

Install Instructions E34 340X30 4 Piston Front Brake System | Road



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From all the asses at Angry Ass, thank you for purchasing an Angry Ass E34 340X30 4 piston front brake system!

Please read this entire installation manual prior to attempting to install or use the Angry Ass E34 340X30 4 piston front brake system to ensure proper installation and safe use.

The Angry Ass E34 340X30 4 piston front brake system should only be installed by persons skilled in vehicle component installation and performance. Angry Ass Limited shall not be held liable for any damage or personal injury (including direct, indirect, or consequential damage) sustained as a result of improper installation of the Angry Ass E34 340X30 4 piston front brake system or its use and maintenance contrary to the instructions and warnings contained herein.

If you have any questions regarding the installation and/or proper use of the Angry Ass E34 340X30 4 piston front brake system, or this manual, please contact Angry Ass via our official website at: www.Angry-Ass.com.

All statements made are made in respect to the Angry Ass E34 340X30 4 piston front brake system being used "as is". Any modifications to the Angry Ass E34 340X30 4 piston front brake system or its improper installation, use or maintenance that is not in accordance with this installation manual, may result in severe damage to the brake system and/or vehicle as a whole, as well as personal injury. Angry Ass Limited reminds you to be responsible and stay safe!!

Thanks again for choosing Angry Ass!



PARTS LIST

The following parts are contained in your kit:

- 1. 1X Loctite 243 capsules
- 2. 4X OEM BMW M12X1.5X55 10.9 bolts
- 3. 4X MIL-A-8625 Type III hard anodized black 6061 aluminum spacers
- 4. 1X Front 340X30 4 Piston Front Brake System | Road brake lines
- 5. 2X Hardline caps
- 6. 2X OEM BMW 340X30 rotors (Optional)
- 7. 2X OEM BMW rotor retaining screws (Optional)
- 8. 2X OEM BMW 4 piston calipers (Optional)
- 9. 1X OEM BMW or Ferodo Racing DS2500 Brake pads (Optional)
- 10. 2X AP Racing Factoy R Brake Fluid (Optional)

TOOLS & SHOP SUPPLIES

You will need to provide the following:

- 1. 17mm Socket
- 2. 18mm Socket
- 3. Pliers
- 4. Ratchet with appropriately sized drive for your sockets
- 5. Breaker bar with appropriately sized drive for your sockets
- 6. Torque wrench capable of 110Nm
- 7. 11mm Flare nut wrench
- 8. 11mm Standard wrench
- 9. Suitable compression device for caliper
- 10. 2X Jack stands
- 11. Jack or other safe vehicle lift
- 12. Wheel chocks
- 13. 5mm Allen wrench or driver
- 14. 1-2 Liters brake fluid
- 15. Paper towel or shop rag
- 16. Wire brush or Scotch-Brite
- 17. Hammer



TOOLS & SHOP SUPPLIES CONTINUED

- 18. 3mm (.125") pin punch
- 19. Brake fluid safe container

INSTALLATION PROCEDURE

1. Unpack your Angry Ass E34 front street brake upgrade and verify all components are accounted for according to the options you ordered.

2. Begin by immobilizing the vehicle to allow safe lifting of the front axle. Properly chock the rear axle wheels, ensure the vehicle is in park (automatic) or in gear (manual), and engage the parking brake. Break loose the front wheel bolts approximately 1/2 turn. **BUT DO NOT REMOVE BOLTS!!!**

3. Proceed to safely lift the vehicle. If using a jack, install jack stands under the vehicle in appropriate locations to support the vehicle. If using a vehicle lift ensure that lift safety locks are engaged.

4. With vehicle safely supported, remove the front wheel bolts, and set the front wheels to the side.

5. Compress the piston into the caliper so that the caliper assembly can be removed from the rotor. This is possible in several ways including using a suitably sized pry bar.

6. Remove the brake line from the chassis with the 11mm flare nut and 11mm wrench. Have your shop rag and brake fluid compatible container ready to mitigate and minimize spilling of brake fluid on components. Care should be taken not to get brake fluid on **ANY** painted surfaces. Cap hard line with provided rubber cap.



7. With the brake line disconnected, it is time to remove the caliper. Loosen the two caliper mounting bolts with the 18mm socket and breaker bar. Transfer the 18mm socket to your ratchet, remove the bolts, and set the caliper assembly aside.

8. Remove rotor retaining screw with 5mm Allen wrench or driver, and set rotor aside. Rotor retaining screws may benefit from a generous soaking of penetrant. Be careful not to strip them!

9. Clean hub face with wire brush or Scotch-Brite to ensure clean fitment of new rotors to the hub.

10. Remove the hardline cap and install new caliper flex line onto chassis hardline and tighten until hand tight. Route the line along the factory path and install retaining grommet in fitting on up right. Tighten fitting at hardline with your 11mm flare nut and standard wrench. **Use CAUTION and avoid overtightening**.

11. To ensure the connection between the chassis hardline and caliper flex line is tight its beneficial to pinch the spring clamp on the hardline using your pliers. See Figure 1 with clip removed.



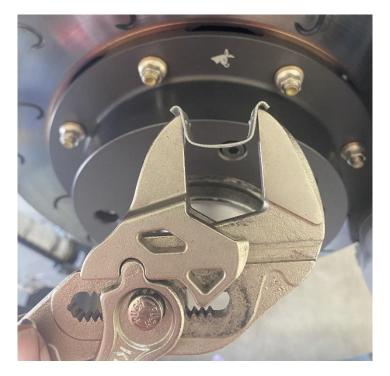


Figure 1

12. Install new 340mm rotor onto hub face, and secure with the new rotor retaining screw. Torque to 16Nm.

13. Place the new caliper mounting bolts through the steering knuckle holes, and slide the caliper spacers onto the bolts. See Figure 2, dust shield removed for clarity.





Figure 2

14. Grab the appropriate caliper for the side of the vehicle you are working on. Bleed screws and hydraulic line boss (the red capped port shown below) should face upwards when in position. Apply Loctite to threads of the caliper bosses. See Figure 3 showing driver side caliper.







15. Ensure that the caliper pistons are fully retracted prior to installation. Position caliper over brake rotor and thread caliper retention bolts into caliper bosses. See Figure 4 for proper assembly (rotor removed for clarity).





Figure 4

16. Torque caliper retention bolts to 110Nm with 18mm socket and torque wrench.



17. Install brake pads into the caliper and then place the anti-rattle clip in place. Slide the retention pins through the caliper body, pad retention loops and anti-rattle clip.

18. Tap the pins back into the caliper securely with a hammer and punch. See Figure 5.







19. Connect the caliper flex line, ensuring that it's not binding, pinching or kinking in any wheel position or under maximum suspension compression or droop. Tighten with 11mm flare nut wrench. It is ok for the line to touch the upright at the abrasion protection section (thicker area) of the line.

20. Repeat steps 1-19 for opposite side of car.

21. With both sides installed, it is time to bleed the brake system. With new calipers it an take 2-3 patient bleeding cycles. **Bleed until the pedal is firm.**

22. Install both wheels and tighten lug bolts to 110Nm with 17mm socket and torque wrench.

Please let us know if you need any assistance or have any questions. Thanks again from all of us at Angry Ass!



TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pedal is soft	Air in brake hydraulics	Bleed brake system
		Replace damaged
	Leaking fluid	component and bleed
		system.



<u>NOTES</u>