

CHELSEA®



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Date: March 15, 1996

To: All Chelsea Power Take-Off Customers

Subject: Updated Shift Kit for Nissan MLS-61B Transmission

Nissan has **recommended** that only P.T.O.'s that are air activated and electronically controlled be installed on their MLS-61B transmission. We have worked together in the past to meet their requirements, and released the "P" shift option designator and 328288-60X Installation kit to be used with the 446A series P.T.O. For all 1995 and 1996 Nissan trucks using the MLS-61B transmission, we have developed an electronically controlled air shift that cannot be engaged unless the clutch pedal is depressed. A new air shift installation kit, part number **328288-63X**, is available for the **446A** Series P.T.O. The "**E**" designation in the shift option position of the model number; i.e. 446AUFYX-**E6XD**, will provide you with the air shift option and the new air shift kit.

Installation of this new kit is similar, but far easier to install than the old kit. What's new is that Nissan has provided mounting positions on the clutch pedal to mount the push plate that will actuate the micro switch. This is the interlock that will not let the P.T.O. be engaged unless the clutch pedal is depressed. You will no longer have to unbolt the clutch master cylinder as you were required to do in the old style kits.

Included with this bulletin is a copy of the instructions that will come with the installation kit. Please have a copy of this bulletin available to all the personnel that may have to assist or answer questions for the customer. The application page for the MLS-61B transmission is NSD-6 and will be updated in the near future to reflect these changes.

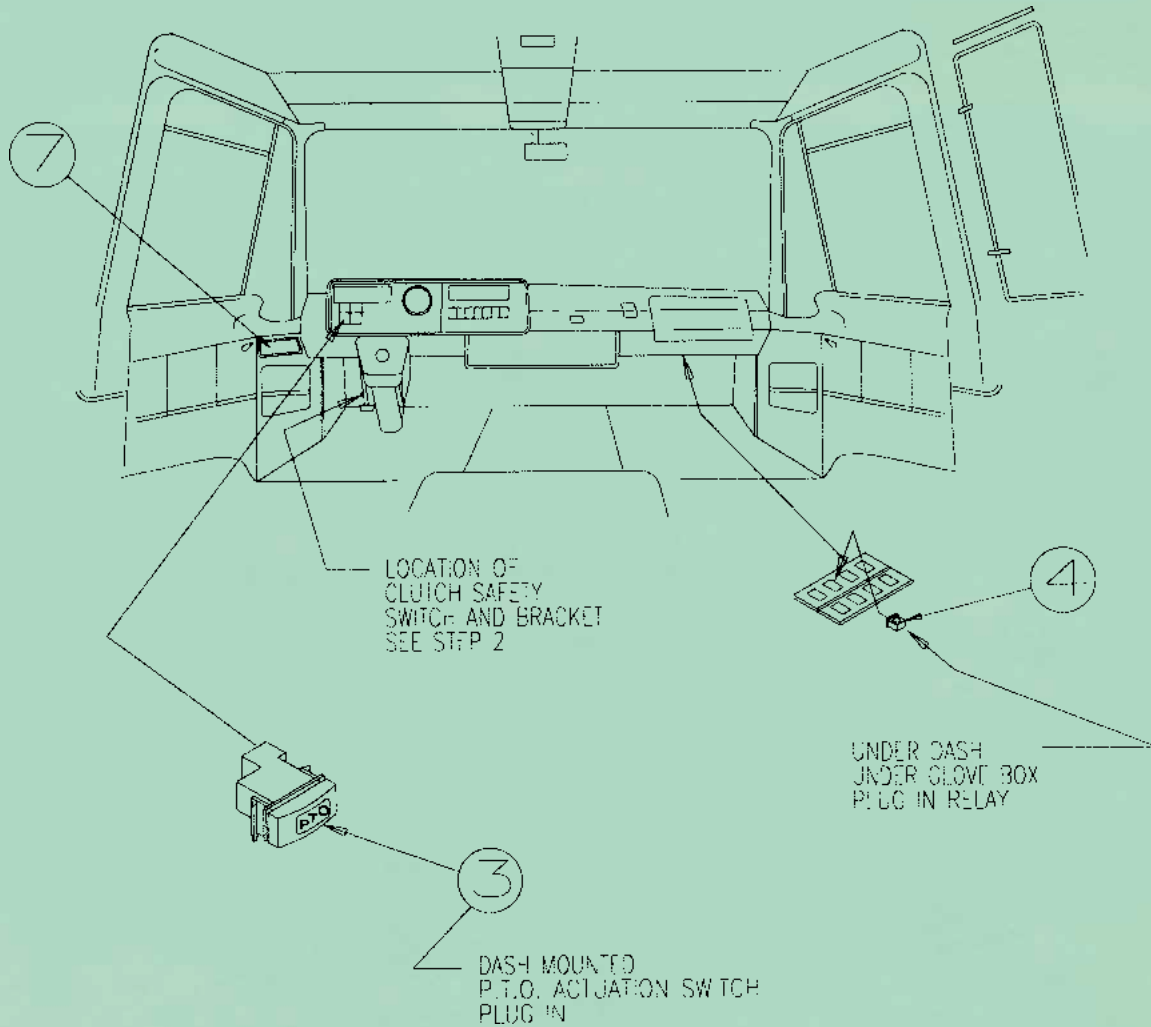
A handwritten signature in black ink that reads "Jeff King".

Jeff King
Product Manger
Power Take-Offs

Attachment

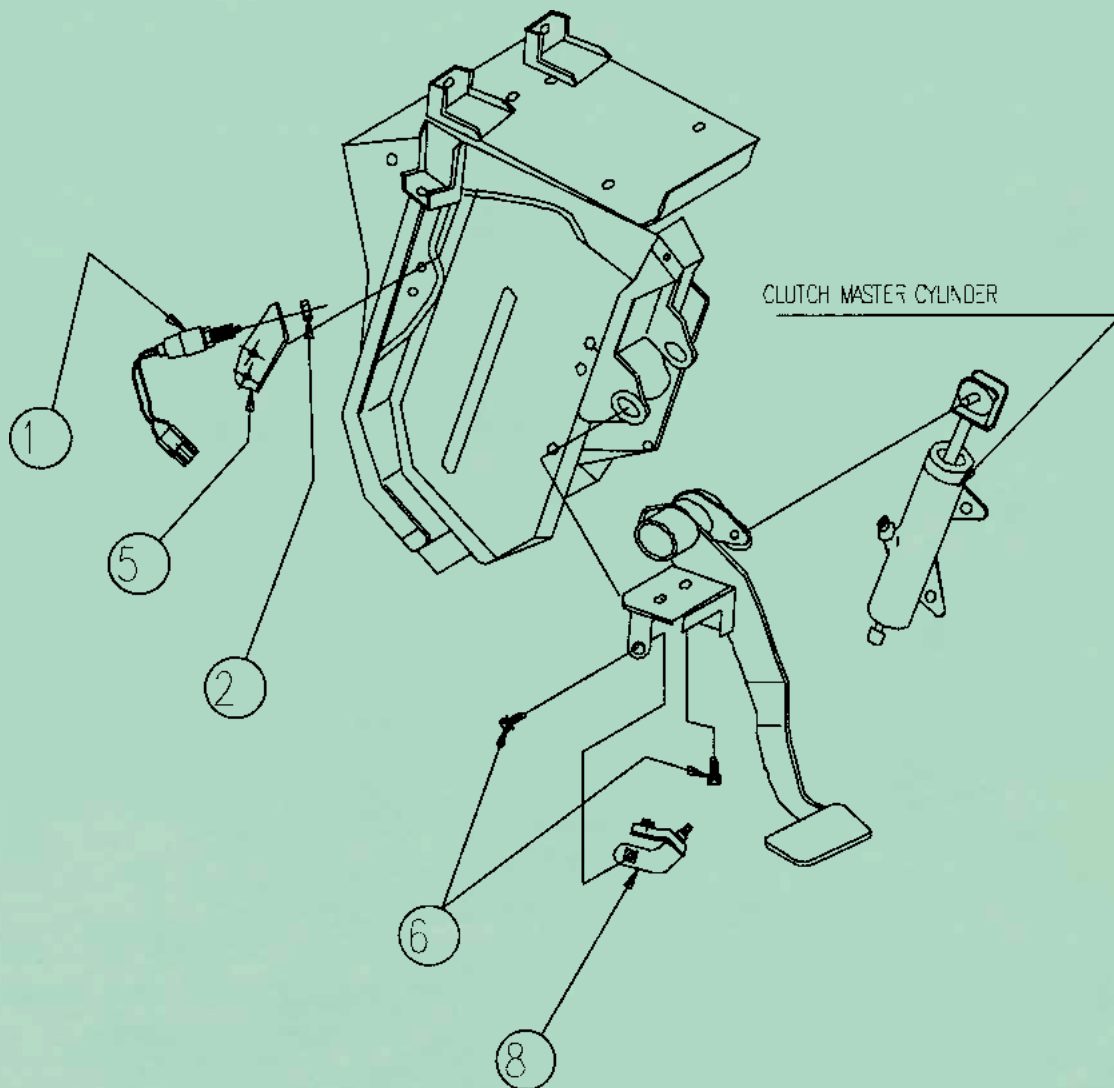
STEP 1. Below is a diagram of the cab showing the locations of the dash-mounted plug in the components. Item **#3** is the P.T.O. actuation switch (379653) that plugs in the dash and the existing wiring harness. Under the dash beneath the glove box is where item **#4**, the relay (379552) for the clutch pedal interlock, is installed. **Item #5 (379549), the P.T.O. indicator light, is also plugged into the existing wiring harness.** Last is the dash-mounted caution label (379591) item **#7**. Please do not forget to install it on the dash in this position.

DIAGRAM SHOWING THE LOCATION OF DASH MOUNTED - PLUG IN COMPONENTS

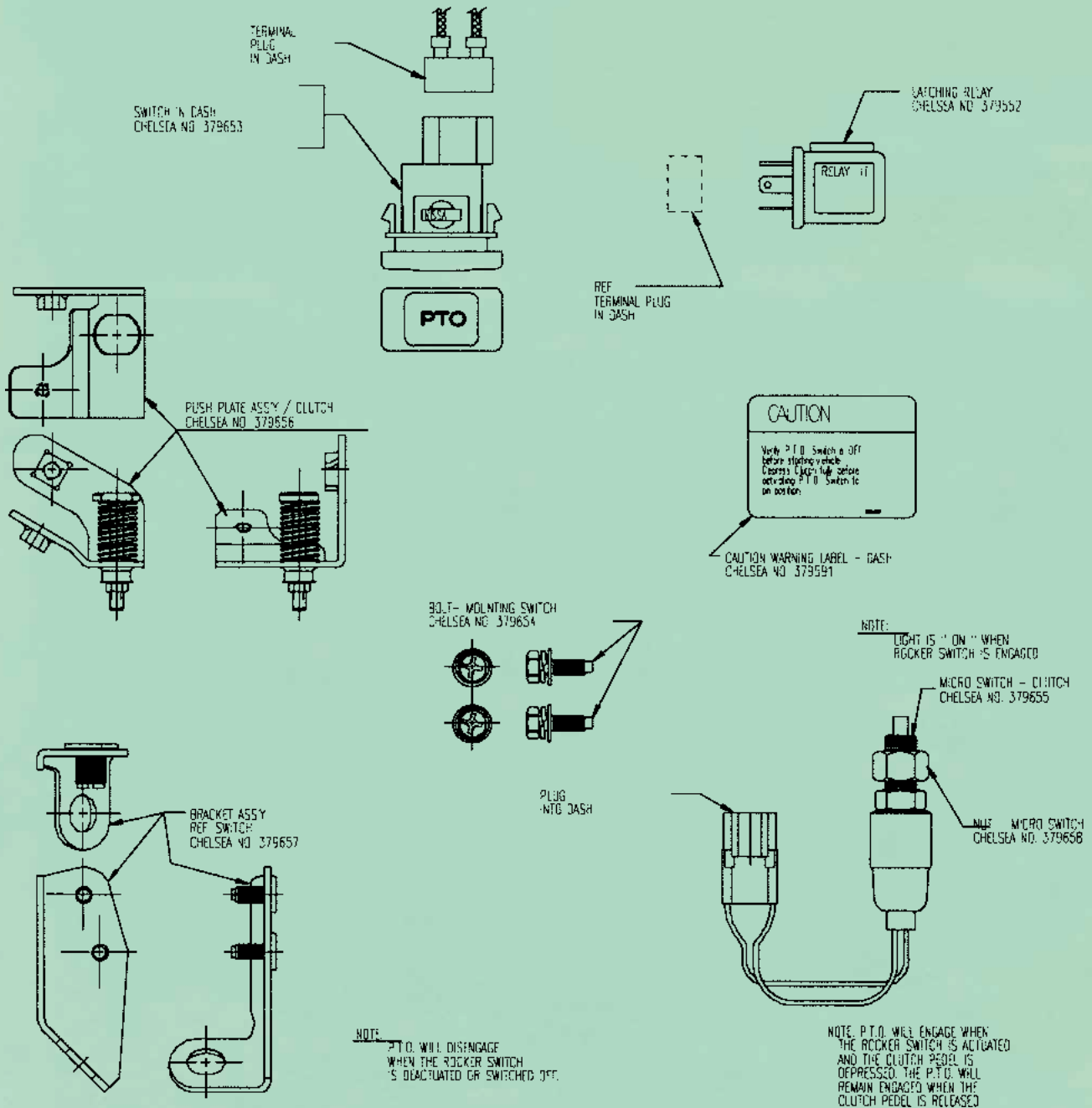


STEP 2. The diagram below shows the locations for mounting the clutch switch components and brackets;. Attach the **Push Plate** bracket, Item **#8 (379656)**, to the clutch pedal bracket using the two mounting bolts item **#6 (379654)** shown in Step 2. Insert the **Micro Switch**, Item **#1 (379655)**, into the **Switch Bracket** item **#5 (379657)** and use the **Nut** for the micro switch, Item **#2 (379658)**, to fasten it in position. Fasten the bracket using two Mounting fasteners that are part of the bracket to the brace as shown below in step 2. Now connect the wires with the female connector from the micro switch into the Nissan wiring harness. Above the steering column you will see the wires with the mating male connector hanging down. The male and female connector on these wires eliminate the possibility of a mismatched or wrong connection. On the opposite page is a larger drawing of the parts mentioned above.

DIAGRAM SHOWING THE LOCATION OF THE CLUTCH SWITCH INSTALLATION

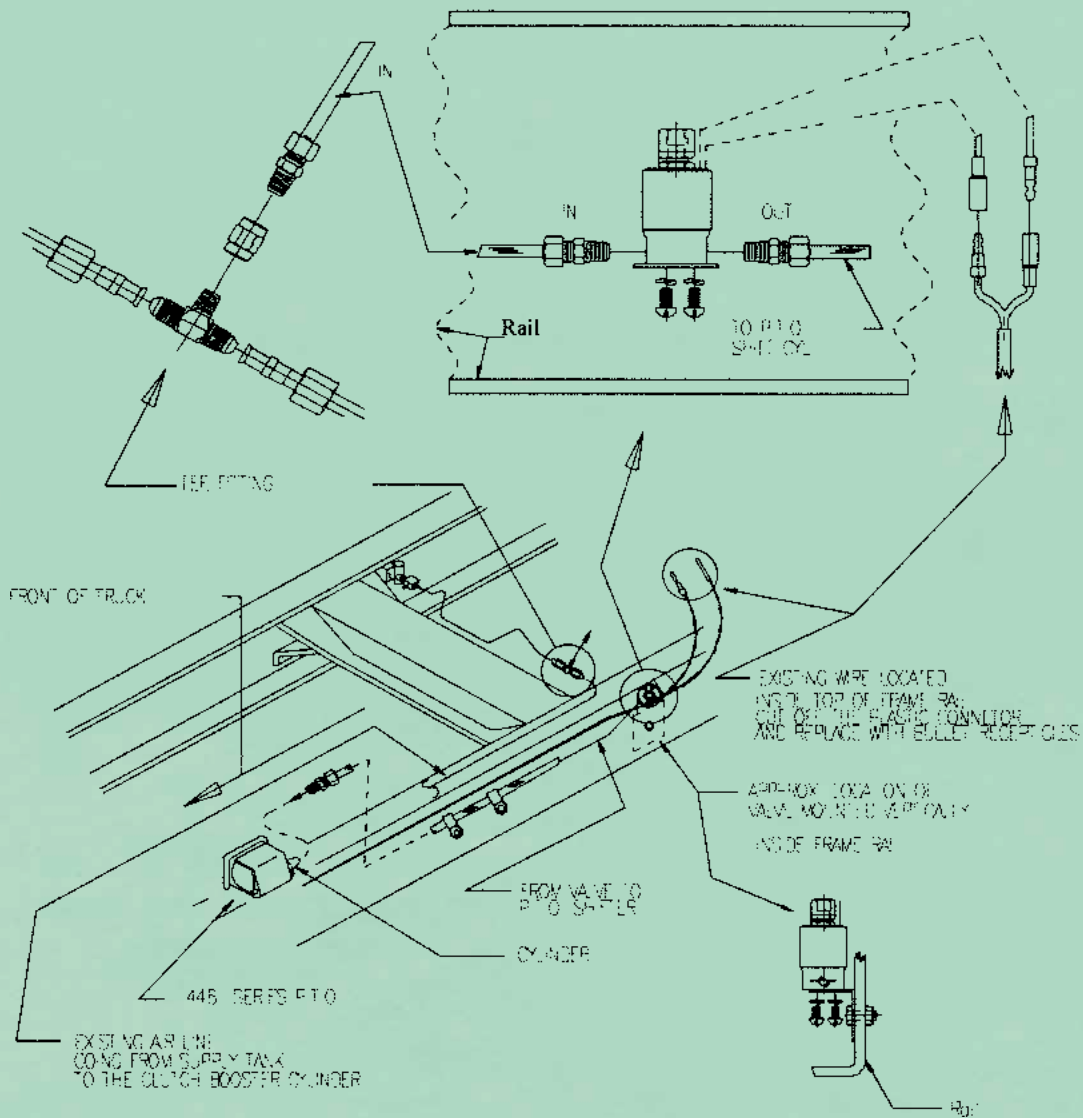


PARTS TO BE INSTALLED IN THE DASH OF THE NISSAN TRUCK



STEP 3. This diagram shows the components that are mounted under the truck between the frame rails. First locate the wires provided by Nissan. These wires are located on the inside top of the frame rail as shown in the drawing below. Once again, the wires are color coded brown with a yellow stripe and the other is black. Cut off the plastic connector found on the wires, install one male connector (379254-12) and one female connector (378307) on the end of these wires. Do the same on the end of the wires that extend from the solenoid valve (379303-1). Mount the solenoid valve to the frame rail and close to the existing wires to complete the connections. Use the male branch tee fitting (379568) provided in the installation kit to tap into the truck air supply. An ideal location for its placement is in front of the crossmember as demonstrated in the diagram below. As in any installation of air lines, make sure there are no leaks. Please check the opposite page for a larger diagram of the components we have mentioned above.

446 SERIES AND LOCATION OF COMPONENTS BETWEEN THE FRAME RAILS



PARTS TO BE INSTALLED INSIDE THE FRAME RAIL ON DRIVER'S SIDE

