Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	$\{y = \widehat{y} $
4	$L \to \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right)$ where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
3	while $m(L_{TL}) < m(L)$ do
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land m(L_{TL}) < m(L) \right\}$
5a	where λ_{11} is 1×1 , χ_1 has 1 row, ψ_1 has 1 row
6	$ \left\{ \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} = \begin{pmatrix} x_0 \\ \widehat{\psi}_1 \\ \widehat{y}_2 \end{pmatrix} \land L_{00} x_0 = \widehat{y}_0 \right\} $
8	$\psi_1 := \chi_1 = \widehat{\psi}_1 - l_{10}^T x_0 = \psi_1 - l_{10}^T y_0$
7	$ \left\{ \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} = \begin{pmatrix} x_0 \\ \chi_1 \\ \widehat{y}_2 \end{pmatrix} \land \begin{matrix} L_{00}x_0 = \widehat{y}_0 \\ l_{10}^T x_0 + \chi_1 = \widehat{\psi}_1 \end{matrix} \right. (\lambda_{11} = 1 \text{ because } L \text{ is unit lower triangular}) $
5b	$\begin{pmatrix} I & I_T & \begin{pmatrix} L_{00} & l_{01} & L_{02} \end{pmatrix} & \begin{pmatrix} x_0 & \begin{pmatrix} x_0 & \end{pmatrix} & \begin{pmatrix} y_0 & \end{pmatrix} \end{pmatrix}$
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \wedge L_{TL} x_T = y_T \right\}$
	endwhile
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg (m(L_{TL}) < m(L)) \right\}$
1b	$\{y = x \land Lx = \widehat{y} $ }

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	\ {
4	where
2	
3	while do
2,3	
5a	where
6	
8	
7	
5b	
2	
	endwhile
2,3	$\left\{ \begin{array}{c} \wedge \neg (\end{array} \right.)$
1b	{

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	$\{y=\widehat{y}\}$
4	where
2	
3	while do
2,3	
5a	where
6	
8	
7	
5b	
2	
	endwhile
2,3	$\left\{ \begin{array}{c} \wedge \neg (\end{array} \right.)$
1b	$\{y = x \land Lx = \widehat{y} \}$

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	
4	where
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
3	while do
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \right\}$
5a	where
6	
8	
7	
5b	
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
	endwhile
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg () \right\}$
1b	$\{y = x \land Lx = \widehat{y} $

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.	
1a	$\{y=\widehat{y}$	}
4	where	
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$	
3	while $m(L_{TL}) < m(L)$ do	
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land m(L_{TL}) < m(L) \right\}$	
5a	where	
6		
8		
7		
5b		
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right.$	
	endwhile	
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg (m(L_{TL}) < m(L)) \right\}$	$\bigg\}$
1b	$\{y = x \land Lx = \widehat{y}$	}

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
la	$\mid \{y = \widehat{y} \mid$
4	$L \to \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right)$ where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
3	while $m(L_{TL}) < m(L)$ do
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land m(L_{TL}) < m(L) \right\}$
5a	where
6	
8	
7	
5b	
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
	endwhile
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg (m(L_{TL}) < m(L)) \right\}$
1b	$\{y = x \land Lx = \widehat{y} \}$

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	$\{y = \widehat{y}\}$
4	$L \to \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right)$ where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
3	while $m(L_{TL}) < m(L)$ do
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land m(L_{TL}) < m(L) \right\}$
5a	$ \begin{pmatrix} L_{TL} & L_{TR} \\ L_{BL} & L_{BR} \end{pmatrix} \rightarrow \begin{pmatrix} L_{00} & l_{01} & L_{02} \\ l_{10}^T & \lambda_{11} & l_{12}^T \\ L_{20} & l_{21} & L_{22} \end{pmatrix}, \begin{pmatrix} x_T \\ x_B \end{pmatrix} \rightarrow \begin{pmatrix} x_0 \\ \chi_1 \\ x_2 \end{pmatrix}, \begin{pmatrix} y_T \\ y_B \end{pmatrix} \rightarrow \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} $ where λ_{11} is 1×1 , χ_1 has 1 row, ψ_1 has 1 row
6	
8	
7	
5b	$ \left(\begin{array}{c c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c c} L_{00} & l_{01} & L_{02} \\ l_{10}^T & \lambda_{11} & l_{12}^T \\ \hline L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \leftarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ \hline x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right) \leftarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ \hline y_2 \end{array}\right) $
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
	endwhile
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg (m(L_{TL}) < m(L)) \right\}$
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Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	$\{y = \widehat{y} $
4	$L \to \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c c} y_T \\ \hline y_B \end{array}\right)$ where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
3	while $m(L_{TL}) < m(L)$ do
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land m(L_{TL}) < m(L) \right\}$
5a	$ \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c c} L_{00} & l_{01} & L_{02} \\ \hline l_{10}^T & \lambda_{11} & l_{12}^T \\ L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \rightarrow \left(\begin{array}{c} x_0 \\ \hline \chi_1 \\ x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right) \rightarrow \left(\begin{array}{c} y_0 \\ \hline \psi_1 \\ y_2 \end{array}\right) $ where λ_{11} is 1×1 , χ_1 has 1 row, ψ_1 has 1 row
6	$\left\{ \begin{array}{c} \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} = \begin{pmatrix} x_0 \\ \widehat{\psi}_1 \\ \widehat{y}_2 \end{pmatrix} \wedge L_{00}x_0 = \widehat{y}_0 \\ \end{pmatrix} \right\}$
8	
7	
5b	$ \left(\begin{array}{c c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c c c} L_{00} & l_{01} & L_{02} \\ l_{10}^T & \lambda_{11} & l_{12}^T \\ \hline L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \leftarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ \hline x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right) \leftarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ \hline y_2 \end{array}\right) $
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
	endwhile
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg (m(L_{TL}) < m(L)) \right\}$
1b	$\{y = x \land Lx = \widehat{y} $ }

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	$\{y = \widehat{y} $
4	$L \to \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c c} y_T \\ \hline y_B \end{array}\right)$ where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
3	while $m(L_{TL}) < m(L)$ do
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5a	$ \left(\begin{array}{c c} L_{TL} & L_{TR} \\ L_{BL} & L_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c c} L_{00} & l_{01} & L_{02} \\ \hline l_{10}^T & \lambda_{11} & l_{12}^T \\ L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ x_B \end{array}\right) \rightarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ y_B \end{array}\right) \rightarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ y_2 \end{array}\right) $ where λ_{11} is 1×1 , χ_1 has 1 row, ψ_1 has 1 row
6	$ \left\{ \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} = \begin{pmatrix} x_0 \\ \widehat{\psi}_1 \\ \widehat{y}_2 \end{pmatrix} \land L_{00} x_0 = \widehat{y}_0 \right\} $
8	
7	$ \left\{ \begin{array}{c} \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} = \begin{pmatrix} x_0 \\ \chi_1 \\ \widehat{y}_2 \end{pmatrix} \wedge \begin{array}{c} L_{00}x_0 = \widehat{y}_0 \\ l_{10}^Tx_0 + \chi_1 = \widehat{\psi}_1 \end{array} \right. (\lambda_{11} = 1 \text{ because } L \text{ is unit lower triangular}) $
5b	$ \left(\begin{array}{c c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c c c} L_{00} & l_{01} & L_{02} \\ l_{10}^T & \lambda_{11} & l_{12}^T \\ \hline L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \leftarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ \hline x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right) \leftarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ \hline y_2 \end{array}\right) $
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
	endwhile
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg (m(L_{TL}) < m(L)) \right\}$
1b	$y = x \wedge Lx = \hat{y}$

Step	Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
1a	$\{y = \widehat{y} $
4	$L \to \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c c} y_T \\ \hline y_B \end{array}\right)$ where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
3	while $m(L_{TL}) < m(L)$ do
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land m(L_{TL}) < m(L) \right\}$
5a	$ \left(\begin{array}{c c} L_{TL} & L_{TR} \\ L_{BL} & L_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c c} L_{00} & l_{01} & L_{02} \\ l_{10}^T & \lambda_{11} & l_{12}^T \\ L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ x_B \end{array}\right) \rightarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ y_B \end{array}\right) \rightarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ y_2 \end{array}\right) $ where λ_{11} is 1×1 , χ_1 has 1 row, ψ_1 has 1 row
6	$ \left\{ \begin{array}{c} \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} = \begin{pmatrix} x_0 \\ \widehat{\psi}_1 \\ \widehat{y}_2 \end{pmatrix} \land L_{00}x_0 = \widehat{y}_0 \\ \end{array} \right\} $
8	$\psi_1 := \chi_1 = \widehat{\psi}_1 - l_{10}^T x_0 = \psi_1 - l_{10}^T y_0$
7	$ \left\{ \begin{array}{c} \begin{pmatrix} y_0 \\ \psi_1 \\ y_2 \end{pmatrix} = \begin{pmatrix} x_0 \\ \chi_1 \\ \widehat{y}_2 \end{pmatrix} \wedge \begin{array}{c} L_{00}x_0 = \widehat{y}_0 \\ l_{10}^Tx_0 + \chi_1 = \widehat{\psi}_1 \end{array} \right. (\lambda_{11} = 1 \text{ because } L \text{ is unit lower triangular}) $
5b	$ \left(\begin{array}{c c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c c c} L_{00} & l_{01} & L_{02} \\ l_{10}^T & \lambda_{11} & l_{12}^T \\ \hline L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \leftarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ \hline x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right) \leftarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ \hline y_2 \end{array}\right) $
2	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \right\}$
	endwhile
2,3	$\left\{ \left(\frac{y_T}{y_B} \right) = \left(\frac{x_T}{\widehat{y}_B} \right) \land L_{TL} x_T = y_T \land \neg (m(L_{TL}) < m(L)) \right\}$
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Algorithm: Solve $Lx = y$ overwriting y with x . L is unit lower triangular.
$L \to \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right)$ where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows
while $m(L_{TL}) < m(L)$ do
$ \left(\begin{array}{c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c c} L_{00} & l_{01} & L_{02} \\ \hline l_{10}^T & \lambda_{11} & l_{12}^T \\ L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ x_B \end{array}\right) \rightarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ y_B \end{array}\right) \rightarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ y_2 \end{array}\right) $ where λ_{11} is 1×1 , χ_1 has 1 row, ψ_1 has 1 row
$\psi_1 := \chi_1 = \widehat{\psi}_1 - l_{10}^T x_0 = \psi_1 - l_{10}^T y_0$
$ \left(\begin{array}{c c c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c c c} L_{00} & l_{01} & L_{02} \\ l_{10}^T & \lambda_{11} & l_{12}^T \\ \hline L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \leftarrow \left(\begin{array}{c} x_0 \\ \chi_1 \\ \hline x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right) \leftarrow \left(\begin{array}{c} y_0 \\ \psi_1 \\ \hline y_2 \end{array}\right) $
endwhile

Algorithm: Solve Lx = y overwriting y with x. L is unit lower triangular.

$$L \to \left(\begin{array}{c|c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right), x \to \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right), y \to \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right)$$

where L_{TL} is 0×0 , x_T has 0 rows, y_T has 0 rows

while $m(L_{TL}) < m(L)$ do

$$\left(\begin{array}{c|c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \to \left(\begin{array}{c|c} L_{00} & l_{01} & L_{02} \\ \hline l_{10}^T & \lambda_{11} & l_{12}^T \\ L_{20} & l_{21} & L_{22} \end{array}\right), \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \to \left(\begin{array}{c} x_0 \\ \hline \chi_1 \\ \hline x_2 \end{array}\right), \left(\begin{array}{c} y_T \\ \hline y_B \end{array}\right) \to \left(\begin{array}{c} y_0 \\ \hline \psi_1 \\ \hline y_2 \end{array}\right)$$

where λ_{11} is 1×1 , χ_1 has 1 row, ψ_1 has 1 row

$$\psi_1 := \chi_1 = \widehat{\psi}_1 - l_{10}^T x_0 = \psi_1 - l_{10}^T y_0$$

$$\frac{\psi_1 := \chi_1 = \widehat{\psi}_1 - l_{10}^T x_0 = \psi_1 - l_{10}^T y_0}{\left(\frac{L_{TL} \mid L_{TR}}{L_{BL} \mid L_{BR}}\right)} \leftarrow \left(\frac{L_{00} \mid l_{01} \mid L_{02}}{l_{10} \mid \lambda_{11} \mid l_{12}^T}\right), \left(\frac{x_T}{x_B}\right) \leftarrow \left(\frac{x_0}{\chi_1}\right), \left(\frac{y_T}{y_B}\right) \leftarrow \left(\frac{y_0}{\psi_1}\right)$$

endwhile