

M7 R53 OVERDRIVE CRANK PULLEY

p/n: 53-3M7101 (2%) & (4%)

Installation Guide



CAUTION: M7 SPEED RECOMMENDS THAT A PROFESSIONAL PERFORMANCE SHOP DO THIS INSTALLATION. THIS IS A THERMAL FIT PART AND REQUIRES KNOWLEDGE OF THIS TYPE OF PROCEDURE.

M7 Tuning engineers and manufactures the highest quality MINI accessories and performance parts available anywhere on the Planet Earth! Please read these instructions completely BEFORE attempting to install this product. If you are not confident in your level of mechanical skill necessary to do this installation or do not have the tools necessary please contact your local M7 dealer (listed on or website www.m7tuning.com) or a local automotive performance & accessory installation center to perform this work.

Tools Required (not included):

- Kitchen oven and clean sheet pan –or–
 - Propane torch or similar
- Infra-red temperature gun or thermocouple
- High temperature oven gloves
- (Optional) Wood block 2"x4" x 6"-12"
- (Optional) Hammer
- Torque Wrench (ft-lb | Nm)
- 14 mm 12 point Socket
- Red Loctite



DANGER: ALWAYS BE AWARE OF FIRE DANGERS WHEN USING OPEN FLAMES. NEVER USE AN OPEN FLAME ON OR NEAR YOUR CAR. HEAT THE PART A SAFE DISTANCE AWAY FROM YOUR CAR AND AWAY FROM ANY COMBUSTIBLE MATERIALS. ALWAYS HAVE A FIRE EXTINGUISHER NEARBY AND A SECOND PERSON WORKING WITH YOU TO WATCH FOR ANY FIRE THAT MAY OCCUR.

This procedure only addresses the actual installation of the M7 pulley onto the crankshaft. The removal and reinstallation of the supercharger belt drive system and other related parts follow the shop manual procedure as described in you reference book for your |YEAR | MAKE | MODEL| of Mini Cooper.

1. Once the drive belt system and factory lower pulley is removed, wipe clean the crank snout using brake clean or similar degreaser. Make sure it is very clean with no oil residue present.
2. Prepare your work area and have the necessary tools close by to complete this installation. You have a very limited amount of time between heating the pulley and getting it installed on the crankshaft. If too much time lapses between heating to temperature and getting it onto the crankshaft STOP! And start over.



CAUTION: DO NOT EXCEED THE SPECIFIED TEMPERATURE. THE PART WILL BE DAMAGED AND CANNOT BE USED

3. Heat the pulley uniformly to 275°F – 300°F (135°C-150°C). We recommend using an oven to heat the part. A small hand held touch is acceptable if you uniformly heat the entire part including the large outer hub, inner hub and spokes to the specified temperature. Use an infrared heat gun to measure the part temperature.



WARNING: USE HEAT RESISTANT GLOVES TO HANDLE THE PART AND PROTECT YOURSELF FROM SEVERE BURNS.

4. Once the part reaches the specified temperature **IMMEDIATELY** place the pulley onto the crank snout. Place it on as straight as possible. It should easily slide on completely and bottom onto the snout. If it starts crooked or cocks for any reason STOP! Remove it, reheat and reinstall. **DO NOT FORCE IT!**
5. To insure it is installed all the way on, one sharp hit with a wooden block and hammer will seat it properly
6. Let the part cool to room temperature. Prepare the supplied ARP bolt and washer. Clean the threads of the bolt to remove any oil or residue. Place 1-2 drops of Red Loctite on the threads thread it into the crankshaft
7. Torque to 98 ft-lbs (133 Nm)
8. Reinstall the drive belt system per the shop manual instructions.
9. Enjoy the new found power!