

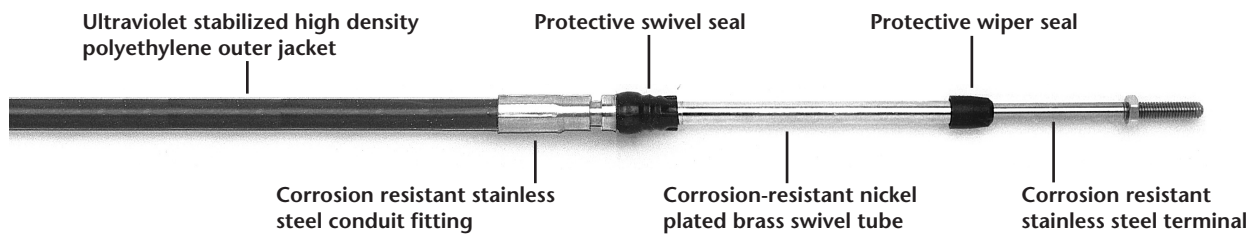
SHIFT AND THROTTLE CONTROL CABLES

The control cable is a very important component in the control system. It is the vital link between the control head and the propulsion unit. Employing the best cable helps insure that your shift and throttle system operates smoothly and efficiently. The design, technology, and materials which are used in Teleflex Marine cables have literally set the standard for the entire marine industry.

Our control cables are environmentally tested for marine applications. They have stainless steel terminals and conduit fittings as well as stainless or

nylon covered core wires with moisture protective seals for added corrosion protection and longer life. Their durable HDPE outer jackets resist abrasion and withstand the effects of UV, salt water, chemicals, gasoline, and oil. Each Teleflex Marine cable is lifetime lubricated at the factory.

Teleflex Marine pioneered the development of high efficiency control cables. Since not all cables utilize this technology there can be significant operating differences between Teleflex Marine cables and other brands.



HOW TO CHOOSE THE RIGHT 3300/33C CABLE:

Teleflex Marine offers several models of universal 3300/33C type cables, each suited to certain operating conditions and installation parameters. Below are key variables that affect how cables perform:

Backlash: the lost motion between the amount of movement put in (input end of the cable) and the amount of movement which occurs at the output end of the cable. Some motion is generally lost in “take up” between the inner wire (core) of the cable and the outer casing (conduit). Backlash manifests itself as free play (slop) felt at the control handle.

Efficiency: the percentage of input force that is transmitted through the cable as output force. For example, if a 10-pound force was exerted on the cable at its input end and resulted in the cable exerting an 8-pound output force, the cable would be 80% efficient.

Breakaway: the “feel” of the cable when put into motion; the breakaway threshold is the force that must be applied to the cable’s input end before something happens at the output end. An example of excessive breakaway: a control that would have to be moved to half-throttle before the engine responded.

Cable Routing: the shorter and straighter the cable routing, the better the cable will perform. With increased length and bends, cable efficiency is reduced, while breakaway and backlash rise.

Environment: generally, the more rugged the cable construction, the longer the cable will last. In harsh environments such as heavy salt and UV exposure, control cables with thicker conduits and stainless steel fittings will generally outlast those with thinner conduits and brass or steel fittings.

Cable design, manufacturing tolerances, length and installation care are additional factors to consider.

3300/33C CABLE TYPE	BACK-LASH	BREAK-AWAY/ EFFICIENCY	LONG/ COMPLEX ROUTINGS	HARSH ENVIRONMENT
CC230/CC172	Good	Good	N/A	Good
CC332	Better	Better	Better	Better
CCX633 TFX TREME	Superior	Superior	Superior	Superior

For definitions of terms used in this chart, see the accompanying article.

WHAT TO CONSIDER WHEN SELECTING CABLES

Teleflex Marine makes engine control cables for a wide variety of applications. We recommend their use with our controls as well as in engine manufacturers' control systems.

We offer three grades of cable: standard, midrange and **TFXTREME**.

THREE PERFORMANCE GRADES:

TFXTREME control cables can be used in any boat. They are by far the best choice for long runs, twin stations or other difficult routings with multiple cable bends.

Midrange cables are recommended for somewhat longer cable routings and heavier use than their standard counterparts.

Standard cables are suitable for most applications with short, simple cable routings.

FOUR APPLICATION TYPES:

OEM Replacement Type

Teleflex offers a direct replacement cable for almost every engine manufacturer's control. Most of our OEM type cables are available in both standard and **TFXTREME** versions.

Universal (3300/33C) Type

Universal (or 3300/33C) type throttle/shift control cables are direct replacements for many boats using aftermarket controls or most engine manufacturer's controls with the correct adapter kit. Universal 3300/33C cables can be connected to most engines. These cables are offered in all three grades: standard, midrange and **TFXTREME**.

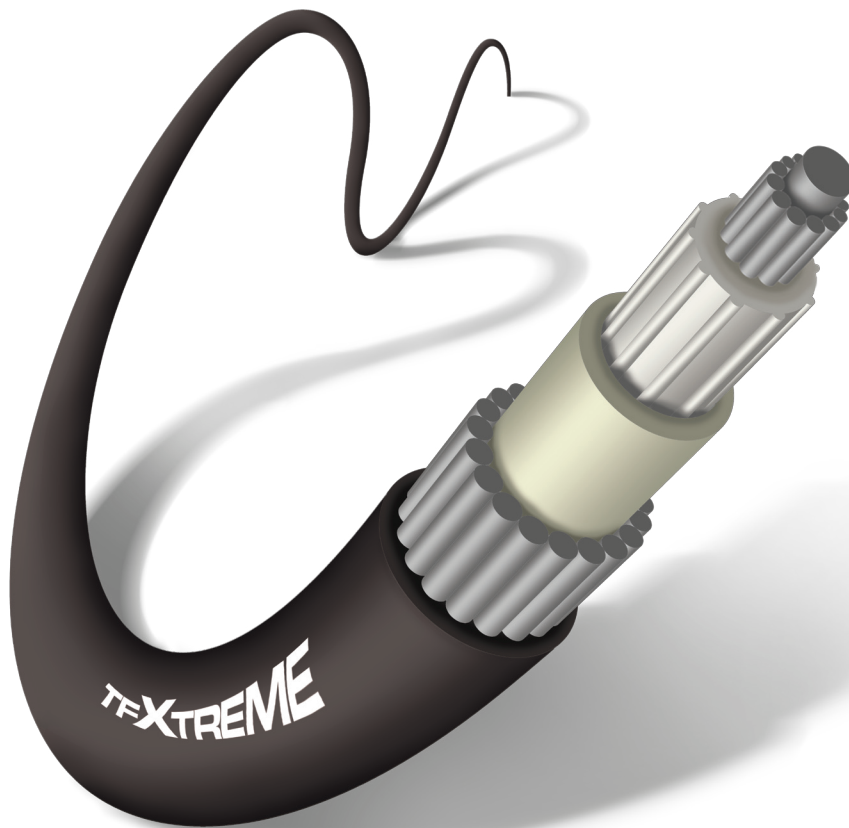
Universal (4300/43 6400/64) Types

Heavy duty universal type control cables are available in **TFXTREME** versions only. These are drop-in replacements for 43C, 43BC, 64C and 64BC and other similar cables.

Jet Boat Gate Control Cables

Three styles of drive-specific jet boat gate control cables are available, for Mercury Sport Jet® 90 and early 120s, Sport Jet 175s and OMC Turbo Jet®. Our **TFXTREME** 43BC cable is used on most other popular jet drives. Replacement throttle control cables are generally an OEM or 3300/33C Universal type.

Teleflex Marine control cables meet OEM specifications for fit, function, reliability and quality. They are built with marine-grade, corrosion-resistant materials and feature either **TFXTREME** premium core construction or Lubri-Core™ lifetime internal lubrication.



HOW TO MEASURE CONTROL CABLES "MEASURE TWICE. ORDER ONCE."

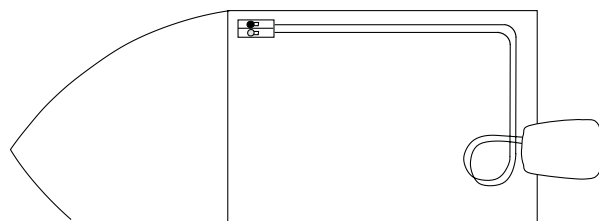
FOR A NEW INSTALLATION:

Measure cable routing path from control head attachment point to engine connection, as follows:

OUTBOARDS:

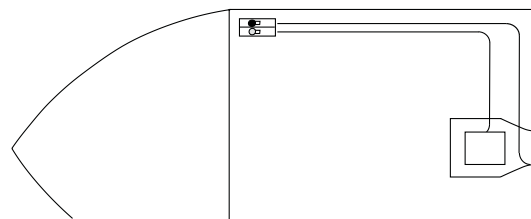
Measure from control along unobstructed cable routing to center of outboard. Add four feet to allow for loop which provides unrestricted engine movement. Round up to the next foot and order required cable part number. (Last two digits of cable part number equal cable length in feet.)

TYPICAL OUTBOARD CABLE ROUTING:



TYPICAL OUTBOARD CABLE ROUTING
(MEASURE CABLE PATH + ROUND UP TO NEXT EVEN FOOT + ADD 4 FEET FOR LOOP AT ENGINE TO PREVENT KINKING)

TYPICAL STERN DRIVE (I/O) OR INBOARD CABLE ROUTING:



TYPICAL STERN DRIVE/INBOARD CONTROL CABLE ROUTING
(MEASURE CABLE PATH + ROUND UP TO NEXT EVEN FOOT)

INBOARDS & STERN DRIVES:

Measure from control along unobstructed cable routing to shift and/or throttle connection. Round this dimension up to the next foot and order required cable part number. (Last two digits of cable part number equal cable length in feet.)

FOR REPLACEMENT OF EXISTING CABLE:

If you removed the old cable, measure for replacement cable as follows:

Measure from tip to tip and round up to the next foot, if necessary (aftermarket cables are sold in foot increments).

The control cable part number contains its length. Teleflex cables are usually listed as CC??XX, where XX = length in feet.

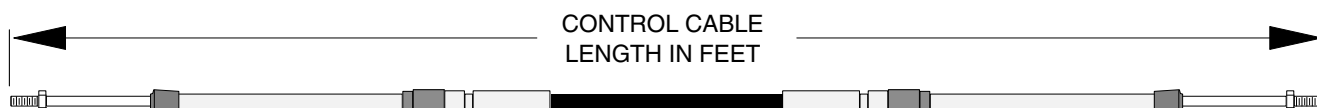
FOR EXAMPLE:

Part Number CCX63320 = 20 ft. CCX633 Control Cable

or

Morse® Part Number 032377-03-240.0 = 20 ft. 33C Control Cable

(240" = 20')



TFXTREME®

REALLY DIFFERENT

Traditional cables vary by the stiffness of the core wire and how tightly it fits in the casing. Thus the classic trade-offs that have existed in control cable design:

Stiffer core/tighter fit offers less lost motion, but is harder to move. With longer and more complex runs, cable movement becomes progressively more difficult.

More flexible core/looser fit has an easier feel, but allows more lost motion. This approach leads to an overall sloppy feel, RPM loss or difficult gear engagement.

These trade-offs aren't an issue for cables with **TFXTREME** technology because they are different — really different!

Teleflex's unique **TFXTREME** technology incorporates a patented splined core.

Ridges on the core allow a close fit with the cable's inner liner, but with minimum contact, so the core glides back and forth smoothly like a skater on ice.

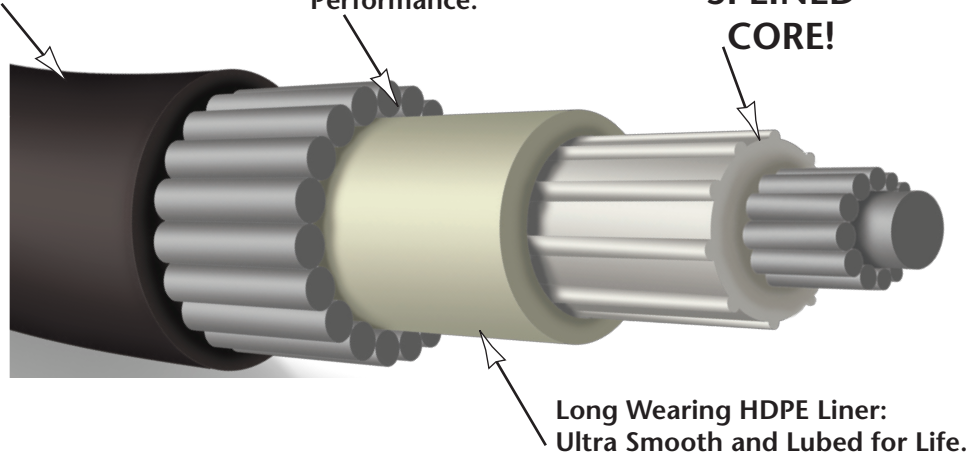
RESULT: a control cable with easy movement AND minimum lost motion.

THE CORE DIFFERENCE:

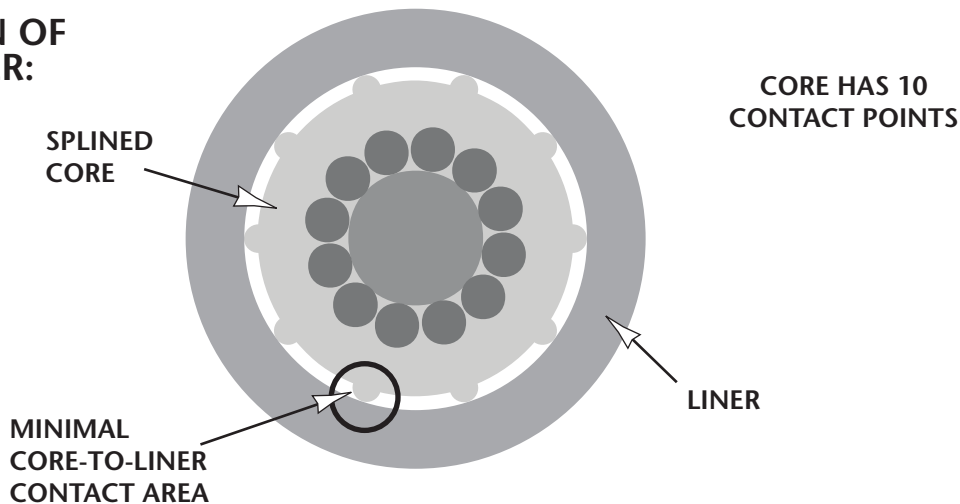
.34" Super Tough HDPE Jacket for Ultimate Protection Against the Elements.

Oil Tempered Lay Wires for Superior Strength & Performance.

UNIQUE SPLINED CORE!



CROSS SECTION OF CORE AND LINER:



A COMPLETE FAMILY OF CABLES:



Teleflex Marine
TFXtREME technology cables are
the ONLY high performance cable family
with a FULL RANGE of universal cables and
ALL popular direct replacement OEM type cables.

OEM CABLE APPLICATIONS:

OEM direct-replacement type cables are designed to fit BRP® Mercury®, Mariner®, OMC®, Volvo® and similar OEM engine control heads which use a proprietary control cable connection. **TFXtreme** versions of the most popular cables are offered for demanding applications in which a smooth feel at the control is essential.

FOR THESE CONTROLS:

Mercury®, MerCruiser®, Mariner®, Force®, OMC®, Evinrude®, Johnson®, Volvo®, Teleflex Osprey Series CH1700, CH7500, CH7600, and CH7800

MERCURY/MARINER/FORCE/U.S. MARINE:	
Mercury Gen II type (standard)	CC189XX
Mercury Gen II type (premium)	CCX189XX
Mariner®/Mercury®/MerCruiser® and other engines using Mercury 2003-date 4000 series controls. CCX189XX is a TFXtreme cable.	
Mercury 600A type (standard)	CC179XX
Mercury 600A type (premium)	CCX179XX
Mariner®/Mercury®/MerCruiser® (1965-date); Force® (1993-date) with Mercury controls. All Mariner engines with Mercury/Mariner controls (except pre-1993 40 HP & lower models). All 1993-date Force (US Marine) with Force/US Marine/Mercury controls. CCX179XX is a TFXtreme cable.	
Mariner 630 type (standard)	CC210XX
Mariner® (pre-1993 40 HP & less) with Mariner/Mercury controls.	
Mercury 3600 type (premium)	CCX630XX
Mercury® products (1965-date); Force® (1993-date) using Mercury controls which accept 10-32 threaded ends or using most aftermarket controls. Mercury style engine end connection.	
US Marine® L-Drive shift cable (std.)	CC213XX
U.S. Marine "L-Drive" engines with original equipment controls. Drop-in replacement for "L-Drive" shift cables.	

FEATURES:

- Drop-in replacement cables are engineered as replacements for original equipment cables.
- Cables use the existing connection components.
- Stainless steel and brass fittings.
- Standard cables use stainless steel Lubri-Core™ core wire for smooth operation and long life. (8" minimum bend radius.)
- Premium cables have a heavy jacket and the **TFXtreme** splined, coated core element for maximum smoothness with minimal lost motion. (4" min. bend radius.)
- Black HDPE outer casing for durability and best resistance to UV and chemicals.
- Red conduit international only.

BRP, OMC, JOHNSON, EVINRUDE, VOLVO/OMC:

400 type (standard)	CC170XX
Pre-1979 OMC®/Johnson®/Evinrude® with BRP/OMC controls. Exceeds engine manufacturer's specifications.	
479 type (standard)	CC205XX
479 type (premium)	CCX205XX
1979-date BRP®/OMC®/Johnson®/Evinrude®/Gale® with BRP/OMC controls. Exceeds engine manufacturer's specifications. CC736 uses Supreme type coated core wire; CCX205XX is a TFXtreme cable.	
Volvo/OMC cable (premium)	CCX214XX
Volvo engines using BRP/OMC side mount controls.	
Volvo/OMC cable (premium)	CCX740XX
Volvo engines using top mount BRP/OMC controls.	



CONTROL CABLES - OEM Cross Reference

EXISTING PART NUMBER	DESCRIPTION	PART NUMBER TO REORDER		Conduit Color / End Metal
		Standard	Premium	
MERCURY/MARINER - STANDARD CABLE CC179XX	600A Series Control Cable Assembly			black/brass
6' - 9' specialty length cables (NLA - all markets) use premium TFXtreme cables		N/A	CX179XX	black/brass
10' - 24' length cables (Aftermarket)		CC179XX	CX179XX	black/brass & stainless
10' - 24' length cables use premium TFXtreme cables		N/A	CX179XX	black/stainless
25' - up specialty length cables (NLA - all markets) use premium TFXtreme cables		N/A	CX179XX	black/stainless
CC189XX	Gen II Series Control Cable			black/brass
6' - 9' specialty length cables (NLA - all markets) use premium TFXtreme cables		N/A	CX189XX	black/brass
10' - 24' length cables (Aftermarket)		CC189XX	CX189XX	black/brass & stainless
10' - 24' length cables use premium TFXtreme cables		N/A	CX189XX	black/stainless
25' - up specialty length cables (NLA - all markets) use premium TFXtreme cables		N/A	CX189XX	black/stainless
CC210XX	630 Mariner Series Control Cable			black/brass & stainless
6' - 9' specialty length cables (NLA - all markets)		N/A	N/A	
10' - 24' length cables (Aftermarket)		CC210XX	N/A	black/brass & stainless
25' - up specialty length cables (NLA - all markets)		N/A	N/A	
MERCURY/MARINER - PREMIUM CABLE CC630XX	3600 Control Cable Assembly			black/stainless
All lengths (all markets) superceded to new part number		N/A	CX630XX	black/stainless
CC635XX	600A Control Cable Assembly			black/stainless
All lengths (all markets) superceded to new part number		N/A	CX179XX	black/stainless
CC679XX	Gen II Control Cable			black/stainless
All lengths (all markets) superceded to new part number		N/A	CX189XX	black/stainless
BRP, OMC, EVINRUDE, JOHNSON - STANDARD CABLES CC205XX	479 Series Control Cable Assembly			black/brass
6' - 9' specialty length cables (NLA - all markets) use premium TFXtreme cables		N/A	CX205XX	black/brass
10' - 24' length cables (Aftermarket)		CC205XX	CX205XX	black/brass & stainless
25' - up specialty length cables (NLA - all markets) use premium TFXtreme cables		N/A	CX205XX	black/stainless
CC170XX	400 Series Control Cable Assembly			black/brass
6' - 24' specialty length cables (Aftermarket)		CC170XX	N/A	black/brass
25' - up specialty length cables (NLA - all markets)		N/A	N/A	
BRP, OMC, EVINRUDE, JOHNSON - PREMIUM CABLES CC636XX	479 Series Control Cable Assembly			black/stainless
All lengths (all markets) superceded to new part number		N/A	CX205XX	black/stainless
CC214XX	OMC, Volvo Penta, Side Mount Control Cable			black/brass
All lengths (North America Aftermarket) superceded to new part number		N/A	CX214XX	black/brass & stainless
CC740XX	OMC, Volvo Penta, Top Mount Control Cable			black/brass
All lengths (North America Aftermarket) superceded to new part number		N/A	CX740XX	black/brass & stainless

NOTES

XX = Length in feet

CONTROL CABLE OPTIONS BASED ON ENGINE TYPE:

OUTBOARD ENGINES:	STANDARD GRADE USING ENG. MFR. CONTROLS	STANDARD GRADE USING AFTMKT. CONTROLS
Chrysler®	CC172XX/CC230XX + ball joint kit*	CC172XX/CC230XX + ball joint kit*
Force® pre-1993 Force® 1993-date	CC172XX/CC230XX + ball joint kit* CC179XX (600A type)	CC172XX/CC230XX + ball joint kit* CC172XX/CC230XX + CA27319P kit**
Johnson®/Evinrude® 1979-date Johnson®/Evinrude® pre-1979	CC205XX (479 type) CC170XX (400 type)	CC172XX/CC230XX + CA27320P kit** CC172XX/CC230XX + CA27321P kit**
Mariner® 40 HP & below pre-1993 Mariner® 40 HP & below 1993-date Mariner® all above 40 HP	CC210XX (630 type) CC179XX (600A type) CC179XX (600A type)	CC172XX/CC230XX CC172XX/CC230XX + CA27319P kit** CC172XX/CC230XX + CA27319P kit**
Mercury® 1965-date Mercury® products 2003-date (4000 series Gen II controls)	CC179XX (600A type) CC189XX (Gen II type)	CC172XX/CC230XX + CA27319P kit** N/A
Honda®, Nissan®, Suzuki®, Tohatsu®, Yamaha®	CC172XX/CC230XX	CC172XX/CC230XX

STERNDRIVE (I/O) AND SOME INBOARDS:

Chrysler®, All Inboards	CC172XX/CC230XX	CC172XX/CC230XX
MerCruiser®, All Stern Drives (except 4000 series controls) MerCruiser® 2003-date (using 4000 series controls) Mercury®, All Inboards (except 4000 series controls) Mercury® Inboards 2003-date (using 4000 series controls)	CC179XX (600A type) CC189XX (Gen II type) CC179XX (600A type) CC189XX (Gen II type)	CC172XX/CC230XX + CA27319P kit** N/A CC172XX/CC230XX + CA27373P kit** N/A
OMC® 1979-date OMC® pre-1979	CC205XX (479 type) CC170XX (400 type)	CC172XX/CC230XX + CA27320P kit** CC172XX/CC230XX + CA27321P kit**
Volvo® using Volvo® controls Volvo® using OMC® controls Volvo® Turbo, SX, new-gen OMC drives w/OMC® controls	CC172XX/CC230XX N/A N/A	CC172XX/CC230XX N/A N/A
Others	CC172XX/CC230XX	CC172XX/CC230XX

HEAVY DUTY APPLICATIONS, INCLUDING SOME INBOARD & JET ENGINES:

1/4-28 terminal, 1 bulkhead, 1 clamp fitting (43BC) 1/4-28 terminal, 2 clamp fittings (43C)	(see Premium Grade) (see Premium Grade)	(see Premium Grade) (see Premium Grade)
5/16-24 terminal, 1 bulkhead, 1 clamp fitting (64BC) 5/16-24 terminal, 2 clamp fittings (64BC)	(see Premium Grade) (see Premium Grade)	(see Premium Grade) (see Premium Grade)

JET ENGINES (MERCURY SPORT JET®, OMC TURBO JET® & SIMILAR):

Mercury® Sport Jet 90 & 120 (throttle cable) Mercury® Sport Jet 90 & early 120 (gate cable) Mercury® Sport Jet 175 (gate cable)	CC172XX/CC230XX + CA27319P kit** CC213XX N/A	CC172XX/CC230XX + CA27319P kit** CC213XX N/A
OMC® Turbo Jet (throttle control cable) OMC® Turbo Jet (gate control cable)	CC205XX (479 type) N/A	CC172XX/CC230XX + CA27320P kit** N/A

* Proprietary ball joint type cable adapter kit required to complete connection to the engine. This part (formerly Teleflex P/N CA27019P) is no longer available from Teleflex. Please consult with Mercury Marine for more information about Chrysler and early model Force engines using this type of cable connection.

** Cable adapter kits listed are required to complete connection to the engine. Consult engine manufacturer, dealer or distributor .

General rule: use direct replacement type cable whenever possible;
use **TFX^{XTREME}** cables for difficult routings/multiple stations.

MIDRANGE GRADE USING ENG. MFR. CONTROLS	MIDRANGE GRADE USING AFTMKT. CONTROLS	PREMIUM GRADE (TFX ^{XTREME}) USING ENG. MFR. CONTROLS	PREMIUM GRADE (TFX ^{XTREME}) USING AFTMKT. CONTROLS
CC332XX + + ball joint kit*	CC332XX + ball joint kit*	CCX633XX + ball joint kit*	CCX633XX + ball joint kit*
N/A	CC332XX CC332XX + CA27319P**	CCX633XX + ball joint kit* CCX179XX (600A type)	CCX633XX + ball joint kit* CCX630XX
N/A	CC332XX + CA27320P**	CCX205XX (479 type)	CCX633XX + CA27320P kit**
N/A	CC332XX + CA27319P**	N/A	CCX633XX + CA27321P kit**
N/A	CC332XX	N/A	CCX633XX
N/A	CC332XX + CA27319P**	CCX179XX (600A type)	CCX630XX
N/A	CC332XX + CA27319P**	CCX179XX (600A type)	CCX630XX
N/A	CC332XX + CA27319P**	CCX179XX (600A type)	CCX630XX
N/A	CC332XX + CA27319P**	CCX189XX (Gen II type)	N/A
CC332XX	CC332XX	CCX633XX/TFX ^{XTREME}	CCX633XX
CC332XX	CC332XX	CCX633XX	CCX633XX
N/A	CC332XX	CCX179XX (600A type)	CCX630XX
N/A	N/A	CCX189XX (Gen II type)	N/A
N/A	CC332XX	CCX179XX (600A type)	CCX630XX
N/A	N/A	CCX189XX (Gen II type)	N/A
N/A	CC332XX	CCX205XX (479 type)	CCX633XX + CA27320P kit**
N/A	CC332XX	N/A	CCX633XX + CA27321P kit**
CC332XX	CC332XX	CCX633XX	CCX633XX
N/A	N/A	CCX214XX*** or CCX740XX	N/A
N/A	N/A	CCX214XX*** or CCX740XX	N/A
CC332XX	CC332XX	CCX633XX	CCX633XX
(see Premium Grade)	(see Premium Grade)	CCX430XX (replaces Morse [®] 43BC)	CCX430XX (replaces Morse [®] 43BC)
(see Premium Grade)	(see Premium Grade)	CCX433XX (replaces Morse [®] 43CC)	CCX433XX (replaces Morse [®] 43CC)
(see Premium Grade)	(see Premium Grade)	CCX640XX (replaces Morse [®] 64BC)	CCX640XX (replaces Morse [®] 64BC)
(see Premium Grade)	(see Premium Grade)	CCX643XX (replaces Morse [®] 64CC)	CCX643XX (replaces Morse [®] 64CC)
CC332XX + CA27319P kit**	CC332XX + CA27319P**	CCX630XX	CCX630XX
N/A	N/A	N/A	N/A
CC400XX	CC400XX	N/A	N/A
N/A	CC332XX	CCX205XX (479 type)	CCX633XX + CA27320P kit**
N/A	CC332XX	CCX214XX*** or CCX740XX***	CCX633XX

*** Cable part numbers shown are for OMC side-mount controls (CCX214XX); OMC binnacle-mount controls (CCX740XX).

NOTE: Most control cables are available in lengths from 6 to 50 feet. See the Teleflex Marine list price sheet for current offering. Where Part Numbers are indicated, XX = length in feet for Teleflex cables. Lengths above 30 feet are only available in two-foot increments (32, 34, 36, etc.)

UNIVERSAL 3300/33C APPLICATIONS:

Universal type cables are designed to fit aftermarket engine controls as well as OEM units from BMW®, Chrysler®, Honda®, Nissan®, Suzuki®, Volvo®, Yamaha® and others. Several versions of the 3300/33C type are available, including a **TFXTREME** model.

TFXTREME versions of the 3300/33C cables are offered for demanding applications in which a smooth feel at the control is essential.

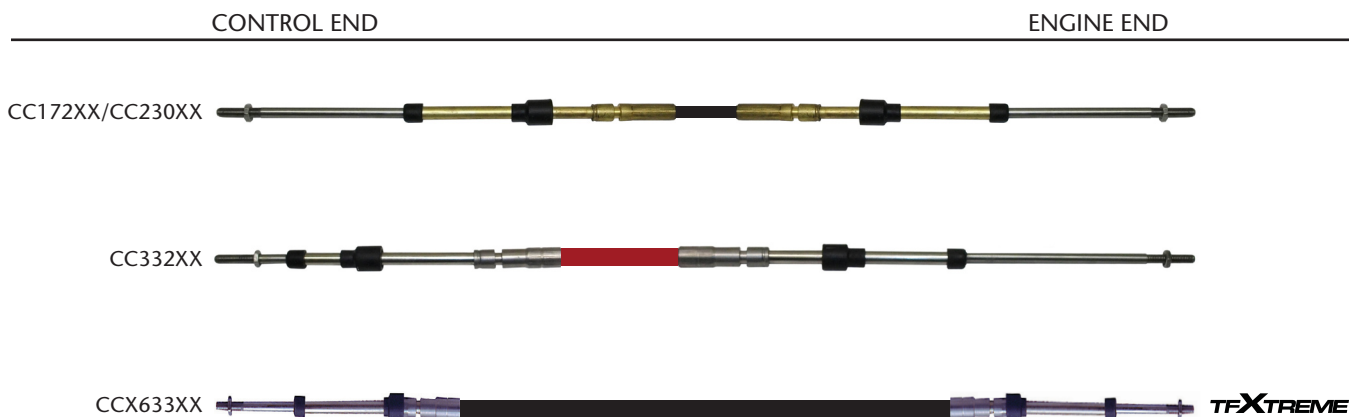
3300/33C TYPES (10-32 ENDS):		
3300 cable (standard)	CC230XX/ CC172XX	Stainless Fittings Brass Fittings
Cable has a 10-32 threaded terminal and a clamp-type fitting at each end. 3" nominal travel.		
33C cable (midrange)	CC332XX	Red Conduit
Cables have a 10-32 threaded terminal and a clamp-type fitting at each end. 3" nominal travel.		
TFXTREME		
3300 cable (premium)	CCX633XX	Stainless Fittings
Cable has a 10-32 threaded terminal and a clamp-type fitting at each end. 3" nominal travel. 4" minimum bend radius.		

FEATURES:

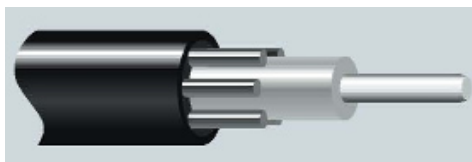
- Cables can use the existing connection components.
- Stainless steel and brass fittings.
- Standard cables use stainless steel Lubri-Core™ core wire for smooth operation and long life. (8" minimum bend radius.)
- Midrange cables use a heavier jacket and a stainless steel Lubri-Core™. (8" minimum bend radius for Lubri-Core construction)
- Premium 3300/33C cables have a heavy jacket and the **TFXTREME** splined, coated core element for maximum smoothness with minimal lost motion. (4" min. bend radius.)
- Black HDPE outer casing for durability and best resistance to UV and chemicals.

FOR THESE CONTROLS:

Teleflex Marine® and other brands which accept "universal" type control cables.

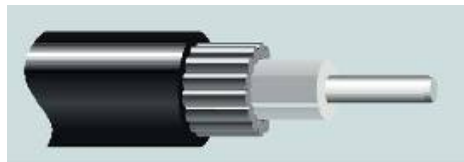


NEW CABLE CONSTRUCTION



OLD CONSTRUCTION CC172XX

- 6 Lay wires.
- Brass conduit fittings.



NEW CONSTRUCTION CC230XX

- 16 Lay wires.
- Stainless Steel conduit fittings.

CONTROL CABLES - Universal 3300/33C

EXISTING PART NUMBER	DESCRIPTION	PART NUMBER TO REORDER		Conduit Color / End Metal
		Standard	Premium	
CC230XX/CC172XX 6' - 9' specialty length cables (NLA - all markets) use premium TEXTREME cables	3300 Series Control Cable Assembly	N/A	CCX633XX	CC230XX black/ stainless CC172XX black/brass black/stainless
10' - 24' length cables (Aftermarket Only)		CC230XX / CC172XX	CCX633XX	CC230XX black/stainless CC172XX black/ brass CCX633XX black/stainless
25' - up specialty length cables (NLA - all markets) use premium TEXTREME cables		N/A	CCX633XX	black/stainless
CC330XX 6' - 9' specialty length cables (NLA - all markets) use premium TEXTREME cables	3300 Series Control Cable Assembly			black/stainless
10' - 24' length cables		N/A	CCX633XX	black/stainless
25' - up specialty length cables (NLA - all markets) use premium TEXTREME cables		N/A	CCX633XX	black/stainless
032377-03-XXXX.0 6' - 9' specialty length cables (NLA - all markets) use premium TEXTREME cables	33C Control Cable			black/stainless red/stainless
10' - 24' length cables (NLA - Aftermarket)		N/A	CCX633XX	CCX633XX black/stainless
10' - 24' length cables use premium TEXTREME cables		CC332XX	CCX633XX	CCX633XX black/stainless
25' - up specialty length cables (NLA - all markets) use premium TEXTREME cables		N/A	CCX633XX	CCX633XX black/stainless
301947-03-XXXX.0 All lengths (NLA - North America Aftermarket) use premium TEXTREME cables	33C Supreme Control Cable	N/A	CCX633XX	CCX633XX black/stainless red/stainless
CC633XX All lengths (NLA - all markets) superceded to new part number	3300 Premium TEXTREME Control Cable Assembly	N/A	CCX633XX	black/stainless

NOTES

XX = Length in feet

~~Red text denotes red conduit cable~~

3300/33C type cables (10-32 end threads)

Engines and connection kits that accept a 10-32 threaded end may require a connection kit from Teleflex or the engine manufacturer

UNIVERSAL 4300/43 & 6400/64 APPLICATIONS:

Universal type cables are designed to fit aftermarket engine controls as well as OEM units from BMW®, Chrysler®, Honda®, Nissan®, Suzuki®, Volvo®, Yamaha® and others. For heavy duty applications, Teleflex offers 4300/43 and 6400/64 series **TFXtreme** cables.

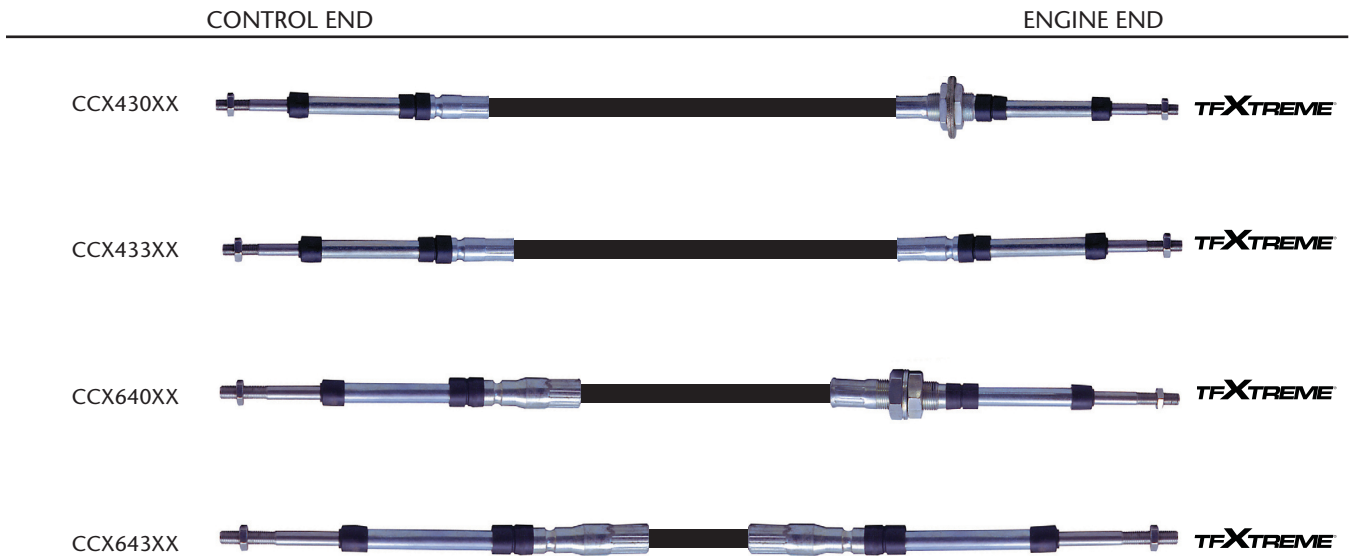
4300/43 TYPES (1/4-28 ENDS):	
TFXtreme 4300 BC cable	CCX430XX
Cable has one bulkhead and one clamp fitting. There is a 1/4-28 threaded terminal at each end. 3" nominal travel. 5" minimum bend radius.	
TFXtreme 4300 CC cable	CCX433XX
Cable has a 1/4-28 threaded terminal and a clamp-type fitting at each end. 3" nominal travel. 5" minimum bend radius.	
6400/64 TYPES (5/16-24 ENDS):	
TFXtreme 6400 BC cable	CCX640XX
Cable has one bulkhead and one clamp fitting. One 5/16-24 threaded terminal at each end. 4" nominal travel. 8" minimum bend radius.	
TFXtreme 6400 CC cable	CCX643XX
Cable has a 5/16-24 threaded terminal and a clamp-type fitting at each end. 4" nominal travel. 8" minimum bend radius.	
*NOTE: 64 Series cables cannot be replaced by 63 Series cables.	

FEATURES:

- 4300/43 type cables have stainless steel conduit fittings. (5" minimum bend radius.)
- 6400/64 type cables have stainless steel conduit fittings. (8" minimum bend radius.)
- Black HDPE outer casing for durability and best resistance to UV and chemicals.
- Cables meet/exceed all applicable industry standards

FOR THESE CONTROLS:

Teleflex Marine® and other brands which accept "universal" type control cables.



4300/43 TYPE HEAVY-DUTY CABLES

EXISTING PART NUMBER	DESCRIPTION	PART NUMBER TO REORDER		Conduit Color / End Metal
		Standard	Premium	
CC692XX	TFXTREME 4300BC Control Cable Assembly			black/stainless
All lengths (all markets) superceded to premium TFXTREME cable		N/A	CCX430XX*	black/stainless
CC693XX	TFXTREME 4300CC Control Cable Assembly			black/stainless
All lengths (all markets) superceded to premium TFXTREME cable			CCX433XX*	black/stainless

6400/64 TYPE HEAVY-DUTY CABLES

EXISTING PART NUMBER	DESCRIPTION	PART NUMBER TO REORDER		Conduit Color / End Metal
		Standard	Premium	
CC694XX	TFXTREME 6400BC Control Cable Assembly			black/stainless
All lengths (all markets) superceded to premium TFXTREME cable		N/A	CCX640XX*	black/stainless
CC695XX	TFXTREME 6400CC Control Cable Assembly			black/stainless
All lengths (all markets) superceded to premium TFXTREME cable		N/A	CCX643XX*	black/stainless

NOTES

XX = Length in feet

4300/43 type cables (1/4-28 end thread) + 3" Travel

6400/64 type cables (5/16-24 end thread) + 4" Travel

64 Series cables cannot be replaced by 63 Series cables.

*Part Number Change Only.

JET BOAT APPLICATIONS:

Just for Jets! Two families of jet boat control cables are available, for replacement of Mercury Sport Jet® and OMC Turbo Jet® throttle and reverse-gate cables. **TFXtreme** versions of the three most popular cables are offered for demanding applications in which a smooth feel at the control is essential.

BRP/OMC TURBO JET®:	
THROTTLE CABLES:	
479 type cable (standard)	CC205XX
For OMC Turbo Jets with OMC side mount controls that accept OMC "snap in" O.E.M. type cable. Drop-in replacement cable; uses existing connection components.	
479 type cable (TFXtreme)	CCX205XX
For OMC Turbo Jets with OMC side mount controls that accept OMC "snap in" O.E.M. type cable. Drop-in replacement cable; uses existing connection components..	
GATE CABLES:	
Turbo Jet cable (TFXtreme)	CCX214XX
For OMC Turbo Jets with OMC side mount controls that accept OMC "snap in" O.E.M. type cable. Drop-in replacement cable; uses existing connection components.	
Turbo Jet cable (TFXtreme)	CCX740XX
For OMC Turbo Jets with OMC top mount controls that accept OMC "snap in" O.E.M. type cable. Drop-in replacement cable; uses existing connection components.	
THROTTLE/GATE CABLES (10-32):	
3300 cable	see 3300/33C cables
(For OMC Turbo Jets with OMC binnacle mount, Teleflex or other controls that accept a cable with 10-32 threaded ends. Drop-in replacement cable; uses existing connection components.	

FOR THESE CONTROLS:

Mercury SportJet®, OMC TurboJet® Teleflex® CH2300, MV-3 and others

Cables for most jet boat throttle & gate controls

FEATURES:

- Drop-in replacement cables are engineered as replacements for original equipment cables.
- Cables use the existing connection components.
- Stainless steel and brass fittings.
- Standard cables use stainless steel Lubri-Core™ core wire for smooth operation and long life. (8" minimum bend radius.)
- Midrange cables use a heavier jacket and a stainless steel Lubri-Core™. (8" minimum bend radius for Lubri-Core construction)
- Premium cables have a heavy jacket and the **TFXtreme** splined, coated core element for maximum smoothness with minimal lost motion. (4" min. bend radius.)
- 4300/43 type cables have stainless steel conduit fittings. (5" minimum bend radius.)
- Black HDPE outer casing for durability and best resistance to UV and chemicals.

MERCURY SPORT JET®:	
THROTTLE CABLES:	
3300 cable (standard)	CC172XX/ CC230XX
33C cable (midrange)	CC332XX
3300 cable (TFXtreme)	CCX633XX
3300/33C cables are for Mercury Sport Jets with controls that accept a cable with 10-32 threaded ends. Drop-in replacement cable; requires connection kit #CA27319P for engine end.	
Mercury 3600 type cable (TFXtreme)	CCX630XX
Cable has a 10-32 threaded terminal at control end and Mercury type engine end. CA27319 kit is not required.	
GATE CABLES:	
90 & early 120 HP:	
Sport Jet 90 & early 120 (standard)	CC213XX
For Mercury Sport Jets with controls which accept a cable with 10-32 threaded ends. Drop-in replacement cable; uses existing connection components.	
175 HP:	
Sport Jet 175 (midrange)	CC400XX
For Mercury Sport Jets with controls which accept a 40BC high-load, stainless steel cable with 1/4-28 threaded end at the control. Drop-in replacement; uses existing connection components.	

EXISTING PART NUMBER	DESCRIPTION	PART NUMBER TO REORDER		Conduit Color / End Metal
		Standard	Premium	
311748-00-XXX.0	40BC Mercury (9-21 feet) Control Cable	CC400XX	N/A	black/stainless
All lengths (all markets) superceded to new part number		CC400XX	N/A	black/stainless
312240-00-XXX.0	Mercury Sport Jet Control Cable	CC401XX	N/A	black/stainless
All lengths (all markets) superceded to new part number		CC401XX	N/A	black/stainless
CC213XX	Jet Boat Shift Control Cable	CC213XX	N/A	black/brass
All lengths (all markets)		CC213XX	N/A	black/brass & stainless
CC692XX	TFX 4300 BC Control Cable Assembly	N/A	CCX430XX	black/stainless
All lengths (all markets) superceded to premium TFX cable		N/A	CCX430XX	black/stainless
CC694XX	TFX 6400BC Control Cable Assembly	N/A	CCX640XX	black/stainless
All lengths (all markets) superceded to premium TFX cable		N/A	CCX640XX	black/stainless
NOTES XX = Length in feet				



UTILITY & VERNIER APPLICATIONS:

UTILITY:	
WITH KNOB AND T-HANDLE:	
Utility Cable (5')	CC34305
Utility Cable (10')	CC34310
Utility Cable (15')	CC34315
Utility Cable (20')	CC34320
Utility Cable (25')	CC34325
Utility Cable (30')	CC34330
Utility Cable (35')	CC34335
Utility Cable (40')	CC34340
VERNIER:	
The vernier cable requires ordering 2 part numbers: a Vernier Cable Head (which includes knob, button, panel body and fine adjustment mechanism) PLUS a Cable, which attaches to the Cable Head.	
Vernier Cable Head	317310
Vernier Cable (5')	CC34505
Vernier Cable (10')	CC34510
Vernier Cable (15')	CC34515
Vernier Cable (20')	CC34520
Vernier Cable (25')	CC34525
Vernier Cable (30')	CC34530
Vernier Cable (35')	CC34535
Vernier Cable (40')	CC34540
CONDUIT FITTING KITS:	
Use these (formerly known as Hub Adapter Kits) to mount utility cables to mount in either bulkhead or clamp type applications.	
Bulkhead Adapter Kit	300673
Clamp Adapter Kit	302485
DC CONTROL:	
Converts standard 3300/33C cable into a utility control. Install through a panel or mount nearly anywhere with optional bracket.	
DC Control	301916
Uses	3300/33C type Cable
Mounting Bracket (stainless steel)	048210

UTILITY CABLE:

An easy-to-install, easy to operate flexible push-pull cable for remote control of choke, throttle, shut off, fuel valves, vents and many other applications.

- Available with both knob and T-handle.
- Solid stainless steel core wire resists corrosion, moves easily in HDPE liner.
- HDPE outer casing for durability and best resistance to UV and chemicals.

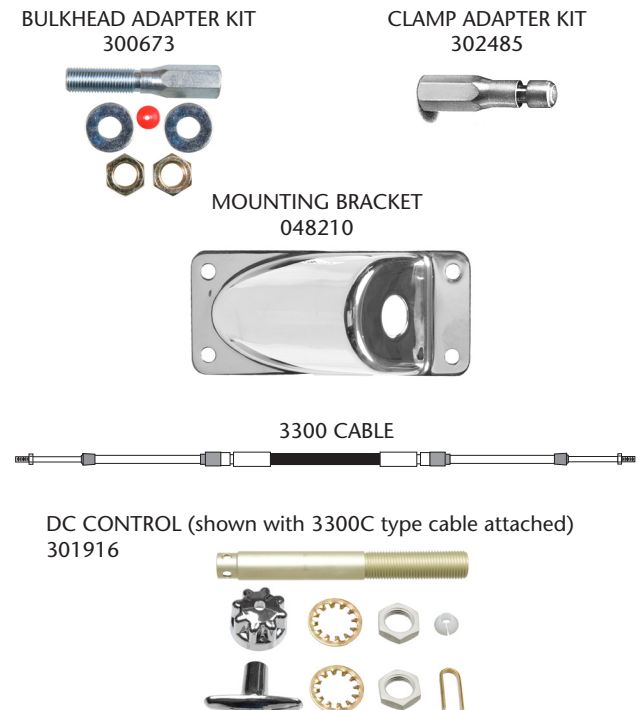
VERNIER CABLE:

Great for throttles or other applications where precise control is desired. Push the button for fast easy setting of approximate position, then turn the knob for micro adjustment.

- Positive, adjustable brake maintains settings regardless of vibration or governor back pressure.
- Uses standard Teleflex Marine throttle connection kits.
- HDPE outer casing for durability and best resistance to UV and chemicals.

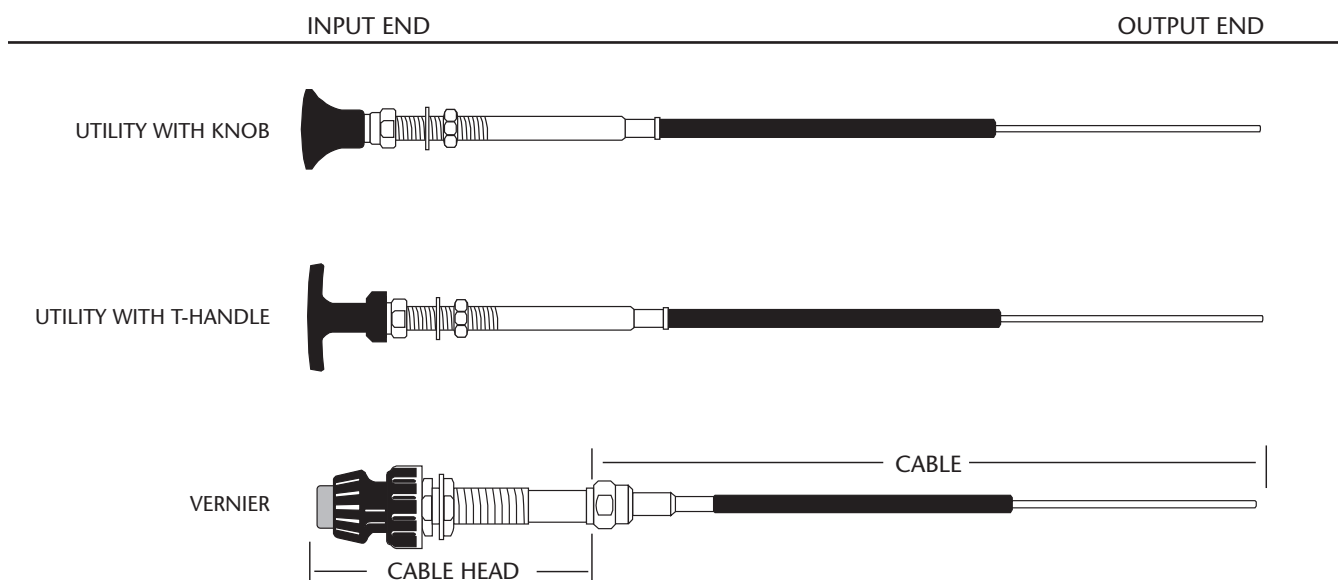
FOR USE ON:

Remote control of choke, governor, throttle, fuel valves, vents and other applications.



EXISTING PART NUMBER	DESCRIPTION	PART NUMBER TO REORDER		Conduit Color / End Metal
		Standard	Premium	
018872-00-XXX.0	33LU Utility Control Cable w/Knob	CC343XX*	N/A	black/brass
All lengths (NLA - all markets)		CC343XX*	N/A	black/brass
018873-00-XXX.0	33LU Utility Control Cable w/T-handle	CC343XX*	N/A	black/brass
All lengths (NLA - all markets)		CC343XX*	N/A	black/brass
043820-03-XXX.0	33LPL Control Cable, No Hub	N/A	N/A	black/brass
All lengths (NLA - all markets)		OBSOLETE	N/A	
307141-00-XXX.0	33LV Vernier Control Cable No Hub	CC345XX **	N/A	black/aluminum
All lengths (NLA - all markets)		CC345XX **	N/A	black/aluminum
307941-003	Vernier Cable Head	317310***	N/A	N/A
No longer available all markets		317310***	N/A	N/A

NOTES
 XX = Length in feet
 * Contains knob and t-handle
 ** CC345XX cables use 317310 Vernier Control Head
 *** Part number change only



CROSS-REFERENCE FOR OTHER BRANDS OF CONTROL CABLES:

NAME & MODEL NUMBER	DESCRIPTION (PART NUMBER)	REPLACEMENT (STANDARD)	REPLACEMENT (MIDRANGE)	RECOMMENDED REPLACEMENT (PREMIUM)
MORSE®:				
Type KM	Mercury 1965-date (063732-000) NLA	CC179XX	N/A	CCX179XX
Mercury Sport Jet up to 120	(310530) NLA	CC213XX	N/A	N/A
Mercury Sport Jet 175	(311718-000) NLA	N/A	CC400XX	N/A
Type O	OMC 1979-date (048296-000) NLA	CC205XX	N/A	CCX205XX
Type OS	OMC pre-1979 (302029-000) NLA	CC170XX	N/A	N/A
Type OC	OMC/Volvo new gen. (310048-000) NLA	N/A	N/A	CCX214XX (side mt.) CCX740XX (top mt)
33C	(032377-003) NLA	CC172XX/CC230XX	CC332XX	CCX633XX
33C Supreme	(301947-003) NLA	N/A	CC332XX	CCX633XX
43BC SST & 43BC	(046348-003/038013-003) NLA	N/A	N/A	CCX430XX
43C SST & 43C	(065885-003/038012-003) NLA	N/A	N/A	CCX433XX
63BC XL & 63BC*	(304263-003/037913-003) NLA (3" stroke)	N/A	N/A	N/A
64BC XL & 64BC	(304263-004/037913-004) NLA (4" stroke)	N/A	N/A	CCX640XX
63C XL & 63C*	(304262-003/037912-003) NLA (3" stroke)	N/A	N/A	N/A
64C XL & 64C	(304262-004/037912-004) NLA (4" stroke)	N/A	N/A	CCX643XX (4" stroke)
Positive Lock (3300TL)	Positive Lock (Turn-To-Lock) (043820) NLA	N/A	N/A	N/A
Utility (3300 UT)	Utility Cable (with knob) (018872-00-XXX.0) NLA	N/A	CC343XX**	N/A
Utility (3300 UT)	Utility Cable (with T-handle) (018873-00-XXX.0) NLA	N/A	CC343XX**	N/A
Vernier (3300 VC)	Vernier Cable & Head (separate) (Cable 307141-00-XXX.0 + Head 307941-03) NLA	N/A	CC345XX + Head 317310	N/A
ACCO®:				
OMTS	OMC pre-1979	CC170XX	N/A	N/A
KMTS	Mercury 1965-date	CC179XX	N/A	CCX179XX
M330L	3300CC or 33C type	CC172XX/CC230XX	CC332XX	CCX633XX
M430C	4300CC or 43C type	N/A	N/A	CCX433XX
M430CB	4300BC or 43BC type	N/A	N/A	CCX430XX
M640C	6400CC or 64C type	N/A	N/A	CCX643XX

* 64 Series cables cannot be used as replacements for 63 Series cables.

** Has both round and T-handle knobs.

General rule: use direct replacement type cable whenever possible;
use **TFXtreme** cables for difficult routings/multiple stations.

NAME & MODEL NUMBER	DESCRIPTION (PART NUMBER)	REPLACEMENT (STANDARD)	REPLACEMENT (MIDRANGE)	RECOMMENDED REPLACEMENT (PREMIUM)
HI-LEX® (TSK):				
CC33-30-00	3300CC or 33C type	CC172XX/CC230XX	CC332XX	CCX633XX
MERCURY®, MOST MARINER®, LATE MODEL FORCE®:				
Control Cable	(C34555A)	CC179XX	N/A	CCX179XX
Mercury Sport Jet	Mercury Sport Jet 120 HP & lower	CC213XX	N/A	N/A
NW CONTROLS®:				
O Style	OMC pre-1979 (A5119)	CC170XX	N/A	N/A
O2 Style	OMC 1979-date (A6523)	CC205XX	N/A	CCX205XX
M3 Style	Mercury 1965-date (A5153)	CC179XX	N/A	CCX179XX
WW Style	CC172 type (A5124)	CC172XX/CC230XX	CC332XX	CCX633XX
Series 75 W-W	CC330/33C type (A5797)	CC172XX/CC230XX	CC332XX	CCX633XX
Series 95 W-W	33C performance cable (A5805)	N/A	CC332XX	CCX633XX
Series 125 W-W	43C type (A5773)	N/A	N/A	CCX433XX
Series 125 W-WB	43BC type (A5804)	N/A	N/A	CCX430XX
Series 185 W-W	64CC type (A6057)	N/A	N/A	CCX643XX (4" stroke)
Series 185 WB-WB	64BC type (A6064)	N/A	N/A	CCX640XX (4" stroke)
OMC®, BRP®, EVINRUDE®, JOHNSON®, GALE®:				
Long-Life Cable	OMC 1979-date (3773-) (3798-)	CC205XX	N/A	CCX205XX
Snap-In Cable	OMC pre-1979 (1731-)	CC170XX	N/A	N/A
OMC/Volvo New Gen	With OMC controls (M-10)	N/A	N/A	CCX214XX (side mount) CCX740XX (top mount)
VOLVO®:				
Volvo old style	With controls that accept 10-32 end	CC172XX/CC230XX	CC332XX	CCX633XX
OMC/Volvo New Gen.	With OMC controls (M-10)	N/A	N/A	CCX214XX (side mount)
OMC/Volvo New Gen.	With OMC controls (M-10)	N/A	N/A	CCX740XX (top mount)

TELEFLEX UNIVERSAL CONTROL CABLES IDENTIFICATION GUIDE:

STANDARD	MIDRANGE	PREMIUM
3300/33 UNIVERSAL (10-32 ENDS)	3300/33 UNIVERSAL (10-32 ENDS)	3300/33 UNIVERSAL (10-32 ENDS)
CC172XX/CC230XX	CC332XX	CCX633XX
	CC199XX (NLA) USE PREMIUM CABLE	CCX633XX
	CC223XX (NLA) USE PREMIUM CABLE	CCX633XX
	CC215XX (NLA) USE PREMIUM CABLE	CCX633XX
4300/43 UNIVERSAL (1/4-28 ENDS)	4300/43 UNIVERSAL (1/4-28 ENDS)	4300/43 UNIVERSAL (1/4-28 ENDS)
038012-03-LENGTH 43C (NLA)	065885-03-LENGTH 43C	CCX433XX (4300CC)
CC193XX (4300CC) (NLA)	USE PREMIUM CABLE	CCX433XX (4300CC)
038013-03-LENGTH 43BC (NLA)	046348-03-LENGTH 43BC (NLA)	CCX430XX (4300BC)
CC192XX (4300BC) (NLA)	USE PREMIUM CABLE	CCX430XX (4300BC)
	311748-00-LENGTH 40BC 175 JET CABLE (NLA) USE CC400XX	N/A
63/6400/64 SERIES (5/16-24 ENDS)	63/6400/64 SERIES "XL" (5/16-24 ENDS)	6400/64 SERIES (5/16-24 ENDS)
037912-03-LENGTH 63C (NLA)	304262-03-LENGTH 63CXL (NLA)*	N/A
037912-04-LENGTH 64C (NLA)	304262-04-LENGTH 64CXL (NLA)	CCX643XX (6400CC)
CC195XX (6400CC) (NLA)	USE PREMIUM CABLE	CCX643XX (6400CC)
037913-03-LENGTH 63BC (NLA)	304263-03-LENGTH 63BCXL (NLA)*	N/A
037913-04-LENGTH 64BC (NLA)	304263-04-LENGTH 64BCXL (NLA)	CCX640XX (6400BC)
CC194XX (6400BC) (NLA)	USE PREMIUM CABLE	CCX640XX (6400BC)
NOTE: NLA = "No Longer Available"; N/A = "Not Available".		
* 64 Series control cables cannot replace 63 Series cables.		

