

WAITER's

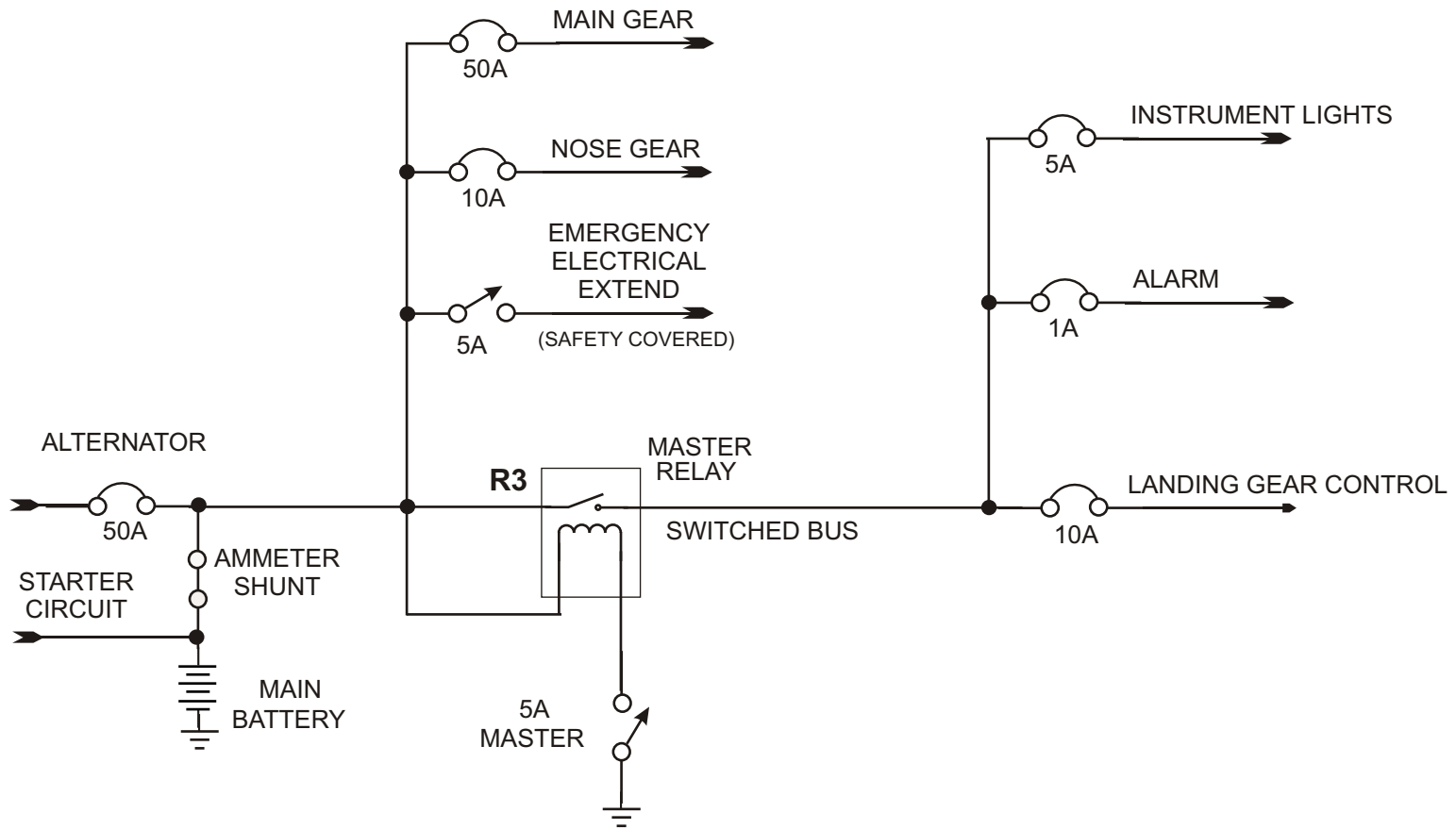
LANDING GEAR CONTROLLER

LONGEZ - BERKUT

REVISION HISTORY

The Drawing, Firmware, and Manual version numbers should all match.

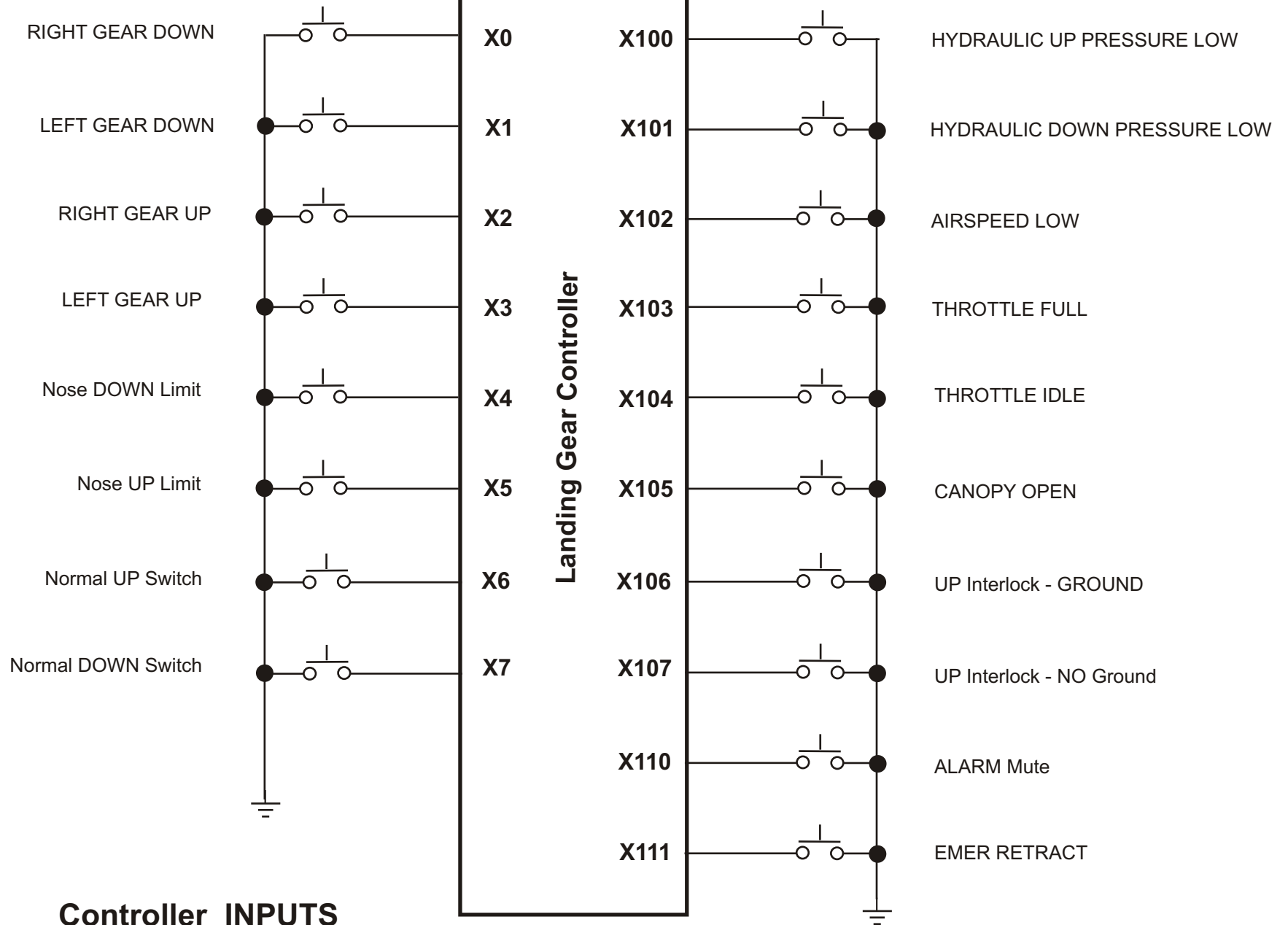
2.1.2 31 MAY 2007 Correct for NC vs NO on the Hydraulic switch.
2.1.1 29 MAY 2007 Stuck MUTE button alarms ½ sec ON ½ sec OFF
2.1.0 26 MAY 2007 Change logic of Canopy Open and Airspeed Sensor
2.0.1 23 MAY 2007 INITIAL RELEASE
1.1.2 BETA NOT RELEASED



MAIN POWER

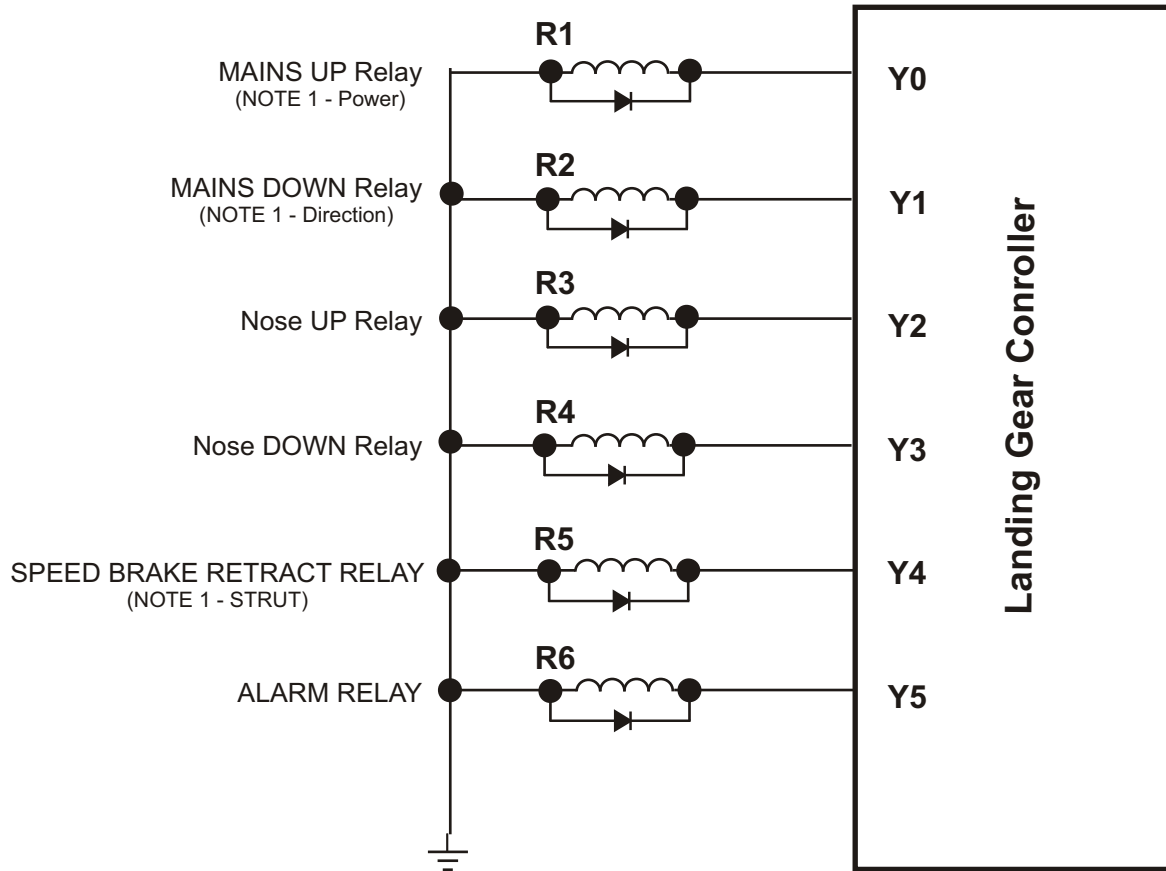
22 MAY 2007

All Diodes are 1N4004



Controller INPUTS

31 MAY 2007

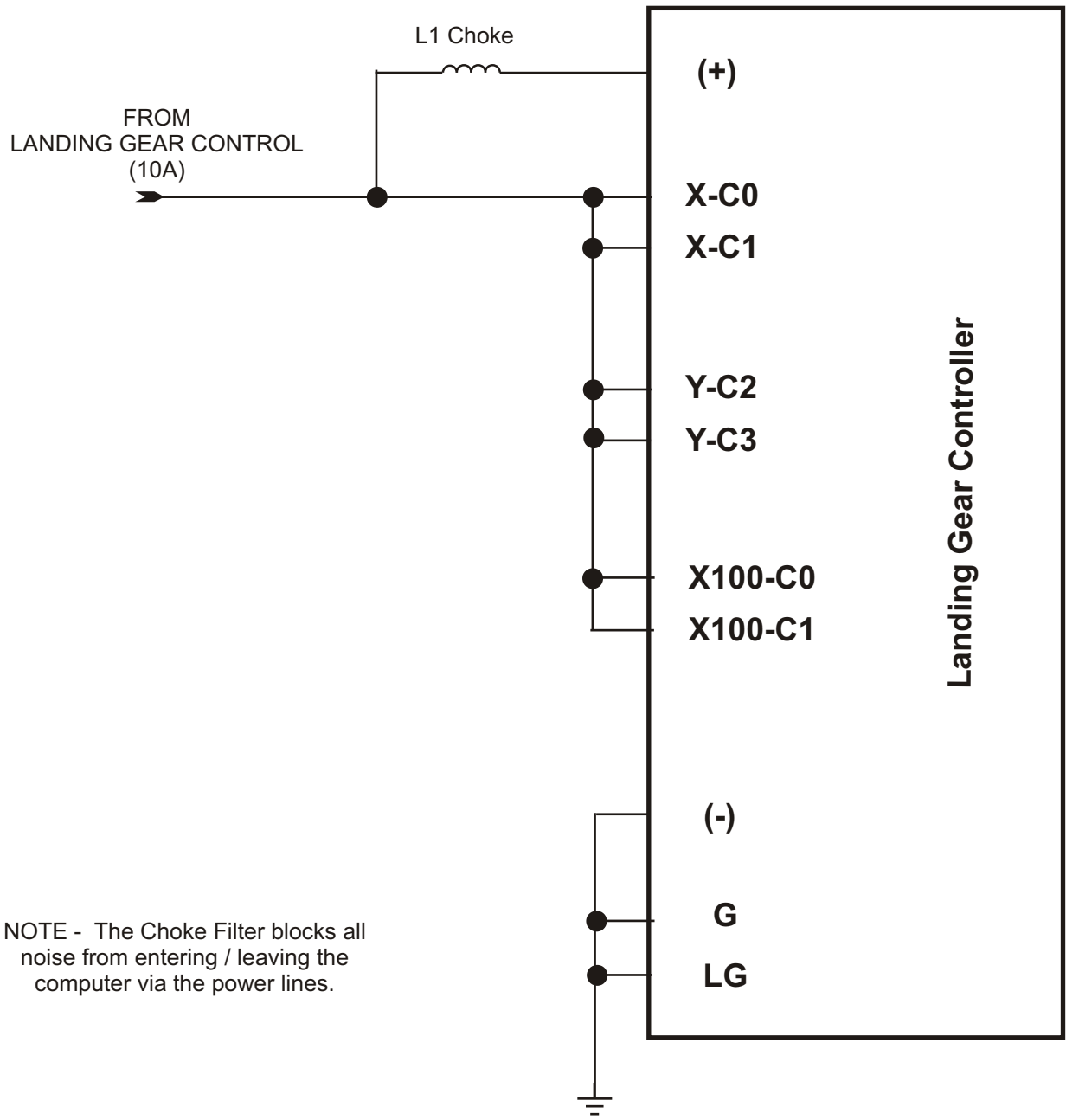


All Diodes are 1N4004

Controller OUTPUTS

31 MAY 2007

NOTE 1 - Depending on how the Controller is programmed, these outputs could serve either of these two functions.



NOTE - The Choke Filter blocks all noise from entering / leaving the computer via the power lines.

Controller POWER

15 MAY 2007

FROM
EMERGENCY
ELECTRICAL
EXTEND

FROM
MAIN GEAR
(50A)

R1 and R2 are High Current Relays
R51-1D70-12F (70 amp SPST relay)

GEAR
UP RELAY

R1

GEAR
DOWN RELAY

R2

GEAR
PUMP

Part of
Landing Gear Controller

Y0

Main Gear
UP

Y1

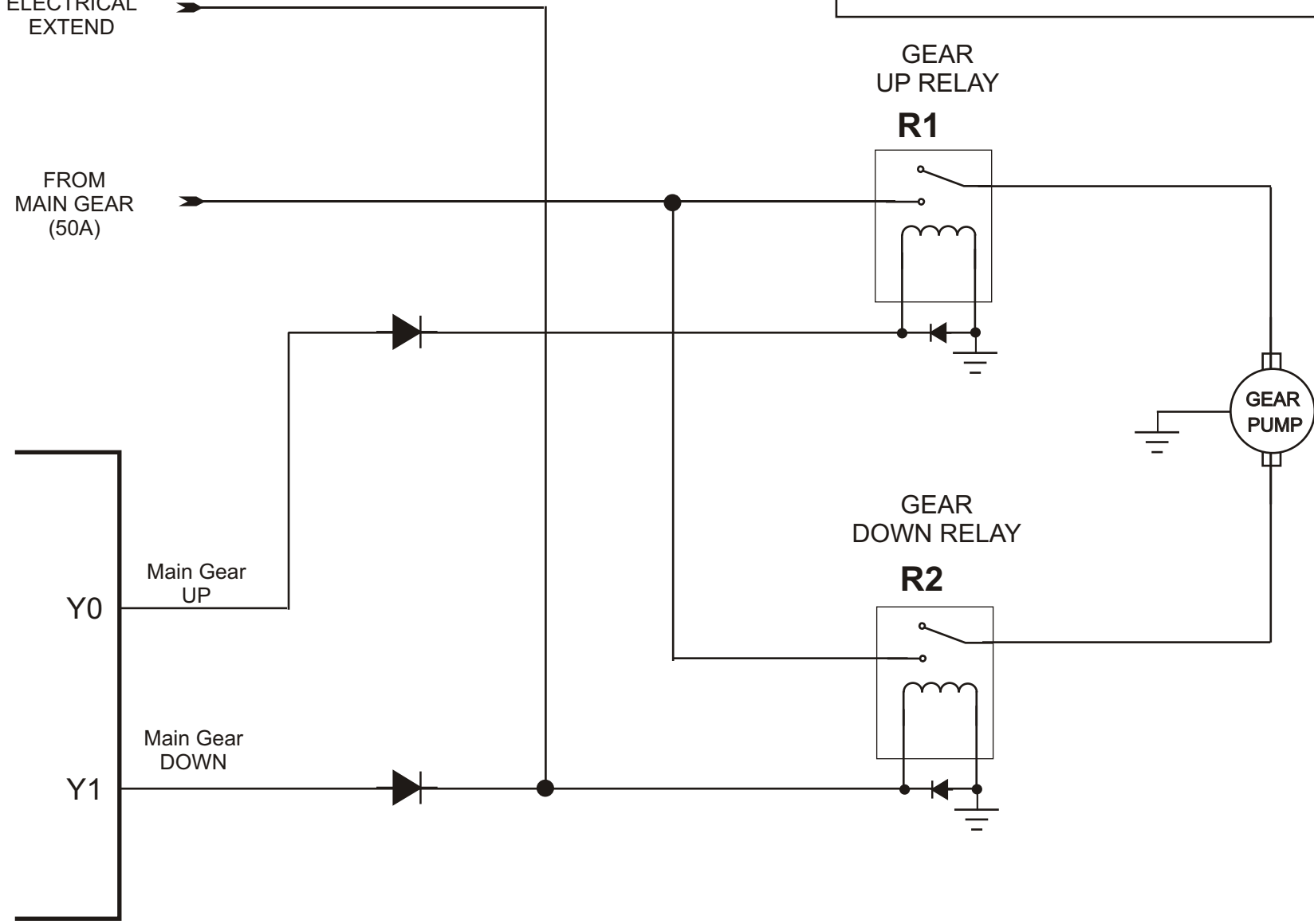
Main Gear
DOWN

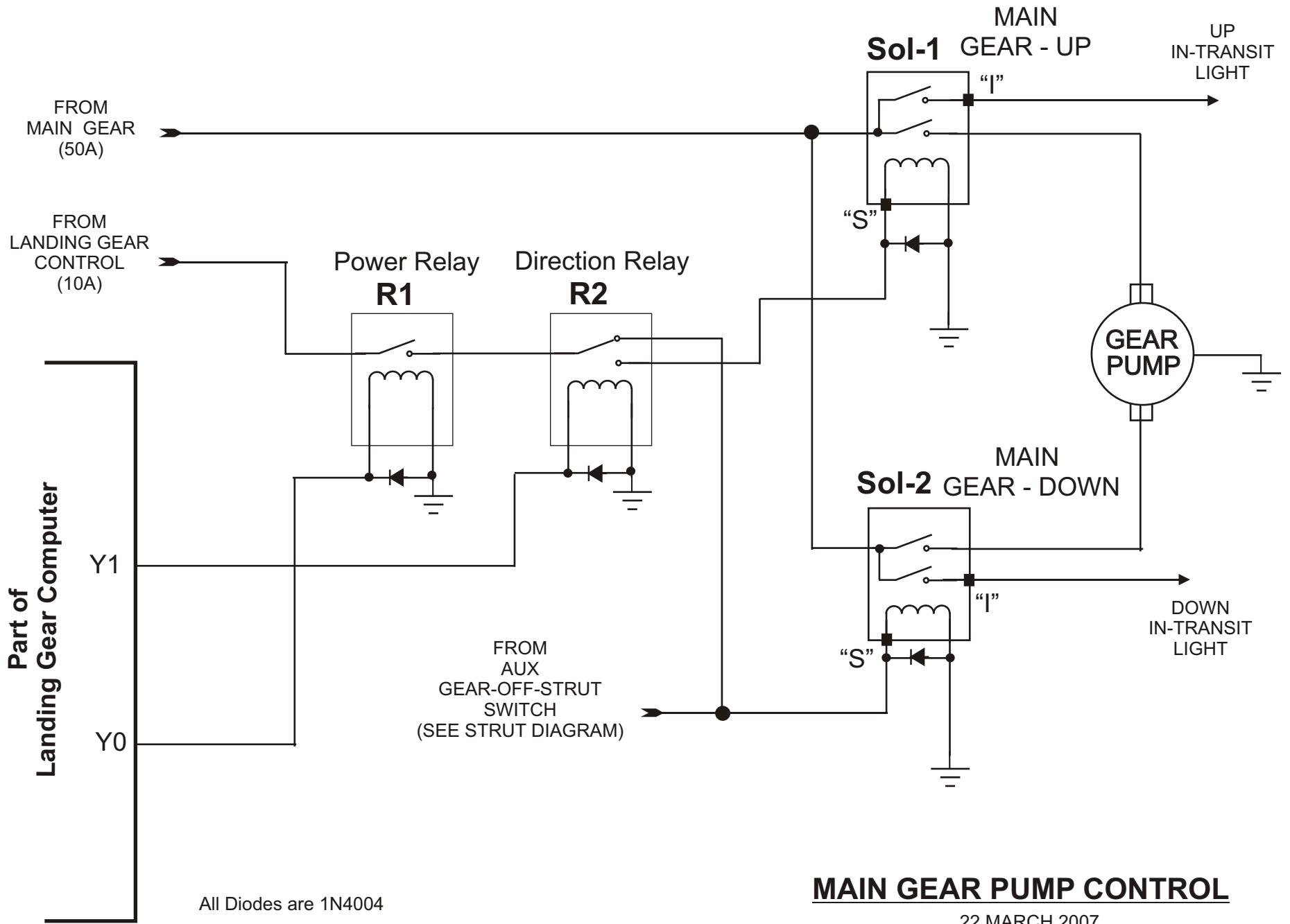
All Diodes are 1N4004

MAIN GEAR PUMP CONTROL

22 MAY 2007

NOTE: Use this diagram if UP/DOWN relays are controlled directly. (Must be programmed into PLC)



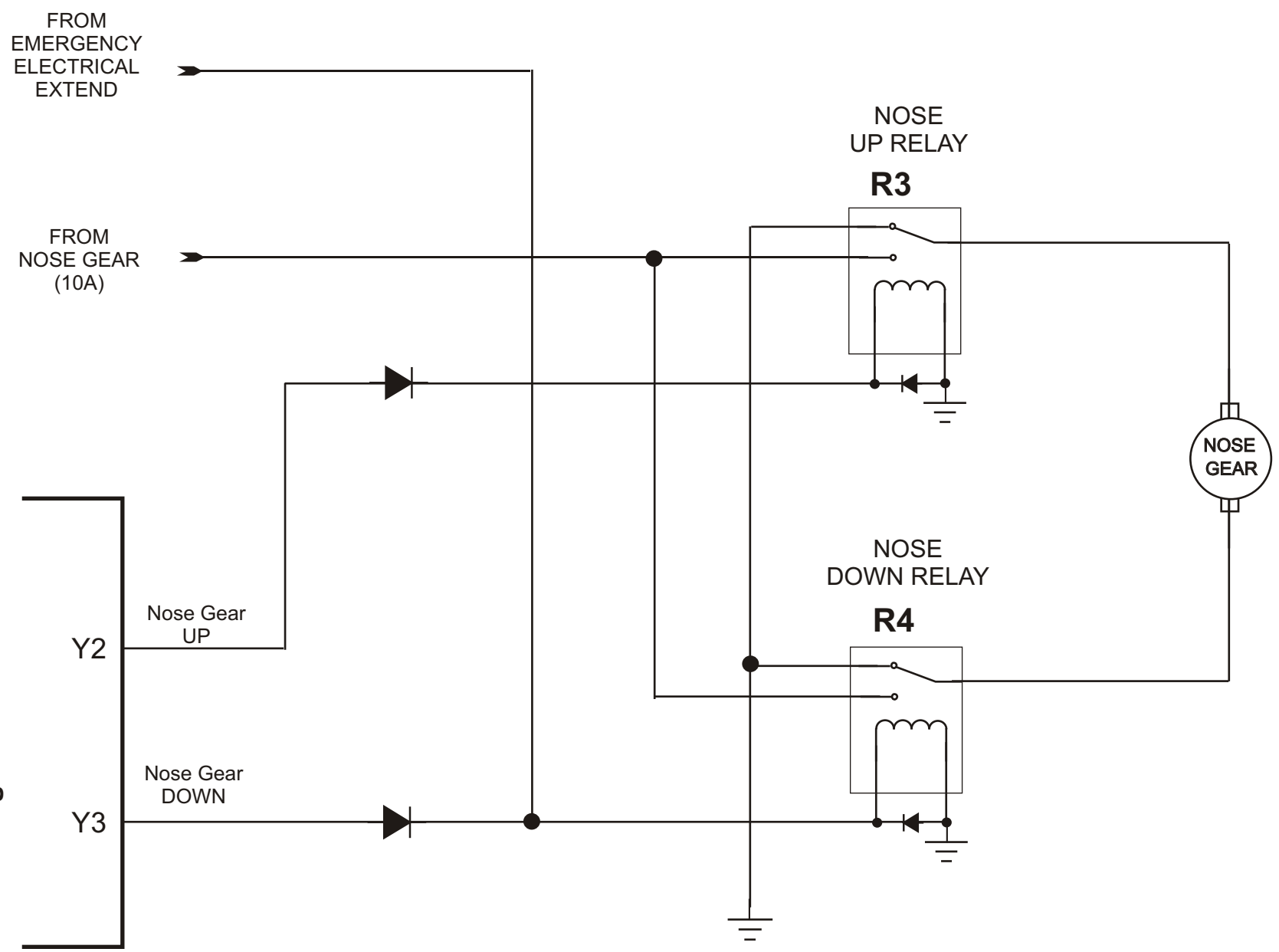


MAIN GEAR PUMP CONTROL

22 MARCH 2007

NOTE: Use this diagram if UP/DOWN Solenoids are controlled via Direction and Power relays. (Must be programmed into PLC)

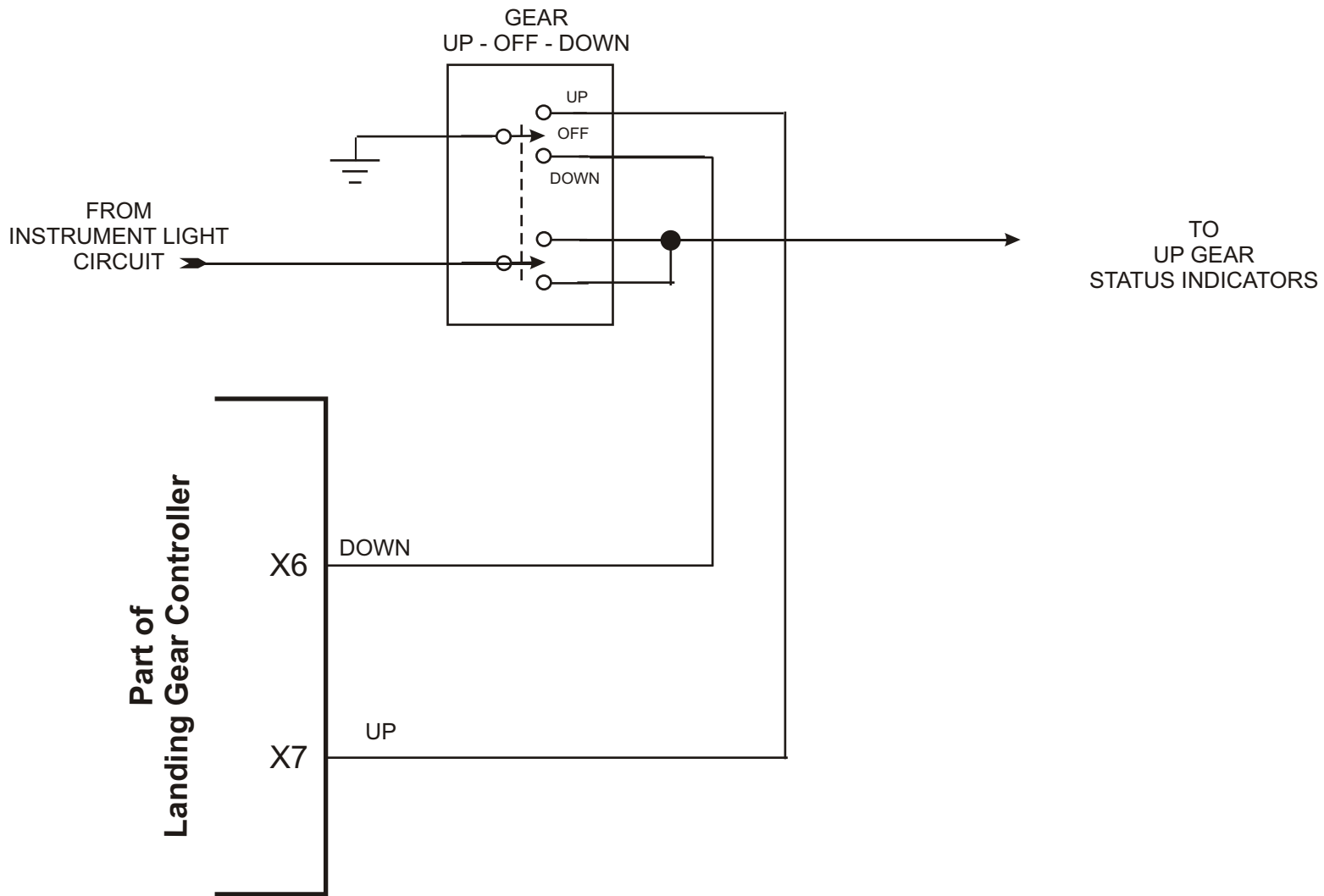
Part of
Landing Gear Controller



NOSE GEAR CONTROL

7 JUNE 2005

All Diodes are 1N4004



GEAR CONTROL SWITCH

15 MAY 2007

Part of
Landing Gear Controller

Y4

FROM
SPEED BRAKE
(5A)

EXTEND

RETRACT

EXTEND
RELAY
R7

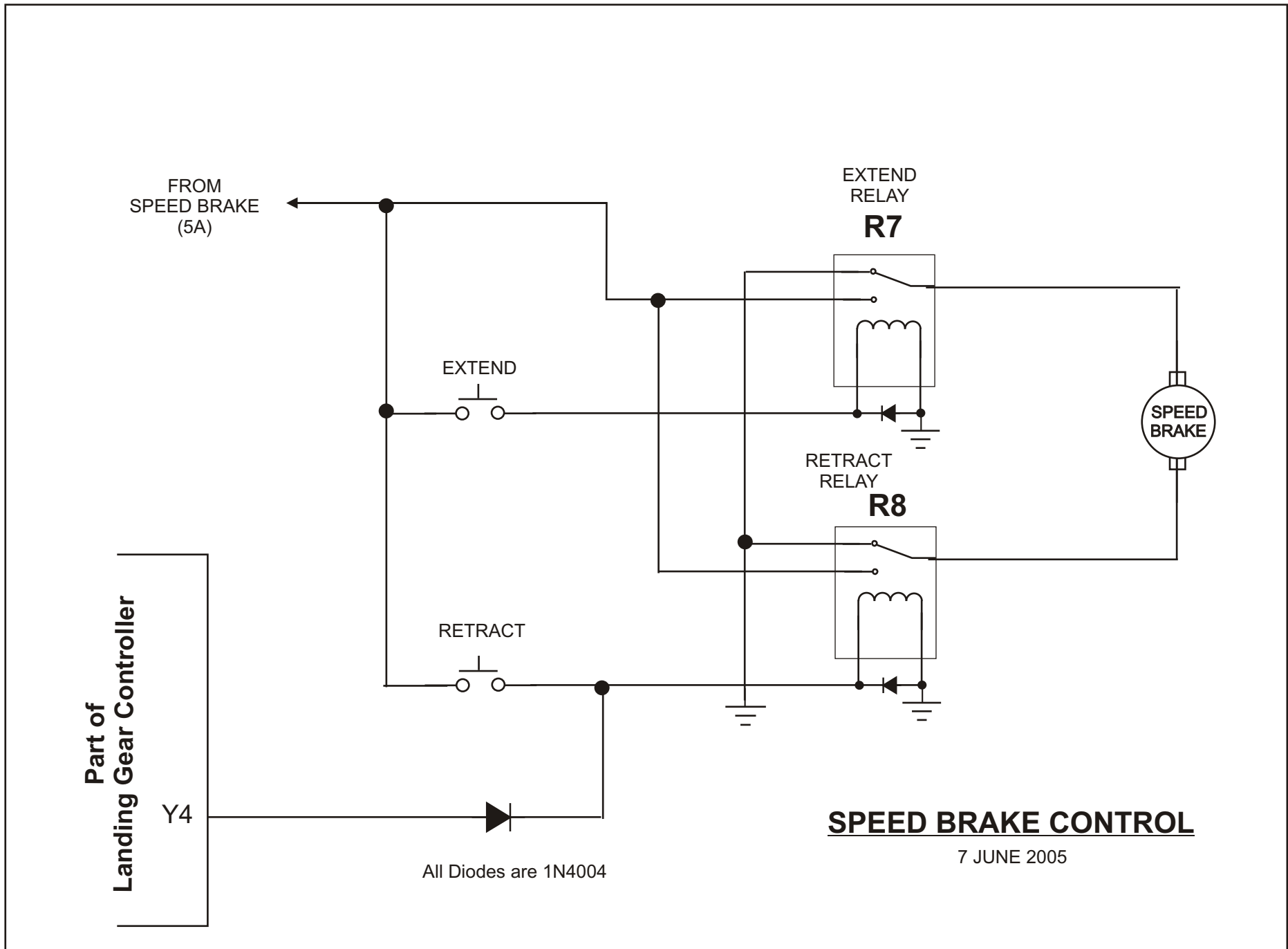
RETRACT
RELAY
R8

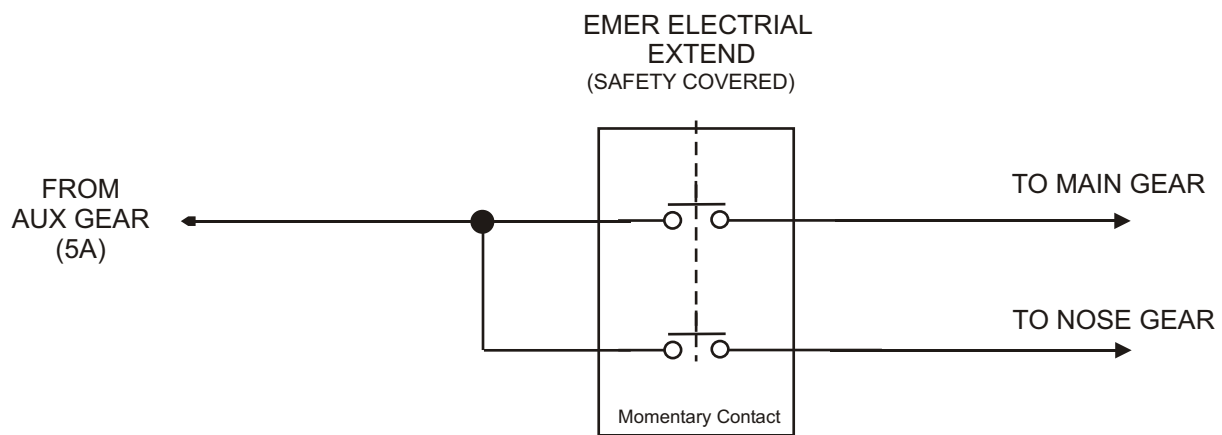
SPEED
BRAKE

All Diodes are 1N4004

SPEED BRAKE CONTROL

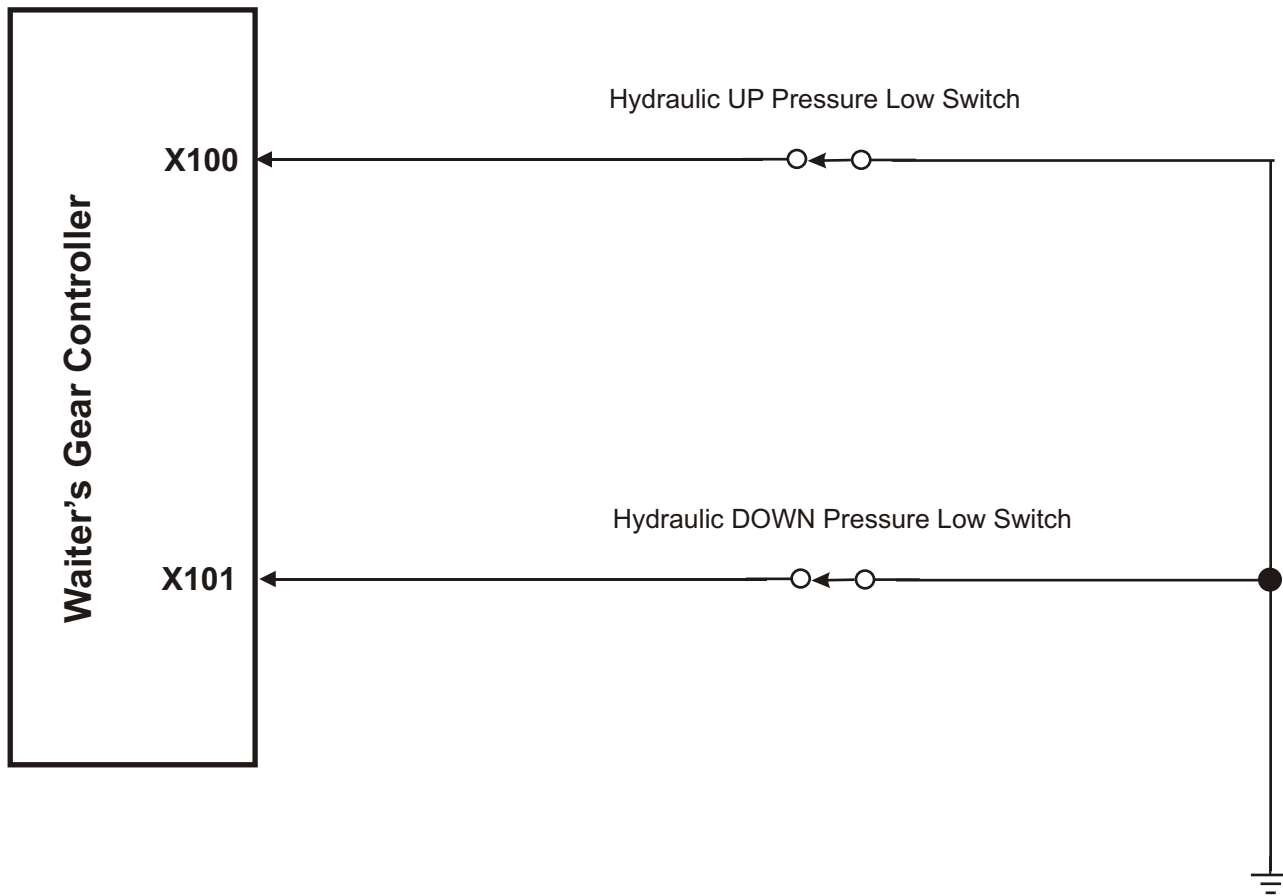
7 JUNE 2005





EMERGENCY ELECTRICAL EXTEND

25 MARCH 2007

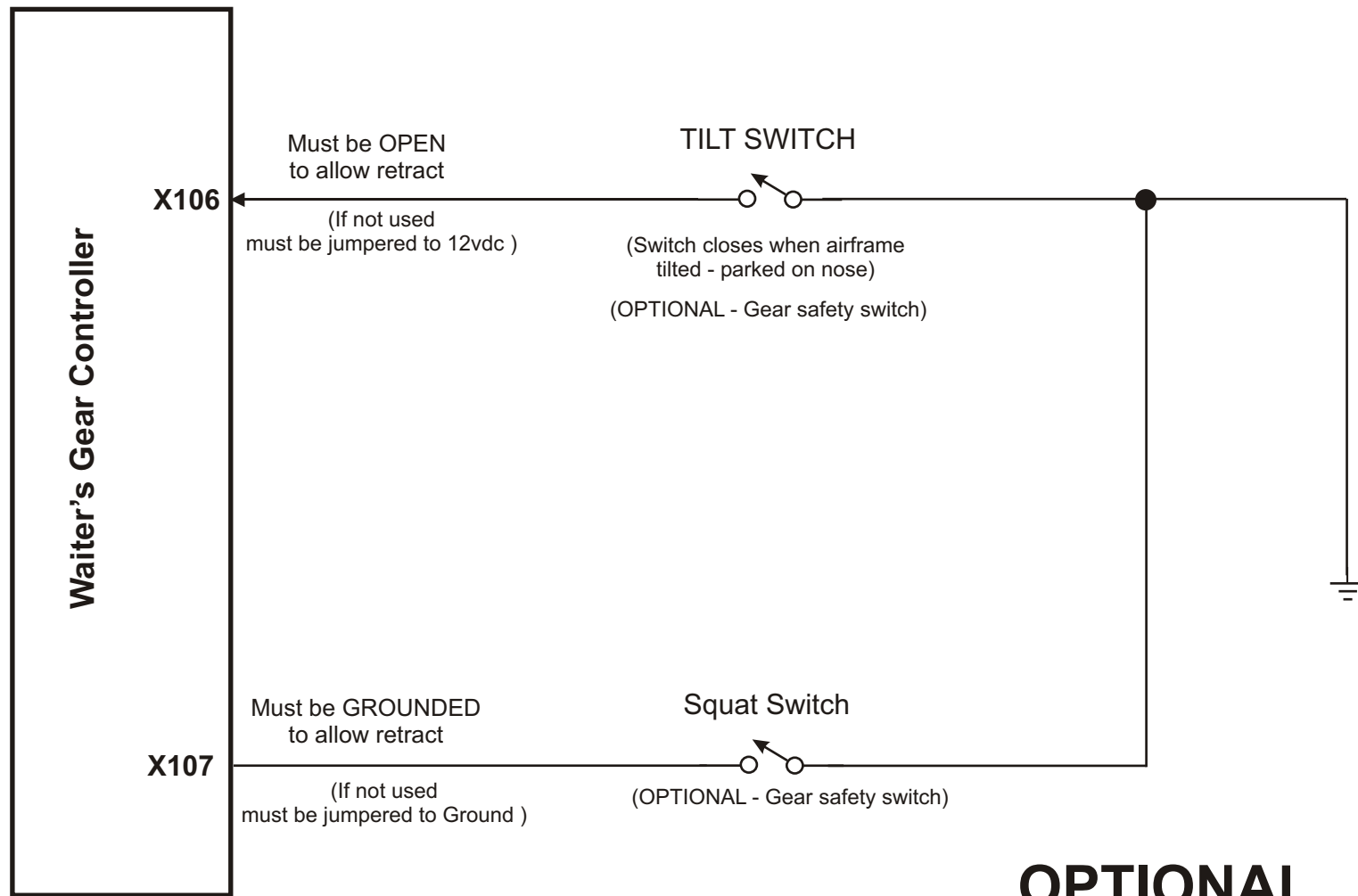


Pressure Switch opens when pressure goes above switch set point.

These switches may be purchased from Velocity Aircraft.

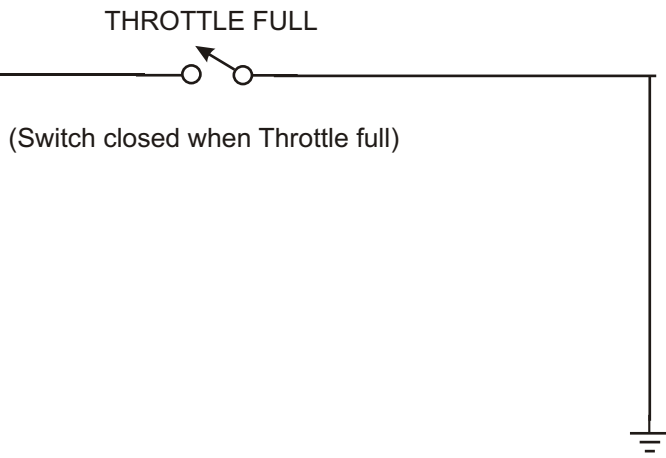
HYDRAULIC PRESSURE SWITCHES

31 MAY 2007



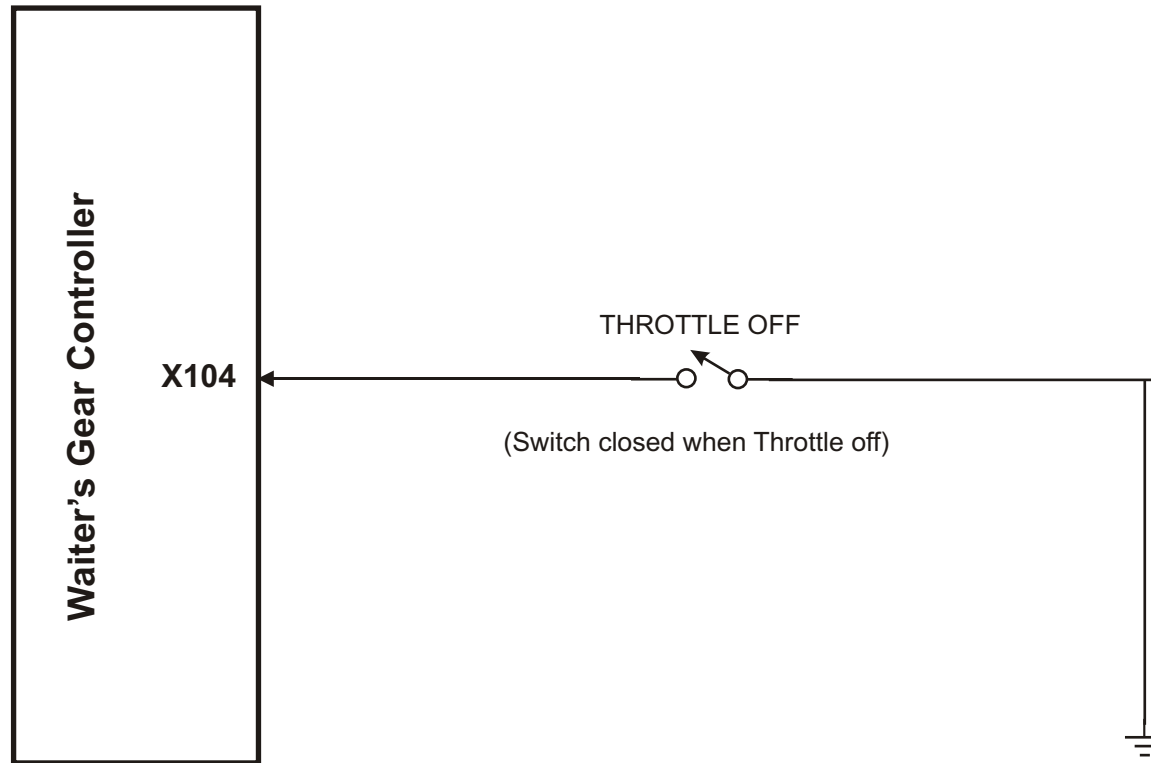
OPTIONAL GEAR RETRACT INTERLOCKS

22 MAY 2007



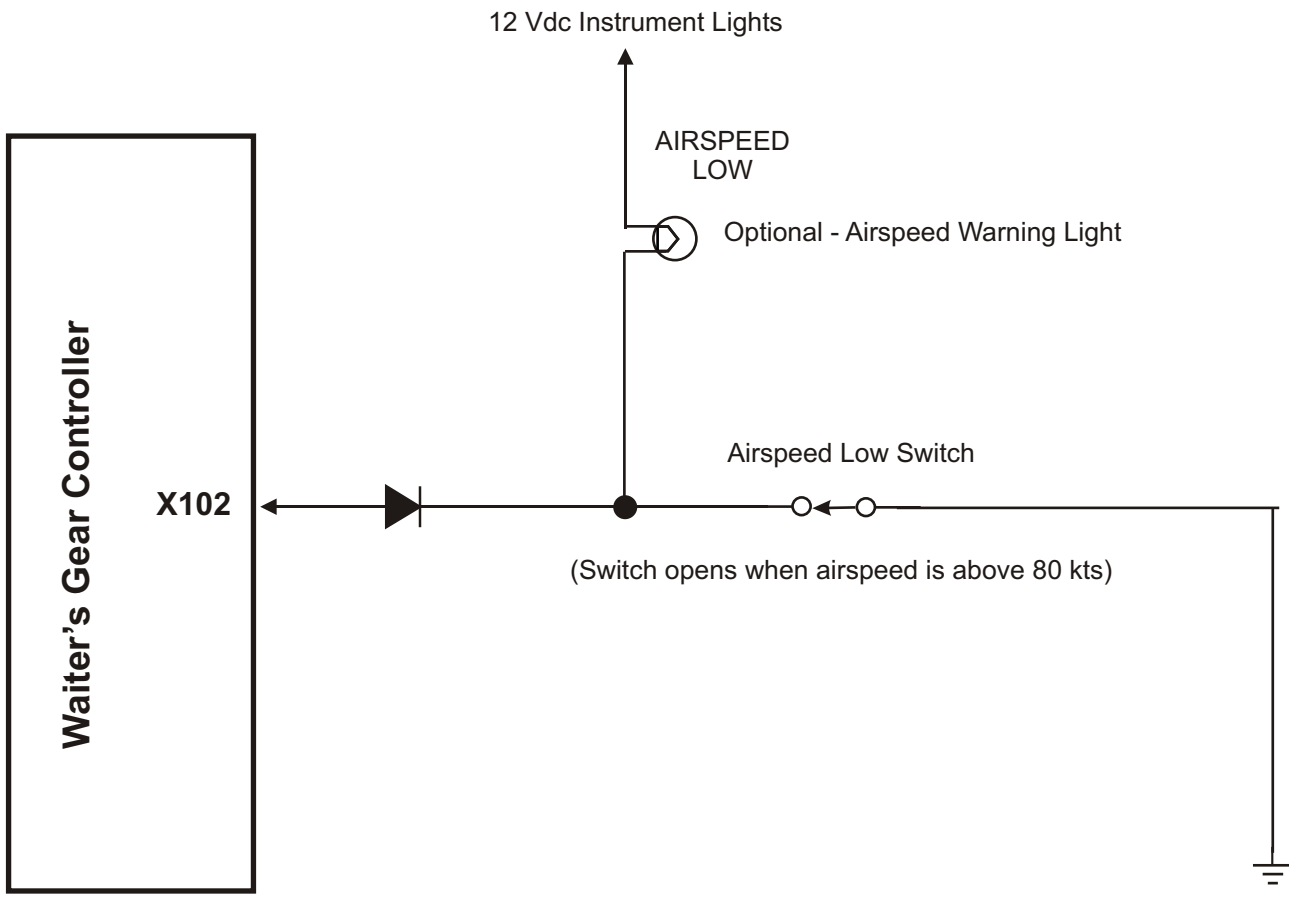
THROTTLE FULL CIRCUIT

16 April 2007



THROTTLE OFF CIRCUIT

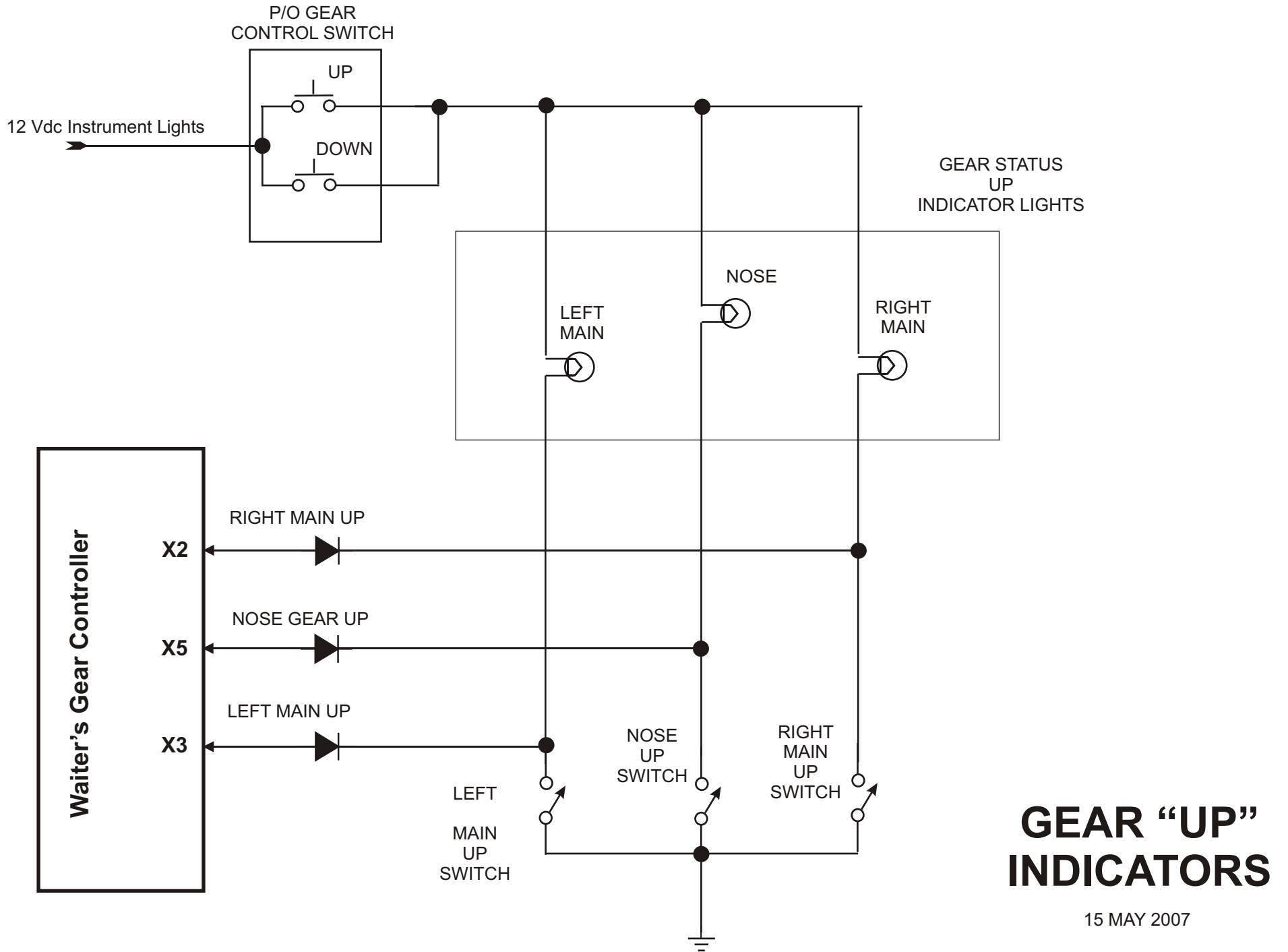
16 April 2007



All Diodes are 1N4004

AIRSPEED SENSOR

26 MAY 2007



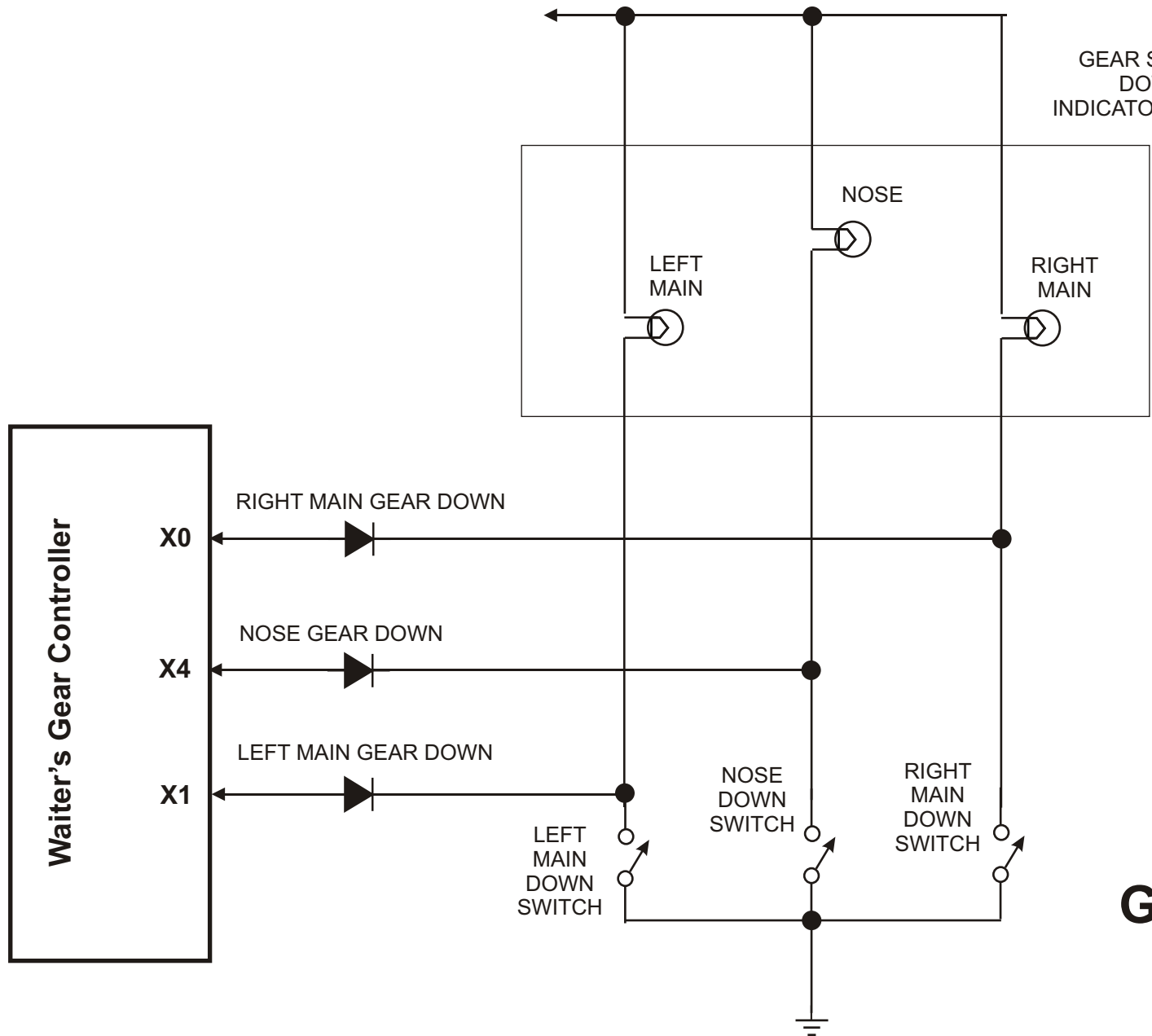
GEAR "UP" INDICATORS

15 MAY 2007

All Diodes are 1N4004

12 Vdc Instrument Lights

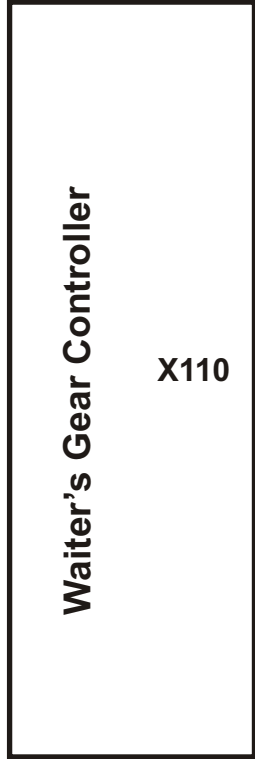
GEAR STATUS
DOWN
INDICATOR LIGHTS



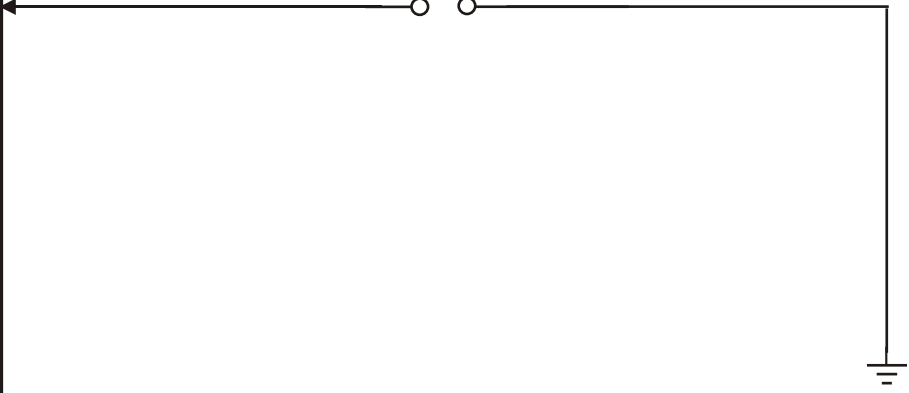
GEAR "DOWN" INDICATORS

16 APR 2007

All Diodes are 1N4004

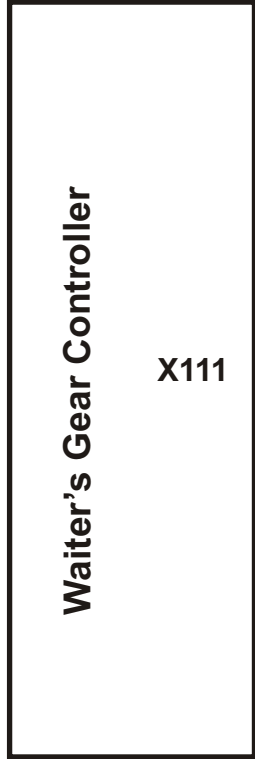


ALARM MUTE

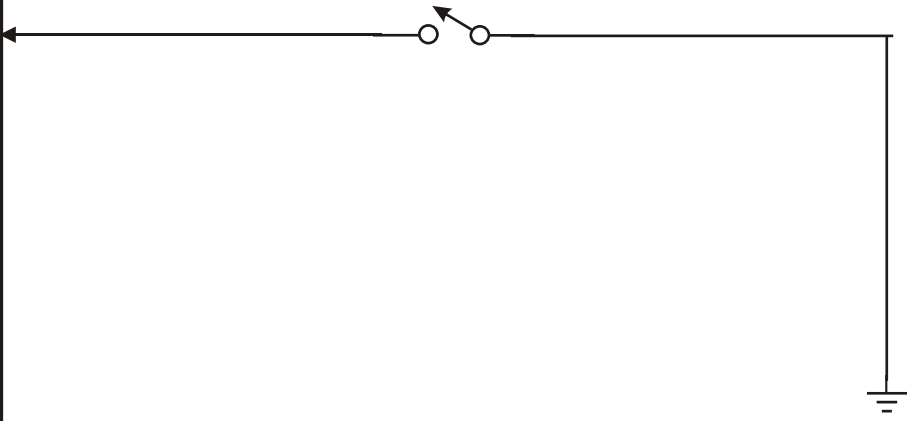


ALARM MUTE SWITCH

22 MAR 2007

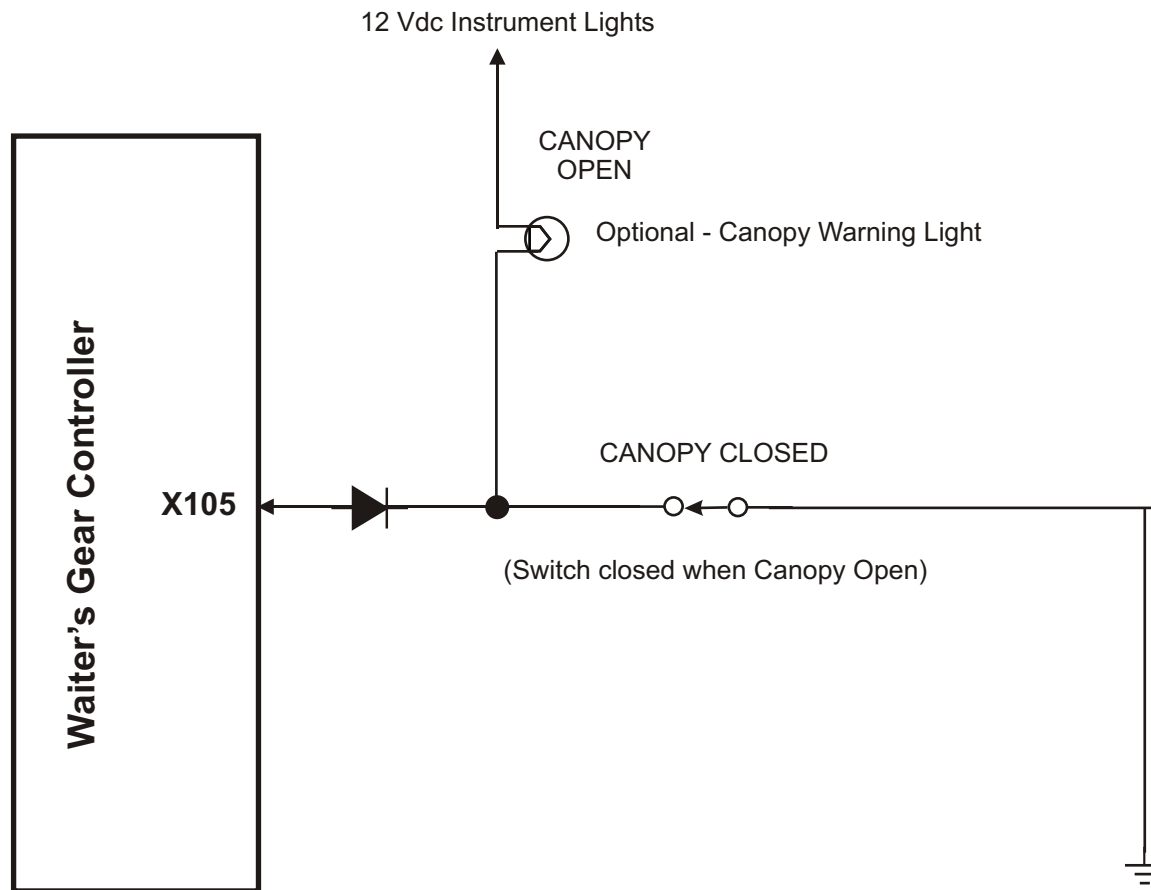


EMERGENCY RETRACT



EMERGENCY RETRACT CIRCUIT

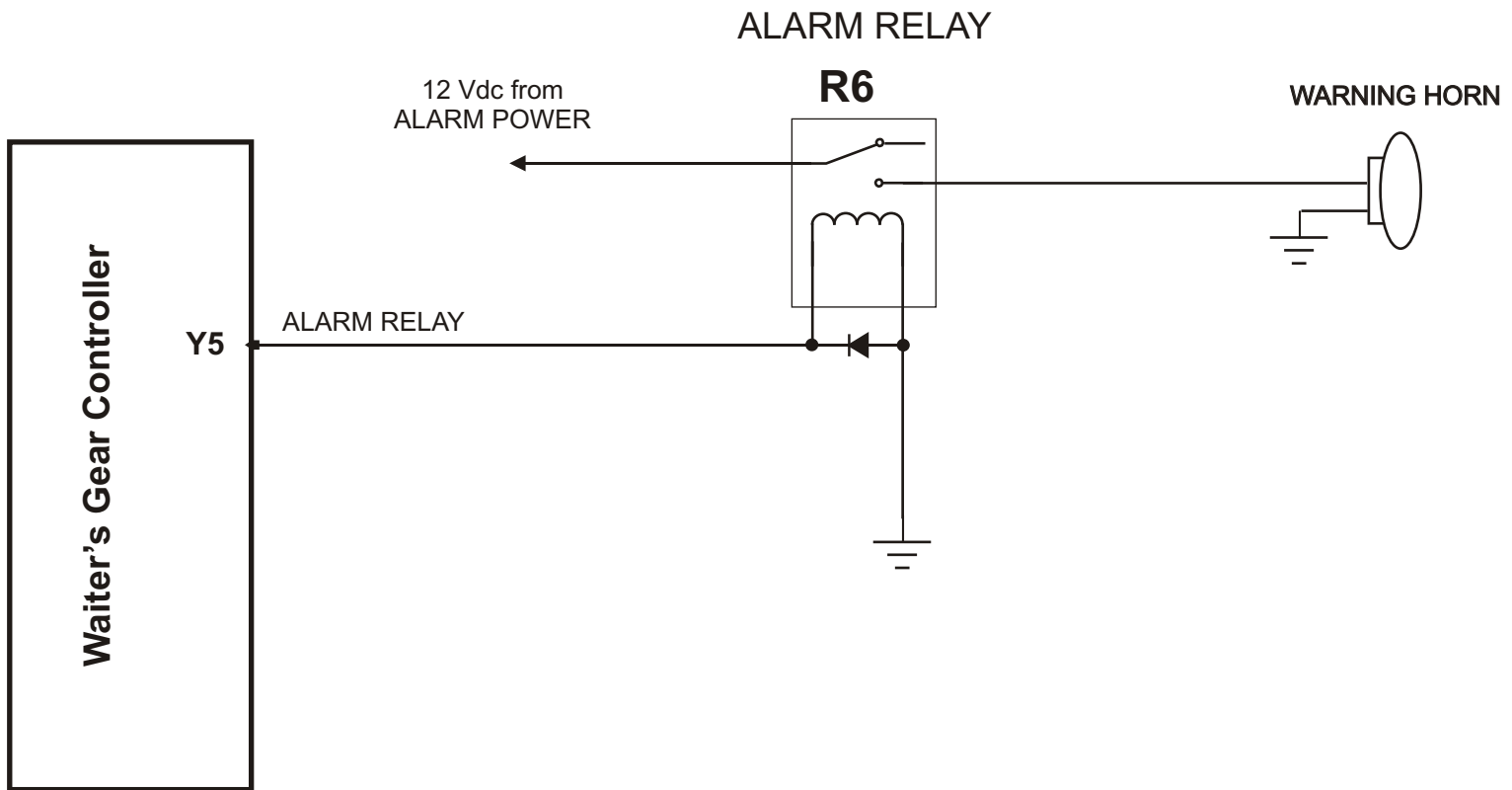
22 MAR 2007



CANOPY CLOSED CIRCUIT

All Diodes are 1N4004

26 MAR 2007

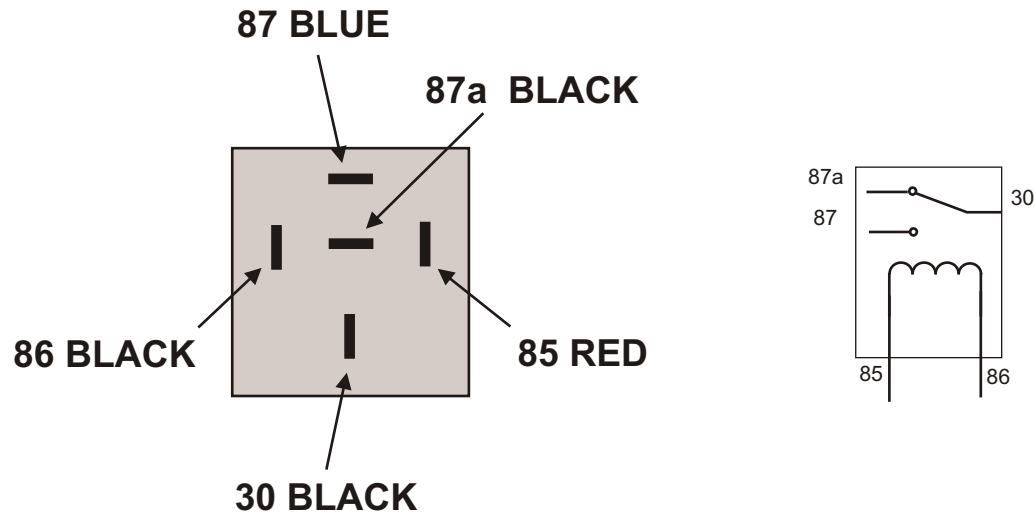


ALARM CIRCUIT

22 MAR 2007

All Diodes are 1N4004

Use this relay for R3 thru R8

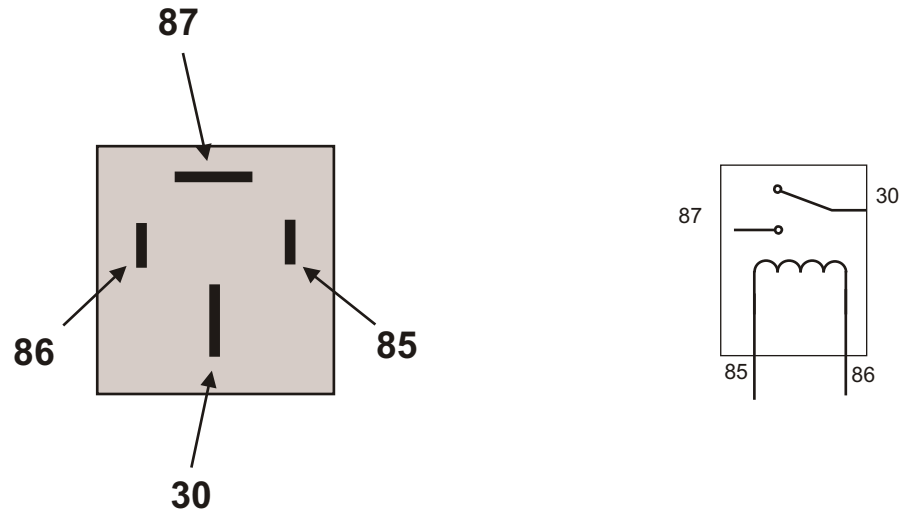


**CUBE RELAY
VIEWED FROM BOTTOM**

10 JULY 2005

The relays and a pigtail (with suppression diode) are available from Jameco. The relays are \$2.49 each (part# 148582CH) and the pigtail is \$2.35 (Part# 170624CH)

Use this relay for R1 and R2



**CUBE RELAY
VIEWED FROM BOTTOM**

22 MAY 2007

R51-1D70-12F (70 amp SPST relay)

R95-160A Socket

These parts available from Mouser Electronics (800) 346-6873