

The Abingdon Co.

Jackie

Product Information and Manual

WELCOME TO THE ABINGDON CREW. THANK YOU FOR PURCHASING YOUR ABINGDON WATCH. I HOPE IT HELPS YOU NAVIGATE FOR YEARS TO COME.

IN THIS BOOKLET I HAVE WRITTEN DOWN INSTRUCTIONS THAT WILL SHOW YOU HOW TO USE ALL OF THE FEATURES YOUR NEW ABINGDON WATCH HAS TO OFFER. IT'S EASY TO READ AND I'VE INCLUDED MANY EXAMPLES.

AGAIN, THANK YOU AND ONE LAST THING. NOW THAT YOU ARE A PART OF THE ABINGDON CREW, PLEASE KEEP IN TOUCH WITH YOUR ADVENTURES AND STORIES ON OUR FACEBOOK PAGE AT http://www.facebook.com/abingdonco.

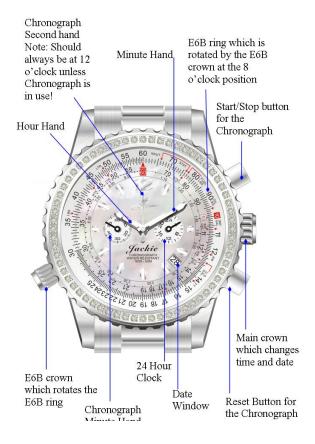
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SETTING THE TIME

- 1. PULL OUT THE CROWN AT THE 3 O'CLOCK POSITION SO THAT IS CLICKS **TWICE**. ROTATE THE CROWN UNTIL THE CURRENT TIME IS SHOWN ON THE FACE.
- 2. PUSH THE CROWN BACK INTO ITS ORIGINAL POSITION. THE SECOND HAND WILL NOT TICK, BUT THE TIME WILL BE SET. YOU WILL SEE A CHANGE IN THE TIME AFTER A COUPLE MINUTES.



SETTING THE DATE

- PULL OUT THE CROWN AT THE 3'OCLOCK POSITION SO THAT IT CLICKS ONCE. ROTATE THE CROWN CLOCKWISE UNTIL THE CORRECT DATE IS SHOWN IN THE DATE BOX. NOTE: I RECOMMENDED SETTING THE DATE BETWEEN THE HOURS OF 5AM AND 5PM TO ENSURE THE DATE WILL CHANGE THE FOLLOWING DAY.
- PUSH THE CROWN BACK INTO ITS ORIGINAL POSITION. NOW THE DATE HAS BEEN SET.



USING THE CHRONOGRAPH

YOU CAN USE THE CHRONOGRAPH (IT'S A FANCY WORD FOR "STOPWATCH) ANYWHERE YOU GO WITH JUST THE PUSH OF A BUTTON. HERE'S HOW:

- TO START THE CHRONOGRAPH, PRESS THE TOP BUTTON ONCE. YOU WILL SEE THE SECOND HAND BEGIN TO TICK.
- AFTER A MINUTE, LOOK AT THE LEFT SUB DIAL. IT WILL HAVE MOVED TO THE FIRST NOTCH, INDICATING THE CHRONOGRAPH IS AT ITS FIRST MINUTE. THE SUB DIAL CAN GO FOR 60 MINUTES BEFORE IT RESETS.
- 3. TO STOP THE CHRONOGRAPH, PRESS THE TOP BUTTON ONCE AGAIN. YOU WILL SEE THE SECOND HAND FREEZE IN ITS PLACE.
- 4. TO RESET THE CHRONOGRAPH BACK TO ZERO, PRESS THE BOTTOM BUTTON ONCE. YOU WILL SEE BOTH THE SECOND HAND AND THE LEFT SUB DIAL RETURN TO THEIR ORIGINAL POSITIONS.



CHRONOGRAPH RESET

THIS PROCEDURE SHOULD BE PERFORMED WHEN THE CHRONOGRAPH SECOND HAND DOES NOT RETURN TO THE ZERO POSITION AFTER THE CHRONOGRAPH HAS BEEN RESET, AND INCLUDING AFTER THE BATTERY HAS BEEN REPLACED.

- PULL THE MAIN CROWN OUT UNTIL IT CLICKS TWICE.
- 2. PRESS THE TOP BUTTON TO SET THE CHRONOGRAPH SECOND HAND TO THE ZERO POSITION. YOU MAY HAVE TO PRESS THE TOP BUTTON SEVERAL TIMES TO GET THE CHRONOGRAPH BACK TO ITS ZERO POSITION.
- 3. ONCE THE SECOND HAND IS AT ZERO, PUSH THE CROWN BACK INTO ITS ORIGINAL POSITION.

THE E6B

YOUR ABINGDON WATCH HAS AN E6B SLIDE RULE ALONG THE INSIDE OF THE BEZEL WHICH CAN BE ROTATED BY A CROWN LOCATED AT THE 8 O'CLOCK POSITION. PRACTICE USING THE E6B AS IT CAN HELP YOU EVERYWHERE! TRAVELING, FLYING, MATH CLASS, EVEN DRIVING. IT MAY LOOK A LITTLE OVERWHELMING AT FIRST, BUT AFTER YOU'VE MASTERED IT YOU'RE GOING TO WONDER HOW YOU'VE GONE SO LONG WITHOUT IT! THERE ARE ALSO VIDEOS ONLINE AT www.theabingdonCo.com and on our You'Tube Channel, Abingdon Co. OK, LET'S BEGIN. THIS IS GOING TO BE FUN...

THE BASICS

FIRST, ROTATE THE RING SO THE 60 ON THE OUTER RING IS IN LINE WITH THE RED 60 ON THE MIDDLE RING. YOU WILL NOTICE THAT ALL THE NUMBERS ON THE MIDDLE AND THE OUTER RINGS ARE THE SAME.



When these two rings match, you have a ratio of 1:1. So now rotate the number 30 on the outer scale so that it is in line with the red 60 on the middle scale. 30 is half of 60 so you have now just created a ratio of 2:1 (two "30s" equal one "60"). Notice that 35 is over 70 and 40 is over 80. You will use these ratios in time, speed, and distance calculations. Isn't that neat?...and we've only just begun.



MULTIPLICATION

Whenever you want to multiply something quickly you can use your Abingdon watch. To do so, you must set one of the numbers on the outer ring to the 10 on the middle ring. It doesn't matter which one. For example, 5 x 7 (we're going to start off easy)

- 1. ROTATE THE NUMBER 50 ON THE OUTER RING TO THE NUMBER 10 ON THE MIDDLE RING. (NOTICE THAT THERE IS NOT A "5" ON THE OUTER RING? WE ARE GOING TO TREAT 50 LIKE IT IS ACTUALLY 5.0). LEAVE IT THERE.
- FIND THE NUMBER 70 ON THE MIDDLE RING (MAKE SURE TO TREAT THE NUMBER 70 LIKE IT IS ACTUALLY THE NUMBER 7.0) AND READ THE NUMBER 35 ON THE OUTER RING.
 5 x 7 = 35! WELL DONE!



3. Let's do the same problem the other way.

Line up the 70 on the outer ring with the 10

on the middle ring. Find the 50 on the middle ring and look! It again reads 35! Remember, it doesn't matter which number you line up with the 10 on the middle ring

PRACTICE THESE MULTIPLICATION PROBLEMS:

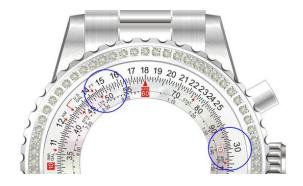
DIVISION

FOR DIVISION PROBLEMS, YOU WILL NOT BE SETTING ANY NUMBERS UNDER THE 10 ON THE MIDDLE RING. BECAUSE

THAT IS WHERE YOUR ANSWER IS GOING TO BE. THE EXAMPLE BELOW EXPLAINS WHAT I'M TRYING TO SAY:

EXAMPLE: 15/5

- WHATEVER NUMBER IS BEING DIVIDED WILL GO ON THE OUTER RING. THEREFORE IN THIS EXAMPLE, FIND 15 ON THE OUTER RING
- 2. ROTATE THE 15 SO THAT IT IS IN LINE WITH THE 50 (5.0 REMEMBER?) ON THE MIDDLE RING.
- 3. Now look at the 10 on the middle ring and read the number on the outer ring. It will say 30 or as we know, 3.0
 Answer: 15/5 = 3



230/5 = 46 5/2 = 2.5 (REMEMBER THAT DECIMAL POINT!) 180/12 = 15 135/9 = 1598/7 = 14

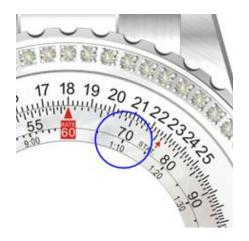
IMPORTANT NOTE:

One thing you may have noticed starting off is that it seems that each number can be anything you want it to be. For example, 1 can be 1, 10, 100, 1000, or .1, .01 and so on. Depending on each problem, you will have to decide which value you need. If you choose 10 to represent the number "10," then the calibrations or "notches" between 10 and 11 represent 0.1. Each notch reads: 10.1, 10.2, 10.3, and so on. But if you choose 10 to represent the number 100, then the calibrations between 10 and 11 represent 1. Now each calibration reads: 101, 102, 103, and so on. Try it out for yourself. It takes some getting used to, but I believe in you. Keep practicing and you will get the hang of it.

TIME CALCULATIONS

FIRST, LET'S TAKE A LOOK AT YOUR ABINGDON WATCH.

HOW EASY THIS IS. FIND THE NUMBER 70 ON THE MIDDLE RING (IT'S AROUND THE ONE O'CLOCK POSITION). IF YOU LOOK OPPOSITE THE 70 ON THE INNER RING, YOU WILL SEE 1:10. 70 MINUTES IS 1 HOUR AND 10 MINUTES!



SEE IF YOU CAN GO AROUND THE ENTIRE FACE CHANGING THE HOURS TO MINUTES.

NOW THAT WE HAVE THAT SETTLED, LET'S WORK ON SOME FLIGHT PROBLEMS. NOTE THAT THE MIDDLE RING WILL ALWAYS BE TIME IN MINUTES.

EXAMPLE 1:

LET'S SAY YOUR PLANE FLIES AT 150 KNOTS. YOU WANT TO FIND OUT HOW LONG IT WILL TAKE TO FLY 90 NAUTICAL MILES. (IF YOU DON'T KNOW HOW TO CONVERT STATUTE MILES TO NAUTICAL MILES, SEE THE CONVERSIONS CHAPTER ON PAGE 25).

- ROTATE THE OUTER RING SO THAT 15 (SIGNIFYING 150 IS IN LINE WITH THE RED 60 LOCATED AT THE 12 O'CLOCK POSITION. THIS IS YOUR "RATE." YOU HAVE NOW SET THE RATE (150 KNOTS IN 60 MINUTES).
- 2. Now find 90 (representing the distance you plan to travel) on the outer ring. You will notice that 90 lines up with 36 on the middle ring. Therefore, it will take 36 minutes to go 90 nautical miles. Piece of cake!



IN FACT, YOU CAN CHOOSE ANY DISTANCE AND, AS LONG AS YOU LEAVE THE RATE SET, YOU CAN FIGURE OUT HOW LONG IT WILL TAKE YOU TO FLY ANY DISTANCE.

FOR PRACTICE, SET YOUR PLANE'S CRUISE SPEED TO THE RATE AND FIND OUT THE TIME IT WILL TAKE TO GO:

25 NAUTICAL MILES 60 NAUTICAL MILES 350 NAUTICAL MILES

SPEED CALCULATIONS

BEFORE I FORGET, I WANT TO MENTION ONE THING.
REMEMBER THAT THE OUTER RING WILL ALWAYS BE
DISTANCE AND SPEED. THE MIDDLE AND INNER RING WILL

THE INNER RING). KEEP THIS IN MIND FOR THE UPCOMING SPEED/TIME/DISTANCE PROBLEMS.

OUTER RING = DISTANCE OR SPEED MIDDLE RING = TIME IN MINUTES INNER RING = TIME IN HOURS

SPEED PROBLEMS ARE LIKE THE TIME PROBLEMS WE JUST DID, EXCEPT WE ARE FINDING THE RATE. REMEMBER IN THE TIME PROBLEMS HOW OUR SPEED WAS OUR RATE? WELL, HERE WE DON'T HAVE THE RATE, BUT WE HAVE THE DISTANCE AND THE TIME. KNOWING THE DISTANCE WE FLEW AND TIME IT TOOK TO FLY, WE CAN EASILY FIGURE OUT THE AVERAGE SPEED AT WHICH WE WERE FLYING.

EXAMPLE 2:

YOU FLEW 130 KNOTS (DISTANCE) AND IT TOOK YOU 47 MINUTES (TIME).

WHAT WAS YOUR AVERAGE SPEED?

- ROTATE THE OUTER RING SO THAT 130 (13 WILL REPRESENT 130 IN THIS EXAMPLE) IS IN LINE WITH 47.
- 2. YOUR AVERAGE SPEED IS FOUND ON THE OUTER RING OPPOSITE THE RATE ARROW. IN THIS CASE

YOUR AVERAGE SPEED WOULD HAVE BEEN 166 knots



DISTANCE CALCULATIONS

FOR DISTANCE PROBLEMS, YOU CAN FIGURE THIS OUT ONCE YOU HAVE THE TIME AND SPEED.

EXAMPLE 3:

YOU ARE TRAVELING AT 150 KNOTS (SPEED) AND YOU WANT TO KNOW HOW FAR YOU WILL GO AFTER 20 MINUTES (TIME).

- 1. ROTATE THE OUTER RING SO THAT 15 IS IN LINE WITH THE RED 60 (RATE).
- 2. YOUR DISTANCE IS FOUND ON THE OUTER RING



HERE ARE SOME PRACTICE PROBLEMS TO TRY:

SPEED	TIME	DISTANCE
125KTS		524NM
	2:30	350NM
110kts	1.50	

FUEL CONSUMPTION CALCULATIONS

FUEL BURN RATE

LET'S SAY YOU WANTED TO FIND OUT HOW MUCH FUEL YOU BURNED PER HOUR WHILE YOU WERE ON YOUR 6 ½ HOUR FLIGHT. AFTER YOU LANDED AND FILLED UP THE TANK, YOU NOTICED THAT YOUR TANK TOOK 17 GALLONS. HERE IS HOW YOU WOULD FIND YOUR FUEL BURN RATE:

- 1. First, set 17 on the outer ring to 6:30 on the inner ring (there is a notch marking the middle of 6:00 and 7:00 that's where you want to line up 17).
- 2. Now you can easily find your burn rate where the RED 60 OR your "RATE" arrow is pointing. In this case the RATE arrow is pointing at the number 26, so the answer is 26 gallons per hour!



Now you can also find out other information using this example. Let's say your fuel burn rate is 26 gph (gallons per hour) and you want to find out how long you could get on a full tank of usable fuel. If a full tank of gas was equal to 140 gallons (which you should know if you are flying a plane that has a maximum useable fuel of 140 gallons), then here is how you would find your *endurance*.

- 1. YOUR RATE (THE RED 60 ARROW ON THE MIDDLE RING) SHOULD BE SET TO 26 ALREADY (FROM THE PREVIOUS EXAMPLE). IF IT ISN'T SET THERE, THEN PLEASE DO SO.
- NOW FIND 14 (REPRESENTING 140 GALLONS) ON THE OUTER RING.
- 3. Opposite 14, you should see 5:20 or as it is read on the middle ring, 32 (which represents

THEREFORE, YOU CAN GO 320 MINUTES ON A FULL TANK OF GAS!



CONVERSIONS

STATUTE TO NAUTICAL

THIS ONE IS AS EASY AS PIE. ON THE OUTER RING, THERE IS A RED DOUBLE-EDGED ARROW AROUND THE NUMBER 70. ON ONE SIDE IT HAS THE WORD "NAUT," FOR NAUTICAL AND

UNDER ONE ARROW AND SEE WHAT THE CONVERSION IS UNDER THE OTHER ARROW.

EXAMPLE: CONVERT 65MPH (STATUTE) TO NAUTICAL MILES PER HOUR

- ROTATE THE OUTER RING SO THAT THE "STAT" SIDE IS IN LINE WITH THE NUMBER 65.
- 2. READ THE NUMBER UNDER THE ARROW "NAUT" TO SEE HOW FAST YOU DRIVE ON THE FREEWAY IN NAUTICAL MILES! ANSWER: 56.5 NM



STATUTE TO KILOMETERS

TO CONVERT STATUTE TO KILOMETERS, YOU WILL USE THE SAME IDEA AS CONVERTING STATUTE TO NAUTICAL MILES,

MIDDLE RING. IT IS LOCATED ABOUT 1 O'CLOCK. NOTE: THIS IS NOT THE SAME "STAT" ON THE OUTER RING. NOW FIND THE "KM" WRITTEN ON THE MIDDLE RING AROUND 4 O'CLOCK. DID YOU FIND IT YET? GOOD. THERE IS AN ARROW POINTING UP AT EACH PLACE. NOW JUST LIKE BEFORE, PUT THE FIGURE YOU WANT TO CONVERT OVER ONE ARROW AND SEE WHAT THE CONVERSION IS UNDER THE OTHER ARROW.

USING THE ARROWS ON YOUR ABINGDON WATCH, YOU CAN ALSO CONVERT EASILY:

FEET POUNDS METERS LITERS

IMPERIAL GALLONS FUEL POUNDS
US GALLONS OIL POUNDS

KILOGRAMS

CURRENCY

HERE IS HOW TO MAKE VACATION ABROAD MUCH EASIER. FIRST YOU MUST FIND OUT THE EXCHANGE RATE, THEN SET IT ON YOUR ABINGDON WATCH.

EXAMPLE: IF ONE US DOLLAR IS EQUAL TO .73 OF A EURO, HERE IS HOW TO MAKE VACATION ABROAD MUCH EASIER.

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- "10" REPRESENTS \$1.00 USD AND 73 REPRESENTS €.73 EURO. LEAVE IT THERE.
- 2. THE OUTER RING WILL NOW ALWAYS BE US DOLLARS AND THE MIDDLE RING WILL ALWAYS BE EUROS

SO IF SOMETHING COSTS €90.00, LOOK AT THE 90 ON THE MIDDLE RING OF YOUR ABINGDON WATCH AND YOU WILL SEE IT LINES UP WITH THE 124 ON THE OUTER RING, SO THE ITEM COSTS ABOUT \$124.00USD. AS LONG AS YOU SET THE 10 TO WHATEVER COUNTRY'S CURRENCY YOU ARE IN, YOU'LL HAVE NO MORE GUESSING GAMES WHEN YOU TRAVEL!

MISCELLANEOUS

<u>Can I wear my Abingdon while swimming or</u> showering?

YOUR ABINGDON WATCH IS NOT RECOMMENDED WHERE THERE IS HOT WATER SINCE STEAM CAN GET INTO PLACES THAT WATER CANNOT. IF YOU SPLASH WATER ON IT, IT IS OK. I ACCIDENTALLY THREW IT IN THE LAUNDRY WITH MY

RECOMMENDED TO SWIM WITH IT ON UNLESS YOUR WATCH IS A 100 METER WATCH

HOW OFTEN SHOULD I GET MY ABINGDON SERVICED?

A QUARTZ MOVEMENT SHOULD GET ROUTINE MAINTENANCE EVERY EIGHT TO TEN YEARS. IF YOU USE YOUR WATCH IN THE WATER, YOU SHOULD CHECK IT FOR WATER RESISTANCE EVERY TWO YEARS

HOW SHOULD I WASH MY ABINGDON WATCH?

METAL BRACELETS SHOULD BE WASHED CAREFULLY WITH MILD SOAP IN WATER. IF IT'S REALLY DIRTY, A SOFT TOOTHBRUSH WILL HELP. RINSE WITH WATER AND PAT DRY WITH A SOFT CLOTH. THE CASE SHOULD BE WIPED GENTLY WITH A MOIST CLOTH AND DRIED CAREFULLY.

FOR LEATHER OR CLOTH BANDS, MILD SOAP AND WATER PLUS A SOFT CLOTH WILL TAKE CARE OF ANY DIRT, SWEAT OR OTHER RESIDUE ON YOUR WATCH. IF THE DIRTINESS LEVEL IS REALLY HIGH, A WATCH SERVICE SHOP WILL BE ABLE TO GET THE WORST STAINS OUT.

WILL HEAT AND COLD AFFECT A WATCH'S ACCURACY?

YOUR ABINGDON WATCH IS DESIGNED TO KEEP GOOD TIME IF WORN ON YOUR WRIST FOR AT LEAST SEVEN HOURS A DAY. IF YOU DO NOT WEAR YOUR WATCH FOR AN EXTENDED PERIOD OF TIME DURING EXTREME TEMPERATURE CHANGES (100°F IN THE SUMMER OR 32°F IN THE WINTER) THEN IT

MAY LOSE UP TO 1 SECOND A DAY, BUT WILL RETURN TO NORMAL AS SOON AS YOU START WEARING IT AGAIN.

WILL WEARING MY ABINGDON WATCH ON THE INSIDE OF MY WRIST AFFECT ITS ACCURACY?

NO, WITH QUARTZ, EXTREME TEMPERATURES ARE THE ONLY VARIABLE THAT WILL AFFECT THE ACCURACY OF THE MOVEMENT

HOW LONG WILL THE BATTERY LAST?

THE SILVER OXIDE BATTERY WILL LAST TYPICALLY ABOUT 2 YEARS.

CAN I CHANGE THE BATTERY MYSELF?

IT IS STRONGLY RECOMMENDED TO TAKE YOUR ABINGDON WATCH TO A WATCH REPAIR SHOP AND HAVE THE PROS DO IT. UNLESS YOU HAVE THE PROPER TOOLS AND EXPERIENCE CHANGING WATCH BATTERIES, PLEASE HAVE A WATCH REPAIRER DO THE JOB.

AGAIN, CONGRATULATIONS ON YOUR NEW PURCHASE AND I HOPE YOU ENJOY YOUR NEW WATCH FOR MANY YEARS!

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