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Stock 92 100cs Q	MotoDyne Supercharged 100cs Q
RPM Torque HP	RPM Torque HP
900 22 01	900 24 02
1000 31 02	1000 38 05

```
1100 38
        03
                                             1100 52
                                                       09
1200 42 06
                                             1200 58
                                                       11
1300 48 06
                                             1300 77
                                                       15
1400 53
                                             1400 85
        11
                                                       20
1500 59
                                             1500 93
                                                       29
         15
1600 64
                                             1600 101
                                                       36
        18
1700 69
        22
                                             1700 111
                                                       38
1800 74 26
                                             1800 121 42
1900 83 30
                                             1900 134
                                                      49
2000 89
         34
                                             2000 145
                                                       56
2100 95 38
                                             2100 154 62
                                             2200 162 68
2200 100 42
2300 105 46
                                             2300 171
                                                       75
2400 112
         51
                                             2400 182
                                                       83
2500 119
         57
                                             2500 194 93
                                             2600 209 104
2600 128 64
2700 138 71
                                             2700 224 116
2800 145 77
                                             2800 235 126
2900 149 83
                                             2900 243 134
                                             3000 248 142
3000 153 87
                                             3100 255 151
3100 157 93
3200 161 98
                                             3200 261 159
3300 165 103
                                             3300 267 168
                                             3400 273 177
3400 168 109
3500 173 115
                                             3500 281 187
3600 177 121
                                             3600 287 197
3700 179 126
                                             3700 291 205
3800 178 129
                                             3800 289 209
                                             3900 285 213
3900 177 131
4000 177 134
                                             4000 284 217
                                             4100 284 223
4100 177 137
                                             4200 287 231
4200 177 142
4300 179 147
                                             4300 290 239
4400 179 151
                                             4400 291 245
                                             4500 288 247
4500 177 152
4600 174 152
                                             4600 283 248
4700 172 154
                                             4700 279 250
                                             4800 278 254
4800 171 156
4900 171 159
                                             4900 278 259
5000 169 160
                                             5000 274 261
5100 165 160
                                             5100 269 261
                                             5200 264 261
5200 162 160
                                             5300 262 264
5300 161 163
5400 159 164
                                             5400 259 266
5500 155 162
                                             5500 252 264
                                             5600 243 258
5600 149 159
                                             5700 235 255
5700 144 156
5800 142 156
                                             5800 230 254
5900 139 157
                                             5900 227 255
6000 136 156
                                             6000 222 254
6100 132 154
Maximums:
                                             Maximums:
  Torque: 179 lb/ft @ 4400 rpm
                                               Torque: 291 lb/ft @ 4400 rpm
```

Horsepower: 164 hp @ 5400 rpm	Horsepower: 266 hp @ 5300 rpm
MotoDyne v1.0	MotoDyne v1.0
92 Audi 100, odo 217k	92 Audi 100, odo 217k
Test Weight: 4861 lb	Test Weight: 4861 lb
Engine Type: aan 2.8L v6	Engine Type: aan 2.8L v6
Tranny Type: M	Tranny Type: M
TC Stall RPM: N/A	TC Stall RPM: N/A
Axle Ratio: 4.11	Axle Ratio: 4.11
Tire Width: 195 mm	Tire Width: 195 mm
Tire Aspect: 65 %	Tire Aspect: 65 %
Wheel Diameter: 15 inches	Wheel Diameter: 15 inches
Drivetrain Loss: 0.15	Drivetrain Loss: 0.15
Air Temp: 43 F	Air Temp: 43 F
Rel. Humidity: 0 %	Rel. Humidity: 0 %
Barometer: 29.23 In	Barometer: 29.23 In
Elevation: 0 Ft	Elevation: 0 Ft

Audi 12 valve Supercharger by MotoDyne

Up to 50% horsepower increase

Up to 55% torque increase

Custom one piece intake manifold to use the reliable Lysholm rotor group

Custom KM Japan Motodyne Hitachi chip

Factory- look appearance

Modular installation

Everything included for a complete installation with the highest quality hardware.



The MotoDyne supercharger features a heavy wall casting for (sound deadening) and wrap around fins for strength and cooling.

The 1600 Lysholm supercharger is one of the best twin screw compressors world-wide. It matches the Audi's mechanical finish perfectly with it's metric hex hardware, enhanced by a hi-temp black powder coat and machined finish, it's an absolutely perfect match.

The Motodyne supercharger makes positive pressure right off idle for smooth, powerful engine response right to redline.

Squeeze the throttle in any gear for instant acceleration .Smooth flowing runners and plenum to deliver matched power and torque. With a superior drive belt configuration of 90percent belt wrap on the blower drive pulley, there is no wasted boost under load from belt slippage, or Power steering cut out in bad weather due to a misconfigured idler and belt orientation.

When not under boost, it only takes 1/3-horsepower to turn the twin-rotors MotoDyne engineered this supercharger to be modular, simple installation that can be completed in about 7 hours. Premium fuel is required, ECM preparation included. Complete with all parts necessary for installation.

Preparation

Upon receiving your MotoDyne 12 valve V6 Supercharger Kit please check the contents to verify that you have everything you need prior to beginning your installation. Also you will need to send your ECU along with receipt to MotoDyne so that we may install the necessary software.

The ECM on the Audi 90, 100, A6 and cabriolet are located inside the vehicle on the passenger side.

The ECM shown, is from a 97 a4Q located under the hood just below the drivers side wiper arm assembly below the cowl.

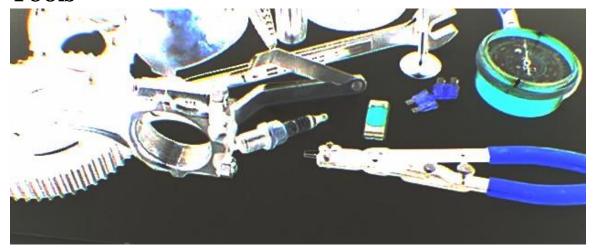


Parts

- 1 Lysholm Supercharger Unit
- 1 MotoDyne Intake Manifold
- Modified Fuel Rail coil pack tray relocation
- 6 Spark Plugs
- 1 power steering pump pulley
- 1 88 6 rib Belt
- 2 Charge Tube Extension bushings
- 1 Idler Bracket plate
- 1 Throttle Body Adapter Plate

- 6 Gaskets
- 6 Hose Clamps
- 2 5/8in Barbs
- 1 3/8in Barbs
- 1 Idler Pulley
- 1 Metric Hardware Pack
- 1 Idle Air Stabilizer Valve Adapter

Tools



Philips Head Screwdriver
Flat Head Screwdriver
4mm Hex Wrench
5mm Hex Wrench
6mm Hex Wrench
10mm Hex Wrench
10mm Wrench
17mm Wrench
13mm Wrench
5/8in Socket and Wrench
10mm Socket and Wrench
1/4in Drill Bit & Drill

Getting Started

Before You Start

Be sure to disconnect the Battery Terminal (100/A6 models remove back seat using a Philips Head Screwdriver)

A4 just below windshield 10mm wrench

Removing the Engine Cover



- 1. To Remove the Engine Cover, Remove the four (4) pushpin screws by pushing down and tuning counter clockwise with a Philips Head Screwdriver.
- Remove the front drive belt cover by unscrewing the two (2) 5mm hex bolts holding it in place.



Removing the Drive Belt

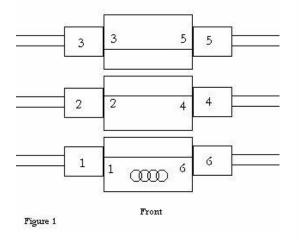
- Using your 10mm hex wrench, push down on the tension pulley – creating slack in the belt.
- 2. Remove the factory belt.

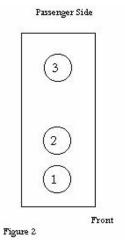


Exposing the Power Steering Pump

1. Label and remove coil pack wires as shown in figures 1 and 2







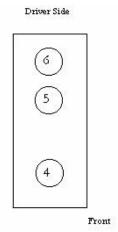


Figure 1 shows the coil pack as seen from the front of the automobile. Be sure to label both the wires and the coil boxes.

Figure 2 shows the injector configuration on both the driver's and passenger's side cylinder heads

- 2. Remove the coil pack and vacuum canister using your 6mm hex wrench.
- 3. Disconnect the vacuum line.

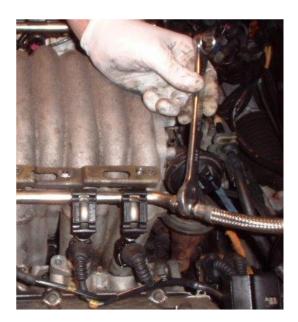


Removing the Factory Intake Manifold

Disconnecting the Fuel Rail

WARNING: The following Steps should be performed in a well ventilated area and away from open flame

- Disconnect the fuel line On the A4 its located on the passenger side(all others located on the driver's side) using a 17mm wrench.
- Also disconnect the fuel regulator return line (located on the passenger's side) using a 17mm wrench.



- 3. Disconnect the fuel injector harness (Press the push clips in and pull up)
- 4. Remove the four (4) screws anchoring the fuel rail, with a Philips head screwdriver, and remove the factory fuel rail.
- 5. Remove the factory fuel injectors.

Removing the Factory Spark Plugs

- 1. Using a deep 5/8 in. spark plug socket carefully remove the factory spark plugs.
- 2. Install the MotoDyne spark plugs.



Disconnecting the Intake

- 1. Disconnect the factory air intake charge tube from the air meter and air bonnet by loosening both hose clamps with a flat head screwdriver.
- 2. Remove the two (2) 10mm bolts connecting the air bonnet to the intake manifold.
- Loosen and disconnect both valve cover breather tubes.
- 4. Disconnect the vacuum lines connected to the air bonnet (located on driver's side).
- 5. Remove the air bonnet.



Disconnecting the Cruise Control Servo

- 1. Disconnect the vacuum line from the cruise control servo.
- 2. Remove the 13mm nut from the back of the servo.
- 3. Disconnect the cruise control assembly from the throttle body linkage.



Disconnecting the Appropriate Lines

- 1. Disconnect the orange vacuum line form the E.G.R. valve.
- 2. Remove the two (2) 10mm bolts anchoring the E.G.R. valve.
- 3. Remove the throttle cable retainer clips and disconnect the throttle cable.
- Disconnect the brake booster line from the intake manifold.
- 5. Disconnect the ground wire (located on the passenger's side near the rear of the factory intake manifold) using your 10mm wrench.
- 6. Disconnect the idle air stabilizer valve harness.
- 7. Disconnect the emissions control line from the throttle body.



Removing the Intake

- Remove the ten (10) 6mm hex intake manifold bolts
- 2. Caution: before removal disconnect the throttle position sensor and EGR temp sensor harness
- 3 Carefully lift the manifold away from the engine valley.
- 3. Take this opportunity to thoroughly clean the engine valley using brake cleaner (if necessary).



Protect the exposed intake ports from ALL debris

4. Carefully remove the factory intake gaskets.



Modifications

Offset power steering



Remove pump and attach to the Motodyne offset bracket as shown



replace the factory power steering bracket (shown on left) with the Motodyne bracket shown above in black



Extending the Cruise Control Servo Bracket

- 1. NOTE: Bracket may look different than one shown.
- 2. Remove two (2) 10mm bolts to remove the cruise control servo bracket from the valve cover. (Located on the driver's side)

SAVE THE BOLTS.

- 2. Attach the cruise control servo bracket to the cruise control extension bracket **Note:** a4 extension bracket may look different. Using two (2) 10mm bolts.
- 3. Reattach the newly extended cruise control servo bracket to the valve cover using your factory 10mm bolts.



Prepare the Factory Power steering pump

 Attach the 76mm idler pulley to the pulley bracket.

BE SURE TO CENTER THE PULLEY IN THE SLIDER HOLE

2. Attach pulley bracket to the power steering pump housing using three (3) 6mm hex bolts.

attach low pressure side extension pipe to pump.

Mount PS. Pump bracket to engine





Connecting Vacuum Lines

1. cap off blue vacuum hose that controlled factory intake servo, no longer used

Preparing the Throttle Body

1. Remove the throttle body from the factory intake.



- 2. Remove the idle air stabilizer valve from the factory intake by disconnecting three (3) 10mm nuts and three (3) 4mm hex bolts.
- 3. Remove the four (4) 6mm hex bolts to disconnect the throttle body.



Replace Intake manifold Gaskets

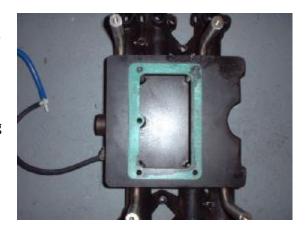
 Place the new MotoDyne intake gaskets over the intake ports.



Blower Assembly

Connecting the Modified Intake

- 1. Attach the fuel pressure regulator and optional boost gauge lines to the barb on the back of the intake manifold.
- 2. Place gasket over blower inlet port on the intake manifold.
- 3. Fasten intake to Lysholm Supercharger using five (5) 13mm x 4in bolts.



Connecting the Throttle Body

- 1. On the throttle body adapter plate, connect the two 3/4 in barbs for bypass and 5/8in barb for brake booster.
- 2. Place gasket over the throttle body adapter plate port on the back of the Supercharger.
- 3. Attach the throttle body adapter plate to the posterior of the Lysholm Supercharger using six (6) 6mm hex bolts.



Connecting the Idle Air Stabilizer

- Place gasket on adapter plate and attach idle air stabilizer valve adapter. (2 x 6mm hex bolts)
- 2. Attach idle air stabilizer assembly to the valve adapter using three (3) 4mm hex bolts.
- 3. Attach the idle air stabilizer to the assembly using three (3) 10mm nuts.
- 4. Place gasket on throttle body and attach to the adapter plate using the four (4) factory bolts.



Attaching the Air Bonnet

1. Place stock rubber grommet over the throttle body and attach the air bonnet with two (2) 10mm bolts using 13mm spacers.



Mounting the Modified Fuel Rail

1. Connect fuel injectors to modified fuel rail.



Be careful not to pinch O-Rings. May result in severe fuel leak.

- 2. **Figure 1 shows** (100,A6 fuel rail) Mount fuel rail to Supercharger assembly, using four (4) Philips head screws.
- 3. Press the injectors into the aligning sockets on the intake manifold.
- 4. Connect the fuel pressure regulator boost reference line to the port on the lower intake manifold .



Attach fuel regulator with blue hose to intake manifold barb as shown



Lowering the Manifold

A second person may be needed to help stabilize and guide the manifold into the engine valley.

Before completely lowering the unit into the engine valley be sure to connect the TPS sensor harness to the throttle position sensor, located on the throttle body.

1. Carefully lower the blower assembly into the engine valley.



Make sure the manifold is sitting on the alignment pins.

2. Secure the intake to the cylinder heads using ten (8) factory audi hex bolts and 2 13mm.x 3.5in



Reconnecting the Appropriate Lines

- Connect the black vacuum line to the back of the throttle body.
- 2. Attach the line for the boost line (optional)
- 3. Connect emission control line to the throttle body.
- 4. Attach the brake booster line to the throttle body.
- 5. Connect the idle air stabilizer valve harness.
- 6. Reconnect the fuel lines and injector harness
- Connect the ground wires to the fuel rail support.

Reminder: If you have not sent in your ECM. Do it now! You can not run the supercharger with the Factory ECM software.





Reconnect the Cruise Control Servo

Connect the air Inlet Tube to the Air Bonnet and Air Meter

Reconnect the Coil Pack

Wrap the 88in belt in the configuration shown below in figure 3

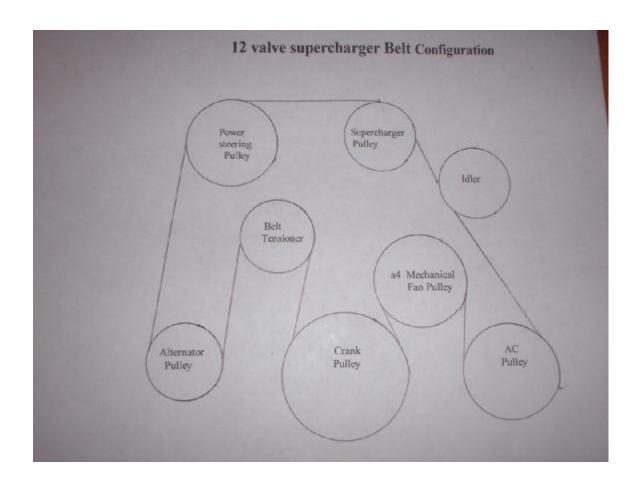


Figure 3: Final Belt Configuration