Step = 0

$\vec{r}_1^{\,0} = (0.75000000;\ 0.75000000;\ 0.50000000)$; $\vec{r}_2^{\,0} = (1.25000000;\ 0.75000000;\ 0.50000000)$;

$\vec{r}_{12}^{\,0} = (-0.50000000;\ 0.00000000;\ 0.00000000)$; $\vec{r}_{21}^{\,0} = (0.50000000;\ 0.00000000;\ 0.00000000)$;

$\left|\vec{r}_{12}^{\,0}\right| = 0.50000000$;

$U^0 = -0.54622684$;

$F_{12} = -5.33383844$;

$\vec{F}_{12}{}^0 = (5.33383844;\ 0.00000000;\ 0.00000000)$; $\vec{F}_{21}{}^0 = (-5.33383844;\ 0.00000000;\ 0.00000000)$;

$\vec{v}_1{}^0 = (vx_1; vy_1; vz_1) = (1.00000000;\ 1.00000000;\ 0.00000000)$;

$\vec{v}_2{}^0 = (vx_2; vy_2; vz_2) = (-1.00000000;\ 1.00000000;\ 0.00000000)$;

$E_{kin} = 398.01000000$

$E_{term} = 199.00500000$

$E_{pot} = -0.54622684$

$E_{int} = 198.45877316$

$E = 397.46377316$

$T = 48.04626134$

$P = 16.47181621$

Step = 1

$\vec{r}_1^{\,1} = (0.75200005;\ 0.75200000;\ 0.50000000)$; $\vec{r}_2^{\,1} = (1.24799995;\ 0.75200000;\ 0.50000000)$;

$\vec{r}_{12}^{\,1} = (-0.49599989;\ 0.00000000;\ 0.00000000)$; $\vec{r}_{21}^{\,1} = (0.49599989;\ 0.00000000;\ 0.00000000)$;

$\left|\vec{r}_{12}^{\,1}\right| = 0.49599989$;

$U^1 = -0.56796759$;

$F_{12} = -5.53691171$;

$\vec{F}_{12}{}^1 = (5.53691171;\ 0.00000000;\ 0.00000000)$; $\vec{F}_{21}{}^1 = (-5.53691171;\ 0.00000000;\ 0.00000000)$;

$\vec{v}_1{}^1 = (vx_1; vy_1; vz_1) = (1.00005463;\ 1.00000000;\ 0.00000000)$;

$\vec{v}_2{}^1 = (vx_2; vy_2; vz_2) = (-1.00005463;\ 1.00000000;\ 0.00000000)$;

$E_{kin} = 398.03174209$

$E_{term} = 199.02674209$

$E_{pot} = -0.56796759$

$E_{int} = 198.45877450$

$E = 397.46377450$

$T = 48.05151059$

$P = 16.47032365$

Step = 2

$\vec{r}_1^{\,3} = (0.75400022;\ 0.75400000;\ 0.50000000)$ ; $\vec{r}_2^{\,3} = (1.24599978;\ 0.75400000;\ 0.50000000)$ ;

$\vec{r}_{12}^{\,3} = (-0.49199956;\ 0.00000000;\ 0.00000000)$ ; $\vec{r}_{21}^{\,3} = (0.49199956;\ 0.00000000;\ 0.00000000)$ ;

$\left|\vec{r}_{12}^{\,3}\right| = 0.49199956$ ;

$U^3 = -0.59052951$ ;

$F_{12} = -5.74366994$ ;

$\vec{F}_{12}{}^3 = (5.74366994;\ 0.00000000;\ 0.00000000)$ ; $\vec{F}_{21}{}^3 = (-5.74366994;\ 0.00000000;\ 0.00000000)$ ;

$\vec{v}_1{}^3 = (vx_1; vy_1; vz_1) = (1.00011131;\ 1.00000000;\ 0.00000000)$ ;

$\vec{v}_2{}^3 = (vx_2; vy_2; vz_2) = (-1.00011131;\ 1.00000000;\ 0.00000000)$ ;

$E_{kin} = 398.05430513$

$E_{term} = 199.04930513$

$E_{pot} = -0.59052951$

$E_{int} = 198.45877562$

$E = 397.46377562$

$T = 48.05695804$

$P = 16.46889164$