

## ISUZU & LUV

ISUZU  
I-Mark  
P'UP  
LUV

### DESCRIPTION & OPERATION

All models have a 2-speed wiper system with washer. The control switch is on a steering column lever. I-Mark models may have an intermittent system which gives a short delay between wiper cycles. The delay relay is mounted in a box near the windshield washer reservoir. It cannot be serviced. If defective, the relay must be replaced.

### TROUBLE SHOOTING

#### WIPER ACTION SLUGGISH OR UNEVEN

Worn or binding linkage. Poor ground connection. Worn motor brushes.

#### WIPER DOES NOT PARK OR DOES NOT STOP

Dirty contact points in park switch at motor. Shorted or open wiring. Bad wiper switch.

#### WIPER DOES NOT OPERATE

Blown fuse. Open wiring circuit. Bad wiper switch. Defective wiper motor.

### TESTING

#### WIPER MOTOR

**I-Mark** — Remove motor from vehicle. Connect jumper wires and ammeter to measure current flow with motor in high speed. Current draw should not exceed 3 amps. If it does, loosen adjusting nut at end of armature.

**NOTE** — Testing procedures were not available for other models.

### REMOVAL & INSTALLATION

#### WIPER MOTOR

**Removal (I-Mark)** — Disconnect battery ground cable. From underneath instrument panel, remove nut and crankarm from motor. Unplug wiring. Remove 3 nuts and motor assembly.

**Installation** — To install, reverse removal procedure.

**Removal (LUV & P'UP)** — Remove 4 motor mounting bolts. Unplug wiring. Pull motor out part-way and remove shaft nut. Remove motor.

**Installation** — To install, reverse removal procedure.

#### WIPER LINKAGE

**Removal (I-Mark)** — 1) Disconnect battery ground cable. Remove wiper arm nuts and wiper arms. Remove steering wheel. Remove instrument cluster. Reach through cluster opening and pry linkage arm from shaft assembly. Remove 3 screws and left shaft assembly.

2) Remove glove box. Pry linkage arm from shaft assembly. Remove 2 screws and right shaft assembly.

**Installation** — To install, reverse removal procedure.

**Removal (LUV & P'UP)** — 1) Remove wiper arm covers, nuts and wiper arms. Remove pivot shaft nuts and push shafts into cowl. Remove access covers on cowl (in engine compartment).

2) Remove wiper motor bolts. Unplug wiring. Remove motor complete with linkage. Disengage finger on link retainer from hole in link. Disconnect link by turning retainer clockwise.

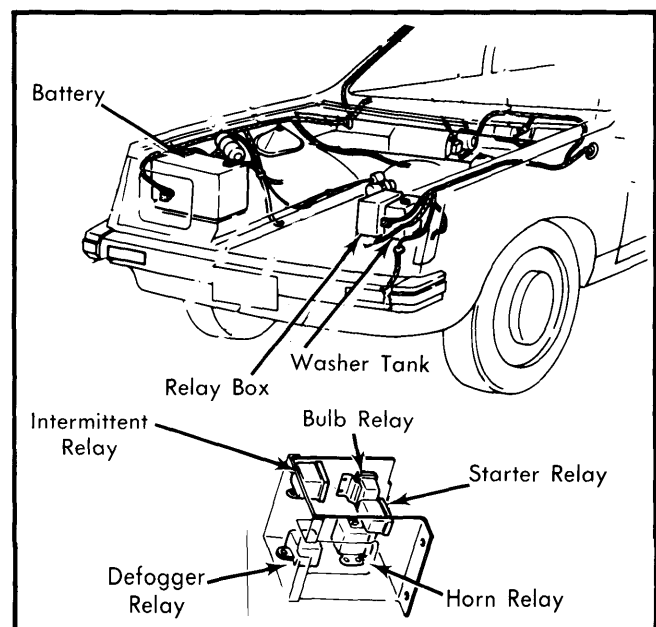
**Installation** — To install, reverse removal procedure.

#### WIPER SWITCH

**Removal (I-Mark)** — Disconnect battery ground cable. Remove steering wheel. Remove steering column covers. Unplug wiring. Remove 2 screws and wiper switch.

**Installation** — To install, reverse removal procedure.

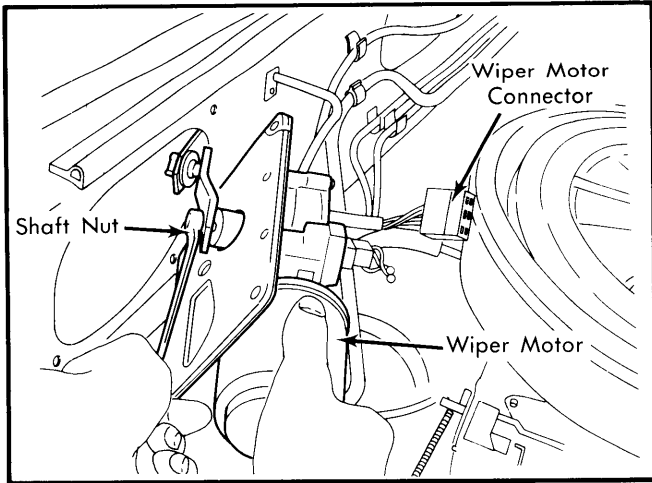
**Removal (LUV & P'UP)** — Disconnect battery ground cable. Remove steering column covers. Unplug wiring. Remove steering wheel, using "C" clamp type puller (GM No. J-24292-A). Remove 2 screws and combination switch.



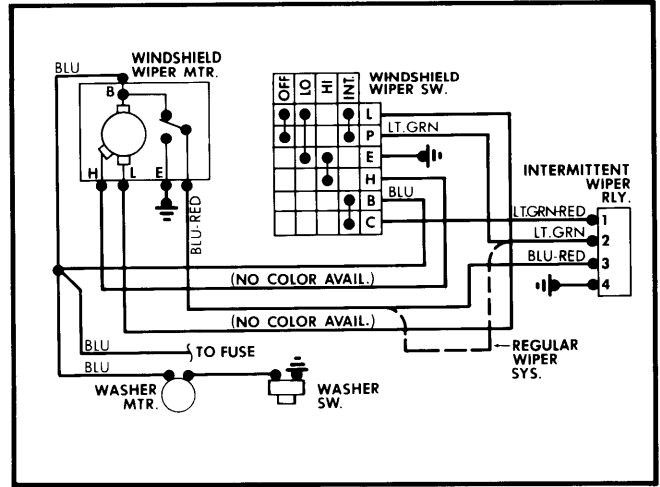
**Fig. 1** Location of I-Mark Intermittent Wiper Relay. Remove Relay Box to Gain Access

# Wiper/Washer Systems

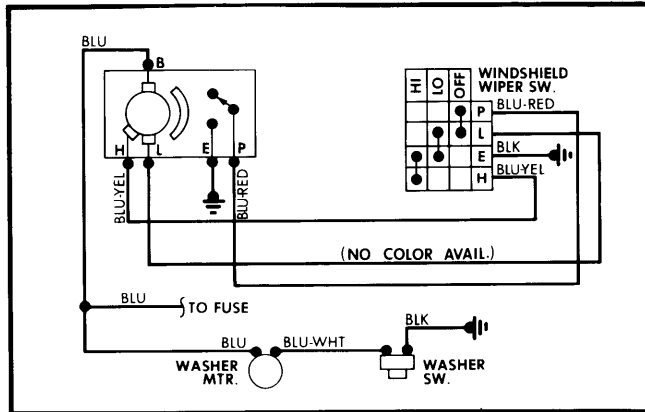
## ISUZU & LUV (Cont.)



**Fig. 2 Removing Wiper Motor on LUV and P'UP. Do Not Bend Linkage While Removing Shaft Nut**



**Fig. 3 I-Mark Wiper/Washer Wiring Diagram**



**Fig. 4 LUV and P'UP Wiper/Washer Wiring Diagram**