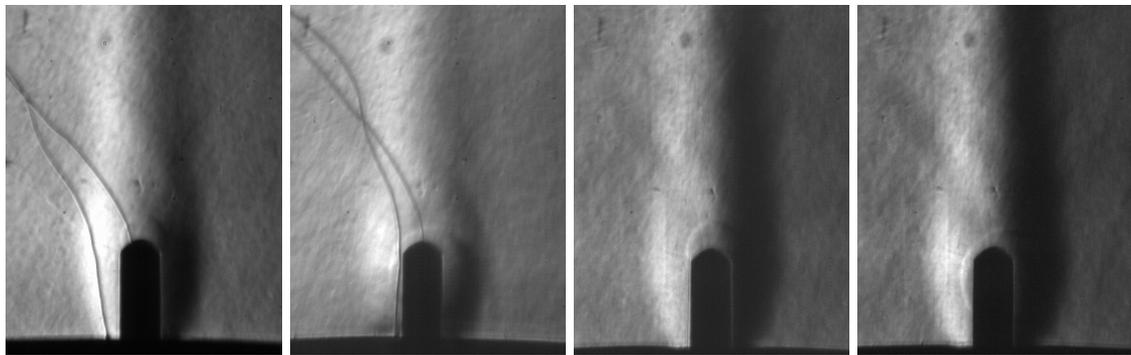
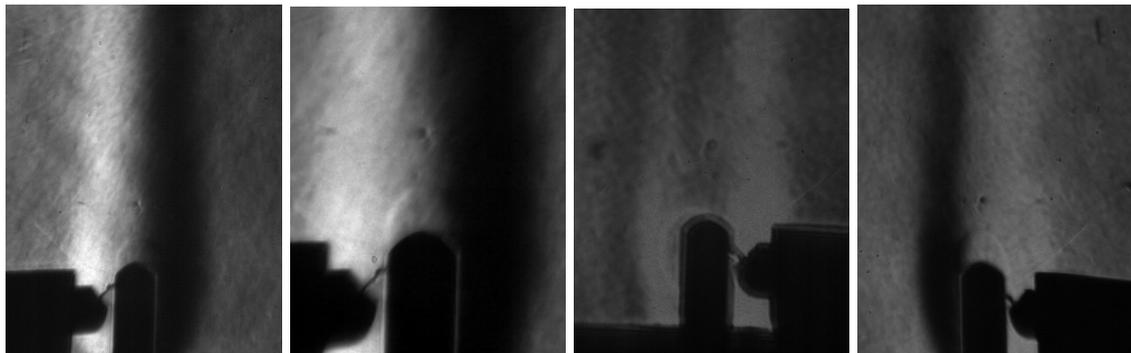


## Appendix J

# Ignition Location



(a) **T**: Shot 6 ( $t = 0.375$  ms) (b) **S**: Shot 7 ( $t = 1.375$  ms) (c) **T**: Shot 8 ( $t = 0.375$  ms) (d) **S**: Shot 9 ( $t = 0.2$  ms)



(e) **T**: Shot 10 ( $t = 0.2$  ms) (f) **T**: Shot 11 ( $t = 0.3$  ms) (g) **S**: Shot 12 ( $t = 0.3$  ms) (h) **T**: Shot 15 ( $t = 0.2$  ms)

Figure J.1: Ignition locations observed in schlieren videos (**T** - top ignition, **S** - side ignition, **P** - plume ignition, time indicated is elapsed from 1 frame before any flame is visible)

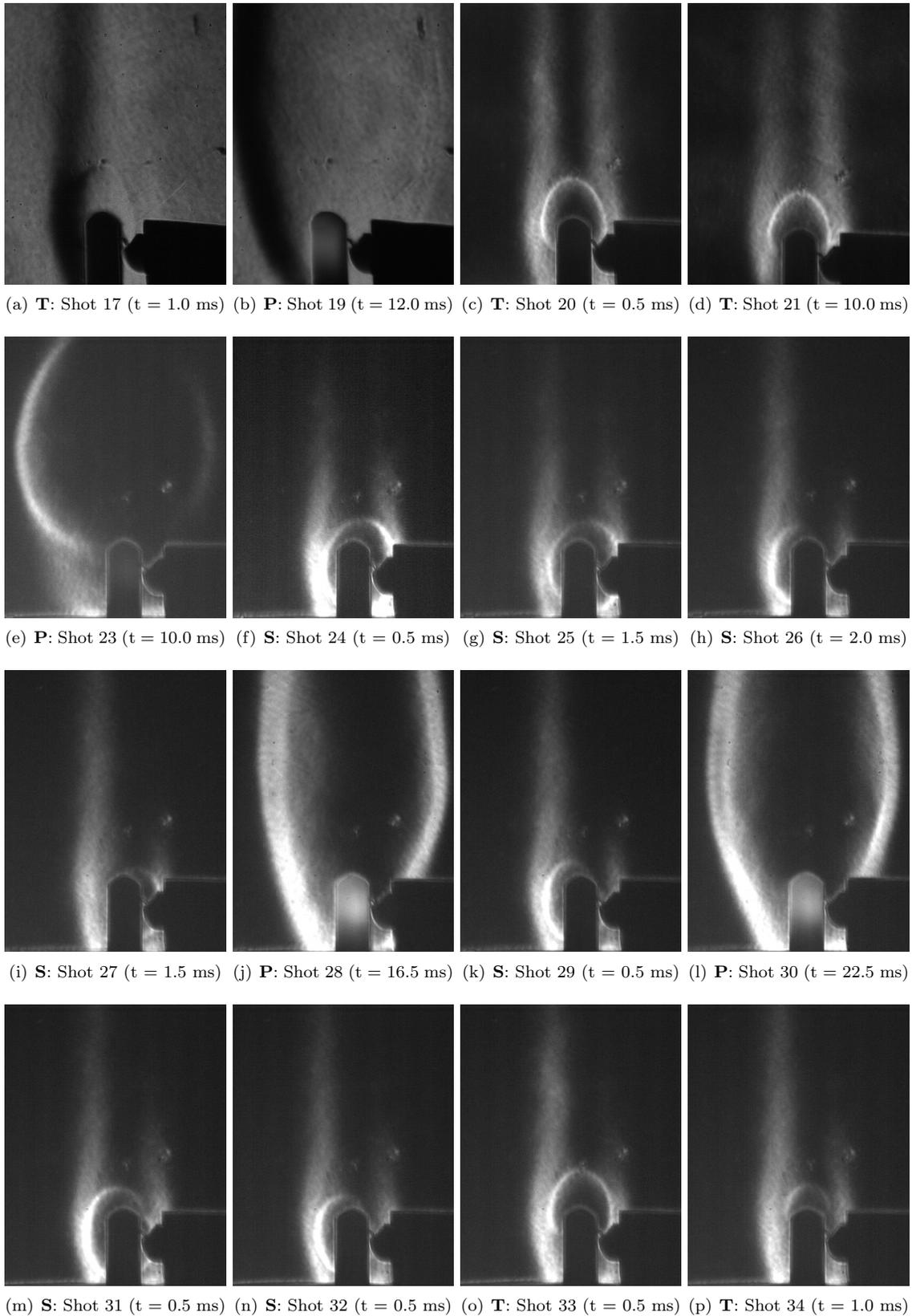
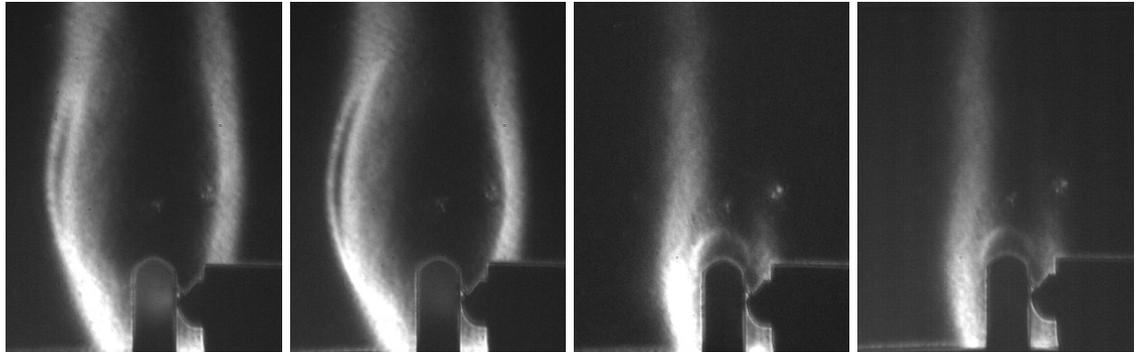
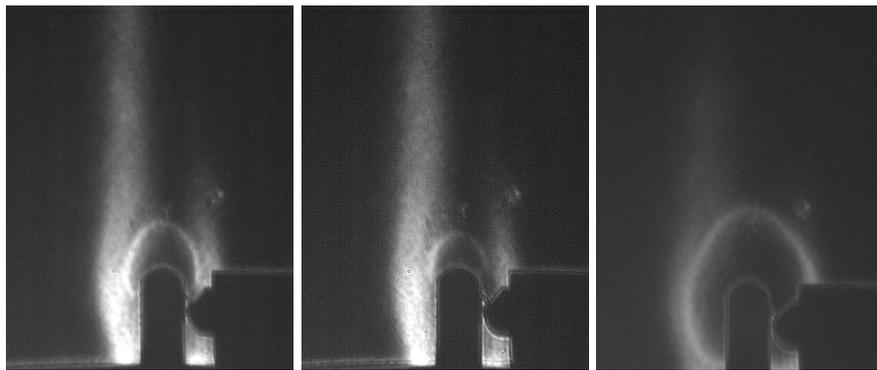


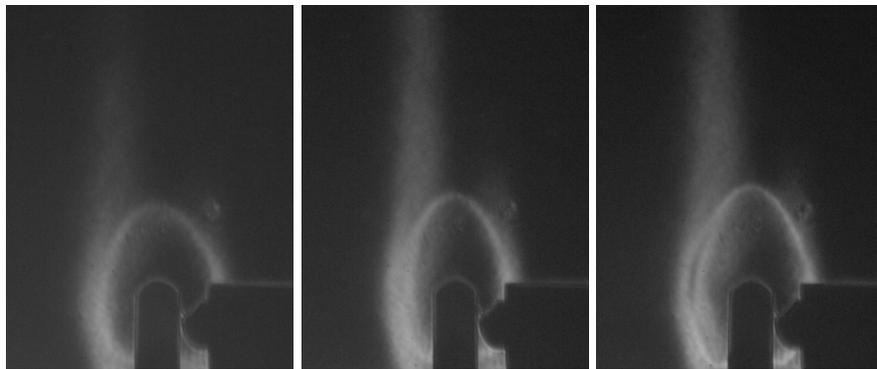
Figure J.2: Ignition locations observed in schlieren videos continued (**T** - top ignition, **S** - side ignition, **P** - plume ignition, time indicated is elapsed from 1 frame before any flame is visible)



(a) **P**: Shot 36 ( $t = 13$  ms) (b) **P**: Shot 37 ( $t = 11$  ms) (c) **T**: Shot 38 ( $t = 1.0$  ms) (d) **T**: Shot 40 ( $t = 0.5$  ms)



(e) **T**: Shot 41 ( $t = 0.5$  ms) (f) **T**: Shot 42 ( $t = 1.0$  ms) (g) **T**: Shot 43 ( $t = 1.0$  ms)



(h) **T**: Shot 44 ( $t = 1.0$  ms) (i) **T**: Shot 45 ( $t = 2.0$  ms) (j) **T**: Shot 46 ( $t = 1.0$  ms)

Figure J.3: Ignition locations observed in schlieren videos continued (**T** - top ignition, **S** - side ignition, **P** - plume ignition, time indicated is elapsed from 1 frame before any flame is visible)

This page intentionally left blank.