

# AIR PISTON / FRONT FORK COMPONENT INSTALLATION



IMAGE A



IMAGE B



IMAGE C

1. Remove stock fork caps, as advised in your service manual. **(see image A)**. Important: The springs inside your fork tubes are under load, use caution when removing fork caps
2. Remove stock spring on 2013-earlier and 2017-later models  
Remove preload spacer tube on 2014-2016 models
3. Remove about 2oz of fork oil from each fork leg on 2013-earlier 41mm touring models – If filling from empty, use 9oz max per leg  
Remove about 3oz of fork oil from each fork leg on 2014-later 49mm touring models – If filling from empty, use 19oz max per leg
4. If your air system or triple trees require new fork caps or leg extensions, use o-ring from stock fork cap
5. Install new springs (if included) into same location as stock springs. 2014-2016 touring models will not require or include new springs
6. Lubricate pistons. Use bearing grease to thoroughly coat the slots in the Delrin guides, as well as cavity in the center. **(see image B)**
7. Insert the air piston into fork tube with the inner threaded portion pointing upward. **(see image C)**
8. Re-install fork cap
9. Re-install forks into triple trees if they were removed from bike. DIRTY AIR external fork bump stops can be installed to limit front travel if necessary to accommodate an oversized front wheel
10. Install air fittings into fork caps and connect airlines per diagram

DIRTY AIR NOTES – Disassemble front end to gain access to fork tubes. Remove fork caps. Caps will be under tension, so use caution when removing as cap will pop up once unscrewed. For 2013-earlier models, remove the long coil spring along with 2oz of fork oil per leg. Drop in new supplied short spring. For 2014-later models, remove the preload spacer tube and washer from above the factory coil spring, along with 3oz of fork oil per leg. 2014-2016 models re-use the factory spring, with no modifications necessary. 2017 models use new supplied spring. On all models, once coil spring is in place and fork oil level is correct, install the air pistons into the fork tubes. Lubricate the air pistons using bearing grease, packing the grease into the seal and around the wear rings. With fork tube extended, push piston (with the threaded side facing up) past the fork cap threads. Then collapse the fork tube quickly to help push any air out from underneath the piston. Next, pull the fork tube upwards to extend completely, this should suck the piston down to the top of the coil spring. Extend and collapse the fork tube a few times to ensure the piston is moving freely, and to help lubricate the inside of the fork tube. Replace fork caps with new caps if supplied. Be sure to remove any o-ring from factory caps and install onto new caps before installation. There are multiple types of fork caps / leg extensions used in custom applications, if your bike has aftermarket raked trees they may include new caps / leg extensions to be installed in place of the stock fork caps. Reinstall fork tubes into triple trees if removed. Be careful not to over-tighten the pinch bolts on the lower triple tree, as this can cause a bulge in the fork tubes and make it difficult for the pistons to pass by. Once caps/extensions are installed and fork tubes are installed, screw in supplied air fittings. The front suspension can now be plumbed in to the rest of the system.