The group G is isomorphic to the group labelled by [10, 1] in the Small Groups library.
Ordinary character table of $G \cong$ D10:

	$1a$	$5a$	$5b$	$2a$
χ_1	1	1	1	1
χ_2	1	1	1	-1
χ_3	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	0
χ_4	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	0

Trivial source character table of $G \cong$ D10 at $p = 5$:

Normalisers N_i	N_1		N_2	
p-subgroups of G up to conjugacy in G	P_1		P_2	
Representatives $n_j \in N_i$	$1a$	$2a$	$1a$	$2a$
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4$	5	1	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4$	5	-1	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4$	1	1	1	1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4$	1	-1	1	-1

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1, 3, 5, 7, 9)(2, 4, 6, 8, 10)]) \cong$ C5

$N_1 = Group([(1, 2)(3, 10)(4, 9)(5, 8)(6, 7), (1, 3, 5, 7, 9)(2, 4, 6, 8, 10)]) \cong$ D10
$N_2 = Group([(1, 3, 5, 7, 9)(2, 4, 6, 8, 10), (1, 2)(3, 10)(4, 9)(5, 8)(6, 7)]) \cong$ D10