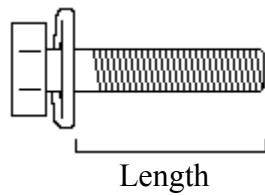
Bolt Type **A**  
w/ integrated lock washer and washer



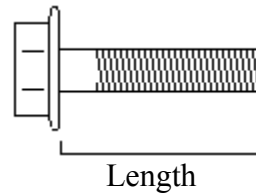
Bolt Type **B**  
w/ integrated lock washer



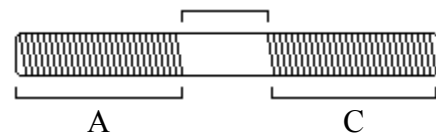
Bolt Type **C**  
w/ integrated washer



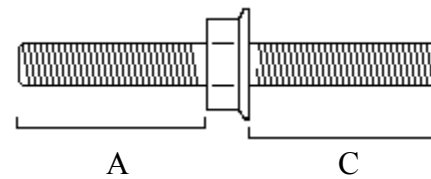
Bolt Type **D**  
w/ flared head



Stud                    B



\*\*\* Stud w/ integrated flared nut



\*NOTE- Bolt lengths were measured from the edge of flare (type D), lock washer (type B), or washer (type A and C) to edge of bolt.

| Bolt/nut location   | Head     | Thread   | Length | Type        | Qty. | Notes |
|---|----------|----------|--------|-------------|------|-------|
| 3000 pipe to 3000 pipe bracket                                      | 12       | m8x1.25  | 20mm   | A           | 2    |       |
| 3000 pipe bracket to valve cover                                    | 10       | m6x1.0   | 9mm    | A           | 2    |       |
| ISC pipe to 3000 pipe   | 10       | m6x1.0   | 10mm   | A           | 2    |       |
| PCV pipe to 3000 pipe   | 12       | m8x1.25  | 12mm   | A           | 1    |       |
| Throttle bracket assembly to head (spark plug valley)               | 12       | m6x1.0   | 65mm   | B           | 1    |       |
| Throttle bracket assembly to head (exhaust side)                    | 12       | m8x1.25  | n/a    | flared nut  | 3    |       |
| Throttle cable adjustment nuts                                      | 12       | m8x1.25  | n/a    | nut         | 4    |       |
| Throttle body to plenum   | 12       | m8x1.25  | 39mm   | B           | 3    |       |
| Throttle body to plenum   | 12       | m8x1.25  | 58mm   | B           | 1    |       |
| ISC valve to plenum   | 12       | m8x1.25  | 18mm   | B           | 2    |       |
| ISC valve cover to ISC valve  | Phillips | m4x.70   | 13mm   | A           | 3    |       |
| EGR vacuum modulator bracket to plenum                              | 12       | m8x1.25  | 11mm   | A           | 1    |       |
| EGR pipe to plenum  | 10       | m8x1.25  | 20mm   | D           | 2    |       |
| EGR valve to intake runners   | 12       | m8x1.25  | n/a    | flared nut  | 2    |       |
| Vacuum pipe bracket to side of plenum                               | 10       | m6x1.0   | 14mm   | A           | 1    |       |
| Intake plenum stay to intake plenum                                 | 14       | m10x1.25 | 16mm   | C           | 1    |       |
| Intake plenum stay to motor mount                                   | 14       | m10x1.25 | 17mm   | C           | 1    |       |
| Intake plenum to intake runners                                     | 12       | m8x1.25  | 23mm   | B           | 5    |       |
| Intake plenum to intake runners                                     | 12       | m8x1.25  | n/a    | lock w. nut | 2    |       |
| VSV to runners  | 12       | m8x1.25  | 12mm   | A           | 1    |       |
| Sensor ground wires to runners                                      | 12       | m8x1.25  | 12mm   | A           | 1    |       |
| Intake runners to head  | 12       | m8x1.25  | 26mm   | A           | 7    |       |
| Intake runners to head  | 12       | m8x1.25  | n/a    | flared nut  | 2    |       |
| Fuel rail to head   | 12       | m8x1.25  | 36mm   | A           | 3    |       |
| Vacuum pipe bracket (between runners #2 & #3) to head (using stud)  | 12       | m8x1.25  | n/a    | flared nut  | 1    |       |
| DIS ground wire to head/vacuum pipe bracket (between runners 4 & 5) | 12       | m8x1.25  | n/a    | lock w. nut | 1    |       |
| DIS ground wire to DIS bracket                                      | Phillips | m4x.70   | 5mm    | B           | 1    |       |
| DIS coils to DIS bracket  | Allen    | m4x.70   | 23mm   | B           | 12   |       |
| CPS to head   | 12       | m8x1.25  | 21mm   | A           | 1    |       |
| CPS cover to CPS  | 8        | m5x.80   | 12mm   | A           | 3    |       |
| CPS harness bracket to CPS  | Phillips | m4x.70   | 8mm    | A           | 1    |       |
| Turbo heat shield to turbo  | 12       | m8x1.25  | n/a    | exhaust nut | 3    |       |
| Heat shields to exhaust manifold                                    | 12       | m8x1.25  | n/a    | exhaust nut | 5    |       |
| Upper turbo stay to head  | 12       | m8x1.25  | 15mm   | D           | 1    |       |
| Lower turbo stay to turbo   | 17       | m12x1.25 | 20mm   | D           | 1    |       |

|   |    |          |       |             |   |                            |
|---|----|----------|-------|-------------|---|----------------------------|
| Lower turbo stay to engine mount                          | 14 | m10x1.25 | 17mm  | C           | 1 |                            |
| Turbo Elbow to turbo                                      | 14 | m10x1.25 | n/a   | flared nut  | 4 | beveled nut edge           |
| Downpipe to turbo elbow                                   | 14 | m10x1.25 | n/a   | exhaust nut | 3 |                            |
| Turbo to exhaust manifold                                 | 14 | m10x1.25 | n/a   | flared nut  | 4 | beveled nut edge           |
| O2 sensor to turbo elbow                                  | 12 | m8x1.25  | n/a   | exhaust nut | 2 |                            |
| Wastegate to turbo  | 12 | m8x1.25  | 16mm  | A           | 2 |                            |
| Exhaust manifold stay to exhaust manifold                 | 12 | m8x1.25  | 10mm  | B           | 2 |                            |
| Exhaust manifold stay to block                            | 14 | m10x1.25 | 12mm  | B           | 1 |                            |
| Exhaust manifold to head                                  | 14 | m10x1.25 | n/a   | exhaust nut | 7 | 21mm diameter flare        |
| Water elbow to head                                       | 12 | m8x1.25  | 33mm  | B           | 1 |                            |
| Water elbow to head                                       | 12 | m8x1.25  | n/a   | lock w. nut | 2 |                            |
| Water pipe brackets (water pipe surrounds block) to block | 12 | m8x1.25  | 10mm  | A           | 3 |                            |
| Front hoist hook to upper alternator mount                | 12 | m8x1.25  | 20mm  | B           | 2 |                            |
| Rear hoist hook to head                                   | 14 | m10x1.25 | 11mm  | B           | 2 |                            |
| PS reservoir to PS reservoir bracket                      | 12 | m8x1.25  | 15mm  | B           | 2 |                            |
| PS reservoir bracket to head                              | 12 | m8x1.25  | n/a   | lock w. nut | 1 |                            |
| PS reservoir bracket to water elbow                       | 12 | m8x1.25  | 18mm  | B           | 1 |                            |
| PS reservoir bracket to rear timing cover/PS pump bracket | 12 | m8x1.25  | n/a   | lock w. nut | 1 |                            |
| PS pump bracket to rear lower timing cover                | 12 | m8x1.25  | n/a   | lock w. nut | 1 |                            |
| PS pump bracket stay to block                             | 14 | m10x1.25 | 16mm  | A           | 1 |                            |
| PS pump bracket stay to PS pump bracket                   | 14 | m10x1.25 | 23mm  | C           | 1 |                            |
| PS pump adjuster bolt to PS pump bracket                  | 14 | m10x1.25 | 21mm  | A           | 1 | 25mm diameter washer       |
| PS pump lower bracket to block                            | 14 | m10x1.25 | 22mm  | D           | 2 |                            |
| PS pump lower bracket to block                            | 14 | m10x1.25 | n/a   | flared nut  | 1 |                            |
| Oil cooler line bracket to PS pump lower bracket          | 12 | m8x1.25  | 14mm  | B           | 1 |                            |
| Alternator 12v wire to alternator                         | 12 | m8x1.25  | n/a   | lock w. nut | 1 |                            |
| Alternator to upper alternator bracket                    | 14 | m10x1.25 | 110mm | D           | 1 |                            |
| Alternator to upper alternator bracket                    | 14 | m10x1.25 | n/a   | flared nut  | 1 |                            |
| Alternator to lower alternator bracket                    | 12 | m8x1.25  | 20mm  | A           | 1 |                            |
| Upper alternator mount to head                            | 14 | m10x1.25 | 37mm  | B           | 3 |                            |
| AC pump to AC pump bracket                                | 12 | m8x1.25  | 84mm  | C           | 4 | 20mm diameter washer       |
| AC pump bracket to front lower timing cover               | 14 | m10x1.25 | 84mm  | A           | 1 |                            |
| AC pump bracket to front lower timing cover               | 12 | m8x1.25  | n/a   | lock w. nut | 1 |                            |
| AC pump bracket to front lower timing cover               | 14 | m10x1.25 | n/a   | lock w. nut | 1 |                            |
| AC pump bracket to block                                  | 14 | m10x1.25 | 22mm  | C           | 2 | 20mm diameter washer       |
| AC belt idler pulley bearing nut                          | 14 | m10x1.25 | n/a   | flared nut  | 1 | no bigger than 18mm flare! |
| AC belt idler pulley adjustment bolt                      | 14 | m10x1.25 | 90mm  | D           | 1 |                            |

|  |       |          |      |               |    |                |
|--|-------|----------|------|---------------|----|----------------|
| AC belt idler pulley bracket to front lower timing cover           | 14    | m10x1.25 | 83mm | A             | 2  |                |
| AC belt idler pulley bracket to AC pump bracket                    | 14    | m10x1.25 | 17mm | C             | 1  |                |
| J tube to block  | 12    | m8x1.25  | n/a  | nut w/ washer | 2  |                |
| Block off plate (under oil filter) to block                        | 12    | m8x1.25  | 14mm | B             | 2  |                |
| Fuel inlet junction to driver motor mount                          | 12    | m8x1.25  | 21mm | A             | 2  |                |
| motor mount (both) to block  | 14    | m10x1.25 | 17mm | C             | 6  |                |
| Drivers motor mount to block/engine shock bracket                  | 14    | m10x1.25 | n/a  | nut w/ washer | 1  |                |
| Passenger motor mount to block/tranny stay                         | 14    | m10x1.25 | 26mm | B             | 1  |                |
| Engine shock to engine shock bracket                               | 12    | m8x1.25  | 16mm | A             | 2  |                |
| Engine shock bracket to tranny stay/block                          | 14    | m10x1.25 | 28mm | A             | 1  |                |
| Tranny stay (both) to tranny                                       | 14    | m10x1.25 | 33mm | B             | 2  |                |
| Passenger tranny stay to block                                     | 14    | m10x1.25 | 26mm | B             | 1  |                |
| Driver tranny stay to block  | 14    | m10x1.25 | 26mm | B             | 1  |                |
| Starter to tranny  | 14    | m10x1.25 | n/a  | flared nut    | 2  |                |
| Starter to tranny  | 14    | m10x1.25 | 53mm | B             | 2  |                |
| Front upper timing cover to rear upper timing cover (top bolts)    | 10    | m6x1.0   | 35mm | D             | 2  |                |
| Front upper timing cover to rear upper timing cover (bottom bolts) | 10    | m6x1.0   | 25mm | D             | 3  |                |
| Fan clutch to water pump   | 12    | m8x1.25  | n/a  | flared nut    | 4  | serrated flare |
| Water pump to rear lower timing cover                              | 10    | m6x1.0   | 28mm | B             | 2  |                |
| Water pump to rear lower timing cover                              | 10    | m6x1.0   | 24mm | B             | 4  |                |
| Water pump to rear lower timing cover                              | 12    | m8x1.25  | n/a  | lock w. nut   | 2  |                |
| Water pump to rear lower timing cover                              | 12    | m8x1.25  | 58mm | B             | 2  |                |
| Cam gear to cam  | 14    | m10x1.25 | 25mm | D             | 2  |                |
| Rear upper timing cover to head                                    | 10    | m6x1.0   | 8mm  | B             | 6  |                |
| Metal vacuum pipe to rear lower timing cover (left side)           | 10    | m6x1.0   | 13mm | A             | 1  |                |
| Metal vacuum pipe to rear lower timing cover (right side)          | 10    | m6x1.0   | 15mm | B             | 1  |                |
| Front lower timing cover to rear lower timing cover                | 10    | m6x1.0   | 25mm | D             | 3  |                |
| Rear lower timing cover to block                                   | 12    | m8x1.25  | 43mm | B             | 3  |                |
| Valve cover (both) to head   | Allen | m6x1.0   | 27mm | B             | 12 |                |
| #1 cam journal retainer (exposed from valve cover) to head         | 10    | m8x1.25  | 37mm | C             | 4  |                |
| Oil pan to block   | 12    | m8x1.25  | 13mm | A             | 22 |                |
| Oil pan to block   | 12    | m8x1.25  | n/a  | lock w. nut   | 4  |                |

| Stud Location                           | Thread   | A    | B    | C    | Qty | Notes  |
|---|----------|------|------|------|-----|--|
| Throttle bracket assembly to head       | m8x1.25  | 11mm | 5mm  | 21mm | 2   |  |
| PS reservoir bracket to head            | m8x1.25  | 11mm | 5mm  | 21mm | 1   |  |
| Heat shields to exhaust manifold        | m8x1.25  | 13mm | 2mm  | 13mm | 5   |  |
| Exhaust manifold to head                | m10x1.25 | 13mm | 9mm  | 30mm | 7   |  |
| Turbo to exhaust manifold               | m10x1.25 | 15mm | 13mm | 18mm | 4   |  |
| Turbo elbow to turbo                    | m10x1.25 | 15mm | 13mm | 15mm | 4   |  |
| Turbo elbow to downpipe                 | m10x1.25 | 14m  | 4mm  | 15mm | 3   |  |
| Vacuum pipe and DIS ground wire to head | m8x1.25  | 13mm | ***  | 13mm | 1   | vacuum pipe between intake runners #2 and #3 |
| Upper turbo stay to turbo               | m8x1.25  | 13mm | ***  | 13mm | 1   |  |

\*\*\* measurement B is actually an integrated 12mm flared nut instead of smooth spot on stud

| Washer Location                          | Hole size | Diameter | Thickness |
|--|-----------|----------|-----------|
| Cam gear to cam                          | m10       | 30mm     | 4mm       |
| Turbo heat shield to turbo               | m8        | 22mm     | 3mm       |
| PS pump adjuster bolt to PS pump bracket | m10       | 25mm     | 2mm       |