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 $p = 2$:

Normalisers N_i	N_1			N_2
p-subgroups of G up to conjugacy in G	P_1			P_2
Representatives $n_j \in N_i$	$1a$	$5a$	$5b$	$1a$
$1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4$	2	2	2	0
$0\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4$	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0
$0\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+1\cdot\chi_4$	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4$	1	1	1	1

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,2)(3,10)(4,9)(5,8)(6,7)]) \cong$ C2

$N_1 = Group([(1,2)(3,10)(4,9)(5,8)(6,7),(1,3,5,7,9)(2,4,6,8,10)]) \cong$ D10
$N_2 = Group([(1,2)(3,10)(4,9)(5,8)(6,7)]) \cong$ C2