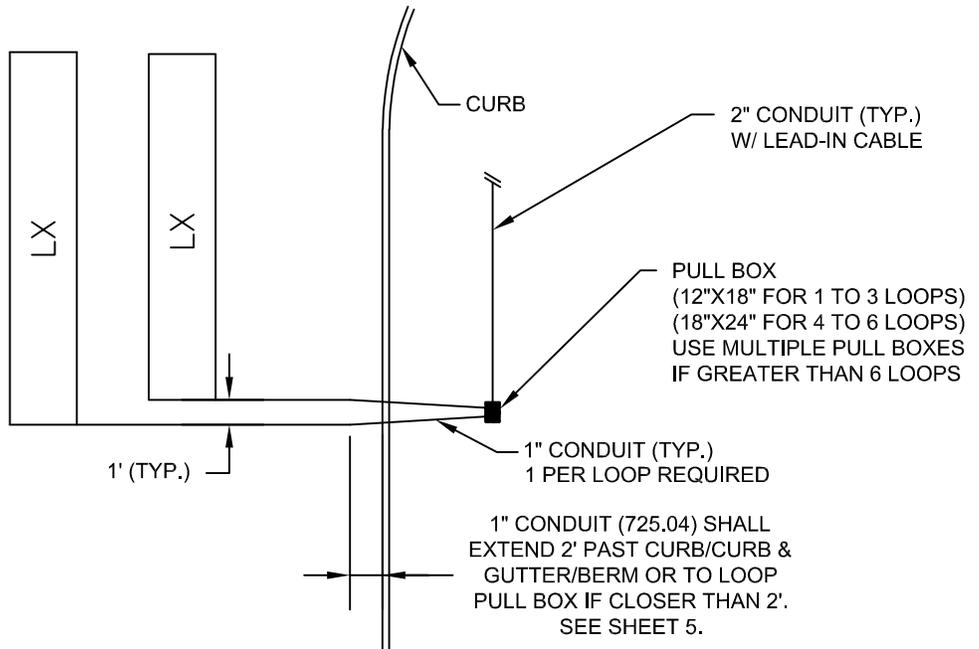


\*LANE WIDTH. DOES NOT INCLUDE WIDTH OF CURB AND GUTTER. LOOP SHALL BE CENTERED IN LANE AND SHALL MAINTAIN 2.5' FROM ADJACENT LANES.

**VEHICULAR DETECTOR**

LOOP WIDTH	
LANE WIDTH (W) (FT.)	LOOP WIDTH (FT.)
$10 \leq W < 11$	5.0
$11 \leq W < 12$	5.5
$12 \leq W < 13$	6.0
$13 \leq W < 14$	3.5 - 3.5 (Q)
$14 \leq W < 15$	4.0 - 4.0 (Q)
$15 \leq W < 16$	4.5 - 4.5 (Q)
$16 \leq W < 17$	5.0 - 5.0 (Q)
$W \geq 17$	USE TWO LOOPS
(Q) = QUADRUPOLE LOOP	

**MULTIPLE LOOP DETECTOR INSTALLATION DETAIL**



**NOTES:**

ONLY ONE SET OF LOOP WIRES SHALL BE RUN IN A SAW SLOT.

ALL ADJACENT SAW SLOTS SHALL HAVE A MINIMUM DISTANCE OF 1 FT BETWEEN THEM. NO SAW SLOT SHALL BE LOCATED WITHIN 1 FT OF A LONGITUDINAL OR TRANSVERSE JOINT IN P.C.C. PAVEMENTS IF THE SLOT IS PARALLEL TO THE JOINT.

DETECTOR LOOPS SHALL EACH BE ON A SEPARATE DETECTOR UNIT CHANNEL.

ALL CONDUIT FROM THE LOOP DETECTOR TO THE PULL BOX SHALL BE 725.04.

THE DETECTOR LOOP SHALL BEGIN 20 FT. BEHIND THE STOP LINE.

THE DETECTOR LOOP SHOULD EXTEND TO WITHIN 15 FT. OF THE CROSSING STREET'S EXTENSION OF THE FACE OF CURB/EDGE LINE.

DETECTOR LOOPS SHALL NOT EXCEED 39 FT. IN LENGTH.

THE 15 FT. REQUIREMENT MAY BE INCREASED IN ORDER TO NOT EXCEED THE MAXIMUM LENGTH REQUIREMENT.

**VEHICULAR DETECTOR STANDARDS**

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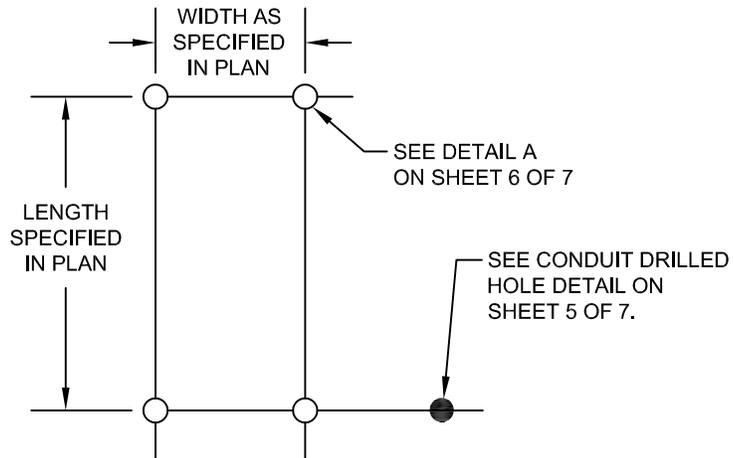
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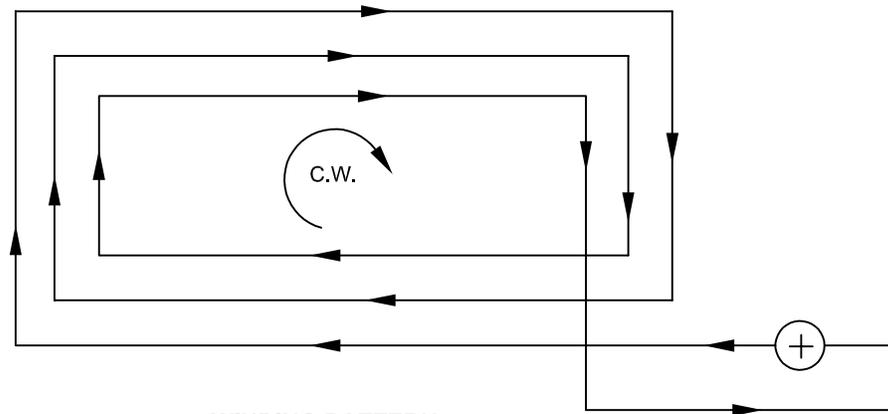
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**RECTANGULAR DETECTOR  
LOOP DETAILS**



**SAW CUT LAYOUT**



**WINDING PATTERN**  
SEE TABLE FOR  
NUMBER OF TURNS

RECTANGULAR LOOP CONSTRUCTION	
LOOP TYPE	NUMBER OF TURNS
PRESENCE DETECTION LOOPS	3
ADVANCED DETECTION LOOPS (6'x6')	4

**VEHICULAR  
DETECTOR  
STANDARDS**

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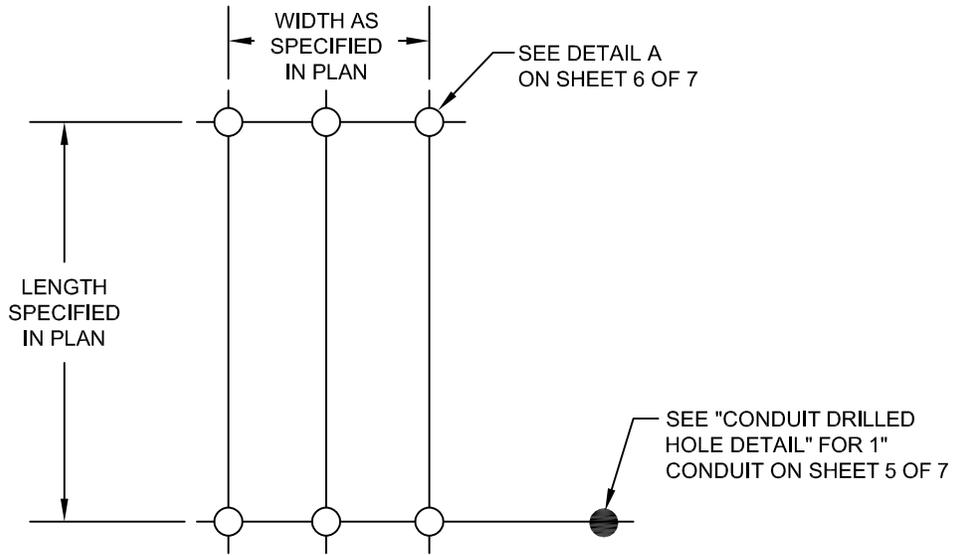
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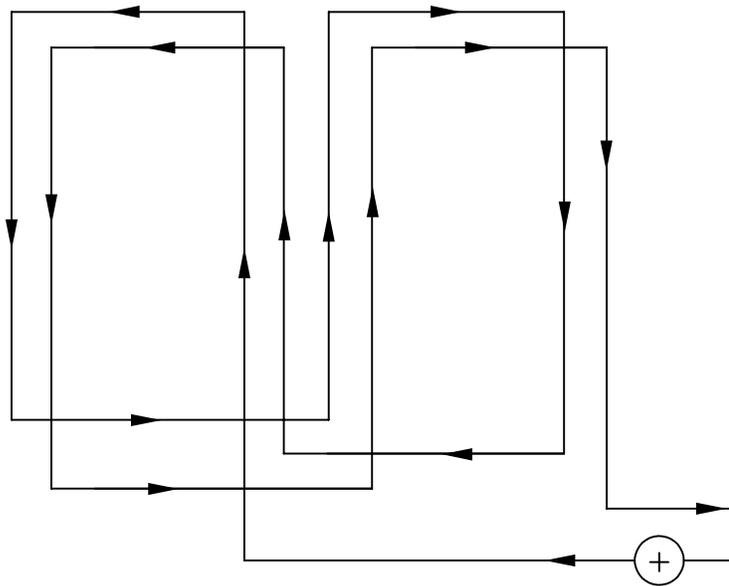
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**QUADRUPOLE LOOP DETAILS**



**SAW CUT LAYOUT**



**WINDING PATTERN**

NUMBER OF TURNS IS 2-4-2

**VEHICULAR  
DETECTOR  
STANDARDS**

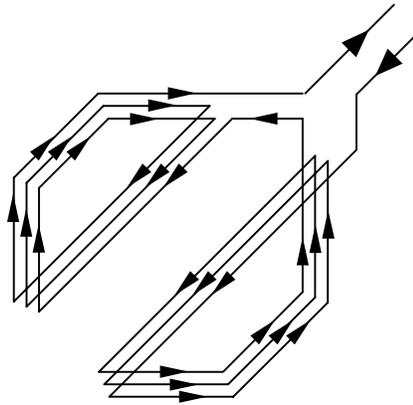
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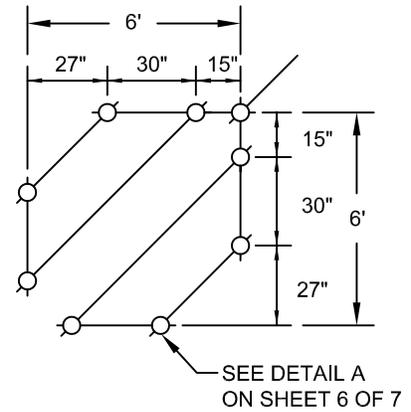
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**WINDING DETAIL**



**SAWCUT DETAIL**

**BICYCLE ONLY  
LOOP DETECTOR  
INSTALLATION DETAIL**

BICYCLE LOOP CONSTRUCTION	
LOOP TYPE	NUMBER OF TURNS
PRESENCE DETECTION LOOPS	3-3-3-3

**VEHICULAR  
DETECTOR  
STANDARDS**

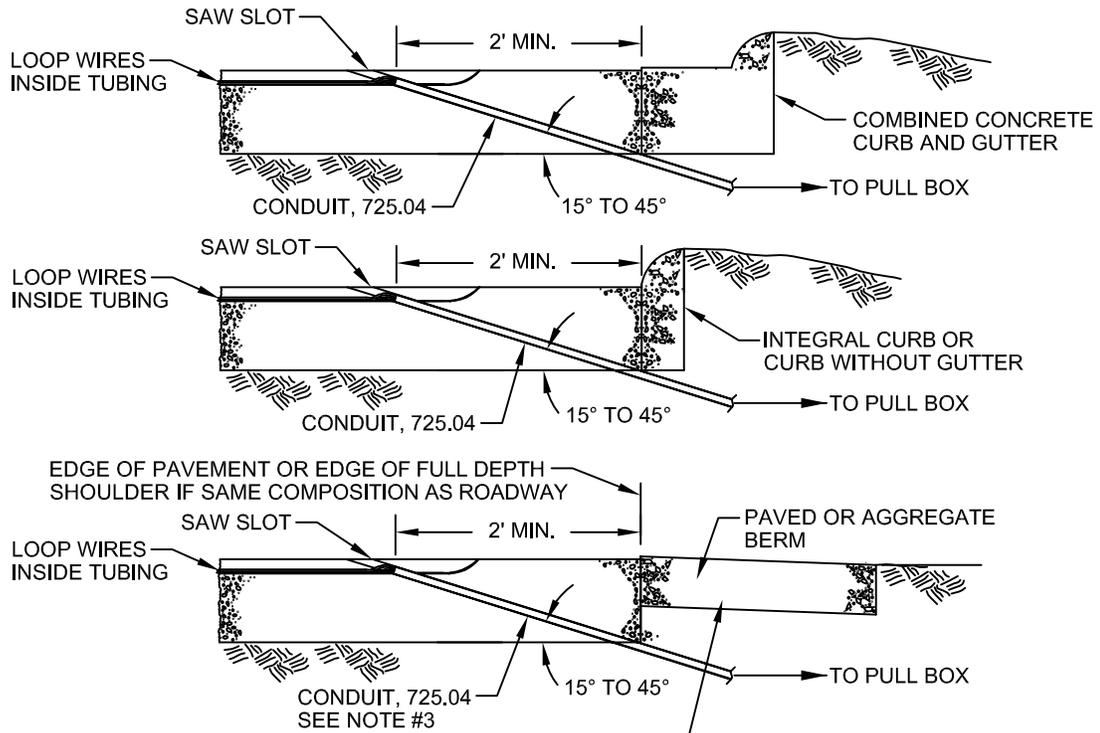
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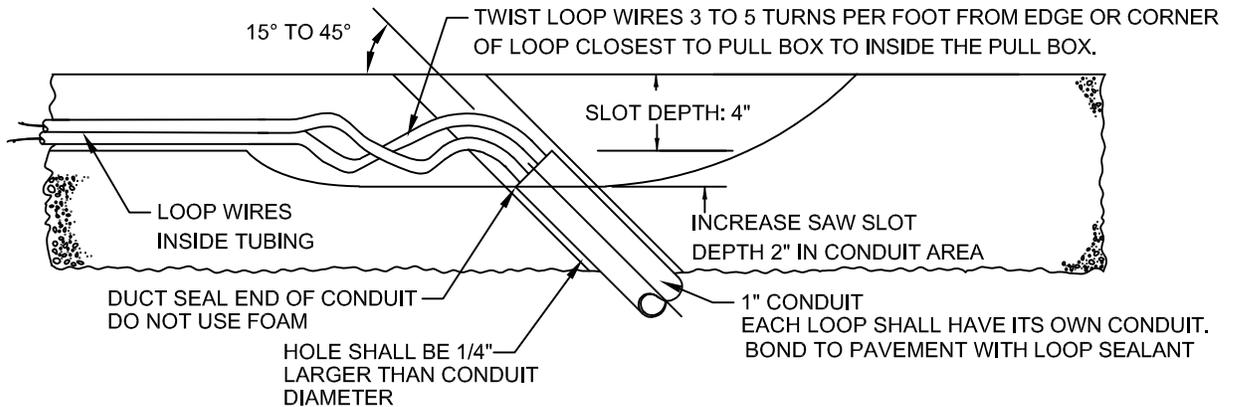


NO TRENCHING OR UNDERCUTTING CLOSER THAN 2' FROM THE EDGE OF PAVEMENT. BACKFILL TRENCH UNDER BERM WITH THE LOW STRENGTH MORTAR.

**NOTES:**

1. THE DRILLED HOLE SHALL BE LOCATED AS SHOWN ABOVE AND WITHIN THE FULL DEPTH PAVEMENT. IT SHALL NOT BE DRILLED OR CUT THROUGH THE PAVED BERM, CURB OR CURB AND GUTTER SECTION.
2. IN AREAS OF POOR PAVEMENT CONDITION, THE SAW SLOT DEPTH SHALL BE INCREASED TO INSURE ADEQUATE WIRE EMBEDMENT. ALL FIELD ADJUSTMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
3. IF AN EXISTING PAVED BERM IS 4.5" THICK OR MORE, THE LOOP WIRE MAY BE INSTALLED IN A SAW SLOT CUT ACROSS THE BERM. WHEN PAVED BERM ARE LESS THAN 4.5" THICK, THE CONDUIT RACEWAY SHALL BE INSTALLED AS SHOWN.

**TYPICAL DRILLED HOLE LOCATIONS FOR 1" CONDUIT**



**CONDUIT DRILLED HOLE DETAIL FOR 1" CONDUIT**

**VEHICULAR  
DETECTOR  
STANDARDS**

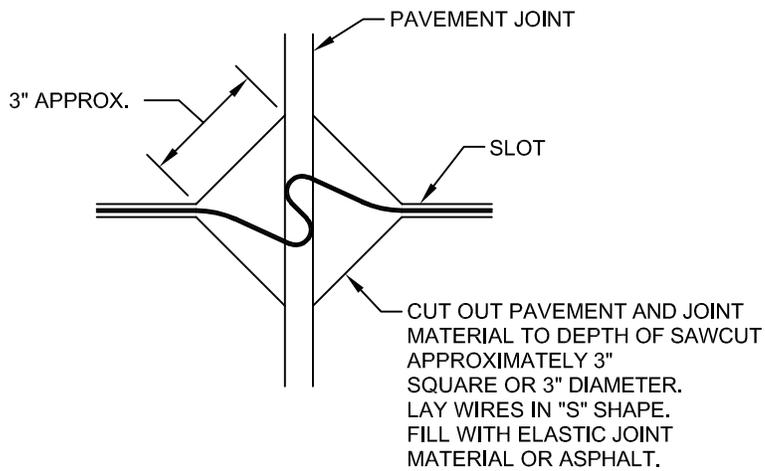
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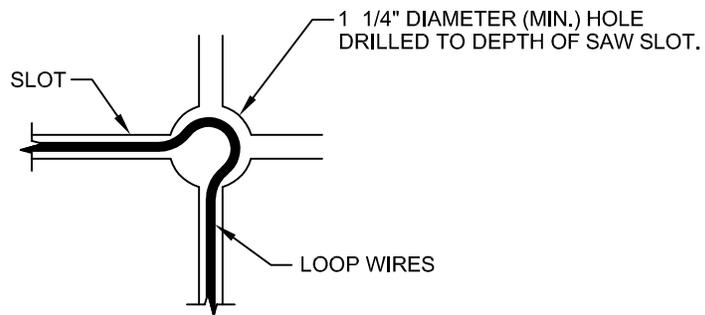
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**JOINT CROSSING DETAIL  
IN PORTLAND CEMENT CONCRETE  
PAVEMENTS**



**DETAIL A**

**VEHICULAR  
DETECTOR  
STANDARDS**

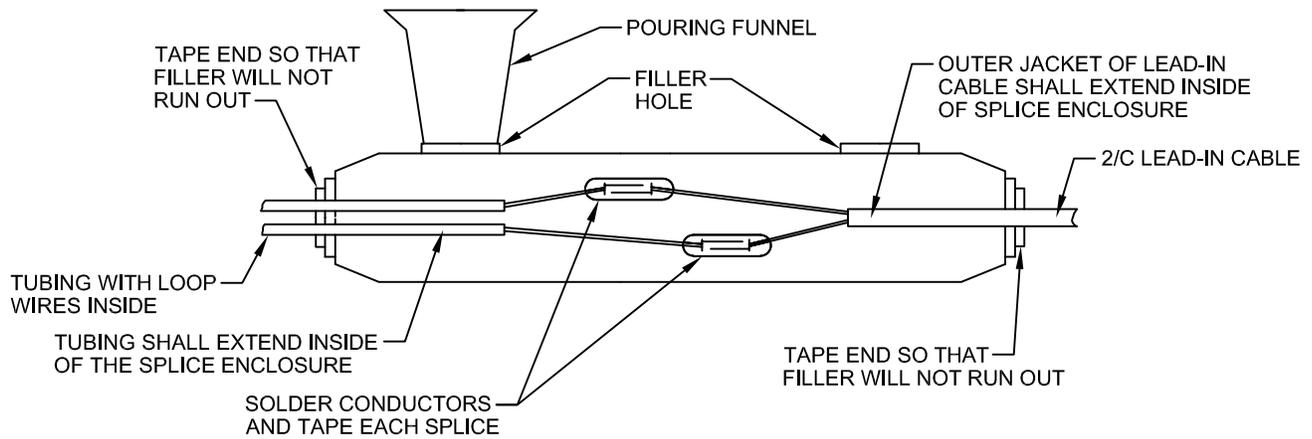
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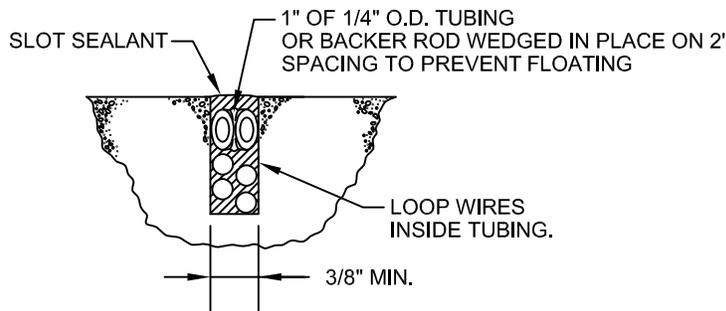
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**SPLICE ENCLOSURE DETAIL**



**SLOT DETAIL**

**NOTES:**

LOOP DETECTOR WIRE TO LEAD-IN CABLE SPLICES WITHIN THE ENCAPSULATED SPLICE ENCLOSURE SHALL BE SOLDERED.

IF A PULLBOX IS NOT SPECIFIED IN THE PLANS, THE WATERPROOF SPLICE ENCLOSURE SHALL BE LOCATED IN THE FIRST ENTERED POLE OR PEDESTAL, EXCEPT IF THE CONTROLLER CABINET IS MOUNTED ON THAT POLE OR PEDESTAL, IN WHICH CASE THE LOOP WIRES SHALL BE ROUTED DIRECTLY INTO THE CABINET.

THE ENCLOSURE SHALL NOT CONTAIN VISIBLE AIR BUBBLES (VOIDS) GREATER THAN 1/4 IN (16 MM)

LOOP SLOT DEPTH SHALL BE 4 IN.

LOOP DETECTOR WIRE IN TUBING SHALL BE AS SPECIFIED IN CMSC TABLE 732.19-1

LOOP DETECTOR SEALANT SHALL BE PER THE CITY OF COLUMBUS PRE-QUALIFIED PRODUCT LIST.

SAW SLOTS SHALL BE THOROUGHLY CLEANED AND DRIED PRIOR TO INSTALLATION OF SEALANT.

# VEHICULAR DETECTOR STANDARDS

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