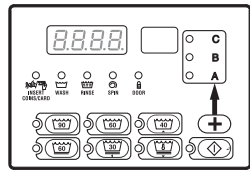


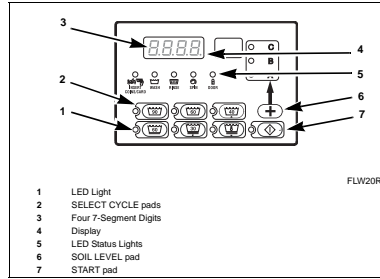
**Frontload Washer
Pocket Programming Guide**



FLW20R

Models with an "L" in the 4th Position

Keypad Definitions



- 1 LED Light
- 2 SELECT CYCLE pads
- 3 Four 7-Segment Digits
- 4 Display
- 5 LED Status Lights
- 6 SOIL LEVEL pad
- 7 START pad

Entering the Manual Programming Mode

1. If the washer is in an active cycle, rapid advance through the cycle.
2. Open the washer's service door.
3. While pressing and holding the NORMAL 90 keypad, press the PERM PRESS 60 keypad. The display will show "APd".
4. Press the NORMAL 40 (Λ) or DELICATES COLD (v) keypad until "Prog" is displayed.
5. Press the START keypad. The first manual programming option, "AtS1", is displayed.

**Keypad Definitions
Entering the Manual Programming Mode
Error Codes
Programmable Options**

Part No. 9-09-189R1G
January 2010

Error Codes

Display	Description	Cause/Correction
EI01	Transmission Failure	Communication failure. Re-aim external device and try again.
EI02	Time-out Error	Communication failure. Re-aim external device and try again.
EI03	Invalid Command Code	Communication successful, but the command was not valid for this machine type, or the control could not perform the command in its current mode of operation. Ensure data is for current machine type and control is in correct mode.
EI04	Expecting Upload Request	Communication failure. Re-aim external device and try again.
EI05	Invalid or Out-of-Range Data	The value in at least one of the programming options is invalid or out of range. Recheck the programming option's value and try again.
EI09	CRC-16 Error	Communication failure. Re-aim external device and try again.
EI0A	Framing Error	Communication error. Re-aim external device and try again.
EI0C	Time-out Exceeded	Communication error. Re-aim external device and try again.
EI0E	Encryption Error	Communication error. Re-aim external device and try again. If the problem persists, check that the security code is correct.
EI0F	Infra-red Disabled	Communication failure or infra-red is disabled. Manually enable infra-red on control or re-aim external device and try again.

Error Codes

Display	Description	Cause/Correction
EC02	Time-out Error	Communication failure. Try card again.
EC03	Invalid Command Code	Communication successful, but the command was not valid for this machine type, or the control could not perform the command in its current mode of operation. Ensure data is for current machine type and control is in correct mode.
EC05	Invalid or Out-of-Range Data	The value in at least one of the programming options is invalid or out of range. Recheck the programming option's value and try again.
EC11	No Card Reader Initialization	Communication is valid, but there is no card reader initialization. Power down, power up and try again.
EC18	No Communication	Card reader is initialized, communication lost. Power down, power up and try again. If error persists, replace control or card reader.
EC19	No Card Reader Communication	Communication failure. Power down, power up and try again. If error persists, replace control or card reader.
Right most decimal point Lit	Network Communication Error	Communication problem. Wait for 1.5 minutes for error to clear. If error doesn't clear, power-down and power-up the machine. If error persists, replace control or network board.

Error Codes

Display	Description	Cause/Correction
ALrn	Break-in Alarm Error	Service the door or coin vault switches.
oFF	Break-in Alarm Shutdown Error	Service the door or coin vault switches.
E FL	Fill Error	Pressure switch fails to open in 30 minutes (or other programmed length of time) in any fill agitate cycle.
E SP	SPI Communications Error	Master control cannot communicate with motor control. Caused by transformer unplugged or wiring to motor control incorrect. Power down the machine, power up and try again.
E dL	Door Lock Error	Door does not lock within 15 seconds of closing (open and reclose door) or doesn't unlock 3 minutes after cycle completion.
E do	Door Opened During A Running Cycle	Control detects door open and door locked inputs high. Caused by pulling on door while locked or about to lock. Correct inoperative door locking system.
E Ub	Unbalance Error	Unable to balance load. Redistribute load and run cycle.
E dF	Drive Failure	Motor unplugged, motor failure, tachometer circuit open or drum locked up. Unpower machine to reset.

Error Codes

Display	Description	Cause/Correction
door	Door Open Indicator	Door is not closed during an active cycle. If door is closed, check for improper wiring or faulty door switch.
E rr	Coin Error	Invalid coin pulse or inoperative coin sensor. Check coin drop area and remove obstructions. If error persists, tampering may have occurred. Evaluate security procedures.
E oP	Open Thermistor Error	Thermistor circuit opens while heating. Heater will turn off and cycle will continue.
E SH	Shorted Thermistor Error	Thermistor circuit is shorted while heating. Heater will turn off and cycle will continue.
E Ht	Heater Error	Programmed temperature hasn't been reached in more than two hours. Cycle will continue with heater off.

Programmable Options				
Option Number	Option Display	Description	Default	Range
1	MS1	Vend Price #1	200	0-85,535
2	dfE1	Coin #1 Value	25	1-85,535
3	dfE2	Coin #2 Value	100	1-85,535
4	PLSE	Start Pulse Mode	25	0FF, 1-28, 192
5	PLSN	Start Pulse Mode	0FF	0FF, 1-28, 192
6	ADST	Adaptor Type	0	0-3
7	GYC	Adaptor Type	6	0-3
8	OP	OP Mode	0FF	0FF, 01/0FF
9	AUI	Audio Signal	29	0-31
10	CAV	Card Reader Display Control	0FF	01/0FF
11	Err	Errors	—	—
a.	CEFF	Coin Error Parameters	—	—
1.	CE1	Coin Error	on	01/0FF
2.	CE2	Coin Error Penalty	0FF	01/0FF
3.	CE3	Coin Drops Header Present Error	on	01/0FF
b.	E FL	Fill Error	on	01/0FF
c.	E Ub	Unbalance Error	on	01/0FF
d.	E oP	Open Thermistor Error	on	01/0FF
e.	E SH	Shorted Thermistor Error	on	01/0FF
f.	E HT	Heater Error	on	01/0FF
12	YXC	Cycle Programming	—	—
13	MS2	Vend Price #2	200	0-85,535
14	MS3	Vend Price #3	200	0-85,535
15	MS4	Vend Price #4	200	0-85,535
16	MS5	Vend Price #5	200	0-85,535
17	MS6	Vend Price #6	200	0-85,535
18	MS7	Vend Price #7	—	—
a.	RC1	Real Time Clock	—	—
b.	RC2	Set Real Time Clock Minutes	—	—
c.	RC3	Set Real Time Clock Hours	—	—
d.	RC4	Set Real Time Clock Day	—	—
e.	RC5	Set Real Time Clock Date	—	—
f.	RC6	Set Real Time Clock Month	—	—
g.	RC7	Set Real Time Clock Year	—	—
9.	rc7	Daylight Savings Option	on	01/0FF
19	SFA	Special Vend A data	—	—
a.	SA01	Special Vend A Days Enable	0	0-23
b.	SA02	Special Vend A Start Hour	0	0-23
c.	SA03	Special Vend A Start Minutes	0	0-59
d.	SA04	Special Vend A Start Months	0	0-12
e.	SA05	Special Vend A Start Years	0	0-31
f.	SA06	Special Vend A Start Date	0	0-31
g.	SA07	Special Vend A Start Year	0	0-99
h.	SA08	Special Vend A End Month	0	0-12
i.	SA09	Special Vend A End Date	0	0-31
j.	SA10	Special Vend A End Year	0	0-99
k.	SA11	Special Vend A Price #1	0	0-85,535
l.	SA12	Special Vend A Price #2	0	0-85,535
m.	SA13	Special Vend A Price #3	0	0-85,535
n.	SA14	Special Vend A Price #4	0	0-85,535
o.	SA15	Special Vend A Price #5	0	0-85,535
p.	SA16	Special Vend A Price #6	0	0-85,535
q.	SA20	Special Vend A Added Wash #4 Full/Plate Time	0	0-15
r.	SA21	Special Vend A Subtracted Wash #4 Full/Plate Time	0	0-15
20	SP0	Special Vend B Days Enable (On/Off)	0FF	01/0FF
21	SP1	Special Vend C Days Enable (On/Off)	0FF	01/0FF
22	SP2	Special Vend D Days Enable (On/Off)	0FF	01/0FF
23	SP3	Special Vend E Days Enable (On/Off)	0FF	01/0FF
a.	CP1	Cycle Modifier Programming	—	—
b.	CP2	Cycle Modifier Heavy Price	25	0-85,535
c.	CP3	Cycle Modifier Medium Price	50	0-85,535
d.	CP4	Cycle Modifier Medium Option	2	0-15
e.	CP5	Cycle Modifier Heavy Option	3	0-15
f.	CP6	Cycle Modifier Added Wash Time	2	0-15
**1.	CP6	Default Cycle Modifier	0	0-2
**24	PC0	Cycle Time Display	—	—
**a.	PC0E	Cycle Time Display Enable	0FF	01/0FF
**b.	PC1	Cycle #1 Time	34	0-255
**c.	PC2	Cycle #2 Time	34	0-255
**d.	PC3	Cycle #3 Time	32	0-255
**e.	PC4	Cycle #4 Time	31	0-255
**f.	PC5	Cycle #5 Time	28	0-255
**g.	PC6	Cycle #6 Time	28	0-255
25	WOP	Wash Only Mode (On/Off)	0FF	01/0FF
26	LPSA	Low Power/Auto Shutdown A Days Enable (On/Off)	0FF	01/0FF
27	LPSB	Low Power/Auto Shutdown B Days Enable (On/Off)	0FF	01/0FF
28	LPSG	Low Power/Auto Shutdown C Days Enable (On/Off)	0FF	01/0FF
29	LPSd	Low Power/Auto Shutdown D Days Enable (On/Off)	0FF	01/0FF
30	PFR	Power Fail Reset	0FF	0FF/133-255
31	IRA	IR Access (On/Off)	on	01/0FF
32	RAEn	Manual Report Advance (On/Off)	on	01/0FF
33	MAEn	Manual Diagnostics (On/Off)	on	01/0FF
34	PIEn	Production Test Cycle (On/Off)	on	01/0FF

*Refer to the programming manual supplied with the machine for value definition.

**This option available in software version 'S.02' or higher only.