

```
function s = solveh(x, h, delh, s_id)

eps = 1e-8; % Set a tolerance for convergence
s = x(s_id); % Save the current state variables

iter = 0; % Set initial iteration to 0
% Set termination criterion
hnorm = norm(h(x),2); % norm of the constraint vector

while(hnorm > eps)
    iter = iter+1; % Increase iteration by 1

    dhds = delh(x);
    m = dhds(:,2:3); % current dh/ds

    % Modify dh/ds when it is singular
    %%% KEEP THIS %%%
    dhds_inv = correctH(m);
    %%%%%%%%%%%%%%%%%%%%%%%%%

    s = s - dhds_inv*h(x); % Use modified dh/ds to calculate new s
    x(s_id) = s; % Save new s to the current solution

    hnorm = norm(h(x),2); % Update termination critetion
end
end
```