

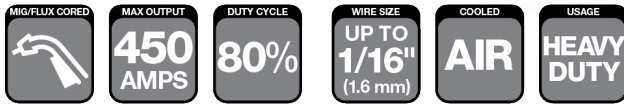
VELOCITY2

Spray Master® V450 AMP MIG Gun Air-Cooled

TWECO
AN ESAB® BRAND



400 amps @ 80% Duty Cycle – Mixed Gases
450 amps @ 60% Duty Cycle – Mixed Gases



WELDING PROCESSES:

MIG (GMAW), Flux Cored (FCAW),
Aluminum (GMAW)

Standard Options Include:

- Dual Schedule On/Off Control, Rear Connector and Knucklehead™ Flexible Conductor Tube
- Standard Conductor Tube — SMVCTLS60 (Stock No. 1240-1377) on all guns up to 15 ft (4.6 m)
- SMVCTLS45 (Stock No. 1240-1376) on all guns over 15 ft (4.6 m)
- Conduit Liner— 44 Series

Industry

- Ship and Offshore Yards
- Repair and Maintenance
- Steel Industry
- Industrial and General Fabrication
- Automotive

The Spray Master MIG Gun receives VELOCITY2 Medium and Heavy Duty consumables to create a new line of MIG guns, the VELOCITY2 Spray Master series. VELOCITY2 Spray Master series maintains the features that made the original Spray Master legendary:

- **COMPACT ERGONOMIC HANDLE DESIGN** is preferred by many for comfort and maneuverability while reducing operator fatigue
- **EXTENDED LENGTH TRIGGER** allows welders to adjust and reposition their grip for access, comfort and to avoid radiated heat. Adjusting your grip helps avoid repetitive motion, thus reducing fatigue
- **FULLY ROTATABLE CONDUCTOR TUBE** allows welders further options to reconfigure the MIG Gun form factor to solve access issues, improve maneuverability, as well as reducing fatigue and adjusting for comfort
- **THICK-WALLED, FOUR-LAYER CONDUCTOR TUBE** is designed for heavy duty cycle applications. The outer layer is made from a high temperature silicone tube decreasing the effect of radiant heat to the MIG gun
- **MAINTAINS THE ORIGINAL TWECO CABLEHOZ®** in 250, 350, and 450 Amp versions that provide the required electrical and thermal conductivity along with cable flexibility that is best in class

VELOCITY2 Spray Master series is outfitted with Velocity a revolutionary new approach in MIG consumables that will change the game in terms of welder productivity.

VELOCITY2 was designed by welders for welders. For more detailed information on VELOCITY2 Medium and Heavy Duty consumables, [visit esab.com](http://www.esab.com)

VELOCITY2 MEDIUM & HEAVY DUTY WELDING CONSUMABLES REFERENCE

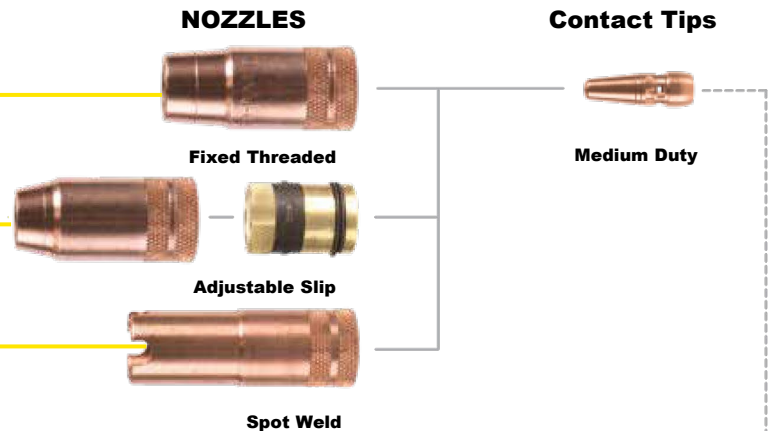
MEDIUM DUTY RANGE OVERVIEW

Wire sizes .023" (0.6 mm) à 1/16" (1.6 mm)
 Optimized for .035" (0.9 mm) & .045" (1.2 mm)
 200–350 Amps @ 60% Duty Cycle

FIXED THREADED maintains a fixed, consistent flushness relationship between nozzle opening and contact tip.

ADJUSTABLE SLIP allows welder to adjust the flushness relationship and provides improved access for cleaning.

SPOT WELD provides a solution for tack and spot welding with MIG.



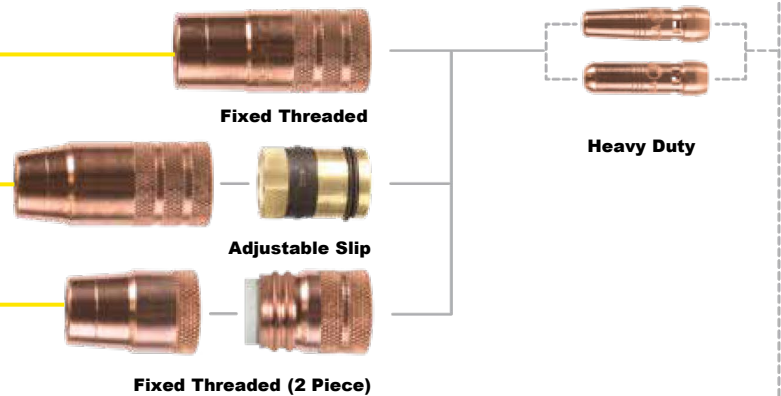
HEAVY DUTY RANGE OVERVIEW

Wire sizes .030" (0.8 mm) à 1/8" (3.2 mm)
 Optimized for .045" (1.2 mm) & 5/64" (2.0 mm)
 300–600 Amps @ 80% Duty Cycle

FIXED THREADED maintains a fixed, consistent flushness relationship between nozzle opening and contact tip.

ADJUSTABLE SLIP allows welder to adjust the flushness relationship and provides improved access for cleaning.

FIXED THREADED (2 piece) maintains flushness relationship and provides for easier cleaning and maintenance.



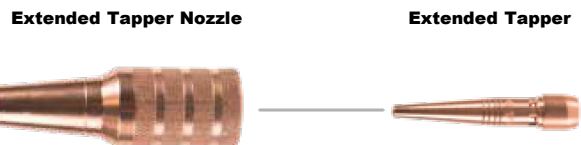
FLUX CORE OVERVIEW

Flux Core Tip Holder provides open sight line and the best solution for gasless flux core welding.



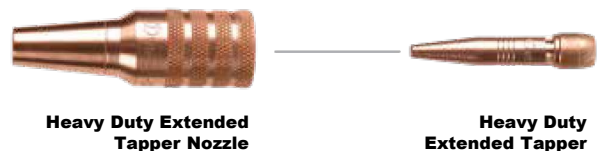
EXTENDED TAPER RANGE OVERVIEW FOR ROOT PASS AND CONFINED ACCESS

Wire sizes .030" (0.8 mm) à 1/16" (1.6 mm)
 Optimized for .045" (1.2 mm)
 200–350 Amps @ 60% Duty Cycle



EXTENDED TAPER RANGE OVERVIEW FOR ROOT PASS AND CONFINED ACCESS

Wire sizes .030" (0.8 mm) à 1/16" (1.6 mm)
 Optimized for .045" (1.2 mm)
 200–350 Amps @ 60% Duty Cycle



VELOCITY2 SPRAY MASTER V450

SPECIFICATIONS	
Description	Spray Master V450
Welding Output Mixed Gas	400 A at 80%, 450A @ 60%
Wire Diameter, Mild Steel	Up To 1/16" (1.6 mm)
Wire Diameter, Stainless	Up To 1/16" (1.6 mm)
Wire Diameter, Aluminum	Up To 1/16" (1.6 mm)
Wire Diameter, Flux-cored	Up To 1/16" (1.6 mm)
Certification Mark (Standards)	CE IEC 60974-7
Operating Temperature	14 to 104 °F (-10 to +40 °C)
Cable Length	10 ft. (3 m), 12 ft. (3.6 m), 15 ft. (4.6 m), 20 ft. (6.1 m) and 25 ft. (7.6 m)

Tweco® Style Rear Connector

Adapter kits are available to fit Tweco rear connection to most wire feeders

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	SMV410-116	1040-1825
	15 ft (4.6 m)	SMV415-116	1040-1833
	15 ft (4.6 m)	SMV425-116LM	1040-1870
	20 ft (6.1 m)	SMV420-116	1040-1854
	25 ft (7.6 m)	SMV425-116	1040-1859

Miller® Style Rear Connector

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	SMV410M-116	1040-1827
	12 ft (3.6 m)	SMV412M-116	1040-1830
	15 ft (4.6 m)	SMV415M-116	1040-1844
	15 ft (4.6 m)	SMV415M-116DSRS	1040-1846
	15 ft (4.6 m)	SMV415M-116LM	1040-1849
	20 ft (6.1 m)	SMV420M-116	1040-1855
	25 ft (7.6 m)	SMV425M-116	1040-1861
	25 ft (7.6 m)	SMV425M-116LM	1040-1872

Lincoln® Style Rear Connector

Fits Lincoln LN7, 8, 9, SP200

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	SMV410L-116	1040-1826
	12 ft (3.6 m)	SMV412L-116	1040-1866
	15 ft (4.6 m)	SMV415L-116	1040-1839
	15 ft (4.6 m)	SMV415L-116DSRS	1040-1840
	15 ft (4.6 m)	SMV415L-116LC	1040-1842
	15 ft (4.6 m)	SMV415L-116K4	1040-1875
	20 ft (6.1 m)	SMV420L-116	1040-1869
	25 ft (7.6 m)	SMV425L-116	1040-1860
	25 ft (7.6 m)	SMV425L-116LM	1040-1871

Some Lincoln wire feeders are assembled with their K1500-2 gun receiving bushing that will accept Tweco Style MIG Guns direct from the factory. Control wire Part No. MS354-DSLJ (Stock No. 2060-2137) must be ordered separately.

Euro-Kwik Style Rear Connector

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	SMV410X-116	1040-1828
	12 ft (3.6 m)	SMV412X-116	1040-1832
	15 ft (4.6 m)	SMV415X-116	1040-1850
	25 ft (7.6 m)	SMV425X-116	1040-1868
	25 ft (7.6 m)	SMV425X-116LM	1040-1873

"DSRS" = Dual Schedule Rocker Switch; "LC" = Locking Trigger; "K4" = Knucklehead Conductor Tube; "LM" = Long reach Conductor Tube

Knucklehead Conductor Tube Part No. VCTL64SFLX480 (Stock No. 1640-1337) Part No. VCTL64SFLX360 (Stock No. 1640-1336)

Long Reach Conductor Tube Part No. SMVCTLS60LM (Stock No. 1640-1403) Part No. SMVCTLS45LM (Stock No. 1640-1402) (Stock No. 1640-1402)

Conduit Liners – For Use With Steel Welding Wires

300-450 Amp – Steel Wound

Wire Size	Length	Part No.	Stock No.
.035" - .049" (0.9 - 1.2 mm)	15 ft (4.6 m)	44-3545-15	1440-1103
.035" - .045" (0.9 - 1.2 mm)	25 ft (7.6 m)	44-3545-25	1440-1105
.052" - 1/16" (1.3 - 1.6 mm)	15 ft (4.6 m)	44-116-15	1440-1113
.052" - 1/16" (1.3 - 1.6 mm)	25 ft (7.6 m)	44-116-25	1440-1115
5/64" (2.0 mm)	15 ft (4.6 m)	44-564-15	1440-1123
5/64" (2.0 mm)	25 ft (7.6 m)	44-564-25	1440-1125
3/32" (2.4 mm)	15 ft (4.6 m)	44-332-15	1440-1127

Conduit Liners – For Use With Aluminium Welding Wires

300-450 Amp – Nylon

Wire Size	Length	Part No.	Stock No.
.030" - 3/64" (0.8 - 1.2 mm)	15 ft (4.6 m)	44N-3545-15	1440-1003
1/16" (1.2 mm)	15 ft (4.6 m)	44N-116-15	1440-1012

VELOCITY2 SPRAY MASTER V450

VELOCITY2 MEDIUM & HEAVY DUTY MIG WELDING CONSUMABLES

Medium Duty Contact Tips

Description	Part No.	Stock No.
.023" (0.6 mm)	VTM23	1160-1750
.030" (0.8 mm)	VTM30	1160-1751
.035" (0.9 mm)	VTM35	1160-1752
.040" (1.0 mm)	VTM40	1160-1753
.045" (1.2 mm)	VTM45	1160-1754
3/64" (1.2 mm)*	VTMA364*	1160-1755
.052" (1.3 mm)	VTM52	1160-1756
1/16" (1.6 mm)	VTM116	1160-1757
1/16" (1.6 mm)*	VTMA116*	1160-1758
5/64" (2.0 mm)	VTM564	1160-1759

Note: All Contact Tips are packaged in quantities of ten (10) per bag and all Nozzles are packaged in quantities of two (2) per bag.

Heavy Duty Contact Tips

Description	Part No.	Stock No.
.030" (0.8 mm)	VTH30	1160-1760
.035" (0.9 mm)	VTH35	1160-1761
.040" (1.0 mm)	VTH40	1160-1762
.045" (1.2 mm)	VTH45	1160-1763
3/64" (1.2 mm)*	VTHA364*	1160-1764
.052" (1.3 mm)	VTH52	1160-1765
1/16" (1.6 mm)	VTH116	1160-1766
1/16" (1.6 mm)*	VTHA116*	1160-1767
5/64" (2.0 mm)	VTH564	1160-1768
3/32" (2.4 mm)	VTH332	1160-1769
7/64" (2.8 mm)	VTH764	1160-1770
1/8" (3.2 mm)	VTH18	1160-1771

Extended Taper Contact Tips

Description	Part No.	Stock No.
.030" (0.8 mm)	VTET30	1160-1772
.035" (0.9 mm)	VTET35	1160-1773
.040" (1.0 mm)	VTET40	1160-1774
.045" (1.2 mm)	VTET45	1160-1775
3/64" (1.2 mm)*	VTETA364*	1160-1776
.052" (1.3 mm)	VTET52	1160-1777
1/16" (1.6 mm)	VTET116	1160-1778

Note: 44 Series Conduit Shoot For VTET tips Part No. VTET44S (Stock No. 1440-1325) individually sold 5 per bag.

Extended HD Taper Contact Tips

Description	Part No.	Stock No.
.035" (0.9 mm)	VTHET35	1160-1780
.045" (1.2 mm)	VTHET45	1160-1782
.052" (1.3 mm)	VTHET52	1160-1784
1/16" (1.6 mm)	VTHET116	1160-1785

Medium Duty Nozzles

Self Insulated Nozzles. 2 per pack

Description	Part No.	Stock No.
1/2" (12.7 mm) Threaded Nozzle Recess	VNM50	1240-1857
1/2" (12.7 mm) Threaded Nozzle Flush	VNM50F	1240-1856
5/8" (15.9 mm) Threaded Nozzle Recess	VNM62	1240-1854
5/8" (15.9 mm) Threaded Nozzle Flush	VNM62F	1240-1855
3/4" (19.1 mm) Threaded Nozzle Recess	VNM75	1240-1852
3/4" (19.1 mm) Threaded Nozzle Flush	VNM75F	1240-1853
1/2" (12.7 mm) Slip Nozzle	VNM50S	1240-1859
5/8" (15.9 mm) Slip Nozzle	VNM62S	1240-1860
3/4" (19.1 mm) Slip Nozzle	VNM75S	1240-1863
Slip Nozzle Base	VNS	1240-1864
1/2" (12.7 mm) Slip Nozzle Cone Only	VNM50SC	1240-1861
5/8" (15.9 mm) Slip Nozzle Cone Only	VNM62SC	1240-1862
3/4" (19.1 mm) Slip Nozzle Cone Only	VNM75SC	1240-1865
5/8" (15.9 mm) Spot Nozzle	VNM62FAS	1240-1866
3/4" (19.1 mm) Spot Nozzle	VNM75FAS	1240-1868

Extended Taper Nozzle

3/8" (9.5 mm) Ext. Taper Nozzle Recess	VNET37	1240-1874
3/8" (9.5 mm) Ext. Taper Nozzle Flush	VNET37F	1240-1897
1/2" (12.7 mm) Ext. Taper Nozzle Recess	VNET50	1240-1873
1/2" (12.7 mm) Ext. Taper Nozzle Flush	VNET50F	1240-1872
5/8" (15.9 mm) Ext. Taper Nozzle Recess	VNET62	1240-1869

Flux Core Tip Holder

Flux Core Tip Holder	VNLFC	1240-1892
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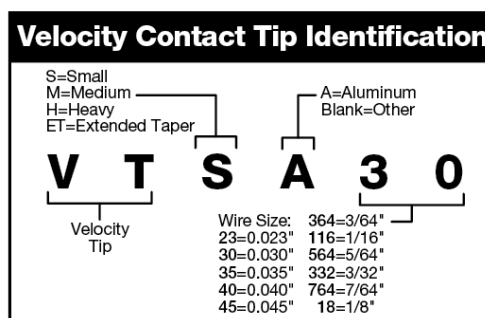
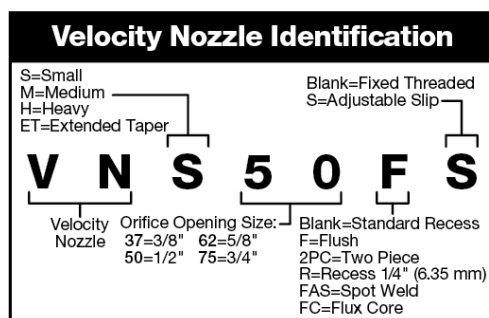
Note: VELOCITY2 medium and heavy duty contact tips and nozzles are for use with Tweco Classic® No. series, Spray Master® series and Supra® XT series MIG Guns.

Heavy Duty Nozzles

Self Insulated Nozzles. 2 per pack

Description	Part No.	Stock No.
1/2" (12.7 mm) Threaded Nozzle Recess	VNH62	1240-1877
1/2" (12.7 mm) Threaded Nozzle Flush	VNH62F	1240-1878
5/8" (15.9 mm) Threaded Nozzle Recess	VNH62R	1240-1898
5/8" (15.9 mm) Threaded Nozzle Flush	VNH75	1240-1875
3/4" (19.1 mm) Threaded Nozzle Recess	VNH75F	1240-1876
3/4" (19.1 mm) Threaded Nozzle Flush	VNH75R	1240-1899
1/2" (12.7 mm) Slip Nozzle	VNH62S	1240-1893
5/8" (15.9 mm) Slip Nozzle	VNH75S	1240-1894
3/4" (19.1 mm) Slip Nozzle	VNS	1240-1864
Slip Nozzle Base	VNH62SC	1240-1895
1/2" (12.7 mm) Slip Nozzle Cone Only	VNH75SC	1240-1896
5/8" (15.9 mm) Slip Nozzle Cone Only	VNH50RC	1240-1867
3/4" (19.1 mm) Slip Nozzle Cone Only	VNH622PC	1240-1880
5/8" (15.9 mm) Spot Nozzle	VNH62C	1240-1884
3/4" (19.1 mm) Spot Nozzle	VNH62RC	1240-1870
1/2" (12.7 mm) Threaded Nozzle Recess	VNH62F2PC	1240-1881
1/2" (12.7 mm) Threaded Nozzle Flush	VNH62FC	1240-1885
5/8" (15.9 mm) Threaded Nozzle Recess	VNH752PC	1240-1882
5/8" (15.9 mm) Threaded Nozzle Flush	VNH75C	1240-1886
3/4" (19.1 mm) Threaded Nozzle Recess	VNH75RC	1240-1871
3/4" (19.1 mm) Threaded Nozzle Flush	VNH75F2PC	1240-1883
1/2" (12.7 mm) Slip Nozzle	VNH75FC	1240-1887
5/8" (15.9 mm) Slip Nozzle	VNH2PC	1240-1879

Use VNH2PC & VNHXXRC series nozzles with the extended HD Taper Contact Tips

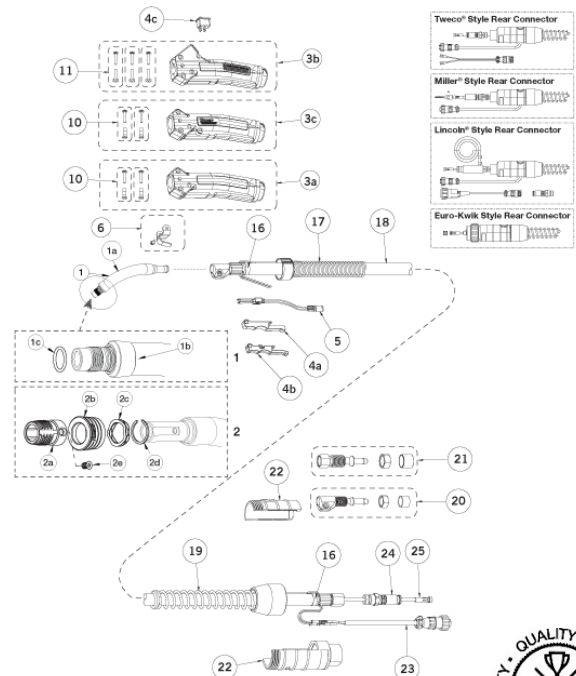


Replacement Parts

#	Description	Part No.	Stock No.
1	Conductor Tube-60°	SMVCTLS60	1240-1377
	Conductor Tube-45°	SMVCTLS45	1240-1376
	Conductor Tube-60° LM	SMVCTLS60LM	1640-1403
	Conductor Tube-45° LM	SMVCTLS45LM	1640-1402
1a	Silicone Tubing (Sold/Foot)	VCTLJBLK	1640-1409
1b	Insulator, VELOCITY2 Conductor Tube Assy	VCTLSI	1640-1408
1c	O-Ring (Pkg Of 10 each)	VCTLS015	1640-1410
2	Conductor Tube-60° (Stainless Steel Sleeve)	SMVCT60SS	1240-1378
	Conductor Tube-45° (Stainless Steel Sleeve)	SMVCT45SS	1240-1379
	Conductor Tube-60° LM (Stainless Steel Sleeve)	SMVCT60LMSS	1640-1404
	Conductor Tube-45° LM (Stainless Steel Sleeve)	SMVCT45LMSS	1640-1405
	Conductor Tube-180° (Stainless Steel Sleeve)	SMVCT180	1240-1375
2a	Threaded Stainless Steel Sleeve	VCTLSL	1640-1397
2b	Nozzle Collar	VCTLSLK	1640-1398
2c	Wave Spring	VCTLSPR	1640-1399
2d	Wave Spring Retainer	PMA64RS	1640-1396
2e	Sleeve Screw	VCT41CS	2040-2048
3	Handle – Standard Spray Master	SMV84	2060-2084
	Handle – Dual Schedule (Rocker Switch)	SMV84DS	2060-2078
	Handle – Locking Trigger	SMV84LC	2060-2080
4a	Trigger – Std & Dual Schedule	ELC94	2060-2647
	Trigger - Locking	MS94LC	2060-2693
4b	Dual Schedule Rocker Switch	MS94RSW	2060-2694
5	Trigger Blade Assy	ELC94-BL	2060-2671
6	Gun Hanger	152	2020-2152
10	Binder Posts & Screws (Standard & Locking)	ELC124FM	2060-2646
11	Binder Posts & Screws (Dual Schedule)	MS174RK	2060-2135
16	Cable Lamp	136	2060-2690

#	Description	Part No.	Stock No.
17	Front Strain Relief Spring & Cap	MS144	2060-2131
18	12 ft (3.6 m) Cablehoz® Assembly (Direct Plug)	MS412	1740-2116
	15 ft (4.6 m) Cablehoz® Assembly (Direct Plug)	MS415	1740-2117
	25 ft (7.6 m) Cablehoz® Assembly (Direct Plug)	MS425	1740-2118
	10 ft (3 m) Cablehoz® Assembly (Euro)	MS410X	1740-2121
	12 ft (3.6 m) Cablehoz® Assembly (Euro)	MS412X	1740-2122
19	15 ft (4.6 m) Cablehoz® Assembly (Euro)	MS415X	1740-2123
	25 ft (7.6 m) Cablehoz® Assembly (Euro)	MS425X	1740-2124
19	Rear Strain Relief Spring & Cap	235RSSR	2060-2035
22	Rear Case (Direct Plug)	C6RC	2060-2041
	Rear Case (Euro)	X6RC	2060-2006
23	Miller® Control Wire	MS354-DSM	2060-2140
24	Connector Plug	--	
25	Conduit Assembly	Refer To Page 3	
NS	Protective Cable Wrap, 50 ft (15.2 m) per box	TCR50	9900-1150

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