#### **SWITCHES AND RELAYS**

### Highlights

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

NAPA® Echlin® has more than 370
Oil Pressure Switches, representing
377M repair opportunities

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



What's in your box?



#### NAPA® ECHLIN® SWITCHES

## 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.

"Automotive Switches are expected to grow at a compound annual growth rate of 7.6% from 2022 to 2030"

- Market Statsville Group, August 2022

"The automotive switch market will exhibit a compound annual growth rate of **5.81**% during 2021-2027"

- Research and Markets, September 2022

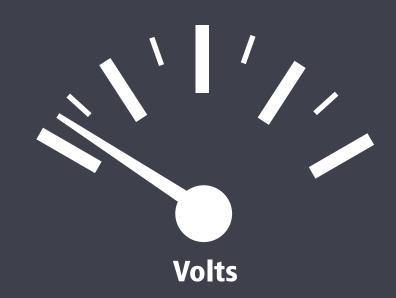
"The automotive switch market is expected to grow at 7.8% annually over the forecast period from 2021-2028"

- Research Dive, September 2022

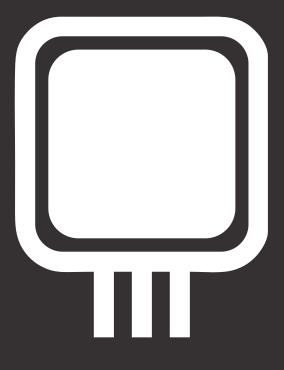
NAPA® ECHLIN®

SWITCHES & RELAYS

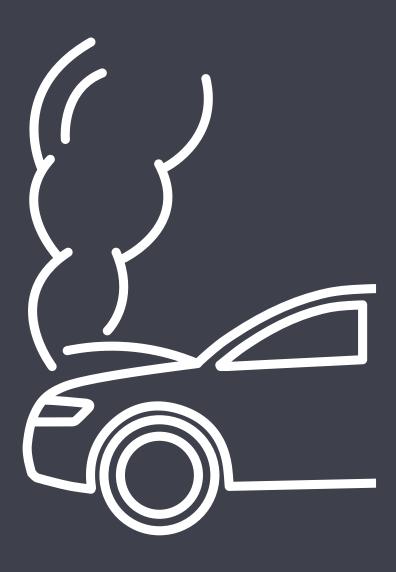
# Impact on Engine Systems



Poor or burnt contacts in a relay will cause a voltage drop to a component. This can cause damage to the component and affect the performance of the vehicle



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



A failed cooling fan
relay should be replaced
immediately as it could
lead to overheating. If
a cooling fan relay has
failed, it is recommend
to thoroughly inspect
the fan as well

#### NAPA® ECHLIN® SWITCHES

### 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

**Door Jamb 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

... and more



#### NAPA® ECHLIN® RELAYS

### Your Complete Program

NAPA® Echlin® has more than 1,125
Relays that cover more than 225 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

A/C 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 Windrow 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









### NAPA® ECHLIN® OIL PRESSURE SWITCHES

#### What's New

NAPA® Echlin® has over 370 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 www.NAPAEchlin.com.



## OP7752 Oil Pressure Light Switch Toyota / Lexus Gas and Hybrid Cars (2022-18)

**VIO: 1.3M** 





# OP7759 Oil Pressure Light Switch Jeep, RAM, and Chrysler Cars & SUVs (2022-17) VIO: 1.3M





## OP7751 Oil Pressure Gauge Switch Porsche 911 (2008-99) VIO: 81K



### NAPA® ECHLIN® POWER WINDOW SWITCHES

#### What's New

NAPA® Echlin® has over 1,400 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 introduced regularly.

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









PA5076
Honda Trucks & SUVs
(2020-2016)
VIO: 1.14M





PA5071
Jeep Wrangler
(2022-18)
VIO: 724K



### NAPA® ECHLIN® IGNITION SWITCHES

#### What's New

NAPA® Echlin® offers more than 456
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 www.NAPAEchlin.com.



KS7884
Ignition Push Button Switch
Honda CR-V
(2018-16)
VIO: 281K





K\$7882
Ignition Starter Switch
GM Trucks
(2020-19)
VIO: 1.02M





K\$7883
Ignition Switch with Lock
Cylinder
Nissan NV Vans
(2015-2014)
VIO: 24K

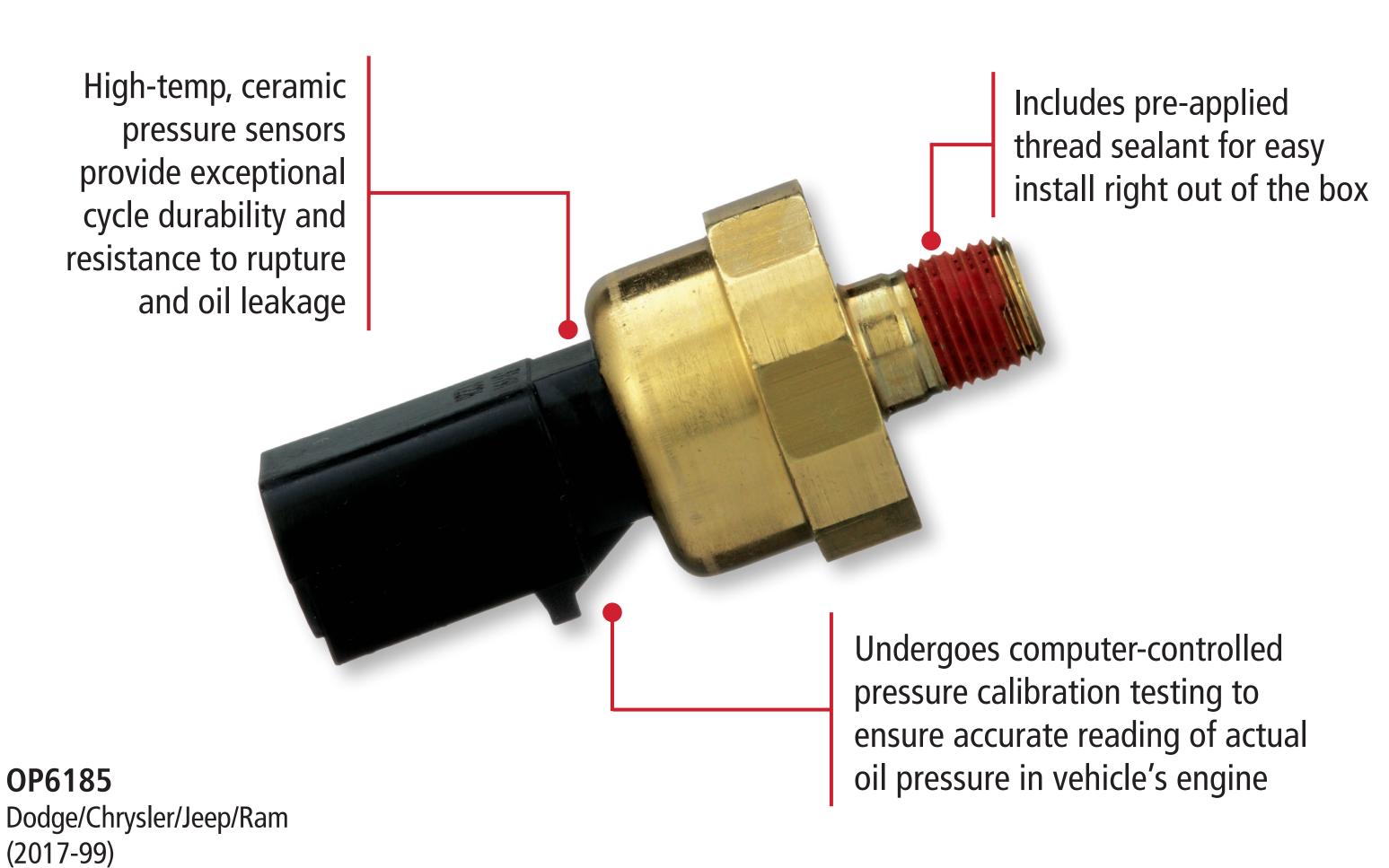


### NAPA® ECHLIN® OIL PRESSURE SWITCHES

### A Closer Look

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

### Top Movers

### IMPORT APPLICATIONS



OP6612

Multiple applications, see

NAPAEchlin.com

for details



**OP6730**Hyundai / Kia Cars & SUVs (2020-03)



OP6163
Toyota / Lexus Cars & SUVs (2020-93)



**OP6775**Honda / Acura Cars & SUVs (2008-84)



OP6917
Subaru Cars & SUVs
(2012-06)

### DOMESTIC APPLICATIONS



OP6971
GM Cars, Trucks & SUVs
(2022-08)



OP6196
GM Cars, Trucks & SUVs
(2009-97)



OP6185

Dodge, Jeep, Chrysler, RAM
(2017-99)



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



OP6889
Ford, Lincoln, Mercury (2021-98)

### NAPA® ECHLIN® IGNITION SWITCHES

#### A Closer Look

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

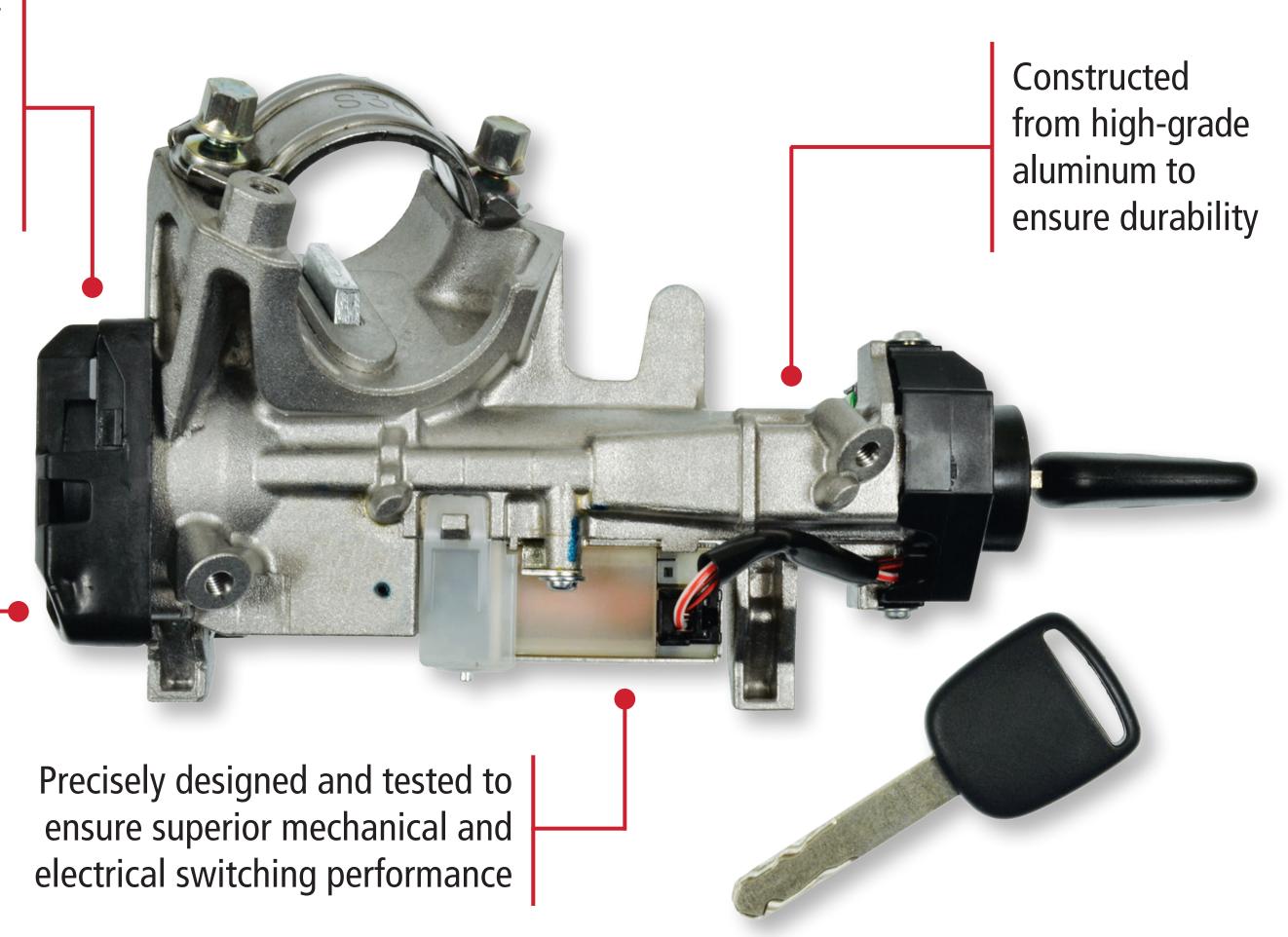
Ignition Switches are also 100% powertrain neutral, meaning they will represent service opportunies for years to come.

#### 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

#### NAPA® ECHLIN® IGNITION SWITCHES

### Top Movers

### IMPORT APPLICATIONS



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



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



KS6853 Honda / Acura Cars (2003-98)



**KS7053**Hyundai / Kia Cars & Vans (2014-06)



KS6770 Nissan Cars, Trucks & SUVs (2019-00)

### DOMESTIC APPLICATIONS



KS6254
GM Cars, Trucks & SUVs
(2011-01)



KS6804
Ford / Mercury
Cars, Trucks & SUVs
(2019-00)

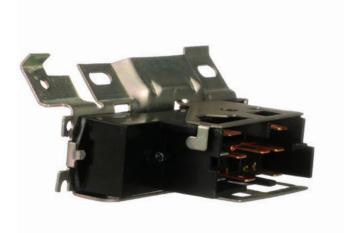


KS6667

Ford / Mercury

Cars, Trucks & SUVs

(2004-90)



KS6622
Multiple applications, see
NAPAEchlin.com
for details



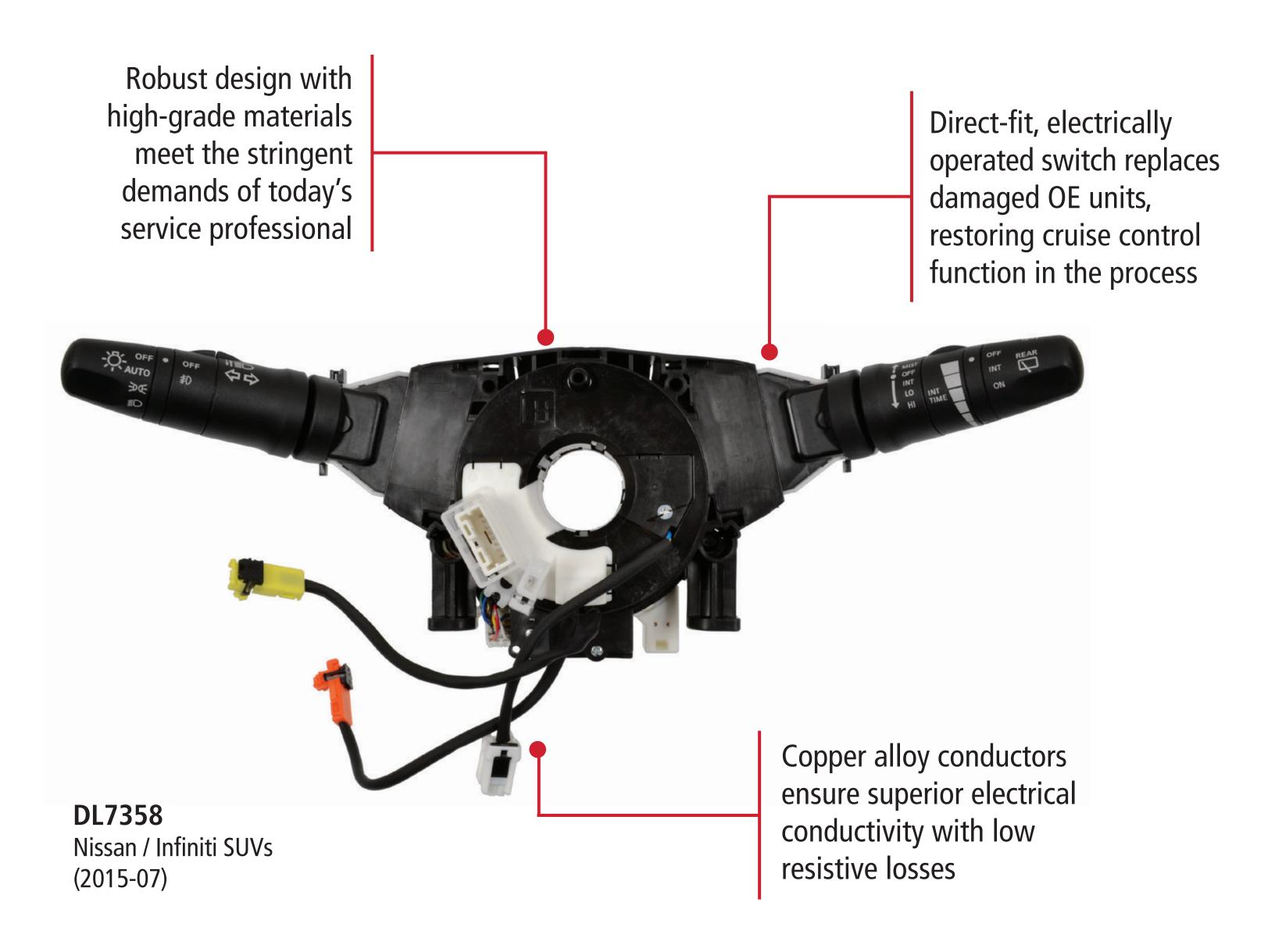
KS6861 Chrysler, Dodge, Jeep Cars & SUVs (2018-01)

### NAPA® ECHLIN® INTERIOR SWITCHES

### A Closer Look

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**



#### NAPA® ECHLIN® COMBINATION SWITCHES

### Top Movers

### IMPORT APPLICATIONS



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



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



DL7358
Nissan / Infiniti SUVs
(2015-07)



**DL7194**Toyota Cars & SUVs (2015-05)



DL6402
Honda / Acura Cars & SUVs (2008-00)

### DOMESTIC APPLICATIONS



**DL7694**Ford Trucks (2020-15)



DL7540 Ford Trucks (2012-11)



DL6740 GM Cars (2011-04)



DL6739
Ford / Lincoln Trucks (2008-05)

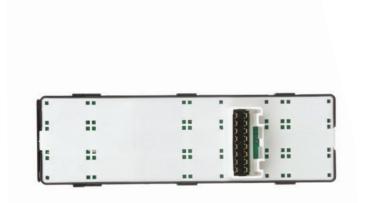


DL6557
GM Trucks & SUVs
(2009-01)

#### NAPA® ECHLIN® POWER WINDOW SWITCHES

### Top Movers





PA1823
Hyundai Cars
(2015-10)



PA1100
Toyota / Scion
Cars, Trucks & SUVs
(2012-93)



PA1661
Nissan Trucks & SUVs (2019-07)



PA3589
Toyota / Scion Cars & Vans
(2010-02)



PA1612
Nissan Trucks & SUVs
(2010-10)





PA1426
GM Cars, Trucks & SUVs
(2017-07)



PA931

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



PA4581
Chrsyler, Dodge and RAM
Vans & Trucks
(2022-12)



PA1510
GM Trucks & SUVs
(2007-03)



PA3379
Dodge / RAM
(2012-09)

#### NAPA® ECHLIN® RELAYS

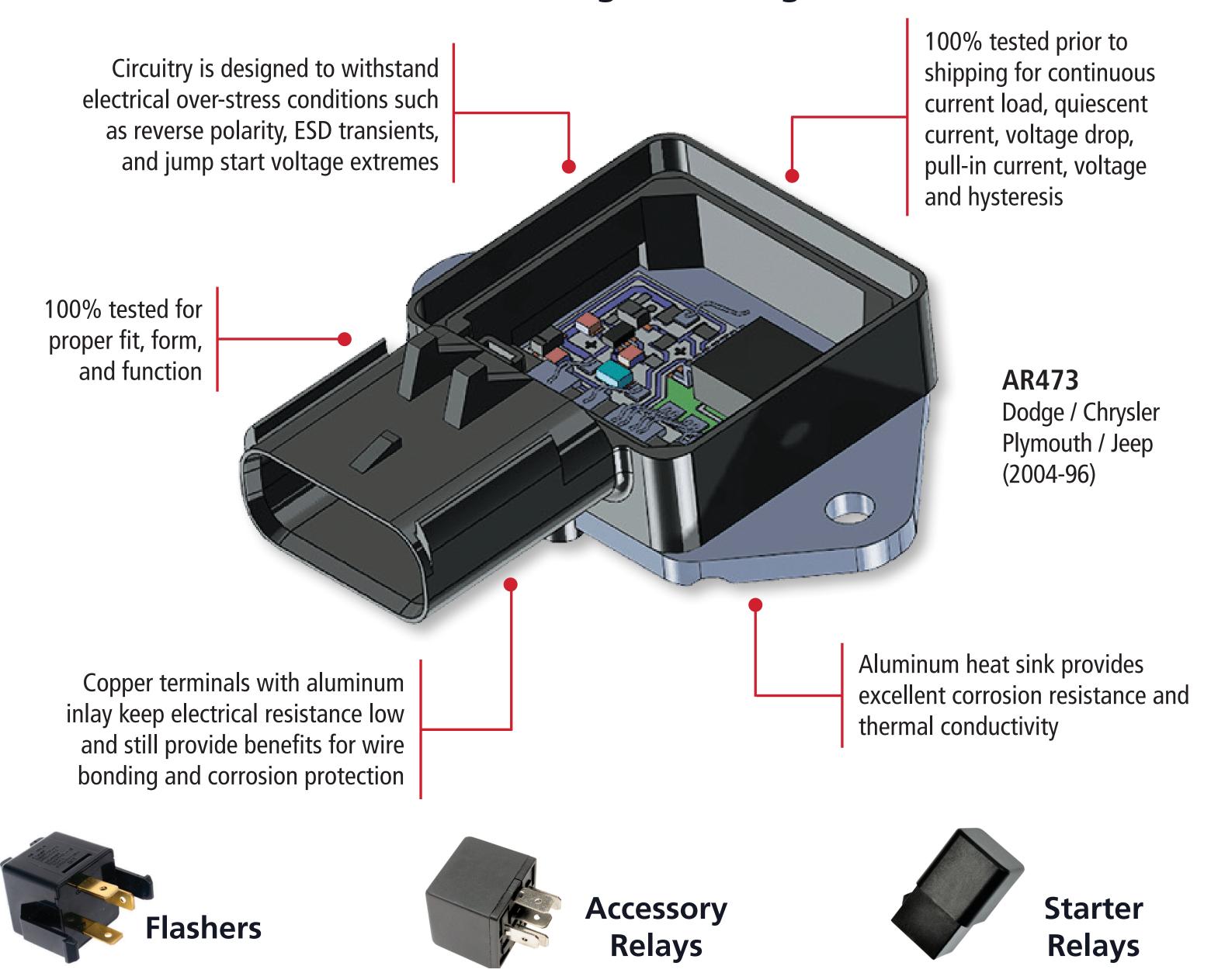
### A Closer Look

NAPA® Echlin® Relays are the product of high-quality design, manufacturing and testing. With over 1000 different Relays, NAPA® Echlin® has the Relay you want with the quality and performance your customers need.

#### NAPA® Echlin® Training Tip

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

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



#### NAPA® ECHLIN® SWITCHES

# 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** 

... and more

# NAPA® Echlin® Training Tech Tip

As experienced ASE-certified automotive technicians themselves, NAPA® Echlin® Trainers are experts in engine and sensor technology.



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



On most modern vehicles, the brake light switch will need to be programmed with a scan tool after installation

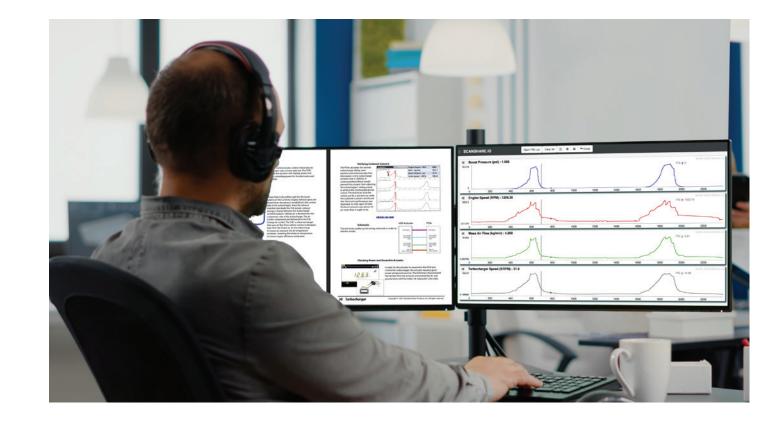
### NAPA® ECHLIN® SWITCHES & RELAYS

# NAPA® Echlin® Professional Training

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

NAPA® Echlin® 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 ADA-compliant YouTube professional installation video library has over 40 million views and 50,000+channel subscribers.





NAPA® Echlin® offers an annual subscription to Pro Training On-Demand. This subscription grants access to more than 200 English, and over 50 Spanish 1-hour courses – and the NAPA® Echlin® on-demand library continues to grow. Topics range from fundamentals to advanced concepts, and include HVAC, diesel, hybrid, ignition, injection, electrical and communication diagnosis.





Whether in-person at your location or virtually via computer, all NAPA® Echlin® Training classes feature a live instructor and are fully interactive as students work through real-life scenarios. Virtual class "workbooks" include on-demand links to video content and student configurable scan data.

**Visit NAPAEchlinTraining.com**