

# Teleflex Marine Control Cables

an introduction to control cables

What to  
**Consider**  
when  
selecting  
**Cables**

**Teleflex**<sup>®</sup>  
MARINE

**Morse**<sup>®</sup>

control 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<sup>®</sup>.**

**Standard** cables are suitable for most applications with short, simple cable routings. **Midrange** cables are recommended for somewhat longer cable routings and heavier use than their standard counterparts. For difficult cable routings or anywhere *uncompromising performance* is needed, use **Premium** (TFXTREME) control cables.

An overview of cable types, design and available models begins on the next page.

## *OEM Replacement Type*

These throttle/shift control cables are direct replacements for applications using engine makers' controls with proprietary cable interfaces, such as: Evinrude<sup>®</sup>, Force<sup>®</sup>, Johnson<sup>®</sup>, Mariner<sup>®</sup>, MerCruiser<sup>®</sup>, Mercury<sup>®</sup>, OMC<sup>®</sup>, U.S. Marine<sup>®</sup> L-Drive and some Volvo<sup>®</sup> engines. Most other engine makers use universal type cables (10-32 ends) and connection kits. Both standard and premium (TFXTREME) versions of Mercury and post-1978 OMC cables are offered. A midrange version of the OMC/Volvo cable is available.

## *Universal (3300) Type*

Universal (or 3300/33) type throttle/shift control cables are direct replacements for many boats using aftermarket controls or the following engine makers' controls: BMW<sup>®</sup>, Chrysler<sup>®</sup>, Honda<sup>®</sup>, Nissan<sup>®</sup>, Suzuki<sup>®</sup>, Tohatsu<sup>®</sup>, Volvo<sup>®</sup>, Yamaha<sup>®</sup> and others. These are offered in five versions: one standard, three midrange and one premium (TFXTREME).

## *Universal (43/64) Types*

Heavy duty universal type control cables are available in TFXTREME versions only. These are drop-in replacements for Morse<sup>®</sup> 43C, 43BC, 64C and 64BC and other similar cables.

## *Jet Boat Gate Control Cables*

Three styles of jet boat gate control cables are available, for replacement of Mercury Sport Jet<sup>®</sup> 90 and early 120's, Sport Jet 175's and OMC Turbo Jet<sup>®</sup>. Replacement throttle control cables are generally an OEM or 3300 Universal type.

*Teleflex Marine control cables meet or exceed all industry standards/certification requirements and 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.*

# Teleflex Marine Control Cables

## Engine Control Cable Designs

Engine control cables are offered in two main forms:

- **OEM Type (direct OEM replacement)**
- **Universal Type (work with most aftermarket and some OEM engine control heads)**

Most cable manufacturers offer a “standard” grade and “premium” (or “high performance”) grade of their 3300 type universal cables. This sounds like grades of gasoline, but read on.

### Standard Grade Cables

Standard grade is normally recommended for short, simple cable routings, such as small single station boats. Most cable companies offer both OEM and universal versions of their standard grade cables.

Often, cable makers do not supply a full line of cables for jet boats. Frequently neglected are OEM type cables which are out of the mainstream, such as proprietary cables needed for many old Mariner® and U.S. Marine® L-drive engines. *Teleflex still supplies these cables.*

### “Midrange” Grade Cables

Only Teleflex also offers several 3300 “midrange” universal cable options which have specific advantages over the normal standard grade.

**Teleflex CC330:** this is similar to Morse 33C, except it has a black jacket. This cable is more rugged than standard grade and can be used in cable routings that are more difficult than those in which a standard cable can be used.

**Morse 33C:** this is similar to CC330 above, except it is red. This cable is still available because it has served well and has quite a loyal following.

**Morse 33 Supreme:** before TFXTREME®, this was the best cable to use for long runs, complicated cable routings and multiple stations. As with 33C, it is still available from Teleflex because of its past reputation for performance.

The old Teleflex CC199 (armored core) cables were attempts to achieve the performance of the 33 Supreme, without merely copying its design.

The current generation of TFXTREME cables came about as a result of Teleflex’s endeavor to make a cable that would *outperform* 33 Supreme in actual use. TFXTREME has met those expectations.

Many “premium” cables are in fact *midrange* offerings, using uncoated armored core or ordinary coated wire rope. They can be impressive in sales demonstrations with no loads applied, but disappointing when in actual use on a boat.

### Premium Grade Cables

Premium grade cables are typically designed for long, complicated routings, such as twin and triple station vessels. *Most manufacturers only offer one universal “premium” control cable.*

This broad-brush approach covers many applications, but not most situations in which an OEM control head (such as Mercury® or OMC® single lever side mount) is used.

*Teleflex addresses the premium control “gaps” by offering TFXTREME® cables for Mercury, OMC and other proprietary control heads.*

### How to Select a Cable:

To replace a control cable, first identify the engine and control head on the boat. In this document, Teleflex offers general guidelines to make the selection process as straightforward as possible.

#### The 3 most popular OEM type cables:

OMC (pre-1978)



OMC (1978-date)



Mercury (1965-date)



#### Two main types of universal type cables:

CC (clamp ends: 3300CC, 4300CC & 6400CC types)



BC (bulkhead-clamp ends: 4300BC & 6400BC types)



## *Approaches to Control Cable Design...*

Cables are essentially the same on the outside — the differences in performance are caused largely by what is on the inside. The size and type of core wire (sliding element) used have more impact on cable performance than any other single facet of design.

### *Wire Rope Core*

Wire rope is typically used in tension-only cables, the kind that have a spring return, such as an automotive accelerator cable. It's the best way to design cables such as these. Wire rope cables don't work well when they have to push a load. Imagine forcing a string through a pipe. You can pull it, but try pushing it!

### *Solid Core*

Solid core wire (not stranded) is used in the majority of push-pull control cables built. It is an economical way (and often more than adequate) way of designing a cable that has to push and pull a load. Standard grade cables usual use solid core. The limitations of solid core are apparent when the cable it is in must be placed in multiple or tight bends; it then becomes difficult to operate. Imagine trying to get a straightened coat hanger through a drain pipe. It moves relatively easily until it must go around a corner.

### *Armored Core (uncoated)*

This approach involves wrapping a metal ribbon ("armor") around wire rope. The ribbon-wrapped wire rope is stiffer due to its sheath, so it "pushes" a load better. It is more flexible than solid core, so it doesn't get as balky as quickly when the cable has multiple/tight bends. Given enough bends in the cable, an armored core cable will become stiff however as it shares some characteristics of the wire rope and solid core designs. Armored core is often used in heavy duty push-pull cables. Old-technology high performance control cables as well as modern-day Rack & Pinion marine steering use this type of core wire. This is somewhat like moving a drain snake through a pipe.

### *Coated Wire Rope Core*

This kind of core is used in cables designed for multiple or tight bends. Similar to armored core (above), the plastic coating makes the core stiffer when pushing a load, but more flexible than solid core, so the cable moves more efficiently in bends. The Morse 33 Supreme used this design, which for

years, was the best approach to a "performance" cable. Imagine moving a very well greased drain snake through a pipe. It goes pretty easily unless you have multiple and/or tight bends.

### *Helically Wound Wire Rope Core*

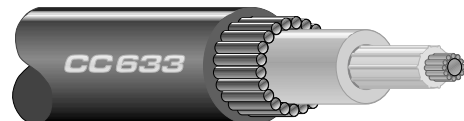
In the marine industry, this kind of core is used exclusively in rotary steering cables. The helically wound wrap wire engages teeth in a helm to move the core back and forth. One of the unintentional benefits of the helix cable design is the minimal contact area between the core and its liner, lessening drag. However, since the wire wrap runs across the direction of core movement, some of this benefit is negated. Helical cable has tremendous push-pull strength and generally performs better than armored core or coated wire rope in tight bends under load. Because of the cross-wrap and related speed bump effect of the helix core as it slides through its liner, helical cable is better suited to steering and other large cable applications where this "feel" is not as noticeable.

### *Profile-Coated Cores*

A new technology was created by Teleflex for its TFXTREME® cables, which combines all the best performance characteristics of each of the previous core designs noted:

- the flexibility of wire rope
- the push strength of solid core wire
- the efficiency in bends of armored core/coated wire rope
- the minimized drag of helical cable

TFXTREME cables use a coated wire rope or coated armored core design. The new technology is the use of a profiled (shaped) coating versus one that was merely round. In most TFXTREME cables, this is a spline pattern; in the largest, it is a coating that follows the helical profile of the armored core wrap. Imagine the drain snake moving through the pipe now has rollers all around.



**Profile-Coated Wire Rope:** a splined coating is extruded onto wire rope for 3300 series TFXTREME cables (CC633, CC630, CC635, CC636, etc.)

**Profile-Coated Armored Core:** either with splines or helically, Teleflex uses this technology on the larger, heavy duty cables such as 4300 (splines) and 6400 (helical profile) marine control cables.

# Teleflex Marine Control Cables

## Control Cables At A Glance:

### CABLE TYPE:

### CONTROL HEADS WHICH CABLE FITS:

#### OEM DIRECT REPLACEMENT TYPE CABLES:

**Mercury®/Mariner® Gen II (2003 to date)**  
Standard: CC189XX, Premium: CC679XX

Mercury/Mariner Gen II 4000 series single lever controls (2003-date)

**Mercury®/Mariner® type 600A (1965 to date)**  
Standard: CC179XX, Premium: CC635XX

Mercury/Mariner single lever controls (1965-date)

**OMC®/Johnson®/Evinrude® type 479 (1979-date)**  
Standard: CC205XX, Premium: CC636XX

OMC®/Johnson®/Evinrude® type single lever controls (1979-date)

**OMC®/Johnson®/Evinrude® type 400 (pre-1979)**  
Standard: CC170XX

OMC®/Johnson®/Evinrude type twin lever controls (pre-1979)

**Mariner® type (pre-1993 40 HP & below)**  
Standard: CC210XX

Mercury/Mariner single lever controls (1965-date)

**Mercury Sport Jet® (90 & early 120 HP)**  
**U.S. Marine® L-drive shift cable**  
**Mercury Sport Jet® (175 HP)**

Standard: CC213XX (Mercury/Mariner single lever controls (1965-date))  
Standard: CC213XX (Mercury/Mariner single lever controls (1965-date))  
Midrange: 312240-000-XXX Mercury Sport Jet 175 controls

**Volvo® engines with OMC® controls, OMC Turbo Jet®**  
Standard: CC214XX, Midrange: CC740XX

OMC®/Johnson®/Evinrude® type single lever controls (1979-date)  
(CC214 for OMC sidemount control, CC740 for any OMC control)

**Mercury®/Mariner® type 3600 (1965-date)**  
Premium: CC630XX

Aftermarket controls; Mercury/Mariner/late model Force controls which accept 10-32 threaded end

#### UNIVERSAL TYPE CABLES:

**3300 type (Teleflex 3300, Morse® 33C/33 Supreme)**  
Standard: CC179XX, Midrange: CC330XX, 33C, 33 Supreme,  
Premium: CC633XX

Aftermarket controls; OEM controls accepting a 10-32 threaded end  
Chrysler®/Force®, Honda®, Nissan®, Suzuki®, Tohatsu®, Volvo®,  
Yamaha®, Teleflex®, Morse®, NW®, Onan®, U-Flex®, Vetus® & most  
other controls

**4300 type (premium only - heavy duty applications)**  
4300BC (bulkhead-clamp): CC692XX  
4300CC (bulkhead clamp): CC693XX

controls which accept 1/4-28 threaded end  
controls which accept 1/4-28 threaded end

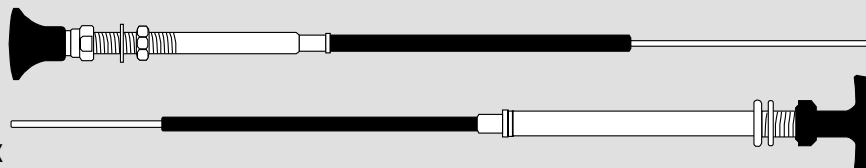
**6400 type (premium only - heavy duty applications)**  
6400BC (bulkhead-clamp): CC694XX  
6400CC (bulkhead clamp): CC695XX

controls which accept 5/16-24 threaded end  
controls which accept 5/16-24 threaded end

#### PANEL MOUNT TYPE CABLES:

##### Utility

(with knob: 018872-000-XXX)  
(with T-handle: 018873-000-XXX)



##### Positive Lock




(turn to lock in place 043820-003-XXX)




# Control Cable Identification Guide




**APPLICATIONS:**




**CONTROL END OF CABLE**




**ENGINE END OF CABLE**

    
 Mercury, MerCruiser (2003-date) late model Force, Mariner except pre-1993 40 HP and less engines




    
 Mercury, MerCruiser (1965-date) late model Force, Mariner except pre-1993 40 HP and less engines





    
 OMC/Johnson/Evinrude engines (1979-date), OMC Turbo Jet Throttle Control





    
 OMC/Johnson/Evinrude engines (pre-1979)





    
 Mariner pre-1993 low engines (40 HP & below)




    
 Sport Jet 90/120 & L-Drive




    
 Mercury Sport Jet 175

     
 Volvo engines using OMC Controls; OMC Turbo Jet (gate control)


     
 Mercury, MerCruiser (1965-date) late model Force, Mariner except pre-1993 40 HP and less engines

     
 Force/Chrysler outboards require connection kit; Honda, Nissan, Suzuki, Tohatsu, Volvo, Yamaha, Mercury and OMC often require engine connection kits; clamp type fittings and 10-32 threaded terminal ends on all

    
 bulkhead fitting has jam nuts; clamp fitting has groove; 1/4-28 threaded terminal ends on all

    
 bulkhead fitting has jam nuts; clamp fitting has groove; 5/16-24 threaded terminal ends on all

**PANEL MOUNT TYPE CABLES:**

**Vernier**  
 (micro-adjustable; 307941-003 body + 307141-00-XXX cable) 

# Teleflex Marine Control Cables

## Control Cable Options Based On Engine Type:

<b>OUTBOARD ENGINES:</b>	<b>STANDARD GRADE USING ENG. MFR. CONTROLS</b>	<b>STANDARD GRADE USING AFTMKT. CONTROLS</b>
Chrysler®	CC172XX + ball joint kit*	CC172XX + ball joint kit*
Force® pre-1993 Force® 1993-date	CC172XX + ball joint kit* CC179XX (600A type)	CC172XX + ball joint kit* CC172XX + CA27319P kit**
Johnson®/Evinrude® 1979-date Johnson®/Evinrude® pre-1979	CC205XX (479 type) CC170XX (400 type)	CC172XX + CA27320P kit** CC172XX + 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 CC172XX + CA27319P kit** CC172XX + CA27319P kit**
Mercury® 1965-date Mercury® products 2003-date (4000 series Gen II controls)	CC179XX (600A type) CC189XX (Gen II type)	CC172XX + CA27319P kit** N/A
Honda®, Nissan®, Suzuki®, Tohatsu®, Yamaha®	CC172XX	CC172XX
<b>STERNDRIVE (I/O) AND SOME INBOARDS:</b>		
Chrysler®, All Inboards	CC172XX	CC172XX
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 + CA27319P kit** N/A CC172XX + CA27373P kit** N/A
OMC® 1979-date OMC® pre-1979	CC205XX (479 type) CCC170XX (400 type)	CC172XX + CA27320P kit** CC172XX + CA27321P kit**
Volvo® using Volvo® controls Volvo® using OMC® controls Volvo® Turbo, SX, new-gen OMC drives w/OMC® controls	CC172XX CC214XX*** (sidemount only) N/A	CC172XX N/A N/A
Others	CC172XX	CC172XX
<b>HEAVY DUTY APPLICATIONS, INCLUDING SOME INBOARD &amp; JET ENGINES:</b>		
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)
<b>JET ENGINES (MERCURY SPORT JET®, OMC TURBO JET® &amp; SIMILAR):</b>		
Mercury® Sport Jet 90 & 120 (throttle cable) Mercury® Sport Jet 90 & early 120 (gate cable) Mercury® Sport Jet 175 (gate cable)	CC172 + CA27319P kit** CC213XX N/A	CC172 + CA27319P kit** CC213XX N/A
OMC® Turbo Jet (throttle control cable) OMC® Turbo Jet (gate control cable)	CC205XX (479 type) CC214XX*** (sidemount only)	CC172XX + 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.

# control cables selection guide

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

MIDRANGE GRADE USING ENG. MFR. CONTROLS		MIDRANGE GRADE USING AFTMKT CONTROLS		PREMIUM GRADE (TFXTREME) USING ENG. MFR. CONTROLS		PREMIUM GRADE (TFXTREME) USING AFTMKT. CONTROLS	
CC330/33C/33SUPREME*		CC330/33C/33SUPREME*		CC633XX + ball joint kit*		CC633XX + ball joint kit*	
CC330/33C/33SUPREME†* N/A		CC330/33C/33SUPREME†* CC330/33C/33SUPREME**		CC633XX + ball joint kit* CC635XX (600A type)		CC633XX + ball joint kit* CC630XX	
N/A N/A		CC330/33C/33SUPREME** CC330/33C/33SUPREME**		CC636XX (479 type) N/A		CC633XX + CA27320P kit** CC633XX + CA27321P kit**	
N/A N/A N/A		** (For connection kit number see premium grade listing at right for same engine/control.) CC330/33C/33SUPREME CC330/33C/33SUPREME** CC330/33C/33SUPREME**		N/A		CC633XX	
				CC635XX (600A type) CC635XX (600A type)		CC630XX CC630XX	
N/A N/A		CC330/33C/33SUPREME** N/A		CC635XX (600A type) CC679XX (Gen II type)		CC630XX N/A	
CC330/33C/33SUPREME/GRAY		CC330/33C/33SUPREME		CC633XX/TFXTREME GRAY (OEM)		CC633XX	
CC330/33C/33SUPREME		CC330/33C/33SUPREME		CC633XX		CC633XX	
N/A N/A N/A N/A		CC330/33C/33SUPREME** N/A CC330/33C/33SUPREME** N/A		CC635XX (600A type) CC679XX (Gen II type) CC635XX (600A type) CC679XX (Gen II type)		CC630XX N/A CC630XX N/A	
N/A N/A		CC330/33C/33SUPREME** CC330/33C/33SUPREME**		CC636XX (479 type) N/A		CC633XX + CA27320P kit** CC633XX + CA27321P kit**	
CC330/33C/33SUPREME CC740XX (any OMC control) CC740XX (any OMC control)		CC330/33C/33SUPREME N/A N/A		CC633XX N/A N/A		CC633XX N/A N/A	
CC330/33C/33SUPREME		CC330/33C/33SUPREME		CC633XX		CC633XX	
(see Premium Grade) (see Premium Grade)		(see Premium Grade) (see Premium Grade)		CC692XX (replaces Morse 43BC) CC693XX (replaces Morse 43CC)		CC692XX (replaces Morse 43BC) CC693XX (replaces Morse 43CC)	
(see Premium Grade) (see Premium Grade)		(see Premium Grade) (see Premium Grade)		CC694XX (replaces Morse 64BC) CC695XX (replaces Morse 64CC)		CC694XX (replaces Morse 64BC) CC695XX (replaces Morse 64CC)	
CC330/33C/33SUPREME ** N/A 312240-000-XXX		CC330/33C/33SUPREME** N/A 312240-000-XXX		CC630XX N/A N/A		CC630XX N/A N/A	
N/A CC740XX (any OMC control)		CC330/33C/33SUPREME** CC330/33C/33SUPREME		CC636XX (479 type) N/A		CC633XX + CA27320P kit** CC633XX	

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

\*\*\* Cable part numbers shown are for OMC side-mount controls; OMC binnacle-mount controls require use of one 3300 for gate and one 3300 cable + CA27320P connection kit for throttle.

# Teleflex Marine Control Cables

## *Cross-Reference for Morse & Other Brands of Control Cables:*

NAME & MODEL NUMBER	DESCRIPTION (PART NUMBER)	RECOMMENDED REPLACEMENT (STANDARD)	RECOMMENDED REPLACEMENT (MIDRANGE)	RECOMMENDED REPLACEMENT (PREMIUM)
<b>MORSE®:</b>				
Type KM	(063732-000)	CC179XX	N/A	CC635XX
Mercury Sport Jet to 120	(310530)	CC213XX	N/A	N/A
Mercury Sport Jet 175	(311718-000)	N/A	312240-000-XXX	N/A
Type O	OMC 1979-date (048296-000)	CC205XX	N/A	CC636XX
Type OS	OMC pre-1979 (302029-000)	CC170XX	N/A	N/A
Type OC	OMC/Volvo new gen. (310048-000)	CC214XX (sidemount)	CC740XX (all controls)	N/A
33C	(032377-003)	CC172XX	CC330XX/ 032377-003-XXX	CC633XX
33C Supreme	(301947-003)	N/A	301947-003-XXX	CC633XX
43BC SST & 43BC	(046348-003 & 038013-003)	N/A	N/A	CC692XX
43C SST & 43C	(065885-003 & 038012-003)	N/A	N/A	CC693XX
63BC XL & 63BC	(304263-003/037913-003) (3" stroke)	N/A	N/A	CC694XX (4" stroke)
64BC XL & 64BC	(304263-004/037913-004) (4" stroke)	N/A	N/A	CC694XX
63C XL & 63C	(304262-003/037912-003) (3" stroke)	N/A	N/A	CC695XX (4" stroke)
64C XL & 64C	(304262-004/037912-004) (4" stroke)	N/A	N/A	CC695XX
Positive Lock (3300TL)	Positive Lock (Turn-To-Lock) (043820)	N/A	043820-003-XXX	N/A
Utility (3300 UT)	Utility Cable (with knob)	N/A	018872-000-XXX	N/A
Utility (3300 UT)	Utility Cable (with T-handle)	N/A	018873-000-XXX	N/A
Vernier (3300 VC)	Vernier Cable & Body (separate)	(307141-000 + 307941-003-XXX)	N/A	N/A
<b>ACCO®:</b>				
OMTS	OMC pre-1979	CC170XX	N/A	N/A
KMTS	Mercury 1965-date	CC179XX	N/A	CC635XX
M330L	3300CC or 33C type	CC172X	CC330XX/ 032377-003-XXX	CC633XX
M430C	4300CC or 43C type	N/A	N/A	CC693XX
M430CB	4300BC or 43BC type	N/A	N/A	CC692XX
M640C	6400CC or 64C type	N/A	N/A	CC695XX



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

NAME & MODEL NUMBER	DESCRIPTION (PART NUMBER)	RECOMMENDED REPLACEMENT (STANDARD)	RECOMMENDED REPLACEMENT (MIDRANGE)	RECOMMENDED REPLACEMENT (PREMIUM)
<b>HI-LEX® (TSK):</b>				
CC33-30-00	3300CC or 33C type	CC172X	CC330XX/ 032377-003-XXX	CC633XX
<b>MERCURY®, MOST MARINER®, LATE MODEL FORCE®:</b>				
Control Cable	(C34555A)	CC179XX	N/A	CC635XX
Mercury Sport Jet	Mercury Sport Jet 120 HP & lower	CC213XX	N/A	N/A
<b>NW CONTROLS®:</b>				
O Style	OMC pre-1979 (A5119)	CC170XX	N/A	N/A
O2 Style	OMC 1979-date (A6523)	CC205XX	N/A	CC636XX
M3 Style	Merucry 1965-date (A5153)	CC179XX	N/A	CC635XX
WW Style	CC172 type (A5124)	CC172X	CC330XX/ 032377-003-XXX	CC633XX
Series 75 W-W	CC330/33C type (A5797)	CC172X	CC330XX/ 032377-003-XXX	CC633XX
Series 95 W-W	33C performance cable (A5805)	N/A	CC330XX/ 032377-003-XXX	CC633XX
Series 125 W-W	43C type (A5773)	N/A	N/A	CC693XX
Series 125 W-WB	43BC type (A5804)	N/A	N/A	CC692XX
Series 185 W-W	64CC type (A6057)	N/A	N/A	CC695XX (4" stroke)
Series 185 WB-WB	64BC type (A6064)	N/A	N/A	CC694XX (4" stroke)
<b>OMC®, EVINRUDE®, JOHNSON®, GALE®:</b>				
Long-Life Cable	OMC 1979-date (3773-) (3798-)	CC205XX	N/A	CC636XX
Snap-In Cable	OMC pre-1979 (1731-)	CC170XX	N/A	N/A
OMC/Volvo New Gen	With OMC controls (M-10)	CC214XX (sidemount)	CC740XX (all controls)	N/A
<b>VOLVO®:</b>				
Volvo old style	With controls that accept 10-32 end	CC172X	CC330XX/ 032377-003-XXX	CC633XX
OMC/Volvo New Gen.	With OMC controls (M-10)	CC214XX (sidemount)	CC740XX (all controls)	N/A

# Teleflex Marine TFX TREME

**Teleflex**<sup>®</sup>  
MARINE

# TFX TREME<sup>®</sup>

## *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 with TFX TREME cables because they are different — really different.**

**TFX TREME's unique design** incorporates a patent-pending 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.

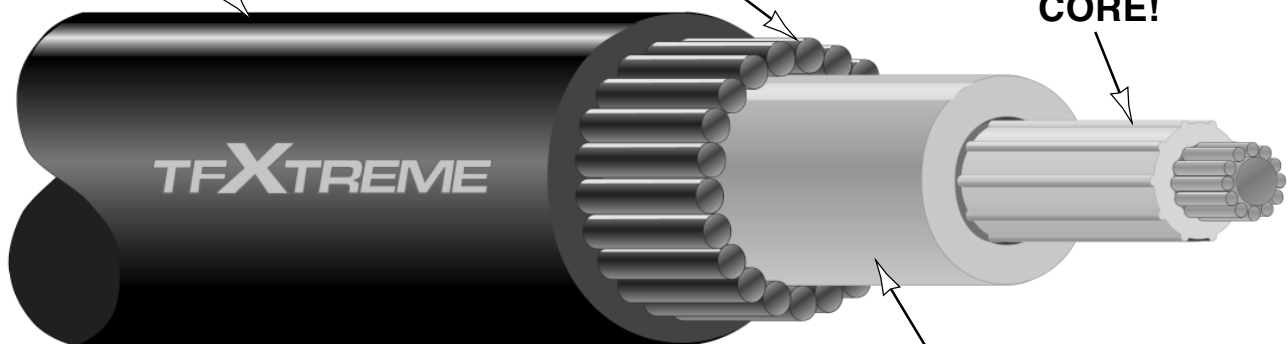
**RESULT: a control cable with easy movement AND minimum lost motion.**

## *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!**



**Long Wearing HDPE Liner: Ultra Smooth and Lubed for Life.**

controlcables

OEM

premium

premium control cables — when performance counts

# A Complete Family Of Cables: **new!**

**CC679**  
Merc Gen II type  
(4000 series controls)



**CC635**  
Merc type



**CC636**  
OMC type



**CC630**  
3600 Merc type



**CC633**  
3300CC type  
(10-32 threaded end)



**CC692**  
4300BC type  
(1/4-28 threaded end)



**CC693**  
4300CC type  
(1/4-28 threaded end)



**CC694**  
6400BC type  
(5/16-24 threaded end)



**CC695**  
6400CC type  
(5/16-24 threaded end)



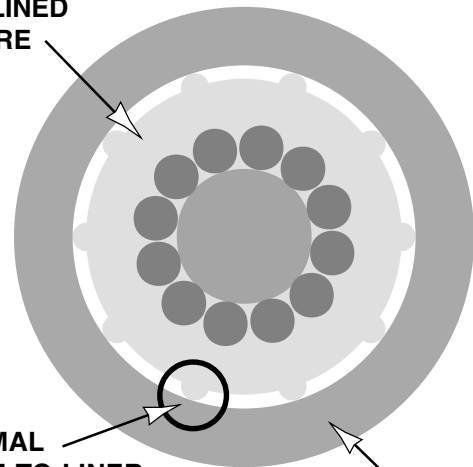
See  
pages  
**232-**  
**237**

*TFXTREME is the only family of high performance cables that offers a full range of universal cables and all the popular direct replacement OEM type cables as well.*

## Cross Section of Core and Liner:

**premium**  
control cables

SPLINED CORE



MINIMAL CORE-TO-LINER CONTACT AREA

LINER

CORE HAS 10 CONTACT POINTS

controlcables

univ.

premium

# Teleflex Marine OEM cables

**Teleflex**<sup>®</sup>  
MARINE

**Morse**<sup>®</sup>

## For These Controls:

*Mercury<sup>®</sup>, MerCruiser<sup>®</sup>,  
Mariner<sup>®</sup>, Force<sup>®</sup>,  
OMC<sup>®</sup>, Evinrude<sup>®</sup>,  
Johnson<sup>®</sup>, Volvo<sup>®</sup>*

*Teleflex<sup>®</sup> CH1700,  
CH7500 & CH7600*

*Morse<sup>®</sup> SL-3*

SELECTION GUIDE: page 224  
TFXTREME CABLES: page 230  
CONNECTION KITS: page 240  
SUPPORT: [www.teleflexmorse.com](http://www.teleflexmorse.com)  
or call 610-495-7011

*NOTE: When properly installed, these engine control cables will connect to their respective types of engines and controls utilizing existing OEM connection hardware. When routing cables, allow the most generous bends possible to assure optimal cable feel and response. Be sure cable is routed away from any potential source of damage, such as heat sources, sharp objects, moving parts, etc. Cables must be installed in such a way that engine movement is not restricted.*

*(cables for engine makers' controls with proprietary cable connections)*

## *Applications:*

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

## *Features:*

- Drop-in replacement cables are engineered as exact replacements for original equipment cables.
- Cables use the existing connection components.
- Stainless steel and brass fittings.
- **Standard cables** use stainless steel Lubri-Core<sup>™</sup> core wire for smooth operation and long life. (*6" minimum bend radius.*)
- **Midrange cables** use a heavier jacket and either stainless steel Lubri-Core<sup>™</sup> or a coated cable (33C Supreme) core wire. (*6" minimum bend radius.*)
- **TFXTREME<sup>®</sup> premium cables** have a heavy jacket and a 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.
- Cables meet/exceed all applicable industry standards.

# throttle & shift cables for engine maker (OEM) controls

CONTROL END

ENGINE END

## Mercury/Mariner/ Force/U.S. Marine:



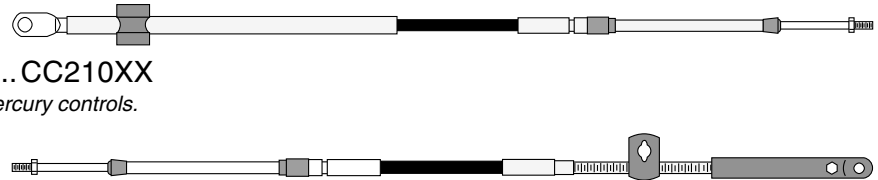
Mercury Gen II type cable (standard) CC189XX  
Mercury Gen II type cable (premium) CC679XX  
*Mariner®/Mercury®/MerCruiser® and other engines using Mercury 2003-date 4000 series controls.*



Mercury 600A type cable (standard) . CC179XX  
Mercury 600A type cable (premium) . CC635XX  
*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.*



Mariner 630 type cable (standard) .... CC210XX  
*Mariner® (pre-1993 40 HP & less) with Mariner/Mercury controls.*



Mercury 3600 type cable (premium) . CC630XX  
*Mercury® products (1965-date); Force® (1993-date) using Mercury controls which accept 10-32 threaded ends or using most aftermarket controls.*



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.*



## OMC, Johnson, Evinrude, Volvo/OMC:

OMC 400 type cable (standard) ..... CC170XX  
*Pre-1979 OMC®/Johnson®/Evinrude®/Gale® with OMC controls. Exceeds engine manufacturer's specifications.*



OMC 479 type cable (standard) ..... CC205XX  
OMC 479 type cable (premium) ..... CC636XX  
*1979-date OMC®/Johnson®/Evinrude®/Gale® with OMC controls. Exceeds engine manufacturer's specifications.*



Volvo/OMC cable (standard) ..... CC214XX  
*Volvo engines using OMC side mount controls.*



Volvo/OMC cable (midrange) ..... CC740XX  
*Volvo engines using any OMC controls. Nominal 3" travel, 6" minimum bend radius.*



*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. Lengths above 30 feet are only available in two-foot increments (32, 34, 36, etc.)*

OEM control cables

OEM

# Teleflex Marine Universal cables

**Teleflex**<sup>®</sup>  
MARINE

**Morse**<sup>®</sup>

## For These Controls:

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

SELECTION GUIDE: page 224  
TFXTREME CABLES: page 230  
CONNECTION KITS: page 240  
SUPPORT: [www.teleflexmorse.com](http://www.teleflexmorse.com)  
or call 610-495-7011

**NOTE:** When properly installed, these engine control cables will connect to their respective types of engines and controls utilizing engine connection kits and possibly OEM connection hardware. (These cables are not designed to replace Mercury/Mariner<sup>®</sup> and OMC<sup>®</sup> O.E.M. type control cables which have "eye" terminals at the control end of the cables.) When routing cables, allow the most generous bends possible to assure optimal cable feel and response. Be sure cable is routed away from any potential source of damage, such as heat sources, sharp objects, moving parts, etc. Cables must be installed in such a way that engine movement is not restricted.

*(cables for aftermarket  
& some OEM controls)*

## *Applications:*

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

*TFXTREME<sup>®</sup> versions of the 3300 cables are offered for demanding applications in which a smooth feel at the control is essential. Teleflex 4300 and 6400 series cables — for heavy duty applications — are TFXTREME products.*

## *Features:*

- Universal cables meet all specifications for 33/3300, 43/4300 or 64/6400 type original equipment cables.
- Cables can use the existing connection components.
- Stainless steel and brass fittings.
- **Standard cables** use stainless steel Lubri-Core<sup>™</sup> core wire for smooth operation and long life. (6" minimum bend radius.)
- **Midrange cables** use a heavier jacket and either stainless steel Lubri-Core<sup>™</sup> or a coated cable (33C Supreme) core wire. (6" minimum bend radius.)
- **TFXTREME<sup>®</sup> premium 3300 cables** have a heavy jacket and a splined, coated core element for maximum smoothness with minimal lost motion. (4" min. bend radius.)
- **4300 type cables** have stainless steel conduit fittings. (5" minimum bend radius.)
- **6400 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.

# throttle & shift cables for aftermarket & some OEM controls

CONTROL END

ENGINE END

## 33 Types (10-32 ends):

3300 cable (standard) ..... CC172XX

*Cable has a 10-32 threaded terminal and a clamp-type fitting at each end. 3" nominal travel.*



3300 cable (midrange) ..... CC330XX

33C cable (midrange) ..... 032377-003-XX

33C Supreme (midrange) ..... 301947-003-XXX

*Cables have a 10-32 threaded terminal and a clamp-type fitting at each end. 3" nominal travel.*



TFXTREME 3300 cable (premium) ... CC633XX

*Cable has a 10-32 threaded terminal and a clamp-type fitting at each end. 3" nominal travel. 4" minimum bend radius.*

**TFXTREME**



## 43 Types (1/4-28 ends):

TFXTREME 4300 BC cable ..... CC692XX

*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**



TFXTREME 4300 CC cable ..... CC693XX

*Cable has a 1/4-28 threaded terminal and a clamp-type fitting at each end. 3" nominal travel. 5" minimum bend radius.*

**TFXTREME**



## 64 Types (5/16-24 ends):

TFXTREME 6400 BC cable ..... CC694XX

*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**



TFXTREME 6400 CC cable ..... CC695XX

*Cable has a 5/16-24 threaded terminal and a clamp-type fitting at each end. 4" nominal travel. 8" minimum bend radius.*

**TFXTREME**



*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. Lengths above 30 feet are only available in two-foot increments (32, 34, 36, etc.)*

universalcontrolcables

OEM univ.

# Teleflex Marine Jet Boat cables

**Teleflex**<sup>®</sup>  
MARINE

**Morse**<sup>®</sup>

*(cables for most jet  
boat throttle & gate  
controls)*

## For These Controls:

*Mercury SportJet<sup>®</sup>,  
OMC TurboJet<sup>®</sup>*

*Teleflex<sup>®</sup> CH2300  
Morse<sup>®</sup> MV-2, MV-3  
and others*

## *Applications:*

**Just for Jets!** Two families of jet boat control cables are available, for replacement of Mercury Sport Jet<sup>®</sup> and OMC Turbo Jet<sup>®</sup> throttle and reverse-gate cables.

*TFXTREME<sup>®</sup> versions of the three most popular cables are offered for demanding applications in which a smooth feel at the control is essential.*

## *Features:*

- Drop-in replacement cables are engineered as exact replacements for original equipment cables.
- Cables use the existing connection components.
- Stainless steel and brass fittings.
- **Standard cables** use stainless steel Lubri-Core<sup>™</sup> core wire for smooth operation and long life. (6" minimum bend radius.)
- **Midrange cables** use a heavier jacket and either stainless steel Lubri-Core<sup>™</sup> or a coated cable (33C Supreme) core wire. (6" minimum bend radius.)
- **TFXTREME<sup>®</sup> premium cables** have a heavy jacket and a 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.
- Cables meet/exceed all applicable industry standards.

SELECTION GUIDE: page 224  
TFXTREME CABLES: page 230  
CONNECTION KITS: page 240  
SUPPORT: [www.teleflexmorse.com](http://www.teleflexmorse.com)  
or call 610-495-7011

*NOTE: When properly installed, these engine control cables will connect to their respective types of engines and controls utilizing existing OEM connection hardware. When routing cables, allow the most generous bends possible to assure optimal cable feel and response. Be sure cable is routed away from any potential source of damage, such as heat sources, sharp objects, moving parts, etc. Cables must be installed in such a way that nozzle/gate movement is not restricted.*



# throttle & shift cables for most OEM & aftermarket jet controls

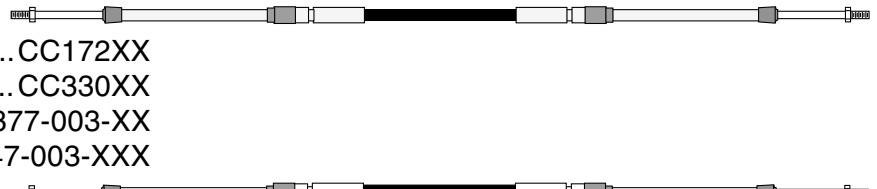
## Mercury Sport Jet®:

CONTROL END

ENGINE END

### THROTTLE CABLES:

- 3300 cable (standard) ..... CC172XX
- 3300 cable (midrange) ..... CC330XX
- 33C cable (midrange) ..... 032377-003-XX
- 33C Supreme (midrange) ..... 301947-003-XXX



### TFXTREME 3300 cable (premium) ... CC633XX

3300/33 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 (premium) . CC630XX

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

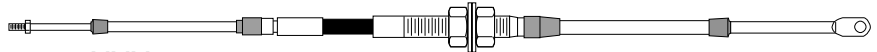
For Mercury Sport Jets with controls which accept a cable with 10-32 threaded ends. Drop-in replacement cable; uses existing connection components.



#### 175 HP:

#### Sport Jet 175 (midrange) ..... 312240-000-XXX

For Mercury Sport Jets with controls which accept a cable with 1/4-28 threaded ends. Drop-in replacement cable; uses existing connection components.



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. Lengths above 30 feet are only available in two-foot increments (32, 34, 36, etc.)

## OMC Turbo Jet®:

### THROTTLE CABLES:

#### OMC 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.



#### OMC 479 type cable (premium) ..... CC636XX

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..



#### 3300/33 cable ..... SEE SPORT JET ABOVE

(For OMC Turbo Jets with OMC binnacle mount, Teleflex, Morse or other controls that accept a cable with 10-32 threaded ends. Drop-in replacement cable; uses existing connection components.



### GATE CABLES:

#### Turbo Jet cable (standard) ..... CC214XX

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 (midrange) ..... CC740XX

For OMC Turbo Jets with OMC controls that accept OMC "snap in" O.E.M. type cable. Drop-in replacement cable; uses existing connection components.



jetcontrolcables

jets

# Teleflex Marine Utility cables

**Teleflex**<sup>®</sup>  
MARINE

**Morse**<sup>®</sup>

## For These Uses:

*remote control of  
choke, governor,  
throttle, fuel valves,  
vents and  
other applications*

SELECTION GUIDE: page 224  
TFXTREME CABLES: page 230  
CONNECTION KITS: page 240  
SUPPORT: [www.teleflexmorse.com](http://www.teleflexmorse.com)  
or call 610-495-7011

*NOTE: When properly installed, these control cables will connect to various engines and other equipment utilizing OEM and/or aftermarket connection hardware. When routing cables, allow the most generous bends possible to assure optimal cable feel and response. Be sure cable is routed away from any potential source of damage, such as heat sources, sharp objects, moving parts, etc. Cables must be installed in such a way that they do not create potentially hazardous conditions.*

*(panel-mount cables for  
remote control)*

## *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 either knob or T-handle.
- Solid stainless steel core wire resists corrosion, moves easily in HDPE liner.
- Black HDPE outer casing for durability and best resistance to UV and chemicals.
- Cables meet/exceed all applicable industry standards.

## *Vernier Cable:*

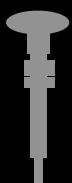
Great for throttles or other applications where precise control is desired. **Push the button for fast easy setting of approximate position, then turn the knob for micro adjustment.**

- Positive, adjustable brake maintains settings regardless of vibration or governor back pressure.
- Uses standard Teleflex Marine throttle connection kits.
- Black HDPE outer casing for durability and best resistance to UV and chemicals.
- Cables meet/exceed all applicable industry standards.

## *Positive Lock Cable:*

Ideal when separate throttle control is required for engine warm-up or for operating auxiliary equipment. **A simple twist of the T-handle locks the cable in any setting.**

- Solid stainless steel core wire resists corrosion, moves easily in HDPE liner.
- Black HDPE outer casing for durability and best resistance to UV and chemicals.
- Cables meet/exceed all applicable industry standards.



# cables for many specialized control applications

## Utility:

INPUT END

OUTPUT END



### WITH KNOB:

- Utility Cable-Knob (5') ..... 018872-000-0060
- Utility Cable-Knob (10') ..... 018872-000-0120
- Utility Cable-Knob (15') ..... 018872-000-0180
- Utility Cable-Knob (20') ..... 018872-000-0240

- Utility Cable-Knob (25') ..... 018872-000-0300
- Utility Cable-Knob (30') ..... 018872-000-0360
- Utility Cable-Knob (35') ..... 018872-000-0420
- Utility Cable-Knob (40') ..... 018872-000-0480



### WITH T-HANDLE:

- Utility Cable-T-handle (5') ..... 018873-000-0060
- Utility Cable-T-handle (10') ... 018873-000-0120
- Utility Cable-T-handle (15') ... 018873-000-0180

- Utility Cable-T-handle (20') ... 018873-000-0240
- Utility Cable-T-handle (25') ... 018873-000-0300

## Positive Lock:

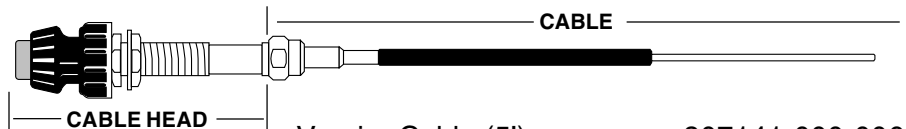


- Positive Lock Cable (5') ..... 043820-003-0060
- Positive Lock Cable (10') ..... 043820-003-0120
- Positive Lock Cable (15') ..... 043820-003-0180
- Positive Lock Cable (20') ..... 043820-003-0240

- Positive Lock Cable (25') ..... 043820-003-0300
- Positive Lock Cable (30') ..... 043820-003-0360
- Positive Lock Cable (45') ..... 043820-003-0540
- Positive Lock Cable (50') ..... 043820-003-0600

## 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 Head.



- Vernier Cable Head ..... 307941-003

- Vernier Cable (5') ..... 307141-000-0060
- Vernier Cable (10') ..... 307141-000-0120
- Vernier Cable (15') ..... 307141-000-0180
- Vernier Cable (20') ..... 307141-000-0240
- Vernier Cable (25') ..... 307141-000-0300
- Vernier Cable (30') ..... 307141-000-0360
- Vernier Cable (35') ..... 307141-000-0420
- Vernier Cable (40') ..... 307141-000-0480

## 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



- Bulkhead Adapter Kit ..... 300673
- Clamp Adapter Kit ..... 302485

### CLAMP ADAPTER KIT



## DC Control:

Converts standard 3300 cable into a utility control. Install through a panel or mount nearly anywhere with optional bracket.

DC CONTROL

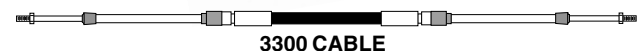


- DC Control ..... 301916
- 3300 type Cable ..... see page 214 for options

MOUNTING BRACKET

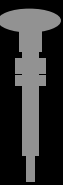


- Mounting Bracket (stainless steel) ..... 048210



3300 CABLE

utility control cables



# Teleflex Marine Connection Kits

## Engine Connection Kits

controlconnectionkits

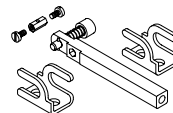
DESCRIPTION OF KIT	MORSE	TELEFLEX
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### Engine-Specific Connection Kits for O.E.M. cables:

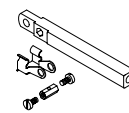
#### For 1973-1978 OMC O.E.M. ("400" type) cables with bare wire ends:

Evinrude/Johnson O/B Kit (35HP & less)	035640	CA27208P
Evinrude/Johnson O/B Kit (over 35HP)	N/A	CA27247P
OMC Stern Drive Kit (all)	N/A	CA27247P

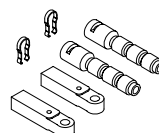
(NOTE: included clip is not used on stern drives.)



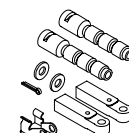
CA27208P



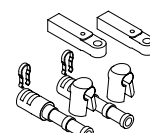
CA27247P



CA27320P



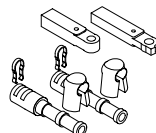
CA27321P



CA27319P

### Engine-Specific Connection Kits for 3300 cables:

Evinrude/Johnson O/B Kit (1979-date)	300557	CA27320P
Evinrude/Johnson O/B Kit (pre-1979)	301729	CA27321P
Mercury Outboard Kit (1965-date)	301901	CA27319P
Mercury Stern Drive Kit (all)	301901	CA27319P
Mercury Inboard Kit (all)	302123	CA27373P
OMC Stern Drive Kit (all)	300557	CA27320P



CA27373P



300557



301729



302123



301901

### OEM Control-Specific Connection Kits for 3300 cables:

Merc/Mariner Control Adapter - 3300 cable	301074	N/A
OMC/J/E Control Adapter - 3300 cable	304939	N/A



301074



304939

### Universal Ball Joint Kits:

Univ. 3300 Ball Joint (1/4-28) (1)	N/A	CA37701P
Univ. 3300 Ball Joint (10-32) QR (1)	031799-001	N/A
Univ. 3300 Ball Joint (1/4-28) QR (1)	031126	N/A
Univ. 3300 Ball Joint (5/16-24) QR (1)	035242	N/A
Univ. 4300 Ball Joint (1/4-28) (1)	N/A	CA28014P
Univ. 4300 Ball Joint (1/4-28) QR (1)	029104	N/A
Univ. 4300 Ball Joint (5/16-24) QR (1)	032267	N/A
Univ. 6400 Ball Joint (5/16-24) (1)	N/A	CA28021P
Univ. 6400 Ball Joint (5/16-24) QR (1)	029108	N/A
Univ. 6400 Ball Joint (5/16-24) ST (1)	038491	N/A

(NOTE: QR type has external spring over ball receptor; ST does not.)



### 3300 SERIES

CA37701P  
031799-001  
031126  
035242

### 4300 SERIES

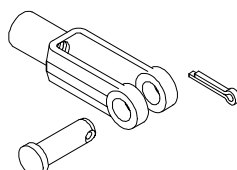
CA28014P  
029104  
032267

### 6400 SERIES

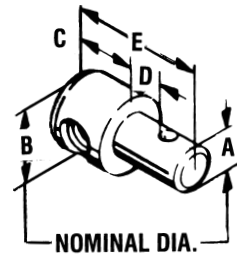
CA28021  
029108  
038491

# control cable connection & accessory hardware

For two cables, except where otherwise noted.  
(1) = for use with one cable.

DESCRIPTION OF KIT	MORSE	TELEFLEX												
<b>Universal Clevis Kits:</b>														
Univ. 3300 Clevis (10-32, 1/4" pin) (1)	N/A	CA37700P												
Univ. 3300 Clevis (10-32, 3/16" pin) (1)	031800	N/A												
Univ. 3300 Clevis (10-32, 1/4" pin) (1)	031125	N/A												
Univ. 3300 Clevis (10-32, 5/16" pin) (1)	033395	N/A												
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <tr> <td>Univ. 4300 Clevis (1/4-28, 1/4" pin) (1)</td> <td>N/A</td> <td>CA28022P</td> </tr> <tr> <td>Univ. 4300 Clevis (1/4-28, 1/4" pin) (1)</td> <td>029025</td> <td>N/A</td> </tr> <tr> <td>Univ. 4300 Clevis (1/4-28, 5/16" pin) (1)</td> <td>042212</td> <td>N/A</td> </tr> <tr> <td>Univ. 4300 Clevis (1/4-28, 5/8" pin) (1)</td> <td>045985</td> <td>N/A</td> </tr> </div> <div style="width: 45%; text-align: right;"> <p><b>3300 SERIES</b> CA37700P 031880 031125 033395</p>  <p><b>4300 SERIES</b> CA28022 029025 042212 045985</p> <p><b>6400 SERIES</b> CA28023P 029132-001 042034</p> </div> </div>			Univ. 4300 Clevis (1/4-28, 1/4" pin) (1)	N/A	CA28022P	Univ. 4300 Clevis (1/4-28, 1/4" pin) (1)	029025	N/A	Univ. 4300 Clevis (1/4-28, 5/16" pin) (1)	042212	N/A	Univ. 4300 Clevis (1/4-28, 5/8" pin) (1)	045985	N/A
Univ. 4300 Clevis (1/4-28, 1/4" pin) (1)	N/A	CA28022P												
Univ. 4300 Clevis (1/4-28, 1/4" pin) (1)	029025	N/A												
Univ. 4300 Clevis (1/4-28, 5/16" pin) (1)	042212	N/A												
Univ. 4300 Clevis (1/4-28, 5/8" pin) (1)	045985	N/A												
Univ. 6400 Clevis (5/16-24, 5/16" pin) (1)	N/A	CA28023P												
Univ. 6400 Clevis (1/4-28, 5/16" pin) (1)	029132-001	N/A												
Univ. 6400 Clevis (1/4-28, 5/8" pin) (1)	042034	N/A												

<b>Other Universal Cable Connection Kits:</b>							
Pivots 3300 Series							
	A	B	C	D	E		
in	3/16	7/16	3/8	9/64	11/16	045583	N/A
mm	4.8	11.1	9.5	3.6	17.5		
in	1/4	7/16	21/64	9/64	5/8	031029	N/A
mm	6.4	11.1	8.3	3.6	15.9		
in	1/4	7/16	3/8	.191	23.32	031539	N/A
mm	6.4	11.1	9.5	4.9	18.3		
in	1/4	7/16	21/64	.295	25/32	032392	N/A
mm	6.4	11.1	8.3	7.5	19.8		
in	1/4	7/16	3/8	.316	15/16	039890	N/A
mm	6.4	11.1	9.5	8.0	23.8		
in	1/4	1/2	3/8	.376	15/16	043939	N/A
mm	6.4	12.7	9.5	9.6	23.8		
in	5/16	7/16	3/8	13/32	1-1/16	037691	N/A
mm	7.9	11.1	9.5	10.3	27.0		
in	5/16	7/16	3/8	7/16	1	039471	N/A
Pivots 4300 Series							
in	1/4	1/2	7/16	9/64	3/4	039110	N/A
mm	6.4	12.7	11.1	3.6	19.1		
in	1/4	1/2	1/2	13/64	7/8	031537	N/A
mm	6.4	12.7	12.7	5.2	22.2		
in	1/4	1/2	1/2	17/64	15/16	036361	N/A
mm	6.4	12.7	12.7	6.7	23.8		
in	5/16	1/2	9/16	9/64	29/32	045199	N/A
mm	7.9	12.7	14.3	3.6	23.0		
in	3/8	9/16	1/2	25/64	13/16	042419	N/A
mm	9.5	14.3	12.7	9.9	20.6		



3300 SERIES	4300 SERIES
045583	039110
031029	031537
031539	036631
032392	045199
039890	042419
043939	
037691	
039471	

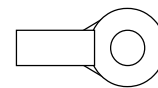
controlconnectionkits

# Teleflex Marine Connection Kits

DESCRIPTION OF KIT	MORSE	TELEFLEX
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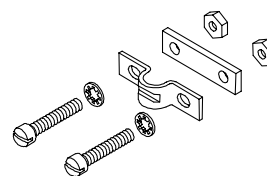
**Other Universal Cable Connection Kits, continued:**

Eye Terminal - 3300 (10-32, 5/16" pin) (1)	031980	N/A
Eye Terminal - 3300 (10-32, 5/16" pin) (1)	300646	N/A
Eye Terminal - 4300 (1/4-28, 5/16" pin) (1)	041134	N/A
Eye Terminal - 4300 (5/16-24, 5/16" pin) (1)	045428	N/A
Eye Terminal - 4300 (5/16-24, 1/2" pin) (1)	041316	N/A
Pin for Eye Terminal (1.5", 5/16" dia.)	300965	N/A
Pin for Eye Terminal (1.687", 5/16" dia.)	047383	N/A
Terminal Pin Kit (300965, ring, nut, washer)	301456	N/A
Spring Link Terminal - 3300 Cables	031545	N/A



**EYE TERMINAL**

Univ. 3300 Clamp & Shim Kit (1)	N/A	CA28020P
Univ. 3300 Clamp (1)	032010	N/A
3300 Clamp (for bare conduit) (1)	037664	N/A
3300 Clamp (for bare cond. or ftg.) (1)	031509	N/A
3300 Clamp Shim for 032010 (1)	035777	N/A



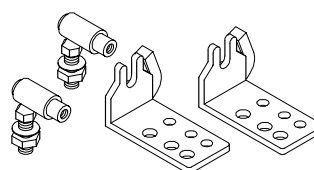
Univ. 4300 Clamp & Shim Kit (1)	N/A	CA28018P
Univ. 4300 Clamp - 2 Holes (1)	031532	N/A
Heavy Duty 4300 Clamp - 4 Holes (1)	021227	N/A
4300 Clamp Shim for 031532 & 021227 (1)	031538	N/A

*(NOTE: 2 shims required for each 021227 clamp.)*

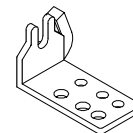
Univ. 6400 Clamp & Shim Kit (1)	N/A	CA28019P
Heavy Duty 6400 Clamp - 4 Holes (1)	036733	N/A
6400 Clamp Shim (1)	031538	N/A

3300 SERIES	4300 SERIES	6400 SERIES
CA28020P	CA28018P	CA28019P
032010	031532	036733
037664	021227	031538
031509	031538	
035777		

Univ. 3300 Inboard Connection Kit (2)	N/A	CA27024P
<i>(Above contains: (2) CA37701P Ball Joints &amp; (2) CA35074P Brackets.)</i>		
Univ. 3300 Inboard Connection Bracket	N/A	CA35074P
Univ. 3300 Inboard Connection Bracket (1)	036174	N/A
<i>(Old Morse description: "Cable Hook Clip - Single")</i>		
Univ. 3300 Inboard Connection Bracket (1)	031419	N/A
<i>(Old Morse description: "Cable Clip - 30 Series Only")</i>		

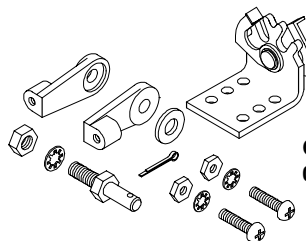


**CA27024P**



**CA35074P  
036174  
031419**

Univ. 3300 Parallel Connection Kit (2)	N/A	CA27328P
Univ. 3300 Parallel Connection Kit (2)	035531	N/A
<i>(Old Morse description: "Cable Hook Clip - Dual")</i>		



**CA27328P  
035531**

**Other Cable Kits/Accessories:**

Anti-Vibration Cable Mount - 3300	294200	N/A
Anti-Vibration Cable Mount - 4300	294201	N/A
Stop Collar - 3300	037693	N/A
Cable Brake - 3300, 4300 & 6400 Cables	044386	N/A

# control cable connection & accessory hardware

For two cables, except where otherwise noted.  
(1) = for use with one cable.

DESCRIPTION OF KIT	MORSE	TELEFLEX
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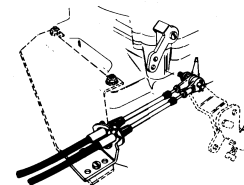
**Conduit Fitting [Hub] Adapter Kits for Panel Cables:**

Bulkhead Adapter Kit - Panel Cables	300673	N/A
Clamp Adapter Kit - Panel Cables	302485	N/A

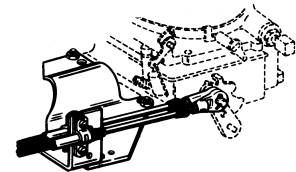


**All-Purpose Clutch & Throttle Kits - BY PART NUMBER:**

Connection Kit - 3300 Cable	036680	N/A
Connection Kit - 4300 Cable	040773	N/A
Connection Kit - Dual Sta. 3300 (TwinDisc)	042577	N/A
Clutch Kit - Twin Disc (right)	063696	N/A
Throttle Kit - 3300 Cable (Cummins)	300580	N/A
Adapter Kit - 4300 Cable (Cummins, GM, Borg-Warner, Twin Disc)	300580	N/A



036680



040773

**Pre-Engineered Clutch & Throttle Kits - BY ENGINE APPLICATION:**

**For Single Station 33C Cables:**

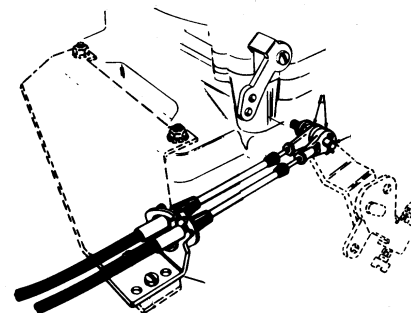
Caterpillar 334, 3304 & 3306	036680	N/A
Caterpillar 343, 3406 & 3408	036680	N/A
Cummins (all with MVSGOV)	036680	N/A
Cummins (V, VT, KT, KTA 1975-up)	300580	N/A
GM (6, 8 & 12 V-71, 6 & 8 V-92 w/v.s.g.)	N/A	N/A
GM (2, 3 & 4-53 w/left & right hand gov.)	036680	N/A
GM (GV-53 rear & front entry)	036680	N/A
GM (6 & 8V-71 front entry shutdown kit)	036680	N/A
Universal (Atomic 4)	036680	N/A
Universal (Atomic 1&2 63C clutch & 33C throttle)	036680	N/A

**For Dual Station 43C Cables:**

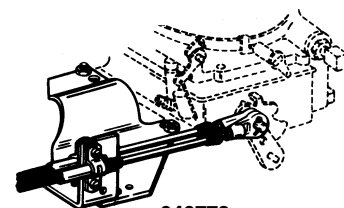
Caterpillar 334, 3304 & 3306	036680	N/A
Caterpillar 343, 3406 & 3408	036680	N/A
Cummins (all with MVSGOV)	036680	N/A
Cummins (V, VT, KT, KTA 1975-up)	300580	N/A
GM (6, 8 & 12 V-71, 6 & 8 V-92 w/v.s.g.)	N/A	N/A
GM (2, 3 & 4-53 w/left & right hand gov.)	036680	N/A
GM (GV-53 rear & front entry)	036680	N/A
GM (6 & 8V-71 front entry shutdown kit)	036680	N/A
Universal (Atomic 4)	036680	N/A
Universal (Atomic 1&2 63C clutch & 33C throttle)	036680	N/A

**To convert from 33C Dual Station to 43C Dual Station, add:**

Caterpillar 334, 3304 & 3306	040773	N/A
Caterpillar 343, 3406 & 3408	040773	N/A
Cummins (all with MVSGOV)	040773	N/A



036680  
300580



040773  
300665

controlconnectionkits

# Teleflex Marine Connection Kits

For two cables, except where otherwise noted.  
(1) = for use with one cable.

DESCRIPTION OF KIT	MORSE	TELEFLEX
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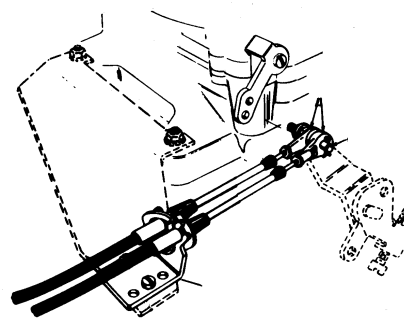
**To convert from 33C Dual Station to 43C Dual Station, add:**

Cummins (V, VT, KT, KTA 1975-up)	300665	N/A
GM (3,4 & 6-71 w/var. spd. Gov.)	300665	N/A
GM (6, 8 & 12 V-71, 6 & 8 V-92 w/v.s.g.)	300665	N/A
GM (2, 3 & 4-53 w/left & right hand gov.)	040773	N/A
GM (GV-53 rear & front entry)	040773	N/A
GM (6 & 8V-71 front entry shutdown kit)	040773	N/A
Universal (Atomic 4)	040773	N/A
Universal (Atomic 1&2 63C clutch & 33C throttle)	040773	N/A

**Pre-Engineered Clutch & Throttle Kits – BY TRANSMISSION:**

**For Dual Station 33C Cables:**

Borg-Warner (70, 71 & 72 inline-red gear)	301474	N/A
Borg-Warner (71C & 72C drop center)	N/A	N/A
Capital (12400, 2, 3 & 4 HD & HE)	036680	N/A
Paragon (HF-7)	036680	N/A
Twin Disc (MG, 508, 509, 510, 510A, 512)	042577	N/A
Twin Disc (514C, 514CHP, 518, 521, 527)	042577	N/A
Twin Disc (530 & 540)	042577	N/A
Twin Disc (MG502, 506 & 507)	063696 (right)	N/A



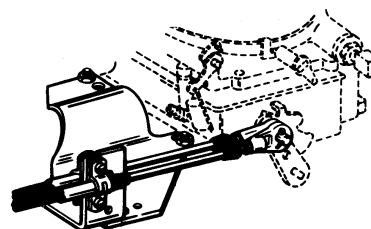
036680  
301474  
042577

**For Dual Station 43C Cables:**

Borg-Warner (70, 71 & 72 inline-red gear)	301474	N/A
Borg-Warner (71C & 72C drop center)	N/A	N/A
Capital (12400, 2, 3 & 4 HD & HE)	036680	N/A
Paragon (HF-7)	036680	N/A
Twin Disc (MG, 508, 509, 510, 510A, 512)	N/A	N/A
Twin Disc (514C, 514CHP, 518, 521, 527)	N/A	N/A
Twin Disc (530 & 540)	N/A	N/A
Twin Disc (MG502, 506 & 507)	N/A	N/A

**To convert from 33C Dual Station to 43C Dual Station, add:**

Borg-Warner (70, 71 & 72 inline-red gear)	300665	N/A
Borg-Warner (71C & 72C drop center)	300665	N/A
Capital (12400, 2, 3 & 4 HD & HE)	040773	N/A
Paragon (HF-7)	040773	N/A
Twin Disc (MG, 508, 509, 510, 510A, 512)	300665	N/A
Twin Disc (514C, 514CHP, 518, 521, 527)	300665	N/A
Twin Disc (530 & 540)	300665	N/A
Twin Disc (MG502, 506 & 507)	300665	N/A



040773  
300665

For more information about Teleflex Marine connection kits, please contact Teleflex Marine at 610-495-7011 or visit us on-line at [www.teleflexmorse.com](http://www.teleflexmorse.com)