

V-Twin Mfg.
RITE ON TIMING TOOL
For use on all 1970-1999 BIG TWINS
VT No. 16-6739

This tool should only be used by a knowledgeable and trained motorcycle technician. V-Twin Mfg. Expects no responsibility for improper use.

INSTALLATION INSTRUCTIONS:

1. Remove spark plugs to ensure easy rotation of motor.
2. Remove 3/8" Allen head screw plug from left side engine case. This will allow you to view flywheels ([see this diagram](#)) and determine TDC (top dead center) which will be marked on flywheels (refer to manual for model and mark types).
3. Once TDC (top dead center) has been determined ([see this diagram](#)), install spark plugs and re-install 3/8" Allen head screw plug. Work on the left side is now complete.
4. Remove circuit breaker cam bolt and install patented RITE ON TIME 10/32" circuit breaker cam bolt. You will notice that the RITE ON TIME bolt is threaded on both ends. This is so indicator attachment can be installed later, in step 10.
5. Remove top right gear cover screw (1.25 inch) thread length.
6. Install shortest 1.25 inch RITE ON TIME degree plate mounting bolt.
7. Remove top left gear cover screw (1.75 inch) thread length.
8. Install longest RITE ON TIME degree plate mounting bolt. REMEMBER: you are installing steel into aluminum.

DO NOT OVER TIGHTEN!
ALL MOUNTING BOLTS ARE NOTCHED SO THEY CAN BE TIGHTENED

9. Both degree plate mounting bolts are now installed. Install RITE ON TIME degree plate on mounting bolts ensuring that degree increments are facing out. Secure degree plate to mounting bolts using the two ¼ inch national course nuts provided.
10. Install indicator Wheel on to circuit breaker cam bolt. You have already determined TDC (top dead center). Set mark on indicator attachment at 0 degrees on the patented Rite On Time degree plate. Tighten to friction fit so indicator is secure.
11. You are now ready to set your timing to desired specifications. Timing light can now be installed. Fire up the bike. Timing can be set by loosening ignition backing plate screws and inserting flat common screw driver into adjustment slot and adjusting to timing and setting that is required. Once you have obtained the setting you desire, point backing plate screws can be tightened.
12. You can now remove all the components of the RITE ON TIME timing tool and replace into the storage case.
13. Reinstall all the stock components and parts to their original places.

