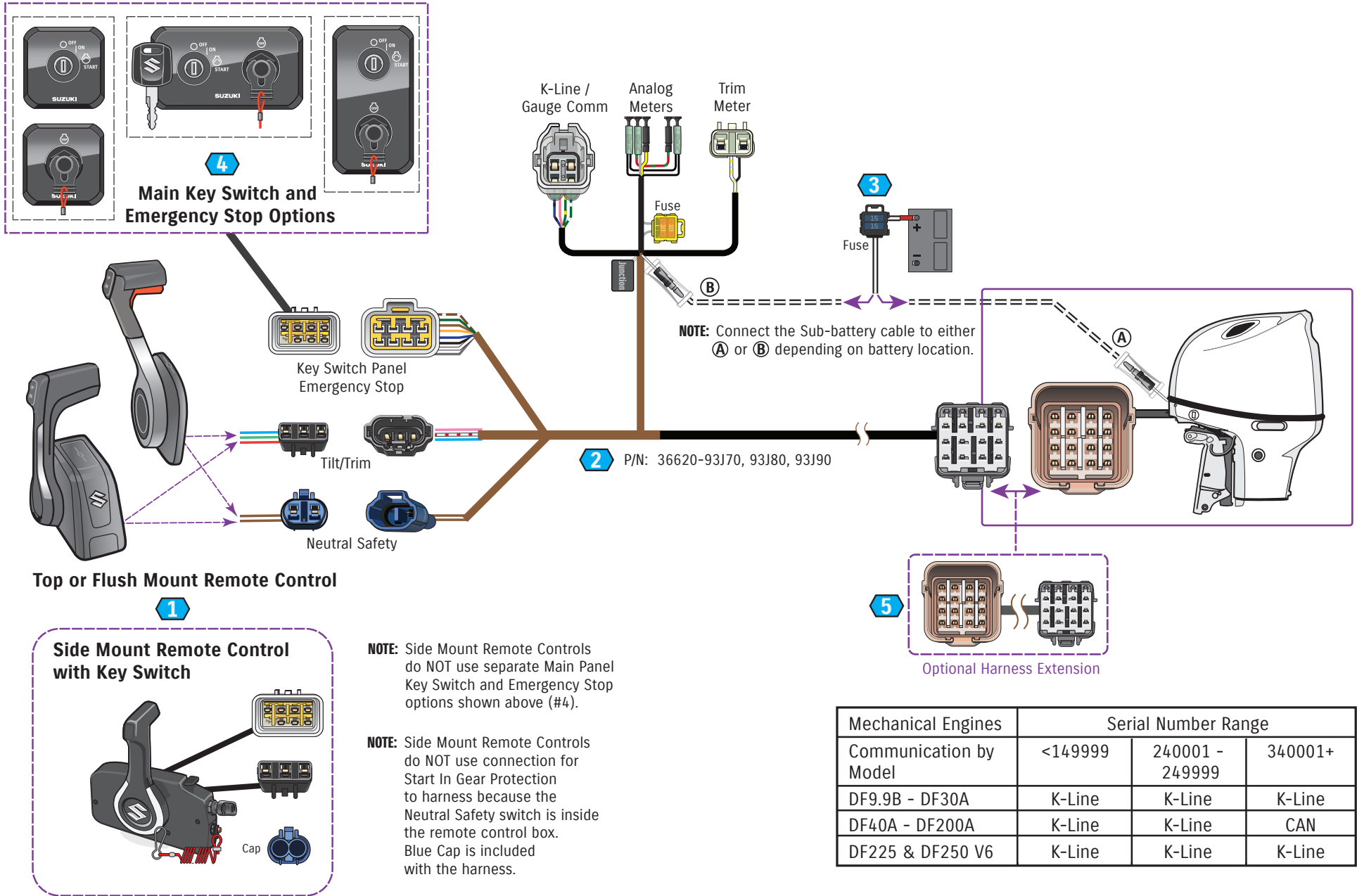


Mechanical Remote Control Single Engine (Non-CAN Harness)



Mechanical Engines	Serial Number Range		
Communication by Model	<149999	240001 - 249999	340001+
DF9.9B - DF30A	K-Line	K-Line	K-Line
DF40A - DF200A	K-Line	K-Line	CAN
DF225 & DF250 V6	K-Line	K-Line	K-Line

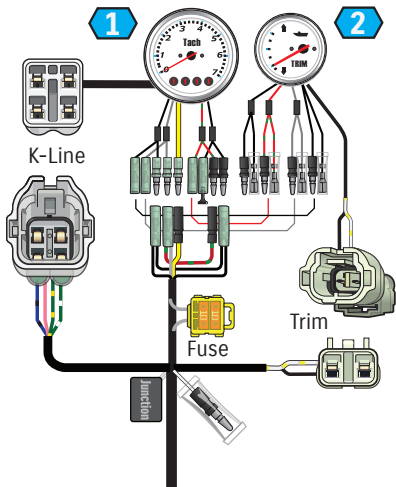
Single Engine Mechanical Remote Control (non-CAN)						
New		No.	Part No.	Part Name	Qty	
	Choose Control	1	67200-88L01	Remote Control Box - Top Mount	1	See Note B
			67200-93J34	Remote Control Box - Flush Mount (concealed)		
			67200-93J70	Remote Control Box - Side w/ Integrated Keyswitch		
	Choose Required Main Harness Length	2	36620-93J80	Remote Control Main Harness 16 ft.	1	Obsolete: -93J54
			36620-93J70	Remote Control Main Harness 21 ft.		Obsolete: -93J04
			36620-93J90	Remote Control Main Harness 26 ft.		Obsolete: -93J64
	Choose Required Clean Power Length	3	36625-93J01	Sub-battery ECM Lead 12.7 ft.	1	Included w/ engine Optional length
			36625-93J10	Sub-battery ECM Lead 22 ft.		
	Matching Panel Style (see Note A) Single Panel Options	4	37100-98L00	Main Key Switch Panel (add Emergency Stop)	1	See Note A and Note B
			37803-98L00	Emergency Stop Switch Panel (for panel above)	1	
			37100-98L10	Main Switch Panel (Vertical) w/ Emergency Stop	1	
			37100-98L20	Main Switch Panel (Horizontal) w/ Emergency Stop		
	As Required	5	36620-93J12	Main Harness Extension 6.5 ft.		
			36620-93J42	Main Harness Extension 10 ft.		
<p>Note A - Matching panel option allows the Main Switch and the Emergency Stop Switch to be located separately at the helm station. Note B - No Main Switch Panels (#4) are needed with the Side Mount Remote Control 67200-93J70 having integrated key and stop switches.</p>						

Twin Engine Mechanical Remote Control (non-CAN)						
New		No.	Part No.	Part Name	Qty	
	Choose Control Style	1	67200-88L11	Remote Control box - Dual Top Mount	1	See Note A
			67200-93J70	Remote Control box - Side w/ Integrated Keyswitch	2	
☆	Choose Required Main Harness Length	2	36620-93J80	Remote Control Main Harness 16 ft.	2	Obsolete: -93J54
			36620-93J70	Remote Control Main Harness 21 ft.		Obsolete: -93J04
			36620-93J90	Remote Control Main Harness 26 ft.		Obsolete: -93J64
	Choose Required Clean Power Length	3	36625-93J01	Sub-battery ECM Lead 12.7 ft.	2	Included w/ engine Optional length
			36625-93J10	Sub-battery ECM Lead 22 ft.		
	Top Mount Only	4	37100-98L30	Main Switch Panel	1	See Note A
☆	As Required	5	36620-93J12	Main Harness Extension 6.5 ft.		
			36620-93J42	Main Harness Extension 10 ft.		
<p>Note A - No Main Switch Panel is needed with the Side Mount Remote Controls 67200-93J70 having integrated key and stop switch.</p>						

Mechanical Remote Control K-Line Display Configurations (Non-CAN Harness)

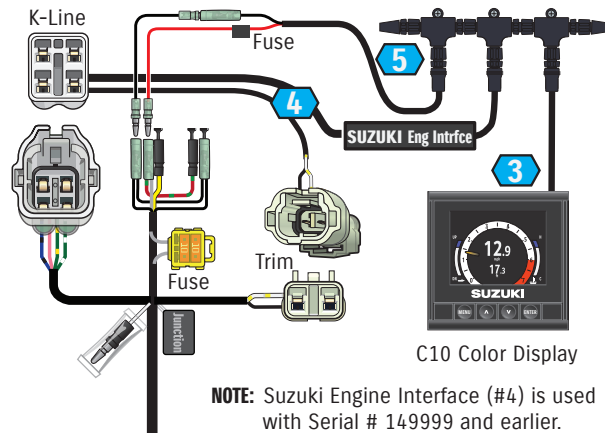


Tach w/ Monitor and Trim



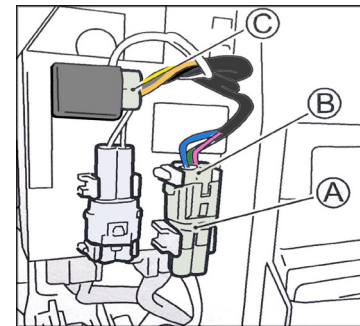
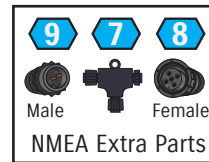
NOTE:
Trim gauge is NOT grounded through sender, so the black wire from gauge MUST be grounded.

C10 using NMEA Network



NOTE: Suzuki Engine Interface (#4) is used with Serial # 149999 and earlier.

Single Engine



NOTE for ENGINE HARNESS RECONFIGURATION from K-LINE to CAN:
Reconfiguration of Engine Harness as shown above is required only when using C10 on Non-CAN Harnesses 36620-93J70, -93J80, -93J90. Disconnect 4-pin gauge connector "A" from gauge connector "B" then connect "A" to connector "C" that is located in the rubber cap. Finish by putting rubber cap on connector "B" and secure in place.

Connector B - Blue w/ Black, Green w/ White, Pink w/ White (gauge)
Connector C - Black, Gray, Orange w/ Yellow, Yellow (digital output)

Twin Engine with C10s using NMEA Network



*If the network will need to be active while engine keys are off, connect the Red wire to a fused switch for this purpose.

APPLICATION NOTE for C10 with DIGITAL ENGINES:

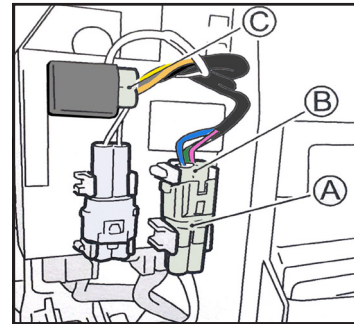
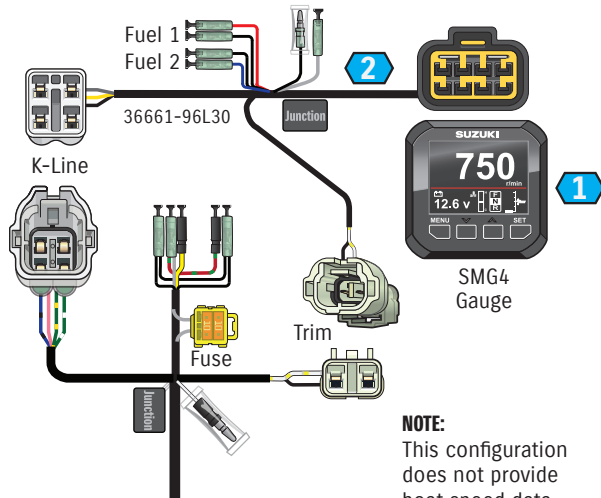
Bulletin PA 22-15 (May 2022) provides part number and year information for ordering adapters or gateways to transmit digital data from engines with SPC 2.0 controls to C10 displays, a Simrad MFD, or for multi-engine installations.

Mechanical Remote Control K-Line Display Configurations (non-CAN)						
New		No.	Part No.	Part Name	Qty	
	Analog Sweep Gauge Style	1	34200-93J14	Tachometer with Monitor, White	1	Each Engine
			34200-93J02	Tachometer with Monitor, Black		
		2	34800-93J13	Trim Gauge, White (DF25A – DF250)	Opt.	
			34800-93J02	Trim Gauge, Black (DF25A – DF250)		
	4" Display Style	3	990C0-04C10	C10 Color Display	1	Note A
			990C0-10C10	Suzuki C10 Protective Cover		
	For Color Display	4	990C0-88149-357	Engine Interface (with K-Line connectors)	1	Each Engine
	NMEA Starter Kit	5	36001-88L00	Wire Set, NMEA ("T" w/ resistors, fused power wire)	1	
	Network Power	6	990C0-88130	Quad Power Cable	as req'd	For Key-off Power
	Replacement #	7	990C0-88110	Connector Comp, Branch	extra parts	"T"
	Replacement #	8	990C0-88113	Female Resistor NMEA Terminator		Female - Sockets
	Replacement #	9	990C0-88114	Male Resistor NMEA Terminator		Male - Pins
	NMEA "Drop"		990C0-88104	Backbone Extension Cable, 2 ft	as req'd	
			990C0-88105	Backbone Extension Cable, 6 ft		
<p>Note A - When using Non-CAN Harnesses 36620-93J70, -93J80, -93J90 refer to accompanying drawing for instructions to reconfigure the Engine Harness to transmit Engine Monitor information via K-Line / SDS wires in the control harness.</p>						

Mechanical Remote Control SMG4 Gauge Configurations (Non-CAN Harness)



SMG4 with Adapter



NOTE for ENGINE HARNESS RECONFIGURATION from K-LINE to CAN:

Reconfiguration of Engine Harness as shown above is required when using SMG4 Gauge on Non-CAN Harnesses 36620-93J70, -93J80, -93J90. Disconnect 4-pin gauge connector "B" from gauge connector "A" then connect "A" to connector "C" that is located in the rubber cap. Finish by putting rubber cap on connector "B" and secure in place.

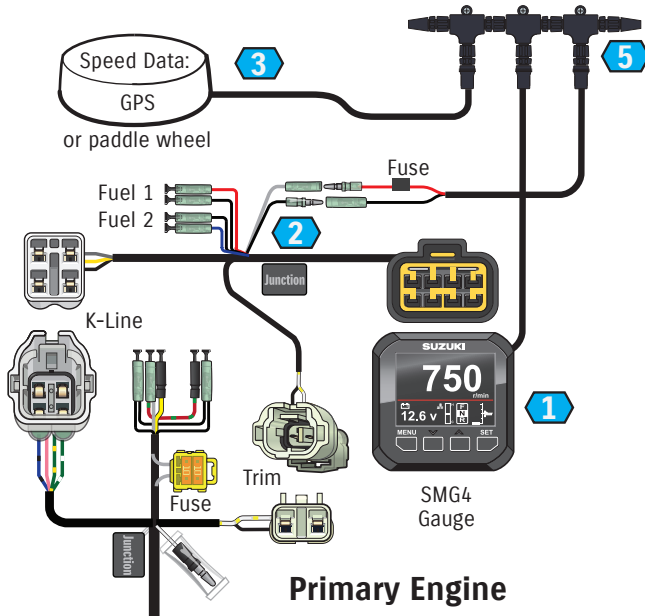
Connector B - Blue w/ Black, Green w/ White, Pink w/ White (gauge)
 Connector C - Black, Gray, Orange w/ Yellow, Yellow (digital output)

SMG4 APPLICATION NOTE:

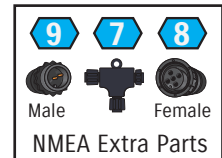
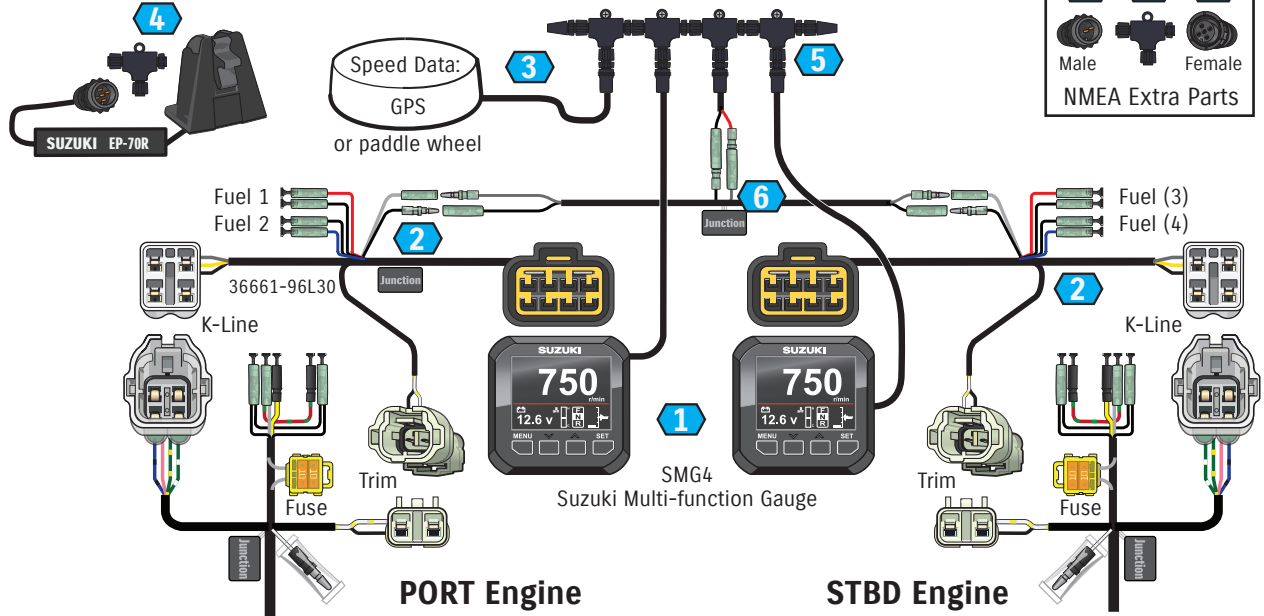
Bulletin **SV 23-04** provides details to identify which SMG4 software versions are compatible with Mechanical and SPC 1.0 or 2.0 engines. Some software versions support interfacing with third party MFDs without using a separate gateway or engine interface.

Version 3.101 and newer provide all capabilities. Turn on gauge then press MENU to view version info.

SMG4 using NMEA Network

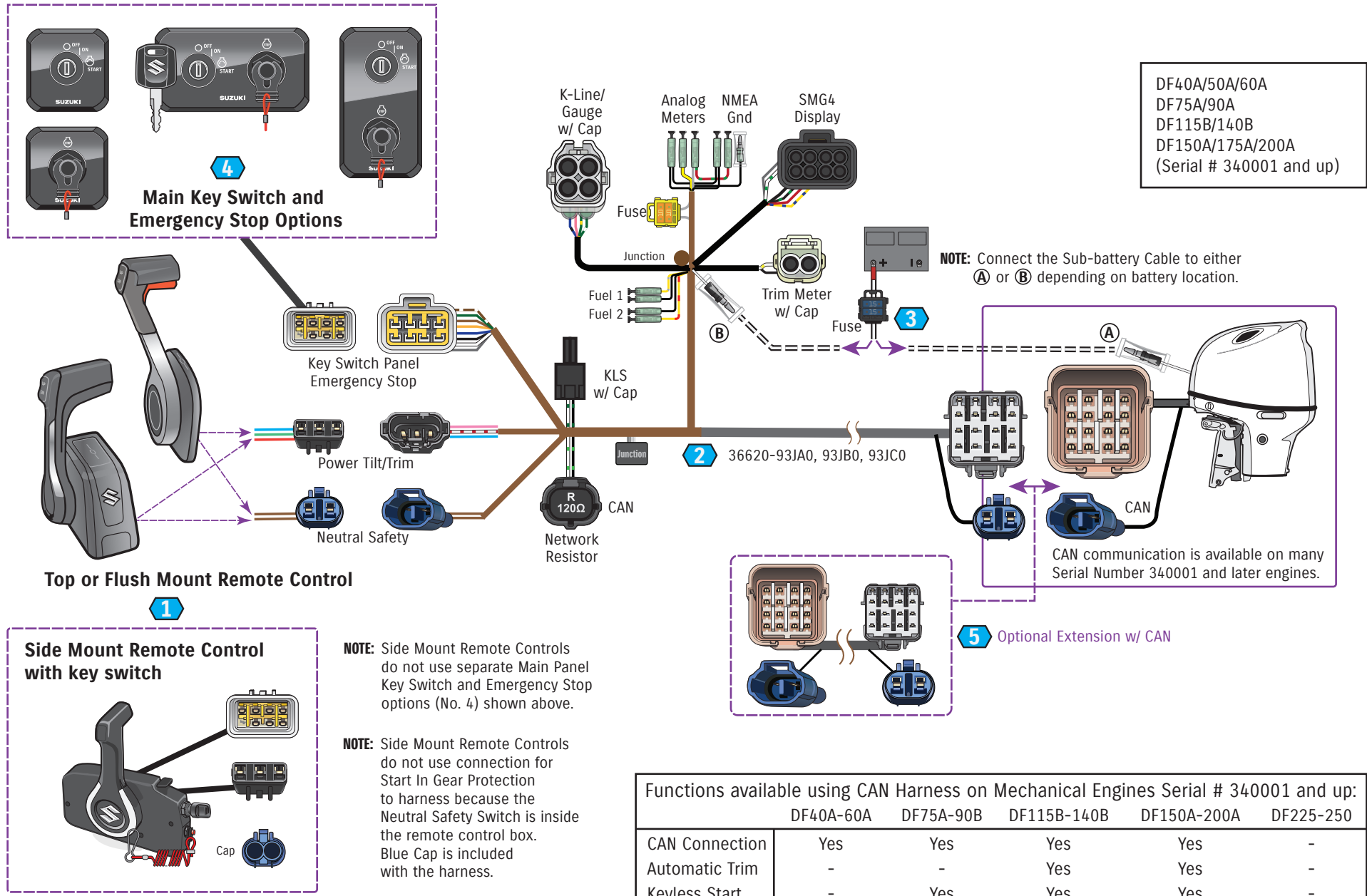


Twin SMG4 using NMEA Network



Mechanical Remote Control SMG4 Gauge Configurations (non-CAN)						
New		No.	Part No.	Part Name	Qty	
	SMG4 Gauge	1	34011-96L44	Gauge Assy, Multi (-96L44 has software ver 3.101)	1 per engine	
			34211-96L00	SMG Sun Cover		
	For Mechanical Harness	2	36661-96L30	Gauge Adapter, Mechanical		
	Add a Speed Data Source	3	990C0-88122	GPS Antenna w/ Compass (w/ NMEA "T")	Opt.	
		4	990C0-88317	Sensor Assy, Paddle Wheel		
	NMEA Starter Kit	5	36001-88L00	Wire Set, NMEA (w/ resistors and fused power wire)		
	Dual Power Source	6	36665-87L10	Multi Gauge Adapter for Mechanical	1	Twin Engines
	Replacement #	7	990C0-88110	Connector Comp, Branch (NMEA "T")	extra parts	
	Replacement #	8	990C0-88113	Female Resistor NMEA Terminator		Female - Sockets
	Replacement #	9	990C0-88114	Male Resistor NMEA Terminator		Male - Pins
	NMEA "Drop"		990C0-88104	Backbone Extension Cable, 2 ft	as req'd	
			990C0-88105	Backbone Extension Cable, 6 ft		
<p>Note A - When using Non-CAN Harnesses 36620-93J70, -93J80, -93J90 refer to accompanying drawing for instructions to reconfigure the Engine Harness to transmit Engine Monitor information via K-Line / SDS wires in the control harness.</p>						

Mechanical Remote Control Single Engine with CAN Harness



DF40A/50A/60A
 DF75A/90A
 DF115B/140B
 DF150A/175A/200A
 (Serial # 340001 and up)

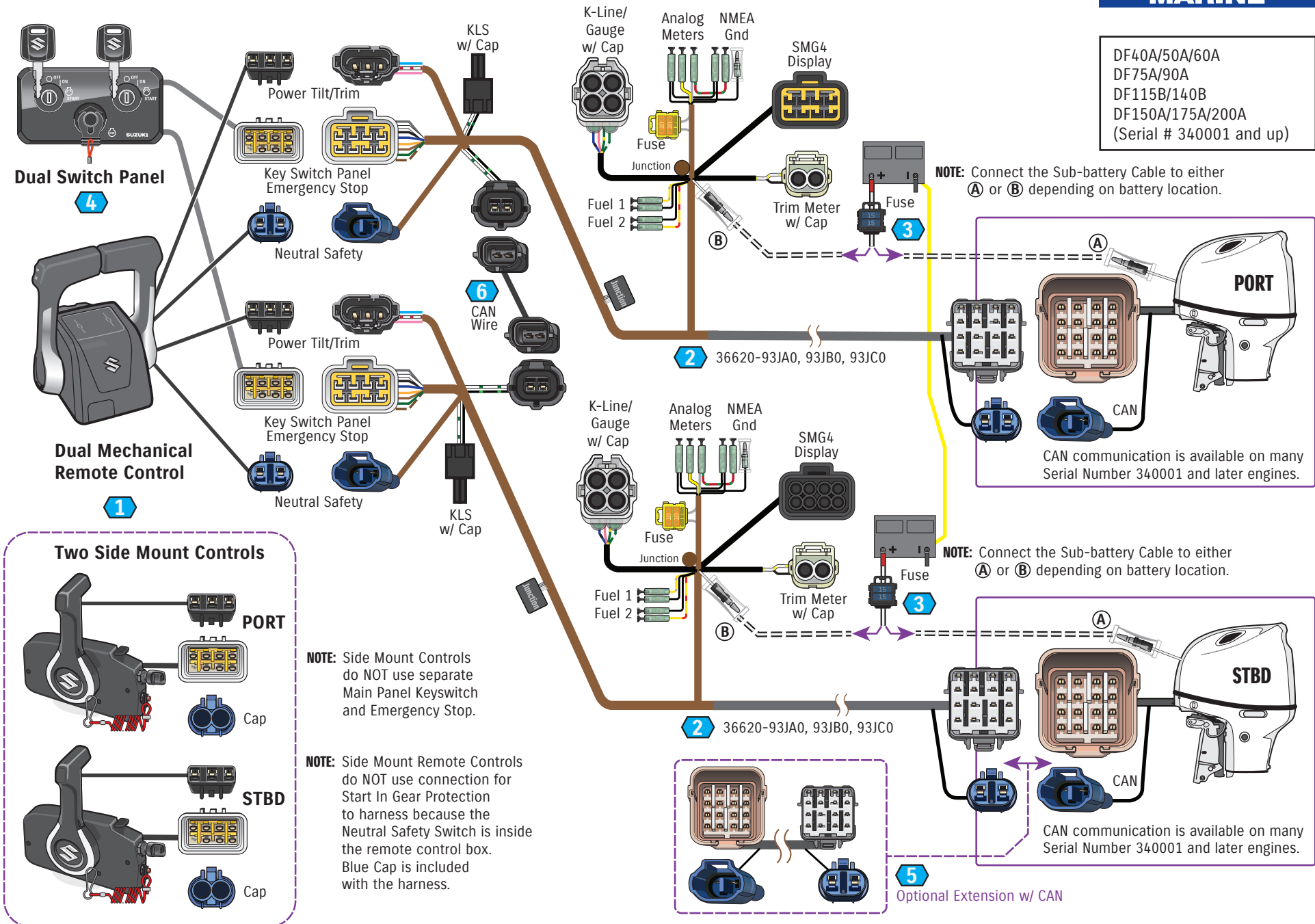
Functions available using CAN Harness on Mechanical Engines Serial # 340001 and up:					
	DF40A-60A	DF75A-90B	DF115B-140B	DF150A-200A	DF225-250
CAN Connection	Yes	Yes	Yes	Yes	-
Automatic Trim	-	-	Yes	Yes	-
Keyless Start	-	Yes	Yes	Yes	-

Single Engine Mechanical Remote Control (CAN Harness)						
New		No.	Part No.	Part Name	Qty	
	Choose Control	1	67200-88L01	Remote Control Box - Top Mount	1	See Note B
			67200-93J34	Remote Control Box - Flush Mount (concealed)		
			67200-93J70	Remote Control Box - Side w/ Integrated Keyswitch		
☆	Choose Required Main Harness Length	2	36620-93JB0	Main Wiring Harness CAN 16 ft.	1	
			36620-93JA0	Main Wiring Harness CAN 21 ft.		
			36620-93JC0	Main Wiring Harness CAN 26 ft.		
	Choose Required Clean Power Length	3	36625-93J01	Sub-battery ECM Lead 12.7 ft.	1	Included w/ engine Optional length
			36625-93J10	Sub-battery ECM Lead 22 ft.		
	Matching panel style (see Note A)	4	37100-98L00	Main Key Switch Panel (add Emergency Stop)	1	See Note A and Note B
	Single panel style		37803-98L00	Emergency Stop Switch Panel (for panel above)	1	
			37100-98L10	Main Switch Panel (Vertical) w/ Emergency Stop	1	
			37100-98L20	Main Switch Panel (Horizontal) w/ Emergency Stop		
☆	As Required	5	36620-93JD0	Wire Assy, Remote Control Extension 6.5 ft.		
			36620-93JE0	Wire Assy, Remote Control Extension 9.8 ft.		
<p>Note A - Matching panel option allows the Main Key Switch and the Emergency Stop Switch to be located separately at the helm station. Note B - No Main Switch Panels (#4) are needed with the Side Mount Remote Control 67200-93J70 having integrated key and stop switches.</p>						

Mechanical Remote Control Twin Engine with CAN Harness

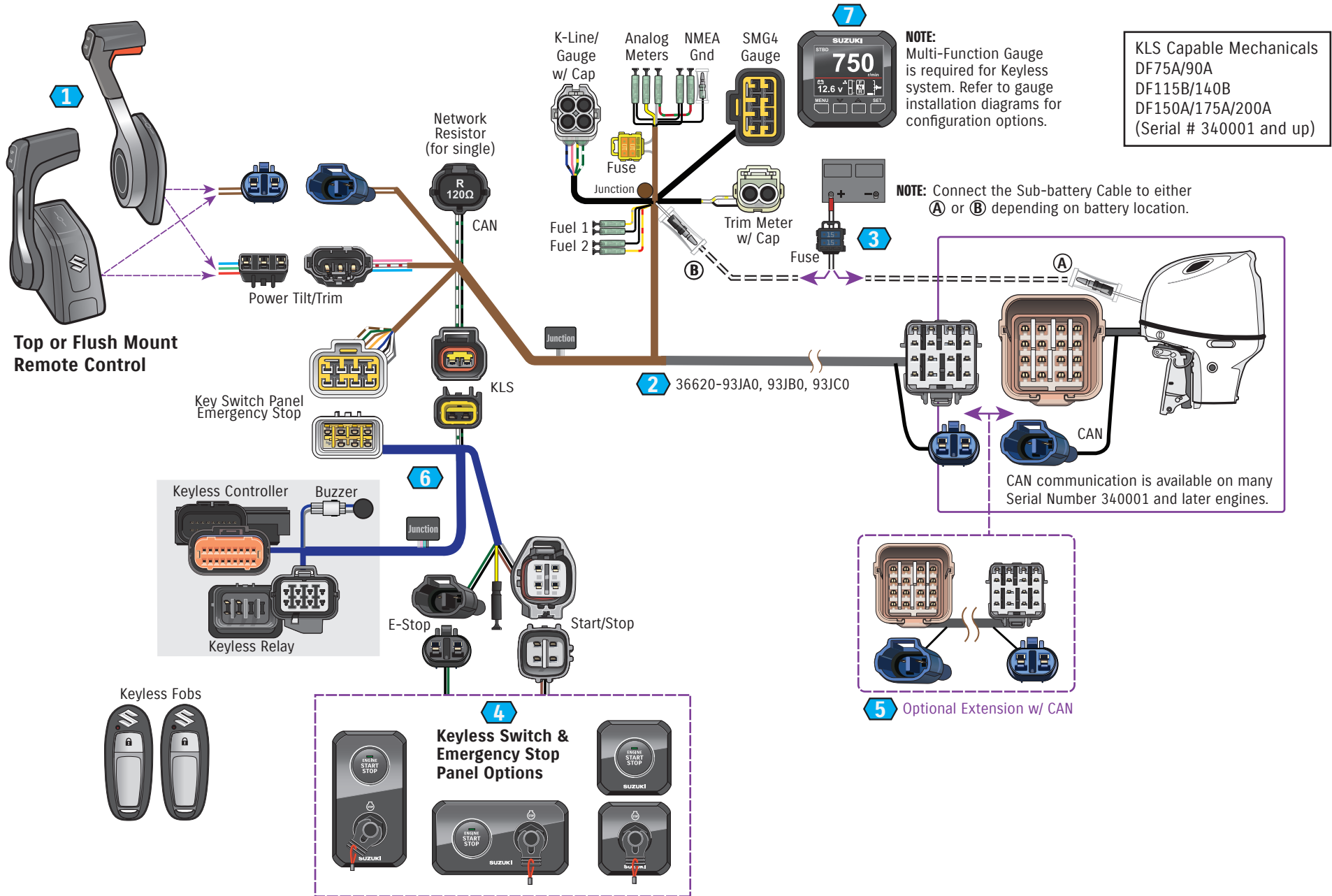


DF40A/50A/60A
DF75A/90A
DF115B/140B
DF150A/175A/200A
(Serial # 340001 and up)



Twin Engine Mechanical Remote Control (CAN Harness)						
New		No.	Part No.	Part Name	Qty	
	Choose Control Style	1	67200-88L11	Remote Control box - Dual Top Mount	1	See Note A
			67200-93J70	Remote Control box - Side w/ Integrated Keyswitch	2	
☆	Choose Required Main Harness Length	2	36620-93JB0	Main Wiring Harness CAN 16 ft.	2	
			36620-93JA0	Main Wiring Harness CAN 21 ft.		
			36620-93JC0	Main Wiring Harness CAN 26 ft.		
	Choose Required Clean Power Length	3	36625-93J01	Sub-battery ECM Lead 12.7 ft.	2	Included w/ engine Optional length
			36625-93J10	Sub-battery ECM Lead 22 ft.		
		4	37100-98L30	Main Switch Panel	1	See Note A
☆	As Required	5	36620-93JD0	Wire Assy, Remote Control Extension 6.5 ft.		
			36620-93JE0	Wire Assy, Remote Control Extension 9.8 ft.		
☆	Replaces Resistors	6	36661-96L40	CAN Wire	1	
<p>Note A - No Main Switch Panel is needed with the Side Mount Remote Controls 67200-93J70 having integrated key and stop switches.</p>						

Mechanical Remote Control Single Engine CAN Harness with Keyless Start (KLS)



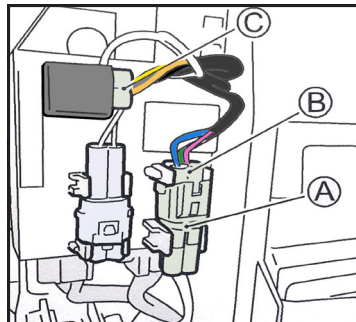
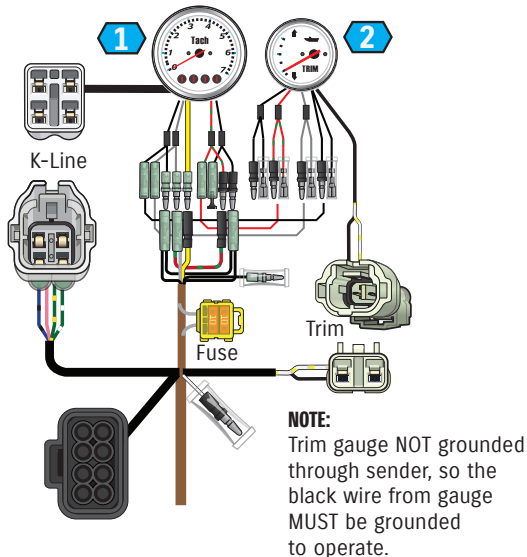
Single Engine Mechanical Remote Control (CAN Harness) With Keyless Start (KLS)						
New		No.	Part No.	Part Name	Qty	
	Select Control Location	1	67200-88L01	Remote Control box - Top Mount	1	
			67200-93J34	Remote Control Box - Flush Mount (concealed)		
☆	Choose Required Main Harness Length	2	36620-93JB0	Main Wiring Harness CAN 16 ft.	1	
			36620-93JA0	Main Wiring Harness CAN 21 ft.		
			36620-93JC0	Main Wiring Harness CAN 26 ft.		
	Choose Required Clean Power Length	3	36625-93J01	Sub-battery ECM Lead 12.7 ft.	1	Included w/ engine Optional length
			36625-93J10	Sub-battery ECM Lead 22 ft.		
	Single Panel Start/Stop Options	4	37290-98L10	Vertical Stop/Start and E-Stop Panel	1	See Note A
	Matching Panel Style (see Note A)		37290-98L20	Horizontal Stop/Start and E-Stop Panel		
			37290-98L00	Individual Stop/Start Panel	1	
			37803-98L00	Emergency Stop Switch Panel w/ Lanyard	1	
	As Required	5	36620-93JD0	Wire Assy, Remote Control Extension 6.5 ft.		
			36620-93JE0	Wire Assy, Remote Control Extension 9.8 ft.		
☆	Kit	6	37105-98L04	Kit, KLS(315) w/ Harness, Controller, Fobs, Relay	1	315 MHz
	Required for Operation	7	34011-96L42	Gauge, Multi-Function SMG4	1	
☆	Extra Keyfob		37172-96L11	Remocon Assy, KLS 315		
Note A - Matching panel option allows the Main Keyless Switch and the Emergency Stop Switch to be located separately at the helm station.						

Twin Engine Mechanical Remote Control (CAN Harness) With Keyless Start (KLS)						
New		No.	Part No.	Part Name	Qty	
		1	67200-88L11	Remote Control box - Dual Top Mount	1	
☆	Choose Required Main Harness Length	2	36620-93JB0	Main Wiring Harness CAN 16 ft.	2	
			36620-93JA0	Main Wiring Harness CAN 21 ft.		
			36620-93JC0	Main Wiring Harness CAN 26 ft.		
	Choose Required Clean Power Length	3	36625-93J01	Sub-battery ECM Lead 12.7 ft.	2	Included w/ engine Optional length
			36625-93J10	Sub-battery ECM Lead 22 ft.		
	Single Panel Start/Stop Options Matching Panel Style (see Note A)	4	37290-98L10	Vertical Stop/Start and E-Stop Panel	1	See Note A
			37290-98L20	Horizontal Stop/Start and E-Stop Panel		
			37290-98L00	Individual Stop/Start Panel	2	
			37803-98L00	Emergency Stop Switch Panel w/ Lanyard	1	
☆	As Required	5	36620-93JD0	Wire Assy, Remote Control Extension 6.5 ft.		
			36620-93JE0	Wire Assy, Remote Control Extension 9.8 ft.		
☆	Kit	6	37105-98L15	Kit, KLS(315) w/ Harness, Controller, Fobs, Relay	1	315 MHz
	Required for Operation	7	34011-96L44	Gauge, Suzuki Multi-Function SMG4	2	
☆	Twin Engine	8	36621-98L30	Harness Assy, KLS for Dual Engine	1	CAN connection
☆	Extra Keyfob		37172-96L11	Remocon Assy, KLS 315		
Note A - Matching panel option allows the Main Keyless Switches and the Emergency Stop Switch to be located separately at the helm station.						

Mechanical Remote Control Engine Gauge Configurations using CAN Harness



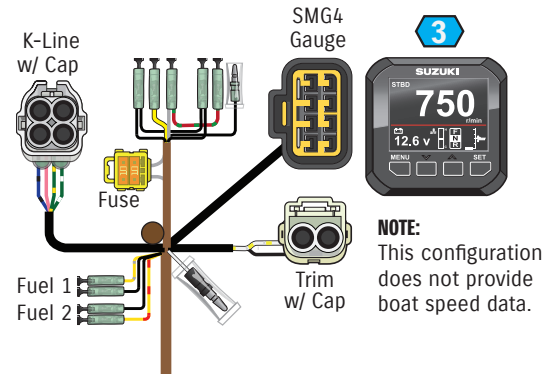
Tach w/ Monitor and Trim Gauge



NOTE for ENGINE HARNESS RECONFIGURATION from K-LINE to CAN:
 Reconfiguration of Engine Harness as shown above is required when using SMG4 Gauge on mechanical engines that are set for K-Line. Disconnect 4-pin gauge connector "B" from gauge connector "A" then connect "A" to connector "C" that is located in the rubber cap. Finish by putting rubber cap on connector "B" and secure in place.

Connector B - Blue w/ Black, Green w/ White, Pink w/ White (gauge)
 Connector C - Black, Gray, Orange w/ Yellow, Yellow (digital output)

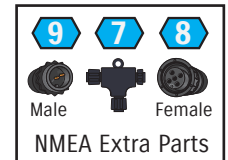
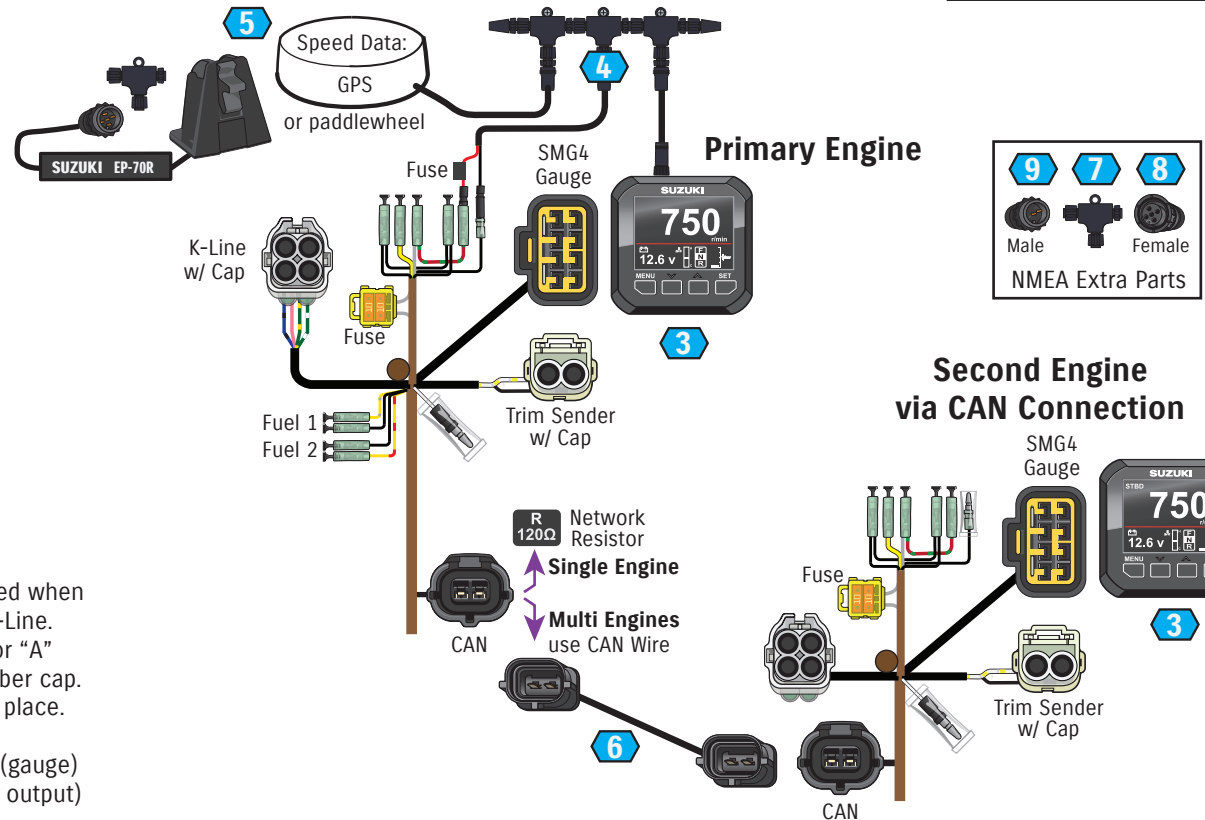
SMG4 Suzuki Multi-function Gauge



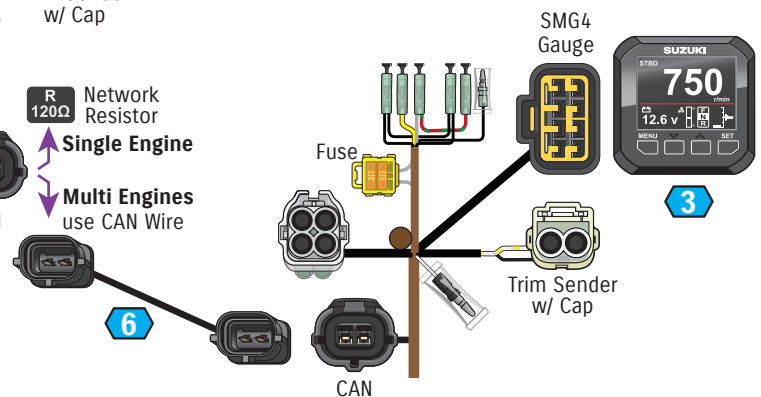
SMG4 Communication	Serial Number Range		
Mechanical Control Engine Model	<149999	240001 - 249999	340001+
DF9.9B - DF30A	K-Line	K-Line	K-Line
DF40A - DF200A	K-Line	K-Line	CAN
DF200/225/250 V6	K-Line	K-Line	K-Line

DF40A/50A/60A
 DF75A/90A
 DF115B/140B
 DF150A/175A/200A
 (Serial # 340001 and up)

SMG4 with NMEA Network



Second Engine via CAN Connection



Mechanical Remote Control Gauge Configurations Using CAN Harness						
New		No.	Part No.	Part Name	Qty	
	Analog Sweep Gauge Style	1	34200-93J14	Tachometer with Monitor, White	1	Each Engine
			34200-93J02	Tachometer with Monitor, Black		
		2	34800-93J13	Trim Gauge, White (DF25A – DF250)	Opt.	
			34800-93J02	Trim Gauge, Black (DF25A – DF250)		
	SMG4 Gauge	3	34011-96L44	Gauge Assy, Multi (-96L44 has software ver 3.101)		
			34211-96L00	SMG Sun Cover		
	NMEA Starter Kit	4	36001-88L00	Wire Set, NMEA ("T" w/ resistors, fused power wire)		
	Add a Speed Data Source	5	990C0-88122	GPS Antenna w/ Compass (w/ NMEA "T")	Opt.	
			990C0-88317	Sensor Assy, Paddle Wheel (w/ NMEA "T")		
	CAN Connection	6	36661-96L40	Wire Comp, CAN	1	Connects twins
	Replacement #	7	990C0-88110	Connector Comp, Branch (NMEA "T")	extra parts	Female - Sockets
	Replacement #	8	990C0-88113	Female Resistor NMEA Terminator		
	Replacement #	9	990C0-88114	Male Resistor NMEA Terminator		
	NMEA "Drop"		990C0-88104	Backbone Extension Cable, 2 ft	as req'd	
			990C0-88105	Backbone Extension Cable, 6 ft		
<p>Note A - When using Non-CAN Harnesses 36620-93J70, -93J80, -93J90 refer to accompanying drawing for instructions to reconfigure the Engine Harness to transmit Engine Monitor information via K-Line / SDS wires in the control harness.</p>						