DUTCHMAN PISTOL GRIP JOYSTICK

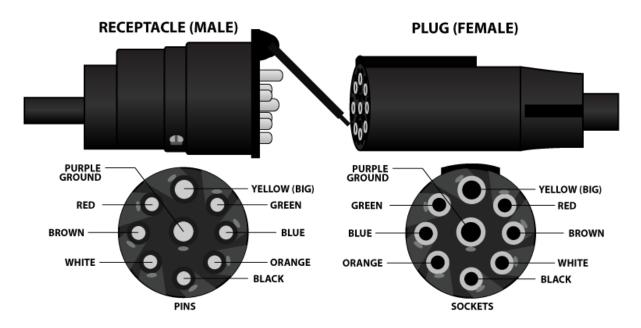
MOUNTING INSTRUCTIONS

DUTCHMAN INDUSTRIES INC.

PISTOL GRIP JOYSTICK MOUNTING

→ WARNING: Always ensure that the vehicle is shut-down and all power is off before beginning installation of the pistol grip joy stick.

Before beginning installation of the pistol grip joystick, check to see if it will be necessary to remove the 9-pin receptacle plug for wiring. Mounting the joystick on a skid steer or track loader according to the instructions below typically requires removing the receptacle. If it is necessary to remove the receptacle, do so before continuing to mounting.



9-PIN PLUG

SKID STEER/TRACK LOADER MOUNTING

Before mounting the pistol grip onto your loader, be certain you have decided exactly what side (left or right) you prefer. Since all loader handles have a multi-button control system, the pistol grip joystick cannot simply replace an existing handle because of the loss of too many functions. To alleviate this problem, your pistol grip joystick will have included an "adapting bracket." Simply attach the bracket to the side of the desired handle. **Be sure to screw your joystick into the adapting tube before mounting to test the placement.** Clamp down the bracket and tighten it securely. This system will still allow you to operate your loader arms because the pistol grip now becomes an extension of the previous handles.

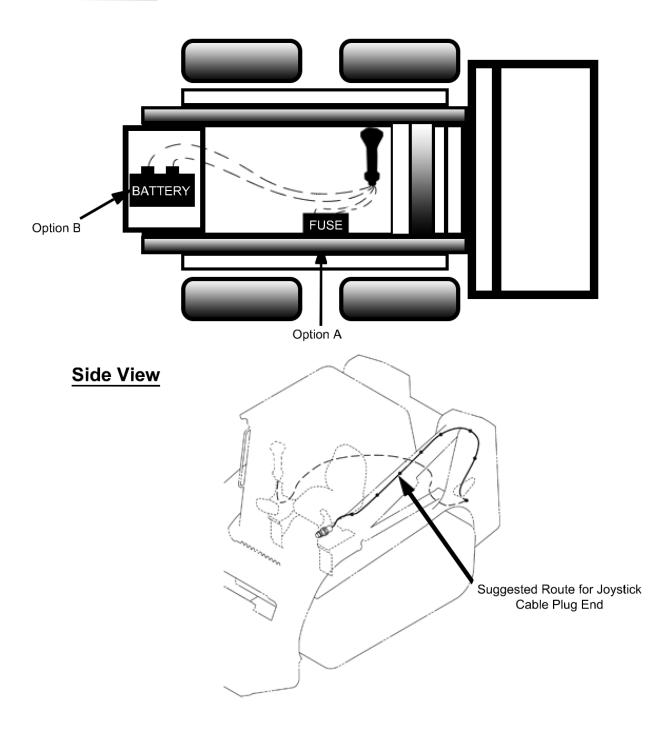
The pistol grip has an extra wire along with the positive and negative end, approximately 12 inches down from the handle base. This auxiliary wire can be used as a hook-up for any kind of 12-volt, 5-amp external device. If no external device needs to be added, it may be left alone in place.

When the wiring in the cab is complete, allow the cable to run out the back of the skid steer cab and onto the back loader arm. Run the cable down towards the front of the loader arm and attach to the receptacle plug bracket. See the diagram on the next page for an example. Clip cables down as desired and find a positive and negative connection in your skid steer.

SKID STEER WIRING DIAGRAM

Top View

Suggested Power and Ground Hookup for Joystick

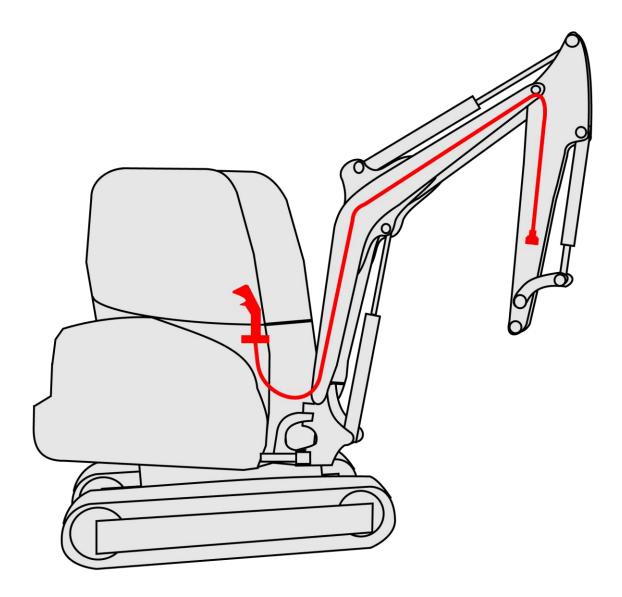


ARTICULATED LOADER/EXCAVATOR MOUNTING

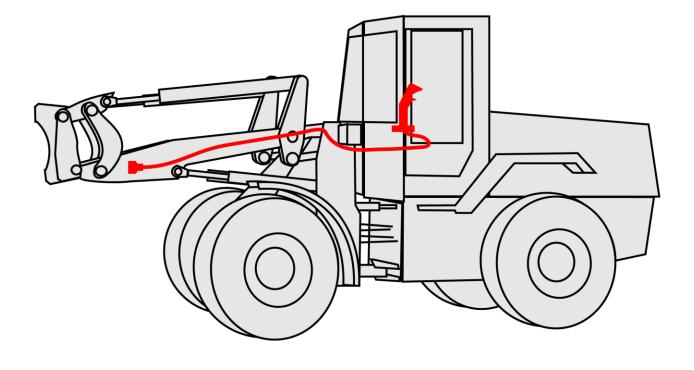
All loaders and excavators will have a mounting system similar to the skid steer/track loader mounting above. Once your pistol grip has been installed, run your cable out of the front of the cab and down your loader arm. This may mean that you have excess cable. Tie up any excess cable in a safe location inside the loader cab to avoid pinching or damage. **Be sure your cable is secured to so that it is not subject to pinching or cutting by the loader bucket.** The way the cable runs out of the cab is up to the end user's preference.

NOTE: After your Pistol Grip Joystick has been installed, proper service checks should be made to ensure that the joystick is functioning properly. Also make sure you have a solid positive and negative connection. Any bad connection will not allow the piece of equipment to function.

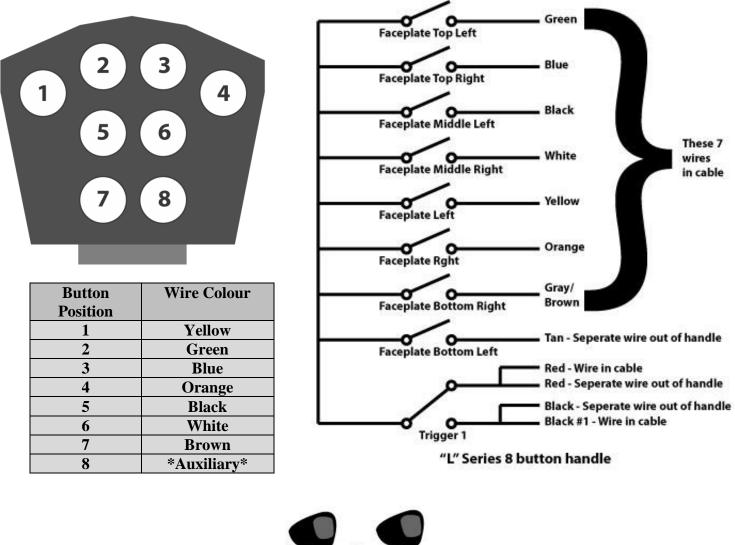
EXCAVATOR WIRING DIAGRAM



WHEEL LOADER WIRING DIAGRAM



PISTOL GRIP SCHEMATICS



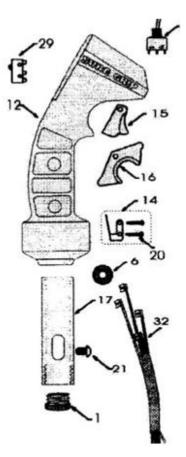


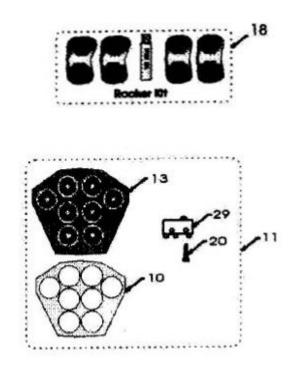
Most wire breakage problems can be traced back to two common installation mistakes.

Crushing the wire: Nylon tie wraps are very useful in giving the wire harness a neat and finished appearance, but applying them too tightly can crush the wire insulation and pinch the wires. When the cable is pinched, it doesn't allow the wire to slide inside the cable jacket which creates a stress point.

Forcing the wire to flex at one point: If the wire from the control handle is routed down the joystick shaft with little slack the wire will tend to flex over a small area. Eventually the repeated flexing will cause the wire strands to break. The solution is to provide enough slack in the cable to the flexing motion is distributed over a longer section of wire.

PISTOL GRIP SCHEMATICS & PARTS LIST





#	Part	Description	#	Part	Description
1	BU-00	5/16 Unthreaded Bushing	14	L6-01	Leaf Spring Kit
	BU-01	10 mm X 1.25 Bushing	15	L-TR-01	Single Trigger
	BU-02	12 mm X 1.25 Bushing	16	L-TR-02	Double Trigger
	BU-03	12 mm x 1.75 Bushing	17	PN-03	Mounting Pin
	BU-04	14 mm X 2 Bushing	18	RK-02	Rocker Lid
	BU-05	5/6" NC Bushing	20	SC-03	#2 X7/16" Self-Tapping Screw
8	GR-01	Wire Grommet	21	SC-02	10 – 32 X 3/8" Screw
10	L-FP-01	"L" Series Empty Faceplate	29	SW-00	Switch (Faceplate or Trigger)
11	L-FP-A8	8 Function Switch Pack Assy	31	T0-2MA	Toggle (on/off)
12	L-HL-01	Handle Case - left		T0-3M0	Toggle (on)/off/(on)
	L-HL-02	Handle Case – right	32	L1M8-W	Harness (Single Trigger)
13	L-ME-A8	5 Button Overlay		L2M6-W	Harness (Double Trigger)