

Idle Air Motor and Dash Pot Subroutine

LD000:

Lookup Target Idle Speed modifier based on COOL.
Stash new Target Idle RPM into L0061.

No
Was dashpot zero
before ?

mis41

Yes

No
Current dashpot
value equal zero ?

(L006E)

Yes

Signal dashpot was zero

Increase Idle speed
by dashpot rpm.

LD07C:

Yes

Dashpot Active ?

No

Throttle Closed ?

Yes

No

Below dashpot rpm
threshold ?

No

Yes

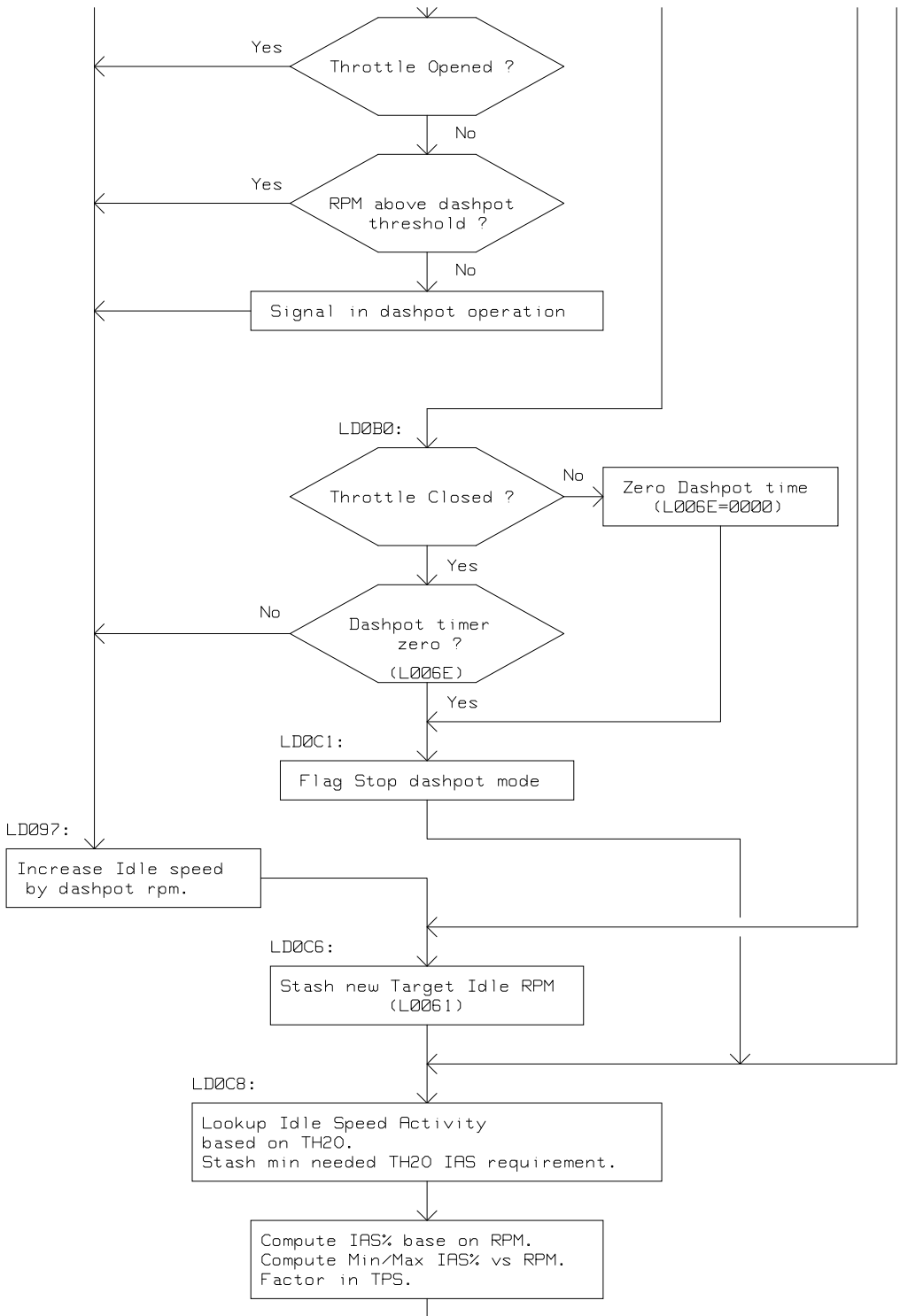
Seed dashpot counter.
(L006E = LF47E 4.85 sec)
Signal dashpot active.

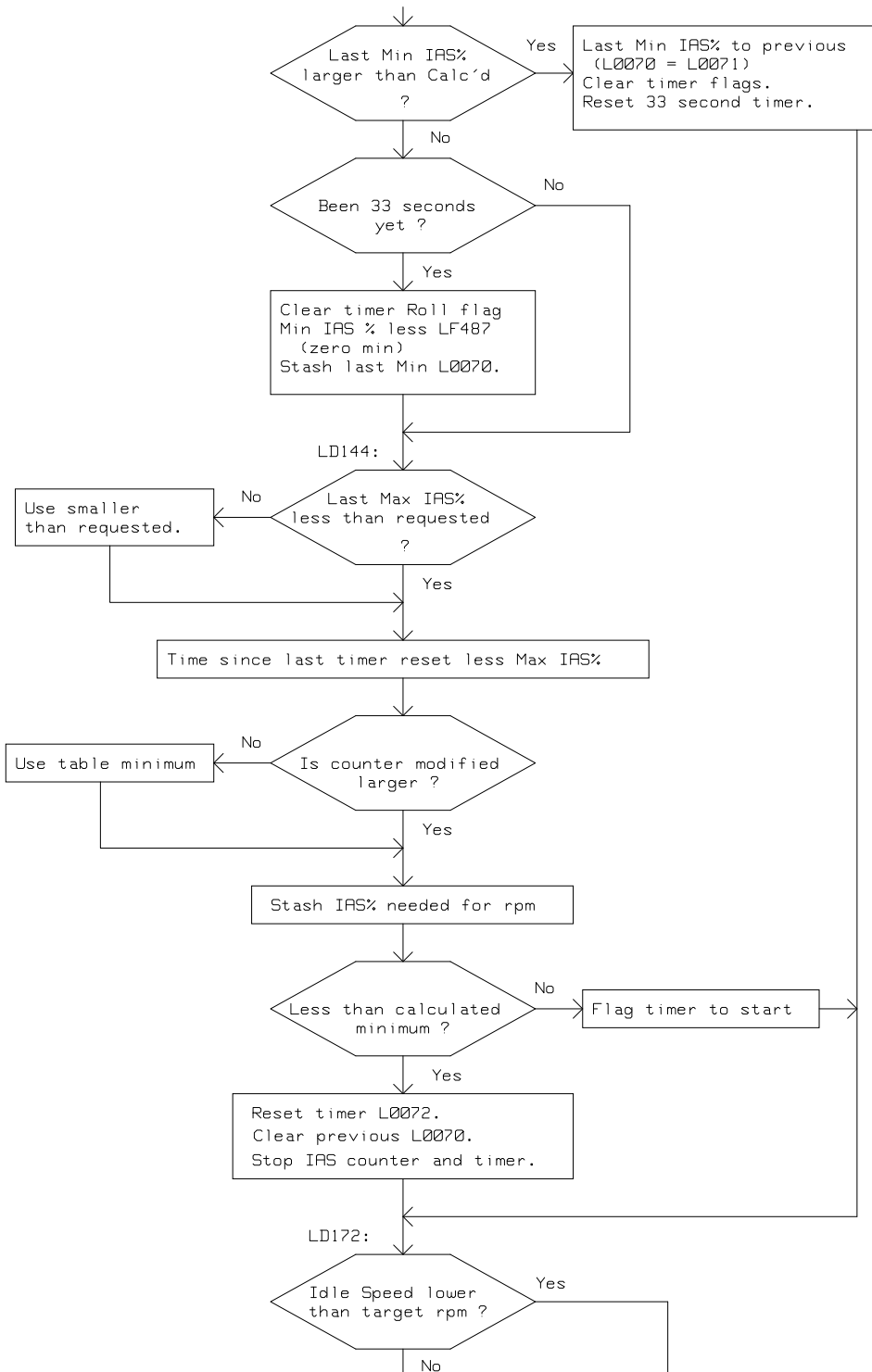
LD09B:

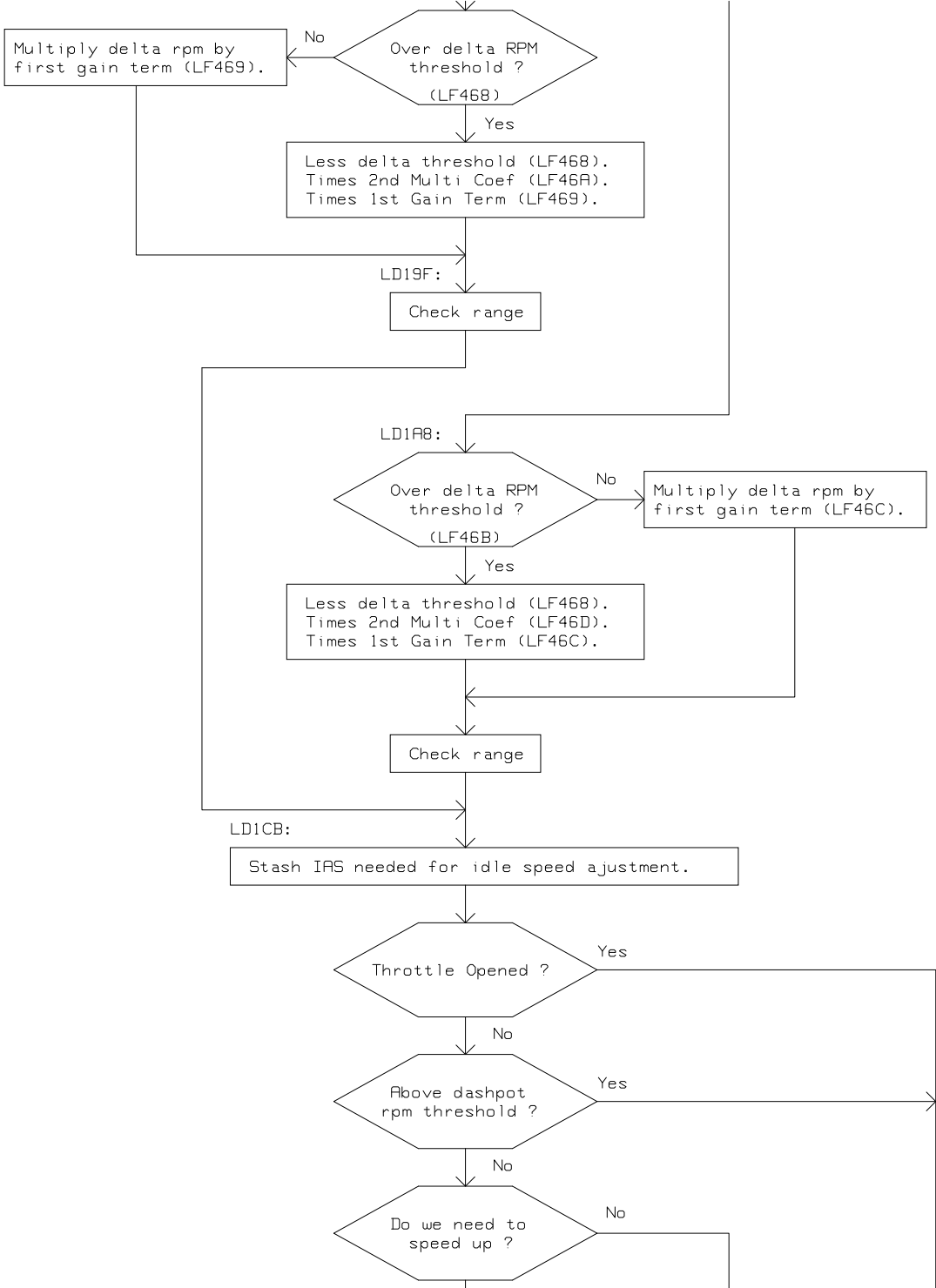
Dashpot Active ?

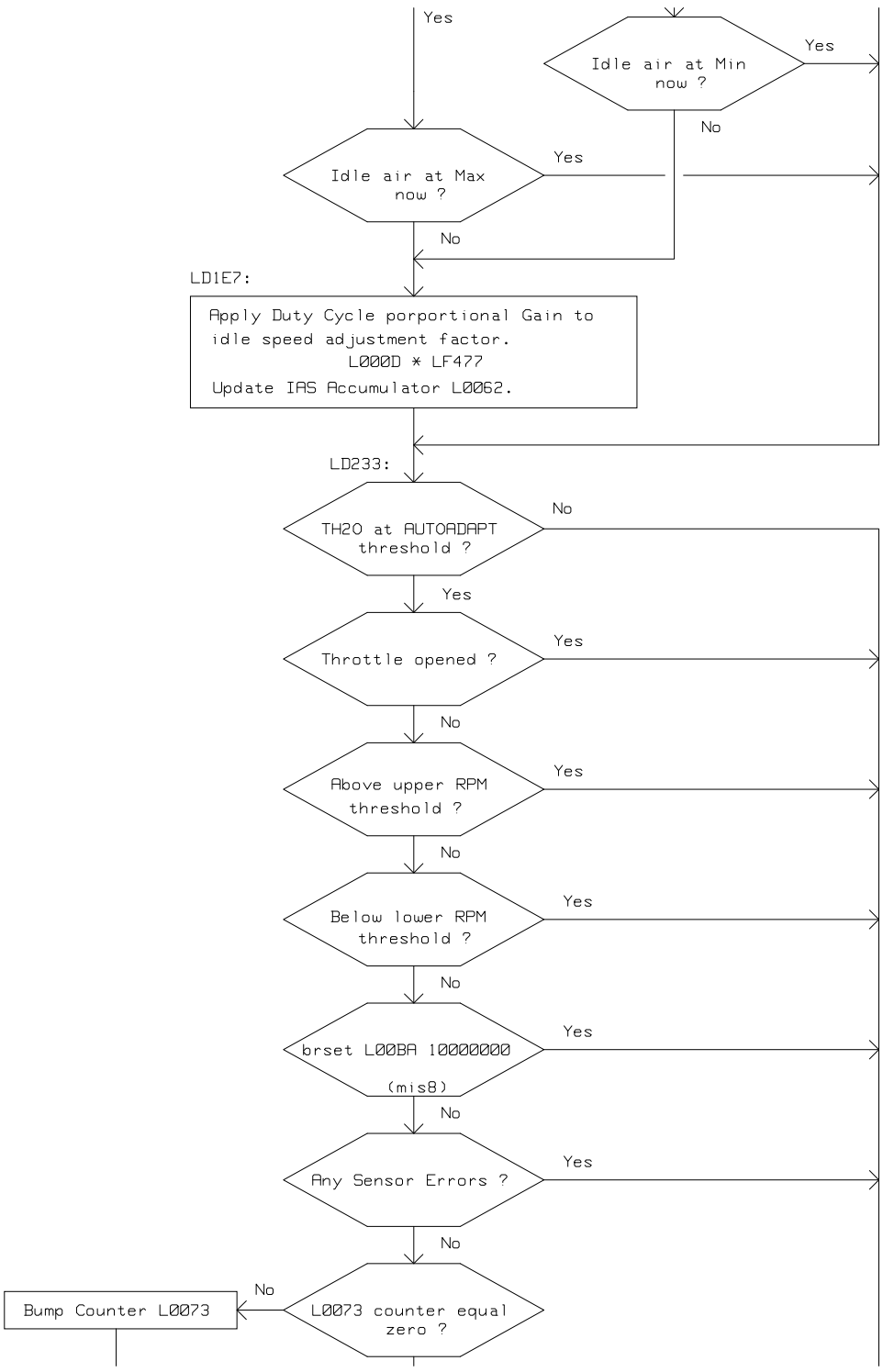
Yes

No









Yes
Not clear what is happening here ???
L0062 and L0064 are used to update L0064
for some reason.
Something for this Auto Adapt code !

LD25D:

L0073 = LF47B

LD29A:

Has the RPM
changed ?

No (Delta rpm = zero)

RPM increasing ?

No

Above LF46E rpm
delta threshold ?

No

Clear delta rpm

Load Positive Derivate ABS value.
(Delta rpm = -LF472)

LD2B7:

Above LF470 rpm
delta threshold ?

No

Clear delta rpm

Load Negative Derivate ABS value.
(Delta rpm = LF473)
Signal motor slowing down.

LD2C8:

Stash Delta RPM into L000Ew.

Throttle Closed ?

Yes

No

Clear Slowing Down Flag.
Clear Acknowledge flag.

LD2DE:

Adjust current dashpot value L006E by
the Extra-Duty Gain Calculation at crank
or during deceleration.
Stash dashpot results into L0004w

Idle Control ON ?

Clear Idle Control requirements.

Update Idle Speed factor.
(L000B = L000D)
Add in accumulator value.
(L000B = L000B + L0062)
Add in ?????
(L000B = L000B + L0064)

Have we seen motor slowing already ?

RPM delta within window ?

Motor speeding up ?

Signal we have seen motor slowing

LD315:

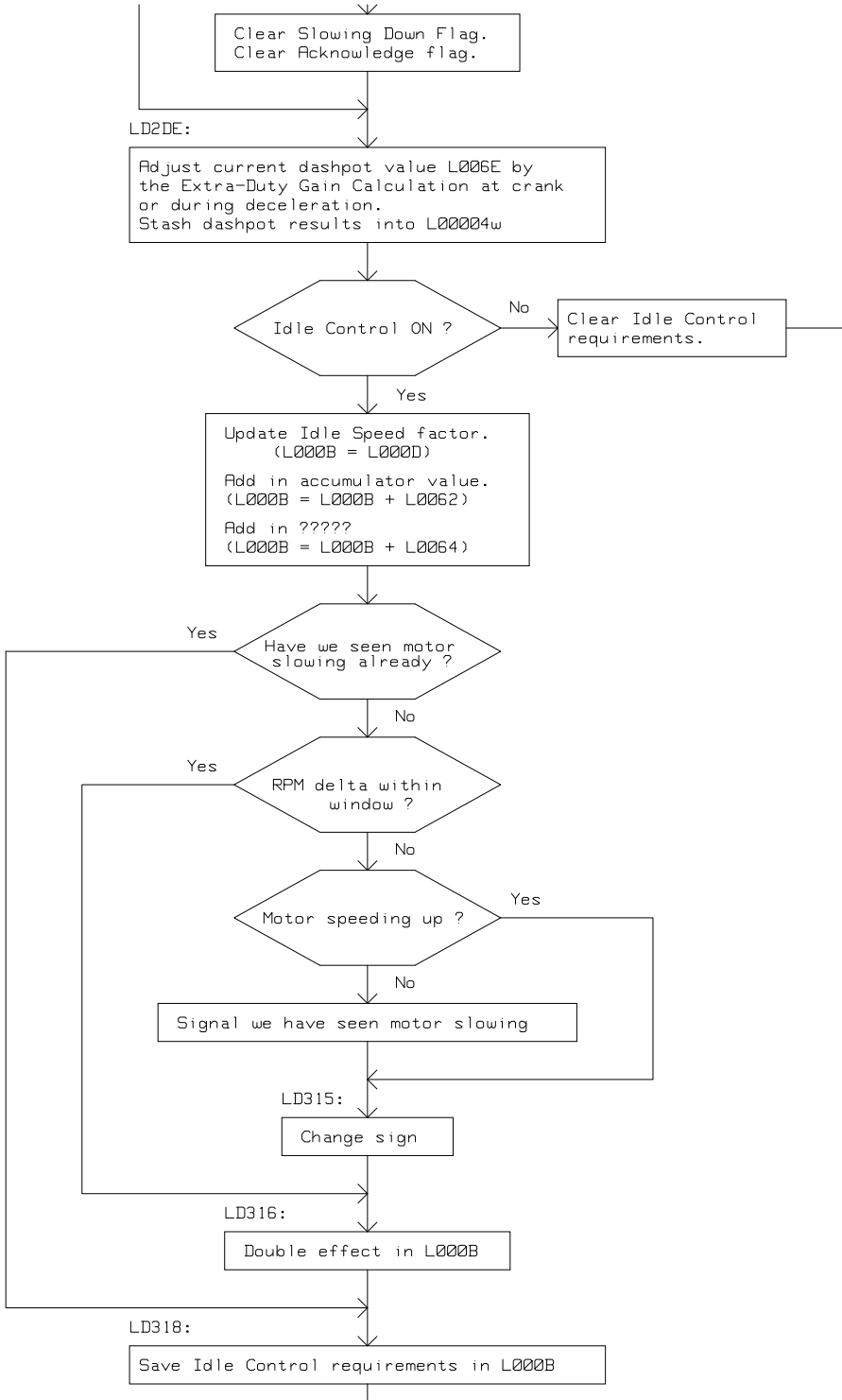
Change sign

LD316:

Double effect in L000B

LD318:

Save Idle Control requirements in L000B



LD31B:

Add IAS% required for the Dashpot and Idle Control together. Adjust these requirements by the Idle Speed Activity modifier. Factor in the min IAS% required by TH20.

Signal idle air at min.
Add 13% air if AC on.

Min IAS for RPM >
these requirements

Yes

?

No

Is the AC on ?

No

Yes

Add 13% air if AC on.

Over flow ?

No

Yes

Idle Control On ?

Yes

No

Signal IAS range has been limited.

LD392:

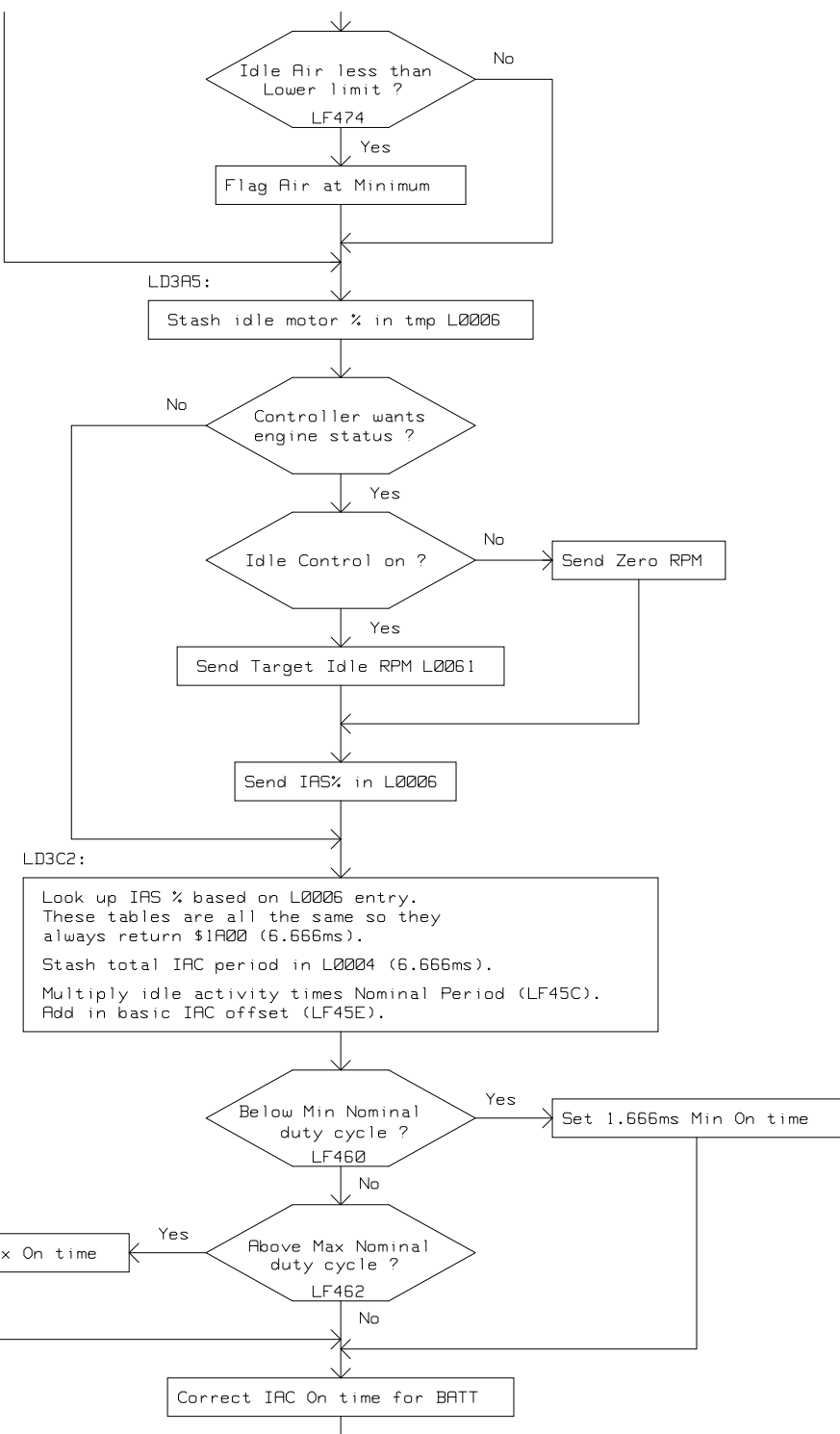
Clear IAS range limited flags.

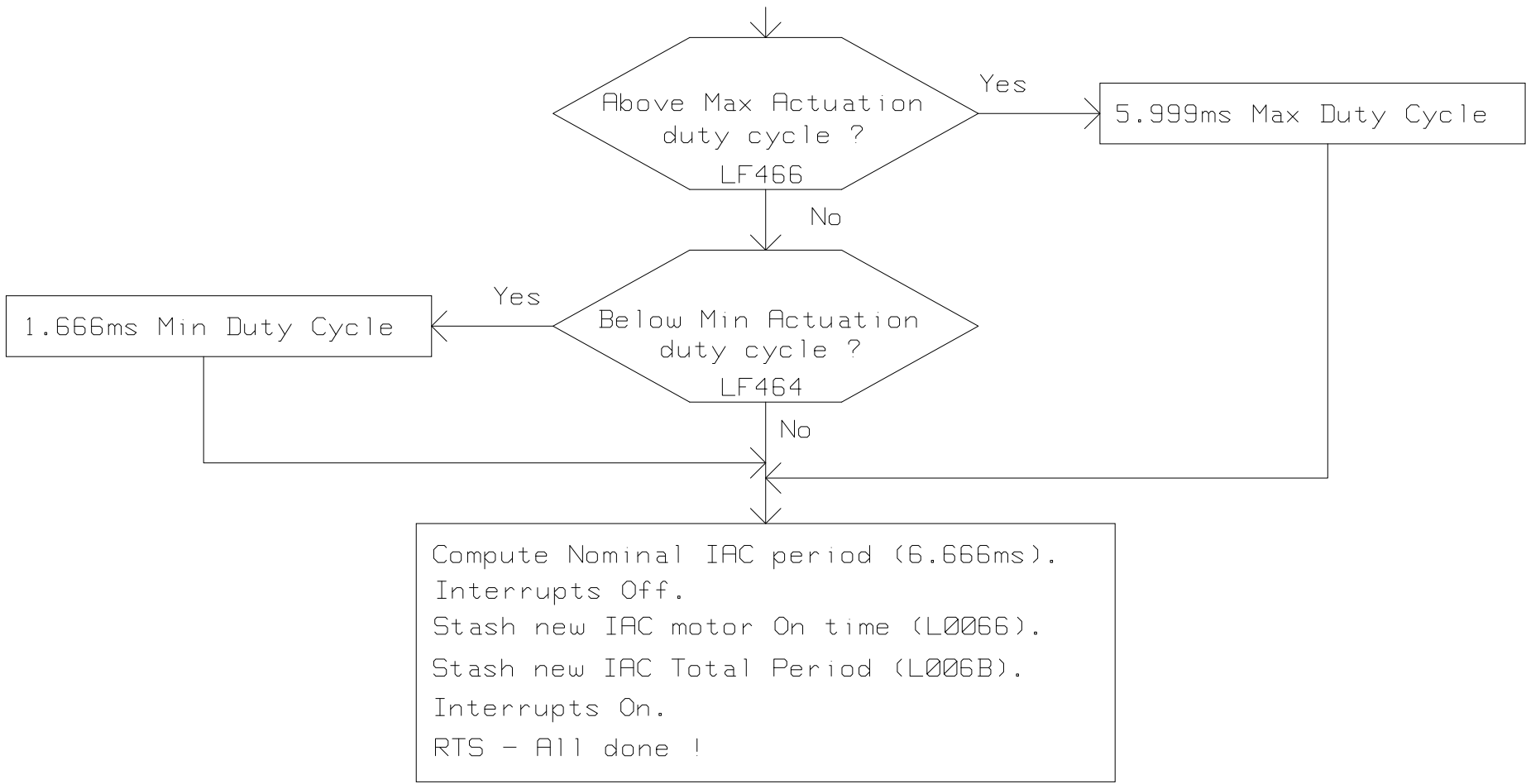
Idle Air less than
upper limit ?
LF475

Yes

No

Flag Air at Maximum





Above Max Actuation
duty cycle ?

LF466

Yes

5.999ms Max Duty Cycle

No

Yes

Below Min Actuation
duty cycle ?

LF464

No

1.666ms Min Duty Cycle

Compute Nominal IAC period (6.666ms).
Interrupts Off.
Stash new IAC motor On time (L0066).
Stash new IAC Total Period (L006B).
Interrupts On.
RTS - All done !