

| Home Team | Result | Away Team | Date | Time | Status |
|------------------|---------------|------------------|---------------|-------------|---------------|
| Chesterfield 1 | 1 - 3 | Chesterfield 2 | Tue 26 Sep 17 | 19:30 | OU |
| Belper 2 | ½ - 3½ | Chesterfield 1 | Wed 11 Oct 17 | 19:30 | OU |
| Chesterfield 1 | 2½ - 1½ | Clay Cross 1 | Tue 31 Oct 17 | 19:30 | OU |
| Chesterfield 1 | 1½ - 2½ | Breadsall 1 | Tue 21 Nov 17 | 19:30 | OU |
| Belper 1 | 2 - 2 | Chesterfield 1 | Thu 21 Dec 17 | 19:30 | OU |
| Chesterfield 1 | 1 - 3 | Derby 1 | Mon 8 Jan 18 | 19:30 | OU |
| Chesterfield 2 | 1½ - 2½ | Chesterfield 1 | Tue 23 Jan 18 | 19:30 | OU |
| Chesterfield 1 | 2½ - 1½ | Belper 2 | Tue 6 Feb 18 | 19:30 | OU |
| Clay Cross 1 | 3 - 1 | Chesterfield 1 | Wed 21 Feb 18 | 19:30 | OU |
| Chesterfield 1 | 3 - 1 | Lichfield 1 | Tue 13 Mar 18 | 19:30 | OU |
| Lichfield 1 | 2 - 2 | Chesterfield 1 | Thu 22 Mar 18 | 19:15 | OU |
| Breadsall 1 | 2½ - 1½ | Chesterfield 1 | Mon 26 Mar 18 | 19:30 | OU |
| Chesterfield 1 | 2 - 2 | Belper 1 | Tue 10 Apr 18 | 19:30 | OU |
| Derby 1 | 1 - 3 | Chesterfield 1 | Tue 24 Apr 18 | 19:30 | OU |