```
Notation:

  FO    -  Fragment Offset
  IHL   -  Internet Header Length
  MF    -  More Fragments flag
  TTL   -  Time To Live
  NFB   -  Number of Fragment Blocks
  TL    -  Total Length
  TDL   -  Total Data Length
  BUFID -  Buffer Identifier
  RCVBT -  Fragment Received Bit Table
  TLB   -  Timer Lower Bound

Procedure:

  (1)  BUFID <- source|destination|protocol|identification;
  (2)  IF FO = 0 AND MF = 0
  (3)     THEN IF buffer with BUFID is allocated
  (4)             THEN flush all reassembly for this BUFID;
  (5)          Submit datagram to next step; DONE.
  (6)     ELSE IF no buffer with BUFID is allocated
  (7)             THEN allocate reassembly resources
                       with BUFID;
                       TIMER <- TLB; TDL <- 0;
  (8)          put data from fragment into data buffer with
               BUFID from octet FO*8 to
                                   octet (TL-(IHL*4))+FO*8;
  (9)          set RCVBT bits from FO
                                  to FO+((TL-(IHL*4)+7)/8);
  (10)         IF MF = 0 THEN TDL <- TL-(IHL*4)+(FO*8)
  (11)         IF FO = 0 THEN put header in header buffer
  (12)         IF TDL # 0
  (13)          AND all RCVBT bits from 0
                                       to (TDL+7)/8 are set
  (14)            THEN TL <- TDL+(IHL*4)
  (15)                 Submit datagram to next step;
  (16)                 free all reassembly resources
                       for this BUFID; DONE.
  (17)         TIMER <- MAX(TIMER,TTL);
  (18)         give up until next fragment or timer expires;
  (19) timer expires: flush all reassembly with this BUFID; DONE.
```