

## PART NO. M10002, M10003 & M10004

### 2003-04 Mustang SVT Cobra Overdrive Supercharger Pulley Kit

| PACKING LIST  |                          |                 |                    |                                      |
|---------------|--------------------------|-----------------|--------------------|--------------------------------------|
| <u>Item #</u> | <u>Check</u>             | <u>Quantity</u> | <u>Part Number</u> | <u>Description</u>                   |
| 1.            | <input type="checkbox"/> | 1               | M10002             | Overdrive Pulley                     |
| 2.            | <input type="checkbox"/> | 1               | M10003             | Pulley Puller/Installer Tool         |
|               |                          |                 |                    | (includes all of the following)      |
|               | <input type="checkbox"/> | 1               | *****              | Backing Plate                        |
|               | <input type="checkbox"/> | 1               | *****              | Ram Brace Bar                        |
|               | <input type="checkbox"/> | 1               | *****              | Threaded Ram Shaft                   |
|               | <input type="checkbox"/> | 1               | *****              | Brace Bar Handle                     |
|               | <input type="checkbox"/> | 2               | *****              | Shoulder Bolts, 1/2" x 4 1/4"        |
|               | <input type="checkbox"/> | 1               | *****              | Heavy Hex Nut, 5/8" - 18             |
|               | <input type="checkbox"/> | 2               | *****              | Heavy Flat Washers, 5/8"             |
|               | <input type="checkbox"/> | 2               | *****              | Heavy Flat Washers, M8               |
|               | <input type="checkbox"/> | 1               | *****              | Allen Head Set Screw, M8-1.25 x 40mm |
|               | <input type="checkbox"/> | 1               | *****              | Acorn Nut                            |
| 3.            | <input type="checkbox"/> | 1               | *****              | Instructions                         |

**Warning:** SLP recommends wearing safety glasses for the complete installation.

**Warning:** Too avoid the chance of electrical shock or damage to your vehicle's electrical system, disconnect both the negative and positive battery leads (in that order) at the battery.

**Warning:** This overdrive supercharger pulley kit will NOT work properly on a vehicle with the factory calibrated Powertrain Control Module (PCM). Operation of the vehicle with this pulley without proper PCM calibration can result in engine damage. SLP DOES NOT RECOMMEND use of this kit in combination with any performance PCM tune other than an SLP performance tune specifically designed for this kit and cannot guarantee compatibility. The appropriate SLP Performance PCM calibration is included in the custom SLP Diablo Sport Predator (PN M27000).

**Note: SLP recommends using Motorcraft part number AGSF22FM1 spark plugs or another plug of equivalent style and heat range. We also recommend that the spark plug gap be reduced to 0.038". Some Cobras came equipped with the AGSF22FM1 spark plugs from Ford others came with AGSF12FM1 or AGSF32FM1. The AGSF32FM1 spark plugs are one heat range hotter and should NOT be used with this pulley. Detonation and serious engine damage could result. If your car came equipped with AGSF12FM1 spark plugs, you should retain these (they are one heat range colder than the AGSF22FM1) but still reduce the gap to 0.038". For an additional margin of safety the AGSF12FM1 spark plugs may also be substituted for the AGSF22FM1 spark plugs as long as the colder operating temperature does not cause problems with fouling or drivability.**

### **INSTALLATION INSTRUCTIONS**

1. Begin by checking for and familiarizing yourself with all parts listed on packing list by comparing to illustration "A" included. All parts listed are necessary for successful O.E.M. pulley removal and overdrive pulley installation. Please follow this procedure carefully and exactly to avoid problems and/or damage.
2. Disconnect the positive (+) cable from battery.
3. Remove the two bolts and one nut retaining the supercharger pulley guard and remove the guard.
4. If your vehicle has a bolt on the supercharger shaft to help retain the pulley, remove it at this time. This is easiest with the belt still in place to prevent the pulley from rotating. Other models may have only a black plastic plug to protect the threads. The easiest way to remove this plug is by sliding a small flat screwdriver behind it. Then, while holding the screwdriver, pinch the edge of the plug firmly between your thumb and the screwdriver blade and rotate the plug counter-clockwise. Continue unscrewing it and remove it.
5. Remove the serpentine drive belt.
6. Refer to illustration "B" for proper arrangement of the puller/install tool. Thread the allen socket head set screw all the way into the 5/8" threaded ram rod and put the two 5/16" washers on it. Grease the threads on ramrod and also on both sides of large 5/8" flat washer. Put puller/installer tool into position as shown in illustration "C". The allen socket head set screw is threaded fully into supercharger shaft until both 5/16" flat washers are snug. Begin turning the large nut. If ramrod turns, it can be held on the squared end with a wrench. Remove pulley and disassemble the puller/install tool.
7. Place new overdrive pulley onto shaft with the side in which the hub protrudes facing away from the supercharger towards the front of the vehicle. Set up the puller/install tool as shown in illustration "D". Again, the allen set screw is threaded fully into ramrod and supercharger shaft with the two 5/16" flat washers in between. Also, a 5/8" flat washer is used on both sides of the ram brace bar. Begin turning large nut and tighten until you can feel the pulley hub bottom. **DON NOT OVERTIGHTEN.** Remove puller/install tool and check for proper positioning by examining pulley alignment. The pulley should be in line with the rest of the pulleys.

8. Install the serpentine belt. In order to maintain proper belt tension with the smaller pulley a shorter belt must be used. SLP PN M10005 Goodyear "Gatorback" serpentine drive belt is the proper length.
9. Finally, reinstall the black plastic plug or bolt on the end of the supercharger shaft and the supercharger pulley guard. Installation of the pulley is now complete.

**Warning:** Though the pulley installation is complete the vehicle should not be operated until the PCM has been reprogrammed with the proper SLP pulley calibration. See the instructions with the custom SLP DiabloSport Predator (PN M27000) for the proper procedures.

**ILLUSTRATION "A"**



**ILLUSTRATION "B"**



**ILLUSTRATION "C"**



**ILLUSTRATION "D"**

