#### **SWITCHES AND RELAYS**

## Highlights

NAPA® Echlin® offers nearly 10,000 high-quality Switches and Relays in hundreds of categories

NAPA® Echlin® has more than 400 Oil Pressure Switches, representing 389 million repair opportunities

Most switches and relays are entirely powertrain neutral, meaning they fit gas, diesel, hybrid and electric vehicles



What's in your box?<sup>TM</sup>



## Growing Market

The world's leading research companies agree, the demand for automotive switches will experience solid growth in the coming years.

Electronic Safety Systems, enhanced infotainment features, and alternative powertrains all add to the complexity of the electrical systems on vehicles. As the loads on electrical systems increase, the performance of switches and relays will be more critical than ever before.

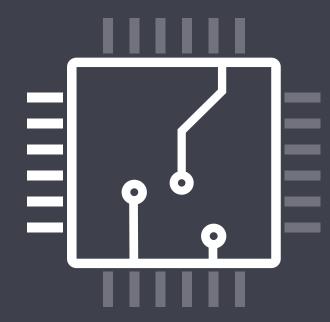
#### **Global Automotive Switches Market, 2023 to 2033**



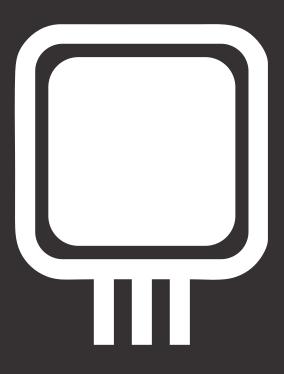
The Global Automotive Switch market is expected to almost double from 2023 to 2033.

- Fact.MR, 2023

# Impact on Engine Systems



Many switches such as an ignition switch or a brake switch have multiple outputs, so just because one output works, it doesn't mean that all work properly — Test each circuit individually



Anytime a load-bearing
electrical device fails, it
is highly recommended
to also replace the
corresponding relay — It
is good insurance on the
new part



Newer brake switches are more than a simple on/off switch, so they need to be calibrated after they are replaced — Failure to do so will affect the starting, the start/stop system, ABS system, and electronic throttle control system

Switches & Relays NAPAEchlin.com

## Your Complete Program

NAPA® Echlin® offers thousands of precision-engineered Switches across multiple categories. Our Switches are designed for both reliability and correct performance in all conditions.

Visit NAPAEchlin.com for more details on the Switches we offer for specific vehicles.

#### NAPA® Echlin® Switch Program

#### **Chassis and Drivetrain Switches**

**Clutch Starter Safety Switches** 

Four Wheel Drive Actuator Switches

Four Wheel Drive Selector Switches

Fuel Pump Cut-Off Switches

**Neutral Safety Switches** 

**Transfer Case Switches** 

**Transmission Control Switches** 

#### **Pressure and Vacuum Switches**

Oil Pressure Switches

**Power Steering Pressure Switches** 

**Transmission Oil Pressure Switches** 

Valve Timing Oil Pressure Switches

#### **Body Light Switches**

Back-Up Light Switches

**Courtesy Light Switches** 

**Hazard Light Switches** 

**Headlight Dimmer Switches** 

**Headlight Switches** 

**Instrument Panel Dimmer Switches** 

**Stoplight Switches** 

**Turn Signal Switches** 

#### **Ignition Switches**

Ignition Switches with Lock Cylinder

Ignition Push Button Switches

**Ignition Starter Switches** 

#### Interior Switches

Cruise Control Release Switches

**Cruise Control Switches** 

Fuel Tank Selector Switches

Liftgate Release Switches

**Clock Spring Switches** 

Parking Brake Switches

**Power Door Lock Switches** 

**Power Seat Switches** 

**Power Window Switches** 

**Remote Mirror Switches** 

Windshield Wiper Switches

Fog Lamp Switches

**Power Sunroof Switches** 

Trunk Release Switches

Vehicle Ride Height Switches

...and more









## Your Complete Program

NAPA® Echlin® has more than 1,300 Relays that cover more than 200 different categories. Our complete Relay program ensures that you find the part you are looking for, with the quality and performance you expect from NAPA® Echlin®.

Visit NAPAEchlin.com for more details on the Relays we offer for specific applications.

#### NAPA® Echlin® Relay Program

AC Compressor Clutch Relays

Daytime Running Lamp Relays

Multi-function Relays

**ABS Relays** 

**Electronic Brake Control Relays** 

**Overdrive Relays** 

**AC** Relays

**Engine Control Relays** 

Power Door Lock Relays

**Accessory Relays** 

Flashers

Power Window Relays

Adjustable Pedal Relays

Headlight Dimmer Switch Relays

Rear Window Defogger Relays

Air Bag Relays

**Heated Mirror Relays** 

Rear Window Wiper Relays

All Wheel Drive Control Relays

Horn Relays

Secondary Air Injection Pump Relays

**Automatic Headlight Relays** 

Ignition Control Module Relays

Trailer Towing Package Relays

Check Lamp Relays

**Ignition Relays** 

Wiper Relays

Coolant Fan Relays

Keyless Entry System Relays

...and hundreds of more applications











Relays NAPAEchlin.com

### What's New

#### **Oil Pressure Switches**

NAPA® Echlin® has over 400 Oil Pressure Switches representing almost 400 million repair opportunities. Our industry-leading coverage gets better all the time with the frequent release of Switches for import and domestic vehicles.

For the most recent applications, check the online catalog at NAPAEchlin.com.



OP7750
Ford
Trucks
(2023-20)
VIO: 368K





OP7759
Chrysler / Jeep
Cars & SUVs
(2022-17)
VIO: 1.3M





OP7755 GM Cars & Trucks (2020-19) VIO: 915K





Oil Pressure Switches NAPAEchlin.com

## What's New

#### **Power Window Switches**

NAPA® Echlin® has over 1,700 Power
Window Switches, representing 700
million repair opportunities. New Power
Window Switches, along with Cruise
Control Switches, Power Seat Switches,
and other interior Switches are being
introduced regularly.

For the most recent applications, check the online catalog at NAPAEchlin.com.



PA5159
Chrysler / RAM
Cars & Trucks
(2023-15)
VIO: 2.2M





PA3853
Toyota
RAV4
(2012-06)
VIO: 885K





PA5154
Jeep
Cherokee
(2017-14)
VIO: 698K





Power Window Switches NAPAEchlin.com

### What's New

#### **Ignition Switches**

NAPA® Echlin® offers more than 450 Ignition Switches covering 200 million vehicles on the road. New Ignition Switches in every style are being added to make sure you have the late-model coverage you need.

For the most recent applications, check the online catalog at NAPAEchlin.com



KS7894 GM Cars & SUVs (2021-19) VIO: 322K





KS7895 GM Trucks (2021-19) VIO: 1.6M





KS7896
Nissan
Cars & SUVs
(2023-18)
VIO: 461K

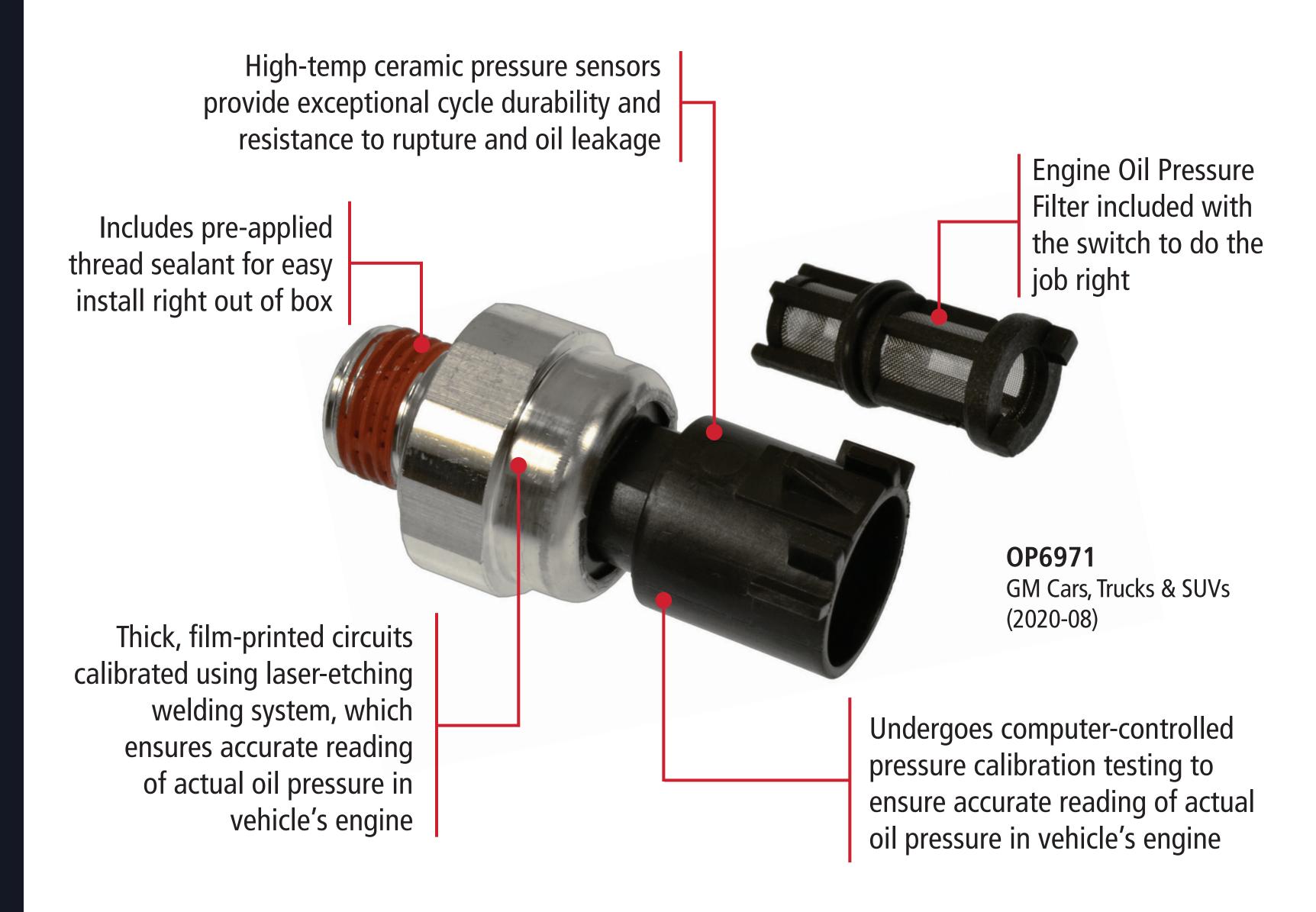




Ignition Switches NAPAEchlin.com

Oil Pressure Switches are critical for monitoring the status and health of engines. NAPA® Echlin® Oil Pressure Switches undergo computer-controlled calibration to ensure precise performance in all conditions.

#### NAPA® Echlin® Oil Pressure Switches



(NAPA) **ECHLIN**. Oil Pressure Switches NAPAEchlin.com

## Top Movers: Oil Pressure Switches

## IMPORT APPLICATIONS



OP6730
Hyundai / Kia
Cars & SUVs
(2021-03)



OP6163
Toyota / Lexus
Cars, Trucks & SUVs
(2024-93)



OP6612
Toyota / Nissan / Subaru & GM (2019-70)



OP6775

Honda / Acura
Cars, Trucks & SUVs
(2019-84)



OP6962
Honda / Acura
Cars & SUVs
(2020-08)





OP6196

GM
Cars, Trucks & SUVs
(2009-97)



OP6971

GM

Cars, Trucks & SUVs

(2020-09)



OP6233

GM
Cars, Trucks & SUVs
(2017-02)



OP6185
Chrysler / Dodge / Jeep / RAM (2017-99)



OP6722 Chrysler / Dodge / Jeep / RAM (2013-02)

Oil Pressure Switches \_\_\_\_\_\_ NAPAEchlin.com

NAPA® Echlin® Ignition Switches are a direct replacement to the original. They are designed for precise function and easy installation.

Ignition Switches are also 100% powertrain neutral, meaning they will represent service opportunies for years to come.

#### NAPA® Echlin® Ignition Switch with Lock Cylinder

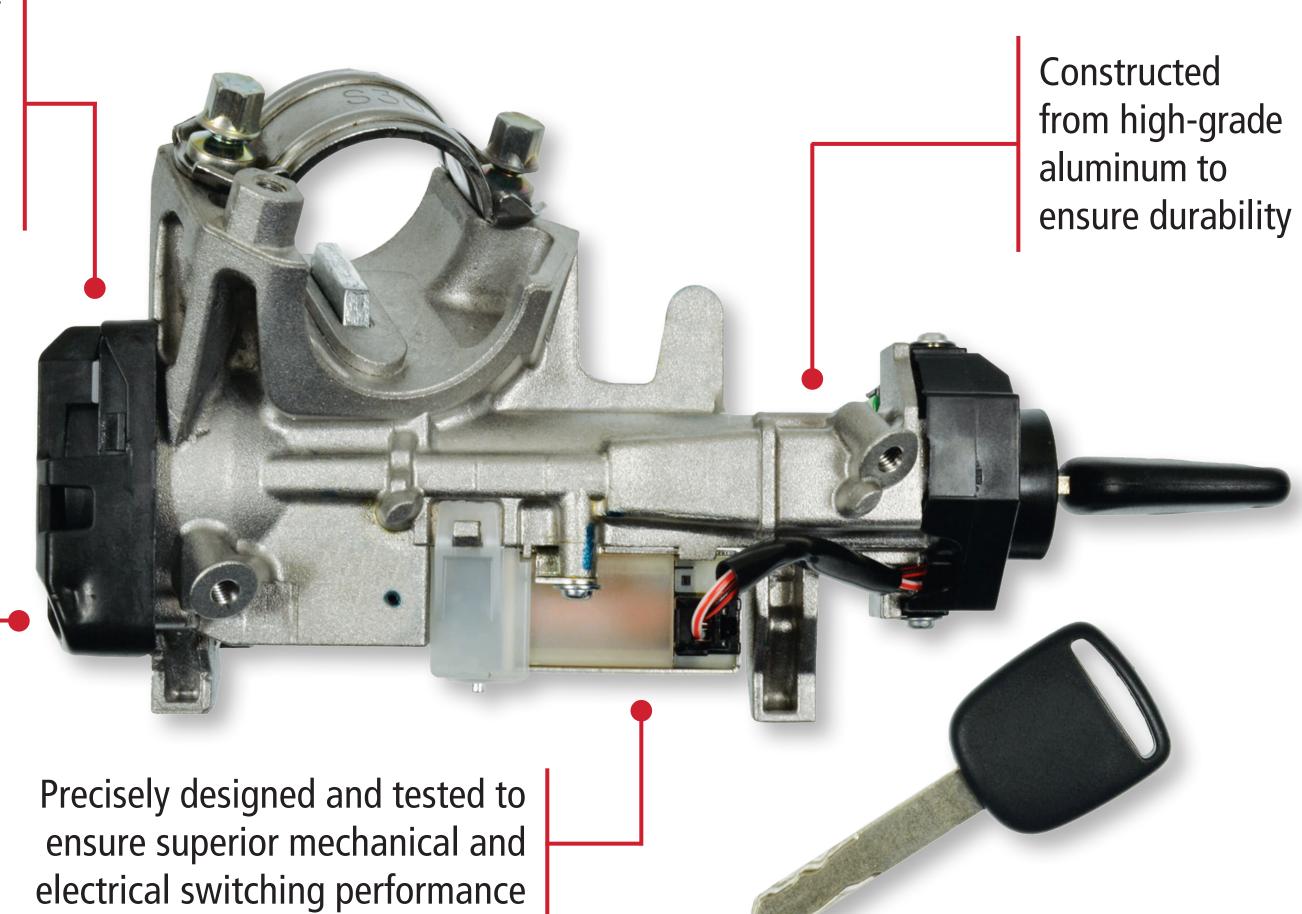
Copper alloy conductors ensure superior electrical conductivity with low resistive losses

KS7515 Honda

(2013-08)

100% tested for proper fit, form,

and function





NAPA® Echlin® also offers the newer style push button ignition switches for import and domestic vehicles



Ignition Switches NAPAEchlin.com

## Top Movers: Ignition Switches

## IMPORT APPLICATIONS



KS6830 Honda / Acura Cars & SUVs (2013-02)



KS7370 Hyundai / Kia Cars & SUVs (2019-10)



KS6405
Nissan
Cars, Trucks & SUVs
(1997-86)



KS7354
Honda / Acura
Cars & SUVs
(2014-08)



KS7804
Volkswagen
Beetle / Jetta
(2019-11)

## DOMESTIC APPLICATIONS



KS6254

GM
Trucks & SUVs
(2011-01)



KS6804

Ford / Lincoln
Cars, Trucks & SUVs
(2019-00)



KS6667

Ford / Mercury

Cars, Trucks & SUVs

(2005-90)



KS6745 GM SUVs (1995-89)

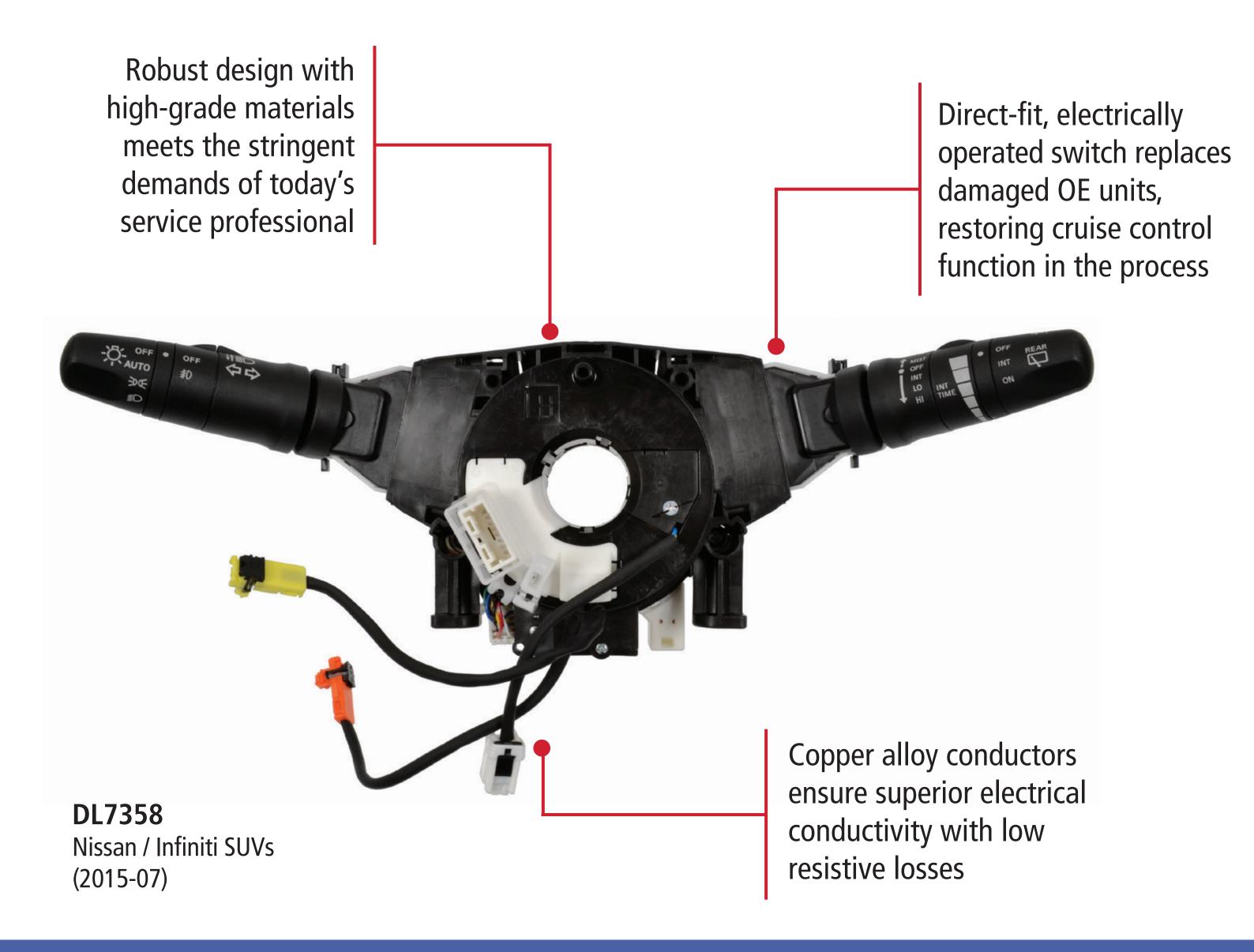


KS6861
Chrysler / Dodge / Jeep
Cars & SUVs
(2018-01)

Ignition Switches NAPAEchlin.com

NAPA® Echlin® offers thousands of direct-replacement interior and driver/passenger-operated switches. All NAPA® Echlin® interior Switches are designed and manufactured for a precise fit and correct on-vehicle performance. Interior Switches are also entirely powertrain neutral.

#### **NAPA® Echlin® Combination Switches**





Interior Switches NAPAEchlin.com

## **Top Movers: Combination Switches**

## IMPORT APPLICATIONS



**DL7194**Toyota

Cars & SUVs

(2015-05)



DL7706 Kia Soul (2019-13)



DL6361
Toyota
Cars, Trucks & SUVs
(2004-98)



DL7358
Nissan / Infiniti
SUVs
(2015-07)



DL7170
Hyundai / Kia
Cars & SUVs
(2012-06)

## DOMESTIC APPLICATIONS



Ford Trucks (2013-11)



DL6739
Ford / Lincoln
Trucks
(2008-05)



DL7694
Ford
Trucks
(2022-15)



DL6740 GM Cars (2011-04)



DL6557 GM Trucks & SUVs (2009-01)

## Top Movers: Power Window Switches

## IMPORT APPLICATIONS



PA2932
Hyundai
Tucson
(2017-10)



PA1697

Honda

Civic
(2011-06)



PA4874 Kia Sportage (2017-10)



PA4699 Kia Soul (2013-10)



PA4849 Kia Optima (2013-11)





PA1426

GM
Trucks & SUVs
(2017-07)



PA1510 GM Trucks & SUVs (2008-03)



PA5050
Ford / Lincoln / Mercury
Cars, Trucks & SUVs
(2008-03)



PA4581
Chrysler / Dodge / RAM
Vans & Trucks
(2022-12)



PA3381
Chrysler / Dodge / Jeep
Cars, Trucks & SUVs
(2017-07)

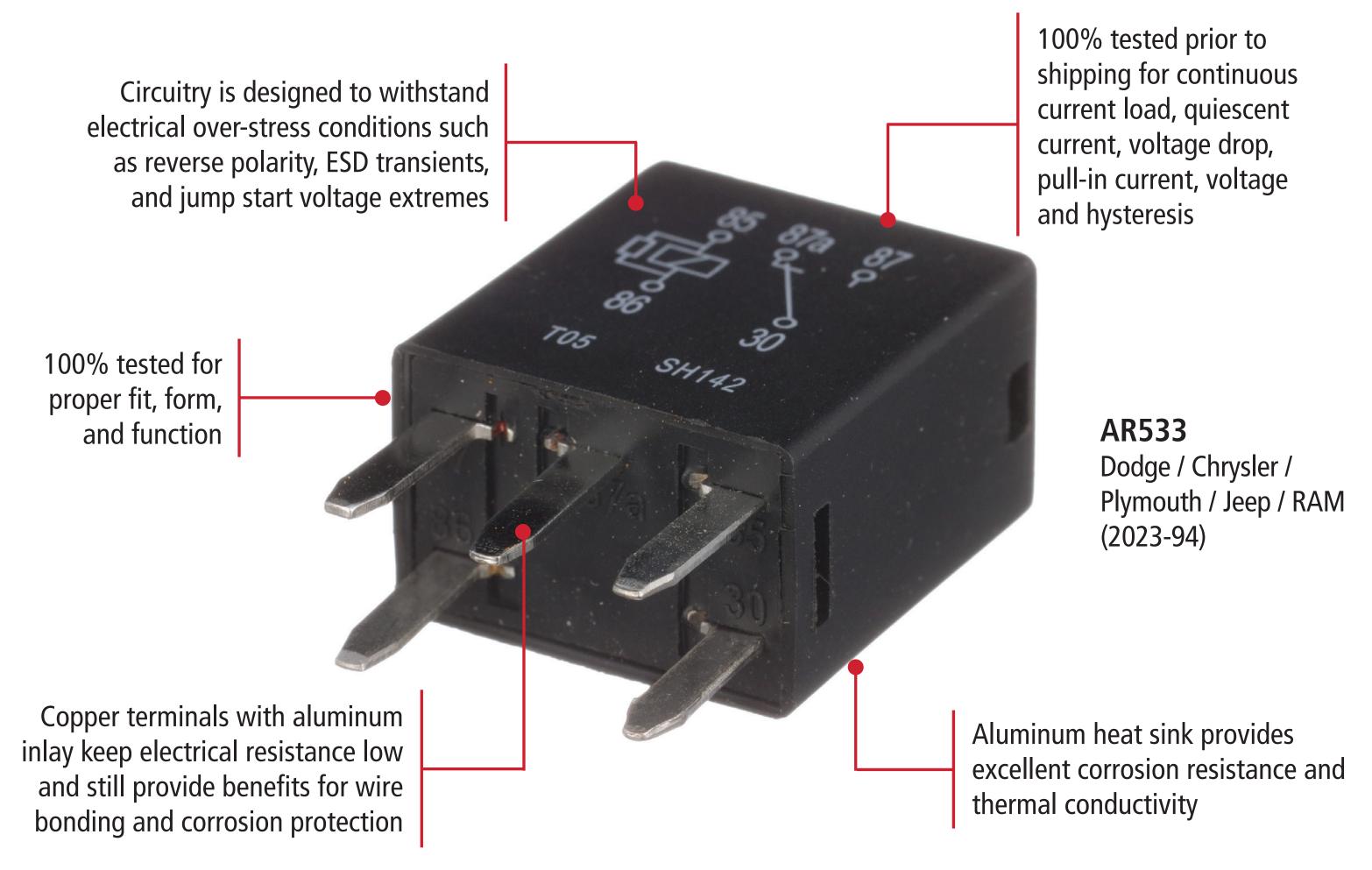
Power Window Switches NAPAEchlin.com

NAPA® Echlin® Relays are the product of high-quality design, manufacturing and testing. With over 1,000 different Relays, NAPA® Echlin® has the Relay you want with the quality and performance your customers need.

#### NAPA® Echlin® Pro Training Tip

On NAPAEchlin.com, you can search "relay" and quickly filter by amperage and terminal type.

#### NAPA® Echlin® Engine Cooling Fan Module







Accessory Relays



Starter Relays

Relays NAPAEchlin.com

## Related Parts

In addition to over 70 different types of Switches, we also offer the high-quality Connectors you need to get your customers back on the road.

To find the Connector you are looking for, visit NAPAEchlin.com.

#### NAPA® Echlin® Switch Connectors







**Multi-function Switch Connectors** 

**Door Jamb Switch Connectors** 

Door Cylinder Anti-Theft Switch Connectors

Oil Pressure Switch Connectors

**Door Lock Position Switch Connectors** 

**Coolant Fan Switch Connectors** 

**Heated Seat Switch Connectors** 

Four Wheel Drive Selector Switch Connectors

**Fuel Pump Cut-Off Switch Connectors** 

**Seat Belt Switch Connectors** 

**Fuel Door Release Switch Connectors** 

**Coolant Fan Switch Connectors** 

**Backup Light Switch Connectors** 

**Clutch Pedal Switch Connectors** 

Shift Interlock Switch Connector

Power Take-Off Switch Connector

Torque Converter Lock-Up Switch Connector

A/C Cut-Off Switch Connector

**Axle Shift Switch Connector** 

Fog Lamo Switch Connector

Four Wheel Drive Selector Switch Connector

**Choke Heater Switch Connector** 

...and more

Switches

# NAPA® Echlin® Pro Training Tech Tip

As experienced ASE-certified automotive technicians themselves, NAPA® Echlin® Pro Trainers are experts in engine and sensor technology. Here's what they say to look out for during an install.



Some switches are "normally open,"

some are "normally closed" and

others communicate data — Having

a vehicle-specific wiring diagram

can save time during any electrical

diagnostic procedure



Many power window switches with
"Auto Up" or "Auto Down" need to
be relearned after replacement — It
is important to look up the correct
procedure, but holding the switch
in the Up position for 10 seconds
and then in the Down position will
usually get the job done



## NAPA® Echlin® Professional Training

**Award-Winning In-Person, Live** Virtual, and Online Learning

NAPA® Echlin® Pro Training delivers accredited classes that educate technicians in the latest automotive repair technologies, and techs can earn CEU credits.

An extension of NAPA® Echlin® training, our extensive YouTube video library has over 500 technical and installation videos.





#### **Available Classes**

**Relay Testing and Diagnosis** 

Labscope

**Vehicle Electronic Fundamentals 1-7** 

**Diagnosing Electronic 4WD Controls** 

**Diagnosing Electronic Fuel Pump Controls** 



#### **Available Classes**

**Powertrain Electronics** 

**Body Control Electronics Diagnosis** 

**Labscope Power User** 

**Domestic Anti-theft** 

Unleash the Power of Your Scan Tool; **Advanced Drivability Diagnostics** 

NAPAEchlin.com



For information on replacing switches, search "Switches" on the NAPA® Echlin® YouTube channel

(NAPA) ECHLIN. **Switches and Relays**