



Doing Our Best to Provide You the Best

8C010262, Rev. AB

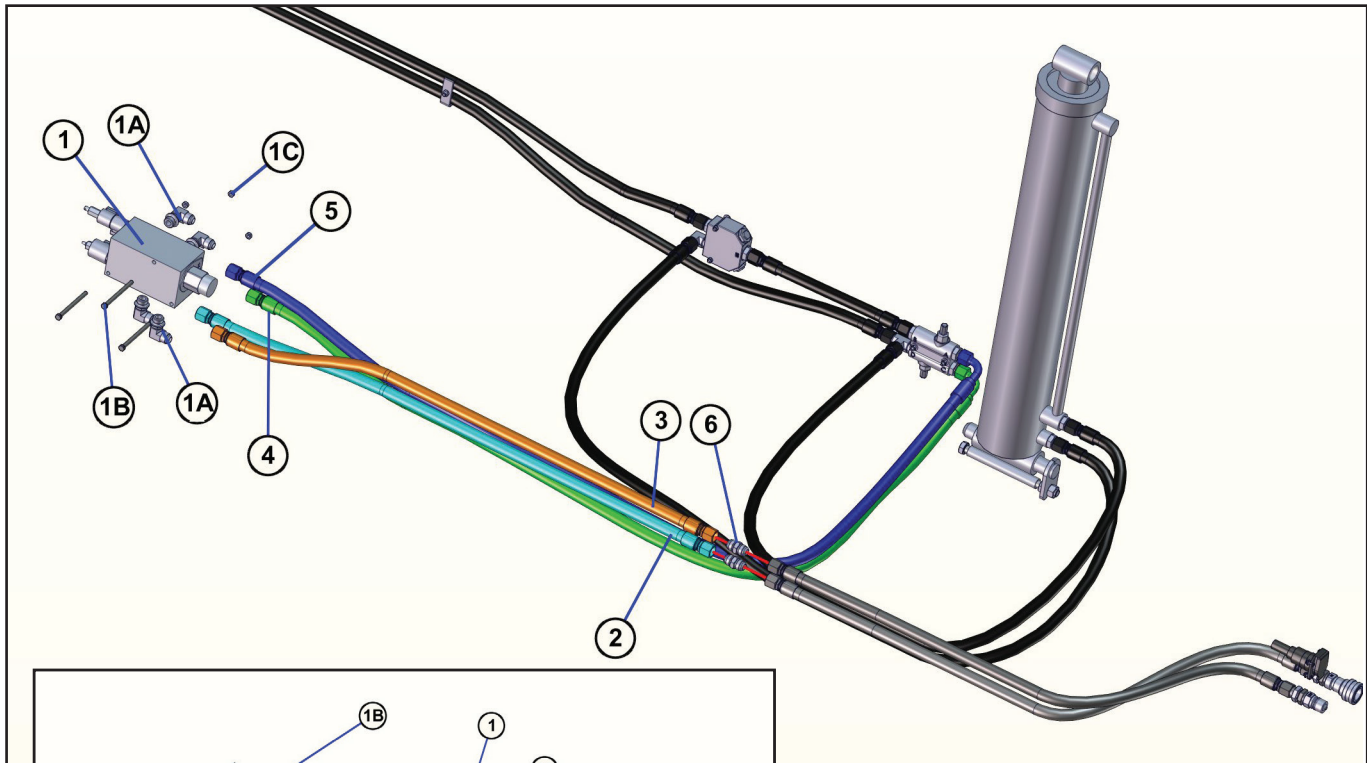
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TRAILER PRO

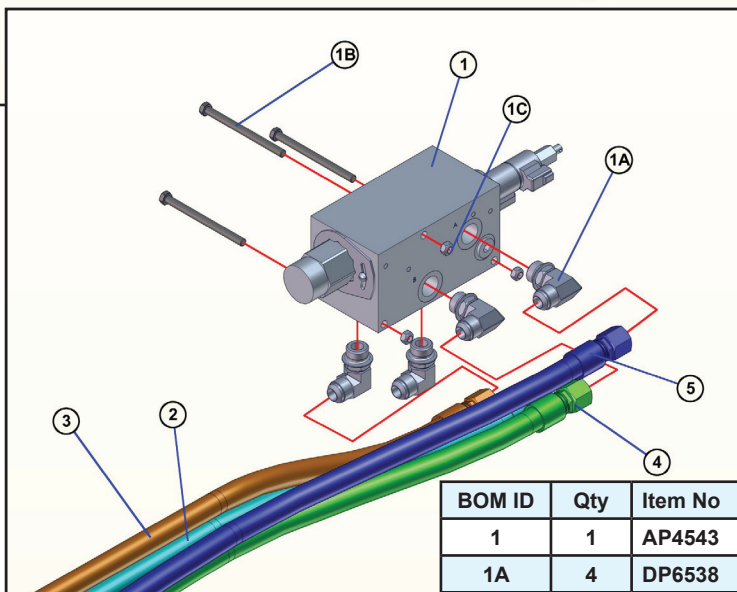
Electric Over Hydraulic Kit



OPERATOR MANUAL



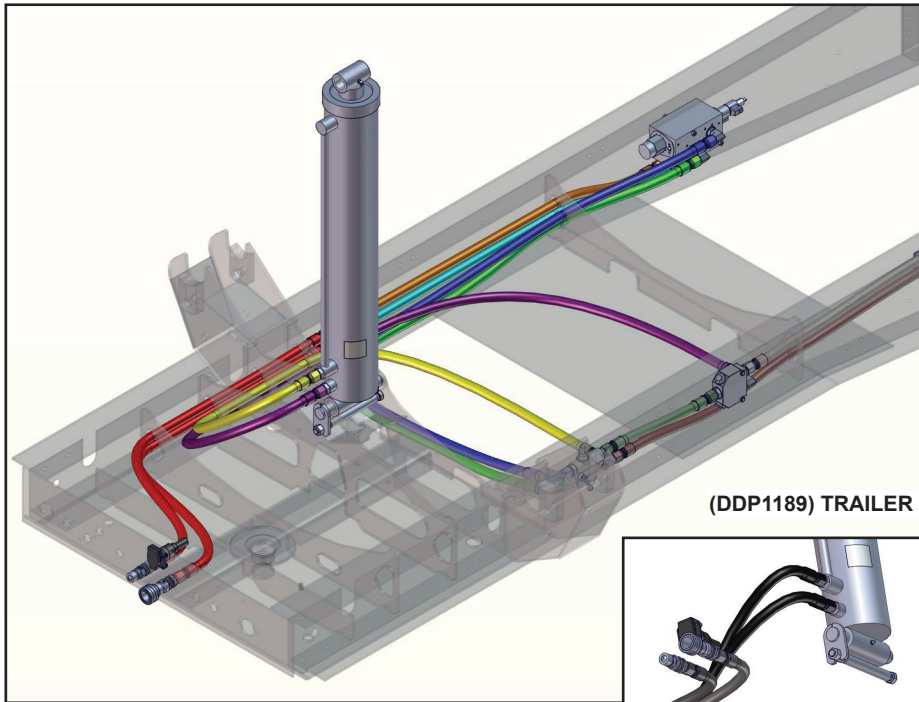
TO CONVERT YOUR DEMCO TRAILER TO **TRAILER PRO** ELECTRIC CONTROLS, SEE YOUR DEALER FOR COMPLETE KIT AND PRICING FOR **FK2018**.



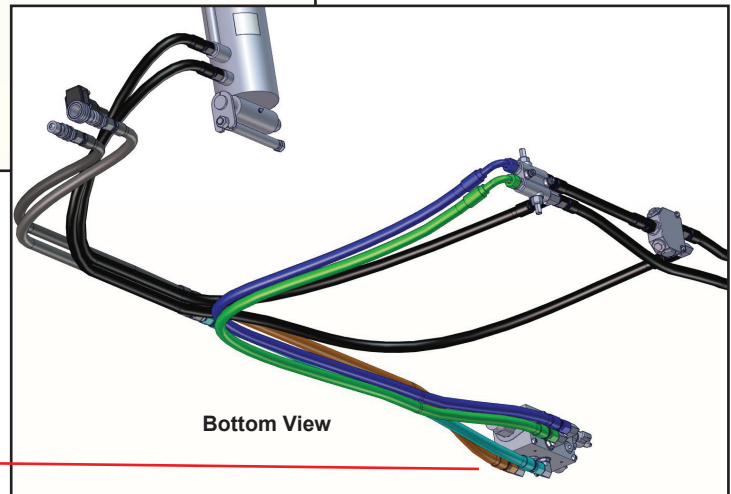
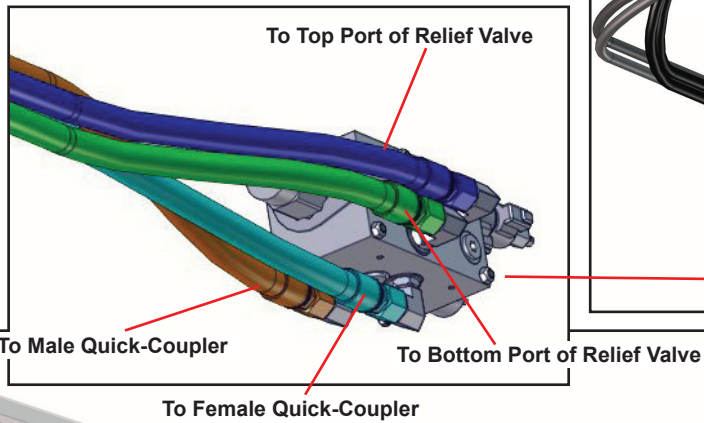
BOM ID	Qty	Item No	Description
1	1	AP4543	VALVE, ELECTRIC/HYDRAULIC
1A	4	DP6538	ADAPTER, 12MJ-12MSAE 90 DEGREE, 6801-12
1B	3	BP3118	HEX CAP SCREW, 3/8"-16 X 5", GRADE 5, PLATED
1C	3	BP3612	NUT, HEX LOCK, 3/8"-16, TOP LOCK
2	1	DP6546	HOSE, HYDRAULIC, 3/4" X 57", 12FJX-12FJX
3	1	DP6554	HOSE, HYDRAULIC, 3/4" X 53", 12FJX-12FJX
4	1	DP6614	HOSE, HYDRAULIC, 3/4" X 105", 12FJX-12FJX90
5	1	DP6615	HOSE, HYDRAULIC, 3/4" X 108", 12FJX-12FJX90
6	2	DP4388	UNION, 12MJ-12MJ, 2403-12

FK2017 KIT, TRAILER PRO CONTROL BOX FOR 2ND TRACTOR, WITH ROLL RITE

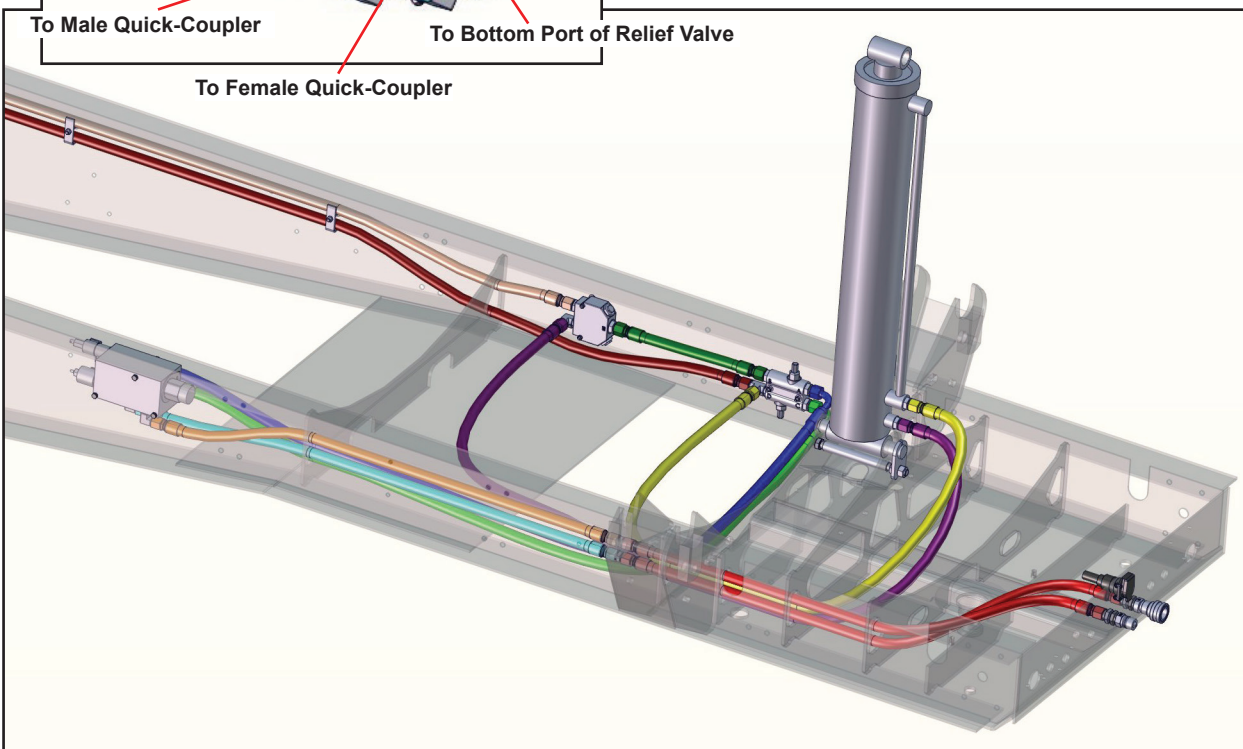
- 1. AP4235 1 Plug, 2 Pin, Male, Cole Hersee, Tarp
- 2. AP4296 1 Tarp Motor Wire, Per Ft, Roll Rite 11330
- 3. AP4533 2 Ring Terminal, #6 Wire, 3/8" Ring, Aero 0755-626503
- 4. AP4534 2 Ring Terminal, #6 Wire, 3/16" Ring, Aero
- 5. AP4548 1 Control Box, 3 Function, Electric/Hydraulic 2013, 304-060
- 6. AP4568 1 Circuit Breaker, 35 Amp. Roll Rite 17918
- 7. 010259 1 Instructions, Tractor Wiring, Trailer Pro/Roll Rite

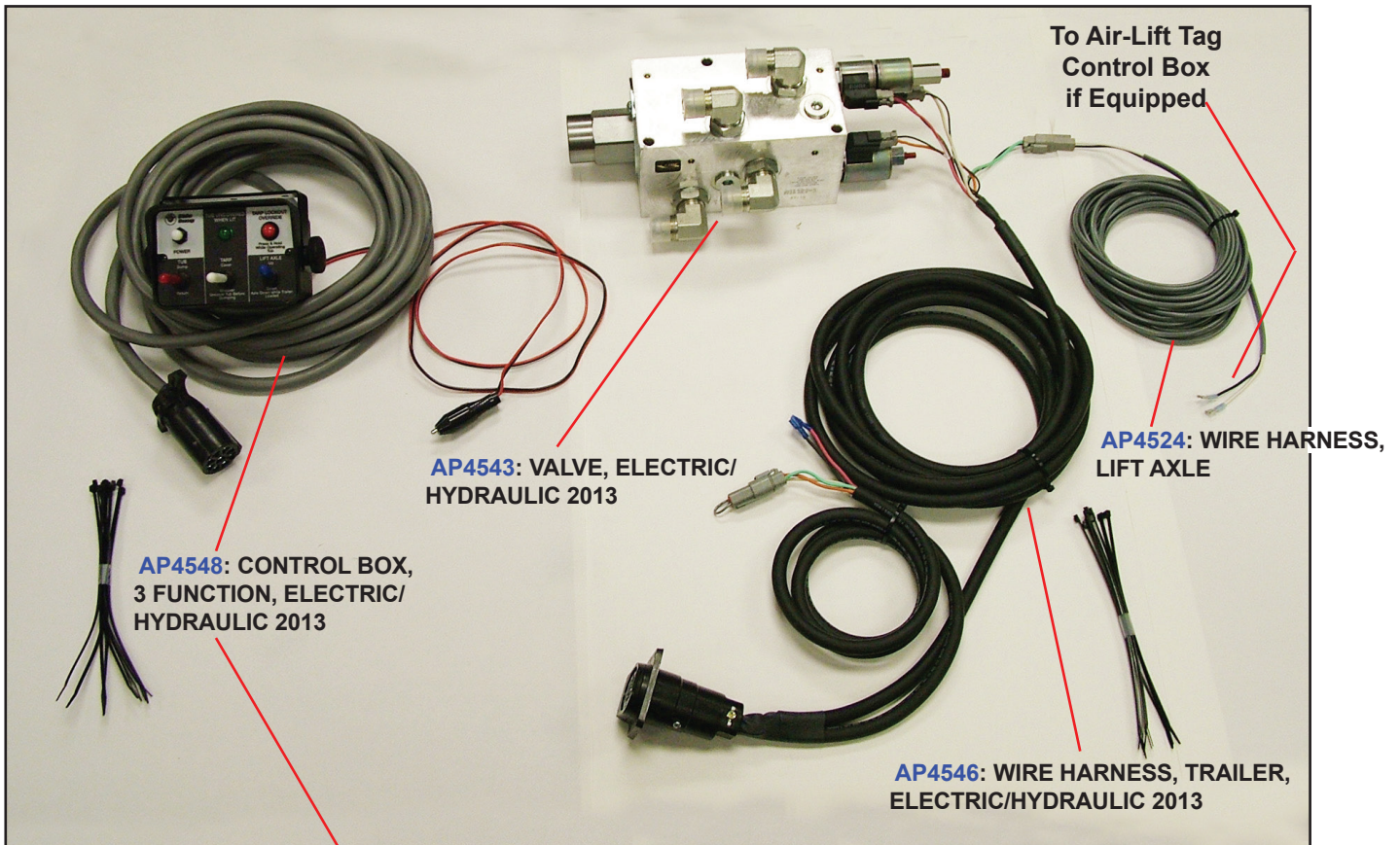


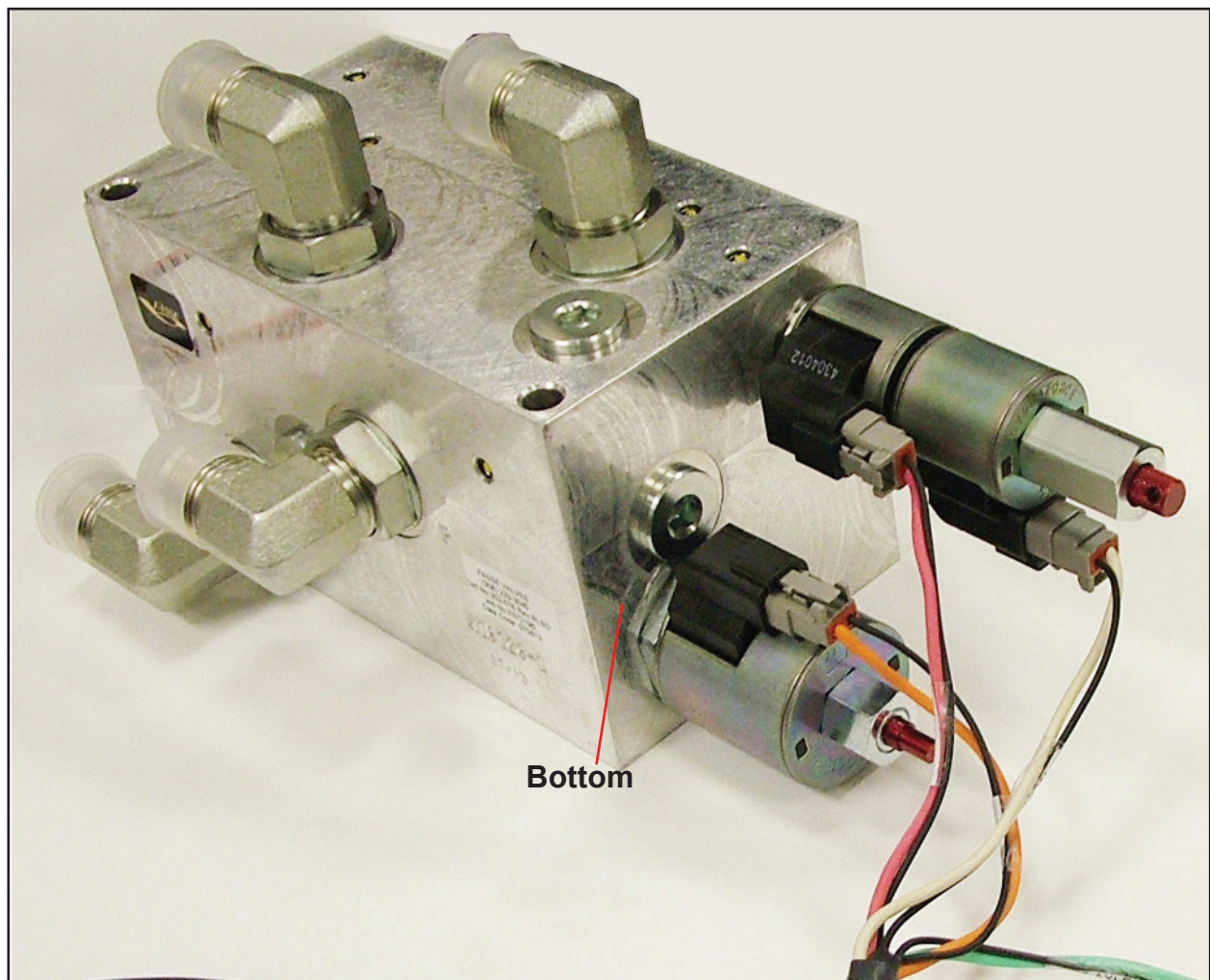
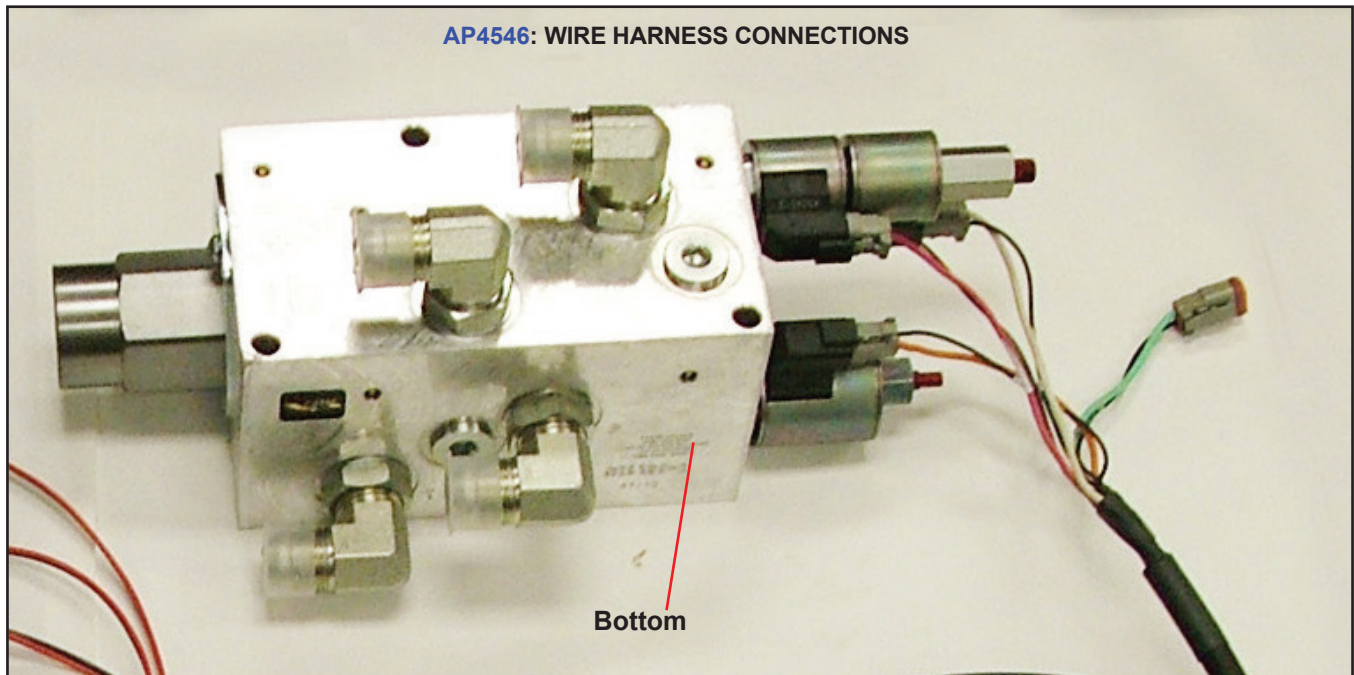
(DDP1189) TRAILER PRO HOSE KIT; FK2018



Bottom View





AP4546: WIRE HARNESS CONNECTIONS

Installing the Control Box in the Tractor

Find a suitable location in the cab of the tractor and mount the control box. The red and black two wire cable attached to the back of the box is the power cable. Plug the cigarette lighter end into a power outlet in the cab.

If you do not have an available outlet for the cigarette lighter end, use the following instructions: Cut the cigarette lighter plug off. Split apart the wires and connect the red wire to a 12 volt dc power source and the black wire to ground. (A bag of terminals is included to allow you to tap into most fuse panels.)



CAUTION: Red wire must be positive and black wire negative.

Reversing these wires can damage the control system.

Route the gray cord and male 9 pole plug out of the cab and to the front bulkhead of the trailer. Plug the cord into the female 9 pole socket on the trailer bulkhead.

To operate your Demco trailer, your tractor will need a hydraulic pump that can supply 25 to 30 gallons per minute of oil to the trailer at 2,500 to 3,000 psi.

If your trailer is equipped with a tarp, you will also need to wire a power cord from the tractor's battery to the trailer to supply power to the tarp's motor.

Operating the TrailerPro Control Box

Press the "Power" button to turn the system on. The button will light up to indicate the power is on. Press the button again to turn the system off.

Dumping the Tub

When the green light in the top center is illuminated, the tub can be dumped. (See Tarp Lock Out Option below)

The red switch in the lower left corner operates the tub. To dump the tub, turn on the tractor's hydraulic pump and then lift and hold the red toggle in the "dump" position to raise the tub and empty its contents. Release the switch when the cylinders reach the fully extended position.




WARNING: Do not stop dumping the load in mid dump and then try to return the tub to the transport position. You may tip over the trailer instead of returning the tub.

Push and hold the red switch in the "Return" position to bring the tub back to its transport position. Release the switch when the cylinders are fully retracted.

Operating the Tarp (If Equipped)


The white switch in the lower middle operates the tarp. Lift and hold the white switch to unroll the tarp and cover the tub. Push down and hold the switch to roll the tarp and uncover the tub.

 **CAUTION:** When rolling the tarp do not continue to hold the switch after the tarp has reached its fully rolled position. Damage to the tarp or the motor can occur when the motor continues to try to roll the tarp after it has reached its fully rolled position.

Operating the Lift Axle (If Equipped)

The blue switch in the lower right corner controls the lift axle option. Lifting the switch to the up position raises the lift axle and pushing the switch down lowers the lift axle.

There is a manual control switch for the lift axle in the gray plastic box at the back of the trailer. There is also a regulator in the box that adjusts the amount of weight the lift axle carries. Instructions are printed inside the box.

 **CAUTION:** Always lower the lift axle when the trailer is loaded. Damage to the trailer's frame can occur if the trailer is transported loaded with the lift axle in the raised position.

Using the Tarp Lock Out Option

The Tarp Lock Out prevents the tub from being dumped while the tarp is covering the tub. Dumping the contents of the tub while the tarp covers the tub will ruin the tarp and may cause the trailer to tip over. If your trailer has a tarp and you purchased the tarp lockout option, the green light and the red button in the top row of the control box will be used. The green light will illuminate when the tarp is in the fully rolled up position. Once the green light is on, the red switch will be able to operate the tub. If the green light is not illuminated the red switch is "locked out" and the tub can't be moved.

The red button will allow you to dump the tub regardless of the position of the tarp. If the sensor for the green light is damaged or fails, or if you want to tip the tub with the tarp unrolled for maintenance, you can push and hold the red button while using the red switch to move the tub.

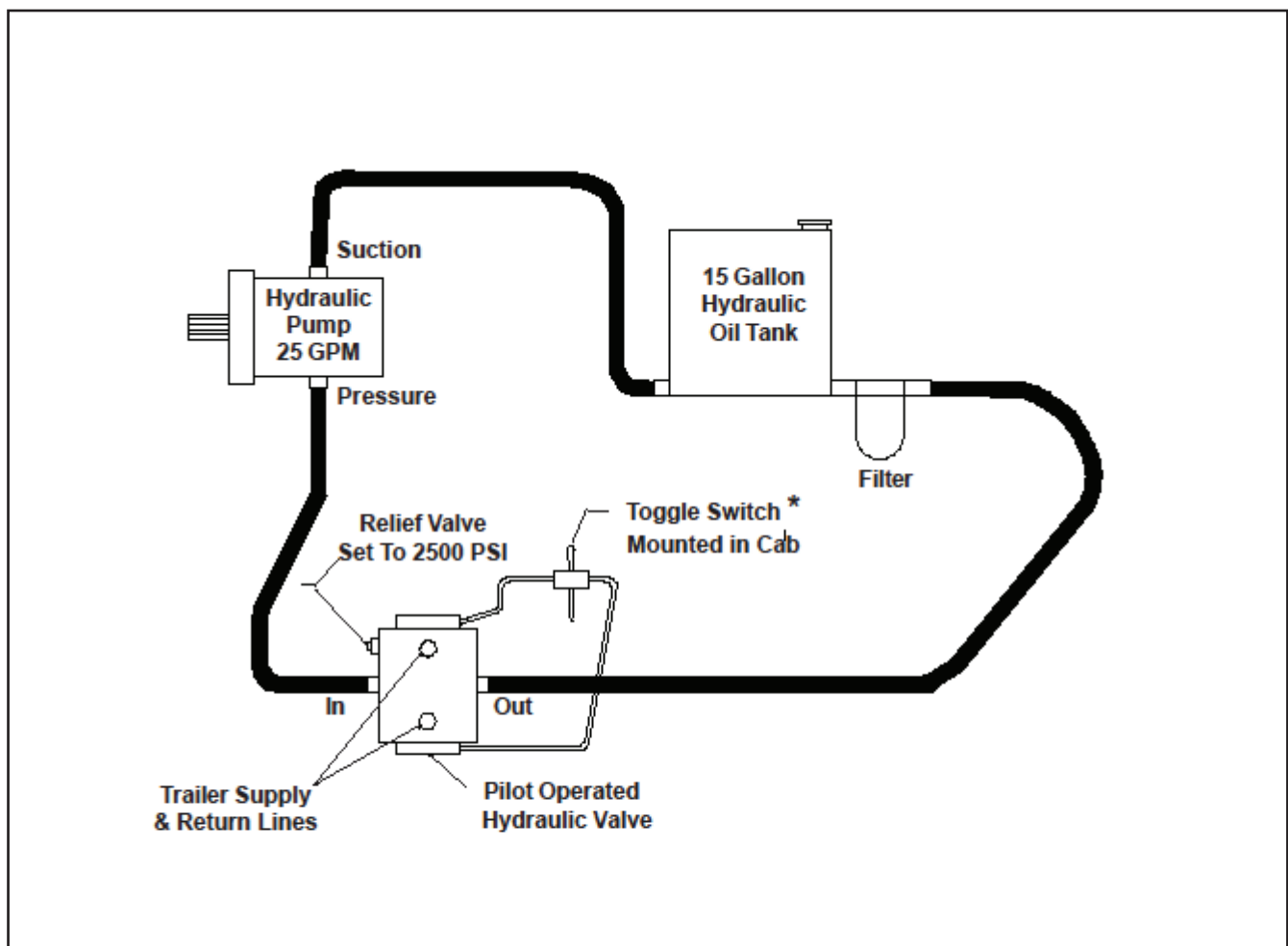
If the Tarp Lock Out option is not installed on your trailer, the green light will be illuminated all the time, regardless of the tarp's position. The Tarp Lock Out can be added to any trailer with a TrailerPro control box. Contact your Demco Dealer for more information. Specify the brand of tarp you have when placing your order.

Efficient, safe operation of side dump trailers require that the tractor hydraulic system provide a clean, high pressure, high volume oil supply. The hydraulic pump pressure should be set at 2500 PSI with a minimum output of 25 GPM supply and a minimum 15 gallon filtered and strained reservoir.

NOTE:

Hydraulic Oil Filter should be Changed every 25,000 miles or yearly, which ever comes first and hydraulic system flushed every 50,000 miles with pressure and flow rates checked.

Generic Tractor Hydraulic System



Wiring the Tractor

There are two items to wire on the tractor before you can operate your Demco side dump trailer. The control box and the tarp power wire.

To install the control box, find a suitable location in the cab of the tractor and mount the control box. The red and black two wire cable attached to the back of the box is the power wire. Plug the cigarette lighter end into a power connection in the cab.

[If you do not have an available outlet for the cigarette lighter end, use the following instructions: Cut the cigarette lighter plug off. Split apart the wires and connect the red wire to a 12v dc power source and the black to ground. **Red wire must be positive and Black negative. Reversing these wires can damage the control system.** A bag of terminals is included to allow you to tap into most truck fuse panels.]

Route the gray cord and male 9 pole plug out of the cab and to the front bulkhead of the trailer. Plug the cord into the female 9 pole socket on the trailer bulkhead. You will now be able to raise and lower the rear axle and dump the tub.

(NOTE: Air must be supplied to the trailer for the lift axle to operate properly. Hydraulic oil must be supplied to the trailer to dump the tub.)

To use the tarp you will need to supply 12 volt power to the trailer to operate the tarp motor. Due to the large power draw of the tarp motor, the electrical supply must be hooked directly to the battery and the heavy #6 wire included with the kit must be used.

Refer to the Roll Rite wiring diagram for reference. The relay has been already mounted on the trailer and the momentary switch that rolls/unrolls the tarp is in the control box installed previously. All that needs to be done is to run a wire from the battery to the female two pole socket on the road side front corner of the trailer.

Locate the circuit breaker as close to the positive battery post as possible. If the circuit breaker is not mounted to the battery box or truck frame, make sure that the terminals cannot touch anything that would create a short circuit.

Separate enough of the white wire on the #6 white/black cord to reach from the positive battery terminal to the circuit breaker. Cut off the white wire. Strip the white wire and crimp on ring terminals to match the battery cable bolt and the post on the circuit breaker. **(Don't hook the white wire to the battery until everything else is wired.)**

Crimp a ring terminal on the white wire on the remaining white/black cord and attach it to the circuit breaker.

Crimp a ring terminal on the black wire and attach it to the negative battery post.

Route the white/black cord to the female socket on the trailer. Cut the cord and strip the ends back to slip into the terminals on the back of the male 2 pin plug.

Match the white and black wires to the corresponding wires in the trailer socket. You may need to slip the cover off the back of the socket to make sure that the wires match up. Secure the white/black cord to the truck frame.

Hook the white wire to the battery.

The tarp will now operate from the control box. It is best to have the tractor running while operating the tarp.

Hydraulic Hook-up

The tractor must have a hydraulic pump and reservoir to supply hydraulic oil to the trailer to dump the tub. The pump needs to supply 25 to 30 gallons per minute of oil at 2500 to 3000 psi. We recommend a minimum of a 15 gallon system reservoir. The tractor should also have a relief valve to protect the tractor's hydraulic system.

When hooking the tractor to the trailer, the pressure line from the pump must hook up to the female quick coupler on the trailer and the return to the reservoir must hook up to the male quick coupler. The control valve on the trailer will not operate properly if the oil flow is reversed. The quick couplers on the trailer are marked "in" and "out" as a reminder.

There are two items to wire on the tractor before you can operate your Demco side dump trailer. The control box and the tarp power wire.

To install the control box, find a suitable location in the cab of the tractor and mount the control box. The red and black two wire cable attached to the back of the box is the power wire. Plug the cigarette lighter end into a power connection in the cab.

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(NOTE: Air must be supplied to the trailer for the lift axle to operate properly. Hydraulic oil must be supplied to the trailer to dump the tub.)

To use the tarp you will need to supply 12 volt power to the trailer to operate the tarp motor. Due to the large power draw of the tarp motor, the electrical supply must be hooked directly to the battery and the heavy #6 wire included with the kit must be used.

Refer to the Aero wiring diagram for reference. The relay has been already mounted on the trailer and the momentary switch that rolls and unrolls the tarp is in the control box installed previously. All that needs to be done is to run a wire from the battery to the female two pole socket on the road side front corner of the trailer.

Find a suitable location on the tractor to mount the included female two pole socket. A mounting bracket and hardware is also supplied.

Locate the circuit breaker as close to the positive battery post as possible. If the circuit breaker is not mounted to the battery box or truck frame, make sure that the terminals cannot touch anything that would create a short circuit.

Separate enough of the red wire on the #6 red/black cord to reach from the positive battery terminal to the circuit breaker. Cut off the red wire. Strip the red wire and crimp on ring terminals to match the battery cable bolt and the post on the circuit breaker.

(Don't hook the red wire to the battery until everything else is wired.)

Crimp a ring terminal on the red wire on the remaining red/black cord and attach it to the circuit breaker.

Crimp a ring terminal on the black wire and attach it to the negative battery post.

Route the red/black cord to the female socket. Cut the cord and crimp ring terminals on the end of the wires. Slip the cover for the back of the socket over the cord and bolt the ring terminals to the socket. Match the positive and negative wires to the corresponding terminals marked on the socket. Slip the cover over the back of the socket. Secure the red/black cord to the truck frame.

Hook the red wire to the battery. A double male stretch cord is included to connect the tractor to the trailer.

The tarp will now operate from the control box. It is best to have the tractor running while operating the tarp.

Hydraulic Hook-up

The tractor must have a hydraulic pump and reservoir to supply hydraulic oil to the trailer to dump the tub. The pump needs to supply 25 to 30 gallons per minute of oil at 2500 to 3000 psi. We recommend a minimum of a 15 gallon system reservoir. The tractor should also have a relief valve to protect the tractor's hydraulic system.

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NOTES

[illegible]



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**Demco warranty policies, operator manuals, and product registration
can be found online:**

www.demco-products.com

