



ORSCHERN[®]

Park Brake Levers & Cables Catalog



PARKING BRAKE LEVERS

Orscheln hand levers are designed on the principle of variable mechanical advantage, and therefore, variable hand effort. During the initial movement of the lever from the “off” to the “on” position, there is great linear movement in comparison to the output effort. As the lever approaches the “on” position, the output effort becomes greater in comparison to the linear movement. As the lever passes over center, or toggle position, the mechanical advantage is theoretically infinite.

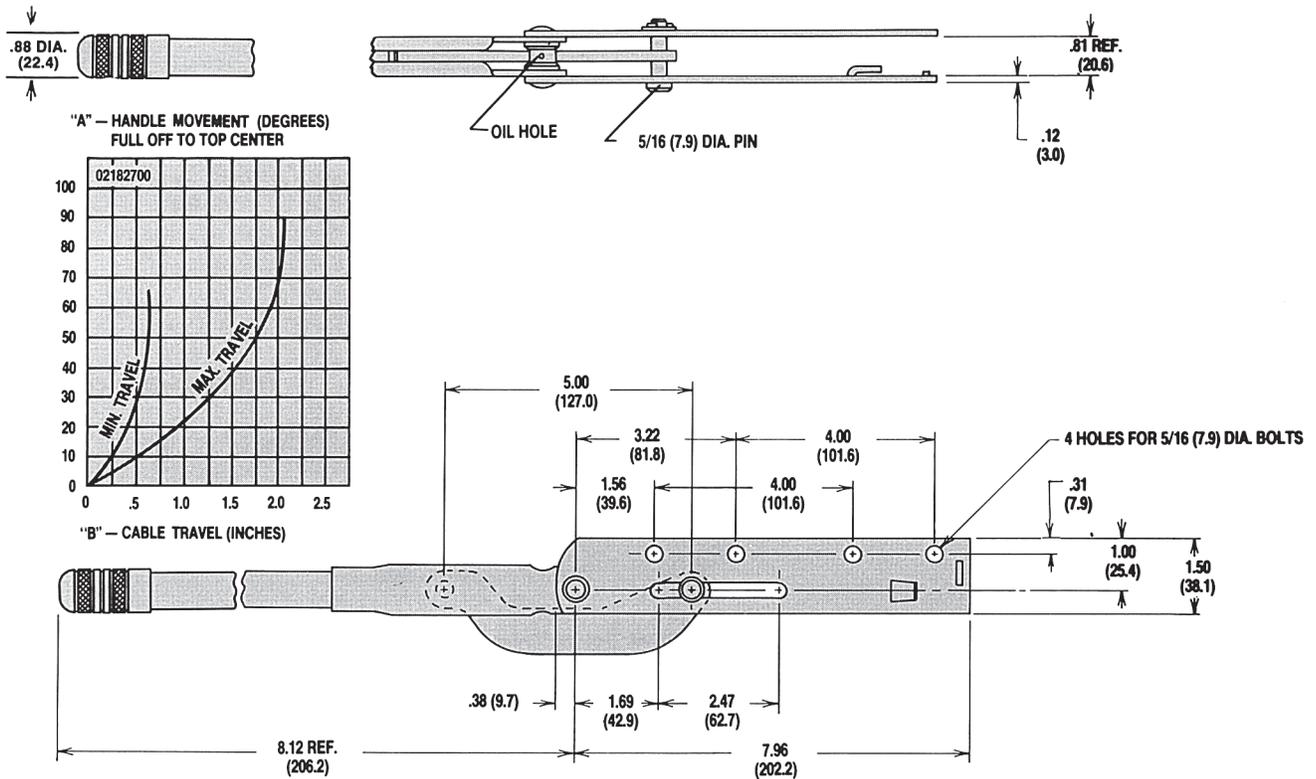
Orscheln hand levers also provide a screw-type adjustment feature which allows the operator to make system adjustments. This is accomplished by simply turning the adjustment knob on the lever handle. Orscheln’s standard levers are shown in this section. Using these standard levers where possible can generally provide shorter lead-times and lower costs. When custom designs are needed, we offer many options and variations. The key characteristics to remember when designing a lever system include safety, required lever output, mounting location, operator access, and handle effort. Mounting bracket design should be determined by travel, cable clamp pattern, and mounting preference.



ORSCHELN LEVER NO. 02182700

Recommended Applications and Features:

Side Mount with Alternate Sets of Mounting Holes for Cowl, Instrument Panel, Seat Riser and Frame Installations. Use with One Cable. With Mounting Hole for Cable Clamp. Clamp and Spacers Supplied.

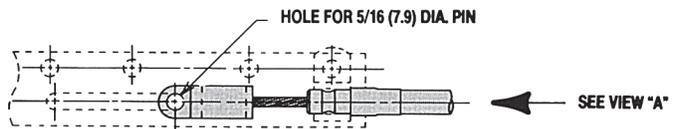


NUT AND BOLT SHOWN FOR REF. ONLY.
NOT SUPPLIED WITH ASSEMBLY.

CABLE CLAMP FOR .50 (12.7) DIA. SLEEVE



VIEW "A"



- 81002454 - .12 (3.0) DIA. PBT STRAND
- 81006273 - .19 (4.8) DIA. PBT STRAND

81002594 - .12 (3.0) DIA. PBT STRAND

81006099 - .19 (4.8) DIA. PBT STRAND



81006287 - .12 (3.0) DIA. PBT STRAND

81006100 - .19 (4.8) DIA. PBT STRAND

THESE ARE RECOMMENDED CABLE PARTS FOR USE WITH THIS LEVER ASSEMBLY. DIMENSION 2.71 (68.8) DEPICTS LENGTH WHEN LEVER IS IN "OFF" POSITION. THIS DIMENSION FOR USE IN CALCULATING CABLE LENGTH.

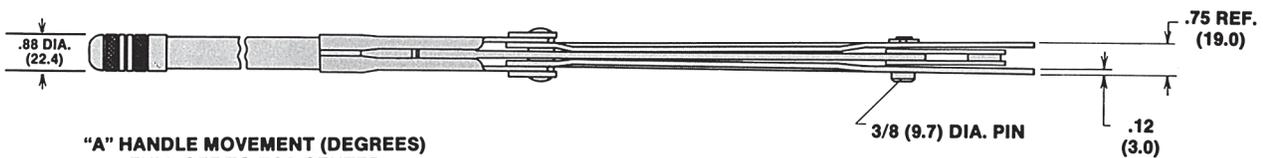


ORSCHELN LEVER NO. 02182900

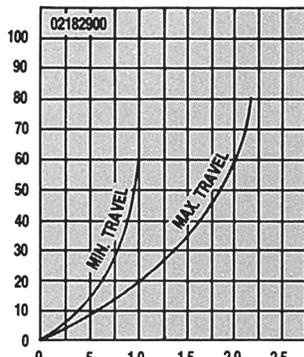
Recommended Applications and Features:

Transmission Mount Type for Mounting on Transmission Bosses, Frames, etc.
Bellcrank Changes Travel 90 Degrees without Load Loss.

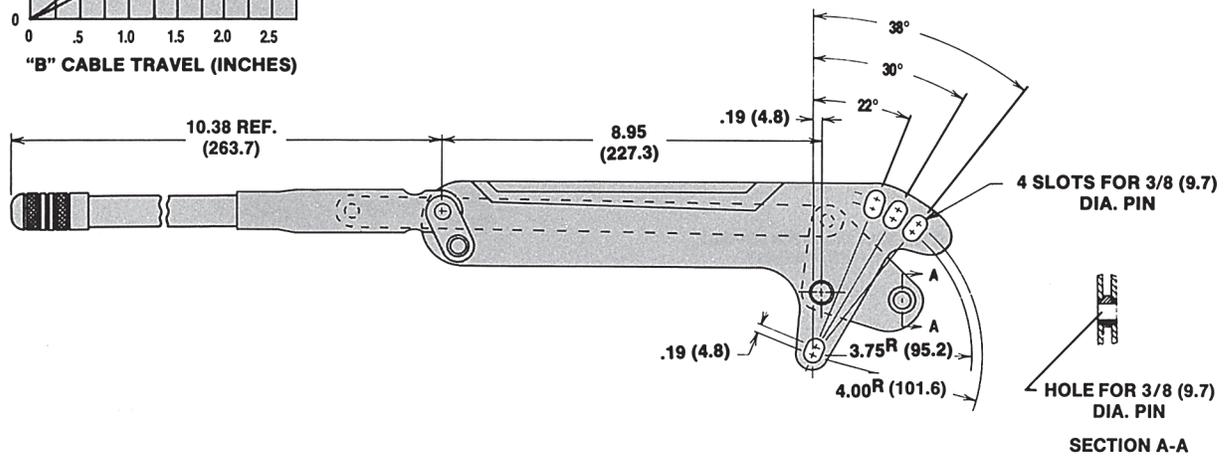
Normally Used with Rod, can be Used with Cable by Attaching Strand with Clevis to Bellcrank and Conduit to Common Mounting Surface. Mounting Spacers Supplied.



"A" HANDLE MOVEMENT (DEGREES)
FULL OFF TO TOP CENTER



"B" CABLE TRAVEL (INCHES)

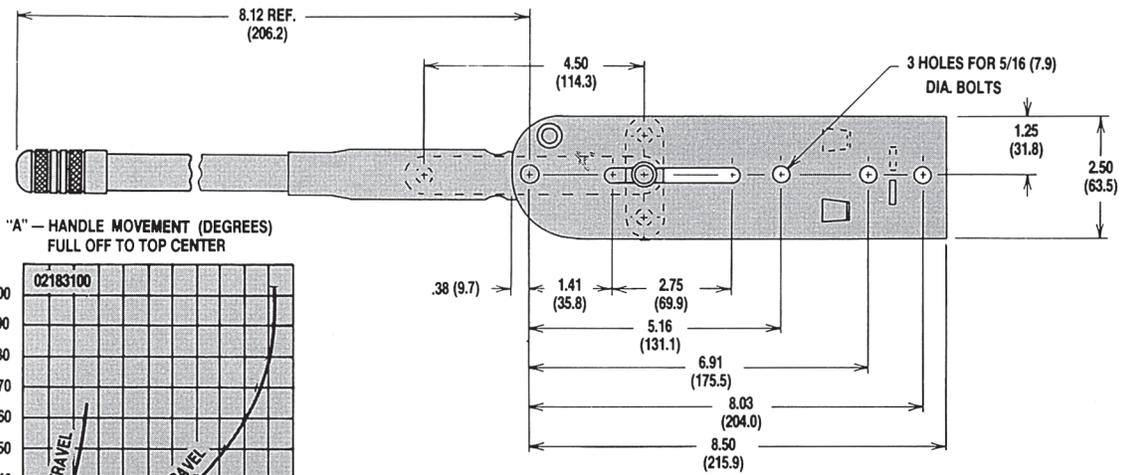
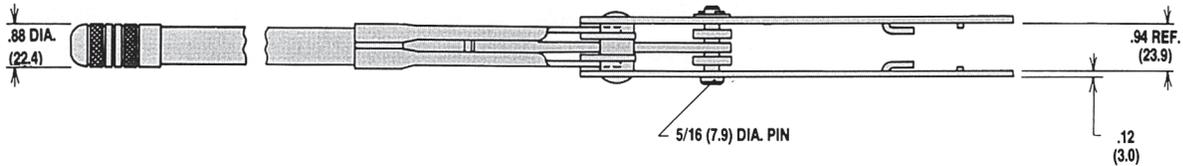




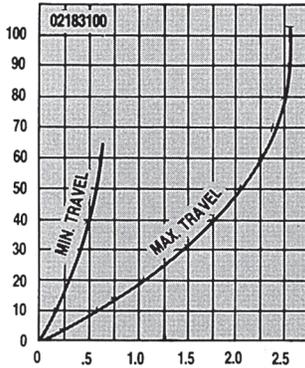
ORSCHL N LEVER NO. 02183100

Recommended Applications and Features:

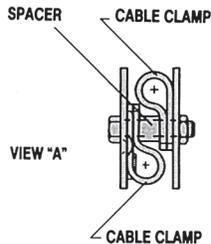
Side Mount for Cowl Instrument Panel, Seat Riser and Frame Installation.
 For Use with 2 Cables. With Mounting Holes for Cable Clamps.
 Equalizers, Pins, Clamps and Spacers Supplied.



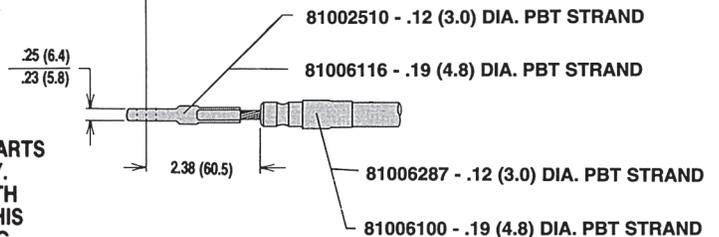
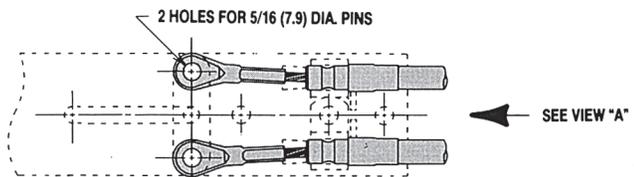
"A" — HANDLE MOVEMENT (DEGREES)
 FULL OFF TO TOP CENTER



"B" — CABLE TRAVEL (INCHES)



NUT AND BOLT SHOWN FOR REF. ONLY.
 NOT SUPPLIED WITH ASSEMBLY.



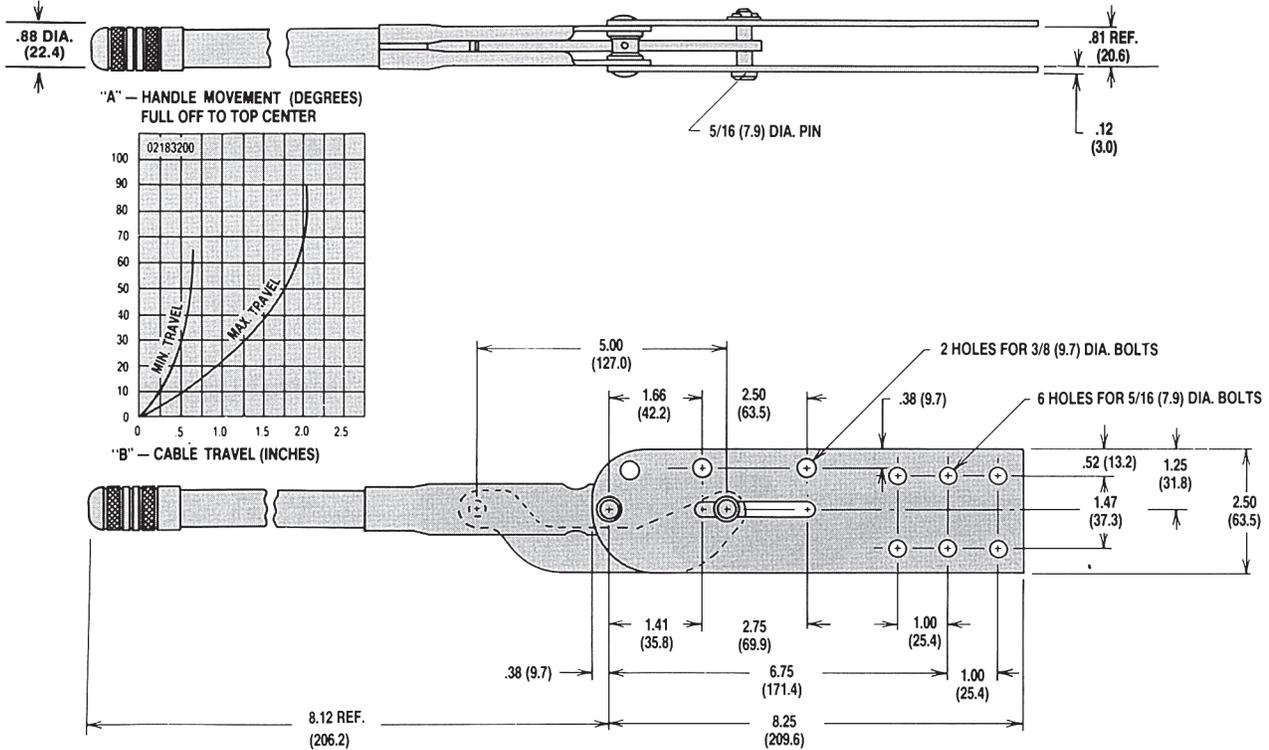
THESE ARE RECOMMENDED CABLE PARTS
 FOR USE WITH THIS LEVER ASSEMBLY.
 DIMENSION 2.38 (60.5) DEPICTS LENGTH
 WHEN LEVER IS IN "OFF" POSITION. THIS
 DIMENSION FOR USE IN CALCULATING
 CABLE LENGTH.



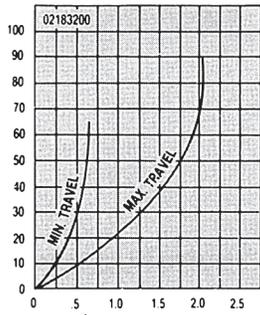
ORSCHELN LEVER NO. 02183200

Recommended Applications and Features:

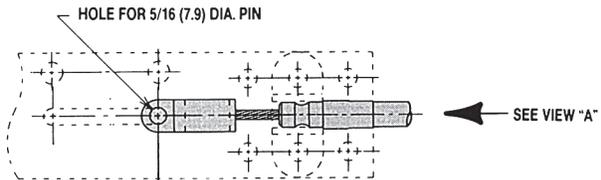
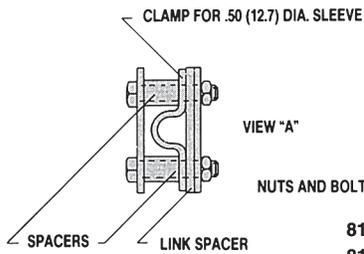
Side Mount for Cowl, Instrument Panel, Seat Riser and Frame Installations. Use with One Cable. Supplied with alternate sets of cable clamp holes. Clamp and spacers supplied.



"A" — HANDLE MOVEMENT (DEGREES)
FULL OFF TO TOP CENTER



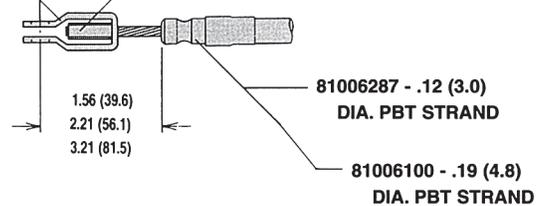
"B" — CABLE TRAVEL (INCHES)



- 81002454 - .12 (3.0) DIA. PBT STRAND
- 81006273 - .19 (4.8) DIA. PBT STRAND

- 81002594 - .12 (3.0) DIA. PBT STRAND
- 81006099 - .19 (4.8) DIA. PBT STRAND

THESE ARE RECOMMENDED CABLE PARTS FOR USE WITH THIS LEVER ASSEMBLY. DIMENSIONS 2.21 (56.1) AND 3.21 (81.5) DEPICT LENGTHS WHEN LEVER IS IN "OFF" POSITION. THE 1.56 (39.6) (CLEVIS LENGTH) DIMENSION WILL NOT ALLOW THE LEVER TO BE PUT IN FULL "OFF" POSITION. THIS WILL REDUCE THE NET TRAVEL OF THE LEVER. THE ABOVE DIMENSIONS ARE USED TO CALCULATE CABLE LENGTH.

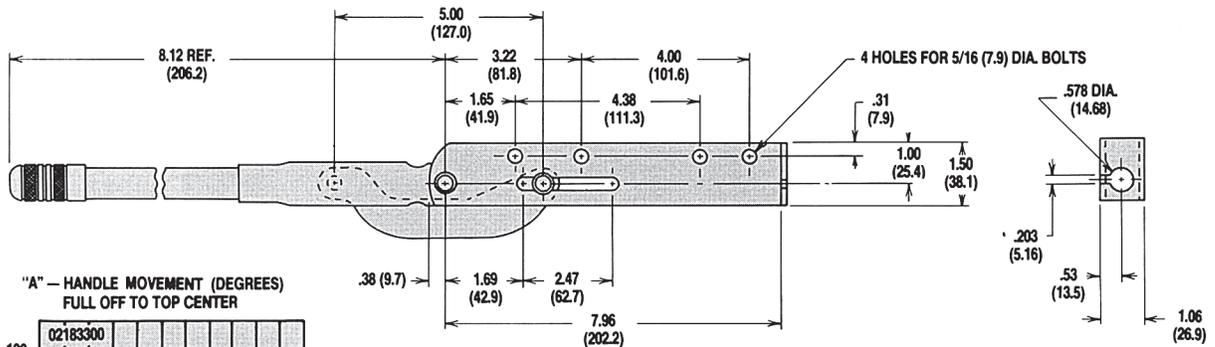
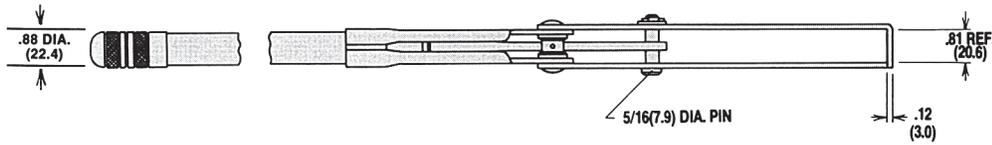




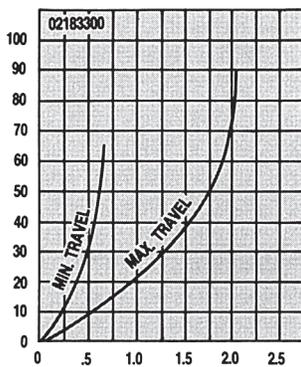
ORSCHELN LEVER NO. 02183300

Recommended Applications and Features:

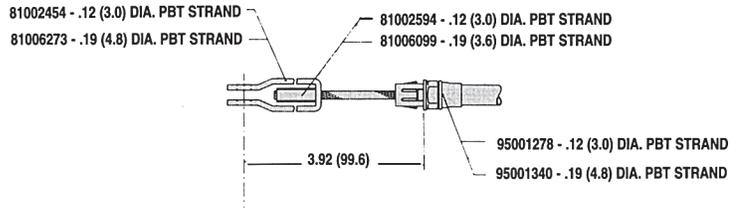
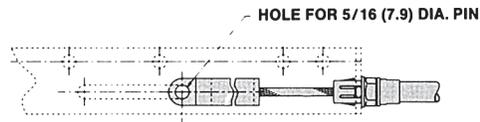
Side Mount with Alternate Sets of Mounting Holes for Cowl, Instrument Panel, Seat Risers and Frame Installations. Use with One Cable. Conduit Anchor Slot and Hole in Flange. Mounting Spacers Supplied.



"A" — HANDLE MOVEMENT (DEGREES)
FULL OFF TO TOP CENTER



"B" — CABLE TRAVEL (INCHES)



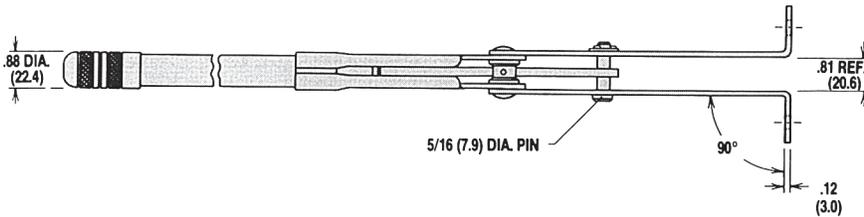
THESE ARE RECOMMENDED CABLE PARTS FOR USE WITH THIS LEVER ASSEMBLY. DIMENSION 3.12 (79.2) DEPICTS LENGTH WHEN LEVER IS IN "OFF" POSITION. THIS DIMENSION FOR USE IN CALCULATING CABLE LENGTH.



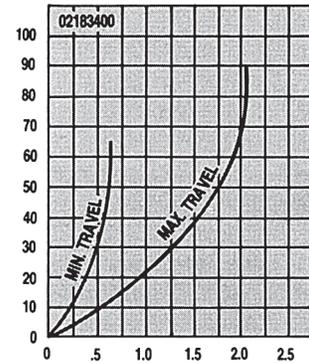
ORSCHELN LEVER NO. 02183400

Recommended Applications and Features:

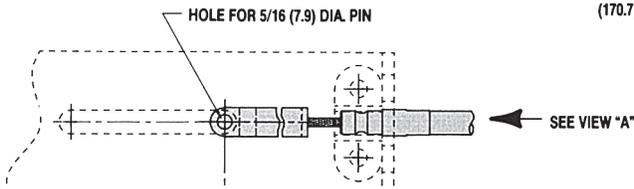
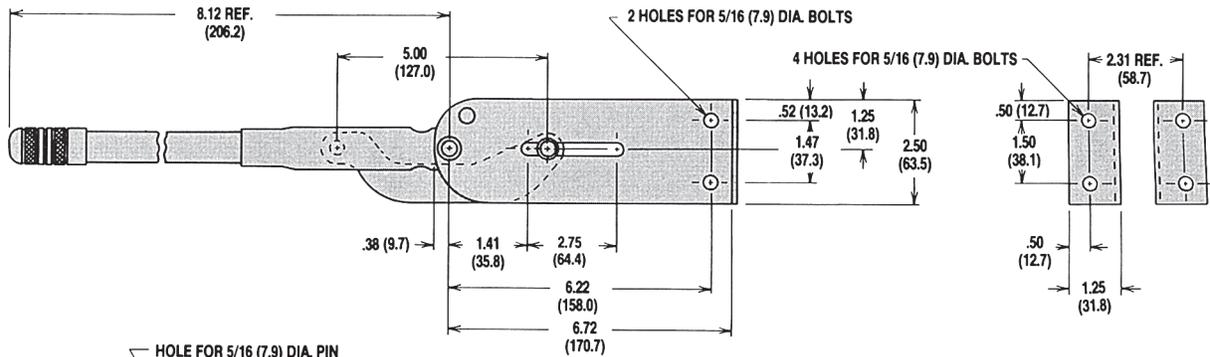
Flange Mount for Bulkhead, Island or Floor Installation. Use with One Cable. With Mounting Holes for Cable Clamp. Clamp and Spacers Supplied.



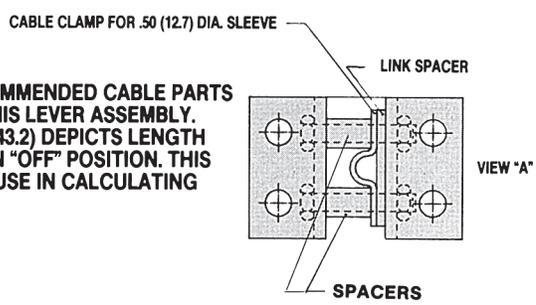
"A" — HANDLE MOVEMENT (DEGREES)
FULL OFF TO TOP CENTER



"B" — CABLE TRAVEL (INCHES)



NUTS AND BOLTS SHOWN FOR REF. ONLY.
NOT SUPPLIED WITH ASSEMBLY.

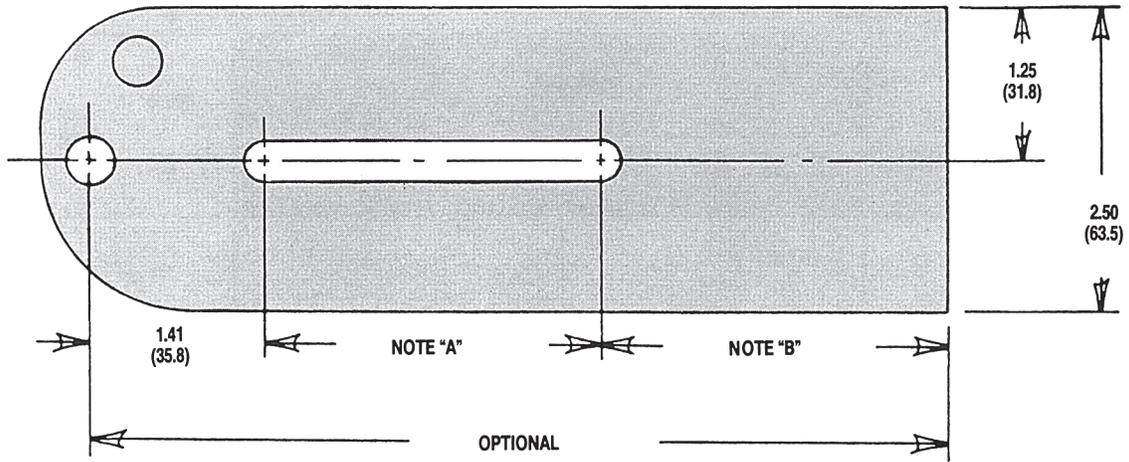


THESE ARE RECOMMENDED CABLE PARTS FOR USE WITH THIS LEVER ASSEMBLY. DIMENSION 1.70 (43.2) DEPICTS LENGTH WHEN LEVER IS IN "OFF" POSITION. THIS DIMENSION FOR USE IN CALCULATING CABLE LENGTH.

- 81002454 - .12 (3.0) DIA. PBT STRAND
- 81006273 - .19 (4.8) DIA. PBT STRAND
- 81002594 - .12 (3.0) DIA. PBT STRAND
- 81006099 - .19 (4.8) DIA. PBT STRAND
- 81006287 - .12 (3.0) DIA. PBT STRAND
- 81006100 - .19 (4.8) DIA. PBT STRAND



MOUNTING BRACKETS

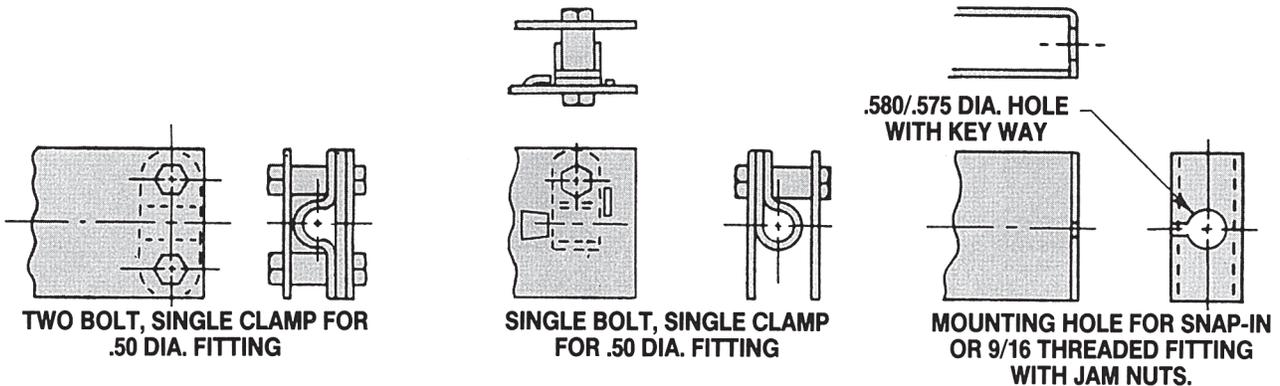


NOTE "A": SLOT OPTIONS

- 1) WITH STANDARD HANDLE, SLOT FOR 5/16 DIA. PIN, 2.75 LONG
- 2) WITH "WEST COAST" HANDLE, SLOT FOR 3/8 DIA. PIN, 4.00 LONG

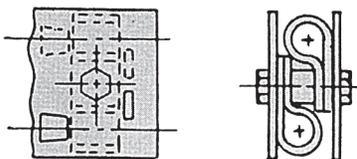
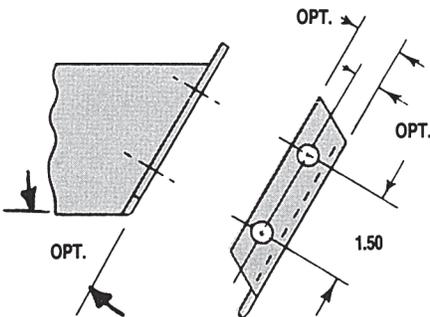
NOTE "B" CUSTOMER OPTION

THIS PORTION OF THE BRACKET IS FOR CUSTOMER OPTIONS.
MOUNTING HOLES CAN BE LOCATED AT ANY POINT. STANDARD BRACKET WILL
BE USED WHENEVER POSSIBLE WITH CUSTOMER APPROVAL.



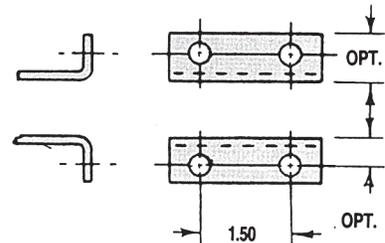
**NOTE: CLAMPS AND SPACERS ARE PROVIDED AS ADDITIONAL PARTS WITH LEVER,
NUTS AND BOLTS ARE SHOWN AS REF. ONLY.**

**ANGULAR FLANGE
AVAILABLE WITH ANY SINGLE OR
DOUBLE CLAMP PATTERN**



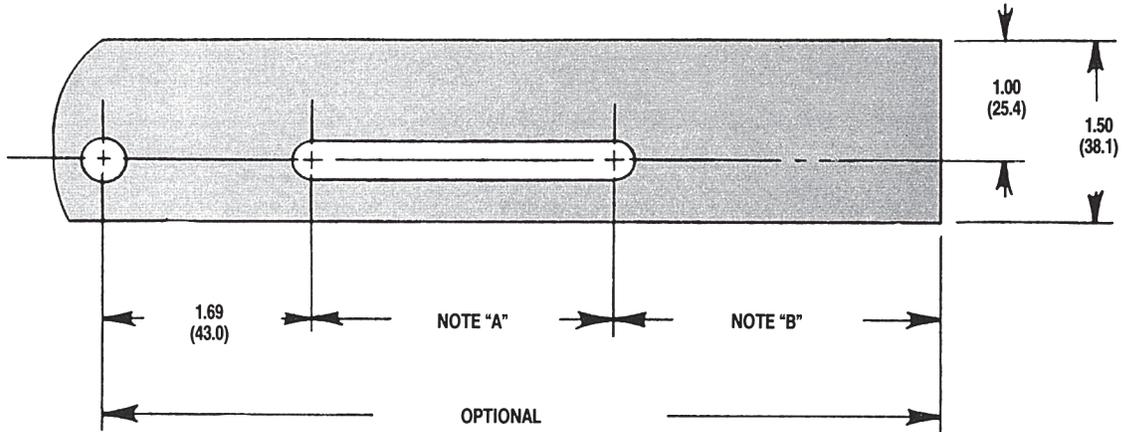
**SINGLE BOLT, DOUBLE CLAMP
FOR .50 DIA. FITTINGS**

**90 DEGREE FLANGE
AVAILABLE WITH ANY SINGLE
OR DOUBLE CLAMP PATTERN**





MOUNTING BRACKETS

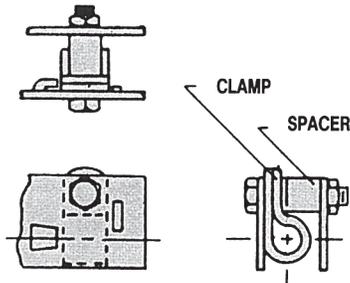


NOTE "A": SLOT OPTIONS

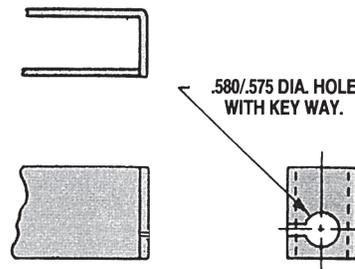
1) WITH STANDARD HANDLE, SLOT FOR 5/16 DIA. PIN, 2.47 LONG

NOTE "B": CUSTOMER OPTION

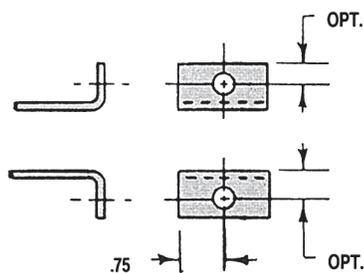
THIS PORTION OF THE BRACKET IS FOR CUSTOMER OPTIONS.
MOUNTING HOLES CAN BE LOCATED AT ANY POINT. STANDARD BRACKET WILL
BE USED WHENEVER POSSIBLE WITH CUSTOMER APPROVAL.



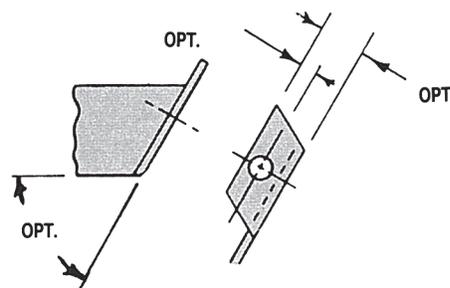
SINGLE CLAMP FOR .50 DIA. FITTING
CLAMP AND SPACER ARE ADDITIONAL PARTS
WITH LEVER.
NUT AND BOLT ARE SHOWN FOR REF. ONLY



**MOUNTING HOLE FOR SNAP-IN OR
9/16 THREADED FITTING WITH JAM NUTS**



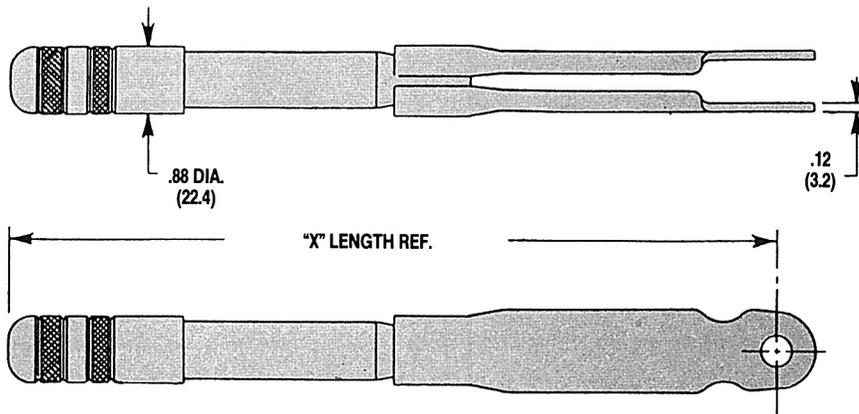
90 DEGREE FLANGE
AVAILABLE WITH SINGLE CLAMP



ANGULAR FLANGE
AVAILABLE WITH SINGLE CLAMP

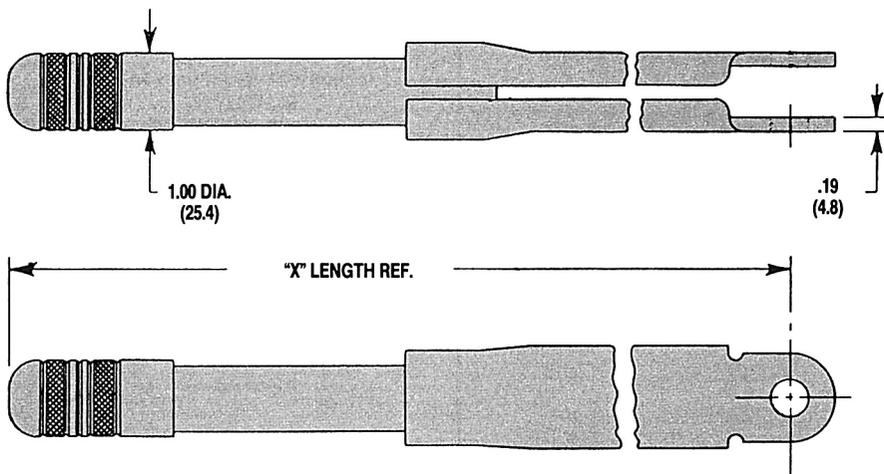


HANDLE OPTIONS



STANDARD LEVER HANDLE:

1. MAX. LEVER OUTPUT 3000 LBS. (13.3 KN)
2. STANDARD LENGTHS "X":
 - 8.12 (206)
 - 8.94 (227)
 - 9.88 (251)
 - 10.38 (264)
 - 12.00 (305)
3. ADJUSTMENT KNOB IS FRICTION CONTROLLED
4. RECOMMENDED USAGE: FORK LIFTS, ALL SIZES
TRUCK TRACTOR
LIGHT TRAILERS 3000 LBS. G.V.W.
LIGHT INDUSTRIAL EQUIPMENT



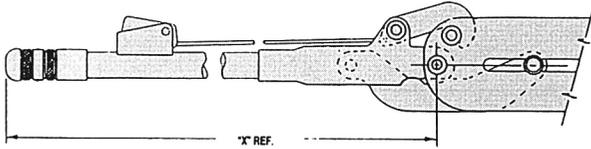
"WEST COAST" LEVER HANDLE

1. MAX. LEVER OUTPUT 4000 LBS. (17.8KN)
2. STANDARD LENGTHS:
 - 11.12 (282)
 - 12.75 (324)
3. ADJUSTMENT KNOB IS FRICTION CONTROLLED
4. RECOMMENDED USAGE: HEAVY CONSTRUCTION EQUIPMENT

HAND LEVERS

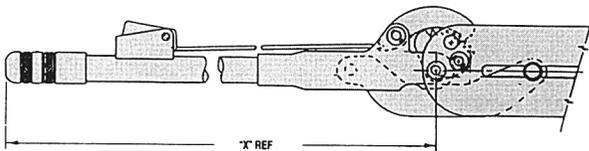


LEVER LOCK OPTIONS



SAFETY HOOK OPTION WITH STANDARD HANDLE

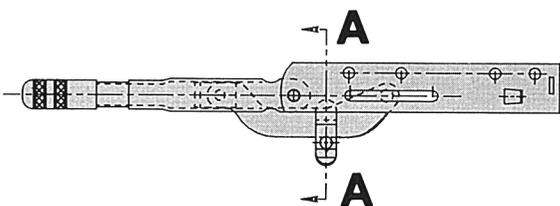
HANDLE LENGTHS "X"
 9.88 (251)
 10.38 (264)
 12.00 (305)



RATCHET AND PAWL OPTION WITH STANDARD HANDLE

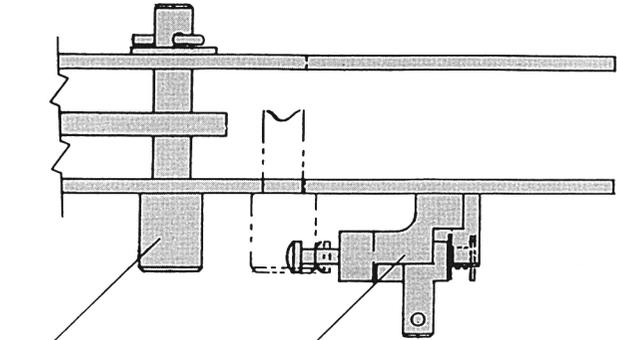
HANDLE LENGTHS "X"
 9.88 (251)
 10.38 (264)
 12.00 (305)

PROVISION FOR PADLOCK



SEC. A - A

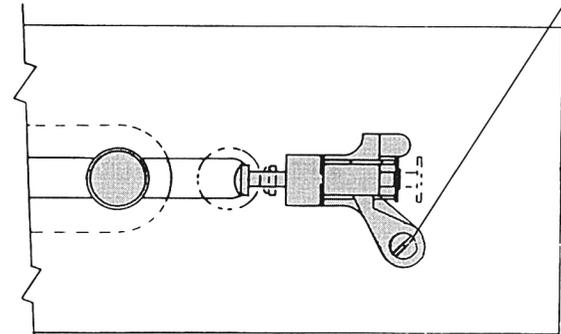
LIGHT SWITCH OPTIONS



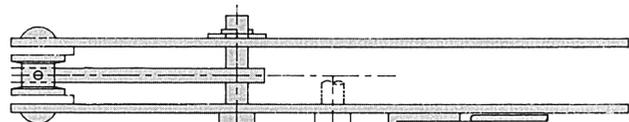
81004360

82100400

84004336



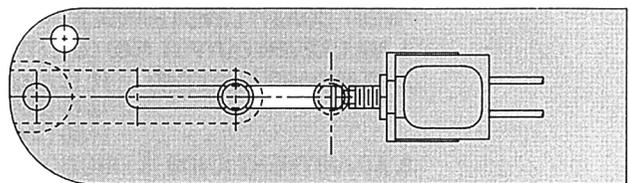
OPTION: "BRAKE ON" LIGHT SWITCH
 NORMALLY ON
 NOT RECOMMENDED FOR USE IN HOSTILE ENVIRONMENTS



81004360

81007617

81007616

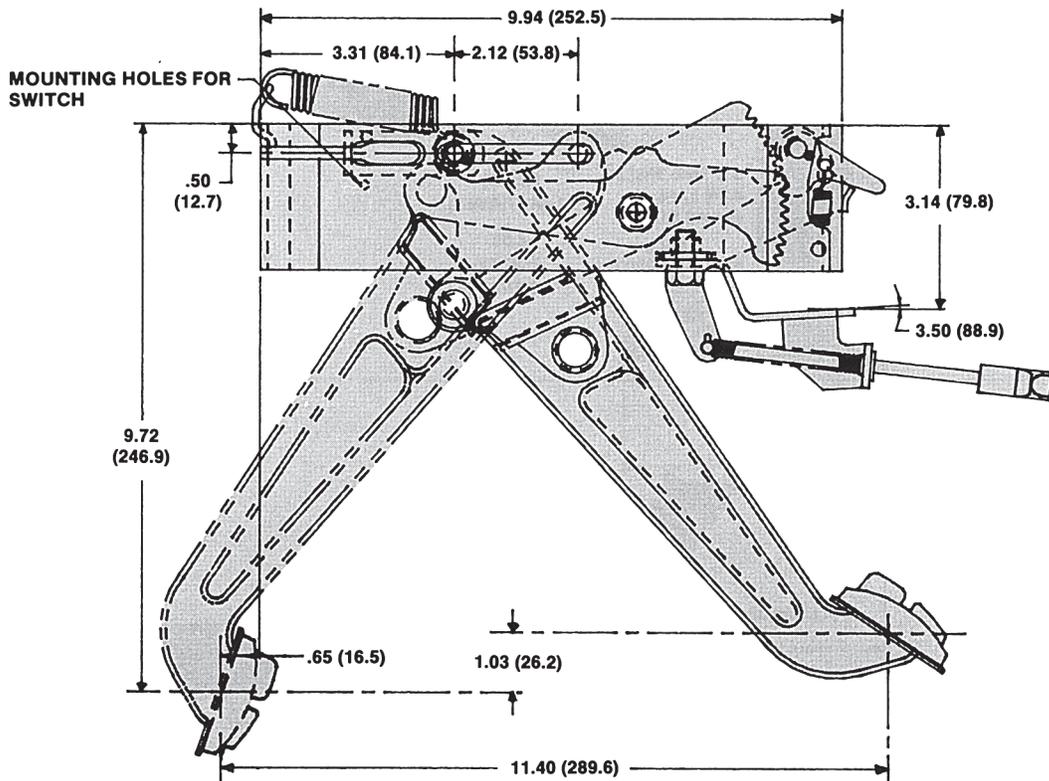
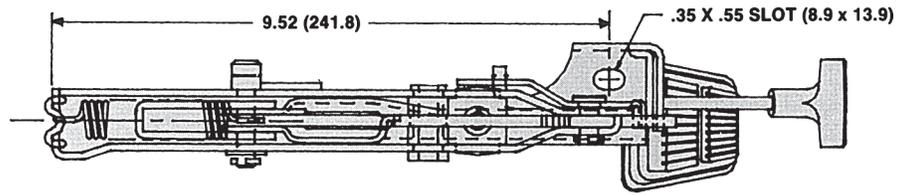


OPTION: "BRAKE ON" LIGHT SWITCH
 NORMALLY ON
 WEATHER RESISTANT

FOOT PEDAL LEVERS



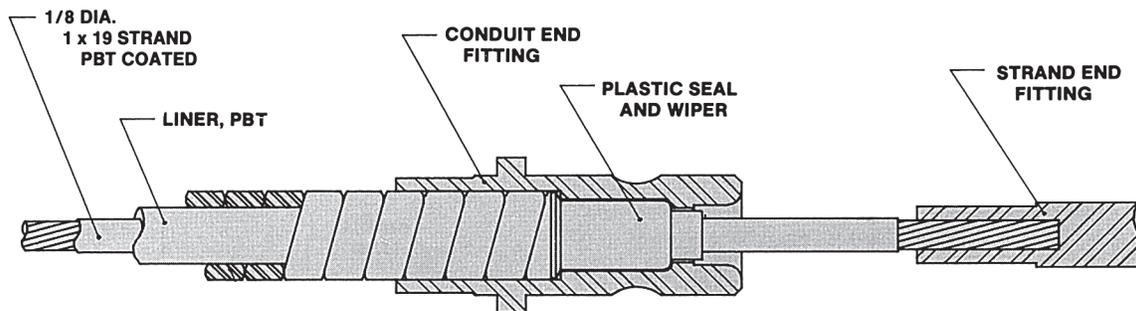
PEDAL LENGTH	MAX. TRAVEL
9.72 (246.9)	2.12 (53.9)





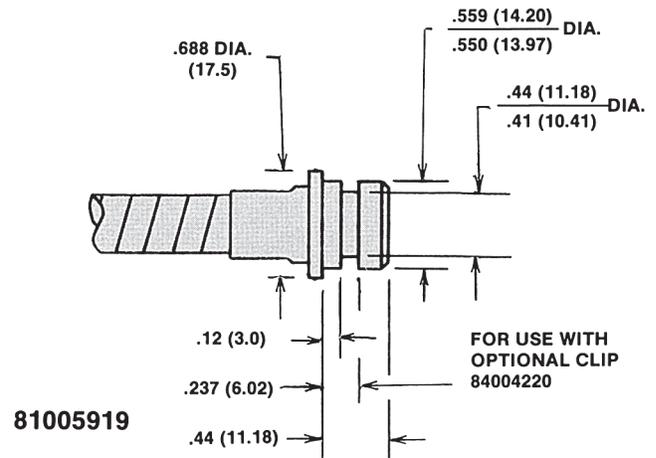
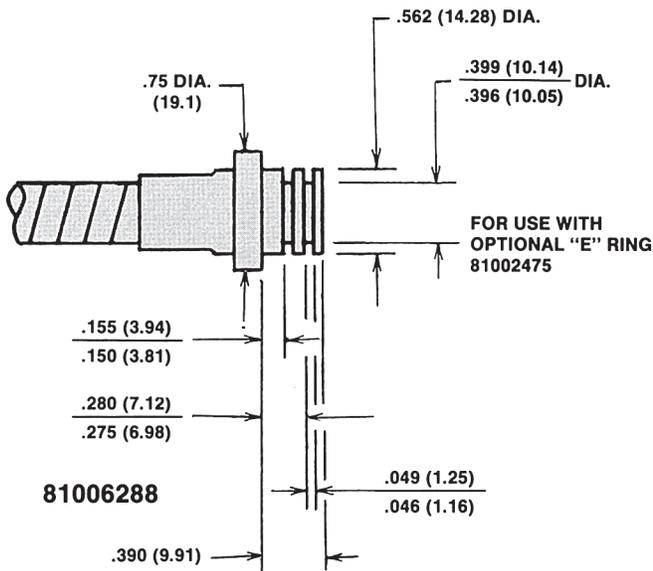
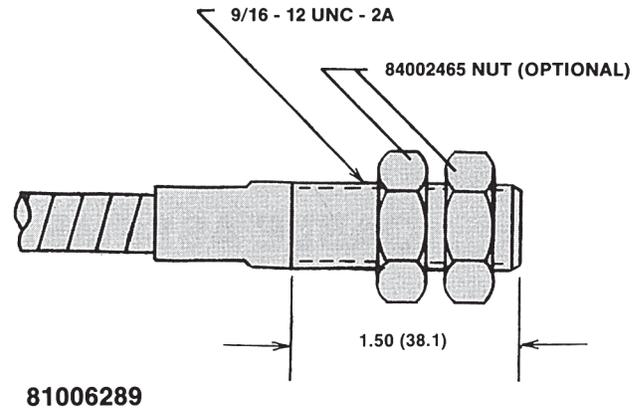
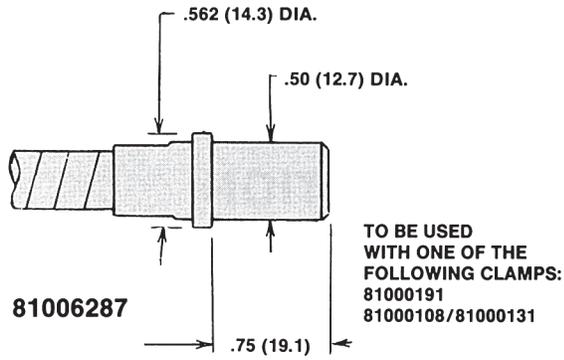
1/8" PBT BRAKE CABLES

PBT is short for Polybutylene Terephthalate: These cables utilize PET coated strand, PET liner, a patented seal with internal and external features and boundary lubrication. All of these features combine to give Orscheln cables far better corrosion protection than ordinary galvanized constructions. The 1/8" PET cables are designed for use in light to medium duty applications. These cables are rated at 1,200 pounds or less.



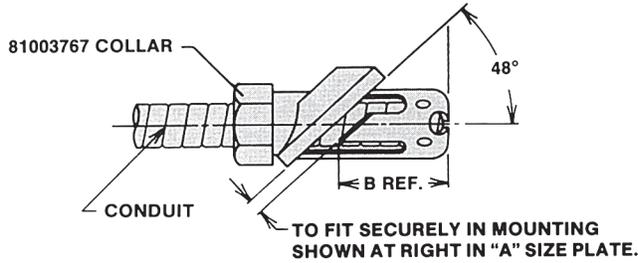


CONDUIT END FITTINGS

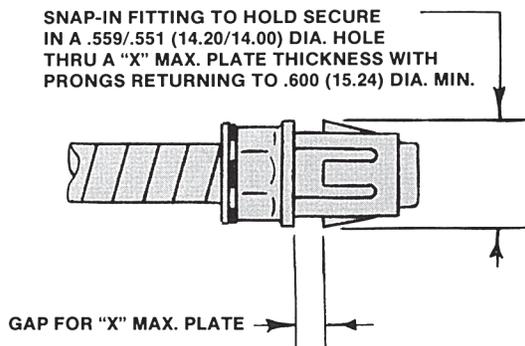




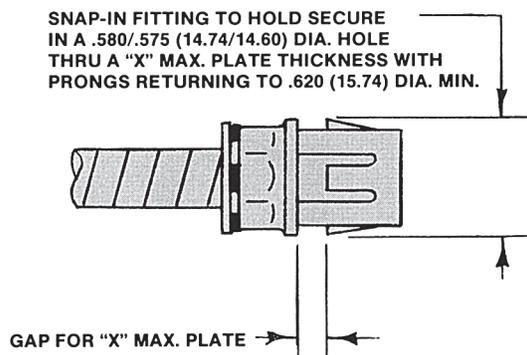
CONDUIT END FITTINGS



PART NO.	A	B
95001244	.130/.105 (3.30/2.67)	1.03 (26.2)
95001388	.205/.170 (5.21/4.32)	.93 (23.6)



PART NO.	"X" MAX. PLATE
95001218	.133 (3.38)
95001434	.193 (4.90)

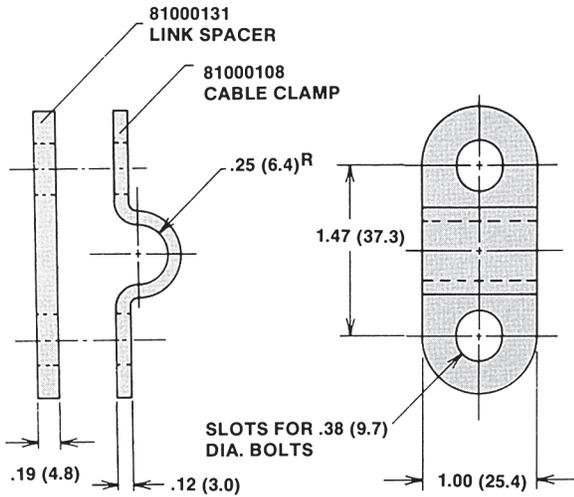


PART NO.	"X" MAX. PLATE
95001278	.133 (3.38)
95001279	.200 (5.08)

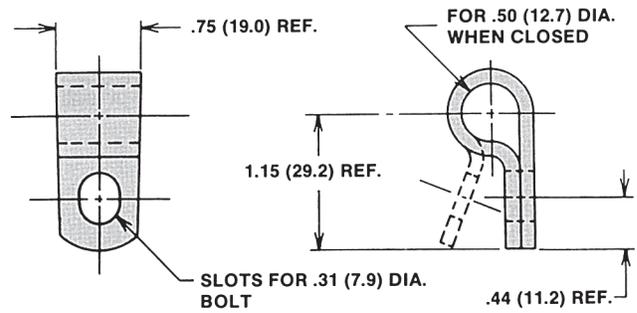


CONDUIT MOUNTING CLAMPS

81000108 CABLE CLAMP
81000131 LINK SPACER

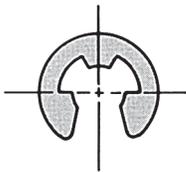


81000191 CABLE CLAMP



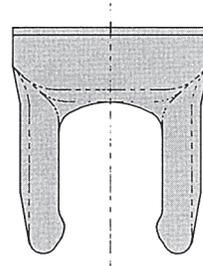
CONDUIT MOUNTING CLIPS

84002475



OPTIONAL WITH END FITTINGS
81002456
81006102
81006288

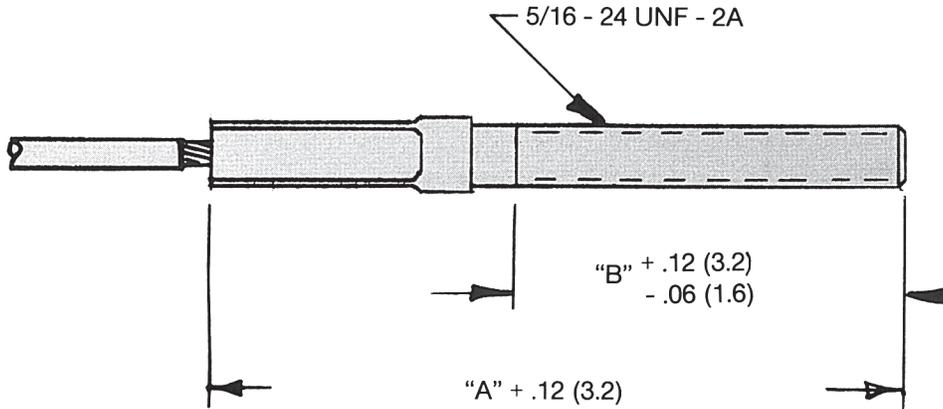
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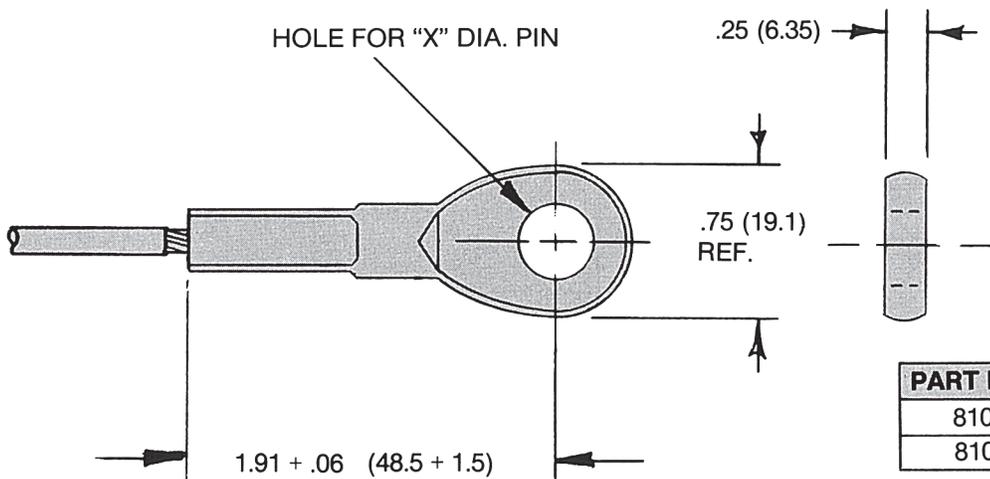
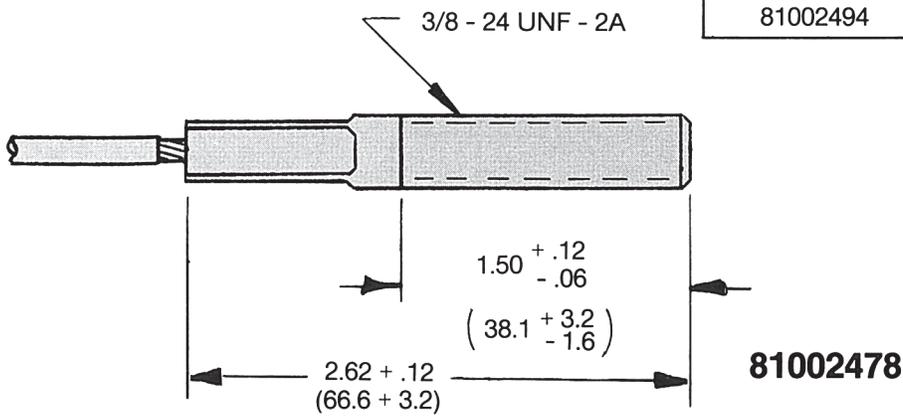
OPTIONAL WITH
END FITTINGS
81005919
81006103



OPTIONAL STRAND END FITTINGS



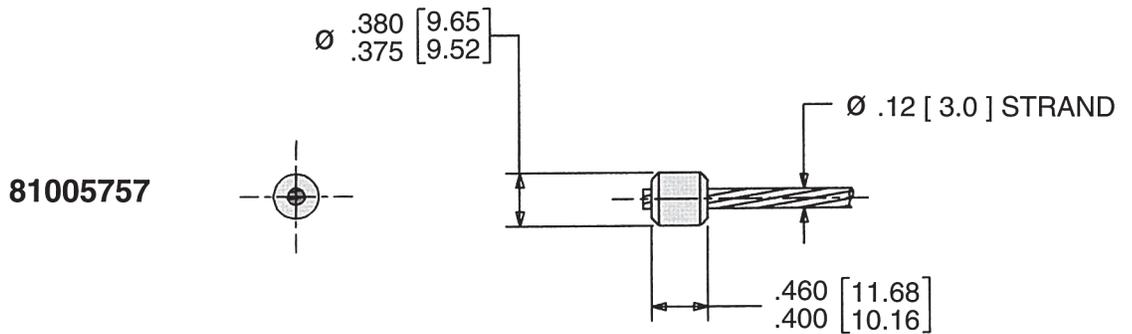
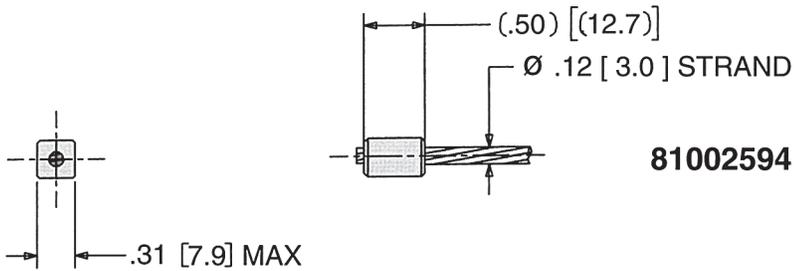
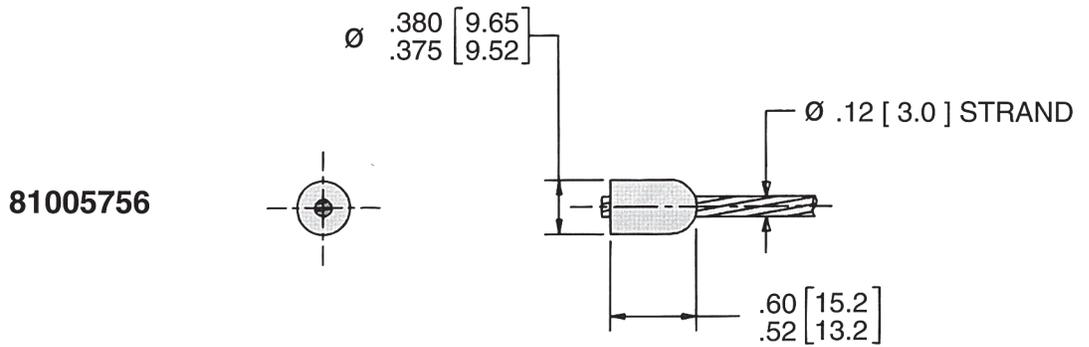
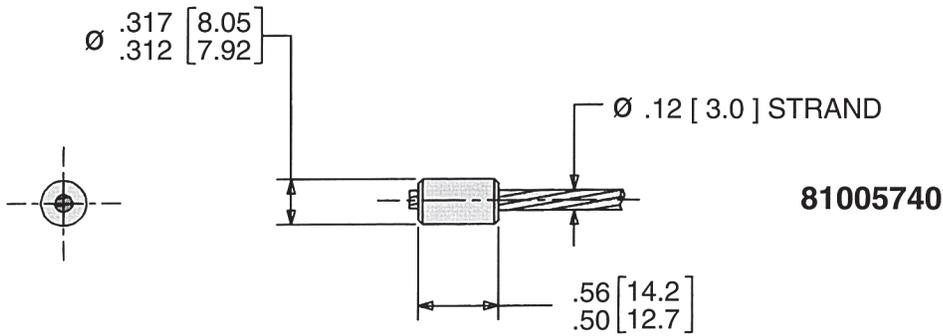
PART NUMBER	A	B
81002491	2.88 (73.2)	1.50 (38.1)
81002494	3.62 (92.0)	2.25 (57.2)



PART NUMBER	"X" DIA. PIN.
81002510	.31 (8.0)
81002519	.38 (9.5)

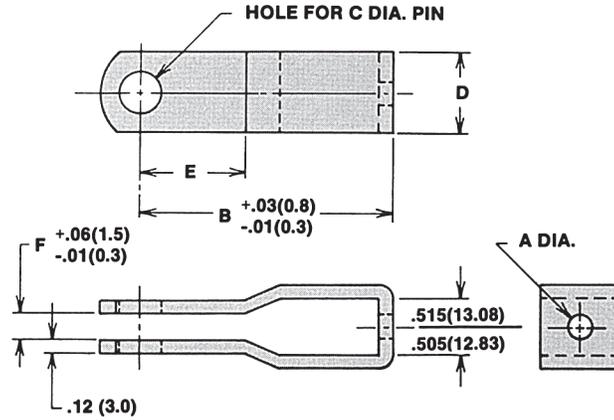


STRAND END FITTINGS



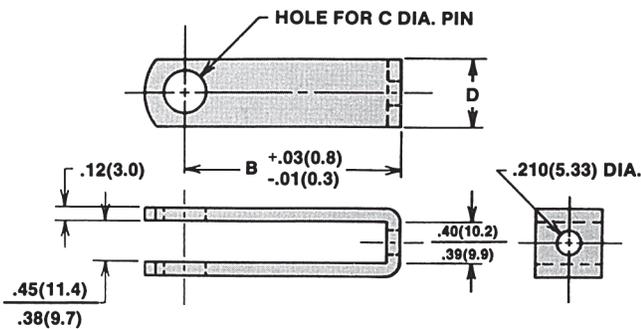


1/8 CLEVIS

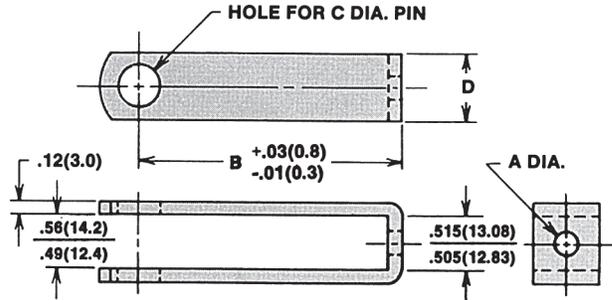


PART NO.	A	B	C	D	E	F
*81002454	.210(5.33)	1.56(39.6)	.31(7.9)	.62(15.8)	.31(7.9)	.19(4.8)
81002535	.210(5.33)	2.38(60.5)	.31(7.9)	.75(19.0)	1.00(25.4)	.25(6.4)
81002536	.210(5.33)	2.38(60.5)	.38(9.7)	.75(19.0)	1.00(25.4)	.25(6.4)
81002537	.210(5.33)	1.75(44.4)	.31(7.9)	.62(15.8)	.38(9.7)	.25(6.4)
81002646	.359(9.12)	1.75(44.4)	.31(7.9)	.75(19.0)	.38(9.7)	.25(6.4)
81002685	.359(9.12)	2.38(60.5)	.31(7.9)	.75(19.0)	1.00(25.4)	.25(6.4)
81002858	.359(9.12)	4.00(101.6)	.38(9.7)	.75(19.0)	.50(12.7)	.25(6.4)
81002963	.359(9.12)	3.00(76.2)	.31(7.9)	.75(19.0)	.75(19.0)	.25(6.4)

* Designed for use in Orscheln COWL TYPE lever assemblies.



PART NO.	B	C	D
81002545	1.62(41.2)	.31(7.9)	.62(15.8)
81002546	2.00(50.8)	.31(7.9)	.62(15.8)
81002550	2.00(50.8)	.38(9.7)	.75(19.0)

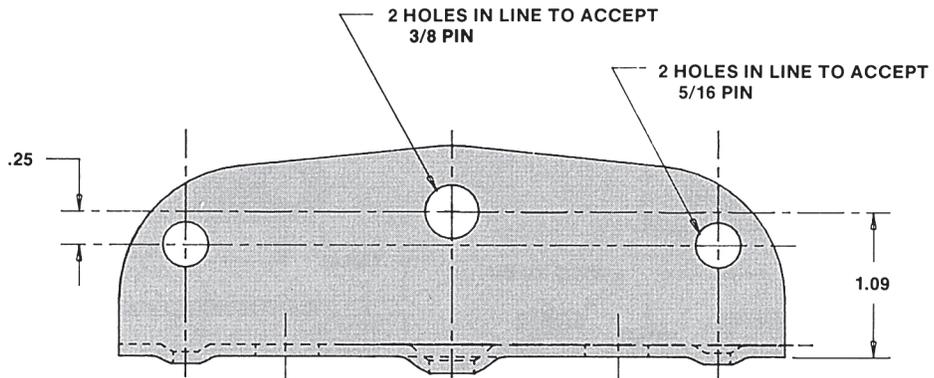
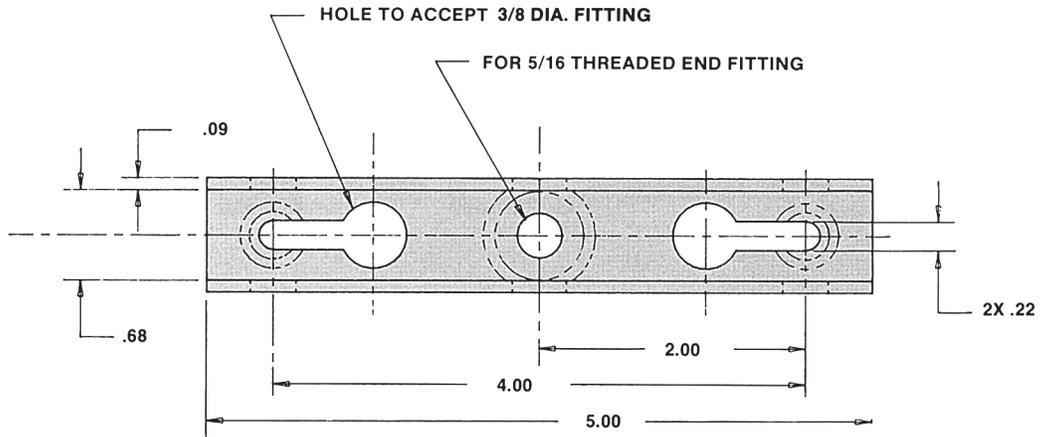


PART NO.	A	B	C	D
*81002467	.210(5.33)	1.94(49.3)	.38(9.7)	.75(19.0)
81002578	.210(5.33)	1.88(47.8)	.31(7.9)	.62(15.8)
81002635	.323(8.20)	2.50(63.5)	.31(7.9)	.62(15.8)
81002914	.323(8.20)	2.50(63.5)	.38(9.7)	.75(19.0)

* For use with Orscheln BELL CRANK TYPE lever assemblies.



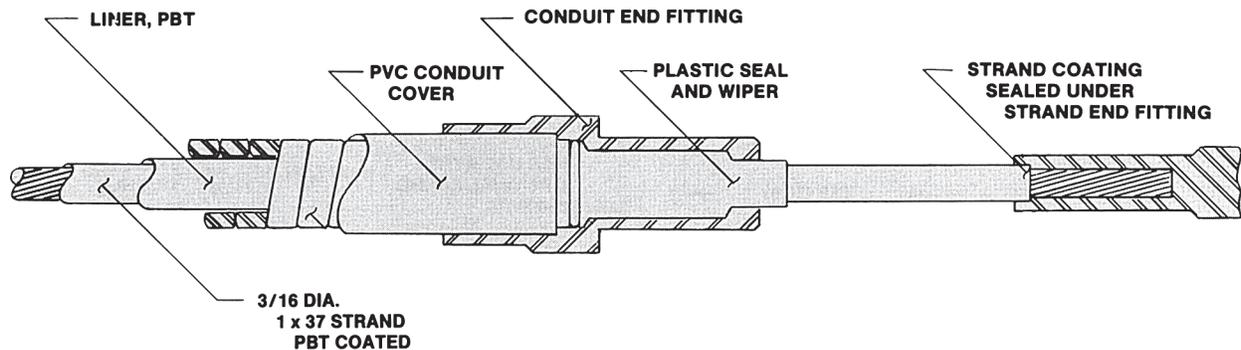
EQUALIZER 81007269





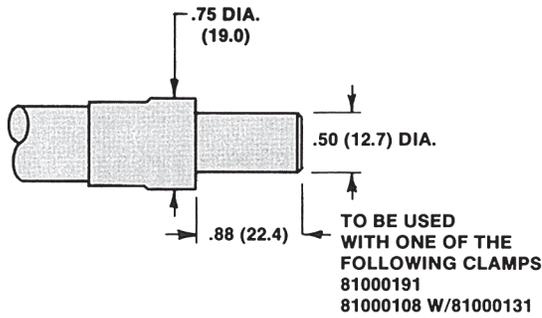
3/16" PBT BRAKE CABLES

3/16" PBT cables offer the same qualities as the 1/8" cables. However, this size of cable is recommended for heavier loads up to 3,000 pounds. Many of the characteristics described in the cable design section will help you in determining which size of cable is right for your application.

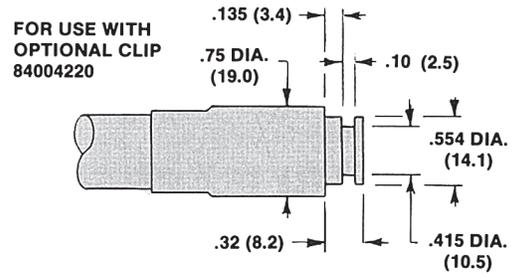




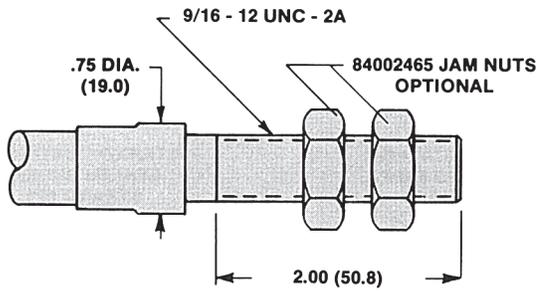
CONDUIT END FITTINGS



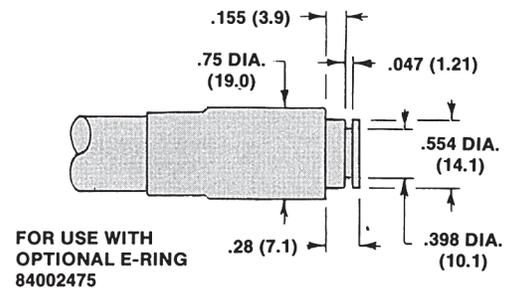
81006100



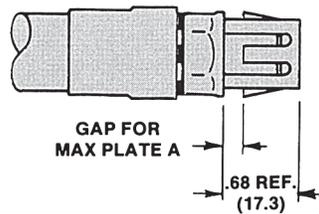
81006103



81006101



81006102

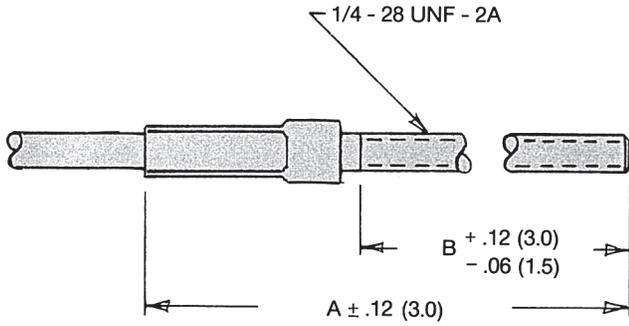


PART TO BE SECURE IN A $\frac{.580}{.575}$ DIA. HOLE
(14.8/14.6)
THRU "A" MAX PLATE WITH PRONGS
RETURNING TO .62 (15.7) DIA. MIN.

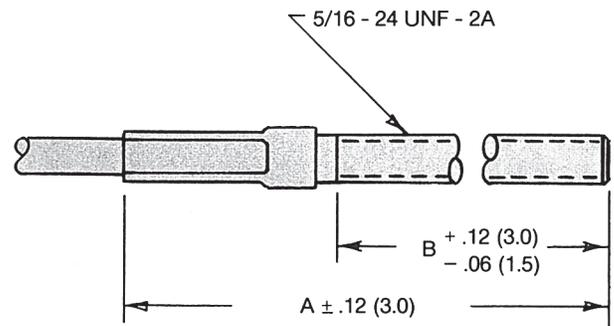
PART NO.	A
95001340	.127 (3.0)
95001341	.193 (4.9)
95001339	.253 (6.4)



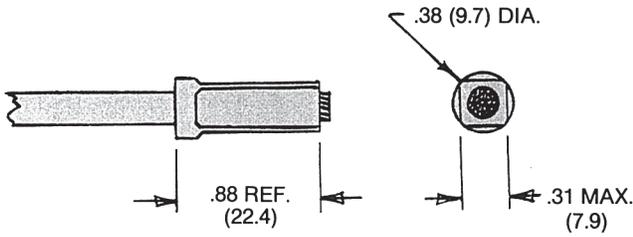
OPTIONAL STRAND END FITTINGS



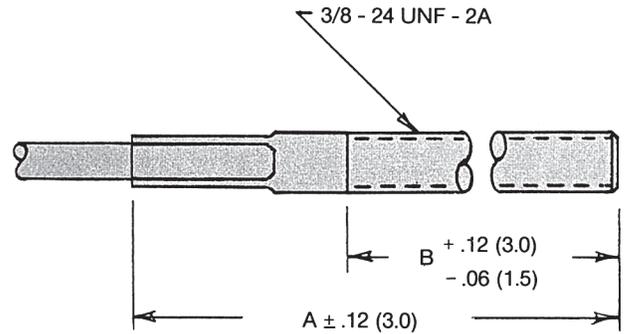
PART NO.	A	B
81006109	3.00 (76.2)	1.50 (38.1)



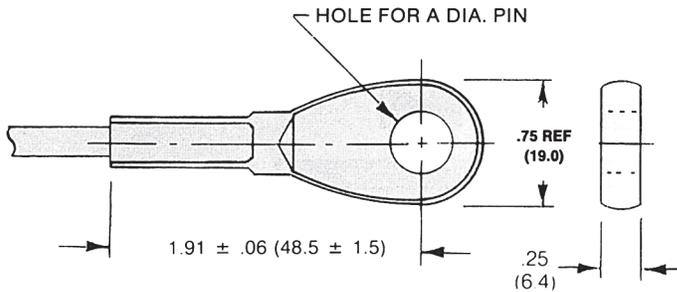
PART NO.	A	B
81006111	3.00 (76.2)	1.50 (38.1)
81006112	3.75 (95.3)	2.25 (57.2)



81006099



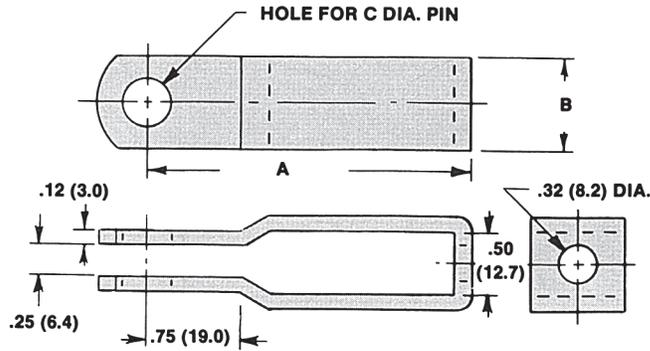
PART NO.	A	B
81006113	2.62 (66.6)	1.50 (38.1)
81006114	3.62 (92.0)	2.50 (63.5)



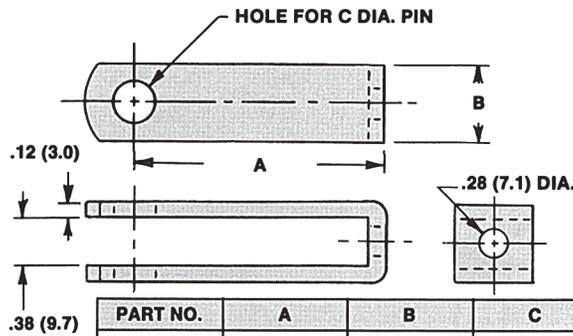
PART NO.	A
81006116	.31 (7.9)
81006117	.38 (9.7)



3/16 CLEVIS

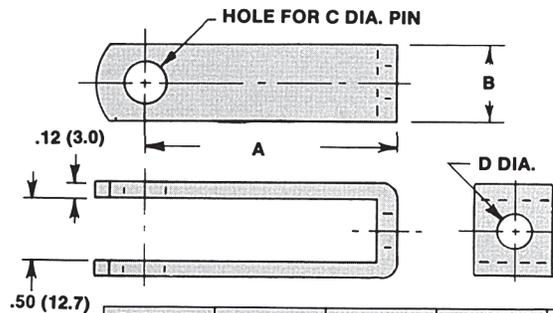


PART NO.	A	B	C
81002963	3.00 (76.2)	.62 (15.8)	.31 (7.9)
81006106	3.00 (76.2)	.75 (19.0)	.38 (9.7)



PART NO.	A	B	C
*81006273	1.50 (38.1)	.62 (15.8)	.31 (7.9)
81006107	2.00 (50.8)	.62 (15.8)	.31 (7.9)
81006108	1.62 (41.2)	.75 (19.0)	.38 (9.7)

* Designed for use in Orscheln COWL TYPE lever assemblies.

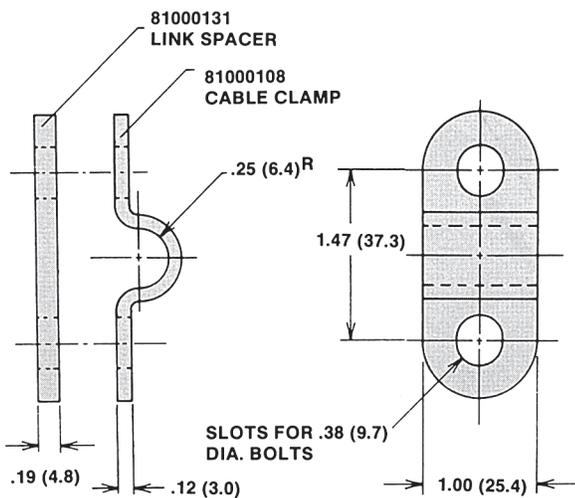


PART NO.	A	B	C	D
81002635	2.50 (63.5)	.62 (15.8)	.31 (7.9)	.32 (8.2)
81002914	2.50 (63.5)	.75 (19.0)	.38 (9.7)	.32 (8.2)
81006104	2.00 (50.8)	.62 (15.8)	.31 (7.9)	.28 (7.1)
81006105	2.00 (50.8)	.75 (19.0)	.38 (9.7)	.28 (7.1)

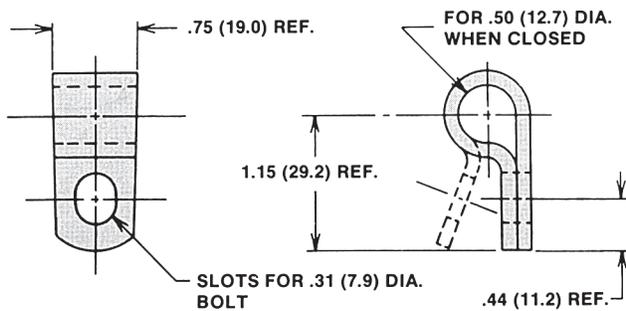


CONDUIT MOUNTING CLAMPS

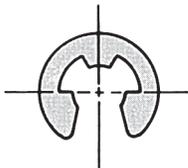
81000108 CABLE CLAMP
81000131 LINK SPACER



81000191 CABLE CLAMP

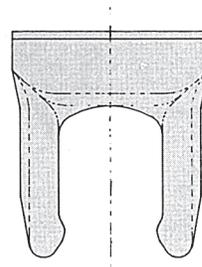


84002475



OPTIONAL WITH END FITTINGS
81002456
81006102
81006288

84004220



OPTIONAL WITH END FITTINGS
81005919
81006103



CABLE SKETCH SHEET

CUSTOMER: _____ DATE: _____
 PART NO.: _____ USE/JOB: _____

STRAND
 CONDUIT

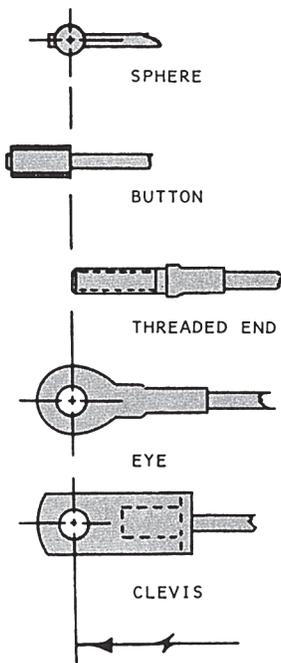
GENERAL CONSTRUCTION:

<u>CONDUIT</u>	<u>STRAND</u>
<input type="checkbox"/> PBT	1/8
<input type="checkbox"/> PBT	3/16

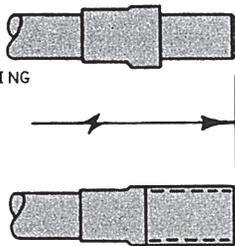
LOCATIONS FOR ASSEMBLY DIMENSIONS:

STRAND END FITTINGS

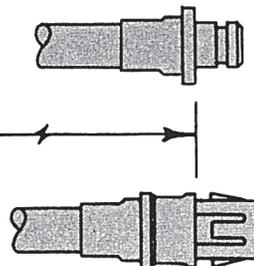
CONDUIT END FITTINGS



FITTINGS UTILIZING
 CLAMPS
 OR
 THREADS
 FOR ANCHORING



FITTINGS WITH
 SHOULDERS
 FOR LOAD POINTS



TRAILER PARKING BRAKE SYSTEMS



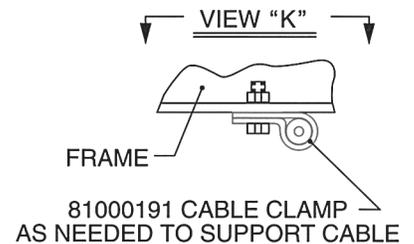
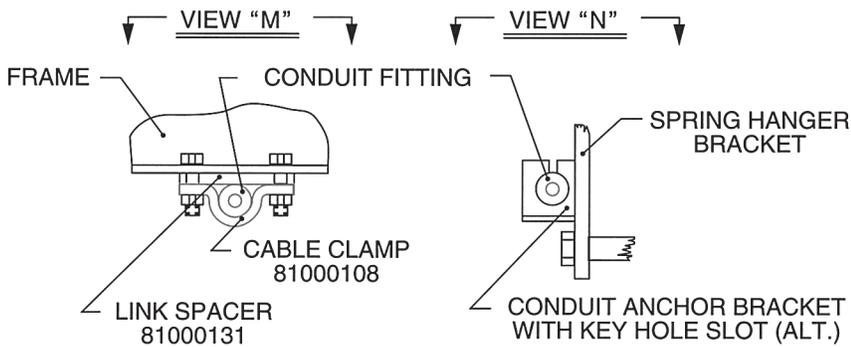
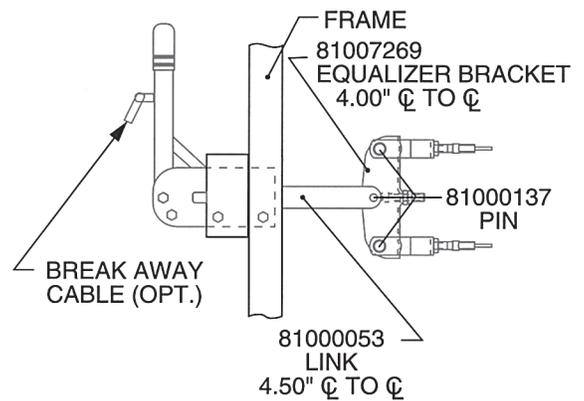
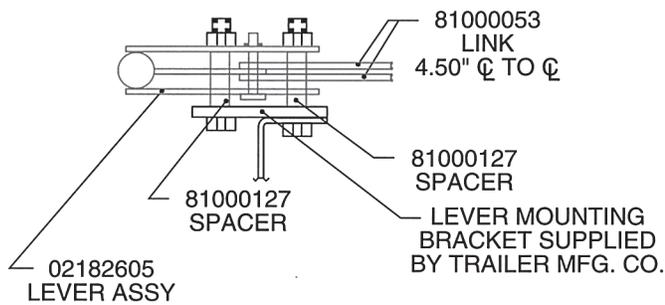
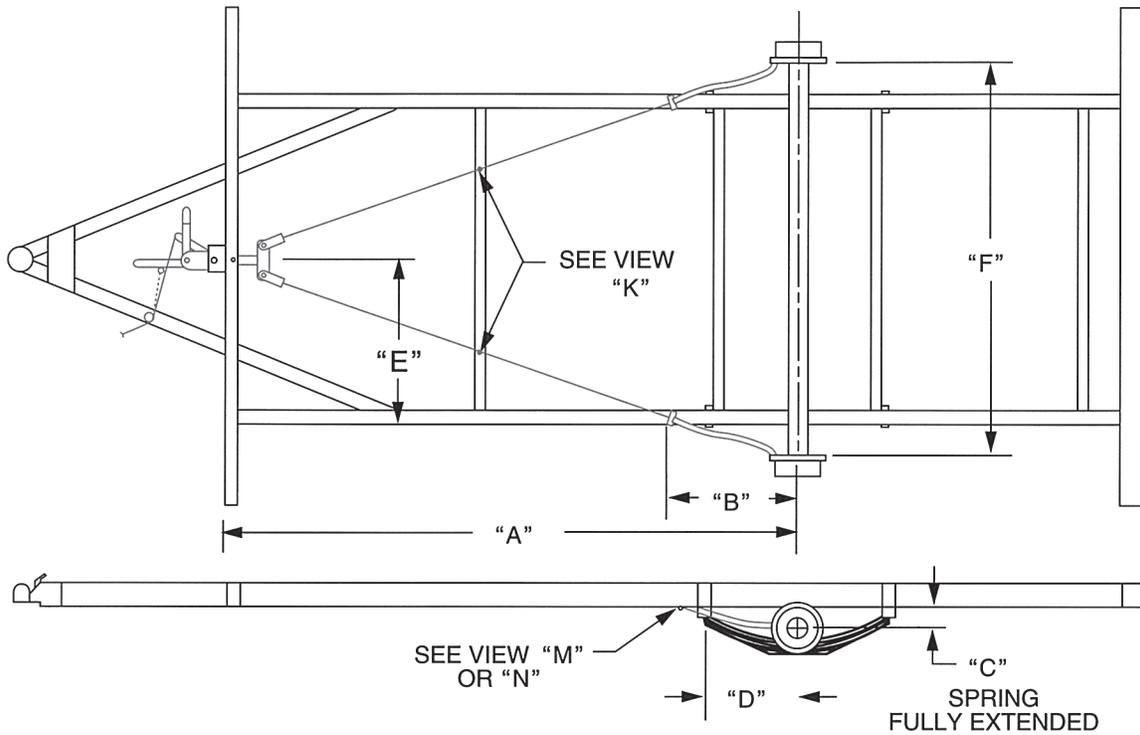
TRAILER PARKING BRAKE SYSTEMS

This section gives you three different layouts to choose from. By filling out and returning the specification sheet, you are assured of receiving a trailer system that is “custom” designed for your application. In addition, our break-away and padlock options provide additional protection. The mechanical break-away feature will engage the trailer brakes automatically if the towed vehicle becomes unhooked during transportation. The lockable over-center lever prevents any unauthorized person from moving the trailer once the system is engaged and locked.



TRAILER PARKING BRAKE SYSTEMS

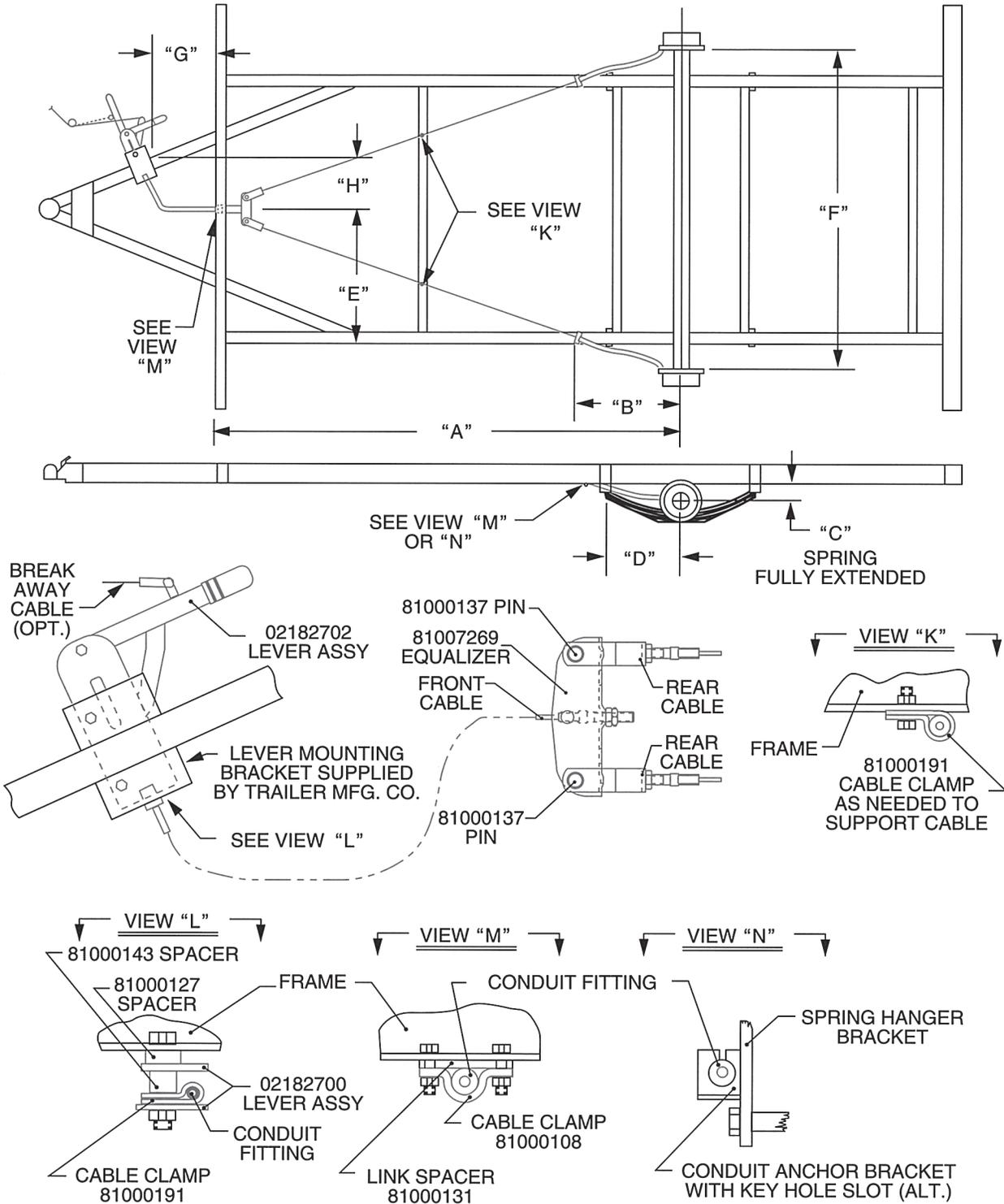
LAYOUT NO. 1 SINGLE AXLE – BRAKE LEVER ON FRONT CROSSMEMBER



**TRAILER PARKING
BRAKE SYSTEMS**



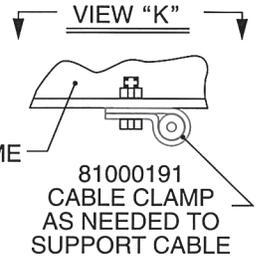
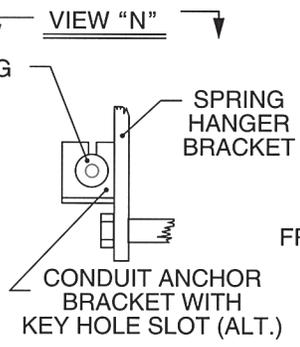
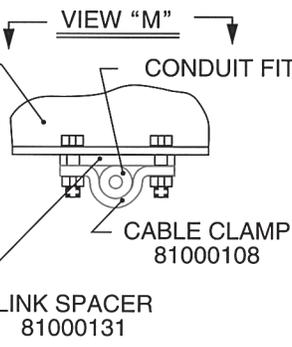
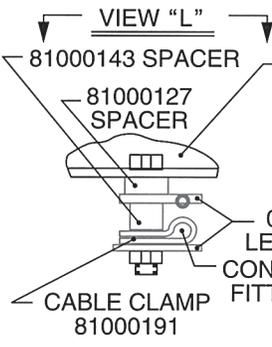
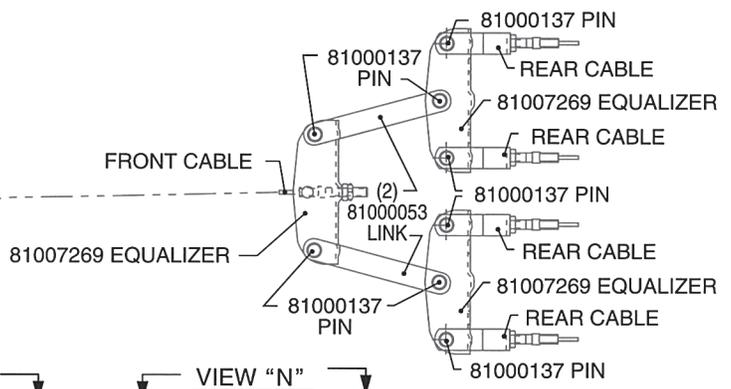
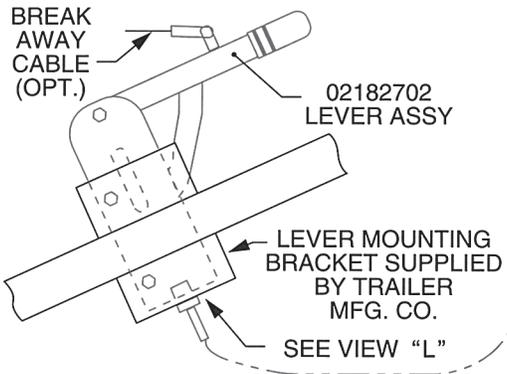
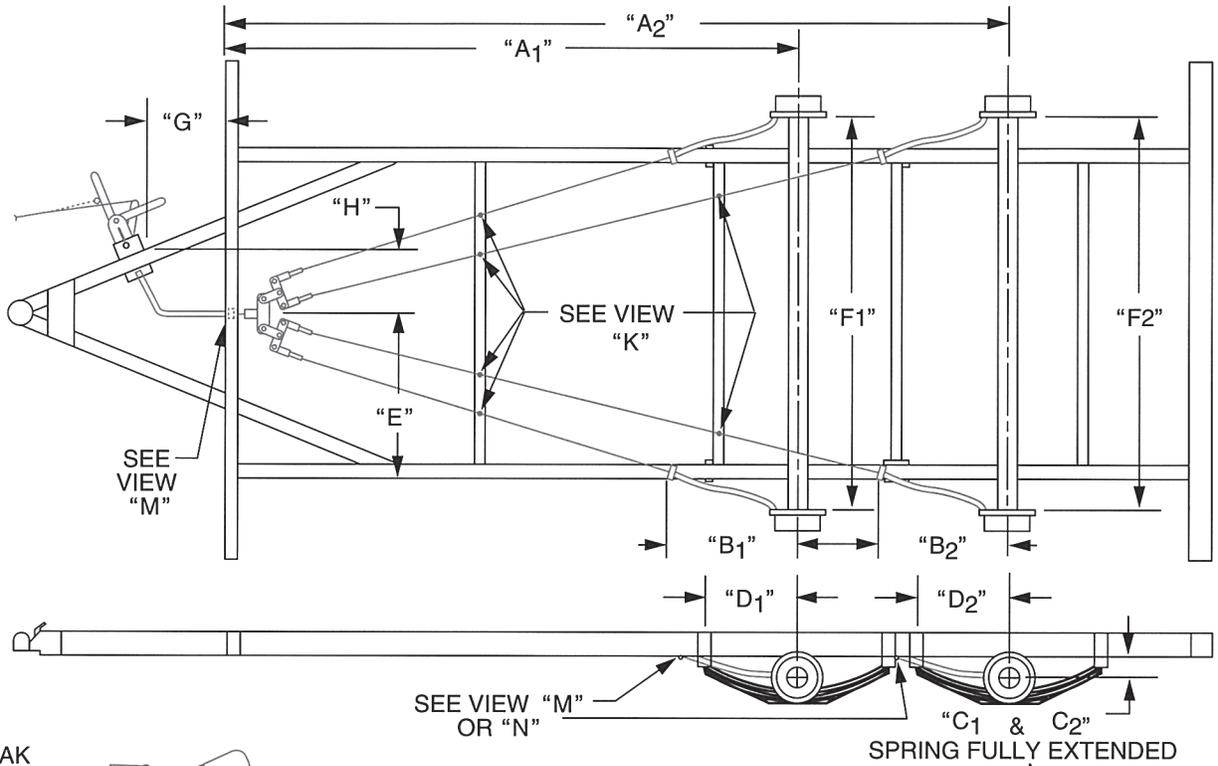
LAYOUT NO. 2 SINGLE AXLE – BRAKE LEVER ON “A” FRAME





TRAILER PARKING BRAKE SYSTEMS

LAYOUT NO. 3 DUAL AXLE – BRAKE LEVER ON “A” FRAME





ORSCHELN PARKING BRAKE SYSTEM SPECIFICATION SHEET

In order to ensure an accurate quote, please provide the following information:

- A1 _____ Front of frame to centerline axle. (Layouts 1 & 2)
- A2 _____ Dual axle only. (Layout 3)
- B1 _____ Centerline of axle to conduit mount on frame. (Layouts 1 & 2)
- B2 _____ Dual axle only. (Layout 3)
- C1 _____ Bottom of frame to centerline of axle. (Layouts 1 & 2)
- C2 _____ Dual axle only. (Layout 3)
- D1 _____ Centerline of axle to centerline of front spring hanger bracket through bolt.
(Layouts 1 & 2)
- D2 _____ Dual axle only. (Layout 3)
- E _____ Centerline of frame and equalizer to outside of frame.
- F1 &2 _____ Backing plate to backing plate.

“A” FRAME LEVER MOUNT INFORMATION

- G _____ Front of frame to edge of lever intersecting “A” frame. (Layouts 2 & 3)
- H _____ Centerline of frame and equalizer to edge of lever intersecting “A” edge.
(Layouts 2 & 3)
- I. _____ Notification of any obstacles below the trailer frame that may interfere with
cable routings.

GENERAL INFORMATION

1. Gross vehicle weight, fully loaded _____ pounds.
2. Brake manufacturer and part number:
Mfg. _____ Left _____ Right _____
3. Lever location, if other than shown on layouts _____
4. Type of axles _____
5. Frame material width at all points where cables are to mount _____

Orscheln Markets

Truck



Bus



Construction



Agriculture



Military



Orscheln Products

ETCS



Shift Control Systems



Park Brake Systems



Mechanical Control Cables



Fluid Level Indicators



ISO 9001 : 2000

Orscheln Products LLC

Sales/Customer Service
1177 N. Morley
P.O. Box 280
Moberly, MO 65270
Phone 660-263-4377
Fax 660-269-3910
email: sales@orscheln.com

Orscheln Products LLC

8351 County Road 245
Holmesville, OH 44633-9771
Phone 330-279-3711
Fax 330-279-3791

Orscheln Europe

Unit 15, Webb Ellis Industrial Park
Wood Street
Rugby England CV21 2NP
Phone +44(0) 1 788 561400
Fax +44 (0) 1 788 567555
www.orschelneurope.co.uk
email: sales@orschelneurope.co.uk

www.orschelnproducts.com

Specifications to change without notice.

FBCAT1207