The group G is isomorphic to the group labelled by [120, 34] in the Small Groups library.
Ordinary character table of $G \cong$ S5:

	$1a$	$2a$	$3a$	$5a$	$2b$	$4a$	$6a$
χ_1	1	1	1	1	1	1	1
χ_2	1	1	1	1	-1	-1	-1
χ_3	6	-2	0	1	0	0	0
χ_4	4	0	1	-1	2	0	-1
χ_5	4	0	1	-1	-2	0	1
χ_6	5	1	-1	0	1	-1	1
χ_7	5	1	-1	0	-1	1	-1

Trivial source character table of $G \cong$ S5 at $p = 2$:

Normalisers N_i	N_1			N_2		N_3	N_4	N_5	N_6		N_7
p-subgroups of G up to conjugacy in G	P_1			P_2		P_3	P_4	P_5	P_6		P_7
Representatives $n_j \in N_i$	$1a$	$3a$	$5a$	$1a$	$3a$	$1a$	$1a$	$1a$	$1a$	$3a$	$1a$
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 2 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7$	24	0	4	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7$	16	-2	1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	8	2	-2	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	12	0	2	2	2	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	4	1	-1	2	-1	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7$	12	0	2	0	0	4	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	6	0	1	2	2	2	2	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	6	0	1	0	0	2	0	2	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	2	2	2	0	0	2	0	0	2	2	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7$	10	-2	0	0	0	2	0	0	2	-1	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	1	1	1	1	1	1	1	1	1	1	1

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(3,5)]) \cong$ C2
$P_3 = Group([(2,4)(3,5)]) \cong$ C2
$P_4 = Group([(2,4),(3,5)]) \cong$ C2 x C2
$P_5 = Group([(2,3,4,5),(2,4)(3,5)]) \cong$ C4
$P_6 = Group([(2,5)(3,4),(2,4)(3,5)]) \cong$ C2 x C2
$P_7 = Group([(2,4),(3,5),(2,3,4,5)]) \cong$ D8

$N_1 = SymmetricGroup([1..5]) \cong$ S5
$N_2 = Group([(1,2,4),(1,2),(3,5)]) \cong$ D12
$N_3 = Group([(3,5),(2,3)(4,5)]) \cong$ D8
$N_4 = Group([(3,5),(2,4),(2,3,4,5)]) \cong$ D8
$N_5 = Group([(2,3,4,5),(2,4)(3,5),(3,5)]) \cong$ D8
$N_6 = SymmetricGroup([2..5]) \cong$ S4
$N_7 = Group([(2,3,4,5),(3,5),(2,4)]) \cong$ D8