



Standard Applications Guide

2021 Rev A



BURNERS • IGNITERS • CONTROLS

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INTRODUCTION TO THE STANDARD APPLICATIONS GUIDE

FORNEY STANDARD APPLICATIONS GUIDE has been revised to allow you to find standard products quickly and conveniently. Also, we have strived to allow for easy visualization of how the equipment can be configured in standard arrangements. More information on each product can be found on the pages in Section 2, 3 and 4 of the guide. Sketches of the standard arrangements have been provided where appropriate. Consult the applicable product manual for more detailed information. Each product section starts with information about the product and its application.

LEGAL DISCLAIMER: PRICES, SPECIFICATIONS AND PRODUCT AVAILABILITY ARE SUBJECT TO CHANGE WITHOUT NOTICE.

OBSOLETE PRODUCTS - THE RMIDD, IDD-IIIA, RM-DR6101E AND PM-DR6101E FLAME DETECTOR AMPLIFIERS AND HORIZONTAL & V AMPLIFIER RACKS ARE OBSOLETE. THESE FLAME DETECTOR AMPLIFIERS AND RACKS, ARE REPLACED BY THE IDD 9000 FLAME DETECTOR AMPLIFIER SERIES AND AMP RACKS. ALSO FLAME DETECTORS D85, UNIFLAME I (SINGLE SENSOR MODELS), IDDCSX AND DR-6.1 ARE OBSOLETE AND REPLACED BY THE HD-01.

SECTION 1-3	These sections contain a listing of all standard Forney Flame Detection and Ignition products with the following information: • General description of products and assemblies with sketches where appropriate • Part Number • Brief Description • List Price • Discount Schedule • Estimated Lead Time (in days) • Estimated Shipping Weight
SECTION 4	This section provides ordering and contact information for the aftermarket group (A Team) and the T&C's that govern spare parts orders. T&C's other than Forney's Standard Terms & Conditions should be negotiated prior to order and may cause a delay in order acceptance.
SECTION 5	This section details Forney Field Service & Training offerings and the T&C's that govern Field Services.
SECTION 6	Exchange or Repair Service is no longer available for Forney products. If the product is under warranty and is not operating properly contact your A TEAM. Before returning any item, a Return Material Authorization (RMA) number is required.

SECTION 1 - FLAME DETECTION PRODUCTS

FLAME DETECTOR SELECTION GUIDE

Use this generally for the selection of your flame detector. In the Discreet Detectors choose your igniter detector for use with the IDD 9000 amplifier. Unitized Detectors contain both sensors and amplifier in the same housing. The following chart may be used for selection of both the igniter detector and the main flame detector.

		Natural Gas	Oil	Coal	Lignite	Coal & Gas	Coal & Oil	Lignite & Gas
Discrete Detectors (separate amplifier required)								
	IDD – IIU PN 38321-22 400 - 3300 nm	A	P	P	A	N	P	N
	IDD – IIL PN 38321-23 700 - 3300 nm	N	N	N	P	N	N	N
	IDD – II PN 38321-21 700 -3300 nm	N	P	P	A	N	A	N
	IDD –Ultra PN 38321-29 200-425 nm	P	A	N	N	N	N	N
Unitized Detectors (integral amplifier)								
	HD® PN HD-01 IR sensor 900 - 1700 nm UV sensor 210 – 390 nm	P	P	P	P	P	P	P
	UniFlame® I IR sensor 700 - 1700 nm UV sensor 295 - 320 nm	A	A	A	A	A	A	A
	UniFlame® II IR sensor 700 - 1700 nm UV sensor 295 - 320 nm	A	A	A	A	A	A	A

P = Preferred

A = Acceptable

N = Not recommended / will not detect

Fiber Optics are available for tangential and opposed fired units.

Notes:

1. UniFlame I have 3 versions: IR, UV, and Dual (IR & UV). Contact Forney for application assistance.
2. Cooling air requirements: Front mount applications - minimum 10 scfm, Fiber optic applications - minimum 15 scfm. Maximum cooling air temperature 120 °F (48°C) for all except **new IDD-Ultra which requires no cooling up to 250 °F (121°C)**

FLAME DETECTOR WORKSHEET

Customer Name _____

Phone Number _____ Fax Number _____

Plant/Unit Name _____

Contact Name _____

Estimated ship date _____

☐ New Installation ☐ Upgrade of Forney equipment ☐ Replacement of _____

Market: ☐ Utility ☐ Petro-chemical ☐ Pulp & Paper ☐ Steel ☐ Other _____

Type of Boiler: ☐ Front Fired ☐ Opposed fired ☐ Tangentially fired ☐ Other _____
For tangentially fired applications, are the burners fixed or tilting? ☐ Fixed ☐ Tilting

Fuel(s) fired for main burner: ☐ Natural Gas ☐ Light Oil ☐ Heavy Oil ☐ Coal
☐ Lignite ☐ Other: _____
Atomization for fuel oils: ☐ Steam ☐ Mechanical ☐ Air

Fuel(s) for Igniter: ☐ Natural Gas ☐ Light Oil ☐ Propane ☐ Other: _____

Furnace Pressure: ☐ Pressurized (FD Fan only) ☐ Balanced (FD and ID Fan)

Burner Arrangement: Number of elevations _____ Burners per elevation _____
Approximate distance between burners (centerline to centerline) _____ ft.

Can customer furnish fully dimensioned burner drawings? _____

Number of main burner detectors _____ Number of igniter detectors _____

Has detection method been specified? ☐ UV ☐ IR ☐ UV/IR ☐ Other _____

Is a weatherproof rating required for the detector? ☐ None ☐ NEMA 4 ☐ IP65 ☐ Other _____

Is an Explosion-proof rating required for the detector?
☐ US Standards: Class 1, Division 2, Group _____ (D, C, B, and or A) ☐ None
☐ CE Standards: Exd II ____ (C, B, and/or A) ☐ Other _____

If Fiber-optics are required, how long do they have to be? 3ft 5ft 7ft 9ft 10ft 12ft 14ft Other _____
Do the fiber optics require an outer carrier or re-use the existing outer carrier? ☐ New ☐ Re-use

Voltage available? ☐ 115VAC ☐ 230VAC ☐ 50Hz ☐ 60Hz

Average distance between amplifier and flame detector (to determine cable length) _____ ft

Will amplifiers be mounted in an existing enclosure or does a new enclosure need to be provided? ☐ Existing ☐ New
If a new enclosure is required for the amplifiers, what is the rating?
☐ NEMA 12 (IP55) ☐ NEMA 4 (IP65) ☐ Explosion-proof

Does a flame detector cooling air blower need to be provided? ☐ Yes ☐ No

HD FLAME DETECTOR

Spec Sheet# 404005-32
Technical Manual#372001-17

The HD Flame Detector is a state-of-the-art flame detector by Forney Corporation which comprises multi-sensor technology, an on-board microprocessor, Bluetooth® connectivity, and optional fiber-optics attachment. The HD Flame Detector is sensitive to ultraviolet light from 210 to 390 nm wavelengths, and infrared light from 900 to 1700 nm wavelengths. The HD Flame Detector is an integrated equipment housing all components and subsystems into a single housing eliminating the need for a remote amplifier yet has a small form factor.

The HD Flame Detector contains two flame relays: Flame Relay 1 (FR1) and Flame Relay 2 (FR2). FR1 is pre-programmed to respond to IR radiations while FR2 is pre-programmed to respond to UV radiations from target flame.

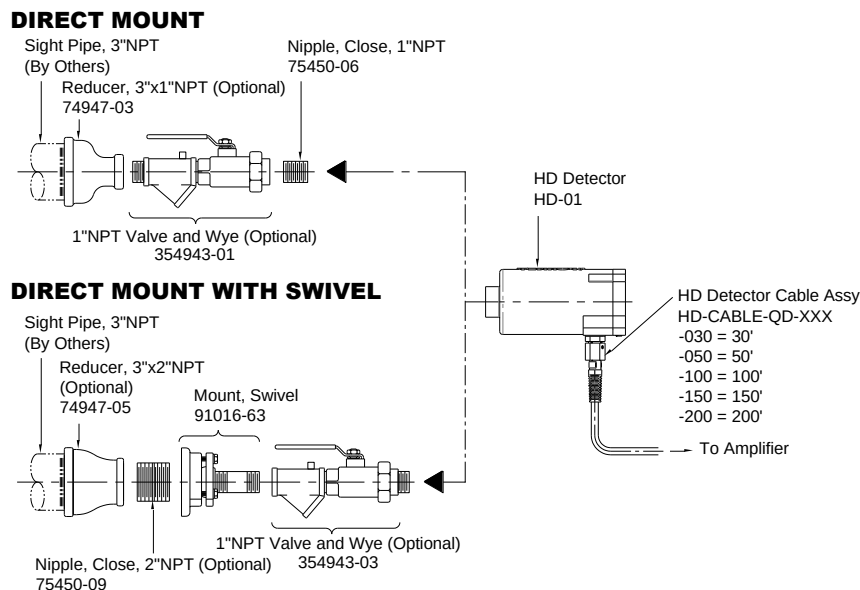
The HD Flame Detector has a 12-pin quick disconnect connector to receive 24 VDC power and for interconnections with the Burner Management System (BMS). The HD Flame Detector includes a Bluetooth® chip to connect with any Bluetooth® equipped smart phone, tablet, or laptop using Forney App. The Forney App is available in the Apple App Store and Google Play Store. Furthermore, the HD Detectors can also be connected to a laptop using RS-485 communication link by utilizing Modbus RTU protocol for remote monitoring and configuration. HD Connect (Forney's HD Flame Detector Software for Desktop/laptop) is available as Modbus Master for polling and visualization of live data streaming from connected detectors.

The HD Detector is equipped with a quick disconnect connector and is suitable for NEC Class I, Division II and ATEX II 3G hazardous locations. The cable length can be customized to suit application requirements. Note: When replacing existing Forney Detectors (D85, Digital Profile Detector (DPD), UniFlame I, or UniFlame II's etc.), existing cables can be used to connect to the HD Detector by use of a suitable quick connect transition adaptor kit cable. See *Cable Options when Upgrading to the HD Detector* section below.

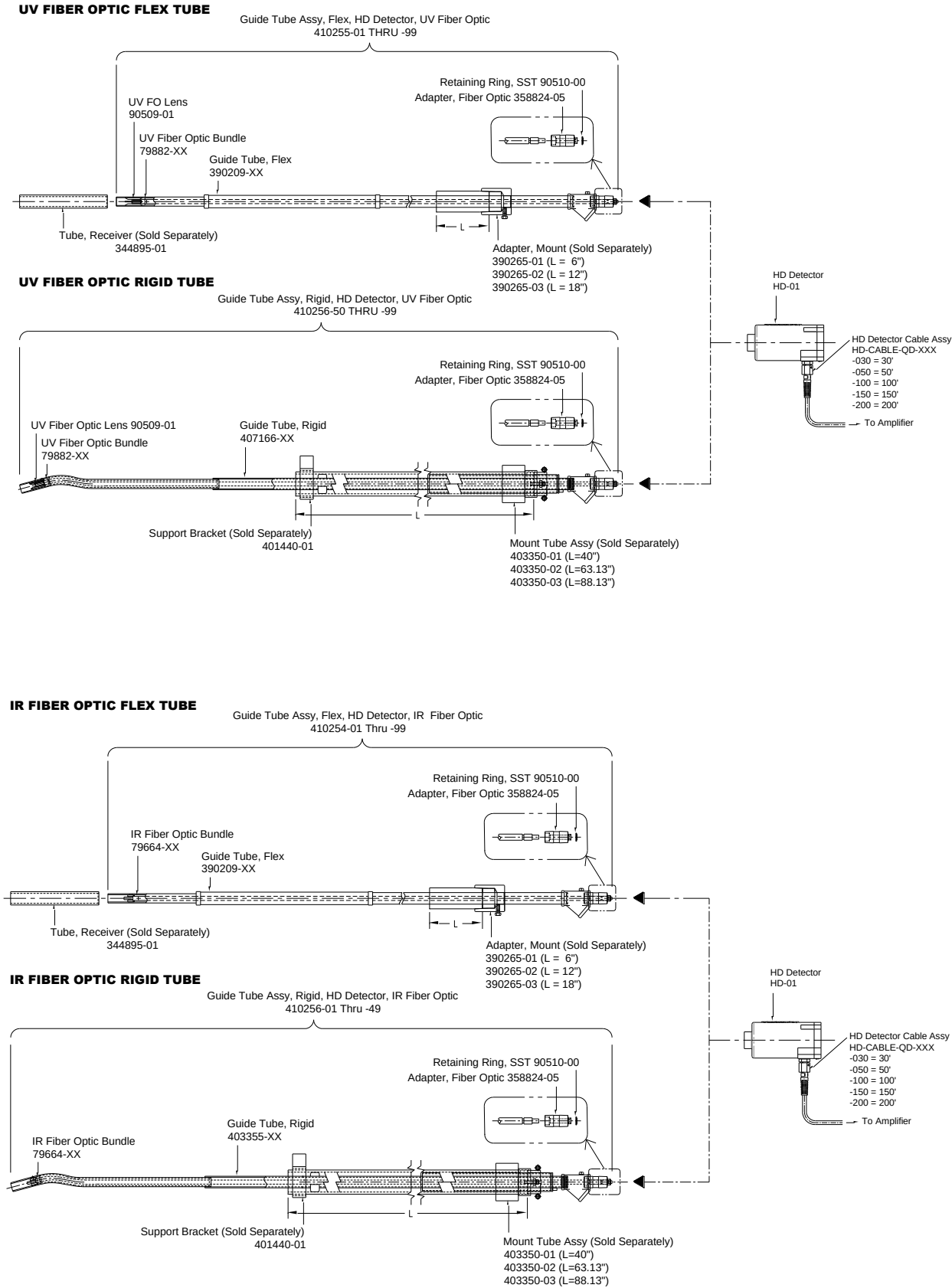
Legacy Fiber Optic Assemblies can often be reused as adjusted per the *Fiber Optic Assembly Conversion from Legacy Detectors to HD Detector – Mechanical* section below.

Forney HD Detector has an IP 66 housing and connections, is RoHS compliant and has the following Agency Approvals: FM, CE; Approval pending for IECEx, Class I Div 2, Groups B, C & D, ATEX and Safety Integrity Level 3.

HD Front Mount Applications Drawing



HD Fiber Optic Mount Applications Drawing



Fiber Optic Assembly Conversion from Legacy Detectors to HD Detector Table

The left shaded columns represent the existing mechanical setup. Please verify the mechanical setup in the Existing Parts column to determine the necessary Replacement Parts to maintain the same fiber optic assembly length.								
Existing Parts						Replacement Parts		
Flame Detector				Optical Fiber Assembly		Parts Needed		Comments
Name	Forney PN	FO Type	FO PN	Assembly Type	Assembly PN	Type	Forney PN	
D85	D85IRFOQD	IR	407160-XX	FLEX TUBE	409270-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	Replace D85 Flange with 1" 3000# FNPT UNION and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
				RIGID TUBE	409268-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	Replace D85 Flange with 1" 3000# FNPT UNION and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
	D85UVFOQD	UV	405923-XX	FLEX TUBE	409271-XX	HD-01 FO UV ADAPTER	358824-12 (BLK PLSTC)	Replace D85 Flange with 1" 3000# FNPT UNION and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
				RIGID TUBE	409269-XX	HD-01 FO UV ADAPTER	358824-12 (BLK PLSTC)	Replace D85 Flange with 1" 3000# FNPT UNION and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
UNIFLAME	401111-21	IR	407160-XX	FLEX TUBE	407161-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	Replace UNIFLAME Snout (UV is 400487-04, IR is 400487-05), and locknut with 1" 3000# FNPT UNION and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
				RIGID TUBE	407162-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
	401115-01	UV	405923-XX	FLEX TUBE	405924-XX	HD-01 FO UV ADAPTER	358824-12 (BLK PLSTC)	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
				RIGID TUBE	407163-XX	HD-01 FO UV ADAPTER	358824-12 (BLK PLSTC)	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
UNIFLAME II	401116-01	IR	407160-XX	FLEX TUBE	408888-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	Replace UNIFLAME-II Flange & locknut with 1" 3000# FNPT UNION and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
				RIGID TUBE	408879-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
	401116-01	UV/DUAL	405923-XX	FLEX TUBE	408889-XX	HD-01 FO UV ADAPTER	358824-12 (BLK PLSTC)	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
				RIGID TUBE	408880-XX	HD-01 FO UV ADAPTER	358824-12 (BLK PLSTC)	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
CLASSIC DIGITAL PROFILE DETECTOR		IR	79664-XX	FLEX TUBE	399853-XX	HD-01 FO ADAPTER STD	358824-05 (BLK PLSTC)	Replace 1"NPT X 3" LG (FORNEY PN 7545604) and DPD Flanged Assembly with 1" 150# FNPT UNION and HD FO Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (150#)	8847922 (304SS, 150#) 8847921 (316SS, 150#)	
						1" NPT CLS Nipple	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
		IR	79664-XX	RIGID TUBE	403368-XX	HD-01 FO ADAPTER STD	358824-05 (BLK PLSTC)	Replace 1"NPT X 3" LG (FORNEY PN 7545604) and DPD Flanged Assembly with 1" 150# FNPT UNION and HD FO Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (150#)	8847922 (304SS, 150#) 8847921 (316SS, 150#)	
						1" NPT CLS Nipple	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	

Fiber Optic Assembly Conversion from Legacy Detectors to HD Detector (Cont.)

Existing Parts						Replacement Parts		
Flame Detector				Optical Fiber Assembly		Parts Needed		Comments
Name	Forney PN	FO Type	FO PN	Assembly Type	Assembly PN	Type	Forney PN	
SUPER BLUE DIGITAL PROFILE DETECTOR	390893-01	UV	79882-XX	FLEX TUBE	389597-XX	HD-01 FO ADAPTER STD	358824-05 (BLK PLSTC)	Replace 1"NPT X 3" LG (FORNEY PN 7545604) and DPD Flanged Assembly with 1" 150# FNPT UNION and HD FO Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (150#)	8847922 (304SS, 150#) 8847921 (316SS, 150#)	
						1" NPT CLS Nipple	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
IDD-II & IIU FLAME DETECTORS	38321-21 -22 -23	IR	79664-XX	FLEX TUBE	390208-XX	HD-01 FO ADAPTER SHORT	358824-09 (BLK PLSTC)	Replace Hex reducing bushing, QD coupling, FO Adapters with 1" Union (3000#) and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union defines the FO length.
						Retaining ring	9051000	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
						1" NPT CLS Nipple	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
				RIGID TUBE	403369-XX XX < 50	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	Replace IDD-II Flange with 1" 3000# Union and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union defines the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
						1" NPT CLS Nipples	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
				FLEX TUBE W/COOLING CHAMBER	409164-XX	Retaining ring	9051000	Replace 1" NPT X 3" LG Nipple (PN 75456-04) with HD Optical Fiber Adapter. Do NOT use any other union because the size of this union defines the FO length.
				RIGID TUBE W/COOLING CHAMBER	409165-XX	HD-01 FO ADAPTER LONG	358824-13 (BLK PLSTC)	
						Retaining ring	9051000	
IDD-ULTRA FLAME DETECTORS	38321-29	UV	79882-XX	FLEX TUBE	403545-XX	HD-01 FO ADAPTER SHORT	358824-09 (BLK PLSTC)	Replace Hex reducing bushing, QD coupling, FO Adapters with 1" Union (3000#) and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union defines the FO length.
						Retaining ring	9051000	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
						1" NPT CLS Nipple	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
				RIGID TUBE	403369-XX XX ≥ 50	HD-01 FO ADAPTER SHORT	358824-09 (BLK PLSTC)	Replace Hex reducing bushing, QD coupling, FO Adapters with 1" Union (3000#) and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union defines the FO length.
						Retaining ring	9051000	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
						1" NPT CLS Nipple	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
				FLEX TUBE W/COOLING CHAMBER	409164-XX	Retaining ring	9051000	Replace 1" NPT X 3" LG Nipple (PN 75456-04) with HD Optical Fiber Adapter.
				RIGID TUBE W/COOLING CHAMBER	409165-XX	HD-01 FO ADAPTER LONG	358824-13 (BLK PLSTC)	
						Retaining ring	9051000	
IID-II CEX	38321-25 -26 -27	IR	407160-XX	FLEX TUBE	409164-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	Replace IDD-II CEX Flange & locknut with 1" 3000# FNPT UNION and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union controls the FO length.
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	
				RIGID TUBE	409165-XX	HD-01 FO IR Adapter	358824-11 (BLK PLSTC)	
						1" SS Union (3000#)	8847909 (316SST, 3000#) 8847920 (304SST, 3000#)	

Fiber Optic Assembly Conversion from Legacy Detectors to HD Detector (Cont.)

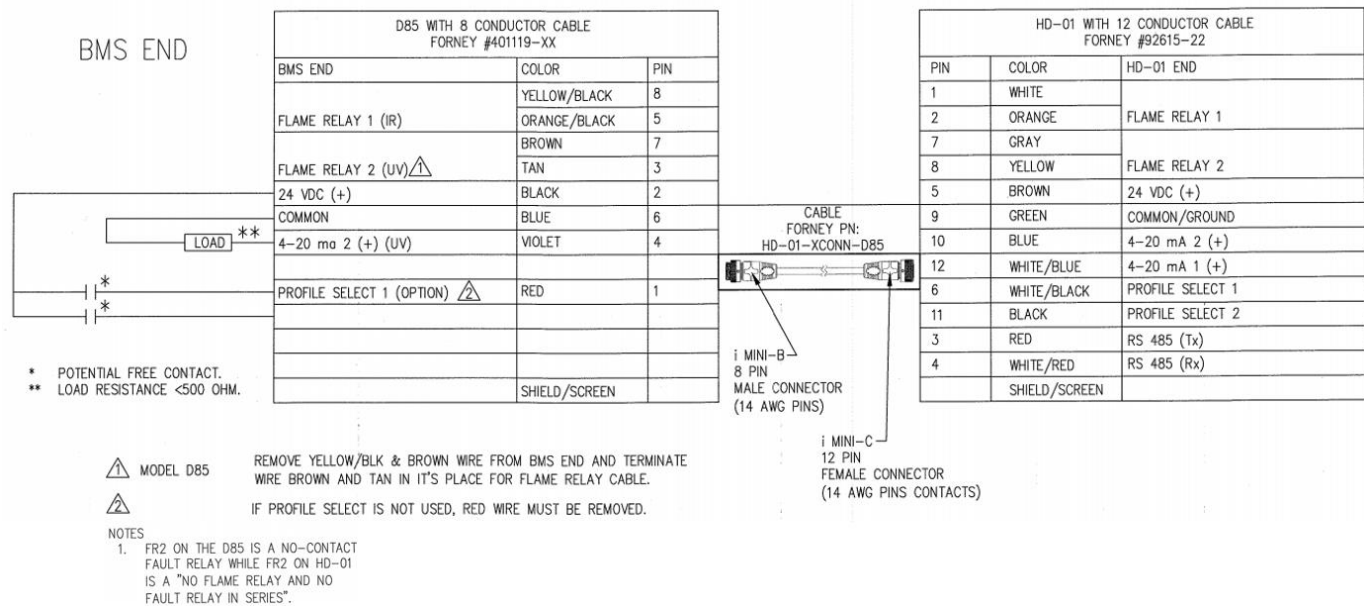
Existing Parts						Replacement Parts		
Flame Detector				Optical Fiber Assembly		Parts Needed		Comments
Name	Forney PN	FO Type	FO PN	Assembly Type	Assembly PN	Type	Forney PN	
UV-4 DETECTOR	378503-01	UV	79882-XX	FLEX TUBE	407167-XX	HD-01 FO ADAPTER STD	358824-05 (BLK PLSTC)	Replace 1" NPT X 3" LG Nipple (PN 75456-04) with 1" Union (150#) and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union fits with the existing FO length.
						Retaining ring	9051000	
						O-Ring	7558208	
						1" SS Union (150#)	8847922 (304SS, 150#) 8847921 (316SS, 150#)	
						1" NPT CLS Nipple	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
				RIGID TUBE	407164-XX	HD-01 FO IR ADAPTER	358824-11 (BLK PLSTC)	Replace 1" NPT X 3" LG Nipple (PN 75456-04) with 1" Union (150#) and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union fits with the existing FO length.
						Retaining ring	9051000	
						O-Ring	7558208	
						1" SS Union (3000#)	8847909 (316SS) 8847920 (304SS)	
						1" NPT CLS Nipples	75450-XX -06 (STD BLK) -23 (CS) -24 (SS304)	
				FLEX TUBE W/COOLING CHAMBER	409166-XX	HD-01 FO ADAPTER SHORT	358824-09 (BLK PLSTC)	Replace cooling jacket with Forney Tee (39499801), 1" Union and HD Optical Fiber Adapter. Do NOT use any other union because the size of this union defines the FO length. Please note that HD-01 will not have a cooling jacket in this option.
				RIGID TUBE W/COOLING CHAMBER	409167-XX	HD-01 FO ADAPTER SHORT	358824-09 (BLK PLSTC)	

Cable Options when Upgrading to the HD Detector Table

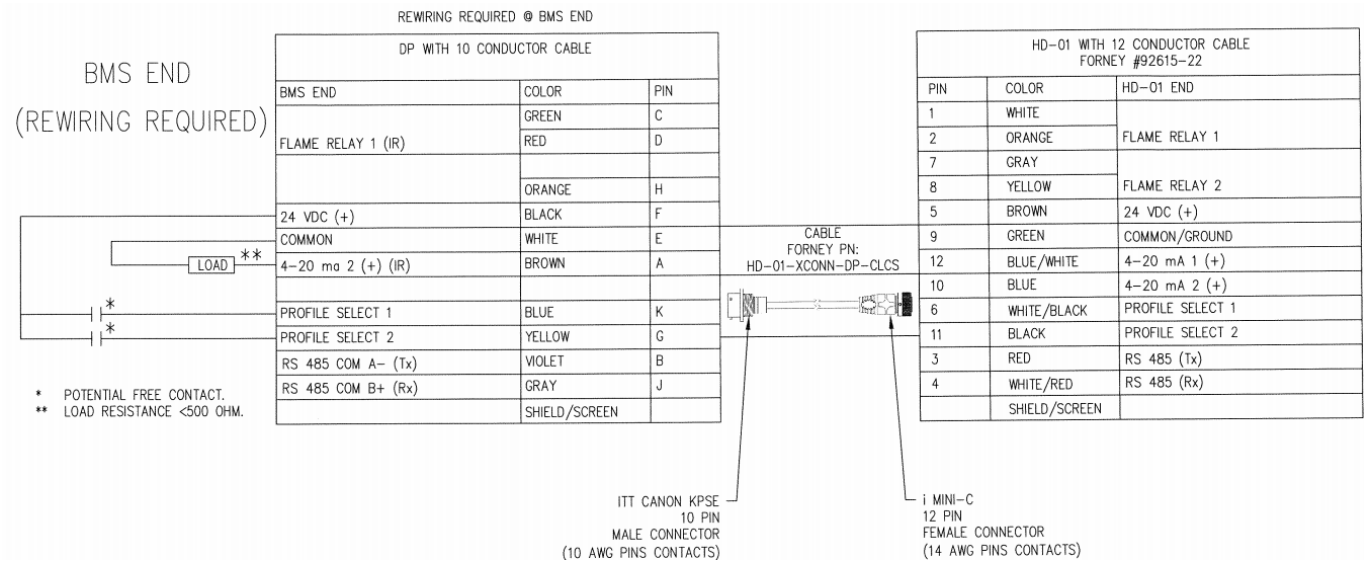
The left shaded columns represent the existing setup. Please verify the existing setup in the left to determine the cable options.					
Existing Parts		Replacement Parts			
Flame Detector		X-Connection Cable Adapter (Forney PN)	New Cable Needed	Rewiring at BMS End Needed?	Comments
Name	Existing Electrical Connection				
D85	8-Pin	HD-01-XCONN-D85	Optional. X-Connection Adapter can be used.	Yes. See HD-01 Manual.	Customer has the 2 choices (1) use all HD functionalities by replacing existing 8 wire cable to 12 wire cable, or (2) use same functionalities as before by purchasing the X-connect adapter and rewire existing cable at BMS End. Please see HD-01 manual to gather more details for option 1 or 2.
DPD	10-Pin	HD-01-XCONN-DP-CLCS	Optional. X-Connection Adapter can be used.	Yes. See HD-01 Manual.	Customer has the 2 choices (1) use all HD functionalities by replacing existing 10 wire cable to 12 wire cable, or (2) use same functionalities as before by purchasing the X-connect adapter and rewire existing cable at BMS End. Please see HD-01 manual to gather more details for option 1 or 2.
45 UV5	4-Pin	Not Available.	Yes (Forney PN: HD-CABLE-QD-XXX). Add a local junction box and rewire at Scanner End	Not needed because Scanner end has been rewired.	Customer has the 2 choices (1) use all HD functionalities by replacing existing 4 wire cable to 12 wire cable, or (2) use same functionalities as before by purchasing the X-connect adapter and rewire existing cable at BMS End. Please see HD-01 manual to gather more details for option 1 or 2.
65 UV5	8-Pin	Not Available.	Yes (Forney PN: HD-CABLE-QD-XXX). Add a local junction box and rewire at Scanner End	Not needed because Scanner end has been rewired.	Customer has the 2 choices (1) use all HD functionalities by replacing existing 8 wire cable to 12 wire cable, or (2) use same functionalities as before by purchasing the X-connect adapter and rewire existing cable at BMS End. Please see HD-01 manual to gather more details for option 1 or 2.
UniFlame I	12-Pin	HD-01-XCONN-UNFLM1	No. X-Connection Adapter can be used.	Yes. See HD-01 Manual.	Forney highly recommend using existing cable and X-connector to replace UniFlame with HD-01. Rewiring at BMS End is needed. Please see HD-01 manual for rewiring diagram.
UniFlame II	12-Pin & 8-Pin	HD-01-XCONN-UNFLM2	Optional. X-Connection Adapter can be used.	Yes. See HD-01 Manual.	Forney highly recommend using existing 12-wire cable and X-connector to replace UniFlame II with HD-01. The existing 8-wire cable is no more needed and can be disconnected from both ends. Rewiring at BMS End is needed. Please see HD-01 manual for rewiring diagram.
UniFlame II (Single UniFlame I Connector)	12-Pin	HD-01-XCONN-UNFLM1	No. X-Connection Adapter can be used.	Yes. See HD-01 Manual.	Forney highly recommend using existing cable and X-connector to replace UniFlame with HD-01. Rewiring at BMS End is needed. Please see HD-01 manual for rewiring diagram.

Cable Cross Connect (XCONN) Mappings for using Existing Legacy Cables Drawings

D85

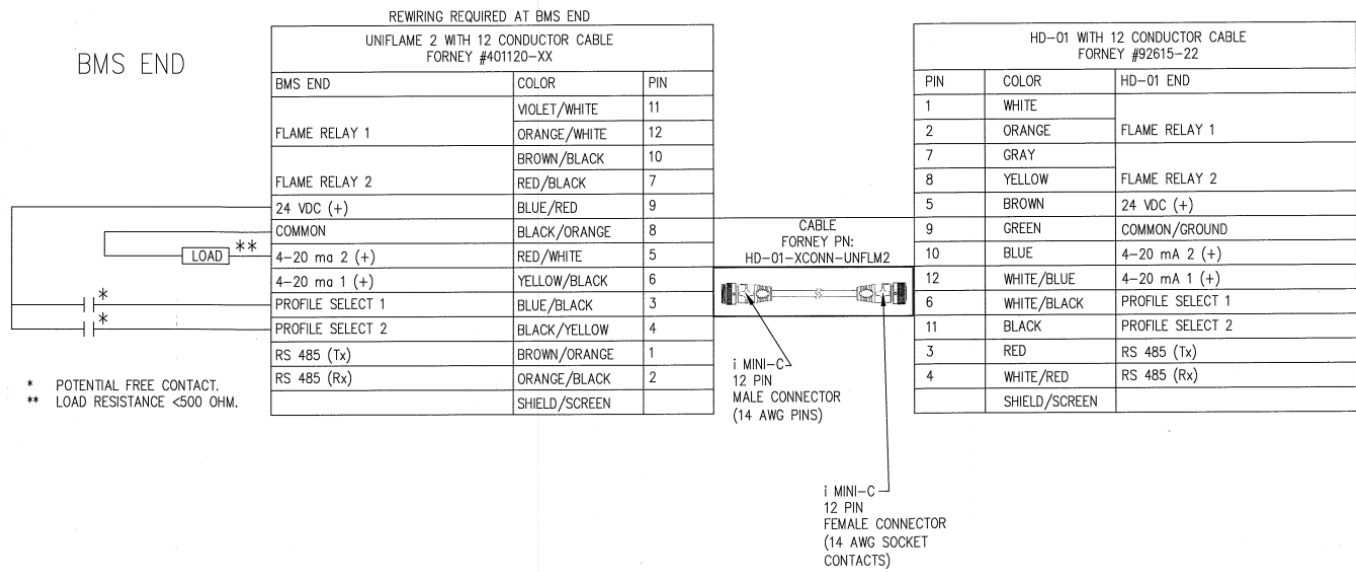


Classic Digital Profile

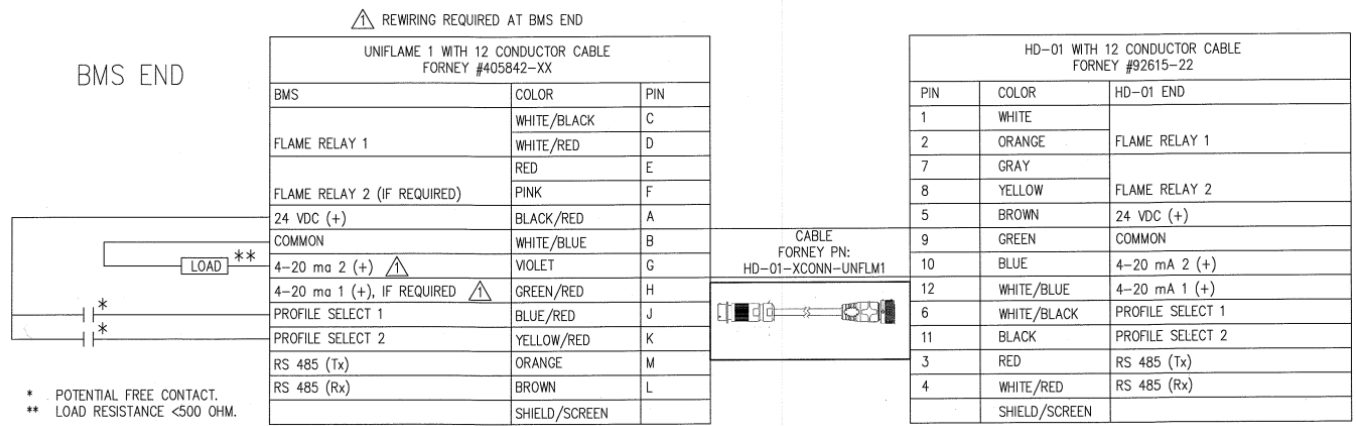


Cable Cross Connect (XCONN) Mappings for using Existing Legacy Cables (Cont.)

UniFlame II



UniFlame I



HD Detector

Detector Details

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
HD-01	HD FLAME DETECTOR, MODEL-01 (UV & IR), FM, IP66 Approved (ZONE 2 APPROVAL PENDING FOR US, EUROPE (ATEX, IECEX), AND CANADA) with Quick Disconnect	B	3	2.6
HD-CABLE-QD-010	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 10 ft	B	3	3.5
HD-CABLE-QD-020	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 20 ft	B	3	5.5
HD-CABLE-QD-030	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 30 ft	B	3	7.5
HD-CABLE-QD-040	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 40 ft	B	20	9.5
HD-CABLE-QD-050	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 50 ft	B	20	11.5
HD-CABLE-QD-060	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 60 ft	B	20	13.5
HD-CABLE-QD-080	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 80 ft	B	20	17.5
HD-CABLE-QD-100	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 100 ft	B	20	21.5
HD-CABLE-QD-120	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 120 ft	B	20	25.5
HD-CABLE-QD-150	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 150 ft	B	20	31.5
HD-CABLE-QD-200	HD Flame Detector 12 Conductor Cable with Quick Disconnect - 200 ft	B	20	41.5
HD-01-XCONN-D85	HD Flame Detector Cable Adapter with D85	B	15	0.9
HD-01-XCONN-UNFLM1	HD Flame Detector Cable Adapter with UniFlame I	B	15	0.8
HD-01-XCONN-UNFLM2	HD Flame Detector Cable Adapter with UniFlame II	B	15	0.9
HD-01-XCONN-DP-CLCS	HD Flame Detector Cable Adapter with DPD CLASSIC	B	15	0.9
FORNEY PRO	HD FORNEY PRO App on App Store & Google Play Store			
HD-FORNEY-IPAD	iPAD, with HD FORNEY PRO App	B	10	1.5
HD-FORNEY-ANDROID	Android Tablet with HD Forney Pro App	B	10	1.3
HD-CONNECT-USB-PACKAGE	Connection Software for HD Tuning with PC via MODBUS	B	3	0.5
91948-98	RS 485 / USB convertor	E	20	1
410964-01	HD-01 Cooling Jacket, Standard Kit	B	30	1.5
410964-02	HD-01 (with Fiber Optics) Cooling Jacket Kit	B	30	1.5
410964-03	HD-01 Cooling Jacket, Standard Kit with Vortex Cooler	B	30	3.0
410964-04	HD-01 (with Fiber Optics) Cooling Jacket Kit with Vortex Cooler	B	30	3.0
79508-81	24 vdc, 50 w , 2.5 amp power supply (up to 5 UniFlame I/II, D85 or HD-01's)	A	15	2.0
79508-82	24 vdc, 100 w , 5 amp power supply (up to 10 UniFlame I/II, D85 or HD-01's)	A	15	2.0
79508-83	24 vdc, 10 w , .65 amp power supply (one HD-01)	A	15	2.0
354943-01	Valve & Wye assembly	B	CF	2.0
75450-06	1" NPT Close Nipple	A	10	0.2
87795-04	Wye Assembly	B	CF	-
409891-50	FO Conversion Kit, UV4 or IDD with cooling chamber to HD	D	30	11.0
410750-00	Optical orifice Plates for HD-01 set of 4	B	10	0.2
FS-01	Forney Flame Simulator - UV/IR	-	20	2.0

HD FO assembly

IR (Glass) FO Assy

Part Number	Description	Sched-ule	Est. Lead Time	Wt
410254-XX	HD Flexible IR FO assembly - includes Fiber Adapter (358824-05), Retaining Ring (90510-00), Disconnect Coupling (90441-00), Reducing (75793-02), 1" NPT Wye, Flex Guide Tube (390509-01), Quartz Fiber Optic Bundle (79664-XX) and necessary screws, washers & o-rings. Length from end of FO adapter to end of outer carrier.			
410254-01	55.38"	B	25	9
410254-02	60.38"	B	25	11
410254-03	65.38"	B	25	13
410254-04	70.38"	B	25	15
410254-05	75.38"	B	25	17
410254-06	80.38"	B	25	19
410254-07	85.38"	B	25	21
410254-08	90.38"	B	25	23
410254-09	95.38"	B	25	25
410254-10	100.38"	B	25	27
410254-11	105.38"	B	25	29
410254-12	110.38"	B	25	31
410254-13	115.38"	B	25	33
410254-14	120.38"	B	25	35
410254-15	45.38"	B	25	9
410254-20	140.38"	B	25	47
410254-21	145.38"	B	25	49
410254-22	150.38"	B	25	51
410254-23	155.38"	B	25	53
410254-24	160.38"	B	25	55
410254-25	165.38"	B	25	57
410254-26	67.88"	B	25	14
410254-27	125.38"	B	25	41
410254-28	130.38"	B	25	43
Part Number	Description	Sched-ule	Est. Lead Time	Wt
410256-XX	HD Rigid IR FO assembly - includes Fiber Optic Adapter (358824-05), Retaining Ring (90510-00), Disconnect Coupling (90441-00), Reducing (75793-02), 1" NPT Wye, Rigid Guide Tube (410256-01), Quartz Fiber Optic Bundle (79664-XX) and necessary screws, washers & o-rings. Length from end of FO adapter to end of outer carrier.			
410256-01	55.38"	B	25	20
410256-02	60.38"	B	25	23
410256-03	65.38"	B	25	26
410256-04	70.38"	B	25	29
410256-05	75.38"	B	25	32
410256-06	80.38"	B	25	35
410256-07	85.38"	B	25	38
410256-08	90.38"	B	25	41
410256-09	95.38"	B	25	44
410256-10	100.38"	B	25	47
410256-11	105.38"	B	25	50
410256-12	110.38"	B	25	53
410256-13	115.38"	B	25	56
410256-14	120.38"	B	25	59
410256-15	125.38"	B	25	62
410256-16	130.38"	B	25	65
410256-17	135.38"	B	25	68
410256-18	140.38"	B	25	71
410256-19	145.38"	B	25	74

UV (Quartz) FO Assy

Part Number	Description	Sched-ule	Est. Lead Time	Wt
410255-XX	HD Flexible UV FO assembly - includes Fiber Adapter (358824-05), Retaining Ring (90510-00), Disconnect Coupling (90441-00), Reducing (75793-02), 1" NPT Wye, Outer Carrier (390509-01), Quartz Fiber Optic Bundle (79882-XX), UV Focusing Lens Assy (90509-01) and necessary screws, washers & o-rings. Length from end of FO adapter to end of outer carrier.			
410255-01	55.38"	B	25	7
410255-02	60.38"	B	25	9
410255-03	65.38"	B	25	11
410255-04	70.38"	B	25	13
410255-05	75.38"	B	25	15
410255-06	80.38"	B	25	17
410255-07	85.38"	B	25	19
410255-08	90.38"	B	25	21
410255-09	95.38"	B	25	23
410255-10	100.38"	B	25	25
410255-11	105.38"	B	25	27
410255-12	110.38"	B	25	29
410255-13	115.38"	B	25	31
410255-14	120.38"	B	25	33
Part Number	Description	Sched-ule	Est. Lead Time	Wt
410256-XX	HD Rigid UV FO assembly - includes Fiber Optic Adapter (358824-05), Retaining Ring (90510-00), Disconnect Coupling (90441-00), Reducing (75793-02), 1" NPT Wye, Rigid Guide Tube (410256-01), Quartz Fiber Optic Bundle (79882-XX), UV Focusing Lens Assy (90509-01) and necessary screws, washers & o-rings. Length from end of FO adapter to end of outer carrier.			
410256-50	55.38"	B	25	20
410256-51	60.38"	B	25	23
410256-52	65.38"	B	25	26
410256-53	70.38"	B	25	29
410256-54	75.38"	B	25	32
410256-55	80.38"	B	25	35
410256-56	85.38"	B	25	38
410256-57	90.38"	B	25	41
410256-58	95.38"	B	25	44
410256-59	100.38"	B	25	47
410256-60	105.38"	B	25	50
410256-61	110.38"	B	25	53
410256-62	115.38"	B	25	56
410256-63	120.38"	B	25	59
410256-64	125.38"	B	25	62
410256-65	130.38"	B	25	65
410256-66	135.38"	B	25	68
410256-67	140.38"	B	25	71

HD to Legacy Detector Fiber Optic Adapter

Part Number	Description	Sched-ule	Est. Lead Time	Wt
358824-05	HD-01 FO Adapter Std -05	B	25	9.0
358824-09	HD-01 FO Adapter -09	B	25	11.0
358824-11	HD-01 FO Adapter -11	B	25	13.0
358824-12	HD-01 FO Adapter -12	B	25	15.0
358824-13	HD-01 FO Adapter -13	B	25	17.0

AMPLIFIERS

IDD 9000 Flame Detector Amplifier

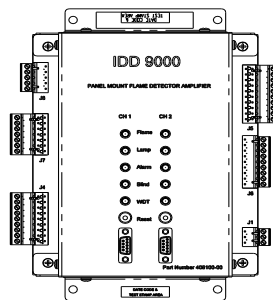
Spec Sheet# 404005-21

Technical Manuals PM # 372001-02 & RM 372001-09

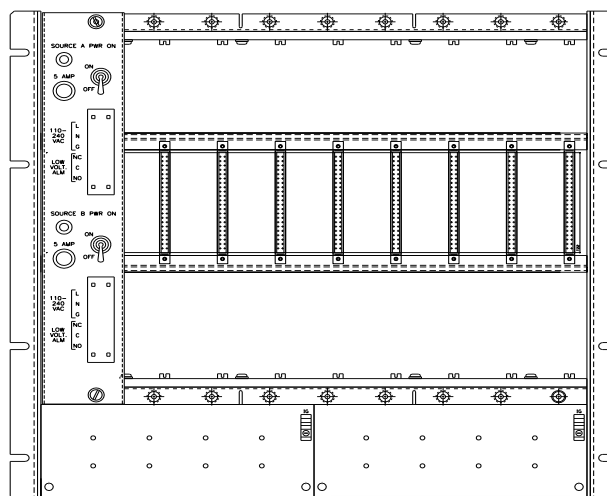
The IDD 9000 employs a Digital Signal Processor (DSP) based flame signal processing method to offer advanced tuning capabilities necessary for a NFPA compliant system. The IDD 9000 works with all versions of Forney's IDD and UV-4 detectors.

The IDD 9000 Flame Amplifier is designed for easy upgrade of existing Forney flame amplifiers with most installations simply requiring a flame amplifier replacement and reconnection of existing wires to improve flame detection and discrimination. The IDD 9000 is available in panel mount (single or dual channel configurations) or rack mount (dual channel configurations). The dual channel configurations use two fully independent channels to support two flame detectors simultaneously.

Legacy amplifiers (RM-IDD, IDD-IIIA, RM-DR 6101E & PM-DR6101E) are obsolete and will only be supplied until inventory is depleted.



PANEL MOUNT
408100-00



RACK MOUNT
404325-01 Rack, Single Power Supply
404325-02 Rack, Redundant Power Supply
408120-01 IDD 9000 Amplifier Card (W/Bezel)
352051-01 Blank Bezel

AMPLIFIERS

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
408100-00	PM IDD 9000, Panel Mount, Dual Channel Amplifier	B	3	5.2
408100-50	PM IDD 9000, Panel Mount, Single Channel Amplifier	B	3	4
408120-01	RM IDD 9000 Amplifier Card (with Bezel), use with Amp Rack 404325-XX	B	3	3.2
92357-02	PM IDD 9000 Replacement Fuse T-LAG 4A	B	0	0.2
92357-03	PM/RM IDD 9000 Replacement Fuse, FAST 250MA	B	0	0.2
92357-04	PM/RM IDD 9000 Replacement Fuse, FAST 125MA	B	0	0.2
92357-12	RM IDD 9000 Replacement Fuse, T-LAG 1.6A	B	0	-
92357-13	RM IDD 9000 Replacement Fuse, FAST 1.0A	B	0	-
92708-12	PM IDD 9000 Replacement Fuse, T-LAG 2A	B	0	-
2820-55	PM IDD 9000 Replacement Fuse, PCB Mount, 62 MA, 100V	B	10	0.1
35205101	Bezel assembly, Blank (Used to cover empty slots)	B	30	1.5
404325-02	Amp Rack assembly 8 slot includes redundant power supplies 120-220 VAC	B	5	-
404358-02	Amp Rack Power Supply	B	CF	4
71311-00	Amp Rack Fuse 5 amp	B	CF	-
	Note: Amplifiers and bezels are not included in amp rack assembly, order separately in the quantity required.			
408106-01	SMART Display programming terminal (Termiflex) with 9-pin connection for IDD 9000 amplifiers	B	15	6
92567-50	Forney Terminal Install Kit; REQUIRES COMPUTER WITH USB - NOT INCLUDED; Kit includes software disc 92567-38, IDD-9000 USB to DB-9 Interface Cable Assy 92528-75, & (for use with legacy amplifiers) DB9F TO DB25M Termiflex Adapter	B	3	-
92528-75	Forney Terminal Interface Cable; FOR USE WITH COMPUTER WITH USB ; requires software disc 92567-38, & (for use with legacy amplifiers) DB9F TO DB25M Termiflex Adapter - NOT INCLUDED	B	3	-
92567-38	Forney Terminal Software; REQUIRES COMPUTER WITH USB , IDD-9000 USB to DB-9 Interface Cable Assy 92528-75, & (for use with legacy amplifiers) DB9F TO DB25M Termiflex Adapter - NOT INCLUDED	A	3	-
FS-01	Forney Flame Simulator - UV/IR	-	20	2

OBSOLETE AMPLIFIERS

Legacy amplifiers (RM-IDD, IDD-IIIA, RM-DR 6101E & PM-DR6101E) are obsolete and will only be supplied until inventory is depleted.

Part Number	Description	Schedule	Est. Lead Time	Wt
384821-01	PM-DR6101E Dual Range Amplifier, panel mounted w/o connectors	B	3	5.5
78701-07	PM6101E Replacement Fuse, 1.0 Amp Fuse	B	CF	0.2
78701-05	PM6101E Replacement Fuse, 0.25 Amp Fuse	B	CF	0.2
388056-01	RM-DR6101E Dual Range Amplifier Card (w/o bezel)	B	3	1.5
78701-10	RM-IDD & PM / RM 6101E Replacement Fuse, 0.125 Amp Fuse	B	CF	0.2
78701-06	RM6101E Replacement Fuse, 0.5 Amp Fuse	B	CF	0.2
78701-01	RM-IDD & RM6101E Replacement Fuse, 2 Amp Fuse	B	CF	0.2
384817-01	Bezel Assembly for Rack Mounted DR6101E Amplifier	B	CF	0.4
36237901	IDD IIIA Panel mount amplifier	B	3	4.2
35831701	RM-IDD Amplifier	B	3	-
364740-01	Bezel assembly for RM-IDD Amplifier	B	3	0.4
35205101	Bezel assembly, Blank (Used to cover empty slots)	B	30	1.5
36483902	SMART Display programming terminal (Termiflex) with 25-pin connection for legacy amplifiers (PM/RM-DR6101E and RM-IDD)	B	3	6
408107-01	DB9M to DB25F adapter, use with 364839-02 for IDD 9000 (408100-00 or 408100-50)	B	CF	0.2

IDD FLAME DETECTOR

Spec Sheet# 404005-05

Technical Manual#372000-05

Forney's Intelligent Dynamic Detector (IDD) is designed to accurately detect and discriminate the luminous flames produced by gas, oil, coal, and lignite fuels. The new high temperature Ultra version is designed to accurately detect and discriminate the radiation produced by the combustion of natural gas or light oil. The IDD-IIU (unfiltered) flame detector is generally used for sensing oil and coal flames. The IDD-IIL (lignite) flame detector is specifically designed to sense the low flame frequency produced by lignite flames.

The IDD-II infrared family and the Ultra UV detectors excel as a high-discrimination detector in difficult applications when used with the PM IDD 9000 or RM IDD 9000 amplifiers.

IDD-II, IIU & Ultra Front Mount Applications Drawing

DIRECT MOUNT

Sight Pipe, 3"NPT
(By Others)

Reducer, 3"x1"NPT (Optional)
74947-03

1"NPT Valve and Wye (Optional)
354943-01

DIRECT MOUNT WITH SWIVEL

Reducer, 3"x2"NPT
(Optional)
74947-05

Mount, Swivel
91016-63

Nipple, Close, 2"NPT (Optional)
75452-09

1"NPT Valve and Wye (Optional)
354943-

DIRECT MOUNT WITH COOLING CHAMBER

Reducer, 3"x1"NPT (Optional)
74947-03

Nipple, Close, 1"NPT
75450-06

Isolation Valve, 1"NPT
70065-10

Cooling Chamber, IDD
Assembly 381071-01

Nipple, Close 1"NPT
75450-06

Isolation Valve, 1"NPT
70065-10

DIRECT MOUNT WITH SWIVEL AND COOLING CHAMBER

Reducer, 3"x2"NPT (Optional)
74947-05

Mount, Swivel
91016-63

Nipple, Close, 1"NPT
75450-06

Cooling Chamber, IDD
Assembly 381071-01

Nipple, Close, 2"NPT (Optional)
75450-09

Isolation Valve, 1"NPT
70065-10

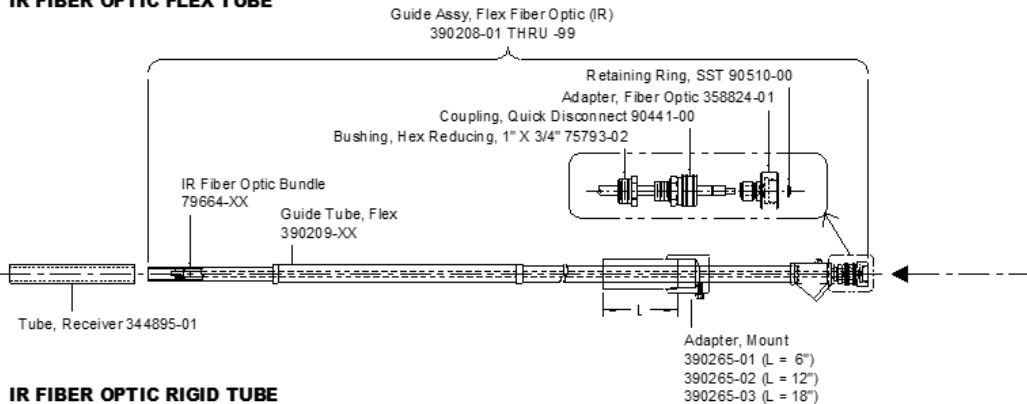
Bracket,
Cable Support
364524-01
(Not Used With
Cooling Chamber)

Cable, IDD
399854-04 (40 Ft)
399854-06 (60 Ft)
399854-10 (100 Ft)
To Amplifier

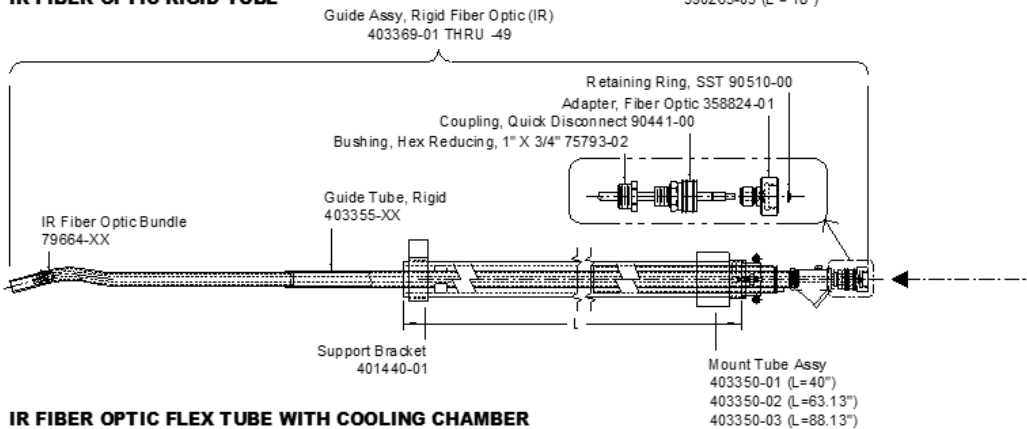
Detector
IDD-II 38321-21 (IR Filtered)
IDD-IIU 38321-22 (IR Unfiltered)
IDD-IIL 38321-23 (Lignite)
IDD-ULTRA 38321-29 (UV)

IDD-II & IIU Fiber Optic Mount Applications Drawing

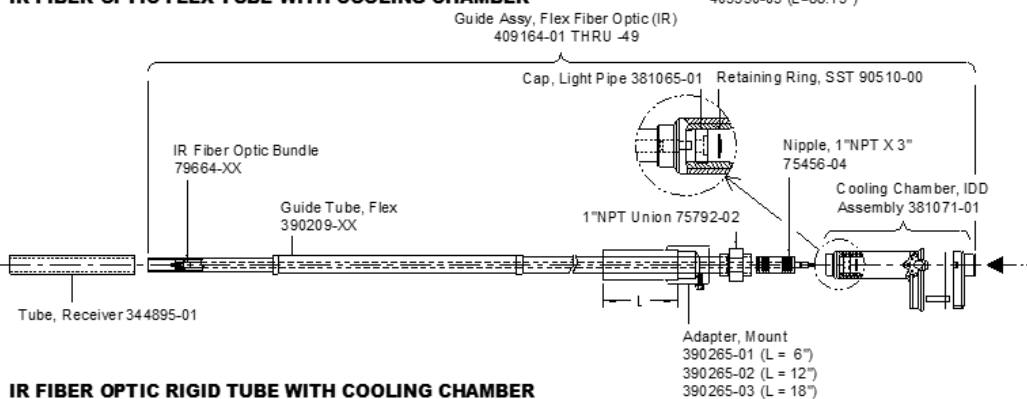
IR FIBER OPTIC FLEX TUBE



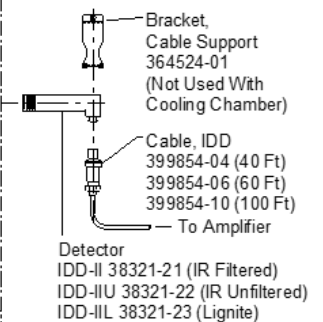
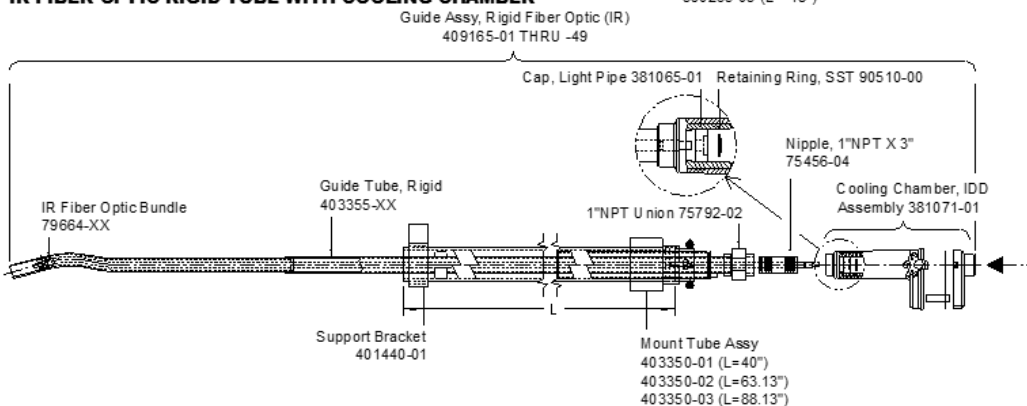
IR FIBER OPTIC RIGID TUBE



IR FIBER OPTIC FLEX TUBE WITH COOLING CHAMBER

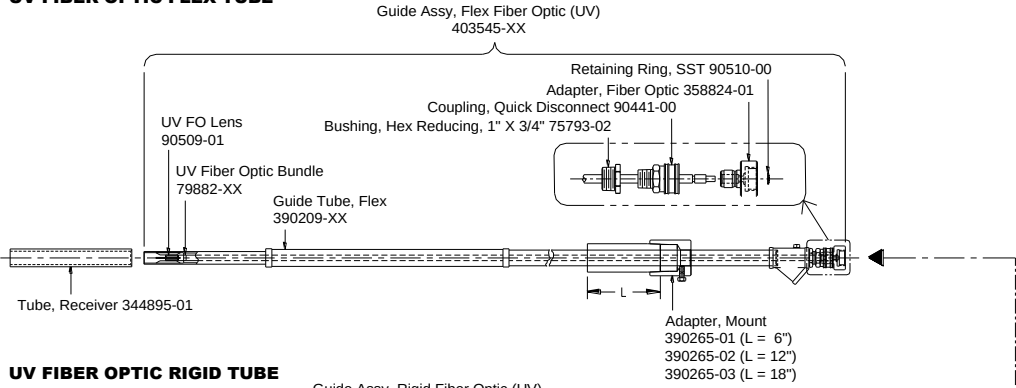


IR FIBER OPTIC RIGID TUBE WITH COOLING CHAMBER

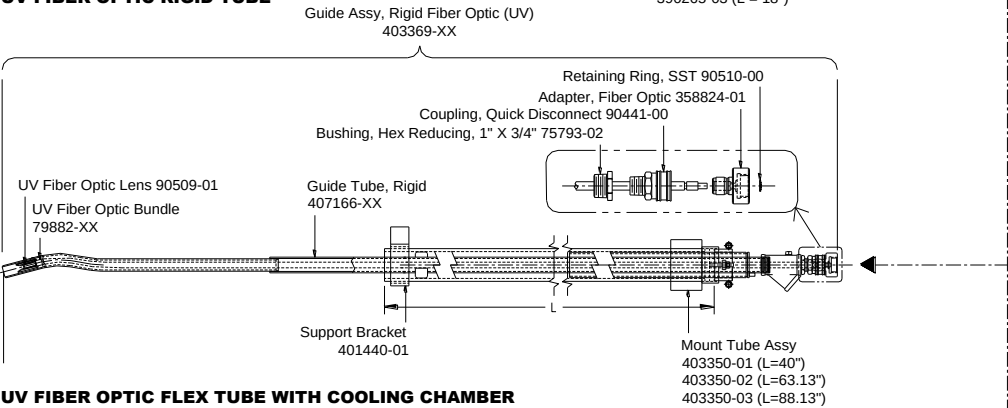


IDD-Ultra Fiber Optic Mount Applications Drawing

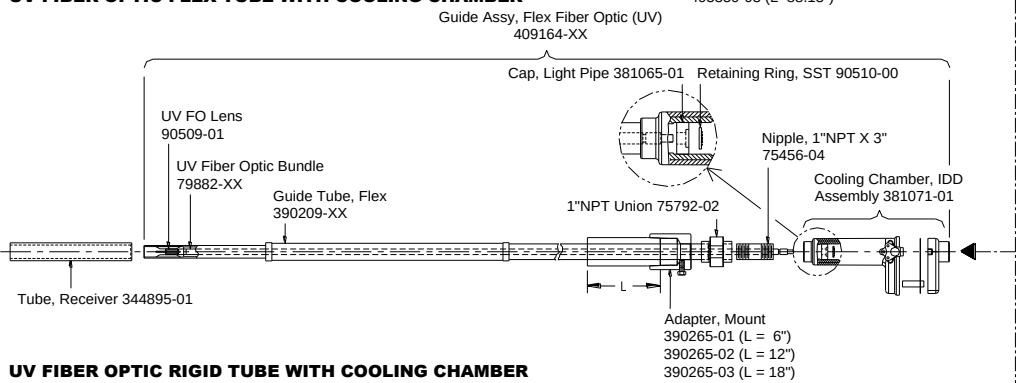
UV FIBER OPTIC FLEX TUBE



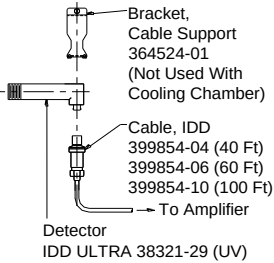
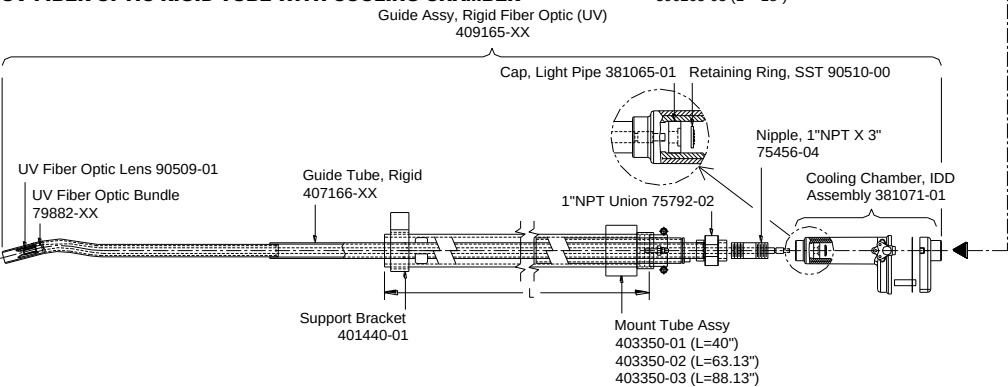
UV FIBER OPTIC RIGID TUBE



UV FIBER OPTIC FLEX TUBE WITH COOLING CHAMBER

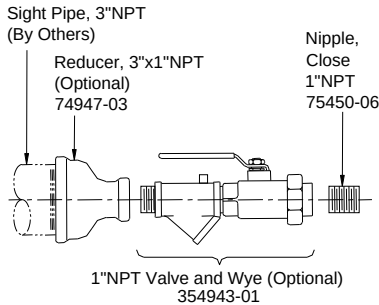


UV FIBER OPTIC RIGID TUBE WITH COOLING CHAMBER

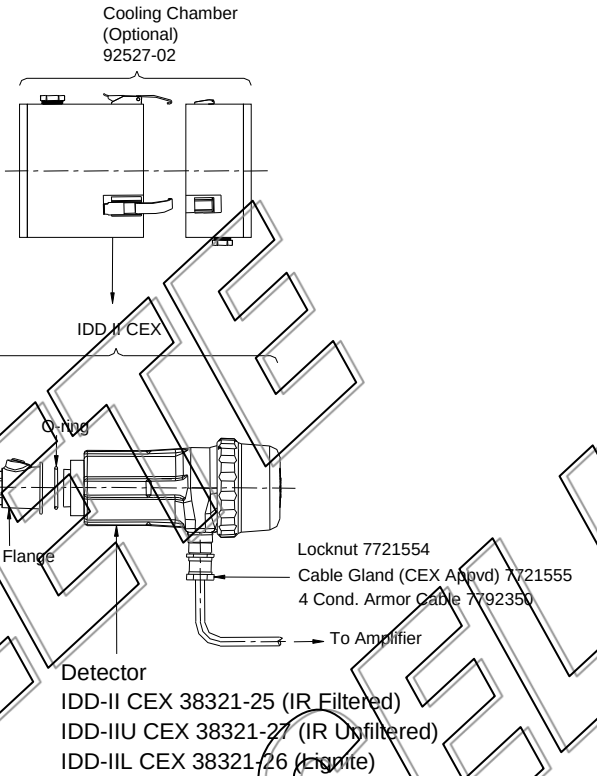
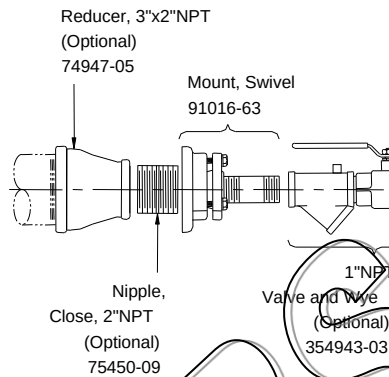


IDD CEX Direct Mount Applications Drawing

DIRECT MOUNT

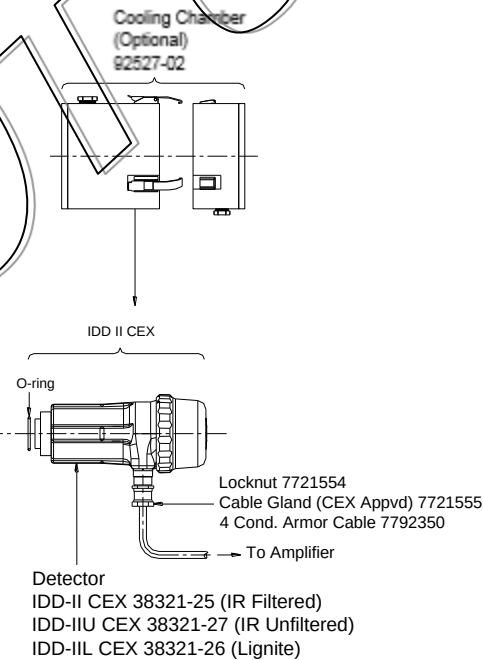
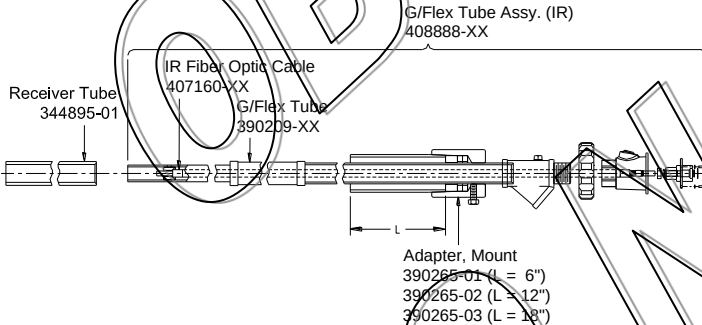


DIRECT MOUNT W/SWIVEL

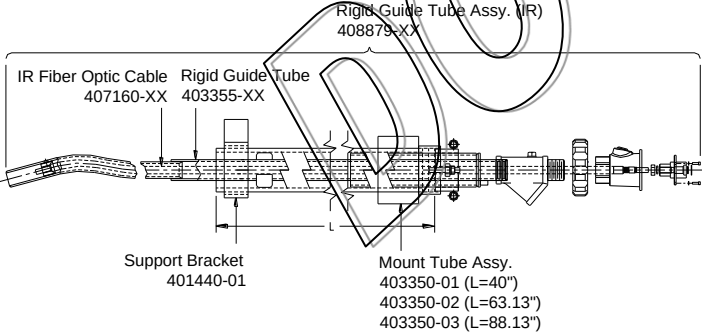


IDD-II CEX Fiber Optic Applications Drawing

IR FIBER OPTIC FLEX TUBE



IR FIBER OPTIC RIGID TUBE



IDD DETECTOR

Detector

IDD Detectors require a Forney Amplifier for operation

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
38321-21	IDD II Detector	B	3	1.2
38321-22	IDD IIU Detector, Unfiltered	B	3	1.2
38321-23	IDD IIL Detector, Low band for Lignite applications	B	CF	1.2
38321-29	IDD ULTRA Detector, UV High Temp	B	CF	1.2
370279-01	Junction Box for use with IDD-ULTRA and existing IDD cables - 1 top & 1 bottom entrances	B	25	2
370279-03	Junction Box for use with IDD-ULTRA and existing IDD cables - 2 bottom entrances	B	25	2
381071-01	IDD Cooling Chamber for use in ambient temperature above 140 F and below 200 F	B	CF	3
409959-01	Optical Amplifier for IDD ULTRA	B	25	2
358824-01	Adapter- used with IDD detector, fiber optic (can be used with P/N 90441-00)	B	CF	1
344803-01	IDD II Fiber Optic Adapter (includes Light Guide Adapter (344803-02) and SST Retaining Ring (90510-00))	B	CF	1
391277-01	IDD II/IIU/IIL Detector Fiber Optic Adapter Assy (includes Fiber Optic Adapter (358824-01), Retaining Ring (90510-00), Quick Disconnect Coupling (90441-00), Reducing Bushing (75793-02), 1" NPT Wye with manometer tap (383340-01), 1/8" NPT Plug	B	CF	-
310253-01	PCB PA101E filtered for IDD IICEX 38321-25	B	CF	0.5
310253-04	PCB PA101E unfiltered for IDD IIUCEX 38321-27	B	CF	0.5
355831-02	PCB PA101FJI for IDD IJ	B	CF	0.5
75450-06	1" NPT Close Nipple	A	10	0.2
70065-10	1" NPT Ball Valve	B	12	1.4
367813-01	NPT to BSP Adapter	B	22	-
354943-01	Valve & Wye assembly	B	CF	2
87795-04	Wye Assembly	B	CF	-
364524-01	IDD II Cable Support Bracket MODEL 92 - for 38321-21, -22 & -23	B	CF	1
76967-00	Connector, IDD Cable	B	20	1
77215-01	Adaptor, IDD Cable, 1/2"	B	20	1
77923-07	Cable, IDD, 4 COND 20 AWG - Price per foot	B	CF	1

IDD Cable Assemblies
Cable

Part Number	Description	Schedule	Est. Lead Time	Wt
399854-01	10 FT. (3.0m)	B	CF	0.5
399854-02	20 FT. (6.1m)	B	CF	1
399854-03	30 FT. (9.1m)	B	CF	1.5
399854-04	40 FT. (12.2m)	B	CF	2.1
399854-05	50 FT. (15.2m)	B	CF	2.6
399854-06	60 FT. (18.3m)	B	CF	3.1
399854-07	70 FT. (21.3m)	B	CF	3.6
399854-08	80 FT. (24.4m)	B	CF	4.1
399854-09	90 FT. (27.4m)	B	CF	4.6
399854-10	100 FT. (30.5m)	B	CF	5.2
399854-11	110 FT. (33.5m)	B	CF	5.7
399854-12	120 FT. (36.6m)	B	CF	6.2
399854-13	130 FT. (39.6m)	B	CF	6.7
399854-14	140 FT. (42.7m)	B	CF	7.2
399854-15	150 FT. (45.7m)	B	CF	7.7
399854-16	160 FT. (48.8m)	B	CF	8.2
399854-17	170 FT. (51.8m)	B	CF	8.8
399854-18	180 FT. (54.9m)	B	CF	9.3
399854-19	190 FT. (57.9m)	B	CF	9.8
399854-20	200 FT. (61.0m)	B	CF	10
399854-21	210 FT. (64.0m)	B	CF	11
399854-22	220 FT. (67.1m)	B	CF	11
399854-23	230 FT. (70.1m)	B	CF	12
399854-24	240 FT. (73.2m)	B	CF	12
399854-25	250 FT. (76.2m)	B	CF	13
399854-26	260 FT. (79.2m)	B	CF	13
399854-27	270 FT. (82.3m)	B	CF	14
399854-28	280 FT. (85.3m)	B	CF	14
399854-29	290 FT. (88.4m)	B	CF	15
399854-30	300 FT. (91.4m)	B	CF	15
399854-33	330 FT. (100.6m)	B	CF	17
399854-34	340 FT. (103.6m)	B	CF	18
399854-35	350 FT. (106.7m)	B	CF	18

IDD-II/IIU Flexible IR FO assembly
FO Assy

Part Number	Description	Schedule	Est. Lead Time	Wt
390208-XX	IDD-II/IIU Flexible IR FO assembly - includes Fiber Optic Adapter (358824-01), Retaining Ring (90510-00), Quick Disconnect Coupling (90441-00), Reducing Bushing (75793-02), 1" NPT Wye, Outer Carrier, Glass Fiber Optic Bundle (79664-XX) and necessary screws, washers & o-rings. Length from scanner end of FO to end of outer carrier.			
390208-15	45.38"	B	CF	9
390208-01	55.38"	B	CF	9
390208-02	60.38"	B	CF	11
390208-03	65.38"	B	CF	13
390208-04	70.38"	B	CF	15
390208-05	75.38"	B	CF	17
390208-06	80.38"	B	CF	19
390208-07	85.38"	B	CF	21
390208-08	90.38"	B	CF	23
390208-09	95.38"	B	CF	25
390208-10	100.38"	B	CF	27
390208-11	105.38"	B	CF	29
390208-12	110.38"	B	CF	31
390208-13	115.38"	B	CF	33
390208-14	120.38"	B	CF	35
390208-27	125.38"	B	CF	37
390208-28	130.38"	B	CF	39
390208-29	135.38"	B	CF	41
390208-20	140.38"	B	CF	41
390208-21	145.38"	B	CF	43
390208-22	150.38"	B	CF	45
390208-23	155.38"	B	CF	47
390208-24	160.38"	B	CF	49
390208-25	165.38"	B	CF	51

Application Note: The fiber optic light guide must be 5.5" longer than the outer carrier. 1.5" to 2" "compression" of fiber optic light guide is included in 5.5".

IDD-II/IIU Fiber Optic Assemblies

Part Number	Description	Schedule	Est. Lead Time	Wt
409164-XX	IDD-II/IIU Flexible IR FO and Cooling Chamber assembly - includes Cooling Chamber (381071-01), Light Pipe Cap (381065-01), Retaining Ring (90510-00), Nipple, Union, Outer Carrier, Glass Fiber Optic Bundle (79664-XX) and necessary screws, washers & o-rings. Length from scanner end of FO to end of outer carrier.			
409164-15	45"	B	CF	12
409164-01	55"	B	CF	12
409164-02	60"	B	CF	14
409164-03	65"	B	CF	16
409164-04	70"	B	CF	18
409164-05	75"	B	CF	20
409164-06	80"	B	CF	22
409164-07	85"	B	CF	24
409164-08	90"	B	CF	26
409164-09	95"	B	CF	28
409164-10	100"	B	CF	30
409164-11	105"	B	CF	32
409164-12	110"	B	CF	34
409164-13	115"	B	CF	36
409164-14	120"	B	CF	38
409164-17	125"	B	CF	40
409164-18	130"	B	CF	42
409164-19	135"	B	CF	44
409164-20	140"	B	CF	46
403369-XX	IDD-II/IIU Rigid IR FO assembly - includes Fiber Optic Adapter (358824-01), Retaining Ring (90510-00), Quick Disconnect Coupling (90441-00), Reducing Bushing (75793-02), 1" NPT Wye, Rigid Guide Tube, Glass Fiber Optic Bundle (79664-XX) and necessary screws, washers & o-rings.			
403369-01	55.38"	B	CF	20
403369-02	60.38"	B	CF	23
403369-03	65.38"	B	CF	26
403369-04	70.38"	B	CF	29
403369-05	75.38"	B	CF	32
403369-06	80.38"	B	CF	35
403369-07	85.38"	B	CF	38
403369-08	90.38"	B	CF	41
403369-09	95.38"	B	CF	44
403369-10	100.38"	B	CF	47
403369-11	105.38"	B	CF	50
403369-12	110.38"	B	CF	53
403369-13	115.38"	B	CF	56
403369-14	120.38"	B	CF	59

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
409165-XX	IDD-II/IIU Rigid IR FO and Cooling Chamber assembly - includes Cooling Chamber (381071-01), Light Pipe Cap (381065-01), Retaining Ring (90510-00), Nipple, Union, Rigid Guide Tube, Glass Fiber Optic Bundle (79664-XX) and necessary screws, washers & o-rings.			
409165-01	55"	B	CF	20
409165-02	60"	B	CF	23
409165-03	65"	B	CF	26
409165-04	70"	B	CF	29
409165-05	75"	B	CF	32
409165-06	80"	B	CF	35
409165-07	85"	B	CF	38
409165-08	90"	B	CF	41
409165-09	95"	B	CF	44
409165-10	100"	B	CF	47
409165-11	105"	B	CF	50
409165-12	110"	B	CF	53
409165-13	115"	B	CF	56
409165-14	120"	B	CF	59

Application Note: The fiber optic light guide must be 5.5" longer than the outer carrier. 1.5" to 2" "compression" of fiber optic light guide is included in 5.5".

IDD-Ultra Fiber Optic Assemblies

Part Number	Description	Sched-ule	Est. Lead Time	Wt
403545-XX	IDD-Ultra Flexible UV FO assembly - includes Fiber Optic Adapter (358824-01), Retaining Ring (90510-00), Quick Disconnect Coupling (90441-00), Reducing Bushing (75793-02), 1" NPT Wye, Outer Carrier (390209-XX), Quartz Fiber Optic Bundle (79882-XX), UV Fiber Optic lens assy (90509-01) and necessary screw s, washers & o-rings. Length from scanner end of FO to end of outer carrier.			
403545-01	55"	B	CF	7
403545-02	60"	B	CF	9
403545-03	65"	B	CF	11
403545-04	70"	B	CF	13
403545-05	75"	B	CF	15
403545-06	80"	B	CF	17
403545-07	85"	B	CF	19
403545-08	90"	B	CF	21
403545-09	95"	B	CF	23
403545-10	100"	B	CF	25
403545-11	105"	B	CF	27
403545-12	110"	B	CF	29
403545-13	115"	B	CF	31
403545-14	120"	B	CF	33
403545-15	125"	B	CF	35
403545-16	130"	B	CF	37
403545-17	135"	B	CF	39
409164-XX	IDD-Ultra Flexible UV FO and Cooling Chamber assembly - includes Cooling Chamber (381071-01), Light Pipe Cap (381065-01), Retaining Ring (90510-00), Nipple, Union, Outer Carrier, Quartz Fiber Optic Bundle (79882-XX), UV Fiber Optic lens assy (90509-01) and necessary screw s, washers & o-rings. Length from scanner end of FO to end of outer carrier.			
409164-50	55"	B	CF	12
409164-51	60"	B	CF	14
409164-52	65"	B	CF	16
409164-53	70"	B	CF	18
409164-54	75"	B	CF	20
409164-55	80"	B	CF	22
409164-56	85"	B	CF	24
409164-57	90"	B	CF	26
409164-58	95"	B	CF	28
409164-59	100"	B	CF	30
409164-60	105"	B	CF	32
409164-61	110"	B	CF	34
409164-64	125"	B	CF	12
409164-65	130"	B	CF	40
409164-66	135"	B	CF	42

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
403369-XX	IDD-Ultra Rigid UV FO assembly - includes Fiber Optic Adapter (358824-01), Retaining Ring (90510-00), Quick Disconnect Coupling (90441-00), Reducing Bushing (75793-02), 1" NPT Wye, Rigid Guide Tube (407166-XX), Quartz Fiber Optic Bundle (79882-XX), UV Fiber Optic lens assy (90509-01) and necessary screw s, washers & o-rings.			
403369-50	55"	B	CF	20
403369-51	60"	B	CF	23
403369-52	65"	B	CF	26
403369-53	70"	B	CF	29
403369-54	75"	B	CF	32
403369-55	80"	B	CF	35
403369-56	85"	B	CF	38
403369-57	90"	B	CF	41
403369-58	95"	B	CF	44
403369-59	100"	B	CF	47
403369-60	105"	B	CF	50
403369-61	110"	B	CF	53
403369-62	115"	B	CF	56
403369-63	120"	B	CF	59
403369-64	125"	B	CF	62
403369-65	130"	B	CF	65
403369-66	135"	B	CF	68
403369-68	145"	B	CF	71
409165-XX	IDD-Ultra Rigid UV and Cooling Chamber assembly - includes Cooling Chamber (381071-01), Light Pipe Cap (381065-01), Retaining Ring (90510-00), Nipple, Union, Rigid Guide Tube, Quartz Fiber Optic Bundle (79882-XX), UV Fiber Optic lens assy (90509-01) and			
409165-50	55"	B	CF	20
409165-51	60"	B	CF	23
409165-52	65"	B	CF	26
409165-53	70"	B	CF	29
409165-54	75"	B	CF	32
409165-55	80"	B	CF	35
409165-56	85"	B	CF	38
409165-57	90"	B	CF	41
409165-58	95"	B	CF	44
409165-59	100"	B	CF	47
409165-60	105"	B	CF	50
409165-61	110"	B	CF	53
409165-62	115"	B	CF	56
409165-63	120"	B	CF	59
409165-64	125"	B	CF	62
409165-65	130"	B	CF	65
409165-66	135"	B	CF	68
409165-68	145"	B	CF	71
409165-69	150"	B	CF	74
409165-70	155"	B	CF	77

UV - 4 FLAME DETECTOR

Spec Sheet # 404005-17

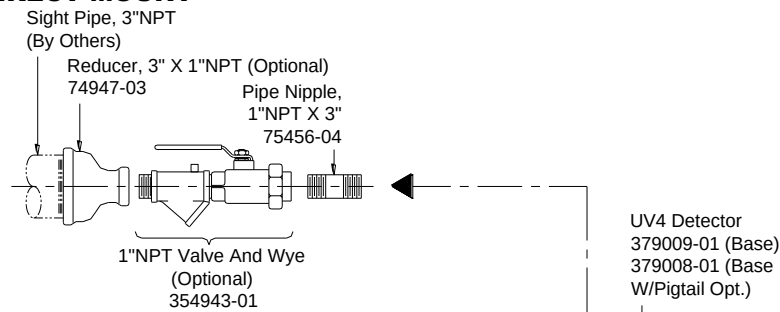
Technical Manual#372000-28

Forney's Model UV-4 flame detector is applicable to all gas burners. The UV-4 Flame Detector is used in conjunction with the Forney PM IDD 9000 or the DR-6101E Amplifier and is connected by a four-conductor, shielded, prefabricated cable.

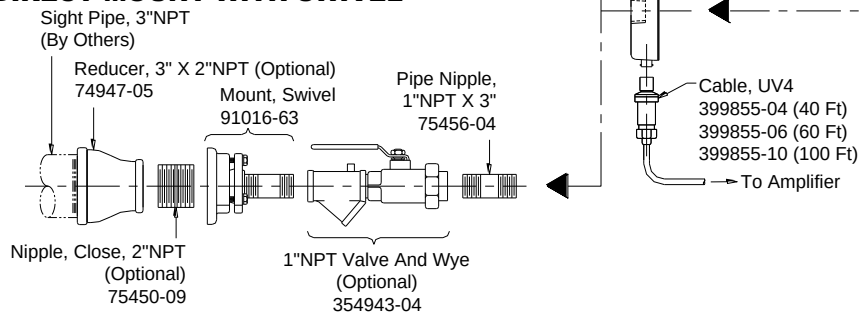
The UV-4 Flame Detector assembly is available with two different base configurations. One is the "front mount" with lens, and the other is the "fiber optic mount" for tilting type burners and difficult flame sighting applications.

Front Mount Applications Drawing

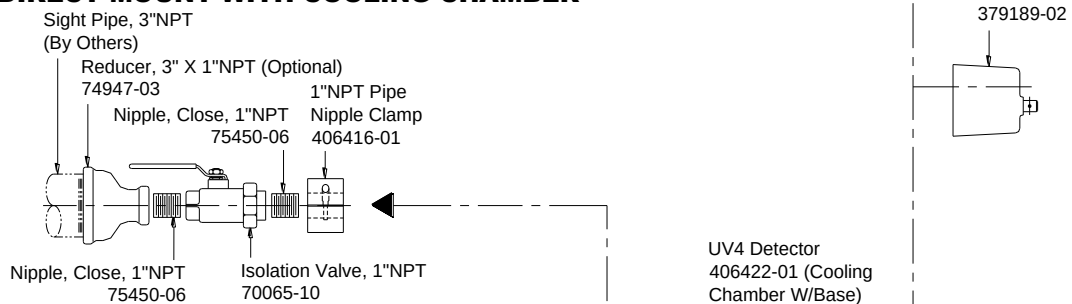
DIRECT MOUNT



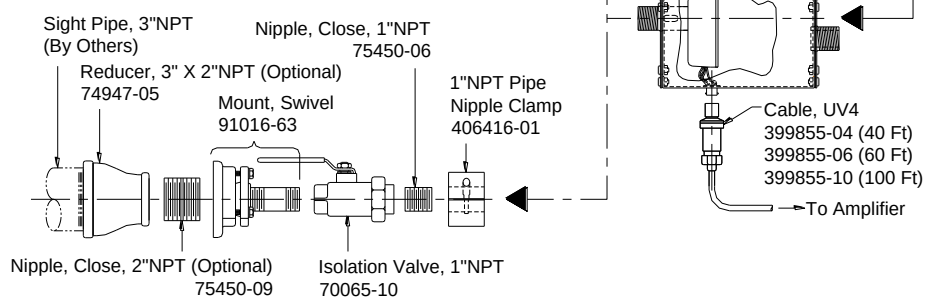
DIRECT MOUNT WITH SWIVEL



DIRECT MOUNT WITH COOLING CHAMBER



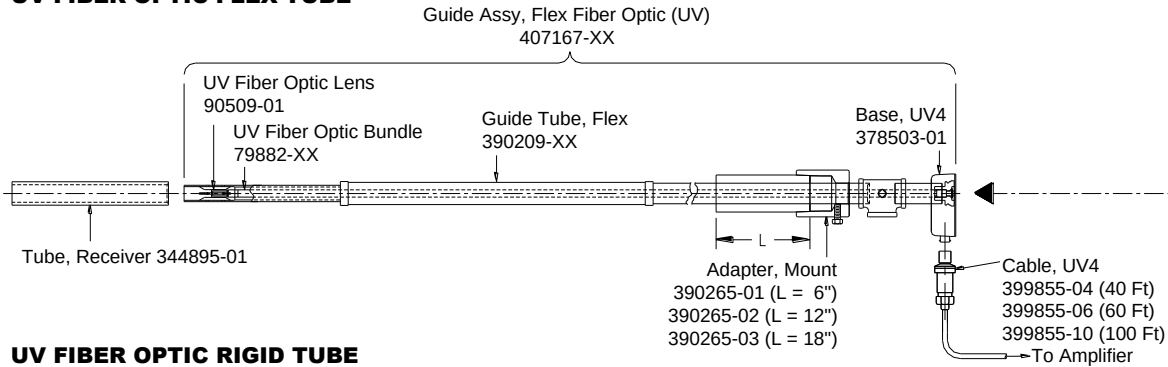
DIRECT MOUNT WITH SWIVEL AND COOLING CHAMBER



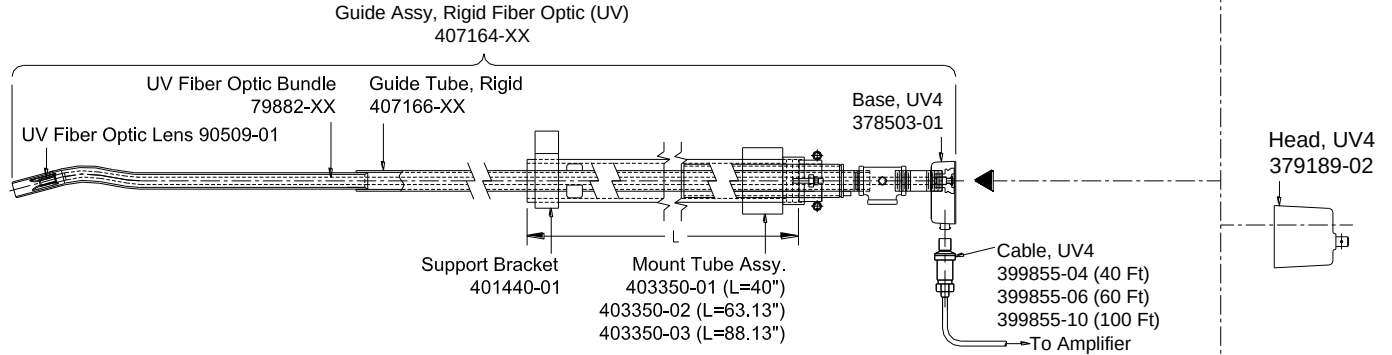
UV-4 DETECTOR

Fiber Optic Mount Applications Drawing

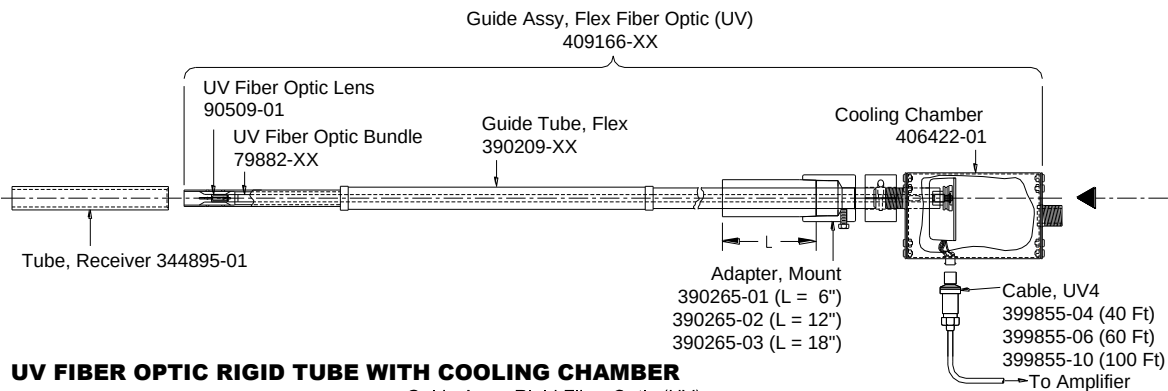
UV FIBER OPTIC FLEX TUBE



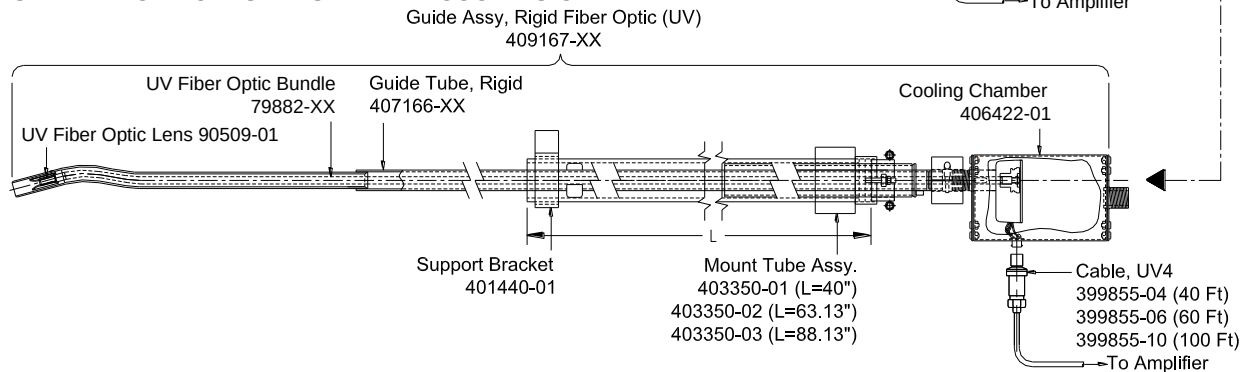
UV FIBER OPTIC RIGID TUBE



UV FIBER OPTIC FLEX TUBE WITH COOLING CHAMBER



UV FIBER OPTIC RIGID TUBE WITH COOLING CHAMBER



UV-4 FLAME DETECTOR

Detector

UV-4 Detectors require a Forney IDD Amplifier for operation

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
379189-02	UV4 UV Flame Detector	B	3	3
379009-01	Base for UV4 with MILITARY connector	B	3	1.3
379008-01	Base for UV4 with PIGTAIL connector	B	CF	1.8
378503-01	Base for UV4 in fiber optic applications (must order adapter kit separately)	B	CF	1.3
406422-01	UV-4 Detector Cooling chamber, includes base with military connector	B	CF	-
393677-01	UV4 Cable end (KIT)	B	CF	-
77923-06	Cable, UV-4, 4 COND 2 EA 20 AWG/2 EA 18 AWG, price per foot	B	CF	-
70065-10	1" NPT Ball Valve	B	12	1.4
379182-01	4" Flange with 1"NPT Detector Mount	B	CF	-
367813-01	NPT to BSP Adapter	B	22	-
354943-01	Valve & Wye assembly	B	CF	2
87795-04	Wye Assembly	B	CF	-
391278-01	UV-4 Detector Fiber Optic Adapter Kit (with lens), converts Front Mount to fiber Optic mount	B	CF	-

Cable

Part Number	Description	Schedule	Est. Lead Time	Wt
UV4 Cable, 4 Conductor, Prefabricated in 10 FT increments				
399855-01	10 FT. (3.0m)	B	CF	0.5
399855-02	20 FT. (6.1m)	B	CF	1.1
399855-03	30 FT. (9.1m)	B	CF	1.6
399855-04	40 FT. (12.2m)	B	CF	2.1
399855-05	50 FT. (15.2m)	B	CF	2.7
399855-06	60 FT. (18.3m)	B	CF	3.2
399855-07	70 FT. (21.3m)	B	CF	3.7
399855-08	80 FT. (24.4m)	B	CF	4.2
399855-09	90 FT. (27.4m)	B	CF	4.8
399855-10	100 FT. (30.5m)	B	CF	5.3
399855-11	110 FT. (33.5m)	B	CF	5.8
399855-12	120 FT. (36.6m)	B	CF	6.4
399855-13	130 FT. (39.6m)	B	CF	6.9
399855-14	140 FT. (42.7m)	B	CF	7.4
399855-15	150 FT. (45.7m)	B	CF	8
399855-16	160 FT. (48.8m)	B	CF	8.5
399855-17	170 FT. (51.8m)	B	CF	9
399855-18	180 FT. (54.9m)	B	CF	9.5
399855-19	190 FT. (57.9m)	B	CF	10
399855-20	200 FT. (61.0m)	B	CF	11
399855-21	210 FT. (64.0m)	B	CF	11
399855-22	220 FT. (67.1m)	B	CF	12
399855-23	230 FT. (70.1m)	B	CF	12
399855-24	240 FT. (73.2m)	B	CF	13
399855-25	250 FT. (76.2m)	B	CF	13
399855-26	260 FT. (79.2m)	B	CF	14
399855-27	270 FT. (82.3m)	B	CF	14
399855-28	280 FT. (85.3m)	B	CF	15
399855-29	290 FT. (88.4m)	B	CF	15
399855-30	300 FT. (91.4m)	B	CF	16

Part Number	Description	Schedule	Est. Lead Time	Wt
UV4 Cable, 4 Conductor, Prefabricated in 10 FT increments				
399855-31	310 FT. (94.5m)	B	CF	16
399855-32	320 FT. (97.5m)	B	CF	17
399855-33	330 FT. (100.6m)	B	CF	17
399855-34	340 FT. (103.6m)	B	CF	18
399855-35	350 FT. (106.7m)	B	CF	19
399855-36	360 FT. (109.7m)	B	CF	19
399855-37	370 FT. (112.8m)	B	CF	20
399855-38	380 FT. (115.8m)	B	CF	20
399855-39	390 FT. (118.9m)	B	CF	21
399855-40	400 FT. (121.9m)	B	CF	21
399855-41	410 FT. (125.0m)	B	CF	22
399855-42	420 FT. (128.0m)	B	CF	22
399855-43	430 FT. (131.1m)	B	CF	23
399855-44	440 FT. (134.1m)	B	CF	23
399855-45	450 FT. (137.2m)	B	CF	24
399855-46	460 FT. (140.2m)	B	CF	24
399855-47	470 FT. (143.3m)	B	CF	25
399855-48	480 FT. (146.3m)	B	CF	25
399855-49	490 FT. (149.4m)	B	CF	26
399855-50	500 FT. (152.4m)	B	CF	27
399855-51	510 FT. (155.4m)	B	CF	27
399855-52	520 FT. (158.5m)	B	CF	28
399855-53	530 FT. (161.5m)	B	CF	28
399855-54	540 FT. (164.6m)	B	CF	29
399855-55	550 FT. (167.6m)	B	CF	29
399855-56	560 FT. (173.7m)	B	CF	30
399855-57	570 FT. (176.8m)	B	CF	30
399855-58	580 FT. (179.8m)	B	CF	31
399855-59	590 FT. (182.9m)	B	CF	31
399855-60	600 FT. (185.9m)	B	CF	32

UV-4 Cable (continued)

Part Number	Description	Schedule	Est. Lead Time	Wt
UV4 Cable, 4 Conductor, Prefabricated in 10 FT increments				
399855-61	610 FT. (189.0m)	B	CF	32
399855-62	620 FT. (192.0m)	B	CF	33
399855-63	630 FT. (195.0m)	B	CF	33
399855-64	640 FT. (198.1m)	B	CF	34
399855-65	650 FT. (201.2m)	B	CF	34
399855-66	660 FT. (204.2m)	B	CF	35
399855-67	670 FT. (207.3m)	B	CF	36
399855-68	680 FT. (210.3m)	B	CF	36
399855-69	690 FT. (213.4m)	B	CF	37
399855-70	700 FT. (216.4m)	B	CF	37
399855-71	710 FT. (219.5m)	B	CF	38
399855-72	720 FT. (222.5m)	B	CF	38
399855-73	730 FT. (225.6m)	B	CF	39
399855-74	740 FT. (228.6m)	B	CF	39
399855-75	750 FT. (231.7m)	B	CF	40
399855-76	760 FT. (234.7m)	B	CF	40
399855-77	770 FT. (237.7m)	B	CF	41
399855-78	780 FT. (240.8m)	B	CF	41
399855-79	790 FT. (243.8m)	B	CF	42
399855-80	800 FT. (246.9m)	B	CF	42
399855-81	810 FT. (249.9m)	B	CF	43
399855-82	820 FT. (253.0m)	B	CF	43
399855-83	830 FT. (256.0m)	B	CF	44
399855-84	840 FT. (259.0m)	B	CF	45
399855-85	850 FT. (262.1m)	B	CF	45
399855-86	860 FT. (265.2m)	B	CF	46
399855-87	870 FT. (268.2m)	B	CF	46
399855-88	880 FT. (271.3m)	B	CF	47
399855-89	890 FT. (274.3m)	B	CF	47
399855-90	900 FT. (277.4m)	B	CF	48
399855-91	910 FT. (280.4m)	B	CF	48
399855-92	920 FT. (283.5m)	B	CF	49
399855-93	930 FT. (286.5m)	B	CF	49
399855-94	940 FT. (289.6m)	B	CF	50
399855-95	950 FT. (292.6m)	B	CF	50
399855-96	960 FT. (295.7m)	B	CF	51
399855-97	970 FT. (298.7m)	B	CF	51
399855-98	980 FT. (301.8m)	B	CF	52
399855-99	990 FT. (304.8m)	B	CF	52
Part Number	Description	Schedule	Est. Lead Time	Wt
UV4 Cable, 4 Conductor, Prefabricated in 5 FT increments				
379972-01	20 FT. (6.1m)	B	CF	20
379972-02	25 FT. (7.6m)	B	CF	25
379972-03	30 FT. (9.1m)	B	CF	30
379972-04	35 FT. (10.7m)	B	CF	35
379972-05	40 FT. (12.2m)	B	CF	40
379972-06	45 FT. (13.7m)	B	CF	45
379972-07	50 FT. (15.2m)	B	CF	50
379972-08	55 FT. (16.8m)	B	CF	55

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
UV4 Cable, 4 Conductor, Prefabricated in 5 FT increments				
379972-09	60 FT. (18.3m)	B	CF	60
379972-10	65 FT. (19.8m)	B	CF	65
379972-11	70 FT. (21.3m)	B	CF	70
379972-12	75 FT. (22.9m)	B	CF	75
379972-13	80 FT. (24.4m)	B	CF	80
379972-14	85 FT. (25.9m)	B	CF	85
379972-15	90 FT. (27.4m)	B	CF	90
379972-16	95 FT. (29m)	B	CF	95
379972-17	100 FT. (30.5m)	B	CF	100
379972-18	105 FT. (32m)	B	CF	105
379972-19	110 FT. (33.5m)	B	CF	110
379972-20	115 FT. (35.1m)	B	CF	115
379972-21	120 FT. (36.6m)	B	CF	120
379972-22	125 FT. (38.1m)	B	CF	125
379972-23	130 FT. (39.6m)	B	CF	130
379972-24	135 FT. (41.1m)	B	CF	135
379972-25	140 FT. (42.7m)	B	CF	140
379972-26	145 FT. (44.2m)	B	CF	145
379972-27	150 FT. (45.7m)	B	CF	150
379972-28	155 FT. (47.2m)	B	CF	155
379972-29	160 FT. (48.8m)	B	CF	160
379972-30	165 FT. (50.3m)	B	CF	165
379972-31	170 FT. (51.8m)	B	CF	170
379972-32	175 FT. (53.3m)	B	CF	175
379972-33	180 FT. (54.9m)	B	CF	180
379972-34	185 FT. (56.4m)	B	CF	185
379972-35	190 FT. (57.9m)	B	CF	190
379972-36	195 FT. (59.4m)	B	CF	195
379972-37	200 FT. (61m)	B	CF	200
379972-38	205 FT. (62.5m)	B	CF	205
379972-39	210 FT. (64m)	B	CF	210
379972-40	215 FT. (65.5m)	B	CF	215
379972-41	220 FT. (67.1m)	B	CF	220
379972-42	225 FT. (68.6m)	B	CF	225
379972-43	230 FT. (70.1m)	B	CF	230
379972-44	235 FT. (71.6m)	B	CF	235
379972-45	240 FT. (73.2m)	B	CF	240
379972-46	255 FT. (77.7m)	B	CF	255
379972-47	260 FT. (79.2m)	B	CF	260
379972-48	265 FT. (80.8m)	B	CF	265
379972-49	270 FT. (82.3m)	B	CF	270
379972-50	275 FT. (83.8m)	B	CF	275
379972-51	280 FT. (85.3m)	B	CF	280
379972-52	285 FT. (86.9m)	B	CF	285
379972-53	290 FT. (88.4m)	B	CF	290
379972-54	295 FT. (89.9m)	B	CF	295
379972-55	300 FT. (91.4m)	B	CF	300
379972-56	305 FT. (93m)	B	CF	305
379972-57	310 FT. (94.5m)	B	CF	310
379972-58	315 FT. (96m)	B	CF	315
379972-59	320 FT. (97.5m)	B	CF	320

UV-4 Cable (continued)

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
UV4 Cable, 4 Conductor, Prefabricated in 5 FT increments				
379972-60	325 FT. (99.1m)	B	CF	325
379972-61	330 FT. (100.6m)	B	CF	330
379972-62	335 FT. (102.1m)	B	CF	335
379972-63	340 FT. (103.6m)	B	CF	340
379972-64	345 FT. (105.2m)	B	CF	345
379972-65	350 FT. (106.7m)	B	CF	350
379972-66	355 FT. (108.2m)	B	CF	355
379972-67	360 FT. (109.7m)	B	CF	360
379972-68	365 FT. (111.3m)	B	CF	365
379972-69	370 FT. (112.8m)	B	CF	370
379972-70	375 FT. (114.3m)	B	CF	375
379972-71	380 FT. (115.8m)	B	CF	380
379972-72	385 FT. (117.3m)	B	CF	385
379972-73	390 FT. (118.9m)	B	CF	390
379972-74	395 FT. (120.4m)	B	CF	395
379972-75	400 FT. (121.9m)	B	CF	400
379972-76	405 FT. (123.4m)	B	CF	405
379972-77	410 FT. (125m)	B	CF	410
379972-78	415 FT. (126.5m)	B	CF	415
379972-79	420 FT. (128m)	B	CF	420
379972-80	425 FT. (129.5m)	B	CF	425
379972-81	430 FT. (131.1m)	B	CF	430
379972-82	435 FT. (132.6m)	B	CF	435
379972-83	440 FT. (134.1m)	B	CF	440
379972-84	445 FT. (135.6m)	B	CF	445
379972-85	450 FT. (137.2m)	B	CF	450
379972-86	455 FT. (138.7m)	B	CF	455
379972-87	460 FT. (140.2m)	B	CF	460
379972-88	465 FT. (141.7m)	B	CF	465
379972-89	470 FT. (143.3m)	B	CF	470
379972-90	475 FT. (144.8m)	B	CF	475
379972-91	480 FT. (146.3m)	B	CF	480
379972-92	485 FT. (147.8m)	B	CF	485
379972-93	490 FT. (149.4m)	B	CF	490
379972-94	495 FT. (150.9m)	B	CF	495
379972-95	500 FT. (152.4m)	B	CF	500
379972-96	505 FT. (153.9m)	B	CF	505
379972-97	510 FT. (155.4m)	B	CF	510
379972-98	515 FT. (157m)	B	CF	515
379972-99	520 FT. (158.5m)	B	CF	520

UV-4 Fiber Optic Assemblies

Part Number	Description	Schedule	Est. Lead Time	Wt
407167-XX	UV4 Flexible UV FO assembly - includes Flexible UV Guide (390209-XX), UV Base Assy (378503-01), UV Fiber Optic Adapter (364547-01), 1" NPT Tee, and Quartz Light Guide Assy (79882-XX) and necessary screws, washers & o-rings. Length from scanner end of FO to end of outer carrier. Available in 5" increments starting at 55".			
407167-01	55"	B	CF	7
407167-02	60"	B	CF	9
407167-03	65"	B	CF	11
407167-04	70"	B	CF	13
407167-05	75"	B	CF	15
407167-06	80"	B	CF	17
407167-07	85"	B	CF	19
407167-08	90"	B	CF	21
407167-09	95"	B	CF	23
407167-10	100"	B	CF	25
407167-11	105"	B	CF	27
407167-12	110"	B	CF	29
407167-13	115"	B	CF	31
407167-14	120"	B	CF	33
407167-15	125"	B	CF	35
407167-16	130"	B	CF	37
407167-17	135"	B	CF	39
407167-18	140"	B	CF	41
407167-19	145"	B	CF	43
409166-XX	UV4 Flexible UV FO and Cooling Chamber assembly - includes Cooling Chamber (381071-01), Light Pipe Cap (381065-01), Retaining Ring (90510-00), Nipple, Union, Outer Carrier, Quartz Fiber Optic Bundle (79882-XX) and necessary screws, washers & o-rings. Length from scanner end of FO to end of outer carrier. Available in 5" increments starting at 55".			
409166-01	55"	B	CF	10
409166-02	60"	B	CF	12
409166-03	65"	B	CF	14
409166-04	70"	B	CF	16
409166-05	75"	B	CF	18
409166-06	80"	B	CF	20
409166-07	85"	B	CF	22
409166-08	90"	B	CF	24
409166-09	95"	B	CF	26
409166-12	110"	B	CF	32
409166-13	115"	B	CF	34
409166-14	120"	B	CF	36
409166-15	125"	B	CF	38
409166-16	130"	B	CF	40
409166-17	135"	B	CF	42
409166-18	140"	B	CF	44
409166-19	145"	B	CF	46

UV-4 Fiber Optic Assemblies

(continued)

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
407164-XX	UV4 Rigid UV FO assembly - includes Fiber Optic Adapter (358824-01), Retaining Ring (90510-00), 1" NPT Wye, Rigid Guide Tube, Quartz Fiber Optic Bundle (79882-XX) and necessary screws, washers & o-rings. Available in 5" increments starting at 55".			
407164-01	55"	B	CF	20
407164-02	60"	B	CF	23
407164-03	65"	B	CF	26
407164-04	70"	B	CF	29
407164-05	75"	B	CF	32
407164-06	80"	B	CF	35
407164-07	85"	B	CF	38
407164-08	90"	B	CF	41
407164-09	95"	B	CF	44
407164-10	100"	B	CF	47
407164-11	105"	B	CF	50
407164-12	110"	B	CF	53
407164-13	115"	B	CF	56
407164-14	120"	B	CF	59
407164-15	125"	B	CF	62
407164-16	130"	B	CF	65
407164-17	135"	B	CF	68
407164-18	140"	B	CF	71
407164-19	145"	B	CF	74
409167-XX	UV4 Rigid UV FO and Cooling Chamber assembly - includes Cooling Chamber (381071-01), Light Pipe Cap (381065-01), Retaining Ring (90510-00), Nipple, Union, Rigid Guide Tube, Quartz Fiber Optic Bundle (79882-XX) and necessary screws, washers & o-rings. Available in 5" increments starting at 55".			
409167-01	55"	B	CF	26
409167-02	60"	B	CF	29
409167-03	65"	B	CF	32
409167-04	70"	B	CF	35
409167-05	75"	B	CF	38
409167-06	80"	B	CF	41
409167-07	85"	B	CF	44
409167-08	90"	B	CF	47
409167-09	95"	B	CF	50
409167-10	100"	B	CF	53
409167-11	105"	B	CF	56
409167-12	110"	B	CF	59
409167-13	115"	B	CF	62
409167-14	120"	B	CF	65
409167-15	125"	B	CF	68
409167-16	130"	B	CF	71
409167-17	135"	B	CF	74
409167-18	140"	B	CF	77
409167-19	145"	B	CF	80

FIBER OPTICS (FO) BUNDLES (CABLES)

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
79664-XX	Classic Digital Profile Detector and IDD-II models - Glass Fiber Optic Cable			
79664-01	55" (1397mm)	B	CF	0.4
79664-02	60" (1524mm)	B	15	0.5
79664-03	65" (1651mm)	B	CF	0.6
79664-04	70" (1778mm)	B	CF	0.7
79664-05	75" (1905mm)	B	CF	0.8
79664-06	80" (2032mm)	B	CF	0.9
79664-07	85" (2159mm)	B	CF	1
79664-08	90" (2286mm)	B	CF	1.1
79664-09	95" (2413mm)	B	CF	1.2
79664-10	100" (2540mm)	B	CF	1.3
79664-11	105" (2667mm)	B	CF	1.4
79664-39	110" (2794mm)	B	CF	-
79664-38	115" (2921mm)	B	CF	-
79664-40	120" (3048mm)	B	CF	-
79882-XX	UV-4 detectors - Quartz Fiber Optic Cable			
79882-01	55" (1397mm)	B	CF	2
79882-02	60" (1524mm)	B	CF	2.2
79882-03	65" (1651mm)	B	CF	2.4
79882-04	70" (1778mm)	B	CF	2.6
79882-05	75" (1905mm)	B	CF	2.8
79882-06	80" (2032mm)	B	CF	3
79882-07	85" (2159mm)	B	CF	3.2
79882-08	90" (2286mm)	B	CF	3.4
79882-09	95" (2413mm)	B	CF	3.6
79882-10	100" (2540mm)	B	CF	3.8
79882-11	105" (2667mm)	B	CF	4
79882-12	110" (2794mm)	B	CF	4.2
79882-13	115" (2921mm)	B	CF	4.4
79882-14	120" (3048mm)	B	CF	4.6
79882-17	135" (1651mm)	B	CF	5.2
79882-18	98.63"	B	CF	5.4
79882-19	145" (1905mm)	B	CF	5.6
79882-20	150" (2032mm)	B	CF	5.8
79882-21	155" (2159mm)	B	CF	6
79882-22	160" (2286mm)	B	CF	6.2
79882-23	165" (2413mm)	B	CF	6.4

FLEXIBLE OUTER CARRIERS

For use with appropriate UniFlame I & II, IDD-II family, DPD family, DR-6 family & UV-4's

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
390209-XX	Outer carrier, used with IR Light Guides			
390209-01	49.5" (1257.3mm)	B	CF	17
390209-02	54.5" (1384.3mm)	B	CF	19
390209-03	59.5" (1511.3mm)	B	CF	21
390209-04	64.5" (1638.3mm)	B	CF	23
390209-05	69.5" (1765.3mm)	B	CF	25
390209-06	74.5" (1892.3mm)	B	CF	27
390209-07	79.5" (2019.3mm)	B	CF	29
390209-08	84.5" (2146.3mm)	B	CF	31
390209-09	89.5" (2273.3mm)	B	CF	33
390209-10	94.5" (2400.3mm)	B	CF	35
390209-11	99.5" (2527.3mm)	B	CF	37
390209-12	104.5" (2654.3mm)	B	CF	39
390209-13	109.5" (2781.3mm)	B	CF	41
390209-14	114.5" (2908.3mm)	B	CF	43
390209-17	119.5" (3035.3mm)	B	CF	45
390209-18	124.5" (3162.3mm)	B	CF	47
390209-19	129.5" (3289.3mm)	B	CF	49
390209-20	134.5" (3416.3mm)	B	CF	51
390209-21	139.5" (3543.3mm)	B	CF	53
390209-22	144.5" (3670.3mm)	B	CF	55

Part Number	Description	Sched-ule	Est. Lead Time	Wt
390209-XX	Outer carrier, used with UV Light			
390209-50	49.5" (1257.3mm)	B	CF	17
390209-51	54.5" (1384.3mm)	B	CF	19
390209-52	59.5" (1511.3mm)	B	CF	21
390209-53	64.5" (1638.3mm)	B	CF	23
390209-54	69.5" (1765.3mm)	B	CF	25
390209-55	74.5" (1892.3mm)	B	CF	27
390209-56	79.5" (2019.3mm)	B	CF	29
390209-57	84.5" (2146.3mm)	B	CF	31
390209-58	89.5" (2273.3mm)	B	CF	33
390209-59	94.5" (2400.3mm)	B	CF	35
390209-60	99.5" (2527.3mm)	B	CF	37
390209-62	104.5" (2654.3mm)	B	CF	39
390209-63	109.5" (2781.3mm)	B	CF	41
390209-64	114.5" (2908.3mm)	B	CF	43
390209-65	119.5" (3035.3mm)	B	CF	45
390209-66	124.5" (3162.3mm)	B	CF	47
390209-67	129.5" (3289.3mm)	B	CF	49
390209-68	134.5" (3416.3mm)	B	CF	51
390209-69	139.5" (3543.3mm)	B	CF	53
390209-70	144.5" (3670.3mm)	B	CF	55

DETECTOR ADAPTERS & ACCESSORIES

Part Number	Description	Sched-ule	Est. Lead Time	Wt
FS-01	Forney Flame Simulator - UV/IR	-	20	2
344895-01	Fuel Bucket Nozzle Guide (Fiber Optic receiver tube)	B	CF	-
351717-01	Flange Mounting Adapter (use when upgrading from old front mount IDD)	B	CF	-
352601-01	IR Fiber optic spacer (for use with old guide tube)	B	CF	-
354943-01	Valve & Wye assembly	B	CF	2
359024-01	Bailey Mounting Adaptor (tw ist flange)	B	CF	-
362722-01	Fiber optic adapter with quartz lens, used with IDD on gas turbine applications.	B	CF	-
367813-01	NPT to BSP Adapter	B	22	-
390265-01	Burner Mount Adapter,6" length (Fiber Optic Mount Tube)	B	CF	-
390265-02	Burner Mount Welded,12" length (Fiber Optic Mount Tube)	B	CF	-
390265-03	Burner Mount Welded,18" length (Fiber Optic Mount Tube)	B	CF	-
401440-01	Mount Tube Support Bracket	B	CF	-
403350-01	Mount Tube Assembly 40"	D	CF	-
403350-02	Mount Tube Assembly 63.13"	D	CF	-
403350-03	Mount Tube Assembly 88.13"	D	CF	-

DETECTOR ADAPTERS & ACCESSORIES

(Cont.)

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
70065-10	1" NPT Ball Valve	B	12	1.4
74947-03	Reducer, 3" to 1" NPT	B	10	0.1
74947-05	Reducer, Conc 3X2" NPT 150#	B	CF	-
75168-01	Heat Insulating Fiberglass Nipple 3" x 1" NPT	E	CF	0.05
75450-06	1" NPT Close Nipple	A	10	0.2
75450-09	2" NPT Close Nipple	D	10	0.4
75456-03	1" NPT Black Plastic Nipple x 2 1/2" long	B	10	0.2
75793-02	Hex Bushing	B	CF	-
76897-50	DR6.1 Lens	B	CF	-
77215-00	Adaptor, IDD Cable, 3/8"	B	CF	-
77215-01	Adaptor, IDD Cable, 1/2"	B	20	1
79672-05	Panel Meter, 0-10 Vdc input	B	CF	-
86226-08	Hose Clamp 1"	B	CF	0.1
86258-34	3" NPT female to 1" NPT female bell reducer	B	CF	-
87795-04	Wye Assembly	B	CF	-
90509-01	UV Fiber Optic lens assembly	B	60	-
90510-00	Retaining Ring <i>* Note: Ring holds fiber optic in place between scanner and adapter - install with prongs out</i>	B	3	0
91016-63	N.P.T. Swivel for Flame Detector	E	3	1.5
91147-93	Obsolete Quartz Sealing Coupling, 1" NPT . Use part 41075301	E	20	1
410753-01	SEALING UNION ASSEMBLY, FLAME DETECTOR, 1" NPT SIGHT PIPE, SS304, 3000#	B	20	1.5
410753-02	SEALING UNION ASSEMBLY, FLAME DETECTOR, 1" NPT SIGHT PIPE, SS316, 3000#	B	20	1.5
91956-01	1 inch cooling air hose	B	CF	-

Part Number	Description	Schedule	Est. Lead Time	Wt
328697-XX	3" N.P.T.(3.5" OD)			
328697-01	36" (914.4mm)	B	CF	-
328697-02	42" (1066.8mm)	B	CF	-
328697-03	48" (1219.2mm)	B	CF	-
328697-04	54" (1371.6mm)	B	CF	-
328697-05	60" (1524.0mm)	B	CF	-
328697-06	66" (1676.4mm)	B	CF	-
328697-07	72" (1828.8mm)	B	CF	-
328697-08	78" (1981.2mm)	B	CF	-
328697-09	84" (2133.6mm)	B	CF	-
328697-10	90" (2286mm)	B	CF	-
328697-11	96" (2438.4mm)	B	CF	-
328697-12	102" (2590.8mm)	B	CF	-
328697-13	108" (2743.4mm)	B	CF	-
328697-14	114" (2895.6mm)	B	CF	-
328697-15	120" (3048.0mm)	B	CF	-

D85 SERIES UNITIZED FLAME DETECTOR

Spec Sheet #404005-26

Technical Manual #372001-12

Date: Jun 9, 2020

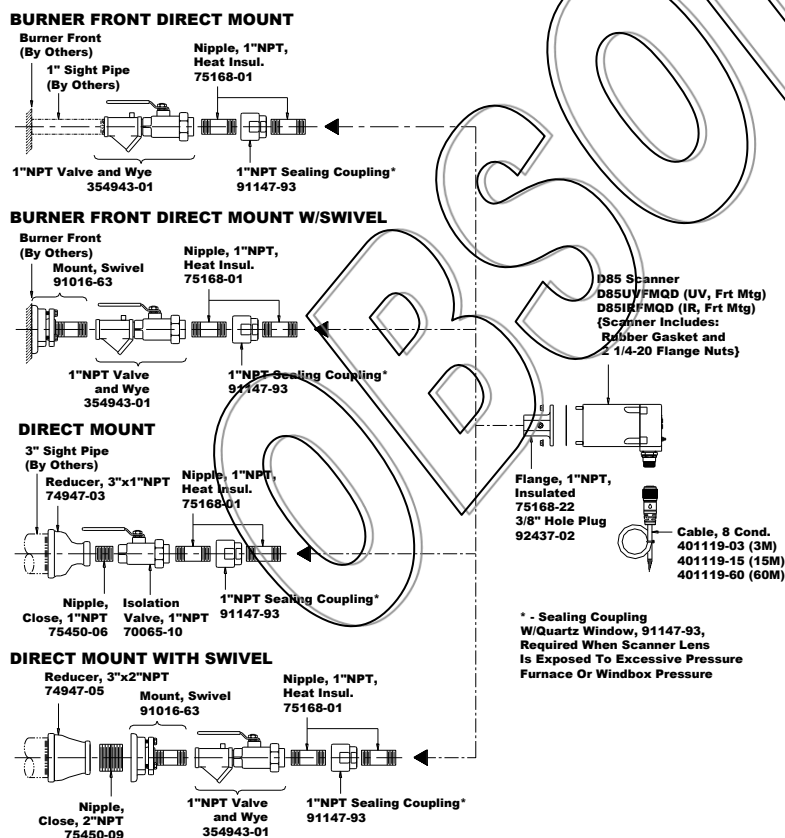
Subject: D85 DETECTOR OBSOLESCENCE UPDATE

The Forney D85 Detector is obsolete and is replaced by the HD Detector. New D85s are no longer available. A limited number of Recertified D85s (P/N D85UVFMQD-R) are available for warranty replacements and emergency spares where HD does not have required certifications yet. The D85UVFMQD-R will not be used for new installations. Obsolete part numbers are listed in table below.

D85 UV versions	D85 IR versions
D85UVFMQD D85UVFMQDK3	D85IRFMQD
D85 UV for Fiber Optics	D85 IR for Fiber Optics
D85UVFOQD D85UVFOQDK3	D85IRFOQD

The HD-01 will be used in the place of the obsolete D85. To use existing D85 wiring a Cross Connect Adapter P/N HD-01-XCONN-D85 is available.

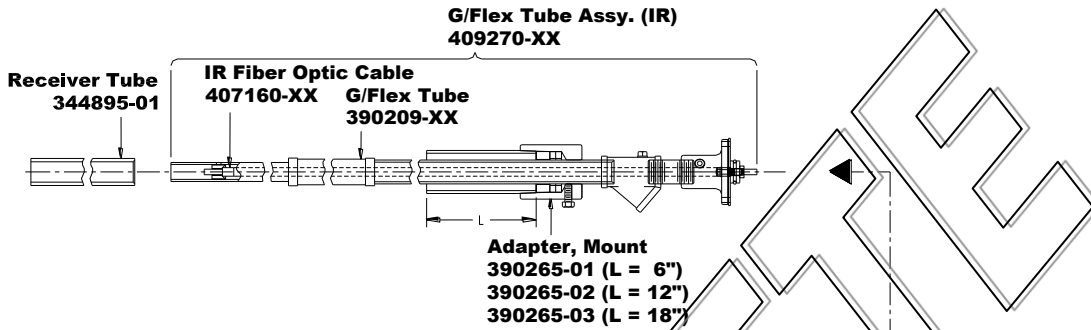
Front Mount Applications Drawing



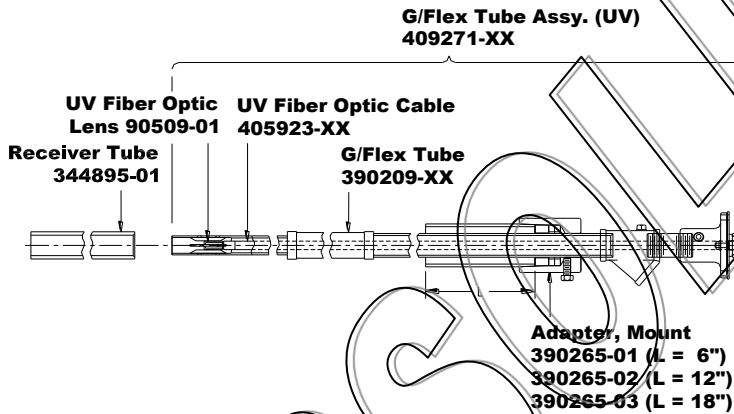
D85 SERIES UNITIZED FLAME DETECTOR

Fiber Optic Mount Applications Drawing

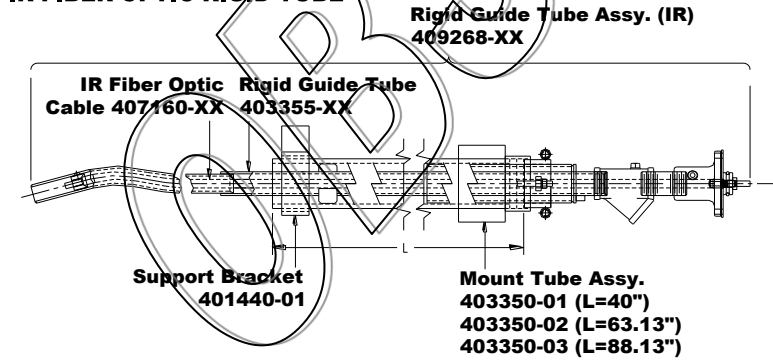
IR FIBER OPTIC FLEX TUBE



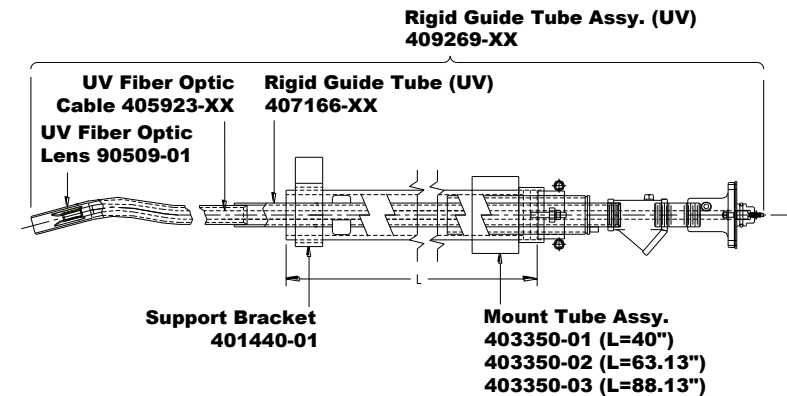
UV FIBER OPTIC FLEX TUBE



IR FIBER OPTIC RIGID TUBE



UV FIBER OPTIC RIGID TUBE



D85 Scanner
D85UVFOQD (UV Fiber Optic)
D85IRFOQD (IR Fiber Optic)
{Scanner Includes:
2 1/4-20 Flange Nuts}



Cable, 8 Cond.
401119-03 (3M)
401119-15 (15M)
401119-60 (60M)

D85 Detector

Detector

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
D85UVFMQD-R	RECERTIFIED D85 Integrated flame detector, for warranty replacements or when ATEX replacement required. Use 401119-xx cable. FM, UL/c, CE Approved. Mounting Flange not included.	E	10	4.5
D85UVFMQD	OBSOLETE D85 Integrated flame detector, selectable FFRT - Ultra-violet, with quick disconnect. Use 401119-xx cable. FM, UL/c, CE Approved. Mounting Flange not included.	E	10	4.5
D85UVFMQDK3	OBSOLETE D85 Integrated flame detector, selectable FFRT - Ultra-violet, with quick disconnect and K3 filter. Use 401119-xx cable. FM, UL/c, CE Approved. Mounting	E	20	4.5
D85IRFMQD	OBSOLETE D85 Integrated flame detector, selectable FFRT - Infrared, with quick disconnect. Use 401119-xx cable. FM, UL/c, CE Approved. Mounting Flange not included.	E	10	4.5
D85UVFMCEX	OBSOLETE Cenelec EExd IIC T6, ATEX approved housing with D85UV flame detector. CE Approved. Mounting flange ordered separately.	E	20	7
D85IRFMCEX	OBSOLETE Cenelec EExd IIC explosion proof housing with D85IR flame detector. CE Approved.	E	20	7
D85UVFOQD	OBSOLETE Fiber-optic version of D85 Integrated flame detector, selectable FFRT - Ultra-violet, with quick disconnect. Use 401119-xx cable. FM, UL/c, CE Approved.	E	10	4.5
D85IRFOQD	OBSOLETE Fiber-optic version of D85 Integrated flame detector, selectable FFRT - Infrared, with quick disconnect. Use 401119-xx cable. FM, UL/c, CE Approved.	E	10	4.5
35-318-1	Mounting flange for D85 flame detector, 1" NPT Non-metallic. 3/8" NPT port requires air or plug	E	3	0.4
35-318-2	Mounting flange for D85 flame detector, 1" BSP Non-metallic. 3/8" NPT port requires air or plug.	E	20	0.4
129-182-1	Mounting flange for D85 flame detector, 1" NPT Aluminum. 3/8" NPT port requires air or plug	E	3	1.0
129-182-2	Mounting flange for D85 flame detector, 1" BSP Aluminum. 3/8" NPT port requires air or plug	E	3	1.0
75304-03	3/8" NPT plug with square head for Mounting Flanges	C	3	0.4
74160-02	3/8" NPT Hex head plug for Mounting Flanges	D	10	0.1
129-168-1	Mounting flange kit for -CEX version of D85 flame detectors, 1" NPT.	E	3	1.0
129-168-2	Mounting flange kit for -CEX version of D85 flame detectors, 1" BSP.	E	3	1.0
79508-81	24 vdc, 50 w, 2.5 amp power supply (up to 5 UniFlame VII, D85 or HD-01's)	A	15	2.0
79508-82	24 vdc, 100 w, 5 amp power supply (up to 10 UniFlame VII, D85 or HD-01's)	A	15	2.0
401119-00	8 conductor cable for UniFlame II & D85 detector. Rated for ITC-ER and PLTC-ER.	E	20	0.1
401119-03	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85 quick disconnect version. 3 meters / 10 ft.	E	10	5.0
401119-06	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 6 meters / 20 ft.	E	10	10.0
401119-09	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 9 meters / 30 ft.	E	10	15.0
401119-12	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 12 meters / 40 ft.	E	10	20.0
401119-15	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 15 meters / 49 ft.	E	20	24.5
401119-30	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 30 meters / 98 ft.	E	20	49.0
401119-45	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 45 meters / 148 ft.	E	20	74.0
401119-60	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 60 meters / 197 ft.	E	20	98.5
401119-90	Factory wired 8 conductor cable (401119-00) assembly for UniFlame II & D85, quick disconnect, 90 meters / 295 ft.	E	20	147.5
401116-04	Forney Explorer software for UniFlame II (FEX)	E	3	0.5
9114739	VORTEX-TUBE COOLER KIT	E	20	-
97-1058	Heat Insulating Jacket for -CEX version of D85 flame detectors.	E	CF	-
97-1067	Heat Insulating Jacket for D85 flame detectors.	E	CF	-
35494301	Valve & Wye assembly	B	CF	2.0

D85 Detector

Detector (continued)

Estimated Lead Time is in Business Days

Part Number	Description	Sched- ule	Est. Lead Time	Wt
46-181	Lens for D85 flame detectors.	E	CF	-
60-2771	Junction box with terminals for D85UVF flame detectors.	E	CF	-
60-1664-3	Use 9101663	E	3	1.5
60-1664-4	Swivel mount adaptor, 1" BSP.	E	20	1.5
53-121	2 through 10 orifice set for flame detectors.	E	10	.5
34-181	Orifice retaining ring (set of 2).	E	20	-
9041511	Quartz window used in 9114793 and 9102849 sealing union/couplings.	E	20	0.1
9114793	Obsolete Quartz Sealing Coupling, 1" NPT . Use part 41075301	E	20	1
9114782	Sealing coupling with quartz window , 1" BSP threads.	E	3	1

D85 Flexible Fiber Optic Assemblies

To order complete D85 flexible fiber optic assembly, select one each: D85, inner carrier assembly, and outer carrier assembly. For example: D85IRFOQD (D85 Detector), 61-7065 (10 foot inner carrier assembly), and 61-6305 (10 foot outer carrier assembly). The fiber optic bundle is included in the inner carrier assembly.

Estimated Lead Time is in Business Days

Part Number	Description	Sched- ule	Est. Lead Time	Wt
D85 IR Fiber Optic Bundles - Glass				
61-4842-7	3 ft. (914 mm)	E	CF	1
61-4842-3	5 ft. (1524 mm)	E	CF	1
61-4842-9	6 ft. (1828 mm)	E	CF	1
61-4842-1	7 ft. (2134 mm)	E	CF	1
61-4842-2	9 ft. (2743 mm)	E	CF	1
61-4842-4	10 ft. (3048 mm)	E	CF	1
61-4842-5	12 ft. (3658 mm)	E	CF	1
61-4842-6	14 ft. (4268 mm)	E	CF	1
D85 UV Fiber Optic Bundles - Quartz				
61-6872-3	3 ft. (914 mm)	E	CF	1
61-6872-5	5 ft. (1524 mm)	E	CF	1
61-6872-6	6 ft. (1829 mm)	E	CF	1
61-6872-7	7 ft. (2134 mm)	E	CF	1
61-6872-9	9 ft. (2743 mm)	E	CF	1
61-6872-10	10 ft. (3048 mm)	E	CF	1
61-6872-12	12 ft. (3658 mm)	E	CF	1
61-6872-14	14 ft. (4268 mm)	E	CF	1

Part Number	Description	Sched- ule	Est. Lead Time	Wt
D85 IR Inner Carriers - Glass				
61-7065-3	3 ft (914 mm)	E	CF	5
61-7065-5	5 ft (1524 mm)	E	CF	6
61-7065-6	6 ft (1828 mm)	E	CF	6
61-7065-7	7 ft (2134 mm)	E	CF	6
61-7065-9	9 ft (2743 mm)	E	CF	8
61-7065-10	10 ft (3048 mm)	E	CF	8
61-7065-12	12 ft (3658 mm)	E	CF	8
61-7065-14	14 ft (4268 mm)	E	CF	8
D85 IR Inner Carriers - Quartz				
61-7064-3	3 ft. (914 mm)	E	CF	5
61-7064-5	5 ft. (1524 mm)	E	CF	6
61-7064-6	6 ft. (1829 mm)	E	CF	6
61-7064-7	7 ft. (2134 mm)	E	CF	6
61-7064-9	9 ft. (2743 mm)	E	CF	8
61-7064-10	10 ft. (3048 mm)	E	CF	8
61-7064-12	12 ft. (3658 mm)	E	CF	8
61-7064-14	14 ft. (4268 mm)	E	CF	8
D85 Outer Carriers -Glass or Quartz				
61-6647	3 ft. (914 mm)	E	CF	8
61-5430	5 ft. (1524 mm)	E	CF	8
61-6845	6 ft. (1829 mm)	E	CF	8
61-4893	7 ft. (2134 mm)	E	CF	8
61-5386	9 ft. (2743 mm)	E	CF	14
61-6305	10 ft. (3048 mm)	E	CF	8
61-6306	12 ft. (3658 mm)	E	CF	8
61-6540	14 ft. (4268 mm)	E	CF	CF

D85 Rigid Fiber Optic Assemblies

Part Number	Description	Schedule	Est. Lead Time	Wt
409268-XX	D85 Rigid IR FO assembly - includes Fiber Optic Flange (75168-08), Fiber Optic Adapter (409267-02), 1" NPT Wye, Rigid Guide Tube, Glass Light guide assy IR (407160-XX) and necessary screws, washers & o-rings. Consult Factory for pricing.			
409268-01	55.5" Long FO cable	A	CF	20
409268-02	60.5" Long FO cable	A	CF	23
409268-03	65.5" Long FO cable	A	CF	26
409268-04	70.5" Long FO cable	A	CF	29
409268-05	75.5" Long FO cable	A	CF	32
409268-06	80.5" Long FO cable	A	CF	35
409268-07	85.5" Long FO cable	A	CF	38
409268-08	90.5" Long FO cable	A	CF	41
409268-09	95.5" Long FO cable	A	CF	44
409268-10	100.5" Long FO cable	A	CF	47
409268-11	105.5" Long FO cable	A	CF	50
409268-12	110.5" Long FO cable	A	CF	53
409268-13	115.5" Long FO cable	A	CF	56
409268-14	120.5" Long FO cable	A	CF	59
409268-15	125.5" Long FO cable	A	CF	62
409268-16	130.5" Long FO cable	A	CF	65
409268-17	135.5" Long FO cable	A	CF	68
409268-18	140.5" Long FO cable	A	CF	71
409268-19	145.5" Long FO cable	A	CF	74
409268-20	150.5" Long FO cable	A	CF	77

Part Number	Description	Schedule	Est. Lead Time	Wt
409269-XX	D85 Rigid UV FO assembly - includes Fiber Optic Flange (75168-08), Fiber Optic Adapter (409267-01), 1" NPT Wye, Rigid Guide Tube, Quartz Light guide assy UV (405923-XX) and necessary screws, washers & o-rings. Consult Factory for pricing.			
409269-01	55" Long FO cable	A	CF	20
409269-02	60" Long FO cable	A	CF	23
409269-03	65" Long FO cable	A	CF	26
409269-04	70" Long FO cable	A	CF	29
409269-05	75" Long FO cable	A	CF	32
409269-06	80" Long FO cable	A	CF	35
409269-07	85" Long FO cable	A	CF	38
409269-08	90" Long FO cable	A	CF	41
409269-09	95" Long FO cable	A	CF	44
409269-10	100" Long FO cable	A	CF	47
409269-11	105" Long FO cable	A	CF	50
409269-12	110" Long FO cable	A	CF	53
409269-13	115" Long FO cable	A	CF	56
409269-14	120" Long FO cable	A	CF	59
409269-15	125" Long FO cable	A	CF	62
409269-16	130" Long FO cable	A	CF	65
409269-17	135" Long FO cable	A	CF	68
409269-18	140" Long FO cable	A	CF	71
409269-19	145" Long FO cable	A	CF	74
409269-20	150" Long FO cable	A	CF	77

Part Number	Description	Schedule	Est. Lead Time	Wt
60-2806	1" compression fitting for mounting outer carrier assemblies.	E	CF	-
61-4895	"TA" lens, 0 degree skew - glass.	E	10	.5
61-4913	"TB" lens, 5 degree skew - glass.	E	CF	.5
61-4914	"TC" lens, 9 degree skew - glass.	E	CF	.5
61-6754	"AA" lens, 0 degree skew - quartz.	E	20	.5
61-6864	"AB" lens, 5 degree skew - quartz.	E	CF	.5
61-6865	"AC" lens, 9 degree skew - quartz.	E	CF	.5

UNIFLAME II FLAME DETECTOR

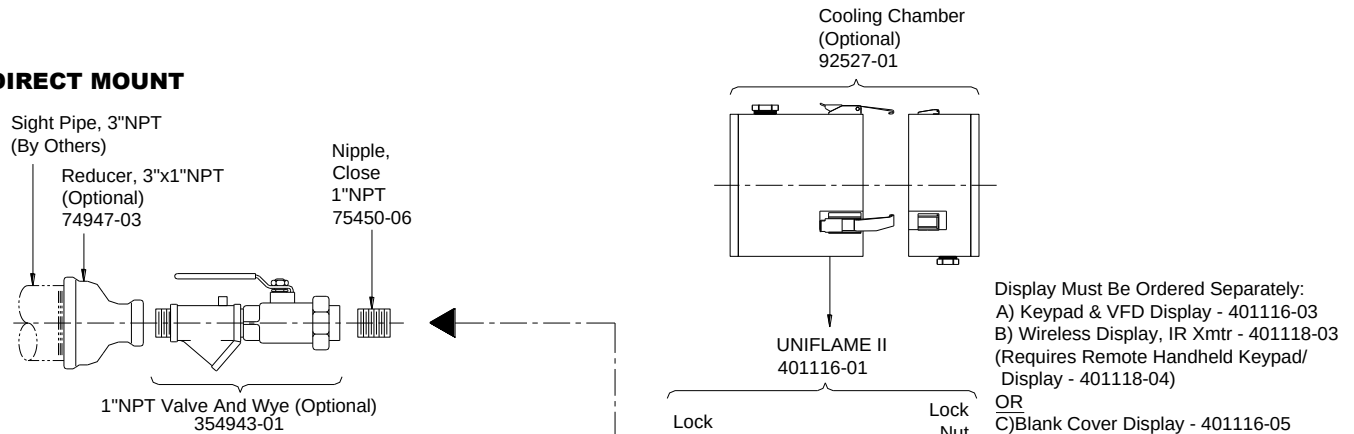
Spec Sheet #404005-24

Technical Manual #372001-05

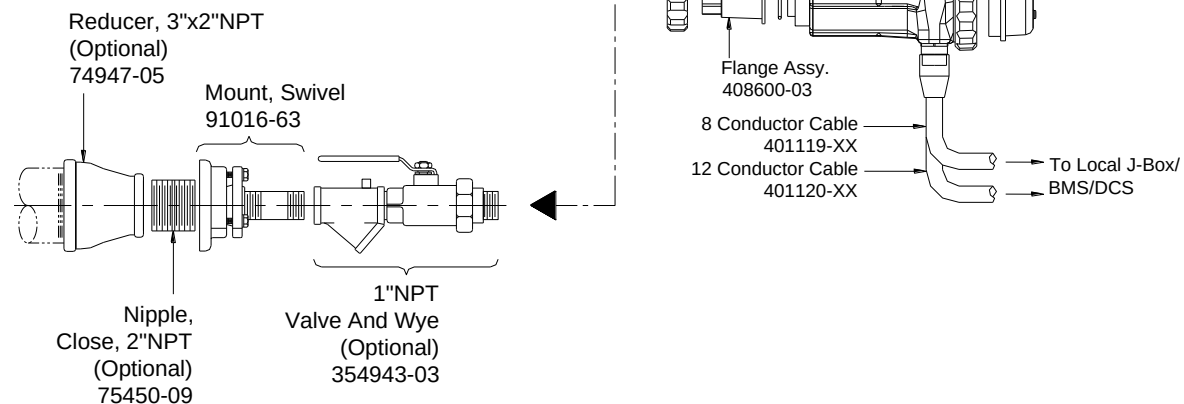
Forney's UniFlame II series flame detectors utilize micro-processor based technology combined with solid state dual (IR and UV) sensors. Unitized flame detector eliminates the need for a remote amplifier. All models are properly suited for gaseous, liquid, solid or combination fuel firing.

Front Mount Applications Drawing

DIRECT MOUNT



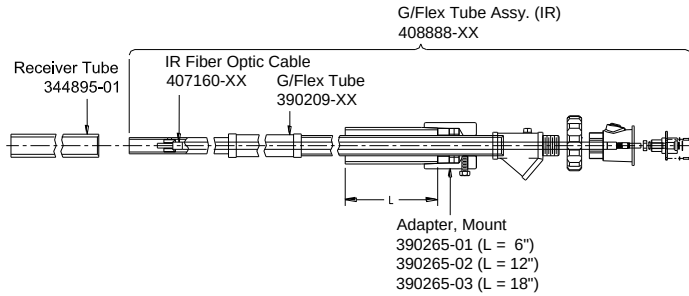
DIRECT MOUNT WITH SWIVEL



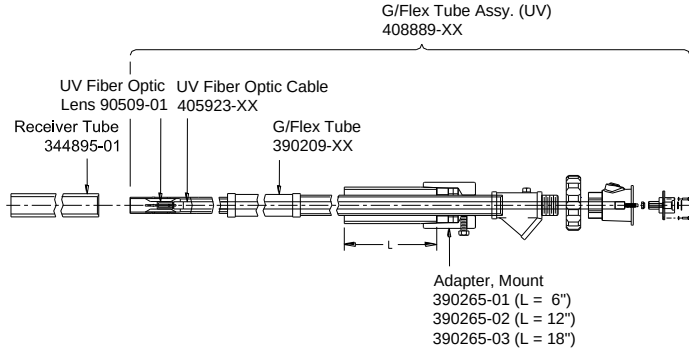
UNIFLAME II DETECTOR

Fiber Optic Mount Applications Drawing

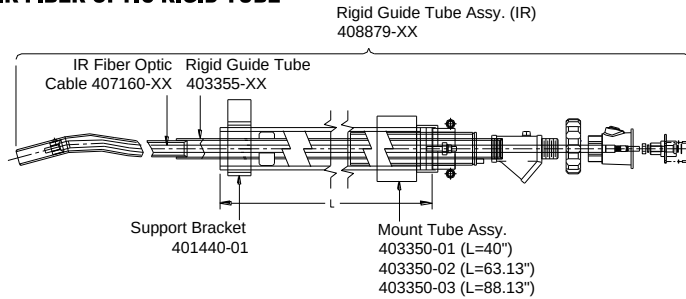
IR FIBER OPTIC FLEX TUBE



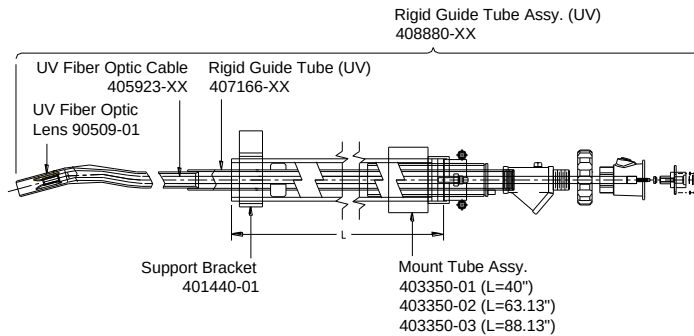
UV/DUAL SENSOR FIBER OPTIC FLEX TUBE



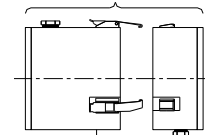
IR FIBER OPTIC RIGID TUBE



UV/DUAL SENSOR FIBER OPTIC RIGID TUBE

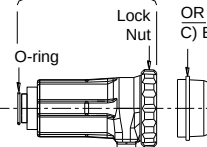


Cooling Chamber
(Optional)
92527-01



Display Must Be Ordered Separately:
A) Keypad & VFD Display - 401116-03
B) Wireless Display, IR Xmtr - 401118-03
(Requires Remote Handheld Keypad/
Display - 401118-04)
OR
C) Blank Cover Display - 401116-05

UNIFLAME II^{*}
401116-01



8 Conductor Cable
401119-XX
12 Conductor Cable
401120-XX
To Local J-Box/
BMS/DCS

NOTE: UNIFLAME II Dual Sensor (DS) Requires
UV Fiber Optic For UV/IR Dual Usage.

^{*} = Front Lock Nut Supplied With 401116-01
Not Used. Use Lock Nut Supplied With Flange
Assy. 408600-XX.

UniFlame II Detector

Detector

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
401116-01	UniFlame II Flame detector - Dual detector (IR and UV) with quick disconnect. NEMA 4X, FM, UL/c Approved. Use 401119-xx and 401120-xx cables. Requires display 401116-03 or 401118-03.	E	10	5.9
401116-10	UniFlame II Flame detector - Dual detector (IR and UV) with single quick disconnect to connect to UniFlame I cable connector (e.g., 405842-xx). NEMA 4X, FM, UL/c Approved. Use 405842-xx cables. Requires display 401116-03 or 401118-03.	E	20	7.1
401116-11	UniFlame II Flame detector - Dual detector (IR and UV) without quick disconnects. Wire directly to terminals inside detector. NEMA 4X, FM, UL/c Approved. Use 405842-xx cables. Requires display 401116-03 or 401118-03.	E	20	7.1
401117-01	UniFlame II Flame detector - Dual detector (IR and UV) with EExd IIC T6, ATEX approved housing. Housing only CE Approved. Includes 401116-03.	E	20	7.1
401117-02	UniFlame II Flame detector - Dual detector (IR and UV) with EExd IIC T6, ATEX approved housing and blank cap. Housing only CE Approved. Includes blank cap 401116-05 in place of a display.	E	20	7.1
401118-01	UniFlame II Flame detector - Dual detector (IR and UV) with EExd IIC T6, ATEX approved housing. Housing only CE Approved. Includes 401118-03.	E	20	7.1
401116-03	Vacuum Fluorescent Display (VFD) Display for UniFlame II flame detector.	E	20	2.0
401116-05	Blank cap for use with UniFlame II without a display.	E	20	0.5
401118-03	Wireless LED Display for UniFlame II flame detector. Requires 401118-04	E	20	1.0
401118-04	Wireless hand held programming tool for 401118-03.	E	20	2.0
400487-01	UniFlame/UniFlame II insulated mounting snout, 1" NPT, Front Mount	E	CF	0.5
400487-06	UniFlame/UniFlame II insulated mounting snout, 1" BSP, Front Mount	E	CF	-
401116-50	1" NPT mounting flange for UniFlame II detector. Heat insulating material and 3/8" air inlet incorporated into flange.	E	10	0.5
401116-60	1" BSP mounting flange for UniFlame II detector. Heat insulating material and 3/8" air inlet incorporated into flange.	E	10	0.5
74160-02	3/8" NPT Hex head plug for Mounting Flanges	D	10	0.1
75304-03	3/8" NPT plug with square head for Mounting Flanges	C	3	0.4
408600-01	UniFlame II IR Fiber Optic Flange Assy	E	CF	-
408600-02	UniFlame II UV Fiber Optic Flange Assy	E	CF	-
79508-81	24 vdc, 50 w, 2.5 amp power supply (up to 5 UniFlame II, D85 or HD-01's)	A	15	2.0
79508-82	24 vdc, 100 w, 5 amp power supply (up to 10 UniFlame II, D85 or HD-01's)	A	15	2.0
92527-01	Cooling Cover for UniFlame II (Made of CPVC plastic)	E	CF	-
92527-02	Cooling Cover for UniFlame II CEX (Made of CPVC plastic)	E	CF	-
91147-39	VORTEX-TUBE COOLER KIT	E	20	-
91948-98	RS 485 / USB convertor	E	20	1
401116-04	Forney Explorer software for UniFlame II (FEX)	E	3	0.5
92527-04	Wiring harness for UniFlame II flame detector - Junction box with one 8 and one 12 conductor cable with quick disconnects 10 ft. long	E	CF	-
401119-00	8 conductor cable for UniFlame II & D85 detector. Rated for ITC-ER and PLTC-ER.	E	20	0.1
401120-00	12 conductor cable for UniFlame II detector. Rated for ITC-ER and PLTC-ER. \$/ft.	E	3	0.2

UniFlame II Cables

Cable

Part Number	Description	Schedule	Est. Lead Time	Wt
Factory wired 8 conductor cable (401119-XX) assembly for UniFlame II & D85 quick				
401119-03	3 meters / 10 ft.	E	10	5.0
401119-06	6 meters / 20 ft.	E	10	10.0
401119-09	9 meters / 30 ft.	E	10	15.0
401119-12	12 meters / 40 ft.	E	10	20.0
401119-15	15 meters / 49 ft.	E	20	24.5
401119-30	30 meters / 98 ft.	E	20	49.0
401119-45	45 meters / 148 ft.	E	20	74.0
401119-60	60 meters / 197 ft.	E	20	98.5
401119-90	90 meters / 295 ft.	E	20	147.5

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
Factory wired 12 conductor cable (401120-XX) assembly for UniFlame II, quick disconnect				
401120-03	3 meters / 10 ft.	E	10	0.2
401120-06	6 meters / 20 ft.	E	10	20.0
401120-09	9 meters / 30 ft.	E	10	40.0
401120-12	12 meters / 40 ft.	E	10	60.0
401120-15	15 meters / 49 ft.	E	20	80.0
401120-30	30 meters / 98 ft.	E	20	98.0
401120-45	45 meters / 148 ft.	E	20	196.0
401120-60	60 meters / 197 ft.	E	20	296.0
401120-90	90 meters / 295 ft.	E	20	394.0

UniFlame II Flexible & Rigid Fiber Optic Assemblies

FO

Part Number	Description	Schedule	Est. Lead Time	Wt
408888-XX Uniflame II Flexible IR FO assembly - includes IR Fiber Optic Flange Assy, 1" NPT Wye, Outer Carrier, Glass Fiber Optic Bundle (407160-XX) and necessary screws, washers & o-rings. Length from scanner end of FO to end of outer carrier.				
408888-01	55.5"	A	CF	9
408888-02	60.5"	A	CF	11
408888-03	65.5"	A	CF	13
408888-04	70.5"	A	CF	15
408888-05	75.5"	A	CF	17
408888-06	80.5"	A	CF	19
408888-07	85.5"	A	CF	21
408888-08	90.5"	A	CF	23
408888-09	95.5"	A	CF	25
408888-10	100.5"	A	CF	27
408888-11	105.5"	A	CF	29
408888-12	110.5"	A	CF	31
408888-13	115.5"	A	CF	33
408888-14	120.5"	A	CF	35
408889-XX Uniflame II Flexible UV FO assembly - includes UV Fiber Optic Flange Assy, 1" NPT Wye, Outer Carrier, Quartz Fiber Optic Cable (405923-XX) and necessary screws, washers & o-rings. Length from scanner end of FO to end of outer carrier.				
408889-01	55"	A	CF	9
408889-02	60"	A	CF	11
408889-03	65"	A	CF	13
408889-04	70"	A	CF	15
408889-05	75"	A	CF	17
408889-06	80"	A	CF	19
408889-07	85"	A	CF	21
408889-08	90"	A	CF	23
408889-09	95"	A	CF	25
408889-10	100"	A	CF	27
408889-11	105"	A	CF	29
408889-12	110"	A	CF	31
408889-13	115"	A	CF	33
408889-14	120"	A	CF	35

Part Number	Description	Schedule	Est. Lead Time	Wt
408879-XX Uniflame II Rigid IR FO assembly - includes Fiber Optic Flange (92437-01), Fiber Optic Adapter (92437-03), 1" NPT Wye, Rigid Guide Tube, Glass Light guide assy UV (4007160-XX), Lens (92437-04) and necessary screws, washers & o-rings.				
408879-01	55"	A	CF	23
408879-02	60"	A	CF	25
408879-03	65"	A	CF	27
408879-04	70"	A	CF	29
408879-05	75"	A	CF	31
408879-06	80"	A	CF	33
408879-07	85"	A	CF	35
408879-08	90"	A	CF	37
408879-09	95"	A	CF	39
408879-10	100"	A	CF	41
408879-11	105"	A	CF	43
408879-12	110"	A	CF	45
408879-13	115"	A	CF	47
408879-14	120"	A	CF	49
408880-XX Uniflame II Rigid UV FO assembly - includes Fiber Optic Flange (92437-01), Fiber Optic Adapter (92437-12), 1" NPT Wye, Rigid Guide Tube, Quartz Light guide assy UV (405923-XX), Lens (92437-04) and necessary screws, washers & o-rings.				
408880-01	55"	A	CF	23
408880-02	60"	A	CF	25
408880-03	65"	A	CF	27
408880-04	70"	A	CF	29
408880-05	75"	A	CF	31
408880-06	80"	A	CF	33
408880-07	85"	A	CF	35
408880-08	90"	A	CF	37
408880-09	95"	A	CF	39
408880-10	100"	A	CF	41
408880-11	105"	A	CF	43
408880-12	110"	A	CF	45
408880-13	115"	A	CF	47
408880-14	120"	A	CF	49

UNIFLAME I DETECTOR

Technical Bulletin #404005-08

Technical Literature #372000-48

Forney's UniFlame I series flame detectors utilize micro-processor-based technology combined with solid state infrared (IR), ultraviolet (UV) or dual (IR and UV) sensors. An adjustable flame relay resides in the body of the UniFlame series flame detector, eliminating the need for a remote amplifier. All three models are properly suited for gaseous, liquid, solid or combination fuel firing.

The infrared model uses an infrared sensor sensitive to radiation prevailing in both #2 and #6 oil or coal fired applications. The ultraviolet model employs an ultraviolet sensor detecting radiation prevalent in gas or #2 oil fired applications. The MultiSpectral model incorporates both the ultraviolet and infrared sensors to detect the radiation from any variety of the three fuels. The configuration allows for applications on wall fired or tilting-tangentially fired burners.

The UniFlame I series flame detectors work on an amplitude and frequency (flame flicker) principle providing the best tuning control where high discrimination is required. The appropriate flicker frequency and amplitude gain is automatically configured in the AutoTune mode and can be manually adjusted via the Edit mode.

The flame detector housing is NEMA 4X, IP66 rated suitable for operation at temperatures up to 150°F (65°C). The UniFlame I detector is used in conjunction with a 24V power supply and is connected by a 12 conductor, shielded, prefabricated cable

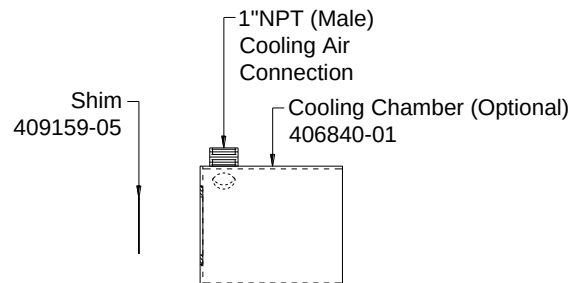
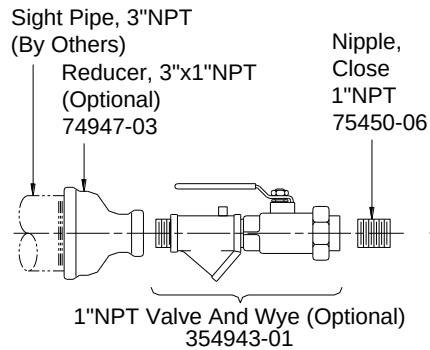
Maximum ambient temperature:	150°F (65°C)
Maximum cooling air temperature:	120 °F (48°C)
Cooling air requirements:	Front mount applications-minimum 10 scfm Fiber optic applications-minimum 15 scfm

FEATURES	BENEFITS
Unitized flame detector with amplifier	An adjustable relay resides in the body of the detector, eliminating the need for a remote amplifier.
Fiber optic adaptable	Fiber optics can easily be adapted to work with the IR or UV cell for difficult flame sighting applications. The Dual Spectrum detector cannot utilize fiber optics at this time.
NEMA 4X housing	Ensures complete protection against dust, sprayed-on water, and even temporary flooding.
Communications	Windows 95/98/NT user software for tuning and flame analysis
Alpha-numeric display	Provides local burner flame on/off status, internal detector temperature and other flame quality characteristics
Software	Used to upload/download previous detector's files, monitor and trend the flames signal and provide an overall view of the burner status
Self-check	No mechanical shutter which reduces maintenance cost
Program files	Four selectable program files for storing separate setpoints based on fuel, load or process conditions
24 VDC operation	Low voltage wiring replaces dangerous high voltage wiring runs

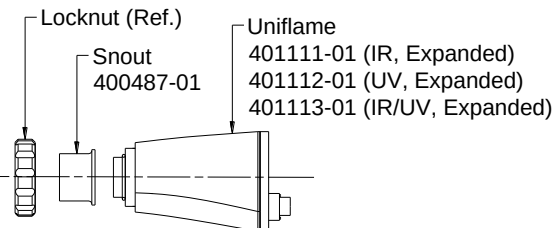
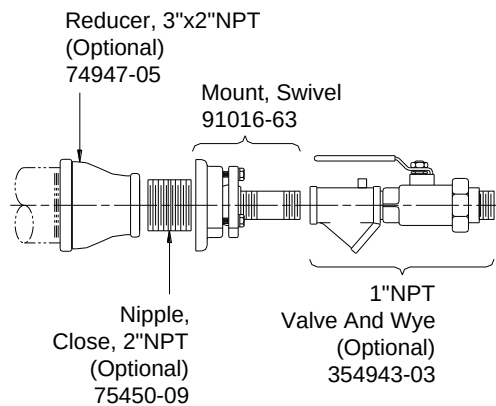
UNIFLAME I DETECTOR

Front Mount Applications Drawing

DIRECT MOUNT



DIRECT MOUNT W/SWIVEL



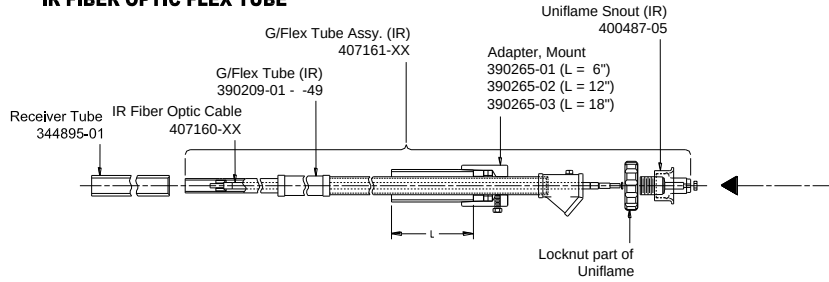
Connector, 12 Pin, Straight
(w/o 1/2" Cond. Adptr.)
405842-XX
-01 = 10Ft.
-02 = 20Ft.
-10 = 100Ft.

Connector, 12 Pin, Rt Angle
(w/ 1/2" Cond. Adptr.)
405842-XX
-51 = 10Ft.
-52 = 20Ft.
-60 = 100Ft.

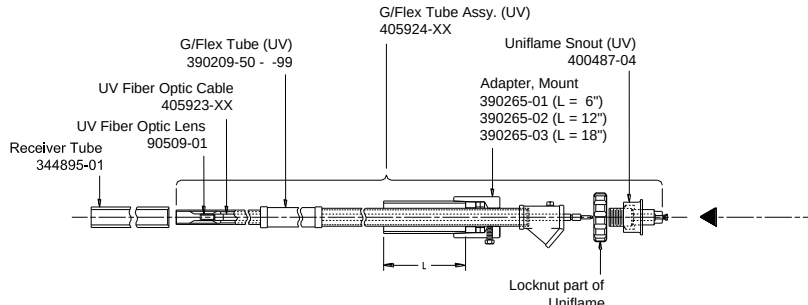
UNIFLAME I DETECTOR

Fiber Optic Mount Applications Drawing

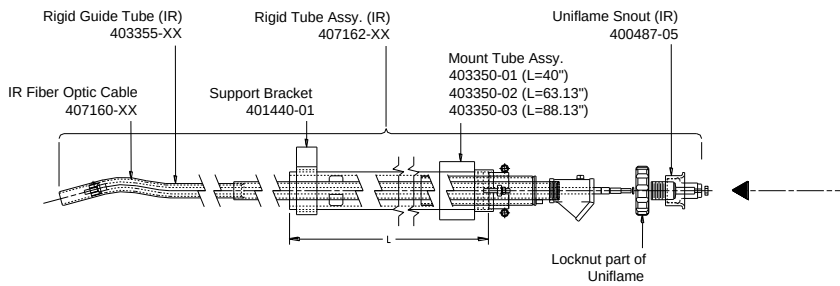
IR FIBER OPTIC FLEX TUBE



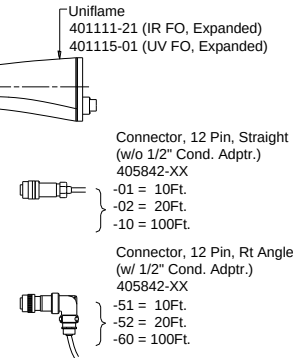
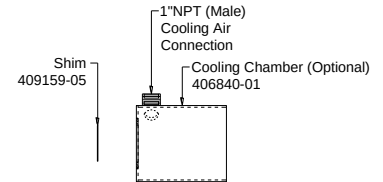
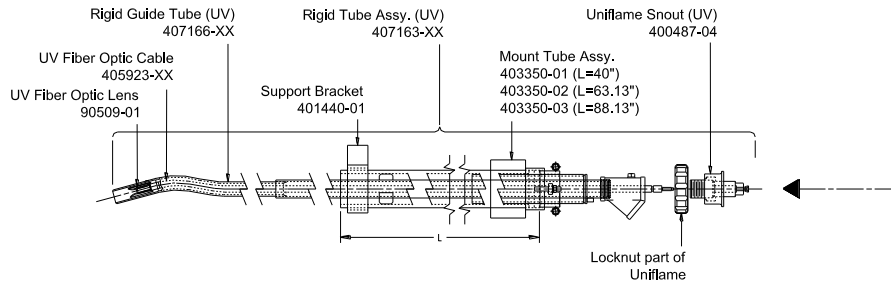
UV FIBER OPTIC FLEX TUBE



IR FIBER OPTIC RIGID TUBE



UV FIBER OPTIC RIGID TUBE



UniFlame I Detector

Detector

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
401111-01	OBSOLETE Enhanced Model UniFlame detector - Infrared with quick disconnect. FM, cULus Approved.	E	40	5
401111-03	OBSOLETE Enhanced Model UniFlame detector - Infrared with 10 foot leads and cable gland. FM, cULus Approved.	E	40	6.5
401111-21	OBSOLETE Fiber-optic version of Enhanced Model UniFlame detector - Infrared with quick disconnect. FM, cULus Approved.	E	40	5
401111-23	OBSOLETE Fiber-optic version of Enhanced Model UniFlame detector - Infrared with 10' leads and cable gland. FM, cULus Approved.	E	40	6.5
401112-01	OBSOLETE Enhanced Model UniFlame detector - Ultra-violet with quick disconnect. FM, cULus Approved.	E	40	5
401112-03	OBSOLETE Enhanced Model UniFlame detector - Ultra-violet with 10 foot leads and cable gland. FM, cULus Approved.	E	40	6.5
401115-01	OBSOLETE Fiber-optic version of Enhanced Model UniFlame detector - Ultra-violet with quick disconnect. FM, cULus Approved.	E	40	6.5
401113-01	Enhanced Model UniFlame detector - Dual detector (IR and UV) with quick disconnect. FM, cULus Approved.	E	40	5
401113-03	Enhanced Model UniFlame detector - Dual detector (IR and UV) with 10 foot leads and cable gland. FM, cULus Approved.	E	40	6.5
<i>*Note: Dual detectors not available in a Fiber Optic version*</i>				
91147-23	Mounting Flange, 1" NPT with insulating nipple	E	3	.7
400487-01	UniFlame/UniFlame II insulated mounting snout, 1" NPT, Front Mount	E	CF	0.45
400487-06	UniFlame/UniFlame II insulated mounting snout, 1" BSP, Front Mount	E	CF	-
400487-04	UniFlame insulated mounting snout, 1" NPT, Fiber Optic Mount UV	E	CF	-
400487-05	UniFlame insulated mounting snout, 1" NPT, Fiber Optic Mount IR	E	CF	-
406839-01	UniFlame Cooling Air Chamber	A	CF	-
79508-81	24 vdc, 50 w, 2.5 amp power supply (up to 5 UniFlame I/II, D85 or HD-01's)	A	15	2
79508-82	24 vdc, 100 w, 5 amp power supply (up to 10 UniFlame I/II, D85 or HD-01's)	A	15	2
91016-63	N.P.T. Swivel for Flame Detector	E	3	1.5
354943-01	Valve & Wye assembly	B	CF	2
91948-98	RS 485 / USB convertor	E	20	1
404000-01	DPD & UniFlame Software, Windows based (FS950W)	E	20	0.5
76097-00	Communication cable, BELDEN 8451-22 AWG, (2 conductor shielded) price per foot	B	CF	-

UniFlame I Cables

Part Number	Description	Sched-ule	Est. Lead Time	Wt
405842-XX	UniFlame Cable, 12 Conductor, Prefabricated, Straight Connector			
405842-01	10 FT. (3.0m)	E	10	1.2
405842-02	20 FT. (6.1m)	E	10	2.4
405842-03	25 FT. (9.1m)	E	10	3
405842-04	40 FT. (12.2m)	E	10	4.8
405842-05	50 FT. (15.2m)	E	10	6
405842-06	60 FT. (18.3m)	E	10	7.2
405842-08	80 FT. (24.4m)	E	10	9.6
405842-10	100 FT. (30.5m)	E	20	12
405842-12	120 FT. (36.6m)	E	20	14.4
405842-14	140 FT. (42.7m)	E	20	16.8
405842-16	160 FT. (48.8m)	E	20	19.2
405842-18	180 FT. (54.9m)	E	20	22.6
405842-20	200 FT. (61.0m)	E	20	25
405842-25	250 FT. (76.2m)	E	20	33
405842-30	300 FT. (91.4m)	E	20	41

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
405842-XX	UniFlame Cable, 12 Conductor, Prefabricated, Right Angle Connector			
405842-51	10 FT. (3.0m)	E	20	1.2
405842-52	20 FT. (6.1m)	E	20	2.4
405842-53	25 FT. (7.6m)	E	20	3
405842-54	40 FT. (12.2m)	E	20	4.8
405842-55	50 FT. (15.2m)	E	20	6
405842-56	60 FT. (18.3m)	E	20	7.2
405842-58	80 FT. (24.4m)	E	20	9.6
405842-60	100 FT. (30.5m)	E	20	12
405842-62	120 FT. (36.6m)	E	20	14.4
405842-64	140 FT. (42.7m)	E	20	16.8
405842-66	160 FT. (48.8m)	E	20	19.2
405842-68	180 FT. (54.9m)	E	20	22.6
405842-70	200 FT. (61.0m)	E	20	25
405842-75	250 FT. (76.2m)	E	20	33
405842-80	300 FT. (91.4m)	E	20	41

UniFlame I Flexible & Rigid Fiber Optic Assemblies

Part Number	Description	Sched-ule	Est. Lead Time	Wt
407161-XX	Uniflame Flexible IR FO assembly - includes IR Fiber Optic Flange Assy, 1" NPT Wye, Outer Carrier, Glass Fiber Optic Bundle (407160-XX) and necessary screw s, washers & o-rings. Length from scanner end of FO to end of outer carrier.			
407161-01	55.96"	A	CF	7
407161-02	60.96"	A	CF	9
407161-03	65.96"	A	CF	11
407161-04	70.96"	A	CF	13
407161-05	75.96"	A	CF	15
407161-06	80.96"	A	CF	17
407161-07	85.96"	A	CF	19
407161-08	90.96"	A	CF	21
407161-09	95.96"	A	CF	23
407161-10	100.96"	A	CF	25
407161-11	105.96"	A	CF	27
407161-12	110.96"	A	CF	29
407161-13	115.96"	A	CF	31
407161-14	120.96"	A	CF	33

Part Number	Description	Sched-ule	Est. Lead Time	Wt
405924-XX	Uniflame Flexible UV FO assembly - includes UV Fiber Optic Flange Assy, 1" NPT Wye, Outer Carrier, Quartz Fiber Optic Cable (405923-XX) and necessary screw s, washers & o-rings. Length from scanner end of FO to end of outer carrier.			
405924-01	55.61"	A	CF	7
405924-02	60.61"	A	CF	9
405924-03	65.61"	A	CF	11
405924-04	70.61"	A	CF	13
405924-05	75.61"	A	CF	15
405924-06	80.61"	A	CF	17
405924-07	85.61"	A	CF	19
405924-08	90.61"	A	CF	21
405924-09	95.61"	A	CF	23
405924-10	100.61"	A	CF	25
405924-11	105.61"	A	CF	27
405924-12	110.61"	A	CF	29
405924-13	115.61"	A	CF	31
405924-14	120.61"	A	CF	33

UniFlame I Flexible & Rigid Fiber Optic Assemblies

(continued)

Part Number	Description	Schedule	Est. Lead Time	Wt
407162-XX	Uniflame Rigid IR FO assembly - includes Fiber Optic Flange (400487-05), 1" NPT Wye, Rigid Guide Tube, Glass Light Guide Assy IR (407160-14) and necessary screws, washers & o-rings.			
407162-01	55"	A	CF	23
407162-02	60"	A	CF	25
407162-03	65"	A	CF	27
407162-04	70"	A	CF	29
407162-05	75"	A	CF	31
407162-06	80"	A	CF	33
407162-07	85"	A	CF	35
407162-08	90"	A	CF	37
407162-09	95"	A	CF	39
407162-10	100"	A	CF	41
407162-11	105"	A	CF	43
407162-12	110"	A	CF	45
407162-13	115"	A	CF	47
407162-14	120"	A	CF	49
407162-15	125"	A	CF	51
407162-16	130"	A	CF	53
407162-17	135"	A	CF	55
407162-18	140"	A	CF	57
407162-19	145"	A	CF	59

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
407163-XX	Uniflame Rigid UV FO assembly - includes Fiber Optic Flange (400487-04), 1" NPT Wye, Rigid Guide Tube, Quartz Light guide assy UV (405923-XX) and necessary screws, washers & o-rings.			
407163-01	55"	A	CF	23
407163-02	60"	A	CF	25
407163-03	65"	A	CF	27
407163-04	70"	A	CF	29
407163-05	75"	A	CF	31
407163-06	80"	A	CF	33
407163-07	85"	A	CF	35
407163-08	90"	A	CF	37
407163-09	95"	A	CF	39
407163-10	100"	A	CF	41
407163-11	105"	A	CF	43
407163-12	110"	A	CF	45
407163-13	115"	A	CF	47
407163-14	120"	A	CF	49
407163-15	125"	A	CF	51
407163-16	130"	A	CF	53
407163-17	135"	A	CF	55
407163-18	140"	A	CF	57
407163-19	145"	A	CF	33

UniFlameI/II & D85 FIBER OPTICS BUNDLES (CABLES)

Part Number	Description	Schedule	Est. Lead Time	Wt
407160-XX	Uniflame, UniFlame II & D85 Rigid IR Glass Fiber Optic Bundle Note: On UniFlame II if using UV then must use Quartz FO			
407160-01	55.5 in (16916mm)	B	CF	2.5
407160-02	60.5 in (18440mm)	B	CF	2.75
407160-03	65.5 in (19964mm)	B	CF	3
407160-04	70.5 in (21488mm)	B	CF	3.25
407160-05	75.5 in (23012mm)	B	CF	3.5
407160-06	80.5 in (24536mm)	B	CF	3.75
407160-07	85.5 in (26060mm)	B	CF	4
407160-08	90.5 in (27584mm)	B	CF	4.25
407160-09	95.5 in (29108mm)	B	CF	4.5
407160-10	100.5 in (30632mm)	B	CF	4.75
407160-11	105.5 in (32156mm)	B	CF	5
407160-12	110.5 in (33680mm)	B	CF	5.25
407160-13	115.5 in (35204mm)	B	CF	5.5
407160-14	120.5 in (36728mm)	B	CF	5.75

Part Number	Description	Schedule	Est. Lead Time	Wt
405923-XX	Uniflame, UniFlame II & D85 Rigid UV Quartz Fiber Optic Bundle Note: On UniFlame II if using UV then must use Quartz FO			
405923-01	55" (1397mm)	B	CF	2.5
405923-02	60" (1524mm)	B	CF	2.75
405923-03	65" (1651mm)	B	CF	3
405923-04	70" (1778mm)	B	CF	3.25
405923-05	75" (1905mm)	B	CF	3.5
405923-06	80" (2032mm)	B	CF	3.75
405923-07	85" (2159mm)	B	CF	4
405923-08	90" (2286mm)	B	CF	4.25
405923-09	95" (2413mm)	B	CF	4.5
405923-10	100" (2540mm)	B	CF	4.75
405923-11	105" (2667mm)	B	CF	5
405923-12	110" (2794mm)	B	CF	5.25
405923-13	115" (2921mm)	B	CF	5.5
405923-14	120" (3048mm)	B	CF	5.75

SECTION 2 – IGNITION PRODUCTS

HIGH ENERGY SPARK IGNITER

Spec Sheet #404006-06

Technical Manual #384077-02

Description

The High Energy Spark Igniter, HESI Series 90 is a Class 3 Igniter used for direct spark ignition of oil or gas igniters, small burners, and combustion turbines (see Section 2 – Gas Turbine HESI). The 12 joules of energy delivered to the spark tip (approximately 3 sparks per second) easily ignites the fuel.

The Standard HESI is FM approved and the CE Version meets the Low Voltage Directive and the Electromagnetic Interference Immunity Directive.

HESI – Manual Retraction

The standard HESI has three (3) components:

- HESI SPARK ROD (available in either carbon steel or stainless-steel).
- HESI POWER PACK (available in either carbon steel or stainless-steel).
- HESI CONNECTING CABLE ASSEMBLY.

Each component must be ordered by a separate part number. All **three (3)** components must be ordered to make a complete functional unit.

The **CE** Version HESI has two (2) components:

- HESI SPARK ROD with integral 5-meter cable assembly (available in either carbon steel or stainless-steel)
- HESI POWER PACK (available in either carbon steel or stainless-steel)

Each component must be ordered by a separate part number. **Both** must be ordered to make a complete functional unit.

A MOUNT TUBE option is available and should be ordered if no mount exists or if existing mount is incorrect size.

HESI – Automatic Retraction

The HESI with automatic retraction consists of five (5) major components:

- HESI SPARK ROD (available in either carbon steel or stainless-steel)
- HESI RETRACTION ASSEMBLY
- HESI MOUNT TUBE FOR RETRACTION
- HESI POWER PACK (available in either carbon steel or stainless-steel)
- HESI CONNECTING CABLE ASSEMBLY.

All **five** components must be ordered to make a complete functional unit.

The **CE** Version retractable HESI consists of four (4) major components:

- HESI SPARK ROD with integral 5 meter cable assembly (available in either carbon steel or stainless-steel)
- HESI RETRACTION ASSEMBLY
- HESI MOUNT TUBE FOR RETRACTION
- HESI POWER PACK (available in either carbon steel or stainless-steel)

All **four** components must be ordered to make a complete functional unit.

HIGH ENERGY SPARK IGNITER

Standard US HESI (NEC) P/N 382087-XX

Carbon steel rod, stainless-steel easy change tip, and NEMA 4 head with 2-pin cable connector.

Used with:

361864-XX	Connecting Cable assembly
358447-05/07	Power Pack 115 VAC 60 HZ (NEMA 4 – carbon steel enclosure or NEMA 4X - stainless-steel enclosure)
397860-01/02	Power Pack 230 VAC 50 HZ (NEMA 4 – carbon steel enclosure or NEMA 4X - stainless-steel enclosure)
404284-01	Power Pack 115 VAC / 60 HZ with proof of spark relay carbon steel enclosure

Stainless rod US HESI P/N 369204-XX

Stainless-steel potted rod, stainless-steel easy change tip, and malleable iron NEMA 4 head with 2-pin cable connector. For use in application where the atmosphere in the furnace may be corrosive (SRU/Hazmat), but explosion proof is not required.

Used with:

361864-XX	Connecting Cable assembly
358447-05/07	Power Pack 115 VAC 60 HZ (NEMA 4 – carbon steel enclosure or NEMA 4X – stainless-steel enclosure)
397860-01/02	Power Pack 230 VAC 50 HZ (NEMA 4 – carbon steel enclosure or NEMA 4X – stainless-steel enclosure)

Explosion proof US HESI. (Class 1 Div I and Div II) P/N 397116-XX

Stainless-steel potted rod and easy change tip, explosion proof malleable iron head no cable connector. Can be used in NEC classified areas.

Used with:

389362-XX	Connecting Cable assembly
374455-01	Power Pack 115 VAC 60 HZ
374455-02	Power Pack 220 VAC 50 HZ

Hazardous Area US HESI. (Class 1 Div II only) P/N 397116-XX

Stainless-steel potted rod and easy change tip, explosion proof malleable iron head no cable connector. Can be used in NEC classified areas.

Used with:

389362-XX	Connecting Cable assembly
402391-01	Power Pack 115 VAC 60 HZ Class 1 Div II NEMA 4X

Standard European HESI (CE Compliant) P/N 380445-XX

Carbon steel rod, stainless-steel easy change tip, NEMA 4 head, with 5-meter cable hard wired to head.

Used with:

388816-02/04	Power Pack (NEMA 4-carbon steel or NEMA 4X-stainless-steel enclosure)
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ATEX HESI (EExd IIC T6) P/N 368542 -XX

Stainless-steel potted rod, stainless-steel easy change tip, no cable.

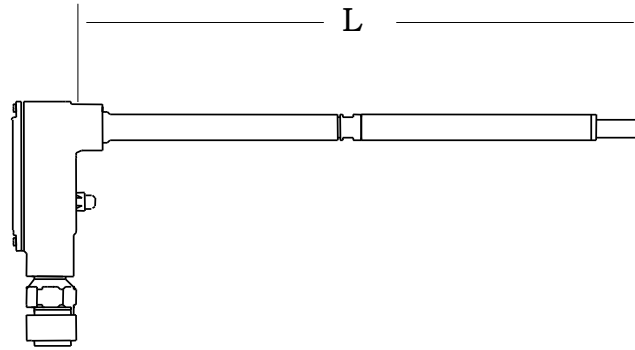
Used with:

368619-01	ATEX Power Pack (Explosion proof aluminum enclosure)
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HIGH ENERGY SPARK IGNITER

HESI SPARK ROD

The HESI spark rod comes in lengths from 14" (356mm) up to 180" (4572mm) in 2" (51mm) increments. The HESI spark rod features a positioning rod and a removable surface gap spark plug tip designed for long life and ease of maintenance.



LENGTH SELECTION

The “L” dimension is the distance from the firing end of the spark tip back to the threaded connection between the positioning rod and the weather head. In selecting a HESI spark rod length there are two dimensions that make up the total rod length. One is the distance from the firing end of the spark tip back to the burner front plate, and the other is the distance from the burner front plate back to the threaded connection at the weather head. The total of these two distances equals the dimension “L” of the HESI spark rod. Both dimensions can be obtained from a burner drawing if this is a retrofit application. If this is a new HESI application the following general rules can be used:

1. Locate the spark tip at the upstream location of the primary combustion zone.
2. Measure the distance back to the burner front plate.
- 3a. For fixed/manual retraction applications - Add 12" (305mm) to this distance for exposure outside the burner front plate. The total of these two distances will be the dimension “L”.
- 3b. Add retraction assembly length based on stroke length and “Y” dimension utilizing automatic retraction application drawing included in this section of price book.

TURBINE HESI SPARK ROD

The turbine HESI spark rod is a special igniter designed to replace the OEM supplied turbine igniter. We currently have configurations for the Westinghouse 301G & 501G and GE Frame 5, 7B, 7FA & 7EA turbines but will configure for any turbine at the customer’s request.

HESI POWER PACK

The HESI power pack comes in two voltages, 115 VAC and 230 VAC, 50/60HZ, and is available housed in your choice of a NEMA 4 (carbon steel painted gray), or NEMA 4x (brushed stainless-steel) junction box. Explosion-proof versions of the HESI power packs are also available.

HESI CABLE (Standard Version & CE Version Explosion Proof)

The standard version has a two-conductor prefabricated cable sheathed in a flexible conduit with a plug in connectors at both ends. The standard is a 15' (4.72m) cable, but cables are also available in 6' (1.83m), 9' (2.74m) and 12' (3.66m) foot lengths (for longer lengths please contact the factory).

The CE Version HESI has the cable prefabricated into the back of the weather head. A 5-meter cable conduit assembly is standard for all HESI lengths. The input side of the cable is terminated inside the power pack during installation.

The explosion proof HESI cables are hard wired into spark rod and power pack during the installation. The explosion proof cables are not included with the spark rod assembly and must be ordered separately.

HIGH ENERGY SPARK IGNITER

HESI MOUNT TUBE - Fixed (Manual Retraction)

The HESI mount tube (Pg. 63) must be ordered if there is no existing mount tube or if existing mount tube is incorrect size. Forney's mount tube consists of a 1.05" (27mm) OD, carbon steel, with packing gland, locking collar and quick release coupling. The mount tube is suitable for welding directly onto the burner front plate and it provides support for the HESI rod. Select the mount tube length from the column adjacent to the HESI igniter length in the HESI Standard & CE Catalog Structure.

HESI SPARK TIP - REPLACEMENT

The spark tip comes in two lengths. For replacement spark tips, order the part number which is correct for the existing equipment.

Part number	Spark tip length
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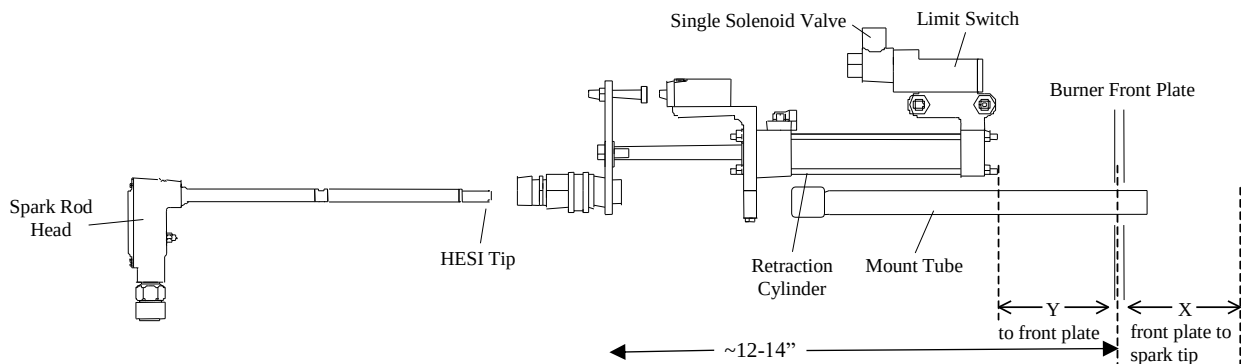
383726-02	8.5" (216mm)	For spark rods 36" (914mm) and shorter.
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383726-03	27" (686mm)	For spark rods 38" (965mm) and longer.
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Note: The same spark tips are used on the CE Version.

HESI RETRACTION ASSEMBLY (Required for oil igniters)

The HESI retraction assembly consists of two parts, a 1.05" (27mm) OD, carbon steel, mount tube and pneumatic cylinder with solenoid valve, extend position limit switch, packing gland and locking collar suitable for welding directly onto the burner front plate. The HESI spark rod does not come as a part of this assembly. Select the mount tube length from the column adjacent to the HESI SPARK ROD length in the HESI Standard & CE Catalog Structure. See "Length Selection" in previous section to determine the HESI SPARK ROD length.



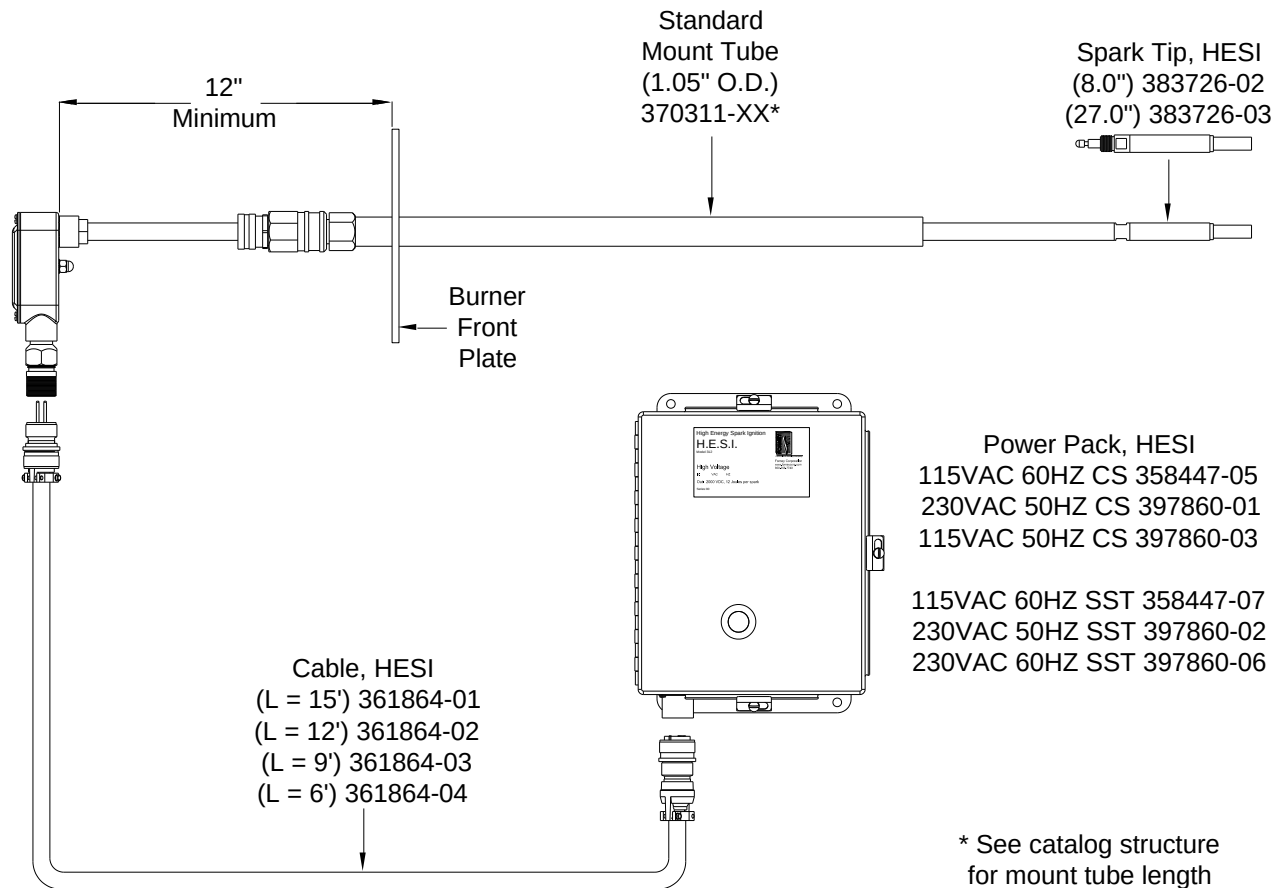
The spark rod extends through its mount tube to a position near the igniter tip. When the igniter is out of service, the retraction cylinder holds the HESI tip inside the mount tube to protect it from heat inside the furnace. During igniter light off, the burner management system (BMS) activates an output signal to extend the spark rod and to energize the HESI power unit for a fixed time. While extended, the HESI spark tip is positioned inside the primary combustion zone of the igniter, and the power unit enables the HESI to produce 3 sparks per second, each of which release 12 joules of energy. After completion of a light off trial interval, the BMS retracts the HESI tip and deenergizes the power unit. Note: Not available in EExd.

Retraction Hardware

The retraction hardware consists of a pneumatic cylinder and solenoid valve with manual override. While the solenoid valve is in its deenergized state, the cylinder holds the HESI in its retracted position. When the solenoid is energized, 60-psig (413.7kPa) instrument air causes the cylinder to extend the HESI. Because the solenoid spool has a spring return, the solenoid must remain energized to keep the HESI extended.

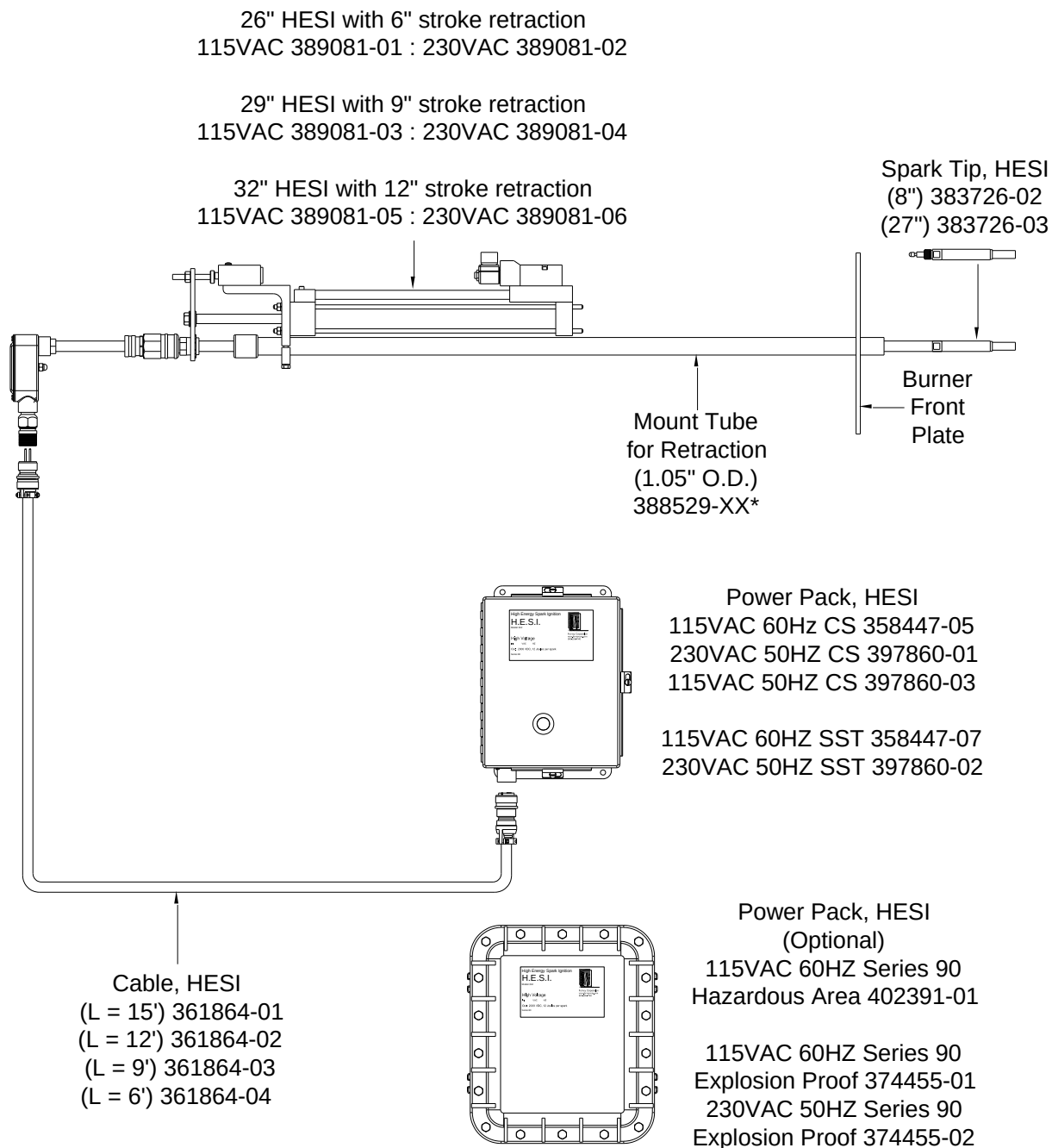
HIGH ENERGY SPARK IGNITER

Manual Retraction Application Drawing



HIGH ENERGY SPARK IGNITER

Automatic Retraction Application Drawing

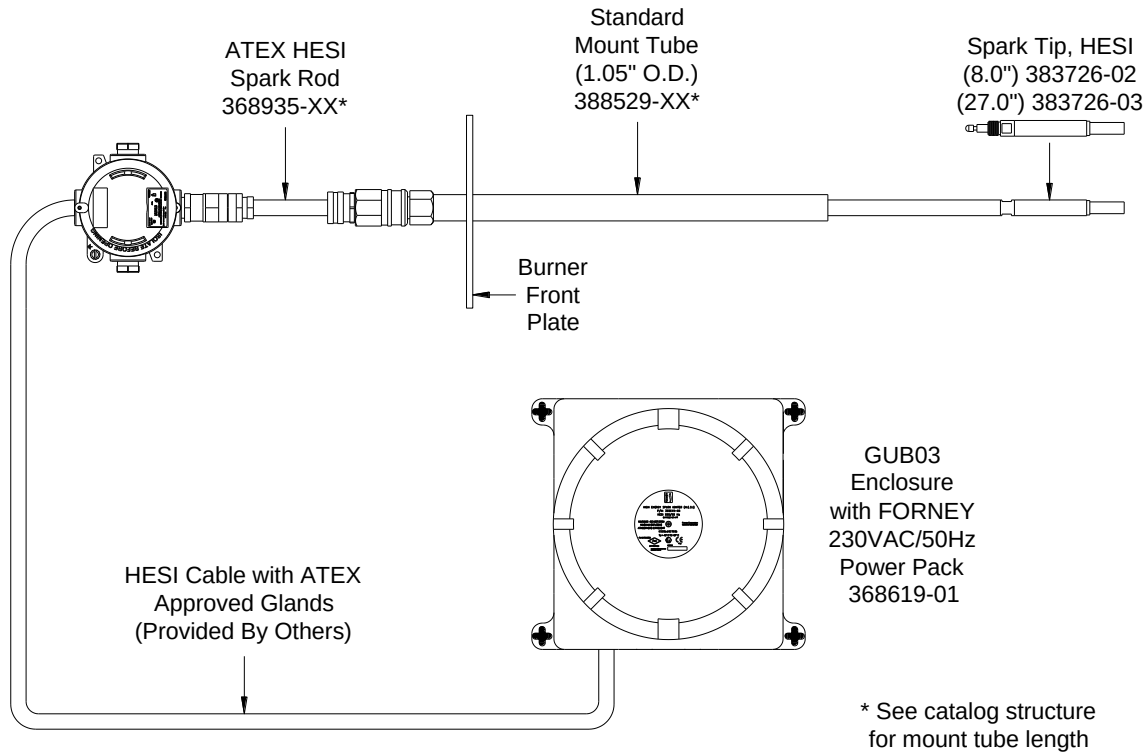


* See catalog structure
for mount tube length

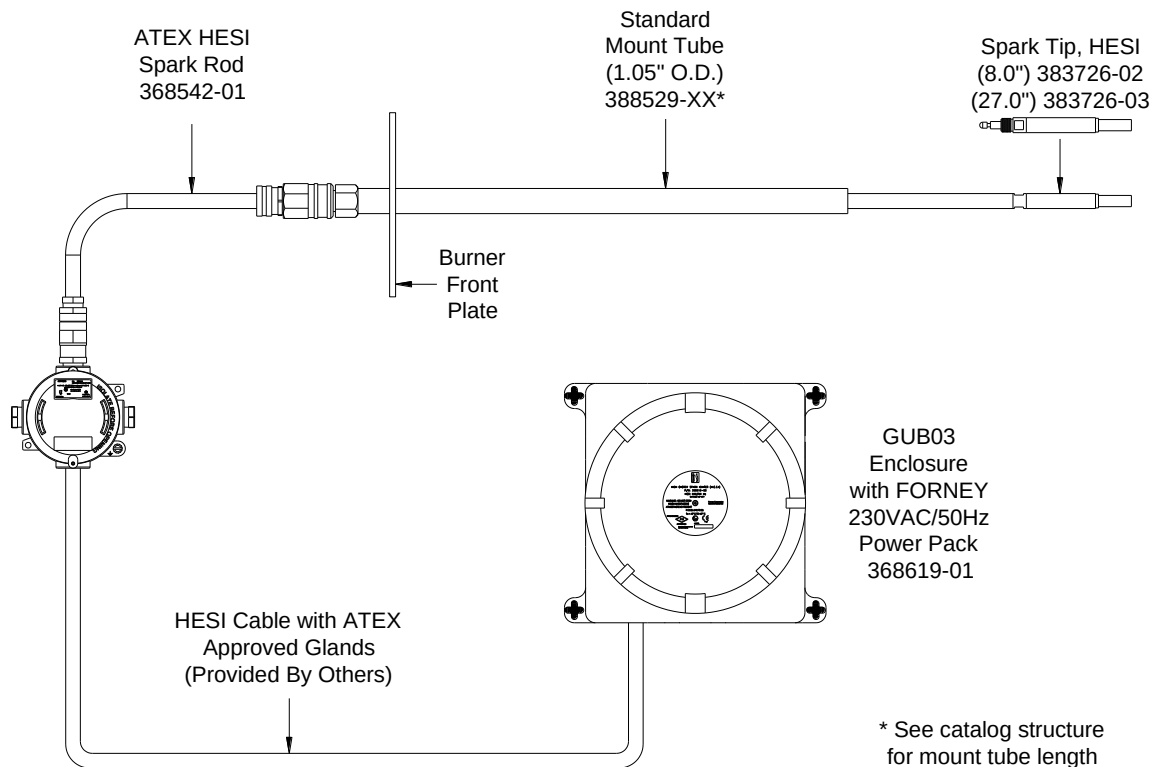
HIGH ENERGY SPARK IGNITER

ATEX Application Drawing

Straight Head



90° Head



HIGH ENERGY SPARK IGNITER

Standard

Replace part number suffix with the appropriate suffix from the HESI Standard & CE Catalog Structure.

Estimated Lead Time is in Business Days

Standard HESI spark rod

Part Number	Description	Schedule	Est. Lead Time	Wt
382087-XX	HESI spark rod			
382087-01	14"(355.6mm)	D	12	1.8
382087-02	16"(406.4mm)	D	12	1.9
382087-03	18"(457.2mm)	D	12	2
382087-04	20"(508.0mm)	D	12	2.1
382087-05	22"(558.8mm)	D	12	2.2
382087-06	24"(609.6mm)	D	12	2.3
382087-07	26"(660.4mm)	D	12	2.4
382087-08	28"(711.2mm)	D	12	2.5
382087-09	30"(762.0mm)	D	12	2.6
382087-10	32"(812.8mm)	D	12	2.7
382087-11	34"(863.6mm)	D	12	2.8
382087-12	36"(914.4mm)	D	12	2.9
382087-13	38"(965.2mm)	D	12	3
382087-14	40"(1016.0mm)	D	12	3.1
382087-15	42"(1066.8mm)	D	12	3.2
382087-16	44"(1117.6mm)	D	12	3.3
382087-17	46"(1168.4mm)	D	12	3.4
382087-18	48"(1219.2mm)	D	12	3.5
382087-19	50"(1270mm)	D	12	3.6
382087-20	52"(1320.8mm)	D	12	3.7
382087-21	54"(1371.6mm)	D	12	3.8
382087-22	56"(1422.4mm)	D	12	3.9
382087-23	58"(1473.2mm)	D	12	4
382087-24	60"(1524mm)	D	12	4.1
382087-25	62"(1574.8mm)	D	17	4.2
382087-26	64"(1625.6mm)	D	17	4.3
382087-27	66"(1676.4mm)	D	17	4.4
382087-28	68"(1727.2mm)	D	17	4.5
382087-29	70"(1778mm)	D	17	4.6
382087-30	72"(1828.8mm)	D	17	4.7
382087-31	74"(1879.6mm)	D	17	4.8
382087-32	76"(1930.4mm)	D	17	4.9
382087-33	78"(1981.2mm)	D	17	5
382087-34	80"(2032.0mm)	D	17	5.1
382087-35	82"(2082.8mm)	D	17	5.2
382087-36	84"(2133.6mm)	D	17	5.3
382087-37	86"(2184.4mm)	D	17	5.4
382087-38	88"(2235.2mm)	D	17	5.5
382087-39	90"(2286.0mm)	D	17	5.6
382087-40	92"(2336.8mm)	D	17	5.7
382087-41	94"(2387.6mm)	D	17	5.8
382087-42	96"(2438.4mm)	D	17	5.9

Standard HESI spark rod (Continued)

Part Number	Description	Schedule	Est. Lead Time	Wt
382087-XX	HESI spark rod (Cont.)			
382087-43	98"(2489.2mm)	D	17	6
382087-44	100"(2540.0mm)	D	17	6.1
382087-45	102"(2590.8mm)	D	17	6.2
382087-46	104"(2641.6mm)	D	17	6.3
382087-47	106"(2692.4mm)	D	17	6.4
382087-48	108"(2743.2mm)	D	17	6.5
382087-49	110"(2794.0mm)	D	17	6.6
382087-50	112"(2844.8mm)	D	17	6.7
382087-51	114"(2895.6mm)	D	17	6.8
382087-52	116"(2946.4mm)	D	17	6.9
382087-53	118"(2997.2mm)	D	17	7
382087-54	120"(3048.0mm)	D	17	7.1
382087-55	122"(3098.8mm)	D	17	7.2
382087-56	124"(3149.6mm)	D	17	7.3
382087-57	126"(3200.4mm)	D	17	7.4
382087-58	128"(3251.2mm)	D	17	7.5
382087-59	130"(3302.0mm)	D	17	7.6
382087-60	132"(3352.8mm)	D	17	7.7
382087-61	134"(3403.6mm)	D	17	7.8
382087-62	136"(3454.4mm)	D	17	7.9
382087-63	138"(3505.2mm)	D	17	8
382087-64	140"(3556.0mm)	D	17	8.1
382087-65	142"(3606.8mm)	D	17	8.2
382087-66	144"(3657.6mm)	D	17	8.3
382087-67	146"(3708.4mm)	D	17	8.4
382087-68	148"(3759.2mm)	D	17	8.5
382087-69	150"(3810.0mm)	D	17	8.6
382087-70	152"(3860.8mm)	D	17	8.7
382087-71	154"(3911.6mm)	D	17	8.8
382087-72	156"(3962.4mm)	D	17	8.9
382087-73	158"(4013.2mm)	D	17	9
382087-74	160"(4064.0mm)	D	17	9.1
382087-75	162"(4114.8mm)	D	17	9.2
382087-76	164"(4165.6mm)	D	17	9.3
382087-77	166"(4216.4mm)	D	17	9.4
382087-78	168"(4267.2mm)	D	17	9.5
382087-79	170"(4318.0mm)	D	17	9.6
382087-80	172"(4368.8mm)	D	17	9.7
382087-81	174"(4419.6mm)	D	17	9.8
382087-82	176"(4470.4mm)	D	17	9.9
382087-83	178"(4521.2mm)	D	17	10
382087-84	180"(4572.0mm)	D	17	10

HIGH ENERGY SPARK IGNITER

Standard (Continued)

Stainless-steel HESI spark rod

Part Number	Description	Sched-ule	Est. Lead Time	Wt
369204-01	Stainless Steel HESI spark rod			
369204-01	14"(355.6mm)	D	CF	2
369204-02	16"(406.4mm)	D	CF	-
369204-03	18"(457.2mm)	D	CF	-
369204-04	20"(508.0mm)	D	CF	-
369204-05	22"(558.8mm)	D	CF	-
369204-06	24"(609.6mm)	D	CF	-
369204-07	26"(660.4mm)	D	CF	-
369204-08	28"(711.2mm)	D	CF	-
369204-09	30"(762.0mm)	D	CF	-
369204-10	32"(812.8mm)	D	CF	-
369204-11	34"(863.6mm)	D	CF	-
369204-12	36"(914.4mm)	D	CF	-
369204-13	38"(965.2mm)	D	CF	-
369204-14	40"(1016.0mm)	D	CF	-
369204-15	42"(1066.8mm)	D	CF	-
369204-16	44"(1117.6mm)	D	CF	-
369204-17	46"(1168.4mm)	D	CF	-
369204-18	48"(1219.2mm)	D	CF	-
369204-19	50"(1270mm)	D	CF	-
369204-20	52"(1320.8mm)	D	CF	-
369204-21	54"(1371.6mm)	D	CF	-
369204-22	56"(1422.4mm)	D	CF	-
369204-23	58"(1473.2mm)	D	CF	-
369204-24	60"(1524mm)	D	CF	-
369204-25	62"(1574.8mm)	D	CF	-
369204-26	64"(1625.6mm)	D	CF	-
369204-27	66"(1676.4mm)	D	CF	-
369204-28	68"(1727.2mm)	D	CF	-
369204-29	70"(1778mm)	D	CF	-
369204-30	72"(1828.8mm)	D	CF	-
369204-31	74"(1879.6mm)	D	CF	-
369204-32	76"(1930.4mm)	D	CF	-
369204-33	78"(1981.2mm)	D	CF	-
369204-34	80"(2032.0mm)	D	CF	-
369204-35	82"(2082.8mm)	D	CF	-
369204-36	84"(2133.6mm)	D	CF	-
369204-37	86"(2184.4mm)	D	CF	-
369204-38	88"(2235.2mm)	D	CF	-
369204-39	90"(2286.0mm)	D	CF	-
369204-40	92"(2336.8mm)	D	CF	-
369204-41	94"(2387.6mm)	D	CF	-
369204-42	96"(2438.4mm)	D	CF	-

Estimated Lead Time is in Business Days

Stainless-steel HESI spark rod (Continued)

Part Number	Description	Sched-ule	Est. Lead Time	Wt
369204-01	Stainless Steel HESI spark rod (Cont.)			
369204-43	98"(2489.2mm)	D	CF	-
369204-44	100"(2540.0mm)	D	CF	-
369204-45	102"(2590.8mm)	D	CF	-
369204-46	104"(2641.6mm)	D	CF	-
369204-47	106"(2692.4mm)	D	CF	-
369204-48	108"(2743.2mm)	D	CF	-
369204-49	110"(2794.0mm)	D	CF	-
369204-50	112"(2844.8mm)	D	CF	-
369204-51	114"(2895.6mm)	D	CF	-
369204-52	116"(2946.4mm)	D	CF	-
369204-53	118"(2997.2mm)	D	CF	-
369204-54	120"(3048.0mm)	D	CF	-
369204-55	122"(3098.8mm)	D	CF	-
369204-56	124"(3149.6mm)	D	CF	-
369204-57	126"(3200.4mm)	D	CF	-
369204-58	128"(3251.2mm)	D	CF	-
369204-59	130"(3302.0mm)	D	CF	-
369204-60	132"(3352.8mm)	D	CF	-
369204-61	134"(3403.6mm)	D	CF	-
369204-62	136"(3454.4mm)	D	CF	-
369204-63	138"(3505.2mm)	D	CF	-
369204-64	140"(3556.0mm)	D	CF	-
369204-65	142"(3606.8mm)	D	CF	-
369204-66	144"(3657.6mm)	D	CF	-
369204-67	146"(3708.4mm)	D	CF	-
369204-68	148"(3759.2mm)	D	CF	-
369204-69	150"(3810.0mm)	D	CF	-
369204-70	152"(3860.8mm)	D	CF	-
369204-71	154"(3911.6mm)	D	CF	-
369204-72	156"(3962.4mm)	D	CF	-
369204-73	158"(4013.2mm)	D	CF	-
369204-74	160"(4064.0mm)	D	CF	-
369204-75	162"(4114.8mm)	D	CF	-
369204-76	164"(4165.6mm)	D	CF	-
369204-77	166"(4216.4mm)	D	CF	-
369204-78	168"(4267.2mm)	D	CF	-
369204-79	170"(4318.0mm)	D	CF	-
369204-80	172"(4368.8mm)	D	CF	-
369204-81	174"(4419.6mm)	D	CF	-
369204-82	176"(4470.4mm)	D	CF	-
369204-83	178"(4521.2mm)	D	CF	-
369204-84	180"(4572.0mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

Standard (Continued)

Class I Div II HESI spark rod

Part Number	Description	Schedule	Est. Lead Time	Wt
397116-01	Class I Div II HESI spark rod			
397116-01	14"(355.6mm)	D	CF	2
397116-02	16"(406.4mm)	D	CF	-
397116-03	18"(457.2mm)	D	CF	2
397116-04	20"(508.0mm)	D	CF	-
397116-05	22"(558.8mm)	D	CF	-
397116-06	24"(609.6mm)	D	CF	-
397116-07	26"(660.4mm)	D	CF	-
397116-08	28"(711.2mm)	D	CF	-
397116-09	30"(762.0mm)	D	CF	-
397116-10	32"(812.8mm)	D	CF	-
397116-11	34"(863.6mm)	D	CF	-
397116-12	36"(914.4mm)	D	CF	-
397116-13	38"(965.2mm)	D	CF	-
397116-14	40"(1016.0mm)	D	CF	-
397116-15	42"(1066.8mm)	D	CF	-
397116-16	44"(1117.6mm)	D	CF	-
397116-17	46"(1168.4mm)	D	CF	-
397116-18	48"(1219.2mm)	D	CF	-
397116-19	50"(1270mm)	D	CF	-
397116-20	52"(1320.8mm)	D	CF	-
397116-21	54"(1371.6mm)	D	CF	-
397116-22	56"(1422.4mm)	D	CF	-
397116-23	58"(1473.2mm)	D	CF	-
397116-24	60"(1524mm)	D	CF	-
397116-25	62"(1574.8mm)	D	CF	-
397116-26	64"(1625.6mm)	D	CF	-
397116-27	66"(1676.4mm)	D	CF	-
397116-28	68"(1727.2mm)	D	CF	-
397116-29	70"(1778mm)	D	CF	-
397116-30	72"(1828.8mm)	D	CF	-
397116-31	74"(1879.6mm)	D	CF	-
397116-32	76"(1930.4mm)	D	CF	-
397116-33	78"(1981.2mm)	D	CF	-
397116-34	80"(2032.0mm)	D	CF	-
397116-35	82"(2082.8mm)	D	CF	-
397116-36	84"(2133.6mm)	D	CF	-
397116-37	86"(2184.4mm)	D	CF	-
397116-38	88"(2235.2mm)	D	CF	-
397116-39	90"(2286.0mm)	D	CF	-
397116-40	92"(2336.8mm)	D	CF	-
397116-41	94"(2387.6mm)	D	CF	-
397116-42	96"(2438.4mm)	D	CF	-

Estimated Lead Time is in Business Days

Class I Div II HESI spark rod (Continued)

Part Number	Description	Schedule	Est. Lead Time	Wt
397116-43	98"(2489.2mm)	D	CF	-
397116-44	100"(2540.0mm)	D	CF	-
397116-45	102"(2590.8mm)	D	CF	-
397116-46	104"(2641.6mm)	D	CF	-
397116-47	106"(2692.4mm)	D	CF	-
397116-48	108"(2743.2mm)	D	CF	-
397116-49	110"(2794.0mm)	D	CF	-
397116-50	112"(2844.8mm)	D	CF	-
397116-51	114"(2895.6mm)	D	CF	-
397116-52	116"(2946.4mm)	D	CF	-
397116-53	118"(2997.2mm)	D	CF	-
397116-54	120"(3048.0mm)	D	CF	-
397116-55	122"(3098.8mm)	D	CF	-
397116-56	124"(3149.6mm)	D	CF	-
397116-57	126"(3200.4mm)	D	CF	-
397116-58	128"(3251.2mm)	D	CF	-
397116-59	130"(3302.0mm)	D	CF	-
397116-60	132"(3352.8mm)	D	CF	-
397116-61	134"(3403.6mm)	D	CF	-
397116-62	136"(3454.4mm)	D	CF	-
397116-63	138"(3505.2mm)	D	CF	-
397116-64	140"(3556.0mm)	D	CF	-
397116-65	142"(3606.8mm)	D	CF	-
397116-66	144"(3657.6mm)	D	CF	-
397116-67	146"(3708.4mm)	D	CF	-
397116-68	148"(3759.2mm)	D	CF	-
397116-69	150"(3810.0mm)	D	CF	-
397116-70	152"(3860.8mm)	D	CF	-
397116-71	154"(3911.6mm)	D	CF	-
397116-72	156"(3962.4mm)	D	CF	-
397116-73	158"(4013.2mm)	D	CF	-
397116-74	160"(4064.0mm)	D	CF	-
397116-75	162"(4114.8mm)	D	CF	-
397116-76	164"(4165.6mm)	D	CF	-
397116-77	166"(4216.4mm)	D	CF	-
397116-78	168"(4267.2mm)	D	CF	-
397116-79	170"(4318.0mm)	D	CF	-
397116-80	172"(4368.8mm)	D	CF	-
397116-81	174"(4419.6mm)	D	CF	-
397116-82	176"(4470.4mm)	D	CF	-
397116-83	178"(4521.2mm)	D	CF	-
397116-84	180"(4572.0mm)	D	CF	-

HESI Mount Tube Assembly for FIXED applications

Part Number	Description	Sched-ule	Est. Lead Time	Wt
370311-01	HESI Mount Tube Assembly for FIXED apps			
370311-01	6.84"(174mm)	D	CF	-
370311-02	16.84"(428mm)	D	CF	-
370311-03	26.84"(682mm)	D	CF	-
370311-04	36.84"(936mm)	D	CF	-
370311-05	46.84"(1190mm)	D	CF	-
370311-06	56.84"(1444mm)	D	CF	-
370311-07	66.84"(1698mm)	D	CF	-
370311-08	76.84"(1952mm)	D	CF	-
370311-09	86.84"(2206mm)	D	CF	-
370311-10	96.84"(2460mm)	D	CF	-
370311-11	106.84"(2714mm)	D	CF	-
370311-12	116.84"(2968mm)	D	CF	-
370311-13	126.84"(3222mm)	D	CF	-
370311-14	136.84"(3476mm)	D	CF	-
370311-15	146.84"(3730mm)	D	CF	-
370311-16	156.84"(3984mm)	D	CF	-
370311-17	166.84"(4238mm)	D	CF	-

HESI Mount Tube Assy for RETRACTION applications

Part Number	Description	Sched-ule	Est. Lead Time	Wt
388529-01	HESI Mount Tube Assembly for RETRACTION			
388529-01	2.62" (67mm)	D	CF	-
388529-02	12.62"(321mm)	D	CF	-
388529-03	22.62" (575mm)	D	CF	-
388529-04	32.62"(829mm)	D	CF	-
388529-05	42.62"(1083mm)	D	CF	-
388529-06	52.62"(1337mm)	D	CF	-
388529-07	62.62"(1591mm)	D	CF	-
388529-08	72.62"(1845mm)	D	CF	-
388529-09	82.62" (2099mm)	D	CF	-
388529-10	92.62"(2353mm)	D	CF	-
388529-11	102.62"(2607mm)	D	CF	-
388529-12	112.62"(2861mm)	D	CF	-
388529-13	122.62"(3115mm)	D	CF	-
388529-14	132.62"(3369mm)	D	CF	-
388529-15	142.62" (3623mm)	D	CF	-
388529-16	152.62"(3877mm)	D	CF	-
388529-17	162.62" (4131mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

Standard (Continued)

HESI Standard & CE Catalog Structure to identify appropriate suffix for Mount Tube part number to match spark rod

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
358447-05	HESI Pow erpack, 120VAC, series 90E, 60Hz, Carbon Steel enclosure, 2 pin	D	3	16
358447-06	HESI Pow erpack, 230VAC, series 90F, 60Hz, Carbon Steel enclosure, 2 pin	D	15	16
397860-03	HESI Pow erpack, 115VAC, series 90M, 50Hz Carbon Steel enclosure, 2 pin	D	15	16.5
397860-01	HESI Pow erpack, 230VAC, series 90F, 50Hz, Carbon Steel enclosure, 2 pin	D	3	16.5
358447-07	HESI Pow erpack, 120VAC, series 90G,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
397860-02	HESI Pow erpack, 230VAC, series 90H,4X, 50Hz Stainless Steel enclosure,2 pin	D	15	16.5
374455-01	HESI Pow erpack, 115VAC, series 90, 60 Hz, Explosion Proof	D	CF	-
374455-02	HESI Pow erpack, 230VAC, series 90, 50 Hz, Explosion Proof	D	CF	-
402391-01	HESI Pow erpack, 115 VAC, series 90, 60 Hz, Class I Div II	D	15	-
361864-05	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 3 (.9m)	D	5	4.4
361864-04	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 6' (1.8m)	D	5	4.8
361864-03	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 9' (2.7m)	D	5	5.2
361864-02	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 12' (3.7m)	D	5	5.6
361864-01	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 15' (4.5m)	D	3	6
361864-06	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 20' (6.1m)	D	15	8
361864-10	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 25' (7.6m)	D	15	10
389362-01	Class I Div II HESI Cable Assembly (US) LENGTH 15' (4.5m)	D	CF	6
389362-13	Class I Div II HESI Cable Assembly (US) LENGTH 30' (9m)	D	CF	12
383726-01	Spark Tip, Very Short (~6") (used in flexible applications only)	D	CF	0.25
383726-02	Spark Tip, Short (~8")	D	3	0.33
383726-03	Spark Tip, Long (~27")	D	3	2
342417-02	Spark Tip, Short (6.7") with 15' white wire lead (used prior to 1995)	D	CF	0.6
314304-01	Spark Tip, Long (27.4") with 15' white wire lead (used prior to 1995)	D	3	2.4
396517-02	HESI Spark Gap Tube, replacement kit	D	CF	0.2
79942-01	HESI Capacitor for 60Hz units	D	40	0.2
79942-04	HESI Capacitor for 50Hz units	D	CF	0.2
79941-00	HESI Transformer	D	30	4

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
	AUTOMATIC RETRACTION EQUIPMENT			
389081-01	HESI Retractor, 6"(152.4mm) stroke, 115 VAC, single coil solenoid valve, SPDT limit switch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	6
389081-02	HESI Retractor, 6"(152.4mm) stroke, 230 VAC, single coil solenoid valve, SPDT limit switch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	6
389081-03	HESI Retractor, 9"(228.6mm) stroke, 115 VAC, single coil solenoid valve, SPDT limit switch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	8
389081-04	HESI Retractor, 9"(228.6mm) stroke, 230 VAC, single coil solenoid valve, SPDT limit switch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	8
389081-05	HESI Retractor, 12"(304.8mm) stroke, 115 VAC, single coil solenoid valve, SPDT limit switch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	10
389081-06	HESI Retractor, 12"(304.8mm) stroke, 230 VAC, single coil solenoid valve, SPDT limit switch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	10
78892-04	Solenoid Valve & Single Coil for Retraction assembly, 115VAC	D	CF	0.4
78892-10	Solenoid Valve & Single Coil for Retraction assembly, 230VAC	D	CF	0.4
78059-04	Coil only for retraction assembly, 115VAC	D	CF	0.1
78059-05	Coil only for retraction assembly, 230VAC	D	CF	0.1

HIGH ENERGY SPARK IGNITER CE

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368542-XX	ATEX EExd IIC T6 HESI spark rod 90 degree head			
368542-08	28"(711.2mm)	D	CF	-
368542-09	30"(762.0mm)	D	CF	-
368542-10	32"(812.8mm)	D	CF	-
368542-11	34"(863.6mm)	D	CF	-
368542-12	36"(914.4mm)	D	CF	-
368542-13	38"(965.2mm)	D	CF	-
368542-14	40"(1016.0mm)	D	CF	-
368542-15	42"(1066.8mm)	D	CF	-
368542-16	44"(1117.6mm)	D	CF	-
368542-17	46"(1168.4mm)	D	CF	-
368542-18	48"(1219.2mm)	D	CF	-
368542-19	50"(1270mm)	D	CF	-
368542-20	52"(1320.8mm)	D	CF	-
368542-21	54"(1371.6mm)	D	CF	-
368542-22	56"(1422.4mm)	D	CF	-
368542-23	58"(1473.2mm)	D	CF	-
368542-24	60"(1524mm)	D	CF	-
368542-25	62"(1574.8mm)	D	CF	-
368542-26	64"(1625.6mm)	D	CF	-
368542-27	66"(1676.4mm)	D	CF	-
368542-28	68"(1727.2mm)	D	CF	-
368542-29	70"(1778mm)	D	CF	-
368542-30	72"(1828.8mm)	D	CF	-
368542-31	74"(1879.6mm)	D	CF	-
368542-32	76"(1930.4mm)	D	CF	-
368542-33	78"(1981.2mm)	D	CF	-
368542-34	80"(2032.0mm)	D	CF	-
368542-35	82"(2082.8mm)	D	CF	-
368542-36	84"(2133.6mm)	D	CF	-
368542-37	86"(2184.4mm)	D	CF	-
368542-38	88"(2235.2mm)	D	CF	-
368542-39	90"(2286.0mm)	D	CF	-
368542-40	92"(2336.8mm)	D	CF	-
368542-41	94"(2387.6mm)	D	CF	-
368542-42	96"(2438.4mm)	D	CF	-
368542-43	98"(2489.2mm)	D	CF	-
368542-44	100"(2540.0mm)	D	CF	-
368542-45	102"(2590.8mm)	D	CF	-
368542-46	104"(2641.6mm)	D	CF	-
368542-47	106"(2692.4mm)	D	CF	-
368542-48	108"(2743.2mm)	D	CF	-
368542-49	110"(2794.0mm)	D	CF	-
368542-50	112"(2844.8mm)	D	CF	-
368542-51	114"(2895.6mm)	D	CF	-
368542-52	116"(2946.4mm)	D	CF	-
368542-53	118"(2997.2mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368542-XX	ATEX EExd IIC T6 HESI Spark Rod 90 degree head (cont.)			
368542-54	120"(3048.0mm)	D	CF	-
368542-55	122"(3098.8mm)	D	CF	-
368542-56	124"(3149.6mm)	D	CF	-
368542-57	126"(3200.4mm)	D	CF	-
368542-58	128"(3251.2mm)	D	CF	-
368542-59	130"(3302.0mm)	D	CF	-
368542-60	132"(3352.8mm)	D	CF	-
368542-61	134"(3403.6mm)	D	CF	-
368542-62	136"(3454.4mm)	D	CF	-
368542-63	138"(3505.2mm)	D	CF	-
368542-64	140"(3556.0mm)	D	CF	-
368542-65	142"(3606.8mm)	D	CF	-
368542-66	144"(3657.6mm)	D	CF	-
368542-67	146"(3708.4mm)	D	CF	-
368542-68	148"(3759.2mm)	D	CF	-
368542-69	150"(3810.0mm)	D	CF	-
368542-70	152"(3860.8mm)	D	CF	-
368542-71	154"(3911.6mm)	D	CF	-
368542-72	156"(3962.4mm)	D	CF	-
368542-73	158"(4013.2mm)	D	CF	-
368542-74	160"(4064.0mm)	D	CF	-
368542-75	162"(4114.8mm)	D	CF	-
368542-76	164"(4165.6mm)	D	CF	-
368542-77	166"(4216.4mm)	D	CF	-
368542-78	168"(4267.2mm)	D	CF	-
368542-79	170"(4318.0mm)	D	CF	-
368542-80	172"(4368.8mm)	D	CF	-
368542-81	174"(4419.6mm)	D	CF	-
368542-82	176"(4470.4mm)	D	CF	-
368542-83	178"(4521.2mm)	D	CF	-
368542-84	180"(4572mm)	D	CF	-
368542-85	182"(4622.8mm)	D	CF	-
368542-86	184"(4673.6mm)	D	CF	-
368542-87	186"(4724.4mm)	D	CF	-
368542-88	188"(4775.2mm)	D	CF	-
368542-89	190"(4826mm)	D	CF	-
368542-90	192"(4876.8mm)	D	CF	-
368542-91	194"(4927.6mm)	D	CF	-
368542-92	196"(4978.4mm)	D	CF	-
368542-93	198"(5029.2mm)	D	CF	-
368542-94	200"(5080mm)	D	CF	-
368542-95	202"(5130.8mm)	D	CF	-
368542-96	204"(5181.6mm)	D	CF	-
368542-97	206"(5232.4mm)	D	CF	-
368542-98	208"(5283.2mm)	D	CF	-
368542-99	210"(5334mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

CE (continued)

Part Number	Description	Schedule	Est. Lead Time	Wt
368935-XX	ATEX EExd IIC T6 HESI spark rod straight head			
368935-08	28"(711.2mm)	D	CF	-
368935-09	30"(762.0mm)	D	CF	-
368935-10	32"(812.8mm)	D	CF	-
368935-11	34"(863.6mm)	D	CF	-
368935-12	36"(914.4mm)	D	CF	-
368935-13	38"(965.2mm)	D	CF	-
368935-14	40"(1016.0mm)	D	CF	-
368935-15	42"(1066.8mm)	D	CF	-
368935-16	44"(1117.6mm)	D	CF	-
368935-17	46"(1168.4mm)	D	CF	-
368935-18	48"(1219.2mm)	D	CF	-
368935-19	50"(1270mm)	D	CF	-
368935-20	52"(1320.8mm)	D	CF	-
368935-21	54"(1371.6mm)	D	CF	-
368935-22	56"(1422.4mm)	D	CF	-
368935-23	58"(1473.2mm)	D	CF	-
368935-24	60"(1524mm)	D	CF	-
368935-25	62"(1574.8mm)	D	CF	-
368935-26	64"(1625.6mm)	D	CF	-
368935-27	66"(1676.4mm)	D	CF	-
368935-28	68"(1727.2mm)	D	CF	-
368935-29	70"(1778mm)	D	CF	-
368935-30	72"(1828.8mm)	D	CF	-
368935-31	74"(1879.6mm)	D	CF	-
368935-32	76"(1930.4mm)	D	CF	-
368935-33	78"(1981.2mm)	D	CF	-
368935-34	80"(2032.0mm)	D	CF	-
368935-35	82"(2082.8mm)	D	CF	-
368935-36	84"(2133.6mm)	D	CF	-
368935-37	86"(2184.4mm)	D	CF	-
368935-38	88"(2235.2mm)	D	CF	-
368935-39	90"(2286.0mm)	D	CF	-
368935-40	92"(2336.8mm)	D	CF	-
368935-41	94"(2387.6mm)	D	CF	-
368935-42	96"(2438.4mm)	D	CF	-
368935-43	98"(2489.2mm)	D	CF	-
368935-44	100"(2540.0mm)	D	CF	-
368935-45	102"(2590.8mm)	D	CF	-
368935-46	104"(2641.6mm)	D	CF	-
368935-47	106"(2692.4mm)	D	CF	-
368935-48	108"(2743.2mm)	D	CF	-
368935-49	110"(2794.0mm)	D	CF	-
368935-50	112"(2844.8mm)	D	CF	-
368935-51	114"(2895.6mm)	D	CF	-
368935-52	116"(2946.4mm)	D	CF	-
368935-53	118"(2997.2mm)	D	CF	-

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
368935-XX	ATEX EExd IIC T6 HESI spk rod straight hd (cont.)			
368935-54	120"(3048.0mm)	D	CF	-
368935-55	122"(3098.8mm)	D	CF	-
368935-56	124"(3149.6mm)	D	CF	-
368935-57	126"(3200.4mm)	D	CF	-
368935-58	128"(3251.2mm)	D	CF	-
368935-59	130"(3302.0mm)	D	CF	-
368935-60	132"(3352.8mm)	D	CF	-
368935-61	134"(3403.6mm)	D	CF	-
368935-62	136"(3454.4mm)	D	CF	-
368935-63	138"(3505.2mm)	D	CF	-
368935-64	140"(3556.0mm)	D	CF	-
368935-65	142"(3606.8mm)	D	CF	-
368935-66	144"(3657.6mm)	D	CF	-
368935-67	146"(3708.4mm)	D	CF	-
368935-68	148"(3759.2mm)	D	CF	-
368935-69	150"(3810.0mm)	D	CF	-
368935-70	152"(3860.8mm)	D	CF	-
368935-71	154"(3911.6mm)	D	CF	-
368935-72	156"(3962.4mm)	D	CF	-
368935-73	158"(4013.2mm)	D	CF	-
368935-74	160"(4064.0mm)	D	CF	-
368935-75	162"(4114.8mm)	D	CF	-
368935-76	164"(4165.6mm)	D	CF	-
368935-77	166"(4216.4mm)	D	CF	-
368935-78	168"(4267.2mm)	D	CF	-
368935-79	170"(4318.0mm)	D	CF	-
368935-80	172"(4368.8mm)	D	CF	-
368935-81	174"(4419.6mm)	D	CF	-
368935-82	176"(4470.4mm)	D	CF	-
368935-83	178"(4521.2mm)	D	CF	-
368935-84	180"(4572mm)	D	CF	-
368935-85	182"(4622.8mm)	D	CF	-
368935-86	184"(4673.6mm)	D	CF	-
368935-87	186"(4724.4mm)	D	CF	-
368935-88	188"(4775.2mm)	D	CF	-
368935-89	190"(4826mm)	D	CF	-
368935-90	192"(4876.8mm)	D	CF	-
368935-91	194"(4927.6mm)	D	CF	-
368935-92	196"(4978.4mm)	D	CF	-
368935-93	198"(5029.2mm)	D	CF	-
368935-94	200"(5080mm)	D	CF	-
368935-95	202"(5130.8mm)	D	CF	-
368935-96	204"(5181.6mm)	D	CF	-
368935-97	206"(5232.4mm)	D	CF	-
368935-98	208"(5283.2mm)	D	CF	-
368935-99	210"(5334mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

CE (continued)

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
380445-XX	CE Compliant HESI spark rod w/ 5 m cable assy (cont.)			
380445-01	14"(355.6mm)	D	CF	-
380445-02	16"(406.4mm)	D	CF	-
380445-03	18"(457.2mm)	D	CF	-
380445-04	20"(508.0mm)	D	CF	-
380445-05	22"(558.8mm)	D	CF	-
380445-06	24"(609.6mm)	D	CF	-
380445-07	26"(660.4mm)	D	CF	-
380445-08	28"(711.2mm)	D	CF	-
380445-09	30"(762.0mm)	D	CF	-
380445-10	32"(812.8mm)	D	CF	-
380445-11	34"(863.6mm)	D	CF	-
380445-12	36"(914.4mm)	D	CF	-
380445-13	38"(965.2mm)	D	CF	-
380445-14	40"(1016.0mm)	D	CF	-
380445-15	42"(1066.8mm)	D	CF	-
380445-16	44"(1117.6mm)	D	CF	-
380445-17	46"(1168.4mm)	D	CF	-
380445-18	48"(1219.2mm)	D	CF	-
380445-19	50"(1270mm)	D	CF	-
380445-20	52"(1320.8mm)	D	CF	-
380445-21	54"(1371.6mm)	D	CF	-
380445-22	56"(1422.4mm)	D	CF	-
380445-23	58"(1473.2mm)	D	CF	-
380445-24	60"(1524mm)	D	CF	-
380445-25	62"(1574.8mm)	D	CF	-
380445-26	64"(1625.6mm)	D	CF	-
380445-27	66"(1676.4mm)	D	CF	-
380445-28	68"(1727.2mm)	D	CF	-
380445-29	70"(1778mm)	D	CF	-
380445-30	72"(1828.8mm)	D	CF	-
380445-31	74"(1879.6mm)	D	CF	-
380445-32	76"(1930.4mm)	D	CF	-
380445-33	78"(1981.2mm)	D	CF	-
380445-34	80"(2032.0mm)	D	CF	-
380445-35	82"(2082.8mm)	D	CF	-
380445-36	84"(2133.6mm)	D	CF	-
380445-37	86"(2184.4mm)	D	CF	-
380445-38	88"(2235.2mm)	D	CF	-
380445-39	90"(2286.0mm)	D	CF	-
380445-40	92"(2336.8mm)	D	CF	-
380445-41	94"(2387.6mm)	D	CF	-
380445-42	96"(2438.4mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
380445-XX	CE Compliant HESI spark rod w/ 5 m cable assy (cont.)			
380445-43	98"(2489.2mm)	D	CF	-
380445-44	100"(2540.0mm)	D	CF	-
380445-45	102"(2590.8mm)	D	CF	-
380445-46	104"(2641.6mm)	D	CF	-
380445-47	106"(2692.4mm)	D	CF	-
380445-48	108"(2743.2mm)	D	CF	-
380445-49	110"(2794.0mm)	D	CF	-
380445-50	112"(2844.8mm)	D	CF	-
380445-51	114"(2895.6mm)	D	CF	-
380445-52	116"(2946.4mm)	D	CF	-
380445-53	118"(2997.2mm)	D	CF	-
380445-54	120"(3048.0mm)	D	CF	-
380445-55	122"(3098.8mm)	D	CF	-
380445-56	124"(3149.6mm)	D	CF	-
380445-57	126"(3200.4mm)	D	CF	-
380445-58	128"(3251.2mm)	D	CF	-
380445-59	130"(3302.0mm)	D	CF	-
380445-60	132"(3352.8mm)	D	CF	-
380445-61	134"(3403.6mm)	D	CF	-
380445-62	136"(3454.4mm)	D	CF	-
380445-63	138"(3505.2mm)	D	CF	-
380445-64	140"(3556.0mm)	D	CF	-
380445-65	142"(3606.8mm)	D	CF	-
380445-66	144"(3657.6mm)	D	CF	-
380445-67	146"(3708.4mm)	D	CF	-
380445-68	148"(3759.2mm)	D	CF	-
380445-69	150"(3810.0mm)	D	CF	-
380445-70	152"(3860.8mm)	D	CF	-
380445-71	154"(3911.6mm)	D	CF	-
380445-72	156"(3962.4mm)	D	CF	-
380445-73	158"(4013.2mm)	D	CF	-
380445-74	160"(4064.0mm)	D	CF	-
380445-75	162"(4114.8mm)	D	CF	-
380445-76	164"(4165.6mm)	D	CF	-
380445-77	166"(4216.4mm)	D	CF	-
380445-78	168"(4267.2mm)	D	CF	-
380445-79	170"(4318.0mm)	D	CF	-
380445-80	172"(4368.8mm)	D	CF	-
380445-81	174"(4419.6mm)	D	CF	-
380445-82	176"(4470.4mm)	D	CF	-
380445-83	178"(4521.2mm)	D	CF	-
380445-84	180"(4572.0mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

CE (continued)

Part Number	Description	Schedule	Est. Lead Time	Wt
398687-XX	CE Compliant Stainless Steel HESI spark rod with 5 meter cable assembly			
398687-01	14"(355.6mm)	D	CF	-
398687-02	16"(406.4mm)	D	CF	-
398687-03	18"(457.2mm)	D	CF	-
398687-04	20"(508.0mm)	D	CF	-
398687-05	22"(558.8mm)	D	CF	-
398687-06	24"(609.6mm)	D	CF	-
398687-07	26"(660.4mm)	D	CF	-
398687-08	28"(711.2mm)	D	CF	-
398687-09	30"(762.0mm)	D	CF	-
398687-10	32"(812.8mm)	D	CF	-
398687-11	34"(863.6mm)	D	CF	-
398687-12	36"(914.4mm)	D	CF	-
398687-13	38"(965.2mm)	D	CF	-
398687-14	40"(1016.0mm)	D	CF	-
398687-15	42"(1066.8mm)	D	CF	-
398687-16	44"(1117.6mm)	D	CF	-
398687-17	46"(1168.4mm)	D	CF	-
398687-18	48"(1219.2mm)	D	CF	-
398687-19	50"(1270mm)	D	CF	-
398687-20	52"(1320.8mm)	D	CF	-
398687-21	54"(1371.6mm)	D	CF	-
398687-22	56"(1422.4mm)	D	CF	-
398687-23	58"(1473.2mm)	D	CF	-
398687-24	60"(1524mm)	D	CF	-
398687-25	62"(1574.8mm)	D	CF	-
398687-26	64"(1625.6mm)	D	CF	-
398687-27	66"(1676.4mm)	D	CF	-
398687-28	68"(1727.2mm)	D	CF	-
398687-29	70"(1778mm)	D	CF	-
398687-30	72"(1828.8mm)	D	CF	-
398687-31	74"(1879.6mm)	D	CF	-
398687-32	76"(1930.4mm)	D	CF	-
398687-33	78"(1981.2mm)	D	CF	-
398687-34	80"(2032.0mm)	D	CF	-
398687-35	82"(2082.8mm)	D	CF	-
398687-36	84"(2133.6mm)	D	CF	-
398687-37	86"(2184.4mm)	D	CF	-
398687-38	88"(2235.2mm)	D	CF	-
398687-39	90"(2286.0mm)	D	CF	-
398687-40	92"(2336.8mm)	D	CF	-
398687-41	94"(2387.6mm)	D	CF	-
398687-42	96"(2438.4mm)	D	CF	-

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
398687-XX	CE Compliant Stainless Steel HESI spark rod with 5 meter cable assembly			
398687-43	98"(2489.2mm)	D	CF	-
398687-44	100"(2540.0mm)	D	CF	-
398687-45	102"(2590.8mm)	D	CF	-
398687-46	104"(2641.6mm)	D	CF	-
398687-47	106"(2692.4mm)	D	CF	-
398687-48	108"(2743.2mm)	D	CF	-
398687-49	110"(2794.0mm)	D	CF	-
398687-50	112"(2844.8mm)	D	CF	-
398687-51	114"(2895.6mm)	D	CF	-
398687-52	116"(2946.4mm)	D	CF	-
398687-53	118"(2997.2mm)	D	CF	-
398687-54	120"(3048.0mm)	D	CF	-
398687-55	122"(3098.8mm)	D	CF	-
398687-56	124"(3149.6mm)	D	CF	-
398687-57	126"(3200.4mm)	D	CF	-
398687-58	128"(3251.2mm)	D	CF	-
398687-59	130"(3302.0mm)	D	CF	-
398687-60	132"(3352.8mm)	D	CF	-
398687-61	134"(3403.6mm)	D	CF	-
398687-62	136"(3454.4mm)	D	CF	-
398687-63	138"(3505.2mm)	D	CF	-
398687-64	140"(3556.0mm)	D	CF	-
398687-65	142"(3606.8mm)	D	CF	-
398687-66	144"(3657.6mm)	D	CF	-
398687-67	146"(3708.4mm)	D	CF	-
398687-68	148"(3759.2mm)	D	CF	-
398687-69	150"(3810.0mm)	D	CF	-
398687-70	152"(3860.8mm)	D	CF	-
398687-71	154"(3911.6mm)	D	CF	-
398687-72	156"(3962.4mm)	D	CF	-
398687-73	158"(4013.2mm)	D	CF	-
398687-74	160"(4064.0mm)	D	CF	-
398687-75	162"(4114.8mm)	D	CF	-
398687-76	164"(4165.6mm)	D	CF	-
398687-77	166"(4216.4mm)	D	CF	-
398687-78	168"(4267.2mm)	D	CF	-
398687-79	170"(4318.0mm)	D	CF	-
398687-80	172"(4368.8mm)	D	CF	-
398687-81	174"(4419.6mm)	D	CF	-
398687-82	176"(4470.4mm)	D	CF	-
398687-83	178"(4521.2mm)	D	CF	-
398687-84	180"(4572.0mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

CE (continued)

Part Number	Description	Schedule	Est. Lead Time	Wt
397981-XX	CE Compliant Explosion Proof HESI spark rod without cable assy			
397981-05	22"(558.8mm)	D	CF	-
397981-06	24"(609.6mm)	D	CF	-
397981-07	26"(660.4mm)	D	CF	-
397981-08	28"(711.2mm)	D	CF	-
397981-09	30"(762.0mm)	D	CF	-
397981-10	32"(812.8mm)	D	CF	-
397981-11	34"(863.6mm)	D	CF	-
397981-12	36"(914.4mm)	D	CF	-
397981-13	38"(965.2mm)	D	CF	-
397981-14	40"(1016.0mm)	D	CF	-
397981-15	42"(1066.8mm)	D	CF	-
397981-16	44"(1117.6mm)	D	CF	-
397981-17	46"(1168.4mm)	D	CF	-
397981-18	48"(1219.2mm)	D	CF	-
397981-19	50"(1270mm)	D	CF	-
397981-20	52"(1320.8mm)	D	CF	-
397981-21	54"(1371.6mm)	D	CF	-
397981-22	56"(1422.4mm)	D	CF	-
397981-23	58"(1473.2mm)	D	CF	-
397981-24	60"(1524mm)	D	CF	-
397981-25	62"(1574.8mm)	D	CF	-
397981-26	64"(1625.6mm)	D	CF	-
397981-27	66"(1676.4mm)	D	CF	-
397981-28	68"(1727.2mm)	D	CF	-
397981-29	70"(1778mm)	D	CF	-
397981-30	72"(1828.8mm)	D	CF	-
397981-31	74"(1879.6mm)	D	CF	-
397981-32	76"(1930.4mm)	D	CF	-
397981-33	78"(1981.2mm)	D	CF	-
397981-34	80"(2032.0mm)	D	CF	-
397981-35	82"(2082.8mm)	D	CF	-
397981-36	84"(2133.6mm)	D	CF	-
397981-37	86"(2184.4mm)	D	CF	-
397981-38	88"(2235.2mm)	D	CF	-
397981-39	90"(2286.0mm)	D	CF	-
397981-40	92"(2336.8mm)	D	CF	-
397981-41	94"(2387.6mm)	D	CF	-
397981-42	96"(2438.4mm)	D	CF	-
397981-43	98"(2489.2mm)	D	CF	-
397981-44	100"(2540.0mm)	D	CF	-

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
397981-XX	CE Compliant Explosion Proof HESI spark rod without cable assy			
397981-45	102"(2590.8mm)	D	CF	-
397981-46	104"(2641.6mm)	D	CF	-
397981-47	106"(2692.4mm)	D	CF	-
397981-48	108"(2743.2mm)	D	CF	-
397981-49	110"(2794.0mm)	D	CF	-
397981-50	112"(2844.8mm)	D	CF	-
397981-51	114"(2895.6mm)	D	CF	-
397981-52	116"(2946.4mm)	D	CF	-
397981-53	118"(2997.2mm)	D	CF	-
397981-54	120"(3048.0mm)	D	CF	-
397981-55	122"(3098.8mm)	D	CF	-
397981-56	124"(3149.6mm)	D	CF	-
397981-57	126"(3200.4mm)	D	CF	-
397981-58	128"(3251.2mm)	D	CF	-
397981-59	130"(3302.0mm)	D	CF	-
397981-60	132"(3352.8mm)	D	CF	-
397981-61	134"(3403.6mm)	D	CF	-
397981-62	136"(3454.4mm)	D	CF	-
397981-63	138"(3505.2mm)	D	CF	-
397981-64	140"(3556.0mm)	D	CF	-
397981-65	142"(3606.8mm)	D	CF	-
397981-66	144"(3657.6mm)	D	CF	-
397981-67	146"(3708.4mm)	D	CF	-
397981-68	148"(3759.2mm)	D	CF	-
397981-69	150"(3810.0mm)	D	CF	-
397981-70	152"(3860.8mm)	D	CF	-
397981-71	154"(3911.6mm)	D	CF	-
397981-72	156"(3962.4mm)	D	CF	-
397981-73	158"(4013.2mm)	D	CF	-
397981-74	160"(4064.0mm)	D	CF	-
397981-75	162"(4114.8mm)	D	CF	-
397981-76	164"(4165.6mm)	D	CF	-
397981-77	166"(4216.4mm)	D	CF	-
397981-78	168"(4267.2mm)	D	CF	-
397981-79	170"(4318.0mm)	D	CF	-
397981-80	172"(4368.8mm)	D	CF	-
397981-81	174"(4419.6mm)	D	CF	-
397981-82	176"(4470.4mm)	D	CF	-
397981-83	178"(4521.2mm)	D	CF	-
397981-84	180"(4572.0mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

CE (continued)

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
380444-XX	CE Compliant HESI spark rod without cable assy			
380444-01	14"(355.6mm)	D	CF	-
380444-02	16"(406.4mm)	D	CF	-
380444-03	18"(457.2mm)	D	CF	-
380444-04	20"(508.0mm)	D	CF	-
380444-05	22"(558.8mm)	D	CF	-
380444-06	24"(609.6mm)	D	CF	-
380444-07	26"(660.4mm)	D	CF	-
380444-08	28"(711.2mm)	D	CF	-
380444-09	30"(762.0mm)	D	CF	-
380444-10	32"(812.8mm)	D	CF	-
380444-11	34"(863.6mm)	D	CF	-
380444-12	36"(914.4mm)	D	CF	-
380444-13	38"(965.2mm)	D	CF	-
380444-14	40"(1016.0mm)	D	CF	-
380444-15	42"(1066.8mm)	D	CF	-
380444-16	44"(1117.6mm)	D	CF	-
380444-17	46"(1168.4mm)	D	CF	-
380444-18	48"(1219.2mm)	D	CF	-
380444-19	50"(1270mm)	D	CF	-
380444-20	52"(1320.8mm)	D	CF	-
380444-21	54"(1371.6mm)	D	CF	-
380444-22	56"(1422.4mm)	D	CF	-
380444-23	58"(1473.2mm)	D	CF	-
380444-24	60"(1524mm)	D	CF	-
380444-25	62"(1574.8mm)	D	CF	-
380444-26	64"(1625.6mm)	D	CF	-
380444-27	66"(1676.4mm)	D	CF	-
380444-28	68"(1727.2mm)	D	CF	-
380444-29	70"(1778mm)	D	CF	-
380444-30	72"(1828.8mm)	D	CF	-
380444-31	74"(1879.6mm)	D	CF	-
380444-32	76"(1930.4mm)	D	CF	-
380444-33	78"(1981.2mm)	D	CF	-
380444-34	80"(2032.0mm)	D	CF	-
380444-35	82"(2082.8mm)	D	CF	-
380444-36	84"(2133.6mm)	D	CF	-
380444-37	86"(2184.4mm)	D	CF	-
380444-38	88"(2235.2mm)	D	CF	-
380444-39	90"(2286.0mm)	D	CF	-
380444-40	92"(2336.8mm)	D	CF	-
380444-41	94"(2387.6mm)	D	CF	-
380444-42	96"(2438.4mm)	D	CF	-

Part Number	Description	Schedule	Est. Lead Time	Wt
380444-XX	CE Compliant HESI spark rod without cable assy			
380444-43	98"(2489.2mm)	D	CF	-
380444-44	100"(2540.0mm)	D	CF	-
380444-45	102"(2590.8mm)	D	CF	-
380444-46	104"(2641.6mm)	D	CF	-
380444-47	106"(2692.4mm)	D	CF	-
380444-48	108"(2743.2mm)	D	CF	-
380444-49	110"(2794.0mm)	D	CF	-
380444-50	112"(2844.8mm)	D	CF	-
380444-51	114"(2895.6mm)	D	CF	-
380444-52	116"(2946.4mm)	D	CF	-
380444-53	118"(2997.2mm)	D	CF	-
380444-54	120"(3048.0mm)	D	CF	-
380444-55	122"(3098.8mm)	D	CF	-
380444-56	124"(3149.6mm)	D	CF	-
380444-57	126"(3200.4mm)	D	CF	-
380444-58	128"(3251.2mm)	D	CF	-
380444-59	130"(3302.0mm)	D	CF	-
380444-60	132"(3352.8mm)	D	CF	-
380444-61	134"(3403.6mm)	D	CF	-
380444-62	136"(3454.4mm)	D	CF	-
380444-63	138"(3505.2mm)	D	CF	-
380444-64	140"(3556.0mm)	D	CF	-
380444-65	142"(3606.8mm)	D	CF	-
380444-66	144"(3657.6mm)	D	CF	-
380444-67	146"(3708.4mm)	D	CF	-
380444-68	148"(3759.2mm)	D	CF	-
380444-69	150"(3810.0mm)	D	CF	-
380444-70	152"(3860.8mm)	D	CF	-
380444-71	154"(3911.6mm)	D	CF	-
380444-72	156"(3962.4mm)	D	CF	-
380444-73	158"(4013.2mm)	D	CF	-
380444-74	160"(4064.0mm)	D	CF	-
380444-75	162"(4114.8mm)	D	CF	-
380444-76	164"(4165.6mm)	D	CF	-
380444-77	166"(4216.4mm)	D	CF	-
380444-78	168"(4267.2mm)	D	CF	-
380444-79	170"(4318.0mm)	D	CF	-
380444-80	172"(4368.8mm)	D	CF	-
380444-81	174"(4419.6mm)	D	CF	-
380444-82	176"(4470.4mm)	D	CF	-
380444-83	178"(4521.2mm)	D	CF	-
380444-84	180"(4572.0mm)	D	CF	-

HIGH ENERGY SPARK IGNITER

CE (continued)

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
370311-XX	HESI Mount Tube Assembly for FIXED apps			
370311-01	6.84"(174mm)	D	CF	-
370311-02	16.84"(428mm)	D	CF	-
370311-03	26.84"(682mm)	D	CF	-
370311-04	36.84"(936mm)	D	CF	-
370311-05	46.84"(1190mm)	D	CF	-
370311-06	56.84"(1444mm)	D	CF	-
370311-07	66.84"(1698mm)	D	CF	-
370311-08	76.84"(1952mm)	D	CF	-
370311-09	86.84"(2206mm)	D	CF	-
370311-10	96.84"(2460mm)	D	CF	-
370311-11	106.84"(2714mm)	D	CF	-
370311-12	116.84"(2968mm)	D	CF	-
370311-13	126.84"(3222mm)	D	CF	-
370311-14	136.84"(3476mm)	D	CF	-
370311-15	146.84"(3730mm)	D	CF	-
370311-16	156.84"(3984mm)	D	CF	-
370311-17	166.84"(4238mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
388529-XX	HESI Mount Tube For RETRACTION			
388529-01	2.62" (67mm)	D	CF	-
388529-02	12.62"(321mm)	D	CF	-
388529-03	22.62" (575mm)	D	CF	-
388529-04	32.62"(829mm)	D	CF	-
388529-05	42.62"(1083mm)	D	CF	-
388529-06	52.62"(1337mm)	D	CF	-
388529-07	62.62"(1591mm)	D	CF	-
388529-08	72.62"(1845mm)	D	CF	-
388529-09	82.62" (2099mm)	D	CF	-
388529-10	92.62"(2353mm)	D	CF	-
388529-11	102.62"(2607mm)	D	CF	-
388529-12	112.62"(2861mm)	D	CF	-
388529-13	122.62"(3115mm)	D	CF	-
388529-14	132.62"(3369mm)	D	CF	-
388529-15	142.62" (3623mm)	D	CF	-
388529-16	152.62"(3877mm)	D	CF	-
388529-17	162.62" (4131mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368619-01	A TEX EExd IIC T6 HESI Pow erpack, 230VAC,50 HZ	D	CF	-
388816-02	HESI Pow erpack, 230VAC, CE compliant, Carbon steel enclosure	D	CF	18
388816-04	HESI Pow erpack, 230VAC, CE compliant, 4X, Stainless steel enclosure	D	CF	20
398492-01	HESI Pow erpack, 115VAC,50 HZ, EEXD Enclosure, CE Compliant	D	CF	-
398492-02	HESI Pow erpack, 230VAC, 50 HZ, EEXD Enclosure, CE Compliant	D	CF	-
388813-02	HESI Pow erpack board subassembly, 230VAC, CE compliant	D	3	-
389081-02	HESI Retractor, 6"(152.4mm) stroke, 230 VAC, single coil solenoid valve, SPDT limit sw itch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	6
389081-04	HESI Retractor, 9"(228.6mm) stroke, 230 VAC, single coil solenoid valve, SPDT limit sw itch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	8
389081-06	HESI Retractor, 12"(304.8mm) stroke, 230 VAC, single coil solenoid valve, SPDT limit sw itch, Appleton cable restraint fitting, (order mount tube separately)	D	CF	10
91929-00	EEXD HESI cable (per foot), use w ith 91981-51 glands	D	CF	-
91981-51	EEXD HESI cable Gland, for use w ith 91929-00 bulk cable (2 required)	D	CF	-
367301-XX	Fabricated cable 91929-00 with glands 401112-04			
383726-01	Spark Tip, Very Short (~6")(used in flexible applications only)	D	CF	0.3
383726-02	Spark Tip, Short (~8")	D	3	0.3
383726-03	Spark Tip, Long (~27")	D	3	2
342417-02	Spark Tip, Short (6.7") w ith 15' w hite w ire lead (used prior to 1995)	D	CF	0.6
314304-01	Spark Tip, Long (27.4") w ith 15' w hite w ire lead (used prior to 1995)	D	3	2.4
396517-02	HESI Spark Gap Tube, replacement kit	D	CF	0.2
79942-01	HESI Capacitor for 60Hz units	D	40	0.2
79942-04	HESI Capacitor for 50Hz units	D	CF	0.2
79941-00	HESI Transformer	D	30	4

HIGH ENERGY SPARK IGNITER

Spark Rod Catalog Structure

Note: Mount tube selections are for reference only

For fixed (manual) applications, the mount tube must be at least 6" shorter than the HESI Spark Rod. For automatic retraction applications, the mount tube must be at least 10" shorter than the HESI Spark Rod.

Spark Rod Length "L"		Assembly Tabulation - HESI Spark Rod Assemblies US/CE or Explosion Proof replace the –XX with the appropriate dash number according to length	Mount Tube Fixed HESI Part Number	Mount Tube Auto HESI Retraction Part Number
inches	mm			
14	356	-01	370311-01 6.84” (174mm)	Minimum Spark Rod length for retraction is 38" (965mm)
16	406	-02		
18	457	-03		
20	508	-04		
22	559	05	370311-02 16.84” (428mm)	
24	610	-06		
26	660	-07		
28	711	-08		
30	762	-09		
32	813	-10	370311-03 26.84” (682mm)	
34	864	-11		
36	914	-12		
38	965	-13		
40	1016	-14		
42	1067	-15	370311-04 36.84” (936mm)	388529-04 32.62”
44	1118	-16		
46	1168	-17		
48	1219	-18		
50	1270	-19		
52	1321	-20	370311-05 46.84” (1190mm)	388529-05 42.62”
54	1372	-21		
56	1422	-22		
58	1473	-23		
60	1524	-24		
62	1575	-25	370311-06 56.84” (1444mm)	388529-06 52.62”
64	1626	-26		
66	1676	-27		
68	1727	-28		
70	1778	-29		
72	1829	-30	370311-07 66.84” (1698mm)	388529-07 62.62”
74	1880	-31		
76	1930	-32		
78	1981	-33		
80	2032	-34		
82	2083	-35	370311-08 76.84” (1952mm)	388529-08 72.62”
84	2134	-36		
86	2184	-37		
88	2235	-38		
90	2286	-39		

HIGH ENERGY SPARK IGNITER

Spark Rod Catalog Structure

Note: Mount tube selections are for reference only

For fixed (manual) applications, the mount tube must be at least 6" shorter than the HESI Spark Rod. For automatic retraction applications, the mount tube must be at least 10" shorter than the HESI Spark Rod.

Spark Rod Length "L"		Assembly Tabulation - HESI Spark Rod Assemblies US/CE or Explosion Proof replace the –XX with the appropriate dash number according to length	Mount Tube Fixed HESI Part Number	Mount Tube Auto HESI Retraction Part Number
inches	mm			
92	2337	-40	370311-09 86.84" (2460mm)	388529-09 82.62"
94	2388	-41		
96	2438	-42		
98	2489	-43		
100	2540	-44		
102	2591	-45	370311-10 96.84" (2714mm)	388529-10 92.62"
104	2642	-46		
106	2692	-47		
108	2743	-48		
110	2794	-49		
112	2845	-50	370311-11 106.84" (2714mm)	388529-11 102.62"
114	2896	-51		
116	2946	-52		
118	2997	-53		
120	3048	-54		
122	3099	-55	370311-12 116.84" (2968mm)	388529-12 112.62"
124	3150	-56		
126	3200	-57		
128	3251	-58		
130	3302	-59		
132	3353	-60	370311-13 126.84" (3222mm)	388529-13 122.62"
134	3404	-61		
136	3454	-62		
138	3505	-63		
140	3556	-64		
142	3607	-65	370311-14 136.84" (3476mm)	388529-14 132.62"
144	3658	-66		
146	3708	-67		
148	3759	-68		
150	3810	-69		
152	3861	-70	370311-15 146.84 (3730mm)	388529-15 142.62"
154	3912	-71		
156	3962	-72		
158	4013	-73		
160	4064	-74		
162	4115	-75	370311-16 156.84" (3984mm)	388529-16 152.62"
164	4166	-76		
166	4216	-77		
168	4267	-78		
170	4318	-79		
172	4369	-80	370311-17 166.84" (4238mm)	388529-17 162.62"
174	4420	-81		
176	4470	-82		
178	4521	-83		
180	4572	-84		

MAXFIRE® SERIES 100 GAS IGNITERS

Spec Sheet #404006-19

Technical Manual #372001-04

Description

Forney's MAXFire® gas igniters have been upgraded to the MAXFire® Series 100 igniters. The MAXFire® 10, 30 and 40 are available ONLY for spare parts. All new applications will use the Series 100 igniters (MAXFire® 110, 130 or 140).

MAXFire® Model	Capacity MMBtu/hr	Guide Tube OD	Connections		Cooling Air Requirement*	Nozzle Type	Typical Fuel Pressure (psig)
			Gas	Air			
110DB	0.7	1 7/8"	½"	½"	23 @ 3	Stiff Flame	5-12
110	0.3 to 1.5	1 7/8"	½"	¾"	23 @ 3	Straight	5-12
130	1.5 to 6.0	2 7/8"	¾"	¾"	45 @ 3	Straight or wide	5-12
140	5.0 to 25	4"	1 ½"	1 ½"	80 @ 6	Straight or wide	5-25

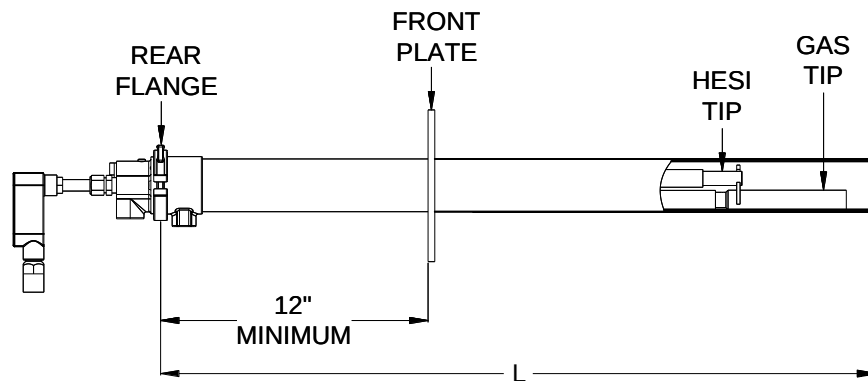
*scfm @ inches w.c. above windbox

The HESI cable and HESI power pack must be selected from the HESI component list to provide a complete working assembly.

Mounting the igniter to the burner front plate can be done several different ways.

- (1) The guide tube can be welded to the burner front plate.
- (2) A mount plate can be welded to the guide tube. Then weld or bolt that assembly to the burner front plate.
- (3) A mount tube with packing gland can be welded to the burner front plate. Then the igniter is inserted into the mount tube and allowing the packing gland to be tightened around the guide tube.
- (4) A combination packing gland/mounting assembly can be welded or bolted to the burner front.

Each igniter comes with a guide tube assembly, HESI spark rod and a cooling/combustion connection (FNPT).



In selecting the length "L" of the MAXFire® Igniter, the length "L" is the distance from the end of the guide tube of the igniter, back to the break point of the rear flange. The dimension is dependent on the burner size and must be measured or taken from a burner dimensional drawing. Select a length "L" that will allow a minimum of 12" (153 mm) from the burner front plate back to the rear flange.

As a general rule the firing tip of a gas igniter can be located 6" (153 mm) for MAXFire® 110's and 8" for MAXFire® 130's and 140's behind the oil gun unless a bluff body diffuser is used to stabilize the flame. In those cases, it must be mounted flush with the diffuser/stabilizer

MOUNT TUBE (Optional)

Forney's mount tube consists of a tube with packing gland and locking collar suitable for welding to the burner front plate. The mount tube is optional equipment and is only required if the owner intends to periodically remove the complete igniter from the burner front. Select the mount tube part number from the Catalog Structure.

MAXFire® Model	Mount Tube OD
MAXFire® 110	2.13" (54 mm) OD
MAXFire® 130	3.5" (90 mm) OD
MAXFire® 140	4.5" (114 mm) OD

GAS HOSE

A gas hose is required. Owner can provide hose or Forney can provide a flexible stainless-steel hose.

MAXFire® Model	Gas Hose Specifications
MAXFire® 110	0.5" (13 mm) ID, with single braid stainless-steel jacket, a ½" NPT nipple connection to igniter and a ¾" NPT nipple connection to the gas supply
MAXFire® 130	1.0" ID, with single braid stainless-steel jacket, a ¾" NPT nipple connection to igniter and a 1" NPT nipple connection to the gas supply
MAXFire® 140	2.0" ID, with single braid stainless-steel jacket, a 1 ½" NPT nipple connection to igniter and a 2" NPT nipple connection to the gas supply

AIR HOSE

An air hose is required to supply cooling/combustion air to the igniter. Owner can provide hose or Forney can provide a reinforced rubber air hose with a nipples and clamps at both ends or a flexible stainless-steel hose.

MAXFire® Model	Air Hose ID
MAXFire® 110	1" (19 mm) ID
MAXFire® 130	1" (19 mm) ID
MAXFire® 140	1.5" (38.1 mm) ID

MOUNT PLATES, MOUNT TUBES & OTHER ASSEMBLIES (Optional)

Forney offers several mounting options including: various sizes of mount plates, mount tubes of various lengths, combo mounting flanges & packing glands, raised face flanges with mount tubes & packing glands, and special flanges allowing our products to easily retrofit onto the burner front easily replacing competitor's products.

MAXFIRE® SERIES 100 GAS IGNITERS

Igniter Spare Parts Proposal Information Sheet

Date: _____ SP- _____ Written by: _____

Customer: _____ Contact Name: _____

Phone: _____ Fax: _____ e-mail: _____

End User: _____ Plant Name/Location/Unit #: _____

☐ Same as customer

☐ New Installation

☐ Upgrade of Forney equipment (Original Contract: _____)

☐ Replacement of _____ Igniters (John Zink/Coen/Callidus etc.)

Quantity of Igniters required: _____

Fuel Type: _____ (Natural Gas, Syn gas, LPG (liquid petroleum gas (propane) refinery gas etc.)

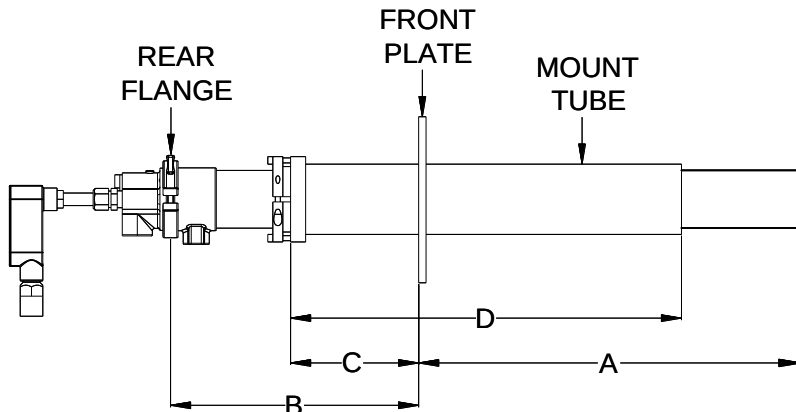
Heat Input (Capacity): _____ MBTU's/Hr _____ other, specify (kW, L etc.)

Fuel Pressure available: _____ PSIG _____ other, specify (Bar, mbar, etc.)

Cooling/Combustion Air available: _____ SCFM **Boiler Pressure Drop** _____ inches WC

☐ **Fully dimensioned Burner/Windbox Drawings received**

☐ **No drawings received** (refer to drawing for input of the following information)



Existing Igniter Length = A + B = _____ inches

A. From firing tip back to burner front plate _____ inches

B. From burner front plate to the rear flange _____ inches

C. From burner front plate to mounting coupling _____ inches

D. Mounting coupling to end of existing mount tube _____ inches

Any obstructions that would interfere with installation/removal distance? _____

Existing Mount Tube Diameter _____ inches OD

Flange size: _____ inches _____ lbs. (2"/150 lb., 4" / 300 lb.)

☐ Standard

☐ SRU/Hazmat (Sulfur Recovery/Hazardous Material)

☐ Explosion Proof

Additional customer information (for reference only)

Number of Boilers: _____ Manufacturer: _____ Type: _____

Burners per boiler: _____ Type: _____

Notes:

MAXFIRE® 110 GAS IGNITERS

Standard US MAXFire® 110 P/N 368327-XX

1 MMBTU/HR @10 PSIG natural gas. 304 stainless-steel guide tube, head and quick release v-band clamp, carbon steel HESI rod and gas tube, brass HESI retainer.

Stainless-steel US MAXFire® 110 P/N 368328-XX

1 MMBTU/HR @ 10 PSIG natural gas. 304 stainless-steel guide tube, head, quick release v-band clamp, potted HESI rod, gas tube, and HESI retainer.

Sulfur recovery and hazardous materials MAXFire® 110 P/N 368329-XX

1 MMBTU/HR @ 10 PSIG natural gas. 316 stainless-steel guide tube, 304 stainless-steel head, 2-bolt v-band clamp, potted HESI rod, gas tube, and HESI retainer.

Duct Burner MAXFire® 110DB Standard P/N 408627-XX

.7 MMBTU/HR @ 10 PSIG natural gas and 23 SCFM cooling/combustion air, 304 stainless-steel head, guide tube and gas tube, Potted, 304 stainless-steel potted HESI, Quick release v-band clamp, Stainless-steel HESI retainer, Stiff flame gas tip

Duct Burner MAXFire® 110DB Domestic Classified P/N 408628-XX

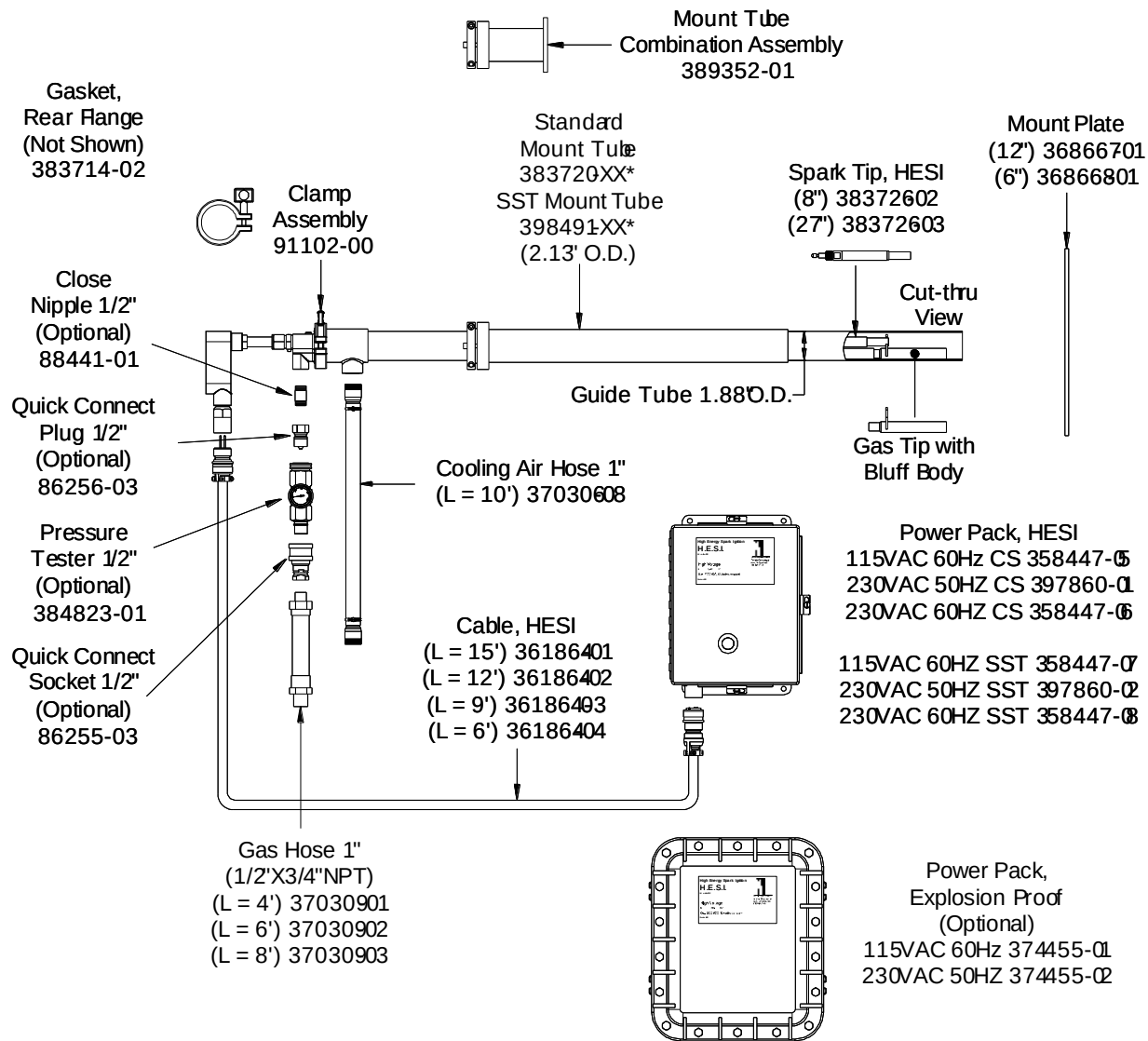
.7 MMBTU/HR @ 10 PSIG natural gas and 23 SCFM cooling/combustion air, 304 stainless-steel head, guide tube and gas tube, Potted, 304 stainless-steel potted HESI with Class I, Div 1 and 2 explosion proof head, 2-bolt v-band clamp, Stainless-steel HESI retainer, Stiff flame gas tip

Explosion proof NEC MAXFire® 110 P/N 368332-XX

1 MMBTU/HR @ 10 PSIG natural gas. 304 stainless-steel guide tube, head and 2-bolt v-band clamp and potted HESI rod with explosion proof head (Class 1 Div I and II) carbon steel gas tube, brass HESI retainer.

MAXFIRE® 110 GAS IGNITERS

Standard MAXFire® 110 Gas Igniter Application Drawing



* See catalog structure for mount tube length

Standard MAXFire® 110 Gas Igniter

Standard

Note: HESI Power Pack & Cable must be ordered separately

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368327-XX	MAXFire 110 Gas Igniter			
368327-05	22"(558.8mm)	D	22	8.25
368327-06	24"(609.6mm)	D	22	-
368327-07	26"(660.4mm)	D	22	-
368327-08	28"(711.2mm)	D	22	-
368327-09	30"(762.0mm)	D	22	-
368327-10	32"(812.8mm)	D	22	-
368327-11	34"(863.6mm)	D	22	-
368327-12	36"(914.4mm)	D	22	-
368327-13	38"(965.2mm)	D	22	-
368327-14	40"(1016.0mm)	D	22	-
368327-15	42"(1066.8mm)	D	22	-
368327-16	44"(1117.6mm)	D	22	-
368327-17	46"(1168.4mm)	D	22	-
368327-18	48"(1219.2mm)	D	22	-
368327-19	50"(1270mm)	D	22	-
368327-20	52"(1320.8mm)	D	22	-
368327-21	54"(1371.6mm)	D	22	-
368327-22	56"(1422.4mm)	D	22	-
368327-23	58"(1473.2mm)	D	22	-
368327-24	60"(1524mm)	D	22	-
368327-25	62"(1574.8mm)	D	22	-
368327-26	64"(1625.6mm)	D	22	-
368327-27	66"(1676.4mm)	D	22	-
368327-28	68"(1727.2mm)	D	22	-
368327-29	70"(1778mm)	D	22	-
368327-30	72"(1828.8mm)	D	22	-
368327-31	74"(1879.6mm)	D	27	-
368327-32	76"(1930.4mm)	D	27	-
368327-33	78"(1981.2mm)	D	27	-
368327-34	80"(2032.0mm)	D	27	-
368327-35	82"(2082.8mm)	D	27	-
368327-36	84"(2133.6mm)	D	27	-
368327-37	86"(2184.4mm)	D	27	-
368327-38	88"(2235.2mm)	D	27	-
368327-39	90"(2286.0mm)	D	27	-
368327-40	92"(2336.8mm)	D	27	-
368327-41	94"(2387.6mm)	D	27	-
368327-42	96"(2438.4mm)	D	27	-
368327-43	98"(2489.2mm)	D	27	-
368327-44	100"(2540.0mm)	D	27	-
368327-45	102"(2590.8mm)	D	27	-
368327-46	104"(2641.6mm)	D	27	-
368327-47	106"(2692.4mm)	D	27	-
368327-48	108"(2743.2mm)	D	27	-
368327-49	110"(2794.0mm)	D	27	-
368327-50	112"(2844.8mm)	D	27	-
368327-51	114"(2895.6mm)	D	27	-
368327-52	116"(2946.4mm)	D	27	-
368327-53	118"(2997.2mm)	D	27	-
368327-54	120"(3048.0mm)	D	27	-
368327-55	122"(3098.8mm)	D	27	-
368327-56	124"(3149.6mm)	D	27	-
368327-57	126"(3200.4mm)	D	27	-
368327-58	128"(3251.2mm)	D	27	-

Estimated Lead Time is in Business Days

List Price	Part Number	Description	Sched-ule	Est. Lead Time	Wt
	368327-XX	MAXFire 110 Gas Igniter (Cont.)			
\$3,910	368327-59	130"(3302.0mm)	D	27	-
\$3,940	368327-60	132"(3352.8mm)	D	27	-
\$3,970	368327-61	134"(3403.6mm)	D	27	-
\$4,000	368327-62	136"(3454.4mm)	D	27	-
\$4,020	368327-63	138"(3505.2mm)	D	27	-
\$4,050	368327-64	140"(3556.0mm)	D	27	-
\$4,090	368327-65	142"(3606.8mm)	D	27	-
\$4,110	368327-66	144"(3657.6mm)	D	27	-
\$4,150	368327-67	146"(3708.4mm)	D	27	-
\$4,190	368327-68	148"(3759.2mm)	D	27	-
\$4,220	368327-69	150"(3810.0mm)	D	27	-
\$4,250	368327-70	152"(3860.8mm)	D	27	-
\$4,280	368327-71	154"(3911.6mm)	D	27	-
\$4,310	368327-72	156"(3962.4mm)	D	27	-
\$4,330	368327-73	158"(4013.2mm)	D	27	-
\$4,360	368327-74	160"(4064.0mm)	D	27	-
\$4,390	368327-75	162"(4114.8mm)	D	27	-
\$4,410	368327-76	164"(4165.6mm)	D	27	-
\$4,450	368327-77	166"(4216.4mm)	D	27	-
\$4,480	368327-78	168"(4267.2mm)	D	27	-
\$4,520	368327-79	170"(4318.0mm)	D	27	-
\$4,540	368327-80	172"(4368.8mm)	D	27	-
\$4,570	368327-81	174"(4419.6mm)	D	27	-
\$4,600	368327-82	176"(4470.4mm)	D	27	-
\$4,620	368327-83	178"(4521.2mm)	D	27	-
\$4,650					
\$4,690					
\$4,710					
\$4,740					
\$4,780					
\$4,820					
\$4,850					
\$4,880					
\$4,910					
\$4,930					
\$4,960					
\$4,990					
\$5,020					
\$5,040					
\$5,070					
\$5,100					
\$5,120					
\$5,150					
\$5,210					
\$5,230					
\$5,260					
\$5,290					
\$5,330					
\$5,350					
\$5,380					
\$5,410					
\$5,430					
\$5,460					
\$5,490					
	Part Number	Description	Sched-ule	Est. Lead Time	Wt
	368328-XX	MAXFire 110 Gas Igniter, All SS internals, 304 SST Guide Tube			
	368328-05	22"(558.8mm)	D	27	11
	368328-06	24"(609.6mm)	D	27	-
	368328-07	26"(660.4mm)	D	27	-
	368328-08	28"(711.2mm)	D	27	-
	368328-09	30"(762.0mm)	D	27	-
	368328-10	32"(812.8mm)	D	27	-
	368328-11	34"(863.6mm)	D	27	-
	368328-12	36"(914.4mm)	D	27	-
	368328-13	38"(965.2mm)	D	27	-
	368328-14	40"(1016.0mm)	D	27	-
	368328-15	42"(1066.8mm)	D	27	-
	368328-16	44"(1117.6mm)	D	27	-
	368328-17	46"(1168.4mm)	D	27	-
	368328-18	48"(1219.2mm)	D	27	-
	368328-19	50"(1270mm)	D	27	-
	368328-20	52"(1320.8mm)	D	27	-
	368328-21	54"(1371.6mm)	D	27	-
	368328-22	56"(1422.4mm)	D	27	-
	368328-23	58"(1473.2mm)	D	27	-
	368328-24	60"(1524mm)	D	27	-
	368328-25	62"(1574.8mm)	D	27	-
	368328-26	64"(1625.6mm)	D	27	-
	368328-27	66"(1676.4mm)	D	27	-
	368328-28	68"(1727.2mm)	D	27	-

Standard MAXFire® 110 Gas Igniter

Standard (Cont.)

Note: HESI Power Pack & Cable must be ordered separately

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368328-XX	MAXFire 110 Gas Igniter, All SS internals, 304 SST Guide Tube			
368328-29	70"(1778mm)	D	27	-
368328-30	72"(1828.8mm)	D	27	-
368328-31	74"(1879.6mm)	D	32	-
368328-32	76"(1930.4mm)	D	32	-
368328-33	78"(1981.2mm)	D	32	-
368328-34	80"(2032.0mm)	D	32	-
368328-35	82"(2082.8mm)	D	32	-
368328-36	84"(2133.6mm)	D	32	-
368328-37	86"(2184.4mm)	D	32	-
368328-38	88"(2235.2mm)	D	32	-
368328-39	90"(2286.0mm)	D	32	-
368328-40	92"(2336.8mm)	D	32	-
368328-41	94"(2387.6mm)	D	32	-
368328-42	96"(2438.4mm)	D	32	-
368328-43	98"(2489.2mm)	D	32	-
368328-44	100"(2540.0mm)	D	32	-
368328-45	102"(2590.8mm)	D	32	-
368328-46	104"(2641.6mm)	D	32	-
368328-47	106"(2692.4mm)	D	32	-
368328-48	108"(2743.2mm)	D	32	-
368328-49	110"(2794.0mm)	D	32	-
368328-50	112"(2844.8mm)	D	32	-
368328-51	114"(2895.6mm)	D	32	-
368328-52	116"(2946.4mm)	D	32	-
368328-53	118"(2997.2mm)	D	32	-
368328-54	120"(3048.0mm)	D	32	-
368328-55	122"(3098.8mm)	D	32	-
368328-56	124"(3149.6mm)	D	32	-
368328-57	126"(3200.4mm)	D	32	-
368328-58	128"(3251.2mm)	D	32	-
368328-59	130"(3302.0mm)	D	32	-
368328-60	132"(3352.8mm)	D	32	-
368328-61	134"(3403.6mm)	D	32	-
368328-62	136"(3454.4mm)	D	32	-
368328-63	138"(3505.2mm)	D	32	-
368328-64	140"(3556.0mm)	D	32	-
368328-65	142"(3606.8mm)	D	32	-
368328-66	144"(3657.6mm)	D	32	-
368328-67	146"(3708.4mm)	D	32	-
368328-68	148"(3759.2mm)	D	32	-
368328-69	150"(3810.0mm)	D	32	-
368328-70	152"(3860.8mm)	D	32	-
368328-71	154"(3911.6mm)	D	32	-
368328-72	156"(3962.4mm)	D	32	-
368328-73	158"(4013.2mm)	D	32	-
368328-74	160"(4064.0mm)	D	32	-
368328-75	162"(4114.8mm)	D	32	-
368328-76	164"(4165.6mm)	D	32	-
368328-77	166"(4216.4mm)	D	32	-
368328-78	168"(4267.2mm)	D	32	-
368328-79	170"(4318.0mm)	D	32	-
368328-80	172"(4368.8mm)	D	32	-
368328-81	174"(4419.6mm)	D	32	-

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368328-XX	MAXFire 110 Gas Igniter, All SS internals, 304 SST Guide Tube			
368328-82	176"(4470.4mm)	D	32	-
368328-83	178"(4521.2mm)	D	32	-
368328-84	180"(4572.0mm)	D	32	-
368328-XX	MAXFire 110 Gas Igniter for 316 SST Guide Tube			
368329-05	22"(558.8mm)	D	32	11
368329-06	24"(609.6mm)	D	32	-
368329-07	26"(660.4mm)	D	32	-
368329-08	28"(711.2mm)	D	32	-
368329-09	30"(762.0mm)	D	32	-
368329-10	32"(812.8mm)	D	32	-
368329-11	34"(863.6mm)	D	32	-
368329-12	36"(914.4mm)	D	32	-
368329-13	38"(965.2mm)	D	32	-
368329-14	40"(1016.0mm)	D	32	-
368329-15	42"(1066.8mm)	D	32	-
368329-16	44"(1117.6mm)	D	32	-
368329-17	46"(1168.4mm)	D	32	-
368329-18	48"(1219.2mm)	D	32	-
368329-19	50"(1270mm)	D	32	-
368329-20	52"(1320.8mm)	D	32	-
368329-21	54"(1371.6mm)	D	32	-
368329-22	56"(1422.4mm)	D	32	-
368329-23	58"(1473.2mm)	D	32	-
368329-24	60"(1524mm)	D	32	-
368329-25	62"(1574.8mm)	D	32	-
368329-26	64"(1625.6mm)	D	32	-
368329-27	66"(1676.4mm)	D	32	-
368329-28	68"(1727.2mm)	D	32	-
368329-29	70"(1778mm)	D	32	-
368329-30	72"(1828.8mm)	D	32	-
368329-31	74"(1879.6mm)	D	32	-
368329-32	76"(1930.4mm)	D	32	-
368329-33	78"(1981.2mm)	D	32	-
368329-34	80"(2032.0mm)	D	32	-
368329-35	82"(2082.8mm)	D	32	-
368329-36	84"(2133.6mm)	D	32	-
368329-37	86"(2184.4mm)	D	32	-
368329-38	88"(2235.2mm)	D	32	-
368329-39	90"(2286.0mm)	D	32	-
368329-40	92"(2336.8mm)	D	32	-
368329-41	94"(2387.6mm)	D	32	-
368329-42	96"(2438.4mm)	D	32	-
368329-43	98"(2489.2mm)	D	32	-
368329-44	100"(2540.0mm)	D	32	-
368329-45	102"(2590.8mm)	D	32	-
368329-46	104"(2641.6mm)	D	32	-
368329-47	106"(2692.4mm)	D	32	-
368329-48	108"(2743.2mm)	D	32	-
368329-49	110"(2794.0mm)	D	32	-
368329-50	112"(2844.8mm)	D	32	-
368329-51	114"(2895.6mm)	D	32	-
368329-52	116"(2946.4mm)	D	32	-

Standard MAXFire® 110 Gas Igniter

Standard (Cont.)

Note: HESI Power Pack & Cable must be ordered separately

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368328-XX	MAXFire 110 Gas Igniter for SRU/ Hazmat 316 SST Guide Tube (Cont.)			
368329-53	118"(2997.2mm)	D	32	-
368329-54	120"(3048.0mm)	D	32	-
368329-55	122"(3098.8mm)	D	32	-
368329-56	124"(3149.6mm)	D	32	-
368329-57	126"(3200.4mm)	D	32	-
368329-58	128"(3251.2mm)	D	32	-
368329-59	130"(3302.0mm)	D	32	-
368329-60	132"(3352.8mm)	D	32	-
368329-61	134"(3403.6mm)	D	32	-
368329-62	136"(3454.4mm)	D	32	-
368329-63	138"(3505.2mm)	D	32	-
368329-64	140"(3556.0mm)	D	32	-
368329-65	142"(3606.8mm)	D	32	-
368329-66	144"(3657.6mm)	D	32	-
368329-67	146"(3708.4mm)	D	32	-
368329-68	148"(3759.2mm)	D	32	-
368329-69	150"(3810.0mm)	D	32	-
368329-70	152"(3860.8mm)	D	32	-
368329-71	154"(3911.6mm)	D	32	-
368329-72	156"(3962.4mm)	D	32	-
368329-73	158"(4013.2mm)	D	32	-
368329-74	160"(4064.0mm)	D	32	-
368329-75	162"(4114.8mm)	D	32	-
368329-76	164"(4165.6mm)	D	32	-
368329-77	166"(4216.4mm)	D	32	-
368329-78	168"(4267.2mm)	D	32	-
368329-79	170"(4318.0mm)	D	32	-
368329-80	172"(4368.8mm)	D	32	-
368329-81	174"(4419.6mm)	D	32	-
368329-82	176"(4470.4mm)	D	32	-
368329-83	178"(4521.2mm)	D	32	-
368329-84	180"(4572.0mm)	D	32	-
368332-XX	NEC Explosion Proof MAXFire 110 Gas Igniter			
368332-05	22"(558.8mm)	D	32	10
368332-06	24"(609.6mm)	D	32	-
368332-07	26"(660.4mm)	D	32	-
368332-08	28"(711.2mm)	D	32	-
368332-09	30"(762.0mm)	D	32	-
368332-10	32"(812.8mm)	D	32	-
368332-11	34"(863.6mm)	D	32	-
368332-12	36"(914.4mm)	D	32	-
368332-13	38"(965.2mm)	D	32	-
368332-14	40"(1016.0mm)	D	32	-
368332-15	42"(1066.8mm)	D	32	-
368332-16	44"(1117.6mm)	D	32	-
368332-17	46"(1168.4mm)	D	32	-
368332-18	48"(1219.2mm)	D	32	-
368332-19	50"(1270mm)	D	32	-
368332-20	52"(1320.8mm)	D	32	-
368332-21	54"(1371.6mm)	D	32	-
368332-22	56"(1422.4mm)	D	32	-
368332-23	58"(1473.2mm)	D	32	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368332-XX	NEC Explosion Proof MAXFire 110 Gas Igniter (Cont.)			
368332-24	60"(1524mm)	D	32	-
368332-25	62"(1574.8mm)	D	32	-
368332-26	64"(1625.6mm)	D	32	-
368332-27	66"(1676.4mm)	D	32	-
368332-28	68"(1727.2mm)	D	32	-
368332-29	70"(1778mm)	D	32	-
368332-30	72"(1828.8mm)	D	32	-
368332-31	74"(1879.6mm)	D	32	-
368332-32	76"(1930.4mm)	D	32	-
368332-33	78"(1981.2mm)	D	32	-
368332-34	80"(2032.0mm)	D	32	-
368332-35	82"(2082.8mm)	D	32	-
368332-36	84"(2133.6mm)	D	32	-
368332-37	86"(2184.4mm)	D	32	-
368332-38	88"(2235.2mm)	D	32	-
368332-39	90"(2286.0mm)	D	32	-
368332-40	92"(2336.8mm)	D	32	-
368332-41	94"(2387.6mm)	D	32	-
368332-42	96"(2438.4mm)	D	32	-
368332-43	98"(2489.2mm)	D	32	-
368332-44	100"(2540.0mm)	D	32	-
368332-45	102"(2590.8mm)	D	32	-
368332-46	104"(2641.6mm)	D	32	-
368332-47	106"(2692.4mm)	D	32	-
368332-48	108"(2743.2mm)	D	32	-
368332-49	110"(2794.0mm)	D	32	-
368332-50	112"(2844.8mm)	D	32	-
368332-51	114"(2895.6mm)	D	32	-
368332-52	116"(2946.4mm)	D	32	-
368332-53	118"(2997.2mm)	D	32	-
368332-54	120"(3048.0mm)	D	32	-
368332-55	122"(3098.8mm)	D	32	-
368332-56	124"(3149.6mm)	D	32	-
368332-57	126"(3200.4mm)	D	32	-
368332-58	128"(3251.2mm)	D	32	-
368332-59	130"(3302.0mm)	D	32	-
368332-60	132"(3352.8mm)	D	32	-
368332-61	134"(3403.6mm)	D	32	-
368332-62	136"(3454.4mm)	D	32	-
368332-63	138"(3505.2mm)	D	32	-
368332-64	140"(3556.0mm)	D	32	-
368332-65	142"(3606.8mm)	D	32	-
368332-66	144"(3657.6mm)	D	32	-
368332-67	146"(3708.4mm)	D	32	-
368332-68	148"(3759.2mm)	D	32	-
368332-69	150"(3810.0mm)	D	32	-
368332-70	152"(3860.8mm)	D	32	-
368332-71	154"(3911.6mm)	D	32	-
368332-72	156"(3962.4mm)	D	32	-
368332-73	158"(4013.2mm)	D	32	-
368332-74	160"(4064.0mm)	D	32	-
368332-75	162"(4114.8mm)	D	32	-
368332-76	164"(4165.6mm)	D	32	-

Standard MAXFire® 110 Gas Igniter

Standard (Cont.)

Note: HESI Power Pack & Cable must be ordered separately

Part Number	Description	Schedule	Est. Lead Time	Wt
368332-XX	NEC Explosion Proof MAXFire 110 Gas Igniter (Cont.)			
368332-77	166"(4216.4mm)	D	32	-
368332-78	168"(4267.2mm)	D	32	-
368332-79	170"(4318.0mm)	D	32	-
368332-80	172"(4368.8mm)	D	32	-
368332-81	174"(4419.6mm)	D	32	-
368332-82	176"(4470.4mm)	D	32	-
368332-83	178"(4521.2mm)	D	32	-
368332-84	180"(4572.0mm)	D	32	-
408627-XX	MAXFire 110 Gas Igniter for DB Apps All SS internals, 304 SST Guide Tube			
408627-05	22"(558.8mm)	D	CF	11
408627-06	24"(609.6mm)	D	CF	-
408627-07	26"(660.4mm)	D	CF	-
408627-08	28"(711.2mm)	D	CF	-
408627-09	30"(762.0mm)	D	CF	-
408627-10	32"(812.8mm)	D	CF	-
408627-11	34"(863.6mm)	D	CF	-
408627-12	36"(914.4mm)	D	CF	-
408627-13	38"(965.2mm)	D	CF	-
408627-14	40"(1016.0mm)	D	CF	-
408627-15	42"(1066.8mm)	D	CF	-
408627-16	44"(1117.6mm)	D	CF	-
408627-17	46"(1168.4mm)	D	CF	-
408627-18	48"(1219.2mm)	D	CF	-
408627-19	50"(1270mm)	D	CF	-
408627-20	52"(1320.8mm)	D	CF	-
408627-21	54"(1371.6mm)	D	CF	-
408627-22	56"(1422.4mm)	D	CF	-
408627-23	58"(1473.2mm)	D	CF	-
408627-24	60"(1524mm)	D	CF	-
408627-25	62"(1574.8mm)	D	CF	-
408627-26	64"(1625.6mm)	D	CF	-
408627-27	66"(1676.4mm)	D	CF	-
408627-28	68"(1727.2mm)	D	CF	-
408627-29	70"(1778mm)	D	CF	-
408627-30	72"(1828.8mm)	D	CF	-
408627-31	74"(1879.6mm)	D	CF	-
408627-32	76"(1930.4mm)	D	CF	-
408627-33	78"(1981.2mm)	D	CF	-
408627-34	80"(2032.0mm)	D	CF	-
408627-35	82"(2082.8mm)	D	CF	-
408627-36	84"(2133.6mm)	D	CF	-
408627-37	86"(2184.4mm)	D	CF	-
408627-38	88"(2235.2mm)	D	CF	-
408627-39	90"(2286.0mm)	D	CF	-
408627-40	92"(2336.8mm)	D	CF	-
408627-41	94"(2387.6mm)	D	CF	-
408627-42	96"(2438.4mm)	D	CF	-
408627-43	98"(2489.2mm)	D	CF	-
408627-44	100"(2540.0mm)	D	CF	-
408627-45	102"(2590.8mm)	D	CF	-
408627-46	104"(2641.6mm)	D	CF	-
408627-47	106"(2692.4mm)	D	CF	-

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
408627-XX	MAXFire 110 Gas Igniter for DB Apps All SST internals, 304 SST Guide Tube			
408627-48	108"(2743.2mm)	D	CF	-
408627-49	110"(2794.0mm)	D	CF	-
408627-50	112"(2844.8mm)	D	CF	-
408627-51	114"(2895.6mm)	D	CF	-
408627-52	116"(2946.4mm)	D	CF	-
408627-53	118"(2997.2mm)	D	CF	-
408627-54	120"(3048.0mm)	D	CF	-
408627-55	122"(3098.8mm)	D	CF	-
408627-56	124"(3149.6mm)	D	CF	-
408627-57	126"(3200.4mm)	D	CF	-
408627-58	128"(3251.2mm)	D	CF	-
408627-59	130"(3302.0mm)	D	CF	-
408627-60	132"(3352.8mm)	D	CF	-
408627-61	134"(3403.6mm)	D	CF	-
408627-62	136"(3454.4mm)	D	CF	-
408627-63	138"(3505.2mm)	D	CF	-
408627-64	140"(3556.0mm)	D	CF	-
408627-65	142"(3606.8mm)	D	CF	-
408627-66	144"(3657.6mm)	D	CF	-
408627-67	146"(3708.4mm)	D	CF	-
408627-68	148"(3759.2mm)	D	CF	-
408627-69	150"(3810.0mm)	D	CF	-
408627-70	152"(3860.8mm)	D	CF	-
408627-71	154"(3911.6mm)	D	CF	-
408627-72	156"(3962.4mm)	D	CF	-
408627-73	158"(4013.2mm)	D	CF	-
408627-74	160"(4064.0mm)	D	CF	-
408627-75	162"(4114.8mm)	D	CF	-
408627-76	164"(4165.6mm)	D	CF	-
408627-77	166"(4216.4mm)	D	CF	-
408627-78	168"(4267.2mm)	D	CF	-
408627-79	170"(4318.0mm)	D	CF	-
408627-80	172"(4368.8mm)	D	CF	-
408627-81	174"(4419.6mm)	D	CF	-
408627-82	176"(4470.4mm)	D	CF	-
408627-83	178"(4521.2mm)	D	CF	-
408627-84	180"(4572.0mm)	D	CF	-
408628-XX	MAXFire 110 Gas Igniter for NEC Explosion Proof DB Applications			
408628-05	22"(558.8mm)	D	CF	12
408628-06	24"(609.6mm)	D	CF	-
408628-07	26"(660.4mm)	D	CF	-
408628-08	28"(711.2mm)	D	CF	-
408628-09	30"(762.0mm)	D	CF	-
408628-10	32"(812.8mm)	D	CF	-
408628-11	34"(863.6mm)	D	CF	-
408628-12	36"(914.4mm)	D	CF	-
408628-13	38"(965.2mm)	D	CF	-
408628-14	40"(1016.0mm)	D	CF	-
408628-15	42"(1066.8mm)	D	CF	-
408628-16	44"(1117.6mm)	D	CF	-
408628-17	46"(1168.4mm)	D	CF	-
408628-18	48"(1219.2mm)	D	CF	-

Standard MAXFire® 110 Gas Igniter

Standard (Cont.)

Note: HESI Power Pack & Cable must be ordered separately

Part Number	Description	Schedule	Est. Lead Time	Wt
408628-XX	MAXFire 110 Gas Igniter for NEC Explosion Proof DB App			
408628-19	50"(1270mm)	D	CF	-
408628-20	52"(1320.8mm)	D	CF	-
408628-21	54"(1371.6mm)	D	CF	-
408628-22	56"(1422.4mm)	D	CF	-
408628-23	58"(1473.2mm)	D	CF	-
408628-24	60"(1524mm)	D	CF	-
408628-25	62"(1574.8mm)	D	CF	-
408628-26	64"(1625.6mm)	D	CF	-
408628-27	66"(1676.4mm)	D	CF	-
408628-28	68"(1727.2mm)	D	CF	-
408628-29	70"(1778mm)	D	CF	-
408628-30	72"(1828.8mm)	D	CF	-
408628-31	74"(1879.6mm)	D	CF	-
408628-32	76"(1930.4mm)	D	CF	-
408628-33	78"(1981.2mm)	D	CF	-
408628-34	80"(2032.0mm)	D	CF	-
408628-35	82"(2082.8mm)	D	CF	-
408628-36	84"(2133.6mm)	D	CF	-
408628-37	86"(2184.4mm)	D	CF	-
408628-38	88"(2235.2mm)	D	CF	-
408628-39	90"(2286.0mm)	D	CF	-
408628-40	92"(2336.8mm)	D	CF	-
408628-41	94"(2387.6mm)	D	CF	-
408628-42	96"(2438.4mm)	D	CF	-
408628-43	98"(2489.2mm)	D	CF	-
408628-44	100"(2540.0mm)	D	CF	-
408628-45	102"(2590.8mm)	D	CF	-
408628-46	104"(2641.6mm)	D	CF	-
408628-47	106"(2692.4mm)	D	CF	-
408628-48	108"(2743.2mm)	D	CF	-
408628-49	110"(2794.0mm)	D	CF	-
408628-50	112"(2844.8mm)	D	CF	-
408628-51	114"(2895.6mm)	D	CF	-
408628-52	116"(2946.4mm)	D	CF	-
408628-53	118"(2997.2mm)	D	CF	-
408628-54	120"(3048.0mm)	D	CF	-
408628-55	122"(3098.8mm)	D	CF	-
408628-56	124"(3149.6mm)	D	CF	-
408628-57	126"(3200.4mm)	D	CF	-
408628-58	128"(3251.2mm)	D	CF	-
408628-59	130"(3302.0mm)	D	CF	-
408628-60	132"(3352.8mm)	D	CF	-
408628-61	134"(3403.6mm)	D	CF	-
408628-62	136"(3454.4mm)	D	CF	-
408628-63	138"(3505.2mm)	D	CF	-
408628-64	140"(3556.0mm)	D	CF	-
408628-65	142"(3606.8mm)	D	CF	-
408628-66	144"(3657.6mm)	D	CF	-
408628-67	146"(3708.4mm)	D	CF	-
408628-68	148"(3759.2mm)	D	CF	-
408628-69	150"(3810.0mm)	D	CF	-
408628-70	152"(3860.8mm)	D	CF	-
408628-71	154"(3911.6mm)	D	CF	-

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
408628-XX	MAXFire 110 Gas Igniter for NEC Explosion Proof DB App			
408628-72	156"(3962.4mm)	D	CF	-
408628-73	158"(4013.2mm)	D	CF	-
408628-74	160"(4064.0mm)	D	CF	-
408628-75	162"(4114.8mm)	D	CF	-
408628-76	164"(4165.6mm)	D	CF	-
408628-77	166"(4216.4mm)	D	CF	-
408628-78	168"(4267.2mm)	D	CF	-
408628-79	170"(4318.0mm)	D	CF	-
408628-80	172"(4368.8mm)	D	CF	-
408628-81	174"(4419.6mm)	D	CF	-
408628-82	176"(4470.4mm)	D	CF	-
408628-83	178"(4521.2mm)	D	CF	-
408628-84	180"(4572.0mm)	D	CF	-
408629-XX	MAXFire 110 Gas Igniter for ATEX (EEXD) Explosion Proof DB Apps			
408629-05	22"(558.8mm)	D	CF	12
408629-06	24"(609.6mm)	D	CF	-
408629-07	26"(660.4mm)	D	CF	-
408629-08	28"(711.2mm)	D	CF	-
408629-09	30"(762.0mm)	D	CF	-
408629-10	32"(812.8mm)	D	CF	-
408629-11	34"(863.6mm)	D	CF	-
408629-12	36"(914.4mm)	D	CF	-
408629-13	38"(965.2mm)	D	CF	-
408629-14	40"(1016.0mm)	D	CF	-
408629-15	42"(1066.8mm)	D	CF	-
408629-16	44"(1117.6mm)	D	CF	-
408629-17	46"(1168.4mm)	D	CF	-
408629-18	48"(1219.2mm)	D	CF	-
408629-19	50"(1270mm)	D	CF	-
408629-20	52"(1320.8mm)	D	CF	-
408629-21	54"(1371.6mm)	D	CF	-
408629-22	56"(1422.4mm)	D	CF	-
408629-23	58"(1473.2mm)	D	CF	-
408629-24	60"(1524mm)	D	CF	-
408629-25	62"(1574.8mm)	D	CF	-
408629-26	64"(1625.6mm)	D	CF	-
408629-27	66"(1676.4mm)	D	CF	-
408629-28	68"(1727.2mm)	D	CF	-
408629-29	70"(1778mm)	D	CF	-
408629-30	72"(1828.8mm)	D	CF	-
408629-31	74"(1879.6mm)	D	CF	-
408629-32	76"(1930.4mm)	D	CF	-
408629-33	78"(1981.2mm)	D	CF	-
408629-34	80"(2032.0mm)	D	CF	-
408629-35	82"(2082.8mm)	D	CF	-
408629-36	84"(2133.6mm)	D	CF	-
408629-37	86"(2184.4mm)	D	CF	-
408629-38	88"(2235.2mm)	D	CF	-
408629-39	90"(2286.0mm)	D	CF	-
408629-40	92"(2336.8mm)	D	CF	-
408629-41	94"(2387.6mm)	D	CF	-
408629-42	96"(2438.4mm)	D	CF	-

Standard MAXFire® 110 Gas Igniter

Standard (Cont.)

Note: HESI Power Pack & Cable must be ordered separately

Estimated Lead Time is in Business Days

Mounting Tubes

Part Number	Description	Schedule	Est. Lead Time	Wt
408629-XX	MAXFire 110 Gas Igniter for ATEX (EEXD) Explosion Proof DB Apps			
408629-43	98"(2489.2mm)	D	CF	-
408629-44	100"(2540.0mm)	D	CF	-
408629-45	102"(2590.8mm)	D	CF	-
408629-46	104"(2641.6mm)	D	CF	-
408629-47	106"(2692.4mm)	D	CF	-
408629-48	108"(2743.2mm)	D	CF	-
408629-49	110"(2794.0mm)	D	CF	-
408629-50	112"(2844.8mm)	D	CF	-
408629-51	114"(2895.6mm)	D	CF	-
408629-52	116"(2946.4mm)	D	CF	-
408629-53	118"(2997.2mm)	D	CF	-
408629-54	120"(3048.0mm)	D	CF	-
408629-55	122"(3098.8mm)	D	CF	-
408629-56	124"(3149.6mm)	D	CF	-
408629-57	126"(3200.4mm)	D	CF	-
408629-58	128"(3251.2mm)	D	CF	-
408629-59	130"(3302.0mm)	D	CF	-
408629-60	132"(3352.8mm)	D	CF	-
408629-61	134"(3403.6mm)	D	CF	-
408629-62	136"(3454.4mm)	D	CF	-
408629-63	138"(3505.2mm)	D	CF	-
408629-64	140"(3556.0mm)	D	CF	-
408629-65	142"(3606.8mm)	D	CF	-
408629-66	144"(3657.6mm)	D	CF	-
408629-67	146"(3708.4mm)	D	CF	-
408629-68	148"(3759.2mm)	D	CF	-
408629-69	150"(3810.0mm)	D	CF	-
408629-70	152"(3860.8mm)	D	CF	-
408629-71	154"(3911.6mm)	D	CF	-
408629-72	156"(3962.4mm)	D	CF	-
408629-73	158"(4013.2mm)	D	CF	-
408629-74	160"(4064.0mm)	D	CF	-
408629-75	162"(4114.8mm)	D	CF	-
408629-76	164"(4165.6mm)	D	CF	-
408629-77	166"(4216.4mm)	D	CF	-
408629-78	168"(4267.2mm)	D	CF	-
408629-79	170"(4318.0mm)	D	CF	-
408629-80	172"(4368.8mm)	D	CF	-
408629-81	174"(4419.6mm)	D	CF	-
408629-82	176"(4470.4mm)	D	CF	-
408629-83	178"(4521.2mm)	D	CF	-
408629-84	180"(4572.0mm)	D	CF	-

Part Number	Description	Schedule	Est. Lead Time	Wt
383720-XX	MAXFire 10/110 Gas Igniter Mounting Tube Assembly			
383720-01	4"(101.6mm)	D	15	3
383720-02	12"(304.8mm)	D	15	-
383720-03	22"(558.8mm)	D	15	-
383720-04	32"(812.8mm)	D	15	-
383720-05	42"(1066.8mm)	D	15	-
383720-06	52"(1320.8mm)	D	15	-
383720-07	62"(1574.8mm)	D	15	-
383720-08	72"(1828.8mm)	D	15	-
383720-09	82"(2082.8mm)	D	15	-
383720-10	92"(2336.8mm)	D	15	-
383720-11	102"(2590.8mm)	D	15	-
383720-12	112"(2844.8mm)	D	15	-
383720-13	132"(3352.8mm)	D	15	-
383720-14	142"(3606.8mm)	D	15	-
383720-15	152"(3860.8mm)	D	15	-
383720-16	162"(4114.8mm)	D	15	-
383720-17	172"(4368.8mm)	D	15	-
398491-XX	MAXFire 10/110 Stainless Steel Mounting Tube Assembly			
398491-01	4"(102mm)	D	20	3.3
398491-02	12"(305mm)	D	20	-
398491-03	22"(559mm)	D	20	-
398491-04	32"(813mm)	D	20	-
398491-05	42"(1067mm)	D	20	-
398491-06	52"(1321mm)	D	20	-
398491-07	62"(1575mm)	D	20	-
398491-08	72"(1829mm)	D	20	-
398491-09	82"(2083mm)	D	20	-
398491-10	92"(2337mm)	D	20	-
398491-11	102"(2591mm)	D	20	-
398491-12	112"(2845mm)	D	20	-
398491-13	122"(3099mm)	D	20	-
398491-14	132"(3353mm)	D	20	-
398491-15	142"(3607mm)	D	20	-
398491-16	152"(3861mm)	D	20	-
398491-17	162"(3861mm)	D	20	-

Standard MAXFire® 110 Gas Igniter

Standard Accessories

HESI Power Pack, Cable and accessories

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
389352-01	MAXFire 10/110 Combination Mounting Assembly	D	CF	-
392673-01	Mount Tube Assembly with 3", 150# flange	D	CF	-
391275-01	MAXFire 10 SRU/HAZMAT mtg assembly with 4", 150# flange	D	CF	-
358447-05	HESI Pow erpack, 120VAC, series 90E, 60Hz, Carbon Steel enclosure, 2 pin	D	3	16
397860-01	HESI Pow erpack, 230VAC, series 90F, 50Hz, Carbon Steel enclosure, 2 pin	D	3	16.5
358447-06	HESI Pow erpack, 230VAC, series 90F, 60Hz, Carbon Steel enclosure, 2 pin	D	15	16
358447-07	HESI Pow erpack, 120VAC, series 90G,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
397860-02	HESI Pow erpack, 230VAC, series 90H,4X, 50Hz Stainless Steel enclosure,2 pin	D	15	16.5
358447-08	HESI Pow erpack, 230VAC, series 90H,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
374455-01	HESI Pow erpack, 115VAC, series 90, 60 Hz, Explosion Proof	D	CF	-
374455-02	HESI Pow erpack, 230VAC, series 90, 50 Hz, Explosion Proof	D	CF	-
361864-01	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 15' (4.5m)	D	3	6
361864-02	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 12' (3.7m)	D	5	5.6
361864-03	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 9' (2.7m)	D	5	5.2
361864-04	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 6' (1.8m)	D	5	4.8
389362-01	Class I Div II HESI Cable Assembly (US) LENGTH 15' (4.5m)	D	CF	6
370309-01	Gas/Oil Hose 3/4"X 48" (3/4" NPT and 1/2" NPT ends)	D	CF	3
370309-02	Gas/Oil Hose 3/4"X 72" (3/4" NPT and 1/2" NPT ends)	D	CF	4.5
370309-03	Gas/Oil Hose 3/4"X 96" (3/4" NPT and 1/2" NPT ends)	D	CF	6
370306-08	Air Hose Assembly 1" X 10 FT, , 3/4" & 1" nipple fitting ends	D	CF	-
368667-01	Igniter Mount Plate 12"x12" w ith 2.25OD hole	D	CF	-
368668-01	Igniter Mount Plate 6"x6" w ith 2.25OD hole	D	CF	-
	<i>User can cut to fit shorter lengths</i>			
91102-00	Clamp (rear flange)	D	12	0.75
383714-02	Gasket, MAXFire 10 (rear flange)	D	CF	-
383726-02	Spark Tip, Short (~8")	D	3	0.33
383726-03	Spark Tip, Long (~27")	D	3	2
384823-01	In-Line Pressure Tester for fuel line	D	CF	1.1
86255-03	1/2" FPT Quick Connect SOCKET (FEMALE)	D	20	0.5
86256-03	1/2" FPT Quick Connect PLUG (MALE)	D	20	0.2
88441-01	1/2" N.P.T. CLOSE NIPPLE, SST	D	CF	-

CE Compliant MAXFire® 110 Gas Igniters

CE

Note: HESI Power Pack & Cable must be ordered separately

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368333-XX	ATEX EExd IIC T6 MAXFire 110 without			
368333-05	22"(558.8mm)	D	CF	-
368333-06	24"(609.6mm)	D	CF	-
368333-07	26"(660.4mm)	D	CF	-
368333-08	28"(711.2mm)	D	CF	-
368333-09	30"(762.0mm)	D	CF	-
368333-10	32"(812.8mm)	D	CF	-
368333-11	34"(863.6mm)	D	CF	-
368333-12	36"(914.4mm)	D	CF	-
368333-13	38"(965.2mm)	D	CF	-
368333-14	40"(1016.0mm)	D	CF	-
368333-15	42"(1066.8mm)	D	CF	-
368333-16	44"(1117.6mm)	D	CF	-
368333-17	46"(1168.4mm)	D	CF	-
368333-18	48"(1219.2mm)	D	CF	-
368333-19	50"(1270mm)	D	CF	-
368333-20	52"(1320.8mm)	D	CF	-
368333-21	54"(1371.6mm)	D	CF	-
368333-22	56"(1422.4mm)	D	CF	-
368333-23	58"(1473.2mm)	D	CF	-
368333-24	60"(1524mm)	D	CF	-
368333-25	62"(1574.8mm)	D	CF	-
368333-26	64"(1625.6mm)	D	CF	-
368333-27	66"(1676.4mm)	D	CF	-
368333-28	68"(1727.2mm)	D	CF	-
368333-29	70"(1778mm)	D	CF	-
368333-30	72"(1828.8mm)	D	CF	-
368333-31	74"(1879.6mm)	D	CF	-
368333-32	76"(1930.4mm)	D	CF	-
368333-33	78"(1981.2mm)	D	CF	-
368333-34	80"(2032.0mm)	D	CF	-
368333-35	82"(2082.8mm)	D	CF	-
368333-36	84"(2133.6mm)	D	CF	-
368333-37	86"(2184.4mm)	D	CF	-
368333-38	88"(2235.2mm)	D	CF	-
368333-39	90"(2286.0mm)	D	CF	-
368333-40	92"(2336.8mm)	D	CF	-
368333-41	94"(2387.6mm)	D	CF	-
368333-42	96"(2438.4mm)	D	CF	-
368333-43	98"(2489.2mm)	D	CF	-
368333-44	100"(2540.0mm)	D	CF	-
368333-45	102"(2590.8mm)	D	CF	-
368333-46	104"(2641.6mm)	D	CF	-
368333-47	106"(2692.4mm)	D	CF	-
368333-48	108"(2743.2mm)	D	CF	-
368333-49	110"(2794.0mm)	D	CF	-
368333-50	112"(2844.8mm)	D	CF	-
368333-51	114"(2895.6mm)	D	CF	-
368333-52	116"(2946.4mm)	D	CF	-
368333-53	118"(2997.2mm)	D	CF	-
368333-54	120"(3048.0mm)	D	CF	-
368333-55	122"(3098.8mm)	D	CF	-
368333-56	124"(3149.6mm)	D	CF	-
368333-57	126"(3200.4mm)	D	CF	-
368333-58	128"(3251.2mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368333-XX	ATEX EExd IIC T6 MAXFire 110 without			
368333-60	132"(3352.8mm)	D	CF	-
368333-61	134"(3403.6mm)	D	CF	-
368333-62	136"(3454.4mm)	D	CF	-
368333-63	138"(3505.2mm)	D	CF	-
368333-64	140"(3556.0mm)	D	CF	-
368333-65	142"(3606.8mm)	D	CF	-
368333-66	144"(3657.6mm)	D	CF	-
368333-67	146"(3708.4mm)	D	CF	-
368333-68	148"(3759.2mm)	D	CF	-
368333-69	150"(3810.0mm)	D	CF	-
368333-70	152"(3860.8mm)	D	CF	-
368333-71	154"(3911.6mm)	D	CF	-
368333-72	156"(3962.4mm)	D	CF	-
368333-73	158"(4013.2mm)	D	CF	-
368333-74	160"(4064.0mm)	D	CF	-
368333-75	162"(4114.8mm)	D	CF	-
368333-76	164"(4165.6mm)	D	CF	-
368333-77	166"(4216.4mm)	D	CF	-
368333-78	168"(4267.2mm)	D	CF	-
368333-79	170"(4318.0mm)	D	CF	-
368333-80	172"(4368.8mm)	D	CF	-
368333-81	174"(4419.6mm)	D	CF	-
368333-82	176"(4470.4mm)	D	CF	-
368333-83	178"(4521.2mm)	D	CF	-
368333-84	180"(4572.0mm)	D	CF	-
368334-XX	CE Compliant MAXFire 110 Gas Igniter 150 kw @ 2 psig			
368334-05	22"(558.8mm)	D	CF	-
368334-06	24"(609.6mm)	D	CF	-
368334-07	26"(660.4mm)	D	CF	-
368334-08	28"(711.2mm)	D	CF	-
368334-09	30"(762.0mm)	D	CF	-
368334-10	32"(812.8mm)	D	CF	-
368334-11	34"(863.6mm)	D	CF	-
368334-12	36"(914.4mm)	D	CF	-
368334-13	38"(965.2mm)	D	CF	-
368334-14	40"(1016.0mm)	D	CF	-
368334-15	42"(1066.8mm)	D	CF	-
368334-16	44"(1117.6mm)	D	CF	-
368334-17	46"(1168.4mm)	D	CF	-
368334-18	48"(1219.2mm)	D	CF	-
368334-19	50"(1270mm)	D	CF	-
368334-20	52"(1320.8mm)	D	CF	-
368334-21	54"(1371.6mm)	D	CF	-
368334-22	56"(1422.4mm)	D	CF	-
368334-23	58"(1473.2mm)	D	CF	-
368334-24	60"(1524mm)	D	CF	-
368334-25	62"(1574.8mm)	D	CF	-
368334-26	64"(1625.6mm)	D	CF	-
368334-27	66"(1676.4mm)	D	CF	-
368334-28	68"(1727.2mm)	D	CF	-
368334-29	70"(1778mm)	D	CF	-
368334-30	72"(1828.8mm)	D	CF	-
368334-31	74"(1879.6mm)	D	CF	-

CE Compliant MAXFire® 110 Gas Igniters

CE (Cont.)

Part Number	Description	Sched-ule	Est. Lead Time	Wt
CE Compliant MAXFire 110 Gas Igniter 150 kw @ 2 psig (Cont.)				
368334-32	76"(1930.4mm)	D	CF	-
368334-33	78"(1981.2mm)	D	CF	-
368334-34	80"(2032.0mm)	D	CF	-
368334-35	82"(2082.8mm)	D	CF	-
368334-36	84"(2133.6mm)	D	CF	-
368334-37	86"(2184.4mm)	D	CF	-
368334-38	88"(2235.2mm)	D	CF	-
368334-39	90"(2286.0mm)	D	CF	-
368334-40	92"(2336.8mm)	D	CF	-
368334-41	94"(2387.6mm)	D	CF	-
368334-42	96"(2438.4mm)	D	CF	-
368334-43	98"(2489.2mm)	D	CF	-
368334-44	100"(2540.0mm)	D	CF	-
368334-45	102"(2590.8mm)	D	CF	-
368334-46	104"(2641.6mm)	D	CF	-
368334-47	106"(2692.4mm)	D	CF	-
368334-48	108"(2743.2mm)	D	CF	-
368334-49	110"(2794.0mm)	D	CF	-
368334-50	112"(2844.8mm)	D	CF	-
368334-51	114"(2895.6mm)	D	CF	-
368334-52	116"(2946.4mm)	D	CF	-
368334-53	118"(2997.2mm)	D	CF	-
368334-54	120"(3048.0mm)	D	CF	-
368334-55	122"(3098.8mm)	D	CF	-
368334-56	124"(3149.6mm)	D	CF	-
368334-57	126"(3200.4mm)	D	CF	-
368334-58	128"(3251.2mm)	D	CF	-
368334-59	130"(3302.0mm)	D	CF	-
368334-60	132"(3352.8mm)	D	CF	-
368334-61	134"(3403.6mm)	D	CF	-
368334-62	136"(3454.4mm)	D	CF	-
368334-63	138"(3505.2mm)	D	CF	-
368334-64	140"(3556.0mm)	D	CF	-
368334-65	142"(3606.8mm)	D	CF	-
368334-66	144"(3657.6mm)	D	CF	-
368334-67	146"(3708.4mm)	D	CF	-
368334-68	148"(3759.2mm)	D	CF	-
368334-69	150"(3810.0mm)	D	CF	-
368334-70	152"(3860.8mm)	D	CF	-
368334-71	154"(3911.6mm)	D	CF	-
368334-72	156"(3962.4mm)	D	CF	-
368334-73	158"(4013.2mm)	D	CF	-
368334-74	160"(4064.0mm)	D	CF	-
368334-75	162"(4114.8mm)	D	CF	-
368334-76	164"(4165.6mm)	D	CF	-
368334-77	166"(4216.4mm)	D	CF	-
368334-78	168"(4267.2mm)	D	CF	-
368334-79	170"(4318.0mm)	D	CF	-
368334-80	172"(4368.8mm)	D	CF	-
368334-81	174"(4419.6mm)	D	CF	-
368334-82	176"(4470.4mm)	D	CF	-
368334-83	178"(4521.2mm)	D	CF	-
368334-84	180"(4572.0mm)	D	CF	-

Estimated Lead Time is in Business Days

List Price	Part Number	Description	Sched-ule	Est. Lead Time	Wt
CE Compliant MAXFire 110 Gas Igniter 100 kw @ 2 psig					
\$4,170	368335-05	22"(558.8mm)	D	CF	-
\$4,180	368335-06	24"(609.6mm)	D	CF	-
\$4,200	368335-07	26"(660.4mm)	D	CF	-
\$4,220	368335-08	28"(711.2mm)	D	CF	-
\$4,240	368335-09	30"(762.0mm)	D	CF	-
\$4,260	368335-10	32"(812.8mm)	D	CF	-
\$4,280	368335-11	34"(863.6mm)	D	CF	-
\$4,300	368335-12	36"(914.4mm)	D	CF	-
\$4,310	368335-13	38"(965.2mm)	D	CF	-
\$4,330	368335-14	40"(1016.0mm)	D	CF	-
\$4,340	368335-15	42"(1066.8mm)	D	CF	-
\$4,360	368335-16	44"(1117.6mm)	D	CF	-
\$4,370	368335-17	46"(1168.4mm)	D	CF	-
\$4,400	368335-18	48"(1219.2mm)	D	CF	-
\$4,420	368335-19	50"(1270mm)	D	CF	-
\$4,430	368335-20	52"(1320.8mm)	D	CF	-
\$4,460	368335-21	54"(1371.6mm)	D	CF	-
\$4,470	368335-22	56"(1422.4mm)	D	CF	-
\$4,510	368335-23	58"(1473.2mm)	D	CF	-
\$4,520	368335-24	60"(1524mm)	D	CF	-
\$4,540	368335-25	62"(1574.8mm)	D	CF	-
\$4,550	368335-26	64"(1625.6mm)	D	CF	-
\$4,570	368335-27	66"(1676.4mm)	D	CF	-
\$4,580	368335-28	68"(1727.2mm)	D	CF	-
\$4,600	368335-29	70"(1778mm)	D	CF	-
\$4,630	368335-30	72"(1828.8mm)	D	CF	-
\$4,640	368335-31	74"(1879.6mm)	D	CF	-
\$4,660	368335-32	76"(1930.4mm)	D	CF	-
\$4,680	368335-33	78"(1981.2mm)	D	CF	-
\$4,700	368335-34	80"(2032.0mm)	D	CF	-
\$4,710	368335-35	82"(2082.8mm)	D	CF	-
\$4,740	368335-36	84"(2133.6mm)	D	CF	-
\$4,750	368335-37	86"(2184.4mm)	D	CF	-
\$4,780	368335-38	88"(2235.2mm)	D	CF	-
\$4,790	368335-39	90"(2286.0mm)	D	CF	-
\$4,820	368335-40	92"(2336.8mm)	D	CF	-
\$4,850	368335-41	94"(2387.6mm)	D	CF	-
\$4,870	368335-42	96"(2438.4mm)	D	CF	-
\$4,890	368335-43	98"(2489.2mm)	D	CF	-
\$4,900	368335-44	100"(2540.0mm)	D	CF	-
\$4,920	368335-45	102"(2590.8mm)	D	CF	-
\$4,930	368335-46	104"(2641.6mm)	D	CF	-
\$4,950	368335-47	106"(2692.4mm)	D	CF	-
\$4,960	368335-48	108"(2743.2mm)	D	CF	-
\$4,990	368335-49	110"(2794.0mm)	D	CF	-
\$5,000	368335-50	112"(2844.8mm)	D	CF	-
\$5,020	368335-51	114"(2895.6mm)	D	CF	-
\$5,040	368335-52	116"(2946.4mm)	D	CF	-
\$5,050	368335-53	118"(2997.2mm)	D	CF	-
\$5,080	368335-54	120"(3048.0mm)	D	CF	-
\$5,090	368335-55	122"(3098.8mm)	D	CF	-
\$5,110	368335-56	124"(3149.6mm)	D	CF	-
\$5,120	368335-57	126"(3200.4mm)	D	CF	-

CE Compliant MAXFire® 110 Gas Igniters
CE (Cont.)

Part Number	Description	Sched-ule	Est. Lead Time	Wt
CE Compliant MAXFire 110 Gas Igniter 100 kw @ 2 psig (Cont.)				
368335-58	128"(3251.2mm)	D	CF	-
368335-59	130"(3302.0mm)	D	CF	-
368335-60	132"(3352.8mm)	D	CF	-
368335-61	134"(3403.6mm)	D	CF	-
368335-62	136"(3454.4mm)	D	CF	-
368335-63	138"(3505.2mm)	D	CF	-
368335-64	140"(3556.0mm)	D	CF	-
368335-65	142"(3606.8mm)	D	CF	-
368335-66	144"(3657.6mm)	D	CF	-
368335-67	146"(3708.4mm)	D	CF	-
368335-68	148"(3759.2mm)	D	CF	-
368335-69	150"(3810.0mm)	D	CF	-
368335-70	152"(3860.8mm)	D	CF	-
368335-71	154"(3911.6mm)	D	CF	-
368335-72	156"(3962.4mm)	D	CF	-
368335-73	158"(4013.2mm)	D	CF	-
368335-74	160"(4064.0mm)	D	CF	-
368335-75	162"(4114.8mm)	D	CF	-
368335-76	164"(4165.6mm)	D	CF	-
368335-77	166"(4216.4mm)	D	CF	-
368335-78	168"(4267.2mm)	D	CF	-
368335-79	170"(4318.0mm)	D	CF	-
368335-80	172"(4368.8mm)	D	CF	-
368335-81	174"(4419.6mm)	D	CF	-
368335-82	176"(4470.4mm)	D	CF	-
368335-83	178"(4521.2mm)	D	CF	-
368335-84	180"(4572.0mm)	D	CF	-
CE Compliant MAXFire 110 Gas Igniter 50 kw @ 2 psig				
368336-05	22"(558.8mm)	D	CF	-
368336-06	24"(609.6mm)	D	CF	-
368336-07	26"(660.4mm)	D	CF	-
368336-08	28"(711.2mm)	D	CF	-
368336-09	30"(762.0mm)	D	CF	-
368336-10	32"(812.8mm)	D	CF	-
368336-11	34"(863.6mm)	D	CF	-
368336-12	36"(914.4mm)	D	CF	-
368336-13	38"(965.2mm)	D	CF	-
368336-14	40"(1016.0mm)	D	CF	-
368336-15	42"(1066.8mm)	D	CF	-
368336-16	44"(1117.6mm)	D	CF	-
368336-17	46"(1168.4mm)	D	CF	-
368336-18	48"(1219.2mm)	D	CF	-
368336-19	50"(1270.0mm)	D	CF	-
368336-20	52"(1320.8mm)	D	CF	-
368336-21	54"(1371.6mm)	D	CF	-
368336-22	56"(1422.4mm)	D	CF	-
368336-23	58"(1473.2mm)	D	CF	-
368336-24	60"(1524.0mm)	D	CF	-
368336-25	62"(1574.8mm)	D	CF	-
368336-26	64"(1625.6mm)	D	CF	-
368336-27	66"(1676.4mm)	D	CF	-
368336-28	68"(1727.2mm)	D	CF	-

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
CE Compliant MAXFire 110 Gas Igniter 50 kw @ 2 psig				
368336-29	70"(1778mm)	D	CF	-
368336-30	72"(1828.8mm)	D	CF	-
368336-31	74"(1879.6mm)	D	CF	-
368336-32	76"(1930.4mm)	D	CF	-
368336-33	78"(1981.2mm)	D	CF	-
368336-34	80"(2032.0mm)	D	CF	-
368336-35	82"(2082.8mm)	D	CF	-
368336-36	84"(2133.6mm)	D	CF	-
368336-37	86"(2184.4mm)	D	CF	-
368336-38	88"(2235.2mm)	D	CF	-
368336-39	90"(2286.0mm)	D	CF	-
368336-40	92"(2336.8mm)	D	CF	-
368336-41	94"(2387.6mm)	D	CF	-
368336-42	96"(2438.4mm)	D	CF	-
368336-43	98"(2489.2mm)	D	CF	-
368336-44	100"(2540.0mm)	D	CF	-
368336-45	102"(2590.8mm)	D	CF	-
368336-46	104"(2641.6mm)	D	CF	-
368336-47	106"(2692.4mm)	D	CF	-
368336-48	108"(2743.2mm)	D	CF	-
368336-49	110"(2794.0mm)	D	CF	-
368336-50	112"(2844.8mm)	D	CF	-
368336-51	114"(2895.6mm)	D	CF	-
368336-52	116"(2946.4mm)	D	CF	-
368336-53	118"(2997.2mm)	D	CF	-
368336-54	120"(3048.0mm)	D	CF	-
368336-55	122"(3098.8mm)	D	CF	-
368336-56	124"(3149.6mm)	D	CF	-
368336-57	126"(3200.4mm)	D	CF	-
368336-58	128"(3251.2mm)	D	CF	-
368336-59	130"(3302.0mm)	D	CF	-
368336-60	132"(3352.8mm)	D	CF	-
368336-61	134"(3403.6mm)	D	CF	-
368336-62	136"(3454.4mm)	D	CF	-
368336-63	138"(3505.2mm)	D	CF	-
368336-64	140"(3556.0mm)	D	CF	-
368336-65	142"(3606.8mm)	D	CF	-
368336-66	144"(3657.6mm)	D	CF	-
368336-67	146"(3708.4mm)	D	CF	-
368336-68	148"(3759.2mm)	D	CF	-
368336-69	150"(3810.0mm)	D	CF	-
368336-70	152"(3860.8mm)	D	CF	-
368336-71	154"(3911.6mm)	D	CF	-
368336-72	156"(3962.4mm)	D	CF	-
368336-73	158"(4013.2mm)	D	CF	-
368336-74	160"(4064.0mm)	D	CF	-
368336-75	162"(4114.8mm)	D	CF	-
368336-76	164"(4165.6mm)	D	CF	-
368336-77	166"(4216.4mm)	D	CF	-
368336-78	168"(4267.2mm)	D	CF	-
368336-79	170"(4318.0mm)	D	CF	-
368336-80	172"(4368.8mm)	D	CF	-
368336-81	174"(4419.6mm)	D	CF	-

CE Compliant MAXFire® 110 Gas Igniters

CE (Cont.)

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368336-XX	CE Compliant MAXFire 110 Gas Igniter 50 kw @ 2 psig			
368336-82	176"(4470.4mm)	D	CF	-
368336-83	178"(4521.2mm)	D	CF	-
368336-84	180"(4572.0mm)	D	CF	-
368863-XX	CE Compliant MAXFire 110 Gas Igniter 300 kw @ 10 psig			
368863-05	22"(558.8mm)	D	CF	-
368863-06	24"(609.6mm)	D	CF	-
368863-07	26"(660.4mm)	D	CF	-
368863-08	28"(711.2mm)	D	CF	-
368863-09	30"(762.0mm)	D	CF	-
368863-10	32"(812.8mm)	D	CF	-
368863-11	34"(863.6mm)	D	CF	-
368863-12	36"(914.4mm)	D	CF	-
368863-13	38"(965.2mm)	D	CF	-
368863-14	40"(1016.0mm)	D	CF	-
368863-15	42"(1066.8mm)	D	CF	-
368863-16	44"(1117.6mm)	D	CF	-
368863-17	46"(1168.4mm)	D	CF	-
368863-18	48"(1219.2mm)	D	CF	-
368863-19	50"(1270mm)	D	CF	-
368863-20	52"(1320.8mm)	D	CF	-
368863-21	54"(1371.6mm)	D	CF	-
368863-22	56"(1422.4mm)	D	CF	-
368863-23	58"(1473.2mm)	D	CF	-
368863-24	60"(1524mm)	D	CF	-
368863-25	62"(1574.8mm)	D	CF	-
368863-26	64"(1625.6mm)	D	CF	-
368863-27	66"(1676.4mm)	D	CF	-
368863-28	68"(1727.2mm)	D	CF	-
368863-29	70"(1778mm)	D	CF	-
368863-30	72"(1828.8mm)	D	CF	-
368863-31	74"(1879.6mm)	D	CF	-
368863-32	76"(1930.4mm)	D	CF	-
368863-33	78"(1981.2mm)	D	CF	-
368863-34	80"(2032.0mm)	D	CF	-
368863-35	82"(2082.8mm)	D	CF	-
368863-36	84"(2133.6mm)	D	CF	-
368863-37	86"(2184.4mm)	D	CF	-
368863-38	88"(2235.2mm)	D	CF	-
368863-39	90"(2286.0mm)	D	CF	-
368863-40	92"(2336.8mm)	D	CF	-
368863-41	94"(2387.6mm)	D	CF	-
368863-42	96"(2438.4mm)	D	CF	-
368863-43	98"(2489.2mm)	D	CF	-
368863-44	100"(2540.0mm)	D	CF	-
368863-45	102"(2590.8mm)	D	CF	-
368863-46	104"(2641.6mm)	D	CF	-
368863-47	106"(2692.4mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368863-XX	CE Compliant MAXFire 110 Gas Igniter 300 kw @ 10 psig (Cont.)			
368863-48	108"(2743.2mm)	D	CF	-
368863-49	110"(2794.0mm)	D	CF	-
368863-50	112"(2844.8mm)	D	CF	-
368863-51	114"(2895.6mm)	D	CF	-
368863-52	116"(2946.4mm)	D	CF	-
368863-53	118"(2997.2mm)	D	CF	-
368863-54	120"(3048.0mm)	D	CF	-
368863-55	122"(3098.8mm)	D	CF	-
368863-56	124"(3149.6mm)	D	CF	-
368863-57	126"(3200.4mm)	D	CF	-
368863-58	128"(3251.2mm)	D	CF	-
368863-59	130"(3302.0mm)	D	CF	-
368863-60	132"(3352.8mm)	D	CF	-
368863-61	134"(3403.6mm)	D	CF	-
368863-62	136"(3454.4mm)	D	CF	-
368863-63	138"(3505.2mm)	D	CF	-
368863-64	140"(3556.0mm)	D	CF	-
368863-65	142"(3606.8mm)	D	CF	-
368863-66	144"(3657.6mm)	D	CF	-
368863-67	146"(3708.4mm)	D	CF	-
368863-68	148"(3759.2mm)	D	CF	-
368863-69	150"(3810.0mm)	D	CF	-
368863-70	152"(3860.8mm)	D	CF	-
368863-71	154"(3911.6mm)	D	CF	-
368863-72	156"(3962.4mm)	D	CF	-
368863-73	158"(4013.2mm)	D	CF	-
368863-74	160"(4064.0mm)	D	CF	-
368863-75	162"(4114.8mm)	D	CF	-
368863-76	164"(4165.6mm)	D	CF	-
368863-77	166"(4216.4mm)	D	CF	-
368863-78	168"(4267.2mm)	D	CF	-
368863-79	170"(4318.0mm)	D	CF	-
368863-80	172"(4368.8mm)	D	CF	-
368863-81	174"(4419.6mm)	D	CF	-
368863-82	176"(4470.4mm)	D	CF	-
368863-83	178"(4521.2mm)	D	CF	-
368863-84	180"(4572.0mm)	D	CF	-

CE Compliant MAXFire® 110 Gas Igniters

CE (Cont.)

Mounting Tubes

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
383720-XX	MAXFire 10/110 Gas Igniter Mounting Tube Assembly			
383720-01	4"(101.6mm)	D	15	3
383720-02	12"(304.8mm)	D	15	-
383720-03	22"(558.8mm)	D	15	-
383720-04	32"(812.8mm)	D	15	-
383720-05	42"(1066.8mm)	D	15	-
383720-06	52"(1320.8mm)	D	15	-
383720-07	62"(1574.8mm)	D	15	-
383720-08	72"(1828.8mm)	D	15	-
383720-09	82"(2082.8mm)	D	15	-
383720-10	92"(2336.8mm)	D	15	-
383720-11	102"(2590.8mm)	D	15	-
383720-12	112"(2844.8mm)	D	15	-
383720-13	132"(3352.8mm)	D	15	-
383720-14	142"(3606.8mm)	D	15	-
383720-15	152"(3860.8mm)	D	15	-
383720-16	162"(4114.8mm)	D	15	-
383720-17	172"(4368.8mm)	D	15	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
383720-XX	MAXFire 10/110 Gas Igniter Mounting Tube Assembly			
383720-01	4"(101.6mm)	D	15	3
383720-02	12"(304.8mm)	D	15	-
383720-03	22"(558.8mm)	D	15	-
383720-04	32"(812.8mm)	D	15	-
383720-05	42"(1066.8mm)	D	15	-
383720-06	52"(1320.8mm)	D	15	-
383720-07	62"(1574.8mm)	D	15	-
383720-08	72"(1828.8mm)	D	15	-
383720-09	82"(2082.8mm)	D	15	-
383720-10	92"(2336.8mm)	D	15	-
383720-11	102"(2590.8mm)	D	15	-
383720-12	112"(2844.8mm)	D	15	-
383720-13	132"(3352.8mm)	D	15	-
383720-14	142"(3606.8mm)	D	15	-
383720-15	152"(3860.8mm)	D	15	-
383720-16	162"(4114.8mm)	D	15	-
383720-17	172"(4368.8mm)	D	15	-

CE Accessory

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
389352-01	MAXFire 10/110 Combination Mounting Assembly	D	CF	-
392673-01	Mount Tube Assembly w with 3", 150# flange	D	CF	-
391275-01	MAXFire 10 SRU/HAZMAT mtg assembly w with 4", 150# flange	D	CF	-
368619-01	ATEX EExd IIC T6 HESI Pow erpack, 230VAC,50 HZ	D	CF	-
388816-02	HESI Pow erpack, 230VAC, CE compliant, Carbon steel enclosure	D	CF	18
388816-04	HESI Pow erpack, 230VAC, CE compliant, 4X, Stainless steel enclosure	D	CF	20
388813-02	HESI Pow erpack board subassembly, 230VAC, CE compliant	D	3	-
398492-01	HESI Pow erpack, 115VAC,50 HZ, EEXD Enclosure, CE Compliant	D	CF	-
398492-02	HESI Pow erpack, 230VAC, 50 HZ, EEXD Enclosure, CE Compliant	D	CF	-
370305-01	Mount Plate,12"x12"x.250" w with 2.00" centered hole	D	CF	-
388302-01	Mount Plate, 6"(152.4mm) X 6"(152.4mm) X 0.25 (6.35mm)	D	CF	-
370309-01	Gas/Oil Hose 3/4"X 48" (3/4" NPT and 1/2" NPT ends)	D	CF	3
370309-02	Gas/Oil Hose 3/4"X 72" (3/4" NPT and 1/2" NPT ends)	D	CF	4.5
370309-03	Gas/Oil Hose 3/4"X 96" (3/4" NPT and 1/2" NPT ends)	D	CF	6
368667-01	Igniter Mount Plate 12"x12" w with 2.25OD hole	D	CF	-
368668-01	Igniter Mount Plate 6"x6" w with 2.25OD hole	D	CF	-
370306-08	Air Hose Assembly 1" X 10 FT, , 3/4" & 1" nipple fitting ends <i>User can cut to fit shorter lengths</i>	D	CF	-
91102-00	Clamp (rear flange)	D	12	0.8
383714-02	Gasket, MAXFire 10 (rear flange)	D	CF	-
383726-02	Spark Tip, Short (~8")	D	3	0.3
383726-03	Spark Tip, Long (~27")	D	3	2
384823-01	In-Line Pressure Tester for fuel line	D	CF	1.1
86255-03	1/2" FPT Quick Connect SOCKET (FEMALE)	D	20	0.5
86256-03	1/2" FPT Quick Connect PLUG (MALE)	D	20	0.2

MAXFire® 110 Gas Igniter Catalog Structure

To obtain the complete Forney part number, use Chart 1 for the base part number (first six digits) of the MAXFire® 110 part number. Then, use the Chart 2 to obtain the last two dash numbers to complete the Forney number.

For example, a MAXFire® 110 with HESI (368327-) and 22" length (-05) yields the part number 368327-05.

For fixed application mount tube should be at least 10 inches shorter than the MAXFire® igniter.

CHART 1

Base Part #	MAXFire® 110 Description
368327-xx	Standard MAXFire 10 with HESI
368328-xx	All Stainless-steel
368329-xx	SRU/Hazmat
368332-xx	Explosion Proof NEC
408627-xx	Duct Burner MAXFire 110 - Standard
408628-xx	Duct Burner MAXFire 110 – Explosion Proof NEC
368334-xx	150 kw CE Compliant MAXFire 110
368335-xx	100 kw CE Compliant MAXFire 110
368336-xx	50 kw CE Compliant MAXFire 110
368333-xx	Explosion Proof ATEX (EEXD)

CHART 2

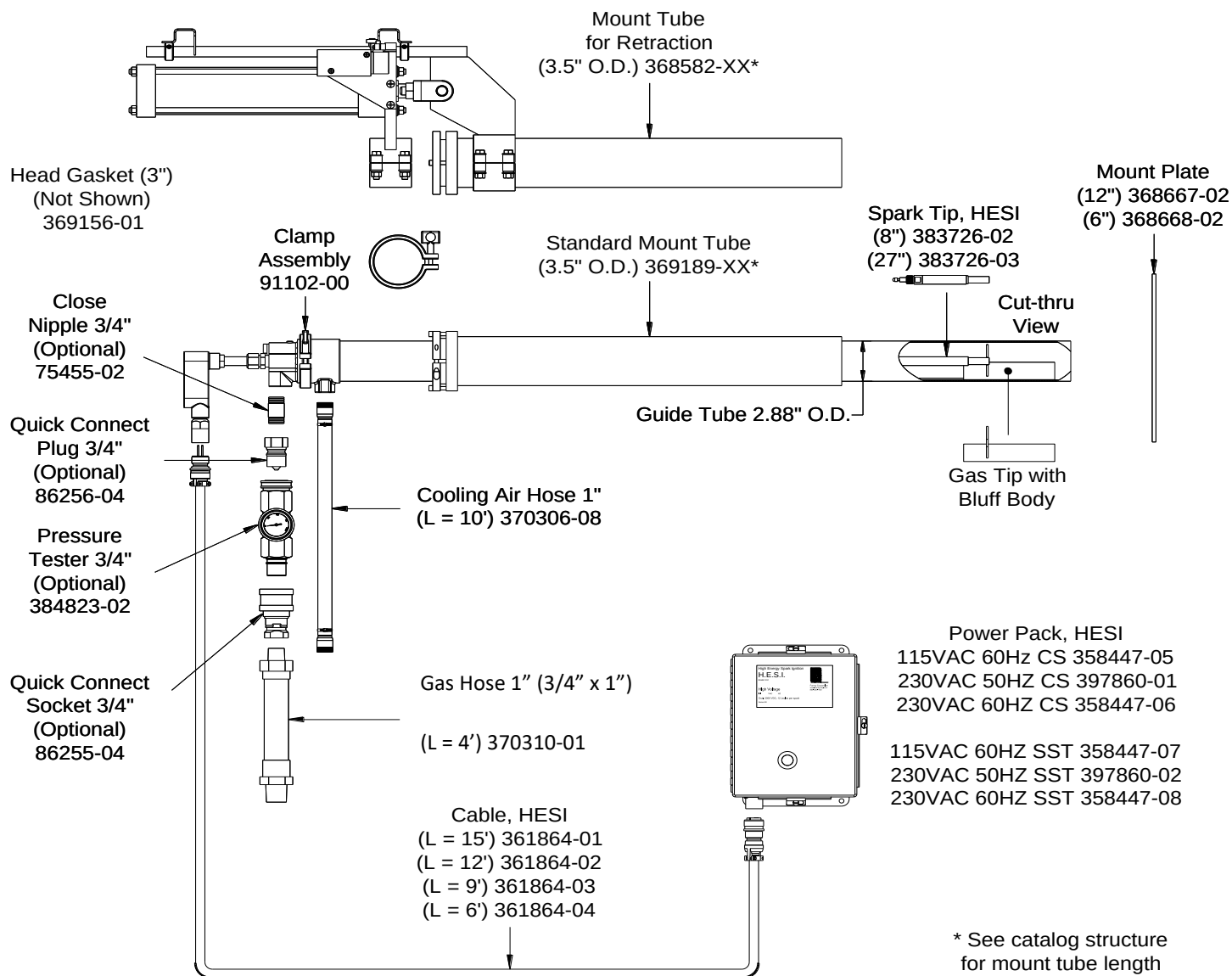
MAXFire® 110		Mount Tube	
Length "L"	Dash Number	Part Number	Length
22" (559mm)	-05	383720-02	12" (305 mm)
34" (864 mm)	-11	383720-03	22" (559 mm)
46" (1168 mm)	-17	383720-04	32" (813 mm)
58" (1473 mm)	-23	383720-05	42" (1067 mm)
70" (1778 mm)	-29	383720-06	52" (1321 mm)

Note:

1. Mount tube selections are for reference only
2. Verify if using a standard or CE compliant MAXFire® 110 gas igniters for correct part number when ordering.
3. MAXFire® igniters are available in 2" increments up to 180".

MAXFIRE® 130 GAS IGNITERS

MAXFire® 130 Gas Igniter Application Drawing



MAXFire® 130 Gas Igniters
Standard

Estimated Lead Time is in Business Days

Refer to MAXFire® 130 & 140 GAS IGNITER Catalog Structure for alternate capacity part numbers.

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368337-XX	MAXFire 130 Gas Igniter, (1 MMBtu/hr)(293kw)			
368337-08	28"(711.2mm)	D	CF	-
368337-09	30"(762.0mm)	D	CF	-
368337-10	32"(812.8mm)	D	CF	-
368337-11	34"(863.6mm)	D	CF	-
368337-12	36"(914.4mm)	D	CF	-
368337-13	38"(965.2mm)	D	CF	-
368337-14	40"(1016.0mm)	D	CF	-
368337-15	42"(1066.8mm)	D	CF	-
368337-16	44"(1117.6mm)	D	CF	-
368337-17	46"(1168.4mm)	D	CF	-
368337-18	48"(1219.2mm)	D	CF	-
368337-19	50"(1270mm)	D	CF	-
368337-20	52"(1320.8mm)	D	CF	-
368337-21	54"(1371.6mm)	D	CF	-
368337-22	56"(1422.4mm)	D	CF	-
368337-23	58"(1473.2mm)	D	CF	-
368337-24	60"(1524mm)	D	CF	-
368337-25	62"(1574.8mm)	D	CF	-
368337-26	64"(1625.6mm)	D	CF	-
368337-27	66"(1676.4mm)	D	CF	-
368337-28	68"(1727.2mm)	D	CF	-
368337-29	70"(1778mm)	D	CF	-
368337-30	72"(1828.8mm)	D	CF	-
368337-31	74"(1879.6mm)	D	CF	-
368337-32	76"(1930.4mm)	D	CF	-
368337-33	78"(1981.2mm)	D	CF	-
368337-34	80"(2032.0mm)	D	CF	-
368337-35	82"(2082.8mm)	D	CF	-
368337-36	84"(2133.6mm)	D	CF	-
368337-37	86"(2184.4mm)	D	CF	-
368337-38	88"(2235.2mm)	D	CF	-
368337-39	90"(2286.0mm)	D	CF	-
368337-40	92"(2336.8mm)	D	CF	-
368337-41	94"(2387.6mm)	D	CF	-
368337-42	96"(2438.4mm)	D	CF	-
368337-43	98"(2489.2mm)	D	CF	-
368337-44	100"(2540.0mm)	D	CF	-
368337-45	102"(2590.8mm)	D	CF	-
368337-46	104"(2641.6mm)	D	CF	-
368337-47	106"(2692.4mm)	D	CF	-
368337-48	108"(2743.2mm)	D	CF	-
368337-49	110"(2794.0mm)	D	CF	-
368337-50	112"(2844.8mm)	D	CF	-
368337-51	114"(2895.6mm)	D	CF	-
368337-52	116"(2946.4mm)	D	CF	-
368337-53	118"(2997.2mm)	D	CF	-
368337-54	120"(3048.0mm)	D	CF	-
368337-55	122"(3098.8mm)	D	CF	-
368337-56	124"(3149.6mm)	D	CF	-
368337-57	126"(3200.4mm)	D	CF	-
368337-58	128"(3251.2mm)	D	CF	-
368337-59	130"(3302.0mm)	D	CF	-
368337-60	132"(3352.8mm)	D	CF	-
368337-61	134"(3403.6mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
368337-XX	MAXFire 130 Gas Igniter, (1 MMBtu/hr)(293kw) (Cont.)			
368337-62	136"(3454.4mm)	D	CF	-
368337-63	138"(3505.2mm)	D	CF	-
368337-64	140"(3556.0mm)	D	CF	-
368337-65	142"(3606.8mm)	D	CF	-
368337-66	144"(3657.6mm)	D	CF	-
368337-67	146"(3708.4mm)	D	CF	-
368337-68	148"(3759.2mm)	D	CF	-
368337-69	150"(3810.0mm)	D	CF	-
368337-70	152"(3860.8mm)	D	CF	-
368337-71	154"(3911.6mm)	D	CF	-
368337-72	156"(3962.4mm)	D	CF	-
368337-73	158"(4013.2mm)	D	CF	-
368337-74	160"(4064.0mm)	D	CF	-
368337-75	162"(4114.8mm)	D	CF	-
368337-76	164"(4165.6mm)	D	CF	-
368337-77	166"(4216.4mm)	D	CF	-
368337-78	168"(4267.2mm)	D	CF	-
368337-79	170"(4318.0mm)	D	CF	-
368337-80	172"(4368.8mm)	D	CF	-
368337-81	174"(4419.6mm)	D	CF	-
368337-82	176"(4470.4mm)	D	CF	-
368337-83	178"(4521.2mm)	D	CF	-
368337-84	180"(4572.0mm)	D	CF	-
368338-XX	CE Compliant MAXFire 130 Gas Igniter, (1 MMBtu/hr)(293kw)			
368338-08	28"(711.2mm)	D	CF	-
368338-09	30"(762.0mm)	D	CF	-
368338-10	32"(812.8mm)	D	CF	-
368338-11	34"(863.6mm)	D	CF	-
368338-12	36"(914.4mm)	D	CF	-
368338-13	38"(965.2mm)	D	CF	-
368338-14	40"(1016.0mm)	D	CF	-
368338-15	42"(1066.8mm)	D	CF	-
368338-16	44"(1117.6mm)	D	CF	-
368338-17	46"(1168.4mm)	D	CF	-
368338-18	48"(1219.2mm)	D	CF	-
368338-19	50"(1270mm)	D	CF	-
368338-20	52"(1320.8mm)	D	CF	-
368338-21	54"(1371.6mm)	D	CF	-
368338-22	56"(1422.4mm)	D	CF	-
368338-23	58"(1473.2mm)	D	CF	-
368338-24	60"(1524mm)	D	CF	-
368338-25	62"(1574.8mm)	D	CF	-
368338-26	64"(1625.6mm)	D	CF	-
368338-27	66"(1676.4mm)	D	CF	-
368338-28	68"(1727.2mm)	D	CF	-
368338-29	70"(1778mm)	D	CF	-
368338-30	72"(1828.8mm)	D	CF	-
368338-31	74"(1879.6mm)	D	CF	-
368338-32	76"(1930.4mm)	D	CF	-
368338-33	78"(1981.2mm)	D	CF	-
368338-34	80"(2032.0mm)	D	CF	-
368338-35	82"(2082.8mm)	D	CF	-

MAXFire® 130 Gas Igniters

CE

Estimated Lead Time is in Business Days

Refer to MAXFire® 130 & 140 GAS IGNITER Catalog Structure for alternate capacity part numbers.

Part Number	Description	Schedule	Est. Lead Time	Wt
	CE Compliant MAXFire 130 Gas Igniter,			
368338-XX	(1 MMBtu/hr)(293kw) (Cont.)			
368338-36	84"(2133.6mm)	D	CF	-
368338-37	86"(2184.4mm)	D	CF	-
368338-38	88"(2235.2mm)	D	CF	-
368338-39	90"(2286.0mm)	D	CF	-
368338-40	92"(2336.8mm)	D	CF	-
368338-41	94"(2387.6mm)	D	CF	-
368338-42	96"(2438.4mm)	D	CF	-
368338-43	98"(2489.2mm)	D	CF	-
368338-44	100"(2540.0mm)	D	CF	-
368338-45	102"(2590.8mm)	D	CF	-
368338-46	104"(2641.6mm)	D	CF	-
368338-47	106"(2692.4mm)	D	CF	-
368338-48	108"(2743.2mm)	D	CF	-
368338-49	110"(2794.0mm)	D	CF	-
368338-50	112"(2844.8mm)	D	CF	-
368338-51	114"(2895.6mm)	D	CF	-
368338-52	116"(2946.4mm)	D	CF	-
368338-53	118"(2997.2mm)	D	CF	-
368338-54	120"(3048.0mm)	D	CF	-
368338-55	122"(3098.8mm)	D	CF	-
368338-56	124"(3149.6mm)	D	CF	-
368338-57	126"(3200.4mm)	D	CF	-
368338-58	128"(3251.2mm)	D	CF	-
368338-59	130"(3302.0mm)	D	CF	-
368338-60	132"(3352.8mm)	D	CF	-
368338-61	134"(3403.6mm)	D	CF	-
368338-62	136"(3454.4mm)	D	CF	-
368338-63	138"(3505.2mm)	D	CF	-
368338-64	140"(3556.0mm)	D	CF	-
368338-65	142"(3606.8mm)	D	CF	-
368338-66	144"(3657.6mm)	D	CF	-
368338-67	146"(3708.4mm)	D	CF	-
368338-68	148"(3759.2mm)	D	CF	-
368338-69	150"(3810.0mm)	D	CF	-
368338-70	152"(3860.8mm)	D	CF	-
368338-71	154"(3911.6mm)	D	CF	-
368338-72	156"(3962.4mm)	D	CF	-
368338-73	158"(4013.2mm)	D	CF	-
368338-74	160"(4064.0mm)	D	CF	-
368338-75	162"(4114.8mm)	D	CF	-
368338-76	164"(4165.6mm)	D	CF	-
368338-77	166"(4216.4mm)	D	CF	-
368338-78	168"(4267.2mm)	D	CF	-
368338-79	170"(4318.0mm)	D	CF	-
368338-80	172"(4368.8mm)	D	CF	-
368338-81	174"(4419.6mm)	D	CF	-
368338-82	176"(4470.4mm)	D	CF	-
368338-83	178"(4521.2mm)	D	CF	-
368338-84	180"(4572.0mm)	D	CF	-

Part Number	Description	Schedule	Est. Lead Time	Wt
	MAXFire 30/130 Gas Igniter			
369189-XX	Mounting Tube Assembly			
369189-01	10"(254mm)	D	CF	-
369189-02	20"(508mm)	D	CF	-
369189-03	30"(762mm)	D	CF	-
369189-04	40"(1016mm)	D	CF	-
369189-05	50"(1270mm)	D	CF	-
369189-06	60"(1524mm)	D	CF	-
369189-07	70"(1778mm)	D	CF	-
369189-08	80"(2032mm)	D	CF	-
369189-09	90"(2286mm)	D	CF	-
369189-10	100"(2540mm)	D	CF	-
369189-11	110"(2794mm)	D	CF	-
369189-12	120"(3048mm)	D	CF	-
369189-13	130"(3302mm)	D	CF	-
369189-14	140"(3556mm)	D	CF	-
369189-15	150"(3810mm)	D	CF	-
369189-16	160"(4064mm)	D	CF	-
369189-17	170"(4318mm)	D	CF	-

MAXFire® 130 Gas Igniters

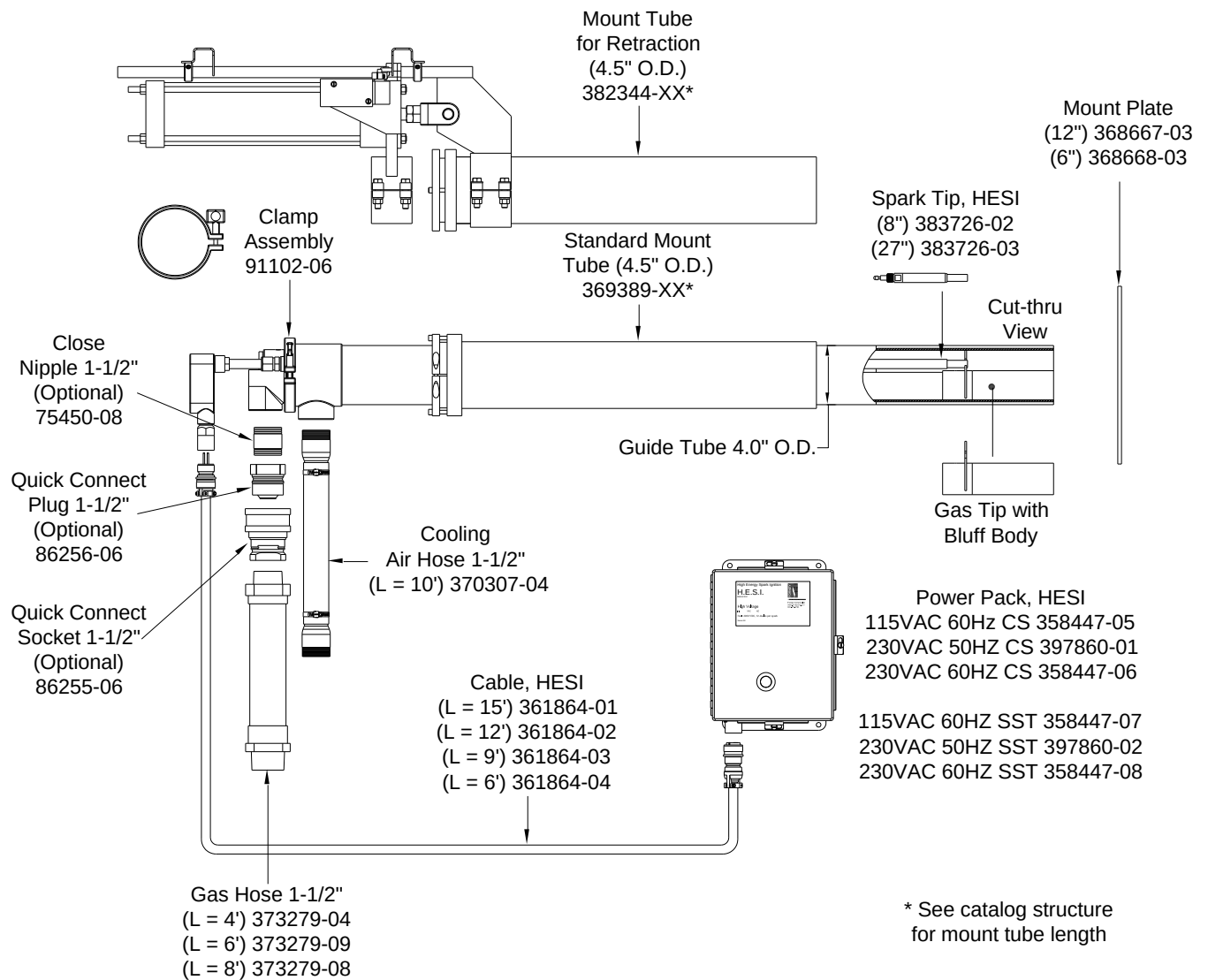
Accessory

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
368667-02	Igniter Mount Plate 12"x12" w ith 3.62OD hole	D	CF	-
368668-02	Igniter Mount Plate 6"x6" w ith 3.62OD hole	D	CF	-
370310-01	Gas/Air Hose 1"X 48" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	4
370310-02	Gas/Air Hose 1"X 72" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	6
370310-03	Gas/Air Hose 1"X 96" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	8
370306-08	Air Hose Assembly 1" X 10 FT, , 3/4" & 1" nipple fitting ends	D	CF	-
369156-01	Gasket, MAXFire 30/130 (rear flange)	D	CF	-
86255-04	3/4" FPT Quick Connect SOCKET (FEMALE)	D	20	0.7
86256-04	3/4" FPT Quick Connect PLUG (MALE)	D	20	0.3
75455-02	3/4" NPT Close Nipple	D	10	0.2
383726-02	Spark Tip, Short (~8")	D	3	0.3
383726-03	Spark Tip, Long (~27")	D	3	2
HESI Reference				
358447-05	HESI Pow erpack, 120VAC, series 90E, 60Hz, Carbon Steel enclosure, 2 pin	D	3	16
397860-01	HESI Pow erpack, 230VAC, series 90F, 50Hz, Carbon Steel enclosure, 2 pin	D	3	17
358447-06	HESI Pow erpack, 230VAC, series 90F, 60Hz, Carbon Steel enclosure, 2 pin	D	15	16
358447-07	HESI Pow erpack, 120VAC, series 90G,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
397860-02	HESI Pow erpack, 230VAC, series 90H,4X, 50Hz Stainless Steel enclosure,2 pin	D	15	17
358447-08	HESI Pow erpack, 230VAC, series 90H,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
388816-02	HESI Pow erpack, 230VAC, CE compliant, Carbon steel enclosure	D	CF	18
388816-04	HESI Pow erpack, 230VAC, CE compliant, 4X, Stainless steel enclosure	D	CF	20
388813-02	HESI Pow erpack board subassembly, 230VAC, CE compliant	D	3	-
361864-01	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 15' (4.5m)	D	3	6
361864-02	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 12' (3.7m)	D	5	5.6
361864-03	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 9' (2.7m)	D	5	5.2
361864-04	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 6' (1.8m)	D	5	4.8

MAXFIRE® 140 GAS IGNITER

MAXFire® 140 Gas Igniter Application Drawing



MAXFire® 140 Gas Igniters

Standard

Estimated Lead Time is in Business Days

Refer to MAXFire® 130 & 140 GAS IGNITER Catalog Structure for alternate capacity part numbers.

Part Number	Description	Sched-ule	Est. Lead Time	Wt
MAXFire 140 Gas Igniter, (5 MMBtu/hr)(1.5Mw) (Narrow Pattern)				
368339-08	28"(711.2mm)	D	CF	-
368339-09	30"(762.0mm)	D	CF	-
368339-10	32"(812.8mm)	D	CF	-
368339-11	34"(863.6mm)	D	CF	-
368339-12	36"(914.4mm)	D	CF	-
368339-13	38"(965.2mm)	D	CF	-
368339-14	40"(1016.0mm)	D	CF	-
368339-15	42"(1066.8mm)	D	CF	-
368339-16	44"(1117.6mm)	D	CF	-
368339-17	46"(1168.4mm)	D	CF	-
368339-18	48"(1219.2mm)	D	CF	-
368339-19	50"(1270mm)	D	CF	-
368339-20	52"(1320.8mm)	D	CF	-
368339-21	54"(1371.6mm)	D	CF	-
368339-22	56"(1422.4mm)	D	CF	-
368339-23	58"(1473.2mm)	D	CF	-
368339-24	60"(1524mm)	D	CF	-
368339-25	62"(1574.8mm)	D	CF	-
368339-26	64"(1625.6mm)	D	CF	-
368339-27	66"(1676.4mm)	D	CF	-
368339-28	68"(1727.2mm)	D	CF	-
368339-29	70"(1778mm)	D	CF	-
368339-30	72"(1828.8mm)	D	CF	-
368339-31	74"(1879.6mm)	D	CF	-
368339-32	76"(1930.4mm)	D	CF	-
368339-33	78"(1981.2mm)	D	CF	-
368339-34	80"(2032.0mm)	D	CF	-
368339-35	82"(2082.8mm)	D	CF	-
368339-36	84"(2133.6mm)	D	CF	-
368339-37	86"(2184.4mm)	D	CF	-
368339-38	88"(2235.2mm)	D	CF	-
368339-39	90"(2286.0mm)	D	CF	-
368339-40	92"(2336.8mm)	D	CF	-
368339-41	94"(2387.6mm)	D	CF	-
368339-42	96"(2438.4mm)	D	CF	-
368339-43	98"(2489.2mm)	D	CF	-
368339-44	100"(2540.0mm)	D	CF	-
368339-45	102"(2590.8mm)	D	CF	-
368339-46	104"(2641.6mm)	D	CF	-
368339-47	106"(2692.4mm)	D	CF	-
368339-48	108"(2743.2mm)	D	CF	-
368339-49	110"(2794.0mm)	D	CF	-
368339-50	112"(2844.8mm)	D	CF	-
368339-51	114"(2895.6mm)	D	CF	-
368339-52	116"(2946.4mm)	D	CF	-
368339-53	118"(2997.2mm)	D	CF	-
368339-54	120"(3048.0mm)	D	CF	-
368339-55	122"(3098.8mm)	D	CF	-
368339-56	124"(3149.6mm)	D	CF	-
368339-57	126"(3200.4mm)	D	CF	-
368339-58	128"(3251.2mm)	D	CF	-
368339-59	130"(3302.0mm)	D	CF	-
368339-60	132"(3352.8mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
MAXFire 140 Gas Igniter, (5 MMBtu/hr)(1.5Mw) (Narrow Pattern)				
368339-61	134"(3403.6mm)	D	CF	-
368339-62	136"(3454.4mm)	D	CF	-
368339-63	138"(3505.2mm)	D	CF	-
368339-64	140"(3556.0mm)	D	CF	-
368339-65	142"(3606.8mm)	D	CF	-
368339-66	144"(3657.6mm)	D	CF	-
368339-67	146"(3708.4mm)	D	CF	-
368339-68	148"(3759.2mm)	D	CF	-
368339-69	150"(3810.0mm)	D	CF	-
368339-70	152"(3860.8mm)	D	CF	-
368339-71	154"(3911.6mm)	D	CF	-
368339-72	156"(3962.4mm)	D	CF	-
368339-73	158"(4013.2mm)	D	CF	-
368339-74	160"(4064.0mm)	D	CF	-
368339-75	162"(4114.8mm)	D	CF	-
368339-76	164"(4165.6mm)	D	CF	-
368339-77	166"(4216.4mm)	D	CF	-
368339-78	168"(4267.2mm)	D	CF	-
368339-79	170"(4318.0mm)	D	CF	-
368339-80	172"(4368.8mm)	D	CF	-
368339-81	174"(4419.6mm)	D	CF	-
368339-82	176"(4470.4mm)	D	CF	-
368339-83	178"(4521.2mm)	D	CF	-
368339-84	180"(4572.0mm)	D	CF	-
MAXFire 140 Gas Igniter, (5 MMBtu/hr)(1.5Mw) (Wide Pattern)				
368340-08	28"(711.2mm)	D	CF	-
368340-09	30"(762.0mm)	D	CF	-
368340-10	32"(812.8mm)	D	CF	-
368340-11	34"(863.6mm)	D	CF	-
368340-12	36"(914.4mm)	D	CF	-
368340-13	38"(965.2mm)	D	CF	-
368340-14	40"(1016.0mm)	D	CF	-
368340-15	42"(1066.8mm)	D	CF	-
368340-16	44"(1117.6mm)	D	CF	-
368340-17	46"(1168.4mm)	D	CF	-
368340-18	48"(1219.2mm)	D	CF	-
368340-19	50"(1270mm)	D	CF	-
368340-20	52"(1320.8mm)	D	CF	-
368340-21	54"(1371.6mm)	D	CF	-
368340-22	56"(1422.4mm)	D	CF	-
368340-23	58"(1473.2mm)	D	CF	-
368340-24	60"(1524mm)	D	CF	-
368340-25	62"(1574.8mm)	D	CF	-
368340-26	64"(1625.6mm)	D	CF	-
368340-27	66"(1676.4mm)	D	CF	-
368340-28	68"(1727.2mm)	D	CF	-
368340-29	70"(1778mm)	D	CF	-
368340-30	72"(1828.8mm)	D	CF	-
368340-31	74"(1879.6mm)	D	CF	-
368340-32	76"(1930.4mm)	D	CF	-
368340-33	78"(1981.2mm)	D	CF	-
368340-34	80"(2032.0mm)	D	CF	-

MAXFire® 140 Gas Igniters

Standard (Cont.)

Estimated Lead Time is in Business Days

Refer to MAXFire® 130 & 140 GAS IGNITER Catalog Structure for alternate capacity part numbers.

Part Number	Description	Sched-ule	Est. Lead Time	Wt
MAXFire 140 Gas Igniter, (5 MMBtu/hr)(1.5Mw) (Wide Pattern)				
368340-35	82"(2082.8mm)	D	CF	-
368340-36	84"(2133.6mm)	D	CF	-
368340-37	86"(2184.4mm)	D	CF	-
368340-38	88"(2235.2mm)	D	CF	-
368340-39	90"(2286.0mm)	D	CF	-
368340-40	92"(2336.8mm)	D	CF	-
368340-41	94"(2387.6mm)	D	CF	-
368340-42	96"(2438.4mm)	D	CF	-
368340-43	98"(2489.2mm)	D	CF	-
368340-44	100"(2540.0mm)	D	CF	-
368340-45	102"(2590.8mm)	D	CF	-
368340-46	104"(2641.6mm)	D	CF	-
368340-47	106"(2692.4mm)	D	CF	-
368340-48	108"(2743.2mm)	D	CF	-
368340-49	110"(2794.0mm)	D	CF	-
368340-50	112"(2844.8mm)	D	CF	-
368340-51	114"(2895.6mm)	D	CF	-
368340-52	116"(2946.4mm)	D	CF	-
368340-53	118"(2997.2mm)	D	CF	-
368340-54	120"(3048.0mm)	D	CF	-
368340-55	122"(3098.8mm)	D	CF	-
368340-56	124"(3149.6mm)	D	CF	-
368340-57	126"(3200.4mm)	D	CF	-
368340-58	128"(3251.2mm)	D	CF	-
368340-59	130"(3302.0mm)	D	CF	-
368340-60	132"(3352.8mm)	D	CF	-
368340-61	134"(3403.6mm)	D	CF	-
368340-62	136"(3454.4mm)	D	CF	-
368340-63	138"(3505.2mm)	D	CF	-
368340-64	140"(3556.0mm)	D	CF	-
368340-65	142"(3606.8mm)	D	CF	-
368340-66	144"(3657.6mm)	D	CF	-
368340-67	146"(3708.4mm)	D	CF	-
368340-68	148"(3759.2mm)	D	CF	-
368340-69	150"(3810.0mm)	D	CF	-
368340-70	152"(3860.8mm)	D	CF	-
368340-71	154"(3911.6mm)	D	CF	-
368340-72	156"(3962.4mm)	D	CF	-
368340-73	158"(4013.2mm)	D	CF	-
368340-74	160"(4064.0mm)	D	CF	-
368340-75	162"(4114.8mm)	D	CF	-
368340-76	164"(4165.6mm)	D	CF	-
368340-77	166"(4216.4mm)	D	CF	-
368340-78	168"(4267.2mm)	D	CF	-
368340-79	170"(4318.0mm)	D	CF	-
368340-80	172"(4368.8mm)	D	CF	-
368340-81	174"(4419.6mm)	D	CF	-
368340-82	176"(4470.4mm)	D	CF	-
368340-83	178"(4521.2mm)	D	CF	-
368340-84	180"(4572.0mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
CE Compliant MAXFire 140, (5 MMBtu/hr)(1.5Mw)(Narrow Flame Pattern)				
368341-08	28"(711.2mm)	D	CF	-
368341-09	30"(762.0mm)	D	CF	-
368341-10	32"(812.8mm)	D	CF	-
368341-11	34"(863.6mm)	D	CF	-
368341-12	36"(914.4mm)	D	CF	-
368341-13	38"(965.2mm)	D	CF	-
368341-14	40"(1016.0mm)	D	CF	-
368341-15	42"(1066.8mm)	D	CF	-
368341-16	44"(1117.6mm)	D	CF	-
368341-17	46"(1168.4mm)	D	CF	-
368341-18	48"(1219.2mm)	D	CF	-
368341-19	50"(1270mm)	D	CF	-
368341-20	52"(1320.8mm)	D	CF	-
368341-21	54"(1371.6mm)	D	CF	-
368341-22	56"(1422.4mm)	D	CF	-
368341-23	58"(1473.2mm)	D	CF	-
368341-24	60"(1524mm)	D	CF	-
368341-25	62"(1574.8mm)	D	CF	-
368341-26	64"(1625.6mm)	D	CF	-
368341-27	66"(1676.4mm)	D	CF	-
368341-28	68"(1727.2mm)	D	CF	-
368341-29	70"(1778mm)	D	CF	-
368341-30	72"(1828.8mm)	D	CF	-
368341-31	74"(1879.6mm)	D	CF	-
368341-32	76"(1930.4mm)	D	CF	-
368341-33	78"(1981.2mm)	D	CF	-
368341-34	80"(2032.0mm)	D	CF	-
368341-35	82"(2082.8mm)	D	CF	-
368341-36	84"(2133.6mm)	D	CF	-
368341-37	86"(2184.4mm)	D	CF	-
368341-38	88"(2235.2mm)	D	CF	-
368341-39	90"(2286.0mm)	D	CF	-
368341-40	92"(2336.8mm)	D	CF	-
368341-41	94"(2387.6mm)	D	CF	-
368341-42	96"(2438.4mm)	D	CF	-
368341-43	98"(2489.2mm)	D	CF	-
368341-44	100"(2540.0mm)	D	CF	-
368341-45	102"(2590.8mm)	D	CF	-
368341-46	104"(2641.6mm)	D	CF	-
368341-47	106"(2692.4mm)	D	CF	-
368341-48	108"(2743.2mm)	D	CF	-
368341-49	110"(2794.0mm)	D	CF	-
368341-50	112"(2844.8mm)	D	CF	-
368341-51	114"(2895.6mm)	D	CF	-
368341-52	116"(2946.4mm)	D	CF	-
368341-53	118"(2997.2mm)	D	CF	-
368341-54	120"(3048.0mm)	D	CF	-
368341-55	122"(3098.8mm)	D	CF	-
368341-56	124"(3149.6mm)	D	CF	-
368341-57	126"(3200.4mm)	D	CF	-
368341-58	128"(3251.2mm)	D	CF	-
368341-59	130"(3302.0mm)	D	CF	-
368341-60	132"(3352.8mm)	D	CF	-

MAXFire® 140 Gas Igniters

CE

Estimated Lead Time is in Business Days

Refer to MAXFire® 130 & 140 GAS IGNITER Catalog Structure for alternate capacity part numbers.

Part Number	Description	Sched-ule	Est. Lead Time	Wt
CE Compliant MAXFire 140, (5 MMBtu/hr)(1.5Mw)(Narrow Flame Pattern)				
368341-61	134"(3403.6mm)	D	CF	-
368341-62	136"(3454.4mm)	D	CF	-
368341-63	138"(3505.2mm)	D	CF	-
368341-64	140"(3556.0mm)	D	CF	-
368341-65	142"(3606.8mm)	D	CF	-
368341-66	144"(3657.6mm)	D	CF	-
368341-67	146"(3708.4mm)	D	CF	-
368341-68	148"(3759.2mm)	D	CF	-
368341-69	150"(3810.0mm)	D	CF	-
368341-70	152"(3860.8mm)	D	CF	-
368341-71	154"(3911.6mm)	D	CF	-
368341-72	156"(3962.4mm)	D	CF	-
368341-73	158"(4013.2mm)	D	CF	-
368341-74	160"(4064.0mm)	D	CF	-
368341-75	162"(4114.8mm)	D	CF	-
368341-76	164"(4165.6mm)	D	CF	-
368341-77	166"(4216.4mm)	D	CF	-
368341-78	168"(4267.2mm)	D	CF	-
368341-79	170"(4318.0mm)	D	CF	-
368341-80	172"(4368.8mm)	D	CF	-
368341-81	174"(4419.6mm)	D	CF	-
368341-82	176"(4470.4mm)	D	CF	-
368341-83	178"(4521.2mm)	D	CF	-
368341-84	180"(4572.0mm)	D	CF	-
CE Compliant MAXFire 140, (5 MMBtu/hr)(1.5Mw)(Wide Flame Pattern)				
368342-08	28"(711.2mm)	D	CF	-
368342-09	30"(762.0mm)	D	CF	-
368342-10	32"(812.8mm)	D	CF	-
368342-11	34"(863.6mm)	D	CF	-
368342-12	36"(914.4mm)	D	CF	-
368342-13	38"(965.2mm)	D	CF	-
368342-14	40"(1016.0mm)	D	CF	-
368342-15	42"(1066.8mm)	D	CF	-
368342-16	44"(1117.6mm)	D	CF	-
368342-17	46"(1168.4mm)	D	CF	-
368342-18	48"(1219.2mm)	D	CF	-
368342-19	50"(1270mm)	D	CF	-
368342-20	52"(1320.8mm)	D	CF	-
368342-21	54"(1371.6mm)	D	CF	-
368342-22	56"(1422.4mm)	D	CF	-
368342-23	58"(1473.2mm)	D	CF	-
368342-24	60"(1524mm)	D	CF	-
368342-25	62"(1574.8mm)	D	CF	-
368342-26	64"(1625.6mm)	D	CF	-
368342-27	66"(1676.4mm)	D	CF	-
368342-28	68"(1727.2mm)	D	CF	-
368342-29	70"(1778mm)	D	CF	-
368342-30	72"(1828.8mm)	D	CF	-
368342-31	74"(1879.6mm)	D	CF	-
368342-32	76"(1930.4mm)	D	CF	-
368342-33	78"(1981.2mm)	D	CF	-
368342-34	80"(2032.0mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
CE Compliant MAXFire 140, (5 MMBtu/hr)(1.5Mw)(Wide Flame Pattern)				
368342-35	82"(2082.8mm)	D	CF	-
368342-36	84"(2133.6mm)	D	CF	-
368342-37	86"(2184.4mm)	D	CF	-
368342-38	88"(2235.2mm)	D	CF	-
368342-39	90"(2286.0mm)	D	CF	-
368342-40	92"(2336.8mm)	D	CF	-
368342-41	94"(2387.6mm)	D	CF	-
368342-42	96"(2438.4mm)	D	CF	-
368342-43	98"(2489.2mm)	D	CF	-
368342-44	100"(2540.0mm)	D	CF	-
368342-45	102"(2590.8mm)	D	CF	-
368342-46	104"(2641.6mm)	D	CF	-
368342-47	106"(2692.4mm)	D	CF	-
368342-48	108"(2743.2mm)	D	CF	-
368342-49	110"(2794.0mm)	D	CF	-
368342-50	112"(2844.8mm)	D	CF	-
368342-51	114"(2895.6mm)	D	CF	-
368342-52	116"(2946.4mm)	D	CF	-
368342-53	118"(2997.2mm)	D	CF	-
368342-54	120"(3048.0mm)	D	CF	-
368342-55	122"(3098.8mm)	D	CF	-
368342-56	124"(3149.6mm)	D	CF	-
368342-57	126"(3200.4mm)	D	CF	-
368342-58	128"(3251.2mm)	D	CF	-
368342-59	130"(3302.0mm)	D	CF	-
368342-60	132"(3352.8mm)	D	CF	-
368342-61	134"(3403.6mm)	D	CF	-
368342-62	136"(3454.4mm)	D	CF	-
368342-63	138"(3505.2mm)	D	CF	-
368342-64	140"(3556.0mm)	D	CF	-
368342-65	142"(3606.8mm)	D	CF	-
368342-66	144"(3657.6mm)	D	CF	-
368342-67	146"(3708.4mm)	D	CF	-
368342-68	148"(3759.2mm)	D	CF	-
368342-69	150"(3810.0mm)	D	CF	-
368342-70	152"(3860.8mm)	D	CF	-
368342-71	154"(3911.6mm)	D	CF	-
368342-72	156"(3962.4mm)	D	CF	-
368342-73	158"(4013.2mm)	D	CF	-
368342-74	160"(4064.0mm)	D	CF	-
368342-75	162"(4114.8mm)	D	CF	-
368342-76	164"(4165.6mm)	D	CF	-
368342-77	166"(4216.4mm)	D	CF	-
368342-78	168"(4267.2mm)	D	CF	-
368342-79	170"(4318.0mm)	D	CF	-
368342-80	172"(4368.8mm)	D	CF	-
368342-81	174"(4419.6mm)	D	CF	-
368342-82	176"(4470.4mm)	D	CF	-
368342-83	178"(4521.2mm)	D	CF	-
368342-84	180"(4572.0mm)	D	CF	-

MAXFire® 140 Gas Igniter

Accessory

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
369389-01	MAXFire 40 Gas/Durafire Igniter Mounting Tube Assembly, Length 12"(101.6mm) <i>Price and part number shown are for 12" assembly. Available in 10" increments. Add \$10 per inch over 12". Modify part number suffix for required length</i>	D	CF	-
368667-03	Igniter Mount Plate 12"x12" w ith 4.62OD hole	D	CF	-
368668-03	Igniter Mount Plate 6"x6" w ith 4.62OD hole	D	CF	-
373279-04	Gas Hose 2"X 48" long (1 1/2" NPT nipple igniter end & 2" NPT nipple supply end)	D	CF	-
373279-09	Gas Hose 2"X 72" long (1 1/2" NPT nipple igniter end & 2" NPT nipple supply end)	D	CF	-
373279-08	Gas Hose 2"X 96" long (1 1/2" NPT nipple igniter end & 2" NPT nipple supply end)	D	CF	-
370307-04	Air Hose Assembly 1 1/2" X10 FT. 1 1/2" NPT nipple each end	D	CF	-
369110-01	4" Head Gasket	D	20	-
383726-02	Spark Tip, Short (~8")	D	3	0.3
383726-03	Spark Tip, Long (~27")	D	3	2
86255-16	2" Quick connect SOCKET (FEMALE) requires 2" to 1 1/2" reducer (71270-06) to use w ith MAXFIRE 140	D	CF	-
86256-14	2" Quick connect PLUG (MALE) requires 2" to 1 1/2" reducer (71270-06) to use w ith MAXFIRE 139	D	CF	-
71270-06	2" to 1 1/2" Reducer	D	CF	-
75450-08	1 1/2" NPT Close Nipple	D	10	0.3
HESI REFERENCE				
358447-05	HESI Pow erpack, 120VAC, series 90E, 60Hz, Carbon Steel enclosure, 2 pin	D	3	16
397860-01	HESI Pow erpack, 230VAC, series 90F, 50Hz, Carbon Steel enclosure, 2 pin	D	3	17
358447-06	HESI Pow erpack, 230VAC, series 90F, 60Hz, Carbon Steel enclosure, 2 pin	D	15	16
358447-07	HESI Pow erpack, 120VAC, series 90G,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
358447-08	HESI Pow erpack, 230VAC, series 90H,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
397860-02	HESI Pow erpack, 230VAC, series 90H,4X, 50Hz Stainless Steel enclosure,2 pin	D	15	17
388816-02	HESI Pow erpack, 230VAC, CE compliant, Carbon steel enclosure	D	CF	18
388816-04	HESI Pow erpack, 230VAC, CE compliant, 4X, Stainless steel enclosure	D	CF	20
388813-02	HESI Pow erpack board subassembly, 230VAC, CE compliant	D	3	-
361864-01	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 15' (4.5m)	D	3	6
361864-02	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 12' (3.7m)	D	5	5.6
361864-03	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 9' (2.7m)	D	5	5.2
361864-04	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 6' (1.8m)	D	5	4.8

MAXFIRE® 130 & 140 GAS IGNITER CATALOG STRUCTURE

To obtain the complete Forney part number, use Chart 1A or Chart 1B to get the first six numbers of the part number. Then, use Chart 2 to obtain the last two dash numbers to complete the Forney number.

For example, a MAXFire® 130, capacity 6 MMBtu/hr with HESI (368347) and 28" length (-08) yields part number 368347-08.

Likewise, a MAXFire® 140, capacity 25 MMBtu/hr, narrow flame with HESI (368356) and 28" length (-08) yields part number 368356-08.

CHART 1A

MAXFire® 130		
Capacity	P/N with HESI	CE COMPLIANT
1.0 MMBtu/hr @ 15 PSI	368337-XX	368338-XX
2 MMBtu/hr @ 15 PSI	368343-XX	368348-XX
3 MMBtu/hr @ 15 PSI	368344-XX	368349-XX
4 MMBtu/hr @ 15 PSI	368345-XX	368350-XX
5 MMBtu/hr @ 15 PSI	368346-XX	368351-XX
6 MMBtu/hr @ 15 PSI	368347-XX	368352-XX

CHART 1B

MAXFire® 140				
Capacity	P/N with HESI		CE COMPLIANT	
	Narrow	Wide	Narrow	Wide
5 MMBtu/hr @ 15 PSI	368339-XX	368340-XX	368341-XX	368342-XX
10 MMBtu/hr @ 15 PSI	368353-XX	368357-XX	368361-XX	368365-XX
15 MMBtu/hr @ 15 PSI	368354-XX	368358-XX	368362-XX	368366-XX
20 MMBtu/hr @ 25 PSI	368355-XX	368359-XX	368363-XX	368367-XX
25 MMBtu/hr @ 25 PSI	368356-XX	368360-XX	368364-XX	368368-XX

MAXFIRE® 130 & 140 GAS IGNITER CATALOG STRUCTURE

CHART 2

Note: Mount tube selections are for reference only

For fixed application mount tube should be at least 10” shorter than the MAXFire® igniter.

Length “L Dimension		MAXFire® 130 and 140 Dash Number	Mount Tube			
			Part Number		Length	
inches	mm		MAXFire® 130	MAXFire® 140	MAXFire® 130	MAXFire® 140
28	711	-08	369189-01	369389-01	10” (254mm)	12” (305mm)
30	762	-09				
32	813	-10				
34	863	-11				
36	914	-12				
38	965	-13	369189-02	369389-02	20” (508 mm)	22” (559 mm)
40	1016	-14				
42	1067	-15				
44	1117	-16				
46	1168	-17				
48	1219	-18	369189-03	369389-03	30” (762 mm)	32” (813 mm)
50	1270	-19				
52	1321	-20				
54	1371	-21				
56	1422	-22				
58	1473	-23	369189-04	369389-04	40” (1016 mm)	42” (1067 mm)
60	1524	-24				
62	1575	-25				
64	1625	-26				
66	1676	-27				
68	1727	-28	369189-05	369389-05	50” (1270 mm)	52” (1321 mm)
70	1778	-29				
72	1829	-30				
74	1879	-31				
76	1930	-32				
78	1981	-33	369189-06	369389-06	60” (1524 mm)	62” (1575 mm)
80	2032	-34				
82	2083	-35				
84	2133	-36				
86	2184	-37				
88	2235	-38	369189-07	369389-07	70” (1778 mm)	72” (1829 mm)
90	2286	-39				
92	2337	-40				
94	2387	-41				
96	2438	-42				
98	2489	-43	369189-08	369389-08	80” (2032 mm)	82” (2083 mm)
100	2540	-44				
102	2591	-45				
104	2641	-46				
106	2692	-47				
108	2743	-48	369189-09	369389-09	90” (2286 mm)	92” (2337 mm)
110	2794	-49				

Continued to next page.

MAXFIRE® 130 & 140 GAS IGNITER CATALOG STRUCTURE

CHART 2 Continued

Note: Mount tube selections are for reference only

For fixed application mount tube should be at least 10 inches shorter than the MAXFire igniter.

Length "L Dimension		MAXFire® 130 and 140 Dash Number	Mount Tube			
inches	mm		Part Number		Length	
			MAXFire® 130	MAXFire® 140	MAXFire® 130	MAXFire® 140
112	2845	-50	369189-10	369389-10	100" (2540 mm)	102" (2591 mm)
114	2895	-51				
116	2946	-52				
118	2997	-53				
120	3048	-54				
122	3099	-55	369189-11	369389-11	110" (2794 mm)	112" (2845 mm)
124	3149	-56				
126	3200	-57				
128	3251	-58				
130	3302	-59				
132	3353	-60	369189-12	369389-12	120" (3048 mm)	122" (3099 mm)
134	3403	-61				
136	3454	-62				
138	3505	-63				
140	3556	-64				
142	3607	-65	369189-13	369389-13	130" (3302 mm)	132" (3353 mm)
144	3657	-66				
146	3708	-67				
148	3759	-68				
150	3810	-69				
152	3861	-70	369189-14	369389-14	140" (3556 mm)	142" (3607 mm)
154	3911	-71				
156	3962	-72				
158	4013	-73				
160	4064	-74				
162	4115	-75	369189-15	369389-15	150" (3810 mm)	152" (3861 mm)
164	4165	-76				
166	4216	-77				
168	4267	-78				
170	4318	-79				
172	4369	-80	369189-16	369389-16	160" (4064mm)	162" (4115 mm)
174	4419	-81				
176	4470	82				
178	4521	-83				
180	4572	-84				

DURAFIRE® OIL IGNITER

Spec Sheet #404006-04

Technical Manual #372000-47

Description

The DURAFire® Oil Igniter is sized to fire No.2 oil with a capacity range from 6-30 MMBTU/HR at a fuel pressure of 60-psig and atomizing air pressure of 80 psig (supplied by plant compressor) and cooling combustion air of 60 scfm at the igniter at all times. The Standard DURAFire® Oil Igniter has a 4" outside diameter (OD) guide tube; however, where space is a limiting factor the DURAFire® is available with a 3 3/4" OD guide tube. The 3 3/4" DURAFire® heat input is limited to 6-20 MMBtu/hr.

The DURAFire® consists of five major components: a guide tube, an atomizer/head assembly, an oil/air mixture transport tube, a spark rod, and a stainless-steel diffuser for pilot stabilization. The guide tube houses the internals, which are attached to the head and easily removed from the guide tube for maintenance purposes by releasing a "V" band retainer. No tools are required. Cooling/combustion airflow is directed down the guide tube to support and maintain the primary combustion zone during operation. This controlled mixture of fuel and air in the primary combustion zone results in a highly reliable, stable igniter flame. While out of service, airflow cools the igniter and prevents debris from entering the end of the guide tube.

The DURAFire® is provided with Forney's HESI spark source. The HESI produces a powerful 12-joule spark approximately three times per second at the primary combustion zone. The HESI spark tip is a non-fouling, surface-gap tip, which is replaceable by a threaded connection. The remaining HESI components consist of a positioning rod, cable and power unit. Optional equipment for the DURAFire® Oil Igniter includes mounting hardware and hoses.

Mount Tube (Optional)

Mount Tube, 4.5" OD with a split clamping ring which is welded to the mount tube. The split clamping ring also acts as a packing gland. Select the mount tube part number from the column adjacent to the DURAFire® Oil Igniter part number in the catalog structure.

Oil Hose

An oil hose is required. Owner can provide his own or Forney can provide a flexible stainless-steel hose, 3/4", with single braid stainless-steel jacket, a 1/2" NPT nipple connection to igniter and a 3/4" nipple connection to the oil supply.

Cooling/Combustion Air Hose

A cooling/combustion air hose is required. Owner can provide his own or Forney can provide a reinforced rubber hose, 1 1/2" NPT x 1 1/2" ID nipple on one end and clamps at both ends.

Atomizing Air Hose

An atomizing air hose is required. Owner can provide his own or Forney can provide a flexible stainless-steel hose, 3/4" NPT, with single braid stainless-steel jacket, a 3/4" NPT nipple connection to the igniter and a 1.00" nipple connection to the air supply.

Mount Plates, Mount Tubes & Other Assemblies (Optional)

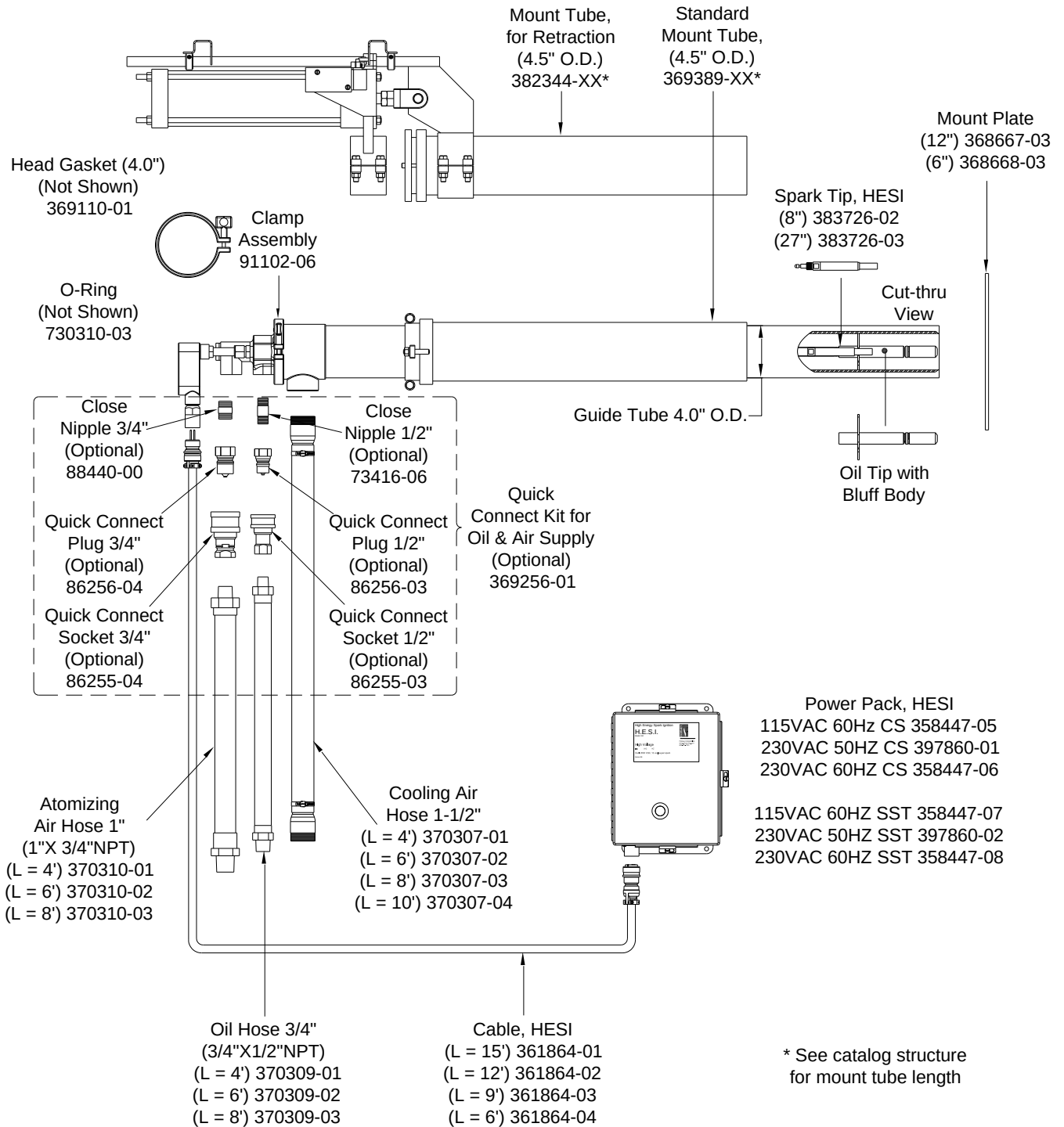
Forney offers several mounting options including: various sizes of mount plates, mount tubes of various lengths, combo mounting flanges & packing glands, raised face flanges with mount tubes & packing glands, and special flanges allowing our products to easily retrofit onto the burner front easily replacing competitor's products.

Retraction (Optional)

Forney recommends retraction on oil igniters. Forney or the customer can supply. Retraction assemblies come standard with 3 1/4" diameter cylinder, solenoid and DPDT limit switch and mounting brackets. Contact factory for application specifications.

DURAFIRE® OIL IGNITER

Standard Application Drawing



DURAFIRE® OIL IGNITER

Standard

Part Number	Description	Schedule	Est. Lead Time	Wt
369261-XX	DURAFire Light Oil Igniter with 4" OD Guide Tube, 10 MMBtu/hr (2.9Mw)			
369261-08	28"(711.2mm)	D	CF	-
369261-09	30"(762.0mm)	D	CF	-
369261-10	32"(812.8mm)	D	CF	-
369261-11	34"(863.6mm)	D	CF	-
369261-12	36"(914.4mm)	D	CF	-
369261-13	38"(965.2mm)	D	CF	-
369261-14	40"(1016.0mm)	D	CF	-
369261-15	42"(1066.8mm)	D	CF	-
369261-16	44"(1117.6mm)	D	CF	-
369261-17	46"(1168.4mm)	D	CF	-
369261-18	48"(1219.2mm)	D	CF	-
369261-19	50"(1270mm)	D	CF	-
369261-20	52"(1320.8mm)	D	CF	-
369261-21	54"(1371.6mm)	D	CF	-
369261-22	56"(1422.4mm)	D	CF	-
369261-23	58"(1473.2mm)	D	CF	-
369261-24	60"(1524mm)	D	CF	-
369261-25	62"(1574.8mm)	D	CF	-
369261-26	64"(1625.6mm)	D	CF	-
369261-27	66"(1676.4mm)	D	CF	-
369261-28	68"(1727.2mm)	D	CF	-
369261-29	70"(1778mm)	D	CF	-
369261-30	72"(1828.8mm)	D	CF	-
369261-31	74"(1879.6mm)	D	CF	-
369261-32	76"(1930.4mm)	D	CF	-
369261-33	78"(1981.2mm)	D	CF	-
369261-34	80"(2032.0mm)	D	CF	-
369261-35	82"(2082.8mm)	D	CF	-
369261-36	84"(2133.6mm)	D	CF	-
369261-37	86"(2184.4mm)	D	CF	-
369261-38	88"(2235.2mm)	D	CF	-
369261-39	90"(2286.0mm)	D	CF	-
369261-40	92"(2336.8mm)	D	CF	-
369261-41	94"(2387.6mm)	D	CF	-
369261-42	96"(2438.4mm)	D	CF	-
369261-43	98"(2489.2mm)	D	CF	-
369261-44	100"(2540.0mm)	D	CF	-
369261-45	102"(2590.8mm)	D	CF	-
369261-46	104"(2641.6mm)	D	CF	-
369261-47	106"(2692.4mm)	D	CF	-
369261-48	108"(2743.2mm)	D	CF	-
369261-49	110"(2794.0mm)	D	CF	-
369261-50	112"(2844.8mm)	D	CF	-
369261-51	114"(2895.6mm)	D	CF	-
369261-52	116"(2946.4mm)	D	CF	-
369261-53	118"(2997.2mm)	D	CF	-
369261-54	120"(3048.0mm)	D	CF	-
369261-55	122"(3098.8mm)	D	CF	-
369261-56	124"(3149.6mm)	D	CF	-
369261-57	126"(3200.4mm)	D	CF	-
369261-58	128"(3251.2mm)	D	CF	-
369261-59	130"(3302.0mm)	D	CF	-
369261-60	132"(3352.8mm)	D	CF	-

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
369261-XX	DURAFire Light Oil Igniter with 4" OD Guide Tube, 10 MMBtu/hr (2.9Mw)			
369261-61	134"(3403.6mm)	D	CF	-
369261-62	136"(3454.4mm)	D	CF	-
369261-63	138"(3505.2mm)	D	CF	-
369261-64	140"(3556.0mm)	D	CF	-
369261-65	142"(3606.8mm)	D	CF	-
369261-66	144"(3657.6mm)	D	CF	-
369261-67	146"(3708.4mm)	D	CF	-
369261-68	148"(3759.2mm)	D	CF	-
369261-69	150"(3810.0mm)	D	CF	-
369261-70	152"(3860.8mm)	D	CF	-
369261-71	154"(3911.6mm)	D	CF	-
369261-72	156"(3962.4mm)	D	CF	-
369261-73	158"(4013.2mm)	D	CF	-
369261-74	160"(4064.0mm)	D	CF	-
369261-75	162"(4114.8mm)	D	CF	-
369261-76	164"(4165.6mm)	D	CF	-
369261-77	166"(4216.4mm)	D	CF	-
369261-78	168"(4267.2mm)	D	CF	-
369261-79	170"(4318.0mm)	D	CF	-
369261-80	172"(4368.8mm)	D	CF	-
369261-81	174"(4419.6mm)	D	CF	-
369261-82	176"(4470.4mm)	D	CF	-
369261-83	178"(4521.2mm)	D	CF	-
369261-84	180"(4572.0mm)	D	CF	-
367438-XX	DuraFire Light Oil Igniter with 3 3/4" OD Guide Tube, 15MBtu/hr(4.4Mw)			
367438-08	28"(711.2mm)	D	22	-
367438-09	30"(762.0mm)	D	CF	-
367438-10	32"(812.8mm)	D	CF	-
367438-11	34"(863.6mm)	D	CF	-
367438-12	36"(914.4mm)	D	CF	-
367438-13	38"(965.2mm)	D	CF	-
367438-14	40"(1016.0mm)	D	CF	-
367438-15	42"(1066.8mm)	D	CF	-
367438-16	44"(1117.6mm)	D	CF	-
367438-17	46"(1168.4mm)	D	CF	-
367438-18	48"(1219.2mm)	D	CF	-
367438-19	50"(1270mm)	D	CF	-
367438-20	52"(1320.8mm)	D	CF	-
367438-21	54"(1371.6mm)	D	CF	-
367438-22	56"(1422.4mm)	D	CF	-
367438-23	58"(1473.2mm)	D	CF	-
367438-24	60"(1524mm)	D	CF	-
367438-25	62"(1574.8mm)	D	CF	-
367438-26	64"(1625.6mm)	D	CF	-
367438-27	66"(1676.4mm)	D	CF	-
367438-28	68"(1727.2mm)	D	CF	-
367438-29	70"(1778mm)	D	CF	-
367438-30	72"(1828.8mm)	D	CF	-
367438-31	74"(1879.6mm)	D	CF	-
367438-32	76"(1930.4mm)	D	CF	-
367438-33	78"(1981.2mm)	D	CF	-
367438-34	80"(2032.0mm)	D	CF	-

DURAFIRE® OIL IGNITER
Standard (Cont.)

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
367438-XX	DuraFire Light Oil Igniter with 3 3/4" OD Guide Tube, 15MBtur/hr(4.4Mw)			
367438-35	82"(2082.8mm)	D	CF	-
367438-36	84"(2133.6mm)	D	CF	-
367438-37	86"(2184.4mm)	D	CF	-
367438-38	88"(2235.2mm)	D	CF	-
367438-39	90"(2286.0mm)	D	CF	-
367438-40	92"(2336.8mm)	D	CF	-
367438-41	94"(2387.6mm)	D	CF	-
367438-42	96"(2438.4mm)	D	CF	-
367438-43	98"(2489.2mm)	D	CF	-
367438-44	100"(2540.0mm)	D	CF	-
367438-45	102"(2590.8mm)	D	CF	-
367438-46	104"(2641.6mm)	D	CF	-
367438-47	106"(2692.4mm)	D	CF	-
367438-48	108"(2743.2mm)	D	CF	-
367438-49	110"(2794.0mm)	D	CF	-
367438-50	112"(2844.8mm)	D	CF	-
367438-51	114"(2895.6mm)	D	CF	-
367438-52	116"(2946.4mm)	D	CF	-
367438-53	118"(2997.2mm)	D	CF	-
367438-54	120"(3048.0mm)	D	CF	-
367438-55	122"(3098.8mm)	D	CF	-
367438-56	124"(3149.6mm)	D	CF	-
367438-57	126"(3200.4mm)	D	CF	-
367438-58	128"(3251.2mm)	D	CF	-
367438-59	130"(3302.0mm)	D	CF	-
367438-60	132"(3352.8mm)	D	CF	-
367438-61	134"(3403.6mm)	D	CF	-
367438-62	136"(3454.4mm)	D	CF	-
367438-63	138"(3505.2mm)	D	CF	-
367438-64	140"(3556.0mm)	D	CF	-
367438-65	142"(3606.8mm)	D	CF	-
367438-66	144"(3657.6mm)	D	CF	-
367438-67	146"(3708.4mm)	D	CF	-
367438-68	148"(3759.2mm)	D	CF	-
367438-69	150"(3810.0mm)	D	CF	-
367438-70	152"(3860.8mm)	D	CF	-
367438-71	154"(3911.6mm)	D	CF	-
367438-72	156"(3962.4mm)	D	CF	-
367438-73	158"(4013.2mm)	D	CF	-
367438-74	160"(4064.0mm)	D	CF	-
367438-75	162"(4114.8mm)	D	CF	-
367438-76	164"(4165.6mm)	D	CF	-
367438-77	166"(4216.4mm)	D	CF	-
367438-78	168"(4267.2mm)	D	CF	-
367438-79	170"(4318.0mm)	D	CF	-
367438-80	172"(4368.8mm)	D	CF	-
367438-81	174"(4419.6mm)	D	CF	-
367438-82	176"(4470.4mm)	D	CF	-
367438-83	178"(4521.2mm)	D	CF	-
367438-84	180"(4572.0mm)	D	CF	-

DURAFIRE® OIL IGNITER

Standard Accessory

Estimated Lead Time is in Business Days

Replace Part Number with the appropriate suffix from DURAFire® Igniter Catalog Structure

Part Number	Description	Schedule	Lead Time	Wt
382344-20	4 1/2" Mount Tube Assembly for MAXFire 40/140 or Standard DuraFire Igniters with RETRACTION, Length 18"(459mm)	D	CF	-
369389-01	MAXFire 40 Gas/Durafire Igniter Mounting Tube Assembly, Length 12"(101.6mm)	D	CF	-
368378-03	4 1/4" Mount Tube Assembly for 3 3/4" DuraFire Igniters, Length 18"(459mm)	D	CF	-
368379-03	4 1/4" Mount Tube Assembly for 3 3/4" DuraFire Igniters WITH Retraction, Length 18"(459mm)	D	CF	-
358447-05	HESI Pow erpack, 120VAC, series 90E, 60Hz, Carbon Steel enclosure, 2 pin	D	3	16
397860-01	HESI Pow erpack, 230VAC, series 90F, 50Hz, Carbon Steel enclosure, 2 pin	D	3	17
358447-06	HESI Pow erpack, 230VAC, series 90F, 60Hz, Carbon Steel enclosure, 2 pin	D	15	16
358447-07	HESI Pow erpack, 120VAC, series 90G,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
397860-02	HESI Pow erpack, 230VAC, series 90H,4X, 50Hz Stainless Steel enclosure,2 pin	D	15	17
358447-08	HESI Pow erpack, 230VAC, series 90H,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
361864-01	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 15' (4.5m)	D	3	6
361864-02	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 12' (3.7m)	D	5	5.6
361864-03	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 9' (2.7m)	D	5	5.2
361864-04	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 6' (1.8m)	D	5	4.8
370305-01	Mount Plate,12"X12"X.250" with 2.00" centered hole	D	CF	-
370309-01	Gas/Oil Hose 3/4"X 48" (3/4" NPT and 1/2" NPT ends)	D	CF	3
370309-02	Gas/Oil Hose 3/4"X 72" (3/4" NPT and 1/2" NPT ends)	D	CF	4.5
370309-03	Gas/Oil Hose 3/4"X 96" (3/4" NPT and 1/2" NPT ends)	D	CF	6
370307-01	Air Hose Assembly 1 1/2" X4 FT.	D	CF	-
370307-02	Air Hose Assembly 1 1/2" X6 FT.	D	CF	-
370307-03	Air Hose Assembly 1 1/2" X8 FT.	D	CF	-
370307-04	Air Hose Assembly 1 1/2" X10 FT. 1 1/2" NPT nipple each end	D	CF	-
370310-01	Gas/Air Hose 1"X 48" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	4
370310-02	Gas/Air Hose 1"X 72" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	6
370310-03	Gas/Air Hose 1"X 96" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	8
73031-01	DuraFire O ring	D	CF	-
369110-01	4" Head Gasket	D	20	-
91102-06	DuraFire Clamp Assy	D	CF	-
383726-02	Spark Tip, Short (~8")	D	3	0.3
383726-03	Spark Tip, Long (~27")	D	3	2
369256-01	Quick Connect kit for oil and atomizing air supply	D	CF	-
86255-03	1/2" FPT Quick Connect SOCKET (FEMALE)	D	20	0.5
86256-03	1/2" FPT Quick Connect PLUG (MALE)	D	20	0.2
86255-04	3/4" FPT Quick Connect SOCKET (FEMALE)	D	20	0.7
86256-04	3/4" FPT Quick Connect PLUG (MALE)	D	20	0.3
88440-00	3/4" Nipple	D	CF	-
73416-06	1/2" Close Nipple	D	3	0.1

DURAFIRE® OIL IGNITER

CE

Estimated Lead Time is in Business Days

Part Number	Description	Sched-ule	Est. Lead Time	Wt
369281-XX	CE Compliant DURAFire Light Oil 10 MMBtu/hr (2.9Mw),			
369281-08	28"(711.2mm)	D	CF	-
369281-09	30"(762.0mm)	D	CF	-
369281-10	32"(812.8mm)	D	CF	-
369281-11	34"(863.6mm)	D	CF	-
369281-12	36"(914.4mm)	D	CF	-
369281-13	38"(965.2mm)	D	CF	-
369281-14	40"(1016.0mm)	D	CF	-
369281-15	42"(1066.8mm)	D	CF	-
369281-16	44"(1117.6mm)	D	CF	-
369281-17	46"(1168.4mm)	D	CF	-
369281-18	48"(1219.2mm)	D	CF	-
369281-19	50"(1270mm)	D	CF	-
369281-20	52"(1320.8mm)	D	CF	-
369281-21	54"(1371.6mm)	D	CF	-
369281-22	56"(1422.4mm)	D	CF	-
369281-23	58"(1473.2mm)	D	CF	-
369281-24	60"(1524mm)	D	CF	-
369281-25	62"(1574.8mm)	D	CF	-
369281-26	64"(1625.6mm)	D	CF	-
369281-27	66"(1676.4mm)	D	CF	-
369281-28	68"(1727.2mm)	D	CF	-
369281-29	70"(1778mm)	D	CF	-
369281-30	72"(1828.8mm)	D	CF	-
369281-31	74"(1879.6mm)	D	CF	-
369281-32	76"(1930.4mm)	D	CF	-
369281-33	78"(1981.2mm)	D	CF	-
369281-34	80"(2032.0mm)	D	CF	-
369281-35	82"(2082.8mm)	D	CF	-
369281-36	84"(2133.6mm)	D	CF	-
369281-37	86"(2184.4mm)	D	CF	-
369281-38	88"(2235.2mm)	D	CF	-
369281-39	90"(2286.0mm)	D	CF	-
369281-40	92"(2336.8mm)	D	CF	-
369281-41	94"(2387.6mm)	D	CF	-
369281-42	96"(2438.4mm)	D	CF	-
369281-43	98"(2489.2mm)	D	CF	-
369281-44	100"(2540.0mm)	D	CF	-
369281-45	102"(2590.8mm)	D	CF	-
369281-46	104"(2641.6mm)	D	CF	-

Part Number	Description	Sched-ule	Est. Lead Time	Wt
369261-XX	CE Compliant DURAFire Light Oil 10 MMBtu/hr (2.9Mw), (Cont.)			
369281-47	106"(2692.4mm)	D	CF	-
369281-48	108"(2743.2mm)	D	CF	-
369281-49	110"(2794.0mm)	D	CF	-
369281-50	112"(2844.8mm)	D	CF	-
369281-51	114"(2895.6mm)	D	CF	-
369281-52	116"(2946.4mm)	D	CF	-
369281-53	118"(2997.2mm)	D	CF	-
369281-54	120"(3048.0mm)	D	CF	-
369281-55	122"(3098.8mm)	D	CF	-
369281-56	124"(3149.6mm)	D	CF	-
369281-57	126"(3200.4mm)	D	CF	-
369281-58	128"(3251.2mm)	D	CF	-
369281-59	130"(3302.0mm)	D	CF	-
369281-60	132"(3352.8mm)	D	CF	-
369281-61	134"(3403.6mm)	D	CF	-
369281-62	136"(3454.4mm)	D	CF	-
369281-63	138"(3505.2mm)	D	CF	-
369281-64	140"(3556.0mm)	D	CF	-
369281-65	142"(3606.8mm)	D	CF	-
369281-66	144"(3657.6mm)	D	CF	-
369281-67	146"(3708.4mm)	D	CF	-
369281-68	148"(3759.2mm)	D	CF	-
369281-69	150"(3810.0mm)	D	CF	-
369281-70	152"(3860.8mm)	D	CF	-
369281-71	154"(3911.6mm)	D	CF	-
369281-72	156"(3962.4mm)	D	CF	-
369281-73	158"(4013.2mm)	D	CF	-
369281-74	160"(4064.0mm)	D	CF	-
369281-75	162"(4114.8mm)	D	CF	-
369281-76	164"(4165.6mm)	D	CF	-
369281-77	166"(4216.4mm)	D	CF	-
369281-78	168"(4267.2mm)	D	CF	-
369281-79	170"(4318.0mm)	D	CF	-
369281-80	172"(4368.8mm)	D	CF	-
369281-81	174"(4419.6mm)	D	CF	-
369281-82	176"(4470.4mm)	D	CF	-
369281-83	178"(4521.2mm)	D	CF	-
369281-84	180"(4572.0mm)	D	CF	-

DURAFIRE® OIL IGNITER

CE Accessory

Estimated Lead Time is in Business Days

Replace suffix in Part Number with the appropriate suffix from DURAFire® Igniter Catalog Structure

Part Number	Description	Sched-ule	Est. Lead Time	Wt
382344-20	4 1/2" Mount Tube Assembly for MAXFire 40/140 or Standard DuraFire Igniters with RETRACTION, Length 18"(459mm)	D	CF	-
369389-01	MAXFire 40 Gas/DuraFire Igniter Mounting Tube Assembly, Length 12"(101.6mm)	D	CF	-
388816-02	HESI Pow erpack, 230VAC, CE compliant, Carbon steel enclosure	D	CF	18
388816-04	HESI Pow erpack, 230VAC, CE compliant, 4X, Stainless steel enclosure	D	CF	20
398492-01	HESI Pow erpack, 115VAC,50 HZ, EEXD Enclosure, CE Compliant	D	CF	-
398492-02	HESI Pow erpack, 230VAC, 50 HZ, EEXD Enclosure, CE Compliant	D	CF	-
361864-01	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 15' (4.5m)	D	3	6
361864-02	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 12' (3.7m)	D	5	5.6
361864-03	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 9' (2.7m)	D	5	5.2
361864-04	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 6' (1.8m)	D	5	4.8
370305-01	Mount Plate,12"X12"X.250" with 2.00" centered hole	D	CF	-
370309-01	Gas/Oil Hose 3/4"X 48" (3/4" NPT and 1/2" NPT ends)	D	CF	3
370309-02	Gas/Oil Hose 3/4"X 72" (3/4" NPT and 1/2" NPT ends)	D	CF	4.5
370309-03	Gas/Oil Hose 3/4"X 96" (3/4" NPT and 1/2" NPT ends)	D	CF	6
370307-01	Air Hose Assembly 1 1/2" X4 FT.	D	CF	-
370307-02	Air Hose Assembly 1 1/2" X6 FT.	D	CF	-
370307-03	Air Hose Assembly 1 1/2" X8 FT.	D	CF	-
370307-04	Air Hose Assembly 1 1/2" X10 FT. 1 1/2" NPT nipple each end	D	CF	-
370310-01	Gas/Air Hose 1"X 48" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	4
370310-02	Gas/Air Hose 1"X 72" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	6
370310-03	Gas/Air Hose 1"X 96" long (3/4" NPT igniter end & 1" NPT supply end)	D	CF	8
73031-01	DuraFire O ring	D	CF	-
369110-01	4" Head Gasket	D	20	-
91102-06	DuraFire Clamp Assy	D	CF	-
383726-02	Spark Tip, Short (~8")	D	3	0.3
383726-03	Spark Tip, Long (~27")	D	3	2
369256-01	Quick Connect kit for oil and atomizing air supply	D	CF	-
86255-03	1/2" FPT Quick Connect SOCKET (FEMALE)	D	20	0.5
86256-03	1/2" FPT Quick Connect PLUG (MALE)	D	20	0.2
86255-04	3/4" FPT Quick Connect SOCKET (FEMALE)	D	20	0.7
86256-04	3/4" FPT Quick Connect PLUG (MALE)	D	20	0.3
88440-00	3/4" Nipple	D	CF	-

DURAFire® Oil Igniter Catalog Structure

The Standard DURAFire® with 4" OD guide tube is available with a heat input from 6-30 MMBtu/hr and lengths from 28"-180". The 3 ¾" OD DURAFire® is available with a heat input from 6-20 MMBtu/hr and lengths from 28"-180".

Forney will assign the base part number based on your needed heat input. The dash numbers (last two digits) of the part number are based on the length as shown in the table below.

Mount tubes are for reference only. Mount tubes should be at least 10" shorter than the DURAFire® igniter

DURAFire® Length "L"	DURAFire® Number	Mount Tube Length	Mount Tube for			
			Standard DURAFire® without Retraction	Standard DURAFire® with Retraction	3 ¾ OD DURAFire® without Retraction	3 ¾ OD DURAFire® with Retraction
24" (609mm)	-06	12" (305mm)	369389-01	382344-20	368378-03	368379-03
26" (660 mm)	-07					
28" (711 mm)	-08					
30" (762 mm)	-09					
32" (813 mm)	-10	22" (559 mm)	369389-02	382344-21	368378-05	368379-05
34" (863 mm)	-11					
36" (914 mm)	-12					
38" (965 mm)	-13					
40" (1016 mm)	-14	32" (813 mm)	369389-03	382344-22	368378-10	368379-10
42" (1067 mm)	-15					
44" (1117 mm)	-16					
46" (1168 mm)	-17					
48" (1219 mm)	-18	42" (1067mm)	369389-04	382344-23	368378-15	368379-15
50" (1270 mm)	-19					
52" (1321 mm)	-20					
54" (1371 mm)	-21					
56" (1422 mm)	-22	52" (1321 mm)	369389-05	382344-24	368378-20	368379-20
58" (1473 mm)	-23					
60" (1524 mm)	-24					
62" (1575 mm)	-25					
64" (1625 mm)	-26	62" (1575 mm)	369389-06	382344-25	368378-25	368379-25
66" (1676 mm)	-27					
68" (1727 mm)	-28					
70" (1778 mm)	-29					
72" (1829 mm)	-30	72" (1829 mm)	369389-07	382344-26	368378-30	368379-30
74" (1879 mm)	-31					
76" (1930 mm)	-32					
78" (1981 mm)	-33					
80" (2032 mm)	-34	82" (2083 mm)	369389-08	382344-27	368378-35	368379-35
82" (2083 mm)	-35					
84" (2133 mm)	-36					
86" (2184 mm)	-37					
88" (2235 mm)	-38	92" (2337 mm)	369389-09	382344-28	368378-40	368379-40
90" (2286 mm)	-39					
92" (2337 mm)	-40					
94" (2387 mm)	-41					
96" (2438 mm)	-42	102" (2591 mm)	369389-10	382344-29	368378-45	368379-45
98" (2489 mm)	-43					
100" (2540 mm)	-44					
102" (2591 mm)	-45					
104" (2641 mm)	-46	112" (2845 mm)	369389-11	382344-30	368378-50	368379-50
106" (2692 mm)	-47					
108" (2743 mm)	-48					
110" (2794 mm)	-49					
112" (2845 mm)	-50	112" (2845 mm)	369389-11	382344-30	368378-50	368379-50
114" (2896 mm)	-51					
116" (2946 mm)	-52					
118" (2997 mm)	-53					
120" (3048 mm)	-54	112" (2845 mm)	369389-11	382344-30	368378-50	368379-50
122" (3099 mm)	-55					

SECTION 3 – GAS TURBINE ACCESSORIES

FLAMEHAWK® FLAME DETECTOR

Spec Sheet #404005-31

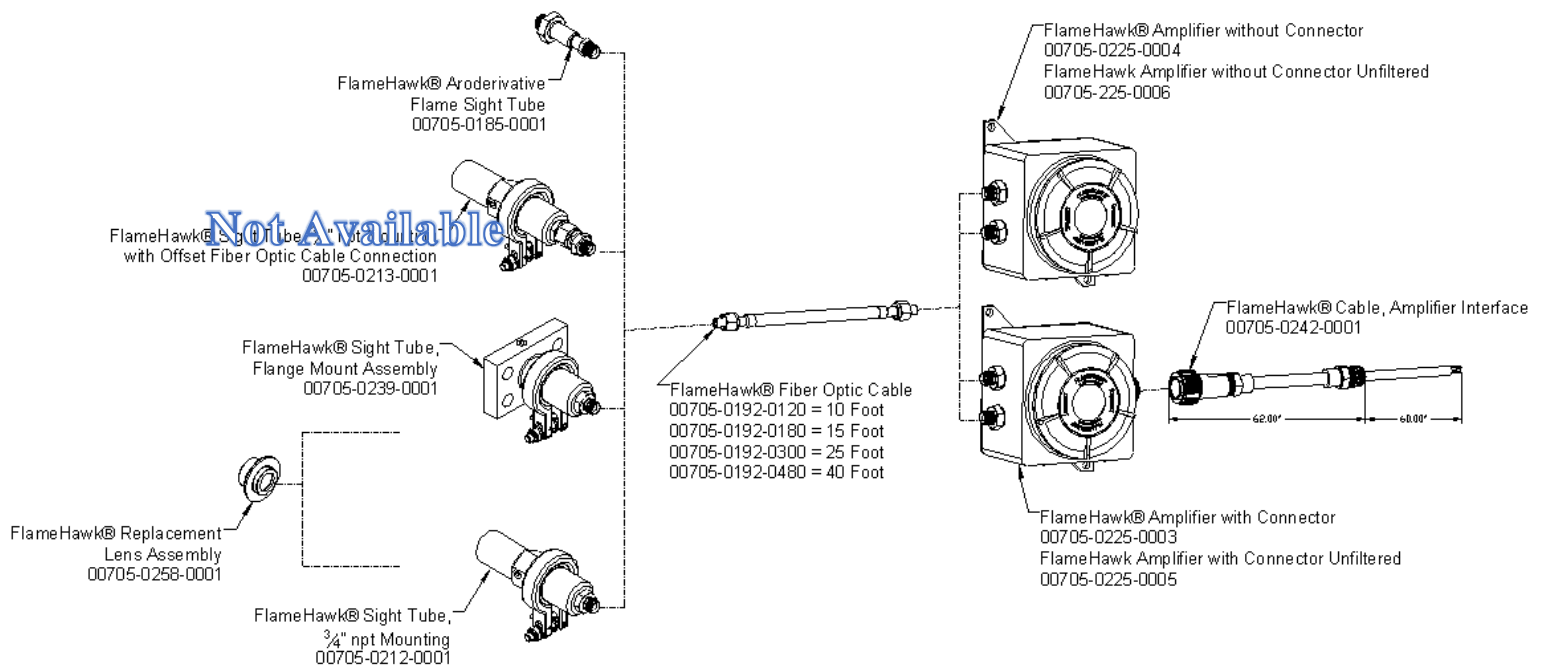
Technical Manual #372001-14

The Model 0705AD FlameHawk® fiber optic flame detector is a dual channel solid-state device designed for direct replacement of Geiger-Mueller (GM) tube flame sensors used on industrial and marine gas turbine engines.

The FlameHawk® flame detector improves performance and reduces maintenance costs. It has durable fiber optic cables that transmit the spectral energy from the combustion process to the electronics module. This allows for remote mounting of the electronics outside of the engine enclosure, which eliminates complicated and costly cooling systems common in other flame sensors. The FlameHawk® flame detector system works in low NOx combustors, multiple fuel applications and with systems incorporating steam injection.

The FlameHawk® flame detection system consists of the three major components: 1) an electronics module (amplifier) with a built-in signal strength meter that indicates flame intensity by the number of LEDs lit in an array of ten per channel, 2) two flexible fiber optic cables that transmit NUV/Vis radiation from the combustion zone to the photovoltaic sensor, and 3) two flame sight assemblies (FSA) for interfacing between the fiber optic cables and the combustion chamber.

FlameHawk® Application Drawing



Part Number	Description	Schedule	Est. Lead Time	Wt
00705-0225-0003	Obsolete - Do Not Sale (Replaced by 00705-0225-0007) FlameHawk® Amplifier w /conn. 0705AD-3	B	15	6.5
00705-0225-0004	Obsolete - Do Not Sale (Replaced by 00705-0225-0008) FlameHawk® Amplifier w /o conn. 0705AD-4	B	3	6.4
00705-0225-0007	FlameHawk® Amplifier w /conn 0705AD-7	B	15	6.2
00705-0225-0008	FlameHawk® Amplifier w /o conn 0705AD-8	B	3	6.1
00705-0225-0009	ATEX approved FlameHawk® Amplifier 0705AD-9	B	3	6.1
QCRPT-FH	Detailed Quality Test Report for FlameHawk® Amplifier	B	3	N/A
00705-0192-0120	FO Cable 10ft	B	15	1.5
00705-0192-0180	FO Cable 15ft	B	15	2.3
00705-0192-0300	FO Cable 25ft	B	15	3.8
00705-0192-0480	FO Cable 40ft	B	15	6.0
00705-0185-0001	FSA LM for LM Frame	B	15	0.3
00705-0212-0001	FSA MS Pri for Frame Primary	B	15	2.0
00705-0213-0001	Do Not Sell	B	15	2.0
00705-0239-0001	FSA MS Sec for Frame Secondary	B	15	3.4
00705-0242-0001	Interface cable to 00705-0225-0003 & 0007	B	15	1.5
00705-0258-0001	FSA Replacement Lens & Gasket for Frame Pri & Sec.	B	15	0.2

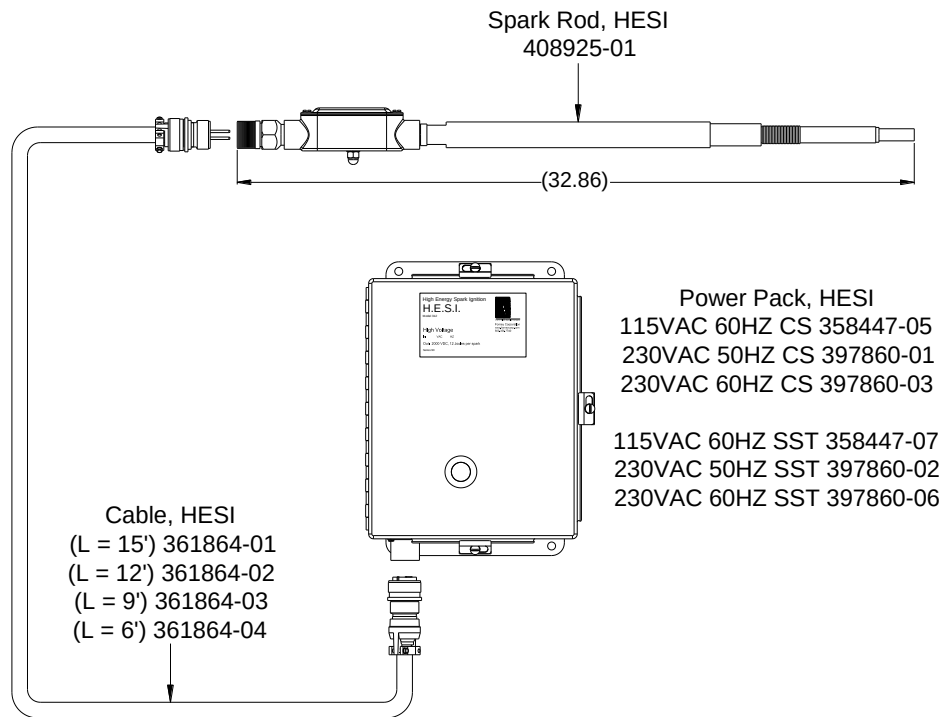
GAS TURBINE HIGH ENERGY SPARK IGNITER

The Gas Turbine High Energy Spark Igniter (GT HESI) is a special adaptation of the proven Forney High Energy Spark Igniter (HESI). It is a Class 3 Igniter used for direct spark ignition of gas turbines and is designed as a direct replacement of the turbine OEM ignition system. Forney's HESI provides a highly reliable source of ignition utilizing a 12-joule source of energy delivered to the spark tip (3 sparks per second) which easily ignites the fuel.

The GT HESI consists of three major components: a power unit, spark rod assembly and cable assembly. Power Packs available to power single rod and dual rods. Presently we offer the spark rod for the 301G, 501G, GE Frame 5, 7B, 7FA, & 7EA turbine as a standard product. If you have a need for other models, please contact the Forney Product Manager (972-458-6100).

HIGH ENERGY SPARK IGNITER FOR 501G WESTINGHOUSE TURBINE

501G Turbine Application Drawing



Turbine Igniter

Estimated Lead Time is in Business Days

Part Number	Description	Schedule	Est. Lead Time	Wt
370032-01	HESI Westinghouse 301G Turbine Igniter	D	30	3.5
365012-01	HESI Westinghouse 501A/D Turbine Igniter 12"	D	30	2.4
365012-02	HESI Westinghouse 501A/D Turbine Igniter 14"	D	30	2.8
365012-03	HESI Westinghouse 501A/D Turbine Igniter 16"	D	30	3.2
408925-01	HESI Westinghouse 501G Turbine Igniter	D	30	3.75
370209-01	HESI Assy with cylinder & Flange GE Frame 5 & 7B Turbine w / Straight J-box	D	30	10
370209-02	HESI Assy with cylinder & Flange GE Frame 5 & 7B Turbine w / 90° J-box	D	30	10
370216-01	HESI Rod Frame 5 & 7B Turbine w / Straight J-box	D	30	4
370441-01	HESI Rod 7FA Turbine	D	30	5
410202-01	7EA Turbine HESI Top Assy with straight conduit box with Flange & Cylinder	D	30	11
410202-02	7EA Turbine HESI Top Assy with 90 degree conduit box with Flange & Cylinder	D	30	11
358447-05	HESI Pow erpack, 120VAC, series 90E, 60Hz, Carbon Steel enclosure, 2 pin	D	3	16
358447-06	HESI Pow erpack, 230VAC, series 90F, 60Hz, Carbon Steel enclosure, 2 pin	D	15	16
397860-03	HESI Pow erpack, 115VAC, series 90M, 50Hz Carbon Steel enclosure, 2 pin	D	15	16.5
397860-01	HESI Pow erpack, 230VAC, series 90F, 50Hz, Carbon Steel enclosure, 2 pin	D	3	16.5
358447-07	HESI Pow erpack, 120VAC, series 90G,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	15	18
397860-02	HESI Pow erpack, 230VAC, series 90H,4X, 50Hz Stainless Steel enclosure,2 pin	D	15	16.5
374455-01	HESI Pow erpack, 115VAC, series 90, 60 Hz, Explosion Proof	D	CF	-
374455-02	HESI Pow erpack, 230VAC, series 90, 50 Hz, Explosion Proof	D	CF	-
402391-01	HESI Pow erpack, 115 VAC, series 90, 60 Hz, Class I Div II	D	15	-
370041-01	HESI Pow erpack Dual Connector, 120VAC, series 90E, 60Hz, Carbon Steel enclosure, 2 pin	D	20	16
370041-02	HESI Pow erpack Dual Connector, 230VAC, series 90F, 60Hz, Carbon Steel enclosure, 2 pin	D	20	16
370041-03	HESI Pow erpack Dual Connector, 120VAC, series 90G,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	20	17
370041-04	HESI Pow erpack Dual Connector, 230VAC, series 90H,4X, 60Hz, Stainless Steel enclosure, 2 pin	D	20	17
361864-05	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 3' (.9m)	D	5	4.4
361864-04	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 6' (1.8m)	D	5	4.8
361864-03	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 9' (2.7m)	D	5	5.2
361864-02	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 12' (3.7m)	D	5	5.6
361864-01	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 15' (4.5m)	D	3	6
361864-06	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 20' (6.1m)	D	15	8
361864-10	HESI Connecting Cable Assembly (SERIES 90 2 pin) LENGTH 25' (7.6m)	D	15	10
389362-01	Class I Div II HESI Cable Assembly (US) LENGTH 15' (4.5m)	D	CF	6
389362-13	Class I Div II HESI Cable Assembly (US) LENGTH 30' (9m)	D	CF	12
396517-02	HESI Spark Gap Tube, replacement kit	D	CF	0.2
79942-01	HESI Capacitor for 60Hz units	D	40	0.2
79942-04	HESI Capacitor for 50Hz units	D	CF	0.2
79941-00	HESI Transformer	D	30	4
79941-10	CE HESI Transformer	D	CF	4

SECTION 4 – ORDERING INFORMATION AND CONDITIONS OF SALE

TERMS

See FE-620P (Rev. 05/08) for full spare parts terms and conditions. In summary:

1. Payment - Net 30 days from invoice date with approved credit. All others 100% wire transfer prior to shipment or irrevocable letter of credit confirmed against US Bank.
2. Freight – Ex-works with all charges to purchasers account or with approved payment terms, shipment can be sent prepaid with freight charges added to the invoice.
3. All prices shown are in US dollars.
4. All prices subject to change without notice and subject to federal, state and local taxes where applicable.
5. Delivery may be withheld without liability for credit or financial reasons.

MINIMUM ORDER

US \$250.00

ANY RESULTANT ORDER WILL BE IN ACCORDANCE WITH **FORNEY STANDARD TERMS & CONDITIONS – FE-620P (Rev. 05/08)**. No other terms or conditions will apply unless alternate T&C's have been reviewed and approved by Forney Legal Department.

Forney Corporation Terms and Conditions

FE-620P (Rev. 05/08)

1. GENERAL

The following Terms and Conditions shall govern the Contract of Sale between Forney Corporation (Forney) and the Purchaser. These Terms and Conditions shall govern the subject order to the entire exclusion of all other terms and conditions. Any other provisions that are inconsistent with these terms and conditions shall be deemed without force or effect.

2. WARRANTY

Materials and Workmanship

Forney warrants that the equipment to be supplied under this contract shall be free from defects in workmanship and material for a period of one year from the date of shipment from factory. Should any failure to conform to this warranty arise within this time period, Forney shall correct such nonconformity by repair or, at its option, by replacement, provided that the equipment has been stored, installed, maintained, and operated in accordance with good industry practice and any specific recommendations of Forney. All claims must be submitted to Forney during the period specified herein and during the warranty period or shall be deemed waived by Purchaser. Forney shall have the right to inspect the defective equipment upon request, or if such is not installed, to have it returned by Purchaser. If it is found that the returned equipment is non-conforming to Forney's warranty, Forney shall reimburse Purchaser for reasonable shipping charges and will return to Purchaser repaired or replaced goods at Forney's Cost. Forney shall not be responsible for costs of removal or installation of any item whether or not supplied by Forney

Correction of Nonconformities

Correction of nonconformities, whether patent or latent, in the manner and within the time provided above shall constitute the entire liability of Seller with respect to such equipment whether in contract, warranty, tort, strict liability, or otherwise.

WARRANTIES EXCLUSIVE

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXCEPT THAT OF TITLE, WHETHER WRITTEN, ORAL, OR IMPLIED, IN FACT OR IN LAW (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE).

3. PRICES

The contract price includes only the equipment listed and does not include field services or installation of the equipment unless otherwise stated in this Contract. Escalation, if applicable, shall be in accordance with Forney's General Escalation Clause. Changes in scope or function may result in additional cost of manufacturing, engineering, or service time. A contract supplement will be required when such changes affect the cost or delivery of the equipment. Unless otherwise stated in this Contract, prices are Ex Works Forney's factory (per ICC Incoterms 2000) with all freight charges for Purchaser's account. Forney will provide United States Customs Clearance from Forney Factory in Mexico. Forney will ship prepaid and bill freight charges in addition to contract amount unless other arrangements are made. Advance written request for shipment by Purchaser's preferred carrier or routing will be honored; all charges thereon shall be for Purchaser's account. Payment terms are Net 30 days from invoice date, unless otherwise specified in contract.

4. TAXES

The amount of any present or future sales, revenue, excise or other taxes applicable to the products listed herein shall be added to the purchase price and shall be paid by the Purchaser, or in lieu thereof the Purchaser shall provide Forney with a tax exemption certificate acceptable to relevant taxing authorities.

5. DELIVERY

All scheduled completion dates are estimated. Forney will use its best efforts to maintain the dates specified; however, Forney shall not be liable for any delay or failure in the estimated delivery or shipment, or for any damages suffered by reason thereof.

6. FORCE MAJEURE

Forney shall not be liable for any loss or damage resulting from delay in the prosecution or completion of the work caused by labor disputes, acts of God, fires, riots, thefts, accidents, inability to obtain necessary labor, materials, components, or fuel, acts of the Government, or any other cause which is beyond the reasonable control of Forney. Forney agrees to notify Purchaser if any of these events occur and Purchaser will extend the dates by a period of time equal to the delay experienced and its consequences, if any.

7. DELAYS

Should Purchaser request a holdup in the prosecution of the work, all costs associated with the holdup shall be for Purchaser's account. Should Purchaser request a delay in shipment once the equipment is ready for shipment, Forney

Corporation will arrange for storage at Purchaser's expense. In this event, the date equipment was placed into storage shall be considered the date of delivery, payment shall be made, and title shall transfer accordingly.

8. CONTRACT DOCUMENTS

Any drawings, sketches or other documents furnished by Forney are strictly for the stated use of Purchaser and/or Owner in the assembly and use of the equipment as covered by the Purchase Order. The information contained in such documents is proprietary to Forney. It is agreed that neither Purchaser nor Owner shall copy, publish or otherwise disseminate such documents or their contents to any other party without the prior written permission of Forney.

9. RETURNS AND SHORTAGES

The Purchaser shall not be entitled to return any equipment shipped to it hereunder, except as permitted by Forney, and subject to such procedures and to such restocking charges as Forney may determine, in its sole discretion. Shortages must be reported in writing to Forney within ten (10) days of receipt of material; otherwise, shipment is presumed to be complete and in accordance with bill of lading and packing list.

12. LIMITATION OF LIABILITY

In no event, shall Forney, its subcontractors or its vendors be liable in contract tort, strict liability, indemnity, warranty or otherwise, for any special, indirect, incidental or consequential damages, such as but not limited to, loss of anticipated profits or revenue, loss of use of system, nonoperation or increased cost of operation of other equipment, cost of capital, cost of purchased or replacement product or power, or claims of customers of Purchaser for loss or damage of any nature whatsoever.

The liability of Forney, its subcontractors or vendors with respect to any contract, or anything done in connection therewith, or from the manufacture, sale, delivery, resale, installation or technical direction of installation, repair, replacement or use of any equipment covered by or furnished under this contract, whether in contract, in tort, in warranty, in indemnity and in strict liability, or otherwise, shall not exceed the purchase price paid and the Buyer will indemnify and hold Forney harmless from any and all liability arising under this contract in excess of said purchase price amount. Buyer further agrees to assign Forney's obligation, rights, responsibilities and benefits under this Agreement to Buyer's Customer upon Forney's completion of the Purchase Order. The foregoing does not limit Forney's liability for any injury to, or death of a person, caused by the gross negligence of Forney.

The remedies of the Purchaser set forth in this contract are exclusive.

13. SOFTWARE

In the event that the scope of this Contract includes software, Forney's acceptance of any Purchase Order shall be contingent upon the execution by Purchaser/Owner of an appropriate Software License Agreement supplied by Forney.

14. CHANGES IN LAW

In the event that any federal, state, or municipal law or regulation, as well as design code, or professional standard, is modified or is instituted after the effective date of this contract, and which mandates changes in the equipment to be supplied hereunder, any increase in the cost of labor and material necessary for compliance with these changes, will be for the Purchaser's account. Such changes in the equipment may also result in changes in warranty and delivery.

13. CANCELLATION

Purchaser may terminate this order, in whole or in part, with payment of reasonable charges, based upon expenses incurred and a reasonable profit thereon, and payment of all termination charges or costs due Forney's suppliers.

14. WAIVER

Waiver by Forney of any of these Standard Terms and Conditions shall not constitute a waiver of any other of these Standard Terms and Conditions.

15. TITLE AND RISK OF LOSS

Title and Risk of Loss shall pass to the Purchaser upon delivery to the carrier unless specified otherwise.

18. GOVERNING LAW AND ARBITRATION

This Contract, its acceptance, sale of the equipment, and any other matter arising out of the transaction contemplated hereunder shall be governed by the substantive law of the State of Texas. Any disputes arising under this Contract shall be referred to binding arbitration in Dallas, Texas, under the commercial arbitration rules of the American Arbitration Association.

Customer Support Contact Information

Al Beaty

Customer Service & Aftermarket Manager

Phone: (972) 458-6166

Cell: (469) 236-1480

Fax: (972) 458-6600

al.beaty@forneycorp.com

Customer Service & Spare Parts

Fax 972-458-6600

Contact a customer service representative for quote requests, ordering spare parts, and general questions.

Esther Lim

Asia & China

Aftermarket Account Specialist (A Team)

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S E C T I O N 5 – R E P A I R S / E X C H A N G E S

Exchange or Repair Service is no longer available for Forney products. If the product is under warranty and is not operating properly contact your A TEAM. Before returning any item for warranty, a Return Material Authorization (RMA) number is required.

SECTION 6 – FIELD SERVICES

FORNEY FIELD SERVICE/TRAINING RATES

FORNEY FIELD SERVICE/TRAINING RATES Effective 1/1/2021

	Service/Training	
	Service Engineer	Project Engineer
Per Day	\$1,784.00	\$2,560.00
Per Hour	\$223.00	\$320.00
Time & Half	\$334.50	\$480.00
Double Time	\$446.00	\$640.00

1. A purchase order with agreed upon T&C's must be provided before mobilization will occur.
2. Time and a half applies to all work/travel performed after 8 hours per day and on Saturday.
3. Double time applies to all work performed on Sunday and Forney holidays.
4. Forney's policy is that no Forney personnel work more than 12 hours in any 24-hour period except for emergencies.
5. All travel time is chargeable at straight time, to and from the job site, portal to portal.
6. Eight-hour minimum charge.
7. Offshore (at sea, platform) or Compound Living (dormitory style housing) rates are an additional \$200 per day.
8. Field Service time, if put on "hold" at job-site or hotel, will be charged at the regular daily rate plus expenses.

Forney Corporation Holidays:

New Year's Day (1/1/21) Friday	Independence Day (7/5/21) Monday	Post-Thanksgiving Day (11/26/21) Friday
Good Friday (4/2/21) Friday	Labor Day (9/6/21) Monday	Christmas Day (12/24/21) Friday
Memorial Day (5/31/21) Monday	Thanksgiving Day (11/25/21) Thursday	

Workday Defined:

The above charges are for a normal eight-hour working day with time and one-half charged for Saturdays, and time over eight (8) hours for a week-day; Sundays and Holidays will be charged at double time. In addition the travel and living expenses will be billed at cost plus 10% Admin Fee. Forney will supply receipts and documentation for the substantiation of reasonable travel and living expenses. These shall include, but not be limited to: (1) air travel receipt if used, (2) hotel receipt if used, (3) car rental receipt if used, and meals, etc. No receipts will be furnished for mileage.

Time Sheets:

Before the work commences, satisfactory arrangements must be made with Forney to review and sign Daily Time Sheets. It is suggested that customer submit a written document to Forney stating whether the customer or their authorized representative will be signing the time sheets. Disputes of any nature should be immediately reported, in writing, to Forney. Approval and acceptance of the work will be assumed if no arrangements have been made to sign the time sheets and invoicing will be submitted accordingly. Once signed, the time sheet is considered as acceptance of the work performed.

Travel/Living Expense:

Airfare	at cost
Auto Rental	at cost
Mileage	(\$.58/mile)
Daily Per diem	https://www.gsa.gov/travel/plan-book/per-diem-rates
International	https://aoprals.state.gov/web920/per_diem.asp

All Travel /Living expenses will include a 10% admin fee

Terms of Payment: Net thirty (30) days

Terms and Conditions: All orders are conditional upon acceptance of Forney Corporation Terms and Conditions on Form FE 810E.

NOTE: CANCELLATION OR RESCHEDULING WITH LESS THAN 48 HOUR NOTICE WILL BE BILLED AT ONE DAY OF APPLICABLE SERVICE RATE.

Forney Corporation Standard Terms and Conditions Domestic & International Field Service and Technical Assistance

FE810 (R4 – 4/18) Form 600159-90, Rev. D

The term “Forney” as used herein shall be deemed to refer to FORNEY CORPORATION.

1. INCORPORATION: These Standard Terms and Conditions are hereby incorporated into Purchaser’s inquiry, request for quotation, letter of intent, purchase order, change order, etc., and any resultant contract. No deviation herewith shall be binding on Forney unless agreed to in writing.

2. TAXES: The prices provided for herein are exclusive of any present or future Federal, State, Host Country, or other sales or use taxes, duties, tariffs, and levies, with respect to any service covered hereby and of any other present or future tax upon or measured by the gross receipts from this transaction or any allocated portion thereof. If Forney is required by applicable law or regulation to pay or collect any such tax on account of this transaction or services covered hereby, then such amount of tax shall be paid by the Purchaser in addition to the prices herein provided for, or the Purchaser shall reimburse to Forney the amount of any taxes which Forney is obligated to pay.

3. INSURANCE AND INDEMNIFICATION: Forney, for itself, as well as for its successors and assigns, shall save, hold harmless and indemnify the Purchaser, its successors, and assigns, from any and all claims, demands and liabilities for injury to or death of, any personnel supplied by Forney for, or in connection with, the plant whether or not caused, or claimed to have been caused by acts or negligence of the Purchaser or by others for, or in connection with, the plant. The Purchaser, for itself, as well as for its successors and assigns, shall save, hold harmless and indemnify Forney, its successors and assigns, from any and all claims, demands and liability, including but not limited to, injury to, or death of, any personnel, other than personnel supplied by Forney for, or in connection with, the plant whether or not caused, or claimed to have been caused, by acts or negligence of Forney, its agents or employees or by others. Forney at its sole cost and expense carries and maintains at all times minimum statutory requirements for the following insurance coverage: Workman’s Compensation, Employer’s Liability, Comprehensive General Liability, and Comprehensive Automobile Liability. Upon written request, Certificates of Insurance shall be supplied by Forney to Purchaser evidencing that the above insurance is in force.

4. LIMITATION OF LIABILITY: In no event shall Forney or its subcontractors or vendors be liable in contract, tort, strict liability, warranty, or otherwise, for any special, indirect, incidental or consequential damages, such as, but not limited to, loss of anticipated profits or revenue, loss of use of system, non-operation or increased expense of operation of other equipment, cost of capital, cost of purchased or replacement product or power, or claims of customers of purchaser for any costs whatsoever. The remedies of the Purchaser set forth in this contract are exclusive. The liability of Forney, its subcontractors or vendors with respect to any contract, or anything done in connection therewith, or from the Field Service, Technical Assistance, manufacture, sale, delivery, resale, installation repair, replacement or use of any service or equipment covered by or furnished under this contract, whether in contract (including the indemnity provisions hereof), in tort, in warranty, in strict liability, or otherwise, shall not exceed the original purchase price paid on the Contract. If the Contract provides for the furnishing of more than one unit of equipment or materials, the limitation prescribed here-in-above shall be applied to each individual unit with respect to which such breach has

occurred and “contract price” shall be deemed to mean the unit price specified in the Contract, or if none is specified, a proportionate part of the total price stipulated for all such units. In the event the Purchaser and the Owner are different parties, the following shall apply:

a. Purchaser shall obtain from the Owner, in favor of Forney, an agreement that Owner will be bound by the remedies extended herein, or Purchaser in lieu thereof, will indemnify Forney from liability, damages, costs, losses, or expenses, in excess of those provided for herein.

b. Purchaser shall obtain from the Owner, in favor of Forney, or its subcontractors or vendors, a release from consequential damages to the extent stated in the first paragraph: or in lieu thereof, the Purchaser will indemnify and hold harmless Forney from and against liability damages, costs, losses, and expenses resulting from Owner’s consequential losses of any nature.

5. WARRANTY: Forney agrees to correct any services it has performed, and which are shown to Forney’s satisfaction to have been performed in a faulty manner, provided notice of such faulty service is given at the conclusion of the work to be performed hereunder. Forney shall correct such defective work on an eight (8) hour per day, forty (40) hour per week basis. The cost of overtime shall be paid by the Purchaser at the applicable overtime rates in force at the time of the work. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXCEPT THAT OF TITLE, WHETHER WRITTEN, ORAL OR IMPLIED. IN FACT, OR IN LAW (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE). The foregoing shall constitute the sole remedy of the Purchaser and the sole liability of Forney for defective or faulty services whether in contract, in tort, in warranty, in strict liability, or otherwise.

6. WAIVERS OF SUBROGATION: The Purchaser shall, in his direct damage and use and occupancy (business interruption) insurance policies covering the facility in which equipment is installed, provide for waivers of subrogation rights in favor of Forney. The Purchaser shall indemnify and hold harmless Forney for failure to effect such waivers.

7. MATERIALS FURNISHED IN CONJUNCTION WITH FIELD SERVICE: In the event spare parts or materials are required in conjunction with Field Service or supplied by the service representative as back up spare parts or material, the Purchaser’s authorized representative shall authorize said parts or material by signing the Field Service Representative Time Report, Form FE346. The parts or materials furnished in conjunction with Field Service shall be governed by Forney Terms and Conditions, Spare and Repair Parts Form (R11/18/89) and Standard Products, Form FI622 including but not limited to, the Warranty for said parts or materials; a copy of Form FI622 is available and will be furnished upon request. When expedited handling of parts and material are required by Field Service Personnel, there will be a 15% handling charge added to the standard current selling price of the parts or material.

8. ACCEPTANCE: This proposal constitutes an offer to sell field service subject to all the terms and conditions set forth in the proposal or contained herein.

9. CANCELLATION: Forney corporation schedules its service technicians upon signing of a purchase order. If there is a cancellation or amendment to the agreed upon schedule after the technician has booked travel arrangements, Forney will charge reasonable administration fees. These fees may include travel, lodging, and any other nonrefundable expense accrued.

Waiver by Forney of any of these Standard Terms and Conditions shall not constitute a waiver of any other of these Standard Terms and Conditions.

Field Services Contact Information

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