

EMERGENCY PROCEDURES
EMERGENCY PROCEDURES CHECK LIST**HYDRAULIC SYSTEM FAILURE (HYD PRESS LIGHT ON)***CAUTION*

With the hydraulic pressure at 3000 PSI it is possible to operate the system but hydraulic pump motor must operate for not more than 1 minute.

Do not operate the parking brake with the hydraulic pressure above 1200 PSI.

With the hydraulic pressure above normal value the steering will be more sensitive.

With the hydraulic pump off the steering is inoperative and the brakes are less effective.

If landing gear is down:

1. Hyd pump switch - CHECK HYD
2. HYDR WARNING/PRESS and HYDR CONT circuit breakers - CHECK IN
3. Hyd pressure - CHECK

If out of range (700 ÷ 1300 PSI) then:

4. Hyd pump switch - OFF

If landing gear is up:

1. Hyd pump switch - OFF

Immediately before landing gear extension:

2. Hyd pump switch - HYD

EMERGENCY GEAR EXTENSION

1. Gear selector - DN
2. Hyd pump switch - OFF
3. Emergency selector - PULL
4. Hand pump - OPERATE (until the 3 green lights illuminate) (about 60 strokes)

EMERGENCY BRAKE OPERATION

Pedal brake operation becomes harder than normal (about 50% increase).

1. Brakes - APPLY
2. Reverse thrust - AS REQUIRED

Normal ground roll (Figure 5-69) will increase approximately by 55% if reverse thrust is not applied.

NOTE

When operating in icing condition the ground roll with flaps MID (Figure 5-73) will increase approximately by 80% if reverse thrust is not applied.

If the airplane is NOT equipped with S.B. 80-0286 (mod. 80-0932):

STEERING SYSTEM FAILURE (STEER FAIL LIGHT ON)

1. Control Wheel Master Switch - PRESS
2. Directional control - MAINTAIN (as necessary) with differential braking
3. Steering indication on PFD - CHECK OFF

NOSE WHEEL STEER RUNAWAY

If an uncontrolled heading change occurs:

1. Control Wheel Master Switch - PRESS
2. Directional control - MAINTAIN with differential braking and asymmetrical power

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If the airplane is equipped with S.B. 80-0286 (mod. 80-0932):

STEER FAIL LIGHT ON

1. Control Wheel Master Switch - PRESS and RELEASE

NOTE

If autopilot is operating, pressing the Control Wheel Master Switch, it will be disengaged.

2. Directional control - MAINTAIN (as necessary)
3. Steering indication on PFD - VERIFY
4. STEER FAIL light - VERIFY
5. After landing do not engage the steering system

NOSE WHEEL STEER RUNAWAY

If an uncontrolled heading change occurs on-ground:

1. Control Wheel Master Switch - PRESS and RELEASE
2. Directional control - MAINTAIN (as necessary)
3. Steering indication on PFD - VERIFY
4. STEER FAIL light - VERIFY

EMERGENCY PROCEDURES
AMPLIFIED EMERGENCY PROCEDURES**HYDRAULIC SYSTEM FAILURE**

When an incorrect pressure of significant duration in the hydraulic system is detected, the HYD PRESS caution (amber) light will illuminate on the annunciator panel.

CAUTION

With the hydraulic pressure at 3000 PSI it is possible to operate the system but hydraulic pump motor must operate for not more than 1 minute.

Do not operate the parking brake with the hydraulic pressure above 1200 PSI.

With the hydraulic pressure above normal value the steering will be more sensitive.

With the hydraulic pump off the steering is inoperative and the brakes are less effective.

When the landing gear is down, check that the hydraulic pump switch is set to HYD position and the breakers labeled HYDR WARNING/PRESS and HYDR CONT on the left circuit breaker panel are in.

If the pressure gauge reading is outside of the 700 ÷ 1300 PSI range, switch OFF the hydraulic pump.

When the landing gear is up, switch OFF the hydraulic pump.

Immediately before landing gear extension, set the pump switch to HYD position.

EMERGENCY GEAR EXTENSION

If an emergency landing gear extension has to be performed, a hand pump provides hydraulic pressure for emergency landing gear extension.

CAUTION

When performing the procedure for training purpose, after completion ascertain the landing gear selector handle has been positively returned to the full down position, to avoid bleeding of hydraulic pressure with subsequent failure of landing gear retraction.

Select the gear handle DN and the hydraulic pump OFF.

PULL the emergency landing gear selector. Note that the emergency procedure is printed on a placard fitted on the control pedestal.

Operate the hand pump handle until all the three green lights illuminate: about 60 strokes and normally 90 seconds are required.

During the hand pump operation, no pressure shall be indicated by the pressure indicator on the control panel.

EMERGENCY BRAKE OPERATION

In case of hydraulic system failure, emergency brake operation is possible with about 50% increase in pedal force. After touchdown engage reverse as required: normal ground roll (Figure 5-69) will increase approximately 55% if reverse thrust is not applied.

NOTE

When operating in icing conditions, since the landing procedures are performed with flaps MID and higher speed, the ground roll distance with flaps MID (Figure 5-73) will increase approximately 80% if reverse thrust is not applied.

If the airplane is NOT equipped with S.B. 80-0286 (mod. 80-0932)

STEERING SYSTEM FAILURE

If the STEER FAIL red warning light is on, the steering system automatically disengages: nevertheless it is suggested to press the Control Wheel Master Switch. Check off the steering indications on the PFD.

Steering of the airplane is achieved through the use of differential brakes and/or power.

NOSE WHEEL STEER RUNAWAY

As soon as an uncontrolled heading change occurs, press the Control Wheel Master Switch (red button) located on the outboard horn of each control wheel.

Directional control can be maintained using differential braking and asymmetrical power.

If the airplane is equipped with S.B. 80-0286 (mod. 80-0932)

STEER FAIL LIGHT ON

If the STEER FAIL red warning light is on, the hydraulic power to the steering system automatically disengages: nevertheless it is suggested to press and release the Control Wheel Master Switch (to reset the control system) and verify the steering indication on the PFD and the STEER FAIL light.

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AMPLIFIED EMERGENCY PROCEDURES

NOTE

If autopilot is operating, pressing the Control Wheel Master Switch, it will be disengaged.

A STEER FAIL light that remains ON after press and release the Control Wheel Master Switch could indicate a permanent damage of the steering command potentiometer, feedback potentiometer or a relay in the electrical circuitry.

A STEER FAIL light that turns OFF after press and release of the Control Wheel Master Switch, could indicate a transient damage to the command potentiometer or feedback potentiometer (such as the lost of contact in a given section of the potentiometer track).

When the hydraulic power to the steering system is not selected or disengaged by the pilot (through the Control Wheel Master Switch), steering of the airplane on-ground is achieved through the use of the pedals (differential braking and rudder control), the control wheel, and/or asymmetrical power.

If a STEER FAIL light has become on, after landing do not engage the steering system in any case (i.e.: for taxi operations).

NOSE WHEEL STEER RUNAWAY

As soon as an uncontrolled heading change occurs on-ground, press the Control Wheel Master Switch (red button) located on the outboard horn of each control wheel.

Directional control can be maintained (as necessary) through Pedals, Control Wheel and asymmetrical power.