

VOCATIONAL
PRO-SHIFT
10-SPEED
TRANSMISSIONS

SPICER®



TRANSMISSION

TTC

TRANSMISSIONS THAT WORK FOR A LIVING

If your business depends on your heavy-duty trucks getting to the job site on time, day in and day out, the Spicer Vocational 10-Speed is your transmission. When we engineered the Vocational Pro-Shift 10-Speeds, we kept in mind all of the criteria that are important in vocational applications – startability, gradability, easy shifting, durability, final drive ratios, and sensible gear splits. We know you need a transmission that gets your trucks moving on the road quickly, yet has deep enough low gears for good job-site maneuvering. Spicer Vocational 10-Speeds are available in models with torque capacities to match most application conditions and engine specifications.



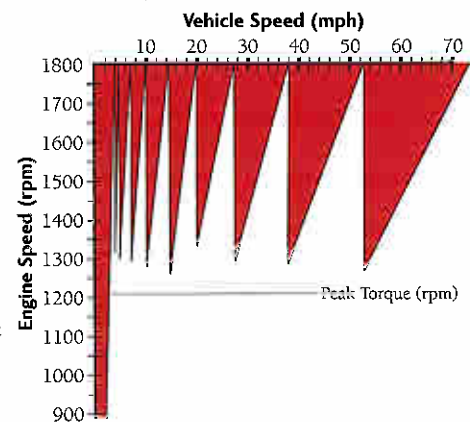
THE LEADER IN CUSTOMER-FOCUSED TRANSMISSION FEATURES

When you're starting out with a heavy load, the Vocational 10-Speed is designed to let you shift on the fly, without losing momentum or grinding gears. Out on the road, carefully selected top gears get you up to speed quickly. To make shifting effortless and smooth, we designed a triple-isolated shift lever with an ergonomically correct shift knob. Shift control components are a unique composite material that reduces friction as it absorbs mechanical noise and vibration. We've also made many internal component improvements to give you superior transmission performance—our shift forks and shift collars are designed to provide more engagement area for improved shift precision, better gear engagement, and increased transmission durability. The result is the kind of shift feel that drivers appreciate.

THE HIGHEST TORQUE-TO-WEIGHT RATIO IN THE INDUSTRY

With torque capacities of 860, 1,150, 1,250 and 1,450 lb. ft., the Spicer Vocational 10-Speeds have the highest torque-to-weight ratios in their class. And with a 19:1 ratio coverage, they offer excellent versatility in construction and vocational applications. Deep first and reverse gears offer exceptional startability and backing control. In addition, models with the .72 overdrive offer excellent fuel economy on the highway.

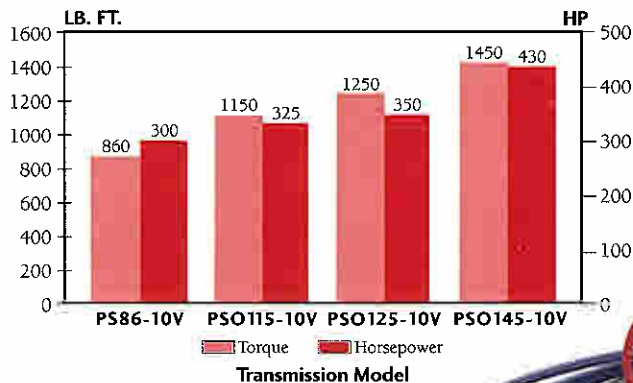
PERFORMANCE CHART



OPTIMUM LUBRICATION SYSTEM FOR COOLER OPERATION, LONGER LIFE

All Spicer 10-Speeds now feature the Optilube Lubrication System. The system uses an internal oil pump and unique oil delivery system to put a continuous shower of oil on critical areas throughout the transmission. This increases transmission efficiency and helps reduce transmission temperatures by up to 50°F when compared with conventional transmission lubrication systems. The Optilube system provides continuous lubrication even when the vehicle is operating on steep inclines. It also continues to lubricate the transmission when the vehicle is in neutral, so transmission temperatures stay low even during high-load PTO operations. Better lubrication and cooler operation mean reduced wear and longer transmission life.

TORQUE AND HP RATINGS Vocational 10-Speed

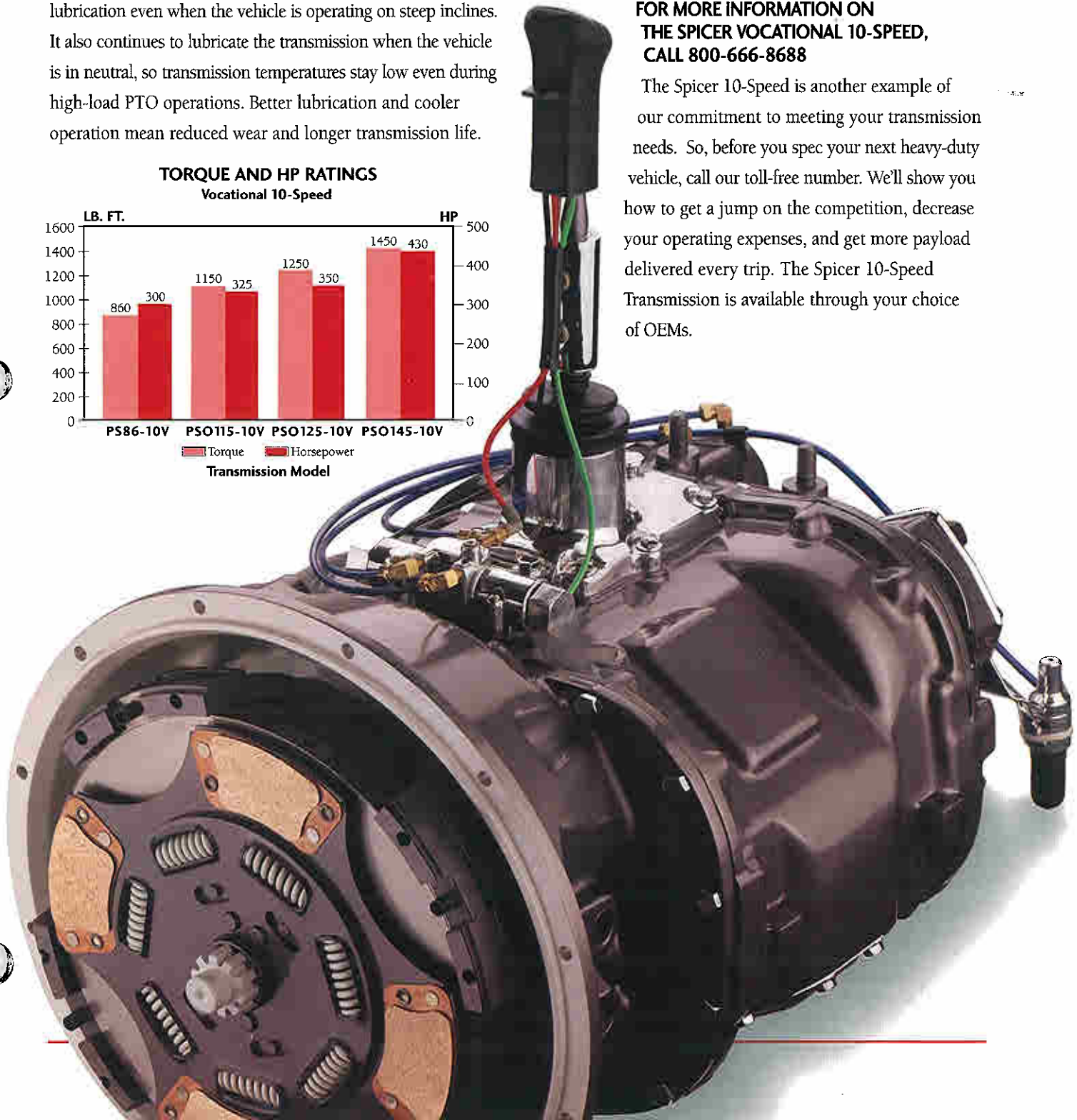


BACKED BY SPICER SERVICE AND SUPPORT

We believe in the Spicer 10-Speed Transmissions. They're designed to provide increased payloads, optimum durability, and low ownership costs. In addition to our network of factory-trained service representatives, we also offer same day shipment of parts – nationwide. We can even help you train your own maintenance personnel to make them as efficient and effective as possible.

FOR MORE INFORMATION ON THE SPICER VOCATIONAL 10-SPEED, CALL 800-666-8688

The Spicer 10-Speed is another example of our commitment to meeting your transmission needs. So, before you spec your next heavy-duty vehicle, call our toll-free number. We'll show you how to get a jump on the competition, decrease your operating expenses, and get more payload delivered every trip. The Spicer 10-Speed Transmission is available through your choice of OEMs.



SPECIFICATIONS

MODEL NO.	TORQUE CAPACITY	GVW/GCW*
PS86-10V	860 lb.ft.	80,000 lbs.
PSO115-10V	1,150 lb.ft.	80,000 lbs.
PSO125-10V	1,250 lb.ft.	80,000 lbs.
PSO145-10V	1,450 lb.ft.	80,000 lbs.

DIRECT/OVERDRIVE	
Ratio Coverage	19.0:1
Length	31.00(787mm)
Weight	630-640 lbs.
Input Shaft	1.75" or 2" x 10-Spline
Output Shaft	2.5" x 10-Spline
Clutch Housing	SAE No. 1 or 2
Clutch	Spicer 14" or 15-1/2"
Lube Capacity	18 Pints, Integral Oil Pump
Lube Type	CD 50 Synthetic Recommended

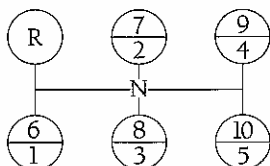
*All other applications require Spicer Engineering approval.

TOTAL REDUCTION

DIRECT		
SPICER 10-SPEEDS	AXLE RATIO	TOTAL REDUCTION
19.00 First Gear	3.21	61.0:
	3.42	64.9:
	3.55	67.5:
	3.73	70.9:
	3.90	74.1:
	4.10	77.9:

OVERDRIVE		
SPICER 10-SPEEDS	AXLE RATIO	TOTAL REDUCTION
13.59 First Gear	4.33	58.8:
	4.44	60.3:
	4.56	62.0:
	4.63	62.9:
	4.88	66.3:
	5.29	71.9:
	5.86	79.6:

SHIFT PATTERN



GEAR RATIOS

GEAR	RATIO	GEAR	RATIO	%STEP
DIRECT		OVERDRIVE		
1st	19.00	1st	13.59	36%
2nd	14.00	2nd	10.01	38%
3rd	10.12	3rd	7.24	39%
4th	7.27	4th	5.20	40%
5th	5.20	5th	3.72	42%
6th	3.66	6th	2.61	36%
7th	2.69	7th	1.92	38%
8th	1.95	8th	1.39	39%
9th	1.40	9th	1.00	40%
10th	1.00	10th	0.715	
Rev.	21.25	Rev.	15.19	

POWER TAKE-OFF APPLICATIONS

TRANSMISSION	P.T.O. GEAR DATA
PS86-10V	60.5% Engine Speed, 45 Tooth, 6 Pitch
PSO115-10V	85% Engine Speed, 45 Tooth, 6 Pitch
PSO125-10V	85% Engine Speed, 45 Tooth, 6 Pitch
PSO145-10V	85% Engine Speed, 45 Tooth, 6 Pitch

SPICER END FITTING REFERENCE

END YOKE	SERIES QUICK DISCONNECT®
1710	6-4-6611-1
1760	6-3-4-651-1
1810	6-5-4-3451-1

COMPANION FLANGES	FLANGE NUMBER	BOLT HOLES
1710	6-1-5541	8
1810	6-5-1-2271	12

TOP-GEARED AVERAGE MPH

DIRECT						
ENGINE GOVERNED RPM	1600	1700	1800	1900	2000	2100
3.21	58	61	65	69	72	76
3.42		58	61	64	68	71
3.55		56	59	62	65	69
3.73			56	59	62	65
3.90				57	60	62
4.10					57	59

OVERDRIVE						
ENGINE GOVERNED RPM	1600	1700	1800	1900	2000	2100
4.33	60	64	67	71	75	
4.44		58	62	66	69	73
4.56			61	64	68	71
4.63			60	63	67	70
4.88			57	60	63	67
5.29				58	61	64
5.86					55	58

With tires @ 517 revolutions per mile.



14700 Helm Court
Plymouth, MI 48170
(800) 401-9866 or (734) 456-3770
Fax: (734) 456-3739
www.ttcautomotive.com

