Linear Aim of the Goldbach Conjecture

Fibonacci Sequence :

\[ F_0, F_1, F_2, F_3, F_4, \ldots = 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, 6765, 10946, 17711, 28657, 46368, 75025, 121393, 196418, 317811, \ldots \]

Context of Proof :

I use the Fibonacci Sequence and its Theorems to prove this.  
Conjecture : Every prime number pair, each prime integer greater than or equal to 2 sums all even integers greater than or equal to 4 : \( A + B = 2N \geq 4 \)
[T 1]: Every Fibonacci number bigger than 1 [except $F_6 = 8$ and $F_{12} = 144$] has at least one prime factor that is not a factor of any earlier Fibonacci number.

[T 2] Any three consecutive Fibonacci numbers are pairwise coprime. Which means that, for every $n$, $\gcd(F_n, F_{n+1}) = \gcd(F_n, F_{n+2}) = 1$

Def: $F_S$ = Fibonacci Sequence, $a, b =$ prime, $\gcd =$ greatest common factor, $\operatorname{gpf} =$ greatest prime factor

Aim: We prove how a recursive function of the Fibonacci Sequence will solve the Goldbach Conjecture.

Proof:

L 1: There are an infinite number of primes. Then there must be infinite possibilities of co-primes.
L 2: Then $F_S$ contains an infinite possibility of co-primes since $F_S$ continues to infinity by [T 1]

S 1: By the unique – prime – factorization theorem: Every $2n + 1 \geq 9 \neq p_1p_2$, a semiprime.

L 3: There are an infinite number of $a + b = 2n$, when $a = b$, since there are infinite primes and $2n$ terms.
L 4: For there to be infinite $a + b = 2N \geq 4$, $a, b$ have to be unique or $a \neq b$ for completion. Omit $a = b = 2$.

C. 0: This implies $\gcd(F_n \cdot F_{n+1} \cdot F_{n+2} \cdots) \cup \{ \forall P \}, \{ \forall P \}$ being the set of all primes. Since by [T 1]:

L 5: $F_n \cdot F_{n+1} \cdot F_{n+2}$ implies any integer $2n + 1 \neq p = p_1p_2 \geq 4$ can set in factorization of semi-primes. If $a + b \geq 2N \geq 4$ is valid then $F_n \cdot F_{n+1} \cdot F_{n+2} \rightarrow F_n \cdot F_{n+1} \cap b$ or $F_n \cdot F_{n+2} \cap a$, since $\{P \geq 3\} = \{P\}$.

By $2n + 1 = N$, it will be prime or odd, $2N \cap \{p_1 + p_2\}$, since $p_1 + F_n \cdot F_{n+1} \cap \{b\}$ or $p_2 + F_n \cdot F_{n+2} \cap \{a\}$

Reasoning: Functionally, this relation algebraically reduces $a + b = \{2N\}$ by [T 1] through linearity.

P R 1: By [T 2] Any three consecutive Fibonacci numbers are pairwise coprime. So we omit $2 + p_o = 2n + 1$

L 6: Every third random $N$ of a $F_S$ is odd or even. When $P$airing $F_S : N \in (1, 1, 2, 3, 5, 8, ...) : (1, 2, 3, 4, 5, 6, ...)$ $P$airing pattern: $(o, o, e, o, o, e, ...)$ always, $o =$ odd, $e =$ even. $F_6 = 8$ and $F_{12} = 144$ so [T 2] sequences $\{p\}$.

C. 1: As $F_{12} = 144 = e$, it is followed by two odds. Therefore $2(2n + 1) = e$ and so we show:

$F(o_{13}) + F(o_{14}) = 2N = e \rightarrow 2n + 1 \neq p = p_1p_2 \rightarrow \gcd(F_n \cdot F_{n+1}) = \gcd(F_n \cdot F_{n+2}) = 1, \ a_n + a_{n+1} = 2N$

so $a, b \geq 3$. Since every $F_{n+1}$ contains at least 1 $F_n$ before it by $F_{n+1} > F_n$ by [T 1]

S 2: $F_S > F_{12}$ retains $A + B = 2N \geq 4$ by C. 1 if and only if $F_{n+1} > F_n$ by [T 1] in the equation:
For $F_n \cdot F_{n+1} = F_1^2 + F_2^2 + F_3^2 + \cdots + F_n^2$, being $F_S$ creating area $(ab)$ by logics $1 \rightarrow L 2$, $F_V \Rightarrow a, b$ max.

By [T 2] $F_V$ correlates $F_{n+2} \cdot F_n \cdot F_{n+1} = F_{n+2} \cdot (F_1^2 + F_2^2 + F_3^2 + \cdots + F_n^2)$, $F_V$ validates L 6 so two prime factors in $F_{n+2} \cdot F_n \cdot F_{n+1} = F_{n+2} \cdot (F_1^2 + F_2^2 + F_3^2 + \cdots + F_n^2)$, unique since any $ab =$ semiprime, $a \neq b$ consider the area retained by $F_n \cdot F_{n+1}$ then checked by $F_{n+2} \cdot F_n \cdot F_{n+1}$ in the sequence $\Rightarrow (o, 0, e, o, e, \ldots)$

So by [T 2] theorem and [T 1]: $F_S > F_{12}$ implies $a + b = 2N \geq 4 \leq 144$, we prove $a + b = 2N \geq 144$ given C. 0 by unique prime factors in $F_{n+1} > F_n$ after $F_{12} = 144$ it is immediately followed by two odd values. By C. 1:

By C. 1 the gpf in $(o_n, o_{n+1})$ index given $(F_S : N) \Rightarrow a, b > 1 \Rightarrow a + b = \forall 2N \geq 4$ by $F_S : N \leftrightarrow F_{n+1} > F_n$ only if $a + b = 2n \leftrightarrow gpf(2n) < gpf(2n+1)$ on $a + b = 2(o, o, e, o, o, e, \ldots o)$ by [T 1] so gcf($F_n, F_{n+2}$) = 1. So let area

retain gpf($F_n, F_{n+1}, F_{n+2}, \ldots \{x_n, x_{n+1}, x_{n+2, \ldots } \in \{P\}$ so $\exists (x - 1) \in (2N_n, 2N_{n+1}) \rightarrow a + b = \forall 2N \geq 4$ by [T 2]

We close the proof by logic in L 5 and L 6, given $L 1 - L 6$ is consistent as follows by P R (1 - 2).

By recursive pairing $F_S : N$, any $2N \geq 4$ is the sum of $p_1 + p_2$ given the third element is also even by $F_V$. It follows:

Every even number has one prime by definition of successive integers, so by there being a set of unique primes in $F_S$ when summing the prime factors in gpf($F_n \cdot F_{n+1} \cdot F_{n+2} \ldots$) $\cup \{P\}$, one can create a linear map $F_S : N$ through area by finding the mean of linear reduction, then the function always reduces per previous two odd elements by (AB)

Since mean $\{gpf(F_n) + gpf(F_{n+1})\}|2 = N$ by max. and min. justified in L 3 and L 4. We have aimed $A + B = \forall 2N \geq 61$