

```
n = Length[Cs];
```

```
A = IdentityMatrix[2 n + 1];
```

```
Cases[Cs, {s_, i_, j_} :> (A[[{i, j}, {i + 1, j + 1}]] +=  $\begin{pmatrix} -T^s & T^s & -1 \\ 0 & -1 \end{pmatrix}$ )];
```