









### **POWERA CONTROL**

- Single Engine with Trim 42010 R
- Single Engine without Trim 42009 G
- Dual Engine with Trim 42012 R
- Dual Engine without Trim 42011 T
  - Control station functions:
  - Station Select
  - Warm up
  - Docking
  - Engine synchronization
  - High idle
- Ergonomic design
- Adjustable friction
- Backlit control panel

## **MECHANICAL SHIFT AND THROTTLE M-ACTUATOR - 42027 J**

- Electromechanical actuator for all mechanically controlled engine functions i.e. throttle or shift
- One actuator required per function per
- Connect to engines using 33C/Universal style mechanical control cables i.e. MachZero and C8
- IP 65 protected
- Dimensions: 4" x 12"

### **PROGRAMMING MODULE - 42017 F**

- LCD Liquid crystal display
- Menu driven programming
- Diagnostic data
- IP 65
- Dimensions: 8" x 4.3"



### **CABLES FOR MECHANICAL SHIFT AND THROTTLE ACTUATORS**

| Main Power Cable 1 per battery |        | Extension Cable Power 1 per M-Actuator |        | CAN Cable 3 per single engine 5 per twin engine |        |
|--------------------------------|--------|--|--------|---|--------|
| Length                         | P. No. | Length                                 | P. No. | Length  | P. No. |
| 3.3'                           | 42052H | 3.3'                                   | 42056S | 3.3'  | 73639T |
| 9.8′                           | 42053K | 9.8′                                   | 42057U | 9.8′  | 73680P |
| 22.9′                          | 42054M | 22.9'                                  | 42058W | 22.9'   | 736815 |
| 32.8′                          | 42055P | 32.8′                                  | 42059Y | 32.8′   | 70021K |
|                                |        |  |        | 49.2'   | 71031N |
|                                |        |  |        | 65.6′   | 71032R |



## POWER DISTRIBUTION MODULE - 42026 G

- Automatic Power Selector
- Rectifier (dual)
- IP 65
- Dimensions: 8.5" x 4.7"





- Controls up to 2 shift functions with solenoids. Required for use with direct connection to electronic shift unit on the transmission.
- IP 65 Protected
- Dimensions: 8.3" x 4.7"



# **ELECTRONIC THROTTLE** V-THROTTLE - 42018 H

■ For 0-5V engine interface.

# **SAEJ-THROTTLE - Customized**

- Digital signal to CAN SAEJ1939 or NMEA 2000 engine interface, on request, according to customer's specifications
- IP 65 protected
- Dimensions: 8" x 4.3"

## **CABLES FOR ELECTRONIC SHIFT AND THROTTLE ACTUATORS:**

| Main Power Cable |        | Universal V Throttle Cable |        | SHIFT Cable<br>1 per solenoid shift |        | CAN Cable 3 per single engine |        |
|------------------|--------|----------------------------|--------|-------------------------------------|--------|-------------------------------|--------|
| 1 per battery    |        | 1 per engine               |        | function                            |        | 5 per twin engine             |        |
| Length           | P. No. | Length                     | P. No. | Length                              | P. No. | Length                        | P. No. |
| 3.3'             | 42052H | 6.6'                       | 42029N | 3.3"                                | 42060G | 3.3'                          | 73639T |
| 9.8'             | 42053K | 13.1′                      | 42030X | 9.8"                                | 42061J | 9.8'                          | 73680P |
| 22.9′            | 42054M |                            |        | 22.9"                               | 42062L | 22.9'                         | 736815 |
| 32.8′            | 42055P |                            |        | 32.8"                               | 42063N | 32.8′                         | 70021K |
|                  |        |                            |        |                                     |        | 49.2'                         | 71031N |
|                  |        |                            |        |                                     |        | 65.6′                         | 71032R |

NETWORK TERMINATOR: 1 per system P.No. 42028L



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| ENGINE   | NO. OF ENGINES   | COMPONENTS  | P. No.  | Q.TY   |
|--|--|---|---|--|
| PwA II-EE Electronic throttle Electric shift       | Single<br>Engine   | Single control with trim (or no trim) Control Unit E-Throttle unit E-Shift unit Throttle cable Shift cable Power supply cable (general) CAN cable Network terminators   | 42010R (42009G) 42017F Chart A 42023A Chart B Chart C Chart C Chart C 42028L        | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>3<br>1      |
|  |  | Power Unit (optional for second battery) Power cable extension (optional for second battery) Power supply cable (optional for second battery)   | 42026G<br>Chart C<br>Chart C  | 1<br>1<br>1                                    |
|  | Two<br>Engines   | Dual control with trim (or no trim) Control Unit E-Throttle unit E-Shift unit Throttle cable Shift cable Power supply cable (general) CAN cable Network terminators   | 42012V (42011T) 42017F Chart A 42023A Chart B Chart C Chart C Chart C 42028L        | 1<br>1<br>1<br>1<br>2<br>2<br>1<br>3<br>1      |
|  |  | Power Unit (optional for second battery) Power cable extension (optional for second battery) Power supply cable (optional for second battery)   | 42026G<br>Chart C<br>Chart C  | 1<br>1<br>1                                    |
|  | Single<br>Engine   | Single control with trim (or no trim) Control Unit E-Throttle unit Mechanical actuator Throttle cable CAN cable Power supply cable (general) Network terminators  | 42010R (42009G) 42017F Chart A 42027J Chart B Chart C Chart C 42028L                | 1<br>1<br>1<br>1<br>1<br>3<br>1                |
| PwA II-EM  |  | Power Unit (optional for second battery) Power cable extension (optional for second battery) Power supply cable (optional for second battery)   | 42026G<br>Chart C<br>Chart C  | 1<br>1<br>1                                    |
| throttle<br>Mechanical<br>shift                    | Two<br>Engines   | Dual control with trim (or no trim) Control Unit E-Throttle unit Mechanical actuator Throttle cable CAN cable Power supply cable (general) Network terminators Power Unit Power extension cable  Power supply cable (optional for second battery) | 42012V (42011T) 42017F Chart A 42027J Chart B Chart C Chart C 42028L 42026G Chart C | 1<br>1<br>1<br>2<br>2<br>4<br>1<br>1<br>1<br>2 |
| For each additic<br>Single Engine:<br>Two Engines: | 42010R (42009G)<br>Chart C<br>42012V (42011T)<br>Chart C | 1<br>1<br>1<br>1  |   |  |

For each additional station add:

CAN cable

**CAN** cable

Single Engine:

Two Engines:

Single lever control station with trim (or no trim)

Dual lever control station with trim (or no trim)

42010R (42009G)

42012V (42011T)

Chart C

Chart C

1

1

1

1



