



FLEXXAIRE

Robust Intelligence | *Engine Cooling Systems*



CASE IH PATRIOT 4440 SPRAYER Reversible Fan Installation Guide

KIT COMPONENTS

- FLEXXAIRE P/N 65364
- FLEXXAIRE DOCUMENT 01996

- Fan Spacer installation hardware
- Hydraulic Valve installation hardware
- Hydraulic hoses to hydraulic valve
- P-clips (2) and hardware, T fittings (2)
- Hydraulic adapter fitting for supply line to fan
- Hydraulic adapter fittings to connect hoses
- Fan control module mounting hardware
- Flexxaire reversing fan kit
- Instructions

- NOTE: all orientation is referenced as-if sitting in operator seat

INSTRUCTIONS FOR ADAPTOR TO FAN DRIVE INSTALLATION

Requires different mounting hardware than stock fan installation (4 pieces of each item)

- **M10 - 1.5x 60, Hex Head, DOR**
 - CNH part Number 86980406
 - Flexxaire p/n 15739
- **0.406" ID x 0.812" OD X 0.089" Thick Washer**
 - CNH part number 87529233
 - Flexxaire p/n 10658 (0.062" thick)
 - washer OD important due to minimal clearance in adapter
- Tighten hardware to 40 ft-lbs
- Install removable Loctite (242) on bolts



Follow instructions from Flexxaire as no modifications are required for this application

- See Flexxaire Manual p/n 01524
- To test the fan installation, Spin the fan drive with the fan installed before tightening the drive belt to the A/C compressor.



ADDING HOLE TO SHROUD FOR FAN REVERSING SUPPLY HOSE

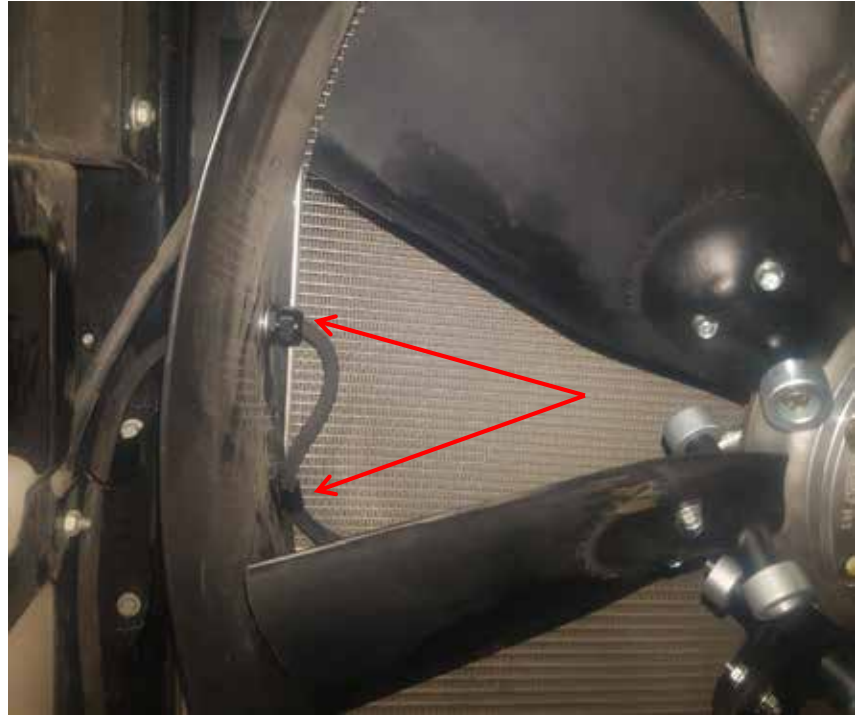
- Need to drill a hole in the left hand side of the fan shroud to allow installation of the bulkhead fitting for the fan reversing hose
- Mark the location at approx. the 9 o'clock position, inline with the bracket/weld seam that is on the flat area of the shroud, and approx. 2" back from the flat area
- Drill 0.75" Size hole

Note: Supply hose line from fan to valve is 70" long. See page 8 for details on connecting to the valve



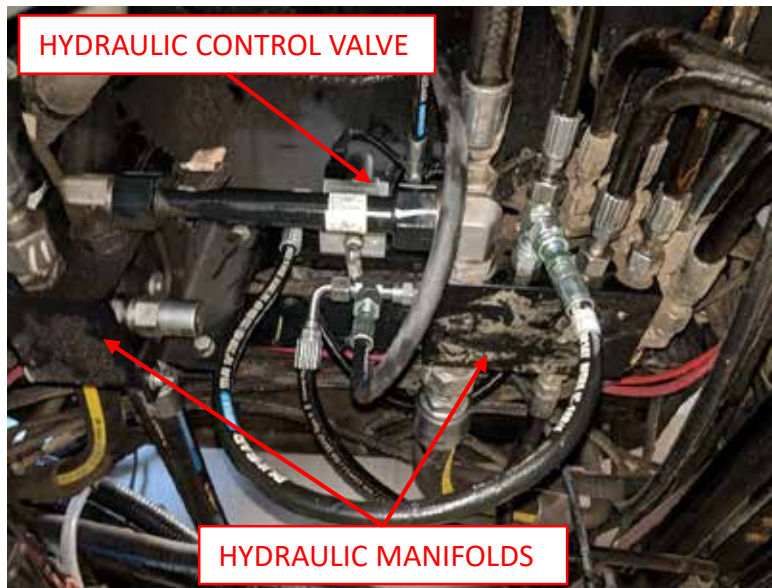
DETAILS TO INSTALL FAN REVERSING HOSE

- Attach hose to the fan hub
- Route hose to the left side of the shroud thru the hole that was drilled in the previous step
- Use a p-clip to secure the hose to the radiator shroud as shown in picture, leaving a natural curve to allow for some flexing of the hose. M5 bolts, washers, and lock nuts are supplied
- Tighten the bulkhead fitting



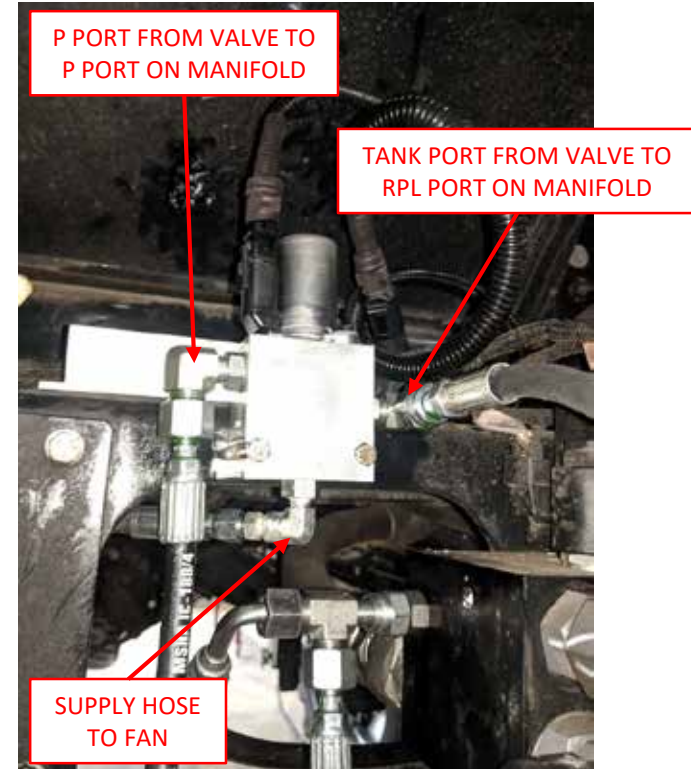
MOUNTING HYDRAULIC CONTROL VALVE

- Locate the (2) hydraulic manifolds underneath the frame/support crossbeam, underneath the fan
- Position the valve approximately centered between them on the backside of the frame/support cross beam
- Position the hydraulic valve with the wire harness connector on the LH side. (P-port LH / Tank-port RH)
- Using the holes in the hydraulic valve as the template, mark the mounting bracket and drill holes
- Mount hydraulic valve with supplied hardware (M6 Bolts, Washers, and Lock Nuts)
- Flexxaire p/n's for hardware are:
 - p/n 18305 – M6 bolt x 50mm
 - p/n 10712 – M6 flat washer
 - p/n 17442 – M6 lock nut



PLUMBING HYDRAULIC CONTROL VALVE

- Requires 90° elbows on all 3 valve ports:
 - Requires a 90° fitting on the supply pressure (P) port (red circle) (#6ORB male x #6ORFS male)
 - Requires a 90° fitting on the tank port (#6ORB male x #6ORFS male)
 - Requires a 90° fitting on the fan port (#6ORB male x #4 JIC male)
- Route hydraulic supply hose to fan underneath frame/support crossbeam



PLUMBING HYDRAULIC PRESSURE TO THE HYDRAULIC CONTROL VALVE

- Using the RH hydraulic manifold (the pressure compensated pump provides the oil supply)
- Remove the hose from “P” port on manifold
- Install a “T” fitting into this port (#6ORB female x #6ORFS male x #6ORFS male) and reconnect hose
- Connect the “pressure” hydraulic hose to this port
- Route this hose to the left and under to the 90° elbow in the hydraulic control valve “P” port

Note:

Hydraulic hose is 23” long, with #6ORFS female fittings on each end. #6ORFS male to #8ORFS female fitting is supplied.



PLUMBING TANK FLOW TO THE HYDRAULIC CONTROL VALVE

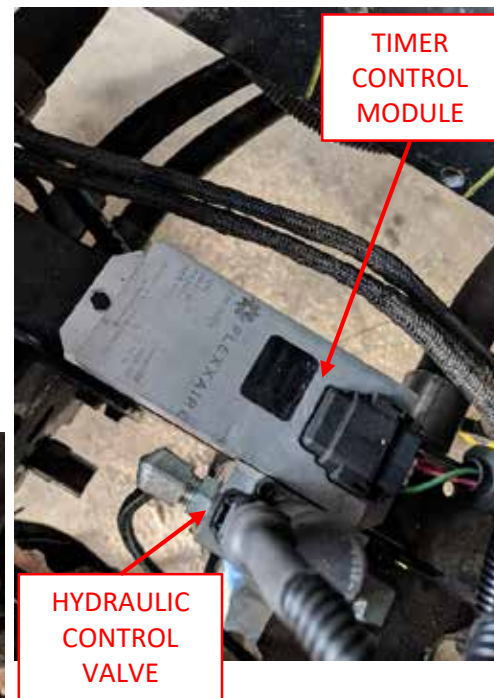
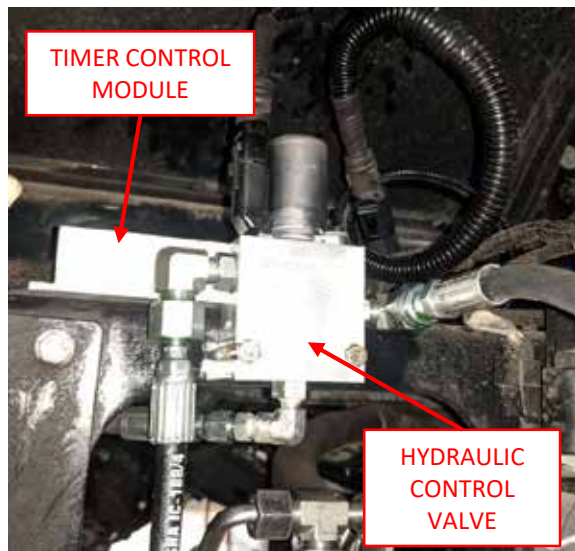
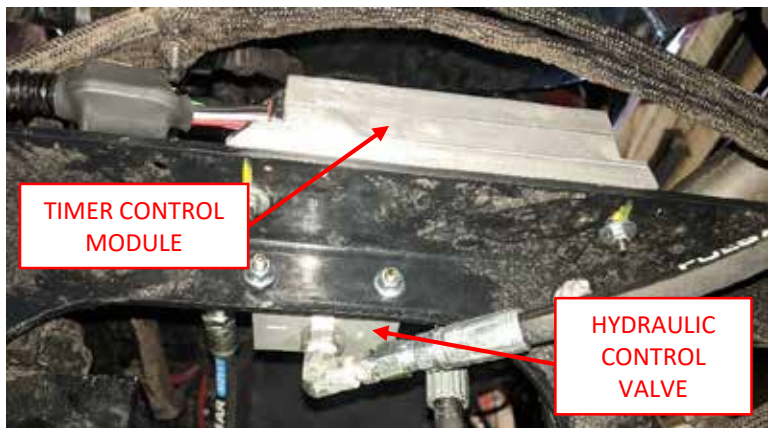
- Remove the hose from "RPL" port on manifold
- Install a "T" fitting into this port (#6ORB female x #6ORFS male x #6ORFS male) and reconnect hose
- Connect the "tank" hydraulic hose to this port
- Route the hose down and under hydraulic hardline and up to the 90° elbow in the hydraulic control valve "Tank" port

Note:
Hydraulic hose is 23" long, with #6ORFS female fittings on each end.
#6ORFS male to #8ORFS female fitting is supplied.



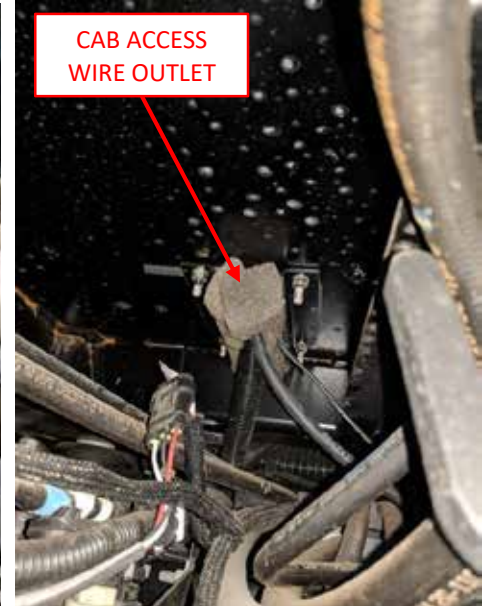
INSTALLING THE REVERSING FAN CONTROL MODULE

- Position the Timer / Control module on top of the frame/support cross beam (next to the hydraulic valve)
- Mark holes on beam, using the control module as the template, and drill 0.25" Dia holes
- Attach control with mounting hardware
- M5 x 20 mm long
- M5 lock nut and washers
- Route wiring harness to hydraulic valve and connect with the appropriate connector (12-pin plug connects to the timer, 2-pin plug to the valve, 4-pin receptacle for power/switch from cab)
- Flexxaire p/ns for hardware are:
 - p/n 15741 - M5 bolt x 20mm
 - p/n 15743 - M5 lock nut
 - p/n 18346 – M5 washer



INSTALLING THE REVERSING CONTROL SWITCH IN THE CAB

- The momentary controlled fan reversing switch will be located under the arm rest in the RH console
- Remove the blanking plug in the port shown
- Pull the 228" long harness up through the Cab Access Wire outlet underneath the rear RH side of the cab (the end with the female terminals and 2-pin receptacle goes into the cab).
- Run wires from Cab Access Wire outlet to under arm rest. Secure to existing harness with ties
- Attach the appropriate electrical wires to the switch per the Flexxaire instructions and install the switch.



INSTALLING THE POWER HARNESS IN THE CAB

- Open the rear RH corner pillar to gain access to wiring
- Connect the 2-pin plug to the 2-pin receptacle on the switch-to-valve harness under the arm rest in the RH console. Route the harness through the triangular access panel up to the RH corner pillar.
- Tie into wire X-059F “BB RADIO” using the butt splices installed on the harness. Heat shrink the splices after crimping.
 - White: 12V keyed and fused
 - Black: Ground

Note:

This electrical harness is 85” long. Flexxaire p/n 18304. One end connects to wire X-059F “BB RADIO” as shown. The other end has a 2-pin plug and connects to the switch-to-valve harness.

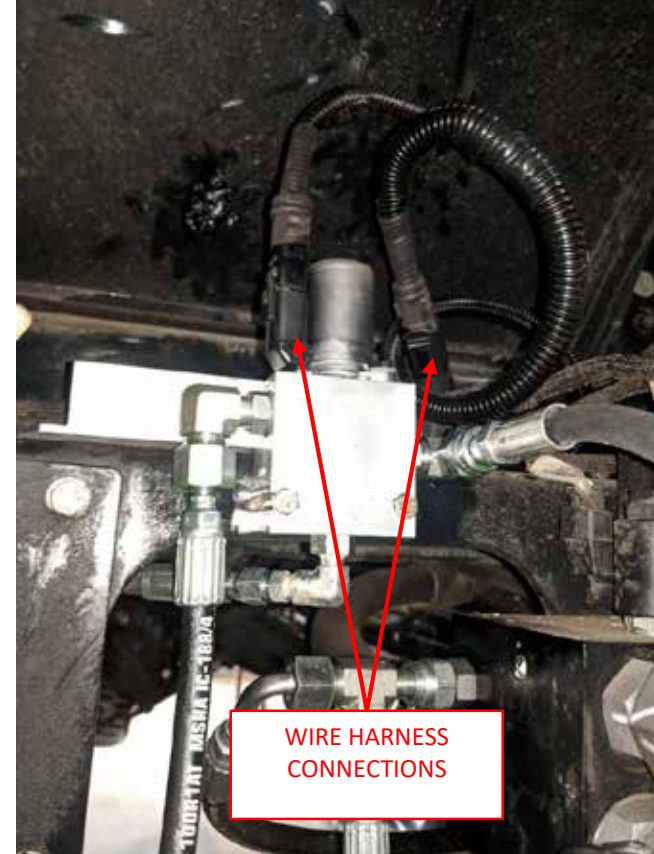
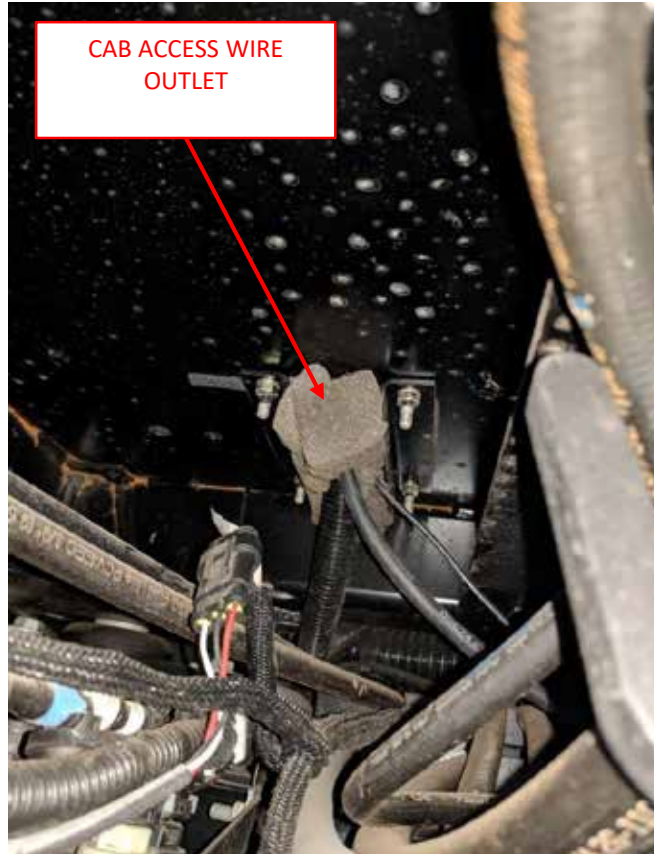


INSTALLING THE ELECTRICAL HARNESS FROM THE SWITCH TO THE CONTROL MODULE

- Stretch the electrical harness from the Cab Access Wire Outlet back along the RH side of the frame rail and connect to the appropriate 4-pin connector on the fan control module harness.

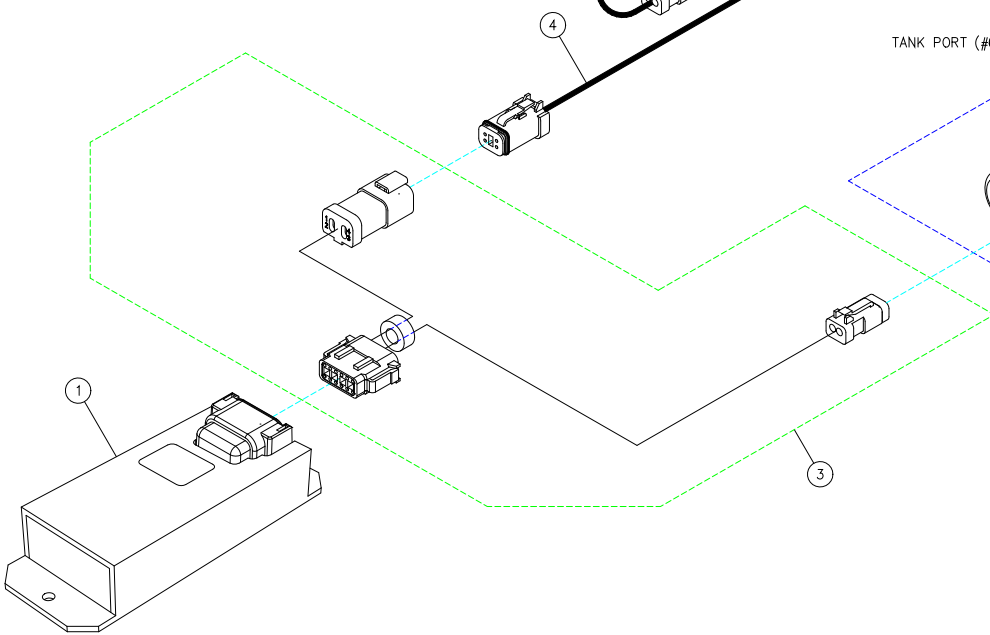
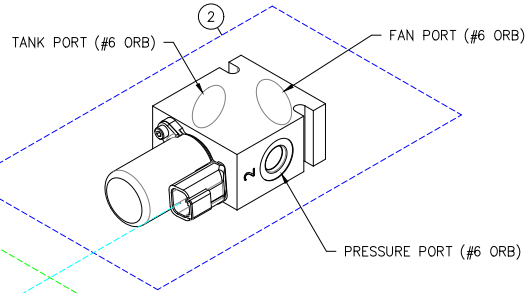
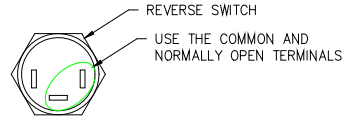
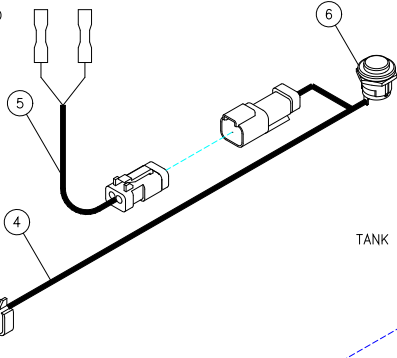
Note:

This electrical harness is 228" long, Flexxaire p/n 18303. The female 0.110" connectors attach to the common and normally closed poles on the switch (they may have to be tightened onto the poles in order to stay connected). The 85" power harness plugs into the 2-pin receptacle on this harness. The timer end of the harness has a 4-pin plug end and connects to the timer harness



2 POSITION HYDRAULIC CONTROL SYSTEM SCHEMATIC

BUTT SPLICE CONNECTION TO
WIRE X-059F "BB RADIO" IN
REAR RH CORNER PILLAR
WHITE: 12V POWER
BLACK: GROUND

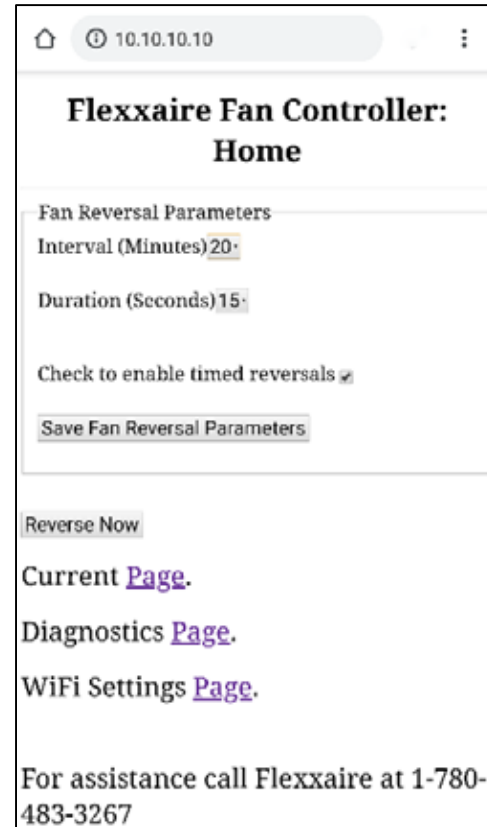


Item	Qty	Part Number	Description
1	1	18268	TIMER
2	1	15922	PROPORTIONAL VALVE, 24V
3	1	18302	SPIDER HARNESS, CASE 4440
4	1	18303	HARNESS, SWITCH TO VALVE
5	1	18304	HARNESS, POWER, CORNER PILLAR
6	1	16000	PUSHBUTTON REVERSE SWITCH

ACCESSING THE 2 POSITION HYDRAULIC CONTROL SYSTEM BY WI-FI

The Flexxaire timer ships with the following settings:

- The interval time between reverse cycles is 20 minutes.
- The reverse time (duration) is 15 seconds.
- Timed (automatic) reversals are enabled.
- The Wi-Fi network will be active for 2 minutes unless it is connected to.
- The timer can be connected to over Wi-Fi using a phone browser in order to change settings.
 - Wi-Fi network name:
Flexxaire####
(where #### is the serial number of the timer)
 - Wi-Fi password (ten zeroes):
0000000000
 - Main internet page:
10.10.10.10
(shown at right)



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THANK YOU

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